MAD

JANUARY 2024

PROJECT ID: 1204-08-73, 1204-08-74

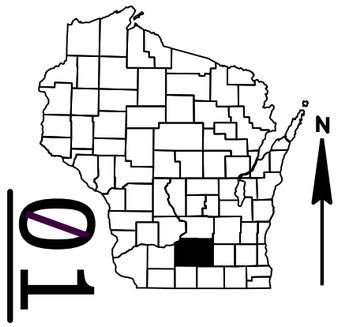
WITH: N/A

COUNTY: DANE

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 = 1054



01

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1204-08-73	WISC 2025145	1
1204-08-74	WISC 2025146	1

MOUNT HOREB - MADISON

CTH G TO WEST VERONA AVE/EPIC LN

USH 18

DANE COUNTY

STATE PROJECT NUMBER

1204-08-73

MOUNT HOREB - MADISON

WEST VERONA AVE/EPIC LN TO STH 69

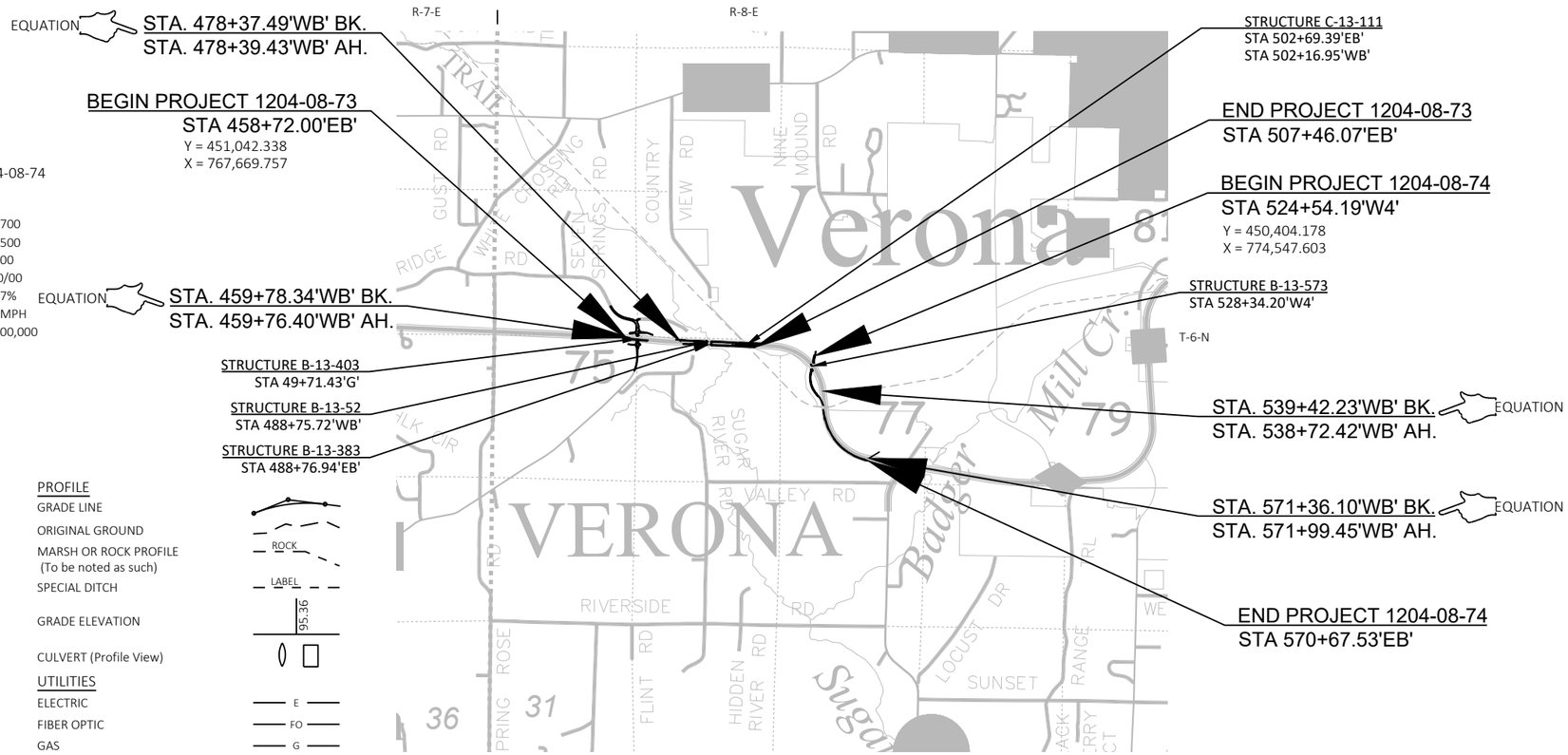
USH 18

DANE COUNTY

STATE PROJECT NUMBER

1204-08-74

DESIGN DESIGNATION			1204-08-73	1204-08-74
A.A.D.T.	(2024)	=	25,400	13,700
A.A.D.T.	(2044)	=	43,200	24,500
D.H.V.		=	4,900	4,600
D.D.		=	51/49	100/00
T.		=	13.0%	12.7%
DESIGN SPEED		=	70 MPH	70 MPH
ESALS		=	4,500,000	5,100,000



EQUATION STA. 478+37.49'WB' BK.
STA. 478+39.43'WB' AH.

BEGIN PROJECT 1204-08-73
STA 458+72.00'EB'
Y = 451,042.338
X = 767,669.757

EQUATION STA. 459+78.34'WB' BK.
STA. 459+76.40'WB' AH.

STRUCTURE B-13-403
STA 49+71.43'G'

STRUCTURE B-13-52
STA 488+75.72'WB'

STRUCTURE B-13-383
STA 488+76.94'EB'

STRUCTURE C-13-111
STA 502+69.39'EB'
STA 502+16.95'WB'

END PROJECT 1204-08-73
STA 507+46.07'EB'

BEGIN PROJECT 1204-08-74
STA 524+54.19'W4'
Y = 450,404.178
X = 774,547.603

STRUCTURE B-13-573
STA 528+34.20'W4'

EQUATION STA. 539+42.23'WB' BK.
STA. 538+72.42'WB' AH.

EQUATION STA. 571+36.10'WB' BK.
STA. 571+99.45'WB' AH.

END PROJECT 1204-08-74
STA 570+67.53'EB'

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'EB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
MARSH AREA		STORM SEWER	SS
WOODED OR SHRUB AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

LAYOUT SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = -73 0.602 MI -74 0.719 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A

ORIGINAL PLANS PREPARED BY

AECOM

WISCONSIN
ZACHARY R. LARSON
E-43030
MADISON
WI
PROFESSIONAL ENGINEER

7/25/24 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	D'ONOFRIO KOTTKE & ASSOC INC
Designer	AECOM
Project Manager	KEVIN DRUNASKY
Regional Examiner	SW REGION
Regional Supervisor	JENNIFER KOBRYN

APPROVED FOR THE DEPARTMENT

DATE: 7/25/24 (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.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN. THE TACK COAT CALCULATIONS ARE BASED ON AN APPLICATION RATE OF 0.05 GAL/SY FOR NEW HMA SURFACES.

THE BASE AGGREGATE DENSE (BAD) CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 2.1 TONS/CY FOR 3/4-INCH BAD, 2.0 TONS/CY FOR 1 1/4-INCH BAD, AND 2.2 TONS/CY FOR 3-INCH BAD.

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

PIPE AND INLET ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

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

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

BEARINGS SHOWN ON THE PLAN ARE TRUE BEARINGS.

THE CONTRACTOR SHALL NOT OPERATE BEYOND THE SLOPE INTERCEPTS AS SHOWN ON PLANS WHEN ADJACENT TO WETLANDS OR ENVIRONMENTALLY SENSITIVE AREAS.

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

UTILITIES CONTACTS

ALLIANT ENERGY (WP&L)
(ELECTRIC)
ATTN: KRYSTAL MCDERMOTT (PRIMARY)
6462 BLANCHAR'S CROSSING
WINDSOR, WI 53598
608-842-1741 (OFFICE)
608-852-2311 (CELL)
KrystalMcDermott@alliantenergy.com

SPECTRUM
(COMMUNICATION - FIBER)
ATTN: PAUL TREPCZYK
2701 DANIELS ST
MADISON, WI 53718
608-288-6814 (OFFICE)
608-280-1663 (CELL)
Paul.Trepczyk@charter.com

TDS TELECOM
(TELEPHONE)
ATTN: ERIC TAYLOR
525 JUNCTION RD
MADISON, WI 53717
608-325-1391 (OFFICE)
Eric.Taylor@tdstelecom.com

WIN
(COMMUNICATIONS-FIBER)
ATTN: TODD ELLICKSON
4955 BULLIS FARM RD
EAU CLAIRE, WI 53701
715-832-3750 (OFFICE)
715-852-4072 (CELL)
Todd.Ellickson@wintechnology.com

STANDARD ABBREVIATIONS

ABUT	ABUTMENT
AC	ACRE
AGG	AGGREGATE
AH	AHEAD
∠	ANGLE
AADT	ANNUAL AVERAGE DAILY TRAFFIC
AEW	APRON ENDWALL
ASPH	ASPHALTIC
BK	BACK
BC	BACK OF CURB
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
CB	CATCH BASIN
CL OR C/L	CENTER LINE
Δ	CENTRAL ANGLE OR DELTA
CONC	CONCRETE
CP	CONTROL POINT
CTH	COUNTY TRUCK HIGHWAY
CY	CUBIC YARD
CP	CULVERT PIPE
CPCA	CULVERT PIPE CORRUGATED ALUMINUM
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
CPT	CULVERT PIPE TEMPORARY
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DHV	DESIGN HOUR VOLUME
DIA	DIAMETER
DD	DIRECTIONAL DISTRIBUTION
EA	EACH
EB	EASTBOUND
EL OR ELEV	ELEVATION
EW	ENDWALL
EAT	ENERGY ABSORBING TERMINAL
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FL OR F/L	FLOW LINE
FT	FOOT
FTMS	FREE TRAFFIC MANAGEMENT SYSTEM
HE	HIGHWAY EASEMENT
CWT	HUNDRED WEIGHT
IN DIA	INCH DIAMETER
INL	INLET
INV	INVERT
LT	LEFT
LHF	LEFT HAND FORWARD
L	LENGTH OF CURVE
LF	LINEAR FOOT
LC	LONG CHORD OF CURVE
LS	LUMP SUM
MGAL	ONE THOUSAND GALLONS
MH	MANHOLE
NC	NORMAL CROWN
PAVT	PAVEMENT
PLE	PERMANENT LIMITED EASEMENT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
LB	POUND
PL	PROPERTY LINE
PRW	PROPOSED RIGHT OF WAY
RL OR R/L	REFERENCE LINE
REQ'D	REQUIRED
RT	RIGHT
RHF	RIGHT HAND FORWARD
R/W	RIGHT OF WAY
RD	ROAD
RDWY	ROADWAY
SHLDR	SHOULDER
SF	SQUARE FEET
SY	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAY
STA	STATION
SE	SUPERELEVATION
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
WB	WESTBOUND

WISDOT

KEVIN DRUNASKY, P.E.
PROJECT MANAGER
SW REGION PDS - MADISON
2101 WRIGHT ST
MADISON, WI 53704
608-264-3811 (OFFICE)
kevin.drunasky@dot.wi.gov

WISDNR

(SOUTHWEST REGION)
ERIC HEGGELUND
3911 FISH HATCHERY RD
FITCHBURG, WI 53711
608-228-7927
eric.heggelund@wisconsin.gov

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
REMOVAL PLANS
PLAN DETAILS
GUARDRAIL DETAILS
CONTOUR MAP
MATCHLINE DIAGRAM
EROSION CONTROL
STORM SEWER
PLANTING DETAILS
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING / SIGNING
TRAFFIC CONTROL
TEMPORARY PAVEMENT
DETOUR
ALIGNMENT DATA

DESIGN CONTACT (ROADWAY)

AECOM
ZACH LARSON, P.E.
1350 DEMING WAY, SUITE 100
MIDDLETON, WI 53562
608-828-8165 (OFFICE)
zachary.larson@aecom.com

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

2

N

BEGIN PROJECT 1204-08-73
STA 458+72.00'EB'
Y=451,042.338
X=767,669.757

BEGIN PROJECT 1204-08-74
STA 524+54.19'W4'
Y=450,404.178
X=774,547.603

END PROJECT 1204-08-73
STA 504+46.07'EB'
MATCH EXISTING
SAW CUT REQUIRED

END PROJECT 1204-08-74
STA 570+67.53'EB'
MATCH EXISTING
SAW CUT REQUIRED

DAIRY RIDGE RD
30'G'
40'G'
BOBCAT LN
CTH G
60'G'
70'G'
EPIC LN
W VERONA AVE
MILITARY RIDGE STATE TRAIL
SUGAR RIVER
USH 18/151
STH 69

BEGIN CONSTRUCTION
STA 32+00.00'G'

BEGIN CONSTRUCTION
STA 460+76.26'GD'

BEGIN CONSTRUCTION
STA 459+29.78'GC'

STA 49+71.43'G'
B-13-403, STRUCTURE WIDENING

EQUATION
STA BACK = 459+78.34'WB'
STA AHEAD = 459+76.40'WB'

END CONSTRUCTION
STA 61+85.00'G'

END CONSTRUCTION
STA 38+50.00'BL'

END CONSTRUCTION
STA 470+00.00'GA'

BEGIN CONSTRUCTION
STA 476+67.09'WB'

BEGIN CONSTRUCTION
STA 479+30.64'EB'

STA 488+75.72'WB'
B-13-52, STRUCTURE WIDENING

STA 488+76.94'EB'
B-13-383, STRUCTURE WIDENING

EQUATION
STA BACK = 478+37.49'WB'
STA AHEAD = 478+39.43'WB'

END CONSTRUCTION
STA 466+43.00'EB'

STA 502+16.95'WB'
C-13-111, BOX EXTENSION

END CONSTRUCTION
STA 506+00.00'EB'

END CONSTRUCTION
STA 508+63.48'WB'

BEGIN CONSTRUCTION
STA 522+87.72'W4'

STA 528+34.20'W4'
B-13-573, STRUCTURE WIDENING

EQUATION
STA BACK = 539+42.23'WB'
STA AHEAD = 538+72.42'WB'

END CONSTRUCTION 1204-08-74
STA 543+99.72'W4'

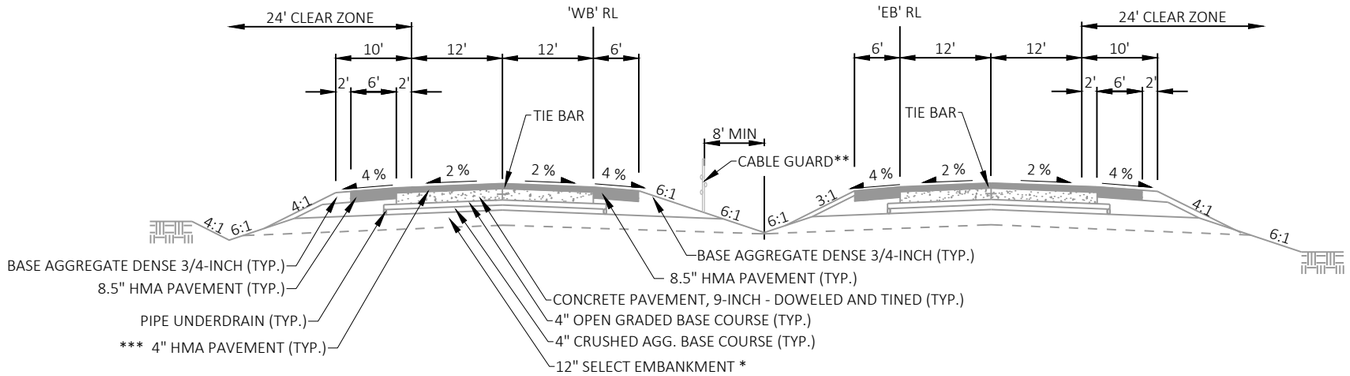
BEGIN CONSTRUCTION 1204-08-74
STA 545+48.90'EB'

END CONSTRUCTION
STA 571+72.85'EB'

EQUATION
STA BACK = 571+36.10'WB'
STA AHEAD = 571+99.45 'WB'

430'WB' 430'EB' 440'WB' 440'EB' 444'GD' 444'GC' 450'WB' 450'EB' 456'GD' 456'GC' 460'WB' 460'EB' 468'GA' 470'WB' 470'EB' 477'GA' 480'WB' 480'EB' 490'WB' 490'EB' 500'WB' 500'EB' 510'WB' 510'EB' 520'WB' 520'EB' 520'W4' 530'W4' 530'WB' 540'WB' 550'WB' 550'EB' 560'WB' 560'EB' 570'WB' 570'EB' 580'WB' 580'EB' 590'WB' 590'EB' 600'WB' 600'EB'

PROJECT NO: 1204-08-73/1204-08-74	HWY: USH 18	COUNTY: DANE	PROJECT OVERVIEW	SHEET 3	E



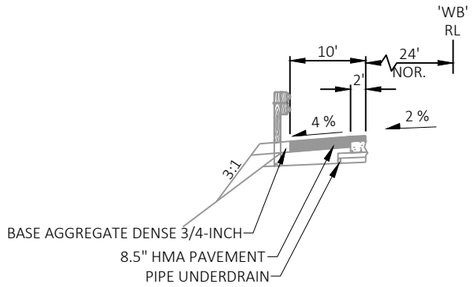
EXISTING TYPICAL SECTION

STA 476+67'WB' - STA 500+00'WB'

EXISTING TYPICAL SECTION

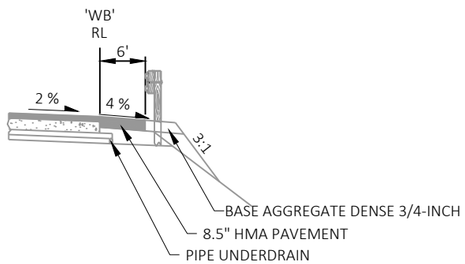
STA 458+72'EB' - STA 466+43'EB'
STA 480+00'EB' - STA 500+00'EB'

* NOT APPLICABLE IN AREAS OF ROCK CUT
** STA 476+67'WB' - STA 486+60'WB'
** STA 490+94'WB' - STA 500+00'WB'
*** STA 499+57'EB' - STA 500+00'EB' 1.75" HMA PAVEMENT



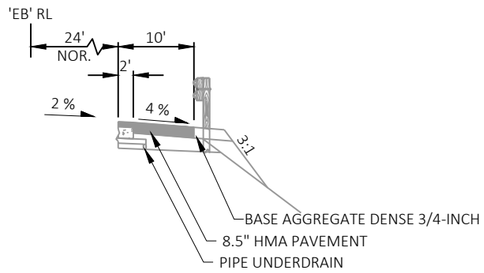
PARTIAL EXISTING TYPICAL SECTION - MGS GUARDRAIL

STA 490+40'WB' - STA 494+75'WB', LT



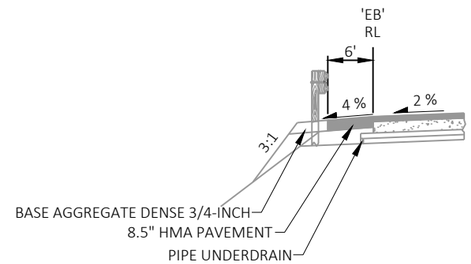
PARTIAL EXISTING TYPICAL SECTION - MGS GUARDRAIL

STA 490+40'WB' - STA 491+63'WB', RT



PARTIAL EXISTING TYPICAL SECTION - MGS GUARDRAIL

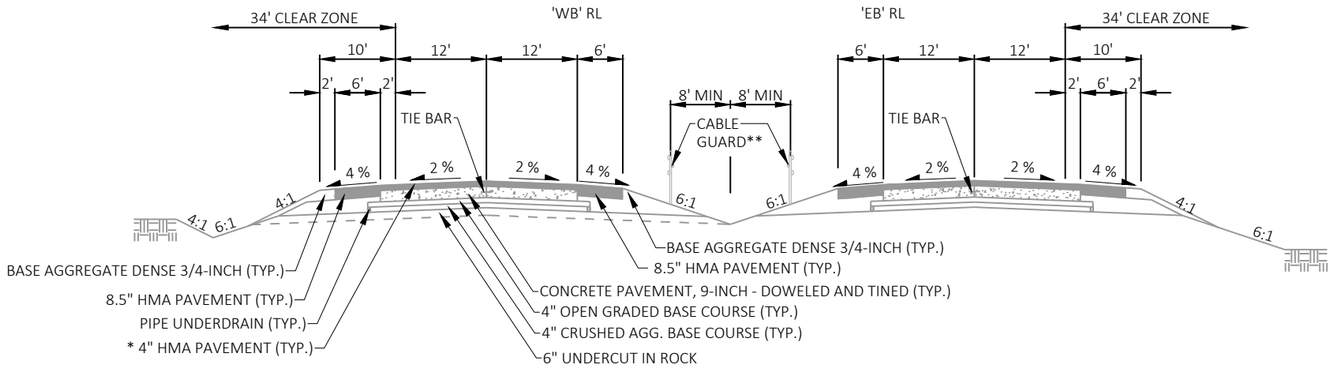
STA 485+67'EB' - STA 487+57'EB', RT



PARTIAL EXISTING TYPICAL SECTION - MGS GUARDRAIL

STA 485+32'EB' - STA 487+57'EB', LT

2



* STA 500+73'WB' - STA 503+75'WB' - 1.75" HMA PAVEMENT

EXISTING TYPICAL SECTION

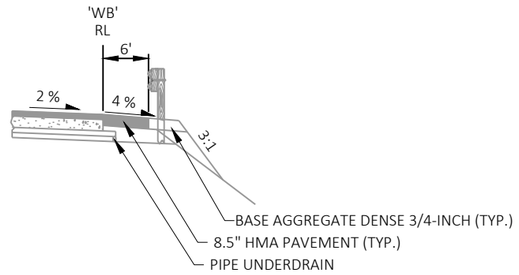
STA 500+00'WB' - STA 507+90'WB'

** CABLE GUARD ON WB MEDIAN: STA 490+82 WB - STA 544+52'WB'
** CABLE GUARD ON EB MEDIAN: STA 545+26'EB' - STA 571+73'EB'

EXISTING TYPICAL SECTION

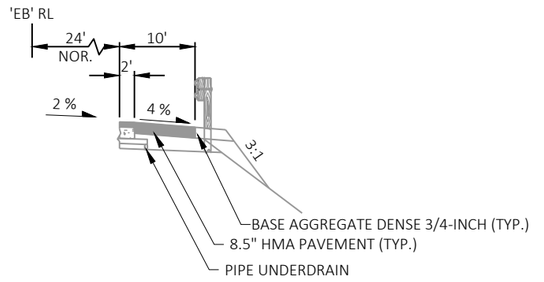
STA 500+00'EB' - STA 505+89'EB'
STA 545+11'EB' - STA 571+73'EB'

* STA 499+57'EB' - STA 503+75'EB' - 1.75" HMA PAVEMENT



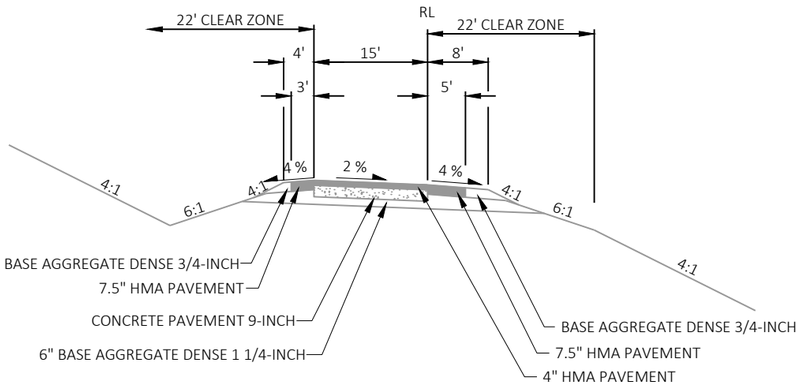
PARTIAL EXISTING TYPICAL SECTION - MGS GUARDRAIL

STA 500+75'WB' - STA 504+35'WB', RT



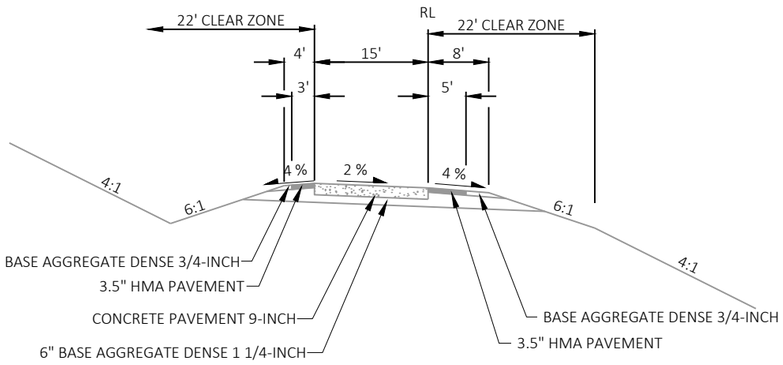
PARTIAL EXISTING TYPICAL SECTION - MGS GUARDRAIL

STA 500+10'EB' - STA 503+75'EB', RT



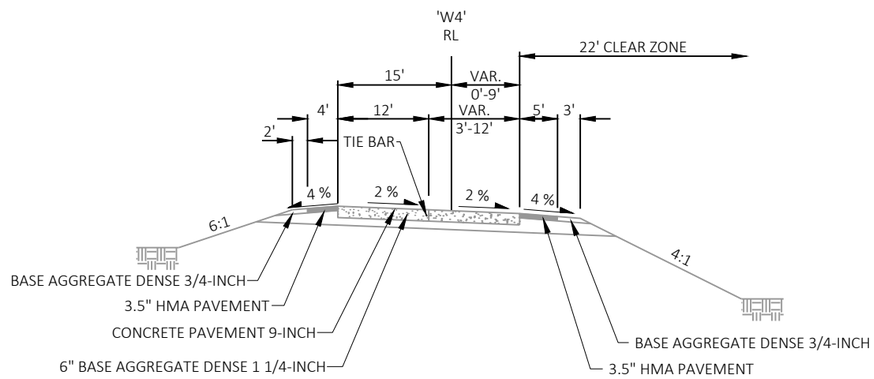
EXISTING TYPICAL SECTION

STA 463+30'GA' - STA 470+00'GA'
STA 460+76'GD' - STA 461+76'GD'



EXISTING TYPICAL SECTION

STA 459+30'GC' - STA 461+69'GC'

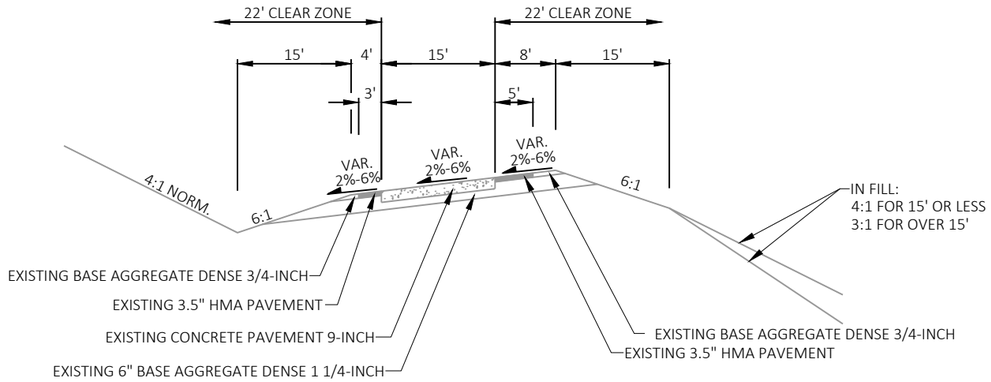


EXISTING TYPICAL SECTION

USH 18 RAMP W4
STA 522+88'W4' - STA 527+05'W4'

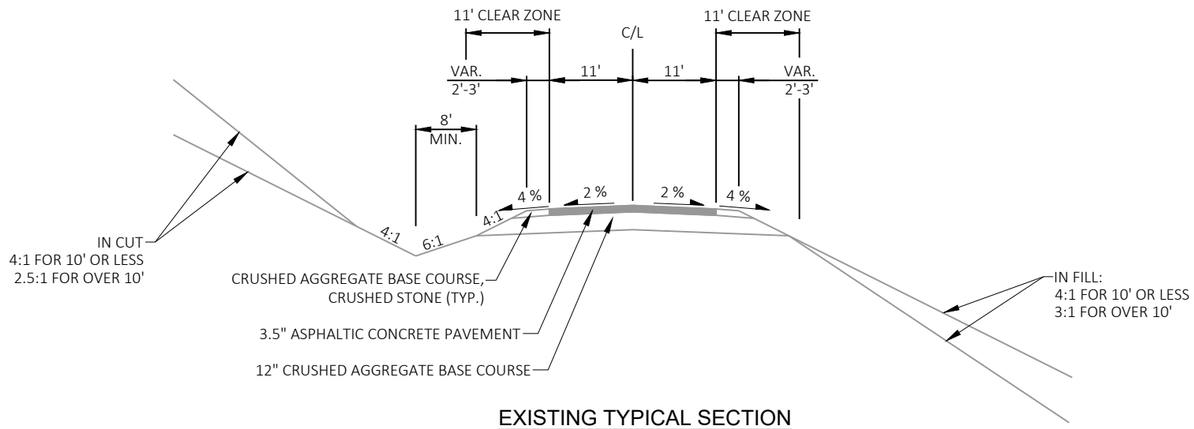
PROJECT NO: 1204-08-73/1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 6	E

2



EXISTING TYPICAL SECTION

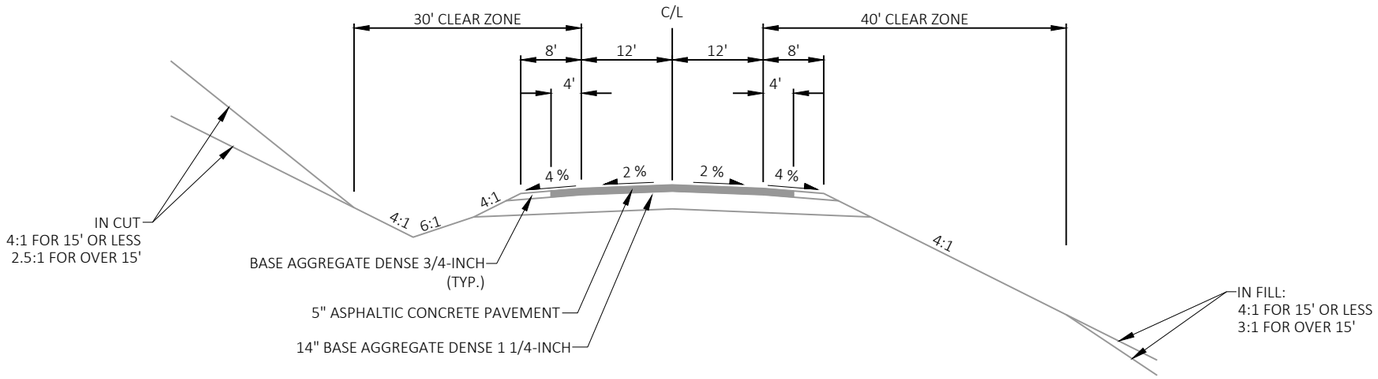
USH 18 RAMP W4
STA 529+66'W4' - STA 540+31'W4'



EXISTING TYPICAL SECTION

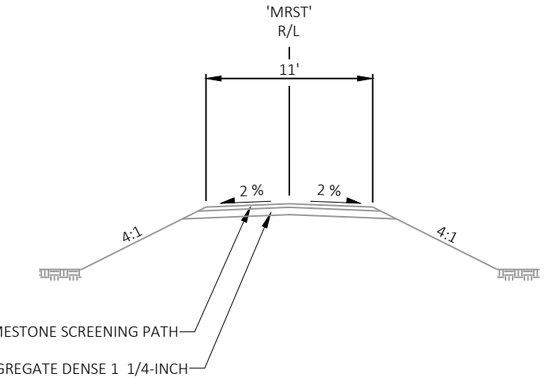
DAIRY RIDGE RD
STA 32+00'G' - STA 39+50'G'

PROJECT NO: 1204-08-73/1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 7	E



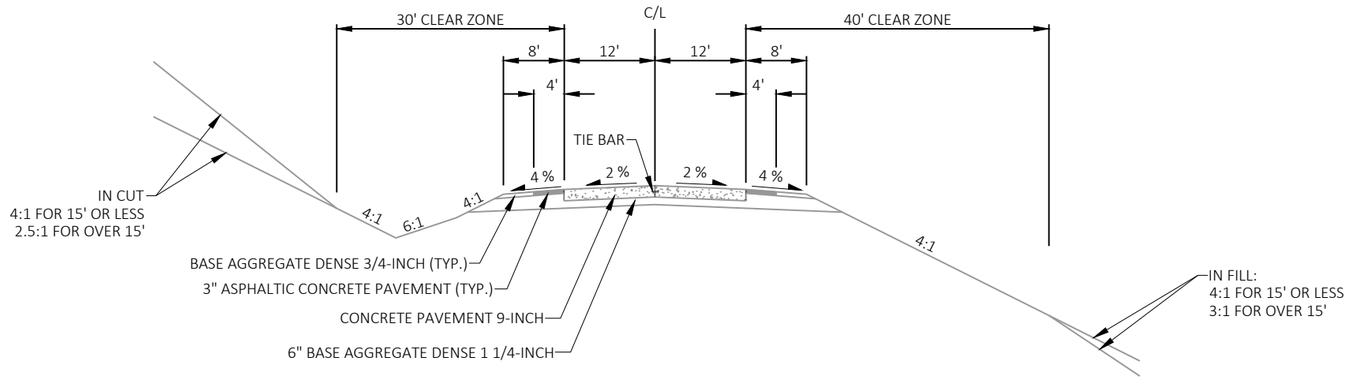
EXISTING TYPICAL SECTION

CTH G/DAIRY RIDGE RD
STA 39+50'G' - STA 45+90'G'
STA 53+45'G' - STA 75+00'G'



EXISTING TYPICAL SECTION

MILITARY RIDGE STATE TRAIL
STA 10+40.00'MRST' - STA 13+15'MRST'



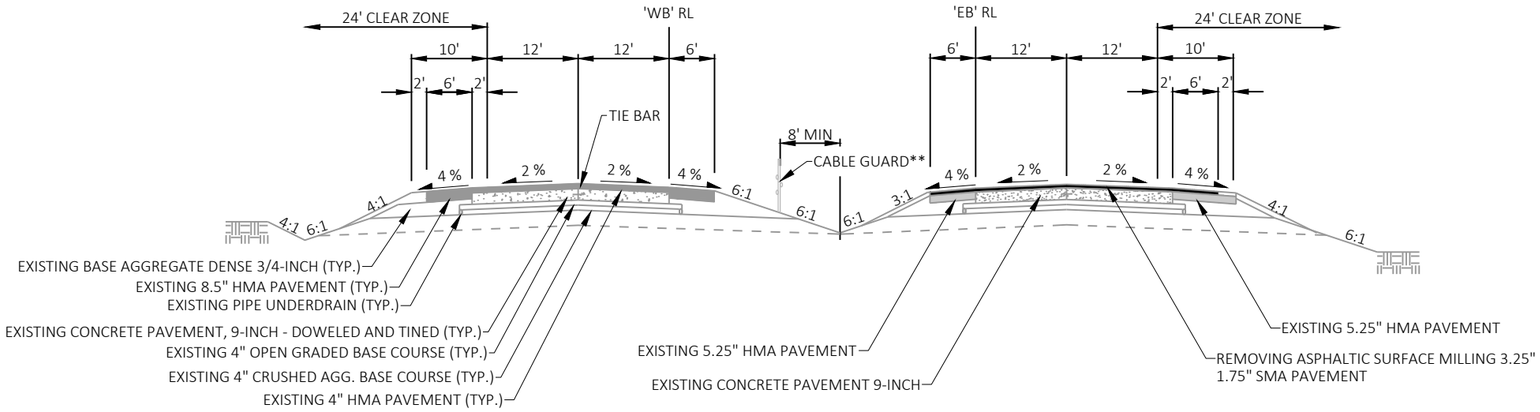
EXISTING TYPICAL SECTION

CTH G
STA 45+90'G' - STA 53+45'G'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 8	E

FILE NAME : C:\USERS\ARBUCKLEA\ONEDRIVE - AECOM\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\020301-TS.DWG
LAYOUT NAME - 05
PLOT DATE : 11/25/2024 6:46 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

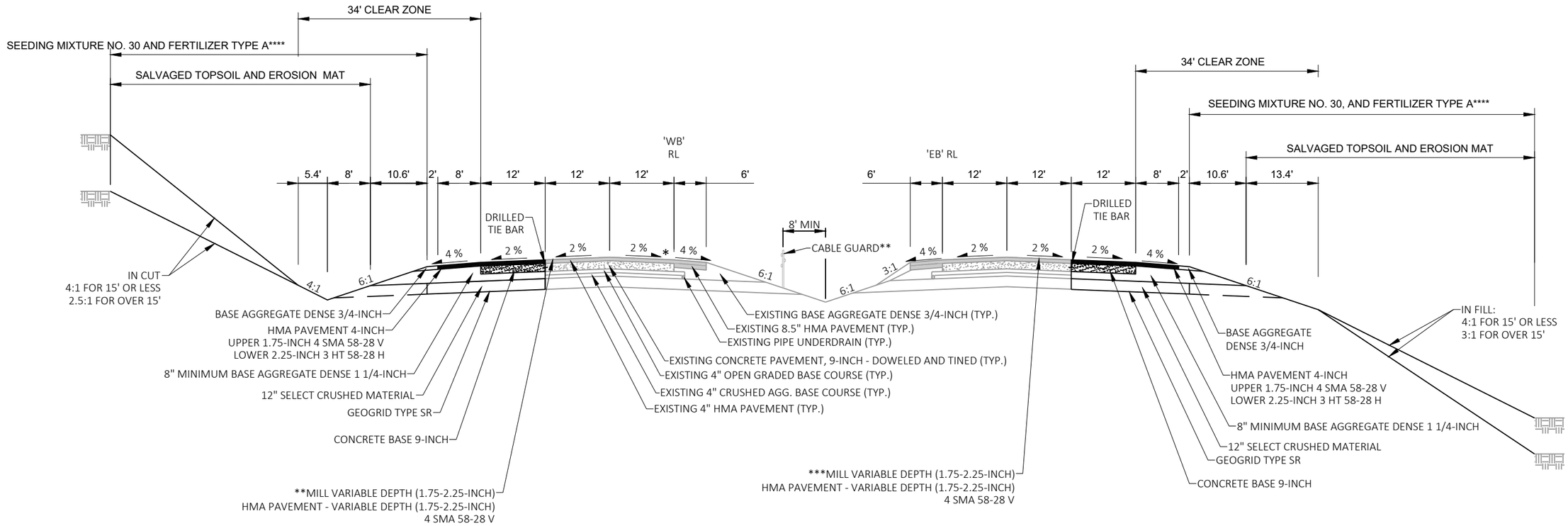
2



* SEE CONSTRUCTION DETAILS - REMOVING ASPHALTIC SURFACE MILLING FOR MORE INFO

FINISHED TYPICAL SECTION

STA 458+72'EB' - STA 466+43'EB'



** STA 498+48 'WB' - STA 500+00 'WB'

FINISHED TYPICAL SECTION

STA 476+67'WB' - STA 500+00'WB'

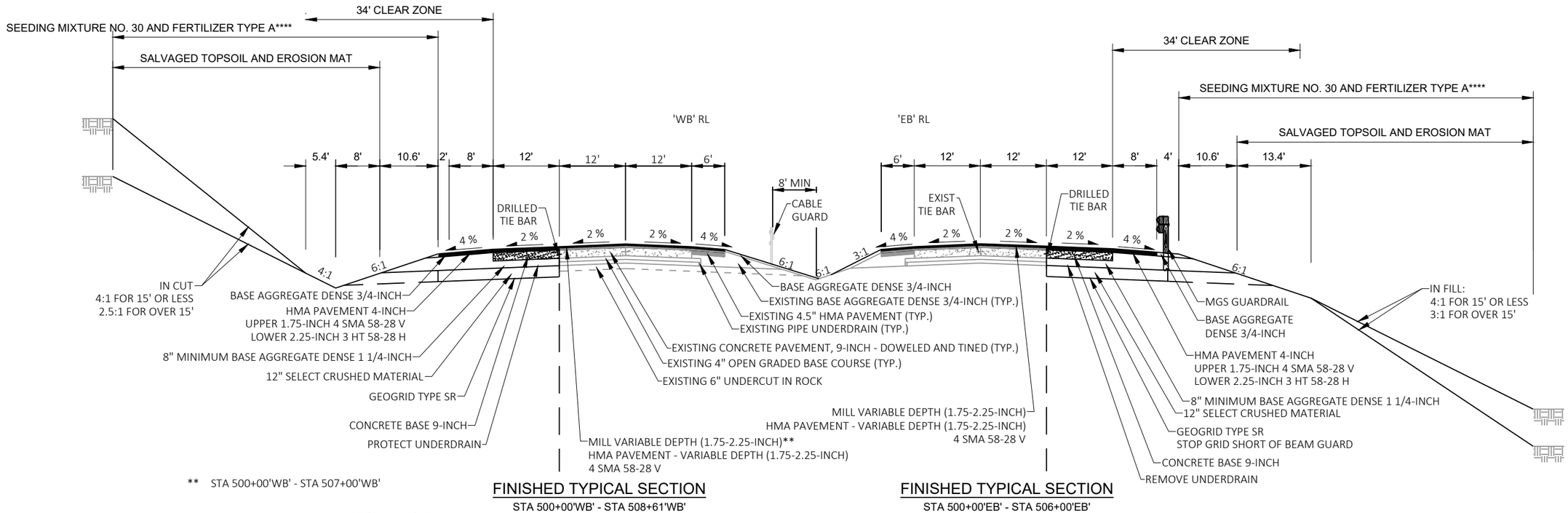
*** STA 497+32 'WB' - STA 500+00 'WB'

FINISHED TYPICAL SECTION

STA 480+00'EB' - STA 500+00'EB'

**** USE SEEDING MIXTURE NO. 60 AND OMIT FERTILIZER TYPE A WHERE WETLANDS ARE PRESENT

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 9	E



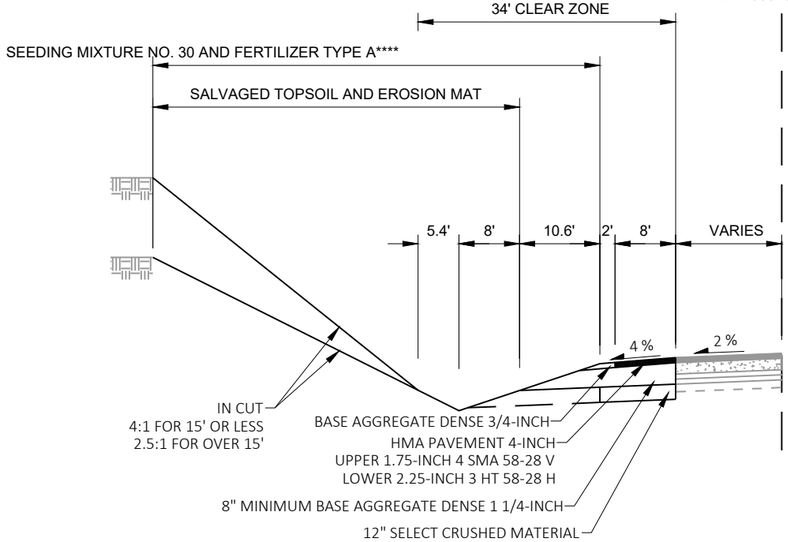
** STA 500+00'WB' - STA 507+00'WB'

FINISHED TYPICAL SECTION

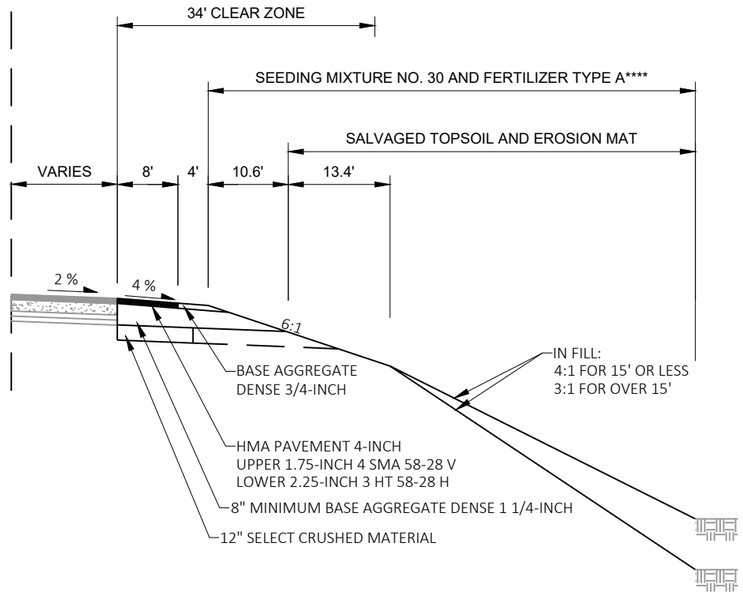
STA 500+00'WB' - STA 508+61'WB'

FINISHED TYPICAL SECTION

STA 500+00'EB' - STA 506+00'EB'



**** USE SEEDING MIXTURE NO. 60 AND OMIT FERTILIZER TYPE A WHERE WETLANDS ARE PRESENT

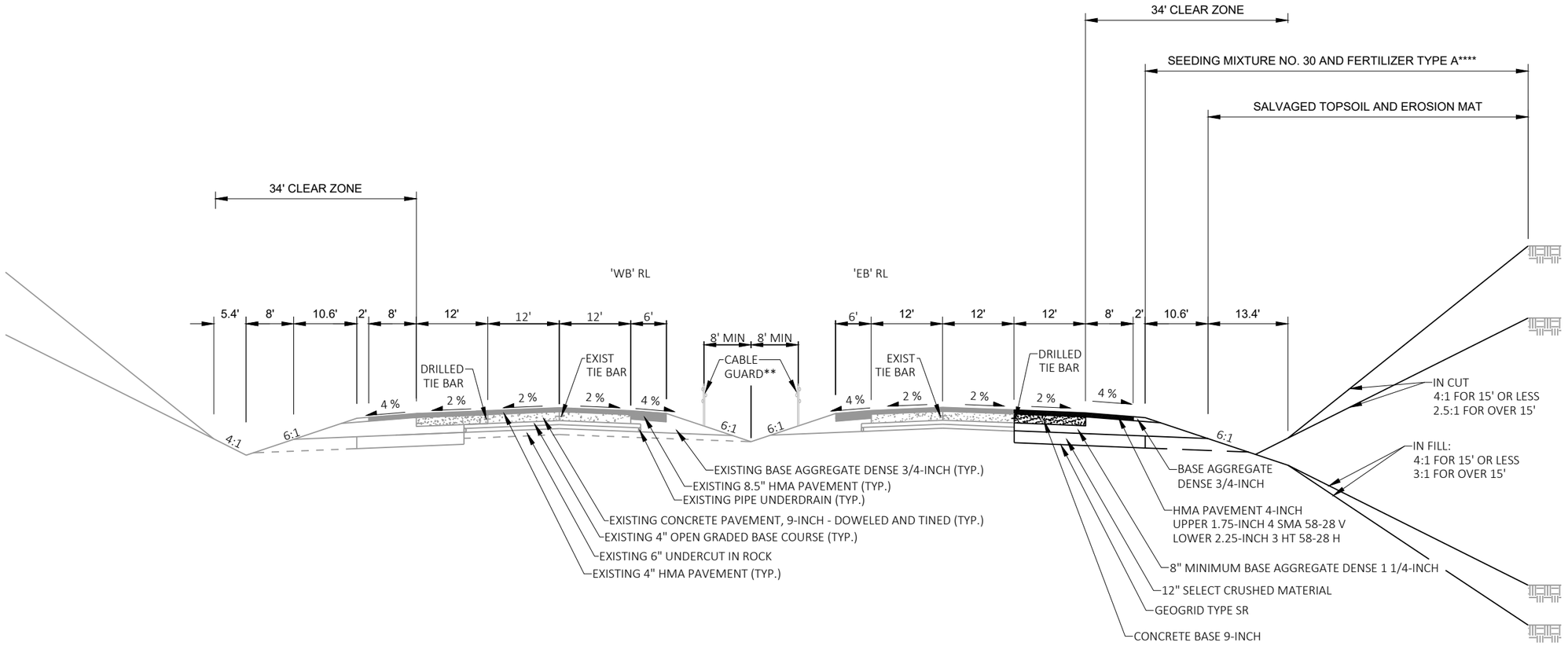


STA 505+78 'WB' - STA 508+61 'WB'

STA 504+46 'WB' - STA 506+00 'WB'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 10	E

2

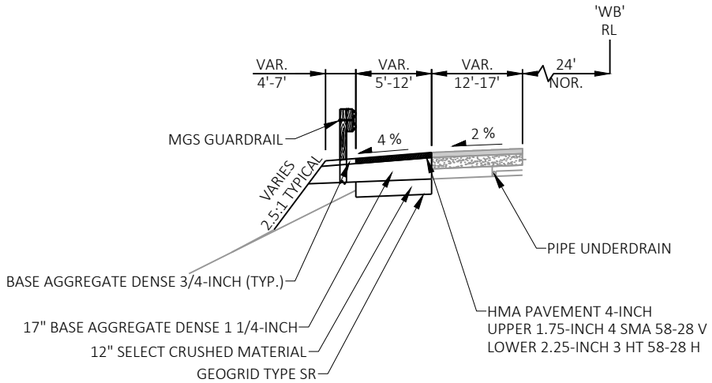


FINISHED TYPICAL SECTION

STA 545+49'EB' - STA 571+73'EB'

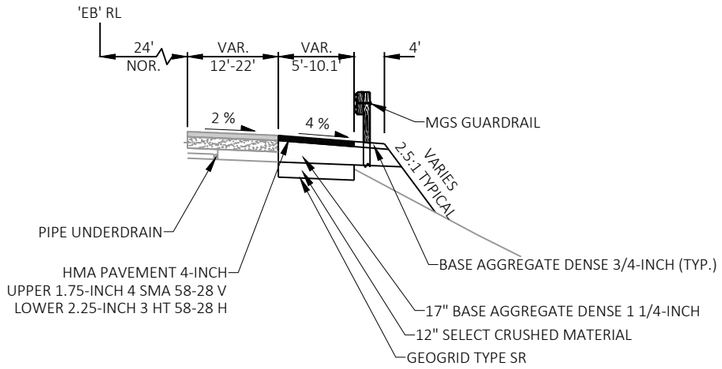
** STA 545+38'EB' - STA 571+72'EB'
SALVAGE AND REINSTALL CABLE GUARD AFTER REMOVING TEMP PAVEMENT

**** USE SEEDING MIXTURE NO. 60 AND OMIT FERTILIZER TYPE A WHERE WETLANDS ARE PRESENT



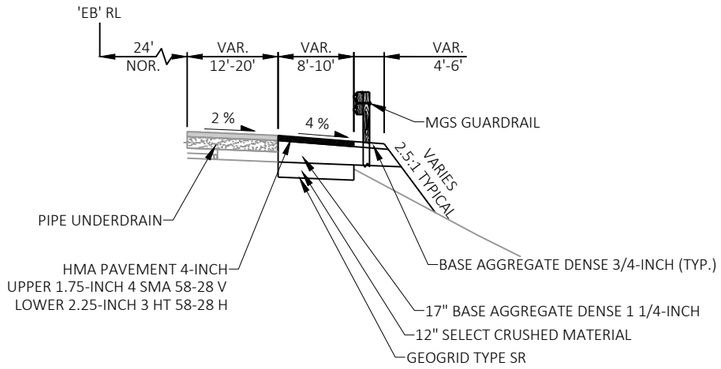
PARTIAL FINISHED TYPICAL SECTION - MGS GUARDRAIL

STA 476+75'WB' - STA 478+82'WB', LT
STA 505+78'WB' - STA 507+39'WB', LT



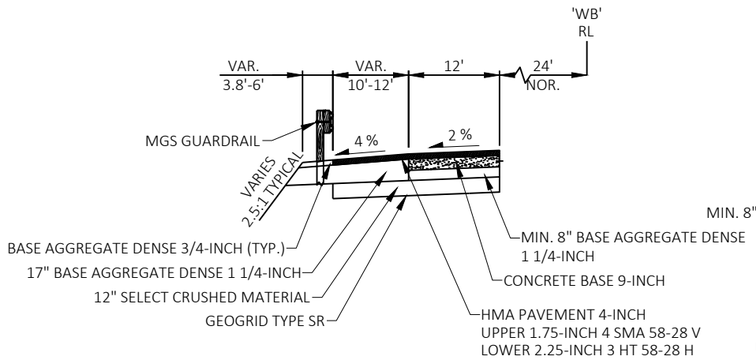
PARTIAL FINISHED TYPICAL SECTION - MGS GUARDRAIL

STA 480+52'EB' - STA 481+95'EB', RT
STA 504+46'EB' - STA 505+80'EB', RT
STA 570+68'EB' - STA 571+33'EB', RT



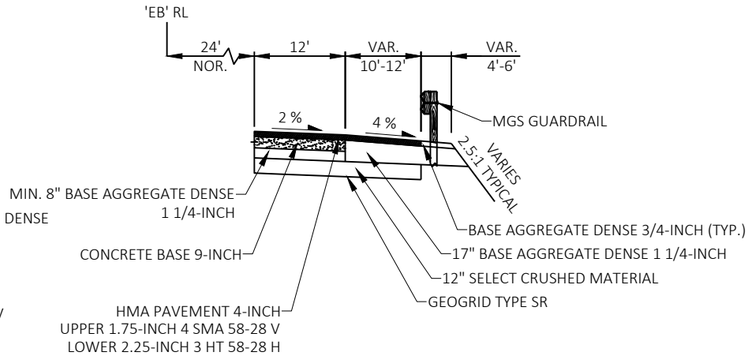
PARTIAL FINISHED TYPICAL SECTION - MGS GUARDRAIL

STA 545+61'EB' - STA 549+48'EB', RT



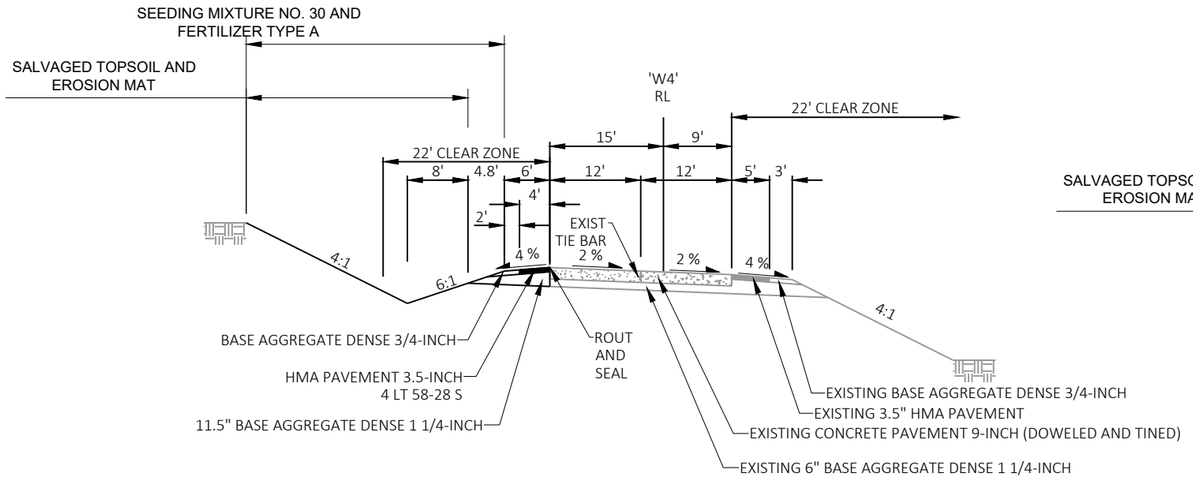
PARTIAL FINISHED TYPICAL SECTION - MGS GUARDRAIL

STA 478+82'WB' - STA 478+93'WB', LT
STA 489+65'WB' - STA 505+78'WB', LT



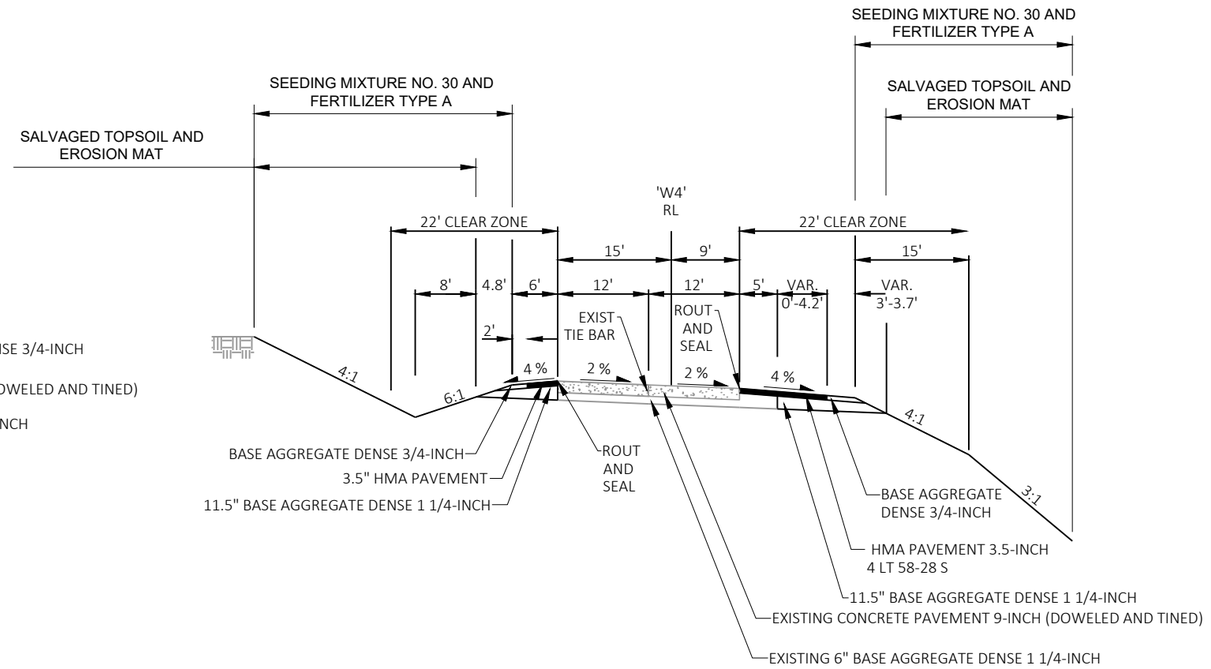
PARTIAL FINISHED TYPICAL SECTION - MGS GUARDRAIL

STA 481+95'EB' - STA 487+94'EB', RT
STA 489+59'EB' - STA 504+46'EB', RT
STA 548+46'EB' - STA 549+48'EB', RT
STA 570+20'EB' - STA 570+68'EB', RT



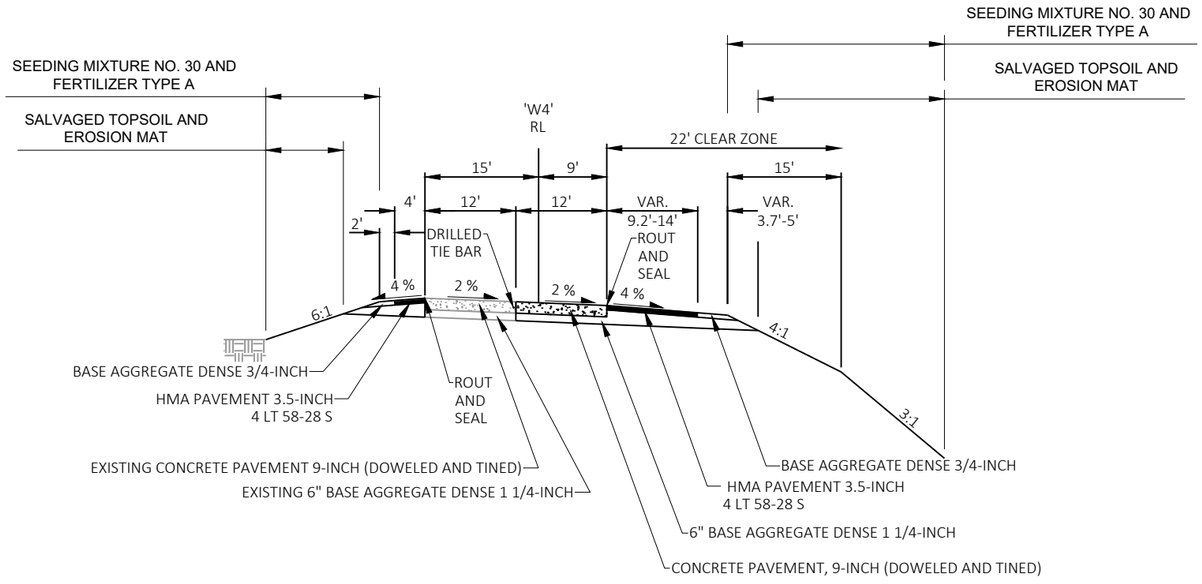
FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 523+00'W4' - STA 524+00'W4'



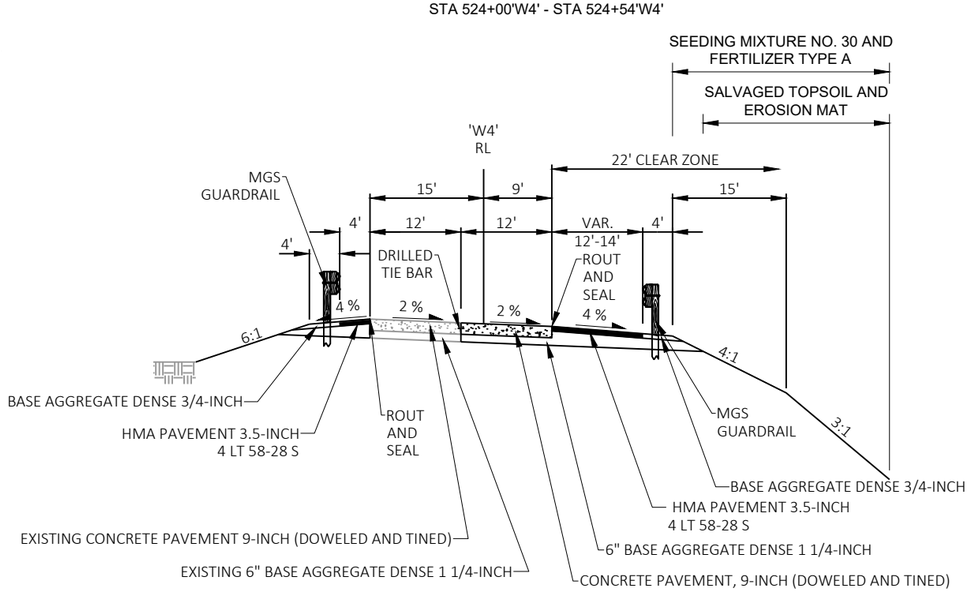
FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 524+00'W4' - STA 524+54'W4'



FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 524+54'W4' - STA 525+20'W4'

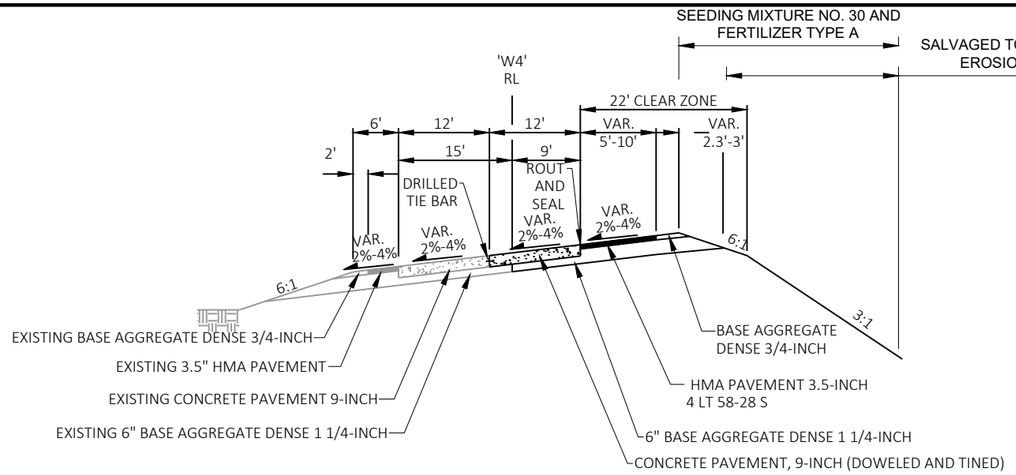


FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 525+20'W4' - STA 527+05'W4'

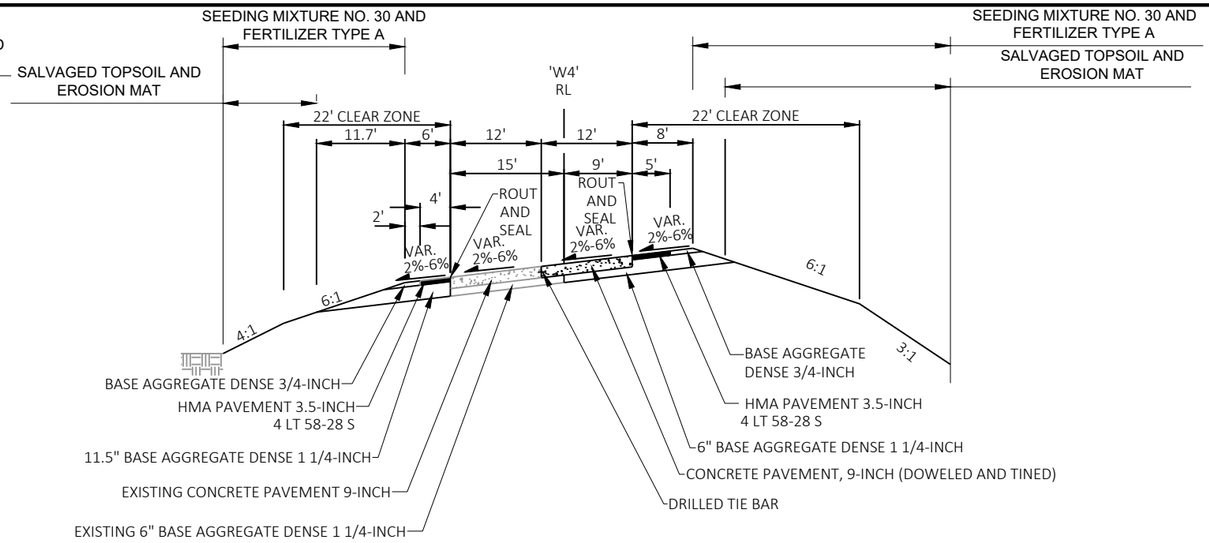
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 13	E

FILE NAME : C:\USERS\ARBUCKLEA\ONEDRIVE - AECOM\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\020301-TS.DWG
LAYOUT NAME - 10
PLOT DATE : 11/25/2024 6:46 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42



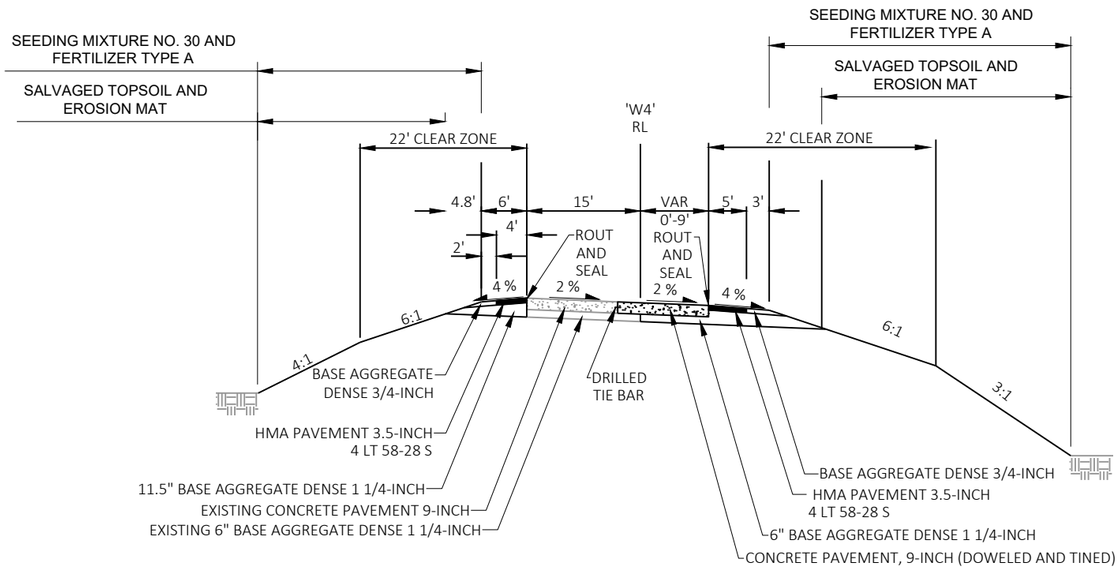
FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 529+66'W4' - STA 530+97'W4'



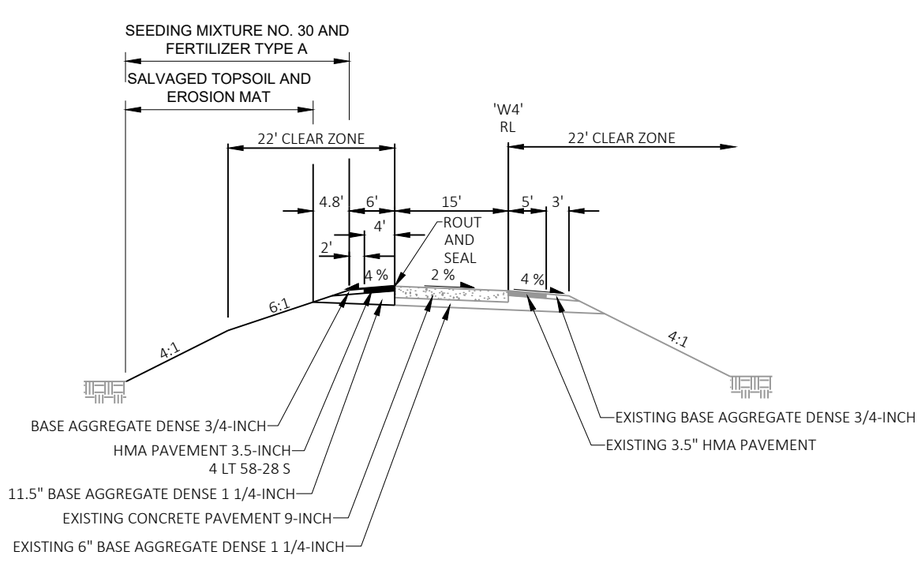
FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 530+97'W4' - STA 538+23'W4'



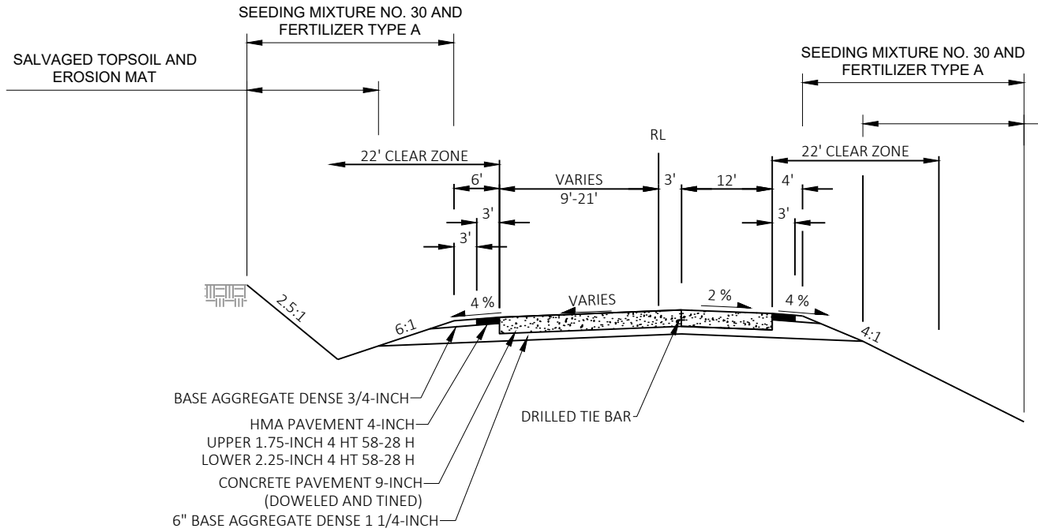
FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 538+23'W4' - STA 540+31'W4'



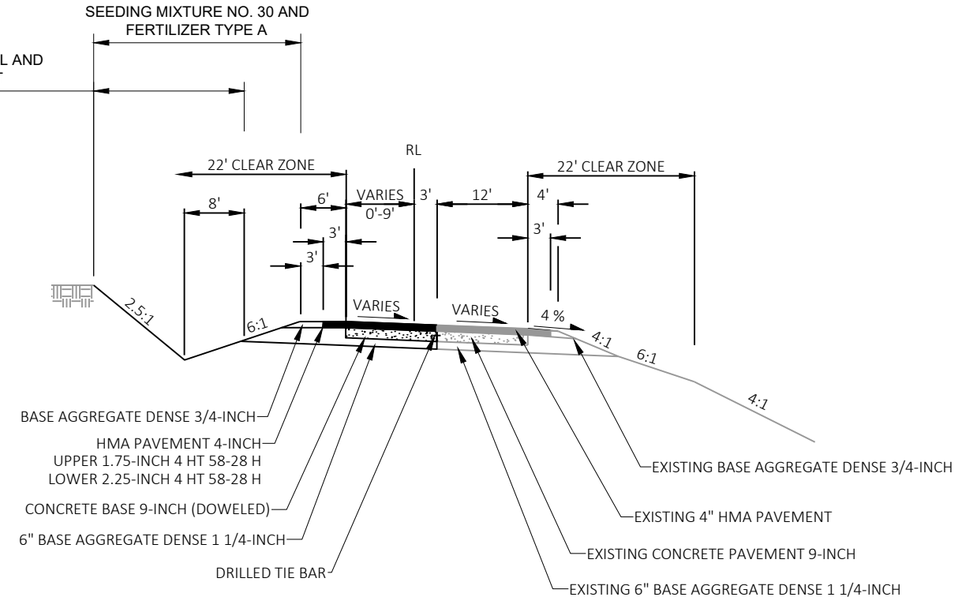
FINISHED TYPICAL SECTION

USH 18 RAMP W4
STA 540+31'W4' - STA 544+00'W4'



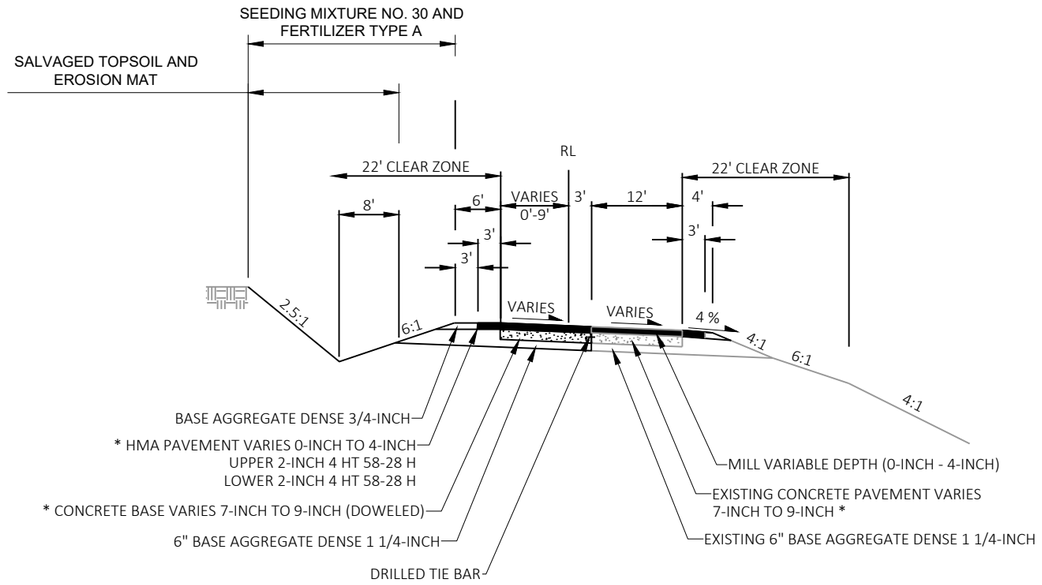
FINISHED TYPICAL SECTION

STA 463+36 'GA' - STA 464+35 'GA'



FINISHED TYPICAL SECTION

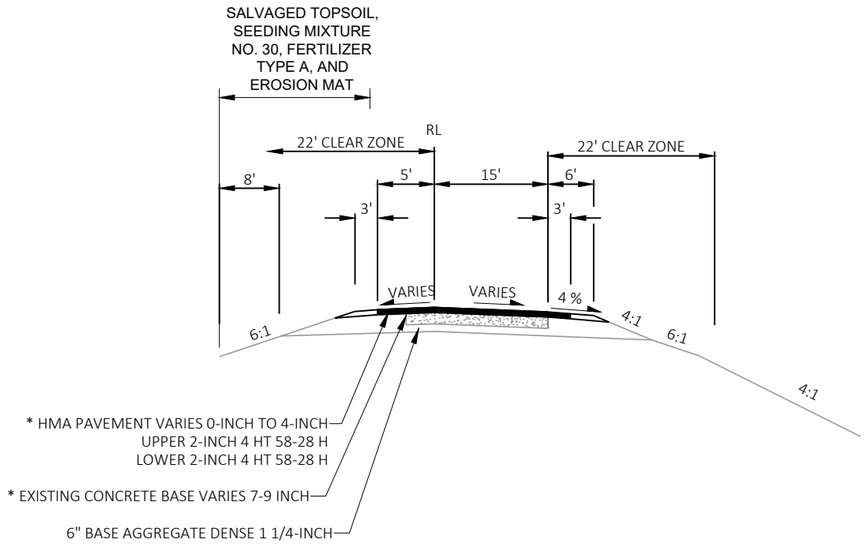
STA 465+35 'GA' - STA 468+00 'GA'



FINISHED TYPICAL SECTION

*STA 464+35 'GA' - STA 465+35 'GA'

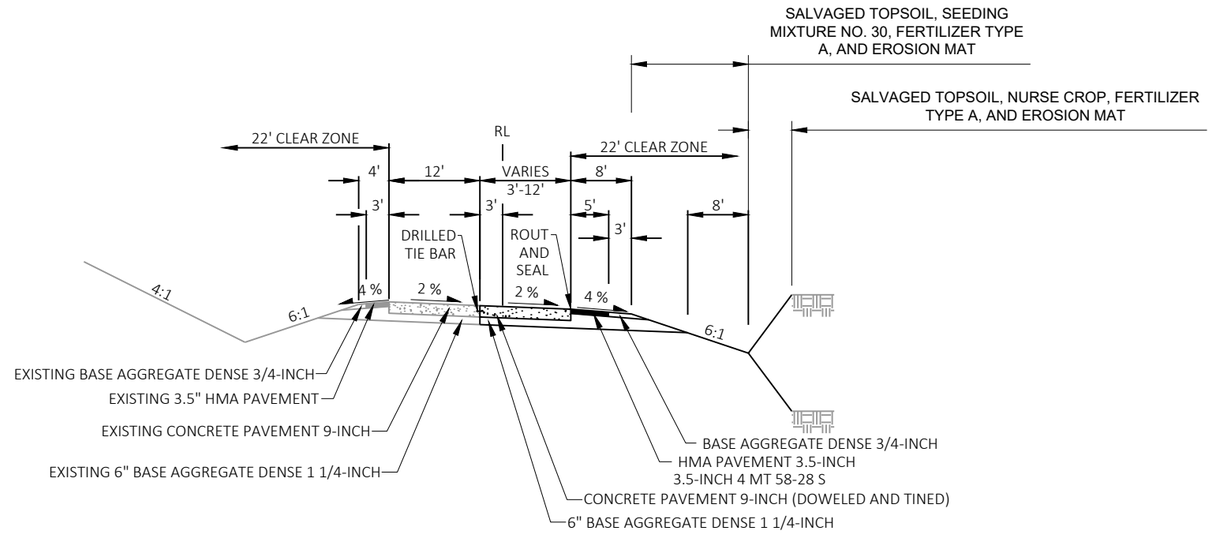
*NOTE: SEE "REMOVING CONCRETE PAVEMENT BUTT JOINTS" CONSTRUCTION DETAILS FOR MORE INFO



FINISHED TYPICAL SECTION

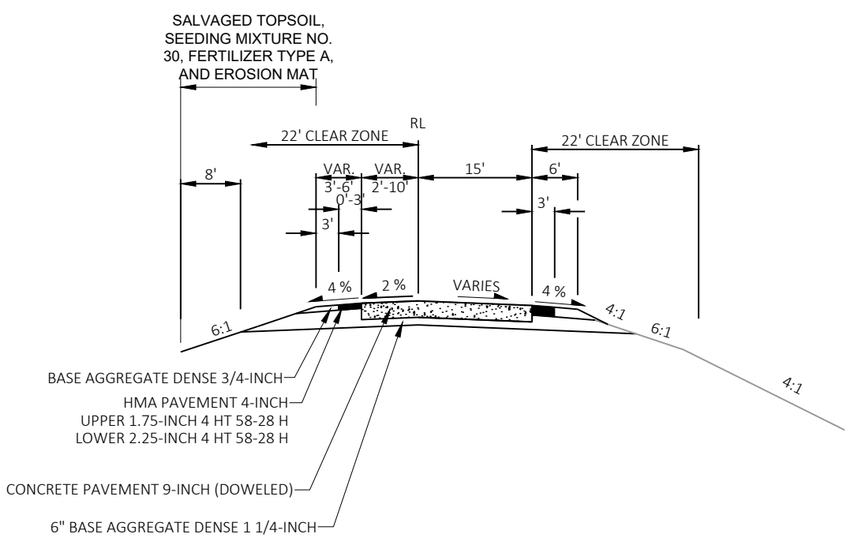
*STA 459+60 'GD' - STA 460+60 'GD'

*NOTE: SEE "REMOVING CONCRETE PAVEMENT BUTT JOINTS" CONSTRUCTION DETAILS FOR MORE INFO



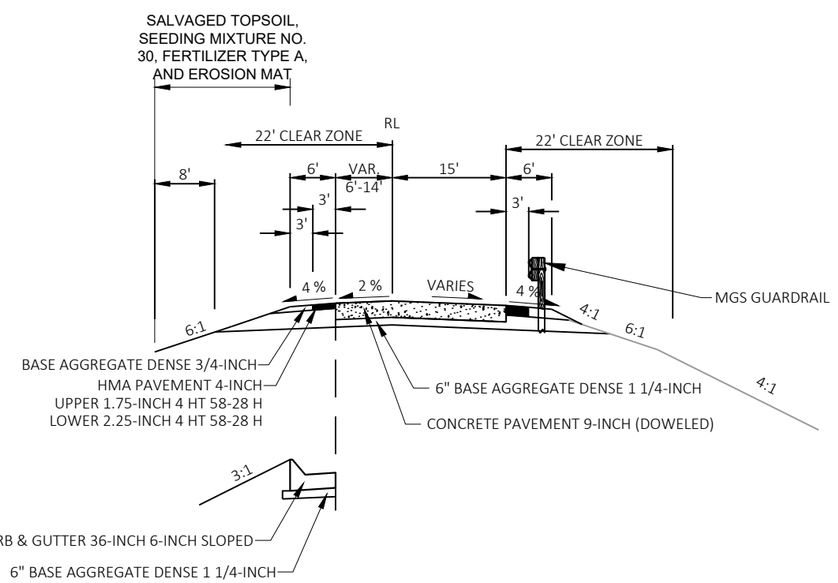
FINISHED TYPICAL SECTION

STA 459+30'GC' - STA 461+69'GC'



FINISHED TYPICAL SECTION

STA 460+59 'GD' - STA 461+51 'GD'

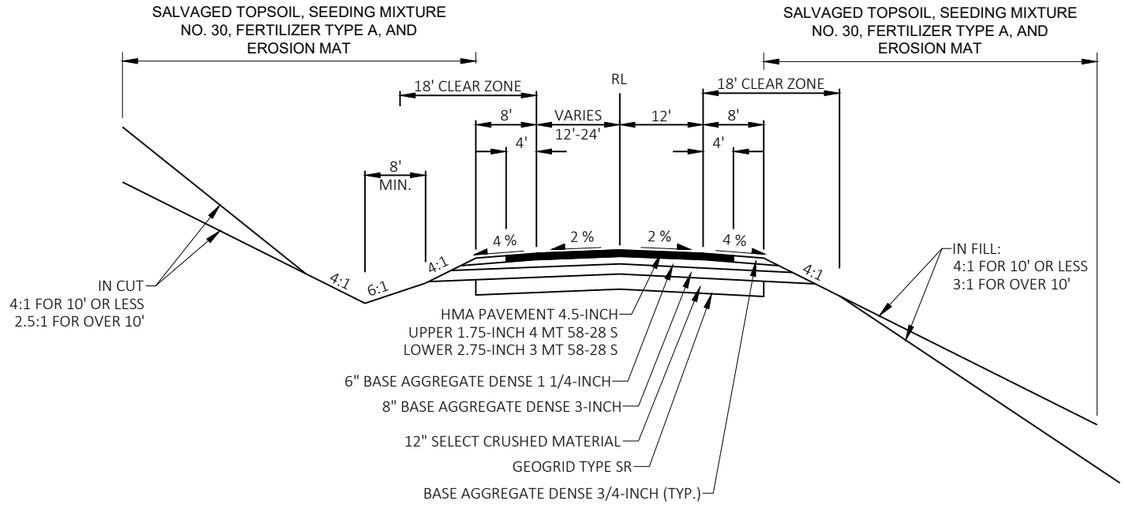


STA 461+60 'GD' - STA 461+84 'GD'

FINISHED TYPICAL SECTION

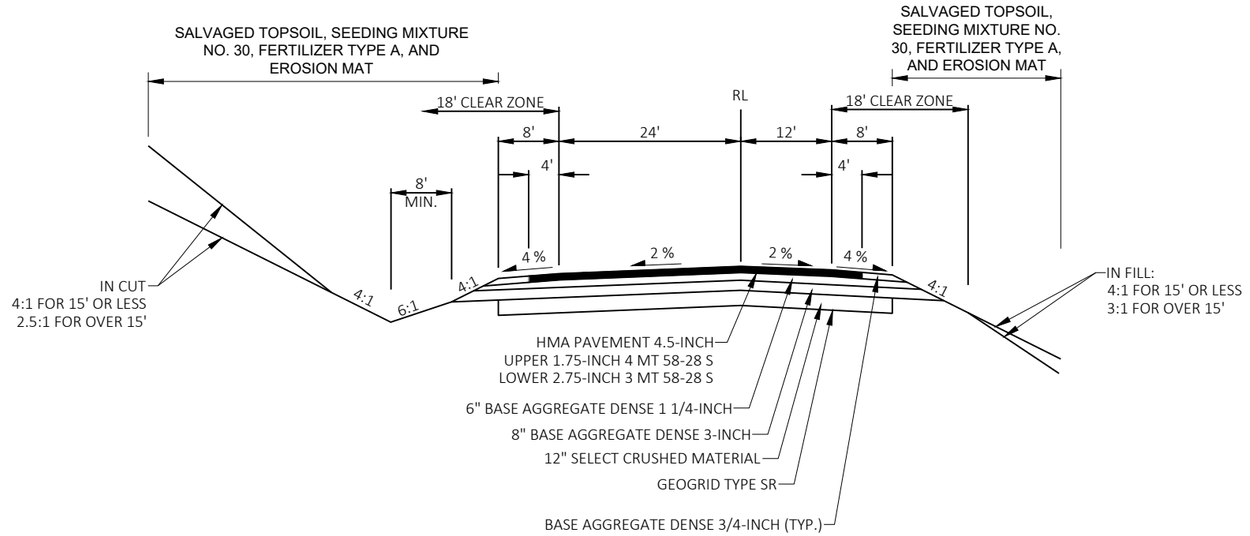
STA 461+42 'GD' - STA 461+84 'GD'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 16	E



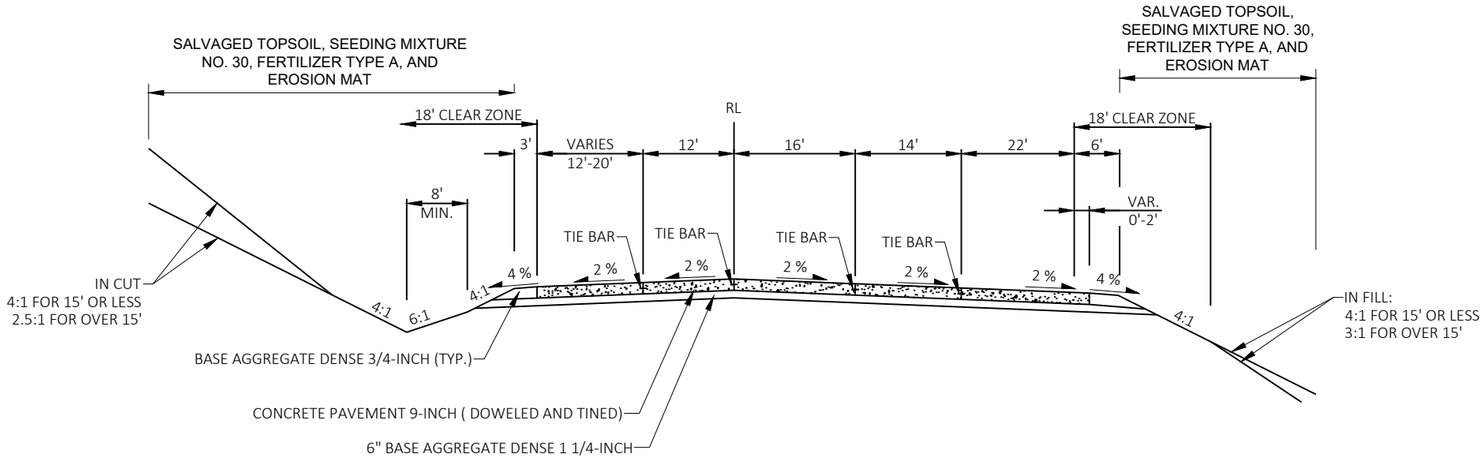
FINISHED TYPICAL SECTION

DAIRY RIDGE RD
STA 32+00'G' - STA 37+55'G'



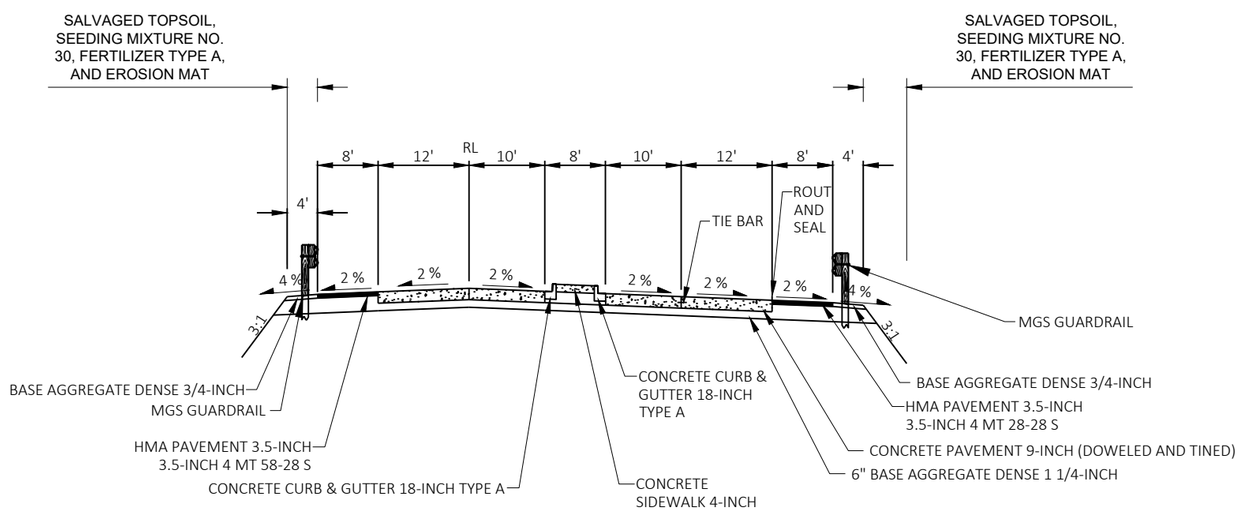
FINISHED TYPICAL SECTION

DAIRY RIDGE RD
STA 37+55'G' - STA 45+66'G'



FINISHED TYPICAL SECTION

DAIRY RIDGE RD
STA 45+66'G' - STA 46+95'G'

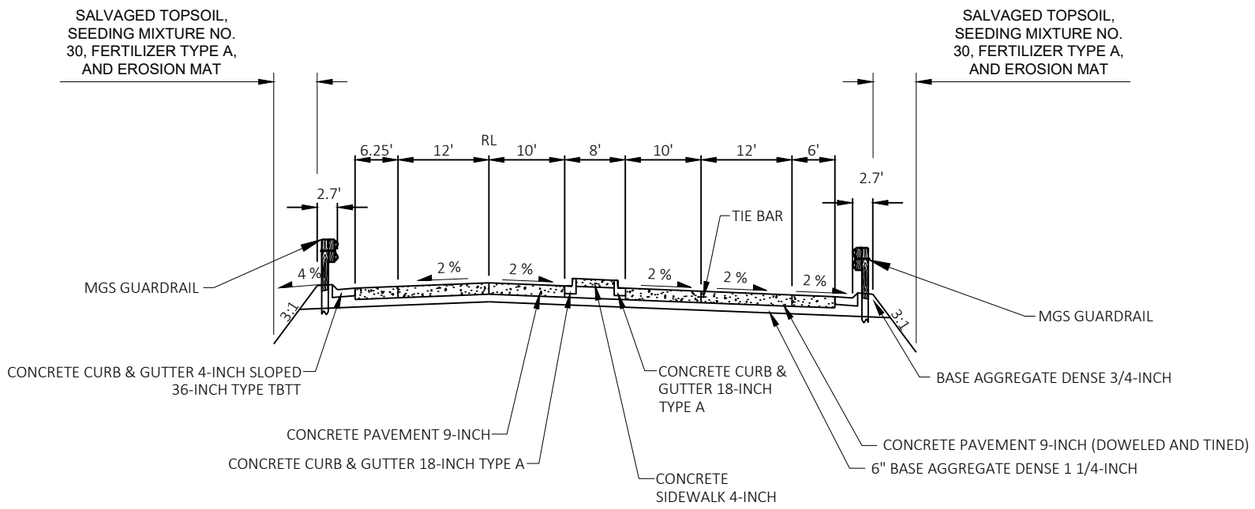


FINISHED TYPICAL SECTION

CTH G
STA 48+10'G' - STA 48+53'G'

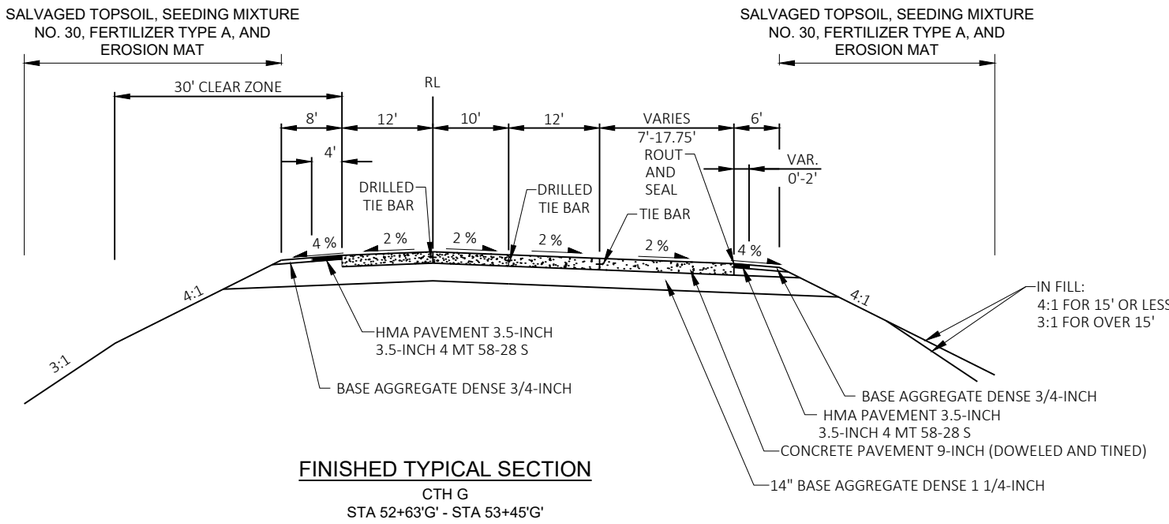
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 18	E

2



FINISHED TYPICAL SECTION

CTH G
STA 50+88'G' - STA 51+35'G'

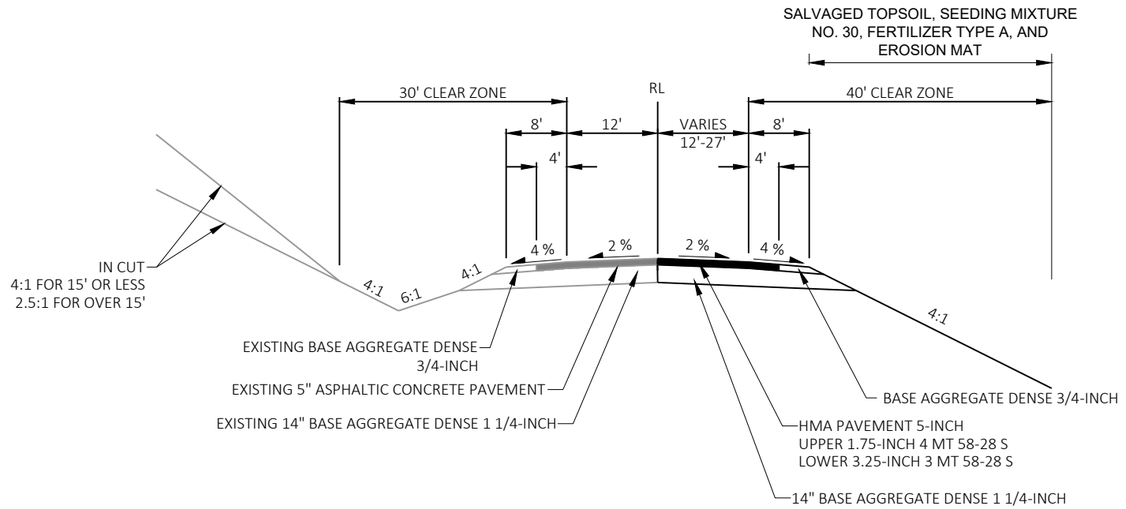


FINISHED TYPICAL SECTION

CTH G
STA 52+63'G' - STA 53+45'G'

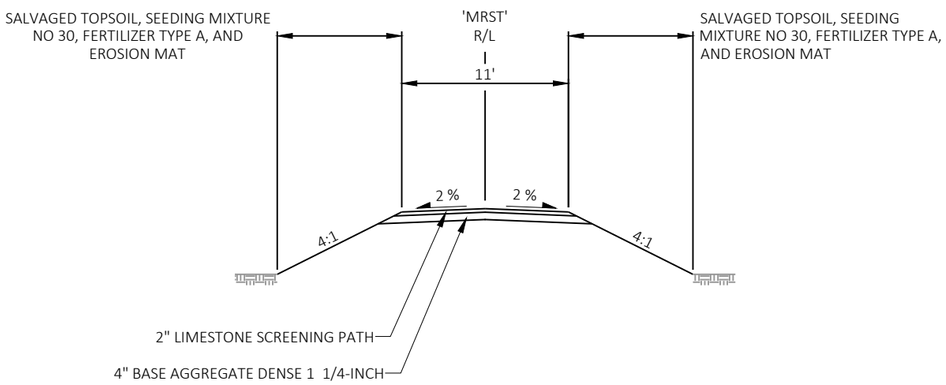
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 19	E

2



FINISHED TYPICAL SECTION

CTH G
STA 53+45'G' - STA 61+85'G'



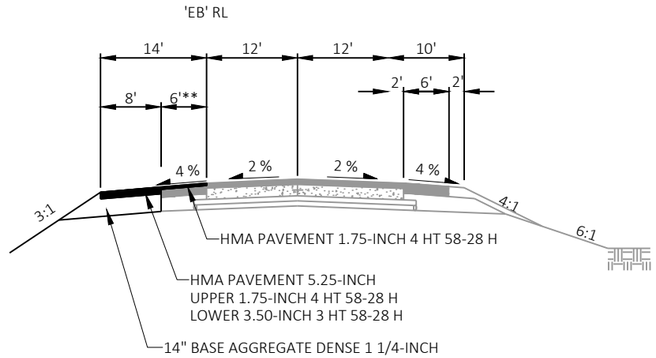
FINISHED TYPICAL SECTION

MILITARY RIDGE STATE TRAIL
STA 10+40.00'MRST' - STA 13+15'MRST'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN: TYPICAL SECTION	SHEET 20	E

FILE NAME : C:\USERS\ARBUCKLEA\ONEDRIVE - AECOM\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\020301-TS.DWG
LAYOUT NAME - 17
PLOT DATE : 11/25/2024 6:46 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

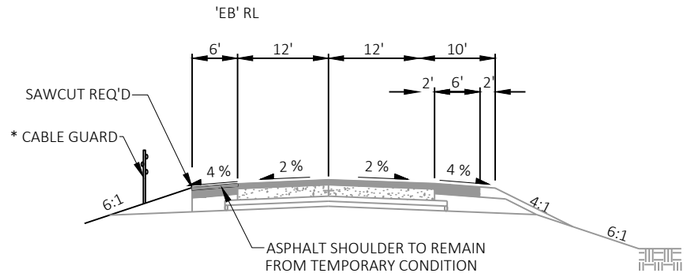
2



** MILL TOP 1.75" OF EXISTING 6' SHOULDER

FINISHED TYPICAL SECTION (TEMPORARY CONDITION)

STA 534+40 'EB' - STA 577+10 'EB'



* SALVAGE AND REINSTALL CABLE GUARD (STA 545+50 'EB' - STA 577+10 'EB')

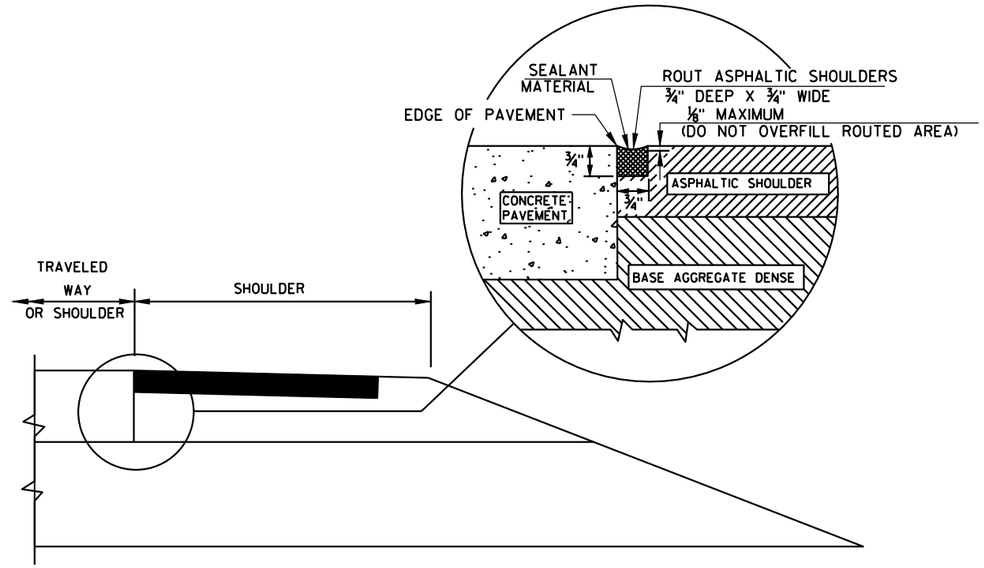
FINISHED TYPICAL SECTION (FINAL CONDITION)

STA 534+40 'EB' - STA 577+10 'EB'

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											

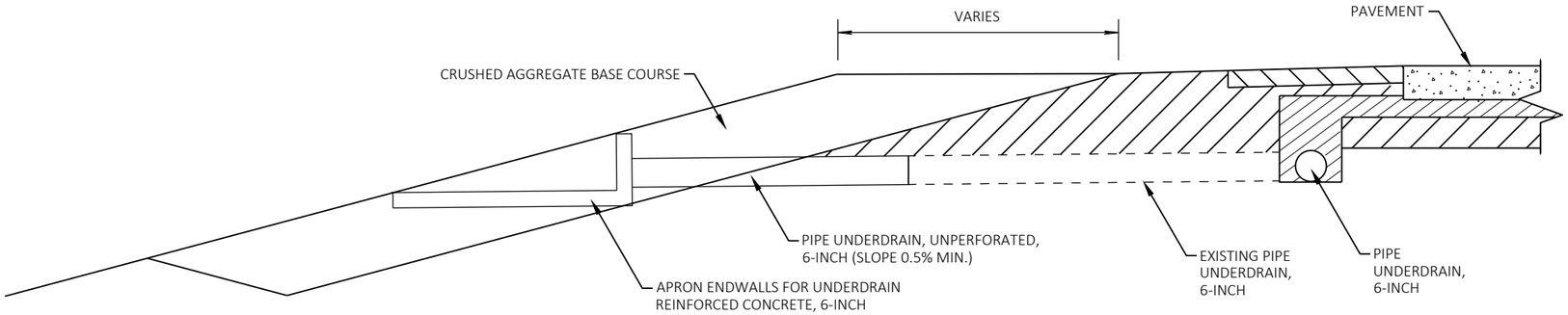
TOTAL PROJECT AREA = 23.68 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 16.40 ACRES



ROUT AND SEAL DETAIL

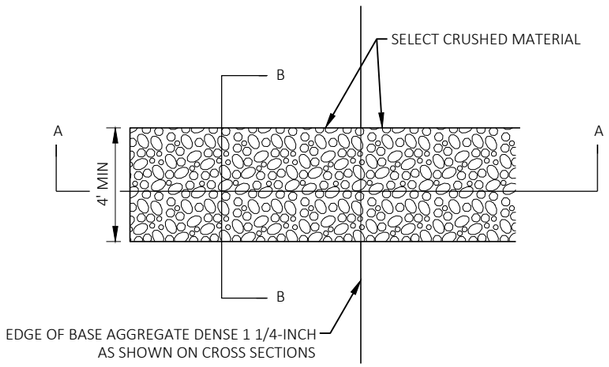
SEE TYPICAL FINISHED SECTIONS FOR LOCATIONS

2

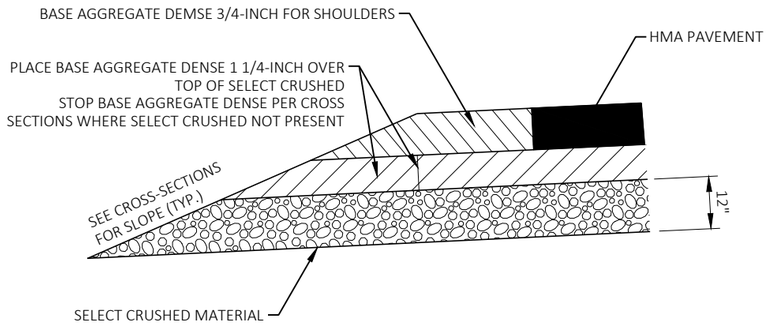


EXTENDING PIPE UNDERDRAIN OUTFALL DETAIL

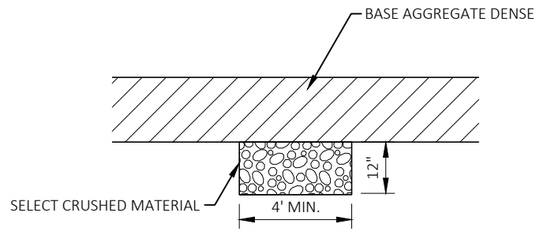
STA 534+40'EB' - 577+10'EB'
(SEE PLANS FOR LOCATIONS)



PLAN VIEW



SECTION A-A



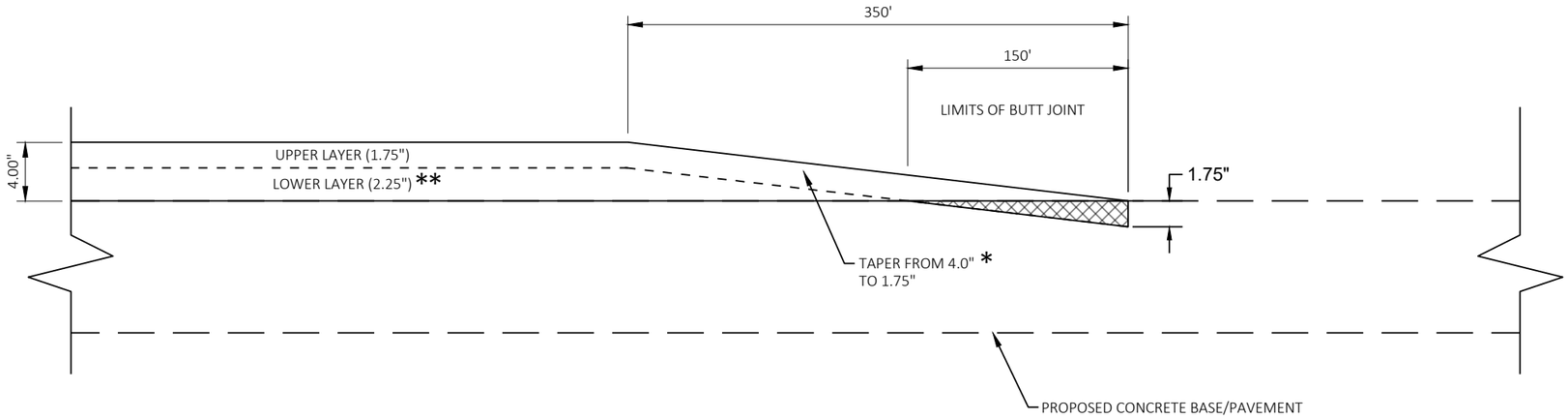
SECTION B-B

RELIEF TRENCH DETAIL

STA 481+94'EB' - 504+46'EB'
STA 545+11'EB' - 571+73'EB'
STA 478+82'WB' - 505+78'WB'

CONSTRUCT RELIEF TRENCHES AT LEAST EVERY 250' AND AT
EACH SAG VERTICAL CURVE IN THE PROFILE.
(LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER)

2



TAPERING CONCRETE PAVEMENT DEPTH ***

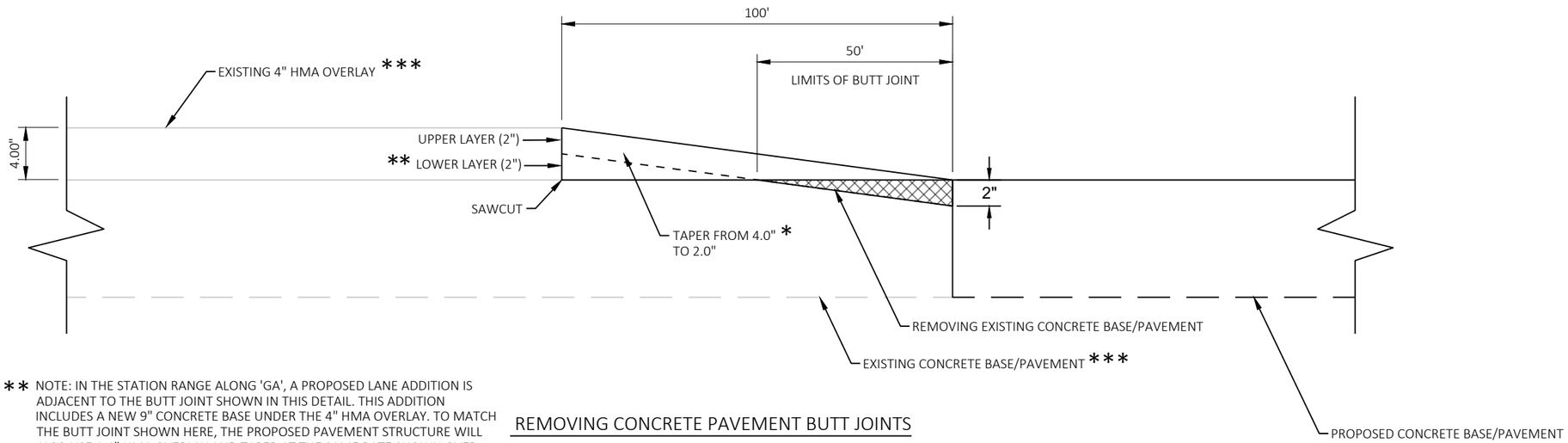
STA 486+31'EB' - 487+81'EB'
STA 489+53'EB' - 491+03'EB'

STA 486+23'WB' - 487+73'WB'
STA 489+79'WB' - 491+29'WB'

* NOTE: TAPER THICKNESS OF HMA PAVEMENT LOWER LAYER. UPPER LAYER TO MAINTAIN UNIFORM THICKNESS OF 1.75".

** NOTE: TAPER HMA LOWER LAYER FROM 2.25" TO 0" IN 200' BEGINNING 350' FROM THE BUTT JOINT.

*** NOTE: THE STATION RANGES LISTED IN THIS DETAIL ARE FOR THE PROPOSED AUX LANE ADDITIONS. THE INTENT OF THIS DETAIL IS TO INDICATE THAT THOSE AUX LANES SHOULD FOLLOW THIS PAVEMENT STRUCTURE. THE PROPOSED AUX LANE ADDITIONS INCLUDE A NEW 9" CONCRETE BASE UNDER THE 4" HMA OVERLAY. TO MATCH THE ADJACENT BUTT JOINTS OF THE EXISTING PAVEMENT, THE PROPOSED PAVEMENT STRUCTURE WILL ALSO USE A 4" HMA OVERLAY AND TAPER AT THE RATE SHOWN OVER 350'. THE PROPOSED CONCRETE BASE WILL THEN TAPER FROM 9" TO 7.25" OVER 150' TO TIE IN AND MATCH THE SAME GRADES AS THE ADJACENT EXISTING PAVEMENT.



REMOVING CONCRETE PAVEMENT BUTT JOINTS

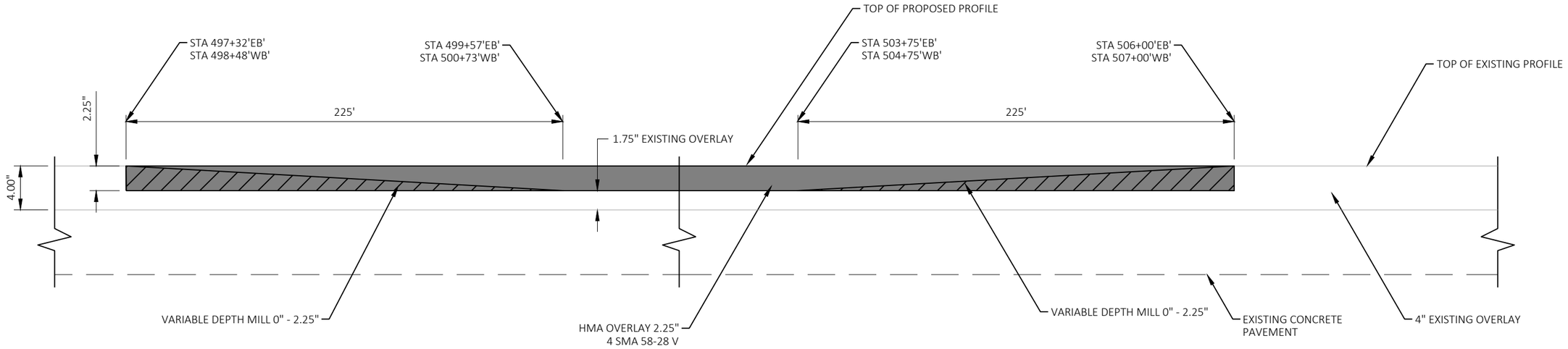
STA 464+35'GA' - 465+35'GA'
STA 459+60'GD' - 460+60'GD'

* NOTE: TAPER THICKNESS OF HMA PAVEMENT LOWER LAYER. UPPER LAYER TO MAINTAIN UNIFORM THICKNESS OF 2".

** NOTE: TAPER HMA LOWER LAYER FROM 2" TO 0" IN 50' BEGINNING 100' FROM THE BUTT JOINT.

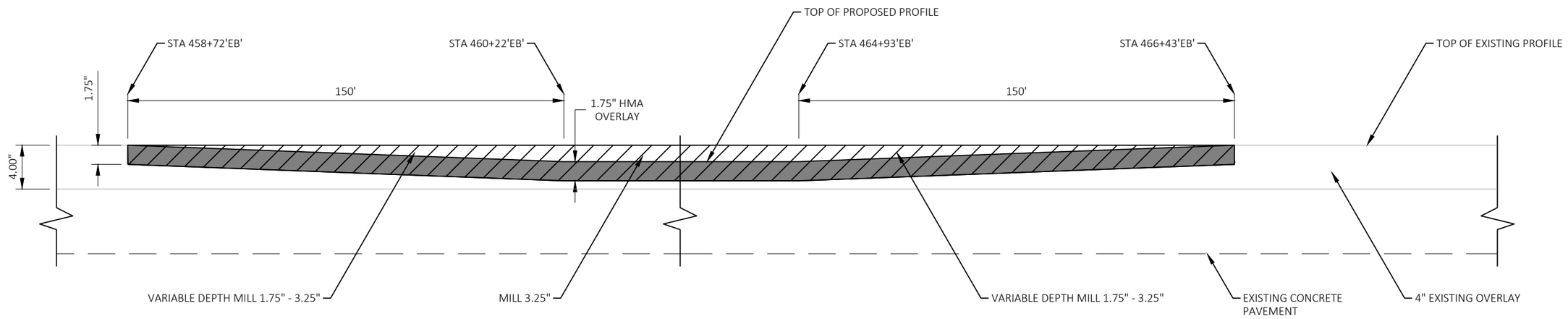
*** NOTE: IN THE STATION RANGE ALONG 'GA', A PROPOSED LANE ADDITION IS ADJACENT TO THE BUTT JOINT SHOWN IN THIS DETAIL. THIS ADDITION INCLUDES A NEW 9" CONCRETE BASE UNDER THE 4" HMA OVERLAY. TO MATCH THE BUTT JOINT SHOWN HERE, THE PROPOSED PAVEMENT STRUCTURE WILL ALSO USE A 4" HMA OVERLAY AND TAPER AT THE SAME RATE SHOWN OVER 100'. THE PROPOSED CONCRETE BASE WILL THEN TAPER FROM 9" TO 7" OVER 50' TO TIE IN AND MATCH THE SAME GRADES AS THE BUTT JOINT.

2



REMOVING ASPHALTIC SURFACE MILLING

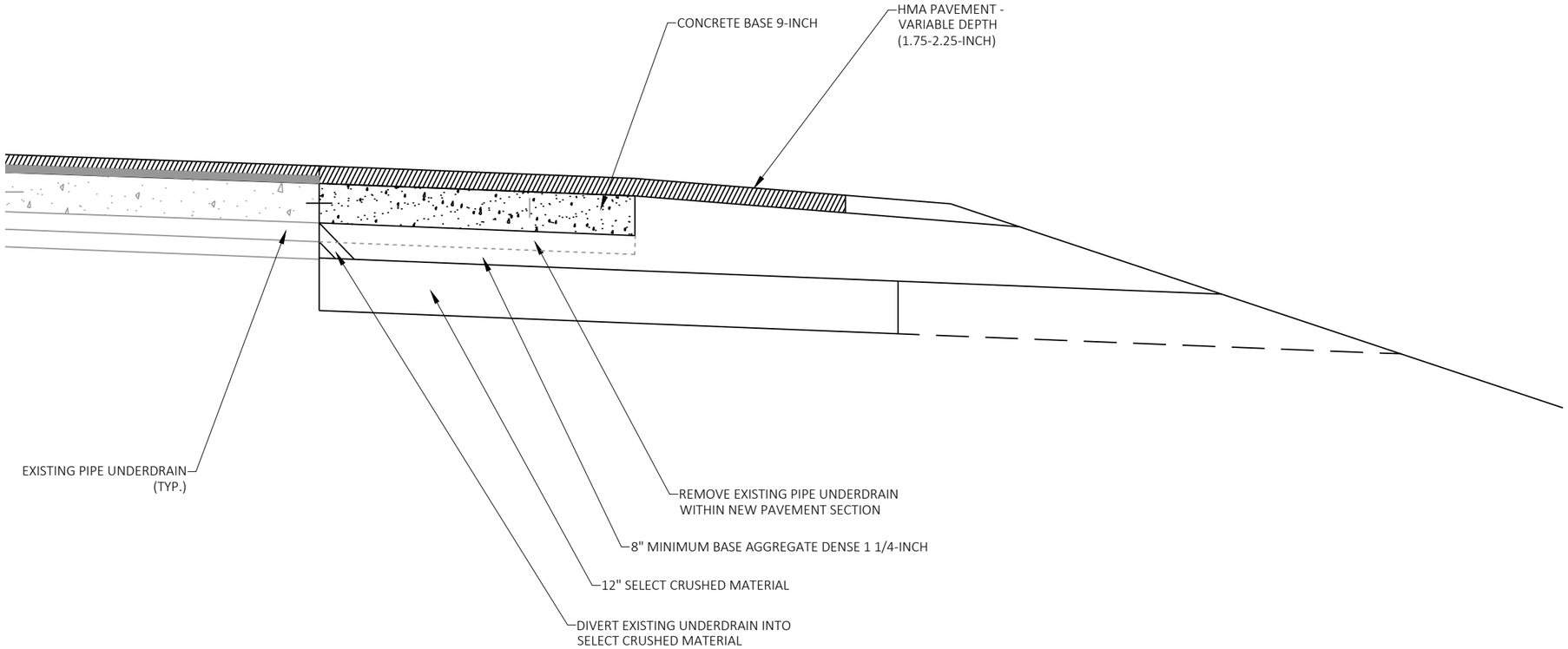
STA 497+32'EB' - 499+57'EB'
STA 498+48'WB' - 500+73'WB'
STA 503+75'EB' - 506+00'EB'
STA 504+75'WB' - 507+00'WB'



REMOVING APSHALTIC SURFACE MILLING

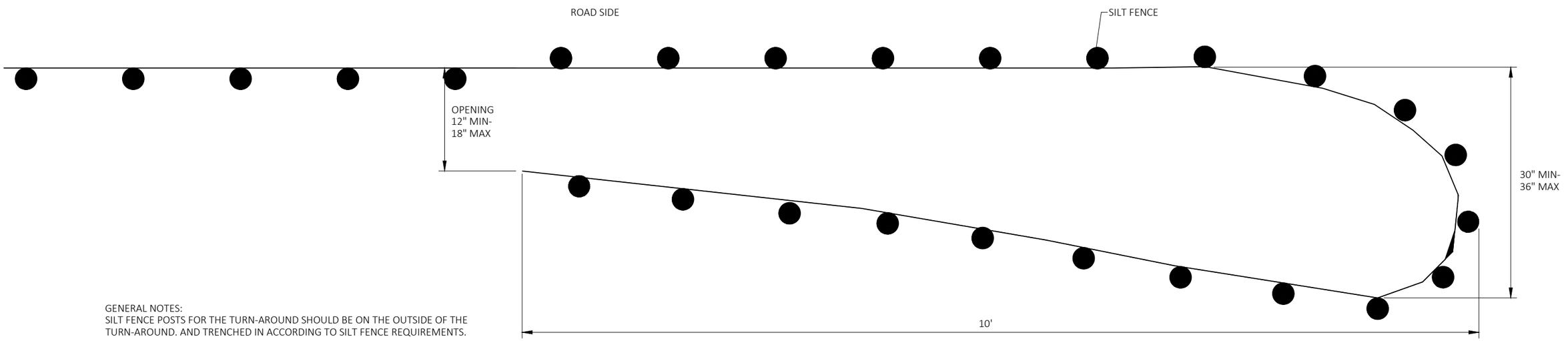
STA 458+72'EB' - STA 466+43'EB'

2



DRAINING OPEN GRADED LAYER INTO SELECT CRUSHED LAYER ALONG USH 18/151

USH 18/151



GENERAL NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND. AND TRENCHED IN ACCORDING TO SILT FENCE REQUIREMENTS.

PLAN VIEW

TEMPORARY SMALL ANIMAL TURN-AROUND

2

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

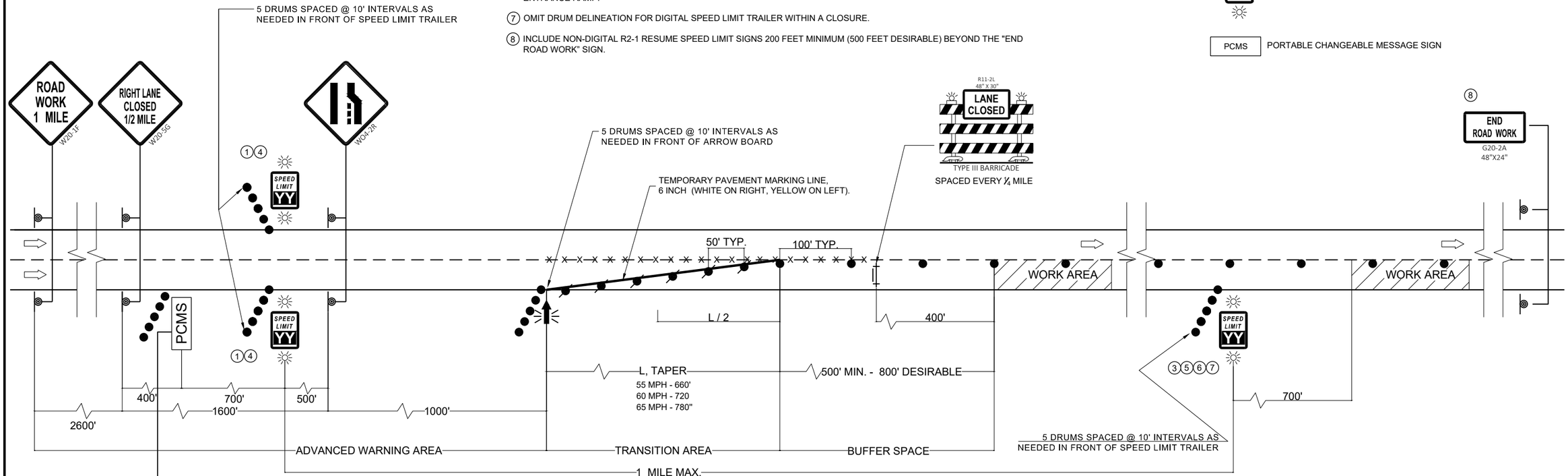
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

1. EXISTING POST MOUNTED SPEED LIMIT SIGNS SHOULD BE COVERED OR REMOVED.
2. PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE.
3. PLACE A DIGITAL SPEED LIMIT TRAILER 700' FEET UPSTREAM OF EACH ACTIVE WORK AREA WHERE WORKERS ARE PRESENT.
4. A DIGITAL SPEED LIMIT TRAILER SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP.
5. IF WORK AREA STARTS LESS THAN 1,000 FEET FROM END OF LANE CLOSURE TAPER, OMIT DIGITAL SPEED LIMIT TRAILER AT THAT LOCATION.
6. PLACE A DIGITAL SPEED LIMIT TRAILER A MINIMUM OF EVERY ONE MILE. MODIFY PLACEMENT AS DIRECTED BY ENGINEER WHEN DIGITAL SPEED LIMIT TRAILER IS LOCATED IN CLOSE PROXIMITY TO AN ACCELERATION LANE OF AN ENTRANCE RAMP.
7. OMIT DRUM DELINEATION FOR DIGITAL SPEED LIMIT TRAILER WITHIN A CLOSURE.
8. INCLUDE NON-DIGITAL R2-1 RESUME SPEED LIMIT SIGNS 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END ROAD WORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- SPEED LIMIT YY — DIGITAL SPEED LIMIT TRAILER
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

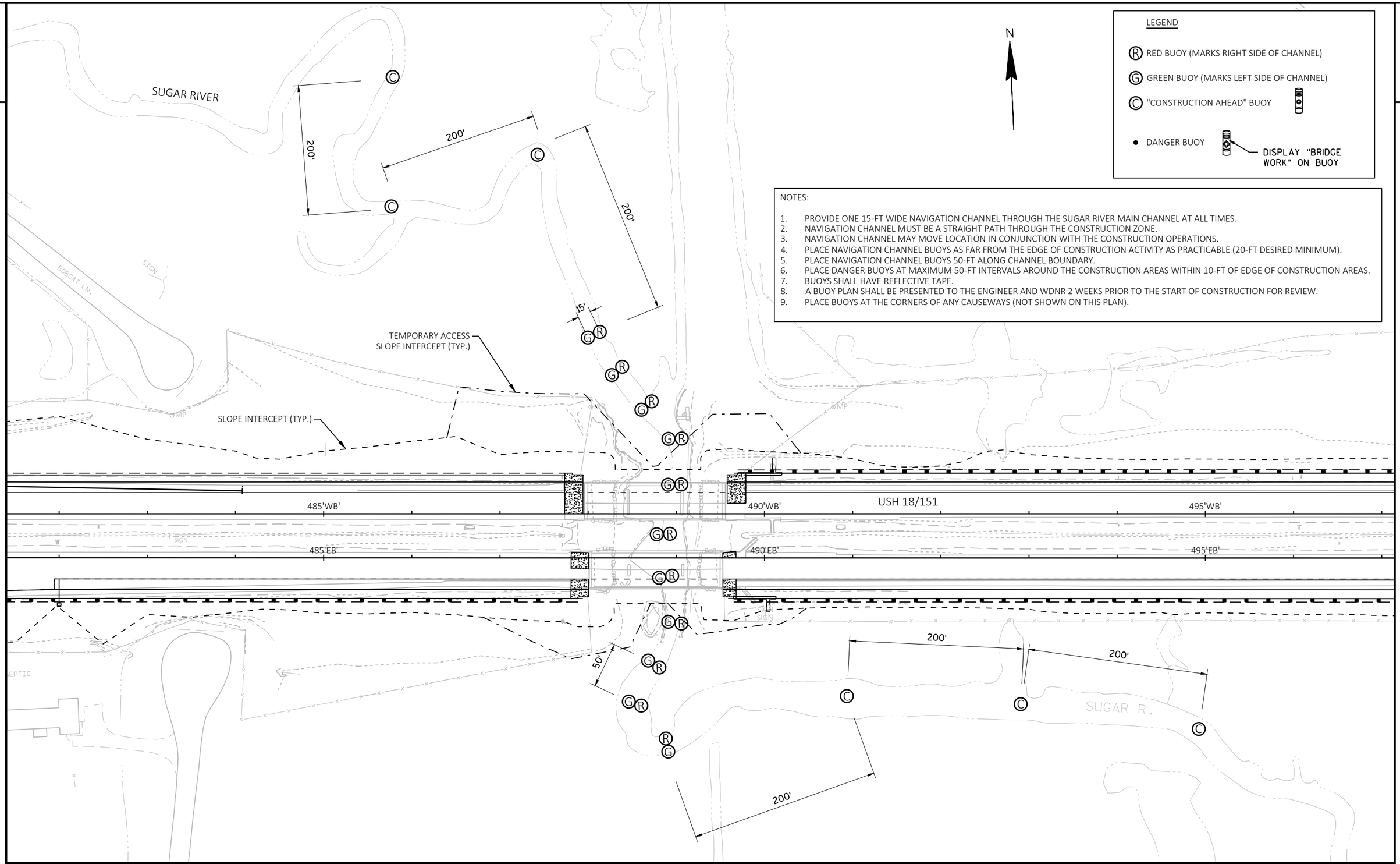


② PCMS MESSAGING

POSTED SPEED REDUCTION		NO SPEED REDUCTION
FRAME 1	FRAME 2	
REDUCED SPEED AHEAD	XX MPH	(FLASHING CAUTION MODE)

TRAFFIC CONTROL, LANE CLOSURE, DIGITAL SPEED REDUCTION SYSTEM DETAIL

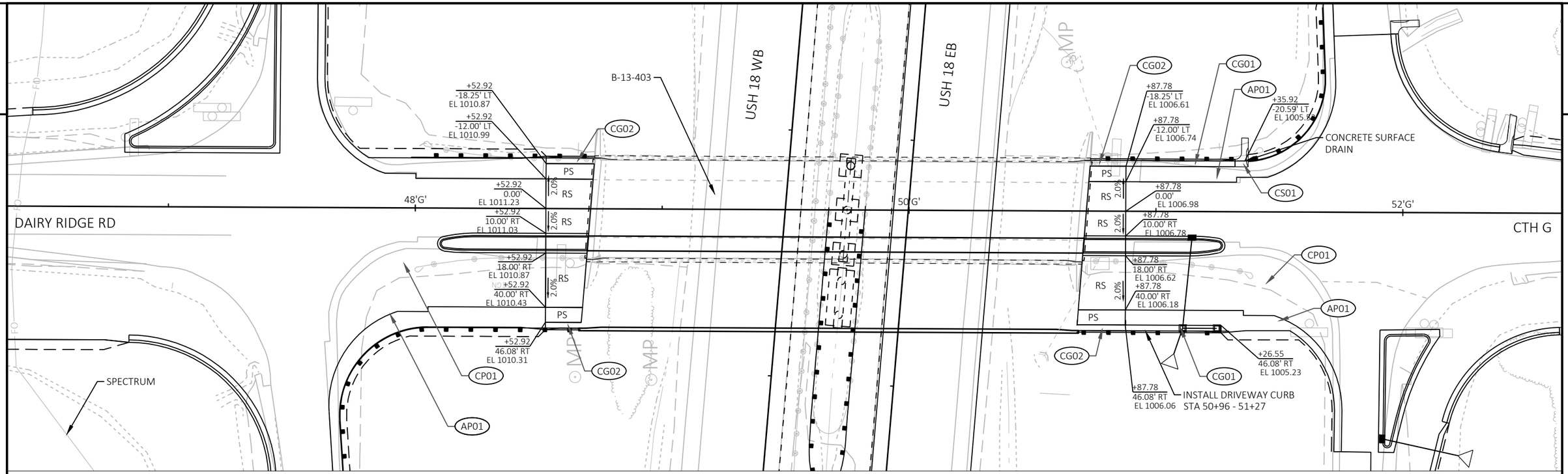
2



NOTES:

1. PROVIDE ONE 15-FT WIDE NAVIGATION CHANNEL THROUGH THE SUGAR RIVER MAIN CHANNEL AT ALL TIMES.
2. NAVIGATION CHANNEL MUST BE A STRAIGHT PATH THROUGH THE CONSTRUCTION ZONE.
3. NAVIGATION CHANNEL MAY MOVE LOCATION IN CONJUNCTION WITH THE CONSTRUCTION OPERATIONS.
4. PLACE NAVIGATION CHANNEL BUOYS AS FAR FROM THE EDGE OF CONSTRUCTION ACTIVITY AS PRACTICABLE (20-FT DESIRED MINIMUM).
5. PLACE NAVIGATION CHANNEL BUOYS 50-FT ALONG CHANNEL BOUNDARY.
6. PLACE DANGER BUOYS AT MAXIMUM 50-FT INTERVALS AROUND THE CONSTRUCTION AREAS WITHIN 10-FT OF EDGE OF CONSTRUCTION AREAS.
7. BUOYS SHALL HAVE REFLECTIVE TAPE.
8. A BUOY PLAN SHALL BE PRESENTED TO THE ENGINEER AND WDNR 2 WEEKS PRIOR TO THE START OF CONSTRUCTION FOR REVIEW.
9. PLACE BUOYS AT THE CORNERS OF ANY CAUSEWAYS (NOT SHOWN ON THIS PLAN).

PROJECT NO: 1204-08-73/1204-08-74	HWY: USH 18	COUNTY: DANE	CONSTRUCTION DETAIL - WATERWAY MARKER	SHEET 28	E



N

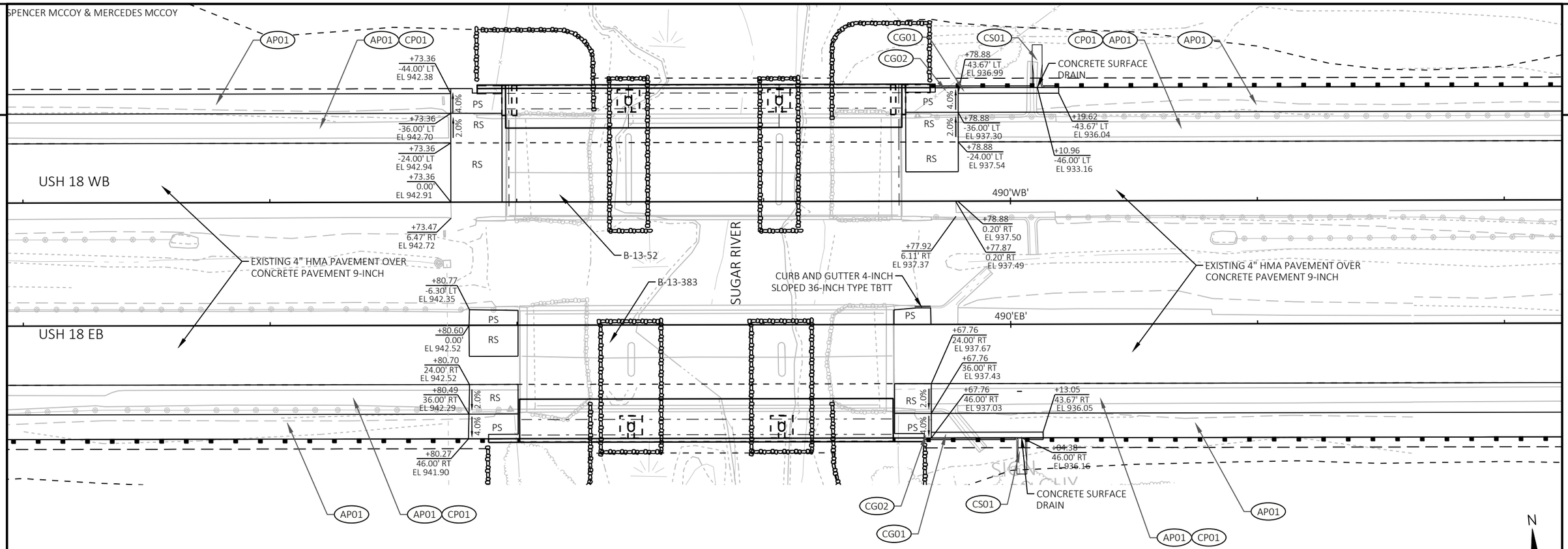
NOTES:

1. RS=REINFORCED CONCRETE SLAB, PAID FOR AS CONCRETE PAVEMENT APPROACH SLAB
2. PS=PAVED CONCRETE SHOULDER
3. FINAL PLACEMENT OF THE CONCRETE SURFACE DRAINS MUST MAINTAIN THE MINIMUM POST SEPARATION AS SHOWN IN SDD 'CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES'
4. FOR DETAILS NOT SHOWN SEE SDD 'CONCRETE APPROACH SLAB' AND 'CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES'

MATERIALS:

- (AP01) HMA PAVEMENT
- (CG01) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
- (CG02) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT
- (CP01) CONCRETE PAVEMENT 9-INCH
- (CS01) CONCRETE SURFACE DRAINS

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CONSTRUCTION DETAILS - BRIDGE APPROACH SLABS	SHEET 29	E



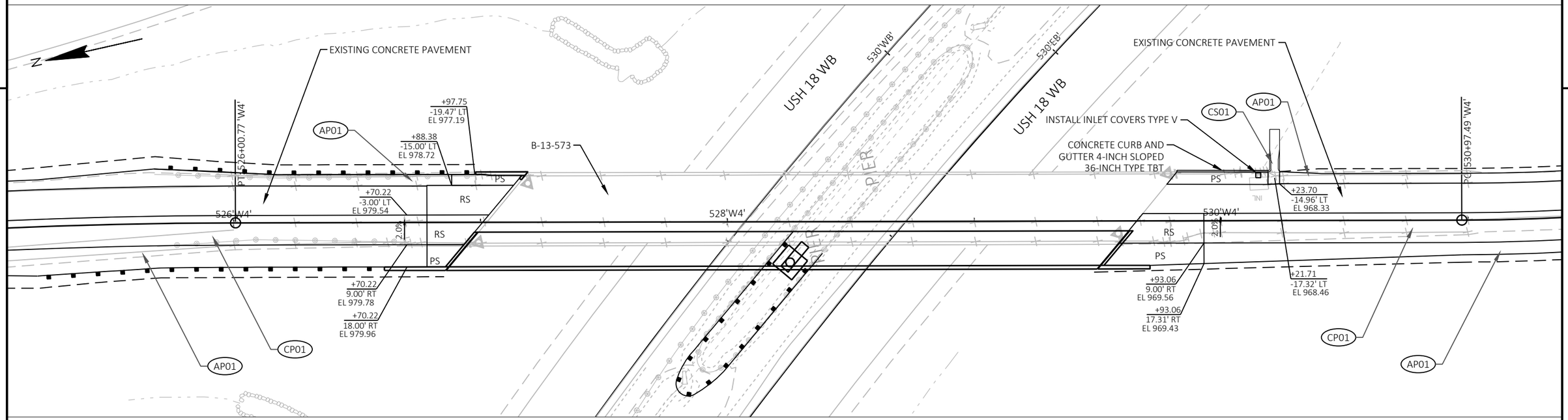
NOTES:

1. RS=REINFORCED CONCRETE SLAB, PAID FOR AS CONCRETE PAVEMENT APPROACH SLAB
2. PS=PAVED CONCRETE SHOULDER
3. FINAL PLACEMENT OF THE CONCRETE SURFACE DRAINS MUST MAINTAIN THE MINIMUM POST SEPARATION AS SHOWN IN SDD 'CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES'
4. FOR DETAILS NOT SHOWN SEE SDD 'CONCRETE APPROACH SLAB' AND 'CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES'

MATERIALS:

- AP01 HMA PAVEMENT
- CG01 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
- CG02 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT
- CP01 CONCRETE BASE 9-INCH
- CS01 CONCRETE SURFACE DRAINS

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CONSTRUCTION DETAILS - BRIDGE APPROACH SLABS	SHEET 30	E



NOTES:

1. RS=REINFORCED CONCRETE SLAB, PAID FOR AS CONCRETE PAVEMENT APPROACH SLAB
2. PS=PAVED CONCRETE SHOULDER
3. FINAL PLACEMENT OF THE CONCRETE SURFACE DRAINS MUST MAINTAIN THE MINIMUM POST SEPARATION AS SHOWN IN SDD 'CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES'
4. FOR DETAILS NOT SHOWN SEE SDD 'CONCRETE APPROACH SLAB' AND 'CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES'

MATERIALS:

- (AP01) HMA PAVEMENT
- (CG01) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
- (CG02) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT
- (CP01) CONCRETE PAVEMENT 9-INCH
- (CS01) CONCRETE SURFACE DRAINS

MATCH LINE 463+50 GA

LEGEND
DOWELED JOINT
TIED JOINT

STA 463+37 GA, LT
CONCRETE SURFACE DRAIN REQUIRED

STA 463'GA'+56.24
-100.31' LT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

SLOPE INTERCEPTS
(TYP.)

USH 18 WB OFF-RAMP

REJECT CURB &
GUTTER

CONCRETE SIDEWALK
4-INCH

CONCRETE CURB & GUTTER
6-INCH SLOPED 30-INCH TYPE G

CONCRETE CURB & GUTTER
18-INCH TYPE A

CONCRETE MEDIAN
SLOPED NOSE

REJECT CURB &
GUTTER

CONCRETE SIDEWALK
4-INCH

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

HMA PAVEMENT
4.0%

CONCRETE PAVEMENT
9-INCH

CTH G

46'G'
47'G'
48'G'

USH 18 WB
ON-RAMP

MATCH LINE 462+00 GD

PROJECT NO: 1204-08-73	HWY: CTH G	COUNTY: DANE	INTERSECTION DETAILS - CTH G NORTH INTERSECTION	SHEET 32	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021101-ID.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 4:00 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:20 FT

2

2

LEGEND

DOWELED JOINT

TIED JOINT

N

USH 18 ON-RAMP

+69.84
-15.00' LT
MATCH EXISTING

+47.99
-15.00' LT
EL 1003.33

+30.26
-15.00' LT
EL 1003.75

STA 51+36 G, LT
CONCRETE SURFACE DRAIN REQUIRED

STA 51'G'+13
-42.00' LT

+06.15
-23.09' LT
EL 1004.52

+35.92
-20.59' LT
EL 1005.53

+87.78
-18.25' LT
EL 1006.61

+06.92
-18.25' LT
EL 1006.17

+31.85
-18.25' LT
EL 1005.68

+87.78
-11.98' LT
EL 1006.74

+32.62
-14.00' LT
EL 1005.75

RIM ELEVATION:
1006.17

+87.78
0.00' LT
EL 1006.98

+32.61
-12.00' LT
EL 1005.79

+45.06
-14.00' LT
EL 1005.46

+52
8.02' RT
MATCH EXISTING

STA 463+52 GB, RT
CONCRETE SURFACE DRAIN REQUIRED

STA 463'GB'+47.99
58.00' RT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

+47.98
8.00' RT
EL 1003.09

+30.70
11.09' RT
EL 1003.23

STA 462+98 GB, RT
CONCRETE SURFACE DRAIN REQUIRED

+15.58
19.93' RT
EL 1003.23

+04.42
33.46' RT
EL 1003.07

+98
53.93' RT
EL 1002.71

+48.77
-23.53' LT
EL 1002.56

+98.63
50.01' RT
EL 1002.79

+45
-14.00' LT
EL 1000.02

+28.32
-14.00' LT
EL 1000.51

1.0%
0.7%
4.3%
0.5%
4.0%
3.6%
0.0%
0.8%
1.5%
3.0%
2.0%
463'GB'
R50'

51'G'
52'G'
53'G'

CONCRETE CURB & GUTTER
18-INCH TYPE A

CONCRETE SIDEWALK
4-INCH

REJECT CURB &
GUTTER

+87.78
10.00' RT
EL 1006.78

+00
10.00' RT
EL 1006.50

+15.78
10.00' RT
EL 1006.16

+87.78
18.00' RT
EL 1006.62

+00
18.00' RT
EL 1006.34

+13
18.00' RT
EL 1006.06

R59'

+25.41
10.78' RT
EL 1005.96

STA 51'G'+24.92
13.75' RT

CONCRETE MEDIAN
SLOPED NOSE

+27.93
13.66' RT
EL 1005.85

+25.56
16.67' RT
EL 1005.84

R2'

2.0%

CONCRETE CURB & GUTTER
6-INCH SLOPED 30-INCH TYPE G

CONCRETE SIDEWALK
4-INCH

+87.78
40.00' RT
EL 1006.18

+87.78
46.08' RT
EL 1006.06

+35.70
40.26' RT
EL 1005.17

+35.64
41.99' RT
EL 1005.13

+26.55
46.08' RT
EL 1005.23

+48.09
41.96' RT
EL 1004.85

+54.42
48.08' RT
EL 1004.45

RIM ELEVATION:
1005.51

STA 51'G'+15.78
70.00' RT

RIM ELEVATION:
1005.24

+51.63
0.00'
EL 1003.65

+42.44
22.73' LT
EL 1003.98

+50
0.00'
EL 1003.60

USH 18 WB ON-RAMP

R59'

R2'

+51.89
12.07' RT
EL 1003.32

STA 462'GC'+47.52
17.65' RT

+52.18
24.14' RT
EL 1002.95

STA 462'GC'+47.23
4.50' RT

+49.48
24.27' RT
EL 1002.91

REJECT
CURB &
GUTTER

+33.21
15.25' RT
EL 1002.66

+42.24
42.59' RT
EL 1002.46

R100'

+29.96
31.87' RT
EL 1002.41

+19.32
-15.00' LT
EL 1003.12

+02.07
0.00'
EL 1002.27

+25
0.00'
EL 1002.91

RIM ELEVATION
1002.40

+02.07
-15.00' LT
EL 1002.52

+02.07
-18.00' LT
EL 1002.40

+02.03
-3.00' LT
EL 1002.32

+15.55
9.40' RT
EL 1002.40

+14.89
25.67' RT
EL 1002.14

STA 462'GC'+05.57
3.50' RT

+02.07
6.28' RT
EL 1002.17

+05.15
23.42' RT
EL 1001.97

STA 461'GC'+93.06
106.83' RT

STA 462'GC'+03.65
74.38' RT

MATCH LINE 462+00 GC

+50.41
56.69' RT
EL 1002.10

+53.62
72.67' RT
EL 1001.69

+53.75
76.68' RT
EL 1001.58

+25.91
40.26' RT
EL 1000.05

STA 52+54 G, RT
CONCRETE SURFACE DRAIN REQUIRED

+45
0.00'
EL 1000.30

+45.02
10.00' RT
EL 1000.10

+45.02
37.51' RT
EL 999.55

CTH G

CONCRETE PAVEMENT
9-INCH

HMA PAVEMENT

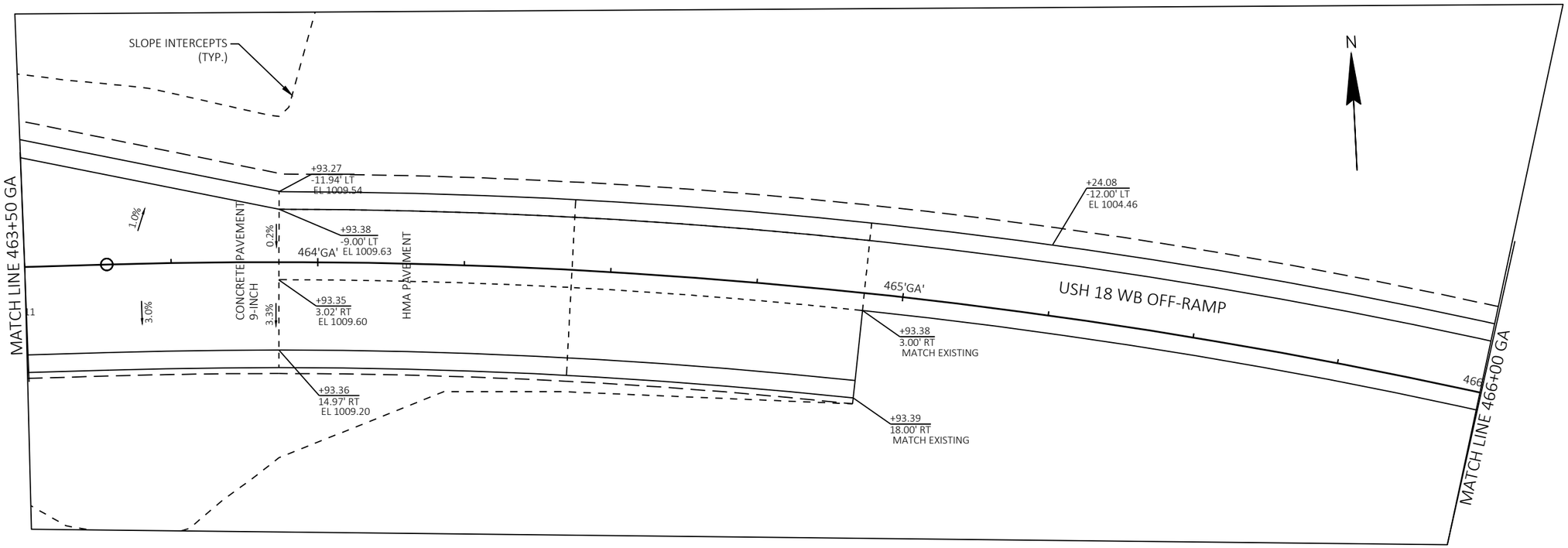
2.8%
2.5%
2.7%
2.3%
1.7%
1.3%
0.1%
2.4%

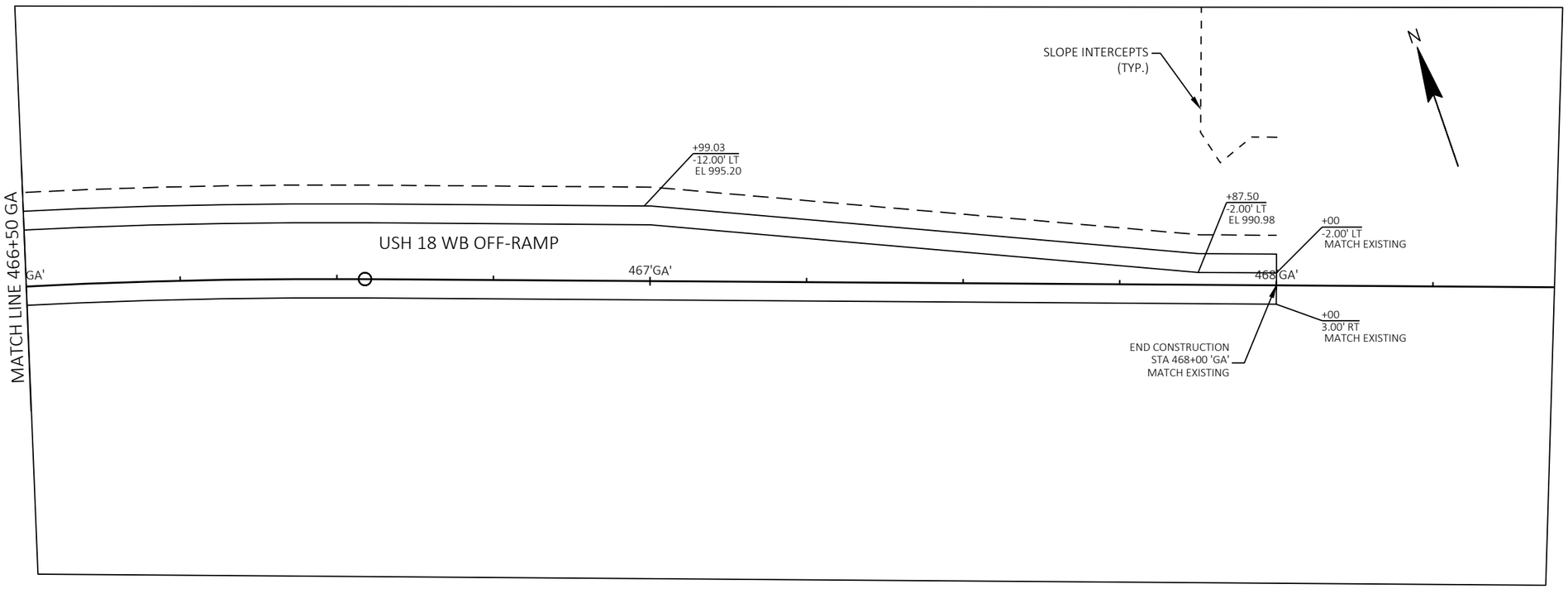
PROJECT NO: 1204-08-73	HWY: CTH G	COUNTY: DANE	INTERSECTION DETAILS - CTH G SOUTH INTERSECTION	SHEET 33	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021101-ID.DWG
LAYOUT NAME - 02

PLOT DATE : 7/25/2024 11:20 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT

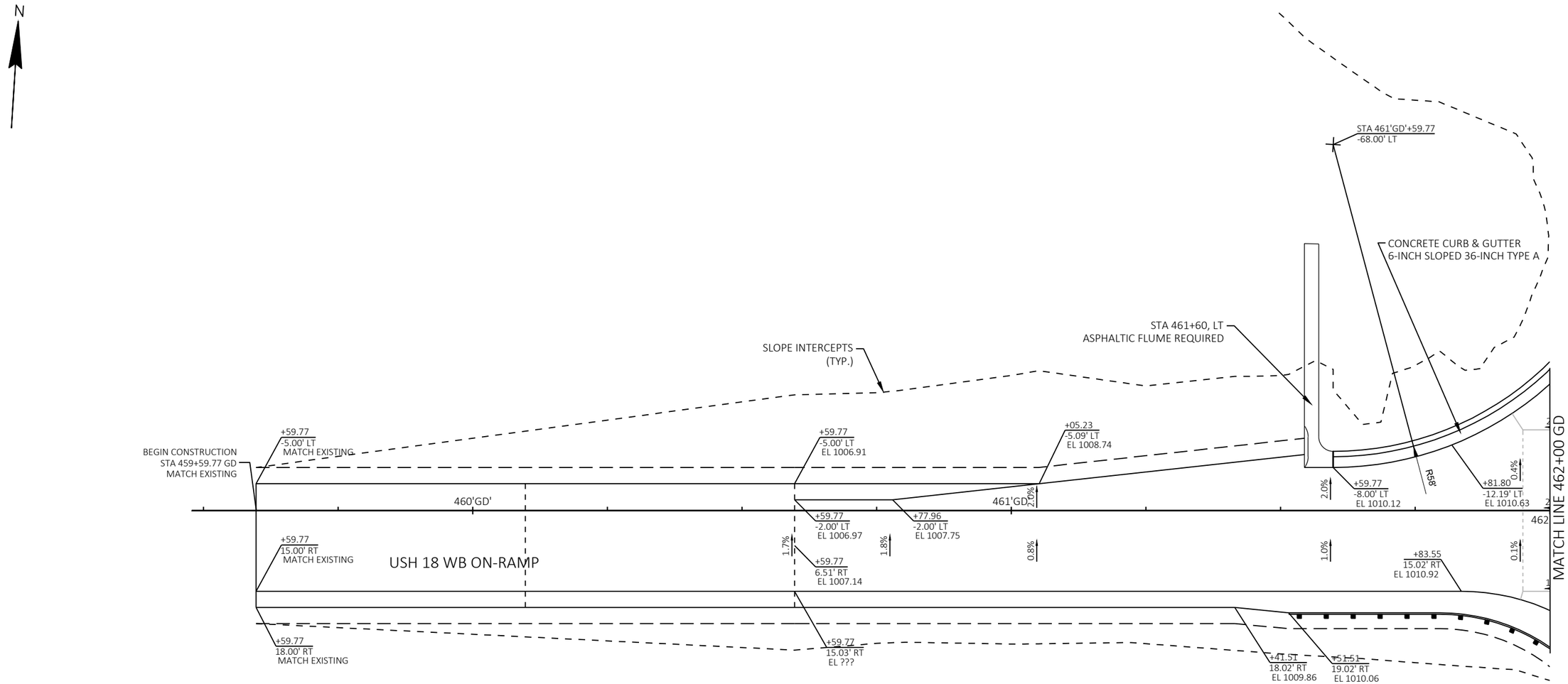
WISDOT/CADDS SHEET 42





PROJECT NO: 1204-08-73	HWY: CTH G	COUNTY: DANE	INTERSECTION DETAILS - RAMP GA	SHEET 34	E

2



PROJECT NO: 1204-08-73	HWY: CTH G	COUNTY: DANE	INTERSECTION DETAILS - RAMP GD	SHEET 35	E

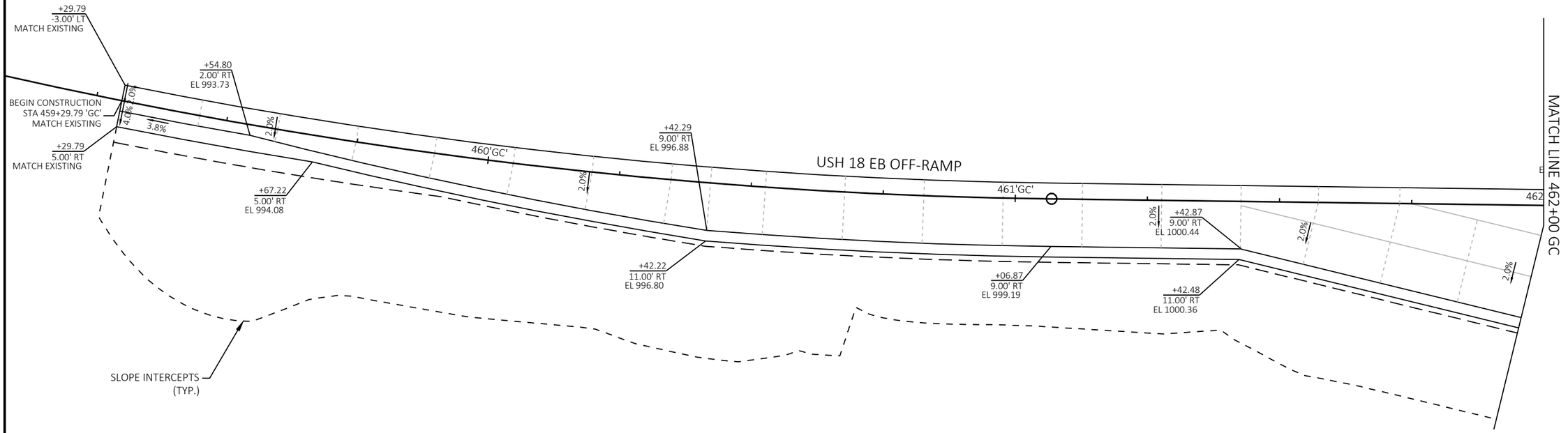
2

LEGEND

DOWELED JOINT

TIED JOINT

N



PROJECT NO: 1204-08-73	HWY: CTH G	COUNTY: DANE	INTERSECTION DETAILS - RAMP GC	SHEET 36	E

2

BEGIN CONSTRUCTION
STA 32+00 'G'
MATCH EXISTING
SAWCUT REQ'D

STA 37+74'G'
1 - REMOVE SMALL CULVERT PIPE (50 LF, 18" CMCP)
2 - REMOVE APRON ENDWALL

EPIC SYSTEMS CORPORATION

TDS TELECOM

TDS TELECOM

BOBCAT LN

EXIST R/W

END CONSTRUCTION
STA 37+90.02 'BL'
MATCH EXISTING
SAWCUT REQ'D

DAIRY RIDGE RD

STA 32+00'G' - STA 42+10'G' LT & RT
GRUBBING
(CLEARING COMPLETE BY OTHERS)

TDS TELECOM

SLOPE INTERCEPTS
(TYP.)

STEVEN J GUST & TERRI L GUST

Spectrum

EPIC SYSTEMS CORPORATION

N

LEGEND

- XXXXXXX SAWCUT
- REMOVING SMALL CULVERT PIPE
- REMOVING GUARDRAIL
- REMOVING INLETS
- SS REMOVING STORM SEWER

DAIRY RIDGE RD

STEVEN J GUST & TERRI L GUST

TDS

ALLIANT ENERGY

N

KEVIN J LUGINBUHL & DIANNE J LUGINBUHL

SLOPE INTERCEPTS
(TYP.)

Spectrum

EPIC SYSTEMS CORPORATIONS

EXIST R/W

REMOVING CONCRETE PAVEMENT

BEGIN CONSTRUCTION
STA 459+59.77 'GD'
MATCH EXISTING
SAWCUT REQ'D

END CONSTRUCTION
STA 468+00 'GA'
MATCH EXISTING
SAWCUT REQ'D

USH 18 WB ON RAMP

USH 18 WB OFF RAMP

STA 48+03'G' - 48+75'G', LT
REMOVE GUARDRAIL

REMOVING CONCRETE PAVEMENT

SAWCUT REQ'D

STA 48+00'G' - 48+72'G', RT
REMOVE GUARDRAIL

REMOVE PARTIAL STRUCTURE.
SEE STRUCTURE PLANS FOR DETAILS

STA 462'EB'+70.08
-32.15' LT

STA 462'EB'+71.86
-17.45' LT

USH 18 WB

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS	SHEET 37	E

2

SALVAGE AND REINSTALL CABLE GUARD
STA 458+00'WB' - 468+00'WB'

USH 18 WB

USH 18 EB

455'WB'

455'EB'

460'WB'

460'EB'

STA 458'EB'+72
-6.00' LT

STA 458'EB'+72
34.00' RT

REMOVING ASPHALTIC SURFACE MILLING
(VARIABLE DEPTH, 1.75-INCH TO 3.25-INCH)

STA BACK = 459+78.34'WB'
STA AHEAD = 459+76.40'WB'

STA 461+78'EB' - STA 462+72'EB'
REMOVE GUARDRAIL

STA 460'EB'+22
-6.00' LT

STA 460'EB'+22
34.00' RT

STA 462'EB'+70.08
-32.15' LT

STA 462'EB'+71.86
-17.45' LT

REMOVING ASPHALTIC SURFACE MILLING (3.25-INCH)

465'WB'

465'EB'

470'W

470'EB

STA 464'EB'+93
-6.00' LT

STA 464'EB'+93
34.00' RT

STA 466'EB'+43
-6.00' LT

STA 466'EB'+43
34.00' RT

REMOVING ASPHALTIC SURFACE MILLING
(VARIABLE DEPTH, 1.75-INCH TO 3.25-INCH)

50'G'

REMOVE STORM SEWER
(48LF)

REMOVE INLET

STA 50+67'G' - 51+40'G', RT
REMOVE GUARDRAIL

SAWCUT REQ'D

REMOVING CONCRETE PAVEMENT

456'GC'

458'GC'

USH 18 EB OFF RAMP

460'GC'

462'GC'

BEGIN CONSTRUCTION
STA 459+29.78 'GC'
MATCH EXISTING
SAWCUT REQ'D

SAWCUT REQ'D

REMOVE STORM SEWER
(48LF)

REMOVE INLET

REMOVING CONCRETE
PAVEMENT

STA 50+70'G' - 51+43'G', LT
REMOVE GUARDRAIL

USH 18 EB ON RAMP

52'G'

SAWCUT REQ'D

N

EXIST R/W

FARM LAND AAJ LLC

SLOPE INTERCEPTS
(TYP.)

CTH G

TLE

EXIST R/W

VERONA AREA SOCCER CLUB INC

LEGEND

- SAWCUT
- REMOVING SMALL CULVERT PIPE
- REMOVING GUARDRAIL
- REMOVING INLETS
- REMOVING STORM SEWER

VERONA AREA SOCCER CLUB INC

EXIST R/W

ALLIANT ENERGY

EXIST R/W

MARSH VIEW RD

TDS

END CONSTRUCTION
STA 61+85 'G'
MATCH EXISTING
SAWCUT REQ'D

SAWCUT REQ'D

54'G'

56'G'

58'G'

60'G'

62'G'

64'G'

66'G'

CTH G

SLOPE INTERCEPTS

EXIST R/W

FARM LAND AAJ LLC

STA 52+00'G' - STA 54+00'G', RT
GRUBBING
(CLEARING COMPLETE BY OTHERS)

TLE

UNKNOWN

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS	SHEET 38	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021101-RM.DWG
LAYOUT NAME - 02

PLOT DATE : 7/30/2024 11:24 AM PLOT BY : SYLVESTER, MORGAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

SPENCER MCCOY & MERCEDES MCCOY

JOEL GRANT & JAMIE GRANT

ALEXANDER J HEINZ & BRITTANEY BERNARDONI

DANE COUNTY

Spectrum

EXIST R/W

SLOPE INTERCEPTS (TYP.)

N

EXIST R/W

STA 488+00'WB', LT
REMOVE FENCE

SALVAGE UNDERDRAIN ENDWALL

'WB' +67.09
-46.04' LT

SAWCUT REQ'D

'WB' +82.07
-35.91' LT

SAWCUT REQ'D

ALLIANT ENERGY

'GA'

476'GA'

478'GA'

480'GA'

482'GA'

484'GA'

STA 489+63.51, -34.00' LT

'WB' +67.09
-41.04' LT

'WB' +82.08
-24.00' LT

475'WB'

USH 18 WB

480'WB'

485'WB'

B-13-52

B-13-383

REMOVING CONCRETE PAVEMENT

475'EB'

480'EB'

485'EB'

USH 18 EB

STA BACK = 478+37.49'WB'

STA AHEAD = 478+39.43'WB'

'EB' +30.81
41.46' RT

'EB' +94.81
24.00' RT

'EB' +94.81
36.00' RT

'EB' +30.81
46.48' RT

SAWCUT REQ'D

STA 485+16 - 487+96, RT
REMOVE GUARDRAIL

REMOVING DELINEATORS AND MARKERS

SAWCUT REQ'D

REMOVING DELINEATORS AND MARKERS

EXIST R/W

AUDRY HANDLER

EXIST R/W

STA 488+00'EB', RT
REMOVE FENCE

RIVER LAND AAJ LLC

UNKNOWN

LEGEND

XXXXXXX SAWCUT

REMOVING SMALL CULVERT PIPE

REMOVING GUARDRAIL

REMOVING INLETS

SS REMOVING STORM SEWER

EXIST R/W

REMOVING DELINEATORS AND MARKERS

STA 501+10'WB', LT
REMOVE FENCE

STA 501+00'WB' - STA 502+00'WB', LT
GRUBBING
(CLEARING COMPLETE BY OTHERS)

N

STA 492+70'WB', 60' LT
REMOVE APRON ENDWALL

SLOPE INTERCEPTS (TYP.)

Spectrum

REMOVING DELINEATORS AND MARKERS

MILITARY RIDGE STATE TRAIL

STA 500+69 - 504+87, LT
REMOVE GUARDRAIL

B-13-52
REMOVE PARTIAL STRUCTURE
SEE STRUCTURE PLANS FOR DETAILS

STA 489+60 - STA 490+10
REMOVE FENCE

STA 489+63 - 495+31, LT
REMOVE GUARDRAIL

SALVAGE UNDERDRAIN ENDWALL

STA 499+65'WB', 70' LT
REMOVE APRON ENDWALL

REMOVE CONCRETE SURFACE DRAIN

STA 502+00'WB', LT
REMOVE FENCE

REMOVE CONCRETE SURFACE DRAIN

STA 489+62.51, -34.00' LT

SALVAGE UNDERDRAIN ENDWALL

STA 500+69.94, -33.19' LT

490'WB'

USH 18 WB

495'WB'

500'WB'

SAWCUT REQ'D

REMOVING CONCRETE PAVEMENT

C-13-111

490'EB'

495'EB'

500'EB'

USH 18 EB

SUGAR RIVER

SAWCUT REQ'D

EXIST R/W

REMOVE CONCRETE SURFACE DRAIN

REMOVING DELINEATORS AND MARKERS

WI DNR

STA 489+55'EB' RT
REMOVE FENCE

STA 494+65'EB', 60' RT
REMOVE APRON ENDWALL

ALLIANT ENERGY

SALVAGE UNDERDRAIN ENDWALL

STA 499+57 - 503+74, RT
REMOVE GUARDRAIL

CATTLE GRATE

B-13-383
REMOVE PARTIAL STRUCTURE
SEE STRUCTURE PLANS FOR DETAILS

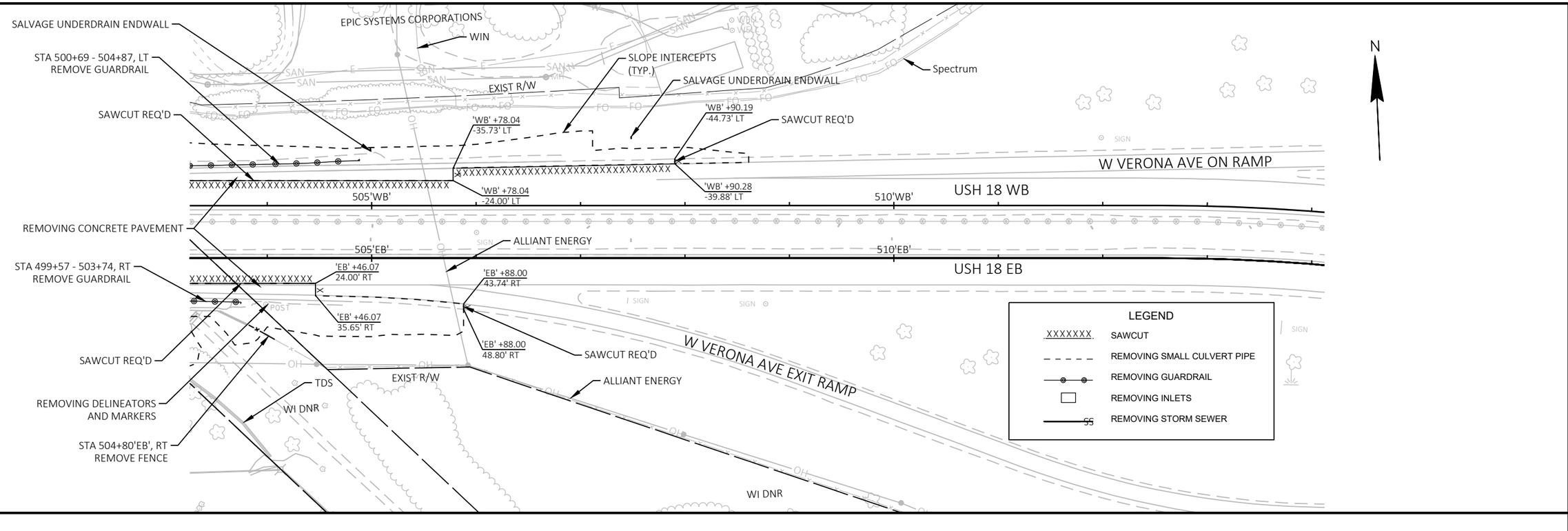
SUGAR R.

SALVAGE UNDERDRAIN ENDWALL

TDS

TDS

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS	SHEET 39	E


SALVAGE UNDERDRAIN ENDWALL
STA 500+69 - 504+87, LT
REMOVE GUARDRAIL
SAWCUT REQ'D
REMOVING CONCRETE PAVEMENT
STA 499+57 - 503+74, RT
REMOVE GUARDRAIL
SAWCUT REQ'D
REMOVING DELINEATORS
AND MARKERS
STA 504+80'EB', RT
REMOVE FENCE
EPIC SYSTEMS CORPORATIONS
WIN
SLOPE INTERCEPTS
(TYP.)
SALVAGE UNDERDRAIN ENDWALL
Spectrum
EXIST R/W
'WB' +78.04
35.73' LT
'WB' +90.19
-44.73' LT
SAWCUT REQ'D
'WB' +78.04
-24.00' LT
'WB' +90.28
-39.88' LT
W VERONA AVE ON RAMP
505'WB'
510'WB'
USH 18 WB
505'EB'
510'EB'
ALLIANT ENERGY
USH 18 EB
'EB' +46.07
24.00' RT
'EB' +88.00
43.74' RT
'EB' +46.07
35.65' RT
'EB' +88.00
48.80' RT
SAWCUT REQ'D
W VERONA AVE EXIT RAMP
EXIST R/W
TDS
WI DNR
ALLIANT ENERGY
WI DNR
N
LEGEND
SAWCUT
REMOVING SMALL CULVERT PIPE
REMOVING GUARDRAIL
REMOVING INLETS
REMOVING STORM SEWER

2

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

CITY OF VERONA

BEGIN PROJECT
STA 524+54.17
Y=450,404.201
X=774,547.607

EXIST R/W

Spectrum

'W4' +87.72
-19.00' LT

'W4' +54.18
-3.00' LT

SAWCUT REQ'D

STA 525+68 - 526+98, LT
REMOVE GUARDRAIL

525'W4'

RAMP W4

520'W4'

'W4' +54.22
9.00' RT

SAWCUT REQ'D

'W4' +54.33
14.00' RT

SLOPE INTERCEPTS
(TYP.)

WISDOT

REMOVING CONCRETE PAVEMENT

STA 525+68 - 526+69, RT
REMOVE GUARDRAIL

'W4' +70.22
-3.00' LT

'W4' +70.22
9.49' RT

STA 528'EB'+76.71
-32.51' LT

530'EB'

STA 528'EB'+78.39
18.09' LT

530'W4'

REMOVE INLET COVER

'W4' +78.06
-14.86' LT

'W4' +19.06
-15.00' LT

'W4' +68.83
-3.00' LT

B-13-573
REMOVAL PARTIAL STRUCTURE
SEE STRUCTURE PLANS FOR DETAILS

STA 528+10'EB' - 528+78'EB'
REMOVAL GUARDRAIL

EXIST R/W

USH 18 WB

USH 18 EB

ALLIANT

N

2

LEGEND

- XXXXXXX SAWCUT
- REMOVING SMALL CULVERT PIPE
- REMOVING GUARDRAIL
- REMOVING INLETS
- 55 REMOVING STORM SEWER

WI DNR

C-13-121

Spectrum

540'EB'

USH 18 WB

USH 18 EB

'W4' +99.71
-19.26' LT

545'EB'

'W4' +67.47
0.12' RT

545'W4'

'W4' +31.01
-3.00' LT

540'W4'

RAMP W4

SAWCUT REQ'D

SAWCUT REQ'D

'W4' +30.98
5.00' RT

STA 545+55'W4' - 545+67'W4'
REMOVE GUARDRAIL

535'W4'

REMOVING CONCRETE PAVEMENT

SLOPE INTERCEPTS
(TYP.)

EXIST R/W

WI DNR

WI DNR

MILITARY RIDGE STATE TRAIL

TDS

EXIST R/W

WI DNR

N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS	SHEET 41	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\021101-RM.DWG
LAYOUT NAME - W4-1

PLOT DATE : 11/12/2024 1:50 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

C-13-121

Spectrum

545'EB'
'W4' +67.42
0.12' RT

545'W4'

SAWCUT REQ'D

REMOVING CONCRETE PAVEMENT

SAWCUT REQ'D

USH 18 WB

'EB' +45.60
24.00' RT

550'EB'

555'EB'

'EB' +45.60
36.00' RT

USH 18 EB

TDS

EXIST R/W

WI DNR

LEGEND

XXXXXXX	SAWCUT
- - - - -	REMOVING SMALL CULVERT PIPE
—◎—◎—	REMOVING GUARDRAIL
▭	REMOVING INLETS
SS	REMOVING STORM SEWER

SLOPE INTERCEPTS
(TYP.)

EXIST R/W

2

REMOVING CONCRETE PAVEMENT

560'EB'

SAWCUT REQ'D

565'EB'

USH 18 WB

USH 18 EB

'EB' +67.53
24.00' RT

'EB' +67.53
36.05' RT

570'EB'

END PROJECT
STA 570+67.53

'EB' +73.11
46.43' RT

SAWCUT REQ'D

'EB' +47.42
48.89' RT

TO STH 69

EXIST R/W

EXIST R/W

N

WINGRA BUILDING GROUP

STA 560+00'EB' - STA 566+00'EB', RT
GRUBBING
(CLEARING COMPLETED BY OTHERS)

SLOPE INTERCEPTS
(TYP.)

WINGRA BUILDING GROUP

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS	SHEET 42	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\021101-RM.DWG
LAYOUT NAME - 69 AUX-1
PLOT DATE : 11/12/2024 1:52 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

USH 18/151 WB

STA 539+67
REMOVE 3 LF - PIPE UNDERDRAIN 6-INCH
SALVAGE APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

SLOPE INTERCEPTS (TYP.)

6' TYP.

+40.33
-6.00' LT

534+00

535+00

536+00

537+00

538+00

539+00

+40.33
0.00'

PT: 538+69.66

MATCH LINE 540+00

USH 18/151 EB

5

5

N

LEGEND

REMOVE EXTRA TEMPORARY HMA WIDTH
AFTER SAWCUTTING
RE-GRADE PER CROSS SECTIONS

HMA PAVEMENT 1.75-INCH 4 HT 58-28 H
(TO REMAIN)

XXXXXXXXXXXXXXX SAWCUT

STA 542+63
REMOVE 3 LF - PIPE UNDERDRAIN 6-INCH
SALVAGE APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

USH 18/151 WB

TDS

SALVAGE AND REINSTALL
CABLE GUARD
STA 545+38 - 577+10

SLOPE INTERCEPTS (TYP.)

6' TYP.

MATCH LINE 540+00

+00

541+00

542+00

543+00

544+00

545+00

546

MATCH LINE 546+00

USH 18/151 EB

ENTRANCE RAMP 'W4'

N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS - STAGE 4 USH 18 EB TEMPORARY PAVEMENT	SHEET 43	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\021101-RM-STAGE4-TEMPPAVE.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 12:46 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

MATCH LINE 546+00

USH 18/151 WB

SALVAGE AND REINSTALL
CABLE GUARD
STA 545+38 - 577+10

PC: 547+49.10

6 TYP.

STA 550+17
REMOVE 5 LF - PIPE UNDERDRAIN 6-INCH
SALVAGE APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

SLOPE INTERCEPTS (TYP.)

MATCH LINE 552+00

547+00 548+00 549+00 550+00 551+00

USH 18/151 EB

5

5

LEGEND

REMOVE EXTRA TEMPORARY HMA WIDTH
AFTER SAWCUTTING
RE-GRADE PER CROSS SECTIONS

HMA PAVEMENT 1.75-INCH 4 HT 58-28 H
(TO REMAIN)

SAWCUT

N

MATCH LINE 552+00

USH 18/151 WB

STA 552+70
REMOVE 4 LF - PIPE UNDERDRAIN 6-INCH
SALVAGE APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

SALVAGE AND REINSTALL
CABLE GUARD
STA 545+38 - 577+10

SLOPE INTERCEPTS (TYP.)

6 TYP.

STA 557+77
REMOVE 3 LF - PIPE UNDERDRAIN 6-INCH
SALVAGE APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

MATCH LINE 558+00

553+00 554+00 555+00 556+00 557+00

USH 18/151 EB

N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS - STAGE 4 USH 18 EB TEMPORARY PAVEMENT	SHEET 44	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\021101-RM-STAGE4-TEMPPAVE.DWG
LAYOUT NAME - 02
PLOT DATE : 7/24/2024 12:47 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

MATCH LINE 558+00

USH 18/151 WB

Mid: 559+72.38

SLOPE INTERCEPTS (TYP.)

6' TYP.

SALVAGE AND REINSTALL
CABLE GUARD
STA 545+38 - 577+10

559+00 560+00 561+00 562+00 563+00

MATCH LINE 564+00

USH 18/151 EB

SIGN

SIGN

N

5

5

LEGEND

REMOVE EXTRA TEMPORARY HMA WIDTH
AFTER SAWCUTTING
RE-GRADE PER CROSS SECTIONS

HMA PAVEMENT 1.75-INCH 4 HT 58-28 H
(TO REMAIN)

SAWCUT

MATCH LINE 564+00

USH 18/151 WB

SALVAGE AND REINSTALL
CABLE GUARD
STA 545+38 - 577+10

SLOPE INTERCEPTS (TYP.)

6' TYP.

565+00 566+00 567+00 568+00 569+00

MATCH LINE 570+00

USH 18/151 EB

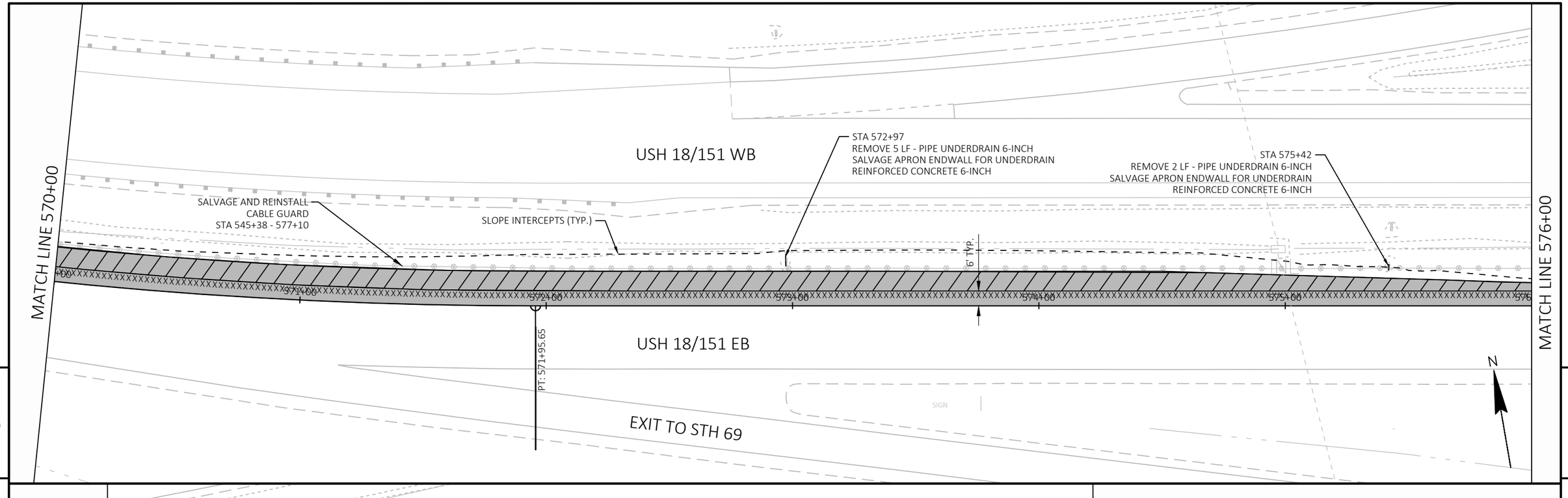
SIGN

SIGN

N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS - STAGE 4 USH 18 EB TEMPORARY PAVEMENT	SHEET 45	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\021101-RM-STAGE4-TEMPPAVE.DWG
LAYOUT NAME - 03
PLOT DATE : 7/24/2024 12:48 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	REMOVAL PLANS - STAGE 4 USH 18 EB TEMPORARY PAVEMENT	SHEET 46	E

STA 37+74'G'
1 - CULVERT PIPE CLASS III 24-INCH REQ'D
2 - APRON ENDWALLS FOR CULVERT PIPE 24-INCH REQ'D
2 - MARKERS CULVERT END REQ'D

EPIC SYSTEMS CORPORATION

BEGIN CONSTRUCTION
STA 32+00 'G'
MATCH EXISTING
SAWCUT REQ'D

32'G'
34'G'
36'G'
38'G'
40'G'
42'G'
44'G'
46'G'

DAIRY RIDGE RD

STA 37+74, 45.0' LT
APRON ENDWALLS FOR CPRC 24-INCH (7)

BASE AGGREGATE DENSE 3/4-INCH

SLOPE INTERCEPTS
(TYP.)

TDS TELECOM

STA 37+74, 31.0' RT
APRON ENDWALLS FOR CPRC 24-INCH (6)

STA 37+75
CPRC CLASS III 24-INCH
INVERT 1: 1009.14
INVERT 2: 1004.25
LENGTH: 76 FT
SLOPE: 6.44%
SKEW 0°

TDS TELECOM
TDS TELECOM

BOBCAT LN

EXIST R/W

END CONSTRUCTION
MATCH EXISTING
SAWCUT REQ'D

HMA PAVEMENT
4.5-INCH

BASE AGGREGATE DENSE 3/4-INCH

STEVEN J GUST & TERRI L GUST

SPECTRUM

EXIST R/W

EPIC SYSTEMS CORPORATION

TLE
FO
SIGN
AMP
STONE RIP RAP
FOOTBRIDGE

2

BASE AGGREGATE DENSE 3/4-INCH
HMA PAVEMENT
4.5-INCH

DAIRY RIDGE RD

CONCRETE PAVEMENT
9-INCH

CONCRETE CURB & GUTTER,
6-INCH SLOPED 36-INCH TYPE A

SPECTRUM

EPIC SYSTEMS CORPORATIONS

EXIST R/W

BEGIN CONSTRUCTION
STA 459+59.77 'GD'
MATCH EXISTING
SAWCUT REQ'D

BASE AGGREGATE DENSE 3/4-INCH

458'GD'
460'GD'
462'GD'

USH 18 WB ON RAMP

HMA PAVEMENT
3.5-INCH

STA 459+60'GD' - 460+60'GD'
REMOVING CONCRETE PAVEMENT BUTT
JOINTS (VARIABLE DEPTH, 0-INCH TO 2-INCH)

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAIL SHEETS)

STRUCTURE WIDENING REQ'D

CONCRETE PAVEMENT 9-INCH
CONCRETE CURB & GUTTER 18-INCH TYPE A
CONCRETE SIDEWALK 4-INCH
CONCRETE PAVEMENT
APPROACH SLAB (SEE CONSTRUCTION DETAIL
FOR MORE INFORMATION)

CONCRETE SIDEWALK 4-INCH

CONCRETE CURB & GUTTER,
6-INCH SLOPED 30-INCH TYPE G

464'GA'
466'GA'
468'GA'
470'GA'
472'GA'

STA 464+35'GA' - 465+35'GA'
REMOVING CONCRETE PAVEMENT BUTT
JOINTS (VARIABLE DEPTH, 0-INCH TO 2-INCH)

USH 18 WB OFF RAMP

END CONSTRUCTION
STA 468+00 'GA'
MATCH EXISTING
SAWCUT REQ'D

TDS

STEVEN J GUST & TERRI L GUST

BASE AGGREGATE DENSE 3/4-INCH

HMA PAVEMENT 4-INCH OVER
CONCRETE PAVEMENT
9-INCH

ALLIANT ENERGY

HMA PAVEMENT
4-INCH

SLOPE INTERCEPTS
(TYP.)

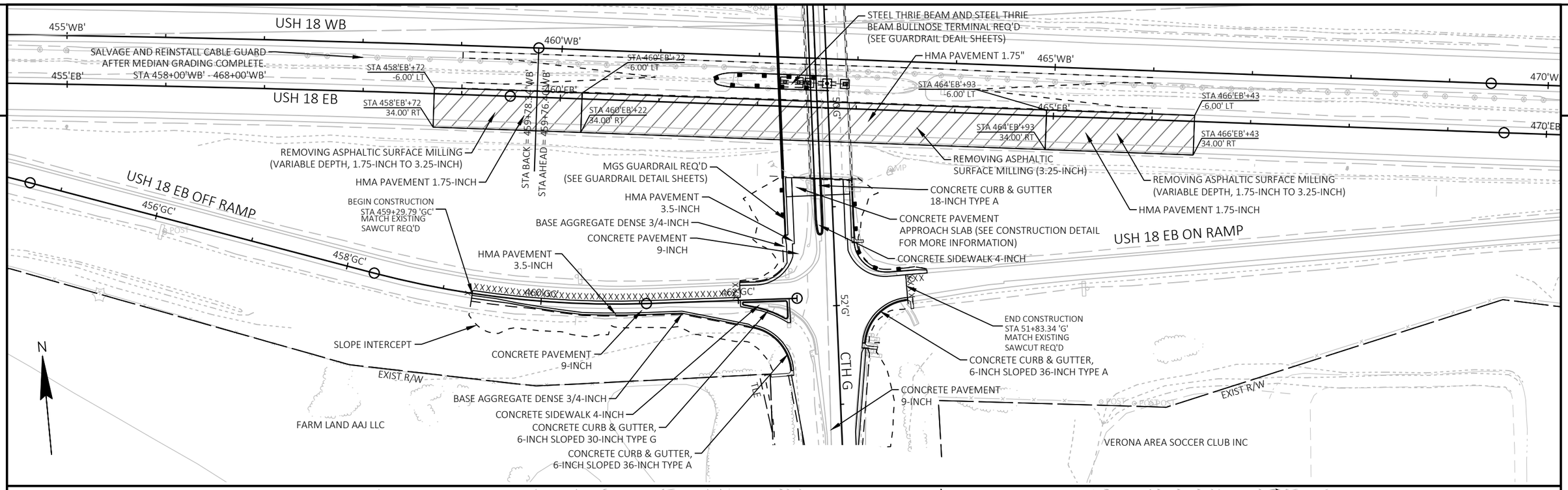
KEVIN J LUGINBUHL & DIANNE J LUGINBUHL

N

460'WB'
465'WB'
USH 18 WB
STA 458'EB'+72
STA 460'EB'+22
6.00' LT

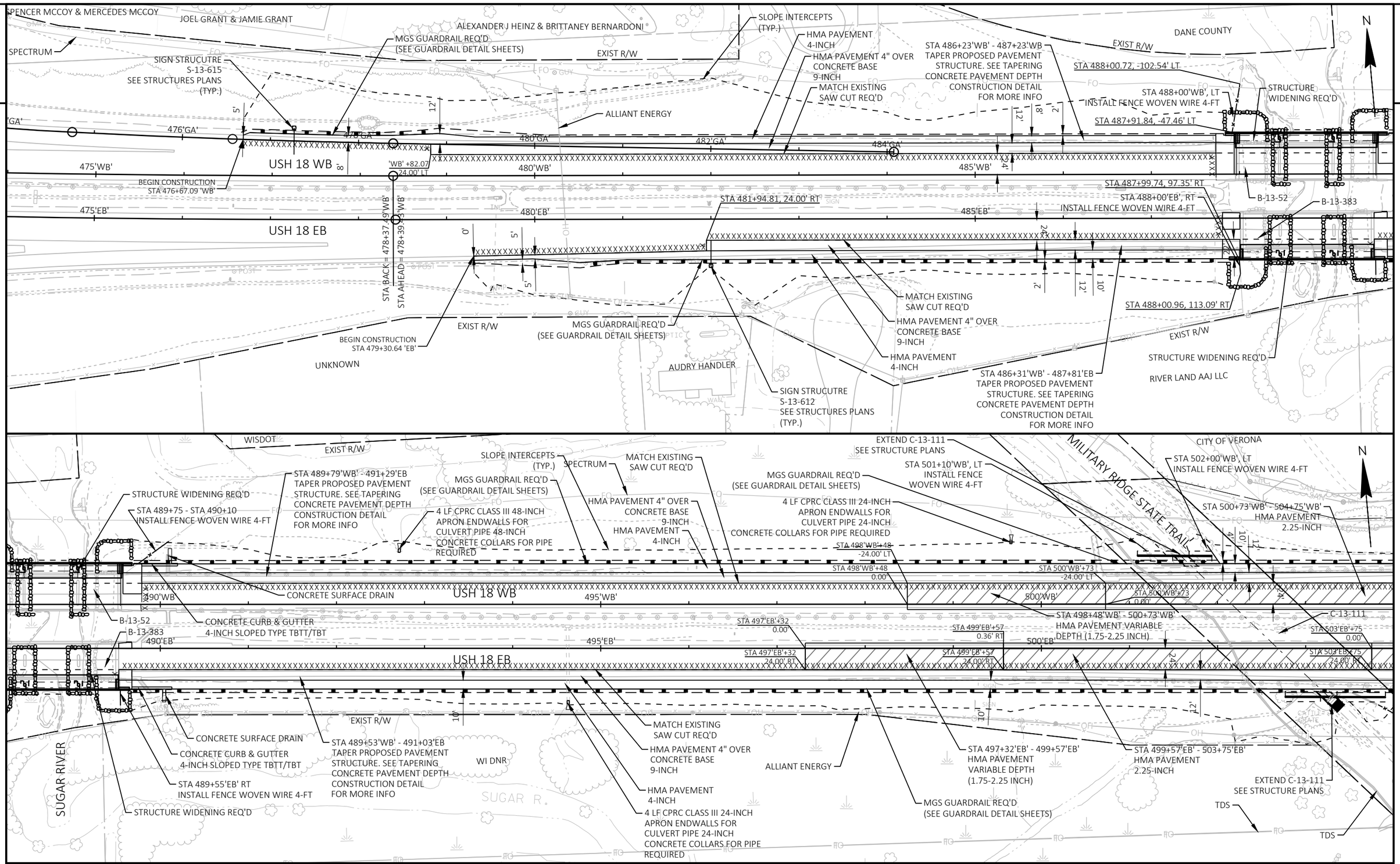
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS	SHEET 47	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021201-PD.DWG
LAYOUT NAME - 01
PLOT DATE : 11/14/2024 10:37 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



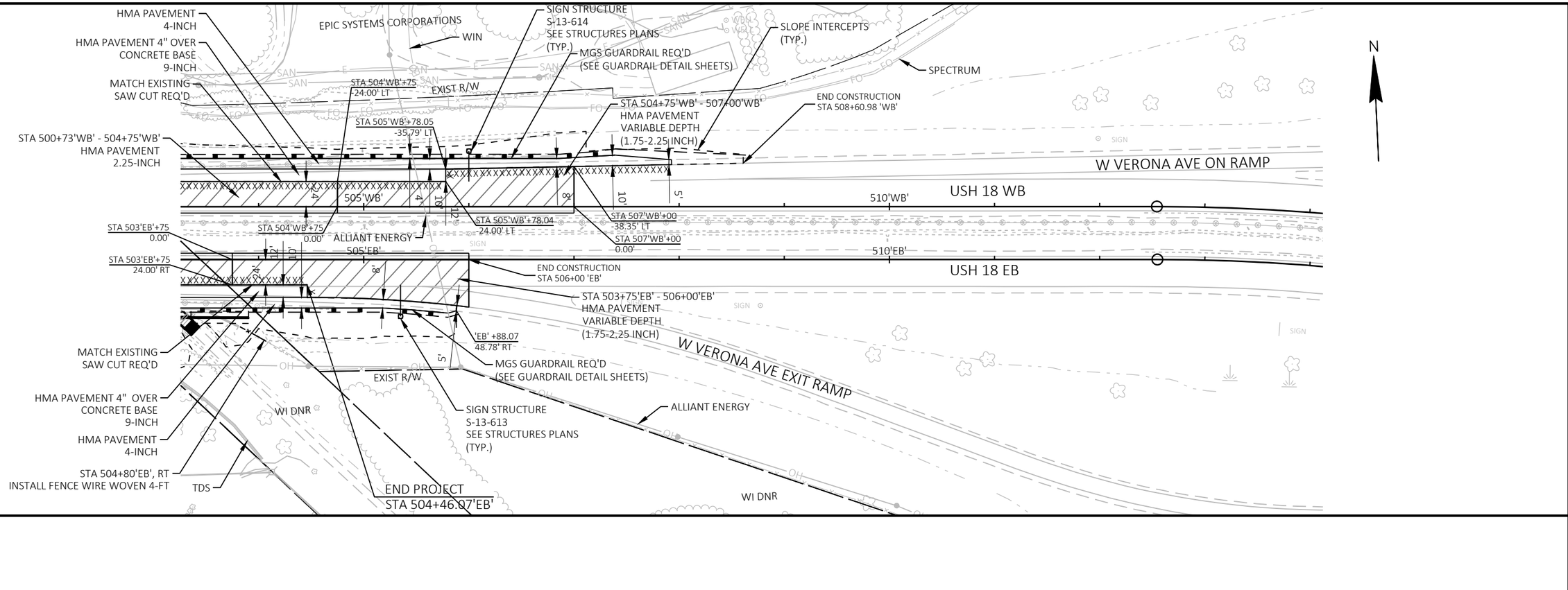
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS	SHEET 48	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021201-PD.DWG
LAYOUT NAME - 02
PLOT DATE : 11/14/2024 10:39 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS	SHEET 49	E

2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS	SHEET 50	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021201-PD.DWG
LAYOUT NAME - 04
PLOT DATE : 11/14/2024 10:40 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

CITY OF VERONA

VERONA AREA SCHOOL DISTRICT

SPECTRUM

BEGIN PROJECT
STA 524+54.19'W4'
Y=450,404.181
X=774,547.604

BEGIN CONSTRUCTION
STA 522+87.72 'W4'

HMA PAVEMENT
3.5-INCH

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAIL SHEETS)

STA 530+15'W4', 19' LT
INSTALL INLET COVERS
TYPE V

B-13-573

HMA PAVEMENT
3.5-INCH

'W4' +87.58
-19.00' LT

'W4' +54.18
-3.00' LT

'W4' +19.19
-20.12' LT

'W4' +15.00
-14.64' LT

'W4' +78.22
-14.86' LT

'W4' +82.12
-19.80' RT

RAMP W4

520'W4'

525'W4'

530'W4'

530'EB'

'W4' +87.75
-15.00' LT

'W4' +54.22
9.00' RT

'W4' +54.33
14.00' RT

'W4' +05.04
-3.00' LT

'W4' +85.22
21.00' RT

'W4' +68.33
-3.00' LT

'W4' +48.63
21.00' RT

MATCH EXISTING
SAW CUT REQ'D

CONCRETE PAVEMENT
9-INCH

HMA PAVEMENT
3.5-INCH

SLOPE INTERCEPTS
(TYP.)

WISDOT

ALLIANT

USH 18 WB

USH 18 EB

STRUCTURE WIDENING REQ'D

STEEL THRIE BEAM AND STEEL THRIE BEAM
BULLNOSE TERMINAL REQ'D
(SEE GUARDRAIL DETAIL SHEETS

MATCH EXISTING
SAW CUT REQ'D

CONCRETE PAVEMENT
9-INCH

HMA PAVEMENT
3.5-INCH

EXIST R/W

WI DNR

C-13-121

SPECTRUM

540'EB'

USH 18 WB

USH 18 EB

'W4' +99.71
-19.26' LT

545'EB'

BEGIN CONSTRUCTION
STA 545+48.90 'EB'

545'W4'

END CONSTRUCTION
STA 543+99.72 'W4'

RAMP W4

540'W4'

'W4' +30.98
5.00' RT

'W4' +55.81
7.84' RT

STA 545+48.90 'EB'
CONNECT TO EXISTING GUARDRAIL

HMA PAVEMENT
3.5-INCH

535'W4'

'W4' +22.65
9.00' RT

'W4' +22.75
14.00' RT

SALVAGE AND REINSTALL CABLE
GUARD AFTER TEMP
PAVEMENT IS REMOVED

EXIST R/W

MATCH EXISTING
SAW CUT REQ'D

CONCRETE PAVEMENT
9-INCH

HMA PAVEMENT
3.5-INCH

SLOPE INTERCEPTS
(TYP.)

WI DNR

TDS

WI DNR

WI DNR

MILITARY RIDGE STATE TRAIL

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - W4 RAMP	SHEET 51	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\1204-08-74-PD.DWG 8/30/2024 11:46 AM
LAYOUT NAME - W4-1

PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

C-13-121

SPECTRUM

SALVAGE AND REINSTALL CABLE GUARD AFTER TEMP PAVEMENT IS REMOVED

545'EB'

BEGIN CONSTRUCTION
STA 545+48.90 'EB'

545'W4'

'W4' +55.81
7.84' RT

STA 545+48.90 'EB'
CONNECT TO EXISTING GUARDRAIL

USH 18 WB

'EB' +45.60
24.00' RT

550'EB'

555'EB'

USH 18 EB

'EB' +45.60
36.00' RT

RIPRAP

EXIST R/W

MATCH EXISTING
SAW CUT REQ'D

4" HMA PAVEMENT OVER
CONCRETE BASE
9-INCH

SIGN STRUCTURE
S-13-616
SEE STRUCTURE PLANS

TDS

HMA PAVEMENT
4-INCH

SLOPE INTERCEPTS
(TYP.)

MGS GUARDRAIL REQ'D
(SEE GUARDRAIL DETAIL SHEETS)

WI DNR

2

SALVAGE AND REINSTALL CABLE GUARD AFTER TEMP PAVEMENT IS REMOVED

END PROJECT
STA 570+67.53'EB'

END CONSTRUCTION
STA 571+72.85 'EB'

'EB' +67.53
24.00' RT

'EB' +67.53
36.05' RT

570'EB'

560'EB'

565'EB

USH 18 WB

TO STH 69

USH 18 EB

'EB' +33.28
50.51' RT

'EB' +81.14
44.92' RT

EXIST R/W

'EB' +20.21
48.03' RT

'EB' +72.04
46.05' RT

SIGN STRUCTURE
S-13-617
SEE STRUCTURE PLANS

MATCH EXISTING
SAW CUT REQ'D

4" HMA PAVEMENT OVER
CONCRETE BASE
9-INCH

HMA PAVEMENT
4-INCH

MGS GUARDRAIL 3 REQ'D
(SEE GUARDRAIL DETAIL SHEETS)

EXIST R/W

SLOPE INTERCEPTS
(TYP.)

WINGRA BUILDING GROUP

WINGRA BUILDING GROUP

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - STH 69 AUX LANE	SHEET 52	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\1204-08-74-PD.DWG
LAYOUT NAME - 69 AUX-1

PLOTTED : 7/30/2024 11:48 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

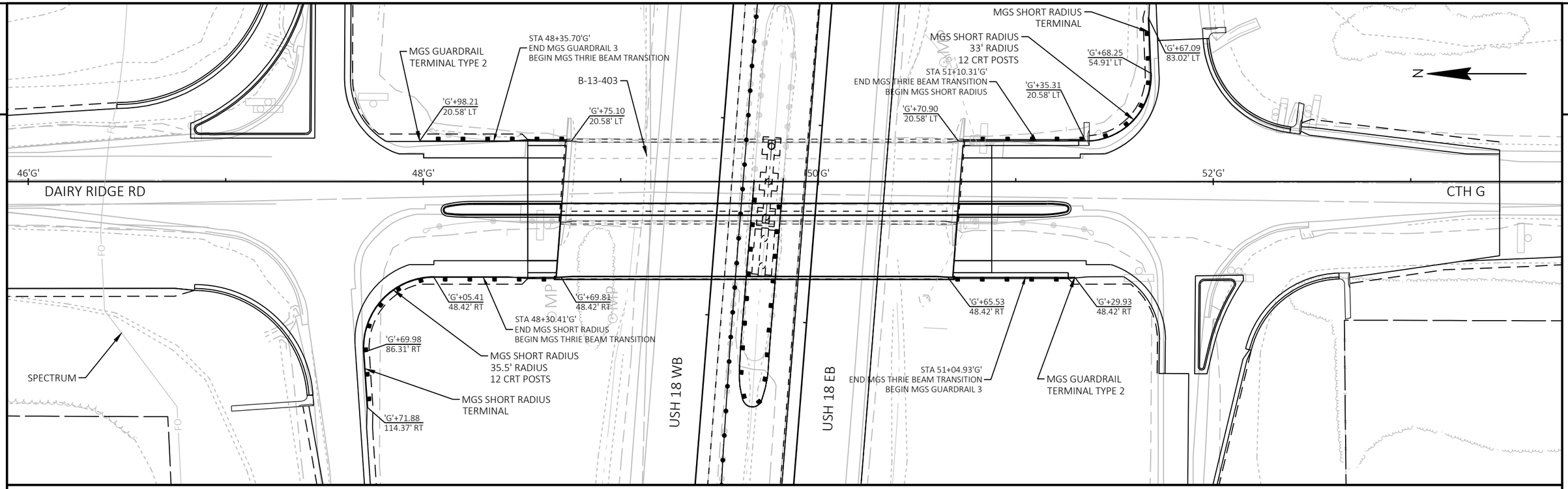
N

SAN
SAN
SAN
SAN
MH
FO
FO
FO
FO
FO-FO
T
SPECTRUM
504'WB'
504'EB'
503'WB'
503'EB'
C-13-111 EXTENSION
EXIST R/W
2-INCHES
LIMESTONE SCREENINGS PATH
OVER
4-INCHES
BASE AGGREGATE DENSE
1-1/4 INCH
+40
0.00'
10'MRST'
12'MRST'
+14.67
0.00'
EP: 13+50.00 'MRST'
OH
BP: 10+00.00 'MRST'
502'WB'
TDS
C-13-111 EXTENSION
502'EB'
2-INCHES
LIMESTONE SCREENINGS PATH
OVER
4-INCHES
BASE AGGREGATE DENSE
1-1/4 INCH
GRATE
501'WB'
USH 18 WB
USH 18 EB
501'EB'
SLOPE INTERCEPTS (TYP.)
EXIST R/W

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - MILITARY RIDGE STATE TRAIL	SHEET 53	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\12105-PD.DWG 7/30/2024 12:20 PM
LAYOUT NAME - 05
PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

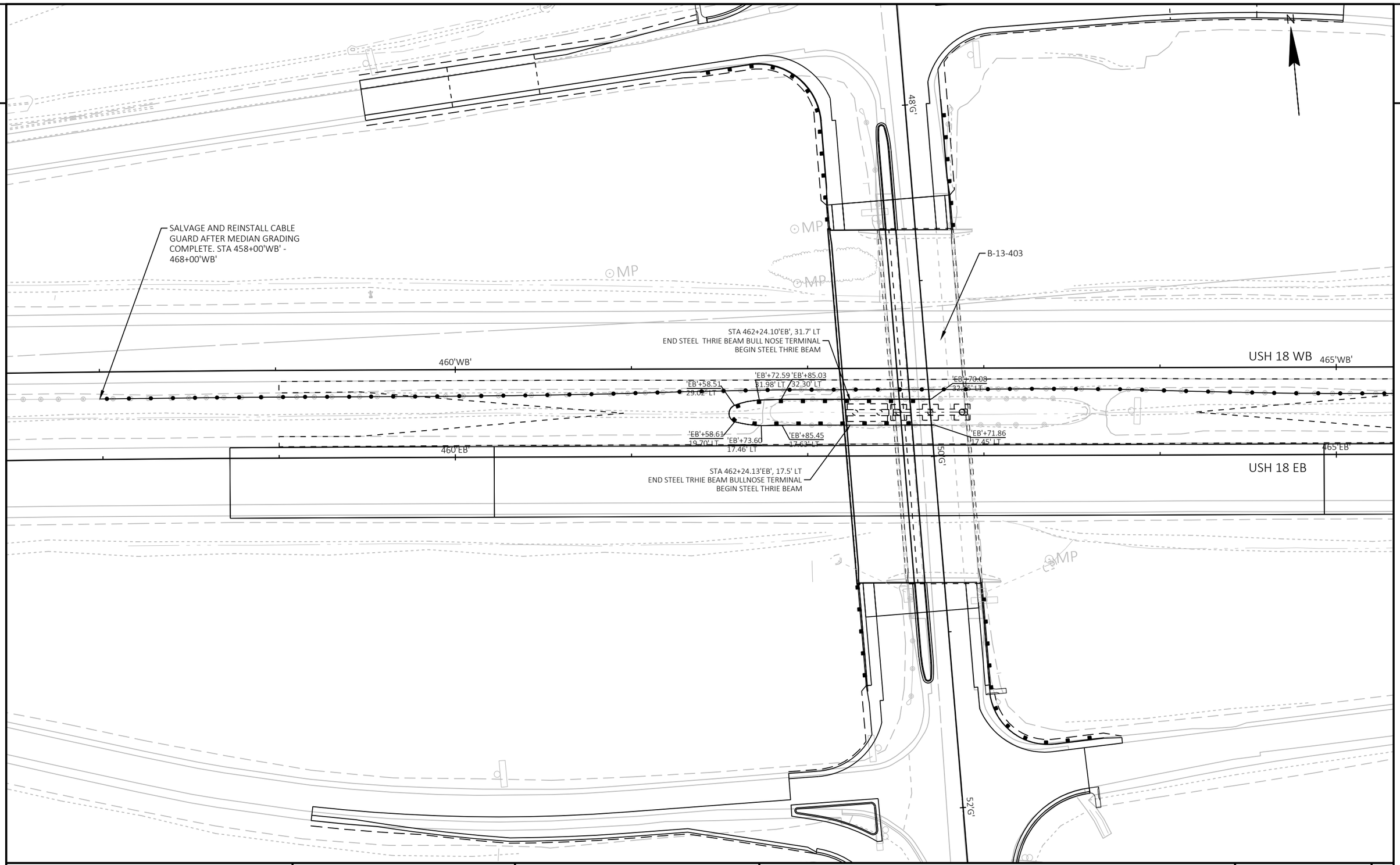
WISDOT/CADDS SHEET 44



2

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 54	E

2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 55	E

2

2

N

SALVAGE AND REINSTALL CABLE GUARD AFTER MEDIAN GRADING COMPLETE. STA 458+00'WB' - 468+00'WB'

465'WB'

470'WB'

USH 18 WB

465'EB'

470'EB'

USH 18 EB

TNL

CMP

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 56	E

2

2

N

MGS GUARDRAIL TERMINAL 2

STA 478+39'WB' - STA 478+92.52'WB'
MGS GUARDRAIL TERMINAL EAT

'WB'+64.67
49.11' LT

'WB'+74.80
52.82' LT

'WB'+87.39
45.93' LT

'WB'+22.64
49.13' LT

POST #9
'WB'+39.43
46.00' LT

POST #1
'WB'+92.52
-48.00' LT

'WB'+92.52
53.94' LT

'WB'+32.52
44.00' LT

STA 476+74.69'WB'
BEGIN MGS GUARDRAIL 3

SPECTRUM

ALLIANT ENERGY

480'WB'

USH 18 WB

480'EB'

USH 18 EB

POST #1
'EB'+51.55
49.10' RT

POST #9
'EB'+01.46
46.18' RT

'EB'+97.70
44.83' RT

'EB'+30.81
49.48' RT

'EB'+51.67
55.03' RT

STA 481+04.58'EB'
BEGIN MGS GUARDRAIL 3

'EB'+03.19
50.00' RT

STA 480+52'EB' - STA 481+05'EB'
MGS GUARDRAIL TERMINAL EAT

UNKNOWN

AUDRY HANDLER

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 57	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021206-PD.DWG
LAYOUT NAME - 04

PLOT DATE : 11/12/2024 4:08 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

N

FO

MP

SPECTRUM

B-13-52

USH 18 WB

485'WB'

485'EB'

USH 18 EB

GUY

STA 487+54.58'EB'
END MGS GUARDRAIL 3
BEGIN MGS THRIE BEAM
TRANSITION

B-13-383

ALLIANT ENERGY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 58	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021206-PD.DWG
LAYOUT NAME - 05

PLOT DATE : 11/12/2024 4:09 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

SPECTRUM

FO

MP

B-13-52

STA 490+04.71'WB'
END MGS THRIE BEAM TRANSITION
BEGIN MGS GUARDRAIL 3

490'WB'

495'WB'

USH 18 WB

N

490'EB'

495'EB'

B-13-383

USH 18 EB

ALLIANT ENERGY

OH

HIGH SIGN GUY

STA 489+90.63'EB'
END MGS THRIE BEAM TRANSITION
BEGIN MGS GUARDRAIL 3

WI DNR

SUGAR R.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 59	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021206-PD.DWG
LAYOUT NAME - 06

PLOT DATE : 11/12/2024 4:09 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

N

STA 501+10.96'WB'
END MGS GUARDRAIL 3
BEGIN MGS LONG SPAN

STA 502+23.46'WB'
END MGS LONG SPAN
BEGIN MGS GUARDRAIL 3

SPECTRUM

WIN

STA 506+86'WB' - STA 507+39'WB'
MGS GUARDRAIL TERMINAL EAT

STA 506+85.96'WB'
END MGS GUARDRAIL 3

'WB'+86.50
49.94' LT

'WB'+13.95
51.90' LT

'WB'+37.87
55.04' LT

POST #1
'WB'+38.99
49.05' LT

'WB'+92.69
44.75' LT

POST #9
'WB'+85.96
46.00' LT

C-13-111 EXTENSION

ALLIANT ENERGY

505'WB'

USH 18 WB

505'EB'

USH 18 EB

STA 502+60.63'EB'
END MGS GUARDRAIL 3
BEGIN MGS LONG SPAN

C-13-111 EXTENSION

STA 503+73.13'EB'
END MGS LONG SPAN
BEGIN MGS GUARDRAIL 3

'EB'+88.07
48.78' RT

'EB'+17.99
46.00' RT

'EB'+80.28
50.97' RT

'EB'+17.98
50.01' RT

MGS GUARDRAIL
TERMINAL TYPE 2

'EB'+79.87
54.94' RT

'EB'+90.23
52.04' RT

TDS

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 60	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021206-PD.DWG
LAYOUT NAME - 07

PLOT DATE : 11/12/2024 4:10 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

N

STA 525+68'W4' - STA 526+18'W4'
MGS GUARDRAIL TERMINAL EAT

STA 526+20.86'W4'
BEGIN MGS GUARDRAIL 3

'W4'+68.68
-27.13' LT

POST #1
'W4'+68.11
-22.16' LT

'W4'+17.84
-23.47' LT

POST #9
'W4'+17.73
-19.47' LT

STA 526+58.36'W4'
END MGS GUARDRAIL 3
BEGIN MGS THRIE BEAM TRANSITION

B-13-573

RAMP W4

'W4'+31.42
14.00' RT

525'W4'

530+00 WB

530 EB

529+00 WB

'W4'+00.45
17.03' RT

POST #1
'W4'+19.82
19.93' RT

'W4'+20.21
24.92' RT

POST #9
'W4'+70.20
18.00' RT

'W4'+70.29
22.00' RT

STA 525+20'W4' - STA 525+73'W4'
MGS GUARDRAIL TERMINAL EAT

SLOPE INTERCEPTS
(TYP.)

STA 525+73.41'W4'
BEGIN MGS GUARDRAIL 3

STA 526+23.57'W4'
END MGS GUARDRAIL 3
BEGIN MGS THRIE BEAM TRANSITION

USH 18 WB

528+00 WB

USH 18 EB

544+00 WB

545+00 WB

546+00 WB

547+00 WB

PC:

548+00 WB

549+00 WB

USH 18 WB

550+00 WB

551+00

545'EB'

550'EB'

USH 18 EB

STA 545+48.90'EB'
BEGIN MGS GUARDRAIL 3
CONNECT TO EXISTING GUARDRAIL

545'W4'

RAMP W4

'EB'+21.61
46.00' RT

'EB'+47.84
46.00' RT

'EB'+59.50
44.00' RT

'EB'+38.57
56.54' RT

'EB'+91.25
47.07' RT

'EB'+91.68
51.06' RT

'EB'+49.10
46.00' RT

'EB'+45.42
50.00' RT

'EB'+59.48
46.00' RT

'EB'+47.84
50.00' RT

'EB'+11.19
55.50' RT

MGS GUARDRAIL
TERMINAL TYPE 2

TDS

SLOPE INTERCEPTS
(TYP.)

MILITARY RIDGE STATE TRAIL

N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 61	E

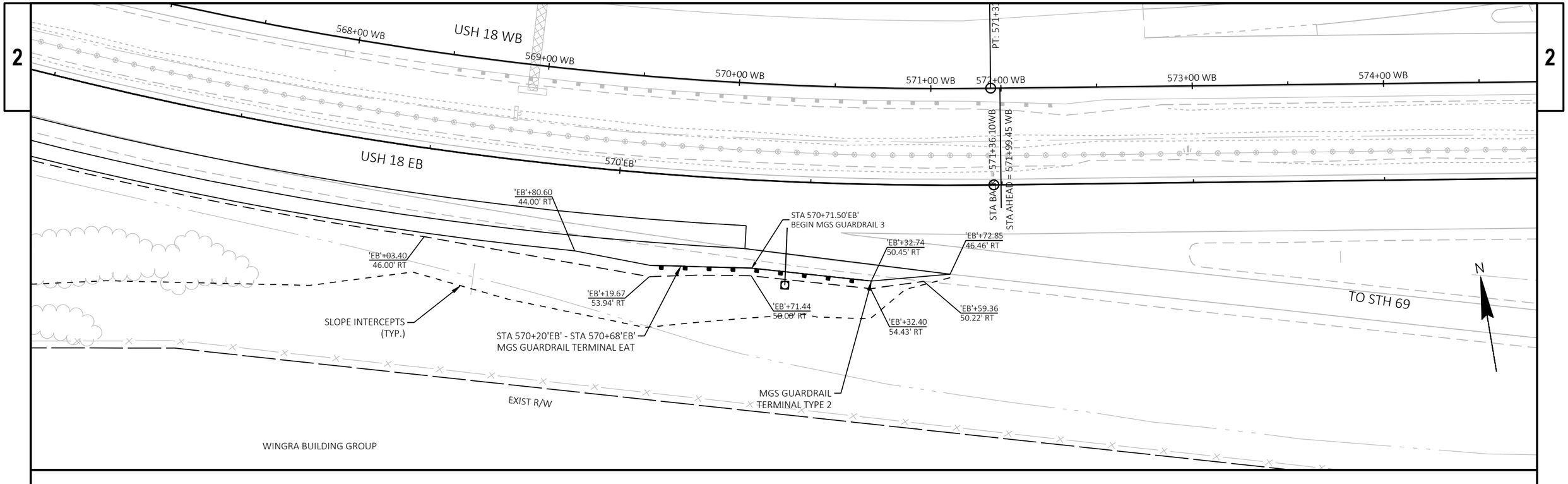
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\01276 LAYOUT NAME - 01

PLOT DATE : 7/30/2024 11:47 AM

PLOT BY : ARBUCKLE, ADRIAN

PLOT NAME :

PLOT SCALE : 1 IN:50 FT

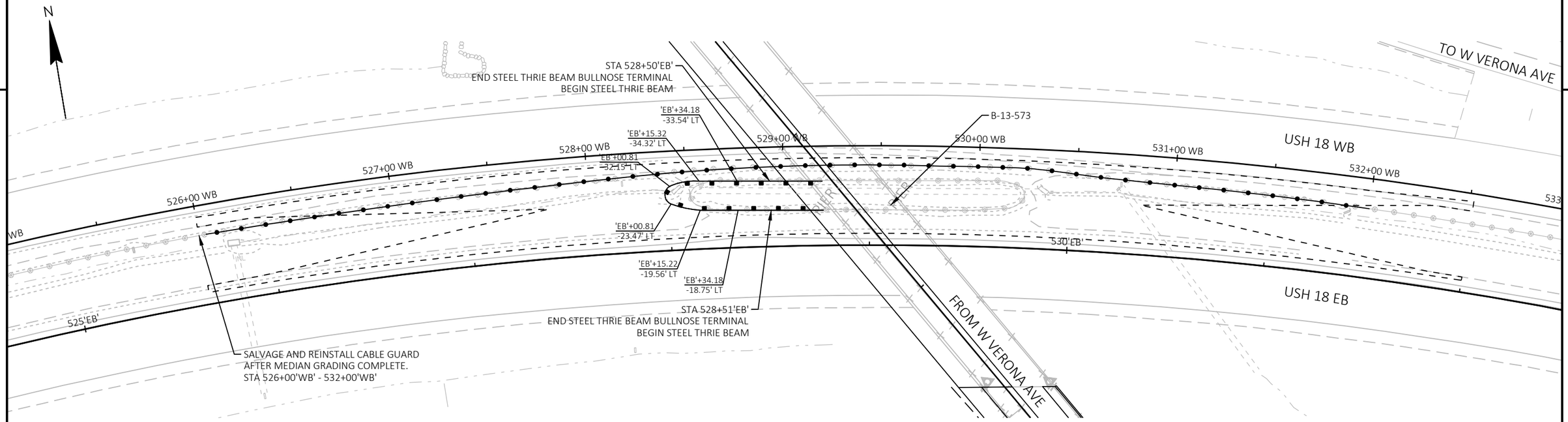


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 62	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\02276 PLOT DATE : 7/30/2024 11:48 AM
LAYOUT NAME - 02

PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLAN DETAILS - GUARDRAIL	SHEET 63	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\02276-PD.DWG
LAYOUT NAME - 03
PLOTTED: 7/30/2024 11:49 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2

2

N

502'EB'

503'EB'

504'EB'

USH 18 EB

C-13-111

936
934
932
930
927
925
923

3.7:1

2.4:1

PI: 10+62.39

PI: 10+37.01

'SPECIAL DITCH' ALIGNMENT

N80°48'57"E

S85°23'18"E

0.4%

N74°53'31"E

0.4%

EP: 11+21.05

1.0:1

923
924
925
926
927
928

OH

EXIST R/W

BP: 10+00.00

ALLIANT ENERGY

MILITARY RIDGE STATE TRAIL

TDS

FO

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CONTOUR MAP - SPECIAL DITCH	SHEET 64	E

2

2

N

DAIRY RIDGE RD.

40'G'

42'G'

44'G'

12'BN

SIGN

SIGN

SIGN

LEGEND

BOBCAT LANE SECTIONS

BOBCAT LANE SB CURB RETURN SECTIONS

BOBCAT LANE NB CURB RETURN SECTIONS

NOTE:
CROSS SECTIONS ARE PROVIDED EVERY 25' (TYP.) FOR BOBCAT LANE.

EARTHWORK VOLUMES FOR EACH ALIGNMENT ARE CALCULATED WITHIN EACH OF THE REGIONS SHOWN. THIS DIAGRAM IS FOR VISUAL REPRESENTATION ONLY. REFER TO CROSS SECTIONS FOR INFORMATION.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	MATCHLINES DIAGRAM	SHEET 65	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021801-EM.DWG
LAYOUT NAME - Matchlines-BobcatLn
PLOT DATE : 7/24/2024 9:02 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

N

MP

46G'

48G'

466GA

464GA

466GA

466GA

LEGEND

- GA RAMP SECTIONS
- GA NORTH CURB RETURN SECTIONS
- GA SOUTH CURB RETURN SECTIONS

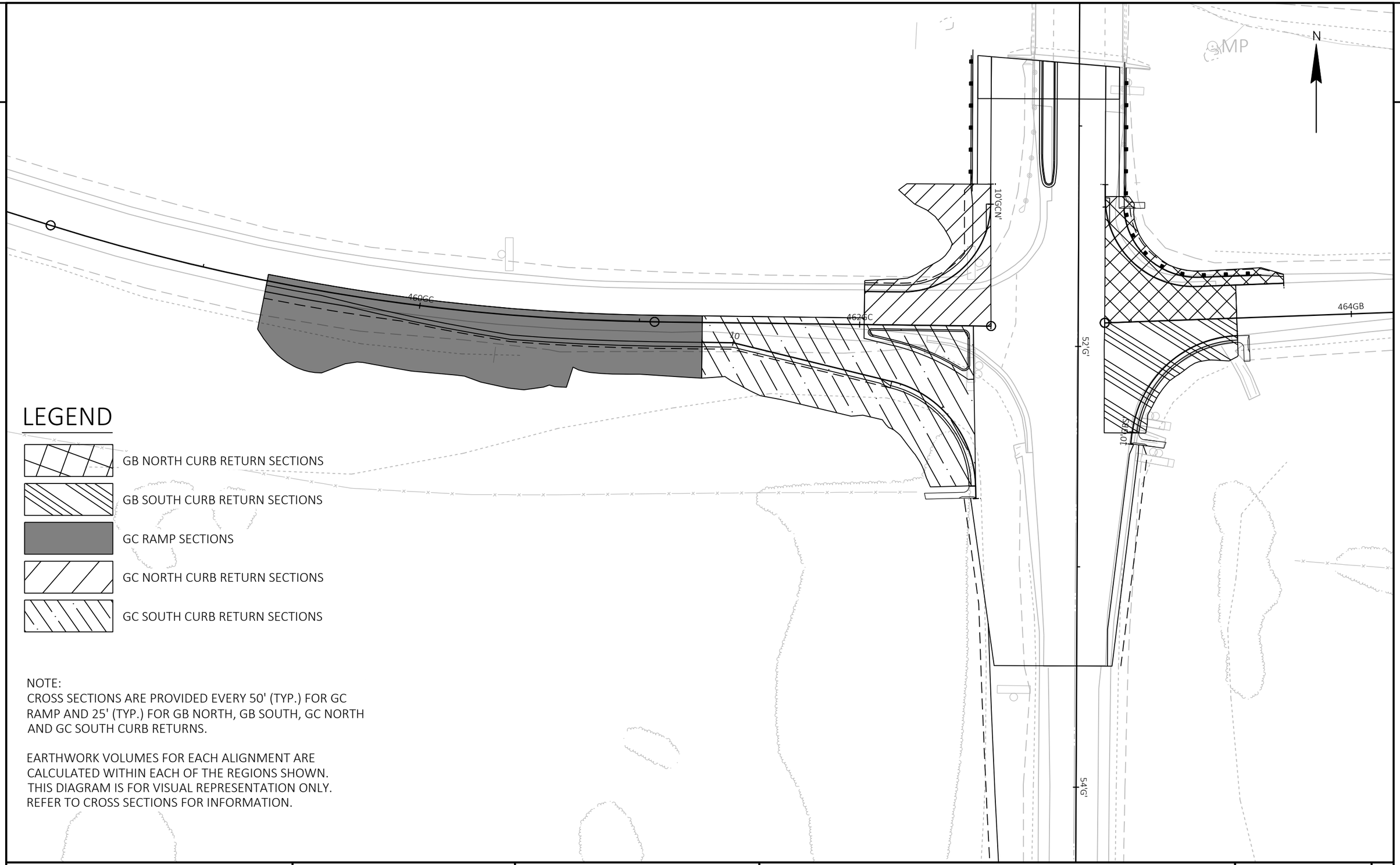
NOTE:
CROSS SECTIONS ARE PROVIDED EVERY 50' (TYP.) FOR GA RAMP AND GA RAMP SOUTH AND 25' (TYP.) FOR GA NORTH AND GA SOUTH CURB RETURNS.

EARTHWORK VOLUMES FOR EACH ALIGNMENT ARE CALCULATED WITHIN EACH OF THE REGIONS SHOWN. THIS DIAGRAM IS FOR VISUAL REPRESENTATION ONLY. REFER TO CROSS SECTIONS FOR INFORMATION.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	MATCHLINES DIAGRAM	SHEET 66	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021801-EM.DWG
LAYOUT NAME - Matchlines-GA Ramp
PLOT DATE : 7/24/2024 9:03 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



LEGEND

- GB NORTH CURB RETURN SECTIONS
- GB SOUTH CURB RETURN SECTIONS
- GC RAMP SECTIONS
- GC NORTH CURB RETURN SECTIONS
- GC SOUTH CURB RETURN SECTIONS

NOTE:
CROSS SECTIONS ARE PROVIDED EVERY 50' (TYP.) FOR GC RAMP AND 25' (TYP.) FOR GB NORTH, GB SOUTH, GC NORTH AND GC SOUTH CURB RETURNS.

EARTHWORK VOLUMES FOR EACH ALIGNMENT ARE CALCULATED WITHIN EACH OF THE REGIONS SHOWN. THIS DIAGRAM IS FOR VISUAL REPRESENTATION ONLY. REFER TO CROSS SECTIONS FOR INFORMATION.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	MATCHLINES DIAGRAM	SHEET 67	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021801-EM.DWG
LAYOUT NAME - Matchlines-GB&GC Ramps
PLOT DATE : 7/24/2024 9:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

2

N

LEGEND

GD RAMP SECTIONS

GD SOUTH CURB RETURN SECTIONS

GD NORTH CURB RETURN SECTIONS

NOTE:
CROSS SECTIONS ARE PROVIDED EVERY 50' (TYP.) FOR GD RAMP AND 25' (TYP.) FOR GD NORTH AND GD SOUTH CURB RETURNS.

EARTHWORK VOLUMES FOR EACH ALIGNMENT ARE CALCULATED WITHIN EACH OF THE REGIONS SHOWN. THIS DIAGRAM IS FOR VISUAL REPRESENTATION ONLY. REFER TO CROSS SECTIONS FOR INFORMATION.

458GD

460GD

463GD

460'WB'

46'G'

48'G'

MP

MP

MP

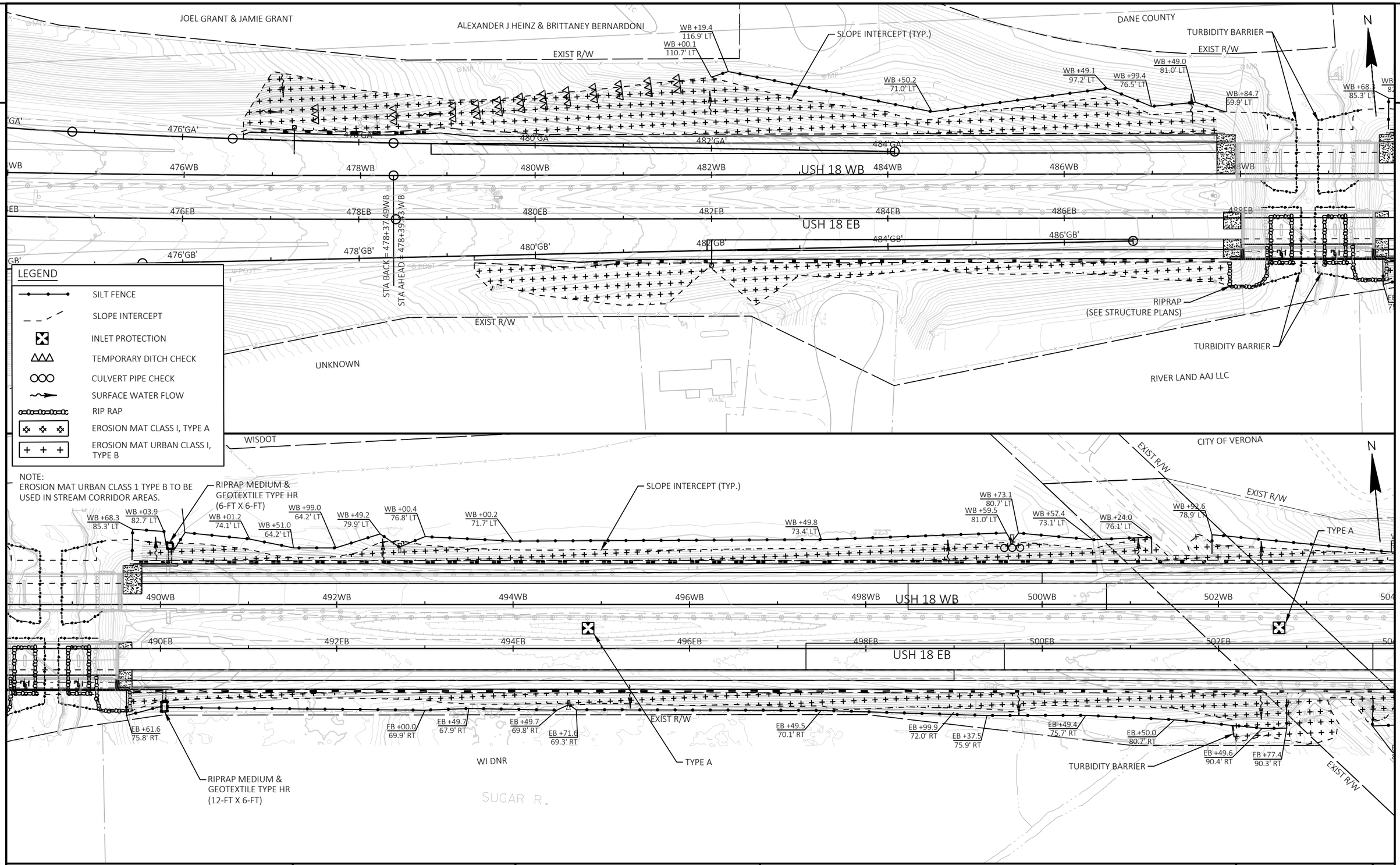
SIGN

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	MATCHLINES DIAGRAM	SHEET 68	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\021801-EM.DWG
LAYOUT NAME - Matchlines-GD Ramps

PLOT DATE : 7/24/2024 9:06 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

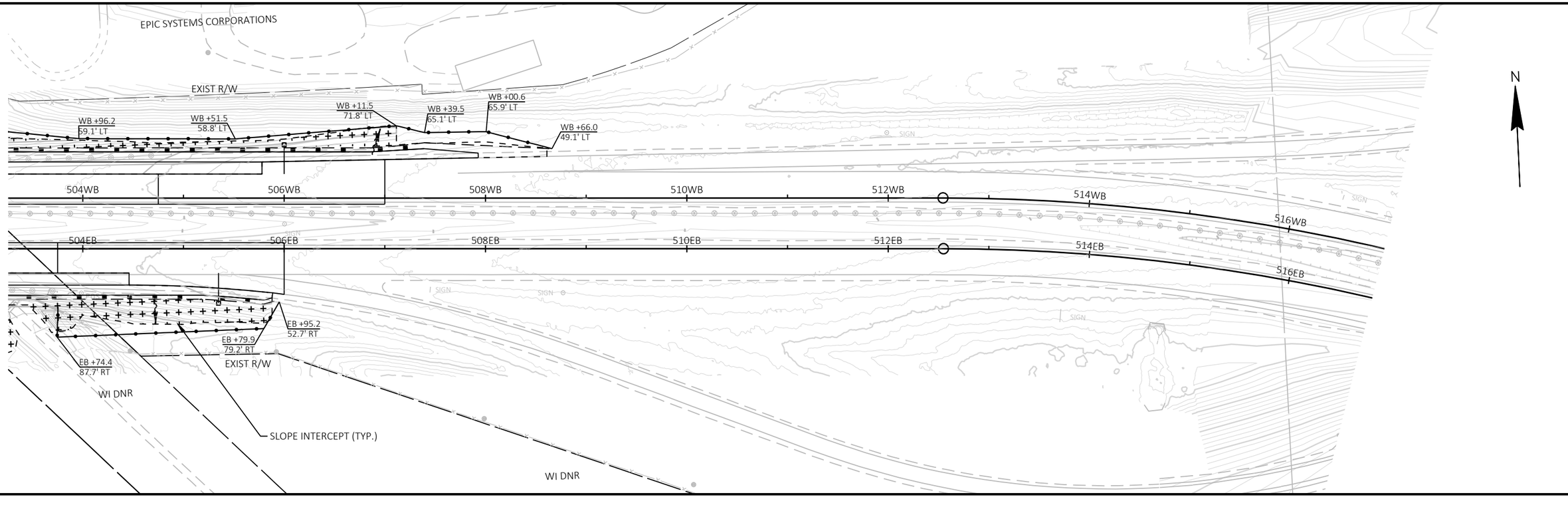
WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 2	SHEET 69	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 2.DWG
LAYOUT NAME - 01
PLOT DATE : 11/12/2024 4:13 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



LEGEND	
	SILT FENCE
	SLOPE INTERCEPT
	INLET PROTECTION
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW
	RIP RAP
	EROSION MAT CLASS I, TYPE A
	EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

2

2

EXIST R/W

W VERONA AVE
OFF-RAMP

STA BACK = 539+42.23WB
STA AHEAD = 538+72.42 WB

534WB
536WB
538WB
540WB
542WB
544WB
532WB
534EB
532EB

USH 18 WB
USH 18 EB

TYPE D

RIPRAP MEDIUM &
GEOTEXTILE TYP HR
(50-FT X 6-FT)

'W4' +72.9
82.0' LT
'W4' +01.1
77.7' LT
'W4' +74.0
66.2' LT
'W4' +28.7
60.0' LT
'W4' +49.0
53.9' LT
530'W4'

'W4' +76.0
54.3' LT
'W4' +73.4
58.1' LT
'W4' +25.0
43.5' LT
'W4' +52.4
49.6' LT
'W4' +77.7
34.1' LT
'W4' +25.5
36.6' LT
'W4' +75.6
33.5' LT
'W4' +45.2
23.8' LT
545'W4'
540'W4'

W VERONA AVE ON-RAMP

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

TYPE A

546WB
548WB
550WB
552WB
554WB
556WB
558WB
560WB
545'W4'

SLOPE INTERCEPT (TYP.)

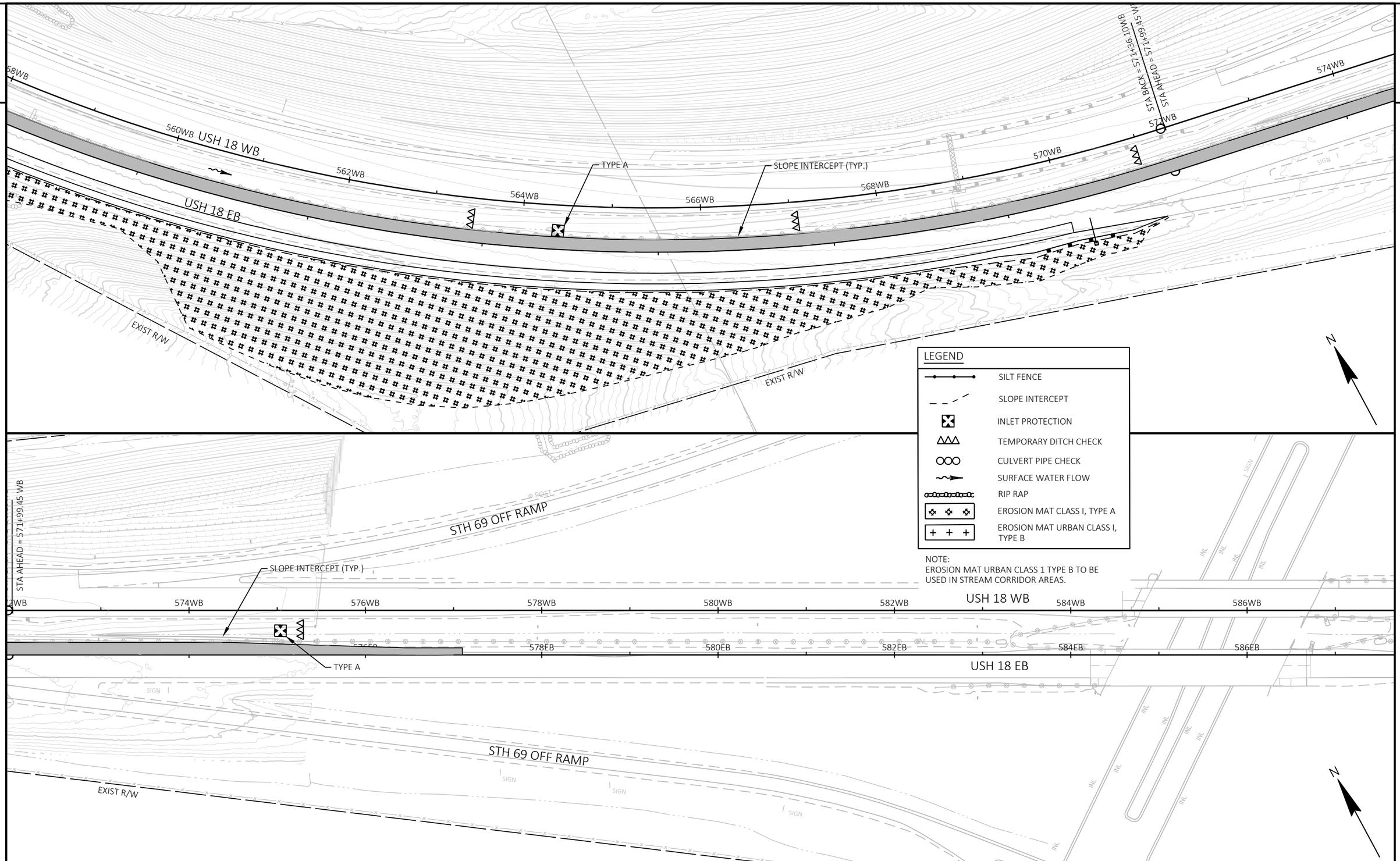
USH 18 WB
USH 18 EB

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 2	SHEET 71	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 2.DWG
LAYOUT NAME - 03
PLOT DATE : 11/12/2024 4:13 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 2	SHEET 72	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 2.DWG
LAYOUT NAME - 04
PLOT DATE : 11/12/2024 4:14 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

N

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

RIPRAP MEDIUM & GEOTEXTILE TYPE HR (26-FT X 6-FT)

SLOPE INTERCEPT (TYP.)

CTH G

EXIST R/W

TLE

BOBCAT LANE

EXIST R/W

30'G'

34'G'

36'G'

38'G'

40'G'

42'G'

44'G'

46'G'

40'BL'

46'GD'

'G' +98.7
78.5' LT

'G' +19.7
73.6' LT

'G' +58.5
79.7' LT

'G' +98.4
59.5' LT

'G' +49.8
65.8' LT

'G' +39.5
79.2' LT

'G' +07.0
59.6' LT

'BL' +50.8
38.0' RT

'BL' +45.7
25.2' RT

'BL' +91.3
45.6' RT

'BL' +01.3
23.8' LT

'BL' +38.6
46.1' RT

'BL' +84.0
35.4' LT

'BL' +44.0
53.6' LT

'GD' +50.9
36.6' LT

'GD' +52.3
27.0' LT

'GD' +59.2
25.4' LT

'GD' +90.0
36.0' RT

'G' +98.4
66.1' RT

'GD' +51.3
34.9' RT

'ST A AHEAD = 459+76.40 WB

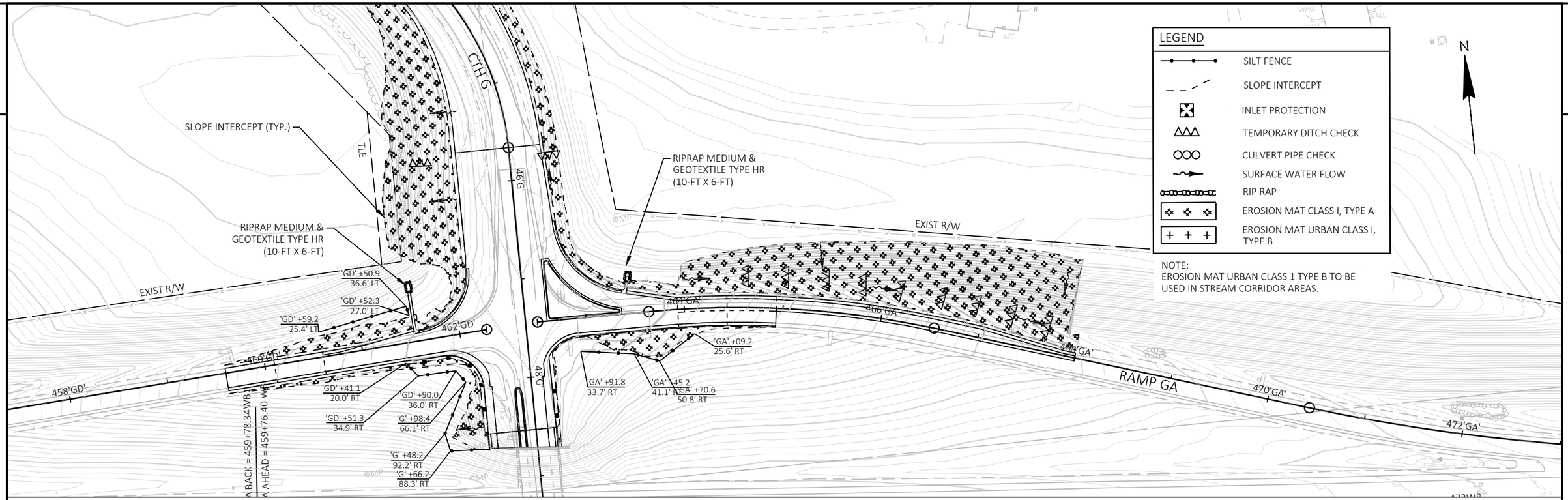
'ST A BACK = 459+78.34 WB

US 18 WB

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 2	SHEET 73	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 2.DWG
LAYOUT NAME - 05

PLOT DATE : 11/12/2024 4:14 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT



THIS SHEET INTENTIONALLY LEFT BLANK

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 2	SHEET 74	E

2

2

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

CITY OF VERONA

VERONA AREA SCHOOL DISTRICT

WISDOT

RAMP W4

520'W4'

525'W4'

530'W4'

535'W4'

540'W4'

545'W4'

532WB

532EB

530WB

530EB

528WB

528EB

526WB

526EB

542WB

544WB

546WB

B-13-573

C-13-121

'W4' +01.1
77.7' LT

'W4' +72.9
82.0' LT

'W4' +74.0
66.2' LT

'W4' +28.7
60.0' LT

'W4' +49.0
53.9' LT

'W4' +25.5
36.6' LT

'W4' +75.6
33.5' LT

'W4' +45.2
23.8' LT

'W4' +52.4
49.6' LT

'W4' +77.7
34.1' LT

'W4' +25.0
43.5' LT

'W4' +73.4
58.1' LT

'W4' +01.3
55.3' LT

'W4' +76.0
54.3' LT

'W4' +00.9
68.2' LT

53.9' LT

SLOPE INTERCEPTS (TYP.)

RIPRAP MEDIUM & GEOTEXTILE TYPE HR (50-FT X 6-FT)

TYPE A & C

USH 18 WB

USH 18 EB

EXIST R/W

WI DNR

MILITARY RIDGE STATE TRAIL

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

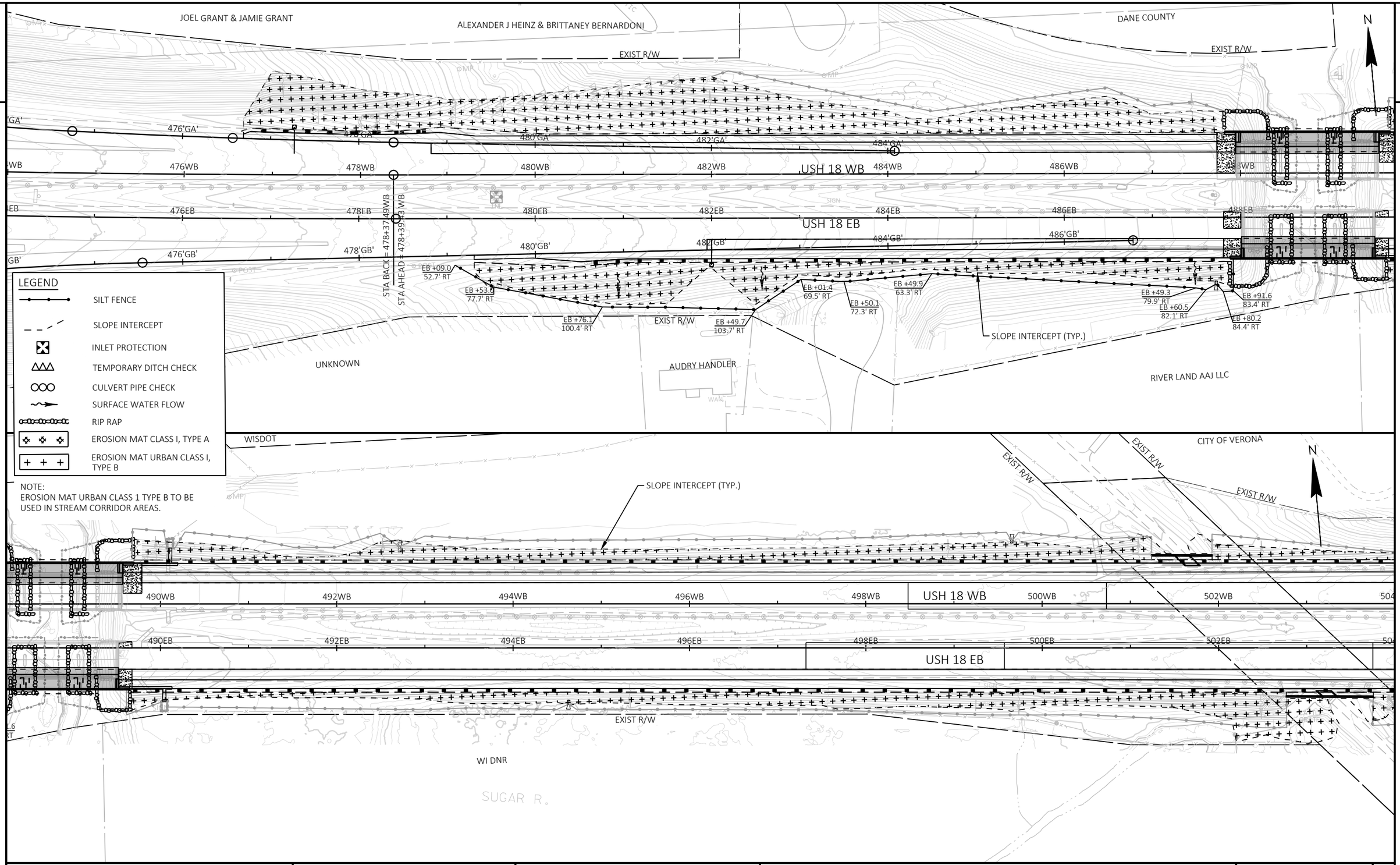
NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 2	SHEET 75	E

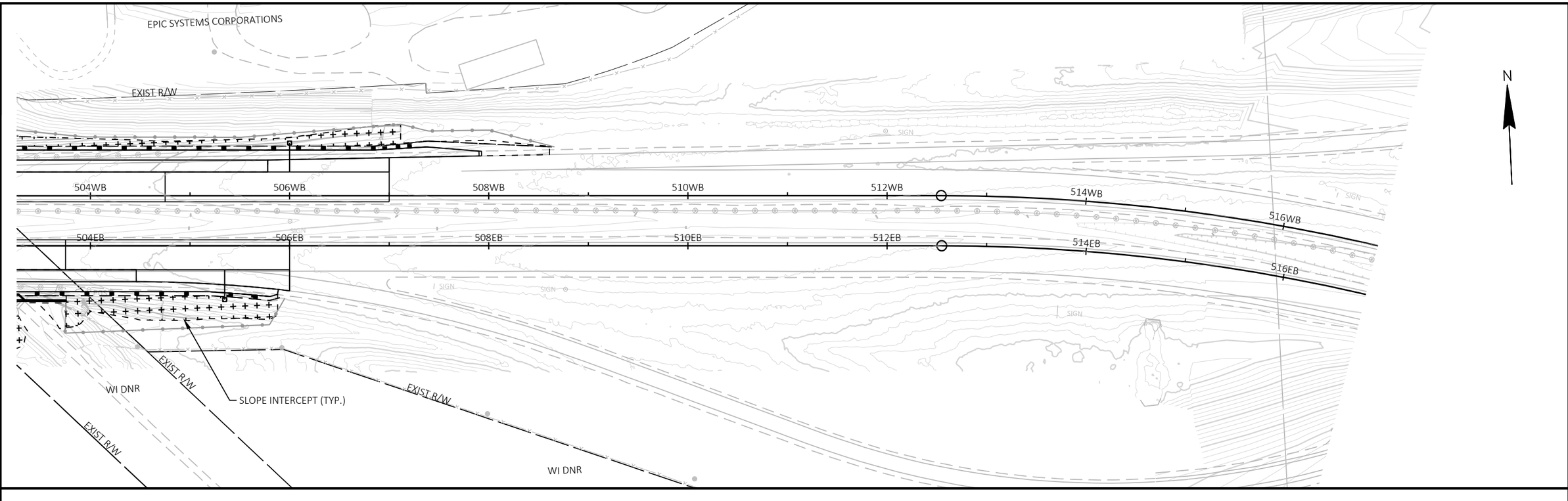
FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 2.DWG
LAYOUT NAME - W4-1

PLOT DATE : 11/12/2024 4:15 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 3	SHEET 76	E



LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 3	SHEET 77	E

2

2

C-13-121

544WB

546WB

548WB

550WB

552WB

USH 18 WB

554WB

556WB

558WB

4'W4'

546'W4'

EB +08.5
75.9' RT

EB +00.0
96.0' RT

EB +98.1
87.2' RT

EXIST R/W

EB +48.5
137.1' RT

EB +99.9
80.7' RT

EB +60.8
86.0' RT

USH 18 EB

EB +93.8
172.6' RT

EB +46.0
175.7' RT

EB +50.5
173.0' RT

EB +53.7
162.2' RT

EB +04.0
117.8' RT

EB +06.2
111.5' RT

EB +32.4
96.2' RT

EB +83.0
70.3' RT

EB +89.5
76.8' RT

EB +79.4
85.8' RT

EB +46.8
107.6' RT

EXIST R/W

EB +11.4
122.4' RT

EB +02.2
138.0' RT

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR

EB +72.9
144.7' RT

EB +00.3
155.5' RT

SLOPE INTERCEPTS
(TYP.)

WI DNR

558WB

560WB

562WB

564WB

TYPE B

566WB

USH 18 WB

568WB

570WB

572WB

574

EB +83.0
70.3' RT

EB +89.5
76.8' RT

EB +79.4
85.8' RT

EB +00.0
98.9' RT

EB +69.3
80.2' RT

EXIST R/W

USH 18 EB

EB +00.0
65.1' RT

EB +98.5
90.0' RT

EB +50.2
93.2' RT

EB +35.9
80.0' RT

EB +70.1
51.5' RT

BM
BM

TO STH 69

SLOPE INTERCEPTS
(TYP.)

WINGRA BUILDING GROUP

WINGRA BUILDING GROUP

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 3	SHEET 78	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 3.DWG
LAYOUT NAME - 69 AUX-1

PLOT DATE : 11/13/2024 10:19 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

EXIST R/W

CTH G

TLE

EXIST R/W

EXIST R/W

EXIST R/W

464'GA'

466'GA'

468'GA'

RAMP GA

470'GA'

472'GA'

458'GD'

462'GD'

460'GC'

461'G'

463'G'

N

464WB

464EB

'G' +29.3
26.7' LT

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR
(46-FT X 6-FT)

'G' +62.7
57.8' LT

'G' +99.9
64.8' LT

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR
(54-FT X 6-FT)

'G' +45.0
48.7' LT

'G' +47.4
39.4' LT

'G' +79.9
53.1' LT

TYPE D

52'G'

50'G'

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR
(12-FT X 6-FT)

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR
(12-FT X 6-FT)

56'G'

54'G'

CTH G

58'G'

60'G'

62'G'

64'G'

'G' +99.9
62.5' RT

'G' +23.0
98.6' RT

'G' +49.5
81.8' RT

'G' +48.7
63.1' RT

'G' +51.9
65.2' RT

'G' +03.0
39.5' RT

'G' +75.8
43.1' RT

'G' +84.8
34.3' RT

'G' +08.1
134.7' RT

EXIST R/W

'G' +00.3
65.0' RT

'G' +54.7
77.8' RT

'G' +75.7
73.0' RT

462WB

462EB

462'GC'

'G' +86.2
99.7' RT

TYPE D

'GC' +31.2
37.3' LT

'GC' +01.6
21.9' LT

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR
(10-FT X 6-FT)

'GC' +72.2
46.4' RT

RIPRAP MEDIUM &
GEOTEXTILE TYPE HR
(12-FT X 6-FT)

TYPE D

'GC' +38.5
35.7' RT

SLOPE INTERCEPT (TYP.)

US 18 WB

US 18 EB

EXIST R/W

'GC' +50.0
43.3' RT

460WB

460EB

460'GC'

'GC' +78.4
39.0' RT

'GC' +53.6
46.9' RT

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 3	SHEET 79	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 3.DWG
LAYOUT NAME - 04

PLOT DATE : 11/13/2024 10:20 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

CITY OF VERONA

VERONA AREA SCHOOL DISTRICT

EXIST R/W

RAMP W4

520'W4'

522'W4'

524'W4'

526'W4'

528'W4'

530'W4'

532'W4'

532WB

532EB

530WB

530EB

B-13-573

'W4' +92.2
17.0' RT

'W4' +01.4
27.2' RT

'W4' +55.5
45.8' RT

'W4' +84.0
75.5' RT

'W4' +00.3
88.6' RT

'W4' +80.6
99.9' RT

'W4' +20.5
74.2' RT

'W4' +77.2
68.8' RT

'W4' +25.0
47.5' RT

WISDOT

SLOPE INTERCEPTS
(TYP.)

528WB

528EB

526WB

526EB

USH 18 WB

USH 18 EB

EXIST R/W

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS.

STA BACK = 539+42.
STA AHEAD = 538+72.

542WB

544WB

546WB

WI DNR

C-13-121

532'W4'

534'W4'

536'W4'

538'W4'

540'W4'

542'W4'

544'W4'

546'W4'

RAMP W4

'W4' +77.2
68.8' RT

'W4' +25.0
47.5' RT

'W4' +70.8
50.4' RT

'W4' +06.9
79.1' RT

'W4' +76.7
86.2' RT

'W4' +76.0
42.8' RT

'W4' +50.0
50.0' RT

'W4' +50.6
44.9' RT

'W4' +76.8
26.6' RT

'W4' +29.0
23.2' RT

'W4' +36.5
5.3' RT

EB +08.5
75.9' RT

EB +00.0
96.0' RT

EB +98.1
87.2' RT

SLOPE INTERCEPTS
(TYP.)

EXIST R/W

WI DNR

WI DNR

WI DNR

MILITARY RIDGE STATE TRAIL

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 3	SHEET 80	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 3.DWG
LAYOUT NAME - W4-1

PLOT DATE : 11/13/2024 10:21 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

SLOPE INTERCEPTS (TYP.)

EXIST R/W

W VERONA AVE ON RAMP

USH 18 WB

USH 18 EB

W VERONA AVE EXIT RAMP

504WB 506WB 508WB 510WB 512WB 514WB 516WB

504EB 506EB 508EB 510EB 512EB 514EB 516EB

518WB 520WB 522WB 524WB 526WB 528WB 530WB 532WB

518EB 520EB 522EB 524EB 526EB 528EB 530EB 532EB

W4' +77.5
76.3' LT

W4' +84.0
58.1' LT

N

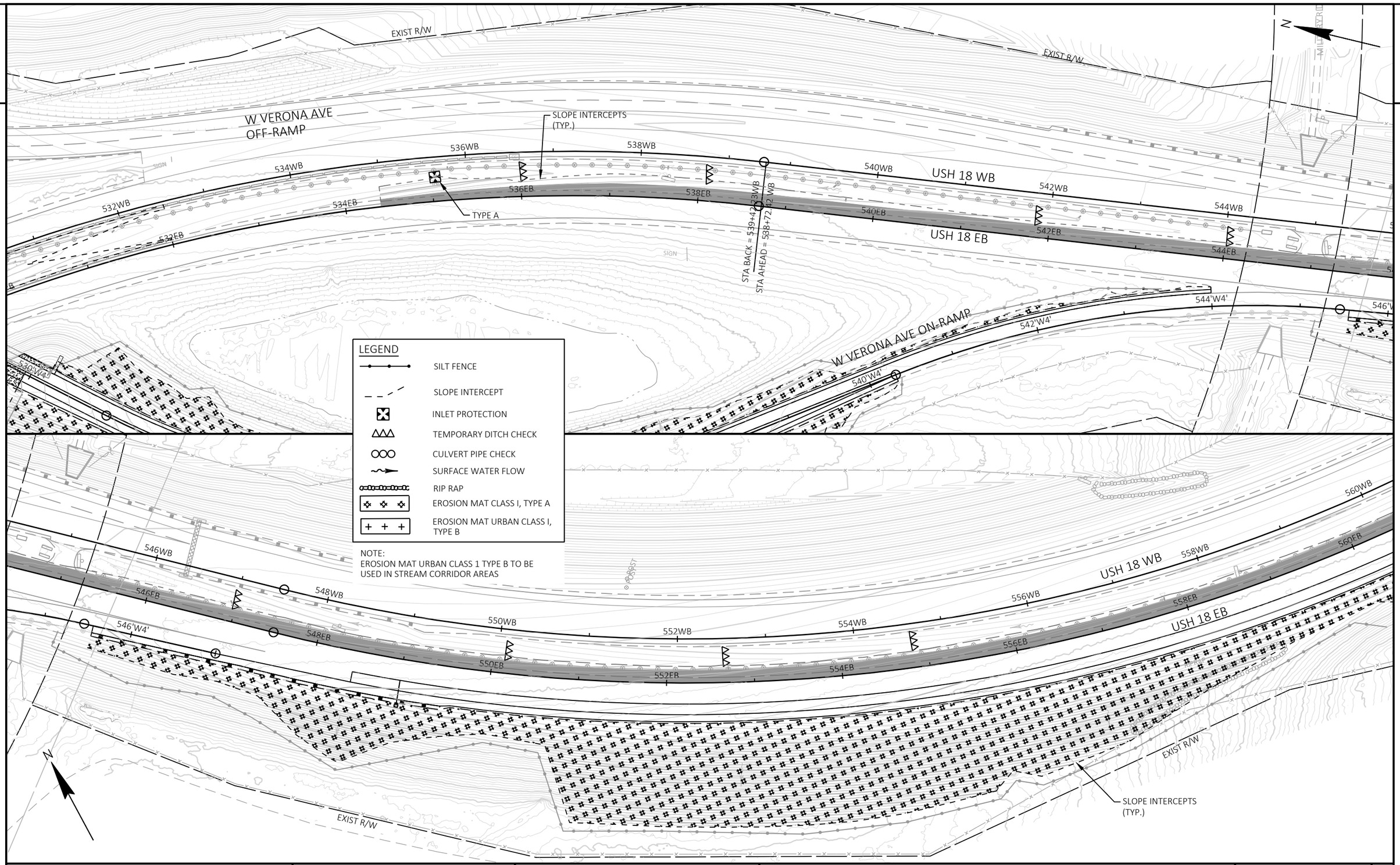
LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 4	SHEET 81	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 4.DWG
LAYOUT NAME - 02
PLOT DATE : 11/12/2024 3:51 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



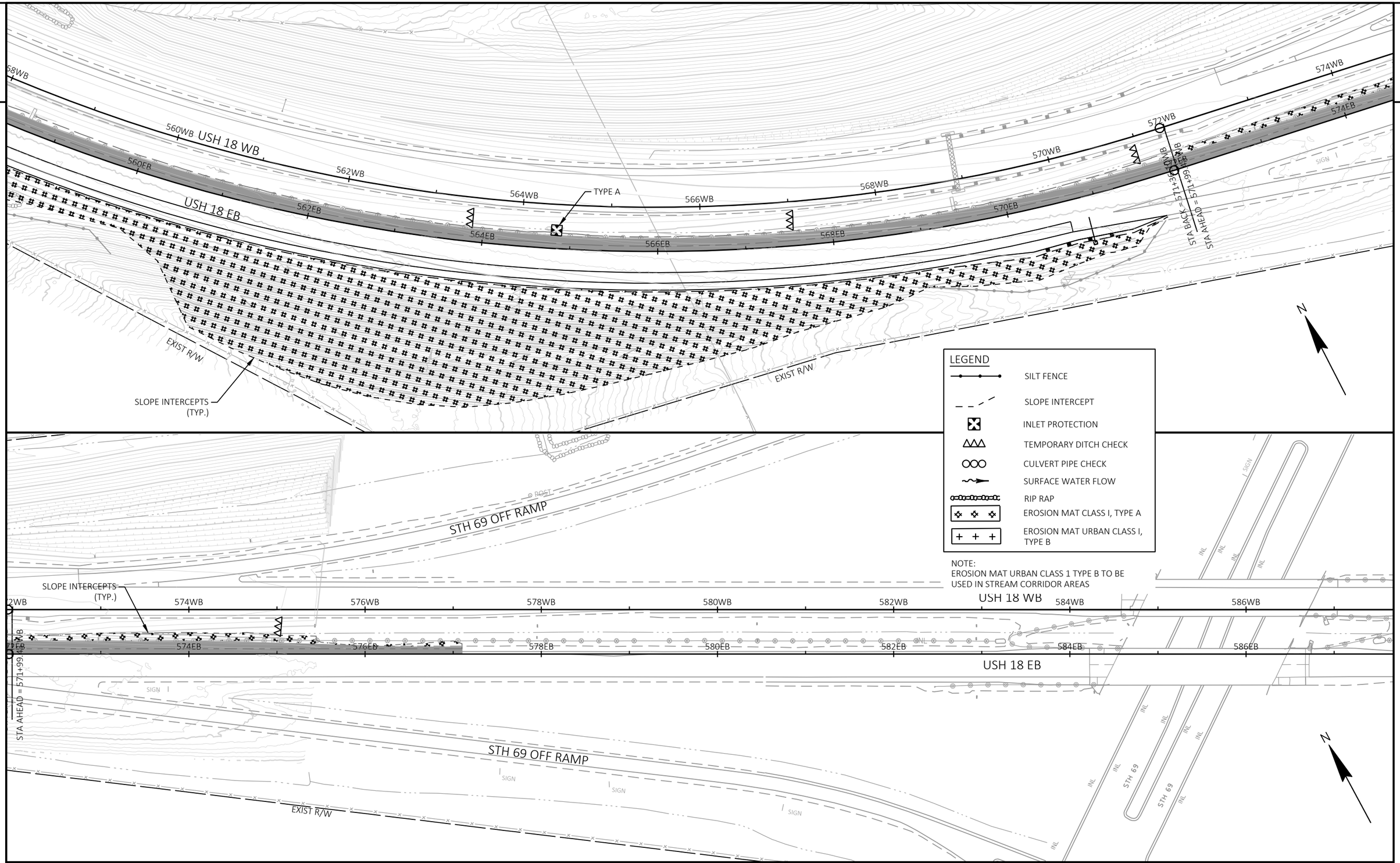
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 4	SHEET 82	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 4.DWG
LAYOUT NAME - 03

PLOT DATE : 11/12/2024 3:52 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 4	SHEET 83	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 4.DWG
LAYOUT NAME - 04

PLOT DATE : 11/12/2024 3:53 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

UNIVERSITY OF WISCONSIN HOSPITALS AND CLINICS

CITY OF VERONA

VERONA AREA SCHOOL DISTRICT

EXIST R/W

RAMP W4

520'W4'

522'W4'

524'W4'

526'W4'

528'W4'

530'W4'

532'W4'

'W4' +10.6
24.5' LT

'W4' +47.3
30.8' LT

'W4' +74.8
32.9' LT

'W4' +25.0
39.0' LT

'W4' +01.9
39.5' LT

'W4' +24.4
51.9' LT

'W4' +67.7
62.3' LT

'W4' +18.9
64.2' LT

'W4' +77.5
76.3' LT

'W4' +84.0
58.1' LT

530WB

530EB

532WB

532EB

B-13-573

WISDOT

SLOPE INTERCEPTS
(TYP.)

528WB

528EB

526WB

526EB

USH 18 WB

USH 18 EB

EXIST R/W

LEGEND

- SILT FENCE
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- RIP RAP
- EROSION MAT CLASS I, TYPE A
- EROSION MAT URBAN CLASS I, TYPE B

NOTE:
EROSION MAT URBAN CLASS 1 TYPE B TO BE USED IN STREAM CORRIDOR AREAS

STA BACK = 539+42.22
STA AHEAD = 538+72.22

540EB

542WB

542EB

USH 18 WB

USH 18 EB

544WB

544EB

546WB

546EB

WI DNR

C-13-121

RAMP W4

532'W4'

534'W4'

536'W4'

538'W4'

540'W4'

542'W4'

544'W4'

546'W4'

SLOPE INTERCEPTS
(TYP.)

EXIST R/W

EXIST R/W

WI DNR

WI DNR

WI DNR

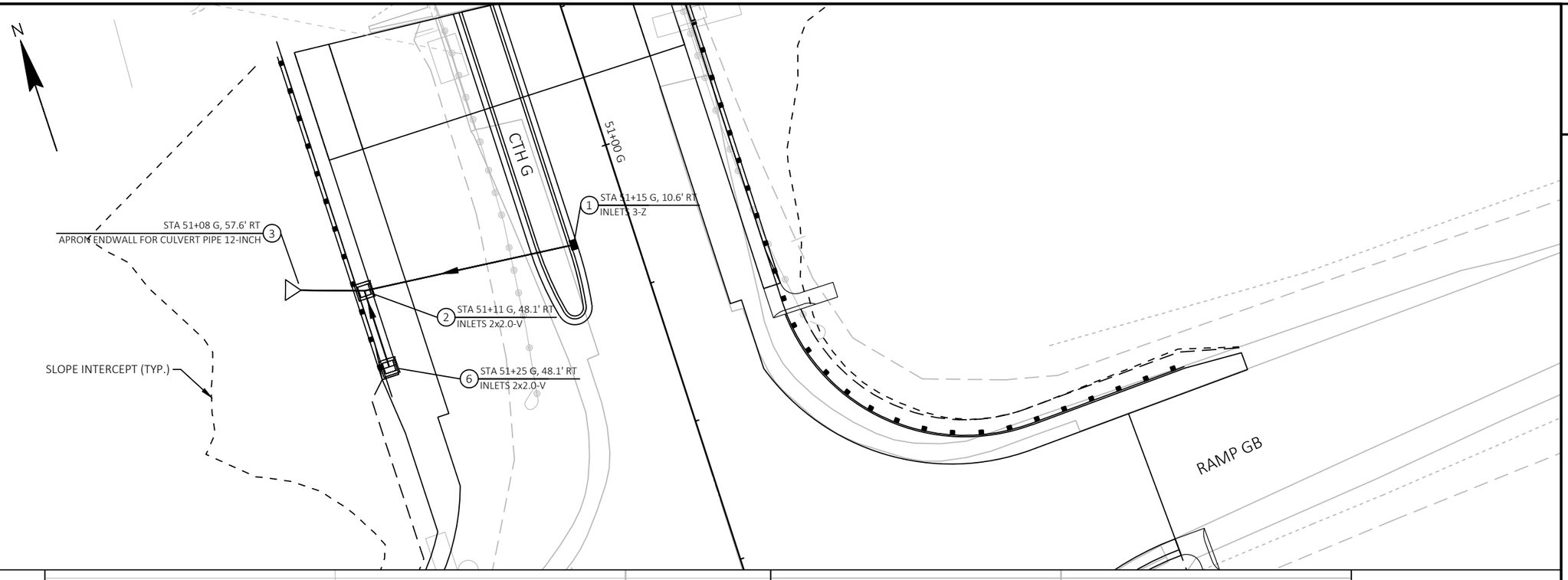
MILITARY RIDGE STATE TRAIL

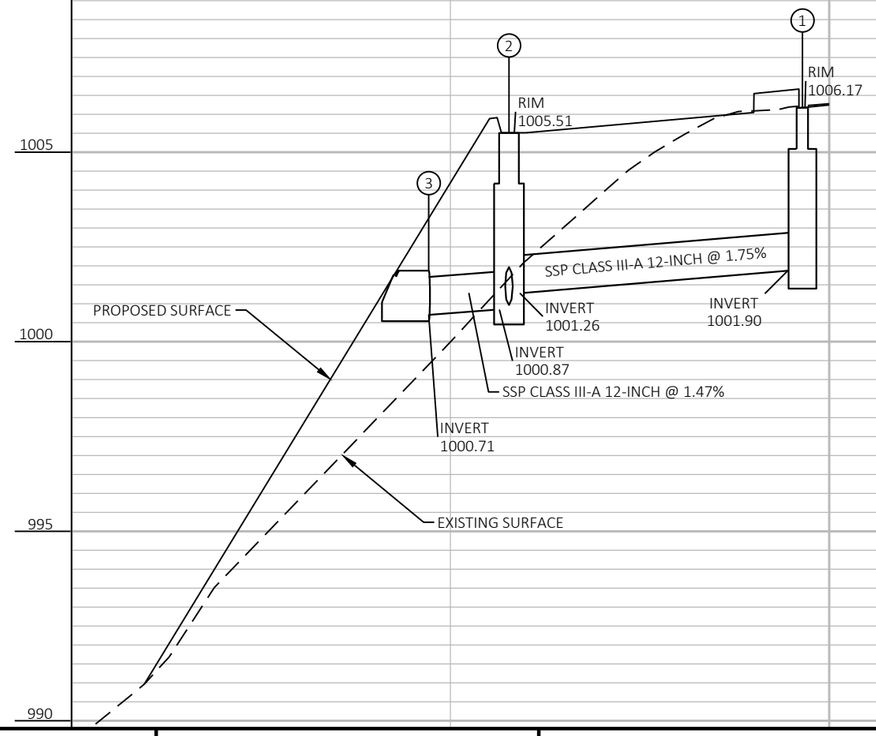
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	EROSION CONTROL - STAGE 4	SHEET 84	E

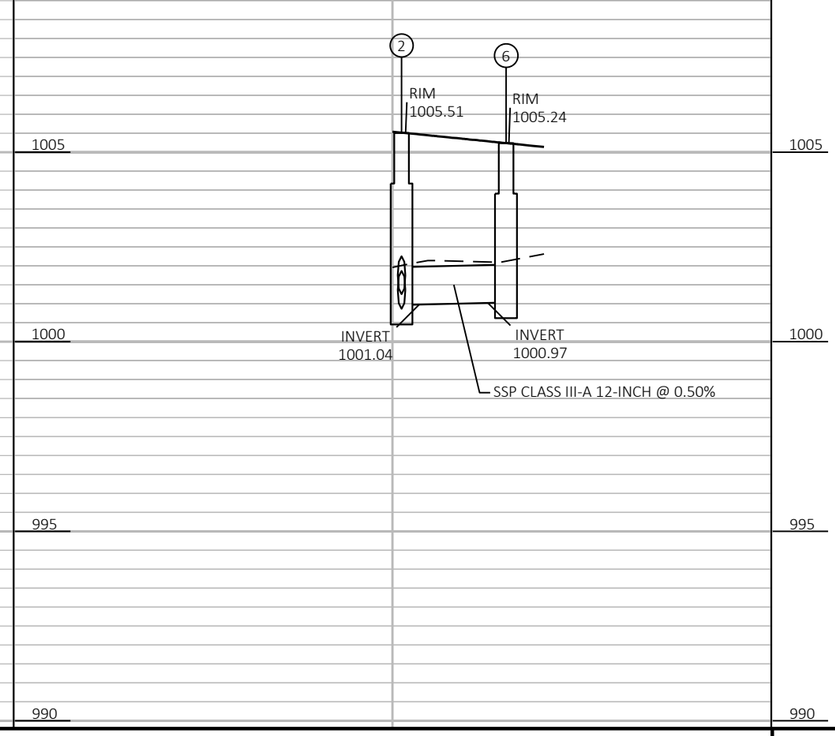
FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022001-EC_STAGE 4.DWG
LAYOUT NAME - W4-1

PLOT DATE : 11/12/2024 3:54 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2







PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	STORM SEWER DETAILS	SHEET 85	E

RAMP GC

461+00 GC

462+00 GC

4 STA 462+07 GC, 1.5' RT
INLETS 2x3-HM-GJ

5 STA 462+01 GC, 32.2' RT
APRON ENDWALL FOR CULVERT PIPE 12-INCH

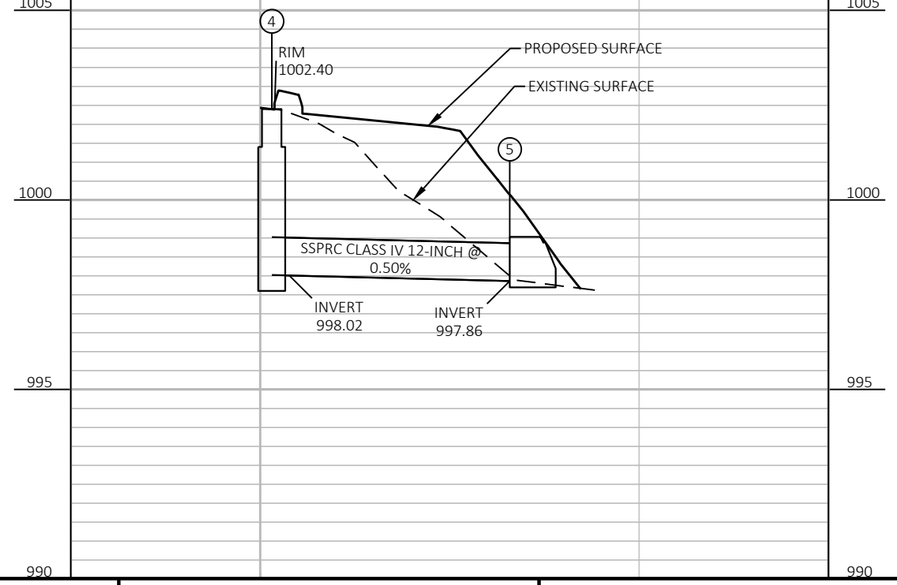
SLOPE INTERCEPT (TYP.)

N

CTH G

52+00 G

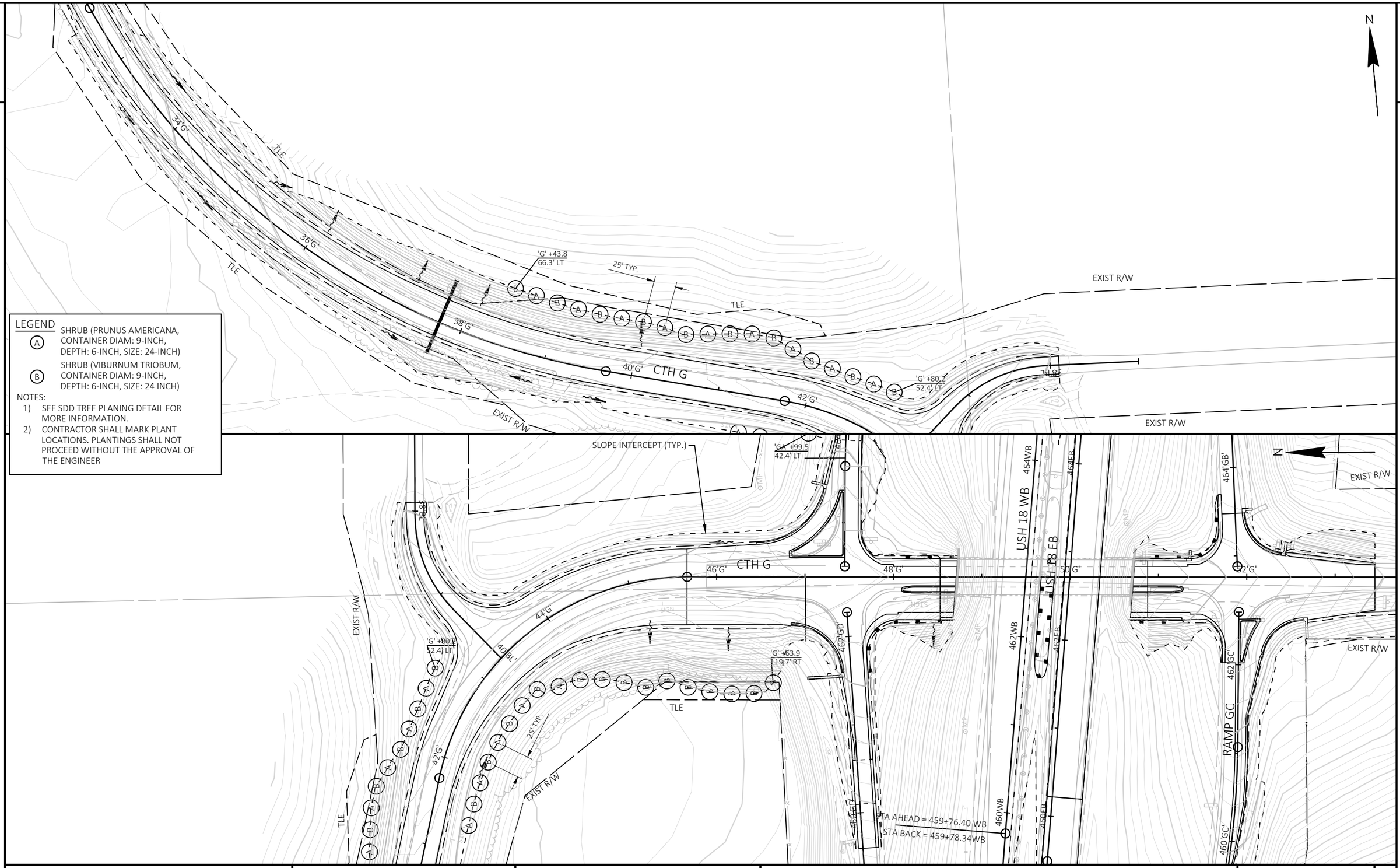
2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	STORM SEWER DETAILS	SHEET 86	E

FILE NAME : C:\USERS\ARBUCKLEA\ONEDRIVE - AECOM\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\022501-SS.DWG
LAYOUT NAME - SS-02
PLOT DATE : 11/25/2024 8:04 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 41

2



LEGEND

(A) SHRUB (PRUNUS AMERICANA, CONTAINER DIAM: 9-INCH, DEPTH: 6-INCH, SIZE: 24-INCH)

(B) SHRUB (VIBURNUM TRIOBUM, CONTAINER DIAM: 9-INCH, DEPTH: 6-INCH, SIZE: 24 INCH)

NOTES:

1) SEE SDD TREE PLANING DETAIL FOR MORE INFORMATION.
2) CONTRACTOR SHALL MARK PLANT LOCATIONS. PLANTINGS SHALL NOT PROCEED WITHOUT THE APPROVAL OF THE ENGINEER

PROJECT NO: 1204-08-73	HWY: CTH G	COUNTY: DANE	PLANTING DETAIL	SHEET 87	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\023101-PL.DWG
LAYOUT NAME - 01
PLOT DATE : 7/30/2024 1:33 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

EXIST R/W

TLE

46'G'

48'G'

EXIST R/W

'G' +63.9
119.7' RT

462'GD'

'GA' +99.5
42.4' LT

25' TYP.

EXIST R/W

404'GA'

406'GA'

'GA' +75.2
98.7' LT

468'GA'

RAMP GA

470'GA'

472'GA'

474'GA'

N

STA AHEAD = 459+76.40 WB

SLOPE INTERCEPT (TYP.)

460WB

462WB

464WB

LEGEND

(A) SHRUB (PRUNUS AMERICANA, CONTAINER DIAM: 9-INCH, DEPTH: 6-INCH, SIZE: 24-INCH)

(B) SHRUB (VIBURNUM TRIOBUM, CONTAINER DIAM: 9-INCH, DEPTH: 6-INCH, SIZE: 24 INCH)

NOTES:

1) SEE SDD TREE PLANING DETAIL FOR MORE INFORMATION.
2) CONTRACTOR SHALL MARK PLANT LOCATIONS. PLANTINGS SHALL NOT PROCEED WITHOUT THE APPROVAL OF THE ENGINEER

EXIST R/W

JOEL GRANT & JAMIE GRANT

ALEXANDER J HEINZ & BRITTANEY BERNARDONI

DANE COUNTY

EXIST R/W

WB +91.4
106.5' LT

25' TYP.

SLOPE INTERCEPT (TYP.)

WB +60.9
96.1' LT

474'GA'

476'GA'

478'GA'

480'GA'

482'GA'

484'GA'

474WB

476WB

USH 18 WB

478WB

480WB

482WB

484WB

486WB

474EB

476EB

USH 18 EB

478EB

480EB

482EB

484EB

486EB

474'GB'

476'GB'

478'GB'

480'GB'

482'GB'

484'GB'

486'GB'

STA BACK = 478+37.49 WB

STA AHEAD = 478+39.43 WB

UNKNOWN

EXIST R/W

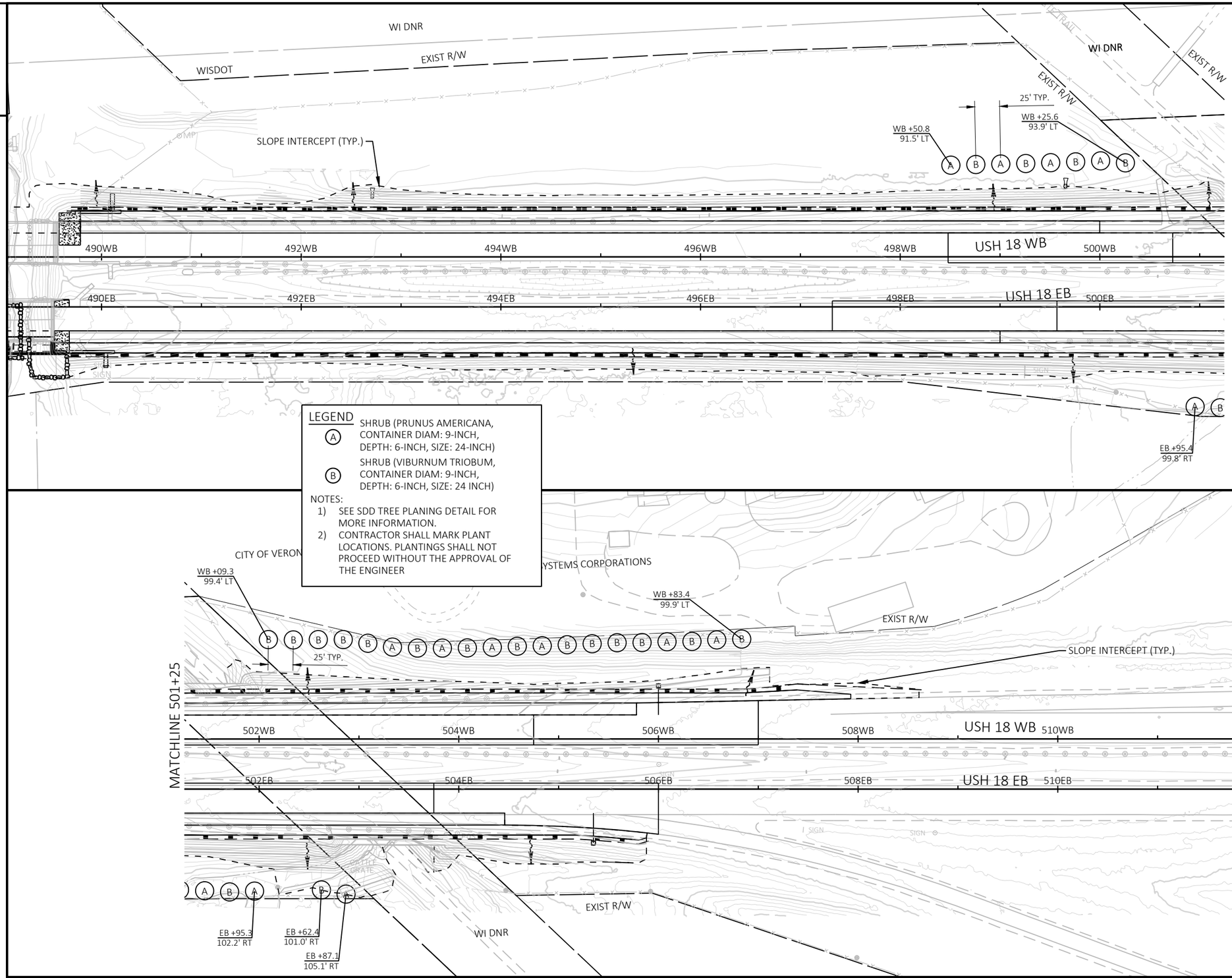
RIVER LAND AAJ LLC

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLANTING DETAIL	SHEET 88	E

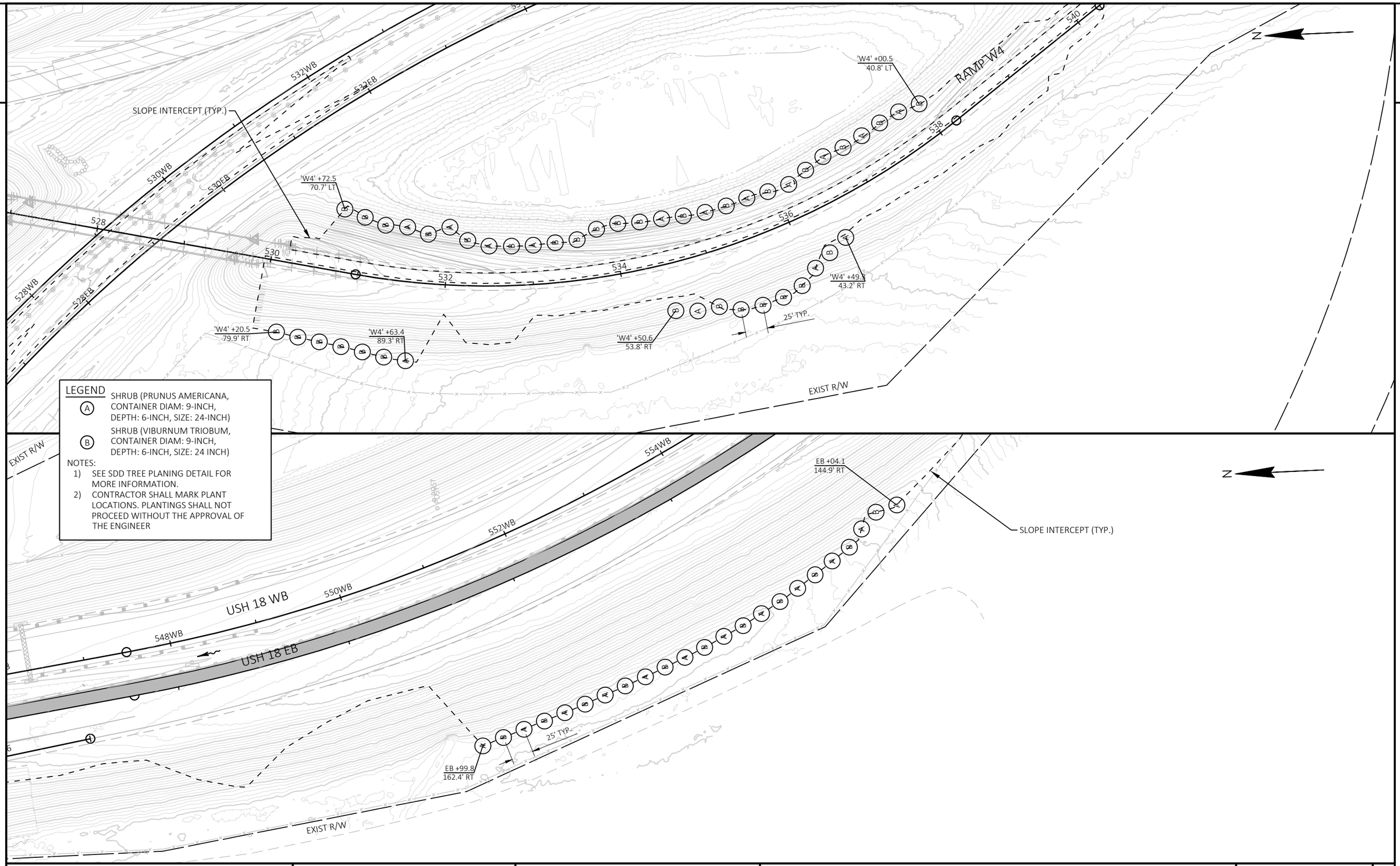
FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\023101-PL.DWG
LAYOUT NAME - 02

PLOT DATE : 7/30/2024 1:34 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

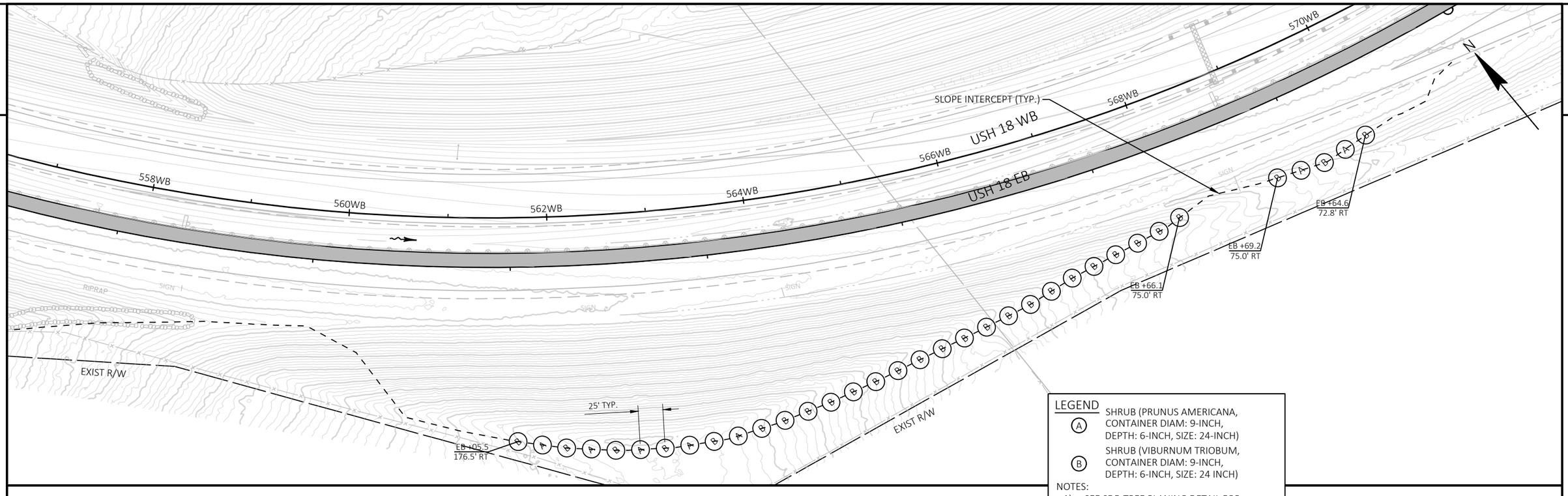
WISDOT/CADDS SHEET 44



PROJECT NO: 1204-0873	HWY: USH 18	COUNTY: DANE	PLANTING DETAIL	SHEET 89	E



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLANTING DETAIL	SHEET 90	E



LEGEND

(A) SHRUB (PRUNUS AMERICANA, CONTAINER DIAM: 9-INCH, DEPTH: 6-INCH, SIZE: 24-INCH)

(B) SHRUB (VIBURNUM TRIOBUM, CONTAINER DIAM: 9-INCH, DEPTH: 6-INCH, SIZE: 24 INCH)

NOTES:

1) SEE SDD TREE PLANING DETAIL FOR MORE INFORMATION.
2) CONTRACTOR SHALL MARK PLANT LOCATIONS. PLANTINGS SHALL NOT PROCEED WITHOUT THE APPROVAL OF THE ENGINEER

THIS SHEET INTENTIONALLY LEFT BLANK

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PLANTING DETAIL	SHEET 91	E

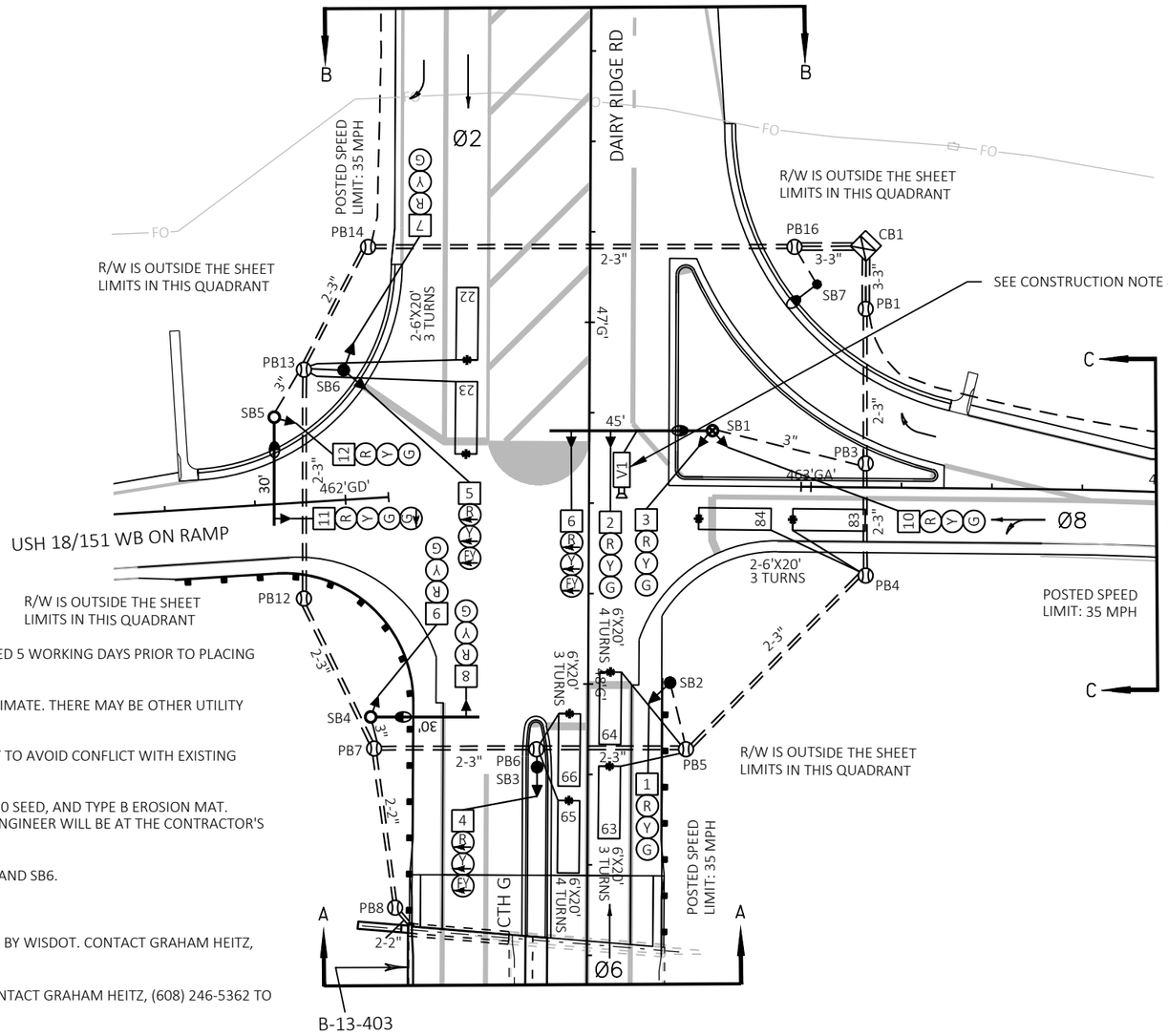
2

LEGEND

- CONTROL CABINET
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- (XX) MONOTUBE BASE, POLE, 15'-30' ARM
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- NON-CONDUCTIVE PULL BOX, 24" X 36"
- NON-CONDUCTIVE PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- YA YELLOW ARROW
- FY FLASHING YELLOW ARROW
- GA GREEN ARROW
- LOOP DETECTOR (SIDE PULL) IN 1" NONMETALLIC CONDUIT
- VX VIDEO DETECTION CAMERA
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LANE DESIGNATION FOR INFO ONLY

SIGNAL BASE	MONOTUBE NO
SB1	S-13-3122-0001
SB4	S-13-3122-0004
SB5	S-13-3122-0005

N



CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLING ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. RESTORE DISTURBED GREEN AREAS WITH 6" TOPSOIL, TYPE A FERTILIZER, NO. 30 SEED, AND TYPE B EROSION MAT. EXCESSIVE AREAS DISTURBED BY CONSTRUCTION ACTIVITIES DEEMED BY THE ENGINEER WILL BE AT THE CONTRACTOR'S EXPENSE.
5. INSTALL R1-1F FOLDING STOP SIGN (30" X 30") ON SIGNAL POLE SB1, SB2, SB3, AND SB6.
6. ALL LUMINAIRES ARE CATEGORY B LED.
7. TRAFFIC SIGNAL CABINET AND CONTROLLER TO BE FURNISHED AND INSTALLED BY WISDOT. CONTACT GRAHAM HEITZ, (608) 246-5362, TO MAKE ARRANGEMENTS.
8. VIDEO DETECTION CAMERA TO BE FURNISHED AND INSTALLED BY WISDOT. CONTACT GRAHAM HEITZ, (608) 246-5362 TO MAKE ARRANGEMENTS.
9. PROPOSED PAVEMENT MARKINGS ARE SHOWN IN GRAYSHADE FOR PLAN CLARITY.
10. INSTALL 15 FOOT STANDARD AND TYPE 1 CONCRETE BASE AT SB2, SB3, AND SB6.
    INSTALL TYPE 5 POLE AND TYPE 5 CONCRETE BASE AT SB7.
    INSTALL TYPE 10 POLE AND TYPE 10 CONCRETE BASE AT SB4 AND SB5.
    INSTALL TYPE 10 SPECIAL POLE AND TYPE 10 SPECIAL CONCRETE BASE AT SB1.

SCALE 0 20 40

TRAFFIC CONTROL SIGNAL
USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G
CITY OF VERONA
DANE COUNTY
SIGNAL NO. S13-1421
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE _____ REGION TRAFFIC ENGINEER
APPROVED
DATE _____ STATE TRAFFIC ENGINEER

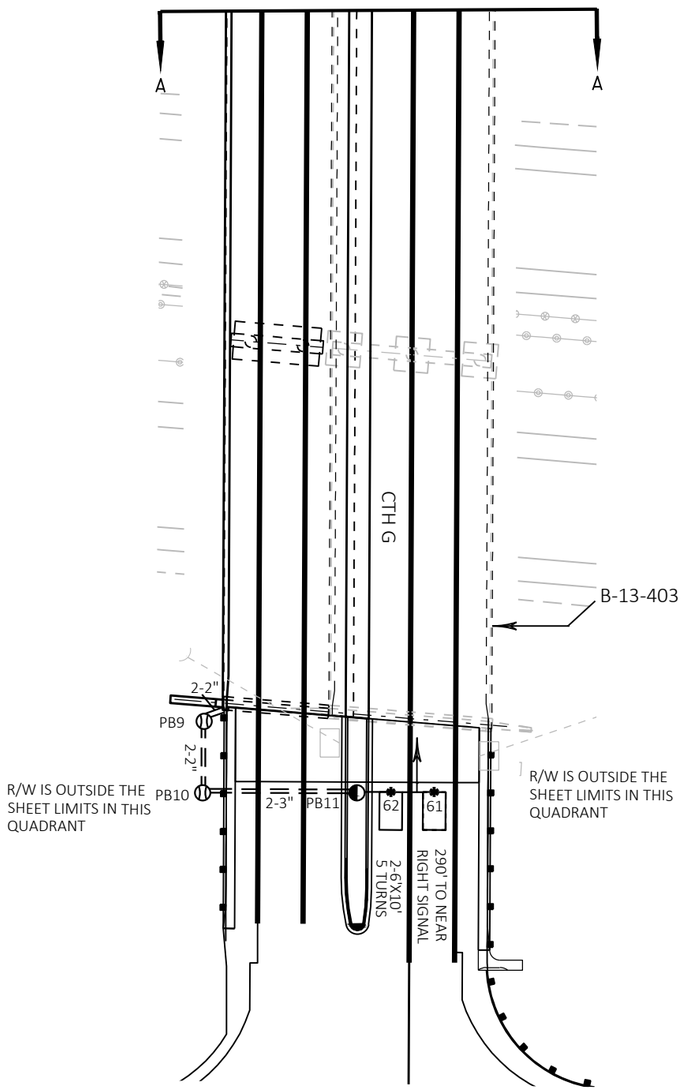
REGION CONTACT: GRAHAM HEITZ
DESIGNED BY: AECOM
REVISED BY:

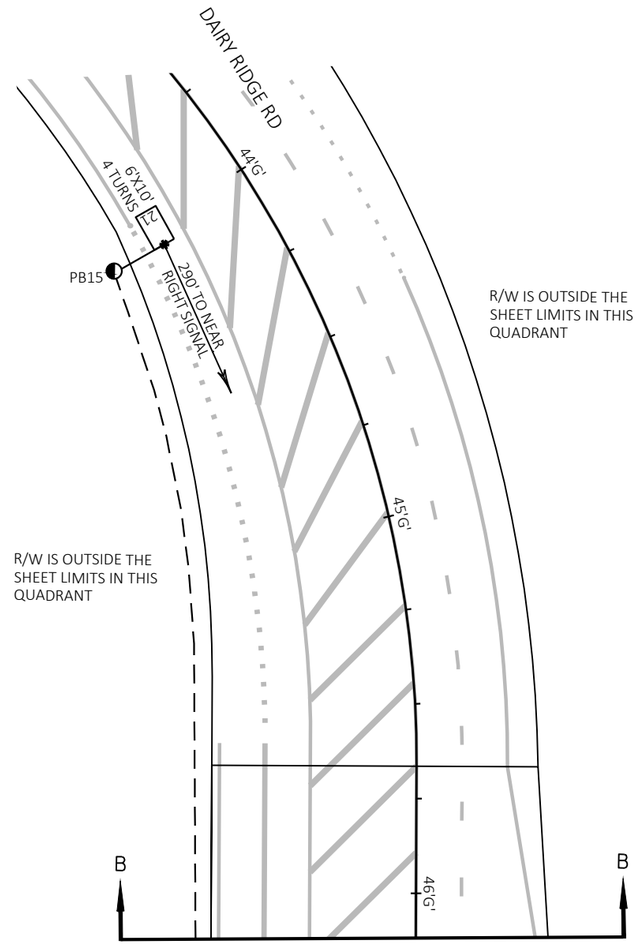
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC SIGNAL PLAN	SHEET 92	E

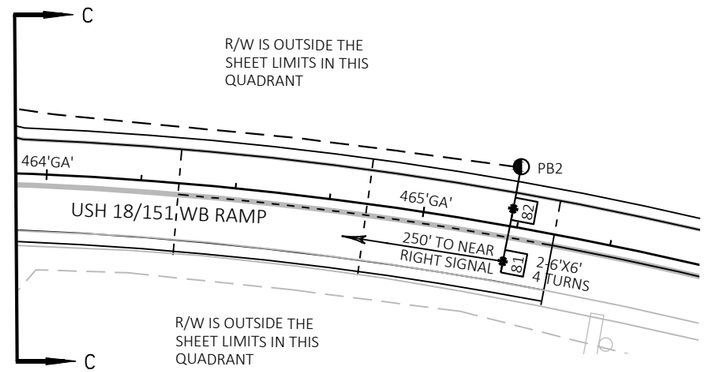
FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\910_CAD\917_PLAN SHEETS\024201-SP.DWG
LAYOUT NAME - Signal Sheet 1
PLOT DATE : 11/13/2024 3:24 PM PLOT BY : JENINGA, JAMES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N







TRAFFIC CONTROL SIGNAL
USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G
CITY OF VERONA
DANE COUNTY

SIGNAL NO. S13-1421

REGION CONTACT: GRAHAM HEITZ
DESIGNED BY: AECOM
REVISED BY:

PAGE 2 OF 4

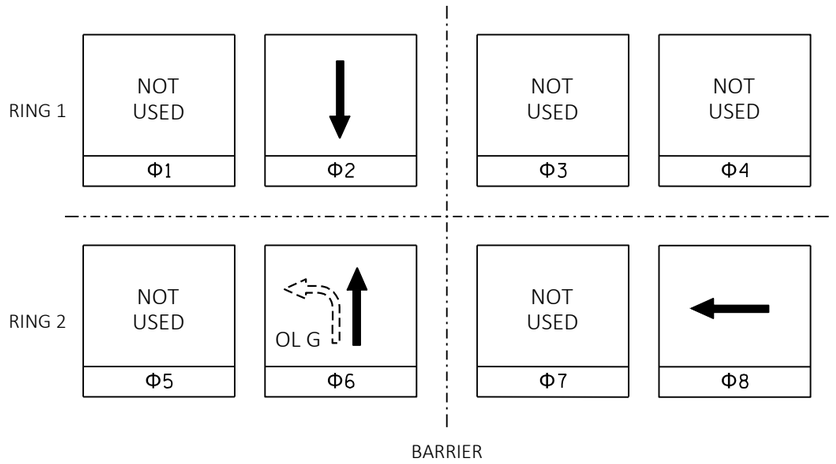
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC SIGNAL PLAN	SHEET 93	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\910_CAD\917_PLAN SHEETS\024201-SP.DWG
LAYOUT NAME - Signal Sheet 2

PLOT DATE : 11/13/2024 3:25 PM PLOT BY : JENINGA, JAMES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH	
Ø1		-	
Ø2	7,8,9	R	
Ø3		-	
Ø4		-	
Ø5		-	
Ø6	1,2,3	R	
Ø7		-	
Ø8	10,11,12	R	OL ASSIGNMENTS
OL G	4,5,6	R	Ø2



CONTROLLER LOGIC

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

N

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

TYPE OF REMOTE COMMUNICATION	
NONE	
FIBER	
CELL MODEM	X
PHONE	
RADIO	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	21	22	61	63	65	81	83	
PHASE CALLED	2	2	6	6	6	8	8	
PHASE EXTENDED	2	2	6	6	6	8	8	
DISCONNECT TIME		30		30	30		30	
CALLING DELAY								
EXTENSION STRETCH	X		X			X		
LOOP FUNCTION	SYS	DIS	SYS	DIS	DIS	SYS	DIS	

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)		23	62	64	66	82	84	
PHASE CALLED		2	6	6	6		8	
PHASE EXTENDED		2	6	6	6		8	
DISCONNECT TIME		30		30	30		30	
CALLING DELAY								
EXTENSION STRETCH			X					
LOOP FUNCTION		DIS	SYS	DIS	DIS	SYS	DIS	

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT TIME								
CALLING DELAY								
EXTENSION STRETCH								
LOOP FUNCTION								

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

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TRAFFIC CONTROL SIGNAL
USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G
CITY OF VERONA
DANE COUNTY

SIGNAL NO. S13-1421

REGION CONTACT: GRAHAM HEITZ
DESIGNED BY: AECOM
REVISED BY:

PROJECT NO: 1204-08-73 | HWY: USH 18 | COUNTY: DANE | SEQUENCE OF OPERATIONS | SHEET 94 | E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\910_CAD\917_PLAN SHEETS\024201-SP.DWG
LAYOUT NAME - Signal Sheet 3-SOO
PLOT DATE : 11/13/2024 3:26 PM PLOT BY : JENINGA, JAMES PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

PROJECT ID:	1204-08-73
INTERSECTION:	USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G

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

DATE: Jul-24

N

CB1 TO	AWG 14 # OF COND.	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	D/WALK	WALK		
SB1	15	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		6				RED/BLK	ORG/BLK	BLK/WHT					
		10	RED/WHT	BLK	GRN/WHT								
SB2	7	1	RED	ORG	GRN								
SB3	7	4				RED	ORG	GRN					
SB4	7	8	RED	ORG	GRN								
		9	RED	ORG	GRN								
SB5	7	11	RED	ORG	GRN				GRN				
		12	RED	ORG	GRN								
SB6	12	5				RED/BLK	ORG/BLK	BLK/WHT					
		7	RED	ORG	GRN								

NOTES:
1. USE WHITE CONDUCTOR IN THE SIGNAL CABLE AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS.
2. ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 18" LONGER THAN THE UNGROUNDED CONDUCTORS.
3. RECONNECT THE GROUNDING CONDUCTORS WHEREVER THE CIRCUIT HAS BEEN INTERRUPTED TO ENSURE THE GROUNDING CIRCUIT IS COMPLETE.

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	CB1

LIGHTING UF 8 AWG W/ GROUND	
FROM	TO
CB1	SB1
SB1	SB4
CB1	SB7
SB7	SB5

VIDEO DETECTION CABLE	
FROM	TO
CB1	V1 (SB1)

TRAFFIC CONTROL SIGNAL
USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G
CITY OF VERONA
DANE COUNTY

SIGNAL NO. S13-1421

REGION CONTACT: GRAHAM HEITZ
DESIGNED BY: AECOM
REVISED BY:

PAGE 4 OF 4

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING	SHEET 96	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 01
PLOT DATE : 7/22/2024 3:44 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

460'WB'

Verona Exits
BUS 18 151 3/4
69 2
PB 3 1/2

MATCHLINE 49+75'G'

465'WB'

USH 18 WB

470'W

USH 18 EB

MOVE

M2-04

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, YELLOW

USH 18 EB OFF RAMP

456'GC'

458'GC'

WRONG WAY
TO REMAIN

'GC'+29.79
0.00'

'GC'+42.29
3.00' LT

460'GC'

462'GC'

SINGLE DELINEATOR
REFLECTORS (WHITE) AND
DELINEATOR POST STEEL, TYP.

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, YELLOW

USH 18 EB ON RAMP

MARKING LINE GROOVED PERMANENT
TAPE EPOXY 6-INCH, WHITE

SEE PAVEMENT MARKING/SIGNING -
CTH G EB TERMINAL

EXIST R/W

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH, WHITE

12'

52'G'

N

'GC'+42.29
9.00' RT

M2-02

WRONG WAY
MOVE

TO REMAIN

Dairy Ridge Rd
MOVE

M2-01

COUNTY G
MOVE

M2-03

MATCHLINE 53+75'G'

EXIST R/W

WEST SOUTH EAST NORTH
18 151 18 151
TO REMAIN

Dodgeville
Madison
TO REMAIN

SPEED LIMIT 35
W3-5
36"X36"

2-03

EPIC SYSTEMS CORPORATIONS

EXIST R/W

MARSH VIEW RD

JCT JCT
18 151
TO REMAIN

SPEED LIMIT 35
R2-1
24"X30"

2-01

MARKING LINE GROOVED
WET REF EPOXY 6-INCH,
DOUBLE YELLOW

+48.79
11.50' RT

11'

58'G'

60'G'

CTH G

'G'+85
0.00'

62'G'

'G'+85
12.00' RT

64'G'

56'G'

12'

54'G'

'G'+97.32
0.00'

MATCHLINE 53+75'G'

MARKING LINE GROOVED WET REF EPOXY 6-INCH,
DOUBLE YELLOW

66'G'

ADOPT A HIGHWAY
GRESSNEYER LAW
DOWNAWI WISCONSIN

TO REMAIN

EXIST R/W

SPEED LIMIT 55
R2-1
24"X30"

2-04

68'G'

UNKNOWN

MARKING DIAGONAL EPOXY 12-INCH,
YELLOW

MARKING LINE GROOVED WET REF EPOXY 6-INCH,
WHITE

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING	SHEET 97	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 02

PLOT DATE : 7/22/2024 3:44 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

EXIST R/W

450'GD'

'WB'+95
47.95' LT

452'GD'

454'GD'

USH 18 WB ON RAMP

456'GD'

458'GD'

460'GD'

USH 18 WB ON RAMP

450'WB'

455'WB'

USH 18 WB

450'EB'

455'EB'

USH 18 EB

450'GC'

'EB'+19
55.12' RT

452'GC'

454'GC'

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

456'GC'

USH 18 EB OFF RAMP

458'GC'

EXIST R/W

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

'WB'+73.70
24.00' LT

'WB'+73.93
12.00' LT

'WB'+73.92
0.00' RT

'EB'+71.92
0.00

'EB'+72
12.00' RT

'EB'+72
24.00' RT

STA 458+72'EB'
BEGIN ASPHALTIC SHOULDER
RUMBLE STRIPS

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED PERMANENT TAPE
6-INCH,
WHITE, (12.5' LINE 37.5' GAP)
FOLLOWED BY MARKING LINE GROOVED
BLACK EPOXY 6-INCH (DASHED BLACK)
(12.5' LINE)

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

460'WB'

465'WB'

465'EB'

SINGLE DELINEATOR
REFLECTORS (WHITE) AND
DELINEATOR POST STEEL, TYP.

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

N

2

USH 18 WB OFF RAMP

470'GA'

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET REF
EPOXY 6-INCH, YELLOW

MARKING LINE GROOVED PERMANENT TAPE
6-INCH,
WHITE, (12.5' LINE 37.5' GAP)
FOLLOWED BY MARKING LINE GROOVED
BLACK EPOXY 6-INCH (DASHED BLACK)
(12.5' LINE)

'GA'+04
14.97' RT

472'GA'

MARKING CHEVRON
EPOXY 24-INCH
(TYP.)

474'GA'

465'WB'

470'WB'

USH 18 WB

475'WB'

'WB'+00
24.00' LT

465'EB'

470'EB'

'EB'+74
23.67' RT

475'EB'

USH 18 EB

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

STA 466+43'EB'
END ASPHALTIC SHOULDER
RUMBLE STRIPS

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

'EB'+73.50
47.12' RT

USH 18 EB ON RAMP

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH, WHITE

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING	SHEET 98	E

SPENCER MCCOY & MERCEDES MCCOY

EXIT 75

G
Mt Vernon
EXIT ONLY

SEE SIGN PLATE DETAIL

3-01

STA 478+93'WB'
BEGIN ASPHALTIC SHOULDER RUMBLE STRIPS

EXIST R/W

'WB'+93.09
24.00' LT

'WB'+43.04
24.00' LT

'WB'+82.07
36.00' LT

MARKING LINE GROOVED PERMANENT TAPE 6-INCH, WHITE, (12.5' LINE 37.5' GAP) FOLLOWED BY MARKING LINE GROOVED BLACK EPOXY 6-INCH (DASHED BLACK) (12.5' LINE)

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

EXIT 75

G
Mt Vernon

REMOVE

R3-02

STA 487+73'WB'
END ASPHALTIC SHOULDER RUMBLE STRIPS

EXIST R/W

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED HIGHWAY

N

'GA' 476'GA' 478'GA' 480'GA' 482'GA' 484'GA'

USH 18 WB

475'WB' 480'WB' 485'WB'

12' 12' 12' 12' 12' 12'

SINGLE DELINEATOR REFLECTORS (WHITE) AND DELINEATOR POST STEEL, TYP.

'EB'+00.25
40.03' RT

'EB'+48.23
24.13' RT

'EB'+00.03
24.13' RT

'EB'+00
36.00' RT

475'EB' 480'EB' 485'EB'

USH 18 EB

400'

B-13-52

MATCHLINE 488+75

MARKING CHEVRON EPOXY 24-INCH (TYP.)

MARKING LINE GROOVED PERMANENT TAPE 10-INCH, WHITE

EXIST R/W

SINGLE DELINEATOR REFLECTORS (WHITE) AND DELINEATOR POST STEEL, TYP.

EXIT 76

R3-01

BUS 18 151
Epic Lane
W Verona Ave
1/2 MILE

REMOVE

STA 481+00'EB'
BEGIN ASPHALTIC SHOULDER RUMBLE STRIPS

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

SEE SIGN PLATE DETAIL

3-02

EXIT 76

BUS 18 151
Epic Lane
W Verona Ave
EXIT ONLY

NORTH 151 MILE 76 0
TO REMAIN

SOUTH 151 MILE 76 0
TO REMAIN

ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED HIGHWAY

MARKING LINE GROOVED PERMANENT TAPE 10-INCH, WHITE, (3' LINE 9' GAP) FOLLOWED BY MARKING LINE GROOVED BLACK EPOXY 10-INCH (DASHED BLACK) (3' LINE)

B-13-52

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

B-13-383

STA 488+51'EB'
END ASPHALTIC SHOULDER RUMBLE STRIPS

MATCHLINE 488+75

MATCH LINE 503+50

N

MILITARY RIDGE STATE TRAIL

B-13-52

STA 489+80'WB'
BEGIN ASPHALTIC SHOULDER RUMBLE STRIPS

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED PERMANENT TAPE 10-INCH, WHITE (3' LINE, 9' GAP) FOLLOWED BY MARKING LINE GROOVED BLACK EPOXY 10-INCH (DASHED BLACK) (3' LINE)

ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED HIGHWAY

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE, (12.5' LINE 37.5' GAP) FOLLOWED BY MARKING LINE GROOVED BLACK EPOXY 6-INCH (DASHED BLACK) (12.5' LINE)

STA 497+32 'EB'
BEGIN ASPHALTIC SHOULDER RUMBLE STRIPS

490'WB' 495'WB' 500'WB'

USH 18 WB

12' 12' 12' 12' 12' 12'

STA 489+80 'EB'
BEGIN ASPHALTIC SHOULDER RUMBLE STRIPS

490'EB' 495'EB' 500'EB'

USH 18 EB

400'

C-13-111

STA 498+48 'WB'
BEGIN ASPHALTIC SHOULDER RUMBLE STRIPS

B-13-383

EXIST R/W

M3-01

EXIT 76
GAS LODGING
KWIK TRIP
FAIRFIELD INN
HOLIDAY INN
MOBIL
SUPER 8

TO BE MOVED BY OTHERS

SPEED LIMIT 55

M3-02

MOVE

MARKING LINE GROOVED WET REF EPOXY 6-INCH, WHITE

EXIT 76

BUS 18 151
Epic Lane
W Verona Ave

REMOVE

R3-03

M3-03

EXIT 50 MPH

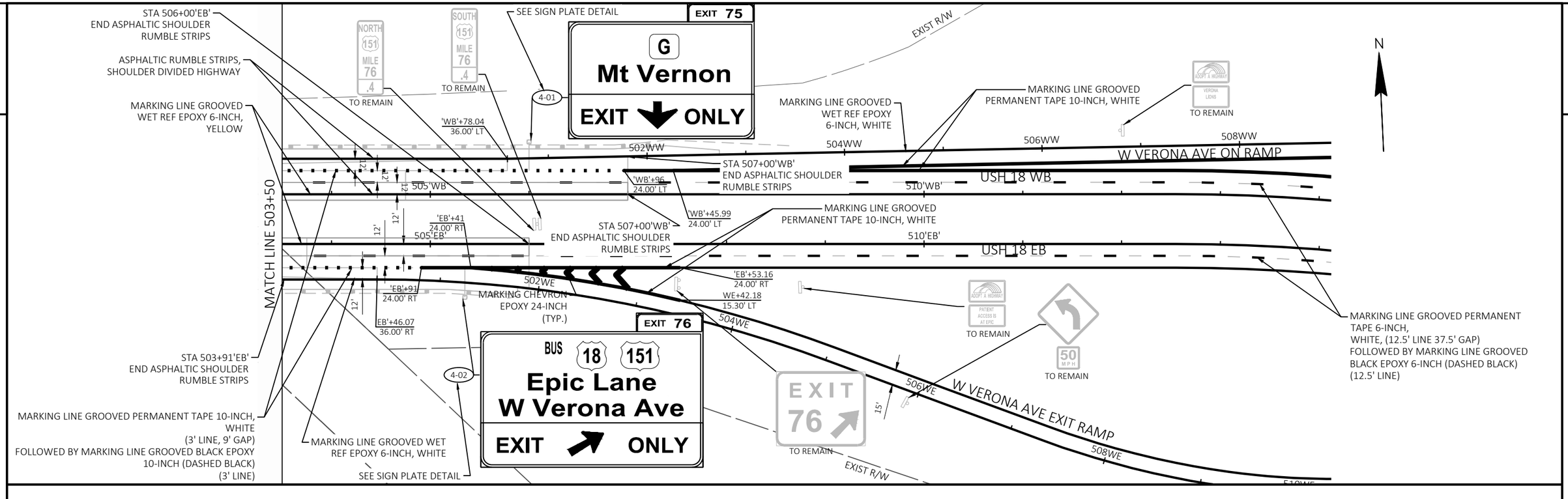
MOVE

SINGLE DELINEATOR REFLECTORS (WHITE) AND DELINEATOR POST STEEL, TYP.

MARKING LINE GROOVED WET REF EPOXY 6-INCH, YELLOW

ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED HIGHWAY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING	SHEET 99	E



THIS SHEET INTENTIONALLY LEFT BLANK

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING	SHEET 100	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 05

PLOT DATE : 7/22/2024 3:44 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH, WHITE

506WW

508WW

WW+23.33
14.97' RT

510WW

W VERONA AVE ON RAMP

512WW

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

514WW

516WW

WW+17.43
0.41' RT

518WW

'WB'+38.80
24.06' LT

515'WB'

USH 18 WB

515'EB'

USH 18 EB

MARKING LINE GROOVED
WET REF EPOXY 6-INCH,
YELLOW

W VERONA AVE EXIT RAMP

508WE

510WE

512WE

514WE

516WE

518WE

520WE

WE+55.25
15.16' LT

520'WB'

520'EB'

MARKING LINE GROOVED
WET REF EPOXY 6-INCH,
YELLOW

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET REF EPOXY 6-INCH,
WHITE, (12.5' LINE 37.5' GAP)
FOLLOWED BY MARKING LINE GROOVED BLACK EPOXY
6-INCH (DASHED BLACK)
(12.5' LINE)

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

EPIC LANE

WW+98.42
15.50' LT

WW+90.06
8.76' LT

522WW

WW+08.83
3.92' RT

518WW

520WW

W VERONA AVE ON RAMP

WW+36.45
3.18' RT

WW+02.32
16.10' RT

W VERONA AVE

WE+87.40
31.53' LT

WE+86.63
19.56' LT

WE+44.32
36.23' LT

WE+48.48
24.19' LT

WE+85.88
7.48' LT

MARKING LINE GROOVED
WET REF EPOXY 6-INCH,
YELLOW

WE+20.65
24.13' LT

524WE

WE+84.73
10.26' RT

W VERONA AVE EXIT RAMP

522WE

520WE

WE+91.33
12.02' LT

WE+39.86
0.23' LT

WE+34.72
10.35' RT

W4 RAMP

W3 RAMP

MARKING STOP LINE
EPOXY 18-INCH

MARKING LINE GROOVED WET
REF EPOXY 6-INCH, WHITE

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH, WHITE

MARKING LINE GROOVED PERMANENT TAPE
6-INCH,
WHITE, (12.5' LINE, 37.5' GAP)
FOLLOWED BY MARKING LINE GROOVED
BLACK EPOXY 6-INCH (DASHED BLACK)
(12.5' LINE)

'WB'+30.58
24.05' LT

'WB'+30.58
12.00' LT

'WB'+30.58
0.05' LT

525'WB'

'EB'+00
24.00' RT

'EB'+00
12.00' RT

'EB'+00.34
0.26' LT

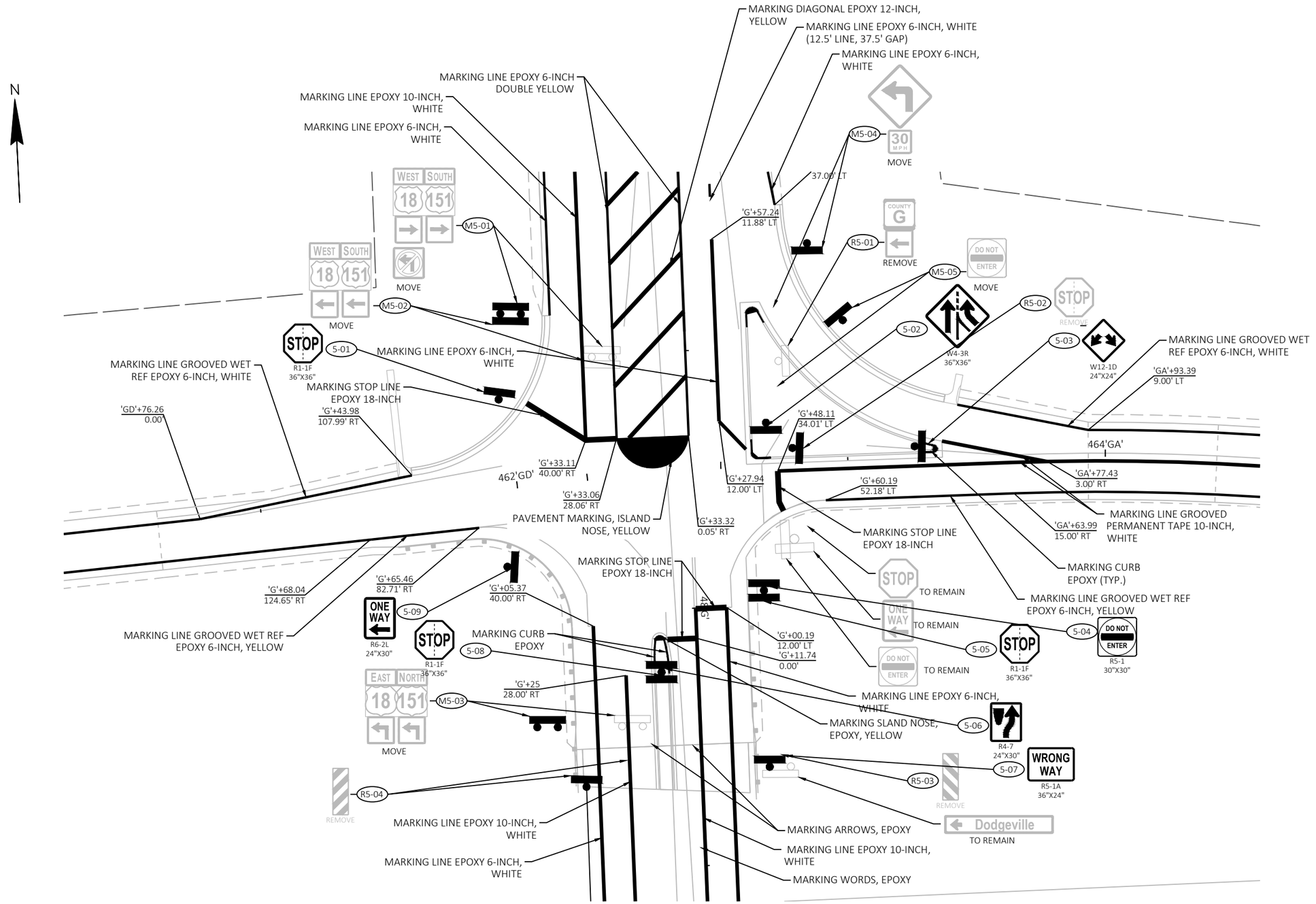
525'EB'

N

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING	SHEET 101	E

2

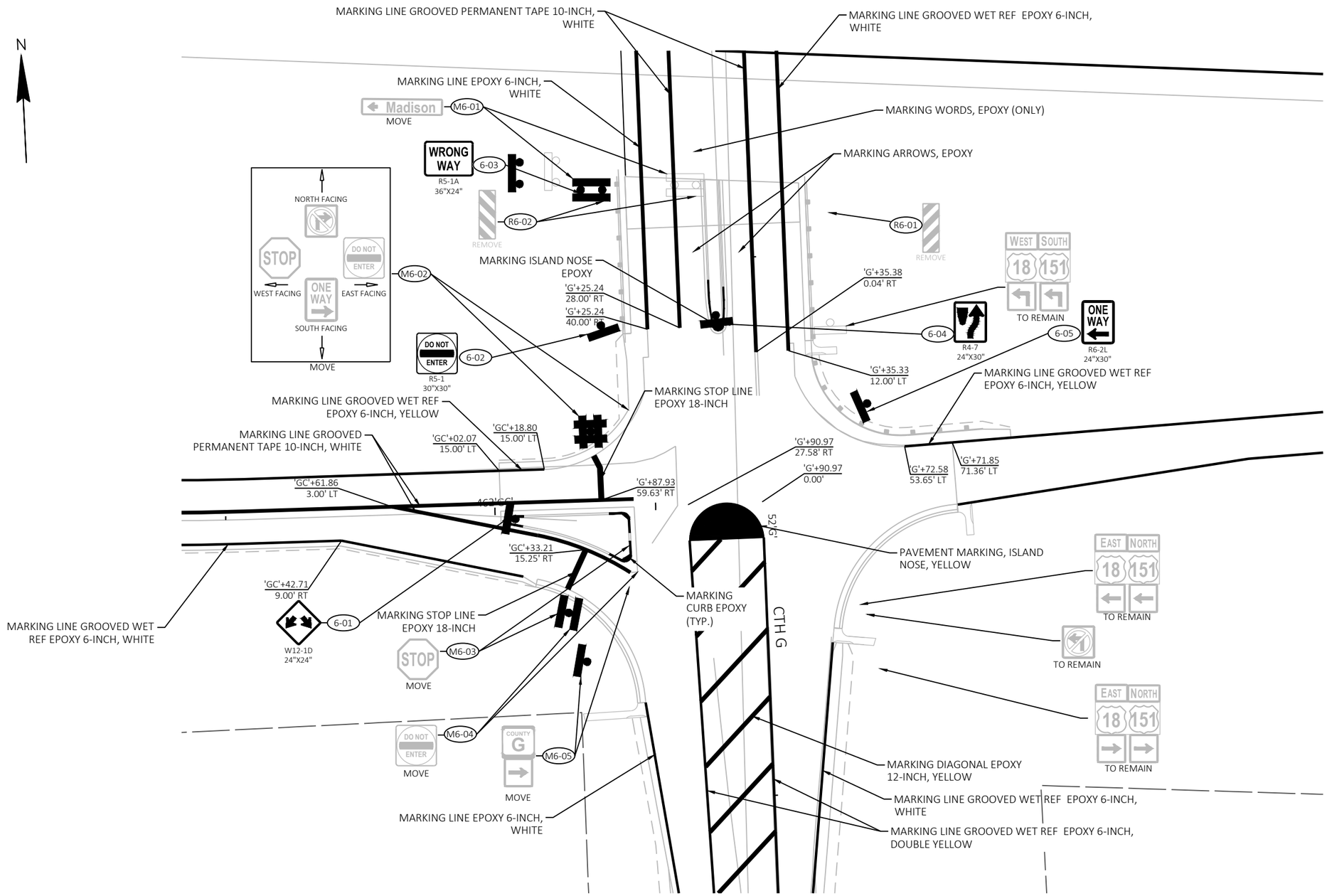


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - CTH G WB TERMINAL	SHEET 102	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 07

PLOT DATE : 7/22/2024 3:44 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - CTH G EB TERMINAL	SHEET 103	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 08

PLOT DATE : 7/22/2024 3:44 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

N

525'W3'

530'W3'

535'W3'

535'WB'

520'W4'

'W4' +93.55
-15.06' LT

'W4' +30.64
-3.00' LT

'W4' +13.63
9.00' RT

'W4' +59.36
19.00' RT

12'

12'

RAMP W4

100'

525'W4'

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, YELLOW

530'WB'

530'EB'

MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH, WHITE, (12.5' LINE 37.5' GAP)
FOLLOWED BY MARKING LINE GROOVED BLACK EPOXY
6-INCH (DASHED BLACK)
(12.5' LINE)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

MARKING ARROW EPOXY

USH 18 WB

USH 18 EB

530'W4'

SINGLE DELINEATOR
REFLECTORS (WHITE) AND
DELINEATOR POST STEEL, TYP.

USH 18 EB

545'WB'

545'EB'

545'W4'

H

540'W4'

'W4' +22.65
-3.00' LT

'W4' +32.29
0.00' LT

'W4' +23.16
8.98' RT

'W4' +57.90
-15.20' LT

15'

MARKING LINE GROOVED REFLECTIVE
TAPE 10-INCH, WHITE

535'W4'

MARKING ARROW EPOXY

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

EXIST R/W

SINGLE DELINEATOR
REFLECTORS (WHITE) AND
DELINEATOR POST STEEL, TYP.

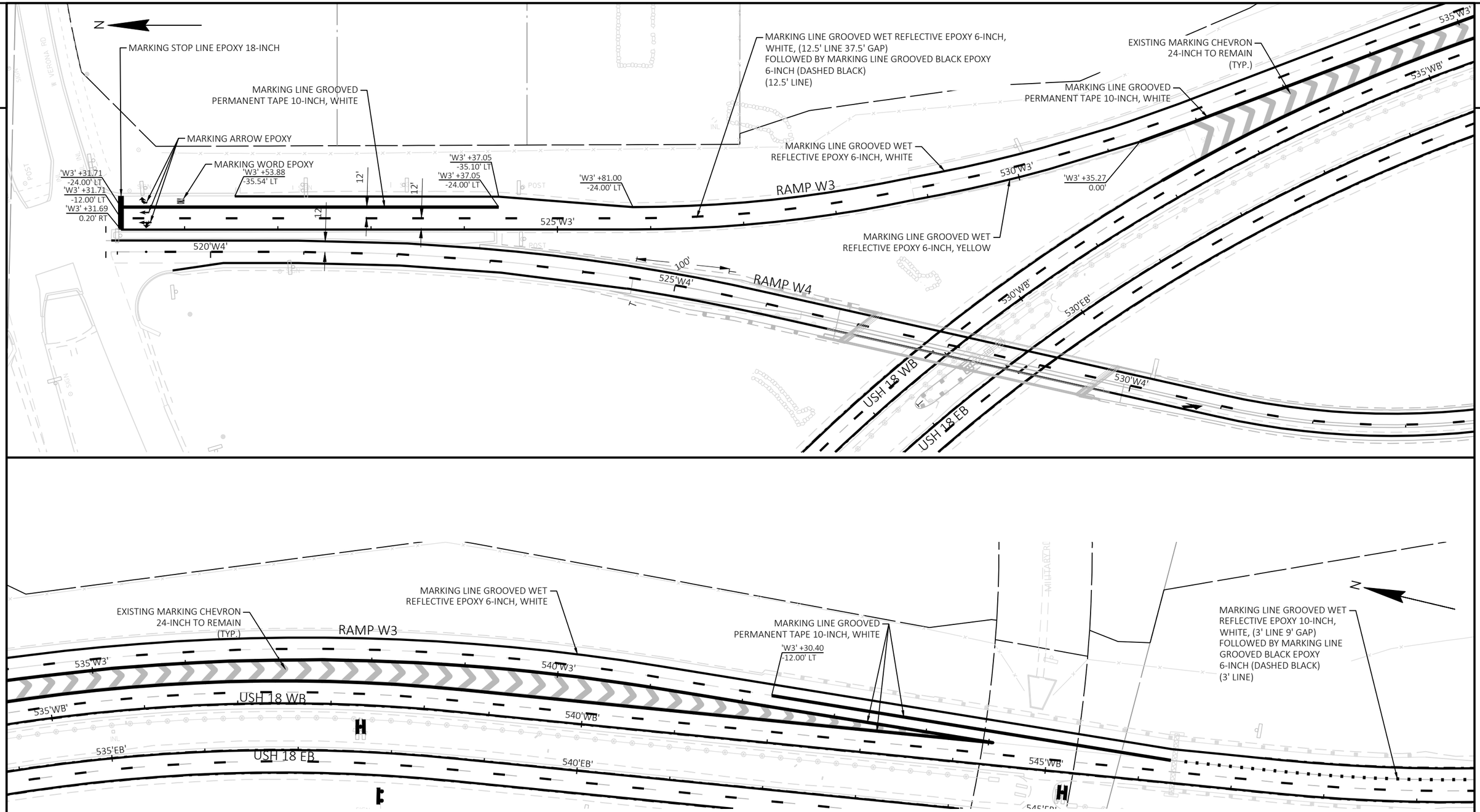
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - W4 RAMP	SHEET 104	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - W4-1

PLOT DATE : 7/23/2024 8:23 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - W3 RAMP	SHEET 105	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - W3-1

PLOT DATE : 7/23/2024 8:23 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH, WHITE

EXISTING MARKING CHEVRON
TO REMAIN
(TPY.)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH,
YELLOW

W3 RAMP

W4 RAMP

530'W3'

530'W4'

530'WB'

USH 18 WB

530'EB'

USH 18 EB

535'W3'

535'WB'

535'EB'

525'WB'

525'EB'

'WB' +95.01
-24.00' LT

'WB' +30.61
-24.00' LT

'WB' +30.61
-12.00' LT

'WB' +30.61
0.00'

'EB' +00.00
0.00'

'EB' +00.00
12.00' RT

'EB' +00.00
24.00' RT

534+40'EB'
BEGIN ASPHALTIC
SHOULDER RUMBLE STRIPS

12'

EXIT 75
G
Verona
1/2 MILE
TO REMAIN

NORTH 151 MILE 76 .8
TO REMAIN

SOUTH 151 MILE 76 .8
TO REMAIN

NORTH 151 MILE 77 0
MOVE
M8-01

SOUTH 151 MILE 77 0
MOVE
M8-02

Badger Prairie
County Park
Reddan
Soccer Park
EXIT 77
TO REMAIN

MARKING LINE GROOVED PERMANENT TAPE
6-INCH,
WHITE (12.5' LINE, 37.5' GAP)
FOLLOWED BY MARKING LINE GROOVED
BLACK EPOXY 6-INCH (DASHED BLACK)
(12.5' LINE)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

MARKING LINE GROOVED
PERMANENT TAPE
10-INCH,
WHITE (3' LINE, 9' GAP)
FOLLOWED BY MARKING LINE
GROOVED BLACK EPOXY
10-INCH (DASHED BLACK)
(3' LINE)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH,
YELLOW

EXISTING MARKING CHEVRON
TO REMAIN
(TYP.)

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH,
WHITE

W3 RAMP

W4 RAMP

540'W3'

540'W4'

540'WB'

USH 18 WB

545'WB'

540'EB'

USH 18 EB

545'EB'

545'W4'

550'WB'

550'EB'

'WB' +41.00
-24.00' LT

'WB' +33.07
-36.18' LT

'WB' +32.70
-24.18' LT

'EB' +48.99
25.61' RT

'EB' +19.00
24.00' RT

'EB' +69.03
24.00' RT

MARKING LINE GROOVED
PERMANENT TAPE,
6-INCH,
WHITE (12.5' LINE, 37.5' GAP)
FOLLOWED BY MARKING LINE
GROOVED BLACK EPOXY
6-INCH (DASHED BLACK)
(12.5' LINE)

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

BOTH SIDES
M9-01
MOVE

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH,
WHITE

M9-02

NORTH 151 MILE 77 .2

SOUTH 151 MILE 77 .2
M9-03
MOVE

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

STA 547+69'EB'
BEGIN ASPHALTIC SHOULDER
RUMBLE STRIPS

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

SEE SIGN PLATE DETAIL
9-01

EXIT 77
69
Verona
Monroe
EXIT ONLY

MILITARY RIDGE
STATE TRAIL

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - STH 69 AUX LANE	SHEET 106	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 69 AUX-1
PLOT DATE : 7/23/2024 8:24 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, YELLOW

MARKING LINE GROOVED
PERMANENT TAPE
6-INCH,
WHITE (12.5' LINE, 37.5' GAP)
FOLLOWED BY MARKING LINE
GROOVED BLACK EPOXY
6-INCH (DASHED BLACK)
(12.5' LINE)

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH,
WHITE (3' LINE, 9' GAP)
FOLLOWED BY MARKING LINE
GROOVED BLACK EPOXY
10-INCH (DASHED BLACK)
(3' LINE)

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

555'WB

555'EB

560'WB

560'EB

565'WB

565'EB

USH 18 WB

USH 18 EB

RIPRAP

M9-04

EAST 18 NORTH 151

MOVE

M9-05

NORTH 151 MILE 77 .4

MOVE

M9-06

SOUTH 151 MILE 77 .4

MOVE

M9-07

SPEED LIMIT 65

MOVE

2

MARKING LINE GROOVED
PERMANENT TAPE 6-INCH,
WHITE (12.5' LINE, 37.5' GAP)
FOLLOWED BY MARKING LINE
GROOVED BLACK EPOXY
6-INCH (DASHED BLACK)
(12.5' LINE)

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

EXIT 77

69
Verona
Monroe

EXIT ONLY

SOUTH 151 MILE 77 .6

M9-09

MOVE

9-02

SEE SIGN PLATE DETAIL

565'WB

565'EB

570'WB

570'EB

570'SC

'WB' +16.69
-35.33' LT

'WB' +10.00
-24.00' LT

'WB' +60.13
-24.00' LT

'EB' +01.98
24.00' RT

'EB' +52.60
24.00' RT

'EB' +66.98
36.00' RT

'EB' +53.00
24.00' RT

'SC' +59.86
-16.35' LT

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH,
WHITE (3' LINE, 9' GAP)
FOLLOWED BY MARKING LINE
GROOVED BLACK EPOXY
10-INCH (DASHED BLACK)
(3' LINE)

ASPHALTIC RUMBLE STRIPS,
SHOULDER DIVIDED HIGHWAY

NORTH 151 MILE 77 .6

M9-08

MOVE

STA 569+53'EB'
END ASPHALTIC SHOULDER
RUMBLE STRIPS

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH, WHITE

MARKING CHEVRON EPOXY
24-INCH
(TYP.)

R9-01

EXIT 76

69
Verona
Monroe

REMOVE

MARKING LINE GROOVED
PERMANENT TAPE 10-INCH,
WHITE

'SD' +09.53
14.03' RT

575'SD'

575'WB

575'EB

575'SC

'WB' +09.00
-24.00' LT

577+10'EB'
END ASPHALTIC SHOULDER
RUMBLE STRIPS

EXIT
77

TO REMAIN

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, YELLOW

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

FROM STH 69

580'SD'

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

580'WB

USH 18 WB

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, YELLOW

580'EB

USH 18 EB

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, YELLOW

TO STH 69

580'SC

MARKING LINE GROOVED WET
REFLECTIVE EPOXY 6-INCH, WHITE

SIGN

SIGN

N

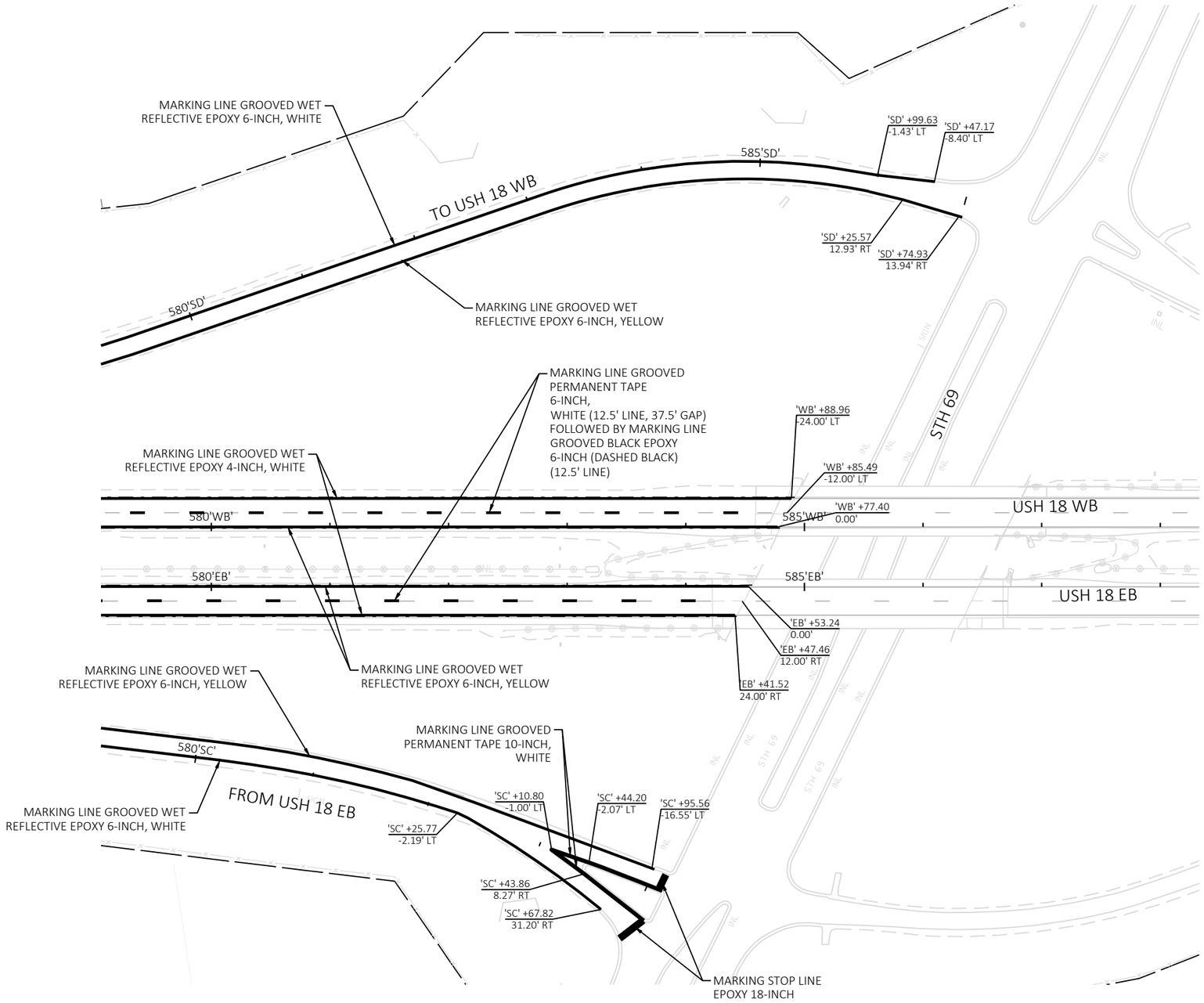
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - STH 69 AUX LANE	SHEET 107	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\024501-PM.DWG
LAYOUT NAME - 69 AUX-2

PLOT DATE : 7/23/2024 8:24 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

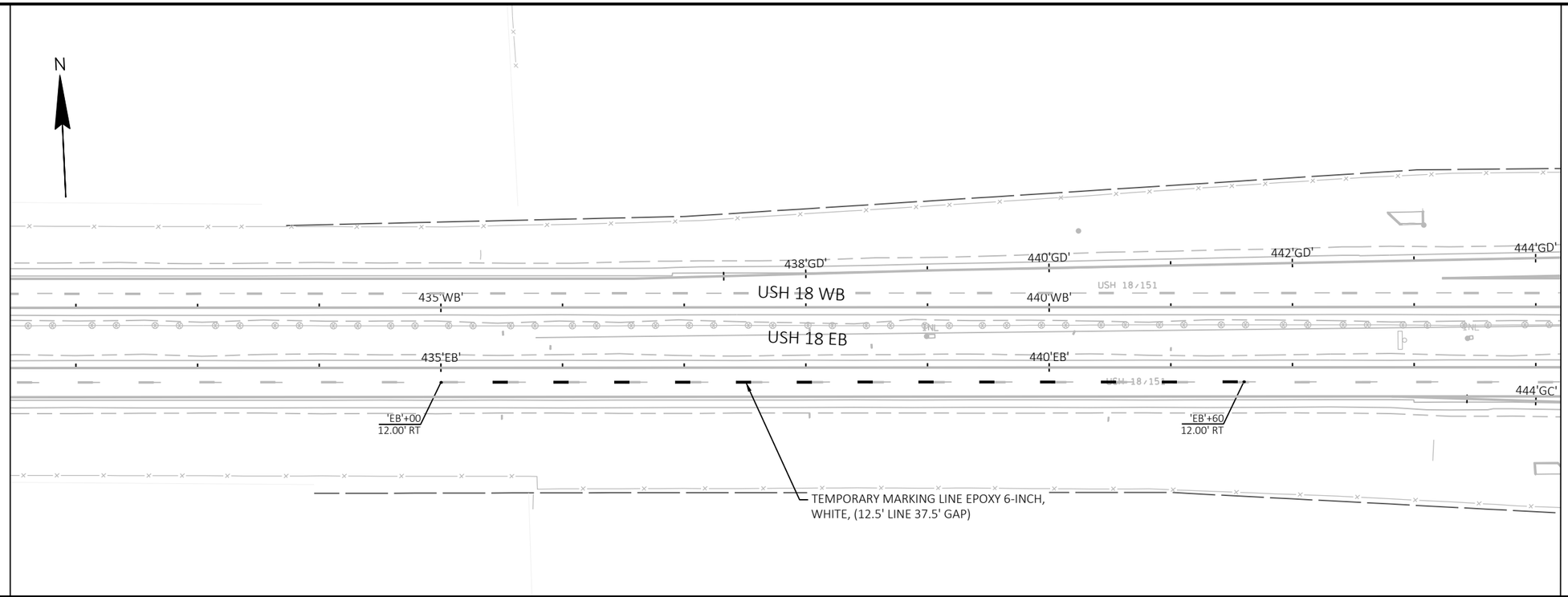
WISDOT/CADDS SHEET 44

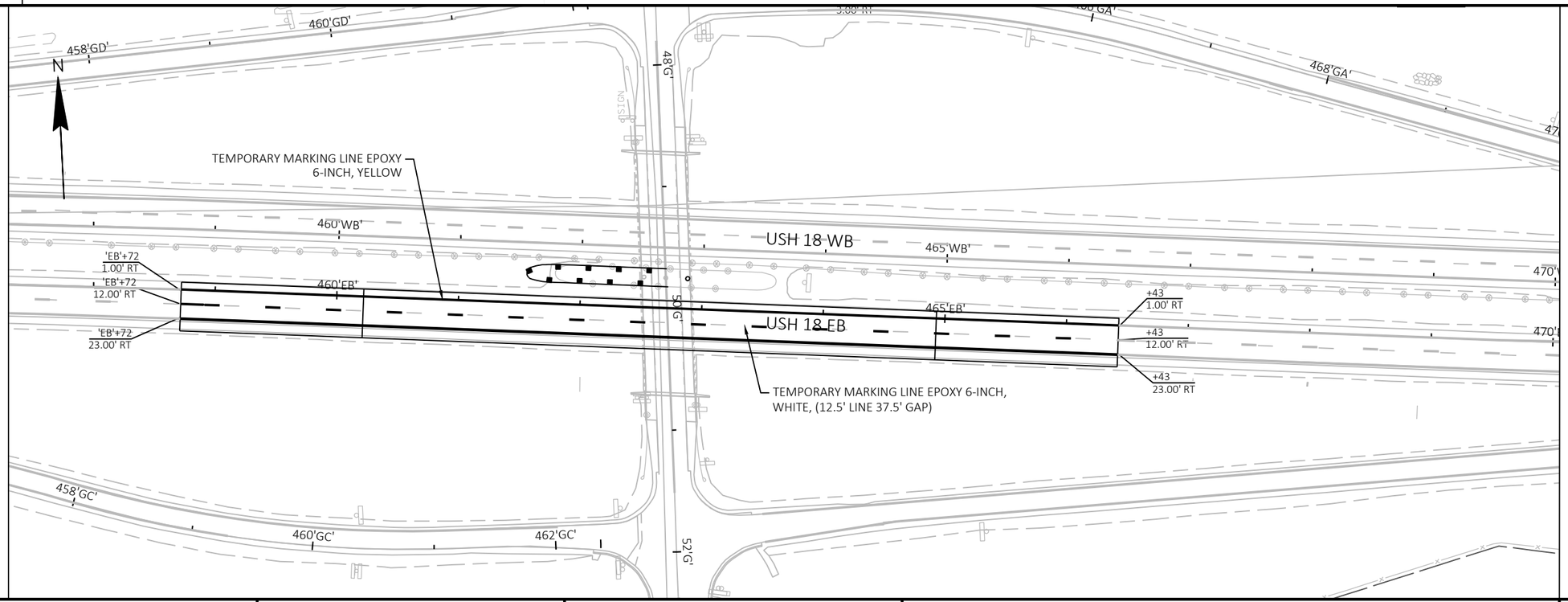
2



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	PAVEMENT MARKING / SIGNING - STH 69 AUX LANE	SHEET 108	E

2

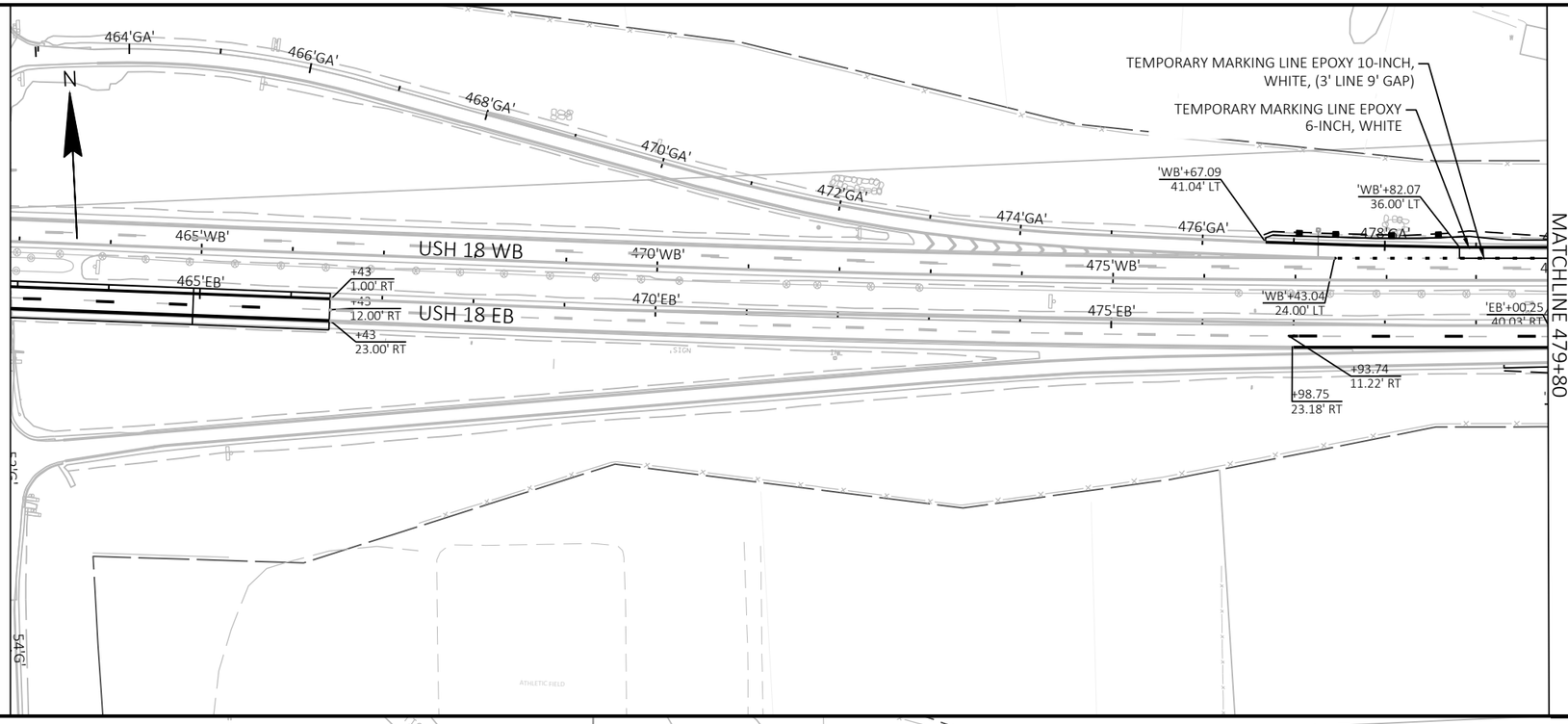


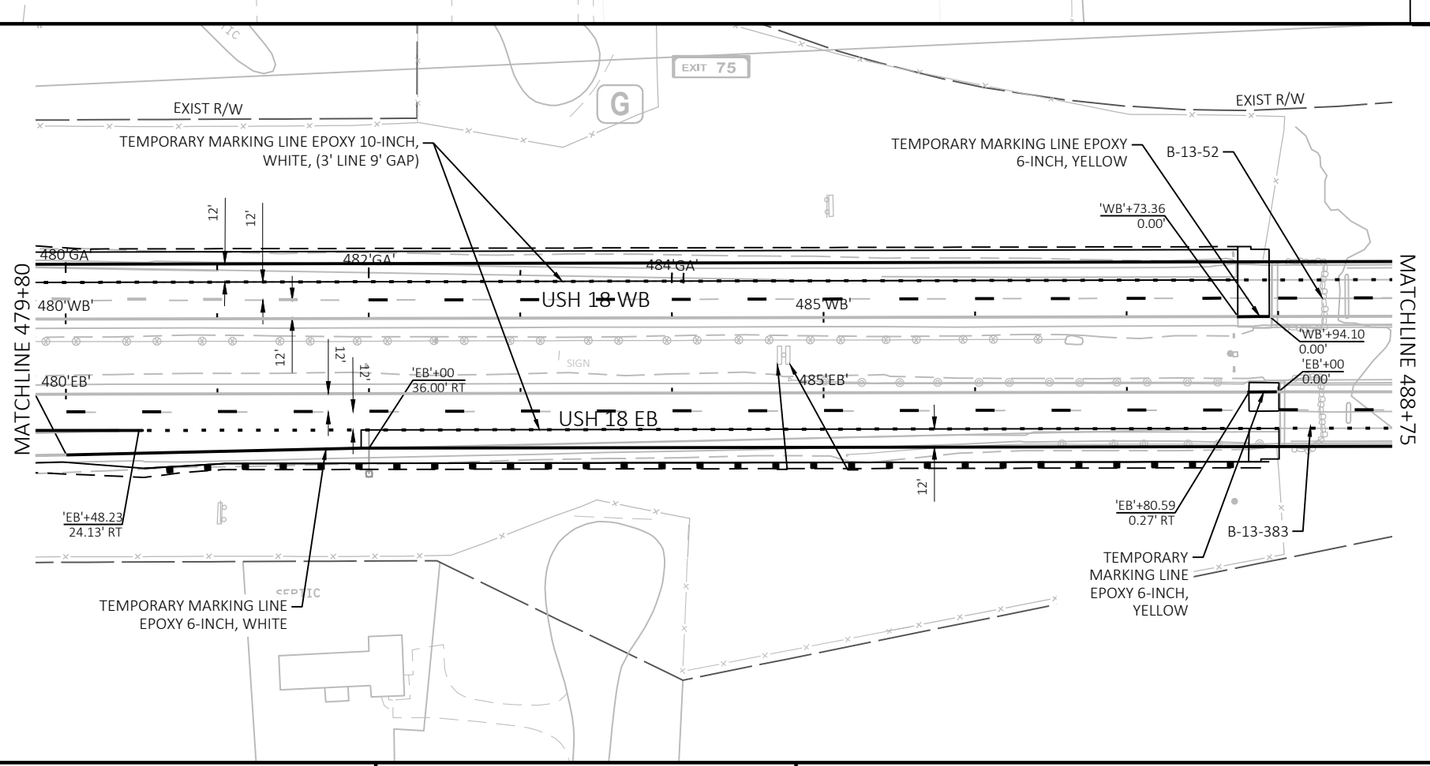


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT MARKING - WINTER 2025	SHEET 109	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024502-PM - WINTER.DWG
LAYOUT NAME - 01
PLOT DATE : 7/23/2024 9:58 AM
PLOT BY : SYLVESTER, MORGAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

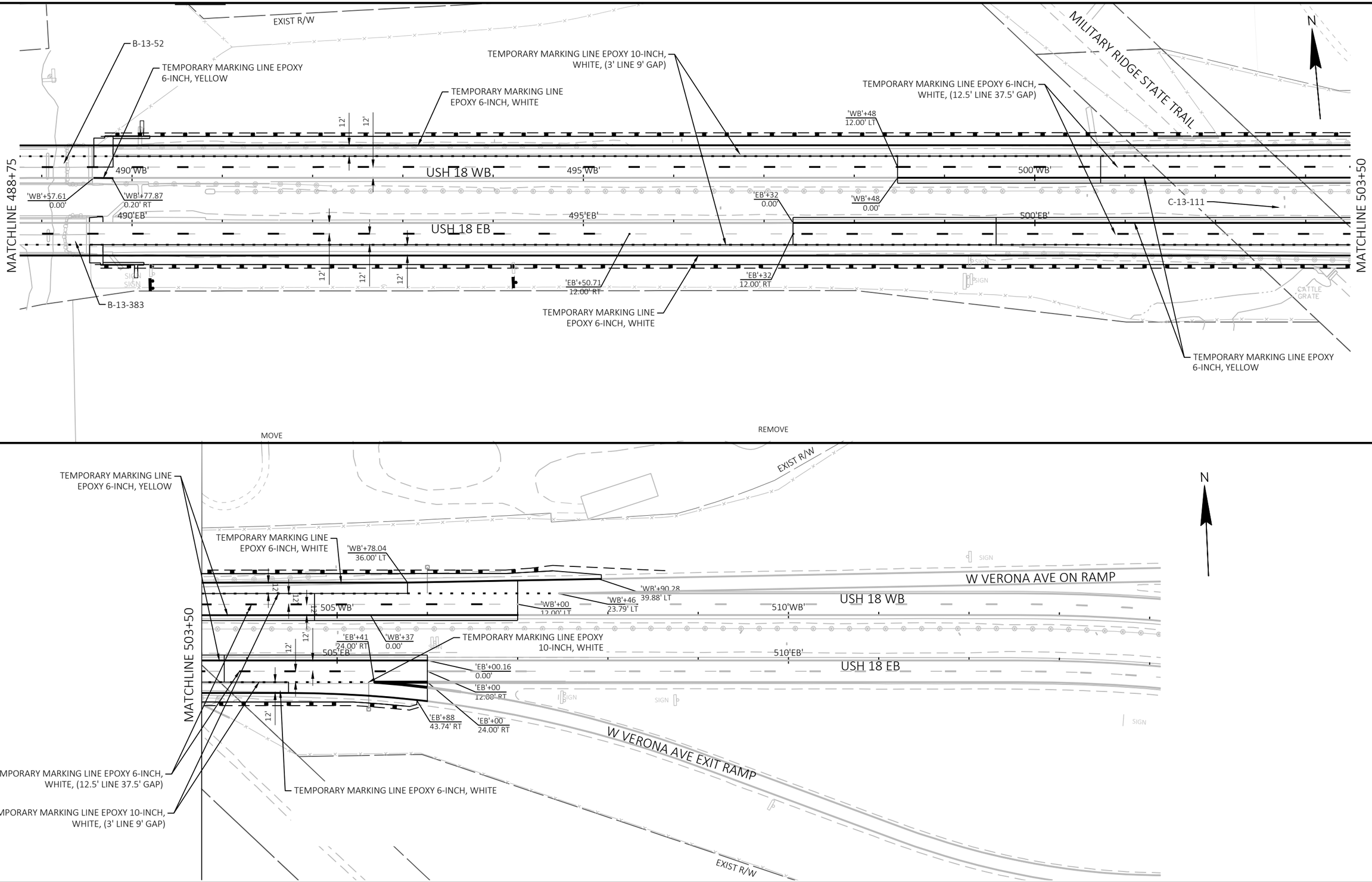




PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT MARKING - WINTER 2025	SHEET 110	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024502-PM - WINTER.DWG
LAYOUT NAME - 02
PLOT DATE : 7/25/2024 11:13 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT MARKING - WINTER 2025	SHEET 111	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\024502-PM - WINTER.DWG
LAYOUT NAME - 03
PLOT DATE : 7/25/2024 11:13 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

TEMPORARY MARKING LINE EPOXY 6-INCH, WHITE, (12.5' LINE 37.5' GAP)

12'

'WB' +00.00
-12.00' LT

USH 18 WB

525'WB'

'WB' +00.00
-12.00' LT

520'WB'

520'EB'

525'EB'

USH 18 EB

530'WB'

530'EB'

530'W4'

RAMP W4

EXIST R/W

'EB'

'W4' +98.63
-15.00' LT

'W4' +20.94
9.00' RT

'EB' +40.33
0.00'

'W4' +54.22
-3.00' LT

RAMP W4

525'W4'

520'W4'

'W4' +87.72
-15.00' LT

'W4' +54.22
9.00' RT

TEMPORARY MARKING LINE EPOXY 6-INCH, WHITE, (12.5' LINE 37.5' GAP)

TEMPORARY MARKING LINE EPOXY 6-INCH, YELLOW

TEMPORARY MARKING LINE EPOXY 6-INCH, WHITE

12'

12'

530'WB'

530'EB'

MARKING ARROW EPOXY

'W4' +98.63
-15.00' LT

530'W4'

'W4' +20.94
9.00' RT

TEMPORARY MARKING LINE EPOXY 6-INCH, WHITE, (12.5' LINE 37.5' GAP)

USH 18 WB

USH 18 EB

EXIST R/W

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT MARKING - WINTER 2025	SHEET 112	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\024502-PM - WINTER.DWG
LAYOUT NAME - 01
PLOT DATE : 7/23/2024 10:01 AM PLOT BY : SYLVESTER, MORGAN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

INL

535'EB'

'EB' +40.33
0.00'

TEMPORARY MARKING LINE EPOXY
6-INCH, YELLOW

SIGN

STA BACK = 539+42.28'WB'
STA AHEAD = 538+72.40' WB'

540'WB'

USH 18 WB

540'EB'

USH ~~18~~ EB

W/ DNR

545'WB'

545'EB'

'EB' +19.00
24.00' RT

545'W4'

TEMPORARY MARKING LINE EPOXY
6-INCH, YELLOW

TEMPORARY MARKING LINE EPOXY 6-INCH,
WHITE, (12.5' LINE 37.5' GAP)

'W4' +30.50
-15.00' LT

TO REMAIN

'W4' +22.65
-15.00' LT

'W4' +22.65
-3.00' LT

12'

12'

540'W4'

RAMP W4

'W4' +99.72
-15.26' LT

'W4' +30.98
0.00'

535'W4'

'W4' +22.65
9.00' RT

TEMPORARY MARKING LINE EPOXY
10-INCH, WHITE

'EB' +27.93
24.00' RT

16'

'W4' +17.68
0.00'

TEMPORARY MARKING LINE EPOXY
6-INCH, WHITE

TEMPORARY MARKING LINE EPOXY
6-INCH, WHITE

EXIST R/W

MARKING ARROW EPOXY

STATE TRAIL

N

TEMPORARY MARKING LINE
EPOXY 10-INCH, WHITE

545'WB'

PC 547+49.20 'WB'

545'EB'

545'W4'

'EB' +19.00
24.00' RT

'EB' +27.93
24.00' RT

'W4' +17.68
0.00'

POST

550'WB'

USH 18 WB

555'WB'

550'EB'

555'EB'

'EB' +28.10
24.00' RT

12'

USH 18 EB

RIPRAP

'EB' +98.76
36.00' RT

EXIST R/W

TEMPORARY MARKING LINE
EPOXY 6-INCH, WHITE

TEMPORARY MARKING LINE EPOXY 10-INCH,
WHITE, (3' LINE 9' GAP)

TEMPORARY MARKING LINE EPOXY
6-INCH, YELLOW

MOVE

N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT MARKING - WINTER 2025	SHEET 113	E

2

2

560'WB

560'EB'

565'WB'

USH 18 WB

565'EB'

570'WB'

570'EB'

PT: 571+31.27 'WB'

STA BACK = 571+36.10 'WB'

STA AHEAD = 571+99.45 'WB'

TO STH 69

'EB' +91.16
26.00' RT

'EB' +01.38
36.00' RT

'EB' +67.53
36.00' RT

'EB' +01.98
24.00' RT

USH 18 EB

EXIST R/W

TEMPORARY MARKING LINE EPOXY 10-INCH, WHITE, (3' LINE 9' GAP)

TEMPORARY MARKING LINE EPOXY 6-INCH, WHITE

TEMPORARY MARKING LINE EPOXY 6-INCH, YELLOW

N

570'WB'

575'WB'

580'WB'

570'EB'

575'EB'

580'EB'

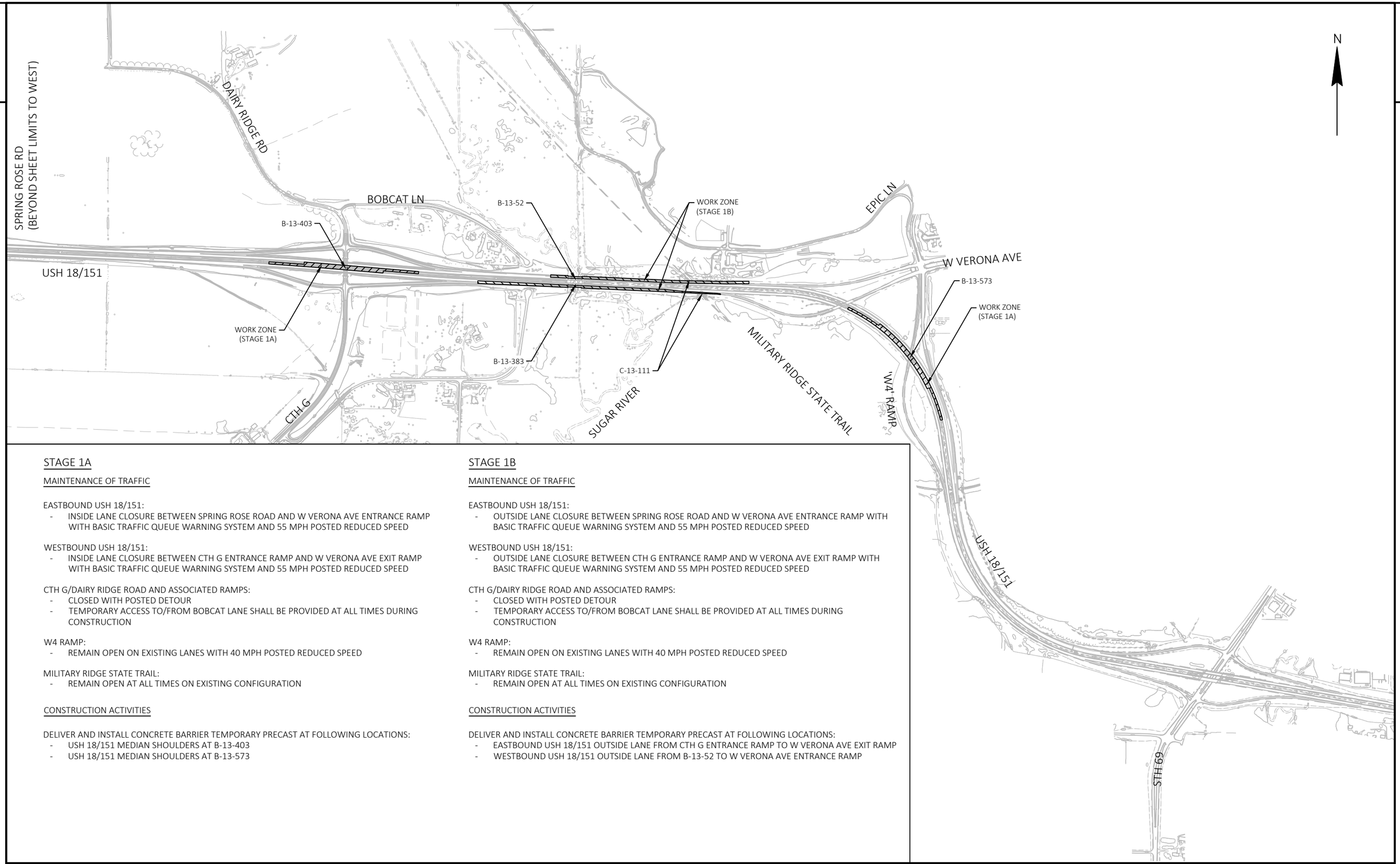
'EB' +90.00
0.00'

'EB' +40.00
12.00' RT

SIGN

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT MARKING - WINTER 2025	SHEET 114	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\024502-PM - WINTER.DWG
LAYOUT NAME - 03
PLOT DATE : 7/23/2024 10:02 AM PLOT BY : SYLVESTER, MORGAN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



STAGE 1A

MAINTENANCE OF TRAFFIC

EASTBOUND USH 18/151:
- INSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

WESTBOUND USH 18/151:
- INSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- CLOSED WITH POSTED DETOUR
- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION

W4 RAMP:
- REMAIN OPEN ON EXISTING LANES WITH 40 MPH POSTED REDUCED SPEED

MILITARY RIDGE STATE TRAIL:
- REMAIN OPEN AT ALL TIMES ON EXISTING CONFIGURATION

CONSTRUCTION ACTIVITIES

DELIVER AND INSTALL CONCRETE BARRIER TEMPORARY PRECAST AT FOLLOWING LOCATIONS:
- USH 18/151 MEDIAN SHOULDERS AT B-13-403
- USH 18/151 MEDIAN SHOULDERS AT B-13-573

STAGE 1B

MAINTENANCE OF TRAFFIC

EASTBOUND USH 18/151:
- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

WESTBOUND USH 18/151:
- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- CLOSED WITH POSTED DETOUR
- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION

W4 RAMP:
- REMAIN OPEN ON EXISTING LANES WITH 40 MPH POSTED REDUCED SPEED

MILITARY RIDGE STATE TRAIL:
- REMAIN OPEN AT ALL TIMES ON EXISTING CONFIGURATION

CONSTRUCTION ACTIVITIES

DELIVER AND INSTALL CONCRETE BARRIER TEMPORARY PRECAST AT FOLLOWING LOCATIONS:
- EASTBOUND USH 18/151 OUTSIDE LANE FROM CTH G ENTRANCE RAMP TO W VERONA AVE EXIT RAMP
- WESTBOUND USH 18/151 OUTSIDE LANE FROM B-13-52 TO W VERONA AVE ENTRANCE RAMP

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A/1B OVERVIEW	SHEET 115	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025101-TC-OVERVIEW-S1.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 10:15 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

STAGE 1A (USH 18/151):

CONSTRUCTION ACTIVITIES

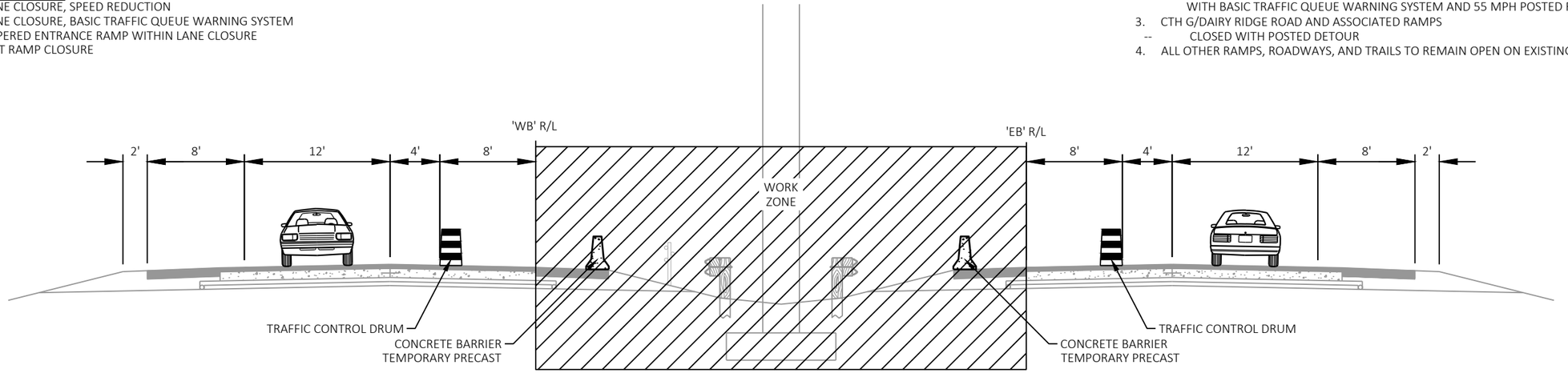
1. DELIVER AND INSTALL CONCRETE BARRIER TEMPORARY PRECAST AT FOLLOWING LOCATIONS:
   -- USH 18/151 MEDIAN SHOULDERS AT B-13-403
   -- USH 18/151 MEDIAN SHOULDERS AT B-13-573

STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
2. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
3. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
4. TRAFFIC CONTROL, EXIT RAMP CLOSURE

TRAFFIC

1. EASTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
2. WESTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
3. CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS
   -- CLOSED WITH POSTED DETOUR
4. ALL OTHER RAMPS, ROADWAYS, AND TRAILS TO REMAIN OPEN ON EXISTING LANES



TRAFFIC CONTROL TYPICAL SECTION
STAGE 1A
USH 18/151
B-13-403 & B-13-573

STAGE 1B (USH 18/151):

CONSTRUCTION ACTIVITIES

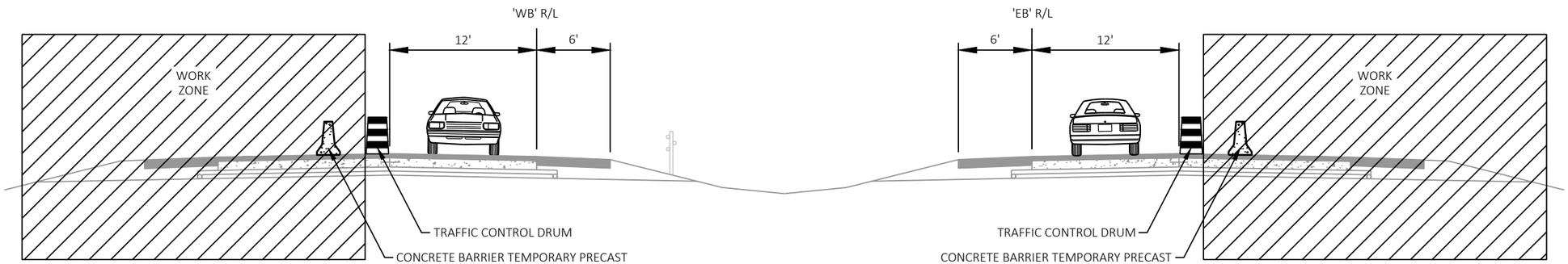
1. DELIVER AND INSTALL CONCRETE BARRIER TEMPORARY PRECAST AT FOLLOWING LOCATIONS:
   -- EASTBOUND USH 18/151 OUTSIDE LANE FROM CTH G ENTRANCE RAMP TO W VERONA AVE EXIT RAMP
   -- WESTBOUND USH 18/151 OUTSIDE LANE FROM B-13-52 TO W VERONA AVE ENTRANCE RAMP

STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
2. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
3. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
4. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
5. TRAFFIC CONTROL, EXIT RAMP CLOSURE

TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
3. CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS
   -- CLOSED WITH POSTED DETOUR
4. ALL OTHER RAMPS, ROADWAYS, AND TRAILS TO REMAIN OPEN ON EXISTING LANES

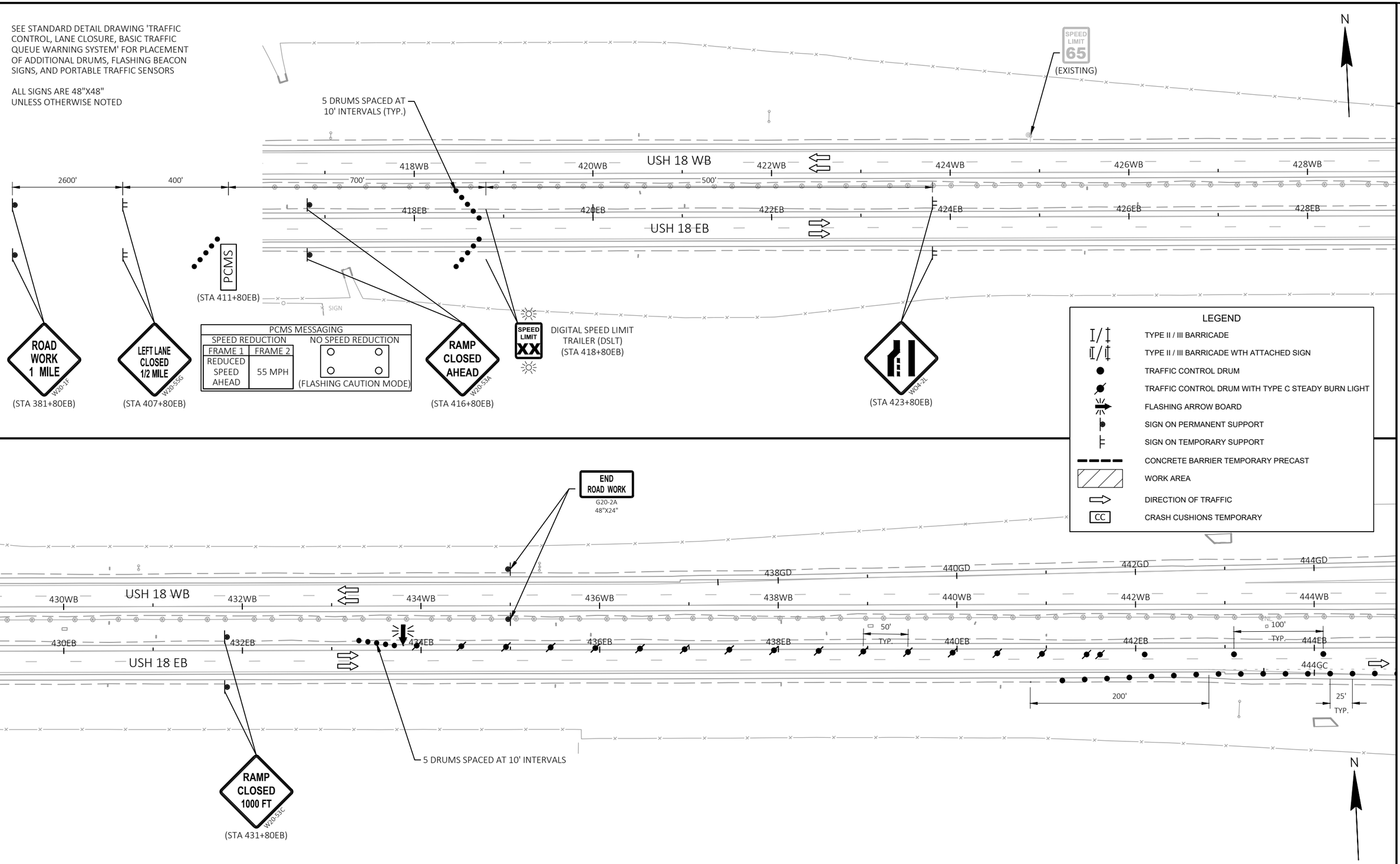


TRAFFIC CONTROL TYPICAL SECTION
STAGE 1B
USH 18/151
CTH G TO W VERONA AVE/EPIC LANE

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGES 1A & 1B (USH 18/151)	SHEET 116	E

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 117	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 01
PLOT DATE : 11/15/2024 12:48 AM
PLOT BY : WOLF, KELLY
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

2

2

N

USH 18 WB

USH 18 EB

GD RAMP

GC RAMP

GA RAMP

GB RAMP

CTH G

446GD 448GD 450GD 452GD 454GD 456GD 458GD

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

446GC 448GC 450GC 452GC 454GC 456GC 458GC 460GC

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

470GA 472GA 474GA

460GB 462GB 464GB 466GB 468GB 470GB 472GB 474GB

100' TYP.

25' TYP.

50' TYP.

100' MIN.

STA BACK = 459+78.34WB
STA AHEAD = 459+76.40 WB

STA 459+01.94, 5.00' RT

STA 455+00, -5.00' LT

STA 470+00, 5.00' RT

STA 466+00, -5.00' LT

COVER EXISTING SIGN

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

DIGITAL SPEED LIMIT TRAILER (DSLT)

LANE CLOSED R11-2L 48"X30"

RAMP CLOSED R11-2R 48"X30"

SPEED LIMIT XX

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHIONS TEMPORARY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 118	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 12:48 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

LANE CLOSED
R11-2L
48"X30"

SPEED LIMIT XX
DIGITAL SPEED LIMIT TRAILER (DSLT)

STA BACK = 478+37.49WB
STA AHEAD = 478+39.43 WB

476GA 478GA 480GA 482GA 484GA
476WB 478WB 480WB 482WB 484WB 486WB 488WB
476EB 478EB 480EB 482EB 484EB 486EB 488EB
476GB 478GB 480GB 482GB 484GB 486GB

USH 18 WB
USH 18 EB

25' TYP.
100' TYP.
200'

SIGN
INL

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHIONS TEMPORARY

RAMP CLOSED 1000 FT
W20-5aC

LANE CLOSED
R11-2L
48"X30"

490WB 492WB 494WB 496WB 498WB 500WB 502WB 504
490EB 492EB 494EB 496EB 498EB 500EB 502EB 504

USH 18 WB
USH 18 EB

100' TYP.
25' TYP.
50' TYP.

SIGN
SIGN
CATTLE GRATE

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 119	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 03
PLOT DATE : 11/15/2024 12:49 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

RAMP CLOSED AHEAD
W20-5A

LANE CLOSED
R11-2L
48"X30"

R1-2
48"X42"

W03-2

ROAD WORK AHEAD
W20-1A

N

25' TYP.

50' TYP.

500'

W VERONA AVE ENTRANCE RAMP

504WB 506WB 508WB 510WB USH 18 WB 512WB 514WB 516WB

50' TYP.

100' TYP.

504EB 506EB 508EB 510EB USH 18 EB 512EB 514EB 516EB

100' TYP.

W04-1R

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

END ROAD WORK
G20-2A
48"X24"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHIONS TEMPORARY

LANE CLOSED
R11-2L
48"X30"

STA 525+25, 5.00' RT

524WB 526WB USH 18 WB 528WB 530WB 532WB

100' TYP.

522WB 520WB 518WB

524EB 526EB USH 18 EB 528EB 530EB 532EB

100' TYP.

STA 521+00, -5.00' LT

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

W04-1L

STA 532+00, -5.00' LT

N

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 120	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 12:49 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

2

2

W VERONA AVE EXIT RAMP

STA 536+50, 5.00' RT

STA 532+00, -5.00' LT

100' TYP.

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

STA BACK = 539+42.23WB

STA AHEAD = 538+72.42 WB

50' TYP.

5 DRUMS SPACED AT 10' INTERVALS

USH 18 WB

USH 18 EB

W VERONA AVE ENTRANCE RAMP

532WB 534WB 536WB 538WB 540WB 542WB 544WB

534EB 536EB 538EB 540EB 542EB 544EB

530W4 540W4 542W4 544W4 546W

546WB 548WB 550WB 552WB 554WB 556WB 558WB 560WB

546EB 548EB 550EB 552EB 554EB 556EB 558EB 560EB

546W4

W04-2L

RIPRAP

SIGN

INL

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHIONS TEMPORARY

© PICTOMETRY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 121	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 05
PLOT DATE : 11/15/2024 12:49 AM
PLOT BY : WOLF, KELLY
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT) (STA 559+36WB)

PCMS MESSAGING	
SPEED REDUCTION	NO SPEED REDUCTION
FRAME 1: REDUCED SPEED AHEAD / FRAME 2: 55 MPH	(FLASHING CAUTION MODE)

LEFT LANE CLOSED 1/2 MILE W20-5SG

STA BACK = 571+36.10WB

STA AHEAD = 571+99.45 WB

5 DRUMS SPACED AT 10' INTERVALS (TYP.)

PCMS

USH 18 WB

USH 18 EB

558WB 560WB 562WB 564WB 566WB 568WB 570WB 572WB 574WB

560EB 562EB 564EB 566EB 568EB 570EB 572EB 574EB

STH 69 ENTRANCE RAMP

STA AHEAD = 571+99.45 WB

572WB 574WB 576WB 578WB 580WB 582WB 584WB 586WB

572EB 574EB 576EB 578EB 580EB 582EB 584EB 586EB

END ROAD WORK
G20-2A
48"X24"

STH 69 EXIT RAMP

END ROAD WORK
G20-2A
48"X24"

STH 69

LEGEND

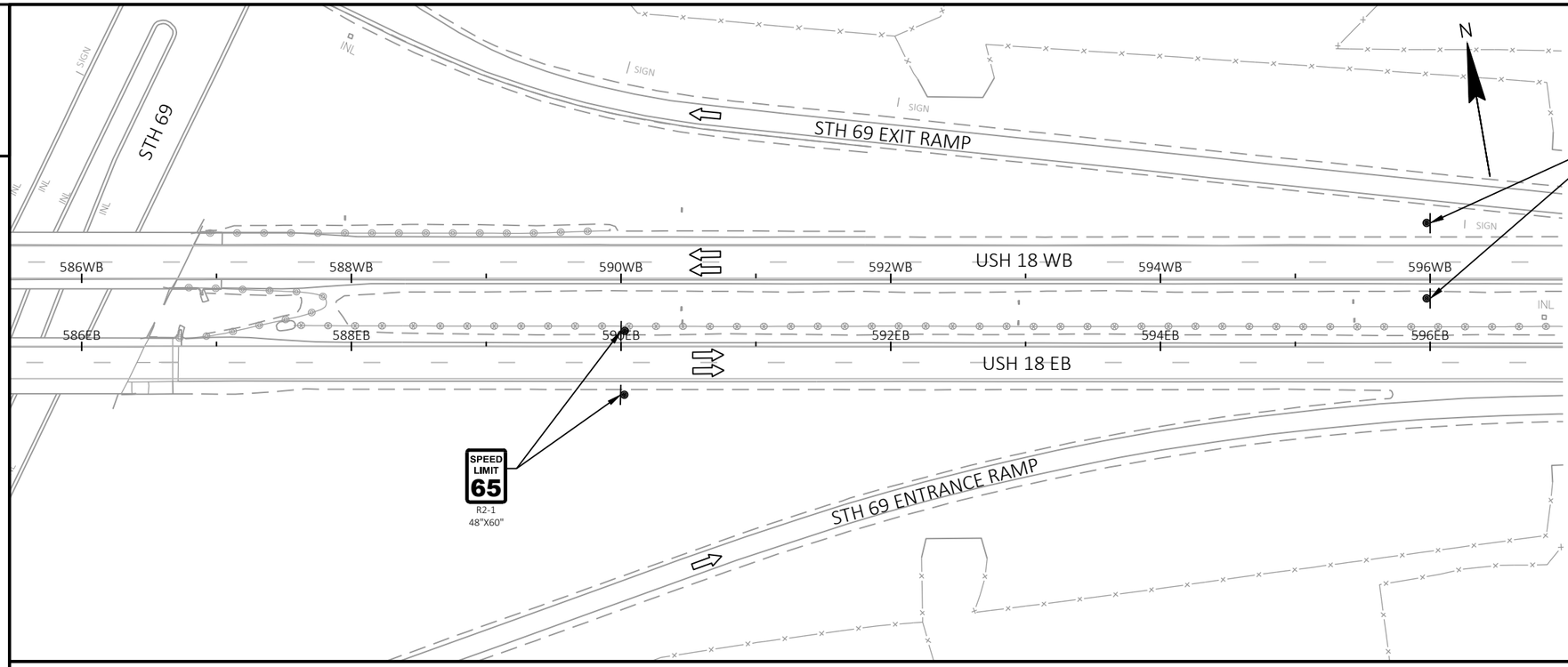
- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHIONS TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 122	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 12:49 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

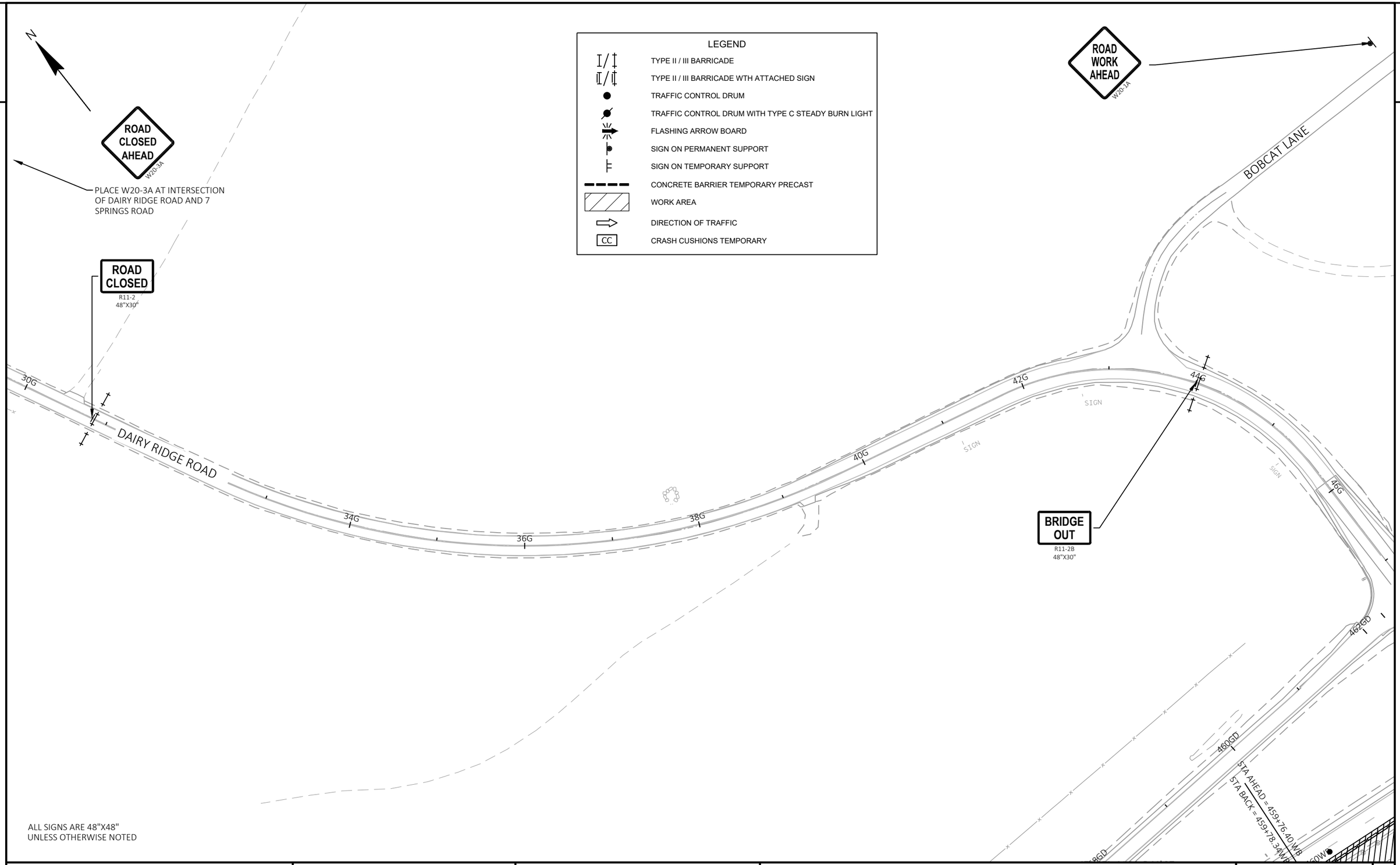
ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHIONS TEMPORARY

THIS SHEET INTENTIONALLY LEFT BLANK

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 123	E



ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 124	E

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

CTH G

STA AHEAD = 459+76.40 WB
STA BACK = 459+78.34 WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHIONS TEMPORARY (CC)

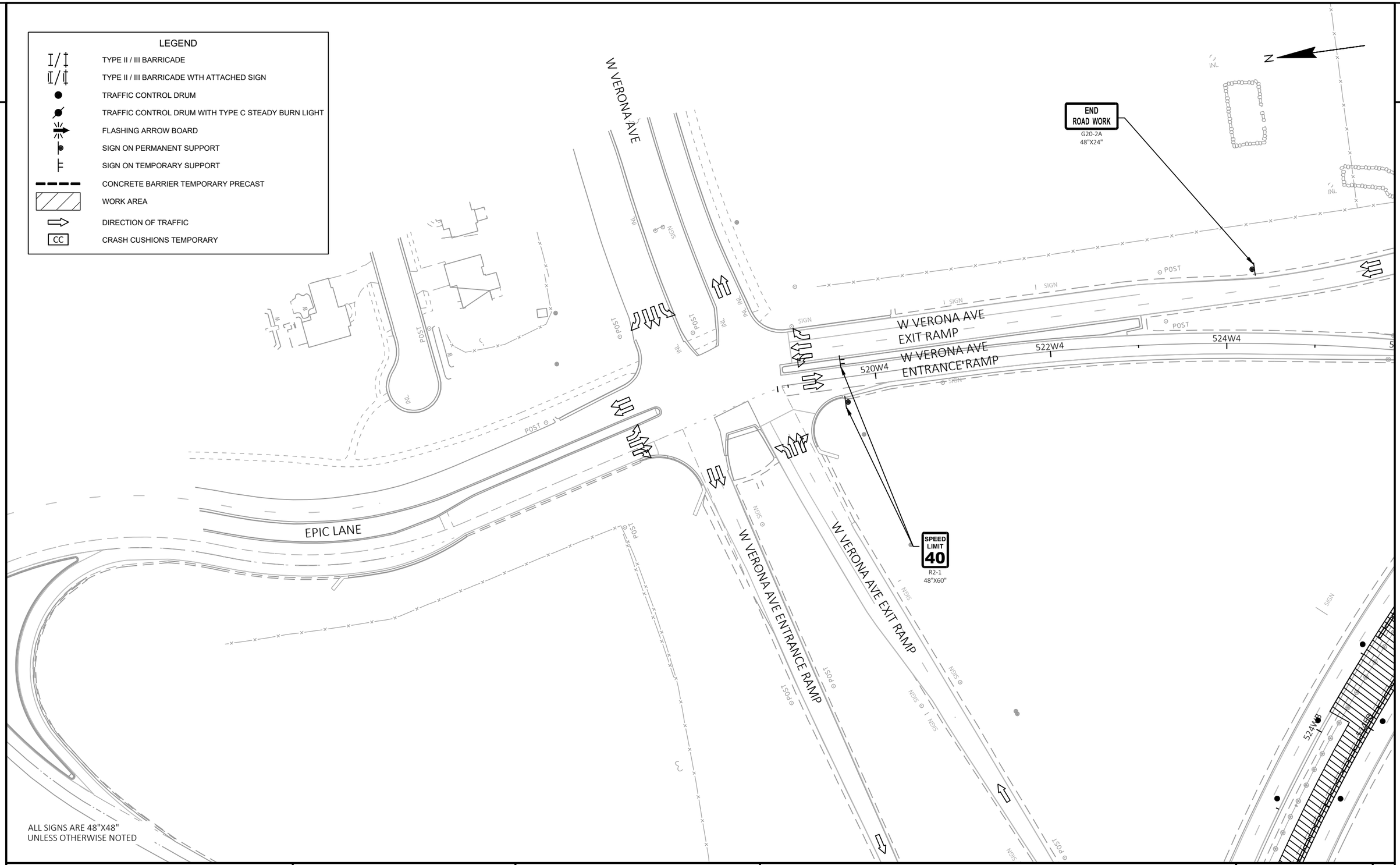
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 125 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 09
PLOT DATE : 11/15/2024 12:50 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHIONS TEMPORARY



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 126	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 10

PLOT DATE : 11/15/2024 12:50 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHIONS TEMPORARY

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

W VERONA AVE ENTRANCE RAMP

STA BACK = 539+42.23WB

STA AHEAD = 538+72.42 WB

528WB 530WB 532WB 534WB 536WB 538WB 540WB 542WB

528EB 530EB 532EB 534EB 536EB 538EB 540EB 542EB

530W4 532W4 534W4 536W4 538W4 540W4 542W4

INL SIGN

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1A	SHEET 127	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025103-TC-1A.DWG
LAYOUT NAME - 11

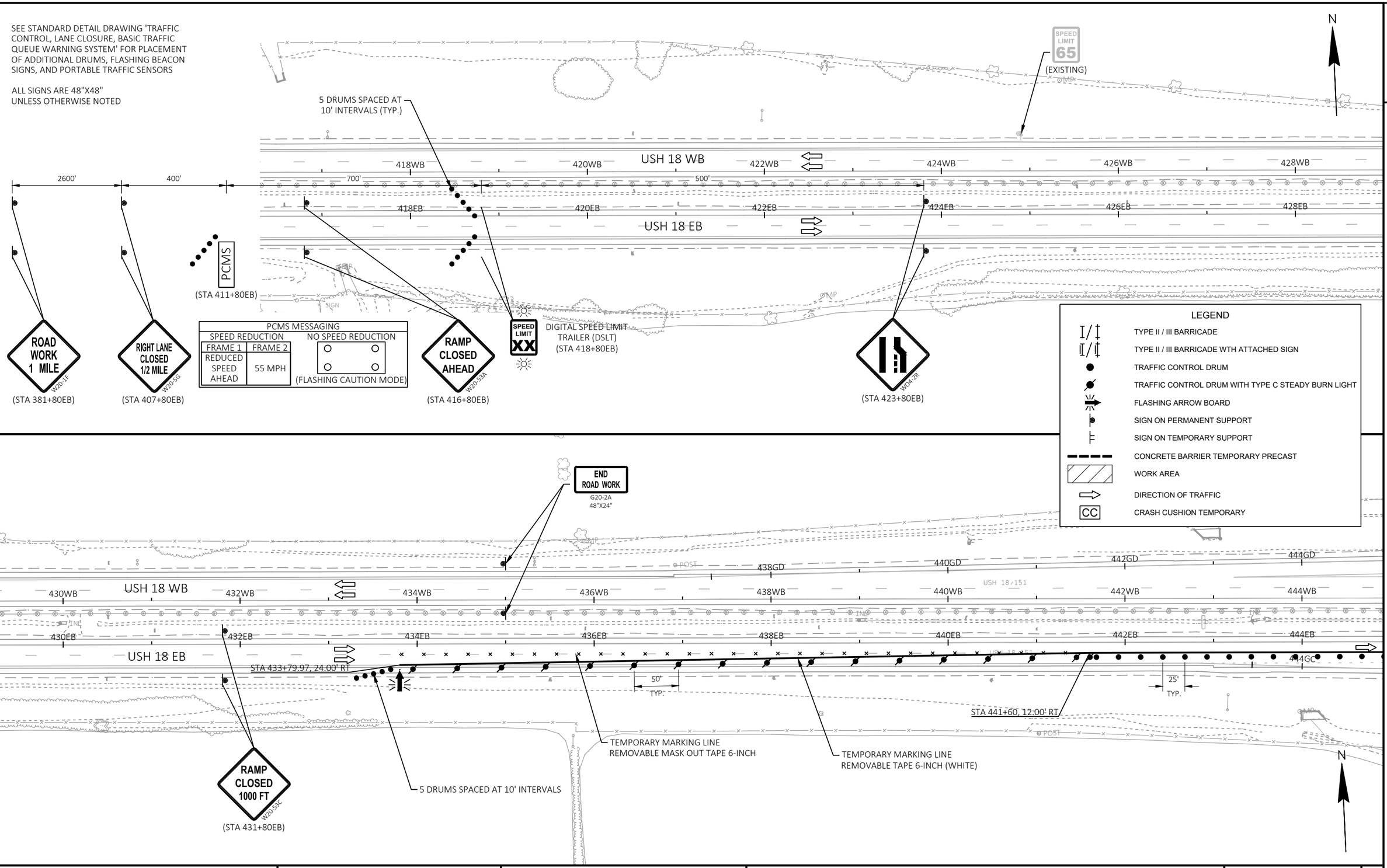
PLOT DATE : 11/15/2024 12:50 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 128	E

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

N

GD RAMP

USH 18 WB

USH 18 EB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

STA 451+00, 12.00' RT

25' TYP.

50' TYP.

100' TYP.

EXISTING SIGN
COVERED IN STAGE 1A

STA BACK = 459+78.34WB

STA AHEAD = 459+76.40WB

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED
R11-2R
48"X30"

GC RAMP

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

GA RAMP

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

STA 472+00, -12.00' LT

CBTP INSTALLED IN STAGE 1A

GB RAMP

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

CTH G

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 129 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 2:09 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

STA BACK = 478+37.49 WB
STA AHEAD = 478+39.43 WB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT XX

LANE CLOSED
R11-2L
48"X30"

STA 486+00, -17.00' LT
STA 486+00, -12.00' LT

N

476GA 478GA 480GA 482GA 484GA 486GA 488GA

476WB 478WB 480WB 482WB 484WB 486WB 488WB

USH 18 WB

25' TYP.

STA 475+00, 12.00' RT

STA 480+00, 17.00' RT

476EB 478EB 480EB 482EB 484EB 486EB 488EB

USH 18 EB

100' TYP.

476GB 478GB 480GB 482GB 484GB 486GB

STA 478+51.16, 35.61' RT

STA 486+50.77, 29.40' RT

W05-52R
18"X54"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

LANE CLOSED
R11-2L
48"X30"

DRUMS TO BE REMOVED AS CONCRETE
BARRIER TEMPORARY PRECAST IS INSTALLED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

RAMP CLOSED 1000 FT
W20-5aC

100' TYP.

490WB 492WB 494WB 496WB 498WB 500WB 502WB 504

USH 18 WB

490EB 492EB 494EB 496EB 498EB 500EB 502EB 504

USH 18 EB

200'

25' TYP.

STA 499+99.95, -17.00' LT
STA 500+00, -12.00' LT

STA 503+92.40, 12.00' RT

STA 499+00, 12.00' RT
STA 498+99.85, 17.00' RT

STA 501+00, 24.00' RT
STA 501+04.68, 29.29' RT

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

SUGAR R.

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 130	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 03

PLOT DATE : 11/15/2024 2:10 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED AHEAD
W20-5A

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

STA 505+99.44, -31.96' LT

STA 508+00, -41.98' LT

YIELD
R1-2
48"X42"

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

STA 508+99.25, -41.93' LT

STA 509+02.25, -27.06' LT

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

LANE CLOSED
R11-2L
48"X30"

W03-2

500'

ROAD WORK AHEAD
W20-1A

STA 514+33.22, -46.00' LT

W VERONA AVE ENTRANCE RAMP

W04-1R

N

504WB 506WB 508WB 510WB 512WB USH 18 WB 514WB 516WB

50' TYP.

100' TYP.

STA 506+00.56, -12.00' LT

STA 507+00, -12.00' LT

STA 507+00.43, -16.99' LT

STA 505+99.82, 12.00' RT

STA 505+00, 12.00' RT

STA 506+99.98, 15.08' RT

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)

50' TYP.

COVER EXISTING SIGN

STA 506+97.24, 45.11' RT

1,000' RAD.

STA 506+10.24, 46.44' RT

STA 505+72.60, 24.00' RT

STA 505+55.48, 37.39' RT

STA 505+34.90, 39.68' RT

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

STA 504+52.93, 35.75' RT

STA 503+92.40, 24.00' RT

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

EXIT
E5-1
48"X48"

W VERONA AVE EXIT RAMP

END ROAD WORK
G20-2A
48"X24"

LANE CLOSED
R11-2L
48"X30"

100' TYP.

518WB 520WB 522WB 524WB USH 18 WB 526WB 528WB 528W4 530WB 532WB

518EB 520EB 522EB 524EB USH 18 EB 526EB 528EB 530EB 530W4 532EB

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

CBTP INSTALLED IN STAGE 1A

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 131	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 2:10 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

STA 532+89.81, -12.00' LT

100' TYP.

50' TYP.

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

STA 540+00, -24.00' LT

5 DRUMS SPACED AT 10' INTERVALS

USH 18 WB

USH 18 EB

STA BACK = 539+42.23 WB

STA AHEAD = 538+72.42 WB

CBTP INSTALLED IN STAGE 1A

W VERONA AVE ENTRANCE RAMP

WORK 2R

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)
(STA 555+00WB)

5 DRUMS SPACED AT 10' INTERVALS (TYP.)

RIPRAP

SIGN

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 132	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 05

PLOT DATE : 11/15/2024 2:11 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PCMS MESSAGING		
SPEED REDUCTION		NO SPEED REDUCTION
FRAME 1	FRAME 2	(FLASHING CAUTION MODE)
REDUCED SPEED AHEAD	55 MPH	

PCMS

5 DRUMS SPACED AT
10' INTERVALS (TYP.)

RIGHT LANE
CLOSED
1/2 MILE
W20-5G

STA BACK = 571+36.10WB
STA AHEAD = 571+99.45 WB

USH 18 WB

USH 18 EB

STH 69 ENTRANCE RAMP

STH 69 EXIT RAMP

STH 69

SIGN

END
ROAD WORK
G20-2A
48"X24"

END
ROAD WORK
G20-2A
48"X24"

LEGEND

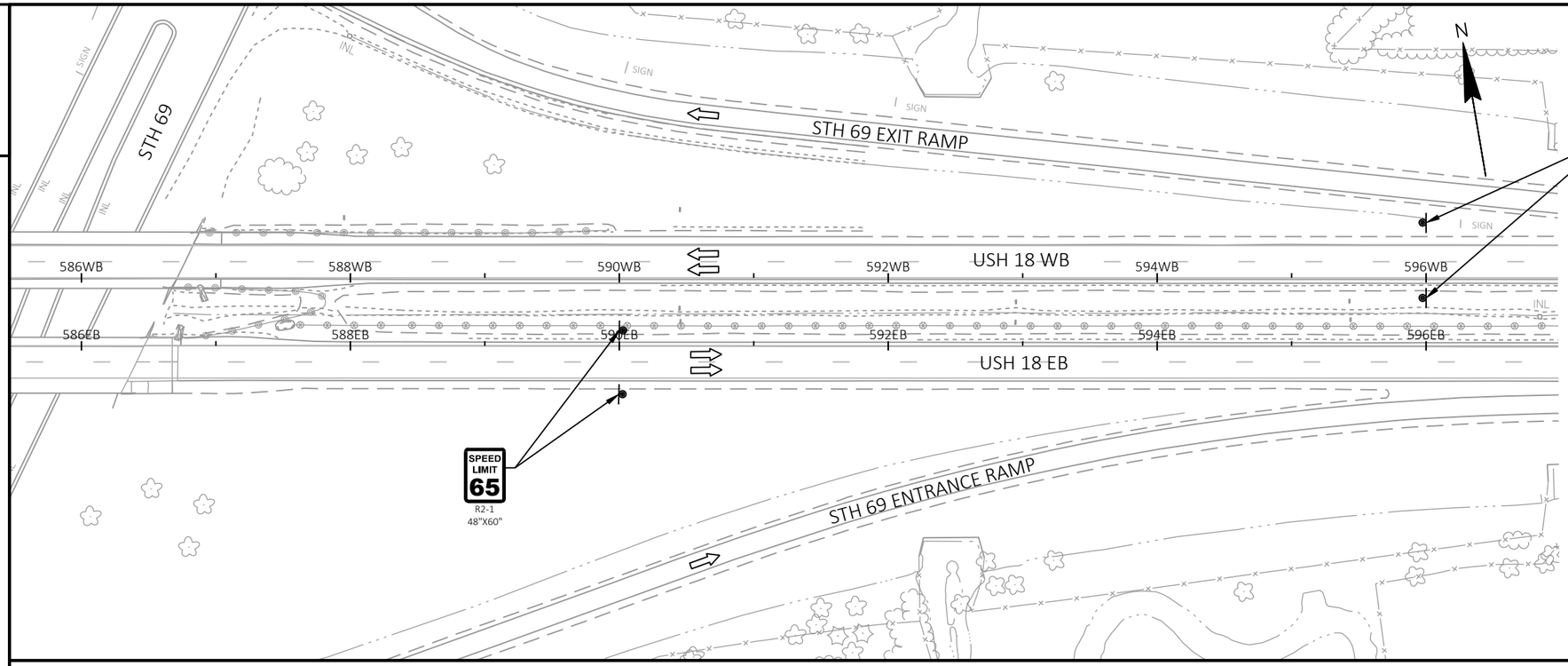
- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 133	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 2:12 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

DAIRY RIDGE ROAD

30G 34G 36G 38G 40G 42G 44G 45G 46GD 46GD 46GD

SIGN SIGN SIGN

BRIDGE OUT
R11-2B
48"X30"

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

2

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 135 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 2:12 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP
GB RAMP
GC RAMP
GD RAMP
US 18 WB
US 18 EB
CTH G

466GA
464GA
466WB
466EB
464WB
464EB
466GB
464GB
462WB
462EB
462GC
460WB
460EB
460GC
462GD
460GD
48G
50G
52G
54G
56G
58G
60G
62G

STA AHEAD = 459+76.40 WB
STA BACK = 459+78.34WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

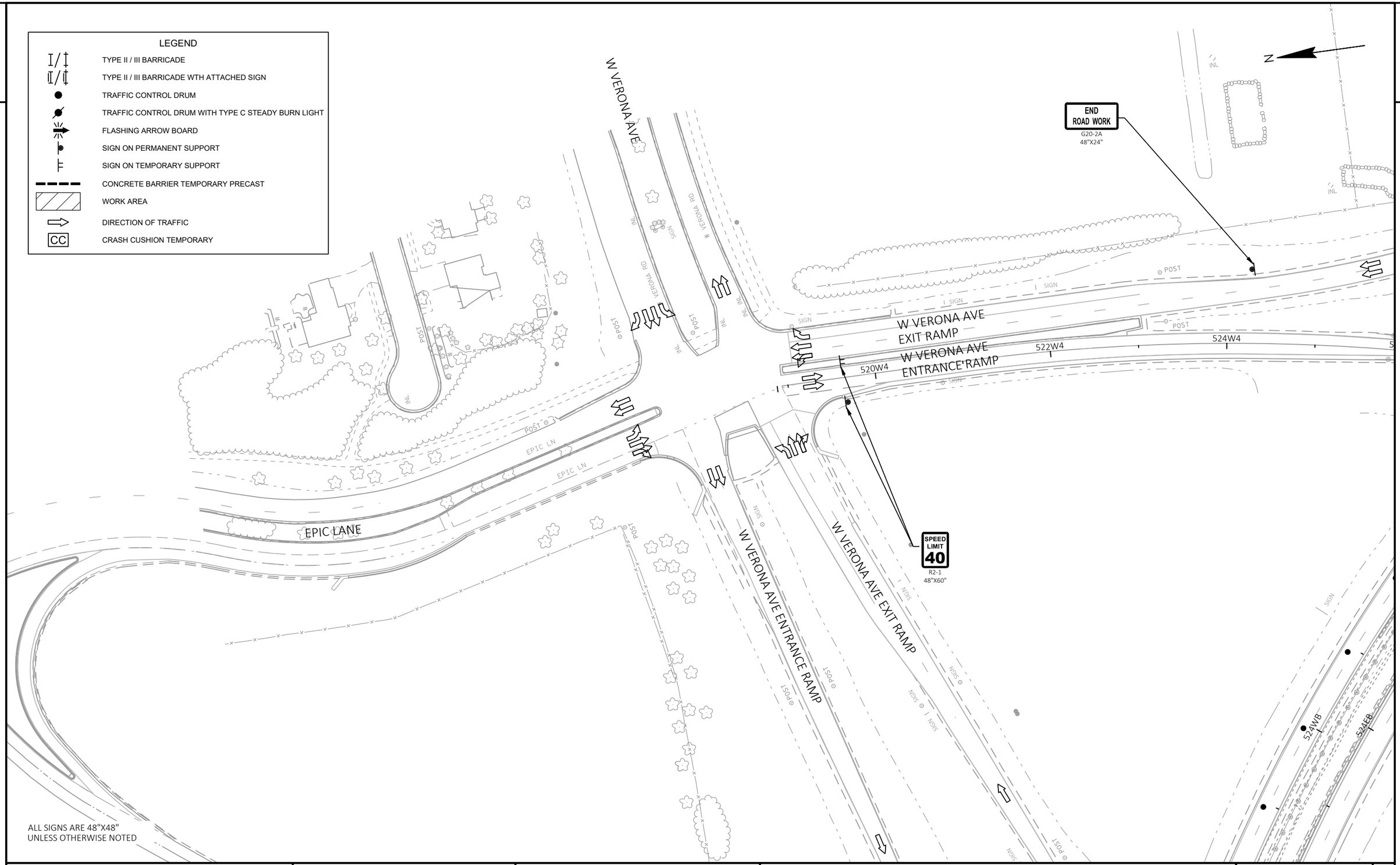
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 136 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 09
PLOT DATE : 11/15/2024 2:13 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY



ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 137	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 10

PLOT DATE : 11/15/2024 2:13 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

W VERONA AVE ENTRANCE RAMP

STA BACK = 539+42.23 WB

STA AHEAD = 538+72.42 WB

530WB 532WB 534WB 536WB 538WB 540WB 542WB

528EB 530EB 532EB 534EB 536EB 538EB 540EB 542EB

528W4 530W4 532W4 534W4 536W4 538W4 540W4 542W4

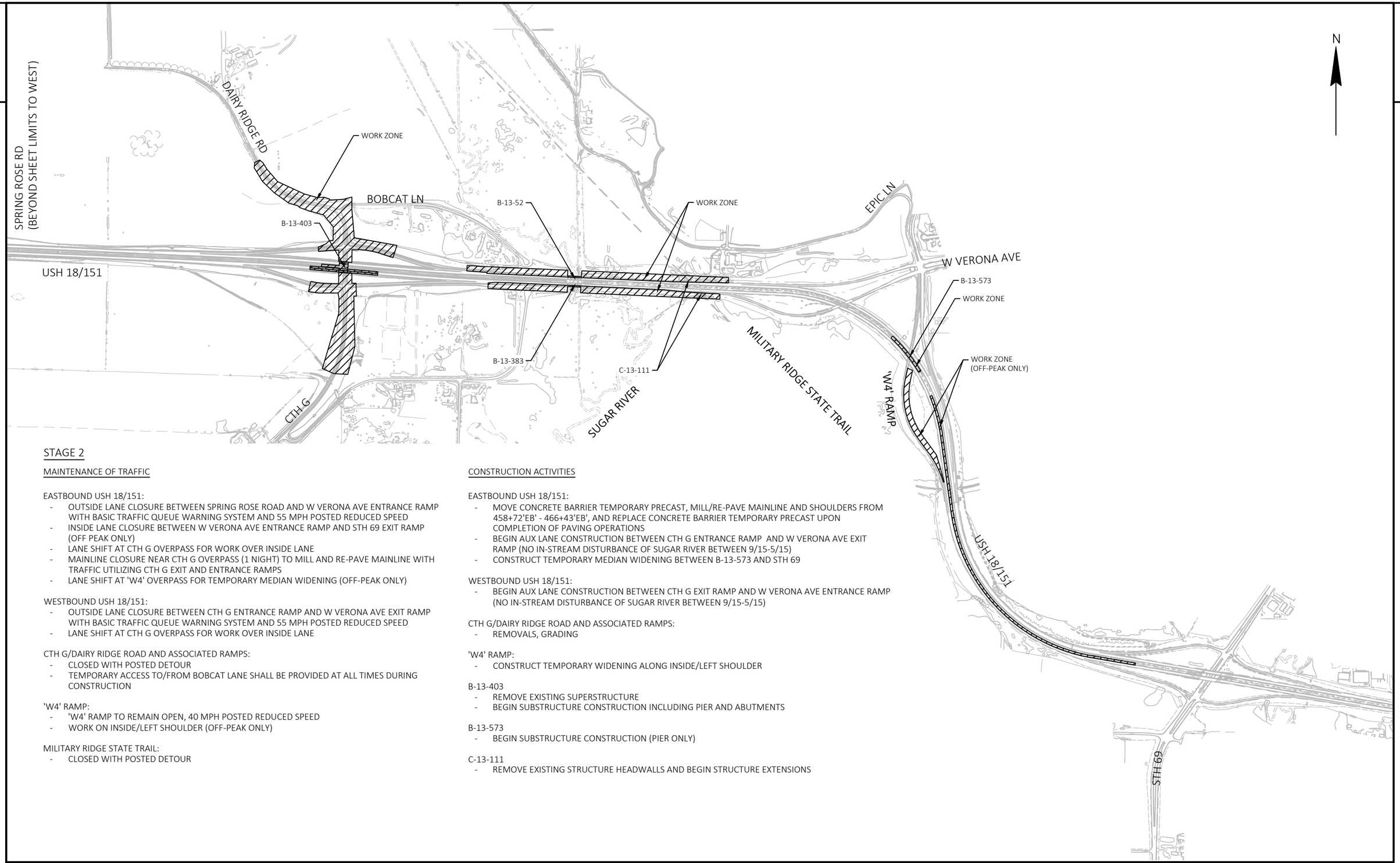
ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 1B	SHEET 138	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025104-TC-1B.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 2:14 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



STAGE 2

MAINTENANCE OF TRAFFIC

EASTBOUND USH 18/151:
- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
- INSIDE LANE CLOSURE BETWEEN W VERONA AVE ENTRANCE RAMP AND STH 69 EXIT RAMP (OFF PEAK ONLY)
- LANE SHIFT AT CTH G OVERPASS FOR WORK OVER INSIDE LANE
- MAINLINE CLOSURE NEAR CTH G OVERPASS (1 NIGHT) TO MILL AND RE-PAVE MAINLINE WITH TRAFFIC UTILIZING CTH G EXIT AND ENTRANCE RAMPS
- LANE SHIFT AT 'W4' OVERPASS FOR TEMPORARY MEDIAN WIDENING (OFF-PEAK ONLY)

WESTBOUND USH 18/151:
- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
- LANE SHIFT AT CTH G OVERPASS FOR WORK OVER INSIDE LANE

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- CLOSED WITH POSTED DETOUR
- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION

'W4' RAMP:
- 'W4' RAMP TO REMAIN OPEN, 40 MPH POSTED REDUCED SPEED
- WORK ON INSIDE/LEFT SHOULDER (OFF-PEAK ONLY)

MILITARY RIDGE STATE TRAIL:
- CLOSED WITH POSTED DETOUR

CONSTRUCTION ACTIVITIES

EASTBOUND USH 18/151:
- MOVE CONCRETE BARRIER TEMPORARY PRECAST, MILL/RE-PAVE MAINLINE AND SHOULDERS FROM 458+72'EB' - 466+43'EB', AND REPLACE CONCRETE BARRIER TEMPORARY PRECAST UPON COMPLETION OF PAVING OPERATIONS
- BEGIN AUX LANE CONSTRUCTION BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP (NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15)
- CONSTRUCT TEMPORARY MEDIAN WIDENING BETWEEN B-13-573 AND STH 69

WESTBOUND USH 18/151:
- BEGIN AUX LANE CONSTRUCTION BETWEEN CTH G EXIT RAMP AND W VERONA AVE ENTRANCE RAMP (NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15)

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- REMOVALS, GRADING

'W4' RAMP:
- CONSTRUCT TEMPORARY WIDENING ALONG INSIDE/LEFT SHOULDER

B-13-403
- REMOVE EXISTING SUPERSTRUCTURE
- BEGIN SUBSTRUCTURE CONSTRUCTION INCLUDING PIER AND ABUTMENTS

B-13-573
- BEGIN SUBSTRUCTURE CONSTRUCTION (PIER ONLY)

C-13-111
- REMOVE EXISTING STRUCTURE HEADWALLS AND BEGIN STRUCTURE EXTENSIONS

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET 139	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025201-TC-OVERVIEW-S2.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 10:17 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

STAGE 2 (CTH G TO WEST VERONA AVE/EPIC LANE):

CONSTRUCTION ACTIVITIES

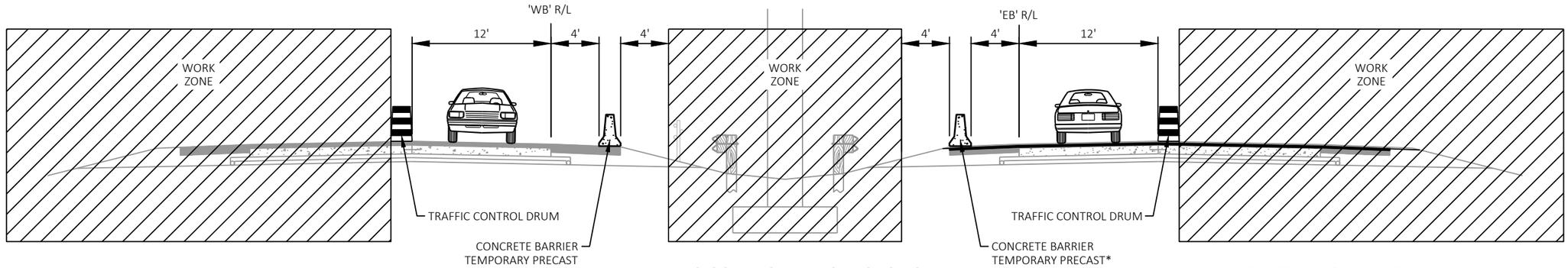
1. EASTBOUND USH 18/151 & B-13-383:
   -- MOVE CONCRETE BARRIER TEMPORARY PRECAST, MILL/RE-PAVE MAINLINE AND SHOULDERS FROM 458+72'EB' - 466+43'EB', AND REPLACE CONCRETE BARRIER TEMPORARY PRECAST ALONG MEDIAN SHOULDER
   -- BEGIN AUX LANE REMOVALS/GRADING/CONSTRUCTION FROM 479+00'EB' - 499+00'EB'
   -- BEGIN STRUCTURE REMOVALS/DEMOLITION AT B-13-383
   -- NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15
2. WESTBOUND USH 18/151 & B-13-52:
   -- BEGIN AUX LANE REMOVALS/GRADING/CONSTRUCTION FROM 476+67'WB' - 500+00'WB'
   -- BEGIN STRUCTURE REMOVALS/DEMOLITION AT B-13-52
   -- NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15
3. CTH G/DAIRY RIDGE ROAD & B-13-403:
   -- BEGIN REMOVALS/GRADING/CONSTRUCTION FROM 32+00'G' - 62+00'G', INCLUDING CTH G ENTRANCE & EXIT RAMPS
   -- REMOVE EXISTING BRIDGE SUPERSTRUCTURE
   -- BEGIN SUBSTRUCTURE CONSTRUCTION INCLUDING PIER AND ABUTMENTS
   -- MILL/RE-PAVE EASTBOUND USH 18/151 MAINLINE AND SHOULDERS - MUST BE COMPLETED PRIOR TO SETTING GIRDERS
4. C-13-111:
   -- CONSTRUCT NORTH AND SOUTH STRUCTURE EXTENSIONS

STANDARD DETAIL DRAWINGS REQUIRED

1. BARRICADES AND SIGNS FOR VARIOUS CLOSURES
2. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
3. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
   A. PLACE 2 PCMS BOARDS WEST OF OLD PB INTERCHANGE OR 300-FT EAST OF THE CTH M OVERPASS FOR WB USH 18/151 TRAFFIC
   B. PLACE 2 PCMS BOARDS 1,000-FT NORTH OF WHALEN ROAD FOR WB USH 18/151 TRAFFIC
5. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
6. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
7. TRAFFIC CONTROL, EXIT RAMP CLOSURE

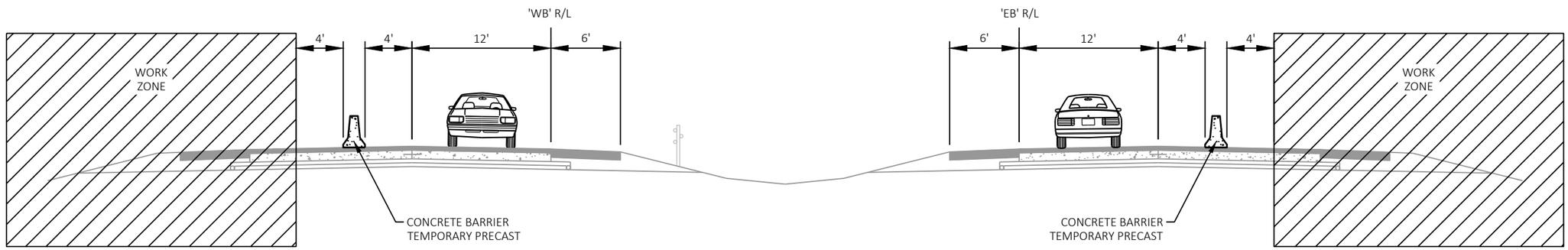
TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR OVERHEAD WORK (SEE OTHER DETAILS)
   -- MAINLINE CLOSURE NEAR CTH G OVERPASS (1 NIGHT) TO MILL AND RE-PAVE MAINLINE WITH TRAFFIC UTILIZING CTH G EXIT AND ENTRANCE RAMPS
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFT AT CTH G OVERPASS FOR WORK OVER INSIDE LANE
3. CTH G/DAIRY RIDGE ROAD AND ASSOCIATE RAMPS:
   -- CLOSED WITH POSTED DETOUR
   -- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION
4. MILITARY RIDGE STATE TRAIL
   -- CLOSED WITH POSTED DETOUR



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (PEAK & OFF-PEAK)
USH 18/151
B-13-403

* MOVE/REPLACE TO MILL & RE-PAVE 'EB' MEDIAN SHOULDER



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (PEAK & OFF-PEAK)
USH 18/151
CTH G TO W VERONA AVE/EPIC LANE

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGE 2 (USH 18/151)	SHEET 140	E

STAGE 2 (OVERHEAD BRIDGE WORK):

CONSTRUCTION ACTIVITIES

1. B-13-403
   -- REMOVE EXISTING SUPERSTRUCTURE

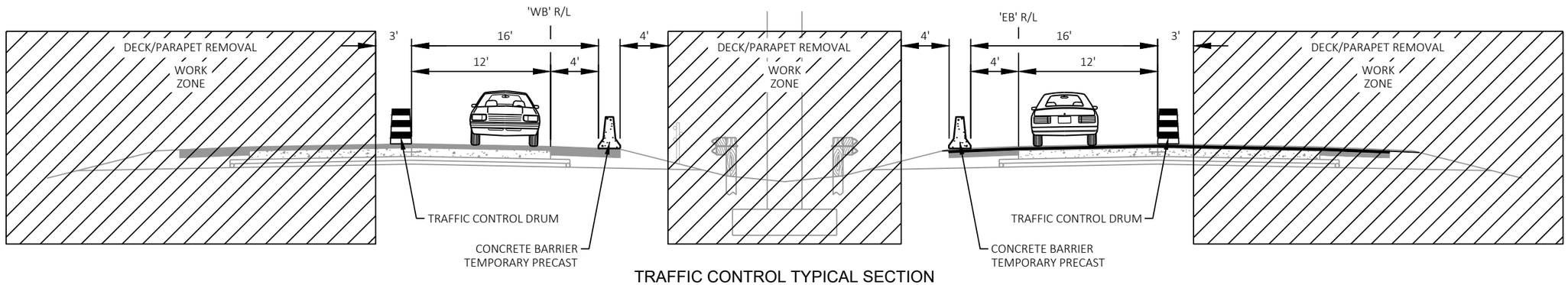
STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
2. TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

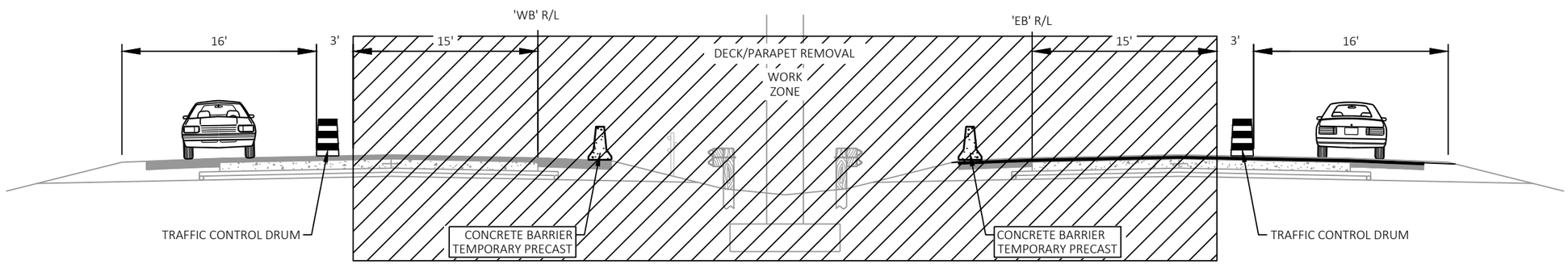
TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR WORK OVER INSIDE/OUTSIDE LANES
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR WORK OVER INSIDE/OUTSIDE LANES

2



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (LANE SHIFT TO INSIDE)
USH 18/151
B-13-403



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (LANE SHIFT TO OUTSIDE)
USH 18/151
B-13-403

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGE 2 (UNDER B-13-403)	SHEET 141	E

STAGE 2 (WEST VERONA AVE/EPIC LANE TO STH 69):

CONSTRUCTION ACTIVITIES

1. EASTBOUND USH 18/151:
   -- CONSTRUCT TEMPORARY MEDIAN WIDENING FROM 534+40'EB' - 577+10'EB' (OFF-PEAK ONLY)
2. WESTBOUND USH 18/151:
   -- NO WORK

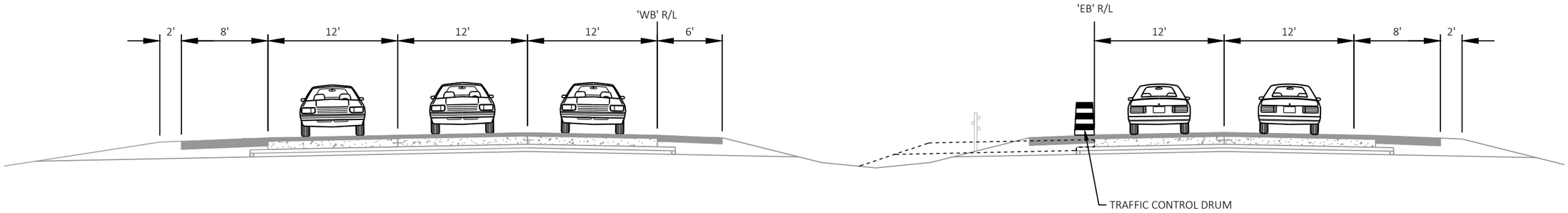
STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
2. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
   A. PLACE 2 PCMS BOARDS WEST OF OLD PB INTERCHANGE OR 300-FT EAST OF THE CTH M OVERPASS FOR WB USH 18/151 TRAFFIC
   B. PLACE 2 PCMS BOARDS 1,000-FT NORTH OF WHALEN ROAD FOR WB USH 18/151 TRAFFIC
3. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
4. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
5. TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

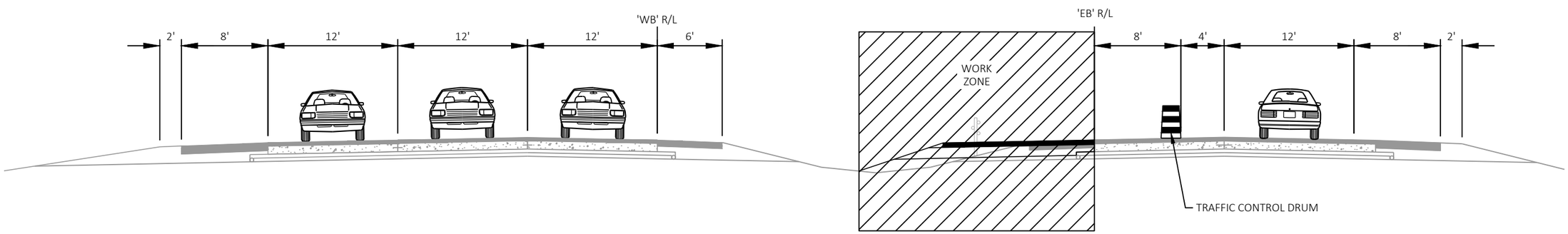
TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- TWO THROUGH LANES OPEN DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP DURING PEAK HOURS
   -- DURING OFF-PEAK HOURS, LANE SHIFT TO OUTSIDE LANE AND CLOSE INSIDE LANE FROM W VERONA AVE/EPIC LANE EXIT RAMP TO STH 69
   -- STH 69 EXIT RAMP TO REMAIN OPEN
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

2



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (PEAK)
USH 18/151
W VERONA AVE/EPIC LANE TO STH 69



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (OFF-PEAK)
USH 18/151
W VERONA AVE/EPIC LANE TO STH 69

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGE 2 (USH 18/151)	SHEET 142	E

2

STAGE 2 (USH 18/151 UNDER B-13-573):

CONSTRUCTION ACTIVITIES

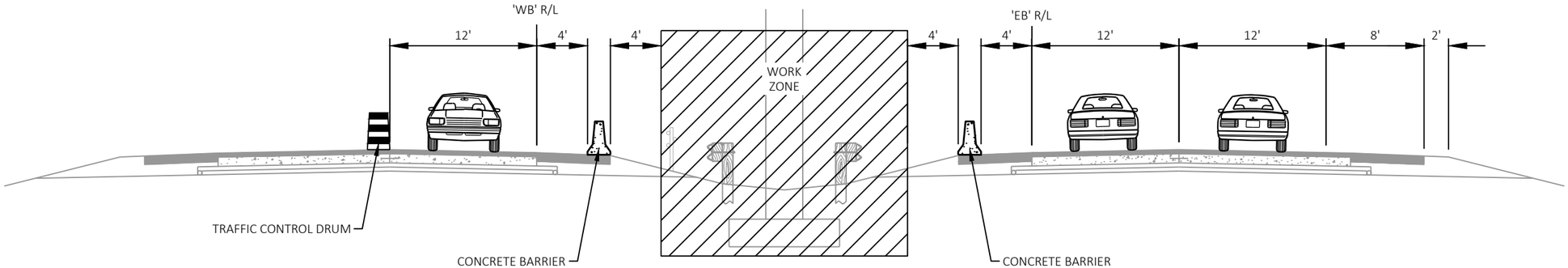
1. B-13-573
   -- CONSTRUCT PIER

STANDARD DETAIL DRAWINGS REQUIRED

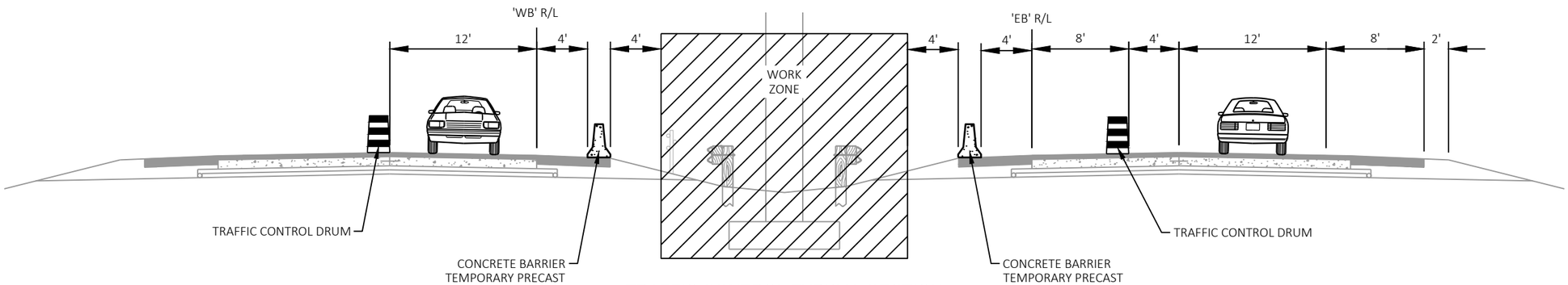
1. TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- TWO THROUGH LANES OPEN DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP DURING PEAK HOURS
   -- DURING OFF-PEAK HOURS, LANE SHIFT TO OUTSIDE LANE AND CLOSE INSIDE LANE FROM W VERONA AVE/EPIC LANE EXIT RAMP TO STH 69
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (PEAK)
USH 18/151 UNDER B-13-573



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (OFF-PEAK)
USH 18/151 UNDER B-13-573

STAGE 2 (W4 RAMP):

CONSTRUCTION ACTIVITIES

1. 'W4' RAMP & B-13-573:
   -- CONSTRUCT INSIDE SHOULDER WIDENING ALONG 'W4' RAMP FROM 529+78'W4' - 544+00'W4' (OFF-PEAK ONLY)
   -- BEGIN CONSTRUCTION OF NEW PIER FOR B-13-573

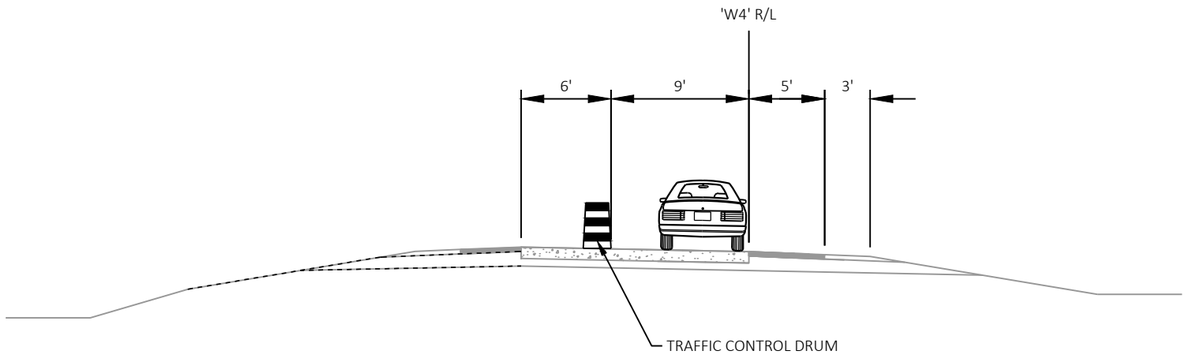
STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
2. TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTI-LANE DIVIDED 45 MPH AND UNDER

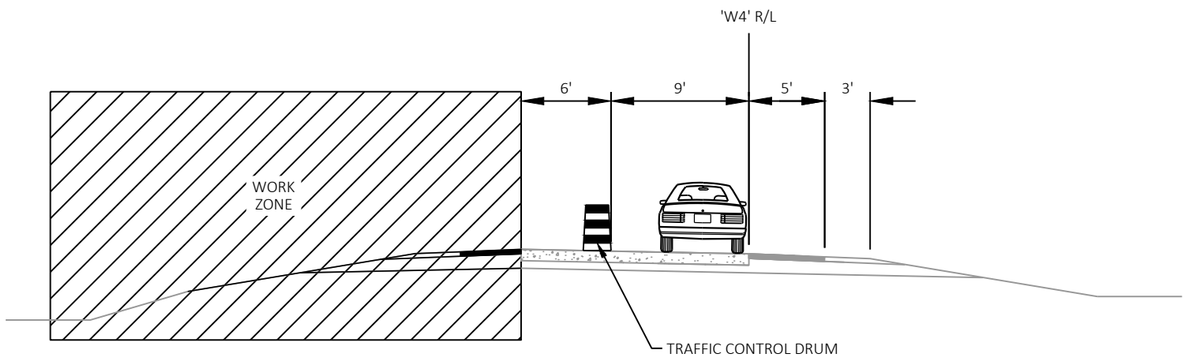
TRAFFIC

1. 'W4' RAMP:
   -- TRAFFIC SHIFT ONTO OUTSIDE SHOULDER DOWNSTREAM OF B-13-573

2



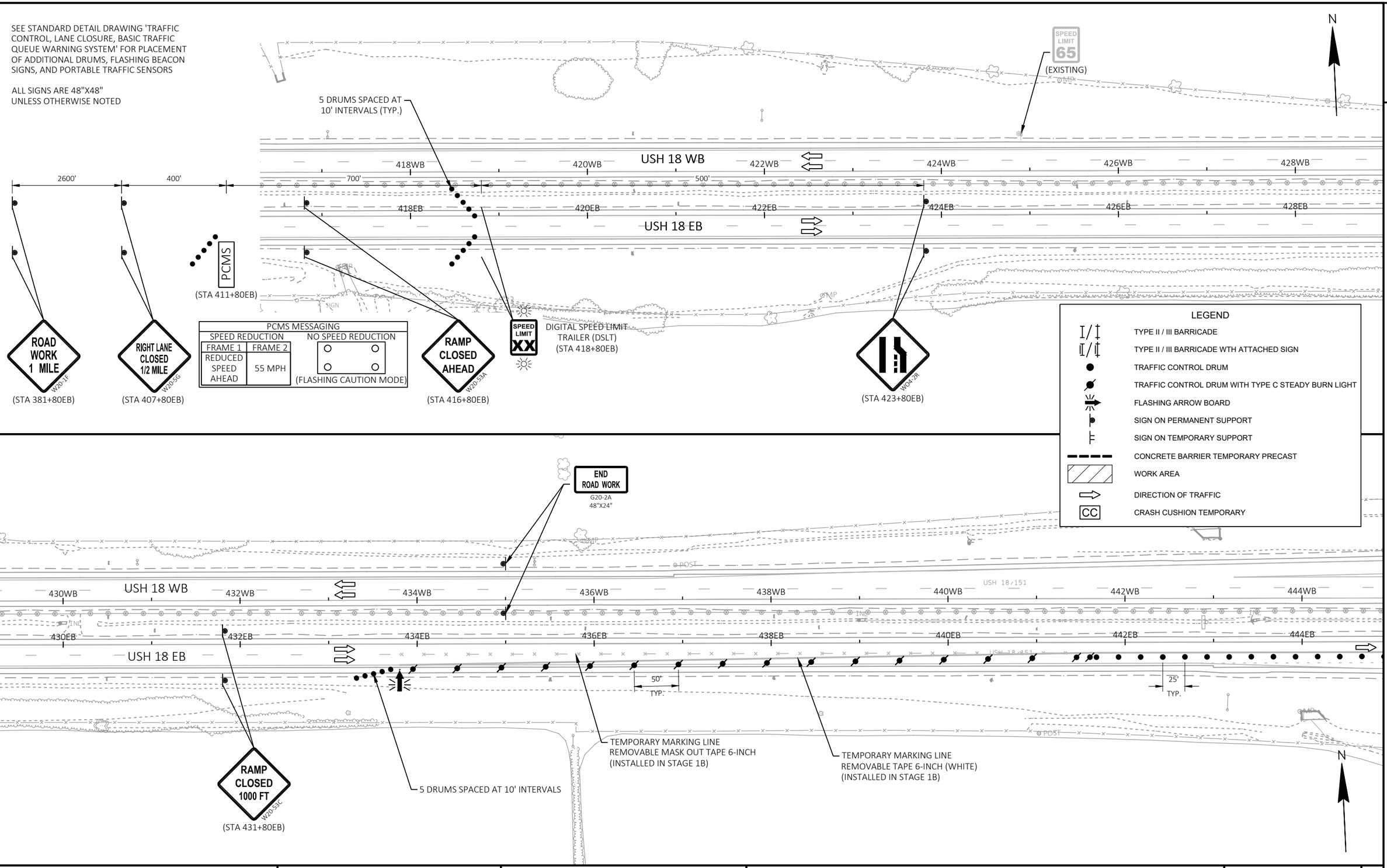
TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (PEAK)
W4 RAMP
WEST VERONA AVE/EPIC LANE TO USH 18/151



TRAFFIC CONTROL TYPICAL SECTION
STAGE 2 (OFF-PEAK)
W4 RAMP
WEST VERONA AVE/EPIC LANE TO USH 18/151

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 145	E

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

GD RAMP

USH 18 WB

USH 18 EB

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

25' TYP.

50' TYP.

100' TYP.

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED
R11-2R
48"X30"

EXISTING SIGN
COVERED IN STAGE 1A

STA BACK = 459+23.34WB
STA AHEAD = 459+76.66WB

GC RAMP

FOR WORK OVER INSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

STA BACK = 465+23.34WB
STA AHEAD = 465+76.66WB

100' TYP.

CBTP INSTALLED IN STAGE 1A

GA RAMP

GB RAMP

GC RAMP

CTH G

EXISTING SIGN
COVERED IN STAGE 1A

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT XX

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 146 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 1:02 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT XX

LANE CLOSED
R11-2L
48"X30"

N

25' TYP.

476WB USH 18 WB 478WB 480WB 482WB 484WB 486WB 488WB

476EB USH 18 EB 478EB 480EB 482EB 484EB 486EB 488EB

100' TYP.

STA BACK = 478+37.49WB
STA AHEAD = 478+39.43 WB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

CBTP INSTALLED IN STAGE 1B

WO5-52R
18"X54"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

RAMP CLOSED 1000 FT
W20-5C

490WB USH 18 WB 492WB 494WB 496WB 498WB 500WB 502WB 504

490EB USH 18 EB 492EB 494EB 496EB 498EB 500EB 502EB 504

100' TYP.

WO5-52R
18"X54"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

CBTP INSTALLED IN STAGE 1B

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

SUGAR R.

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 147	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 03

PLOT DATE : 11/15/2024 1:03 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED AHEAD
W20-5AA

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

YIELD
R1-2
48"X42"

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 1B)

LANE CLOSED
R11-2L
48"X30"

W03-2

500'

ROAD WORK AHEAD
W20-1A

N

W VERONA AVE ENTRANCE RAMP

504WB 506WB 508WB 510WB 512WB USH 18 WB 514WB 516WB

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

50' TYP.
100' TYP.
100' TYP.
50' TYP.
25' TYP.

SIGN

W04-1R

EXISTING SIGN COVERED IN STAGE 1B

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

EXIT
E5-1
48"X48"

W VERONA AVE EXIT RAMP

END ROAD WORK
G20-2A
48"X24"

PLACE DRUMS ALONG MEDIAN SHOULDER DURING PEAK HOURS

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

LANE CLOSED
R11-2L
48"X30"

100' TYP.

518WB 520WB 522WB 524WB USH 18 WB 526WB 528WB 530WB 532WB

518EB 520EB 522EB 524EB USH 18 EB 526EB 528EB 530EB 532EB

INC

STA 526+38.65, 0.00'

5 DRUMS MINIMUM IN TAPER

40'

50' TYP.

STA 528+08.18, 3.00' RT

CBTP INSTALLED IN STAGE 1A

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

PLACE DRUMS ALONG MEDIAN SHOULDER DURING PEAK HOURS

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 148	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 1:04 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

5 DRUMS SPACED AT 10' INTERVALS

USH 18 WB

USH 18 EB

PLACE DRUMS ALONG MEDIAN
SHOULDER DURING PEAK HOURS

STA BACK = 539+42.23 WB
STA AHEAD = 538+72.42 WB

CBTP INSTALLED IN STAGE 1A

W VERONA AVE ENTRANCE RAMP

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE
PAINT 6-INCH (WHITE)

STA 545+00, 3.00' RT

STA 547+19.32, 38.52' RT

DIGITAL SPEED LIMIT
TRAILER (DSLT)
(STA 555+00WB)

5 DRUMS SPACED AT
10' INTERVALS (TYP.)

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 149	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 05
PLOT DATE : 11/15/2024 1:04 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PCMS MESSAGING		
SPEED REDUCTION		NO SPEED REDUCTION
FRAME 1	FRAME 2	(FLASHING CAUTION MODE)
REDUCED SPEED AHEAD	55 MPH	

PCMS

5 DRUMS SPACED AT
10' INTERVALS (TYP.)

RIGHT LANE
CLOSED
1/2 MILE
W20-5G

STA BACK = 571+36.10WB
STA AHEAD = 571+99.45 WB

USH 18 WB

USH 18 EB

560WB 562WB 564WB 566WB 568WB 570WB 572WB 574WB

560EB 562EB 564EB 566EB 568EB 570EB 572EB 574EB

100'
TYP.

SIGN

PLACE DRUMS ALONG MEDIAN
SHOULDER DURING PEAK HOURS

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

STH 69 ENTRANCE RAMP

STA AHEAD = 571+99.45 WB

574WB 576WB 578WB 580WB 582WB 584WB 586WB

574EB 576EB 578EB 580EB 582EB 584EB 586EB

USH 18 WB

USH 18 EB

100'
TYP.

PLACE DRUMS ALONG MEDIAN
SHOULDER DURING PEAK HOURS

END
ROAD WORK
G20-2A
48"X24"

END
ROAD WORK
G20-2A
48"X24"

STH 69 EXIT RAMP

STH 69

INL

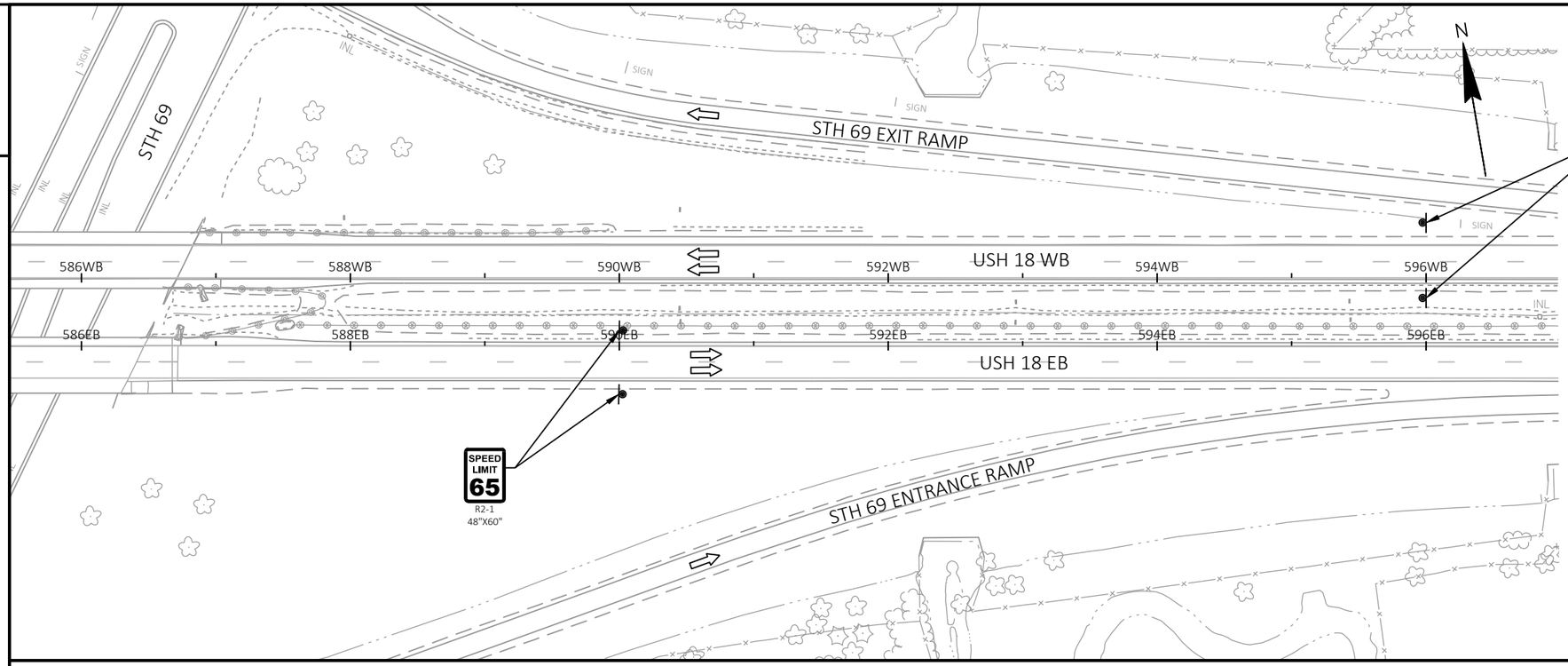
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 150	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 1:05 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

DAIRY RIDGE ROAD

BRIDGE OUT
R11-2B
48"X30"

30G
32G
36G
38G
40G

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 152	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 1:06 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

CTH G

464WB

464EB

466WB

466EB

460WB

460EB

48G

50G

52G

54G

56G

58G

60G

62G

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 153	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 09

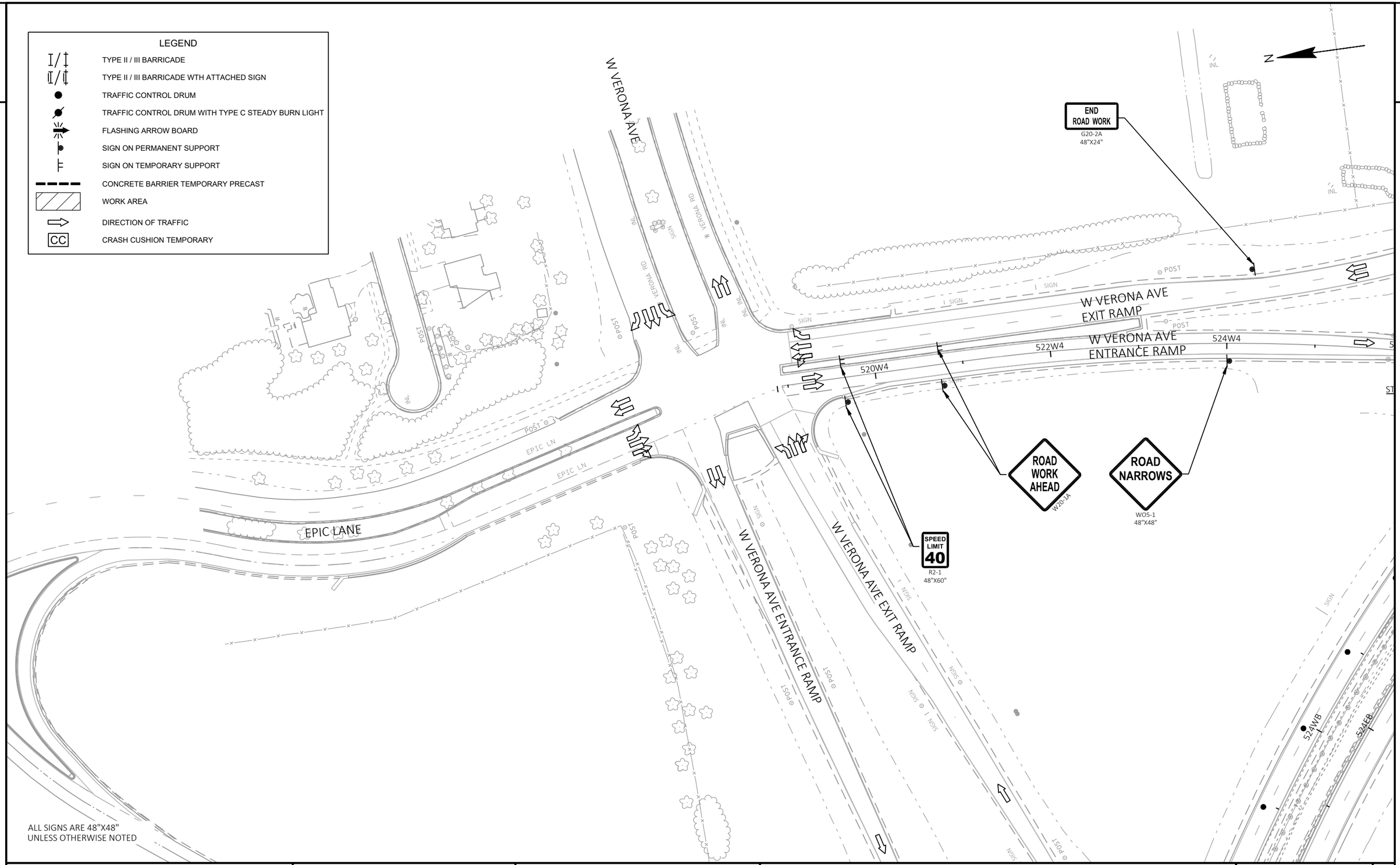
PLOT DATE : 11/15/2024 1:06 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY



ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 154	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 10
PLOT DATE : 11/15/2024 1:06 AM
PLOT BY : WOLF, KELLY
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

5 DRUMS SPACED AT 10' INTERVALS

STA 528+08.18, 3.00' RT

STA BACK = 539+42.23 WB

STA AHEAD = 538+72.42 WB

530WB 532WB 534WB 536WB 538WB 540WB 542WB

530EB 532EB 534EB 536EB 538EB 540EB 542EB

530W4 532W4 534W4 536W4 538W4 540W4 542W4

W VERONA AVE ENTRANCE RAMP

50' TYP.

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE
PAINT 6-INCH (WHITE)

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - PEAK	SHEET 155	E

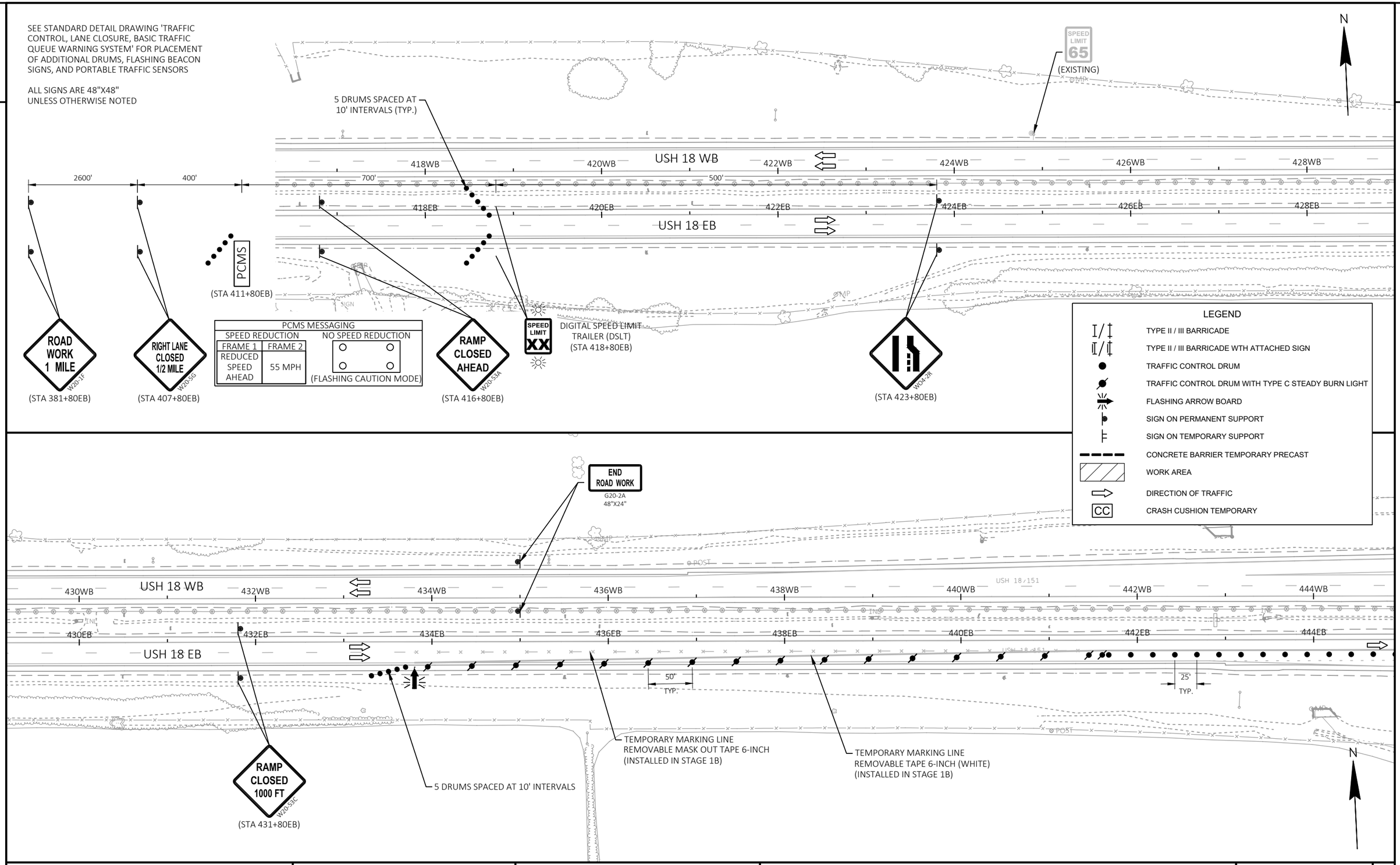
FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025203-TC-2P.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 1:07 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 156	E

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

GD RAMP

USH 18 WB

USH 18 EB

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

25' TYP.

50' TYP.

100' TYP.

100' TYP.

EXISTING SIGN
COVERED IN STAGE 1A

STA BACK = 2534+23.34WB
STA AHEAD = 2535+76.00WB

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED
R11-2R
48"X30"

GC RAMP

FOR WORK OVER INSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

GA RAMP

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

100' TYP.

100' TYP.

STA BACK = 2534+23.34WB
STA AHEAD = 2535+76.00WB

CBTP INSTALLED IN STAGE 1A

EXISTING SIGN
COVERED IN STAGE 1A

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED
R11-2R
48"X30"

25' TYP.

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

LANE CLOSED
R11-2L
48"X30"

GB RAMP

GC RAMP

CTH G

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 157	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 1:10 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT XX

LANE CLOSED
R11-2L
48"X30"

N

25' TYP.

476WB USH 18 WB 478WB 480WB 482WB 484WB 486WB 488WB

476EB USH 18 EB 478EB 480EB 482EB 484EB 486EB 488EB

100' TYP.

STA BACK = 478+37.49 WB
STA AHEAD = 478+39.43 WB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

CBTP INSTALLED IN STAGE 1B

WO5-52R
18"X54"

POST

SIGN

INL

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

RAMP CLOSED 1000 FT
W20-5C

490WB USH 18 WB 492WB 494WB 496WB 498WB 500WB 502WB 504

490EB USH 18 EB 492EB 494EB 496EB 498EB 500EB 502EB 50

100' TYP.

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

WO5-52R
18"X54"

CBTP INSTALLED IN STAGE 1B

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

WO1-4R

SUGAR R.

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 158	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 03

PLOT DATE : 11/15/2024 1:11 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED AHEAD
W20-5AP

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

YIELD
R1-2
48"X42"

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 1B)

LANE CLOSED
R11-2L
48"X30"

W3-2

500'

ROAD WORK AHEAD
W20-1A

N

W VERONA AVE ENTRANCE RAMP

504WB 506WB 508WB 510WB 512WB USH 18 WB 514WB 516WB

100' TYP.

50' TYP.

100' TYP.

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

100' TYP.

50' TYP.

25' TYP.

50' TYP.

WO1-6
48"X24"

EXISTING SIGN COVERED IN STAGE 1B

LANE CLOSED
R11-2L
48"X30"

EXIT
E5-1
48"X48"

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

W VERONA AVE EXIT RAMP

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

END ROAD WORK
G20-2A
48"X24"

LANE CLOSED
R11-2L
48"X30"

100' TYP.

522WB 524WB USH 18 WB 526WB 528WB 530WB 532WB

520WB 524EB 526EB 528EB 530EB 532EB

518WB 520EB

518EB 100' TYP.

LANE CLOSED
R11-2L
48"X30"

STA 526+38.65, 0.00'

5 DRUMS MINIMUM IN TAPER

40'

50' TYP.

STA 528+08.18, 3.00' RT

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

CBTP INSTALLED IN STAGE 1A

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 159	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 1:12 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

5 DRUMS SPACED AT 10' INTERVALS

USH 18 WB

USH 18 EB

STA BACK = 539+42.23 WB
STA AHEAD = 538+72.62 WB

CBTP INSTALLED IN STAGE 1A

W VERONA AVE ENTRANCE RAMP

MARKING REMOVAL LINE 4-INCH

TEMPORARY MARKING LINE
PAINT 6-INCH (WHITE)

STA 545+00, 3.00' RT

STA 547+19.32, 38.52' RT

WORK ZONE

DIGITAL SPEED LIMIT
TRAILER (DSLT)
(STA 555+00WB)

5 DRUMS SPACED AT
10' INTERVALS (TYP.)

RIPRAP

SIGN

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 160	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 05

PLOT DATE : 11/15/2024 1:12 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PCMS MESSAGING	
SPEED REDUCTION	
FRAME 1	FRAME 2
REDUCED SPEED AHEAD	55 MPH

NO SPEED REDUCTION
(FLASHING CAUTION MODE)

PCMS

5 DRUMS SPACED AT
10' INTERVALS (TYP.)

RIGHT LANE
CLOSED
1/2 MILE
W20-5G

STA BACK = 571+36.10WB
STA AHEAD = 571+99.45 WB

558WB
560WB
USH 18 WB
560EB
562WB
564WB
566WB
568WB
570WB
572WB
574WB
USH 18 EB
562EB
564EB
566EB
568EB
570EB
572EB

LANE
CLOSED
R11-2L
48"X30"

100'
TYP.

SIGN

LANE
CLOSED
R11-2L
48"X30"

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

STA AHEAD = 571+99.45 WB

STH 69 ENTRANCE RAMP

572WB
574WB
576WB
578WB
580WB
582WB
USH 18 WB
584WB
586WB
572EB
574EB
576EB
578EB
580EB
582EB
584EB
586EB
USH 18 EB

50'
TYP.

100'
TYP.

SIGN

END
ROAD WORK
G20-2A
48"X24"

STH 69 EXIT RAMP

END
ROAD WORK
G20-2A
48"X24"

INC

STH 69

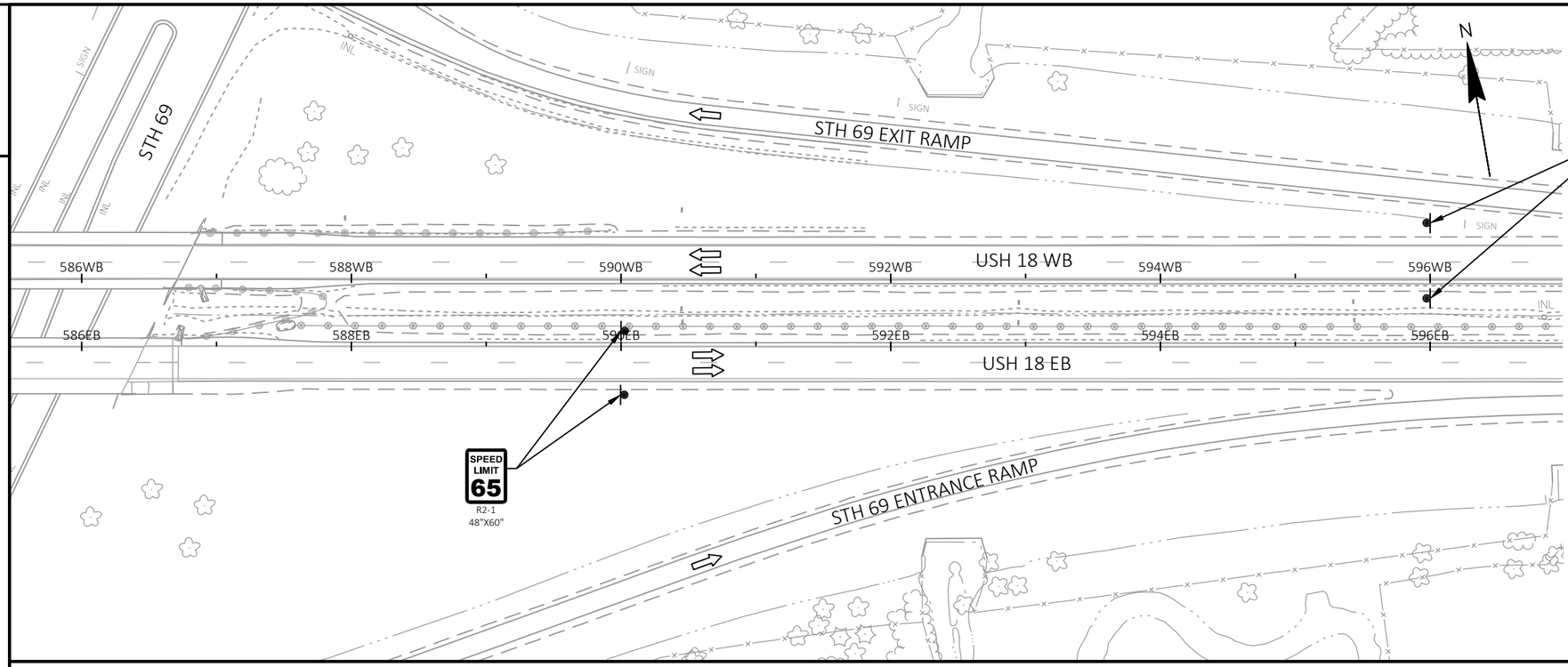
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 161	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 1:13 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

30G

DAIRY RIDGE ROAD

32G

36G

38G

40G

42G

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

BRIDGE OUT
R11-2B
48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 163	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 1:14 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

CTH G

466WB

466EB

464WB

464EB

460WB

460EB

48G

50G

52G

54G

56G

58G

60G

62G

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 164	E

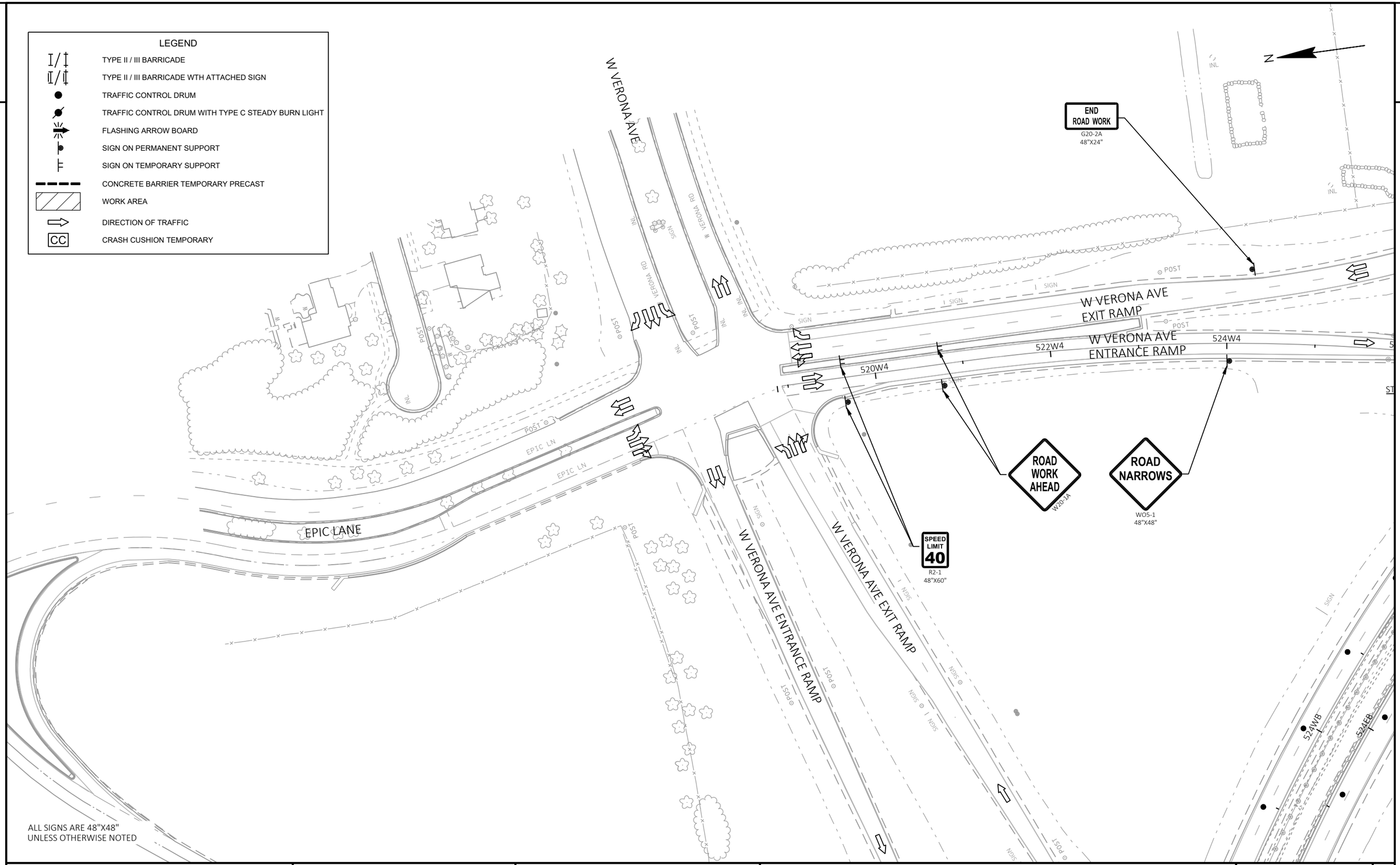
FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 09

PLOT DATE : 11/15/2024 1:14 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY



ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 165	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 10
PLOT DATE : 11/15/2024 1:15 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

INL

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

5 DRUMS SPACED AT 10' INTERVALS

STA 528+08.18, 3.00' RT

STA BACK = 539+42.23

STA AHEAD = 538+72.23

W VERONA AVE ENTRANCE RAMP

50'
TYP.

MARKING REMOVAL LINE 4-INCH

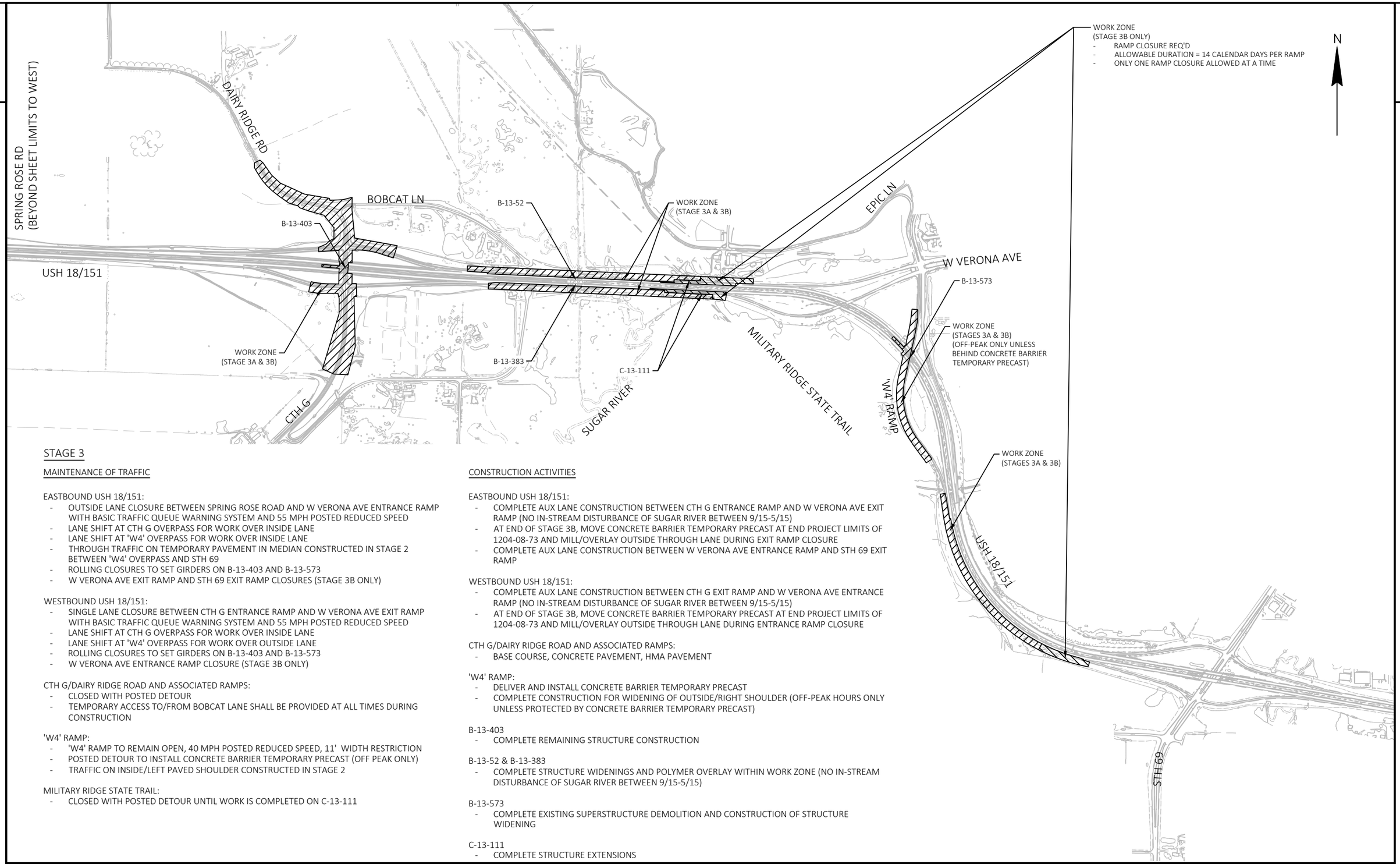
TEMPORARY MARKING LINE
PAINT 6-INCH (WHITE)

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 2 - OFF PEAK	SHEET 166	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025204-TC-2OP.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 1:15 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



STAGE 3

MAINTENANCE OF TRAFFIC

EASTBOUND USH 18/151:
- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
- LANE SHIFT AT CTH G OVERPASS FOR WORK OVER INSIDE LANE
- LANE SHIFT AT 'W4' OVERPASS FOR WORK OVER INSIDE LANE
- THROUGH TRAFFIC ON TEMPORARY PAVEMENT IN MEDIAN CONSTRUCTED IN STAGE 2 BETWEEN 'W4' OVERPASS AND STH 69
- ROLLING CLOSURES TO SET GIRDERS ON B-13-403 AND B-13-573
- W VERONA AVE EXIT RAMP AND STH 69 EXIT RAMP CLOSURES (STAGE 3B ONLY)

WESTBOUND USH 18/151:
- SINGLE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
- LANE SHIFT AT CTH G OVERPASS FOR WORK OVER INSIDE LANE
- LANE SHIFT AT 'W4' OVERPASS FOR WORK OVER OUTSIDE LANE
- ROLLING CLOSURES TO SET GIRDERS ON B-13-403 AND B-13-573
- W VERONA AVE ENTRANCE RAMP CLOSURE (STAGE 3B ONLY)

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- CLOSED WITH POSTED DETOUR
- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION

'W4' RAMP:
- 'W4' RAMP TO REMAIN OPEN, 40 MPH POSTED REDUCED SPEED, 11' WIDTH RESTRICTION
- POSTED DETOUR TO INSTALL CONCRETE BARRIER TEMPORARY PRECAST (OFF PEAK ONLY)
- TRAFFIC ON INSIDE/LEFT PAVED SHOULDER CONSTRUCTED IN STAGE 2

MILITARY RIDGE STATE TRAIL:
- CLOSED WITH POSTED DETOUR UNTIL WORK IS COMPLETED ON C-13-111

CONSTRUCTION ACTIVITIES

EASTBOUND USH 18/151:
- COMPLETE AUX LANE CONSTRUCTION BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP (NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15)
- AT END OF STAGE 3B, MOVE CONCRETE BARRIER TEMPORARY PRECAST AT END PROJECT LIMITS OF 1204-08-73 AND MILL/OVERLAY OUTSIDE THROUGH LANE DURING EXIT RAMP CLOSURE
- COMPLETE AUX LANE CONSTRUCTION BETWEEN W VERONA AVE ENTRANCE RAMP AND STH 69 EXIT RAMP

WESTBOUND USH 18/151:
- COMPLETE AUX LANE CONSTRUCTION BETWEEN CTH G EXIT RAMP AND W VERONA AVE ENTRANCE RAMP (NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15)
- AT END OF STAGE 3B, MOVE CONCRETE BARRIER TEMPORARY PRECAST AT END PROJECT LIMITS OF 1204-08-73 AND MILL/OVERLAY OUTSIDE THROUGH LANE DURING ENTRANCE RAMP CLOSURE

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- BASE COURSE, CONCRETE PAVEMENT, HMA PAVEMENT

'W4' RAMP:
- DELIVER AND INSTALL CONCRETE BARRIER TEMPORARY PRECAST
- COMPLETE CONSTRUCTION FOR WIDENING OF OUTSIDE/RIGHT SHOULDER (OFF-PEAK HOURS ONLY UNLESS PROTECTED BY CONCRETE BARRIER TEMPORARY PRECAST)

B-13-403
- COMPLETE REMAINING STRUCTURE CONSTRUCTION

B-13-52 & B-13-383
- COMPLETE STRUCTURE WIDENINGS AND POLYMER OVERLAY WITHIN WORK ZONE (NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15)

B-13-573
- COMPLETE EXISTING SUPERSTRUCTURE DEMOLITION AND CONSTRUCTION OF STRUCTURE WIDENING

C-13-111
- COMPLETE STRUCTURE EXTENSIONS

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A/3B OVERVIEW	SHEET 167	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025301-TC-OVERVIEW-S3.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 10:18 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

STAGES 3A & 3B (CTH G TO WEST VERONA AVE/EPIC LANE):

CONSTRUCTION ACTIVITIES

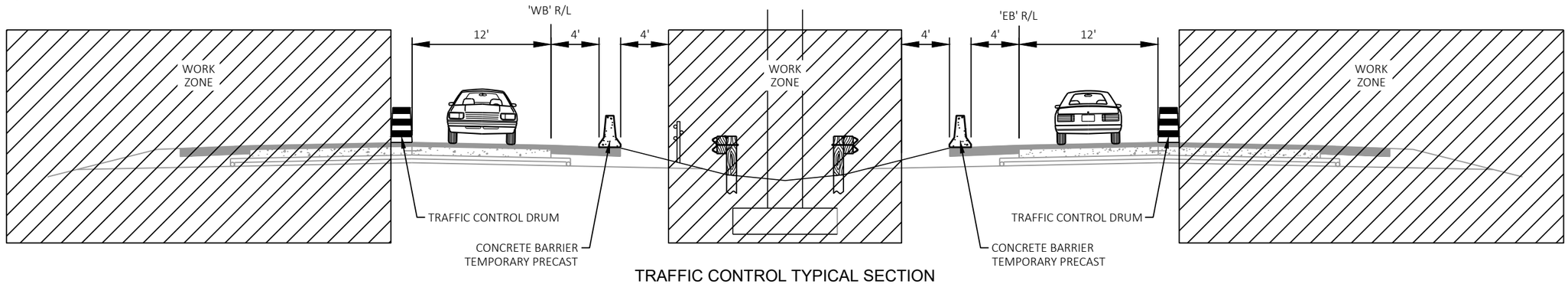
1. EASTBOUND USH 18/151 & B-13-383:
   -- COMPLETE AUX LANE CONSTRUCTION FROM CTH G TO WEST VERONA AVE/EPIC LANE EXIT RAMP
   -- MOVE CONCRETE BARRIER TEMPORARY PRECAST AND CONSTRUCT REMAINING AUX LANE AT WEST VERONA AVE/EPIC LANE EXIT RAMP (STAGE 3B)
   -- MILL & RE-PAVE OUTSIDE THROUGH LANE FROM 497+32EB - 506+00EB AT END OF STAGE 3B WHILE EXIT RAMP IS CLOSED
   -- COMPLETE CONSTRUCTION OF WIDENING FOR B-13-383, INCLUDING PORTIONS OF POLYMER OVERLAY AND APPROACH SLABS
   -- NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15
   -- COMPLETE SIGN STRUCTURES S-13-612 (STAGE 3A) AND S-13-613 (STAGE 3B)
2. WESTBOUND USH 18/151 & B-13-52:
   -- COMPLETE AUX LANE CONSTRUCTION FROM CTH G TO WEST VERONA AVE/EPIC LANE ENTRANCE RAMP
   -- MOVE CONCRETE BARRIER TEMPORARY PRECAST AND CONSTRUCT REMAINING AUX LANE AT WEST VERONA AVE/EPIC LANE ENTRANCE RAMP (STAGE 3B)
   -- MILL & RE-PAVE OUTSIDE THROUGH LANE FROM 498+48WB - 507+00WB AT END OF STAGE 3B WHILE ENTRANCE RAMP IS CLOSED
   -- COMPLETE CONSTRUCTION OF WIDENING FOR B-13-52, INCLUDING PORTIONS OF POLYMER OVERLAY AND APPROACH SLABS
   -- NO IN-STREAM DISTURBANCE OF SUGAR RIVER BETWEEN 9/15-5/15
   -- COMPLETE SIGN STRUCTURES S-13-615 (STAGE 3A) AND S-13-614 (STAGE 3B)
3. CTH G/DAIRY RIDGE ROAD & B-13-403:
   -- COMPLETE ALL ROADWAY AND STRUCTURE CONSTRUCTION, INCLUDING ASSOCIATED CTH G RAMPS

STANDARD DETAIL DRAWINGS REQUIRED

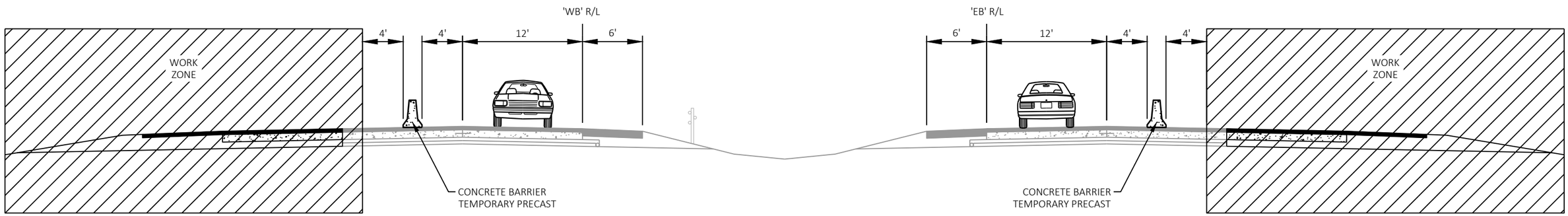
1. BARRICADES AND SIGNS FOR MAINLINE CLOSURES
2. BARRICADES AND SIGNS FOR VARIOUS CLOSURES
3. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
4. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
   A. PLACE 2 PCMS BOARDS WEST OF OLD PB INTERCHANGE OR 300-FT EAST OF THE CTH M OVERPASS FOR WB USH 18/151 TRAFFIC
   B. PLACE 2 PCMS BOARDS 1,000-FT NORTH OF WHALEN ROAD FOR WB USH 18/151 TRAFFIC
5. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
6. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
7. TRAFFIC CONTROL, EXIT RAMP CLOSURE

TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR OVERHEAD WORK (SEE OTHER DETAILS)
   -- ROLLING CLOSURES AT CTH G OVERPASS (1 NIGHT) TO SET NEW GIRDERS
   -- WEST VERONA AVE/EPIC LANE EXIT RAMP CLOSURE WITH POSTED DETOUR IN STAGE 3B SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AND SHALL NOT BE CLOSED AT SAME TIME AS WEST VERONA AVE/EPIC LANE ENTRANCE RAMP TO WESTBOUND USH 18/151 OR EASTBOUND USH 18/151 EXIT RAMP TO STH 69
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR OVERHEAD WORK (SEE OTHER DETAILS)
   -- ROLLING CLOSURES AT CTH G OVERPASS (1 NIGHT) TO SET NEW GIRDERS
   -- WEST VERONA AVE/EPIC LANE ENTRANCE RAMP CLOSURE WITH POSTED DETOUR IN STAGE 3B SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AND SHALL NOT BE CLOSED AT SAME TIME AS EASTBOUND USH 18/151 EXIT RAMP TO WEST VERONA AVE/EPIC LANE OR EASTBOUND USH 18/151 EXIT RAMP TO STH 69
3. CTH G/DAIRY RIDGE ROAD AND ASSOCIATE RAMPS:
   -- CLOSED WITH POSTED DETOUR
   -- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION
4. CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
   -- CLOSED WITH POSTED DETOUR UNTIL WORK IS COMPLETED ON C-13-111



TRAFFIC CONTROL TYPICAL SECTION
STAGES 3A & 3B
USH 18/151
B-13-403



TRAFFIC CONTROL TYPICAL SECTION
STAGES 3A & 3B
USH 18/151
CTH G TO W VERONA AVE/EPIC LANE

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGES 3A & 3B (USH 18/151)	SHEET 168	E

2

STAGES 3A & 3B (OVERHEAD BRIDGE WORK):

CONSTRUCTION ACTIVITIES

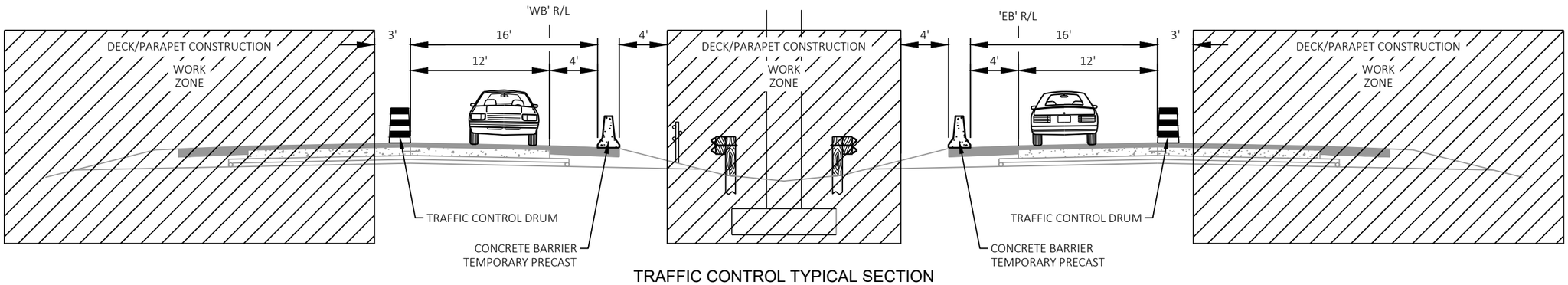
1. B-13-403
   -- COMPLETE SUPERSTRUCTURE

STANDARD DETAIL DRAWINGS REQUIRED

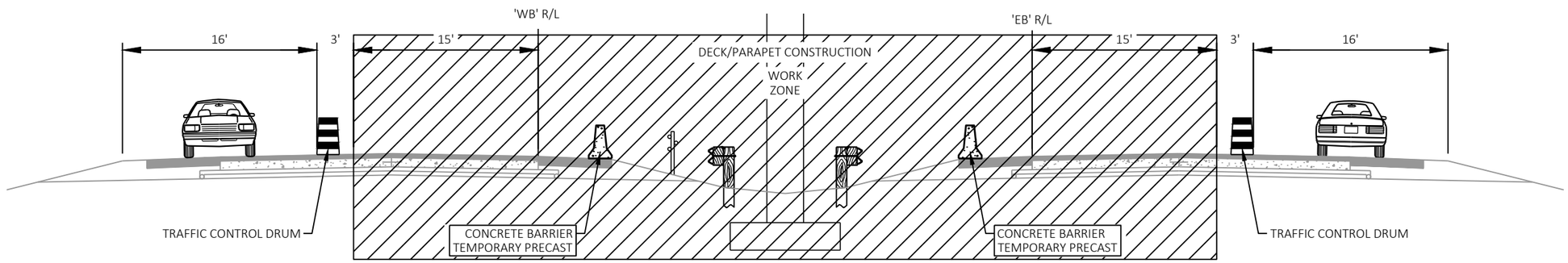
1. TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
2. TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR WORK OVER INSIDE/OUTSIDE LANES
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN CTH G ENTRANCE RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR WORK OVER INSIDE/OUTSIDE LANES



TRAFFIC CONTROL TYPICAL SECTION
STAGE 3A (LANE SHIFT TO INSIDE)
USH 18/151
B-13-403



TRAFFIC CONTROL TYPICAL SECTION
STAGE 3A (LANE SHIFT TO OUTSIDE)
USH 18/151
B-13-403

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGES 3A & 3B (UNDER B-13-403)	SHEET 169	E

2

STAGES 3A & 3B (WEST VERONA AVE/EPIC LANE TO STH 69):

CONSTRUCTION ACTIVITIES

1. EASTBOUND USH 18/151:
   -- CONSTRUCT AUX LANE WEST VERONA AVE/EPIC LANE ENTRANCE RAMP TO STH 69 EXIT RAMP
   -- CONSTRUCT AUX LANE MATCH INTO STH 69 EXIT RAMP DURING STAGE 3B
   -- COMPLETE SIGN STRUCTURES S-13-616 (STAGE 3A) AND S-13-617 (STAGE 3B)
2. WESTBOUND USH 18/151:
   -- NO WORK

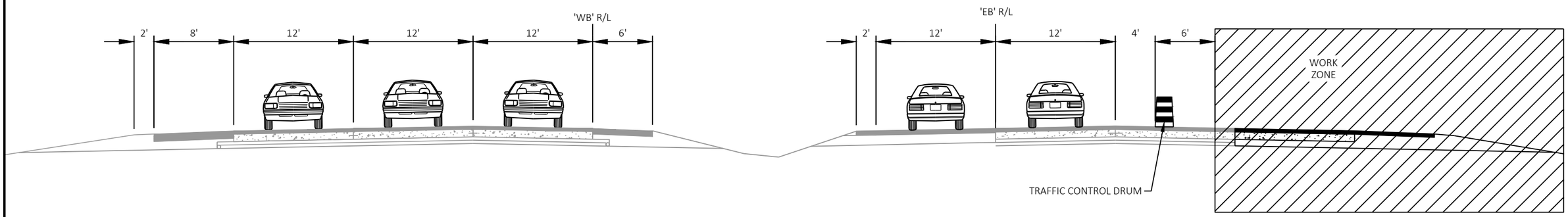
STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
2. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
   A. PLACE 2 PCMS BOARDS WEST OF OLD PB INTERCHANGE OR 300-FT EAST OF THE CTH M OVERPASS FOR WB USH 18/151 TRAFFIC
   B. PLACE 2 PCMS BOARDS 1,000-FT NORTH OF WHALEN ROAD FOR WB USH 18/151 TRAFFIC
3. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
4. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
5. TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFT TO TEMPORARY MEDIAN WIDENING CONSTRUCTED IN STAGE 2 BETWEEN THE WEST VERONA AVE/EPIC LANE INTERCHANGE AND STH 69 INTERCHANGE
   -- MAINTAIN TWO EASTBOUND LANES AT ALL TIMES EAST OF THE WEST VERONA AVE/EPIC LANE ENTRANCE RAMP.
   -- STH 69 EXIT RAMP CLOSURE WITH POSTED DETOUR IN STAGE 3B SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS AND SHALL NOT BE CLOSED AT SAME TIME AS EASTBOUND USH 18/151 EXIT RAMP TO WEST VERONA AVE/EPIC LANE OR WEST VERONA AVE/EPIC LANE ENTRANCE RAMP TO WESTBOUND USH 18/151
2. WESTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE DOWNSTREAM OF W VERONA AVE/EPIC LANE ENTRANCE RAMP
   -- LANE SHIFT BETWEEN W VERONA AVE/EPIC LANE ENTRANCE RAMP AND B-13-573
   -- INSIDE LANE CLOSURE DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

2



TRAFFIC CONTROL TYPICAL SECTION
STAGES 3A & 3B
USH 18/151
W VERONA AVE/EPIC LANE TO STH 69

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGES 3A & 3B (USH 18/151)	SHEET 170	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025001-TC-TS.DWG
LAYOUT NAME - 3 - WVA TO 69
PLOT DATE : 7/23/2024 9:00 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

STAGES 3A & 3B (OVERHEAD BRIDGE WORK):

CONSTRUCTION ACTIVITIES

1. B-13-573
   -- REMOVE EXISTING SUPERSTRUCTURE AND CONSTRUCT WIDENING

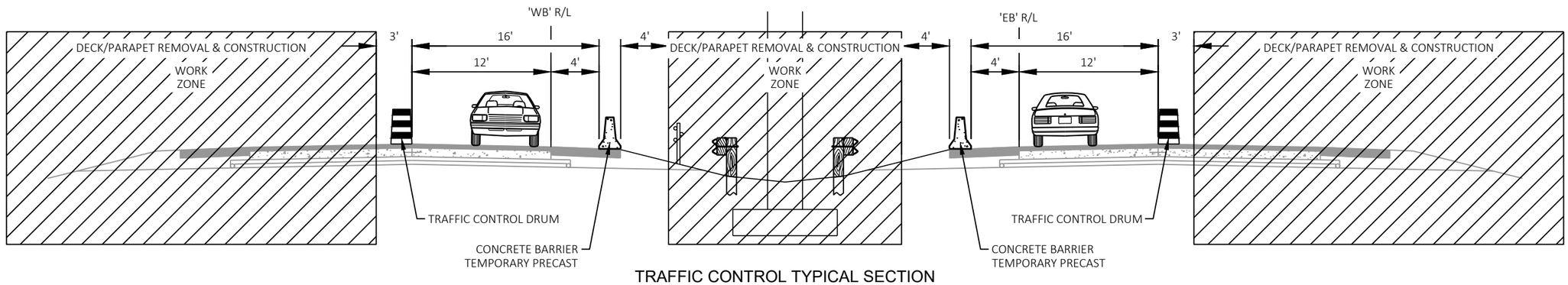
STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
2. TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

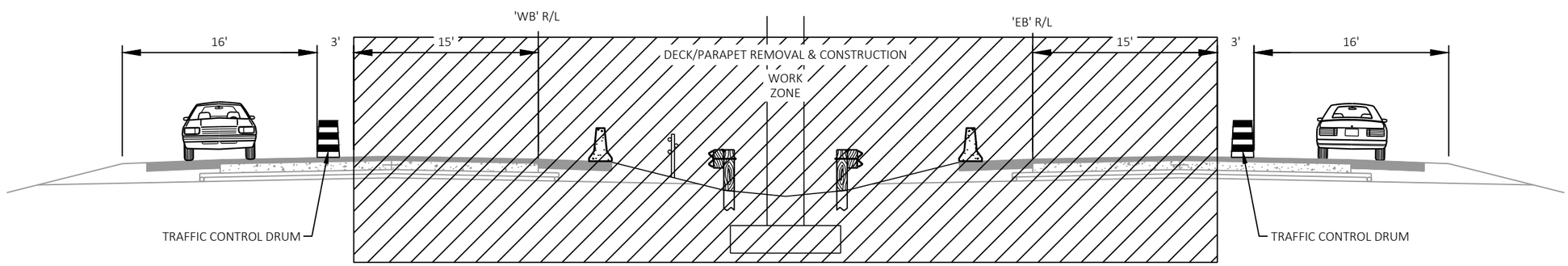
TRAFFIC

1. EASTBOUND USH 18/151:
   -- OUTSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT B-13-573 OVERPASS FOR WORK OVER INSIDE/OUTSIDE LANES
2. WESTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE BETWEEN B-13-573 AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFTS AT CTH G OVERPASS FOR WORK OVER INSIDE/OUTSIDE LANES

2



TRAFFIC CONTROL TYPICAL SECTION
STAGE 3A (LANE SHIFT TO INSIDE)
USH 18/151
B-13-573



TRAFFIC CONTROL TYPICAL SECTION
STAGE 3A (LANE SHIFT TO OUTSIDE)
USH 18/151
B-13-573

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGES 3A & 3B (UNDER B-13-573)	SHEET 171	E

2

STAGE 3A & 3B (W4 RAMP & B-13-573):

CONSTRUCTION ACTIVITIES

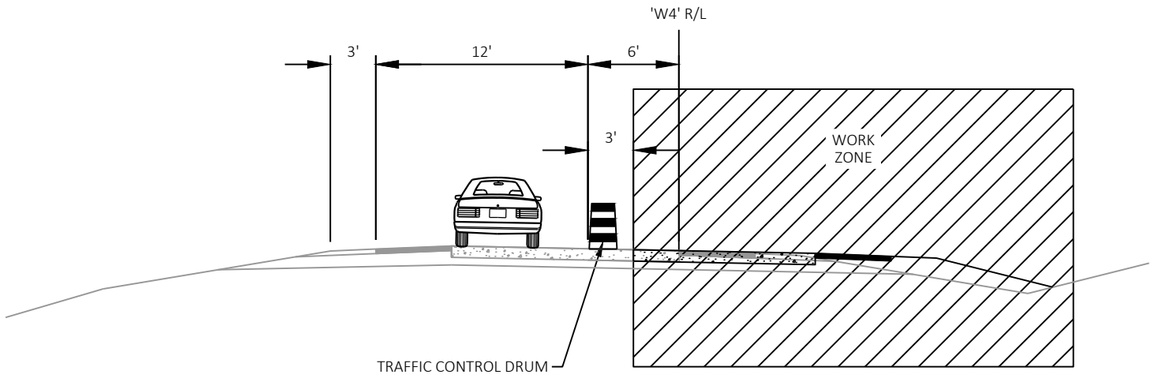
1. 'W4' RAMP & B-13-573:
   -- DELIVER & INSTALL CONCRETE BARRIER TEMPORARY PRECAST ALONG 'W4' RAMP
   -- CONSTRUCT W4 RAMP WIDENING FROM 524+00'W4' - 540+30'W4' (OFF-PEAK ONLY UNLESS PROTECTED BY BARRIER)
   -- COMPLETE STRUCTURE WIDENING FOR B-13-573

STANDARD DETAIL DRAWINGS REQUIRED

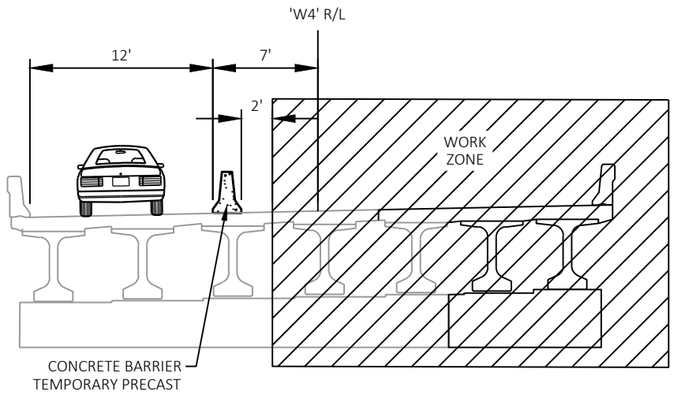
1. ADVANCED WIDTH RESTRICTION
2. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
3. TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTI-LANE DIVIDED 45 MPH AND UNDER

TRAFFIC

1. 'W4' RAMP:
   -- TRAFFIC SHIFT ONTO INSIDE SHOULDER DOWNSTREAM OF B-13-573
   -- SIGNED AS 11' WIDTH RESTRICTION



TRAFFIC CONTROL TYPICAL SECTION
STAGES 3A & 3B
W4 RAMP



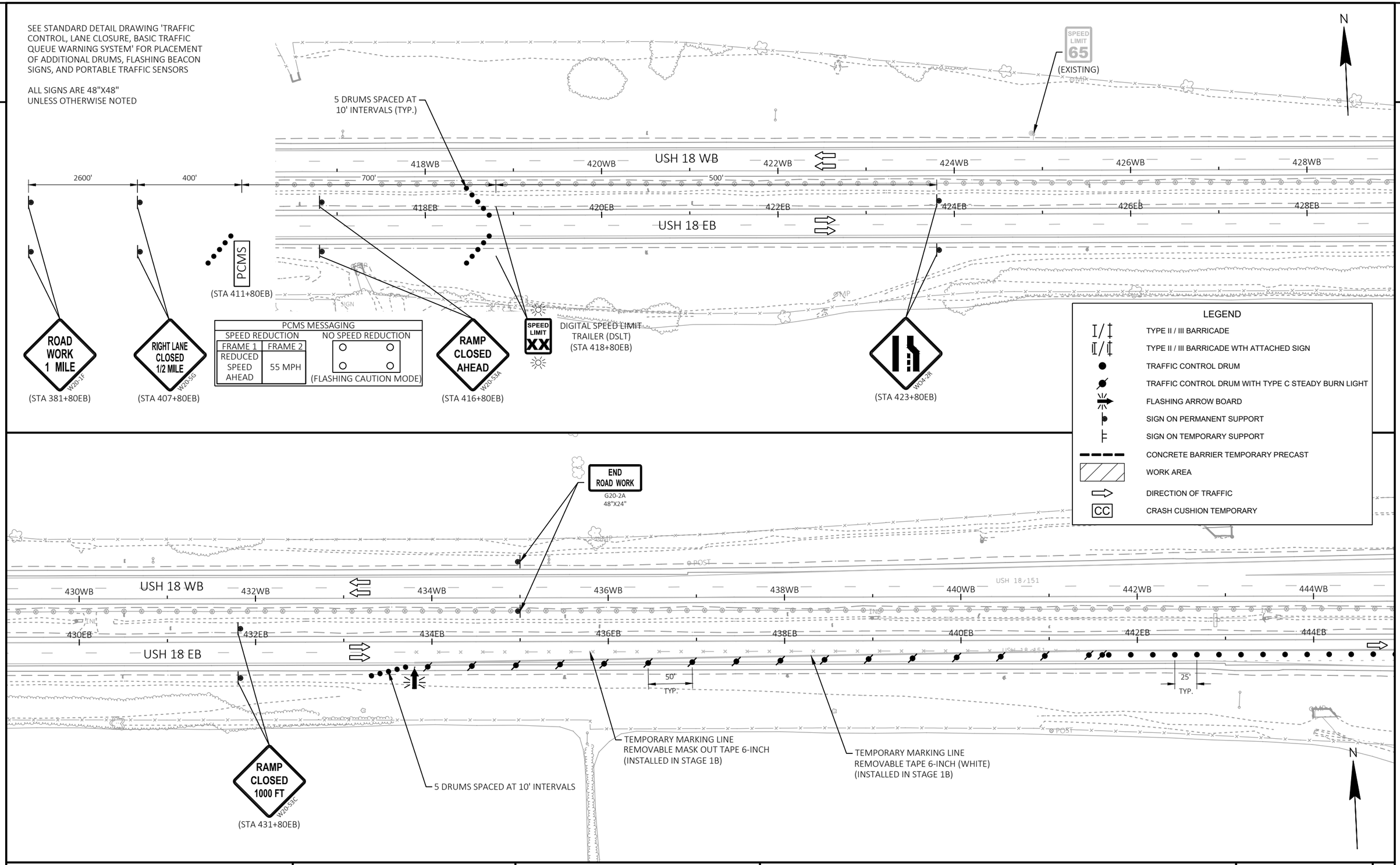
TRAFFIC CONTROL TYPICAL SECTION
STAGES 3A & 3B
W4 RAMP
B-13-573 OVER USH 18/151

2

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGES 3A & 3B (W4 RAMP)	SHEET 172	E

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 173	E

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

GD RAMP

USH 18 WB

USH 18 EB

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

25' TYP.

50' TYP.

100' TYP.

100' TYP.

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED
R11-2R
48"X30"

EXISTING SIGN
COVERED IN STAGE 1A

STA BACK = 459+78.34WB
STA AHEAD = 459+76.40WB

GC RAMP

FOR WORK OVER INSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

GA RAMP

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

100' TYP.

100' TYP.

CBTP INSTALLED IN STAGE 1A

GB RAMP

GC RAMP

CTHG

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 174	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 1:21 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT XX

LANE CLOSED
R11-2L
48"X30"

N

25'
TYP.

476WB USH 18 WB 478WB 480WB 482WB 484WB 486WB 488WB

476EB USH 18 EB 478EB 480EB 482EB 484EB 486EB 488EB

100'
TYP.

STA BACK = 478+37.49WB
STA AHEAD = 478+39.43 WB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

CBTP INSTALLED IN STAGE 1B

WO5-52R
18"X54"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

RAMP CLOSED 1000 FT
W20-5C

490WB 492WB 494WB USH 18 WB 496WB 498WB 500WB 502WB 504

490EB 492EB 494EB USH 18 EB 496EB 498EB 500EB 502EB 504

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

WO5-52R
18"X54"

CBTP INSTALLED IN STAGE 1B

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

SUGAR R.

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 175	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 03

PLOT DATE : 11/15/2024 1:23 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED AHEAD W20-5AF

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

YIELD R1-2 48"X42"

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 1B)

LANE CLOSED R11-2L 48"X30"

W03-2

500'

ROAD WORK AHEAD W20-1A

N

W VERONA AVE ENTRANCE RAMP

504WB 506WB 508WB 50' TYP. 510WB 512WB USH 18 WB 514WB 516WB

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

SIGN

100' TYP.

25' TYP.

EXISTING SIGN COVERED IN STAGE 1B

EXIT E5-1 48"X48"

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

LANE CLOSED R11-2L 48"X30"

W VERONA AVE EXIT RAMP

END ROAD WORK G20-2A 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 1B)

W04-1R

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

WO1-6 48"X24"

50' TYP.

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

STA 524+99.65, -23.99' LT

STA 525+00, -12.00' LT

LANE CLOSED R11-2L 48"X30"

STA 521+00, -12.00' LT

STA 521+00, 0.00'

524WB 526WB 527WB 528WB

CBTP INSTALLED IN STAGE 1A

520WB 522EB 524EB 526EB

518WB 518EB 520EB

100' TYP.

INL

SIGN

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

WO1-4L

FOR WORK OVER OUTSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

FOR WORK OVER INSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

530WB 530EB 532WB 532EB USH 18 WB USH 18 EB

STA 530+00, -6.00' LT

50' TYP.

LANE CLOSED R11-2L 48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 176	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 1:25 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 1B)

WO1-4L

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

STA 537+26.38, -12.00' LT

50' TYP.

STA BACK = 539+42.23 WB

STA AHEAD = 538+72.42 WB

TEMPORARY MARKING LINE
EPOXY 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

N

STA 544+36.57, -0.22' LT

STA 544+64.92, -14.99' LT

5 DRUMS SPACED
AT 10' INTERVALS

532WB 534WB 536WB 538WB 540WB 542WB 544WB

532EB 534EB 536EB 538EB 540EB 542EB 544EB

STA 534+50, 0.00'
STA 534+50.44, 11.99' RT

100' TYP.

USH 18 WB

USH 18 EB

STA 538+39.82, -12.00' LT
STA 538+40, 0.00'

SIGN

WO1-6
48"X24"

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

LANE CLOSED
R11-2L
48"X30"

WO4-3R
48"X48"

STA 542+00, -18.00' LT

W VERONA AVE ENTRANCE RAMP

542'W4' 544'W4' 546'W4' 540'W4'

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

25' TYP.

STA 544+64.92, 0.01' RT

STA 530+00, -6.00' LT

542'W4'

STA 544+64.92, -14.99' LT

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

STA 546+97.84, 0.00'
STA 546+98.30, 9.02' RT

TEMPORARY MARKING LINE
REMOVABLE TAPE 10-INCH (WHITE)

STA 548+47.84, 0.00'

546WB 548WB 550WB 552WB 554WB 556WB 558WB 560WB

546EB 548EB 550EB 552EB 554EB 556EB 558EB 560EB

50' TYP.

546'W4'

WO4-2L

TEMPORARY MARKING LINE
EPOXY 6-INCH (YELLOW)

USH 18 WB

USH 18 EB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

STA 544+64.92, 0.01' RT

25' TYP.

STA 547+97.84, 0.00'

STA 548+50, 12.00' RT

LANE CLOSED
R11-2L
48"X30"

100' TYP.

STA 553+64.92, -0.23' LT

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH
(WHITE, 12.5' LINE, 37.5' GAP)

LANE CLOSED
R11-2L
48"X30"

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 177	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 05

PLOT DATE : 11/15/2024 1:27 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT) (STA 559+36WB)

PCMS MESSAGING	
SPEED REDUCTION	
FRAME 1	FRAME 2
REDUCED SPEED AHEAD	55 MPH

NO SPEED REDUCTION (FLASHING CAUTION MODE)

LEFT LANE CLOSED 1/2 MILE W20-5SG

STA 572+00, -12.00' LT
STA 571+99.63, -0.01' LT
STA 571+99.63, 12.00' RT

STA BACK = 571+36.10WB
STA AHEAD = 571+99.45 WB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE EPOXY 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

PCMS

5 DRUMS SPACED AT 10' INTERVALS (TYP.)

558WB 560WB 562WB 564WB 566WB 568WB 570WB 572WB 574WB

560EB 562EB 564EB 566EB 568EB 570EB 572EB 574EB

100' TYP.

25' TYP.

50' TYP.

25' TYP

USH 18 WB

USH 18 EB

SIGN

COVER EXISTING SIGN

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

STA 562+50, 12.00' RT
STA 564+50, 24.00' RT
STA 567+00, 12.00' RT
STA 569+24.06, 12.00' RT

EXIT

E5-1
48"X48"

N

W01-4BR

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE, 12.5' LINE, 37.5' GAP)

TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)

STA 571+22.91, 12.00' RT
STA 571+21.72, 25.92' RT

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

STH 69 ENTRANCE RAMP

STA AHEAD = 571+99.45 WB

572WB 574WB 576WB 578WB 580WB 582WB 584WB 586WB

572EB 574EB 576EB 578EB 580EB 582EB 584EB 586EB

50' TYP.

100' TYP.

STA 578+39.82, 12.00' RT

STA 575+90, 0.00'
STA 575+89.82, 12.00' RT
STA 575+89.45, 23.99' RT

WO1-6
48"X24"

END ROAD WORK
G20-2A
48"X24"

STH 69 EXIT RAMP

STH 69

INL

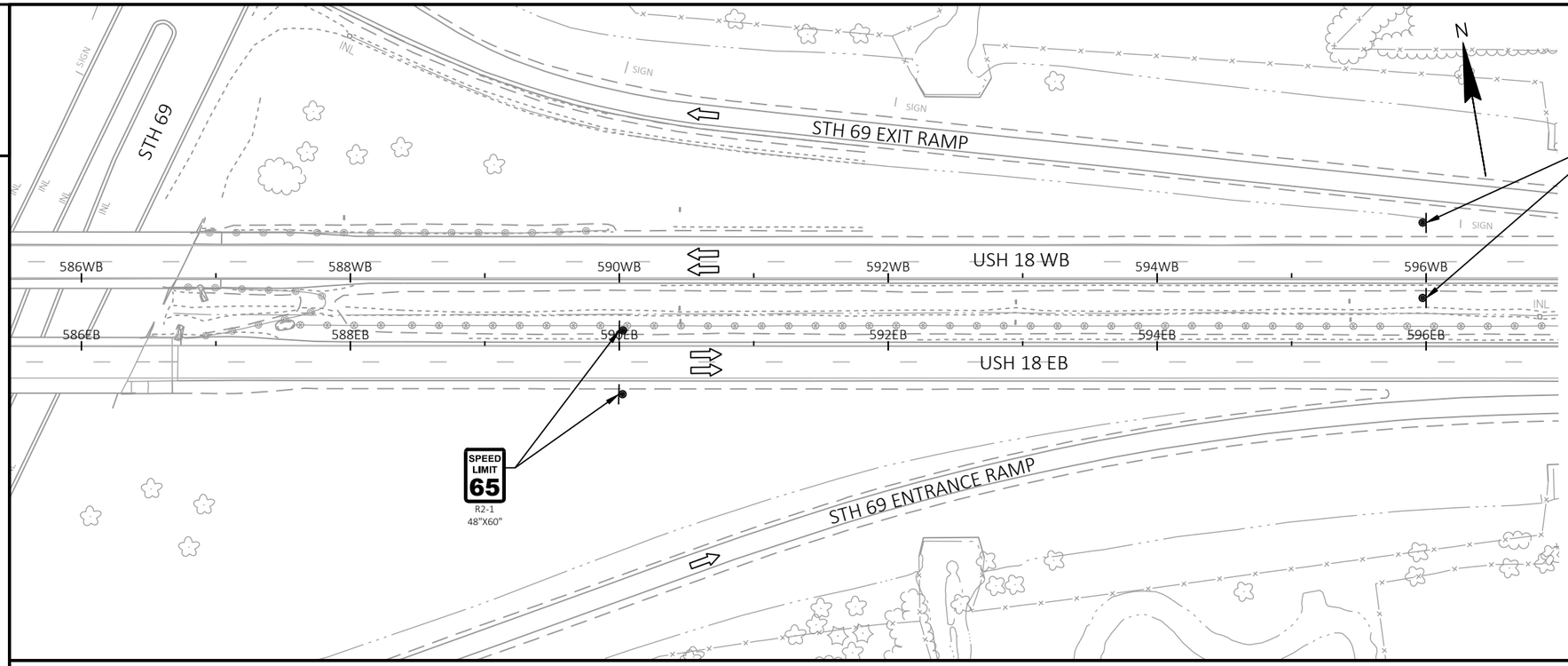
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 178	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 1:29 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

DAIRY RIDGE ROAD

BRIDGE OUT
R11-2B
48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 180	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 1:30 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

CTH G

45G

50G

52G

54G

56G

58G

60G

62G

464WB

464EB

466WB

466EB

460WB

460EB

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 181	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 09

PLOT DATE : 11/15/2024 1:31 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

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

1/2 MILE AHEAD
W057-52
36"X24"

ROAD WORK AHEAD
W20-1A

2,300'

350'

W VERONA AVE

W VERONA RD

EPIC LANE

EPIC LN

END ROAD WORK
G20-2A
48"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

STA 523+69.18, -7.00' LT

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

W VERONA AVE
EXIT RAMP

STA 523+00, -18.00' LT
STA 522+87.72, -15.00' LT

STA 524+54.18, -6.00' LT

522'W4'

524'W4'

520'W4'

25'
TYP.

STA 521+29.18, -3.00' LT
STA 521+29.20, 9.00' RT

STA 523+55.51, 10.93' RT

W VERONA AVE
ENTRANCE RAMP

PCMS

5 DRUMS SPACED AT 10' INTERVALS

SPEED LIMIT 40
R2-1
48"X60"

WO5-52R
18"X54"

PORTABLE CHANGEABLE
MESSAGE SIGN (PCMS)

MESSAGE 1	MESSAGE 2
MERGE HERE	TAKE TURNS

W VERONA AVE ENTRANCE RAMP

W VERONA AVE EXIT RAMP

STA 524+99.65
STA 525+00

524EB

524WB

EXISTING SIGN TO REMAIN

ONLY | ONLY

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 182	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 10

PLOT DATE : 11/15/2024 1:32 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

STA BACK = 539+42.23 WB

STA AHEAD = 538+72.42 WB

530WB 532WB 534WB 536WB 538WB 540WB 542WB

530EB 532EB 534EB 536EB 538EB 540EB 542EB

STA 530+00, -6.00' LT

STA 542+00, -18.00' LT

530'W4' 532'W4' 534'W4' 536'W4' 538'W4' 540'W4' 542'W4'

50' TYP.

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

W VERONA AVE ENTRANCE RAMP

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3A	SHEET 183	E

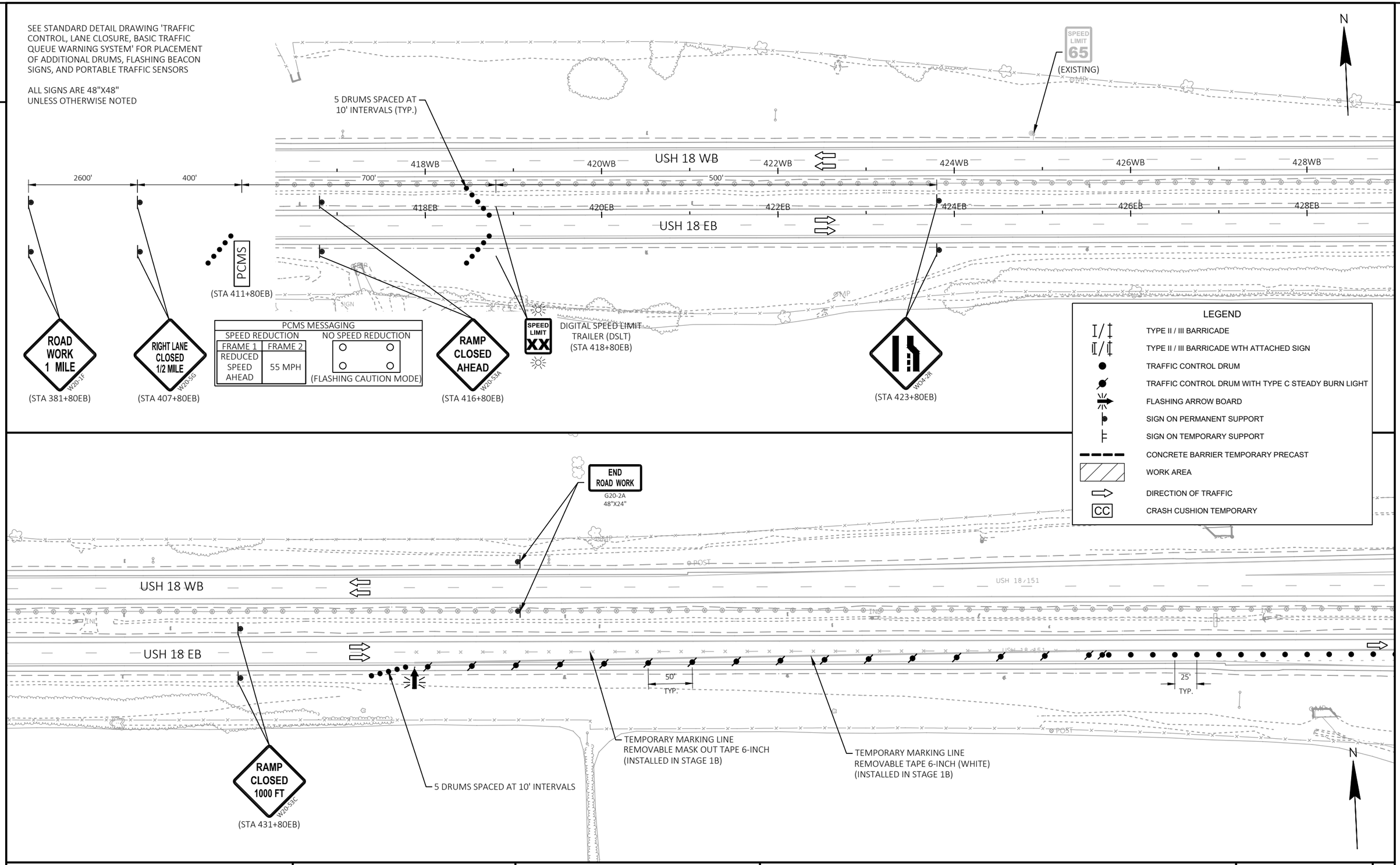
FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025303-TC-3A.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 1:33 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 184	E

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

GD RAMP

USH 18 WB

USH 18 EB

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

25' TYP.

50' TYP.

100' TYP.

100' TYP.

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED
R11-2R
48"X30"

EXISTING SIGN
COVERED IN STAGE 1A

CBTP INSTALLED IN STAGE 1A

STA BACK = 459+78.34WB
STA AHEAD = 459+76.40WB

GC RAMP

FOR WORK OVER INSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

GA RAMP

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

100' TYP.

100' TYP.

25' TYP.

CBTP INSTALLED IN STAGE 1A

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

GB RAMP

GC RAMP

CTHG

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 185 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 2:30 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

LANE CLOSED
R11-2L
48"X30"

25' TYP.

476WB USH 18 WB 478WB 480WB 482WB 484WB 486WB 488WB

476EB USH 18 EB 478EB 480EB 482EB 484EB 486EB 488EB

100' TYP.

STA BACK = 478+37.49 WB
STA AHEAD = 478+39.43 WB

STA 487+50, 17.00' RT

CBTP INSTALLED IN STAGE 1B

RAMP CLOSED AHEAD
W20-3A

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

WO5-52R
18"X54"

SEPTIC

WELL

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

RAMP CLOSED 1000 FT
W20-3C

UPON COMPLETION OF WB AUX LANE WIDENING WORK AT END OF STAGE 3B, MOVE/REMOVE CBTP FROM 495+00 - 508+24 WB AND REPLACE WITH DRUMS AT 50' INTERVALS ALONG EDGE OF TRAVEL LANE TO MILL AND REPAVE OUTSIDE MAINLINE THROUGH LANE FROM 498+48 - 507+00 WB (COMPLETE DURING W VERONA AVE ENTRANCE RAMP CLOSURE PERIOD)

8:1 TAPER

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

MOVE CBTP

490WB 492WB 494WB USH 18 WB 496WB 498WB 500WB 502WB 504

STA 499+99.95, -17.00' LT
STA 500+00, -12.00' LT

STA 495+00, -17.00' LT

STA 497+23.26, -44.91' LT

STA 499+00, 12.00' RT
STA 498+99.85, 17.00' RT

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

490EB 492EB 494EB 496EB 498EB 500EB 502EB 504

USH 18 EB

RAMP CLOSED 1000 FT
W20-3C

CBTP INSTALLED IN STAGE 1B

MOVE CBTP

UPON COMPLETION OF EB AUX LANE WIDENING WORK AT END OF STAGE 3B, REMOVE CBTP FROM 495+00 - 505+25 EB AND REPLACE WITH DRUMS AT 25' INTERVALS ALONG EDGE OF TRAVEL LANE TO MILL AND REPAVE OUTSIDE MAINLINE THROUGH LANE FROM 497+32 - 506+00 EB (COMPLETE DURING W VERONA AVE EXIT RAMP CLOSURE PERIOD)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

SUGAR R.

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 186 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 03

PLOT DATE : 11/15/2024 2:31 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED AHEAD
W20-5AT

REMOVE TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)

W05-52R 18"X54"

UPON COMPLETION OF WB AUX LANE WIDENING WORK AT END OF STAGE 3B, MOVE/REMOVE CBTP FROM 495+00 - 508+24 WB AND REPLACE WITH DRUMS AT 50' INTERVALS ALONG EDGE OF TRAVEL LANE TO MILL AND REPAVE OUTSIDE MAINLINE THROUGH LANE FROM 498+48 - 507+00 WB (COMPLETE DURING W VERONA AVE ENTRANCE RAMP CLOSURE PERIOD)

MOVE CBTP (BEGINNING OF STAGE 3B)

REMOVE TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

LANE CLOSED
R11-2L 48"X30"

W VERONA AVE ENTRANCE RAMP

504WB 506WB 508WB 510WB 512WB USH 18 WB 514WB 516WB

STA 508+23.99, -32.50' LT

STA 505+24.85, 12.00' RT
STA 505+24.85, 17.00' RT

STA 507+00, -17.00' LT

STA 508+23.99, -12.00' LT

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

100' TYP.

SIGN

EXISTING SIGN COVERED IN STAGE 1B

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE) (INSTALLED IN STAGE 1B)

LANE CLOSED
R11-2L 48"X30"

MOVE CBTP (BEGINNING OF STAGE 3B)

REMOVE TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

UPON COMPLETION OF EB AUX LANE WIDENING WORK AT END OF STAGE 3B, REMOVE CBTP FROM 495+00 - 505+25 EB AND REPLACE WITH DRUMS AT 25' INTERVALS ALONG EDGE OF TRAVEL LANE TO MILL AND REPAVE OUTSIDE MAINLINE THROUGH LANE FROM 497+32 - 506+00 EB (COMPLETE DURING W VERONA AVE EXIT RAMP CLOSURE PERIOD)

W VERONA AVE EXIT RAMP

END ROAD WORK
G20-2A 48"X24"

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 3A)

WO1-6 48"X24"

50' TYP.

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 3A)

LANE CLOSED
R11-2L 48"X30"

522WB 524WB 526WB 528WB

CBTP INSTALLED IN STAGE 1A

520WB 522EB 524EB 526EB 528EB

100' TYP.

518WB 520EB 518EB

LANE CLOSED
R11-2L 48"X30"

DIGITAL SPEED LIMIT TRAILER (DSLT)

SPEED LIMIT XX

WO1-4L

FOR WORK OVER OUTSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

100' TYP.

530WB 530EB USH 18 WB USH 18 EB 532WB 532EB

530W4A 530E4A

50' TYP.

FOR WORK OVER INSIDE LANE USE SDD ' TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER' AND/OR 'TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTILANE DIVIDED 50 MPH AND GREATER'

LANE CLOSED
R11-2L 48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

N

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 187	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 2:31 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

LANE CLOSED
R11-2L
48"X30"

W01-4L

W VERONA AVE EXIT RAMP

W VERONA AVE ENTRANCE RAMP

USH 18 WB

USH 18 EB

STA BACK = 539+42.23WB

STA AHEAD = 538+72.42 WB

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
EPOXY 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE TAPE 10-INCH (WHITE)
(INSTALLED IN STAGE 3A)

WO1-6
48"X24"

RAMP CLOSED AHEAD
W20-53A

WO4-3R
48"X48"

WO4-2L

RAMP CLOSED 1000 FT
W20-53C

5 DRUMS SPACED AT 10' INTERVALS

50' TYP.

100' TYP.

25' TYP.

530'W4'
540'W4'
542'W4'
544'W4'
546'W4'

530WB
532WB
534WB
536WB
538WB
540WB
542WB
544WB
546WB
548WB
550WB
552WB
554WB
556WB
558WB
560WB

530EB
532EB
534EB
536EB
538EB
540EB
542EB
544EB
546EB
548EB
550EB
552EB
554EB
556EB
558EB
560EB

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 188	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 05

PLOT DATE : 11/15/2024 2:32 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT) (STA 559+36WB)

PCMS MESSAGING	
SPEED REDUCTION	
FRAME 1	FRAME 2
REDUCED SPEED AHEAD	55 MPH

NO SPEED REDUCTION (FLASHING CAUTION MODE)

LEFT LANE CLOSED 1/2 MILE W20-5G

STA BACK = 571+36.10WB

STA AHEAD = 571+99.45 WB

TEMPORARY MARKING LINE EPOXY 6-INCH (YELLOW) (INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 3A)

PCMS

5 DRUMS SPACED AT 10' INTERVALS (TYP.)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 3A)

558WB 560WB 562WB 564WB 566WB 568WB 570WB 572WB 574WB

558EB 560EB 562EB 564EB 566EB 568EB 570EB 572EB 574EB

100' TYP. 25' TYP. 200' 50' TYP. 100' TYP. 50' TYP. 25' TYP.

USH 18 WB

USH 18 EB

STA 562+50, 12.00' RT

STA 571+22.91, 12.00' RT

SIGN

EXISTING SIGN COVERED IN STAGE 3A

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 3A)

N

WO1-4BR

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

REMOVE TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE, 12.5' LINE, 37.5' GAP) (INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 3A)

STA AHEAD = 571+99.45 WB

STH 69 ENTRANCE RAMP

STH 69 EXIT RAMP

574WB 576WB 578WB 580WB 582WB 584WB 586WB

574EB 576EB 578EB 580EB 582EB 584EB 586EB

50' TYP. 100' TYP.

WO1-6 48"X24"

END ROAD WORK G20-2A 48"X24"

END ROAD WORK G20-2A 48"X24"

STH 69

INL

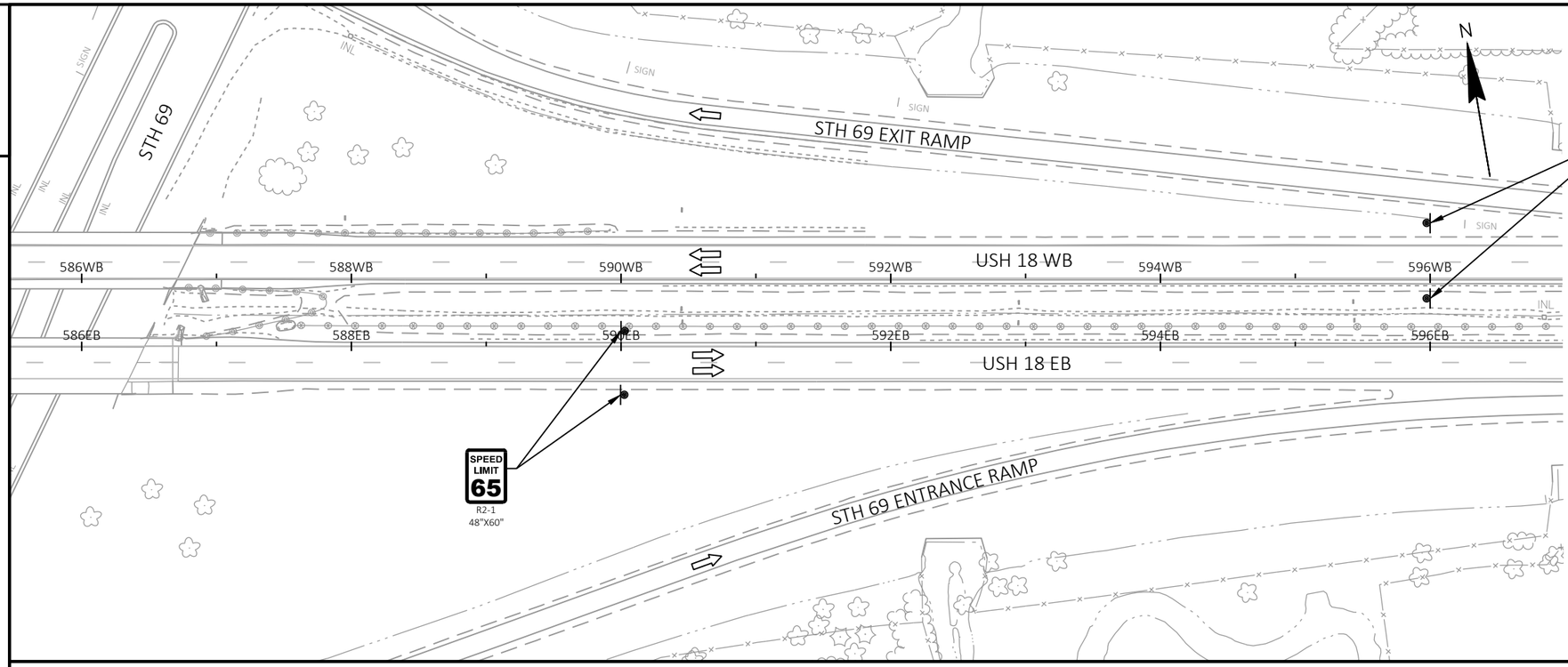
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 189 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 2:33 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

DAIRY RIDGE ROAD

PC: 32+32.16 'G'

PC: 41+25.91 'G'

PT: 39+70.63 'G'

PT: 45+66.47 'G'

30'G'

34'G'

35'G'

38'G'

42'G'

Δ12°S

Δ10°S

BRIDGE OUT
R11-2B
48"X30"

@MP

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 191	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 2:33 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

466WB

466EB

464WB

464EB

460WB

460EB

CTH G

48"G"

50"G"

52"G"

54"G"

56"G"

58"G"

60"G"

62"G"

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

BRIDGE OUT
R11-3B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 192 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 09

PLOT DATE : 11/15/2024 2:34 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

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

1/2 MILE AHEAD
W057-52
36"X24"

25' TYP.

W VERONA AVE

2,300'

350'

ROAD WORK AHEAD
W20-1A

LANE CLOSED
R11-2L
48"X30"

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

END ROAD WORK
G20-2A
48"X24"

USE REMOVABLE MASK OUT TAPE TO CHANGE THE EXISTING THROUGH/LEFT ARROW SYMBOL TO A THROUGH ARROW ONLY

R3-2
24"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

CBTP INSTALLED IN STAGE 3A

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

W VERONA AVE
EXIT RAMP

520'W4'

522'W4'

524'W4'

25' TYP.

W VERONA AVE
ENTRANCE RAMP

PCMS

SPEED LIMIT 40
R2-1
48"X60"

5 DRUMS SPACED AT 10' INTERVALS

WO5-52R
18"X54"

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

MESSAGE 1	MESSAGE 2
MERGE HERE	TAKE TURNS

USE REMOVABLE MASK OUT TAPE TO CHANGE THE EXISTING THROUGH/RIGHT ARROW SYMBOL TO A THROUGH ARROW ONLY

EPIC LN

EPIC LANE

ROAD WORK AHEAD
W20-1A

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

WO4-2R

R3-1
24"X24"

ROAD CLOSED
R11-2
48"X30"

MODIFY EXISTING SIGN

ONLY | ONLY | ONLY

ONLY

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

W VERONA AVE ENTRANCE RAMP

W VERONA AVE EXIT RAMP

524WB

524EB

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 193	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 10

PLOT DATE : 11/15/2024 2:34 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

W VERONA AVE ENTRANCE RAMP

STA BACK = 539+42.23 WB

STA AHEAD = 538+72.42 WB

530WB
532WB
534WB
536WB
538WB
540WB
542WB

530EB
532EB
534EB
536EB
538EB
540EB
542EB

528'W4'
530'W4'
532'W4'
534'W4'
536'W4'
538'W4'
540'W4'
542'W4'

50'
TYP.

CBTP INSTALLED
IN STAGE 3A

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

INL

SIGN

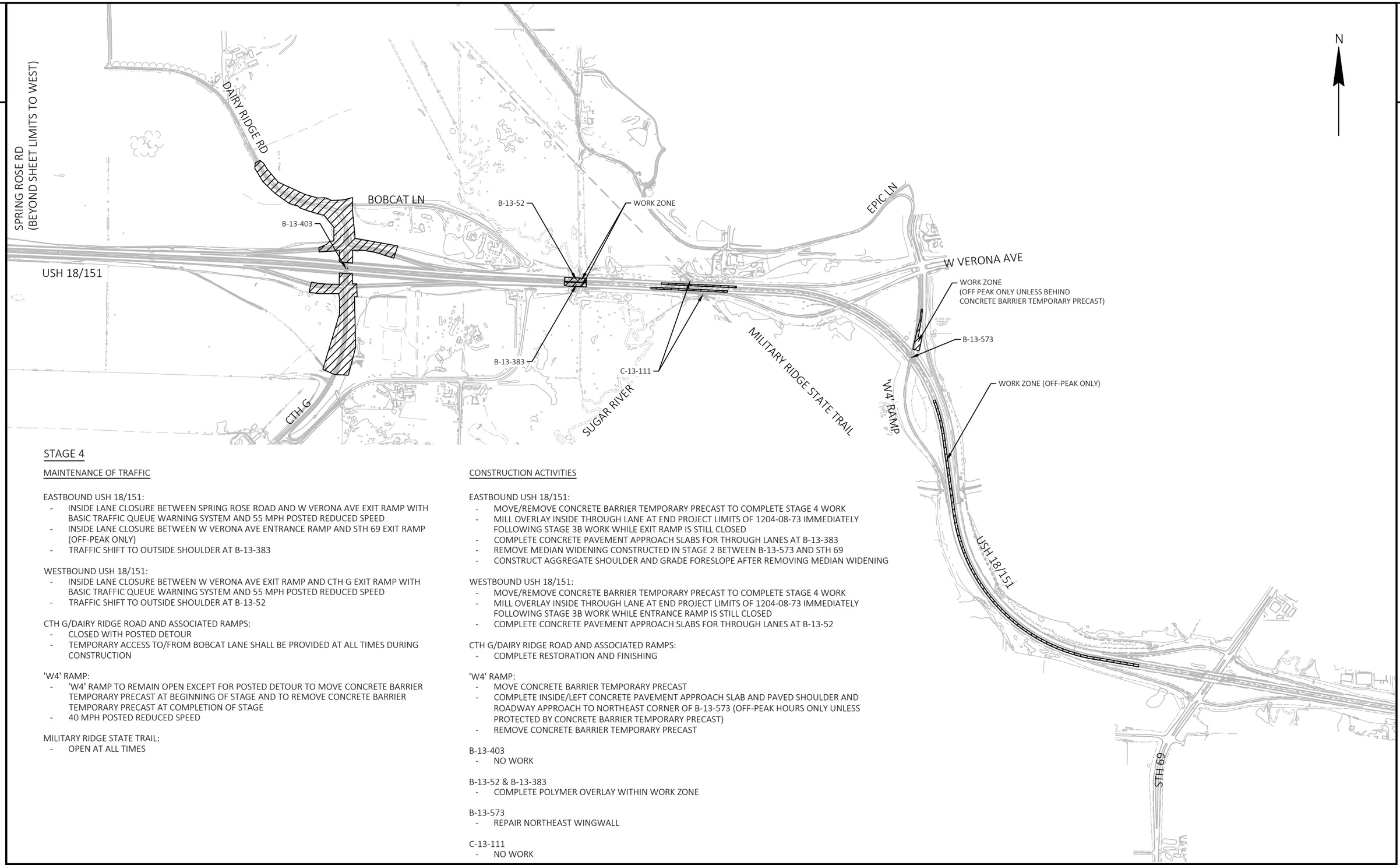
ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 3B	SHEET 194	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025304-TC-3B.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 2:34 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



STAGE 4

MAINTENANCE OF TRAFFIC

EASTBOUND USH 18/151:
- INSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
- INSIDE LANE CLOSURE BETWEEN W VERONA AVE ENTRANCE RAMP AND STH 69 EXIT RAMP (OFF-PEAK ONLY)
- TRAFFIC SHIFT TO OUTSIDE SHOULDER AT B-13-383

WESTBOUND USH 18/151:
- INSIDE LANE CLOSURE BETWEEN W VERONA AVE EXIT RAMP AND CTH G EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
- TRAFFIC SHIFT TO OUTSIDE SHOULDER AT B-13-52

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- CLOSED WITH POSTED DETOUR
- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION

'W4' RAMP:
- 'W4' RAMP TO REMAIN OPEN EXCEPT FOR POSTED DETOUR TO MOVE CONCRETE BARRIER TEMPORARY PRECAST AT BEGINNING OF STAGE AND TO REMOVE CONCRETE BARRIER TEMPORARY PRECAST AT COMPLETION OF STAGE
- 40 MPH POSTED REDUCED SPEED

MILITARY RIDGE STATE TRAIL:
- OPEN AT ALL TIMES

CONSTRUCTION ACTIVITIES

EASTBOUND USH 18/151:
- MOVE/REMOVE CONCRETE BARRIER TEMPORARY PRECAST TO COMPLETE STAGE 4 WORK
- MILL OVERLAY INSIDE THROUGH LANE AT END PROJECT LIMITS OF 1204-08-73 IMMEDIATELY FOLLOWING STAGE 3B WORK WHILE EXIT RAMP IS STILL CLOSED
- COMPLETE CONCRETE PAVEMENT APPROACH SLABS FOR THROUGH LANES AT B-13-383
- REMOVE MEDIAN WIDENING CONSTRUCTED IN STAGE 2 BETWEEN B-13-573 AND STH 69
- CONSTRUCT AGGREGATE SHOULDER AND GRADE FORESLOPE AFTER REMOVING MEDIAN WIDENING

WESTBOUND USH 18/151:
- MOVE/REMOVE CONCRETE BARRIER TEMPORARY PRECAST TO COMPLETE STAGE 4 WORK
- MILL OVERLAY INSIDE THROUGH LANE AT END PROJECT LIMITS OF 1204-08-73 IMMEDIATELY FOLLOWING STAGE 3B WORK WHILE ENTRANCE RAMP IS STILL CLOSED
- COMPLETE CONCRETE PAVEMENT APPROACH SLABS FOR THROUGH LANES AT B-13-52

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- COMPLETE RESTORATION AND FINISHING

'W4' RAMP:
- MOVE CONCRETE BARRIER TEMPORARY PRECAST
- COMPLETE INSIDE/LEFT CONCRETE PAVEMENT APPROACH SLAB AND PAVED SHOULDER AND ROADWAY APPROACH TO NORTHEAST CORNER OF B-13-573 (OFF-PEAK HOURS ONLY UNLESS PROTECTED BY CONCRETE BARRIER TEMPORARY PRECAST)
- REMOVE CONCRETE BARRIER TEMPORARY PRECAST

B-13-403
- NO WORK

B-13-52 & B-13-383
- COMPLETE POLYMER OVERLAY WITHIN WORK ZONE

B-13-573
- REPAIR NORTHEAST WINGWALL

C-13-111
- NO WORK

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 OVERVIEW	SHEET 195	E

2

STAGE 4 (CTH G TO WEST VERONA AVE/EPIC LANE):

CONSTRUCTION ACTIVITIES

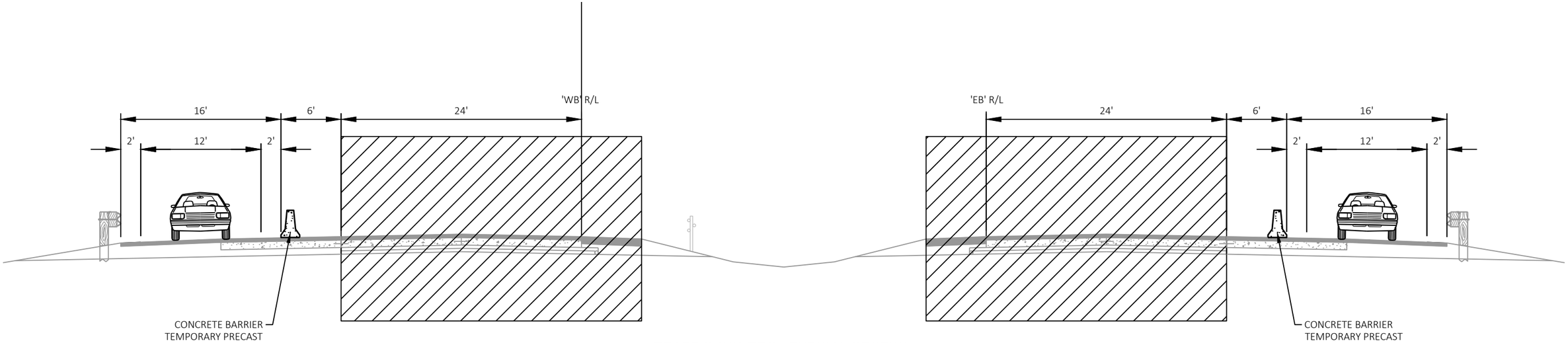
1. EASTBOUND USH 18/151 & B-13-383:
   -- MOVE CONCRETE BARRIER TEMPORARY PRECAST
   -- MILL & RE-PAVE INSIDE THROUGH LANE FROM 497+32EB - 506+00EB AT BEGINNING OF STAGE 4 WHILE EXIT RAMP IS CLOSED
   -- COMPLETE POLYMER OVERLAY AND CONCRETE PAVEMENT APPROACH SLABS AT B-13-383
   -- COMPLETE WING REPAIR AT B-13-383
2. WESTBOUND USH 18/151 & B-13-52:
   -- MOVE CONCRETE BARRIER TEMPORARY PRECAST
   -- MILL & RE-PAVE INSIDE THROUGH LANE FROM 498+48WB - 507+00WB AT BEGINNING OF STAGE 4 WHILE ENTRANCE RAMP IS CLOSED
   -- COMPLETE POLYMER OVERLAY AND CONCRETE PAVEMENT APPROACH SLABS AT B-13-52

STANDARD DETAIL DRAWINGS REQUIRED

1. BARRICADES AND SIGNS FOR MAINLINE CLOSURES
2. BARRICADES AND SIGNS FOR VARIOUS CLOSURES
3. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
4. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
   A. PLACE 2 PCMS BOARDS WEST OF OLD PB INTERCHANGE OR 300-FT EAST OF THE CTH M OVERPASS FOR WB USH 18/151 TRAFFIC
   B. PLACE 2 PCMS BOARDS 1,000-FT NORTH OF WHALEN ROAD FOR WB USH 18/151 TRAFFIC
5. TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
6. TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
7. TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
8. TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

TRAFFIC

1. EASTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE ENTRANCE RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFT TO AND FROM NEW AUX LANE AND OUTSIDE SHOULDER AT B-13-383
2. WESTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE BETWEEN CTH G EXIT RAMP AND W VERONA AVE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- LANE SHIFT TO AND FROM NEW AUX LANE AND OUTSIDE SHOULDER AT B-13-52
3. CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
   -- CLOSED WITH POSTED DETOUR
   -- TEMPORARY ACCESS TO/FROM BOBCAT LANE SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION
4. MILITARY RIDGE STATE TRAIL
   -- OPEN AT ALL TIMES



TRAFFIC CONTROL TYPICAL SECTION
STAGE 4 (PEAK & OFF-PEAK)
USH 18/151
APPROACHES TO STRUCTURES B-13-52 & B-13-383

2

STAGE 4 (WEST VERONA AVE/EPIC LANE TO STH 69):

CONSTRUCTION ACTIVITIES

1. EASTBOUND USH 18/151:
   -- REMOVE TEMPORARY MEDIAN WIDENING FROM 534+40'EB' - 577+10'EB' (OFF-PEAK ONLY)
2. WESTBOUND USH 18/151:
   -- NO WORK

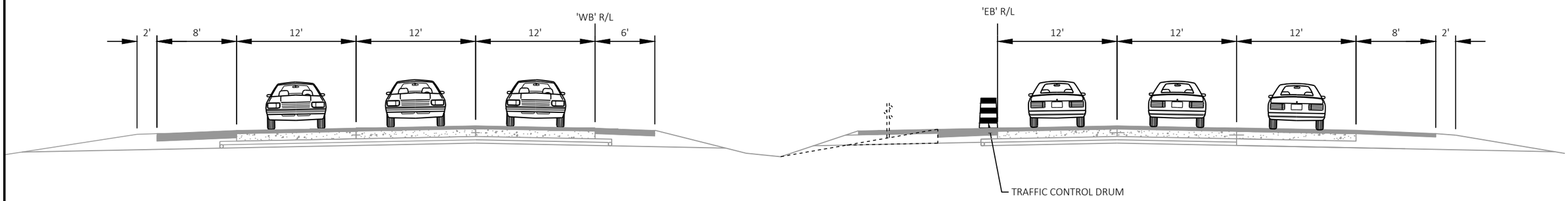
STANDARD DETAIL DRAWINGS REQUIRED

1. TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
2. TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
   A. PLACE 2 PCMS BOARDS WEST OF OLD PB INTERCHANGE OR 300-FT EAST OF THE CTH M OVERPASS FOR WB USH 18/151 TRAFFIC
   B. PLACE 2 PCMS BOARDS 1,000-FT NORTH OF WHALEN ROAD FOR WB USH 18/151 TRAFFIC

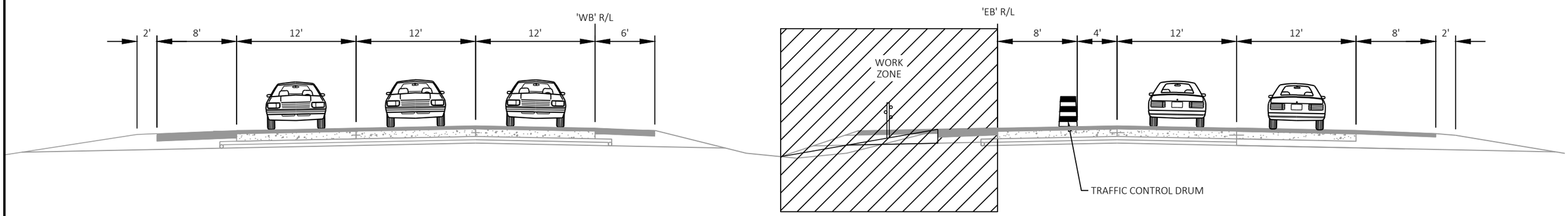
TRAFFIC

1. EASTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE BETWEEN SPRING ROSE ROAD AND W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED
   -- TWO THROUGH LANES OPEN DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP DURING PEAK HOURS
   -- DURING OFF-PEAK HOURS, INSIDE LANE CLOSURE CONTINUES FROM W VERONA AVE/EPIC LANE EXIT RAMP TO STH 69
   -- STH 69 EXIT RAMP TO REMAIN OPEN
2. WESTBOUND USH 18/151:
   -- INSIDE LANE CLOSURE DOWNSTREAM OF W VERONA AVE/EPIC LANE EXIT RAMP WITH BASIC TRAFFIC QUEUE WARNING SYSTEM AND 55 MPH POSTED REDUCED SPEED

2



TRAFFIC CONTROL TYPICAL SECTION
STAGE 4 (PEAK)
USH 18/151
W VERONA AVE/EPIC LANE TO STH 69



TRAFFIC CONTROL TYPICAL SECTION
STAGE 4 (OFF-PEAK)
USH 18/151
W VERONA AVE/EPIC LANE TO STH 69

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS - STAGE 4 (USH 18/151)	SHEET 197	E

STAGE 4 (W4 RAMP & B-13-573):

CONSTRUCTION ACTIVITIES

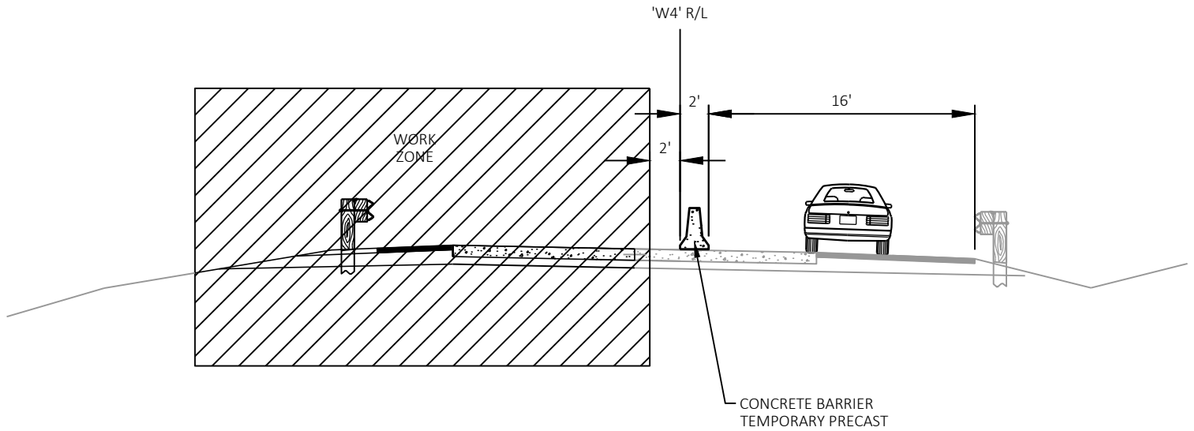
1. 'W4' RAMP & B-13-573:
   -- MOVE CONCRETE BARRIER TEMPORARY PRECAST ALONG 'W4' RAMP
   -- COMPLETE REPAIRS TO NORTHEAST WINGWALL OF B-13-573
   -- COMPLETE ROADWAY APPROACH REPAIRS ASSOCIATED WITH WINGWALL REPAIR

STANDARD DETAIL DRAWINGS REQUIRED

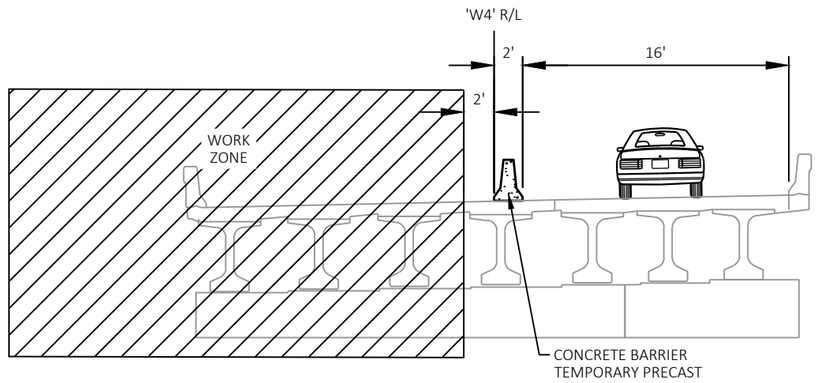
1. TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTI-LANE DIVIDED 45 MPH AND UNDER

TRAFFIC

1. 'W4' RAMP:
   -- TRAFFIC SHIFT ONTO OUTSIDE SHOULDER AT APPROACH TO B-13-573



TRAFFIC CONTROL TYPICAL SECTION
STAGE 4
W4 RAMP

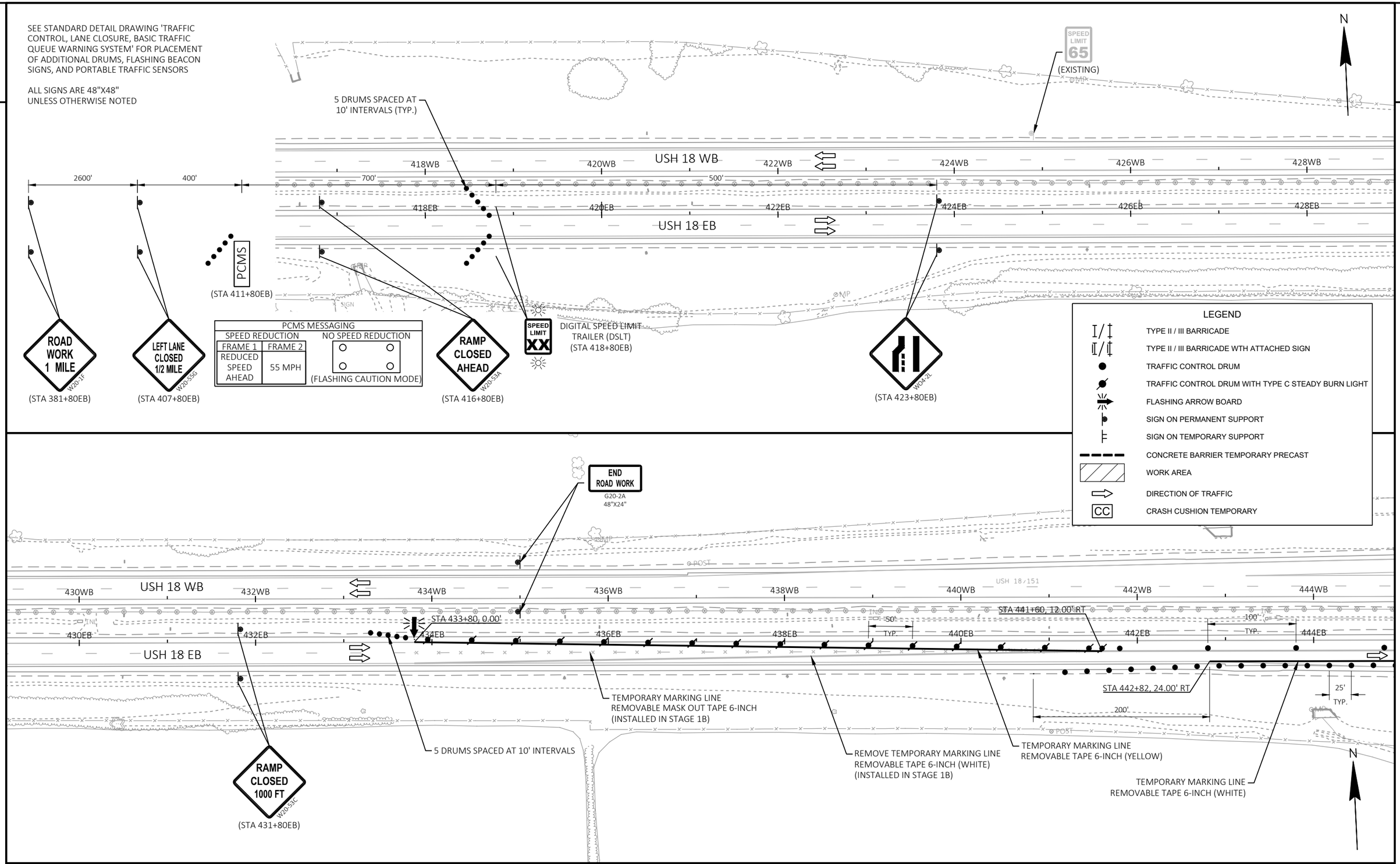


TRAFFIC CONTROL TYPICAL SECTION
STAGE 4
W4 RAMP
B-13-573 OVER USH 18/151

2

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 199	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 01
PLOT DATE : 11/15/2024 2:21 AM
PLOT BY : WOLF, KELLY
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

GD RAMP

USH 18 WB

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

100' TYP.

STA 449+73, 24.00' RT

USH 18 EB

25' TYP.

100' MIN.

EXISTING SIGN COVERED IN STAGE 1A

LANE CLOSED R11-2L 48"X30"

RAMP CLOSED R11-2R 48"X30"

GC RAMP

LANE CLOSED R11-2L 48"X30"

REMOVE CBTP INSTALLED IN STAGE 1A

STA BACK = 459+78.34WB

STA AHEAD = 459+76.40WB

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

GA RAMP

RAMP CLOSED R11-2R 48"X30"

EXISTING SIGN COVERED IN STAGE 1A

100' MIN.

25' TYP.

100' TYP.

REMOVE CBTP INSTALLED IN STAGE 1A

LANE CLOSED R11-2L 48"X30"

GB RAMP

GC RAMP

W01-4R

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 200	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 02

PLOT DATE : 11/15/2024 2:22 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED
R11-2R
48"X30"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

STA BACK = 478+37.49WB
STA AHEAD = 478+39.43 WB

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

STA 477+43.04, -24.00' LT
STA 481+00.99, -24.04' LT
STA 481+00, -12.00' LT
STA 487+49.78, -44.00' LT
STA 487+50, -32.00' LT
STA 487+50, -29.00' LT
STA 477+00.07, 12.00' RT
STA 476+99.70, 23.99' RT
STA 480+34.73, 24.00' RT
STA 485+28.20, -5.11' LT
STA 483+50, 32.00' RT
STA 483+49.81, 44.00' RT
STA 488+01.07, 29.00' RT

25' TYP.
100' TYP.
50' TYP.

476WB 478WB 480WB 482WB 484WB 486WB
476EB 478EB 480EB 482EB 484EB 486EB

USH 18 WB
USH 18 EB

LANE CLOSED
R11-2L
48"X30"

WO1-6
48"X24"

WO1-4L

WO5-52L
18"X54"

MOVE/REMOVE CBTP
8:1 TAPER

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

RAMP CLOSED
1000 FT
W20-3C

SPEED LIMIT XX
DIGITAL SPEED LIMIT TRAILER (DSLT)

COMPLETE MILL AND OVERLAY OPERATIONS IMMEDIATELY UPON COMPLETION OF STAGE 3B DURING W VERONA AVE ENTRANCE RAMP CLOSURE

ADJUST DRUMS AS NEEDED TO MILL AND REPAVE INSIDE MAINLINE THROUGH LANE

STA 490+00, -29.00' LT
STA 494+00.18, -44.00' LT
STA 494+00, -32.00' LT
STA 500+50.44, -23.99' LT
STA 500+50, -12.00' LT
STA 503+00, -24.00' LT
STA 490+01.07, 29.00' RT
STA 490+01.13, 32.00' RT
STA 490+01.34, 44.00' RT
STA 492+72.88, 5.11' RT
STA 496+51.13, 12.00' RT
STA 496+51.50, 23.99' RT
STA 499+02, 24.00' RT

100' TYP.
50' TYP.

490WB 492WB 494WB 496WB 498WB 500WB 502WB
490EB 492EB 494EB 496EB 498EB 500EB 502EB

USH 18 WB
USH 18 EB

MOVE/REMOVE CBTP

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 1B)

ADJUST DRUMS AS NEEDED TO MILL AND REPAVE INSIDE MAINLINE THROUGH LANE

LANE CLOSED
R11-2L
48"X30"

CATCH TAPE

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 201 E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 03

PLOT DATE : 11/15/2024 2:22 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

W01-4R

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED AHEAD
W20-5aR

R1-2
48"X42"

W03-2

ROAD WORK AHEAD
W20-1A

N

25'
TYP.

STA 506+00, -36.42' LT

W VERONA AVE ENTRANCE RAMP

500'

100'
TYP.

LANE CLOSED
R11-2L
48"X30"

504WB 506WB 508WB 510WB 512WB USH 18 WB 514WB 516WB

50'
TYP.

300' MIN.

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

SIGN

STA 505+88.63, 43.67' RT

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

STA 504+81.07, 36.11' RT

EXISTING SIGN
COVERED IN STAGE 1B

W VERONA AVE EXIT RAMP

END
ROAD WORK
G20-2A
48"X24"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

W04-1R

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE CBTP INSTALLED
IN STAGE 1A

LANE CLOSED
R11-2L
48"X30"

100'
TYP.

518WB 520WB 522WB 524WB 526WB 528WB 530WB 532WB USH 18 WB

518EB 520EB 522EB 524EB 526EB 528EB 530EB 532EB USH 18 EB

INL

5 DRUMS SPACED AT 10' INTERVALS AS
NEEDED IN FRONT OF SPEED LIMIT TRAILER

PLACE DRUMS ALONG MEDIAN
SHOULDER DURING PEAK HOURS

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT
XX

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 202	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 2:23 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

100' TYP.

532WB
534WB
536WB
538WB
540WB
542WB
544WB

532EB
534EB
536EB
538EB
540EB
542EB
544EB

USH 18 WB
USH 18 EB

STA BACK = 539+42.23WB
STA AHEAD = 538+72.42 WB

50' TYP.

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

5 DRUMS SPACED
AT 10' INTERVALS

REMOVE CBTP INSTALLED
IN STAGE 1A

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

PLACE DRUMS ALONG MEDIAN
SHOULDER DURING PEAK HOURS

W VERONA AVE ENTRANCE RAMP

530W4
540W4
542W4
544W4
546W

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 10-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

W04-2L

546WB
546EB
546W4
548WB
548EB
550WB
550EB
552WB
552EB
554WB
554EB
556WB
556EB
558WB
558EB
560WB
560EB

USH 18 WB
USH 18 EB

RIPRAP

PLACE DRUMS ALONG MEDIAN
SHOULDER DURING PEAK HOURS

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH
(WHITE, 12.5' LINE, 37.5' GAP)
(INSTALLED IN STAGE 3A)

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 203	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 05
PLOT DATE : 11/15/2024 2:23 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT) (STA 559+36WB)

PCMS MESSAGING		
SPEED REDUCTION		NO SPEED REDUCTION
FRAME 1	FRAME 2	(FLASHING CAUTION MODE)
REDUCED SPEED AHEAD	55 MPH	

LEFT LANE CLOSED 1/2 MILE W20-5G

STA BACK = 571+36.10WB

STA AHEAD = 571+99.45 WB

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 3A)

5 DRUMS SPACED AT 10' INTERVALS (TYP.)

PCMS

REMOVE TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH (INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) (INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 3B)

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE, 12.5' LINE, 37.5' GAP) (INSTALLED IN STAGE 3A)

PLACE DRUMS ALONG MEDIAN SHOULDER DURING PEAK HOURS

100' TYP.

USH 18 WB

USH 18 EB

STH 69 ENTRANCE RAMP

STH 69 EXIT RAMP

STH 69

560WB 562WB 564WB 566WB 568WB 570WB 572WB 574WB

560EB 562EB 564EB 566EB 568EB 570EB 572EB 574EB

574WB 576WB 578WB 580WB 582WB 584WB 586WB

571EB 576EB 578EB 580EB 582EB 584EB 586EB

END ROAD WORK G20-2A 48"X24"

END ROAD WORK G20-2A 48"X24"

SIGN

INL

N

LEGEND

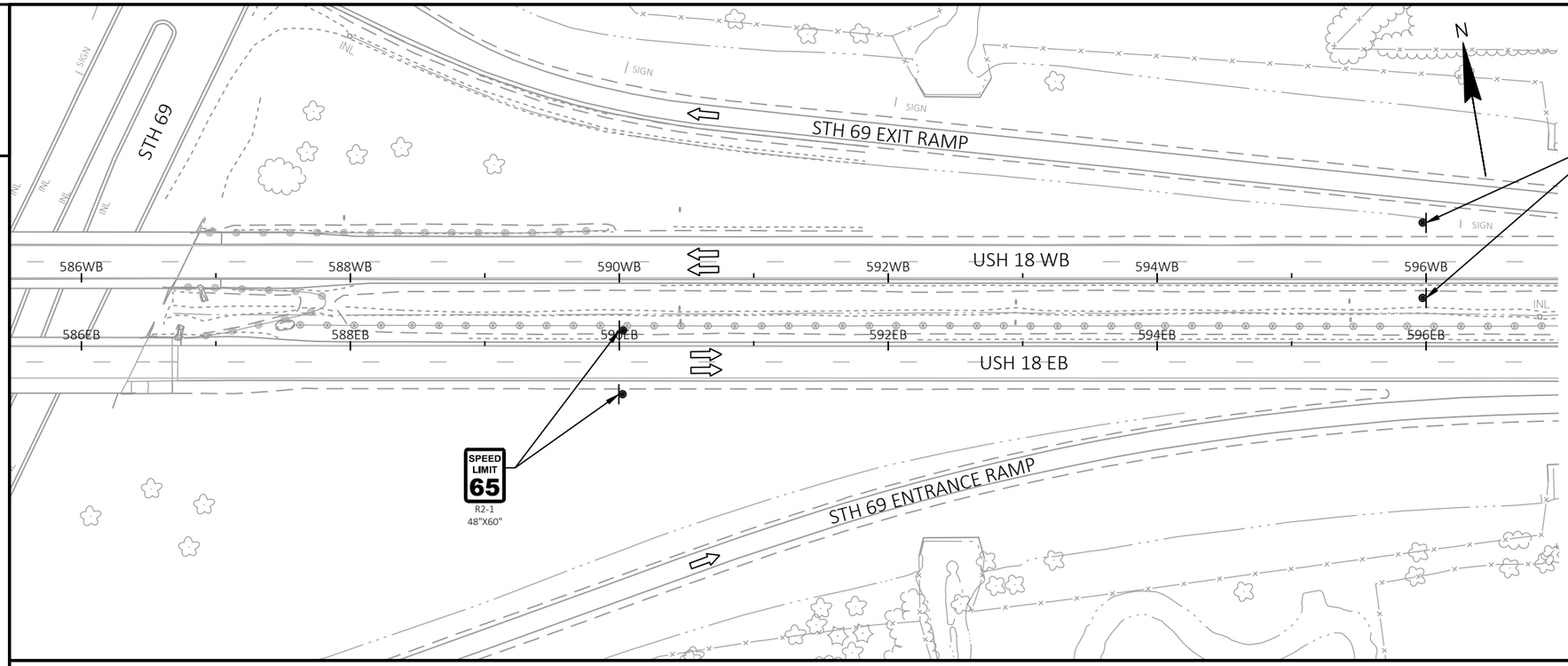
- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 204	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 2:24 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

DAIRY RIDGE ROAD

30G

34G

36G

38G

40G

42G

BRIDGE OUT
R11-28
48"X30"

@MP

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 206	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 2:25 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

CTH G

466WB

466EB

464WB

464EB

462WB

462EB

460WB

460EB

48G

50G

52G

54G

56G

58G

60G

62G

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY (CC)

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 207	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 09

PLOT DATE : 11/15/2024 2:25 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

W VERONA AVE

ROAD WORK AHEAD
W20-1A

W VERONA AVE EXIT RAMP

W VERONA AVE ENTRANCE RAMP

END ROAD WORK
G20-2A
48"X24"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

STA 524+22.72, -13.54' LT

STA 524+11.29, -3.00' LT

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

STA 521+29.18, -15.00' LT

STA 525+21.40, 5.00' RT

STA 525+21.40, 1.00' RT

522W4

524W4

520W4

25'
TYP.

STA 524+10.71, 9.00' RT

MOVE CBTP

WO5-52L
12"X36"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

PCMS

SPEED LIMIT 40
R2-1
48"X60"

PORTABLE CHANGEABLE
MESSAGE SIGN (PCMS)

MESSAGE 1	MESSAGE 2
MERGE HERE	TAKE TURNS

350'

EPIC LN

EPIC LANE

ROAD WORK AHEAD
W20-1A

WO4-2L

EXISTING SIGN TO REMAIN

ONLY ONLY

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

524W4

524EB

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 208	E

FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 10

PLOT DATE : 11/15/2024 2:25 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

W VERONA AVE ENTRANCE RAMP

STA BACK = 539+42.23WB

STA AHEAD = 538+72.42 WB

530W4

528W4

528EB

530EB

532EB

534EB

536EB

538EB

540EB

542EB

532W4

534W4

536W4

538W4

540W4

542W4

STA 529+71.43, 1.00' RT

STA 529+90.49, 5.00' RT

STA 530+97.49, -3.00' LT

STA 530+97.49, 9.00' RT

STA 529+90.93, 17.00' RT

MOVE/REMOVE CBTP

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

50' TYP.

25' TYP.

WO1-6
48"X24"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - PEAK	SHEET 209	E

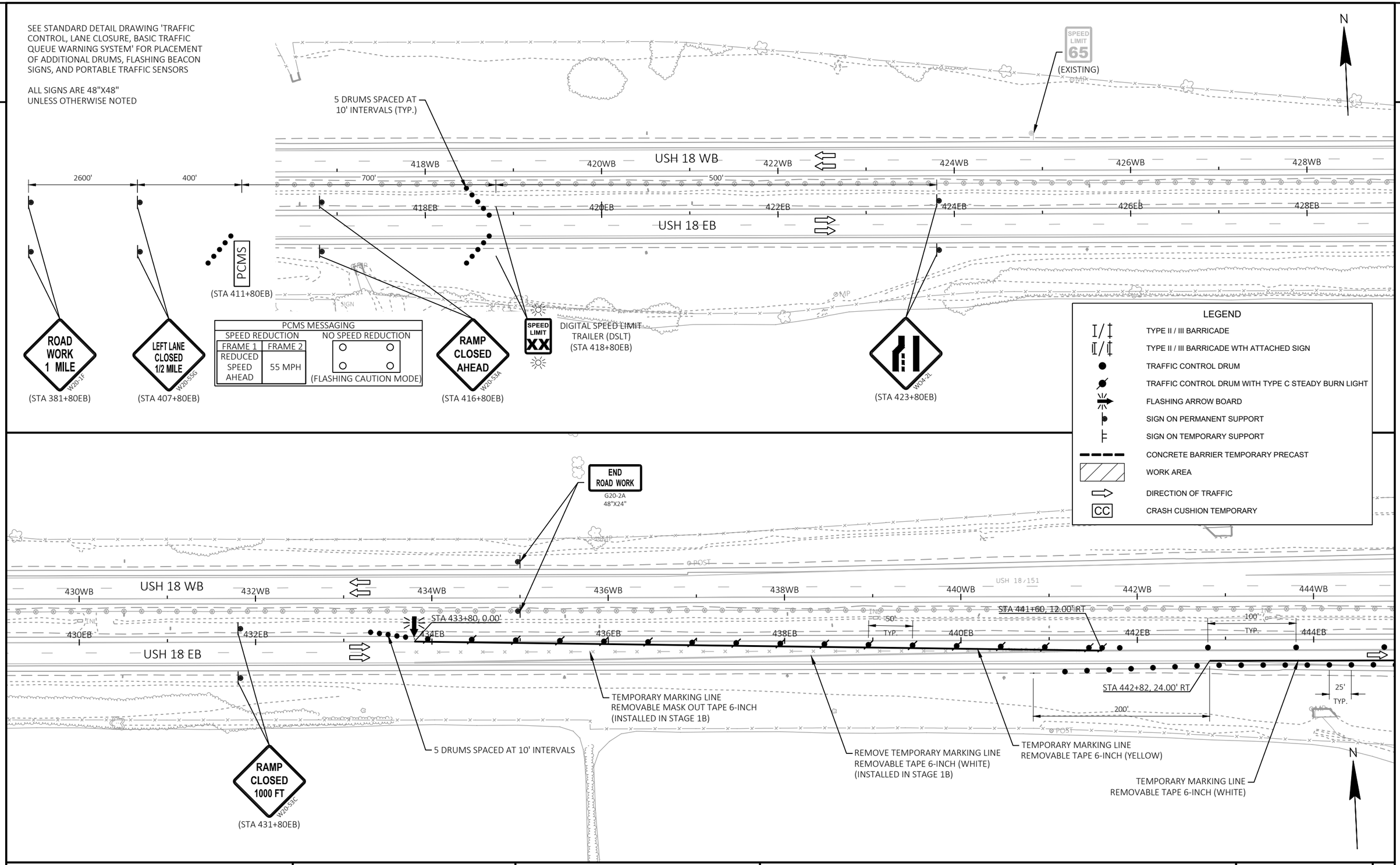
FILE NAME : C:\USERS\WOLFK2\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025403-TC-4P.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 2:26 AM PLOT BY : WOLF, KELLY PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 210	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 01
PLOT DATE : 11/15/2024 2:35 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : ##N##D##H##
WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

GD RAMP

USH 18 WB

446WB 448WB 450WB 452WB 454WB 456WB 458WB 460WB

446EB 448EB 450EB 452EB 454EB 456EB 458EB 460EB

100' TYP.

STA 449+73, 24.00' RT

USH 18 EB

25' TYP.

100' MIN.

EXISTING SIGN COVERED IN STAGE 1A

LANE CLOSED R11-2L 48"X30"

RAMP CLOSED R11-2R 48"X30"

GC RAMP

LANE CLOSED R11-2L 48"X30"

REMOVE CBTP INSTALLED IN STAGE 1A

STA BACK = 459+78.34WB

STA AHEAD = 459+76.40WB

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

GA RAMP

RAMP CLOSED R11-2R 48"X30"

EXISTING SIGN COVERED IN STAGE 1A

460WB 462WB 464WB 466WB 468WB 470WB 472WB 474WB

460EB 462EB 464EB 466EB 468EB 470EB 472EB 474EB

100' TYP.

100' MIN.

25' TYP.

REMOVE CBTP INSTALLED IN STAGE 1A

LANE CLOSED R11-2L 48"X30"

GB RAMP

GC RAMP

W01-4R

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

5 DRUMS SPACED AT 10' INTERVALS AS NEEDED IN FRONT OF SPEED LIMIT TRAILER

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 211	E

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

RAMP CLOSED R11-2R 48"X30"

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

STA BACK = 478+37.49WB

STA AHEAD = 478+39.43 WB

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

STA 477+43.04, -24.00' LT

STA 481+00.99, -24.04' LT

STA 481+00, -12.00' LT

25' TYP.

50' TYP.

WO1-6 48"X24"

STA 487+49.78, -44.00' LT

STA 487+50, -32.00' LT

STA 487+50, -29.00' LT

476WB 478WB 480WB 482WB USH 18 WB 484WB 486WB

STA 477+00.07, 12.00' RT

STA 476+99.70, 23.99' RT

STA 480+34.73, 24.00' RT

STA 485+28.20, -5.11' LT

MOVE/REMOVE CBTP

100' TYP.

476EB 478EB 480EB 482EB USH 18 EB 484EB 486EB

LANE CLOSED R11-2L 48"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

STA 483+50, 32.00' RT

STA 483+49.81, 44.00' RT

MOVE/REMOVE CBTP 8:1 TAPER

100' TYP.

STA 488+01.07, 29.00' RT

WO1-4L

WO5-52L 18"X54"

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

WO5-52L 18"X54"

WO1-4L

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

STA 490+00, -29.00' LT

MOVE/REMOVE CBTP 8:1 TAPER

STA 494+00.18, -44.00' LT

STA 494+00, -32.00' LT

RAMP CLOSED 1000 FT W20-3C

WO1-6 48"X24"

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT)

COMPLETE MILL AND OVERLAY OPERATIONS IMMEDIATELY UPON COMPLETION OF STAGE 3B DURING W VERONA AVE ENTRANCE RAMP CLOSURE

ADJUST DRUMS AS NEEDED TO MILL AND REPAVE INSIDE MAINLINE THROUGH LANE

STA 500+50.44, -23.99' LT

STA 500+50, -12.00' LT

STA 503+00, -24.00' LT

490WB USH 18 WB 492WB 494WB 496WB 498WB 500WB 502WB

100' TYP.

50' TYP.

STA 490+01.07, 29.00' RT

STA 490+01.13, 32.00' RT

STA 490+01.34, 44.00' RT

STA 492+72.88, 5.11' RT

STA 499+02, -24.00' RT

490EB USH 18 EB 492EB 494EB 496EB 498EB 500EB 502EB

MOVE/REMOVE CBTP

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

WO1-6 48"X24"

LANE CLOSED R11-2L 48"X30"

REMOVE TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) (INSTALLED IN STAGE 1B)

STA 496+51.13, 12.00' RT

STA 496+51.50, 23.99' RT

ADJUST DRUMS AS NEEDED TO MILL AND REPAVE INSIDE MAINLINE THROUGH LANE

LANE CLOSED R11-2L 48"X30"

LANE CLOSED R11-2L 48"X30"

CATCH TILE AT GRADE

TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 212	E

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

W04-1R

LANE CLOSED
R11-2L
48"X30"

RAMP CLOSED AHEAD
W20-5aR

R1-2
48"X42"

W03-2

ROAD WORK AHEAD
W20-1A

N

25'
TYP.

STA 506+00, -36.42' LT

W VERONA AVE ENTRANCE RAMP

504WB 506WB 508WB 510WB 512WB USH 18 WB 514WB 516WB

50'
TYP.

300' MIN.

100'
TYP.

LANE CLOSED
R11-2L
48"X30"

504EB 506EB 508EB 510EB 512EB USH 18 EB 514EB 516EB

SIGN

STA 505+88.63, 43.67' RT

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

STA 504+81.07, 36.11' RT

EXISTING SIGN
COVERED IN STAGE 1B

LANE CLOSED
R11-2L
48"X30"

W VERONA AVE EXIT RAMP

END ROAD WORK
G20-2A
48"X24"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

W04-1R

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE CBTP INSTALLED
IN STAGE 1A

LANE CLOSED
R11-2L
48"X30"

100'
TYP.

518WB 520WB 522WB 524WB 526WB 528WB 530WB USH 18 WB 532WB

518EB 520EB 522EB 524EB 526EB 528EB 530EB USH 18 EB 532EB

INL

5 DRUMS SPACED AT 10' INTERVALS AS
NEEDED IN FRONT OF SPEED LIMIT TRAILER

LANE CLOSED
R11-2L
48"X30"

DIGITAL SPEED LIMIT
TRAILER (DSLT)

SPEED LIMIT XX

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 213	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 04

PLOT DATE : 11/15/2024 2:40 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

W VERONA AVE EXIT RAMP

LANE CLOSED
R11-2L
48"X30"

100' TYP.

532WB
534WB
536WB
538WB
540WB
542WB
544WB

532EB
534EB
536EB
538EB
540EB
542EB
544EB

STA BACK = 539+42.23WB
STA AHEAD = 538+72.42 WB

50' TYP.

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

5 DRUMS SPACED
AT 10' INTERVALS

USH 18 WB

USH 18 EB

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE CBTP INSTALLED
IN STAGE 1A

LANE CLOSED
R11-2L
48"X30"

LANE CLOSED
R11-2L
48"X30"

544W4
542W4
540W4
546W4
548W4
550W4
552W4
554W4
556W4
558W4
560W4

W VERONA AVE ENTRANCE RAMP

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 10-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

W4-2L

RIPRAP

LANE CLOSED
R11-2L
48"X30"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH
(WHITE, 12.5' LINE, 37.5' GAP)
(INSTALLED IN STAGE 3A)

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 214	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 05

PLOT DATE : 11/15/2024 2:41 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

SPEED LIMIT XX

DIGITAL SPEED LIMIT TRAILER (DSLT) (STA 559+36WB)

PCMS MESSAGING		
SPEED REDUCTION		NO SPEED REDUCTION
FRAME 1	FRAME 2	
REDUCED SPEED AHEAD	55 MPH	(FLASHING CAUTION MODE)

LEFT LANE CLOSED 1/2 MILE
W20-5G

STA BACK = = 571+36+10WB
STA AHEAD = = 571+99+45 WB

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

5 DRUMS SPACED AT 10' INTERVALS (TYP.)

PCMS

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

560WB USH 18 WB
560EB
562WB
562EB
564WB
564EB
566WB
566EB
568WB
568EB
570WB
570EB
572WB
572EB
574WB
574EB

USH 18 EB

LANE CLOSED
R11-2L
48"X30"

100' TYP.

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3B)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH
(WHITE, 12.5' LINE, 37.5' GAP)
(INSTALLED IN STAGE 3A)

LANE CLOSED
R11-2L
48"X30"

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

N

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC CRASH CUSHION TEMPORARY

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

STA AHEAD = 571+99.45 WB

STH 69 ENTRANCE RAMP

572WB
574WB
576WB
578WB
580WB
582WB
584WB
586WB
572EB
574EB
576EB
578EB
580EB
582EB
584EB
586EB

USH 18 WB

USH 18 EB

100' TYP.

END ROAD WORK
G20-2A
48"X24"

STH 69 EXIT RAMP

END ROAD WORK
G20-2A
48"X24"

STH 69

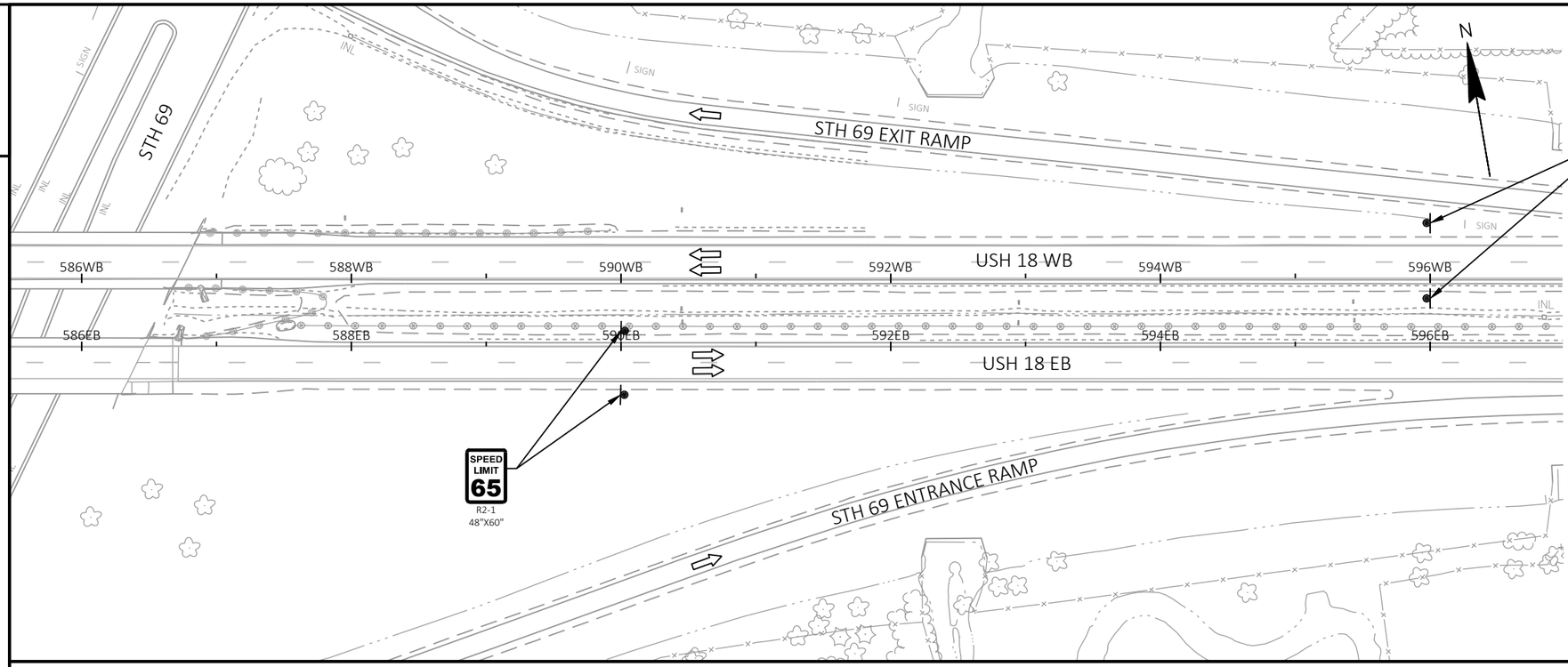
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 215	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 06

PLOT DATE : 11/15/2024 2:43 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



SEE STANDARD DETAIL DRAWING 'TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM' FOR PLACEMENT OF ADDITIONAL DRUMS, FLASHING BEACON SIGNS, AND PORTABLE TRAFFIC SENSORS

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

2

THIS SHEET INTENTIONALLY LEFT BLANK

2

N

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT INTERSECTION OF DAIRY RIDGE ROAD AND 7 SPRINGS ROAD

ROAD CLOSED
R11-2
48"X30"

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

ROAD WORK AHEAD
W20-1A

BOBCAT LANE

DAIRY RIDGE ROAD

30G

34G

36G

38G

40G

42G

BRIDGE OUT
R11-28
48"X30"

@MP

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 217	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 08

PLOT DATE : 11/15/2024 2:44 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

N

GA RAMP

GB RAMP

GC RAMP

GD RAMP

US 18 WB

US 18 EB

CTH G

466WB

466EB

464WB

464EB

462WB

462EB

460WB

460EB

48G

50G

52G

54G

56G

58G

60G

62G

STA AHEAD = 459+76.40 WB

STA BACK = 459+78.34WB

BRIDGE OUT
R11-2B
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

PLACE W20-3A AT
INTERSECTION OF CTH G
AND MARSH VIEW ROAD

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 218	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 09

PLOT DATE : 11/15/2024 2:44 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

W VERONA AVE

ROAD WORK AHEAD
W20-1A

W VERONA AVE EXIT RAMP

W VERONA AVE ENTRANCE RAMP

520W4

PCMS

SPEED LIMIT 40
R2-1
48"X60"

PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)
MESSAGE 1: MERGE HERE
MESSAGE 2: TAKE TURNS

EPIC LN

350'

EPIC LANE

ROAD WORK AHEAD
W20-1A

W04-2L

EXISTING SIGN TO REMAIN

ONLY ONLY

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

END ROAD WORK
G20-2A
48"X24"

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

STA 524+22.72, -13.54' LT

STA 524+11.29, -3.00' LT

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

STA 521+29.18, -15.00' LT

STA 525+21.40, 5.00' RT

STA 525+21.40, 1.00' RT

522W4

524W4

25' TYP.

STA 524+10.71, 9.00' RT

MOVE CBTP

WO5-52L
12"X36"

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

524W4

534EB4

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 219	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 10
PLOT DATE : 11/15/2024 2:45 PM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- DIRECTION OF TRAFFIC
- CC — CRASH CUSHION TEMPORARY

INL

N

W VERONA AVE EXIT RAMP

USH 18 WB

USH 18 EB

STA BACK = 539+42.23WB

STA AHEAD = 538+72.42 WB

530WB

532WB

534WB

536WB

538WB

540WB

542WB

530EB

532EB

534EB

536EB

538EB

540EB

542EB

528W4

530W4

532W4

534W4

536W4

538W4

540W4

542W4

528EB

STA 529+71.43, 1.00' RT

STA 529+90.49, 5.00' RT

STA 530+97.49, -3.00' LT

STA 530+97.49, 9.00' RT

MOVE/REMOVE CBTP

STA 529+90.93, 17.00' RT

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)

TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (WHITE)

50' TYP.

25' TYP.

WO1-6
48"X24"

REMOVE TEMPORARY MARKING LINE
REMOVABLE MASK OUT TAPE 6-INCH
(INSTALLED IN STAGE 3A)

REMOVE TEMPORARY MARKING LINE
REMOVABLE TAPE 6-INCH (YELLOW)
(INSTALLED IN STAGE 3A)

W VERONA AVE ENTRANCE RAMP

SIGN

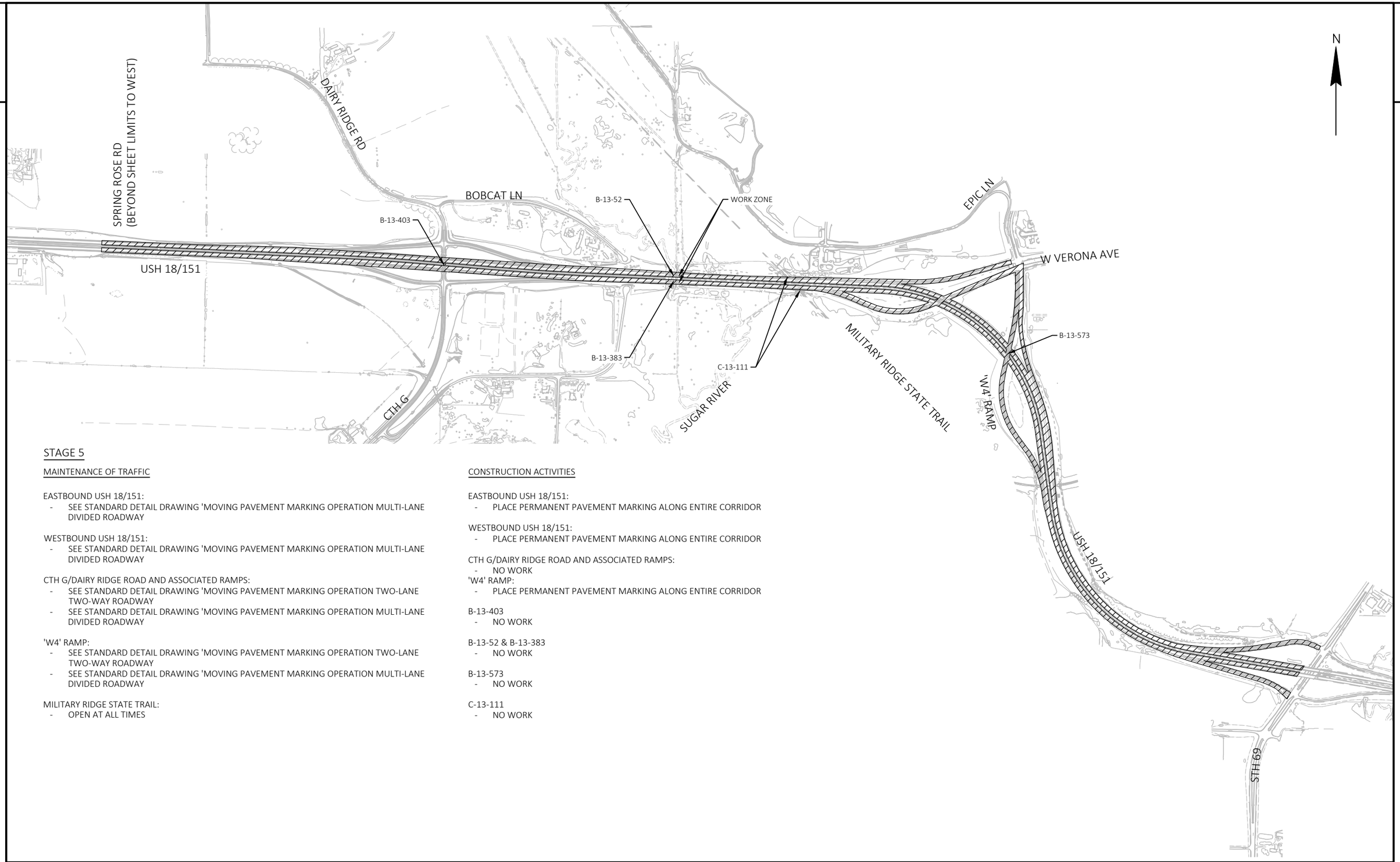
ALL SIGNS ARE 48"X48"
UNLESS OTHERWISE NOTED

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 4 - OFF PEAK	SHEET 220	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025404-TC-4OP.DWG
LAYOUT NAME - 11

PLOT DATE : 11/15/2024 2:46 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



STAGE 5

MAINTENANCE OF TRAFFIC

EASTBOUND USH 18/151:
- SEE STANDARD DETAIL DRAWING 'MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

WESTBOUND USH 18/151:
- SEE STANDARD DETAIL DRAWING 'MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- SEE STANDARD DETAIL DRAWING 'MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
- SEE STANDARD DETAIL DRAWING 'MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

'W4' RAMP:
- SEE STANDARD DETAIL DRAWING 'MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
- SEE STANDARD DETAIL DRAWING 'MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

MILITARY RIDGE STATE TRAIL:
- OPEN AT ALL TIMES

CONSTRUCTION ACTIVITIES

EASTBOUND USH 18/151:
- PLACE PERMANENT PAVEMENT MARKING ALONG ENTIRE CORRIDOR

WESTBOUND USH 18/151:
- PLACE PERMANENT PAVEMENT MARKING ALONG ENTIRE CORRIDOR

CTH G/DAIRY RIDGE ROAD AND ASSOCIATED RAMPS:
- NO WORK

'W4' RAMP:
- PLACE PERMANENT PAVEMENT MARKING ALONG ENTIRE CORRIDOR

B-13-403
- NO WORK

B-13-52 & B-13-383
- NO WORK

B-13-573
- NO WORK

C-13-111
- NO WORK

PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	TRAFFIC CONTROL - STAGE 5 OVERVIEW	SHEET 221	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\025501-TC-OVERVIEW-S5.DWG
LAYOUT NAME - 01
PLOT DATE : 7/25/2024 11:06 AM
PLOT BY : SHERZAD, SULAIMAN
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

USH 18/151 WB

SLOPE INTERCEPTS (TYP.)

+40.33
-8.00' LT

+12.54
-14.00' LT

8' TYP.

14' TYP.

STA 539+67
3 LF - PIPE UNDERDRAIN UNPERFORATED 6-INCH
APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

534+00

535+00

536+00

537+00

538+00

539+00

540

+40.33
0.00'

PT: 538+69.66

MATCH LINE 540+00

USH 18/151 EB

LEGEND

5.25-INCHES HMA
UPPER 1.75-INCH 4 HT 58-28 H
LOWER 3.5-INCH 3 HT 58-28 H
OVER
14-INCHES BASE AGGREGATE DENSE 1 1/4-INCH

MILL 1.75-INCH
HMA PAVEMENT 1.75-INCH 4 HT 58-28 H
ASPHALTIC SHOULDER TO REMAIN FROM
TEMPORARY CONDITION

N

5

5

MATCH LINE 540+00

STA 542+63
3 LF - PIPE UNDERDRAIN UNPERFORATED 6-INCH
APRON ENDWALL FOR UNDERDRAIN
REINFORCED CONCRETE 6-INCH

USH 18/151 WB

TDS

REINSTALL SALVAGED CABLE GUARD
(TO BE REINSTALLED IN STAGE 4)
STA 545+38 - 577+10

SLOPE INTERCEPTS (TYP.)

14' TYP.

8' TYP.

+37.45
-15.00' LT

+00

541+00

542+00

543+00

544+00

545+00

546

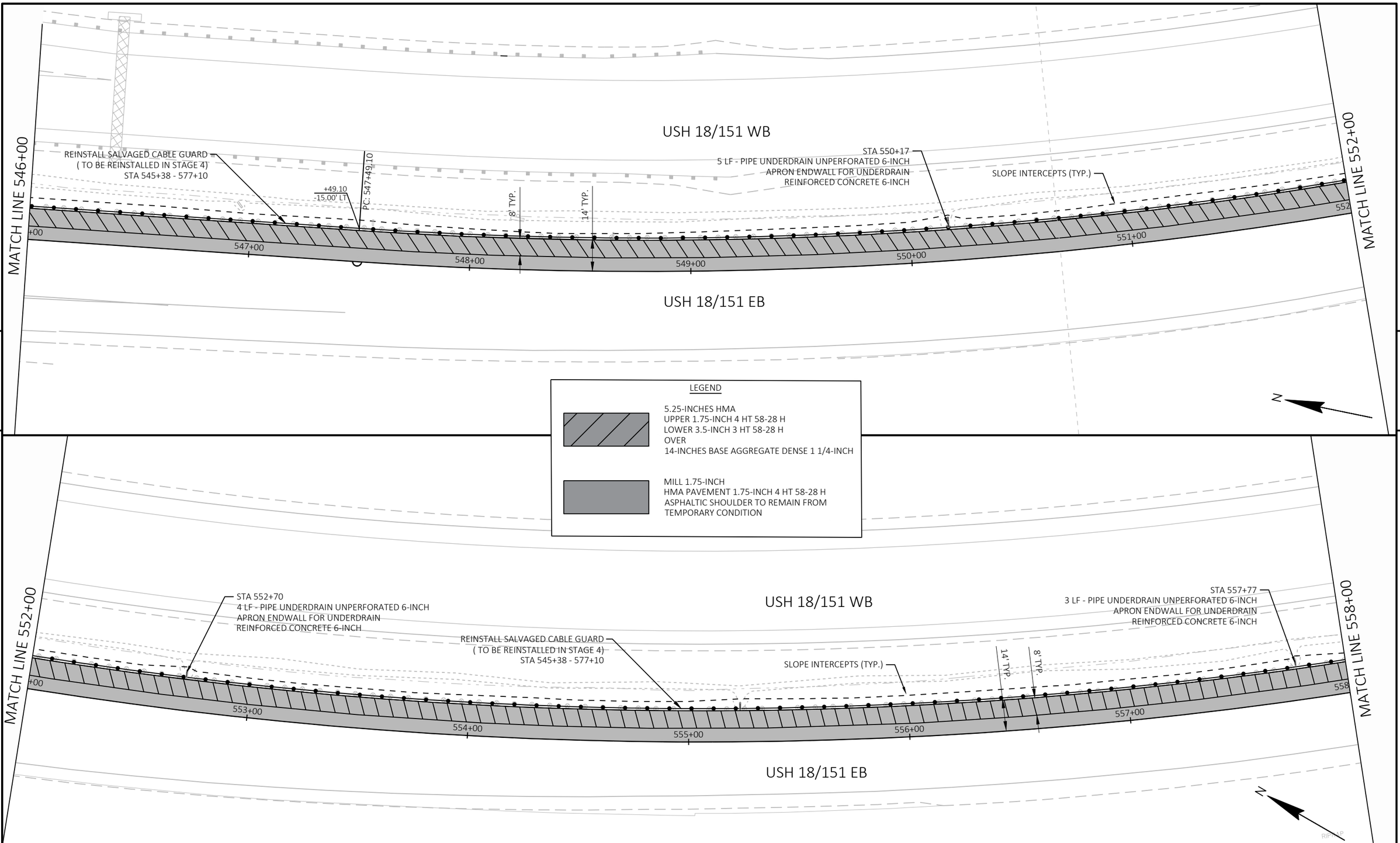
MATCH LINE 546+00

USH 18/151 EB

ENTRANCE RAMP 'W4'

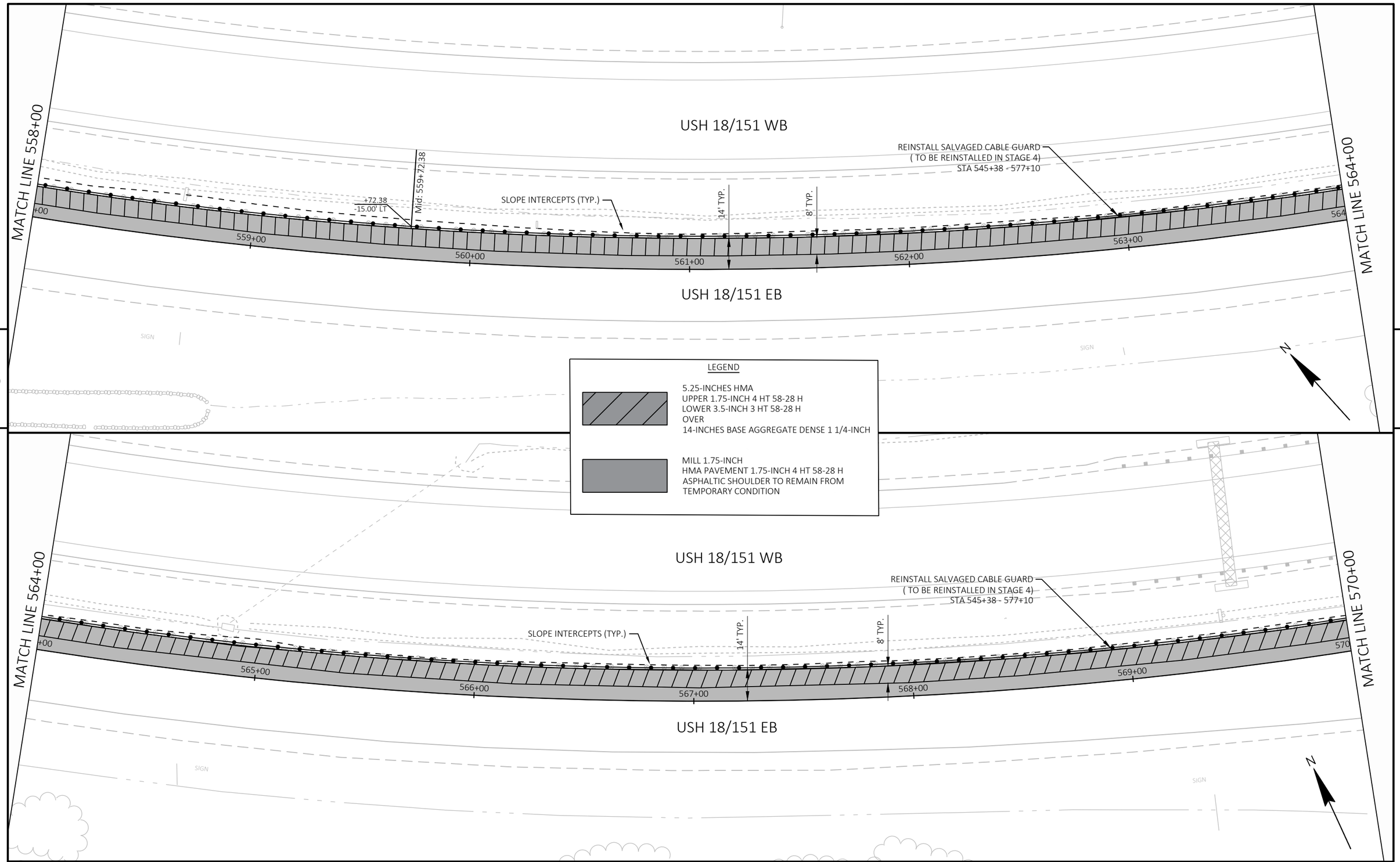
N

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT - USH 18 EB	SHEET 222	E



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT - USH 18 EB	SHEET 223	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\026001_TP.DWG
LAYOUT NAME - 02
PLOT DATE : 11/13/2024 11:34 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



5

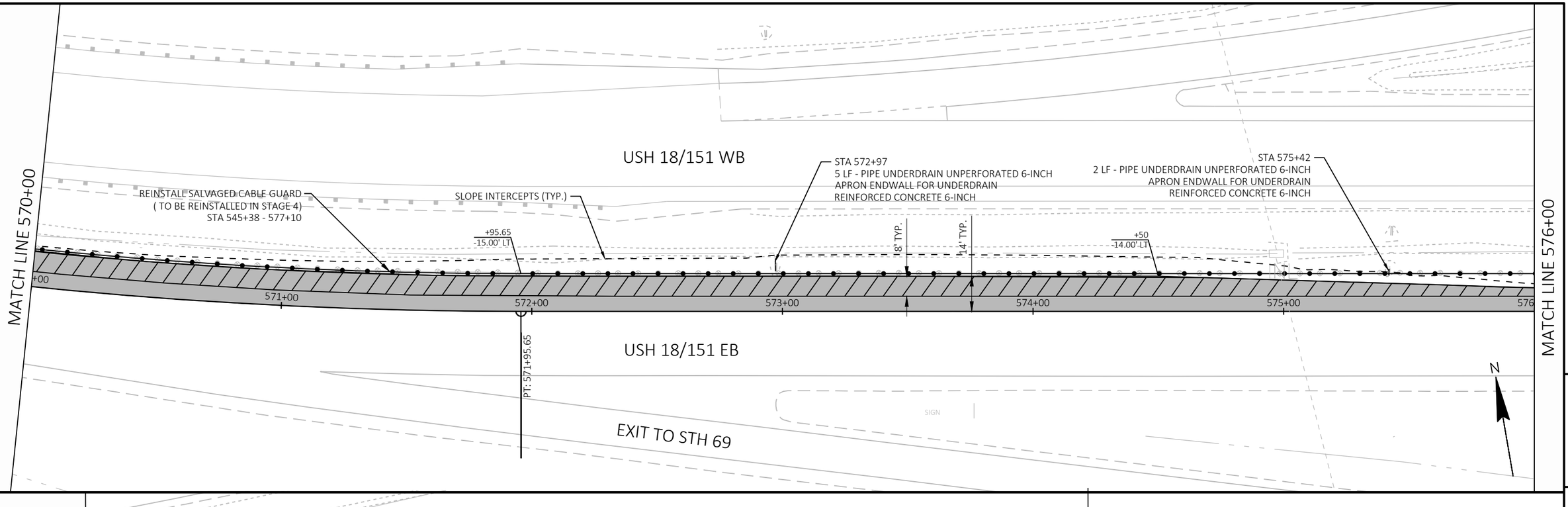
5

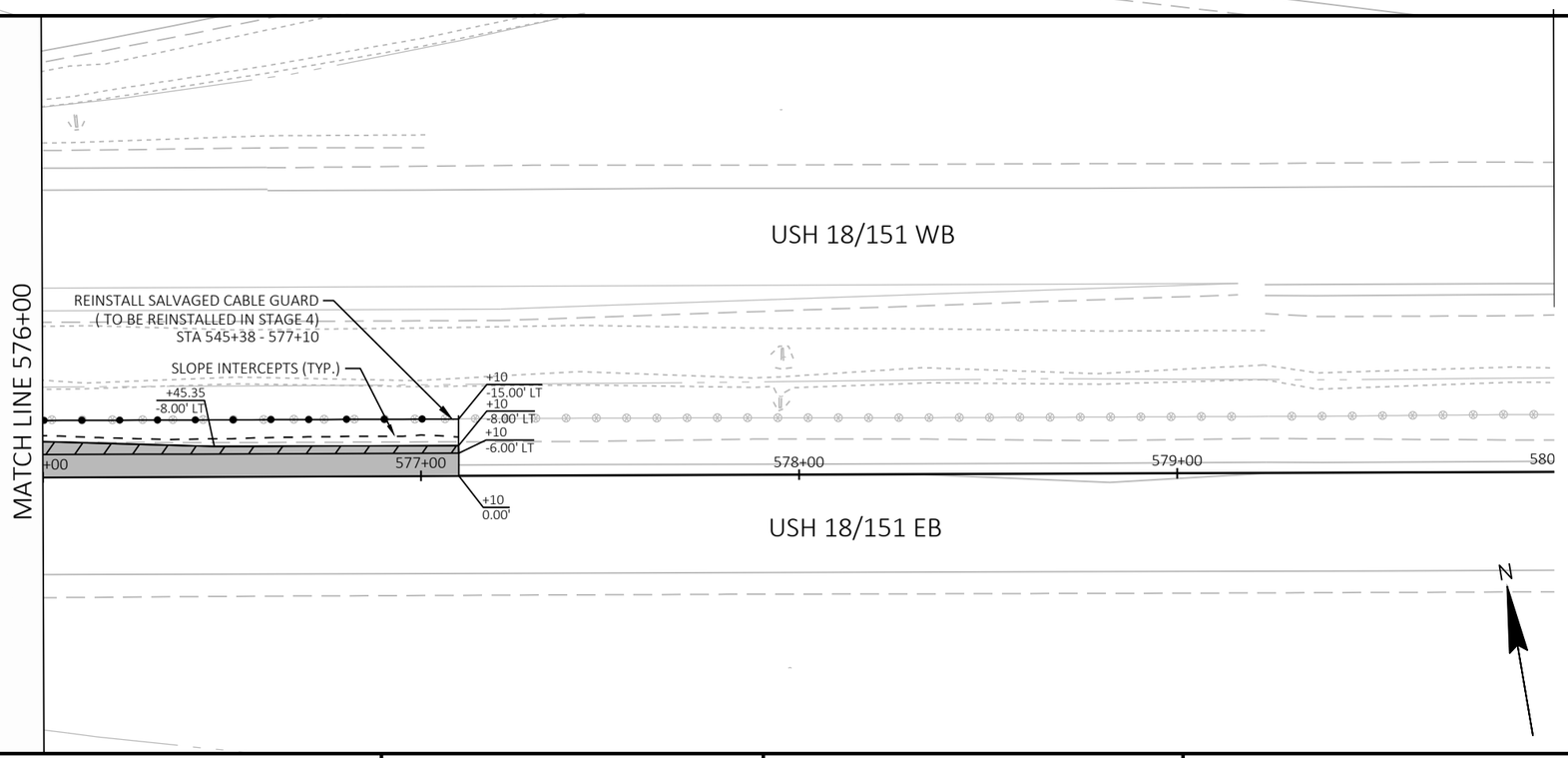
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT - USH 18 EB	SHEET 224	E

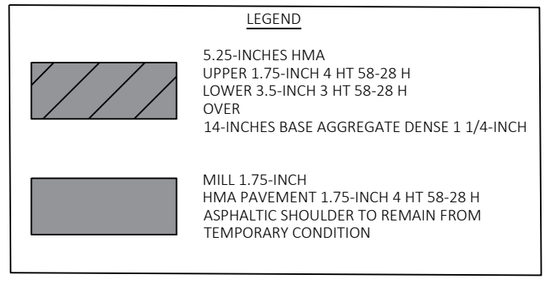
FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\026001_TP.DWG
LAYOUT NAME - 03

PLOT DATE : 11/13/2024 11:36 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

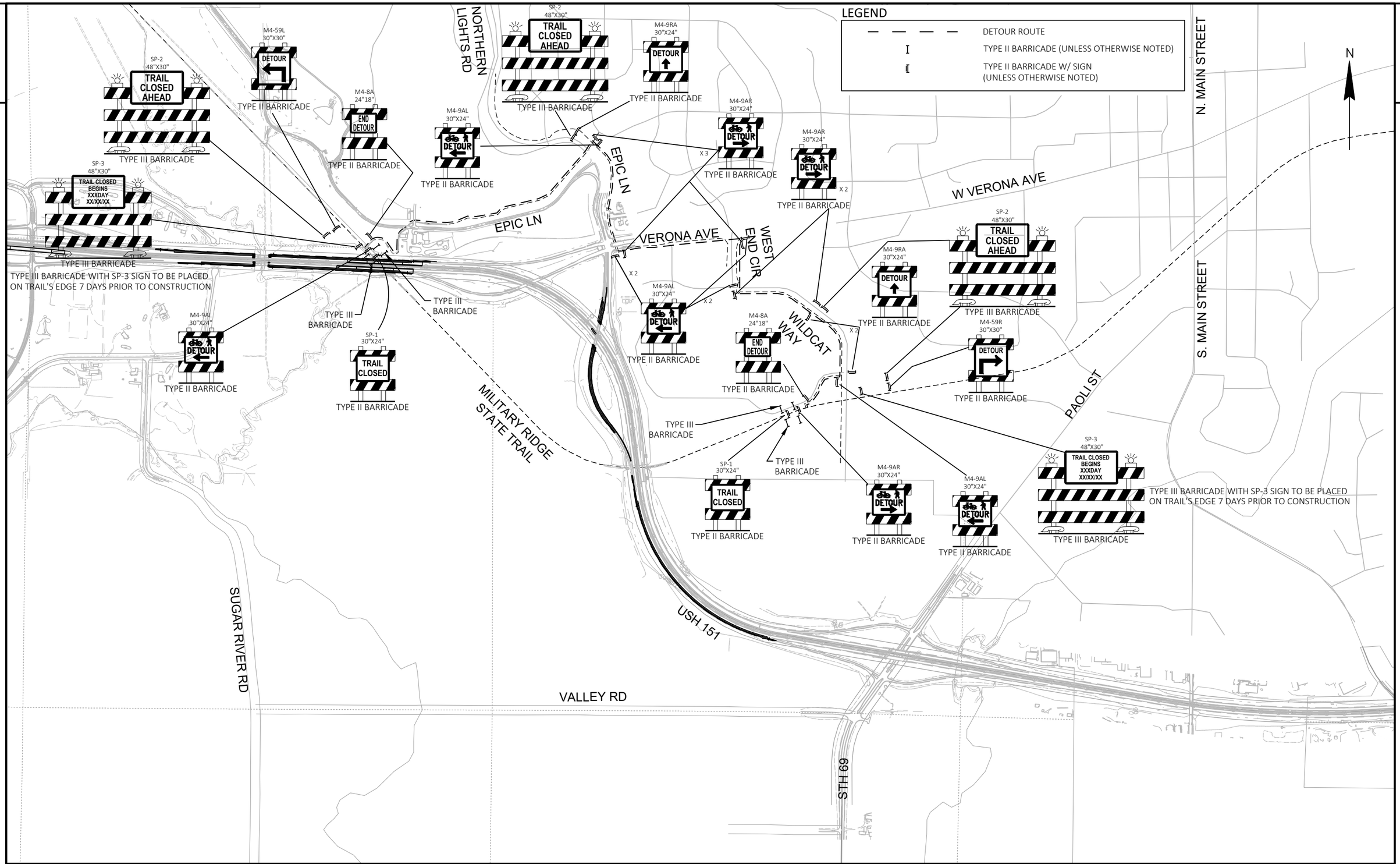






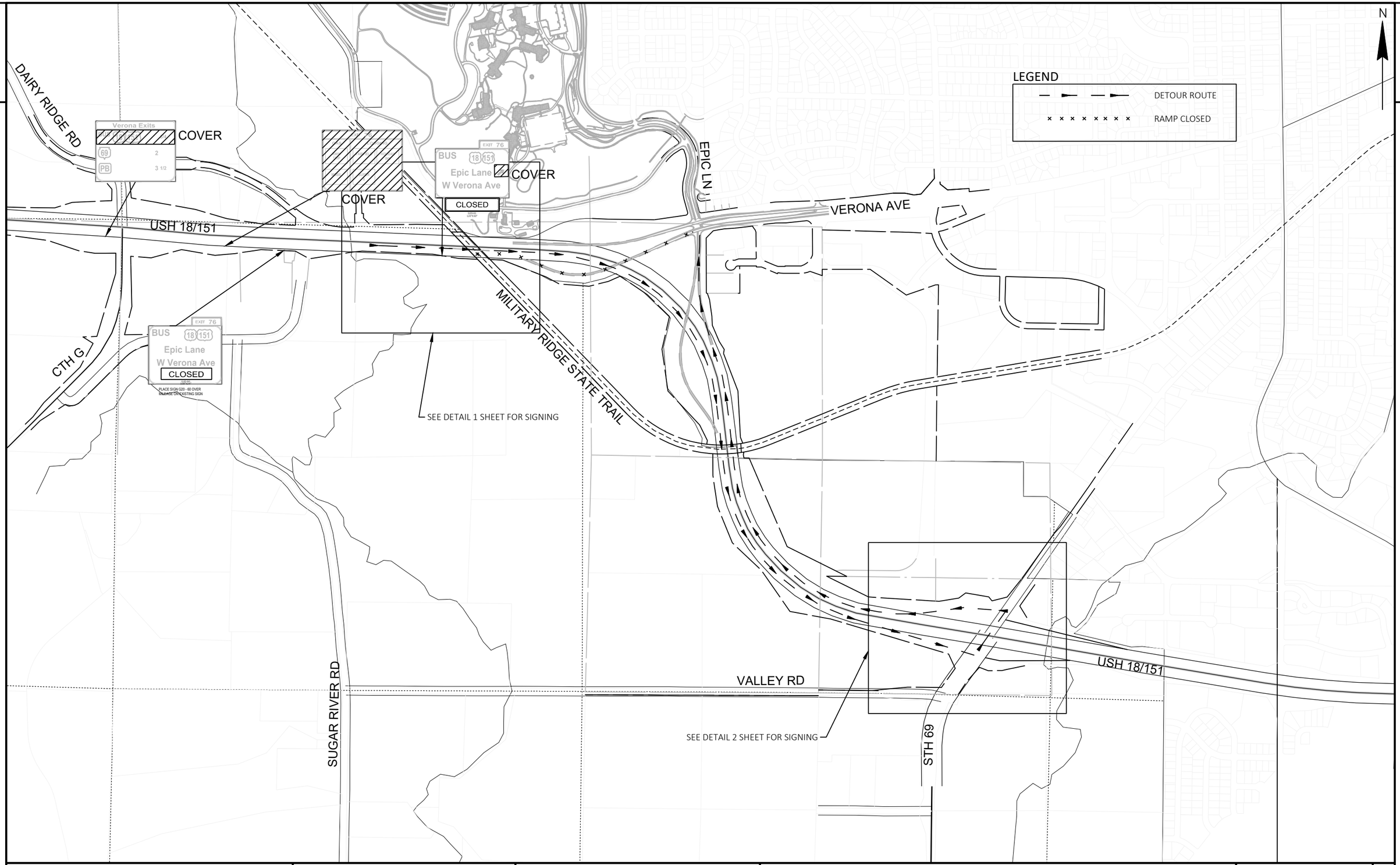
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	TEMPORARY PAVEMENT - USH 18 EB	SHEET 225	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\026001_TP.DWG
LAYOUT NAME - 04
PLOT DATE : 11/13/2024 11:39 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	MILITARY RIDGE PATH DETOUR	SHEET 226	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027003-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 10:24 AM
PLOT BY : MERGEN, BAILEE
PLOT NAME :
PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42



2

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - EB 18/151 TO W VERONA RD OFF RAMP (STAGE 3)	SHEET 227	E

2

LEGEND

PROPOSED SIGN SUPPORT

EXISTING SIGN SUPPORTS

N

2

SEE SDD TRAFFIC CONTROL, EXIT RAMP CLOSURE FOR TEMPORARY SIGNING AND TRAFFIC CONTROL ITEMS

R11-2R
48" X 30"
RAMP CLOSED

TYPE III BARRICADE

PCMS

TRAFFIC CONTROL DRUMS
10' SPACING TYPICAL

5,280'

PCMS MESSAGING

MESSAGE 1	MESSAGE 2
EXIT 76 CLOSED	USE EXIT 77

OR
FIXED MESSAGE SIGN

W VERONA AVE
RAMP CLOSED
USE EXIT 77

R14-2R
48" X 30"
RAMP CLOSED

TYPE III BARRICADE

PCMS

TRAFFIC CONTROL DRUMS
10' SPACING TYPICAL

PCMS TO BE PLACED 7 DAYS PRIOR TO CONSTRUCTION

MESSAGE 1	MESSAGE 2
RAMP CLOSED BEGINS	XXXDAY XX XX XX

EXIT 76

COVER

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - EB 18/151 TO W VERONA RD OFF RAMP (STAGE 3) - DETAIL 1	SHEET 228	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027004-DT.DWG
LAYOUT NAME - DETAIL 1

PLOT DATE : 7/22/2024 11:50 AM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

- DETOUR ROUTE
- RAMP CLOSED
- PROPOSED SIGN SUPPORT
- EXISTING SIGN SUPPORTS
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

N

2

2

EAST NORTH SOUTH 18 151 69

WEST SOUTH 18 151

EAST NORTH WEST SOUTH 18 151 18 151

Madison
Belleville
Mt Horeb

PAOLI ST

TO
M04-5
24"X12"
W Verona Ave
SP-XX
MO6-1
21"X21"

WEST SOUTH 18 151

Verona
Mt Horeb

TO
M04-5
36"X18"
W Verona Ave
SP-XX
M05-2R
30"X30"

560'

TO
M04-5
24"X12"
W Verona Ave
SP-XX
MO6-2
21"X21"

TO
M04-5
24"X12"
W Verona Ave
SP-XX
MO5-1L
21"X21"

WEST SOUTH END 18 151 69
TO
M04-5
24"X12"
W Verona Ave
SP-XX
MO5-1L
21"X21"

USH WB18/SB 151

USH EB18/NB 151

SEE SDD BARRICADES AND SIGN FOR VARIOUS CLOSURES DETAIL D, ROAD CLOSURE BARRICADE DETAIL

EAST NORTH SOUTH 18 151 69

TO
M04-5
24"X12"
W Verona Ave
SP-XX
MO6-1
21"X21"

VALLEY RD

STH 69

EAST NORTH 18 151

WEST SOUTH EAST NORTH 18 151 18 151

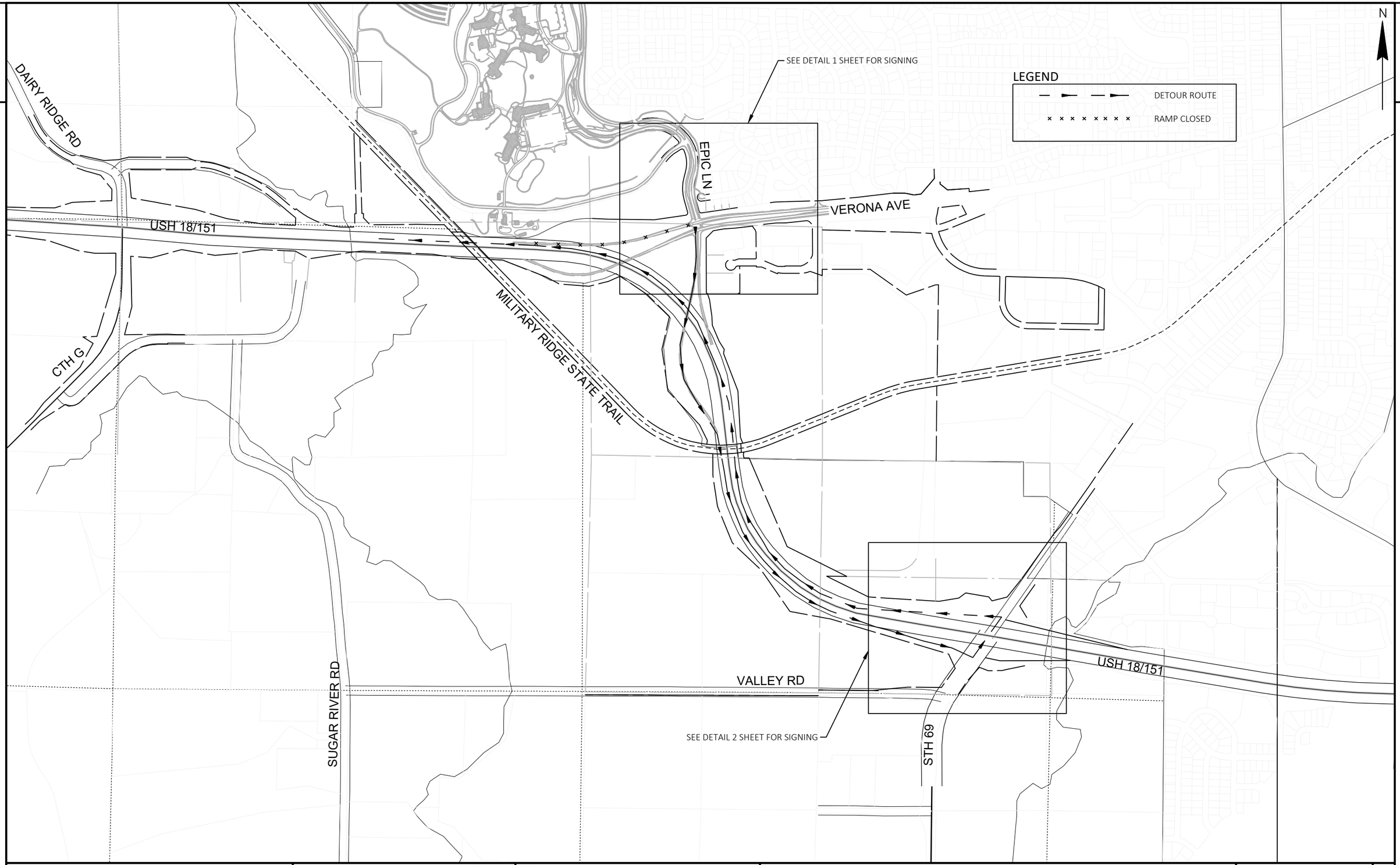
Mt Horeb
Verona
Madison

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - EB 18/151 TO W VERONA RD OFF RAMP (STAGE 3) - DETAIL 2	SHEET 229	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027004-DT.DWG
LAYOUT NAME - DETAIL 2

PLOT DATE : 7/22/2024 11:50 AM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - W VERONA RD ON-RAMP TO WB 18/151 (STAGE 3)	SHEET 230	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027005-DT.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 10:26 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:1000 FT
WISDOT/CADDS SHEET 42

2

N

LEGEND

- DETOUR ROUTE
- RAMP CLOSED
- PROPOSED SIGN SUPPORT (2 POSTS)
- EXISTING SIGN SUPPORTS
- TYPE III BARRICADE WITH/WITHOUT SIGN
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

DETOUR AHEAD
W20-2A

500'

ONLY ONLY ONLY
R3-50A
30"X36"
COVER

ONLY ONLY ONLY
R3-50A
30"X36"
COVER

TO TO
M04-5
24"X12"
WEST SOUTH
M3-4 MB3-4
24"X12"
18 151
M1-4
24"X24"
MO6-1
21"X21"

PCMS TO BE PLACED 7 DAYS PRIOR
TO CONSTRUCTION

MESSAGE 1	MESSAGE 2
RAMP CLOSED BEGINS	XXXDAY XX XX XX

TRAFFIC CONTROL DRUMS
10' SPACING TYPICAL

PCMS

SEE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES,
DETAIL D FOR RAMP CLOSURE BARRICADE DETAIL

TO TO
M04-5
24"X12"
WEST SOUTH
M3-4 MB3-4
24"X12"
18 151
M1-4
24"X24"
MO5-1L
21"X21"
COVER

DETOUR AHEAD
W20-2A

500'

TO TO
M04-5
24"X12"
WEST SOUTH
M3-4 MB3-4
24"X12"
18 151
M1-4
24"X24"
MO6-1
21"X21"

TO TO
M04-5
24"X12"
WEST SOUTH
M3-4 MB3-4
24"X12"
18 151
M1-4
24"X24"
MO5-1L
21"X21"

EAST NORTH
18 151
USE LEFT LANE
USE LEFT LANE

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - W VERONA RD ON-RAMP TO WB 18/151 (STAGE 3) - DETAIL 1	SHEET 231	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027005-DT.DWG
LAYOUT NAME - DETAIL 1
PLOT DATE : 7/24/2024 10:26 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

LEGEND

DETOUR ROUTE

RAMP CLOSED

PROPOSED SIGN SUPPORT

EXISTING SIGN SUPPORTS

N

2

PAOLI ST

VALLEY RD

STH 69

USH WB18/SB 151

USH EB18/NB 151

500'

TO M04-5 36"X18" — WEST M3-4 36"X18" — 18 M1-4 36"X36" — M05-2R 30"X30"

TO M04-5 36"X18" — SOUTH M3-3 36"X18" — 151 M1-4 36"X36" — M05-2R 30"X30"

TO M04-5 24"X12" — WEST M3-4 24"X12" — 18 M1-4 24"X24" — MO6-2 21"X21"

TO M04-5 24"X12" — SOUTH M3-3 24"X21" — 151 M1-4 24"X24" — MO6-2 21"X21"

TO M04-5 24"X12" — WEST M3-4 24"X12" — 18 M1-4 24"X24" — MO5-1L 21"X21"

TO M04-5 24"X12" — SOUTH M3-3 24"X21" — 151 M1-4 24"X24" — MO5-1L 21"X21"

TO M04-5 24"X12" — WEST M3-4 24"X12" — 18 M1-4 24"X24" — MO6-1 21"X21"

TO M04-5 24"X12" — SOUTH M3-3 24"X21" — 151 M1-4 24"X24" — MO6-1 21"X21"

EAST NORTH SOUTH 18 151 69

WEST SOUTH 18 151

EAST NORTH WEST SOUTH 18 151 18 151

Madison Belleville / Mt Horeb

WEST SOUTH 18 151

Verona / Mt Horeb

EAST NORTH 18 151

WEST SOUTH END 18 151 69

WEST SOUTH EAST NORTH 18 151 18 151

Mt Horeb Verona / Madison

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - W VERONA RD ON-RAMP TO WB 18/151 (STAGE 3) - DETAIL 2	SHEET 232	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027005-DT.DWG
LAYOUT NAME - DETAIL 2

PLOT DATE : 7/24/2024 10:26 AM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

VERONA AVE

LEGEND

DETOUR ROUTE

RAMP CLOSED

N

CTH M

SEE DETAIL 2 SHEET FOR SIGNING

EXIT 77

69

Verona

Monroe

CLOSED

PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING SIGN

Belleville

New Glarus

CLOSED

PLACE SIGN G20 - 60 OVER EXIT ON EXISTING SIGN

Badger Prairie

County Park

Reddan

Soccer Park

CLOSED

PLACE SIGN G20 - 60 OVER EXIT ON EXISTING SIGN

VALLEY RD

USH 18/151

OLD PB

CTH M

EXIT 77

69

Verona

Monroe

CLOSED

CLOSED

PLACE SIGN G20 - 60 OVER EXIT ON EXISTING SIGN

SEE DETAIL 1 SHEET FOR SIGNING

STH 69

LOCUST DR

RANGE TRAIL

CTH PB

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	DETOUR - EB 18/151 TO STH 69 OFF RAMP (STAGE 3)	SHEET 233	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027006-DT.DWG
LAYOUT NAME - OVERVIEW

PLOT DATE : 7/22/2024 12:06 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- DETOUR ROUTE
- RAMP CLOSED
- EXISTING SIGN SUPPORTS
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

N

EAST NORTH SOUTH 18 151 69

WEST SOUTH 18 151

EAST NORTH WEST SOUTH 18 151 18 151

Madison
Belleville
Mt Horeb

WEST SOUTH 18 151

Verona
Mt Horeb

PAOLI ST

USH WB18/SB 151

USH EB18/NB 151

PCMS

TRAFFIC CONTROL DRUMS
10' SPACING TYPICAL

PCMS TO BE PLACED 7 DAYS PRIOR TO CONSTRUCTION

MESSAGE 1	MESSAGE 2
RAMP CLOSED BEGINS	XXXDAY XX XX XX

WEST SOUTH END 18 151 69

EAST NORTH SOUTH 18 151 69

STH 69

VALLEY RD

EAST NORTH 18 151

WEST SOUTH EAST NORTH 18 151 18 151

Mt Horeb
Verona
Madison

2

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	DETOUR - EB 18/151 TO STH 69 OFF RAMP (STAGE 3) - DETAIL 1	SHEET 234	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027006-DT.DWG
LAYOUT NAME - DETAIL 1

PLOT DATE : 7/22/2024 12:06 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

PROPOSED SIGN SUPPORT

EXISTING SIGN SUPPORTS

N

OLD PB

USH WB 18/ SB 151

USH EB 18/ NB 151

500'

EXIT 79

WEST SOUTH 18 151 — TO 69 — M04-5 24"X12" — M1-6 24"X24" — MO6-1 21"X21"

WEST SOUTH 18 151 — TO 69 — M04-5 24"X12" — M1-6 24"X24" — MO5-1L 21"X21"

TO 69 — M04-5 24"X12" — M1-6 24"X24" — MO6-1 21"X21"

TO 69 — M04-5 24"X12" — M1-6 24"X24" — MO5-1L 21"X21"

TO 69 — M04-5 24"X12" — M1-6 24"X24" — M06-2 21"X21"

TO 69 — M04-5 36"X18" — M1-6 36"X36" — M05-2R 30"X30"

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	DETOUR - EB 18/151 TO STH 69 OFF RAMP (STAGE 3) - DETAIL 2	SHEET 235	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027006-DT.DWG
LAYOUT NAME - DETAIL 2

PLOT DATE : 7/22/2024 12:06 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

DETOUR ROUTE

RAMP CLOSED

EXISTING SIGN SUPPORTS

PROPOSED SIGN SUPPORTS

2

2

N

TO
M4-5
24"X12"

COUNTY G
M1-5A
24"X24"

M6-1
21"X21"

EB USH 18/151
PCMS MESSAGING REQ'D
(SEE DETAIL 1: PCMS MESSAGING)

BUS 18

CTH P

CTH PD

CTH J

CTH J

COVER
M6-1
21"X21"

DAIRY RIDGE RD

MILITARY RIDGE STATE TRAIL

EPIC LN

VERONA AVE

USH 18/151

SEE DETAIL 2 SHEET FOR SIGNING

ERB RD

SPRINGDALE CENTER RD

DIRECTION OF TRAFFIC

PCMS

TRAFFIC CONTROL DRUMS
10' SPACING TYPICAL

PCMS TO BE PLACED 7 DAYS PRIOR
TO CONSTRUCTION

MESSAGE 1	MESSAGE 2
RAMP CLOSED BEGINS	XXXDAY XX XX XX

END DETOUR
M4-8A
24"X18"

R11-3
60" X 30"
ROAD CLOSED
TO THRU TRAFFIC
1.5 MILES AHEAD

TYPE III BARRICADE

SPRING ROSE RD

CTH G

CTH G

SEE DETAIL 1 SHEET FOR SIGNING

WB USH 18/151
PCMS MESSAGING REQ'D
(SEE DETAIL 1: PCMS MESSAGING)

USH 18/151

VALLEY RD

SUGAR RIVER RD

STH 69

DETAIL 1: PCMS MESSAGING

REFER TO SDD "BARRICADES AND SIGNS FOR MAINLINE, DETOUR, ON RAMP, OFF RAMP CLOSURES AND ADVANCED WIDTH RESTRICTIONS - OFF RAMP LANE CLOSURE"

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - WB 18/151 TO CTH G RAMPS - OVERVIEW (STAGES 2, 3, 4)	SHEET 236	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027007-DT.DWG
LAYOUT NAME - OVERVIEW
PLOT DATE : 7/22/2024 12:11 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:0.5 MI
WISDOT/CADDS SHEET 42

LEGEND

DETOUR ROUTE

RAMP CLOSED

EXISTING SIGN SUPPORTS

PROPOSED SIGN SUPPORTS

N

DAIRY RIDGE RD

BOBCAT LN

EXIT 75

G

Mt Vernon

CLOSED

G20-61
120"X30"

MILITARY RIDGE STATE TRAIL

SEE SSD BARRICADES AND SIGNS FOR VARIOUS CLOSURES, DETAIL D FOR ROAD CLOSURE BARRICADE DETAIL

COVER

USH 18/151

SEE SSD BARRICADES AND SIGNS FOR VARIOUS CLOSURES, DETAIL D FOR ROAD CLOSURE BARRICADE DETAIL

MARSH VIEW RD

CTH G

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - WB 18/151 TO CTH G RAMPS - DETAIL 1 (STAGES 2, 3, 4)	SHEET 237	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027007-DT.DWG
LAYOUT NAME - DETAIL 1

PLOT DATE : 7/22/2024 12:11 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

LEGEND

- DETOUR ROUTE
- RAMP CLOSED
- EXISTING SIGN SUPPORTS
- PROPOSED SIGN SUPPORTS

N

USH 18/151

CTH P

CTH PD

PRAIRIE RIDGE RD

INDIAN MOUND TRAIL

EXIT 70

TO M4-5 36"X18" / COUNTY G M1-5A 36"X36" / M5-2R 30"X30"

TO M4-5 24"X12" / COUNTY G M1-5A 24"X24" / M6-2 21"X21"

TO M4-5 24"X12" / COUNTY G M1-5A 24"x24" / M5-1L 21"X21"

TO M4-5 24"X12" / COUNTY G M1-5A 24"x24" / M6-1 21"X21"

TO COUNTY P COUNTY PD M6-1 21"X21"

TO M4-5 24"X12" / COUNTY G M1-5A 24"x24" / M6-1 21"X21"

TO COUNTY P COUNTY PD M6-1 21"X21"

TO M4-5 24"X12" / COUNTY G M1-5A 24"x24" / M6-1 21"X21"

TO COUNTY P COUNTY PD M6-1 21"X21"

TO M4-5 24"X12" / COUNTY G M1-5A 24"x24" / M5-1R 21"X21"

TO M4-5 24"X12" / COUNTY G M1-5A 24"X24" / M6-2 21"X21"

TO M4-5 36"X18" / COUNTY G M1-5A 36"X36" / M5-2R 30"X30"

EXIT 70 TO P PD Cross Plains

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - WB 18/151 TO CTH G RAMPS - DETAIL 2 (STAGES 2, 3, 4)	SHEET 238	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027007-DT.DWG
LAYOUT NAME - DETAIL 2

PLOT DATE : 7/22/2024 12:11 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

LEGEND

DETOUR ROUTE

RAMP CLOSED

EXISTING SIGN SUPPORTS

PROPOSED SIGN SUPPORTS

2

2

N

COUNTY PD

COUNTY J

TO M4-5 24"X12"

18 M1-6 24"X24"

151 M1-6 24"X24"

M6-1 21"X21"

M6-1 21"X21"

CTH J

CTH PD

BUS 18

CTH P

SEE DETAIL 2 SHEET FOR SIGNING

TO M4-5 24"X12"

COUNTY G M1-5A 24"X24"

M6-1 21"X21"

CTH J

DAIRY RIDGE RD

MILITARY RIDGE STATE TRAIL

EPIC LN

VERONA AVE

USH 18/151

SEE DETAIL 1 SHEET FOR SIGNING

ERB RD

SPRINGDALE CENTER RD

SPRING ROSE RD

CTH G

SUGAR RIVER RD

VALLEY RD

STH 69

USH 18/151

TO M4-5 24"X12"

18 M1-6 24"X24"

151 M1-6 24"X24"

COUNTY J

M6-1 21"X21"

M6-1 21"X21"

CTH G

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - EB CTH G TO 18/151 RAMPS - OVERVIEW (STAGES 2, 3, 4)	SHEET 239	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027008-DT.DWG
LAYOUT NAME - OVERVIEW

PLOT DATE : 7/22/2024 12:15 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

WISDOT/CADDS SHEET 42

LEGEND

DETOUR ROUTE

RAMP CLOSED

EXISTING SIGN SUPPORTS

PROPOSED SIGN SUPPORTS

N

DAIRY RIDGE RD

BOBCAT LN

MILITARY RIDGE STATE TRAIL

USH 18/151

EXIT 75

EXIT 75 AHEAD

COVER

G

Diary Ridge Rd

CLOSED

G20-61
120"X30"

MARSH VIEW RD

CTH G

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - EB CTH G TO 18/151 RAMPS - DETAIL 1 (STAGES 2, 3, 4)	SHEET 240	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027008-DT.DWG
LAYOUT NAME - DETAIL 1

PLOT DATE : 7/22/2024 12:15 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:500 FT

WISDOT/CADDS SHEET 42

2

LEGEND

DETOUR ROUTE

RAMP CLOSED

EXISTING SIGN SUPPORTS

PROPOSED SIGN SUPPORTS

N

2

USH 18/151

CTH P

CTH PD

EAST NORTH 18 151

JCT JCT END 18 151 COUNTY PD

Madison

Dodgeville

EAST NORTH 18 151

END DETOUR
M4-8A
24"X18"

PRAIRIE RIDGE RD

INDIAN MOUND TRAIL

SEPTIC

SIGN

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	DETOUR - EB CTH G TO 18/151 RAMPS - DETAIL 2 (STAGES 2, 3, 4)	SHEET 241	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027008-DT.DWG
LAYOUT NAME - DETAIL 2

PLOT DATE : 7/22/2024 12:16 PM PLOT BY : SHERZAD, SULAIMAN PLOT NAME : PLOT SCALE : 1 IN:500 FT

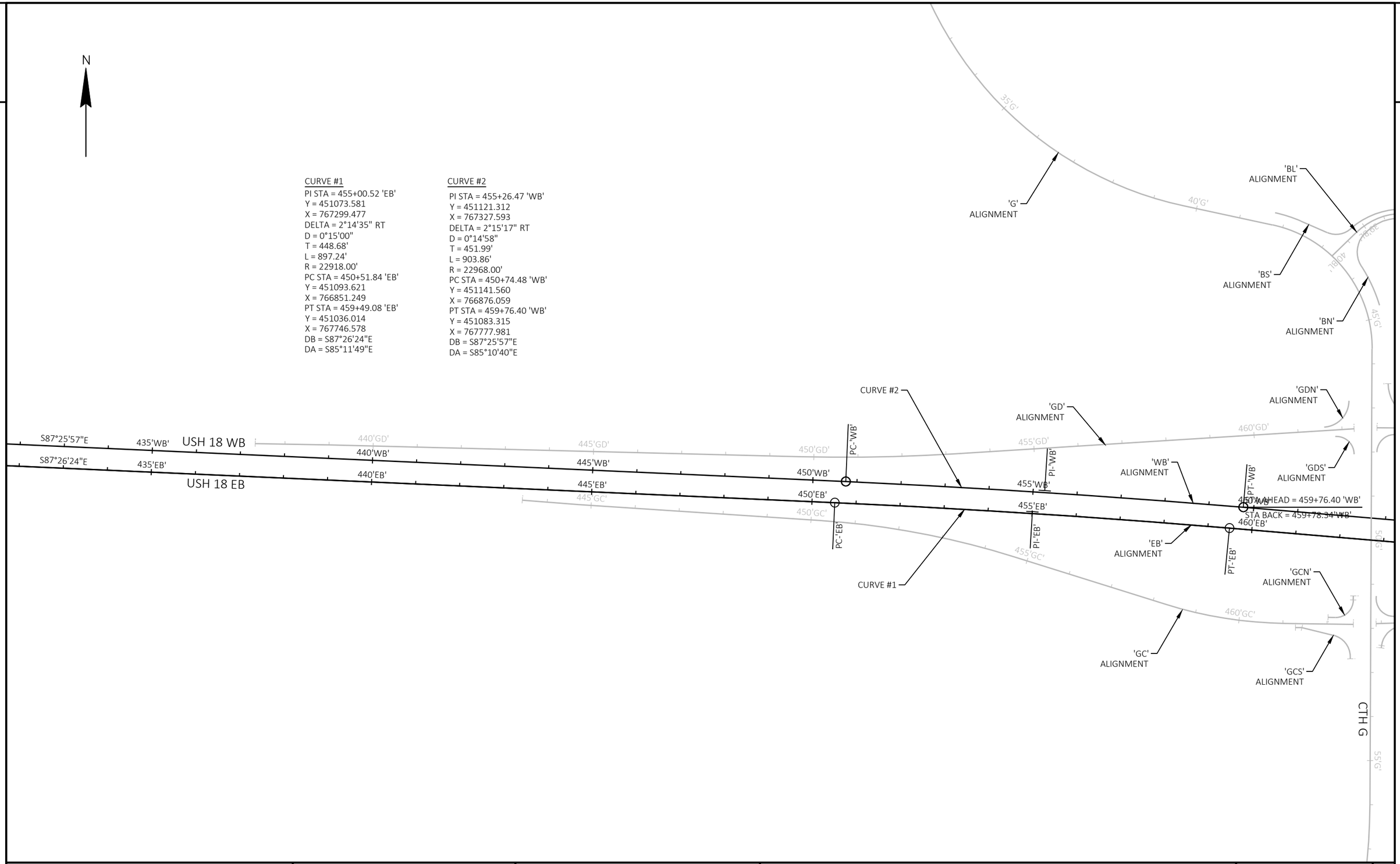
WISDOT/CADDS SHEET 42

2

N

CURVE #1
PI STA = 455+00.52 'EB'
Y = 451073.581
X = 767299.477
DELTA = 2°14'35" RT
D = 0°15'00"
T = 448.68'
L = 897.24'
R = 22918.00'
PC STA = 450+51.84 'EB'
Y = 451093.621
X = 766851.249
PT STA = 459+49.08 'EB'
Y = 451036.014
X = 767746.578
DB = S87°26'24"E
DA = S85°11'49"E

CURVE #2
PI STA = 455+26.47 'WB'
Y = 451121.312
X = 767327.593
DELTA = 2°15'17" RT
D = 0°14'58"
T = 451.99'
L = 903.86'
R = 22968.00'
PC STA = 450+74.48 'WB'
Y = 451141.560
X = 766876.059
PT STA = 459+76.40 'WB'
Y = 451083.315
X = 767777.981
DB = S87°25'57"E
DA = S85°10'40"E



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 242	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 01
PLOT DATE : 7/24/2024 9:14 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

N

'G' ALIGNMENT

'BL' ALIGNMENT

'BS' ALIGNMENT

'BN' ALIGNMENT

'GDN' ALIGNMENT

'GD' ALIGNMENT

'GAN' ALIGNMENT

'GA' ALIGNMENT

'GDS' ALIGNMENT

'GAS' ALIGNMENT

CURVE #4

'WB' ALIGNMENT

'EB' ALIGNMENT

'GCN' ALIGNMENT

'GBN' ALIGNMENT

'GC' ALIGNMENT

'GCS' ALIGNMENT

'GBS' ALIGNMENT

'GB' ALIGNMENT

CURVE #3

'G' ALIGNMENT

USH 18 WB

USH 18 EB

CTH G

PT-'WB'

PC-'WB'

PI-'WB'

PT-'WB'

PI-'EB'

PC-'GC'

PI-'EB'

PT-'EB'

460'EB'

460'GD'

460'GC'

465'WB'

465'EB'

465'GA'

465'GB'

470'WB'

470'EB'

470'GA'

470'GB'

475'WB'

475'EB'

475'GA'

475'GB'

480'WB'

480'EB'

480'GA'

480'GB'

485'WB'

485'EB'

485'GB'

490'WB'

490'EB'

S85°10'40"E

S85°11'49"E

S87°25'15"E

S87°24'34"E

STA AHEAD = 459+76.40 'WB'

STA BACK = 459+78.34'WB'

STA AHEAD = 478+39.43 'WB'

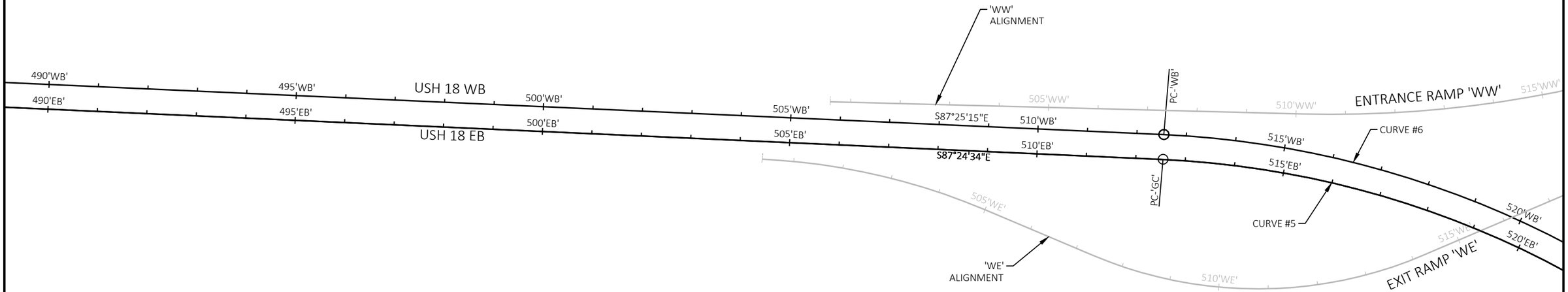
STA BACK = 478+37.49 'WB'

CURVE #3	CURVE #4
PI STA = 473+99.47 'EB'	PI STA = 473+89.91 'WB'
Y = 450914.571	Y = 450964.487
X = 769191.878	X = 769186.491
DELTA = 2°12'45" LT	DELTA = 2°14'35" LT
D = 0°15'00"	D = 0°15'02"
T = 442.55'	T = 447.69'
L = 884.98'	L = 895.27'
R = 22918.00'	R = 22868.00'
PC STA = 469+56.93 'EB'	PC STA = 469+42.22 'WB'
Y = 450951.626	Y = 451002.123
X = 768750.886	X = 768740.384
PT STA = 478+41.91 'EB'	PT STA = 478+39.43 'WB'
Y = 450894.569	Y = 450944.341
X = 769633.972	X = 769633.728
DB = S85°11'49"E	DB = S85°10'40"E
DA = S87°24'34"E	DA = S87°25'15"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 243	E

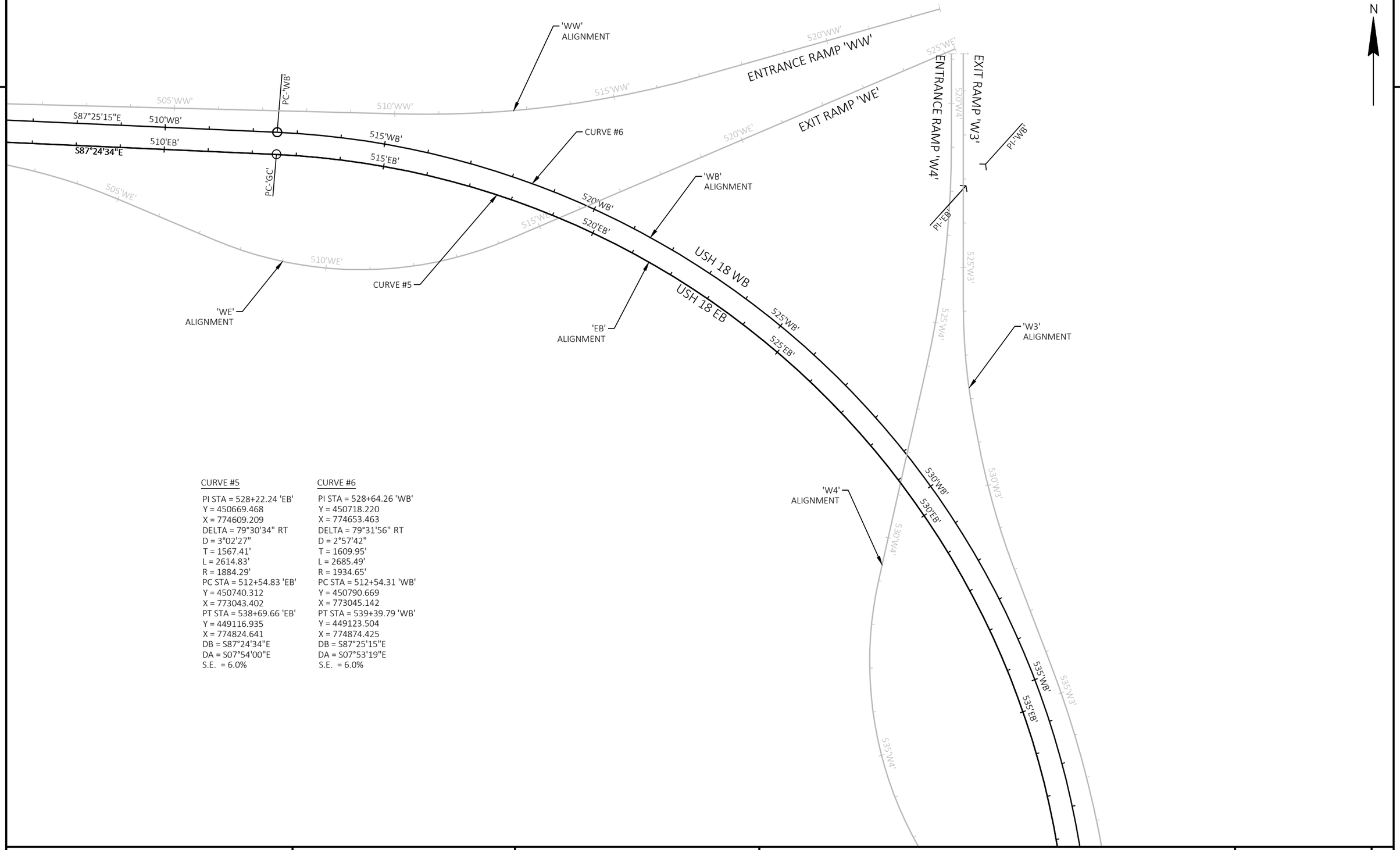
2

N



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 244	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 03
PLOT DATE : 7/24/2024 9:14 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44



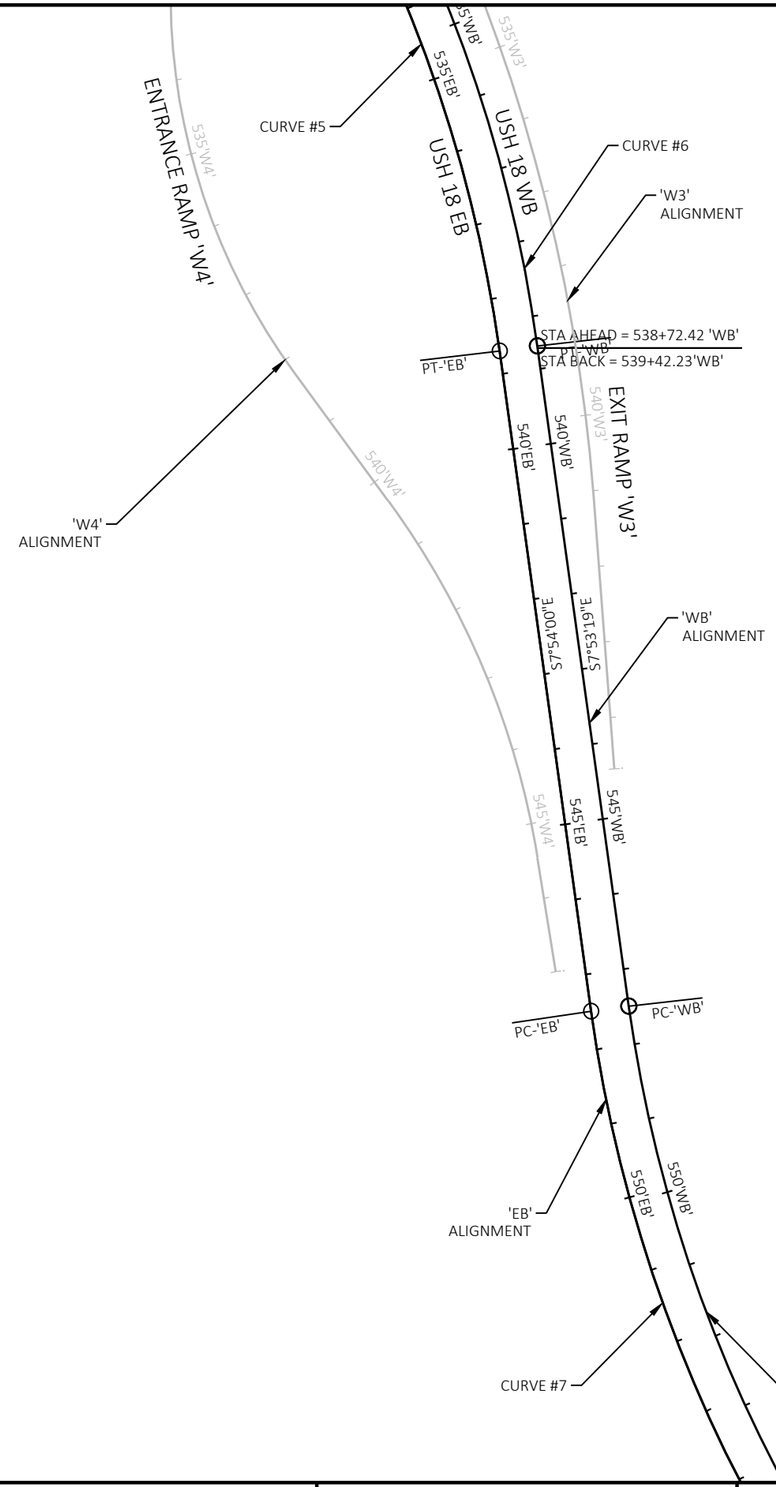
CURVE #5

PI STA = 528+22.24 'EB'
Y = 450669.468
X = 774609.209
DELTA = 79°30'34" RT
D = 3°02'27"
T = 1567.41'
L = 2614.83'
R = 1884.29'
PC STA = 512+54.83 'EB'
Y = 450740.312
X = 773043.402
PT STA = 538+69.66 'EB'
Y = 449116.935
X = 774824.641
DB = S87°24'34"E
DA = S07°54'00"E
S.E. = 6.0%

CURVE #6

PI STA = 528+64.26 'WB'
Y = 450718.220
X = 774653.463
DELTA = 79°31'56" RT
D = 2°57'42"
T = 1609.95'
L = 2685.49'
R = 1934.65'
PC STA = 512+54.31 'WB'
Y = 450790.669
X = 773045.142
PT STA = 539+39.79 'WB'
Y = 449123.504
X = 774874.425
DB = S87°25'15"E
DA = S07°53'19"E
S.E. = 6.0%

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 245	E


N
ENTRANCE RAMP 'W4'
535'W4'
CURVE #5
535'WB'
535'EB'
USH 18 EB
USH 18 WB
535'W3'
CURVE #6
'W3'
ALIGNMENT
STA AHEAD = 538+72.42 'WB'
PC-'WB'
STA BACK = 539+42.23'WB'
PT-'EB'
540'W4'
'W4'
ALIGNMENT
540'EB'
540'WB'
540'W3'
EXIT RAMP 'W3'
S7°54'00"E
S7°53'19"E
'WB'
ALIGNMENT
545'W4'
545'EB'
545'WB'
PC-'EB'
PC-'WB'
'EB'
ALIGNMENT
550'EB'
550'WB'
CURVE #7
CURVE #8

2

N

CURVE #7

PI STA = 561+66.48 'EB'
Y = 446841.911
X = 775140.327
DELTA = 72°27'08" LT
D = 2°57'41"
T = 1417.38'
L = 2446.55'
R = 1934.75'
PC STA = 547+49.10 'EB'
Y = 448245.838
X = 774945.515
PT STA = 571+95.65 'EB'
Y = 446604.375
X = 776537.659
DB = S07°54'00"E
DA = S80°21'08"E
S.E. = 6.0%

CURVE #8

PI STA = 561+29.30 'WB'
Y = 446885.565
X = 775184.511
DELTA = 72°27'53" LT
D = 3°02'32"
T = 1380.10'
L = 2382.07'
R = 1883.43'
PC STA = 547+49.20 'WB'
Y = 448252.603
X = 774995.096
PT STA = 571+31.27 'WB'
Y = 446654.303
X = 776545.095
DB = S07°53'19"E
DA = S80°21'12"E
S.E. = 6.0%

555'EB'
555'WB'
560'EB'
560'WB'
565'EB'
565'WB'
570'EB'
570'WB'
575'EB'
575'WB'
580'EB'
580'WB'
585'EB'
585'WB'
570'SC'
575'SC'
580'SC'
575'SD'
580'SD'
585'SD'

'WB' ALIGNMENT
'EB' ALIGNMENT
'SD' ALIGNMENT
'SC' ALIGNMENT
CURVE #8
CURVE #7
PI-'WB'
PI-'EB'
PT-'WB'
PT-'EB'
STA AHEAD = 571+99.45 'WB'
STA BACK = 571+36.10'WB'
ENTRANCE RAMP 'SD'
EXIT RAMP 'SC'
USH 18 WB
USH 18 EB
S80°21'12"E
S80°21'08"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 247	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 06
PLOT DATE : 7/24/2024 9:14 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

N

CURVE #9
PI STA = 452+44.73 'GC'
Y = 451038.630
X = 767041.639
DELTA = 13°36'26" RT
D = 3°02'17"
T = 225.00'
L = 447.89'
R = 1885.91'
PC STA = 450+19.73 'GC'
Y = 451053.467
X = 766817.125
PT STA = 454+67.62 'GC'
Y = 450971.388
X = 767256.360
DB = S86°13'09"E
DA = S72°36'42"E

CURVE #10
PI STA = 459+68.53 'GC'
Y = 450821.693
X = 767734.383
DELTA = 16°38'34" LT
D = 5°58'22"
T = 140.31'
L = 278.64'
R = 959.28'
PC STA = 458+28.23 'GC'
Y = 450863.623
X = 767600.486
PT STA = 461+06.87 'GC'
Y = 450819.867
X = 767874.680
DB = S72°36'42"E
DA = S89°15'16"E

CURVE #11
PI STA = 451+45.88 'GD'
Y = 451193.638
X = 766949.563
DELTA = 5°01'15" LT
D = 1°25'10"
T = 176.96'
L = 353.69'
R = 4036.17'
PC STA = 449+68.93 'GD'
Y = 451198.056
X = 766772.660
PT STA = 453+22.61 'GD'
Y = 451204.718
X = 767126.173
DB = S88°34'09"E
DA = N86°24'36"E

PI 437+32.48'GD'
Y=451227.652
X=765536.574

PI 439+04.92'GD'
Y=451224.624
X=765708.989

PI 443+43.37'GC'
Y=451099.290
X=766142.326

PI 444+72.17'GC'
Y=451089.357
X=766270.744

PI 447+97.60'GC'
Y=451068.114
X=766595.480

PI 462+11.92'GD'
Y=451260.404
X=768013.736

PI 462+36.95'GC'
Y=450818.174
X=768004.750

USH 18 WB
USH 18 EB
CTH G

S88°59'38"E 440'GD' 445'GD' S88°34'09"E 450'GD' PC-'GD' PI-'GD' PT-'GD' 455'GD' N86°24'36"E 460'GD'

S85°34'37"E 445'GC' S86°15'27"E S86°13'09"E 450'GC' PC-'GC' PI-'GC' 455'GC' PT-'GC' S72°36'42"E 460'GC' S89°15'16"E PC-'GC' PI-'GC' PT-'GC'

CURVE #9
CURVE #10
CURVE #11

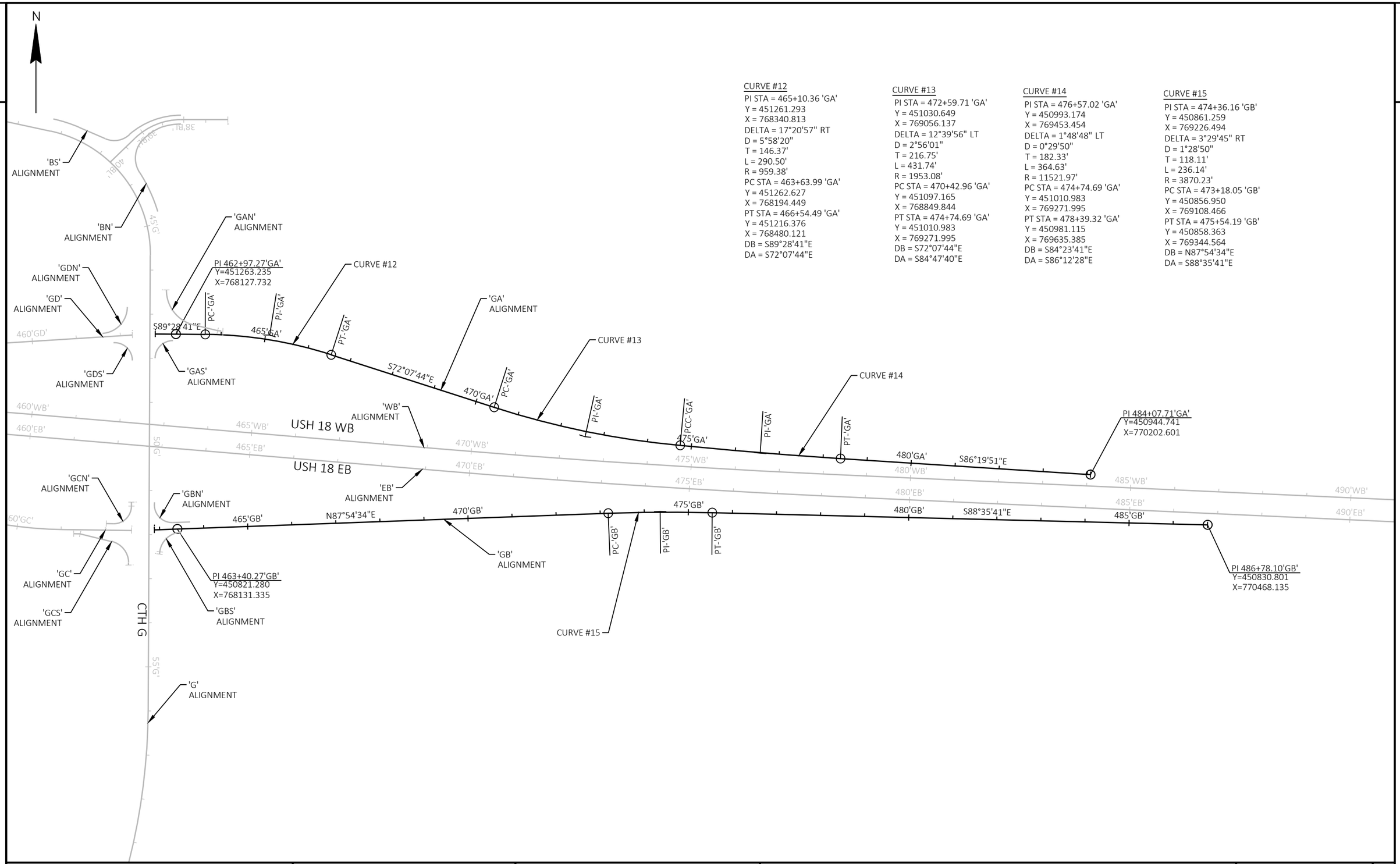
'BL' ALIGNMENT
'G' ALIGNMENT
'BS' ALIGNMENT
'BN' ALIGNMENT
'GDN' ALIGNMENT
'GD' ALIGNMENT
'WB' ALIGNMENT
'GDS' ALIGNMENT
'EB' ALIGNMENT
'GCN' ALIGNMENT
'GC' ALIGNMENT
'GCS' ALIGNMENT

435'WB' 435'EB' 440'WB' 440'EB' 445'WB' 445'EB' 450'WB' 450'EB' 455'WB' 455'EB' 460'WB' 460'EB'
35'G' 40'G' 40'BL' 30'BL' 45'G' 50'G' 55'G'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 248	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 07
PLOT DATE : 7/24/2024 9:14 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2



CURVE #12
PI STA = 465+10.36 'GA'
Y = 451261.293
X = 768340.813
DELTA = 17°20'57" RT
D = 5°58'20"
T = 146.37'
L = 290.50'
R = 959.38'
PC STA = 463+63.99 'GA'
Y = 451262.627
X = 768194.449
PT STA = 466+54.49 'GA'
Y = 451216.376
X = 768480.121
DB = S89°28'41"E
DA = S72°07'44"E

CURVE #13
PI STA = 472+59.71 'GA'
Y = 451030.649
X = 769056.137
DELTA = 12°39'56" LT
D = 2°56'01"
T = 216.75'
L = 431.74'
R = 1953.08'
PC STA = 470+42.96 'GA'
Y = 451097.165
X = 768849.844
PT STA = 474+74.69 'GA'
Y = 451010.983
X = 769271.995
DB = S72°07'44"E
DA = S84°47'40"E

CURVE #14
PI STA = 476+57.02 'GA'
Y = 450993.174
X = 769453.454
DELTA = 1°48'48" LT
D = 0°29'50"
T = 182.33'
L = 364.63'
R = 11521.97'
PC STA = 474+74.69 'GA'
Y = 451010.983
X = 769271.995
PT STA = 478+39.32 'GA'
Y = 450981.115
X = 769635.385
DB = S84°23'41"E
DA = S86°12'28"E

CURVE #15
PI STA = 474+36.16 'GB'
Y = 450861.259
X = 769226.494
DELTA = 3°29'45" RT
D = 1°28'50"
T = 118.11'
L = 236.14'
R = 3870.23'
PC STA = 473+18.05 'GB'
Y = 450856.950
X = 769108.466
PT STA = 475+54.19 'GB'
Y = 450858.363
X = 769344.564
DB = N87°54'34"E
DA = S88°35'41"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 249	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 08
PLOT DATE : 7/24/2024 9:14 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

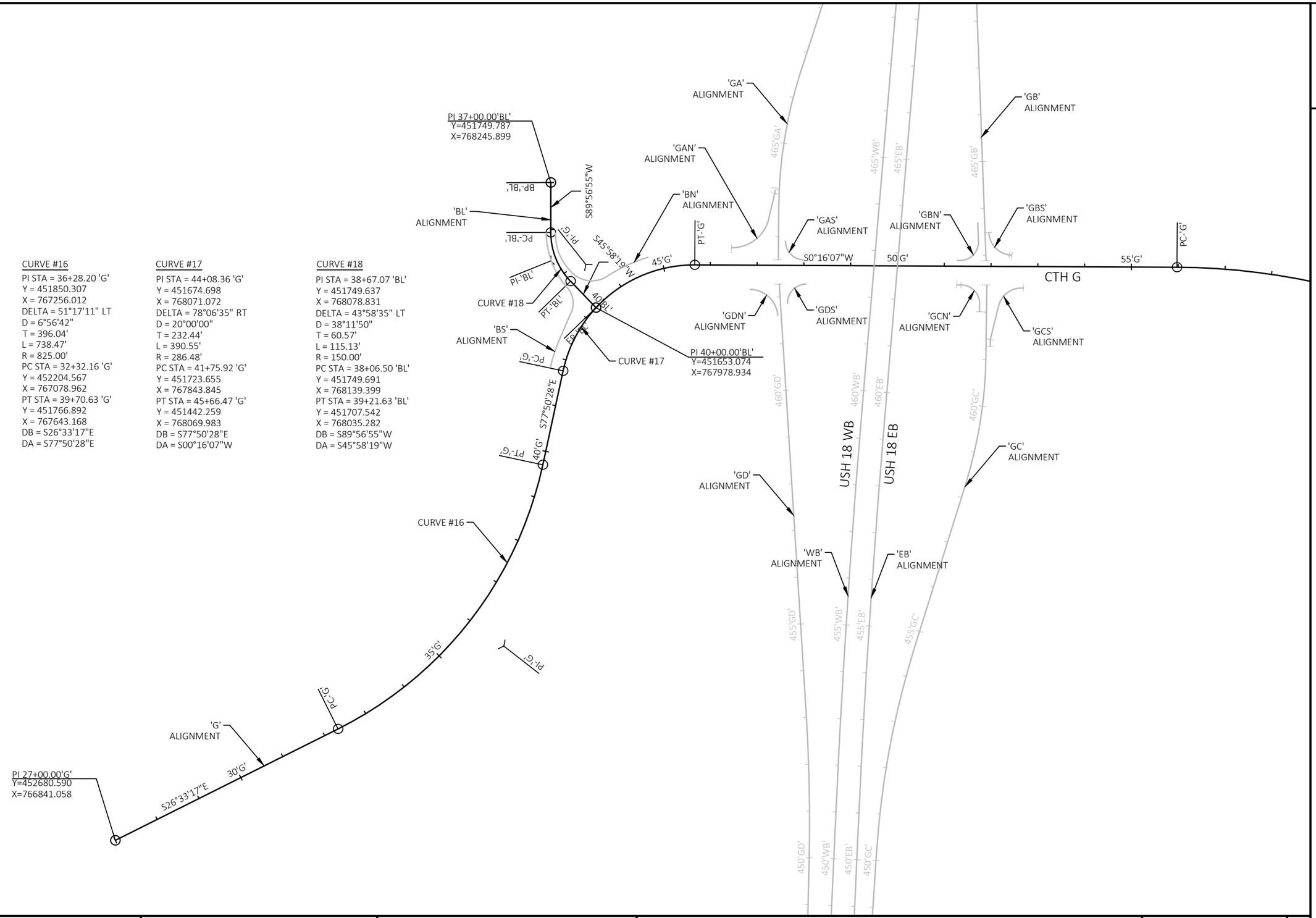
2

N

CURVE #16
PI STA = 36+28.20 'G'
Y = 451850.307
X = 767256.012
DELTA = 51°17'11" LT
D = 6°56'42"
T = 396.04'
L = 738.47'
R = 825.00'
PC STA = 32+32.16 'G'
Y = 452204.567
X = 767078.962
PT STA = 39+70.63 'G'
Y = 451766.892
X = 767643.168
DB = S26°33'17"E
DA = S77°50'28"E

CURVE #17
PI STA = 44+08.36 'G'
Y = 451674.698
X = 768071.072
DELTA = 78°06'35" RT
D = 20°00'00"
T = 232.44'
L = 390.55'
R = 286.48'
PC STA = 41+75.92 'G'
Y = 451723.655
X = 767843.845
PT STA = 45+66.47 'G'
Y = 451442.259
X = 768069.983
DB = S77°50'28"E
DA = S00°16'07"W

CURVE #18
PI STA = 38+67.07 'BL'
Y = 451749.637
X = 768078.831
DELTA = 43°58'35" LT
D = 38°11'50"
T = 60.57'
L = 115.13'
R = 150.00'
PC STA = 38+06.50 'BL'
Y = 451749.691
X = 768139.399
PT STA = 39+21.63 'BL'
Y = 451707.542
X = 768035.282
DB = S89°56'55"W
DA = S45°58'19"W



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 250	E

2

'GA' ALIGNMENT

'GB' ALIGNMENT

'GAN' ALIGNMENT

'GAS' ALIGNMENT

'GBN' ALIGNMENT

'GBS' ALIGNMENT

'GDN' ALIGNMENT

'GDS' ALIGNMENT

'GDN' ALIGNMENT

'GDS' ALIGNMENT

'GC' ALIGNMENT

'GD' ALIGNMENT

'WB' ALIGNMENT

'EB' ALIGNMENT

'G' ALIGNMENT

465'GA'
465'WB'
465'EB'
465'GB'
460'GD'
460'WB'
460'EB'
460'GC'
455'GD'
455'WB'
455'EB'
455'GC'
450'GD'
450'WB'
450'EB'
450'GC'

PT-'G'

PC-'G'

PI-'G'

PT-'G'

45'G'
50'G'
55'G'
60'G'
65'G'
70'G'
75'G'

S58°19'W

S0°16'07"W

S45°19'59"W

CTH G

USH 18 WB

USH 18 EB

CURVE #19

PI 40+00.00'BL'
Y=451653.074
X=767978.934

CURVE #19
PI STA = 61+91.58 'G'
Y = 449817.164
X = 768062.366
DELTA = 45°03'52" RT
D = 4°00'00"
T = 594.26'
L = 1126.61'
R = 1432.39'
PC STA = 55+97.32 'G'
Y = 450411.417
X = 768065.151
PT STA = 67+23.93 'G'
Y = 449399.409
X = 767639.726
DB = S00°16'07"W
DA = S45°19'59"W

PI 76+00.00'G'
Y=448783.542
X=767016.659

N

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 251	E

2

N

PI 500+58.52'WW'
Y=450857.065
X=772371.176

'WW'
ALIGNMENT

CURVE #22

PI 522+66.52'WW'
Y=451070.668
X=774549.770

PI 525+25.97'WE'
Y=450980.196
X=774584.446

ENTRANCE RAMP 'WW'

EXIT RAMP 'WE'

ENTRANCE RAMP 'W4'

EXIT RAMP 'W3'

'W4'
ALIGNMENT

'W3'
ALIGNMENT

'WB'
ALIGNMENT

'EB'
ALIGNMENT

USH 18 WB

USH 18 EB

PI 500+36.01'WE'
Y=450741.253
X=772233.842

CURVE #20

'WE'
ALIGNMENT

PI-'WE'

CURVE #21

PI-'WW'

505'WW'
510'WW'
515'WW'
520'WW'
525'WE'
505'WE'
510'WE'
515'WE'
520'WE'
505'WB'
510'WB'
515'WB'
520'WB'
525'WB'
530'WB'
505'EB'
510'EB'
515'EB'
520'EB'
525'EB'
530'EB'
520'W4'
525'W4'
530'W4'
525'W3'
530'W3'

S88°31'25"E
N74°17'16"E
N66°53'09"E
S86°03'49"E
S67°06'11"E

CURVE #20
PI STA = 502+84.75 'WE'
Y = 450724.176
X = 772481.998
DELTA = 18°57'38" RT
D = 4°23'21"
T = 217.99'
L = 431.99'
R = 1305.40'
PC STA = 500+66.77 'WE'
Y = 450739.141
X = 772264.526
PT STA = 504+98.75 'WE'
Y = 450639.363
X = 772682.809
DB = S86°03'49"E
DA = S67°06'11"E

CURVE #21
PI STA = 511+00.64 'WE'
Y = 450405.184
X = 773237.270
DELTA = 46°00'40" LT
D = 6°42'11"
T = 362.93'
L = 686.42'
R = 854.77'
PC STA = 507+37.71 'WE'
Y = 450546.389
X = 772902.940
PT STA = 514+24.13 'WE'
Y = 450547.655
X = 773571.062
DB = S67°06'11"E
DA = N66°53'09"E

CURVE #22
PI STA = 513+30.05 'WW'
Y = 450824.298
X = 773642.283
DELTA = 15°38'11" LT
D = 2°28'56"
T = 316.94'
L = 629.94'
R = 2308.25'
PC STA = 510+13.11 'WW'
Y = 450832.469
X = 773325.450
PT STA = 516+43.05 'WW'
Y = 450901.826
X = 773949.593
DB = S88°31'22"E
DA = N75°50'27"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 252	E

2

N

CURVE #23
PI STA = 527+33.56 'W3'
Y = 450251.095
X = 774602.828
DELTA = 12°02'03" LT
D = 3°57'31"
T = 152.56'
L = 304.01'
R = 1447.39'
PC STA = 525+81.00 'W3'
Y = 450403.659
X = 774602.828
PT STA = 528+85.01 'W3'
Y = 450101.884
X = 774634.637
DB = S00°00'00"E
DA = S12°02'03"E

CURVE #24
PI STA = 529+58.96 'W3'
Y = 450029.091
X = 774647.663
DELTA = 5°14'46" LT
D = 3°32'58"
T = 73.95'
L = 147.80'
R = 1614.19'
PC STA = 528+85.01 'W3'
Y = 450101.884
X = 774634.637
PT STA = 530+32.80 'W3'
Y = 449957.794
X = 774667.289
DB = S10°08'42"E
DA = S15°23'28"E

CURVE #25
PI STA = 531+10.72 'W3'
Y = 449882.494
X = 774687.332
DELTA = 5°56'51" LT
D = 3°49'11"
T = 77.92'
L = 155.70'
R = 1500.00'
PC STA = 530+32.80 'W3'
Y = 449957.794
X = 774667.289
PT STA = 531+88.50 'W3'
Y = 449809.677
X = 774715.069
DB = S14°54'19"E
DA = S20°51'09"E

CURVE #26
PI STA = 537+72.02 'W3'
Y = 449264.378
X = 774922.782
DELTA = 16°28'59" RT
D = 2°26'55"
T = 338.93'
L = 673.18'
R = 2340.00'
PC STA = 534+33.09 'W3'
Y = 449581.108
X = 774802.135
PT STA = 541+06.27 'W3'
Y = 448926.431
X = 774948.605
DB = S20°51'09"E
DA = S04°22'10"E

CURVE #27
PI STA = 523+48.42 'W4'
Y = 450508.470
X = 774575.849
DELTA = 12°40'09" RT
D = 2°30'00"
T = 254.42'
L = 506.76'
R = 2291.83'
PC STA = 520+94.00 'W4'
Y = 450762.889
X = 774575.850
PT STA = 526+00.77 'W4'
Y = 450260.244
X = 774520.050
DB = S00°00'00"W
DA = S12°40'09"W
S.E. = 3.0%

CURVE #28
PI STA = 534+83.79 'W4'
Y = 449398.723
X = 774326.385
DELTA = 48°52'50" LT
D = 6°44'26"
T = 386.30'
L = 725.16'
R = 850.00'
PC STA = 530+97.49 'W4'
Y = 449775.617
X = 774411.108
PT STA = 538+22.65 'W4'
Y = 449087.041
X = 774554.598
DB = S12°40'09"W
DA = S36°12'41"E
S.E. = 6.0%

CURVE #29
PI STA = 542+93.05 'W4'
Y = 448707.503
X = 774832.495
DELTA = 27°00'38" RT
D = 5°15'06"
T = 262.03'
L = 514.32'
R = 1091.00'
PC STA = 540+31.01 'W4'
Y = 448918.922
X = 774677.694
PT STA = 545+45.34 'W4'
Y = 448448.842
X = 774874.393
DB = S36°12'41"E
DA = S09°12'03"E
S.E. = 6.0%

PI 520+15.54'W3'
Y=450969.120
X=774602.828

PI 518+87.77'W4'
Y=450969.120
X=774575.850

PI 544+68.15'W3'
Y=448565.603
X=774976.176

PI 546+98.15'W4'
Y=448297.998
X=774898.827

'W3' ALIGNMENT
'WB' ALIGNMENT
'EB' ALIGNMENT
'W4' ALIGNMENT
'WW' ALIGNMENT
'WE' ALIGNMENT

USH 18 WB
USH 18 EB
EXIT RAMP 'W3'
ENTRANCE RAMP 'W4'
EXIT RAMP 'WE'
ENTRANCE RAMP 'WW'

CURVE #23
CURVE #24
CURVE #25
CURVE #26
CURVE #27
CURVE #28
CURVE #29

S0°00'00"E
S20°51'09"E
S4°22'10"E
S9°12'03"E
S0°00'00"W
S36°12'41"E

520'W4'
525'W3'
525'W4'
530'W3'
530'W4'
535'W3'
535'W4'
540'W3'
540'W4'
545'W4'

PC-'W3'
PI-'W3'
PT-'W3'
PC-'W4'
PI-'W4'
PT-'W4'

525'WB'
525'EB'
530'WB'
530'EB'
535'WB'
535'EB'
540'WB'
540'EB'
545'WB'
545'EB'
520'WB'
520'EB'
515'WW'
520'WE'
525'WE'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 253	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 12
PLOT DATE : 7/24/2024 9:15 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

N

CURVE #30
PI STA = 570+45.47 'SC'
Y = 446599.462
X = 776377.704
DELTA = 3°59'07" LT
D = 1°21'04"
T = 147.53'
L = 294.94'
R = 4240.28'
PC STA = 568+97.95 'SC'
Y = 446651.012
X = 776239.476
PT STA = 571+92.88 'SC'
Y = 446557.643
X = 776519.180
DB = S69°32'52"E
DA = S73°31'59"E

CURVE #31
PI STA = 581+42.79 'SC'
Y = 446288.380
X = 777430.123
DELTA = 14°07'15" RT
D = 5°54'04"
T = 120.26'
L = 239.29'
R = 970.94'
PC STA = 580+22.53 'SC'
Y = 446322.468
X = 777314.800
PT STA = 582+61.83 'SC'
Y = 446227.186
X = 777533.646
DB = S73°31'59"E
DA = S59°24'43"E

CURVE #32
PI STA = 576+27.22 'SD'
Y = 446636.084
X = 776979.067
DELTA = 16°19'45" LT
D = 2°15'27"
T = 364.14'
L = 723.35'
R = 2538.12'
PC STA = 572+63.08 'SD'
Y = 446680.564
X = 776617.649
PT STA = 579+86.43 'SD'
Y = 446695.012
X = 777338.412
DB = S82°59'02"E
DA = N80°41'14"E

CURVE #33
PI STA = 584+36.14 'SD'
Y = 446767.787
X = 777782.198
DELTA = 26°50'45" RT
D = 11°05'20"
T = 123.31'
L = 242.10'
R = 516.70'
PC STA = 583+12.83 'SD'
Y = 446747.832
X = 777660.511
PT STA = 585+54.93 'SD'
Y = 446730.639
X = 777899.782
DB = N80°41'14"E
DA = S72°28'02"E

PI 571+80.17'SD'
Y=446690.690
X=776535.365

S82°59'02"E

PC-'SD'

CURVE #32

'SD'
ALIGNMENT

PT-'SD'

PI-'SD'

PC-'SD'

PI-'SD'

PT-'SD'

PI 586+00.40'SD'
Y=446715.906
X=777942.803

PI 586+76.67'SD'
Y=446683.689
X=778011.933

565'WB'
565'EB'
570'WB'
570'EB'
575'WB'
575'EB'
580'WB'
580'EB'
585'WB'
585'EB'
590'WB'
590'EB'

575'SD'
580'SD'
585'SD'

N80°41'14"E
S71°05'43"E
S65°00'46"E

ENTRANCE RAMP 'SD'

CURVE #33

CURVE #30

PC-'SC'
PI-'SC'
PT-'SC'

570'SC'

S73°31'59"E

575'SC'

EXIT RAMP 'SC'

580'SC'

'SC'
ALIGNMENT

PC-'SC'
PI-'SC'
PT-'SC'

S59°24'43"E

CURVE #31

PI 583+96.80'SC'
Y=446158.503
X=777649.838

'WB'
ALIGNMENT

USH 18 WB

USH 18 EB

'EB'
ALIGNMENT

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 254	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - 13
PLOT DATE : 7/24/2024 9:15 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2

N

PI 10+00.00'MRST'
Y=450938.753
X=771910.518

BP: 10+00.00

11'MRST'

12'MRST'

13'MRST'

S43°48'18"E

EP: 13+50.00

PI 13+50.00'MRST'
Y=450686.158
X=772152.790

'MRST'
ALIGNMENT

'WW'
ALIGNMENT

'WB' ALIGNMENT

'EB' ALIGNMENT

'WE'
ALIGNMENT

USH 18 WB

USH 18 EB

ENTRANCE RAMP 'WW'

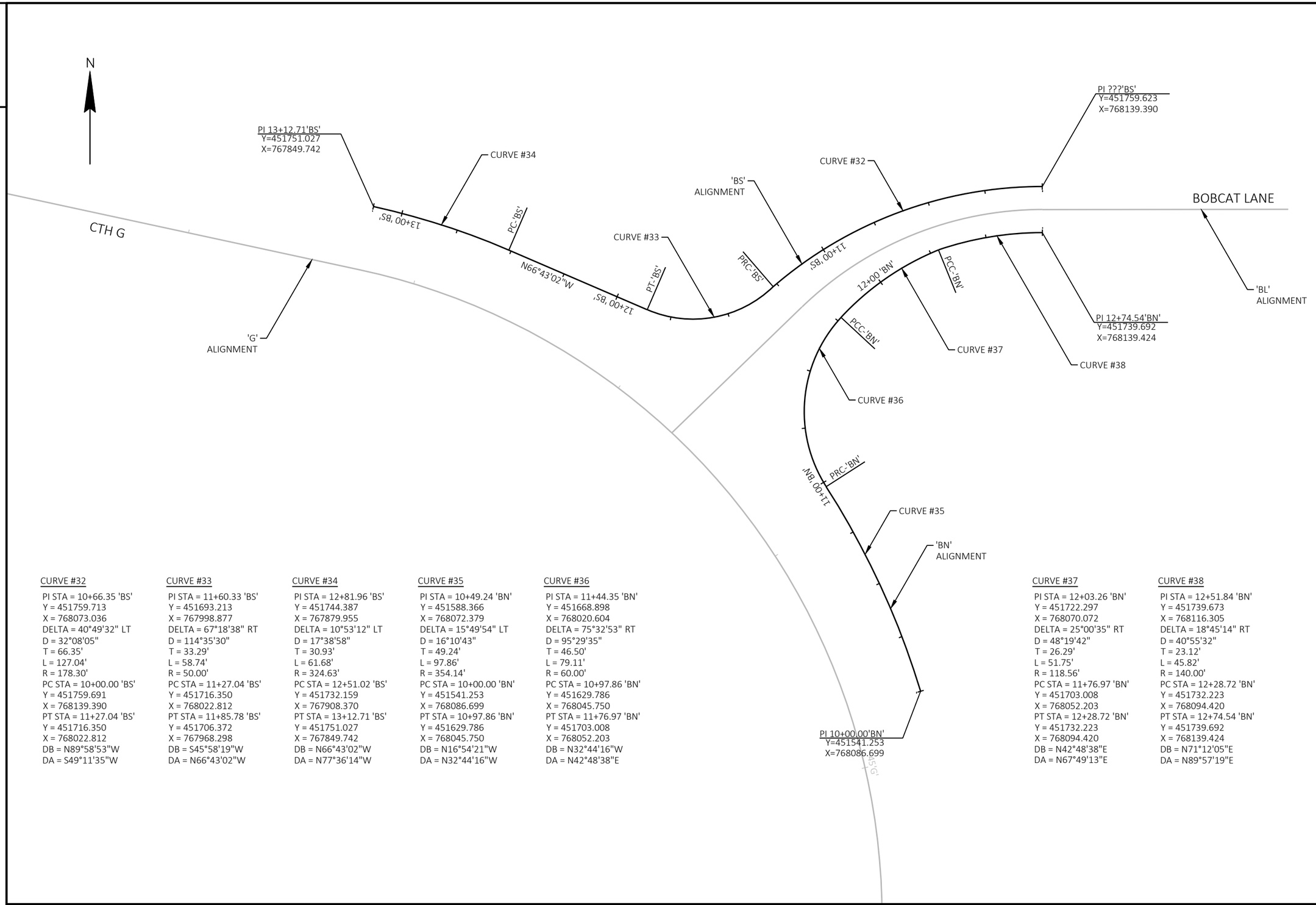
EXIT RAMP 'WE'

490'WB'
495'WB'
500'WB'
505'WW'
510'WW'
515'WW'
510'WB'
515'WB'
490'EB'
495'EB'
500'EB'
505'EB'
510'EB'
515'EB'
505'WE'
510'WE'
515'WE'
520'WB'
520'EB'

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 255	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027201-AD.DWG
LAYOUT NAME - MRST
PLOT DATE : 7/24/2024 9:15 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 44

2



CURVE #32
PI STA = 10+66.35 'BS'
Y = 451759.713
X = 768073.036
DELTA = 40°49'32" LT
D = 32°08'05"
T = 66.35'
L = 127.04'
R = 178.30'
PC STA = 10+00.00 'BS'
Y = 451759.691
X = 768139.390
PT STA = 11+27.04 'BS'
Y = 451716.350
X = 768022.812
DB = N89°58'53"W
DA = S49°11'35"W

CURVE #33
PI STA = 11+60.33 'BS'
Y = 451693.213
X = 767998.877
DELTA = 67°18'38" RT
D = 114°35'30"
T = 33.29'
L = 58.74'
R = 50.00'
PC STA = 11+27.04 'BS'
Y = 451716.350
X = 768022.812
PT STA = 11+85.78 'BS'
Y = 451706.372
X = 767968.298
DB = S45°58'19"W
DA = N66°43'02"W

CURVE #34
PI STA = 12+81.96 'BS'
Y = 451744.387
X = 767879.955
DELTA = 10°53'12" LT
D = 17°38'58"
T = 30.93'
L = 61.68'
R = 324.63'
PC STA = 12+51.02 'BS'
Y = 451732.159
X = 767908.370
PT STA = 13+12.71 'BS'
Y = 451751.027
X = 767849.742
DB = N66°43'02"W
DA = N77°36'14"W

CURVE #35
PI STA = 10+49.24 'BN'
Y = 451588.366
X = 768072.379
DELTA = 15°49'54" LT
D = 16°10'43"
T = 49.24'
L = 97.86'
R = 354.14'
PC STA = 10+00.00 'BN'
Y = 451541.253
X = 768086.699
PT STA = 10+97.86 'BN'
Y = 451629.786
X = 768045.750
DB = N16°54'21"W
DA = N32°44'16"W

CURVE #36
PI STA = 11+44.35 'BN'
Y = 451668.898
X = 768020.604
DELTA = 75°32'53" RT
D = 95°29'35"
T = 46.50'
L = 79.11'
R = 60.00'
PC STA = 10+97.86 'BN'
Y = 451629.786
X = 768045.750
PT STA = 11+76.97 'BN'
Y = 451703.008
X = 768052.203
DB = N32°44'16"W
DA = N42°48'38"E

CURVE #37
PI STA = 12+03.26 'BN'
Y = 451722.297
X = 768070.072
DELTA = 25°00'35" RT
D = 48°19'42"
T = 26.29'
L = 51.75'
R = 118.56'
PC STA = 11+76.97 'BN'
Y = 451703.008
X = 768052.203
PT STA = 12+28.72 'BN'
Y = 451732.223
X = 768094.420
DB = N42°48'38"E
DA = N67°49'13"E

CURVE #38
PI STA = 12+51.84 'BN'
Y = 451739.673
X = 768116.305
DELTA = 18°45'14" RT
D = 40°55'32"
T = 23.12'
L = 45.82'
R = 140.00'
PC STA = 12+28.72 'BN'
Y = 451732.223
X = 768094.420
PT STA = 12+74.54 'BN'
Y = 451739.692
X = 768139.424
DB = N71°12'05"E
DA = N89°57'19"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 256	E

2

N

CURVE #41
PI STA = 10+56.09 'GDN'
Y = 451268.635
X = 768017.169
DELTA = 86°08'29" RT
D = 95°29'35"
T = 56.09'
L = 90.21'
R = 60.00'
PC STA = 10+00.00 'GDN'
Y = 451324.724
X = 768017.432
PT STA = 10+90.21 'GDN'
Y = 451265.122
X = 767961.189
DB = S00°16'07"W
DA = S86°24'36"W

PI 10+00.00'GDN'
Y=451324.724
X=768017.432

CURVE #41

'GDN'
ALIGNMENT

PI 10+90.21'GDN'
Y=451265.122
X=767961.189

'GD'
ALIGNMENT

460'GD'

PI 10+00.00'GDS'
Y=451243.656
X=767986.359

CURVE #42

'GDS'
ALIGNMENT

PI 10+65.51'GDS'
Y=451203.547
X=768028.864

CURVE #42
PI STA = 10+42.74 'GDS'
Y = 451246.292
X = 768029.023
DELTA = 93°44'52" RT
D = 143°06'35"
T = 42.74'
L = 65.51'
R = 40.04'
PC STA = 10+00.00 'GDS'
Y = 451243.656
X = 767986.359
PT STA = 10+65.51 'GDS'
Y = 451203.547
X = 768028.864
DB = N86°27'56"E
DA = S00°12'47"W

'WB'
ALIGNMENT

460'WB'

USH 18 WB

CTH G

CURVE #39
PI STA = 11+21.47 'GAN'
Y = 451299.304
X = 768106.086
DELTA = 76°56'59" RT
D = 70°44'08"
T = 64.37'
L = 108.79'
R = 81.00'
PC STA = 10+57.10 'GAN'
Y = 451284.253
X = 768168.674
PT STA = 11+65.89 'GAN'
Y = 451363.675
X = 768106.616
DB = N76°28'41"W
DA = N00°28'18"E

PI 11+65.89'GAN'
Y=451363.675
X=768106.616

CURVE #39

'GAN'
ALIGNMENT

11+00 'GAN'

PC-'GAN'

N76°28'41"W

10+00 'GAN'

PI 10+00.00'GAN'
Y=451270.902
X=768224.192

PI 9+93.32'GAN'
Y=451270.613
X=768230.862

'GA'
ALIGNMENT

PI-'GAN'

N87°31'30"W

465'GA'

PI 10+63.01'GAS'
Y=451248.293
X=768121.251

CURVE #40

'GAS'
ALIGNMENT

PI 10+00.00'GAS'
Y=451208.482
X=768080.887

CURVE #40
PI STA = 10+40.18 'GAS'
Y = 451248.659
X = 768081.076
DELTA = 90°15'12" RT
D = 143°14'22"
T = 40.18'
L = 63.01'
R = 40.00'
PC STA = 10+00.00 'GAS'
Y = 451208.482
X = 768080.887
PT STA = 10+63.01 'GAS'
Y = 451248.293
X = 768121.251
DB = N00°16'07"E
DA = S89°28'41"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 257	E

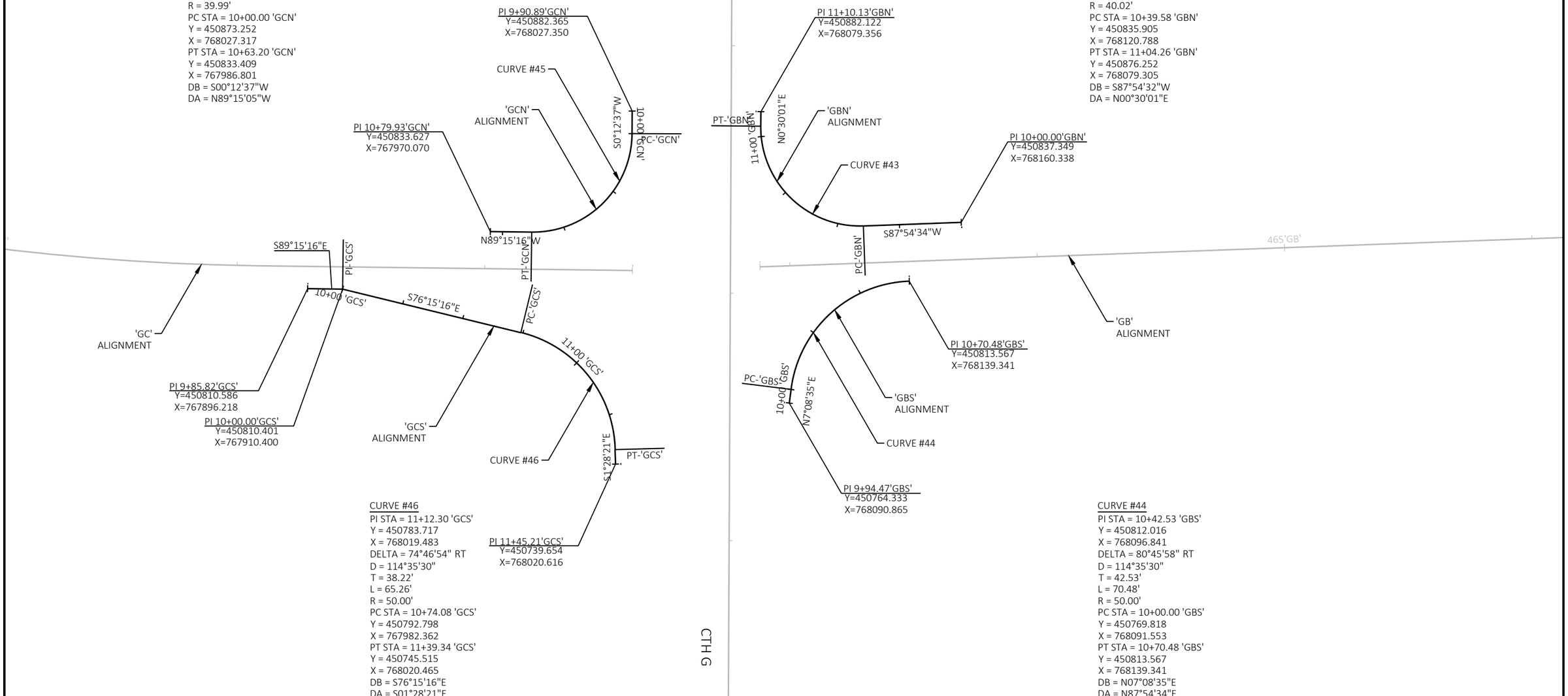
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\027202-AD_CURB RETURNS.DWG
LAYOUT NAME - 02
PLOT DATE : 7/24/2024 9:58 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2

N

CURVE #45
PI STA = 10+40.37 'GCN'
Y = 450832.881
X = 768027.169
DELTA = 90°32'18" RT
D = 143°15'45"
T = 40.37'
L = 63.20'
R = 39.99'
PC STA = 10+00.00 'GCN'
Y = 450873.252
X = 768027.317
PT STA = 10+63.20 'GCN'
Y = 450833.409
X = 767986.801
DB = S00°12'37"W
DA = N89°15'05"W

CURVE #43
PI STA = 10+81.45 'GBN'
Y = 450834.377
X = 768078.939
DELTA = 92°35'30" RT
D = 143°09'08"
T = 41.88'
L = 64.68'
R = 40.02'
PC STA = 10+39.58 'GBN'
Y = 450835.905
X = 768120.788
PT STA = 11+04.26 'GBN'
Y = 450876.252
X = 768079.305
DB = S87°54'32"W
DA = N00°30'01"E



CTH G

CURVE #46
PI STA = 11+12.30 'GCS'
Y = 450783.717
X = 768019.483
DELTA = 74°46'54" RT
D = 114°35'30"
T = 38.22'
L = 65.26'
R = 50.00'
PC STA = 10+74.08 'GCS'
Y = 450792.798
X = 767982.362
PT STA = 11+39.34 'GCS'
Y = 450745.515
X = 768020.465
DB = S76°15'16"E
DA = S01°28'21"E

CURVE #44
PI STA = 10+42.53 'GBS'
Y = 450812.016
X = 768096.841
DELTA = 80°45'58" RT
D = 114°35'30"
T = 42.53'
L = 70.48'
R = 50.00'
PC STA = 10+00.00 'GBS'
Y = 450769.818
X = 768091.553
PT STA = 10+70.48 'GBS'
Y = 450813.567
X = 768139.341
DB = N07°08'35"E
DA = N87°54'34"E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	ALIGNMENT DATA	SHEET 258	E

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	1204-08-73 Qty	1204-08-74 Qty
0002	201.0205	Grubbing	STA	19.000	13.000	6.000
0004	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000	
0006	203.0220	Removing Structure (structure) 001. B-13-403	EACH	1.000	1.000	
0008	203.0220	Removing Structure (structure) 002. C-13-111	EACH	1.000	1.000	
0010	203.0220	Removing Structure (structure) 004. B-13-0573	EACH	1.000		1.000
0012	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 001. B-13-52	EACH	1.000	1.000	
0014	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 002. B-13-0383	EACH	1.000	1.000	
0016	203.0330	Debris Containment (structure) 001. B-13-403	EACH	1.000	1.000	
0018	203.0330	Debris Containment (structure) 002. B-13-0573	EACH	1.000		1.000
0020	204.0100	Removing Concrete Pavement	SY	7,179.000	5,911.000	1,268.000
0022	204.0105	Removing Concrete Pavement Butt Joints	SY	151.000	151.000	
0024	204.0120	Removing Asphaltic Surface Milling	SY	6,482.000	6,482.000	
0026	204.0126.S	Removing Asphaltic Longitudinal Notched Wedge Joint Milling	LF	9,564.000	8,612.000	952.000
0028	204.0165	Removing Guardrail	LF	2,559.000	2,175.000	384.000
0030	204.0170	Removing Fence	LF	278.000	278.000	
0032	204.0180	Removing Delineators and Markers	EACH	5.000	5.000	
0034	204.0190	Removing Surface Drains	EACH	3.000	3.000	
0036	204.0195	Removing Concrete Bases	EACH	2.000	2.000	
0038	204.0220	Removing Inlets	EACH	2.000	2.000	
0040	204.0245	Removing Storm Sewer (size) 001. 12-Inch	LF	96.000	96.000	
0042	204.9060.S	Removing (item description) 001. Apron Endwalls	EACH	3.000	3.000	
0044	204.9090.S	Removing (item description) 002. Removing Pipe Underdrain 6-Inch	LF	25.000		25.000
0046	205.0100	Excavation Common	CY	46,617.000	26,644.000	19,973.000
0048	205.0200	Excavation Rock	CY	5,000.000	2,000.000	3,000.000
0050	205.0400	Excavation Marsh	CY	135.000	135.000	
0052	206.1001	Excavation for Structures Bridges (structure) 001. B-13-52	EACH	1.000	1.000	
0054	206.1001	Excavation for Structures Bridges (structure) 002. B-13-0383	EACH	1.000	1.000	
0056	206.1001	Excavation for Structures Bridges (structure) 003. B-13-403	EACH	1.000	1.000	
0058	206.1001	Excavation for Structures Bridges (structure) 004. B-13-0573	EACH	1.000		1.000
0060	206.2001	Excavation for Structures Culverts (structure) 001. C-13-111	EACH	1.000	1.000	
0062	206.5001	Cofferdams (structure) 001. B-13-52	EACH	1.000	1.000	
0064	206.5001	Cofferdams (structure) 002. B-13-0383	EACH	1.000	1.000	
0066	206.5001	Cofferdams (structure) 003. C-13-111	EACH	1.000	1.000	
0068	208.0100	Borrow	CY	2,671.000	2,037.000	634.000
0070	210.1500	Backfill Structure Type A	TON	3,322.000	2,822.000	500.000
0072	213.0100	Finishing Roadway (project) 001. 1204-08-73	EACH	1.000	1.000	
0074	213.0100	Finishing Roadway (project) 002. 1204-08-74	EACH	1.000		1.000
0076	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,871.000	1,366.000	505.000
0078	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	34,962.000	22,532.000	12,430.000
0080	305.0130	Base Aggregate Dense 3-Inch	TON	4,747.000	4,747.000	
0082	312.0110	Select Crushed Material	TON	19,742.000	15,231.000	4,511.000
0084	320.0155	Concrete Base 9-Inch	SY	9,559.000	6,550.000	3,009.000
0086	415.0090	Concrete Pavement 9-Inch	SY	7,663.000	6,000.000	1,663.000
0088	415.0410	Concrete Pavement Approach Slab	SY	509.000	403.000	106.000
0090	415.6000.S	Rout and Seal	LF	3,043.000	381.000	2,662.000
0092	416.0610	Drilled Tie Bars	EACH	4,036.000	2,095.000	1,941.000
0094	416.0620	Drilled Dowel Bars	EACH	121.000	112.000	9.000
0096	455.0605	Tack Coat	GAL	3,791.000	2,749.000	1,042.000
0098	460.0115.S	HMA Pavement Test Strip Volumetrics	EACH	1.000	1.000	

					1204-08-73	1204-08-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0100	460.0120.S	HMA Pavement Test Strip Density	EACH	1.000	1.000	
0102	460.2000	Incentive Density HMA Pavement	DOL	5,950.000	5,950.000	
0104	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	1,744.000	1,744.000	
0106	460.5224	HMA Pavement 4 LT 58-28 S	TON	322.000		322.000
0108	460.6223	HMA Pavement 3 MT 58-28 S	TON	1,377.000	1,377.000	
0110	460.6224	HMA Pavement 4 MT 58-28 S	TON	1,074.000	1,074.000	
0112	460.7423	HMA Pavement 3 HT 58-28 H	TON	2,861.000	1,476.000	1,385.000
0114	460.7424	HMA Pavement 4 HT 58-28 H	TON	856.000	226.000	630.000
0116	460.8624	HMA Pavement 4 SMA 58-28 V	TON	2,793.000	2,259.000	534.000
0118	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000	
0120	465.0315	Asphaltic Flumes	SY	14.000	14.000	
0122	465.0510	Asphaltic Rumble Strips, Shoulder Divided Roadway	LF	14,478.000	8,024.000	6,454.000
0124	502.0100	Concrete Masonry Bridges	CY	1,024.000	716.000	308.000
0126	502.1100	Concrete Masonry Seal	CY	100.000	100.000	
0128	502.3101	Expansion Device	LF	73.000	36.000	37.000
0130	502.3200	Protective Surface Treatment	SY	1,870.000	1,450.000	420.000
0132	502.3205	Pigmented Surface Sealer Reseal	SY	259.000	139.000	120.000
0134	502.3210	Pigmented Surface Sealer	SY	428.000	278.000	150.000
0136	502.3215	Protective Surface Treatment Reseal	SY	1,402.000	720.000	682.000
0138	502.4204	Adhesive Anchors No. 4 Bar	EACH	42.000	12.000	30.000
0140	502.4205	Adhesive Anchors No. 5 Bar	EACH	92.000	92.000	
0142	502.4206	Adhesive Anchors No. 6 Bar	EACH	155.000	98.000	57.000
0144	502.4208	Adhesive Anchors No. 8 Bar	EACH	16.000		16.000
0146	502.4209	Adhesive Anchors No. 9 Bar	EACH	9.000		9.000
0148	503.0155	Prestressed Girder Type I 54W-Inch	LF	1,321.000	799.000	522.000
0150	504.0100	Concrete Masonry Culverts	CY	300.000	300.000	
0152	505.0400	Bar Steel Reinforcement HS Structures	LB	37,260.000	32,900.000	4,360.000
0154	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	189,500.000	136,690.000	52,810.000
0156	506.0105	Structural Steel Carbon	LB	9,140.000	9,140.000	
0158	506.0605	Structural Steel HS	LB	82,490.000	82,490.000	
0160	506.2605	Bearing Pads Elastomeric Non-Laminated	EACH	24.000	20.000	4.000
0162	506.2610	Bearing Pads Elastomeric Laminated	EACH	4.000		4.000
0164	506.3015	Welded Stud Shear Connectors 7/8x6-Inch	EACH	2,844.000	2,844.000	
0166	506.4000	Steel Diaphragms (structure) 001. B-13-403	EACH	16.000	16.000	
0168	506.4000	Steel Diaphragms (structure) 002. B-13-0573	EACH	8.000		8.000
0170	506.5000	Bearing Assemblies Fixed (structure) 001. B-13-0052	EACH	2.000	2.000	
0172	506.5000	Bearing Assemblies Fixed (structure) 002. B-13-0383	EACH	4.000	4.000	
0174	506.6000	Bearing Assemblies Expansion (structure) 001. B-13-0052	EACH	6.000	6.000	
0176	509.0301	Preparation Decks Type 1	SY	10.000		10.000
0178	509.0302	Preparation Decks Type 2	SY	10.000		10.000
0180	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	138.000		138.000
0182	509.1500	Concrete Surface Repair	SF	12.000	12.000	
0184	509.2100.S	Concrete Masonry Deck Repair	CY	1.000		1.000
0186	509.5100.S	Polymer Overlay	SY	1,810.000	1,810.000	
0188	511.1200	Temporary Shoring (structure) 001. B13-0052	SF	234.000	234.000	
0190	511.1200	Temporary Shoring (structure) 002. B-13-0383	SF	510.000	510.000	
0192	511.1200	Temporary Shoring (structure) 003. B-13-403	SF	273.000	273.000	
0194	511.1200	Temporary Shoring (structure) 004. C-13-111	SF	3,370.000	3,370.000	
0196	511.1200	Temporary Shoring (structure) 005. B-13-0573	SF	680.000		680.000

					1204-08-73	1204-08-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0198	513.2001	Railing Pipe	LF	35.000	35.000	
0200	516.0500	Rubberized Membrane Waterproofing	SY	100.000	87.000	13.000
0202	516.0610.S	Sheet Membrane Waterproofing for Buried Structures 001. C-13-111	SY	90.000	90.000	
0204	517.0601	Painting Epoxy System (structure) 001. B-13-0052	EACH	1.000	1.000	
0206	517.0601	Painting Epoxy System (structure) 002. B-13-0383	EACH	1.000	1.000	
0208	517.0901.S	Preparation and Coating of Top Flanges (structure) 001. B-13-0052	EACH	1.000	1.000	
0210	517.0901.S	Preparation and Coating of Top Flanges (structure) 002. B-13-0383	EACH	1.000	1.000	
0212	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	2.000	2.000	
0214	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000	
0216	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	84.000	84.000	
0218	522.0148	Culvert Pipe Reinforced Concrete Class III 48-Inch	LF	4.000	4.000	
0220	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	4.000	4.000	
0222	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	1.000	1.000	
0224	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	30.000	30.000	
0226	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	2,780.000	2,780.000	
0228	531.1160	Steel Reinforcement HS Coated Ancillary Structures Type NS	LB	2,200.000	2,200.000	
0230	531.2024	Drilling Shaft 24-Inch	LF	30.000	30.000	
0232	531.2036	Drilling Shaft 36-Inch	LF	170.000	106.000	64.000
0234	531.6010	Foundation Two-Shaft Type FC-I (structure) 001. S-13-613	EACH	1.000	1.000	
0236	531.6010	Foundation Two-Shaft Type FC-I (structure) 002. S-13-614	EACH	1.000	1.000	
0238	531.6010	Foundation Two-Shaft Type FC-I (structure) 003. S-13-0616	EACH	1.000		1.000
0240	531.6020	Foundation Two-Shaft Type FC-II (structure) 001. S-13-0617	EACH	1.000		1.000
0242	531.8990	Anchor Assemblies Poles on Structures	EACH	2.000	2.000	
0244	532.6010	Truss Cantilever 4-Chord Type I (structure) 001. S-13-613	EACH	1.000	1.000	
0246	532.6010	Truss Cantilever 4-Chord Type I (structure) 002. S-13-614	EACH	1.000	1.000	
0248	532.6010	Truss Cantilever 4-Chord Type I (structure) 003. S-13-615	EACH	1.000	1.000	
0250	532.6010	Truss Cantilever 4-Chord Type I (structure) 004. S-13-0616	EACH	1.000		1.000
0252	532.6020	Truss Cantilever 4-Chord Type II (structure) 001. S-13-612	EACH	1.000	1.000	
0254	532.6020	Truss Cantilever 4-Chord Type II (structure) 002. S-13-0617	EACH	1.000		1.000
0256	550.0020	Pre-Boring Rock or Consolidated Materials	LF	30.000		30.000
0258	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	2,045.000	1,545.000	500.000
0260	550.1140	Piling Steel HP 14-Inch X 73 Lb	LF	1,980.000	1,980.000	
0262	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	244.000	244.000	
0264	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	379.000	379.000	
0266	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	335.000	335.000	
0268	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	169.000	169.000	
0270	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	82.000	82.000	
0272	602.0405	Concrete Sidewalk 4-Inch	SF	2,523.000	2,523.000	
0274	602.3010	Concrete Surface Drains	CY	9.000	8.000	1.000
0276	603.8000	Concrete Barrier Temporary Precast Delivered	LF	10,187.000	7,312.000	2,875.000
0278	603.8125	Concrete Barrier Temporary Precast Installed	LF	19,174.000	15,749.000	3,425.000
0280	604.0500	Slope Paving Crushed Aggregate	SY	495.000	372.000	123.000
0282	604.9010.S	Slope Paving Repair Crushed Aggregate	CY	5.000		5.000
0284	604.9015.S	Reseal Crushed Aggregate Slope Paving	SY	790.000	516.000	274.000
0286	606.0200	Riprap Medium	CY	338.000	124.000	214.000
0288	606.0300	Riprap Heavy	CY	800.000	800.000	
0290	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	31.000	31.000	
0292	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	62.000	62.000	
0294	611.0630	Inlet Covers Type HM-GJ	EACH	1.000	1.000	

Line	Item	Item Description	Unit	Total	1204-08-73 Qty	1204-08-74 Qty
0296	611.0654	Inlet Covers Type V	EACH	3.000	2.000	1.000
0298	611.0666	Inlet Covers Type Z	EACH	1.000	1.000	
0300	611.3003	Inlets 3-FT Diameter	EACH	1.000	1.000	
0302	611.3220	Inlets 2x2-FT	EACH	2.000	2.000	
0304	611.3230	Inlets 2x3-FT	EACH	1.000	1.000	
0306	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	175.000		175.000
0308	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	306.000	206.000	100.000
0310	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	7.000		7.000
0312	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000	1.000	1.000
0314	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	8.000	6.000	2.000
0316	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	1.000	1.000
0318	614.0230	Steel Thrie Beam	LF	146.000	94.000	52.000
0320	614.0905	Crash Cushions Temporary	EACH	9.000	5.000	4.000
0322	614.2300	MGS Guardrail 3	LF	4,469.000	3,906.000	563.000
0324	614.2340	MGS Guardrail 3 L	LF	225.000	225.000	
0326	614.2350	MGS Guardrail Short Radius	LF	111.000	111.000	
0328	614.2500	MGS Thrie Beam Transition	LF	355.000	276.000	79.000
0330	614.2610	MGS Guardrail Terminal EAT	EACH	6.000	3.000	3.000
0332	614.2620	MGS Guardrail Terminal Type 2	EACH	6.000	4.000	2.000
0334	614.2630	MGS Guardrail Short Radius Terminal	EACH	2.000	2.000	
0336	616.0100	Fence Woven Wire (height) 001. 4-FT	LF	199.000	199.000	
0338	618.0100	Maintenance and Repair of Haul Roads (project) 001. 1204-08-73	EACH	1.000	1.000	
0340	618.0100	Maintenance and Repair of Haul Roads (project) 002. 1204-08-74	EACH	1.000		1.000
0342	619.1000	Mobilization	EACH	1.000	0.700	0.300
0344	620.0300	Concrete Median Sloped Nose	SF	74.000	74.000	
0346	624.0100	Water	MGAL	638.000	442.000	196.000
0348	625.0500	Salvaged Topsoil	SY	70,241.000	34,652.000	35,589.000
0350	628.1504	Silt Fence	LF	15,046.000	9,479.000	5,567.000
0352	628.1520	Silt Fence Maintenance	LF	15,046.000	9,479.000	5,567.000
0354	628.1905	Mobilizations Erosion Control	EACH	24.000	18.000	6.000
0356	628.1910	Mobilizations Emergency Erosion Control	EACH	36.000	27.000	9.000
0358	628.2002	Erosion Mat Class I Type A	SY	55,762.000	20,173.000	35,589.000
0360	628.2008	Erosion Mat Urban Class I Type B	SY	14,479.000	14,479.000	
0362	628.6005	Turbidity Barriers	SY	622.000	622.000	
0364	628.7005	Inlet Protection Type A	EACH	7.000	2.000	5.000
0366	628.7015	Inlet Protection Type C	EACH	1.000		1.000
0368	628.7020	Inlet Protection Type D	EACH	6.000	5.000	1.000
0370	628.7504	Temporary Ditch Checks	LF	849.000	381.000	468.000
0372	628.7555	Culvert Pipe Checks	EACH	56.000	56.000	
0374	629.0205	Fertilizer Type A	CWT	49.000	25.000	24.000
0376	630.0130	Seeding Mixture No. 30	LB	1,220.000	599.000	621.000
0378	630.0160	Seeding Mixture No. 60	LB	52.000	47.000	5.000
0380	630.0200	Seeding Temporary	LB	2,446.000	1,276.000	1,170.000
0382	630.0400	Seeding Nurse Crop	LB	137.000	76.000	61.000
0384	630.0500	Seed Water	MGAL	1,973.000	1,061.000	912.000
0386	632.0201	Shrubs (species, root, size) 001. Prunus Americana Cont. 8X6-Inch, 24-Inch	EACH	81.000	47.000	34.000
0388	632.0201	Shrubs (species, root, size) 002. Viburnum Trilobum Cont. 9X6-Inch, 24-Inch	EACH	158.000	88.000	70.000
0390	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	18.000	9.000	9.000
0392	633.0100	Delineator Posts Steel	EACH	21.000	16.000	5.000

					1204-08-73	1204-08-74
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0394	633.0500	Delineator Reflectors	EACH	21.000	16.000	5.000
0396	633.5200	Markers Culvert End	EACH	5.000	5.000	
0398	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	6.000	6.000	
0400	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	12.000	12.000	
0402	635.0200	Sign Supports Structural Steel HS	LB	2,438.000	2,438.000	
0404	637.1220	Signs Type I Reflective SH	SF	906.000	595.000	311.000
0406	637.1230	Signs Type I Reflective F	SF	311.000	220.000	91.000
0408	637.2210	Signs Type II Reflective H	SF	105.000	105.000	
0410	637.2215	Signs Type II Reflective H Folding	SF	25.000	25.000	
0412	637.2230	Signs Type II Reflective F	SF	36.000	36.000	
0414	638.2101	Moving Signs Type I	EACH	1.000	1.000	
0416	638.2102	Moving Signs Type II	EACH	56.000	44.000	12.000
0418	638.2601	Removing Signs Type I	EACH	7.000	5.000	2.000
0420	638.2602	Removing Signs Type II	EACH	4.000	4.000	
0422	638.3000	Removing Small Sign Supports	EACH	5.000	5.000	
0424	638.3100	Removing Structural Steel Sign Supports	EACH	10.000	8.000	2.000
0426	638.4000	Moving Small Sign Supports	EACH	46.000	34.000	12.000
0428	643.0300	Traffic Control Drums	DAY	124,944.000	66,647.000	58,297.000
0430	643.0410	Traffic Control Barricades Type II	DAY	1,750.000		1,750.000
0432	643.0420	Traffic Control Barricades Type III	DAY	12,963.000	9,687.000	3,276.000
0434	643.0705	Traffic Control Warning Lights Type A	DAY	19,804.000	13,698.000	6,106.000
0436	643.0715	Traffic Control Warning Lights Type C	DAY	21,324.000	6,885.000	14,439.000
0438	643.0800	Traffic Control Arrow Boards	DAY	572.000	280.000	292.000
0440	643.0900	Traffic Control Signs	DAY	25,179.000	13,825.000	11,354.000
0442	643.0910	Traffic Control Covering Signs Type I	EACH	10.000	6.000	4.000
0444	643.0920	Traffic Control Covering Signs Type II	EACH	10.000	9.000	1.000
0446	643.1050	Traffic Control Signs PCMS	DAY	1,204.000	168.000	1,036.000
0448	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	62.000	12.000	50.000
0450	643.1205.S	Basic Traffic Queue Warning System	DAY	476.000	238.000	238.000
0452	643.3165	Temporary Marking Line Paint 6-Inch	LF	2,082.000		2,082.000
0454	643.3170	Temporary Marking Line Epoxy 6-Inch	LF	20,506.000	9,656.000	10,850.000
0456	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	36,609.000	21,581.000	15,028.000
0458	643.3270	Temporary Marking Line Epoxy 10-Inch	LF	2,220.000	1,433.000	787.000
0460	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	1,244.000	596.000	648.000
0462	643.3550	Temporary Marking Arrow Removable Tape	EACH	1.000		1.000
0464	643.3960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	3,584.000	1,032.000	2,552.000
0466	643.4100	Traffic Control Interim Lane Closure	EACH	178.000	80.000	98.000
0468	643.5000	Traffic Control	EACH	1.000	0.700	0.300
0470	645.0105	Geotextile Type C	SY	670.000	670.000	
0472	645.0111	Geotextile Type DF Schedule A	SY	212.000	142.000	70.000
0474	645.0120	Geotextile Type HR	SY	2,081.000	1,552.000	529.000
0476	645.0130	Geotextile Type R	SY	73.000	73.000	
0478	645.0220	Geogrid Type SR	SY	29,329.000	23,082.000	6,247.000
0480	646.2020	Marking Line Epoxy 6-Inch	LF	1,953.000	1,953.000	
0482	646.2025	Marking Line Grooved Black Epoxy 6-Inch	LF	7,678.000	3,412.000	4,266.000
0484	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	84,533.000	48,072.000	36,461.000
0486	646.2050	Marking Line Grooved Permanent Tape 6-Inch	LF	8,143.000	3,581.000	4,562.000
0488	646.4025	Marking Line Grooved Black Epoxy 10-Inch	LF	2,613.000	1,323.000	1,290.000
0490	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	2,613.000	1,323.000	1,290.000

Line	Item	Item Description	Unit	Total	1204-08-73 Qty	1204-08-74 Qty
0492	646.4050	Marking Line Grooved Permanent Tape 10-Inch	LF	11,781.000	6,273.000	5,508.000
0494	646.5020	Marking Arrow Epoxy	EACH	9.000	4.000	5.000
0496	646.5120	Marking Word Epoxy	EACH	3.000	2.000	1.000
0498	646.6120	Marking Stop Line Epoxy 18-Inch	LF	254.000	179.000	75.000
0500	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,139.000	1,139.000	
0502	646.7220	Marking Chevron Epoxy 24-Inch	LF	422.000	295.000	127.000
0504	646.8120	Marking Curb Epoxy	LF	87.000	87.000	
0506	646.8220	Marking Island Nose Epoxy	EACH	3.000	3.000	
0508	646.9000	Marking Removal Line 4-Inch	LF	2,088.000		2,088.000
0510	650.4000	Construction Staking Storm Sewer	EACH	5.000	5.000	
0512	650.4500	Construction Staking Subgrade	LF	16,707.000	12,173.000	4,534.000
0514	650.5000	Construction Staking Base	LF	840.000	840.000	
0516	650.6000	Construction Staking Pipe Culverts	EACH	13.000	6.000	7.000
0518	650.6501	Construction Staking Structure Layout (structure) 001. B-13-383	EACH	1.000	1.000	
0520	650.6501	Construction Staking Structure Layout (structure) 002. B-13-403	EACH	1.000	1.000	
0522	650.6501	Construction Staking Structure Layout (structure) 003. B-13-52	EACH	1.000	1.000	
0524	650.6501	Construction Staking Structure Layout (structure) 004. C-13-111	EACH	1.000	1.000	
0526	650.6501	Construction Staking Structure Layout (structure) 005. S-13-0612	EACH	1.000	1.000	
0528	650.6501	Construction Staking Structure Layout (structure) 006. S-13-0613	EACH	1.000	1.000	
0530	650.6501	Construction Staking Structure Layout (structure) 007. S-13-0614	EACH	1.000	1.000	
0532	650.6501	Construction Staking Structure Layout (structure) 008. S-13-0615	EACH	1.000	1.000	
0534	650.6501	Construction Staking Structure Layout (structure) 009. B-13-0573	EACH	1.000		1.000
0536	650.6501	Construction Staking Structure Layout (structure) 010. S-13-0616	EACH	1.000		1.000
0538	650.6501	Construction Staking Structure Layout (structure) 011. S-13-0617	EACH	1.000		1.000
0540	650.7000	Construction Staking Concrete Pavement	LF	16,707.000	12,173.000	4,534.000
0542	650.8501	Construction Staking Electrical Installations (project) 001. 1204-08-73	EACH	1.000	1.000	
0544	650.9500	Construction Staking Sidewalk (project) 001. 1204-0-8-73	EACH	1.000	1.000	
0546	650.9911	Construction Staking Supplemental Control (project) 001. 1204-08-73	EACH	1.000	1.000	
0548	650.9911	Construction Staking Supplemental Control (project) 002. 1204-08-74	EACH	1.000		1.000
0550	650.9920	Construction Staking Slope Stakes	LF	18,817.000	12,017.000	6,800.000
0552	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,199.000	1,199.000	
0554	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	1,252.000	1,252.000	
0556	652.0800	Conduit Loop Detector	LF	1,140.000	1,140.000	
0558	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	3.000	3.000	
0560	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	13.000	13.000	
0562	653.0222	Junction Boxes 18x12x6-Inch	EACH	2.000	2.000	
0564	654.0101	Concrete Bases Type 1	EACH	3.000	3.000	
0566	654.0105	Concrete Bases Type 5	EACH	1.000	1.000	
0568	654.0110	Concrete Bases Type 10	EACH	2.000	2.000	
0570	654.0120	Concrete Bases Type 10-Special	EACH	1.000	1.000	
0572	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000	
0574	655.0230	Cable Traffic Signal 5-14 AWG	LF	233.000	233.000	
0576	655.0240	Cable Traffic Signal 7-14 AWG	LF	1,317.000	1,317.000	
0578	655.0260	Cable Traffic Signal 12-14 AWG	LF	244.000	244.000	
0580	655.0270	Cable Traffic Signal 15-14 AWG	LF	146.000	146.000	
0582	655.0325	Cable Type UF 2-8 AWG Grounded	LF	768.000	768.000	
0584	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,052.000	1,052.000	
0586	655.0610	Electrical Wire Lighting 12 AWG	LF	480.000	480.000	
0588	655.0700	Loop Detector Lead In Cable	LF	3,367.000	3,367.000	

Line	Item	Item Description	Unit	Total	1204-08-73 Qty	1204-08-74 Qty
0590	655.0800	Loop Detector Wire	LF	4,220.000	4,220.000	
0592	656.0201	Electrical Service Meter Breaker Pedestal (location) 001. USH 18/151 WB Ramp & Dairy Ridge Rd/CTH G	EACH	1.000	1.000	
0594	657.0100	Pedestal Bases	EACH	3.000	3.000	
0596	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	1.000	1.000	
0598	657.0322	Poles Type 5-Aluminum	EACH	1.000	1.000	
0600	657.0350	Poles Type 10	EACH	2.000	2.000	
0602	657.0352	Poles Type 10-Special	EACH	1.000	1.000	
0604	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	3.000	3.000	
0606	657.0530	Monotube Arms 30-FT	EACH	2.000	2.000	
0608	657.0546	Monotube Arms 45-FT-Special	EACH	1.000	1.000	
0610	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	1.000	1.000	
0612	657.0806	Luminaire Arms Steel 6-FT	EACH	3.000	3.000	
0614	658.0173	Traffic Signal Face 3S 12-Inch	EACH	11.000	11.000	
0616	658.0174	Traffic Signal Face 4S 12-Inch	EACH	1.000	1.000	
0618	658.5070	Signal Mounting Hardware (location) 001. USH 18/151 WB Ramps & Dairy Ridge RD/CTH G	EACH	1.000	1.000	
0620	659.1120	Luminaires Utility LED B	EACH	4.000	4.000	
0622	690.0150	Sawing Asphalt	LF	5,178.000	915.000	4,263.000
0624	690.0250	Sawing Concrete	LF	9,851.000	6,183.000	3,668.000
0626	715.0502	Incentive Strength Concrete Structures	DOL	9,804.000	7,956.000	1,848.000
0628	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	2,569.000	2,038.000	531.000
0630	740.0440	Incentive IRI Ride	DOL	3,086.000	3,086.000	
0632	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 001. 462+50'EB'	EACH	1.000	1.000	
0634	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 002. 489+00'EB'	EACH	1.000	1.000	
0636	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 003. 489+00'WB'	EACH	1.000	1.000	
0638	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 004. 502+50'EB'	EACH	1.000	1.000	
0640	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 005. 529+00'EB'	EACH	1.000		1.000
0642	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	1,600.000	800.000
0644	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	4,900.000	3,300.000	1,600.000
0646	SPV.0025	Special 501. Neat Cement Grout	CF	302.000		302.000
0648	SPV.0025	Special 502. Low-Mobility Grout	CF	33.000		33.000
0650	SPV.0045	Special 101. Digital Speed Reduction System	DAY	296.000	148.000	148.000
0652	SPV.0060	Special 101. Salvage and Reinstall Underdrain Endwalls	EACH	14.000	7.000	7.000
0654	SPV.0060	Special 102. Temporary Access for Sugar River Structure Construction and Demolition	EACH	1.000	1.000	
0656	SPV.0060	Special 103. Field Office Special	EACH	1.000	0.700	0.300
0658	SPV.0060	Special 501. Embedded Galvanic Anodes	EACH	79.000	4.000	75.000
0660	SPV.0060	Special 502. Cleaning and Painting Bearings	EACH	12.000	12.000	
0662	SPV.0060	Special 503. Temporary Support B-13-0052	EACH	1.000	1.000	
0664	SPV.0060	Special 504. Temporary Support B-13-0383	EACH	1.000	1.000	
0666	SPV.0060	Special 505. Trench Drain and Grate	EACH	1.000	1.000	
0668	SPV.0090	Special 101. Salvage and Reinstall Cable Guard	LF	4,772.000	1,000.000	3,772.000
0670	SPV.0090	Special 350. Transport and Install State Furnished CAT-5E Cable	LF	240.000	240.000	
0672	SPV.0090	Special 501. Strip Seal Gland Replacement	LF	130.000	70.000	60.000
0674	SPV.0090	Special 502. Grout Drilling	LF	1,136.000		1,136.000
0676	SPV.0195	Special 101. Limestone Screenings Path	TON	4.000	4.000	

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GRUBBING

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	201.0205 GRUBBING (STA)
1204-08-73	2	32+00	-	42+00	'G'	LT/RT	10
		52+00	-	54+00	'G'	RT	2
		501+00	-	502+00	WB'	LT	1
						1204-08-73 SUBTOTAL	13
1204-08-74	2	560+00	-	566+00	'EB'	RT	6
						1204-08-74 SUBTOTAL	6
						PROJECT TOTALS	19

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REMOVALS

PROJECT	STAGE	STATION	-	STATION	ALIGNMENT	204.0100 REMOVING CONCRETE PAVEMENT (SY)	204.0105 REMOVING CONCRETE PAVEMENT BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)	204.0190 REMOVING SURFACE DRAINS (EACH)	204.0126.S REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING (LF)
		45+89	-	48+72	'G'	1,418	-	-	-	-
		50+68	-	53+45	'G'	1,520	-	-	-	-
		463+00	-	470+00	'GA'	378	67	-	-	-
		459+30	-	462+00	'GC'	90	-	-	-	-
		459+60	-	462+12	'GD'	311	84	-	-	-
1204-08-73		458+72	-	466+43	'EB'	-	-	3,255	-	1,542
		478+82	-	487+73	'WB'	557	-	-	-	891
		489+56	-	505+78	'WB'	677	-	1,590	2	1,622
		498+48	-	507+00	'WB'	-	-	-	-	852
		481+95	-	487+80	'EB'	422	-	-	-	585
		481+94	-	504+46	'EB'	538	-	1,637	1	2,252
		497+32	-	506+00	'EB'	-	-	-	-	868
					1204-08-73 SUBTOTAL	5,911	151	6,482	3	8,612
1204-08-74	2	524+54	-	526+70	'W4'	186	-	-	-	-
		529+93	-	540+31	'W4'	330	-	-	-	-
		548+46	-	555+25	'EB'	618	-	-	-	679
		567+95	-	570+68	'EB'	134	-	-	-	273
					1204-08-74 SUBTOTAL	1,268	0	0	0	952
					PROJECT TOTAL	7,179	151	6,482	3	9,564

EARTHWORK SUMMARY

Stages	From/To Station	Location	(1) 205.0100 Excavation Common CY		Salvaged/ Unusable Pavement Material	Available Material (4)	Marsh Excavation	Rock Excavation	Expanded EBS Backfill	Unexpanded Fill	Expanded Fill CY	208.0100 Borrow CY	(5) Mass Ordinate +/-
			(2) Cut	(3) EBS Excavation			(item #205.0400)	(item #205.0200)	Factor 1.3		Factor 1.3	Factor 1.0	
Stage 1													
Stage 1 Subtotal			0	0	0	0	0	0	0	0	0	0	0
Stage 2	476+67'WB' to 500+00'WB'	USH 18 & 151 Aux Lane WB	4,543	0	748	3,795	0	0	0	2,484	3,229	0	1,314
	479+31'EB' to 500+00'EB'	USH 18 & 151 Aux Lane EB	3,376	0	487	2,889	0	0	0	1,155	1,502	0	1,874
	459+00'EB' to 466+00'EB'	USH 18 & 151 Aux Bullnose	52	0	0	52	0	0	0	102	133	81	-81
	32+00'G' to 51+50'G'	CTH G & Dairy Ridge Road	8,437	0	956	6,581	0	900	0	3,050	3,965	0	4,472
	37+90'BL' to 38+06'BL'	Bobcat Lane	44	0	5	39	0	0	0	1	1	0	43
	10+00'BN' to 12+75'BN'	Bobcat Lane NB Curb Return	298	0	36	262	0	0	0	89	116	0	182
	10+00'BS' to 13+13'BS'	Bobcat Lane SB Curb Return	458	0	28	430	0	0	0	179	233	0	225
	462+93'GA' to 468+00'GA'	GA Ramp	2,812	0	203	1,509	0	1,100	0	48	62	0	2,750
	10+00'GAN' to 11+66'GAN'	GA North Curb Return	185	0	0	185	0	0	0	40	52	0	133
	10+00'GAS' to 10+63'GAS'	GA South Curb Return	53	0	0	53	0	0	0	0	0	0	53
	10+85'GBN' to 11+04'GBN'	GB North Curb Return	9	0	0	9	0	0	0	0	0	0	9
	9+91'GCN' to 10+10'GCN'	GC North Curb Return	0	0	0	0	0	0	0	33	43	43	-43
	460+60'GD' to 461+80'GD'	GD Ramp	236	0	140	96	0	0	0	0	0	0	236
	10+00'GDN' to 10+90'GDN'	GD North Curb Return	77	0	0	77	0	0	0	18	23	0	54
	10+00'GDS' to 10+65'GDS'	GD South Curb Return	60	0	0	60	0	0	0	2	3	0	57
Stage 2 Subtotal			20,640	0	2,603	16,037	0	2,000	0	7,201	9,362	124	11,278
Stage 3	500+00'WB' to 508+61'WB'	USH 18 & 151 Aux Lane WB	1,367	0	121	1,246	0	0	0	548	712	0	655
	500+00'EB' to 505+88'EB'	USH 18 & 151 Aux Lane EB	1,174	0	0	1,039	135	0	0	913	1,187	148	-13
	51+75'G' to 61+85'G'	CTH G & Dairy Ridge Road	1,706	0	627	1,079	0	0	0	2,039	2,651	1,572	-945
	10+00'GBN' to 10+85'GBN'	GB North Curb Return	71	0	0	71	0	0	0	0	0	0	71
	10+01'GBS' to 10+70'GBS'	GB South Curb Return	74	0	0	74	0	0	0	0	0	0	74
	459+30'GC' to 461+29'GC'	GC Ramp	199	0	38	161	0	0	0	10	13	0	186
	10+10'GCN' to 10+80'GCN'	GC North Curb Return	46	0	0	46	0	0	0	10	13	0	33
	9+90'GCS' to 11+39'GCS'	GC South Curb Return	67	0	0	67	0	0	0	200	260	193	-193
Stage 3 Subtotal			4,704	0	748	3,783	135	0	0	3,720	4,836	1,913	-132
Stage 4													
Stage 4 Subtotal			0	0	0	0	0	0	0	0	0	0	0
		Undistributed EBS Excavation		1,300					1,690				
		1204-08-73 Project Subtotal	25,344	1,300	3,351	19,820	135	2,000	1,690	10,921	14,198	2,037	11,146
		1204-08-73 Excavation Common Subtotal	26,644										

1) Excavation Common 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 Borrow unless otherwise noted in the plans. All EBS material is assumed to be wasted offsite.
4) Available Material = Cut - Salvaged/Unusuable Pavement Material.
5) 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. Mass Ordinate = Cut - Fill. The Mass Ordinate is for information purposes only.
NOTE: WORK LISTED UNDER STAGE 2 CAN ALSO BE COMPLETED IN STAGE 3.

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EARTHWORK SUMMARY

Stages	From/To Station	Location	(1) 205.0100 Excavation Common CY		Salvaged/ Unusable Pavement Material	Available Material (4)	Marsh Excavation	Rock Excavation	Expanded EBS Backfill	Unexpanded Fill	Expanded Fill CY	208.0100 Borrow CY	(5) Mass Ordinate +/-
			(2) Cut	(3) EBS Excavation			(item #205.0400)	(item #205.0200)	Factor 1.3		Factor 1.3	Factor 1.0	
Stage 1													
Stage 1 Subtotal			0	0	0	0	0	0	0	0	0	0	0
Stage 2	534+40'EB' to 577+10EB'	STH 69 Temp Pave	1,289	0	0	1,289	0	0	0	271	353	0	936
	530+00'W4' to 544+00'W4'	STH 69 Entrance Ramp W4	612	0	102	510	0	0	0	228	296	0	316
	525+65'EB' to 532+00'EB'	STH 69 Bullnose	89	0	0	89	0	0	0	79	103	14	-14
Stage 2 Subtotal			1,990	0	102	1,888	0	0	0	578	752	14	1,238
Stage 3	523+56'W4' to 541+00'W4'	STH 69 Entrance Ramp W4	942	0	29	913	0	0	0	1,037	1,348	435	-406
	545+11'EB' to 571+73'EB'	STH 69 Aux Lane EB	15,139	0	698	11,441	0	3,000	0	6,623	8,610	0	6,529
Stage 3 Subtotal			16,081	0	727	12,354	0	3,000	0	7,660	9,958	435	6,123
Stage 4	534+40'EB' to 577+10'EB'	STH 69 Median Reinstatement	787	0	0	787	0	0	0	23	30	0	757
	522+88'W4' to 526+88'W4'	STH 69 Entrance Ramp W4	165	0	0	0	0	0	0	142	185	185	-20
Stage 4 Subtotal			952	0	0	787	0	0	0	165	215	185	737
Undistributed EBS Excavation				950					1,235				
1204-07-74 Project Subtotal			19,023	950	829	15,029	0	3,000	1,235	8,403	10,925	634	8,098
1204-07-74 Excavation Common Subtotal			19,973										
PROJECT TOTAL			46,617		4,180	34,849	135	5,000	2,925	19,324	25,123	2,671	19,244

1) Excavation Common 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 Borrow unless otherwise noted in the plans. All EBS material is assumed to be wasted offsite.
4) Available Material = Cut - Salvaged/Unusuable Pavement Material.
5) 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. Mass Ordinate = Cut - Fill. The Mass Ordinate is for information purposes only.

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BASE AGGREGATE

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	305.0130 BASE AGGREGATE DENSE 3-INCH (TON)	312.0110 SELECT CRUSHED MATERIAL (TON)	SPV.0195.101 LIMESTONE SCREENINGS PATH (TON)	624.0100 WATER (MGAL)	645.0220 GEOGRID TYPE SR (SY)
		476+67	-	487+83	'WB'	79	2,456	-	1,607	-	39	2,537
		487+83		487+95	'WB'	-	40	-	-	-	1	-
		489+57		489+79	'WB'	-	40	-	-	-	1	-
		489+79	-	508+61	'WB'	196	4,697	-	3,135	-	74	4,950
		498+48		507+00	'WB'	-	-	-	-	-	-	-
		479+31	-	487+80	'EB'	95	2,015	-	1,285	-	32	2,028
		487+80	-	488+00	'EB'	-	36	-	-	-	1	-
		489+53	-	489+68	'EB'	-	12	-	-	-	1	-
		489+68	-	505+88	'EB'	168	4,172	-	2,831	-	66	4,470
		497+32		506+00	'EB'	-	-	-	-	-	-	-
1204-08-73	3	462+51	-	468+00	'GA'	58	878	-	-	-	15	-
		462+88	-	463+48	GB'	6	175	-	-	-	3	-
		459+30	-	462+60	'GC'	20	450	-	-	-	8	-
		459+60	-	462+27	'GD'	30	422	-	-	-	7	-
		32+00	-	45+66	'G'	363	2,915	4,292	5,240	-	114	8,274
		45+66	-	48+70	'G'	115	882	-	-	-	15	-
		50+71	-	53+45	'G'	42	760	-	-	-	13	-
		53+45	-	61+85	'G'	135	2,272	-	-	-	37	-
		37+90	-	39+70	Bobcat Ln	59	301	455	523	-	13	823
		10+40	-	10+60	'MRST'	-	4	-	-	2	1	-
		12+94	-	13+14	'MRST'	-	4	-	-	2	1	-
					1204-08-73 SUBTOTAL	1,366	22,532	4,747	14,621	4	442	23,082
	2	534+40	-	577+10	'EB'	0	3,994	-	0	-	60	0
					STAGE 2 SUBTOTAL	0	3,994	-	0	-	60	0
1204-08-74		522+87	-	527+19	'W4'	69	693	-	-	-	12	-
	3	529+48	-	544+00	'W4'	184	2,157	-	-	-	36	-
		545+49	-	571+73	'EB'	252	5,586	-	4,511	-	88	6,247
					STAGE 3 SUBTOTAL	505	8,436	-	4,511	-	136	6,247
					1204-08-74 SUBTOTAL	505	12,430	-	4,511	-	196	6,247
					PROJECT TOTAL	1,871	34,962	4,747	19,132	4	638	29,329

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ROUT AND SEAL

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	415.6000.S ROUT AND SEAL (LF)
		48+10	-	48+70	'G'	60
		52+63	-	53+45	'G'	82
		459+30	-	461+69	'GC'	239
					1204-08-73 SUBTOTAL	381
		523+00	-	524+00	'W4'	100
		524+00	-	524+54	'W4'	108
		524+54	-	525+20	'W4'	132
1204-08-74	3	525+20	-	527+05	'W4'	370
		529+66	-	530+97	'W4'	131
		530+97	-	538+23	'W4'	1,452
		540+31	-	544+00	'W4'	369
					1204-08-74 SUBTOTAL	2,662
					PROJECT TOTALS	3,043

DRILLED TIE BARS AND DOWEL BARS

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	416.0610 DRILLED TIE BARS (EACH)	416.0620 DRILLED DOWEL BARS (EACH)
		462+51	-	468+00	'GA'	163	15
		462+88	-	463+48	'GB'	-	22
1204-08-73	3	459+30	-	462+60	'GC'	109	15
		459+60	-	462+27	'GD'	-	16
		479+31	-	504+46	'EB'	826	22
		476+67	-	507+93	'WB'	997	22
					1204-08-73 SUBTOTAL	2,095	112
1204-08-74	3	522+87	-	544+00	'W4'	1,041	5
		545+11	-	571+73	'EB'	900	4
					1204-08-74 SUBTOTAL	1,941	9
					PROJECT TOTALS	4,036	121

ASPHALTIC ITEMS

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	455.0605 TACK COAT (GAL)	460.5224 HMA PAVEMENT 4 LT 58-28 S (TON)	460.6223 HMA PAVEMENT 3 MT 58-28 S (TON)	460.6224 HMA PAVEMENT 4 MT 58-28 S (TON)	460.7423 HMA PAVEMENT 3 HT 58-28 H (TON)	460.7424 HMA PAVEMENT 4 HT 58-28 H (TON)	460.8624 HMA PAVEMENT 4 SMA 58-28 V (TON)
		458+72	-	466+43	'EB'	239	-	-	-	-	-	335
		476+67	-	487+83	'WB'	71	-	-	-	127	-	99
		478+82	-	487+83	'WB'	166	-	-	-	150	-	116
		489+79	-	507+90	'WB'	139	-	-	-	249	-	194
		489+79	-	505+78	'WB'	299	-	-	-	269	-	209
		498+48	-	507+00	'WB'	211	-	-	-	-	-	380
		479+30	-	487+80	'EB'	61	-	-	-	110	-	86
		481+94	-	487+80	'EB'	109	-	-	-	98	-	77
		489+68	-	505+88	'EB'	124	-	-	-	224	-	174
		489+68	-	504+46	'EB'	276	-	-	-	248	-	193
1204-08-73	3	497+32	-	506+00	'EB'	221	-	-	-	-	-	397
		32+00	-	45+66	'G'	549	-	988	768	-	-	-
		47+60	-	48+53	'G'	-	-	-	49	-	-	-
		50+88	-	51+76	'G'	-	-	-	32	-	-	-
		53+26	-	61+85	'G'	150	-	390	210	-	-	-
		459+30	-	462+09	'GC'	-	-	-	15	-	-	-
		459+60	-	461+52	'GD'	18	-	-	-	-	29	-
		459+60	-	461+52	'GD'	12	-	-	-	-	19	-
		462+50	-	468+00	'GA'	16	-	-	-	-	51	-
		463+93	-	464+94	'GA'	18	-	-	-	-	15	-
		463+93	-	468+00	'GA'	70	-	-	-	-	112	-
					1204-08-73 SUBTOTAL	2,749	0	1,377	1,074	1,476	226	2,259
	2	534+40	-	577+10	'EB'	250	-	-	-	699	349	-
		534+40	-	577+10	EB'	200	-	-	-	-	280	-
		522+88	-	526+98	'W4'	-	41	-	-	-	-	-
1204-08-74		524+31	-	526+70	'W4'	-	44	-	-	-	-	-
	3	529+93	-	540+31	'W4'	-	118	-	-	-	-	-
		530+20	-	544+00	'W4'	-	120	-	-	-	-	-
		545+49	-	571+73	'EB'	171	-	-	-	308	-	239
		548+46	-	570+68	'EB'	421	-	-	-	379	-	295
					1204-08-74 SUBTOTAL	1,042	322	0	0	1,385	630	534
					PROJECT TOTALS	3,790	322	1,377	1,074	2,861	855	2,794

HMA PAVEMENT TEST STRIP

PROJECT ID	460.0115.S HMA PAVEMENT TEST STRIP VOLUMETRICS (EACH)	460.0120.S HMA PAVEMENT TEST STRIP DENSITY (EACH)
1204-08-73/74	1	1
PROJECT TOTAL	1	1

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HMA MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

							QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
LOCATION	STATION - STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
USH 18 DRIVING LANES	476+67 'WB' - 508+61 'WB'	UPPER LAYER	3 HT 58-28 H	4 SMA 58-28 V	1,707	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 DRIVING LANES	476+67 'WB' - 508+61 'WB'	LOWER LAYER	CONCRETE BASE	3 HT 58-28 H	753	2.25"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 SHOULDERS	476+67 'WB' - 508+61 'WB'	UPPER LAYER	3 HT 58-28 H	4 SMA 58-28 V	553	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 SHOULDERS	476+67 'WB' - 508+61 'WB'	LOWER LAYER	BASE AGGREGATE	3 HT 58-28 H	711	2.25"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
GA RAMP DRIVING LANE	462+50 'GA' - 468+00 'GA'	UPPER AND LOWER LAYER	CONCRETE BASE	4 HT 58-28 H	127	4"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
GA RAMP SHOULDERS	462+50 'GA' - 468+00 'GA'	UPPER AND LOWER LAYER	BASE AGGREGATE	4 HT 58-28 H	51	4"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
GC RAMP SHOULDERS	459+30 'GC' - 462+09 'GC'	UPPER LAYER	BASE AGGREGATE	4 MT 58-28 S	15	3.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
GD RAMP DRIVING LANE	459+60 'GD' - 461+52 'GD'	UPPER AND LOWER LAYER	EXISTING CONCRETE BASE	4 HT 58-28 H	19	4"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
GD RAMP SHOULDERS	459+60 'GD' - 461+52 'GD'	UPPER AND LOWER LAYER	BASE AGGREGATE	4 HT 58-28 H	29	4"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
DAIRY RIDGE RD	32+00 'G' - 45+66 'G'	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	768	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
DAIRY RIDGE RD	32+00 'G' - 45+66 'G'	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	988	2.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
CTH G INTERCHANGE CORE SHOULDERS	47+60 'G' - 51+76 'G'	UPPER LAYER	BASE AGGREGATE	4 MT 58-28 S	81	3.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
CTH G SOUTH APPROACH	53+26 'G' - 61+85 'G'	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	210	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
CTH G SOUTH APPROACH	53+26 'G' - 61+85 'G'	LOWER LAYER	BASE AGGREGATE	3 MT 58-28 S	390	3.25"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
W4 RAMP SHOULDERS	522+88 'W4' - 544+00 'W4'	UPPER LAYER	BASE AGGREGATE	4 LT 58-28 S	322	3.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 DRIVING LANES	545+49 'EB' - 571+73 'EB'	UPPER LAYER	3 HT 58-28 H	4 SMA 58-28 V	295	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 DRIVING LANES	545+49 'EB' - 571+73 'EB'	LOWER LAYER	CONCRETE BASE	3 HT 58-28 H	379	2.25"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 SHOULDERS	545+49 'EB' - 571+73 'EB'	UPPER LAYER	3 HT 58-28 H	4 SMA 58-28 V	239	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 SHOULDERS	545+49 'EB' - 571+73 'EB'	LOWER LAYER	BASE AGGREGATE	3 HT 58-28 H	308	2.25"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 TEMPORARY PAVEMENT	534+40 'EB' - 577+10 'EB'	UPPER LAYER	3 HT 58-28 H	4 HT 58-28 H	630	1.75"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
USH 18 TEMPORARY PAVEMENT	534+40 'EB' - 577+10 'EB'	LOWER LAYER	BASE AGGREGATE	3 HT 58-28 H	699	3.5"	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000

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ASPHALTIC FLUMES

PROJECT ID	STATION	-	STATION	ALIGNMENT	OFFSET	465.0315 ASPHALTIC FLUMES (SY)
1204-08-73	461+54	-	461+60	'GD'	LT	14
				1204-08-73 SUBTOTAL		14
				1204-08-74 SUBTOTAL		0
				PROJECT TOTAL		14

SHOULDER RUMBLE STRIPS

PROJECT ID	STATION	-	STATION	ALIGNMENT	OFFSET	465.0510 ASPHALTIC RUMBLE STRIPS, SHOULDER DIVIDED ROADWAY (LF)
1204-08-73	458+72	-	466+43	'EB'	LT	771
	458+72	-	466+43	'EB'	RT	771
	481+00	-	488+51	'EB'	RT	751
	489+80	-	503+91	'EB'	RT	1,411
	497+32	-	506+00	'EB'	LT	868
	478+93	-	487+73	'WB'	LT	880
	489+80	-	507+00	'WB'	LT	1,720
	498+48	-	507+00	'WB'	RT	852
				1204-08-73 SUBTOTAL		8,024
1204-08-74	534+40	-	577+10	'EB'	RT	4,270
	547+69	-	569+53	'EB'	LT	2,184
				1204-08-74 SUBTOTAL		6,454
				PROJECT TOTAL		14,478

3

CULVERTS

PROJECT ID	STAGE	STATION	ALIGNMENT	(1) OFFSET	INVERT 1 ELEVATION	INVERT 2 ELEVATION	SLOPE	203.0100 REMOVING SMALL PIPE CULVERTS (EACH)	204.0180 REMOVING DELINEATORS AND MARKERS (EACH)	204.9060.S REMOVING APRON ENDWALLS (EACH)	520.8000 CONCRETE COLLARS FOR PIPE (EACH)	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III-24-INCH (LF)	522.0148 CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH (LF)
1204-08-73	3	37+74	'G'	LT/RT	1009.14	1004.25	6.44%	1	2	-	-	76	-
		494+63	'EB'	RT	924.54	924.50	1.00%	-	1	1	1	4	-
		499+66	'WB'	LT	925.02	925.00	0.50%	-	1	1	1	4	-
		492+71	'WB'	LT	922.63	922.61	0.50%	-	1	1	1	-	4
							1204-08-73 SUBTOTAL	1	5	3	3	84	4
							PROJECT TOTAL	1	5	3	3	84	4

(1) OFFSET TO STRUCTURES ARE AT THE CENTER OF STRUCTURES

CULVERTS

PROJECT ID	STAGE	STATION	ALIGNMENT	(1) OFFSET	INVERT 1 ELEVATION	INVERT 2 ELEVATION	SLOPE	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH (EACH)	522.1048 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH (EACH)	633.5200 MARKERS CULVERT END (EACH)
1204-08-73	3	37+74	'G'	LT/RT	1009.14	1004.25	6.44%	2	-	2
		494+63	'EB'	RT	924.54	924.50	1.00%	1	-	1
		499+66	'WB'	LT	925.02	925.00	0.50%	1	-	1
		492+71	'WB'	LT	922.63	922.61	0.50%	-	1	1
							1204-08-73 SUBTOTAL	4	1	5
							PROJECT TOTAL	4	1	5

(1) OFFSET TO STRUCTURES ARE AT THE CENTER OF STRUCTURES

3

UNDERDRAIN

PROJECT ID	STAGE	STATION	ALIGNMENT	OFFSET	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH (LF)	612.0806 APRON ENDWALLS FOR PIPE UNDERDRAIN REINFORCED CONCRETE 6-INCH (EACH)	SPV.0060.101 SALVAGE AND REINSTALL UNDERDRAIN ENDWALLS (EACH)	204.9090.S REMOVING PIPE UNDERDRAIN 6-INCH (LF)
1204-08-73	3	487+73	'WB'	LT	-	-	1	-
		496+09	'WB'	LT	-	-	1	-
		500+06	'WB'	LT	-	-	1	-
		505+00	'WB'	LT	-	-	1	-
		507+47	'WB'	LT	-	-	1	-
		500+00	'EB'	RT	-	-	1	-
		502+48	'EB'	RT	-	-	1	-
			1204-08-73 SUBTOTAL		0	0	7	0
1204-08-74	2	539+67	'EB'	LT	3	1	-	-
		542+63	'EB'	LT	3	1	-	-
		550+17	'EB'	LT	5	1	-	-
		552+70	'EB'	LT	4	1	-	-
		557+77	'EB'	LT	3	1	-	-
		572+97	'EB'	LT	5	1	-	-
		575+42	'EB'	LT	2	1	-	-
	4	539+67	'EB'	LT	-	-	1	3
		542+63	'EB'	LT	-	-	1	3
		550+17	'EB'	LT	-	-	1	5
		552+70	'EB'	LT	-	-	1	4
		557+77	'EB'	LT	-	-	1	3
		572+97	'EB'	LT	-	-	1	5
		575+42	'EB'	LT	-	-	1	2
				UNDISTRIBUTED	150	-	-	-
			1204-08-74 SUBTOTAL		175	7	7	25
				PROJECT TOTAL	175	7	14	25

(1) SLOPE OF 0.5% MINIMUM

STORM SEWER REMOVALS

PROJECT ID	STAGE	STATION	ALIGNMENT	(1) OFFSET	LOCATION	204.0220 REMOVING INLETS (EACH)	204.0245 REMOVING STORM SEWER (SIZE) 12-INCH (LF)
1204-08-73	2	50+77	'G'	20'	RT	1	48
		50+84	'G'	20'	LT	1	48
				1204-08-73 SUBTOTAL		2	96
					PROJECT TOTAL	2	96

(1) OFFSET TO STRUCTURES ARE AT THE CENTER OF STRUCTURES

3

STORM SEWER STRUCTURES

PROJECT ID	STAGE	STATION	ALIGNMENT	(1) OFFSET	STRUCTURE NUMBER	RIM ELEVATION	PIPE INVERT ELEV	TOP OF STRUCTURE ELEV	(2) BOTTOM OF STRUCTURE ELEV	STR DEPTH FEET	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH (EACH)	611.0630 INLET COVERS TYPE HM-GJ (EACH)	611.0654 INLET COVERS TYPE V (EACH)	611.0666 INLET COVERS TYPE Z (EACH)	611.3003 INLETS 3-FT DIAMETER (EACH)	611.3220 INLETS 2X2-FT (EACH)	611.3230 INLETS 2X3-FT (EACH)
1204-08-73	2	51+15	'G'	10.6' RT	1	1006.17	1001.90	1005.09	1001.40	3.69	-	-	-	1	1	-	-
		51+11	'G'	48.1' RT	2	1005.51	1001.26	1004.18	1000.45	3.73	-	-	1	-	-	1	-
		51+08	'G'	57.6' RT	3	-	-	-	-	-	1	-	-	-	-	-	-
		51+25	'G'	48.1' RT	6	1005.24	1000.97	1003.91	1000.62	3.29	-	-	1	-	-	1	-
		462+07	'GC'	1.5' RT	4	1002.40	998.00	1001.40	997.6	3.80	-	1	-	-	-	-	1
		462+01	'GC'	32.2' RT	5	-	-	-	-	-	1	-	-	-	-	-	-
										1204-08-73 SUBTOTAL	2	1	2	1	1	2	1
1204-08-74	2	530+15	'W4'	-	-	-	-	-	-	-	-	-	1	-	-	-	-
										1204-08-74 SUBTOTAL	0	0	1	0	0	0	0
										PROJECT TOTAL	2	1	3	1	1	2	1

(2) DEPTH OF STRUCTURE = GRATE ELEVATION MINUS THE DEPTH OF FRAME AND ADJUSTING RINGS (1 FT) MINUS THE FLOOR ELEVATION

STORM SEWER PIPE

PROJECT ID	STAGE	STATION	ALIGNMENT	OFFSET	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE (%)	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH (LF)	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH (LF)
1204-08-73	2	51+15	'G'	9.9' RT	1	2	1001.90	1001.26	1.75%	37	-
		51+15	'G'	47.0' RT	2	3	1000.87	1000.71	1.47%	11	-
		51+25	'G'	47.0' RT	2	6	1001.04	1000.97	0.50%	14	-
		462+07	GC'	1.4' RT	4	5	998.02	997.86	0.50%	-	31
									1204-08-73 SUBTOTAL	62	31
									1204-08-74 SUBTOTAL	0	0
									PROJECT TOTAL	62	31

3

CONCRETE PAVEMENT

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	320.0155 CONCRETE BASE 9-INCH (SY)	415.0090 CONCRETE PAVEMENT 9-INCH (SY)	415.0410 CONCRETE PAVEMENT APPROACH SLAB (SY)
1204-08-73	3	48+53		48+71	'G'	-	23	98
		50+72		50+88	'G'	-	27	98
		478+82		487+83	'WB'	1,190	-	-
		489+79		505+78	'WB'	2,140	-	-
		481+95		487+80	'EB'	790	-	-
		489+68		504+46	'EB'	1,980	-	-
		45+66		48+53	'G'	-	2,760	-
		50+88		53+45	'G'	-	2,100	-
		460+60		461+84	'GD'	-	270	-
		462+93		468+00	'GA'	450	380	-
		459+30		462+19	'GC'	-	410	-
		463+30		463+48	'GB'	-	30	-
	4	478+82		487+94	'WB'	-	-	83
		489+57		505+78	'WB'	-	-	57
		481+95		488+00	'EB'	-	-	47
		489+53		504+46	'EB'	-	-	20
					1204-08-73 SUBTOTAL	6,550	6,000	403
1204-08-74	3	524+54		526+70	'W4'	-	288	-
		529+93		540+31	'W4'	-	1,284	-
		548+46		570+68	'EB'	3,009	-	-
	4	526+70		527+19	'W4'	-	33	67
		529+51		530+19	'W4'	-	58	40
					1204-08-74 SUBTOTAL	3,009	1,663	106
					PROJECT TOTAL	9,559	7,663	510

CONCRETE CURB & GUTTER, SIDEWALK

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	601.0405 CONCRETE CURB & GUTTER 18-INCH TYPE A (LF)	601.0413 CONCRETE CURB & GUTTER 6-INCH SLOPED 30- INCH TYPE G (LF)	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A (LF)	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT (LF)	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT (LF)	602.0405 CONCRETE SIDEWALK 4-INCH (SF)	620.0300 CONCRETE MEDIAN SLOPED NOSE (SF)	602.3010 CONCRETE SURFACE DRAINS (CY)	645.0130 GEOTEXTILE TYPE R** (SY)
1204-08-73	3	46+45	-	47+45	'G'	-	245	199	-	-	1,592	-	2	18
		48+09	-	48+72	'G'	126	-	-	-	35	286	37	-	-
		50+68	-	51+32	'G'	118	-	-	83	35	267	37	2	16
		51+91		52+64	'G'	-	134	136	-	-	378	-	3	24
		489+57	-	490+19	'WB'	-	-	-	41	9	-	-	1	8
		489+53	-	490+13	'EB'	-	-	-	45	3	-	-	1	7
					1204-08-73 SUBTOTAL	244	379	335	169	82	2,523	74	8	73
1204-08-74	4		530+23		W4'	-	-	-	-	-	-	-	1	-
					1204-08-74 SUBTOTAL	0	0	0	0	0	0	0	1	0
					PROJECT TOTAL	244	379	335	169	82	2,523	74	9	73

** Additional quantities elsewhere

3

TRAFFIC CONTROL - CONCRETE BARRIER TEMPORARY PRECAST AND CRASH CUSHIONS TEMPORARY

PROJECT ID	STAGE	STATION		STATION	ALIGNMENT	OFFSET	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	614.0905 CRASH CUSHION TEMPORARY (EACH)	SIGN PLATE	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
	1A	455+00	-	466+00	'EB'	LT	1,100	1,100	1	OM-3L(W05-58L)	TL-2	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER ON SHOULDER
		459+01	-	470+00	WB'	RT	1,100	1,100	1	OM-3L(W05-58L)	TL-3	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 1A SUBTOTAL		2,200	2,200	2					
	1B	478+51	-	505+35	'EB'	RT	2,686	2,686	1	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
		486+00	-	508+00	'WB'	LT	2,201	2,201	1	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 1B SUBTOTAL		4,887	4,887	2					
	2	455+00	-	466+00	'EB'	LT	-	1,100	-	OM-3L(W05-58L)	TL-2	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER ON SHOULDER
		478+51	-	505+35	'EB'	RT	-	-	-					
		459+01	-	470+00	WB'	RT	-	-	-					
		486+00	-	508+00	'WB'	LT	-	-	-					
					STAGE 2 SUBTOTAL		0	1,100	0					
1204-08-73	3A	455+00	-	466+00	'EB'	LT	-	-	-				L	
		478+51	-	505+35	'EB'	RT	-	-	-					
		459+01	-	470+00	WB'	RT	-	-	-					
		486+00	-	508+00	'WB'	LT	-	-	-				L	
					STAGE 3A SUBTOTAL		0	0	0					
	3B	499+00	-	505+25	'EB'	RT	-	625	-	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
		478+51	-	505+35	'EB'	RT	-	2,686	-	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
		495+00	-	497+24	'WB'	LT	225	225	-	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
		500+00	-	508+24	'WB'	LT	-	825	1	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
		486+00	-	508+00	'WB'	LT	-	2,201	-	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 3B SUBTOTAL		225	6,562	1					
	4	485+28	-	490+01	'EB'	RT	-	525	-	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
		487+50	-	492+73	'WB'	LT	-	475	-	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 4 SUBTOTAL		0	1,000	0					
					1204-08-73 SUBTOTAL		7,312	15,749	5					

3

TRAFFIC CONTROL - CONCRETE BARRIER TEMPORARY PRECAST AND CRASH CUSHIONS TEMPORARY - CONTINUED

PROJECT ID	STAGE	STATION		STATION	ALIGNMENT	OFFSET	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	614.0905 CRASH CUSHION TEMPORARY (EACH)	SIGN PLATE	CRASH TEST LEVEL	TRAFFIC DIRECTION	TRAFFIC LOCATION	CRASH CUSHION SHIELDS
	1A	521+00	-	532+00	'EB'	LT	1,103	1,103	1	OM-3L(W05-58L)	TL-3	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER ON SHOULDER
		525+25	-	536+50	'WB'	RT	1,122	1,122	1	OM-3L(W05-58L)	TL-3	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 1A SUBTOTAL		2,225	2,225	2					
	1B	521+00	-	532+00	'EB'	LT	-	-	-					
		525+25	-	536+50	'WB'	RT	-	-	-					
					STAGE 1B SUBTOTAL		0	0	0					
	2	521+00	-	532+00	'EB'	LT	-	-	-					
		525+25	-	536+50	'WB'	RT	-	-	-					
					STAGE 2 SUBTOTAL		0	0	0					
1204-08-74	3A	521+00	-	532+00	'EB'	LT	-	-	-					
		525+25	-	536+50	'WB'	RT	-	-	-					
		523+56		530+00	'W4'	LT/RT	650	650	1	OM-3R(W05-58R)	TL-3	UNIDIRECTIONAL	L	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 3A SUBTOTAL		650	650	1					
	3B	521+00	-	532+00	'EB'	LT	-	-	-					
		525+25	-	536+50	'WB'	RT	-	-	-					
		523+56		530+00	'W4'	LT/RT	-	-	-					
					STAGE 3B SUBTOTAL		0	0	0					
	4	523+00		530+25	'W4'	LT	-	550	1	OM-3L(W05-58L)	TL-3	UNIDIRECTIONAL	R	TEMPORARY CONCRETE BARRIER ON SHOULDER
					STAGE 4 SUBTOTAL		0	550	1					
					1204-08-74 SUBTOTAL		2,875	3,425	4					
					PROJECT TOTAL		10,187	18,549	9					

MGS GUARDRAIL

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	204.0165 REMOVING GUARDRAIL (LF)	614.2300 MGS GUARDRAIL 3 (LF)	614.2340 MGS GUARDRAIL 3 L (LF)	614.2350 MGS GUARDRAIL SHORT RADIUS (LF)	614.2500 MGS THRIE BEAM TRANSITION (LF)	614.0220 STEEL THRIE BEAM BULLNOSE (EACH)	614.0230 STEEL THRIE BEAM (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 (EACH)	614.2630 MGS SHORT RADIUS TERMINAL (EACH)	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING (EACH)
		47+69	-	48+75	'G'	LT/RT	140	63	-	58	79	-	-	-	1	1	-
		50+65	-	51+69	'G'	LT/RT	141	50	-	53	79	-	-	-	1	1	-
		461+77	-	462+62	'EB'	MEDIAN	191	-	-	-	-	1	94	-	-	-	1
1204-08-73	2	480+51	-	488+00	'EB'	RT	284	650	-	-	39	-	-	1	-	-	-
		489+65	-	505+80	'EB'	RT	423	1,463	113	-	39	-	-	-	1	-	-
		476+65	-	478+93	WB'	LT	-	113	-	-	-	-	-	1	1	-	-
		489+65	-	507+40	'WB'	LT	996	1,569	113	-	39	-	-	1	-	-	-
					1204-08-73 SUBTOTAL		2,175	3,906	225	111	276	1	94	3	4	2	1
		525+20	-	525+73	'W4'	RT	-	-	-	-	-	-	-	1	-	-	-
		525+68	-	526+70	'W4'	LT	130	-	-	-	-	-	-	-	-	-	-
		525+69	-	526+69	'W4'	RT	100	-	-	-	-	-	-	-	-	-	-
		525+68	-	526+18	'W4'	LT	-	-	-	-	-	-	-	1	-	-	-
		525+73	-	526+24	'W4'	RT	-	50	-	-	-	-	-	-	-	-	-
		526+21	-	526+58	'W4'	LT	-	38	-	-	-	-	-	-	-	-	-
		526+24	-	526+63	'W4'	RT	-	-	-	-	39	-	-	-	-	-	-
1204-08-74	3	526+58	-	526+98	'W4'	LT	-	-	-	-	39	-	-	-	-	-	-
		545+55	-	545+67	'W4'	RT	13	-	-	-	-	-	-	-	-	-	-
		527+98	-	528+51	'EB'	MEDIAN	-	-	-	-	-	1	-	-	-	-	1
		528+07	-	528+77	'EB'	MEDIAN	141	-	-	-	-	-	-	-	-	-	-
		528+51	-	528+77	'EB'	MEDIAN	-	-	-	-	-	-	52	-	-	-	-
		545+49	-	549+48	'EB'	RT	-	413	-	-	-	-	-	-	1	-	-
		570+20	-	570+68	'EB'	RT	-	-	-	-	-	-	-	1	-	-	-
		570+72	-	571+35	'EB'	RT	-	63	-	-	-	-	-	-	1	-	-
					1204-08-74 SUBTOTAL		384	563	0	0	79	1	52	3	2	0	1
					PROJECT TOTAL		2,559	4,469	225	111	355	2	146	6	6	2	2

BARRIER SYSTEM GRADING SHAPING FINISHING, ITEM 614.0010 *

STATION	-	STATION	LOCATION	BORROW (CY)	SALVAGED TOPSOIL (SY)	FERTILIZER TYPE A (CWT)	SEEDING MIXTURE NO. 30 (LB)	SEEDING TEMPORARY (LB)	SEED WATER (MGAL)	EROSION MAT CLASS I TYPE A (SY)
462+24	-	462+57 'EB'	MEDIAN	2	222	0.05	1.7	2.6	5	222
528+00	-	529+00 'EB'	MEDIAN	2	222	0.05	1.7	2.6	5	222
			TOTALS	4	444	0.1	3.4	5.2	10	444

* ITEMS AND QUANTITIES IN THIS TABLE LISTED FOR BID INFORMATION ONLY

3

FENCE

PROJECT ID	STAGE	STATION	STATION	ALIGNMENT	OFFSET	204.0170 REMOVING FENCE (LF)	616.0100 FENCE WOVEN WIRE (4-FT) (LF)
1204-08-73	3	487+92	488+01	'WB'	LT	68	56
		489+75	490+10	'WB'	LT	61	42
		501+10	501+20	'WB'	LT	37	13
		501+88	502+03	'WB'	LT	26	26
		488+00	488+01	'EB'	RT	27	16
		489+55	489+55	'EB'	RT	30	17
		503+82	504+07	'EB'	RT	29	29
					1204-08-73 SUBTOTAL	278	199
					PROJECT TOTAL	278	199

MOBILIZATIONS EROSION CONTROL

PROJECT ID	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
1204-08-73	18	27
1204-08-74	6	9
PROJECT TOTAL	24	36

3

EROSION CONTROL

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	606.0200 RIPRAP MEDIUM (CY)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2002 EROSION MAT CLASS I TYPE A (SY)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.6005 TURBIDITY BARRIERS (SY)	628.7005 INLET PROTECTION TYPE A (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)	645.0120 GEOTEXTILE TYPE HR (SY)
1204-08-73	2	32+00	-	48+55	'G'	LT/RT	12	1,390	1,390	9,203	-	-	-	-	-	117	3	40
		50+65	-	61+90	'G'	LT/RT	-	213	213	-	-	-	-	-	-	-	-	-
		463+35	-	468+00	'GA'	LT	3	-	-	3,116	-	-	-	-	-	90	-	12
		479+00	-	488+00	'EB'	RT	-	947	947	-	2,133	136	-	-	-	-	0	-
		489+50	-	505+90	'EB'	RT	4	1,663	1,663	-	3,049	128	2	-	-	-	0	14
		476+50	-	488+00	'WB'	LT	-	860	860	-	4,903	132	-	-	-	84	0	-
		489+50	-	508+60	'WB'	LT	2	1,925	1,925	-	2,506	144	-	-	-	-	1	8
						UNDISTRIBUTED	3	1,050	1,050	1,848	1,889	81	-	-	-	44	1	11
						1204-08-73 STAGE 2 PROJECT TOTALS	25	8,048	8,048	14,166	14,479	622	2	0	0	335	5	85
																		-
1204-08-74	2	522+85	-	526+75	'W4'	LT/RT	-	351	351	-	-	-	-	-	-	-	-	-
		530+00	-	543+70	'W4'	LT/RT	17	1,345	1,345	-	-	-	1	1	-	-	-	52
		534+00	-	577+00	'EB'	LT	-	-	-	-	-	-	1	-	-	96	-	-
		545+00	-	572+00	'EB'	RT	-	158	158	-	-	-	1	-	1	10	-	-
						UNDISTRIBUTED	3	278	278	-	-	-	-	-	-	16	-	8
						12040-08-74 STAGE 2 PROJECT TOTALS	19	2,132	2,132	0	0	0	3	1	1	122	0	60
						STAGE 2 PROJECT TOTALS	44	10,180	10,180	14,166	14,479	622	5	1	1	457	5	145

3

EROSION CONTROL

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	606.0200 RIPRAP MEDIUM (CY)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2002 EROSION MAT CLASS I TYPE A (SY)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.6005 TURBIDITY BARRIERS (SY)	628.7005 INLET PROTECTION TYPE A (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7020 INLET PROTECTION TYPE D (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)	645.0120 GEOTEXTILE TYPE HR (SY)
		32+00	-	48+55	'G'	LT/RT	-	-	-	-	-	-	-	-	-	-	-	-
		50+65	-	61+90	'G'	LT/RT	79	1,245	1,245	5,223	-	-	-	-	4	40	45	189
		463+35	-	468+00	'GA'	LT	-	-	-	-	-	-	-	-	-	-	-	-
1204-08-73	3	479+00	-	488+00	'EB'	RT	-	-	-	-	-	-	-	-	-	-	-	-
		489+50	-	505+90	'EB'	RT	-	-	-	-	-	-	-	-	-	-	-	-
		476+50	-	488+00	'WB'	LT	-	-	-	-	-	-	-	-	-	-	-	-
		489+50	-	508+60	'WB'	LT	-	-	-	-	-	-	-	-	-	-	-	-
						UNDISTRIBUTED	12	187	187	783	0	0	0	0	1	6	7	28
				1204-08-73 STAGE 3 PROJECT TOTALS			90	1,432	1,432	6,006	0	0	0	0	5	46	52	217
		522+85	-	526+75	'W4'	LT/RT	-	-	-	-	-	-	-	-	-	-	-	-
		530+00	-	543+70	'W4'	LT/RT	-	1,200	1,200	-	-	-	-	-	-	-	-	-
1204-08-74	3	534+00	-	577+00	'EB'	LT/RT	-	-	-	-	-	-	-	-	-	-	-	-
		545+00	-	572+00	'EB'	RT	169	1,352	1,352	-	-	-	-	-	-	205	-	408
						UNDISTRIBUTED	25	383	383	-	-	-	-	-	-	31	-	61
				12040-08-74 STAGE 3 PROJECT TOTALS			194	2,935	2,935	0	0	0	0	0	0	236	0	470
				STAGE 3 PROJECT TOTALS			285	4,367	4,367	6,006	0	0	0	0	5	282	52	687
		522+85	-	526+75	W4	LT	-	435	435	1,876	-	-	-	-	-	-	-	-
		530+00	-	544+00	W4'	LT/RT	-	-	-	6,886	-	-	-	-	-	-	-	-
1204-08-74	4	535+00	-	577+10	EB	LT	-	-	-	22,185	-	-	2	-	-	96	-	-
						UNDISTRIBUTED	-	65	65	4,642	-	-	-	-	-	14	-	-
				12040-08-74 STAGE 4 PROJECT TOTALS			0	500	500	35,589	0	0	2	0	0	110	0	0
				STAGE 4 PROJECT TOTALS			0	500	500	35,589	0	0	2	0	0	110	0	0
				PROJECT 1204-08-73 TOTALS			115	9,479	9,479	20,173	14,479	622	2	0	5	381	56	302
				PROJECT 1204-08-74 TOTALS			214	5,567	5,567	35,589	0	0	5	1	1	468	0	529
				COMBINED TOTALS			329	15,047	15,047	55,762	14,479	622	7	1	6	849	56	832

3

RESTORATION

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	625.0500 SALVAGED TOPSOIL (SY)	629.0205 FERTILIZER TYPE A (CWT)	630.0130 SEEDING MIXTURE NO. 30 (LB)	630.0160 SEEDING MIXTURE NO. 60 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0400 SEEDING NURSE CROP (LB)	630.0500 SEED WATER (MGAL)
		32+00	-	47+50	'G'	LT/RT	8,666	6	124	0	290	28	241
		47+50	-	48+72	'G'	LT/RT	0	0	6	0	9	0	7
		50+67	-	51+90	'G'	LT/RT	264	0	10	0	14	0	12
		51+90	-	62+00	'G'	LT/RT	4,384	3	96	0	143	0	119
		459+25	-	462+13	'GC'	RT	575	0	14	0	20	0	17
		460+54	-	461+80	'GD'	LT/RT	536	0	6	0	10	0	8
1204-08-73	4	463+00	-	468+05	'GA'	LT/RT	3,116	2	15	0	89	18	74
		476+67	-	488+50	'WB'	LT	4,903	3	64	1	155	15	129
		488+50	-	508+66	'WB'	LT	2,506	2	57	8	103	0	86
		479+25	-	488+50	'EB'	RT	2,133	2	50	0	75	0	63
		488+50	-	505+92	'EB'	RT	3,049	1	38	28	112	0	93
						UNDISTRIBUTED	4,520	5	120	9	255	15	212
						1204-08-73 SUBTOTAL	34,652	25	599	47	1,276	76	1,061
		523+00	-	526+90	'W4'	LT/RT	1,876	1	39	0	58	0	0
		529+95	-	543+66	'W4'	LT/RT	6,886	5	152	0	227	0	189
1204-08-74	4	545+11	-	571+76	'EB'	RT	22,185	13	306	4	650	49	541
						UNDISTRIBUTED	4,642	5	124	1	234	12	182
						1204-08-74 SUBTOTAL	35,589	24	621	5	1,170	61	912
						PROJECT TOTAL	70,241	49	1,220	52	2,445	137	1,973

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PLANTING

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	632.0201.001 SHRUBS (SPECIES) (SIZE) (ROOT) (01. PRUNUS AMERICANA CONT. 8X6-INCH, 24-INCH) EACH	632.0201.002 SHRUBS (SPECIES) (SIZE) (ROOT) (02. VIBURNUM TRIOBUM CONT. 9X6-INCH, 24-INCH) EACH	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH
1204-08-73	4	38+44	-	46+64	'G'	14	24	-
		464+00	-	467+75	'GA'	7	10	-
		476+91	-	483+35	'WB'	12	32	-
		498+51	-	506+83	'WB'	10	19	-
		500+95	-	503+34	'EB'	4	3	-
					1204-08-73 SUBTOTAL	47	88	9
1204-08-74	4	530+21	-	538+00	'W4'	15	31	-
		551+00	-	555+00	'EB'	12	11	-
		562+00	-	570+65	'EB'	7	28	-
					1204-08-74 SUBTOTAL	34	70	9
					PROJECT TOTAL	81	158	18

DELINEATOR POSTS AND DELINEATORS

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	SPACING FT	633.0100 DELINEATOR POSTS STEEL (EACH)	633.0500 DELINEATOR REFLECTORS WHITE (EACH)
1204-08-73	2	47+98	-	48+35	'G'	LT/RT	400	2	2
		50+70	-	51+29	'G'	LT/RT	400	2	2
		462+24	-	462+57	'EB'	MEDIAN	400	1	1
		480+51		488+00	'EB'	RT	400	2	2
		489+65		505+80	'EB'	RT	400	4	4
		476+74		478+93	'WB'	LT	400	1	1
		489+65		507+38	'WB'	LT	400	4	4
						1204-08-73 SUBTOTAL		16	16
1204-08-74	3	524+55		526+80	'W4'	LT/RT	100	3	3
		528+00		529+00	'EB'	MEDIAN	400	1	1
		545+00		571+33	'EB'	RT	400	1	1
						1204-08-74 SUBTOTAL		5	5
						PROJECT TOTAL		21	21

REMOVING SIGNS, MOVING SIGNS, AND PERMANENT SIGNING

PROJECT ID	STAGE	SIGN #	STATION	ALIGNMENT	OFFSET	SIGN CODE	SIGN MESSAGE	SIGN SIZE INCHES	204.0195 REMOVING CONCRETE BASES (EACH)	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS (CY)	531.1140 STEEL REINFOREMENT HS ANCILLARY STRUCTURES TYPE NS (LB)	531.2024 DRILLING SHAFT (24-INCH) (LF)	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	637.1230 SIGNS TYPE I REFLECTIVE F (SF)	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING (SF)
		M1-01	38+29	'G'	RT		RIGHT TURN, 30 MPH	-	-	-	-	-	-	-	-	-	-
		M1-02	41+15	'G'	RT		WEST 18 SOUTH 151 RIGHT TURN	-	-	-	-	-	-	-	-	-	-
		M1-03	42+77	'G'	RT		EAST 18 NORTH 151 COUNTY G	-	-	-	-	-	-	-	-	-	-
		M1-04	45+37	'G'	RT		MADISON DODGEVILLE	-	-	-	-	-	-	-	-	-	-
		M1-05	41+59	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	-	-	-	-	-
		M1-05	42+20	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	-	-	-	-	-
		M1-06	42+80	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	-	-	-	-	-
		M1-07	39+67	'BL'	RT		BOBCAT LN	-	-	-	-	-	-	-	-	-	-
		M1-08	39+56	'BL'	RT	R1-1	STOP	-	-	-	-	-	-	-	-	-	-
		M1-09	43+75	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	-	-	-	-	-
		M1-09	44+36	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	-	-	-	-	-
		M1-10	45+02	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	-	-	-	-	-
		M1-11	465+59	'GA'	LT	R5-1A	WRONG WAY	-	-	-	-	-	-	-	-	-	-
		M1-12	465+59	'GA'	LT		MT VERNON DAIRY RIDGE RD	-	-	-	-	-	-	-	-	-	-
		M2-01	460+37	'GC'	RT		DAIRY RIDGE RD	-	-	-	-	-	-	-	-	-	-
		M2-02	460+37	'GC'	RT	R5-1A	WRONG WAY	-	-	-	-	-	-	-	-	-	-
		M2-03	53+56	'G'	RT		COUNTY G	-	-	-	-	-	-	-	-	-	-
		M2-04	462+00	EB'	RT		VERONA EXITS	-	2	4	540	30	-	-	-	-	-
		M3-01	490+20	'EB'	RT		EXIT 76 LODGING	-	-	-	-	-	-	-	-	-	-
		M3-02	494+22	'EB'	RT	R2-1	SPEED LIMIT 55	-	-	-	-	-	-	-	-	-	-
		M3-03	499+28	'EB'	RT		EXIST 50 MPH	-	-	-	-	-	-	-	-	-	-
		M5-01	47+01	'G'	RT		WEST 18 SOUTH 151, RIGHT, NO LEFT TUI	-	-	-	-	-	-	-	-	-	-
1204-08-73	2	M5-02	47+01	'G'	RT		WEST 18 SOUTH 151 LEFT	-	-	-	-	-	-	-	-	-	-
		M5-03	48+42	'G'	RT		EAST 18 NORTH 151 LEFT	-	-	-	-	-	-	-	-	-	-
		M5-04	46+82	'G'	LT		LEFT TURN, 30 MPH	-	-	-	-	-	-	-	-	-	-
		M5-05	462+77	'GA'	LT	R5-1	DO NOT ENTER	-	-	-	-	-	-	-	-	-	-
		M6-01	50+72	'G'	RT		MADISON LEFT	-	-	-	-	-	-	-	-	-	-
		M6-02	51+62	'G'	RT		NO RIGHT TURN	-	-	-	-	-	-	-	-	-	-
		M6-02	51+62	'G'	RT	R5-1	DO NOT ENTER	-	-	-	-	-	-	-	-	-	-
		M6-02	51+62	'G'	RT		ONE WAY RIGHT	-	-	-	-	-	-	-	-	-	-
		M6-02	51+62	'G'	RT	R1-1	STOP	-	-	-	-	-	-	-	-	-	-
		M6-03	462+50	'GC'	RT	R1-1	STOP	-	-	-	-	-	-	-	-	-	-
		M6-04	462+50	'GC'	RT	R5-1	DO NOT ENTER	-	-	-	-	-	-	-	-	-	-
		M6-05	462+50	'GC'	RT		CT G RIGHT	-	-	-	-	-	-	-	-	-	-
		R1-01	40+85	'G'	LT	R2-1	SPEED LIMIT 45	-	-	-	-	-	-	-	-	-	-
		R3-01	481+00	'EB'	RT		EXIT 76 W VERONA 1/2 MILE	-	-	-	-	-	-	-	-	-	-
		R3-02	485+00	'WB'	RT		MT VERNON G	-	-	-	-	-	-	-	-	-	-
		R3-03	499+25	'EB'	RT		EXIT 76 BUS EPIC LANE	-	-	-	-	-	-	-	-	-	-
		R5-01	462+77	'GA'	LT		CTY G LEFT	-	-	-	-	-	-	-	-	-	-
		R5-02	462+77	'GA'	LT	R1-1	STOP SIGN	-	-	-	-	-	-	-	-	-	-
		R5-03	4859	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	-	-	-	-	-
		R5-04	48+62	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	-	-	-	-	-
		R6-01	50+72	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	-	-	-	-	-
		R6-02	50+72	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	-	-	-	-	-
		R3-03	499+25	'EB'	RT		EXIT 76 BUS EPIC LANE	-	-	-	-	-	-	-	-	-	-
							STAGE 2 SUBTOTAL	2	4	540	30	0	0	0	0	0	

REMOVING SIGNS, MOVING SIGNS, AND PERMANENT SIGNING (CONTINUED)

PROJECT ID	STAGE	SIGN #	STATION	ALIGNMENT	OFFSET	SIGN CODE	SIGN MESSAGE	SIGN SIZE INCHES	634.0612 POSTS WOOD 4X6-INCH 12-FT (EACH)	634.0616 POSTS WOOD 4X6-INCH 16-FT (EACH)	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS (LB)	638.2101 MOVING SIGNS TYPE 1 (EACH)	638.2102 MOVING SIGNS TYPE II (EACH)	638.2601 REMOVING SIGNS TYPE I (EACH)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS (EACH)	638.4000 MOVING SMALL SIGN SUPPORTS (EACH)	REMARKS
		M1-01	38+29	'G'	RT		RIGHT TURN, 30 MPH	-	-	-	-	-	2	-	-	-	-	1	
		M1-02	41+15	'G'	RT		WEST 18 SOUTH 151 RIGHT TURN	-	-	-	-	-	1	-	-	-	-	2	
		M1-03	42+77	'G'	RT		EAST 18 NORTH 151 COUNTY G	-	-	-	-	-	1	-	-	-	-	2	
		M1-04	45+37	'G'	RT		MADISON DODGEVILLE	-	-	-	-	-	1	-	-	-	-	2	
		M1-05	41+59	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	2	-	-	-	-	1	
		M1-05	42+20	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	2	-	-	-	-	1	
		M1-06	42+80	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	2	-	-	-	-	1	
		M1-07	39+67	'BL'	RT		BOBCAT LN	-	-	-	-	-	1	-	-	-	-	1	
		M1-08	39+56	'BL'	RT	R1-1	STOP	-	-	-	-	-	1	-	-	-	-	1	
		M1-09	43+75	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	2	-	-	-	-	1	
		M1-09	44+36	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	2	-	-	-	-	1	
		M1-10	45+02	'G'	LT	W1-8	CHEVRONS	-	-	-	-	-	2	-	-	-	-	1	
		M1-11	465+59	'GA'	LT	R5-1A	WRONG WAY	-	-	-	-	-	1	-	-	-	-	-	
		M1-12	465+59	'GA'	LT		MT VERNON DAIRY RIDGE RD	-	-	-	-	-	1	-	-	-	-	2	
		M2-01	460+37	'GC'	RT		DAIRY RIDGE RD	-	-	-	-	-	1	-	-	-	-	2	
		M2-02	460+37	'GC'	RT	R5-1A	WRONG WAY	-	-	-	-	-	1	-	-	-	-	-	
		M2-03	53+56	'G'	RT		COUNTY G	-	-	-	-	-	1	-	-	-	-	1	
		M2-04	462+00	EB'	RT		VERONA EXITS	-	-	-	2,438	1	-	-	-	-	-	-	
		M3-01	490+20	'EB'	RT		EXIT 76 LODGING	-	-	-	-	-	-	-	-	-	-	-	MOVED BY OTHERS
		M3-02	494+22	'EB'	RT	R2-1	SPEED LIMIT 55	-	-	-	-	-	1	-	-	-	-	2	
		M3-03	499+28	'EB'	RT		EXIST 50 MPH	-	-	-	-	-	1	-	-	-	-	2	
		M5-01	47+01	'G'	RT		WEST 18 SOUTH 151, RIGHT, NO LEFT TUI	-	-	-	-	-	2	-	-	-	-	2	
1204-08-73	2	M5-02	47+01	'G'	RT		WEST 18 SOUTH 151 LEFT	-	-	-	-	-	1	-	-	-	-	-	
		M5-03	48+42	'G'	RT		EAST 18 NORTH 151 LEFT	-	-	-	-	-	1	-	-	-	-	1	
		M5-04	46+82	'G'	LT		LEFT TURN, 30 MPH	-	-	-	-	-	2	-	-	-	-	1	
		M5-05	462+77	'GA'	LT	R5-1	DO NOT ENTER	-	-	-	-	-	1	-	-	-	-	1	
		M6-01	50+72	'G'	RT		MADISON LEFT	-	-	-	-	-	1	-	-	-	-	2	
		M6-02	51+62	'G'	RT		NO RIGHT TURN	-	-	-	-	-	1	-	-	-	-	1	
		M6-02	51+62	'G'	RT	R5-1	DO NOT ENTER	-	-	-	-	-	1	-	-	-	-	-	
		M6-02	51+62	'G'	RT		ONE WAY RIGHT	-	-	-	-	-	1	-	-	-	-	-	
		M6-02	51+62	'G'	RT	R1-1	STOP	-	-	-	-	-	1	-	-	-	-	-	
		M6-03	462+50	'GC'	RT	R1-1	STOP	-	-	-	-	-	1	-	-	-	-	1	
		M6-04	462+50	'GC'	RT	R5-1	DO NOT ENTER	-	-	-	-	-	1	-	-	-	-	-	
		M6-05	462+50	'GC'	RT		CT G RIGHT	-	-	-	-	-	2	-	-	-	-	1	
		R1-01	40+85	'G'	LT	R2-1	SPEED LIMIT 45	-	-	-	-	-	-	1	-	1	-	-	
		R3-01	481+00	'EB'	RT		EXIT 76 W VERONA 1/2 MILE	-	-	-	-	-	-	1	-	-	2	-	
		R3-02	485+00	'WB'	RT		MT VERNON G	-	-	-	-	-	-	1	-	-	2	-	
		R3-03	499+25	'EB'	RT		EXIT 76 BUS EPIC LANE	-	-	-	-	-	-	1	-	-	2	-	
		R5-01	462+77	'GA'	LT		CTY G LEFT	-	-	-	-	-	-	-	1	1	-	-	
		R5-02	462+77	'GA'	LT	R1-1	STOP SIGN	-	-	-	-	-	-	-	1	1	-	-	
		R5-03	4859	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	-	-	1	1	-	-	
		R5-04	48+62	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	-	-	1	1	-	-	
		R6-01	50+72	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	1	-	-	-	-	-	
		R6-02	50+72	'G'	RT		VERTICAL STRIPES	-	-	-	-	-	1	-	-	-	-	-	
		R3-03	499+25	'EB'	RT		EXIT 76 BUS EPIC LANE	-	-	-	-	-	-	1	-	-	2	-	
							STAGE 2 SUBTOTAL	0	0	2,438	1	44	5	4	5	8	34		

REMOVING SIGNS, MOVING SIGNS, AND PERMANENT SIGNING CONTINUED

PROJECT ID	STAGE	SIGN #	STATION	ALIGNMENT	OFFSET	SIGN CODE	SIGN MESSAGE	SIGN SIZE INCHES	204.0195 REMOVING CONCRETE BASES (EACH)	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS (CY)	531.1140 STEEL REINFOREMENT HS ANCILLARY STRUCTURES TYPE NS (LB)	531.2024 DRILLING SHAFT (24-INCH) (LF)	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	637.1230 SIGNS TYPE I REFLECTIVE F (SF)	637.2210 SIGNS TYPE II REFLECTIVE H (SF)	637.2230 SIGNS TYPE II REFLECTIVE F (SF)	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING (SF)
		1-01	40+88	'G'	LT	R2-1	SPEED LIMIT 35	24"x30"	-	-	-	-	-	-	5	-	-
		1-02	37+58	'BL'	RT	W3-1	STOP AHEAD	36"X36"	-	-	-	-	-	-	-	9	-
		1-03	42+53	'G'	LT	W4-2	LANE DROP RT	36"X36"	-	-	-	-	-	-	-	9	-
		1-04	45+41	'G'	LT	W4-2	LANE DROP RT	36"X36"	-	-	-	-	-	-	-	9	-
		2-01	55+00	'G'	LT	R2-1	SPEED LIMIT 35	24"X30"	-	-	-	-	-	-	5	-	-
		2-02	57+00	'G'	RT	W3-5	SPEED LIMIT AHEAD 35	36"X36"	-	-	-	-	-	-	9	-	-
		2-03	61+13	'G'	LT	WE-5	SPEED LIMIT AHEAD 35	36"X36"	-	-	-	-	-	-	9	-	-
		2-04	55+00	'G'	RT	R2-1	SPEED LIMIT 55	24"X30"	-	-	-	-	-	-	5	-	-
		3-01	477+27	'WB'	RT	SP-04	EXIT 75	108"X30"	-	-	-	-	23	-	-	-	-
		3-01	477+27	'WB'	RT	SP-04	MT VERNON	78"X168"	-	-	-	-	91	-	-	-	-
		3-01	477+27	'WB'	RT	SP-04	EXIT ONLY UP ARROW	42"X168"	-	-	-	-	-	49	-	-	-
		3-02	482+00	'EB'	RT	SP-01	EXIT 76	108"X30"	-	-	-	-	23	-	-	-	-
		3-02	482+00	'EB'	RT	SP-01	EPIC LN, W VERONA AVE	114"X204"	-	-	-	-	162	-	-	-	-
		3-02	482+00	'EB'	RT	SP-01	EXIT ONLY DOWN ARROW	36"X204"	-	-	-	-	-	51	-	-	-
		4-01	506+00	'WB'	RT	SP-03	EXIT 75	108"X30"	-	-	-	-	23	-	-	-	-
		4-01	506+00	'WB'	RT	SP-03	MT VERNON	78"X168"	-	-	-	-	91	-	-	-	-
		4-01	506+00	'WB'	RT	SP-03	EXIT ONLY DOWN ARROW	36"X168"	-	-	-	-	-	42	-	-	-
		4-02	505+35	'EB'	RT	SP-02	EXIT 76	108"X30"	-	-	-	-	23	-	-	-	-
1204-08-73	3	4-02	505+35	'EB'	RT	SP-02	EPIC LN, W VERONA AVE	114"X204"	-	-	-	-	162	-	-	-	-
		4-02	505+35	'EB'	RT	SP-02	EXIT ONLY UP ARROW	42"X204"	-	-	-	-	-	60	-	-	-
		5-01	462+02	'GD'	RT	R1-1F	STOP SIGN	36"X36"	-	-	-	-	-	-	9	-	-
		5-02	47+23	'G'	LT	W4-3R	ADDED LANE LT	36"X36"`	-	-	-	-	-	-	-	9	-
		5-03	463+30	'GA'	LT	W12-1D	DOWN ARROW LT AND RT	24"X24"	-	-	-	-	-	9	-	-	-
		5-04	47+90	'G'	LT	R5-1	DO NOT ENTER	30"X30"	-	-	-	-	-	-	6	-	-
		5-05	47+97	'G'	LT	R1-1F	STOP SIGN	36"X36"	-	-	-	-	-	-	9	-	-
		5-06	48+22	'G'	LT	R4-7	KEEP LEFT/RIGHT	24'X30"	-	-	-	-	-	-	5	-	-
		5-07	48+59	'G'	LT	R5-1A	WRONG WAY	36"X24"	-	-	-	-	-	-	6	-	-
		5-08	48+25	'G'	LT	R1-1F	STOP SIGN	36"X36"	-	-	-	-	-	-	9	-	-
		5-09	461+97	'GA'	RT	R6-2L	ONE WAY	24"X30"	-	-	-	-	-	-	5	-	-
		6-01	462+07	'GC'	RT	W12-1D	DOWN ARROW LT AND RT	24"X24"	-	-	-	-	-	9	-	-	-
		6-02	51+25	'G'	RT	R5-1	DO NOT ENTER	30"X30"	-	-	-	-	-	-	6	-	-
		6-03	50+76	'G'	RT	R5-1A	WRONG WAY	36"X24"	-	-	-	-	-	-	6	-	-
		6-04	51+25	'G'	RT	R4-7	KEEP LEFT/RIGHT	24'X30"	-	-	-	-	-	-	5	-	-
		6-05	463+13	'GB'	LT	R6-2L	ONE WAY	24"X30"	-	-	-	-	-	-	5	-	-
			47+30	'G'	LT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	6
			48+00	'G'	LT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	6
			48+23	'G'	RT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	6
			47+13	'G'	RT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	6
							STAGE 3 SUBTOTAL		0	0	0	0	595	220	105	36	25
							1204-08-73 SUBTOTAL		2	4	540	30	595	220	105	36	25

REMOVING SIGNS, MOVING SIGNS, AND PERMANENT SIGNING CONTINUED

PROJECT ID	STAGE	SIGN #	STATION	ALIGNMENT	OFFSET	SIGN CODE	SIGN MESSAGE	SIGN SIZE INCHES	634.0612 POSTS WOOD 4X6-INCH 12-FT (EACH)	634.0616 POSTS WOOD 4X6-INCH 16-FT (EACH)	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS (LB)	638.2101 MOVING SIGNS TYPE 1 (EACH)	638.2102 MOVING SIGNS TYPE II (EACH)	638.2601 REMOVING SIGNS TYPE I (EACH)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS (EACH)	638.4000 MOVING SMALL SIGN SUPPORTS (EACH)	REMARKS
		1-01	40+88	'G'	LT	R2-1	SPEED LIMIT 35	24"x30"	-	1	-	-	-	-	-	-	-	-	
		1-02	37+58	'BL'	RT	W3-1	STOP AHEAD	36"X36"	-	1	-	-	-	-	-	-	-	-	
		1-03	42+53	'G'	LT	W4-2	LANE DROP RT	36"X36"	-	1	-	-	-	-	-	-	-	-	
		1-04	45+41	'G'	LT	W4-2	LANE DROP RT	36"X36"	-	1	-	-	-	-	-	-	-	-	
		2-01	55+00	'G'	LT	R2-1	SPEED LIMIT 35	24"X30"	-	1	-	-	-	-	-	-	-	-	
		2-02	57+00	'G'	RT	W3-5	SPEED LIMIT AHEAD 35	36"X36"	-	1	-	-	-	-	-	-	-	-	
		2-03	61+13	'G'	LT	WE-5	SPEED LIMIT AHEAD 35	36"X36"	-	1	-	-	-	-	-	-	-	-	
		2-04	55+00	'G'	RT	R2-1	SPEED LIMIT 55	24"X30"	-	1	-	-	-	-	-	-	-	-	
		3-01	477+27	'WB'	RT	SP-04	EXIT 75	108"X30"	-	-	-	-	-	-	-	-	-	-	
		3-01	477+27	'WB'	RT	SP-04	MT VERNON	78"X168"	-	-	-	-	-	-	-	-	-	-	S-13-615
		3-01	477+27	'WB'	RT	SP-04	EXIT ONLY UP ARROW	42"X168"	-	-	-	-	-	-	-	-	-	-	
		3-02	482+00	'EB'	RT	SP-01	EXIT 76	108"X30"	-	-	-	-	-	-	-	-	-	-	
		3-02	482+00	'EB'	RT	SP-01	EPIC LN, W VERONA AVE	114"X204"	-	-	-	-	-	-	-	-	-	-	S-13-612
		3-02	482+00	'EB'	RT	SP-01	EXIT ONLY DOWN ARROW	36"X204"	-	-	-	-	-	-	-	-	-	-	
		4-01	506+00	'WB'	RT	SP-03	EXIT 75	108"X30"	-	-	-	-	-	-	-	-	-	-	S-13-614
		4-01	506+00	'WB'	RT	SP-03	MT VERNON	78"X168"	-	-	-	-	-	-	-	-	-	-	
		4-01	506+00	'WB'	RT	SP-03	EXIT ONLY DOWN ARROW	36"X168"	-	-	-	-	-	-	-	-	-	-	
		4-02	505+35	'EB'	RT	SP-02	EXIT 76	108"X30"	-	-	-	-	-	-	-	-	-	-	
1204-08-73	3	4-02	505+35	'EB'	RT	SP-02	EPIC LN, W VERONA AVE	114"X204"	-	-	-	-	-	-	-	-	-	-	S-13-613
		4-02	505+35	'EB'	RT	SP-02	EXIT ONLY UP ARROW	42"X204"	-	-	-	-	-	-	-	-	-	-	
		5-01	462+02	'GD'	RT	R1-1F	STOP SIGN	36"X36"	-	1	-	-	-	-	-	-	-	-	
		5-02	47+23	'G'	LT	W4-3R	ADDED LANE LT	36"X36"`	-	1	-	-	-	-	-	-	-	-	
		5-03	463+30	'GA'	LT	W12-1D	DOWN ARROW LT AND RT	24"X24"	1	-	-	-	-	-	-	-	-	-	
		5-04	47+90	'G'	LT	R5-1	DO NOT ENTER	30"X30"	1	-	-	-	-	-	-	-	-	-	
		5-05	47+97	'G'	LT	R1-1F	STOP SIGN	36"X36"	-	1	-	-	-	-	-	-	-	-	
		5-06	48+22	'G'	LT	R4-7	KEEP LEFT/RIGHT	24'X30"	1	-	-	-	-	-	-	-	-	-	
		5-07	48+59	'G'	LT	R5-1A	WRONG WAY	36"X24"	-	-	-	-	-	-	-	-	-	-	
		5-08	48+25	'G'	LT	R1-1F	STOP SIGN	36"X36"	-	1	-	-	-	-	-	-	-	-	
		5-09	461+97	'GA'	RT	R6-2L	ONE WAY	24"X30"	-	-	-	-	-	-	-	-	-	-	
		6-01	462+07	'GC'	RT	W12-1D	DOWN ARROW LT AND RT	24"X24"	1	-	-	-	-	-	-	-	-	-	
		6-02	51+25	'G'	RT	R5-1	DO NOT ENTER	30"X30"	1	-	-	-	-	-	-	-	-	-	
		6-03	50+76	'G'	RT	R5-1A	WRONG WAY	36"X24"	-	-	-	-	-	-	-	-	-	-	
		6-04	51+25	'G'	RT	R4-7	KEEP LEFT/RIGHT	24'X30"	1	-	-	-	-	-	-	-	-	-	
		6-05	463+13	'GB'	LT	R6-2L	ONE WAY	24"X30"	-	-	-	-	-	-	-	-	-	-	
			47+30	'G'	LT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	-	-	SB1
			48+00	'G'	LT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	-	-	SB2
			48+23	'G'	RT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	-	-	SB3
			47+13	'G'	RT	R1-1F	STOP	30"X30"	-	-	-	-	-	-	-	-	-	-	SB6
								STAGE 3 SUBTOTAL	6	12	0	0	0	0	0	0	0	0	
								1204-08-73 SUBTOTAL	6	12	2438	1	44	5	4	5	8	34	

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REMOVING SIGNS, MOVING SIGNS, AND PERMANENT SIGNING

PROJECT ID	STAGE	SIGN #	STATION	ALIGNMENT	OFFSET	SIGN CODE	SIGN MESSAGE	SIGN SIZE INCHES	637.1220 SIGNS TYPE I REFLECTIVE SH (SF)	637.1230 SIGNS TYPE I REFLECTIVE F (SF)	638.2102 MOVING SIGNS TYPE II (EACH)	638.2601 REMOVING SIGNS TYPE I (EACH)	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS (EACH)	638.4000 MOVING SMALL SIGN SUPPORTS (EACH)	REMARKS
		M8-01	537+67	'EB'	LT	-	NORTH 151 MILE 77.0	-	-	-	1	-	-	1	
		M8-02	537+67	'EB'	LT	-	NORTH 151 MILE 77.0	-	-	-	1	-	-	1	
		M9-01	545+19	'EB'	LT	R3-4B	NO U TURN	-	-	-	1	-	-	1	
		M9-01	545+19	'EB'	LT	R3-4B	NO U TURN	-	-	-	1	-	-	1	
		M9-02	548+21	'EB'	LT	-	NORTH 151 MILE 77.2	-	-	-	1	-	-	1	
		M9-03	548+21	'EB'	LT	-	NORTH 151 MILE 77.2	-	-	-	1	-	-	1	
		M9-04	558+59	'EB'	RT	-	EAST 18 NORTH 151	-	-	-	1	-	-	1	
	2	M9-05	558+69	'EB'	LT	-	NORTH 151 MILE 77.4	-	-	-	1	-	-	1	
		M9-06	558+69	'EB'	LT	-	NORTH 151 MILE 77.4	-	-	-	1	-	-	1	
		M9-07	562+94	'EB'	RT	R2-1	SPEED LIMIT 65	-	-	-	1	-	-	1	
1204-08-74		M9-08	569+46	'EB'	LT	-	NORTH 151 MILE 77.6	-	-	-	1	-	-	1	
		M9-09	569+46	'EB'	LT	-	NORTH 151 MILE 77.6	-	-	-	1	-	-	1	
		R9-01	571+92	'EB'	RT	E1-5P	EXIT 76	-	-	-	-	1	-	-	
		R9-01	571+92	'EB'	RT	-	VERONA MONROE	-	-	-	-	1	2	-	
								STAGE 2 SUBTOTAL	0	0	12	2	2	12	
		9-01	549+00	'EB'	RT	SP-05	EXIT 77	108"X30"	23	-	-	-	-	-	
		9-01	549+00	'EB'	RT	SP-05	VERONA MONROE	168"X114"	133	-	-	-	-	-	S-13-616
	3	9-01	549+00	'EB'	RT	SP-05	EXIT ONLY DOWN ARROW	168"X36"	-	42	-	-	-	-	
		9-02	570+89	'EB'	RT	SP-06	EXIT 77	108"X30"	23	-	-	-	-	-	
		9-02	570+89	'EB'	RT	SP-06	VERONA MONROE	168"X114"	133	-	-	-	-	-	S-13-617
		9-02	570+89	'EB'	RT	SP-06	EXIT ONLY UP ARROW	168"X42"	-	49	-	-	-	-	
								STAGE 3 SUBTOTAL	311	91	0	0	0	0	
								1204-08-74 SUBTOTAL	311	91	12	2	2	12	

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TEMPORARY PAVEMENT MARKING - WINTER 2025

PROJECT ID	STATION	-	STATION	ALIGNMENT	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH SOLID YELLOW (LF)	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH SOLID WHITE (LF)	643.3170 TEMPORARY MARKING LINE EPOXY 6-INCH 12.5' LINE, 37.5' GAP WHITE (LF)	643.3270 TEMPORARY MARKING LINE EPOXY 10-INCH SOLID WHITE (LF)	643.3270 TEMPORARY MARKING LINE EPOXY 10-INCH 3' LINE, 9' GAP WHITE (LF)
1204-08-73	458+72	-	466+43	'EB'	771	771	193	-	-
	480+00	-	480+48	'EB'	-	48	-	-	-
	480+48	-	487+81	'EB'	-	732	-	-	183
	487+81	-	488+00	'EB'	19	19	-	-	5
	488+00	-	497+32	'EB'	-	932	-	-	233
	497+32	-	505+41	'EB'	809	809	202	-	202
	505+41	-	505+88	'EB'	47	47	12	47	-
	505+88	-	506+00	'EB'	12	-	3	12	-
	476+67	-	477+43	'WB'	-	76	-	-	-
	477+43	-	487+73	'WB'	-	1,030	-	-	258
	487+73	-	487+94	'WB'	21	21	-	-	5
	487+94	-	489+58	'WB'	-	164	-	-	41
	489+58	-	489+78	'WB'	20	20	-	-	5
	489+78	-	498+48	'WB'	-	870	-	-	218
	498+48	-	507+00	'WB'	852	852	213	-	213
	507+00	-	507+46	'WB'	-	46	-	-	12
	507+46	-	507+90	'WB'	-	44	-	-	-
				QUANTITIES SUBTOTAL	2,551	6,482	623	59	1,374
				1204-08-73 SUBTOTAL		9,656		1,433	
1204-08-74	522+88	-	524+54	'W4'	167	-	-	-	-
	524+54	-	538+23	'W4'	1,368	1,368	342	-	-
	538+23	-	540+31	'W4'	208	208	-	-	-
	540+31	-	544+00	'W4'	369	-	-	-	-
	534+40	-	545+18	'EB'	1,077	-	-	-	-
	545+18	-	545+28	'EB'	10	10	-	-	-
	545+28	-	547+19	'EB'	191	191	-	191	-
	547+19	-	570+68	'EB'	2,349	2,349	-	-	587
	570+68	-	571+02	'EB'	34	-	-	-	9
	571+02	-	577+10	'EB'	608	-	-	-	-
				QUANTITIES SUBTOTAL	6,382	4,127	342	191	596
				1204-08-74 SUBTOTAL		10,850		787	
				PROJECT TOTALS		20,506		2,220	

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TEMPORARY PAVEMENT MARKING

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE (LF)	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW (LF)	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE (LF)	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE 12.5' LINE, 37.5' GAP (LF)	643.3280 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH WHITE (LF)	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE WHITE EACH	643.3960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH (LF)
1204-08-73	1B	433+80	-	451+00	'EB'	-	-	1,720	-	-	-	195
		475+00	-	506+11	'EB'	-	-	3,111	-	396	-	164
		472+00	-	509+00	'WB'	-	-	3,700	-	200	-	150
		506+00	-	514+34	'WB'	-	734	0	-	-	-	38
					STAGE 1B SUBTOTAL	0	734	8,531	0	596	0	547
	2	472+00	-	486+00	'WB'	-	-	-	-	-	-	-
					STAGE 2 SUBTOTAL	0	0	0	0	0	0	0
	3A	442+00	-	450+00	'EB'	-	-	-	-	-	-	-
					STAGE 3 SUBTOTAL	0	0	0	0	0	0	0
	3B	499+00	-	505+25	'EB'	-	-	625	-	-	-	-
		500+00	-	508+24	'WB'	-	-	824	-	-	-	-
					STAGE 3 SUBTOTAL	0	0	1,449	0	0	0	0
	4	433+80	-	441+60	'EB'	-	780	-	-	-	-	-
		442+82	-	449+73	'EB'	-	-	691	-	-	-	-
		477+00	-	505+89	'EB'	-	1,951	2,638	-	-	-	485
		477+43	-	506+00	'WB'	-	1,950	2,857	-	-	-	-
					STAGE 4 SUBTOTAL	0	4,681	6,186	0	0	0	485
					1204-08-73 SUBTOTAL	0	21,581		0	596	0	1,032

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TEMPORARY PAVEMENT MARKING (CONTINUED)

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH WHITE (LF)	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH YELLOW (LF)	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE (LF)	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH WHITE 12.5' LINE, 37.5' GAP (LF)	643.3280 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH WHITE (LF)	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE - EACH	643.3960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH (LF)
	1B	532+90	-	540+00	'WB'	-	0	710	-	0	-	178
		527+95	-	534+52	'WB'	-	-	-	-	-	-	-
					STAGE 1B SUBTOTAL	0	0	710	0	0	0	178
	2	501+00	-	507+00	'EB'	-	-	-	-	-	-	-
		526+38	-	547+20	'W4'	2,082	-	-	-	-	-	-
		540+31	-	547+19	'W4'	-	-	-	-	-	-	-
					STAGE 2 SUBTOTAL	2,082	0	0	0	0	0	0
1204-08-74	3A	521+29	-	548+50	'W4'	-	2,498	710	-	0	-	719
		521+00	-	525+00	'WB'	-	400	400	-	-	-	100
		534+50	-	575+90	'EB'	-	4,140	2,540	390	648	-	1,378
		537+26	-	544+37	'WB'	-	711	-	-	-	-	178
					STAGE 3A SUBTOTAL	0	7,749	3,650	390	648	0	2,374
	3B	562+50	-	571+23	'EB'	-	-	873	-	-	-	-
	3B	-	-	-	'EPIC LAN'	-	-	-	-	-	1	-
					STAGE 3B SUBTOTAL	0	0	873	0	0	1	0
	4	521+29	-	530+98	'W4'	-	969	687	-	-	-	-
					STAGE 4 SUBTOTAL	0	969	687	0	0	0	0
					1204-08-74 SUBTOTAL	2,082	14,638		390	648	1	2,552
					PROJECT TOTAL	2,082	36,219		390	1,244	1	3,583

3

TRAFFIC CONTROL

PROJECT	STAGE	ROADWAY	ANTICIPATED DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS** NO.	643.0300 (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III** NO.	643.0420 (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A** NO.	643.0705 (DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C** NO.	643.0715 (DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS** NO.	643.0800 (DAYS)	643.0900 TRAFFIC CONTROL SIGNS** NO.	643.0900 (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS** NO.	643.1050 (DAYS)	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR NO.	643.1055.S (DAYS)	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II** (EACH)	643.0920 LOCATION	643.0920 CYCLE	643.4100 TRAFFIC CONTROL INTERIM LANE CLOSURE (EACH)
1204-08-73	1A	ADVANCED SIGNAGE	10	-	-	-	-	-	-	-	-	-	-	-	-	2	20	-	-	-	-	-	-
		USH 18 EB	9	99	891	5	45	10	90	17	153	1	9	15	135	-	-	1	2	-	-	-	5
		USH 18 WB	9	169	1,521	8	72	14	126	25	225	-	-	14	126	-	-	1	2	1	472+70	1	-
		CTH G/DAIRY RIDGE RD	9	-	-	20	180	24	216	-	-	-	-	7	63	-	-	-	-	-	-	-	-
		CTH G RAMPS	9	52	468	4	36	6	54	-	-	-	-	2	18	-	-	-	-	1	453+90	1	-
		STAGE 1A SUBTOTAL			2,880		333		486		378		9		342		20		4	2			5
	1B	USH 18 EB	9	166	1,494	4	36	8	72	24	216	1	9	18	162	-	-	-	-	1	507+46	1	5
		USH 18 WB	9	144	1,296	8	72	14	126	39	351	-	-	15	135	-	-	-	-	-	-	-	-
		CTH G/DAIRY RIDGE RD	9	-	-	20	180	24	216	-	-	-	-	7	63	-	-	-	-	-	-	-	-
		CTH G RAMPS	9	-	-	4	36	6	54	-	-	-	-	2	18	-	-	-	-	-	-	-	-
		STAGE 1B SUBTOTAL			2,790		324		468		567		9		378		0		0	1			5
	2 OFF PEAK	USH 18 EB	28	144	4,032	5	140	10	280	33	924	1	28	19	532	-	-	1	4	-	-	-	8
		USH 18 WB	28	92	2,576	7	196	12	336	-	-	-	-	14	392	-	-	4	4	-	-	-	-
		CTH G/DAIRY RIDGE RD	28	-	-	20	560	24	672	-	-	-	-	7	196	-	-	-	-	-	-	-	-
		CTH G RAMPS	28	-	-	4	112	6	168	-	-	-	-	2	56	-	-	-	-	-	-	-	-
		STAGE 2 OFF PEAK SUBTOTAL			6,608		1,008		1,456		924		28		1,176		0		8	0			8
	2 PEAK	USH 18 EB	28	3	84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
		USH 18 WB	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CTH G/DAIRY RIDGE RD	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CTH G RAMPS	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		STAGE 2 PEAK SUBTOTAL			84		0		0		0		0		0		0		0	0			8

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TRAFFIC CONTROL CONTINUED

PROJECT	STAGE	ROADWAY	ANTICIPATED DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS** NO.	(DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III** NO.	(DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A** NO.	(DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C** NO.	(DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS** NO.	(DAYS)	643.0900 TRAFFIC CONTROL SIGNS** NO.	(DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS** NO.	(DAYS)	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR NO.	(DAYS)	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II** (EACH)	LOCATION	CYCLE	643.4100 TRAFFIC CONTROL INTERIM LANE CLOSURE (EACH)
1204-08-73	3A	USH 18 EB	83	116	9,628	4	332	8	664	23	1,909	1	83	17	1,411	-	-	-	-	-	-	-	12
		USH 18 WB	83	90	7,470	8	664	14	1,162	-	-	-	-	15	1,245	-	-	-	-	-	-	-	-
		CTH G/DAIRY RIDGE RD	83	-	-	20	1,660	24	1,992	-	-	-	-	7	581	-	-	-	-	-	-	-	-
		CTH G RAMPS	83	-	-	4	332	6	498	-	-	-	-	2	166	-	-	-	-	-	-	-	-
		STAGE 3A SUBTOTAL			17,098		2,988		4,316		1,909		83		3,403		0		0	0			12
	3B	USH 18 EB	83	110	9,130	4	332	8	664	17	1,411	1	83	18	1,494	-	-	-	-	-	-	-	12
		USH 18 WB	83	87	7,221	8	664	14	1,162	-	-	-	-	11	913	-	-	-	-	-	-	-	-
		CTH G/DAIRY RIDGE RD	83	-	-	20	1,660	24	1,992	-	-	-	-	7	581	-	-	-	-	-	-	-	-
		CTH G RAMPS	83	-	-	4	332	6	498	-	-	-	-	2	166	-	-	-	-	-	-	-	-
		STAGE 3B SUBTOTAL			16,351		2,988		4,316		1,411		83		3,154		0		0	0			12
	4 OFF PEAK	USH 18 EB	12	219	2,628	10	120	20	240	47	564	1	12	23	276	-	-	-	-	-	-	-	8
		USH 18 WB	12	143	1,716	9	108	16	192	36	432	-	-	18	216	-	-	-	-	-	-	-	-
		CTH G/DAIRY RIDGE RD	12	-	-	20	240	24	288	-	-	-	-	7	84	-	-	-	-	-	-	-	-
		CTH G RAMPS	12	-	-	4	48	6	72	-	-	-	-	2	-	-	-	-	-	-	-	-	-
		OFF PEAK SUBTOTAL			4,344		516		792		996		12		576		0		0	0			8
	4 PEAK	USH 18 EB	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
		USH 18 WB	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CTH G/DAIRY RIDGE RD	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CTH G RAMPS	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		STAGE 4 PEAK SUBTOTAL			0		0		0		0		0		0		0		0	0			8
	STAGE 5	USH 18 EB	14	480	6,720	5	70	6	84	15	210	1	14	12	168	-	-	-	-	-	-	-	14
		USH 18 WB	14	480	6,720	5	70	6	84	15	210	1	14	12	168	-	-	-	-	-	-	-	-
		W VERONA AVE RAMP	14	158	2,212	6	84	8	112	20	280	2	28	7	98	-	-	-	-	-	-	-	-
		STAGE 5 SUBTOTAL			15,652		224		280		700		56		434		0		0	0			14
		1204-08-73 PROJECT TOTAL			65,807		8,381		12,114		6,885		280		9,463		20		12	3			80

**Additional Quantities Elsewhere

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TRAFFIC CONTROL

PROJECT	STAGE	ROADWAY	ANTICIPATED DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS** NO.	(DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III** NO.	(DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A** NO.	(DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C** NO.	(DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS** NO.	(DAYS)	643.0900 TRAFFIC CONTROL SIGNS** NO.	(DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS** NO.	(DAYS)	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR NO.	(DAYS)	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II** (EACH)	LOCATION	CYCLE	643.4100 TRAFFIC CONTROL INTERIM LANE CLOSURE (EACH)
1204-08-74	STAGE 1A	USH 18 EB	9	42	378	2	18	4	36	-	-	-	-	6	54	-	-	1	2	-	-	-	-
		USH 18 WB	9	56	504	2	18	4	36	17	153	1	9	8	72	-	-	1	2	-	-	-	5
		ENTRANCE/EXIT RAMPS	9	-	-	-	-	-	-	-	-	-	-	4	36	-	-	-	-	-	-	-	-
		STAGE 1A SUBTOTAL			882		36		72		153		9		162		0		4	0			5
	STAGE 1B	USH 18 EB	9	-	-	-	-	-	-	-	-	-	-	4	36	-	-	-	-	-	-	-	-
		USH 18 WB	9	36	324	2	18	4	36	17	153	1	9	8	72	-	-	-	-	-	-	-	5
		ENTRANCE/EXIT RAMPS	9	-	-	-	-	-	-	-	-	-	-	4	36	-	-	-	-	-	-	-	-
		STAGE 1B SUBTOTAL			324		18		36		153		9		144		0		0	0			5
	STAGE 2 OFF PEAK	USH 18 EB	28	101	2,828	6	168	12	336	28	784	-	-	10	280	-	-	1	28	-	-	-	-
		USH 18 WB	28	36	1,008	2	56	4	112	17	476	1	28	8	224	4	112	-	-	-	-	-	28
		ENTRANCE/EXIT RAMPS	28	-	-	-	-	-	-	0	0	-	-	2	56	-	-	-	-	-	-	-	-
		W VERONA AVE/EPIC LANE	28	-	-	-	-	-	-	0	0	-	-	0	0	-	-	-	-	-	-	-	-
		W4	28	40	1,120	-	-	-	-	0	0	-	-	5	140	-	-	-	-	-	-	-	-
		STAGE 2 OFF PEAK SUBTOTAL			4,956		224		448		1,260		28		700		112		28	0			28
	STAGE 2 PEAK	USH 18 EB	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		USH 18 WB	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
		ENTRANCE/EXIT RAMPS	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		W VERONA AVE/EPIC LANE	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		W4	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		STAGE 2 PEAK SUBTOTAL			0		0		0		0		0		0		0		0	0			6

**Additional Quantities Elsewhere

TRAFFIC CONTROL CONTINUED

PROJECT	STAGE	ROADWAY	ANTICIPATED DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS** NO.	643.0300 (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III** NO.	643.0420 (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A** NO.	643.0705 (DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C** NO.	643.0715 (DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS** NO.	643.0800 (DAYS)	643.0900 TRAFFIC CONTROL SIGNS** NO.	643.0900 (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS** NO.	643.1050 (DAYS)	643.1055.S TRUCK OR TRAILER-MOUNTED ATTENUATOR NO.	643.1055.S (DAYS)	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II** (EACH)	643.0920 LOCATION	643.0920 CYCLE	643.4100 TRAFFIC CONTROL INTERIM LANE CLOSURE (EACH)
1204-08-74	STAGE 3A	USH 18 EB	83	54	4,482	6	498	12	996	15	1,245	-	-	16	1,328	-	-	1	4	1	573+77	1	-
		USH 18 WB	83	70	5,810	3	249	6	498	21	1,743	1	83	9	747	4	332	1	4	-	-	-	12
		ENTRANCE/EXIT RAMPS	83	8	664	-	-	-	-	8	664	-	-	2	166	-	-	-	-	-	-	-	-
		W VERONA AVE/EPIC LANE	83	-	-	-	-	-	-	-	-	-	-	14	1,162	-	-	-	-	-	-	-	-
		W4	83	68	5,644	1	-	-	-	23	1,909	1	-	4	-	1	83	-	-	-	-	-	-
		STAGE 3A SUBTOTAL			16,600		747		1,494		5,561		83		3,403		415		8	1			12
	STAGE 3B	USH 18 EB	83	118	9,794	7	581	14	1,162	17	1,411	-	-	18	1,494	-	-	-	-	-	-	-	-
		USH 18 WB	83	54	4,482	2	166	4	332	27	2,241	1	83	9	747	4	332	-	-	-	-	-	12
		ENTRANCE/EXIT RAMPS	83	-	-	-	-	-	-	-	-	-	-	3	249	-	-	-	-	-	-	-	-
		W VERONA AVE/EPIC LANE	83	29	2,407	4	332	6	498	9	747	-	-	19	1,577	-	-	-	-	-	-	-	-
		W4	83	68	5,644	-	-	-	-	23	1,909	1	-	4	-	1	83	-	-	-	-	-	-
		STAGE 3B SUBTOTAL			22,327		1,079		1,992		6,308		83		4,067		415		0	0			12
	STAGE 4 OFF PEAK	USH 18 EB	12	61	732	6	72	12	144	-	-	1	12	10	120	-	-	-	-	-	-	-	-
		USH 18 WB	12	61	732	2	24	4	48	17	204	-	-	9	108	4	48	-	-	-	-	-	8
		ENTRANCE/EXIT RAMPS	12	-	-	-	-	-	-	-	-	-	-	2	24	-	-	-	-	-	-	-	-
		W VERONA AVE/EPIC LANE	12	-	-	-	-	-	-	-	-	-	-	6	72	-	-	-	-	-	-	-	-
		W4	12	29	348	1	12	2	24	20	240	1	12	4	48	1	12	-	-	-	-	-	-
		STAGE 4 OFF PEAK SUBTOTAL			1,812		108		216		444		24		372		60		0	0			8
	STAGE 4 PEAK	USH 18 EB	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10	-	-	-	-
		USH 18 WB	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
		ENTRANCE/EXIT RAMPS	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		W VERONA AVE/EPIC LANE	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		W4	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		STAGE 4 PEAK SUBTOTAL			0		0		0		0		0		0		0		10	0			8
	STAGE 5	USH 18 EB	14	324	4,536	10	140	12	168	10	140	1	14	13	182	-	-	-	-	-	-	-	14
		USH 18 WB	14	324	4,536	10	140	12	168	10	140	1	14	13	182	-	-	-	-	-	-	-	-
		W4	14	152	2,128	6	84	8	112	20	280	2	28	7	98	-	-	-	-	-	-	-	-
		STAGE 5 SUBTOTAL			11,200		364		448		560		56		462		0		0	0			14
		1204-08-74 PROJECT TOTAL			58,101		2,576		4,706		14,439		292		9,310		1,002		50	1			98
		PROJECT TOTALS			123,908		10,957		16,820		21,324		572		18,773		1,022		62	4			178

**Additional Quantities Elsewhere

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BASIC TRAFFIC QUEUE WARNING SYSTEM

1204-08-73

LOCATION	STAGE	FLASHING BEACON SIGNS (FBS)	PORTABLE TRAFFIC SENSORS (PTS)	643.1205.S BASIC QUEUE WARNING SYSTEM (DAY)
USH 18 EB	1A	3	3	9
USH 18 EB	1B	3	3	9
USH 18 EB	2 (PEAK & OFF-PEAK)	3	3	28
USH 18 EB	3A	3	3	83
USH 18 EB	3B	3	3	83
USH 18 EB	4 (PEAK & OFF PEAK)	3	3	12
USH 18 EB	5	3	3	14
PROJECT 1204-08-73 TOTALS				238

*These items are part of the QWS and are paid for one complete system per roadway.

BASIC TRAFFIC QUEUE WARNING SYSTEM

1204-08-74

LOCATION	STAGE	FLASHING BEACON SIGNS (FBS)	PORTABLE TRAFFIC SENSORS (PTS)	643.1205.S BASIC QUEUE WARNING SYSTEM (DAY)
USH 18 WB	1A	3	3	9
USH 18 WB	1B	3	3	9
USH 18 WB	2 (PEAK & OFF-PEAK)	3	3	28
USH 18 WB	3A	3	3	83
USH 18 WB	3B	3	3	83
USH 18 WB	4 (PEAK & OFF PEAK)	3	3	12
USH 18 WB	5	3	3	14
PROJECT 1204-08-74 TOTALS				238

*These items are part of the QWS and are paid for one complete system per roadway.

3

TRAFFIC CONTROL DETOUR

PROJECT	DETOUR	ROADWAY	ANTICIPATED DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS** NO.	643.0300 (DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II NO.	643.0410 (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III** NO.	643.0420 (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A** NO.	643.0705 (DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C** NO.	643.0715 (DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS** NO.	643.0800 (DAYS)	643.0900 TRAFFIC CONTROL SIGNS** NO.	643.0900 (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS** NO.	643.1050 (DAYS)	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I (EACH)	643.0910 LOCATION	643.0910 CYCLE	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II** (EACH)	643.0920 LOCATION	643.0920 CYCLE
		ADVANCED SIGNAGE	10	-	-		-		-		-		-		-		-	5	50	-	-	-	-	-	-
	EB 18/151 TO W VERONA RD OFF RAMP (STAGE 3)	USH 18 EB	14	-	-	-	-	-	-	-	-	-	-	-	-	2	28	-	-	4	-	1	1	-	-
		USH 18 WB	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		W VERONA RD OFF RAMP	14	25	350	-	-	4	56	6	84	-	-	-	-	5	70	2	28	-	-	-	-	-	-
		PAOLI ST	14	-	-	-	-	-	-	-	-	-	-	-	-	2	28	-	-	-	-	-	-	-	-
	EB 18/151 TO W VERONA RD OFF RAMP SUBTOTAL			25	350	-	-	4	56	6	84	-	-	-	-	9	126	7	78	4	-	1	1	-	-
		USH 18 EB	70		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		USH 18 WB	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	W VERONA RD ON RAMP TO WB 18/151 (STAGE 3)	W VERONA AVE	70	7	490	-	-	5	350	6	420	-	-	-	-	5	350	1	70	-	-	-	1	-	-
		PAOLI ST RAMP	70	-	-	-	-	-	-	-	-	-	-	-	-	5	350	-	-	-	-	-	1	-	-
		EPIC LN	70	-	-	-	-	-	-	-	-	-	-	-	-	6	420	-	-	-	-	-	2	-	-
1204-08-73	MILITARY RIDGE PATH DETOUR SUBTOTAL			7	490	-	-	5	350	6	420	-	-	-	-	16	1120	1	70	-	-	-	4	-	-
		USH 18 EB	180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WB 18/151 TO CTH G RAMPS (STAGES 2, 3, 4)	USH 18 WB	180	-	-	-	-	-	-	-	-	-	-	-	-	1	180	-	-	1	-	-	-	-	-
		CTH G/CTH J	180	-	-	-	-	5	900	6	1080	-	-	-	-	3	540	-	-	-	-	-	-	-	-
		CTH PD RAMP	180	-	-	-	-	-	-	-	-	-	-	-	-	13	2340	-	-	-	-	-	-	-	-
		CTH G RAMPS SUBTOTAL		-	-	-	-	5	900	6	1080	-	-	-	-	17	3060	-	-	1	-	-	-	-	-
		USH 18 EB	14	-	-	-	-	-	-	-	-	-	-	-	-	1	14	-	-	1	-	-	1	-	-
	EB CTH G TO 18/151 RAMPS (STAGES 2, 3, 4)	USH 18 WB	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		CTH J	14	-	-	-	-	-	-	-	-	-	-	-	-	2	28	-	-	-	-	-	-	-	-
		CTH PD RAMP	14	-	-	-	-	-	-	-	-	-	-	-	-	1	14	-	-	-	-	-	-	-	-
	EB CTH G TO 18/151 RAMPS SUBTOTAL			-	-	-	-	-	-	-	-	-	-	-	-	4	56	-	-	1	-	-	1	-	-
	1204-08-73 PROJECT TOTAL			32	840	-	-	14	1306	18	1584	-	-	-	-	46	4362	8	148	6	-	1	6	-	-

**Additional Quantities Elsewhere

3

TRAFFIC CONTROL DETOUR

PROJECT	DETOUR	ROADWAY	ANTICIPATED DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS** NO.	(DAYS)	643.0410 TRAFFIC CONTROL BARRICADES TYPE II NO.	(DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III** NO.	(DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A** NO.	(DAYS)	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C** NO.	(DAYS)	643.0800 TRAFFIC CONTROL ARROW BOARDS** NO.	(DAYS)	643.0900 TRAFFIC CONTROL SIGNS** NO.	(DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS** NO.	(DAYS)	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I (EACH)	LOCATION	CYCLE
1204-08-74	W VERONA AVE TO EB 18/NB 151	ADVANCED SIGNAGE	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	20	0	-	-
		USH 18 EB	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
		USH 18 WB	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
		CTH G/DAIRY RIDGE RD	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
		CTH G RAMPS	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
		W VERONA AVE TO USH EB 18/NB 151 SUBTOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	20	0	0	0
	MILITARY RIDGE PATH DETOUR	MILITARY RIDGE PATH DETOUR EB	70	0	0	25	1,750	10	700	20	1,400	0	0	0	0	27	1,890		0	-	-	-
		MILITARY RIDGE PATH DETOUR WB	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	-	-	-
		MILITARY RIDGE PATH DETOUR SUBTOTAL		0	0	25	1,750	10	700	20	1,400	0	0	0	0	27	1,890	0	0	0	0	0
	EB 18/151 TO STH 69 OFF RAMP (STAGE 3)	USH 18 EB	14	0	98	0	0	0	0	0	0	0	0	0	0	4	56	0	0	4	-	-
		USH 18 WB	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
		EPIC LANE RAMP	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-
		PAOLI ST RAMP	14	7	98	0	0	0	0	0	0	0	0	0	0	0	0	1	14	-	-	-
		OLD PB RAMP	14	0	0	0	0	0	0	0	0	0	0	0	0	7	98	0	0	0	-	-
		EB 18/151 TO STH 69 OFF RAMP SUBTOTAL		7	196	0	0	0	0	0	0	0	0	0	0	11	154	1	14	4	0	0
		1204-08-74 PROJECT TOTAL		7	196	25	1,750	10	700	20	1,400	0	0	0	0	38	2,044	3	34	4	0	0

**Additional Quantities Elsewhere

3

PAVEMENT MARKING

PROJECT ID	STATION	-	STATION	ALIGNMENT	646.2020 MARKING LINE EPOXY 6-INCH YELLOW (LF)	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH 12.5' LINE BLACK (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH SOLID YELLOW (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH SOLID WHITE (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH 3' LINE, 9' GAP WHITE (LF)	646.2050 MARKING LINE GROOVED PERMANENT TAPE 6-INCH 12.5' LINE, 37.5' GAP WHITE (LF)	646.4025 MARKING LINE GROOVED BLACK EPOXY 10-INCH 3' LINE BLACK (LF)	646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH 3' LINE, 9' GAP WHITE (LF)	646.4050 MARKING LINE GROOVED PERMANENT TAPE 10-INCH SOLID WHITE (LF)
1204-08-73	32+00	-	39+71	'G'	1,541	-	-	1,541	-	-	-	-	-
	39+71	-	41+77	'G'	412	-	-	412	-	51	-	-	-
	41+77	-	42+46	'G'	-	-	140	140	-	17	-	-	-
	42+46	-	43+96	'G'	-	-	299	150	-	37	-	-	-
	43+96	-	44+44	'G'	-	-	96	-	24	12	-	-	-
	44+44	-	45+59	'G'	-	-	231	116	29	29	-	-	-
	38+50	-	39+53	'BL'	-	-	102	-	-	-	-	-	-
	45+59	-	46+45	"G'		-	171	171	-	21	-	-	86
	46+45	-	46+82	"G'	-	-	74	74	-	-	-	-	37
	46+82	-	47+33	"G'	-	-	102	86	-	-	-	-	51
	48+00	-	51+35	"G'	-	-	-	671	-	-	-	-	671
	51+91	-	52+54	"G'	-	-	126	-	-	-	-	-	-
	52+54	-	53+75	"G'	-	-	242	242	-	-	-	-	-
	53+75	-	61+85	"G'	-	-	1,620	810	-	-	-	-	-
	453+19	-	460+42	'GC'	-	-	723	723	-	-	-	-	-
	460+42	-	462+88	'GC'	-	-	246	246	-	-	-	-	302
	463+73	-	473+74	"GB'	-	-	1,001	1,001	-	-	-	-	-
	473+74	-	481+00	"GB'	-	182	727	727	-	182	-	-	1,453
	451+95	-	461+65	'GD'	-	-	970	970	-	-	-	-	-
	464+48	-	467+00	'GA'	-	-	252	252	-	-	-	-	252
	467+00	-	472+04	'GA'	-	-	504	504	-	-	-	-	-
	472+04	-	477+94	"GA'	-	148	590	590	-	148	-	-	1,180
	458+72	-	473+74	'EB'	-	376	1,502	1,502	-	376	-	-	-
	481+00	-	504+91	"EB'	-	598	2,391	2,391	-	598	598	598	-
	504+91	-	507+53	"EB'	-	66	262	-	-	66	-	-	262
	507+53	-	524+00	"EB'	-	412	1,647	1,647	-	412	-	-	-
	458+74	-	472+04	'WB'	-	333	1,330	1,330	-	333	-	-	-
	477+93	-	506+96	"WB'	-	726	2,903	2,903	-	726	726	726	-
	506+96	-	514+39	"WB'		186	743	-		186	-		743
	514+39	-	524+31	"WB'	-	248	992	992	-	248	-	-	-
	501+77	-	509+23	'WW'	-	-	-	746	-	-	-	-	746
	509+23	-	520+36	"WW'	-	-	1,113	1,113	-	-	-	-	-
	520+36	-	522+02	"WW'	-	41	166	166	-	41	-	-	-
	500+91	-	503+42	'WE'	-	-	-	251	-	-	-	-	251
	503+42	-	520+91	"WE'	-	-	1,749	1,749	-	-	-	-	-
	520+91	-	522+48	"WE'	-	39	157	157	-	39	-	-	-
	522+48	-	524+87	"WE'	-	60	239	239	-	60	-	-	239
			1204-08-73 SUBTOTAL		1,953	3,412	23,409	24,611	53	3,581	1,323	1,323	6,273
			1204-08-73 SUBTOTAL		1,953	3,412		48,072		3,581	1,323	1,323	6,273

3

PAVEMENT MARKING - CONTINUED

PROJECT ID	STATION	-	STATION	ALIGNMENT	646.2020 MARKING LINE EPOXY 6-INCH YELLOW (LF)	646.2025 MARKING LINE GROOVED BLACK EPOXY 6-INCH 12.5' LINE BLACK (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH SOLID YELLOW (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH SOLID WHITE (LF)	646.2040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH 3' LINE, 9' GAP WHITE (LF)	646.2050 MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH 12.5' LINE, 37.5' GAP WHITE (LF)	646.4025 MARKING LINE GROOVED BLACK EPOXY 10-INCH 3' LINE BLACK (LF)	646.4040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH 3' LINE, 9' GAP WHITE (LF)	646.4050 MARKING LINE GROOVED PERMANENT TAPE 10-INCH SOLID WHITE (LF)
	520+32	-	524+37	'W3'	-	101	405	405	-	101	-	-	405
	524+37	-	531+95	"W3'	-	189	758	758	-	189	-	-	-
	531+95	-	542+30	"W3'	-	517	1,035	1,035	-	517	-	-	2,070
	542+30	-	544+41	"W3'	-	53	211	211	-	53	-	-	632
	544+41	-	546+33	"W3'	-	48	192	192	-	48	-	-	192
	518+94	-	543+49	'W4'	-	614	2,455	2,455	-	614	-	-	-
	573+60	-	583+11	'SC'	-	-	951	951	-	-	-	-	-
	583+11	-	583+96	"SC'	-	-	85	85	-	-	-	-	170
1204-08-74	575+10	-	586+75	'SD'	-	-	1,165	1,165	-	-	-	-	-
	524+00	-	543+49	"EB'	-	487	1,949	1,949	-	487	-	-	-
	543+49	-	547+69	'EB'	-	105	420	420	-	210	-	-	840
	547+69	-	570+53	"EB'	-	571	2,284	2,284	-	571	571	571	-
	570+53	-	573+53	"EB'	-	75	300	300	-	75	-	-	601
	573+53	-	584+53	"EB'	-	275	1,100	1,100	-	275	-	-	-
	524+31	-	531+94	"WB'	-	191	763	763	-	382	-	-	-
	543+33	-	572+10	"WB'	-	719	2,877	2,877	-	719	719	719	-
	572+10	-	575+09	'WB'	-	75	299	299	-	75	-	-	598
	575+09	-	584+89	"WB'	-	245	980	980	-	245	-	-	-
				1204-08-74 SUBTOTAL	0	4,266	18,230	18,230	0	4,562	1,290	1,290	5,508
				1204-08-74 SUBTOTAL	0	4,266		36,461		4,562	1,290	1,290	5,508
				PROJECT TOTALS	1,953	7,678		84,533		8,143	2,614	2,614	11,780

3

PAVEMENT MARKING MISCELLANEOUS

PROJECT ID	STATION	-	STATION	ALIGNMENT	646.5020 MARKING ARROW EPOXY WHITE (EACH)	646.5120 MARKING WORD EPOXY WHITE (EACH)	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE (LF)	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW (LF)	646.7220 MARKING CHEVRON EPOXY 24-INCH WHITE (LF)	646.8120 MARKING CURB EPOXY YELLOW (LF)	646.8220 MARKING ISLAND NOSE EPOXY YELLOW (EACH)
1204-08-73	41+77	-	47+43	'G'	-	-	39	740	-		1
	48+00	-	51+35	'G'	4	2	23	-	-	42	1
	51+91	-	61+85	'G'	-	-	-	399	-	-	1
	453+19	-	463+00	'GC'	-	-	33	-	-	45	-
	452+00	-	461+65	'GD'	-	-	-	-	-	-	-
	462+48	-	477+93	'GA'	-	-	16	-	205	-	-
	501+00	-	524+88	'WE'	-	-	68	-	90	-	-
				1204-08-73 SUBTOTAL	4	2	179	1,139	295	87	3
1204-08-74	520+32	-	546+33	'W3'	3	1	36	-	-	-	-
	518+94	-	54769.03	'W4'	2	-	-	-	-	-	-
	570+00		585+05	'SC'	-	-	39	-	127	-	-
				1204-08-74 SUBTOTAL	5	1	75	0	127	0	0
				PROJECT TOTALS	9	3	254	1,139	422	87	3

PAVEMENT MARKING REMOVALS

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	646.9000 MARKING REMOVAL LINE 4-INCH (LF)
1204-08-74	2	526+38		547+28	'W4'	2,088
					STAGE 2 SUBTOTAL	2,088
					1204-08-74 SUBTOTAL	2,088
					PROJECT TOTAL	2,088

3

CONSTRUCTION STAKING

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	650.4500 CONSTRUCTION STAKING SUBGRADE (LF)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)	650.9500 CONSTRUCTION STAKING SIDEWALK (PROJECT)	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (EACH)	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT)	650.9920 CONSTRUCTION STAKING SLOPE STAKES (LF)
1204-08-73	1	476+67	-	508+61	'WB'	-	3,194	-	3	3,194	-	1		3,194
		479+30	-	506+00	'EB'	-	2,600	-	3	2,600	-	-		2,600
		32+00	-	61+85	'G'	5	6,379	840	-	6,379	1	-		6,223
1204-08-73 SUBTOTAL						5	12,173	840	6	12,173	1	1		12,017
1204-08-74	1	522+00		577+10	'EB'	-	2,963	-	7	2,963	-	1		3,042
		522+87		544+00	'W4'	-	1,571	-	-	1,571	-	-		3,758
1204-08-74 SUBTOTAL						0	4,534	0	7	4,534	0	1		6,800
PROJECT TOTAL						5	16,707	840	13	16,707	1	2		18,817

CONSTRUCTION STAKING

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT B-13-52 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT B-13-383 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT B-13-403 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT C-13-111 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT B-13-573 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT S-13-612 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT S-13-613 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT S-13-614 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT S-13-615 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT S-13-616 (EACH)	650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT S-13-617 (EACH)
1204-08-73	1	476+67	-	508+61	'WB'	1	-	-	-	-	-	-	-	-	-	-
		477+25		-	'WB'	-	-	-	-	-	-	-	-	1	-	-
		605+00			'WB'	-	-	-	-	-	-	-	1	-	-	-
		458+72	-	466+43	'EB'	-	1	-	-	-	-	-	-	-	-	-
		479+30	-	506+00	'EB'	-	-	-	1	-	-	-	-	-	-	-
		482+00		-	'EB'	-	-	-	-	-	1	-	-	-	-	-
		505+35		-	'EB'	-	-	-	-	-	-	1	-	-	-	-
		32+00	-	61+85	'G'	-	-	1	-	-	-	-	-	-	-	-
1204-08-73 SUBTOTAL						1	1	1	1	0	1	1	1	1	0	0
1204-08-74	1	522+87		544+00	'W4'	-	-	-	-	1	-	-	-	-	-	-
		549+00		-	'EB'	-	-	-	-	-	-	-	-	-	1	-
		570+89		-	'EB'	-	-	-	-	-	-	-	-	-	-	1
1204-08-74 SUBTOTAL						0	0	0	0	1	0	0	0	0	1	1
PROJECT TOTAL						1	1	1	1	1	1	1	1	1	1	1

3

SAWCUTTING

PROJECT ID	STAGE	STATION - STATION	ALIGNMENT	690.0150 SAWING ASPHALT (LF)	690.0250 SAWING CONCRETE (LF)
		38+50	'BL'	20	-
		32+00	'G'	22	-
		48+71	'G'	-	41
		50+72	'G'	-	40
		53+45 - 61+85	'G'	873	-
		459+29 - 462+02	'GC'	-	295
		459+60	'GD'	-	23
		464+93 - 468+00	'GA'	-	333
		463+48 - 463+70	'GB'	-	48
1204-08-73	2	479+31	'EB'	-	5
		479+31 - 487+81	'EB'	-	862
		487+81	'EB'	-	19
		489+53 - 504+46	'EB'	-	1,527
		505+88	'EB'	-	5
		476+67	'WB'	-	5
		476+67 - 487+73	'WB'	-	1,140
		489+79 - 507+90	'WB'	-	1,835
		507+90	'WB'	-	5
			1204-08-73 SUBTOTAL	915	6,183
		524+54 - 526+70	'W4'	-	252
		529+68 - 540+31	'W4'	-	1,109
	2	548+46 - 570+68	'EB'	-	2,273
1204-08-74		545+67	'W4'	-	8
		571+47 - 571+73	'EB'	-	26
	4	534+40 577+10	'EB'	4,263	-
			1204-08-74 SUBTOTAL	4,263	3,668
			PROJECT TOTAL	5,178	9,851

3

BIRD DETERRENT SYSTEM

PROJECT ID	ALIGNMENT	999.2000.S INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM 489+00 'EB' (EACH)	999.2000.S INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM 489+00 'WB' (EACH)	999.2000.S INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM 462+50 'EB' (EACH)	999.2000.S INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM 502+50 'EB' (EACH)	999.2000.S INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM 529+00 'EB' (EACH)
1204-08-73	'WB'	1	-	-	-	-
	'EB'	-	1	-	-	-
	'WB'	-	-	-	1	-
	'G'	-	-	1	-	-
1204-08-73 SUBTOTAL		1	1	1	1	0
1204-08-74	'W4'	-	-	-	-	1
1204-08-74 SUBTOTAL		0	0	0	0	1
PROJECT TOTAL		1	1	1	1	1

SALVAGE AND REINSTALL CABLE GUARD

PROJECT ID	STAGE	STATION	-	STATION	ALIGNMENT	OFFSET	SPV.0090.101 SALVAGE AND REINSTALL CABLE GUARD (LF)
124-08-73	4	458+00	-	468+00	'WB'	RT	1,000
					1204-08-73 SUBTOTAL		1,000
		526+00	-	532+00	'WB'	RT	600
1204-08-74	4	545+38	-	577+10	'EB'	LT	3,172
					1204-08-74 SUBTOTAL		3,772
						PROJECT TOTAL	4,772

DIGITAL SPEED REDUCTION SYSTEM

PROJECT	LOCATION	STAGE	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)*	DIGITAL SPEED LIMIT TRAILERS (DSLT)*	SPV.0045.101 DIGITAL SPEED REDUCTION SYSTEM (DSRS) (DAYS)
1204-08-73	USH 18 EB	1A	1	3	16
	USH 18 WB	1A	---	1**	---
	USH 18 EB	1B	1	3	9
	USH 18 WB	1B	---	1**	---
	USH 18 EB	2 (PEAK/OFF-PEAK)	1	3	28
	USH 18 WB	2 (PEAK/OFF-PEAK)	---	1**	---
	USH 18 EB	3A/3B	1	3	83
	USH 18 WB	3A/3B	---	1**	---
	USH 18 EB	4 (PEAK/OFF-PEAK)	1	3	12
	USH 18 WB	4 (PEAK/OFF-PEAK)	---	1**	---
				1204-08-73 PROJECT TOTAL	148
1204-08-74	USH 18 EB	1A	---	1***	---
	USH 18 WB	1A	1	2	16
	USH 18 EB	1B	---	1***	---
	USH 18 WB	1B	1	2	9
	USH 18 EB	2 (PEAK/OFF-PEAK)	---	1***	---
	USH 18 WB	2 (PEAK/OFF-PEAK)	1	2	28
	USH 18 EB	3A/3B	---	1***	---
	USH 18 WB	3A/3B	1	2	83
	USH 18 EB	4 (PEAK/OFF-PEAK)	---	1***	---
	USH 18 WB	4 (PEAK/OFF-PEAK)	1	2	12
				1204-08-74 PROJECT TOTAL	148
				PROJECT TOTAL	296

* FOR INFORMATION ONLY

**WB DSLT WITHIN LIMITS OF PROJECT 1204-08-73 ARE FOR DSRS IN PROJECT 1204-08-74

***EB DSLT WITHIN LIMITS OF PROJECT 1204-08-74 ARE FOR DSRS IN PROJECT 1204-08-73

3

ELECTRICAL SERVICE

PROJECT ID	CABINET NO.	** LOCATION	656.0201 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
1204-08-73	CB1	USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G	1
		TOTAL	1

CONSTRUCTION STAKING

PROJECT ID	** LOCATION	650.8501 CONSTRUCTION STAKING ELECTRICAL INSTALLATION (1204-08-73) EACH
1204-08-73	USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G	1
	TOTAL	1

3

CONCRETE BASES

PROJECT ID	SIGNAL BASE NO.	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0105 CONCRETE BASE TYPE 5 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217 CONCRETE CONTROL CABINET BASE TYPE 9 SPECIAL EACH
1204-08-73	CB1	46+79 'G', 75' LT					1
	SB1	47+30 'G', 34' LT				1	
	SB2	48+00 'G', 23' LT	1				
	SB3	48+23 'G', 14' RT	1				
	SB4	48+09 'G', 60' RT			1		
	SB5	47+27 'G', 87' RT			1		
	SB6	47+14 'G', 70' RT	1				
	SB7	46+90 'G', 62' LT		1			
		TOTAL	3	1	2	1	1

SIGNAL MOUNTING HARDWARE

PROJECT ID	** LOCATION	658.5070 SIGNAL MOUNTING HARDWARE EACH
1204-08-73	USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G	1
	TOTAL	1

LEGEND

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

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G

PAGE 1 OF 4

CONDUIT

PROJECT ID	LOC.	TO LOC.	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.
	CB1	PB1		51
	PB1	PB2	224	
	PB1	PB3		86
	PB3	SB1		43
	PB3	PB4		62
	PB4	PB5		138
	PB5	SB2	19	
	PB5	PB6		84
	PB6	SB3	5	
	PB6	PB7		90
	PB7	SB4		9
	PB7	PB8	90	
	PB7	PB12		92
1204-08-73	PB8	BRIDGE	16	
	PB9	BRIDGE	16	
	PB9	PB10	38	
	PB10	PB11		82
	PB12	PB13		128
	PB13	SB5		16
	PB13	SB6	11	
	PB13	PB14		78
	PB14	PB15	247	
	PB14	PB16		236
	PB16	SB7	13	
	PB16	CB1		57
		TOTAL	679	1252

PULL BOXES

PROJECT ID	PULL BOX NO.	LOCATION	653.0154 PULL BOXES NON-CONDUCTIVE 24x36-INCH EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24x42-INCH EACH
	PB1	46+96 'G', 76' LT		1
	PB2	465+23 'GA', 16' LT	1	
	PB3	47+39 'G', 76' LT		1
	PB4	47+70 'G', 76' LT		1
	PB5	48+18 'G', 27' LT		1
	PB6	48+18 'G', 14' RT		1
	PB7	48+18 'G', 59' RT		1
	PB8	48+62 'G', 53' RT		1
1204-08-73	PB9	50+72 'G', 54' RT		1
	PB10	50+91 'G', 55' RT		1
	PB11	50+91 'G', 14' RT	1	
	PB12	47+77 'G', 79' RT		1
	PB13	47+13 'G', 79' RT		1
	PB14	46+80 'G', 61' RT		1
	PB15	44+05 'G', 43' RT	1	
	PB16	46+79 'G', 56' LT		1
		TOTAL	3	13

TRAFFIC SIGNAL FACES

PROJECT ID	SIG. HEAD NO.	SIG. BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH
	1	SB2	1	
	2	SB1	1	
	3	SB1	1	
	4	SB3	1	
	5	SB6	1	
	6	SB1	1	
1204-08-73	7	SB6	1	
	8	SB4	1	
	9	SB4	1	
	10	SB1	1	
	11	SB5		1
	12	SB5	1	
		TOTAL	11	1

LEGEND

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

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G

PAGE 2 OF 4

TRAFFIC DETECTOR LOOPS

PROJECT ID	LOOP NO.	HOME RUN PB	** LOCATION	SIZE (FT)	X	SIZE (FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR L.F.	655.0700 LOOP DETECTOR LEAD IN CABLE L.F.	655.0800 LOOP DETECTOR WIRE L.F.
	21	PB15	44+06 'G', 28' RT	6	X	10	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	391	260
	22	PB13	47+11 'G', 34' RT	6	X	20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	142	183	438
	23	PB13	47+37 'G', 34' RT	6	X	20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	136	183	420
	61	PB11	50+90 'G', 6' LT	6	X	10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	568	372
	62	PB11	50+90 'G', 5' RT	6	X	10	5	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	50	568	262
	63	PB5	48+23 'G', 6' LT	6	X	20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	168	282
1204-08-73	64	PB5	47+97 'G', 6' LT	6	X	20	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	168	444
	65	PB6	48+32 'G', 5' RT	6	X	20	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	209	340
	66	PB6	48+08 'G', 5' RT	6	X	20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	209	240
	81	PB2	465+23 'GA', 9' RT	6	X	6	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	70	249	292
	82	PB2	465+23 'GA', 5' LT	6	X	6	4	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	42	249	180
	83	PB4	47+54 'G', 56' LT	6	X	20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	99	312
	84	PB4	47+54 'G', 30' LT	6	X	20	3	HMA	LOOP DETECTOR INSTALLED IN BASE COURSEWITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	99	342
									TOTAL	1140	3367	4220

TRAFFIC SIGNAL EQUIPMENT

PROJECT ID	SIG. BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0322 POLES TYPE 5-ALUMINUM EACH	657.0350 POLES TYPE 10 EACH	657.0352 POLES TYPE 10-SPECIAL EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0530 MONOTUBE ARMS 30-FT EACH	657.0546 MONOTUBE ARMS 45-FT-SPECIAL EACH	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	657.0806 LUMINAIRE ARMS STEEL 6-FT EACH	659.1120 LUMINAIRES UTILITY LED-B EACH
	SB1					1			1		1	1
	SB2	1					1					
	SB3	1					1					
	SB4				1			1			1	1
1204-08-73	SB5				1			1			1	1
	SB6	1					1					
	SB7		1	1						1		1
	TOTAL	3	1	1	2	1	3	2	1	1	3	4

LEGEND

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

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	MISCELLANEOUS QUANTITIES	SHEET NO: 310	E

FILE NAME : PLOT DATE : 7/19/2024 10:30 AM PLOT BY : BENJAMIN GIESE PLOT NAME : Dairy Ridge Signal_mq PLOT SCALE : 1.000000:1.000000 WISDOT / CADDS SHEET 42

3

TRAFFIC SIGNAL CABLE AND ELECTRICAL WIRE

PROJECT ID	LOC.	TO	LOC.	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0270 CABLE TRAFFIC SIGNAL 15-14 AWG L.F.	655.0325 CABLE TYPE UF 2-8 AWG GROUNDED L.F.	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.	SPV.0090.350 INSTALL STATE FURNISHED CAT-5E CABLE L.F.
	CB1		SB1				146	146	146		240
	CB1		SB2		251						
	CB1		SB3		294						
	CB1		SB4		358						
	CB1		SB5		249						
	CB1		SB6			244			244		
	SB1		SB2						217		
	SB2		SB3						105		
	SB3		SB4						99		
	SB4		SB5						189		
	SB5		SB6						52		
	SB1		SB4					324			
	CB1		SB7					59			
	SB7		SB5					239			
1204-08-73	SB1		HEAD 2	54							
	SB1		HEAD 3	21							
	SB1		HEAD 6		66						
	SB1		HEAD 10	21							
	SB1		LUMINAIRE							120	
	SB2		HEAD 1	21							
	SB3		HEAD 4		22						
	SB4		HEAD 8	53							
	SB4		HEAD 9	21							
	SB4		LUMINAIRE							120	
	SB5		HEAD 11		55						
	SB5		HEAD 12	21							
	SB5		LUMINAIRE							120	
	SB6		HEAD 5		22						
	SB6		HEAD 7	21							
	SB7		LUMINAIRE							120	
			TOTAL	233	1317	244	146	768	1052	480	240

LEGEND

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

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010

USH 18/151 WB RAMP & DAIRY RIDGE RD/CTH G

PAGE 4 OF 4

4

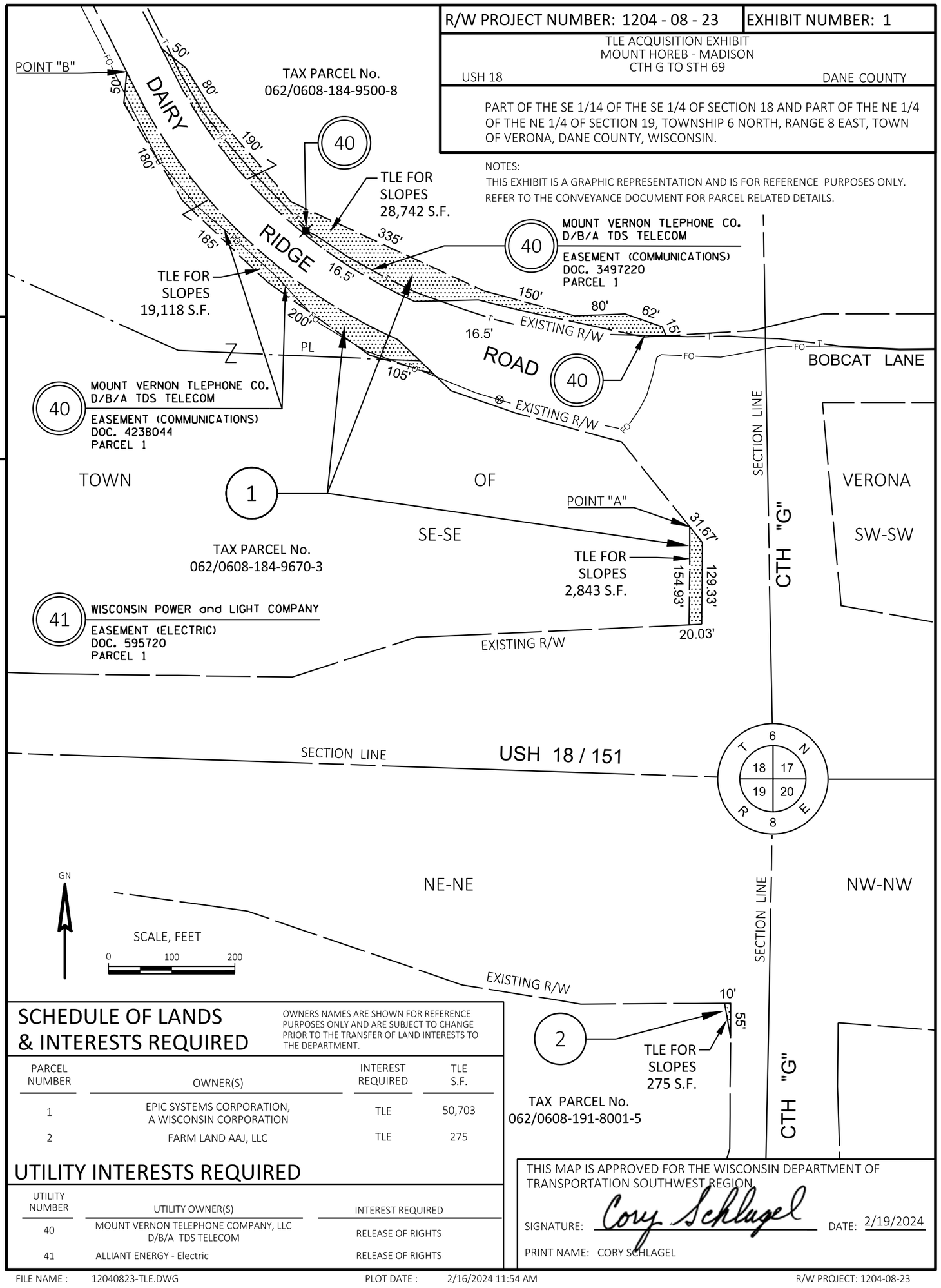
R/W PROJECT NUMBER: 1204 - 08 - 23	EXHIBIT NUMBER: 1

TLE ACQUISITION EXHIBIT
MOUNT HOREB - MADISON
CTH G TO STH 69

USH 18 — DANE COUNTY

PART OF THE SE 1/14 OF THE SE 1/4 OF SECTION 18 AND PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 19, TOWNSHIP 6 NORTH, RANGE 8 EAST, TOWN OF VERONA, DANE COUNTY, WISCONSIN.

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.



SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	EPIC SYSTEMS CORPORATION, A WISCONSIN CORPORATION	TLE	50,703
2	FARM LAND AAJ, LLC	TLE	275

UTILITY INTERESTS REQUIRED

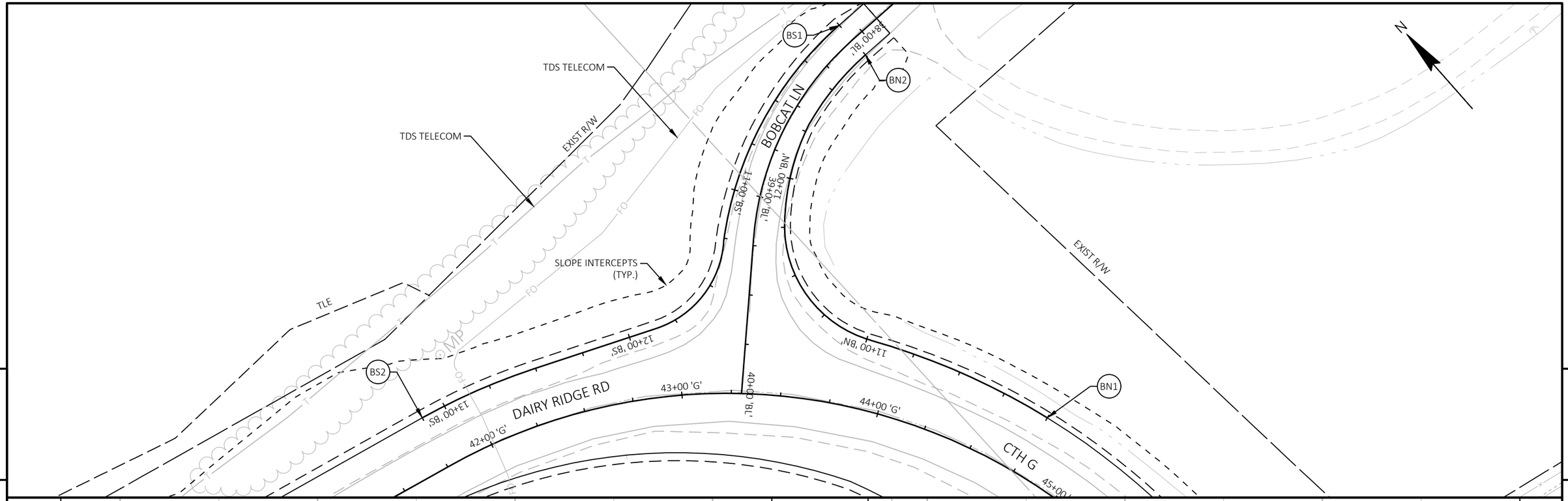
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
40	MOUNT VERNON TELEPHONE COMPANY, LLC D/B/A TDS TELECOM	RELEASE OF RIGHTS
41	ALLIANT ENERGY - Electric	RELEASE OF RIGHTS

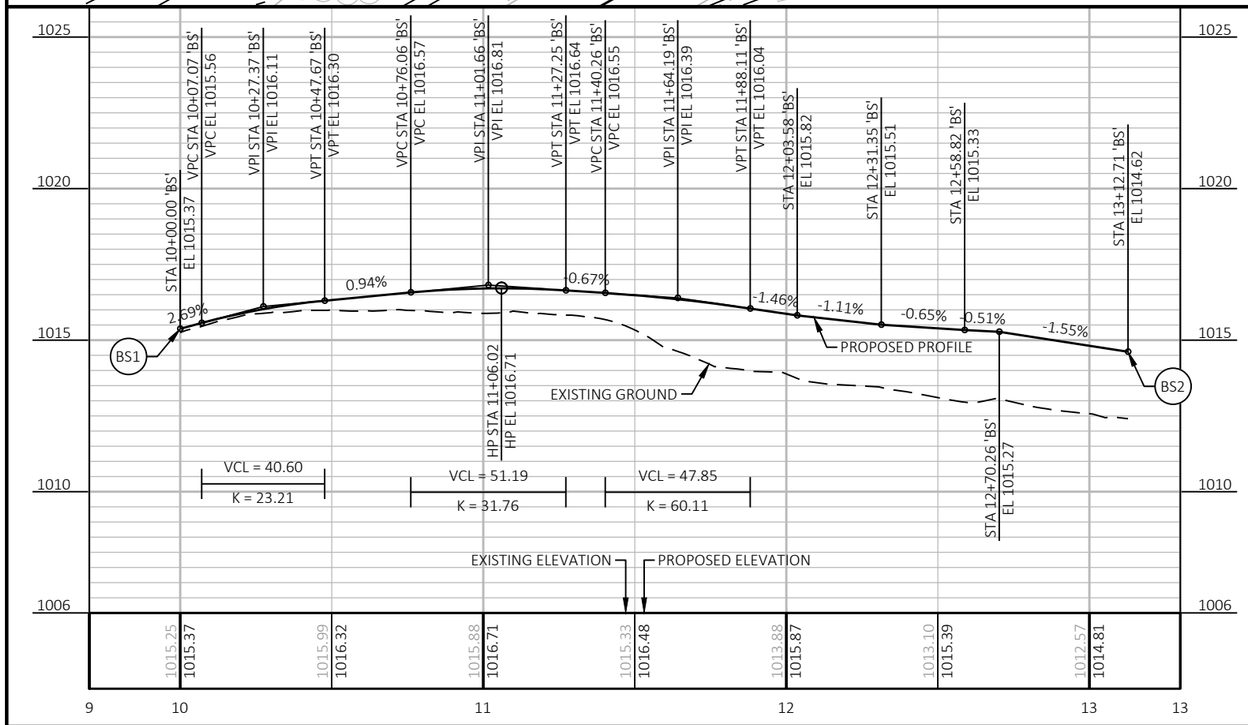
THIS MAP IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION

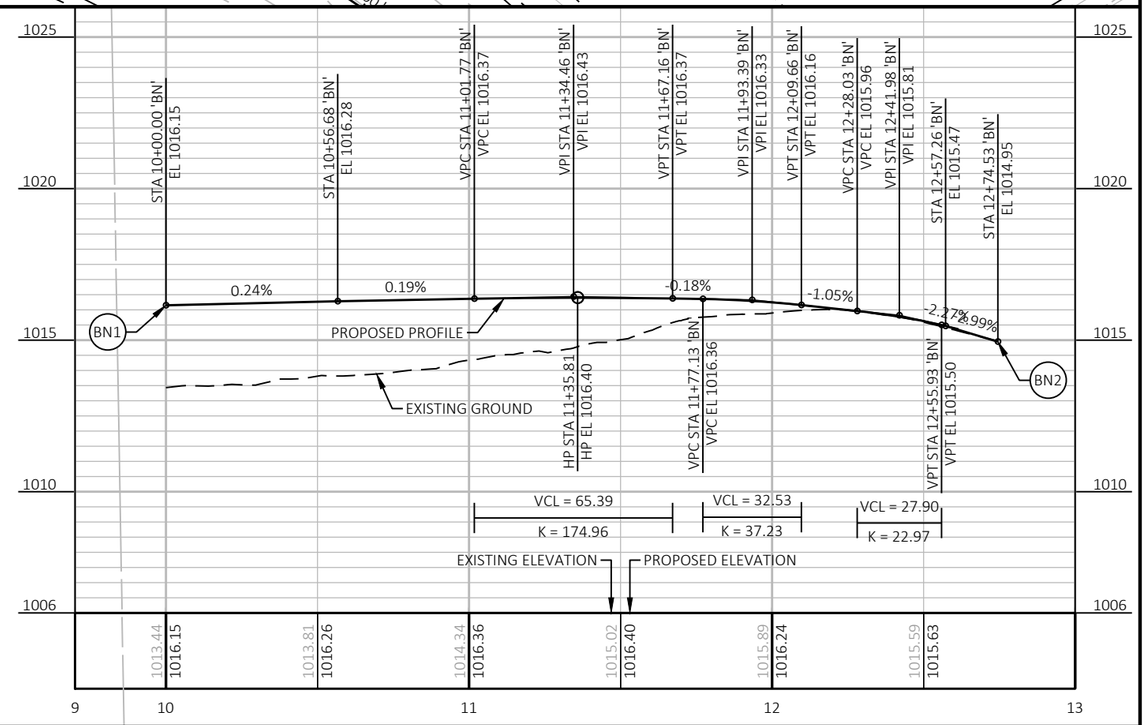
SIGNATURE: Cory Schlagel DATE: 2/19/2024

PRINT NAME: CORY SCHLAGEL

FILE NAME : 12040823-TLE.DWG PLOT DATE : 2/16/2024 11:54 AM R/W PROJECT: 1204-08-23

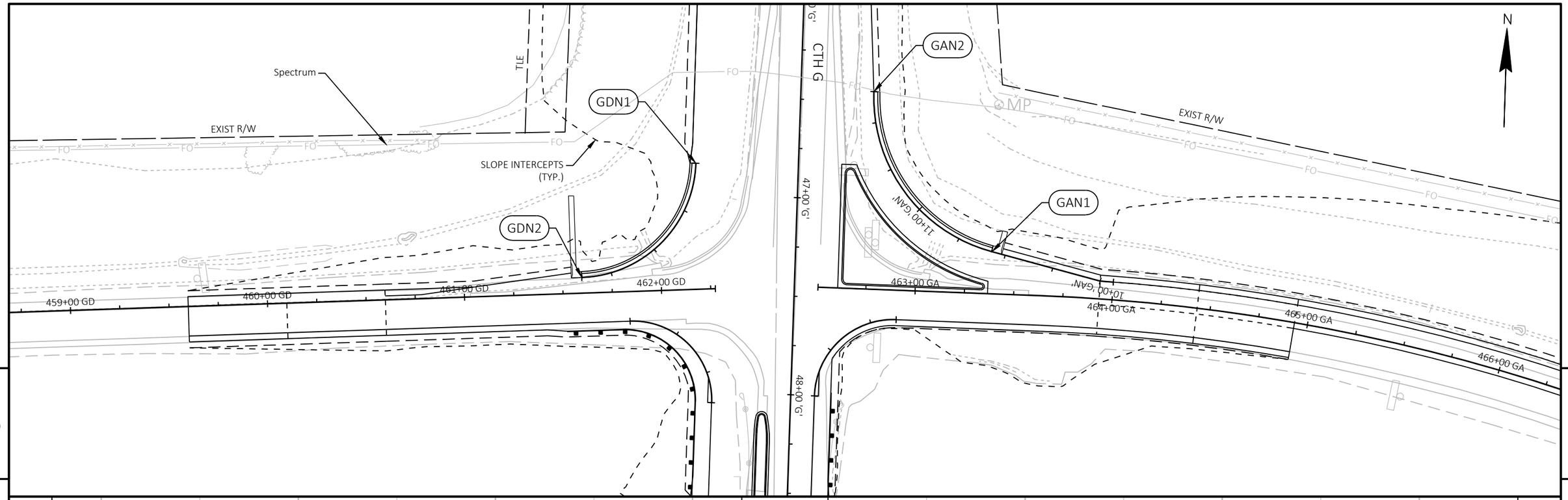


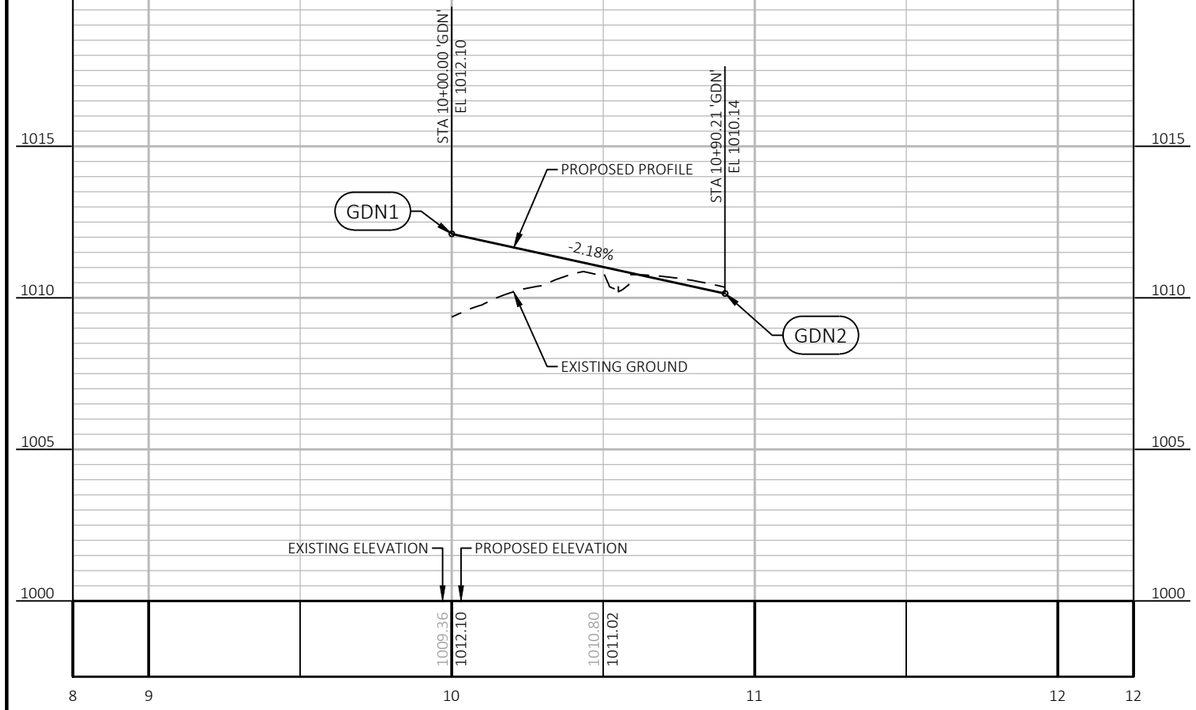


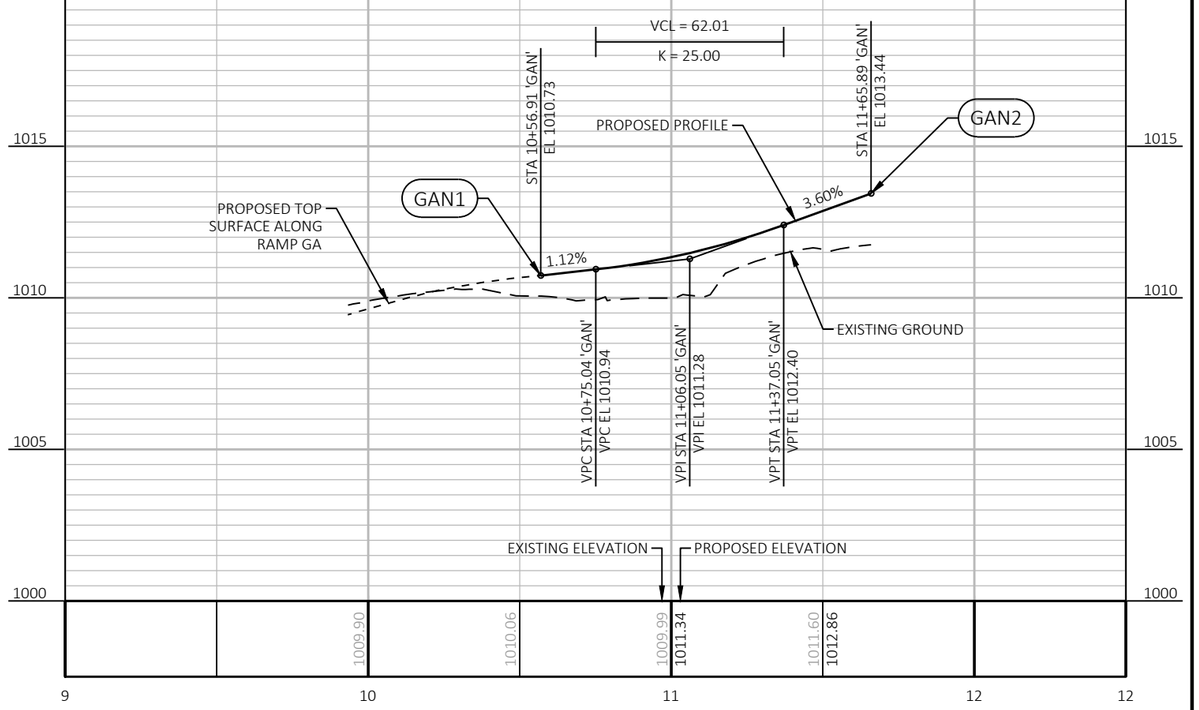


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: BOBCAT LN CURB RETURNS	SHEET 313	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\05-01-PP_CURB RETURNS.DWG
LAYOUT NAME - 01
PLOT DATE : 7/8/2024 11:39 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44





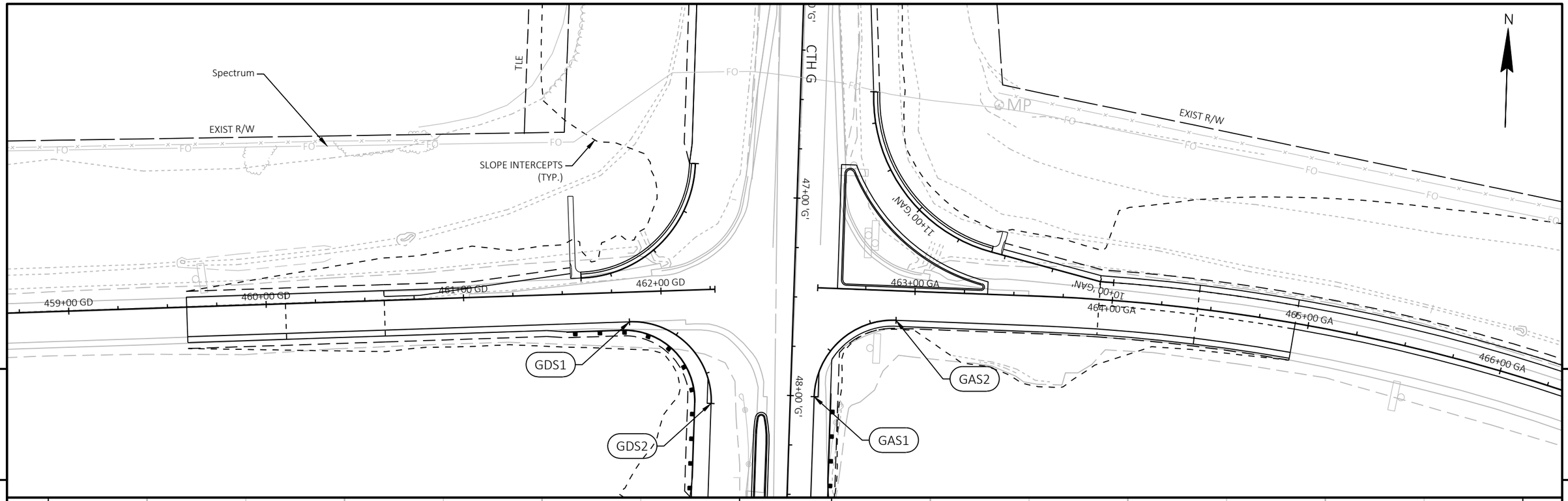


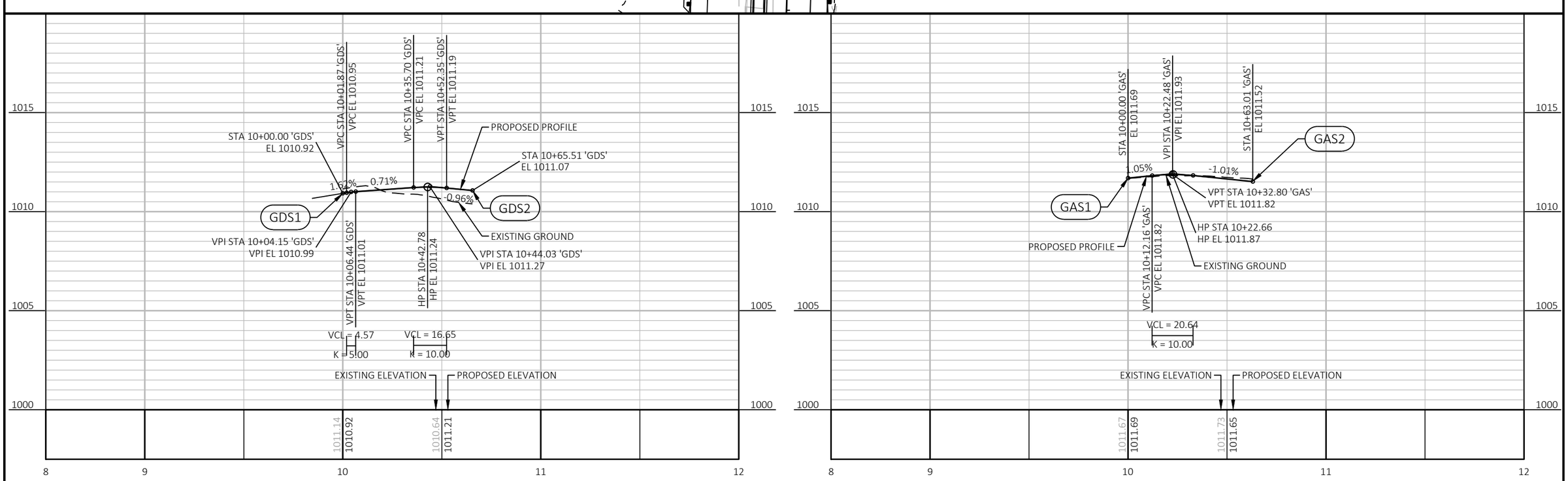
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: CTH G / USH 18 WB RAMPS CURB RETURNS	SHEET 314 E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\1501-PP_CTHG_RCRNS.DWG
LAYOUT NAME - 02

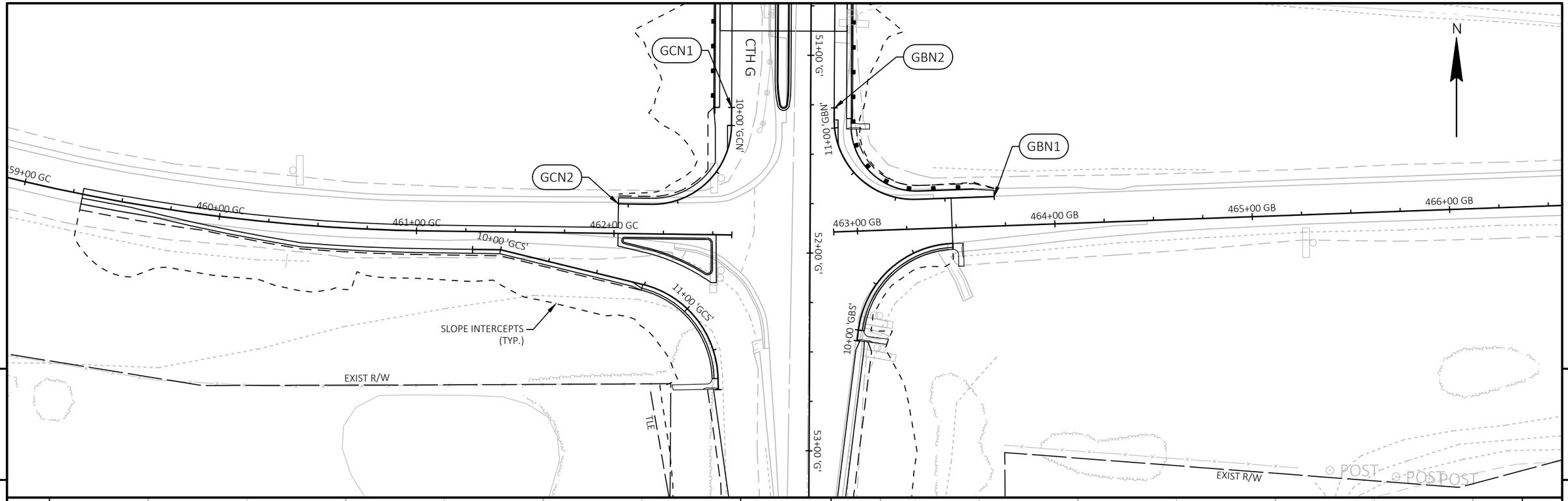
PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

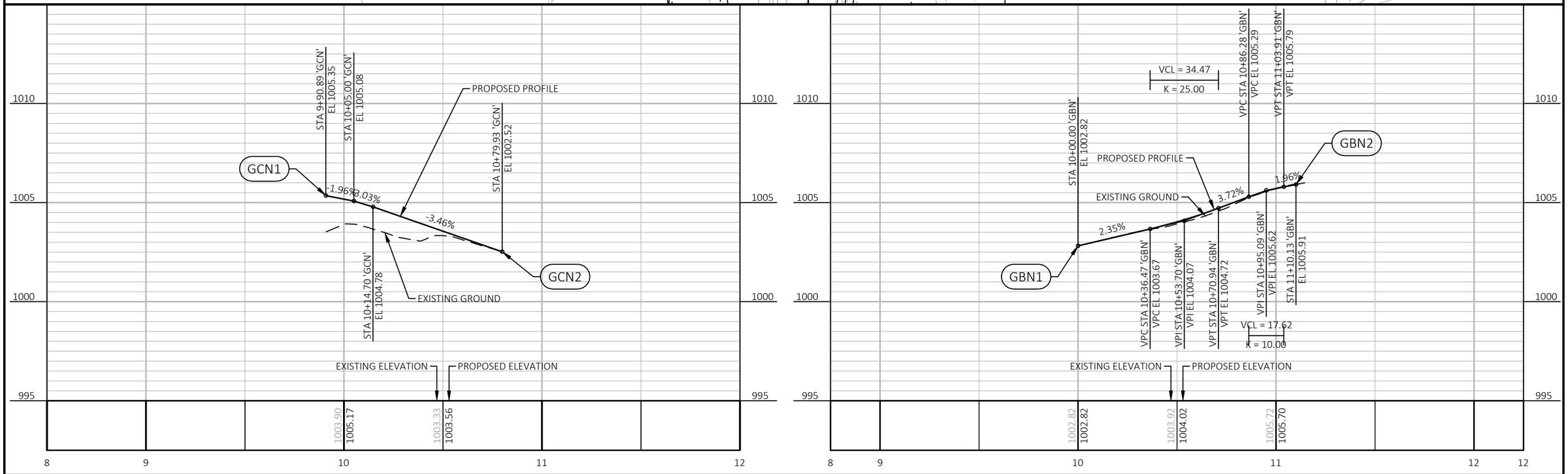
WISDOT/CADDS SHEET 44





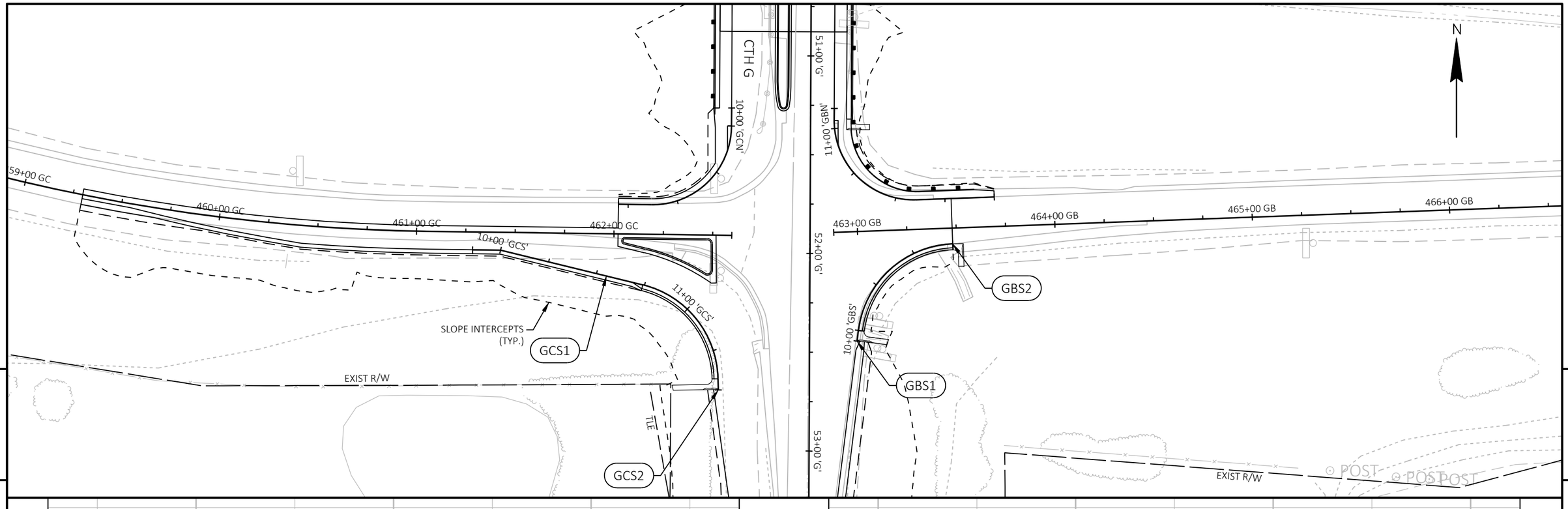
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: CTH G / USH 18 WB RAMPS CURB RETURNS	SHEET 315 E

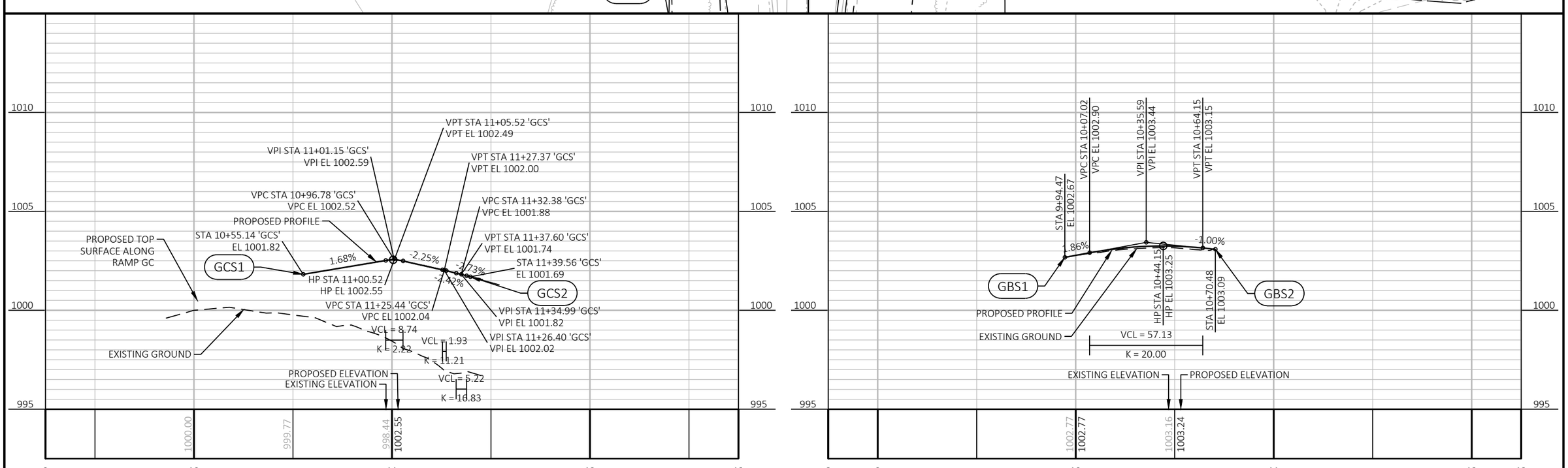




PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: CTH G / USH 18 EB RAMPS CURB RETURNS	SHEET 316	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\05\E1-05-01-PP_CTHG_EB_RAMPS_CURB_RETURNS.DWG
LAYOUT NAME - 04
PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44



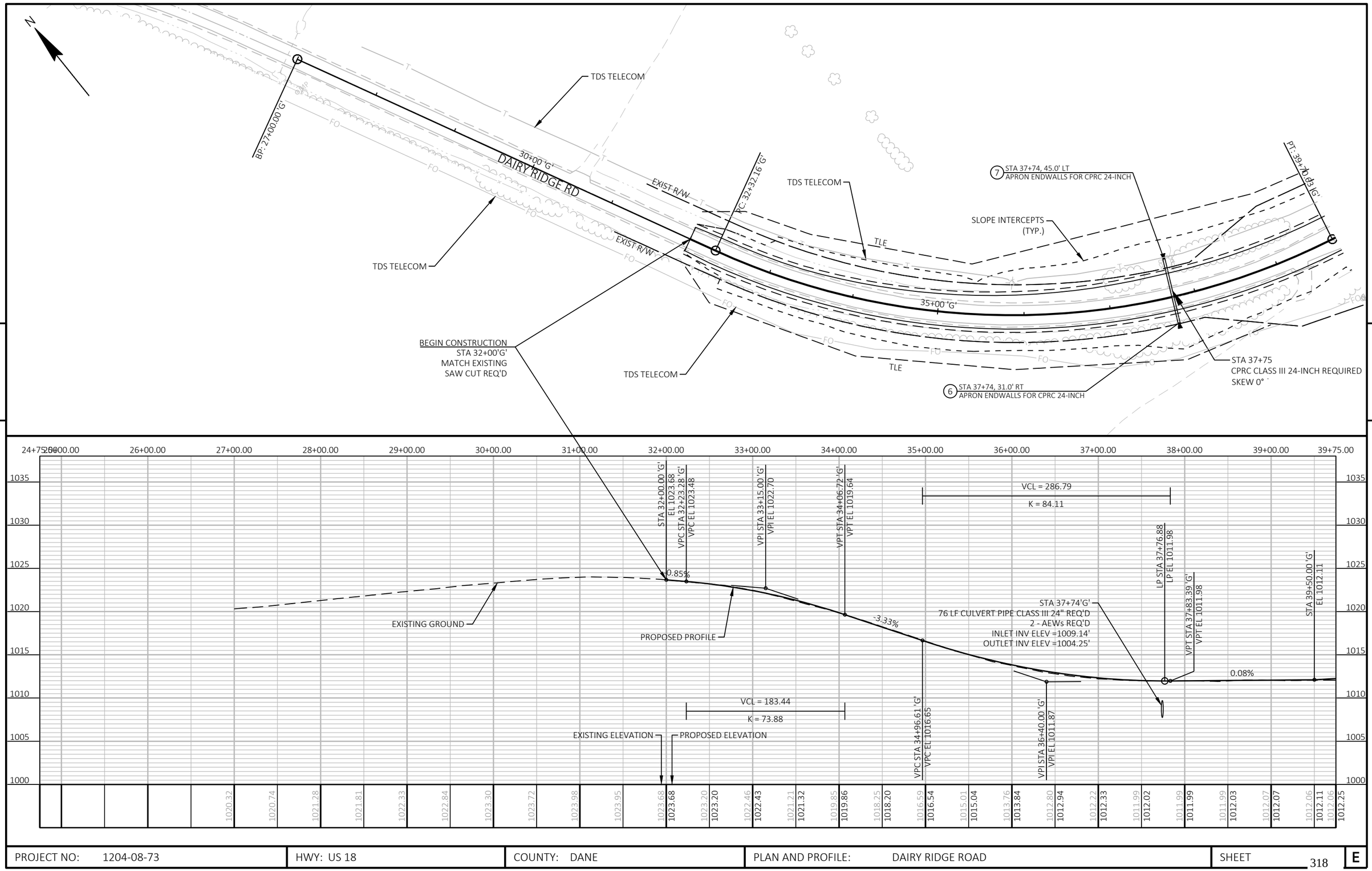


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: CTH G / USH 18 EB RAMPS CURB RETURNS	SHEET 317	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\ONEDRIVE - AECOM DIRECTORY\GENERAL - 2022-116 CTHG INTERCHANGE\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\05\01-PP_CTHG_EB_RAMPS_CURB_RETURNS.DWG
LAYOUT NAME - 05

PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44



5

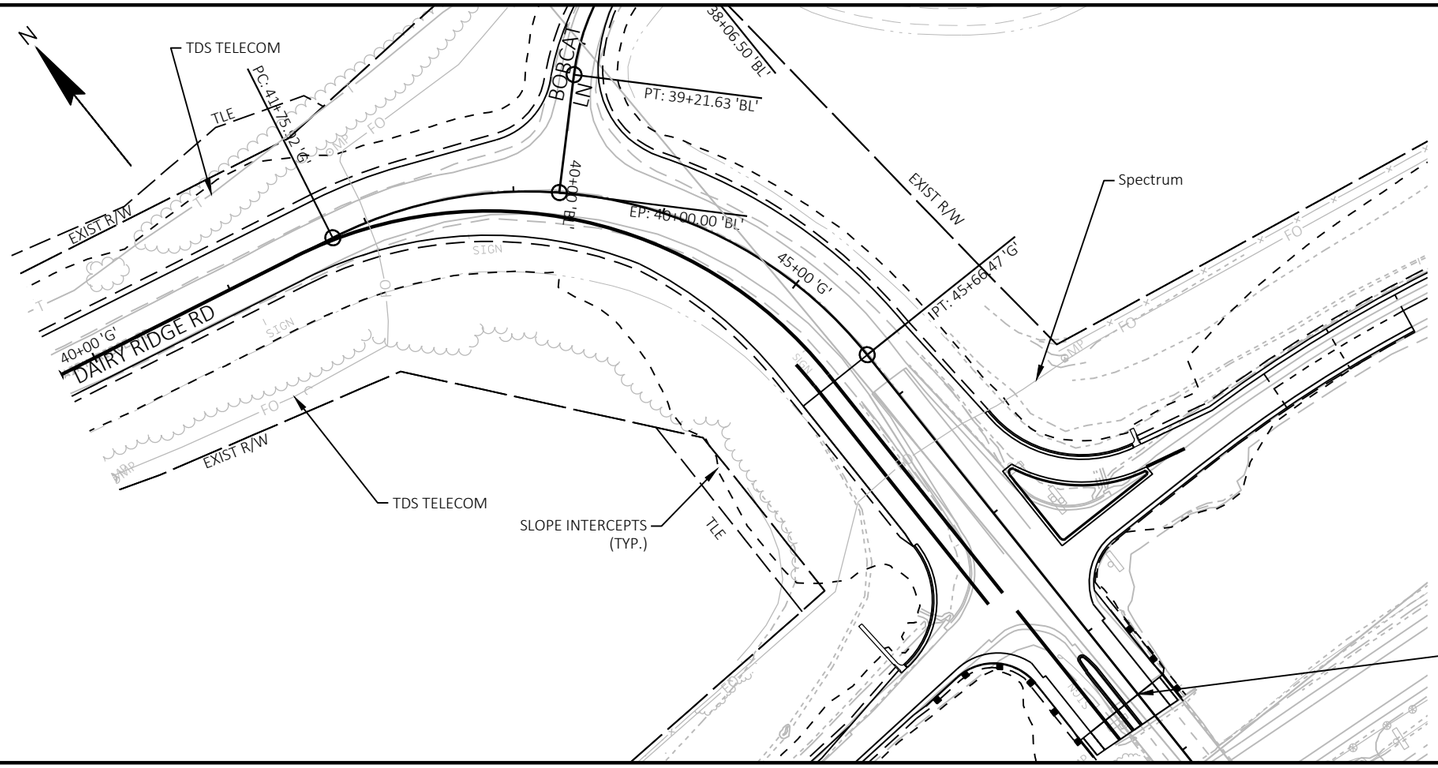
5

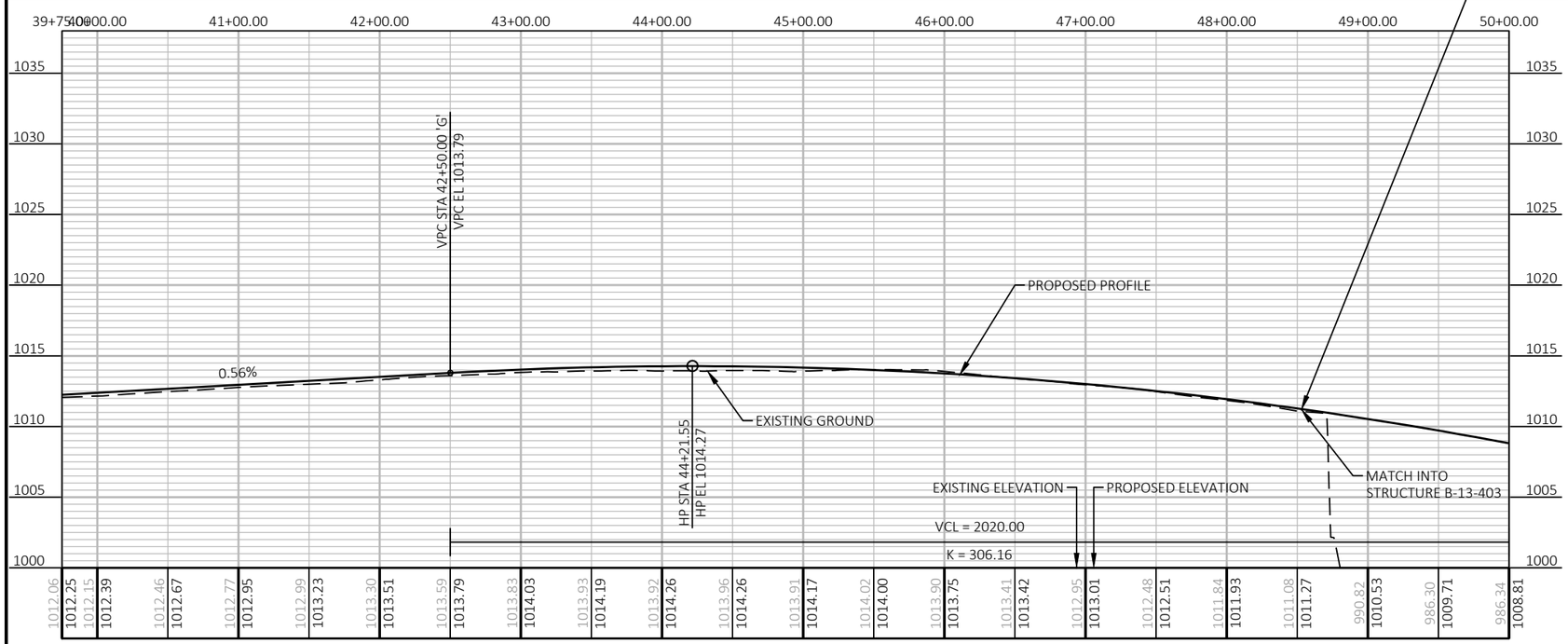
PROJECT NO: 1204-08-73	HWY: US 18	COUNTY: DANE	PLAN AND PROFILE: DAIRY RIDGE ROAD	SHEET 318	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_G_BOBCAT.DWG
LAYOUT NAME - 01

PLOT DATE : 11/13/2024 2:49 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

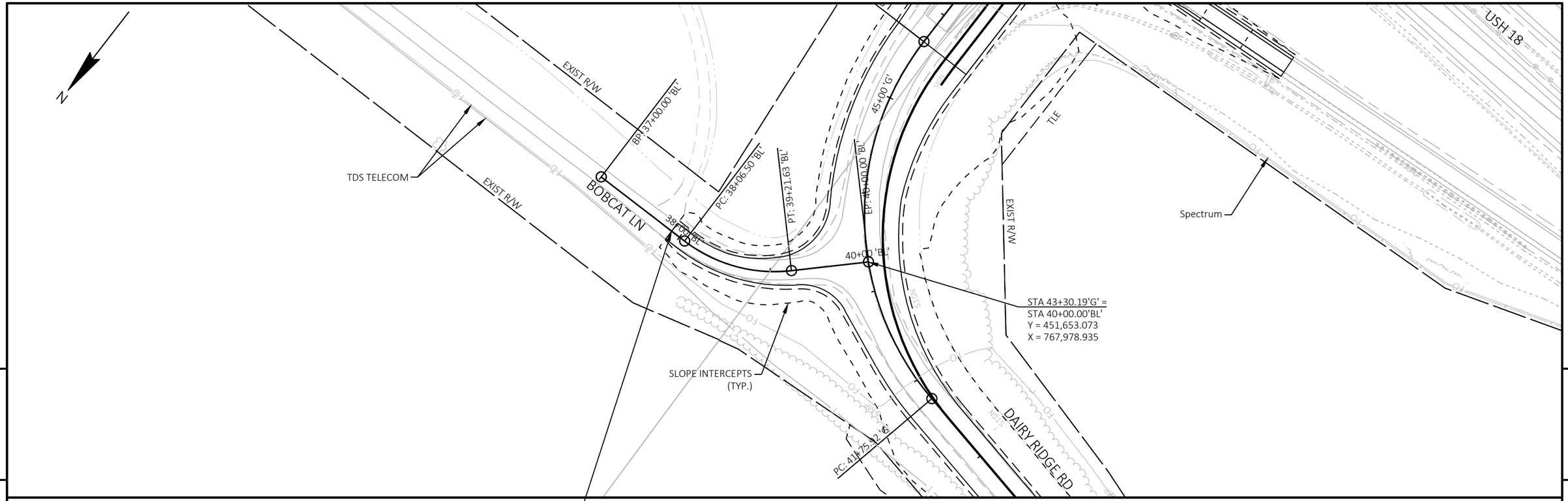
WISDOT/CADDS SHEET 44





PROJECT NO: 1204-08-73	HWY: US 18	COUNTY: DANE	PLAN AND PROFILE: DAIRY RIDGE ROAD	SHEET 319	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_G_BOBCAT.DWG
LAYOUT NAME - 02
PLOT DATE : 11/13/2024 2:50 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: BOBCAT LANE	SHEET 320	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_G_BOBCAT.DWG
LAYOUT NAME - 03

PLOT DATE : 11/13/2024 2:52 PM PLOT BY : MERGEN, BAILEE PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

EXIST R/W

Spectrum

SLOPE INTERCEPTS (TYP.)

CTH G

47+00 'G'

48+00 'G'

EP: 462+27.35 'GD'

BP: 462+50.68 'GA'

PC: 463+63.99 'GA'

463+00 'GA'

464+00 'GA'

465+00 'GA'

466+00 'GA'

PT: 466+54.49 'GA'

467+00 'GA'

RAMP GA

N

END CONSTRUCTION
STA 463+93.39 'GA'
SAWCUT REQ'D

BEGIN CONSTRUCTION
STA 462+50.68 'GA'

STA 462+50.68 'GA'
EL 1012.32

STA 462+60.68 'GA'
EL 1012.12

VPI STA 463+34.59 'GA'
VPI EL 1011.37

VPT STA 463+78.61 'GA'
VPT EL 1010.04

STA 463+93.39 'GA'
EL 1009.60

2.00%

-1.02%

-3.02%

VPC STA 462+90.57 'GA'
VPC EL 1011.82

PROPOSED PROFILE

VCL = 88.04

K = 44.00

EXISTING GROUND

PROPOSED TOP SURFACE, SEE REMOVING CONCRETE PAVEMENT BUTT JOINTS CONSTRUCTION DETAILS FOR MORE INFO

EXISTING ELEVATION

PROPOSED ELEVATION

1015
1010
1005
1004

1011.79
1011.71
1010.96
1010.81
1009.84
1007.97
1005.34
1002.80
1000.28
997.79
995.18
992.73
991.30

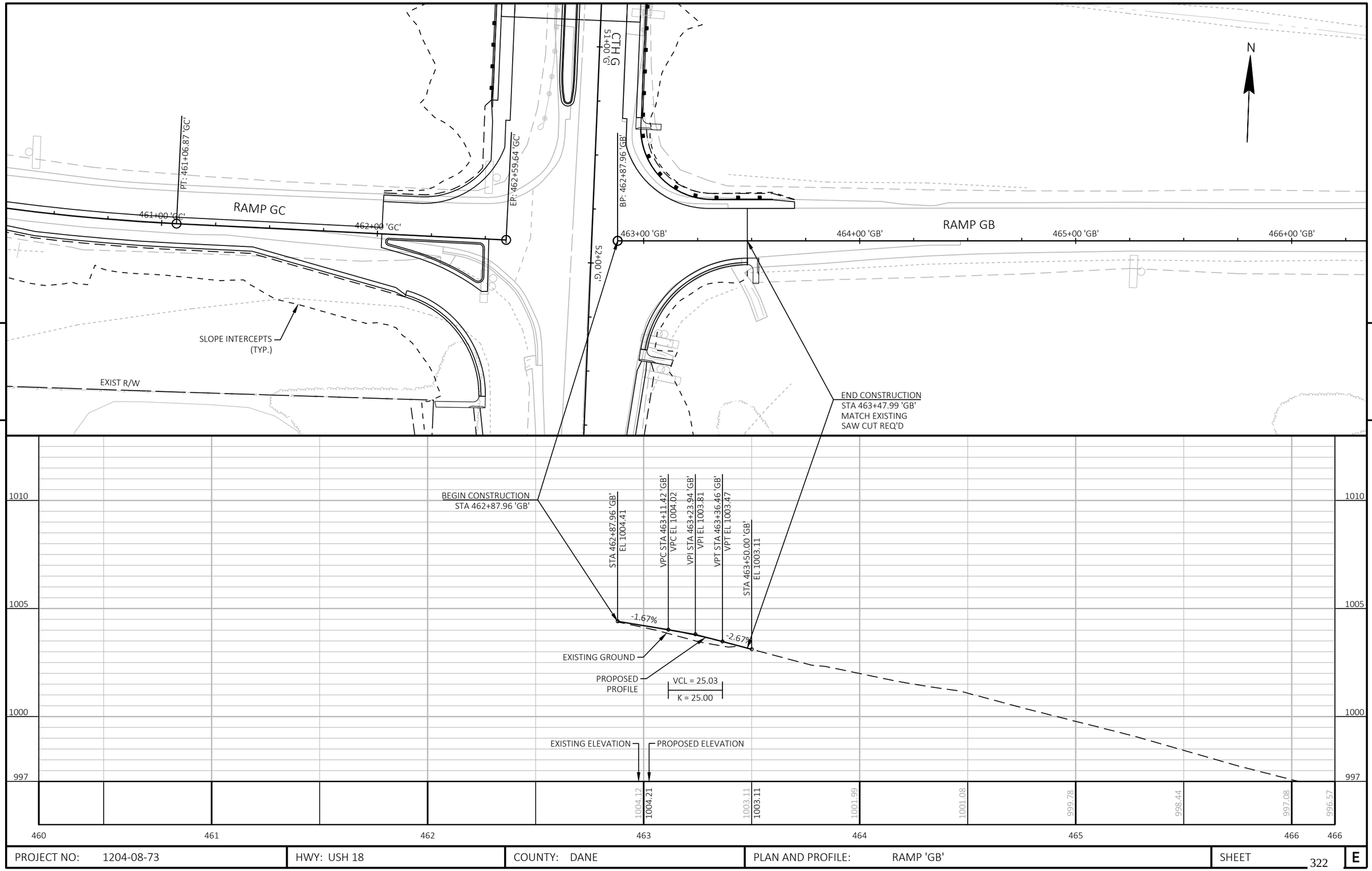
461 462 463 464 465 466 467 467

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: RAMP 'GA'	SHEET 321	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_GRAMPS.DWG
LAYOUT NAME - 01-GA

PLOT DATE : 7/30/2024 12:43 PM PLOT BY : SYLVESTER, MORGAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: RAMP 'GB'	SHEET 322	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_GRAMPS.DWG
LAYOUT NAME - 02-GB

PLOT DATE : 7/30/2024 12:44 PM PLOT BY : SYLVESTER, MORGAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

EXIST R/W

Spectrum

SLOPE INTERCEPTS (TYP.)

POST

458+00 'GD' 459+00 'GD' 460+00 'GD' 461+00 'GD' 462+00 'GD'

RAMP GD

EP: 462+27.35 'GD'

47+00 'G'

BP: 462+50.68 'GA'

463+00 'GA'

PC 463+63.99 'GA'

RAMP GA

MP

48+00 'G'

SIGN

BEGIN CONSTRUCTION
STA 460+59.77 'GD'
SAW CUT REQ'D

END CONSTRUCTION
STA 462+27.35 'GD'

STA 460+59.77 'GD'
EL 1007.01

VPC STA 460+78.88 'GD'
VPC EL 1007.83

VPI STA 461+11.88 'GD'
VPI EL 1009.24

VPT STA 461+44.88 'GD'
VPT EL 1009.95

STA 462+27.35 'GD'
EL 1011.74

PROPOSED PROFILE

4.28%

2.16%

EXISTING GROUND

PROPOSED TOP SURFACE,
SEE REMOVING CONCRETE
PAVEMENT BUTT JOINTS
CONSTRUCTION DETAILS
FOR MORE INFO

VCL = 66.00

K = 31.21

EXISTING ELEVATION

PROPOSED ELEVATION

1015 1010 1005 1002

994.51 997.00 999.49 1002.07 1004.65 1006.98 1008.82 1008.66 1010.17 1010.06 1011.19 1011.14

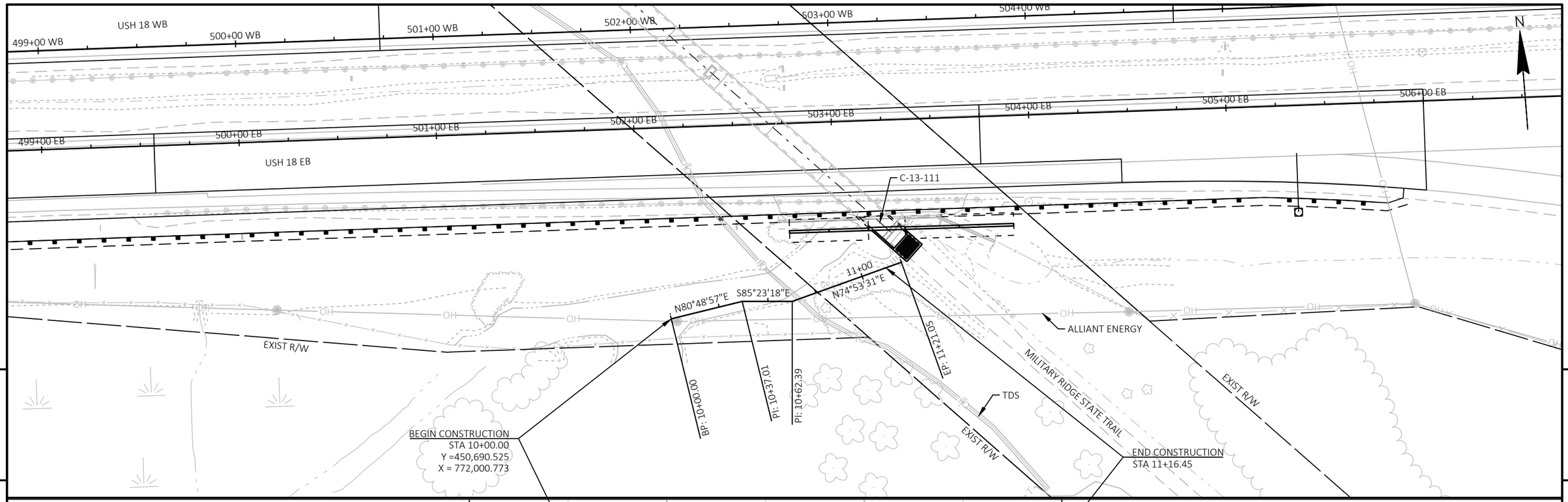
458 459 460 461 462 463 463

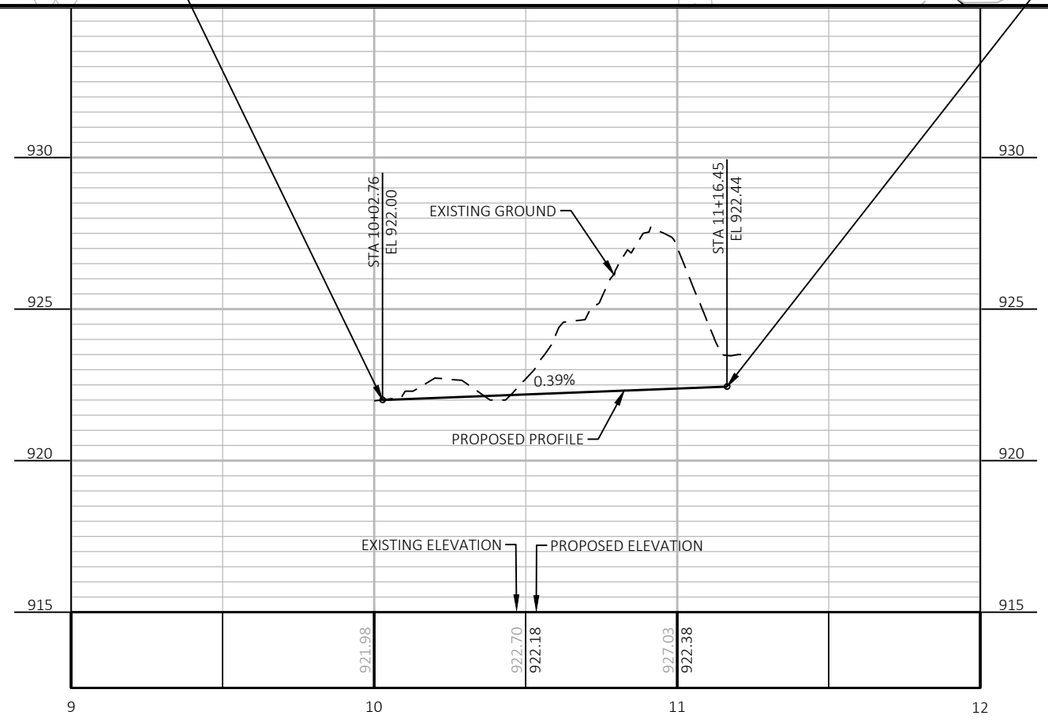
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: RAMP 'GD'	SHEET 323	E

FILE NAME : C:\ONEDRIVE\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_GRAMPS.DWG
LAYOUT NAME - 03-GD

PLOT DATE : 7/30/2024 12:45 PM PLOT BY : SYLVESTER, MORGAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PLAN AND PROFILE: SPECIAL DITCH	SHEET 324	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\050101-PP_SPECIAL_DITCH.DWG
LAYOUT NAME - 01
PLOT DATE : 7/23/2024 11:41 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08A05-21D	INLET COVERS TYPE V, V-B, & VV-B
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D03-09A	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D03-09B	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C15-01	CONCRETE BASE TYPE 10 SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E08-09E	TYPE 10 POLE 15'-30' MONOTUBE ARM
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-07	CONCRETE PAVEMENT SHOULDERS
13A05-06A	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13A05-06B	SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C15-08A	CONCRETE BASE
13C15-08B	CONCRETE BASE
13C16-02A	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C18-08G	CONCRETE PAVEMENT JOINTING ACCELERATION/DECELERATION LANE
13C19-03	HMA LONGITUDINAL JOINTS
14A02-01	TREE PLANTING DETAIL
14B07-16A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

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Standard Detail Drawing List

14B07-16H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16J	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16K	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16L	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16M	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-16N	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B26-05A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-05H	STEEL THRIE BEAM BULLNOSE TERMINAL
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
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
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)
14B47-05A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B52-03A	CABLE BARRIER TYPE 1 LAYOUT
14B52-03B	CABLE BARRIER TYPE 1 LAYOUT
14B52-03C	CABLE BARRIER TYPE 1 LAYOUT
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-08C	DELINEATOR POST WITH REFLECTIVE SHEETING
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE

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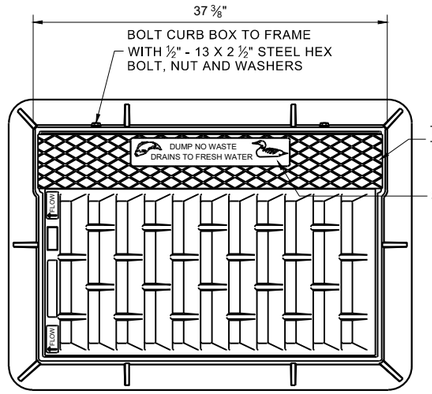
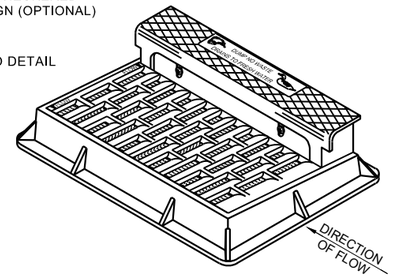
Standard Detail Drawing List

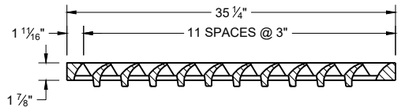
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09D	ON RAMP LANE CLOSURE
15C02-09E	OFF RAMP LANE CLOSURE
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C02-09G	TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
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
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-08C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-09C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-06A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-06C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-06D	PAVEMENT MARKING LANE DROP AND LANE REDUCTION
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-13B	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D12-13D	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D15-07A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-07E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-06	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-08A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D40-05B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND OVER
15D40-05C	TRAFFIC CONTROL, PARTIAL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-05D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D47-03A	TRAFFIC CONTROL, INGRESS/EGRESS WITH BARRIER
15D49-03	TRAFFIC CONTROL, SYSTEM RAMP CLOSURE

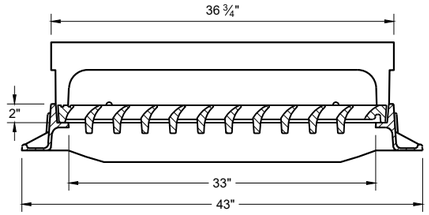


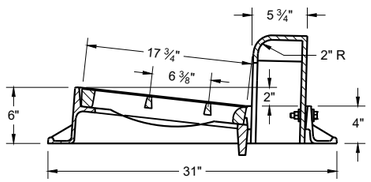
NOTE: EITHER CASTING IS ACCEPTABLE

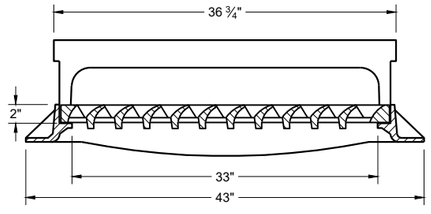


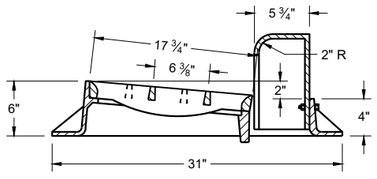
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







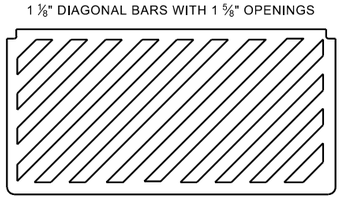




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

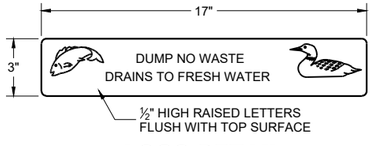
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



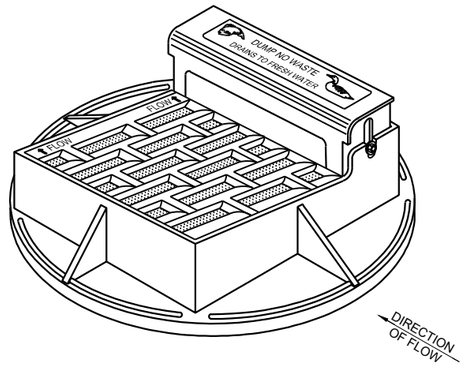
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

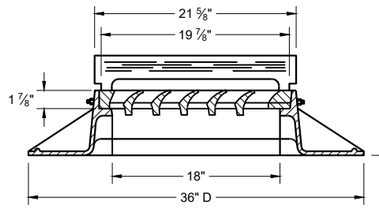


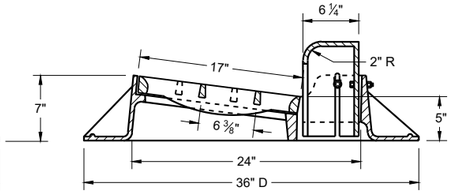
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





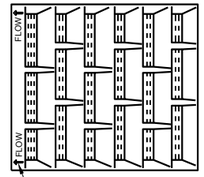
TYPE "A"

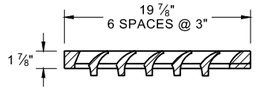
GENERAL NOTES

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

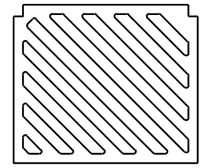
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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





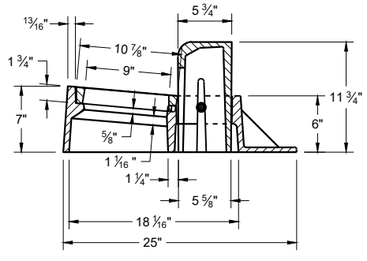
1" DIAGONAL BARS WITH 1 ½" OPENINGS

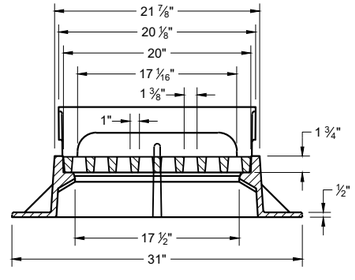


SPECIAL GRATE FOR TYPE "A" COVER

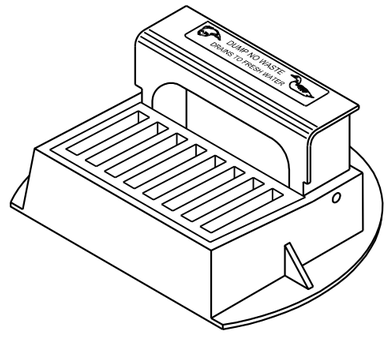
(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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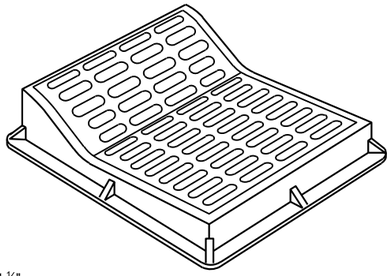
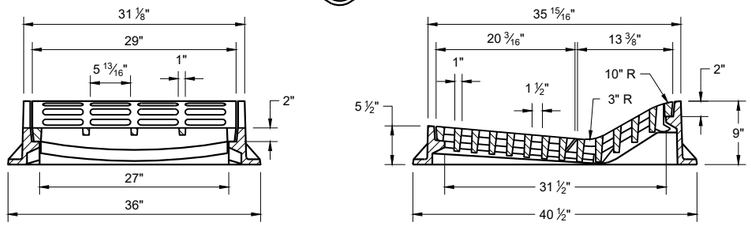
SDD 08A05-21a

GENERAL NOTES

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

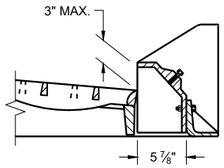
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

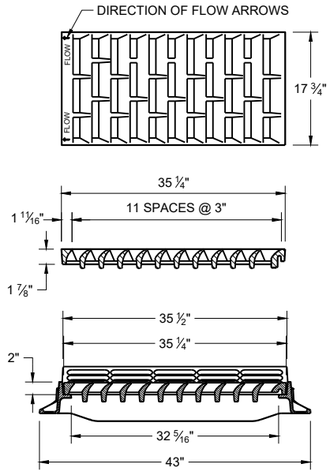


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

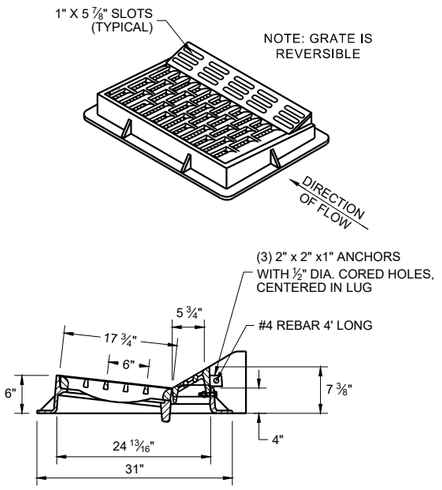
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



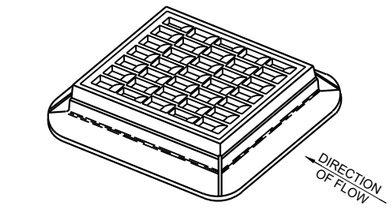
TYPE "HM"

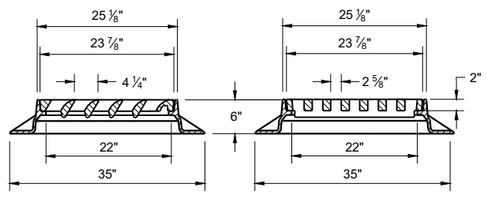
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



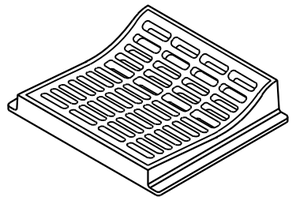
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

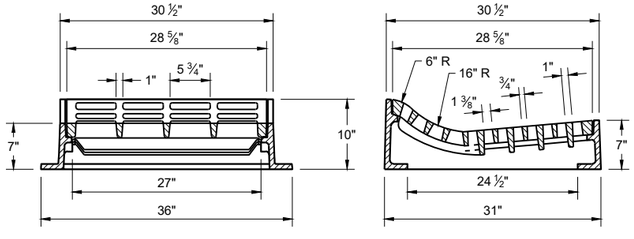
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

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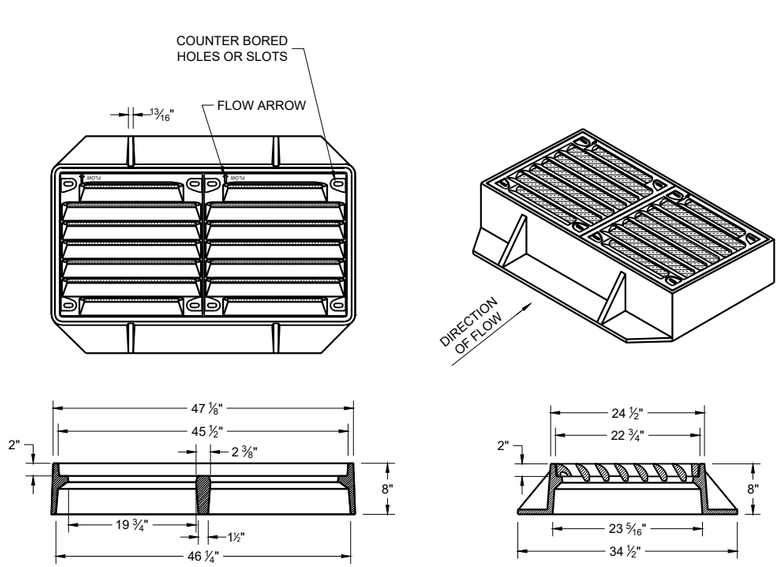
SDD 08A05-21c

GENERAL NOTES

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

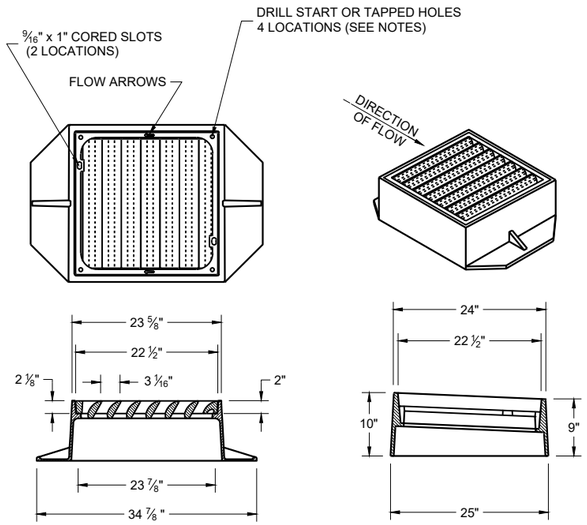
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



TYPE "VV-B"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER
ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

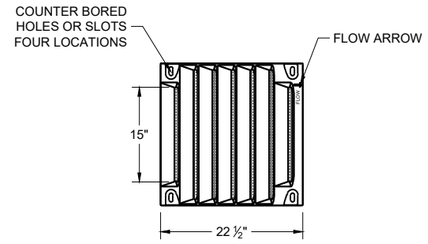
TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 35B
3/8" DIA. X 1/16" DRILL START IN 8 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



TYPE "V"

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER ALL DRILLING AND TAPPING GRATES AND FRAMES BY CASTING MANUFACTURER

TYPE V
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A
3/8" DIA. X 1/16" DRILL START IN 4 LOCATIONS
GRATE - CAST GRAY IRON ASTM A-48, CLASS 35B



BOLT DOWN GRATE FOR TYPE "V" AND "VV-B" COVER

NOTES: ALL HARDWARE TO BE SUPPLIED BY CASTING MANUFACTURER NOTED AS TYPE "V-B" OR "VV-B" (FOR DOUBLE GRATE) ON DRAINAGE TABLE

TAP 1/2" -13 HOLES IN FOUR LOCATIONS PER GRATE IN FRAME TO BOLT GRATE(S).
FRAME - CAST GRAY IRON ASTM A48 CLASS 40A

GRATE - CAST DUCTILE IRON ASTM A536, 55+KSI YIELD
BOLTS - 1/2" -13 STAINLESS STEEL BOLTS WITH WASHERS
TORQUE BOLTS TO MANUFACTURER SPECIFICATION DO NOT OVERTIGHTEN.

INLET COVERS
TYPES V, V-B, AND VV-B

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

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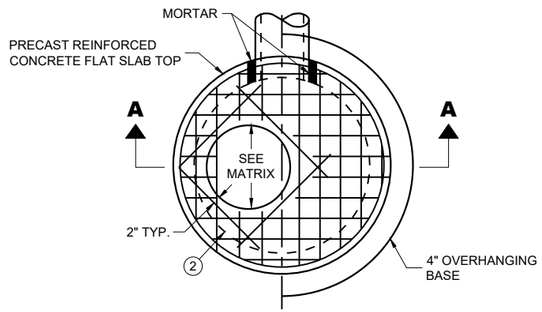
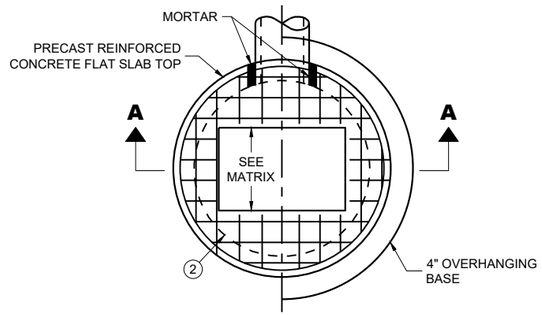
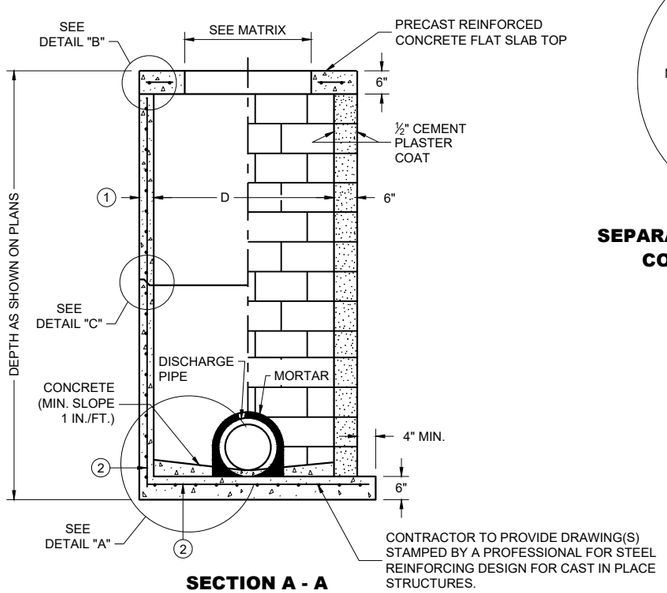
SDD 08A05-21d



PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

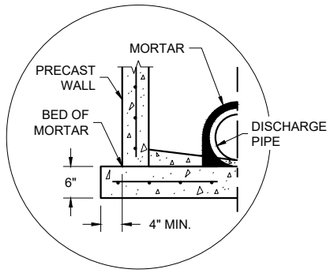
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

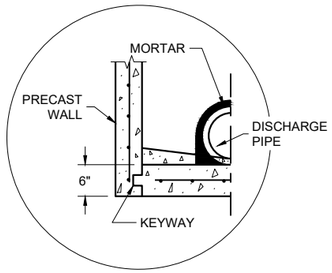
INLET SIZE	INLET COVER TYPE / OPENING SIZE (FT.)	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

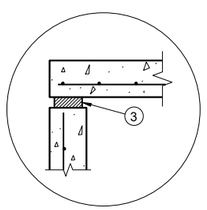


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

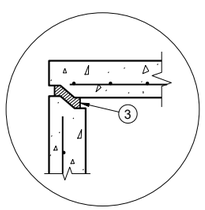


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

DETAIL "A"

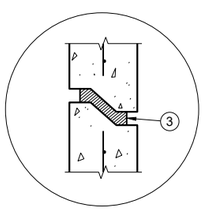


TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

DETAIL "B"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

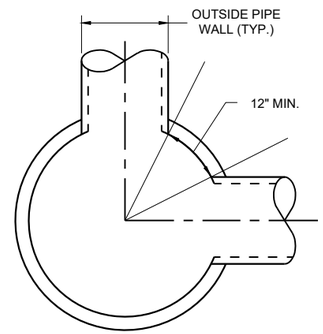
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
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December 2023 — DATE
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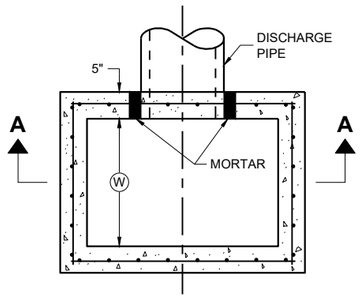
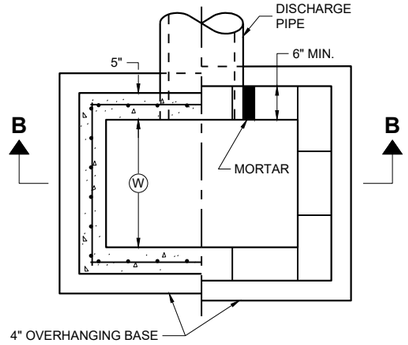
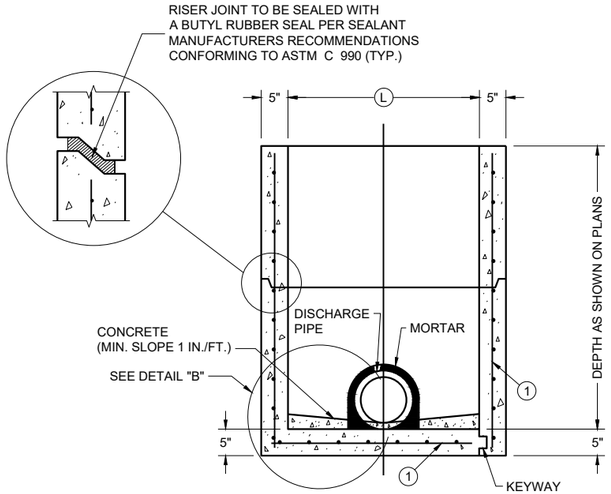


PLAN VIEW



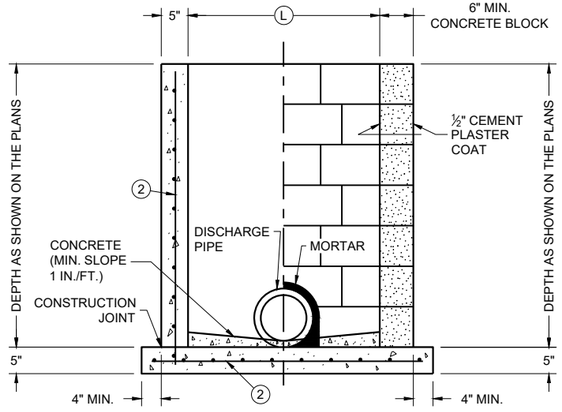
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

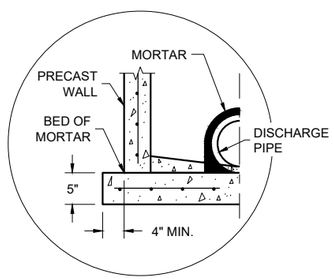
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

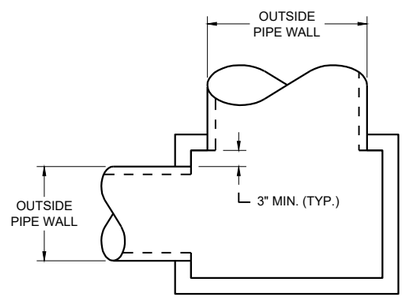
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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

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

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

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

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

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

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

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

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

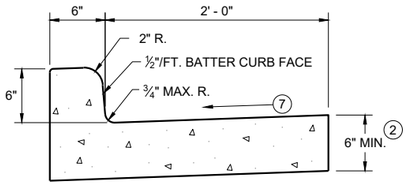
FHWA

6

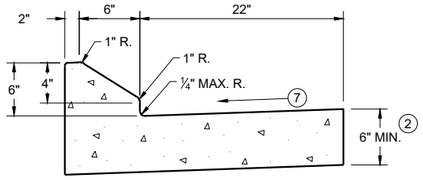
SDD 08C07-03

6

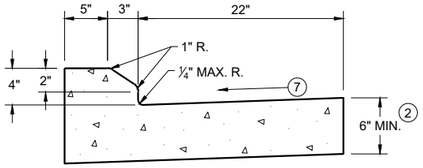
SDD 08C07-03



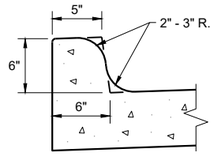
TYPES A (1) & D



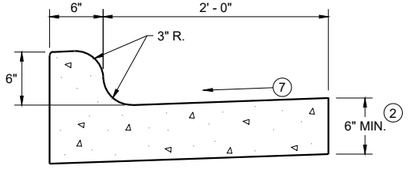
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

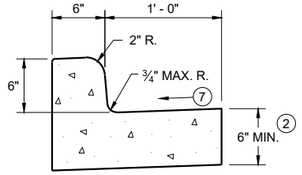


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



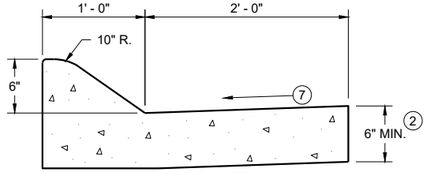
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

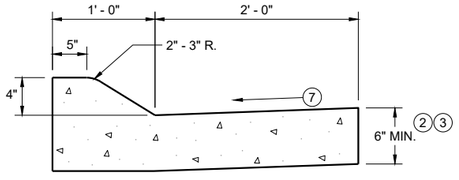


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

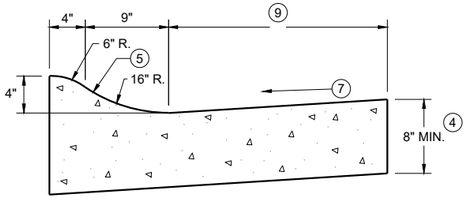


6" SLOPED CURB TYPES A (1) & D



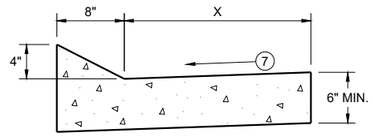
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

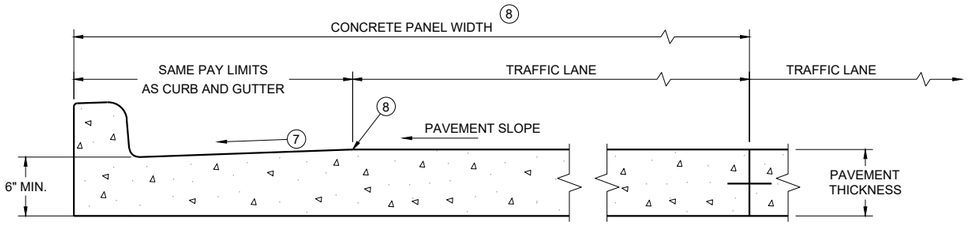


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

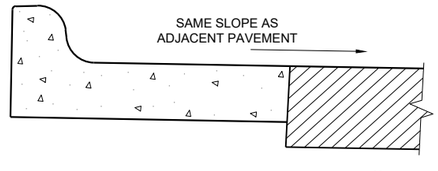
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

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

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

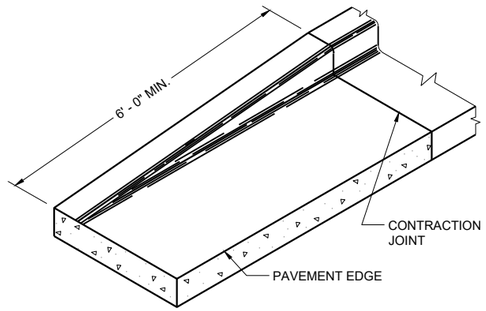
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

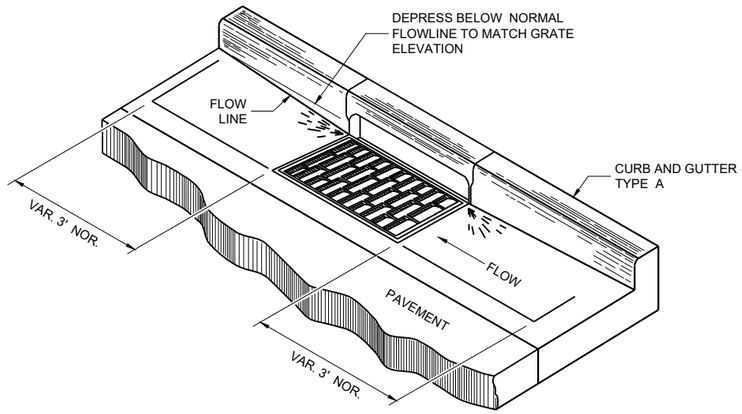
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

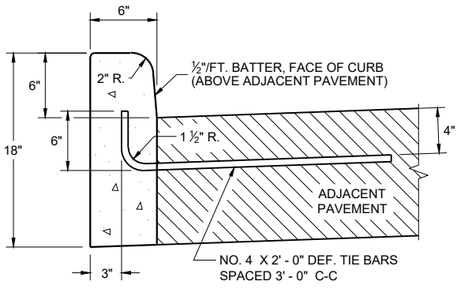
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

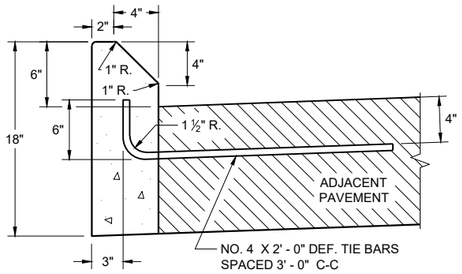
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

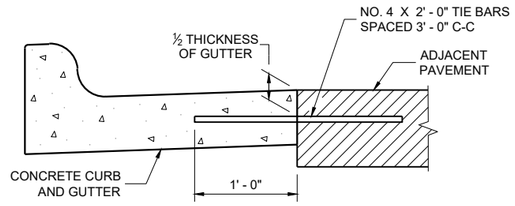


TYPES A (1) & D

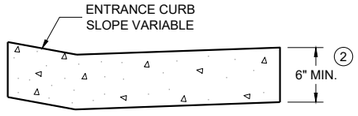


TYPES G (1) & J

CONCRETE CURB

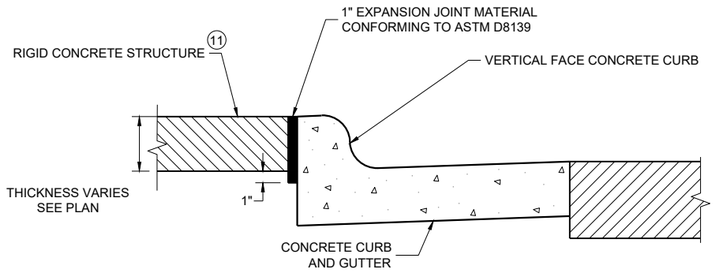


TYPICAL TIE BAR LOCATION (1)

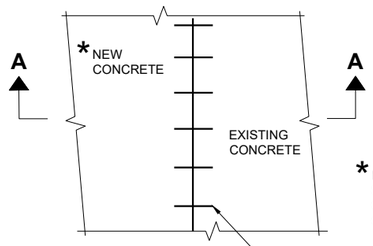


DRIVEWAY ENTRANCE CURB (10)

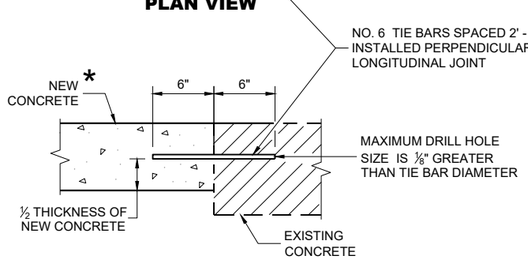
(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D01-23b

GENERAL NOTES

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

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

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

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

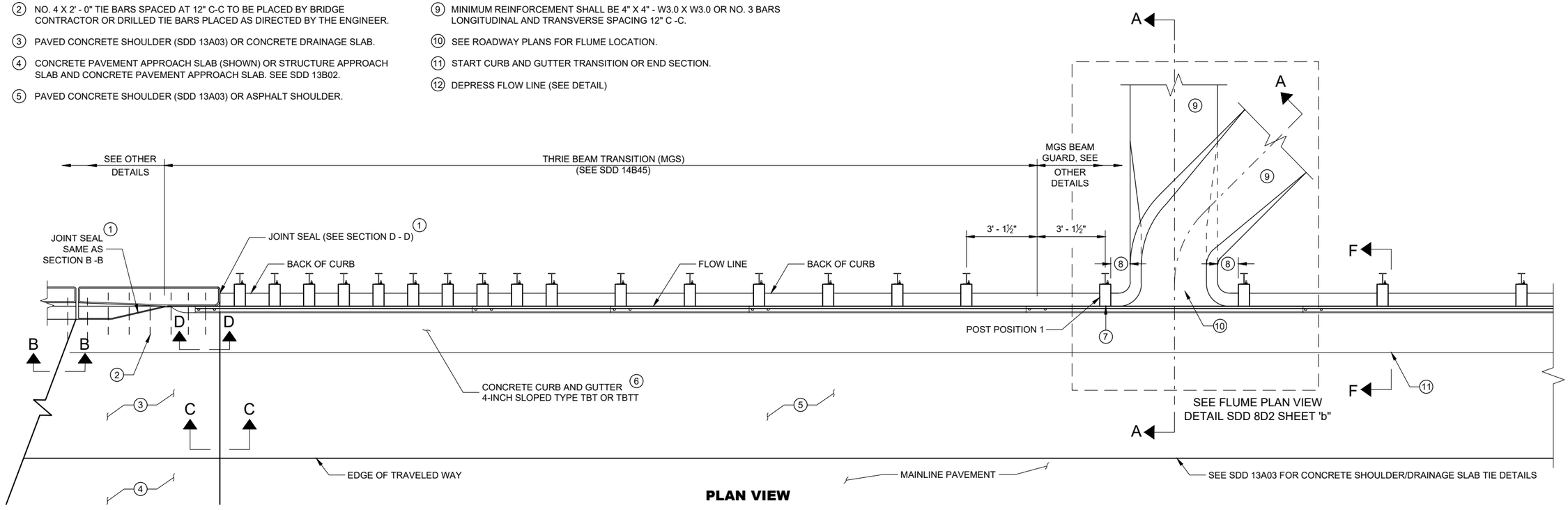
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

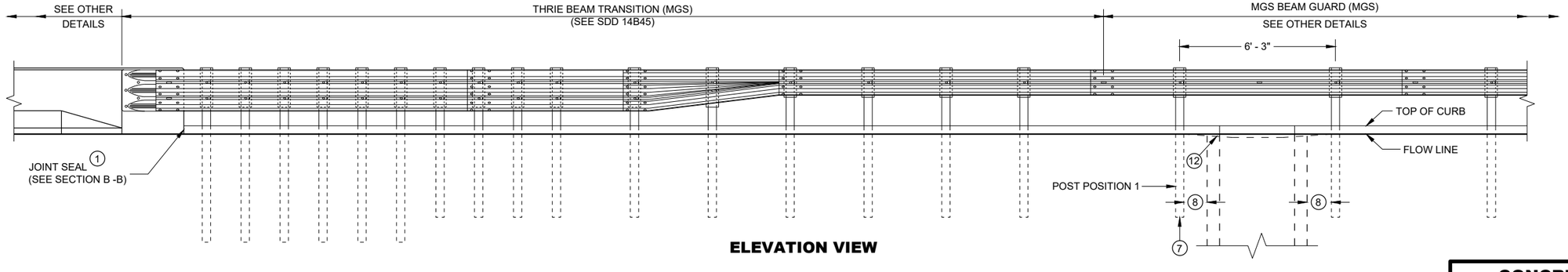
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

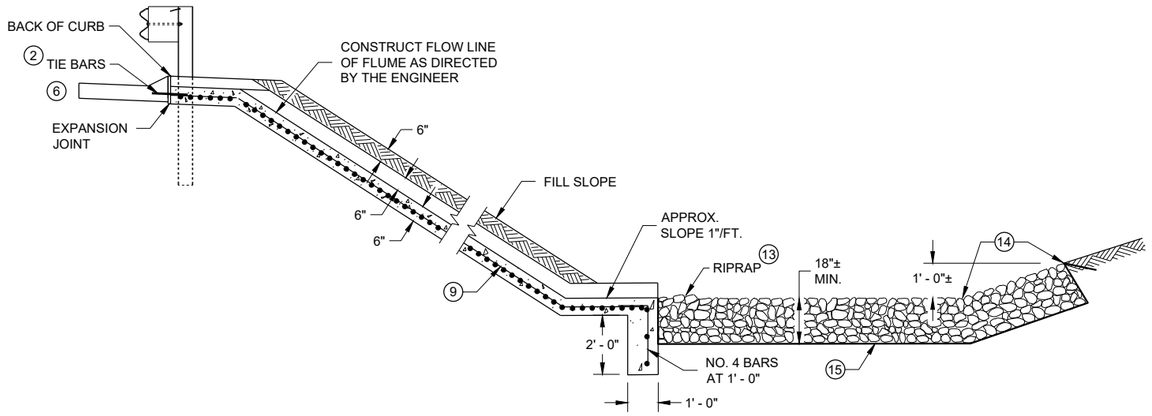
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

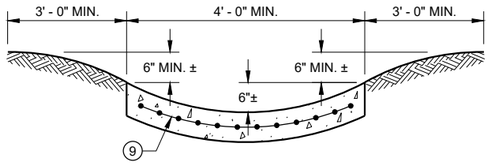
SDD 08D02 - 08a

6

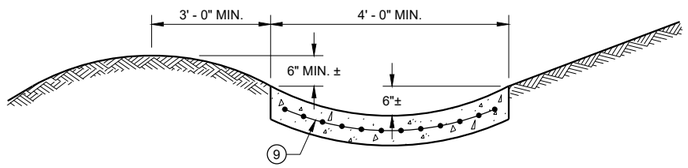
SDD 08D02 - 08a



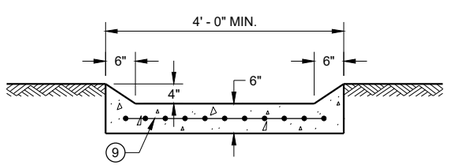
SECTION A - A



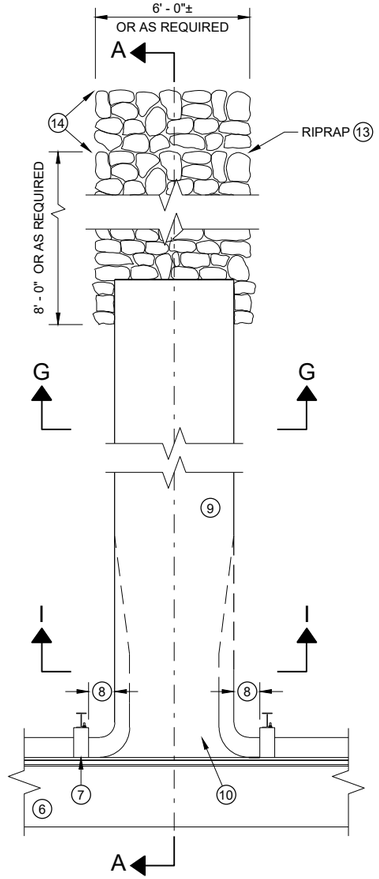
SECTION G - G



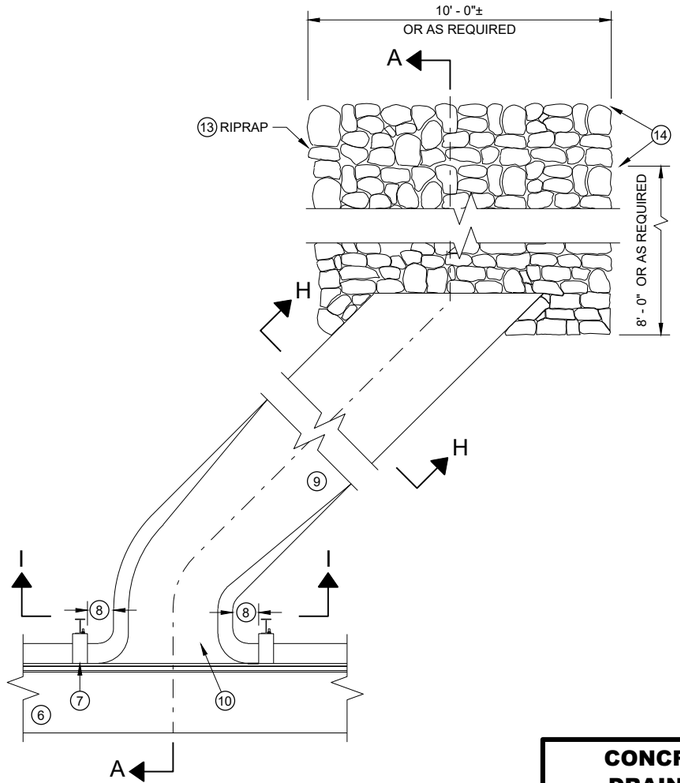
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

GENERAL NOTES

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

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

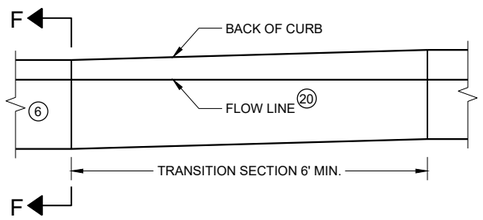
1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

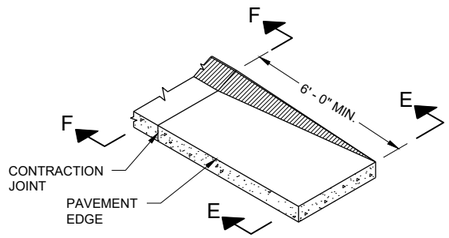
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

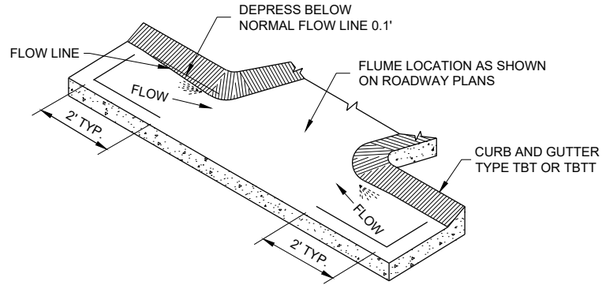
SDD 08D02 - 08b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

GENERAL NOTES

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

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

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

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

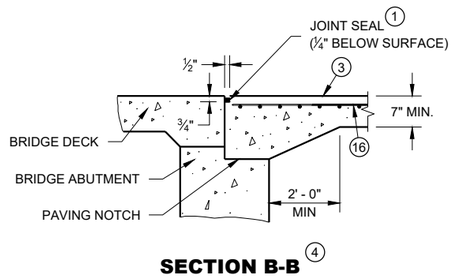
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

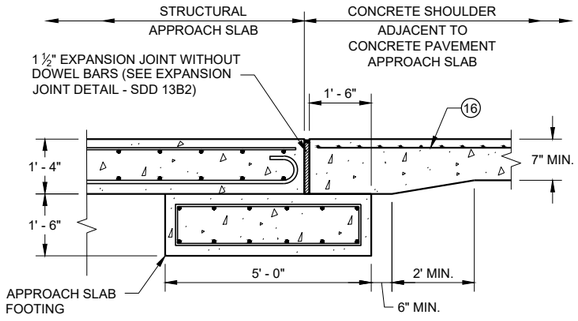
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

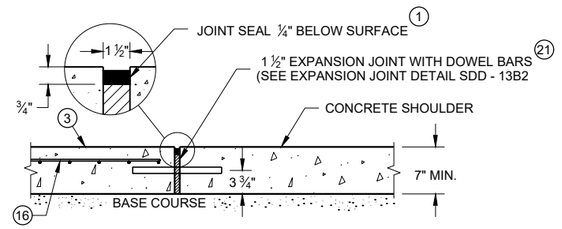
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



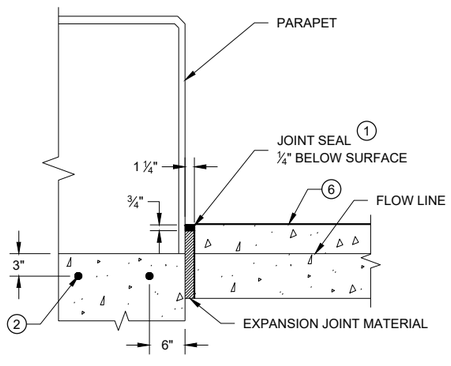
SECTION B-B (4)



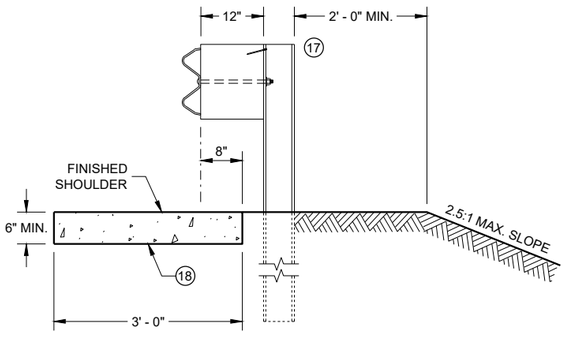
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



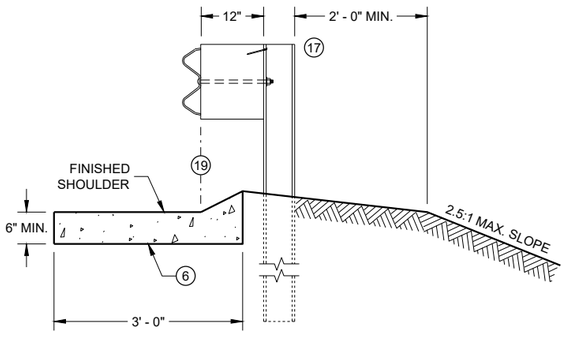
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

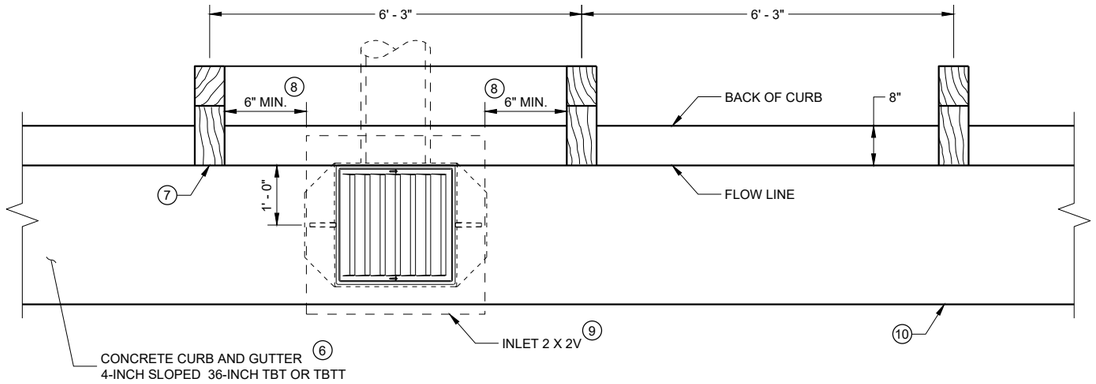
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

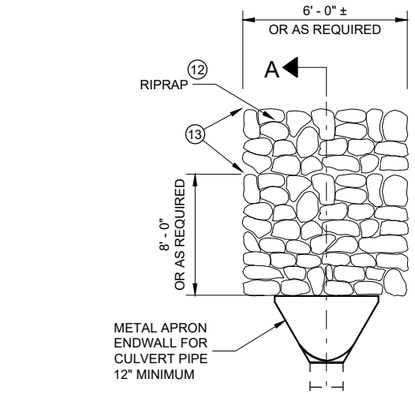
FHWA

6
SDD 08D02 - 08c



INLET PLAN VIEW

(NOTE: RAIL NOT SHOWN FOR CLARITY)



GENERAL NOTES

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

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

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

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE DRAINAGE STRUCTURE BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

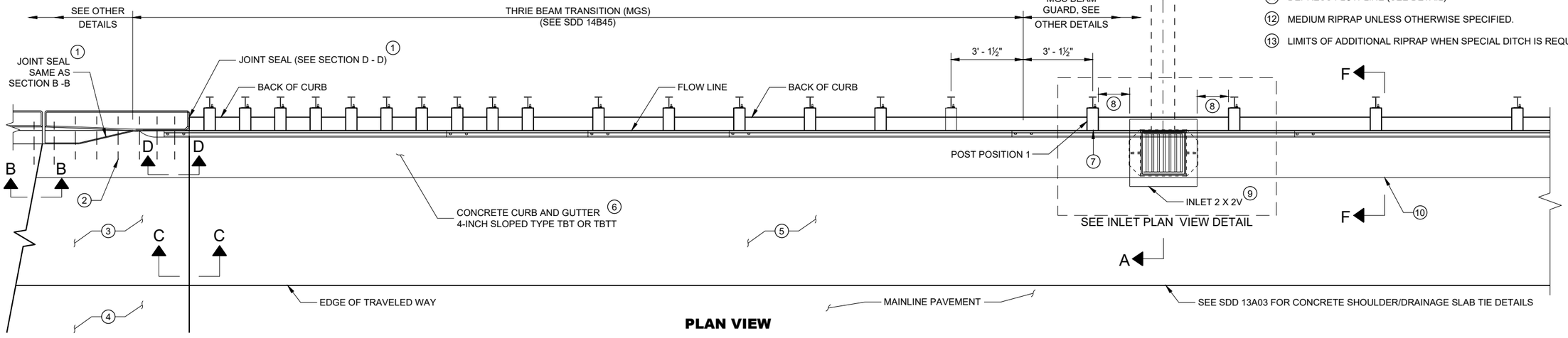
(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

(10) START CURB AND GUTTER TRANSITION OR END SECTION.

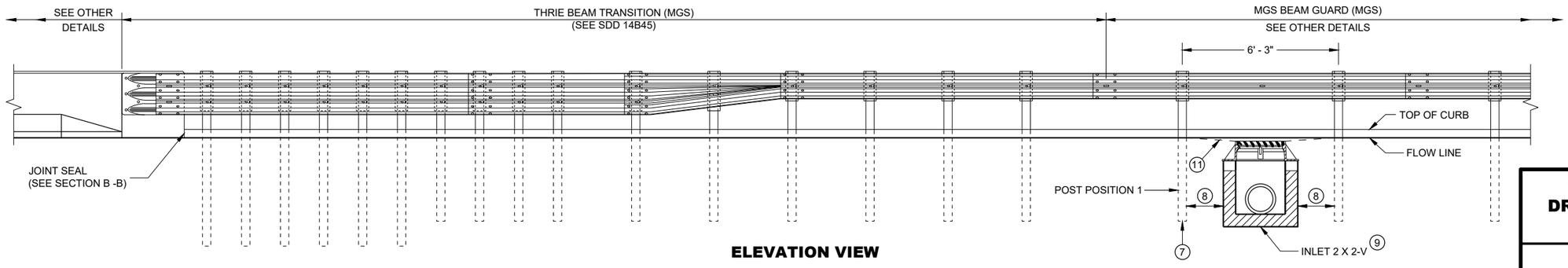
(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(13) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.



PLAN VIEW



ELEVATION VIEW

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

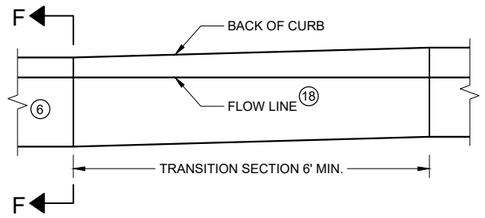
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

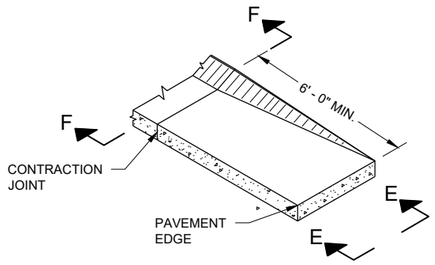
SDD 08D03 - 09a

6

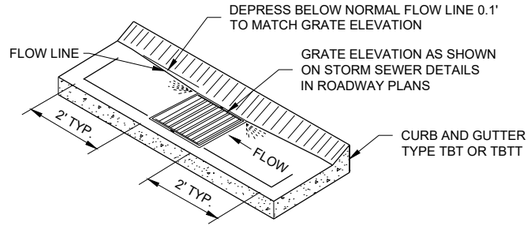
SDD 08D03 - 09a



CURB AND GUTTER TRANSITION SECTION CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION AT INLETS CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

GENERAL NOTES

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

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

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(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE DRAINAGE STRUCTURE BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER DRAINAGE STRUCTURE BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE WALL OF DRAINAGE STRUCTURE TO POSTS.

(9) SEE SDD 08A05 AND 08C07 FOR DETAILS. SEE ROADWAY PLANS FOR LOCATION.

(10) START CURB AND GUTTER TRANSITION OR END SECTION.

(11) DEPRESS FLOW LINE (SEE DETAIL)

(12) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(13) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(14) GEOTEXTILE TYPE HR.

(15) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(16) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

(17) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

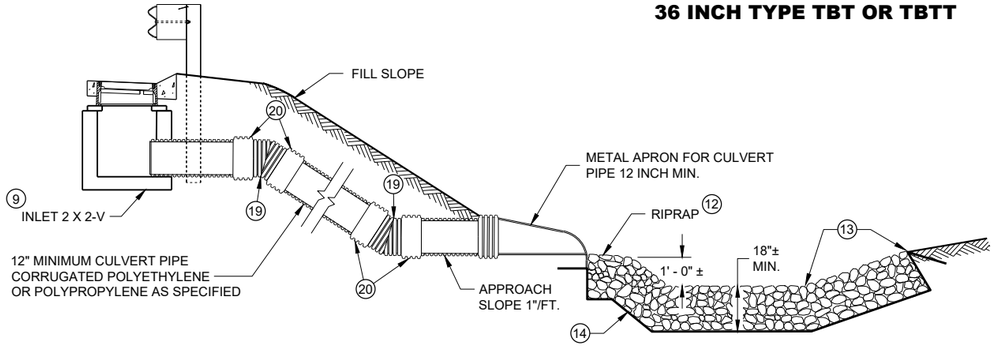
(18) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

(19) MANUFACTURER SUPPLIED BEND.

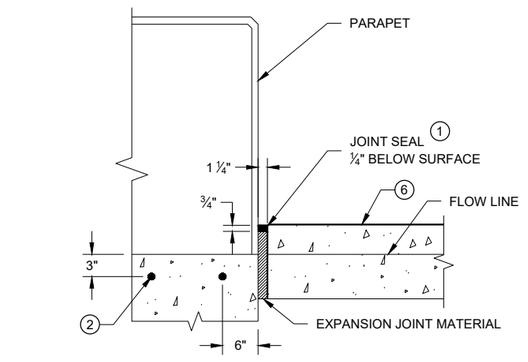
(20) MANUFACTURER SUPPLIED EXTERNAL MECHANICAL COUPLING OR A MANUFACTURER RECOMMENDED COUPLING WITH A MASTIC IMPREGNATED GEOTEXTILE WRAP AND MECHANICAL FASTENING BANDS.

(21) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

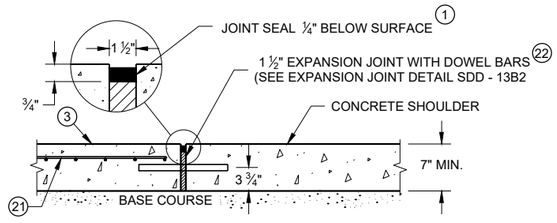
(22) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



SECTION A - A

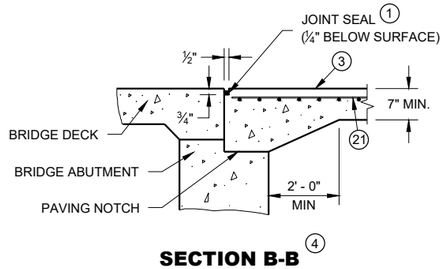


SECTION D - D

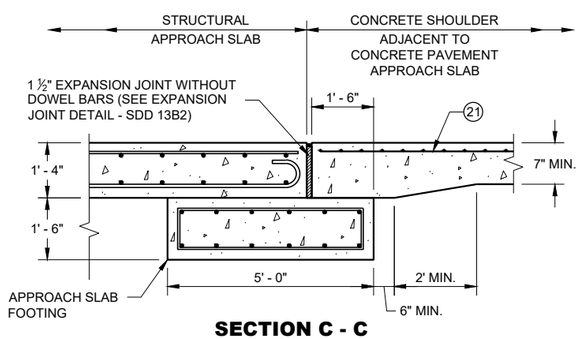


SECTION C - C

JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS

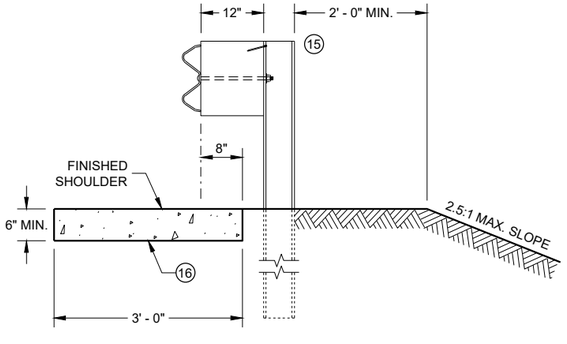


SECTION B-B 4

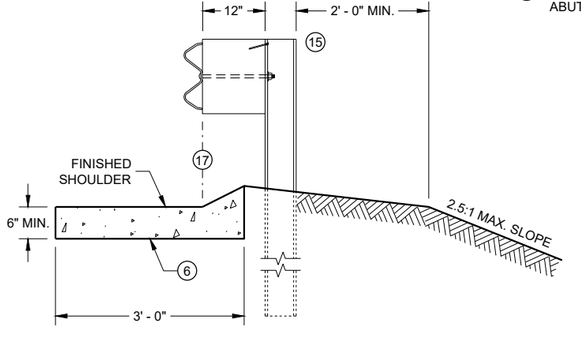


SECTION C - C

JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

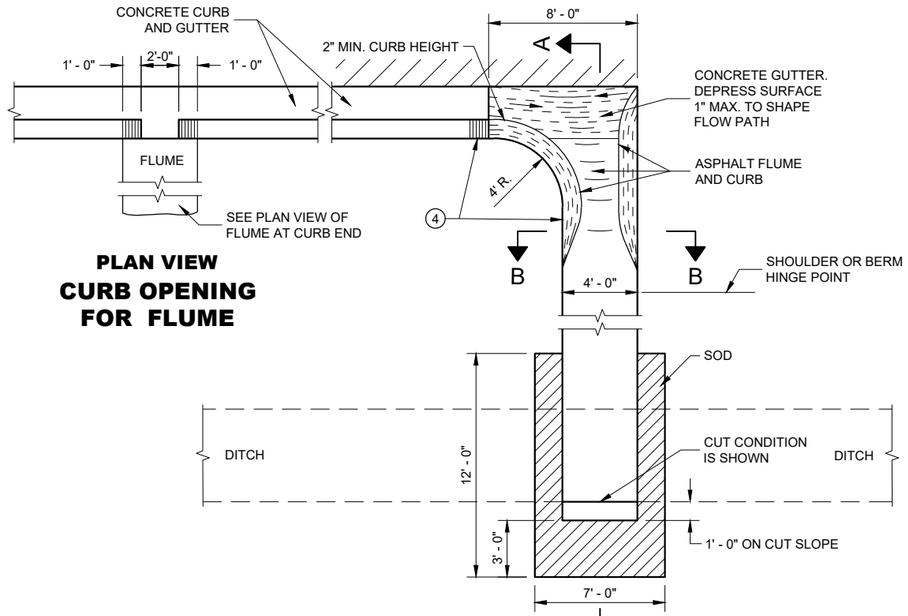
FHWA

6

SDD 08D03 - 09b
SDD 08D03 - 09b

NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME

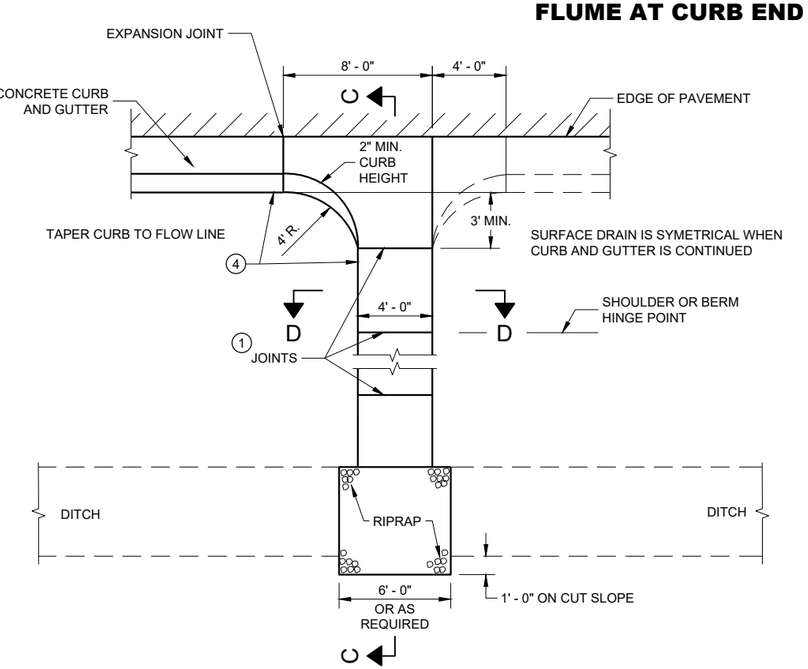


PLAN VIEW

CURB OPENING FOR FLUME

PLAN VIEW

FLUME AT CURB END



PLAN VIEW

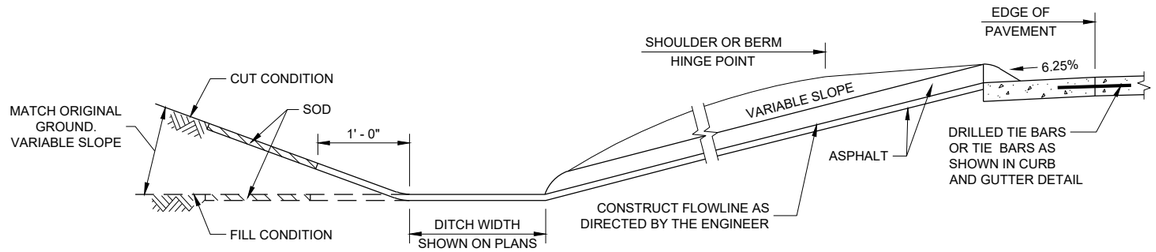
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

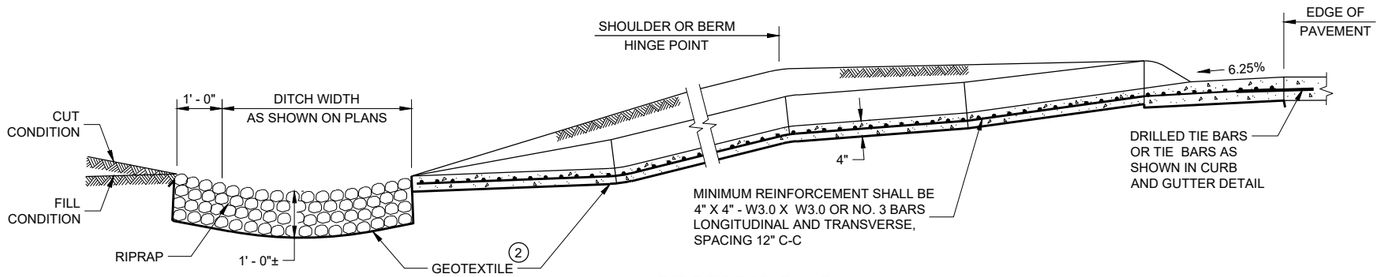
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

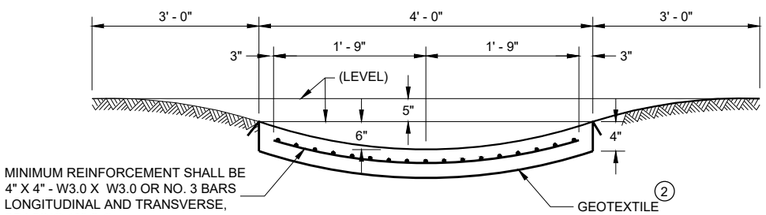


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

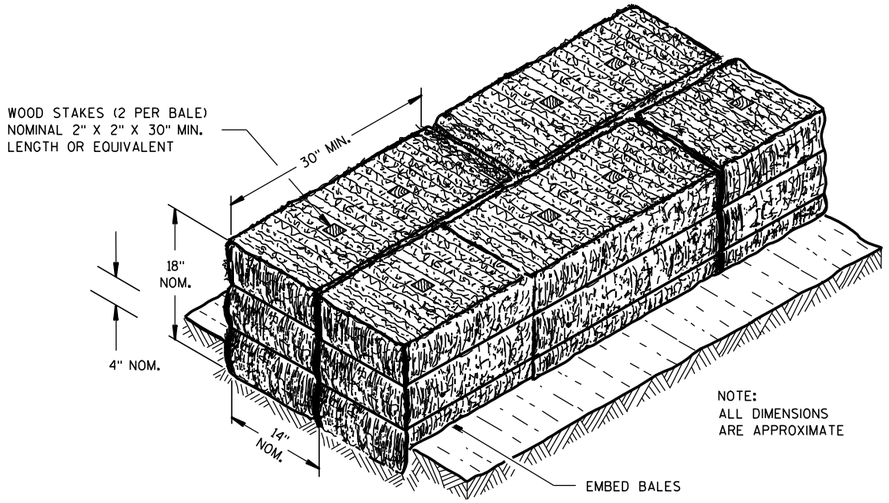
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

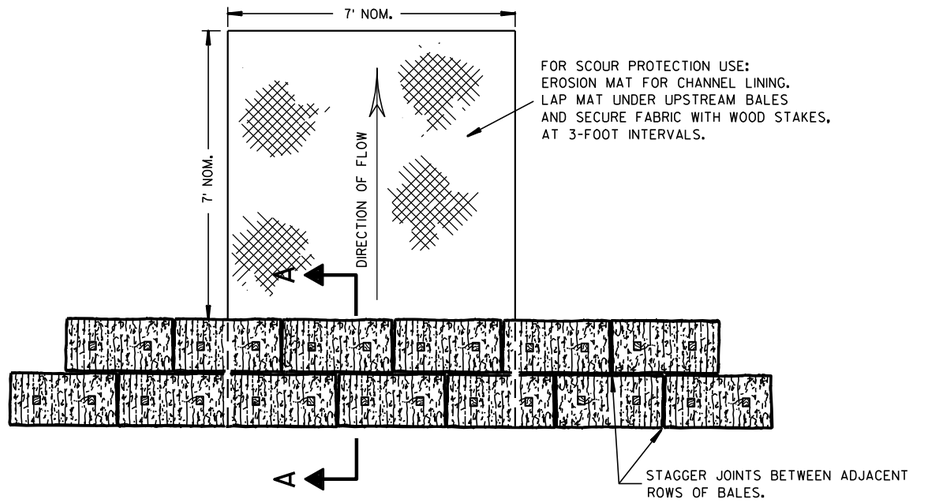
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

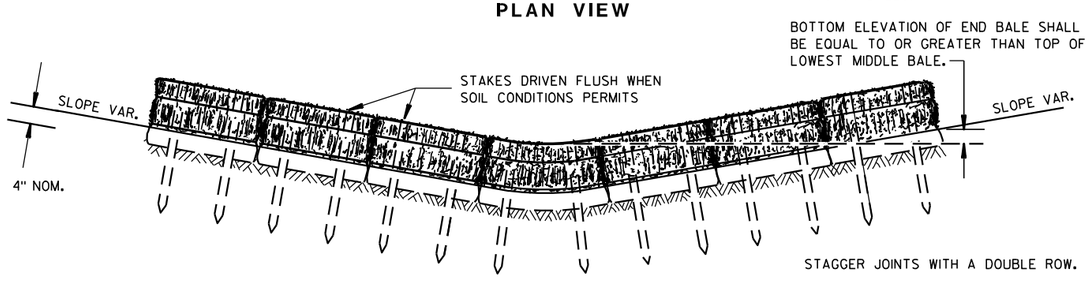
6
SDD 08D04 - 07



SECTION A-A



PLAN VIEW



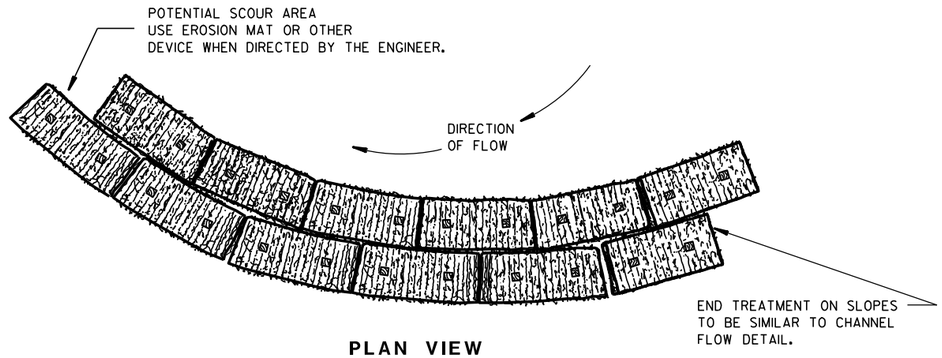
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

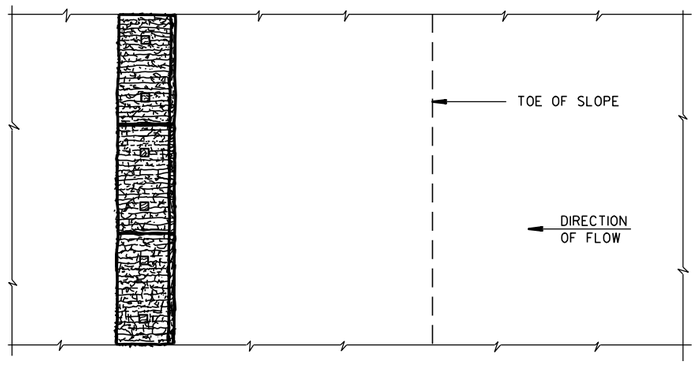
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

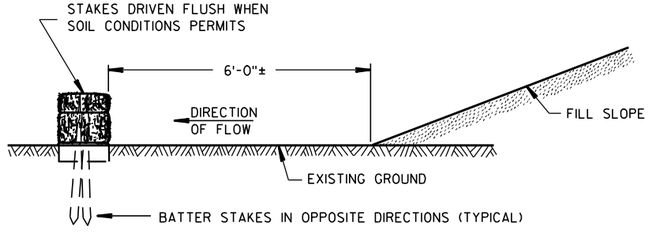


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 8 E 8-3

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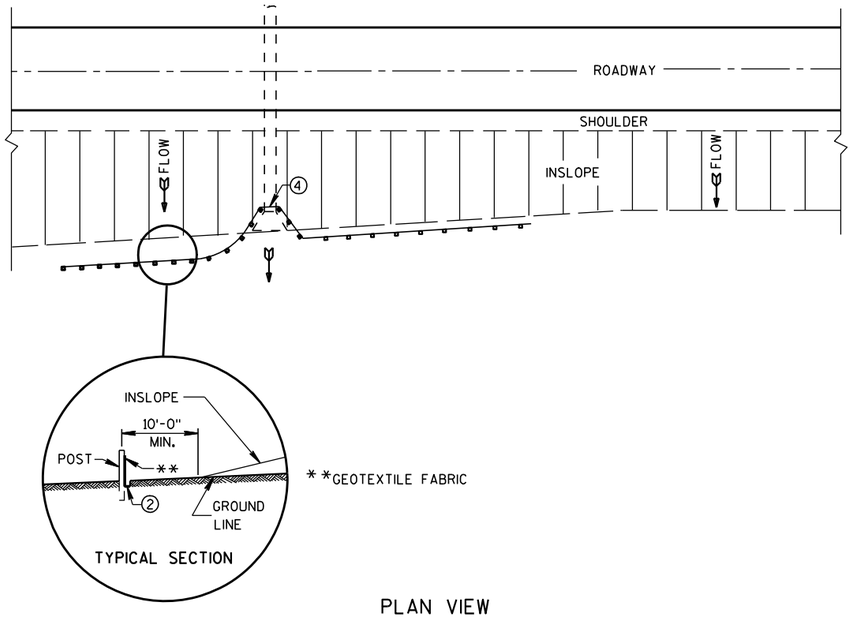
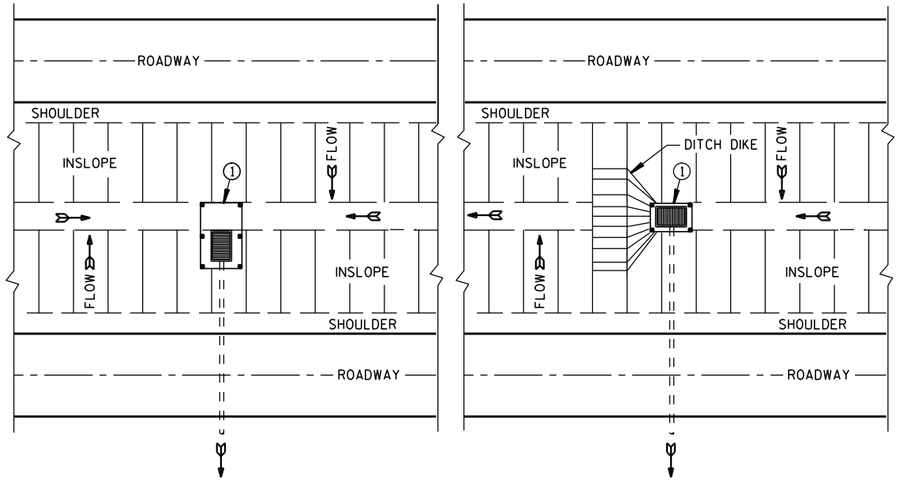
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

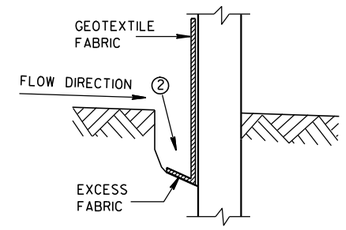
(1) HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

(2) FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

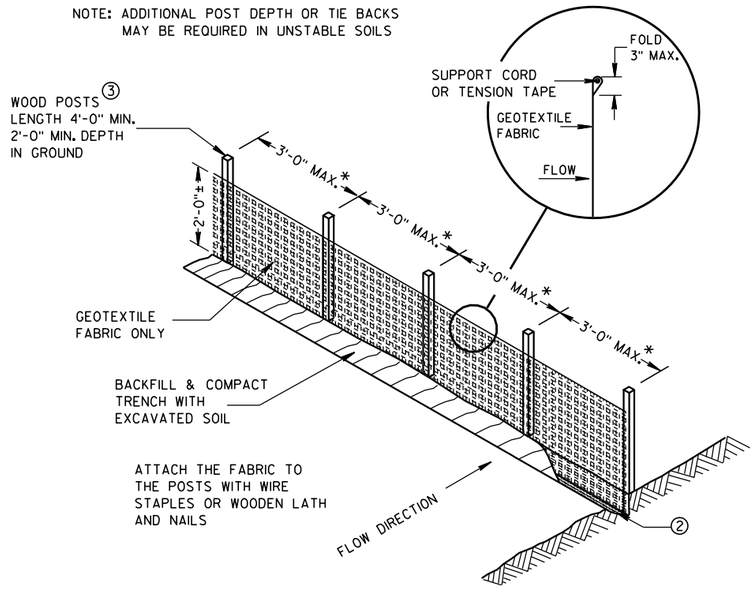
(3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

(4) SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

(5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

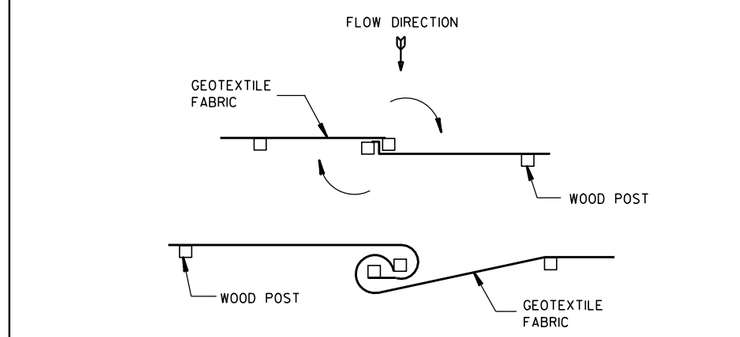


TRENCH DETAIL

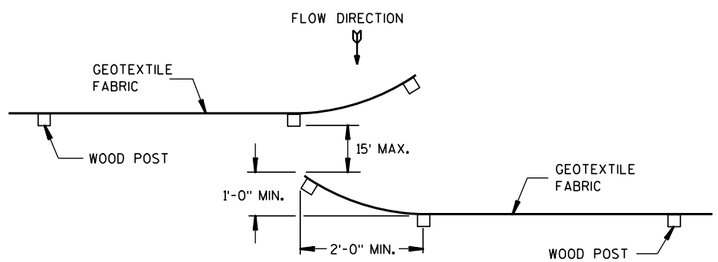


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

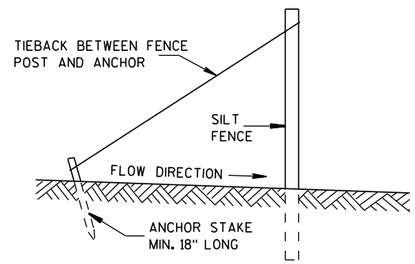


TWIST METHOD



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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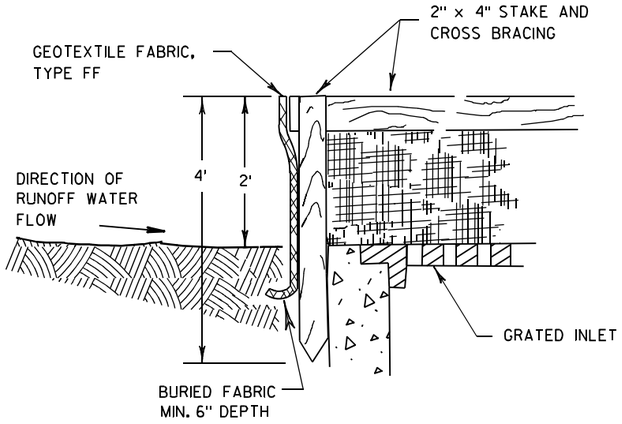
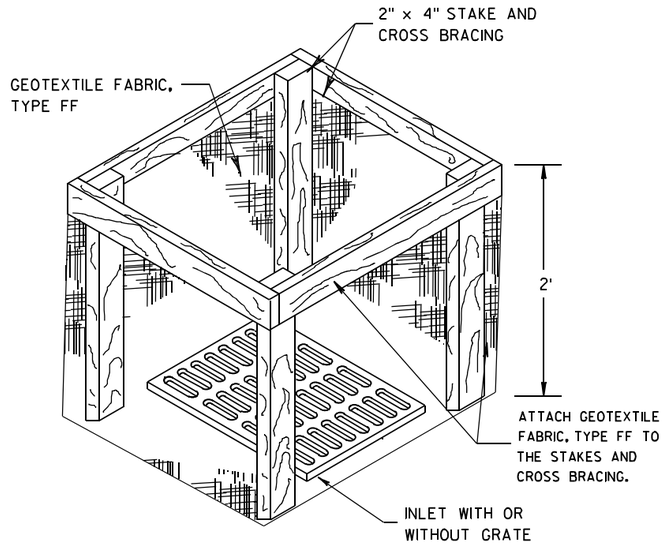
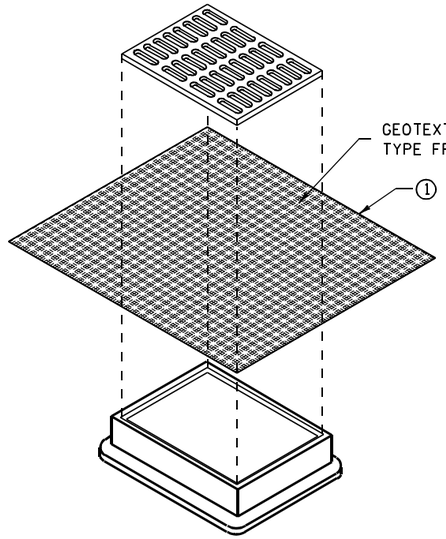
S.D.D. 8 E 9-6



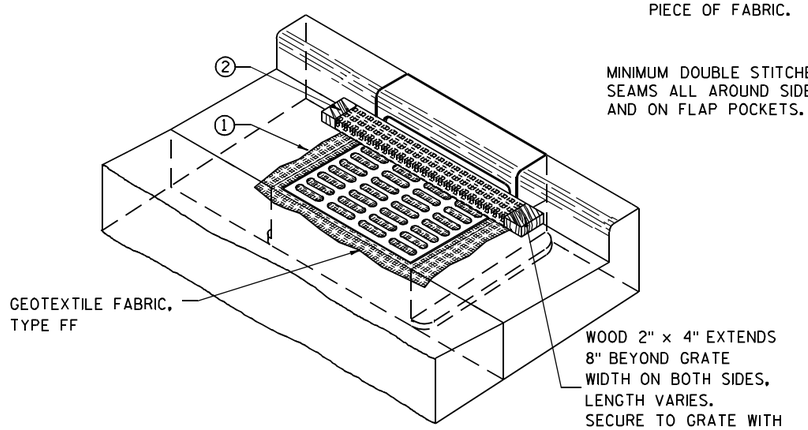


INLET PROTECTION, TYPE A

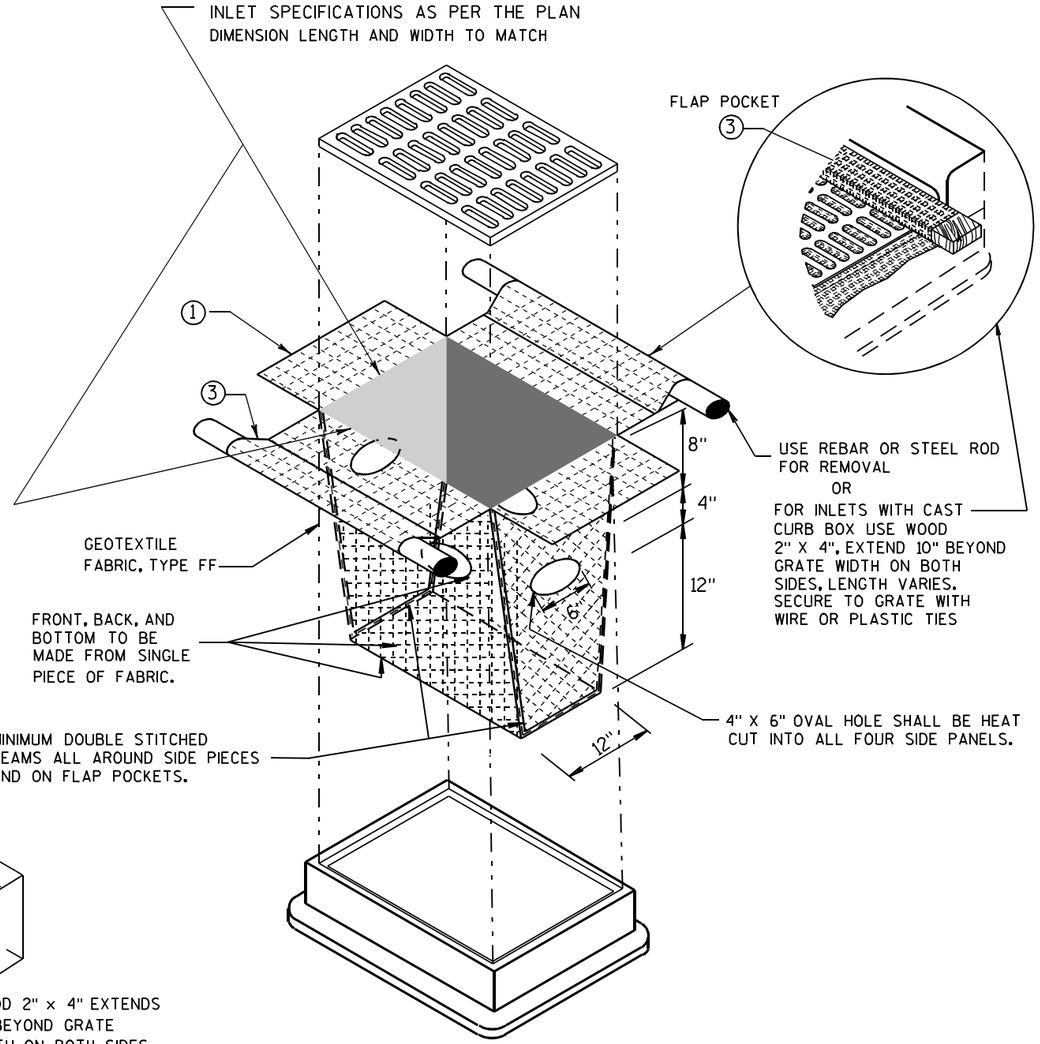


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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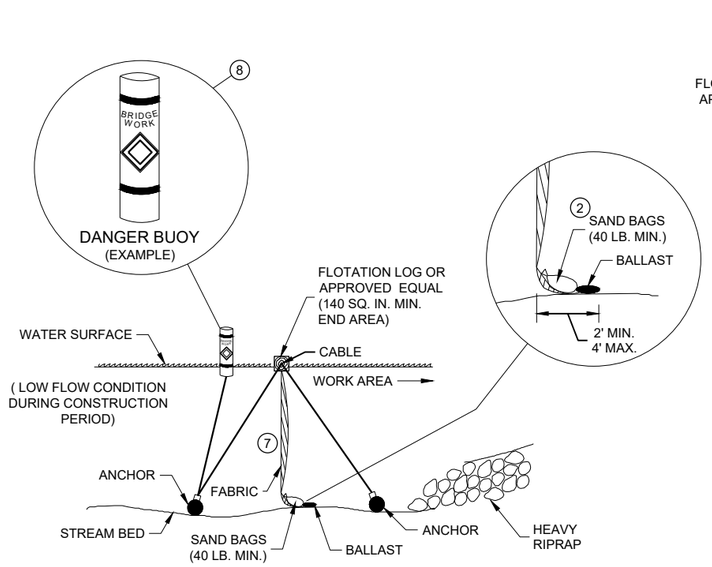
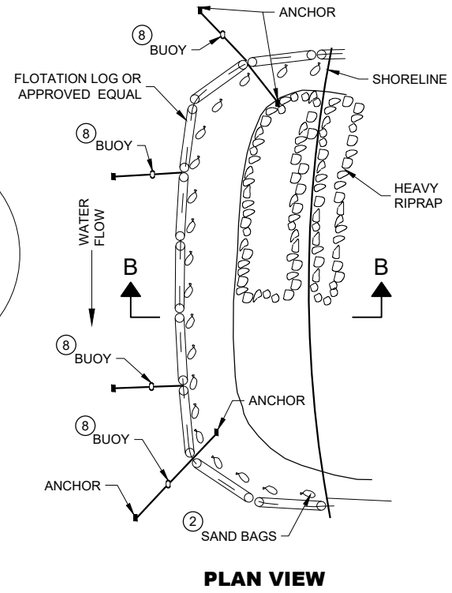
S.D.D. 8 E 10-2

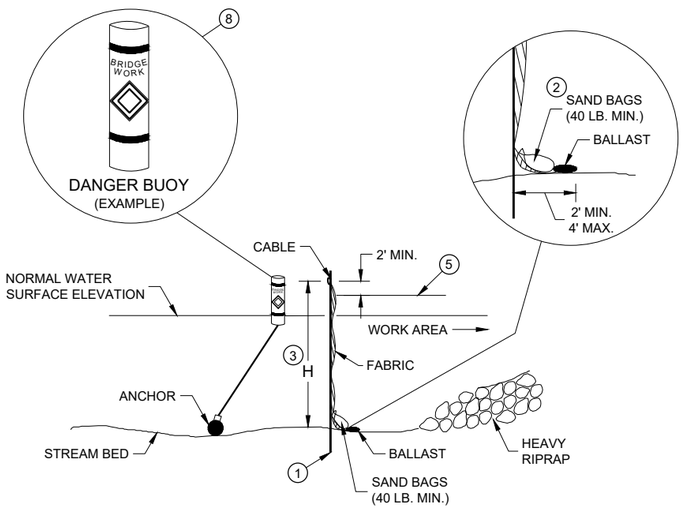


SECTION B - B

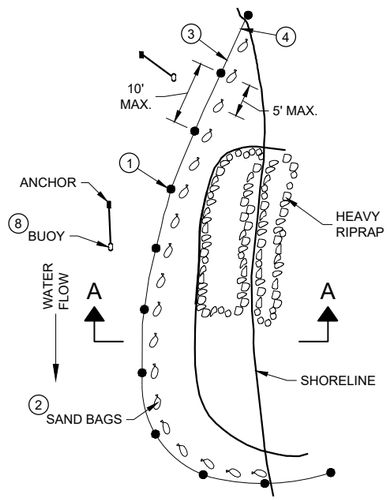


PLAN VIEW

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.

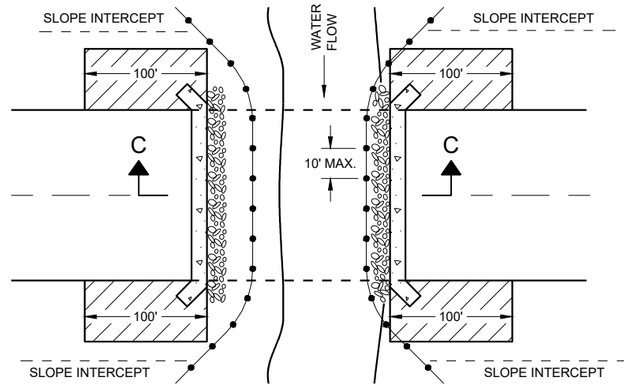
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(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.

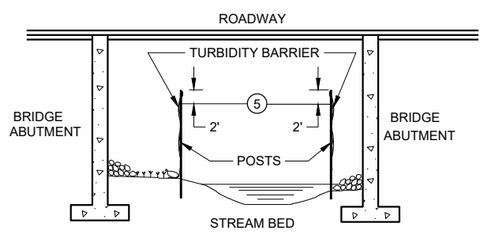
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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

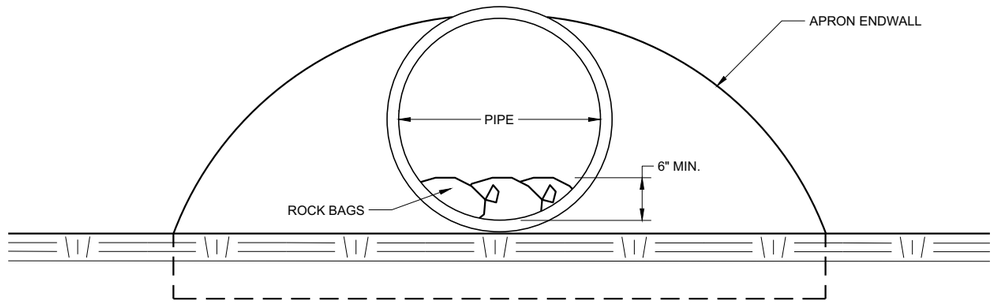
TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

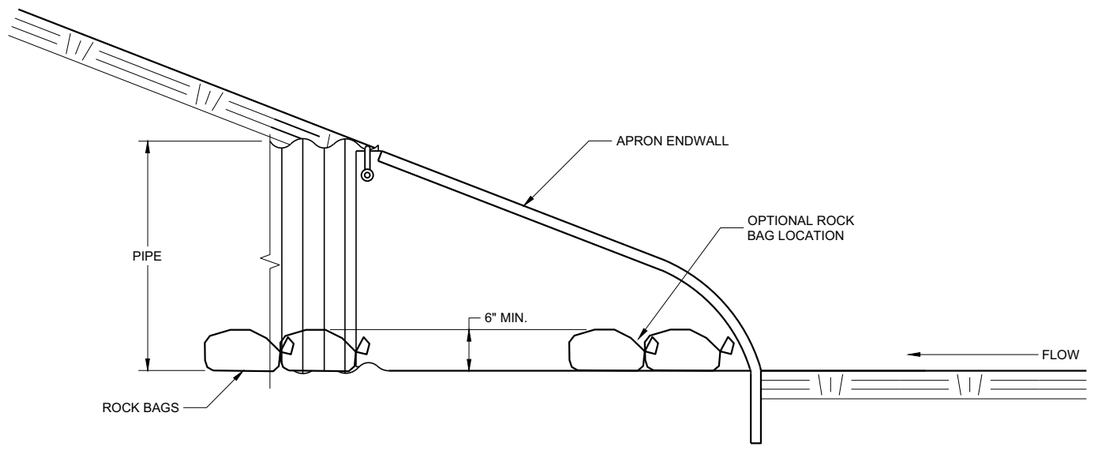
APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
SDD 08E11 - 02



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

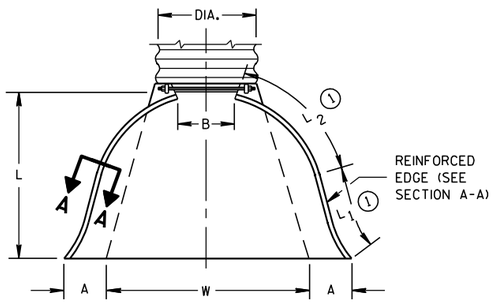
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

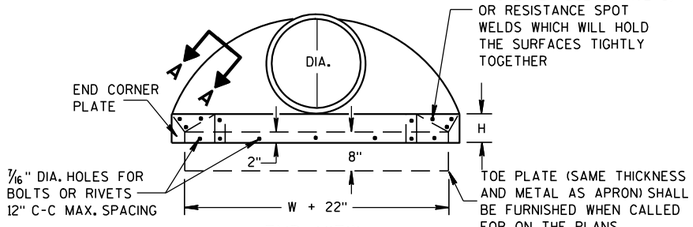
REINFORCED CONCRETE APRON ENDWALLS

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

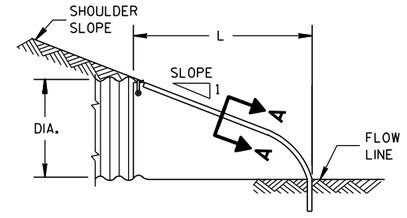
*MINIMUM
**MAXIMUM



PLAN VIEW

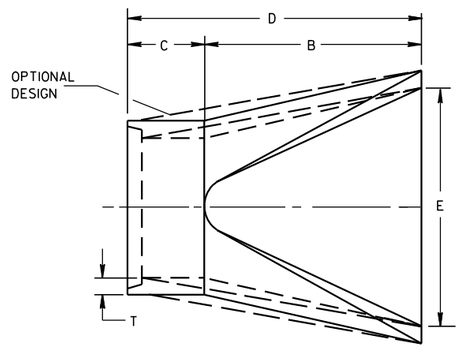


END VIEW

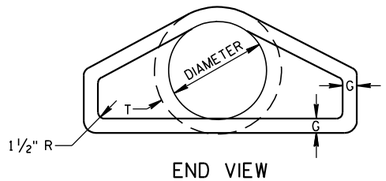


SIDE ELEVATION

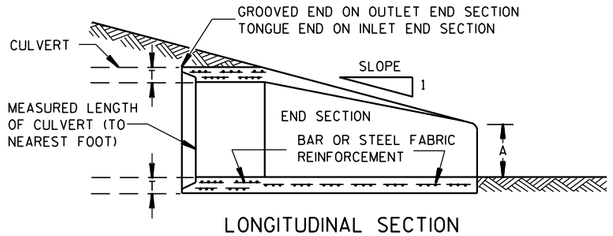
METAL ENDWALLS



PLAN

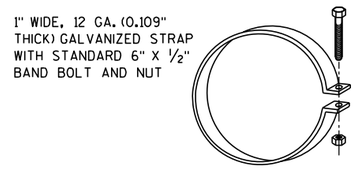


END VIEW



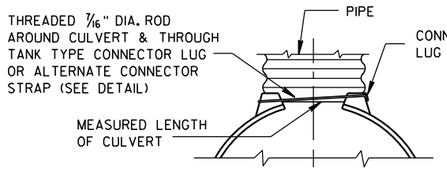
LONGITUDINAL SECTION

CONCRETE ENDWALLS

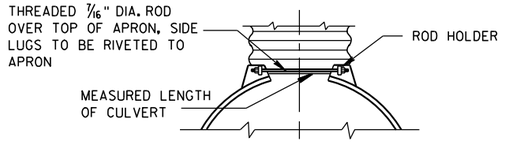


ALTERNATE FOR TYPE 1 CONNECTION

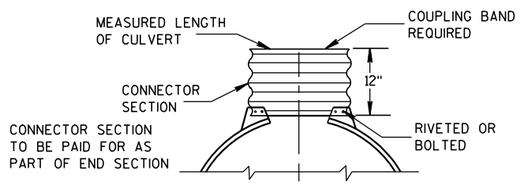
END SECTION CONNECTOR STRAP



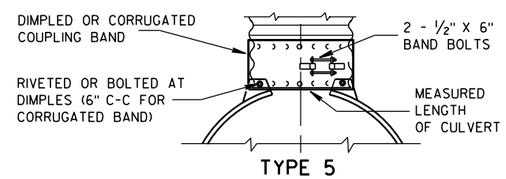
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

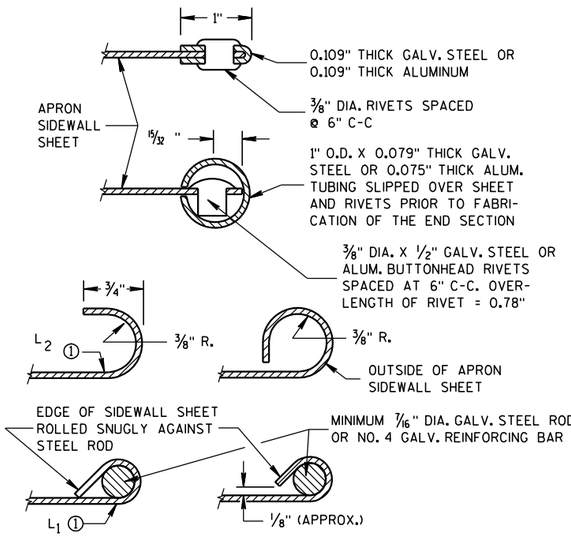
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

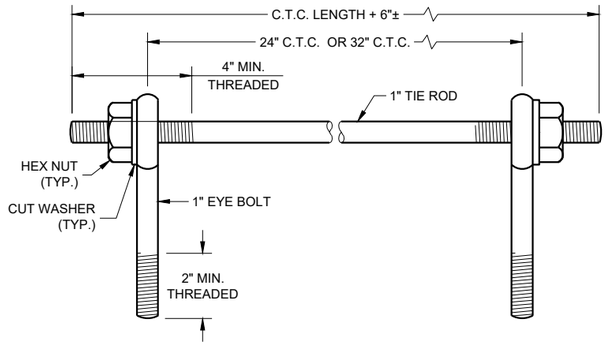
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

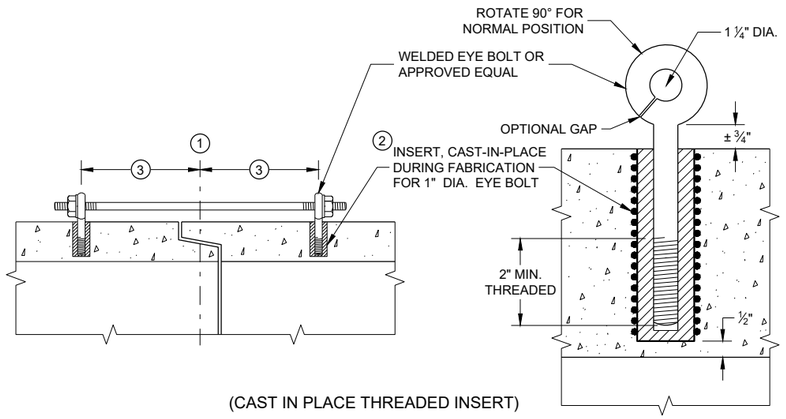
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

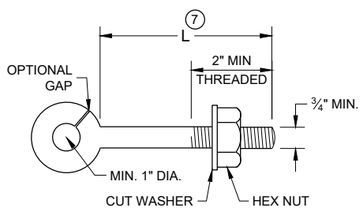
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

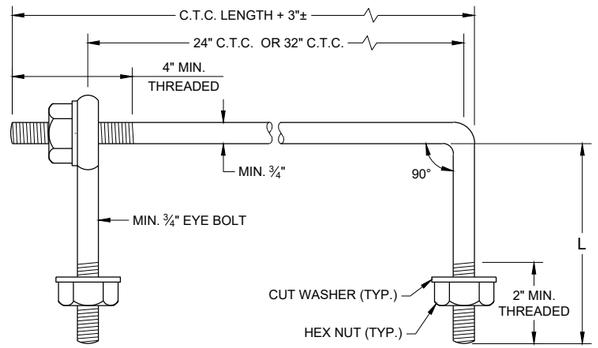
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

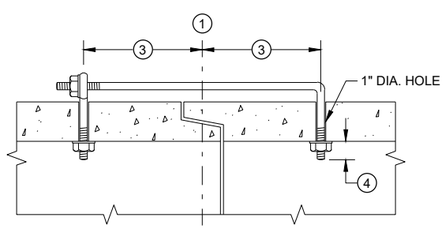


EYE BOLT (7)

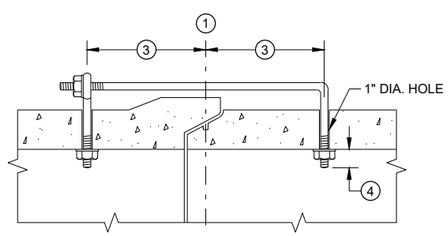
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

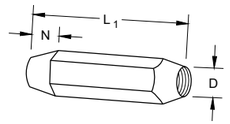
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



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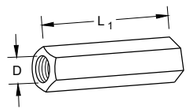
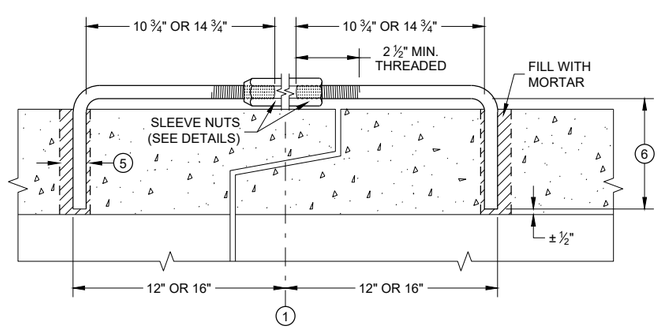


PLAIN

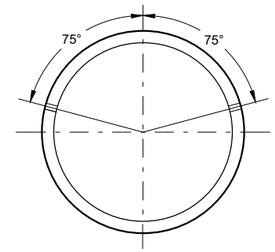
RIGHT AND LEFT THREADS

SLEEVE NUTS



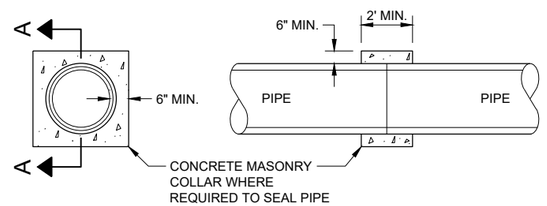
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

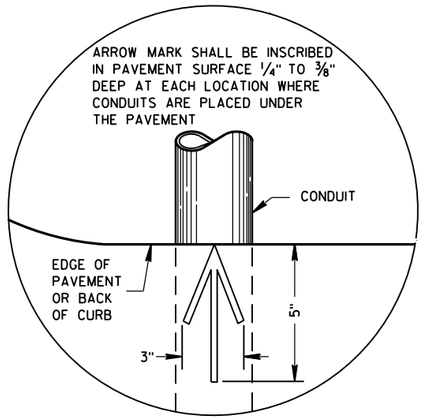
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

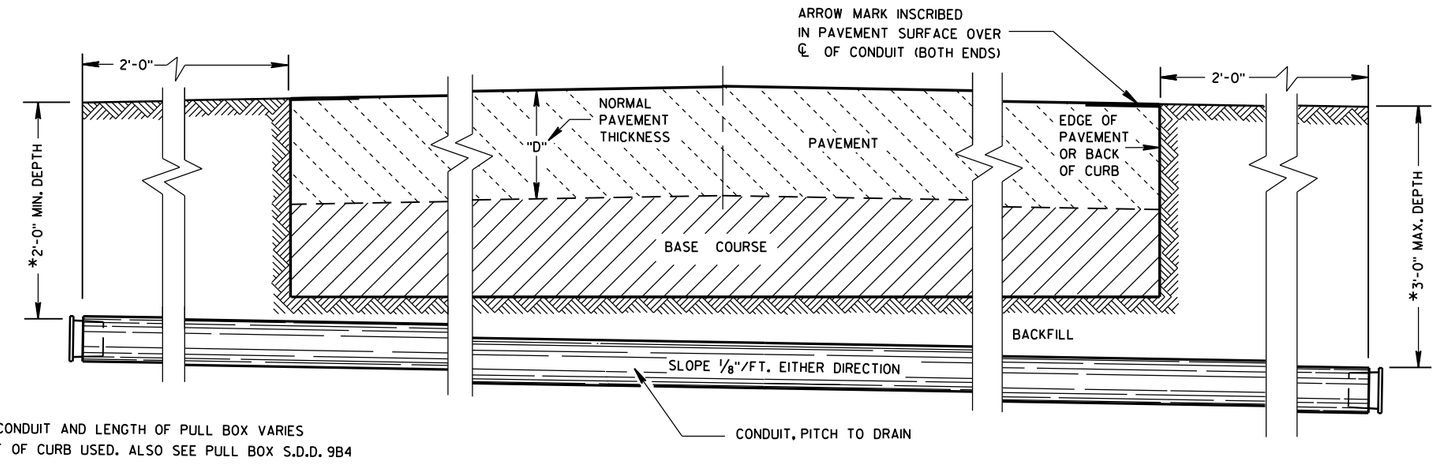
SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

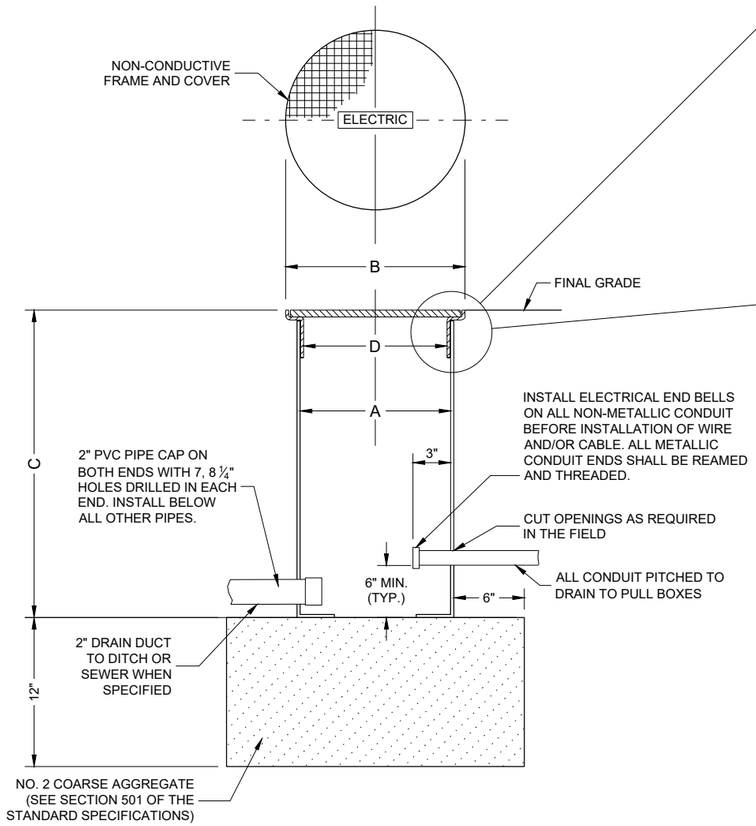
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

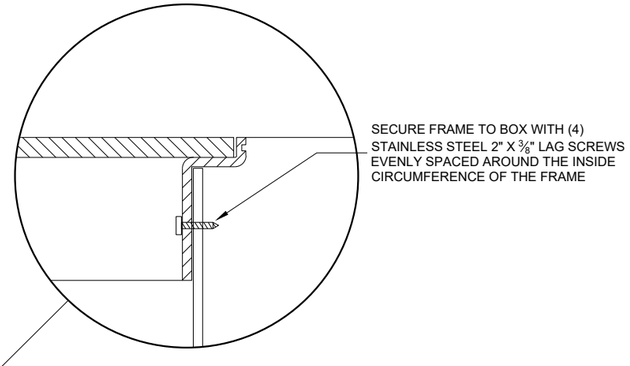
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

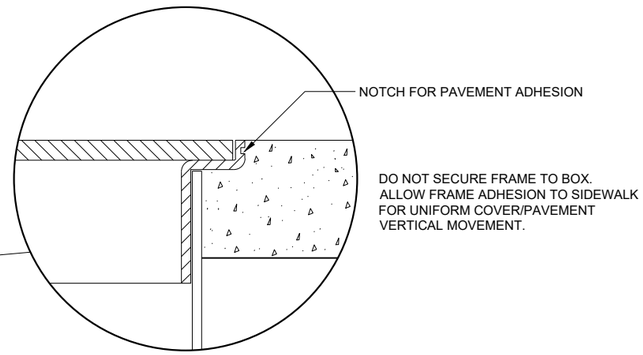
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



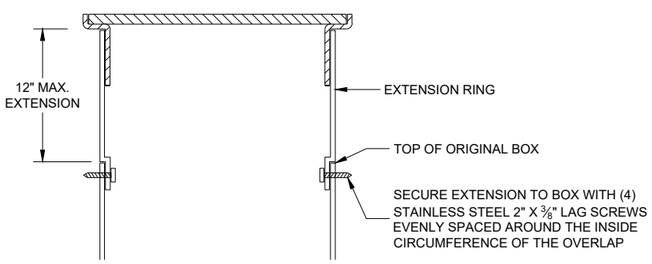
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

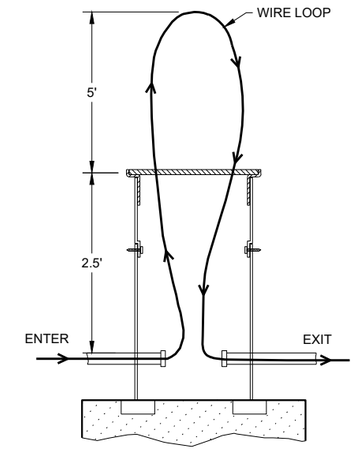
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

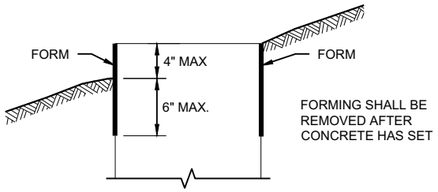
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 349

FHWA

6
SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

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

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

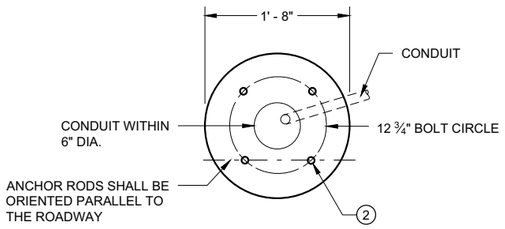
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

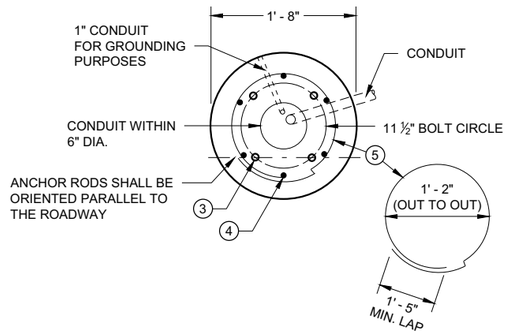
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

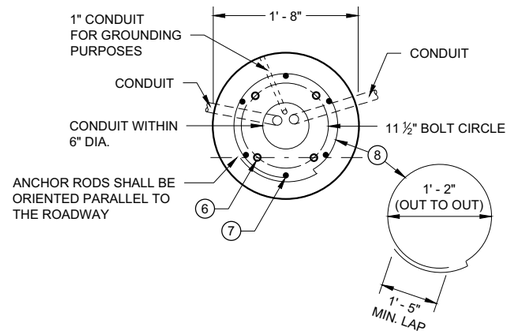
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

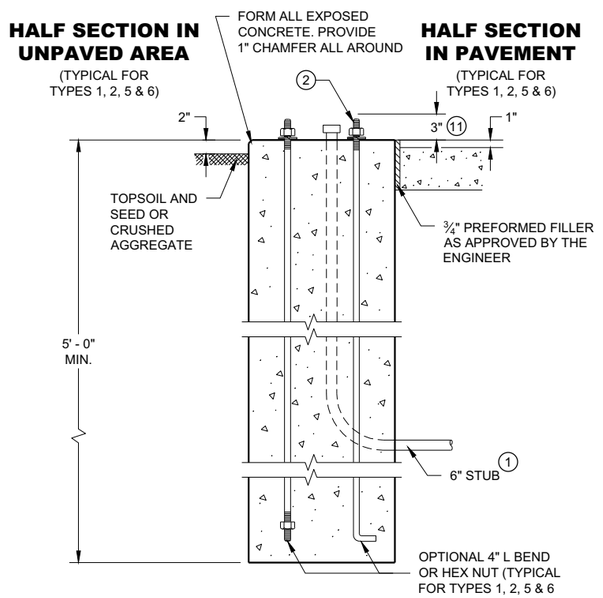
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

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

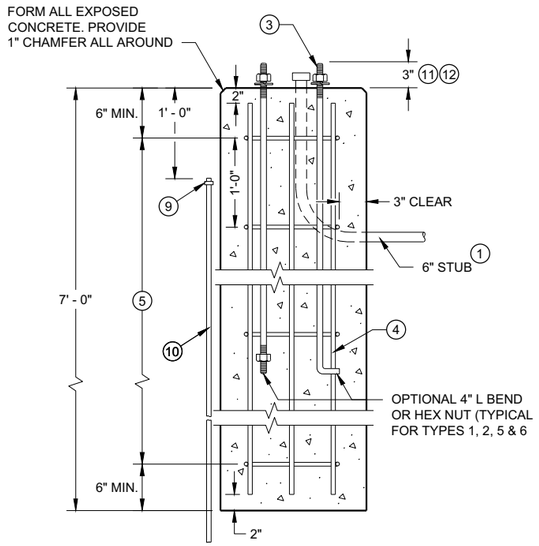




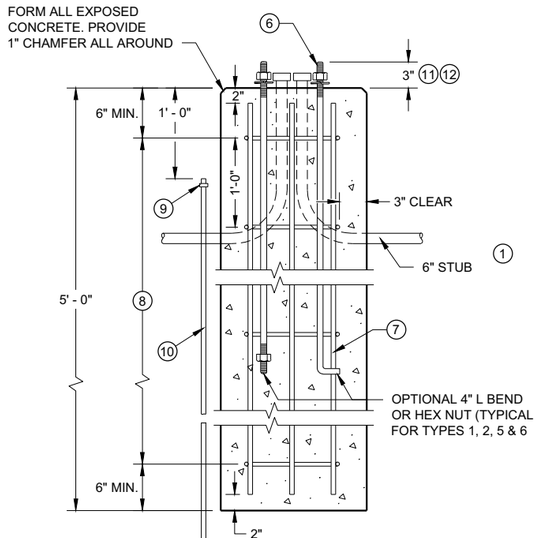




TYPE 1



TYPE 2



TYPE 5 & 6

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 350
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

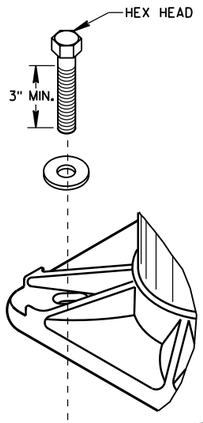
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

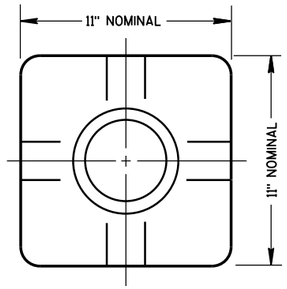
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

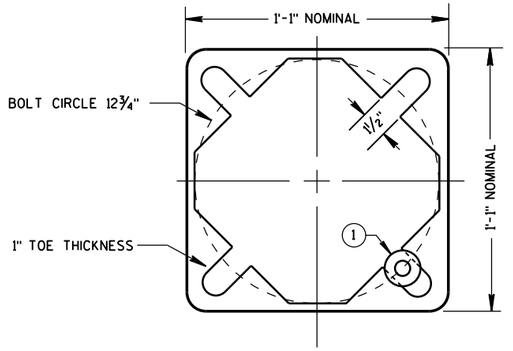
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

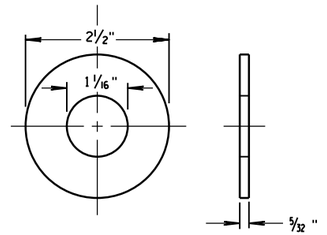




TOP VIEW
(PEDESTAL BASE)

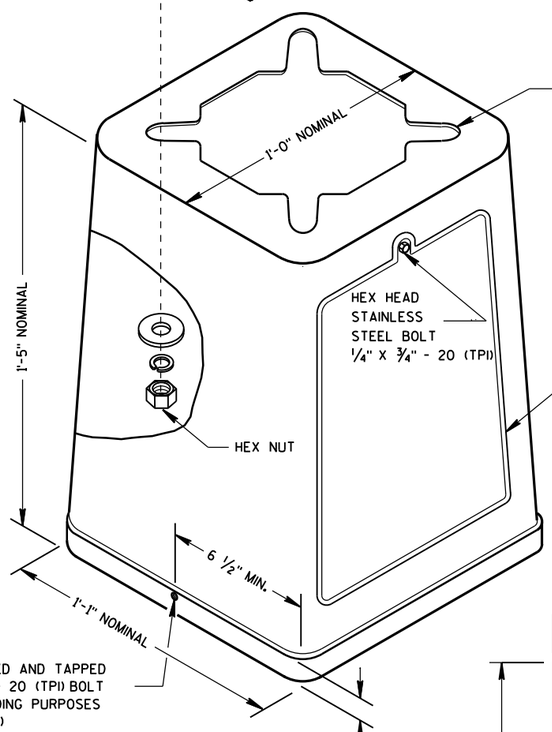


BOTTOM VIEW
(PEDESTAL BASE)

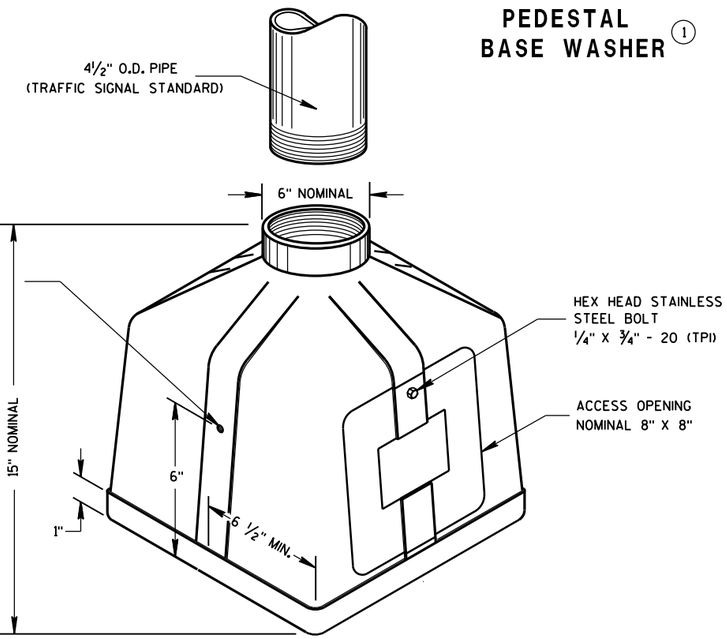


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

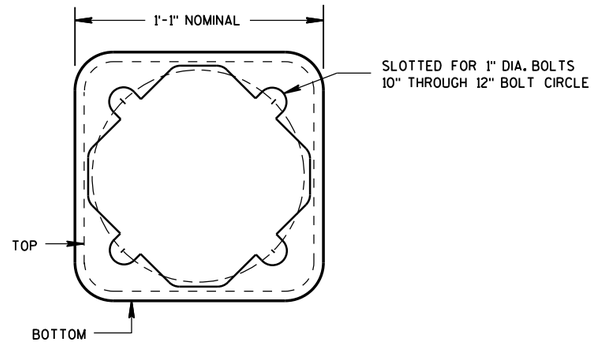


ISOMETRIC VIEW

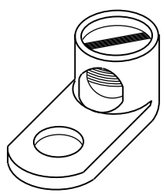


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

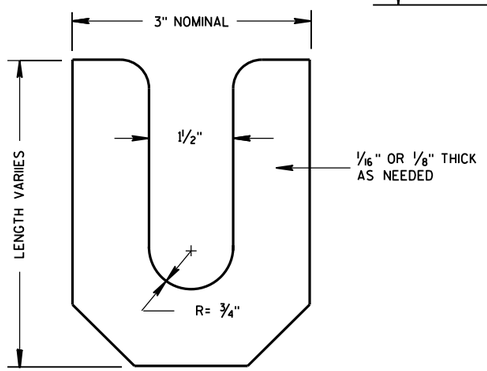


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 3-4

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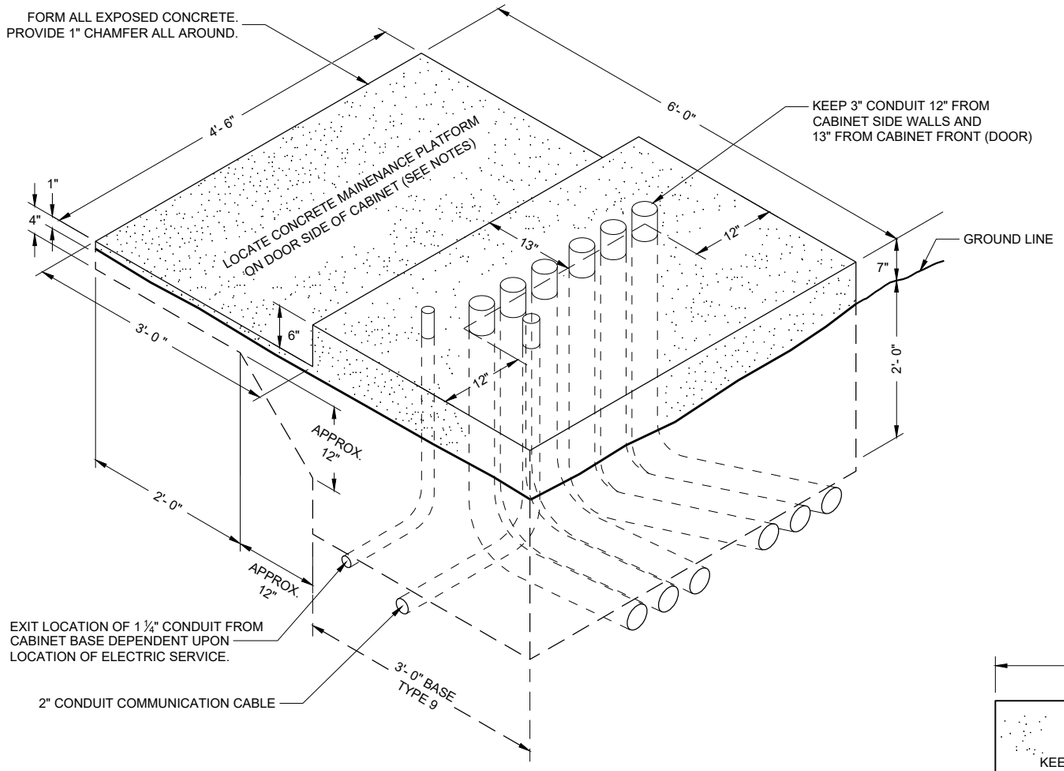
S.D.D. 9 C 3-4

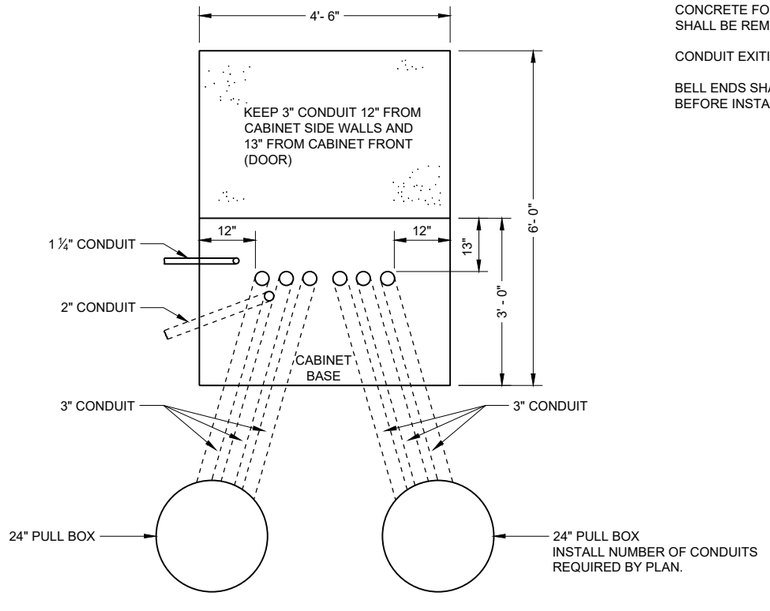
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

INSTALL FOUR INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

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

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 352

FHWA

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SDD 09C06 - 07

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SDD 09C06 - 07

GENERAL NOTES

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

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

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

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

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

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

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

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

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

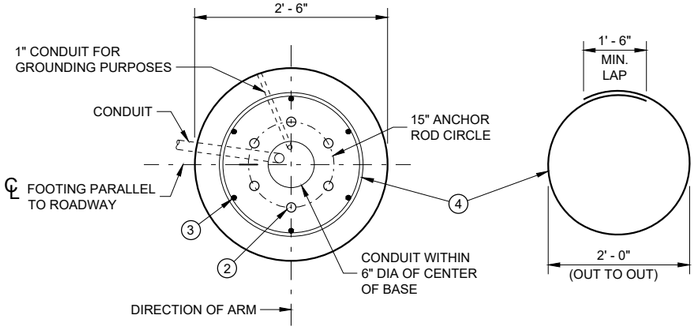
(2) (6) 1 ½ DIA. X 4' - 4" ANCHOR RODS

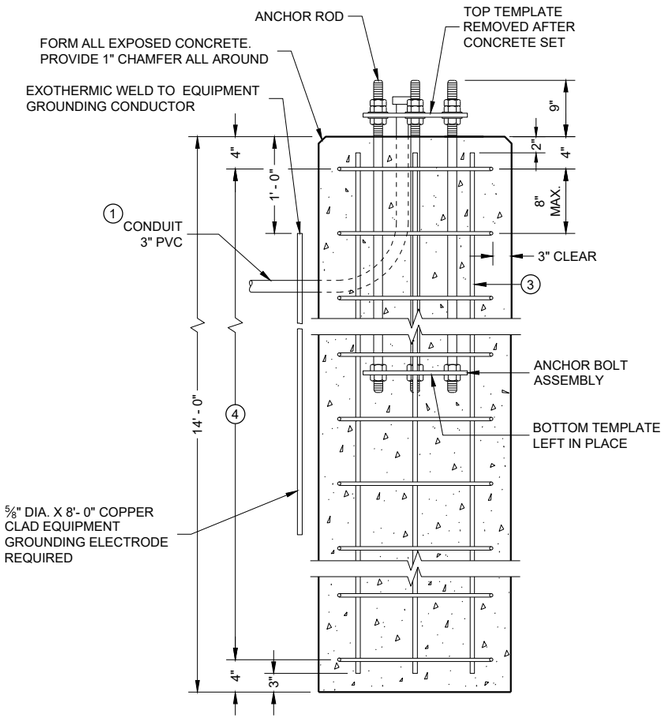
(3) (6) NO. 6 X 13' - 7" BAR STEEL REINFORCEMENT.

(4) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE .....fy = 55,000 p.s.i.
WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.

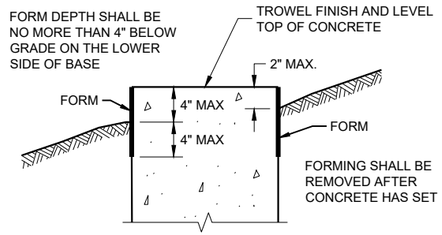
QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122



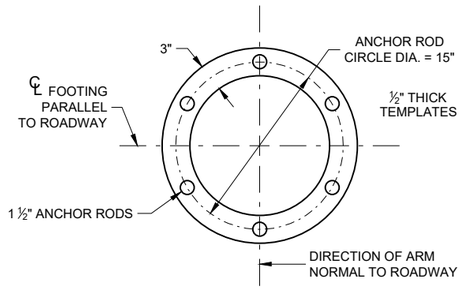


CONCRETE BASE, TYPE 10
(FOR TYPE 9, TYPE 10 AND OVER HEIGHT (OH) POLES)

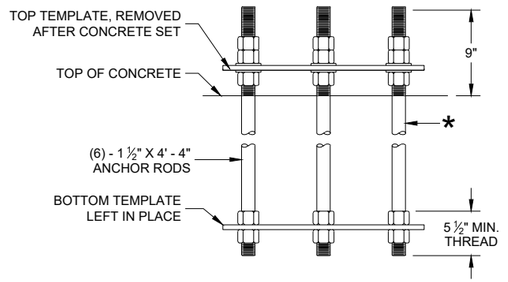
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE SDD 9C13 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demerbilek — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

6

SDD 09C11 - 10

GENERAL NOTES

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

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

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

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

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

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

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

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

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

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

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

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

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

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

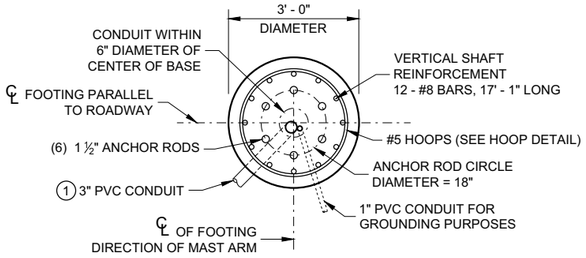
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

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

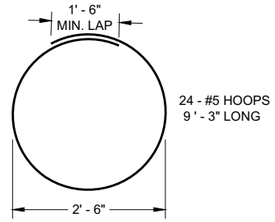
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

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

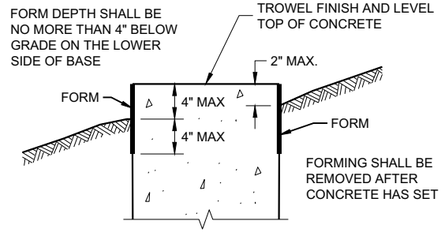
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION).....fy = 55,000 p.s.i.
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



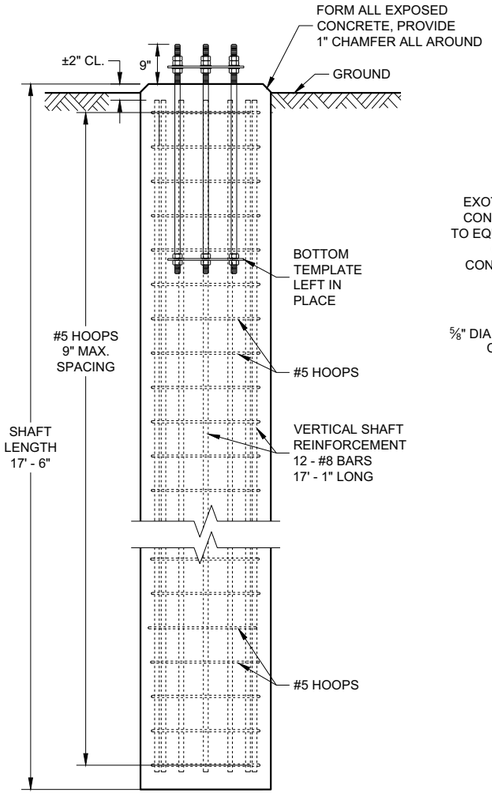
PLAN VIEW



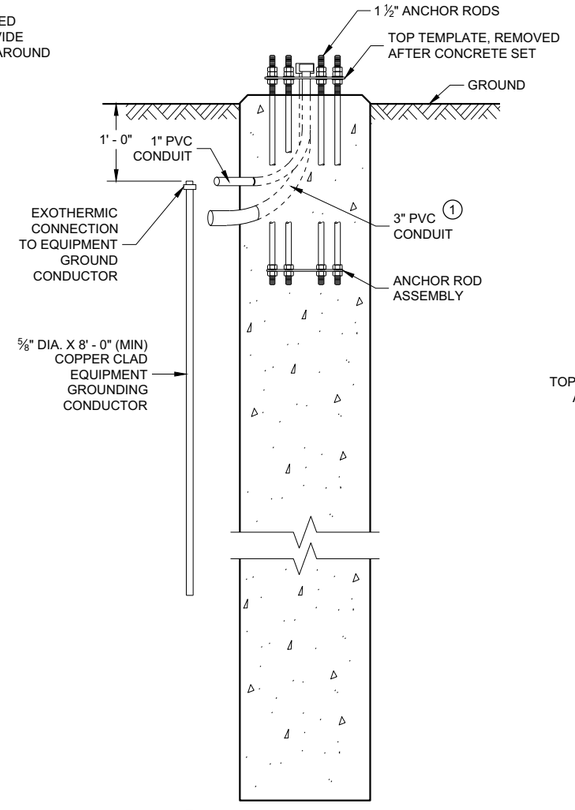
HOOP DETAIL



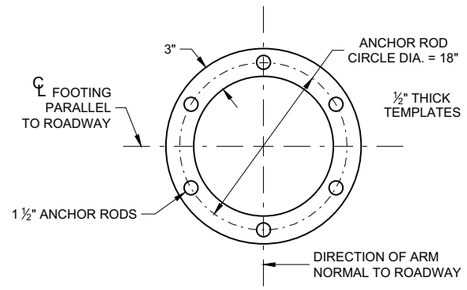
FORMING DETAIL



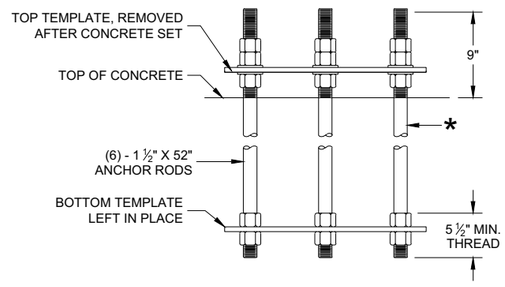
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES)

CONCRETE = 4.6 CUBIC YARD
H.S. REINFORCEMENT = 779 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTU PROGRAM LEADER
FHWA

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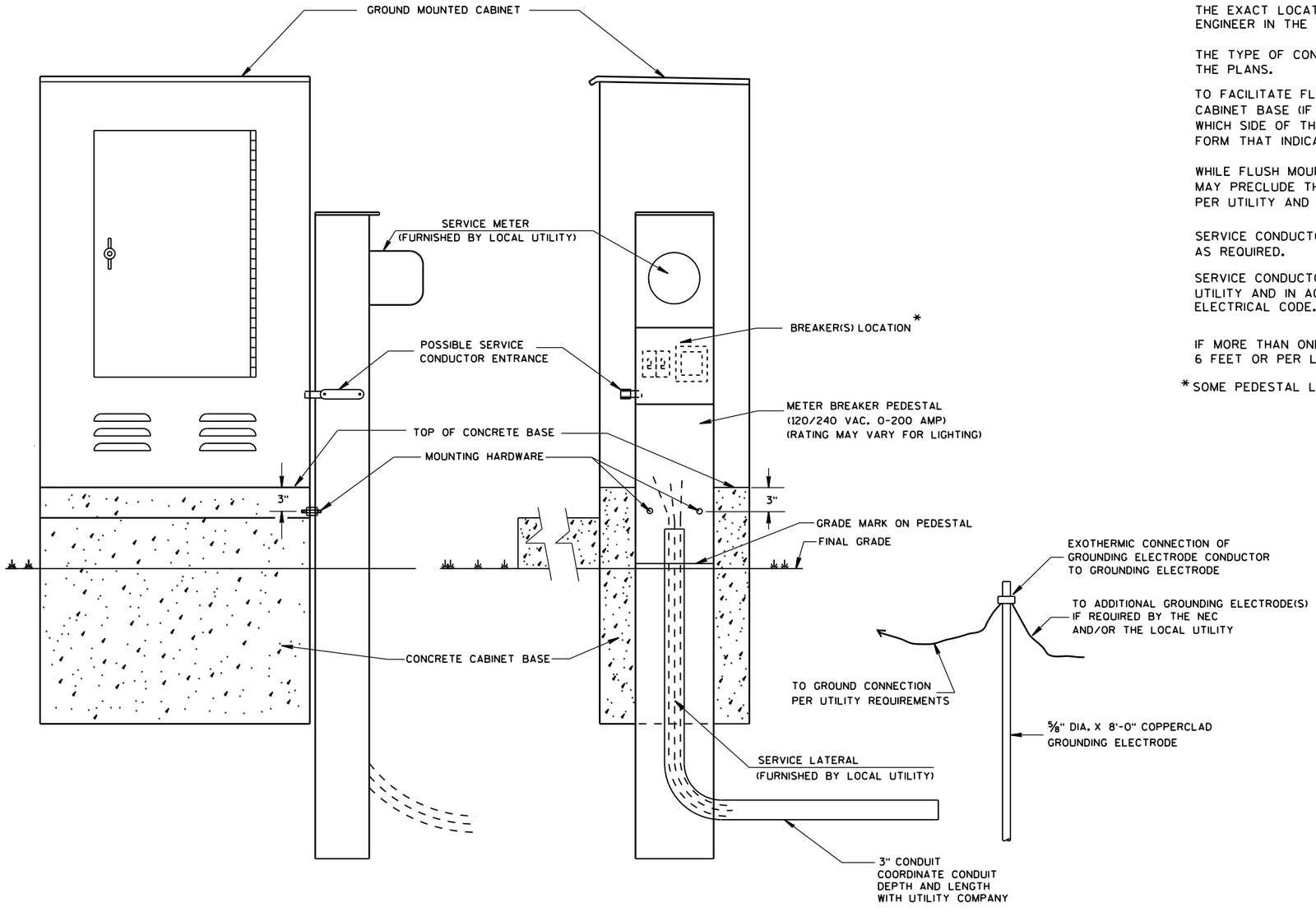

TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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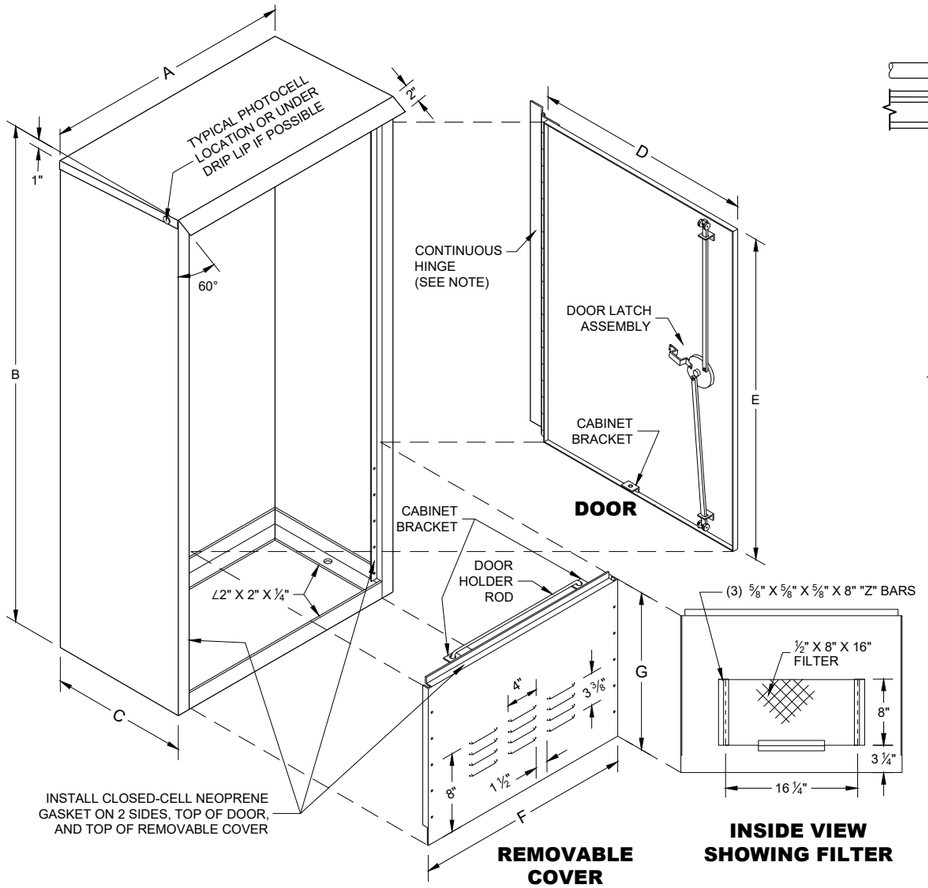
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

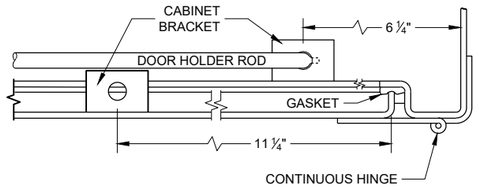
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

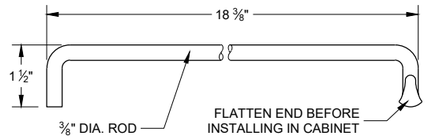


REMOVABLE COVER

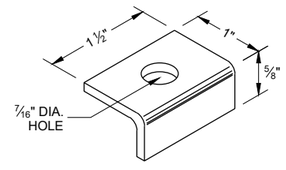
INSIDE VIEW SHOWING FILTER



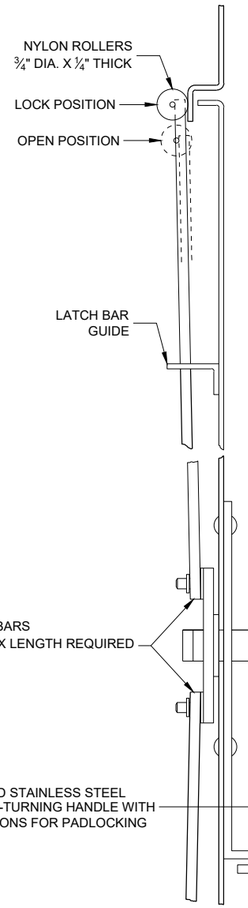
HINGE AND DOOR HOLDER



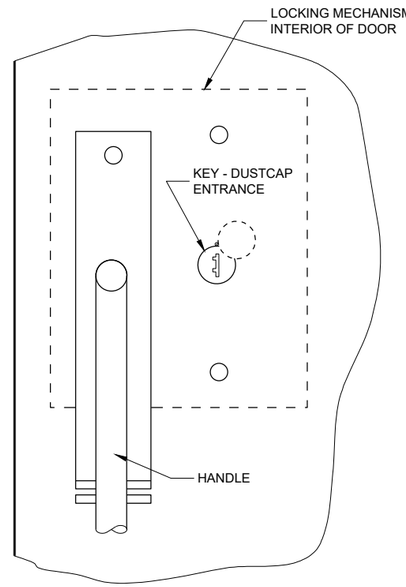
HOLDER ROD



CABINET BRACKET



SIDE VIEW



FRONT VIEW

LATCH ASSEMBLY

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

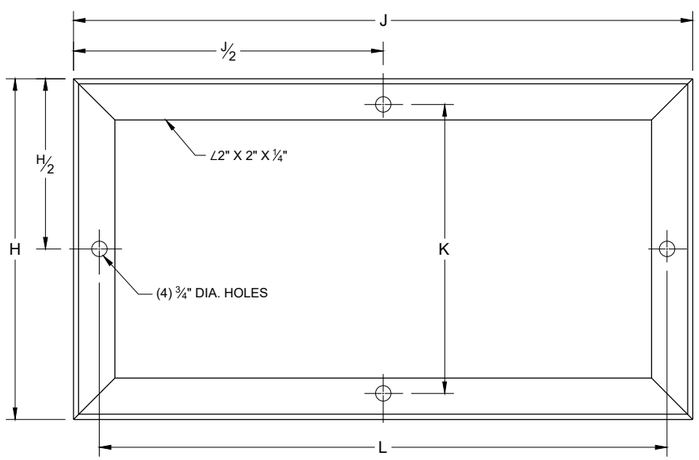
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH ¼" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH ¼" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

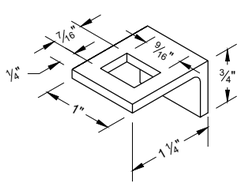
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 ½	16 ½	24
D	26 ½	34 ¾	33 ¾
E	38 ¾	38 ¾	38 ¾
F	26 ½	34 ¾	33 ¾
G	19	19	25
H	16 ½	16 ½	24
H/2	8 ¼	8 ¼	12
J	30	38	38
J/2	15	19	19
K	13 ¾	13 ¾	21 ¼
L	27 ½	35 ½	35 ½



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 356

FHWA

SDD 09D02 - 03

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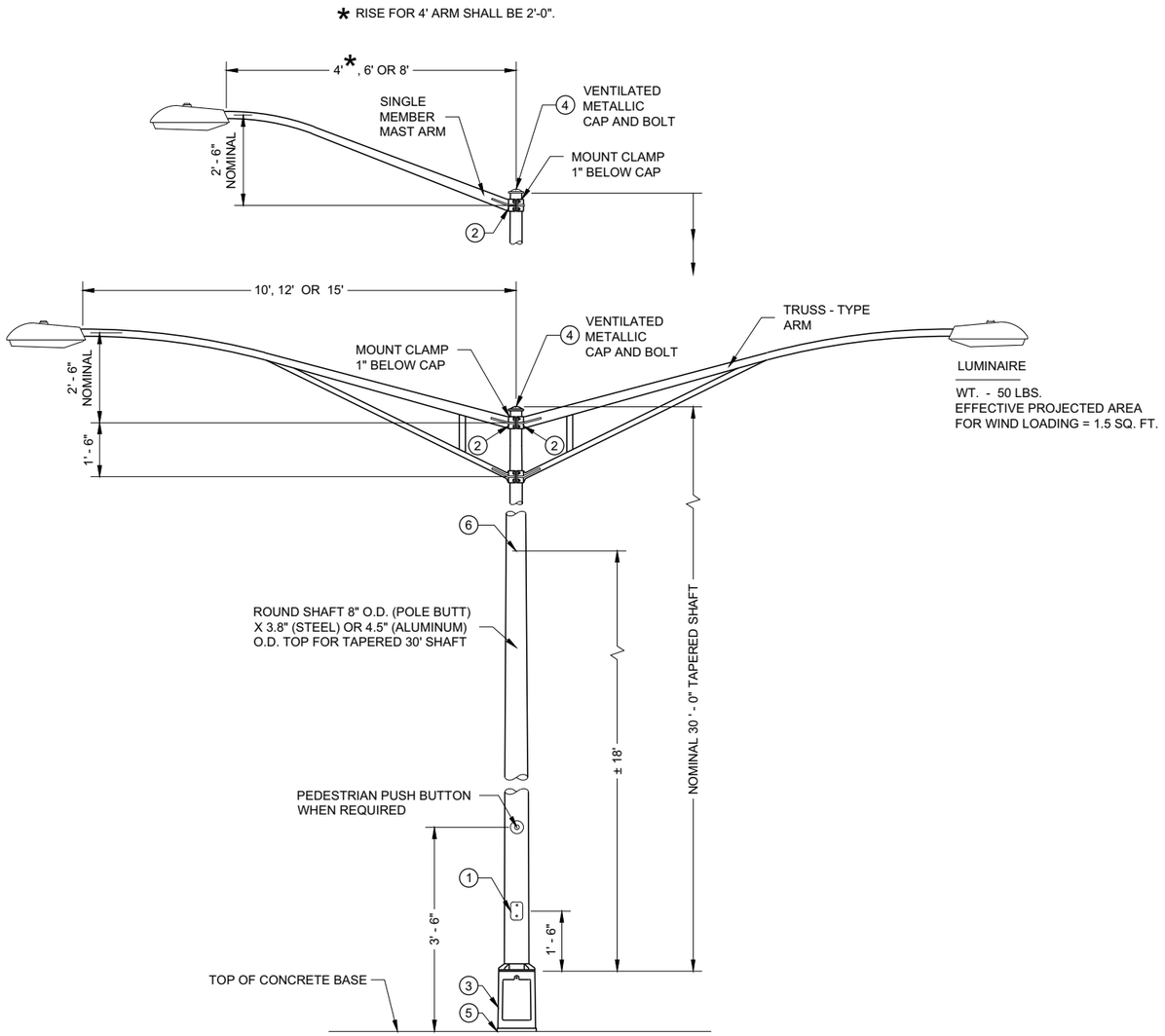


TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

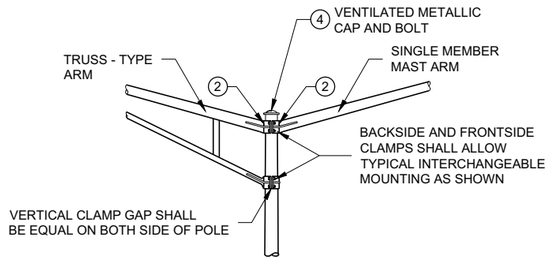
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

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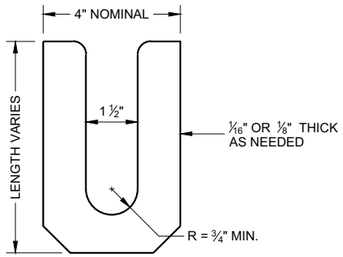
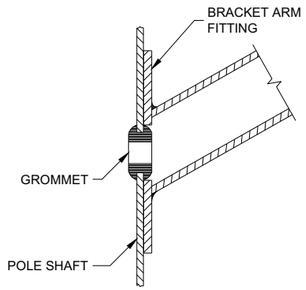
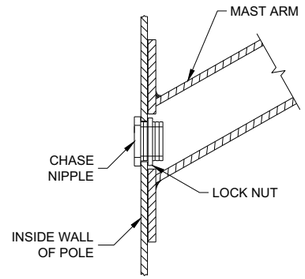


LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

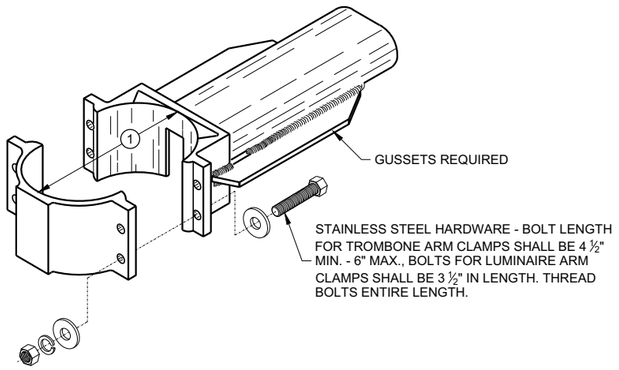
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

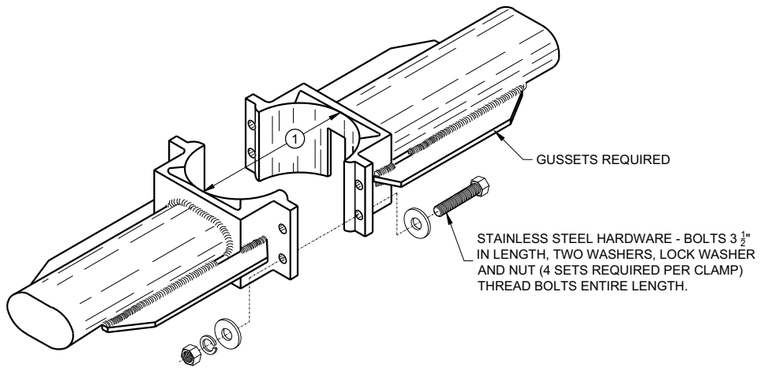
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

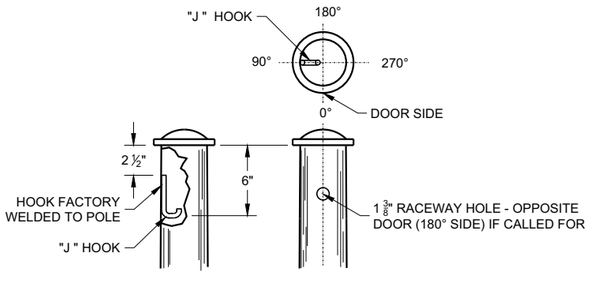
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



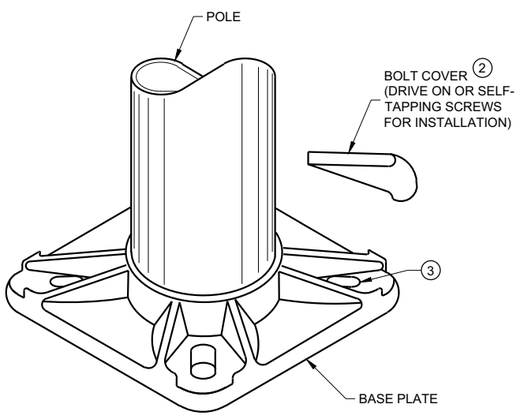
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



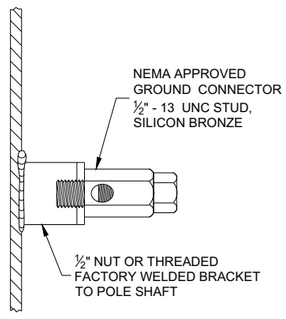
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

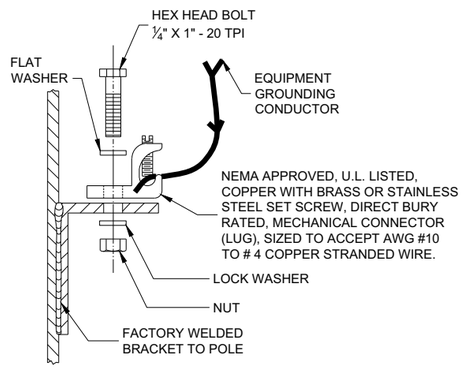


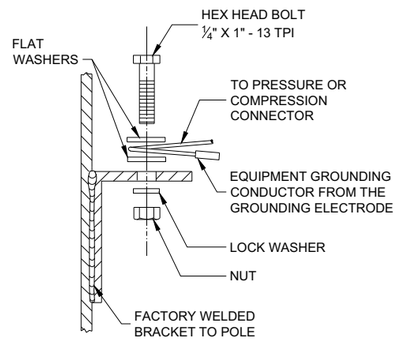
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 358

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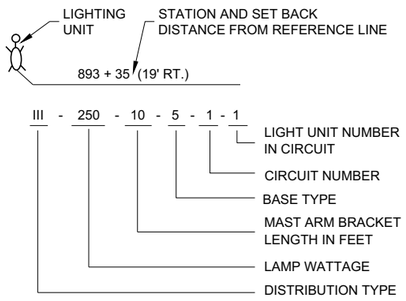
SDD 09E01 - 15g

GENERAL NOTES

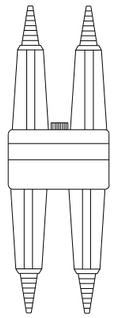
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

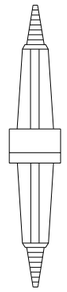
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



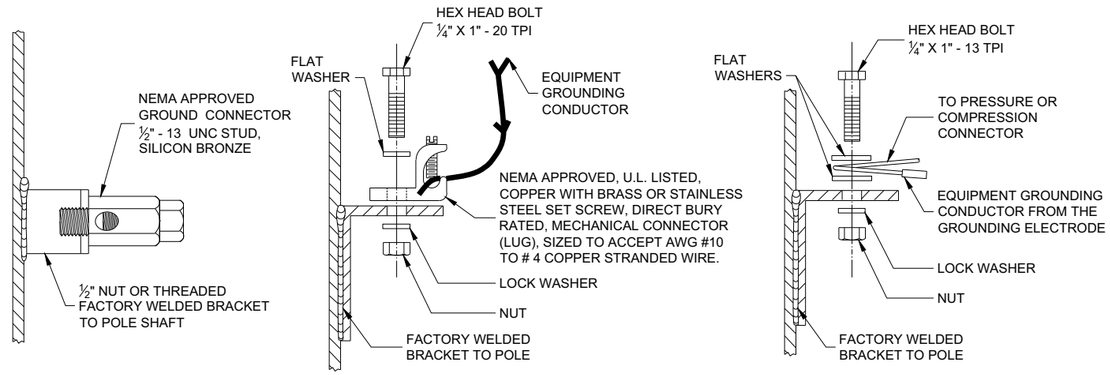
LIGHTING UNIT CODE
(TYPICAL)



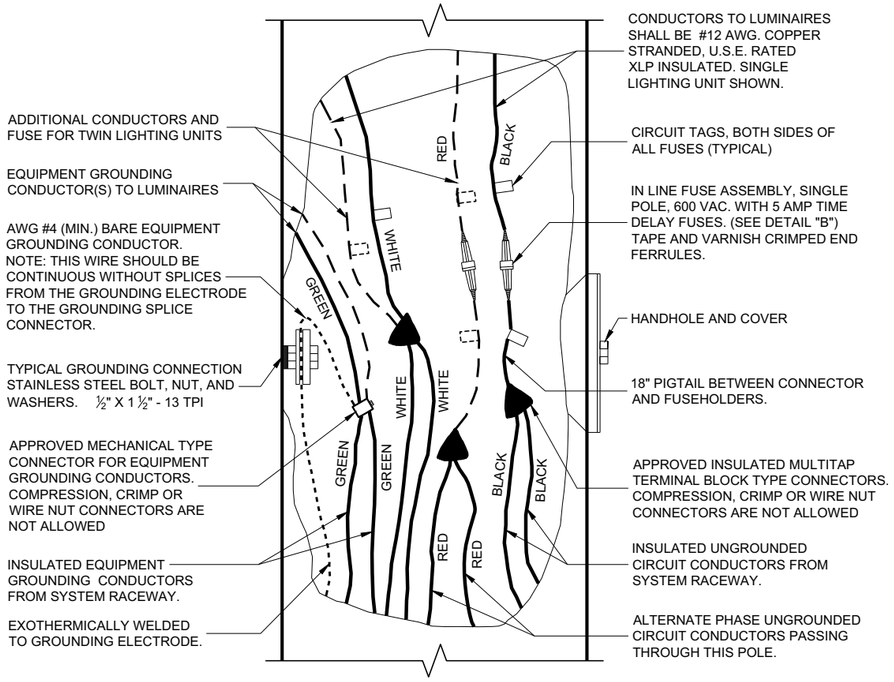
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



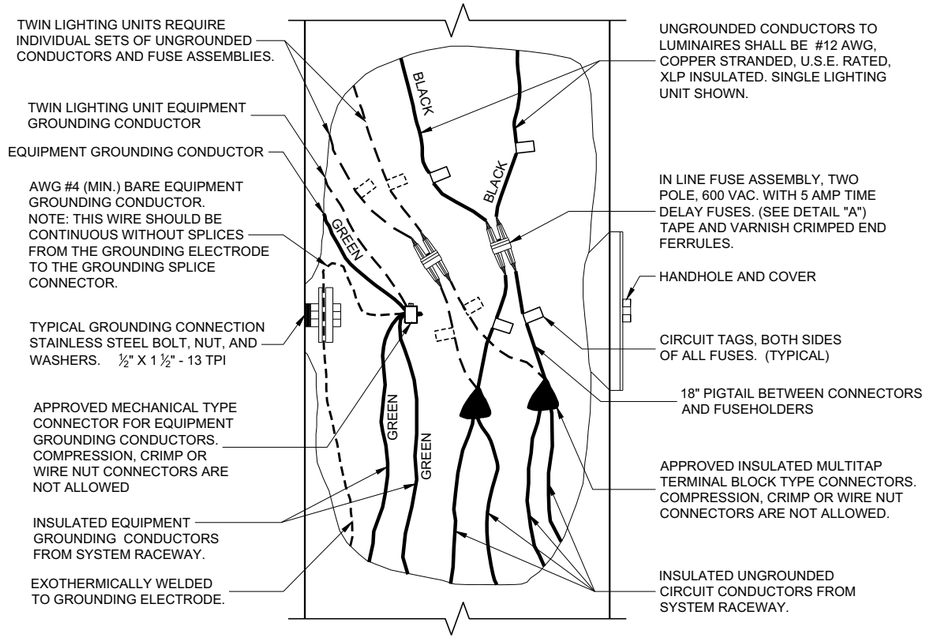
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

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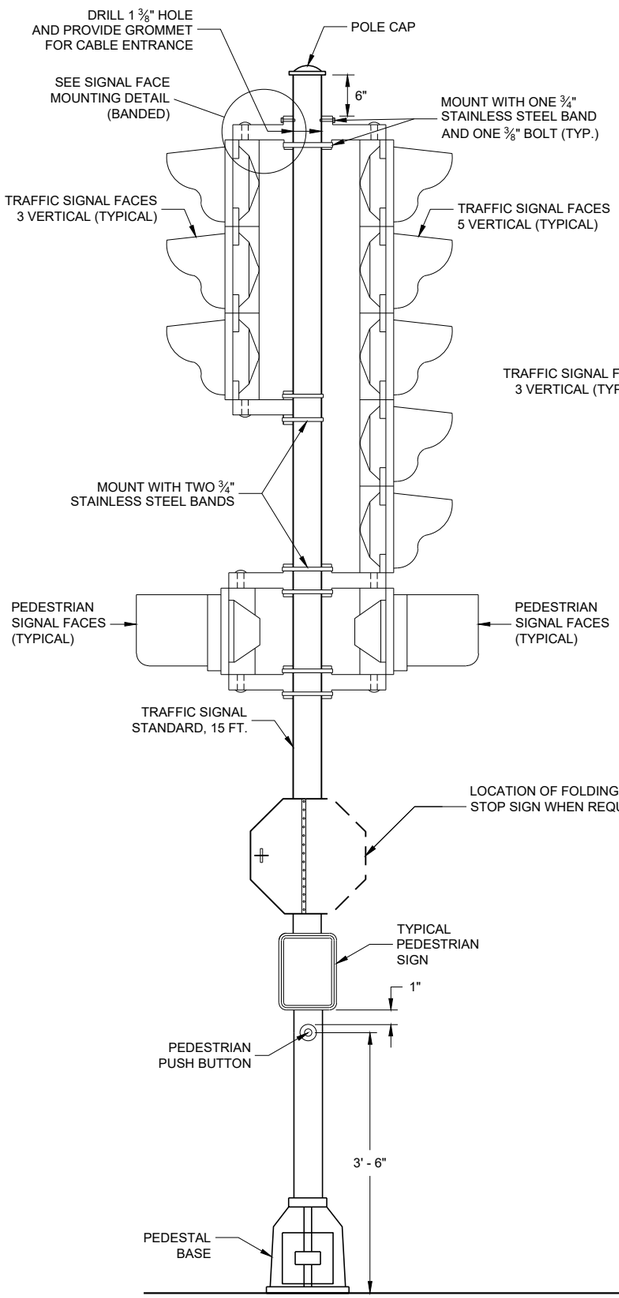
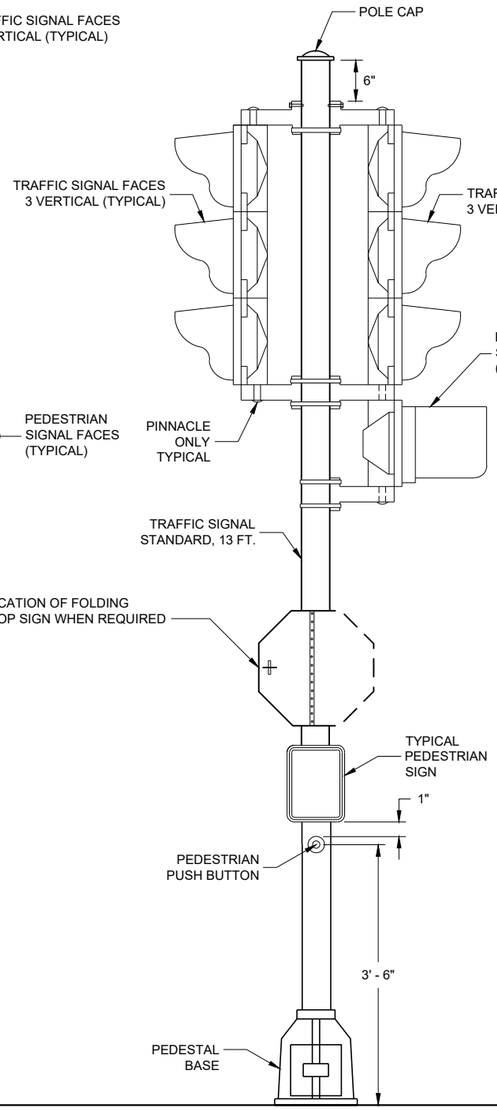
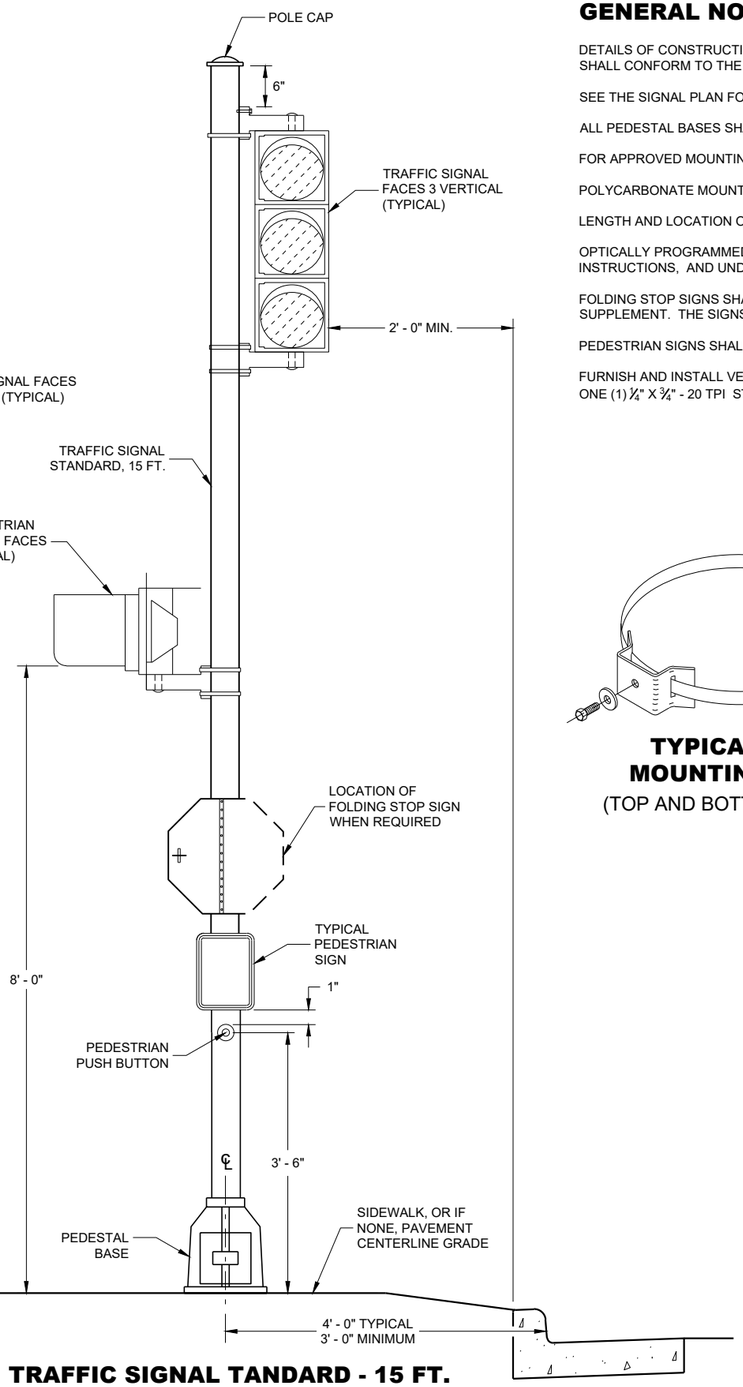


TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

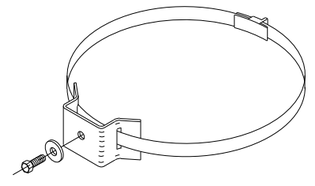
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

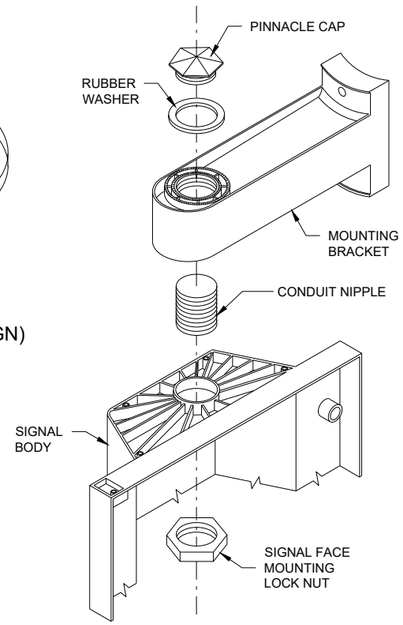
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

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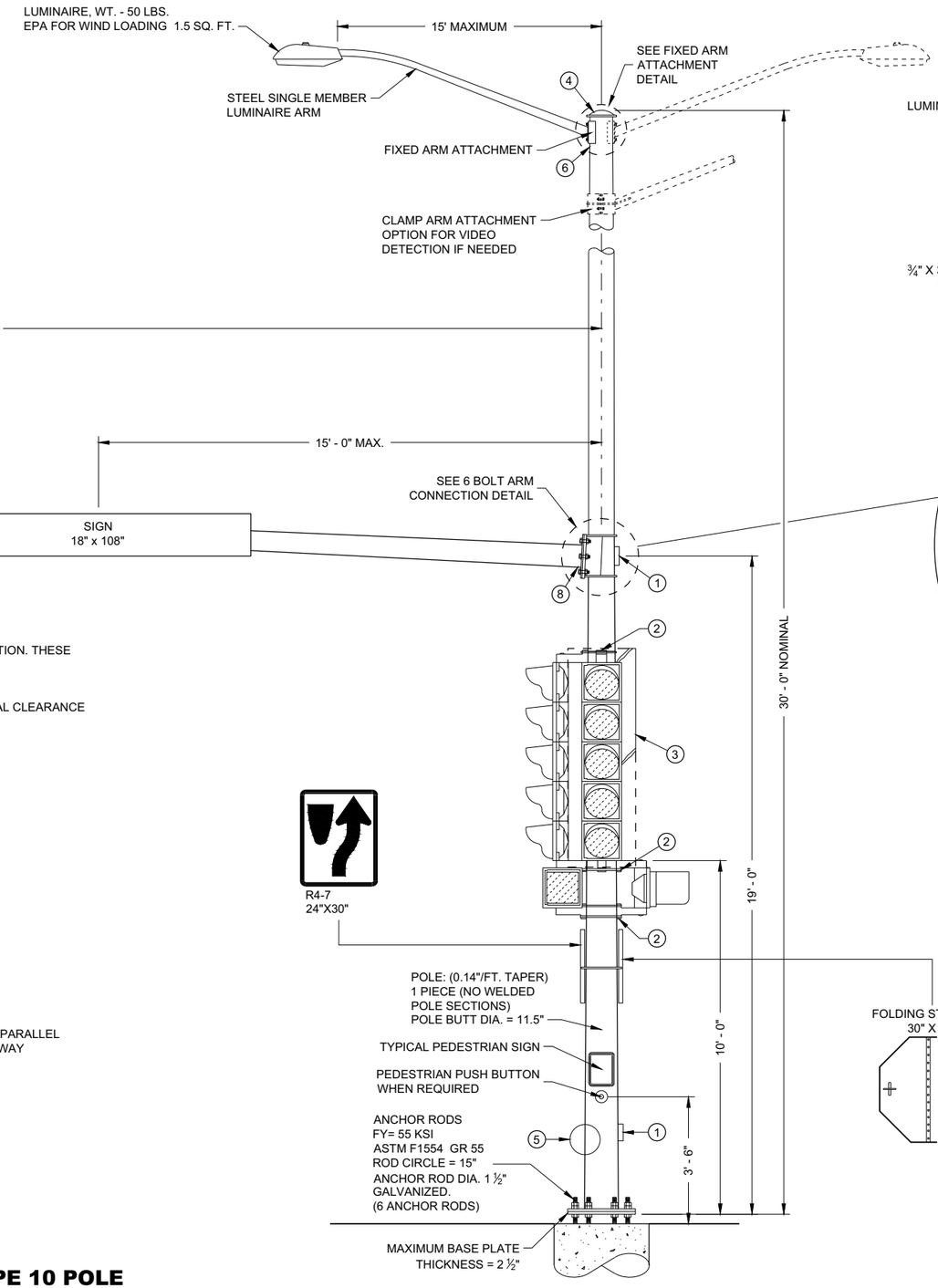
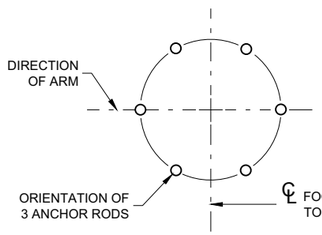
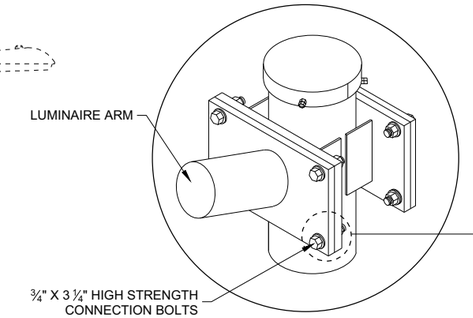


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

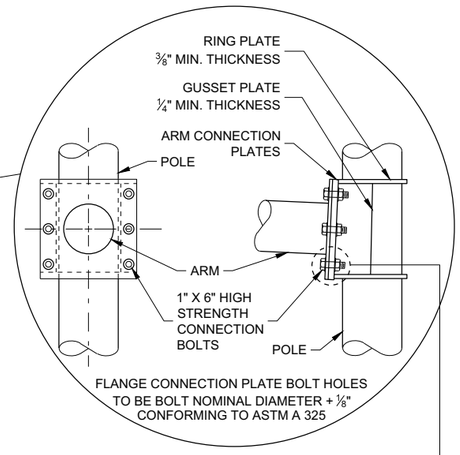
** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE



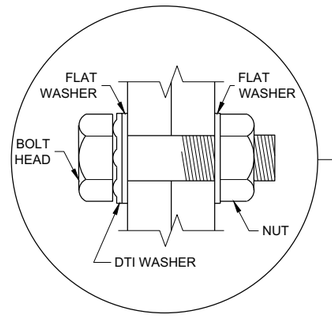
ANCHOR ROD LOCATION



FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE

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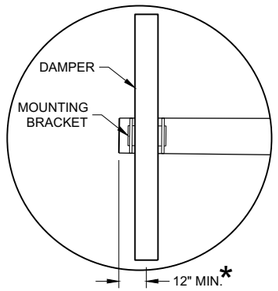
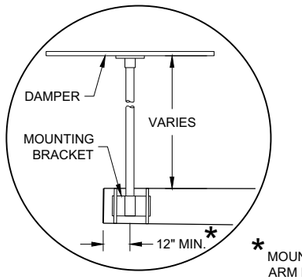
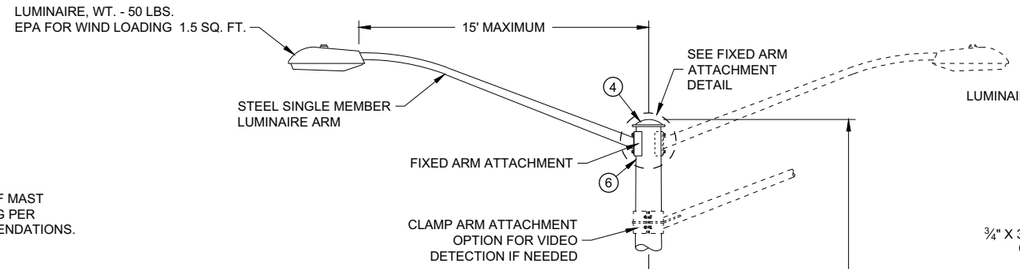


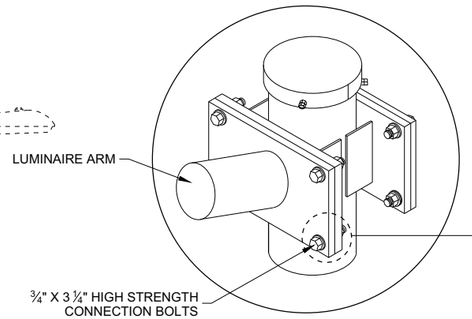
DUMBBELL VIBRATION DAMPER



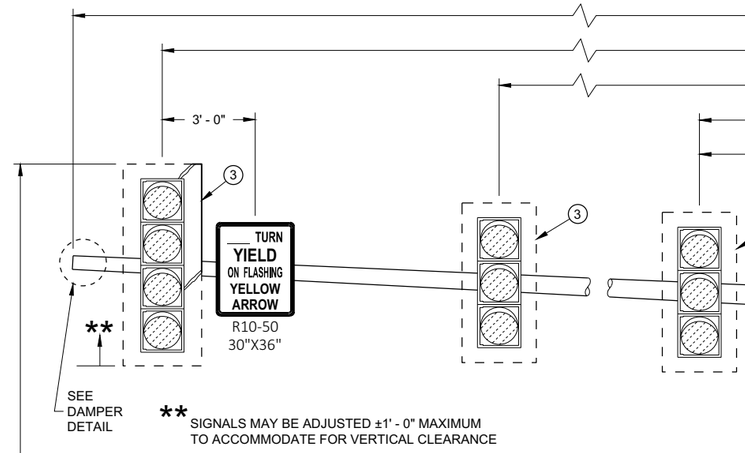
FLAT VIBRATION DAMPER

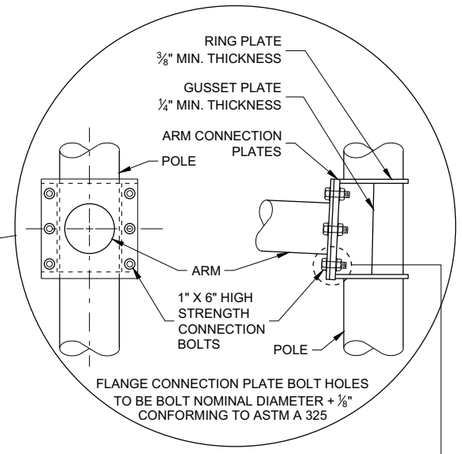
* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.



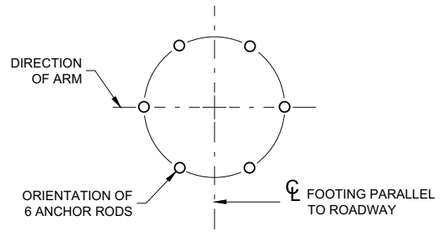


FIXED ARM ATTACHMENT DETAIL

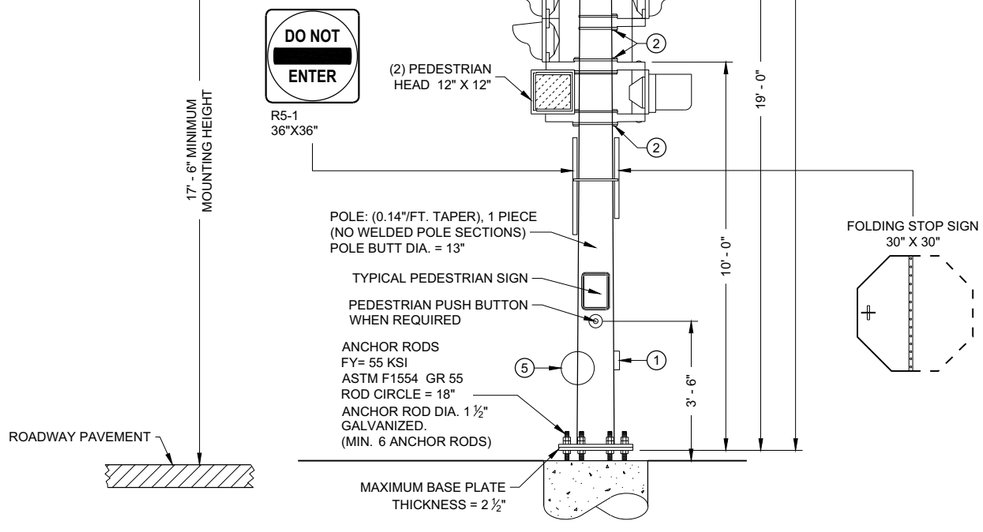


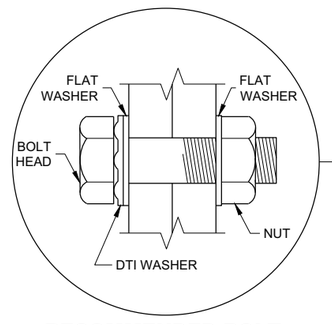


6 BOLT ARM CONNECTION DETAIL



ANCHOR ROD LOCATION





RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
45' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
45' MONTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

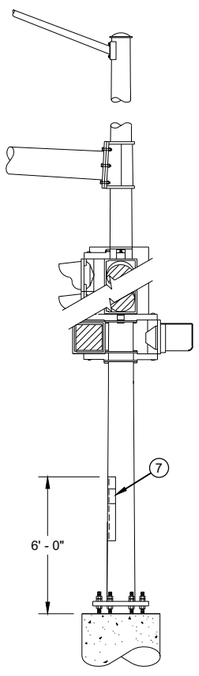
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

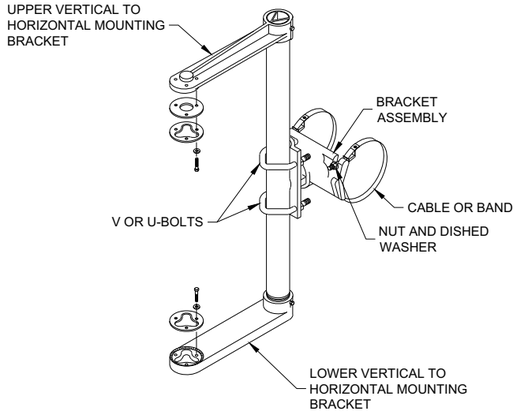
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

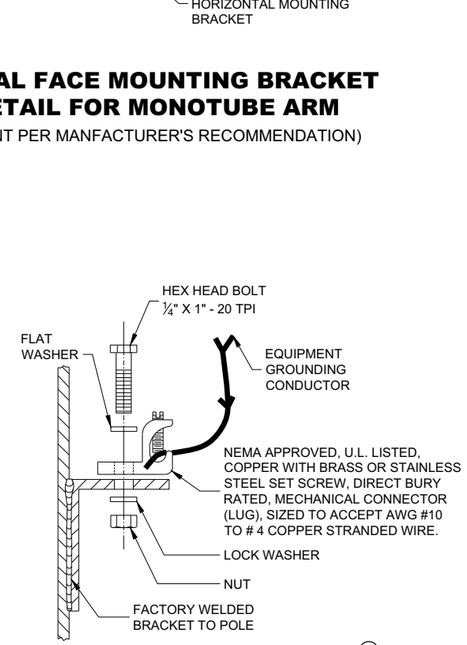


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



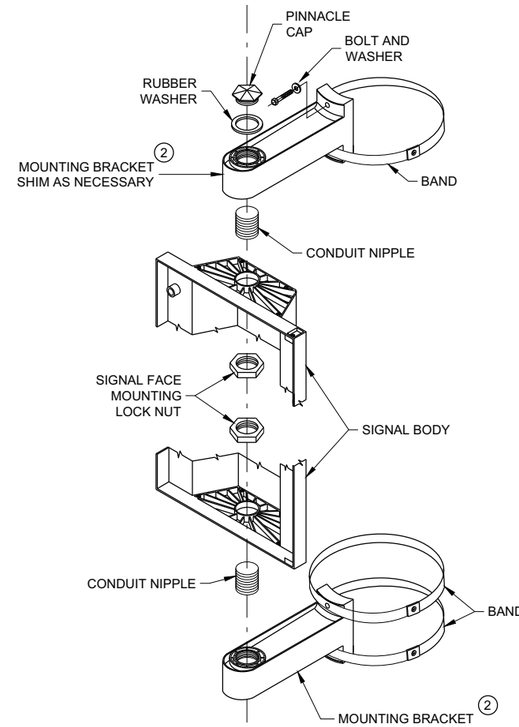
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

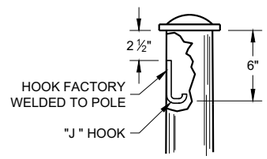


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

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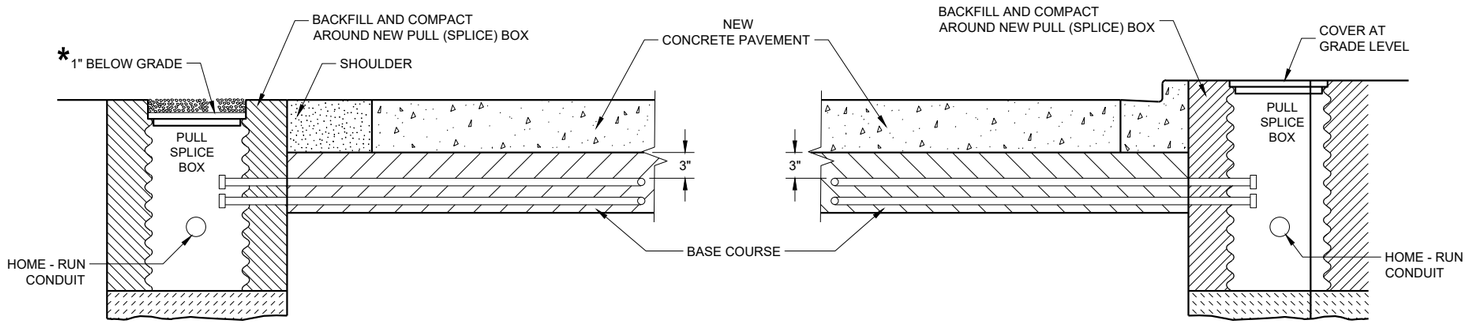


SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

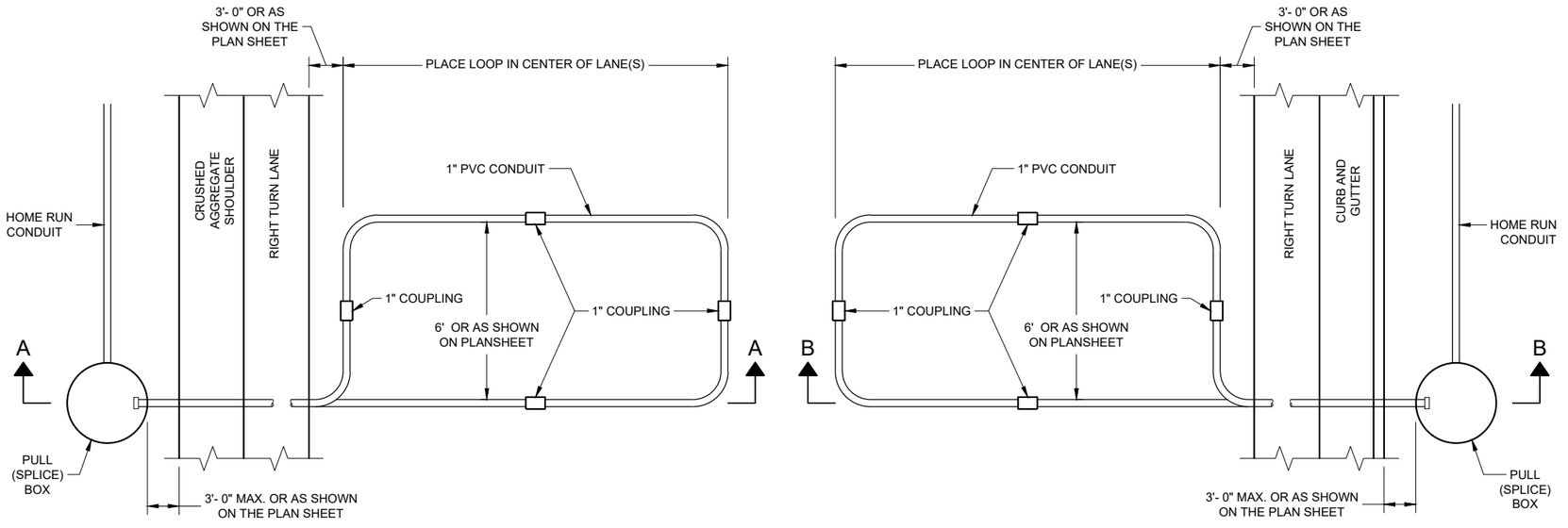
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

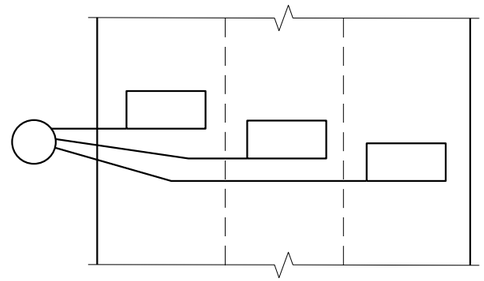
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09F15 - 04b

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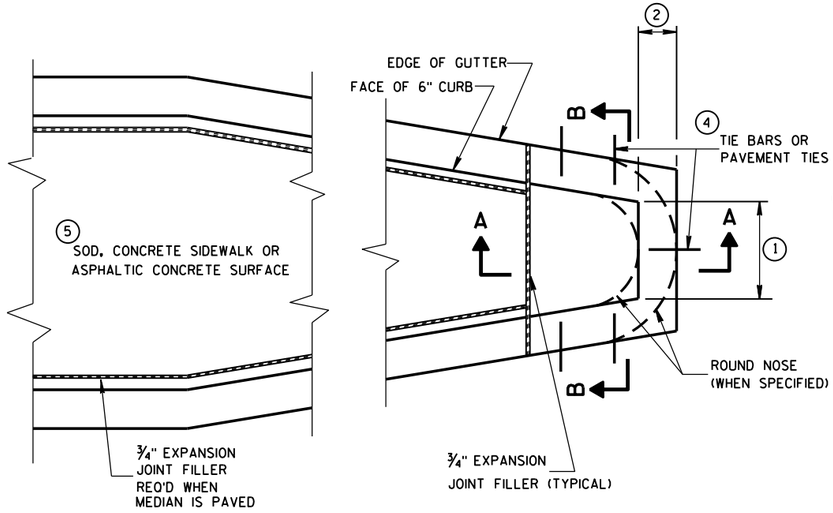
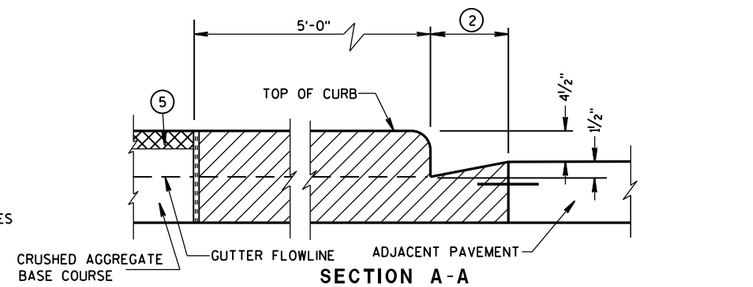
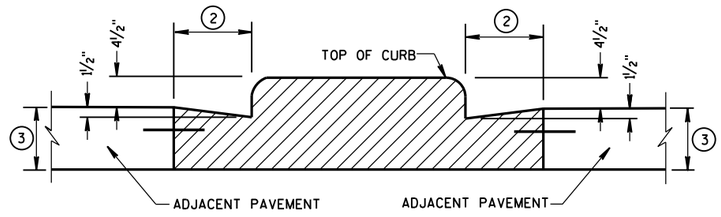
SDD 09F15 - 04b







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

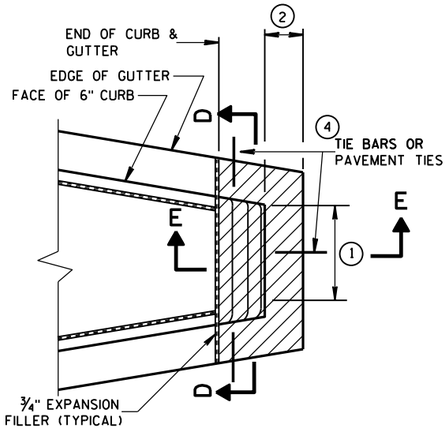
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

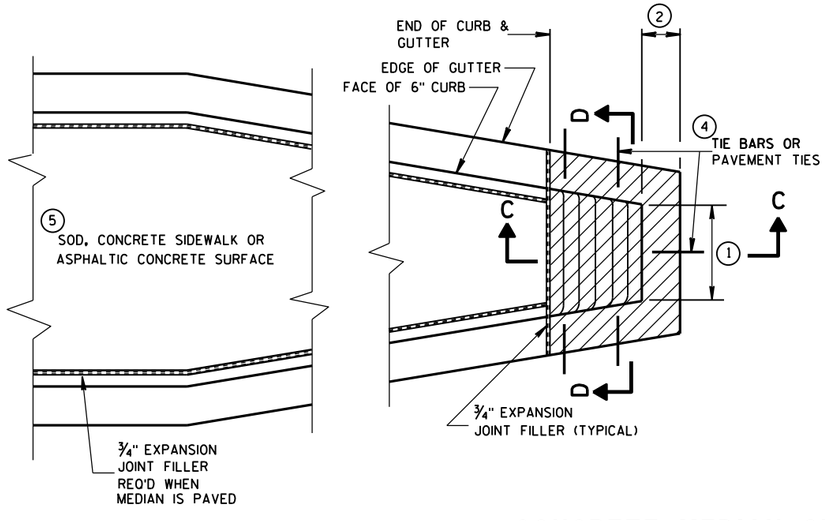
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

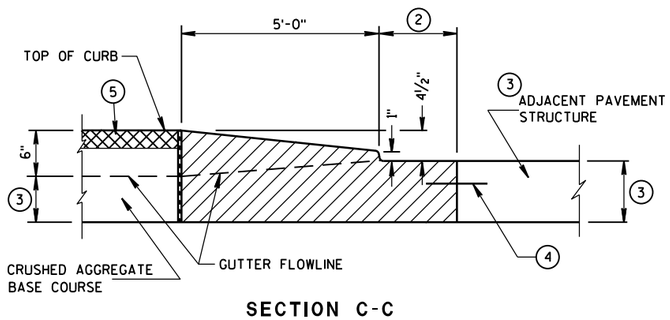
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

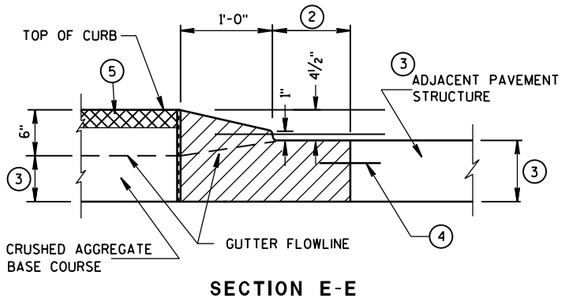
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



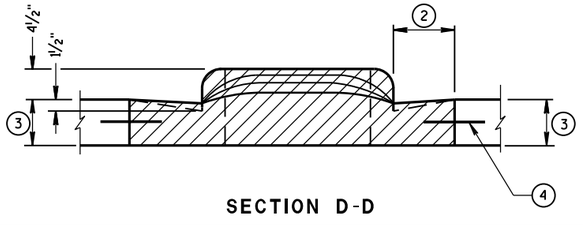




CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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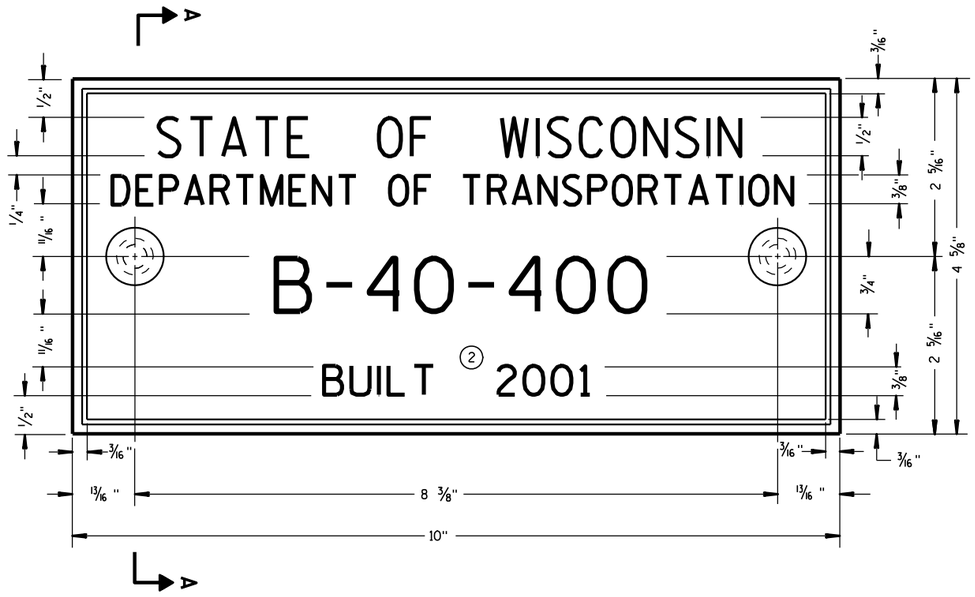
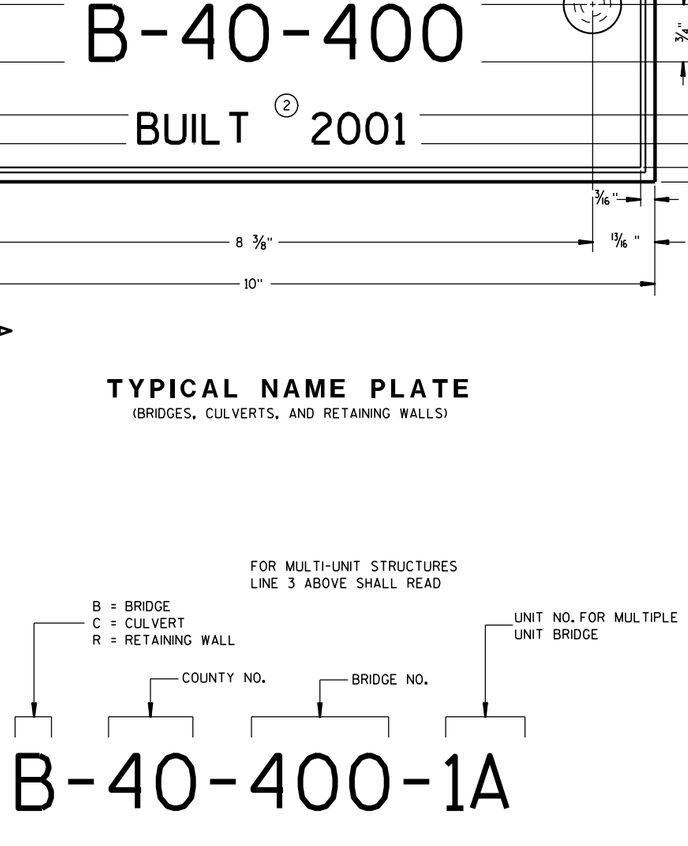
S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



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



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

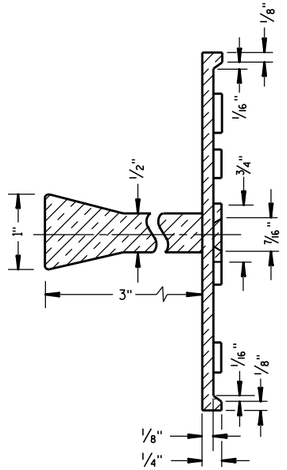
GENERAL NOTES

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.

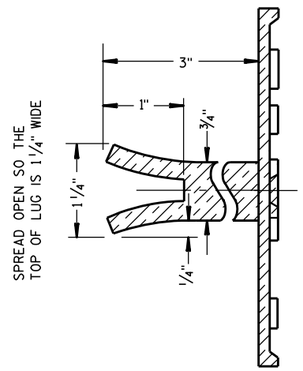
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

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

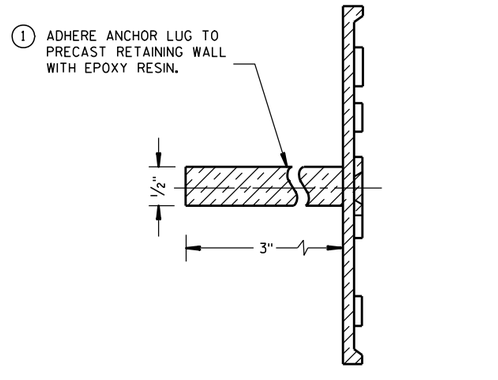
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



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

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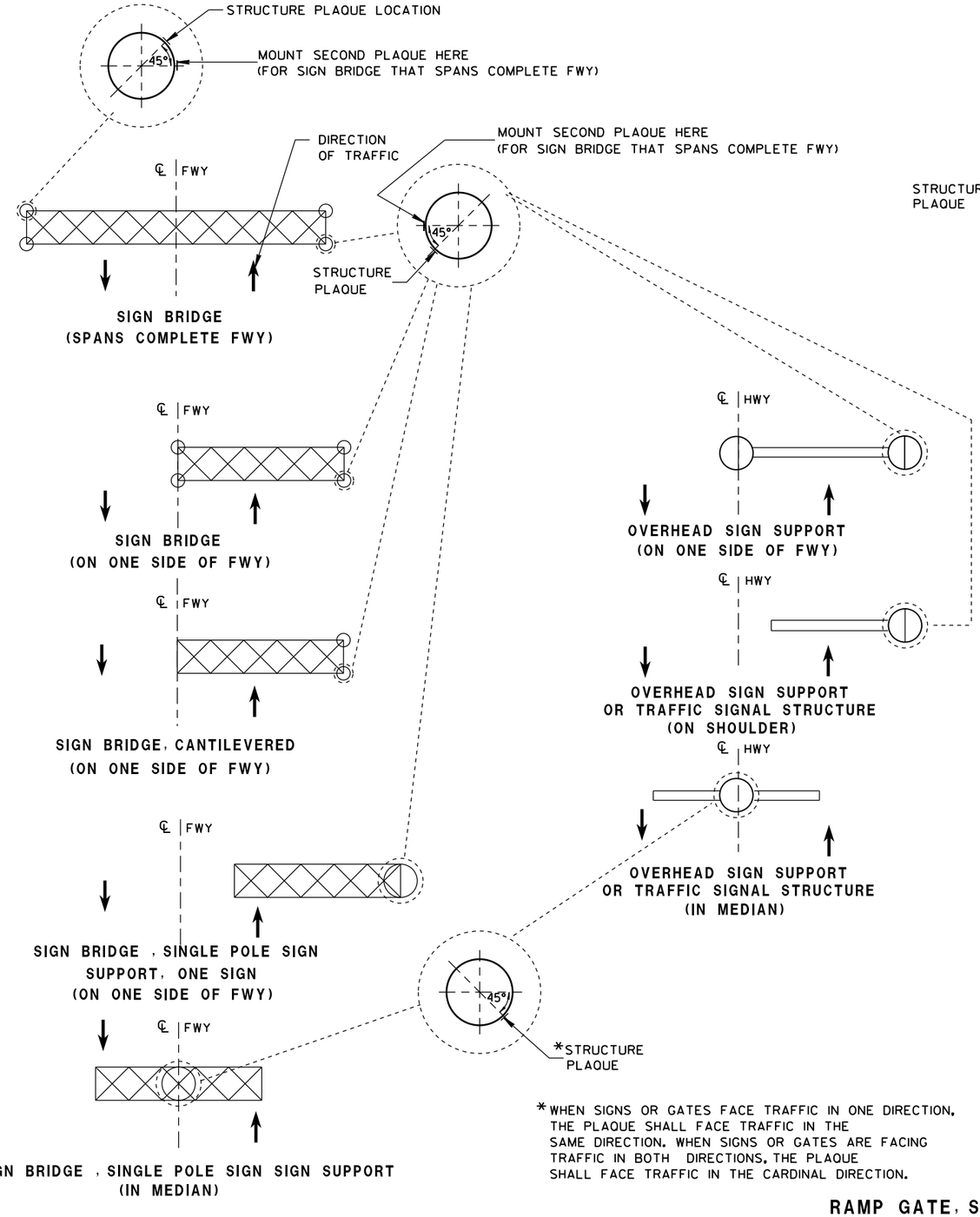
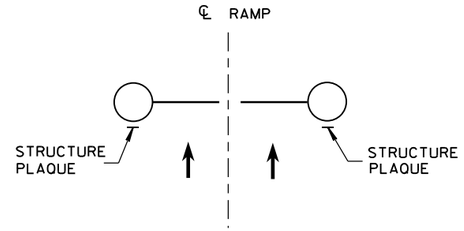
S.D.D. 12 A 3-10

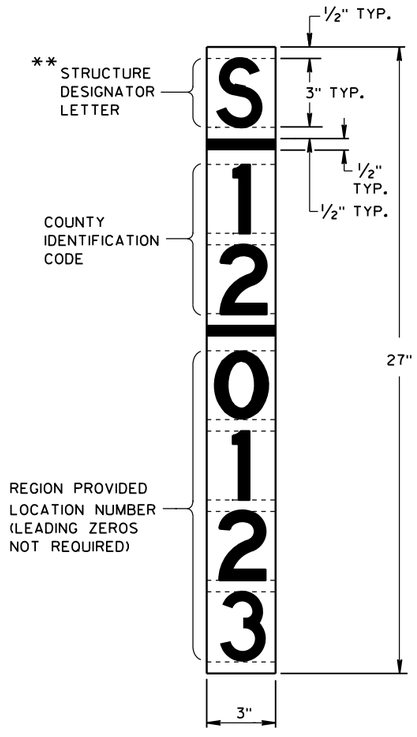


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

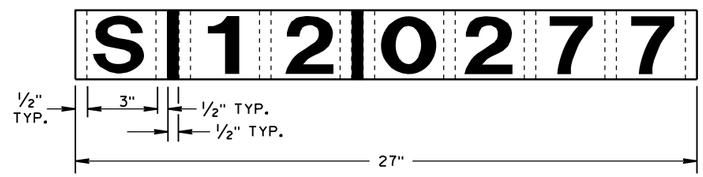
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 12 A 4-3

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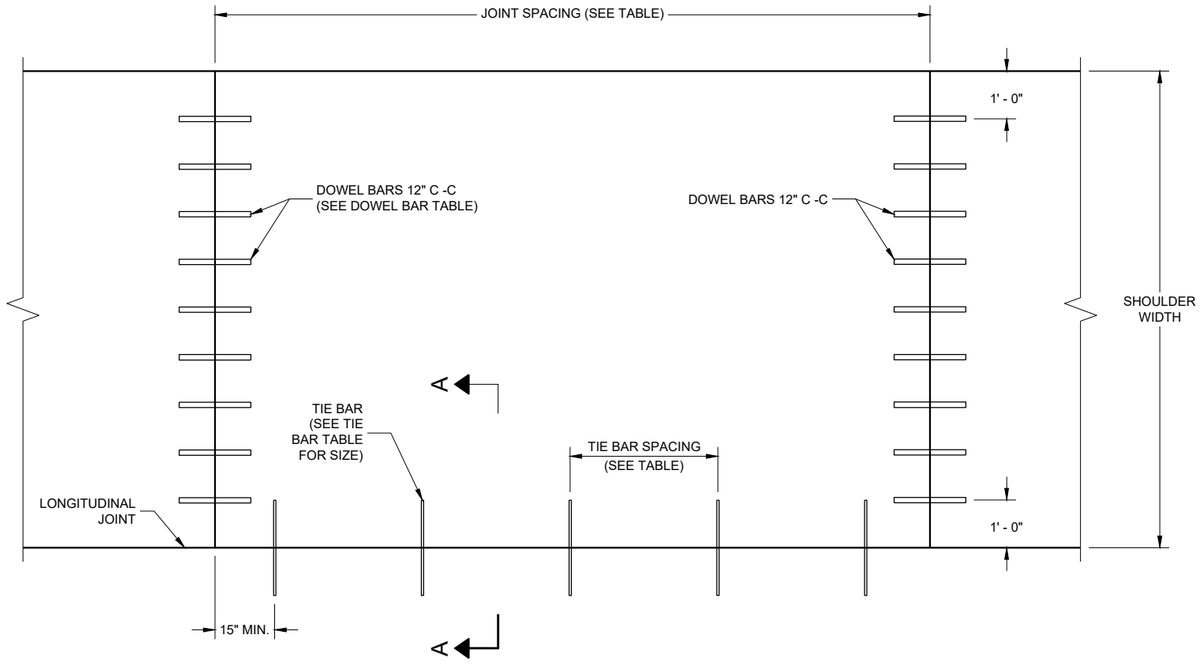
S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

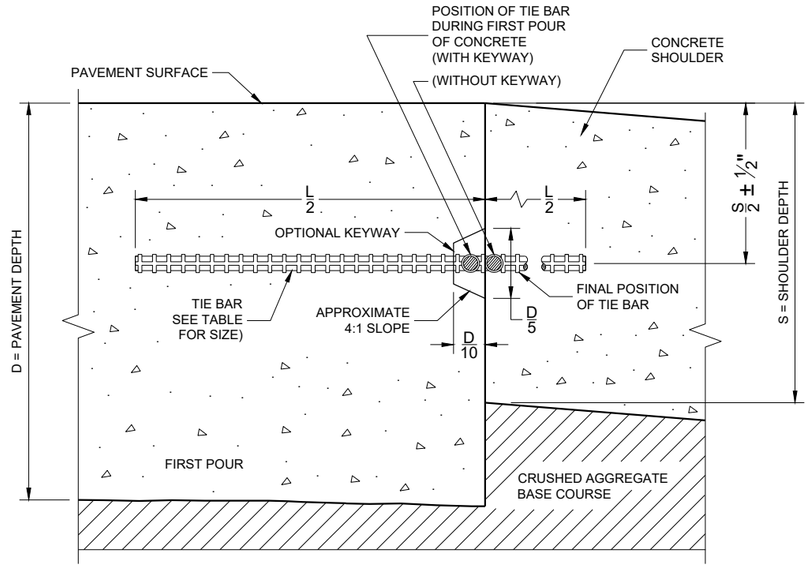
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND 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 BATS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES.

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

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER ***	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12"
7", 7 ½"	1"	14"
8" & ABOVE	1 ¼"	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 FRO THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp
PAVEMENT SUPERVIS

FHWA

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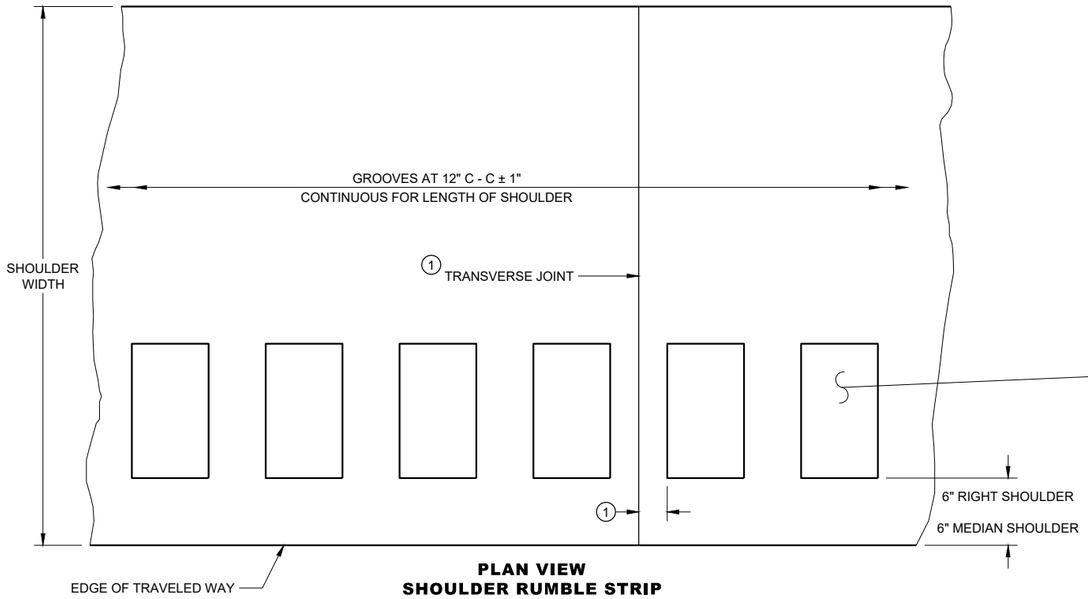
SDD 13A03 - 07

GENERAL NOTES

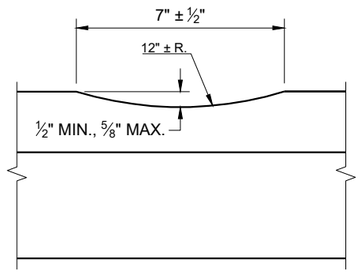
SDD 13A5, SHEET "b" SHOWS THE LOCATION OF THE RUMBLE STRIPS AT RAMP AND GORE LOCATIONS.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL AND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

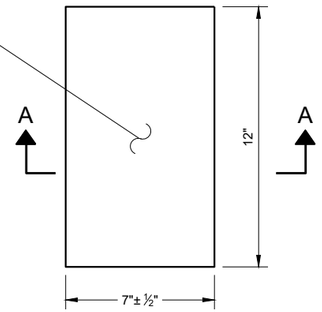
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6 INCHES AWAY FROM TRANSVERSE JOINTS.



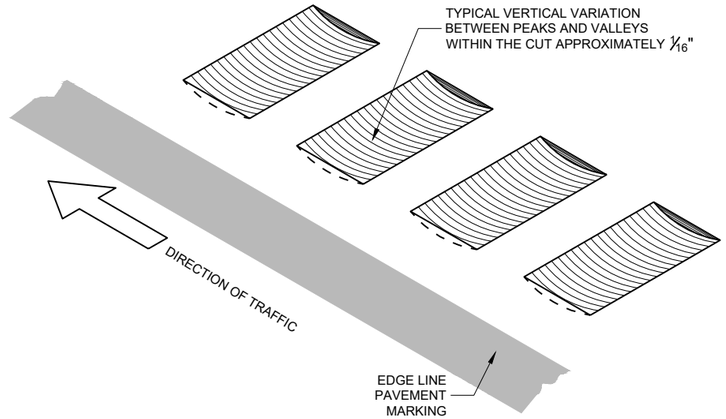
PLAN VIEW
SHOULDER RUMBLE STRIP



SECTION A - A

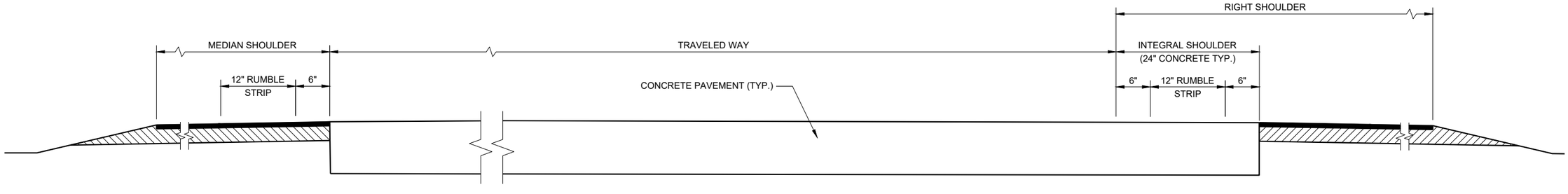


PLAN VIEW
(SINGLE GROOVE)



ISOMETRIC

PLACEMENT DETAIL FOR RUMBLE STRIP



SECTION VIEW

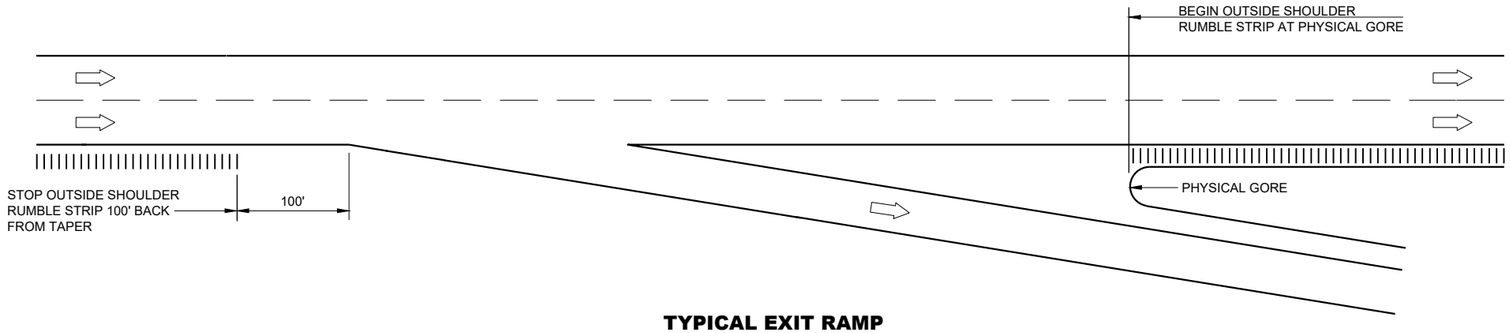
TYPICAL SHOULDER RUMBLE STRIPS
(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

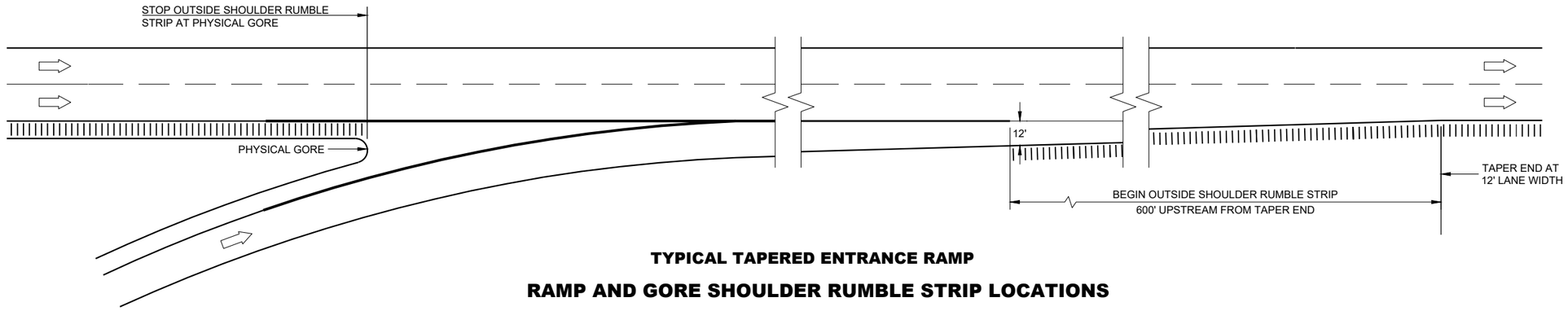
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A05-06a

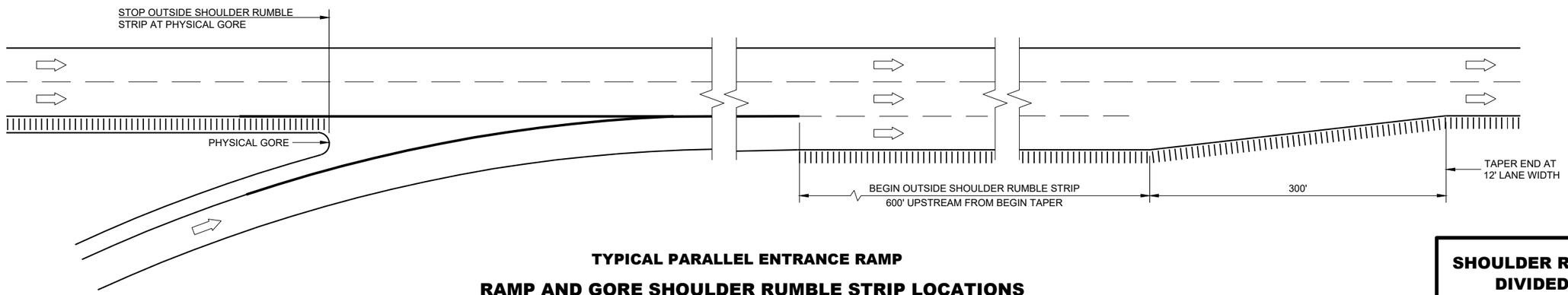


TYPICAL EXIT RAMP



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE SHOULDER RUMBLE STRIP LOCATIONS

GENERAL NOTES

NO RUMBLE STRIP ON EXIT, DIRECTIONAL OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

RUMBLE STRIPS ON EXPRESSWAYS:
DO NOT INSTALL SHOULDER RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIALAND PRIVATE DRIVEWAYS, ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, 25' IN ADVANCE OF BRIDGE DECKS, 25' IN ADVANCE OF BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSINGS.

LEGEND

DIRECTION OF TRAFFIC

SHOULDER RUMBLE STRIPS, DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

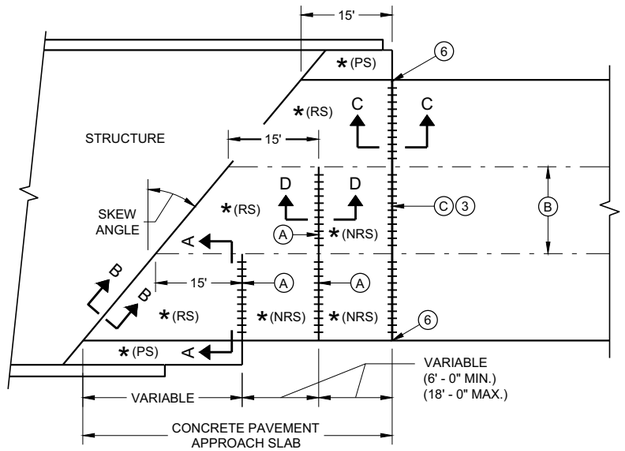
APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY DESIGN STANDARDS UNIT SUPERVISOR

FHWA

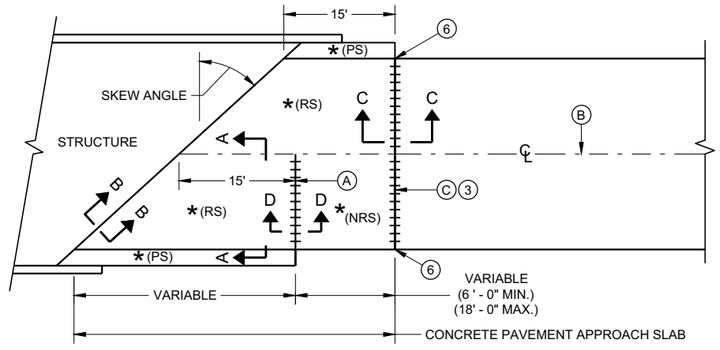
6

SDD 13A05-06b

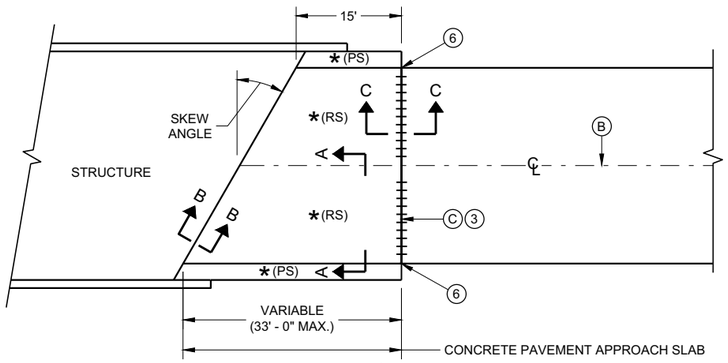
SDD 13A05-06b



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

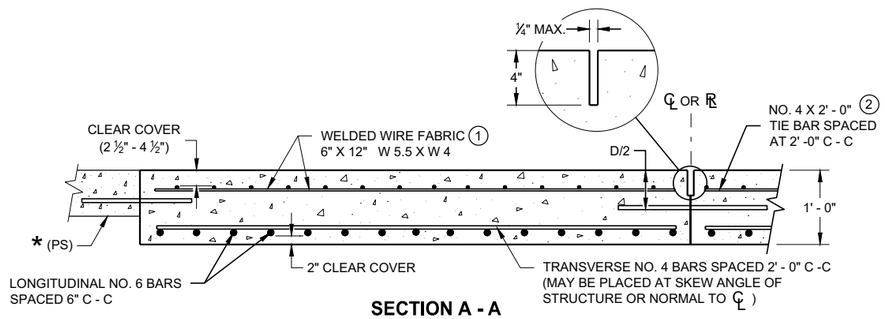
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

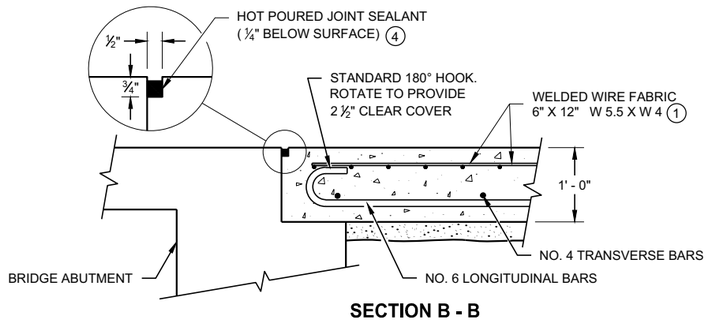
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

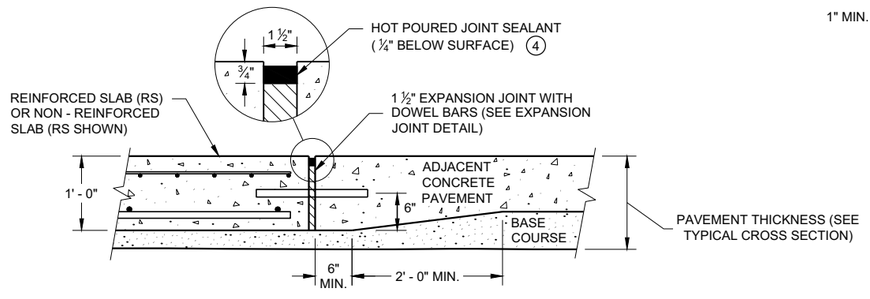
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



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.

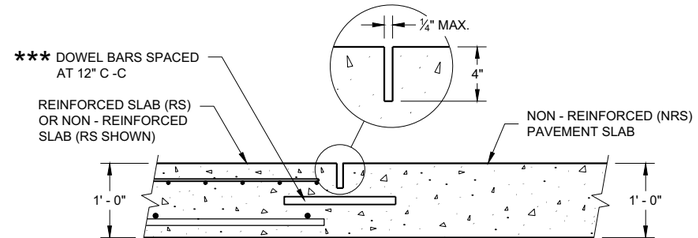
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

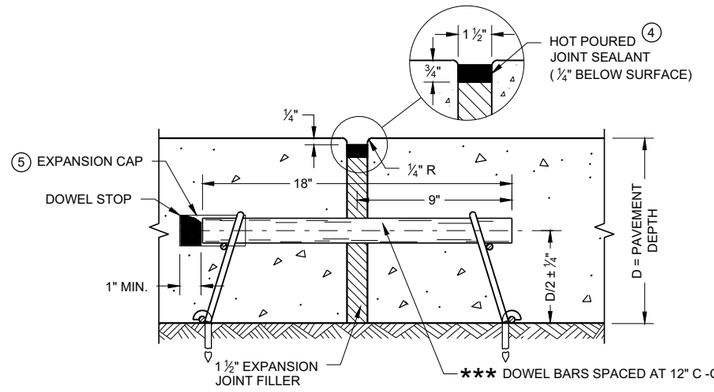
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(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 SUPERVIS

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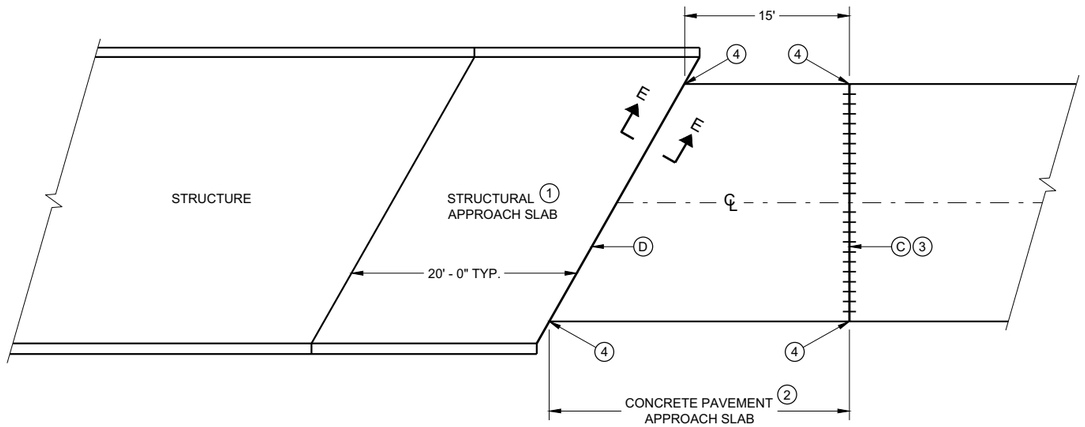


BRIDGE APPROACHES

GENERAL NOTES

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

(1) SEE BRIDGE PLAN.

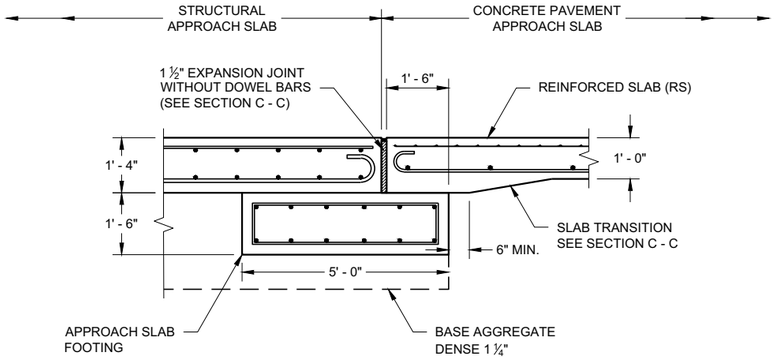
(2) CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS

(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

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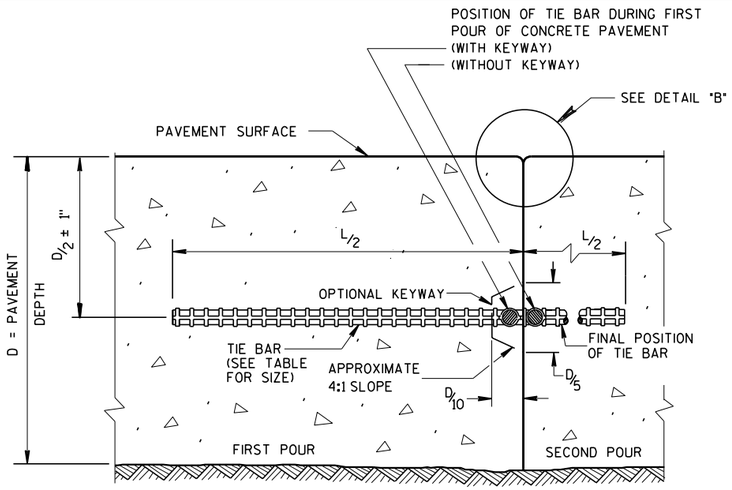
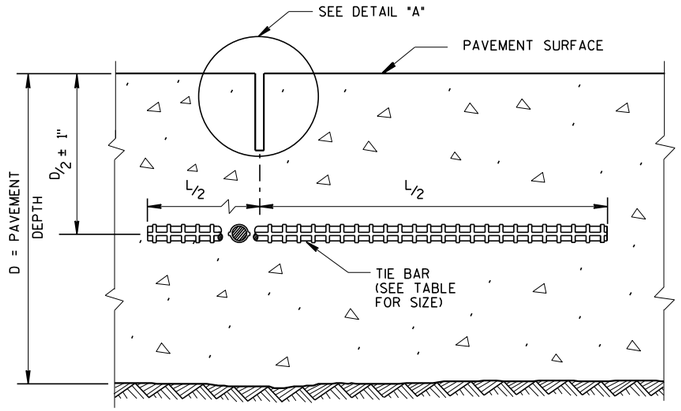


CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

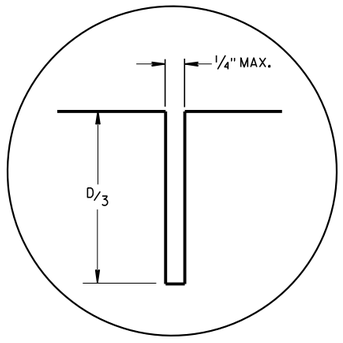
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

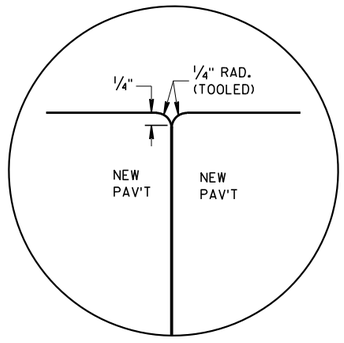
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

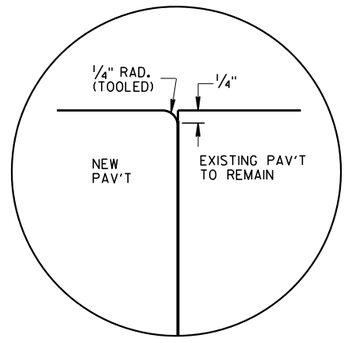
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



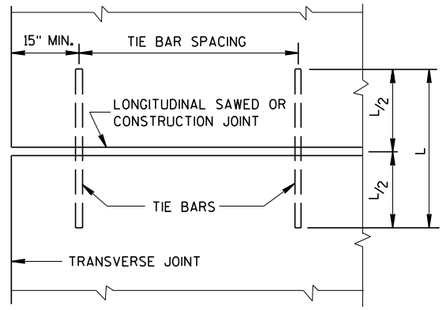
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp — PAVEMENT SUPE
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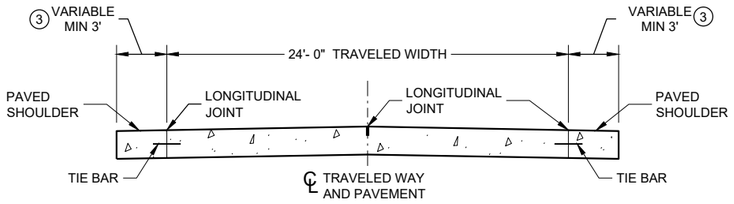
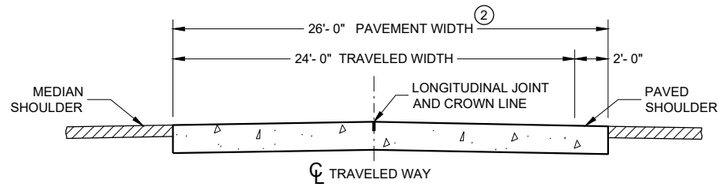
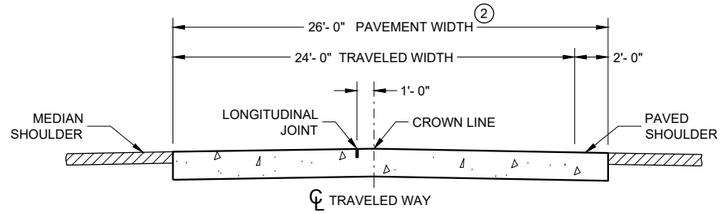


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

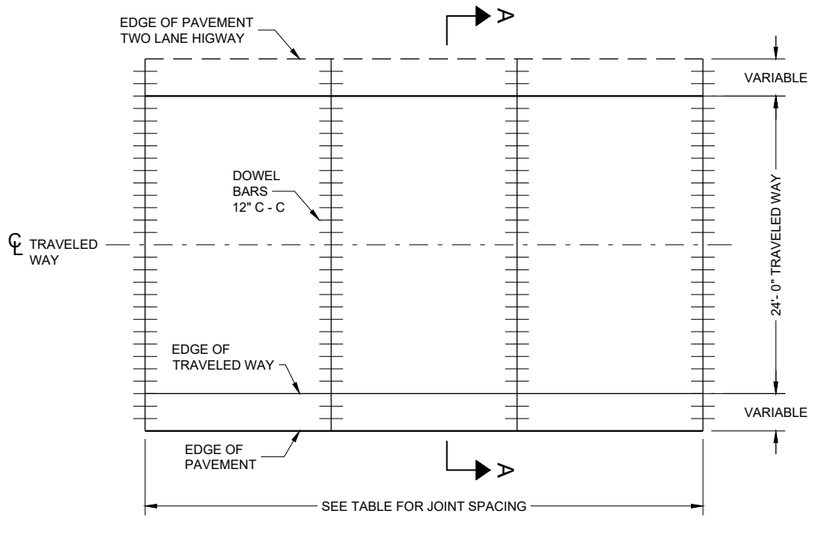
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

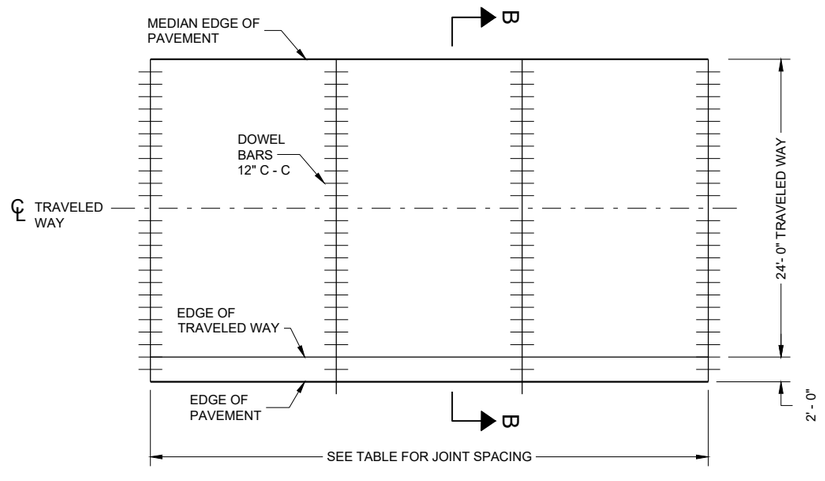
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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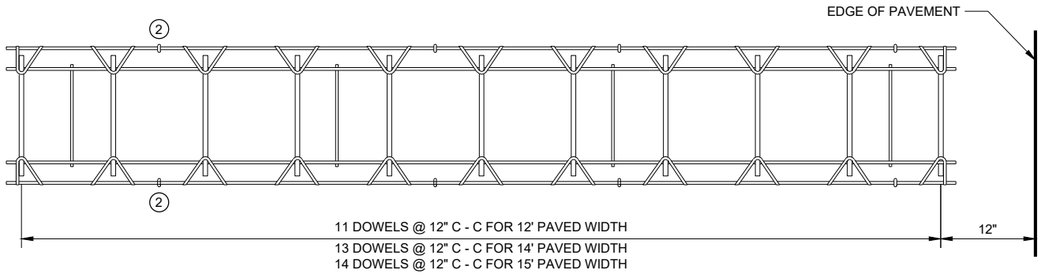


PLAN VIEW

SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

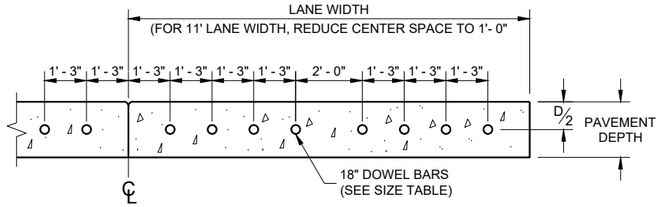
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

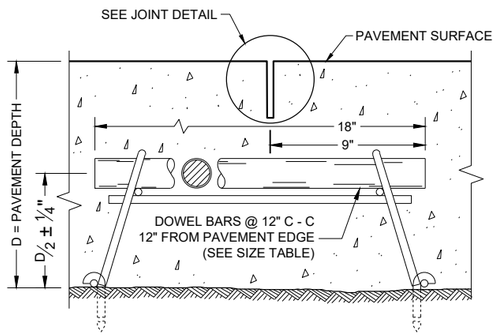
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

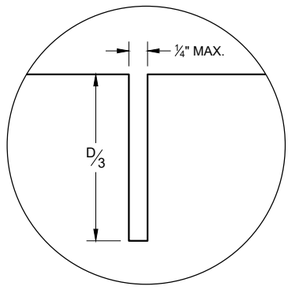
(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



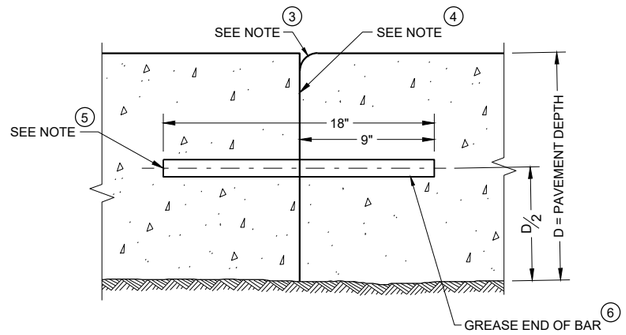
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2022
DATE

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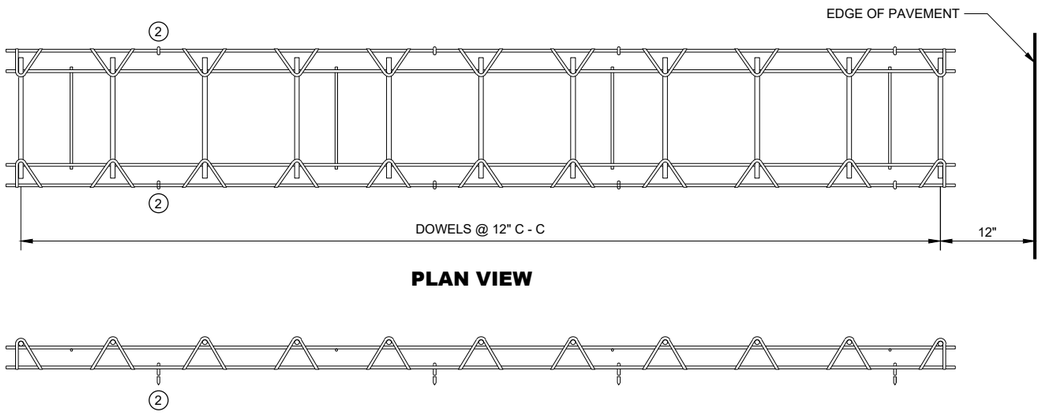
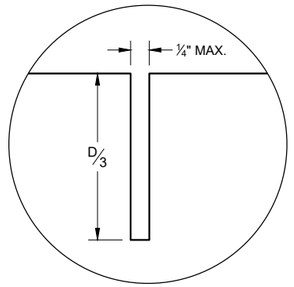


PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY (1)



JOINT DETAIL

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

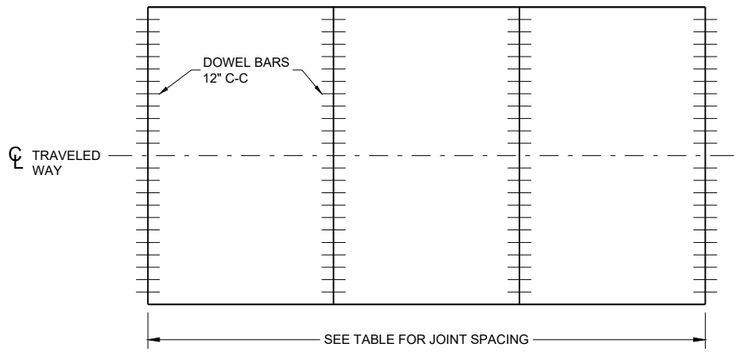
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

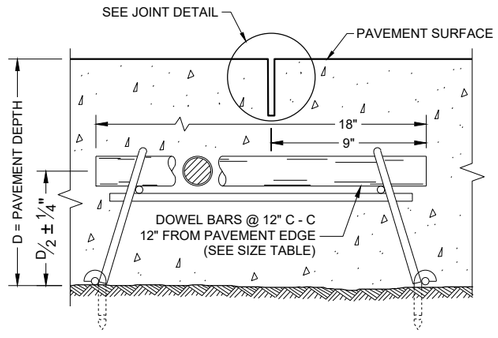
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



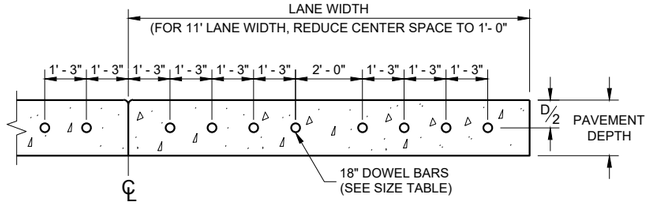
CONTRACTION JOINT LOCATIONS



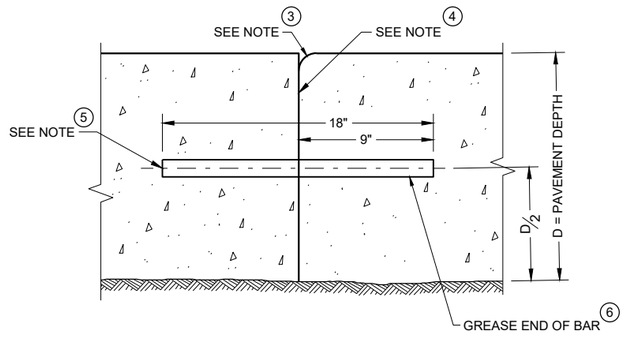
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



TRANSVERSE CONSTRUCTION JOINT

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE

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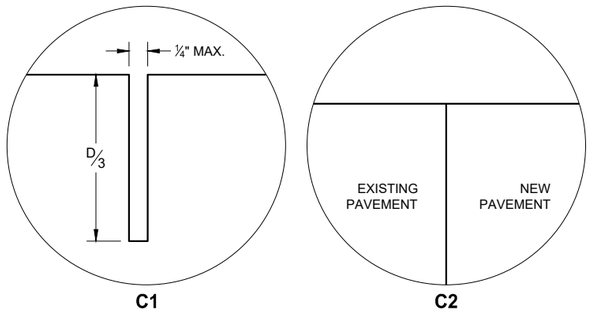
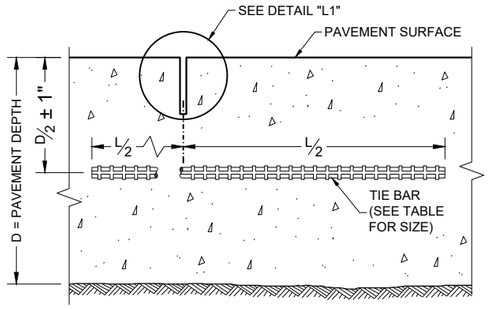
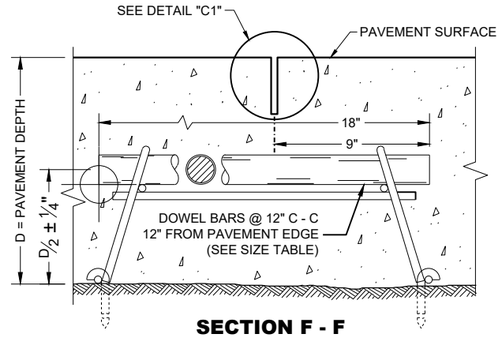


TRANSVERSE JOINTS



SECTION C - C
SAWED JOINT



SECTION F - F
CONTRACTION JOINT

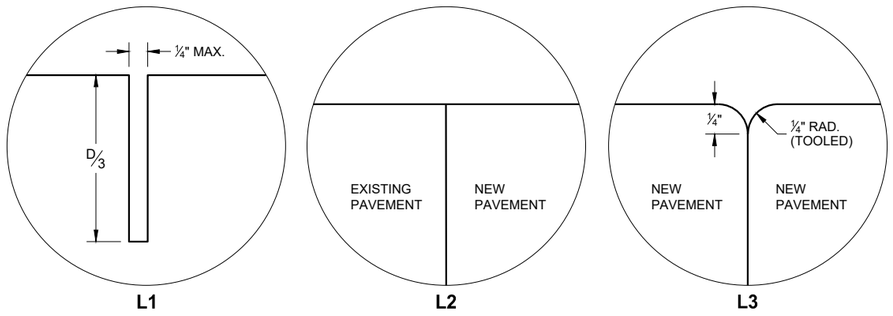
GENERAL NOTES

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

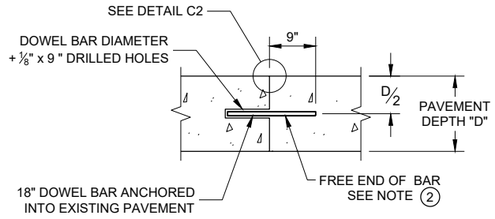
PROVIDE A MIMIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

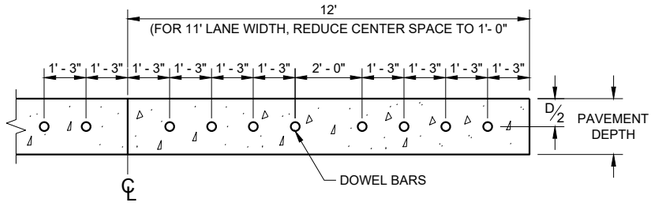
(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



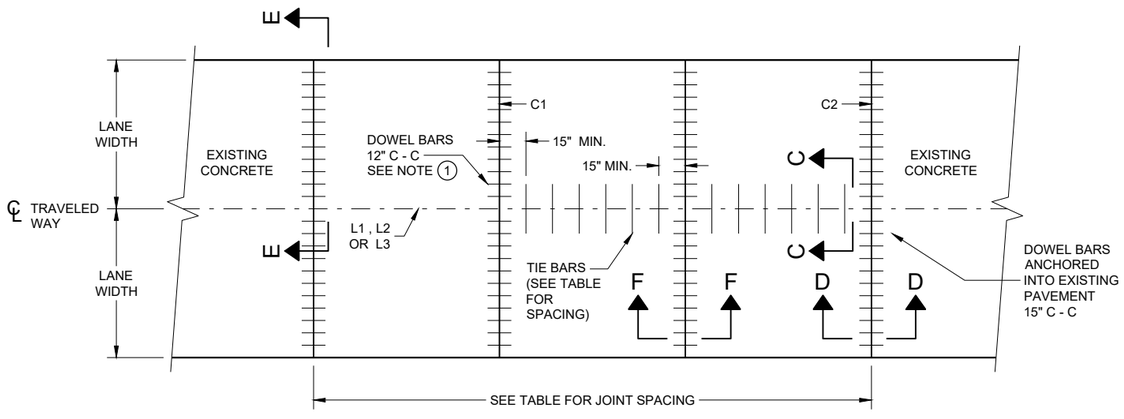
LONGITUDINAL JOINTS



SECTION D - D



SECTION E - E
SPACING OF DOWEL BARS
ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW
CONCRETE BASE
CONTRACTION JOINT LOCATIONS

TIE BAR TABLE

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

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

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

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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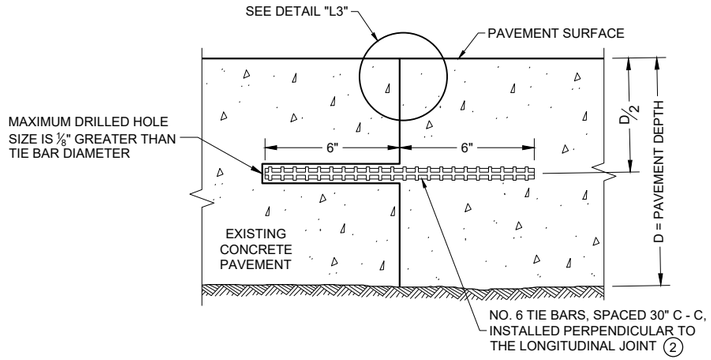
SDD 13C15 - 08a

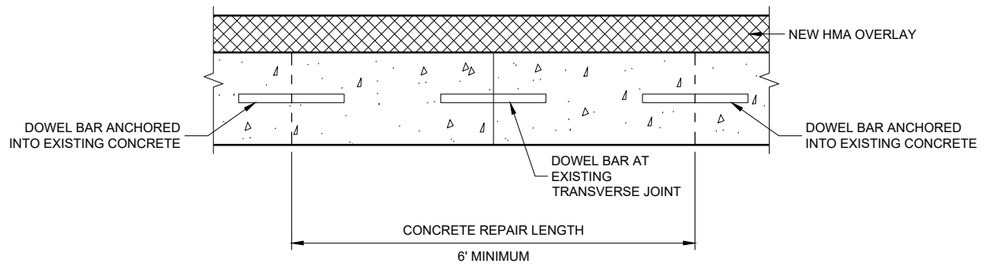
GENERAL NOTES

1. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.
2. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
3. PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

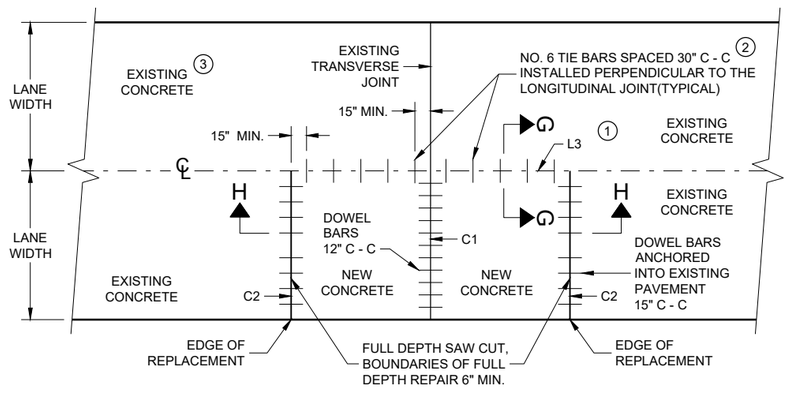


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H - H



PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR

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CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD 13C15 - 08b

GENERAL NOTES

PCCP = PORTLAND CEMENT CONCRETE PAVEMENT.

SHLDR = SHOULDER.

CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

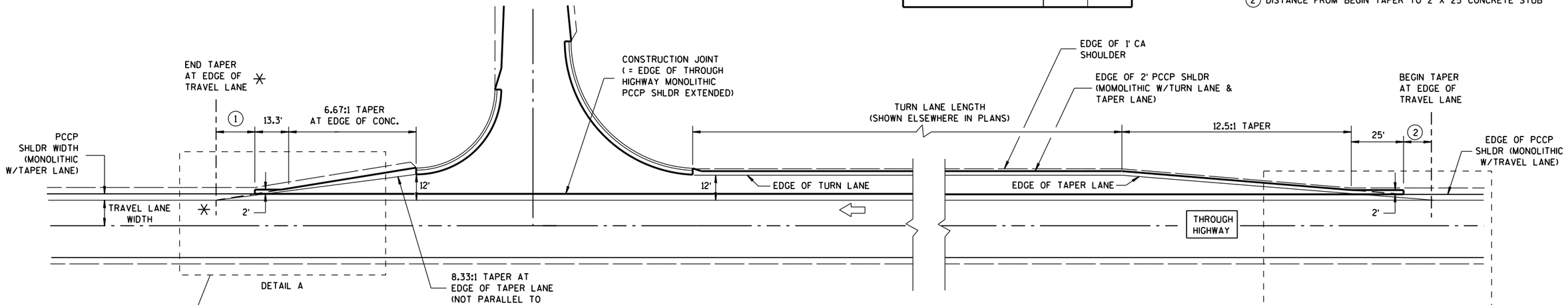
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

THROUGH HIGHWAY LANE WIDTH AND PCCP SHOULDER WIDTH ARE SHOWN ELSEWHERE IN PLANS

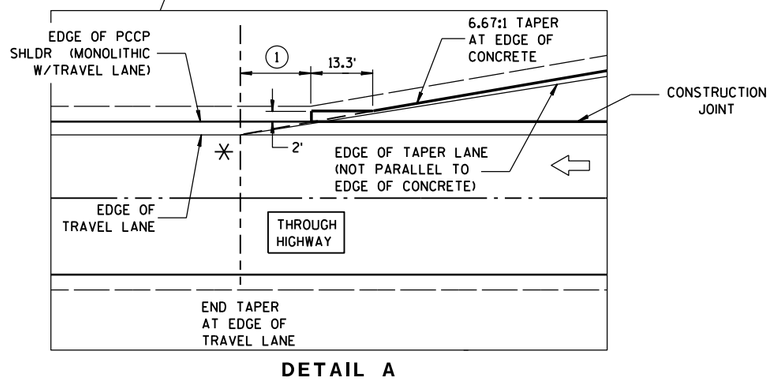
(1) DISTANCE FROM END TAPER TO 2' X 13.3' CONCRETE STUB

(2) DISTANCE FROM BEGIN TAPER TO 2' X 25' CONCRETE STUB

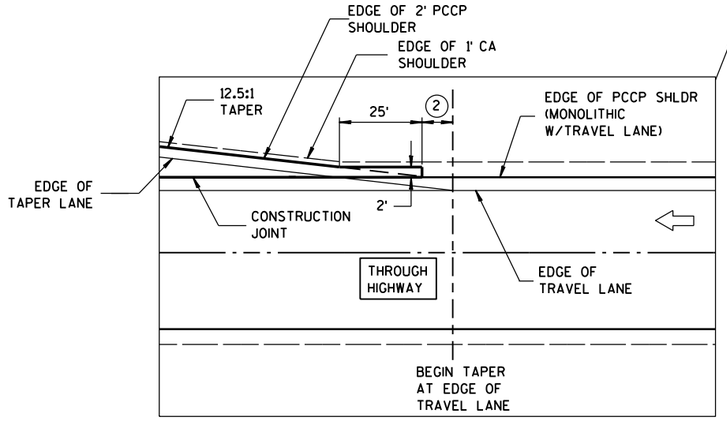
THROUGH HIGHWAY MONOLITHIC PCCP SHOULDER WIDTH (FEET)	DISTANCE (FEET)	
	(1)	(2)
2	13.3	0.0
3	20.0	12.5
TAPER RATE : 1	6.67	12.5



NOTE: EDGE OF CONCRETE TAPER (EXTENDED) & EDGE OF TAPER LANE CONVERGE



DETAIL A



DETAIL B

RIGHT TURN LANE AND EXIT TAPER

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 13 C 16-2a

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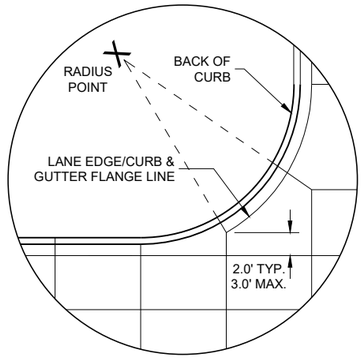
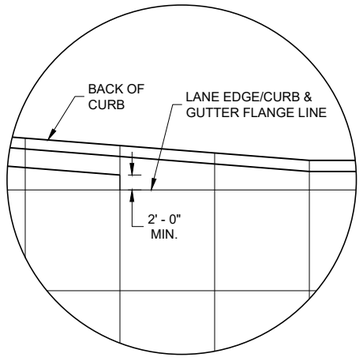
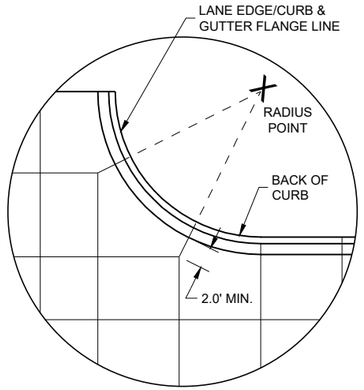
S.D.D. 13 C 16-2a



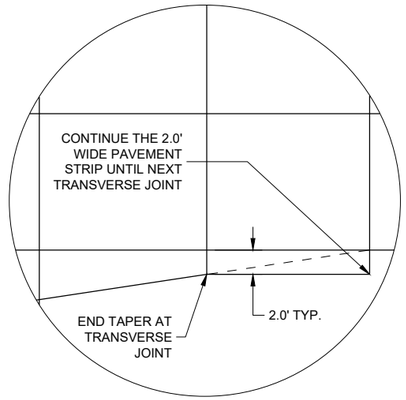
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

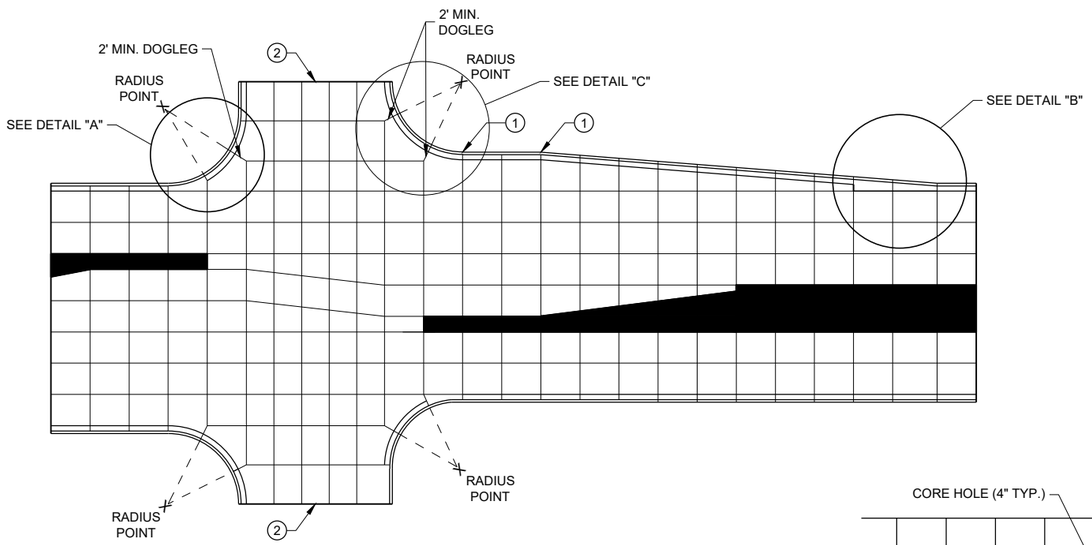
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

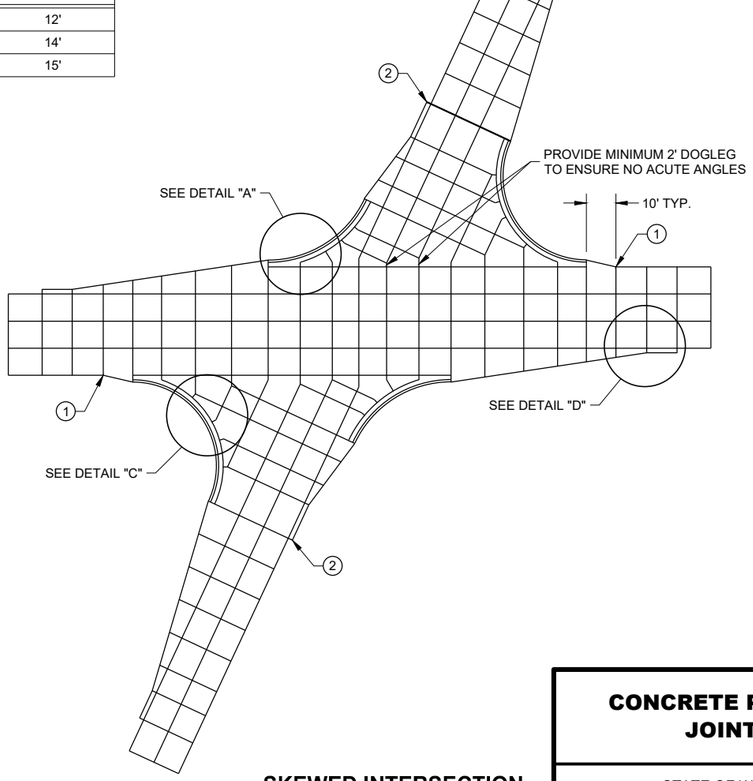
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



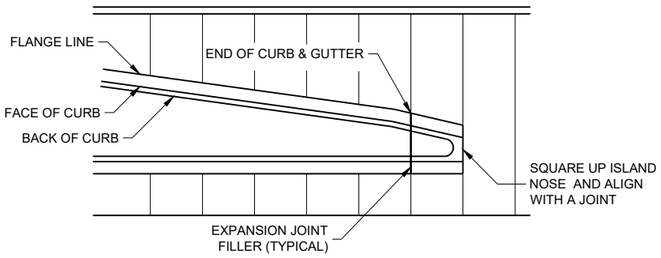
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

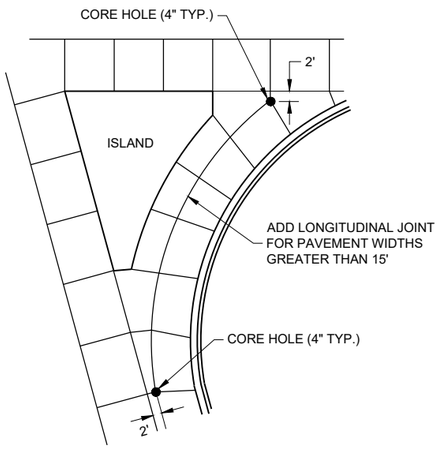
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 13C18 - 08a

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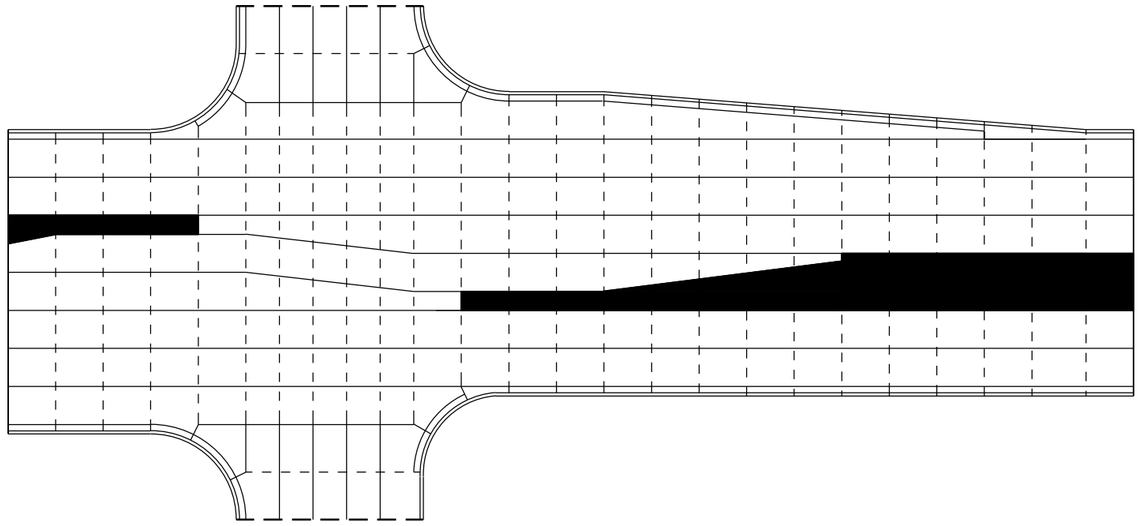
LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

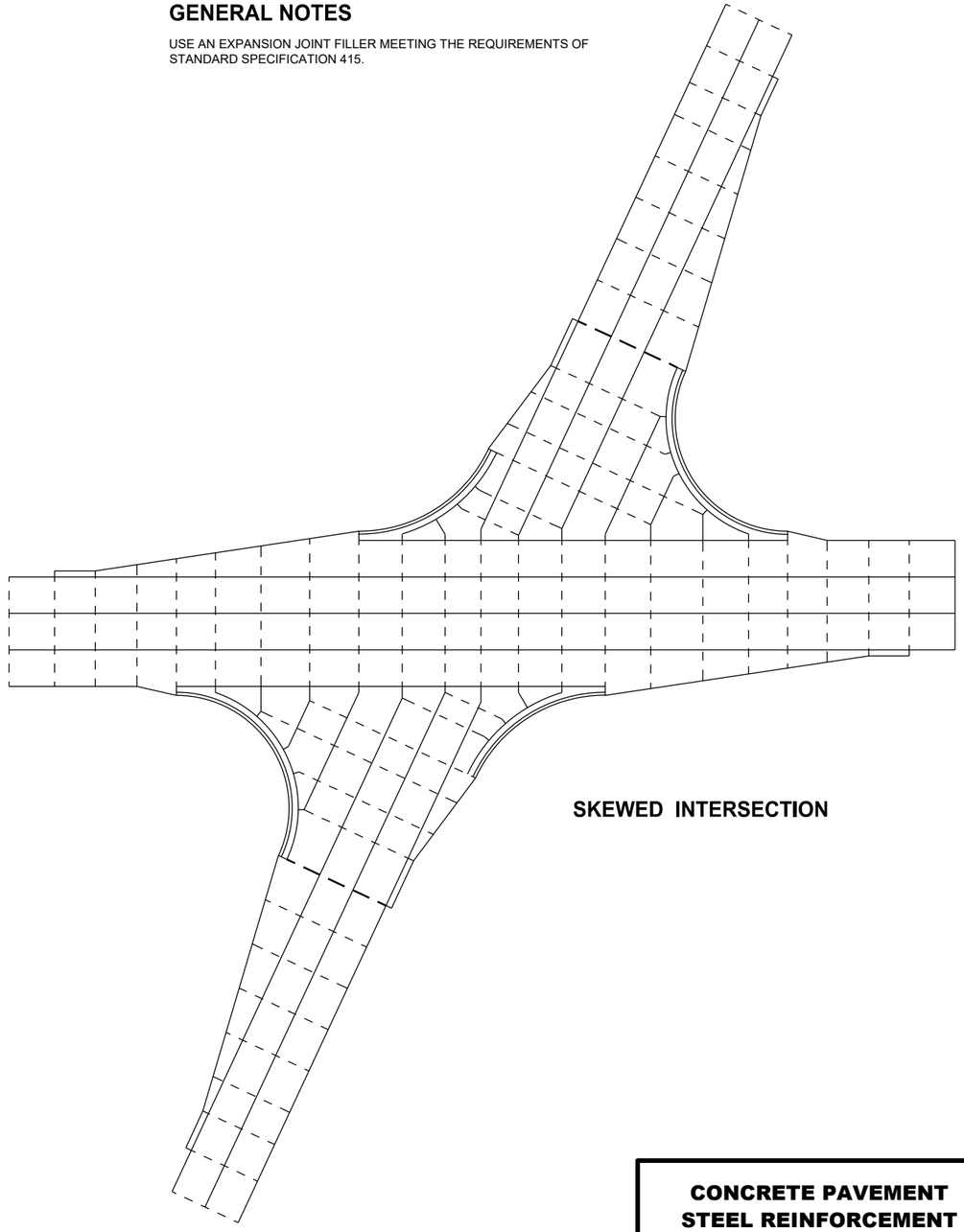
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

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SDD 13C18 - 08b

CONCRETE PAVEMENT STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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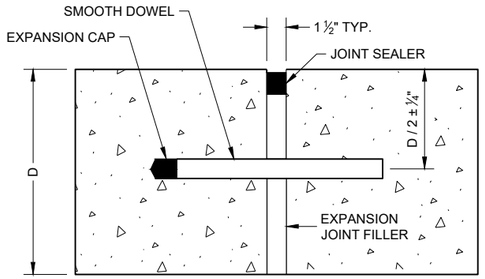
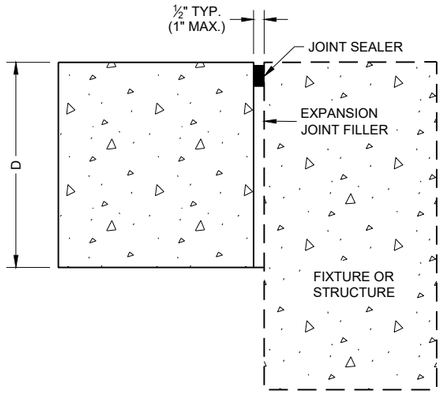
SDD 13C18 - 08b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

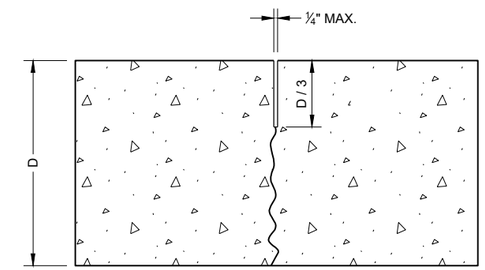
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

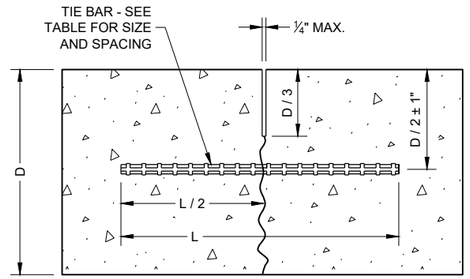
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

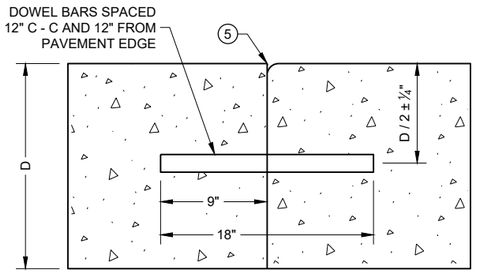
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



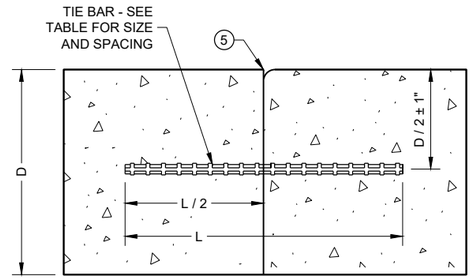
UNDOWELED TRANSVERSE



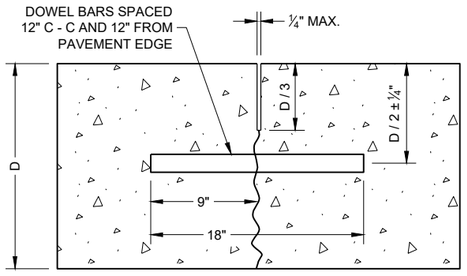
TIED LONGITUDINAL



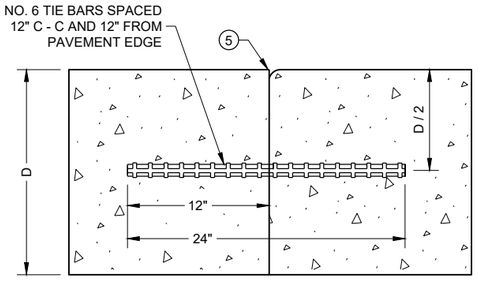
DOWELED TRANSVERSE (3)



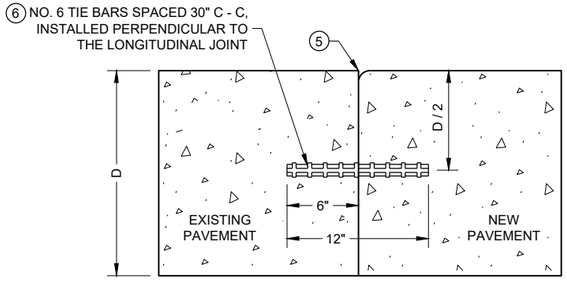
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

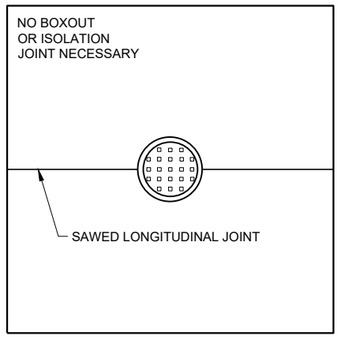


TIED LONGITUDINAL TO EXISTING

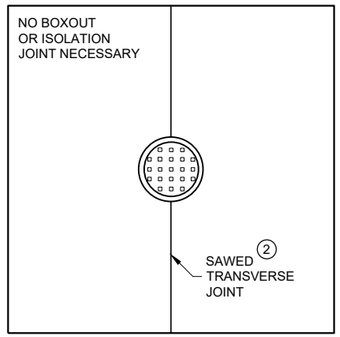
CONTRACTION JOINTS (2)

CONSTRUCTION JOINTS (4)

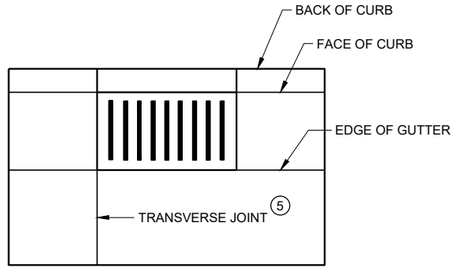
CONCRETE PAVEMENT JOINT TYPES



MANHOLE WITH LONGITUDINAL JOINT



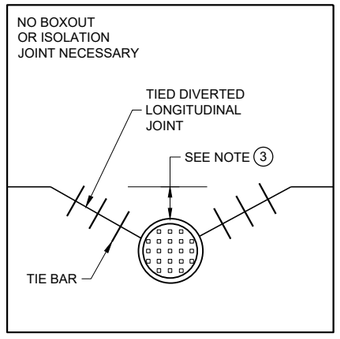
MANHOLE WITH TRANSVERSE JOINT



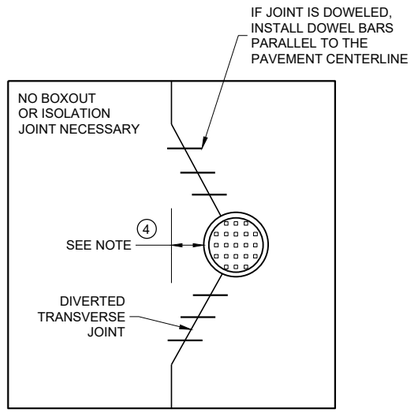
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

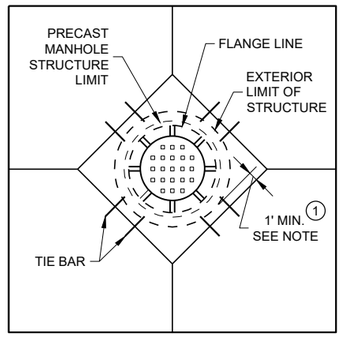
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD13C18 - 08d
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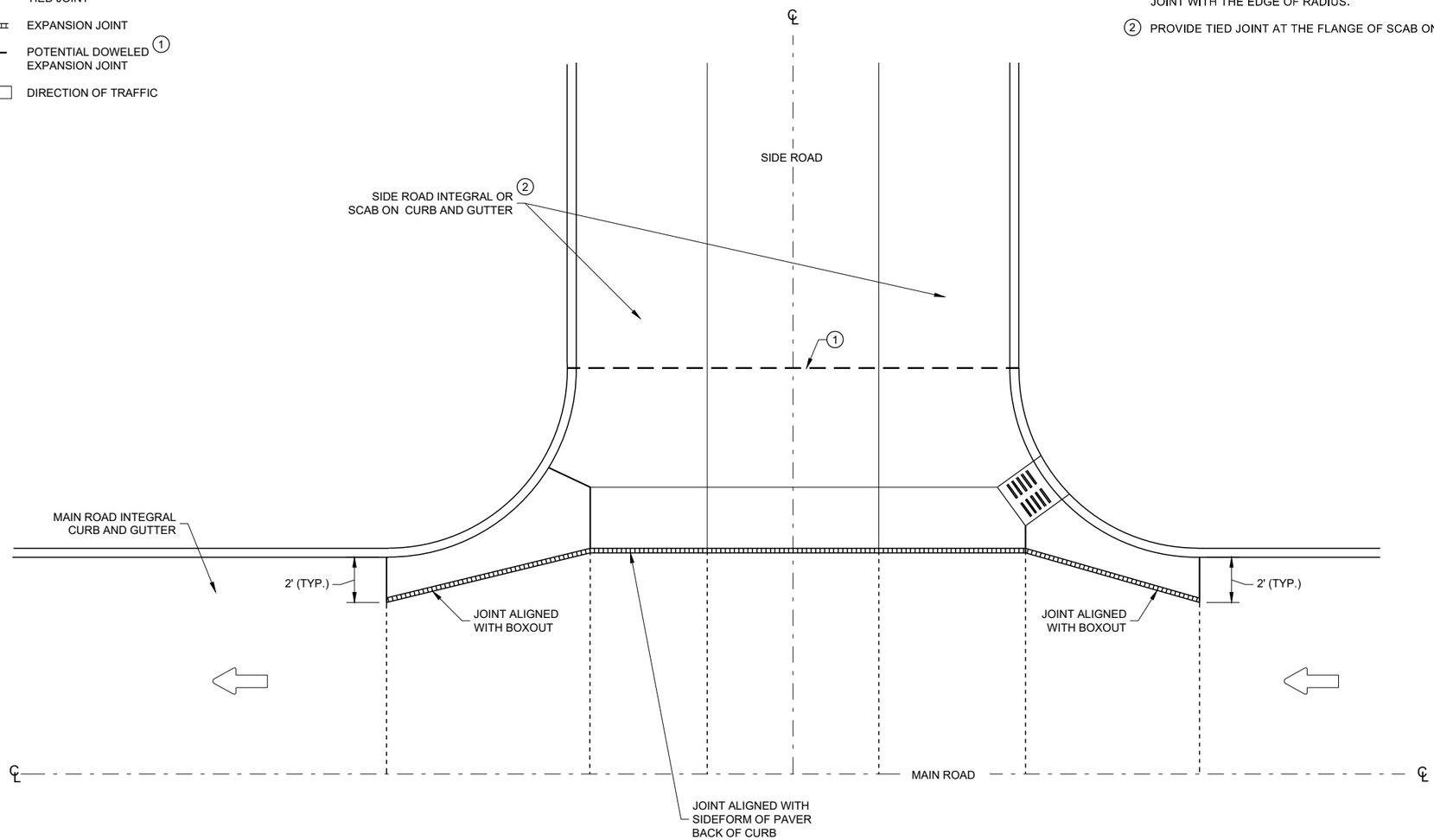
LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

(1) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.

(2) PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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SDD 13C18 - 08f

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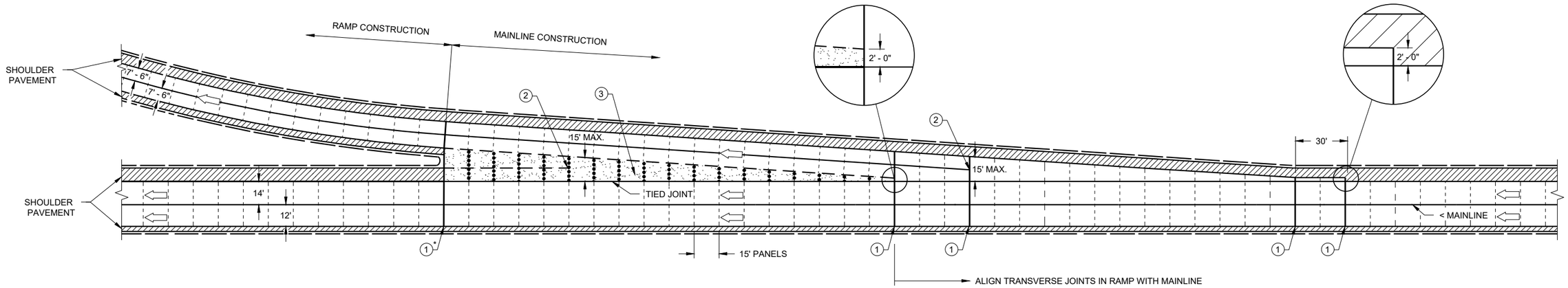
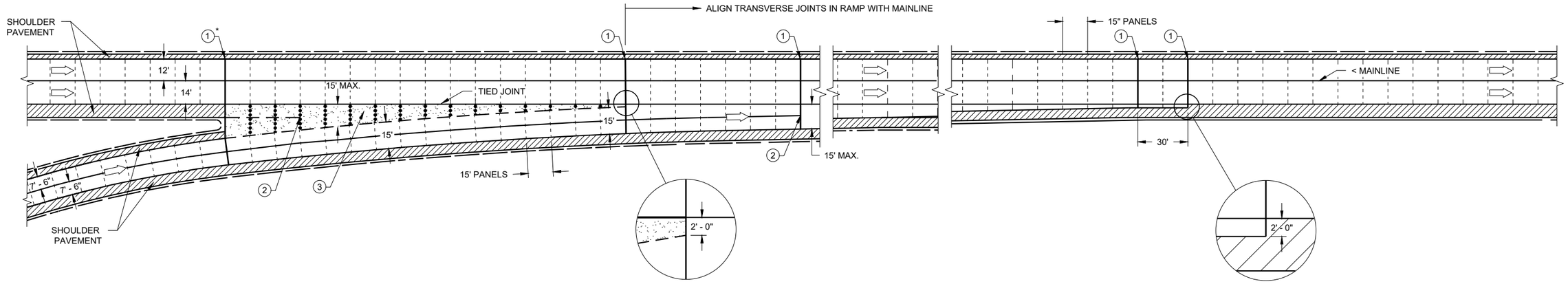
SDD 13C18 - 08f



DECELERATION LANE



ACCELERATION LANE

GENERAL NOTES

PAVEMENT AND BASE THICKNESS, PANEL LENGTHS, JOINTS AND REINFORCEMENT FOR THE DECELERATION AND ACCELERATION LANES, INCLUDING TAPERS, SHALL BE THE SAME AS THE MAINLINE, EXCEPT WHERE OTHERWISE NOTED.

ALL REINFORCEMENT BARS SHALL BE EPOXY COATED CONFORMING TO SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS.

LANE AND SHOULDER WIDTHS MAY VARY FROM SHOWN. SEE CONSTRUCTION PLANS FOR ACTUAL PROPOSED WIDTHS.

(1) CRITICAL TRANSVERSE JOINT LOCATIONS AT PAVEMENT WIDTH CHANGES.
((1)* IS NOT A CRITICAL TRANSVERSE JOINT WHEN ASPHALTIC GORE IS INSTALLED).

(2) STOP LONGITUDINAL JOINT WITH CORE HOLE (2" TYP.) WHEN IT MEETS THE FIRST TRANSVERSE JOINT LESS THAN 15' WIDE OR STOP LONGITUDINAL JOINT WHEN IT MEETS 2' AWAY FROM THE TIED JOINT OF THE MAINLINE.

(3) DISREGARD THE JOINT DETAILS IN AND AROUND THE GORE WHEN ASPHALTIC GORE IS INSTALLED.

LEGEND

- DOWELED JOINT
- UNDOWELED JOINT
- TIED JOINT
- UNTIED JOINT
- GORE
- DIRECTION OF TRAVEL

CONCRETE PAVEMENT JOINTING ACCELERATION/ DECELERATION LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD13C18 - 08g

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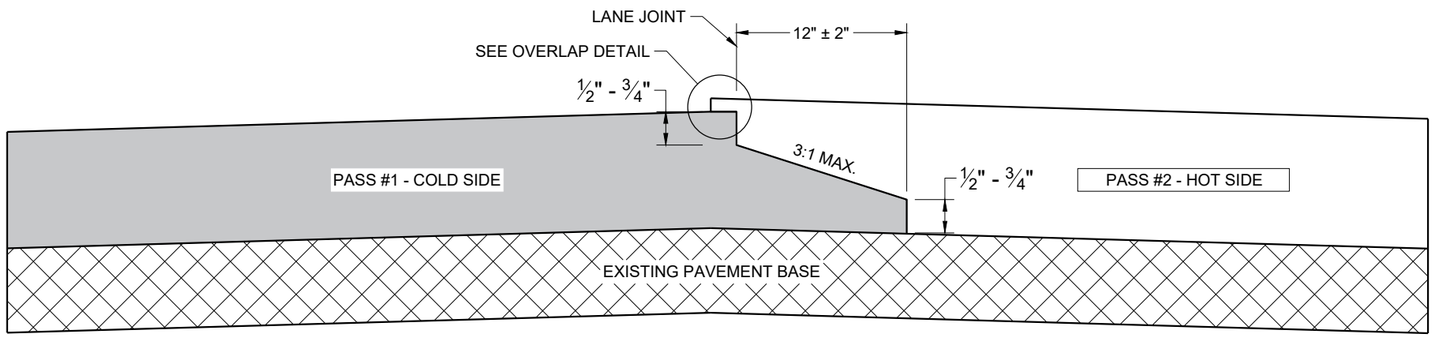
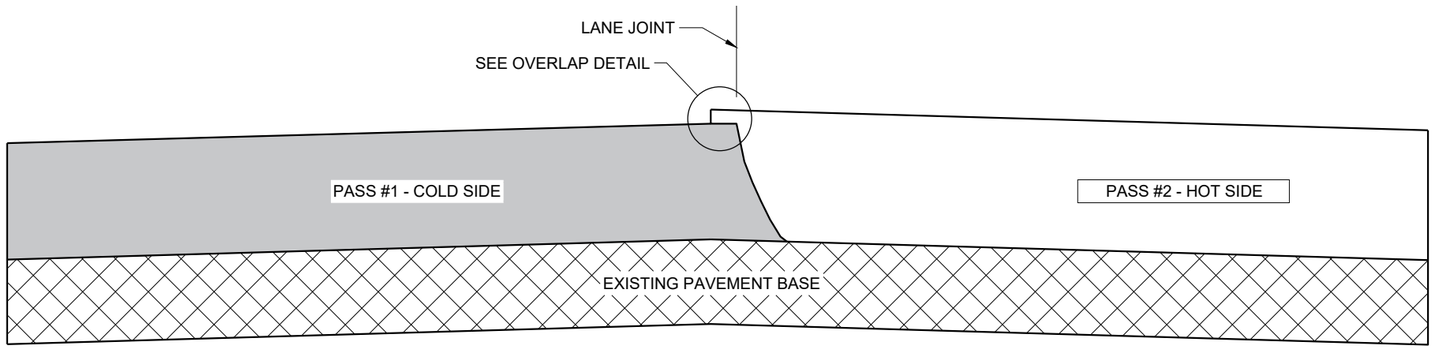
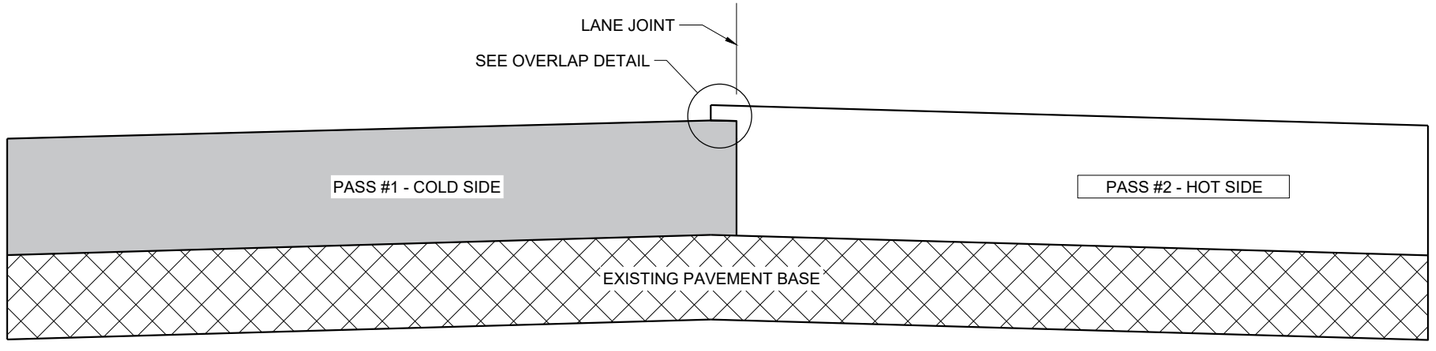
SDD13C18 - 08g



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

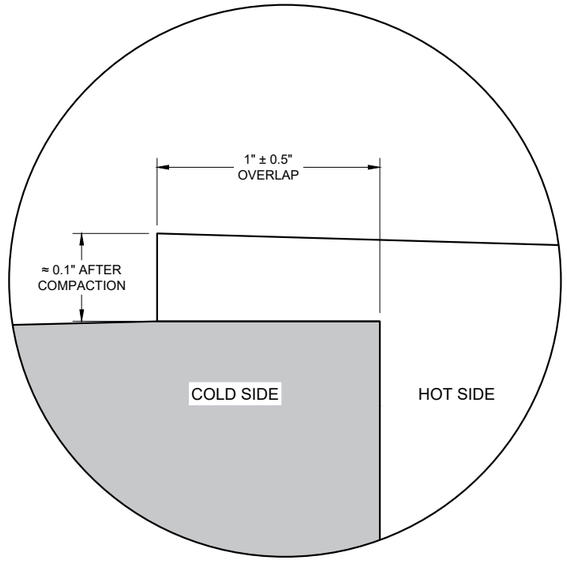
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

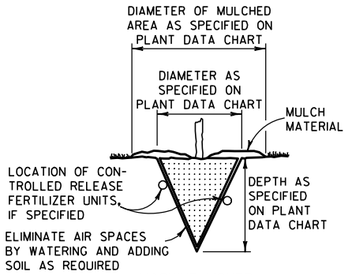
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

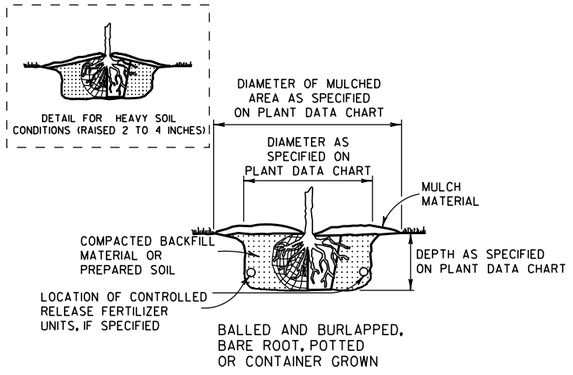
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

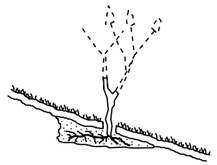
FHWA



MACHINE MOVED

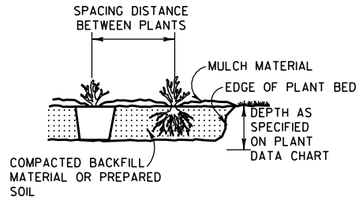


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



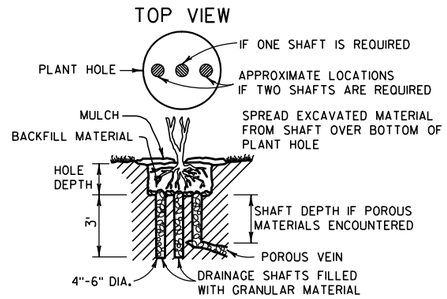
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



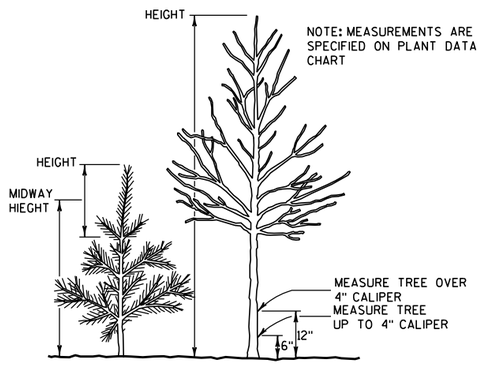
PREPARED BED (BARE ROOT AND POTTED)

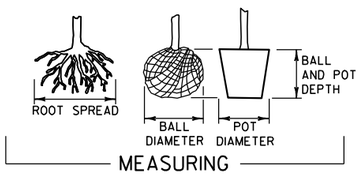
PLANTING



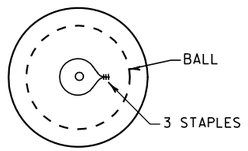
NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

DRAINING

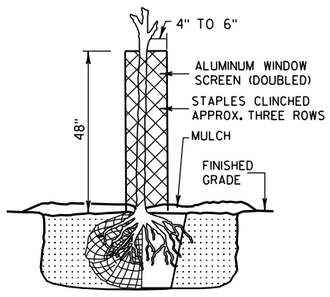




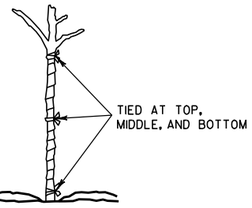
MEASURING



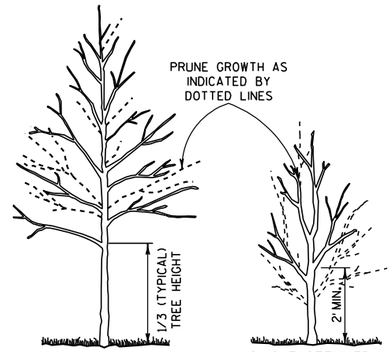
TOP VIEW



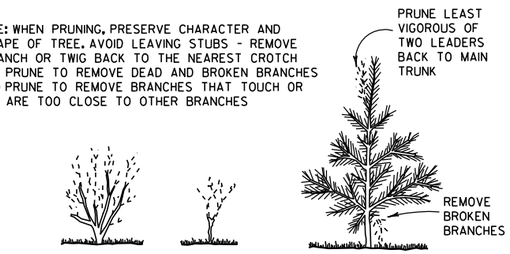
RODENT PROTECTION



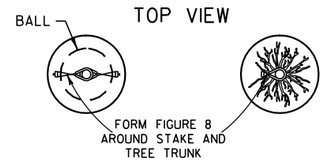
WRAPPING

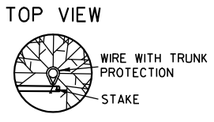


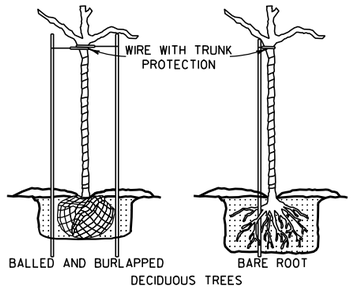
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

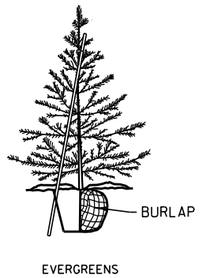


PRUNING



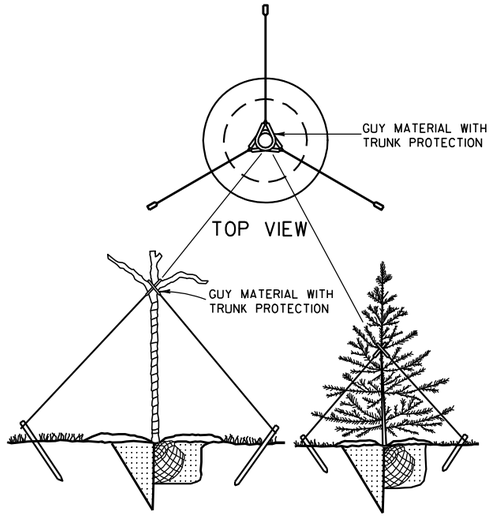




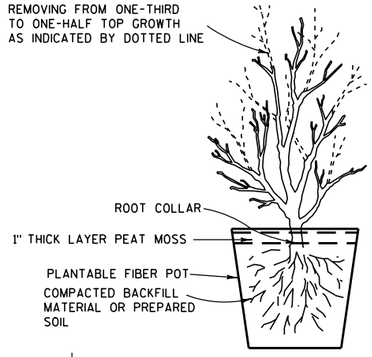


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

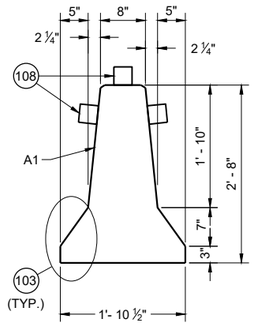
TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

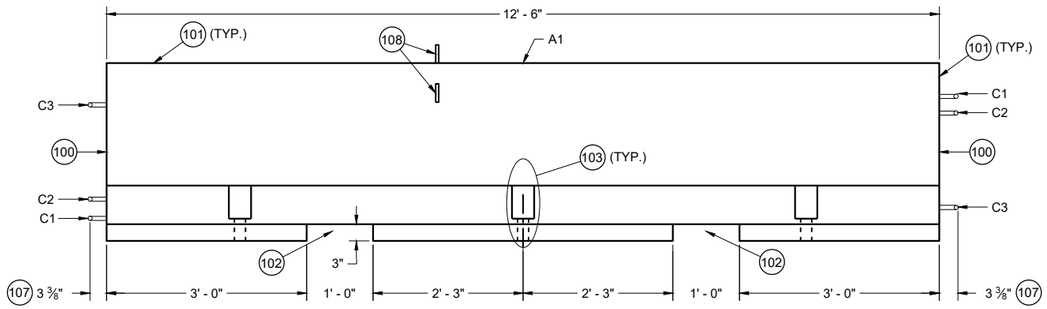
APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 A 2-1



CROSS SECTION



PROFILE VIEW

GENERAL NOTES

PLACE BARRIER ON PAVED SURFACE. BEFORE PLACEMENT OF TEMPORARY BARRIER, REMOVE ALL LOOSE MATERIAL FROM PAVED SURFACE.

LOOP BARS C1, C2 AND C3 ARE NOT FOR PLACEMENT OR MOVEMENT OF BARRIER.

(100) PERMANENTLY FORM INTO ONE END OF BARRIER THE FOLLOWING INFORMATION:
- A. TYPE OF BARRIER: WI-CBTP
- B. MANUFACTURER
- C. DATE OF MANUFACTURE (MONTH AND YEAR)

(101) 1" OPTIONAL CHAMFER

(102) SEE LIFTING SLOT DETAIL

(103) SEE ANCHOR BLOCK DETAIL

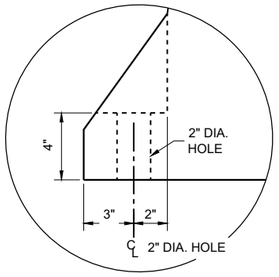
(104) 1 ¾" MIN. CLEAR COVER

(105) 2" MIN. CLEAR COVER

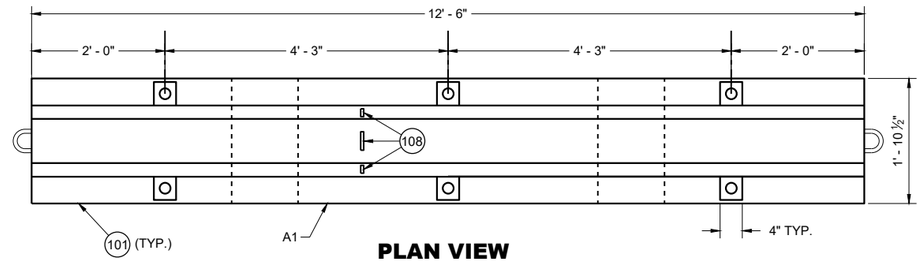
(106) 1" MIN. CLEAR COVER

(107) ± ⅛" MEASURED FROM FACE OF CONCRETE BARRIER TO OUTSIDE OF LOOP BAR (TYP.)

(108) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURERS INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED LEFT OF TRAFFIC AND WHITE WHEN BARRIER IS LOCATED RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART, PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO SIDE MOUNTED DELINEATORS ON BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAT 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

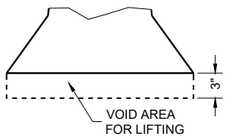


ANCHOR BLOCK DETAIL

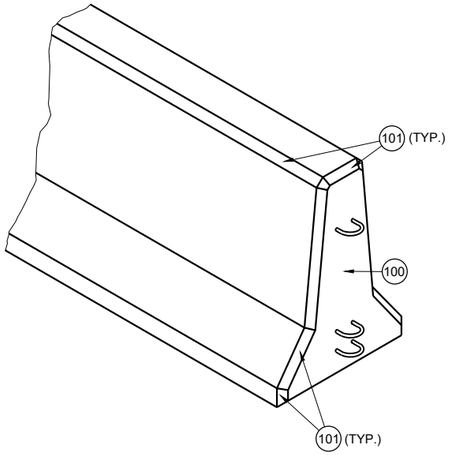


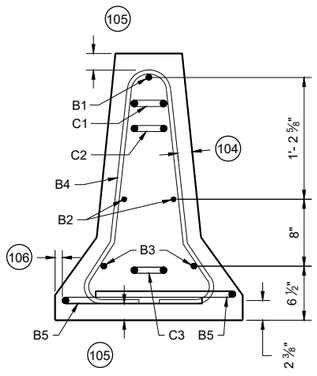
PLAN VIEW

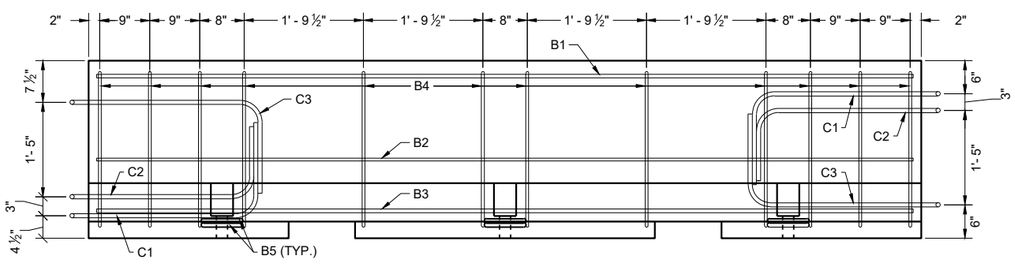
TEMPORARY BARRIER



LIFTING SLOT DETAIL (TYP.)







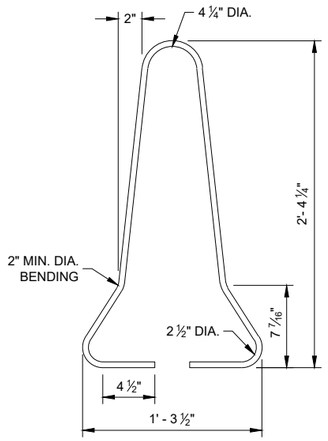
PROFILE VIEW

TEMPORARY BARRIER REINFORCEMENT

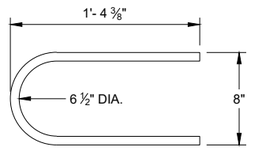
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

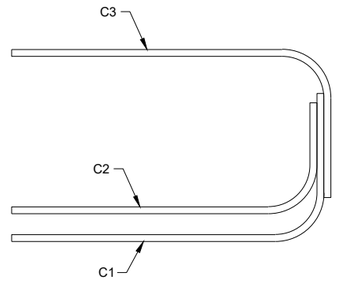
SDD 14B07-16a



B4 BAR DETAIL

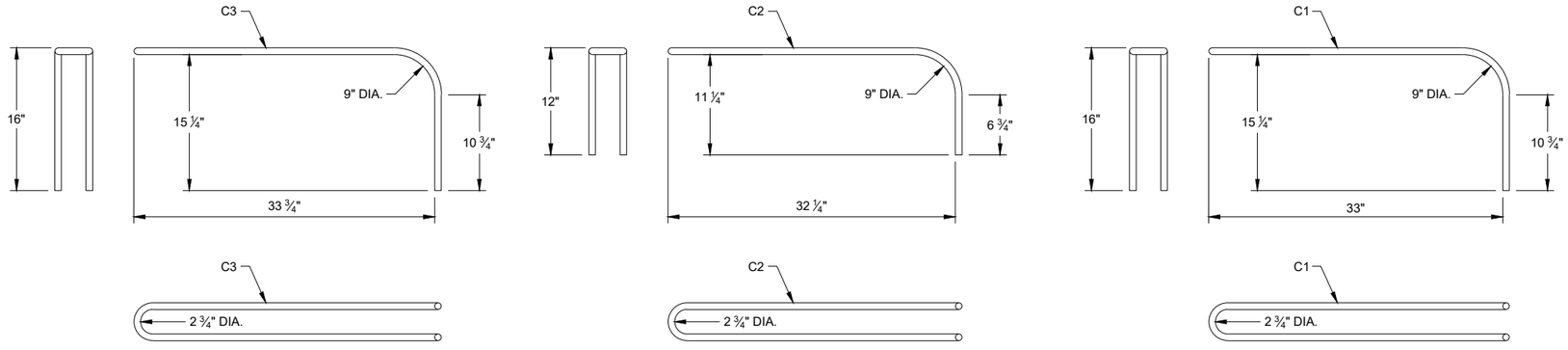


B5 BAR DETAIL



PROFILE VIEW

LOOP BAR ASSEMBLY



C BAR DETAILS

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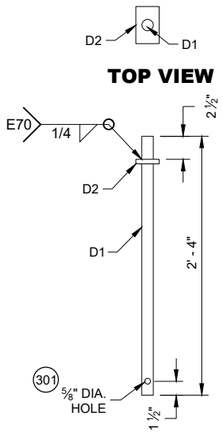
SDD 14B07-16b

6

SDD 14B07-16b

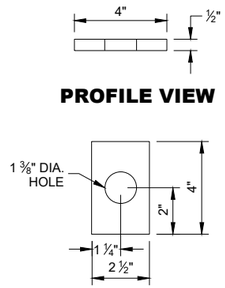
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"



TOP VIEW

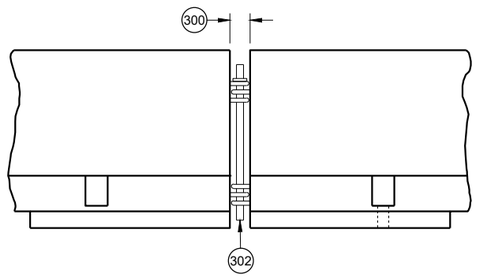
PROFILE VIEW

CONNECTOR PIN ASSEMBLY



PROFILE VIEW

TOP VIEW D2



CONNECTING TEMPORARY BARRIER SECTIONS

GENERAL NOTES

300 SET WITH 3 ⅝" WOOD BLOCK.

301 HOLE IS OPTIONAL.

302 CONNECTOR PIN ASSEMBLY.

303 CONCRETE PAVEMENT, APPROACH SLAB, OR DECK.

304 CONCRETE DECK.

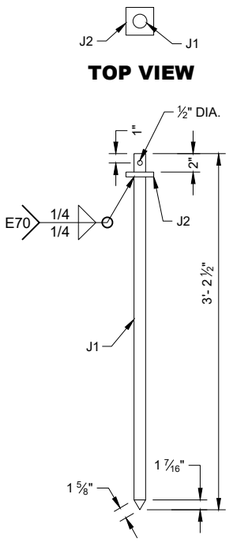
305 DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY OR CONCRETE PAVEMENT WITH ASPHALT OVERLAY.

306 MINIMUM OF 2" OF ASPHALT.

307 ASPHALT ANCHOR PIN ASSEMBLY

308 IF DRILLING A PILOT HOLE, THE MAX, DIA. OF THE HOLE IS 3/4"

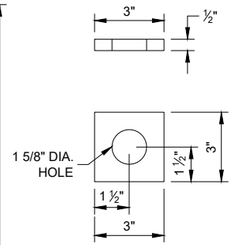
309 WHEN THERE IS ASPHALT OVERLAYING CONCRETE PAVEMENT, A 1 5/8" DIA. PILOT HOLE CAN BE DRILLED INTO THE OVERLAY AND CONCRETE. IF NEEDED DRILL A 3/4" PILOT HOLE IN BASE COURSE.



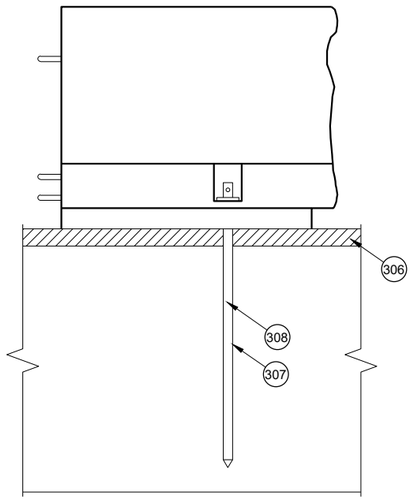
TOP VIEW

PROFILE VIEW

ASPHALT ANCHOR PIN ASSEMBLY

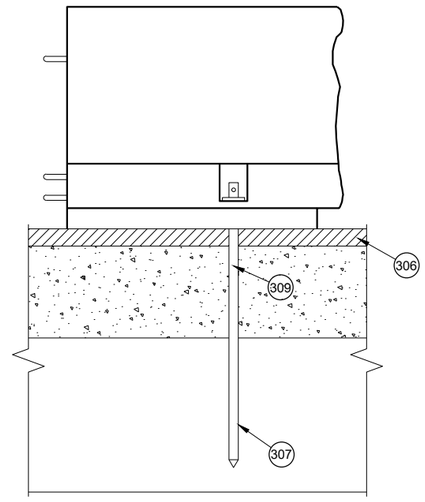


TOP VIEW J2



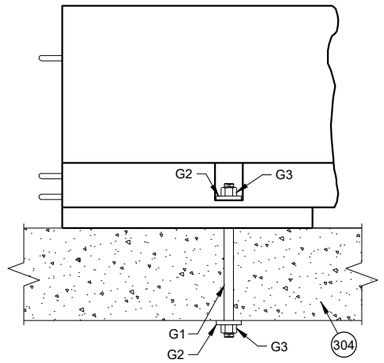
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT PAVEMENT



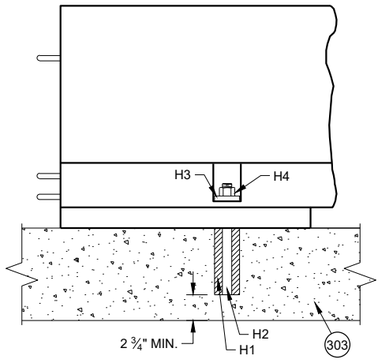
SIDE VIEW

ASPHALT ANCHOR INSTALLATION THROUGH ASPHALT OVERLAY ON TOP OF CONCRETE PAVEMENT



SIDE VIEW

THROUGH BOLT ANCHOR INSTALLATION (305)



SIDE VIEW

ADHESIVE ANCHOR INSTALLATION (305)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

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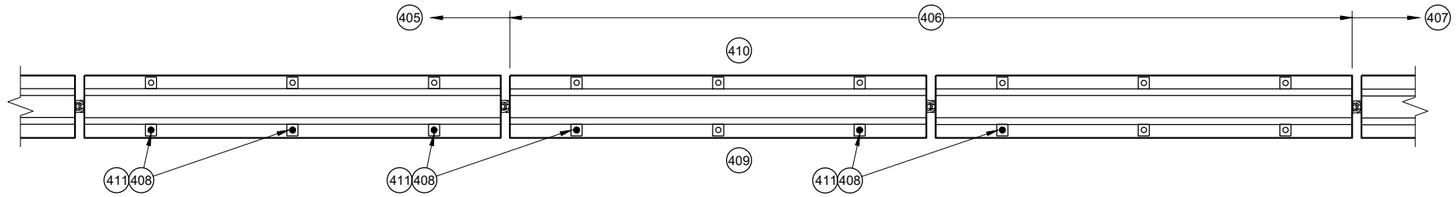
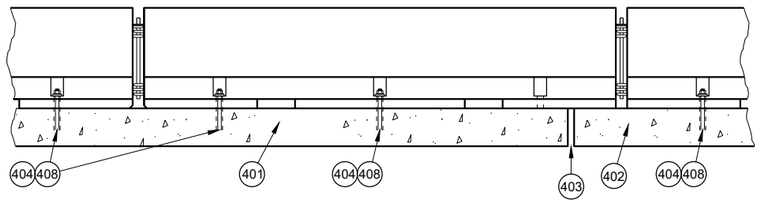


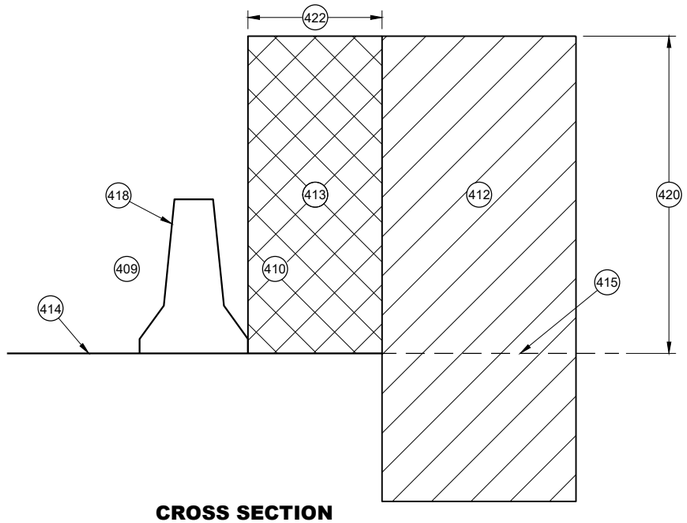
PLAN VIEW

TRANSITION FROM FREE STANDING TO ANCHORED BARRIER



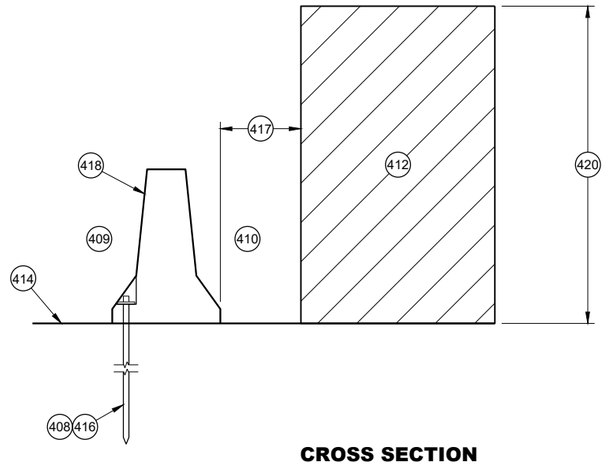
PROFILE VIEW

ANCHORED BARRIER NEAR EXPANSION JOINT (400)



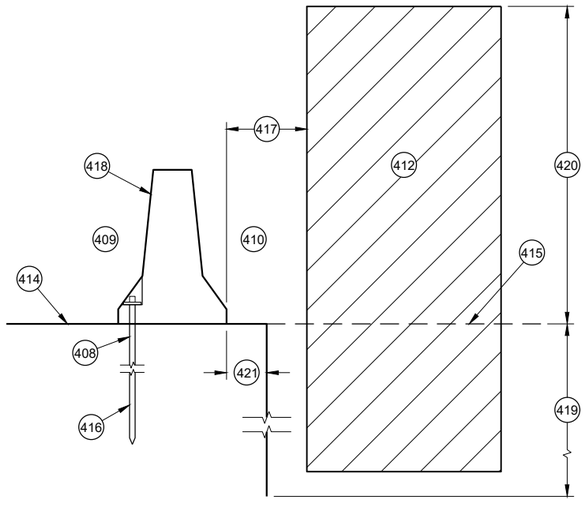
CROSS SECTION

FREE STANDING BARRIER



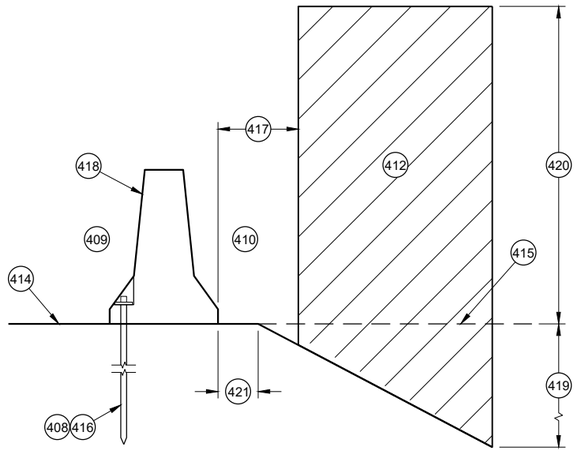
CROSS SECTION

ANCHORED BARRIER FOR OBJECTS ABOVE THE GRADE LINE AND NEAR THE BARRIER



CROSS SECTION

ANCHORED BARRIER NEAR VERTICAL DROP OFF



CROSS SECTION

ANCHORED BARRIER NEAR A SLOPE

GENERAL NOTES

(400) NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.

(401) CONCRETE DECK

(402) CONCRETE DECK OR APPROACH SLAB.

(403) EXPANSION JOINT

(404) ADHESIVE ANCHOR SHOWN. SEE ANCHOR DETAILS.

(405) ANCHORED TEMPORARY BARRIER

(406) TRANSITION FROM ANCHORED TEMPORARY BARRIER TO FREE STANDING

(407) FREE STANDING BARRIER

(408) REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(409) TRAFFIC SIDE

(410) NON-TRAFFIC SIDE

(411) ANCHOR LOCATION. SEE ANCHORING DETAILS.

(412) WORK AREA

(413) AREA FREE OF OBJECTS AND WORKERS

(414) GRADE LINE

(415) EXTENDED GRADE LINE

(416) ANCHORED TEMPORARY BARRIER. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR AN ASPHALT ANCHOR ROD DETAILS FOR MORE INFORMATION. ASPHALT ANCHOR ROD SHOWN.

(417) WHEN OBJECTS EXTEND ABOVE THE GRADE. A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT.

(418) OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR ALLOWED TO LEAN AGAINST THE BARRIER WITHOUT WRITTEN PERMISSION OF THE PROJECT ENGINEER.

(419) DEPTHS OF 3 FEET OR MORE.

(420) Y = 6.5'

(421) OFFSET FROM BACK OF BARRIER EDGE:

CONCRETE PAVEMENT	0.5'
ASPHALT	0.5'

(422) POSTED SPEED (MPH):

45 OR GREATER	4.0'
40 OR LOWER	2.0'

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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GENERAL NOTES

(500) EXISTING RIGID BARRIERS (VARIES)

(501) TEMPORARY BARRIER

(502) SEE OTHER DETAIL ON HOW TO ANCHOR TEMPORARY BARRIER (BARRIER ASPHALT ANCHOR SHOWN).

(503) ANCHORS ARE REQUIRED ON BOTH SIDE OF THE TEMPORARY BARRIER.

(504) NESTED RAILS ARE REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS.

(505) TRAFFIC TRAVELS FROM PERMANENT BARRIER TO TEMPORARY BARRIER.

(506) TRAFFIC TRAVELS FROM TEMPORARY BARRIER TO PERMANENT BARRIER.

(507) VERTICAL BARRIER

(508) SAFETY SHAPE BARRIER

(509) SINGLE SLOPE BARRIER

(510) CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF RIGID BARRIER.

(511) BENT THRIE BEAM TO FIT.

(512) THRIE BEAM PIECES ARE OFFSET 15 ¼" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.

(513) TWO (2) P1, P2 AND P3 ARE REQUIRED

(514) FIVE (5) N1, N2 AND N3 ARE REQUIRED

(515) TWO (2) R1, R2 AND R3 ARE REQUIRED

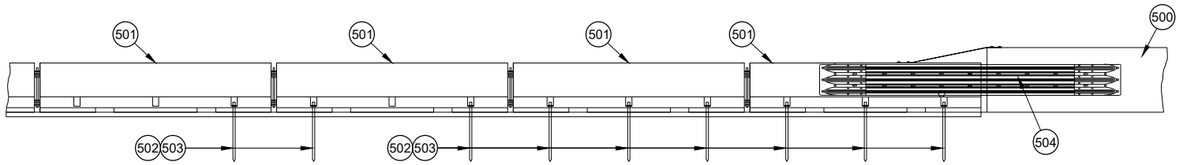
(516) CUT WOOD BLOCK TO FIT.

(517) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL ASSEMBLY.

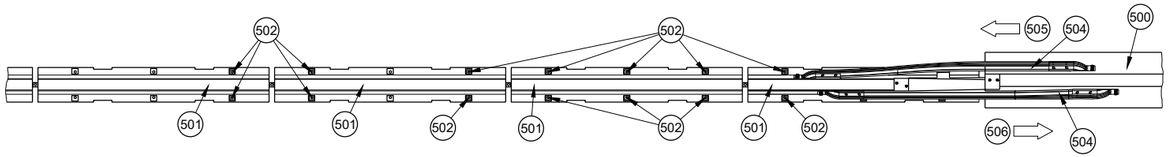
(518) CAP ASSEMBLY

(519) 4" MAX. GAP BETWEEN TEMPORARY BARRIER AND RIGID BARRIER.

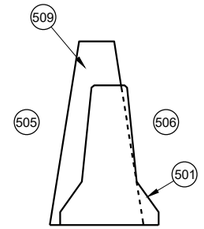
(520) ALL TWELVE SPLICE HOLES REQUIRE M1 AND M2



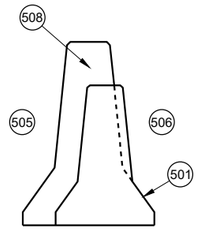
PROFILE VIEW



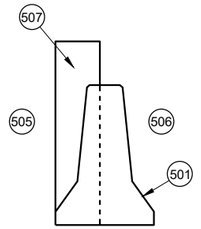
PLAN VIEW



CROSS SECTION TEMPORARY BARRIER PLACEMENT SINGLE SLOPE

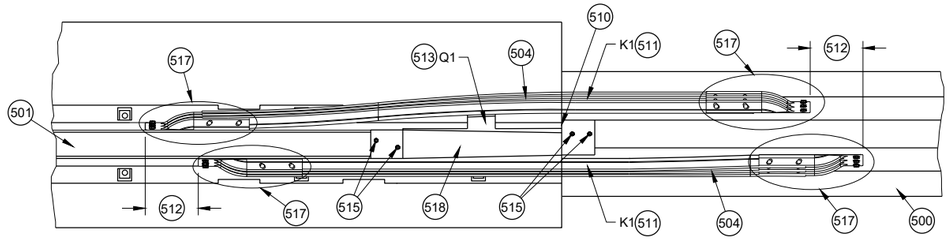


CROSS SECTION TEMPORARY BARRIER PLACEMENT SAFETY SHAPE

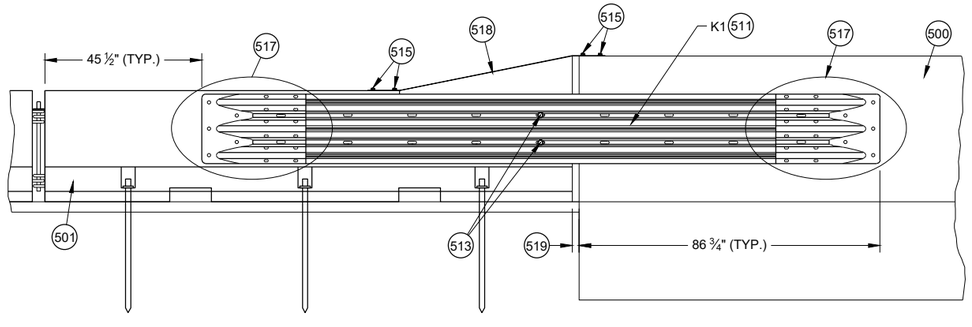


CROSS SECTION TEMPORARY BARRIER PLACEMENT VERTICAL

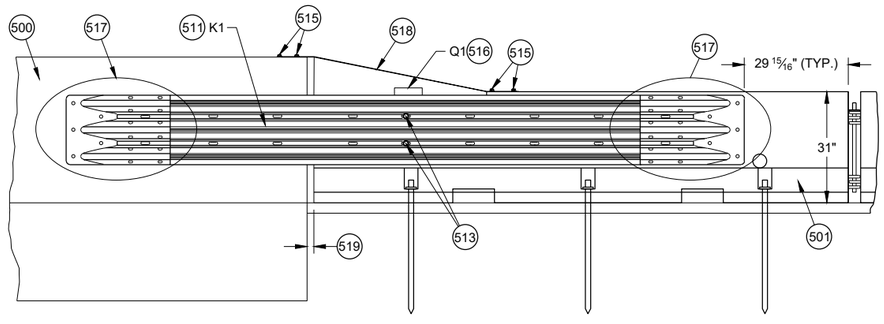
PLAN VIEW
TRANSITION TO RIGID BARRIER



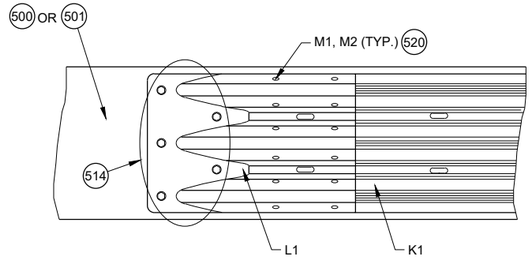
PLAN DETAIL VIEW
TRANSITION TO RIGID BARRIER



FRONT DETAIL VIEW
TRANSITION TO RIGID BARRIER



BACK DETAIL VIEW
TRANSITION TO RIGID BARRIER



(517) DETAIL PLAN VIEW
THRIE BEAM RAIL TERMINAL CONNECTOR ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

6

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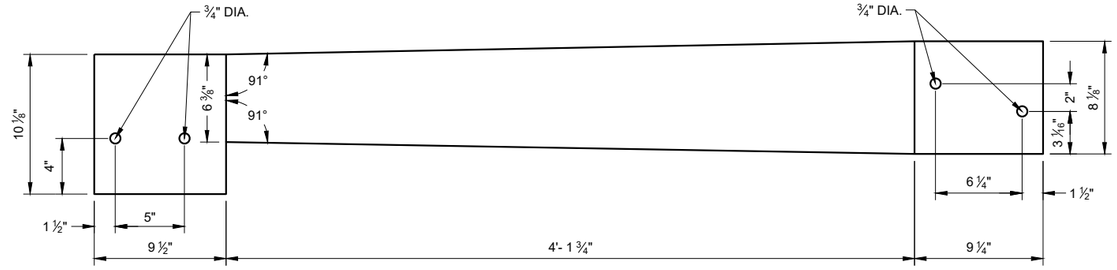
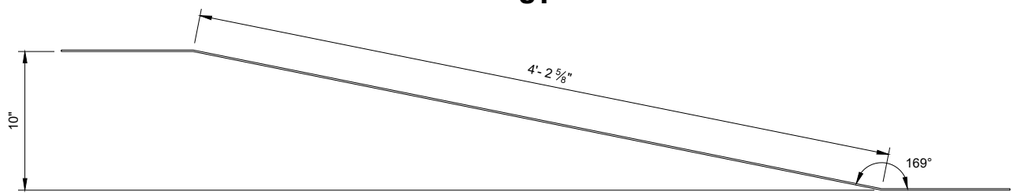


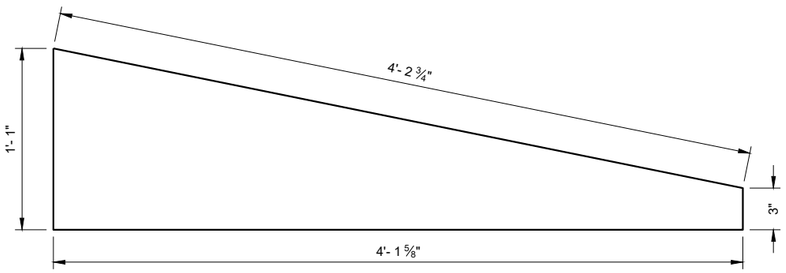
TOP VIEW

S1



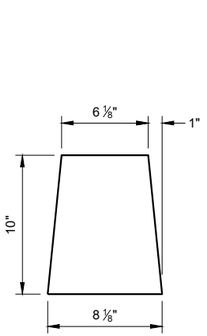
ELEVATION VIEW

S1

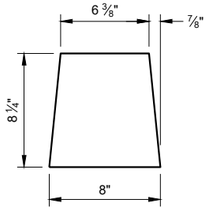


SIDE VIEW

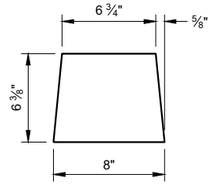
S3



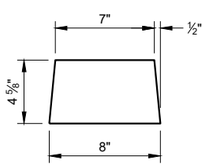
S2



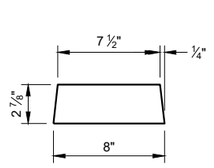
S4



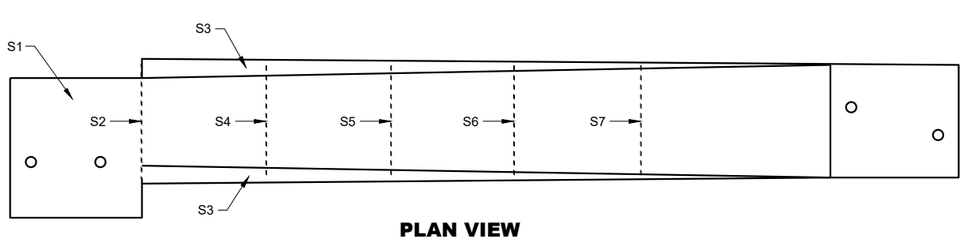
S5



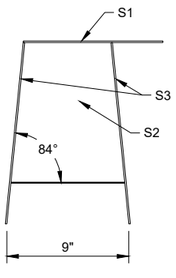
S6



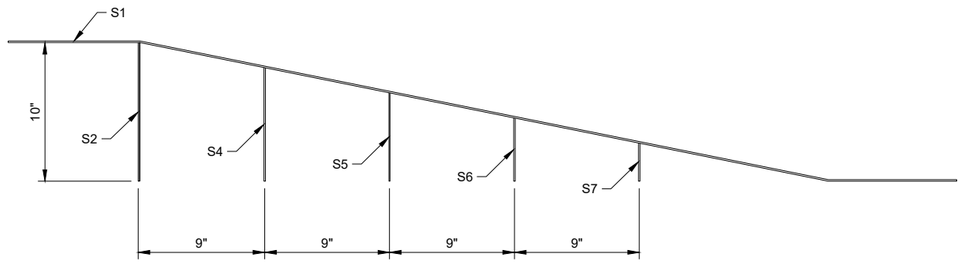
S7



PLAN VIEW



BACK VIEW



SIDE VIEW (600)

42" TOP CAP ASSEMBLY

GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THREE SIDES

STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

(600) SIDE PLATES (S3) NOT SHOWN FOR CLARITY.

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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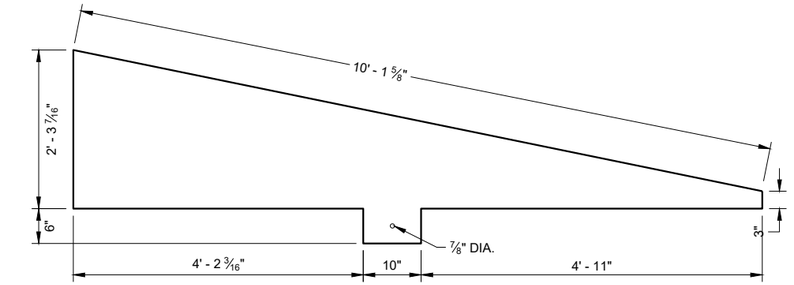
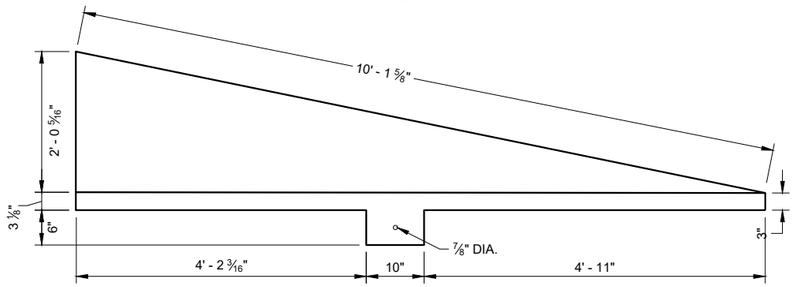


SIDE VIEW
T4

END VIEW



SIDE VIEW
T3

END VIEW

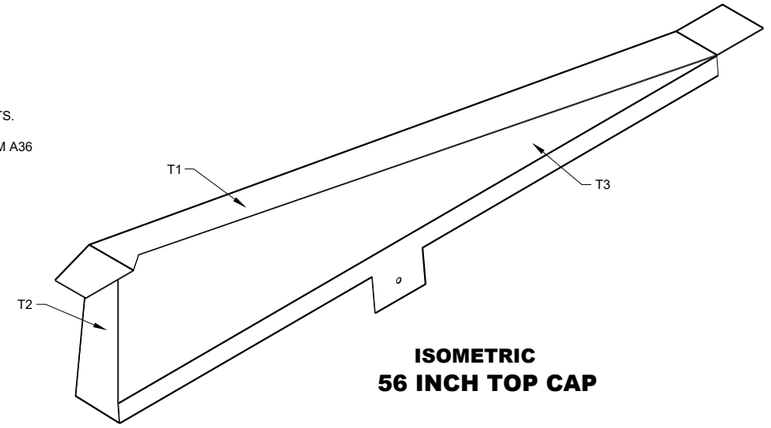
GENERAL NOTES

STITCH WELD GUSSET PLATES AND END PLATES ON THRIE SIDES

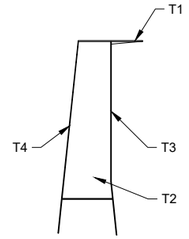
STITCH WELD TWO SIDE PLATES TO TOP PLATE, END PLATE AND GUSSETS.

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

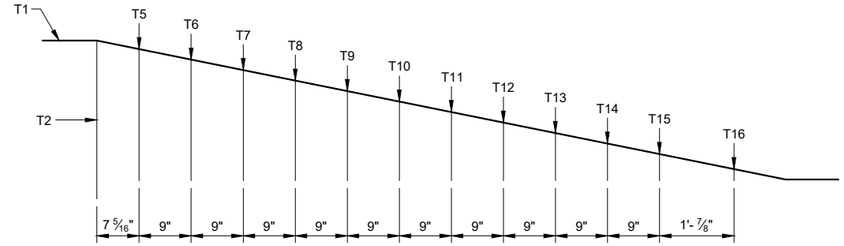
(700) SIDE PLATES (T3 AND T4) NOT SHOWN FOR CLARITY.



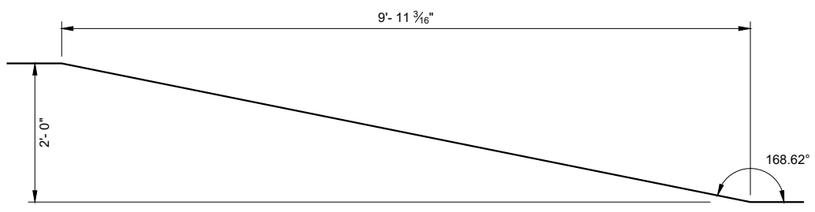
ISOMETRIC
56 INCH TOP CAP



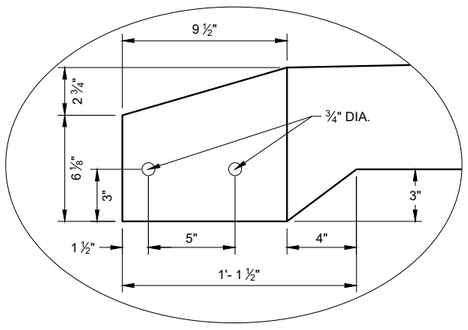
END VIEW
56 INCH TOP CAP



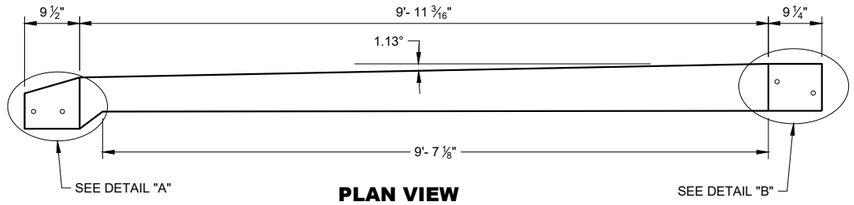
SIDE VIEW (700)
56 INCH TOP CAP



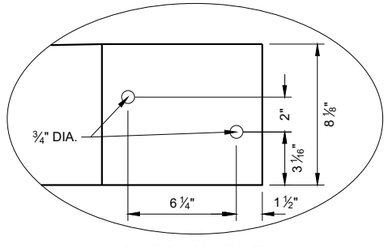
SIDE VIEW
TOP PLATE T1



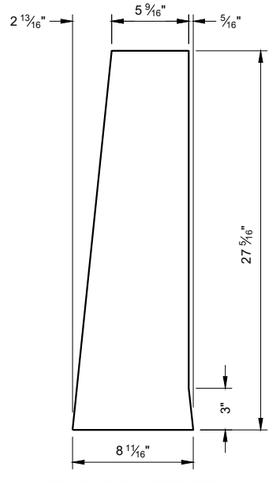
DETAIL "A"



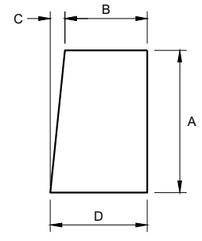
PLAN VIEW
TOP PLATE T1



DETAIL "B"



END PLATE T2



GUSSET PLATES
T5 - T16

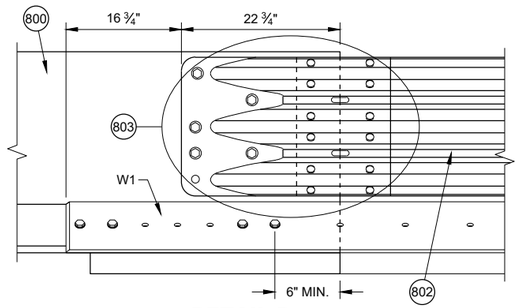
GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
T5	22 13/16"	5 1/16"	2 5/16"	8 1/16"
T6	21"	5 7/8"	2 3/16"	8 1/16"
T7	19 3/16"	6 1/16"	1 15/16"	8 1/16"
T8	17 3/8"	6 1/4"	1 13/16"	8 1/16"
T9	15 5/16"	6 7/16"	1 9/16"	8 1/16"
T10	13 3/4"	6 5/8"	1 7/16"	8 1/16"
T11	11 15/16"	6 13/16"	1 1/4"	8 1/16"
T12	10 1/8"	7"	1 1/16"	8 1/16"
T13	8 5/16"	7 3/16"	7/8"	8 1/16"
T14	6 1/2"	7 3/8"	1 1/16"	8 1/16"
T15	4 11/16"	7 9/16"	1/2"	8"
T16	2 7/8"	7 3/4"	1/4"	8"

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

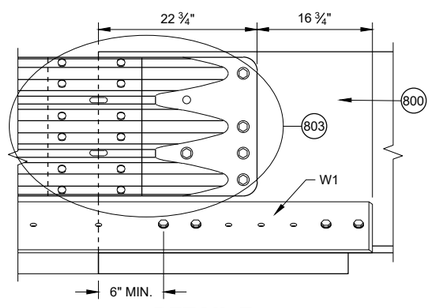
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

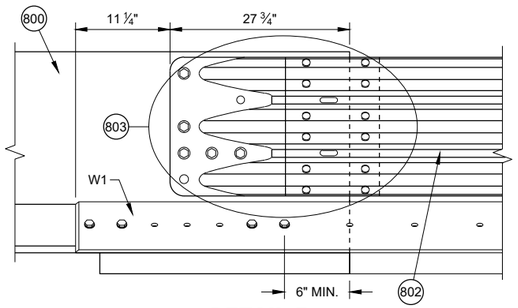
SDD 14B07-16g



DETAIL D



DETAIL E



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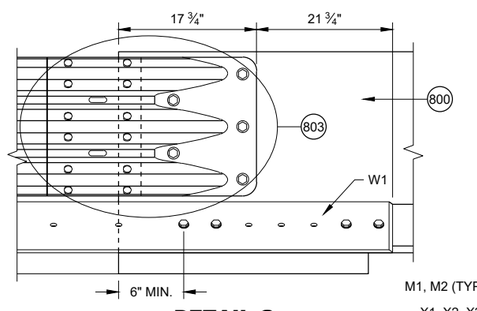
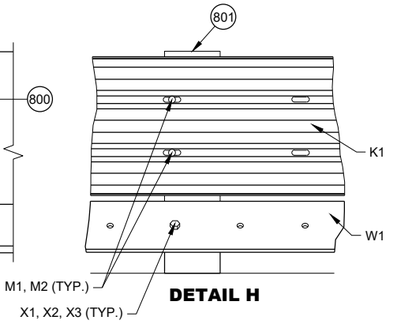
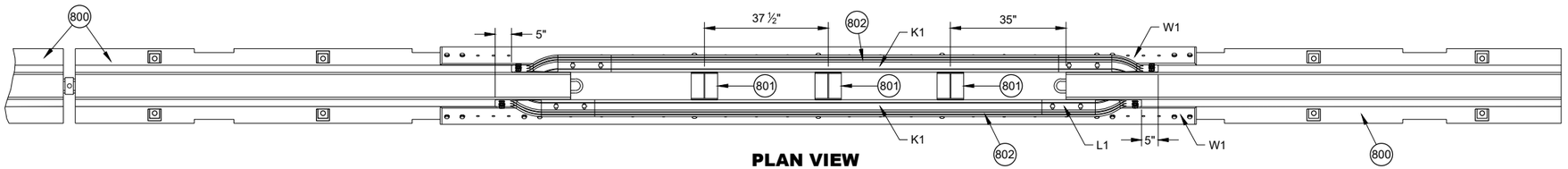


DETAIL G



DETAIL H



PLAN VIEW

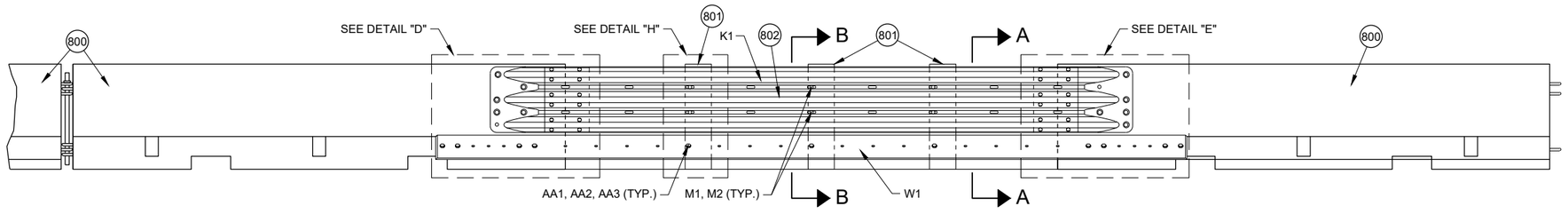
GENERAL NOTES

(800) FREE STANDING TEMPORARY BARRIER

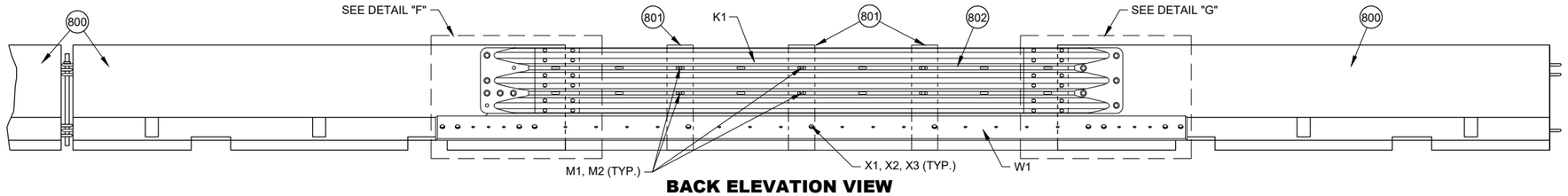
(801) GAP STIFFENER ASSEMBLY

(802) THRIE BEAMS ARE NESTED ON BOTH SIDES OF THE TEMPORARY BARRIER.

(803) SEE THRIE BEAM RAIL TERMINAL CONNECTOR DETAIL



FRONT ELEVATION VIEW



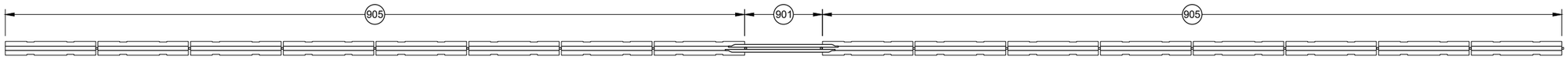
BACK ELEVATION VIEW

PORTABLE CONCRETE BARRIER GAP THRIE BEAM COVER

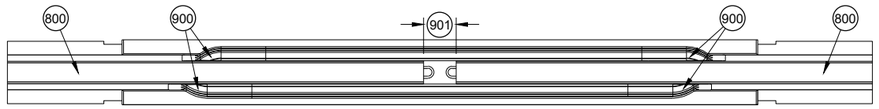
CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16h



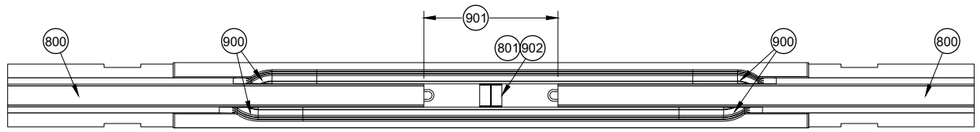
PLAN VIEW
GAP WITHIN SPACING



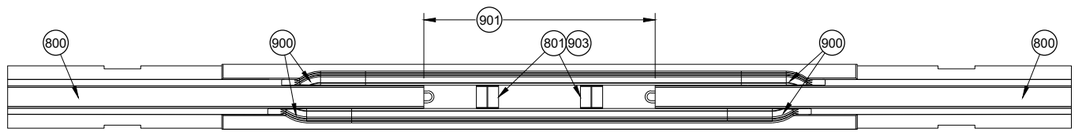
PLAN VIEW
TEMPORARY BARRIER GAP OVER 4" TO 1' MAX. (904)

GENERAL NOTES

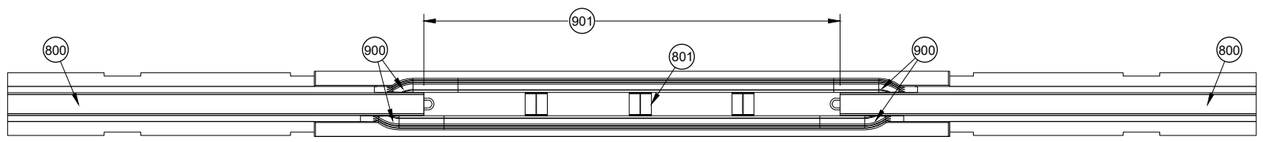
(900) SEE OTHER DETAILS FOR TEMPORARY GAP HARDWARE (TYP.)
(901) TEMPORARY BARRIER GAP
(902) GAP STIFFENER ASSEMBLY CENTERED IN THE GAP.
(903) GAP STIFFENER ASSEMBLY IS OFFSET 18 ¾" FROM CENTER
(904) MINIMUM NUMBER OF GAP STIFFENERS SHOWN FOR THE GAP RANGE SHOWN.
(905) MINIMUM OF 8 CONTINUOUS FREE STANDING TEMPORARY BARRIERS



PLAN VIEW
TEMPORARY BARRIER GAP OVER 1' TO 4' MAX. (904)



PLAN VIEW
TEMPORARY BARRIER GAP OVER 4' TO 7' MAX. (904)

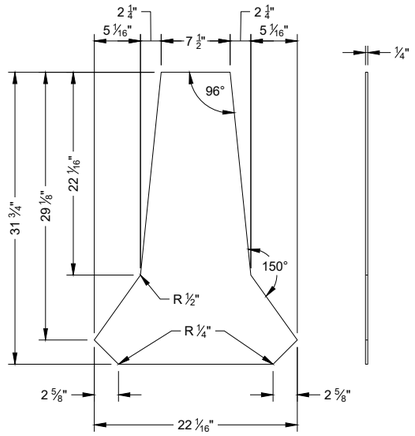


PLAN VIEW
TEMPORARY BARRIER GAP OVER 7' TO 12.5' MAX. (904)

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

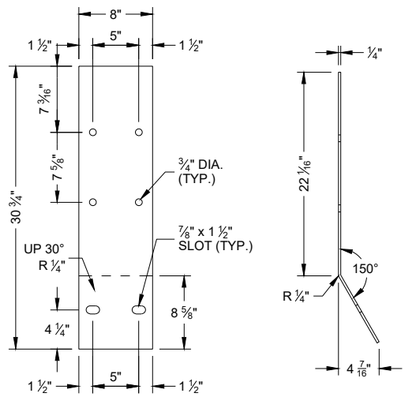
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B07-16i



PROFILE VIEW SIDE VIEW

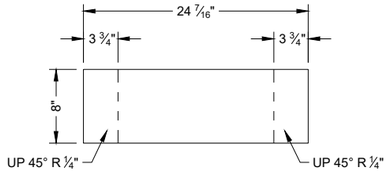
STIFFENER ASSEMBLY CENTER PANEL U1



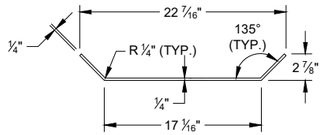
FLAT PATTERN

SIDE VIEW

STIFFENER ASSEMBLY SIDE PANEL U2

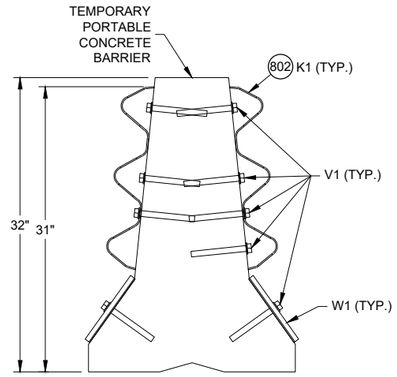


FLAT PATTERN

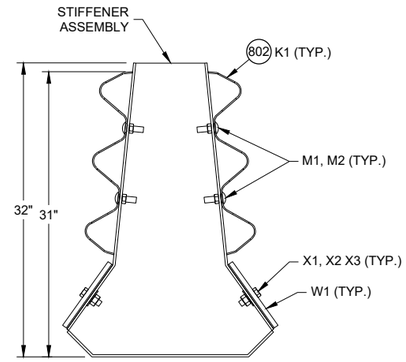


PROFILE VIEW

STIFFENER ASSEMBLY BOTTOM PANEL U3

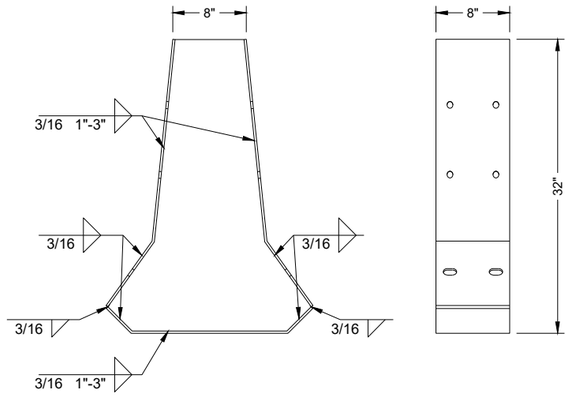


SECTION A - A



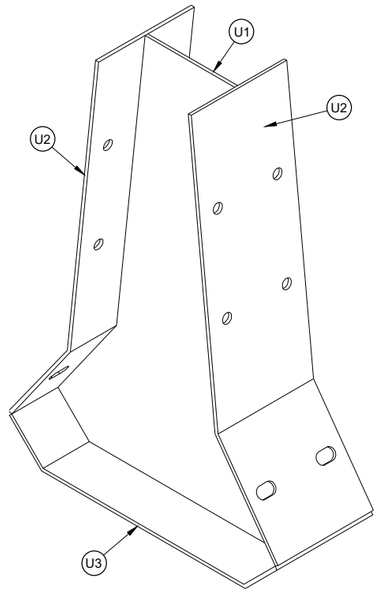
SECTION B - B

PLAN VIEW



PROFILE VIEW

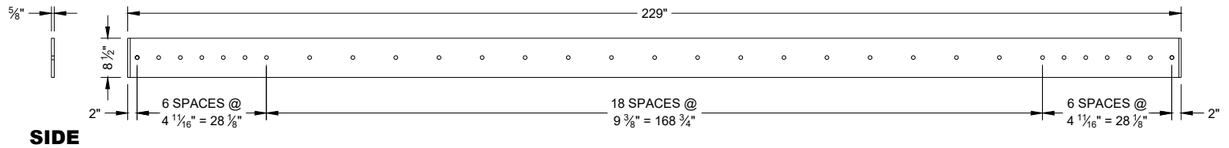
SIDE VIEW



ISOMETRIC

GAP STIFFENER ASSEMBLY

PLAN VIEW

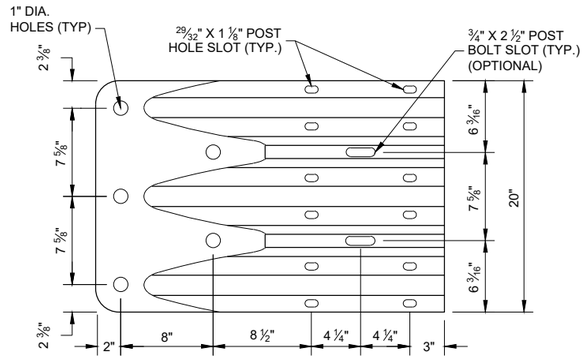


SIDE VIEW

ELEVATION VIEW

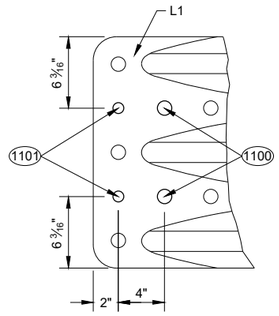
W1 TOE PLATE

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"



ELEVATION VIEW

THRIE BEAM TERMINAL CONNECTOR



ELEVATION VIEW

ADDITIONAL THRIE BEAM (1102) TERMINAL CONNECTOR HOLE DETAIL

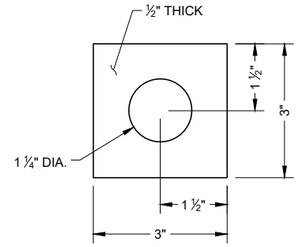


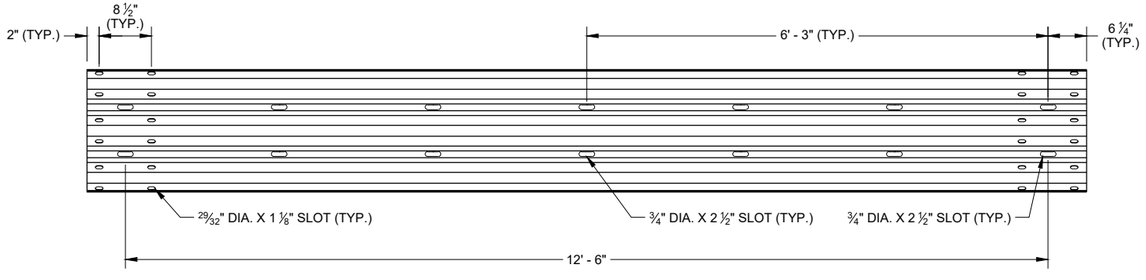
PLATE WASHER DETAIL G2, H3

GENERAL NOTES

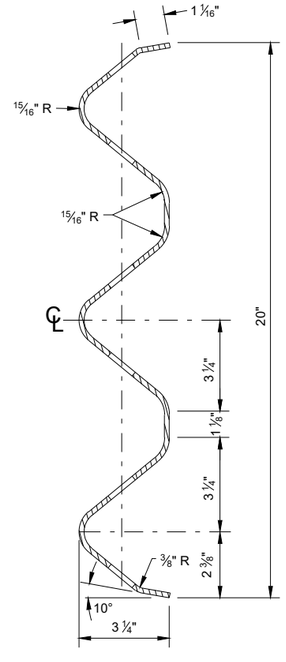
(1100) 1" DIA. HOLE

(1101) 3/4" DIA. HOLE

(1102) PROVIDE HOLES IN THRIE BEAM TERMINAL CONNECTOR TO LIMIT STEEL REINFORCEMENT OR LOOP BAR CONFLICT. CONTRACTOR MAY FIELD DRILL ADDITIONAL HOLE OR PROVIDE THRIE BEAM TERMINAL CONNECTOR WITH ADDITIONAL HOLES FROM SUPPLIER.



SLOTTED THRIE BEAM RAIL K1



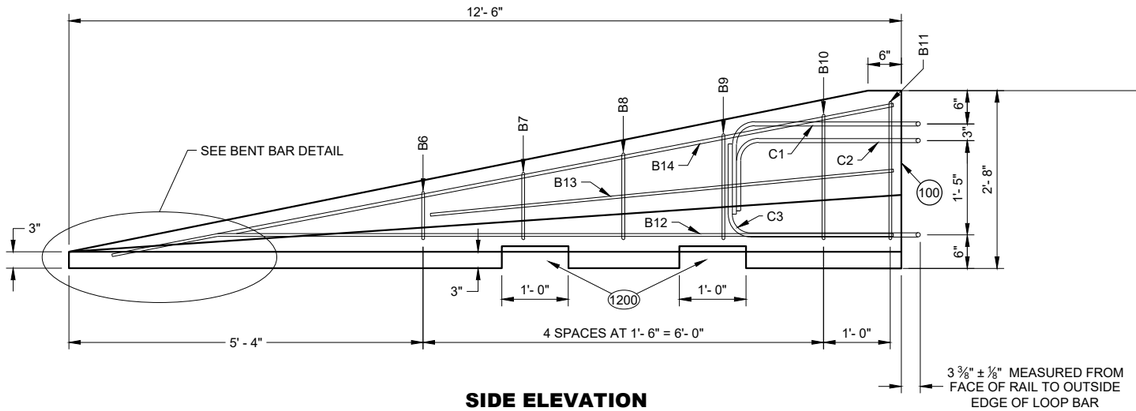
SECTION THROUGH BEAM K1

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

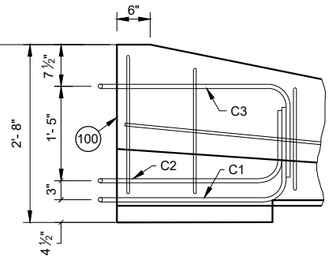
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16k



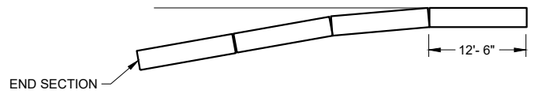
SIDE ELEVATION
(FOR CONNECTION TO LEFT END OF BARRIER)



SIDE ELEVATION
LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END
(FOR CONNECTION TO RIGHT END OF BARRIER)

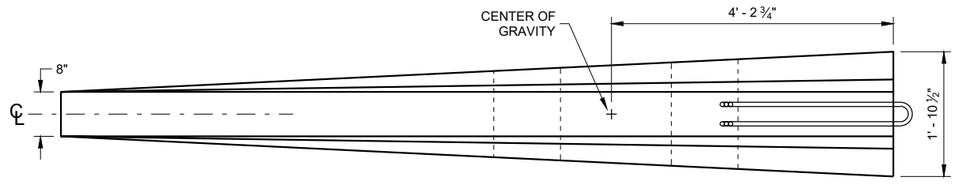
GENERAL NOTES

(1200) SEE LIFTING SLOT DETAIL. LOCATION OF LIFTING SLOTS DETERMINED BY CONTRACTOR.

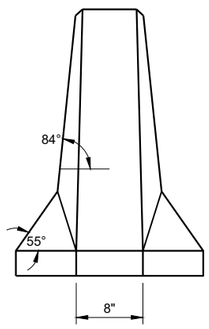


FLARE AT BARRIER END

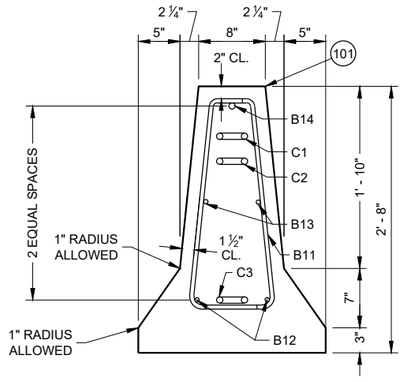
POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1



PLAN VIEW

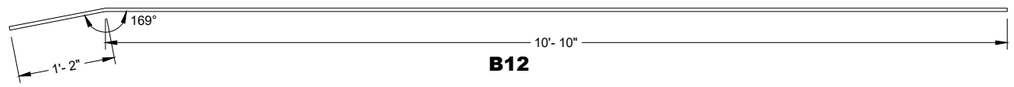


FRONT ELEVATION

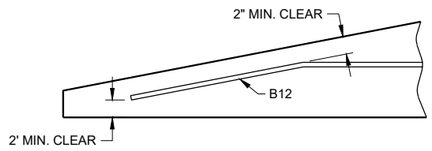


END SECTION

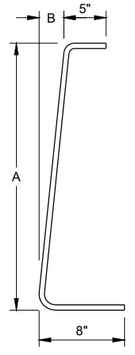
DETAILS OF BARRIER TAPER SECTION



B12



BENT BAR DETAIL



BAR	A	B
B6	10"	1"
B7	1'- 1"	1 ¼"
B8	1'- 5"	1 ⅝"
B9	1'- 8"	1 ⅞"
B10	2'- 0 ½"	2 ⅜"
B11	2'- 3"	2 ¾"

B BARS

2 OF EACH SIZE REQUIRED FOR STIRRUP ASSEMBLY

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	PRECAST TEMPORARY BARRIER - CONCRETE	MIN. = f'c 5000 PSI	
B1	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B2	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-2"
B3	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 12'-2"
B4	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 6'-0"
B5	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#6 REBAR, LENGTH 2'-11"
B6	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 1'-11"
B7	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-2"
B8	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-6"
B9	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 2'-9"
B10	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-2"
B11	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 3'-4"
B12	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 12'-0"
B13	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#4 REBAR, LENGTH 7'-9"
B14	REBAR	STANDARD SPEC. 505.2 GRADE 60 UNCOATED REBAR	#5 REBAR, LENGTH 11'-9"
C1	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C2	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
C3	LOOP BAR	ASTM A709 GRADE 70 SMOOTH BAR OR ASTM A706 GRADE 60 REBAR UNCOATED	¾" DIA.
D1	CONNECTION PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ¼" DIA.
D2	CONNECTION PIN - TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G1	BOLT THROUGH ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A OR SAE J429 GRADE 2 UNC	1 ⅛" DIA.
G2	BOLT THROUGH ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
G3	BOLT THROUGH ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
H1	ADHESIVE ANCHOR - ADHESIVE	ICC-ES-AC308 5 ¼" EMBEDMENT WITH A MIN. BOND STRENGTH OF 1,650 PSI. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
H2	ADHESIVE ANCHOR - THREADED ROD	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 A307 GRADE A / SAE J429 GRADE 2 UNC	1 ⅛" DIA.
H3	ADHESIVE ANCHOR - WASHER, SQUARE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
H4	ADHESIVE ANCHOR - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
J1	ASPHALT ANCHOR PIN - ROD	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	1 ½" DIA.
J2	ASPHALT ANCHOR PIN - STOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI / ASTM A529 MAX. STRENGTH 50 KSI / ASTM A572 MAX STRENGTH 50 KSI / ASTM A709 MAX STRENGTH 50 KSI / ASTM A992 MAX STRENGTH 50 KSI	
K1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE
L1	THRIE BEAM RAIL - TERMINAL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER	12 GAUGE

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
M1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	⅝" DIA.
M2	SPLICE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
N1	THRIE BEAM RAIL TERMINAL - MECHANICAL ANCHOR	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA. LENGTH 6"
N2	THRIE BEAM RAIL TERMINAL - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
N3	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
P1	THRIE BEAM RAIL CONNECTION 1-BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	¾" DIA.
P2	THRIE BEAM RAIL CONNECTION 1-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
P3	THRIE BEAM RAIL CONNETION 1- MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	
Q1	BLOCK WOOD	SEE STANDARD SPEC. 614	
R1	CAP - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	⅝" DIA.
R2	CAP- BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1	
R3	CAP - BOLT - MECHANICAL ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	12 GAUGE
S1	CAP 42-INCH TOP PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
S2	CAP 42-INCH END PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
S3	CAP 42-INCH SIDE PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
S4	CAP 42-INCH GUSSET 1	AASHTO M111 / ASTM A123 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	12 GAUGE
S5	CAP 42-INCH GUSSET 2	AASHTO M111 / ASTM A123 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	12 GAUGE
S6	CAP 42-INCH GUSSET 3	AASHTO M111 / ASTM A123 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	12 GAUGE
S7	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 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	12 GAUGE

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SDD 14B07-16m

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B07-16m

BILL OF MATERIALS - CONCRETE BARRIER PRECAST

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
T1	CAP 56-INCH TOP PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
T2	CAP 56-INCH END PLATE	AASHTO M111 / ASTM A123 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	12 GAUGE
T3	CAP 56-INCH SIDE PLATE 1	AASHTO M111 / ASTM A123 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	12 GAUGE
T4	CAP 56-INCH SIDE PLATE 2	AASHTO M111 / ASTM A123 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	12 GAUGE
T5	CAP 56-INCH GUSSET 1	AASHTO M111 / ASTM A123 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	12 GAUGE
T6	CAP 56-INCH GUSSET 2	AASHTO M111 / ASTM A123 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	12 GAUGE
T7	CAP 56-INCH GUSSET 3	AASHTO M111 / ASTM A123 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	12 GAUGE
T8	CAP 42-INCH GUSSET 4	AASHTO M111 / ASTM A123 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	12 GAUGE
T9	CAP 42-INCH GUSSET 5	AASHTO M111 / ASTM A123 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	12 GAUGE
T10	CAP 42-INCH GUSSET 6	AASHTO M111 / ASTM A123 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	12 GAUGE
T11	CAP 42-INCH GUSSET 7	AASHTO M111 / ASTM A123 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	12 GAUGE
T12	CAP 42-INCH GUSSET 8	AASHTO M111 / ASTM A123 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	12 GAUGE
T13	CAP 42-INCH GUSSET 9	AASHTO M111 / ASTM A123 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	12 GAUGE
T14	CAP 42-INCH GUSSET 10	AASHTO M111 / ASTM A123 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	12 GAUGE
T15	CAP 42-INCH GUSSET 11	AASHTO M111 / ASTM A123 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	12 GAUGE
T16	CAP 42-INCH GUSSET 12	AASHTO M111 / ASTM A123 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	12 GAUGE
U1	GAP STIFFENER	AASHTO M111 / ASTM A123 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	
U2	GAP STIFFENER - CONNECTOR PLATE 1	AASHTO M111 / ASTM A123 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	
U3	GAP STIFFENER - CONNECTOR PLATE 2	AASHTO M111 / ASTM A123 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	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
V1	THRIE BEAM RAIL TERMINAL MECHANICAL OR ADHESIVE ANCHOR	MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS ULTIMATE TENSILE LOAD 24.0 KIPS AND ULTIMATE SHEAR LOAD 21.5 KIPS. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.	¾" DIA.
V2	GAP STIFFENER - BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C O R MECHANICAL GALVANIZE TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
W1	TOE PLATE	AASHTO M111/ASTM A123 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	
X1	TOE PLATE - CONNECTION BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 UNC HEAVY HEX HEAD OR AASTHO M180 HEAD, ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED. PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	¾" DIA.
X2	TOE PLATE - CONNECTION BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 TYPE 2 F436 TYPE 1 (HARDEN WASHER ONLY)	
X3	TOE PLATE - CONNECTION BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GALVANIZE TO AASHTO M298 CLASS 55 TYPE 2 / ASTM B695 CLASS 55 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	

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SDD 14B07-16n

CONCRETE BARRIER TEMPORARY PRECAST, 12' - 6"

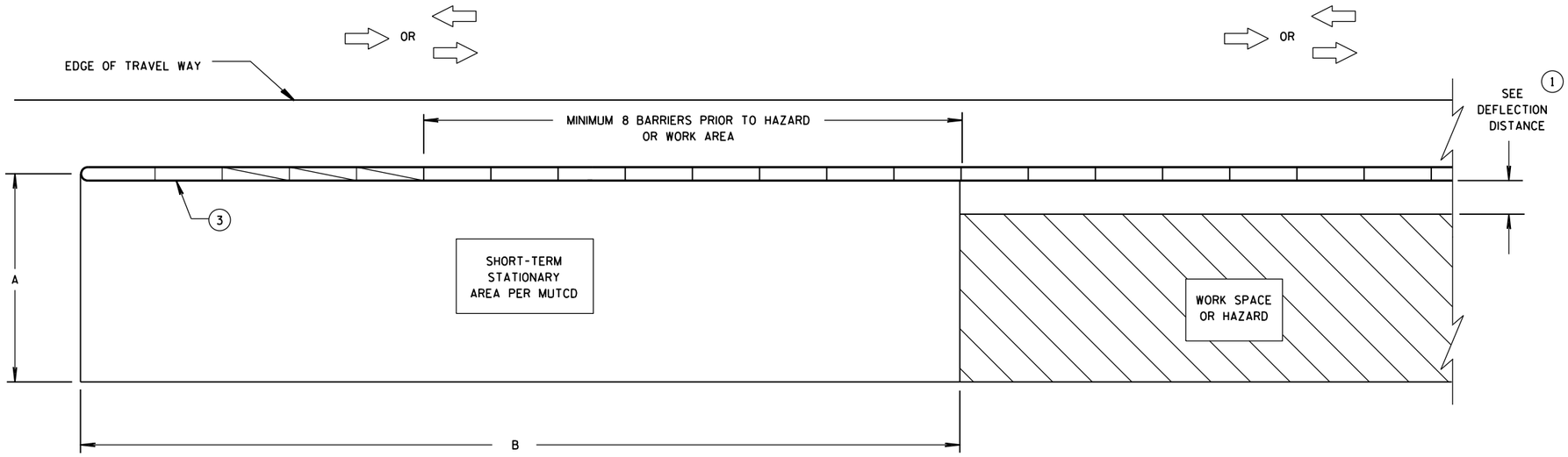
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B07-16n



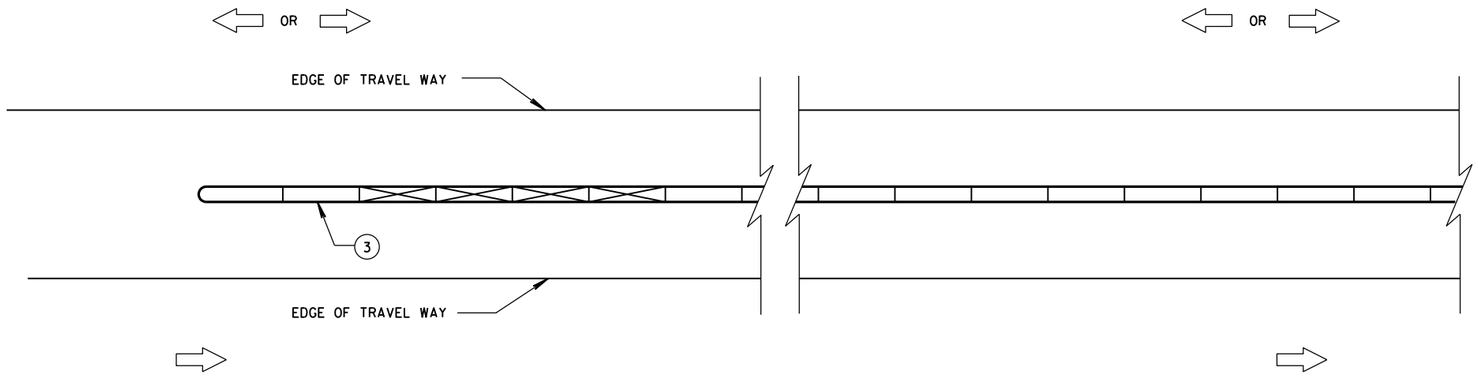
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 402

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S.D.D. 14 B 8-2a

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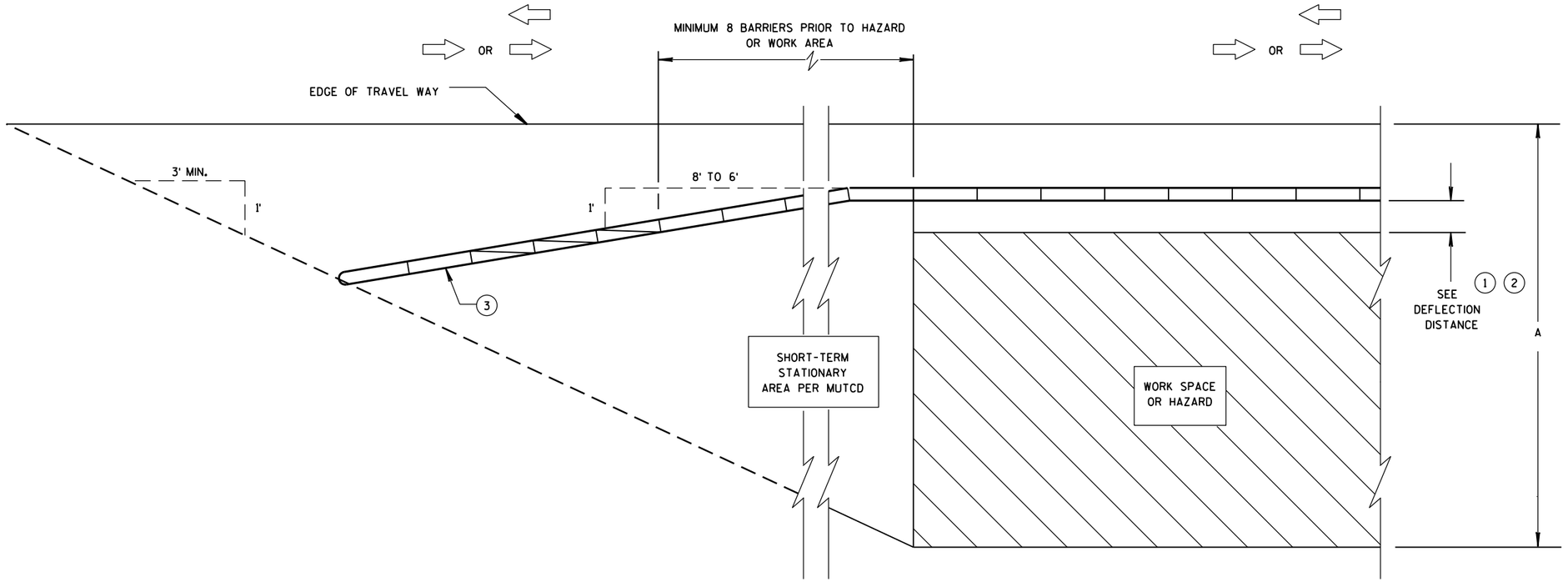
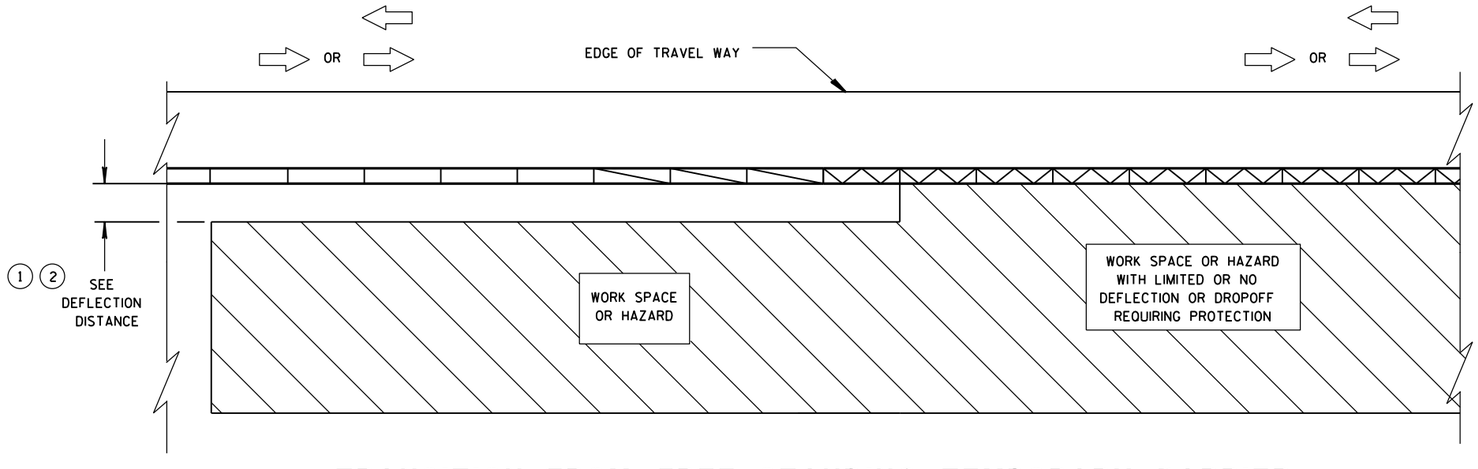
S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2b

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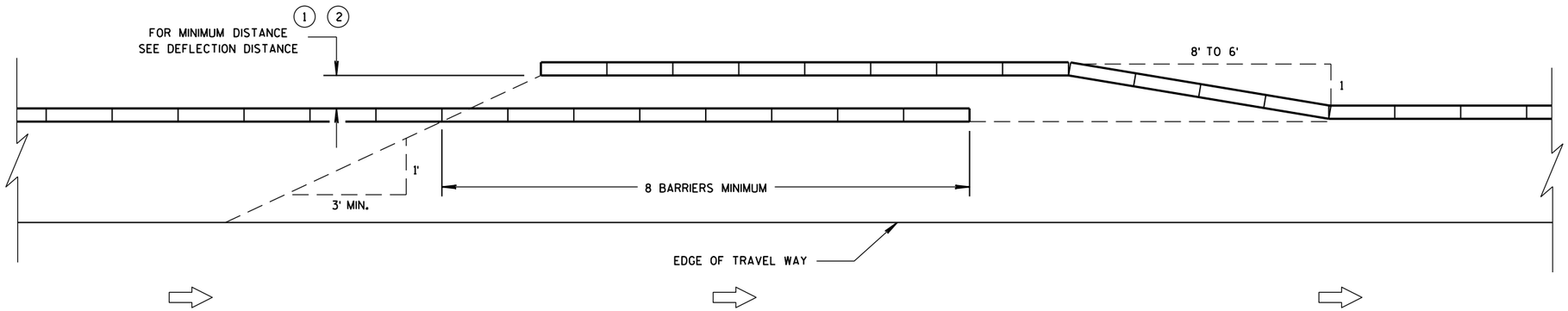
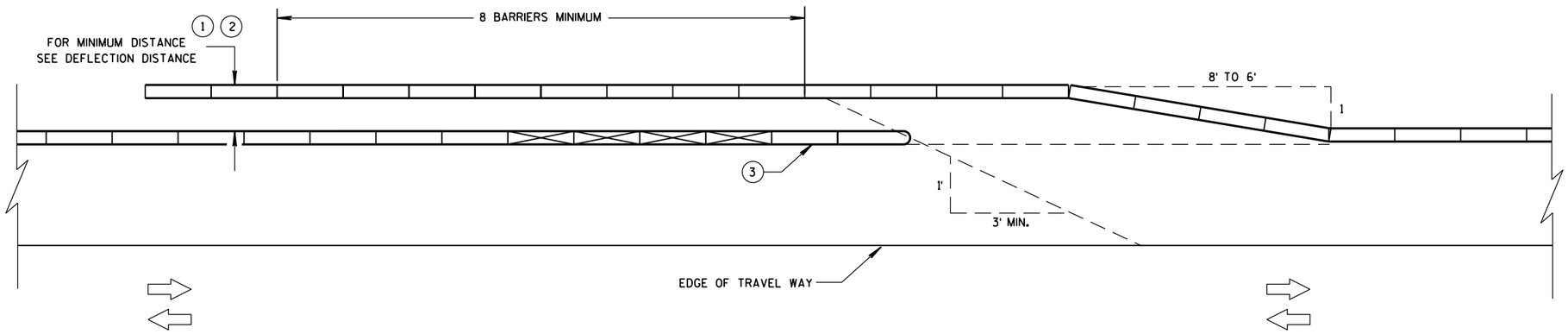
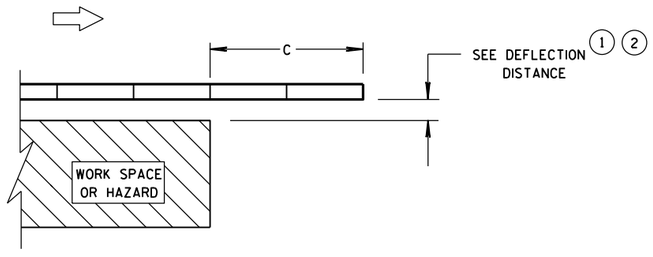
S.D.D. 14 B 8-2b



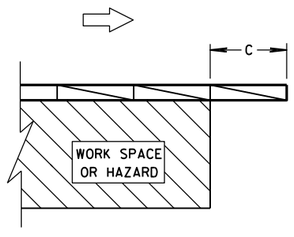
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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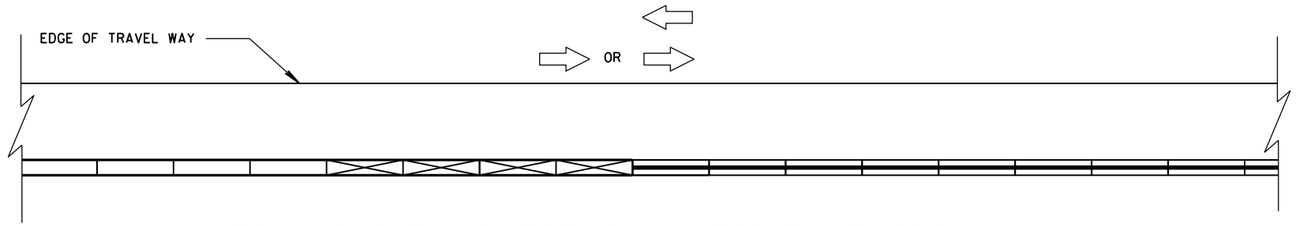
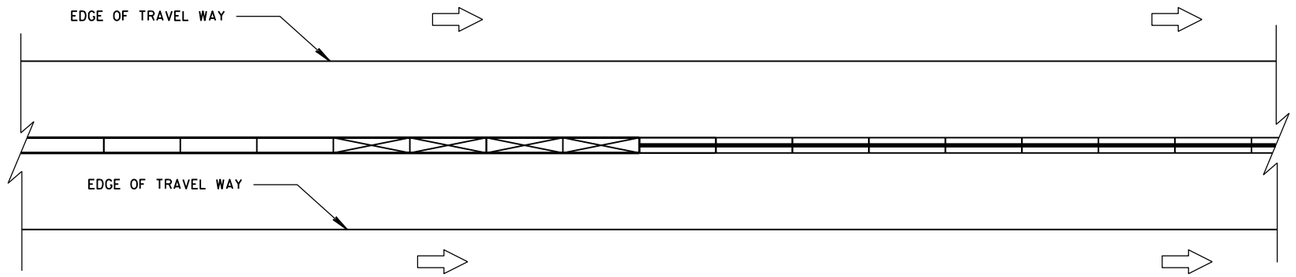
S.D.D. 14 B 8-2c



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR
SAND BARREL ARRAY

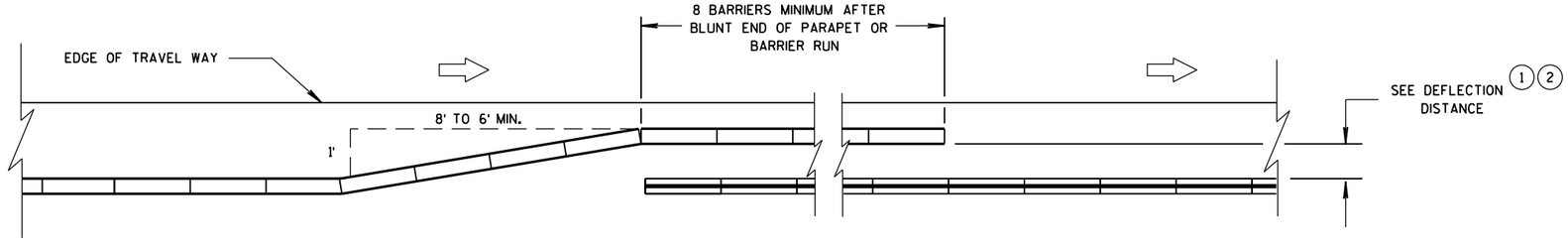
SEE FREE STANDING TRANSITION
TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION
TO TIED-DOWN SYSTEM DETAILS

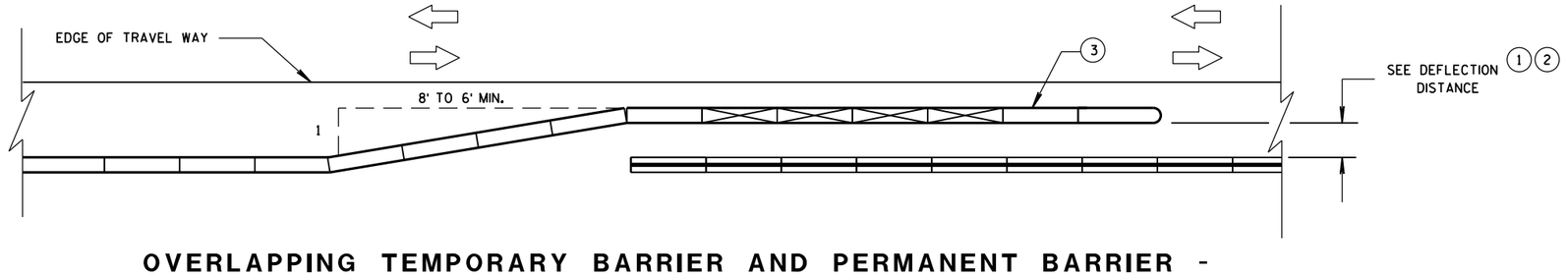
3 PINS PLACED ON
TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER
OR CONCRETE PARAPET

FREE STANDING TEMPORARY
BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL
ARRAY AND OTHER TEMPORARY
BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

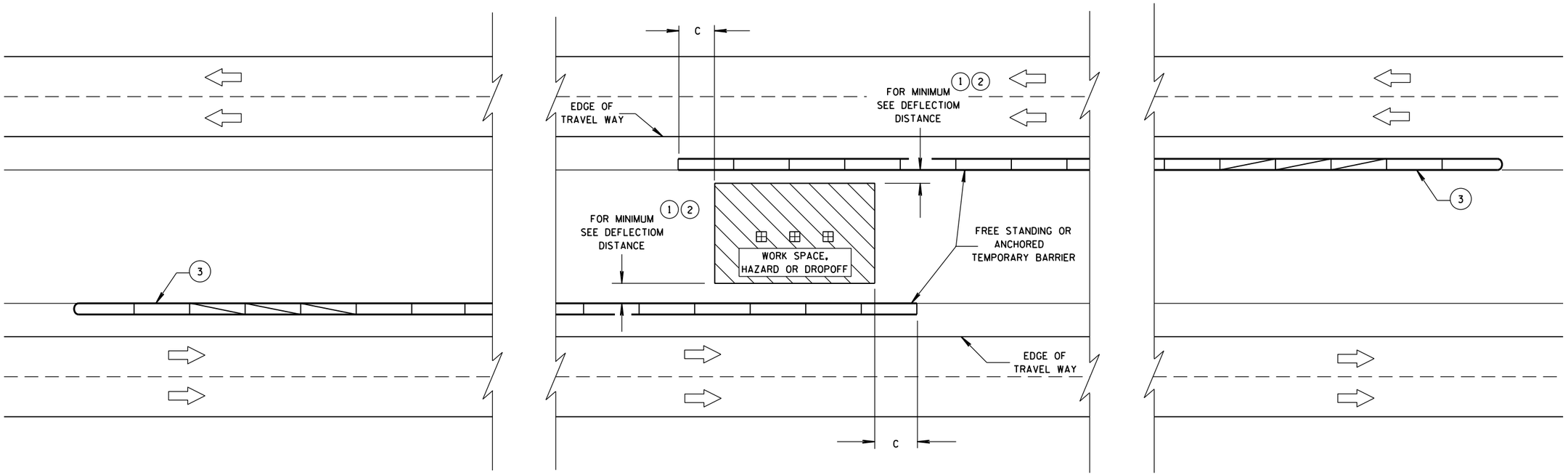
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



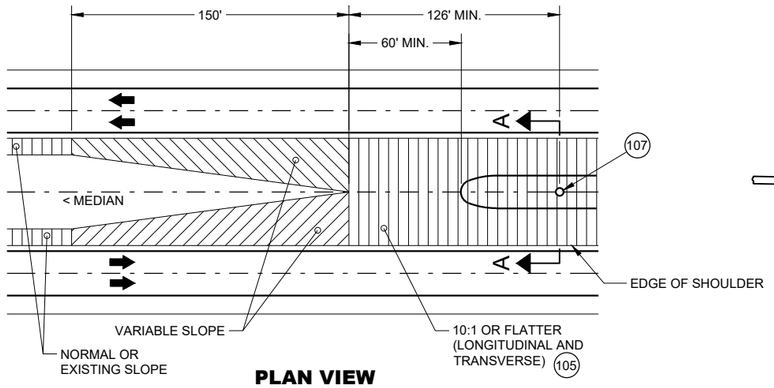
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

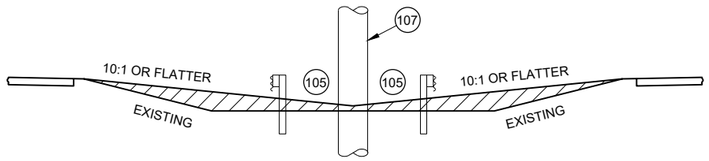
APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER
FHWA

6

S.D.D. 14 B 8-2e



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

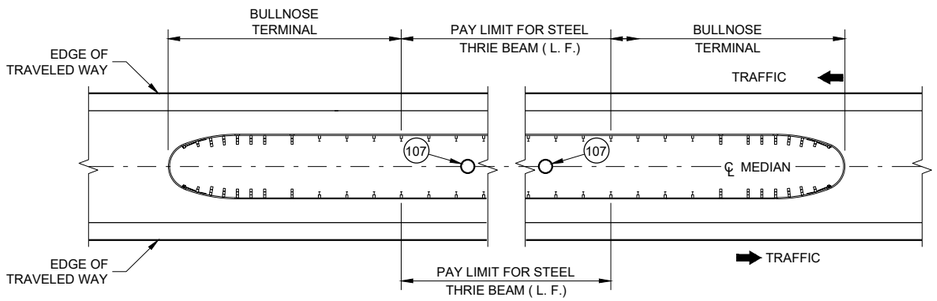
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

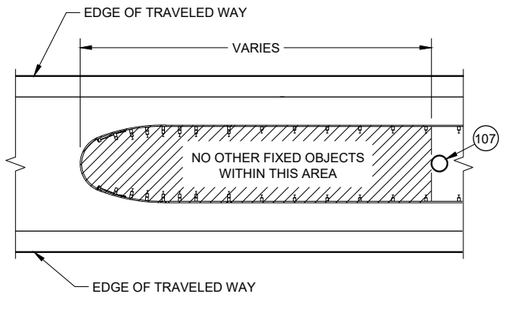
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

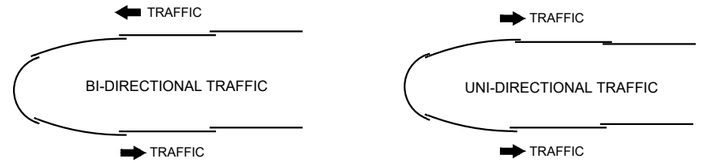
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



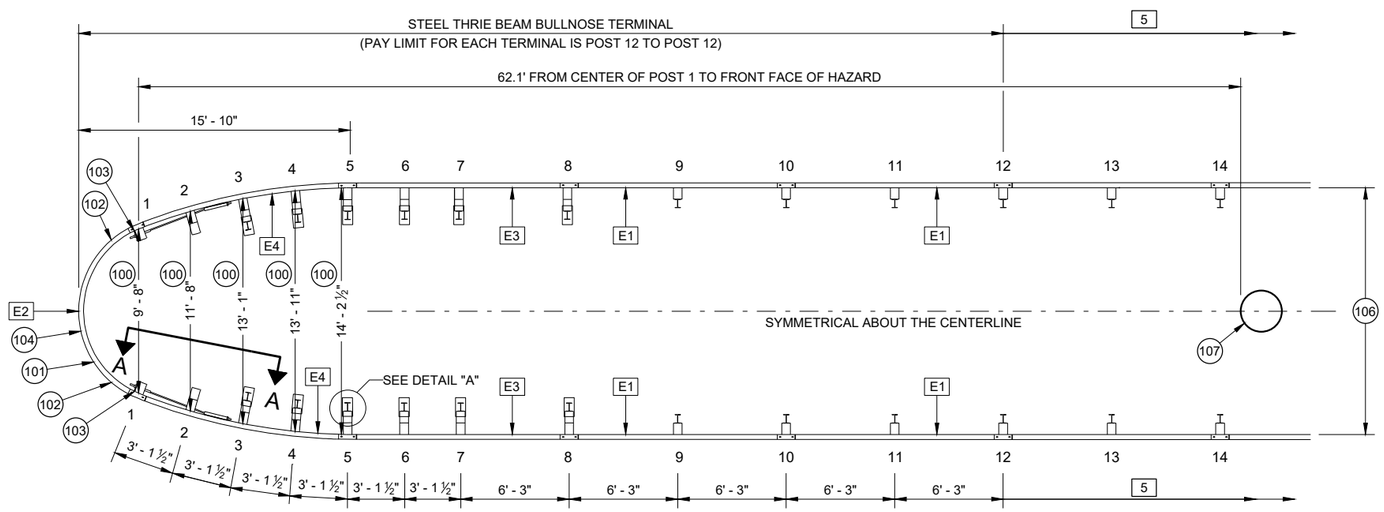
MEDIAN HAZARD PROTECTION PAY LIMITS



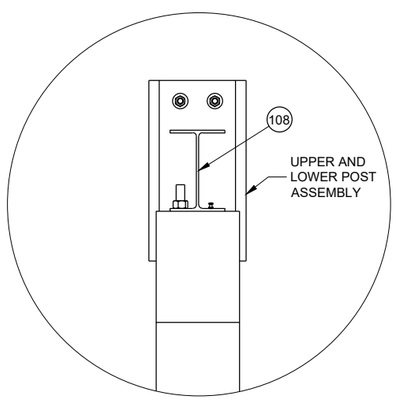
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



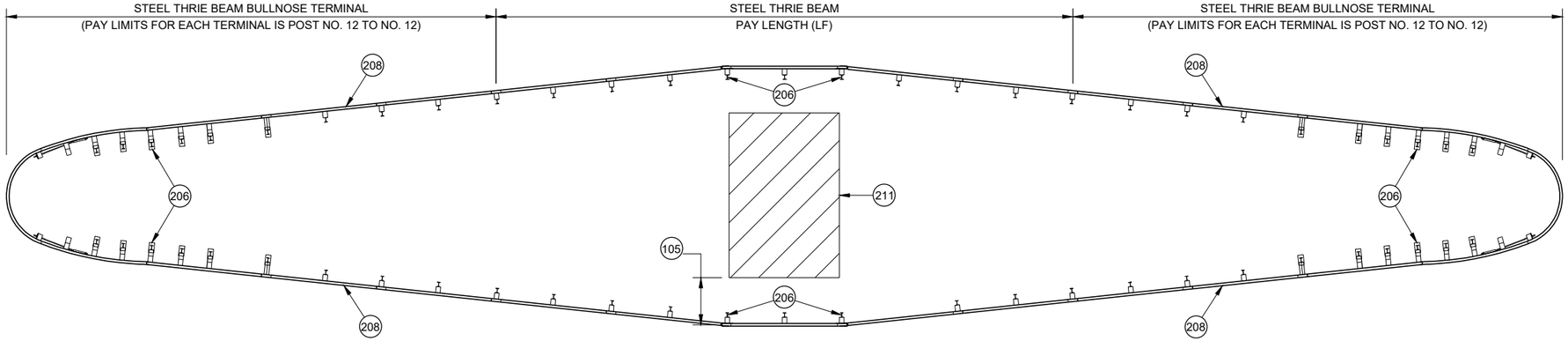
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B26 - 05a
SDD 14B26 - 05a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

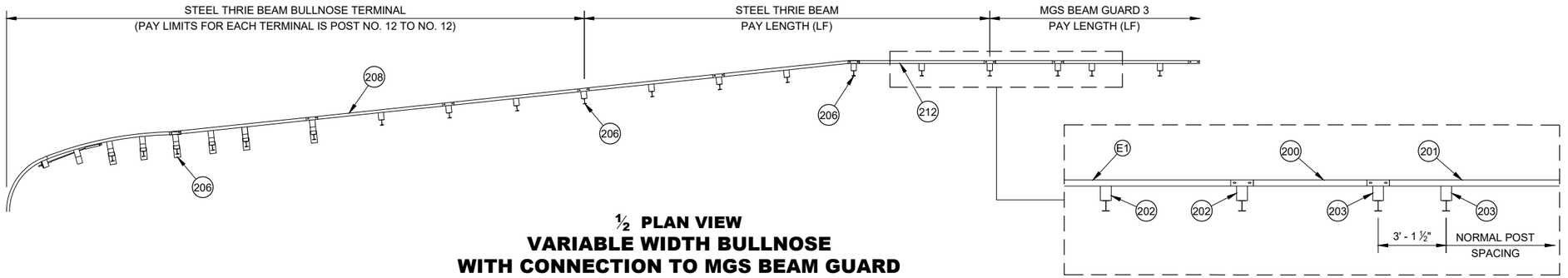
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

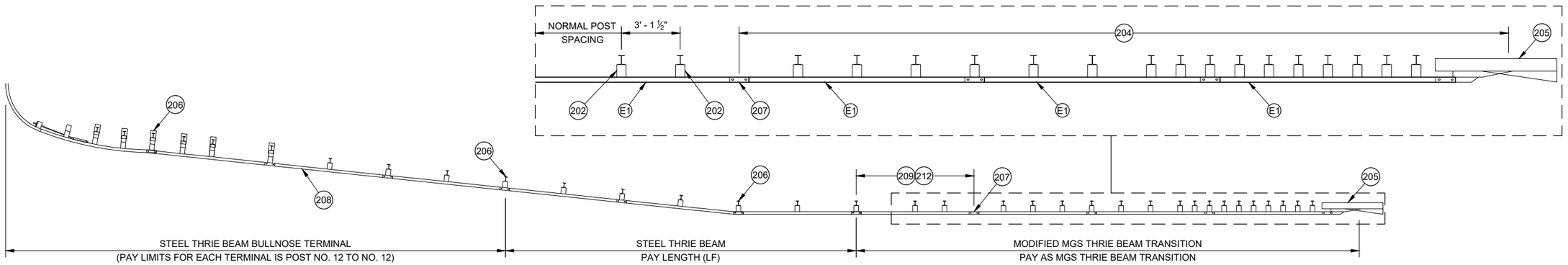
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE WITH CONNECTION TO MGS BEAM GUARD



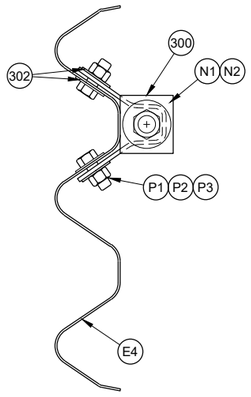
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

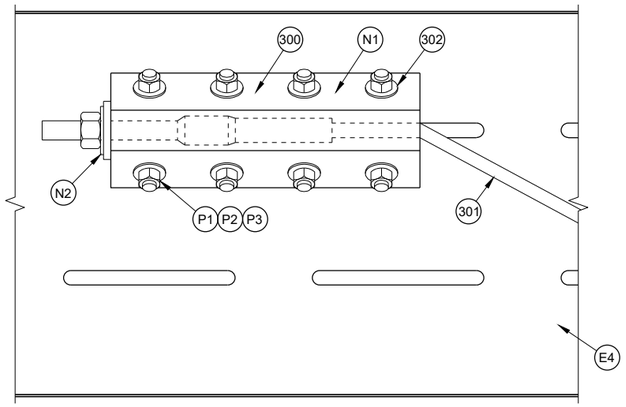
6

SDD 14B26 - 05b

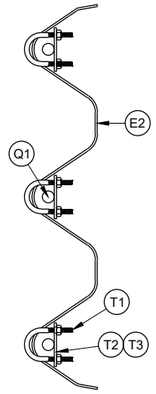


PROFILE VIEW

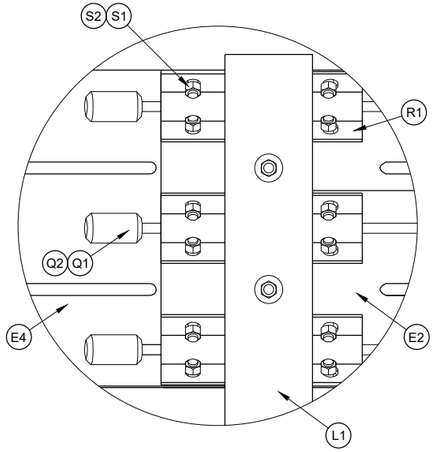
CABLE ANCHOR ASSEMBLY CONNECTION



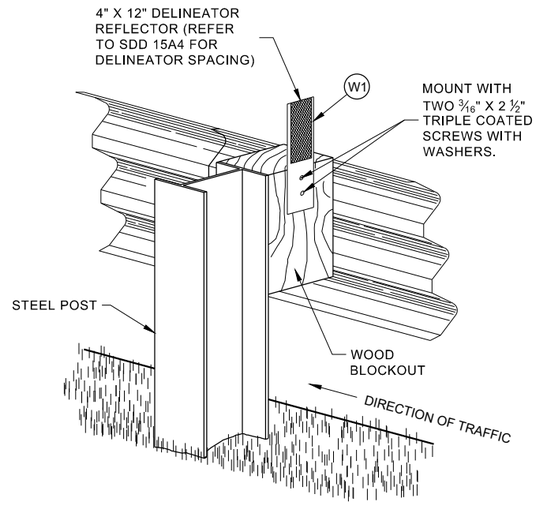
CABLE ANCHOR ASSEMBLY



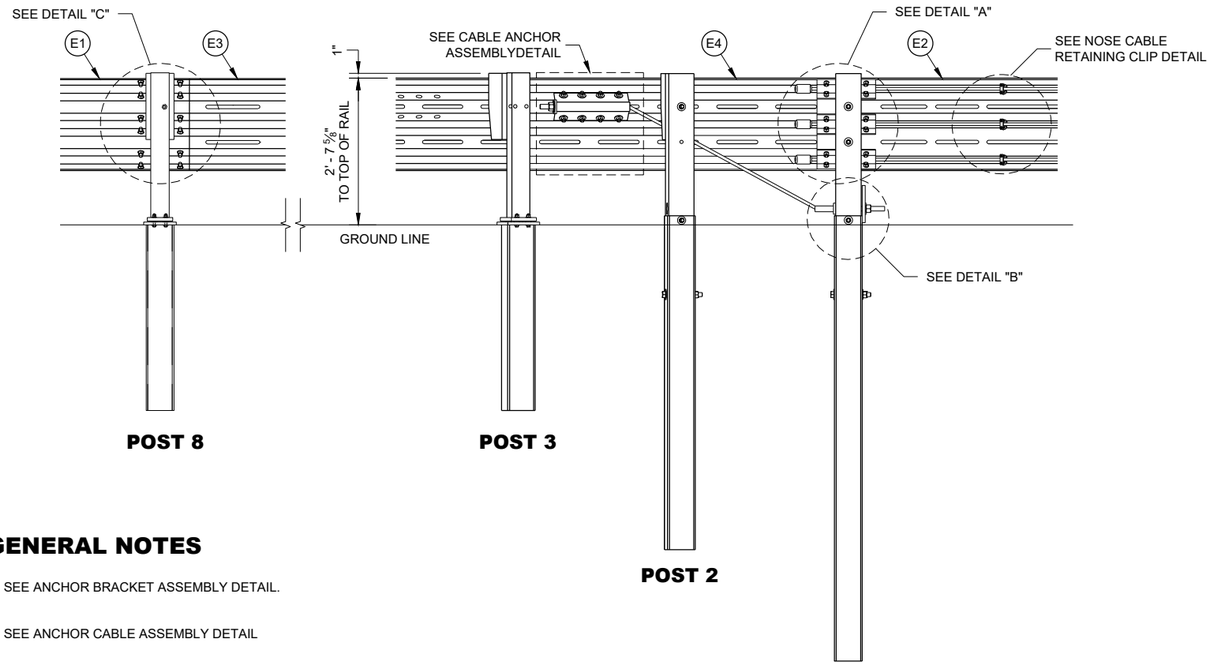
NOSE CABLE RETAINING CLIP



DETAIL "A"

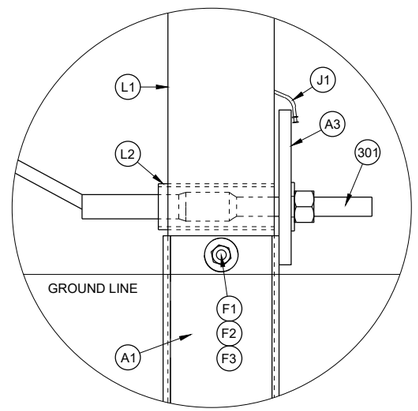


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

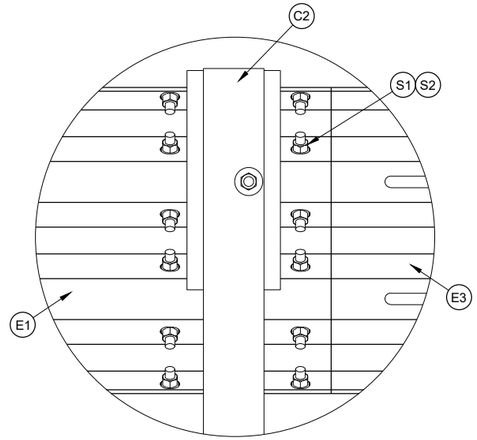


POST 8 **POST 3** **POST 2** **POST 1**

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

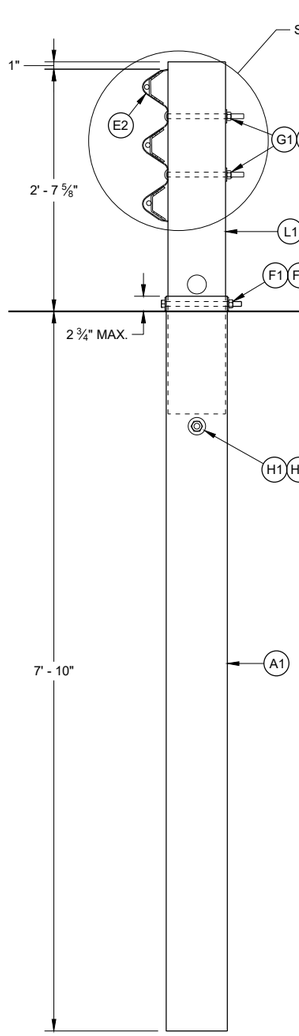
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

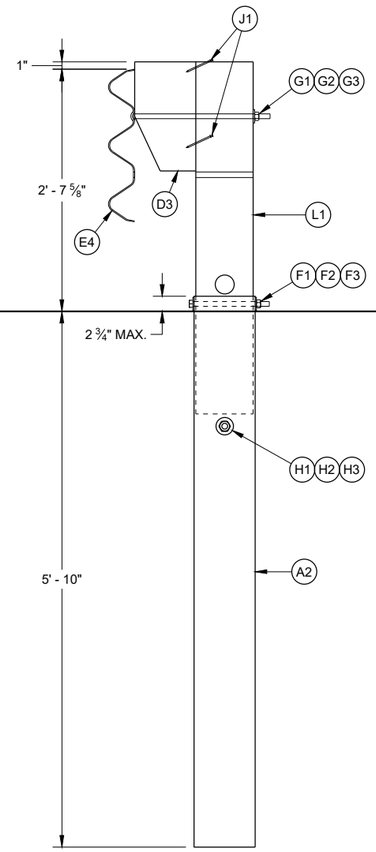
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

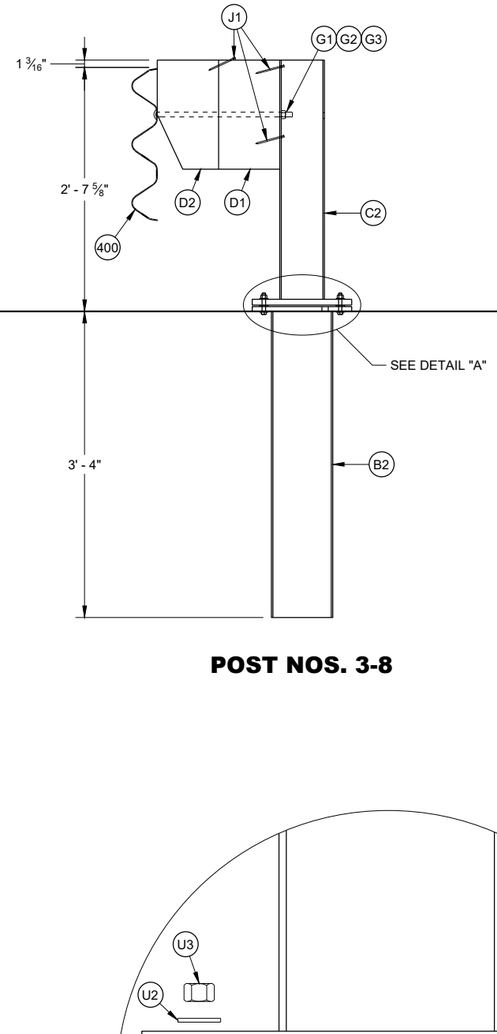
SDD 14B26 - 05c



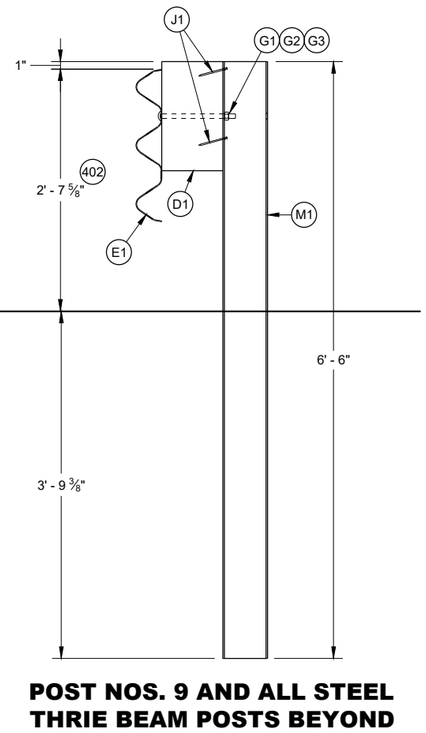
POST NO. 1



POST NO. 2



POST NOS. 3-8



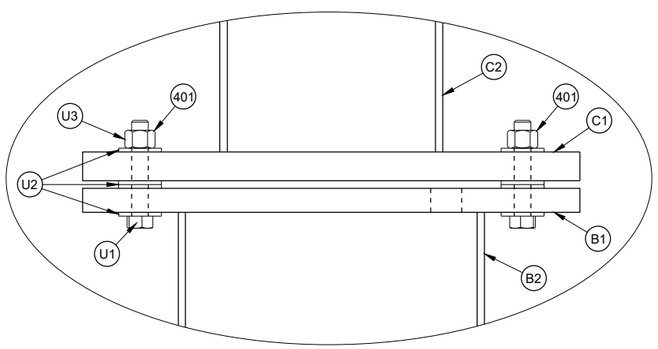
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

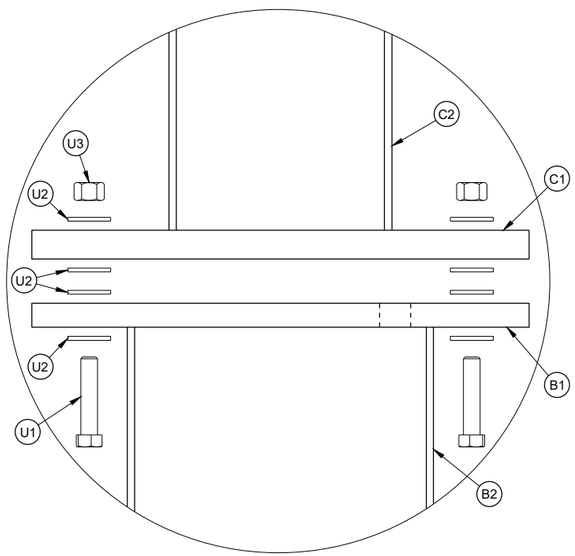
(400) RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

(401) TORQUE BOLD BETWEEN 60-75 FT-LB

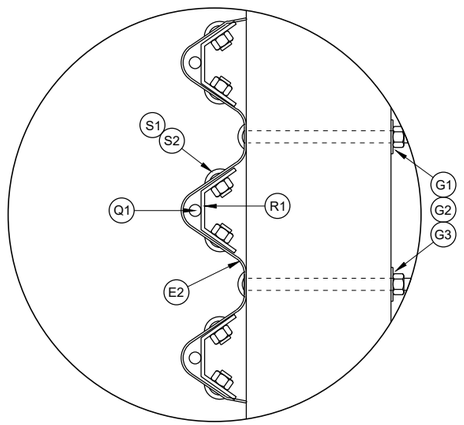
(402) HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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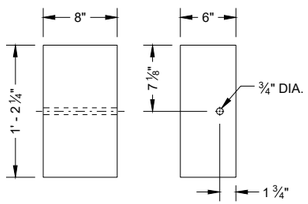
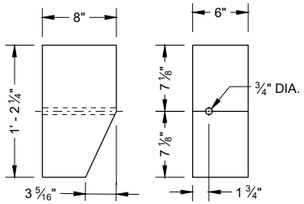
SDD 14B26 - 05d



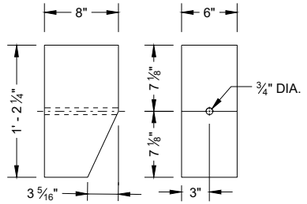
ELEVATION PROFILE

BLOCKOUT (D1)



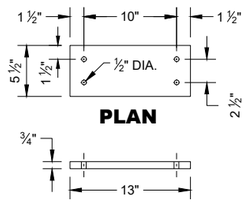
ELEVATION PROFILE

BLOCKOUT (D2)



ELEVATION PROFILE

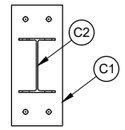
BLOCKOUT (D3)



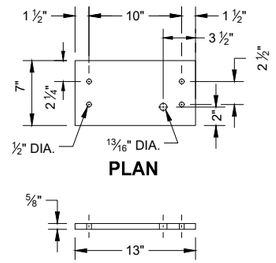
PLAN

PROFILE

UPPER SHEAR PLATE (C1)



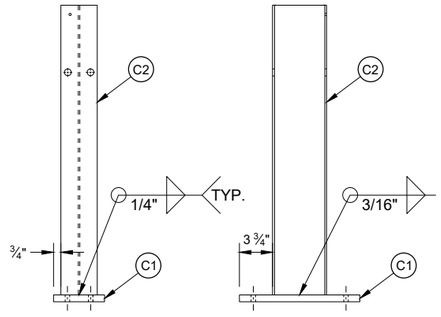
PLAN



PLAN

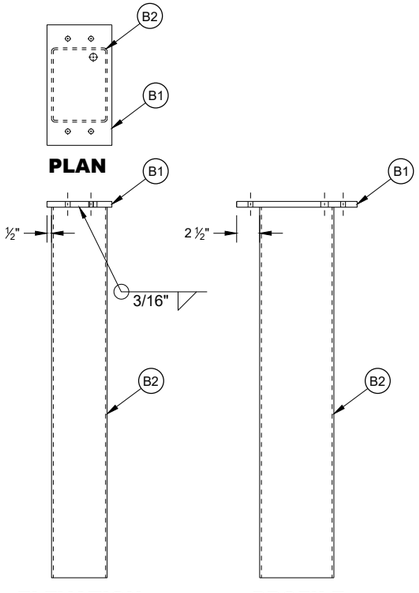
PROFILE

LOWER SHEAR PLATE (B1)



ELEVATION PROFILE

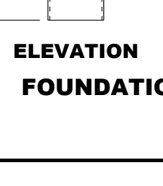
UPPER POST ASSEMBLY



PLAN

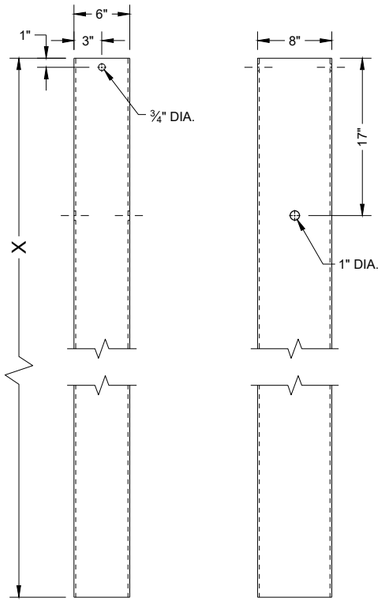
ELEVATION PROFILE

LOWER POST ASSEMBLY



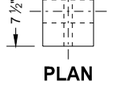
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 4"

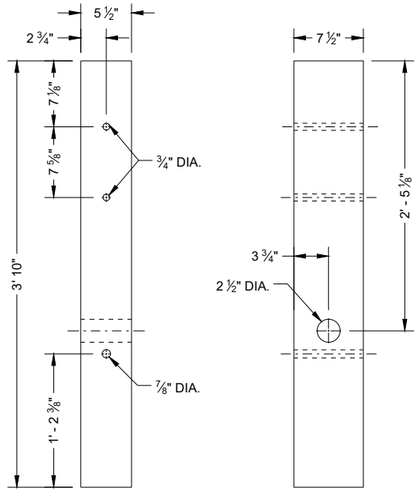


ELEVATION PROFILE

FOUNDATION TUBE

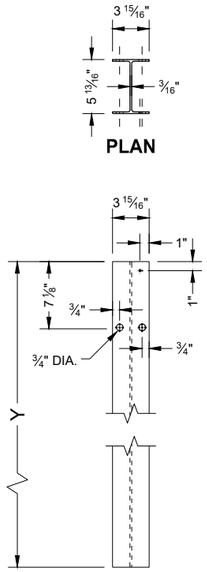


PLAN



ELEVATION PROFILE

BCT POST (L1)



ELEVATION

POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 7 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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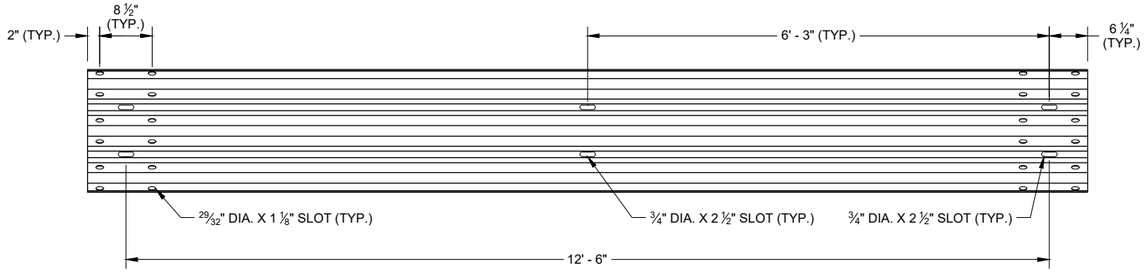
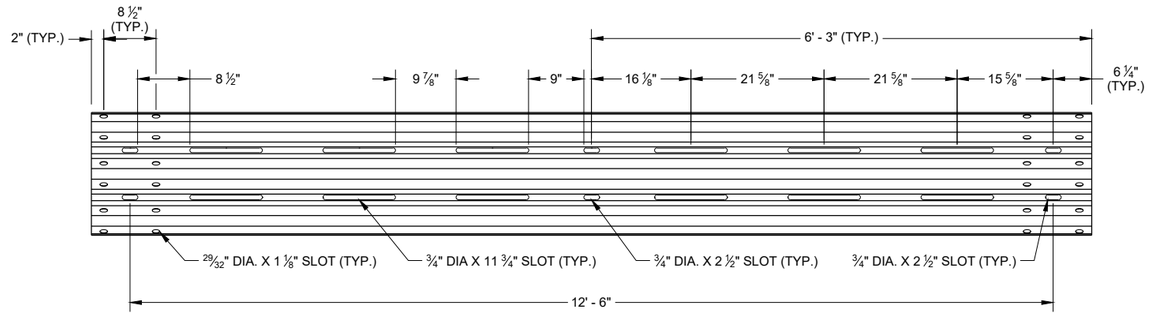
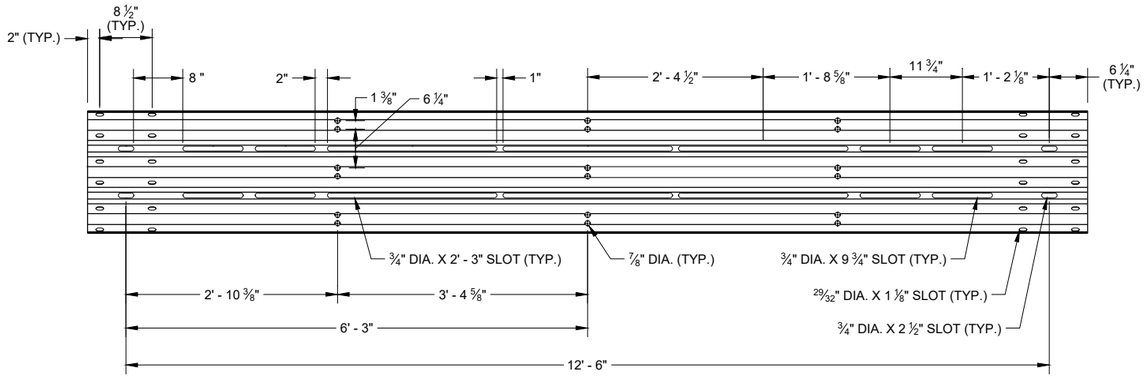
SDD 14B26 - 05e



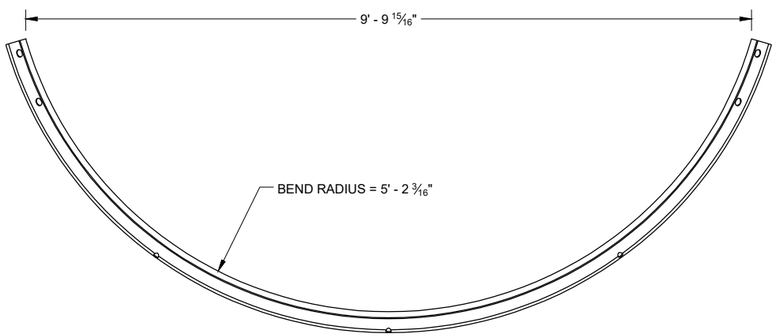
SLOTTED THRIE BEAM RAIL E1



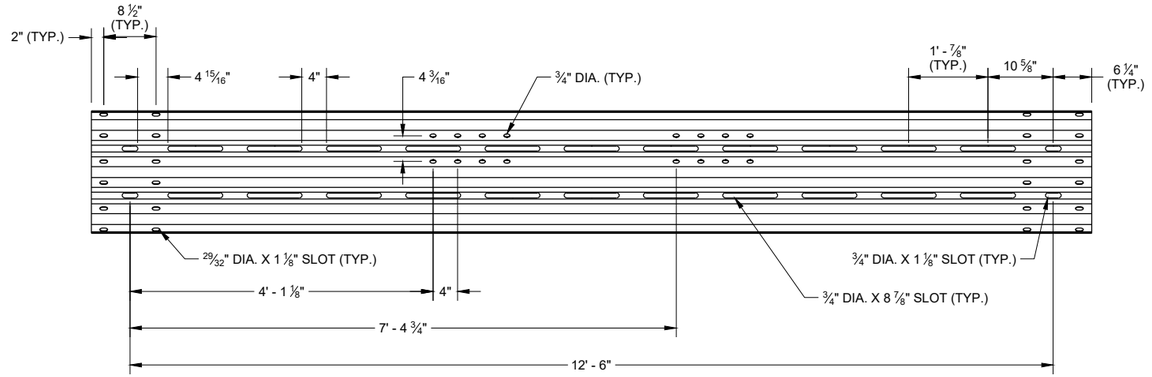
SLOTTED THRIE BEAM RAIL E3



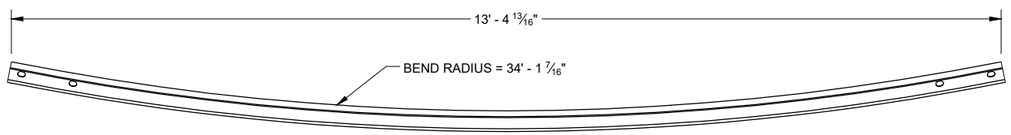
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4



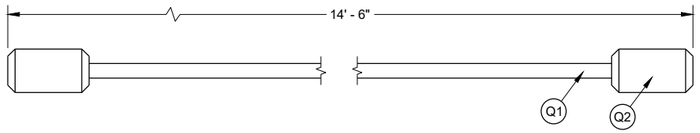
PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

STEEL THRIE BEAM BULLNOSE TERMINAL

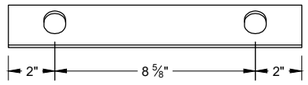
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

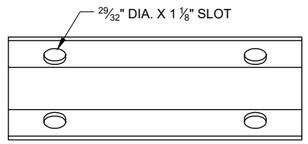
SDD 14B26 - 05f



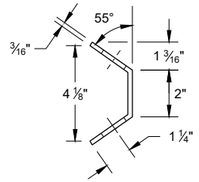
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

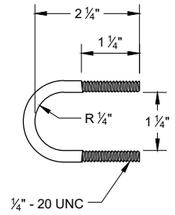


ELEVATION VIEW

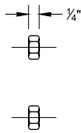


PROFILE VIEW

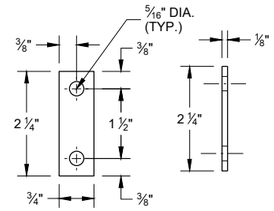
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

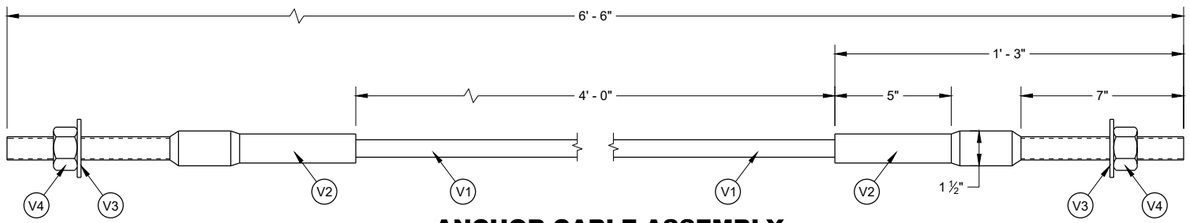


U - BOLT NUT (T3)

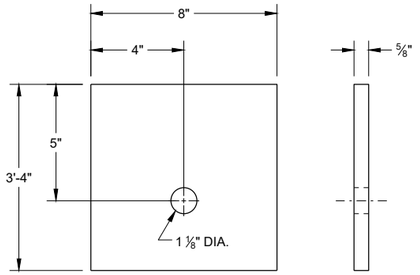


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

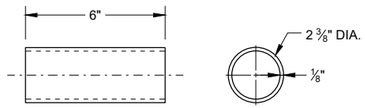


ANCHOR CABLE ASSEMBLY



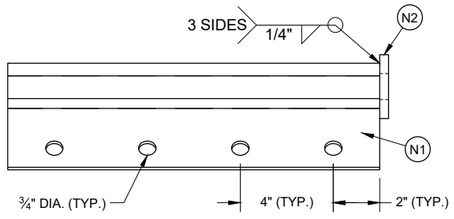
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

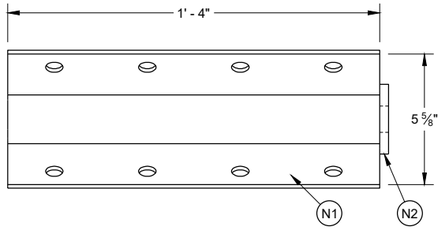


ELEVATION VIEW **PROFILE VIEW**

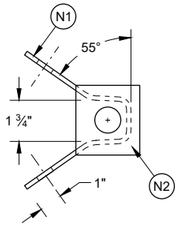
BCT POST SLEEVE (L2)



PLAN VIEW

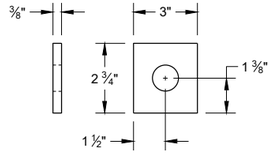


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B26 - 05g

BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	AASHTO M111/ASTM A123 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
B1	LOWER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 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
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 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
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 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
N1	ANCHOR BRACKET	AASHTO M111/ASTM A123 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
N2	ANCHOR BRACKET - BEARING PLATE	AASHTO M111/ASTM A123 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

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	AASHTO M111/ASTM A123 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
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
V1	¾" DIA. BCT CABLE	AASHTO M30 / ASTM A741 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6X19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN BREAKING STRENGTH OF 42.7 KIPS
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
W1	REFLECTOR	SEE SDD 15A4

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SDD 14B26 - 05h

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SDD 14B26 - 05h

STEEL THRIE BEAM BULLNOSE TERMINAL

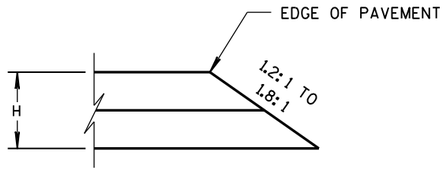
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2022
DATE

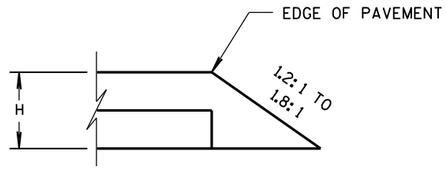
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



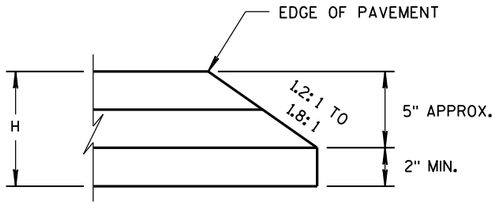
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



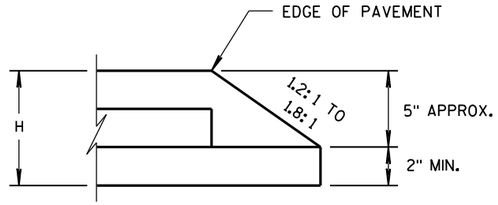
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

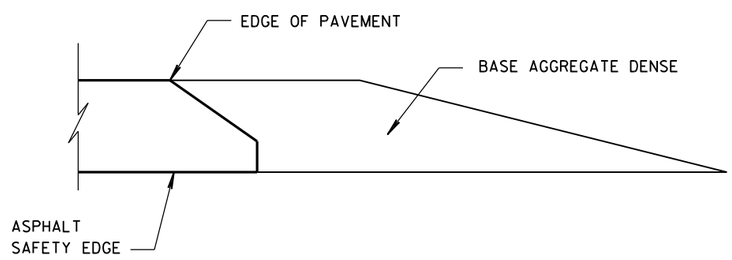
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

(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.

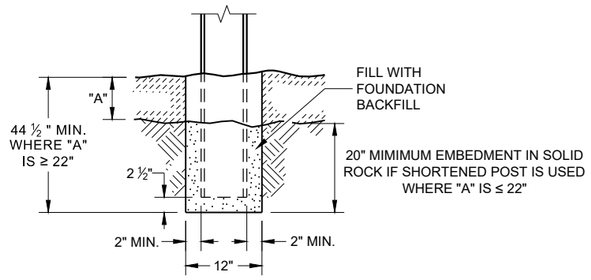
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

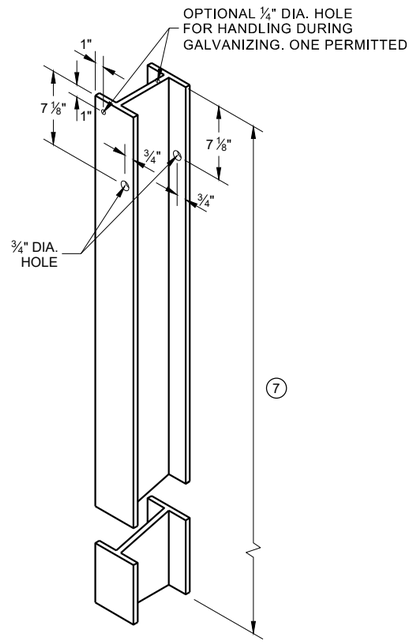
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

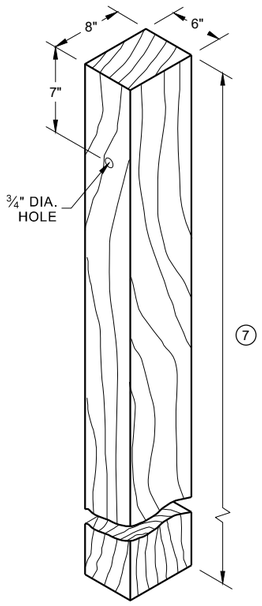
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



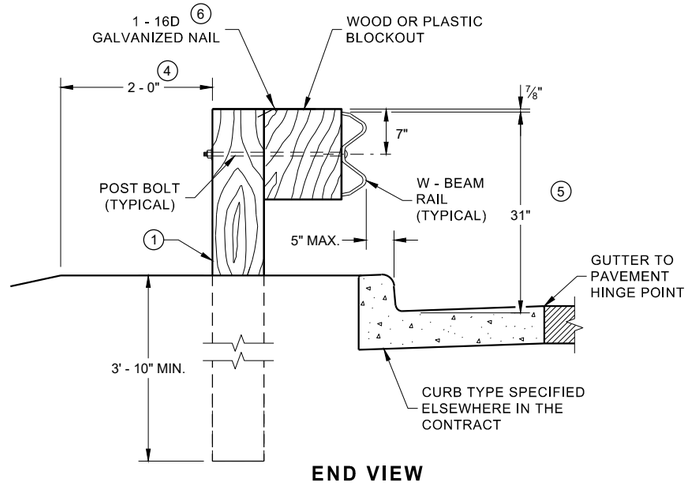
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



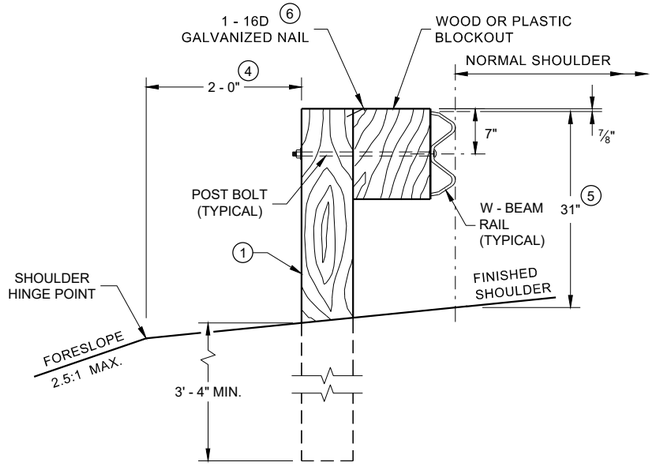
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



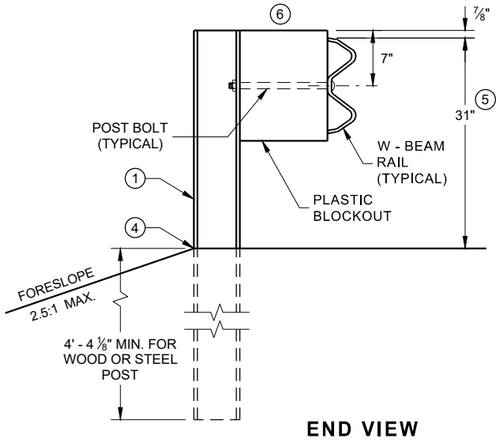
WOOD POST (6" X 8") NOMINAL (1)



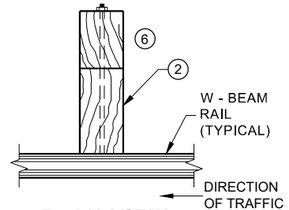
END VIEW
LOCATED ALONG A CURBED ROADWAY



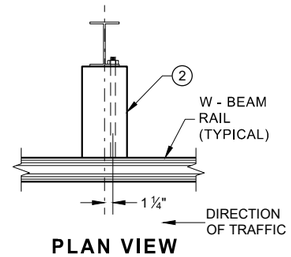
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



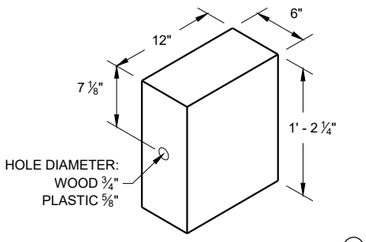
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



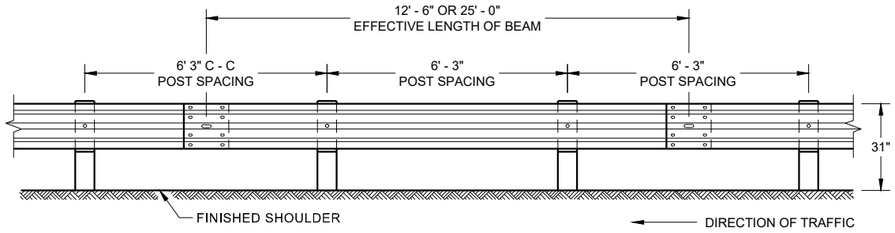
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

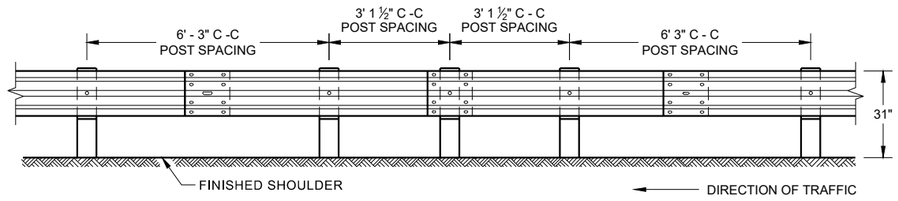
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

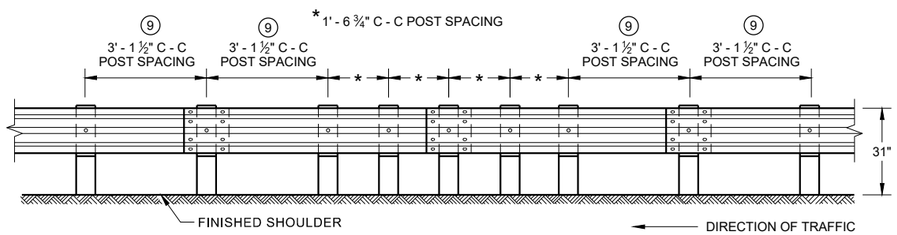
SDD 14B42 - 07a



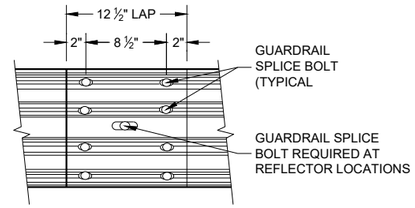
FRONT VIEW
POST SPACING STANDARD INSTALLATION



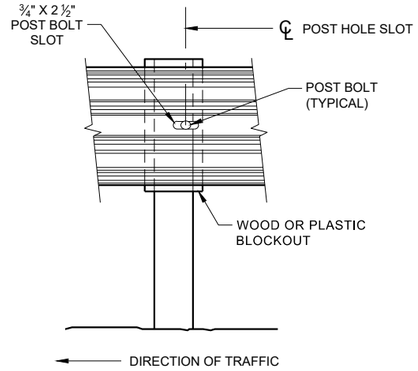
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



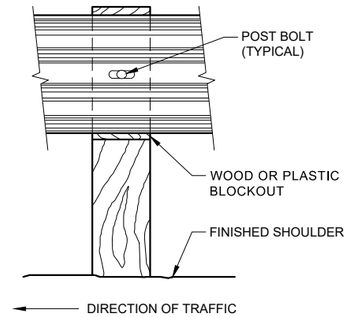
FRONT VIEW
QUARTER POST SPACING (QS)



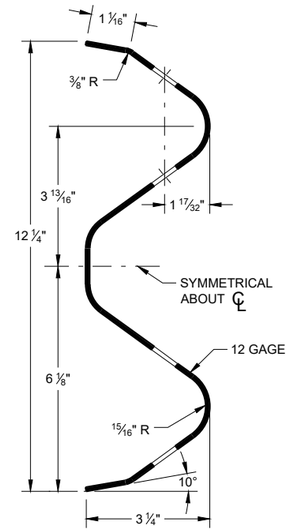
FRONT VIEW
MID-SPAN BEAM SPLICE



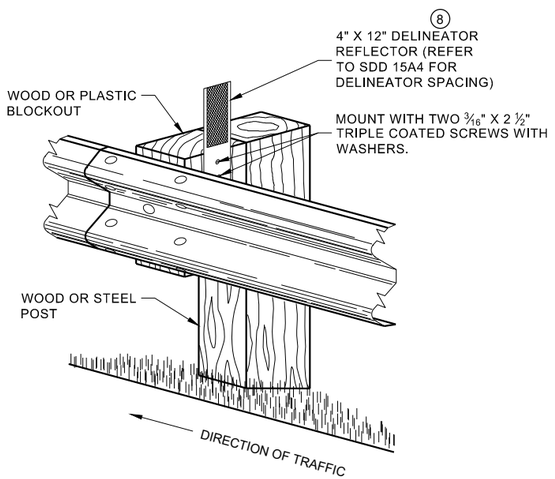
FRONT VIEW AT STEEL POST



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

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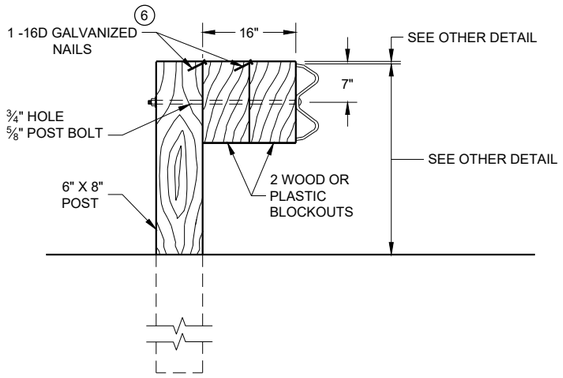
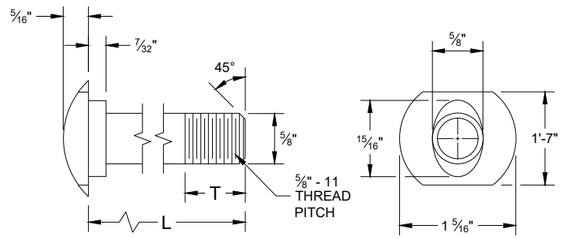


DETAIL FOR 16" BLOCKOUT DEPTH

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

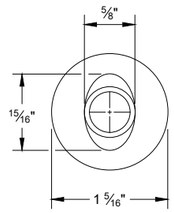
NOTE:

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

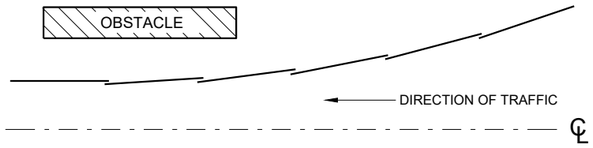


POST BOLT TABLE

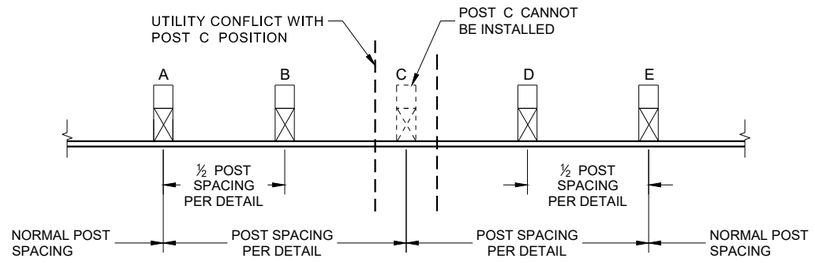
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



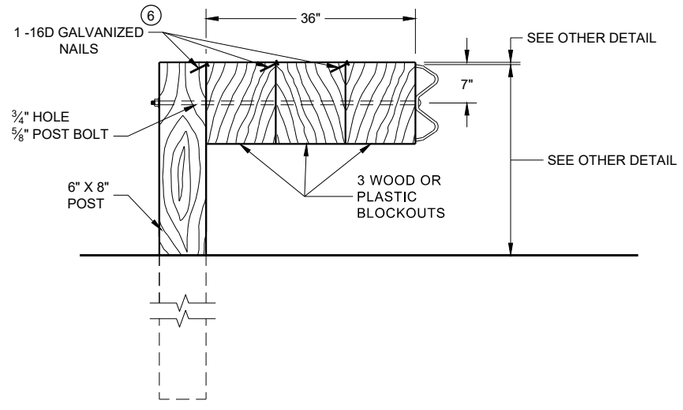
ALTERNATE BOLT HEAD



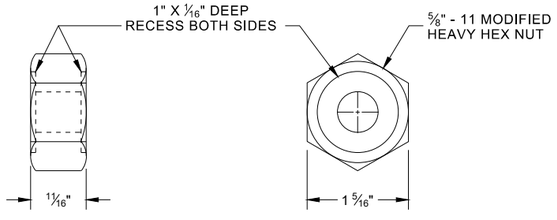
PLAN VIEW
BEAM LAPPING DETAIL



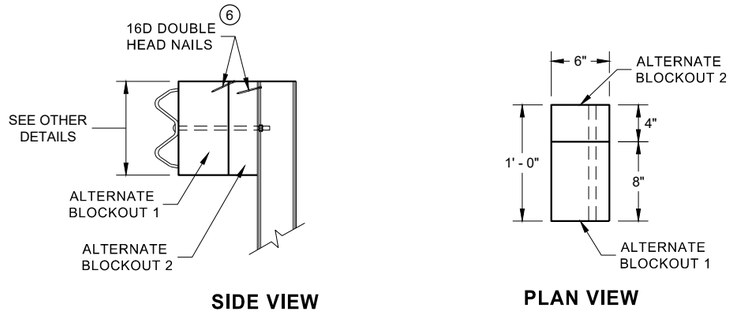
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

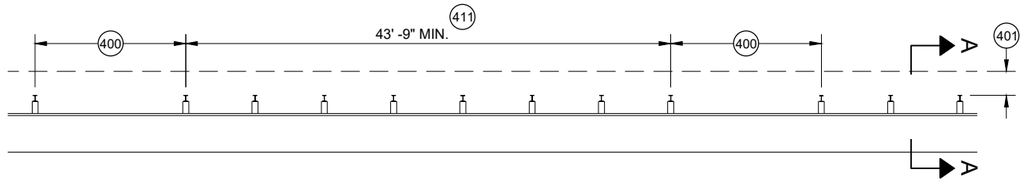
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

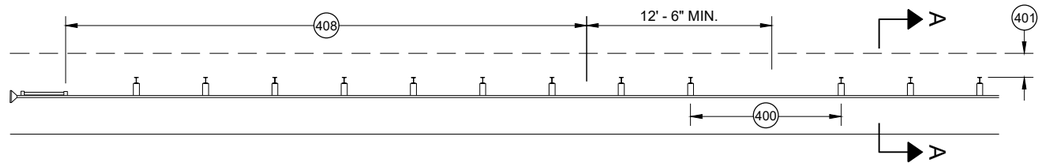
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

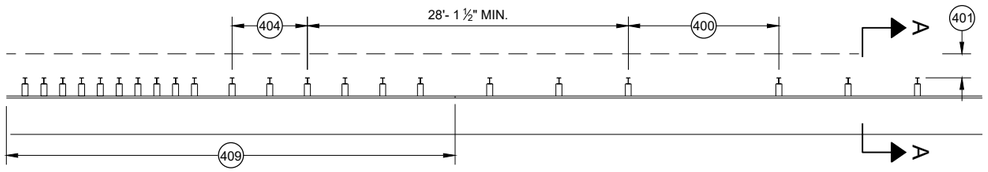
SDD 14B42 - 07c



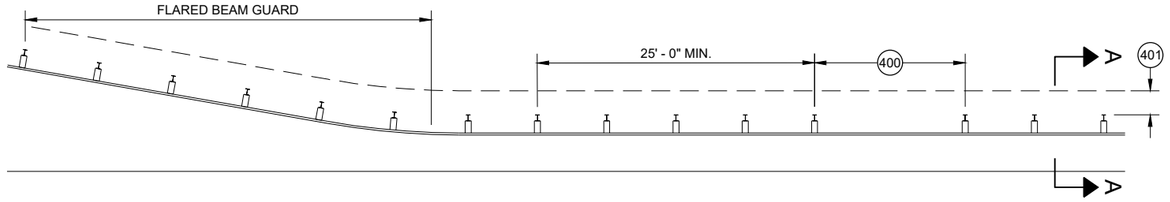
MISSING POST IN MGS GUARDRAIL



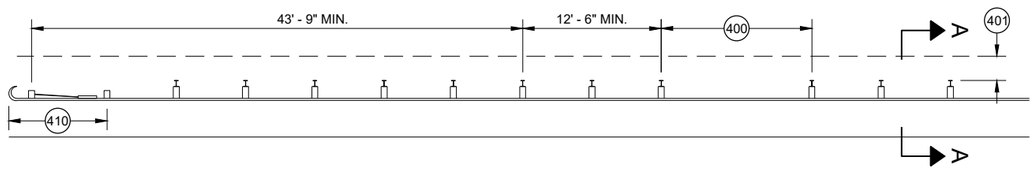
MISSING POST IN MGS GUARDRAIL NEAR EAT



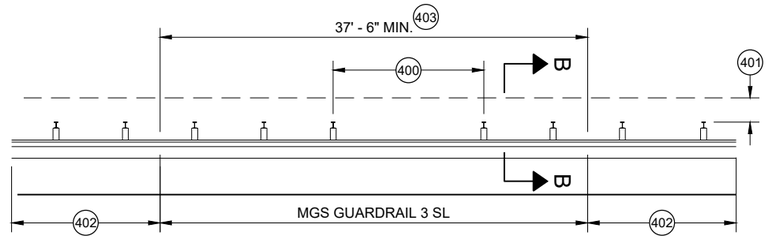
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

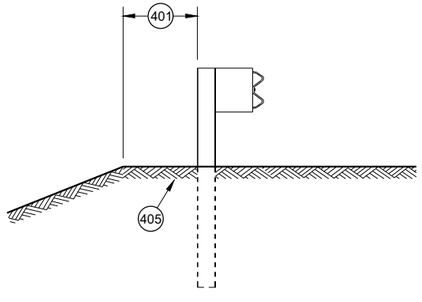


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

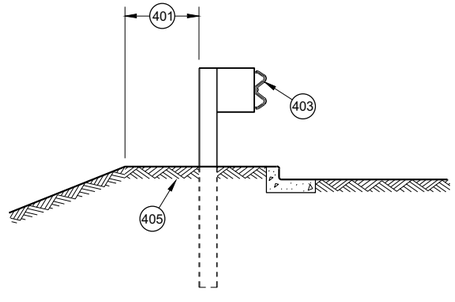


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

SDD 14B42 - 07d

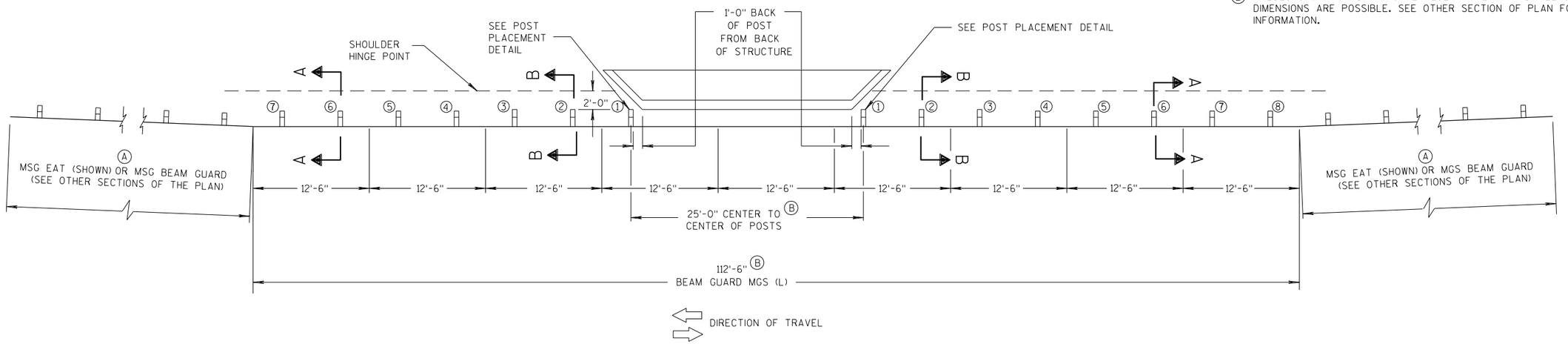
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

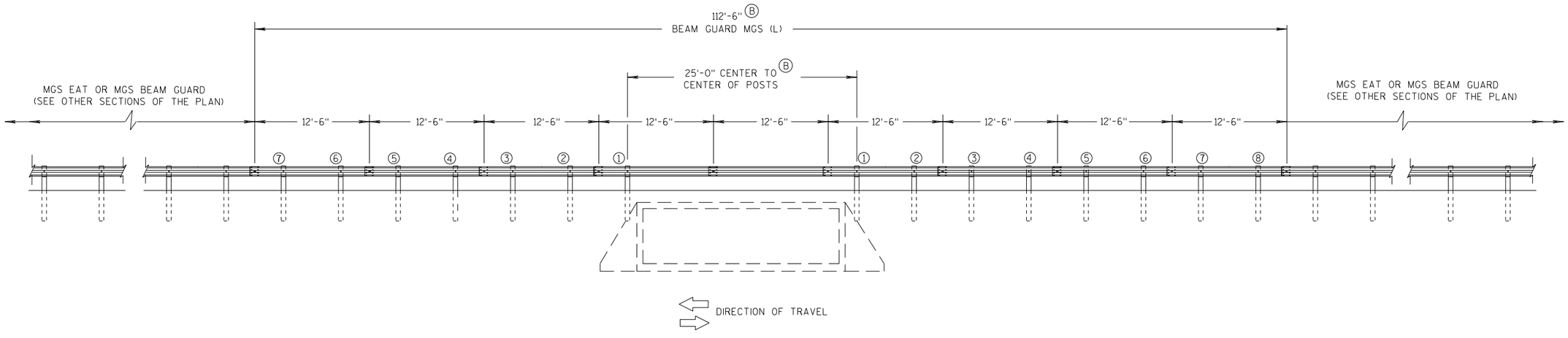
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 43-4a

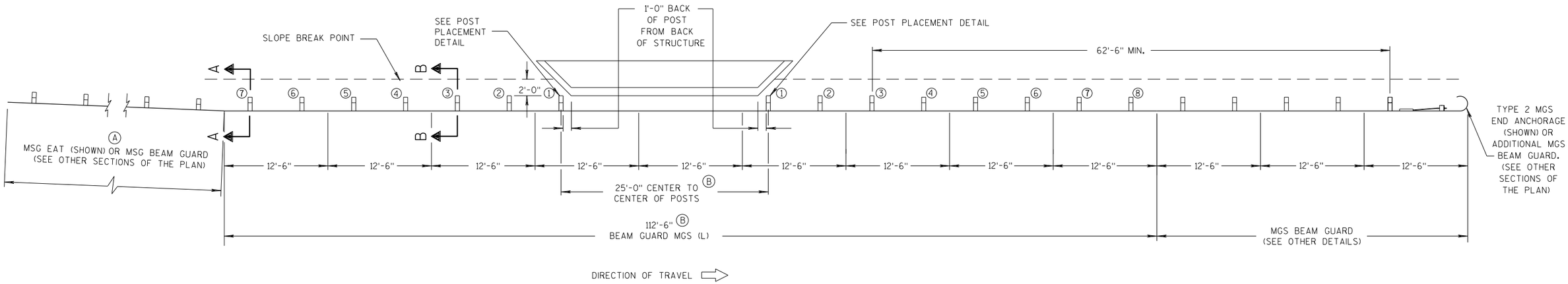
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

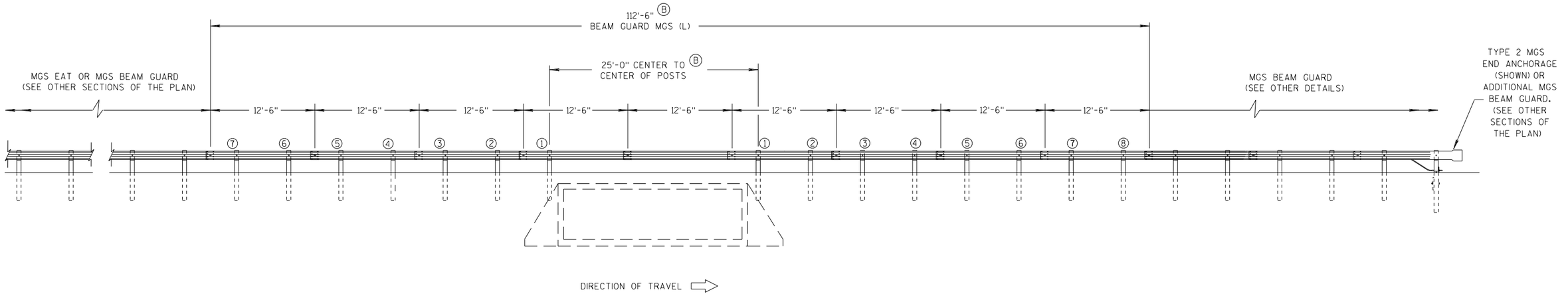
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

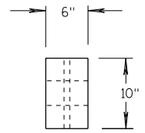
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	421

6

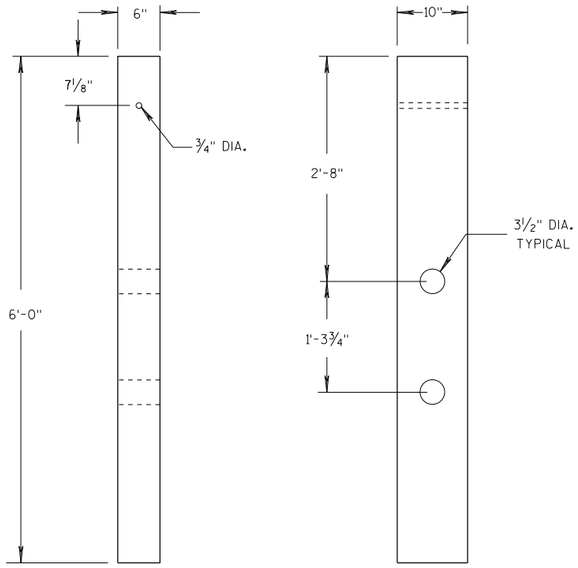
S.D.D. 14 B 43-4b

6

S.D.D. 14 B 43-4b

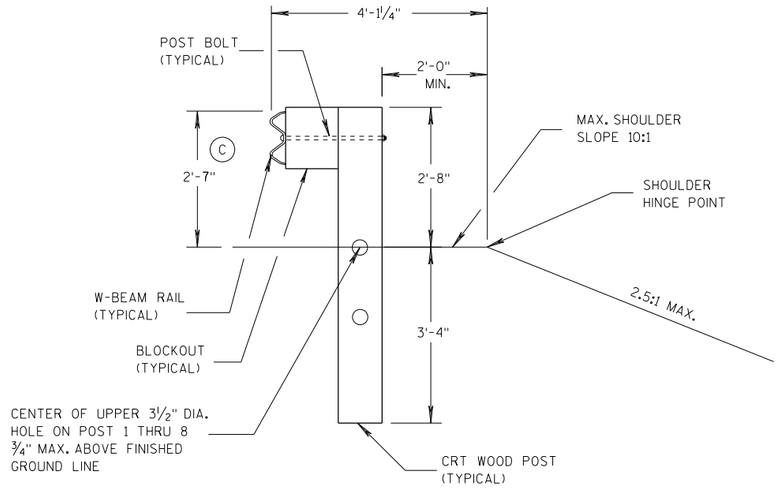


PLAN VIEW



FRONT VIEW SIDE VIEW

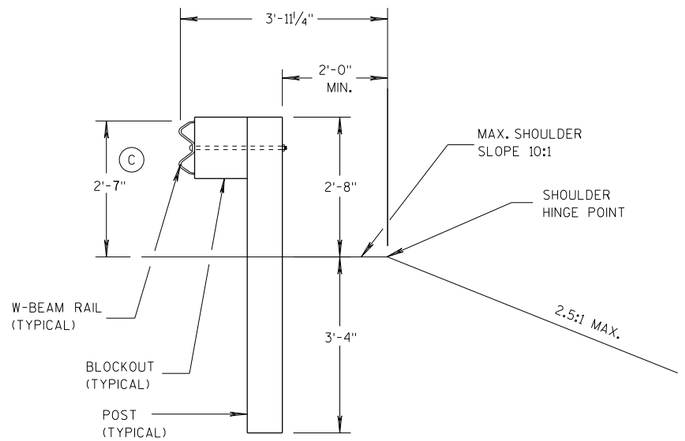
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



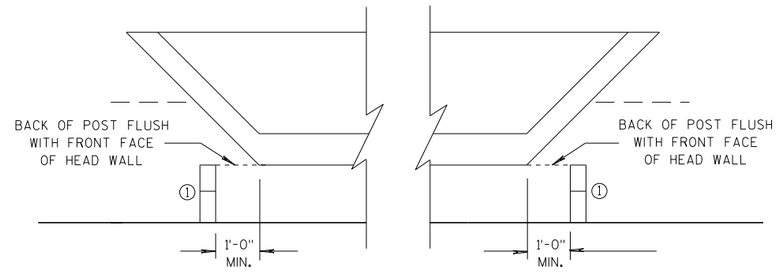
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

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



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D422 NT
ENGINEER

6

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

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.

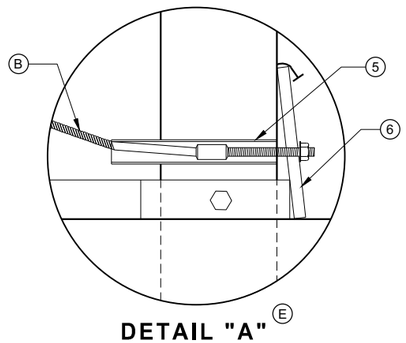
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

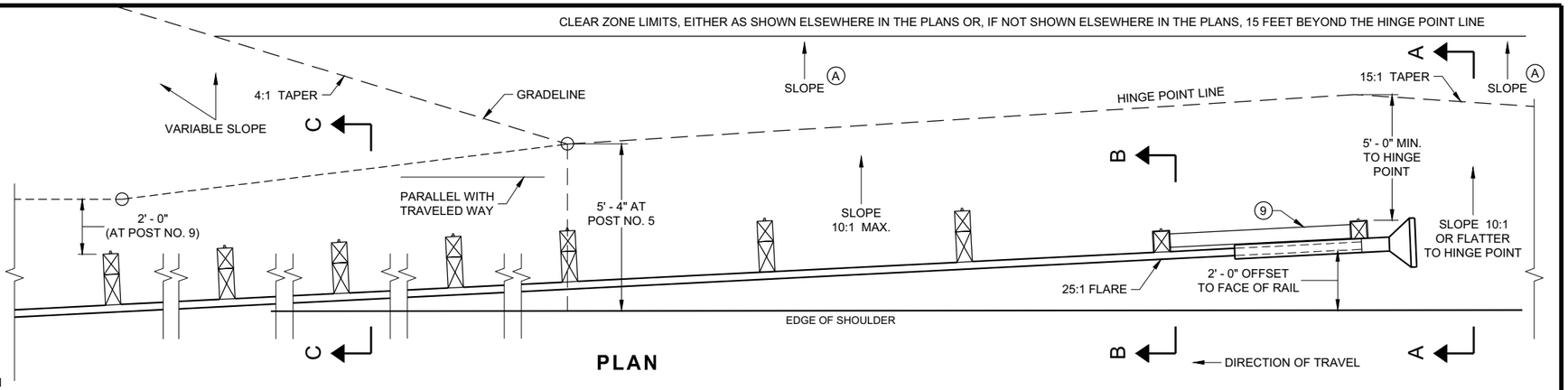
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

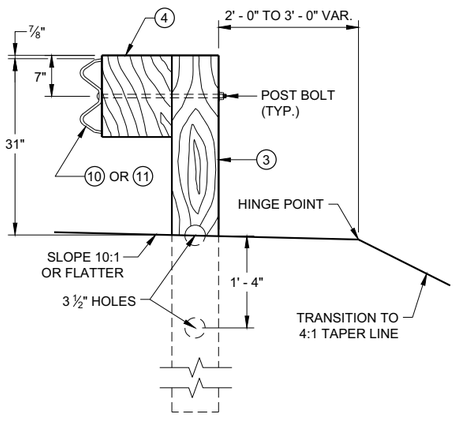
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

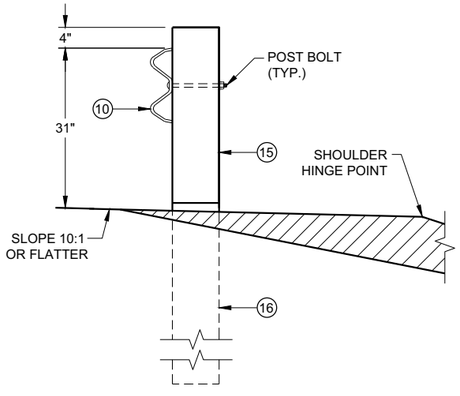


DETAIL "A" (E)

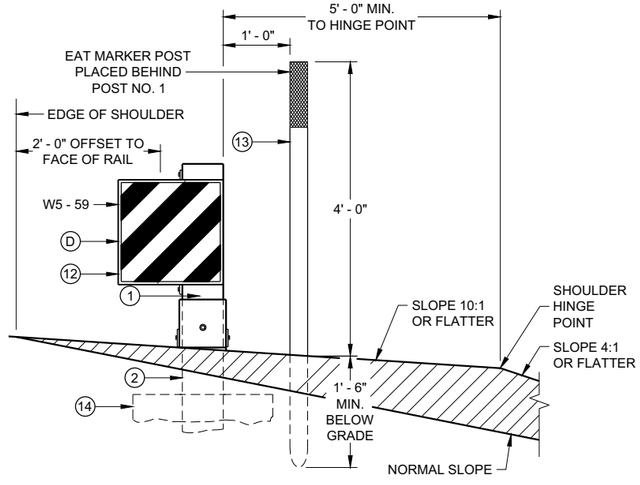




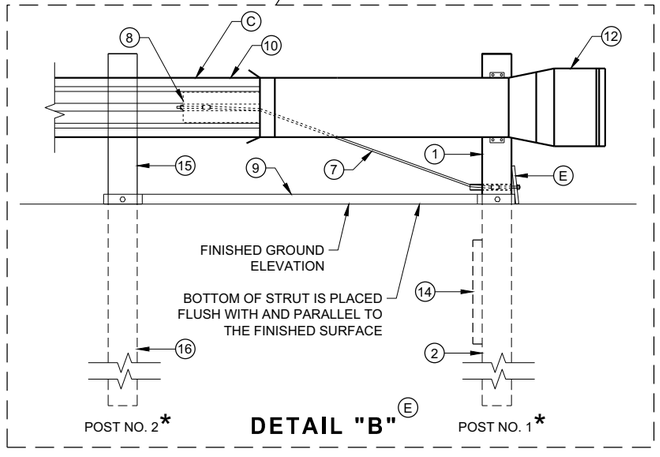
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



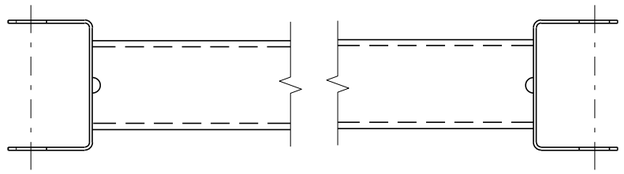
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

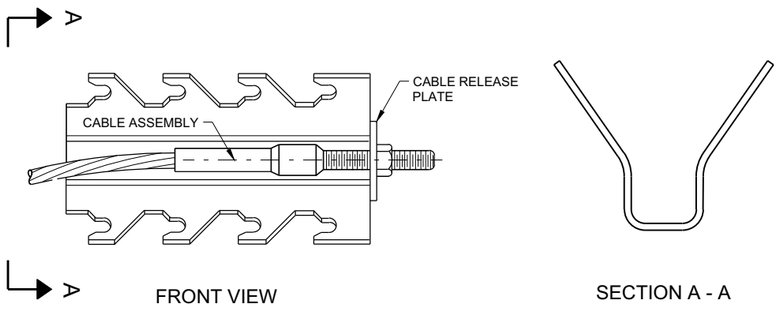
SDD 14B44 - 04a



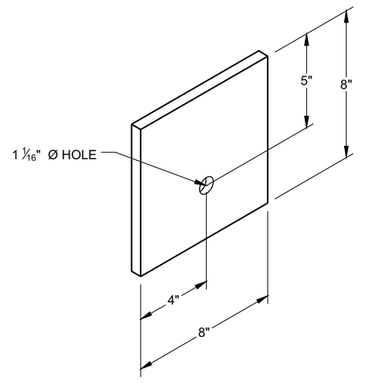
GENERIC GROUND STRUT ⑨ Ⓔ

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

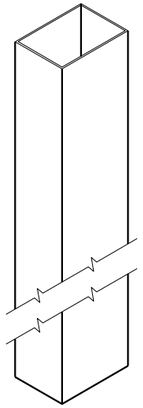
6

SDD 14B44 - 04b

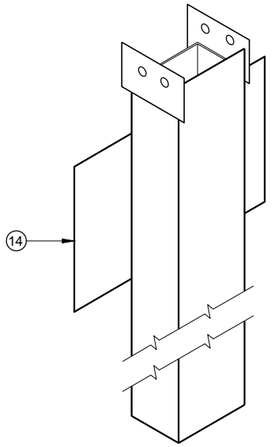
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

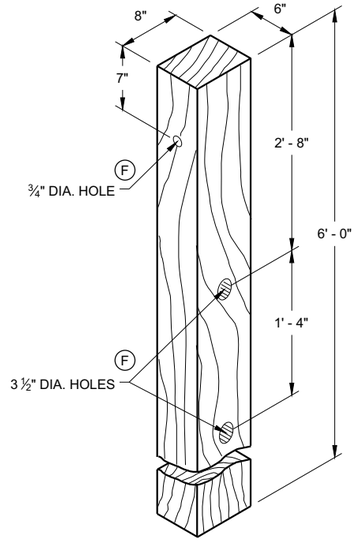
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



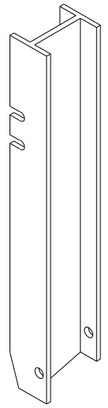
UPPER POST NO. 1 (1) (E)



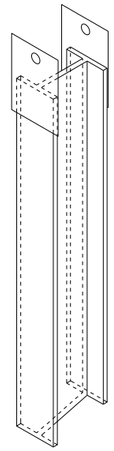
LOWER POST NO. 1 (2) (E)



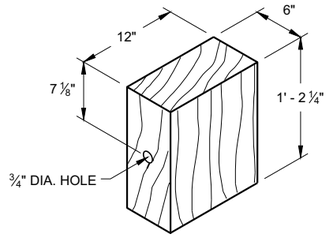
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



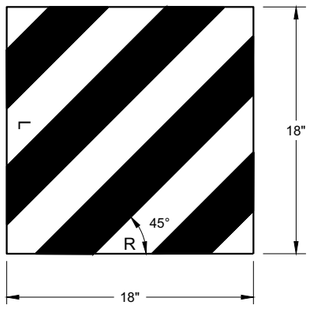
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

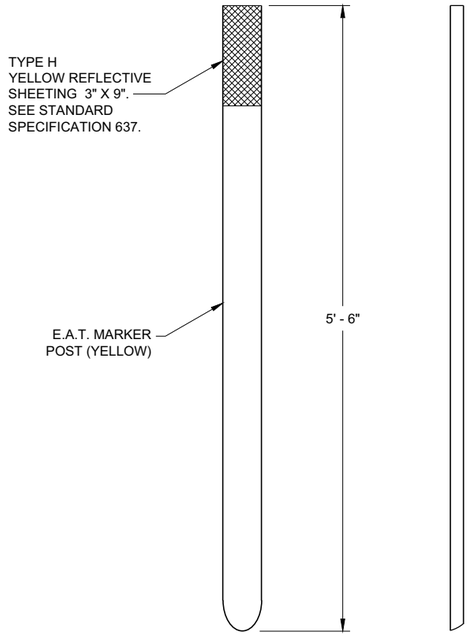


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



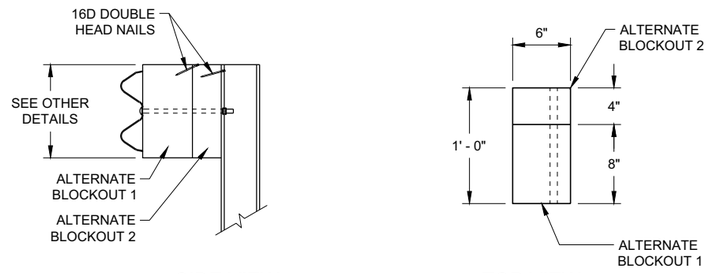
W5 - 59

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)

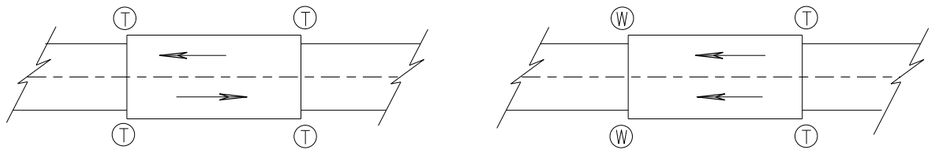
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

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

TRANSITION USES STEEL POSTS ONLY.

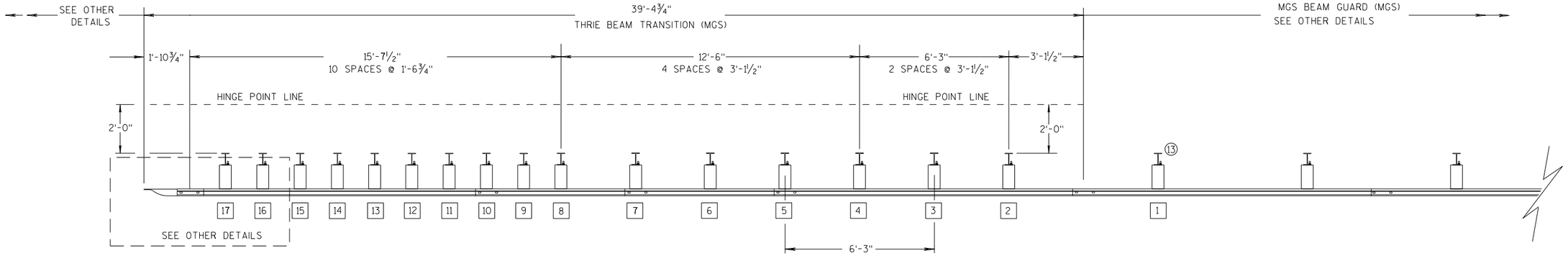
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

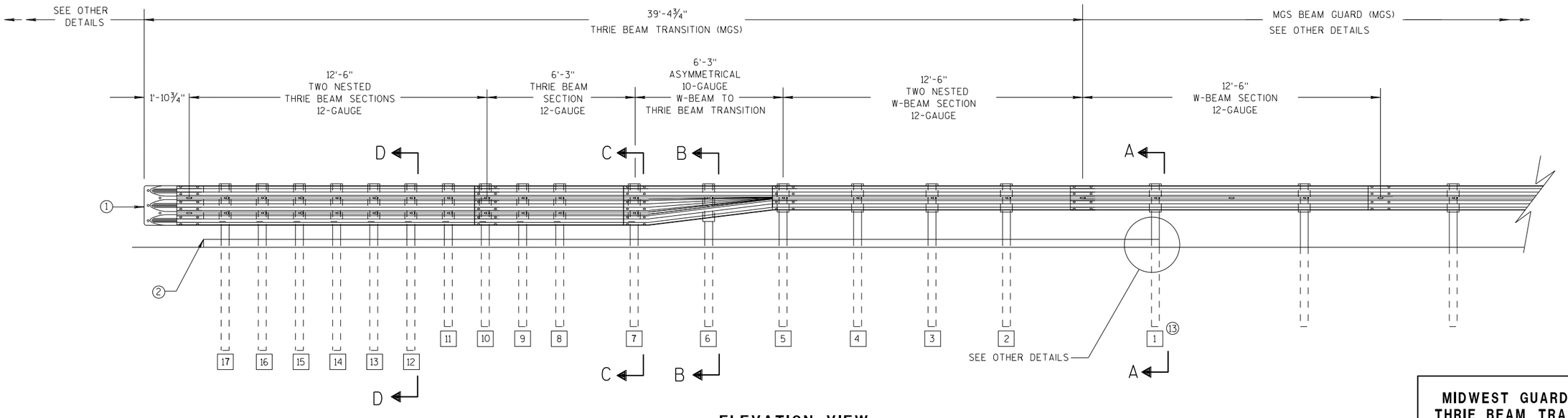
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

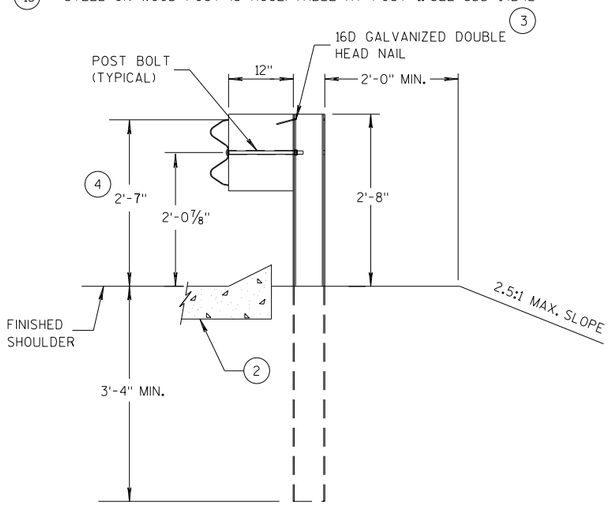
GENERAL NOTES

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

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

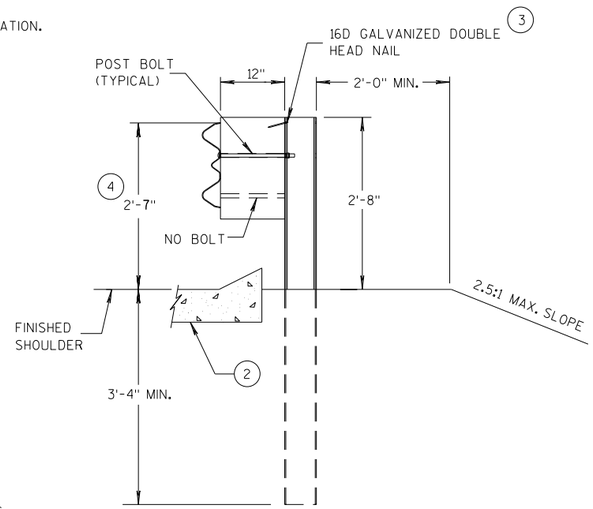
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



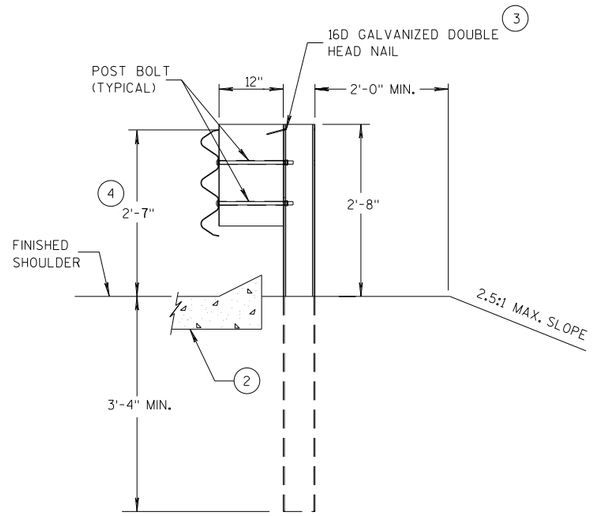
SECTION A-A (13)

POSTS 1-5



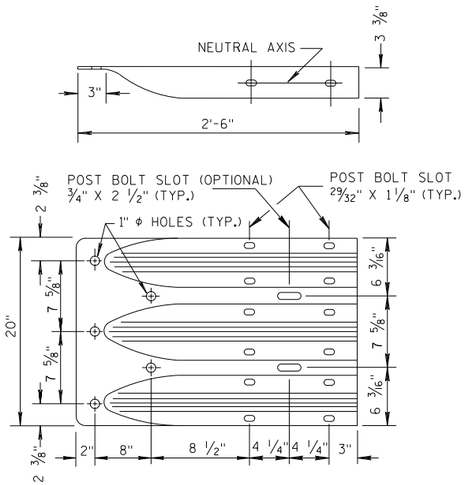
SECTION B-B

POST 6

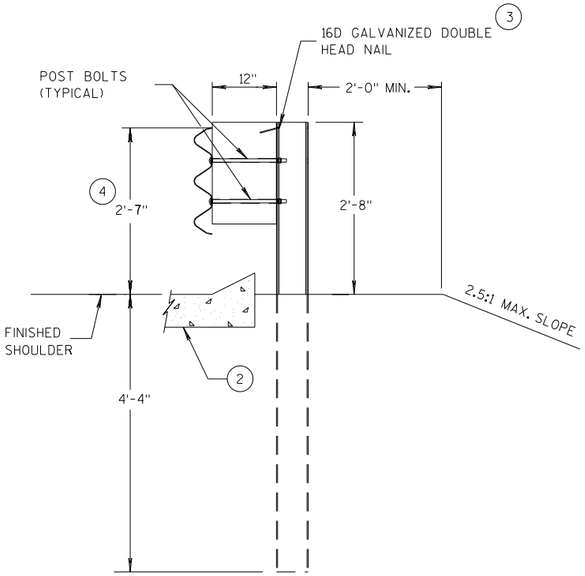


SECTION C-C

POSTS 7-11

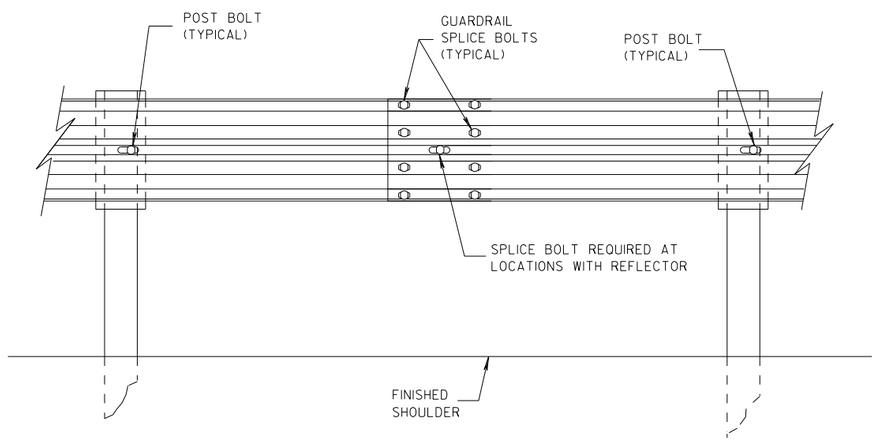


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

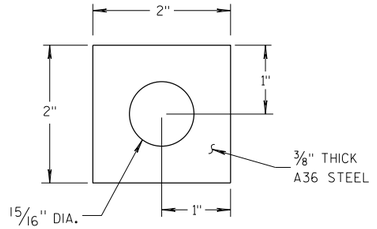
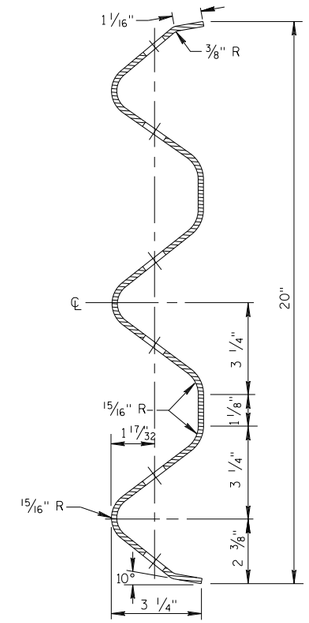


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

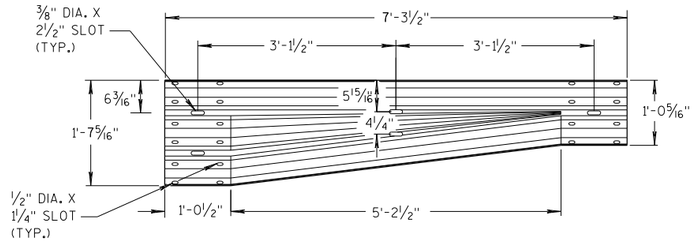
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 427

6

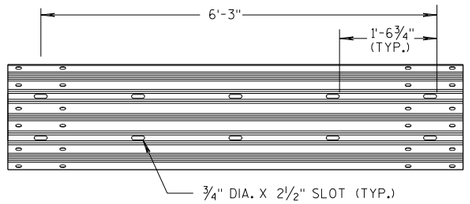
S.D.D. 14 B 45-5b

6

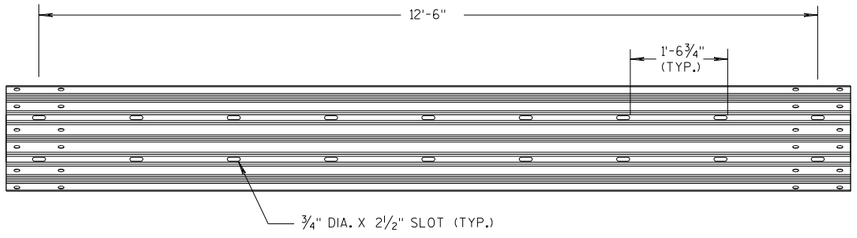
S.D.D. 14 B 45-5b



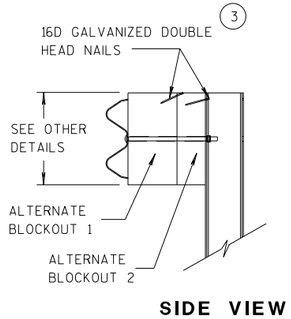
W-BEAM TO THRIE BEAM TRANSITION SECTION



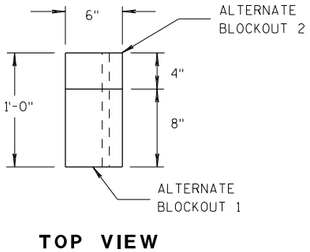
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

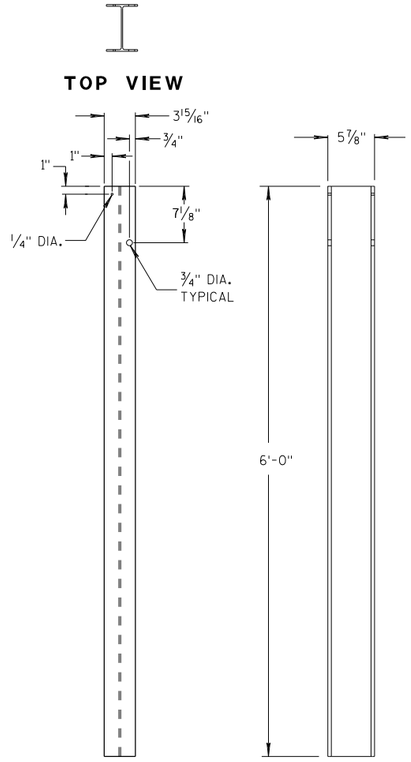


SIDE VIEW



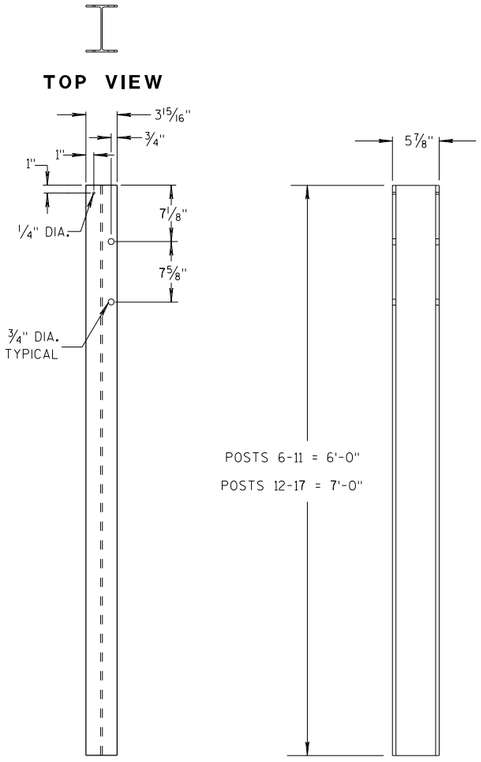
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



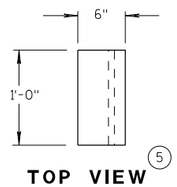
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

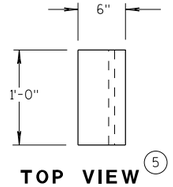


FRONT VIEW SIDE VIEW

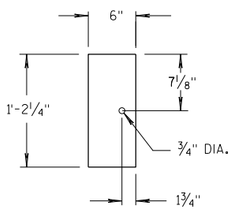
STEEL POSTS 6-17



TOP VIEW (5)

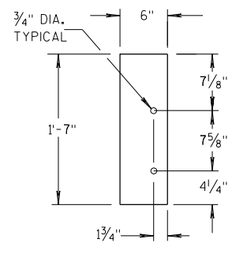


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 428

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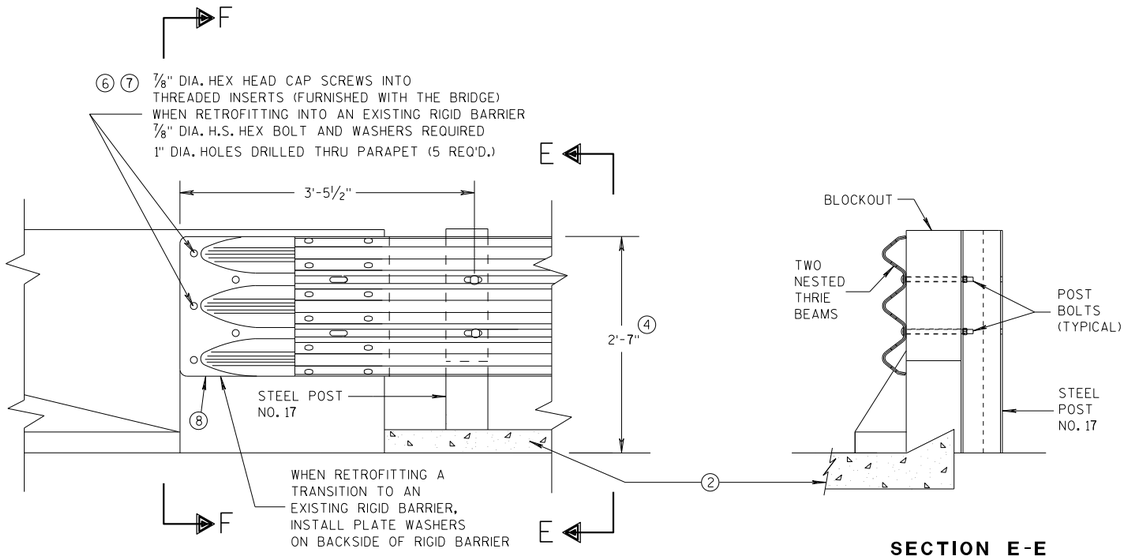
S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

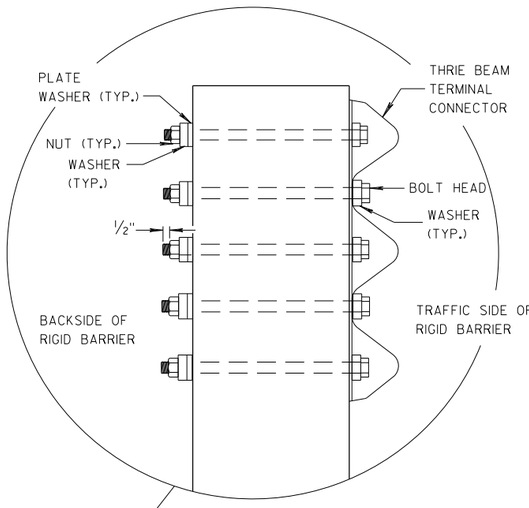
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

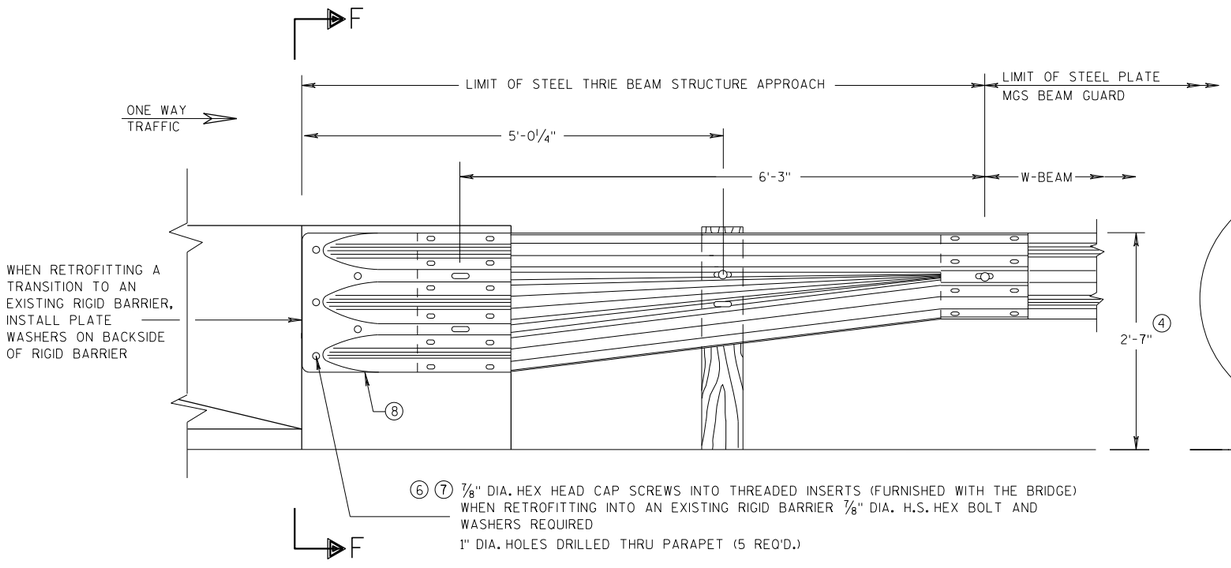
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

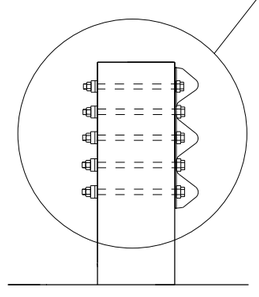
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

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

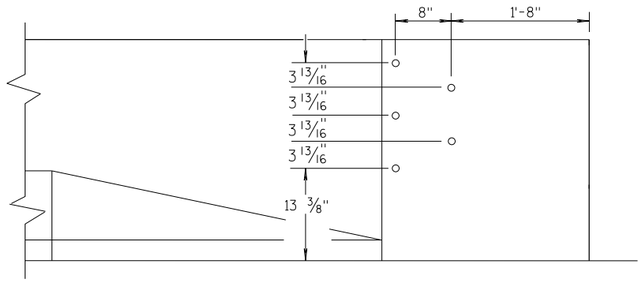




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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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.

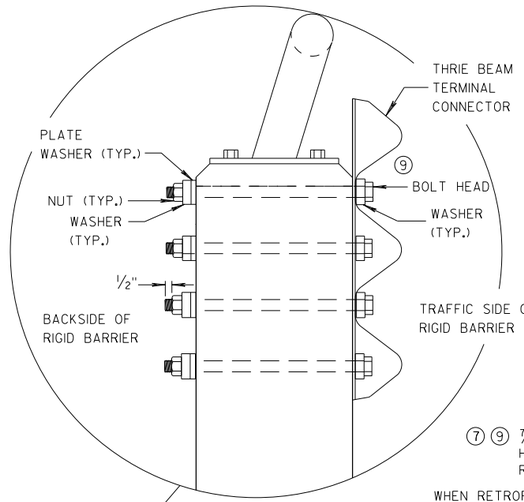
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

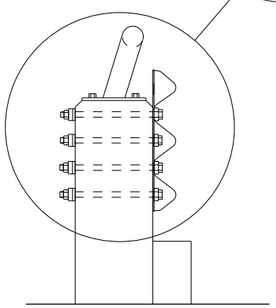
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

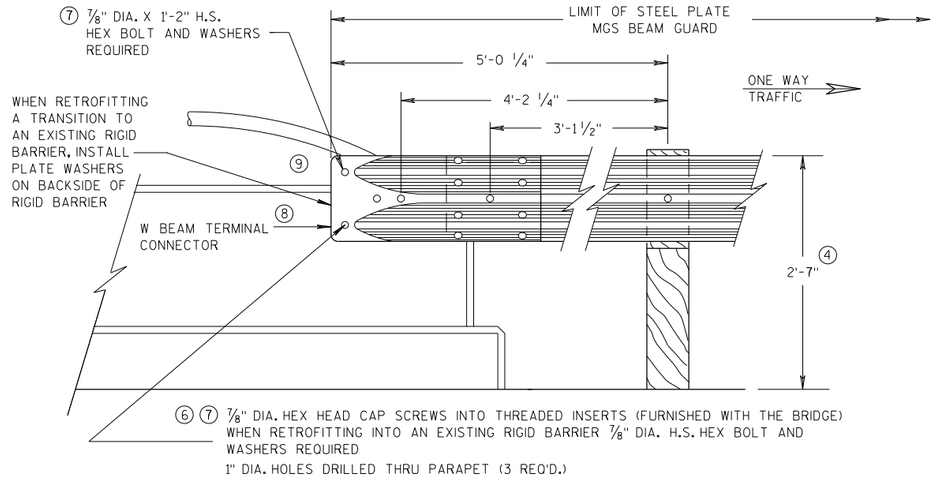
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





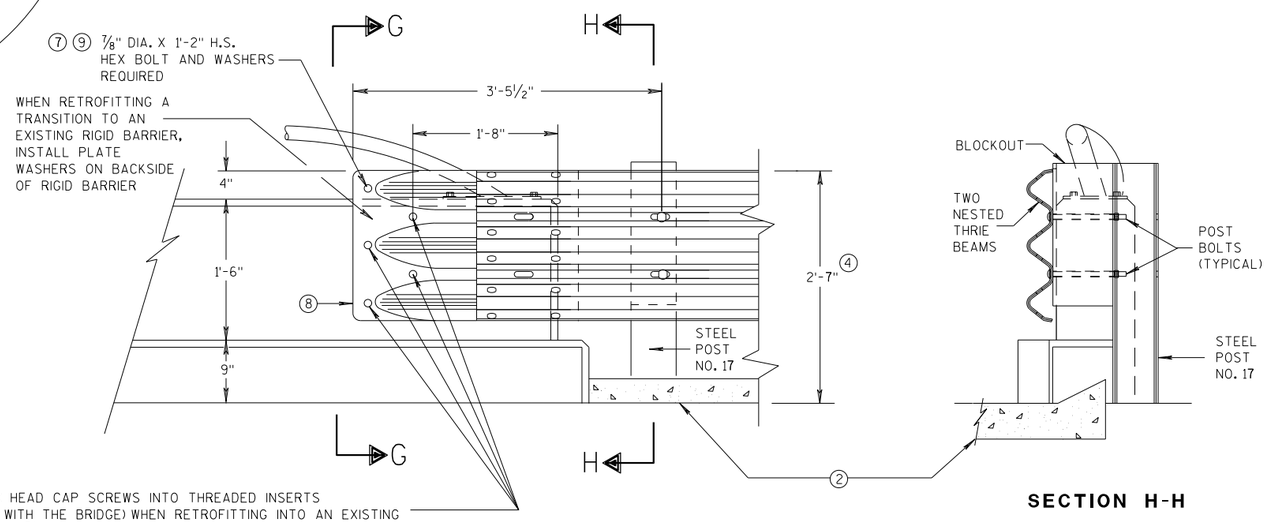
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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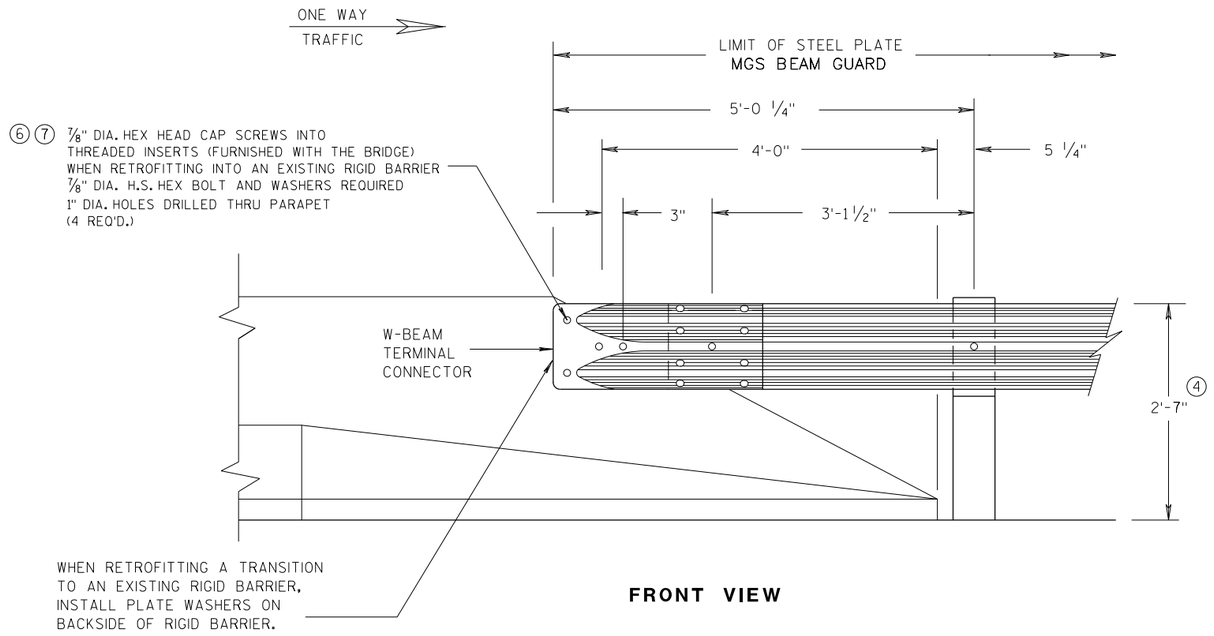

FRONT VIEW

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.

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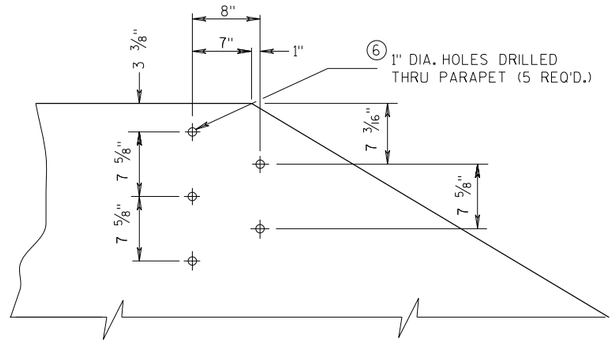
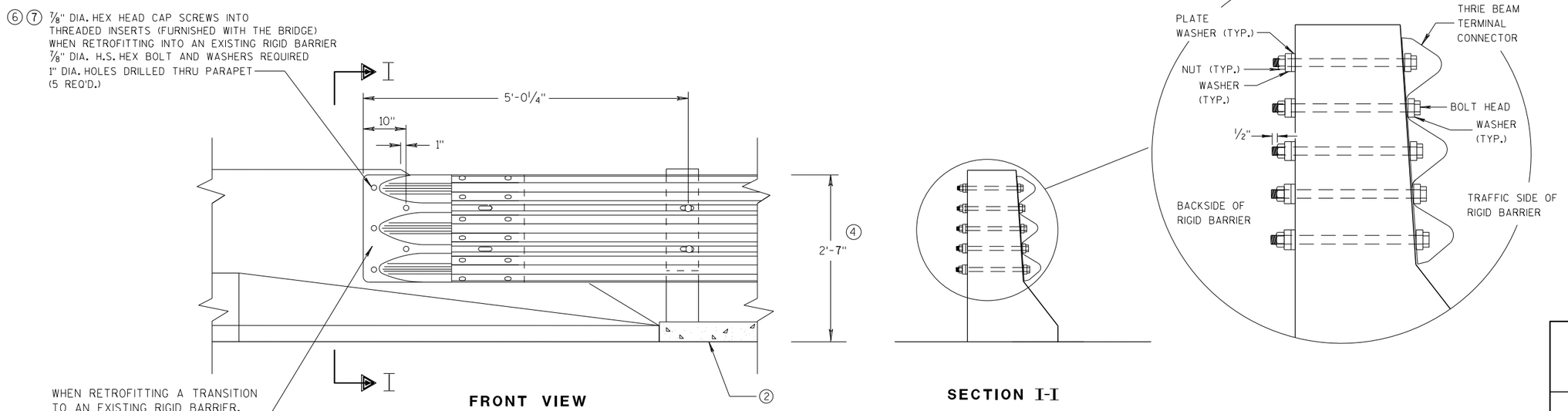


DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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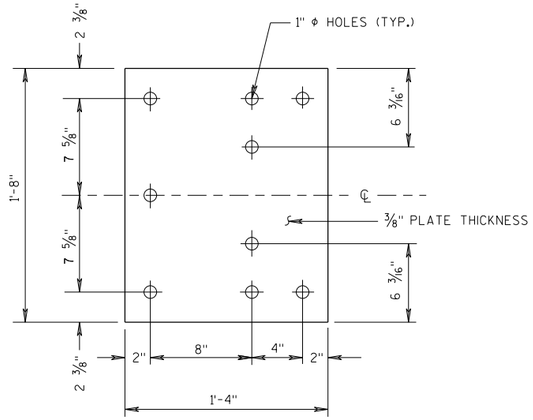
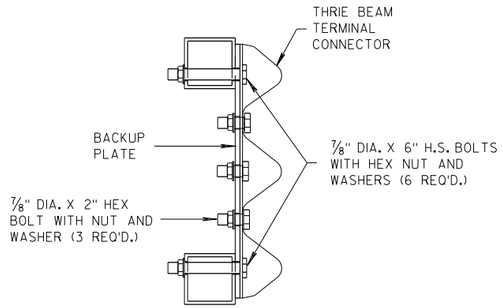
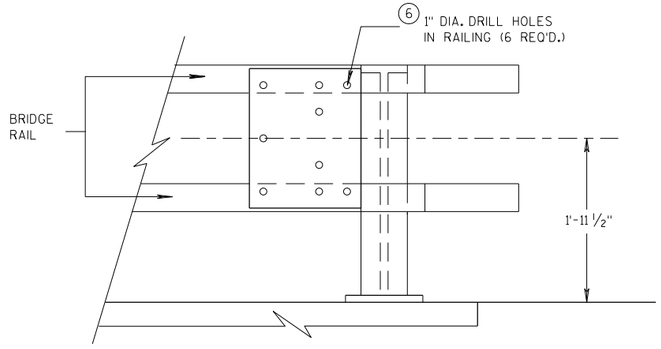


BACK-UP PLATE DETAIL



SECTION J-J

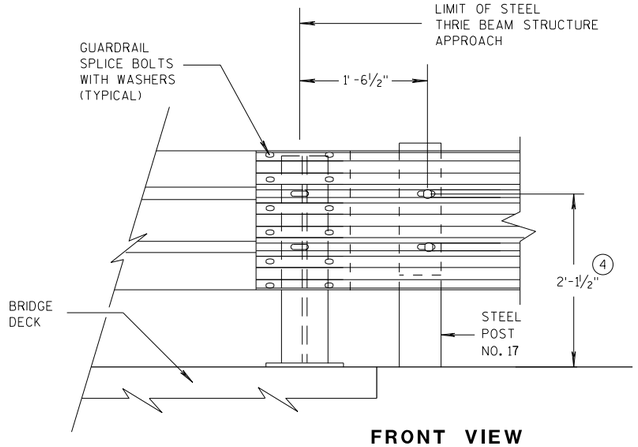


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

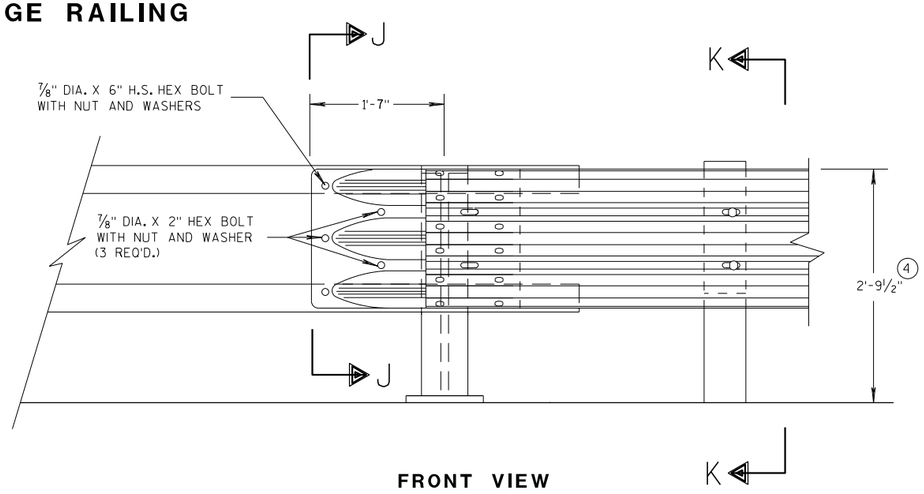
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

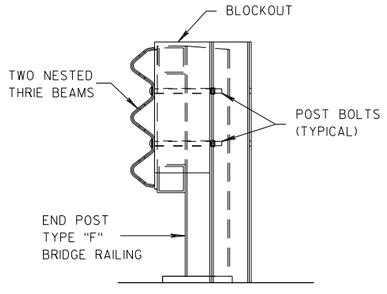


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
FHWA

/S/ Rodney Taylor 432
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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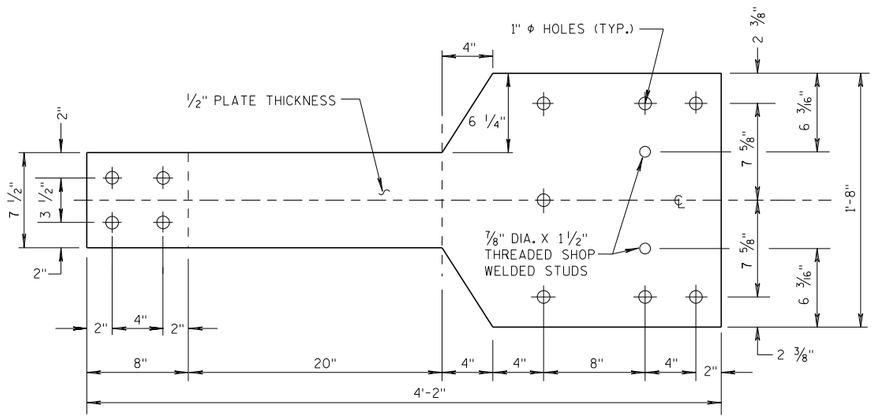
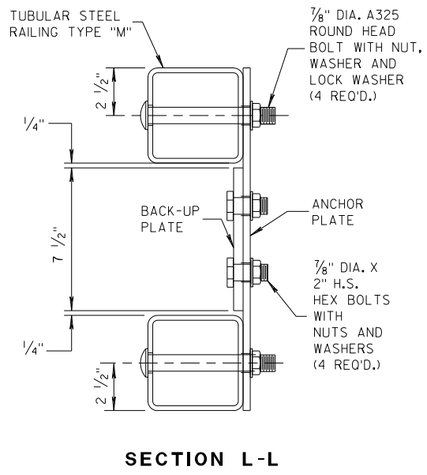
GENERAL NOTES

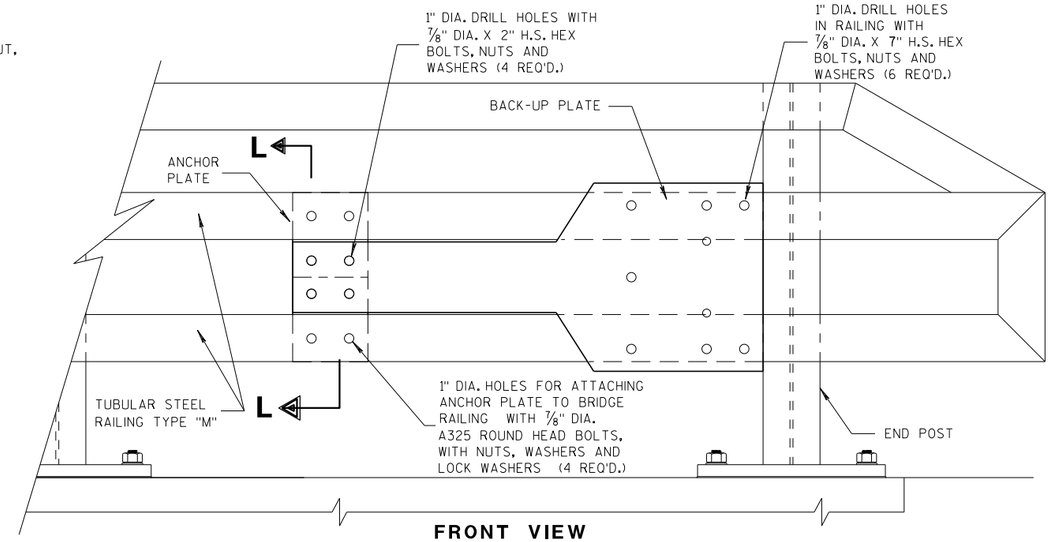
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



FRONT VIEW

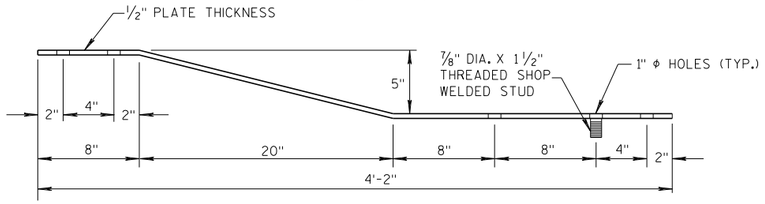


SECTION L-L



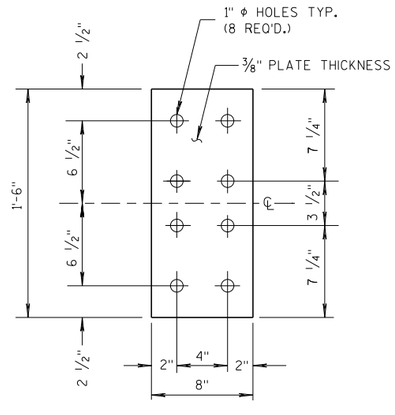
FRONT VIEW

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



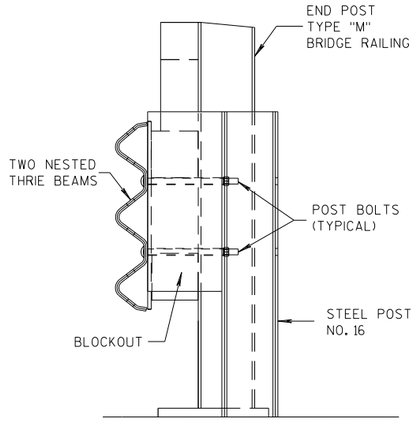
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

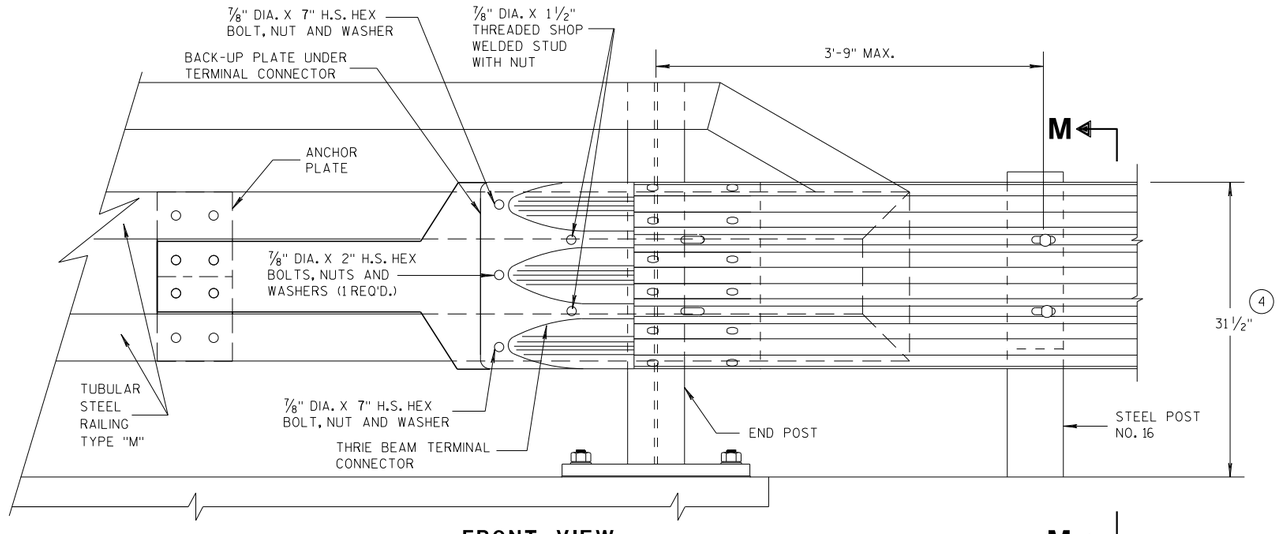


FRONT VIEW

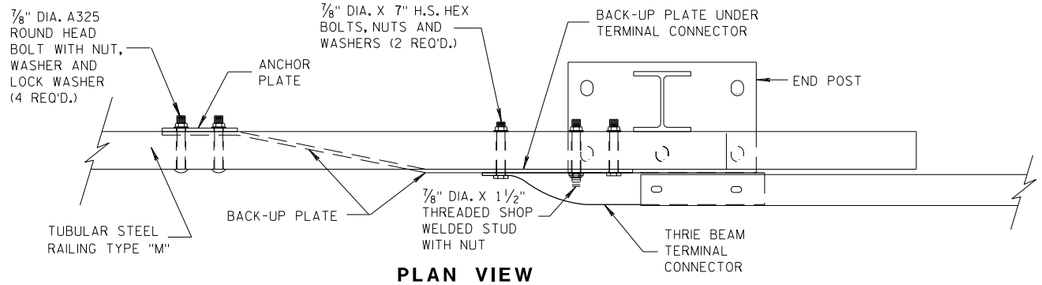
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
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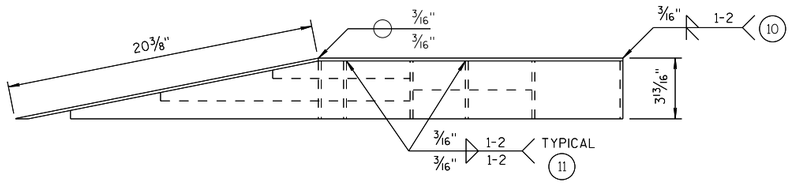

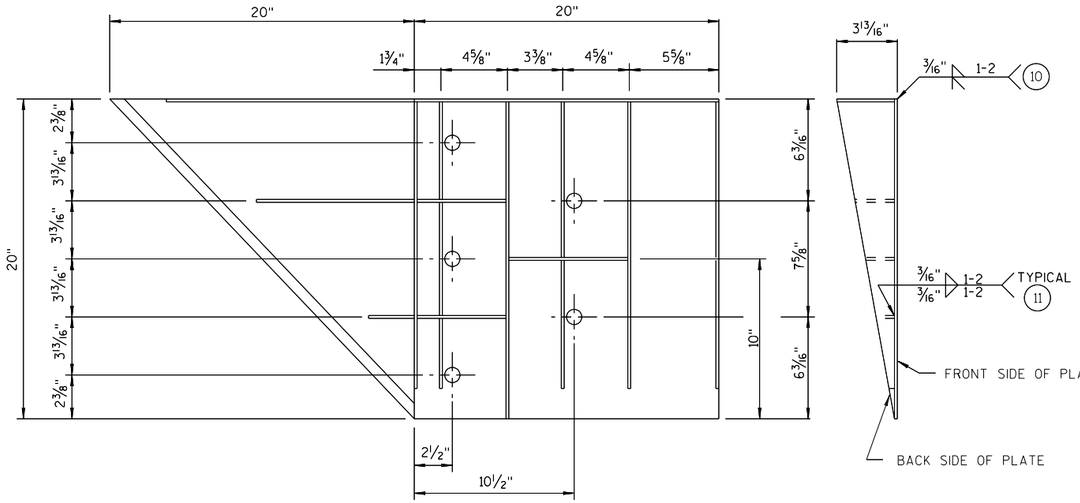

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

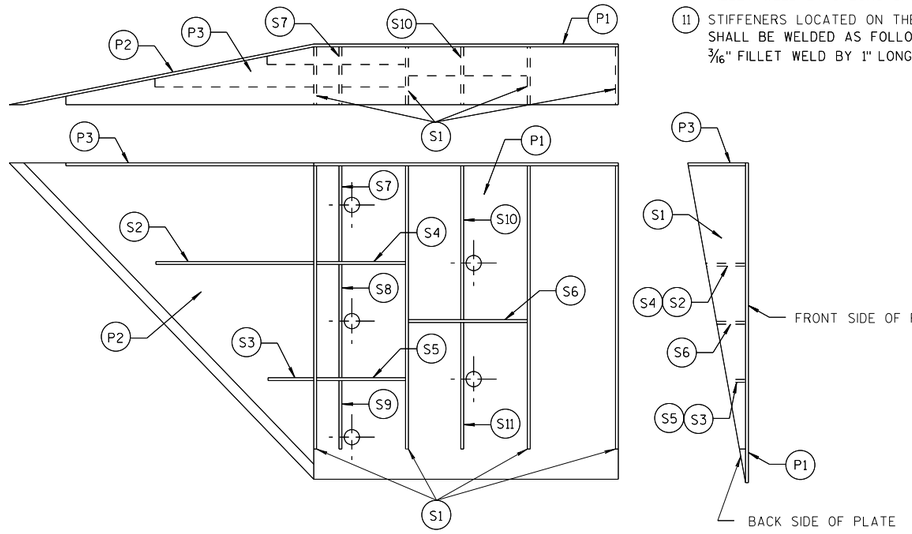

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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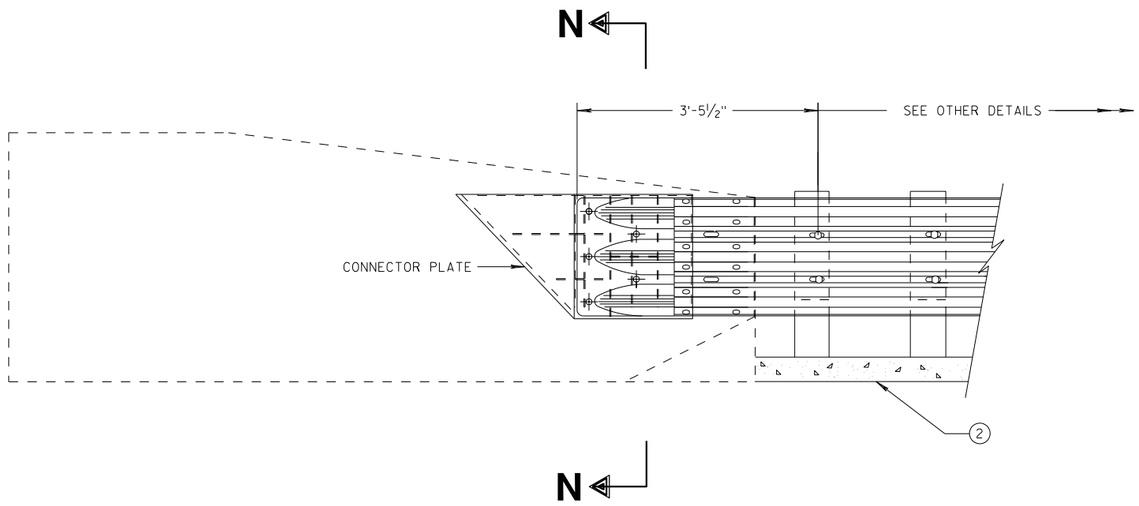
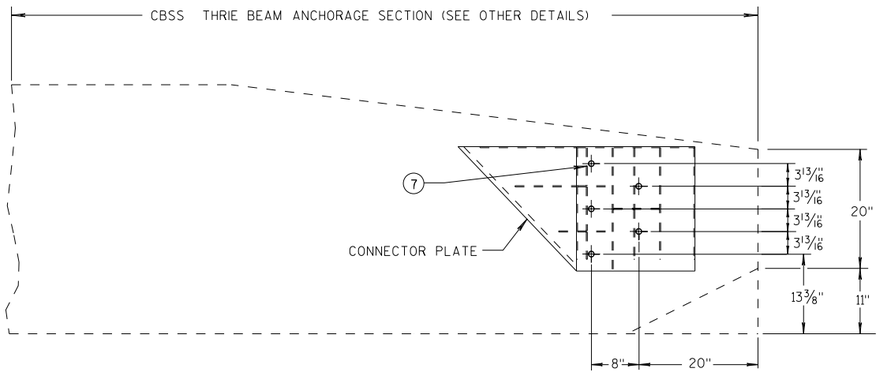


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



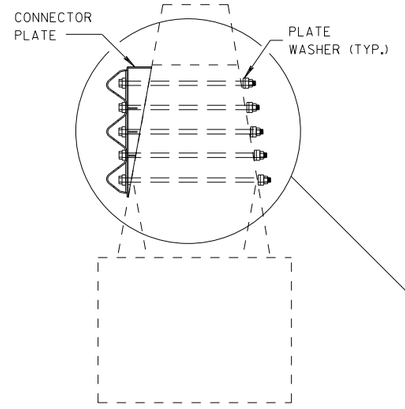
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

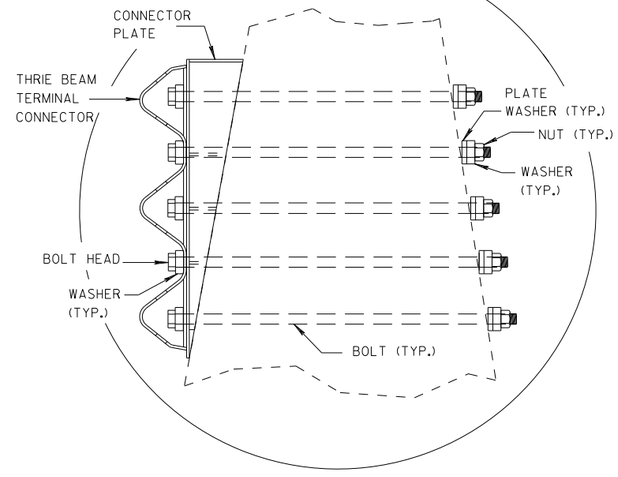
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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



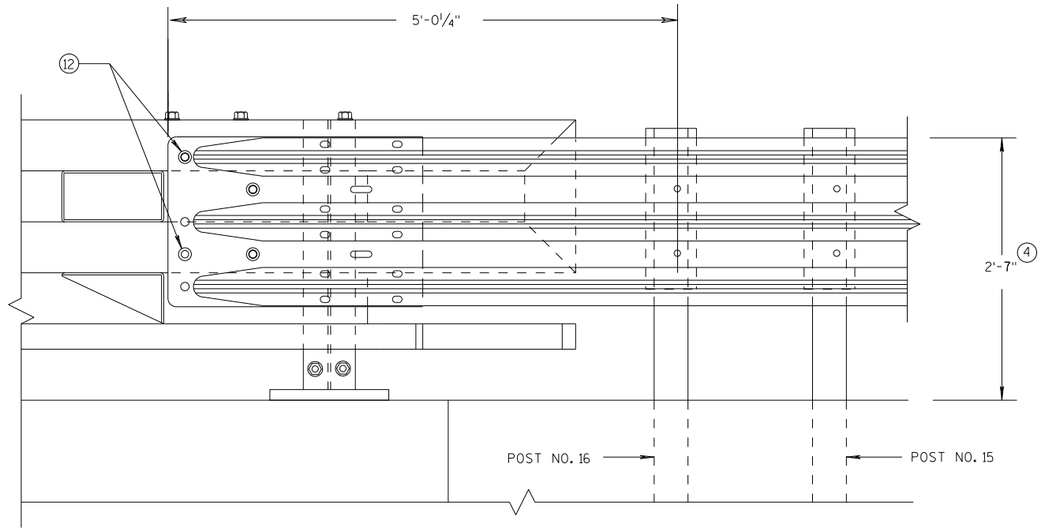
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DI UNIT SUPERVIS NT
FHWA

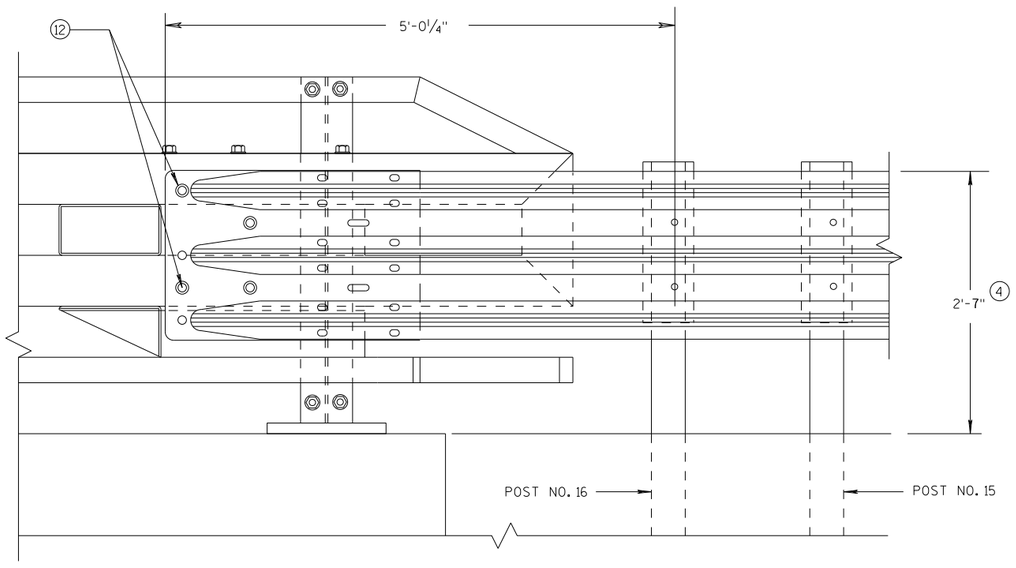
6

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



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS
FHWA

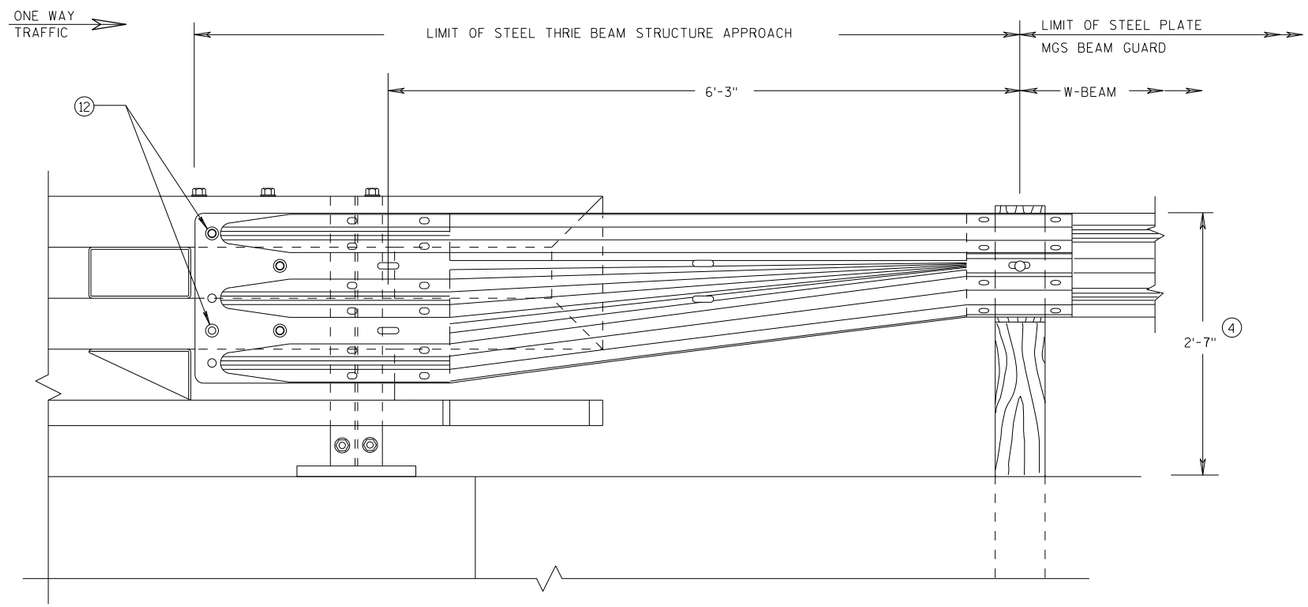
NT

6

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

6

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



FRONT VIEW

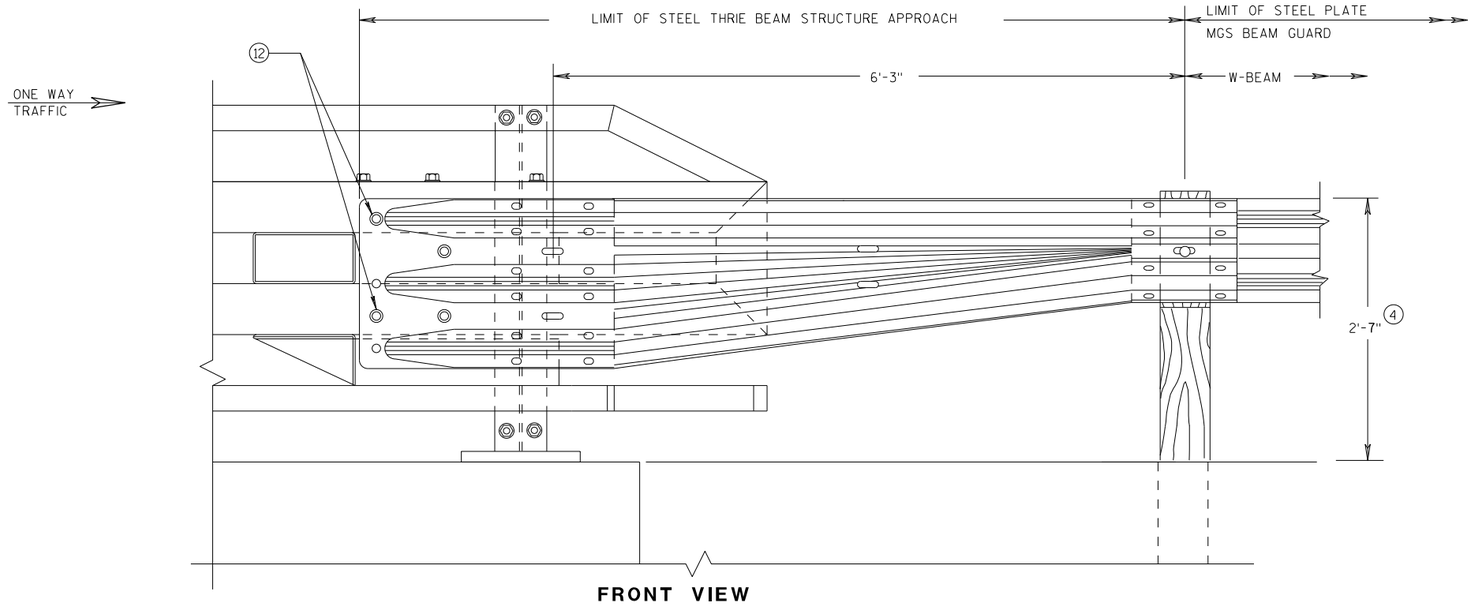
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

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



FRONT VIEW

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

437

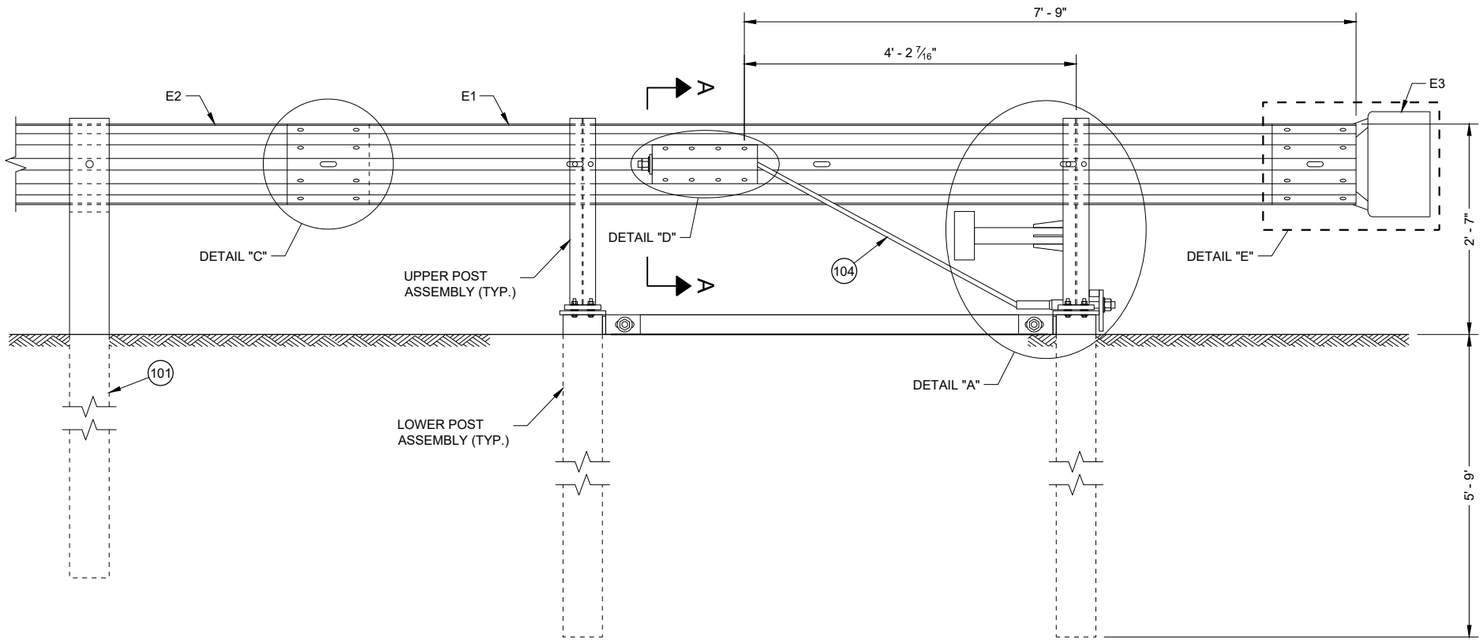
NT

6

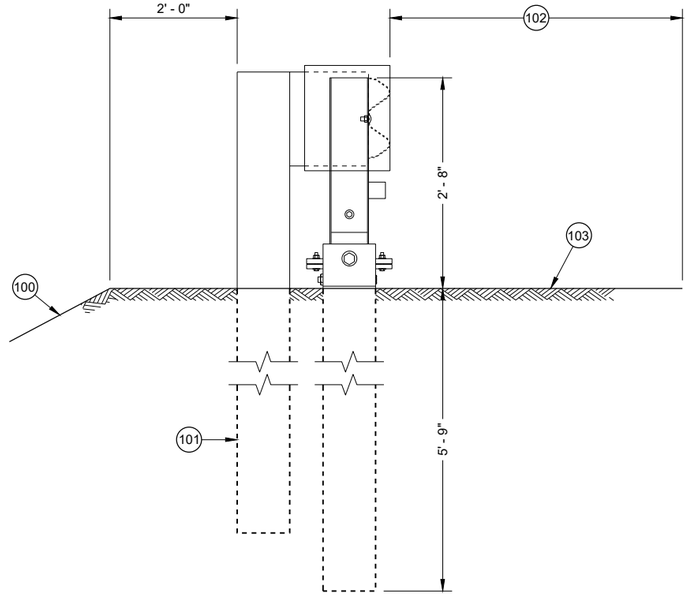
S.D.D. 14 B 45-5L

6

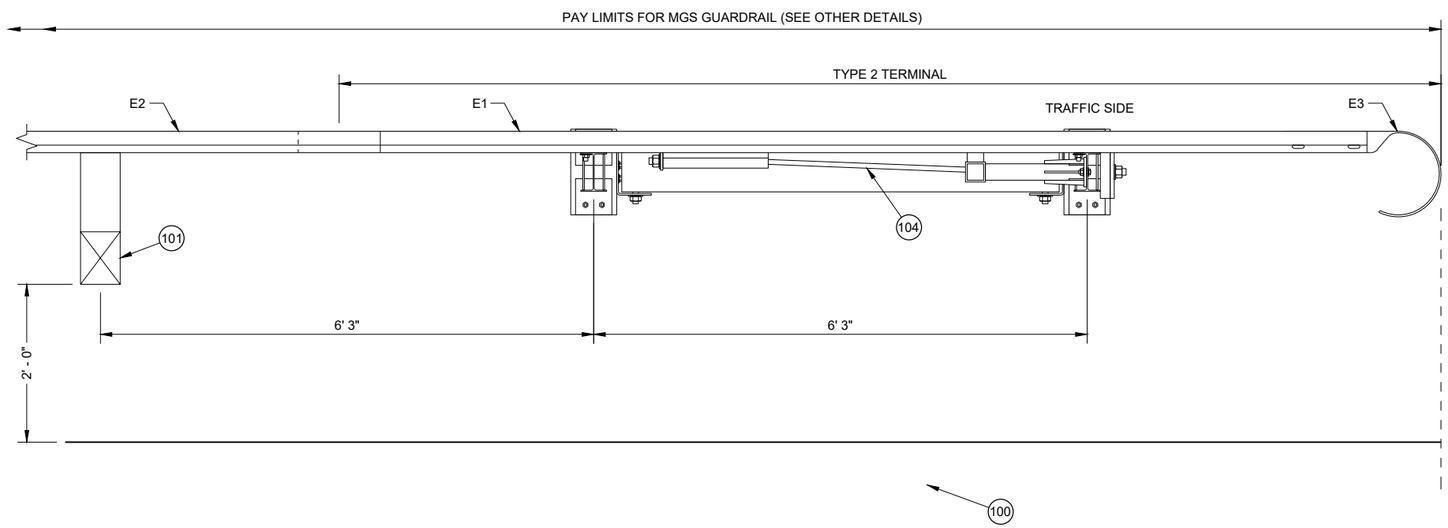
S.D.D. 14 B 45-5L



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

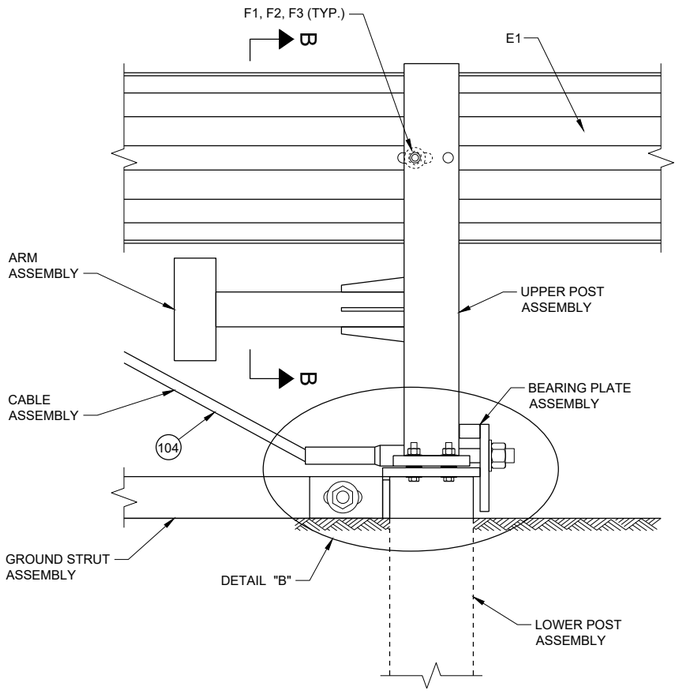
(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

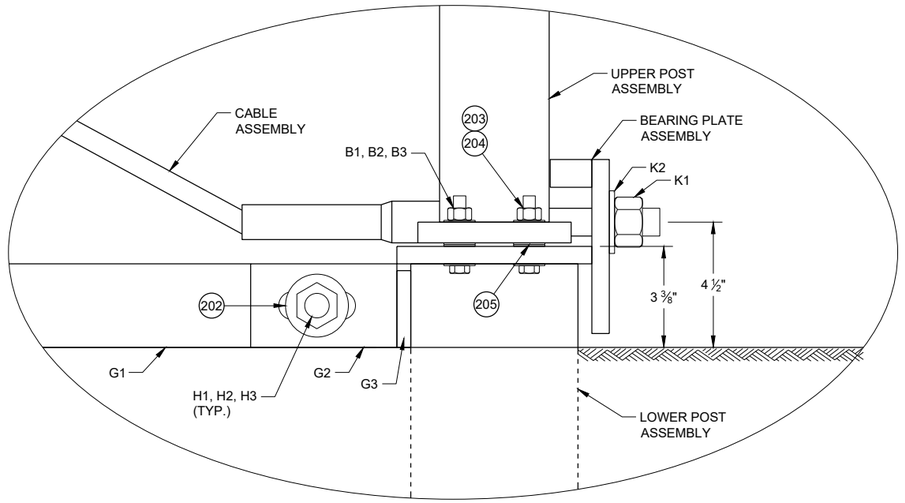
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

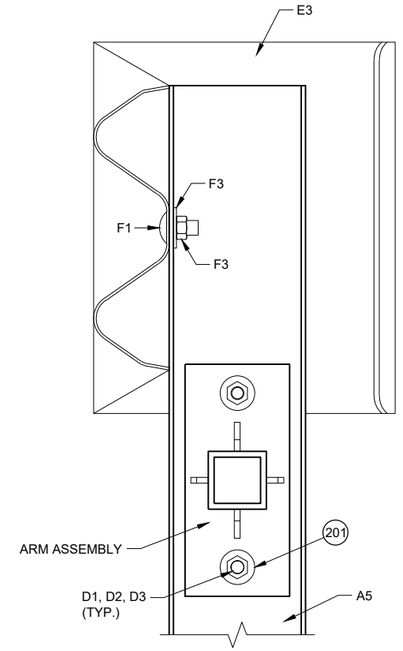
SDD 14B47 - 05a



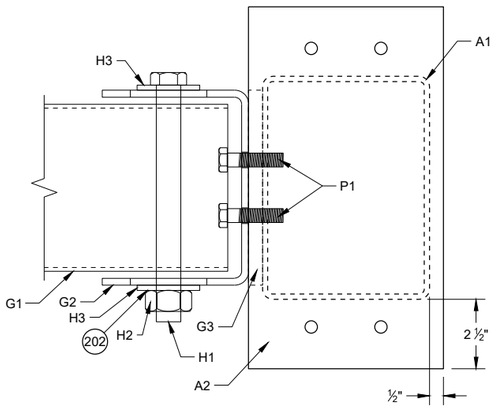
DETAIL "A"



DETAIL "B"

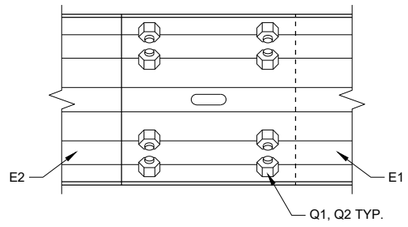


SECTION B - B



TOP VIEW

GROUND STRUT CONNECTION DETAIL



DETAIL "C"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

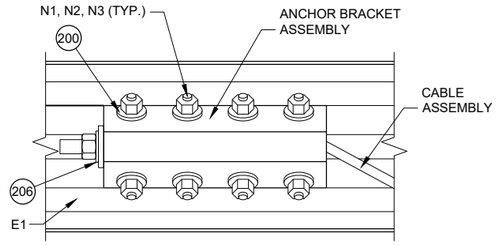
202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

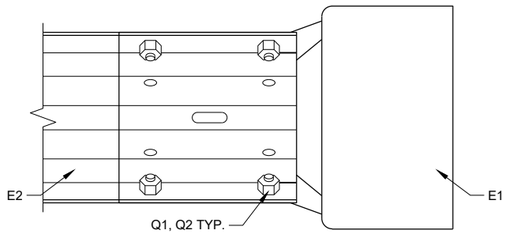
204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.



DETAIL "D"



DETAIL "E"

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

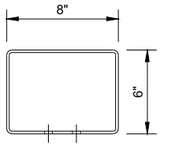
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

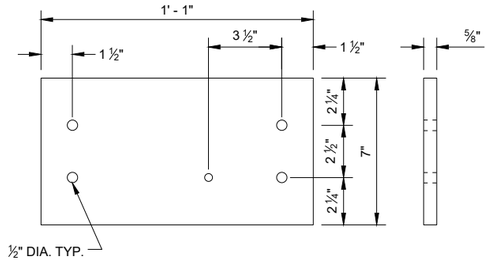
SDD 14B47 - 05b

GENERAL NOTES

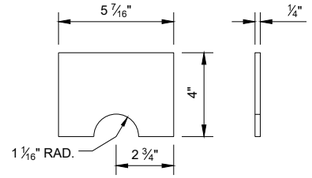
(300) TAP FOR 1/2" AFTER GALVANIZATION



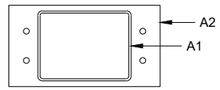
TOP VIEW



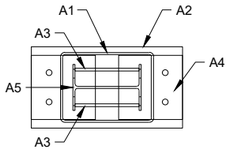
LOWER PLATE (A2)

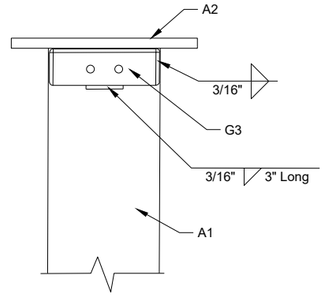


POST GUSSET (A3)

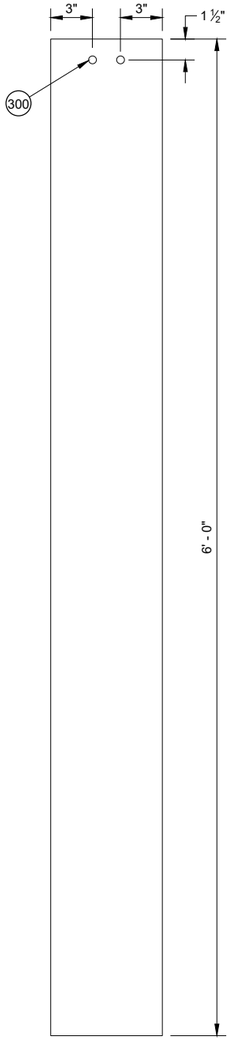


PLAN VIEW



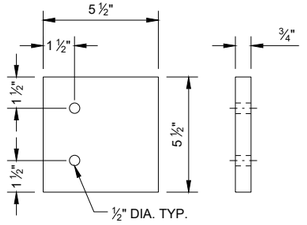


WELDING DETAIL
G3 AND A1

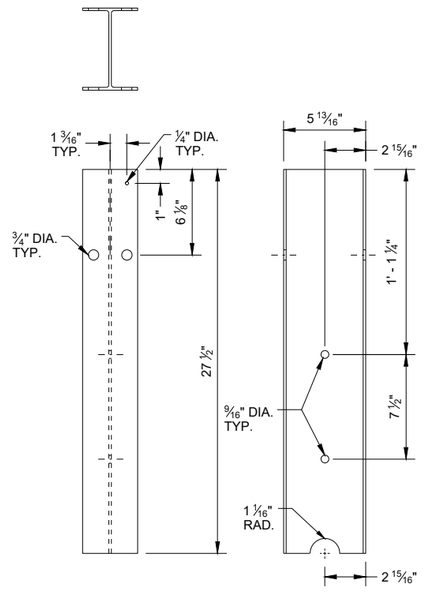


SIDE VIEW

FOUNDATION TUBE (A1)

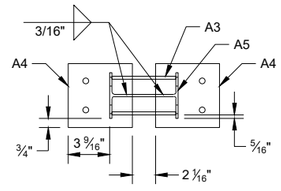


UPPER PLATE (A4)

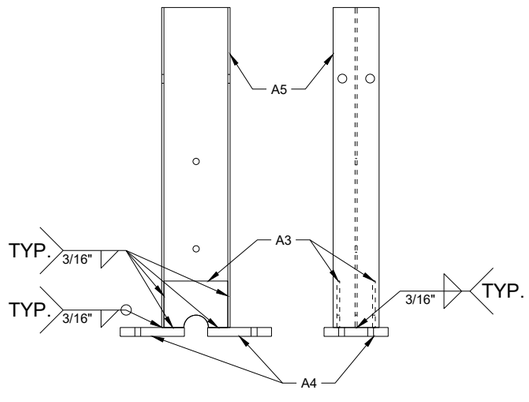


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

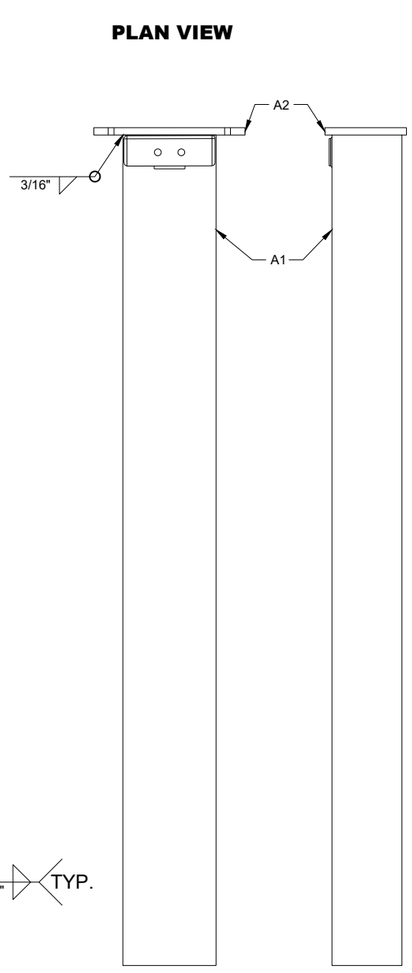


PLAN VIEW



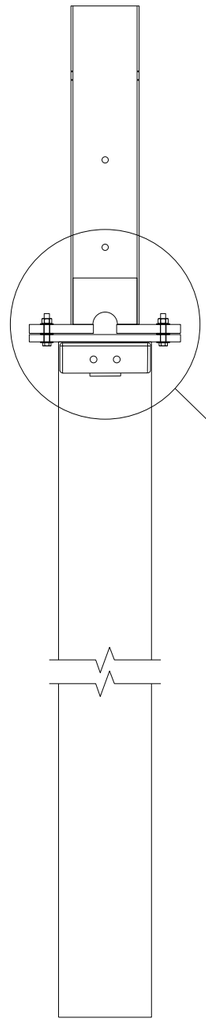
SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY

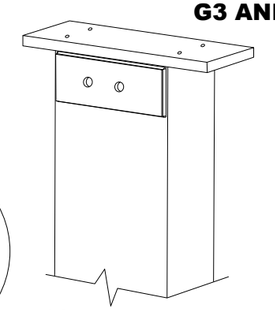


FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY



ASSEMBLED POST



ASSEMBLY DETAIL
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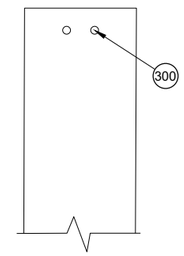
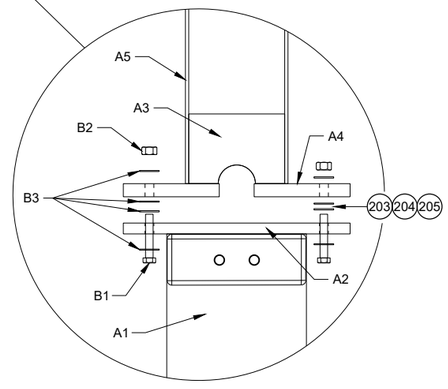


A1



POST CONNECTION DETAIL

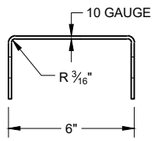
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

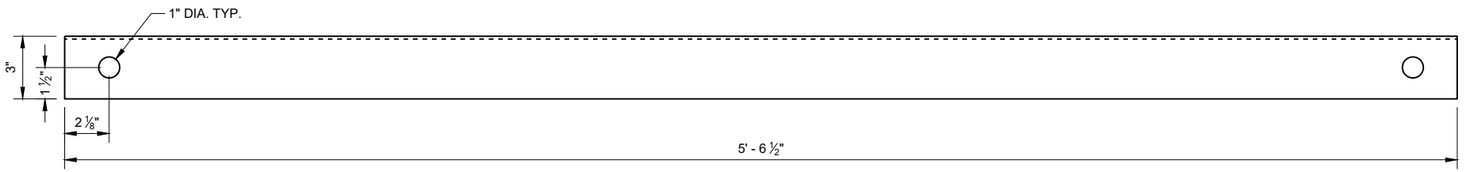
6

SDD 14B47 - 05c

SDD 14B47 - 05c

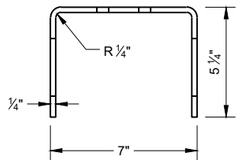


SIDE VIEW

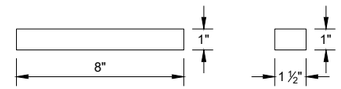


FRONT VIEW

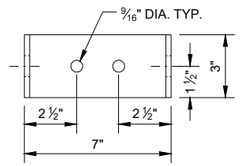
GROUND STRUT CHANNEL (G1)



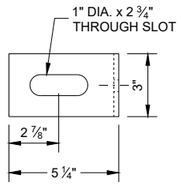
TOP VIEW



BEARING PLATE FLANGE (L2)

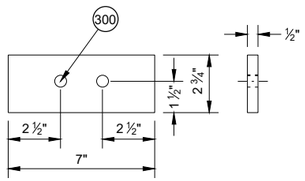


FRONT VIEW

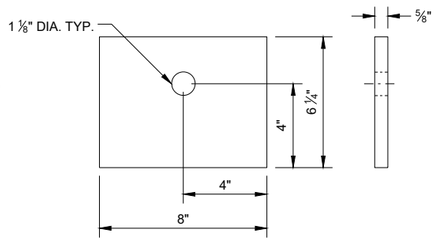


SIDE VIEW

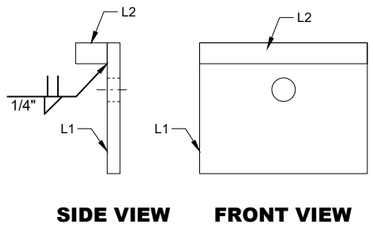
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)

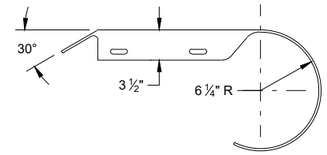


BEARING PLATE (L1)

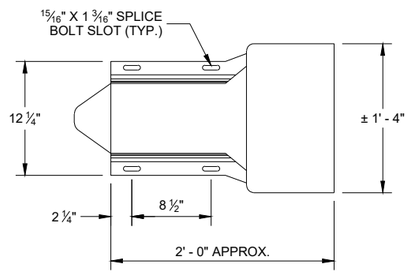


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY

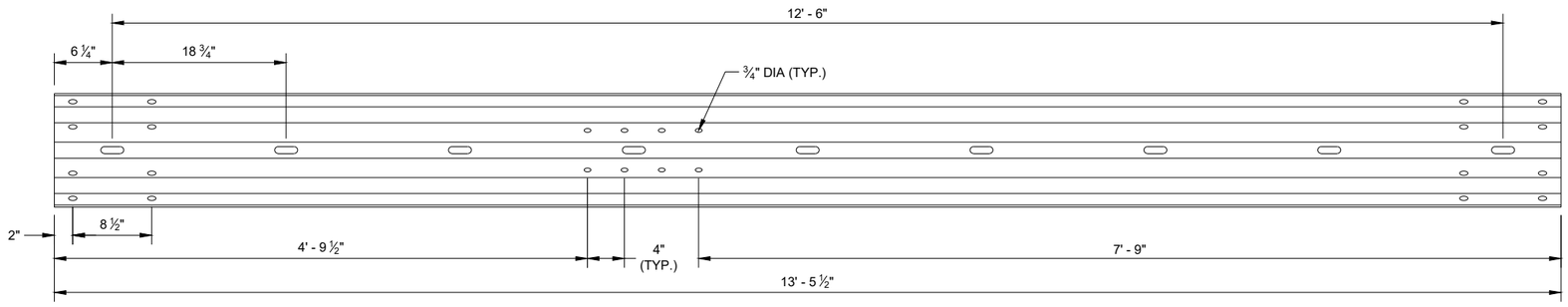


PLAN VIEW

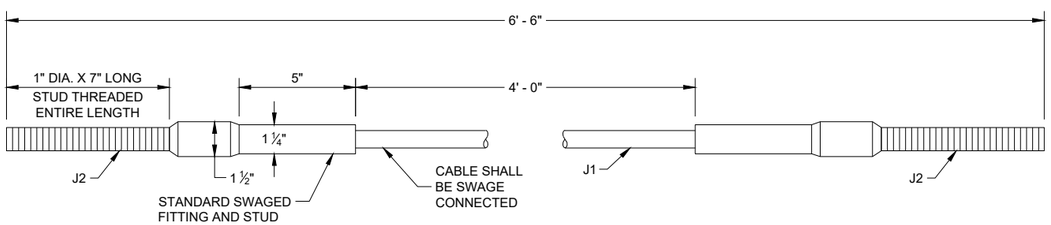


ELEVATION VIEW

ROUNDED BUFFER END (E3)



TYPE 2 GUARDRAIL (E1)



CABLE ASSEMBLY

6

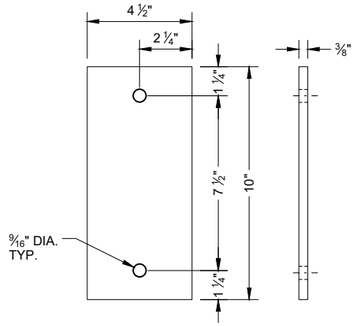
SDD 14B47 - 05d

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

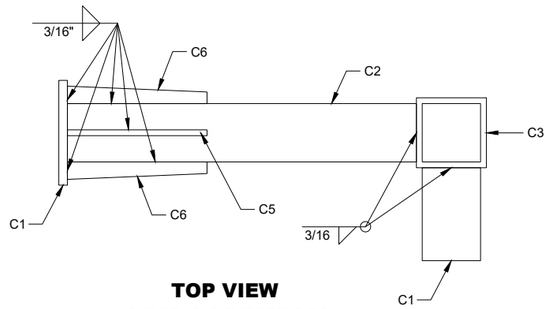
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

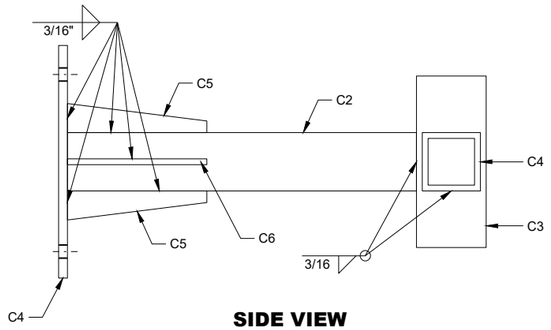
SDD 14B47 - 05d



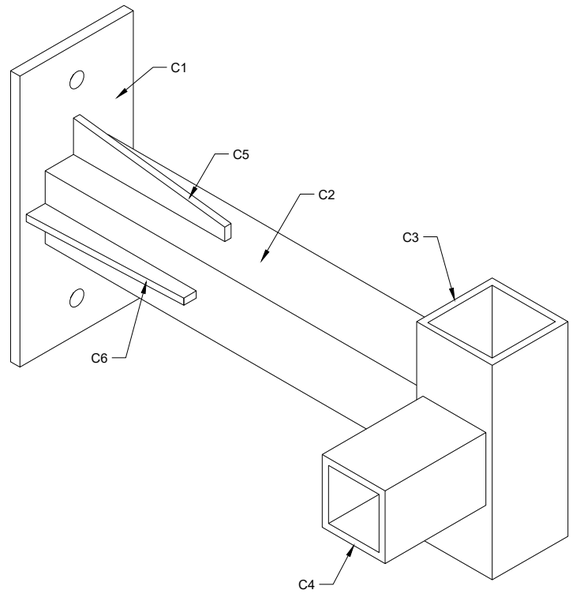
ARM PLATE (C1)



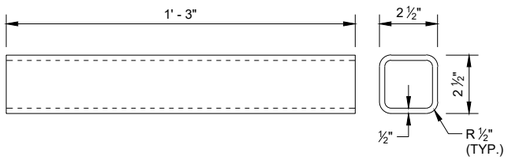
TOP VIEW
ARM ASSEMBLY



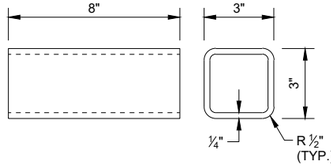
SIDE VIEW
ARM ASSEMBLY



ISOMETRIC VIEW
ARM ASSEMBLY



ARM TUBE 1 (C2)



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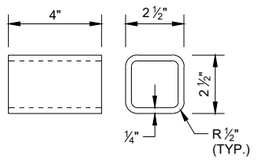

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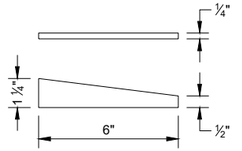
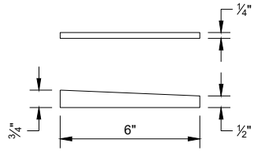
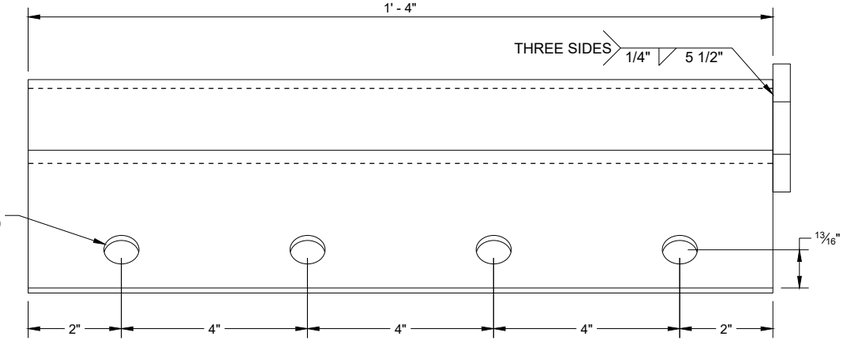
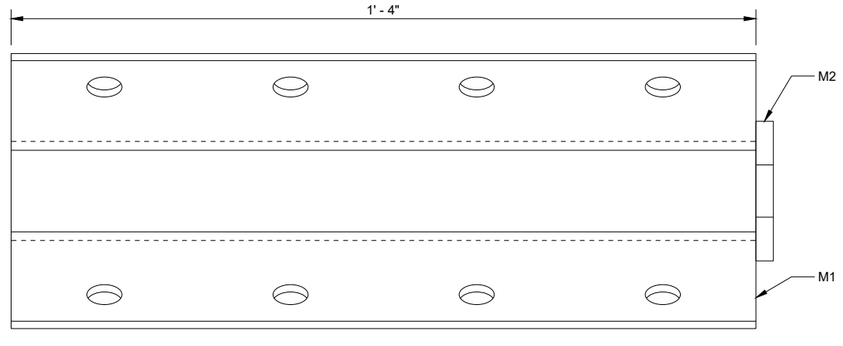


ARM GUSSET PLATE 1 (C5)

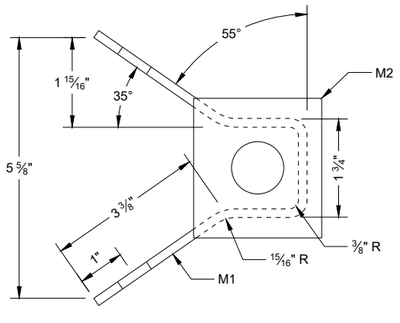


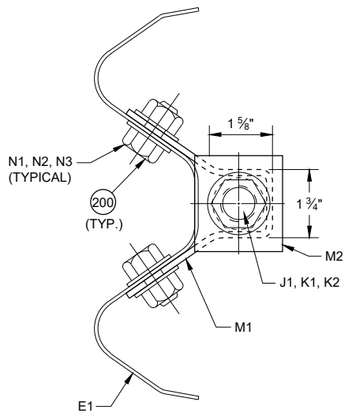
ARM GUSSET PLATE 2 (C6)

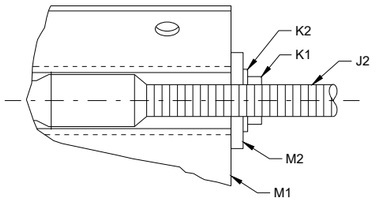




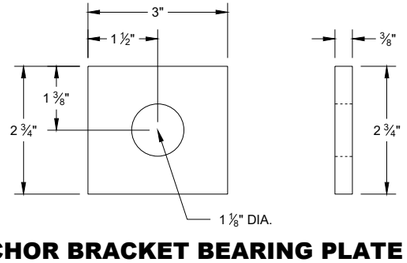
ANCHOR BRACKET (M1, M2)







SECTION A - A



ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47 - 05e

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER PLATE	AASHTO M111 / ASTM A123 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	5/8" THICKNESS
A3	POST GUSSET	AASHTO M111 / ASTM A123 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	1/4" THICKNESS
A4	UPPER PLATE	AASHTO M111 / ASTM A123 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	3/4" THICKNESS
A5	TYPE 2 POST	AASHTO M111 / ASTM A123 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, w6x9 or w6x8.5	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED . PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
C1	ARM ASSEMBLY PLATE	AASHTO M111 / ASTM A123 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	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET PLATE 1	AASHTO M111 / ASTM A123 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	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET PLATE 2	AASHTO M111 / ASTM A123 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	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	AASHTO M111 / ASTM A123 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	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	AASHTO M111 / ASTM A123 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	1/4" THICKNESS
G3	GROUND STRUT PLATE	AASHTO M111 / ASTM A123 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	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47 - 05f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	**3/4" DIA.**
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 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	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 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	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 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	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 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	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

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MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

444

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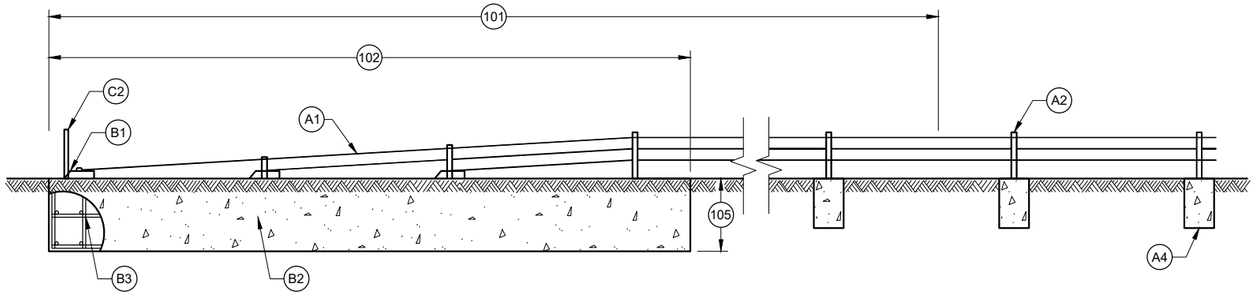
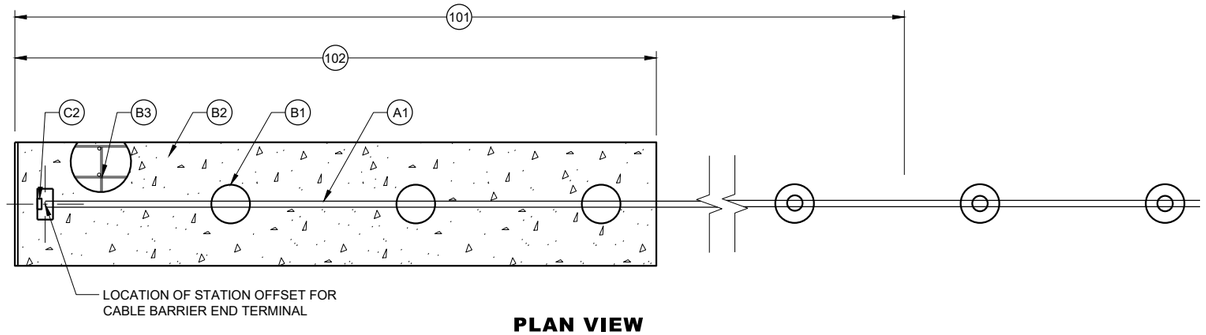
SDD 14B47 - 05g

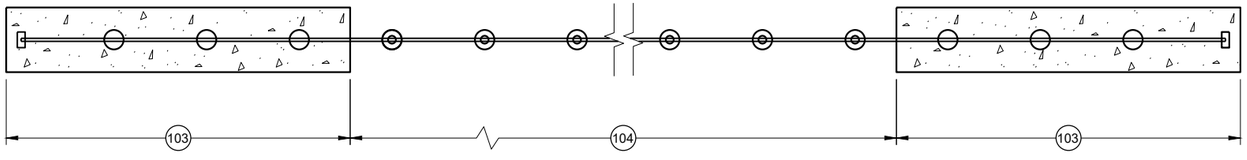


PROFILE VIEW

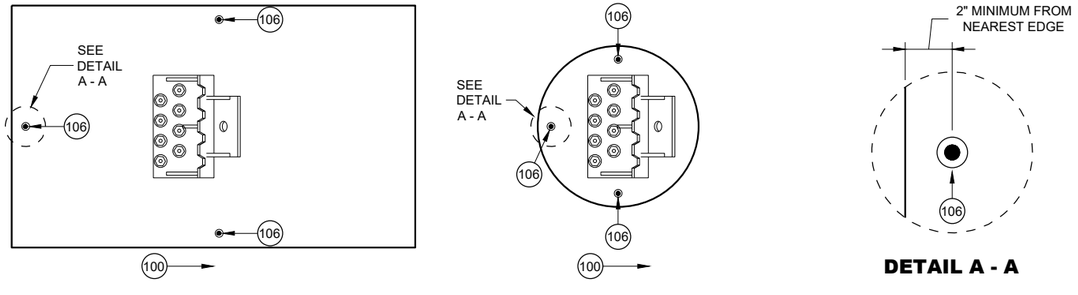


PLAN VIEW

TRANSITION FROM CABLE BARRIER TERMINAL TO CABLE BARRIER LINE POSTS



TYPICAL PLAN VIEW



DETAIL A - A

ANCHOR MONITOR POINTS FOR CABLE BARRIER END TERMINAL ANCHORS

GENERAL NOTES

DRAWINGS ARE GENERAL IN NATURE. SEE MANUFACTURER'S INFORMATION FOR MORE DETAIL.

PROVIDE 2 INCH CLEAR COVER FROM OUTER EDGE OF CONCRETE FOOTINGS TO REINFORCEMENT.

INSTALL LINE POSTS PLUMB. LINE POSTS ARE TO BE EASILY REMOVED BY HAND AND HOLD CABLES AT THE PROPER ELEVATION.

PROVIDE CABLE BARRIER SYSTEM FROM APPROVED PRODUCT LIST.

PROVIDE A SYSTEM TO HAVE THE WORKING WIDTH INDICATED IN PLAN.

PROVIDE DOCUMENTATION HOW POST SPACING, RADIUS OF CURVE AND ANCHOR SPACING INFLUENCES WORKING WIDTH TO CONSTRUCTION STAFF.

CONSTRUCT SHAFTS VERTICALLY. VERTICAL TOLERANCE OF SHAFT IS $\frac{1}{8}$" PER FOOT OF DEPTH. SHAFTS ARE TO MINIMIZE DISTURBANCE TO ADJACENT SOILS.

SECURE STEEL REINFORCEMENT AND STEEL SLEEVE PRIOR TO PLACEMENT OF CONCRETE. MAINTAIN CLEAR DISTANCE BETWEEN SOIL AND REINFORCEMENT CAGE.

PLACE CONCRETE IN ONE CONTINUOUS POUR FOR EACH FOOTING. USE VIBRATION TO CONSOLIDATE CONCRETE.

PROVIDE CASING AS NECESSARY TO PREVENT INTRUSION OF UNCONSOLIDATED MATERIALS OR WATER. USE CASINGS WHEN THERE IS 3 OR MORE INCHES OF WATER IN EXCAVATION.

PROVIDE WISCONSIN PROFESSIONAL ENGINEER SIGNED AND APPROVED FOOTING DESIGN USING A CASING AND CONSTRUCTION SEQUENCE. PROJECT ENGINEER WILL REVIEW AND APPROVED CASING DESIGN AND CONSTRUCTION SEQUENCE. CASING IS TO HAVE INTIMATE CONTACT WITH SHAFT SIDEWALL. CASING IT TO WITHSTAND INSERTION STRESS, REMOVAL STRESS, CONCRETE PRESSURE AND SOIL PRESSURE. REMOVE CASING DURING CONCRETE PLACEMENT OR IMMEDIATELY AFTER CONCRETE PLACEMENT. NO TEMPORARY CASING MAY REMAIN IN-PLACE.

PROVIDE WISCONSIN PROFESSIONAL ENGINEER SIGNED AND APPROVED FOOTING DESIGN AND CONSTRUCTION SEQUENCE WHEN OVER EXCAVATION IS REQUIRED NEAR A FOOTING. PROJECT ENGINEER WILL REVIEW AND APPROVED DESIGN AND CONSTRUCTION SEQUENCE.

FINISH TOP OF FOOTINGS TO THE DIMENSIONS INDICATED IN PLAN. REMOVE EXCESS CONCRETE.

DESIGN POST FOOTINGS SO THAT LINE POST FOOTING MOVE LESS THAN 1 INCH WHEN LINE POST IS IMPACTED BY A NCHRP 350 TL-3 SMALL CAR.

USE MARINE GRADE ANTI-SEIZE LUBRICANT FOR THREADING FITTINGS THAT IS ACCEPTABLE FOR USE ON GALVANIZED STEEL.

(100) DIRECTION THAT THE CABLE PULLS THE END ANCHOR FOOTING

(101) LOCATION OF LENGTH OF NEED POINT FOR CABLE BARRIER END TERMINAL VARIES. (SEE MANUFACTURER'S INFORMATION)

(102) PAY LIMIT FOR CABLE BARRIER END TERMINAL. LENGTH OF CABLE BARRIER END TERMINAL VARIES. (SEE MANUFACTURER'S INFORMATION)

(103) CABLE BARRIER END TERMINAL

(104) CABLE BARRIER AND LINE POSTS

(105) IN SOIL MINIMUM DEPTH OF CABLE BARRIER END TERMINAL FOOTING IS 60 INCHES. DEEPER FOOTINGS PER MANUFACTURER'S RECOMMENDATION ARE ACCEPTABLE.

(106) ANCHOR MONITOR POINTS ARE GALVANIZED SURVEY NAIL, OR MASONRY NAIL, PLACED INTO CONCRETE FOOTING BEFORE HARDENING. IF THERE ARE MULTIPLE ANCHOR POINTS WITHIN A PAY LIMIT FOR A CABLE BARRIER END TERMINAL, EACH ANCHOR POINT NEEDS THREE ANCHOR MONITOR POINTS.

CABLE BARRIER TYPE 1 LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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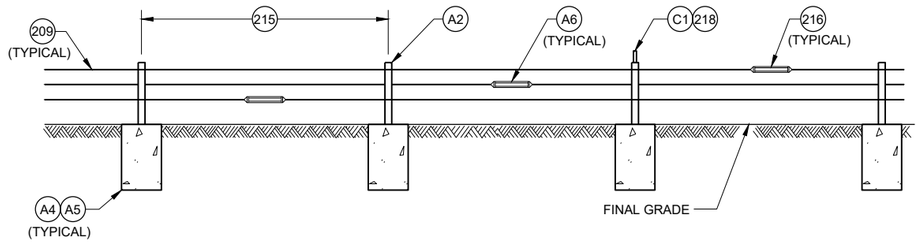
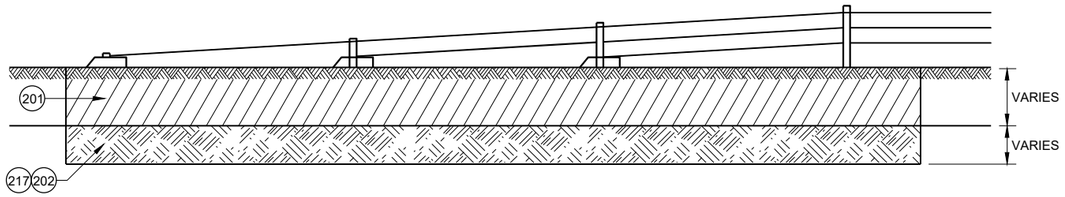
SDD14B52 - 03a



PROFILE VIEW
LINE POST INSTALLATION



CABLE BARRIER END TERMINAL
ROCK EXCAVATION DETAIL

GENERAL NOTES

201 SOIL TO BE EXCAVATED FOR CABLE BARRIER END TERMINAL (VARIES)

202 ROCK TO BE EXCAVATED FOR CABLE BARRIER END TERMINAL (VARIES)

203 SOIL TO BE EXCAVATED FOR LINE POST (VARIES)

204 ROCK TO BE EXCAVATED FOR LINE POST (VARIES)

205 EXCAVATE AND GRADE LINE FOR LINE POST FOOTINGS. INSTALL LINE POST FOOTING TO MINIMIZE 4 INCH TALL OBJECT ON 5 FOOT CHORD.

206 2 INCHES OF CLEAR COVER FROM EDGE OF CONCRETE TO REINFORCEMENT.

207 DIAMETER OF LINE POST FOOTING VARIES. SEE MANUFACTURERS' INFORMATION.

208 MINIMUM DEPTH OF LINE POST FOOTING IS 4' - 0" IN SOIL. DEEPER FOOTINGS PER MANUFACTURER'S RECOMMENDATION ARE ACCEPTABLE.

209 NUMBER AND LOCATION OF CABLES VARY. SEE MANUFACTURERS' INFORMATION.

210 LINE POST DIMENSIONS AND CONNECTION HARDWARE VARY. SEE MANUFACTURERS' INFORMATION.

211 LANE OF ROADWAY (VARIES). SEE PLAN FOR MORE INFORMATION.

212 PAVED SHOULDER (VARIES). SEE PLAN FOR MORE INFORMATION.

213 GRAVEL SHOULDER (VARIES). SEE PLAN FOR MORE INFORMATION.

214 CABLE BARRIER OFFSET FROM CENTERLINE OF MEDIAN DITCH (8 FOOT MINIMUM). SEE PLAN FOR MORE INFORMATION.

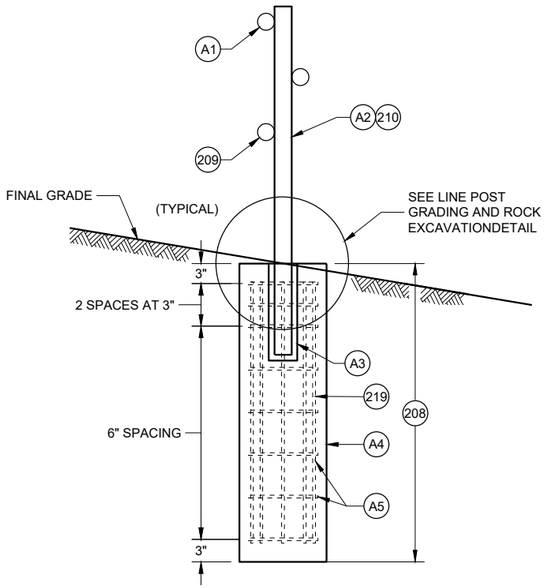
215 MAXIMUM POST SPACING IS 15 FEET.

216 STAGGER TURNBUCKLES (TYPICAL).

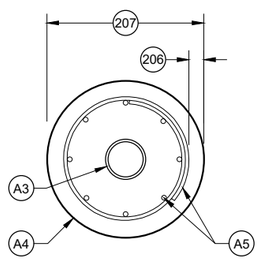
217 SEE MANUFACTURER'S DESIGN WHEN ROCK IS ENCOUNTERED.

218 LINE POST DELINEATOR SPACING IS 100 FEET.

219 MINIMUM LINE POST FOOTING REINFORCEMENT SHOWN. MANUFACTURER IS TO INDICATE REINFORCEMENT IS ADEQUATE FOR THEIR SYSTEM. IF REINFORCEMENT IS NOT ADEQUATE, PROVIDE FOOTING DESIGN WITH A ADEQUATE REINFORCEMENT.

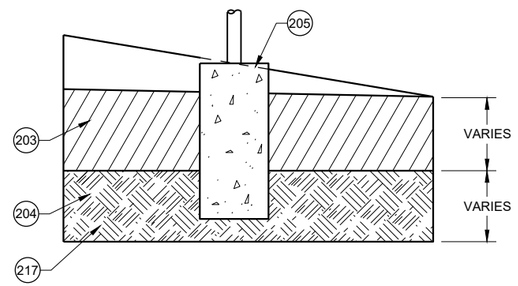


CROSS SECTION

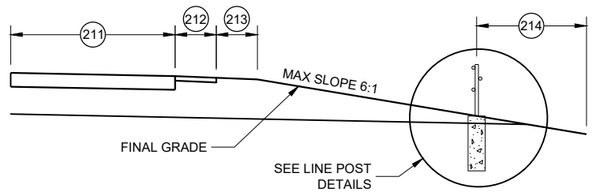


PROFILE VIEW
(LINE POSTS AND CABLES NOT SHOWN)

LINE POST DETAILS



LINE POST GRADING
AND ROCK EXCAVATION DETAIL



CABLE BARRIER OFFSET FROM DITCH LINE

CABLE BARRIER
TYPE 1 LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B52 - 03b

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BILL OF MATERIALS

PART NUMBER	QTY.	DESCRIPTION	MATERIALS SPECIFICATIONS
A1	3 OR 4	¾" 3x7 PRESTRECHED GALVANIZED STEEL WIRE ROPE	AASHTO M30 TYPE 1 CLASS A OR ASTM A741 TYPE 1 CLASS A WITH MINIMUM BREAKING STRENGTH = 39 KIPS (173.5 KN)
A2	1 PER LINE POST	GALVANIZED REMOVABLE STEEL LINE POST	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS AND MATERIAL REQUIREMENTS.
			ASTM A123 (GALVANIZATION).
A3	1 PER LINE POST	GALVANIZED STEEL SLEEVE	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS AND MATERIAL REQUIREMENTS.
			ASTM A123 (GALVANIZATION).
A4	VARIES	CONCRETE FOR LINE POST FOOTING	A, A-FA.A-T, OR A-IP OF STANDARD SPECIFICATION 501.2 OR AS MANUFACTURER SPECIFIES.
			STANDARD SPECIFICATION 716 QMP FOR CLASS II ANCILLARY CONCRETE
			SEE MANUFACTURER'S INFORMATION ON DIMENSIONS.
A5	MINIMUM REINFORCEMENT: 8 HORIZONTAL LOOP BARS 8 VERTICAL BARS	EPOXY COATED STEEL REINFORCEMENT	STANDARD SPECIFICATION 505.
			ALL BARS ARE NO. 4 BARS
A6	VARIES	TURNBUCKLES AND OTHER CABLE CONNECTING HARDWARE	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS.
			MINIMUM BREAKING STRENGTH OF TURNBUCKLES AND CONNECTION HARDWARE IS EQUAL TO CABLE.
			TURNBUCKLES AND OTHER CABLE CONNECTION HARDWARE IS FIELD SWAGED PER MANUFACTURER'S RECOMMENDATION AND DETAILS.
			PROVIDE DOCUMENTATION THAT THE FITTINGS ARE STRONGER THAN THE CABLE BARRIER. DOCUMENTATION IS TO INCLUDE: MANUFACTURER NAME, TESTING RESULTS, AND DATE OF TESTING.
B1	VARIES	CABLE CONNECTION TO CABLE BARRIER END TERMINAL	SEE MANUFACTURER'S INFORMATION ON DIMENSIONS AND MATERIAL REQUIREMENTS.
B2	VARIES	CONCRETE FOR CABLE BARRIER END TERMINAL	A, A-FA.A-T, OR A-IP OF STANDARD SPECIFICATION 501.2.
			STANDARD SPECIFICATION 716 QMP FOR CLASS II ANCILLARY CONCRETE
B3	VARIES	EPOXY COATED STEEL REINFORCEMENT	STANDARD SPECIFICATION 505.
C1	VARIES	LINE POST DELINEATOR	REFLECTIVE SHEETING TYPE SH. SEE APPROVED PRODUCT LIST YELLOW.
C2	VARIES	CABLE BARRIER END TERMINAL DELINEATOR	REFLECTIVE SHEETING TYPE SH. SEE APPROVED PRODUCT LIST OBJECT MARKER TYPE 3 PATTERN

6

CABLE BARRIER TYPE 1 LAYOUT

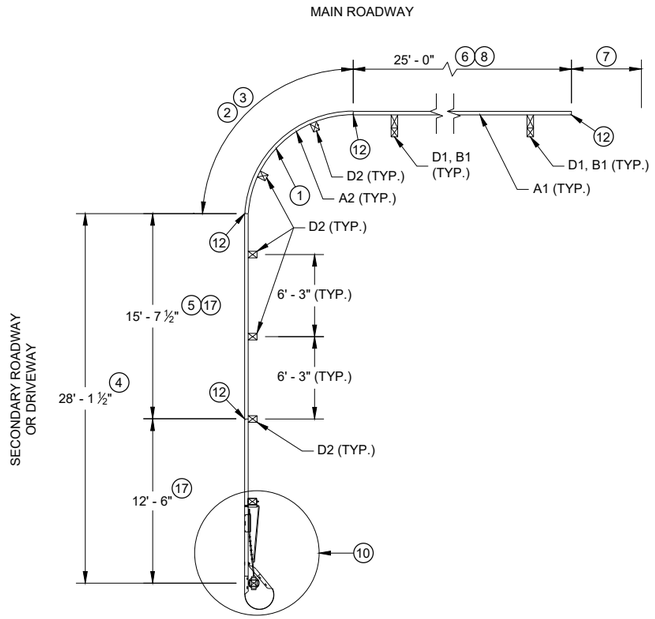
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

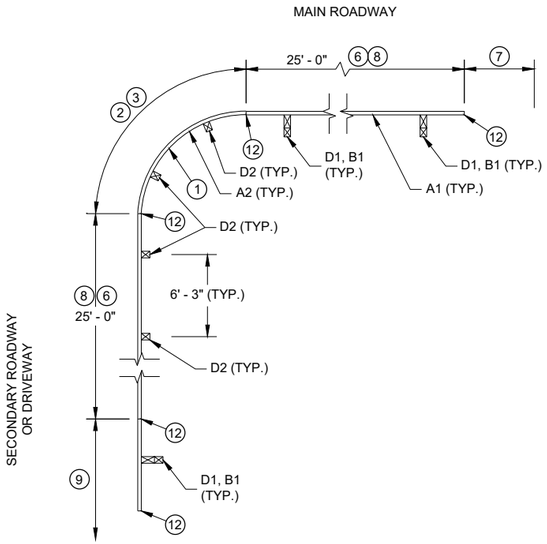
FHWA

SDD 14B52 - 03c



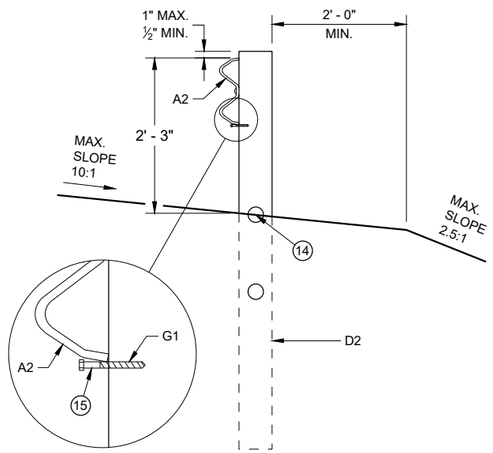
PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

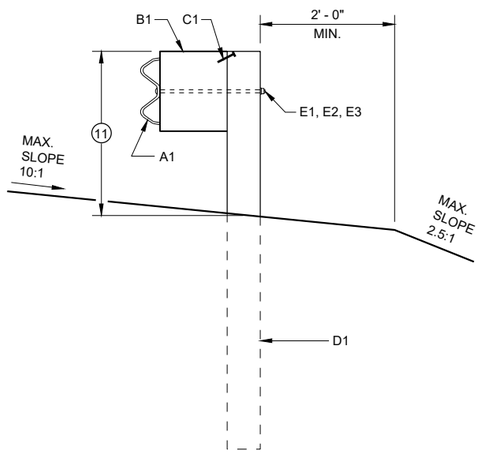


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



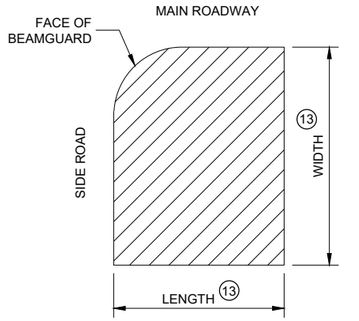
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



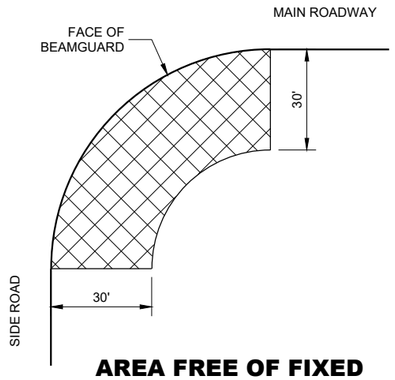
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

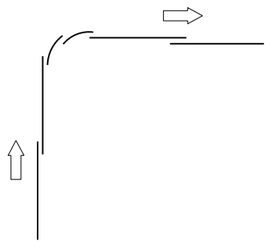
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



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.

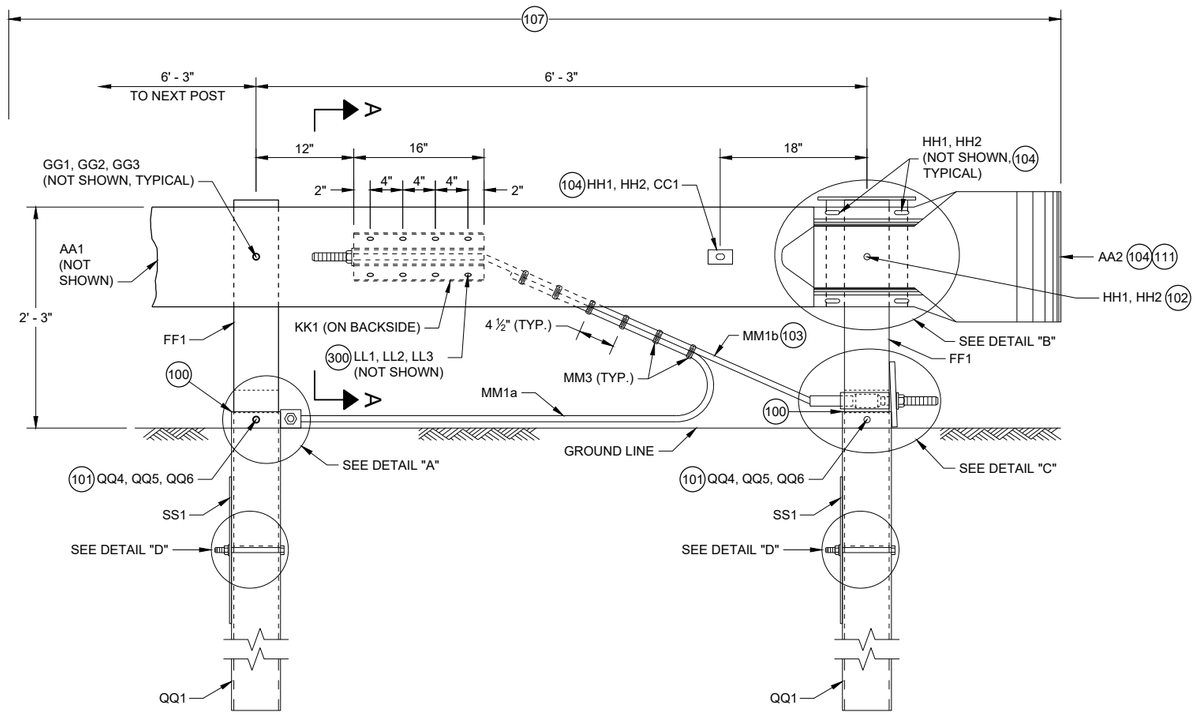
(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

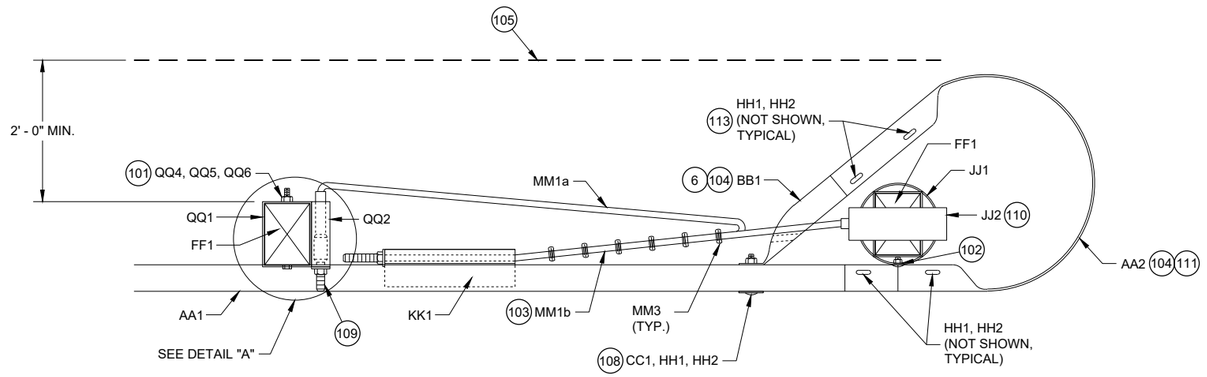
6

SDD 14B53 - 02a



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.

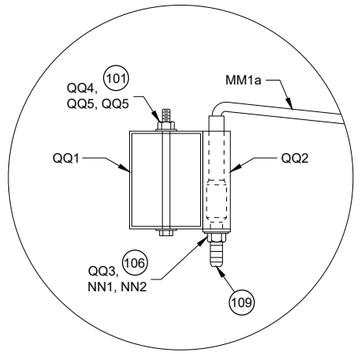
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

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.

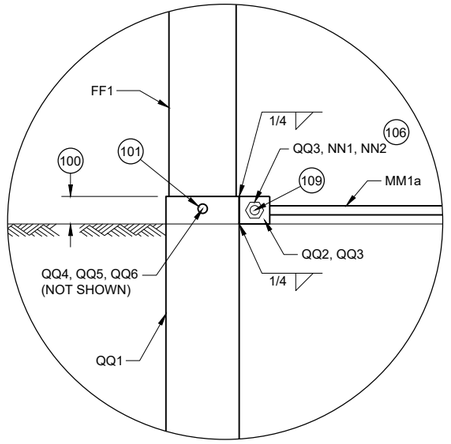
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

SDD 14B53 - 02b

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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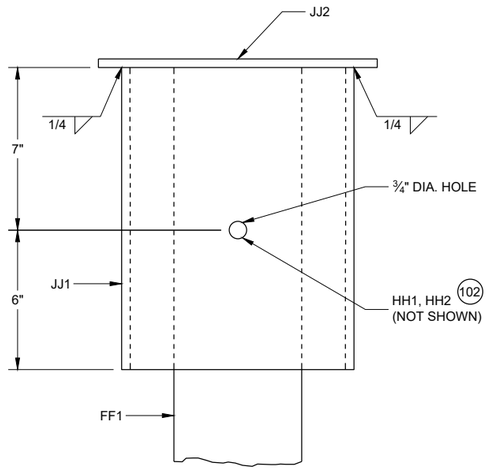
SDD 14B53 - 02b

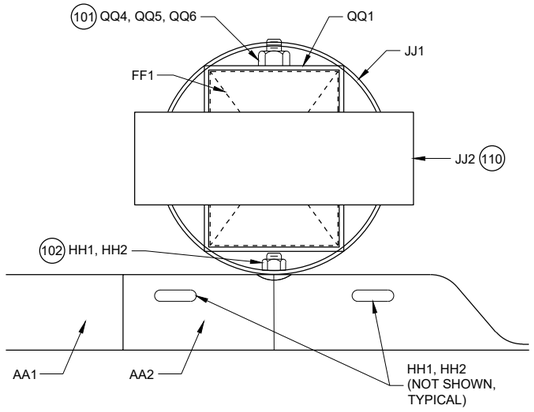
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



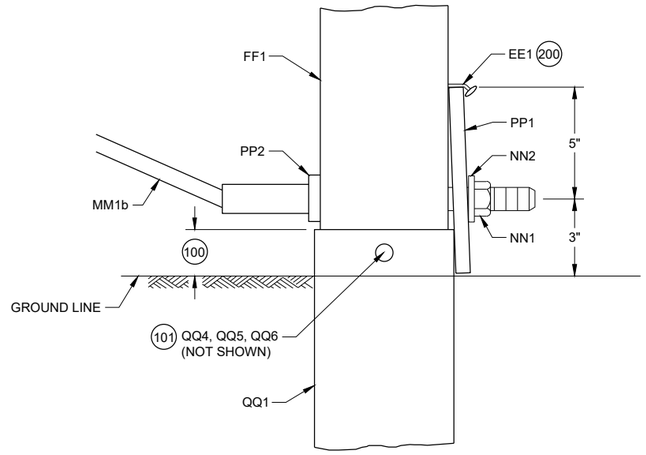
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



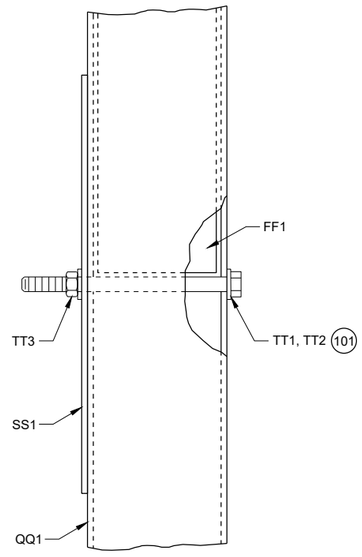
PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "C"



PROFILE VIEW

DETAIL "D"

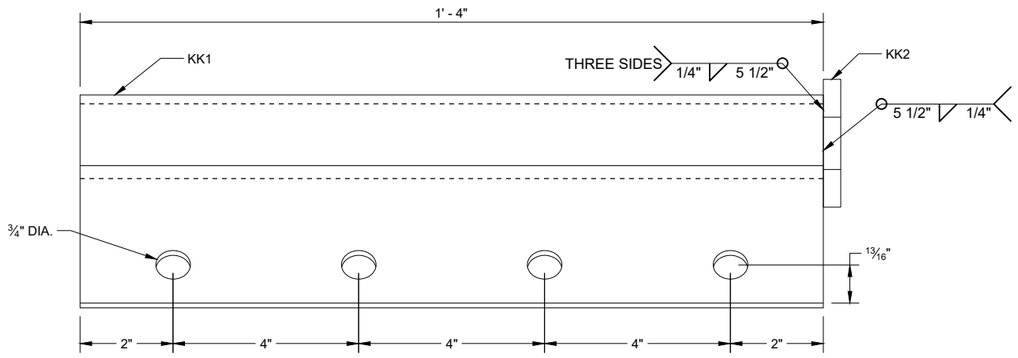
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

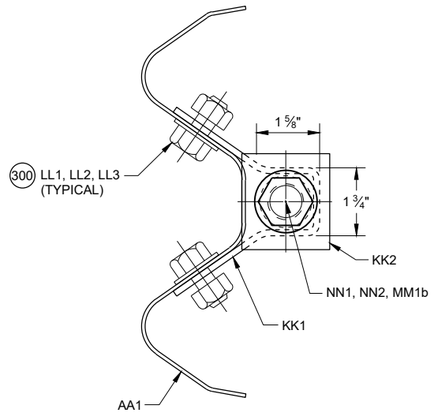
6

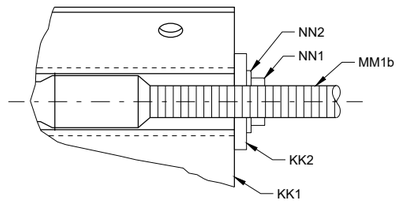
SDD 14B53 - 02c

GENERAL NOTES

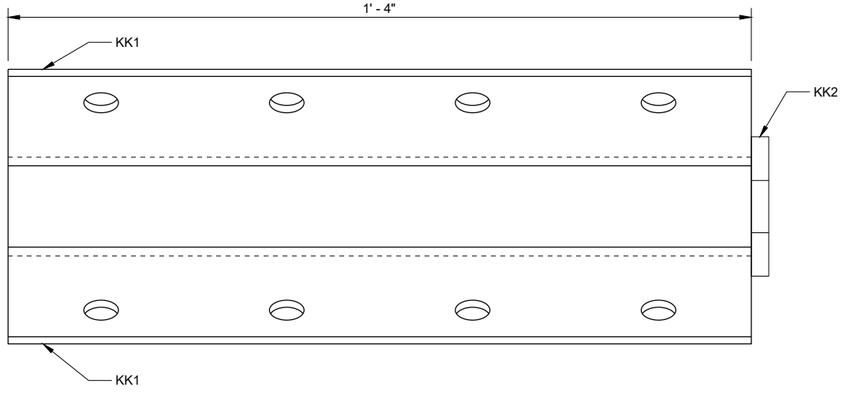
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

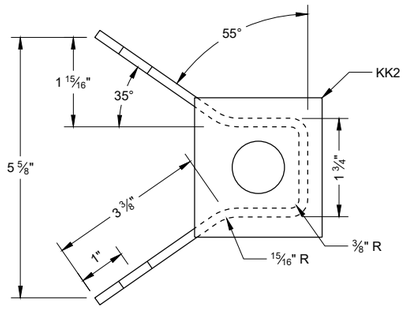




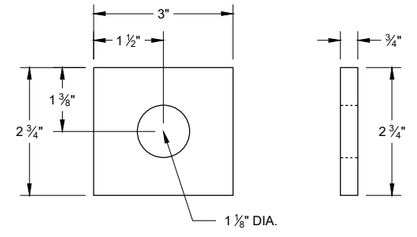


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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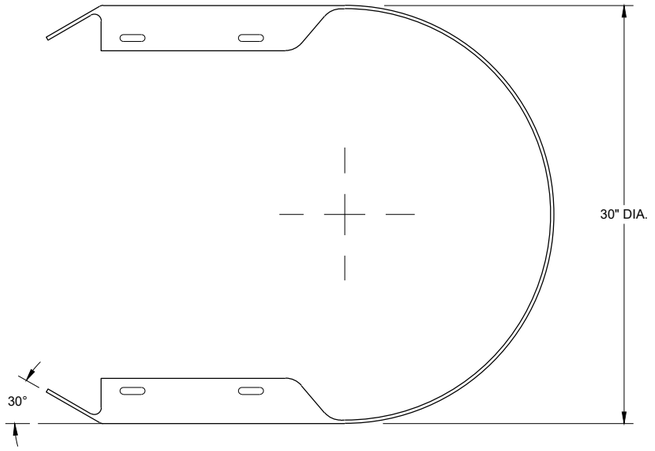
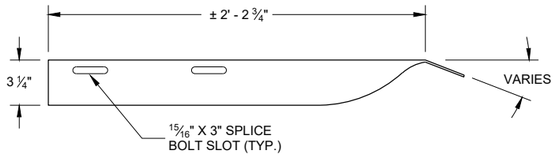
SDD 14B53 - 02d



TOP VIEW

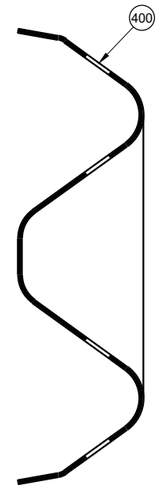


TOP VIEW

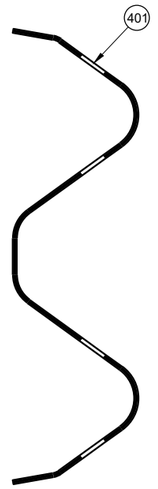
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

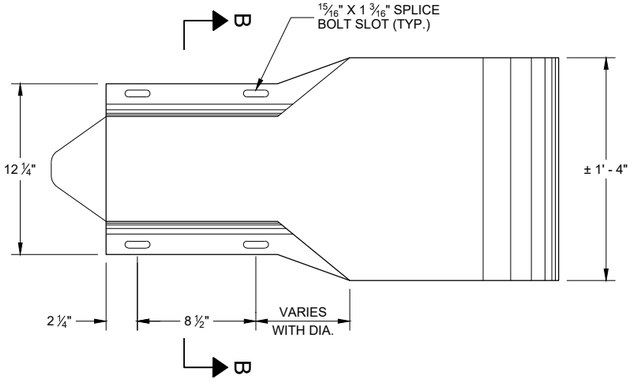
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



SECTION B -B

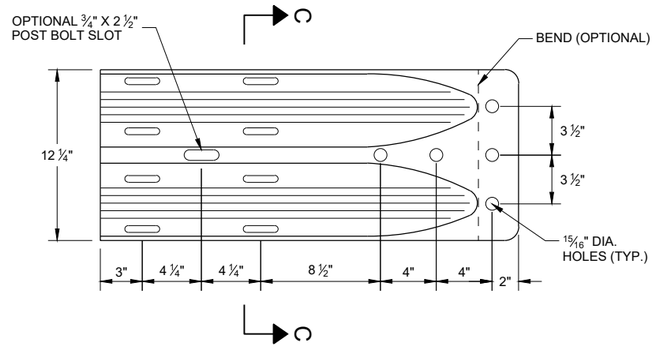


SECTION C -C



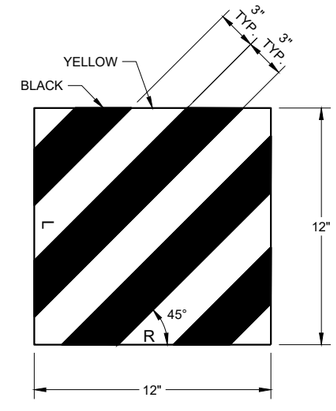
PROFILE VIEW

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
DEPARTMENT OF TRANSPORTATION

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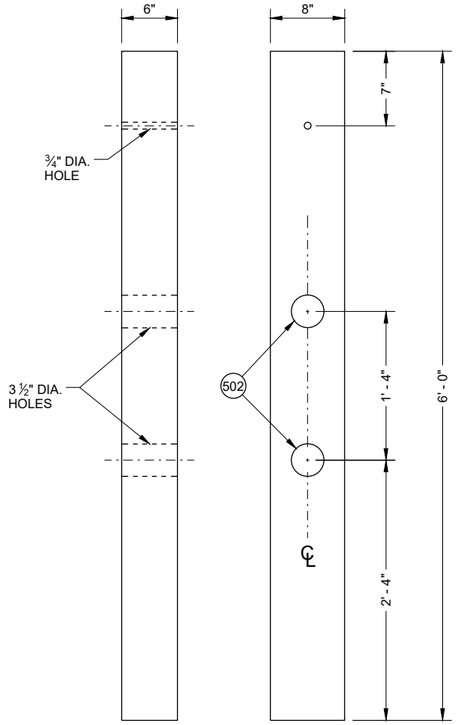
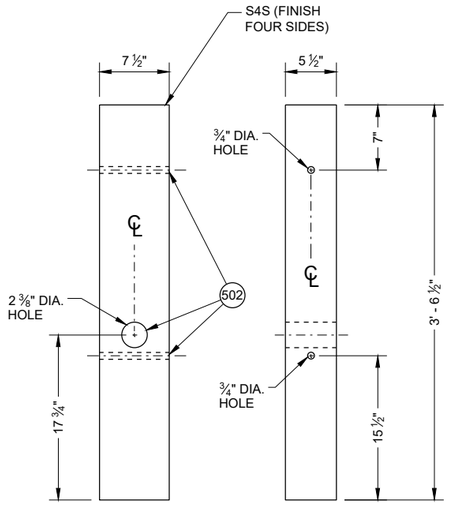
SDD 14B53 - 02e



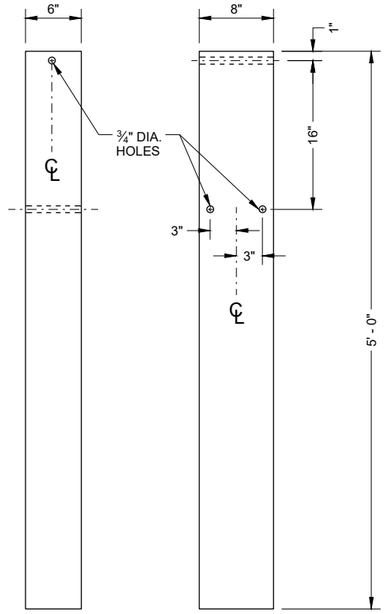
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) (500)

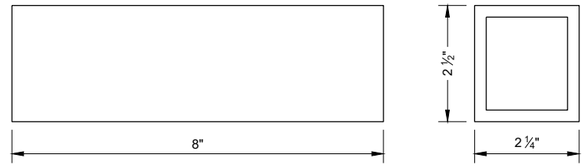
GENERAL NOTES

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

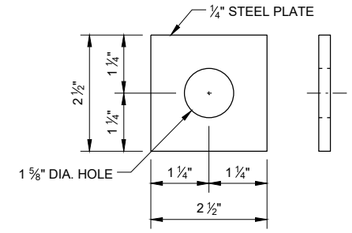
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

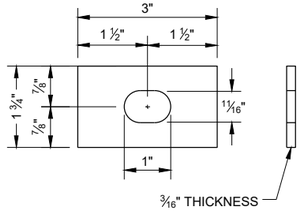
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



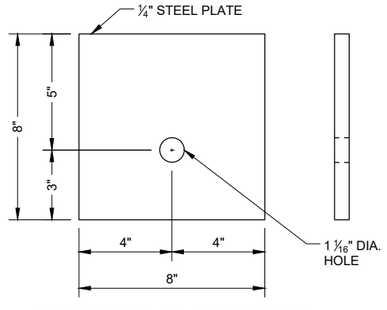
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



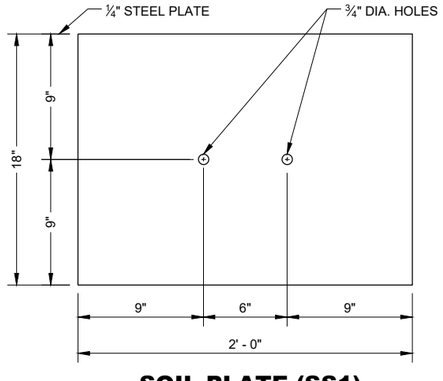
ANCHOR CABLE TUBE END PLATE (QQ3)



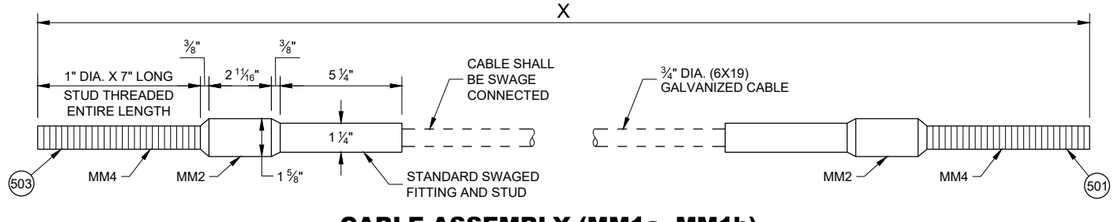
RECTANGULAR PLATE WASHER (CC1)



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 - 02f

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	

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SDD 14B53 - 02g

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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SDD 14B53 - 02h

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
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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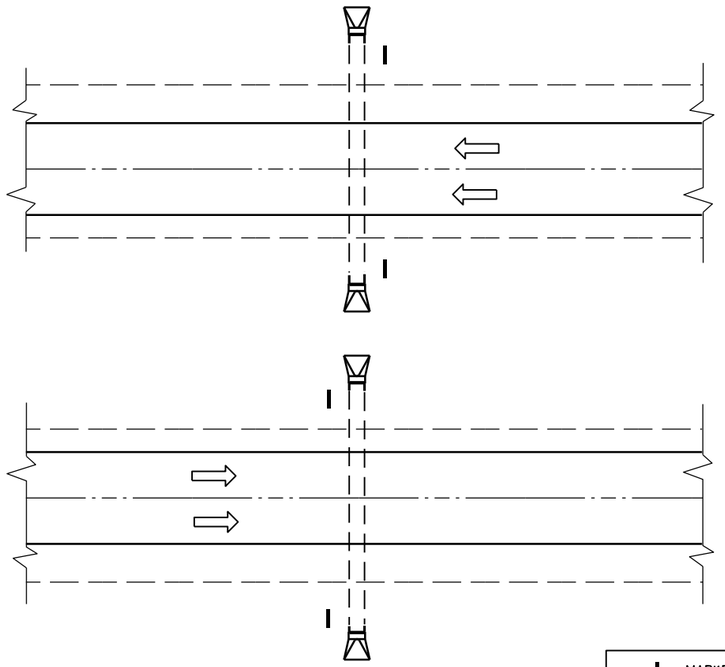
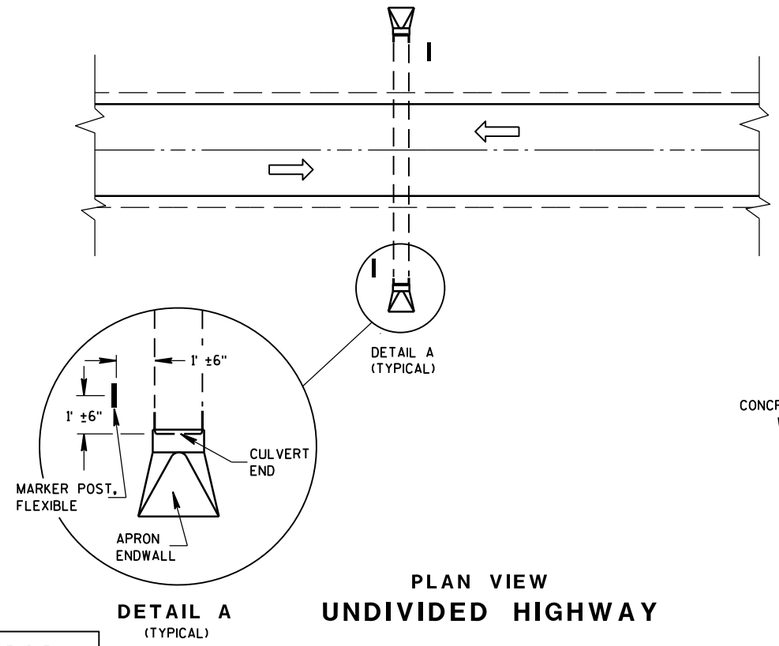
SDD 14B53 - 02i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

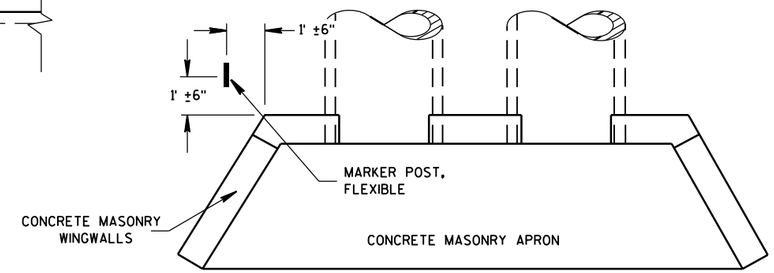
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

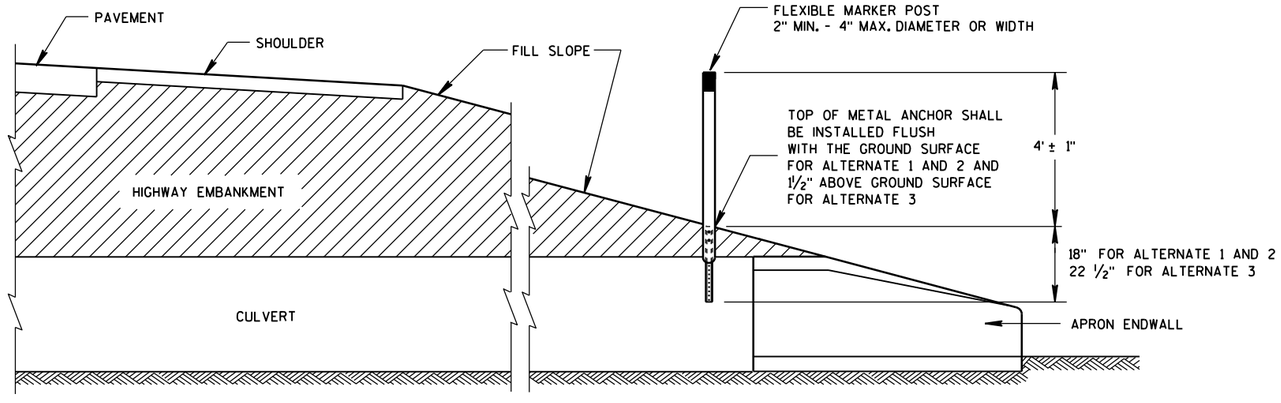
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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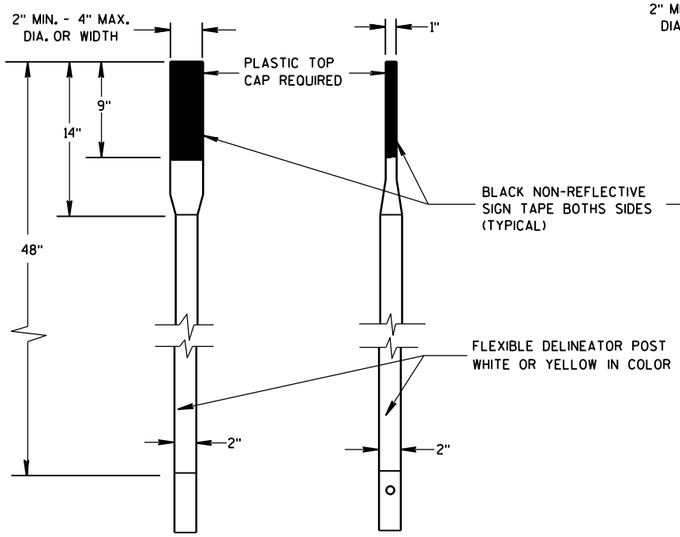
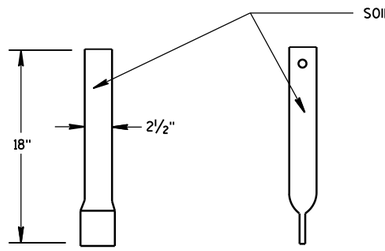
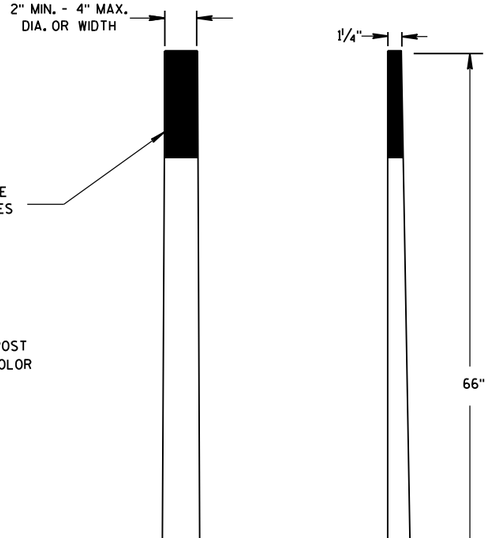
S.D.D. 15 A 3-2a





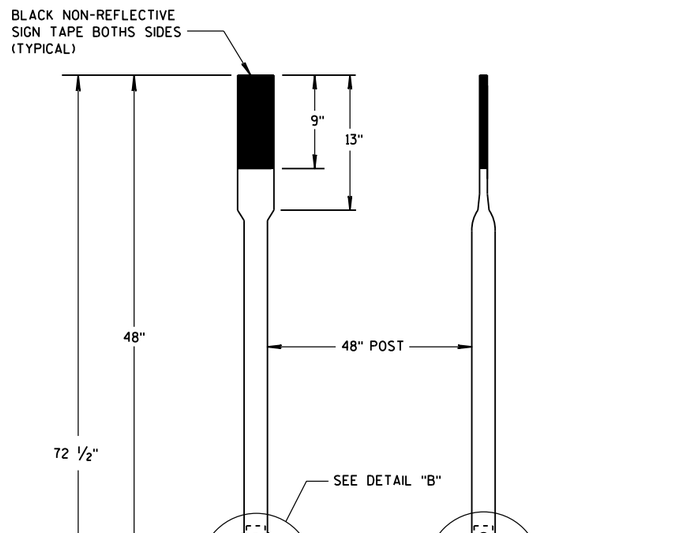
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

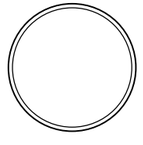
ALTERNATE 2



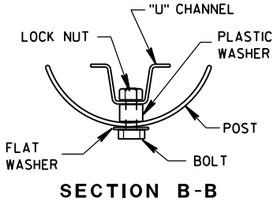
FRONT VIEW SIDE VIEW

ALTERNATE 3

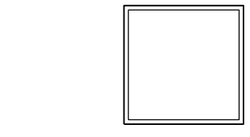
FLEXIBLE MARKER POSTS



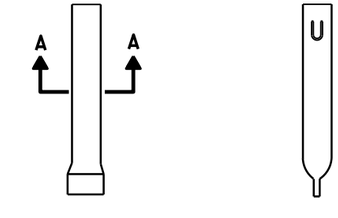
SECTION A-A



SECTION B-B

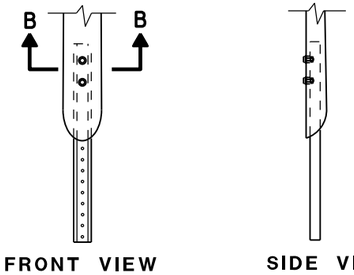


SECTION C-C



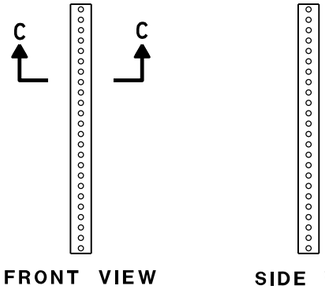
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

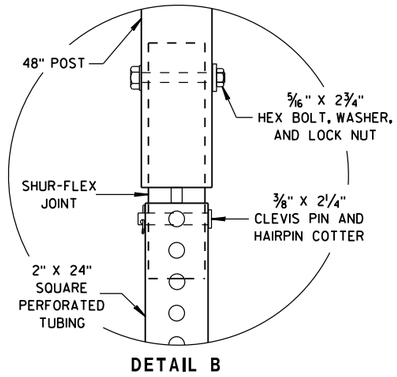
ALTERNATE 2



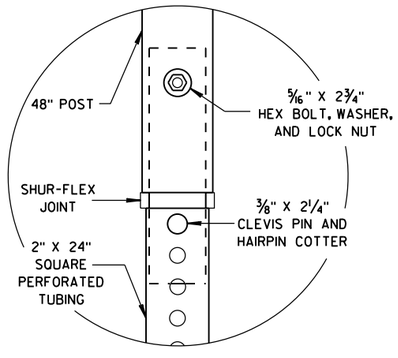
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

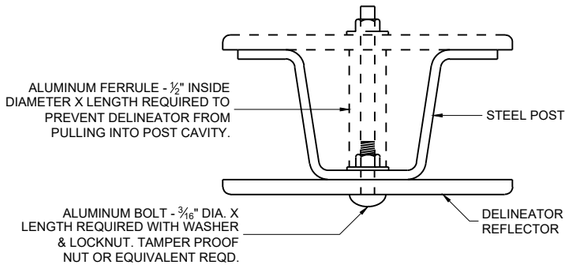
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
458
IGN
FHWA

6

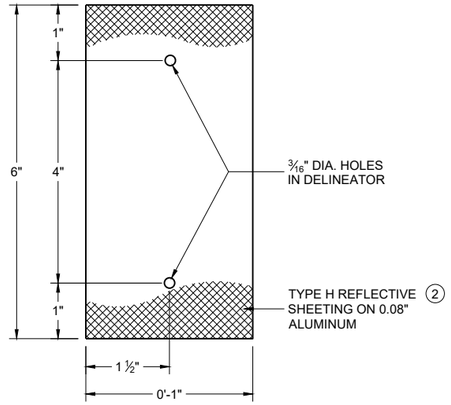
S.D.D. 15 A 3-2b

6

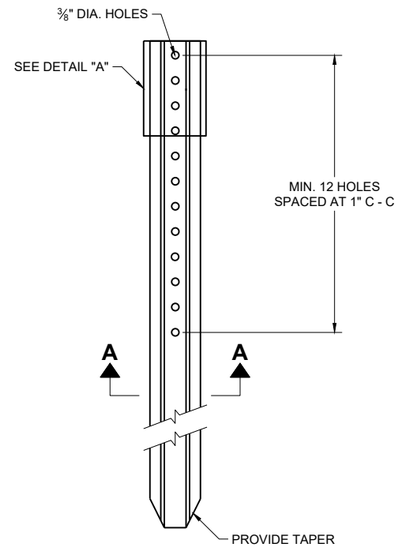
S.D.D. 15 A 3-2b



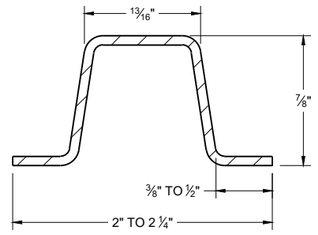
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



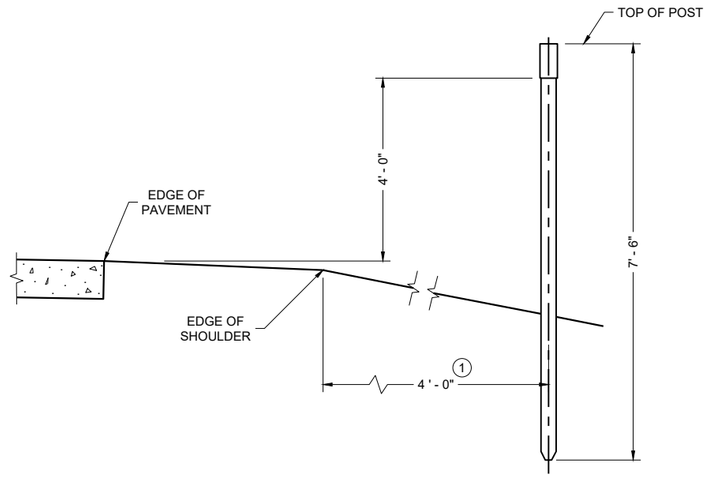
SECTION A - A

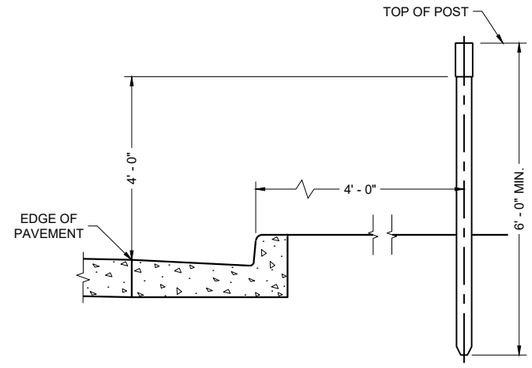
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

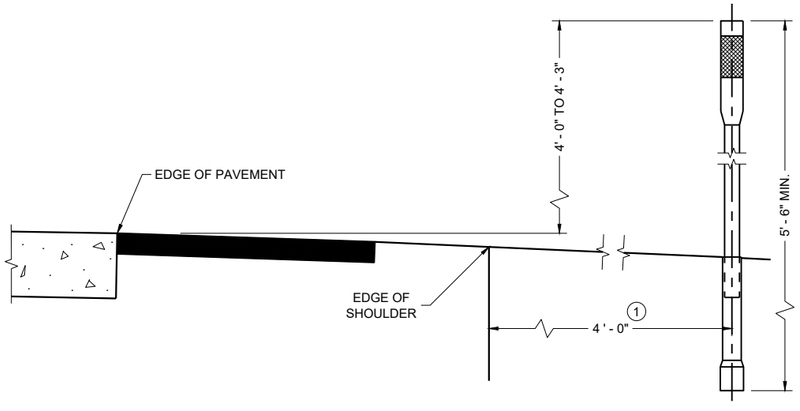
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

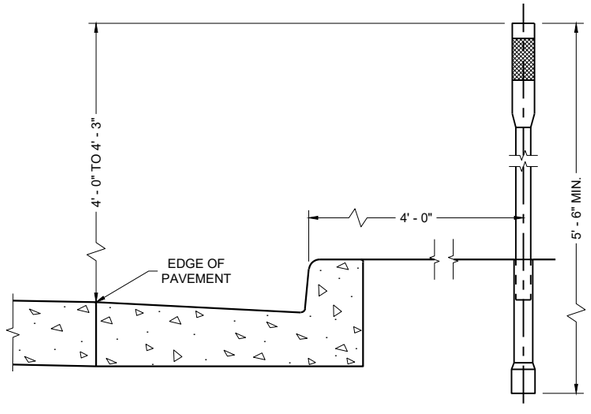
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

(1) DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.

(2) FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

DELINEATOR POST WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

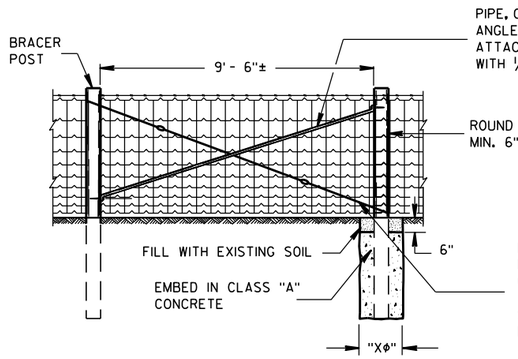
SDD 15A04-08c

6

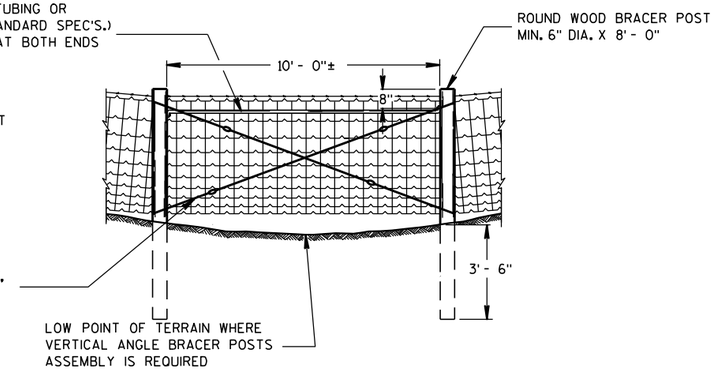
SDD 15A04-08c

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

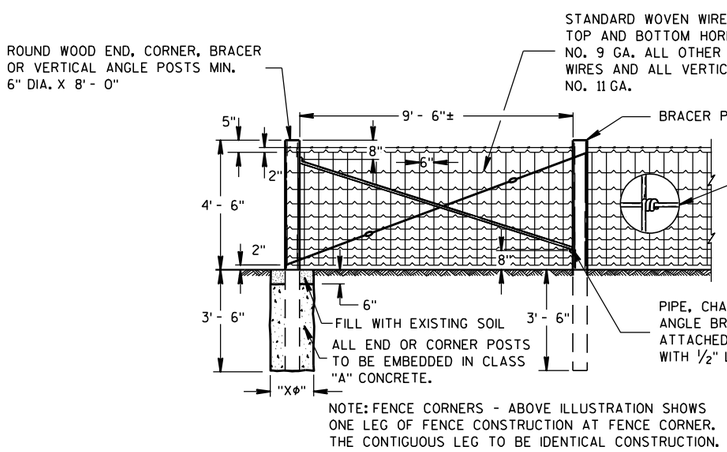
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

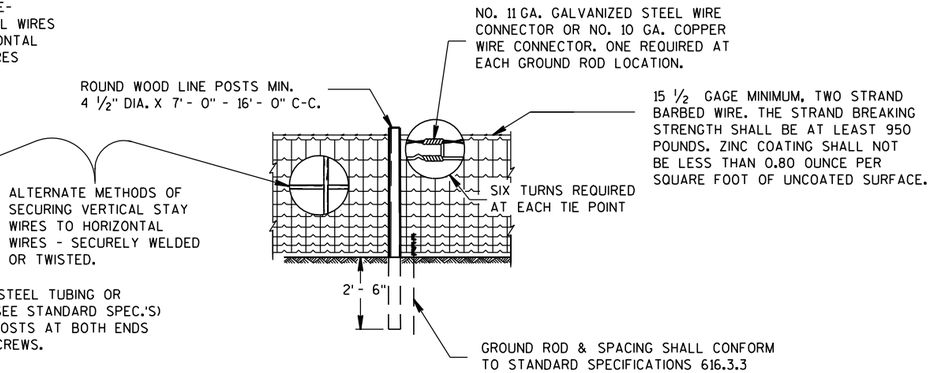
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



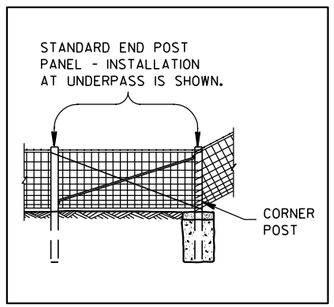
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

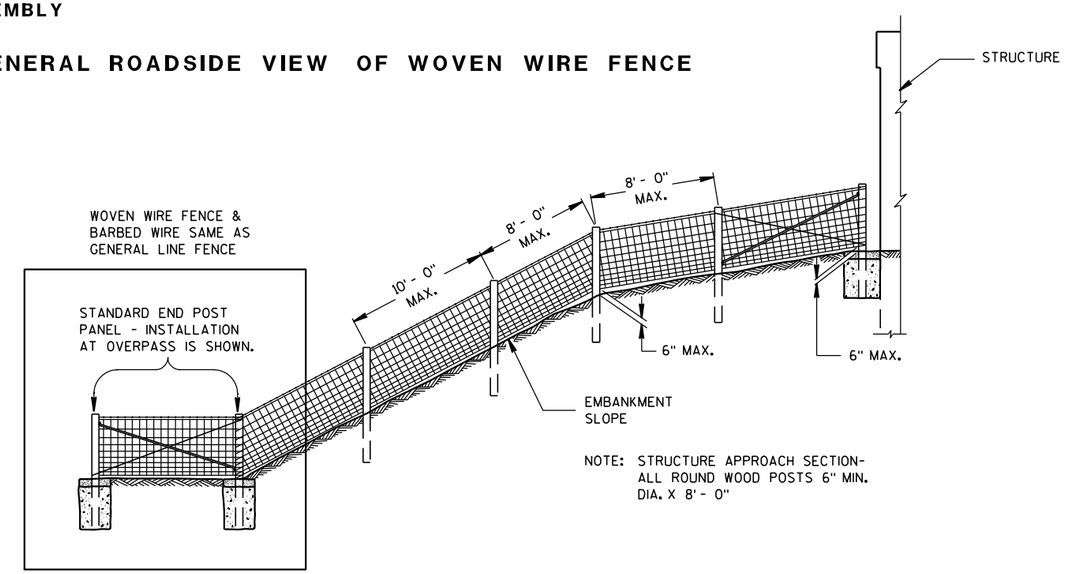


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

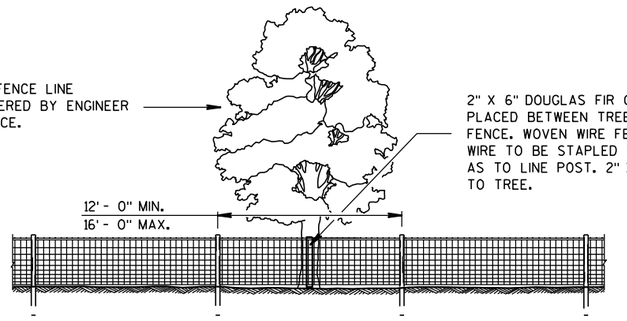
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

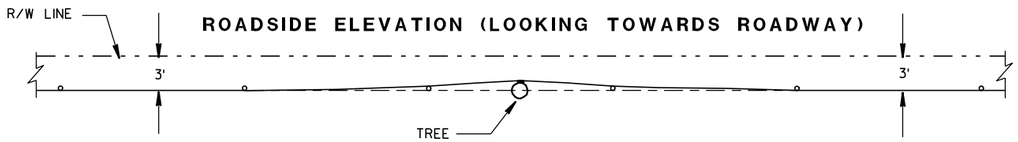
S.D.D. 15 B 1-8a

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.

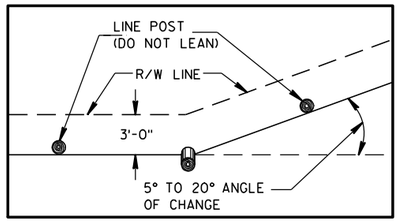


ROADSIDE ELEVATION (LOOKING TOWARDS ROADWAY)

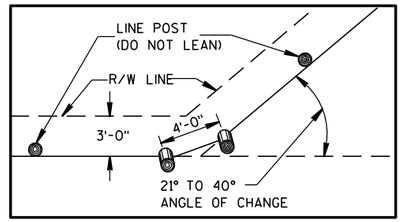


PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



PLAN VIEW
SINGLE POST CORNER

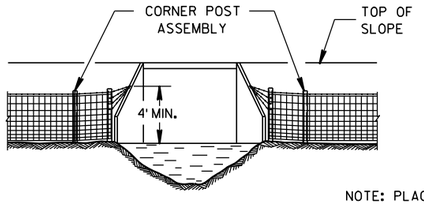


PLAN VIEW
DOUBLE POST CORNER

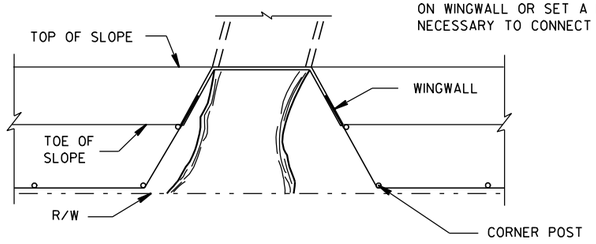
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

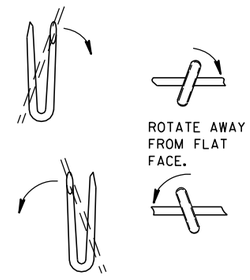
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



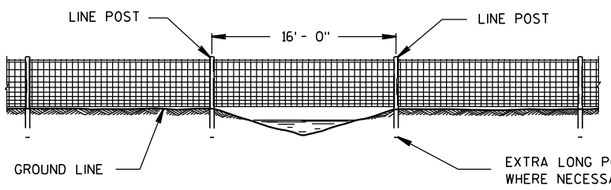
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



FENCE INSTALLATION TO WINGWALLS

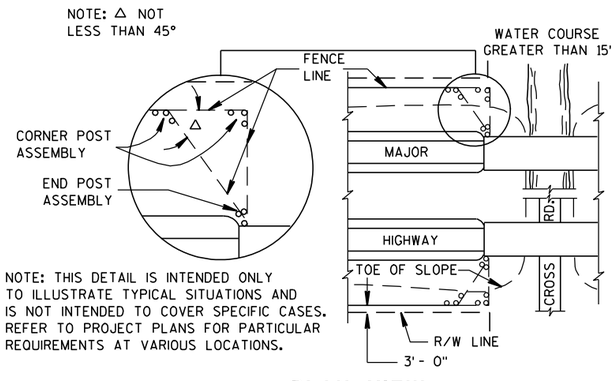


LINE POST



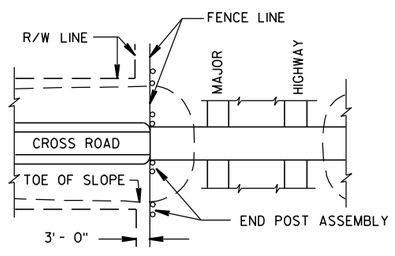
FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

NOTE: △ NOT LESS THAN 45°



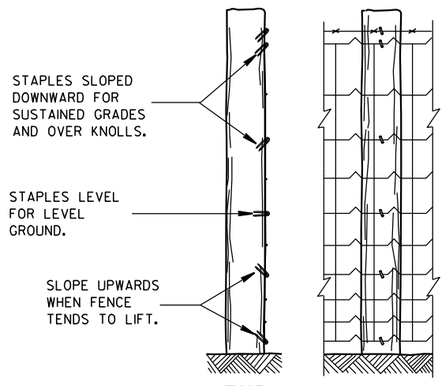
NOTE: THIS DETAIL IS INTENDED ONLY TO ILLUSTRATE TYPICAL SITUATIONS AND IS NOT INTENDED TO COVER SPECIFIC CASES. REFER TO PROJECT PLANS FOR PARTICULAR REQUIREMENTS AT VARIOUS LOCATIONS.

PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION — FARM SIDE ELEVATION

FENCE MOUNTING DETAIL

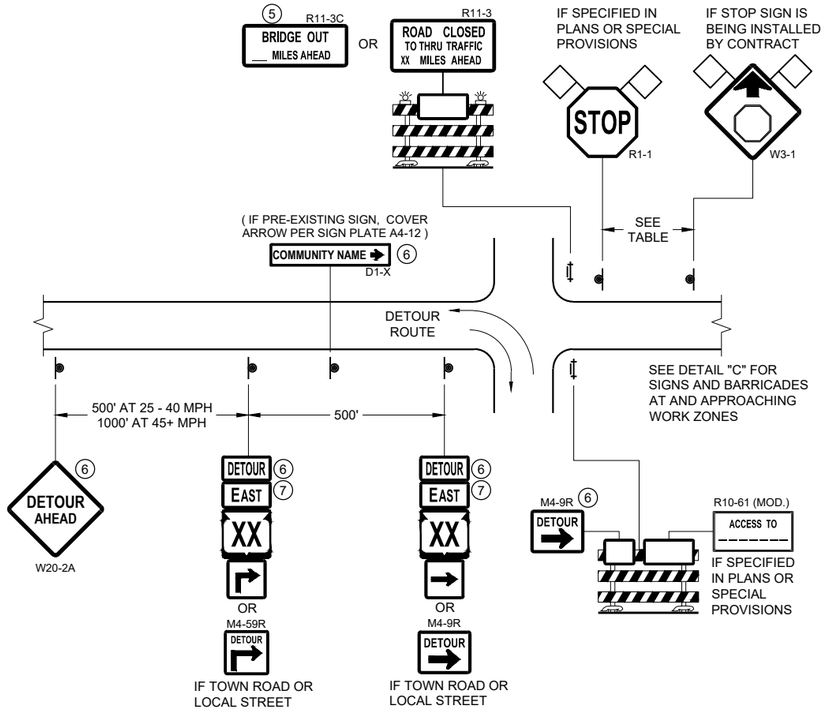
FENCE LOCATION AT STRUCTURES

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

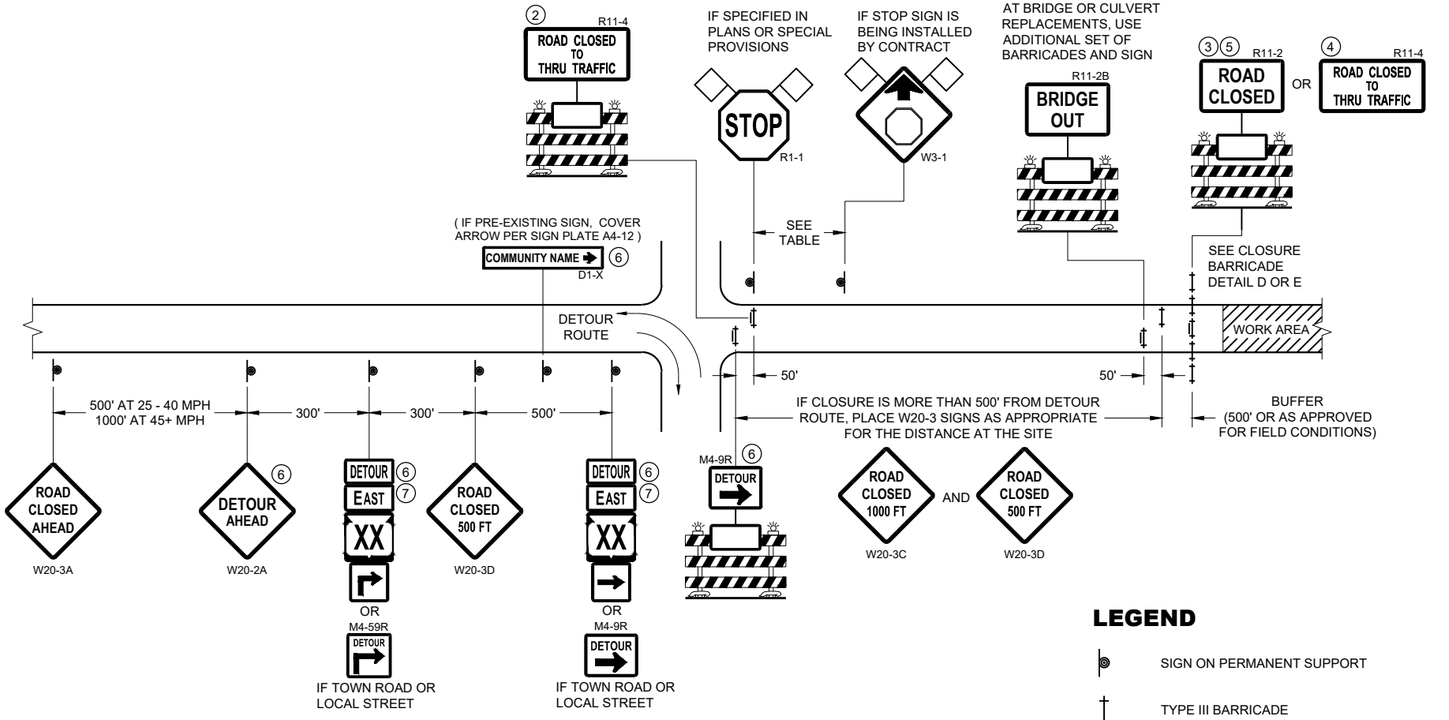
APPROVED
4/4/2008
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible]461 [illegible]ENT
ENGINEER
FHWA

6
S.D.D. 15 B 1-8b



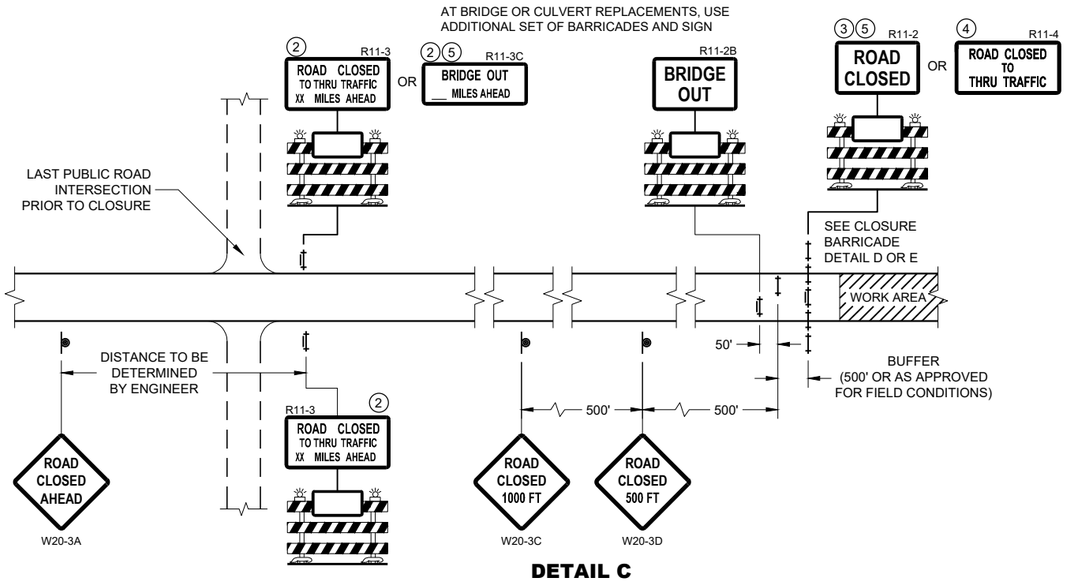
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

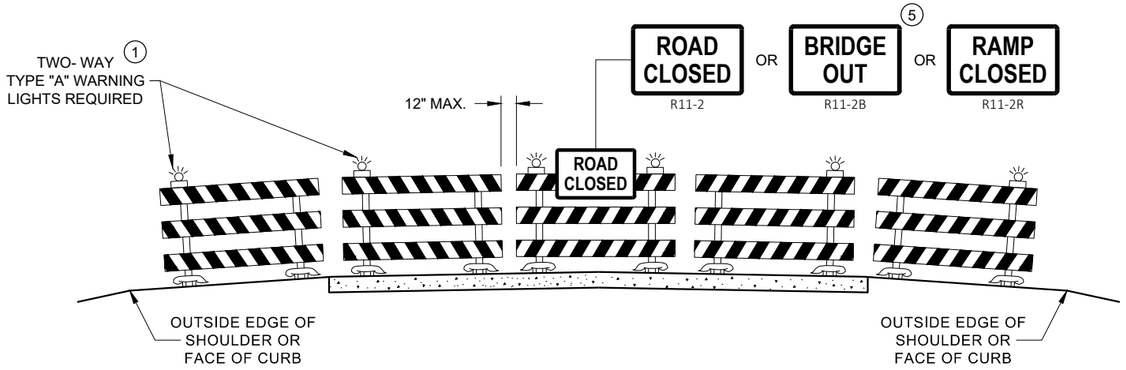
APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

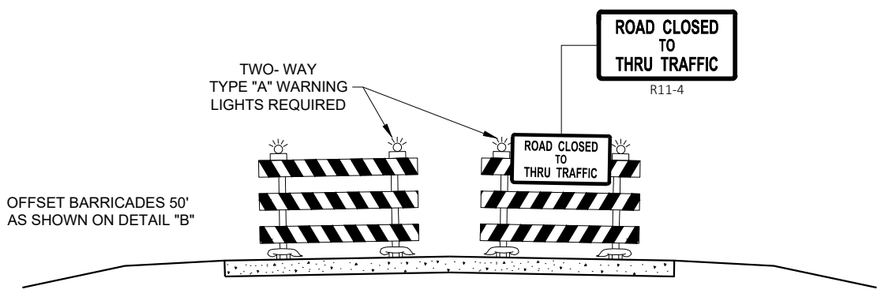
6

SDD 15C02 - 09a

SDD 15C02 - 09a



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
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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.

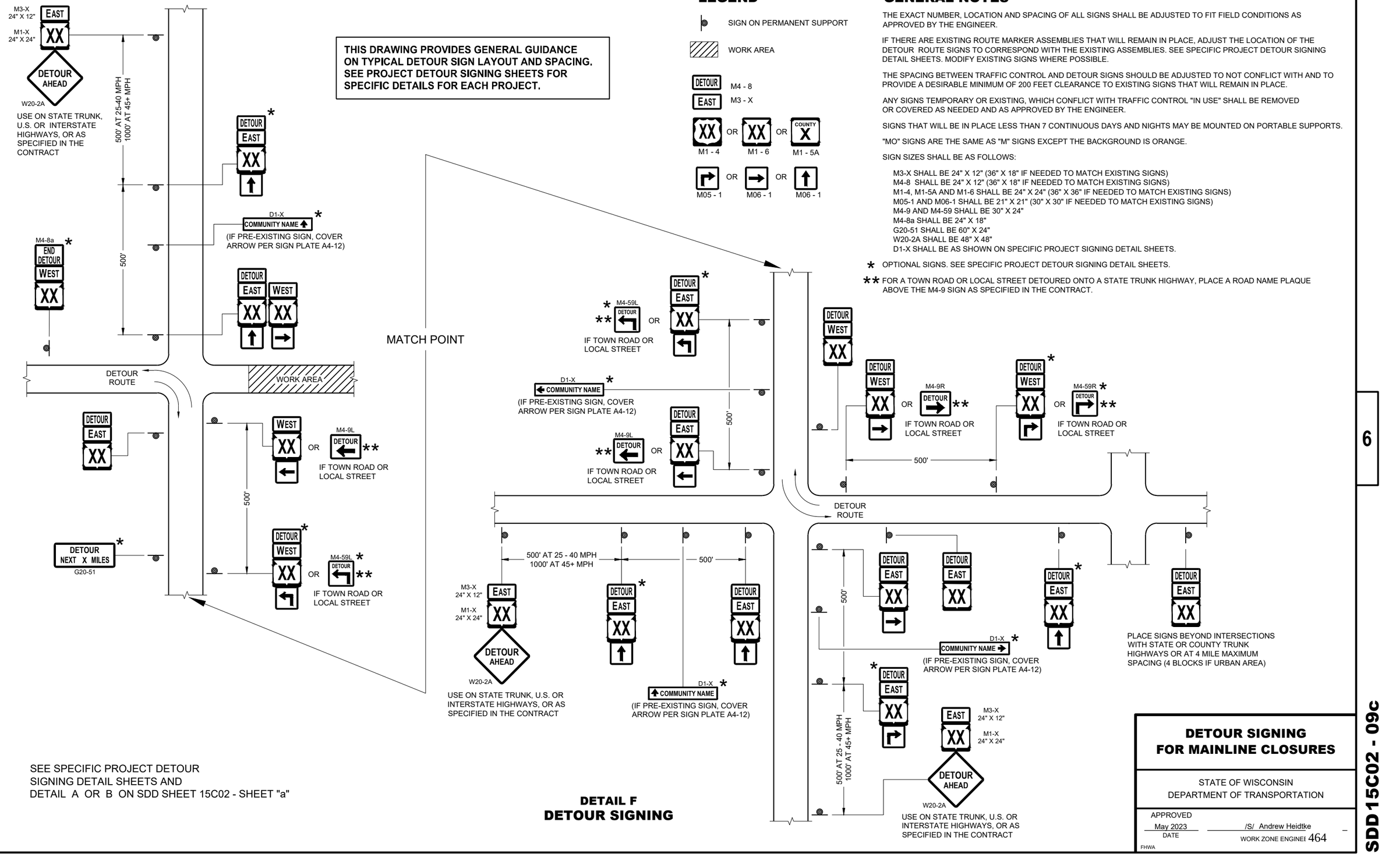
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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
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/S/ Andrew Heidtke — WORK ZONE ENGINEER

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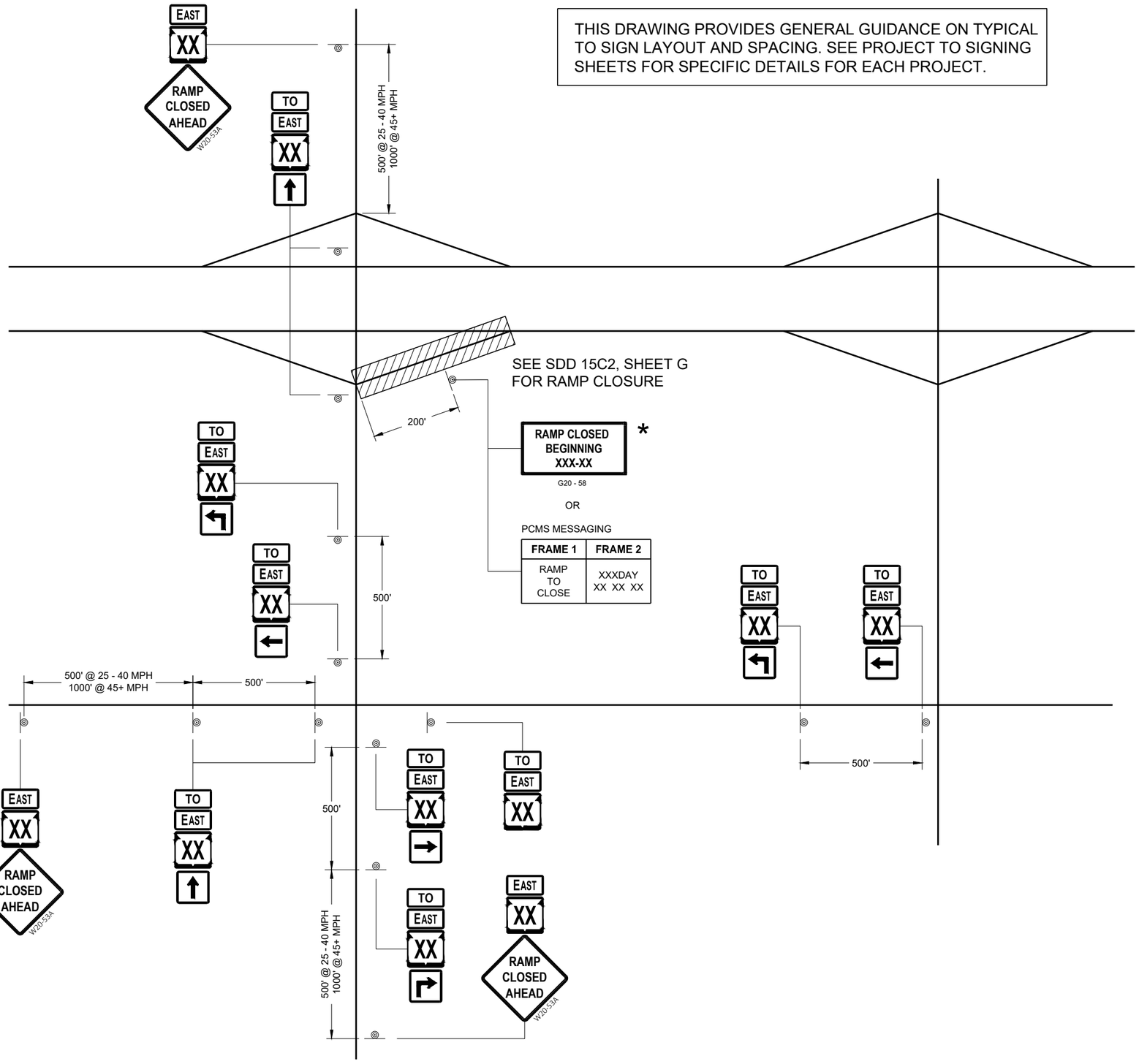

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

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.

ON RAMP LANE CLOSURE

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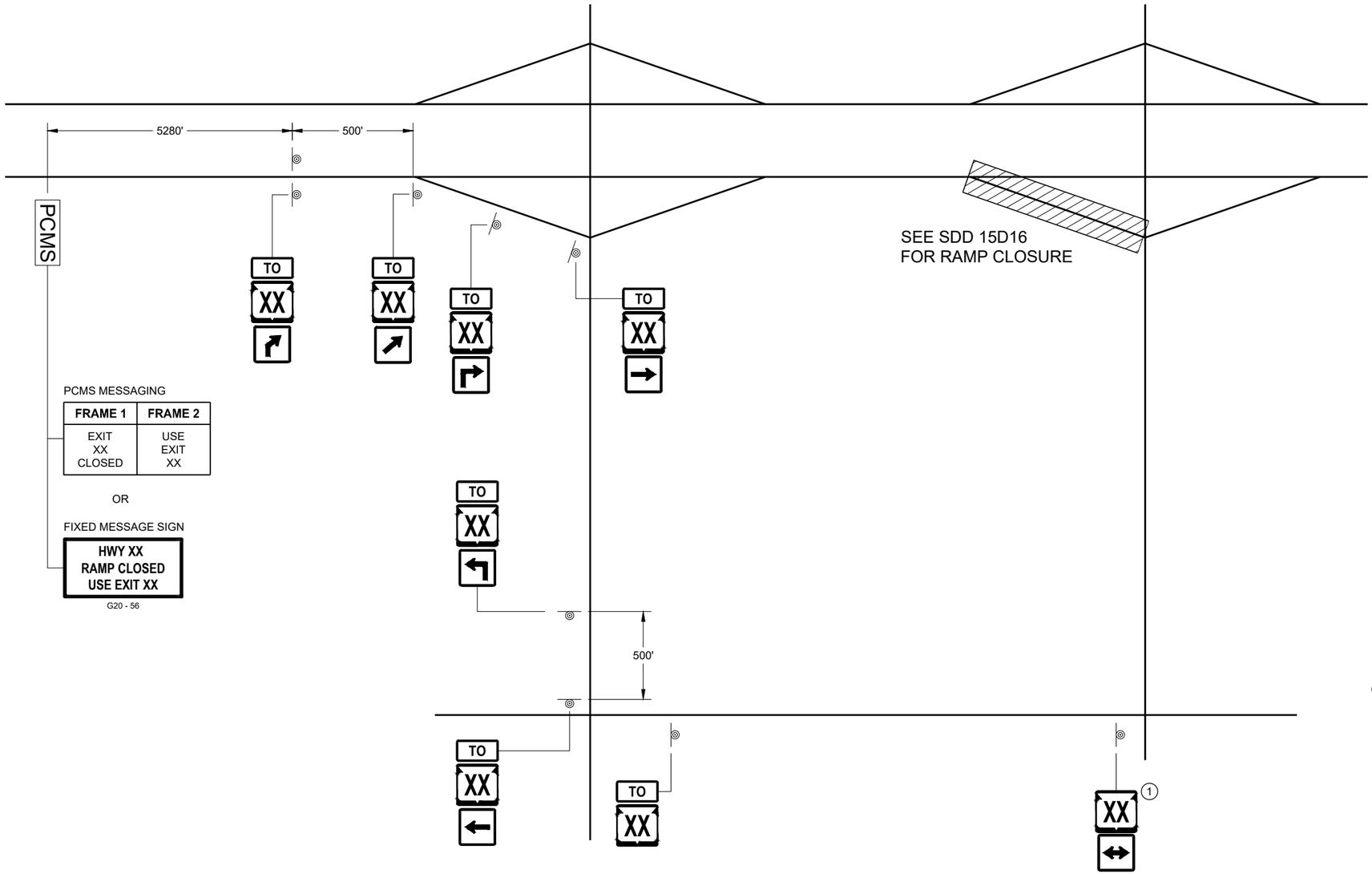
THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



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

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
May 2023 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA

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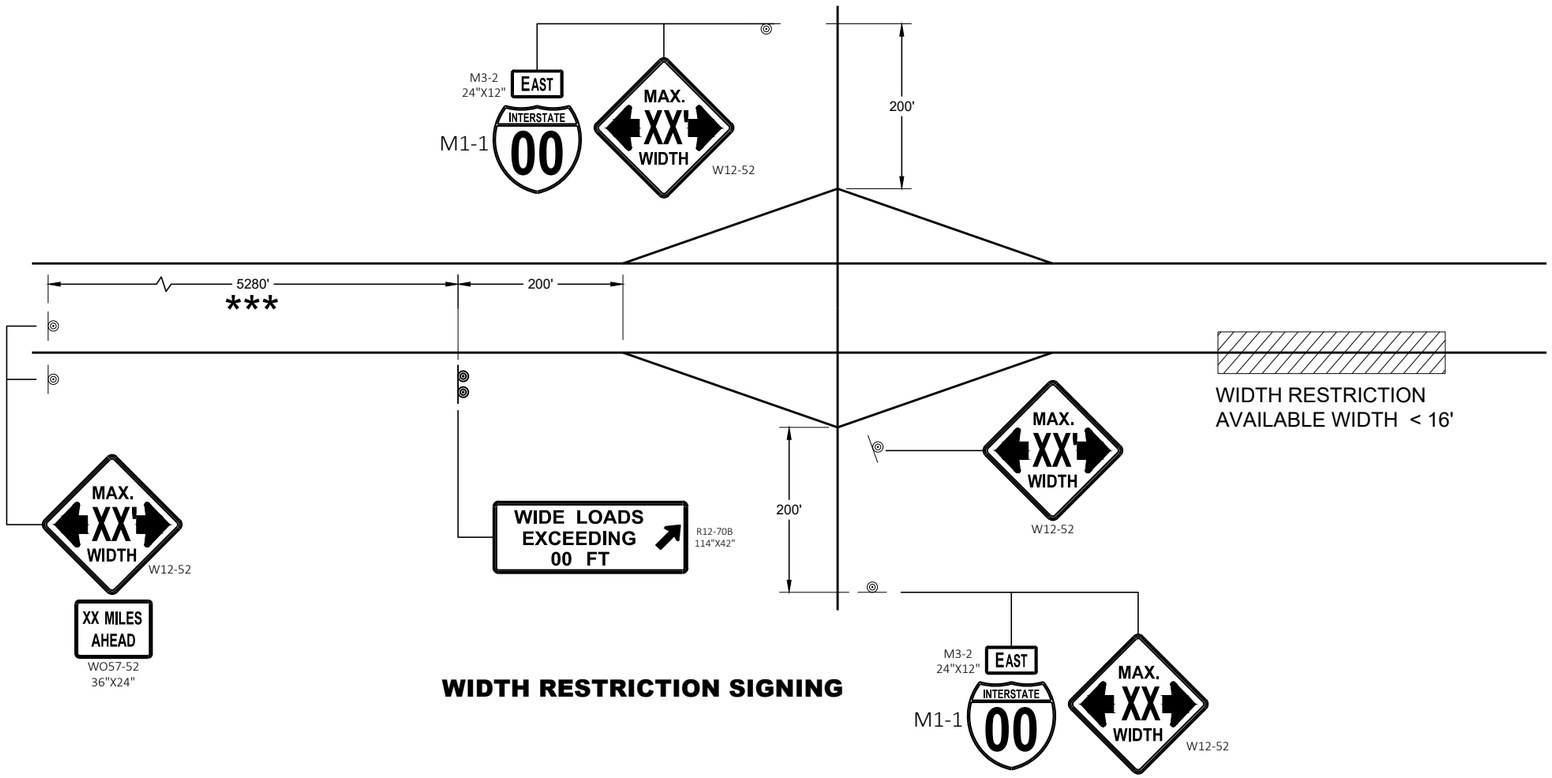
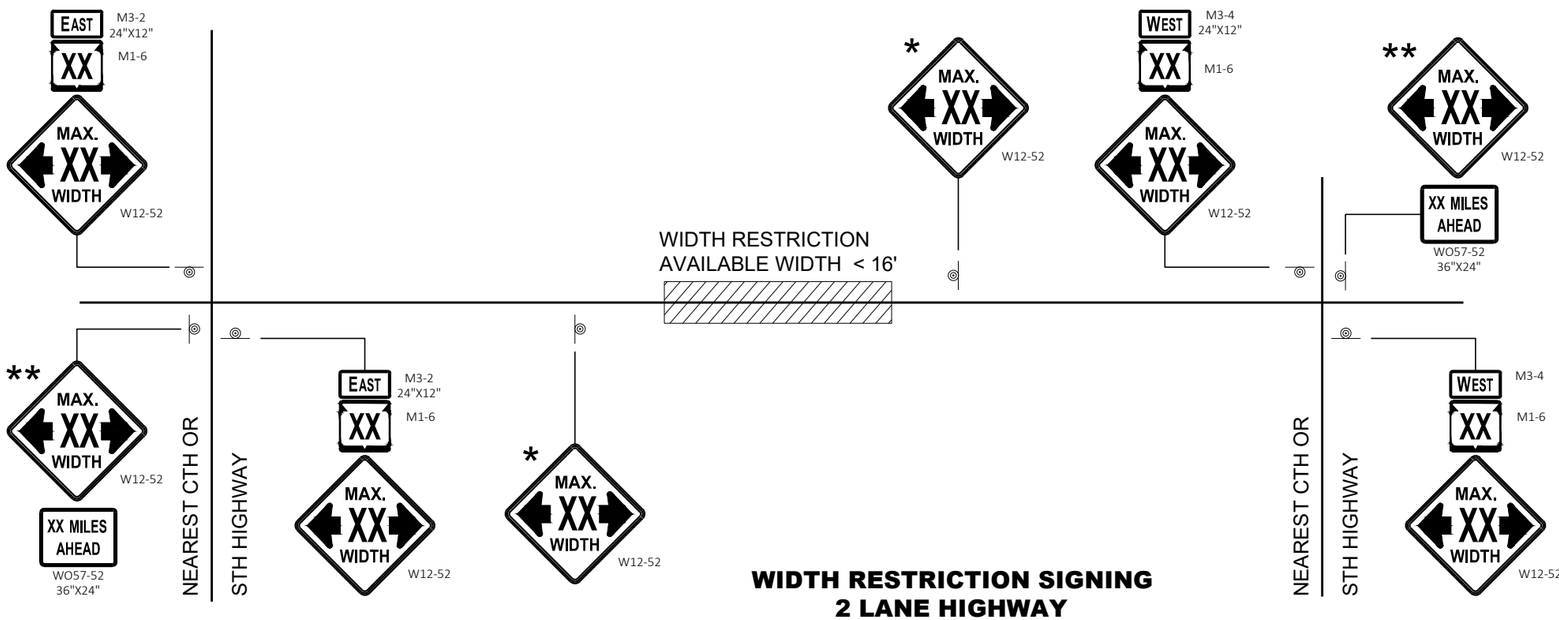


WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

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

ADVANCED WIDTH RESTRICTION SIGNING

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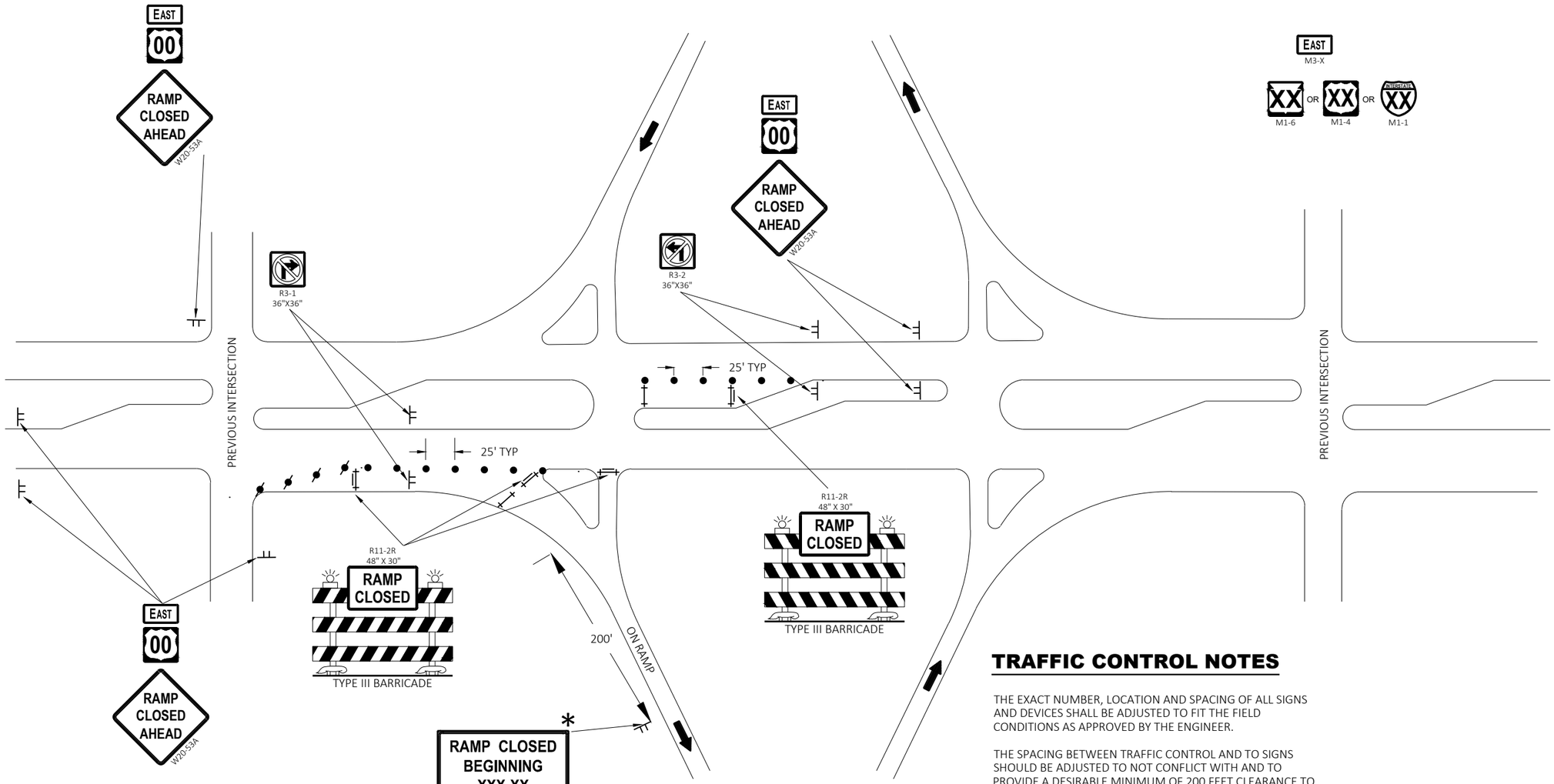

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

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

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 THE 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.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24"x24" (36" x18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-1, M1-4, AND M1-6 SHALL BE 24"x24" (36"x36" IF NEEDED TO MATCH EXISTING SIGNS)
- W20-53A SHALL BE 48"X48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE

STATE OF WISCONSIN
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May 2023 — DATE
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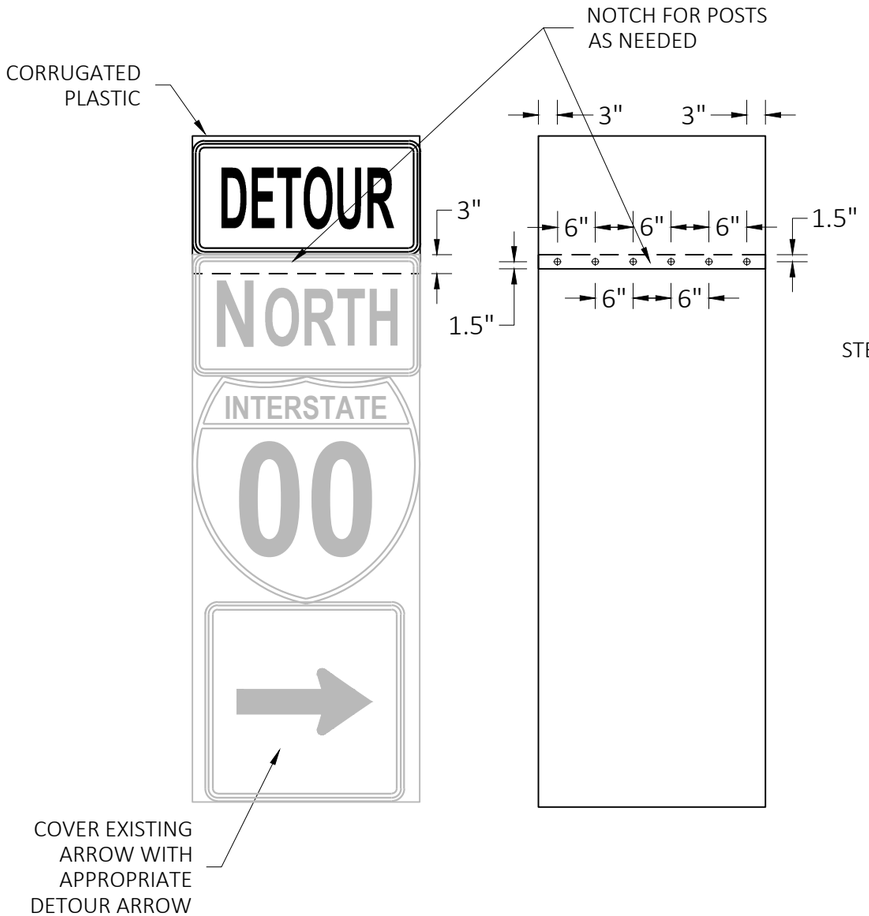
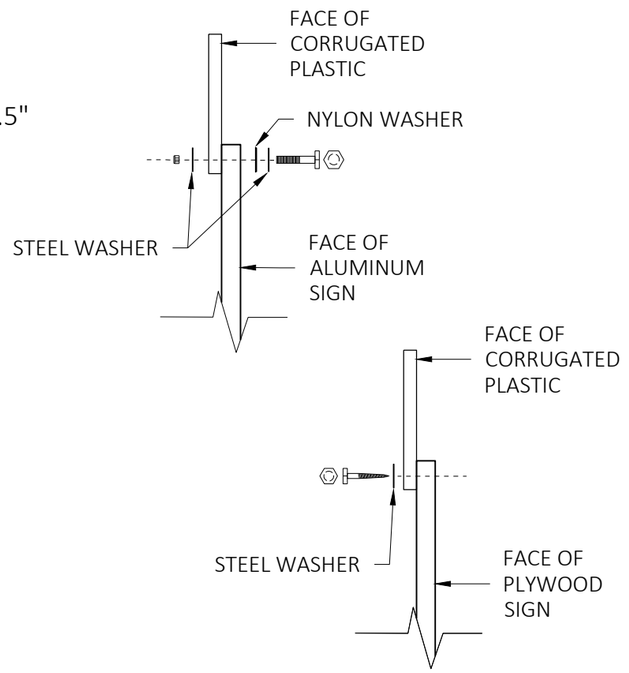
SDD 15C02-09g

FRONT SIDE

BACK SIDE

SIDE VIEW





GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS 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, SC3

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.

PLYWOOD SIGNS:
LAG SCREWS - 5/16" x 1"
ALUMINUM SIGNS:
MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS
WASHERS:
1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1-1/4" O.D. x 3/8" I.D. x .080 NYLON

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

STATE OF WISCONSIN
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APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVEL ENGINEER
FHWA

6
SDD 15C02-09h

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.

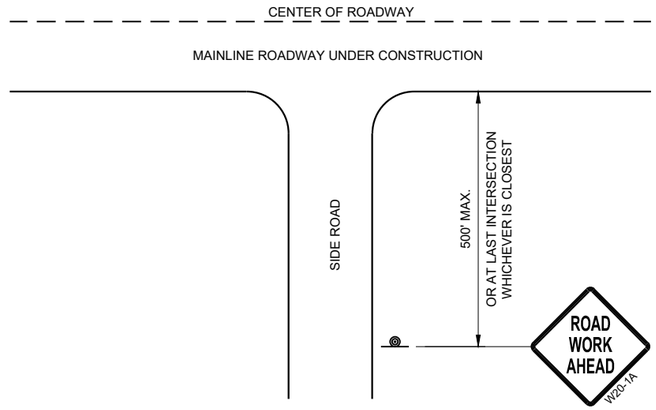
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



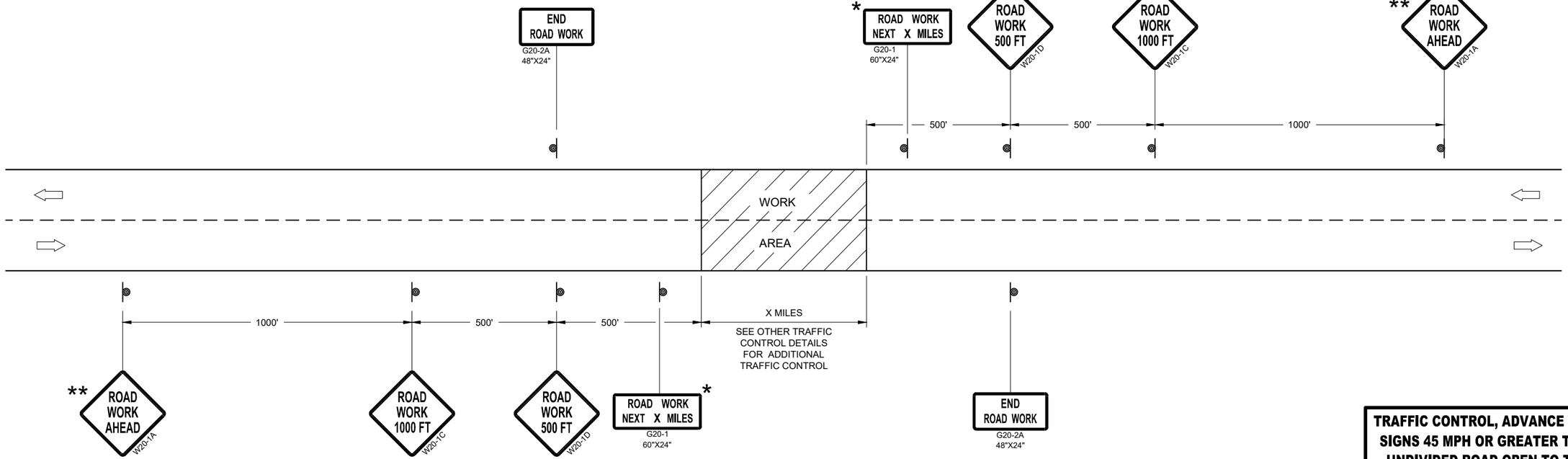
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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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APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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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.

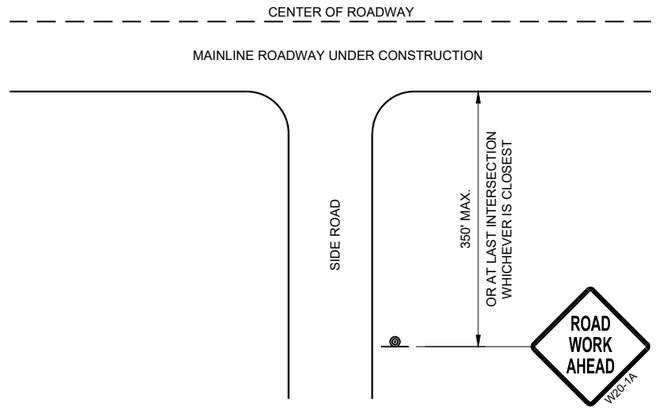
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.



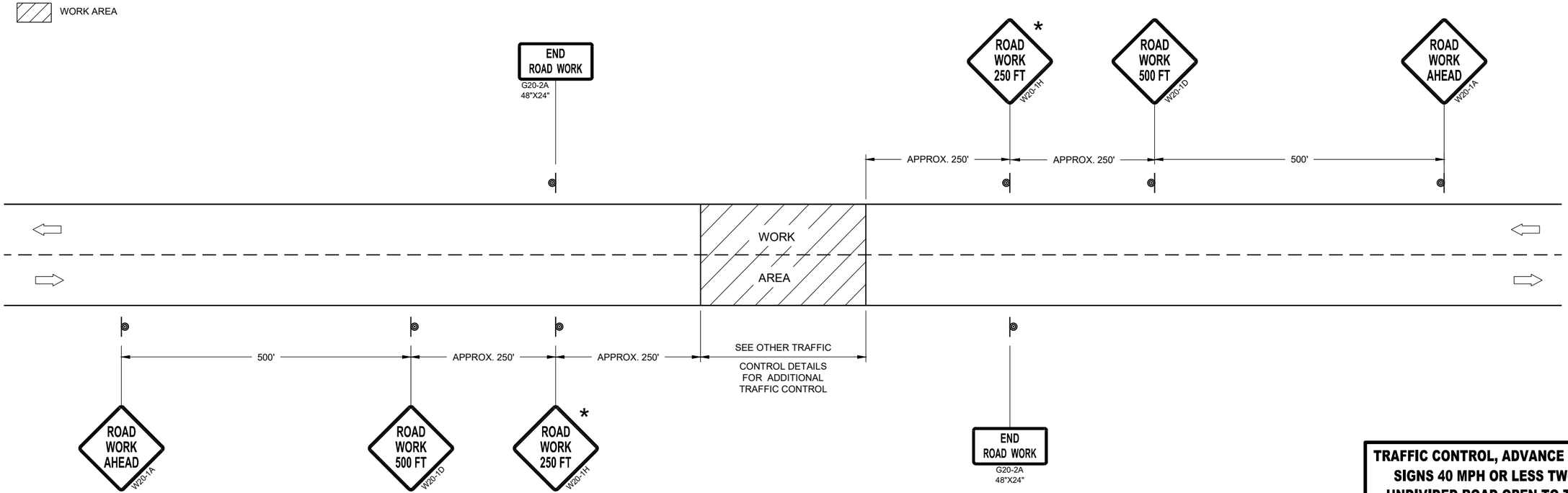
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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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APPROVED
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/S/ Andrew Heidtke
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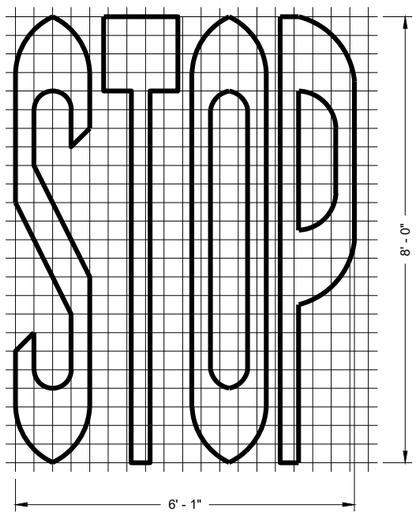
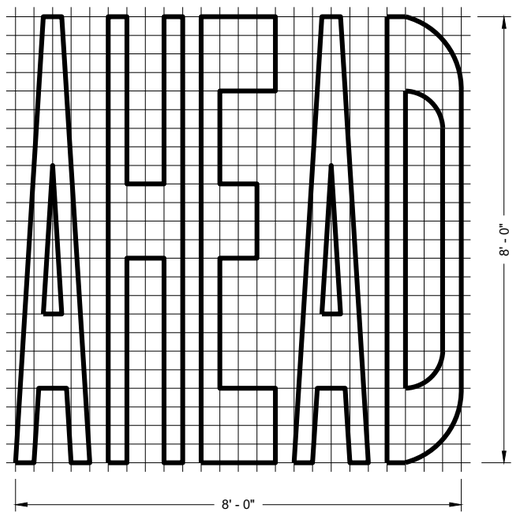
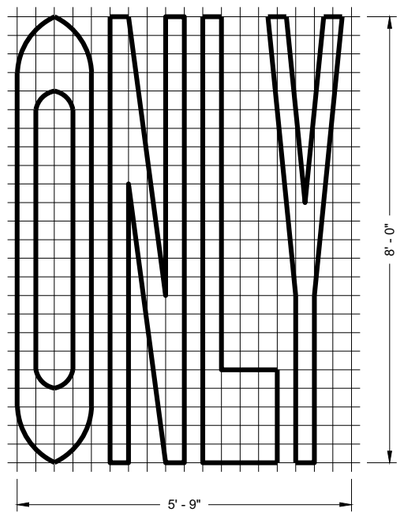
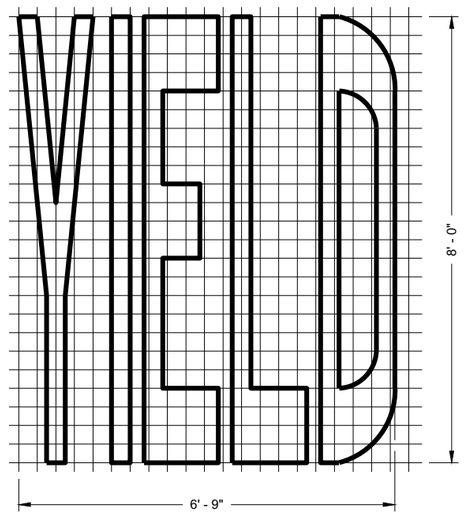
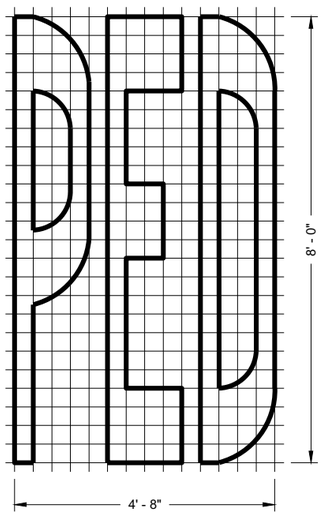
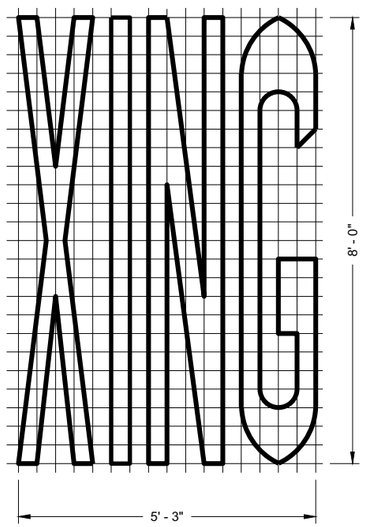


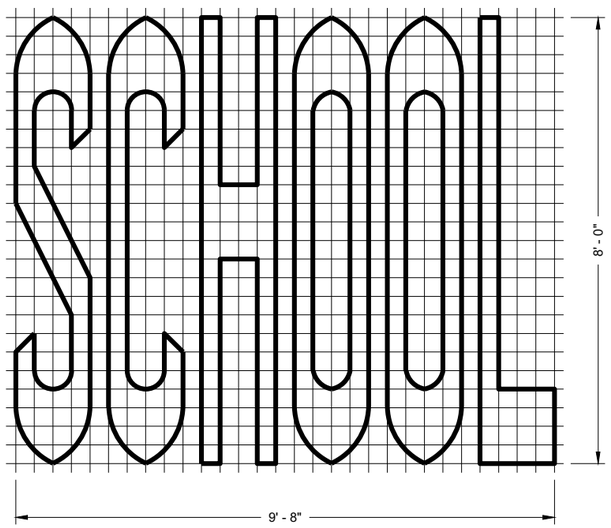




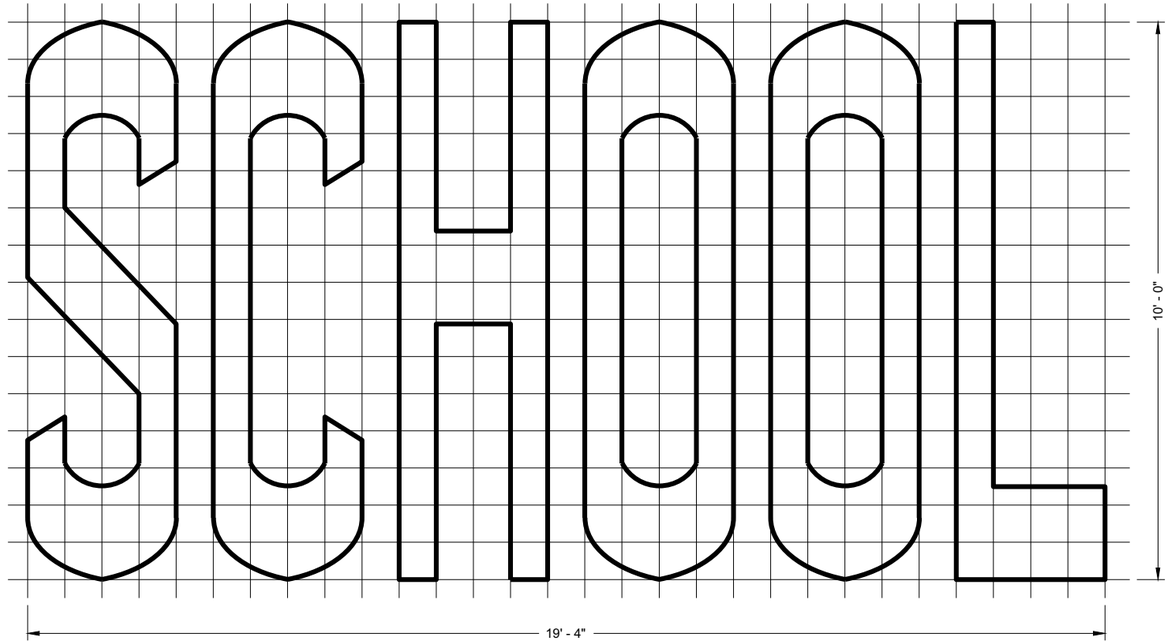








SINGLE LANE



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

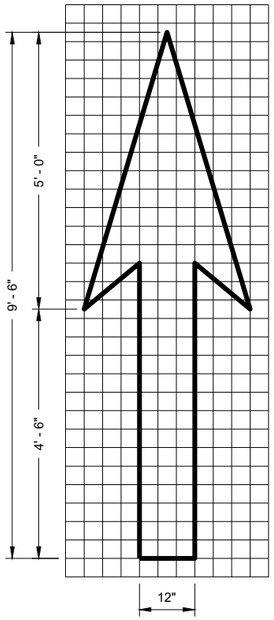
SDD 15C07 - 15b

6

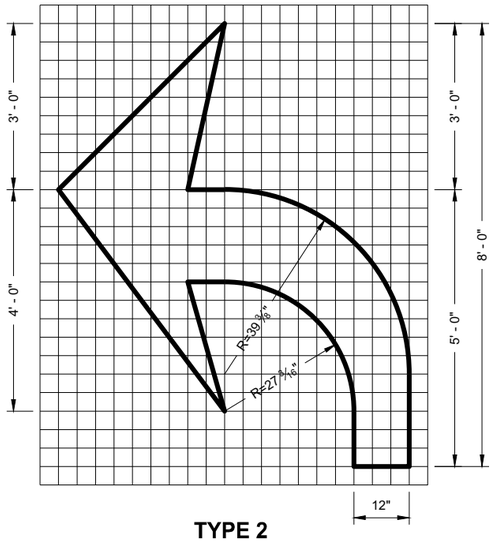
SDD 15C07 - 15b

GENERAL NOTES

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



TYPE 1



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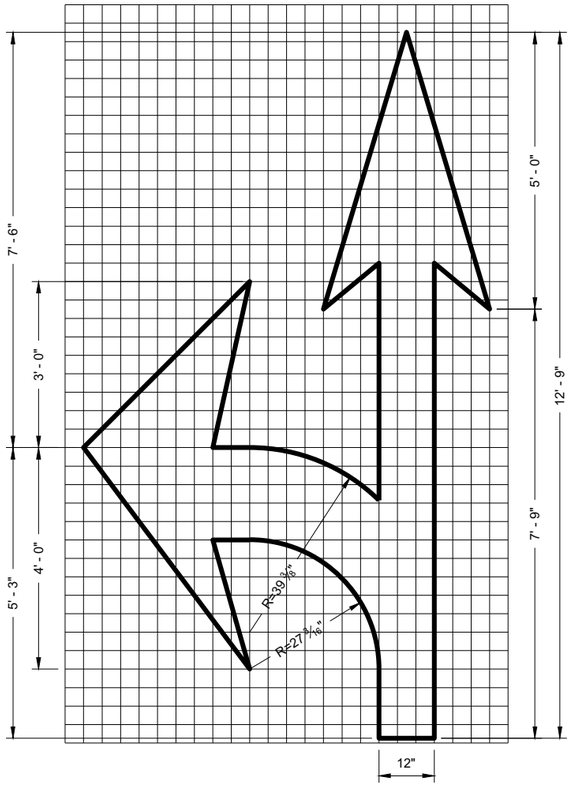

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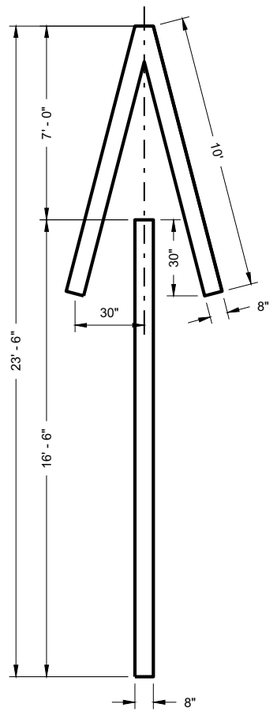

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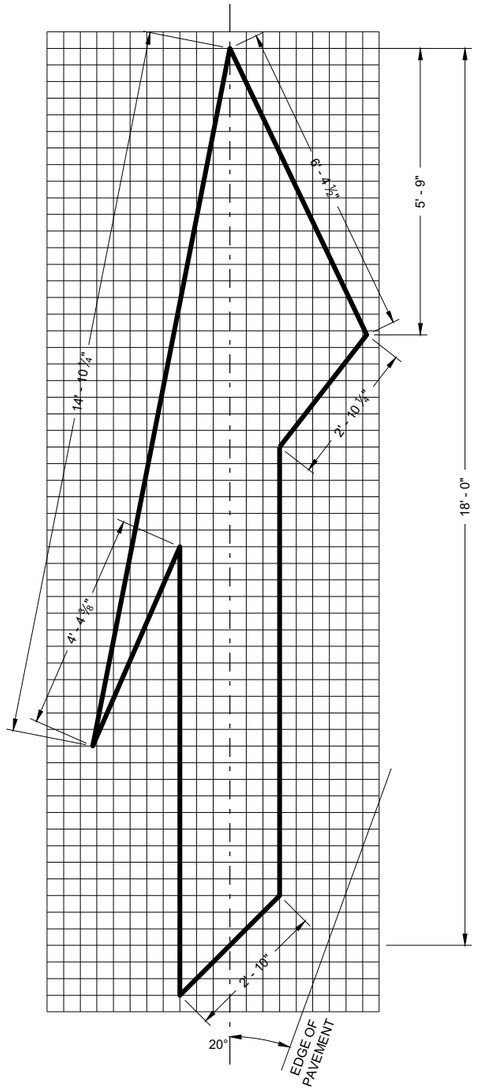
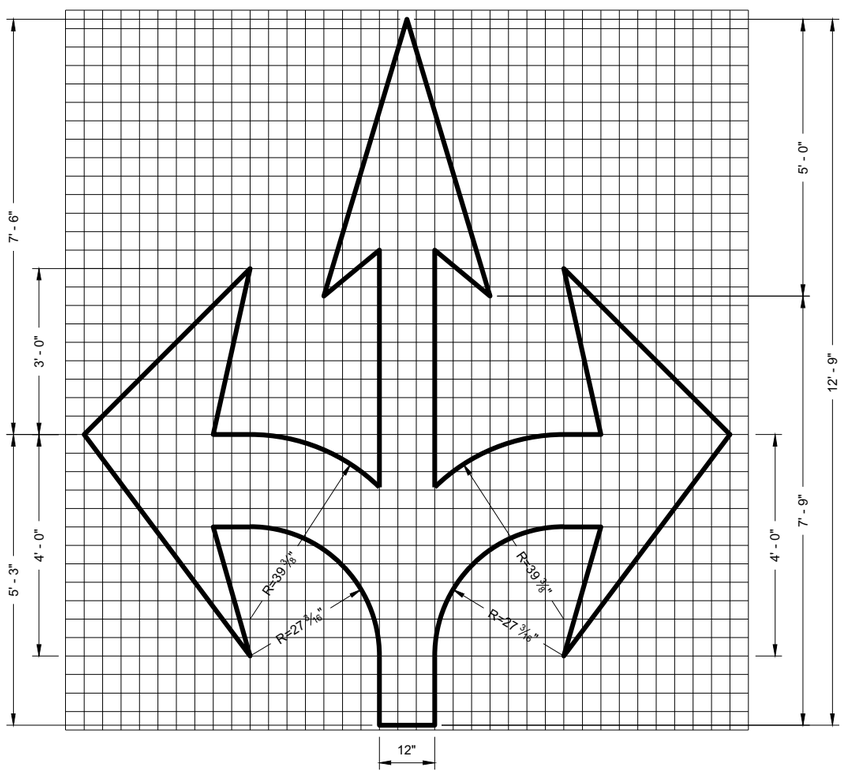
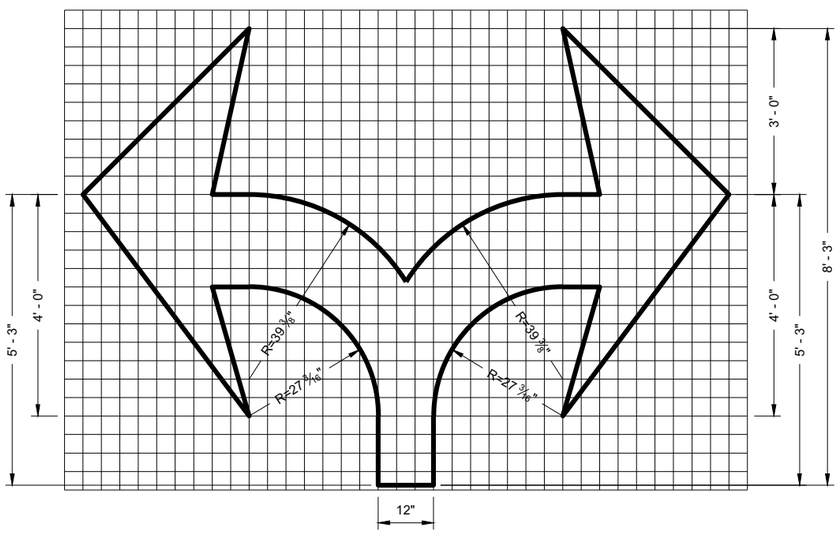


TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

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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.

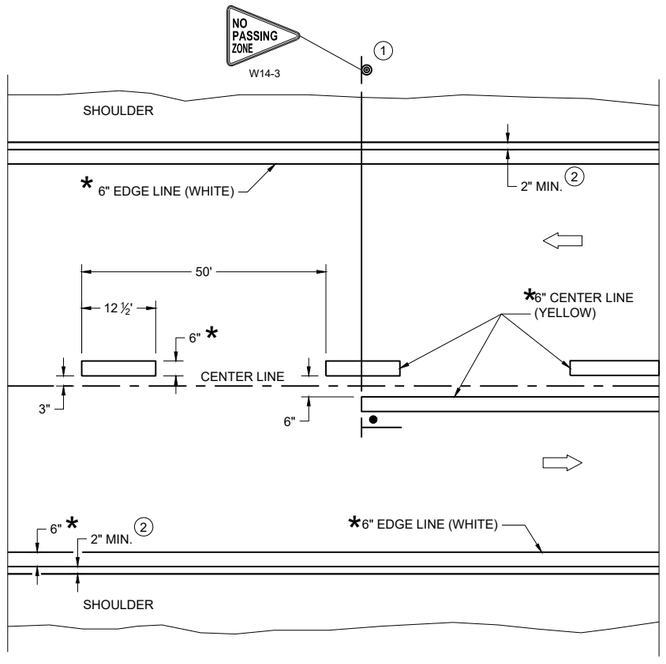
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

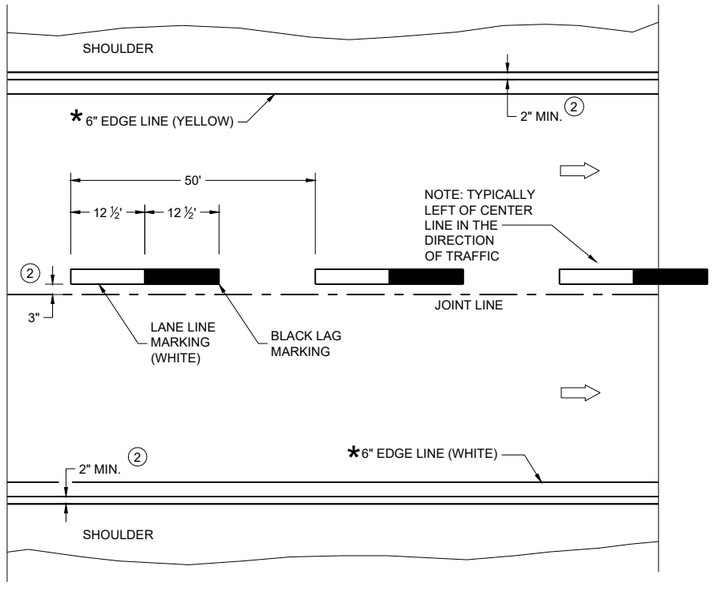
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

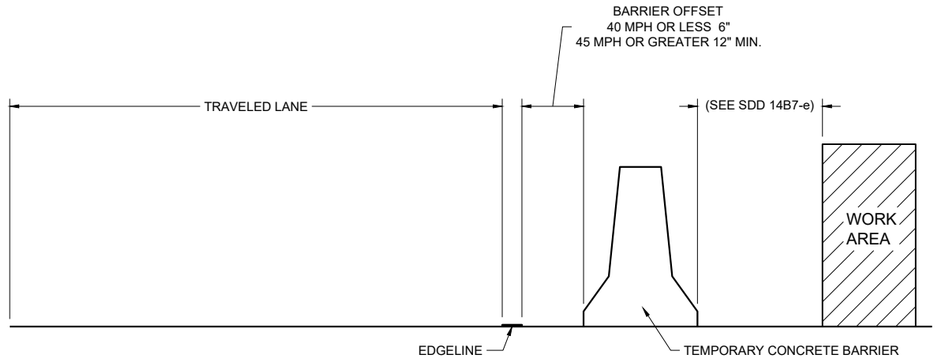
APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

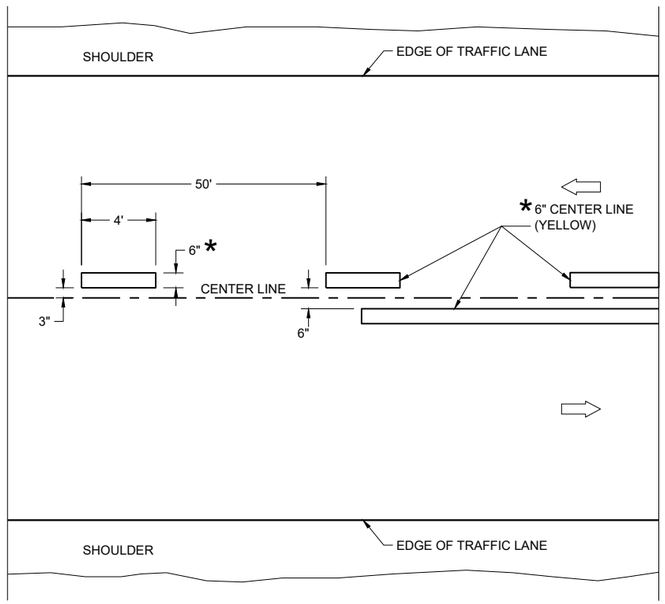
GENERAL NOTES

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

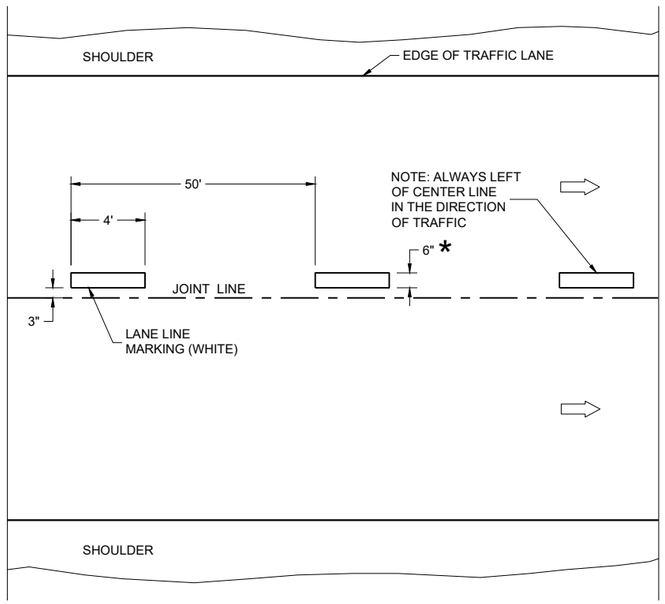
LEGEND

DIRECTION OF TRAFFIC

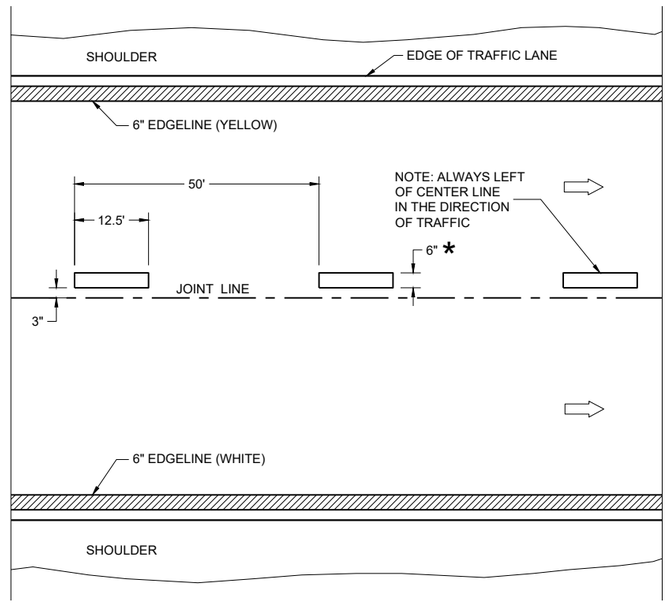
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — Statewide Pavement Marking Engineer

FHWA

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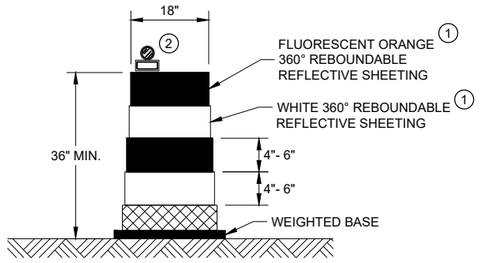
SDD 15C08-23b

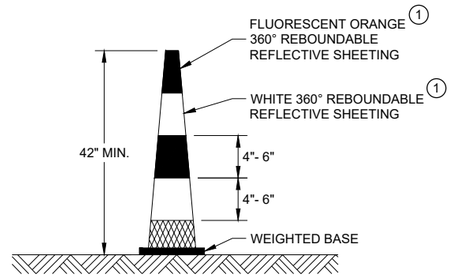
GENERAL NOTES

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

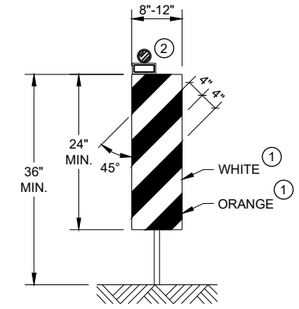
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

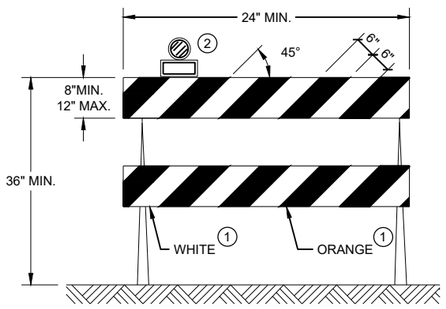
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



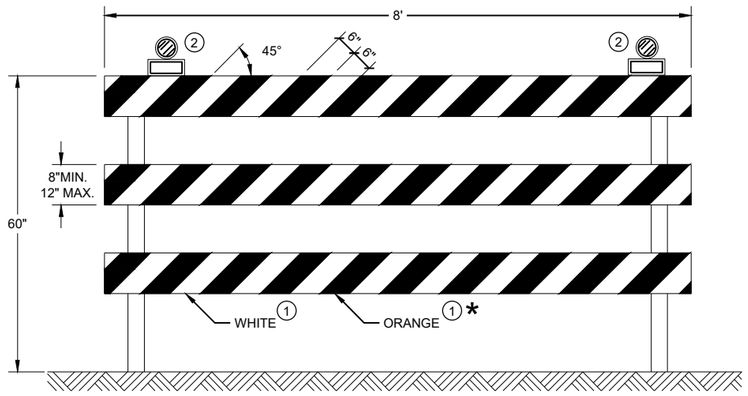
VERTICAL PANEL

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
November 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
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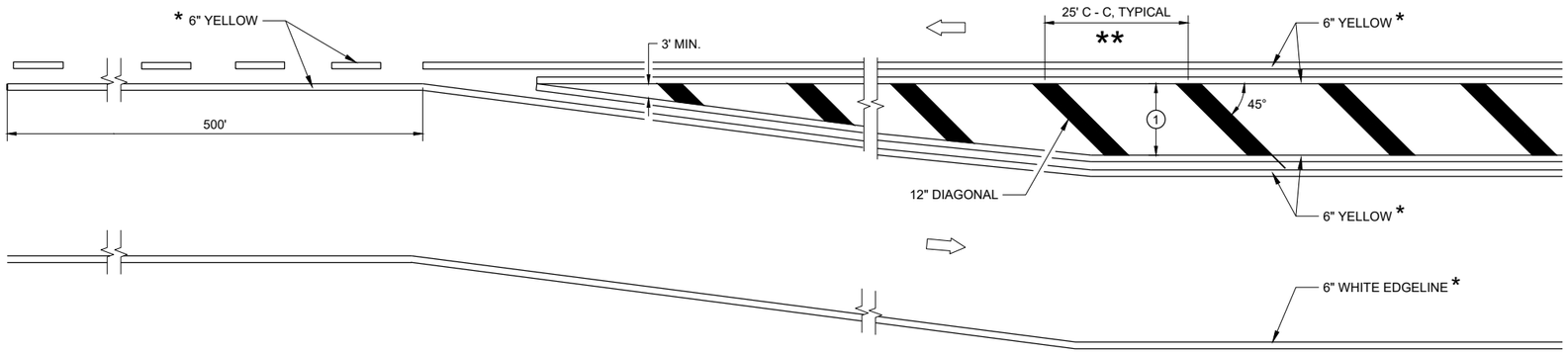
** WHEN THE PAINTED MEDIAN LENGTH IS LESS THAN 50 FEET THE SPACING IS 10'.



MEDIAN ISLAND DETAIL

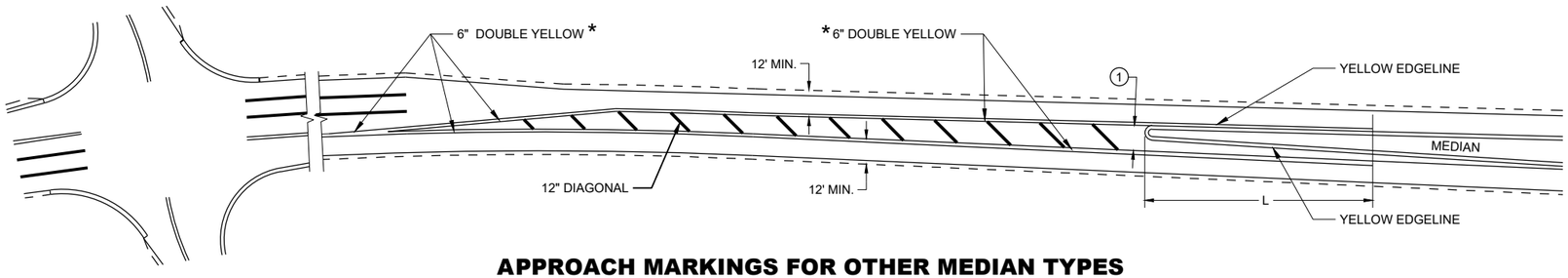
GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

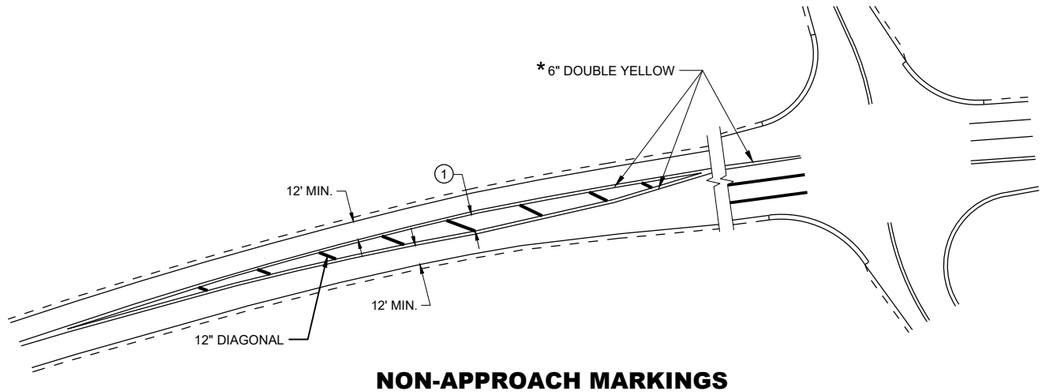
⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
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FHWA

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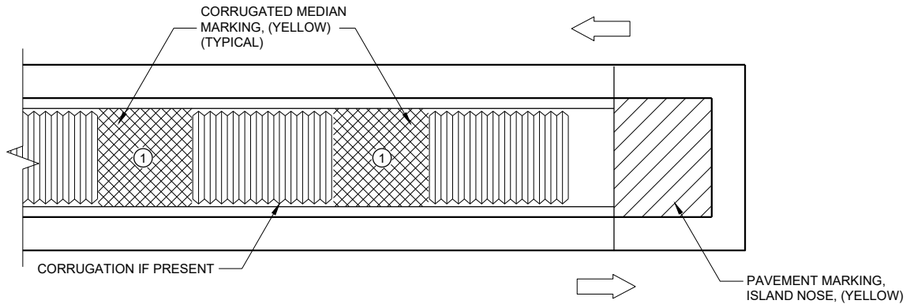
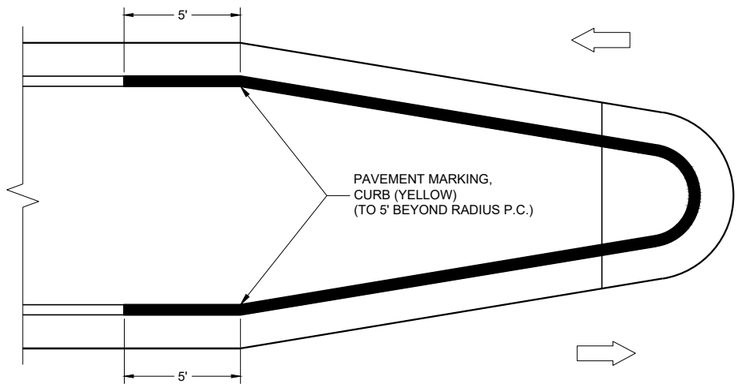
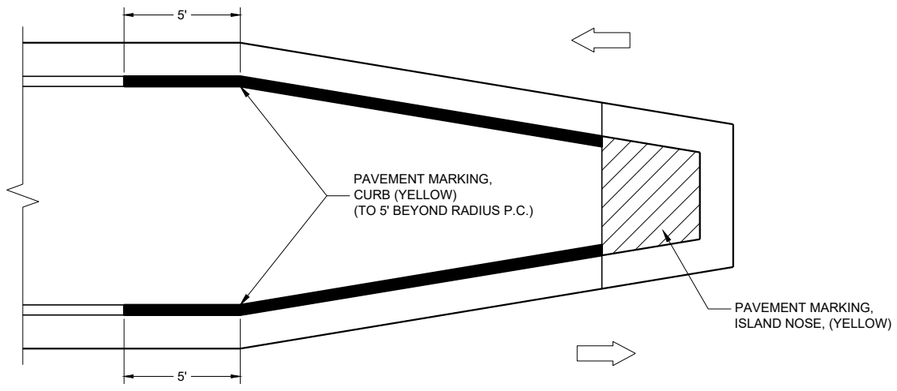


MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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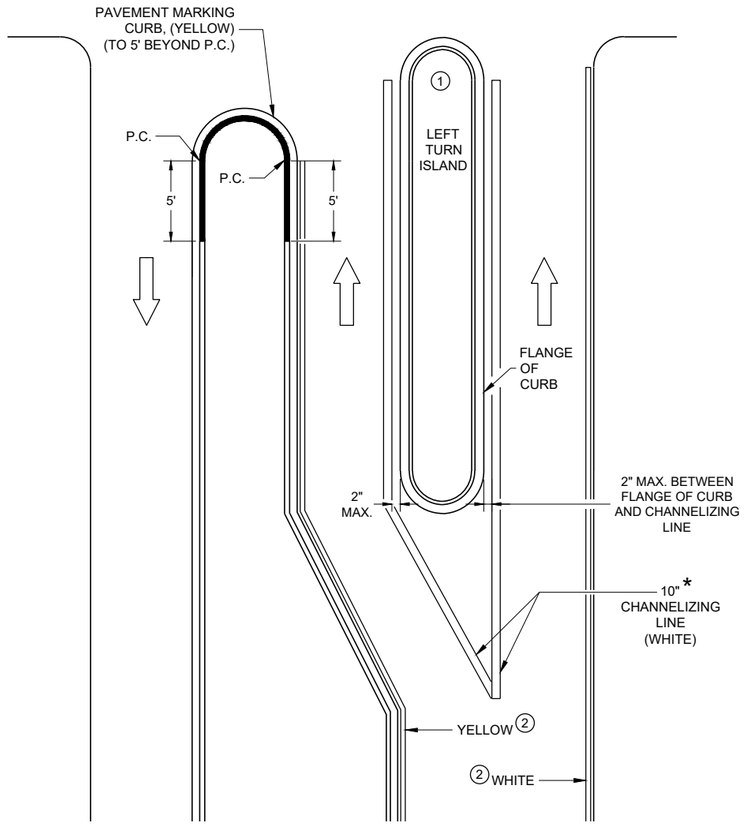
REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

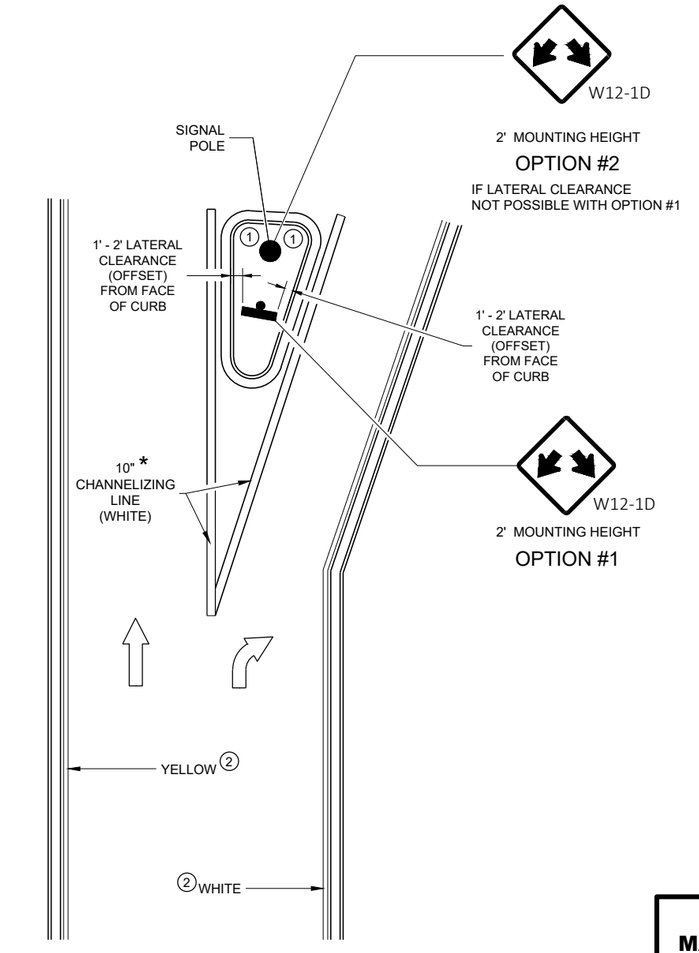
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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SDD 15C18-08c

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

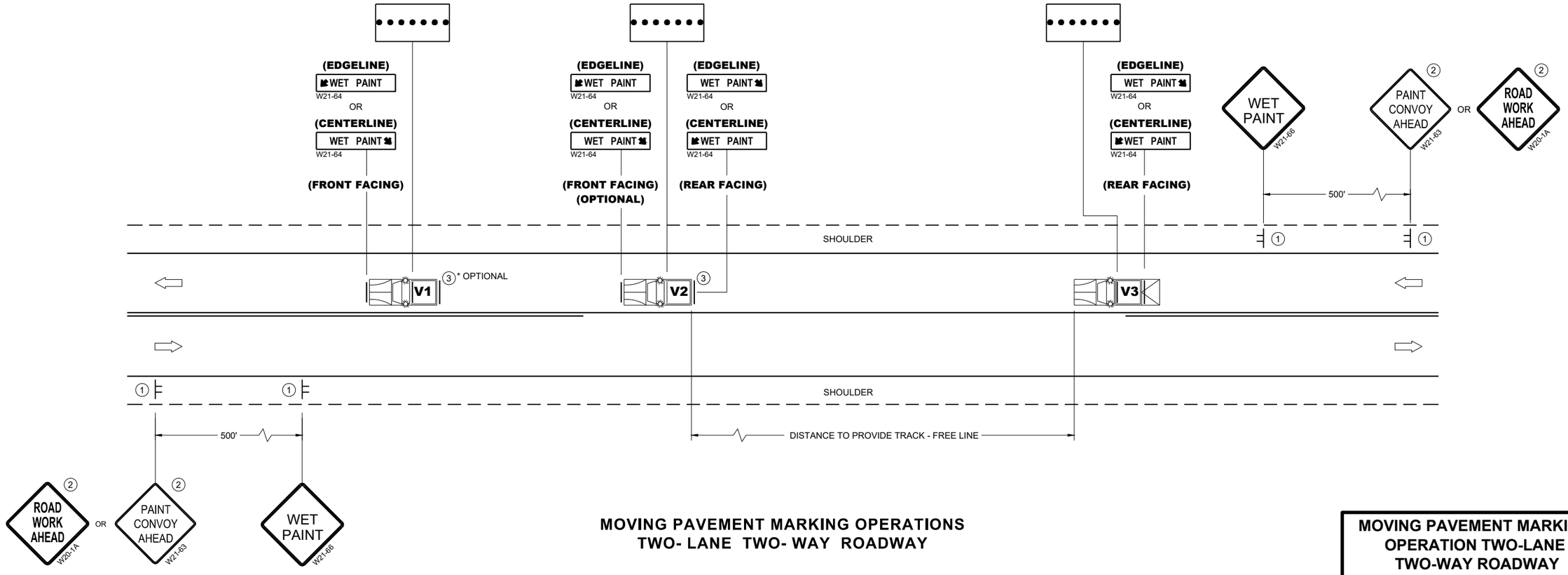
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

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SDD 15C19-9a

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

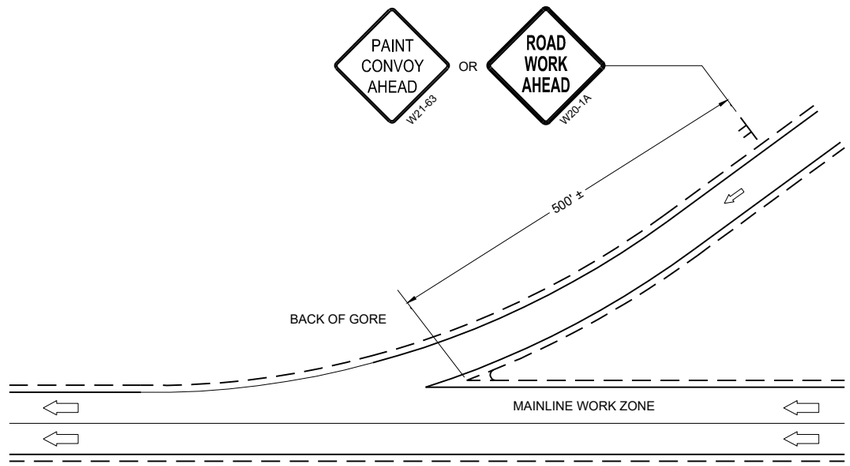
V3 TRAIL VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (MERGE)



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.

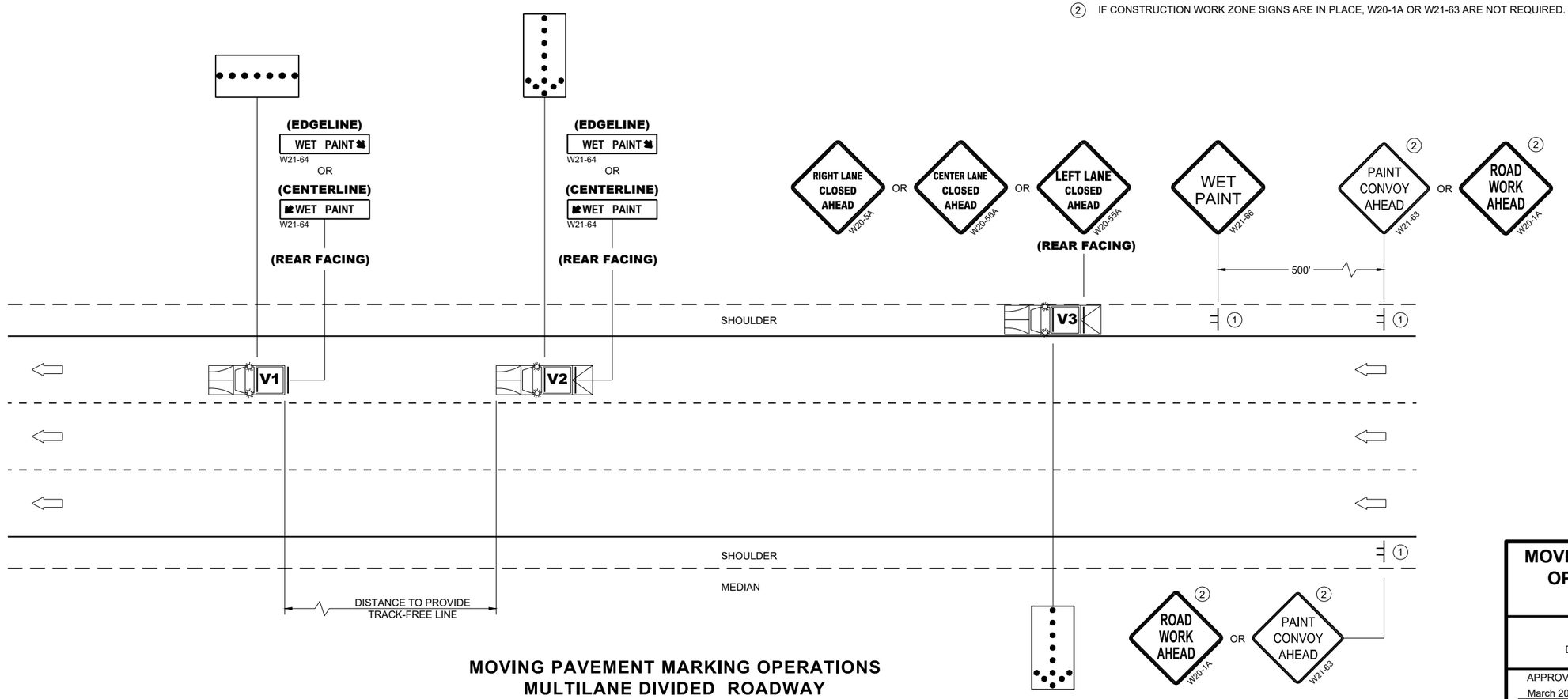
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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 28" 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
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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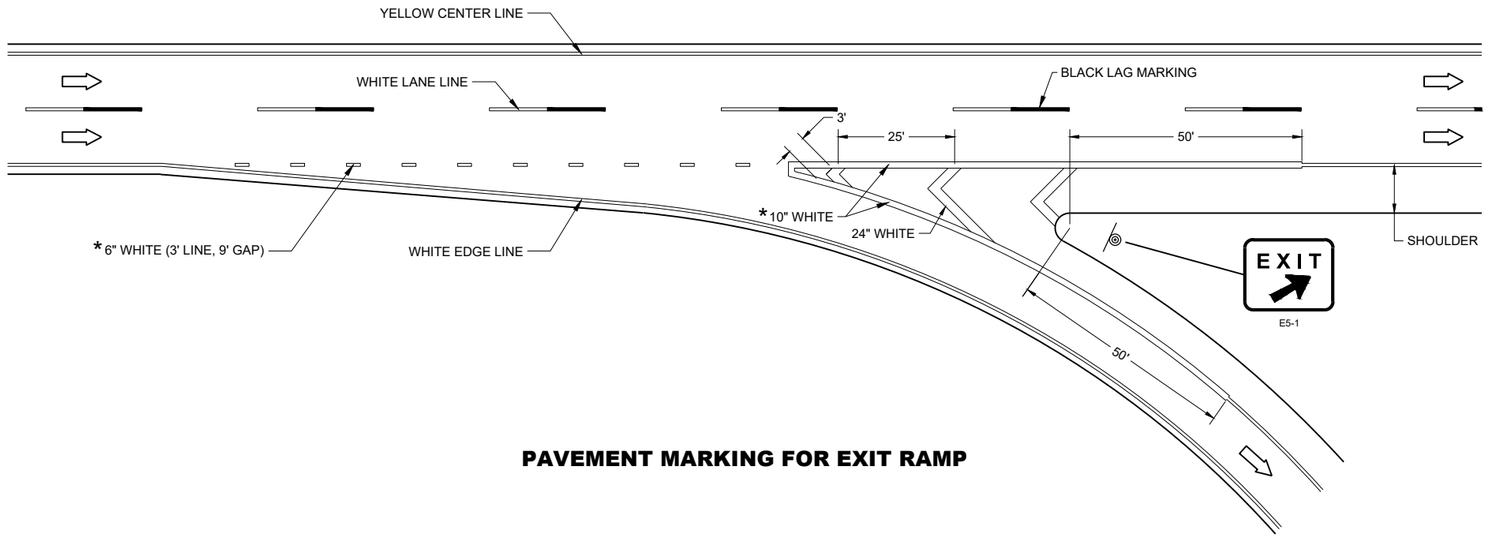
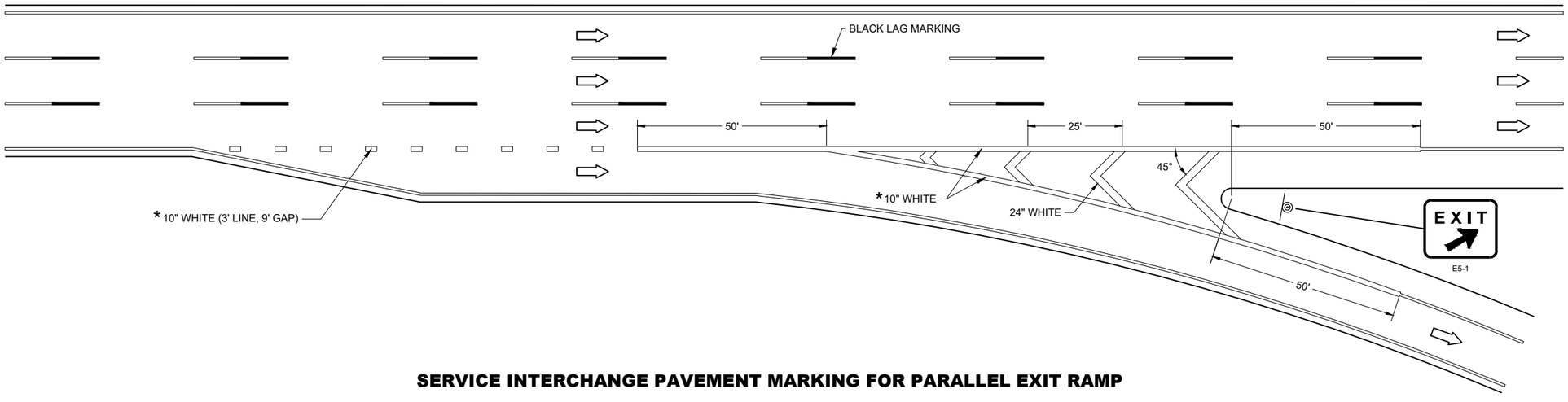
SDD 15C19-9c

6

SDD 15C19-9c



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

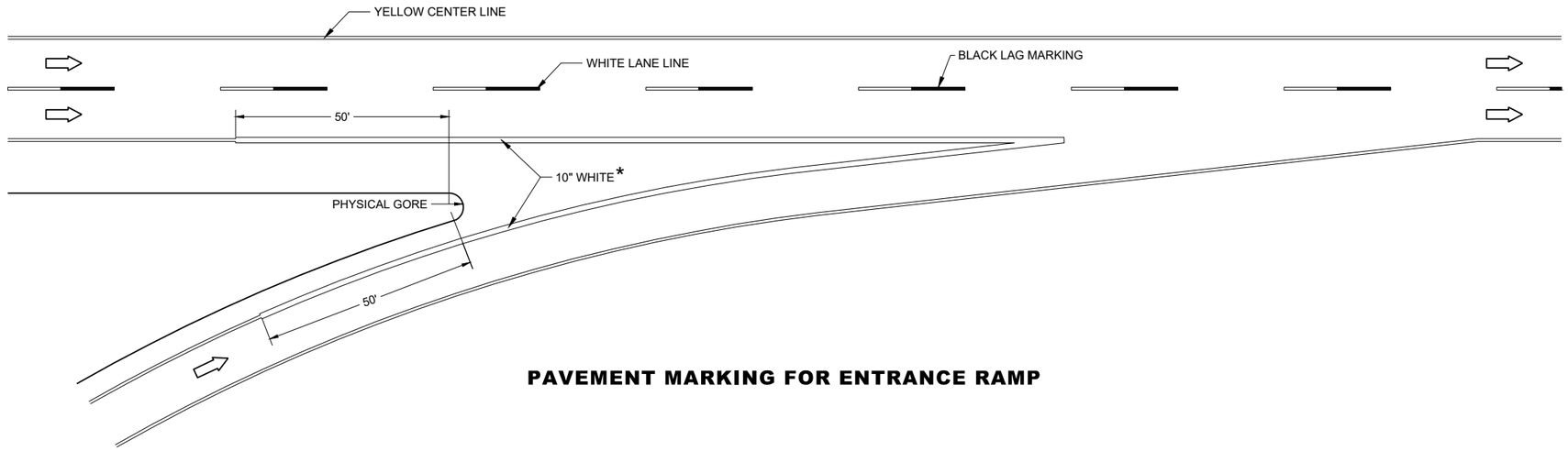
DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15C31-06a



PAVEMENT MARKING FOR ENTRANCE RAMP

GENERAL NOTES

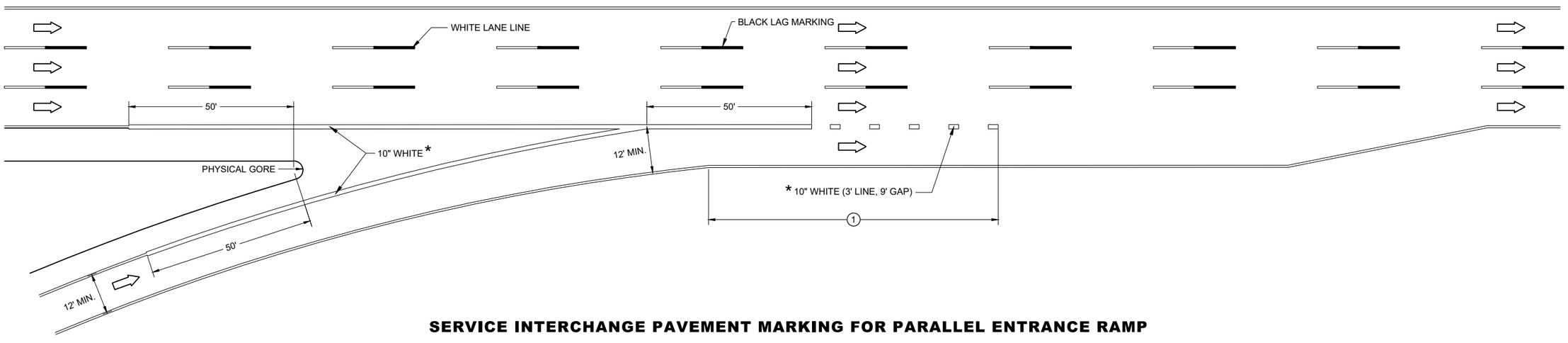
PLACE GROOVE 3 INCHES LEFT OF JOINT.

(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

SDD 15C31-06c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31-06c

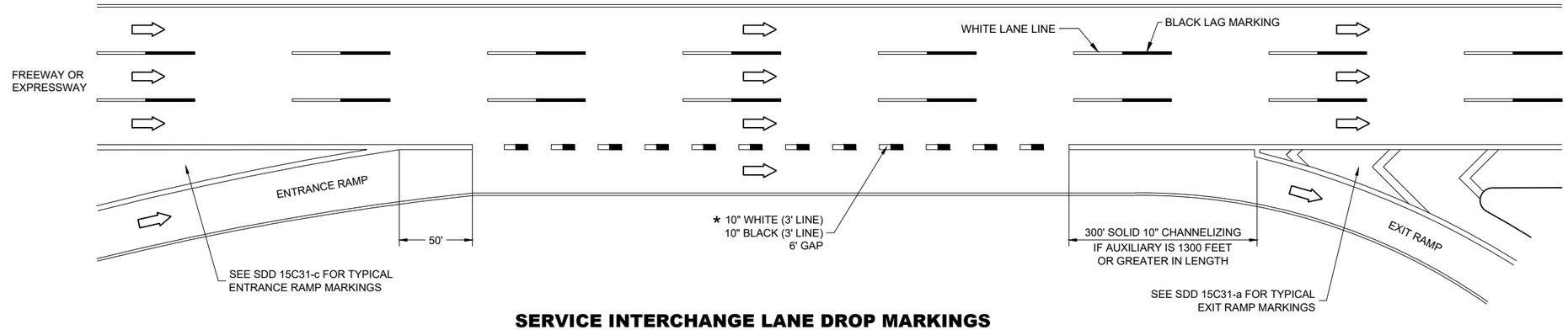
LEGEND

DIRECTION OF TRAVEL

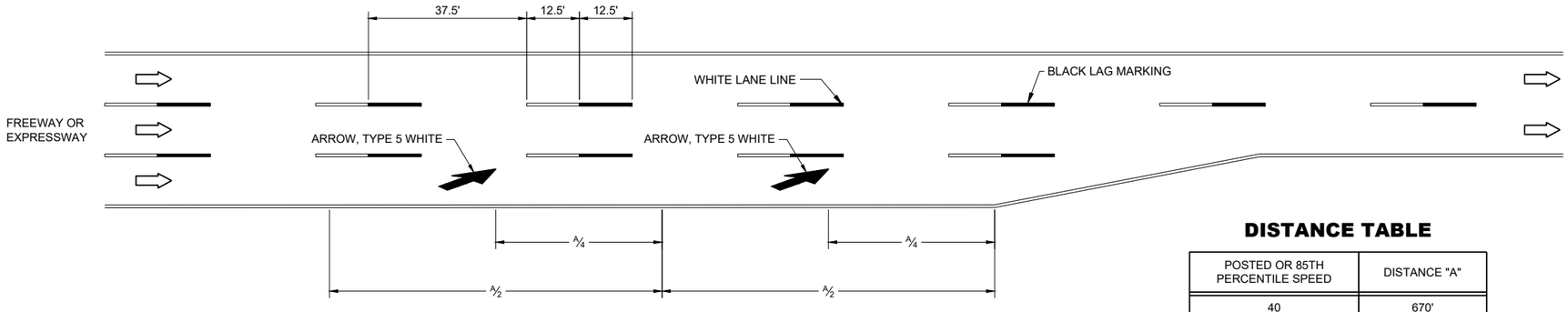
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

PAVEMENT MARKING, LANE DROP AND LANE REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

September 2023
DATE

/S/ Matthew Rauch
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

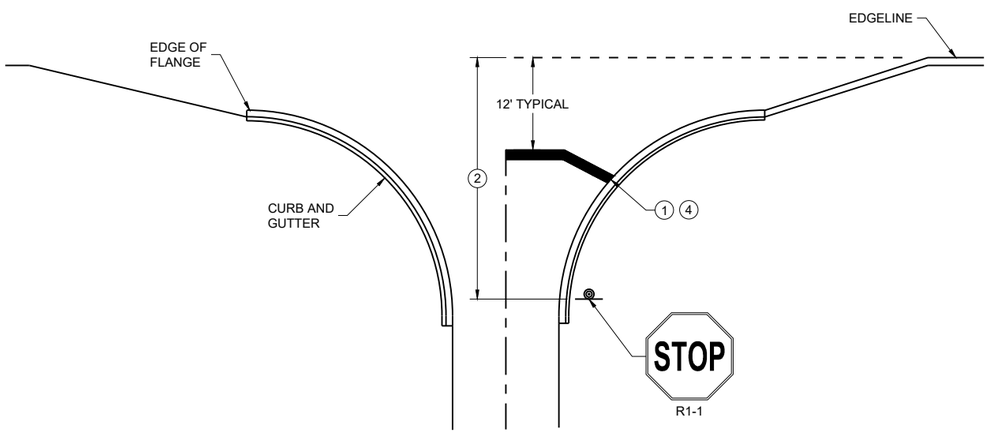
FHWA

6
SDD 15C31-06d

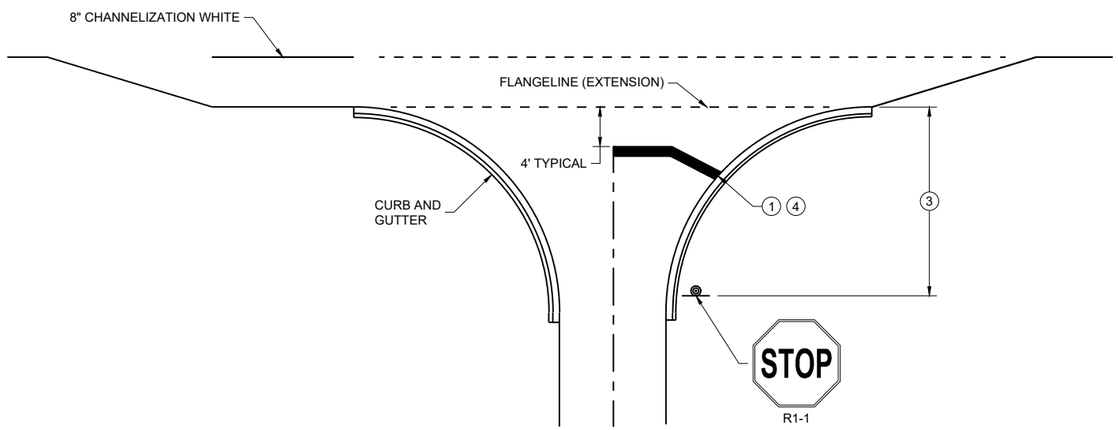
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

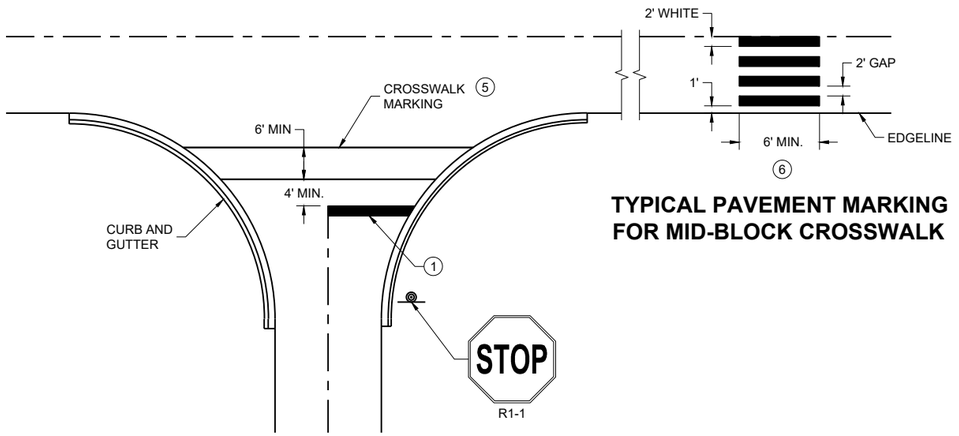
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

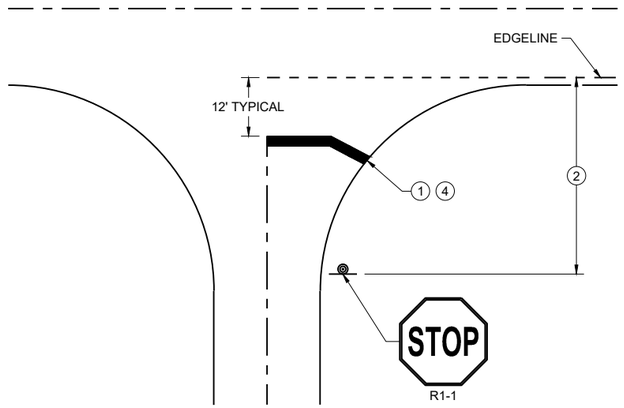


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS 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

March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

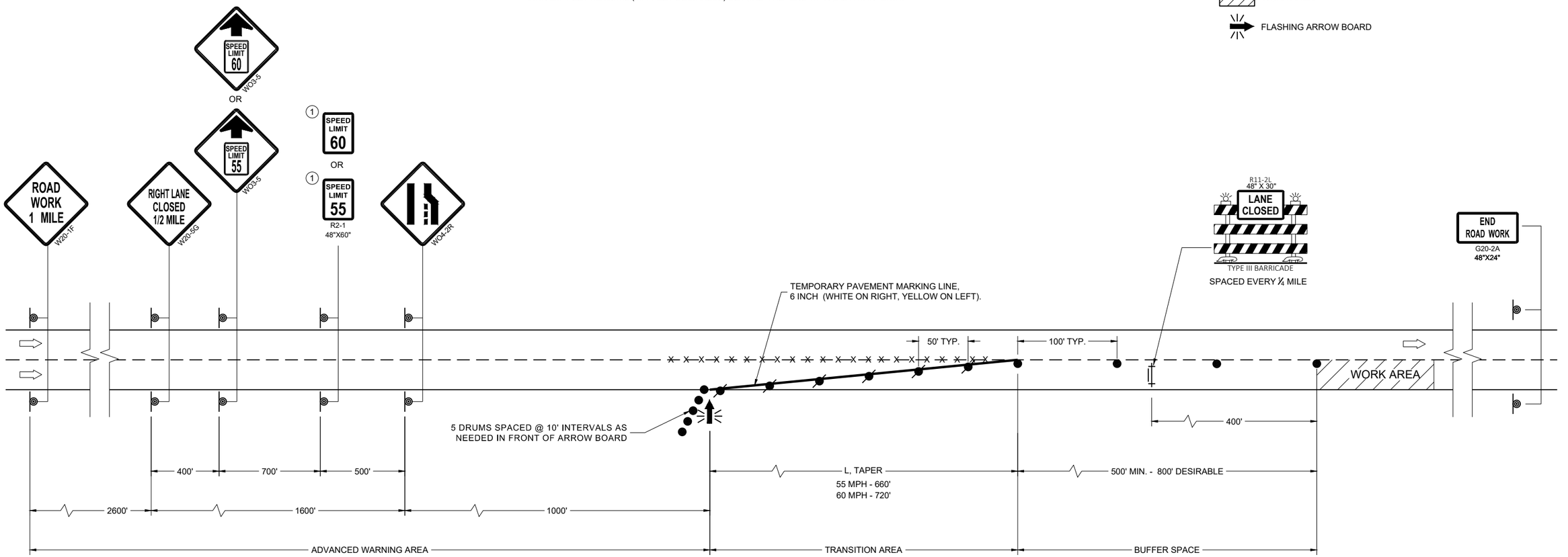
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 — DATE
/S/ Andrew Heidtke — Work Zone Engineer

FHWA

SDD 15D12-13b

6
SDD 15D12-13b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- (S) PORTABLE TRAFFIC SENSOR (PTS)
- FBS FLASHING BEACON SIGN

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS. WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

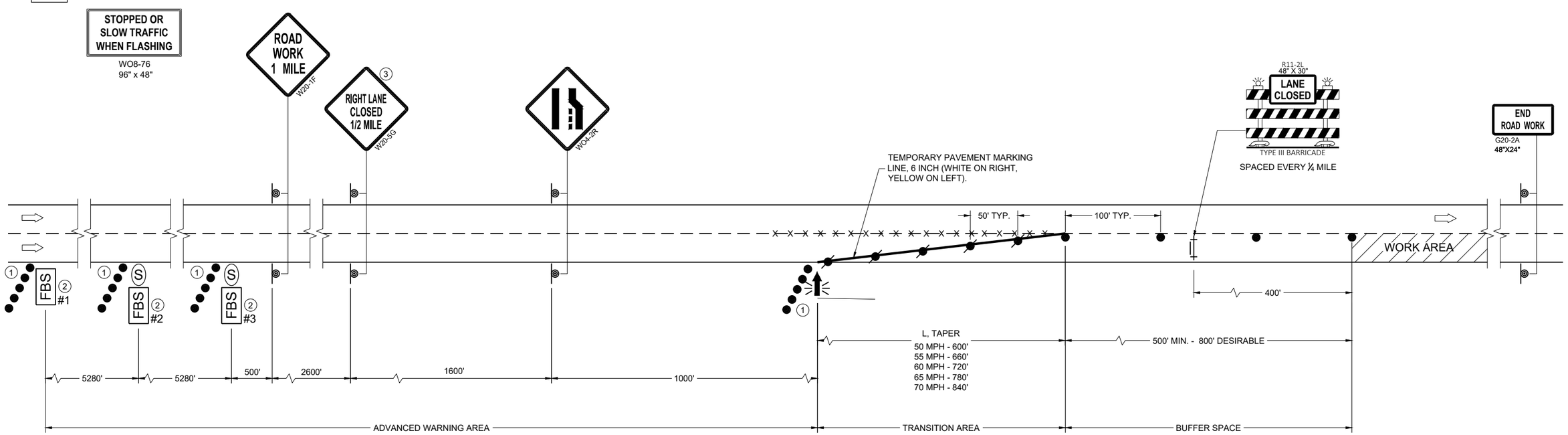
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.

(2) IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.

(3) IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Erin Schwark
Work Zone Engineer

FHWA

6

SDD 15D12-13d

SDD 15D12-13d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

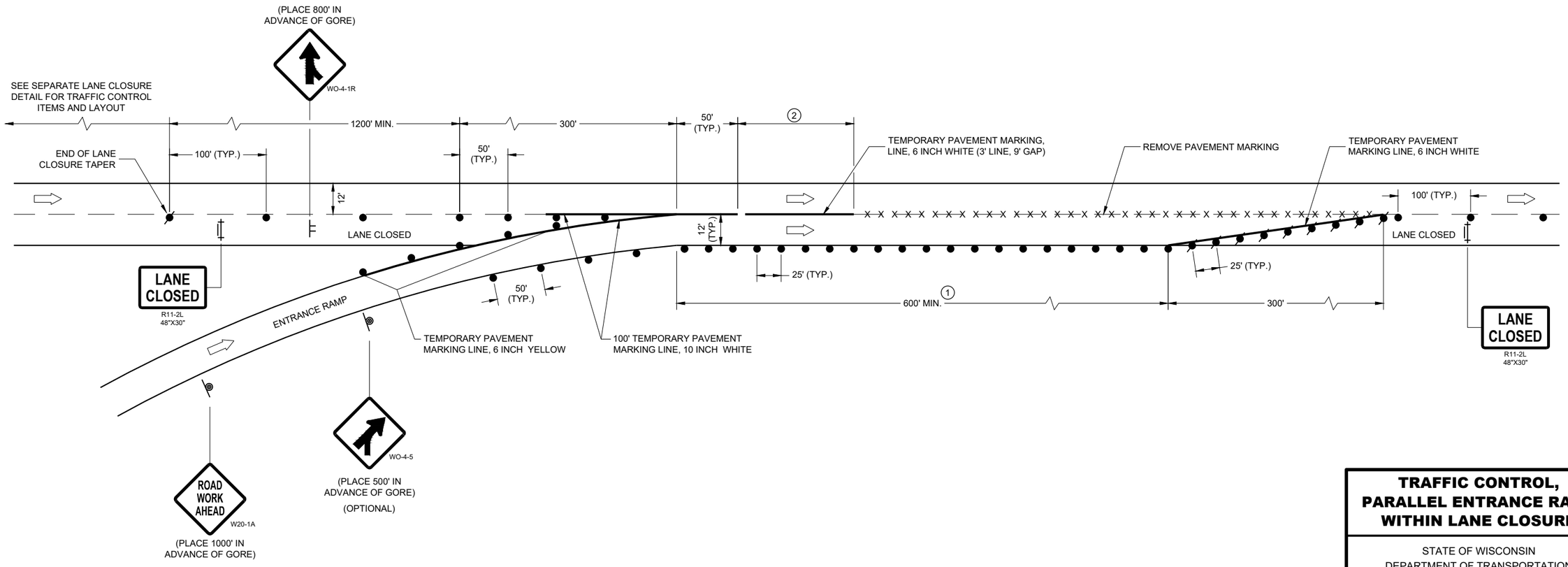
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

488

FHWA

6

SDD 15D15-07a

6

SDD 15D15-07a

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

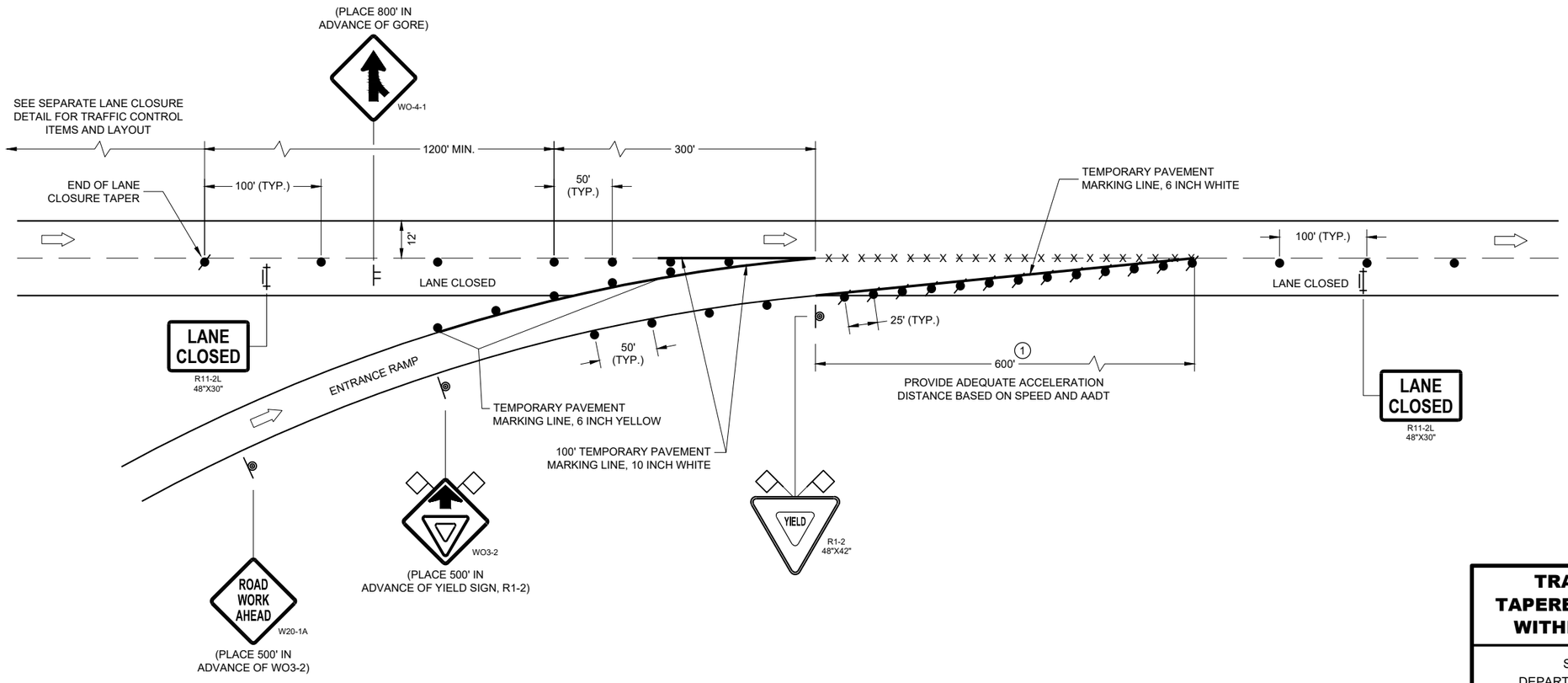
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15-07c

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SDD 15D15-07c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

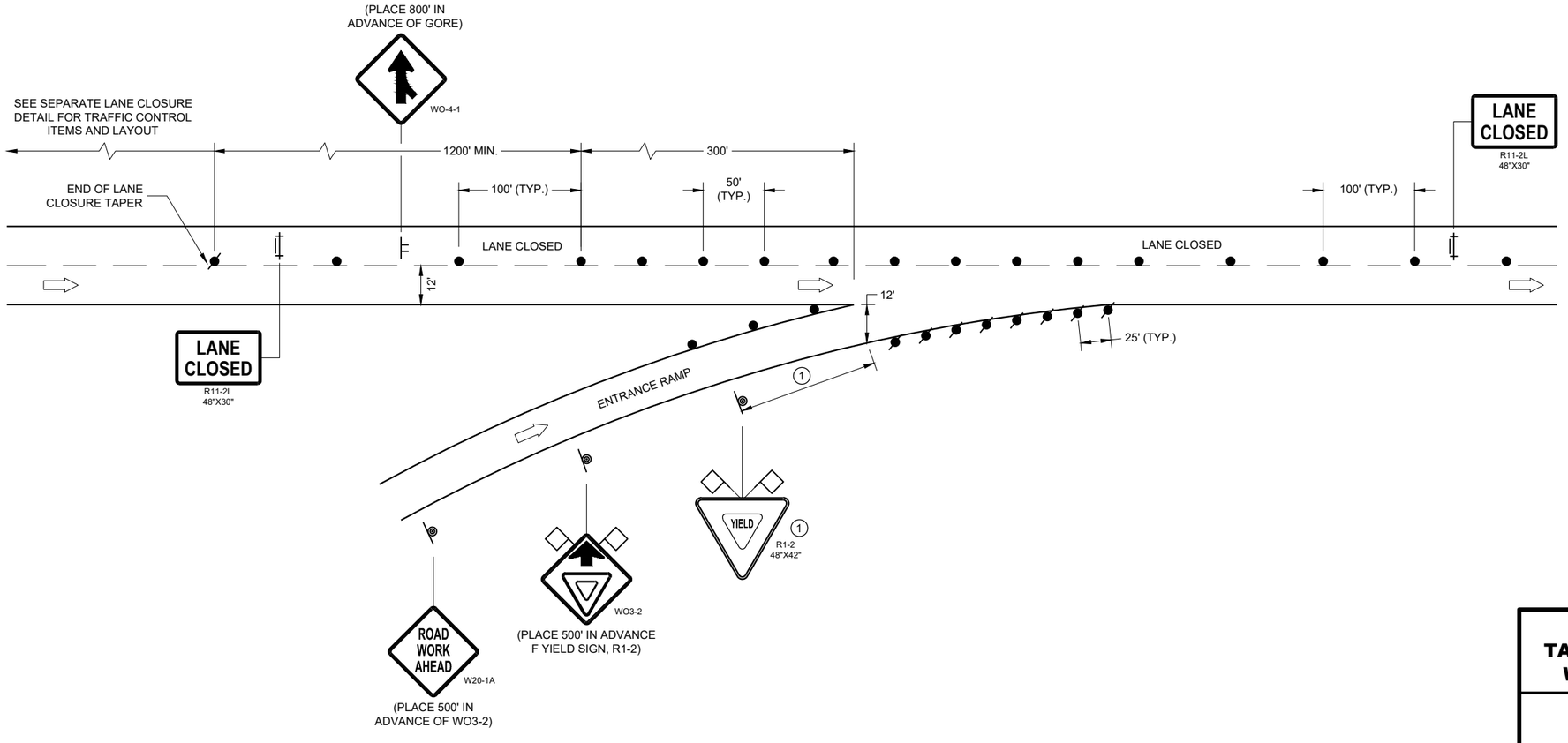
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15-07d

6

SDD 15D15-07d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH 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.

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

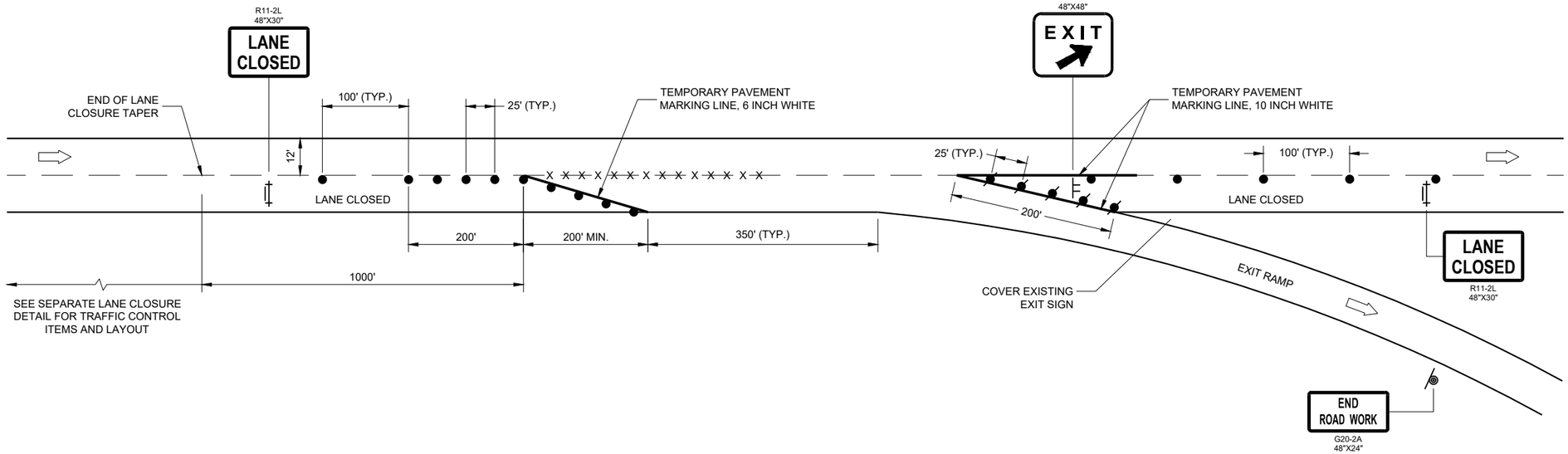
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.



TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15-07e

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A 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 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

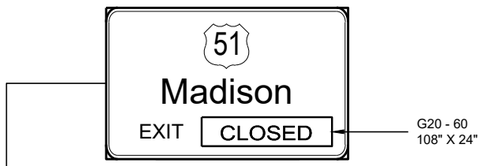
PLACE TEMPORARY PAVEMENT MARKING LINE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

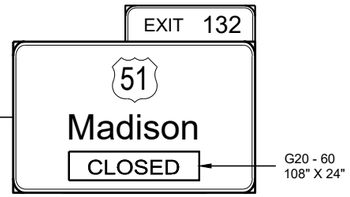
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

(1) W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

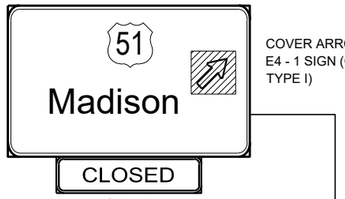
(2) PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

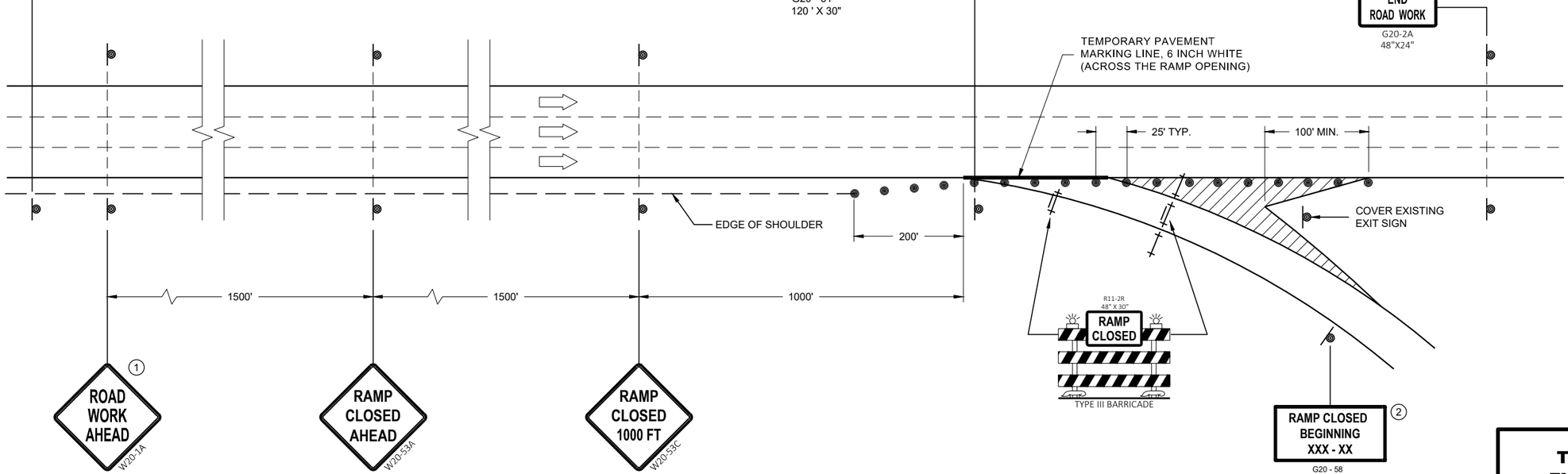


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



G20 - 61
120 ' X 30"

COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16-06

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 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. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

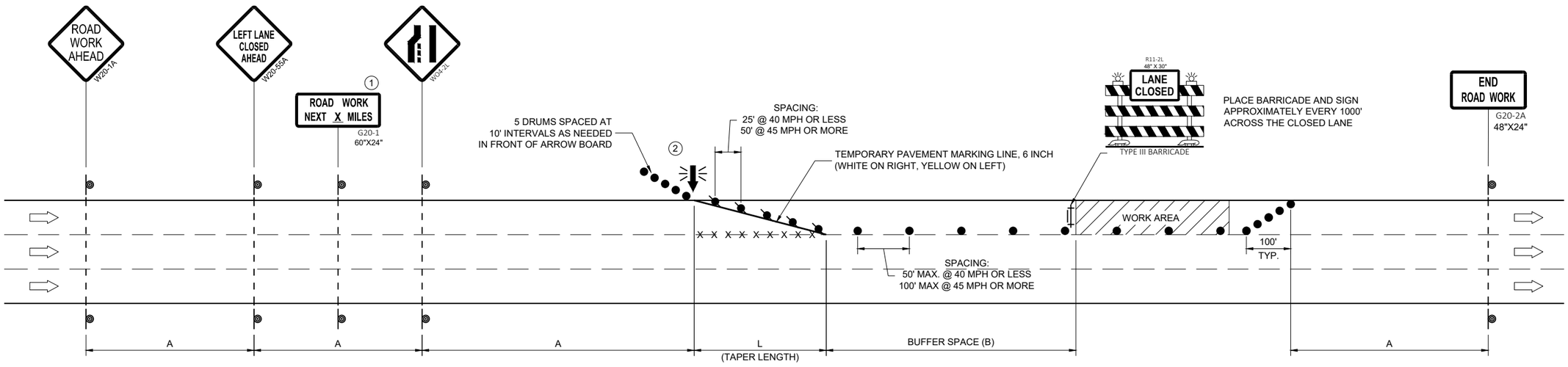
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

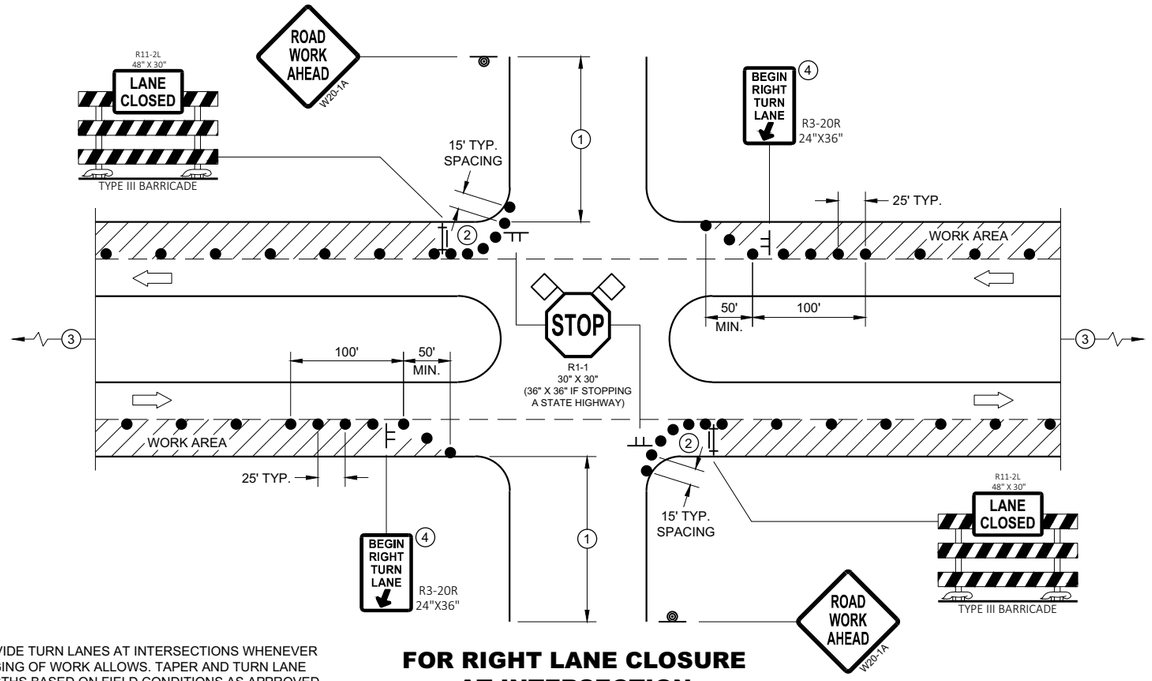
FHWA

6

SDD 15D20-08a

6

SDD 15D20-08a



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 RIGHT LANE CLOSURE AT INTERSECTION

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.

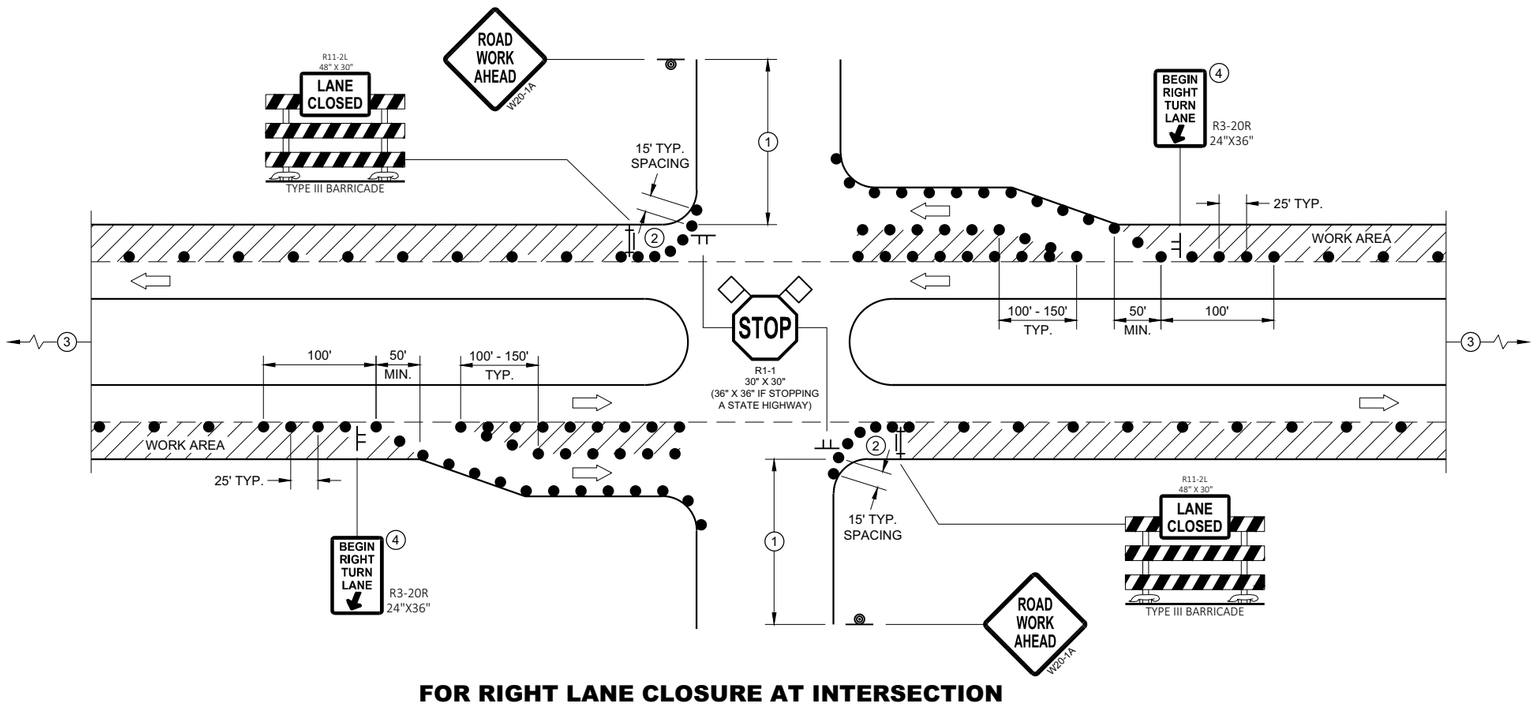
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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

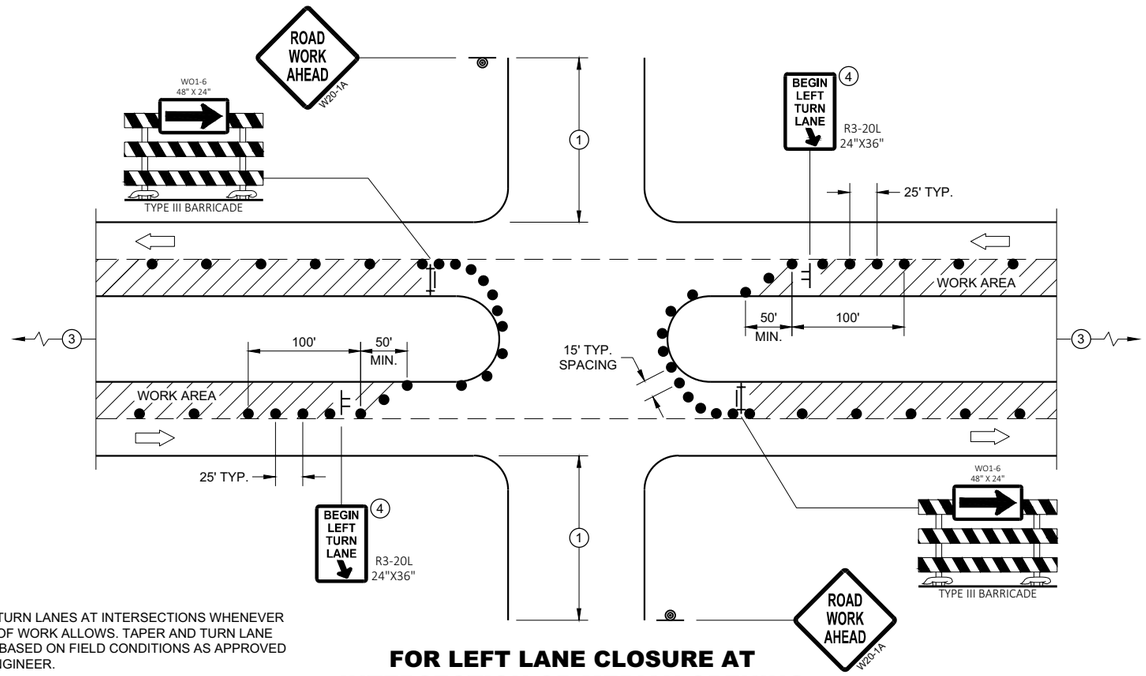
- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a
SDD15D21 - 07a



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.

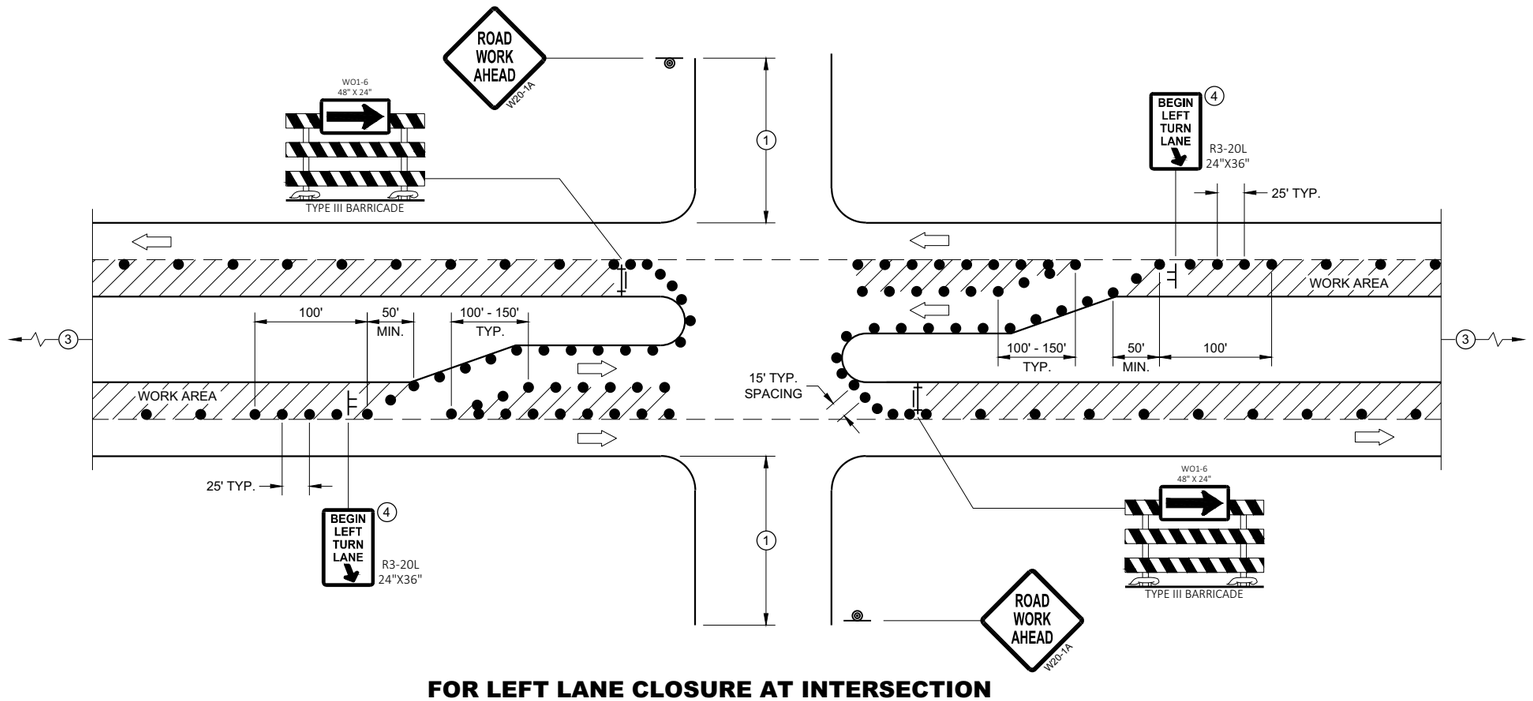
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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

- 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
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

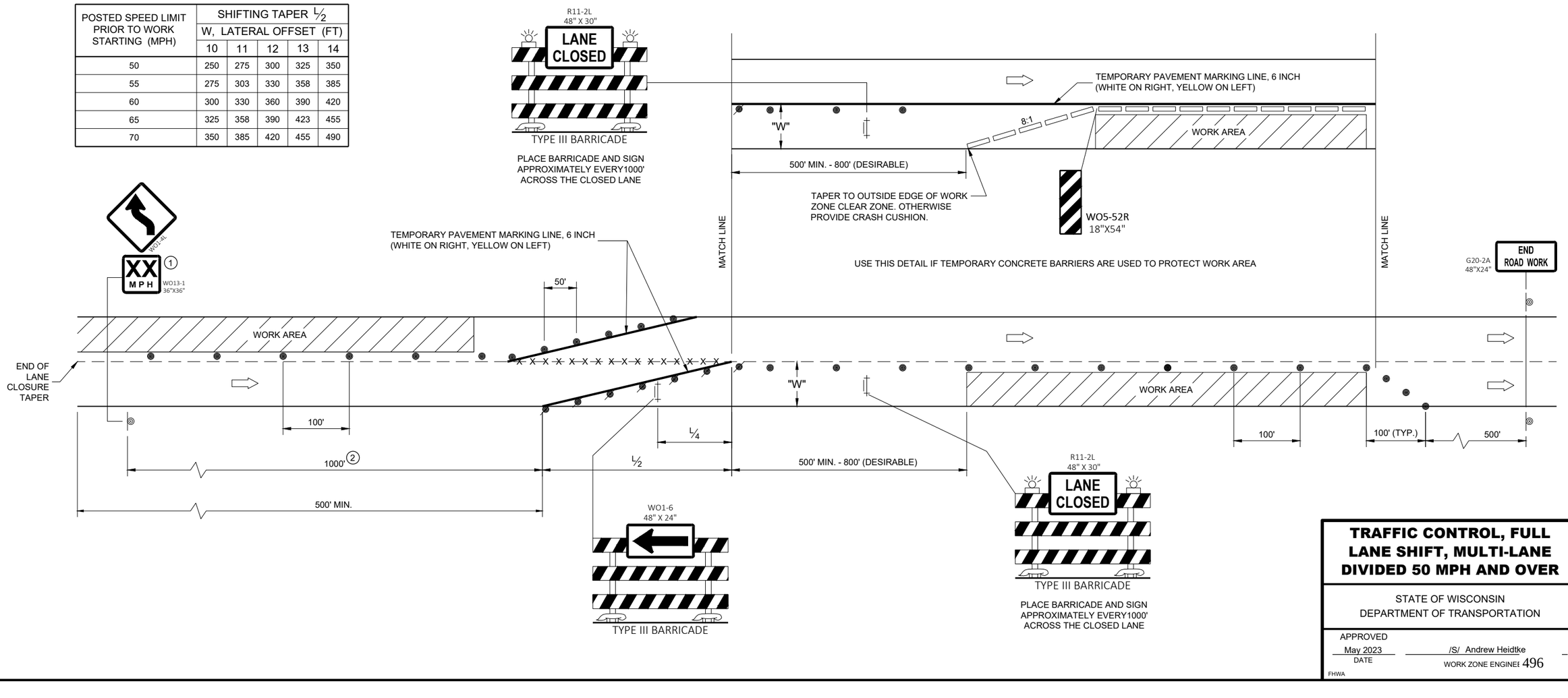
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ½ THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) IF BEGINNING OF LANE SHIFT IS 1200' OF LESS FROM THE END OF THE LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D40-05b

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
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

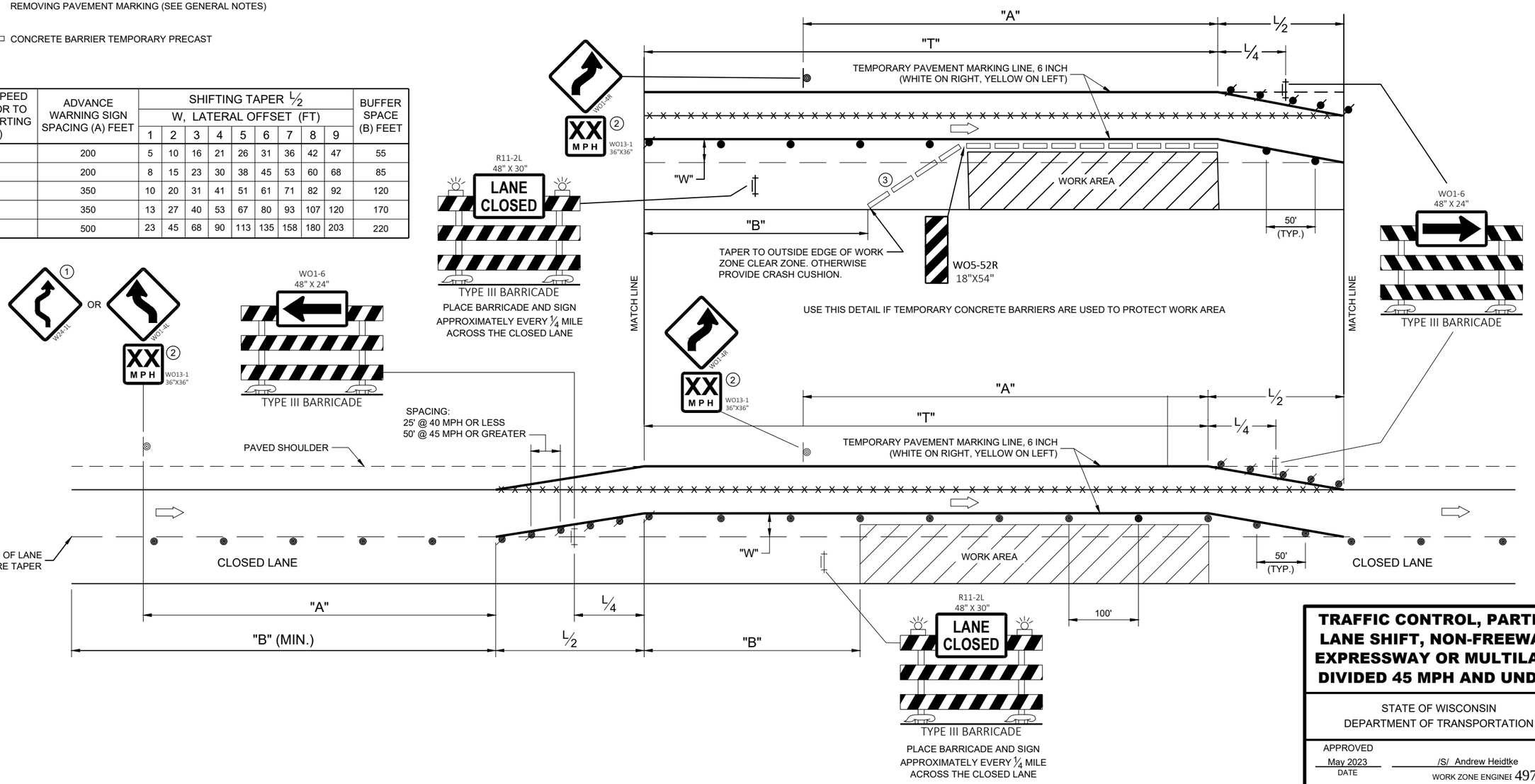
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(3) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	55
30	200	8	15	23	30	38	45	53	60	68	85
35	350	10	20	31	41	51	61	71	82	92	120
40	350	13	27	40	53	67	80	93	107	120	170
45	500	23	45	68	90	113	135	158	180	203	220



TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D40-05c

6

SDD 15D40-05c

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
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

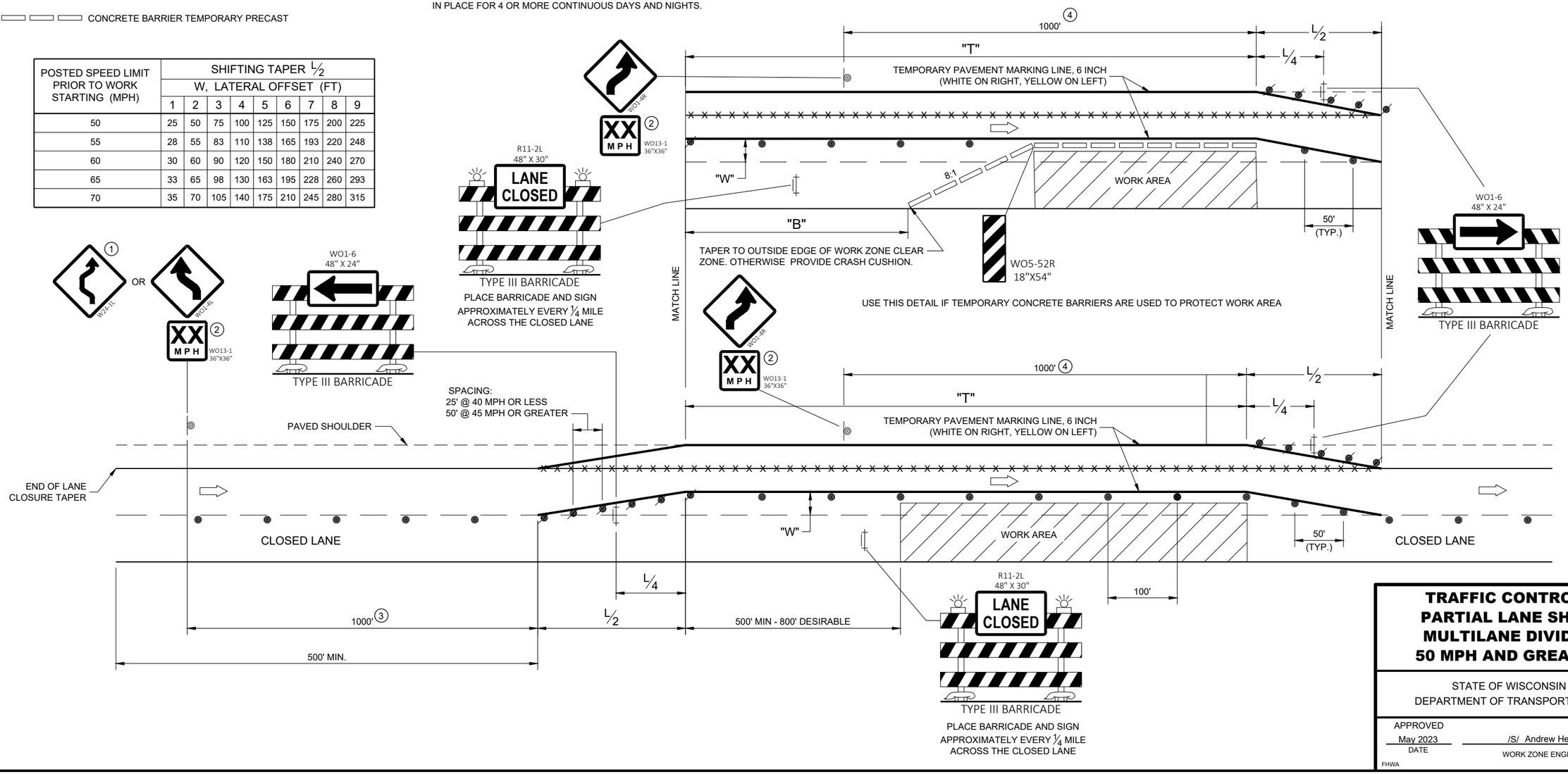
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

1. USE ONLY WHEN T<600', OMIT WO1-4R.
2. IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.
3. IF THE BEGINNING OF LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE LANE CLOSURE TAPER.
4. IF THE BEGINNING OF THE SECOND LANE SHIFT TAPER IS 1200 FEET OR LESS FROM END OF THE FIRST LANE CLOSURE TAPER, PLACE THE WO1-4L SIGN 200 FEET AFTER THE END OF THE FIRST LANE CLOSURE TAPER.



TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D40-05d

SDD 15D40-05d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR, FLEXIBLE TUBULAR MARKER
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- CONSTRUCTION TRAFFIC
- WORK AREA
- CC — CRASH CUSHION TEMPORARY
- EXISTING CONCRETE BARRIER TEMPORARY PRECAST

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"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.

WORK ZONE INGRESS/EGRESS LOCATIONS SHALL BE APPROVED BY THE ENGINEER. LOCATIONS FOR WORK ZONE ACCESS TO/FROM THE FREEWAY SHALL NOT BE USED FOR INGRESS AND EGRESS AT THE SAME TIME.

THIS ACCESS DETAIL IS TYPICAL FOR LEFT LANE ACCESS, FOR RIGHT LANE ACCESS, REVERSE THE TRAFFIC CONTROL

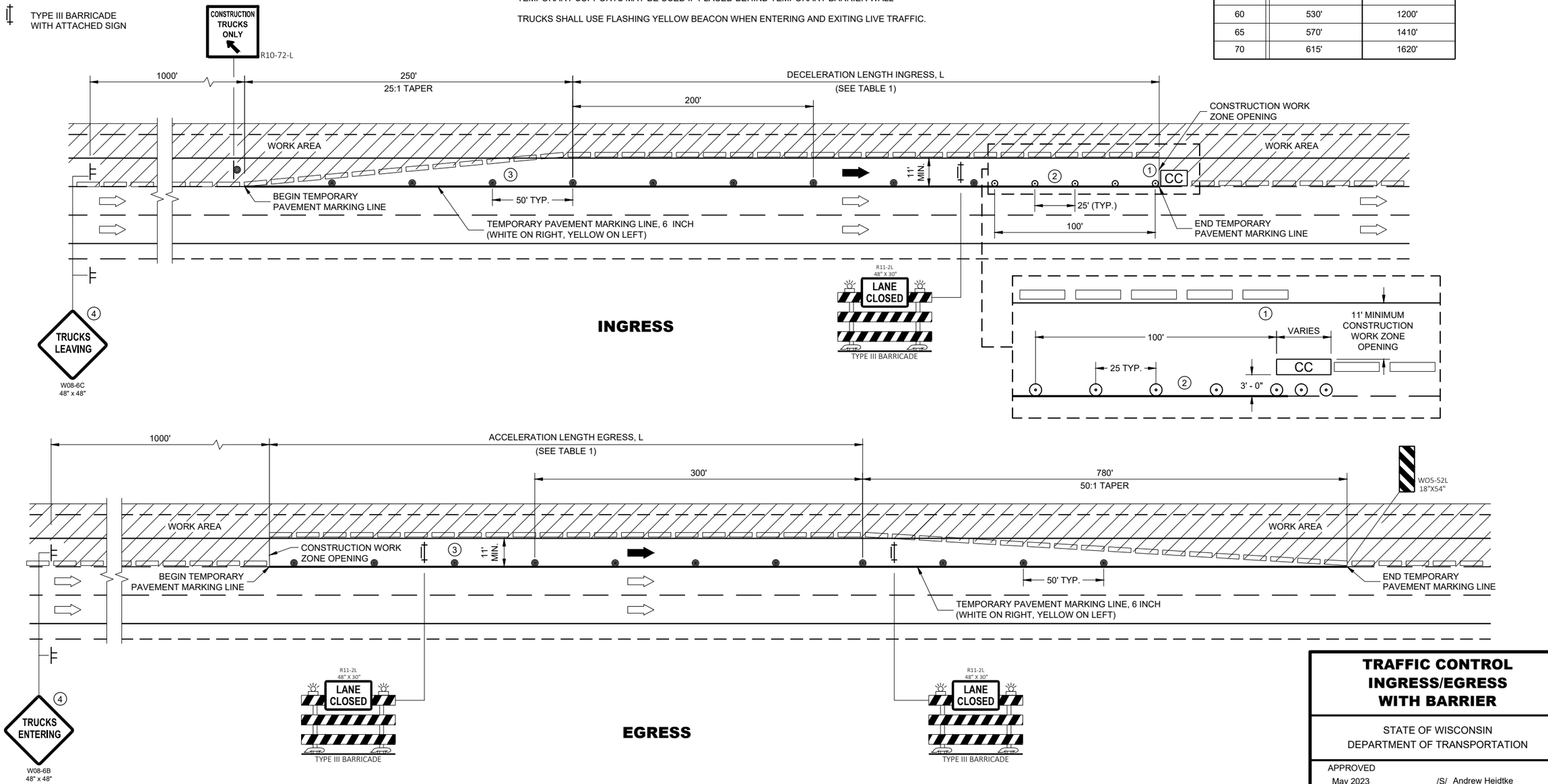
TEMPORARY SUPPORTS MAY BE USED IF PLACED BEHIND TEMPORARY BARRIER WALL

TRUCKS SHALL USE FLASHING YELLOW BEACON WHEN ENTERING AND EXITING LIVE TRAFFIC.

1. WIDEN BARRIER AS NECESSARY TO ACCOMMODATE CRASH CUSHION WIDTH.
2. USE TUBULAR MARKERS TO HELP DELINEATE TEMPORARY CRASH CUSHION.
3. REMOVE DRUMS / BARRICADES WHEN INGRESS / EGRESS ARE IN USE.
4. REMOVE OR COVER WHEN ACCESS IS NOT NEEDED.

TABLE 1

S (MPH)	INGRESS, L	EGRESS, L
50	435'	720'
55	480'	960'
60	530'	1200'
65	570'	1410'
70	615'	1620'



TRAFFIC CONTROL INGRESS/EGRESS WITH BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

499

6

SDD 15D47-03a

6

SDD 15D47-03a

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

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

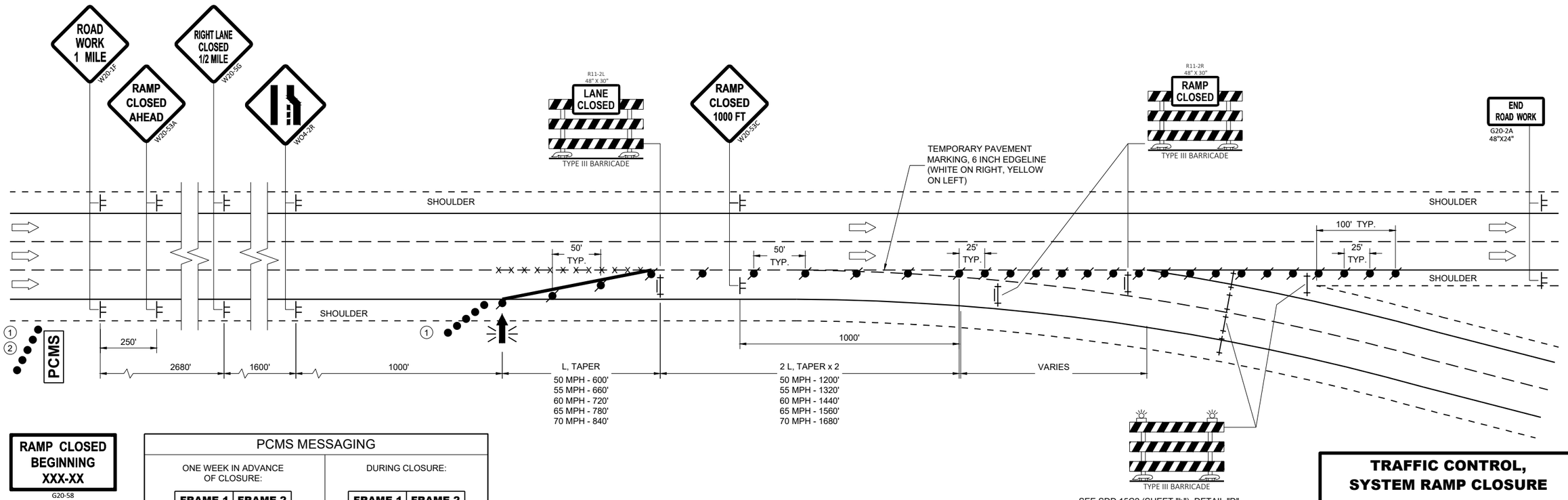
REMOVE ALL ARROW BOARDS AND DEVICES BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS.

REFER TO SDD 15C2 FOR SETTING DETOUR SIGNAGE.

ADD FREEWAY SHIELD AND DIRECTION IF APPLICABLE. COVER EXISTING RAMP AND LANE SIGNS IF APPLICABLE.

(1) 5 DRUMS SPACED AT 10 FOOT INTERVALS.

(2) DURING THE PRE-WARNING PERIOD, PLACE THE PCMS AT THE SYSTEM RAMP THAT IS TO BE CLOSED. DURING CLOSURE PERIOD, PLACE PCMS OR FMS AT LAST AVAILABLE EXIT IN ADVANCE OF SYSTEM RAMP CLOSURE. IF DYNAMIC MESSAGE SIGNS (DMS) ARE AVAILABLE, COORDINATE POTENTIAL SIGN MESSAGES WITH THE TRAFFIC MANAGEMENT CENTER (TMC).



SEE SDD 15C2 (SHEET "b"), DETAIL "D" "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" PLACE BARRICADES TO FULLY SEAL OFF ROAD

RAMP CLOSED BEGINNING XXX-XX
G20-58

PCMS MESSAGING	
ONE WEEK IN ADVANCE OF CLOSURE:	DURING CLOSURE:

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

FRAME 1	FRAME 2
HWY XX RAMP CLOSED	USE ALT ROUTE

TRAFFIC CONTROL, SYSTEM RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE

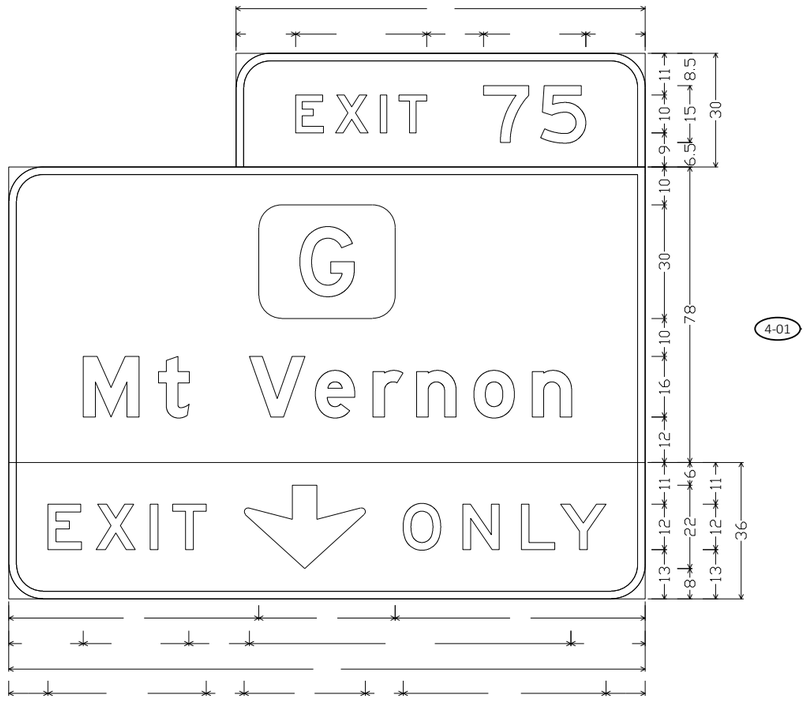
/S/ Andrew Heidtke
WORK ZONE ENGINEER

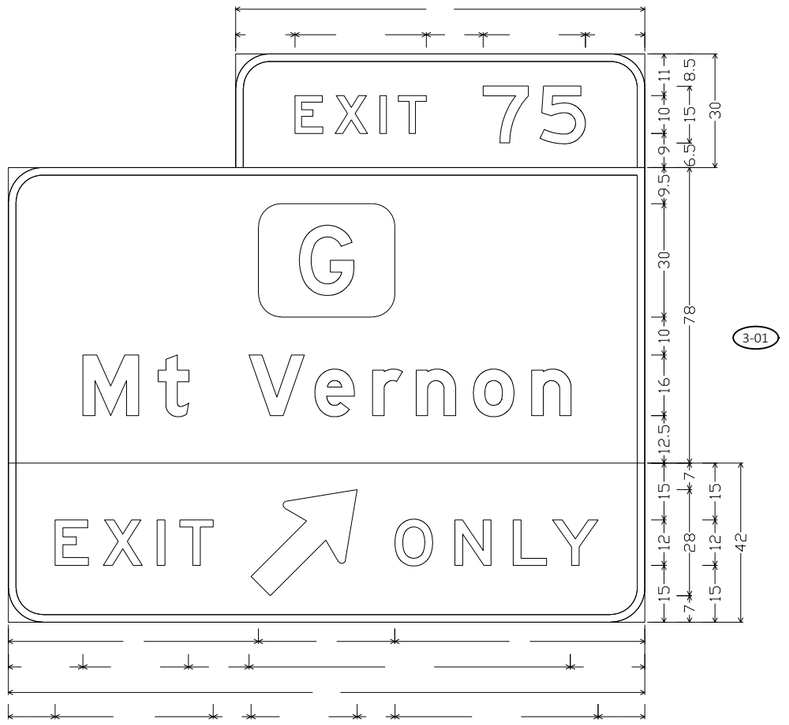
FHWA

6
SDD 15D49-03

NOTES

1. All Signs Type I – Type SH Reflective
2. Color:
   Background – Green
   Message – White
3. Message Series – E Modified except all CAP words Series E
4. Exit Only Panel on Yellow Type F Reflective Sheeting
   with Black Non-Reflective Message

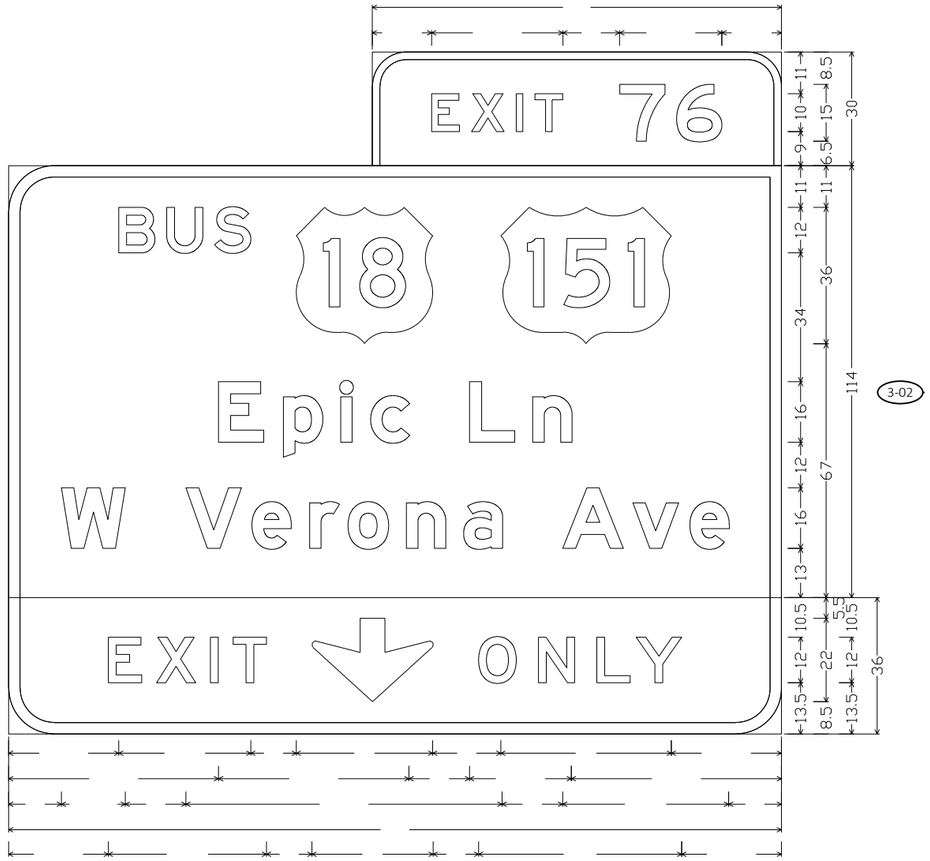




PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	PERMANENT SIGNING	SHEET NO:	E

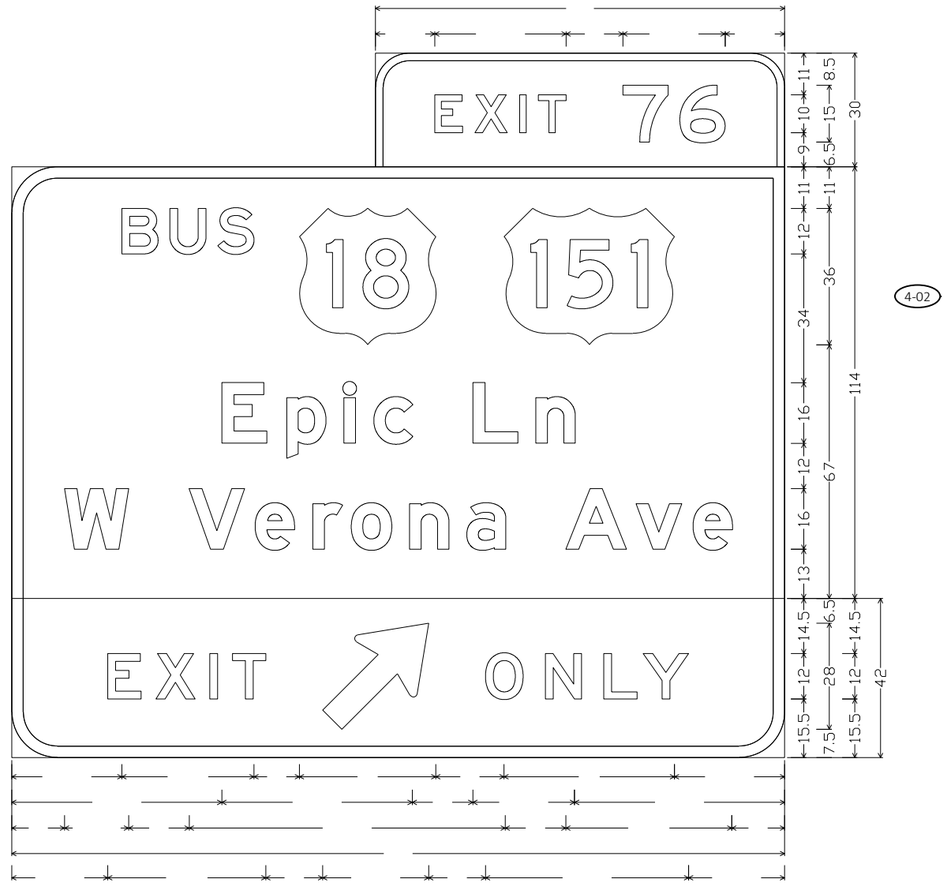
FILE NAME : C:\CAEfiles\Projects\tr_d1_1136an23.dgn PLOT DATE : 20-NOV-2023 8:33 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42



NOTES

1. All Signs Type I – Type SH Reflective
2. Color:
   Background – Green
   Message – White
3. Message Series – E Modified except all CAP words Series E
4. Exit Only Panel on Yellow Type F Reflective Sheeting with Black Non-Reflective Message



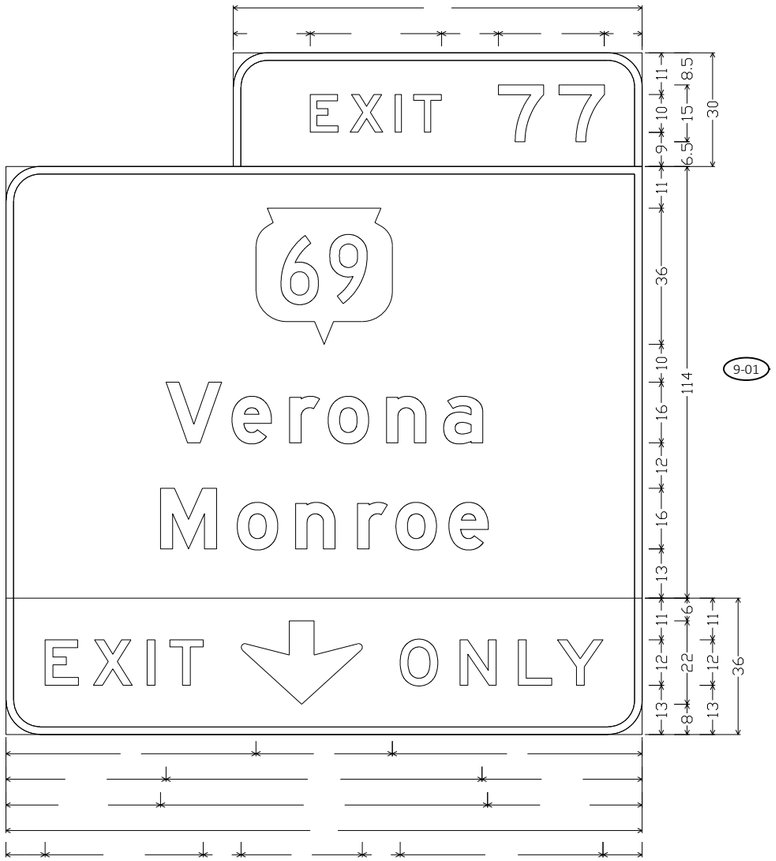
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY:DANE	PERMANENT SIGNING	SHEET NO:	E

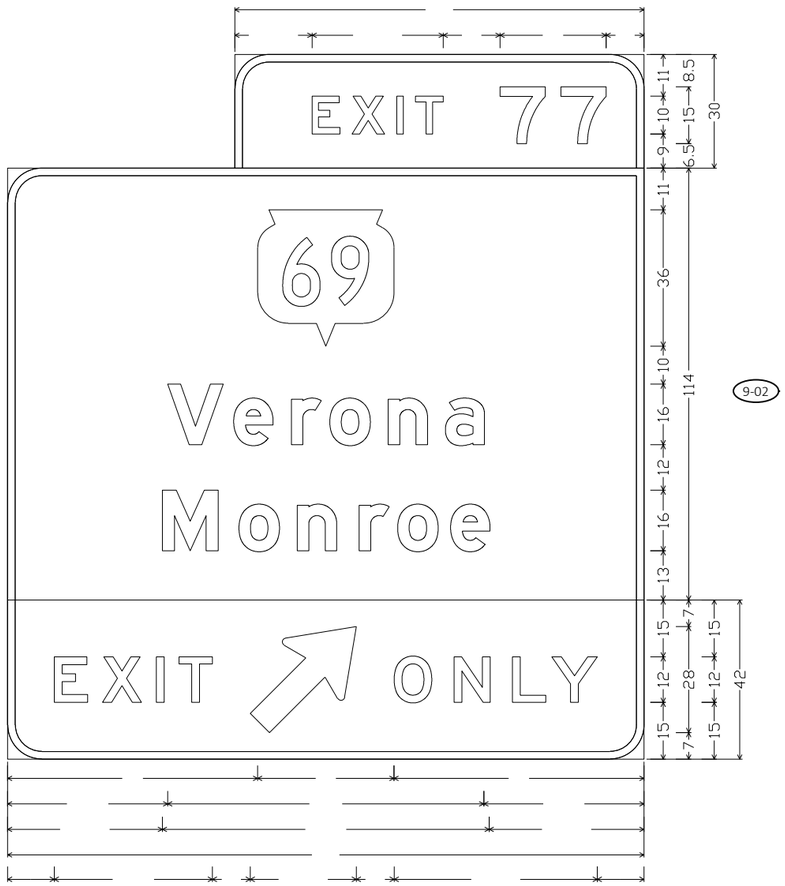
FILE NAME : C:\CAEfiles\Projects\tr_d1_1136an23.dgn PLOT DATE : 20-NOV-2023 8:33 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

NOTES

1. All Signs Type I – Type SH Reflective
2. Color:
   Background – Green
   Message – White
3. Message Series – E Modified except all CAP words Series E
4. Exit Only Panel on Yellow Type F Reflective Sheeting with Black Non–Reflective Message





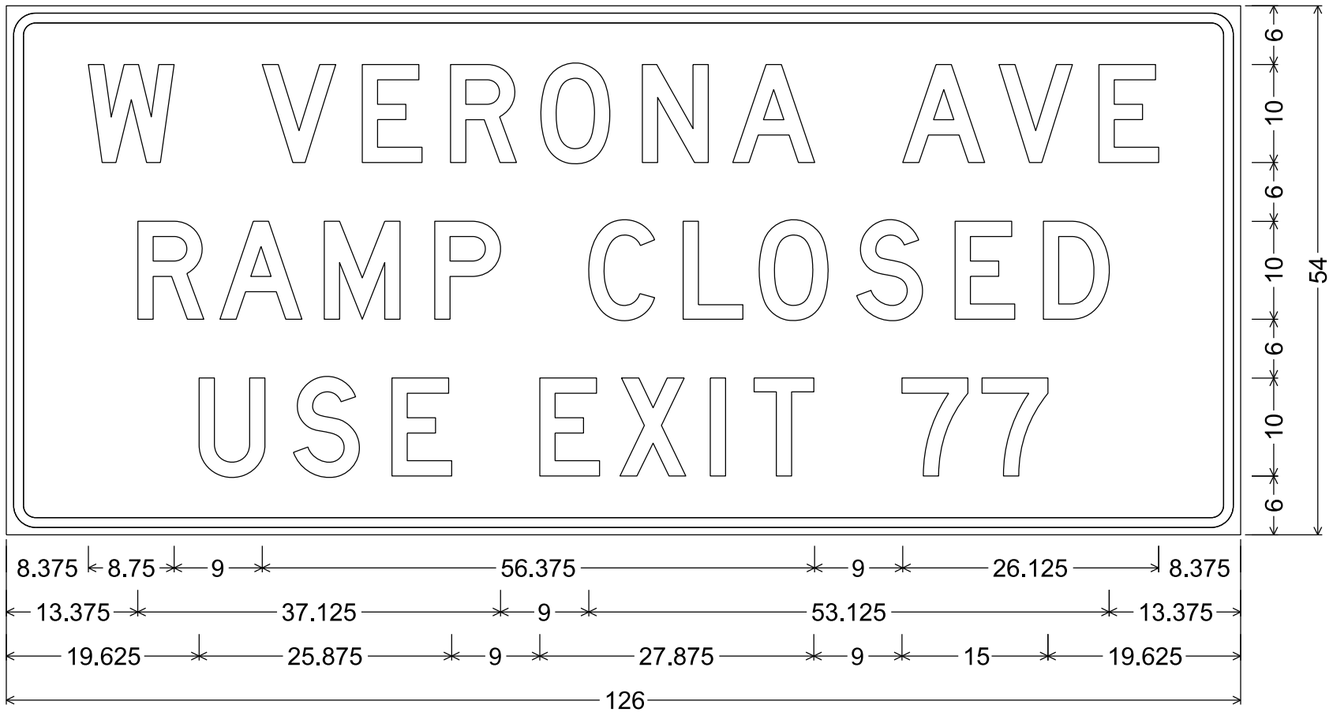
PROJECT NO: 1204–08–74	HWY: USH 18	COUNTY: DANE	PERMANENT SIGNING	SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_d1_1136an23.dgn PLOT DATE : 20–NOV–2023 8:33 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

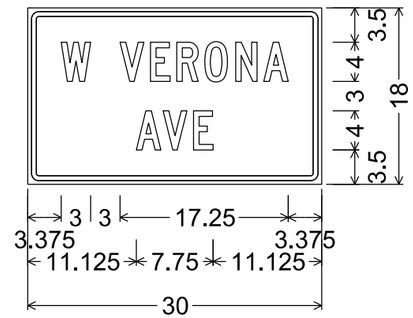
WISDOT/CADDS SHEET 42

NOTES

1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D or as noted



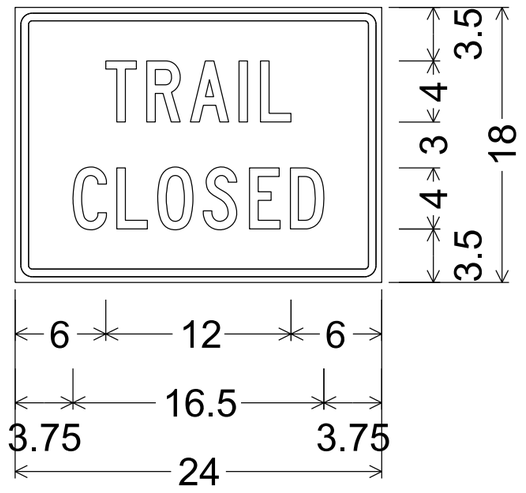
3.000" Radius, 1.000" Border, 0.750" Indent



1.125" Radius, 0.500" Border, 0.375" Indent
"W", C;
"VERONA", C;
"AVE", C

NOTES

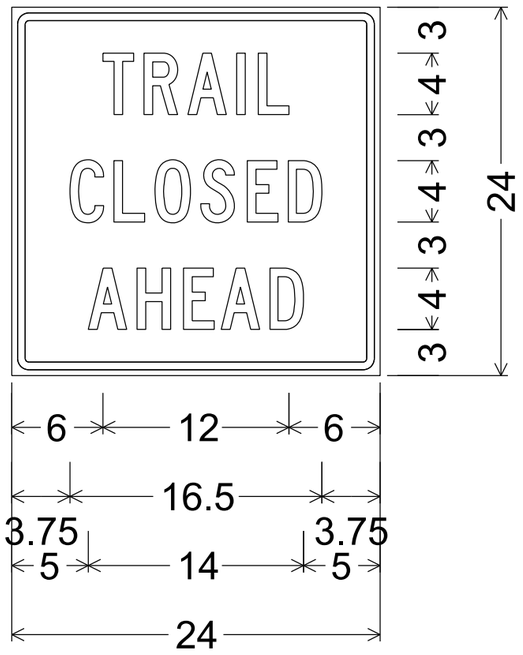
1. Fixed Message Sign Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C



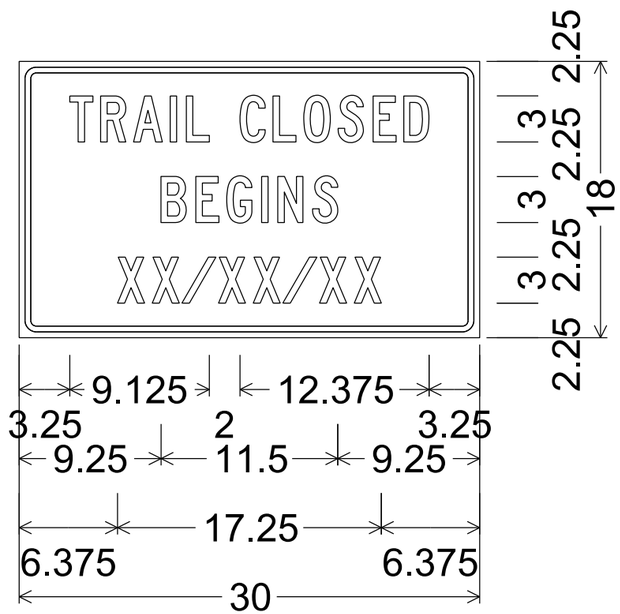
1.125" Radius, 0.500" Border, 0.375" Indent, Black on White

NOTES

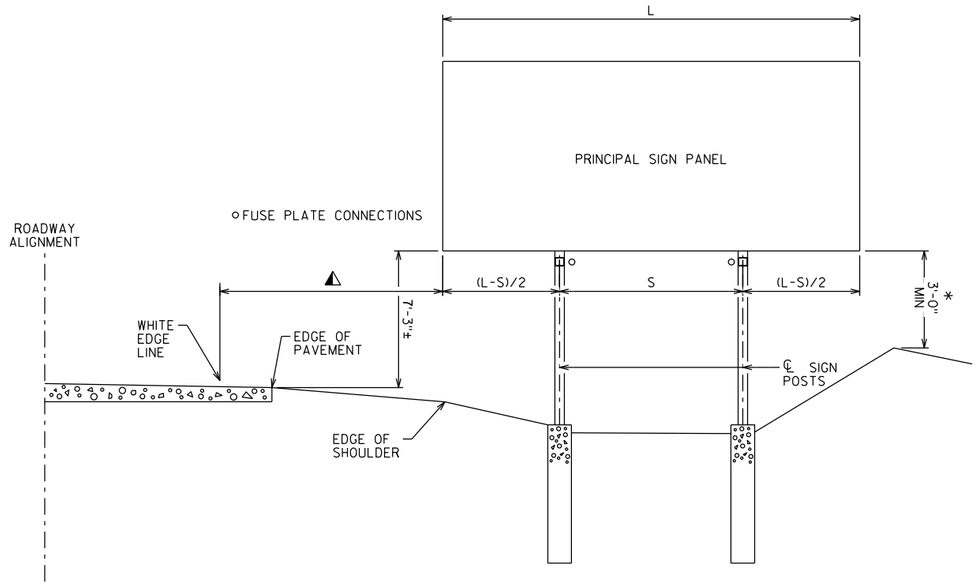
1. Fixed Message Signs Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



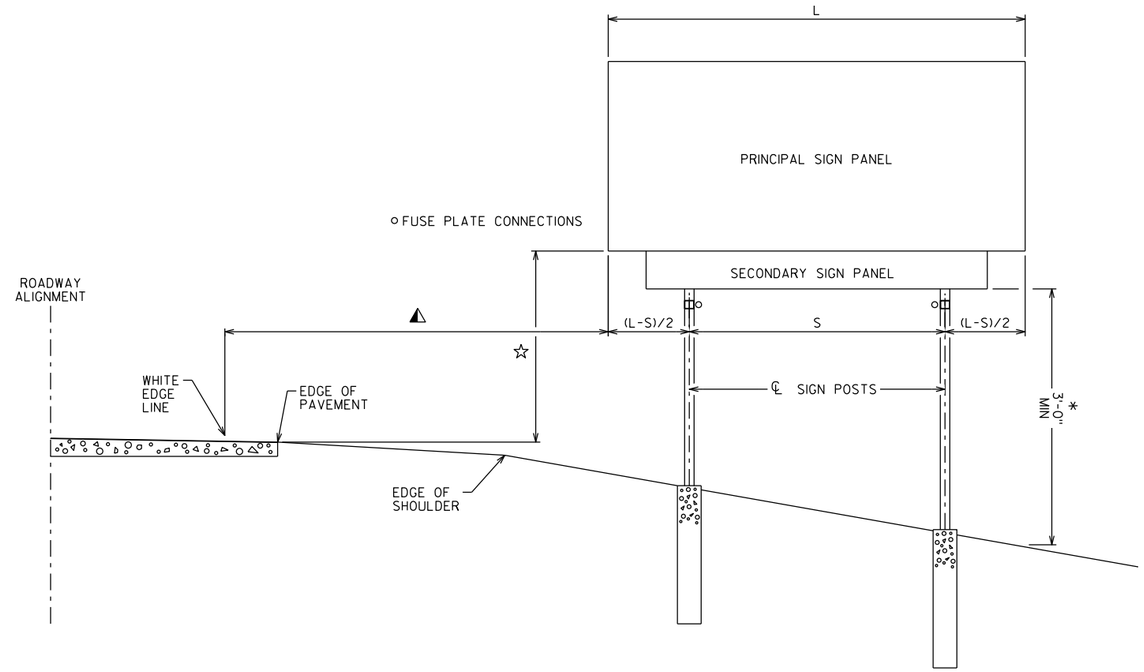
1.125" Radius, 0.500" Border, 0.375" Indent



1.125" Radius, 0.375" Border, 0.375" Indent



INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

WHERE SIGNS ARE MOUNTED BEHIND CRASH WORTHY PROTECTION SUCH AS GUARDRAIL OR BARRIER WALL, THE LATERAL OFFSET MAY BE 4'-6" BEHIND THE GUARDRAIL OR BARRIER WALL.

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

○ FOR 2-POST SIGNS, IF THERE IS A SECONDARY SIGN THAT IS NOT AS WIDE AS THE POSTS, INSTALL FUSE PLATES BENEATH PRINCIPAL SIGN.

FOR SECONDARY SIGNS THAT ARE NOT AS WIDE AS THE EXTERIOR POSTS, SECURE SIGN WITH CHANNEL STEEL AS DESCRIBED IN A4-6.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY
	2/29/24		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

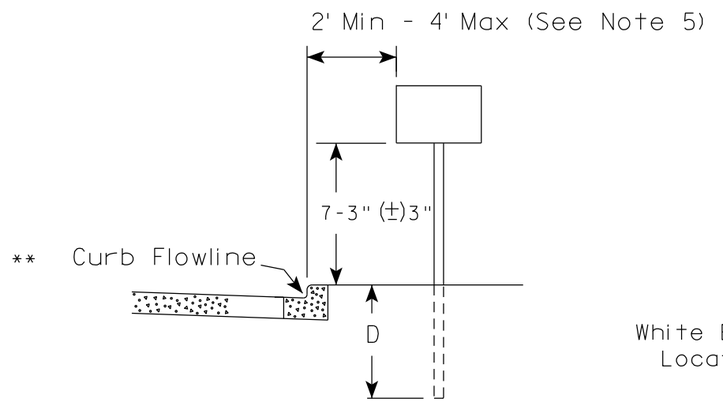
DRAWN BY	PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

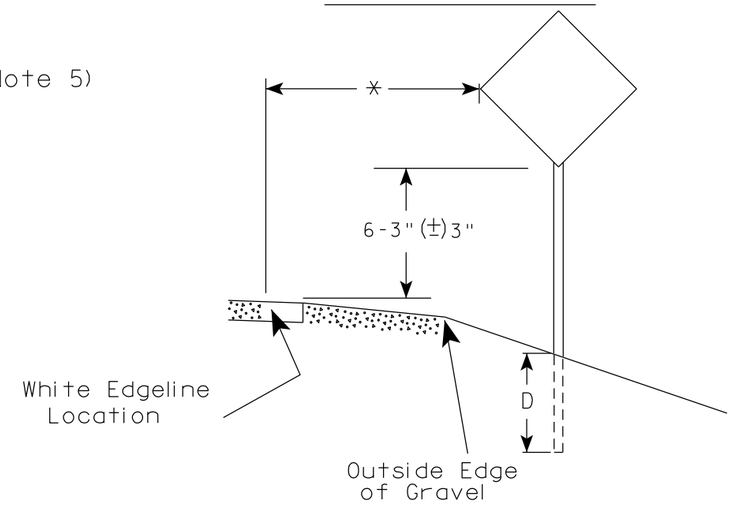
SHEET A4-1.11

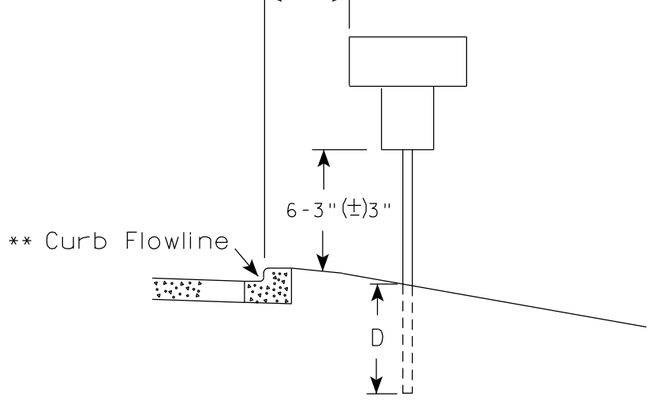
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 507	E

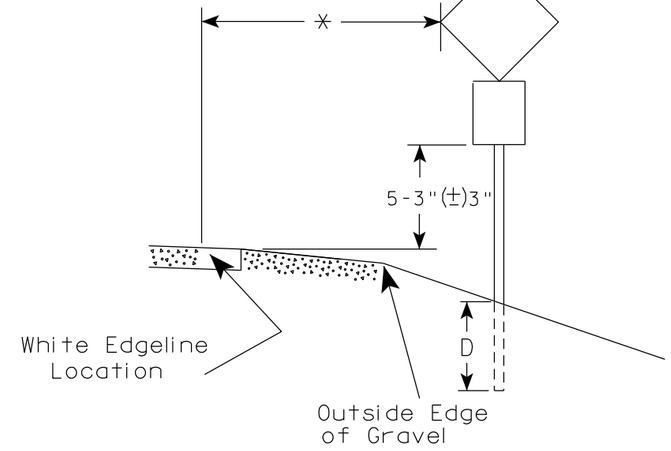
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

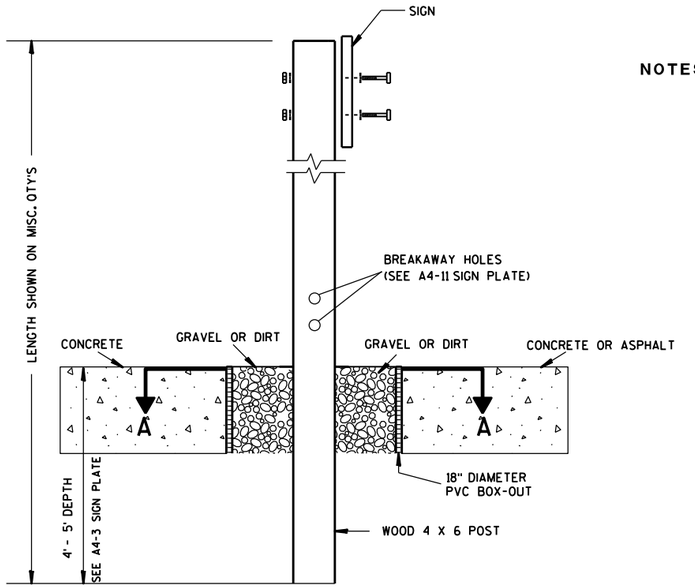
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

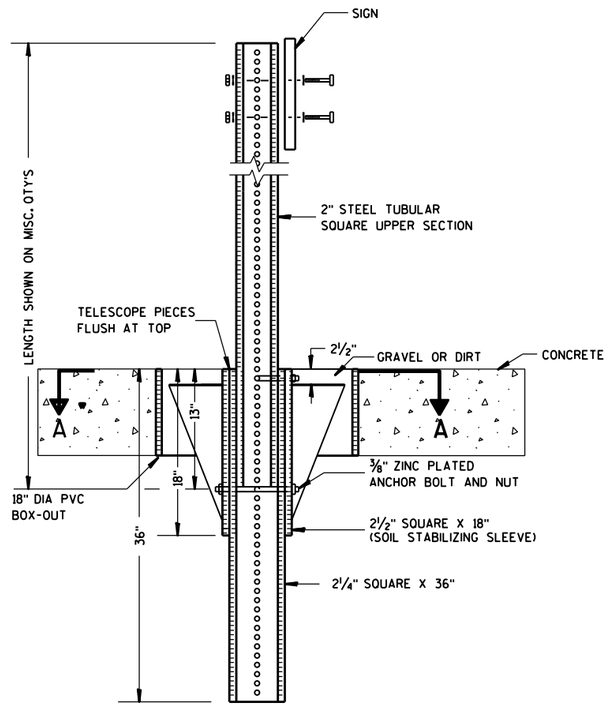
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 508	E



ELEVATION VIEW

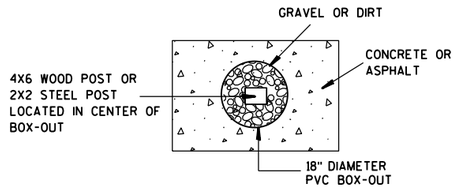
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

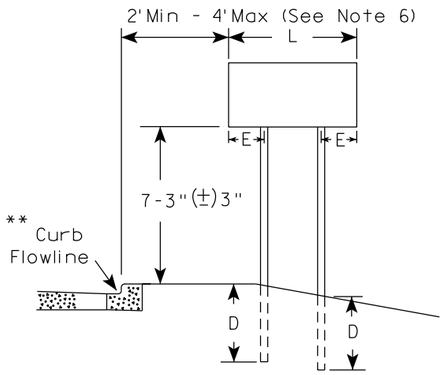
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

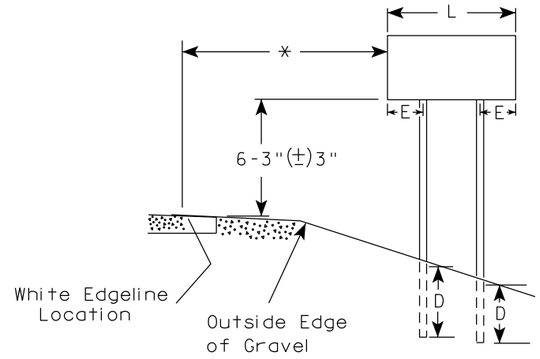
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

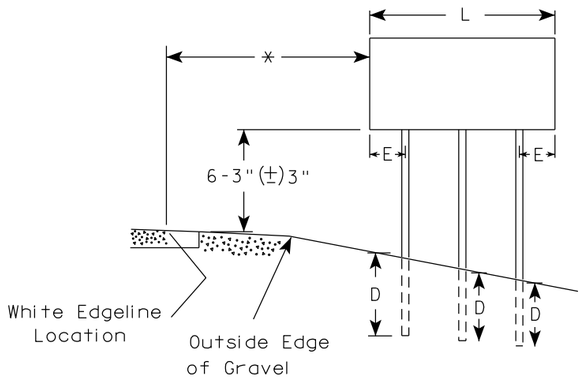
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

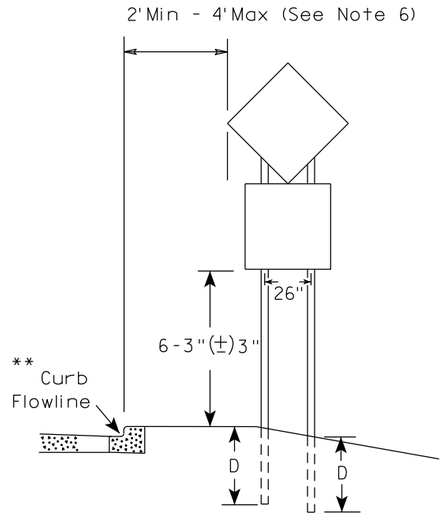
URBAN AREA



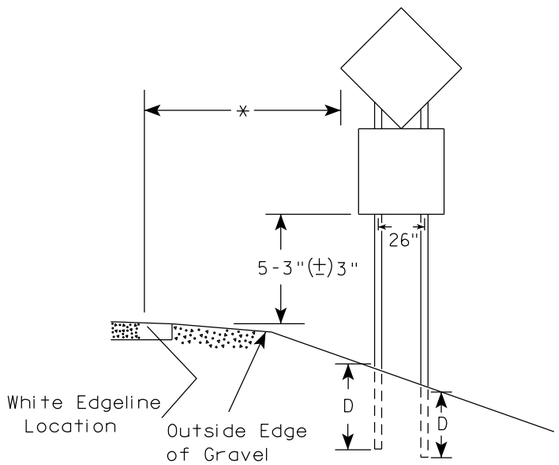
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

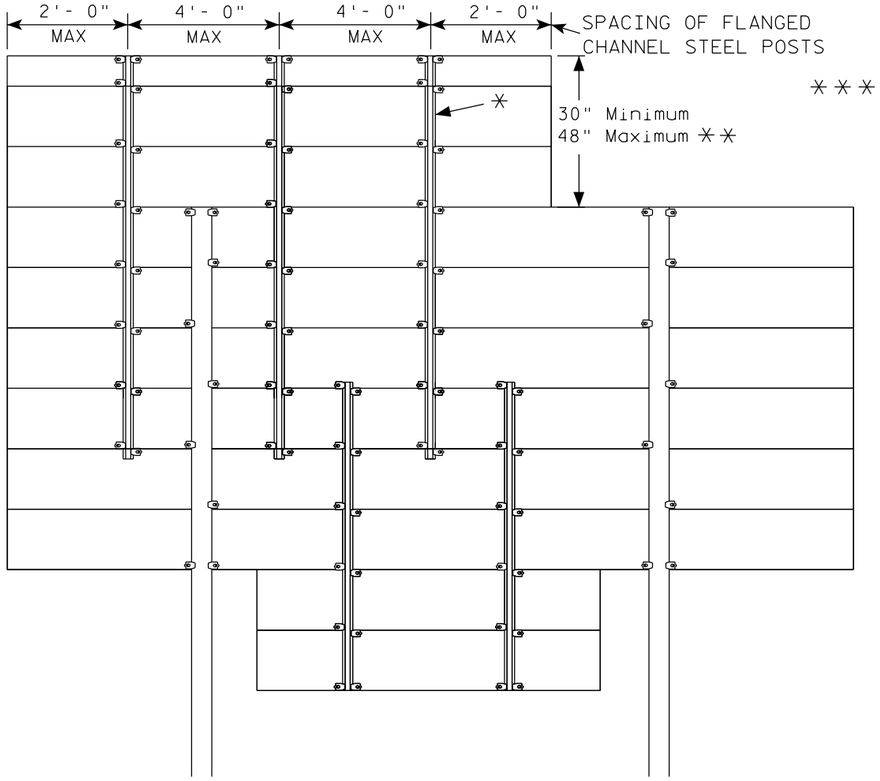
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 510	E

GROUND MOUNTED SIGN



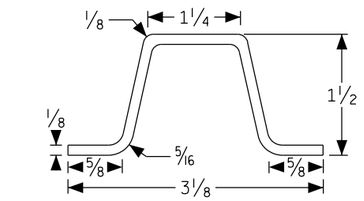
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

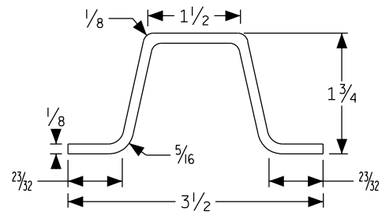
✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

NOT TO SCALE

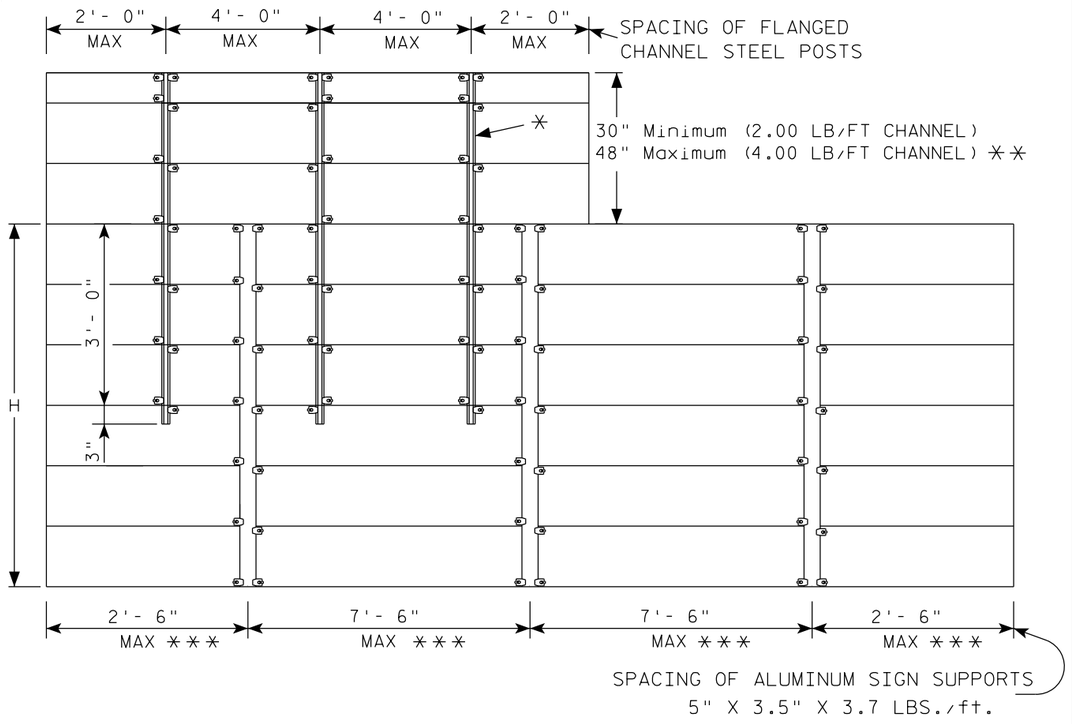


2.00 LB/FT CHANNEL



4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

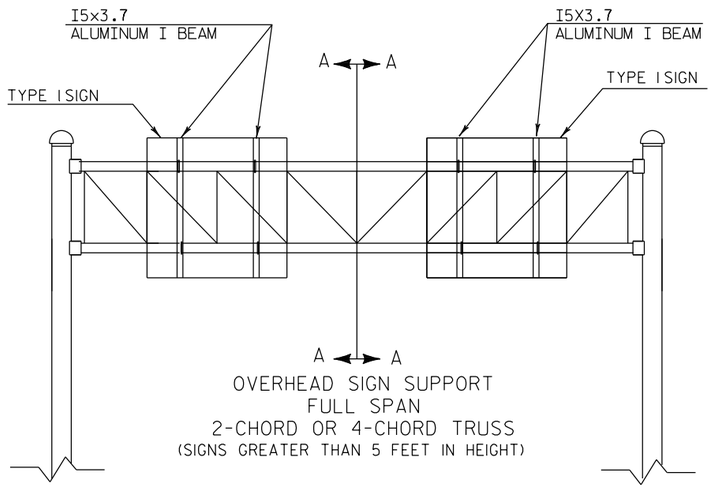
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

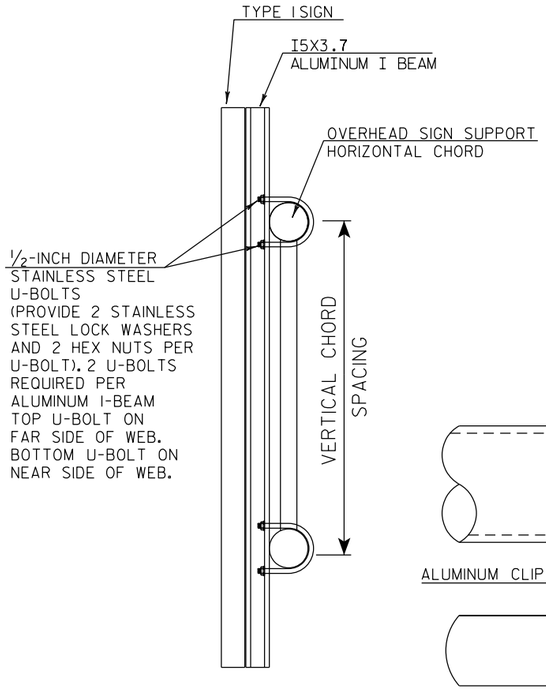
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

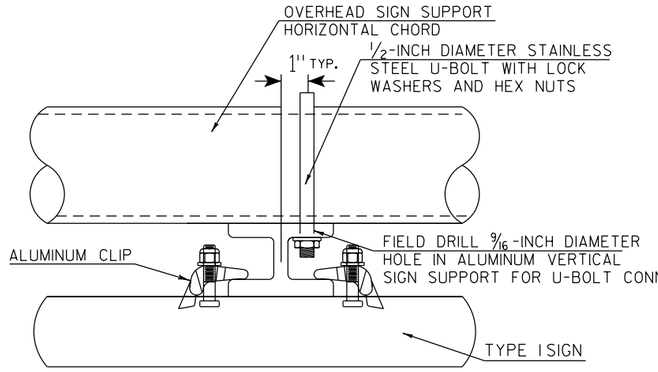
DATE 1/07/20 PLATE NO. A4-6.12



OVERHEAD SIGN SUPPORT
FULL SPAN
2-CHORD OR 4-CHORD TRUSS
(SIGNS GREATER THAN 5 FEET IN HEIGHT)



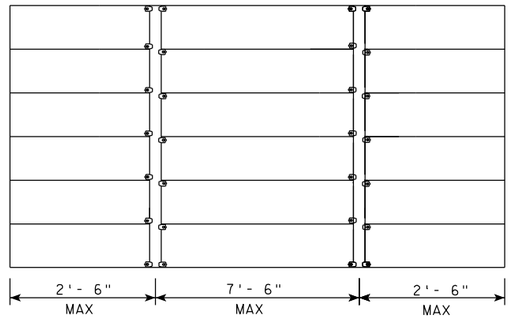
CUT SECTION A-A



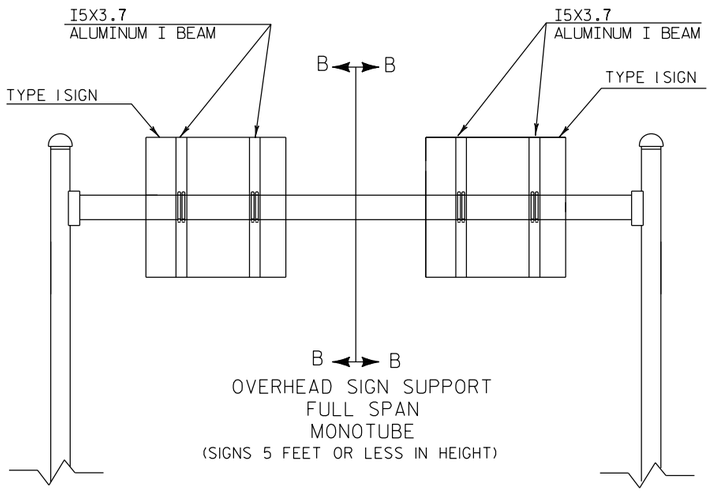
TYPICAL SIGN CONNECTION FOR
2-CHORD OR 4-CHORD TRUSS
PLAN VIEW

GENERAL NOTES

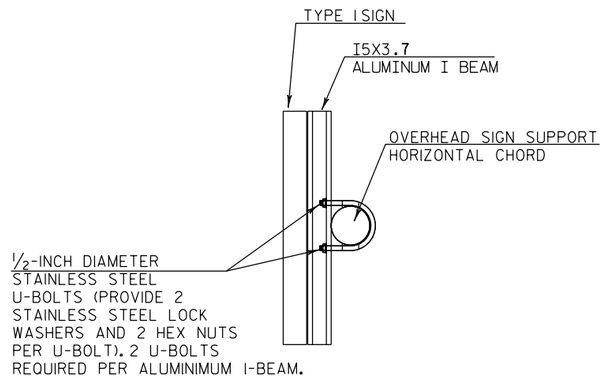
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.
9. SLOTTED HOLES IN I-BEAMS ARE NOT ALLOWED



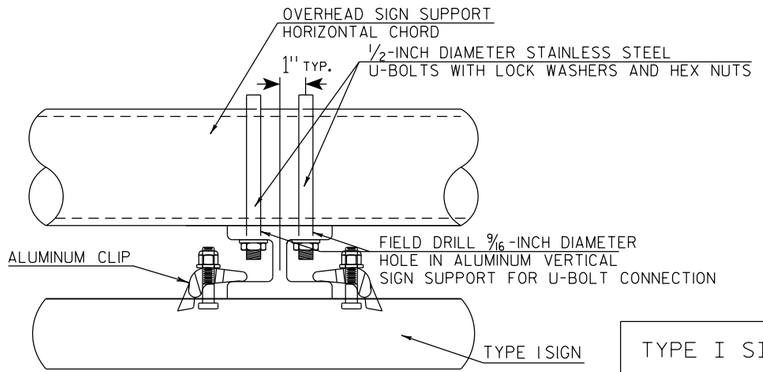
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
MONOTUBE
(SIGNS 5 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
MONOTUBE
PLAN VIEW

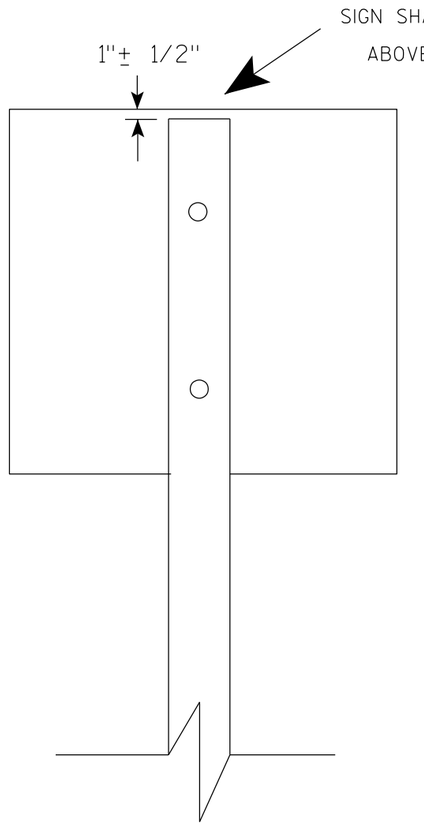
TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

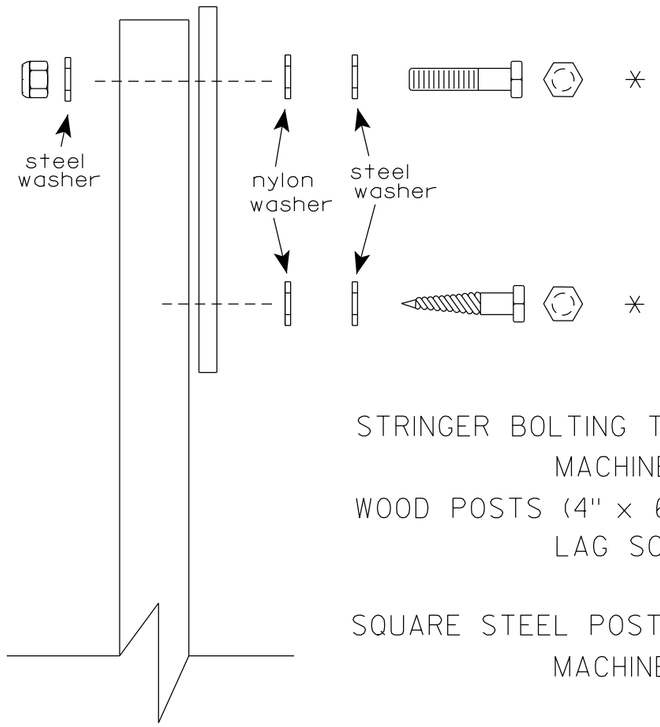
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-7A.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 512	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

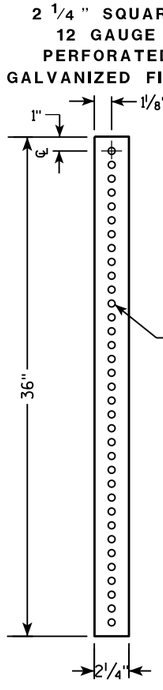
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

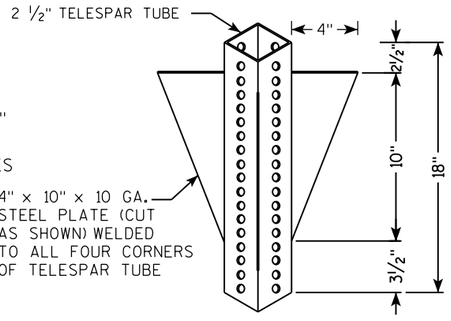
SHEET NO: 513 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

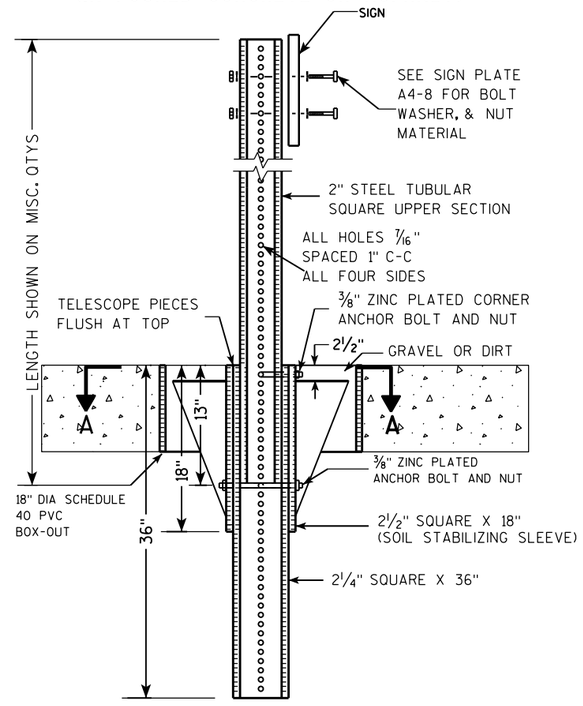
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



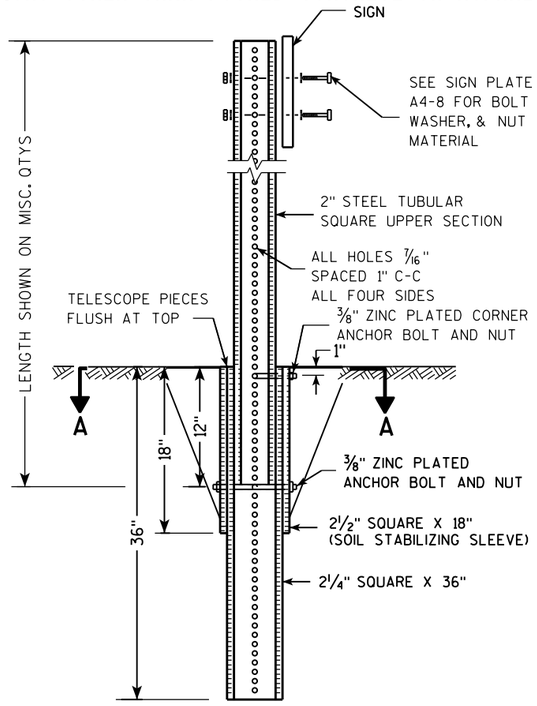
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

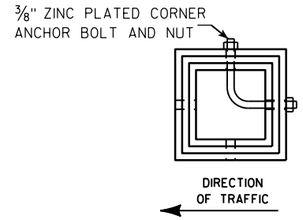


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

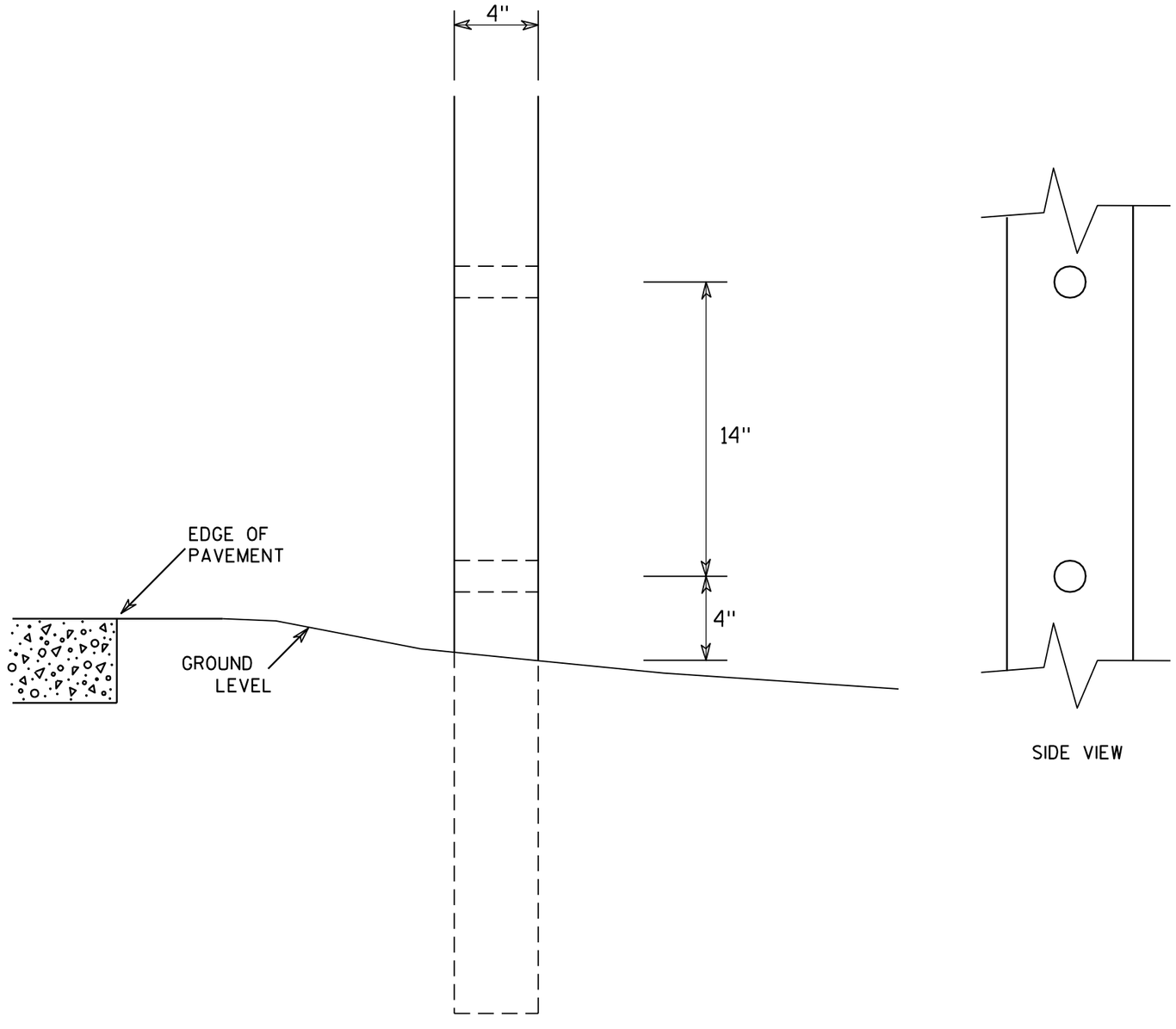
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 514 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

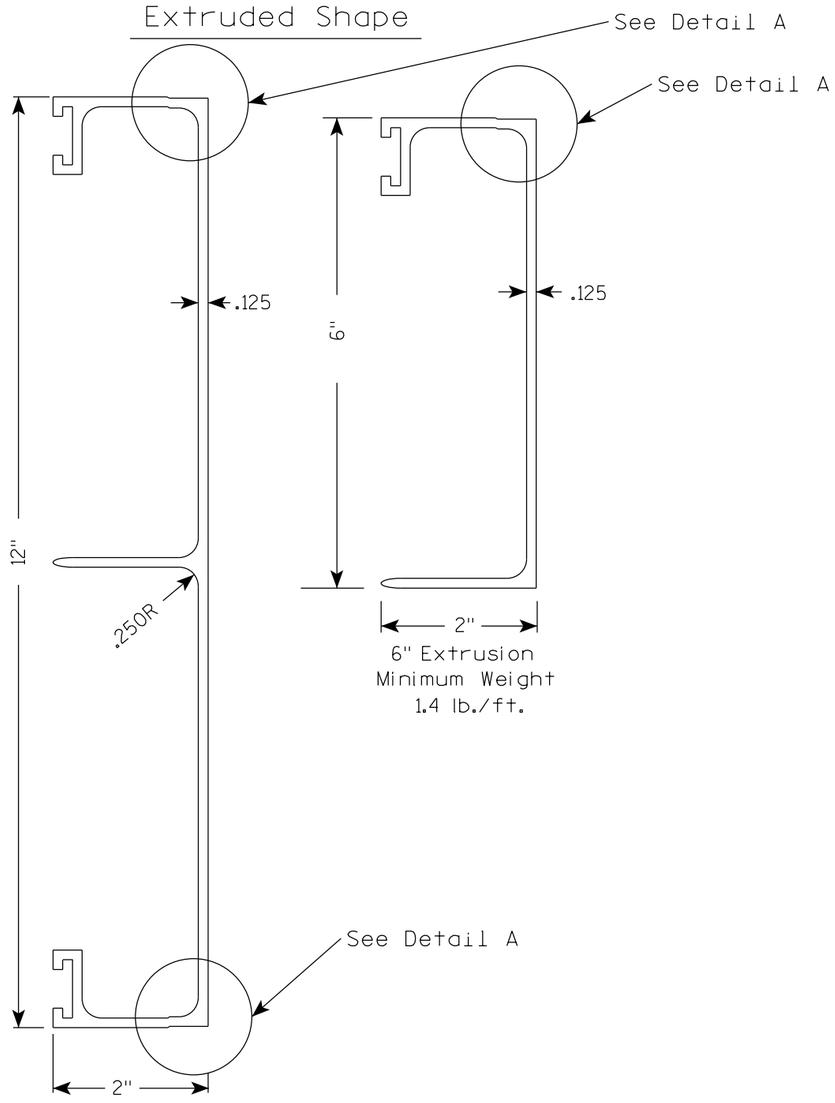
WISCONSIN DEPT OF TRANSPORTATION

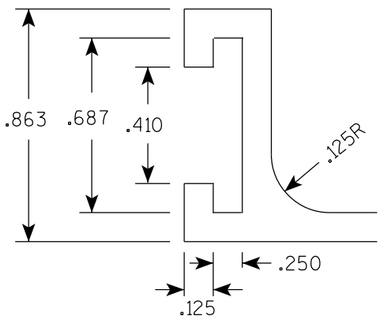
APPROVED Chester J Spang
for State Traffic Engineer

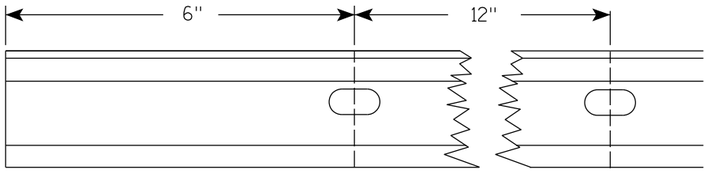
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 515	E

Extruded Shape







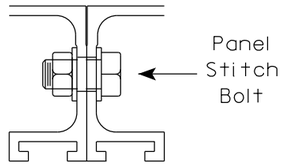
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

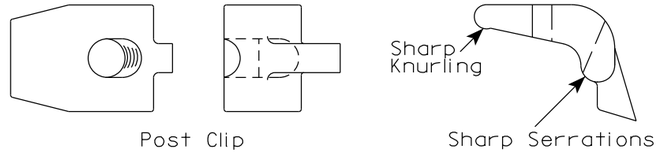
The hardware includes:

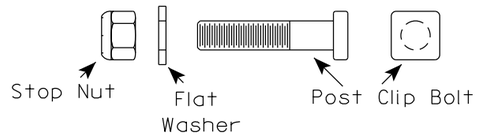
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

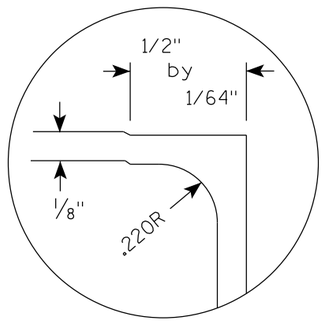
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

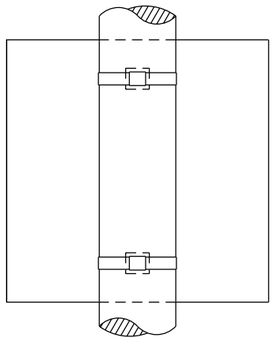
DATE 1/07/20 PLATE NO. A5-2.10

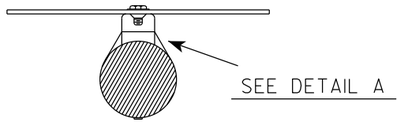
PROJECT NO:

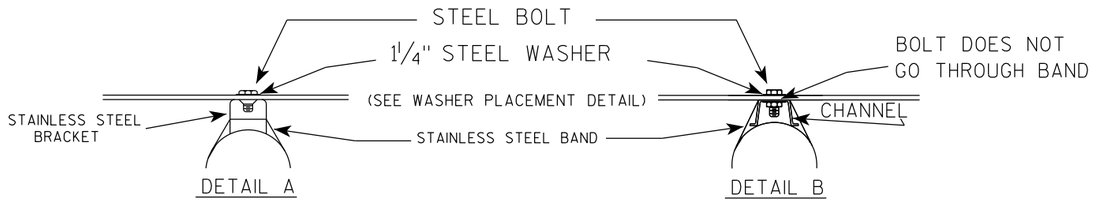
SHEET NO: 516 E

BANDING

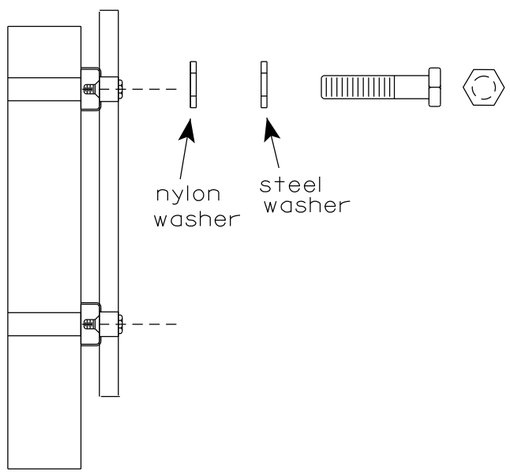
SINGLE SIGN







WASHER PLACEMENT

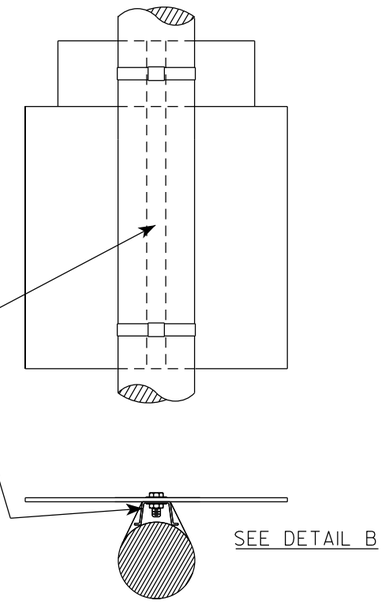


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

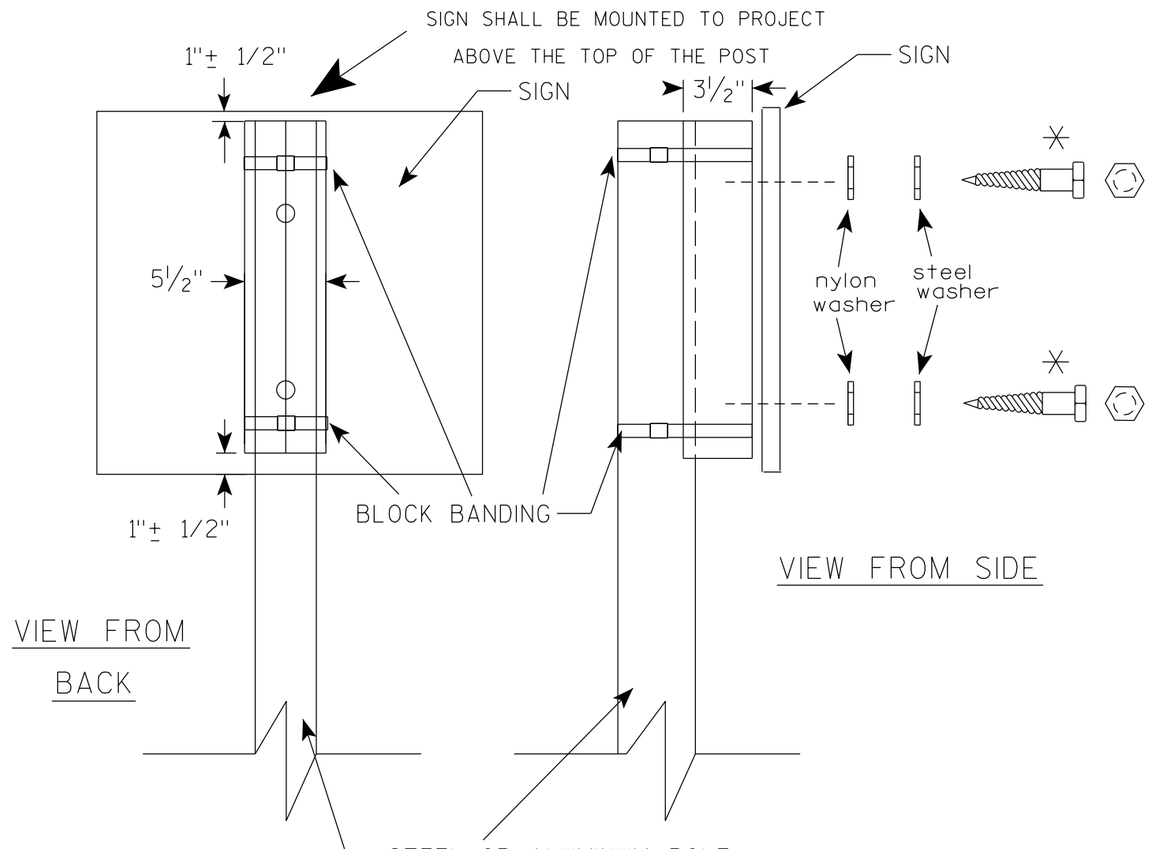
DATE 6/10/19 PLATE NO. A5-9.4

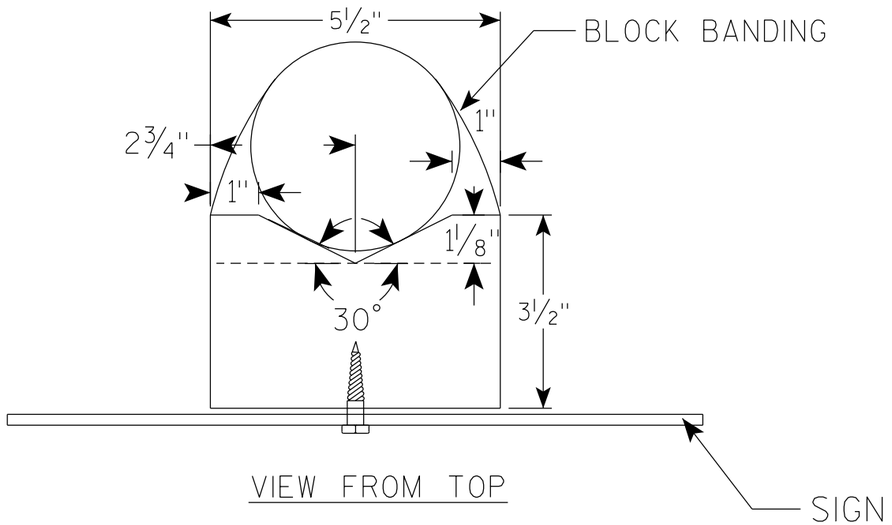
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 517	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

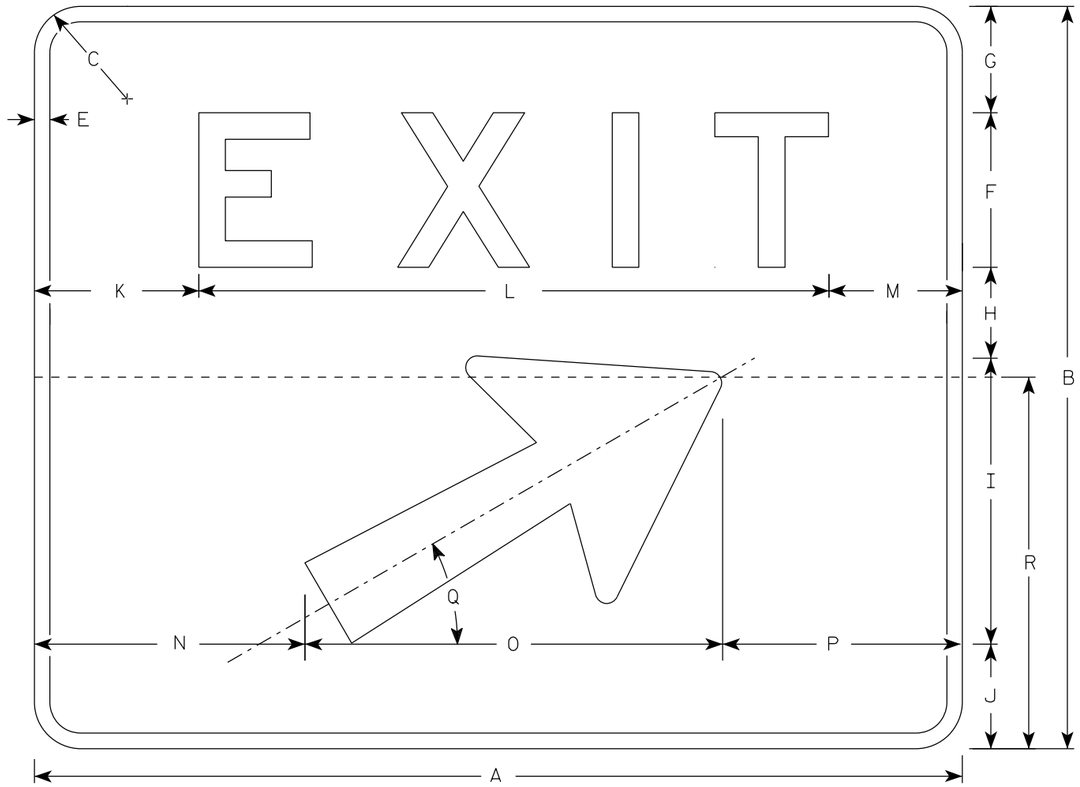
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 518 E



E5-1

NOTES

1. Sign is Type II - Type H reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Sign shall be split into two seperate pieces as shown on the detail by the dashed line (----------) for sizes 4 & 5.
5. Arrow is Type "A" from sign plate A1-1.
6. As per the Standard Spec's, this sign shall not have a vertical joint.
7. Size 3 E5-1 shall only be used in a Work Zone application with a Temporary Sign Support

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3	48	48	3		1	10	6 7/8	5 7/8	18 1/2	6 3/4	8 1/2	31 1/8	8 3/8	11 1/2	27	9 1/2	30°	30									16.0
4	60	48	3		1	10	6 7/8	5 7/8	18 1/2	6 3/4	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°	30									20.0
5	72	60	3		1	12	9 3/4	10	18 1/2	9 3/4	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°	30									30.0

STANDARD SIGN

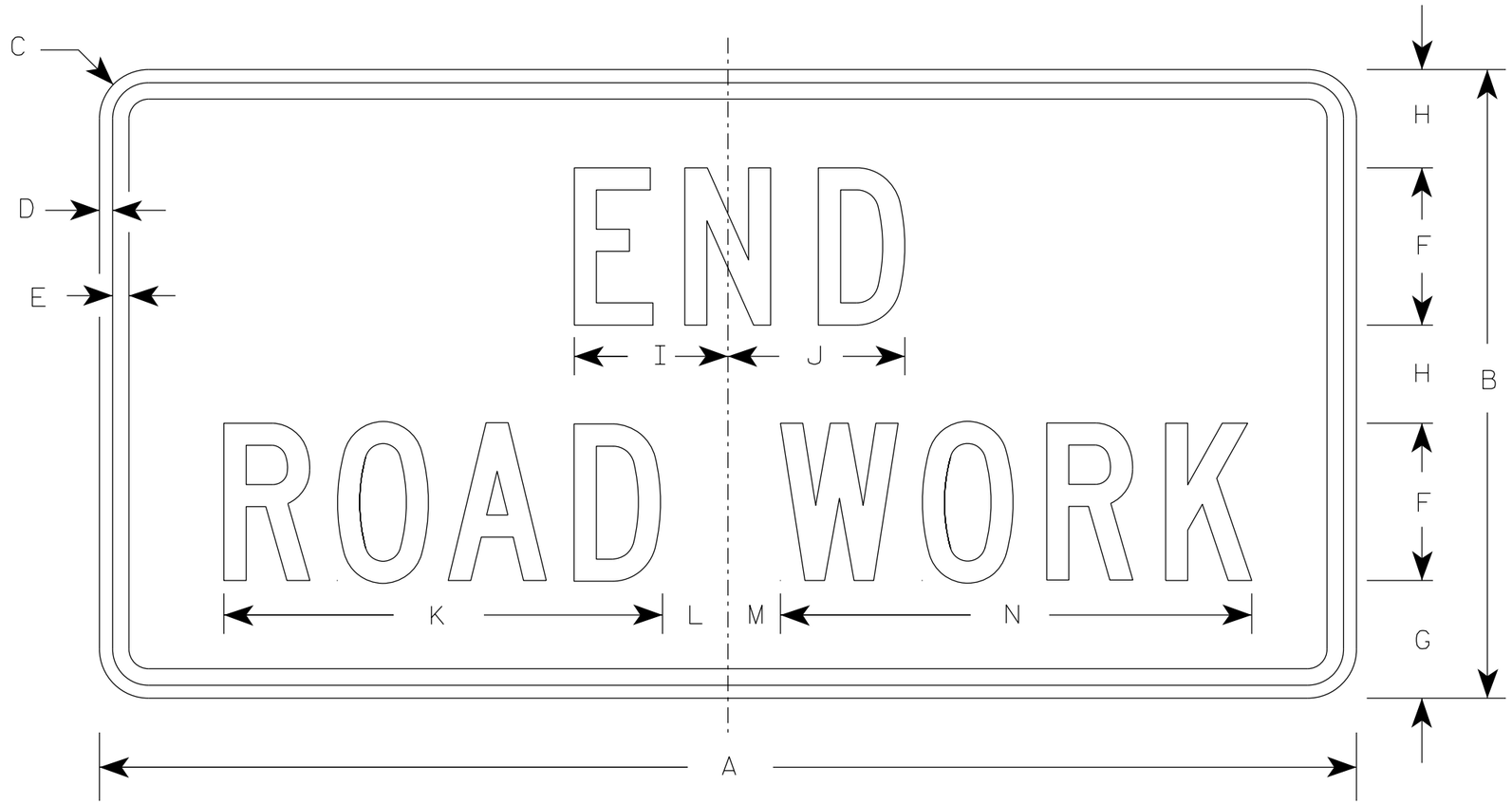
E5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. E5-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 519 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5
2	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
2M	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
3	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
4	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0
5	48	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 520 E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum

G20-60

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000
WISDOT/CADDS SHEET 42

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E

G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

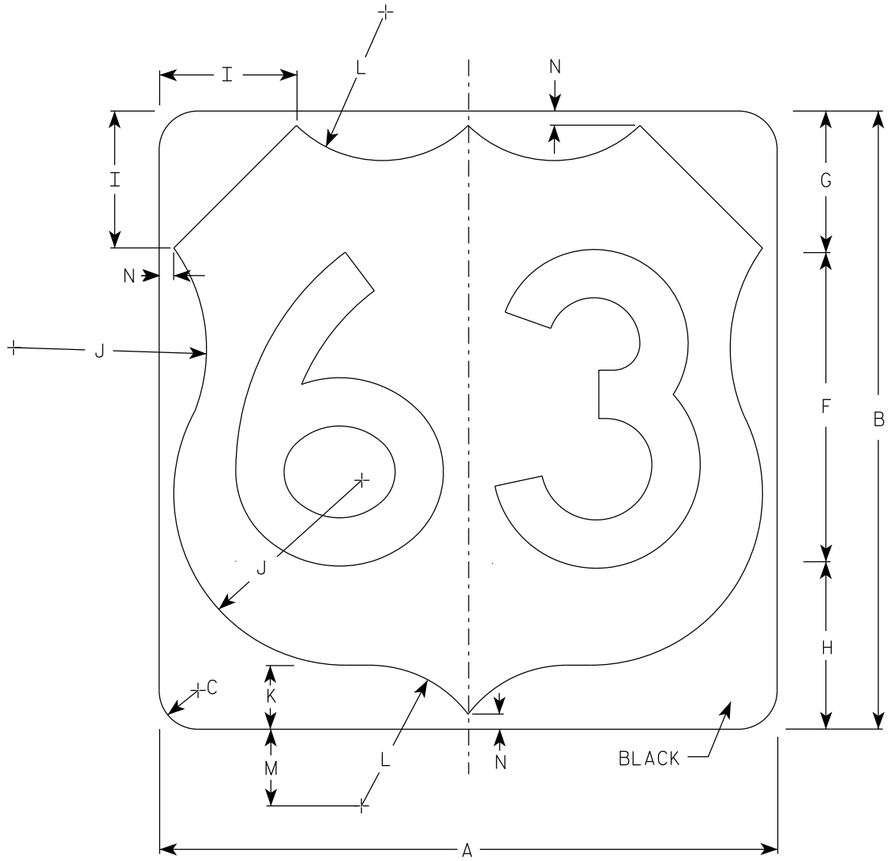
DATE 5/07/15 PLATE NO G20-61.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

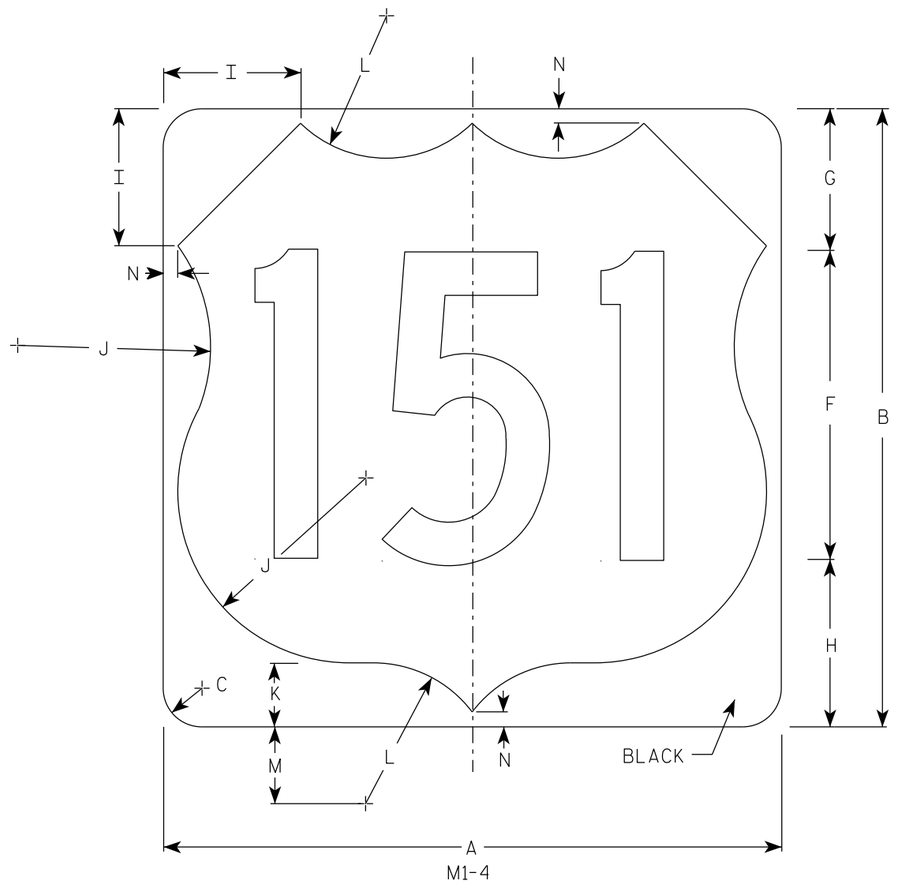
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
2M	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

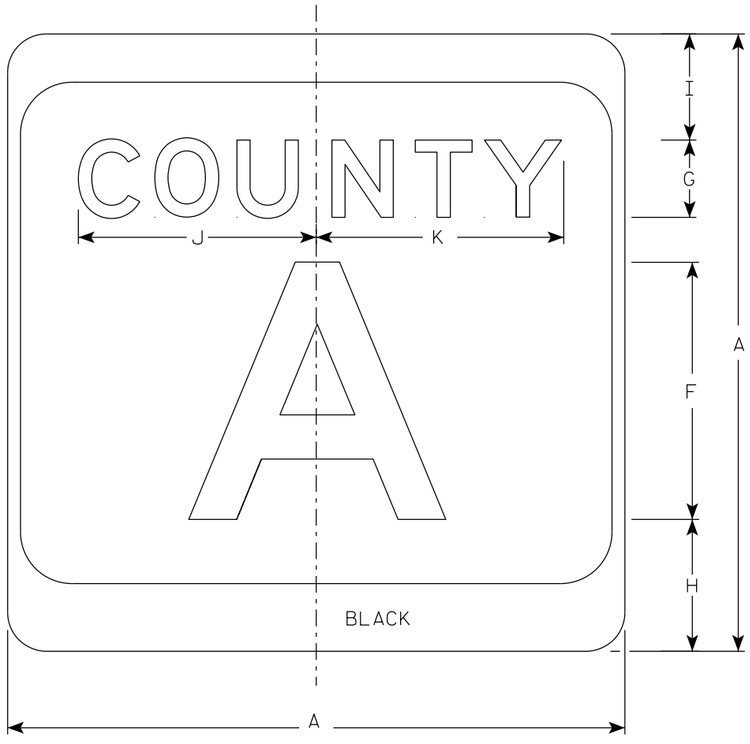
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

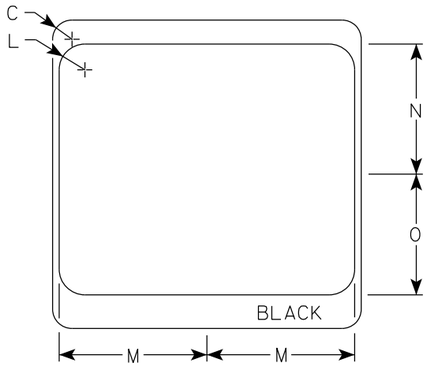
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 523 | E

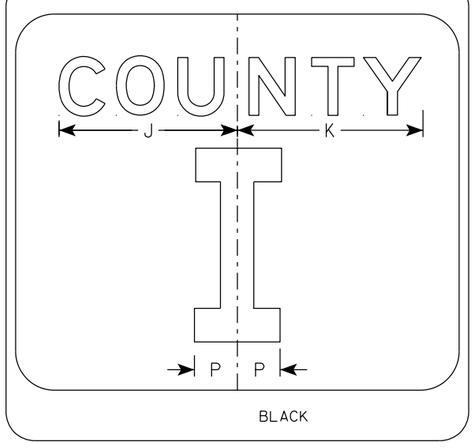


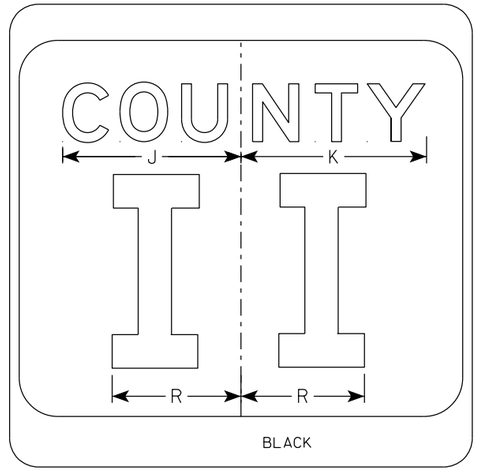
M1-5A



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
5. Substitute appropriate letters & optically center to achieve proper balance.





SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
2M	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

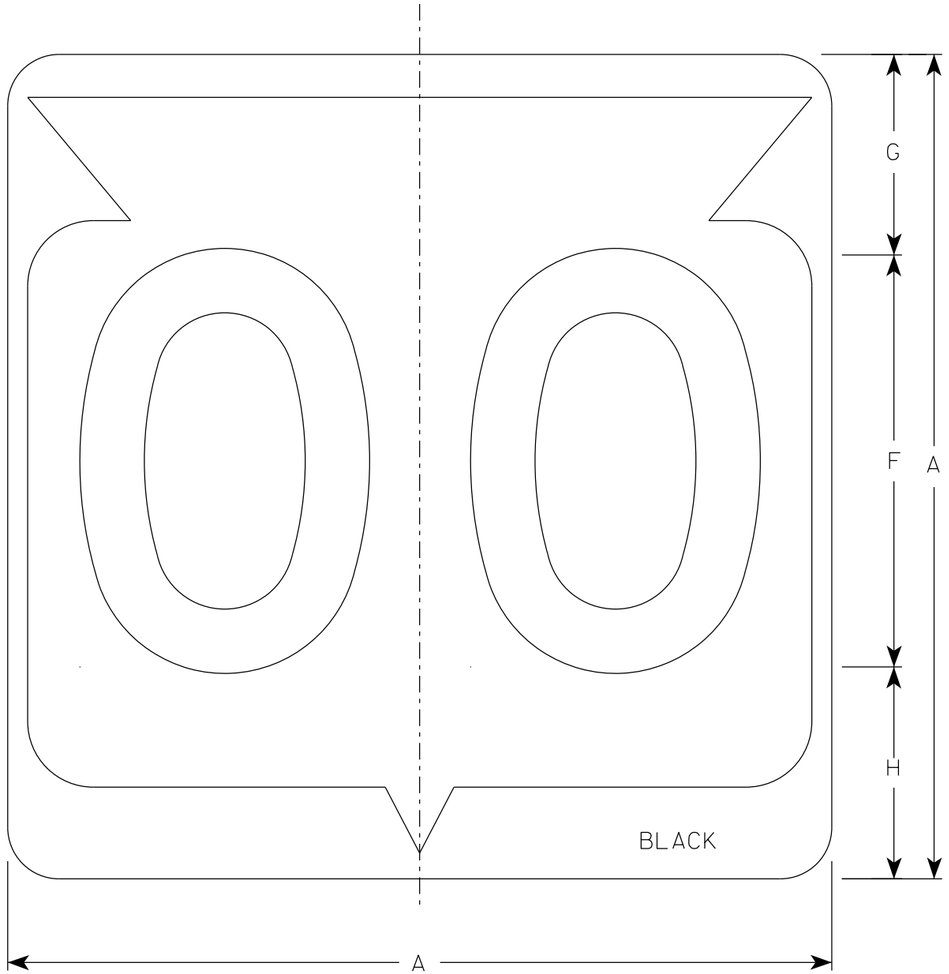
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

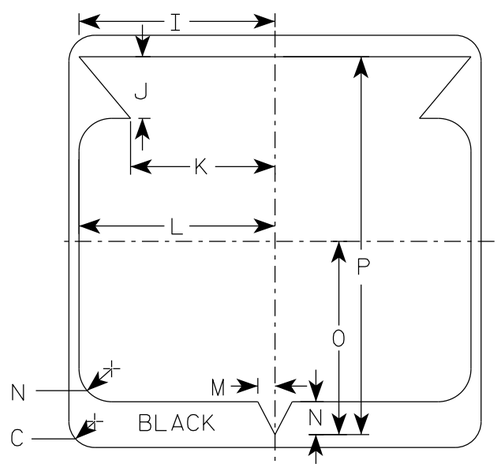
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M15A.dgn PLOT DATE : 8-NOV 2022 8:26 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



M1-6



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

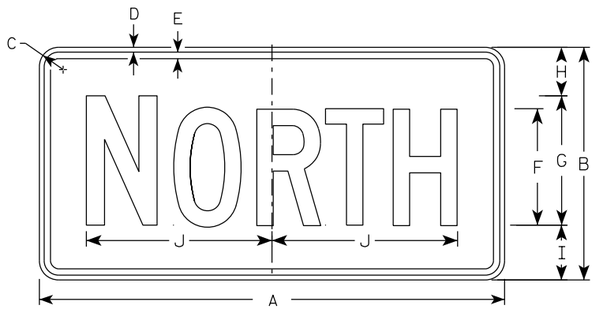
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

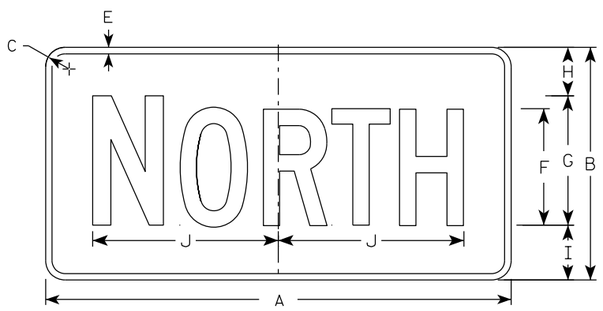
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

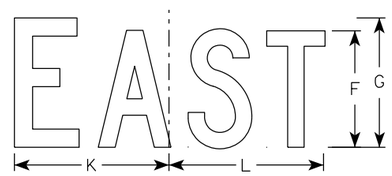
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 525	E



M3-1
MM3-1
MP3-1

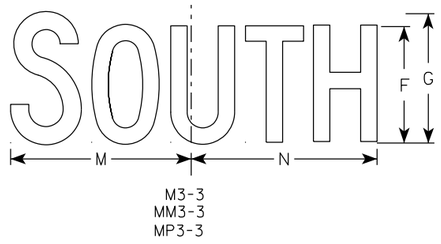


MB3-1
MK3-1
MN3-1

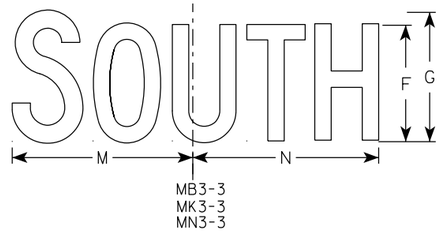


M3-2
MM3-2
MP3-2

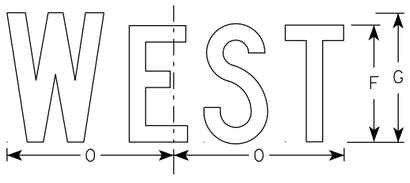
MB3-2
MK3-2
MN3-2



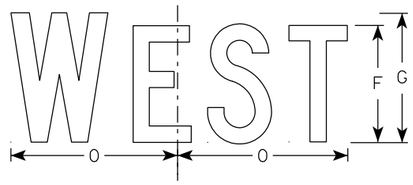
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

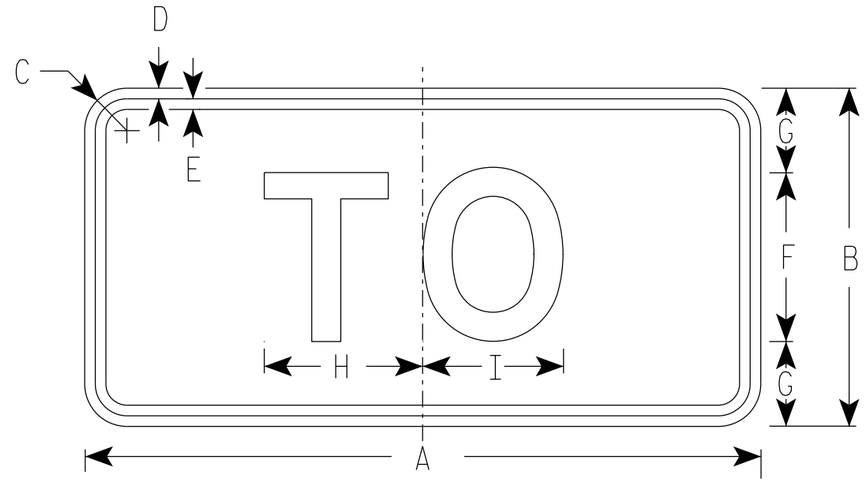
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

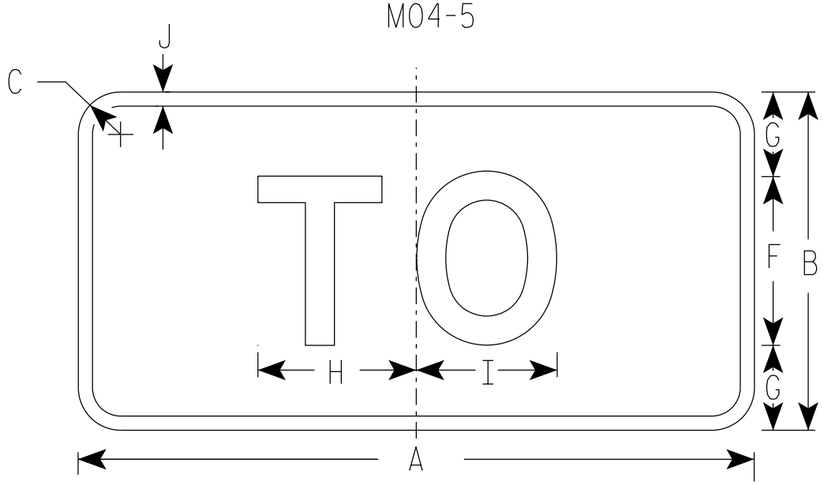
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 526 | E



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
2M	24	12	1 ½	⅜	⅜	6	3	5 ⅜	5 ¼	½																	2.00
3	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
4	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5
5	36	18	1 ½	⅜	½	9	4 ½	8 ¼	8 ⅜	½																	4.5

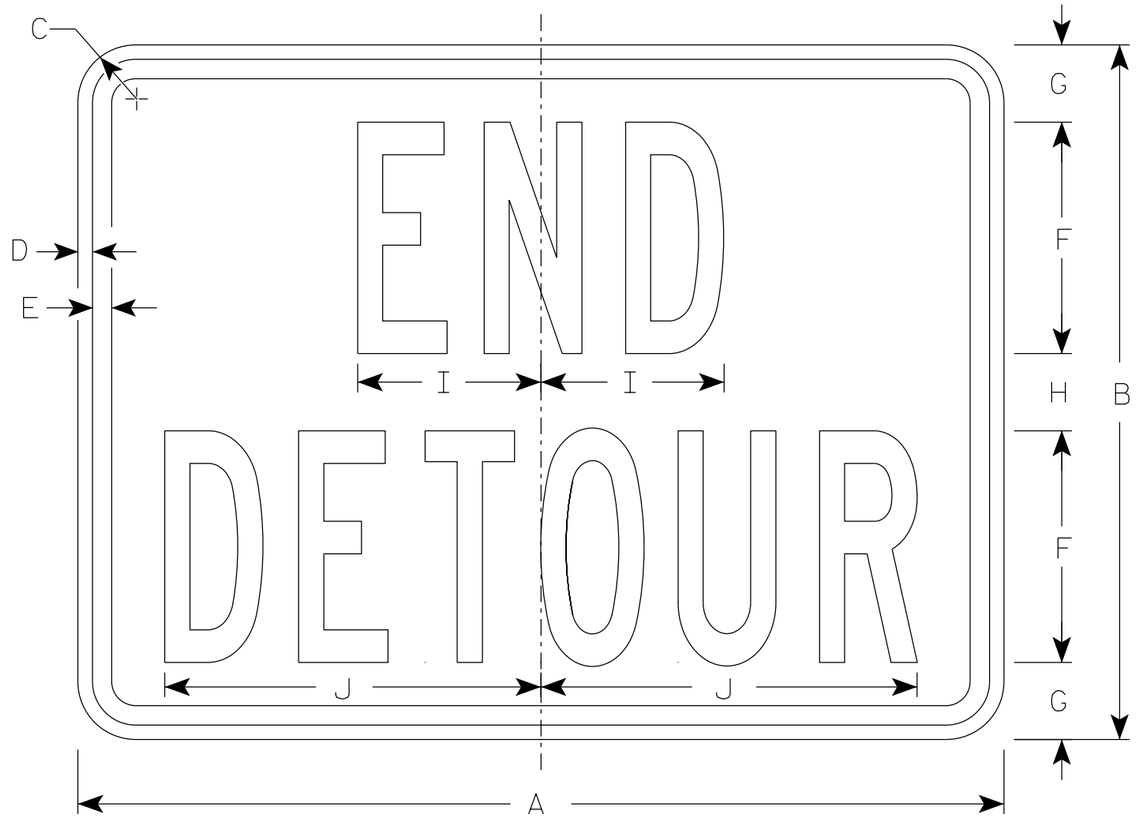
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M4-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 527 | E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

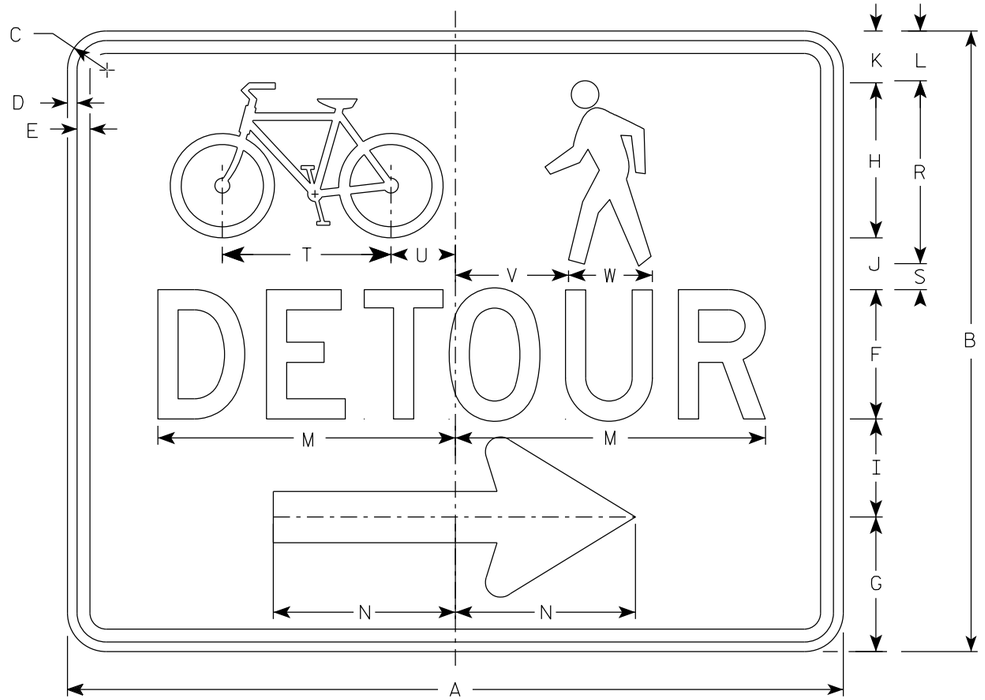
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

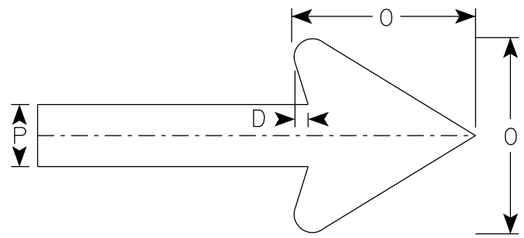
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 528 | E



M4-9AR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9AL is the same as M4-9AR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	6	3 3/4	2	2	1 7/8	11 3/4	7	6	2		7 1/8	1	6 1/2	2 1/2	4 3/8	3 1/4				5.00
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	6	3 3/4	2	2	1 7/8	11 3/4	7	6	2		7 1/8	1	6 1/2	2 1/2	4 3/8	3 1/4				5.00
3																											
4																											
5																											

STANDARD SIGN
M4-9A L&R

WISCONSIN DEPT OF TRANSPORTATION

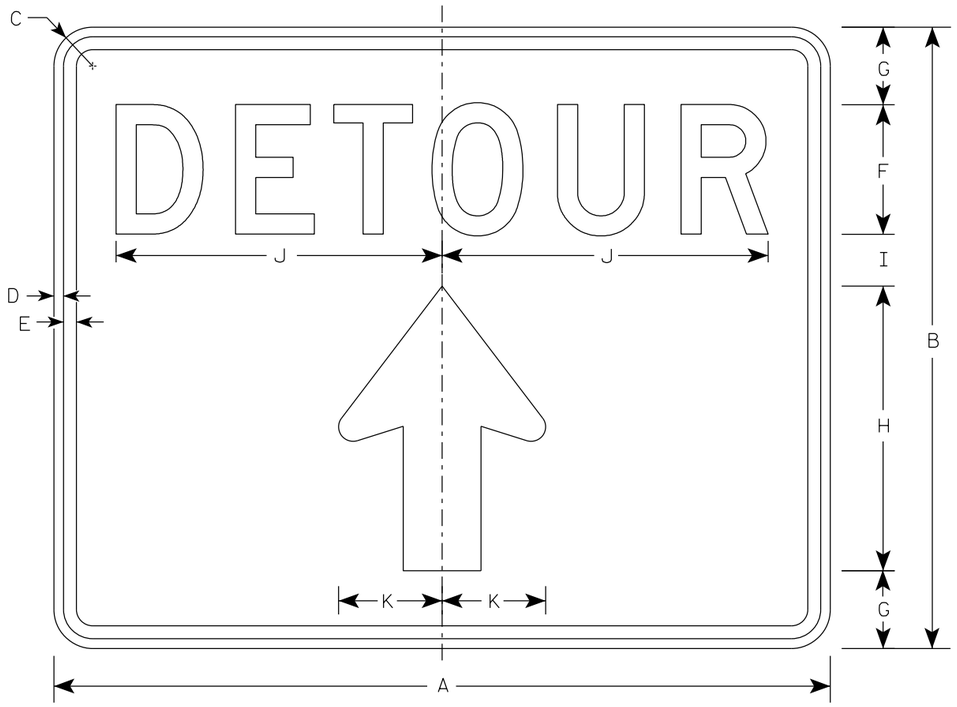
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9A.3

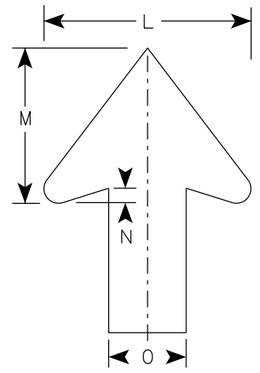
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 529 | E

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



M4-9RA



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	3	11	2	12 5/8	4	8	6	1/2	3												5.00
2M	30	24	1 1/2	3/8	1/2	5	3	11	2	12 5/8	4	8	6	1/2	3												5.00
3																											
4																											
5																											

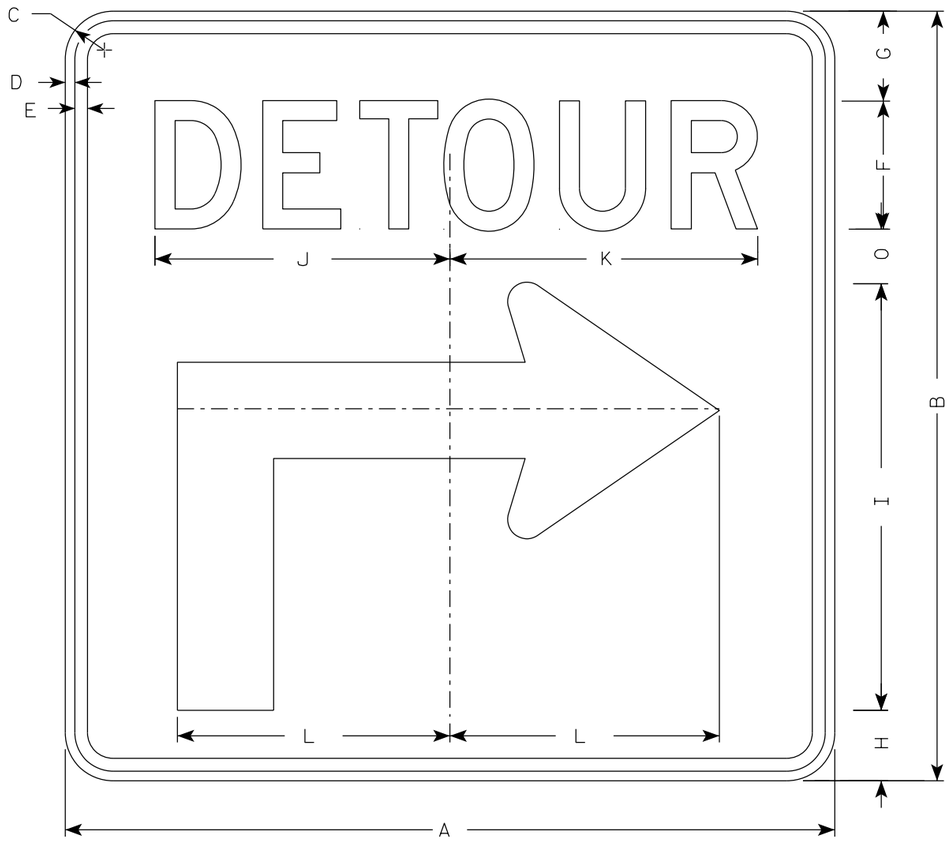
STANDARD SIGN
M4-9RA

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9RA.3

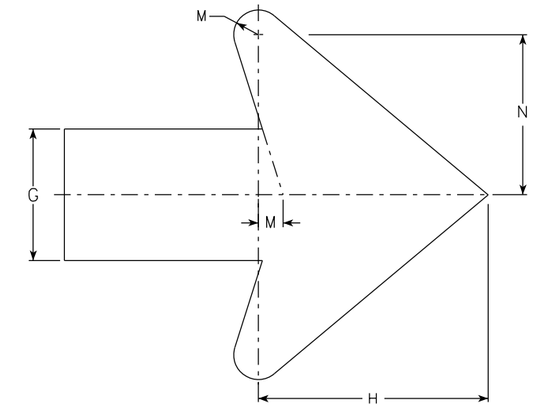
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 530	E



M4-59R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown when base material is metal.
5. M4-59L is the same as M4-59R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	30	1 7/8	3/8	1/2	5	3 1/2	2 3/4	16 5/8	11 1/2	12	10 1/2	3/4	4 7/8	2 1/8												6.25
2M	30	30	1 7/8	3/8	1/2	5	3 1/2	2 3/4	16 5/8	11 1/2	12	10 1/2	3/4	4 7/8	2 1/8												6.25
3	30	30	1 7/8	3/8	1/2	5	3 1/2	2 3/4	16 5/8	11 1/2	12	10 1/2	3/4	4 7/8	2 1/8												6.25
4	48	48	2 1/4	1/2	5/8	8	5 5/8	4 3/8	26 5/8	20 5/8	20 1/2	17	1 1/8	6 7/8	3 3/8												16.0
5	48	48	2 1/4	1/2	5/8	8	5 5/8	4 3/8	26 5/8	20 5/8	20 1/2	17	1 1/8	6 7/8	3 3/8												16.0

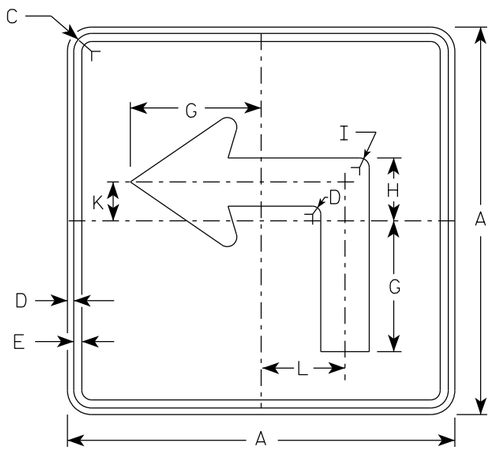
STANDARD SIGN
M4-59 L&R

WISCONSIN DEPT OF TRANSPORTATION

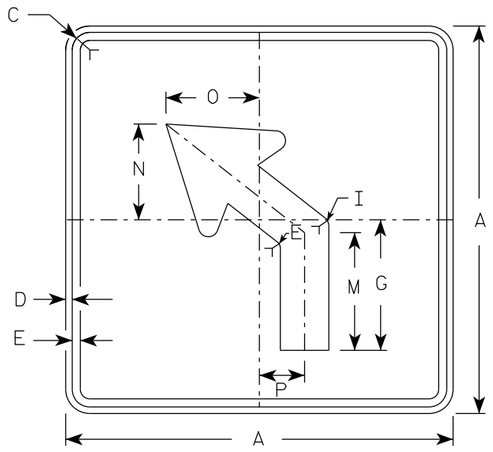
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M4-59.2

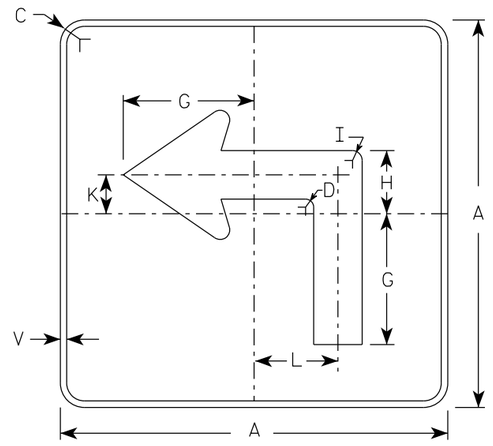
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



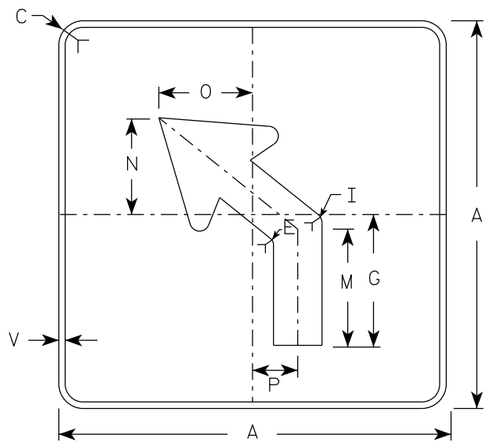
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

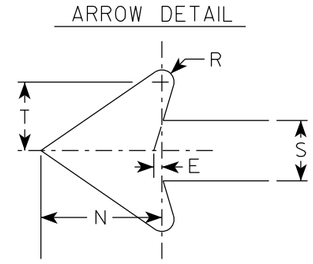


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

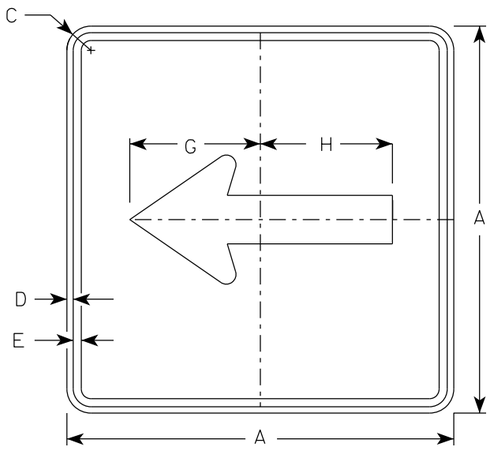
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

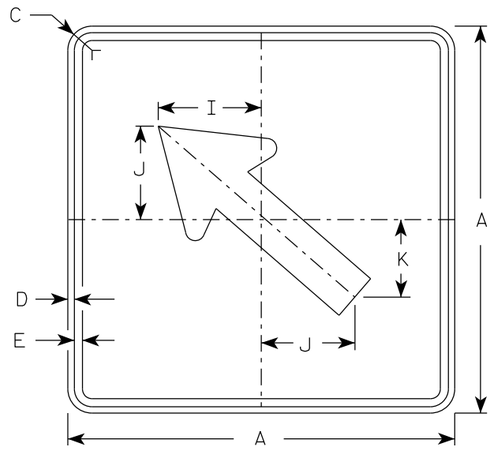
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

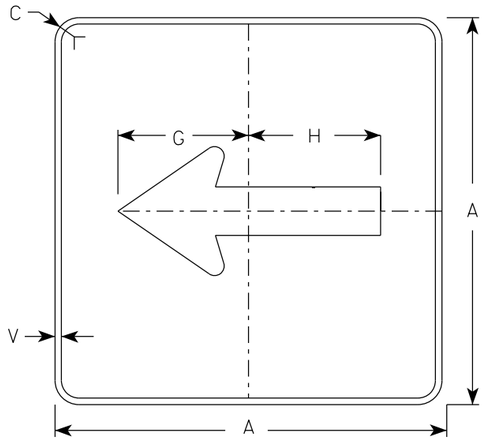
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 532 | E



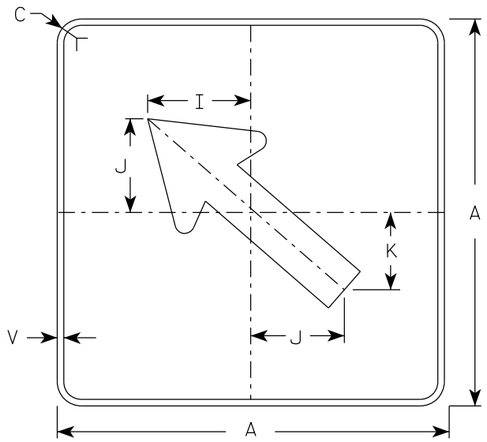
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

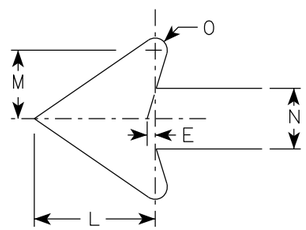


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

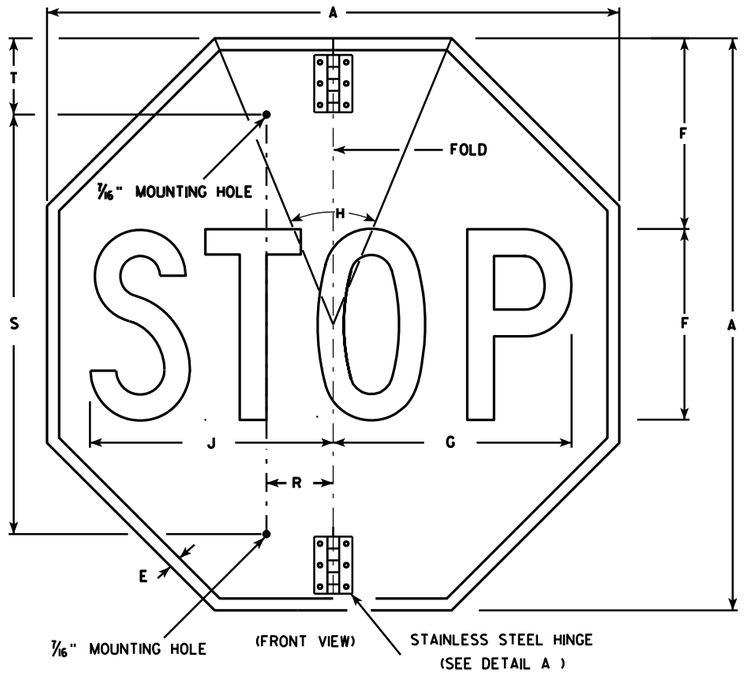
STANDARD SIGN M6-1 & M6-2 SERIES

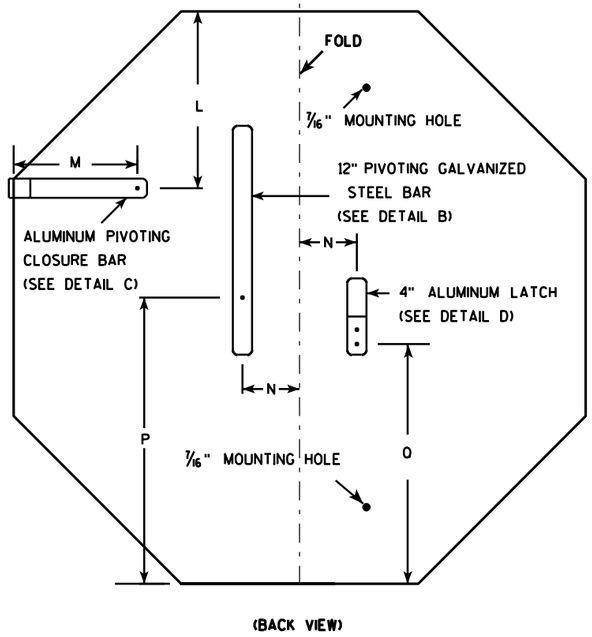
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

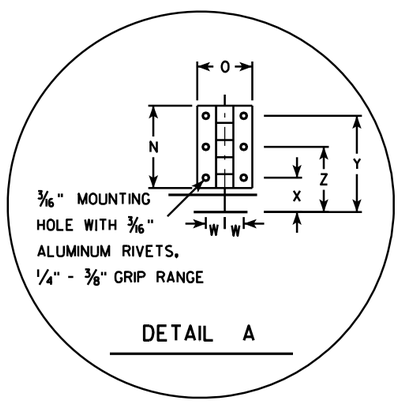
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 533 | E



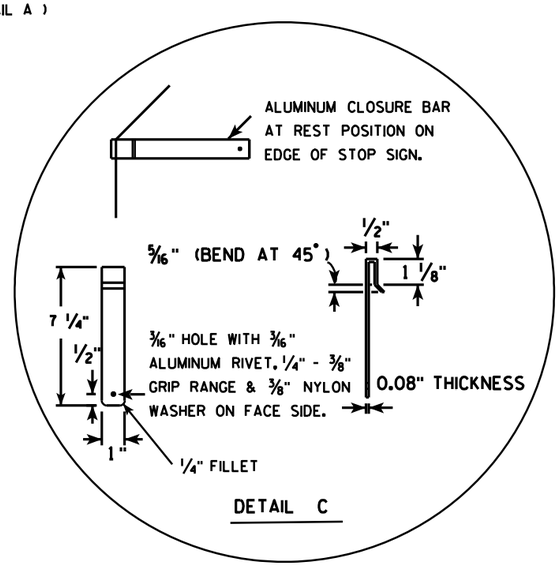


NOTES

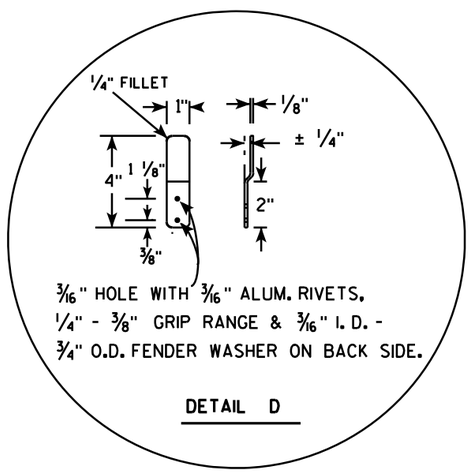
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



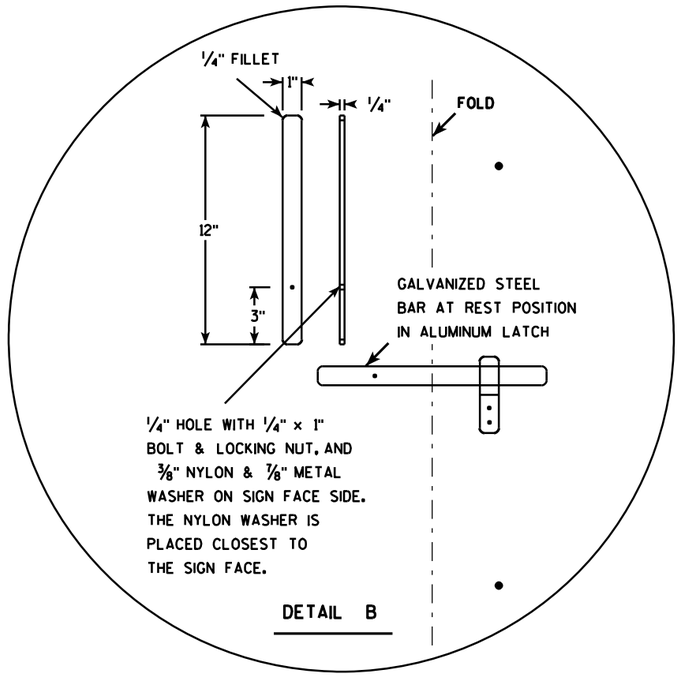
DETAIL A



DETAIL C



DETAIL D



DETAIL B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

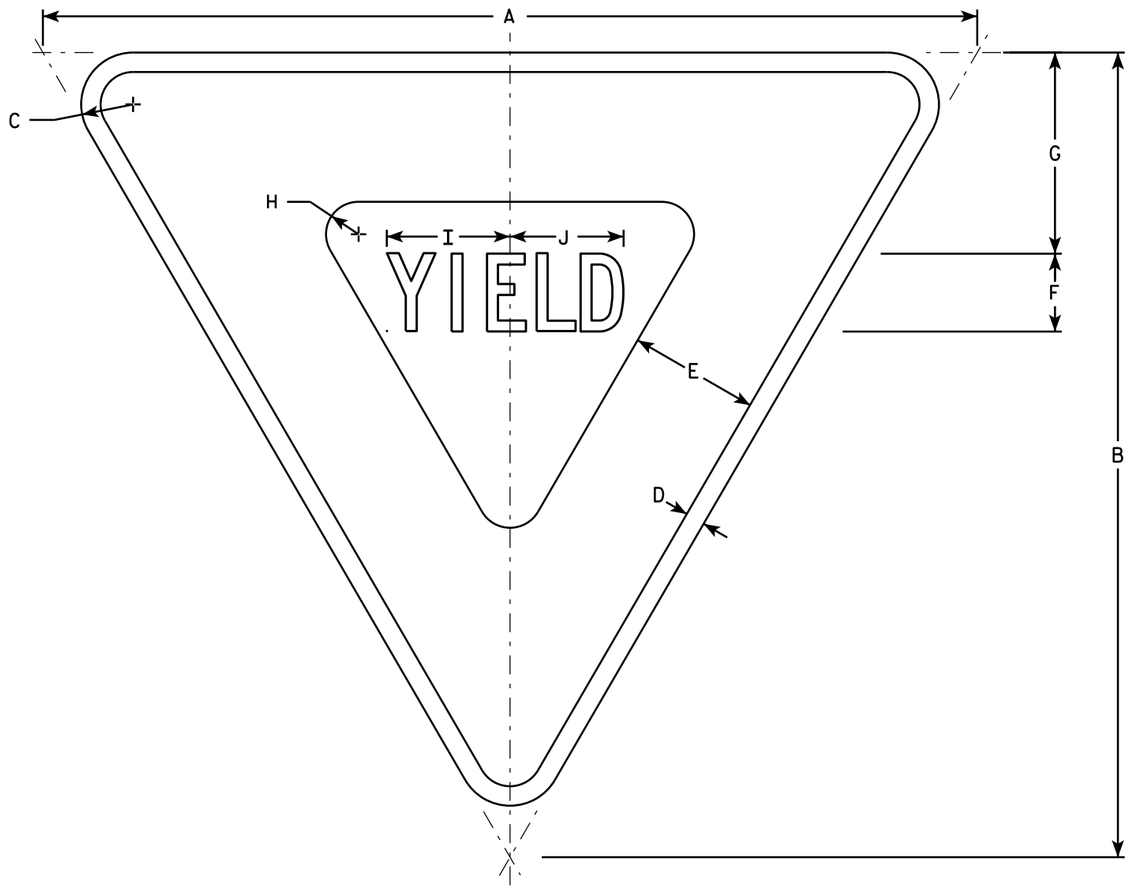
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 534 | E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

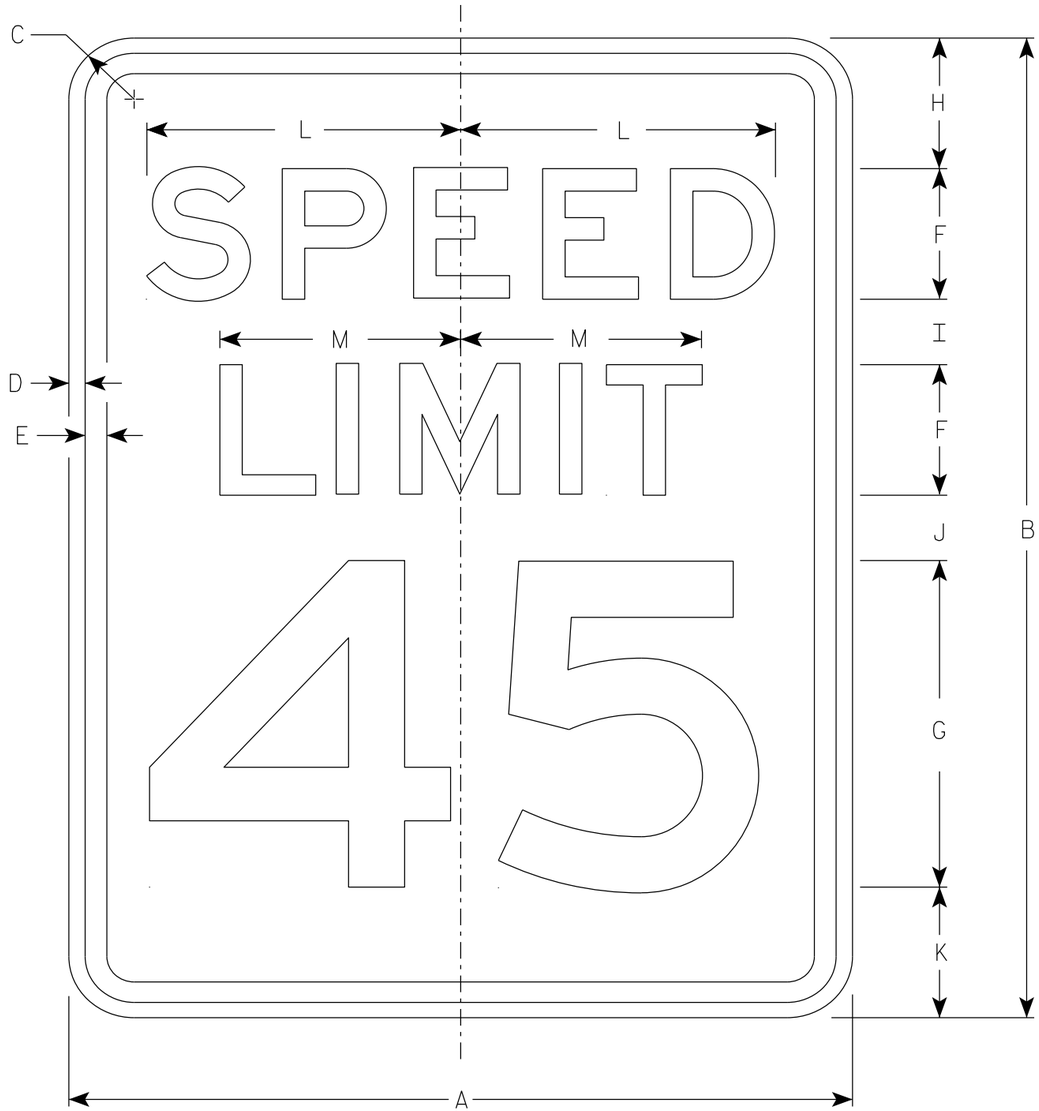
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

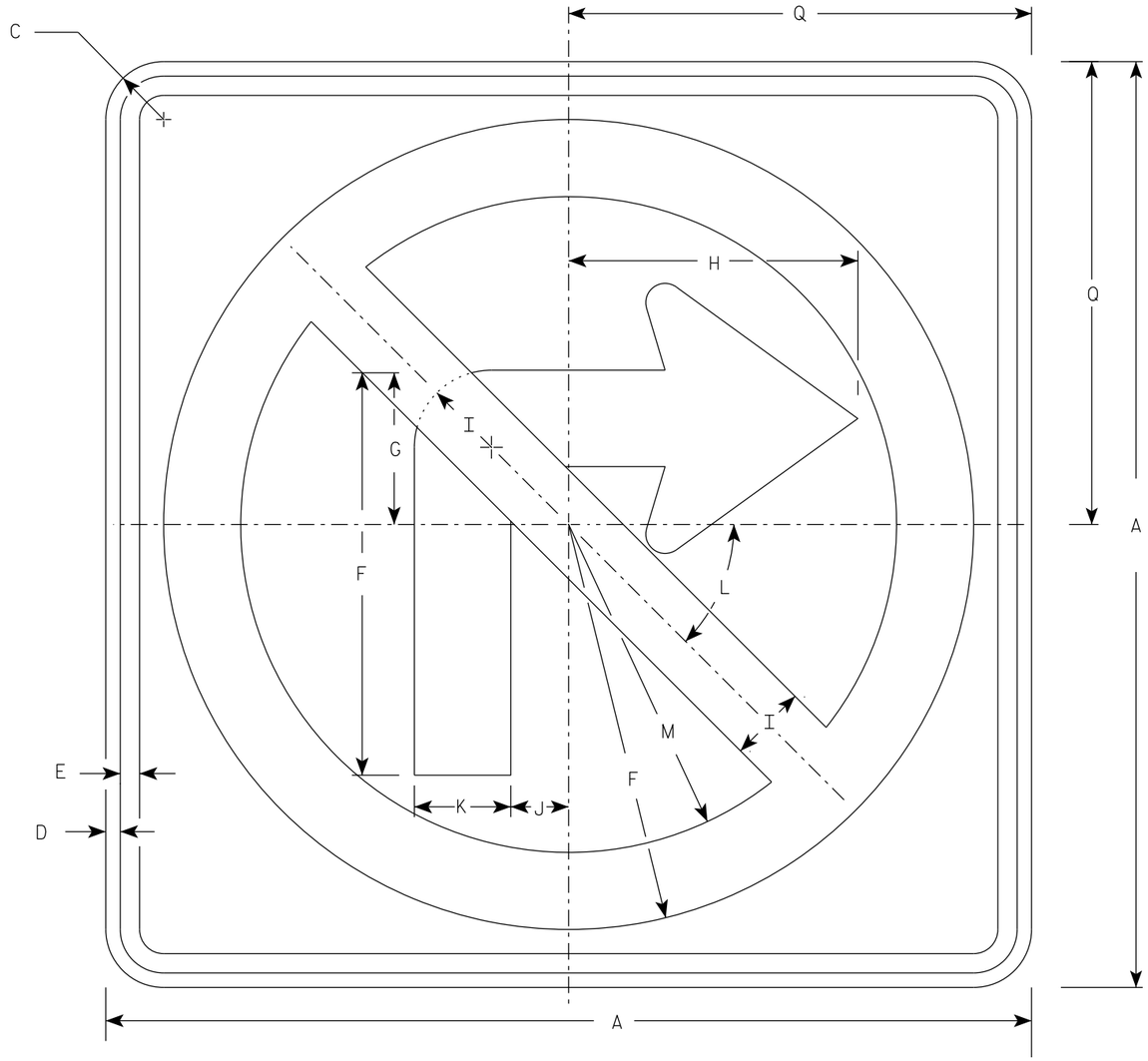
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

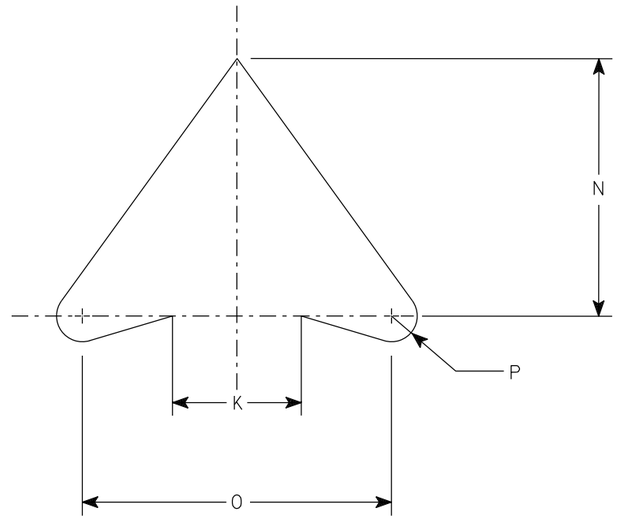
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 536 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45	8 ½	5	6	½	12										4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½	12										4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾	18										9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

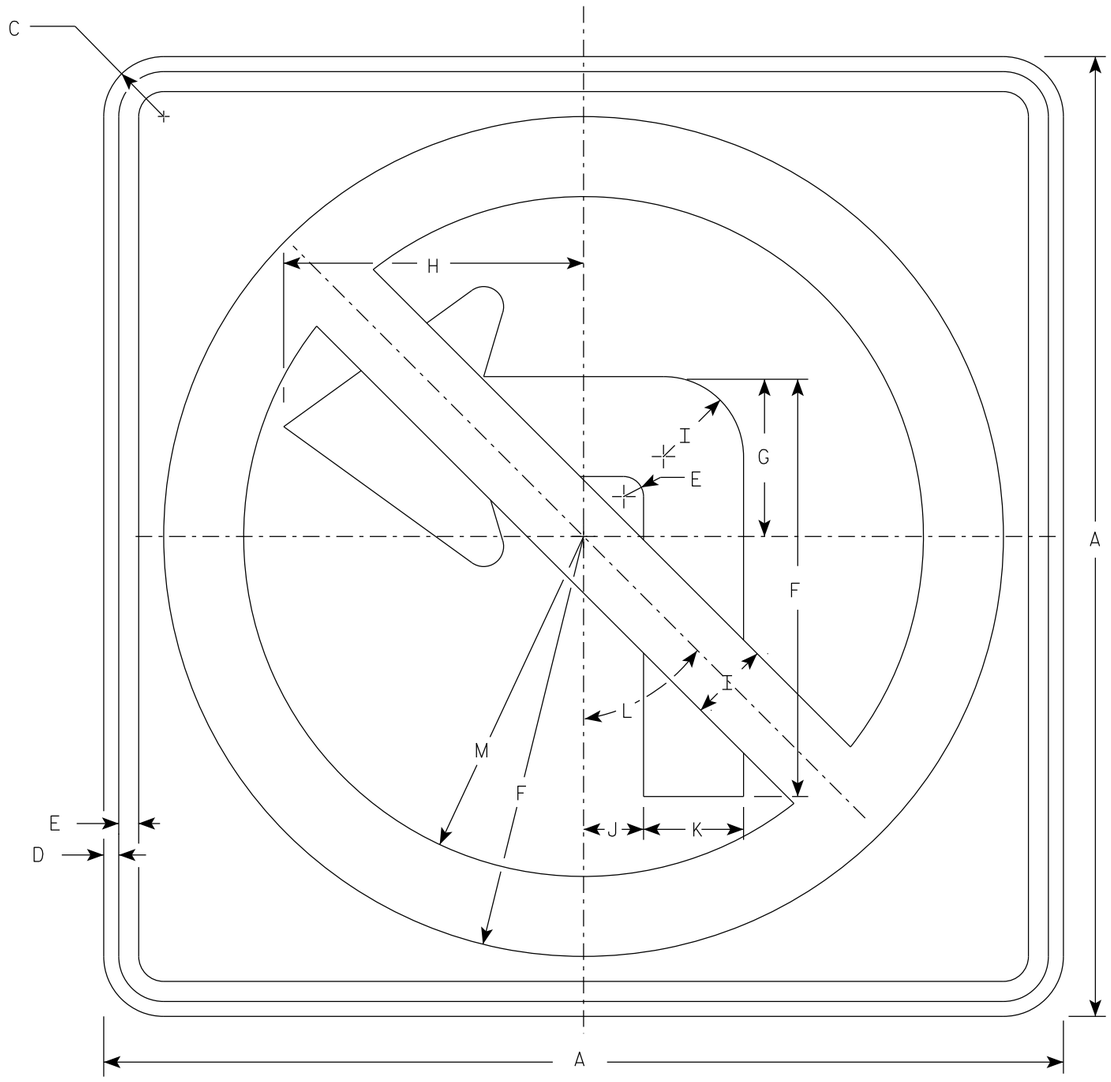
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

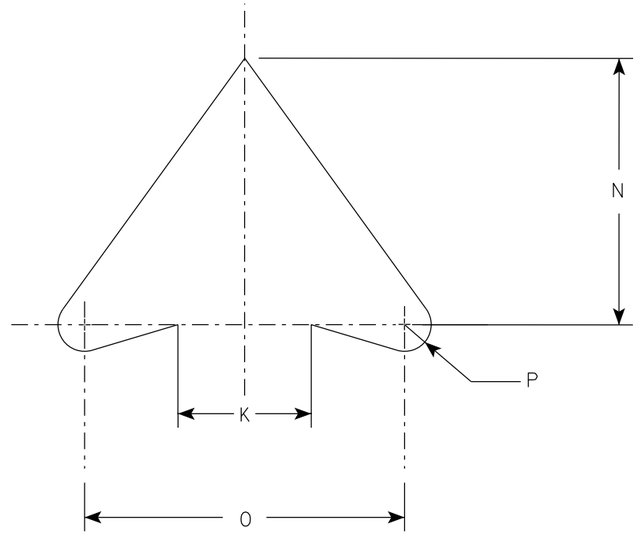
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 537 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

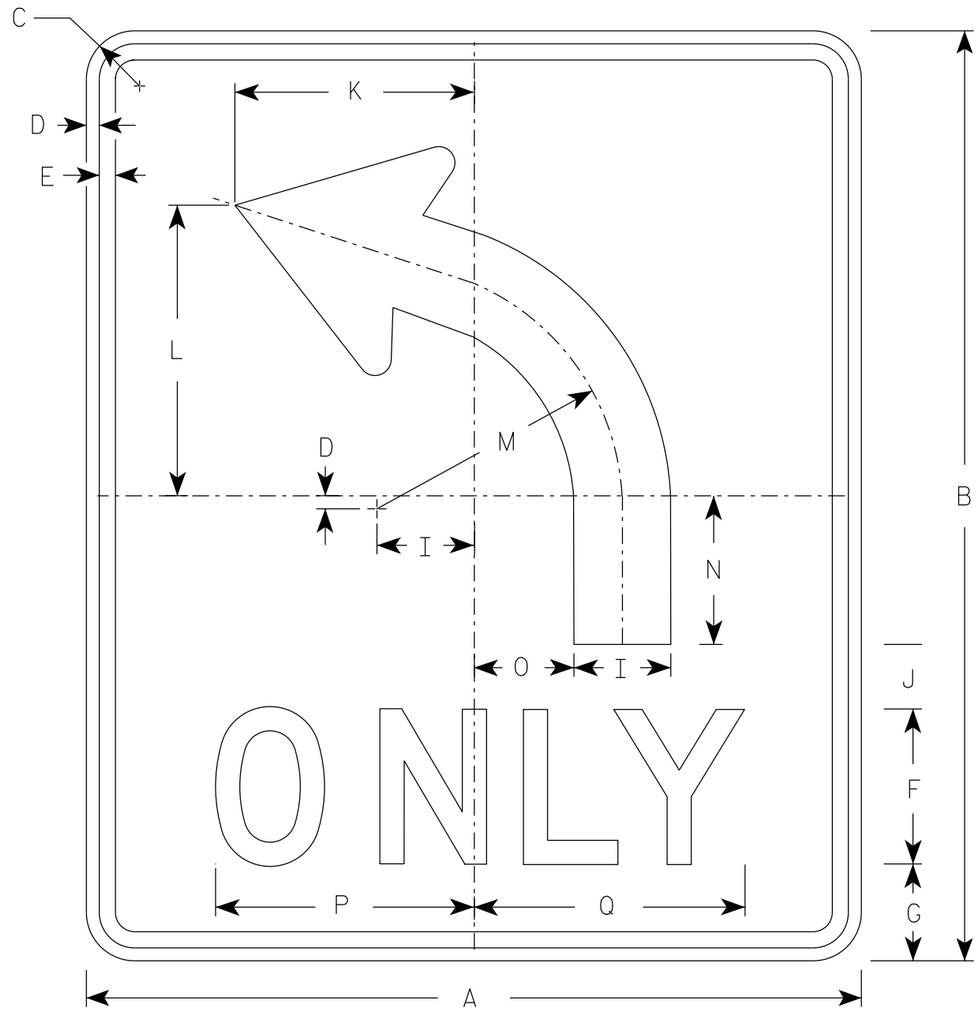
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-2.11

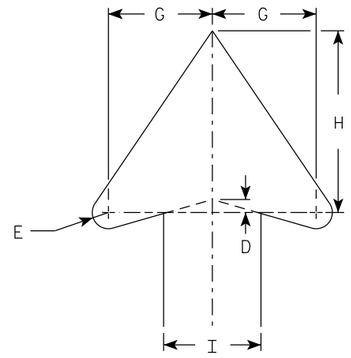
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 538 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R3-50R is the same as R3-50L except curved portion of arrow points right.



R3-50L



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 7/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
2M	30	36	1 7/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
3																											
4																											
5																											

STANDARD SIGN
R3-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

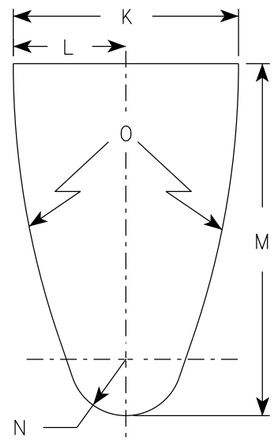
DATE 2/23/23 PLATE NO. R3-50.3

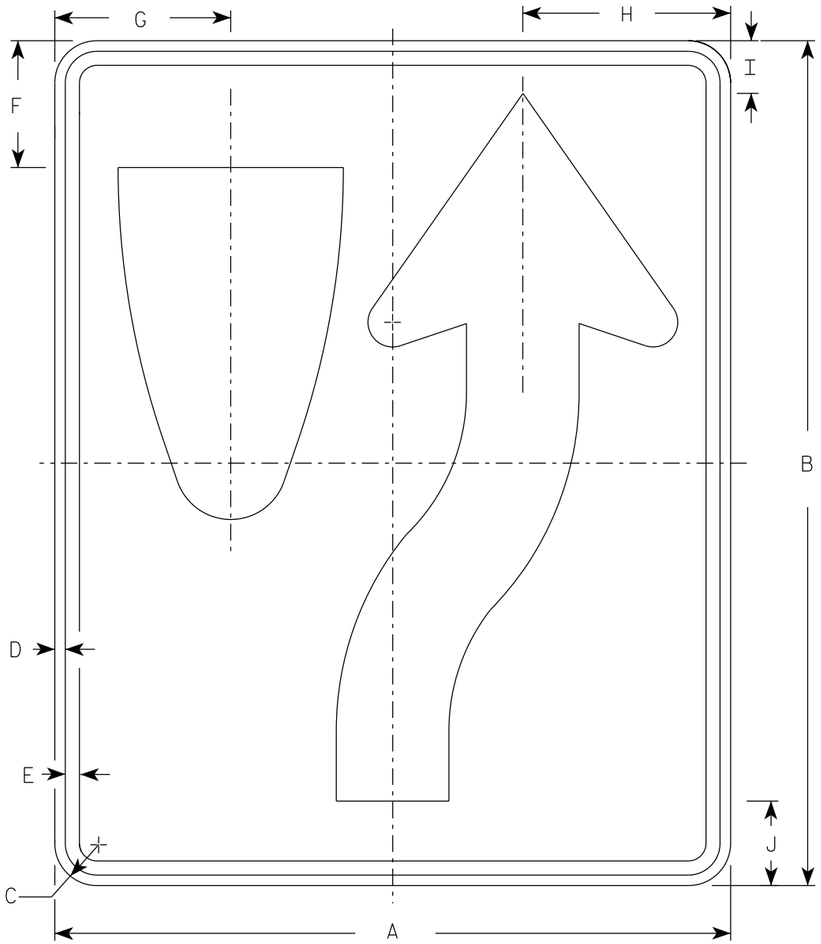
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 539	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. R4-8 is the same as R4-7 except Legend is reversed.

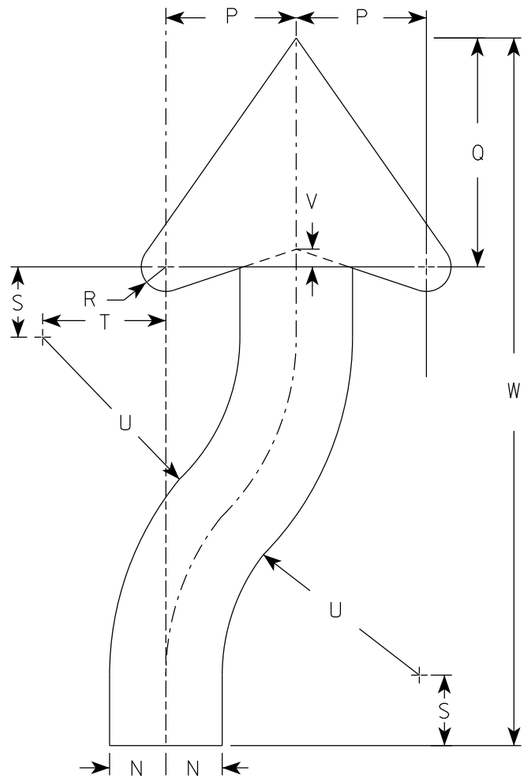
DIVIDER DETAIL





R4-7

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/2	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 7/8	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	3	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

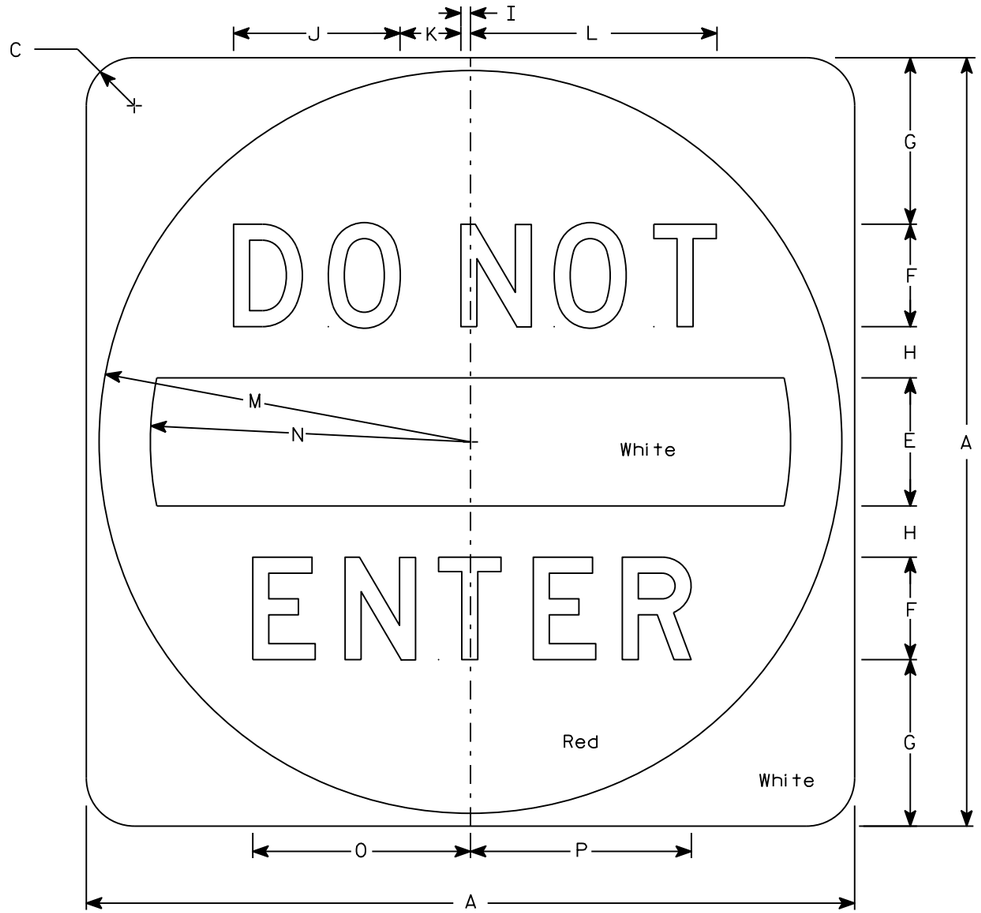
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-7.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 540	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

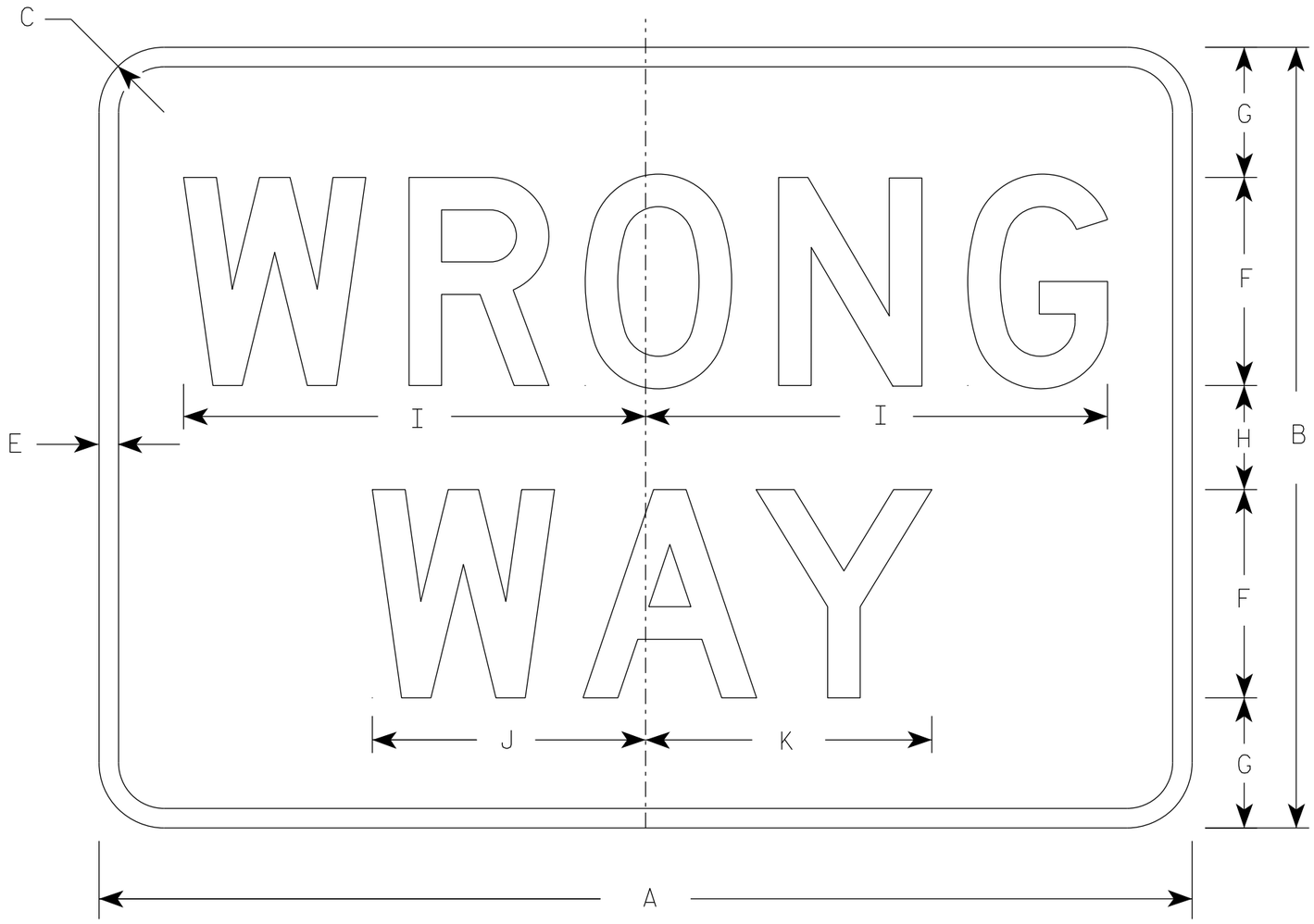
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 541 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	1 1/2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	1 7/8		3/4	8	5	4	17 3/4	10 1/2	11																8.75

STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

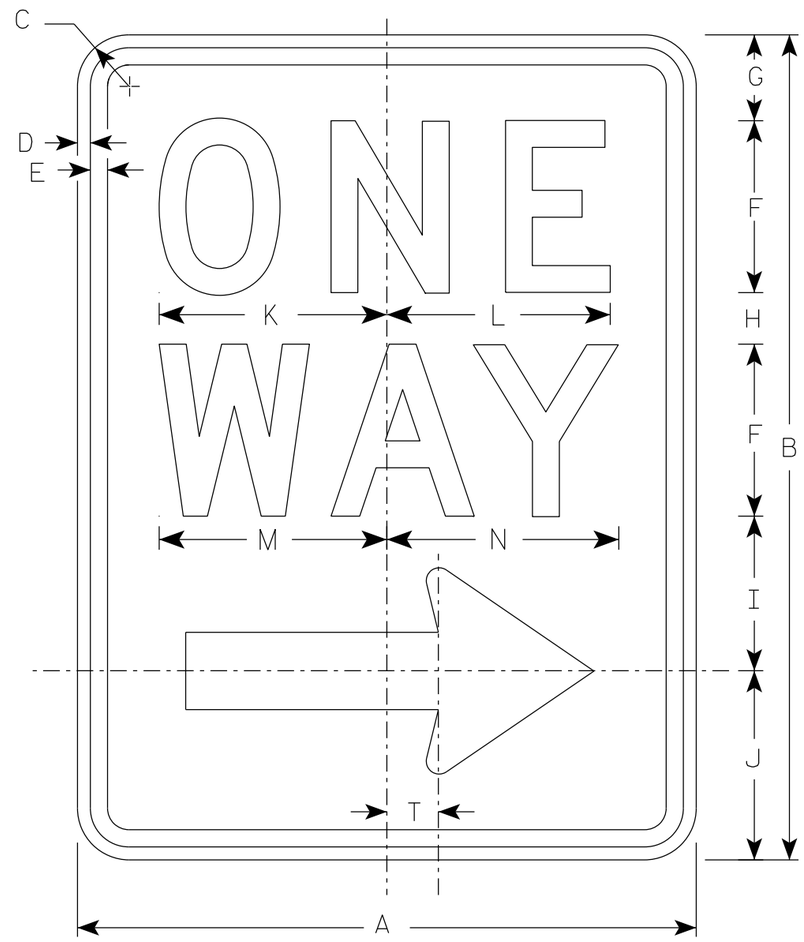
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-1A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 542 | E

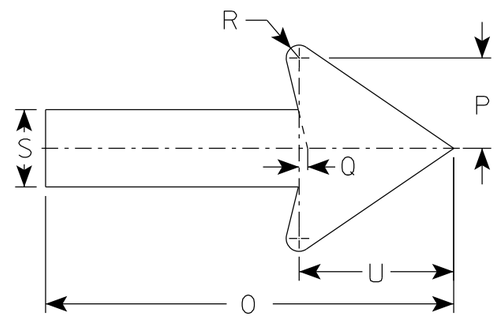
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R6-2L same as R6-2R except arrow points to the left.



R6-2R

Arrow Detail



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/2	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	1 1/2	1 1/2	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 7/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

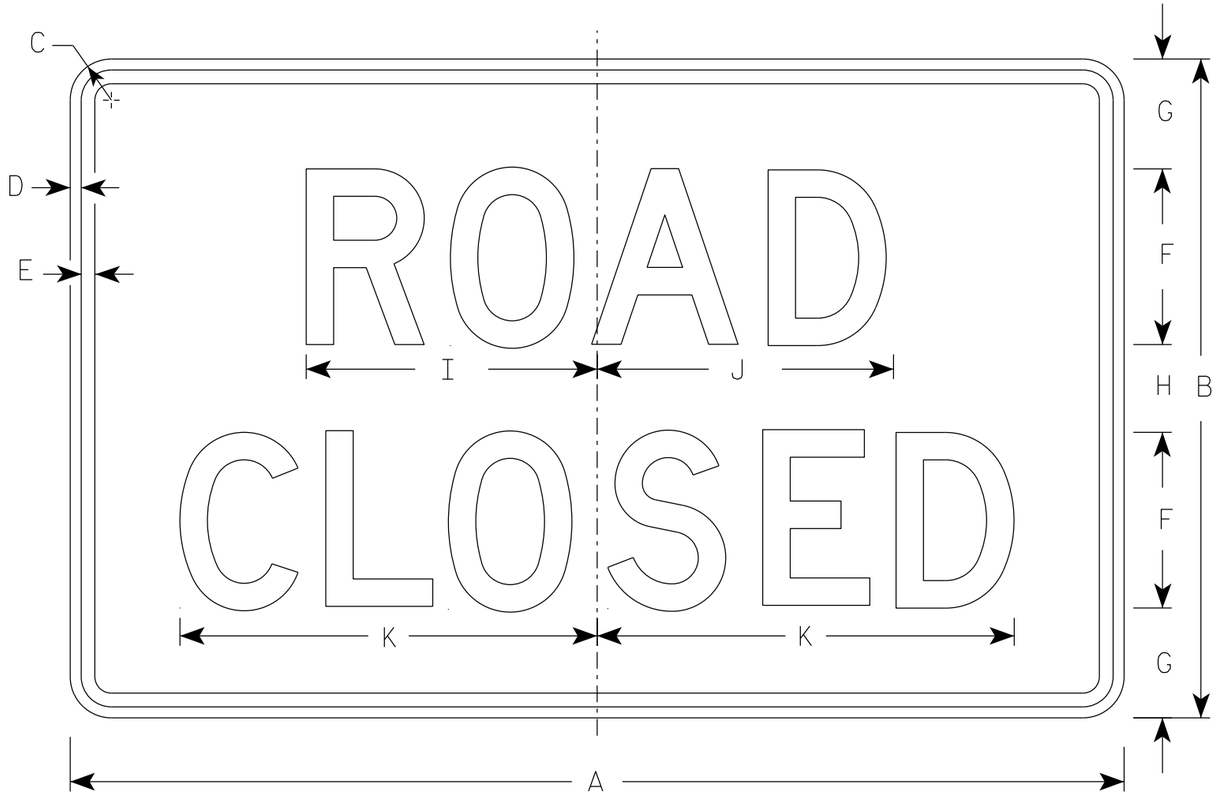
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

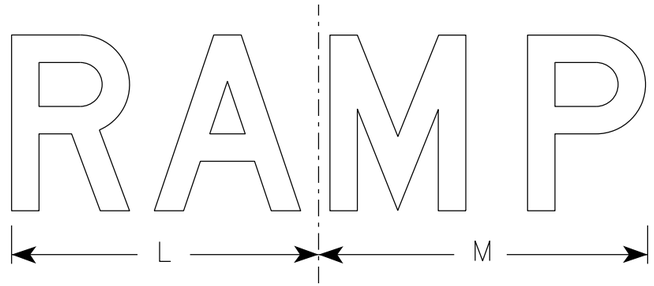
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 543	E



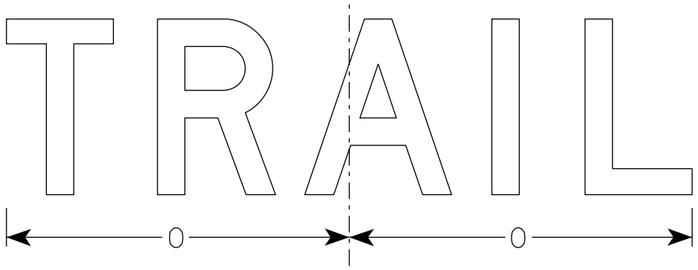
R11-2

NOTES

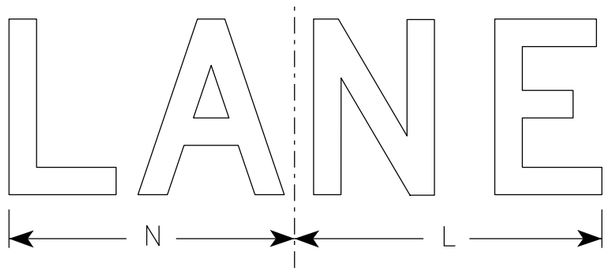
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

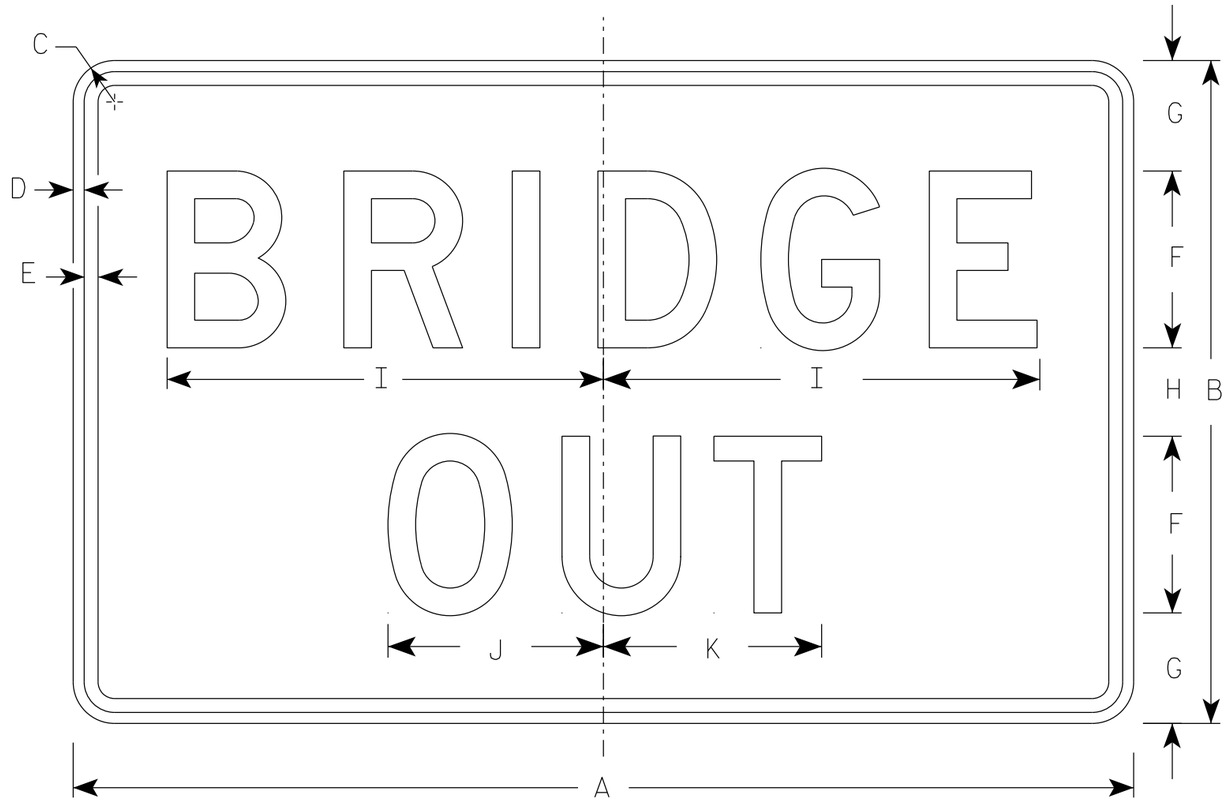
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 544	E



R11-2B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

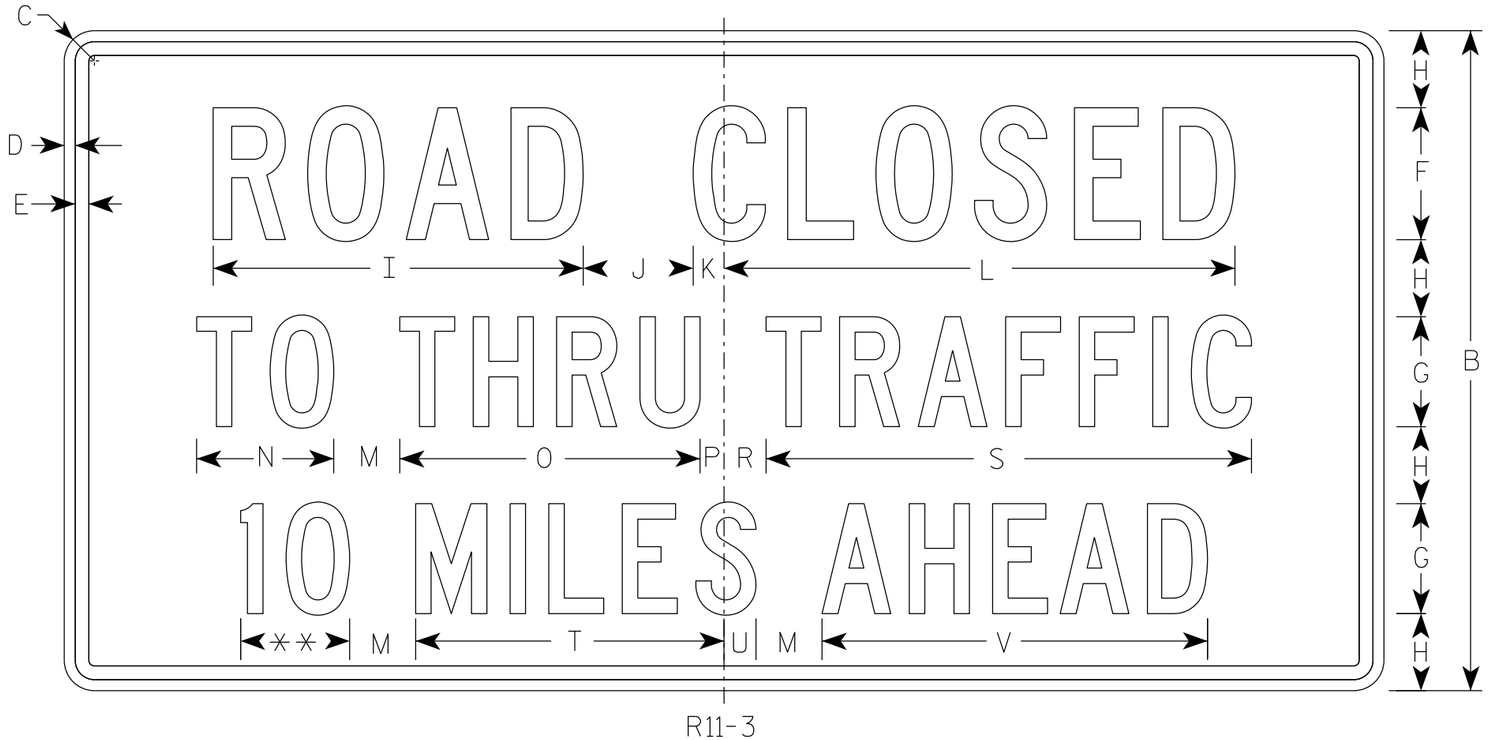
DATE 2/5/24 PLATE NO. R11-2B.3

PROJECT NO:

SHEET NO: 545 E

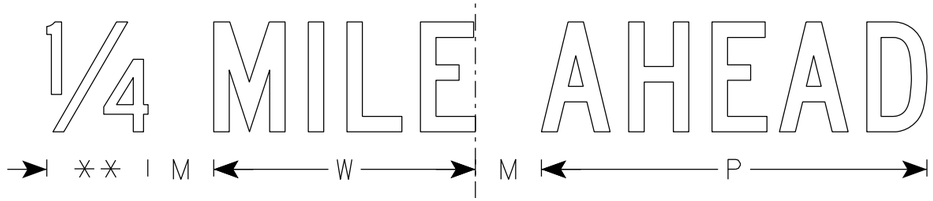
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

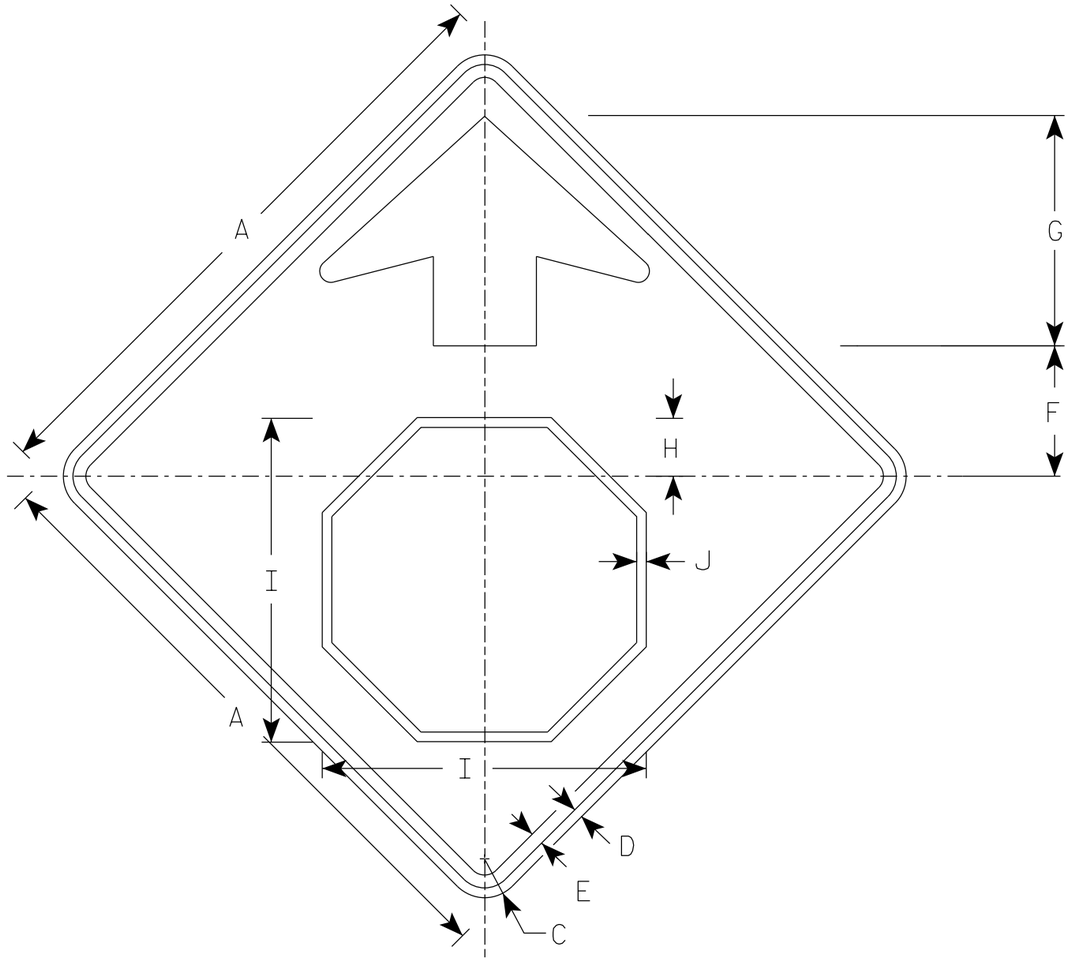
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

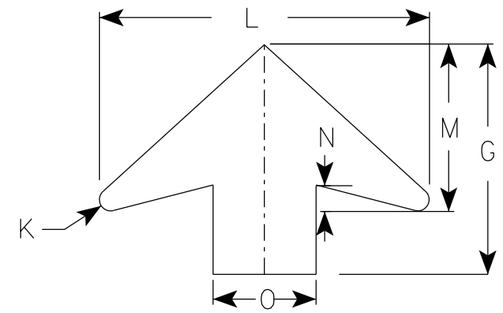
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 546 E



W3-1

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Arrow & Border - Black
   Stop Symbol - White Border on Red Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/2023 PLATE NO. W3-1.13

PROJECT NO:

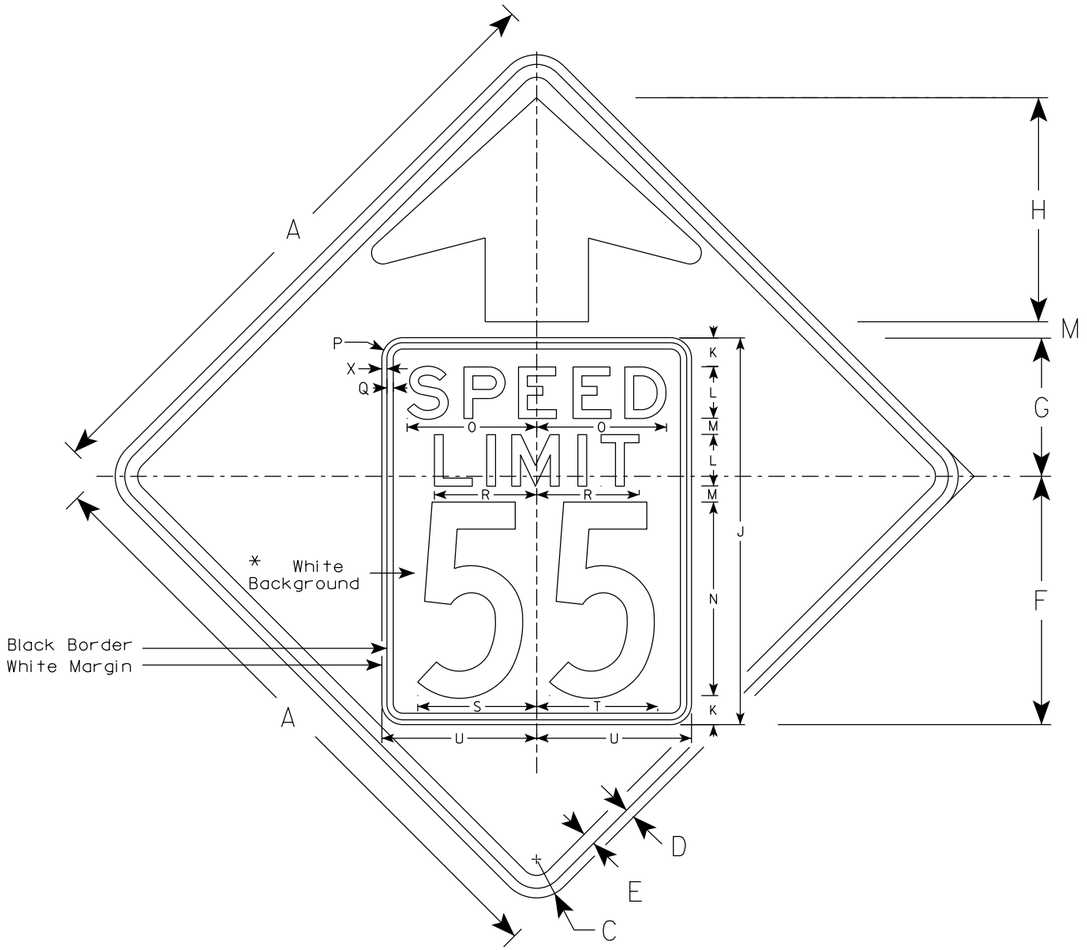
SHEET NO: 547 E

FILE NAME : C:\CAEfiles\Project\tr_stdplate\W31.dgn PLOT DATE : 17-AUG 2023 2:30 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7

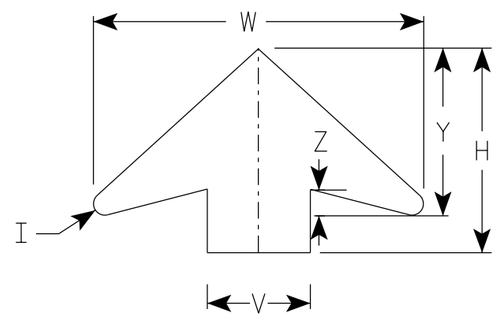


W3-5

NOTES

1. Sign is Type II - See Note 2 for Sheeting Type
2. Color: *
   Background - Yellow* (Type F Reflective)
   Message - Black
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background with black message (Type SH Reflective)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN

W3-5

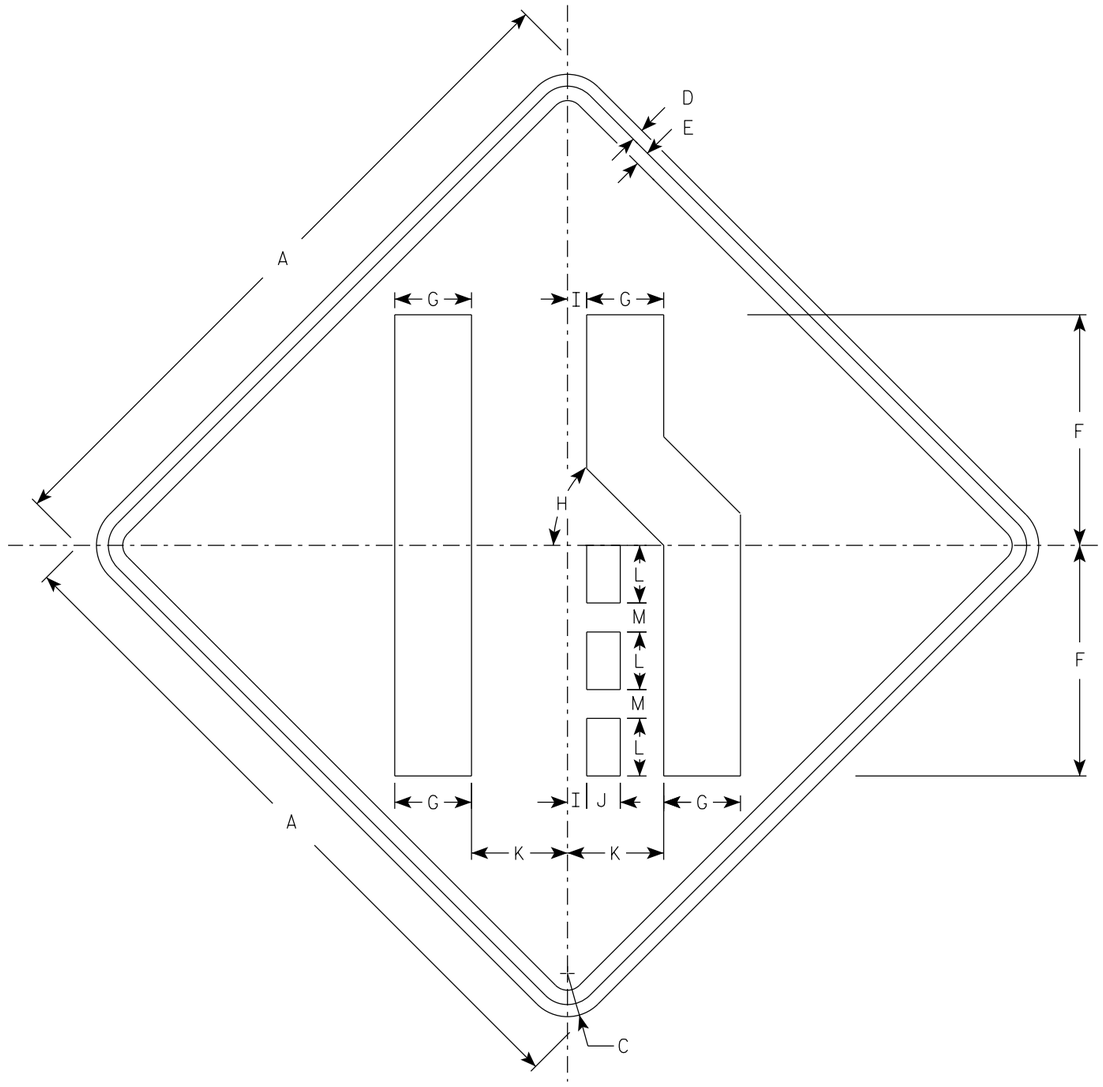
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/30/2023 PLATE NO. W3-5.7

PROJECT NO:

SHEET NO: 548 E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W4-2L is the same as W4-2R except the symbolis reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/31/2023 PLATE NO. W4-2.15

PROJECT NO:

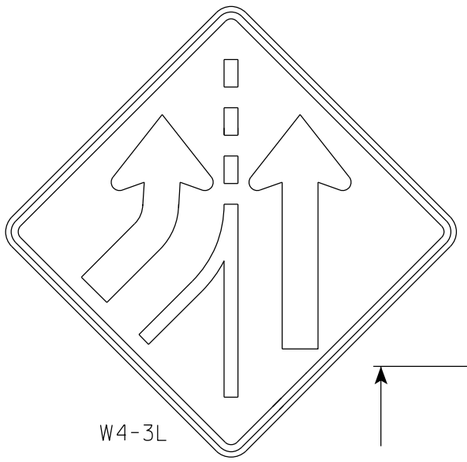
SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W42.DGN PLOT DATE : 31-AUG 2023 11:15 PLOT BY : dotc4c

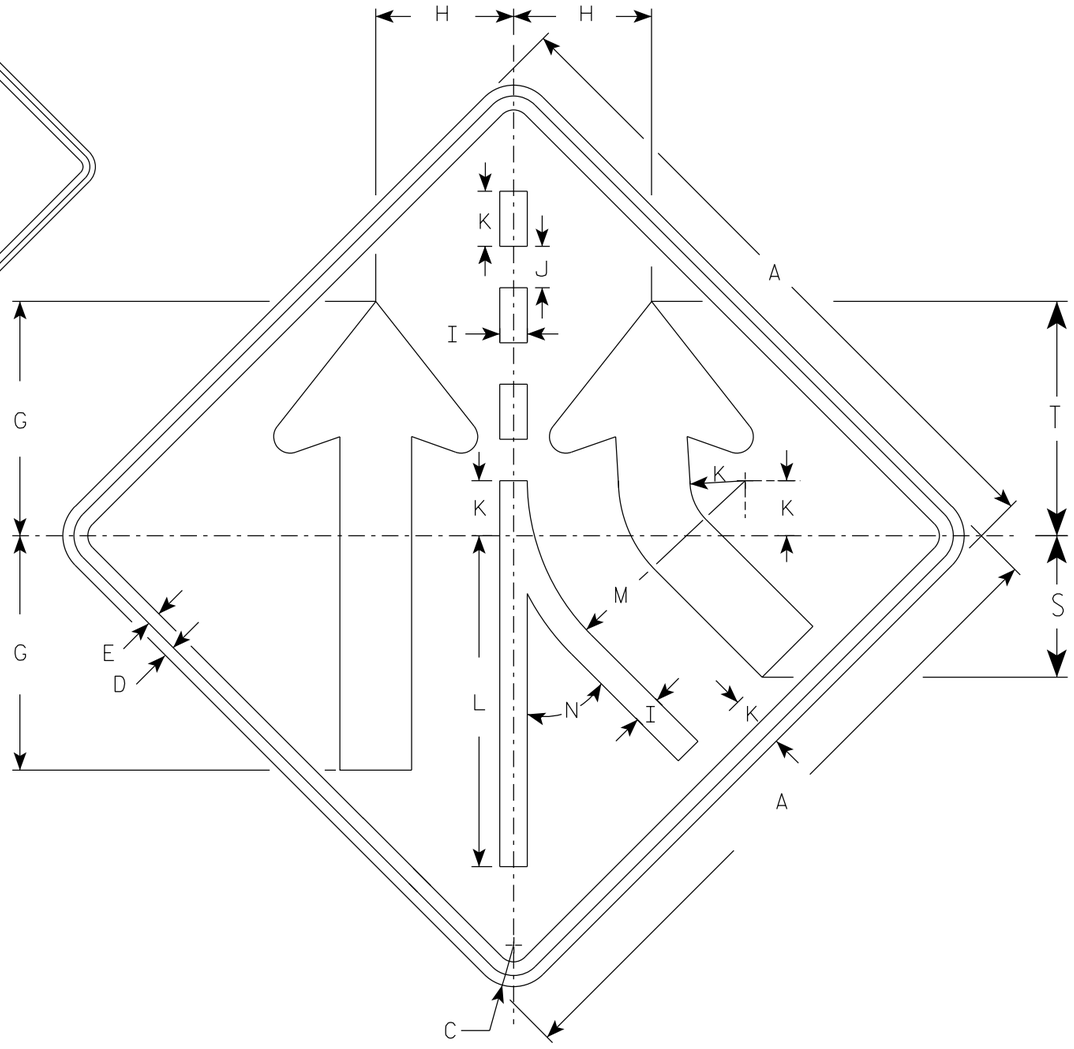
WISDOT/CADDS SHEET 42

7

7



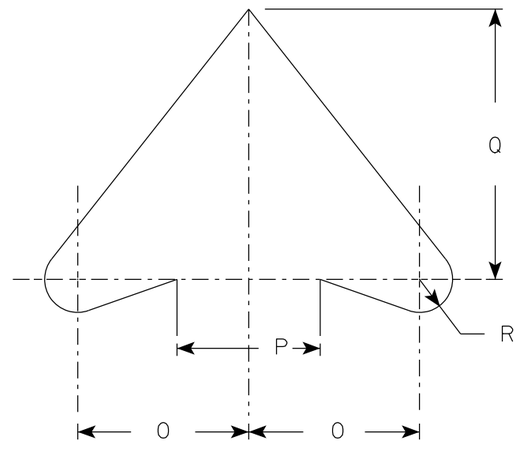
W4-3L



W4-3R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-3 L is the same as W4-3 R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8		10 5/8	6 1/4	1 1/4	1 7/8	2 1/2	15	9 7/8	45°	3 7/8	3 1/4	6 1/8	3/4	6 3/8	10 5/8							6.25
2S	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2M	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
3	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
4	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W4-3

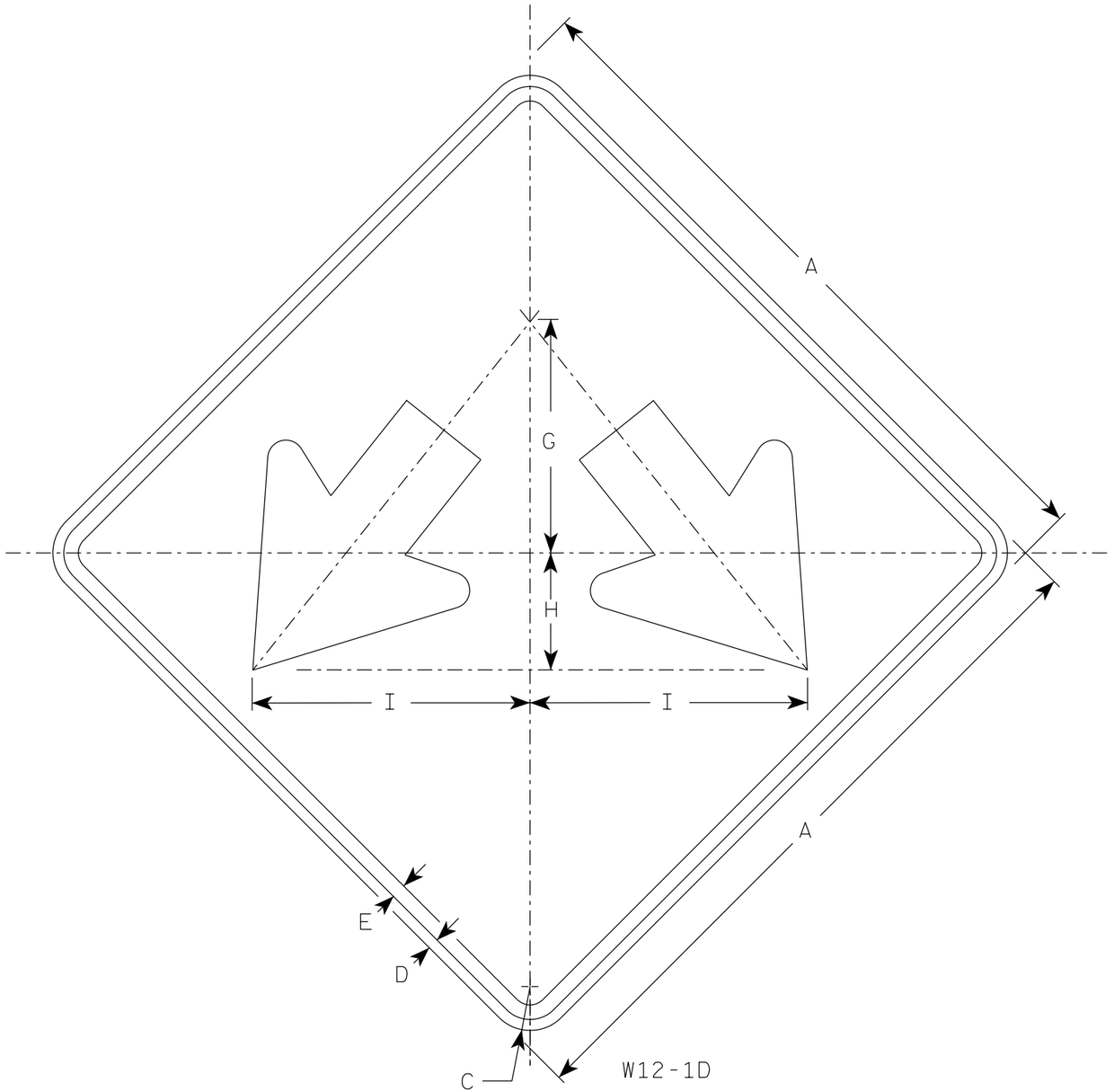
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/31/2023 PLATE NO. W4-3.10

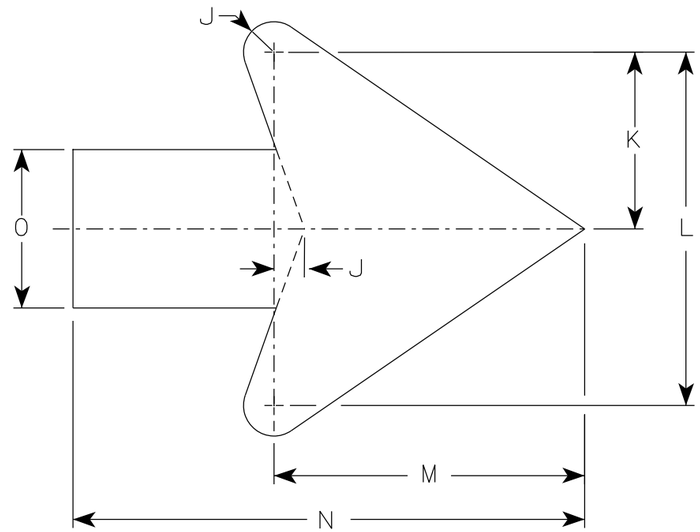
PROJECT NO:

SHEET NO: 550 E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq sq. ft.
1																											
2S	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
2M	24		1 ½	½	⅜		8	4	9 ½	⅜	3 ⅜	7 ¼	6 ⅜	10 ⅜	3 ¼												4.0
3	30		1 ⅞	½	⅝		10	5	11 ⅞	¾	4 ½	9	7 ⅞	13	4												6.25
4	36		2 ¼	½	⅝		12	6	14 ¼	1	5 ½	10 ⅞	9 ⅝	15 ¾	4 ¾												9.0
5	48		3	¾	1		16	8	19	1 ¼	7 ¼	14 ½	12 ¾	21	6 ¼												16.0

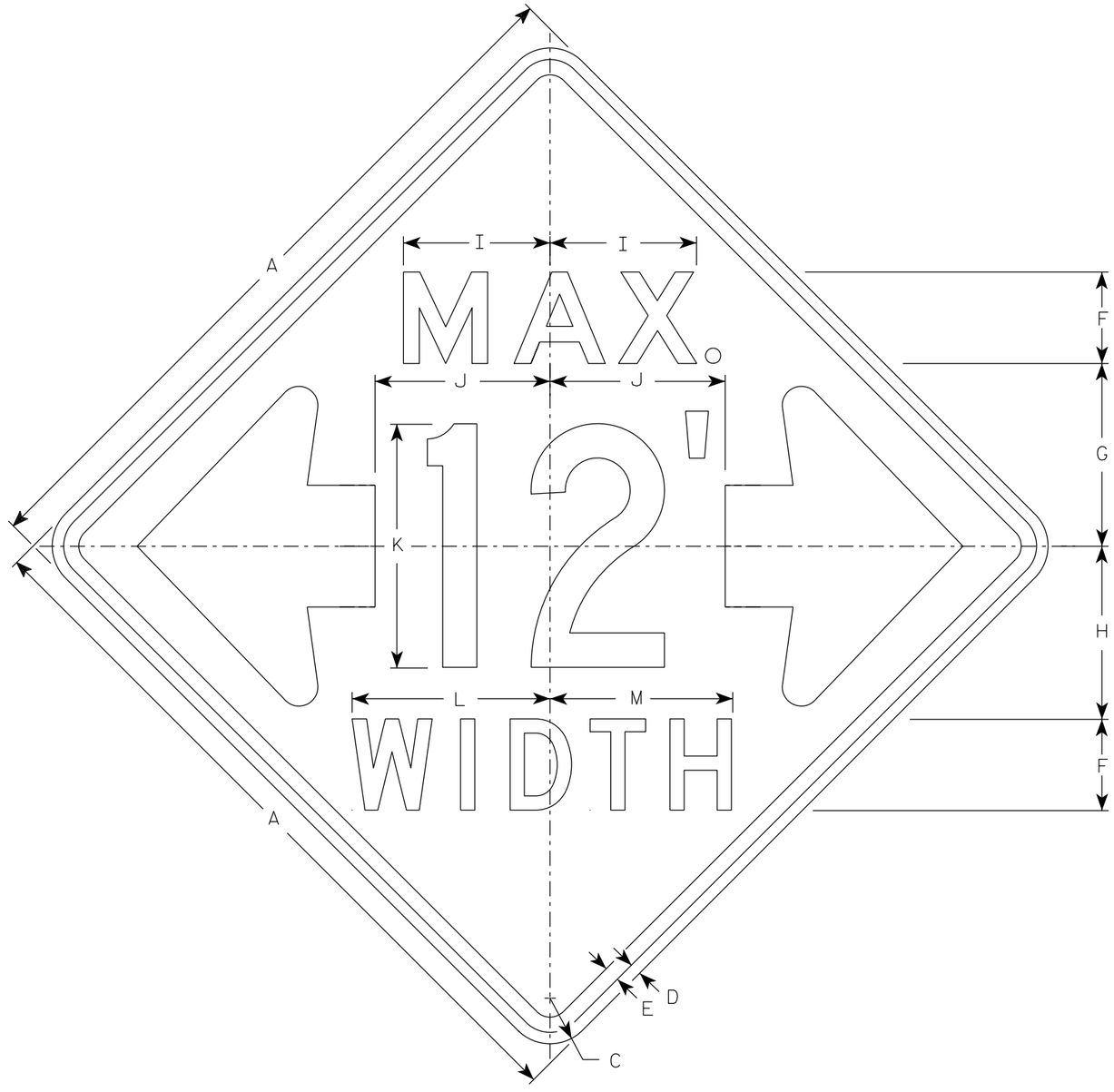
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/30/2023 PLATE NO. W12-1D.16

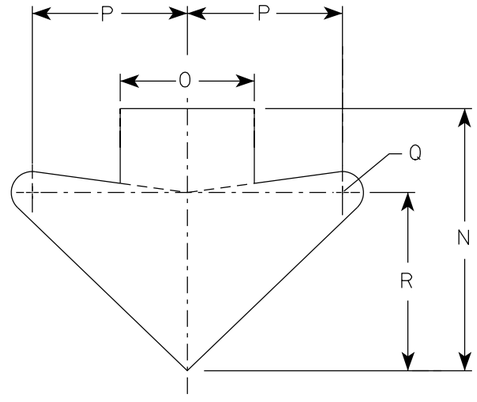
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 551	E



W12-52

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. The top line is series E, the numerals are series C, and the bottom line is series D.
5. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
2M	48		3	¾	1	6	12	11 ⅜	9 ⅝	11 ½	16	13	12	15 ⅝	8	9 ¼	1 ¼	10 ⅝									16.0
3																											
4																											
5																											

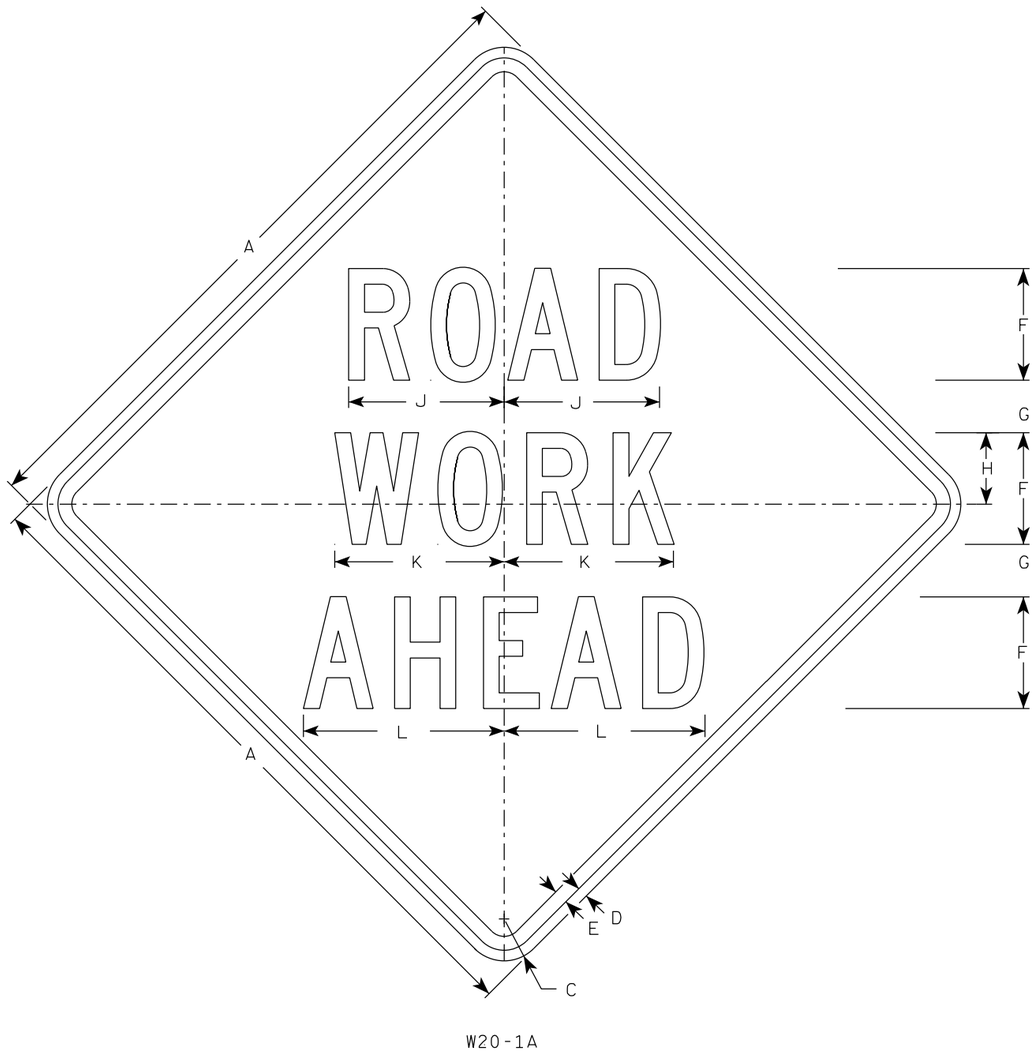
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

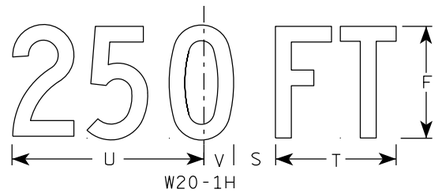
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/10/2024 PLATE NO. W12-52.8

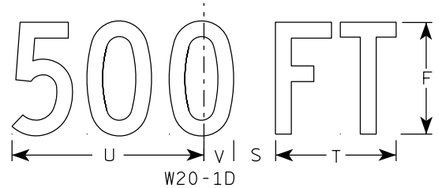
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 552 | E



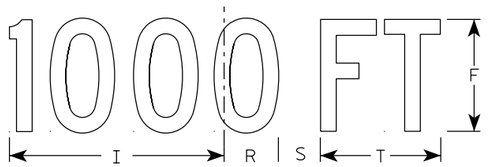
W20-1A



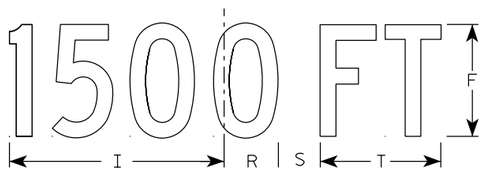
W20-1H



W20-1D



W20-1C

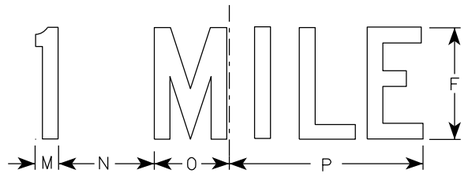


W20-1B

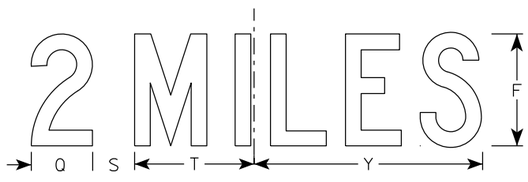
NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

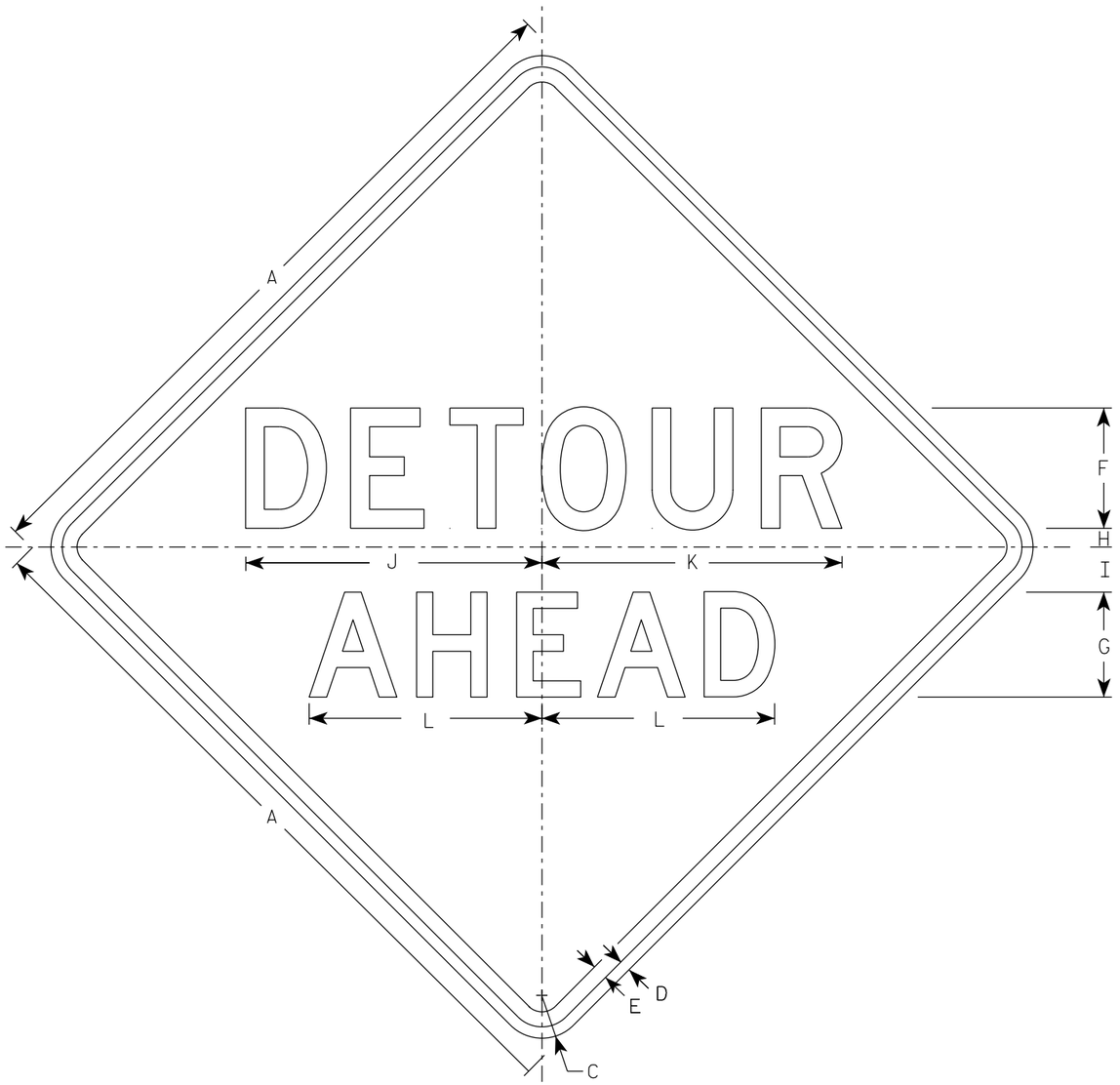
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

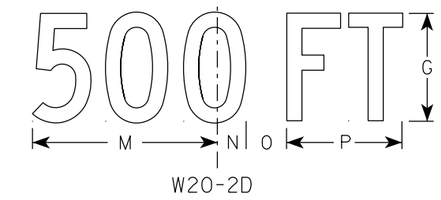
DATE 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

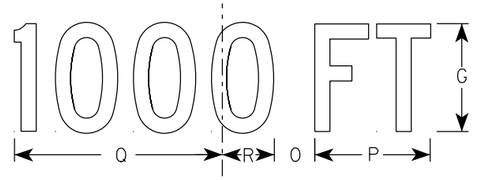
SHEET NO: 553 E



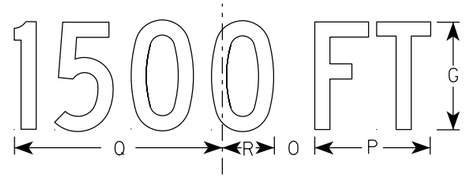
W20-2A



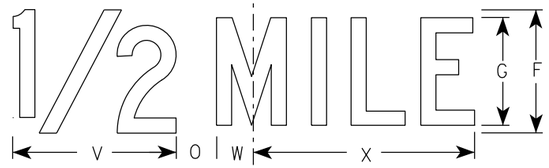
W20-2D



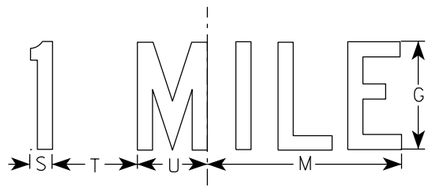
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

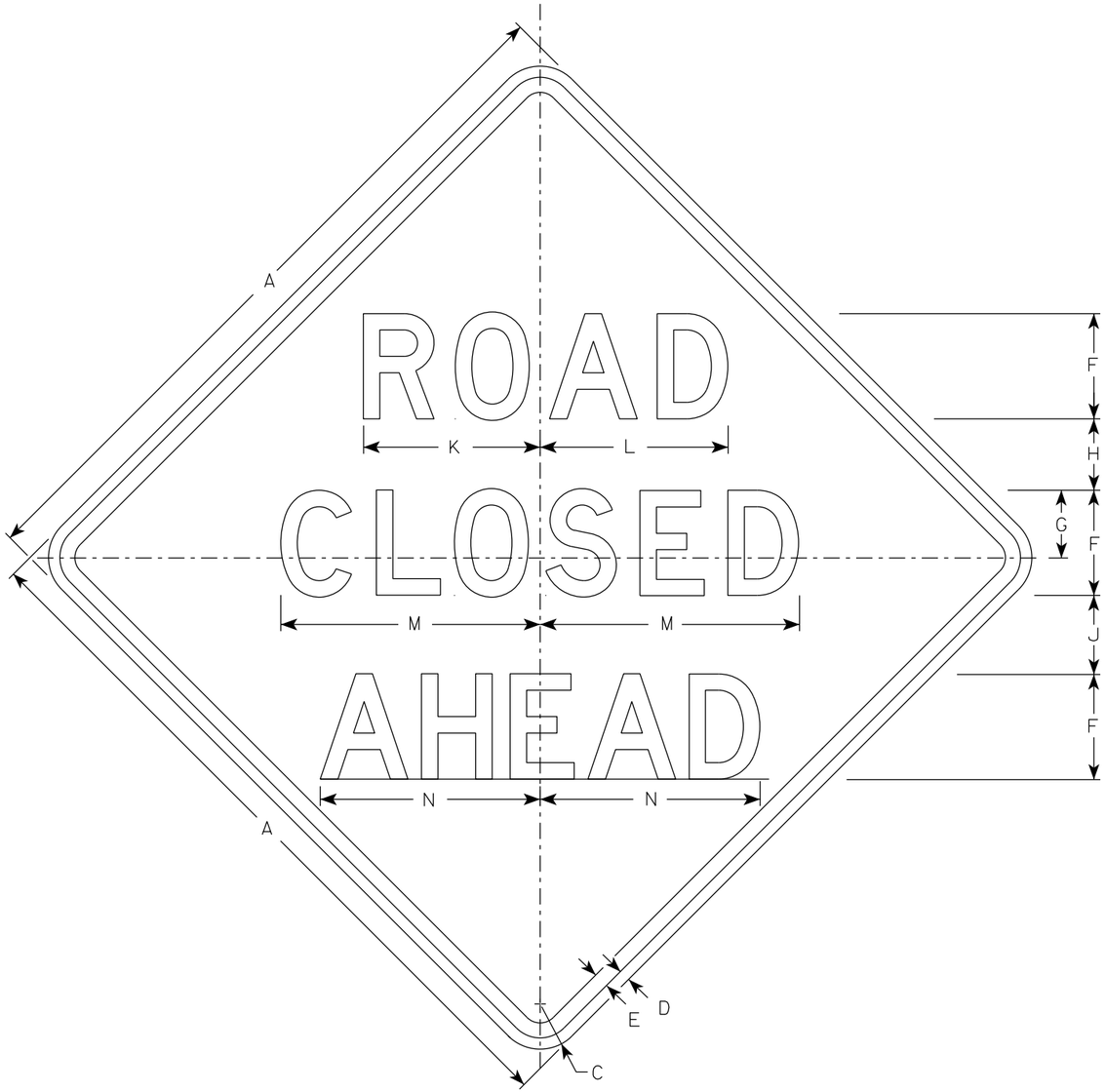
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

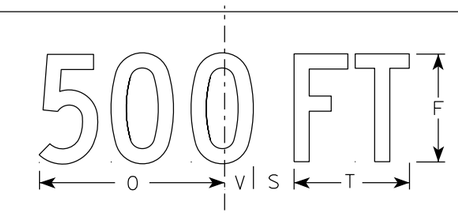
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

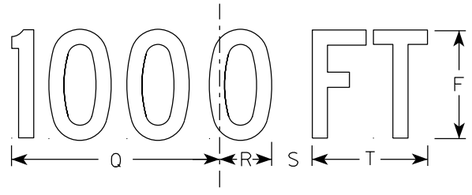
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



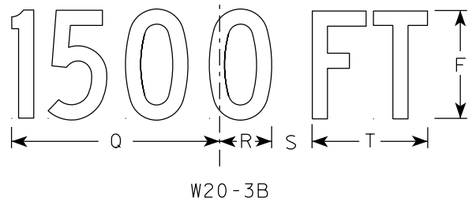
W20-3A



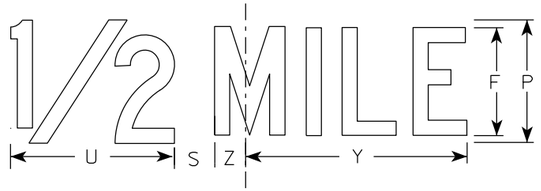
W20-3D



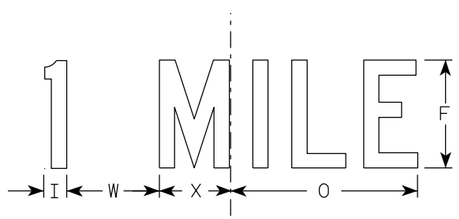
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

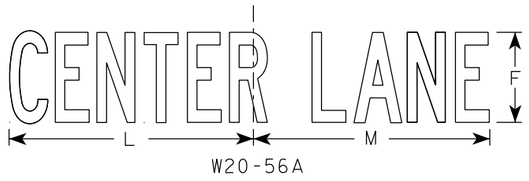
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

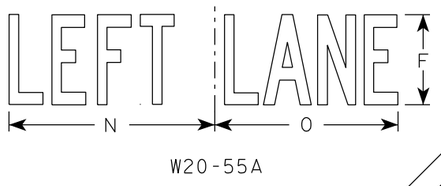
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

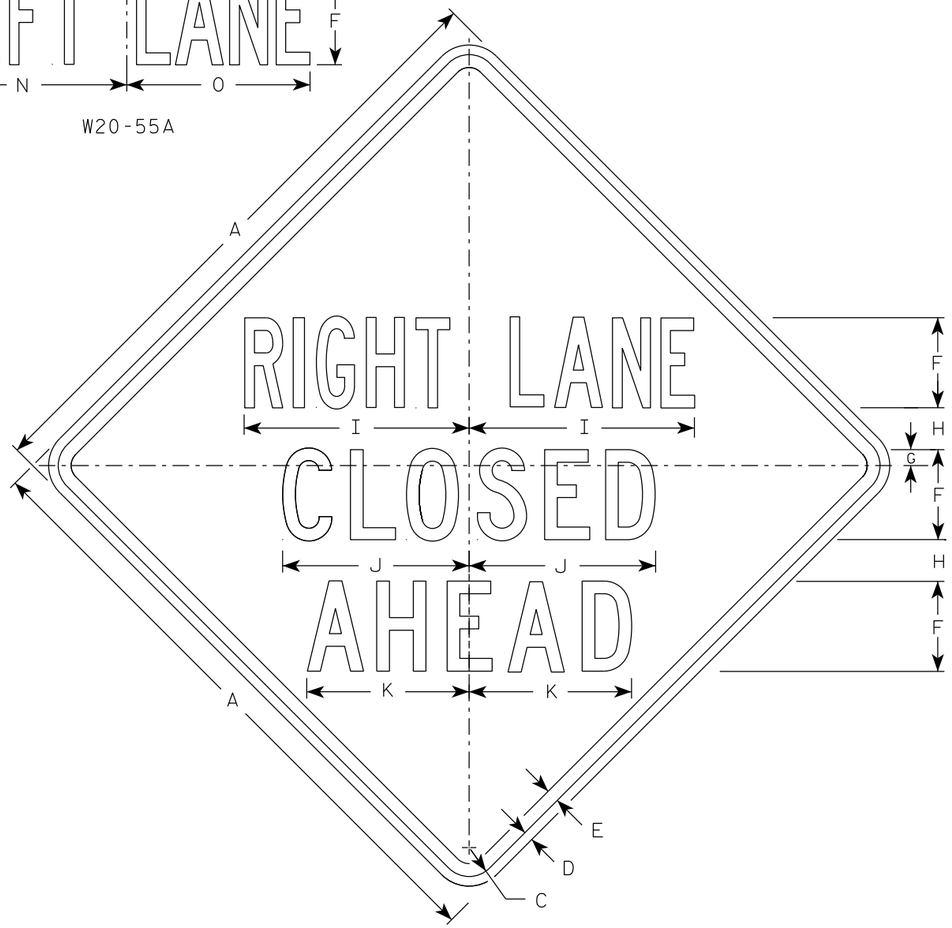
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 555 | E



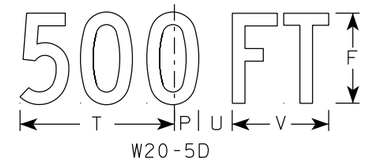
W20-56A



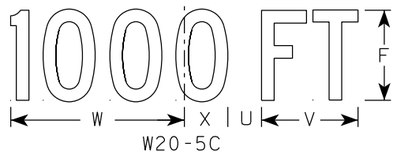
W20-55A



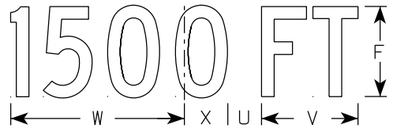
W20-5A



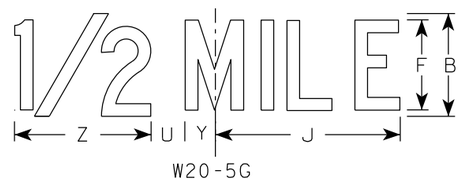
W20-5D



W20-5C



W20-5B



W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	2 1/4	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	3	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

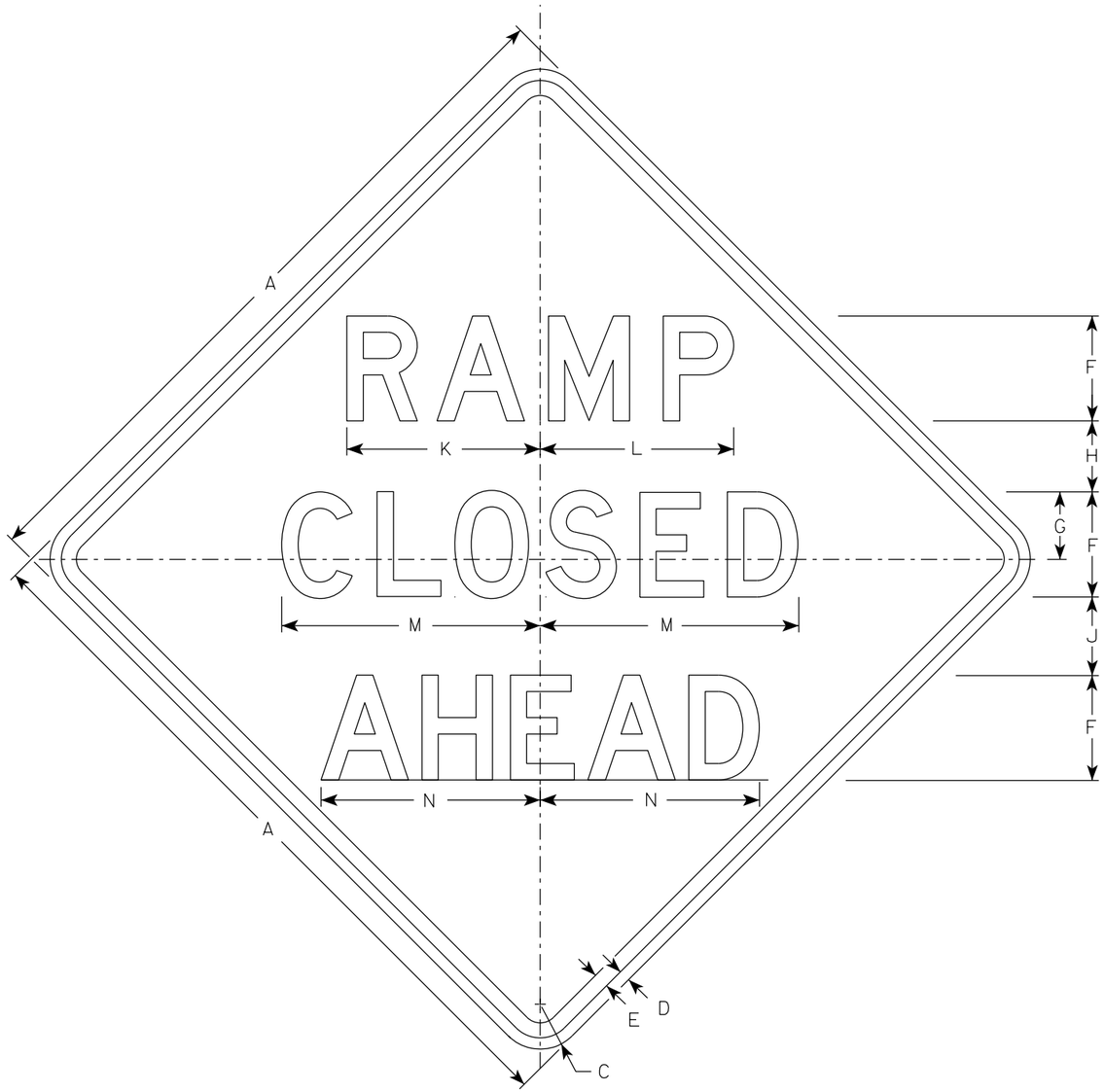
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

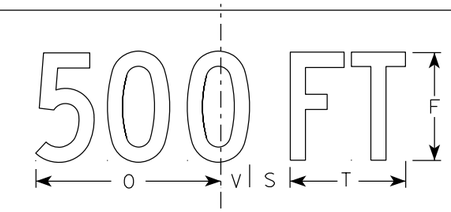
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

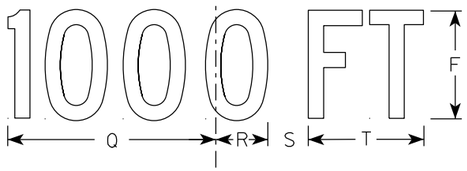
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 556	E



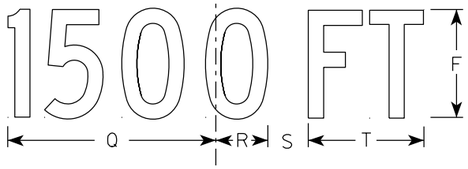
W20-53A



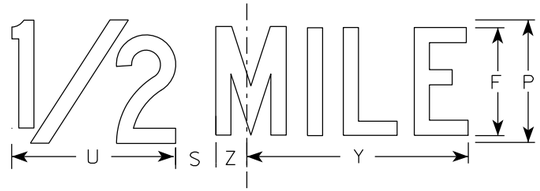
W20-53D



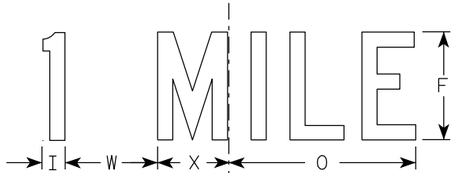
W20-53C



W20-53B



W20-53G



W20-53F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

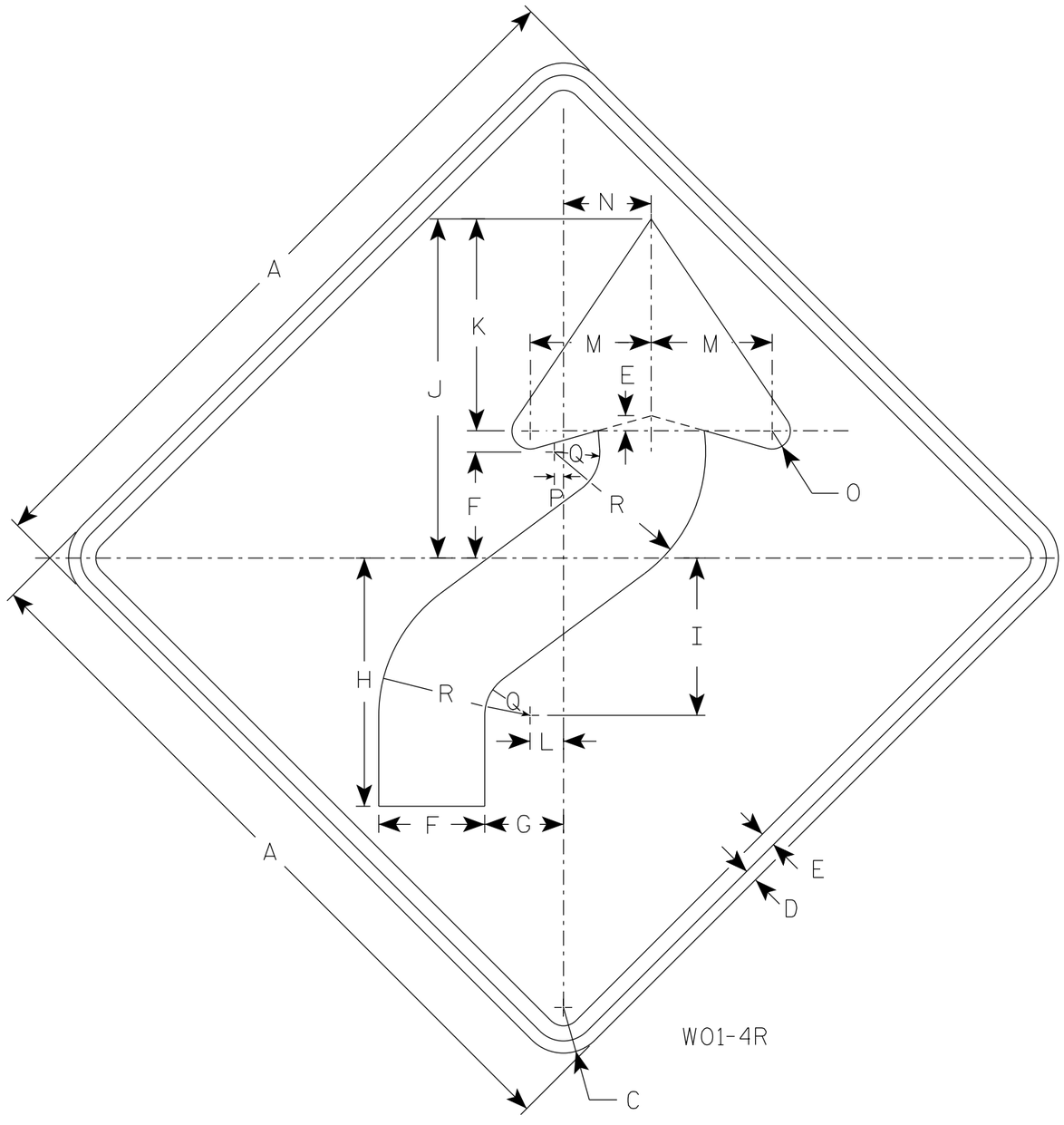
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-53.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W2053.DGN PLOT DATE : 10-JAN 2024 2:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

7



W01-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		3	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

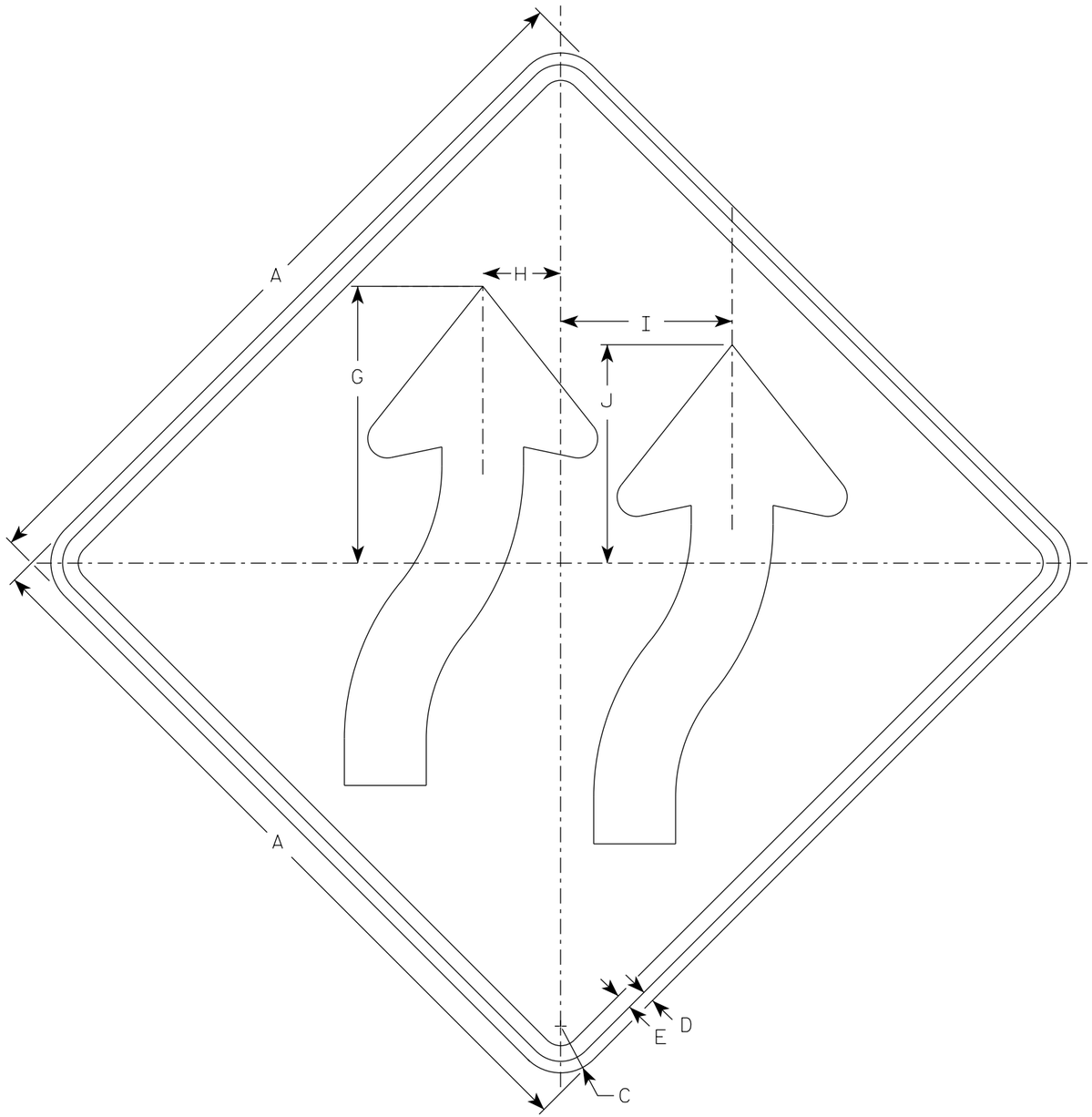
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

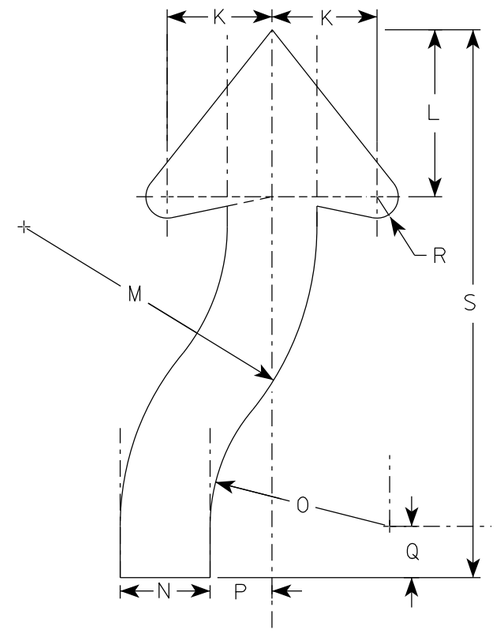
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 558 | E



W01-4BR

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4BL is the same as W014-BR exept arrows are reversed along the vertical centerline



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		13 3/8	3 3/4	8 1/4	10 1/2	4 5/8	7 3/8	12 7/8	3 7/8	7 7/8	2 3/4	2 1/4	7/8	24								9.0
2S	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
2M	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
3	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
4	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0
5	48		3	3/4	1		17 3/4	5	11	14	6 1/8	9 3/4	17 1/8	5 1/4	10 1/2	3 5/8	3	1 1/4	32								16.0

STANDARD SIGN
W01-4B

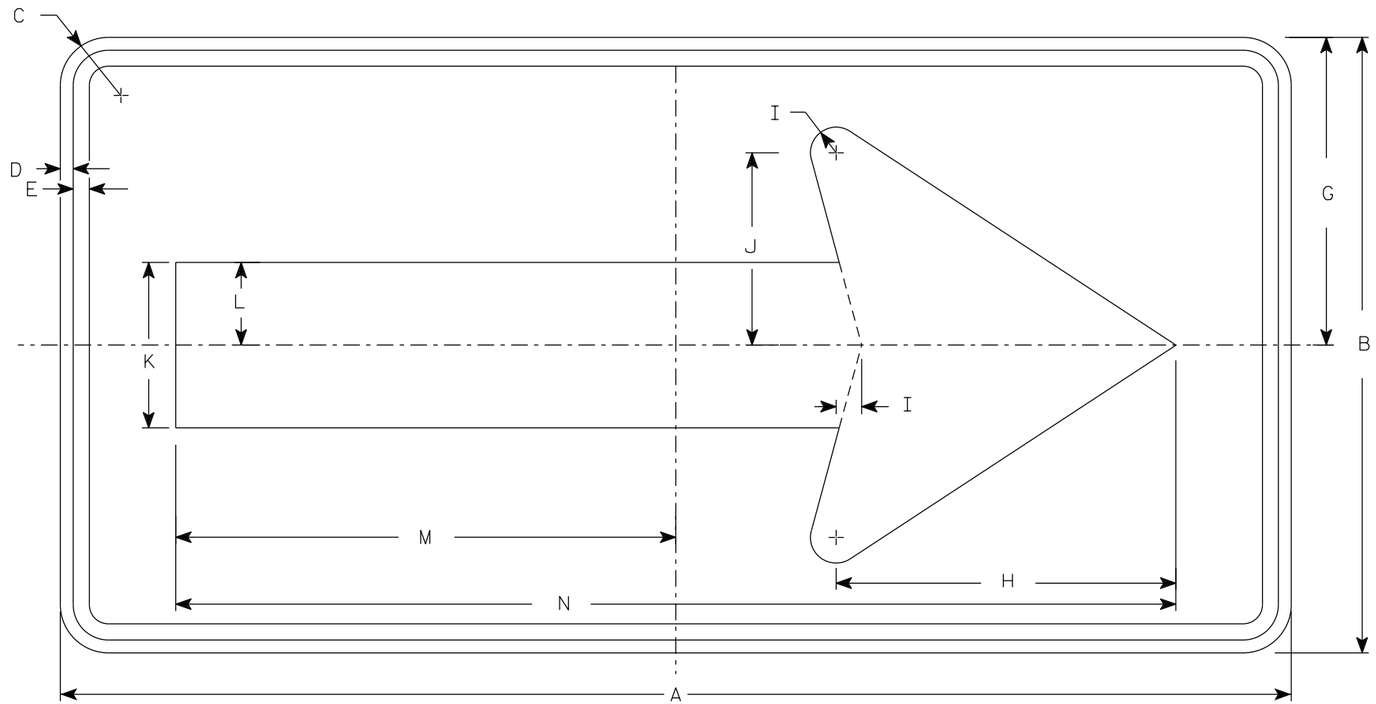
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014B.dgn PLOT DATE : 29-JAN 2024 3:41 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



WO1-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

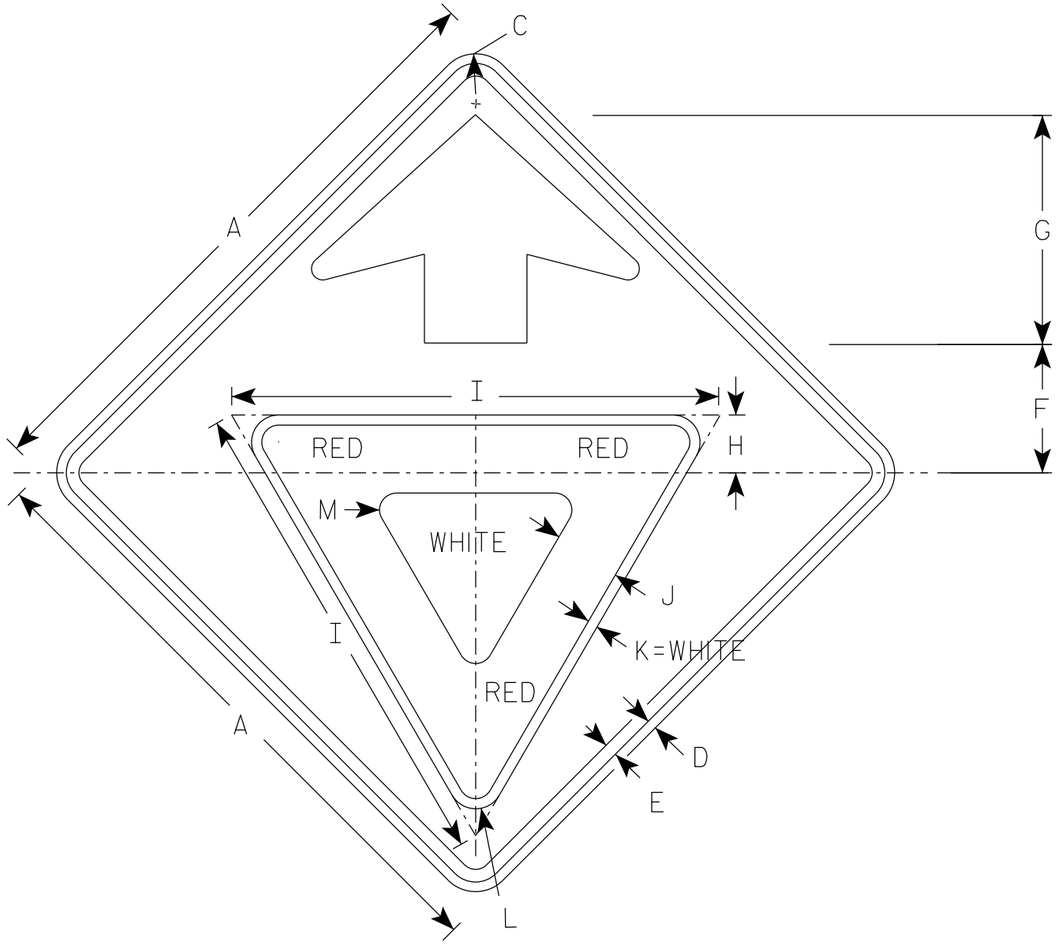
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

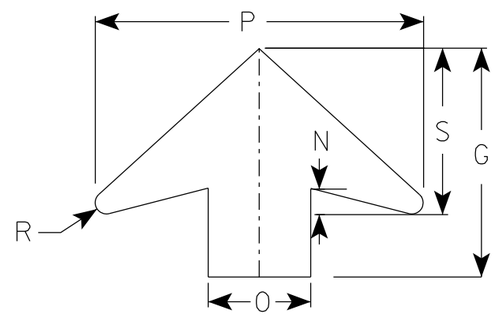
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W03-2

NOTES

1. All Signs Type II - Type F Reflective
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2S	48		3	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
2M	48		3	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
3	48		3	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
4	48		3	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		3	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W03-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

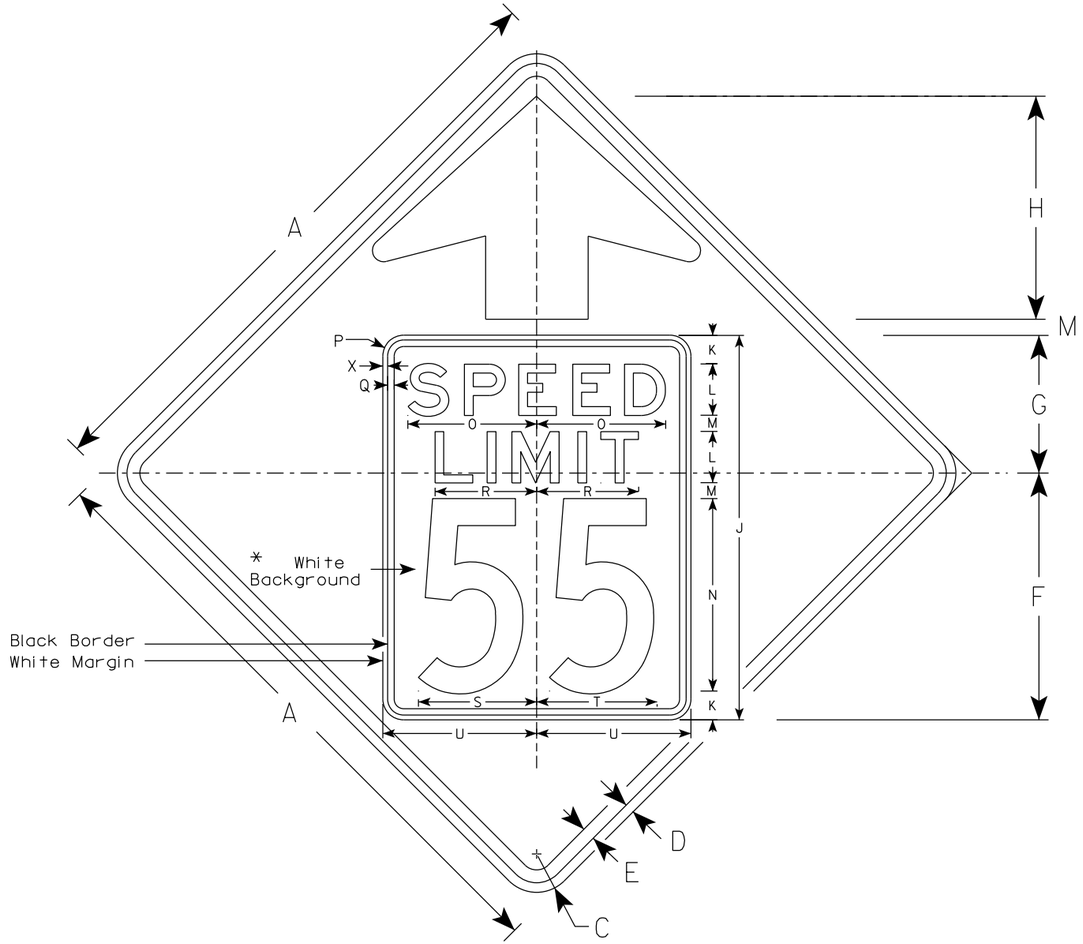
DATE 1/24/2024 PLATE NO. W03-2.2

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W032.DGN PLOT DATE : 24-JAN 2024 1:55 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

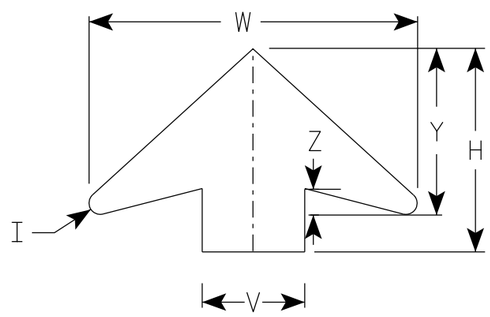


W03-5

NOTES

1. Sign is Type II - Type F Reflective
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		3	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W03-5.2

PROJECT NO:

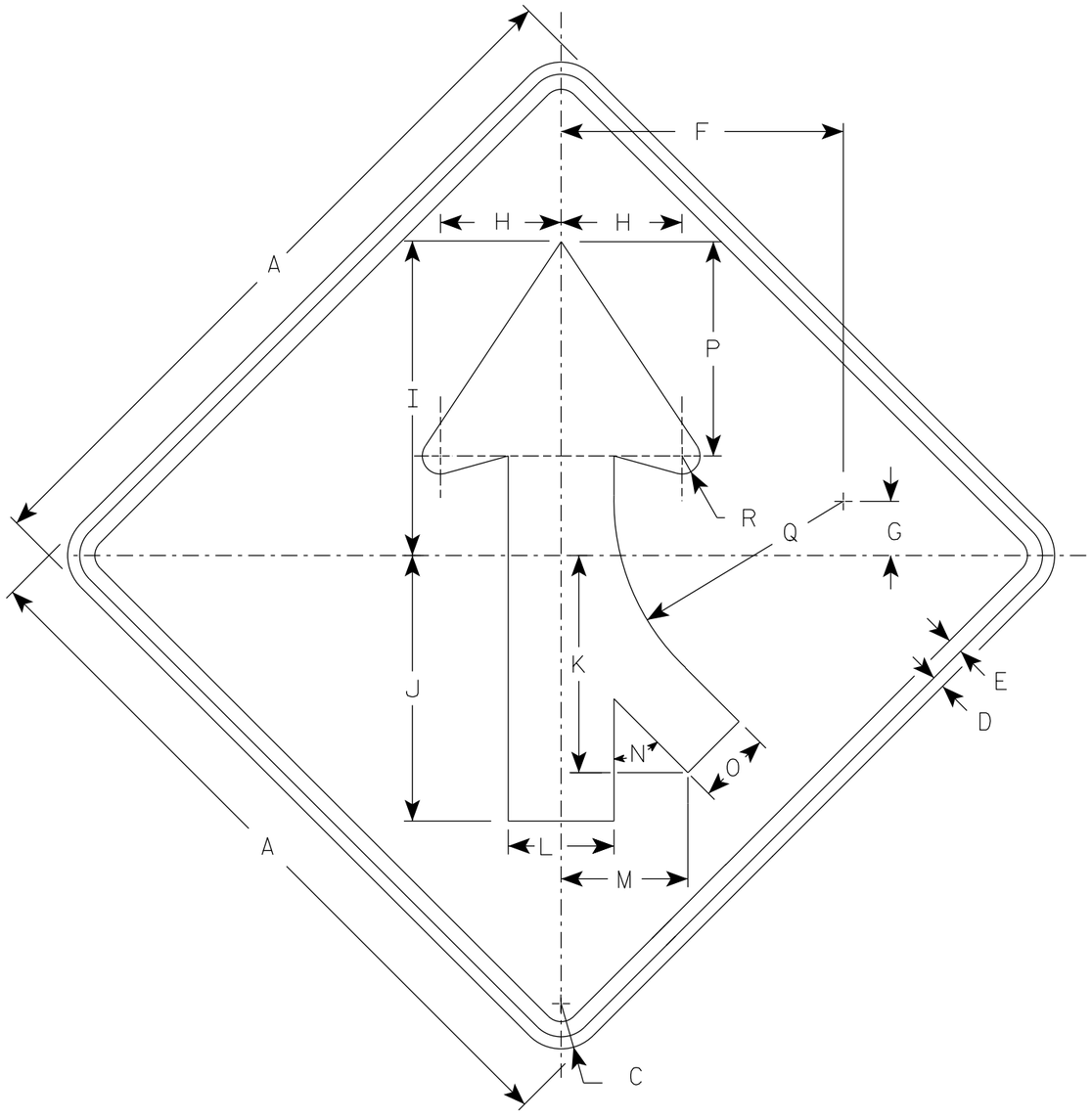
SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 24-JAN 2024 2:20 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7



W04-1R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-1L is the same as W04-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		3	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-1.3

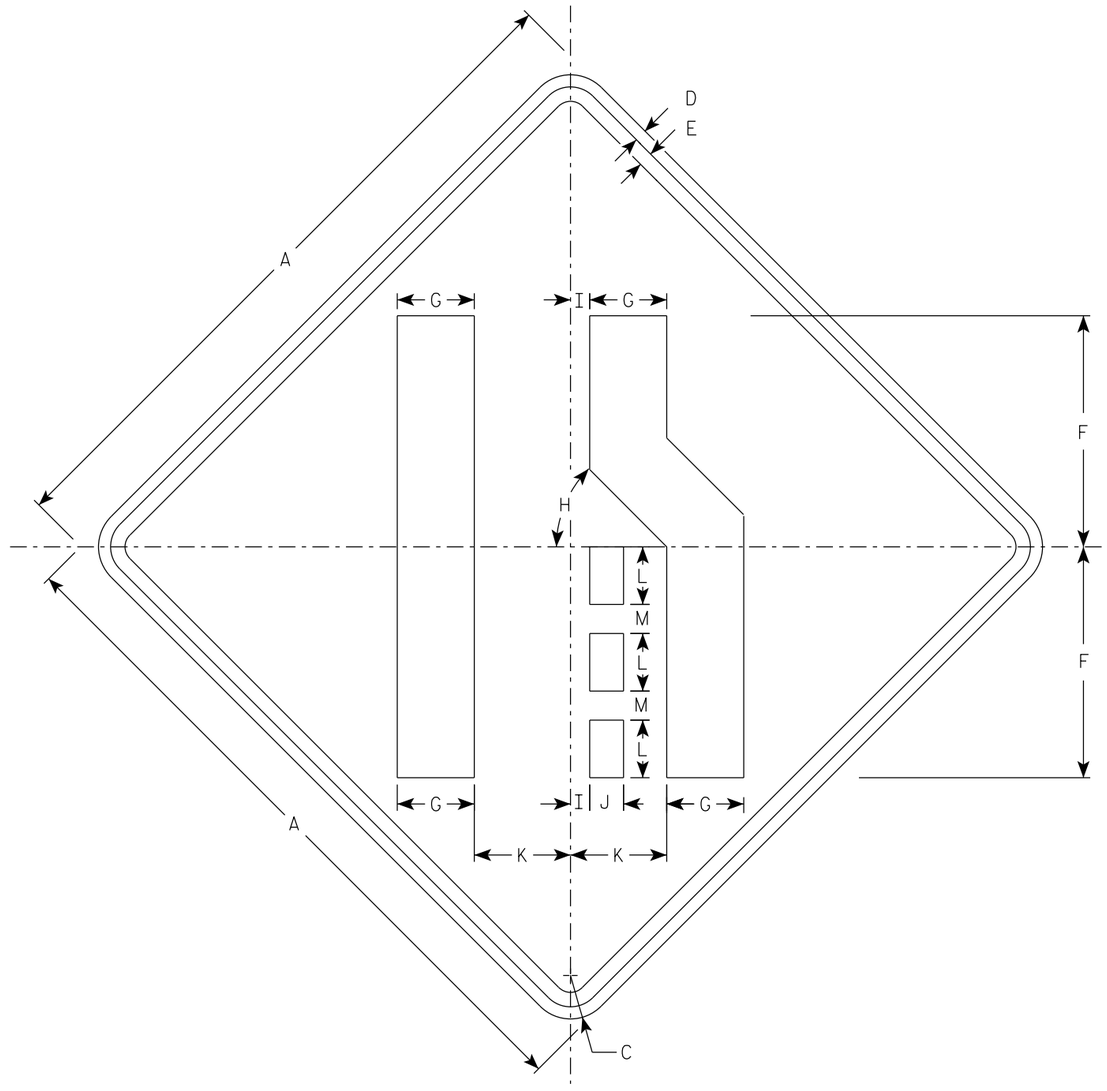
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 563 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W041.dgn PLOT DATE : 25-JAN 2024 8:20 PLOT BY : dotc4c PLOT NAME : PLOT SCALE :

WISDOT/CADDS SHEET 42

7

7



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

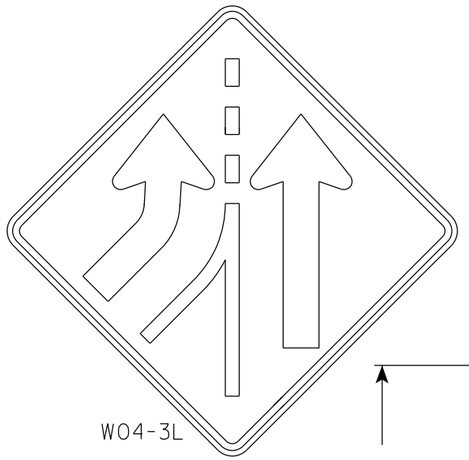
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

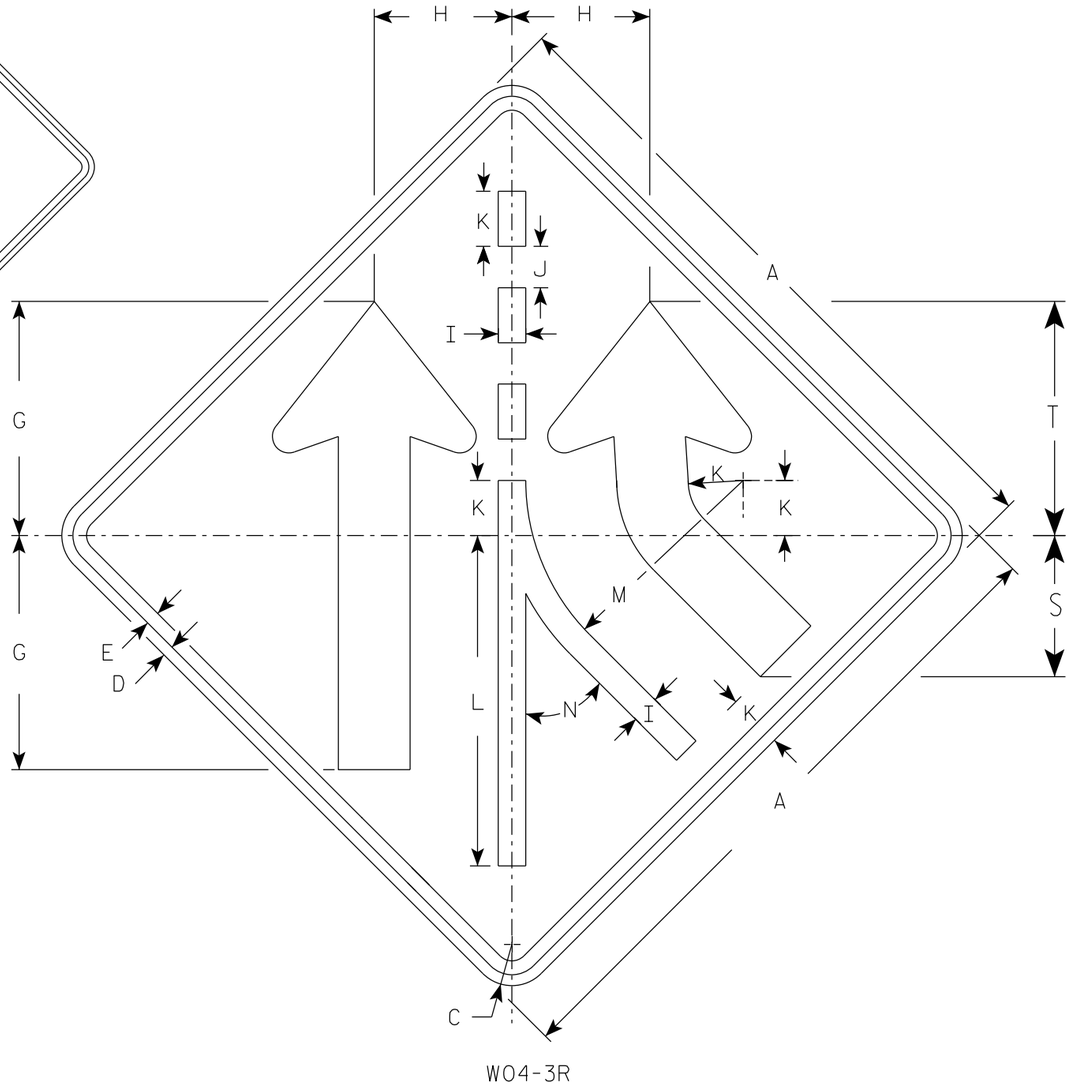
DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 564 E



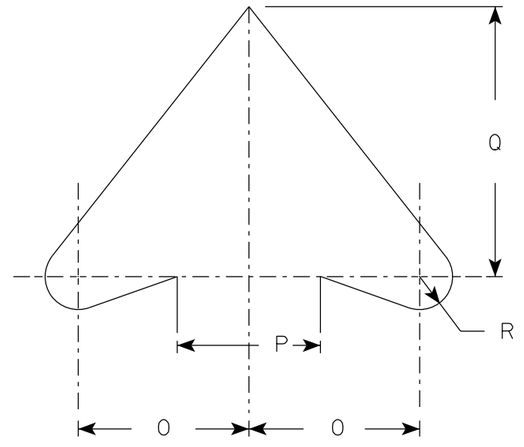
W04-3L



W04-3R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-3L is the same as W04-3R except the arrow is reversed along the vertical centerline.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2S	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
2M	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
3	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
4	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		3	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN
W04-3

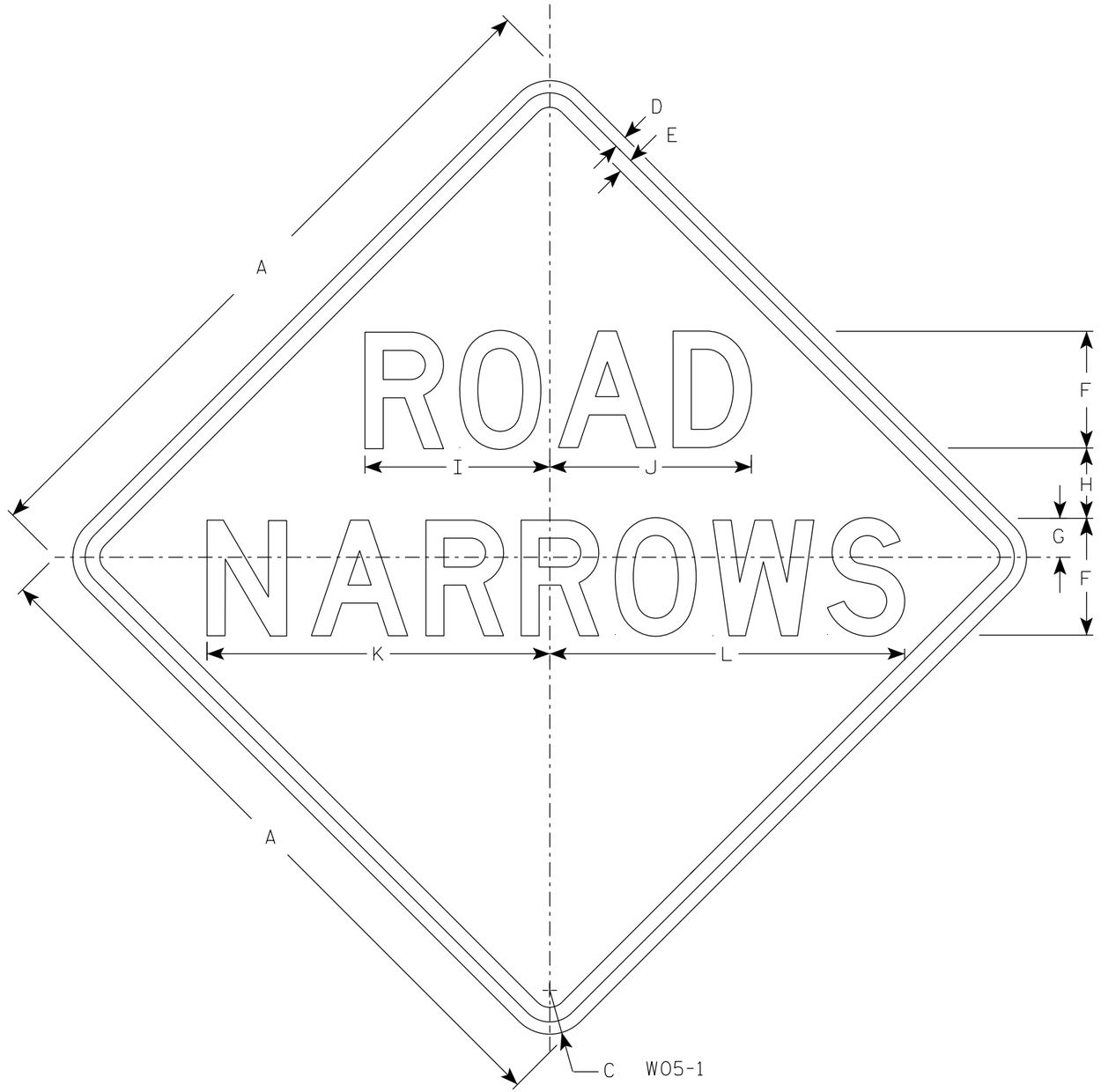
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-3.2

PROJECT NO:

SHEET NO: 565 E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	2	3 1/2	9 1/2	10 3/8	17 5/8	18 1/4															9.0
2S	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
2M	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
3	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
4	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
5	48		3	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0

STANDARD SIGN
W05-1

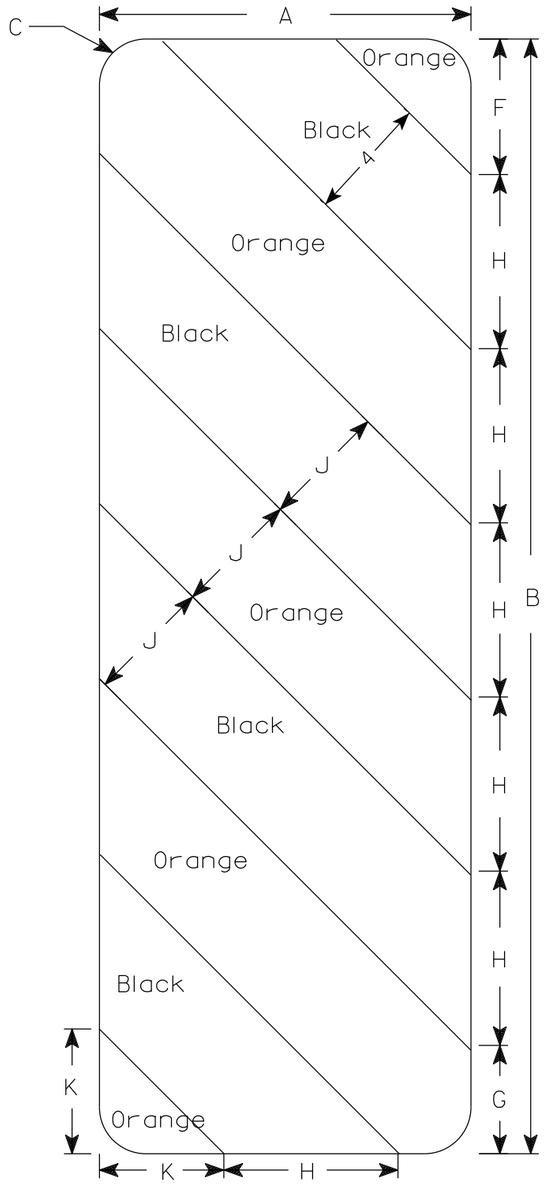
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

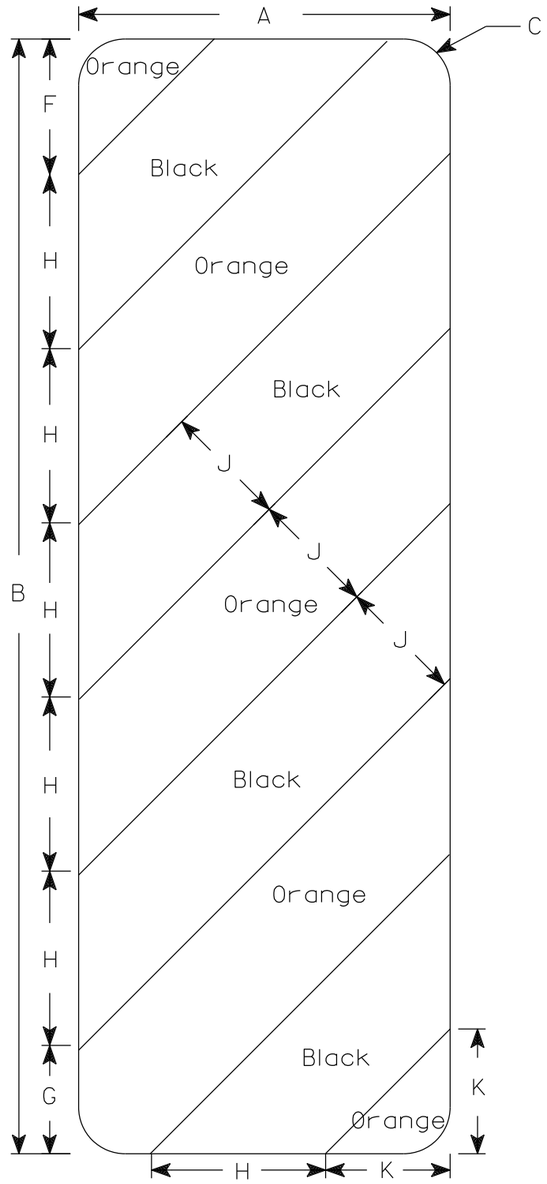
DATE 1/29/2024 PLATE NO. W05-1.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 566 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W051.dgn PLOT DATE : 29-JAN 2024 8:10 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W05-52L



W05-52R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
4. Alternate colors of stripes as shown.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36	1 1/2			4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54	1 1/2			6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

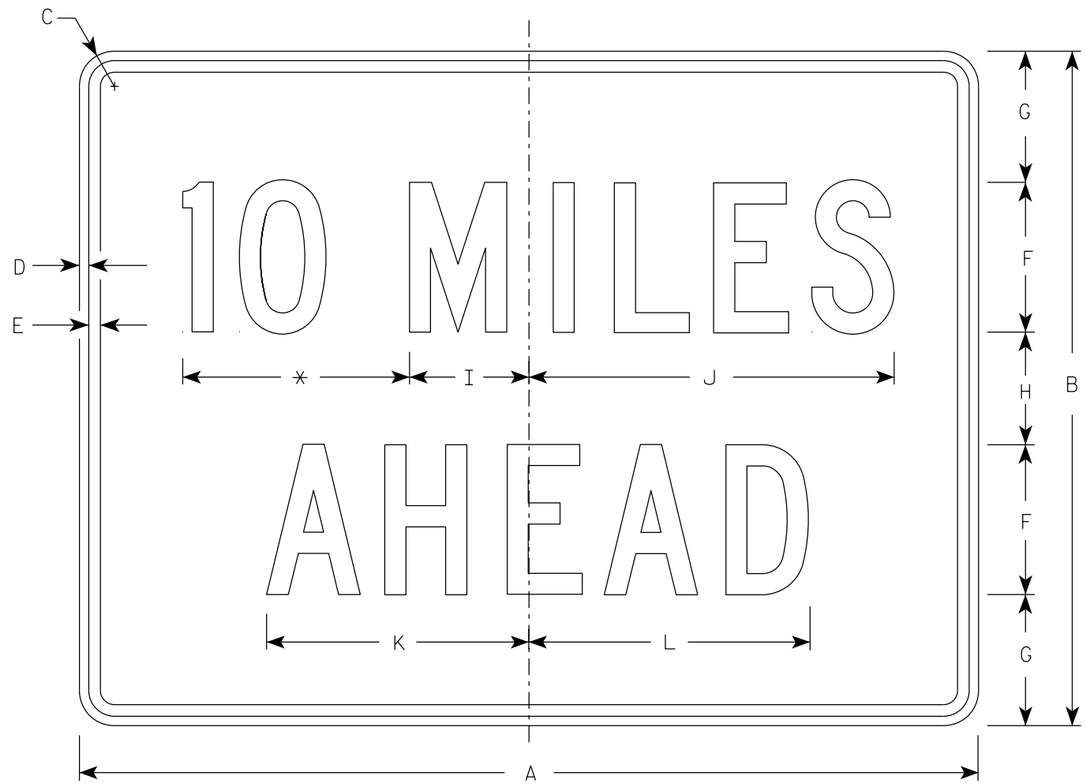
STANDARD SIGN
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

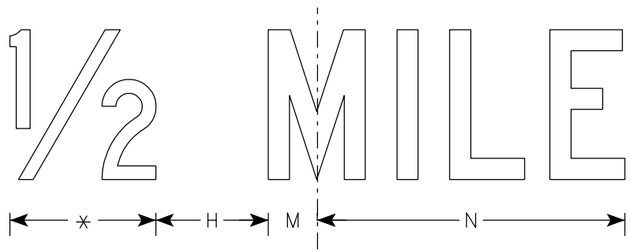
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/2024 PLATE NO. W05-52.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 567	E



W057-52



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.

* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	2 1/4	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

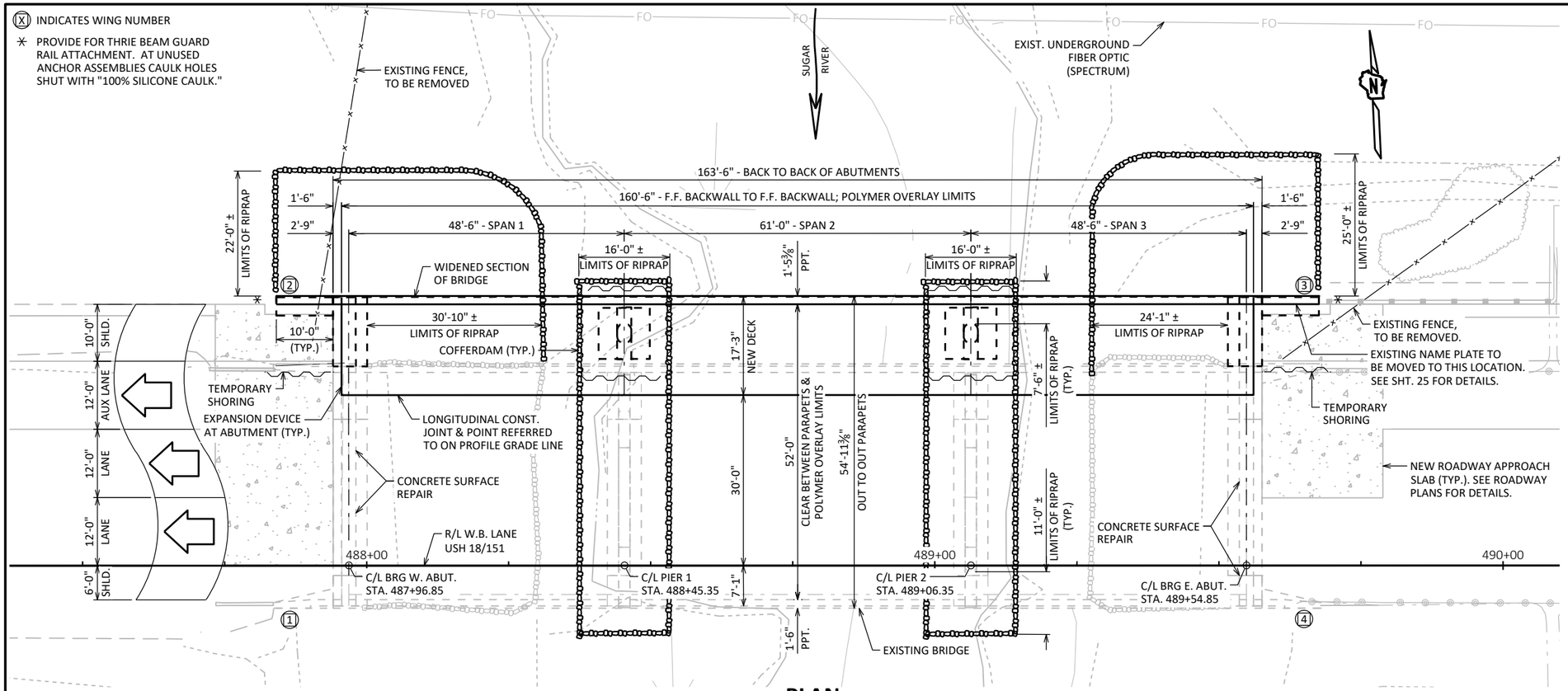
DATE 2/1/2024 PLATE NO. W057-52.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 568 E

STATE PROJECT NUMBER
1204-08-73

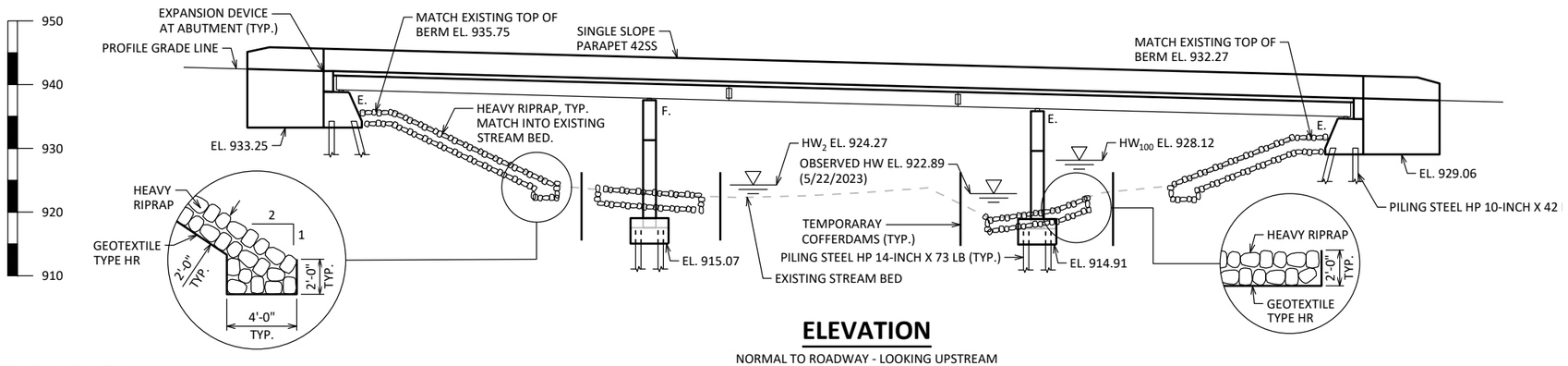
ⓧ INDICATES WING NUMBER

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK."



PLAN

(3-SPAN - W27X114 GIRDER BRIDGE WIDENING)



ELEVATION

NORMAL TO ROADWAY - LOOKING UPSTREAM
(LOOKING AT WIDENED SECTION OF BRIDGE)

LIST OF DRAWINGS:

1. GENERAL PLAN
2. CROSS SECTION & NOTES
3. QUANTITIES
4. SUBSURFACE EXPLORATION
5. CONSTRUCTION STAGING
6. WEST ABUTMENT 1
7. WEST ABUTMENT 2
8. WING 2
9. WEST ABUTMENT DETAILS
10. EAST ABUTMENT 1
11. EAST ABUTMENT 2
12. WING 3
13. EAST ABUTMENT DETAILS
14. PIERS 1 & 2
15. PIERS 1 & 2 DETAILS
16. BEARING DETAILS
17. FRAMING PLAN
18. GIRDER DETAILS
19. SUPERSTRUCTURE 1
20. SUPERSTRUCTURE 2
21. SUPERSTRUCTURE 3
22. SUPERSTRUCTURE 4
23. EXPANSION DEVICE
24. COVER PLATE DETAILS
25. SINGLE SLOPE PARAPET 42SS

SCOPE OF WORK:

1. CONCRETE SURFACE REPAIR
2. WIDEN DECK AND SUBSTRUCTURES
3. BEARING PAINTING
4. REPAIR SCOUR AT PIERS
5. PLACE OVERLAY ON DECK
6. RESEAL REMAINING EXISTING PARAPET

DESIGN DATA

LFR LIVE LOAD:

DESIGN RATING: HS-20
INVENTORY RATING: HS-21
OPERATING RATING: HS-35
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

LRFR LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: 1.18
OPERATING RATING 1.54
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

STRUCTURE IS RATED FOR A POLYMER OVERLAY OF 5 PSF.

MATERIAL PROPERTIES:

CONCRETE MASONRY
DECK WIDENING, PARAPET AND DIAPHRAGM — f'_c = 4,000 PSI
ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 — f_y = 60,000 PSI

HIGH STRENGTH STRUCTURAL STEEL
ASTM A709, GRADE 50 — f_y = 50,000 PSI

STRUCTURAL CARBON STEEL
ASTM A709, GRADE 36 — f_y = 36,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 LB PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 75-'0" LONG.

PIERS TO BE SUPPORTED ON HP14 X 73 LB PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 125 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 55-'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 PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100}= 2298 C.F.S.
V_{100}= 5.46 F.P.S.
HW_{100}= EL. 928.12
WATERWAY AREA = 371 SQ. FT.
DRAINAGE AREA = 36.2 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

Q_2= 155 C.F.S.
V_2= 1.35 F.P.S.
HW_2= EL. 924.27

TRAFFIC DATA

USH 18 WB:

ADT = 25,400 (2024)
ADT = 43,200 (2044)
R.D.S. = 70 MPH

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261

CONSULTANT
MATTHEW KRIPPNER (608) 828-8123

WISCONSIN
MATTHEW S. KRIPPNER
E-42470
VERONA
WI
PROFESSIONAL ENGINEER

11/26/2024

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/27/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-13-52

USH 18 WB OVER SUGAR RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
DANE	VERONA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
DCH	SRA	DCH	SRA

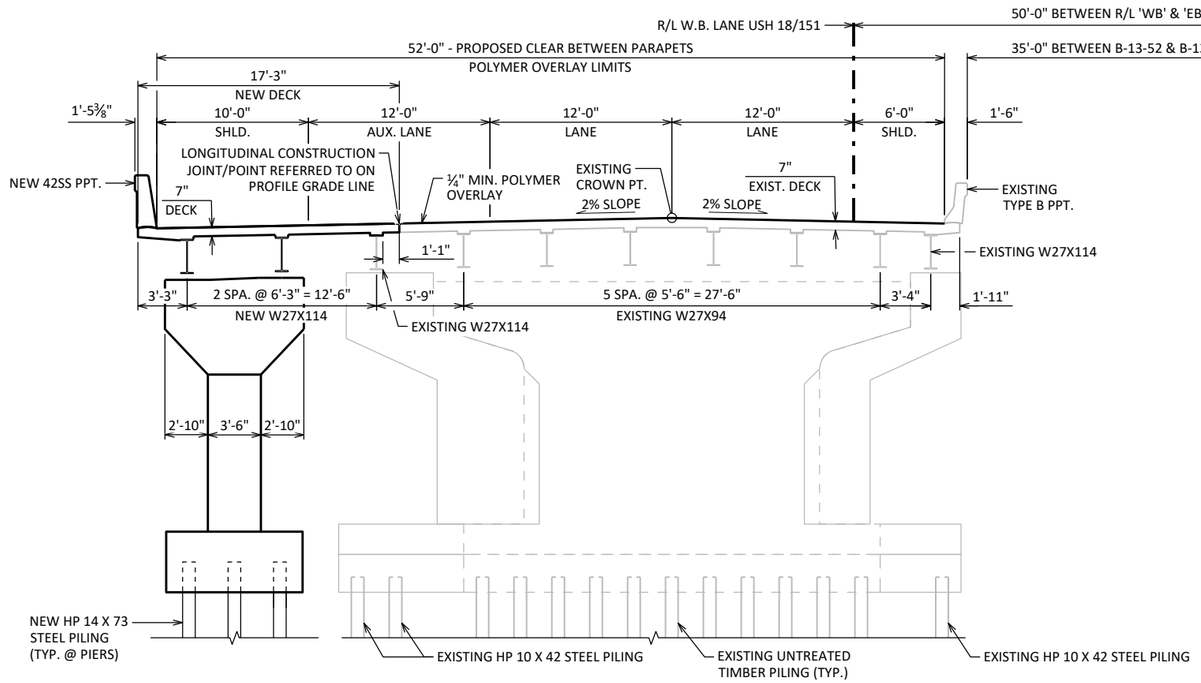
GENERAL PLAN

SHEET 1 OF 25
569

SCALE =

I.D. 1204-08-03

DATE: NOV. 2024

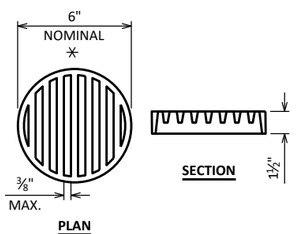


CROSS SECTION THRU ROADWAY - AT PIER

PIER 2 SHOWN - LOOKING UPSTATION

ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY 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)



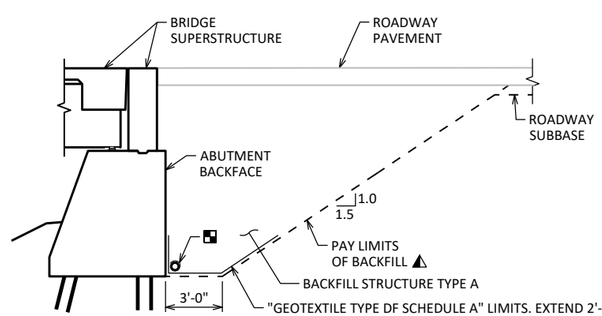
RODENT SHIELD DETAIL

⚹ 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.

PROFILE GRADE LINE



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND 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.

STATE PROJECT NUMBER

1204-08-73

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

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.

THE EXISTING STRUCTURE, B-13-52, IS A 3 SPAN STEEL GIRDER BRIDGE, 163.5-FOOT LONG AND 43-FOOT WIDE. THE SUPERSTRUCTURE AND SUBSTRUCTURE IS WIDENED BY TWO GIRDER LINES AT THE NORTH EDGE OF THE STRUCTURE.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

CLEAN STRAIGHTEN AND EXTEND EXISTING STEEL REINFORCING 24 DIAMETERS INTO NEW CONSTRUCTION, WHERE APPLICABLE.

ROUGHEN SURFACE OF CONCRETE 1/4-INCH MINIMUM DEPTH AT ALL SURFACES RECIEVING NEW CONCRETE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURE BRIDGES B-13-52" SHALL BE THE EXISTING GROUNDLINE.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE NEW PARAPETS ON BRIDGE AND WING WALLS. POLYMER OVERLAY TO BE APPLIED TO THE ENTIRE TOP OF DECK.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS AND PIERS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1, ABUTMENT DETAILS AND PIER DETAILS.

EXISTING SUBSTRUCTURE LOCATIONS ARE BASED ON AS-BUILT PLANS AND 2023 SURVEY DATA. EXISTING SUBSTRUCTURES TO REMAIN IN PLACE AND INCORPORATED INTO NEW CONSTRUCTION AS SHOWN IN THE PLANS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. BACKFILL PLACE BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

PROFILE GRADE LINE DETERMINED BY 2023 EXISTING DECK SURVEY ALONG PROPOSED CONSTRUCTION JOINT. CONTRACTOR TO MATCH DECK WIDENING INTO EXISTING DECK.

VARIATIONS TO THE NEW GRADE LINE OVER ¼" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR CONSIDERED ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" SAW CUT.

SHOT BLASTING, DECK SURFACE PREPARATIONS, AND TRANSITIONAL AREAS ARE INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING GIRDER AND SHEAR CONNECTORS.

THE COLOR OF THE FINISH EPOXY TOP COAT SHALL BE BROWN. (FEDERAL STANDARD AMS COLOR NO. 20059) OR SIMILAR COLOR APPROVED BY THE ENGINEER.

ALL THE FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER ASTM F3125 GRADE A325 FRICTION TYPE HIGH STRENGTH BOLTS UNLESS OTHERWISE SHOWN OR NOTED.

ALL STRUCTURAL STEEL FOR GIRDERS AND SPLICE PLATES SHALL BE HIGH-STRENGTH STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A709 GRADE 50. ALL OTHER STRUCTURAL STEEL SHALL BE STRUCTURAL CARBON STEEL, A.S.T.M. A709 GRADE 36.

THE MINIMUM CONCRETE HAUNCH SHALL BE 2" FOR DESIGN CALCULATIONS AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE DEPTH OF 2¼" WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE, SHALL BE PAID FOR IN THE BID ITEM "EXPANSION DEVICE". REMOVE EXISTING EXPANSION JOINT FOR WIDENING TO THE PROPOSED DECK CONSTRUCTION JOINT. EXISTING EXPANSION JOINT TO BE PEN WELDED TO NEW EXPANSION JOINT. SEE SHEET 23 FOR DETAILS.

CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR EXISTING DECK OVERHANG DURING CONSTRUCTION. ALL RELATED DESIGNING, CONSTRUCTING, MAINTAINING AND REMOVING OF TEMPORARY SUPPORT SHALL BE INCLUDED IN "TEMPORARY SUPPORT B-13-0052".

"CONCRETE SURFACE REPAIR" AT ABUTMENTS IS ESTIMATED TO BE 15 S.F. "CONCRETE SURFACE REPAIR" AREAS SHOWN IN THE QUANTITIES TABLE ARE BASED ON THE FIELD INSPECTION AND ARE APPROXIMATE. EXACT AREAS OF REPAIR SHALL BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER.

"PIGMENTED SURFACE SEALER RESEAL" SHALL BE APPLIED TO THE TOP AND INSIDE SURFACES OF THE EXISTING PARAPETS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DCH | PLANS CK'D SRA

CROSS SECTION & NOTES

SHEET 2 OF 25
570

SCALE =

8

8

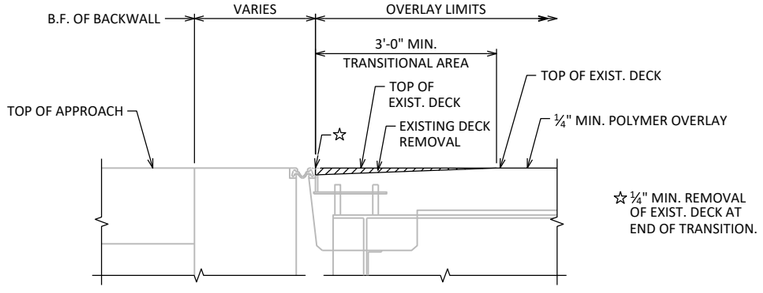
STATE PROJECT NUMBER

1204-08-73

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEM	UNIT	WEST ABUTMENT	PIER 1	PIER 2	EAST ABUTMENT	SUPER.	TOTALS
	203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-13-0052	EACH	———	———	———	———	———	1
	206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-13-0052	EACH	———	———	———	———	———	1
	206.5001	COFFERDAMS B-13-0052	EACH	———	———	———	———	———	1
	210.1500	BACKFILL STRUCTURE TYPE A	TON	64	117	117	65	———	363
	502.0100	CONCRETE MASONRY BRIDGES	CY	25	20	20	25	89	178
	502.1100	CONCRETE MASONRY SEAL	CY	———	25	25	———	———	50
	502.3101	EXPANSION DEVICE	LF	18	———	———	18	———	36
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	———	———	———	310	310
	502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	5	———	———	5	64	74
	502.3210	PIGMENTED SURFACE SEALER	SY	6	———	———	6	79	91
	502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	———	———	———	———	———	8
	502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	———	———	———	———	———	12
	502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	———	———	———	———	———	28
	505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	850	835	835	850	———	3,370
	505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,100	1,895	1,895	1,090	25,210	31,190
	506.0105	STRUCTURAL STEEL CARBON	LB	———	———	———	———	5,670	5,670
	506.0605	STRUCTURAL STEEL HS	LB	———	———	———	———	37,520	37,520
	506.3015	WELDED STUD SHEAR CONNECTORS 7/8X6-INCH	EACH	———	———	———	———	———	1,422
	506.5000	BEARING ASSEMBLIES FIXED B-13-0052	EACH	———	———	———	———	———	2
	506.6000	BEARING ASSEMBLIES EXPANSION B-13-0052	EACH	———	———	———	———	———	6
	509.1500	CONCRETE SURFACE REPAIR	SF	7	———	———	———	———	7
	509.5100.S	POLYMER OVERLAY	SY	———	———	———	———	930	930
	511.1200	TEMPORARY SHORING B-13-0052	SF	117	———	———	117	———	234
	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	5	———	———	5	———	10
	517.0601	PAINTING EPOXY SYSTEM B-13-0052	EACH	———	———	———	———	———	1
	517.0901.S.001	PREPARATIONS AND COATING OF TOP FLANGES B-13-0052	EACH	———	———	———	———	———	1
	550.1100	PILING STEEL HP 10-INCH X42 LB	LF	450	———	———	450	———	900
	550.1140	PILING STEEL HP 14-INCH X73 LB	LF	———	495	495	———	———	990
	606.0300	RIPRAP HEAVY	CY	110	80	90	110	———	390
	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	29	———	———	29	———	58
	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	———	———	———	———	2
	645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	9	———	———	9	———	18
	645.0120	GEOTEXTILE TYPE HR	SY	170	130	130	160	———	590
⚹	SPV.0060.502	CLEANING AND PAINTING BEARINGS	EACH	———	———	———	———	———	12
	SPV.0060.503	TEMPORARY SUPPORT B-13-0052	EACH	———	———	———	———	———	1
	SPV.0090.501	STRIP SEAL GLAND REPLACEMENT	LF	35	———	———	35	———	70
		NON-BID ITEMS							
		FILLER	SIZE	———	———	———	———	———	1/2"

⚹ CLEAN AND PAINT GIRDER BEARINGS AT ABUTMENTS AND PIERS AS DIRECTED BY FIELD ENGINEER.



SECTION THRU ABUTMENT TRANSITIONAL AREA ON DECK AT EXPANSION JOINT

(REMOVAL AND OVERLAY THICKNESS NOT TO SCALE)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DCH | PLANS CK'D SRA

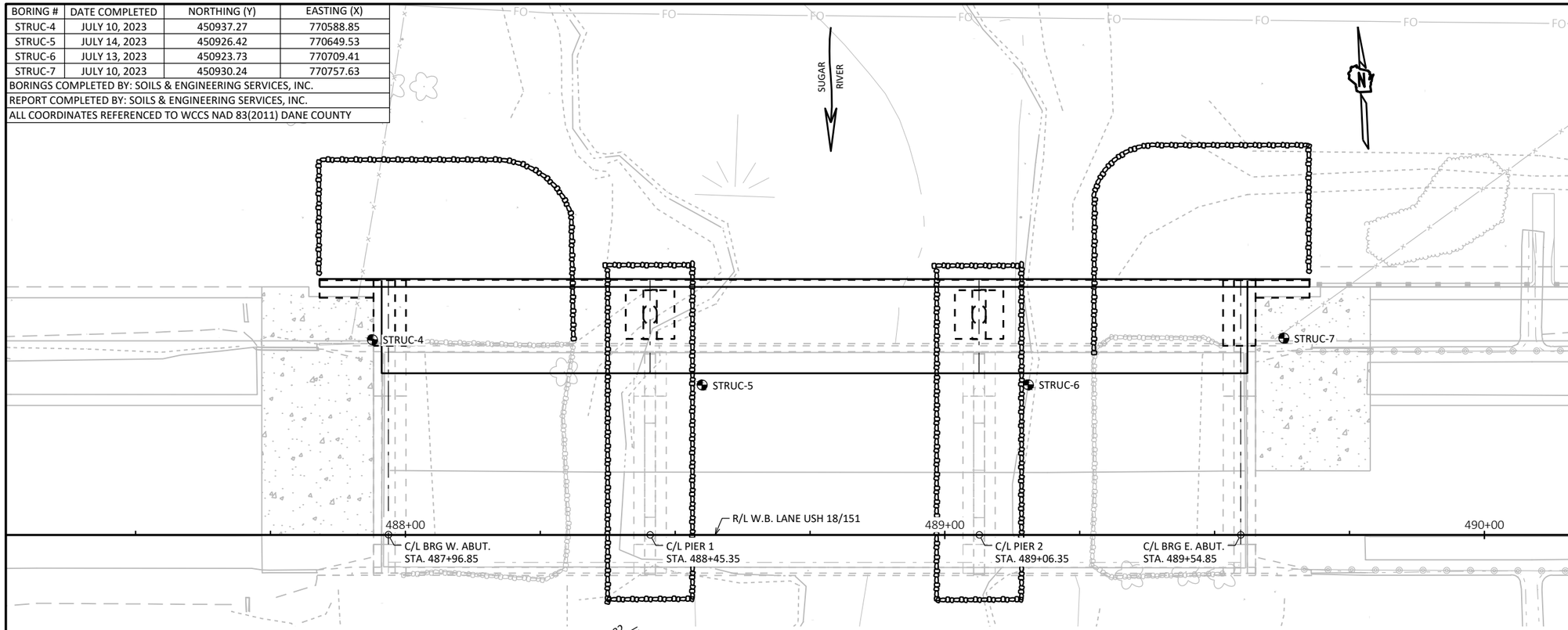
QUANTITIES

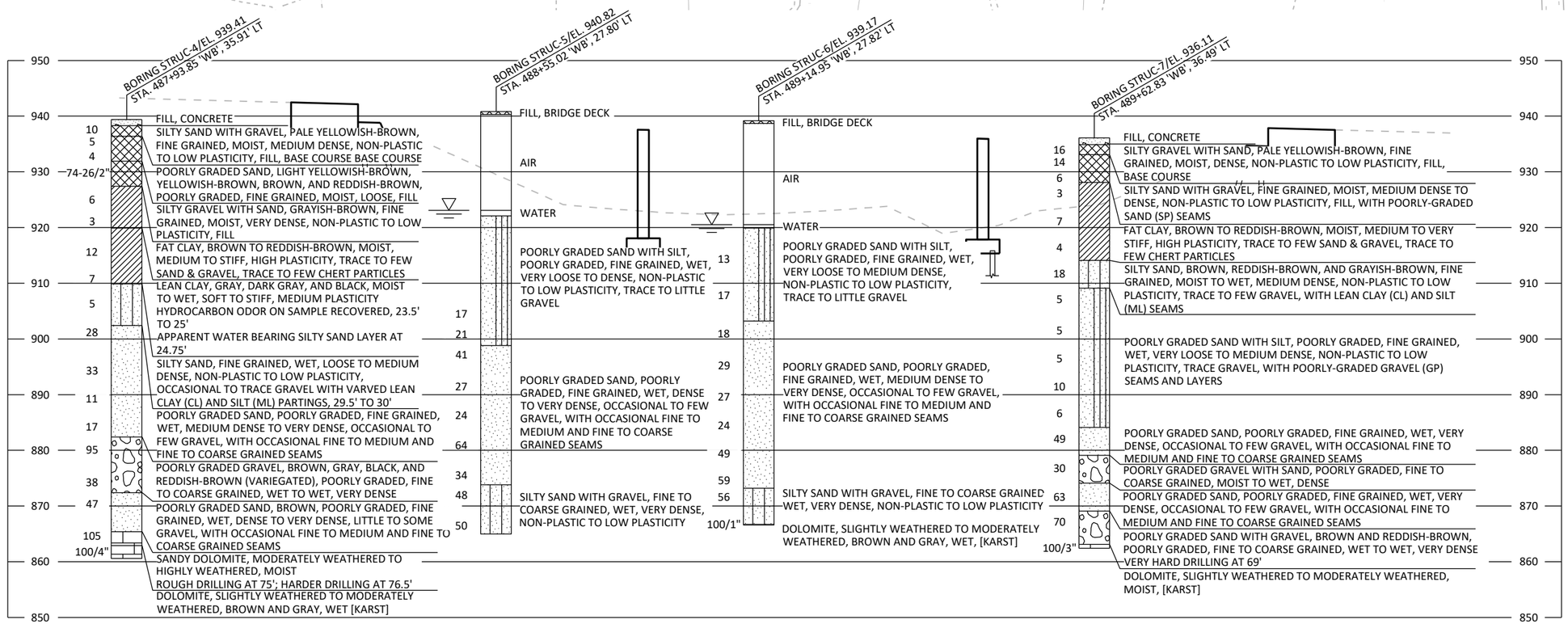
SHEET 3 OF 25

571

SCALE =

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
STRUC-4	JULY 10, 2023	450937.27	770588.85
STRUC-5	JULY 14, 2023	450926.42	770649.53
STRUC-6	JULY 13, 2023	450923.73	770709.41
STRUC-7	JULY 10, 2023	450930.24	770757.63
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(2011) DANE COUNTY			





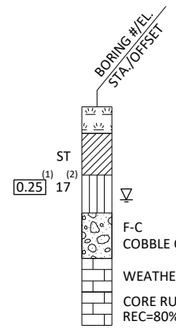
STATE PROJECT NUMBER

1204-08-73

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

STRUCTURE B-13-52

DRAWN BY DCH · PLANS CK'D SRA

SUBSURFACE EXPLORATION

SHEET 4 OF 25
572

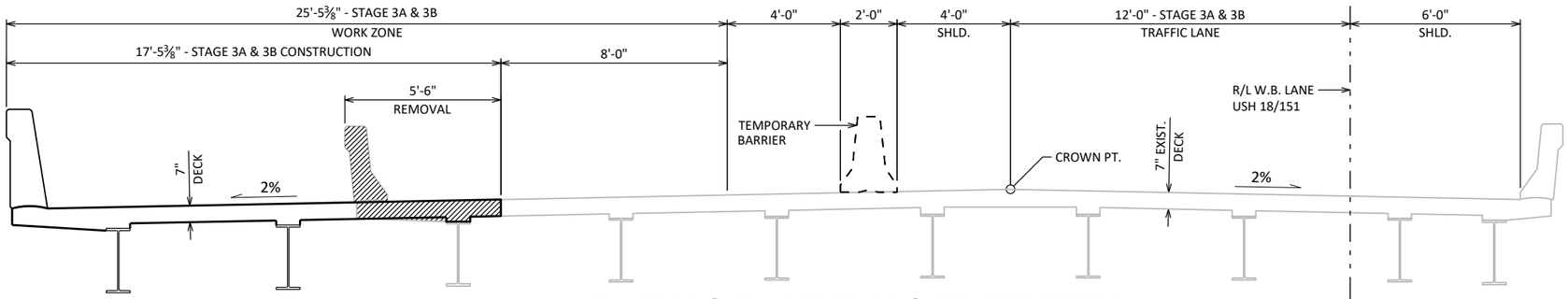
SCALE =

8

8

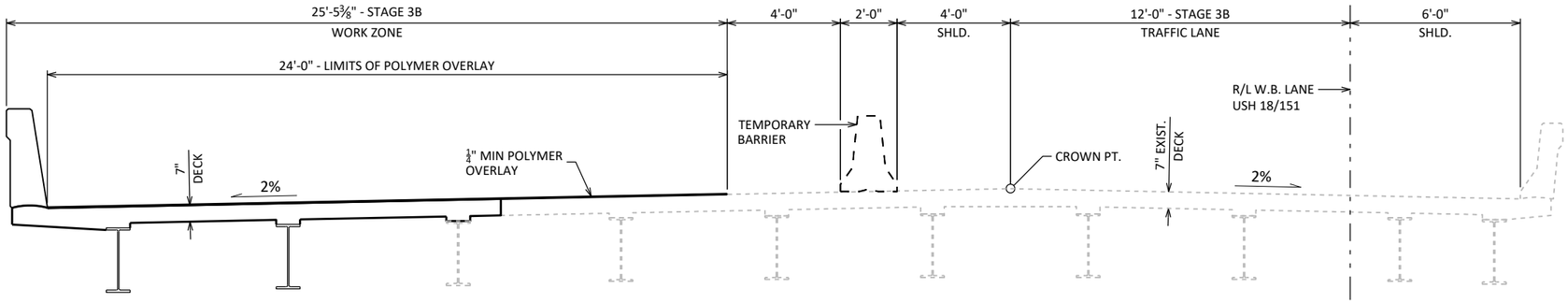
STATE PROJECT NUMBER

1204-08-73



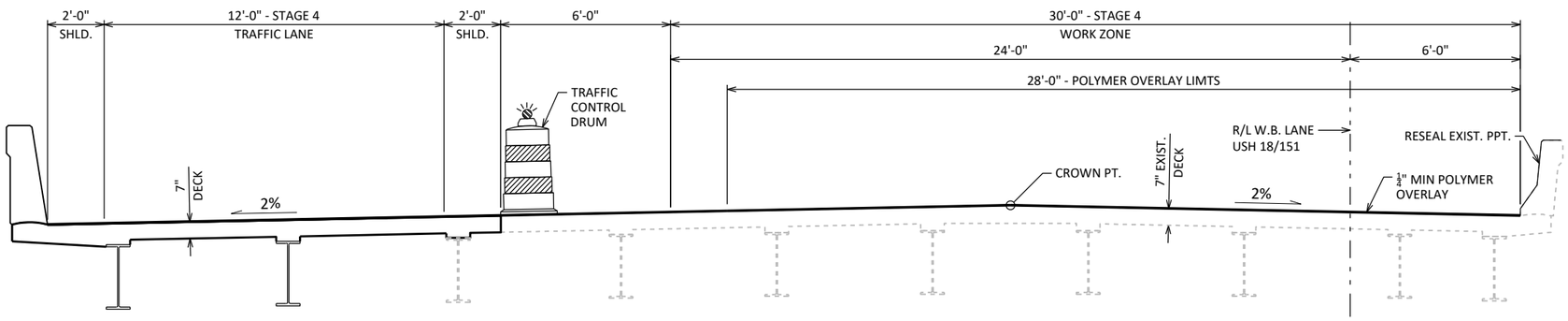
STAGE 3A & 3B - REMOVAL & CONSTRUCTION

(LOOKING UPSTATION)



STAGE 3B - POLYMER OVERLAY

(LOOKING UPSTATION)



STAGE 4 - POLYMER OVERLAY

(LOOKING UPSTATION)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY MAG | PLANS CK'D SRA

CONSTRUCTION STAGING

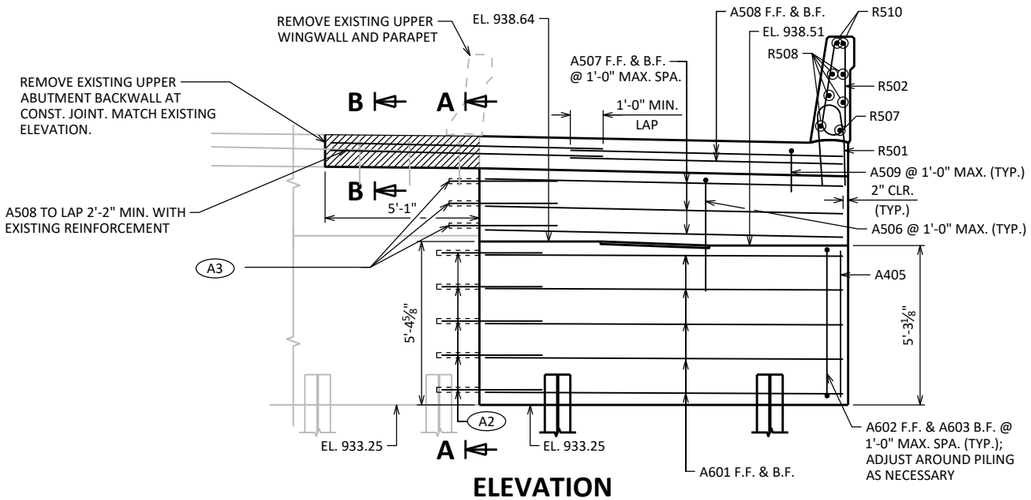
SHEET 5 OF 25

573

SCALE =

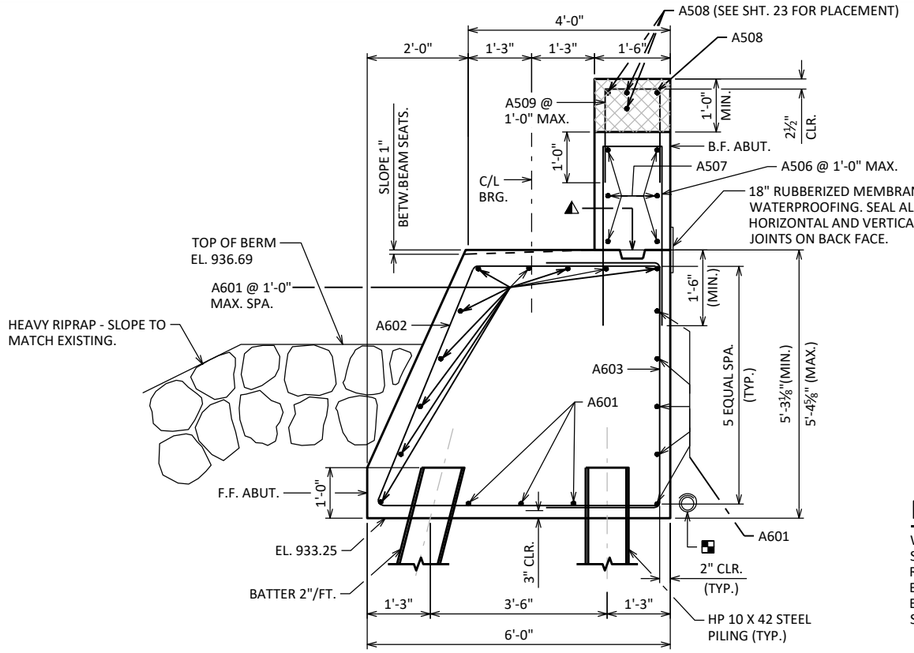
STATE PROJECT NUMBER

1204-08-73



ELEVATION

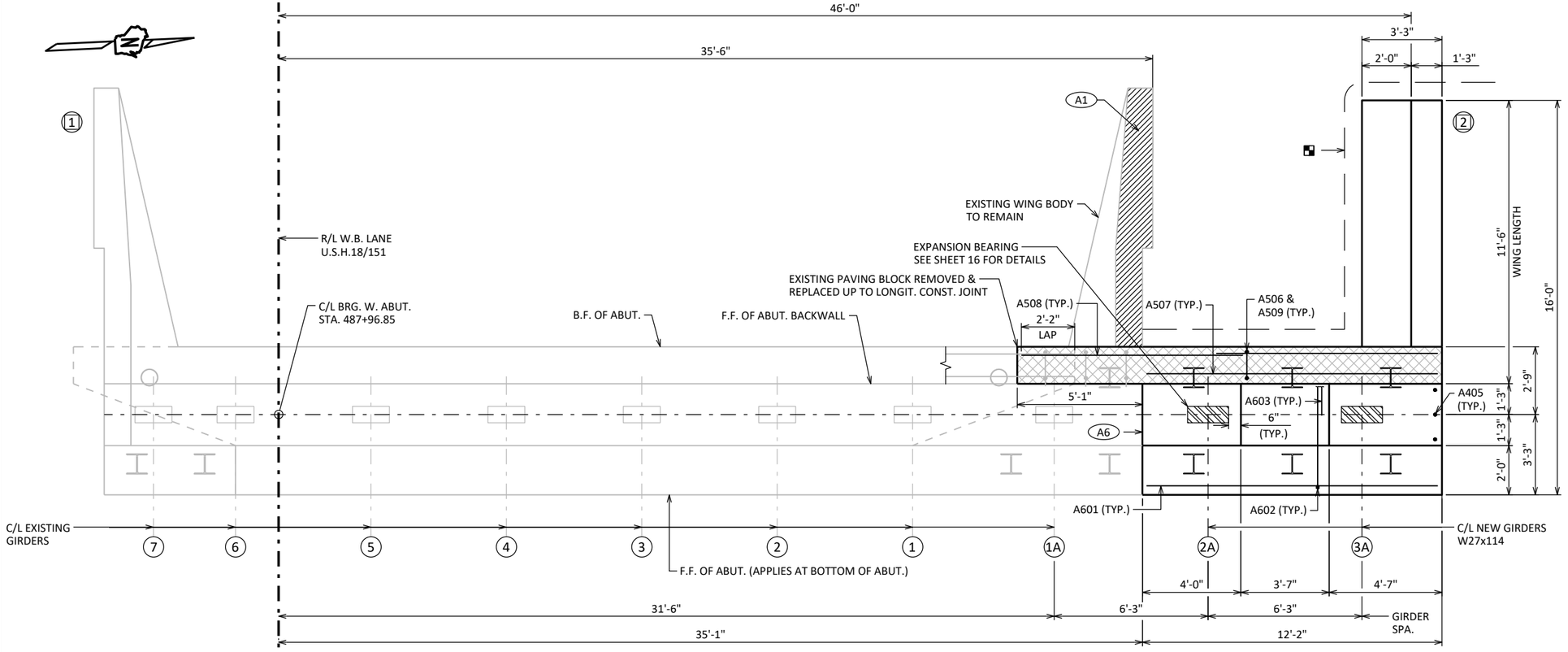
(LOOKING WEST)



SECTION THRU ABUT. BODY

PILE NOTE

WEST ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10 X 42 WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 75' LONG. FOR PILE LAYOUT AND PILE SPLICE DETAILS, SEE SHEET 7.



PLAN

LEGEND

- REMOVAL LIMITS.
- (X) INDICATES WING NUMBER.
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE (SHOWN IN GREY ON SHEET FOR CLARITY).
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A1) REMOVE EXISTING WING AND WING PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.
- (A2) ADHESIVE ANCHORS A604 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.
- (A3) ADHESIVE ANCHORS A510 BAR. EMBED 1'-0" IN EXISTING ABUTMENT.
- (A6) ROUGHEN SURFACE OF CONCRETE ¼" DEEP MINIMUM AT ALL AREAS WHERE NEW CONCRETE CONTACTS EXISTING CONCRETE.
- KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6".

FOR ADHESIVE ANCHOR LAYOUT DETAILS, SEE SHEET 07.

SEE SHEET 7 FOR SECTIONS A-A & B-B.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

WEST ABUTMENT 1

SHEET 6 OF 25

574

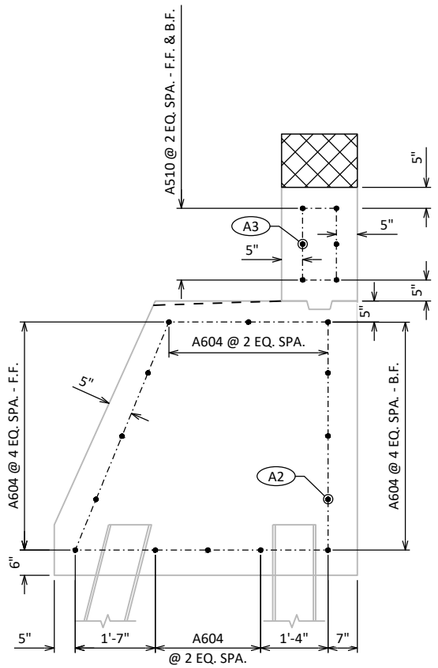
SCALE =

8

8

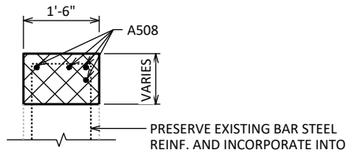
STATE PROJECT NUMBER

1204-08-73

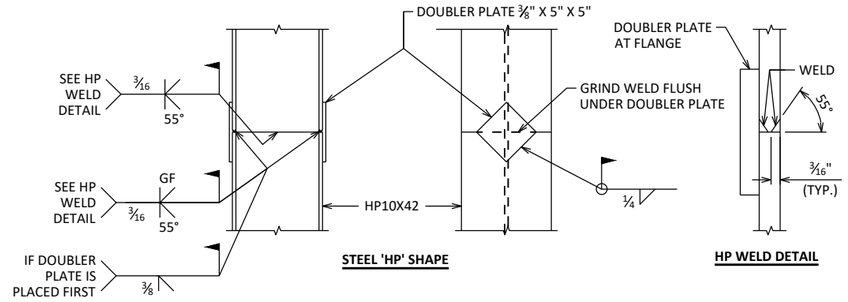


SECTION A-A

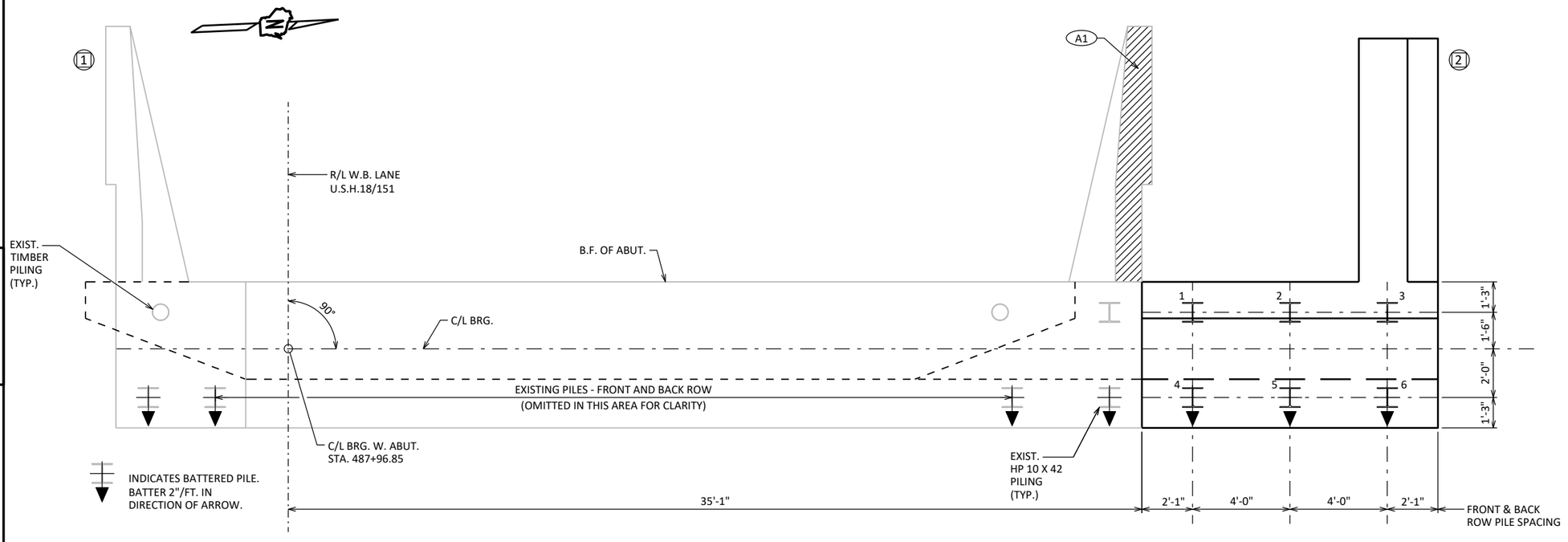
ADHESIVE ANCHOR LAYOUT



SECTION B-B



'HP' PILE DETAILS



PILE PLAN

LEGEND

- REMOVAL LIMITS.
- (X) INDICATES WING NUMBER.
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.
- (A1) REMOVE EXISTING WING AND WING PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.
- (A2) ADHESIVE ANCHORS A604 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.
- (A3) ADHESIVE ANCHORS A510 BAR. EMBED 1'-0" IN EXISTING ABUTMENT.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

WEST ABUTMENT 2

SHEET 7 OF 25

575

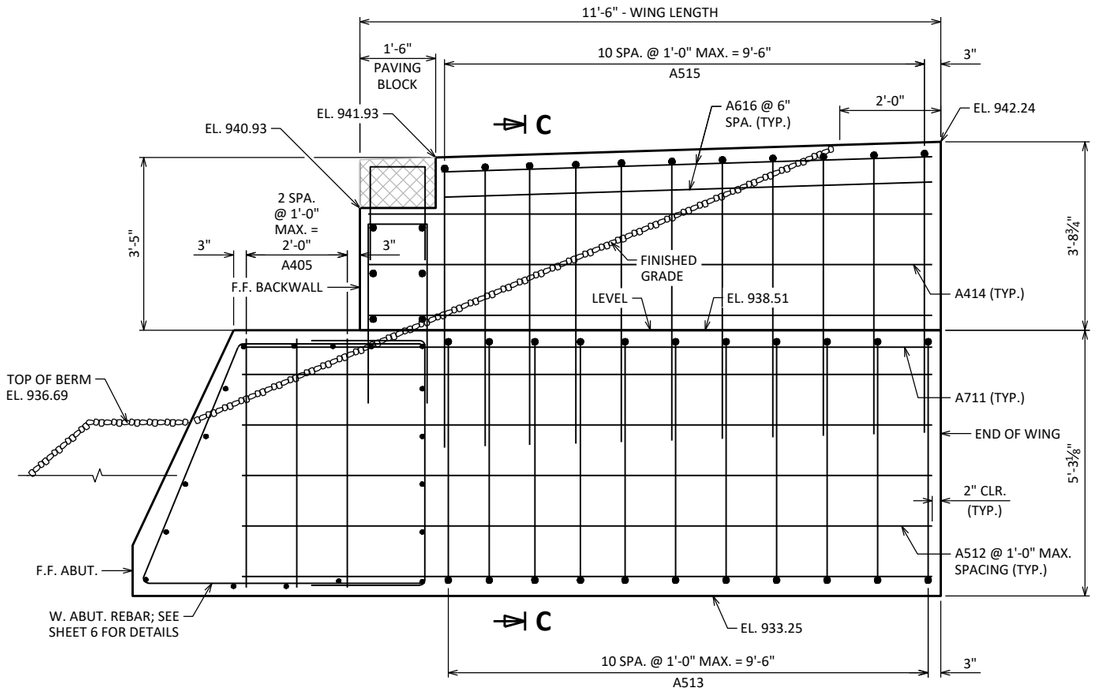
SCALE =

8

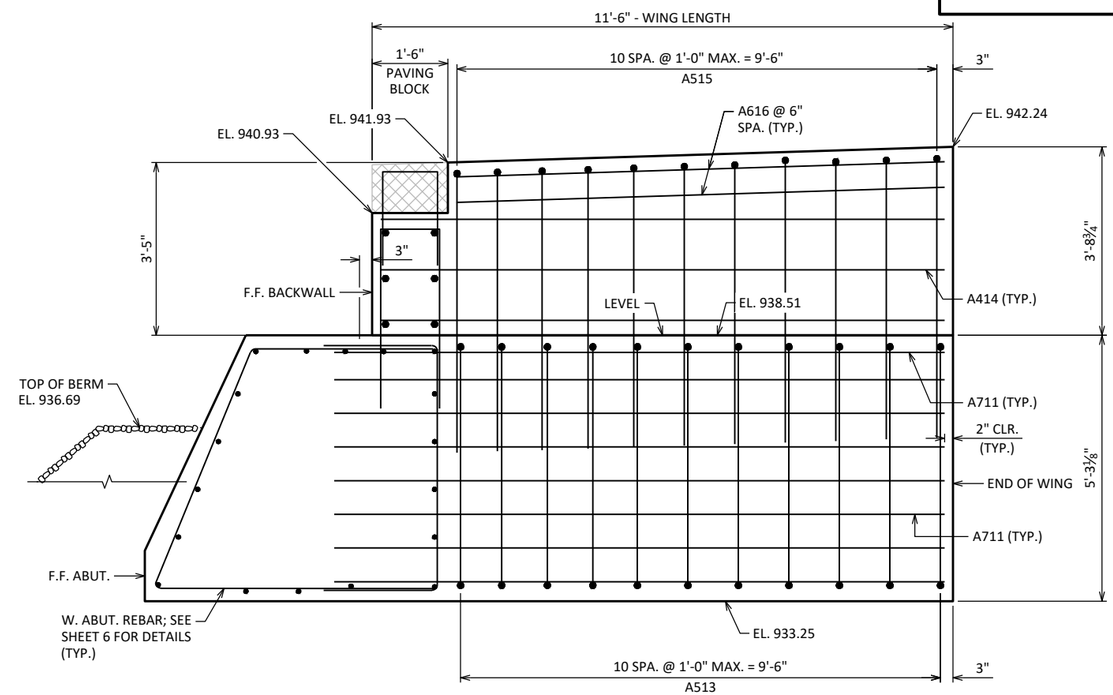
8

STATE PROJECT NUMBER

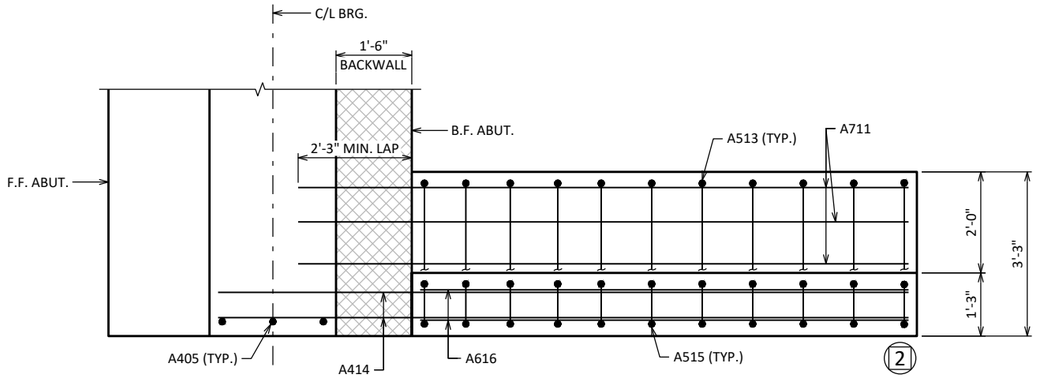
1204-08-73



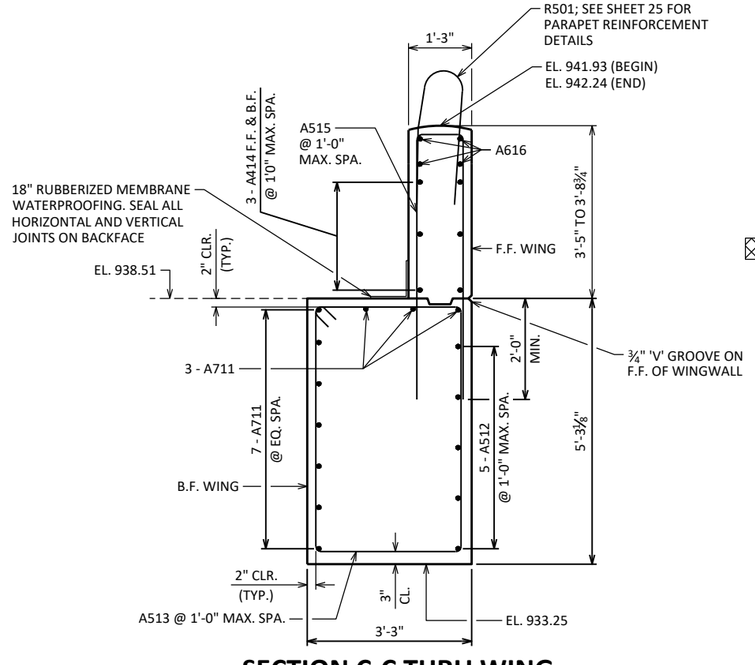
WING ELEVATION - FRONT FACE



WING ELEVATION - BACK FACE



WING PLAN



SECTION C-C THRU WING

LEGEND

INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE (SHOWN IN GREY ON SHEET FOR CLARITY).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

WING 2

SHEET 8 OF 25

576

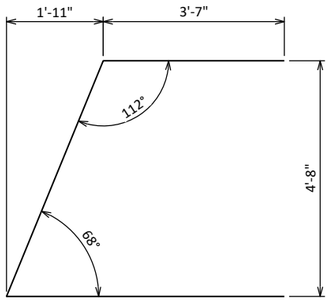
SCALE =

8

8

STATE PROJECT NUMBER

1204-08-73



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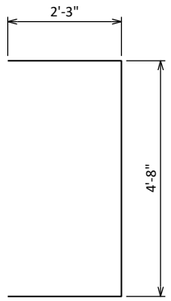

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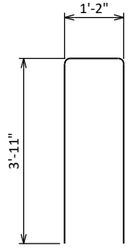

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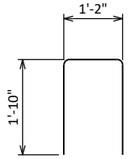

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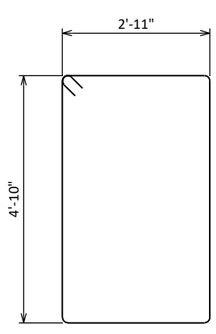

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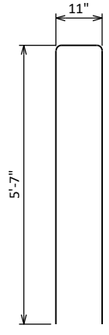


A515

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 850
A601	18	11'-10''			WEST ABUTMENT - BODY	HORIZ.
A602	13	13'-10''	X		WEST ABUTMENT - BODY F.F.	VERT.
A603	13	8'-10''	X		WEST ABUTMENT - BODY B.F.	VERT.
A604	14	3'-4''			WEST ABUTMENT ANCHORS - BODY	HORIZ.
A405	3	4'-10''			WEST ABUTMENT - BODY END	VERT.
COATED BARS						TOTAL WEIGHT = 1100
A506	13	8'-9''	X		WEST ABUTMENT - BACKWALL	VERT.
A507	6	11'-10''			WEST ABUTMENT - BACKWALL F.F. & B.F.	HORIZ.
A508	8	9'-0''			WEST ABUTMENT - BACKWALL TOP	HORIZ.
A509	13	4'-7''	X		WEST ABUTMENT - BACKWALL	VERT.
A510	6	3'-7''			WEST ABUTMENT ANCHORS - BACKWALL	HORIZ.
A711	10	12'-1''			WING 2 - BODY B.F. & TOP	HORIZ.
A512	5	13'-8''			WING 2 - BODY F.F.	HORIZ.
A513	11	16'-2''	X		WING 2 STIRRUPS - BODY	VERT.
A414	6	11'-2''			WING 2 - UPPER F.F. & B.F.	HORIZ.
A515	11	11'-10''	X		WING 2 - UPPER	VERT.
A616	4	9'-8''			WING 2 - UPPER TOP	HORIZ.

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

WEST ABUTMENT DETAILS

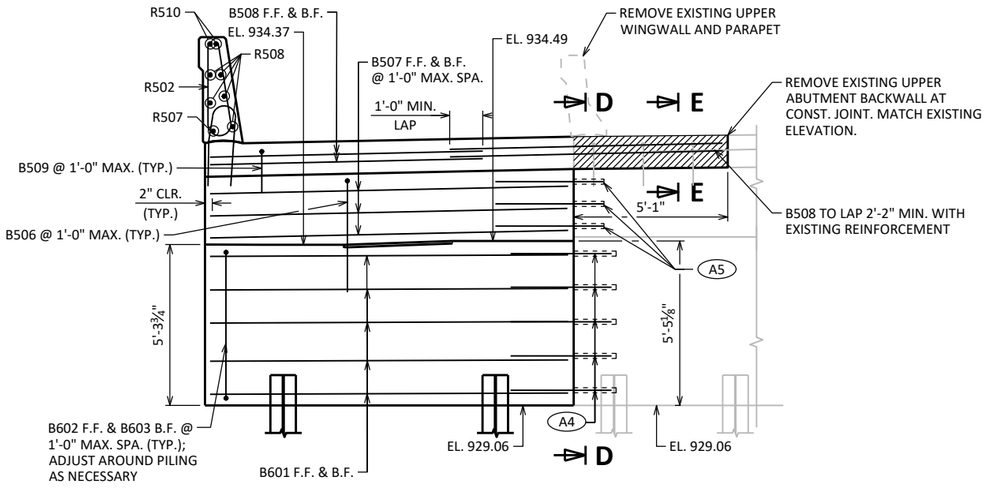
SHEET 9 OF 25

577

SCALE =

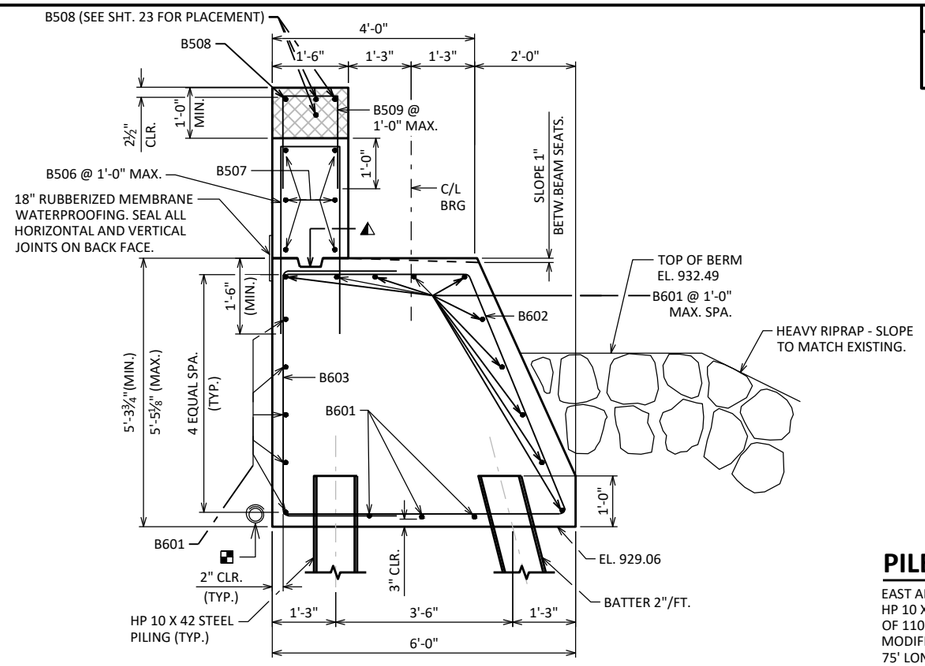
STATE PROJECT NUMBER

1204-08-73



ELEVATION

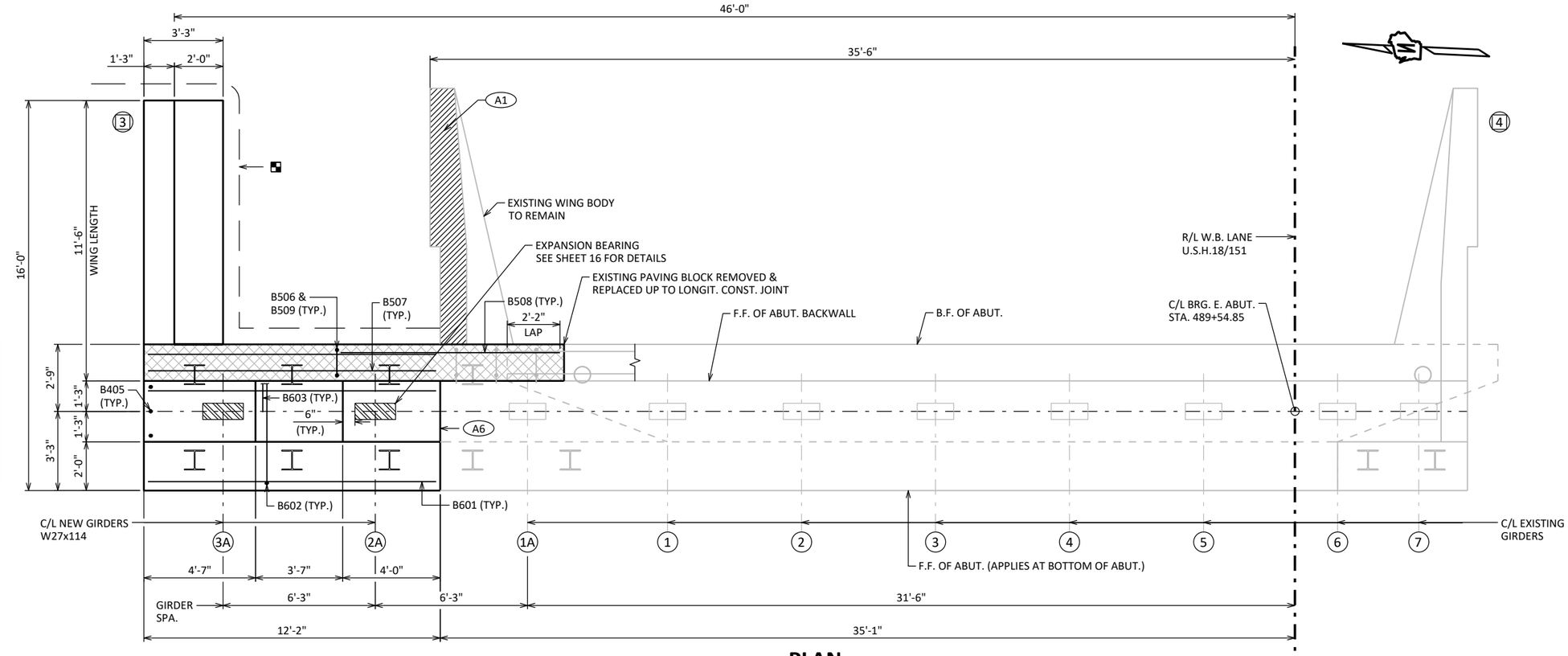
(LOOKING EAST)



SECTION THRU ABUT. BODY

PILE NOTE

EAST ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10 X 42 WITH A REQUIRED DRIVING RESISTANCE OF 110 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 75' LONG. FOR PILE LAYOUT AND PILE SPLICE DETAILS, SEE SHEET 11.



PLAN

LEGEND

- REMOVAL LIMITS.
- (X) INDICATES WING NUMBER.
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE (SHOWN IN GREY ON SHEET FOR CLARITY).
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A1) REMOVE EXISTING WING AND WING PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.
- (A4) ADHESIVE ANCHORS B604 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.
- (A5) ADHESIVE ANCHORS B510 BAR. EMBED 1'-0" IN EXISTING ABUTMENT.
- (A6) ROUGHEN SURFACE OF CONCRETE ¼" DEEP MINIMUM AT ALL AREAS WHERE NEW CONCRETE CONTACTS EXISTING CONCRETE.
- ◭ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6".

FOR ADHESIVE ANCHOR LAYOUT DETAILS, SEE SHEET 11.

SEE SHEET 11 FOR SECTIONS D-D & E-E.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

EAST ABUTMENT 1

SHEET 10 OF 25

578

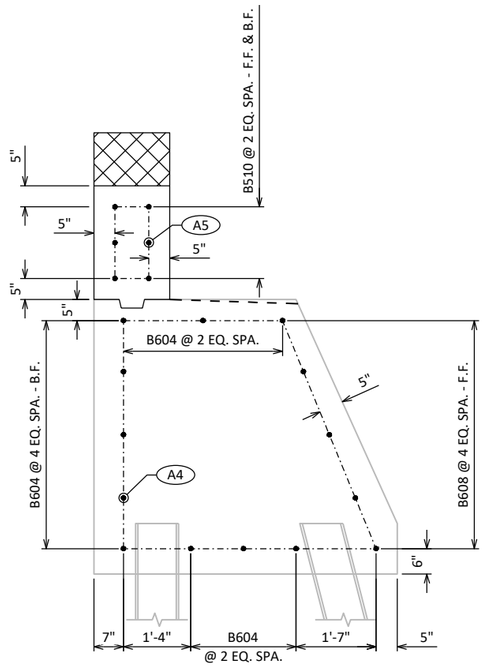
SCALE =

8

8

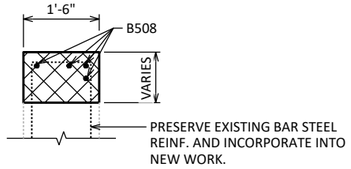
STATE PROJECT NUMBER

1204-08-73

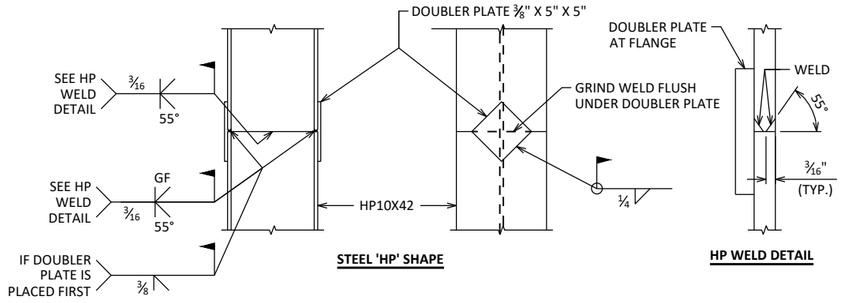


SECTION D-D

ADHESIVE ANCHOR LAYOUT



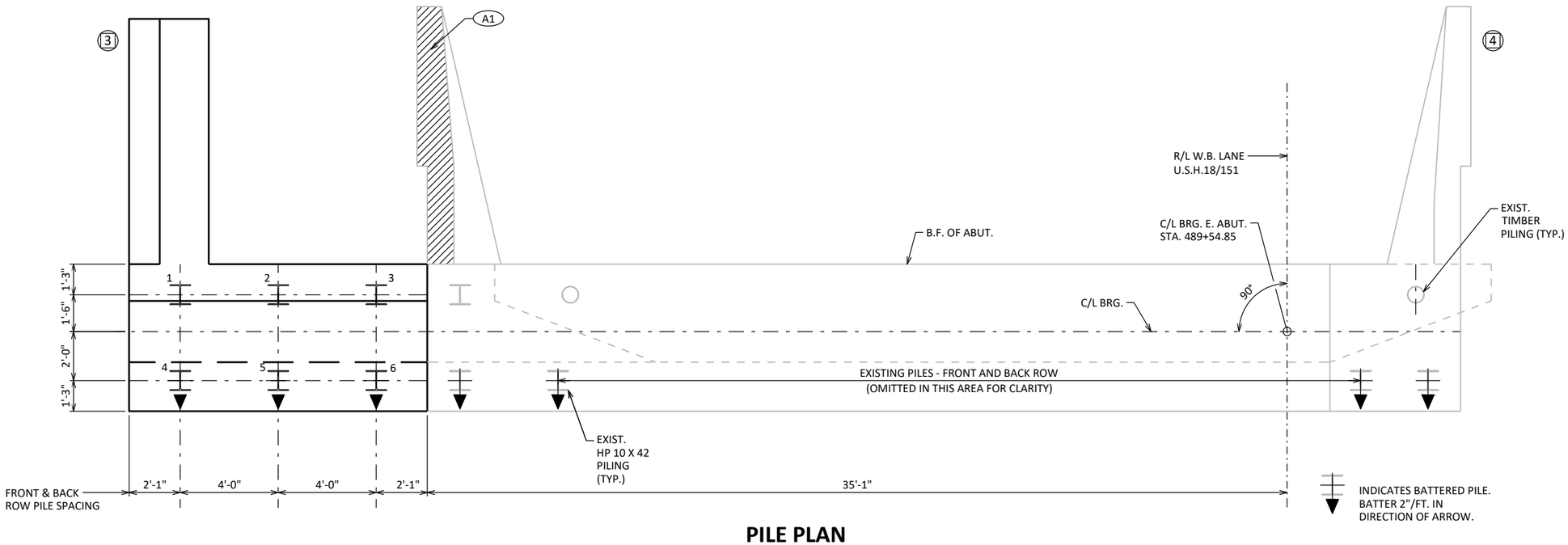
SECTION E-E



'HP' PILE DETAILS

LEGEND

- REMOVAL LIMITS.
- (X) INDICATES WING NUMBER.
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.
- (A1) REMOVE EXISTING WING AND WING PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.
- (A4) ADHESIVE ANCHORS B604 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.
- (A5) ADHESIVE ANCHORS B510 BAR. EMBED 1'-0" IN EXISTING ABUTMENT.



PILE PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

EAST ABUTMENT 2

SHEET 11 OF 25

579

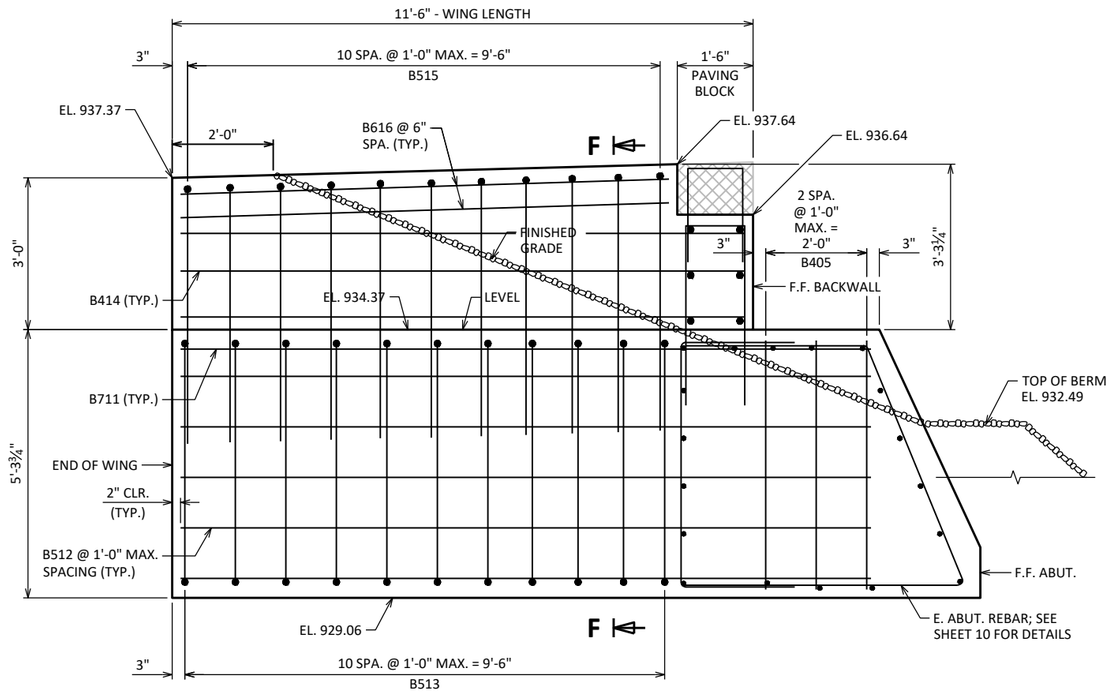
SCALE =

8

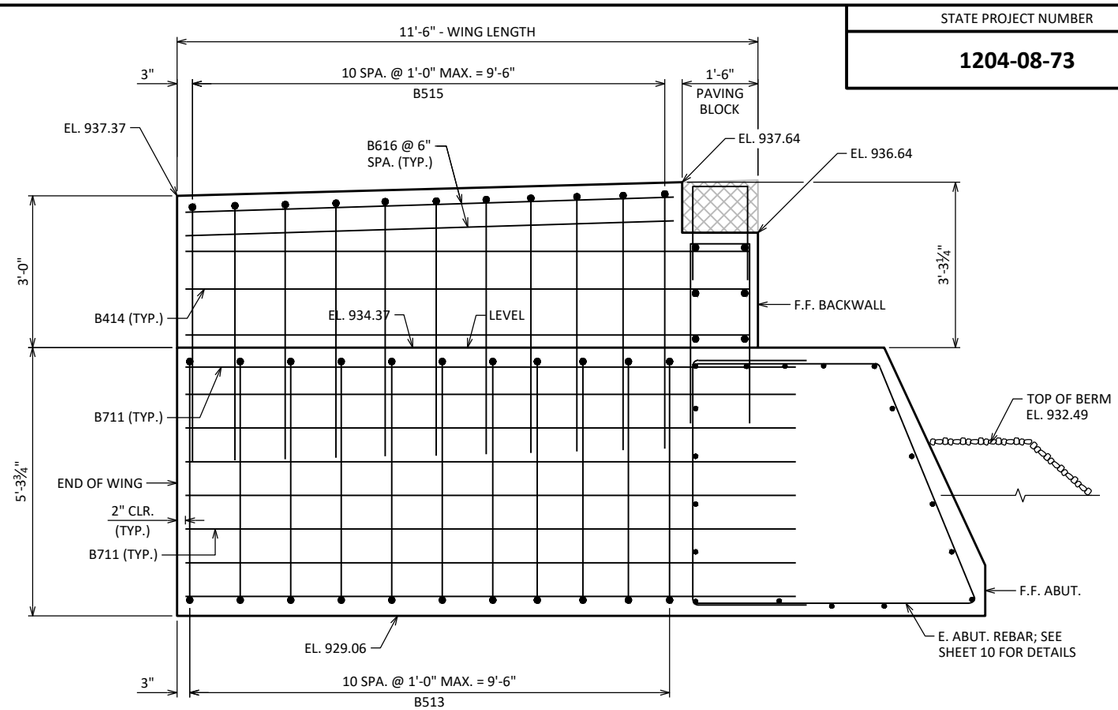
8

STATE PROJECT NUMBER

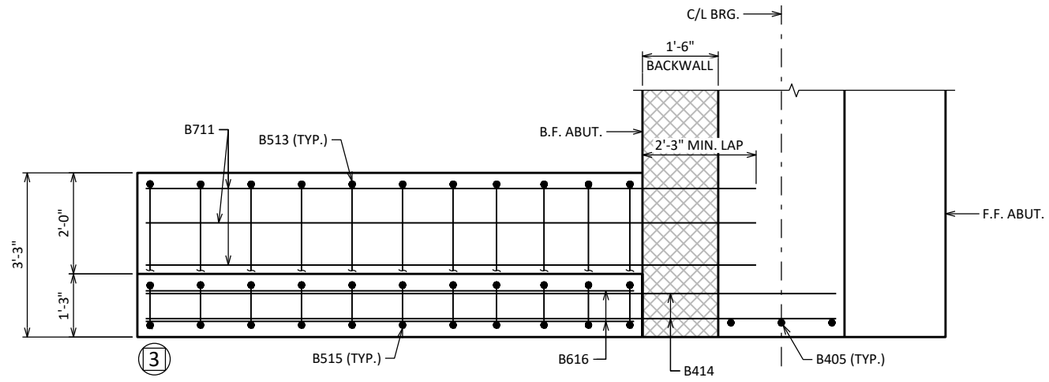
1204-08-73



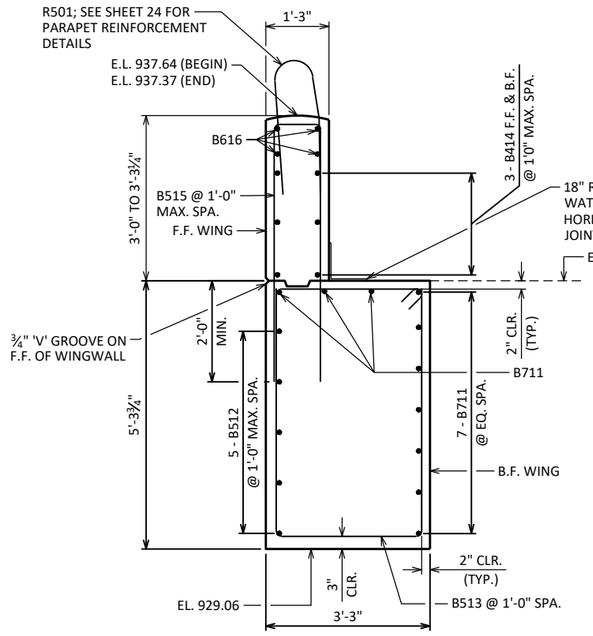
WING ELEVATION - FRONT FACE



WING ELEVATION - BACK FACE



WING PLAN



SECTION F-F THRU WING

LEGEND

INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE (SHOWN IN GREY ON SHEET FOR CLARITY).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

WING 3

SHEET 12 OF 25

580

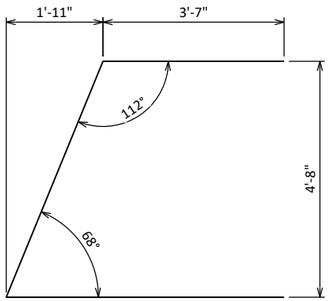
SCALE =

8

8

STATE PROJECT NUMBER

1204-08-73



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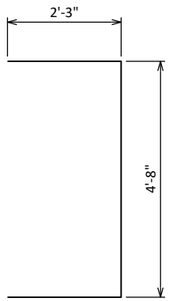

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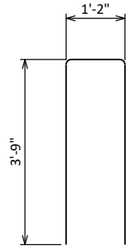

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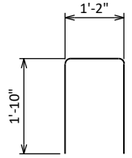
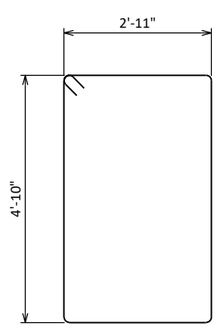


B509

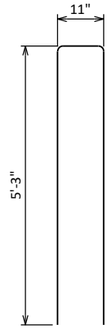
BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIE	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 850
B601	18	11'-10''			EAST ABUTMENT - BODY	HORIZ.
B602	13	13'-10''	X		EAST ABUTMENT - BODY F.F	VERT.
B603	13	8'-10''	X		EAST ABUTMENT - BODY B.F.	VERT.
B604	14	3'-4''			EAST ABUTMENT ANCHORS - BODY	HORIZ.
B405	3	4'-10''			EAST ABUTMENT - BODY END	VERT.
COATED BARS						TOTAL WEIGHT = 1090
B506	13	8'-9''	X		EAST ABUTMENT - BACKWALL	VERT.
B507	6	11'-10''			EAST ABUTMENT - BACKWALL F.F. & B.F.	HORIZ.
B508	8	9'-0''			EAST ABUTMENT - BACKWALL TOP	HORIZ.
B509	13	4'-7''	X		EAST ABUTMENT - BACKWALL	VERT.
B510	6	3'-7''			EAST ABUTMENT ANCHORS - BACKWALL	HORIZ.
B711	10	12'-1''			WING 3 - BODY B.F. & TOP	HORIZ.
B512	5	13'-8''			WING 3 - BODY F.F.	HORIZ.
B513	11	16'-2''	X		WING 3 STIRRUPS - BODY	VERT.
B414	6	11'-2''			WING 3 - UPPER F.F. & B.F.	HORIZ.
B515	11	11'-2''	X		WING 3 - UPPER	VERT.
B616	4	9'-8''			WING 3 - UPPER TOP	HORIZ.

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.



B513



B515

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

EAST ABUTMENT DETAILS

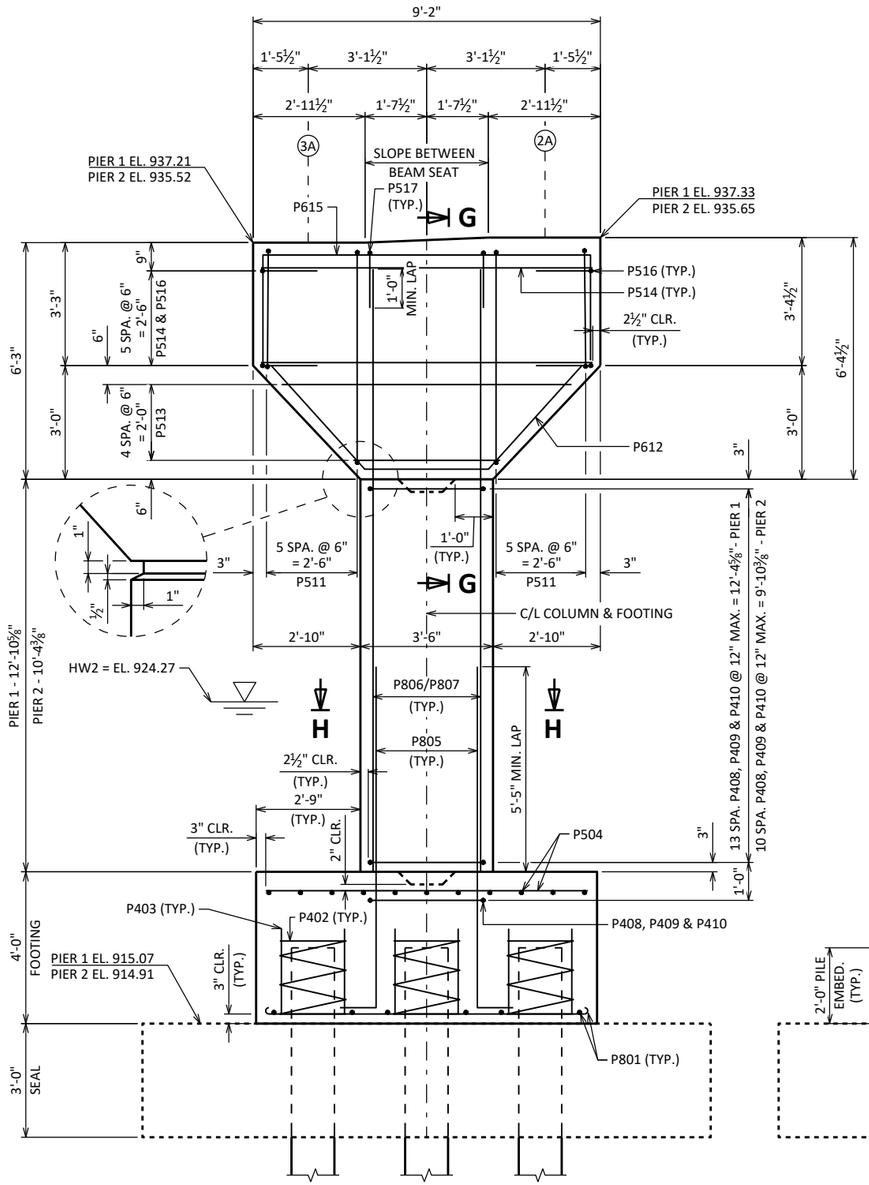
SHEET 13 OF 25

581

SCALE =

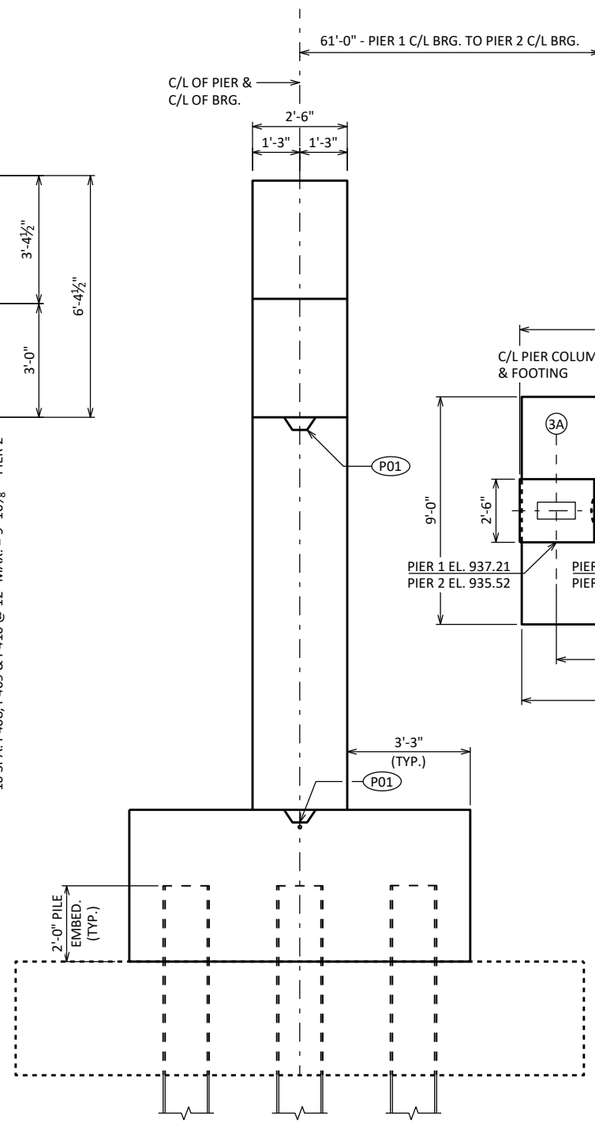
STATE PROJECT NUMBER

1204-08-73



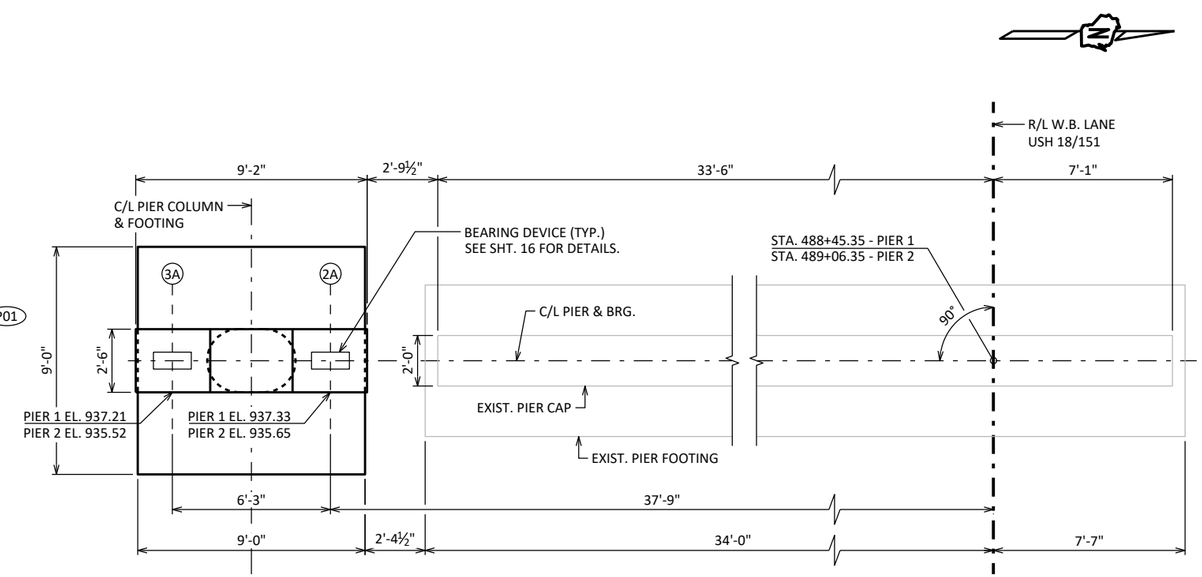
ELEVATION

(LOOKING EAST/UPSTATION)



END VIEW

(LOOKING NORTH)
(PIER 1 SHOWN, PIER 2 SIMILAR)



PLAN

NOTES

P01 — 4" DEEP x 10" THICK KEYED CONST. JOINT FORMED BY BEVELED KEYWAY.

SEE SHEET 14 FOR SECTIONS G-G & H-H

PILE NOTE

PIERS TO BE SUPPORTED ON PILING STEEL HP 14 X 73 WITH A REQUIRED DRIVING RESISTANCE OF 125 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 55' LONG. FOR PILE LAYOUT AND PILE SPLICE DETAILS, SEE SHEET 15.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-52

DRAWN BY MAG | PLANS CK'D SRA

PIERS 1 & 2

SHEET 14 of 25
582

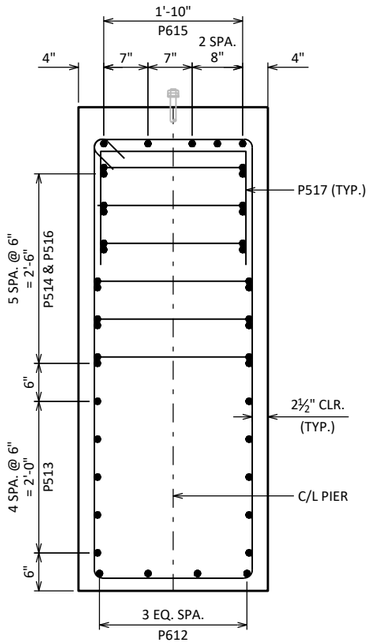
SCALE =

8

8

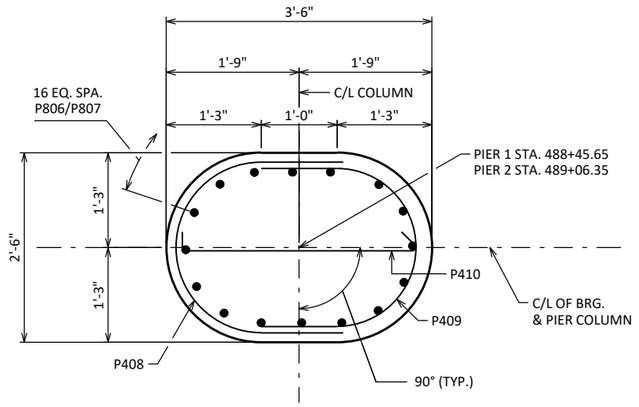
STATE PROJECT NUMBER

1204-08-73



SECTION G-G

(COLUMN BARS EXTENDING INTO CAP NOT SHOWN FOR CLARITY)



SECTION H-H

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

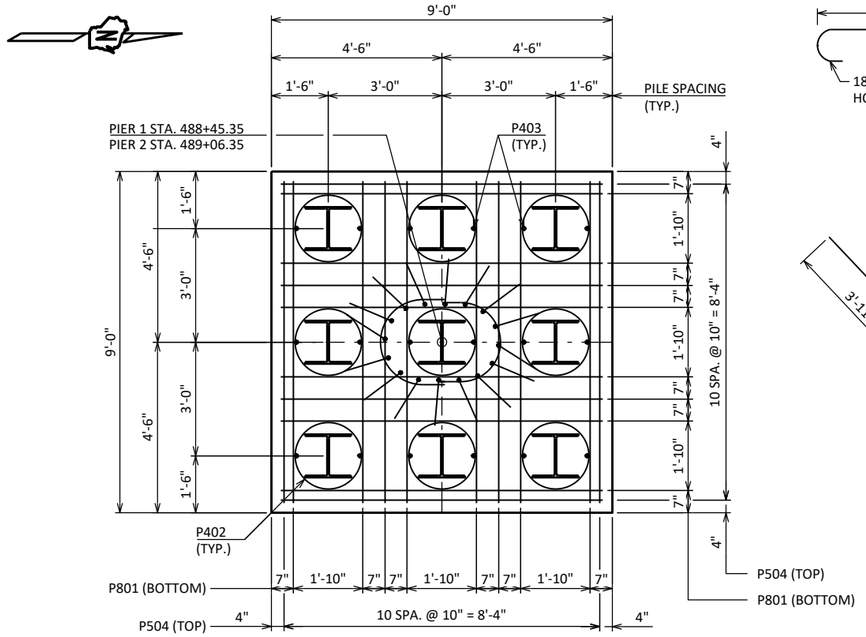
BAR MARK	COAT	PIER 1	PIER 2	LENGTH	BENT	BAR SERIES	LOCATION
							NON-COATED BAR WEIGHT = 1670 LB **COATED BAR WEIGHT = 3790 LB**
P801		16	16	10'-4"	X		FOOTING BOT. HORZ.
P402		9	9	28'-0"	X		FOOTING PILE SPIRALS
P403		18	18	2'-3"			FOOTING PILE VERT.
P504		22	22	8'-6"			FOOTING TOP HORIZ.
P805	X	16	16	10'-2"	X		FOOTING DOWELS
P806	X	16	0	18'-5"			PIER 1 COLUMN
P807	X	0	16	15'-11"			PIER 2 COLUMN
P408	X	15	12	5'-6"	X		COLUMN TIES HORIZ.
P409	X	15	12	5'-3"	X		COLUMN TIES HORIZ.
P410	X	15	12	3'-9"	X	⚠	COLUMN TIES HORIZ.
P511	X	12	12	13'-6"	X		CAP STIRRUPS
P612	X	4	4	10'-11"	X		CAP BOTTOM HORIZ.
P513	X	10	10	5'-9"		⚠	CAP HORIZ.
P514	X	12	12	8'-9"			CAP HORZ.
P615	X	5	5	14'-2"	X		CAP TOP HORIZ.
P516	X	12	12	4'-9"	X		CAP END TIES HORIZ.
P517	X	5	5	4'-10"	X		CAP TOP TIES VERT.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

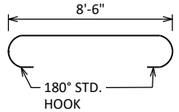
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
P511	4 SERIES OF 6	10'-10" TO 16'-2"
P513	2 SERIES OF 5	3'-10" TO 7'-7"

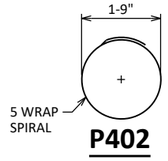


FOOTING PLAN & PILE LAYOUT

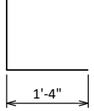
NOTE: ROTATE FOOTING DOWEL BARS AS NEEDED TO MAINTAIN 2" CLEAR FROM PILES.



P801



P402



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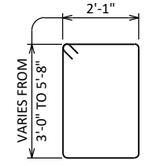

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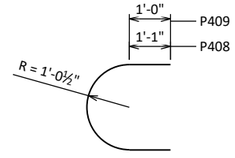
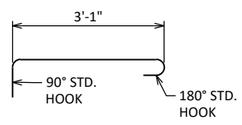


P408, P409



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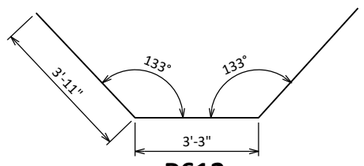

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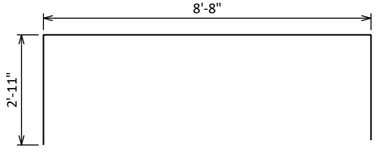

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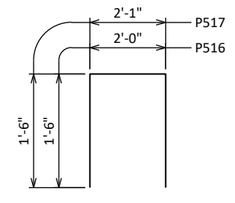
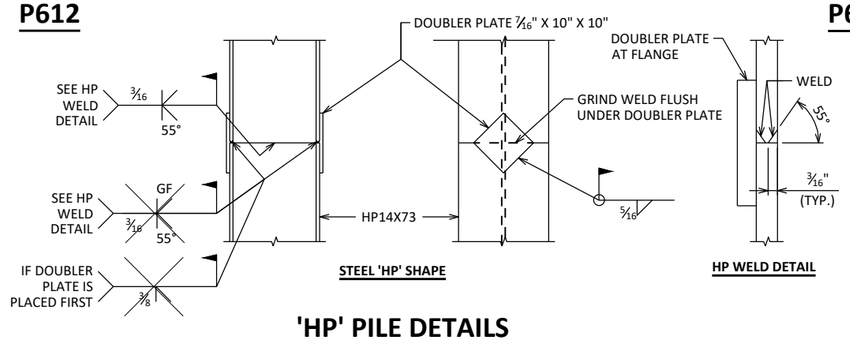


P516, P517



STEEL 'HP' SHAPE

HP WELD DETAIL

'HP' PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-52

DRAWN BY MAG | PLANS CK'D SRA

PIERS 1 & 2 DETAILS

SHEET 15 of 25

583

SCALE =

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STATE PROJECT NUMBER

1204-08-73

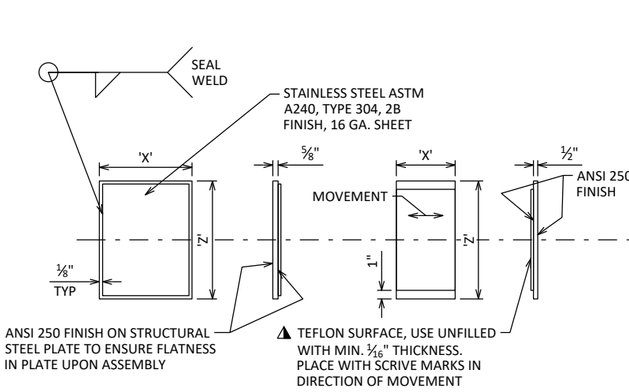
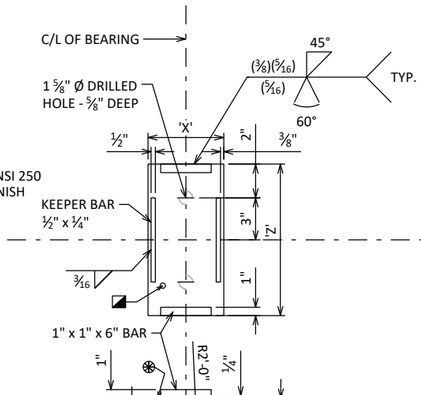
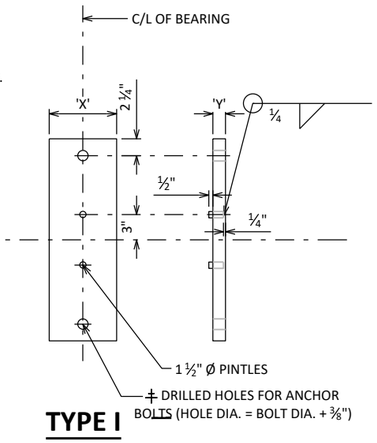


PLATE "A"



TEFLON SURFACE ON PLATE "B"

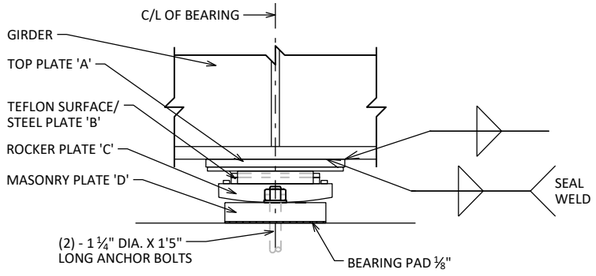
ROCKER PLATE "C"



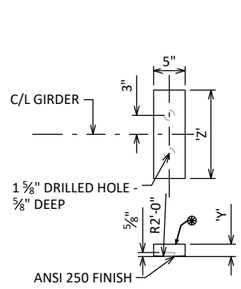
TYPE I

MASONRY PLATE "D"

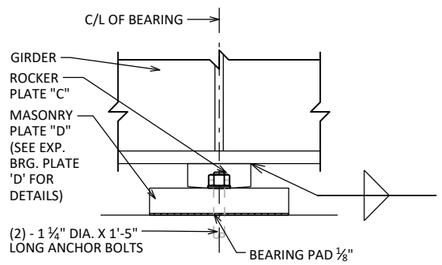
EXPANSION BEARING



EXPANSION BEARING ASSEMBLY



ROCKER PLATE "C"



FIXED BEARING ASSEMBLY

FIXED BEARING

	PLATE 'A'			PLATE 'B'			PLATE 'C'			PLATE 'D'			PLATE "D" TYPE	ANCHOR BOLT SIZE	NO. OF BRG'S REQ'D.	LOCATION
	'X'	'Y'	'Z'	'X'	'Y'	'Z'	'X'	'Y'	'Z'	'X'	'Y'	'Z'				
EXPANSION BEARING	9"	⅝"	10"	5"	½"	10"	7"	1 7/16"	1'-0 ¼"	8"	1 ½"	1'-8"	I	1 ¼" Ø	4	AT BOTH ABUTMENTS
	1'-1"	⅝"	10"	9"	½"	10"	11"	2 ⅜"	1'-0 ¼"	8"	1 ½"	1'-8"	I	1 ¼" Ø	2	AT PIER 2
FIXED BEARING							5"	2 ⅜"	10"	8"	1 ¾"	1'-7"	I	1 ¼" Ø	2	AT PIER 1

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT C/L OF GIRDER AND C/L OF BEARING.

IN LIEU OF USING SHIM PLATES, FABRICATOR MAY INCREASE THICKNESS OF MASONRY PLATE "D" BY THE SHIM PLATE THICKNESS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER AND ONE HEX NUT PER BOLT. PROJECT ANCHOR BOLTS, MASONRY PLATE "D" THICKNESS +2 ¼", ABOVE TOP OF CONCRETE.

ALL MATERIALS IN BEARINGS, INCLUDING SHIM PLATES, BUT EXCLUDING PINTLES, ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR ASTM 572 GRADE 50.

ALL MATERIAL IN TYPE "A" BEARINGS, INCLUDING SHIM PLATES AND BEARING PADS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES FIXED B-13-0052", EACH.

CHAMFER TOP OF PINTLES ⅛". DRILL HOLES FOR ALL PINTLES IN MASONRY PLATE "D" FOR A DRIVING FIT.

PROVIDE ⅛" THICK BEARING PAD THE SAME SIZE AS MASONRY PLATE "D" FOR EACH BEARING.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

ANCHOR BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM F1554 GRADE 55, OR MATERIAL OF EQUIVALENT YIELD STRENGTH & ELONGATION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS C.

FIXED BEARINGS:
ROCKER PLATE "C" SHALL BE SHOP PAINTED WITH A WELDABLE PRIMER.
MASONRY PLATE "D" SHALL BE GALVANIZED.

PLACE SHIM PLATES BETWEEN BEARING PAD AND MASONRY PLATE "D". PLATES SHALL HAVE 'X' & 'Z' DIMENSIONS THAT MATCH MASONRY PLATE "D".

‡ DRILLED HOLES FOR ANCHOR BOLTS IN MASONRY PLATE "D". PLATES SHALL HAVE A DIAMETER ⅜" LARGER THAN ANCHOR BOLT.

⊛ FINISH THESE SURFACES TO ANSI 250 IF 'Y' DIMENSION IS GREATER THAN 2".

◭ BOND STEEL PLATE "B" AND TEFLON WITH ADHESIVE MATERIAL MEETING REQUIREMENTS FOUND IN THE STANDARD SPECIFICATION.

◪ PROVIDE A METHOD FOR HANDLING ROCKER PLATE "C" DURING GALVANIZING.

AT INSTALLATION, ENSURE STAINLESS STEEL SLIDING FACE OF THE UPPER ELEMENT AND THE TFE SLIDING FACE OF THE LOWER ELEMENT HAVE THE SURFACE FINISH SPECIFIED AND ARE CLEAN AND FREE OF ALL DUST, MOISTURE & OTHER FOREIGN MATTER.

TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED.	‡ MIN. SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1 ½"	5/16"
OVER 1 ½" TO 2 ¼"	⅜"
OVER 2 ¼" TO 6"	½"

‡ EXCEPT THAT WELD SIZE SHALL NOT EXCEED THICKNESS OF THINNER PART JOINED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

BEARING DETAILS

SHEET 16 OF 25

584

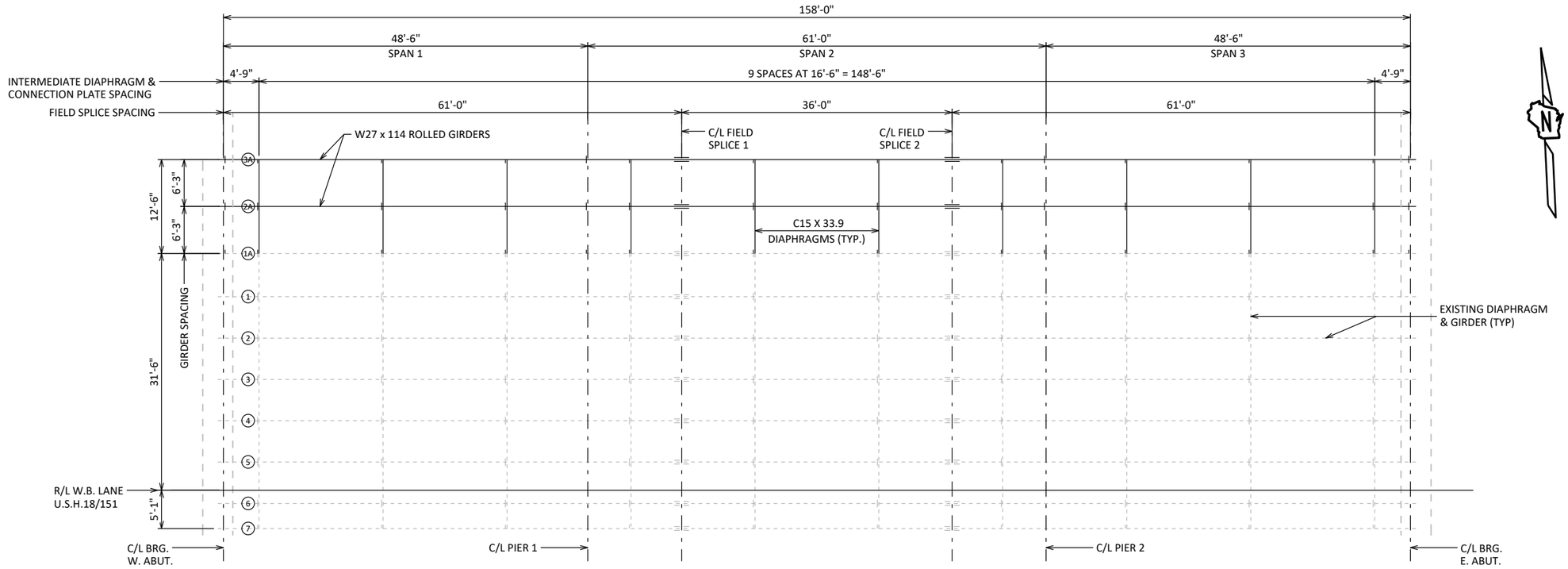
SCALE =

8

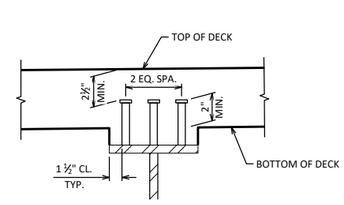
8

STATE PROJECT NUMBER

1204-08-73

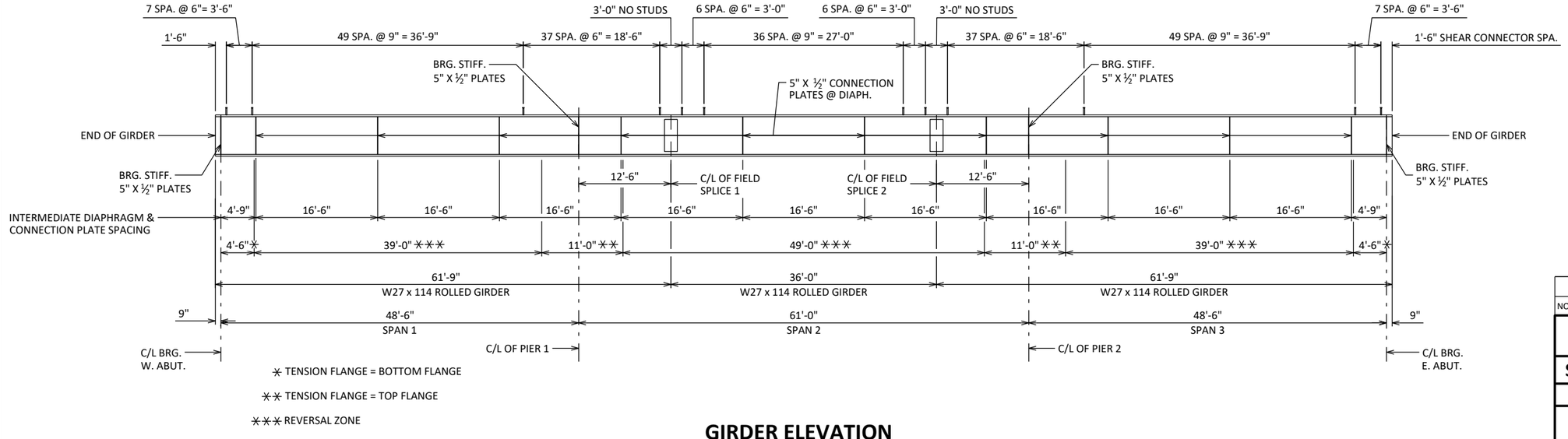


FRAMING PLAN



SHEAR CONN. DETAILS

NOTE: USE THREE SHOP OR FIELD WELDED ⅞" DIA. X 6" LONG STUDS EQUALLY SPACED WITH A MIN. OF 1¼" CL. FROM THE FLANGE EDGE. STUDS SHALL NOT BE PLACED OVER FIELD SPLICE PLATES.



GIRDER ELEVATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

FRAMING PLAN

SHEET 17 of 25

585

SCALE =

8

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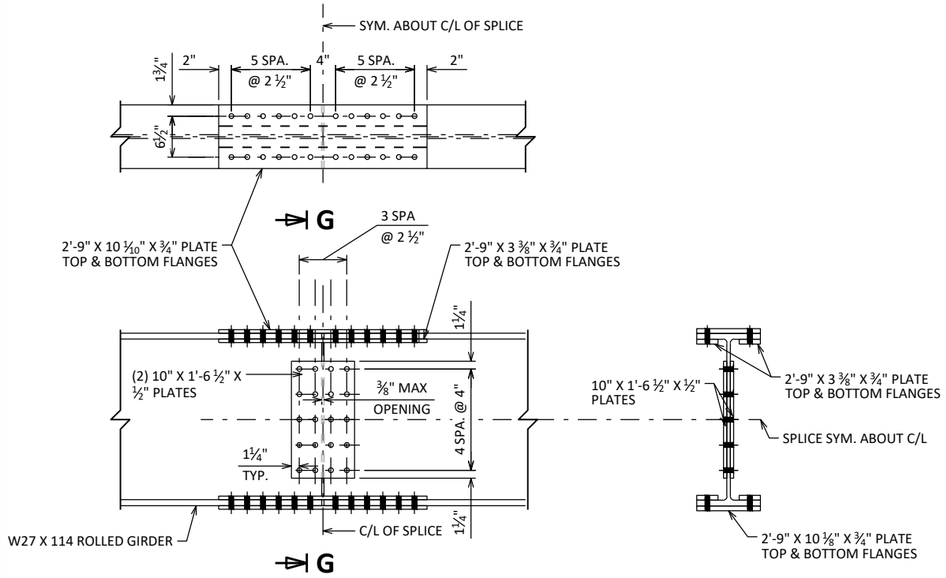
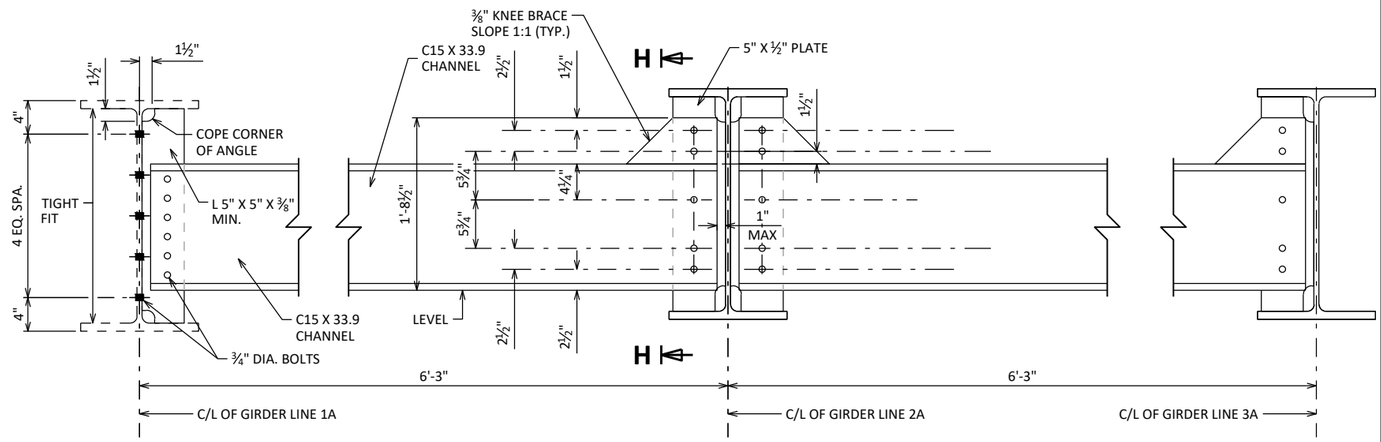


FIELD SPLICE DETAIL

SECTION G-G



INTERMEDIATE & PIER DIAPHRAGM CONNECTION DETAILS

* TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED	‡ MINIMUM SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1 ½"	△ 5/16"
OVER 1 ½"	△ ⅜"

‡ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED

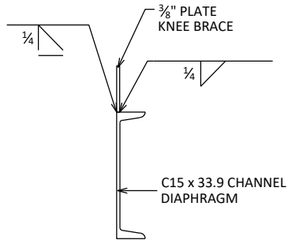
△ MINIMUM PASS SIZE IS 5/16"

NOTES

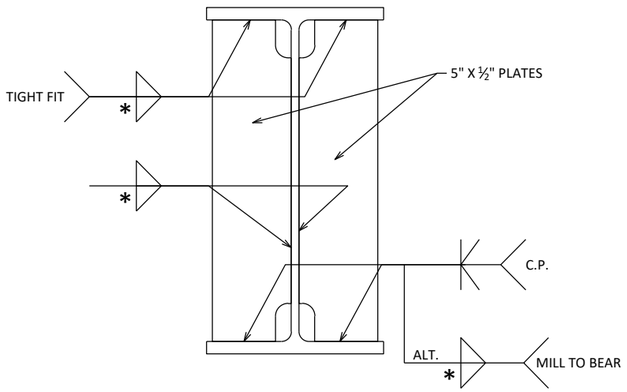
ALL STRUCTURAL STEEL FOR GIRDERS & SPLICE PLATES SHALL BE HIGH-STRENGTH STRUCTURAL STEEL ASTM A709, GRADE 50. ALL OTHER STRUCTURAL STEEL SHALL BE STRUCTURAL CARBON STEEL, ASTM A709, GRADE 36.

ALL FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS UNLESS SHOWN OR NOTED OTHERWISE.

HOLES FOR BOLTED CONNECTIONS SHALL NOT BE MORE THAN 1/16" GREATER THAN THE NOMINAL BOLT DIAMETER

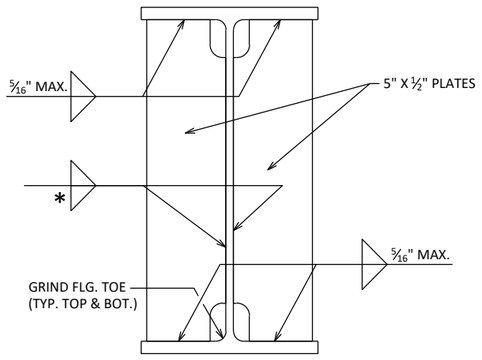


SECTION H-H



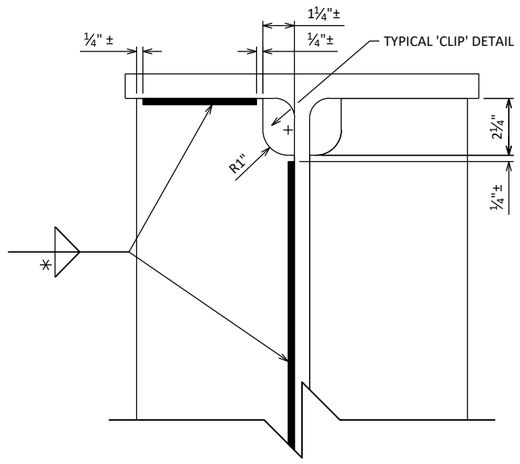
BEARING STIFFENER DETAILS

(TYPICAL AT ABUTMENTS & PIERS)



CONNECTION PLATE DETAILS

(TYPICAL AT INTERMEDIATE DIAPHRAGMS)



WELD TERMINATION DETAIL

(TYP. AT CONNECTIONS, STIFFENERS OR PLATES)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

GIRDER DETAILS

SHEET 18 OF 25

586

SCALE =

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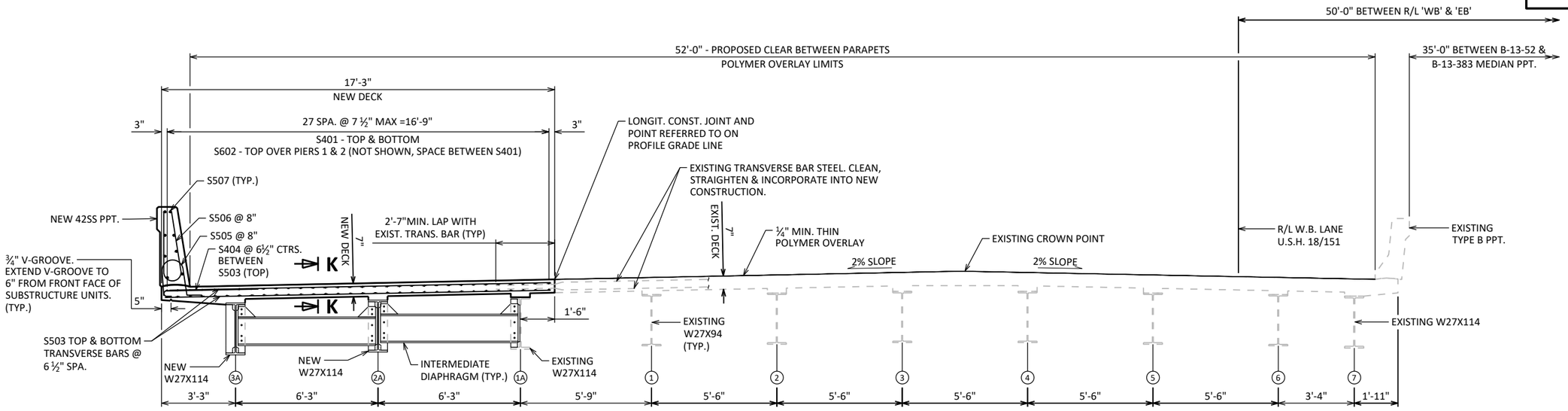
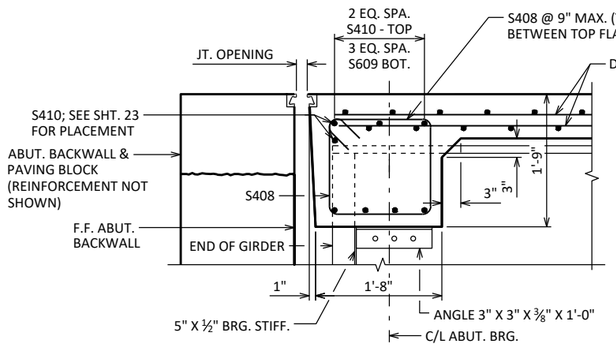


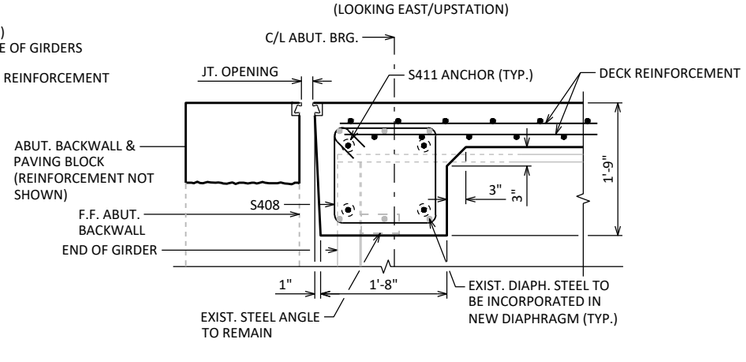
CROSS SECTION THRU ROADWAY

(LOOKING EAST/UPSTATION)



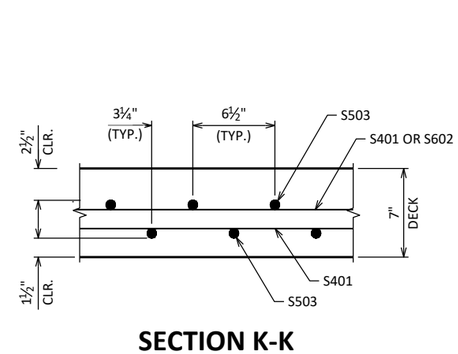
SECTION I-I THRU EXPANSION END

HARDWARE FOR EXPANSION JOINT NOT SHOWN FOR CLARITY.
SEE SHEET 23 FOR DETAILS.



SECTION J-J THRU EXPANSION END

HARDWARE FOR EXPANSION JOINT NOT SHOWN FOR CLARITY.
SEE SHEET 23 FOR DETAILS.



SECTION K-K

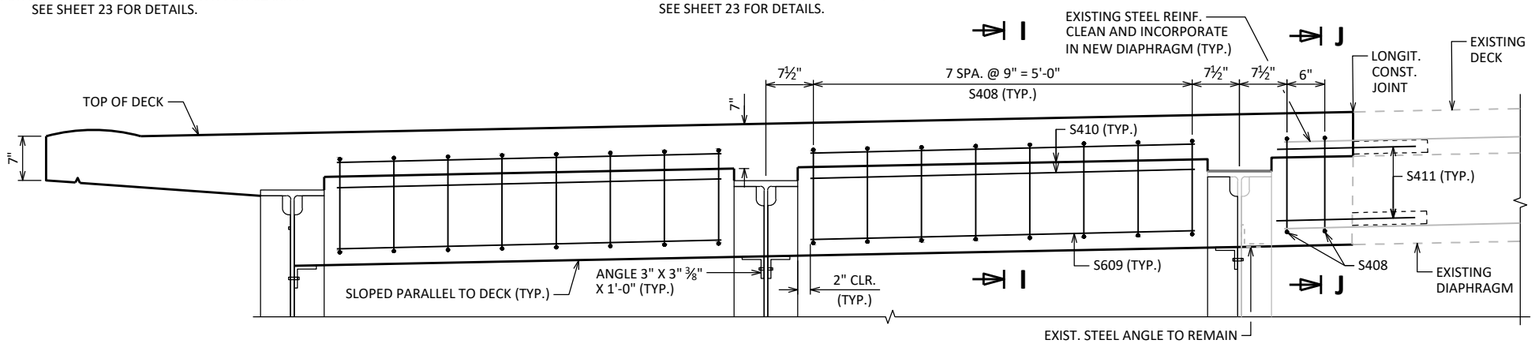
NOTES

DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36. BOLTS ARE ¾" DIA. AL BOLTS, NUTS ANDWASHERS SHALL BE ASTM A325 TYPE 1.

ALL SUPPORT ANGLES SUPPORT ANGLES SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED BUTS.

ALL DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

REPLACEMENT PAVING BLOCK DIMENSIONS SHALL MATCH EXISTING.



EXTERIOR GIRDER 3A | INTERIOR GIRDER 2A | EXISTING GIRDER 1A

PART TRANSVERSE SECTION AT DIAPHRAGM EXPANSION END

DECK REINFORCEMENT NOT SHOWN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

SUPERSTRUCTURE 1

SHEET 19 OF 25
587

SCALE =

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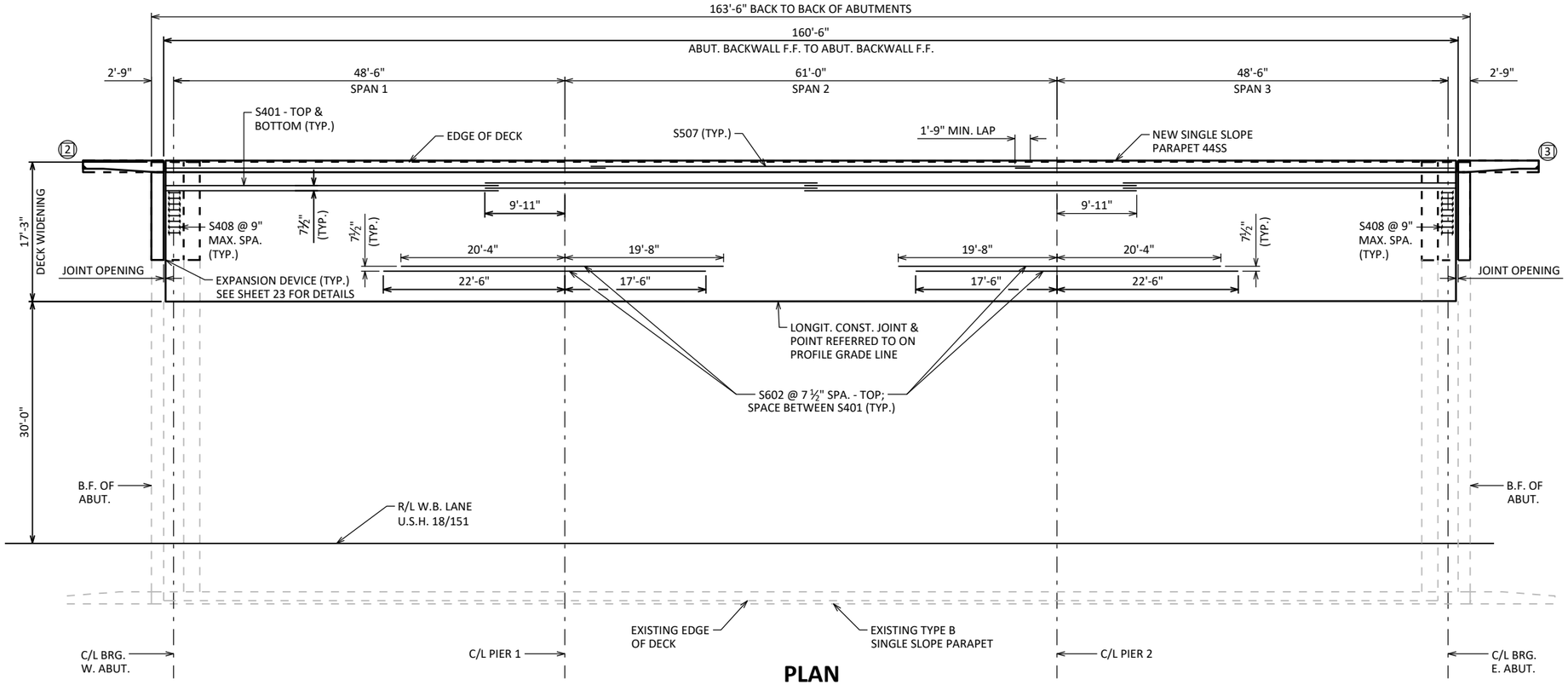
NOTES

ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED PERPINDICULAR TO THE R/L

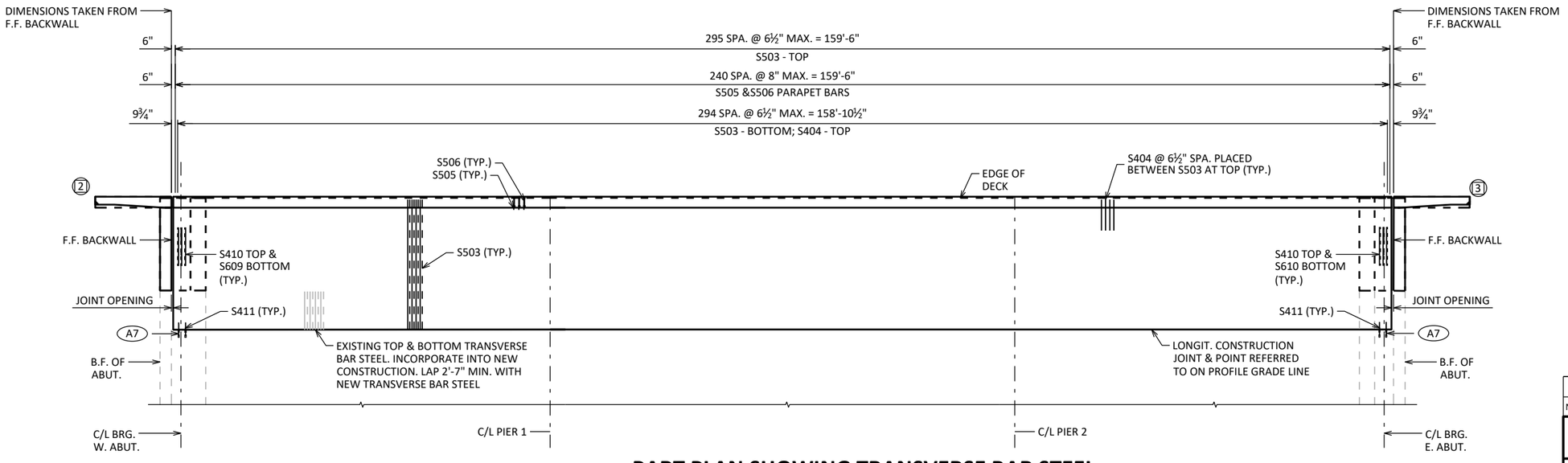
LAP S401 BARS IN DECK 1'-8" MIN.

SEE SHEET 25 FOR 42SS PARAPET ON DECK DETAILS.

(A7) ADHESIVE ANCHORS S411 BAR. EMBED 10" IN EXISTING ABUTMENT.



PLAN



PART PLAN SHOWING TRANSVERSE BAR STEEL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

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SUPERSTRUCTURE 2

SHEET 20 OF 25

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SCALE =

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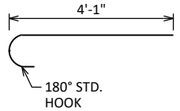
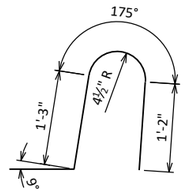


S404



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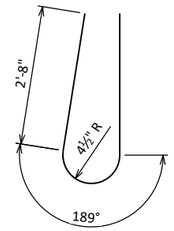

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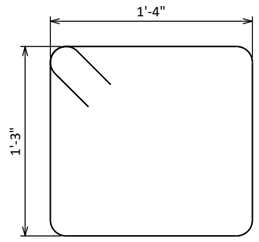

S508

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS						TOTAL WEIGHT = 25210
S401	224	41'-3''			DECK - TOP & BOTTOM	LONGIT.
S602	54	40'-0''			DECK - TOP OVER PIERS	LONGIT.
S503	590	16'-11''			DECK - TOP & BOTTOM	TRANS.
S404	295	4'-7''	X		SLAB OVERHANG	TRANS.
S505	241	4'-5''	X		PARAPET	VERT.
S506	241	6'-8''	X		PARAPET	VERT.
S507	24	54'-6''			PARAPET	LONGIT.
S408	36	5'-8''	X		DIAPHRAGM - STIRRUPS AT ABUTMENTS	VERT.
S609	16	5'-1''			DIAPHRAGM - BOTTOM AT ABUTMENTS	TRANS.
S410	16	5'-1''			DIAPHRAGM - TOP AT ABUTMENTS	TRANS.
S411	8	1'-10''			DIAPHRAGM - ANCHORS AT ABUTMENTS	HORIZ.

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

SUPERSTRUCTURE 3

SHEET 21 OF 25

589

SCALE =

STATE PROJECT NUMBER

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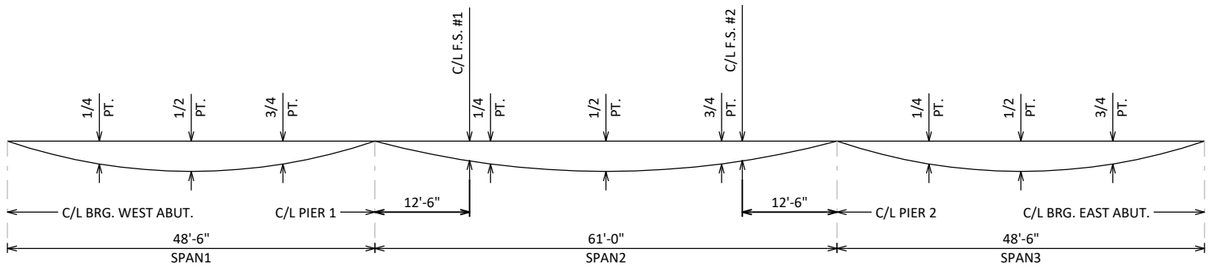


DEFLECTION DIAGRAM

TOP OF DECK ELEVATIONS & DEFLECTIONS

	C/L of Brg. W. Abut.	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	C/L of Pier #1	0.1 Pt.	C/L of F.S. #1	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	C/L of F.S. #2	0.9 Pt.	C/L of Pier #2	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	C/L of Brg. E. Abut.
Construction Joint (PGL)	942.18	942.05	941.92	941.80	941.67	941.54	941.41	941.29	941.16	941.03	940.91	940.74	940.58	940.58	940.42	940.26	940.10	939.94	939.78	939.63	939.62	939.46	939.30	939.18	939.05	938.92	938.79	938.67	938.54	938.41	938.28	938.16	938.03
Girder 1A (Existing W27x114)	942.15	942.02	941.89	941.77	941.64	941.51	941.38	941.26	941.13	941.00	940.88	940.71	940.55	940.55	940.39	940.23	940.07	939.91	939.75	939.60	939.59	939.43	939.27	939.15	939.02	938.89	938.76	938.64	938.51	938.38	938.25	938.13	938.00
Girder 2A	942.02	941.90	941.77	941.64	941.51	941.39	941.26	941.13	941.00	940.88	940.75	940.59	940.43	940.42	940.27	940.11	939.95	939.79	939.63	939.48	939.47	939.31	939.15	939.02	938.89	938.77	938.64	938.51	938.38	938.26	938.13	938.00	937.87
Girder 3A	941.90	941.77	941.64	941.52	941.39	941.26	941.13	941.01	940.88	940.75	940.63	940.46	940.30	940.30	940.14	939.98	939.82	939.66	939.50	939.35	939.34	939.18	939.02	938.90	938.77	938.64	938.51	938.39	938.26	938.13	938.00	937.88	937.75
Conc. Defl. (inches)	0.0	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.0
Total Defl. (inches)	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.1	0.0

BLOCKING DIMENSIONS

	"A"	"B"	"C"	"D"	"E"	"F"
Girder 2A	49.79	34.06	30.00	18.66	14.83	0.00
Girder 3A	49.79	34.07	30.02	18.67	14.84	0.00

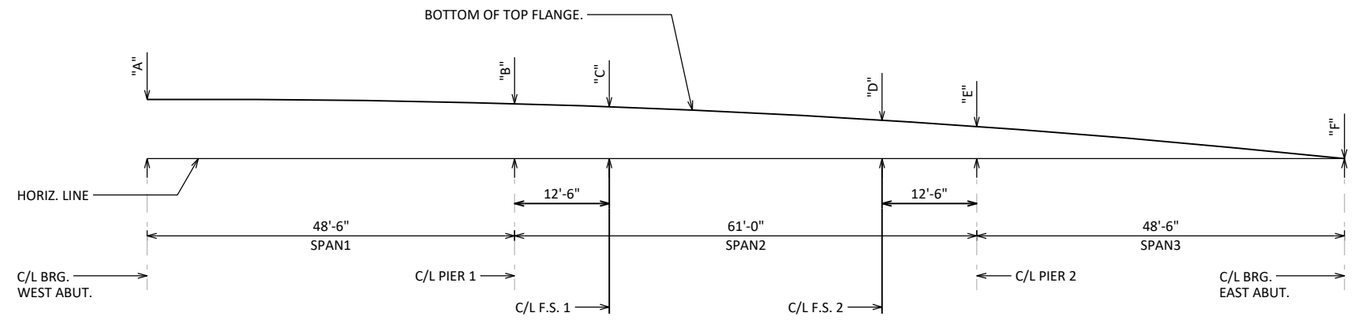
REQUIRED CAMBER

Location	Camber (inches)
C/L Brg. W. Abut. to F.S. #1	0.3
F.S. #1 to F.S. #2	0.5
F.S. #2 to C/L Brg. E. Abut.	0.3

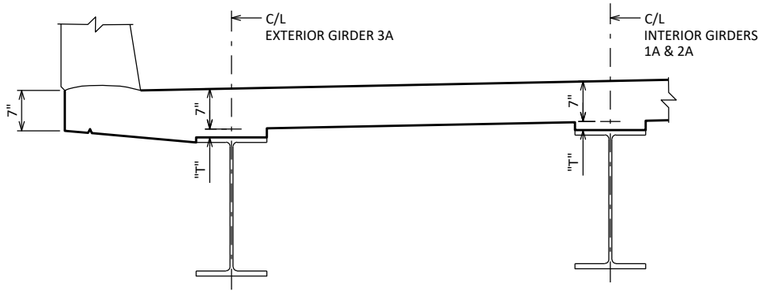
TOP OF STEEL ELEVATIONS

	C/L of Brg. W. Abut.	C/L of Pier #1	C/L of F.S. #1	C/L of F.S. #2	C/L of Pier #2	C/L of Brg. E. Abut.
Girder 2A	941.27	939.96	939.67	938.73	938.36	937.12
Girder 3A	941.15	939.84	939.55	938.60	938.24	937.00

NOTE: TOP OF STEEL ELEVATIONS AT C/L OF FIELD SPLICE INCLUDE BEAM DEFLECTION. THESE ELEVATIONS ARE TO TOP OF STEEL (SPLICE & COVER PLATE THICKNESS, IF APPLICABLE, ARE ACCOUNTED FOR) AND THEY ARE FOR THE MATERIAL AS ERECTED. THE ELEVATION OF THE TOP OF STEEL AT THE FIELD SPLICE POINTS SHALL BE CHECKED, AND CORRECTED, IF POSSIBLE, AFTER ERECTION AND BEFORE PERMANENTLY BOLTING THE DIAPHRAGMS IN PLACE.



BLOCKING DIAGRAM



DECK HAUNCH DETAILS

(TO DETERMINE "T": ELEVATIONS OF THE TOP FLANGES, TOP OF SPLICE OR TOP OF COVER PLATES, WHICHEVER APPLIES, SHALL BE TAKEN AT C/L OF BRGS., C/L OF FIELD SPLICES AND AT QUARTER POINTS OF EACH SPAN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF STEEL ELEV.
+ THICKNESS OF TOP FLG. & TOP PL'S.
+ DEFLECTION
- SLAB THICKNESS (7")

= HAUNCH THICKNESS "T".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

SUPERSTRUCTURE 4

SHEET 22 OF 25

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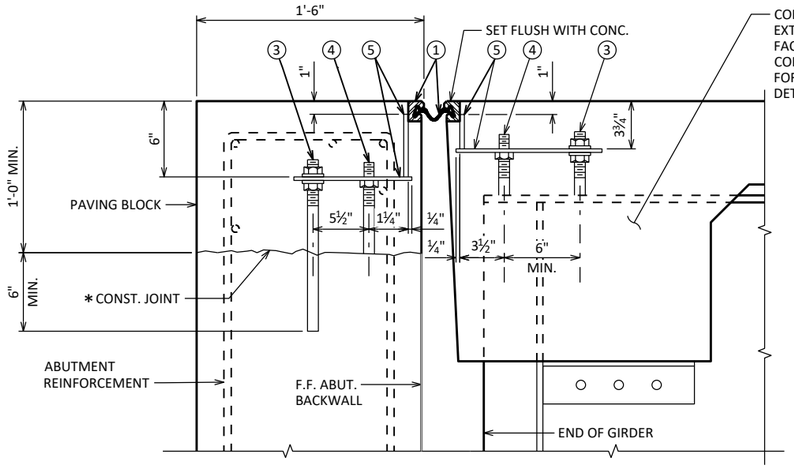
SCALE =

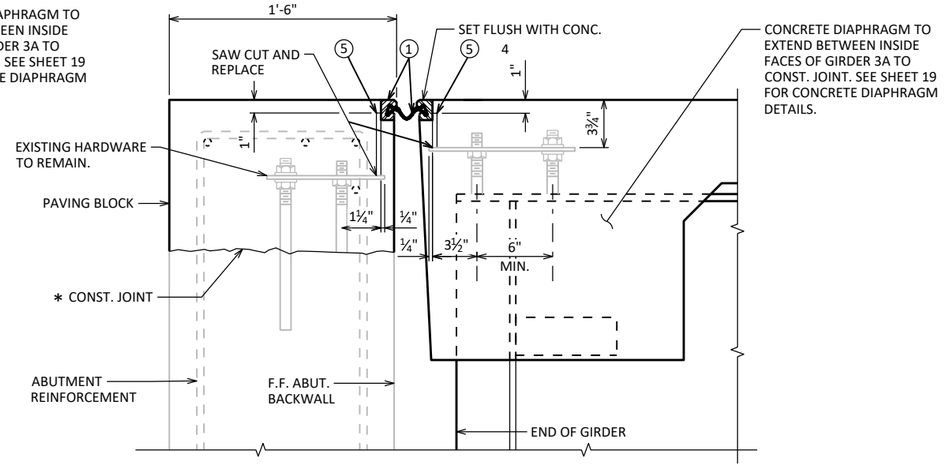
STATE PROJECT NUMBER

1204-08-73



SECTION THRU JOINT AT ABUTMENT

NORMAL TO C/L SUBSTRUCTURE



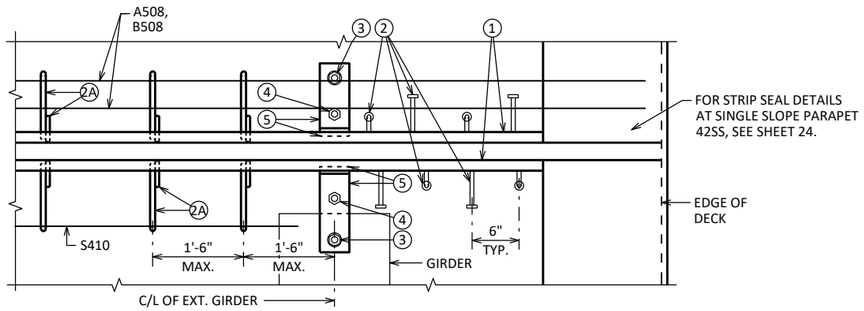
SECTION THRU JOINT AT ABUTMENT

NORMAL TO C/L SUBSTRUCTURE

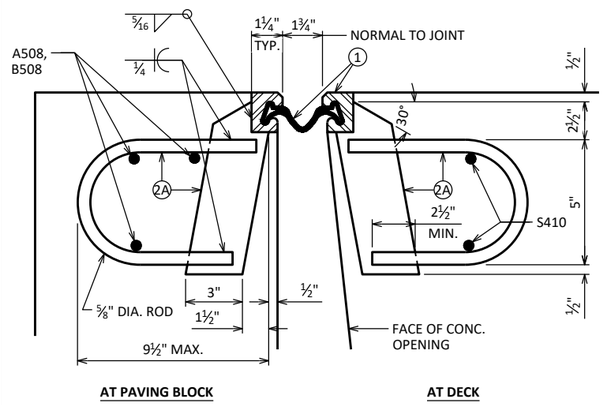
LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.
2. STUDS ⅝" DIA. X 6¾" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
2A. ½" THICK ANCHOR PLATE WITH ⅝" DIA. ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. ¾" DIA. THREADED ROD WITH 2 NUTS AND PLATE WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾" DIA. THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" DIA. HOLE FOR NO. 3 AND 1" DIA. HOLE FOR NO. 4.
6. GALVANIZED PLATE ⅜" X 10" X 2'-2" LONG WITH HOLES FOR NO.7.
7. ¾" DIA. X 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" DIA. X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.
9. ¾" DIA. X 2¼" GALVANIZED THREADED COUPLING.
11. 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.

∗ POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

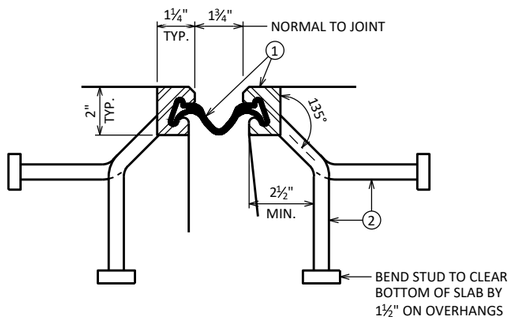


PART PLAN



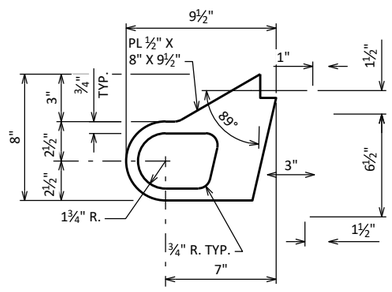
SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS



SECTION THRU JOINT

EXISTING GIRDER 1A TO CONSTRUCTION JOINT, EXTERIOR GIRDER 3A TO EDGE OF DECK AND AT PARAPETS.



ALTERNATE STRIP SEAL ANCHOR

NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. IF USED, ANCHOR PLATES SHALL BE PROVIDED 3" FROM EACH SIDE OF THE FIELD SPLICE. DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

ALL MATERIAL IN THE EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE SHALL BE PAID AT THE UNIT PRICE BID FOR "EXPANSION DEVICE B-13-0052", LF.

SAW CUT EXISTING EXPANSION DEVICE AT LONGITUDINAL CONST. JOINT. PEN WELD STEEL EXTRUSIONS AT JOINT WHERE EXISTING AND NEW EXPANSION DEVICES MEET.

EXISTING NEOPRENE STRIP SEAL GLAND TO BE REMOVED AND REPLACED. PAYMENT INCLUDES DETERMINING THE EXISTING GLAND DIMENSIONS AND PROVIDING A REPLACEMENT GLAND PER BID ITEM "STRIP SEAL GLAND REPLACEMENT" AND AS APPROVED BY ENGINEER.

NO.	DATE	REVISION	BY

STRUCTURE B-13-52

DRAWN BY DCH | PLANS CK'D SRA

EXPANSION DEVICE

SHEET 23 OF 25

591

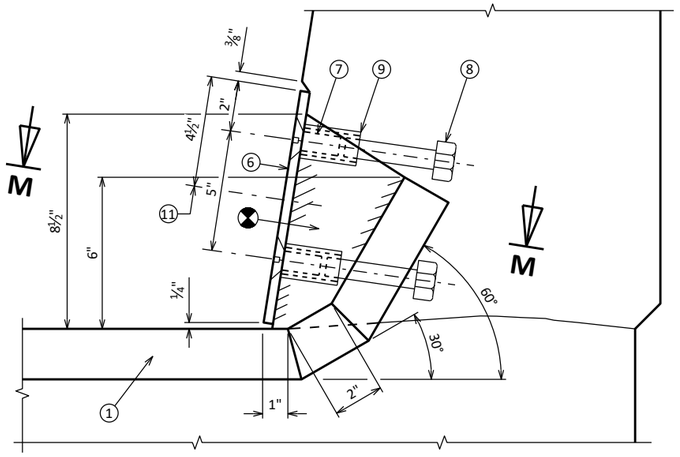
SCALE =

8

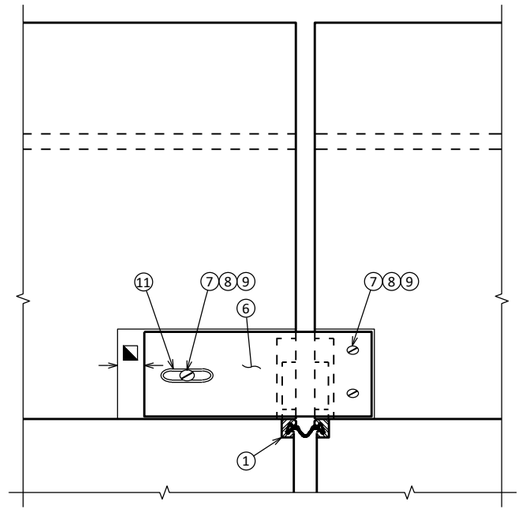
8

STATE PROJECT NUMBER

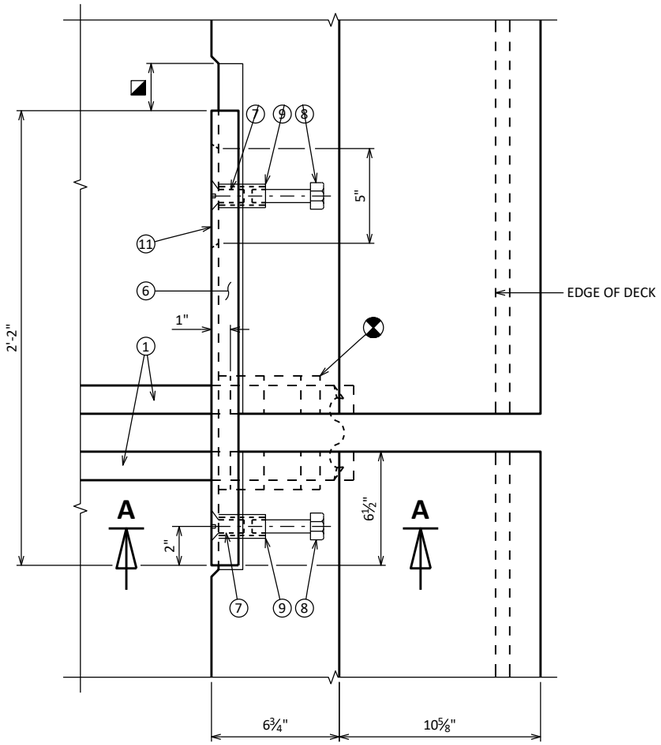
1204-08-73



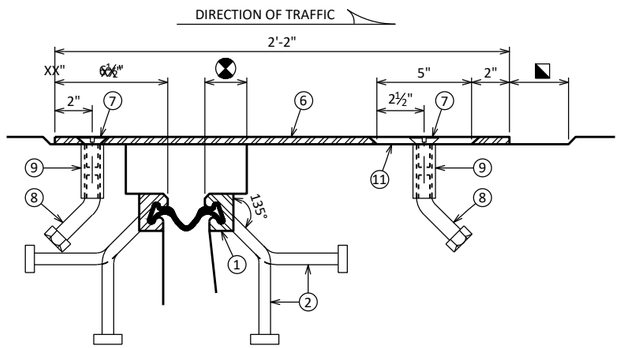
SECTION L-L



VIEW OF PARAPET PLATE FROM ROADWAY



PLAN



SECTION M-M

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS ½".

SEE SHEET 23 FOR LEGEND.

NO.	DATE	REVISION	BY

STRUCTURE B-13-52

DRAWN BY DCH | PLANS CK'D SRA

COVER PLATE DETAILS

SHEET 24 OF 25

592

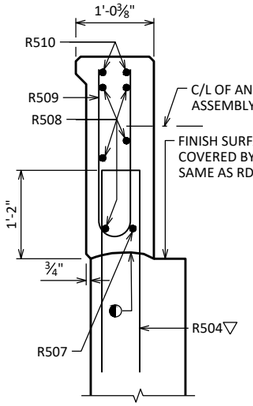
SCALE = 2.00

8

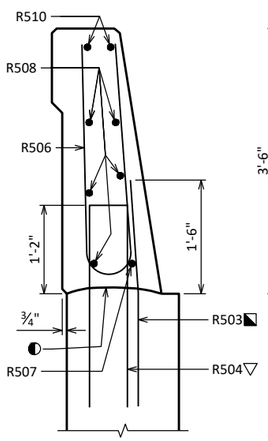
8

STATE PROJECT NUMBER

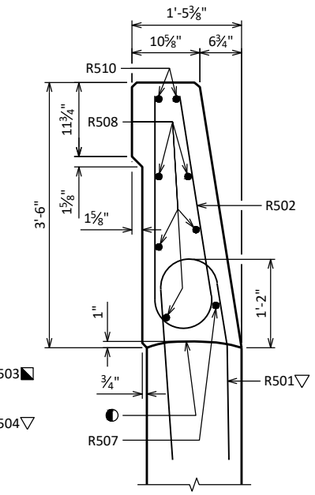
1204-08-73



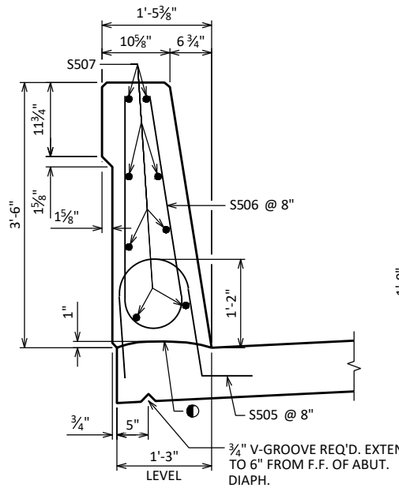
SECTION A-A



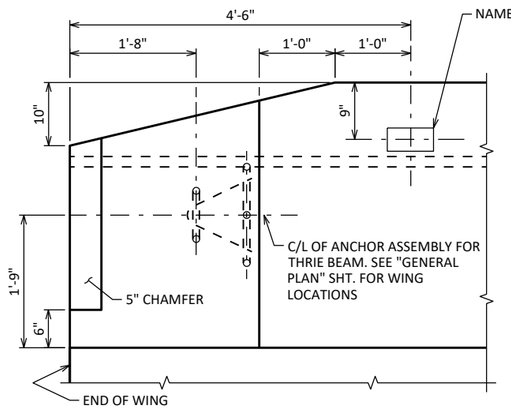
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON DECK



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR WING PARAPETS

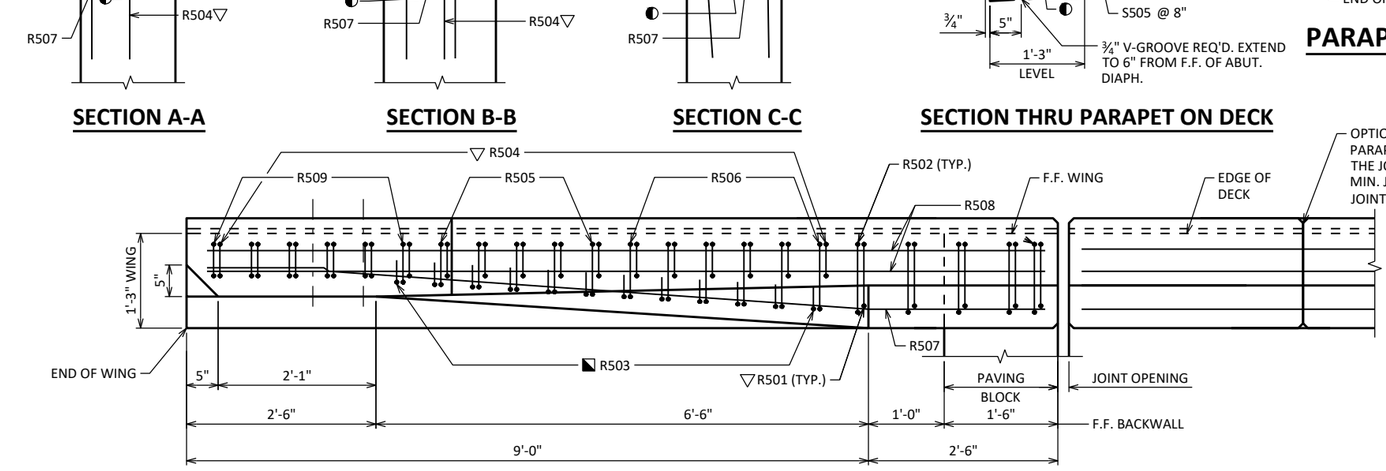
BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS							TOTAL WEIGHT = 810 LBS
R501	X	5	5	5'-10"	X		PARAPET VERT.
R502	X	5	5	6'-8"	X		PARAPET VERT.
R503	X	12	12	3'-0"	X		PARAPET VERT.
R504	X	17	17	5'-7"	X		PARAPET VERT.
R505	X	5	5	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	11'-1"	X		PARAPET HORIZ.
R508	X	5	5	11'-2"		⚠	PARAPET HORIZ.
R509	X	6	6	5'-5"	X		PARAPET VERT.
R510	X	2	2	11'-3"	X		PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

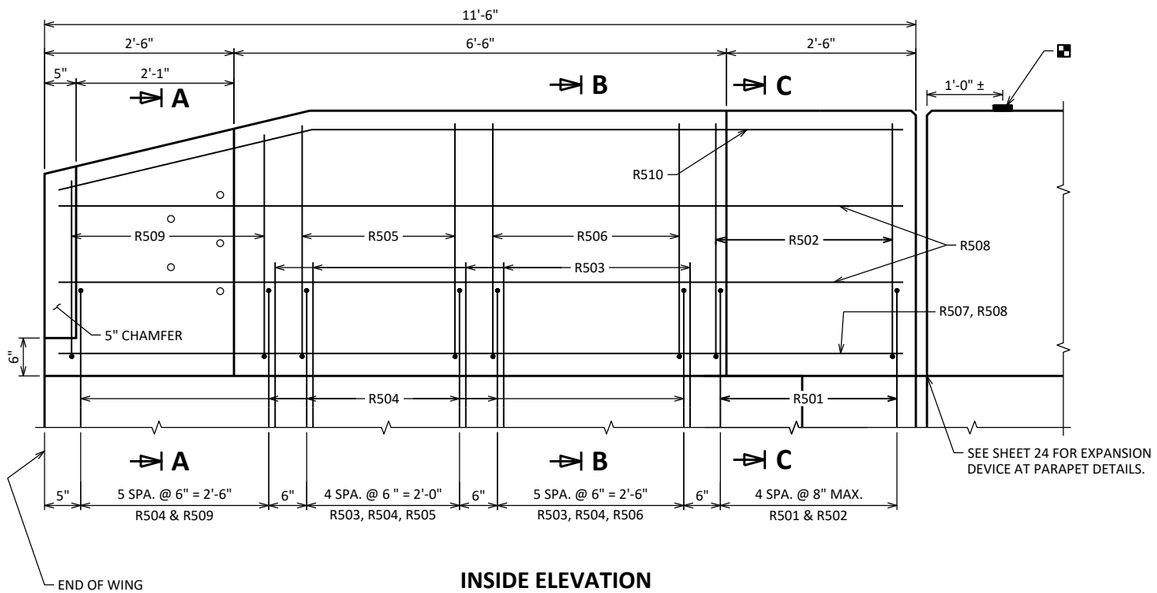
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"



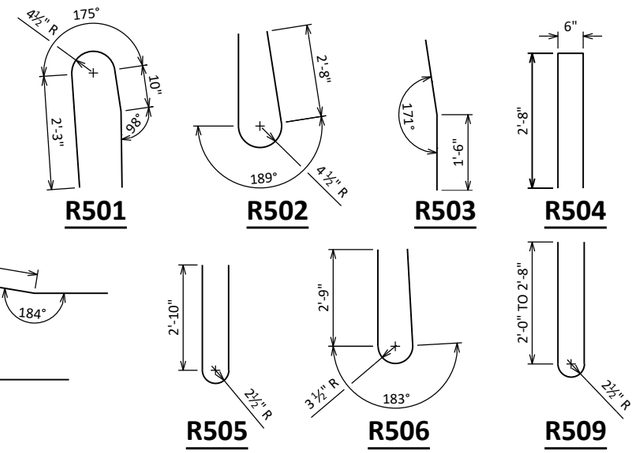
PLAN

NW CORNER SHOWN, NE CORNER SHOWN SIMILAR



INSIDE ELEVATION

NW CORNER SHOWN, NE CORNER SHOWN SIMILAR

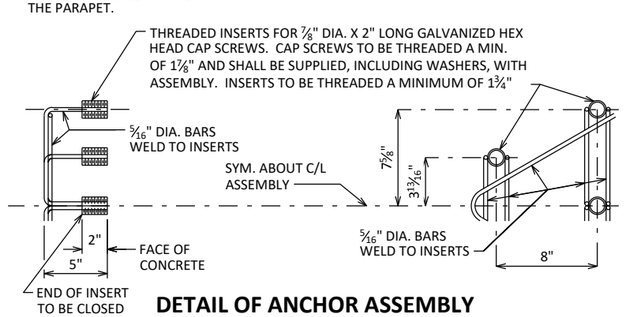


BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.

CONST. JOINT - STRIKE OFF AS SHOWN

R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STRUCTURE B-13-52

DRAWN BY DC | PLANS CK'D SRA

SINGLE SLOPE PARAPET 42SS

SHEET 25 OF 25

593

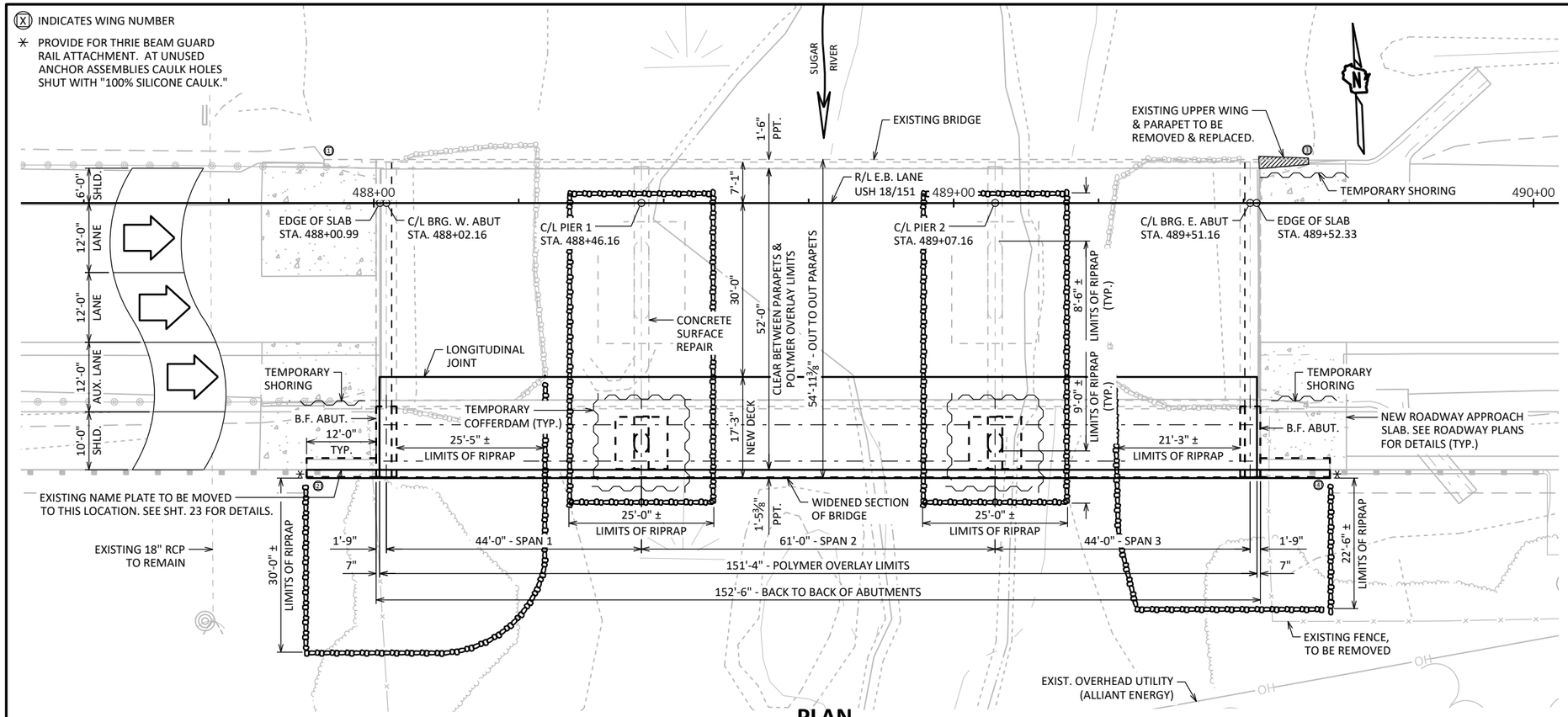
SCALE =

8

8

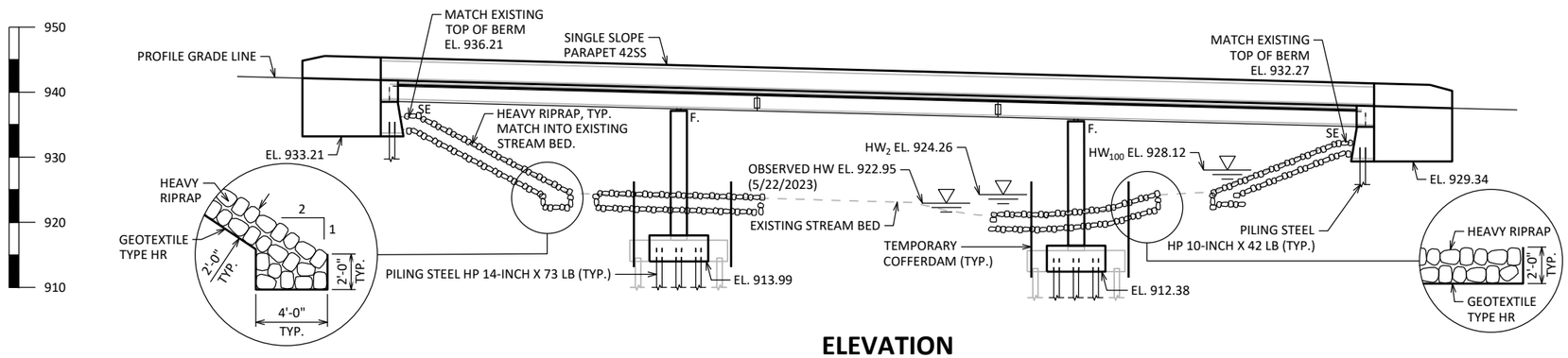
STATE PROJECT NUMBER

1204-08-73



PLAN

(3-SPAN - W27X146 GIRDER BRIDGE WIDENING)



ELEVATION

NORMAL TO ROADWAY - LOOKING UPSTREAM

DESIGN DATA

LFR LIVE LOAD:

DESIGN RATING:	HS-20
INVENTORY RATING:	HS-33
OPERATING RATING:	HS-56

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

LRFR LIVE LOAD:

DESIGN LOADING:	HL-93
INVENTORY RATING:	1.79
OPERATING RATING	2.36

WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

STRUCTURE IS RATED FOR A POLYMER OVERLAY OF 5 PSF.

MATERIAL PROPERTIES:

CONCRETE MASONRY
- DECK WIDENING, PARAPET AND DIAPHRAGM — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
- GRADE 60 — f_y = 60,000 PSI

HIGH STRENGTH STRUCTURAL STEEL
- ASTM A709 — fy = 50,000 PSI

STRUCTURAL CARBON STEEL
- ASTM A709, GRADE 36 — fy = 36,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH X 42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 150 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 70-'0" LONG.

PIERS TO BE SUPPORTED ON HP 14-INCH X 73 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 160 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 55-'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 PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

Q_{100}= 2298 C.F.S.
V_{100}= 5.46 F.P.S.
HW_{100}= EL. 928.12
WATERWAY AREA = 371 SQ. FT.
DRAINAGE AREA = 36.2 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:

Q_2= 117.72 C.F.S.
V_2= 1.31 F.P.S.
HW_2= EL. 924.26

TRAFFIC DATA

USH 18 EB:

ADT = 25,400 (2024)
ADT = 43,200 (2044)
R.D.S. = 70 MPH

STRUCTURE DESIGN CONTACTS:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261

CONSULTANT
MATTHEW KRIPPNER (608) 828-8123

LIST OF DRAWINGS:

1. GENERAL PLAN
2. CROSS SECTION & NOTES
3. QUANTITIES
4. SUBSURFACE EXPLORATION
5. CONSTRUCTION STAGING
6. WEST ABUTMENT 1
7. WEST ABUTMENT 2
8. WING 2
9. WEST ABUTMENT DETAILS
10. EAST ABUTMENT 1
11. EAST ABUTMENT 2
12. WING 4
13. EAST ABUTMENT DETAILS
14. PIERS 1 & 2
15. PIERS 1 & 2 DETAILS
16. BEARING DETAILS
17. FRAMING PLAN
18. GIRDER DETAILS
19. SUPERSTRUCTURE 1
20. SUPERSTRUCTURE 2
21. SUPERSTRUCTURE 3
22. SUPERSTRUCTURE 4
23. SINGLE SLOPE PARAPET 42SS

SCOPE OF WORK:

1. CONCRETE SURFACE REPAIR
2. WIDEN DECK AND SUBSTRUCTURES
3. CLEAN & PAINT GIRDER ENDS
4. REPAIR SCOUR AT PIERS
5. PLACE OVERLAY ON DECK
6. RESEAL REMAINING EXISTING PARAPET
7. REMOVE & REPLACE EXISTING WING 3 UPPER

11/26/2024

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 11/27/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-13-383

USH 18 EB OVER SUGAR RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
DANE	VERONA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DCH	DESIGNED CK'D	SRA	DRAWN BY	DCH	PLANS CK'D	SRA

GENERAL PLAN

SHEET 1 OF 23
594

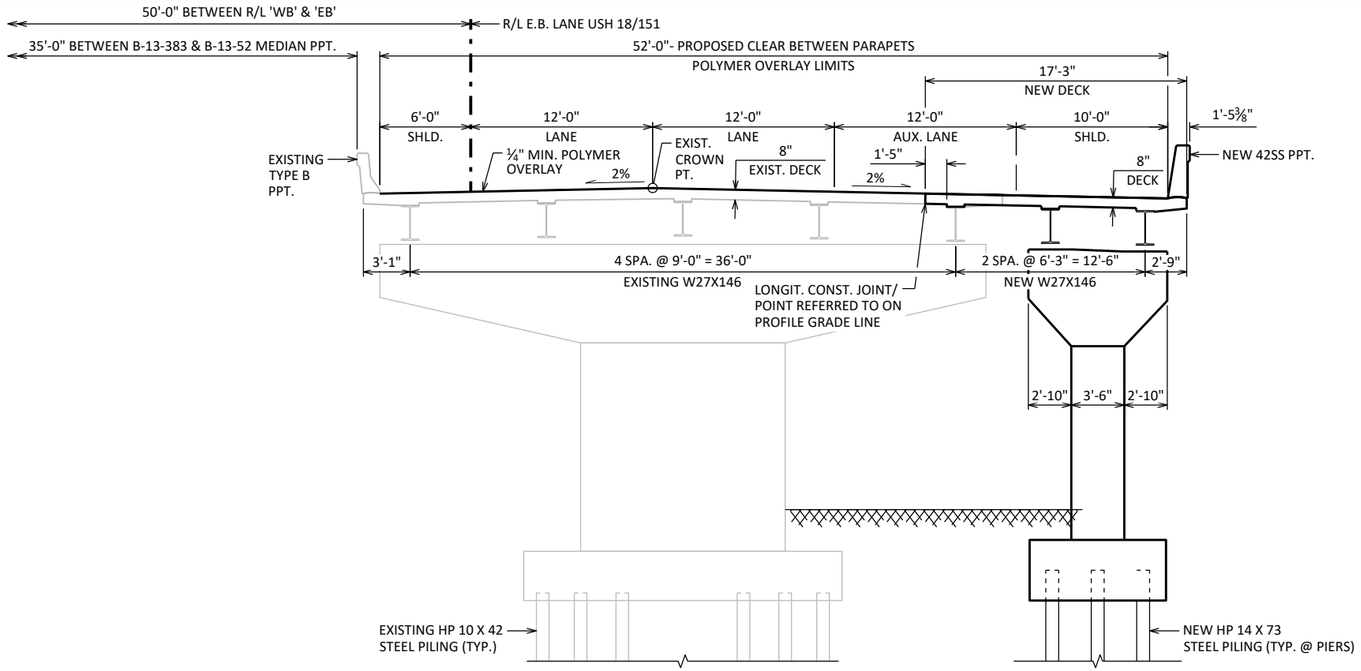
SCALE =

I.D. 1204-08-03

DATE: NOV. 2024

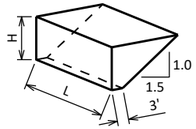
8

8



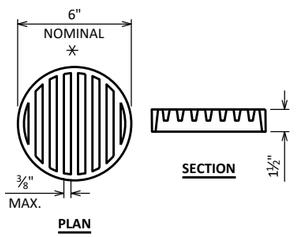
CROSS SECTION THRU ROADWAY - AT PIER

PIER 2 SHOWN - LOOKING UPSTATION



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY 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)

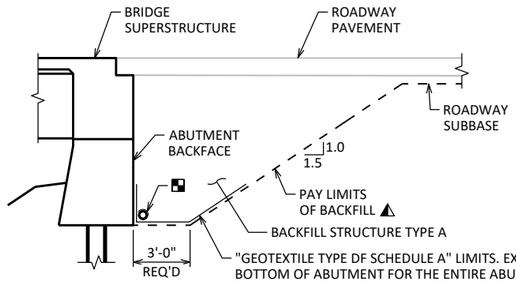


RODENT SHIELD DETAIL

✳ 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".

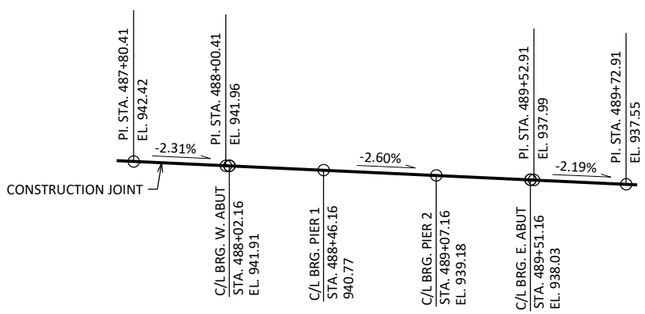
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND 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.



PROFILE GRADE LINE

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

EXISTING DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

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.

THE EXISTING STRUCTURE, B-13-383, IS A THREE SPAN STEEL GIRDER BRIDGE, 152.5-FOOT LONG AND 43-FOOT WIDE. THE SUPERSTRUCTURE AND SUBSTRUCTURE IS TO BE WIDENED BY TWO GIRDER LINES AT THE SOUTH EDGE OF THE STRUCTURE.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURE BRIDGES B-13-383" SHALL BE THE EXISTING GROUNDLINE. "EXCAVATION FOR STRUCTURE BRIDGES B-13-383" TO INCLUDE EXCAVATION NECESSARY FOR WING 3 REPLACEMENT.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

CLEAN, STRAIGHTEN AND EXTEND EXISTING STEEL REINFORCING 24 DIAMETERS INTO NEW CONSTRUCTION, WHERE APPLICABLE AND UNLESS SPECIFIED OTHERWISE.

ROUGHEN SURFACE OF CONCRETE 1/4-INCH MINIMUM DEPTH AT ALL SURFACES RECEIVING NEW CONCRETE.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS. POLYMER TO BE APPLIED TO THE ENTIRE TOP OF THE DECK.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE NEW PARAPETS ON THE BRIDGE AND WING WALLS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS AND PIERS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1, ABUTMENT DETAILS AND PEIR DETAILS.

EXISTING SUBSTRUCTURE LOCATIONS ARE BASED ON AS-BUILT PLANS AND 2023 SURVEY DATA. EXISTING SUBSTRUCTURES TO REMAIN IN PLACE AND INCORPORATED INTO NEW CONSTRUCTION AS SHOWN IN PLANS.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. BACKFILL PLACE BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

THE UTILITY INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR CONSIDERED ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" SAW CUT.

SHOT BLASTING, DECK SURFACE PREPARATIONS, AND TRANSITIONAL AREAS ARE INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

VARIATIONS TO THE NEW GRADE LINE OVER ¼" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE EXISTING GIRDER AND SHEAR CONNECTORS.

THE COLOR OF THE FINISH EPOXY TOP COAT SHALL BE BROWN (FEDERAL STANDARD AMS COLOR NO. 20059) OR SIMILIAR COLOR APPROVED BY THE ENGINEER.

ALL FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS UNLESS OTHERWISE SHOWN OR NOTED.

ALL STRUCTURAL STEEL FOR GIRDERS AND SPLICE PLATES SHALL BE HIGH-STRENGTH STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A709 GRADE 50. ALL OTHER STRUCUTRAL STEEL SHALL BE STRUCTURAL CARBON STEEL, A.S.T.M. A709 GRADE 36.

THE MINIMUM CONCRETE HAUNCH SHALL BE 2" FOR DESIGN CALCULATIONS AND THE HAUNCH CONCRETE QUANTITY IS BASED ON AN AVERAGE DEPTH OF 1½" WHICH IS THE MAXIMUM HAUNCH QUANTITY FOR WHICH THE CONTRACTOR WILL BE PAID.

POSSIBLE SWALLOW NESTS LOCATED ON UNDERSIDE OF EXISTING STRUCTURE. DETERRENT IS TO BE INSTALLED PRIOR TO CONSTRUCTION. WORKING DAYS WILL NOT BE ASSESSED FOR PLACEMENT OF DETERRENT SYSTEMS.

"CONCRETE SURFACE REPAIR" AREAS SHOWN IN THE QUANTITIES TABLE ARE BASED ON THE BRIDGE INSPECTION REPORT FOR THE PIER AND ARE APPROXIMATE. EXACT AREAS OF REPAIR SHALL BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER.

CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR EXISTING DECK OVERHANG DURING CONSTRUCTION. ALL RELATED DESIGNING, CONSTRUCTING, MAINTAINING AND REMOVING OF TEMPORARY SUPPORT SHALL BE INCLUDED IN "TEMPORARY SUPPORT B-13-0383".

"PIGMENTED SURFACE SEALER RESEAL" SHALL BE APPLIED TO THE TOP AND INSIDE SURFACES OF THE EXISTING PARAPETS.

STATE PROJECT NUMBER

1204-08-73

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

CROSS SECTIONS & NOTES

SHEET 2 OF 23

595

SCALE =

8

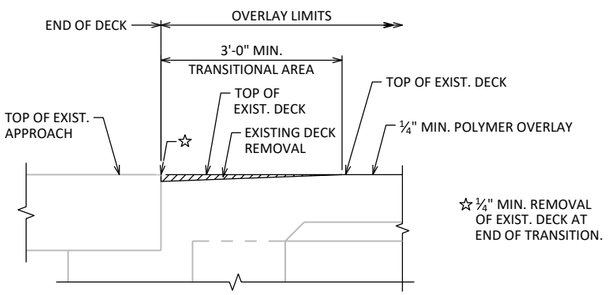
8

STATE PROJECT NUMBER

1204-08-73

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	WEST ABUTMENT	PIER 1	PIER 2	EAST ABUTMENT	SUPER.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-13-0383	EACH	———	———	———	———	———	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-13-0383	EACH	———	———	———	———	———	1
206.5001	COFFERDAMS B-13-0383	EACH	———	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	75	117	117	70	———	379
502.0100	CONCRETE MASONRY BRIDGES	CY	19	21	21	19	97	177
502.1100	CONCRETE MASONRY SEAL	CY	———	25	25	———	———	50
502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	———	———	———	280	280
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	4	———	———	———	61	65
502.3210	PIGMENTED SURFACE SEALER	SY	6	———	———	6	75	87
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	———	———	———	———	———	46
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	930	835	835	930	———	3,530
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	1,190	1,895	1,895	1,170	20,620	26,770
506.0105	STRUCTURAL STEEL CARBON	LB	———	———	———	———	3,470	3,470
506.0605	STRUCTURAL STEEL HS	LB	———	———	———	———	44,970	44,970
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	———	———	———	———	4
506.3015	WELDED STUD SHEAR CONNECTORS 7/8X6-INCH	EACH	———	———	———	———	———	1,422
506.5000	BEARING ASSEMBLIES FIXED B-13-0383	EACH	———	———	———	———	———	4
509.1500	CONCRETE SURFACE REPAIR	SF	———	2	———	———	———	2
509.5100.S	POLYMER OVERLAY	SY	———	———	———	———	880	880
511.1200	TEMPORARY SHORING B-13-0383	SF	180	———	———	330	———	510
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	7	———	———	7	———	14
517.0601	PAINTING EPOXY SYSTEM B-13-0383	EACH	———	———	———	———	———	1
517.0901.S.002	PREPARATIONS AND COATING OF TOP FLANGES B-13-0383	EACH	———	———	———	———	———	1
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	210	———	———	210	———	420
550.1140	PILING STEEL HP 14-INCH X 73 LB	LF	———	495	495	———	———	990
606.0300	RIPRAP HEAVY	CY	120	100	100	90	———	410
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	29	———	———	29	———	58
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	———	———	———	———	2
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	22	———	———	22	———	44
645.0120	GEOTEXTILE TYPE HR	SY	180	170	170	140	———	660
SPV.0060.504	TEMPORARY SUPPORT B-13-0383	EACH	———	———	———	———	———	1
	NON-BID ITEMS							
	FILLER	SIZE	———	———	———	———	———	1/2"



SECTION THRU ABUTMENT TRANSITIONAL AREA ON DECK AT SEMI-EXPANSION OR FIXED JOINT

(REMOVAL AND OVERLAY THICKNESS NOT TO SCALE)

NOTE: TRANSITIONAL AREA REQUIRED WHEN APPROACH PAVEMENT HAS BEEN PLACED PRIOR TO OVERLAY PLACEMENT.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

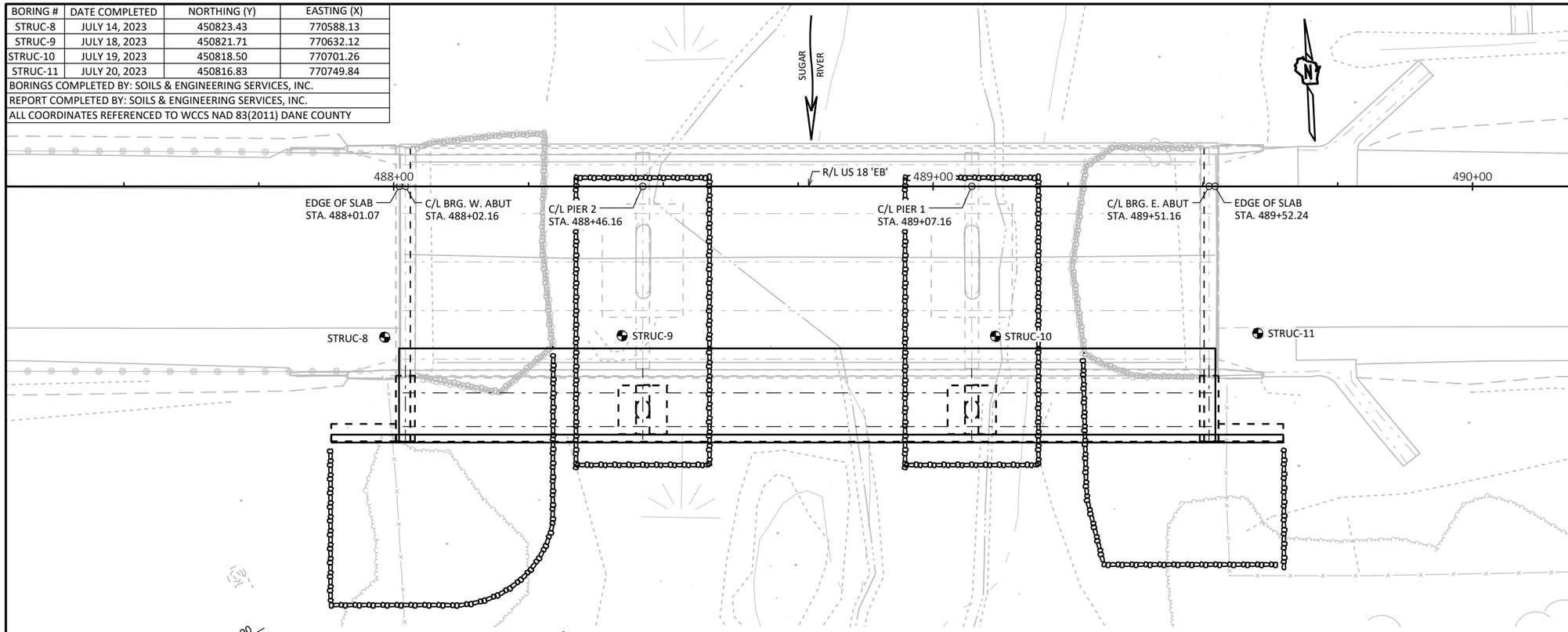
QUANTITIES

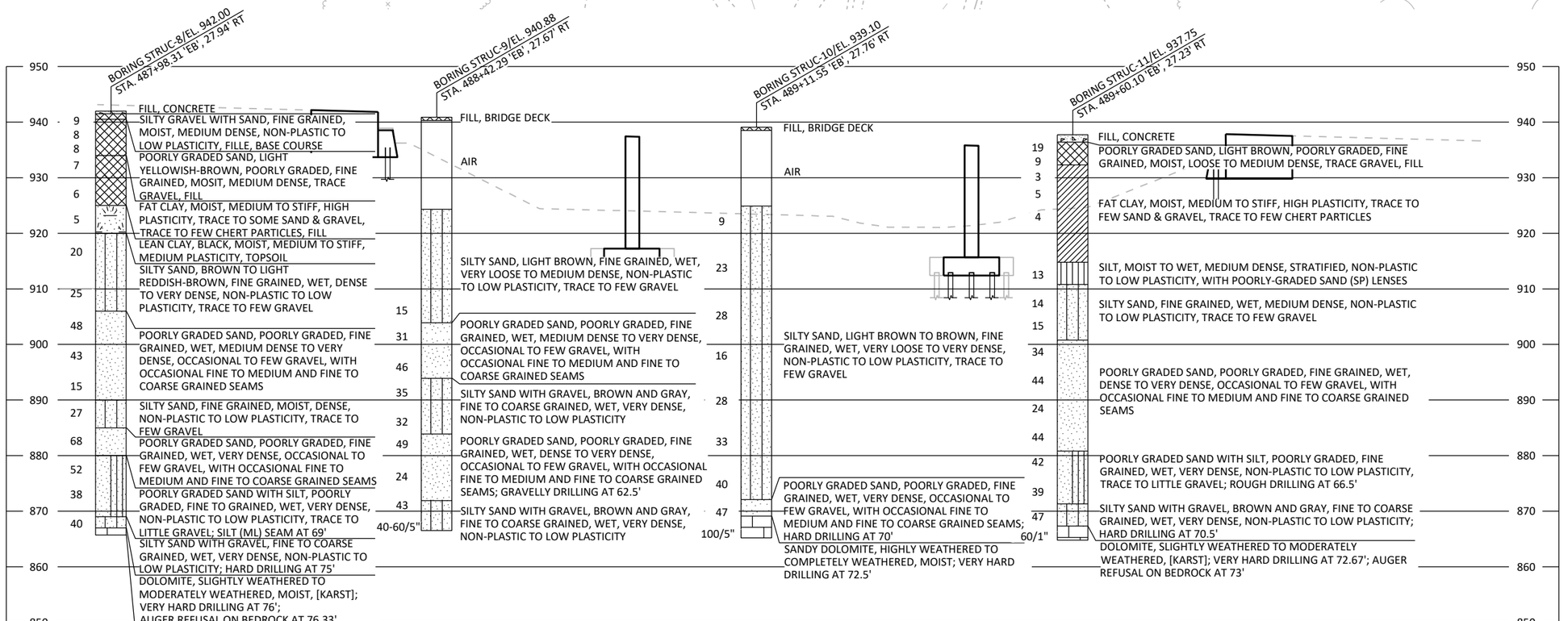
SHEET 3 OF 23

596

SCALE =

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
STRUC-8	JULY 14, 2023	450823.43	770588.13
STRUC-9	JULY 18, 2023	450821.71	770632.12
STRUC-10	JULY 19, 2023	450818.50	770701.26
STRUC-11	JULY 20, 2023	450816.83	770749.84
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(2011) DANE COUNTY			





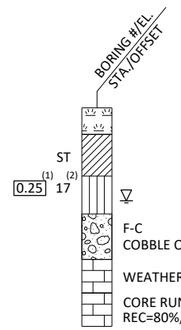
STATE PROJECT NUMBER

1204-08-73

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

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

SUBSURFACE EXPLORATION

SHEET 4 OF 23
597

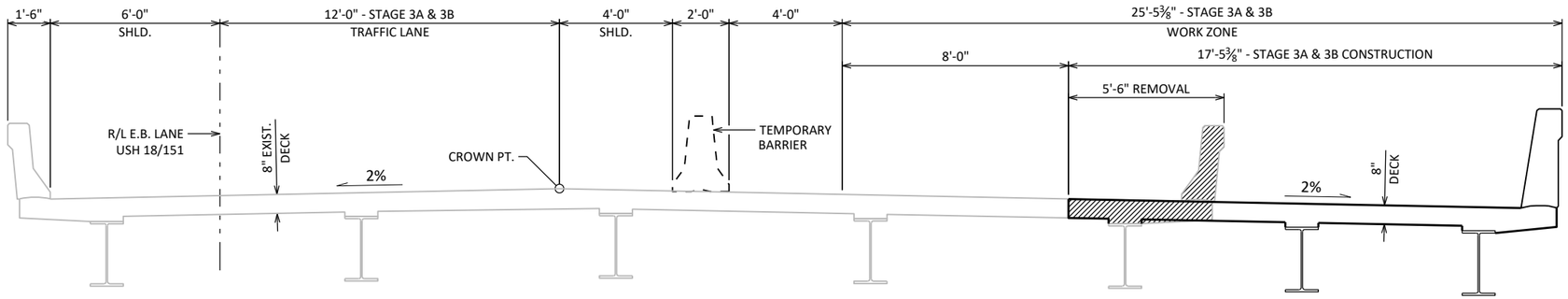
SCALE =

8

8

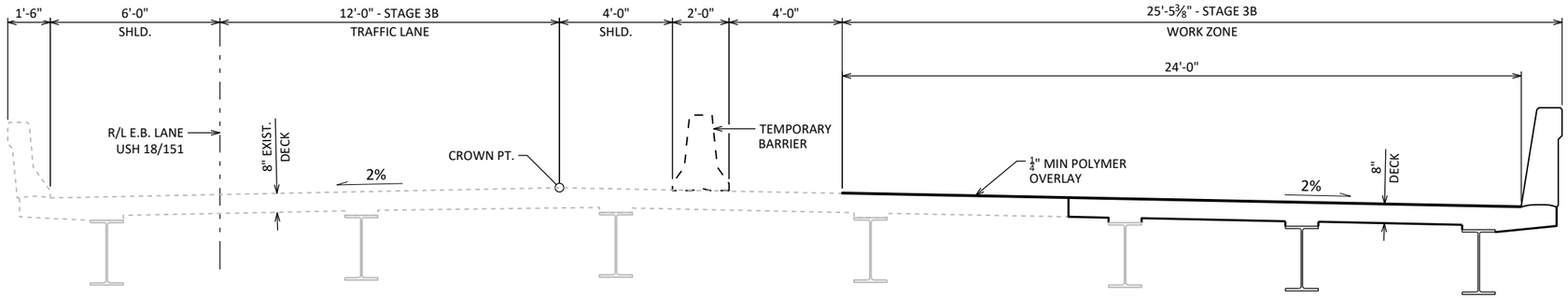
STATE PROJECT NUMBER

1204-08-73



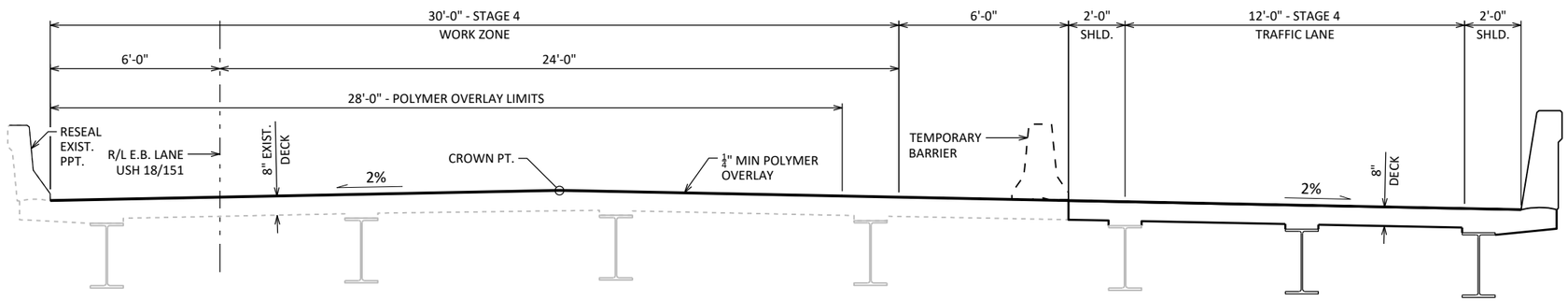
STAGE 3A & 3B - REMOVAL & CONSTRUCTION

(LOOKING UPSTATION)



STAGE 3B - POLYMER OVERLAY

(LOOKING UPSTATION)



STAGE 4 - POLYMER OVERLAY & WING 3 REPLACEMENT

(LOOKING UPSTATION)

NOTE: WING 3 UPPER REMOVAL AND REPLACEMENT NOT SHOWN BUT INCLUDED DURING THIS CONSTRUCTION STAGE.
SEE SHEET 1 AND WING WALL REPLACEMENT PLAN FOR DETAILS.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY MAG | PLANS CK'D SRA

CONSTRUCTION STAGING

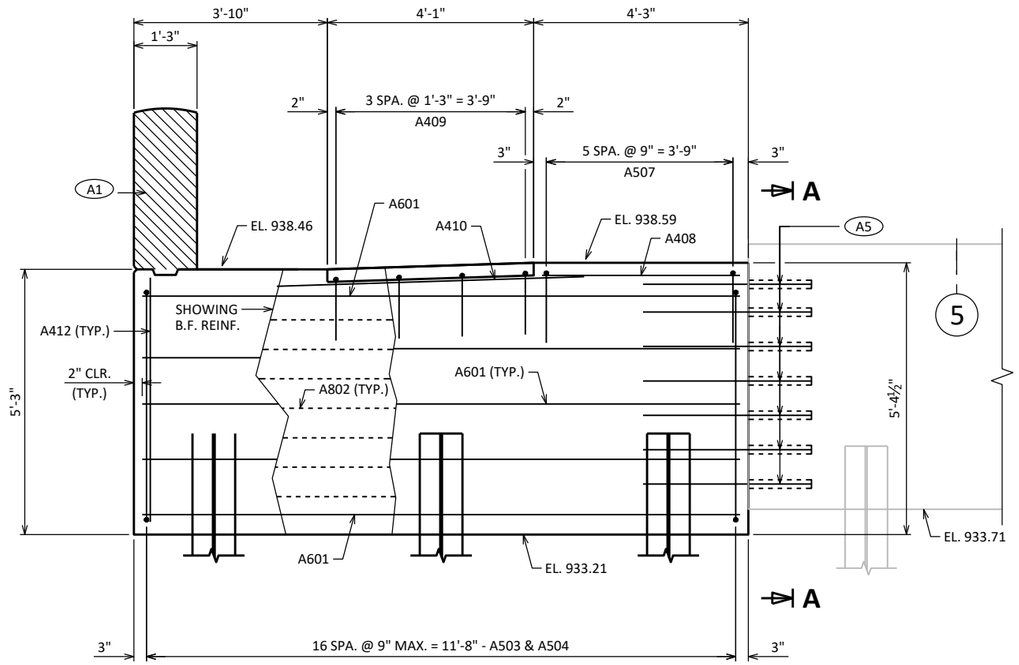
SHEET 5 OF 23

598

SCALE =

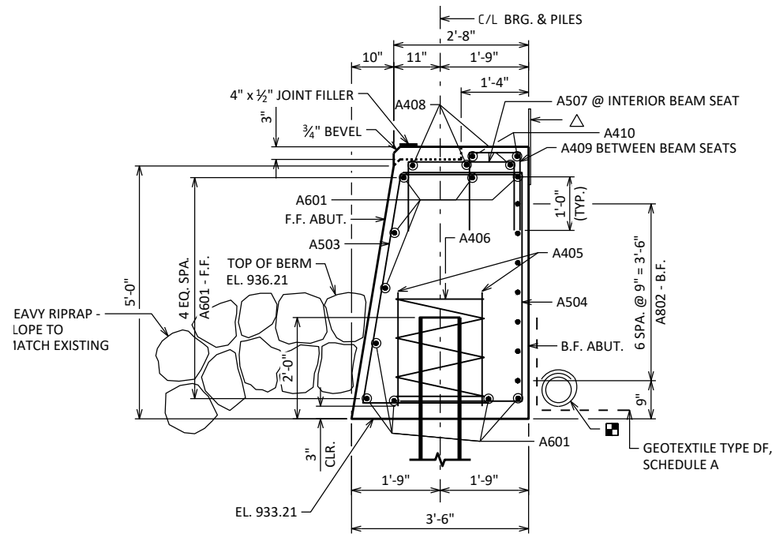
STATE PROJECT NUMBER

1204-08-73



ELEVATION

(LOOKING WEST)



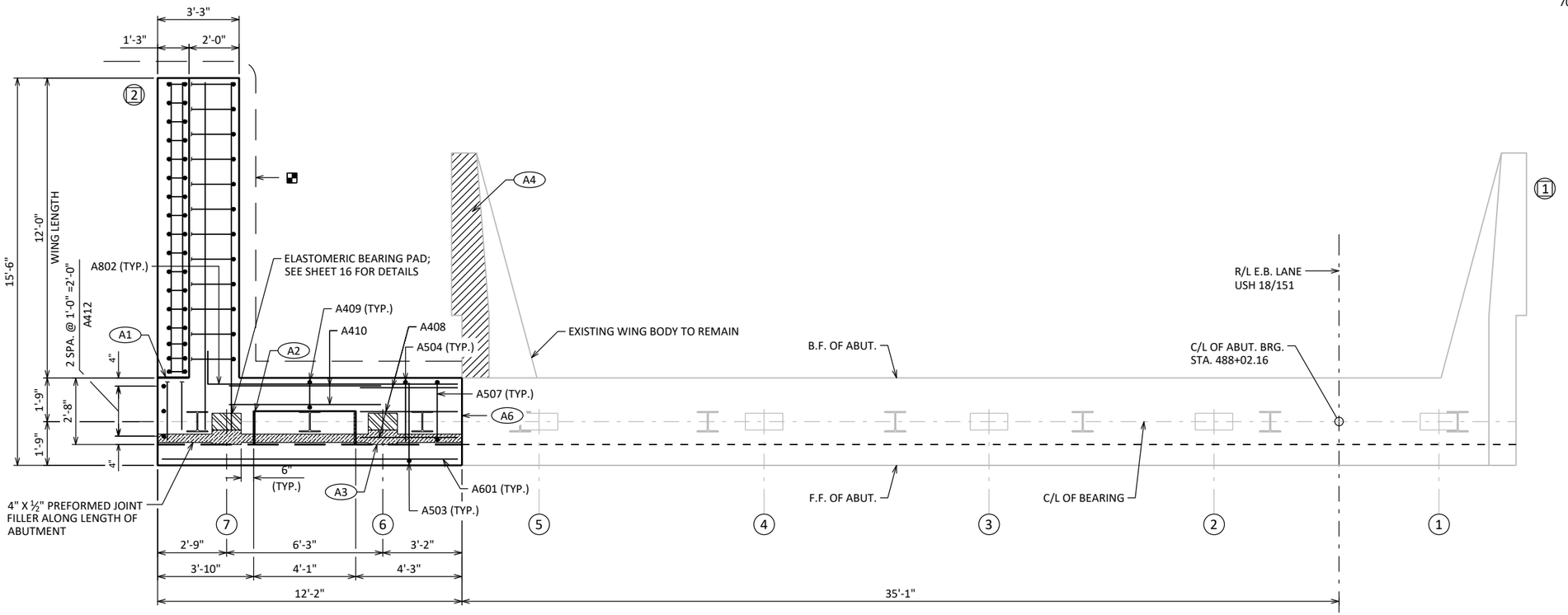
SECTION THRU ABUTMENT

LEGEND

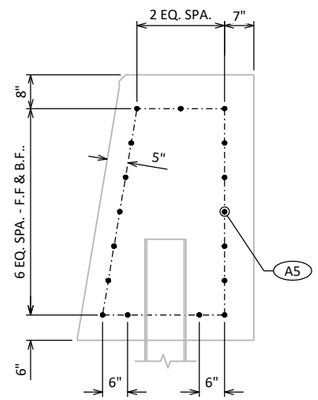
- REMOVAL LIMITS.
- (X) INDICATES WING NUMBER.
- △ 18" RUBBERIZED MEMBRANE WATERPROFFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE
- PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A1) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON -STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A2) ¾" CORK FILLED UP VERTICAL BEAM SEAT FACES THAT RUN PARRALLEL WITH GIRDER.
- (A3) ½" PREFORMED JOINT FILLER UNDER GIRDER FLANGE IN FRONT OF BEARING PAD.
- (A4) REMOVE EXISTING UPPER WING & PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.
- (A5) ADHESIVE ANCHORS A611 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.
- (A6) ROUGHEN SURFACE OF CONCRETE ¼" DEEP MINIMUM AT ALL AREAS WHERE NEW CONCRETE CONTACTS EXISTING CONCRETE.

PILE NOTE

WEST ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10 X 42 WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 70' LONG. FOR PILE LAYOUT AND PILE SPLICE DETAILS, SEE SHEET 7.



PLAN



SECTION A-A

ADHESIVE ANCHOR LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

WEST ABUTMENT 1

SHEET 6 OF 23

599

SCALE =

8

8

STATE PROJECT NUMBER

1204-08-73

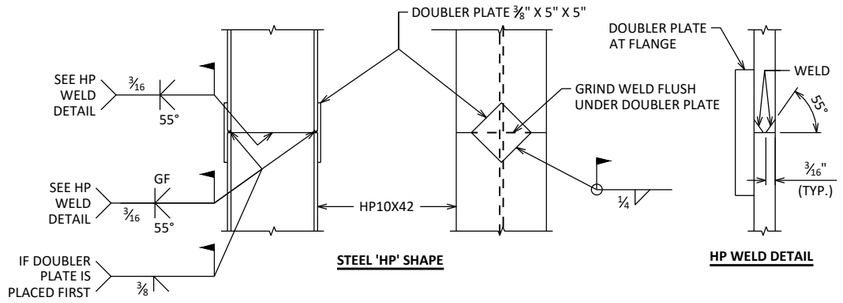
LEGEND

REMOVAL LIMITS.

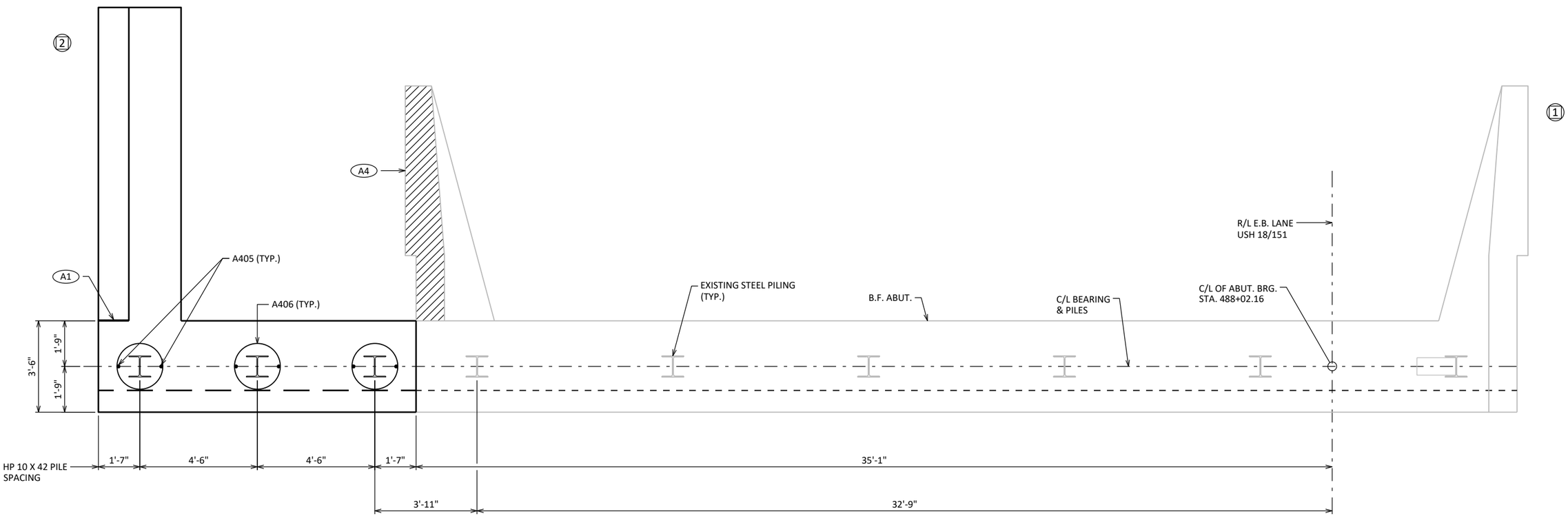
(X) INDICATES WING NUMBER.

(A1) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON -STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A4) REMOVE EXISTING UPPER WING & PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.



'HP' PILE DETAILS



PILE PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

WEST ABUTMENT 2

SHEET 7 OF 23

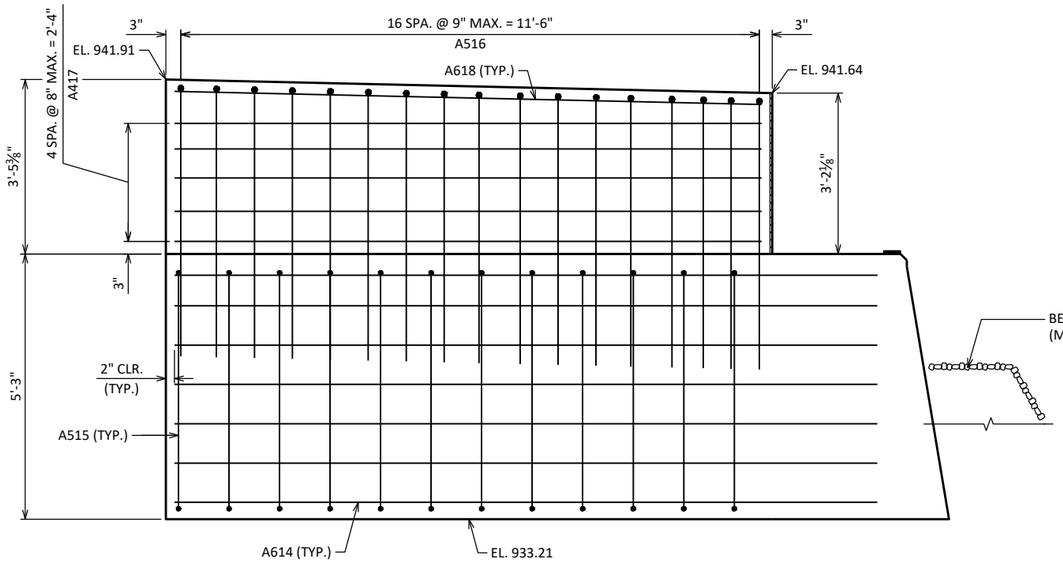
SCALE = 600

8

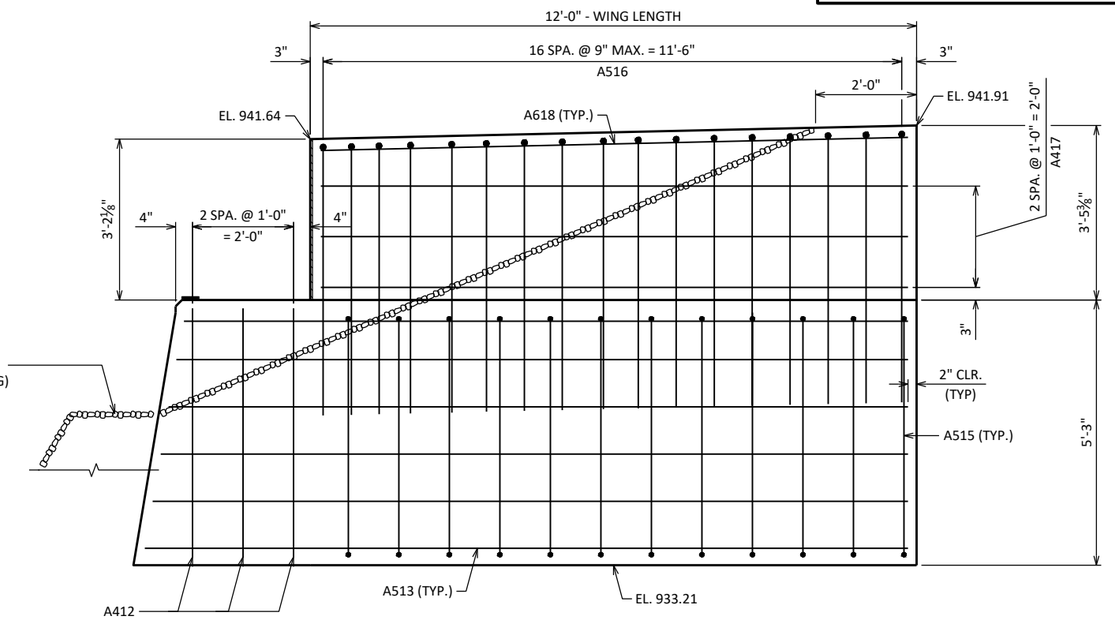
8

STATE PROJECT NUMBER

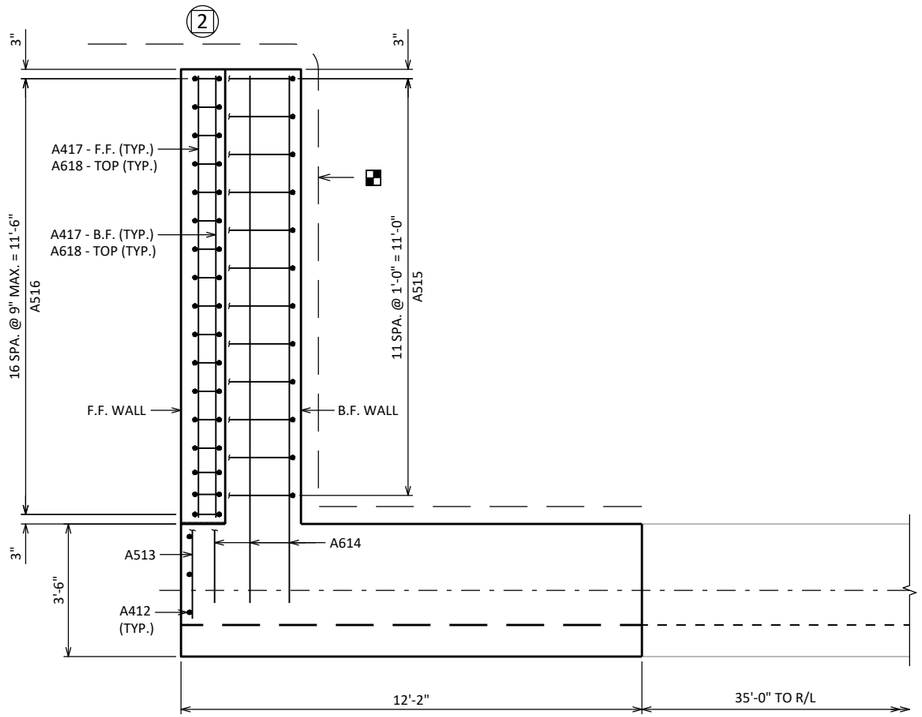
1204-08-73



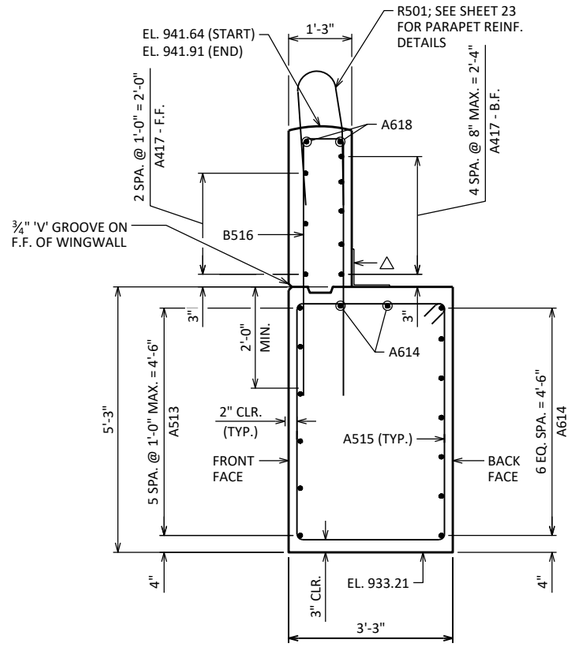
WING ELEVATION - BACK FACE



WING ELEVATION - FRONT FACE



PLAN



SECTION THRU WING

(LOOKING WEST)

LEGEND

- (X) INDICATES WING NUMBER.
- △ 18" RUBBERIZED MEMBRANE WATERPROFFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE
- ▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

WING 2

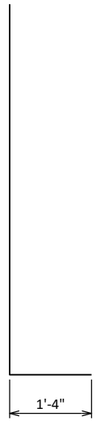
SHEET 8 OF 23

601

SCALE =

STATE PROJECT NUMBER

1204-08-73



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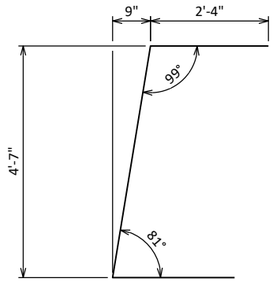

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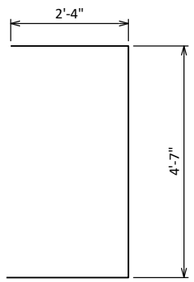

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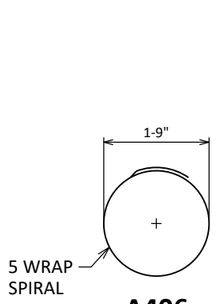

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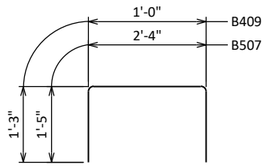
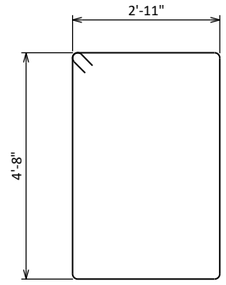


A507 & A409



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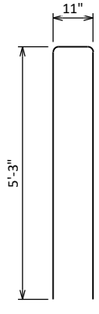


A516

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 930
A601	10	11'-10''			WEST ABUTMENT - BODY	HORIZ.
A802	7	11'-2''	X		WEST ABUTMENT - BODY B.F.	HORIZ.
A503	17	9'-3''	X		WEST ABUTMENT - BODY F.F.	VERT.
A504	17	9'-1''	X		WEST ABUTMENT - BODY B.F.	VERT.
A405	6	2'-3''			WEST ABUTMENT - PILES	VERT.
A406	3	28'-0''	X		WEST ABUTMENT TIES - PILES	HORIZ.
A507	6	4'-11''	X		WEST ABUTMENT - BEAM SEAT	VERT.
A408	3	3'-11''			WEST ABUTMENT - BEAM SEAT	HORIZ.
A409	4	3'-4''	X		WEST ABUTMENT- BTWN. BEAM SEATS	VERT
A410	2	6'-1''			WEST ABUTMENT - BTWN. BEAM SEATS	HORIZ.
A611	17	3'-4''			WEST ABUTMENT ANCHORS - BODY	HORIZ.
A412	3	4'-10''			WEST ABUTMENT - BODY END	VERT.
COATED BARS						TOTAL WEIGHT = 780
A513	6	14'-9''		⚠	WING 2 - BODY F.F	HORIZ.
A614	9	13'-11''			WING 2 - BODY B.F. & TOP	HORIZ.
A515	12	15'-10''	X		WING 2 - BODY STIRRUP	VERT.
A516	17	11'-2''	X		WING 2 - UPPER	VERT.
A417	8	11'-7''			WING 2 - UPPER F.F. & B.F.	HORIZ.
A618	2	11'-7''			WING 2 - UPPER TOP	HORIZ.

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
A513	1 SERIES OF 6	14'-4" TO 15'-1"

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

WEST ABUTMENT DETAILS

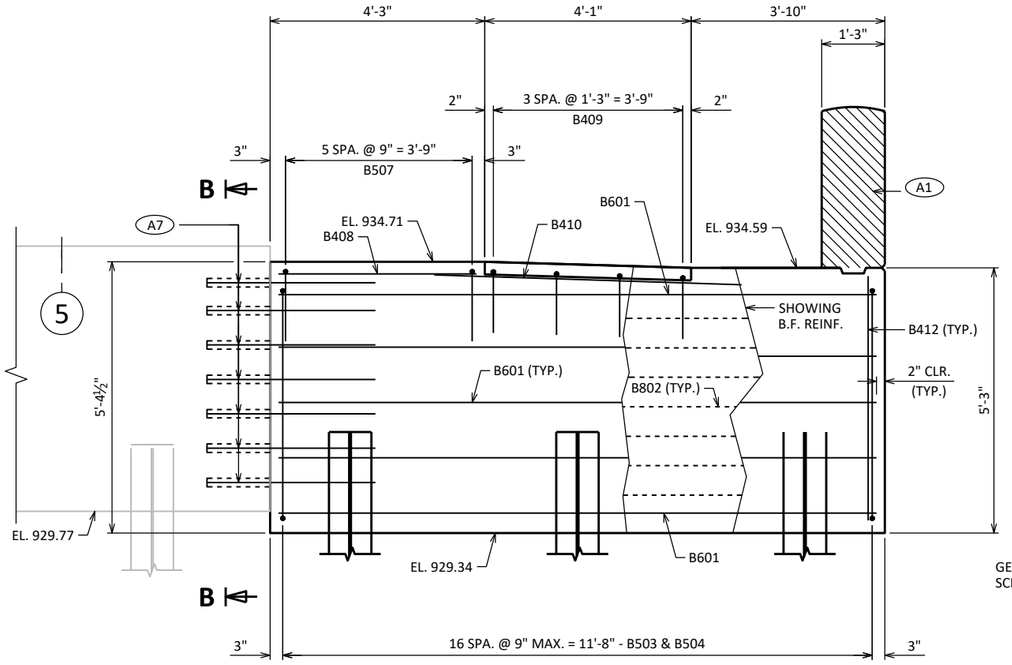
SHEET 9 OF 23

602

SCALE =

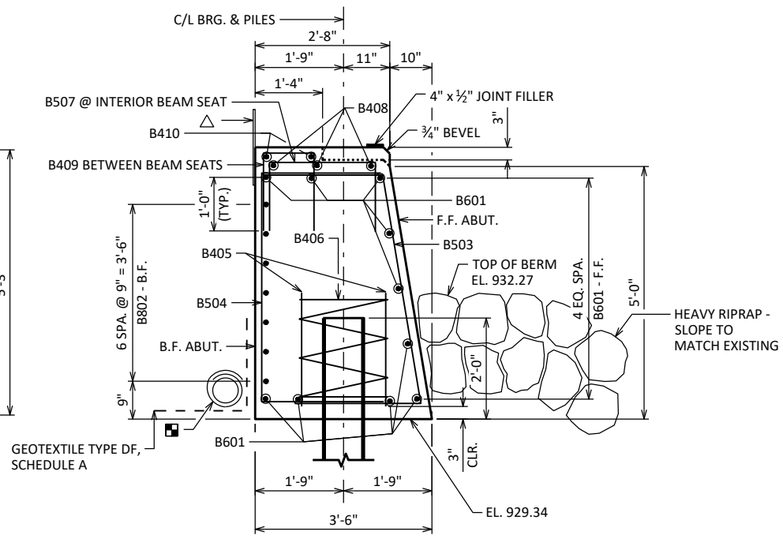
STATE PROJECT NUMBER

1204-08-73



ELEVATION

(LOOKING EAST)



SECTION THRU ABUTMENT

LEGEND

REMOVAL LIMITS.

(X) INDICATES WING NUMBER.

△ 18" RUBBERIZED MEMBRANE WATERPROFFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A1) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON -STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A2) ¾" CORK FILLED UP VERTICAL BEAM SEAT FACES THAT RUN PARRALLEL WITH GIRDER.

(A3) ½" PREFORMED JOINT FILLER UNDER GIRDER FLANGE IN FRONT OF BEARING PAD.

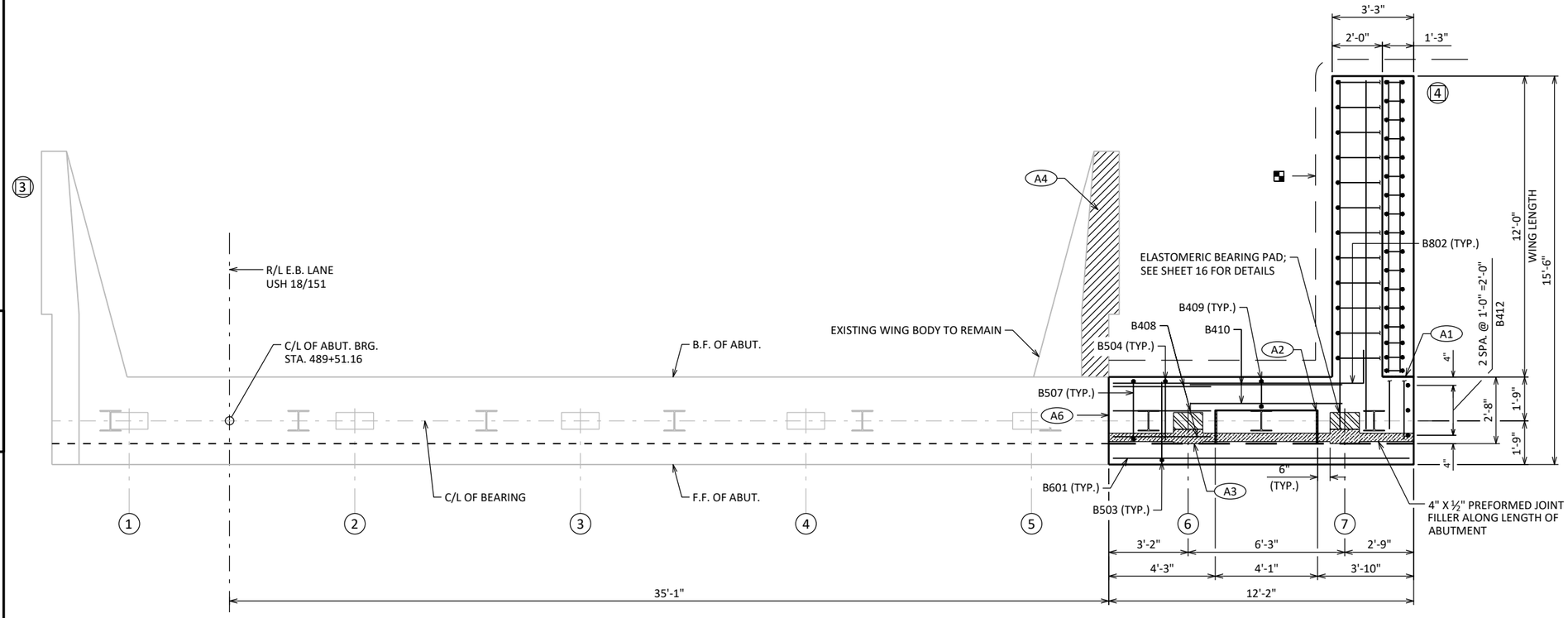
(A4) REMOVE EXISTING UPPER WING & PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.

(A6) ROUGHEN SURFACE OF CONCRETE ¼" DEEP MINIMUM AT ALL AREAS WHERE NEW CONCRETE CONTACTS EXISTING CONCRETE.

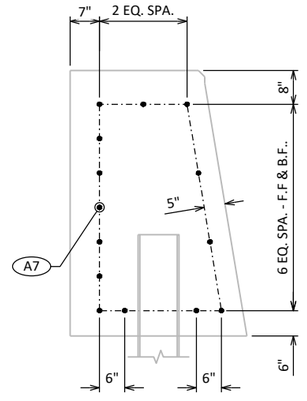
(A7) ADHESIVE ANCHORS B611 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.

PILE NOTE

EAST ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10 X 42 WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 70' LONG. FOR PILE LAYOUT AND PILE SPLICE DETAILS, SEE SHEET 11.



PLAN



SECTION B-B

ADHESIVE ANCHOR LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

EAST ABUTMENT 1

SHEET 10 OF 23

603

SCALE =

8

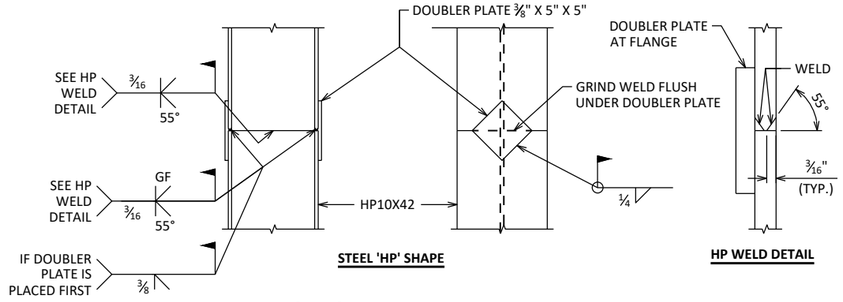
8

STATE PROJECT NUMBER

1204-08-73

LEGEND

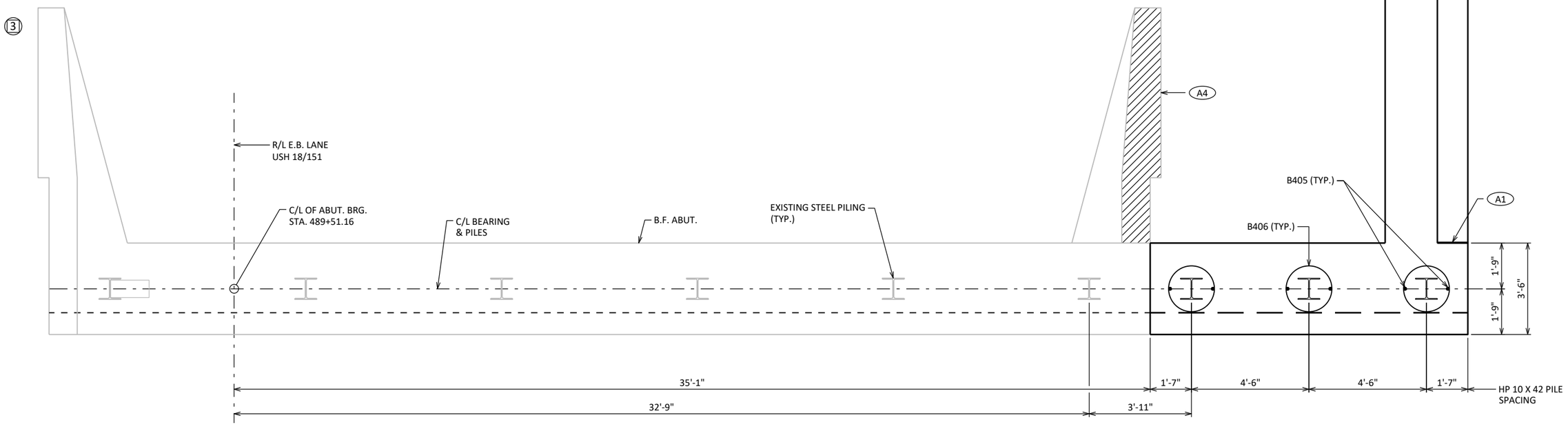
- REMOVAL LIMITS.
- (X) INDICATES WING NUMBER.
- (A1) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZONTAL & VERTICAL SURFACES OF ½" FILLER WITH NON -STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD ⅛" BELOW SURFACE OF CONCRETE.) EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A4) REMOVE EXISTING UPPER WING & PARAPET A MINIMUM OF 2'-0" BELOW FINISHED GRADE.



STEEL 'HP' SHAPE

HP WELD DETAIL

'HP' PILE DETAILS



PILE PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

EAST ABUTMENT 2

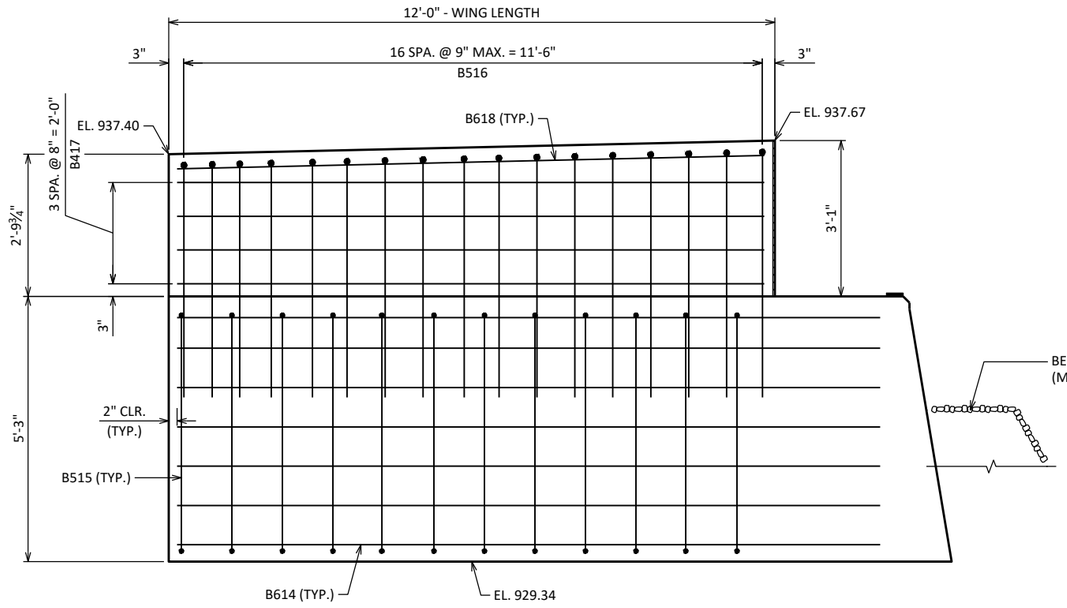
SHEET 11 OF 23

604

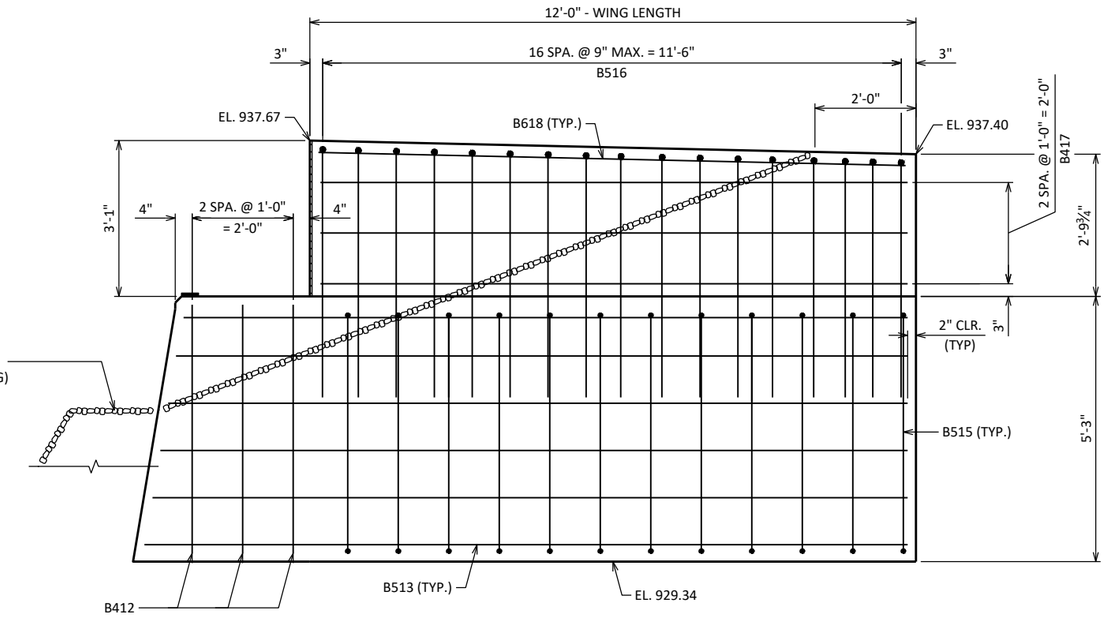
SCALE =

STATE PROJECT NUMBER

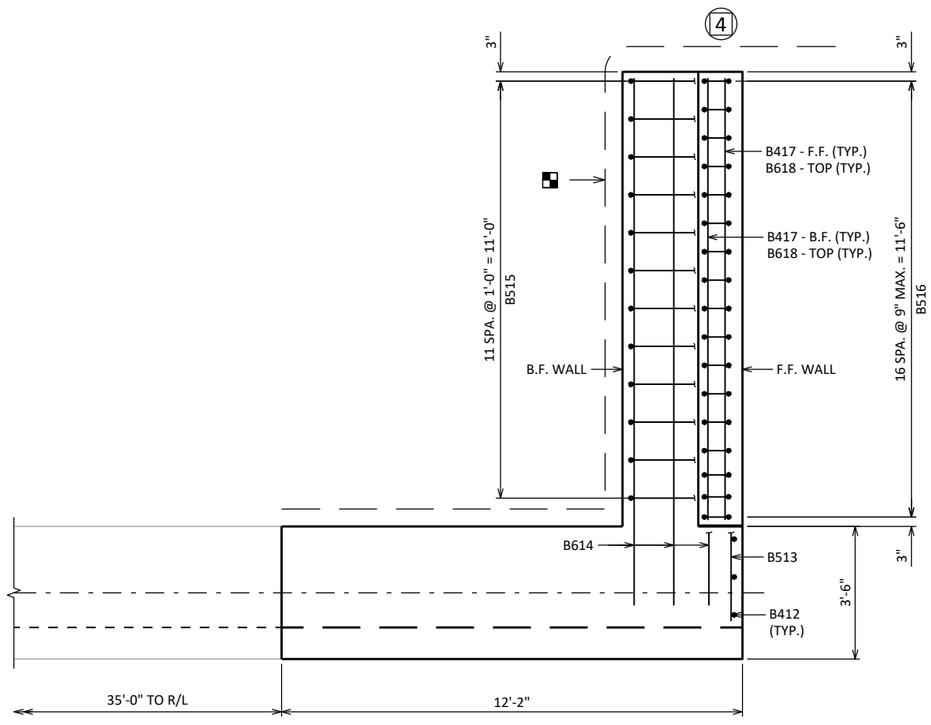
1204-08-73



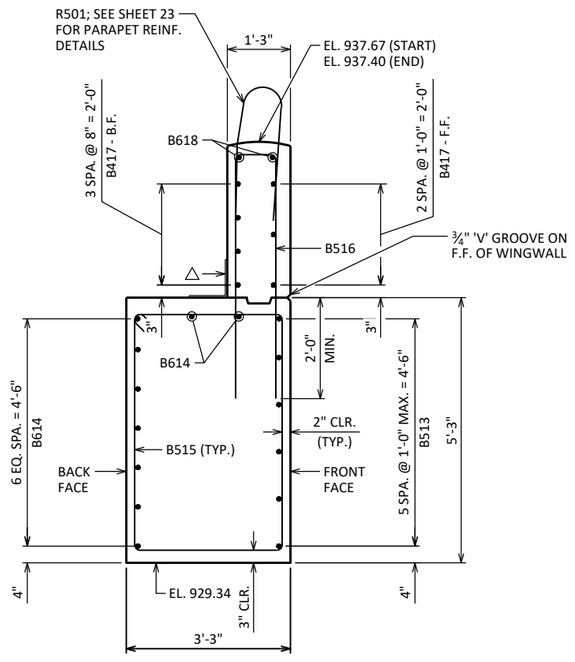
WING ELEVATION - BACK FACE



WING ELEVATION - FRONT FACE



PLAN



SECTION THRU WING

(LOOKING EAST)

LEGEND

- (X) INDICATES WING NUMBER.
- △ 18" RUBBERIZED MEMBRANE WATERPROFFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE
- ▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

WING 4 REPLACEMENT

SHEET 12 OF 23

605

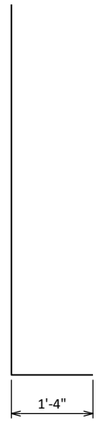
SCALE =

8

8

STATE PROJECT NUMBER

1204-08-73



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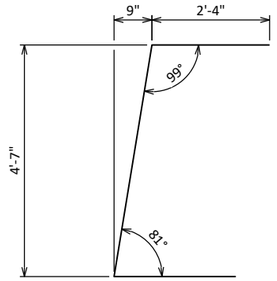

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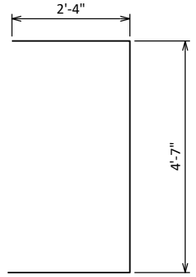

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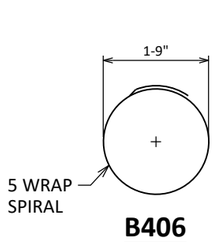

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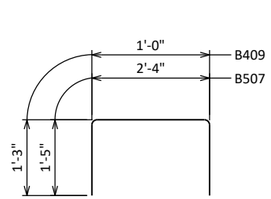
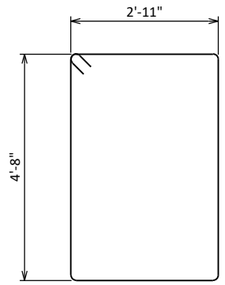


B507 & B409



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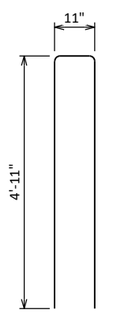


B516

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS						TOTAL WEIGHT = 930
B601	10	11'-10''			WEST ABUTMENT - BODY	HORIZ.
B802	7	11'-2''	X		WEST ABUTMENT - BODY B.F.	HORIZ.
B503	17	9'-3''	X		WEST ABUTMENT - BODY F.F.	VERT.
B504	17	9'-1''	X		WEST ABUTMENT - BODY B.F.	VERT.
B405	6	2'-3''			WEST ABUTMENT - PILES	VERT.
B406	3	28'-0''	X		WEST ABUTMENT TIES - PILES	HORIZ.
B507	6	4'-11''	X		WEST ABUTMENT - BEAM SEAT	VERT.
B408	3	3'-11''			WEST ABUTMENT - BEAM SEAT	HORIZ.
B409	4	3'-4''	X		WEST ABUTMENT- BTWN. BEAM SEATS	VERT
B410	2	6'-1''			WEST ABUTMENT - BTWN. BEAM SEATS	HORIZ.
B611	17	3'-4''			WEST ABUTMENT ANCHORS - BODY	HORIZ.
B412	3	4'-10''			WEST ABUTMENT - BODY END	VERT.
COATED BARS						TOTAL WEIGHT = 760
B513	6	14'-9''		⚠	WING 4 - BODY F.F	HORIZ.
B614	9	13'-11''			WING 4 - BODY B.F. & TOP	HORIZ.
B515	12	15'-10''	X		WING 4 - BODY STIRRUP	VERT.
B516	17	10'-6''	X		WING 4 - UPPER	VERT.
B417	7	11'-7''			WING 4 - UPPER F.F. & B.F.	HORIZ.
B618	2	11'-7''			WING 4 - UPPER TOP	HORIZ.

NOTE: THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
B513	1 SERIES OF 6	14'-4" TO 15'-1"

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY DCH | PLANS CK'D SRA

EAST ABUTMENT DETAILS

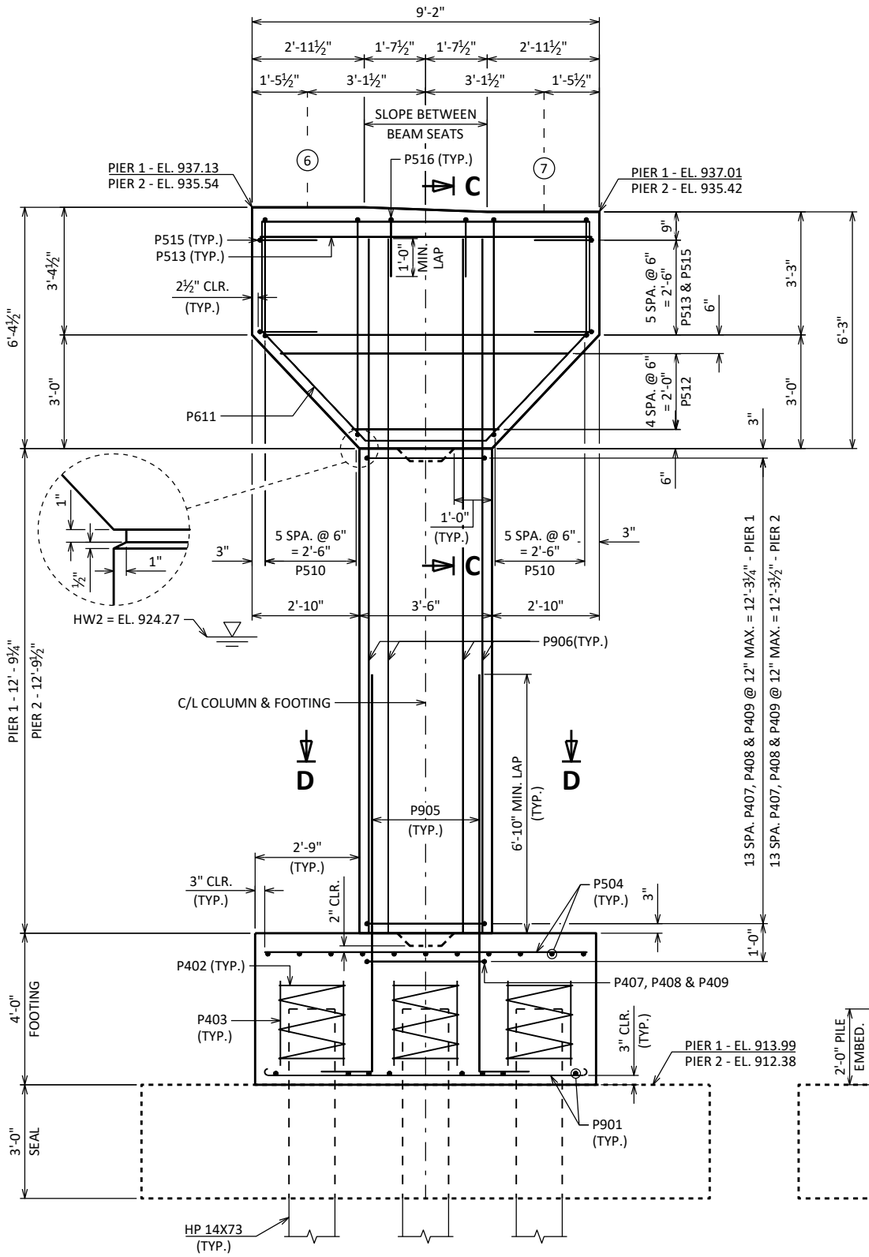
SHEET 13 OF 23

606

SCALE =

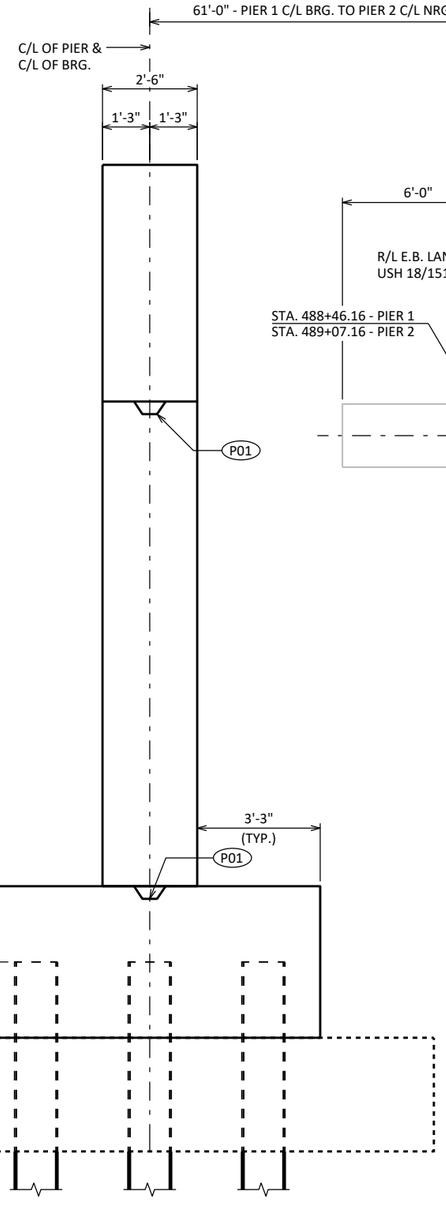
STATE PROJECT NUMBER

1204-08-73



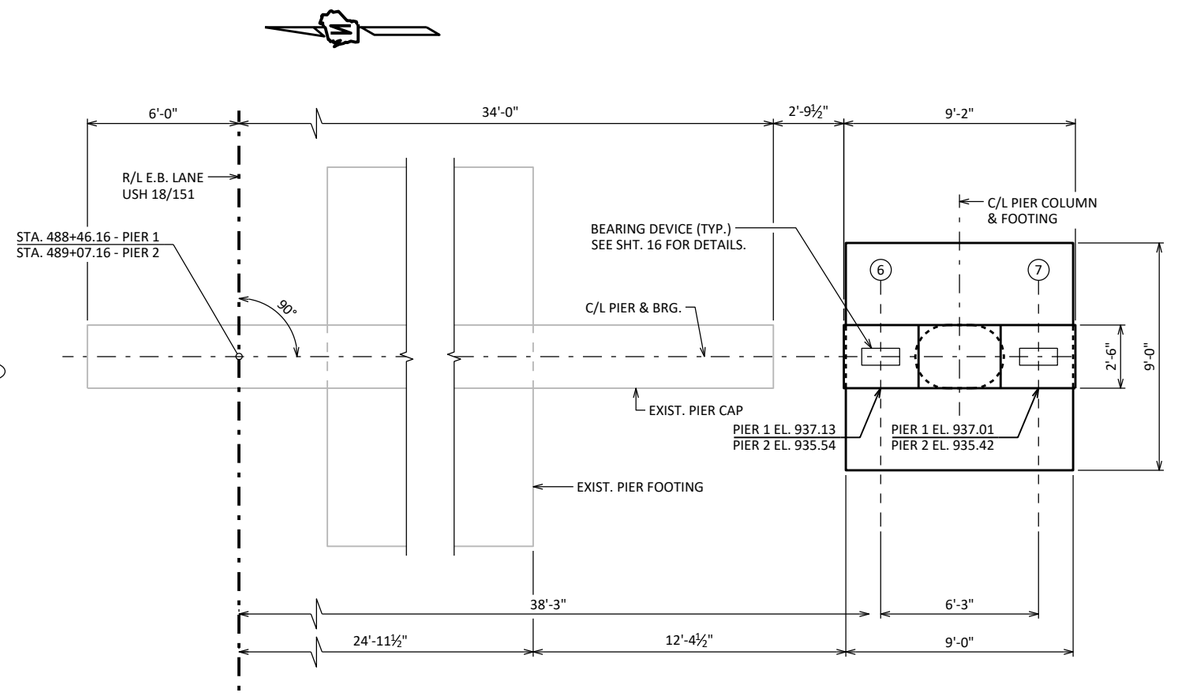
ELEVATION

(LOOKING EAST/ UPSTATION)



END VIEW

(LOOKING NORTH)
(PIER 1 SHOWN; PIER 2 SIMILAR)



PLAN

NOTES

(P01) 4" DEEP x 10" THICK KEYED CONST. JOINT FORMED BY BEVELED KEYWAY.

SEE SHEET 14 FOR SECTIONS G-G & H-H

PILE NOTE

PIERS TO BE SUPPORTED ON PILING STEEL HP 14 X 73 WITH A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 55' LONG. FOR PILE LAYOUT AND PILE SPLICE DETAILS, SEE SHEET 15.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-383

DRAWN BY	MAG	PLANS CK'D	SRA

PIERS 1 & 2

SHEET 14 of 23
607

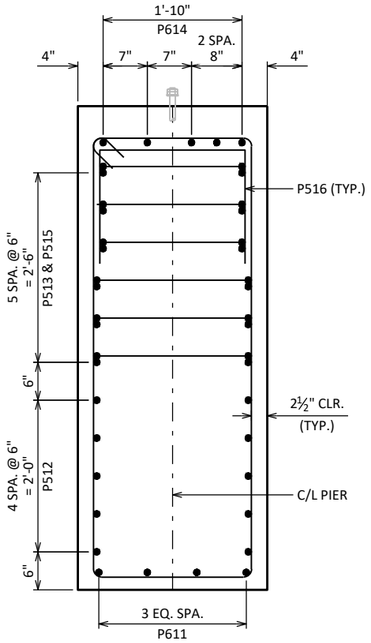
SCALE =

8

8

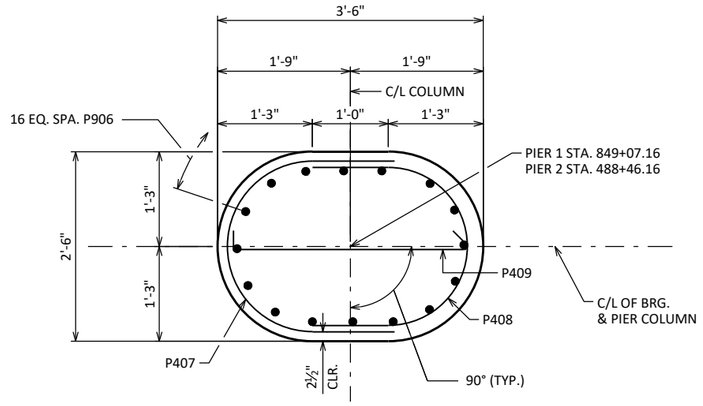
STATE PROJECT NUMBER

1204-08-73



SECTION C-C

(COLUMN BARS EXTENDING INTO CAP NOT SHOWN FOR CLARITY)



SECTION D-D

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

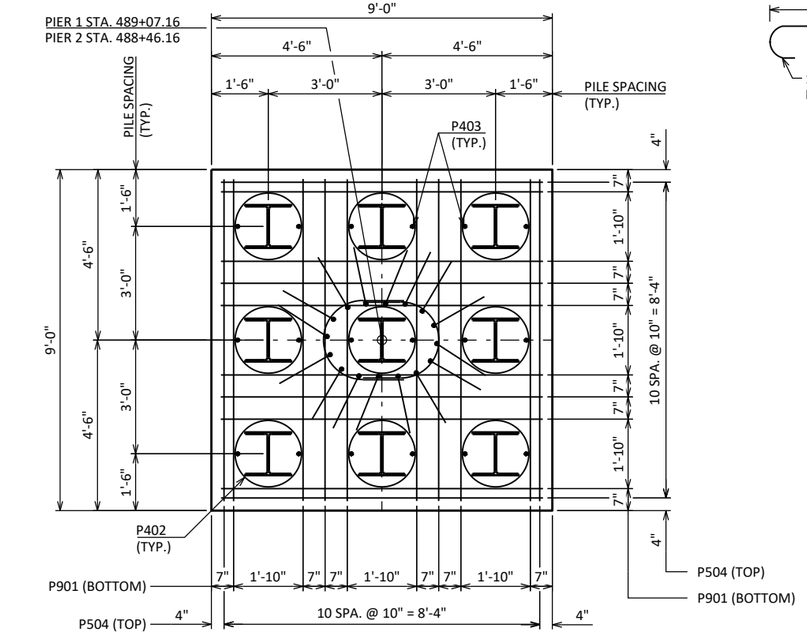
BAR MARK	COAT	PIER 1	PIER 2	LENGTH	BENT	BAR SERIES	LOCATION
							NON-COATED BAR WEIGHT = 1670 LB **COATED BAR WEIGHT = 3790 LB**
P901		16	16	11'-0"	X		FOOTING BOT. HORZ.
P402		9	9	28'-0"	X		FOOTING PILE SPIRALS
P403		18	18	2'-3"			FOOTING PILE VERT.
P504		22	22	8'-6"			FOOTING TOP HORIZ.
P905	X	16	16	11'-6"	X		FOOTING DOWELS
P906	X	16	16	18'-4"			PIER 1 & 2 COLUMN
P407	X	15	15	5'-6"	X		COLUMN TIES HORIZ.
P408	X	15	15	5'-4"	X		COLUMN TIES HORIZ.
P409	X	15	15	3'-9"	X		COLUMN TIES HORIZ.
P510	X	12	12	13'-6"	X	⚠	CAP STIRRUPS
P611	X	4	4	10'-11"	X		CAP BOTTOM HORIZ.
P512	X	10	10	5'-9"			CAP HORIZ.
P513	X	12	12	8'-9"		⚠	CAP HORZ.
P614	X	5	5	14'-2"	X		CAP TOP HORIZ.
P515	X	12	12	4'-9"	X		CAP END TIES HORIZ.
P516	X	5	5	4'-10"	X		CAP TOP TIES VERT.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

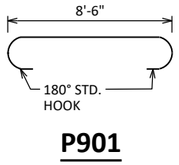
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
P510	4 SERIES OF 6	10'-10" TO 16'-2"
P512	2 SERIES OF 5	3'-10" TO 7'-7"

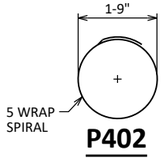


FOOTING PLAN & PILE LAYOUT

NOTE: ROTATE FOOTING DOWEL BARS AS NEEDED.



P901



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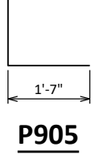

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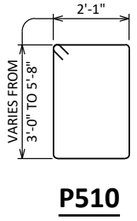

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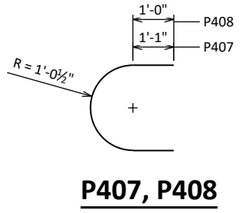
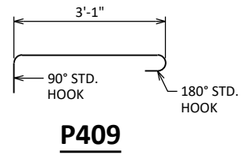


P407, P408



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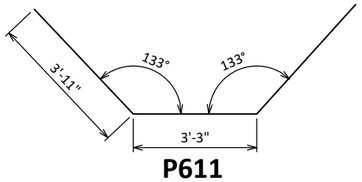

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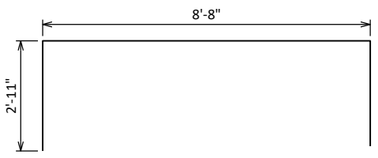

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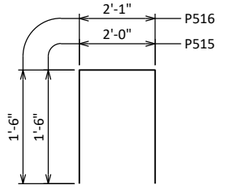
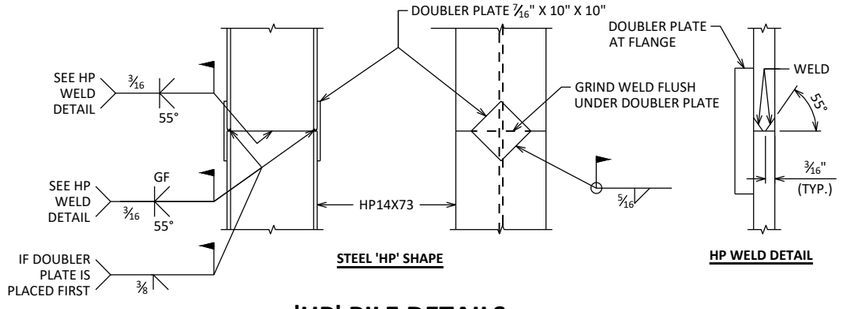


P515, P516



STEEL 'HP' SHAPE

HP WELD DETAIL

'HP' PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY MAG | PLANS CK'D SRA

PIER 1 & 2 DETAILS

SHEET 15 of 23

608

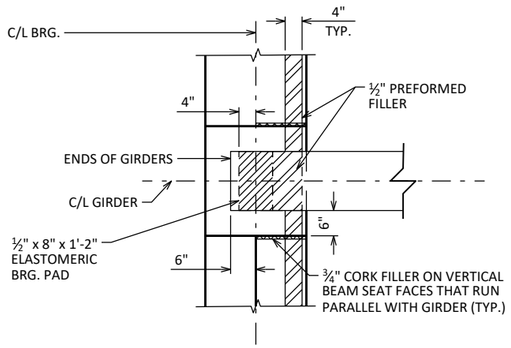
SCALE =

8

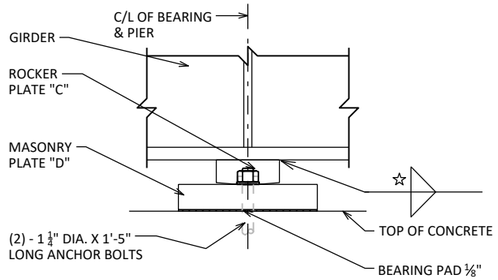
8

STATE PROJECT NUMBER

1204-08-73

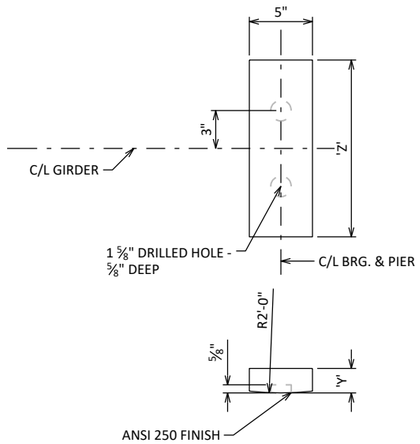


BEARING PAD DETAIL

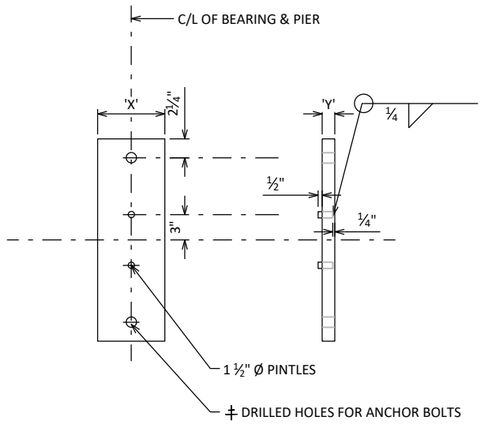


FIXED BEARING ASSEMBLY

(PIERS 1 & 2)



ROCKER PLATE "C"



MASONRY PLATE "D"

BEARING NOTES

ALL BEARINGS ARE SYMMETRICAL ABOUT C/L OF GIRDER & C/L OF BEARING.

IN LIEU OF USING SHIM PLATES, FABRICATOR MAY INCREASE THICKNESS OF MASONRY PLATE "D" BY THE SHIM PLATE THICKNESS.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED STEEL PLATES WITH ALL SURFACES SMOOTH & FREE FROM WARP & ALL EDGES SMOOTH, STRAIGHT & VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS

ALL FINISHED SURFACES SHALL BE MACHINE FINISHED BY AN AUTOMATIC PROCESS.

ANCHOR BOLTS SHALL BE THREADED 3". PROVIDE ONE STANDARD WROUGHT WASHER & ONE HEX NUT PER BOLT. PROJECT ANCHOR BOLTS, MASONRY PLATE "D" THICKNESS +2 ¼", ABOVE TOP OF CONCRETE.

ALL MATERIALS IN BEARINGS, INCLUDING SHIM PLATES, BUT EXCLUDING PINTLES, ANCHOR BOLTS, NUTS & WASHERS SHALL CONFORM TO ASTM A709 GRADE 50W.

STEEL PINTLES SHALL CONFORM TO ASTM A449 OR ASTM A572 GRADE 50.

ALL MATERIAL IN TYPE "A" BEARINGS, INCLUDING SHIM PLATES & BEARING PADS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING ASSEMBLIES FIXED B-13-0383", EACH.

CHAMFER TOP OF PINTLES ⅛". DRILL HOLES FOR ALL PINTLES IN MASNRY PLATE "D" FOR A DRIVING FIT.

PROVIDE ⅛" THICK BEARING PAD THE SAME SIZE AS MASONRY PLATE "D" FOR EACH BEARING.

CHAMFER ANCHOR BOLTS PRIOR TO THREADING.

ANCHOR BOLTS, NUTS & WASHERS SHALL CONFORM TO ASTM F1554 GRADE 55, OR MATERIAL OF EQUIVALENT YIELD STRENGTH & ELONGATION.

ANCHOR BOLTS, NUTS & WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS C.

ROCKER PLATE "C" SHALL BE SHOP PAINTED WITH A WELDABLE PRIMER.

MASONRY PLATE "D" SHALL BE GALVANIZED.

PLACE SHIM PLATES BETWEEN BEARING PAD & MASONRY PLATE "D". PLATES SHALL HAVE 'X' & 'Z' DIMENSIONS THAT MATCH MASONRY PLATE "D".

‡ DRILLED HOLES FOR ANCHOR BOLTS IN MASONRY PLATE "D" SHALL HAVE A DIAMETER ⅜" LARGER THAN ANCHOR BOLT.

	PLATE 'C'		PLATE 'D'			ANCHOR BOLT SIZE	NO. OF BRG'S REQ'D.	LOCATION
	'Y'	'Z'	'X'	'Y'	'Z'			
FIXED BEARING	1 15/16"	1'-2"	9"	1 ¾"	1'-11"	1 ¼" Ø	4	PIERS 1 & 2

☆ TABLE OF FILLER WELD SIZES

THICKNESS OF THICKER PART JOINED	‡ MIN. SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1 ½"	5/16"
OVER 1 ½" TO 2 ¼"	⅜"
OVER 2 ¼" TO 6"	½"

‡ EXCEPT THAT WELD SIZE SHALL NOT EXCEED THICKNESS OF THINNER PART JOINED

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STRUCTURE B-13-383

DRAWN BY PB | PLANS CK'D SRA

BEARING DETAILS

SHEET 16 OF 23

609

SCALE =

8

8

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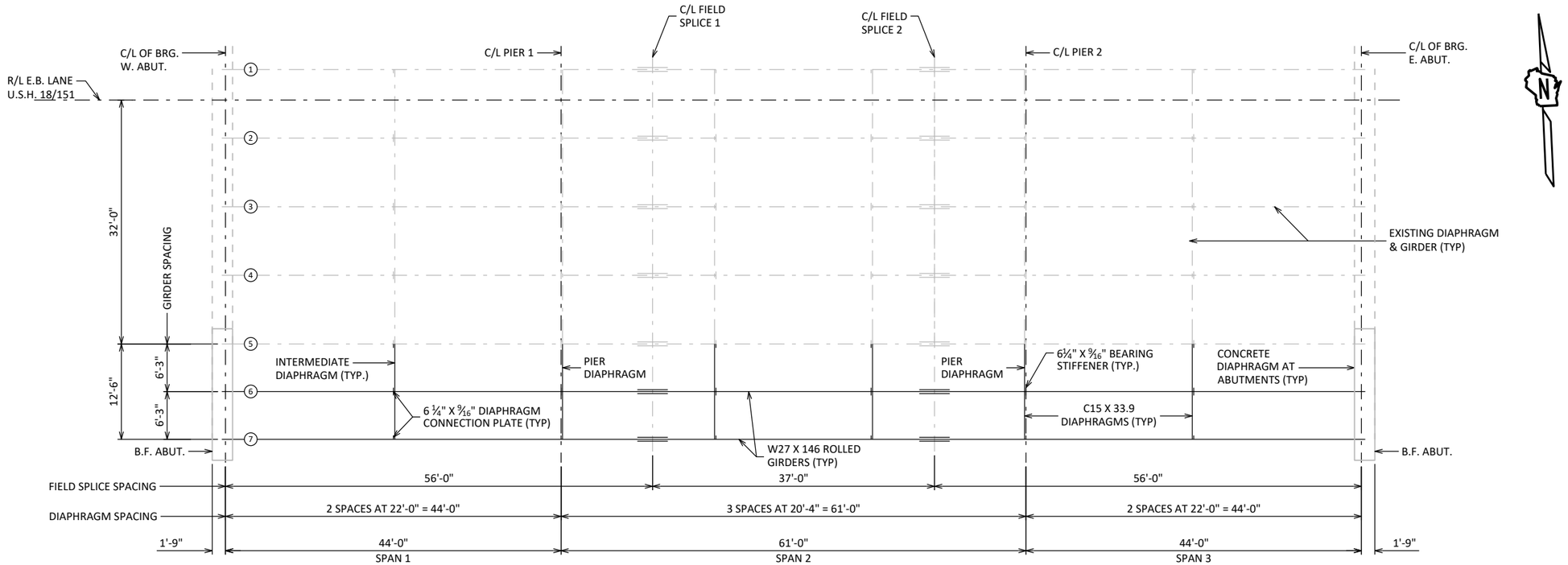
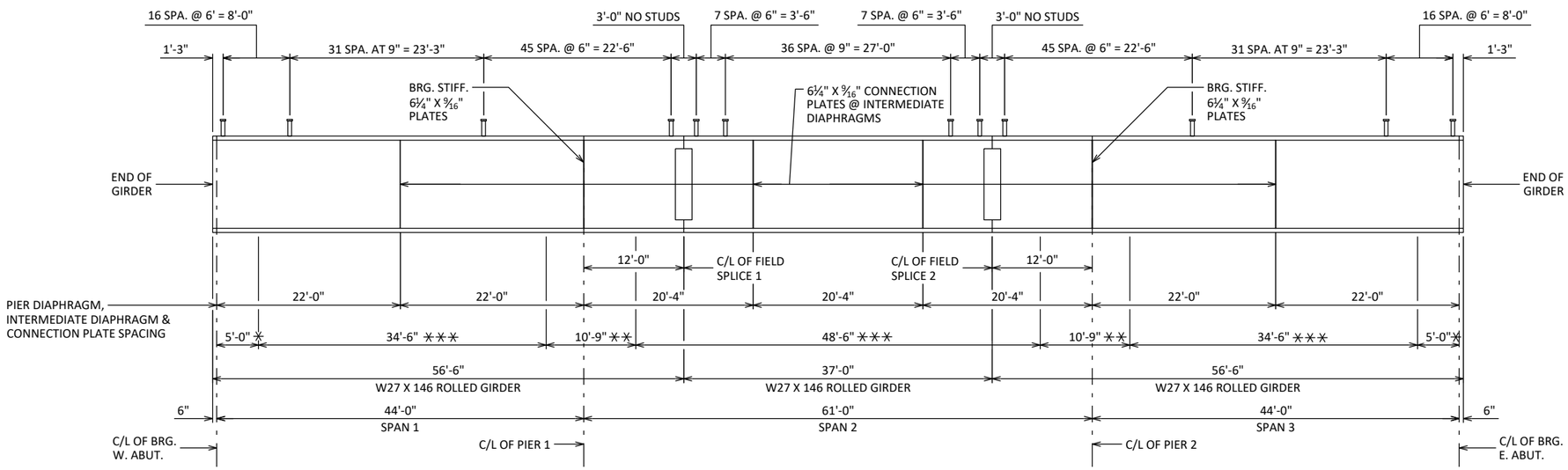
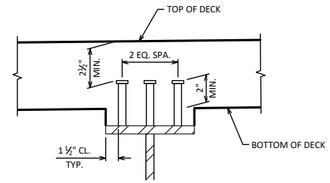


FRAMING PLAN



GIRDER ELEVATION



SHEAR CONN. DETAILS

NOTE: USE THREE SHOP OR FIELD WELDED ¾" DIA. X 6" LONG STUDS EQUALLY SPACED WITH A MIN. OF 1½" CL. FROM THE FLANGE EDGE. STUDS SHALL NOT BE PLACED OVER FIELD SPLICE PLATES.

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STRUCTURE B-13-383

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FRAMING PLAN

SHEET 17 OF 23

610

SCALE =

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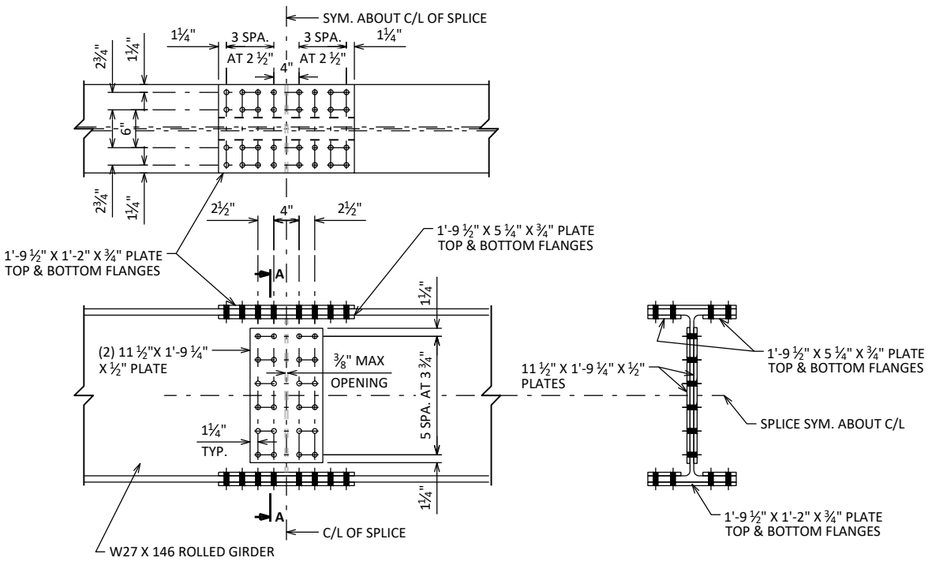
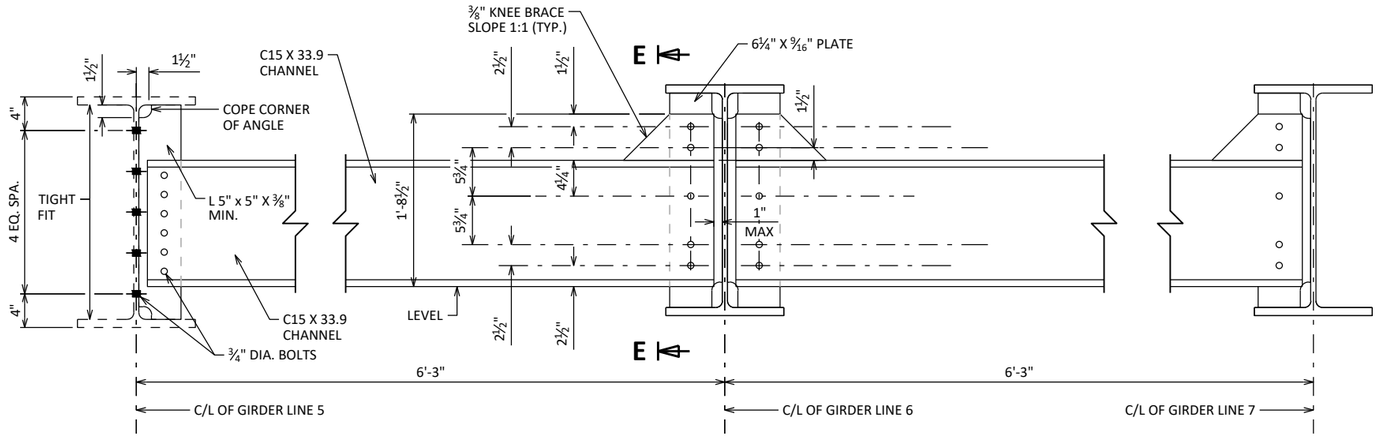


FIELD SPLICE DETAIL



INTERMEDIATE & PIER DIAPHRAGM CONNECTION DETAILS

⁎ TABLE OF FILLET WELD SIZES

MATERIAL THICKNESS OF THICKER PART JOINED	ǂ MINIMUM SIZE OF FILLET WELD
TO ½" INCLUSIVE	3/16"
OVER ½" TO ¾"	¼"
OVER ¾" TO 1 ½"	△ 5/16"
OVER 1 ½"	△ ⅜"

ǂ EXCEPT THAT THE WELD SIZE SHALL NOT EXCEED THE THICKNESS OF THE THINNER PART JOINED

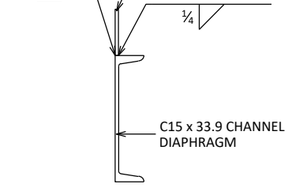
△ MINIMUM PASS SIZE IS 5/16"

NOTES

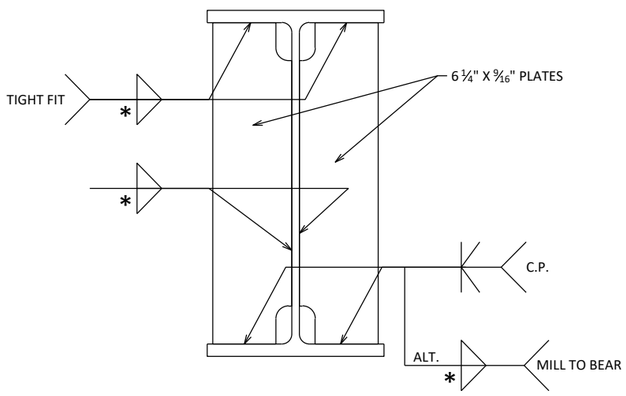
ALL STRUCTURAL STEEL FOR GIRDERS & SPLICE PLATES SHALL BE HIGH-STRENGTH STRUCTURAL STEEL ASTM A709, GRADE 50. ALL OTHER STRUCTURAL STEEL SHALL BE STRUCTURAL CARBON STEEL, ASTM A709, GRADE 36.

ALL FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS UNLESS SHOWN OR NOTED OTHERWISE.

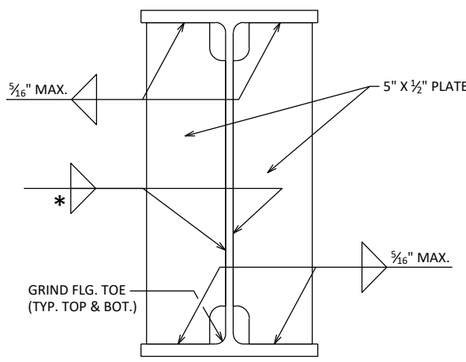
HOLES FOR BOLTED CONNECTIONS SHALL NOT BE MORE THAN 1/16" GREATER THAN THE NOMINAL BOLT DIAMETER



SECTION E-E

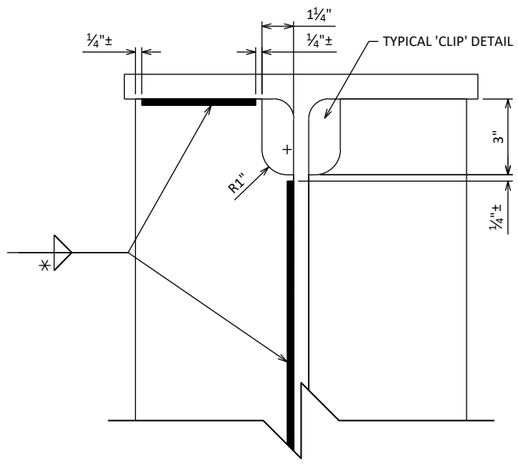


BEARING STIFFENER DETAILS



CONNECTION PLATE DETAILS

(TYPICAL AT INTERMEDIATE DIAPHRAGMS)



WELD TERMINATION DETAIL

(TYP. AT CONNECTIONS, STIFFENERS OR PLATES)

8

8

NO.	DATE	REVISION	BY

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STRUCTURE B-13-383

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GIRDER DETAILS

SHEET 18 OF 23

611

SCALE =

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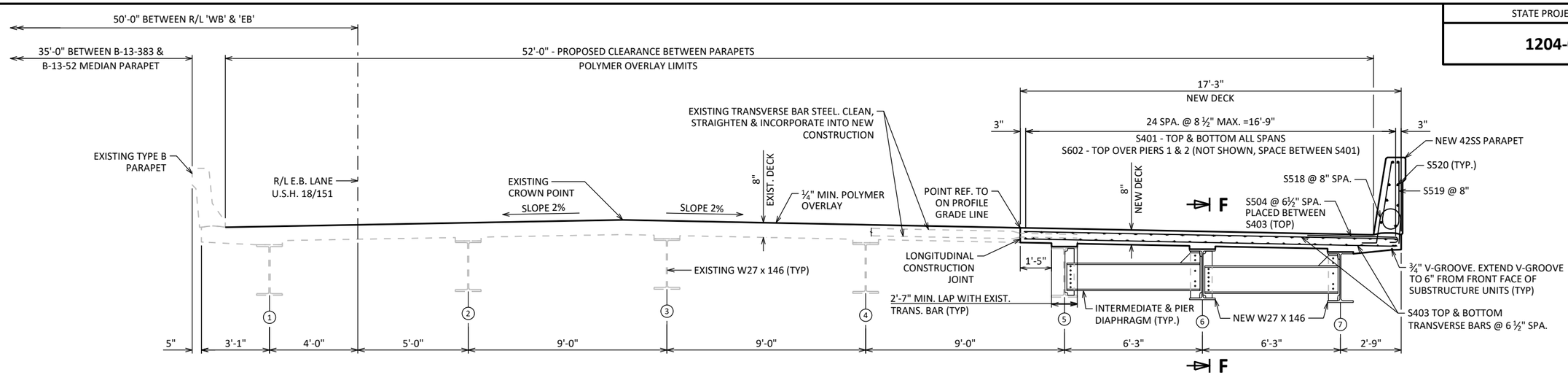
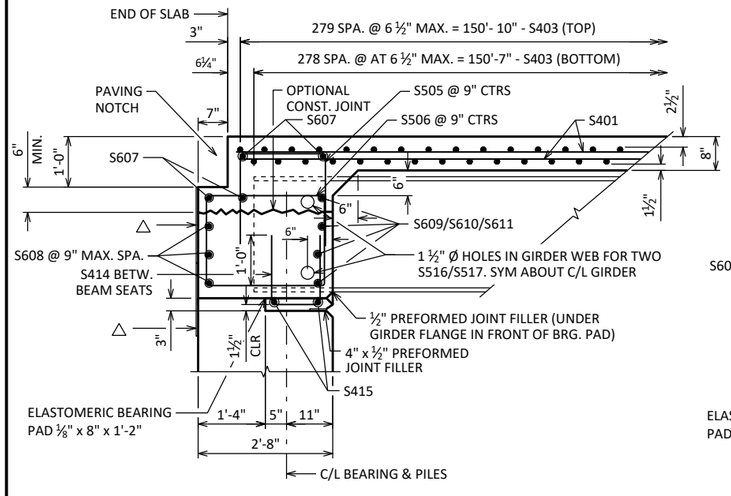
1204-08-73



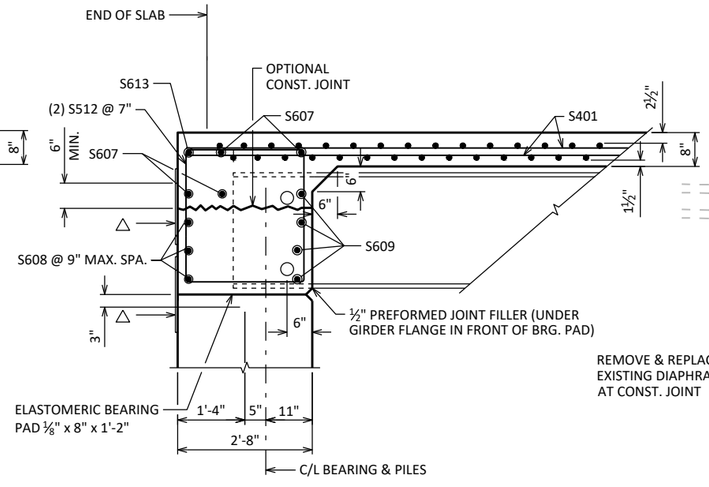
CROSS SECTION THRU ROADWAY

(LOOKING EAST/UPSTATION)



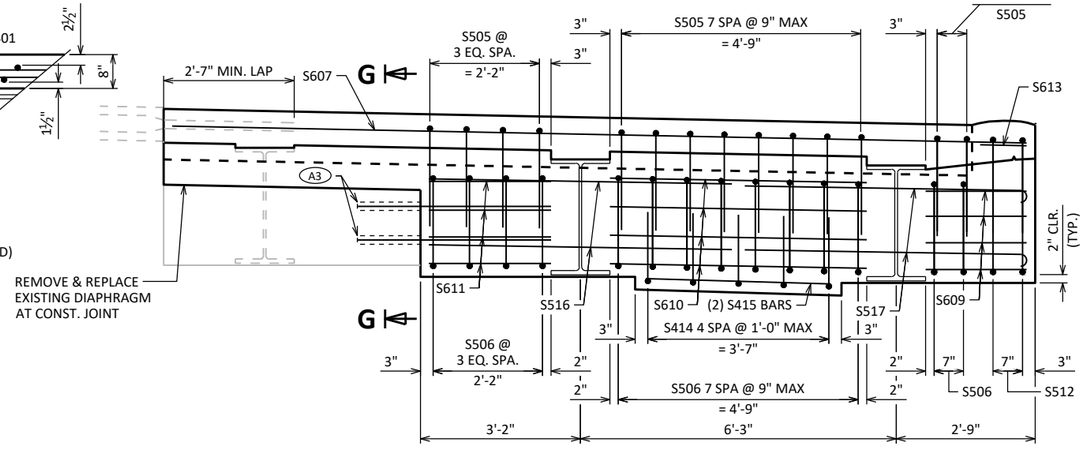
STEEL GIRDER WITH SEMI-EXPANSION SEAT

WITH PAVING NOTCH



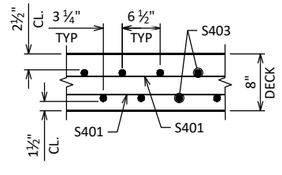
STEEL GIRDER WITH SEMI-EXPANSION SEAT

WITHOUT PAVING NOTCH
(ADHESIVE ANCHORS NOT SHOWN; SEE SECTION G-G FOR LAYOUT)

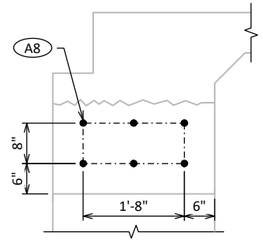


ABUTMENT DIAPHRAGM REINFORCEMENT

NOTE: S607 & S608 BARS ALONG B.F. OF DIAPHRAGM NOT SHOWN FOR CLARITY.
(EAST ABUTMENT DIAPHRAGM SHOWN; WEST SIMILAR)



SECTION F-F



SECTION G-G

ADHESIVE ANCHOR LAYOUT

LEGEND

(A8) ADHESIVE ANCHORS A621 BAR. EMBED 1'-3" IN EXISTING ABUTMENT.

△ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE.

NO.	DATE	REVISION	BY

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STRUCTURE B-13-383

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SUPERSTRUCTURE 1

SHEET 19 OF 23
612

SCALE =

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STATE PROJECT NUMBER

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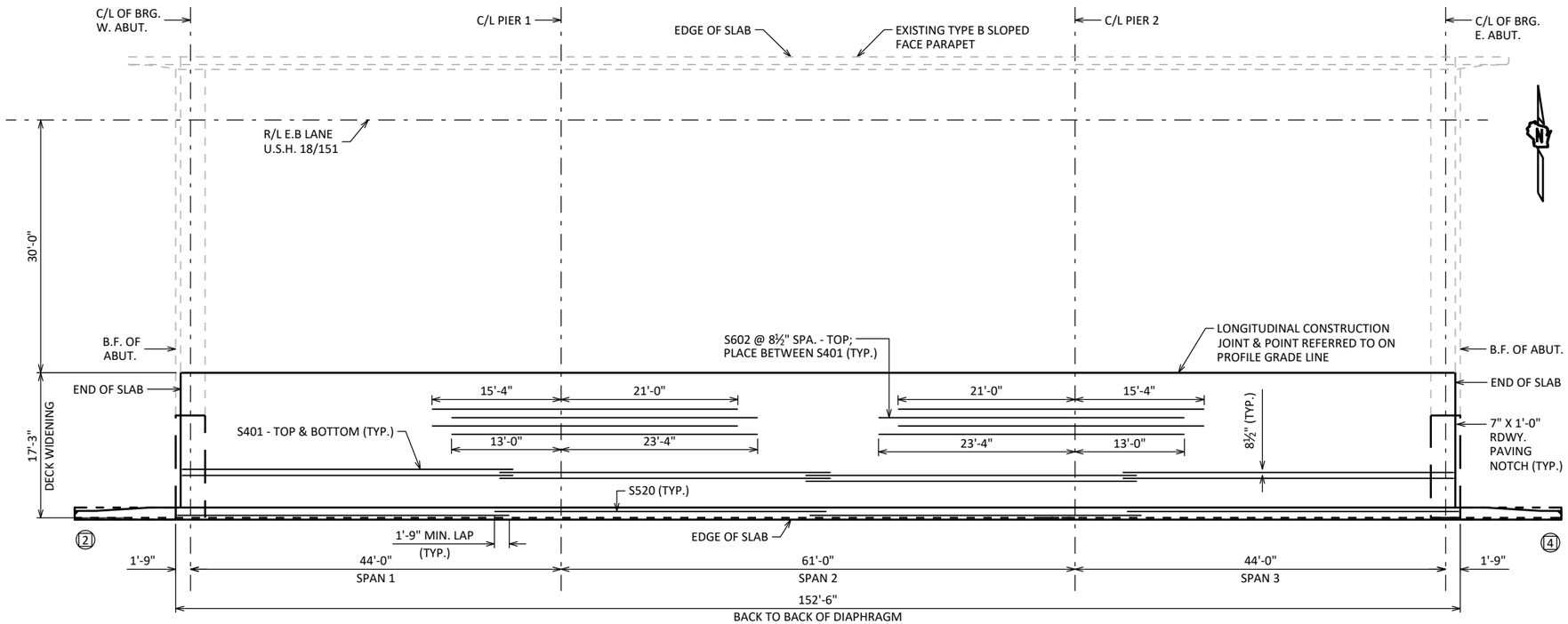
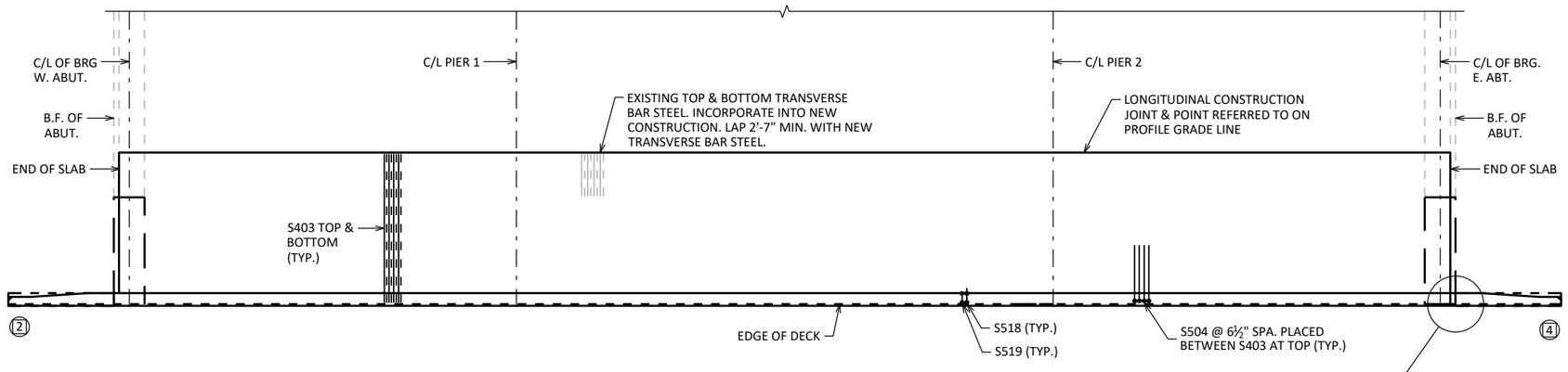
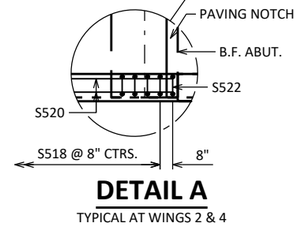


PLAN



PART PLAN SHOWING TRANSVERSE BAR STEEL



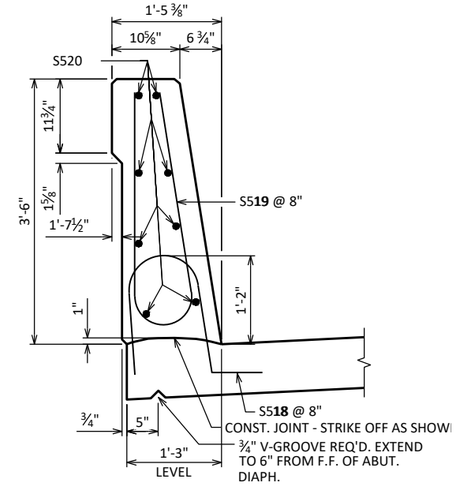
DETAIL A

TYPICAL AT WINGS 2 & 4

NOTES

LAP LONGITUDINAL S401 BARS IN DECK 1'-0" MIN.

LAP TRANSVERSE S402 BARS IN DECK 2'-7" MIN. WITH EXISTING TRANSVERSE BAR STEEL.



SECTION THRU PARAPET ON DECK

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STRUCTURE B-13-383

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SUPERSTRUCTURE 2

SHEET 20 OF 23

613

SCALE =

8

8

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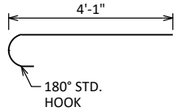
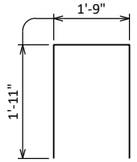


S504



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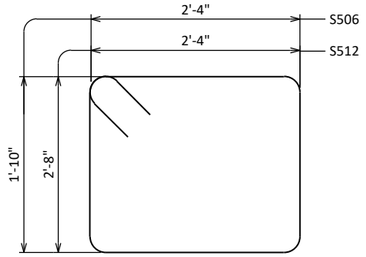
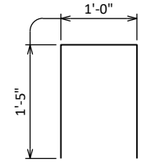


S506 & S512



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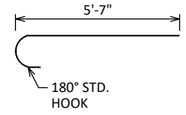

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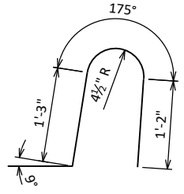

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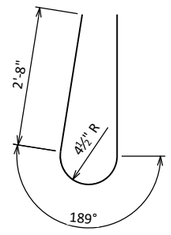

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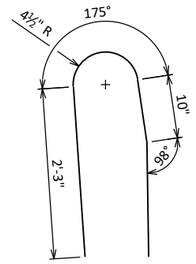

S522

BILL OF BARS

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
COATED BARS					TOTAL WEIGHT = 20620	
S401	200	39'-4''			DECK - TOP & BOTTOM	LONGIT.
S602	48	36'-4''			DECK - TOP OVER PIERS	LONGIT.
S403	559	16'-11''			DECK - TOP & BOTTOM	TRANS.
S504	279	4'-8''	X		DECK OVERHANG	TRANS.
S505	28	5'-4''	X		DIAPHRAGM - TOP	VERT
S506	28	9'-0''	X		DIAPHRAGM - STIRRUPS	VERT
S607	8	16'-11''			DIAPHRAGM - TOP	HORIZ.
S608	6	11'-10''			DIAPHRAGM - B.F.	HORIZ.
S609	8	2'-0''			DIAPHRAGM - F.F.	HORIZ.
S610	8	5'-1''			DIAPHRAGM - F.F.	HORIZ.
S611	8	2'-5''			DIAPHRAGM - F.F.	HORIZ.
S512	4	10'-8''	X		DIAPHRAGM - STIRRUPS AT END	VERT
S613	2	0'-11''			DIAPGRAGM - STIRRUP TIES AT END	HORIZ.
S414	10	3'-8''	X		DIAPHRAGM - BETWEEN BEAM SEAT	VERT
S415	4	3'-7''			DIAPHRAGM - BETWEEN BEAM SEAT	HORIZ.
S516	8	6'-0''			DIAPHRAGM - THROUGH GIRDER WEB	HORIZ.
S517	8	6'-2''	X		DIAPHRAGM - THROUGH GIRDER WEB	VERT
S518	230	4'-5''	X		PARAPET	VERT
S519	230	6'-8''	X		PARAPET	VERT
S520	32	39'-5''			PARAPET	LONGIT.
S621	12	3'-1''			DIAPHRAGM - ADHESIVE ANCHORS	HORIZ.
S522	2	5'-10''	X		PARAPET CORNERS	VERT.

NOTE:THE FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY PB | PLANS CK'D SRA

SUPERSTRUCTURE 3

SHEET 21 OF 23

614

SCALE =

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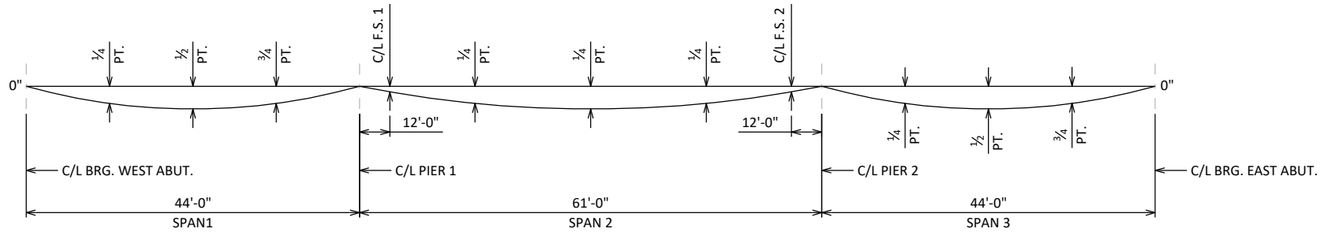


DEFLECTION DIAGRAM

DECK ELEVATIONS & DEFLECTIONS

	C/L of Brg. W. Abut.	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	C/L of Pier #1	0.1 Pt.	C/L of F.S. #1	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	C/L of F.S. #2	0.9 Pt.	C/L of Pier #2	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	C/L of Brg. E. Abut.
Construction Joint (PGL)	941.91	941.80	941.68	941.57	941.45	941.34	941.22	941.11	941.00	940.88	940.77	940.61	940.45	940.45	940.29	940.13	939.97	939.81	939.65	939.50	939.49	939.34	939.18	939.06	938.95	938.83	938.72	938.61	938.49	938.38	938.26	938.15	938.03
Girder 5 (Existing W27x146)	941.87	941.76	941.64	941.53	941.41	941.30	941.18	941.07	940.96	940.84	940.73	940.57	940.41	940.41	940.25	940.09	939.93	939.77	939.61	939.46	939.45	939.30	939.14	939.02	938.91	938.79	938.68	938.57	938.45	938.34	938.22	938.11	937.99
Girder 6	941.75	941.63	941.52	941.40	941.29	941.17	941.06	940.94	940.83	940.72	940.60	940.44	940.29	940.28	940.12	939.97	939.81	939.65	939.49	939.33	939.33	939.17	939.01	938.90	938.78	938.67	938.55	938.44	938.33	938.21	938.10	937.98	937.87
Girder 7	941.62	941.51	941.39	941.28	941.16	941.05	940.93	940.82	940.71	940.59	940.48	940.32	940.16	940.16	940.00	939.84	939.68	939.52	939.36	939.21	939.20	939.05	938.89	938.77	938.66	938.54	938.43	938.32	938.20	938.09	937.97	937.86	937.74
Conc. Defl. (inches)	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Total Defl. (inches)	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0

TOP OF STEEL ELEVATIONS

	C/L of Brg. W. Abut.	C/L of Pier #1	C/L of F.S. #1	C/L of F.S. #2	C/L of Pier #2	C/L of Brg. E. Abut.
Girder 6	940.91	939.73	939.45	938.49	938.14	937.03
Girder 7	940.79	939.61	939.33	938.37	938.02	936.91

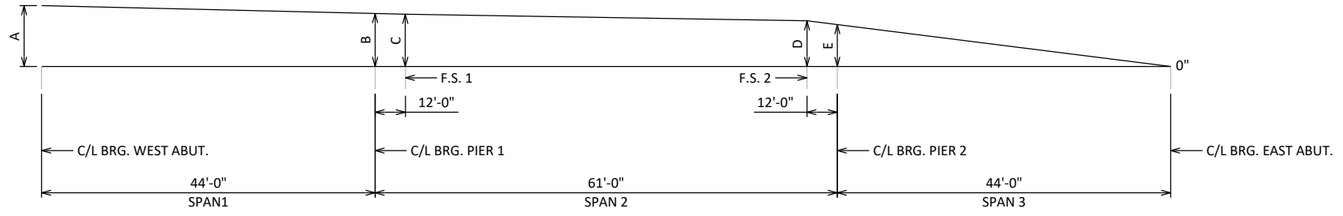
BLOCKING DIMENSIONS

	"A"	"B"	"C"	"D"	"E"	"F"
Girder 6	46.55	32.37	28.50	16.94	13.31	0.00
Girder 7	46.55	32.37	28.50	16.94	13.31	0.00

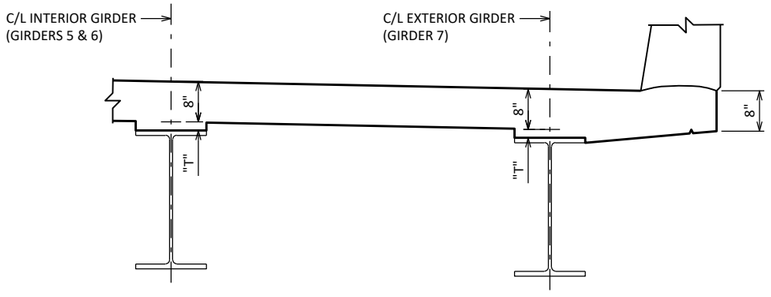
REQUIRED CAMBER

Location	Camber (inches)
C/L Brg. W. Abut. to F.S. #1	0.2
F.S. #1 to F.S. #2	0.4
F.S. #2 to C/L Brg. E. Abut.	0.2

NOTE: TOP OF STEEL ELEVATIONS AT C/L OF FIELD SPLICE INCLUDE BEAM DEFLECTION. THESE ELEVATIONS ARE TO TOP OF STEEL (SPLICE & COVER PLATE THICKNESS, IF APPLICABLE, ARE ACCOUNTED FOR) & THEY ARE THE MATERIAL AS ERECTED. THE ELEVATION OF THE TOP STEEL AT THE FIELD SPLICE POINTS SHALL BE CHECKED, & CORRECTED, IF POSSIBLE, AFTER ERECTION & BEFORE PERMANENTLY BOLTING THE DIAPHRAGMS IN PLACE



BLOCKING DIAGRAM



SLAB HAUNCH DETAIL

TO DETERMINE "T": AFTER ALL STRUCTURAL STEEL HAS BEEN ERECTED, ELEVATIONS OF THE TOP FLANGE OR TOP OF SPLICE PLATES SHALL BE TAKEN AT CENTERLINES OF BEARINGS, CENTERLINE OF FILED SPLICES & AT 0.1 POINTS OF THE SPAN
THE PROCESS IS SHOWN BELOW & IN THE DETAILS ABOVE

TOP OF DECK ELEVATION AT FINAL GRADE
\- TOP OF STEEL ELEVATION AFTER STEEL ERECTION
\+ CONCRETE ONLY DEFLECTION: DOWNWARD DEFLECTION IS ADDED, UPWARD DEFLECTION IS SUBTRACTED

\- SLAB THICKNESS

= "T" VALUE FOR SETTING HAUNCH

NOTE: MINIMUM VALUE FOR HAUNCH SHALL BE 1 ¼"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY PB | PLANS CK'D SRA

SUPERSTRUCTURE 4

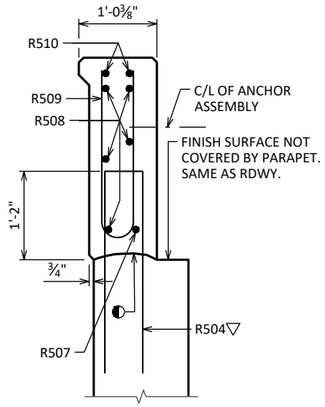
SHEET 22 OF 23

615

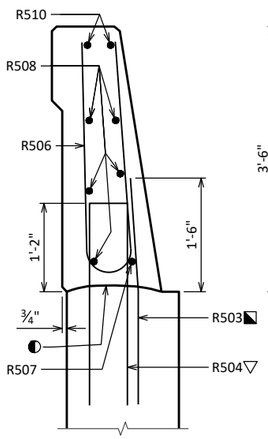
SCALE =

8

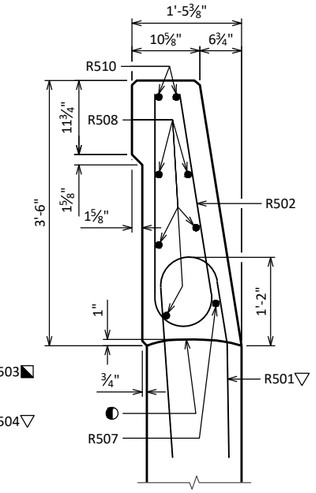
8



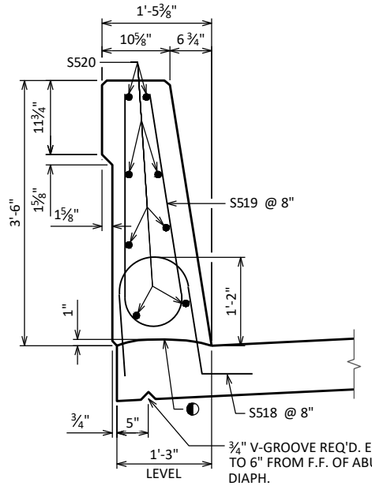
SECTION H-H



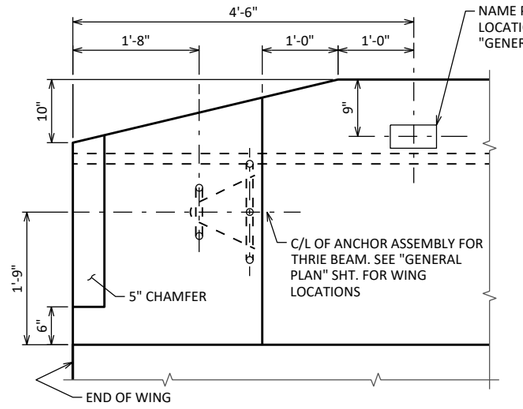
SECTION I-I



SECTION J-J



SECTION THRU PARAPET ON DECK



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

STATE PROJECT NUMBER

1204-08-73

BILL OF BARS

FOR WING PARAPETS

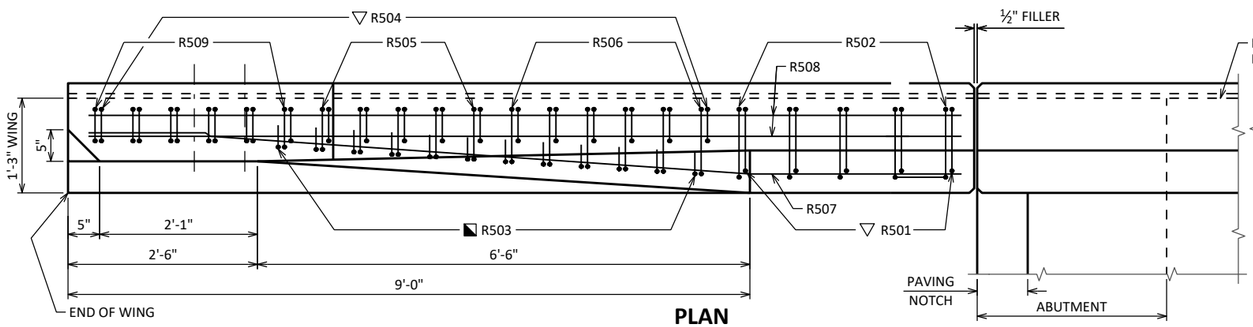
BAR MARK	COAT	WEST ABUT.	EAST ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS							TOTAL WEIGHT = 820 LBS
R501	X	5	5	5'-10"	X		PARAPET VERT.
R502	X	5	5	6'-8"	X		PARAPET VERT.
R503	X	12	12	3'-0"	X		PARAPET VERT.
R504	X	17	17	5'-7"	X		PARAPET VERT.
R505	X	5	5	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	11'-6"	X		PARAPET HORIZ.
R508	X	5	5	11'-7"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	11'-6"	X		PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

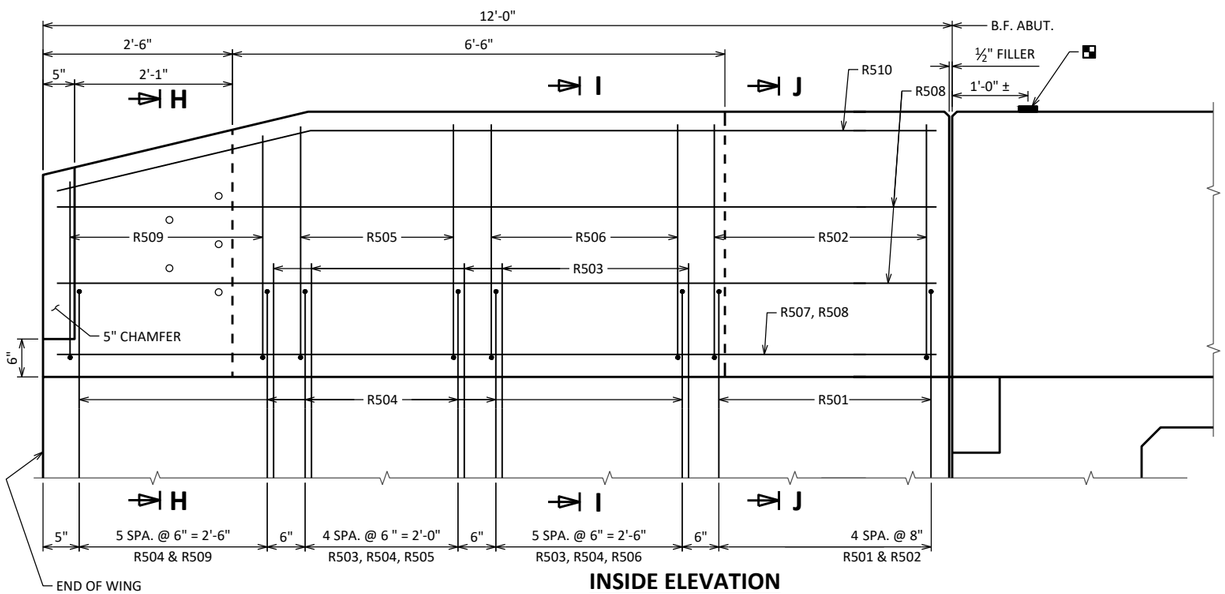
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"



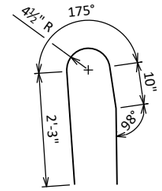
PLAN

SW CORNER SHOWN, SE CORNER SIMILAR

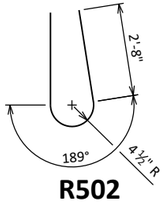


INSIDE ELEVATION

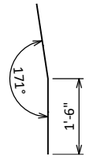
SW CORNER SHOWN, SE CORNER SIMILAR



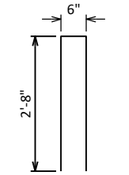
R501



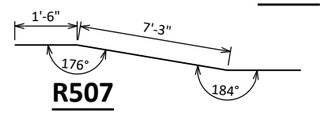
R502



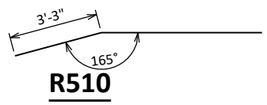
R503



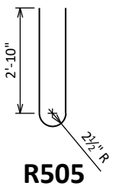
R504



R507



R510



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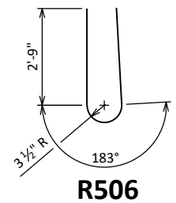
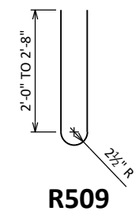


R506



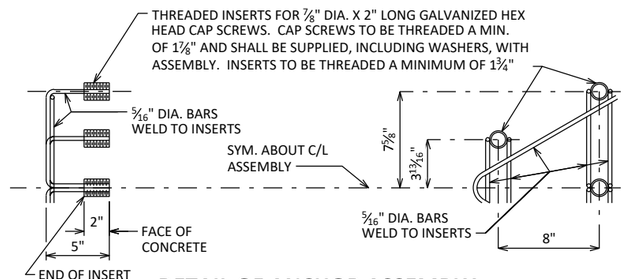
R509

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-383

DRAWN BY PB | PLANS CK'D SRA

SINGLE SLOPE PARAPET 42SS

SHEET 23 OF 23

616

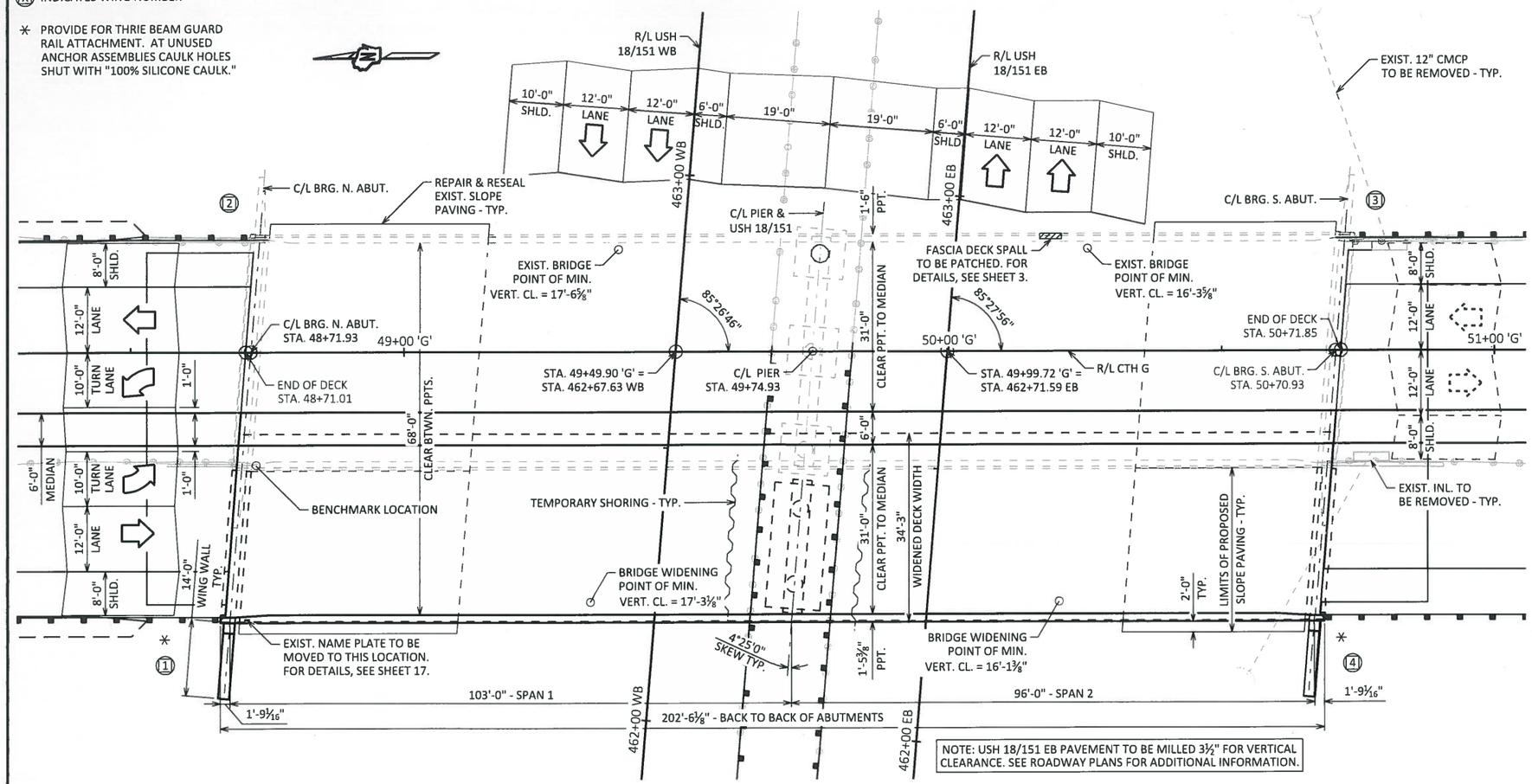
SCALE = 2.00

8

8

(X) INDICATES WING NUMBER

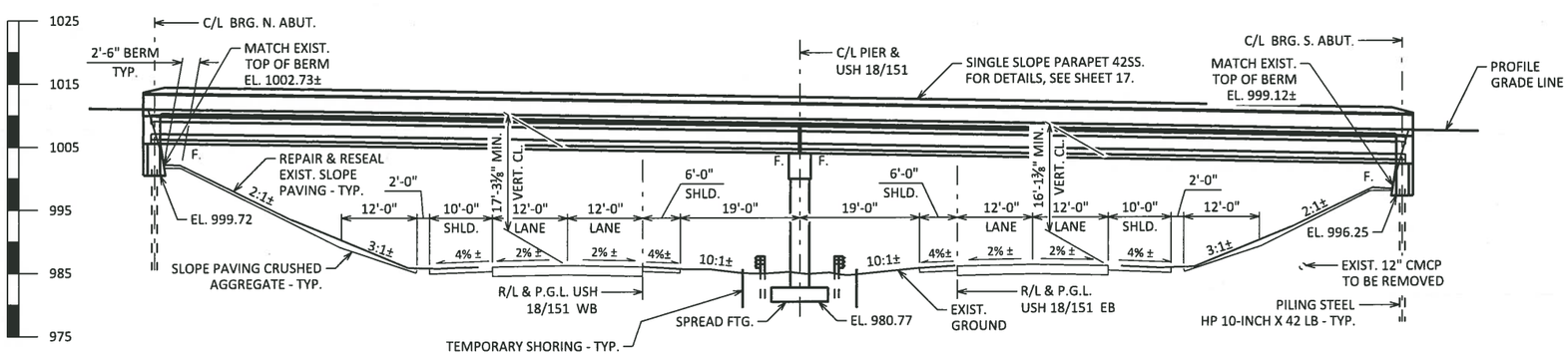
* PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK."



NOTE: USH 18/151 EB PAVEMENT TO BE MILLED 3½" FOR VERTICAL CLEARANCE. SEE ROADWAY PLANS FOR ADDITIONAL INFORMATION.

PLAN

2-SPAN PRESTRESSED CONCRETE GIRDER STRUCTURE



ELEVATION

NORMAL TO USH 18/151
LOOKING EAST

DESIGN DATA

STATE PROJECT NUMBER

1204-08-73

LIVE LOAD

EXISTING DESIGN RATING:	HS-20	WIDENED DESIGN LOADING:	HL-93
INVENTORY RATING:	HS-23	INVENTORY RATING:	RF = 1.20
OPERATING RATING:	HS-39	OPERATING RATING:	RF = 1.56
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)		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 — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT:
- GRADE 60 — f_y = 60,000 PSI

54W" PRESTRESSED GIRDERS:
- CONCRETE MASONRY — f'_c = 8,000 PSI
- STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10-INCH X 42 LB STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
- ESTIMATED 20-'0" LONG AT N. ABUTMENT.
- ESTIMATED 25-'0" LONG AT S. ABUTMENT.

**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 PILE CAPACITY.

PIERS WITH SPREAD FOOTINGS TO BE SUPPORTED ON SOUND ROCK WITH A REQUIRED FACTORED BEARING RESISTANCE OF 15,000 PSF***. A GEOTECHNICAL ENGINEER WILL DETERMINE THE FACTORED BEARING RESISTANCE BY VISUAL INSPECTION PRIOR TO CONSTRUCTION OF THE PIER FOOTING.

***THE FACTORED BEARING RESISTANCE IS THE VALUE USED FOR DESIGN.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & GENERAL NOTES
3. QUANTITIES
4. SUBSURFACE EXPLORATION
5. NORTH ABUTMENT
6. NORTH ABUTMENT DETAILS
7. SOUTH ABUTMENT
8. SOUTH ABUTMENT DETAILS
9. PIER DETAILS
10. 54W" PRESTRESSED GIRDER DETAILS
11. 54W" PRESTRESSED GIRDER DETAILS 2
12. STEEL DIAPHRAGM DETAILS
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE DETAILS
15. SUPERSTRUCTURE DETAILS 2
16. SUPERSTRUCTURE BILL OF BARS
17. SINGLE SLOPE PARAPET 42SS
18. SINGLE SLOPE PARAPET 42SS ELECTRICAL
19. SLOPE PAVING CRUSHED AGGREGATE

TRAFFIC DATA

USH 18/151	CTH G
ADT (2024) = 25400	ADT (2022) = 2700
ADT (2044) = 43200	ADT (2042) = 25980
R.D.S. = 70 MPH	R.D.S. = 40 MPH

WISCONSIN PROFESSIONAL ENGINEER
ELISABETH STUMP
E-49984-6
SHOREWOOD
WI
07/11/2024

STRUCTURE DESIGN CONTACTS

AARON BONK	ELISABETH STUMP
608-261-0261	714-872-1825

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/06/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-13-403

CTH G OVER USH 18/151

COUNTY	TOWN
DANE	VERONA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
UD	ECS	UD	ECS

GENERAL PLAN

SHEET 1 OF 19
617

SCALE =

I.D. 1204-08-03

DATE: JULY 2024

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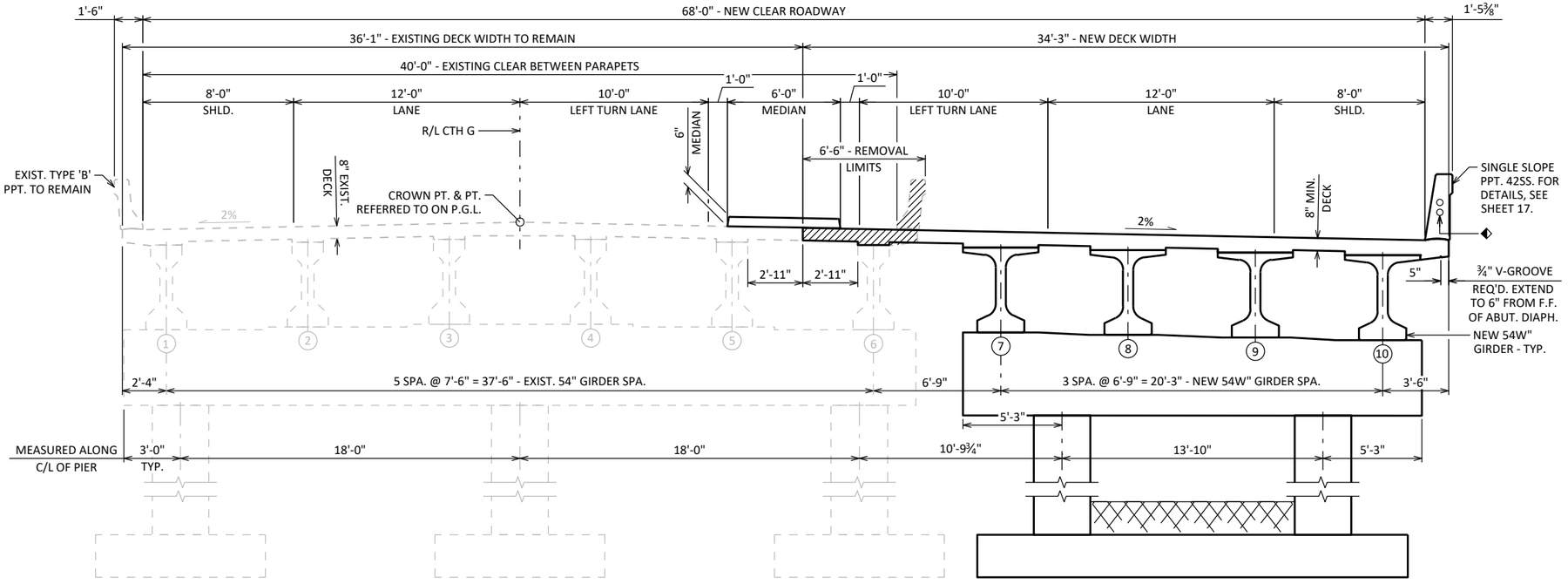
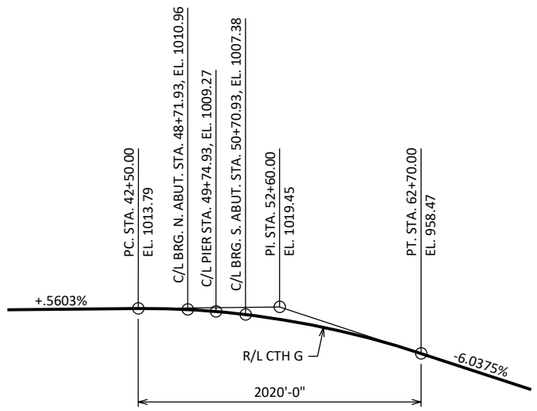


◆ (2) 2" DIAMETER NON-METALLIC CONDUIT IN SINGLE SLOPE PPT. 42SS.

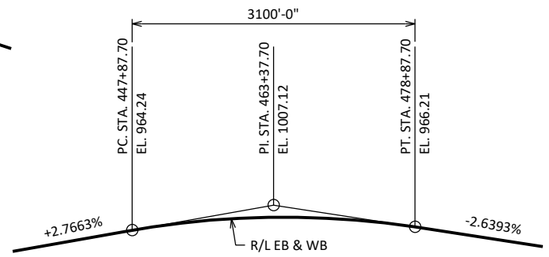
CROSS SECTION THRU ROADWAY

LOOKING SOUTH



PROFILE GRADE LINE - CTH G

PROFILE GRADE LINE BASED ON ORIGINAL PLANS



PROFILE GRADE LINE - USH 18/151

PROFILE GRADE LINE BASED ON ORIGINAL PLANS

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 B-13-403" SHALL BE THE EXISTING GROUNDLINE.

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.

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.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

"PROTECTIVE SURFACE TREATMENT" TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF NEW DECK, MEDIAN AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS. "PROTECTIVE SURFACE TREATMENT RESEAL" TO BE APPLIED TO THE REMAINING PORTION OF EXISTING EXPOSED DECK.

"PIGMENTED SURFACE SEALER" TO BE APPLIED TO THE FRONT FACE AND THE TOP OF NEW 42SS PARAPET.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING MATERIAL TO THE EXTENT SHOWN ON SHEET 1, 19 AND THE ABUTMENT DETAILS.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

THE EXISTING STRUCTURE (B-13-403) IS A 2 SPAN PRESTRESSED CONCRETE GIRDER BRIDGE, 200.83' LONG x 43' WIDE. THE SUBSTRUCTURE AND SUPERSTRUCTURE SHALL BE WIDENED BY ADDING 4 GIRDER LINES TO THE WEST, EXTENDING THE ABUTMENTS AND ADDING AN ADJACENT PIER.

ALL STATIONS AND ELEVATIONS ARE IN FEET.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT, UNLESS SPECIFIED OTHERWISE.

CLEAN, STRAIGHTEN, AND EXTEND EXISTING BAR STEEL REINFORCEMENT 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

ROUGHEN SURFACE OF CONCRETE ¼" MIN. DEEP AT ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT AT ABUTMENTS.

THE EXISTING ABUTMENTS AND PIERS TO REMAIN IN PLACE AS SHOWN AND INCORPORATED INTO NEW CONSTRUCTION.

VARIATIONS TO THE NEW GRADE LINE OVER ¼" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

MONITOR SAW CUTTING OF EXIST. BRIDGE DECK AND BLADE DEPTH SO THAT THE EXISTING TRANSVERSE DECK STEEL IS NOT DAMAGED.

CARE SHALL BE TAKEN TO AVOID DAMAGE TO EXISTING GIRDERS, INCLUDING SHEAR STIRRUPS. SAW CUTTING OF THE EXISTING SHEAR STIRRUPS IS NOT ALLOWED.

REMOVE EXIST. ABUTMENT DIAPH. AT THE EXTERIOR SIDE OF EXIST. GIRDER NO. 6. CONTINUE LONGITUDINAL DECK CUT TO THE END OF EXIST. DECK. REMOVE 1'-0" FROM TOP OF DECK AT ABUTMENT DIAPHRAGM. INCORPORATE EXIST. HORIZONTAL BAR STEEL INTO NEW ABUT. DIAPHRAGM CONSTRUCTION. FOR DETAILS SEE SHEET 15.

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DRAWN BY UD | PLANS CK'D ECS

CROSS SECTION & GENERAL NOTES

SHEET 2 OF 19

618

SCALE =

8

8

STATE PROJECT NUMBER

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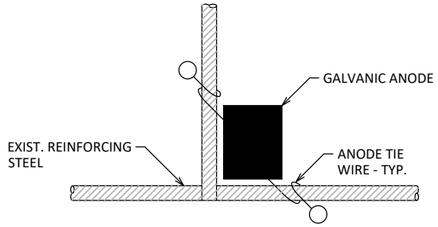
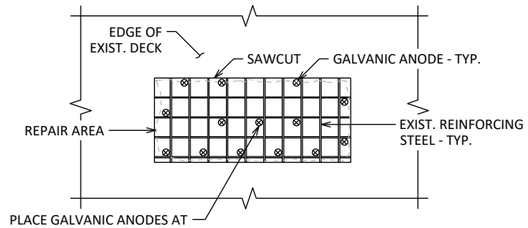
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	NORTH ABUT.	PIER	SOUTH ABUT.	TOTALS
203.0220	REMOVING STRUCTURE B-13-0403	EACH	---	---	---	---	1
203.0330	DEBRIS CONTAINMENT B-13-0403	EACH	---	---	---	---	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-13-0403	EACH	---	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	220	---	220	440
502.0100	CONCRETE MASONRY BRIDGES	CY	264.2	25.1	46.7	25.1	361.1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	860	---	---	---	860
502.3210	PIGMENTED SURFACE SEALER	SY	100	---	---	---	100
502.3215	PROTECTIVE SURFACE TREATMENT RESEAL	SY	720	---	---	---	720
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	---	---	---	---	4
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	---	---	---	---	24
503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	799	---	---	---	799
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	1,600	2,900	1,600	6,100
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	54,520	880	4,440	880	60,720
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	---	---	---	---	16
506.4000	STEEL DIAPHRAGMS B-13-0403	EACH	---	---	---	---	16
509.1500	CONCRETE SURFACE REPAIR	SF	3	---	---	---	3
511.1200	TEMPORARY SHORING B-13-0403	SF	---	---	273	---	273
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	10	---	10	20
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	100	---	125	225
604.0500	SLOPE PAVING CRUSHED AGGREGATE	SY	---	199	---	173	372
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	---	276	---	240	516
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	45	---	45	90
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	---	---	---	---	2
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	40	---	40	80
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	400	60	---	60	520
653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	---	---	---	---	2
SPV.0060.501	EMBEDDED GALVANIC ANODES	EACH	---	---	---	---	4
	NON-BID ITEMS						
	FILLER	SIZE	---	---	---	---	½"



TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



NOTES

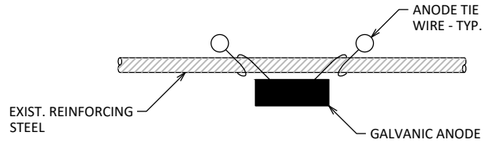
SURFACE REPAIR AREAS WITH CATHODIC PROTECTION ARE BASED ON THE INSPECTION REPORT. THE PLAN QUANTITY FOR THE BID ITEM "EMBEDDED GALVANIC ANODES" IS BASED ON A MAXIMUM SPACING OF 24-INCHES AROUND THE SURFACE REPAIR PERIMETER. THE ACTUAL QUANTITY SHALL BE BASED ON THE FIELD CONDITIONS AND AS RECOMMENDED BY THE GALVANIC ANODE SUPPLIER.

SURFACE REPAIRS SHALL BE FILLED WITH REPAIR MATERIALS COMPATIBLE WITH CATHODIC PROTECTION, AS RECOMMENDED BY THE ANODE SUPPLIER.

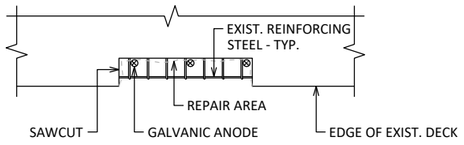
EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORRODED MATERIAL AND CONCRETE TO PROVIDE SUFFICIENT ELECTRICAL CONNECTION AND BOND. CATHODIC PROTECTION PREPARATIONS ARE INCLUDED IN THE BID ITEM "EMBEDDED GALVANIC ANODES".

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

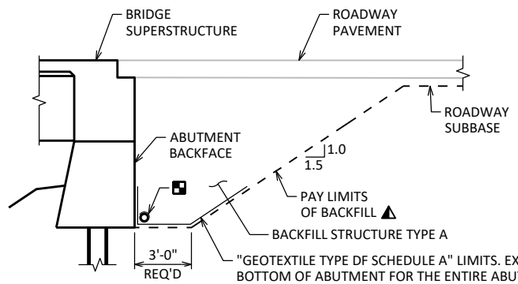
AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".



TYPICAL INSTALLATION FOR BAR STEEL



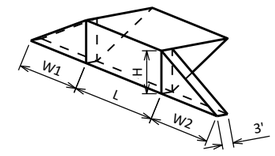
ANODE REPAIR DETAIL



TYPICAL SECTION THRU ABUTMENT

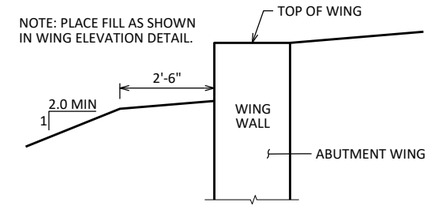
⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

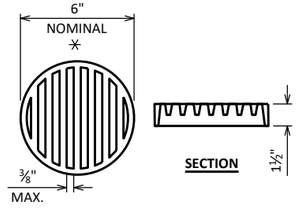


ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
W1 = WING 1 LENGTH (FT)
W2 = WING 2 LENGTH (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) + (3')(0.5)(W1 + W2)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)



TYPICAL FILL SECTION AT WING



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.

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QUANTITIES

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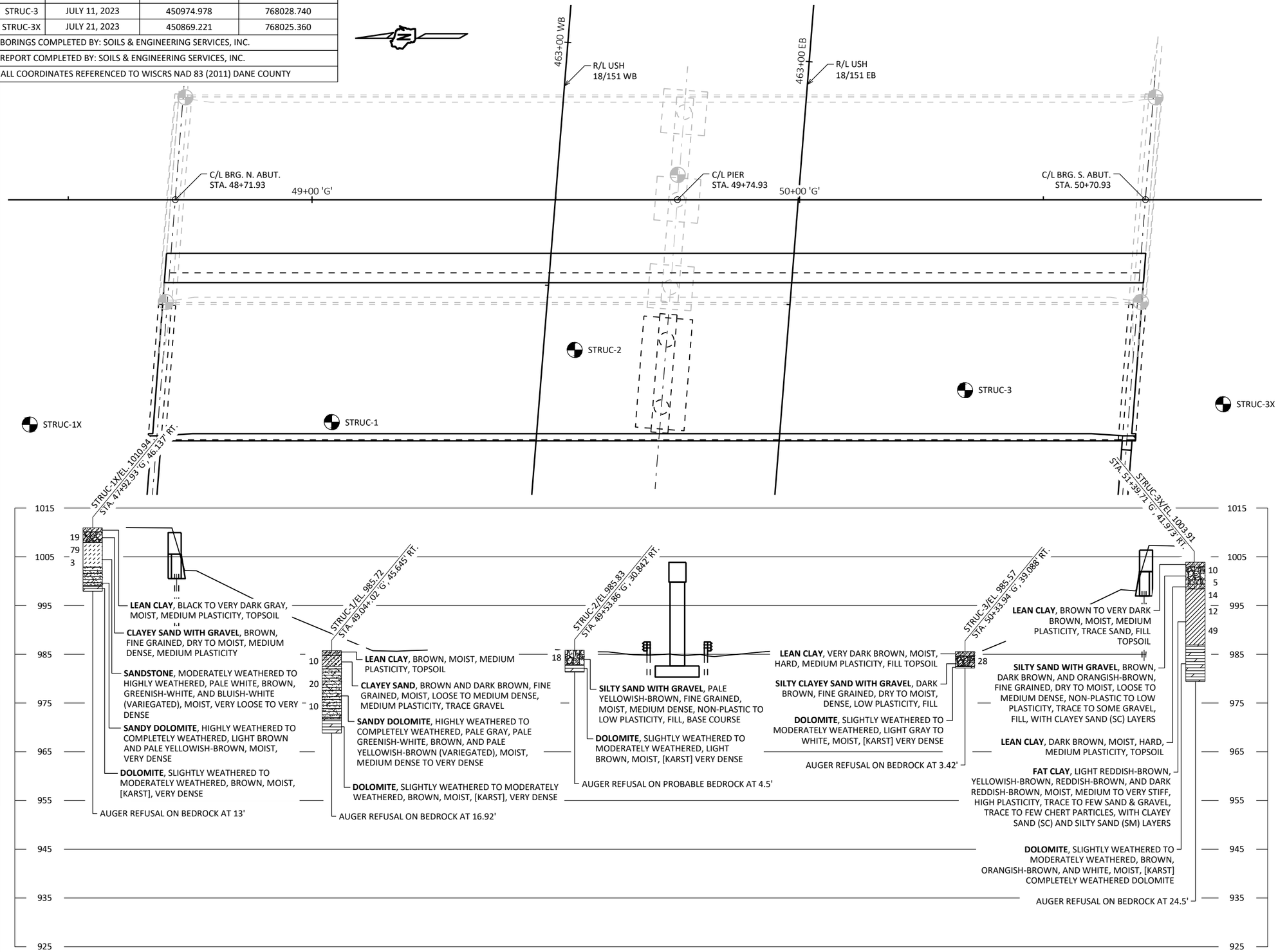
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
STRUC-1	JULY 11, 2023	451104.921	768022.792
STRUC-1X	JULY 21, 2023	451216.012	768022.785
STRUC-2	JULY 21, 2023	451055.017	768037.361
STRUC-3	JULY 11, 2023	450974.978	768028.740
STRUC-3X	JULY 21, 2023	450869.221	768025.360
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WISCRS NAD 83 (2011) DANE COUNTY			



STATE PROJECT NUMBER

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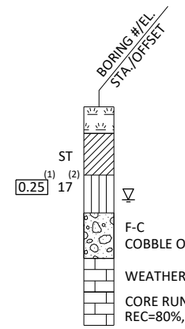
MATERIAL SYMBOLS

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
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SUBSURFACE EXPLORATION

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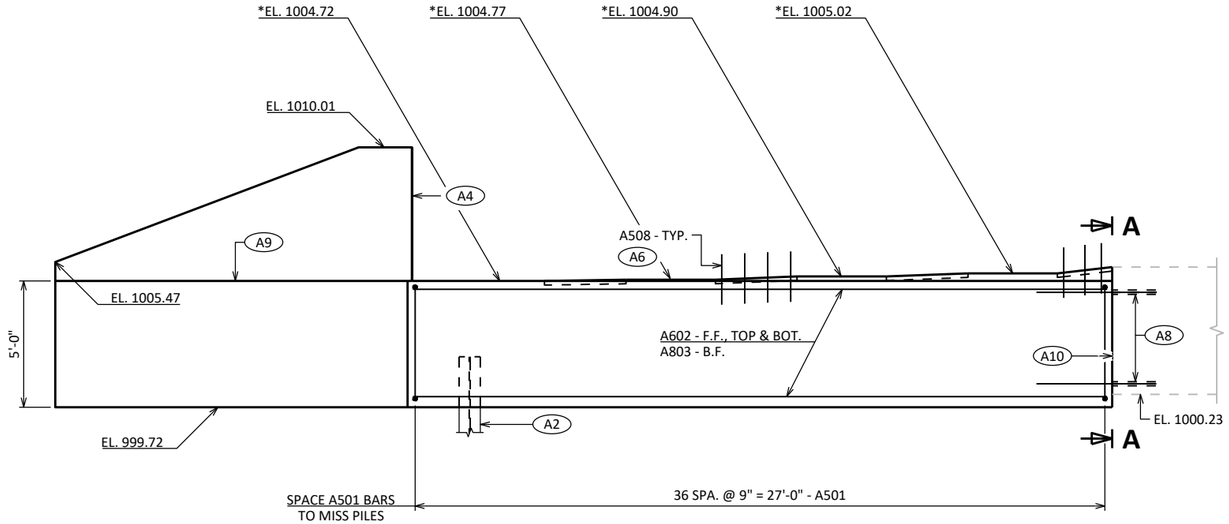
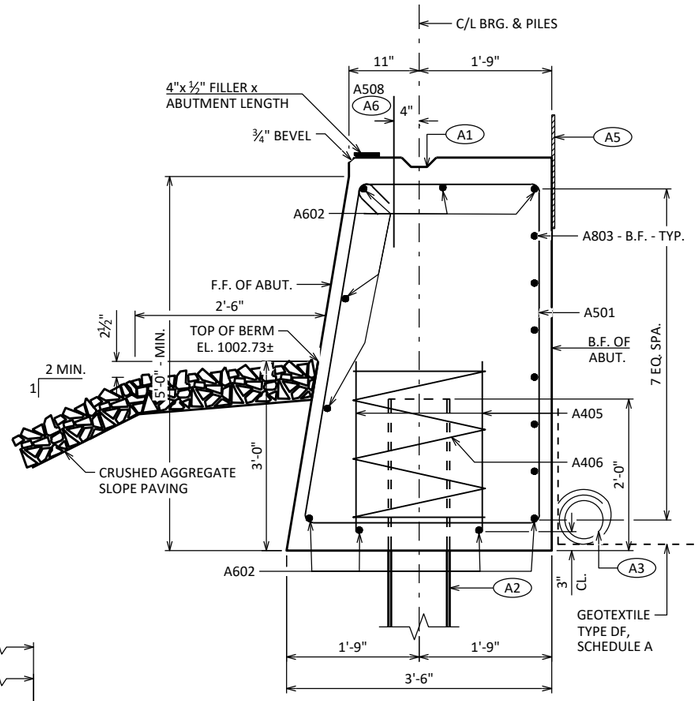


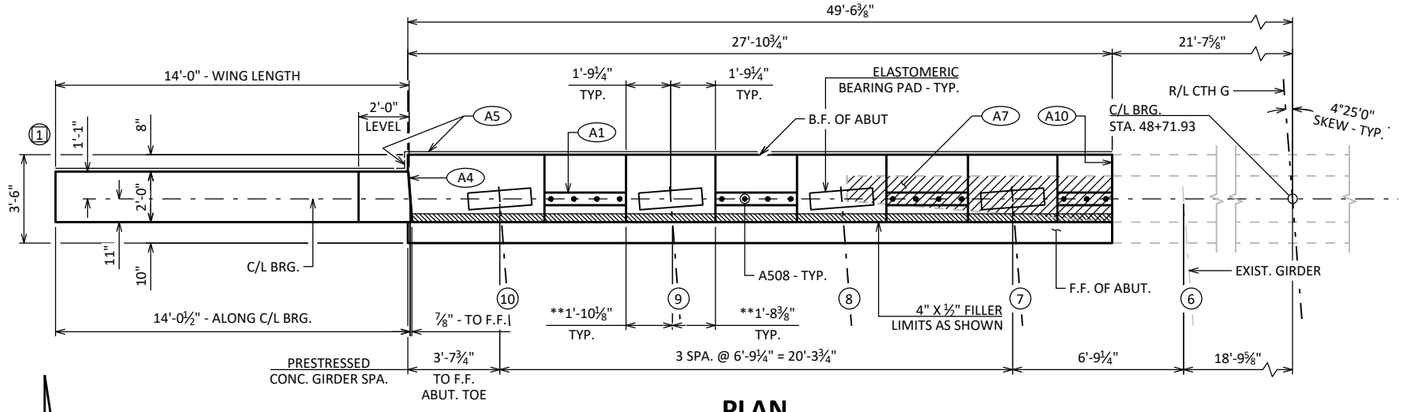
ELEVATION

LOOKING NORTH

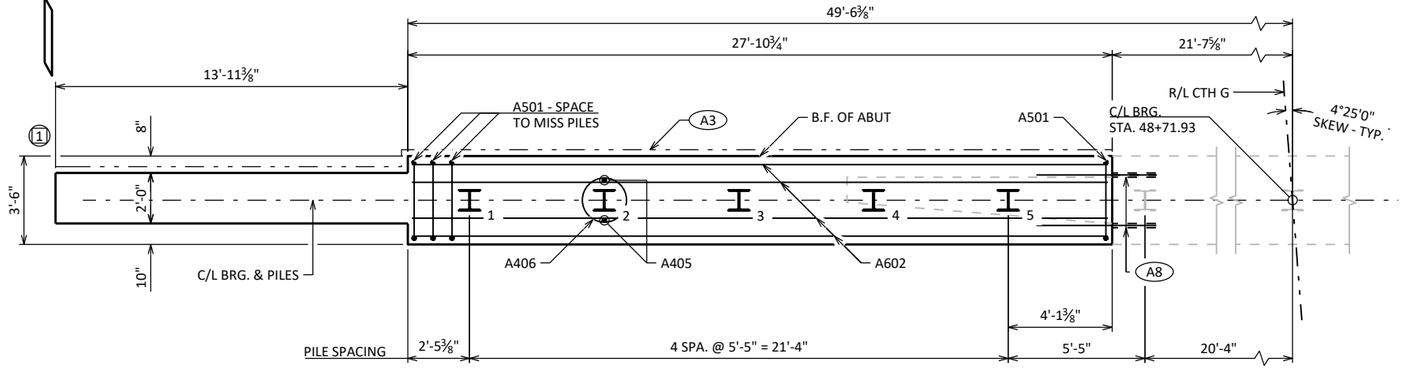


SECTION THRU BODY

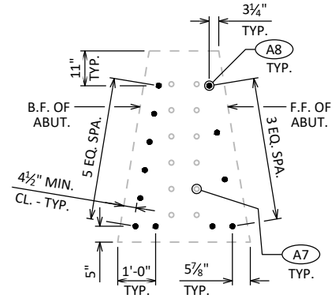
LOOKING WEST



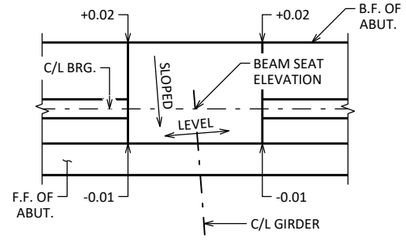
PLAN



PILE PLAN



SECTION A-A



SLOPED BEAM SEAT DETAIL

NOTES

FOR WING DETAILS AND ELEVATIONS, SEE SHEET 6.

LEGEND

- REMOVAL LIMITS
- (X) INDICATES WING NUMBER
- ✳ ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE C/L OF BEARING.
- ✳✳ DIMENSIONS TAKEN AT FRONT FACE OF ABUTMENT.
- (A1) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- (A2) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 20'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A3) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A4) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A5) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A6) BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (A7) EXISTING WING TO BE REMOVED. SALVAGE AND INCORPORATE HORIZONTAL REINFORCEMENT A MIN. OF 1'-9" INTO NEW WORK.
- (A8) ADHESIVE ANCHORS NO. 6 BAR. EMBED 1'-3" IN CONCRETE. TOTAL NUMBER REQUIRED AT NORTH ABUTMENT = 12. USE A607 BARS WITH ANCHORS. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- (A9) OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE. ("V" GROOVE NOT REQUIRED IF CONST. JOINT IS NOT USED.)
- (A10) ROUGHEN SURFACE OF CONCRETE ¼" DEEP MINIMUM AT ALL AREAS WHERE NEW CONCRETE CONTACTS EXISTING CONCRETE.

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NORTH ABUTMENT

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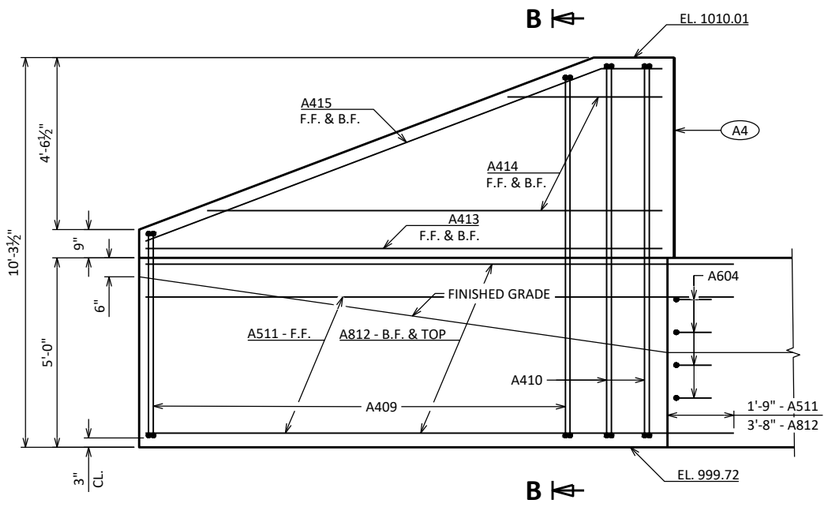
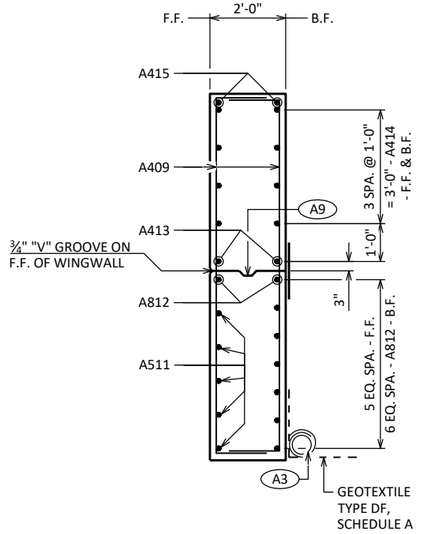
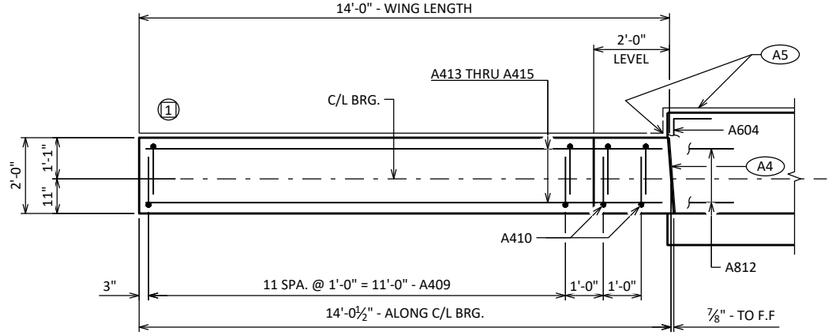


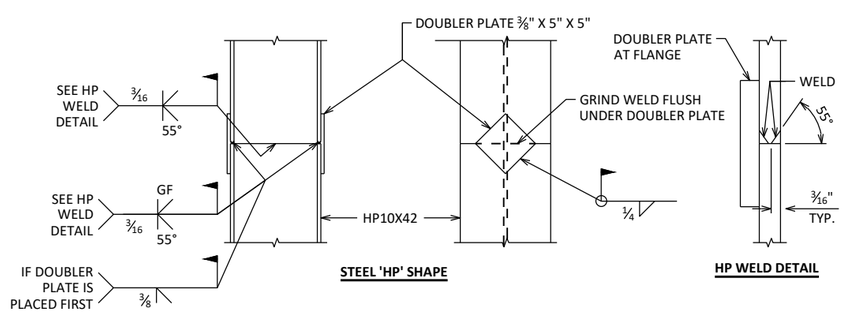
ELEVATION - WING 1



SECTION B-B



PLAN - WING 1



'HP' PILE DETAILS

NOTE: PLATE AND WELDS FOR HP10X42 PILING OPTION ONLY.
SEE WISDOT STD DETAIL 11.01 IF HP12X53 PILING IS USED.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

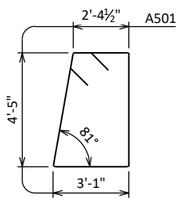
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 1600	
A501	37	15-0	X		ABUT. BODY - STIRRUPS	VERT.
A602	9	27-6			ABUT. BODY - F.F., TOP & BOT.	HORIZ.
A803	6	27-6			ABUT. BODY - B.F.	HORIZ.
A604	4	3-2	X		ABUT. BODY - ENDS	HORIZ.
A405	10	2-3			ABUT. BODY - TWO PER PILE	VERT.
A406	5	28-0	X		ABUT. BODY - SPIRAL WRAP @ PILE	VERT.
A607	12	4-3			ABUT. BODY - ADHESIVE ANCHORS	HORIZ.
COATED BARS					TOTAL WEIGHT = 880	
A508	15	2-0			ABUT. BODY - DOWELS	VERT.
A409	24	10-0	X	⚠	WING 1 - F.F. & B.F.	VERT.
A410	4	12-4	X		WING 1 - B.F. & F.F.	VERT.
A511	12	15-9			WING 1 BODY - F.F.	HORIZ.
A812	8	17-5			WING 1 BODY - B.F. & TOP	HORIZ.
A413	2	13-7			WING 1 - F.F. & B.F.	HORIZ.
A414	8	8-1		⚠	WING 1 - F.F. & B.F.	HORIZ.
A415	2	14-4	X		WING 1 - F.F. & B.F.	HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

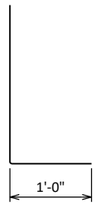
BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
A409	2 SERIES OF 12	7'-11" TO 12'-1"
A414	2 SERIES OF 4	4'-1" TO 12'-0"



A501



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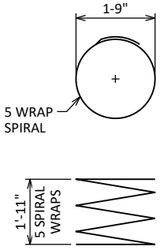
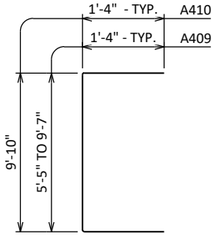
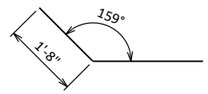


A406



A409 & A410



A415

LEGEND

(A3) (A4) (A5) (A9) FOR SYMBOL DESCRIPTIONS, SEE SHEET 5.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

NORTH ABUTMENT DETAILS

SHEET 6 OF 19

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STATE PROJECT NUMBER

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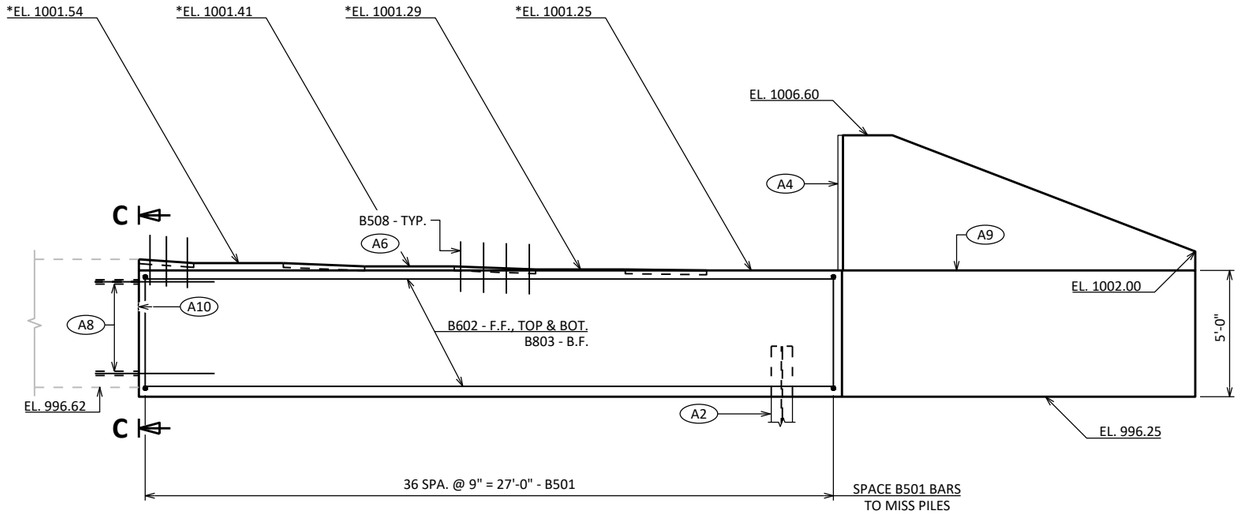
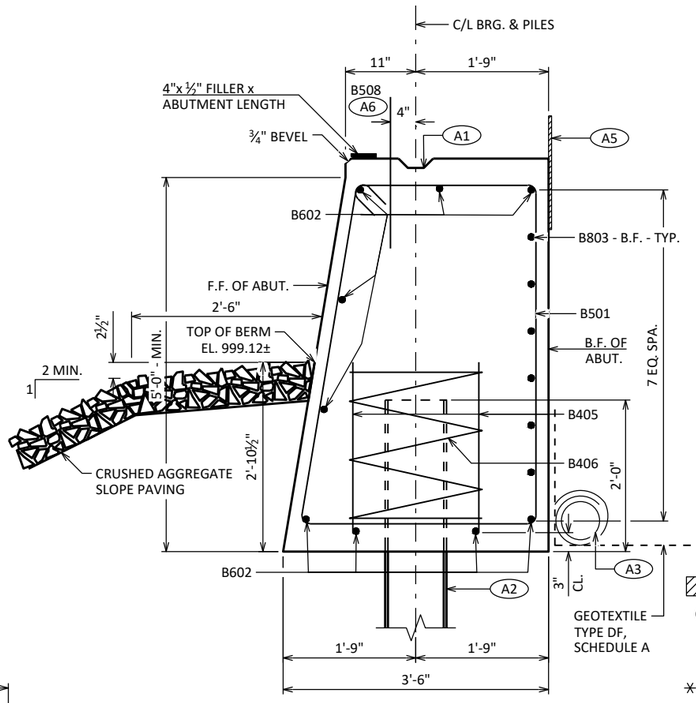


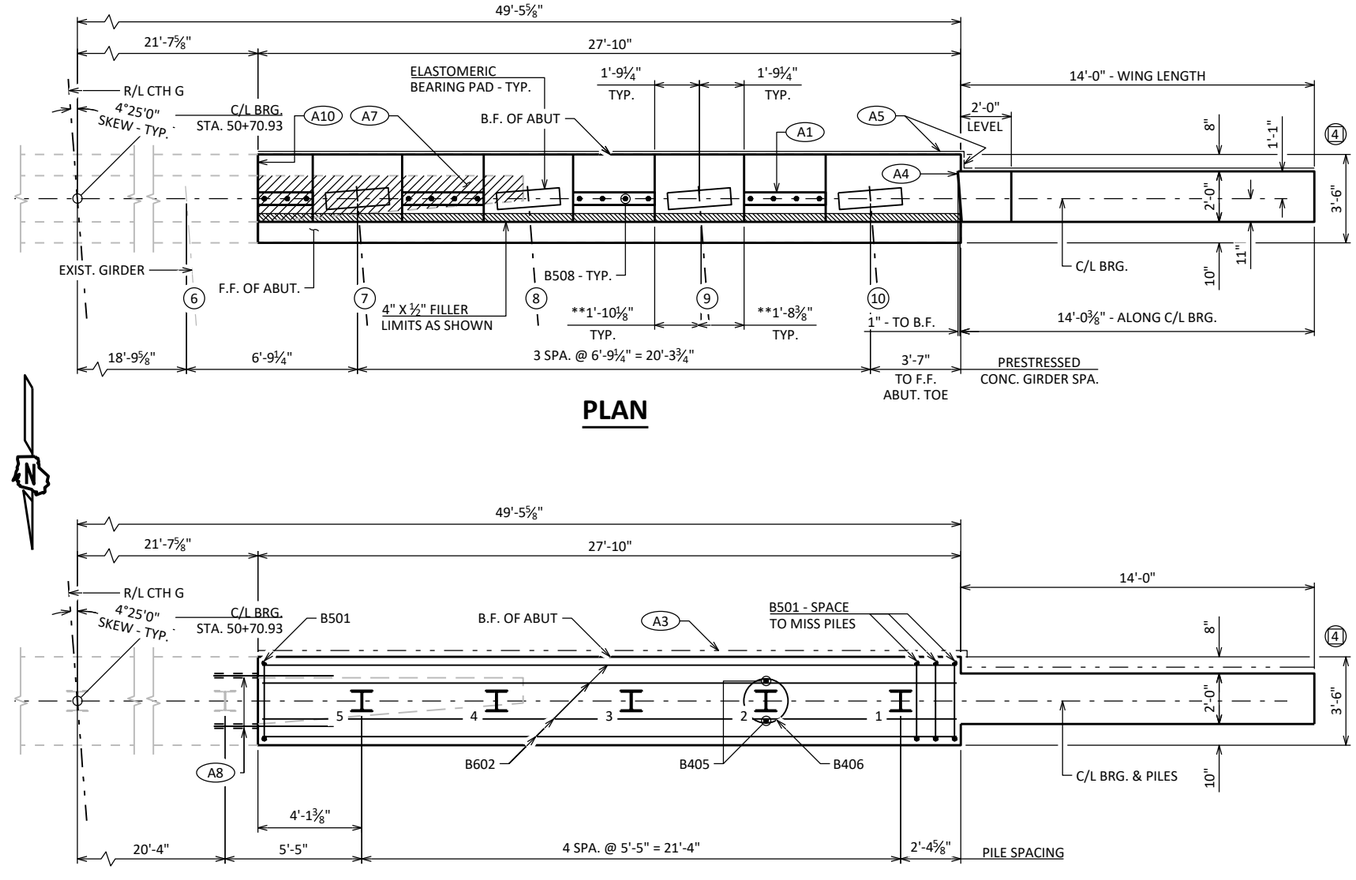
ELEVATION

LOOKING SOUTH



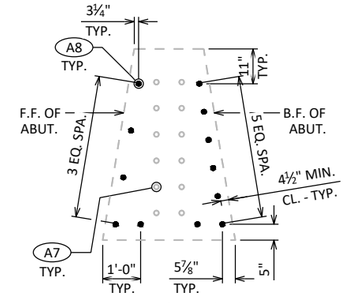
SECTION THRU BODY

LOOKING EAST

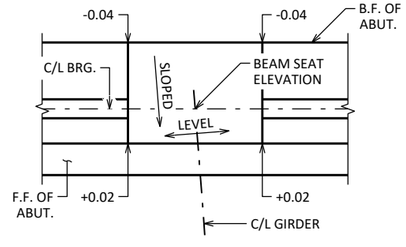


PLAN

PILE PLAN



SECTION C-C



SLOPED BEAM SEAT DETAIL

NOTES

FOR WING DETAILS AND ELEVATIONS, SEE SHEET 8.

LEGEND

- REMOVAL LIMITS
- (X) INDICATES WING NUMBER
- ✳ ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE C/L OF BEARING.
- ✳✳ DIMENSIONS TAKEN AT FRONT FACE OF ABUTMENT.
- (A1) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- (A2) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 25'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.
- (A3) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.
- (A4) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A5) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A6) BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (A7) EXISTING WING TO BE REMOVED. SALVAGE AND INCORPORATE HORIZONTAL REINFORCEMENT A MIN. OF 1'-9" INTO NEW WORK.
- (A8) ADHESIVE ANCHORS NO. 6 BAR. EMBED 1'-3" IN CONCRETE. TOTAL NUMBER REQUIRED AT NORTH ABUTMENT = 12. USE B607 BARS WITH ANCHORS. ANCHORS SHALL BE APPROVED FOR USE IN CRACKED CONCRETE.
- (A9) OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6" KEYWAY WITH RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE. ("V" GROOVE NOT REQUIRED IF CONST. JOINT IS NOT USED.)
- (A10) ROUGHEN SURFACE OF CONCRETE ¼" DEEP MINIMUM AT ALL AREAS WHERE NEW CONCRETE CONTACTS EXISTING CONCRETE.

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STRUCTURE B-13-403

DRAWN BY	UD	PLANS CK'D	ECS

SOUTH ABUTMENT

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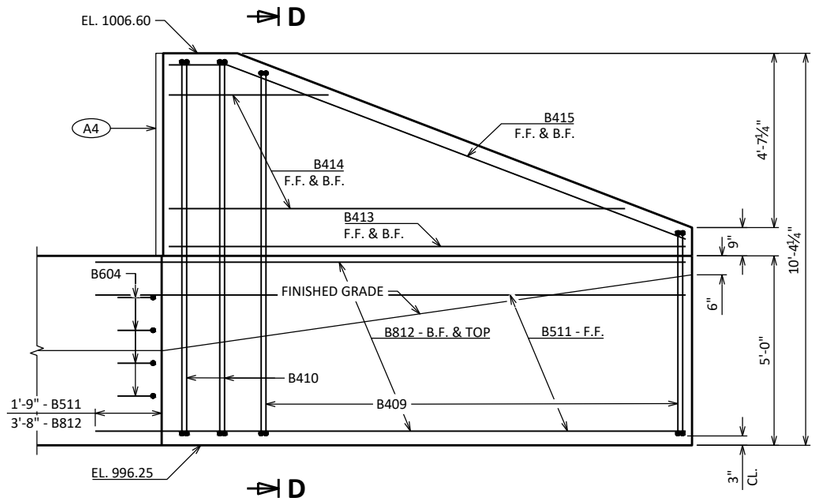
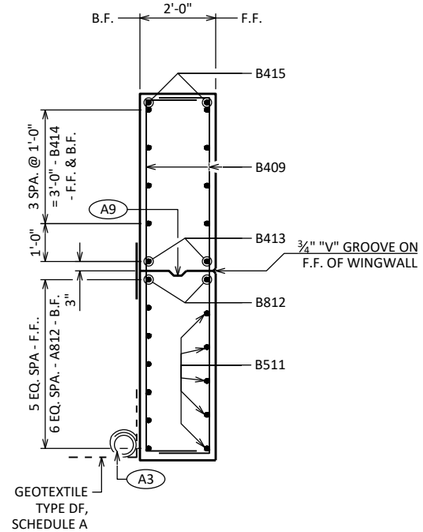
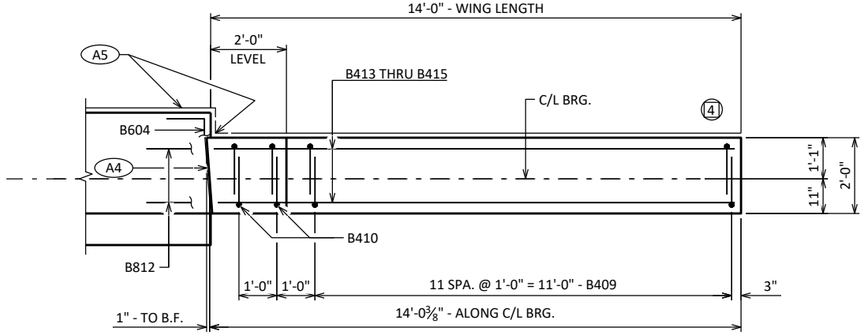


ELEVATION - WING 4



SECTION D-D



PLAN - WING 4

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

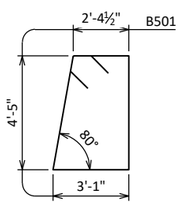
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 1600	
B501	37	15-0	X		ABUT. BODY - STIRRUPS	VERT.
B602	9	27-6			ABUT. BODY - F.F., TOP & BOT.	HORIZ.
B803	6	27-6			ABUT. BODY - B.F.	HORIZ.
B604	4	3-2	X		ABUT. BODY - ENDS	HORIZ.
B405	10	2-3			ABUT. BODY - TWO PER PILE	VERT.
B406	5	28-0	X		ABUT. BODY - SPIRAL WRAP @ PILE	VERT.
B607	12	4-3			ABUT. BODY - ADHESIVE ANCHORS	HORIZ.
COATED BARS					TOTAL WEIGHT = 880	
B508	15	2-0			ABUT. BODY - DOWELS	VERT.
B409	24	10-0	X	⚠	WING 4 - F.F. & B.F.	VERT.
B410	4	12-5	X		WING 4 - B.F. & F.F.	VERT.
B511	12	15-9			WING 4 BODY - F.F.	HORIZ.
B812	8	17-6			WING 4 BODY - B.F. & TOP	HORIZ.
B413	2	13-7			WING 4 - F.F. & B.F.	HORIZ.
B414	8	8-1		⚠	WING 4 - F.F. & B.F.	HORIZ.
B415	2	14-5	X		WING 4 - F.F. & B.F.	HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
B409	2 SERIES OF 12	7'-11" TO 12'-1"
B414	2 SERIES OF 4	4'-2" TO 12'-0"



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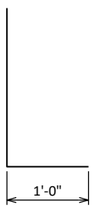

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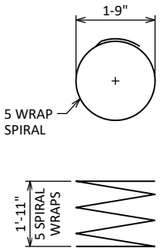

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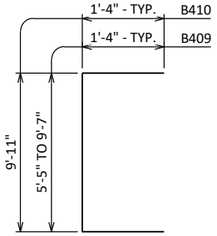
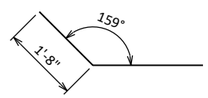


B409 & B410



B415

LEGEND

(A3) (A4) (A5) (A9) FOR SYMBOL DESCRIPTIONS, SEE SHEET 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

SOUTH ABUTMENT DETAILS

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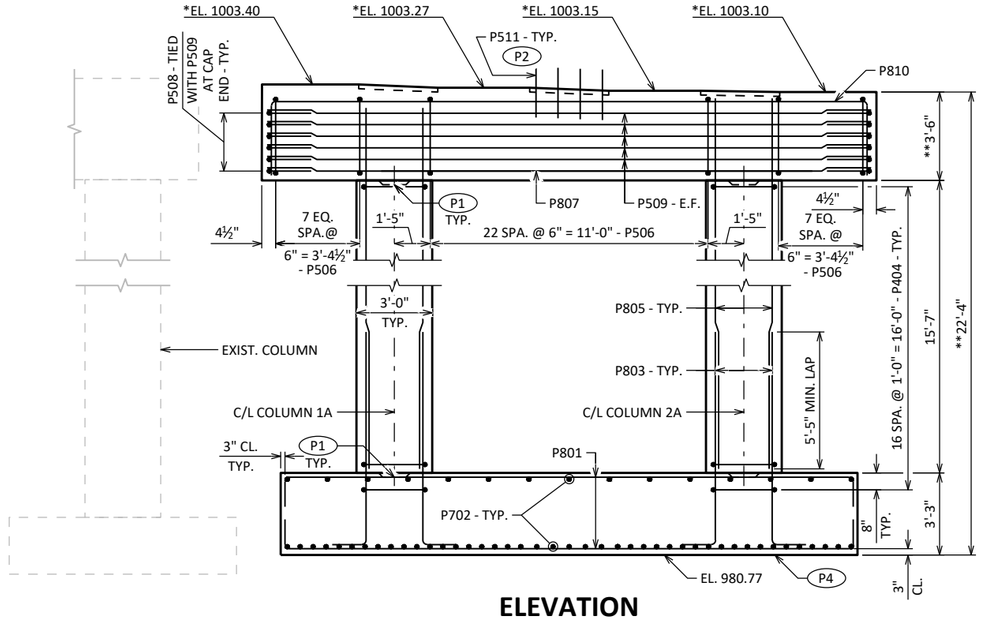
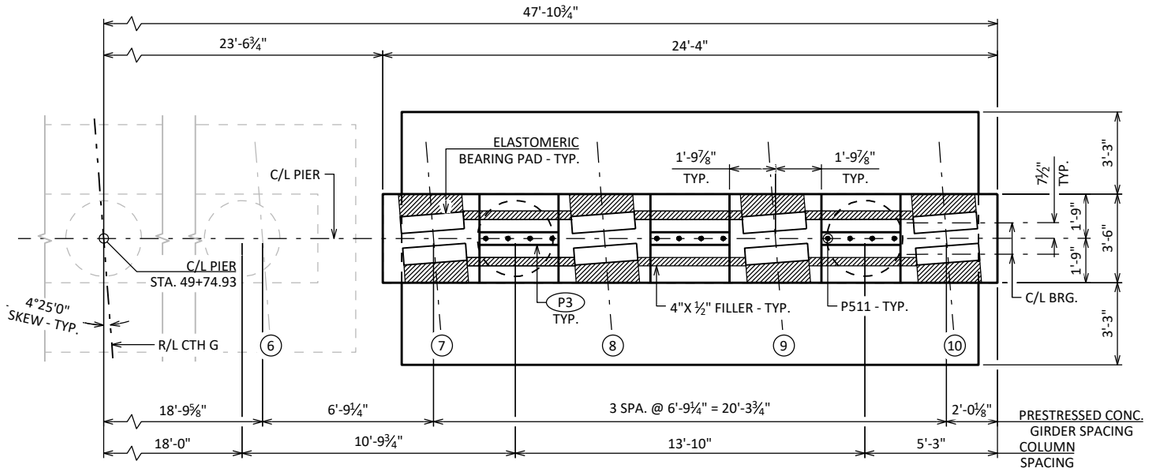
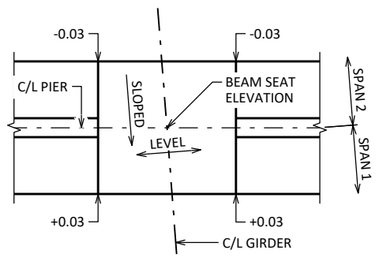


ELEVATION

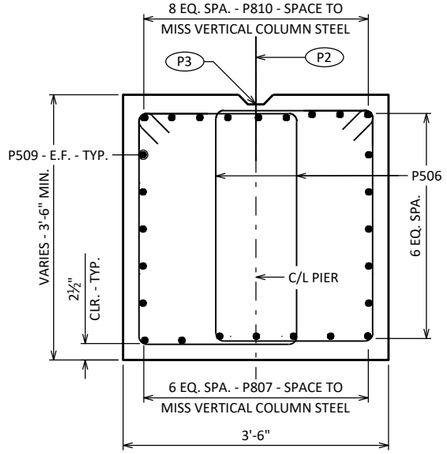
LOOKING SOUTH



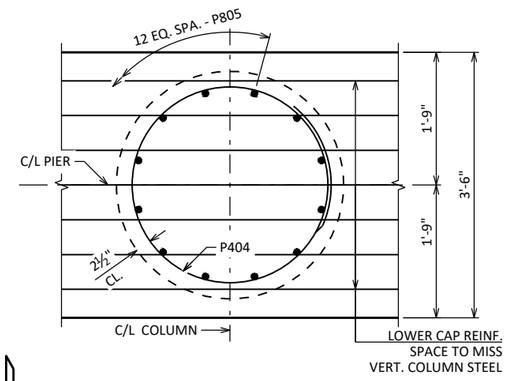
PLAN



SLOPED BEAM SEAT DETAIL

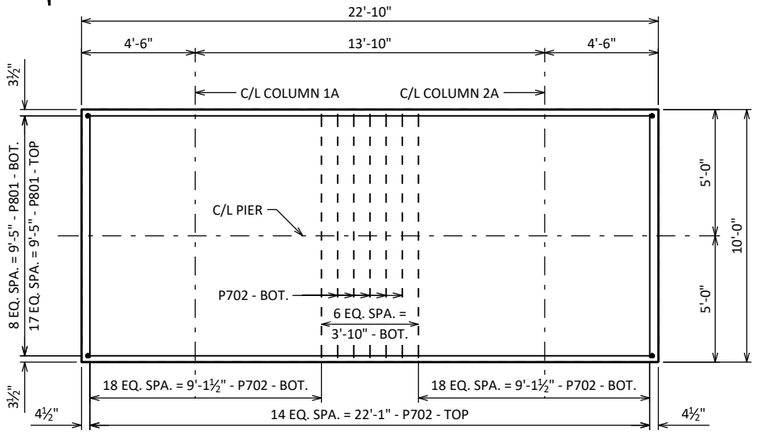


SECTION THRU PIER CAP



SECTION THRU COLUMN

SECTION TAKEN AT BOTTOM OF PIER CAP

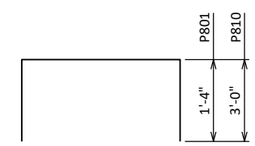


FOOTING PLAN

BILL OF BARS

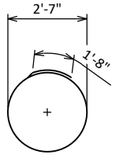
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 2900	
P801	27	24-7	X		FOOTING	HORIZ.
P702	58	9-6			FOOTING	HORIZ.
COATED BARS					TOTAL WEIGHT = 4440	
P803	24	9-5	X		FOOTING & COLUMN	VERT.
P404	34	9-10	X		COLUMN - STIRRUPS	HORIZ.
P805	24	18-8			COLUMN	VERT.
P506	78	11-2	X		CAP - STIRRUPS	VERT.
P807	7	23-11			CAP - BOT.	HORIZ.
P508	12	6-3	X		CAP - END	HORIZ.
P509	10	23-11			CAP - SIDES	HORIZ.
P810	9	29-4	X		CAP - TOP	HORIZ.
P511	12	2-0			CAP - TOP - DOWELS	VERT.



P801 & P810

P803



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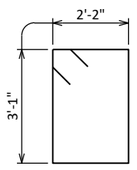

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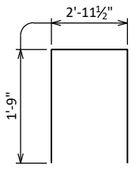

P508

LEGEND

- ✳ ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE C/L OF PIER.
- ✳✳ DIMENSIONS ARE TAKEN AT C/L COLUMN.
- (P1) 1'-3" x 1'-3" x 2" CONST. JOINT FORMED BY BEVELED KEYWAY.
- (P2) BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P3) KEYED CONST. JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.
- (P4) PIER TO BE SUPPORTED ON SOUND BEDROCK WITH A REQUIRED FACTORED RESISTANCE OF 15,000 PSF.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

PIER DETAILS

SHEET 9 OF 19

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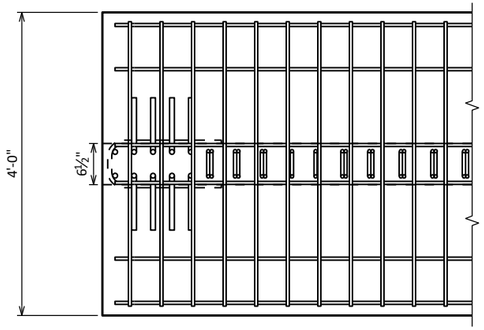
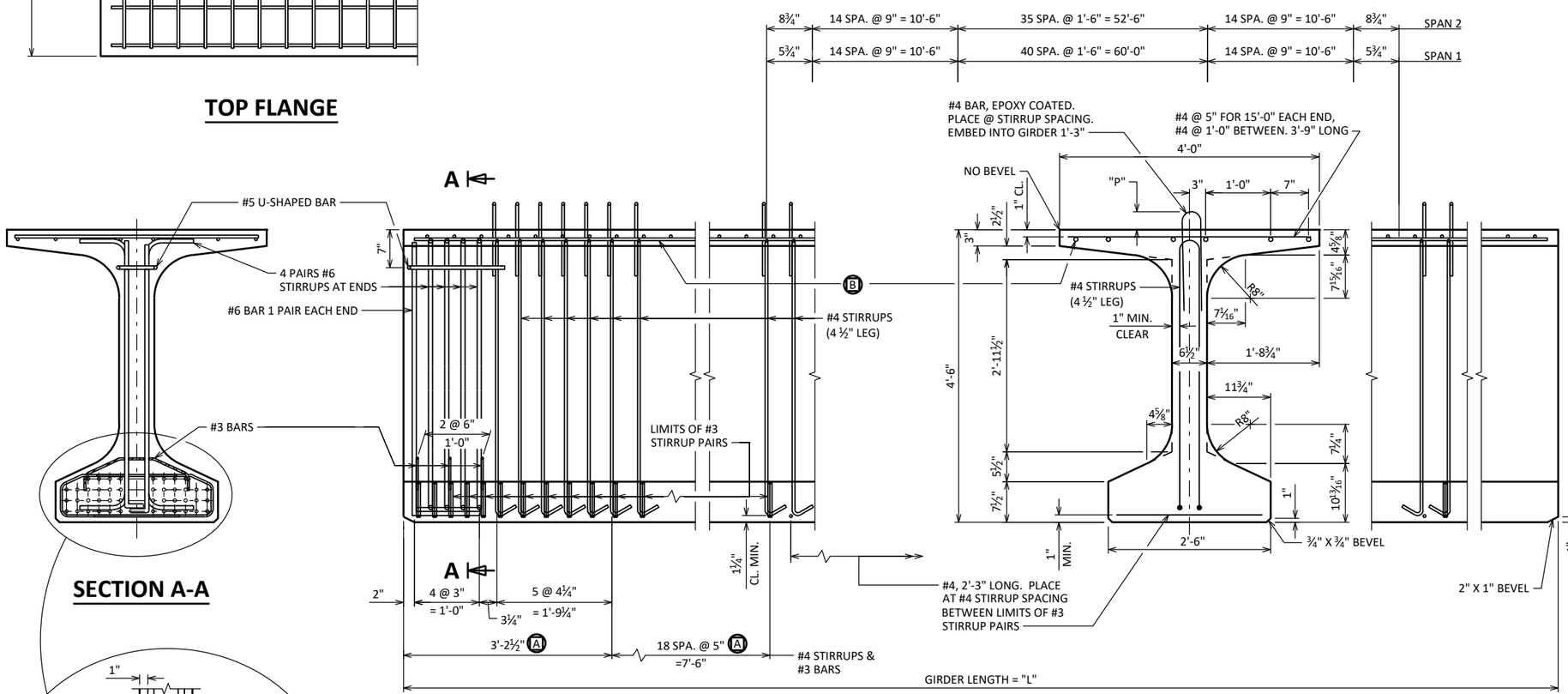


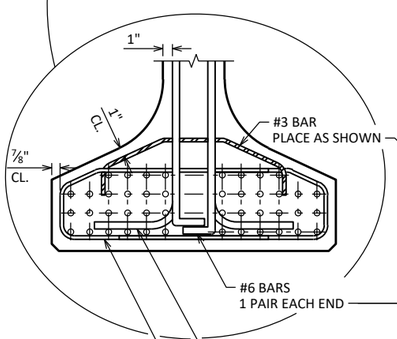
TOP FLANGE



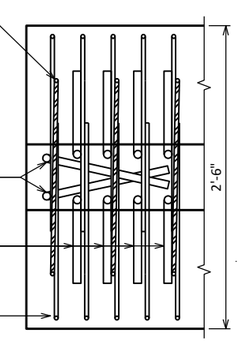
SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 2'-4"



SECTION A-A



BOTTOM FLANGE

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

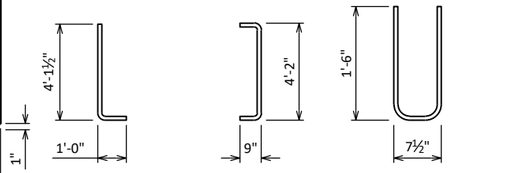
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

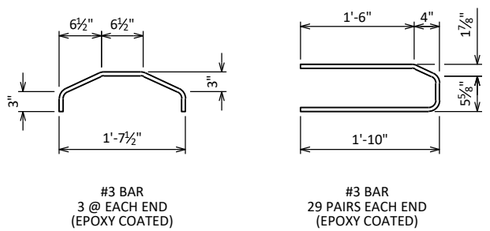
SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DESIGN SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM DETAILS" SHEET.





⚹ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L" (FEET)	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'_c (P.S.I.)	"P" (IN.)			DIA. OF STRAND (IN.)	DRAPED PATTERN						UNDRAPED PATTERN	
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10		1ST ⅓ OF GIRDER	MID ⅓ OF GIRDER	END ⅓ OF GIRDER		TOTAL NO. OF STRANDS	f'_{ci} (P.S.I.) ⚹	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	TOTAL NO. OF STRANDS	f'_{ci} (P.S.I.) ⚹
1	7-9	103'-4½"	0.3	0.6	0.8	1.0	1.0	1.0	0.8	0.6	0.3	8,000	7	7	7	0.6	24	6,800	50	15.5	18.5	4		
1	10	103'-4½"	0.3	0.6	0.9	1.0	1.0	1.0	0.8	0.6	0.3	8,000	6	6	6	0.6	24	6,800	50	15.5	18.5	4		
2	7-9	96'-4½"	0.2	0.4	0.6	0.7	0.8	0.7	0.6	0.5	0.2	8,000	7	7	7	0.6	20	6,800	50	15.5	18.5	4		
2	10	96'-4½"	0.2	0.5	0.6	0.7	0.8	0.7	0.6	0.5	0.2	8,000	6	6	6	0.6	20	6,800	50	15.5	18.5	4		

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STATE OF WISCONSIN
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STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

54W" PRESTRESSED GIRDER DETAILS

SHEET 10 OF 19

626

SCALE =

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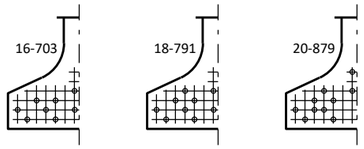
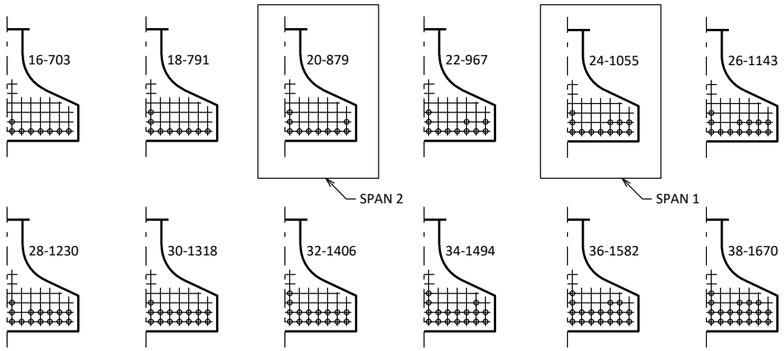
STATE PROJECT NUMBER

1204-08-73



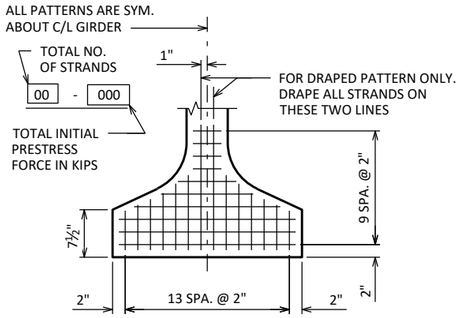
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6" DIA. STRANDS

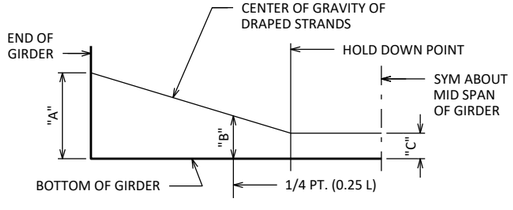


ARRANGEMENT AT C/L SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6" DIA. STRANDS



TYP. STRAND PATTERN



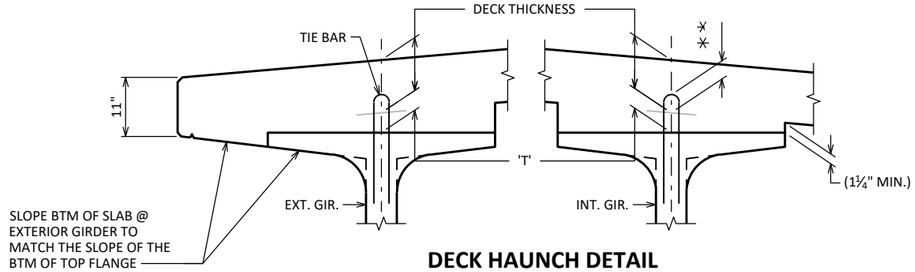
DRAPED STRAND PROFILE

⚹ THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) ⚹
1	1.740
2	1.207

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



DECK HAUNCH DETAIL

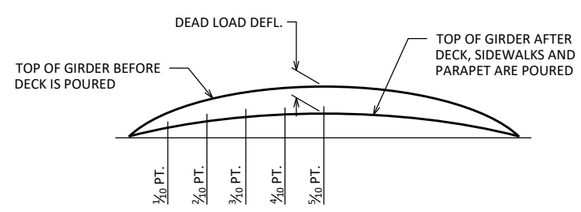
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

⚹⚹ IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT C/L OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

	TOP OF DECK ELEV. AT FINAL GRADE
-	TOP OF GIRDER ELEVATION
+	DEAD LOAD DEFLECTION
-	DECK THICKNESS
=	HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2¾" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

54W" PRESTRESSED GIRDER DETAILS 2

SHEET 11 OF 19

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SCALE =

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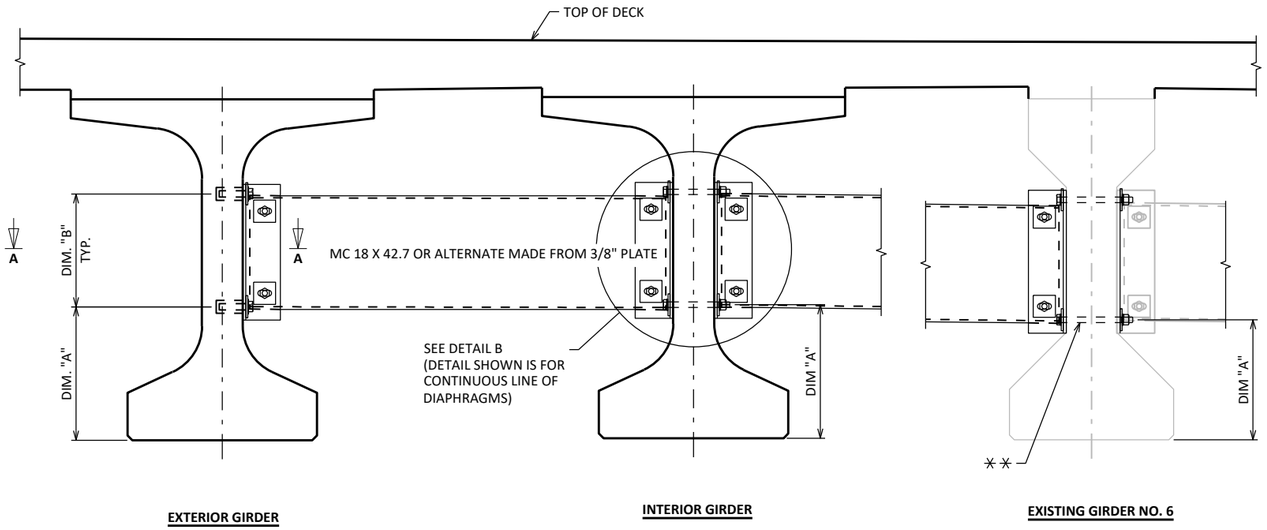
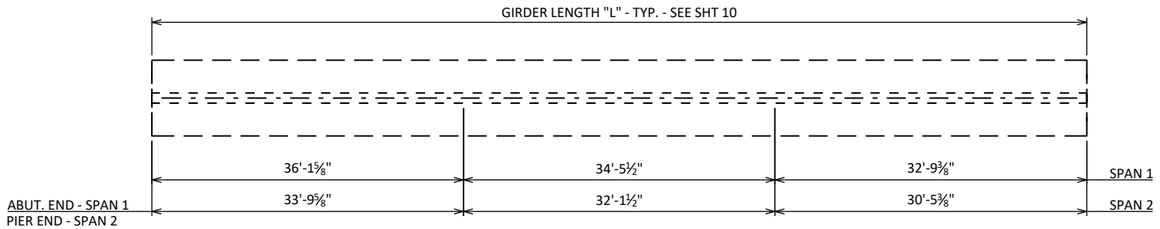
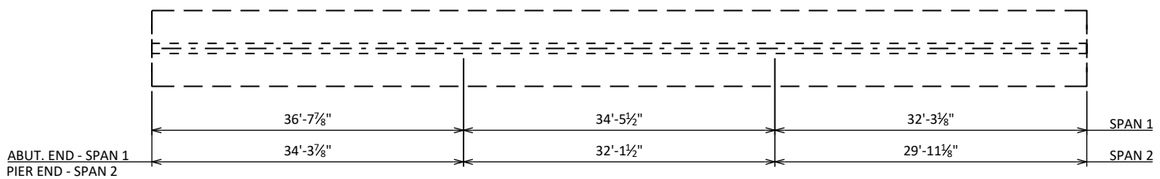


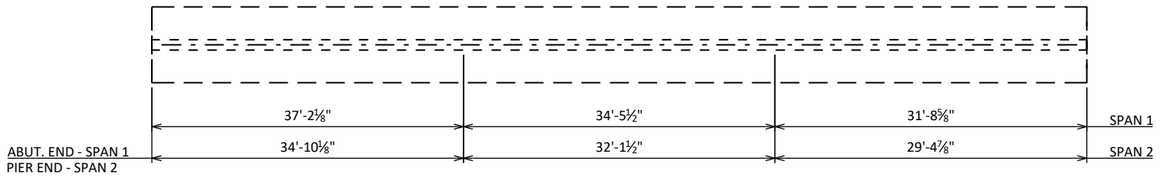
EXTERIOR GIRDER | **INTERIOR GIRDER** | **EXISTING GIRDER NO. 6**



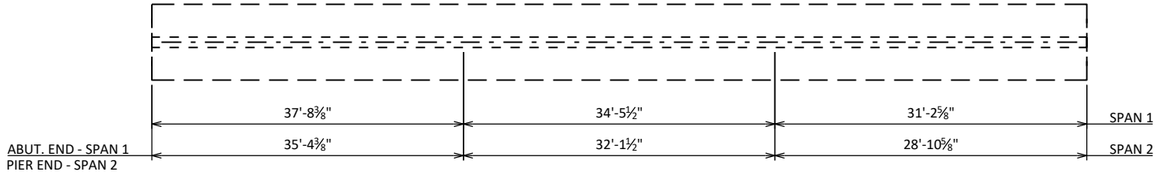
GIRDER 7



GIRDER 8

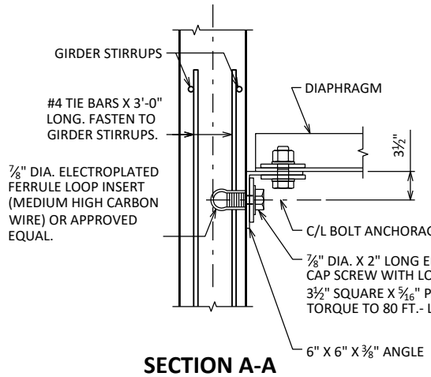


GIRDER 9



GIRDER 10

DIAPHRAGM CONNECTION SPACING



SECTION A-A

(FOR EXTERIOR ATTACHMENT)

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-403", EACH.

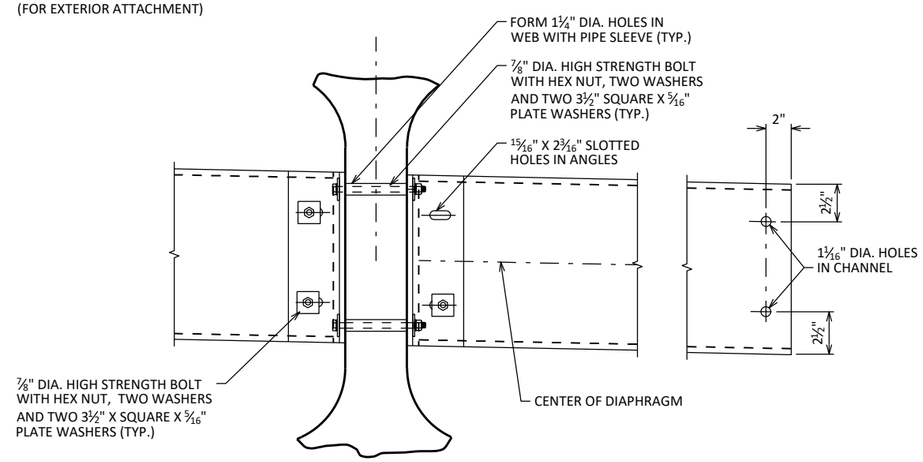
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS 1/4 TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

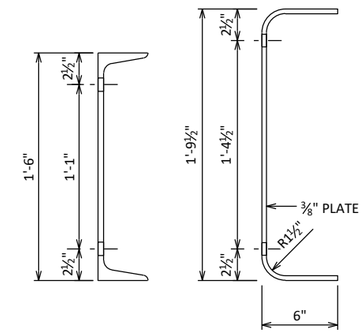
✳✳ FIELD DRILL HOLES THRU WEB AT EXISTING GIRDER LINE NO. 6 TO CONNECT DIAPHRAGMS FROM EXISTING GIRDER LINE NO. 6 TO NEW EXTERIOR GIRDER LINE NO. 7.



(FOR CONTINUOUS LINE OF DIAPHRAGMS)

TABLE

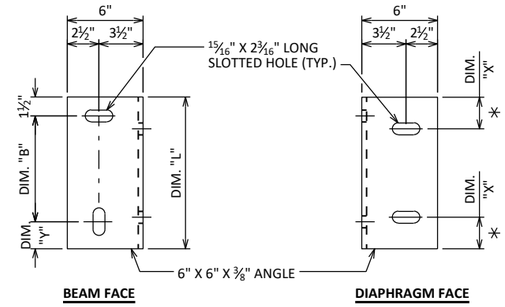
GIRDER TYPE	DIM. "A"	DIM. "B"	DIM. "L"	DIM. "X"	DIM. "Y"
54"	1'-7"	1'-7"	1'-10"	4½"	1½"
54W"	1'-9⅛"	1'-5⅞"	1'-9½"	4¼"	2⅛"



MC18X42.7 | **ALTERNATE DIAPHRAGM**

SECTION THRU DIAPHRAGM

DETAIL B



BEAM FACE | **DIAPHRAGM FACE**

DIAPHRAGM SUPPORT

✳ 2½" FOR ALTERNATE PLATE DIAPHRAGM

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STEEL DIAPHRAGM DETAILS

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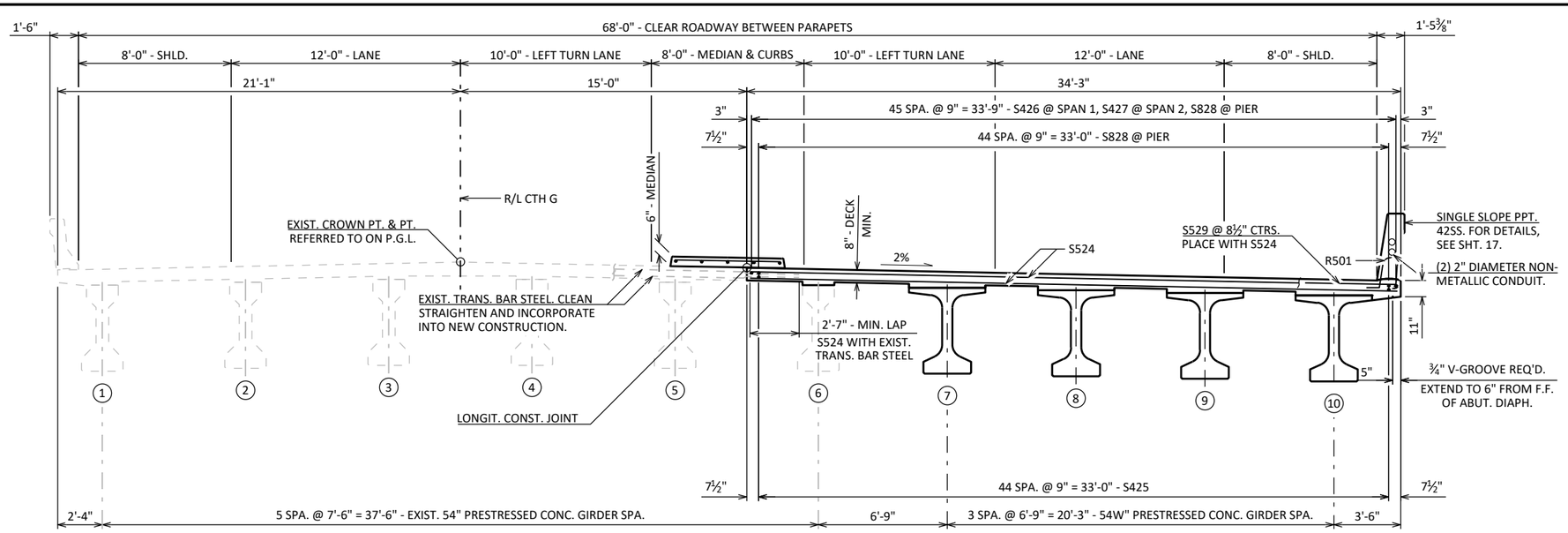
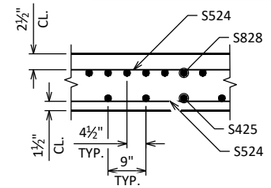


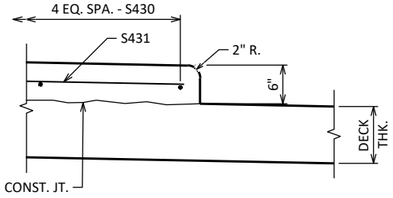
CROSS SECTION THRU ROADWAY

LOOKING SOUTH

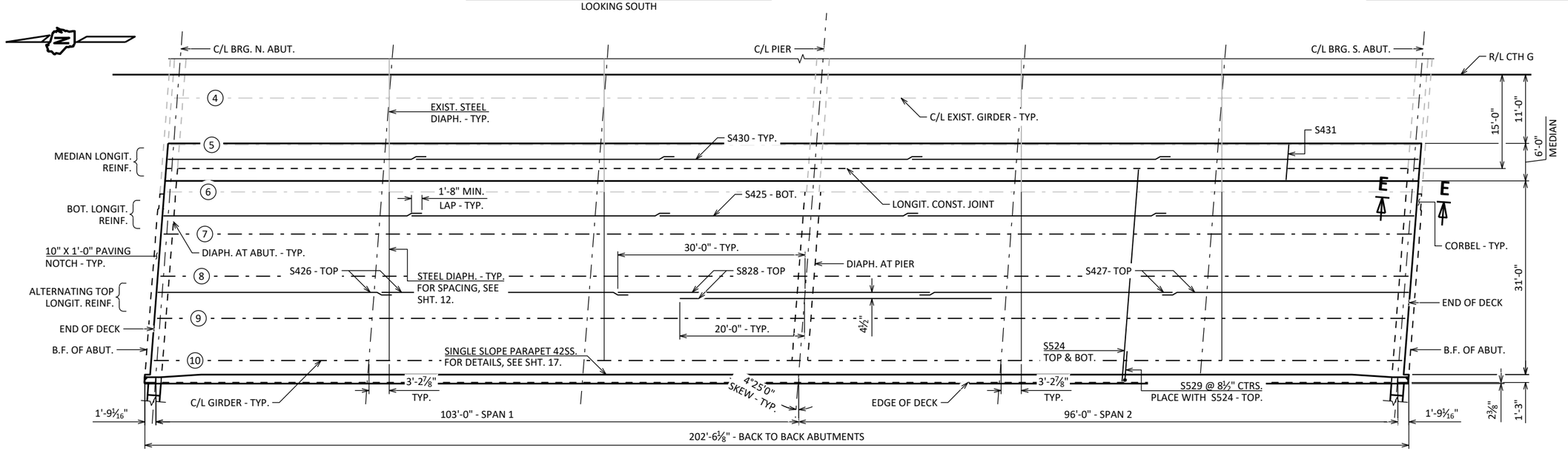


CROSS SECTION THRU DECK AT PIER

LOOKING SOUTH. SEE "CROSS SECTION THRU ROADWAY" ON THIS SHEET FOR EXCEPTION TO THE BAR SPACING SHOWN.



MEDIAN REINFORCEMENT DETAIL



PLAN

TOP OF DECK ELEVATIONS

LOCATION	C.L. BRG. N. ABUT.	0.10 PT.	0.20 PT.	0.30 PT.	0.40 PT.	0.50 PT.	0.60 PT.	0.70 PT.	0.80 PT.	0.90 PT.	C.L. PIER	0.10 PT.	0.20 PT.	0.30 PT.	0.40 PT.	0.50 PT.	0.60 PT.	0.70 PT.	0.80 PT.	0.90 PT.	C.L. BRG. S. ABUT.
GIRDER 6	1010.61	1010.49	1010.33	1010.16	1009.99	1009.81	1009.64	1009.49	1009.32	1009.13	1008.97	1008.81	1008.63	1008.42	1008.26	1008.07	1007.87	1007.67	1007.48	1007.31	1007.14
GIRDER 7	1010.46	1010.36	1010.20	1010.04	1009.87	1009.69	1009.52	1009.36	1009.20	1009.01	1008.83	1008.69	1008.51	1008.30	1008.13	1007.95	1007.74	1007.54	1007.36	1007.18	1007.02
GIRDER 8	1010.32	1010.23	1010.07	1009.91	1009.74	1009.56	1009.39	1009.23	1009.07	1008.88	1008.70	1008.56	1008.39	1008.17	1008.01	1007.82	1007.62	1007.42	1007.24	1007.06	1006.89
GIRDER 9	1010.19	1010.10	1009.95	1009.78	1009.62	1009.43	1009.27	1009.10	1008.95	1008.76	1008.57	1008.44	1008.26	1008.05	1007.88	1007.70	1007.49	1007.29	1007.11	1006.93	1006.77
GIRDER 10	1010.06	1009.97	1009.82	1009.65	1009.49	1009.31	1009.14	1008.98	1008.82	1008.64	1008.44	1008.32	1008.14	1007.92	1007.75	1007.57	1007.37	1007.17	1006.99	1006.80	1006.64
W. EOD	1010.01	1009.93	1009.78	1009.61	1009.45	1009.27	1009.10	1008.93	1008.78	1008.59	1008.40	1008.28	1008.09	1007.88	1007.71	1007.53	1007.33	1007.12	1006.95	1006.76	1006.60

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

SUPERSTRUCTURE

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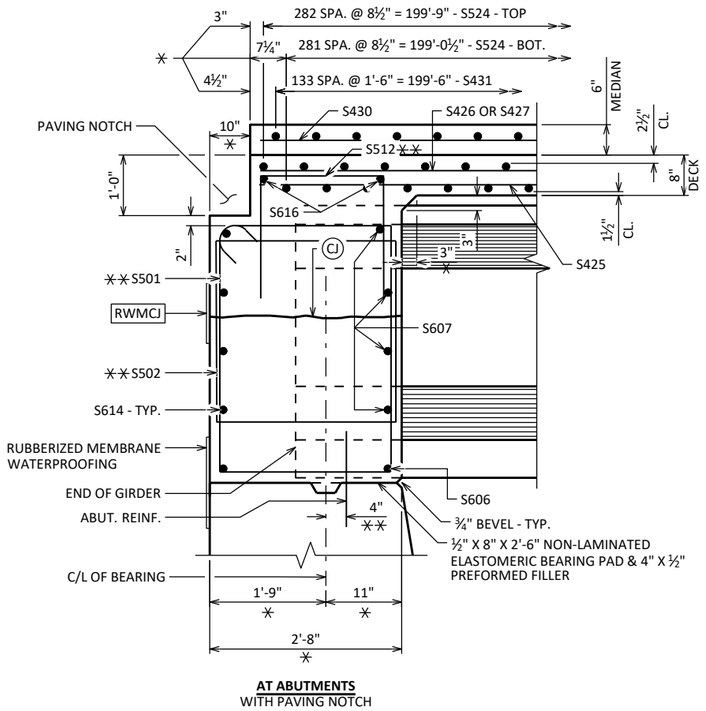
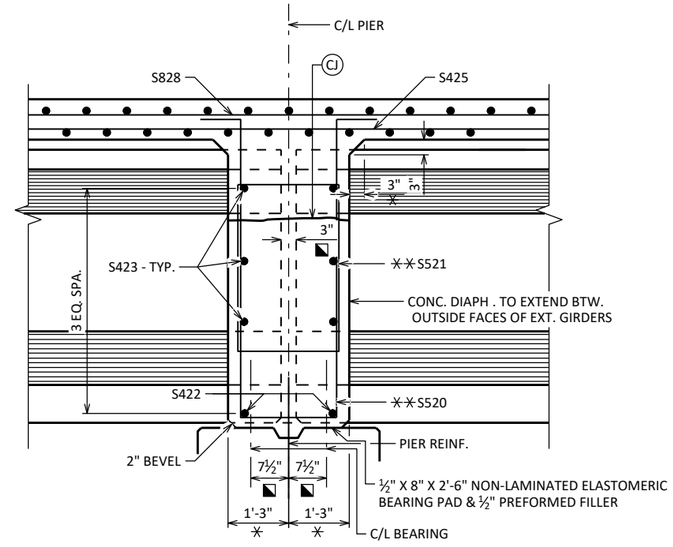
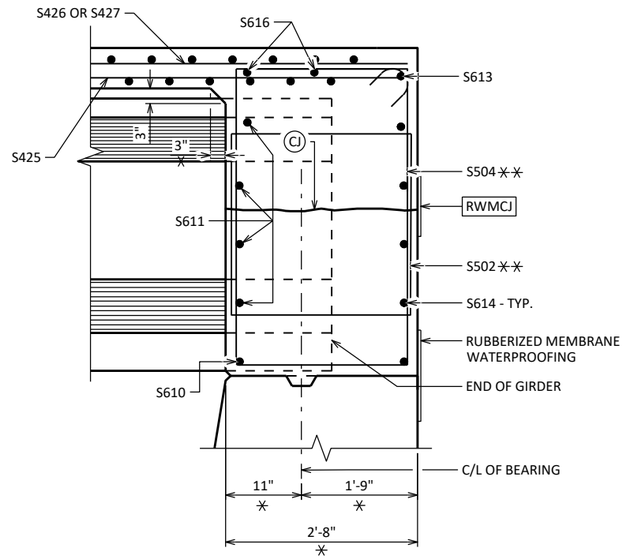


AT ABUTMENTS
WITH PAVING NOTCH



AT PIER

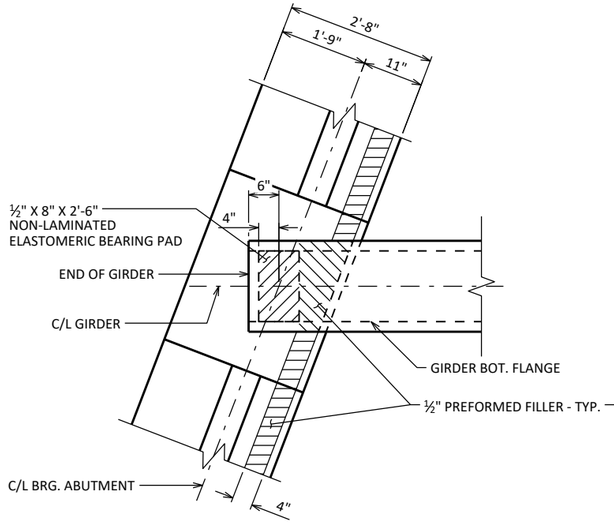


AT ABUTMENTS
WITHOUT PAVING NOTCH

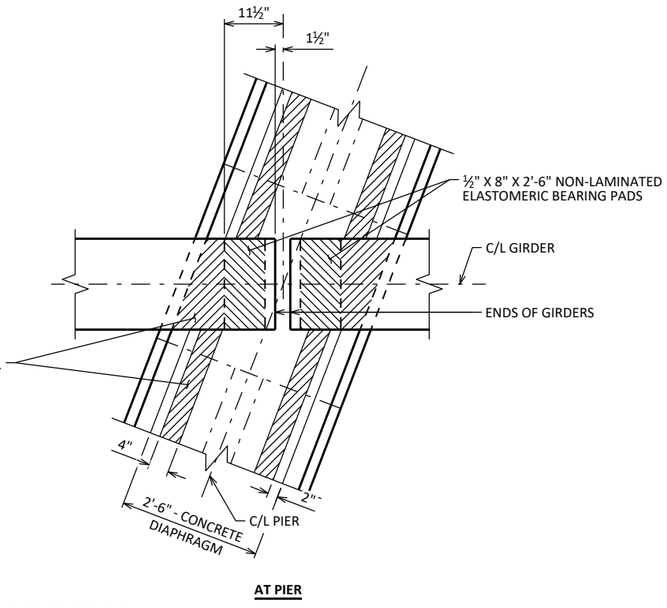
PART LONGITUDINAL SECTION

LEGEND

- ✳ DIMENSION TAKEN NORMAL TO C/L OF SUBSTRUCTURE UNITS.
- ✳✳ BARS PLACED PERPENDICULAR TO C/L GIRDERS.
- (CJ) OPTIONAL CONSTRUCTION JOINT 1'-10" AT ABUT. & 1'-2" AT PIER BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.
- [RWMCJ] 18" RUBBERIZED MEMBRANE WATERPROOFING IF CONSTRUCTION JOINT IS USED. (COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY BRIDGES").
- ◥ DIMENSION IS TAKEN PARALLEL TO C/L GIRDER.
- ◆ ADHESIVE ANCHORS NO. 4 BARS, EMBED 10" INTO EXISTING CORBEL. TOTAL NUMBER REQUIRED AT SOUTH AND NORTH ABUT. DIAPH. = 4. USE S419 BARS WITH ANCHORS. SPACING OF ANCHORS SHALL BE MORE THAN 3".

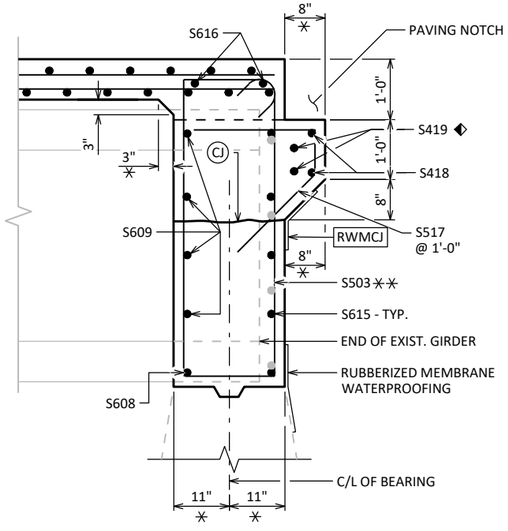


AT ABUTMENTS



AT PIER

BEARING PAD DETAIL



SECTION E-E

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-13-403

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SUPERSTRUCTURE DETAILS

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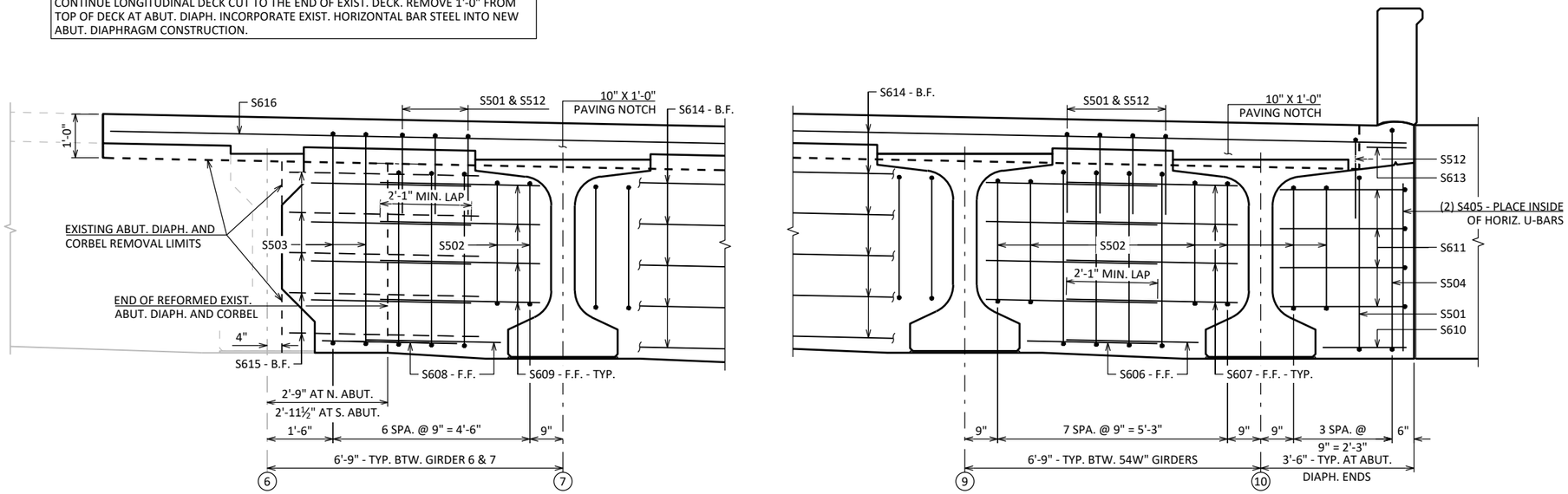
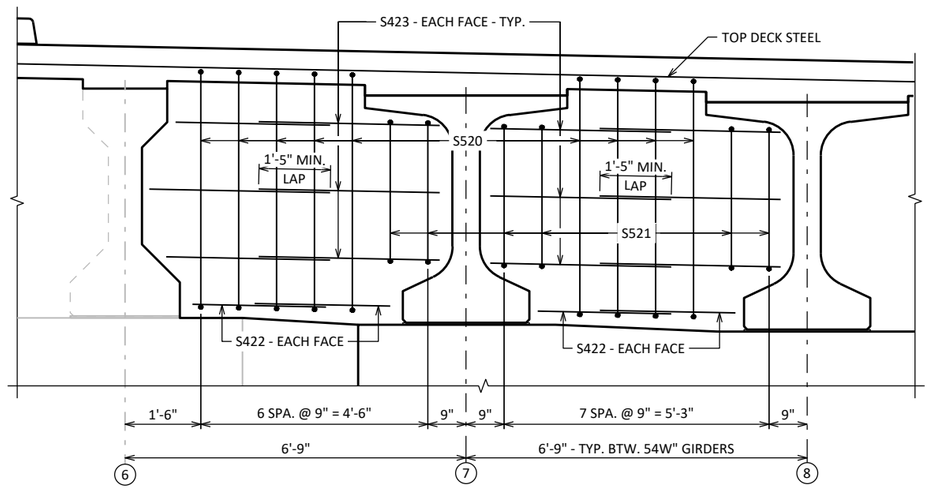
NOTE: REMOVE EXIST. ABUT. DIAPH. AT THE EXTERIOR SIDE OF EXIST. GIRDER NO. 6. CONTINUE LONGITUDINAL DECK CUT TO THE END OF EXIST. DECK. REMOVE 1'-0" FROM TOP OF DECK AT ABUT. DIAPH. INCORPORATE EXIST. HORIZONTAL BAR STEEL INTO NEW ABUT. DIAPHRAGM CONSTRUCTION.



PART TRANSVERSE SECTION AT ABUTMENT DIAPHRAGM

NORMAL TO ROADWAY
LOOKING SOUTH

NOTE: REMOVE EXIST. PIER PILASTER AT THE EXTERIOR SIDE OF EXIST. GIRDER NO. 6.



PART TRANSVERSE SECTION AT PIER DIAPHRAGM

NORMAL TO ROADWAY
LOOKING SOUTH

8

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

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SUPERSTRUCTURE DETAILS 2

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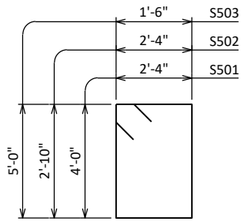
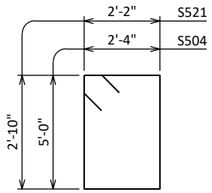
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

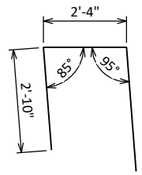
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
COATED BARS					TOTAL WEIGHT = 49070	
S501	32	13-4	X		ABUT. DIAPH. - STIRRUPS	VERT.
S502	32	11-0	X		ABUT. DIAPH. - STIRRUPS	VERT.
S503	4	13-8	X		ABUT. DIAPH. - STIRRUPS	VERT.
S504	2	15-4	X		ABUT. DIAPH. - STIRRUPS - WINGS 1 & 4	VERT.
S405	4	3-10			ABUT. DIAPH. - ENDS	VERT.
S606	12	3-0			ABUT. DIAPH. - BTW. GIRDERS	HORIZ.
S607	48	4-0			ABUT. DIAPH. - BTW. GIRDERS	HORIZ.
S608	4	3-1			ABUT. DIAPH. - BTW. GIRDERS	HORIZ.
S609	16	3-9			ABUT. DIAPH. - BTW. GIRDERS	HORIZ.
S610	2	1-11			ABUT. DIAPH. - WINGS 1 & 4 ENDS	HORIZ.
S611	8	8-4	X		ABUT. DIAPH. - WINGS 1 & 4 ENDS	HORIZ.
S512	32	4-11	X		ABUT. DIAPH. - TOP	VERT.
S613	2	0-11			ABUT. DIAPH. - WINGS 1 & 4	HORIZ.
S614	10	27-3			ABUT. DIAPH. - B.F.	HORIZ.
S615	10	5-1			ABUT. DIAPH. - B.F.	HORIZ.
S616	4	34-0			ABUT. DIAPH. - TOP	HORIZ.
S517	8	4-5	X		ABUT. DIAPH. - CORBEL	VERT.
S418	4	3-5			ABUT. DIAPH. - CORBEL	HORIZ.
S419	4	2-1			ABUT. DIAPH. - CORBEL - ADHESIVE ANCHORS	HORIZ.
S520	17	12-10	X		PIER DIAPH. - STIRRUPS	VERT.
S521	14	10-8	X		PIER DIAPH. - STIRRUPS	VERT.
S422	16	2-8			PIER DIAPH. - BOT.	HORIZ.
S423	48	3-8			PIER DIAPH.	HORIZ.
S524	565	34-0			DECK - BOT. & TOP	TRANS.
S425	225	41-10			DECK - BOT.	LONGIT.
S426	92	39-0			DECK - TOP - SPAN 1	LONGIT.
S427	92	40-6			DECK - TOP - SPAN 2	LONGIT.
S828	91	50-0			DECK - TOP - PIER	LONGIT.
S529	283	5-5	X		DECK - TOP - OVERHANG	TRANS.
S430	25	41-6			MEDIAN	LONGIT.
S431	134	5-8			MEDIAN	TRANS.



S501 THRU S503



S504 & S521



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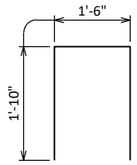

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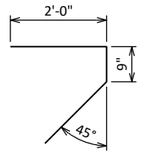

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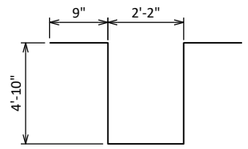

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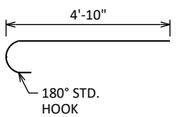


S529

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

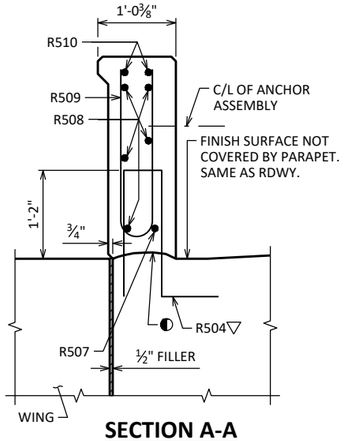
SUPERSTRUCTURE BILL OF BARS

SHEET 16 OF 19

632

STATE PROJECT NUMBER

1204-08-73



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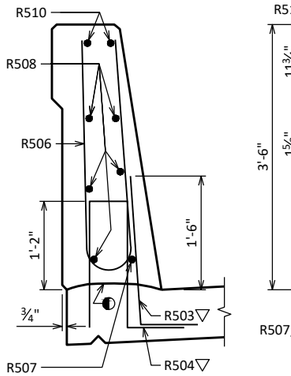

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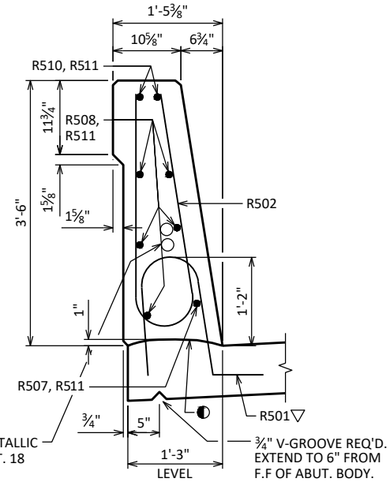

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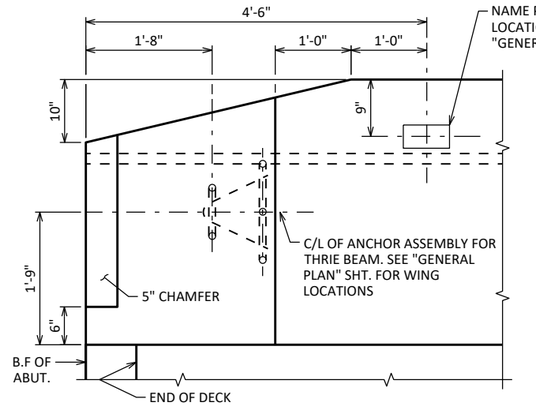


PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR DECK PARAPETS

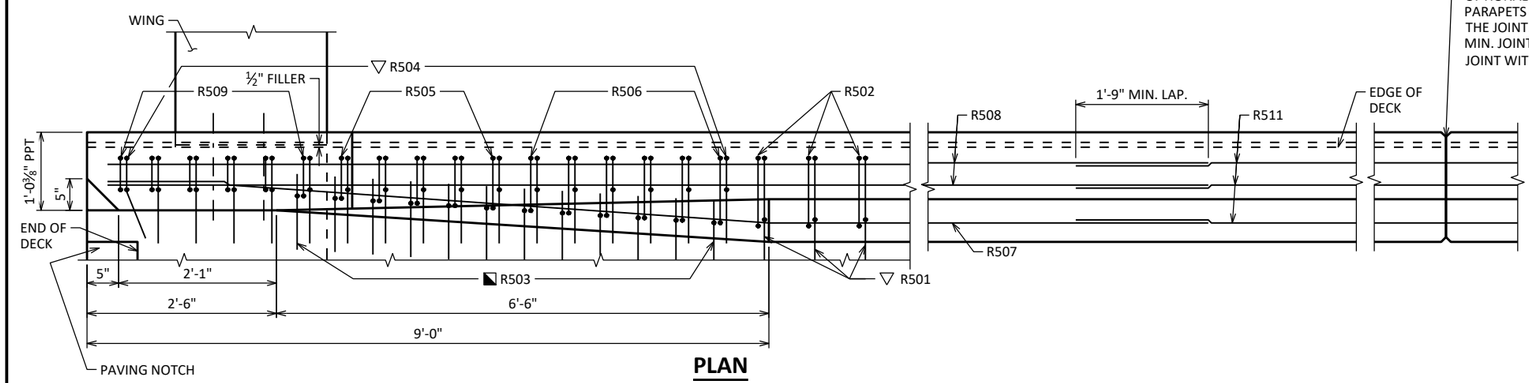
BAR MARK	COAT	NORTH ABUT.	SOUTH ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS							TOTAL WEIGHT = 5450
R501	X	141	141	4'-5"	X		PARAPET VERT.
R502	X	139	139	6'-8"	X		PARAPET VERT.
R503	X	12	12	2'-9"	X		PARAPET VERT.
R504	X	17	17	4'-4"	X		PARAPET VERT.
R505	X	5	5	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	19'-9"	X		PARAPET HORIZ.
R508	X	5	5	19'-9"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	19'-9"	X		PARAPET HORIZ.
R511	X	16	16	42'-10"			PARAPET HORIZ.
R512	X	2	2	3'-2"			PPT. - JUNCTION BOX - VERT.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

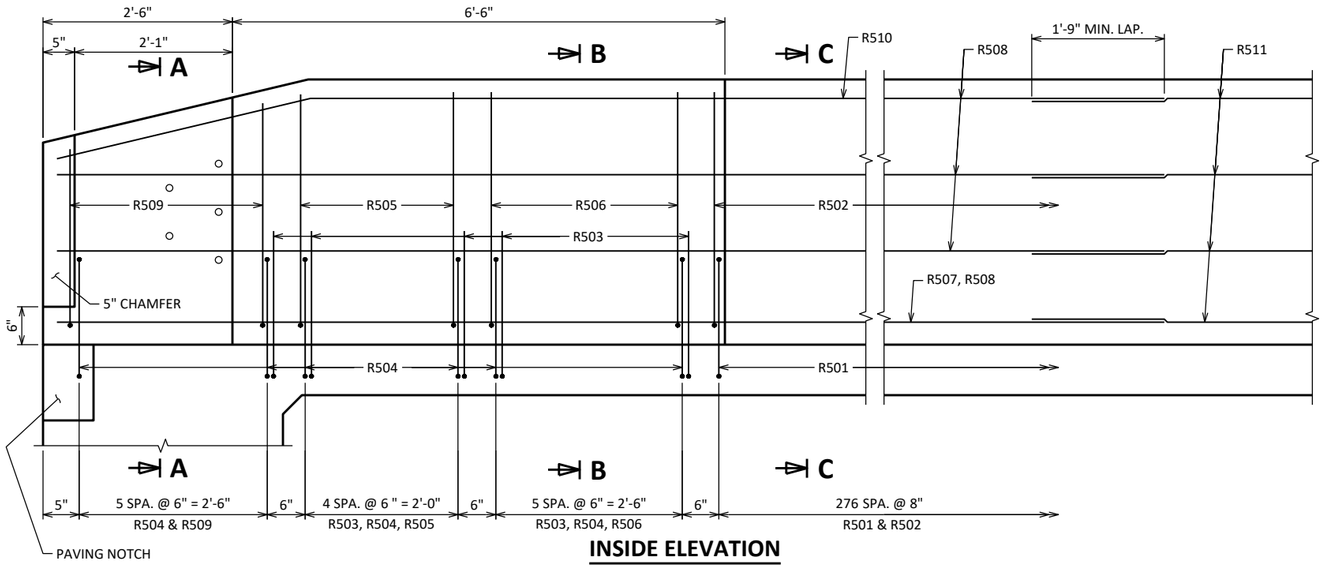
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"



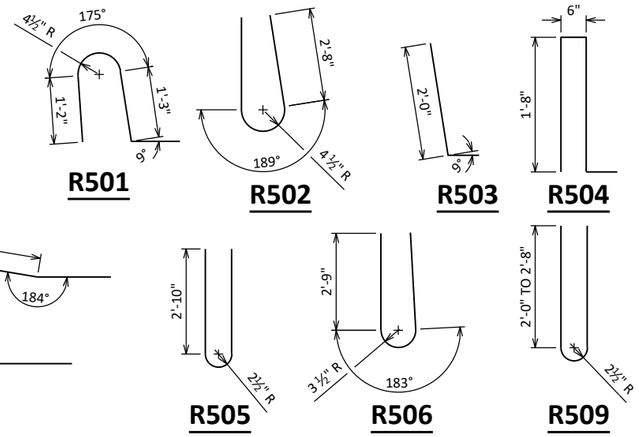
PLAN

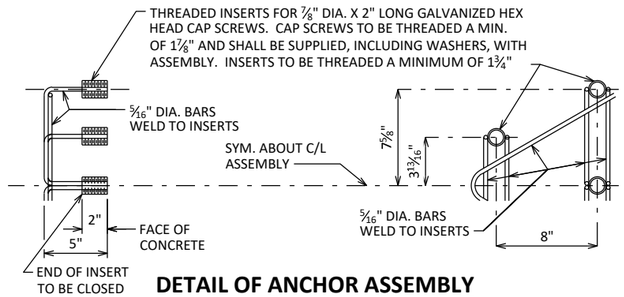
NE CORNER SHOWN, OTHERS SIMILAR



INSIDE ELEVATION

NE CORNER SHOWN, OTHERS SIMILAR





DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501, R503, R504, R511, AND R512 BARS TO BE TIED TO SUPERSTRUCTURE STEEL BEFORE SUPERSTRUCTURE IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

SINGLE SLOPE PARAPET 42SS

SHEET 17 OF 19

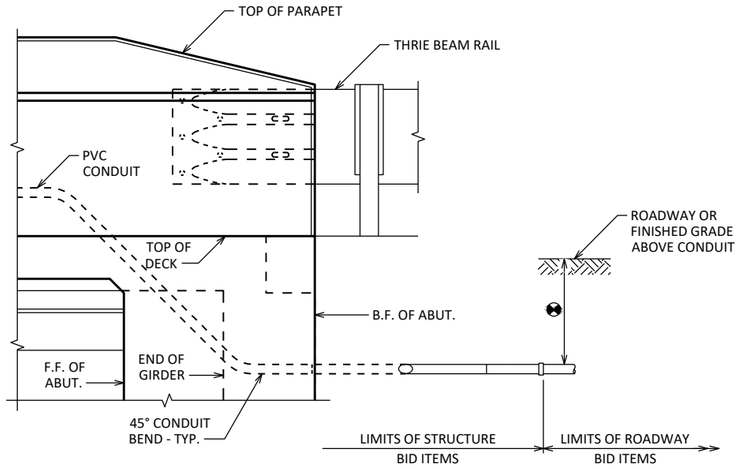
633

8

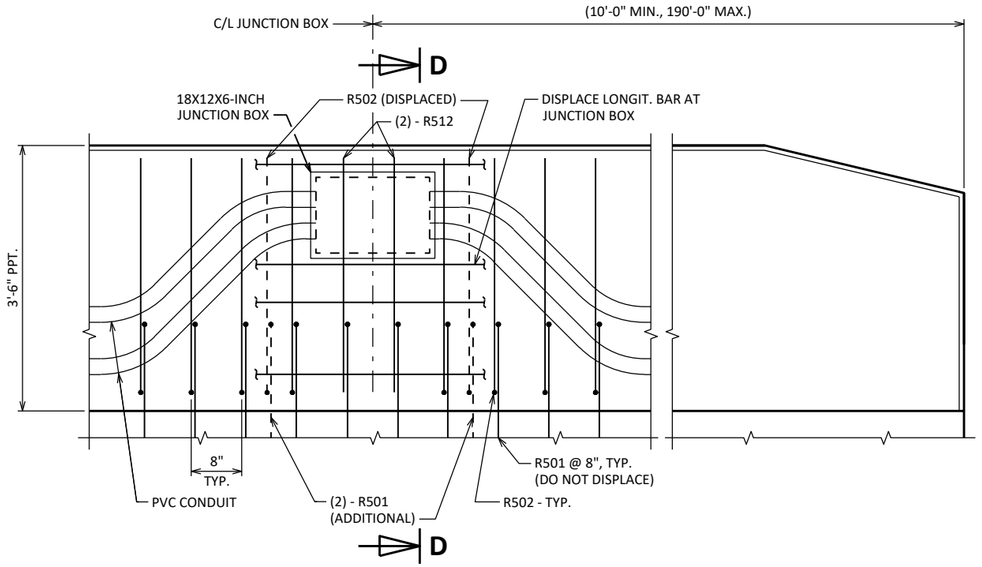
8

STATE PROJECT NUMBER

1204-08-73

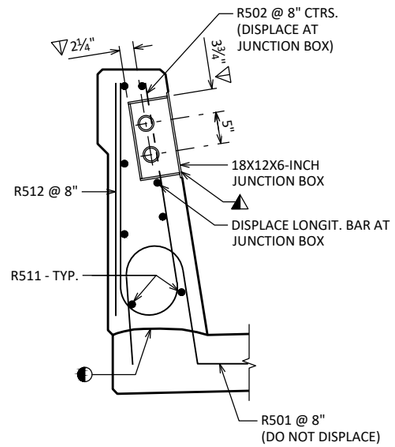


OUTSIDE ELEVATION OF PARAPET AT WINGWALL

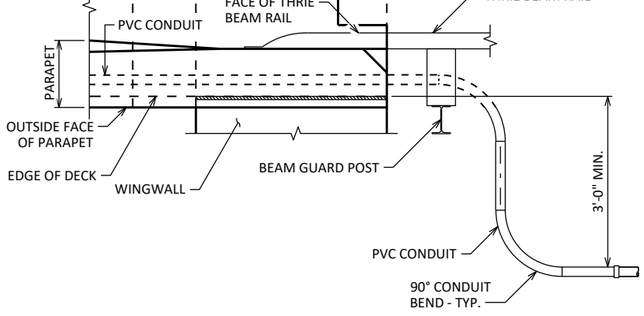


INSIDE ELEVATION AT JUNCTION BOX

(DECK STEEL NOT SHOWN FOR CLARITY)



SECTION D-D



PLAN OF PARAPET AT WINGWALL

LEGEND

- CONSTRUCTION JOINT, STRIKE OFF AS SHOWN.
- CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.
- LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.
- 2'-0" MIN. CONDUIT COVER UNDER ROADWAYS, 1'-6" OTHERWISE. CONDUIT COVER SHOULD NOT EXCEED 3'-0".

PVC = POLYVINYL CHLORIDE (RIGID NONMETALLIC) CONDUIT.

NOTES

CONDUIT SHALL BE EMBEDDED 2" CLEAR.

USE 2" DIA. RIGID NONMETALLIC CONDUIT (PVC) UNLESS NOTED OTHERWISE.

CONDUIT FITTINGS, CONDUIT BENDS, AND ADAPTER FITTINGS INCIDENTAL TO CONDUIT WORK.

CONDUIT BENDS SHALL CONFORM TO THE NATIONAL ELECTRIC CODE.

TERMINATE CONDUIT AT PULL BOX. REFER TO ROADWAY PLANS FOR LOCATION AND DETAILS.

PULL BOX QUANTITIES ARE NOT INCORPORATED INTO THE STRUCTURE "TOTAL ESTIMATED QUANTITIES".

PROVIDE JUNCTION BOXES FROM THE APPROVED PRODUCTS LIST.

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY UD | PLANS CK'D ECS

SINGLE SLOPE PARAPET 42SS ELECTRICAL

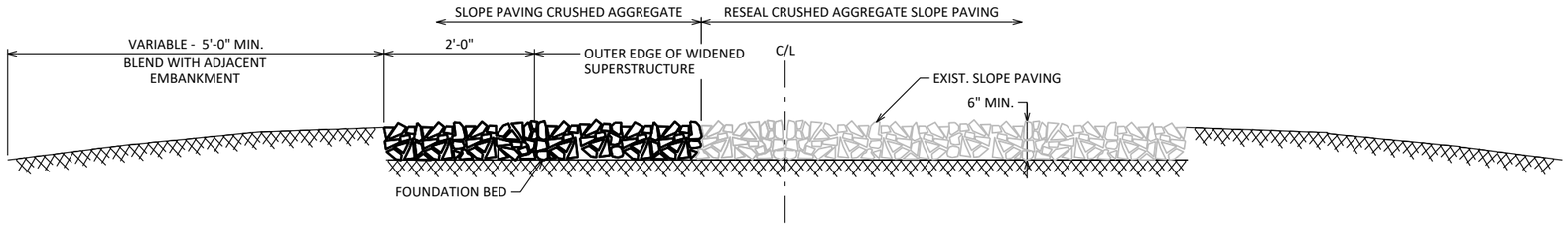
SHEET 18 OF 19

634

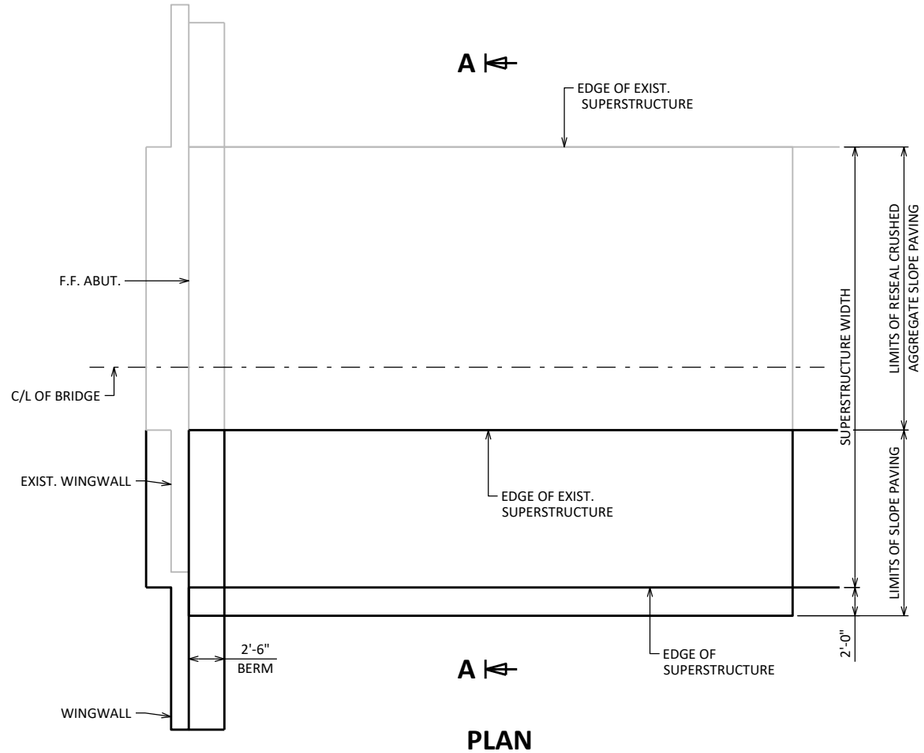
SCALE =

STATE PROJECT NUMBER

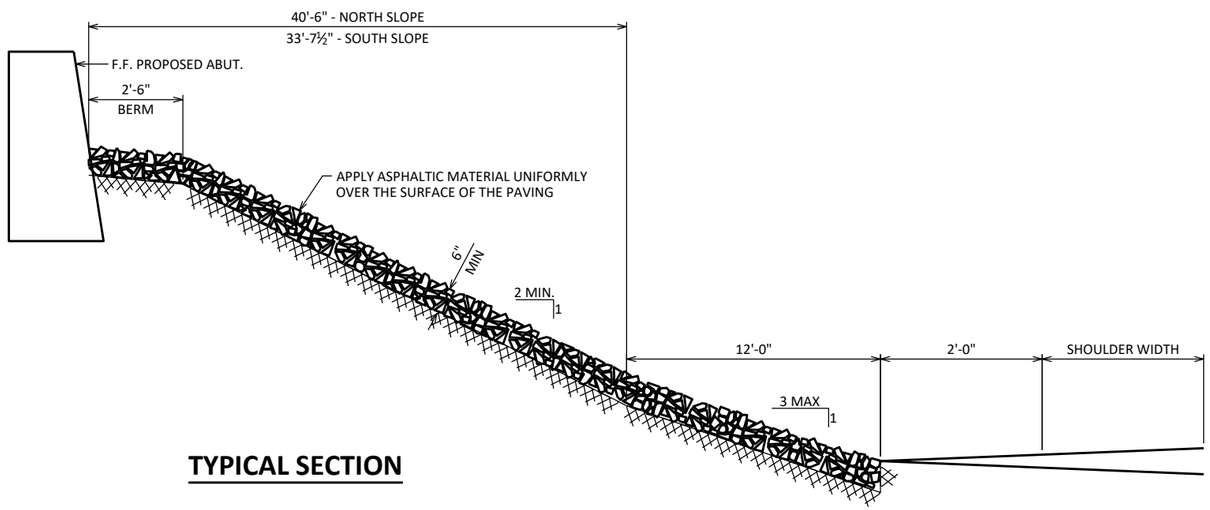
1204-08-73



SECTION A-A



PLAN



TYPICAL SECTION

NOTES

BID ITEM SHALL BE "SLOPE PAVING CRUSHED AGGREGATE".

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-403

DRAWN BY	UD	PLANS CK'D	ECS

SLOPE PAVING CRUSHED AGGREGATE

SHEET 19 OF 19

8

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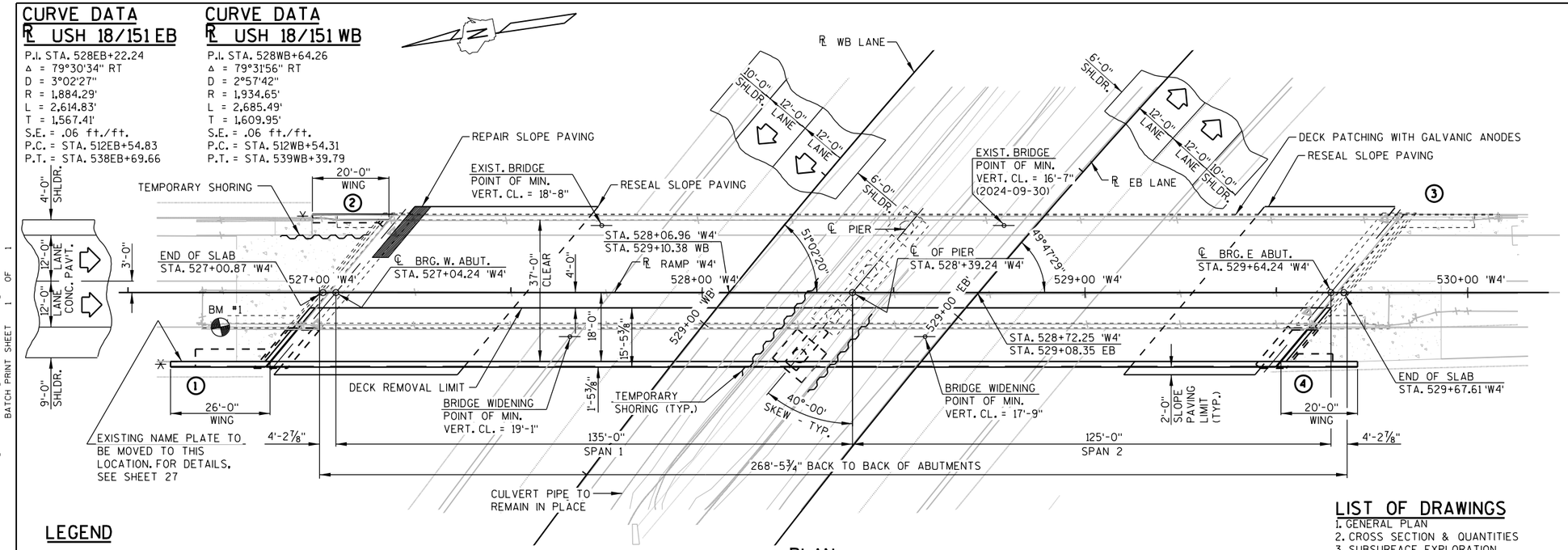
PLOT DATE: 11/14/2024 PLOT TIME: 11:19:46 AM BATCH PRINT SHEET 1 OF 1

CURVE DATA
℄ USH 18/151 EB

P.I. STA. 528EB+22.24
Δ = 79°30'34" RT
D = 3°02'27"
R = 1,884.29'
L = 2,614.83'
T = 1,567.41'
S.E. = .06 ft./ft.
P.C. = STA. 512EB+54.83
P.T. = STA. 538EB+69.66

CURVE DATA
℄ USH 18/151 WB

P.I. STA. 528WB+64.26
Δ = 79°31'56" RT
D = 2°57'42"
R = 1,934.65'
L = 2,685.49'
T = 1,609.95'
S.E. = .06 ft./ft.
P.C. = STA. 512WB+54.31
P.T. = STA. 539WB+39.79

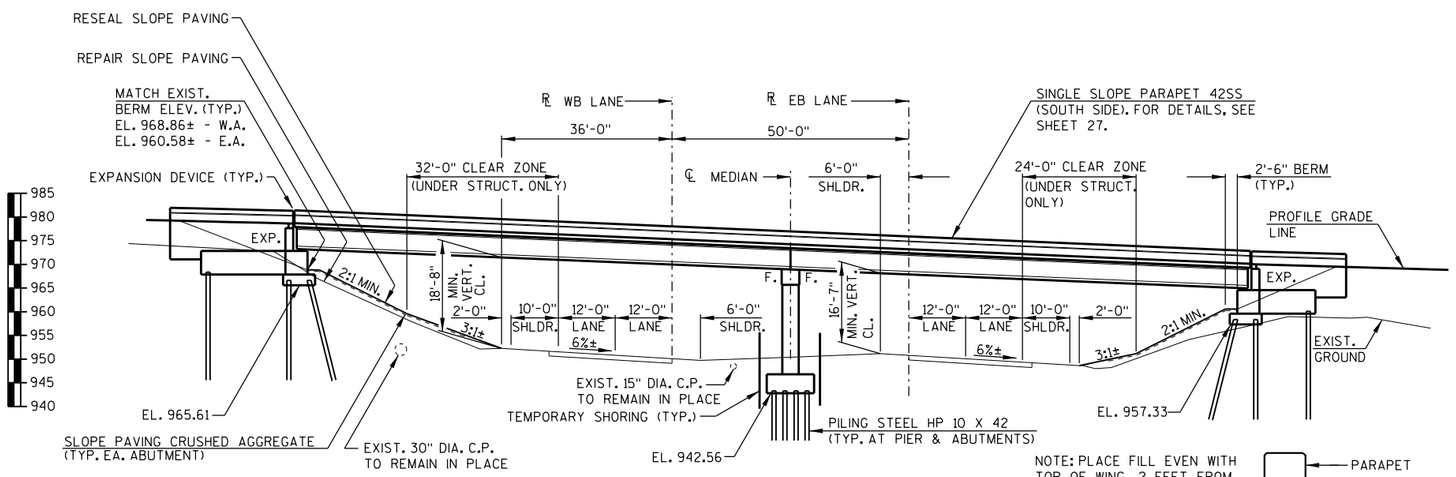


PLAN
(2 SPAN 54W-INCH PRESTRESSED CONCRETE GIRDERS WIDENING)

LEGEND

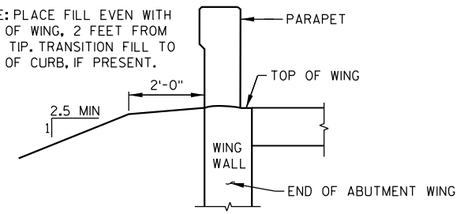
(X) INDICATES WING NUMBER

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT



ELEVATION
(NORMAL TO USH 18/151)
LOOKING SOUTHEAST

NOTE: PLACE FILL EVEN WITH TOP OF WING, 2 FEET FROM WING TIP. TRANSITION FILL TO TOP OF CURB, IF PRESENT.



TYPICAL FILL SECTION AT WING TIPS

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEVATION
1	526+74'W4'	METAL CAP ON NW WING 9.2'RT.	982.51

DESIGN DATA

LIVE LOAD:
DESIGN RATING: HS20
WIDENED DESING LOADING: HL-93
INVENTORY RATING: HS20
OPERATIONAL RATING: HS52
WISCONSIN STANDARD PERMIT VEHICLE (Wis-SPV): 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.

MATERIAL PROPERTIES:
CONCRETE MASONRY - SUPERSTRUCTURE- f'c = 4,000 PSI
- ALL OTHER —— f'c = 3,500 PSI
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 PSI
54W" PRE-STRESSED GIRDER
CONCRETE MASONRY —— f'c = 8,000 PSI
STRANDS - 0.6-INCH DIA. WITH AN ULTIMATE TENSILE STRENGTH OF 270,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 25 FEET LONG AT WEST ABUTMENT AND 25 FEET LONG AT EAST ABUTMENT.

PIER TO BE SUPPORTED ON PILING STEEL HP 10-INCH X 42 LB DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 10 FEET LONG. PRE-BORE A MINIMUM OF 3 FEET INTO COMPETENT BEDROCK. PRE-BORED HOLES TO BE FILLED WITH FRESH CONCRETE AFTER PILE IS PLACED IN HOLE.

**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.

PRIOR TO DRIVING PILES, PRESSURE GROUT AT THE CENTER OF EACH PROPOSED PILE LOCATION AS DESCRIBED IN THE "BEDROCK GROUTING STRUCTURE B-13-573" SPECIAL PROVISION. PRESSURE GROUT TO A MINIMUM OF 30 FEET BELOW PILE TIP ELEVATION AT EACH ABUTMENT AND 24 FEET AT THE PIER.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. WEST ABUTMENT 1
5. WEST ABUTMENT 2
6. WEST ABUTMENT 3
7. WING 1
8. WING 2
9. WEST ABUTMENT DETAILS
10. EAST ABUTMENT 1
11. EAST ABUTMENT 2
12. WING 4
13. EAST ABUTMENT DETAILS
14. PIER DETAILS 1
15. PIER DETAILS 2
16. PRESTRESSED GIRDER BEARINGS
17. 54W" PRESTRESSED GIRDER DETAILS
18. 54W" PRESTRESSED GIRDER DETAILS
19. STEEL DIAPHRAGM
20. SUPERSTRUCTURE 1
21. SUPERSTRUCTURE 2
22. SUPERSTRUCTURE 3
23. SUPERSTRUCTURE 4
24. EXPANSION DEVICE
25. EXPANSION DEVICE - WINGS 1 & 4
26. EXPANSION DEVICE - WING 2
27. SINGLE SLOPE PARAPET 42SS
28. SLOPED FACE PARAPET 'LF'
29. SLOPE PAVING CRUSHED AGGREGATE
30. CONSTRUCTION STAGING
31. IR DECK SCAN

TRAFFIC DATA

USH 18/151	'W4' ON-RAMP
A.A.D.T. (2024) = 13,700	A.A.D.T. (2024) = 4,100
A.A.D.T. (2044) = 24,500	A.A.D.T. (2044) = 6,600
R.D.S. = 70 MPH	R.D.S. = 50 MPH

WISCONSIN
MATTHEW S. KRIPPNER
E-42470
VERONA
WI
PROFESSIONAL ENGINEER

11/18/2024

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK (608) 261-0261

CONSULTANT:
MATT KRIPPNER (608) 828-8123

STATE PROJECT NUMBER
1204-08-74

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/18/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-13-573

'W4' ON-RAMP OVER USH 18/151

COUNTY DANE — ~~TOWN~~ CITY ~~VILLAGE~~ VERONA

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	MSK	DESIGN CK'D.	CAB	DRAWN BY	MEO	PLANS CK'D.	ECS

GENERAL PLAN

SHEET 1 OF 31
636

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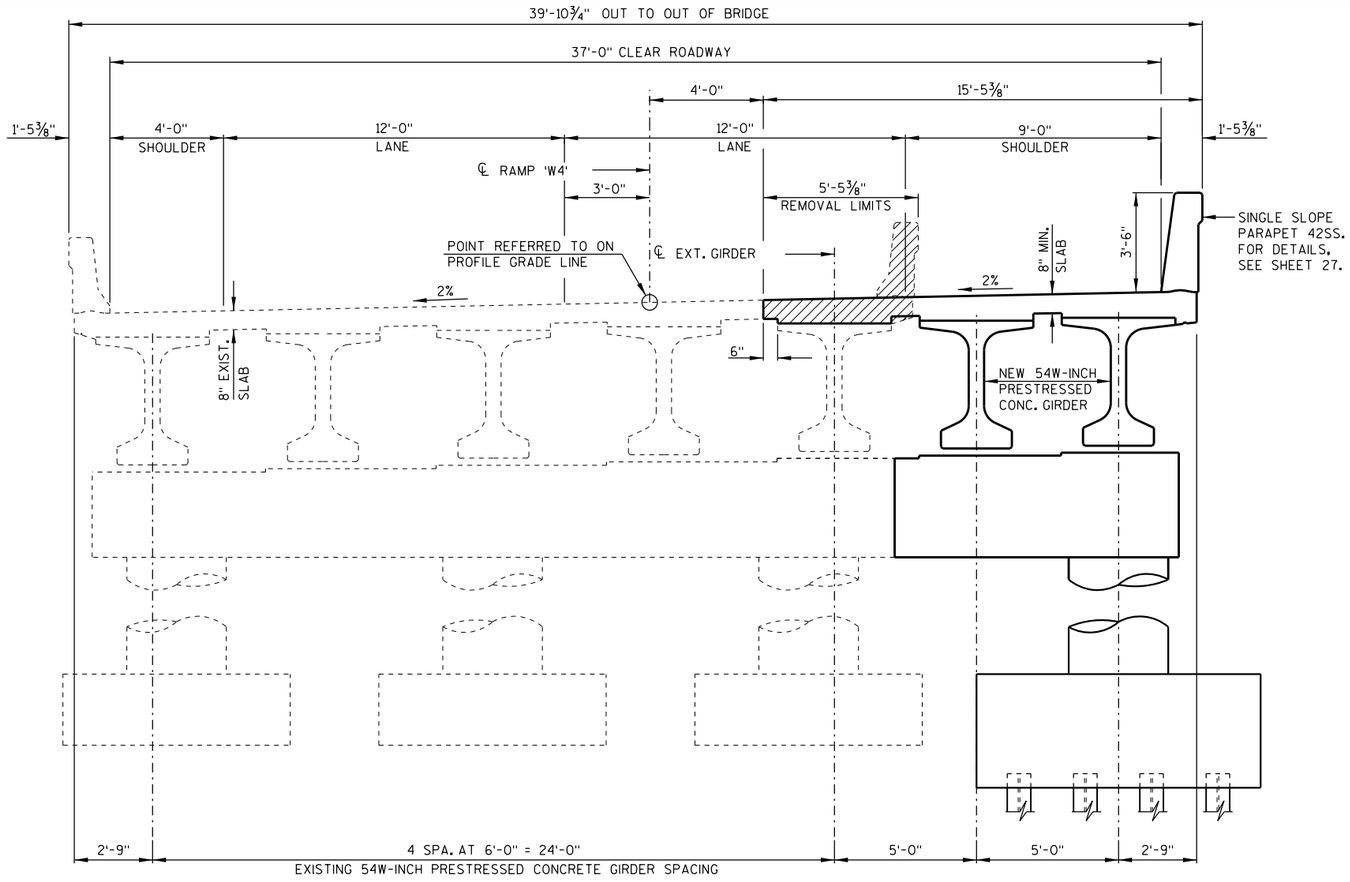


CROSS SECTION THRU ROADWAY - B-13-573

(LOOKING EAST)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	WEST ABUTMENT	PIER	EAST ABUTMENT	SUPER.	TOTALS
203.0220	REMOVING STRUCTURE B-13-0573	EACH	———	———	———	———	1
203.0330	DEBRIS CONTAINMENT B-13-0573	EACH	———	———	———	———	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-13-0573	EACH	———	———	———	———	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	320	———	180	———	500
502.0100	CONCRETE MASONRY BRIDGES	CY	64	31	42	171	308
502.3101	EXPANSION DEVICE	LF	———	———	———	37	37
502.3200	PROTECTIVE SURFACE TREATMENT	SY	———	———	———	420	420
502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	———	———	10	110	120
502.3210	PIGMENTED SURFACE SEALER	SY	20	———	10	120	150
502.3215	PROTECTIVE SURFACE TREATMENT RESEAL	SY	———	———	———	682	682
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	20	———	10	———	30
502.4206	ADHESIVE ANCHORS NO. 6 BAR	EACH	32	4	21	———	57
502.4208	ADHESIVE ANCHORS NO. 8 BAR	EACH	8	———	8	———	16
502.4209	ADHESIVE ANCHORS NO. 9 BAR	EACH	———	9	———	———	9
503.0155	PRESTRESSED GIRDER TYPE 154W-INCH	LF	———	———	———	522	522
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	1,890	740	1,730	———	4,360
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3,480	4,140	1,870	43,320	52,810
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	4	———	———	4
506.2610	BEARING PADS ELASTOMERIC LAMINATED	EACH	2	———	2	———	4
506.4000	STEEL DIAPHRAGMS B-13-0573	EACH		———	———	8	8
509.0301	PREPARATION DECKS TYPE 1	SY	———	———	———	10	10
509.0302	PREPARATION DECKS TYPE 2	SY	———	———	———	10	10
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	———	———	———	138	138
509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	———	———	———	1	1
511.1200	TEMPORARY SHORING B-13-0573	SF	200	480	———	———	680
604.9010.S	RUBBERIZED MEMBRANE WATERPROOFING	SY	8	———	5	———	13
516.0500	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	———	30	———	———	30
550.0020	PILING STEEL HP 10-INCH X 42 LB	LF	200	100	200	———	500
550.1100	SLOPE PAVING CRUSHED AGGREGATE	SY	70	———	54	———	123
604.0500	SLOPE PAVING REPAIR CRUSHED AGGREGATE	CY	5	———	———	———	5
604.9015.S	RESEAL CRUSHED AGGREGATE SLOPE PAVING	SY	153	———	121	———	274
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	50	———	50	———	100
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	———	———	———	2
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	40	———	30	———	70
SPV.0025.501	NEAT CEMENT GROUT	CF	101	101	101	———	302
SPV.0025.502	LOW-MOBILITY GROUT	CF	12	10	12	———	33
SPV.0060.501	EMBEDDED GALVANIC ANODES	EACH	———	———	———	75	75
SPV.0090.501	STRIP SEAL GLAND REPLACEMENT	LF	———	———	———	60	60
SPV.0090.502	GROUT DRILLING	LF	368	400	368	———	1,136
	NON-BID ITEMS						
	FILLER	SIZE	———	———	———	———	1/2" & 3/4"

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.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CRUSHED AGGREGATE TO THE EXTENT SHOWN ON SHEETS 1, 29 AND IN THE ABUTMENT DETAILS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIER.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.

EXISTING DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

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

ROUGHEN SURFACE OF ALL EXISTING CONCRETE ¼" DEEP MINIMUM AT ALL AREAS OF NEW TO EXISTING CONCRETE CONTACT.

MONITOR SAW CUTTING OF EXISTING BRIDGE DECK AND BLADE DEPTH SO THAT THE EXISTING TRANSVERSE DECK STEEL IS NOT DAMAGED.

THE QUANTITY OF BACKFILL STRUCTURE TYPE A, BID ITEM 210.1500, IS CALCULATED BASED ON STANDARD 9.01 IN THE WISCONSIN DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL.
SEE "BACKFILL STRUCTURE LIMITS" DETAIL ON SHEET 9.

THE EXISTING STRUCTURE (B-13-573) IS A TWO SPAN PRESTRESSED CONCRETE GIRDER BRIDGE, 268.5' LONG X 29.9' WIDE. THE SUBSTRUCTURE AND SUPERSTRUCTURE SHALL BE WIDENED TO ADD TWO NEW GIRDER LINES TO THE OUTSIDE SHOULDER.

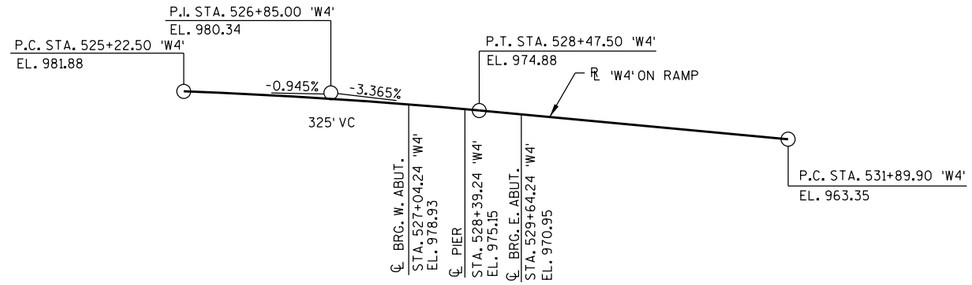
SEE ROADWAY PLANS FOR TRAFFIC CONTROL/CONSTRUCTION STAGING DETAILS FOR THE BRIDGE CONSTRUCTION.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF NEW DECK. AFTER DECK PATCHING WITH GALVANIC ANODES, PROTECTIVE SURFACE TREATMENT RESEAL TO BE APPLIED TO REMAINING PORTION OF EXISTING DECK. PIGMENTED SURFACE SEALER TO BE APPLIED TO THE INSIDE FACE OF NEW PARAPET AND TOP OF PARAPET, INCLUDING NEW PARAPETS ON WING WALLS.

PIGMENTED SURFACE SEALER RESEAL TO BE APPLIED TO THE INSIDE AND TOP OF EXISTING PARAPET.

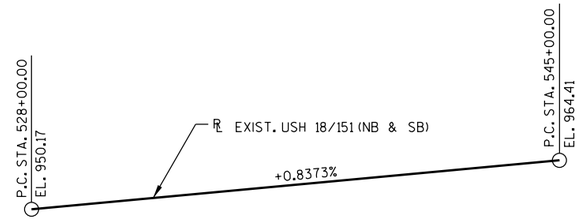
EXISTING NEOPRENE STRIP SEAL GLAND TO BE REMOVED AND REPLACED. PAYMENT INCLUDES DETERMINING THE EXISTING GLAND DIMENSIONS AND PROVIDING A REPLACEMENT GLAND PER BID ITEM "STRIP SEAL GLAND REPLACEMENT" AND AS APPROVED BY THE ENGINEER.

"SLOPE PAVING REPAIR CRUSHED AGGREGATE" AREAS SHOWN IN THE QUANTITIES TABLE ARE BASED ON THE BRIDGE INSPECTION REPORT. EXACT AREAS FOR REPAIR SHALL BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER.



PROFILE GRADE LINE, 'W4' ON-RAMP OVER USH 18/151

(PROFILE BASED ON EXISTING PLANS & SURVEY)



PROFILE GRADE LINE, EXISTING NB & SB USH 18/151

(PROFILE BASED ON EXISTING PLANS)

STATE PROJECT NUMBER

1204-08-74

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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CROSS SECTION & QUANTITIES

SHEET 2 OF 31
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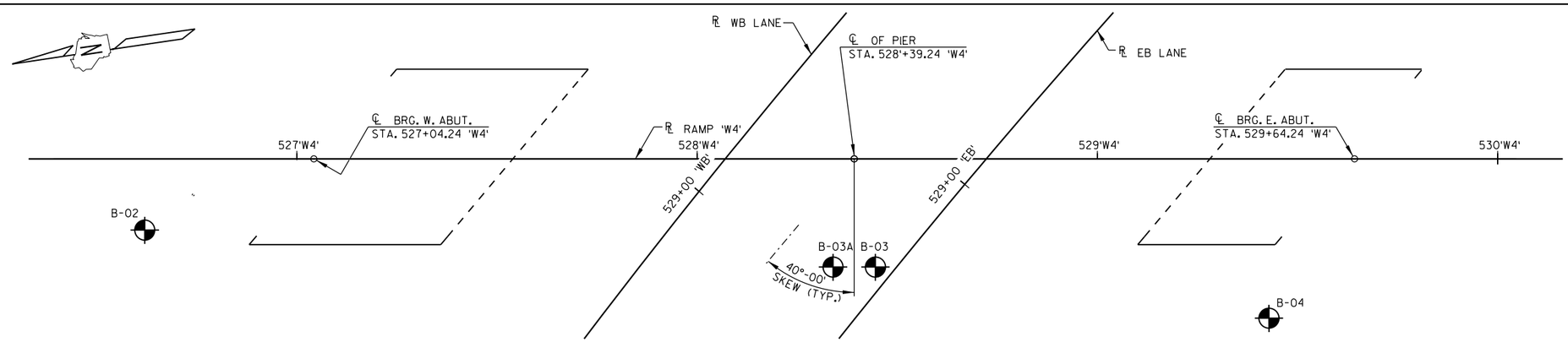
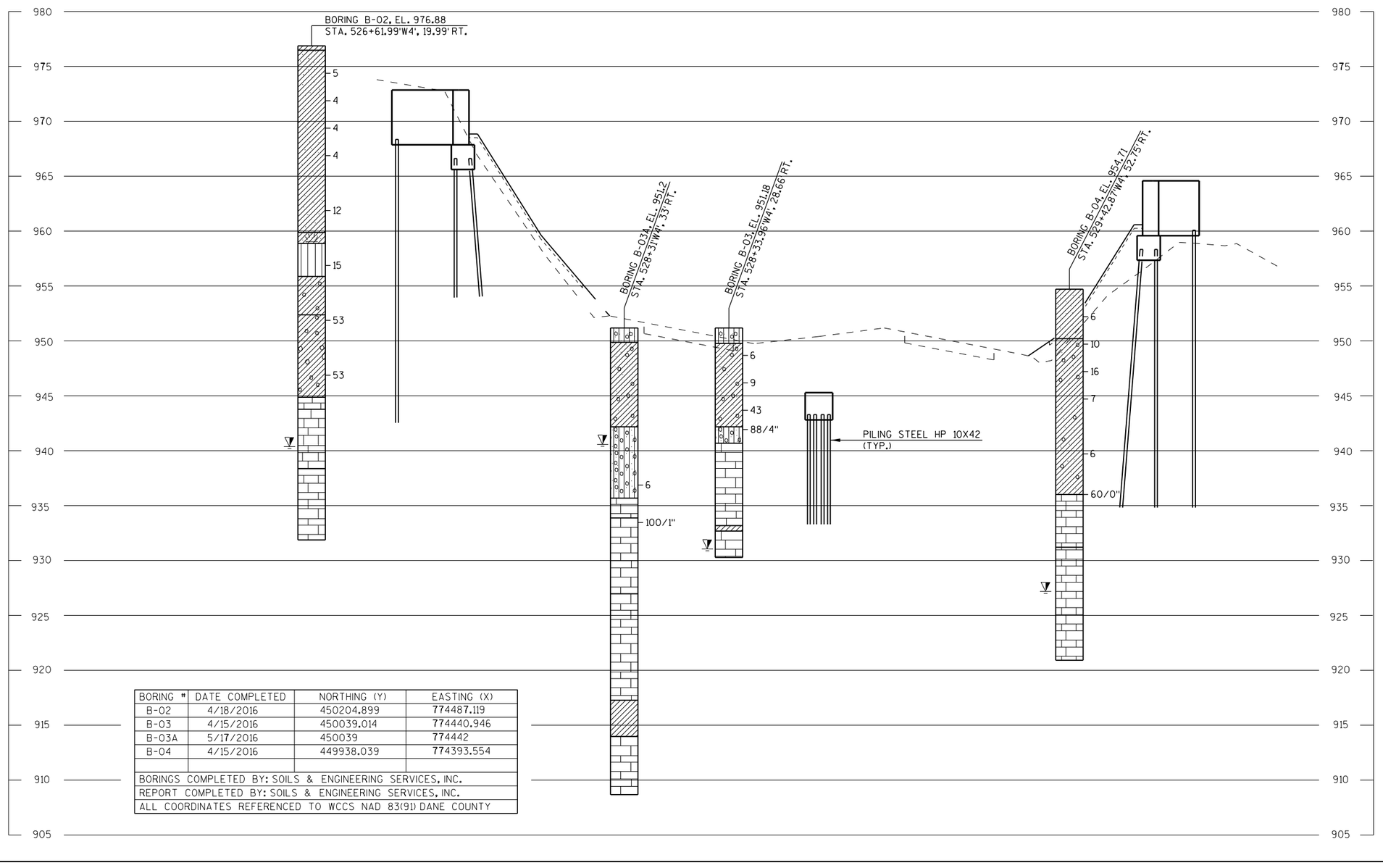




BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-02	4/18/2016	450204.899	774487.119
B-03	4/15/2016	450039.014	774440.946
B-03A	5/17/2016	450039	774442
B-04	4/15/2016	449938.039	774393.554
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			

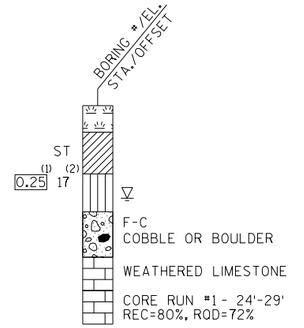
STATE PROJECT NUMBER

1204-08-74

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-13-573

DRAWN BY MEO | PLANS CK'D. MSK

SUBSURFACE EXPLORATION

SHEET 3 OF 30

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SCALE =

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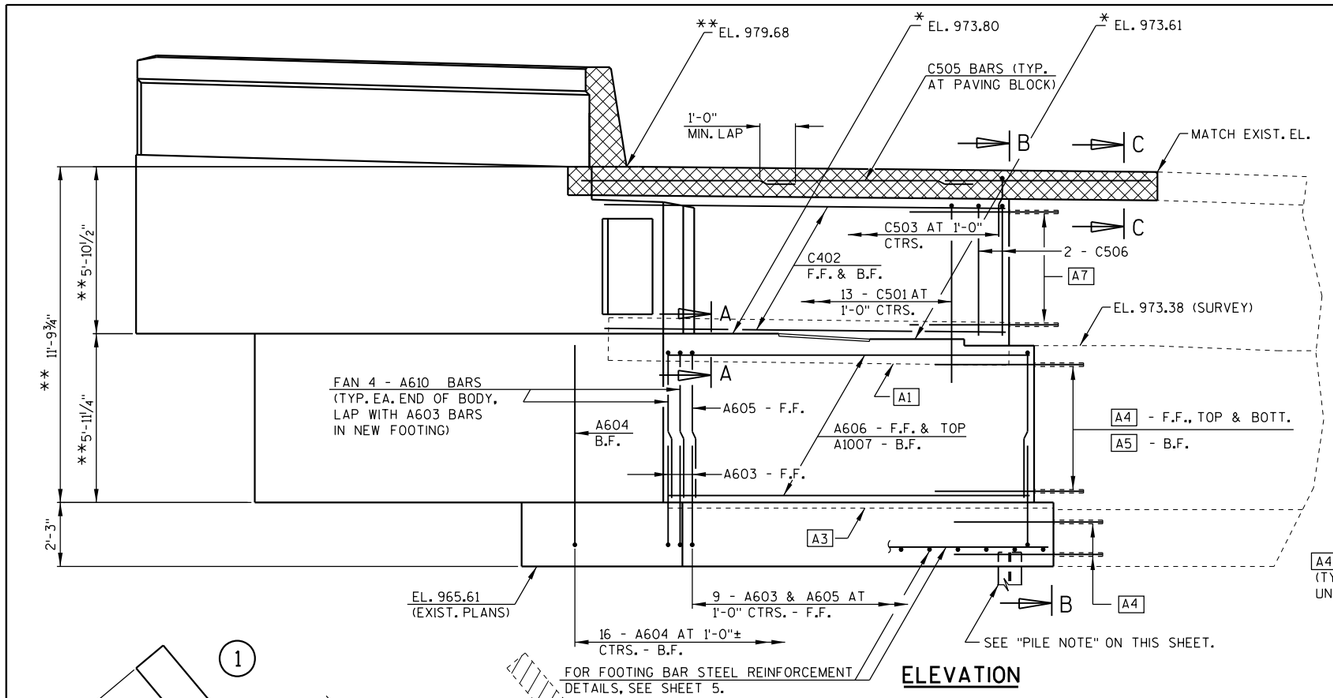
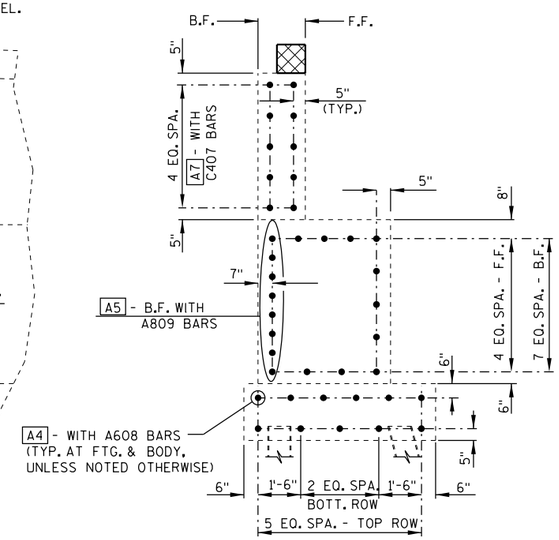
PLOT TIME: 5:41:55 PM
BATCH PRINT SHEET 4 OF 30

STATE PROJECT NUMBER

1204-08-74

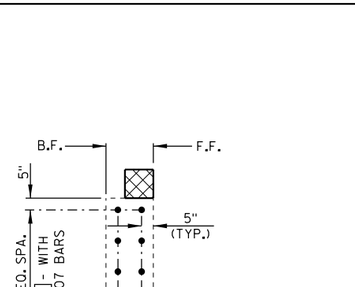


ELEVATION



SECTION B-B

(SHOWING CONCRETE MASONRY ANCHOR LAYOUT)



SECTION C-C

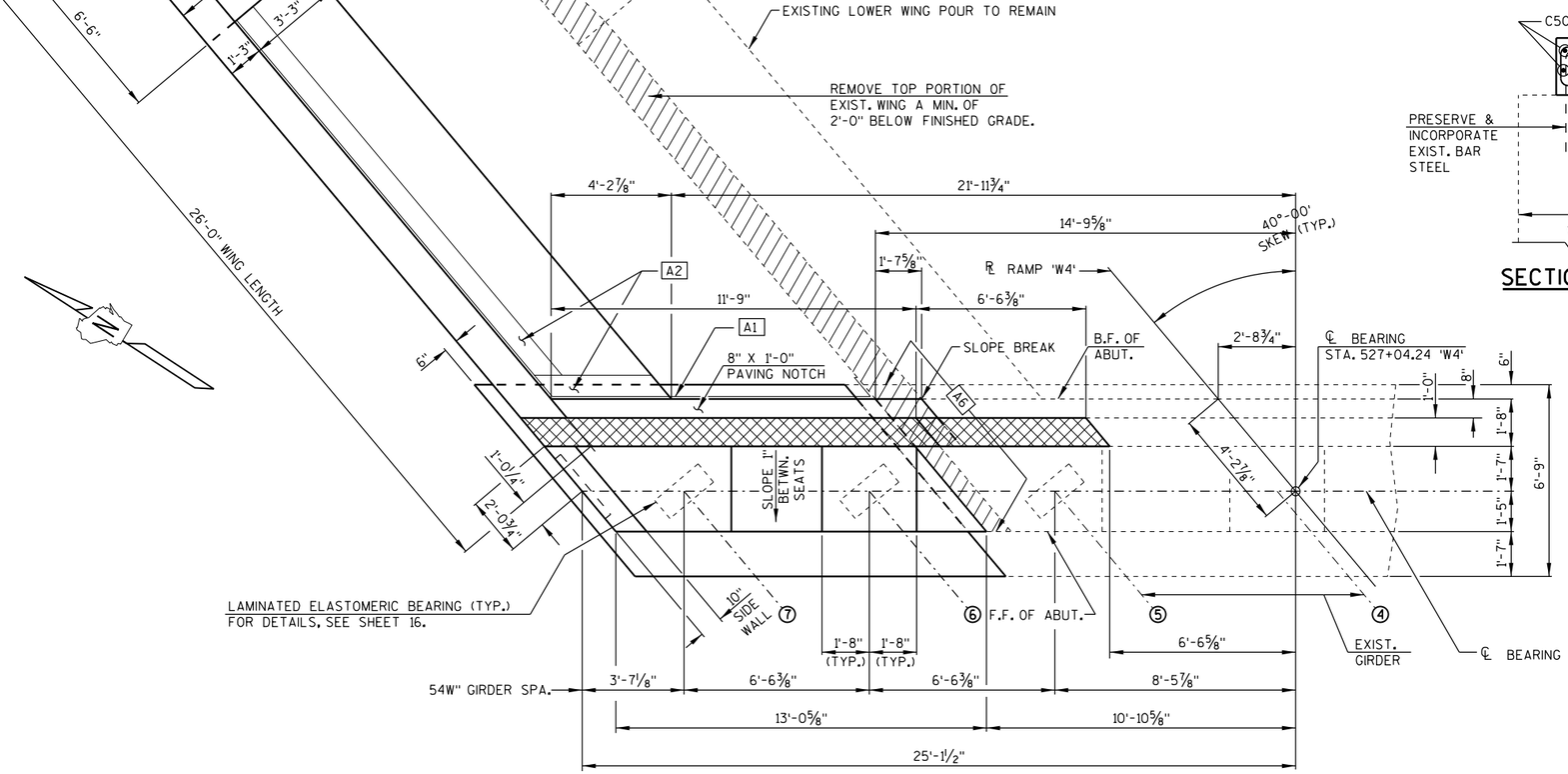
LEGEND

- REMOVAL LIMITS
- (X) INDICATES WING NUMBER
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.
- * ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE ℄ OF BEARING.
- ** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE F.F. OF ABUTMENT BACKWALL. FOR WING DETAILS AND ELEVATIONS, SEE SHEET 7.
- A1 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- A2 PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING HORIZONTAL IN THIS AREA. SEE SECTION A-A ON THIS SHEET.
- A3 KEYED CONSTRUCTION JOINT FORMED BY A BEVELED 2" X 6".
- A4 ADHESIVE ANCHORS NO. 6 BARS, EMBED 1'-3". TOTAL NUMBER REQUIRED AT WEST ABUTMENT - WING 1 = 21. (USE A608 BARS WITH ANCHORS).
- A5 ADHESIVE ANCHORS NO. 8 BARS, EMBED 1'-8". TOTAL NUMBER REQUIRED AT WEST ABUTMENT = 8. (USE A809 BARS WITH ANCHORS).
- A6 REMOVE EXIST. WING WALL, BACK WALL & SIDE WALL DOWN TO EXIST. BRIDGE SEAT IN THIS AREA. INCORPORATE EXIST. BAR STEEL INTO NEW WORK.
- A7 ADHESIVE ANCHORS NO. 4 BARS, EMBED 10". TOTAL NUMBER REQUIRED AT WEST ABUTMENT - WING 1 = 10. (USE C407 BARS WITH ANCHORS).

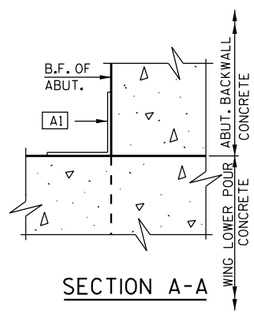
PILE NOTE

WEST ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10 X 42 WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 25' LONG. FOR PILE LAYOUT DETAILS, SEE SHEET 5. FOR PILE SPLICE DETAILS, SEE SHEET 5.

PRIOR TO DRIVING PILES, PRESSURE GROUT AT THE CENTER OF EACH PROPOSED PILE LOCATION AS DESCRIBED IN THE "BEDROCK GROUTING STRUCTURE B-13-573" SPECIAL PROVISION. PRESSURE GROUT TO A MINIMUM OF 30 FEET BELOW TIP ELEVATION AT WEST ABUTMENT.



PLAN



SECTION A-A

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

WEST ABUTMENT 1

SHEET 4 OF 31
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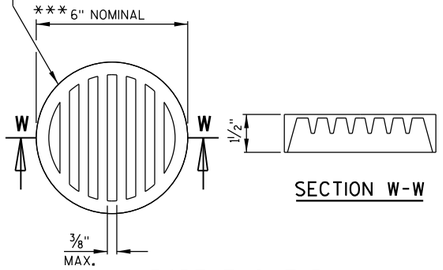
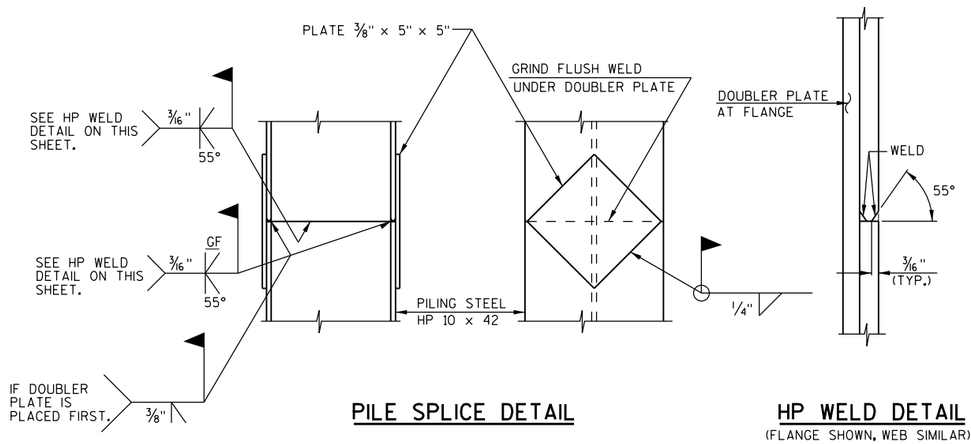
PLOT DATE: 11/14/2024 PLOT TIME: 5:41:55 PM
BATCH PRINT SHEET 5 OF 30

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. THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".



RODENT SHIELD

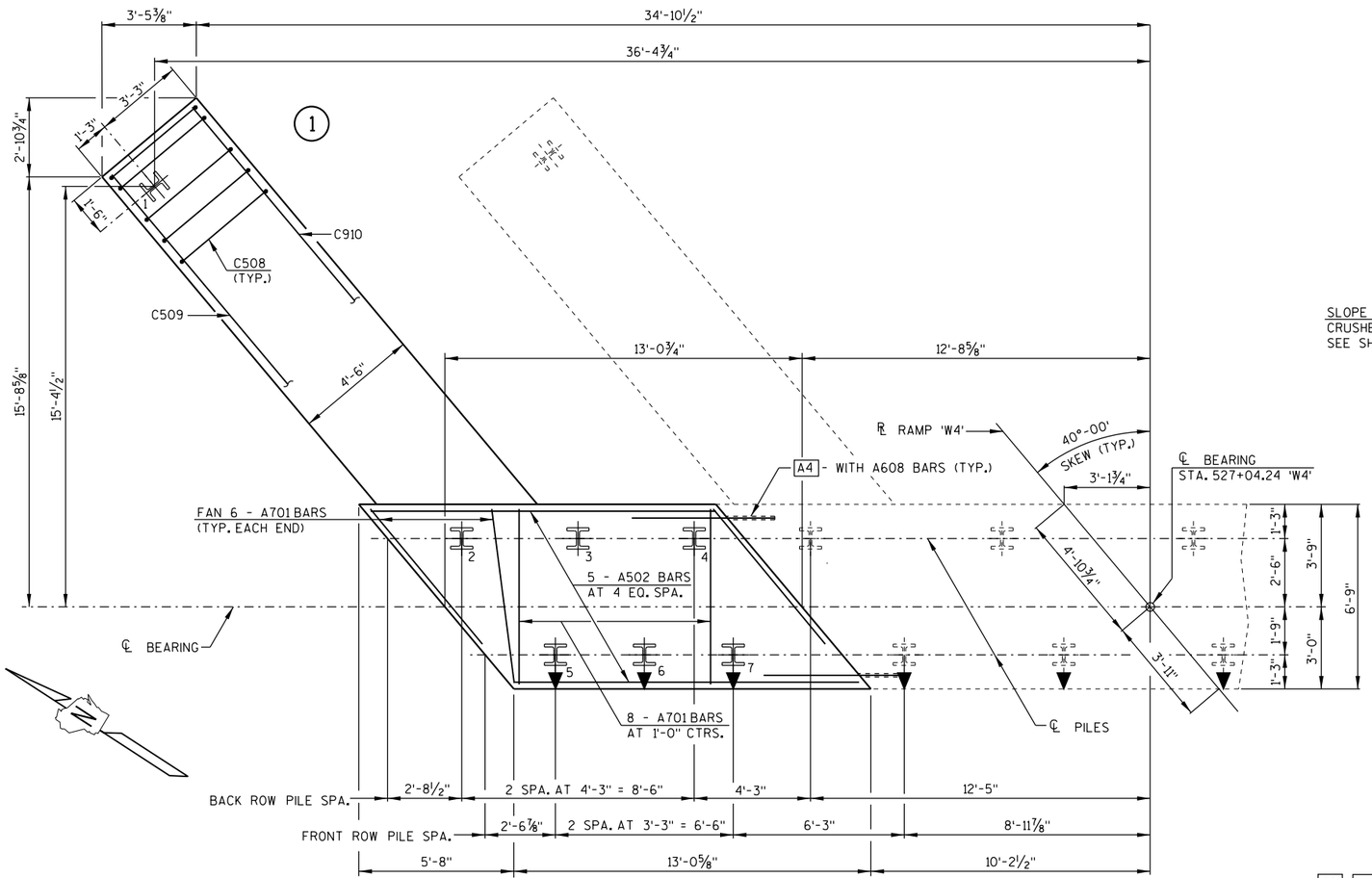
*** DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.



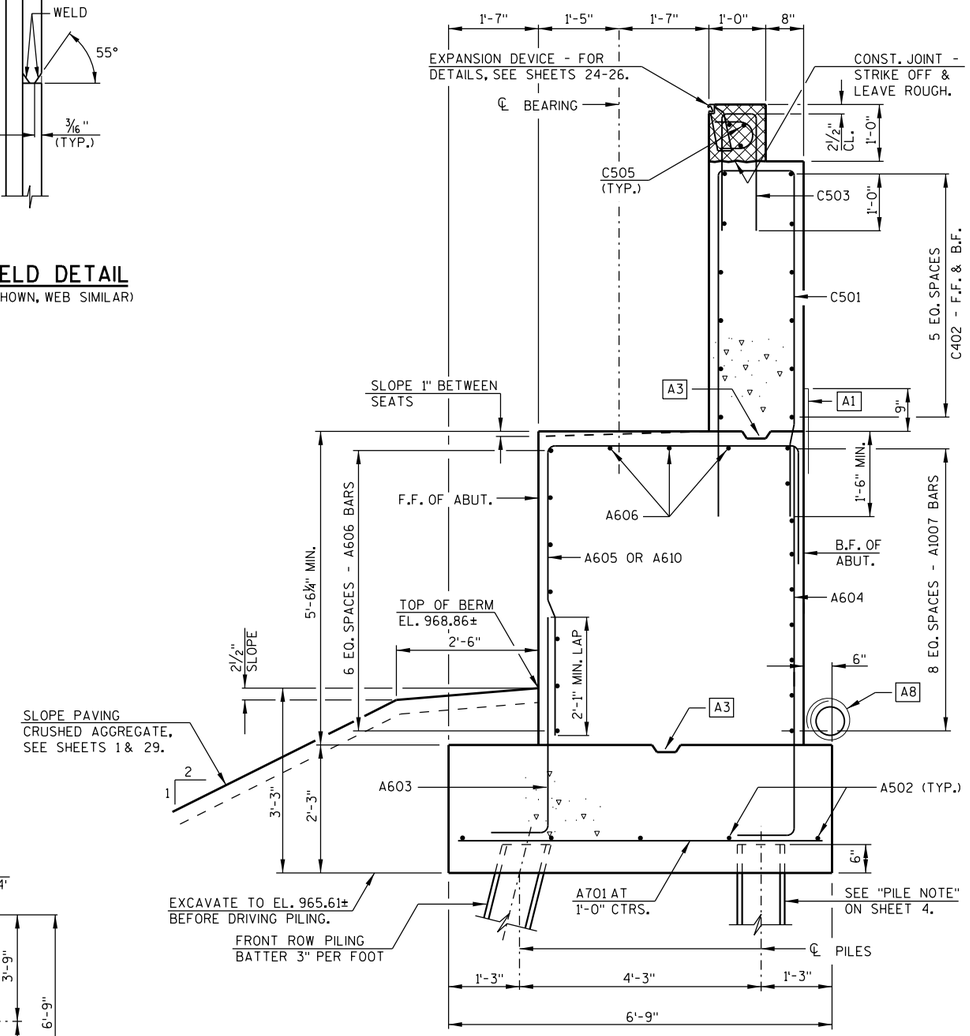
PILE SPLICE DETAIL

HP WELD DETAIL

(FLANGE SHOWN, WEB SIMILAR)



PILE PLAN



TYPICAL SECTION THRU BODY

LEGEND

INDICATES PILES BATTERED 3" PER FOOT IN DIRECTION OF ARROW.

A8 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE "RODENT SHIELD" DETAIL ON THIS SHEET.

A1 A3 A4 FOR SYMBOL DESCRIPTIONS, SEE SHEET 4.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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WEST ABUTMENT 2

SHEET 5 OF 31
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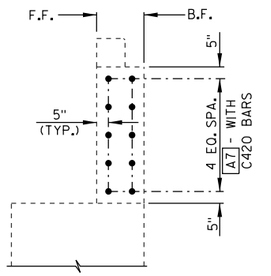
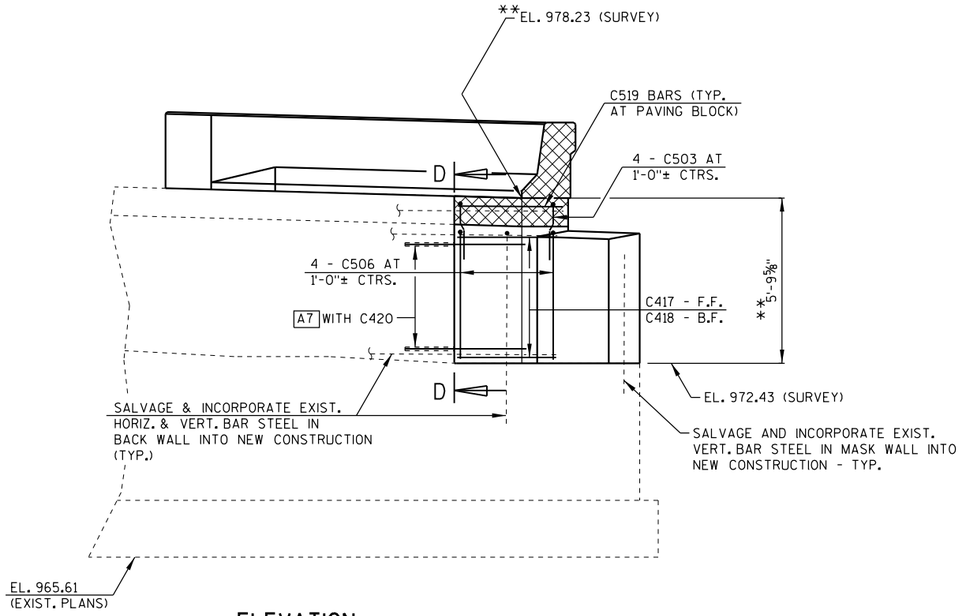
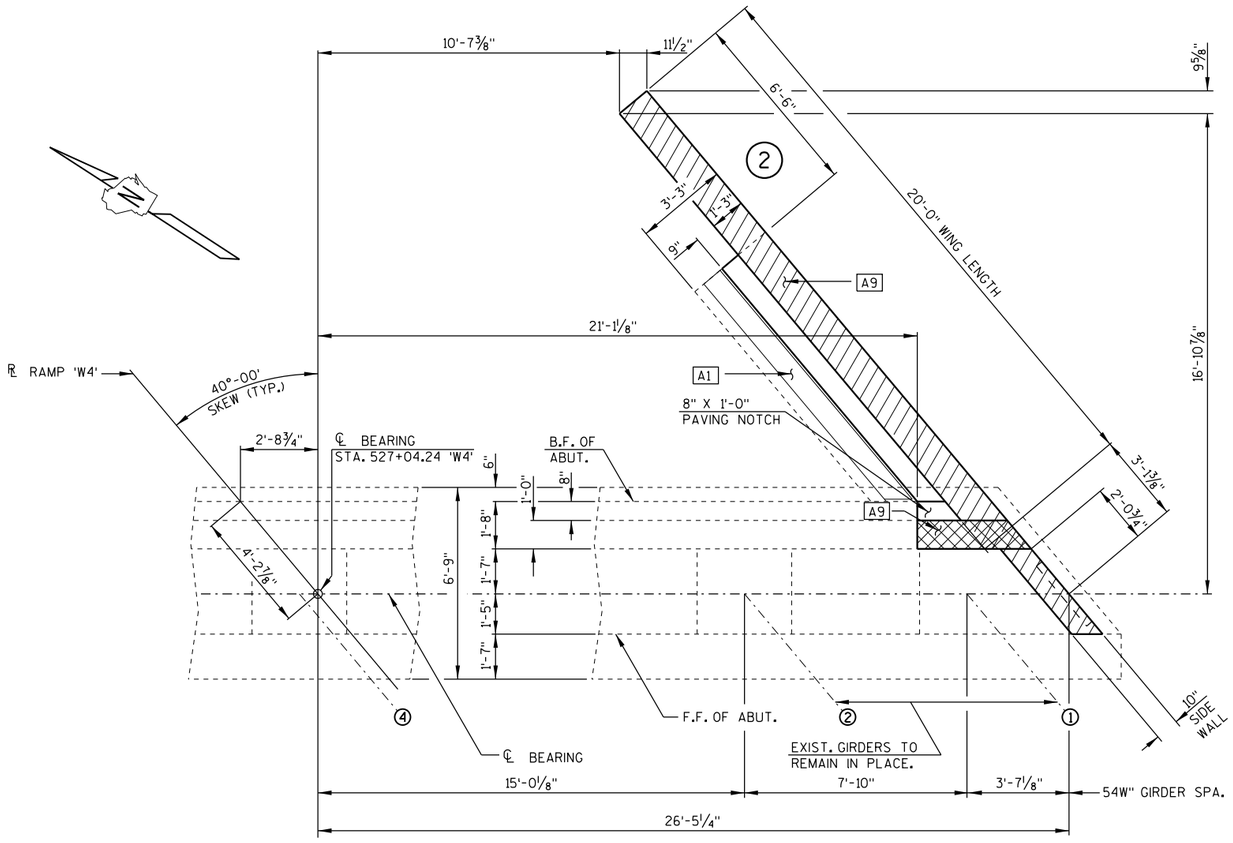


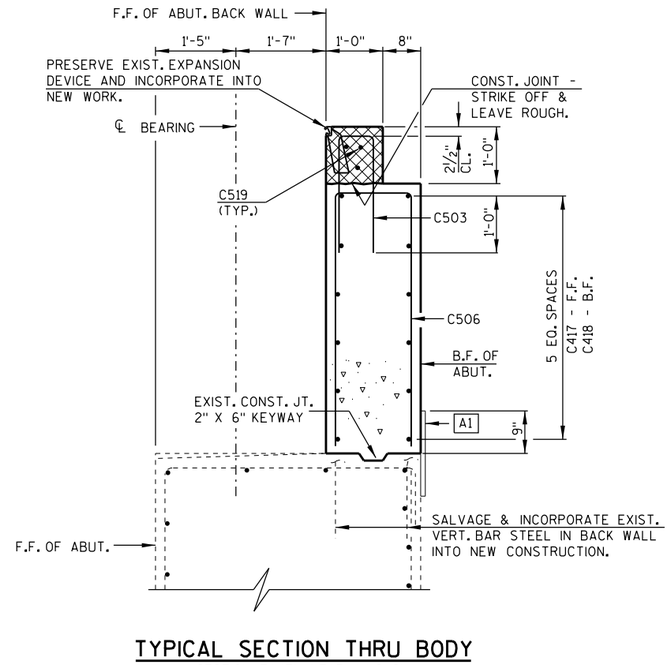
SECTION D-D
(SHOWING CONCRETE MASONRY ANCHOR LAYOUT)



ELEVATION



PLAN



TYPICAL SECTION THRU BODY
(SECTION TAKEN NEAR WING 2)

LEGEND

- REMOVAL LIMITS
- (X) INDICATES WING NUMBER
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.
- ** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE F.F. OF ABUTMENT BACKWALL. FOR WING DETAILS AND ELEVATIONS, SEE SHEET 8.
- A1 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- A7 ADHESIVE ANCHORS NO. 4 BARS, EMBED 10". TOTAL NUMBER REQUIRED AT WEST ABUTMENT - WING 2 = 10. (USE C420 BARS WITH ANCHORS).
- A9 REMOVE EXIST. WING WALL, BACK WALL & SIDE WALL DOWN TO EXIST. BRIDGE SEAT/TOP OF WING BODY AS SHOWN. REMOVE ENTIRE PORTION OF EXIST. WING IN THE 6'-6" DIMENSIONED AREA AT THE END OF THE WING. INCORPORATE EXIST. BAR STEEL INTO NEW WORK. TAKE CARE NOT TO DAMAGE EXIST. EXPANSION DEVICE. PRESERVE AND INCORPORATE INTO NEW WORK.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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WEST ABUTMENT 3

SHEET 6 OF 31
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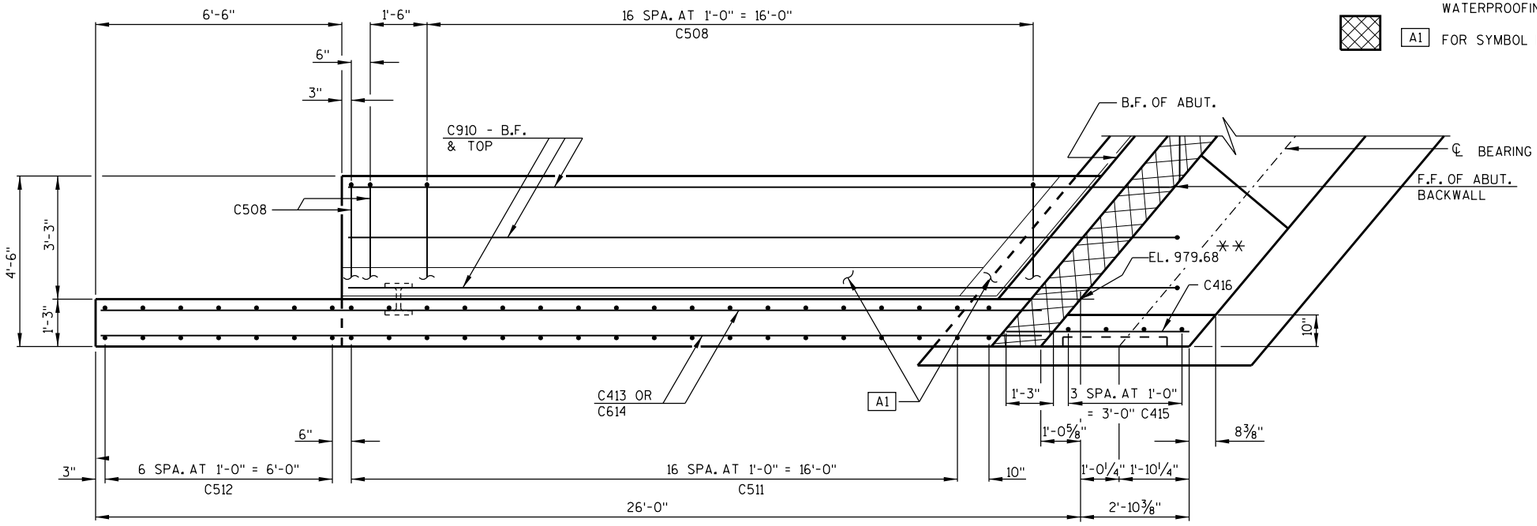
LEGEND

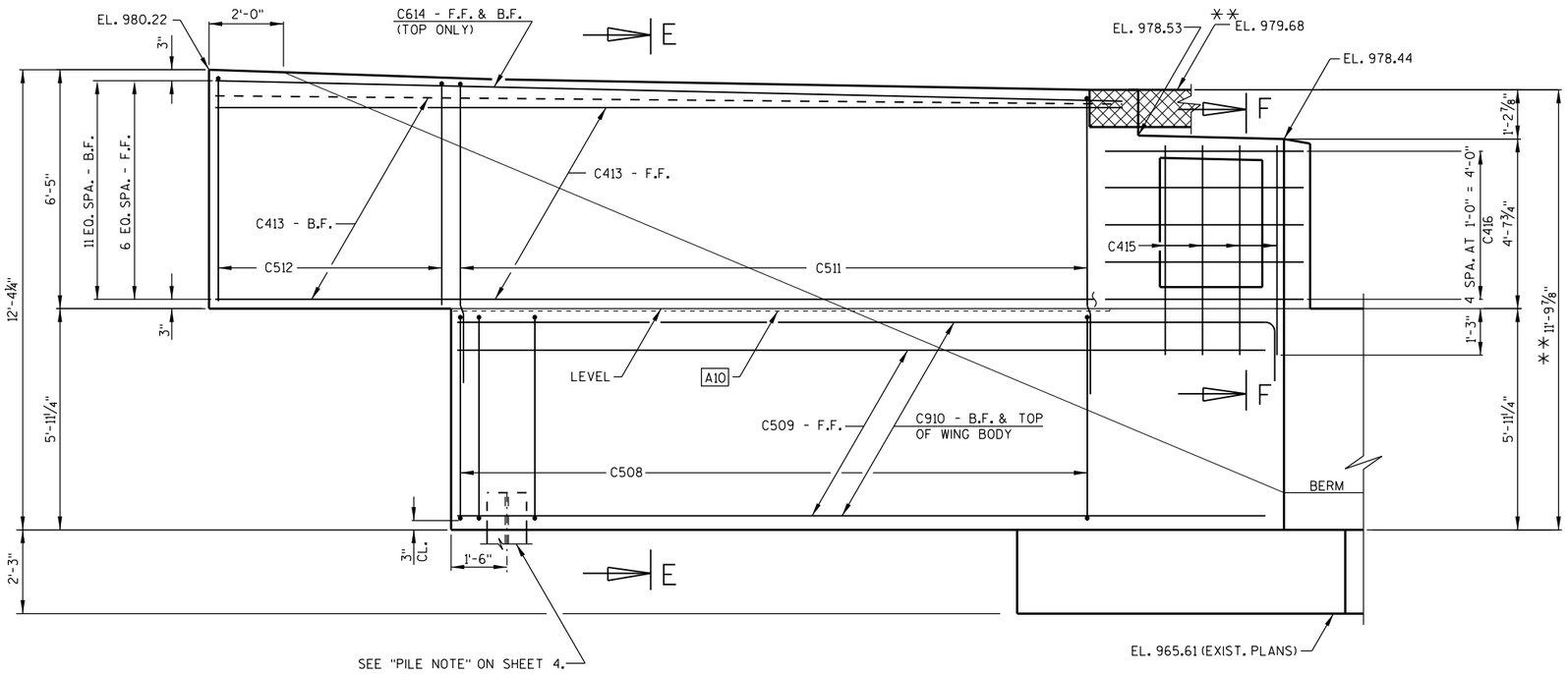
** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF WING WALL.

A10 OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE.

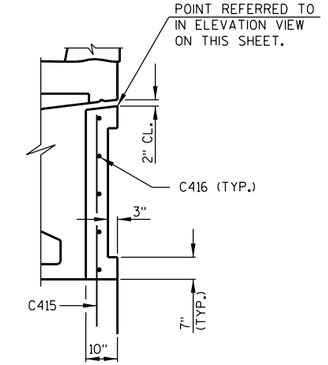
A1 FOR SYMBOL DESCRIPTIONS, SEE SHEET 6.



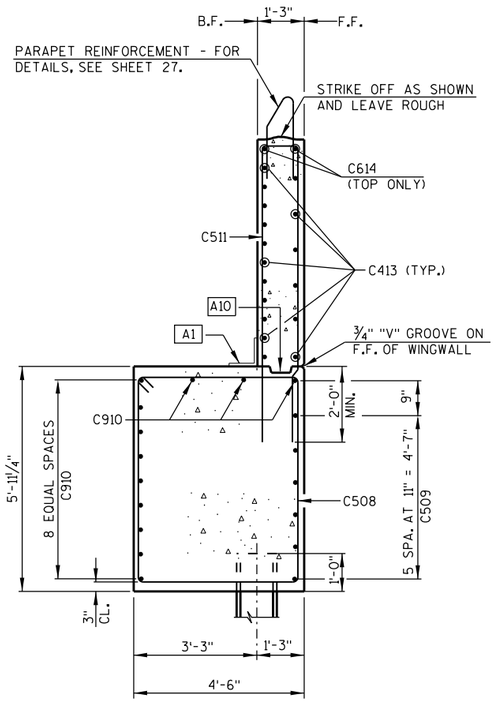
PLAN - WING 1



ELEVATION - WING 1



SECTION F-F



SECTION E-E

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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WING 1

SHEET 7 OF 31
642

8

8

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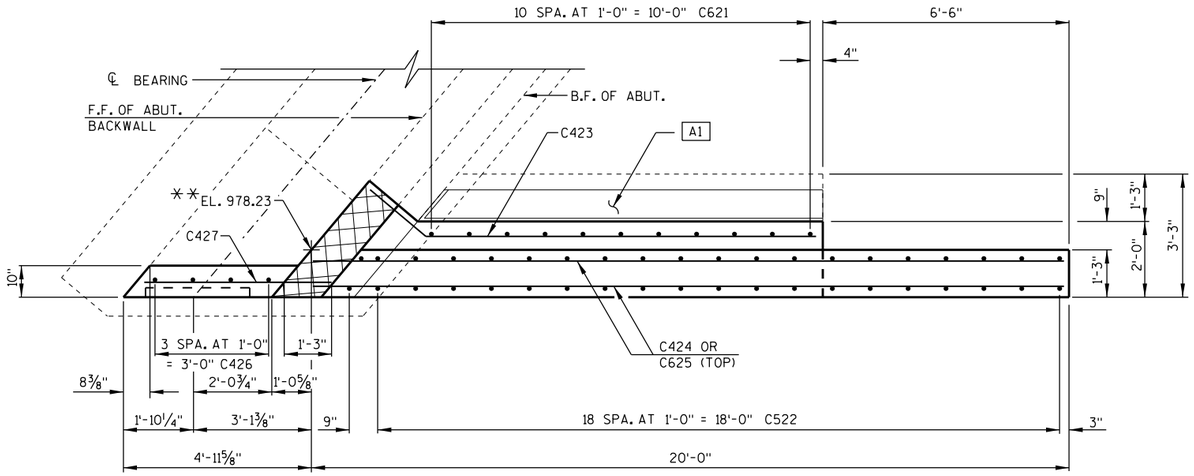
STATE PROJECT NUMBER
1204-08-74



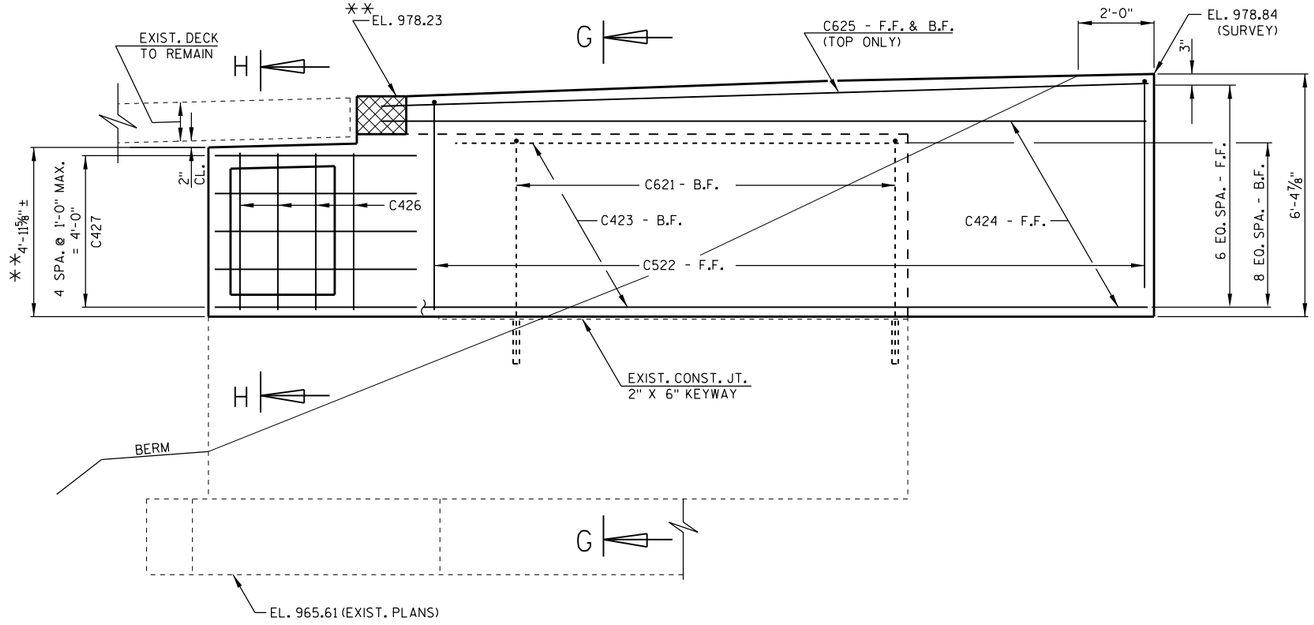
PLAN - WING 2

LEGEND

** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF WING WALL.

A1 FOR SYMBOL DESCRIPTIONS, SEE SHEET 6.

A4 AHESIVE ANCHORS NO. 6 BARS, EMBED 1'-3". TOTAL NUMBER REQUIRED AT WEST ABUTMENT - WING 2 = 11. (USE C621 BARS WITH ANCHORS).



ELEVATION - WING 2

SECTION G-G

SECTION H-H

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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WING 2

SHEET 8 OF 31
643

8

8

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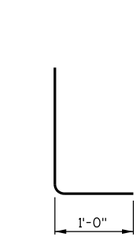
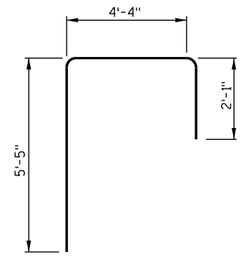


A603 & A604



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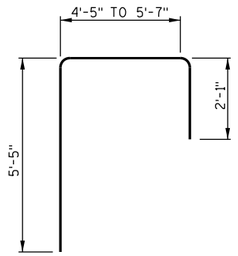

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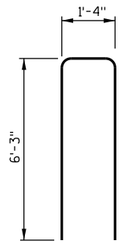
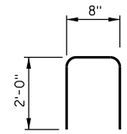


C501



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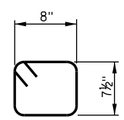

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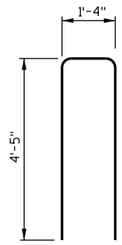

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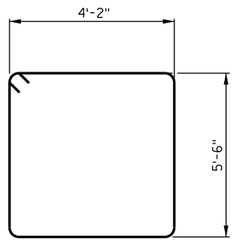

C508

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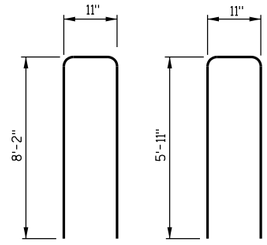
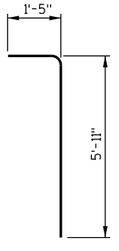


C511 C512



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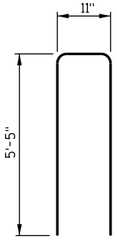

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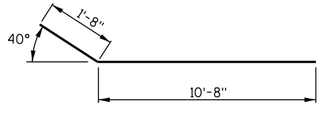


C423

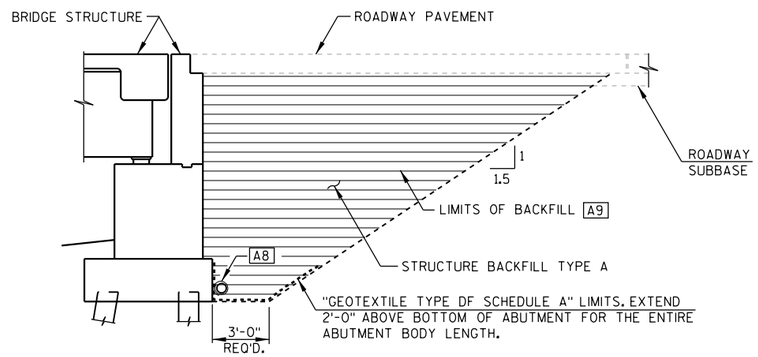
BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
Δ LENGTH SHOWN FOR BAR IS AN AVG. LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION	
NON-COATED BARS					TOTAL WEIGHT = 1,890 LBS	
A701	20	6-5			FOOTING	HORIZ.
A502	5	12-7			FOOTING	HORIZ.
A603	16	4-9	X		FOOTING & BODY - F.F.	VERT.
A604	16	7-11	X		FOOTING & BODY - B.F.	VERT.
A605	9	11-6	X		BODY	VERT.
A606	10	12-7			BODY - F.F. & TOP	HORIZ.
A1007	9	12-7			BODY - B.F.	HORIZ.
A608	21	4-3			FOOTING & BODY - ADHESIVE ANCHORS	HORIZ.
A809	8	6-11			BODY - ADHESIVE ANCHORS	HORIZ.
A610	8	12-2	X	Δ	BODY - AT CORNERS	VERT.
COATED BARS					TOTAL WEIGHT = 3,480 LBS	
C501	13	13-7	X		BACK WALL	VERT.
C402	12	14-3			BACK WALL	HORIZ.
C503	19	4-5	X		BACK WALL & PAVING BLOCK	VERT.
C404	6	3-1	X		PAVING BLOCK	VERT.
C505	9	7-3			PAVING BLOCK	HORIZ.
C506	4	9-11	X		BACK WALL	VERT.
C407	10	3-9			BACK WALL - ADHESIVE ANCHORS	HORIZ.
C508	19	20-0	X		WING 1 - STIRRUPS	VERT.
C509	6	22-3			WING 1 - BODY	HORIZ.
C910	12	22-11	X		WING 1 - BODY	HORIZ.
C511	18	17-0	X		WING 1 - F.F. & B.F.	VERT.
C512	7	12-6	X		WING 1 - F.F. & B.F.	VERT.
C413	17	24-10			WING 1 - F.F. & B.F.	HORIZ.
C614	2	24-10			WING 1 - TOP - F.F. & B.F.	HORIZ.
C415	4	5-11			WING 1 - SIDE WALL	VERT.
C416	5	4-7			WING 1 - SIDE WALL	HORIZ.
C417	6	3-5			BACK WALL - F.F.	HORIZ.
C418	6	2-5			BACK WALL - B.F.	HORIZ.
C519	3	3-0			PAVING BLOCK	HORIZ.
C420	10	3-9			BACK WALL - ADHESIVE ANCHORS	HORIZ.
C621	11	7-2	X		WING 2 - B.F. - ADHESIVE ANCHORS	VERT.
C522	20	11-6	X		WING 2 - F.F.	VERT.
C423	9	12-4	X		WING 2 - B.F.	HORIZ.
C424	7	19-10			WING 2 - F.F.	HORIZ.
C625	2	19-10			WING 2 - TOP F.F. & B.F.	HORIZ.
C426	4	4-7			WING 2 - SIDE WALL	VERT.
C427	5	5-0			WING 2 - SIDE WALL	HORIZ.

BAR SERIES

MARK	NO. REQ'D	LENGTH
A610	2 SETS OF 4	11'-7" TO 12'-9"



BACKFILL STRUCTURE LIMITS
(TYPICAL AT EACH ABUTMENT)

LEGEND

A8 FOR SYMBOL DESCRIPTION, SEE SHEET 5.

A9 BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-13-573

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WEST ABUTMENT DETAILS

SHEET 9 OF 31
644

8

8

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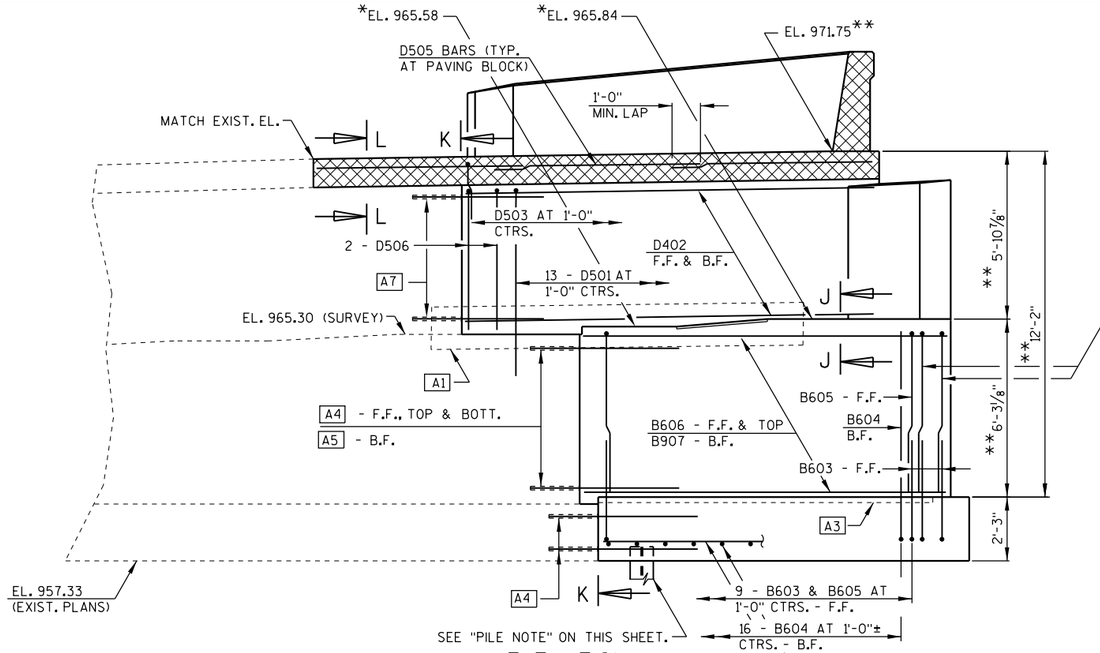
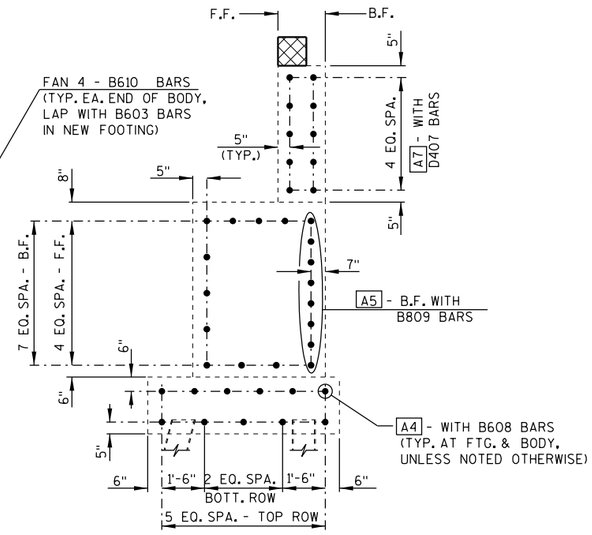
STATE PROJECT NUMBER

1204-08-74

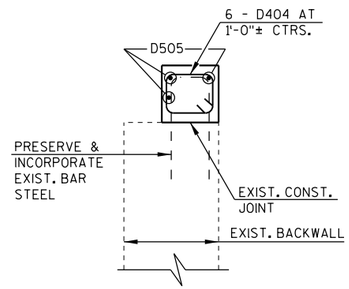


ELEVATION

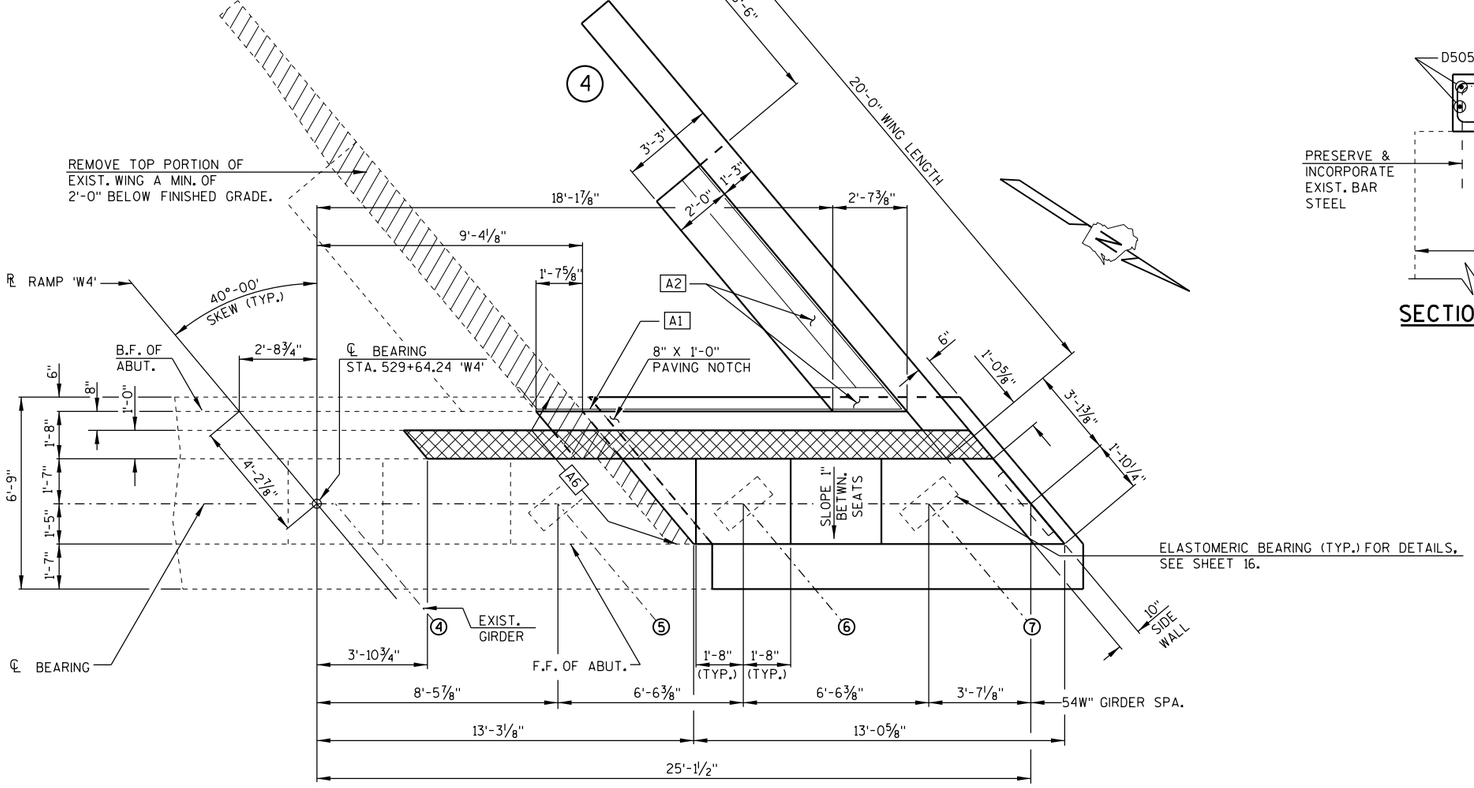


SECTION K-K

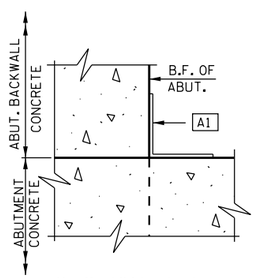
(SHOWING CONCRETE MASONRY ANCHOR LAYOUT)



SECTION L-L



PLAN



SECTION J-J

LEGEND

- REMOVAL LIMITS
- (X) INDICATES WING NUMBER
- INDICATES CONCRETE AREA TO BE POURED AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE.
- * ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE ℄ OF BEARING.
- ** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE F.F. OF ABUTMENT BACKWALL. FOR WING DETAILS AND ELEVATIONS, SEE SHEET 12.
- A1 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- A2 PLACE BOTTOM HALF OF RUBBERIZED MEMBRANE WATERPROOFING HORIZONTAL IN THIS AREA. SEE SECTION J-J ON THIS SHEET.
- A3 KEYED CONSTRUCTION JOINT FORMED BY A BEVELED 2" X 6".
- A4 ADHESIVE ANCHORS NO. 6 BARS, EMBED 1'-3". TOTAL NUMBER REQUIRED AT EAST ABUTMENT = 21. (USE B608 BARS WITH ANCHORS).
- A5 ADHESIVE ANCHORS NO. 8 BARS, EMBED 1'-8". TOTAL NUMBER REQUIRED AT EAST ABUTMENT = 8. (USE B809 BARS WITH ANCHORS).
- A6 REMOVE EXIST. WING WALL, BACK WALL & SIDE WALL DOWN TO EXIST. BRIDGE SEAT IN THIS AREA. INCORPORATE EXIST. BAR STEEL INTO NEW WORK.
- A7 ADHESIVE ANCHORS NO. 4 BARS, EMBED 10". TOTAL NUMBER REQUIRED AT EAST ABUTMENT = 10. (USE D407 BARS WITH ANCHORS).

PILE NOTE

EAST ABUTMENT TO BE SUPPORTED ON PILING STEEL HP 10 X 42 WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 25' LONG. FOR PILE LAYOUT DETAILS, SEE SHEET 9. FOR PILE SPLICE DETAILS, SEE SHEET 5.

PRIOR TO DRIVING PILE, PRESSURE GROUT AT THE CENTER OF EACH PROPOSED PILE LOCATION AS DESCRIBED IN THE "BEDROCK GROUTING STRUCTURE B-13-573" SPECIAL PROVISION. PRESSURE GROUT TO A MINIMUM OF 30 FEET BELOW PILE TIP ELEVATION AT EAST ABUTMENT.

NO.	DATE	REVISION	BY

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STRUCTURE B-13-573

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EAST ABUTMENT 1

SHEET 10 OF 31
645

8

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PLOT DATE: 11/14/2024 PLOT TIME: 5:41:57 PM
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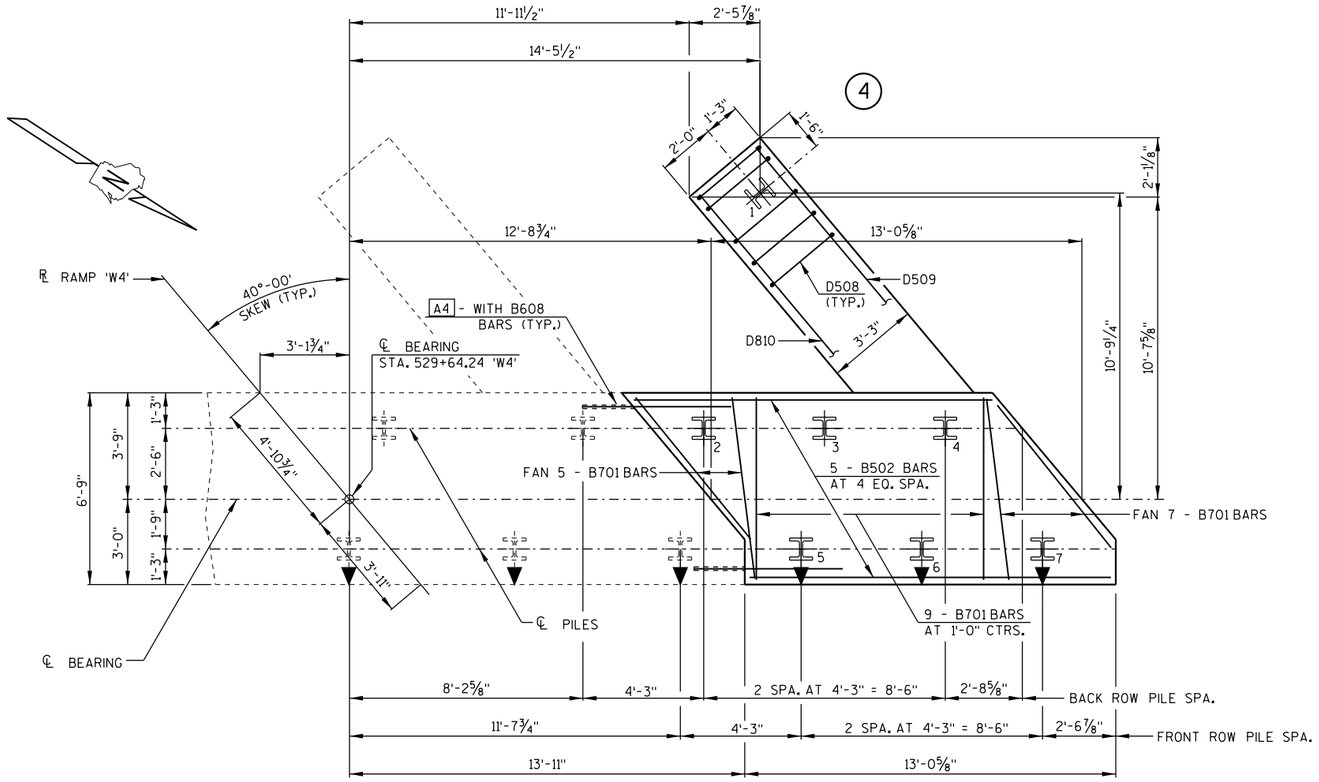
LEGEND

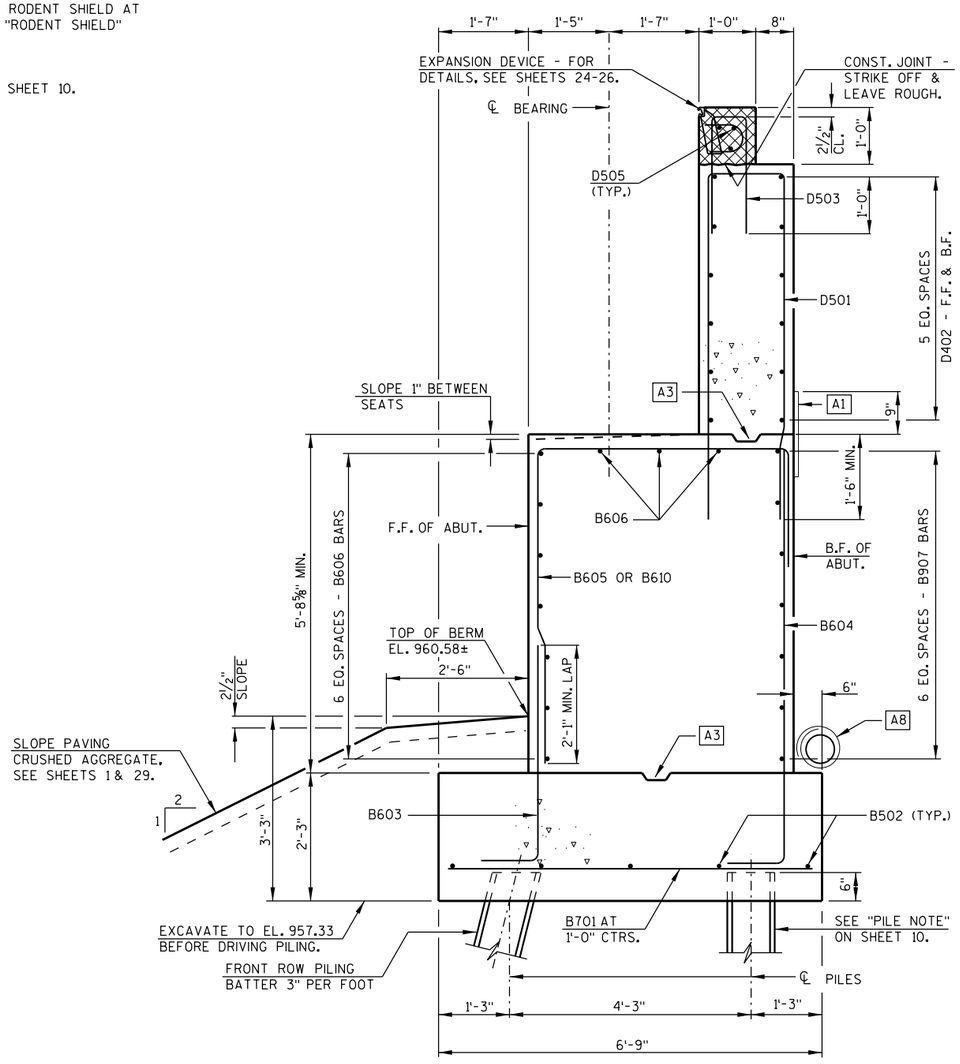
INDICATES PILES BATTERED 3" PER FOOT IN DIRECTION OF ARROW.

A8 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE "RODENT SHIELD" DETAIL ON SHEET 5.

A1 A3 A4 FOR SYMBOL DESCRIPTIONS, SEE SHEET 10.



PILE PLAN



TYPICAL SECTION THRU BODY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-13-573

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EAST ABUTMENT 2

SHEET 11 OF 31
646

8

8

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BATCH PRINT SHEET 12 OF 30

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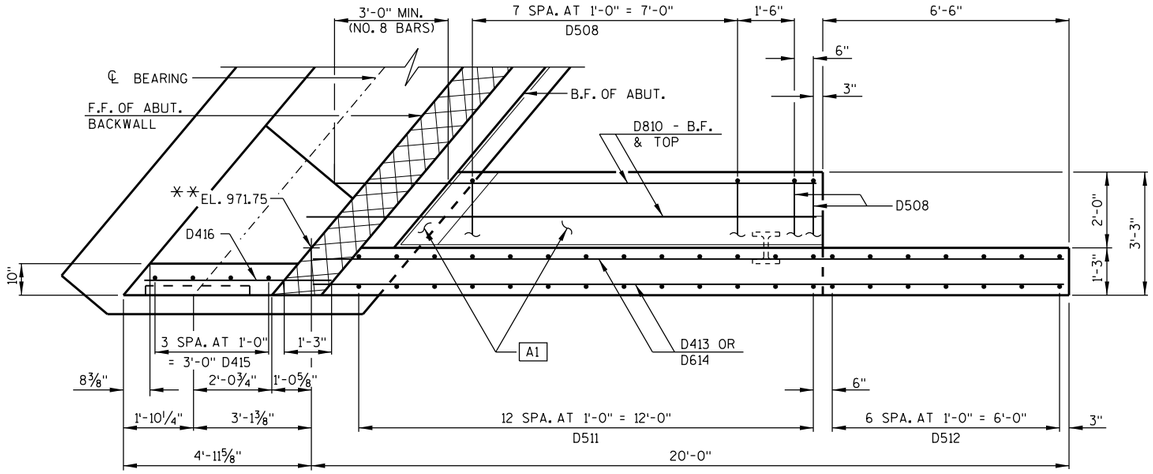
1204-08-74



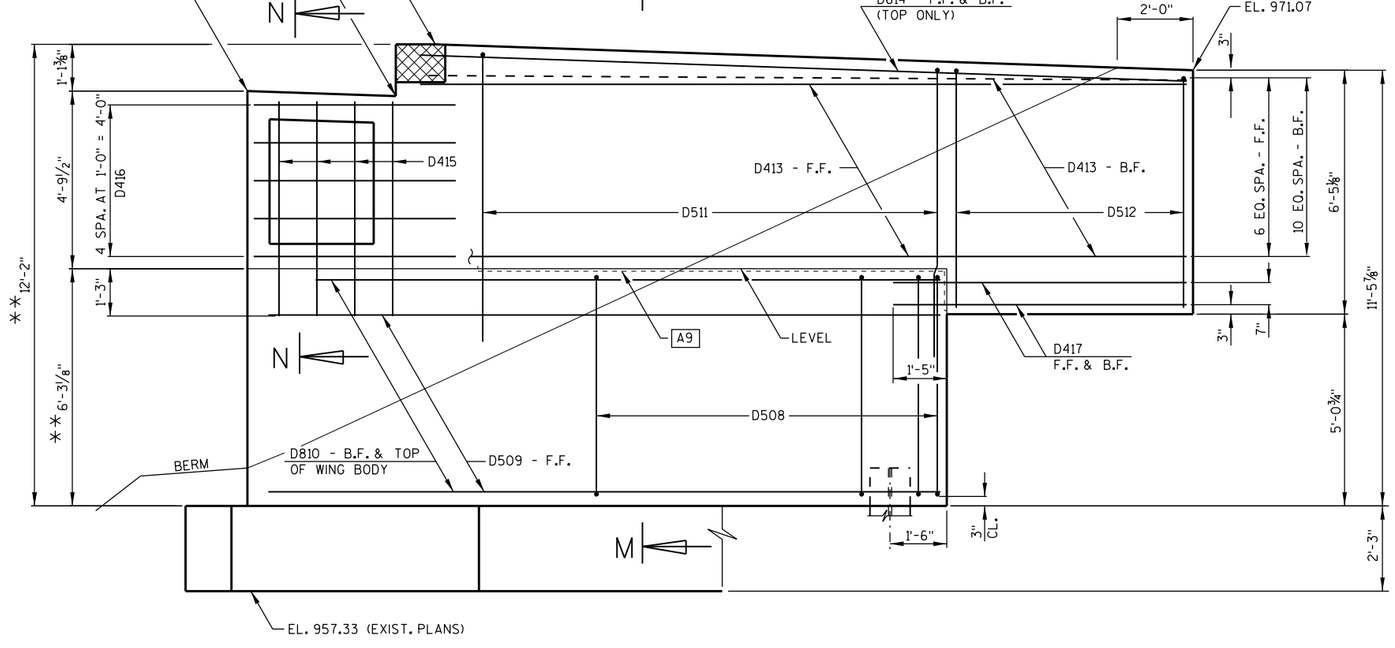
PLAN - WING 4

LEGEND

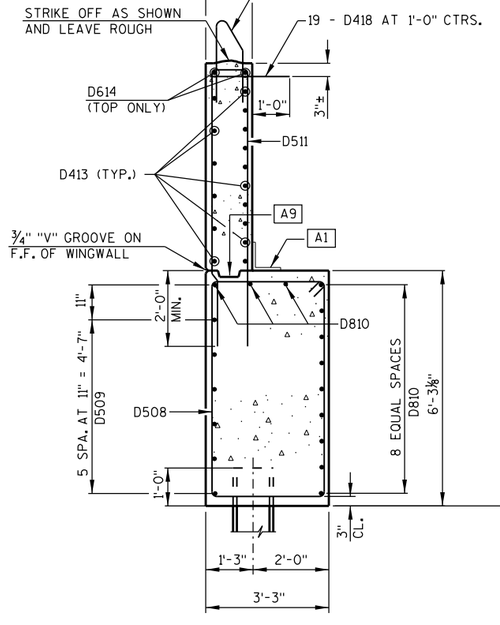
** DIMENSIONS AND ELEVATIONS ARE GIVEN AT THE B.F. OF WING WALL.

A9 OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2" x 6" KEYWAY WITH RUBBERIZED MEMBRANE WATERPROOFING ON BACKFACE.

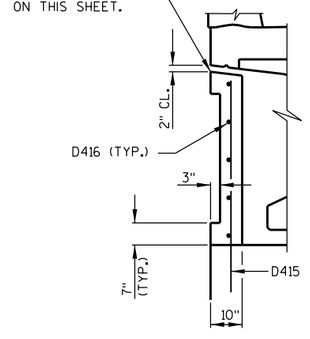
A1 FOR SYMBOL DESCRIPTIONS, SEE SHEET 10.



ELEVATION - WING 4



SECTION M-M



SECTION N-N

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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WING 4

SHEET 12 OF 31
647

8

8

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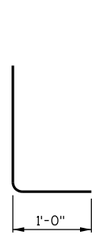
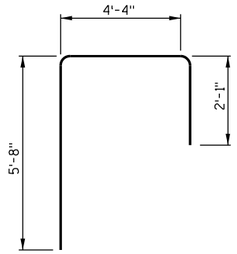


B603 & B604



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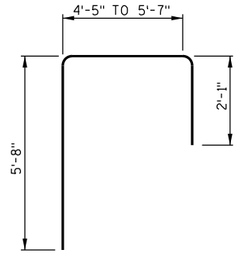

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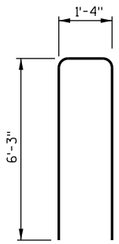

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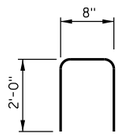

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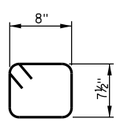

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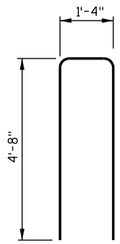

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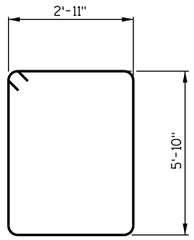

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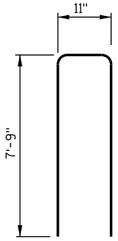

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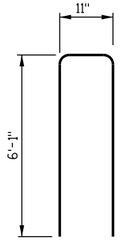

D512

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
Δ LENGTH SHOWN FOR BAR IS AN AVG. LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
NON-COATED BARS					TOTAL WEIGHT = 1,730 LBS
B701	21	6 - 5			FOOTING HORIZ.
B502	5	12 - 7			FOOTING HORIZ.
B603	16	4 - 9	X		FOOTING & BODY - F.F. VERT.
B604	16	8 - 4	X		FOOTING & BODY - B.F. VERT.
B605	9	11 - 9	X		BODY VERT.
B606	10	12 - 7			BODY - F.F. & TOP HORIZ.
B907	7	12 - 7			BODY - B.F. HORIZ.
B608	21	4 - 3			FOOTING & BODY - ADHESIVE ANCHORS HORIZ.
B809	8	6 - 11			BODY - ADHESIVE ANCHORS HORIZ.
B610	8	12 - 7	X	Δ	BODY - AT CORNERS VERT.
COATED BARS					TOTAL WEIGHT = 1,870 LBS
D501	13	13 - 7	X		BACK WALL VERT.
D402	12	14 - 3			BACK WALL HORIZ.
D503	15	4 - 5	X		BACK WALL & PAVING BLOCK VERT.
D404	6	3 - 1	X		PAVING BLOCK VERT.
D505	9	7 - 3			PAVING BLOCK HORIZ.
D506	2	10 - 5	X		BACK WALL VERT.
D407	10	3 - 9			BACK WALL - ADHESIVE ANCHORS HORIZ.
D508	10	18 - 2	X		WING 4 - STIRRUPS VERT.
D509	6	17 - 10			WING 4 - BODY HORIZ.
D810	12	12 - 8			WING 4 - BODY HORIZ.
D511	13	16 - 2	X		WING 4 - F.F. & B.F. VERT.
D512	7	12 - 10	X		WING 4 - F.F. & B.F. VERT.
D413	16	19 - 10			WING 4 - F.F. & B.F. HORIZ.
D614	2	19 - 10			WING 4 - TOP - F.F. & B.F. HORIZ.
D415	4	5 - 9			SIDE WALL VERT.
D416	5	5 - 0			SIDE WALL HORIZ.
D417	4	7 - 9			WING 4 - F.F. & B.F. HORIZ.
D418	19	2 - 0			WING 4 - TOP - DOWELS HORIZ.

BAR SERIES

MARK	NO. REQ'D	LENGTH
B610	2 SETS OF 4	12'-0" TO 13'-2"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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EAST ABUTMENT DETAILS

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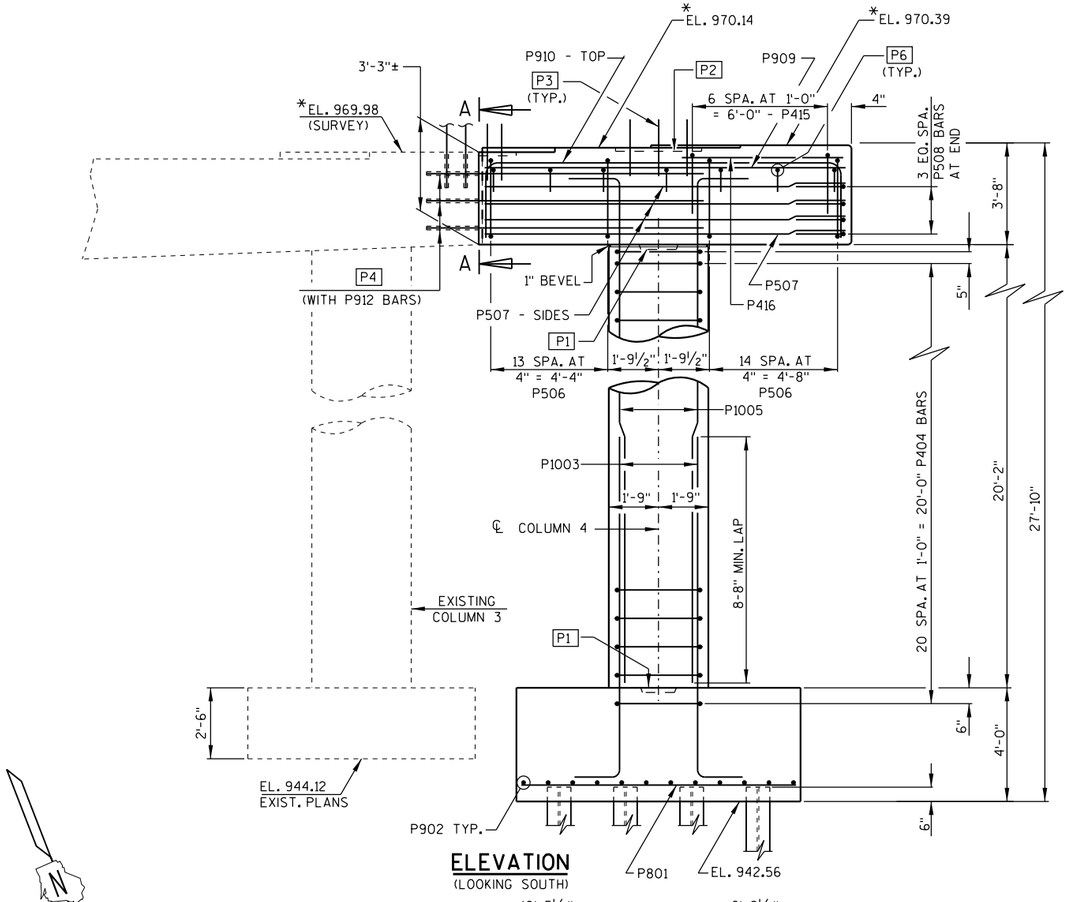
PLOT DATE: 11/15/2024 PLOT TIME: 11:43:47 AM BATCH PRINT SHEET 1 OF 1

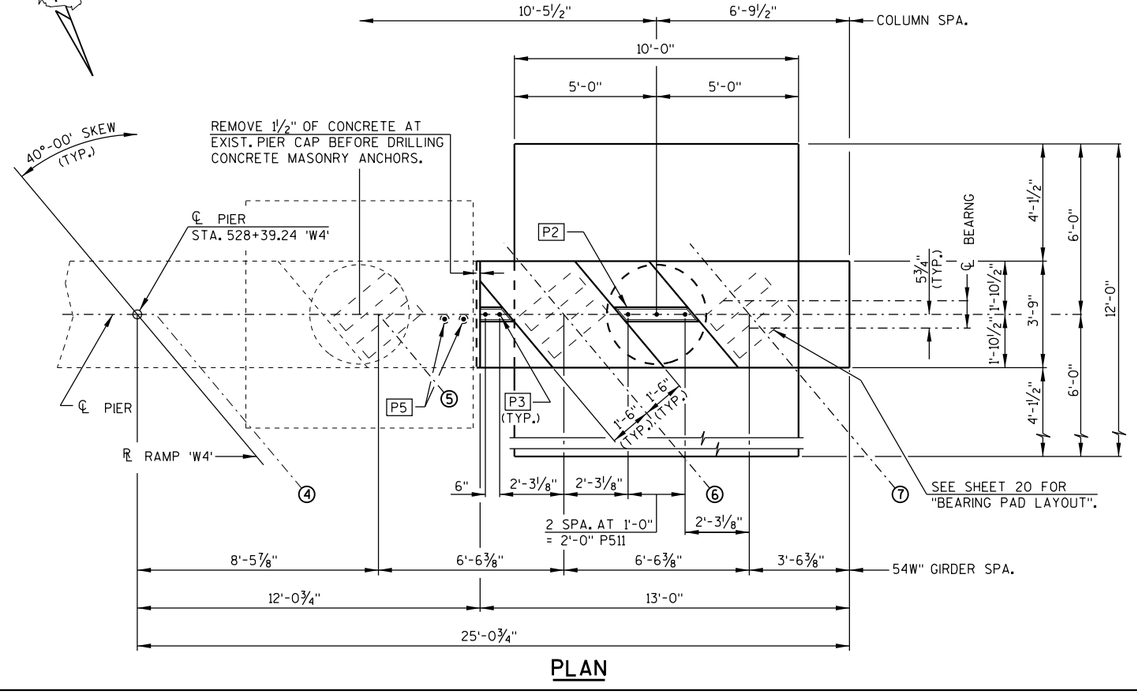
FOUNDATION DATA

PIER TO SUPPORTED ON PILING STEEL HP 10 X 42 DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 10 FEET LONG. PRE-BORE A MINIMUM OF 3 FEET INTO COMPETENT BEDROCK. PRE-BORED HOLES TO BE FILLED WITH FRESH CONCRETE AFTER PILE IS PLACED IN HOLE.

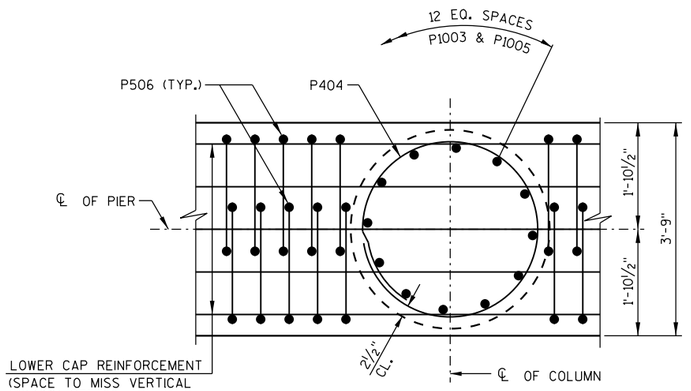
PRIOR TO DRIVING PILES, PRESSURE GROUT AT THE CENTER OF EACH PROPOSED PILE LOCATION AS DESCRIBED IN THE "BEDROCK GROUTING STRUCTURE B-13-573" SPECIAL PROVISON. PRESSURE GROUT TO A MINIMUM OF 24 FEET BELOW TIP ELEVATION AT THE PIER.



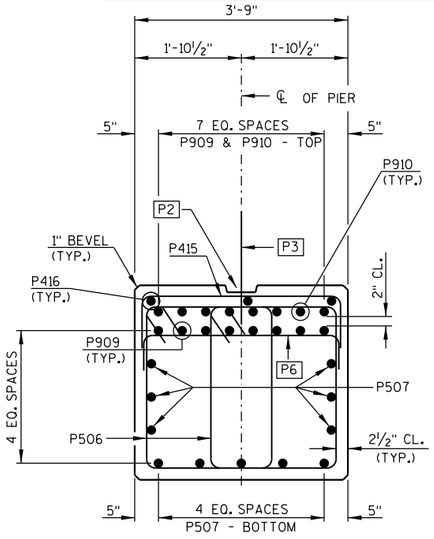
ELEVATION
(LOOKING SOUTH)



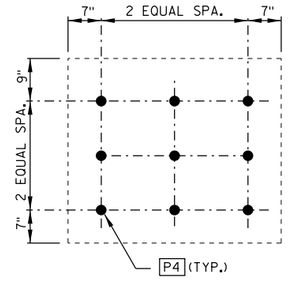
PLAN



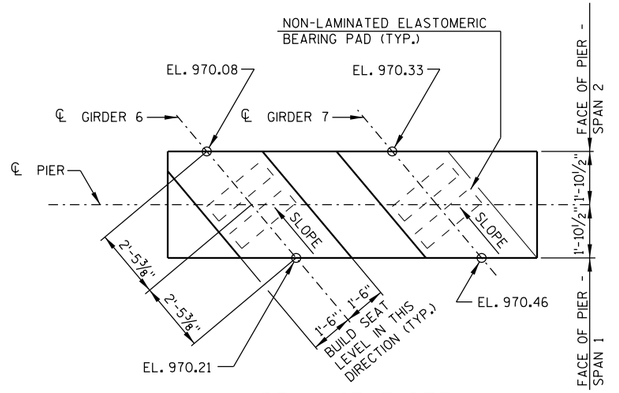
SECTION THRU COLUMN
(SECTION TAKEN AT BOTTOM OF PIER CAP)



SECTION THRU PIER CAP
NOTE: SEE "BEAM SEAT DETAIL" ON THIS SHEET FOR TOP OF PIER CAP ELEVATIONS.



SECTION A-A



BEAM SEAT DETAIL

LEGEND

* ELEVATIONS ARE GIVEN AT THE TOP OF CONCRETE AT THE ℄ OF PIER.

P1 1'-3" × 1'-3" × 2" CONSTRUCTION JOINT FORMED BY A BEVELED KEYWAY.

P2 2" × 6" BEVELED KEYWAY BETWEEN GIRDERS.

P3 EMBED P511 BARS 1'-0". PLACE BARS AFTER CONCRETE IS POURED, BUT BEFORE INITIAL SET HAS TAKEN PLACE.

P4 ADHESIVE ANCHORS NO. 9 BARS, EMBED 1'-10". TOTAL NUMBER REQUIRED AT PIER = 9. (USE P912 BARS WITH ANCHORS.)

P5 ADHESIVE ANCHORS NO. 6 BARS, EMBED 1'-3". TOTAL NUMBER REQUIRED AT PIER = 2. (USE P613 BARS WITH ANCHORS.) OFFSET ANCHOR PLACEMENT 2"± EITHER SIDE OF PIER ℄

P6 P414 BARS SPACED AT 2'-0" CTRS. BARS TO SUPPORT PLACEMENT OF P909 BARS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

PIER DETAILS 1

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649

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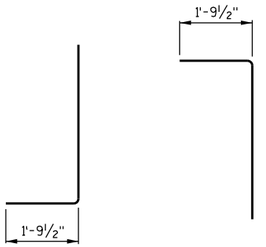
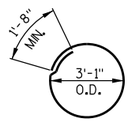


P1003

P1005



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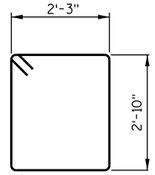

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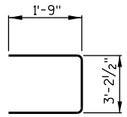

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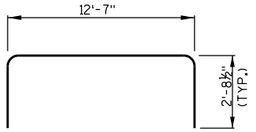

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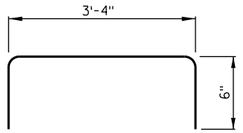

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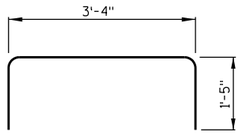

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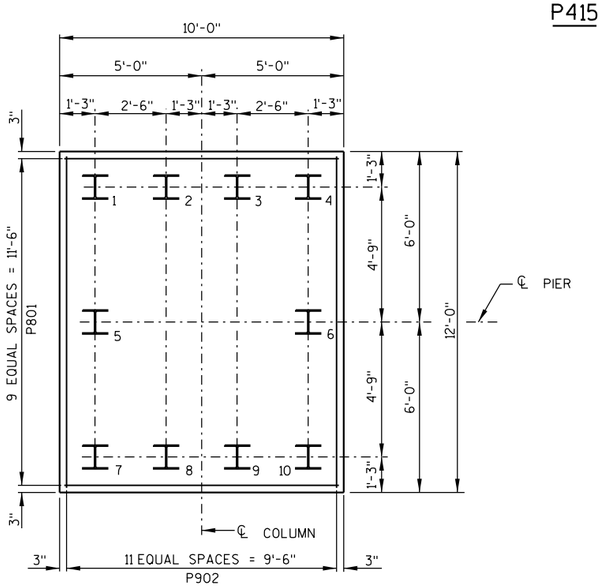


FOOTING PLAN

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
NON-COATED BARS					TOTAL WEIGHT = 740 LBS
P801	10	9 - 8			FOOTING HORIZ.
P902	12	11 - 8			FOOTING HORIZ.
COATED BARS					TOTAL WEIGHT = 4,140 LBS
P1003	12	13 - 8	X		COLUMN & FOOTING VERT.
P404	22	11 - 5	X		COLUMN - STIRRUPS HORIZ.
P1005	12	24 - 1	X		COLUMN VERT.
P506	58	10 - 10	X		CAP - STIRRUPS VERT.
P507	11	12 - 8			CAP - SIDES HORIZ.
P508	4	6 - 6	X		CAP - END HORIZ.
P909	8	12 - 3			CAP - TOP HORIZ.
P910	8	17 - 6	X		CAP - TOP HORIZ.
P511	5	2 - 0			CAP - TOP - DOWELS HORIZ.
P912	9	9 - 9			CAP - AT ADHESIVE ANCHORS VERT.
P613	2	2 - 3			CAP - TOP - AT ADHESIVE ANCHORS VERT.
P414	7	4 - 2	X		CAP - SUPPORT BAR HORIZ.
P415	7	6 - 0	X		CAP - TOP VERT.
P416	3	7 - 0			CAP - TOP HORIZ.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

PIER DETAILS 2

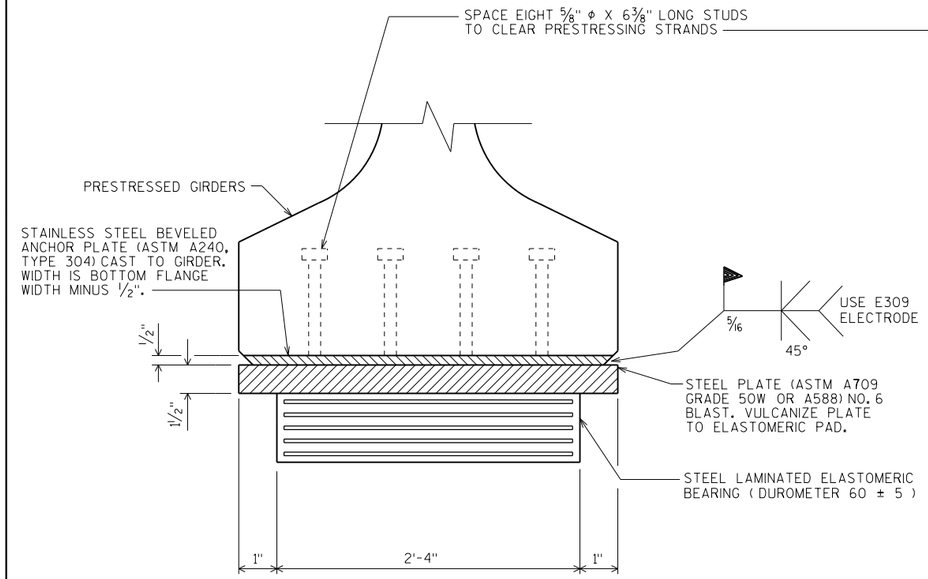
SHEET 15 OF 31
650

8

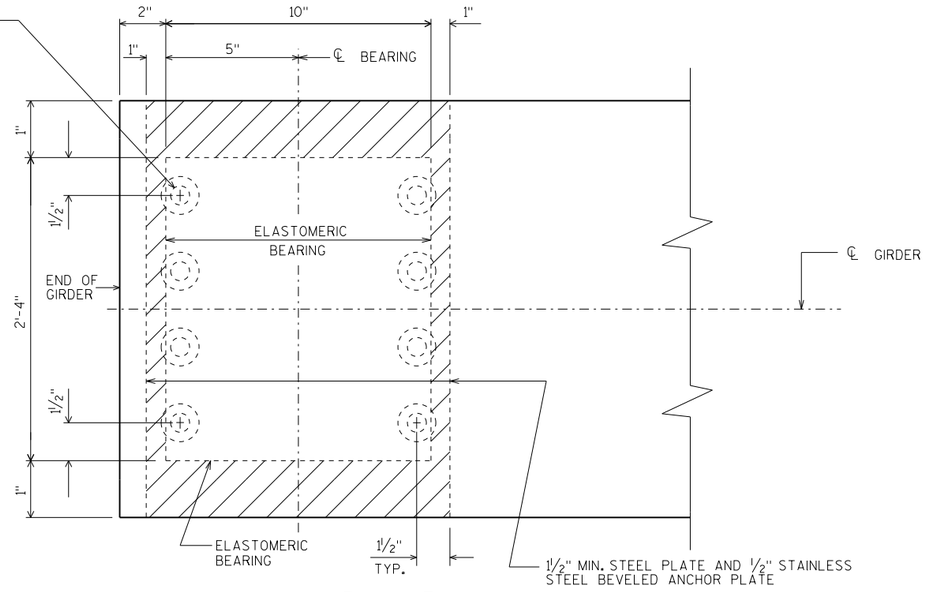
8

STATE PROJECT NUMBER

1204-08-74



END VIEW



PLAN VIEW

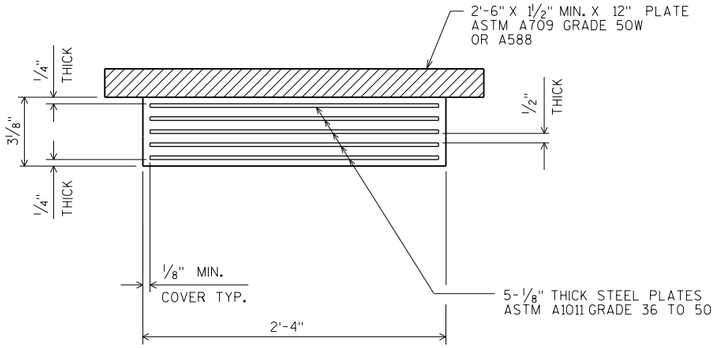
BEARING NOTES

BEARINGS SHALL NOT BE PLACED AT A TEMPERATURE GREATER THAN 85° F.

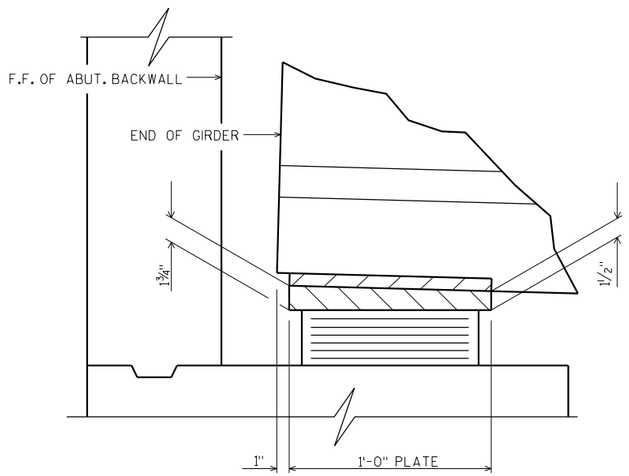
ALL MATERIAL USED FOR BEARINGS SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "BEARING PADS ELASTOMERIC LAMINATED", EACH.

ALL STRUCTURAL STEEL BEARING PLATES SHALL BE FLAT ROLLED WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL.

ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

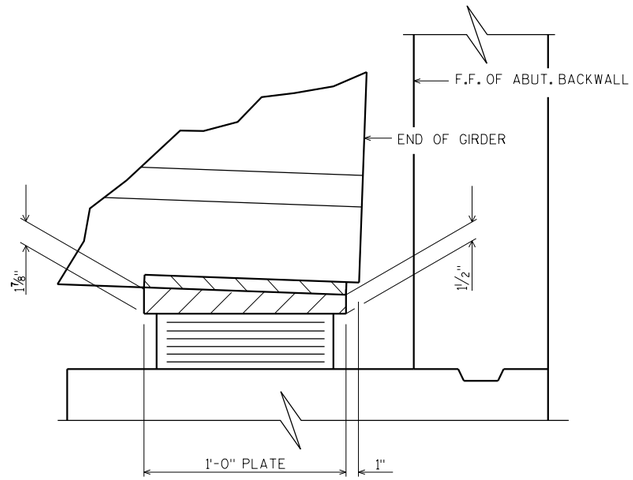


SECTION THRU ELASTOMERIC BEARING



PART ELEVATION AT WEST ABUTMENT

(SHOWING TAPERED STEEL PLATE)



PART ELEVATION AT EAST ABUTMENT

(SHOWING TAPERED STEEL PLATE)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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PRESTRESSED GIRDER BEARINGS

SHEET 16 OF 31

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8

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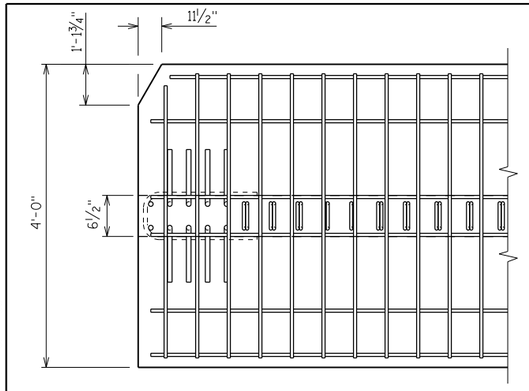
STATE PROJECT NUMBER

1204-08-74



TOP FLANGE

(CUT TOP FLANGE OF GIRDERS AT ABUTMENTS)

NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY, EXCEPT THE OUTSIDE 15" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER OR EPOXY TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS. SEE SECT. 503.3.4 OF STANDARD SPECIFICATIONS FOR GUIDANCE.

STRANDS SHALL BE FLUSH WITH END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, END OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, GRADE 2, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO THE APPLICATION OF THE SEALER.

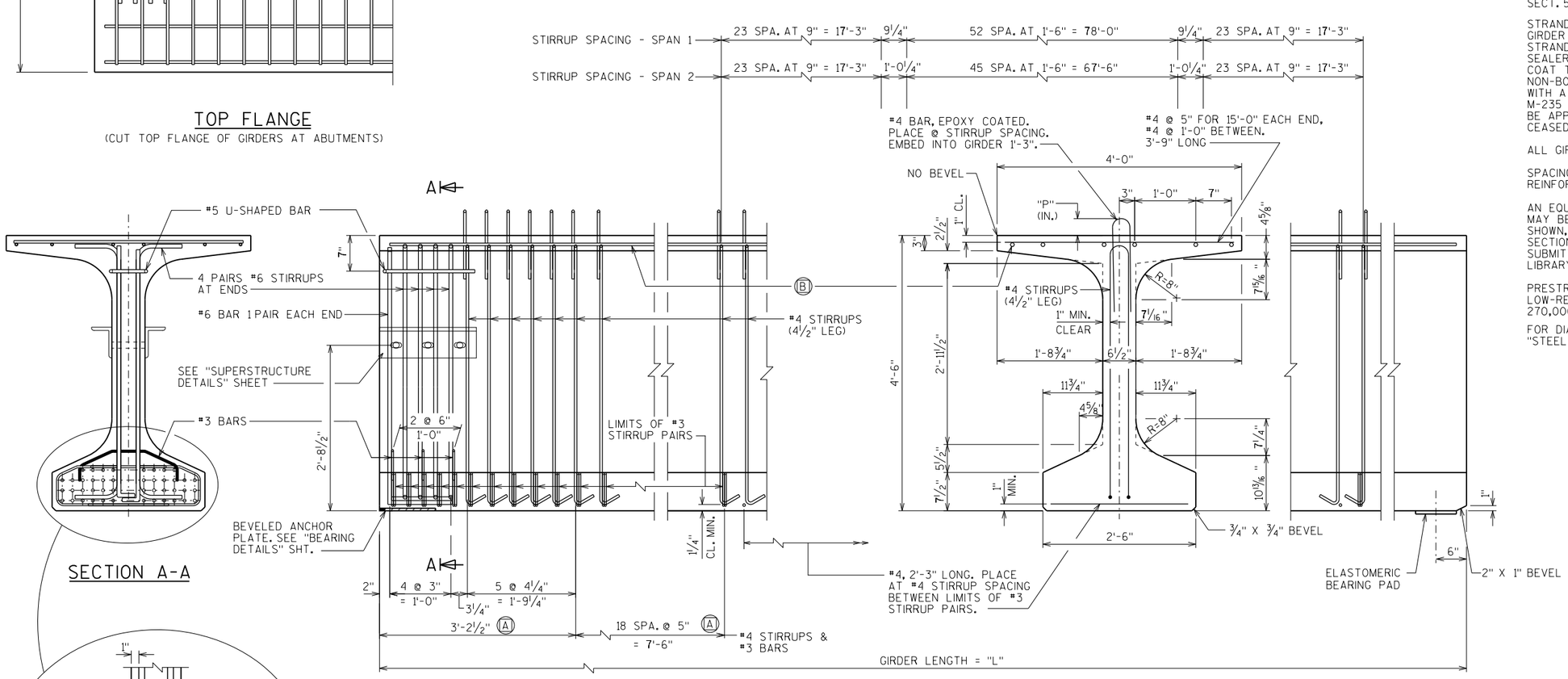
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT.

AN EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A1064 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DESIGN SECTION. IF USED, WWF SUBSTITUTION DETAILS SHALL BE SUBMITTED ELECTRONICALLY TO THE WISDOT FABRICATION LIBRARY AND ACCEPTED PRIOR TO SHOP DRAWING SUBMITTAL.

PRESTRESSING STRANDS SHALL BE (0.6" DIA.)-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.



SECTION A-A

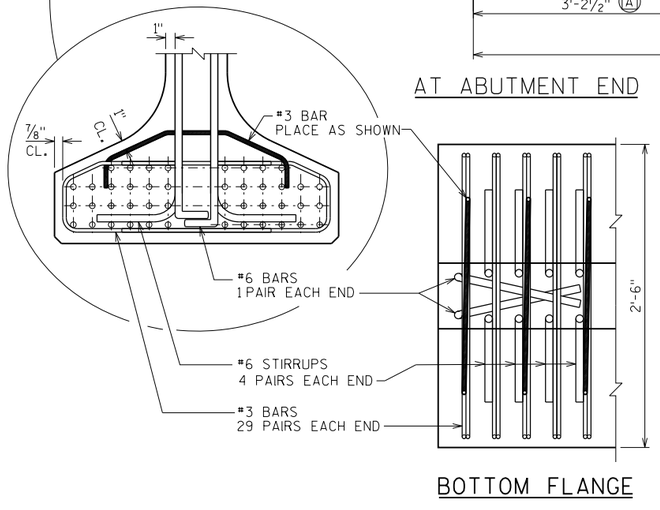
AT ABUTMENT END

AT PIER END

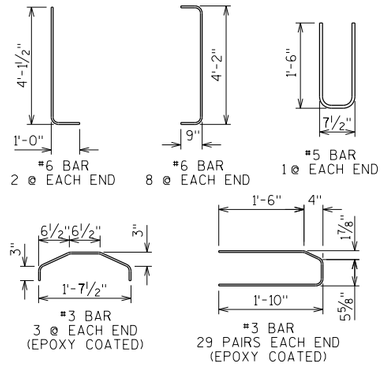
SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 1'-8"



BOTTOM FLANGE



✳ MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.)									CONC. STRGTH. f'c (p.s.i.)	"P" 1ST ⅓ OF GIRDER	"P" MID ⅓ OF GIRDER	"P" END ⅓ OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN					
			1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10						TOTAL NO. OF STRANDS	f'ci (P.S.I.) ✳	(IN.) "A"	"B" MIN.	"B" MAX.	"C"
1	6	135'-5½"	0.8	1.5	2.0	2.4	2.5	2.4	2.0	1.4	0.7	8000	7	7	8	0.6	42	6800	49	16	19	5
1	7	135'-5½"	0.8	1.6	2.2	2.6	2.7	2.6	2.2	1.6	0.8	8000	7	7	8	0.6	42	6800	49	16	19	5
2	6	125'-5½"	0.5	1.0	1.4	1.7	1.8	1.7	1.5	1.1	0.6	8000	7	7	7	0.6	36	6800	49	16	19	5
2	7	125'-5½"	0.6	1.1	1.6	1.9	2.0	1.9	1.6	1.2	0.6	8000	7	7	7	0.6	36	6800	49	16	19	5

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STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

54W" PRESTRESSED GIRDER DETAILS

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PRINTER DRIVER: C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration\WorkSpaces\WisDOT Bridge MP Ver A\WorkSets\WisDOT Bridge\Plotdrv\AE_PDF_11 x 17.plt
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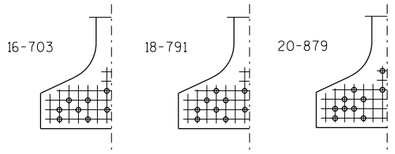
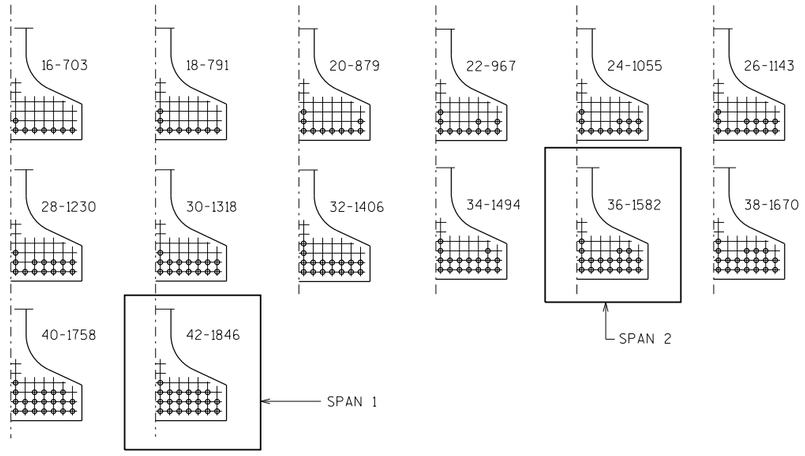
PLOT DATE: 11/14/2024 PLOT TIME: 5:41:59 PM BATCH PRINT SHEET 18 OF 30



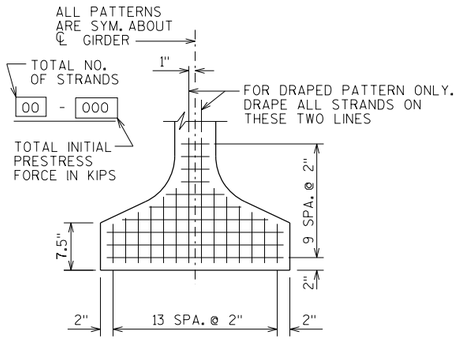
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS

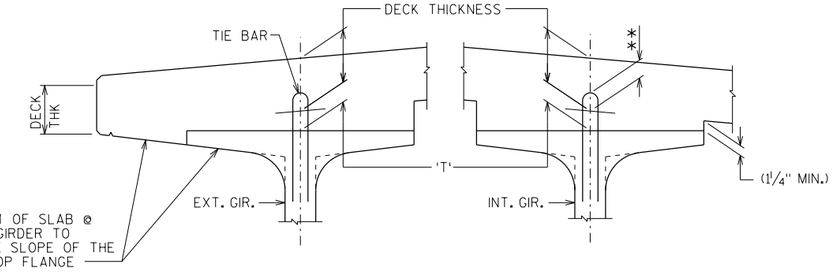


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS



TYP. STRAND PATTERN



DECK HAUNCH DETAIL

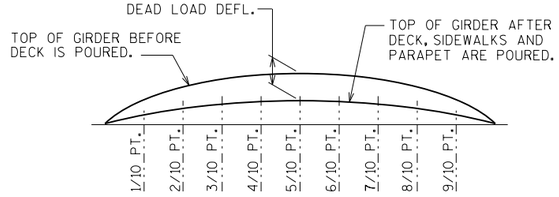
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR, THE PLAN DECK THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

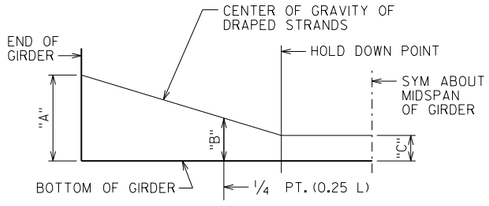
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- DECK THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	4.66
2	3.55

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T', USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

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STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

54W" PRESTRESSED GIRDER DETAILS

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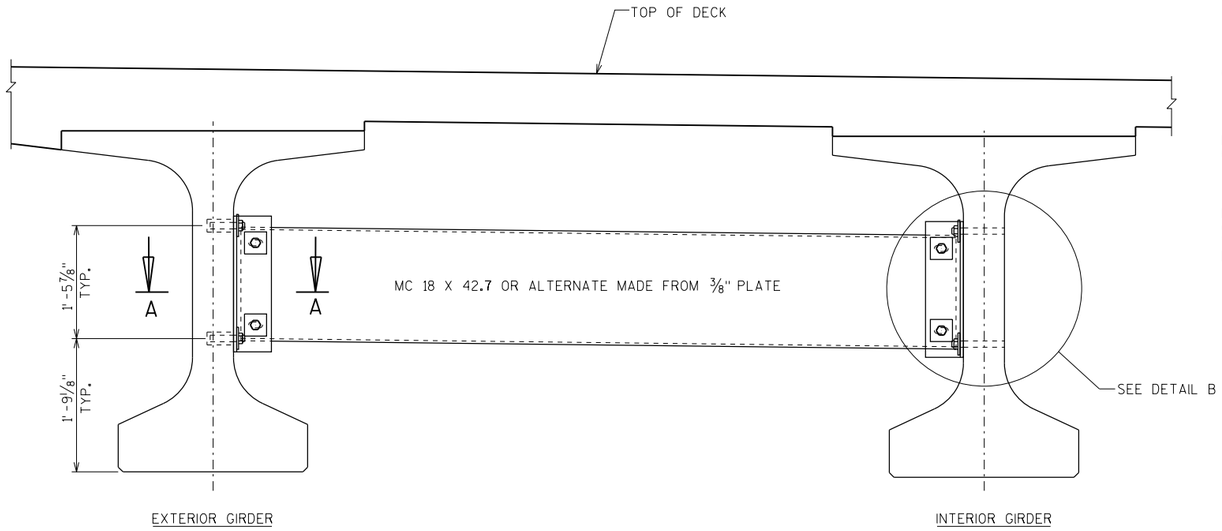
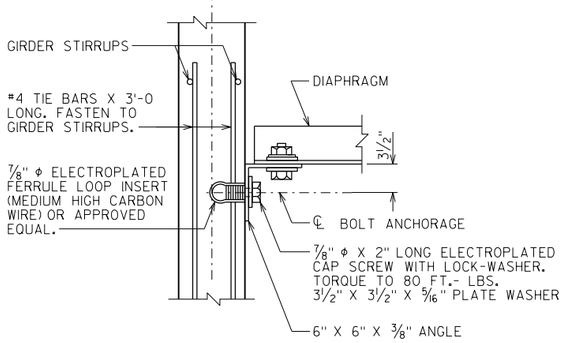


PART TRANSVERSE SECTION AT DIAPHRAGM



SECTION A-A

(FOR EXTERIOR ATTACHMENT)

NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-573", EACH.

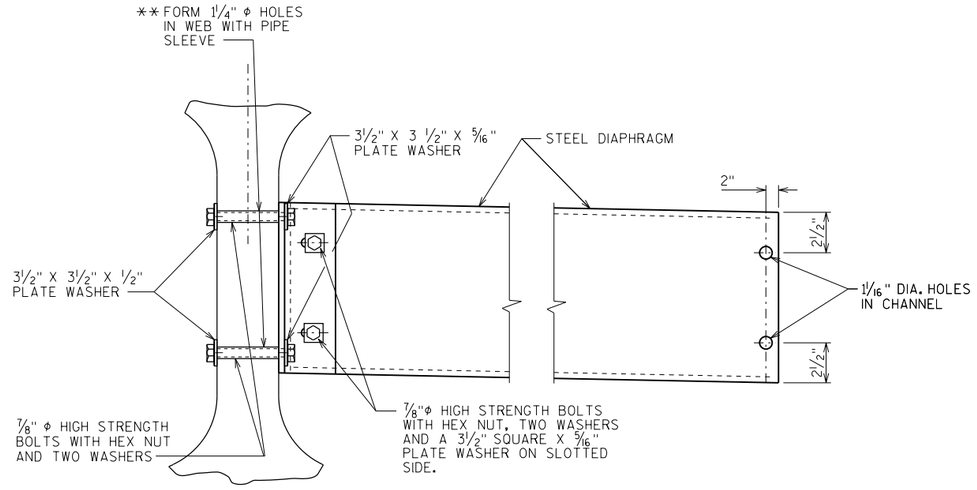
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36.

ALL DIAPHRAGM MATERIAL INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

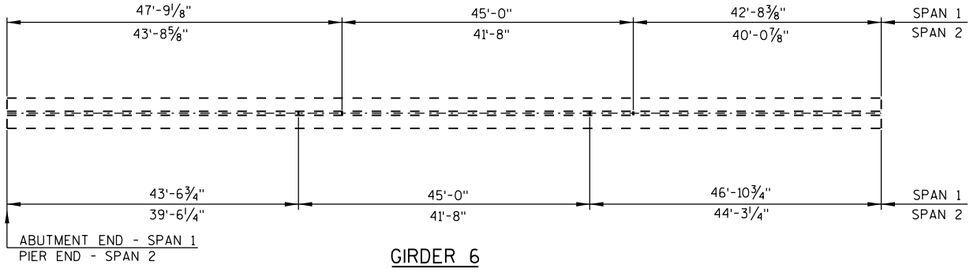
STEEL DIAPHRAGM TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS ¼ TURN, UNLESS NOTED OTHERWISE. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

** FIELD DRILL HOLES THRU WEB AT EXISTING GIRDER LINE NO. 5 TO CONNECT DIAPHRAGMS FROM EXISTING GIRDER LINE NO. 5 TO NEW EXTERIOR GIRDER LINE NO. 6

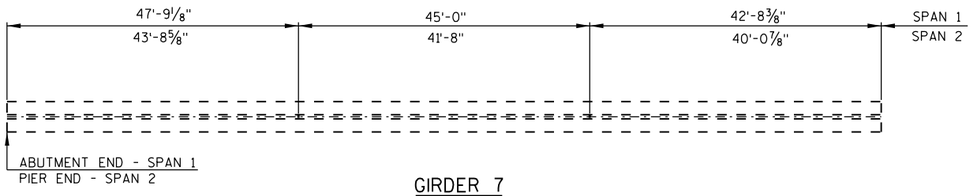


(FOR STAGGERED DIAPHRAGM)

DETAIL B

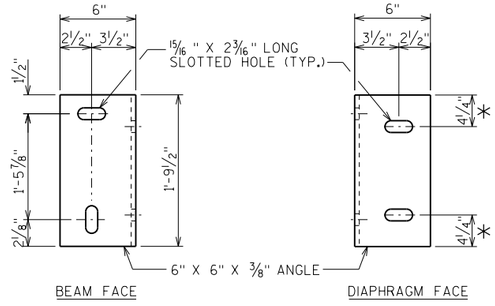


GIRDER 6



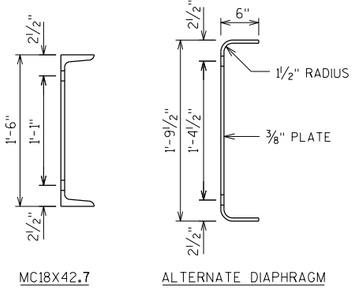
GIRDER 7

DIAPHRAGM CONNECTION SPACING



DIAPHRAGM SUPPORT

✳ 2½" FOR ALTERNATE PLATE DIAPHRAGM



SECTION THRU DIAPHRAGM

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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STEEL DIAPHRAGM

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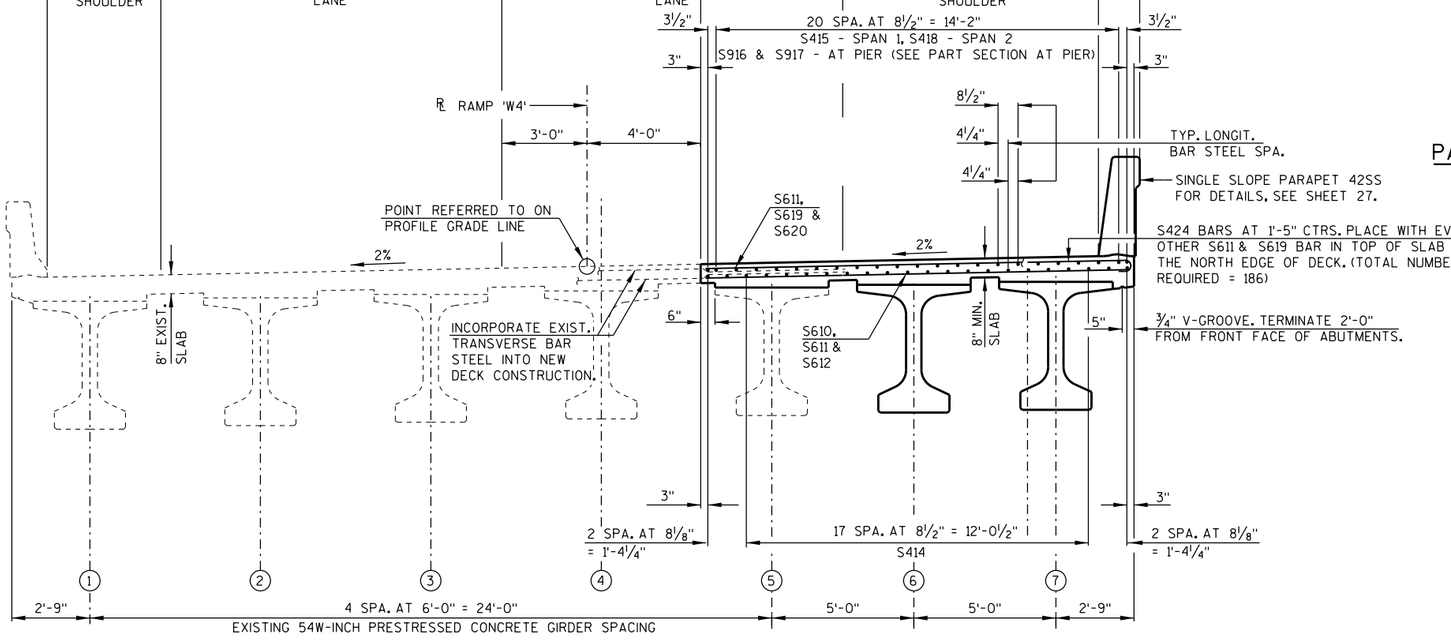
BATCH PRINT SHEET 1 OF 1

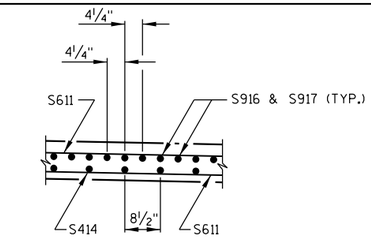
STATE PROJECT NUMBER

1204-08-74

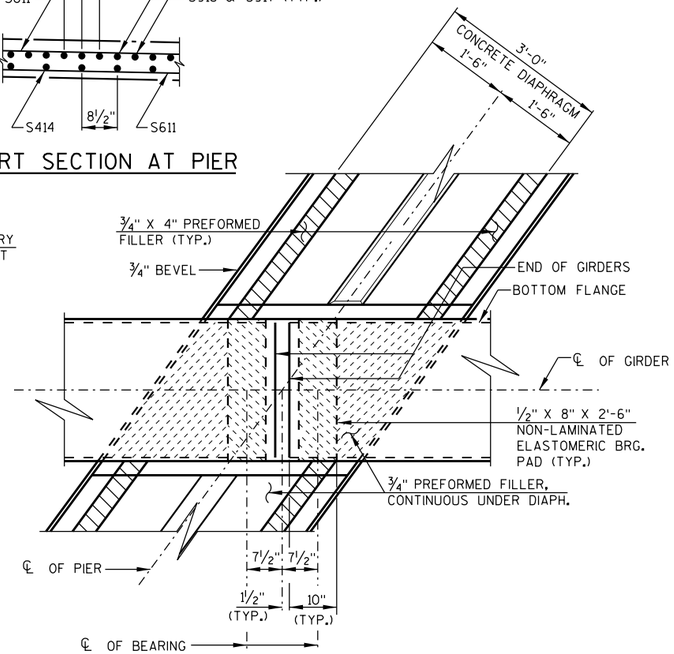


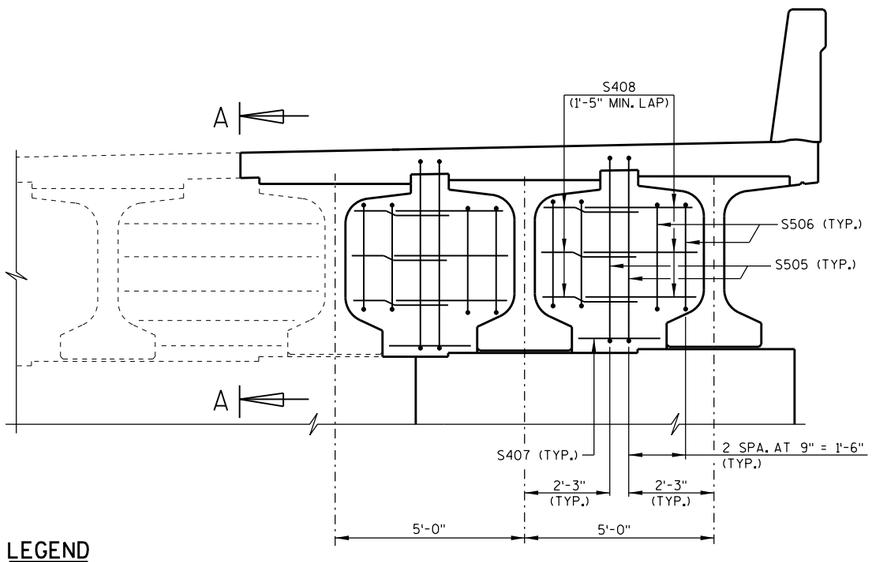
CROSS SECTION THRU ROADWAY

(LOOKING EAST)



PART SECTION AT PIER

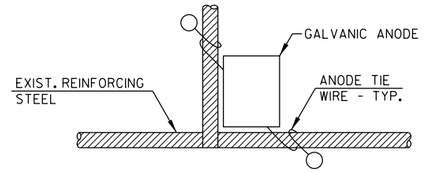




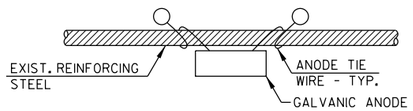
PIER DIAPHRAGM DETAILS

LEGEND

* DIMENSIONS ARE GIVEN NORMAL TO ℄ OF PIER



TYPICAL INSTALLATION AT BAR STEEL INTERSECTION



TYPICAL INSTALLATION FOR BAR STEEL

BEARING PAD LAYOUT AT PIER

NOTES

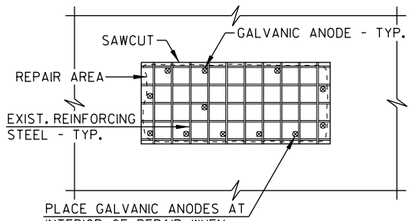
DECK REPAIR AREAS WITH CATHODIC PROTECTION ARE BASED ON THE INSPECTION REPORT. THE PLAN QUANTITY FOR THE BID ITEM "EMBEDDED GALVONIC ANODES" IS BASED ON A MAXIMUM SPACING OF 24-INCHES AROUND THE SURFACE REPAIR PERIMETER. THE ACTUAL QUANTITY SHALL BE BASED ON THE FIELD CONDITIONS AND AS RECOMMENDED BY THE GALVANIC ANODE SUPPLIER.

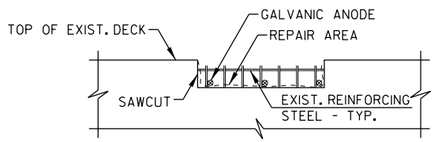
SURFACE REPAIRS SHALL BE FILLED WITH REPAIR MATERIALS COMPATIBLE WITH CATHODIC PROTECTION, AS RECOMMENDED BY THE ANODE SUPPLIER.

EXISTING REINFORCING STEEL TO BE COMPLETELY CLEANED OF CORRODED MATERIAL AND CONCRETE TO PROVIDE SUFFICIENT ELECTRICAL CONNECTION AND BOND. CATHODIC PROTECTION PREPARATIONS ARE INCLUDED IN THE BID ITEM "EMBEDDED GALVANIC ANODES".

ANODES NEAREST TO EDGE OF REPAIR TO BE WITHIN 6" OF EDGE.

AFTER PLACEMENT, GALVANIC ANODES SHOULD MAINTAIN A MINIMUM TOP COVER OF 1½" AND A MINIMUM BOTTOM COVER OF ¾".





ANODE REPAIR DETAIL

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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SUPERSTRUCTURE 1

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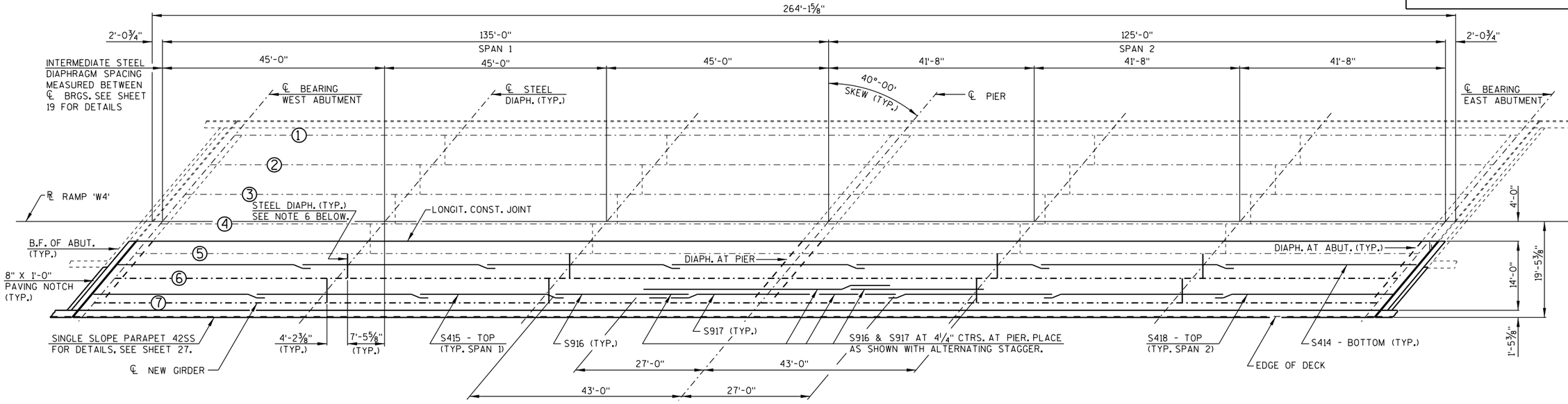
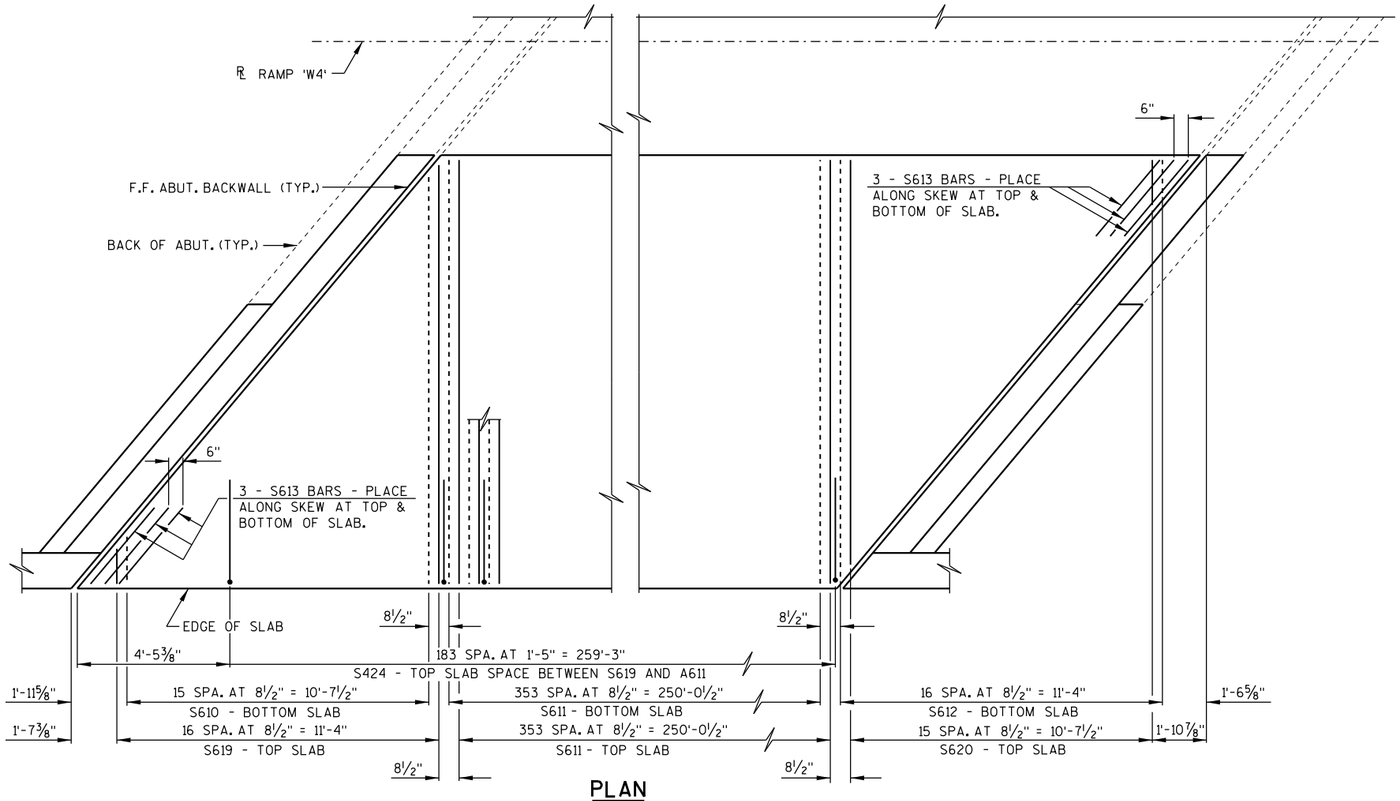
STATE PROJECT NUMBER

1204-08-74



PLAN



PLAN

(SHOWING TOP & BOTTOM OF SLAB TRANSVERSE BAR STEEL LAYOUT)

TOP OF DECK ELEVATIONS

	℄ OF BRG. W. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER
GIRDER 5	979.19	978.88	978.55	978.21	977.86	977.49	977.11	976.72	976.31	975.89	975.46
GIRDER 6	979.38	979.07	978.75	978.42	978.07	977.71	977.33	976.94	976.54	976.13	975.70
GIRDER 7	979.57	979.27	978.95	978.62	978.28	977.92	977.55	977.17	976.77	976.36	975.93
EOD	979.63	979.33	979.01	978.69	978.34	977.99	977.62	977.23	976.84	976.43	976.00

TOP OF DECK ELEVATIONS CONT.

	℄ OF PIER	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF BRG. E. ABUT.
GIRDER 5	975.46	975.05	974.63	974.21	973.79	973.36	972.94	972.52	972.10	971.68	971.26
GIRDER 6	975.70	975.29	974.87	974.45	974.03	973.61	973.19	972.76	972.34	971.92	971.50
GIRDER 7	975.93	975.53	975.11	974.69	974.27	973.85	973.43	973.01	972.59	972.16	971.74
EOD	976.00	975.60	975.18	974.76	974.34	973.92	973.50	973.08	972.66	972.24	971.82

NOTES

1. ALL TRANSVERSE BAR STEEL REINFORCEMENT SHALL BE PLACED PERPENDICULAR TO ℄. SEE SHEET 22.
2. LAP LONGITUDINAL S523 BARS IN SINGLE SLOPE PARAPET 42SS 1'-9" MIN.
3. LAP LONGITUDINAL NO. 4 BARS IN DECK 1'-8" MIN.
4. LAP LONGITUDINAL NO. 9 BARS IN DECK 8'-0" MIN.
5. EDGE OF DECK (EOD) ELEVATIONS ARE CALCULATED ASSUMING DECK IS LEVEL UNDER PARAPET.
6. FOR LOCATIONS OF DIAPHRAGM CONNECTION INSERTS/HOLES IN GIRDERS, SEE SHEET 17.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-13-573

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SUPERSTRUCTURE 2

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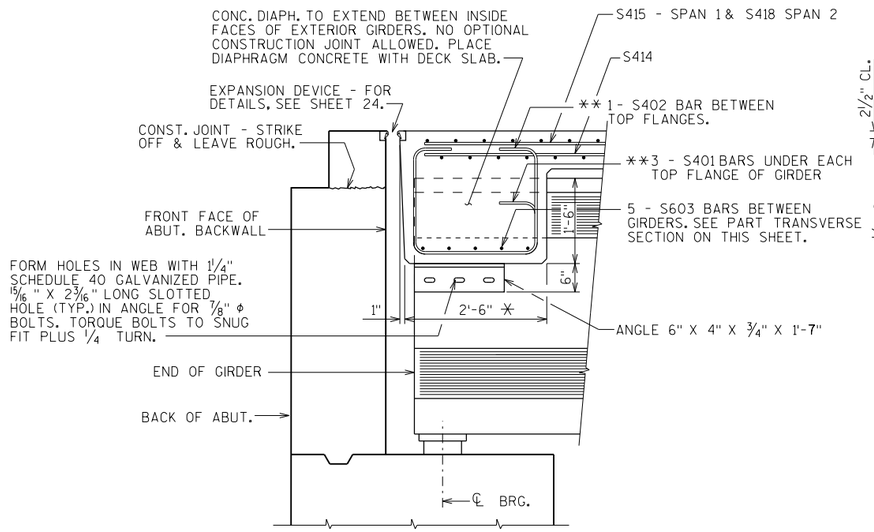
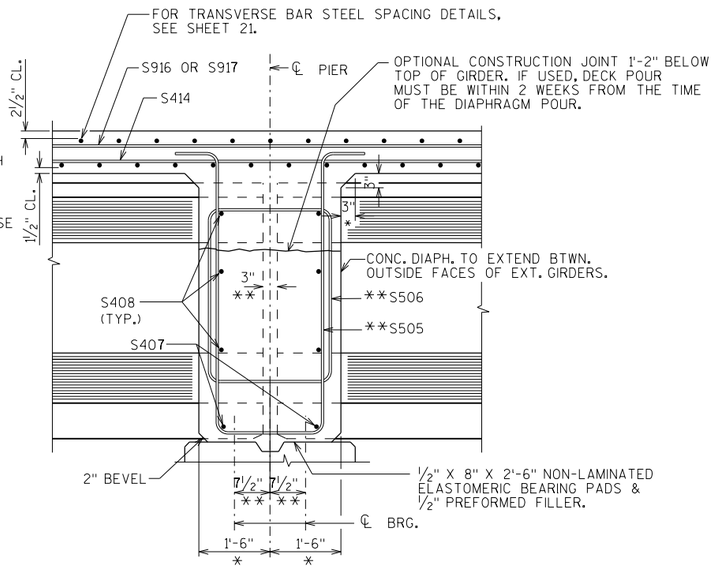
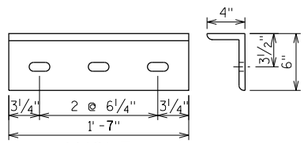




AT PIER DIAPHRAGM

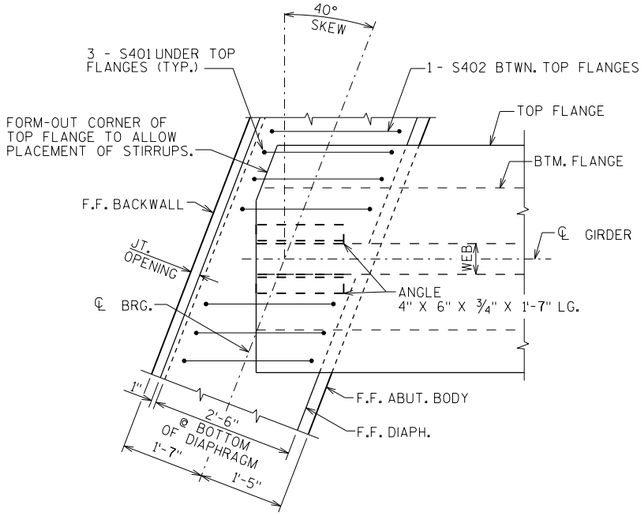
PART LONGIT. SECTION



ANGLE

6" X 4" X ¾" X 1'-7"

PROVIDE 3½" x 3½" x 5/16" PLATE WASHERS AT ALL LOCATIONS EXCEPT AT EXTERIOR FACES OF EXTERIOR GIRDERS WHERE 3½" x 3½" x ½" PLATE WASHERS SHALL BE PROVIDED.

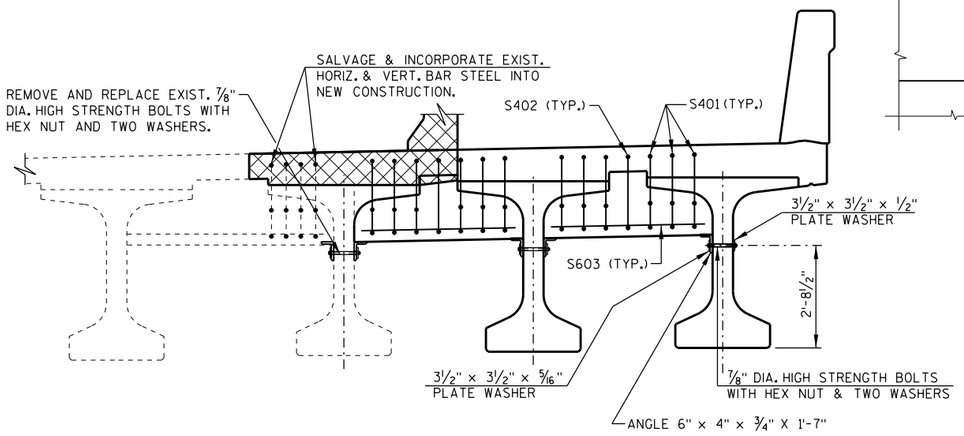


TOP VIEW OF DIAPHRAGM

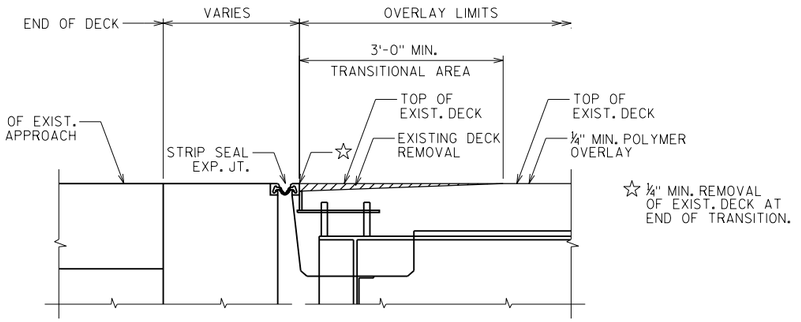
LEGEND

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** BARS PLACED PARALLEL TO GIRDERS SPACING PERPENDICULAR TO ℄ GIRDERS



PART TRANSVERSE SECTION AT CONCRETE END DIAPHRAGM



SECTION THRU ABUTMENT TRANSITIONAL AREA ON DECK AT EXPANSION JOINT

(REMOVAL AND OVERLAY THICKNESS NOT TO SCALE)

NOTES

ALL CONCRETE END DIAPHRAGM SUPPORT HARDWARE SHALL BE INCIDENTAL TO "CONCRETE MASONRY BRIDGES".

CONCRETE END DIAPHRAGM SUPPORT ANGLES SHALL BE ASTM A709 GRADE 36.

ALL CONCRETE END DIAPHRAGM SUPPORT HARDWARE INCLUDING BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AFTER FABRICATION.

CONCRETE END SUPPORT ANGLE TO CONCRETE WEB CONNECTION SHALL BE SNUG-TIGHT PLUS ¼ TURN. HIGH STRENGTH BOLTS FOR WEB CONNECTION SHALL MEET THE REQUIREMENTS FOR ASTM A325 OR ASTM A449.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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SUPERSTRUCTURE 3 | SHEET 22 OF 31 | 657

8

8

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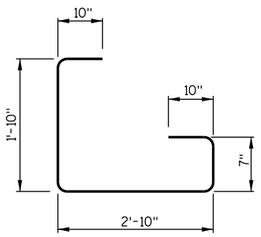
PLOT DATE: 11/14/2024 PLOT TIME: 5:42:00 PM BATCH PRINT SHEET 23 OF 30



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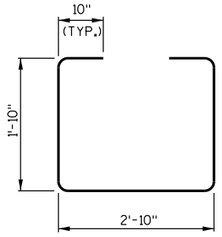

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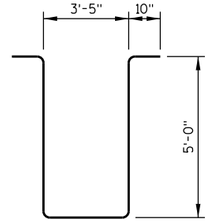

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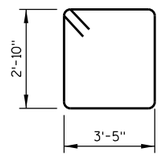

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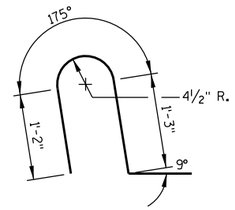

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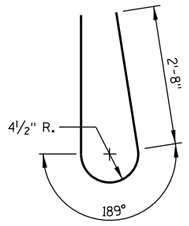

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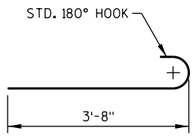

S424

BILL OF BARS

DIMENSIONS IN BENDING DETAILS ARE OUT TO OUT OF BAR.
Δ LENGTH SHOWN FOR BAR IS AN AVG. LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

MARK	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
COATED BARS					TOTAL WEIGHT = 43,320 LBS
S401	24	6-7	X		ABUTMENT DIAPHRAGM VERT.
S402	4	7-10	X		ABUTMENT DIAPHRAGM VERT.
S603	20	5-4			ABUTMENT DIAPHRAGM HORIZ.
S404	8	5-4			PAVING BLOCK HORIZ.
S505	4	14-7	X		PIER DIAPHRAGM VERT.
S506	8	13-2	X		PIER DIAPHRAGM VERT.
S407	4	2-10			PIER DIAPHRAGM HORIZ.
S408	24	3-5			PIER DIAPHRAGM HORIZ.
S610	16	8-0		Δ	SLAB - BOTTOM TRANS.
S611	708	14-11			SLAB - BOTTOM & TOP TRANS.
S612	17	7-11		Δ	SLAB - BOTTOM TRANS.
S613	12	4-0			SLAB - BOTTOM & TOP - CORNERS TRANS.
S414	154	39-1			SLAB - BOTTOM LONGIT.
S415	69	32-11			SLAB - TOP - SPAN 1 LONGIT.
S916	43	28-0			SLAB - TOP AT PIER LONGIT.
S917	43	50-0			SLAB - TOP AT PIER LONGIT.
S418	69	34-11			SLAB - TOP - SPAN 2 LONGIT.
S619	17	8-0		Δ	SLAB - TOP TRANS.
S620	16	7-11		Δ	SLAB - TOP TRANS.
S521	396	4-5	X		PARAPET VERT.
S522	396	6-8	X		PARAPET VERT.
S523	56	39-2			PARAPET LONGIT.
S424	186	4-2	X		SLAB - TOP - OVERHANG TRANS.

BAR SERIES

MARK	NO. REQ'D	LENGTH
S610	16	1'-8" TO 14'-3"
S612	17	1'-2" TO 14'-8"
S619	17	1'-2" TO 14'-9"
S620	16	1'-7" TO 14'-3"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURE B-13-573

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SUPERSTRUCTURE 4

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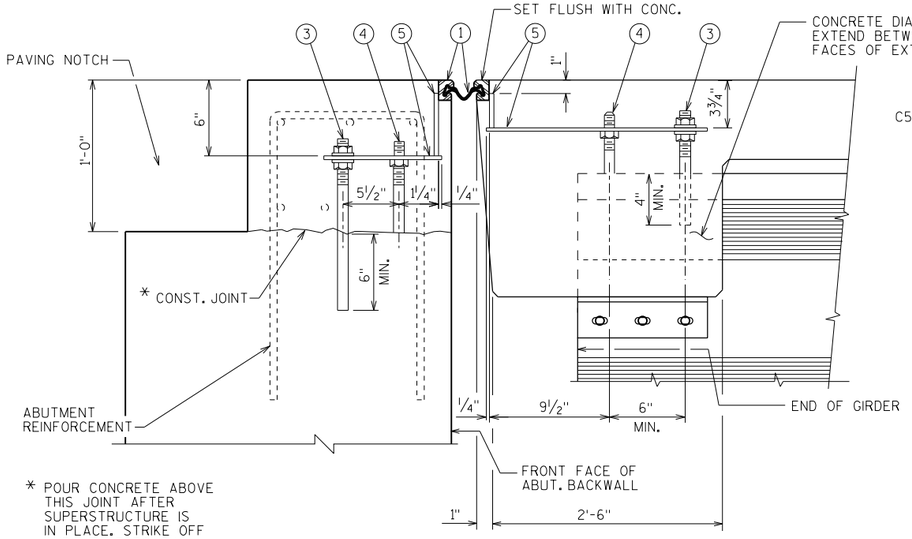
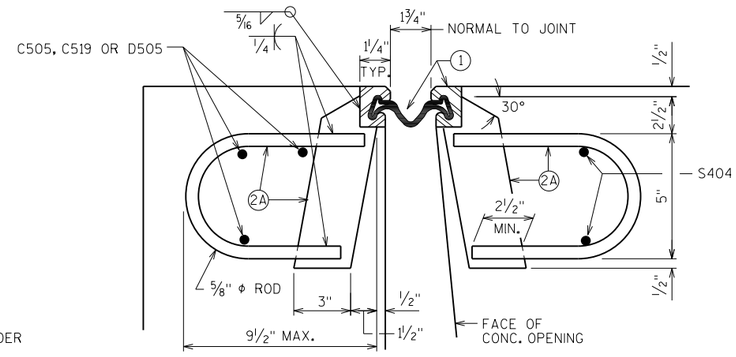
PLOT DATE: 11/14/2024 PLOT TIME: 5:42:00 PM BATCH PRINT SHEET 24 OF 30



* POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

SECTION THRU JOINT AT ABUTMENT

NORMAL TO ℄ SUBSTRUCTURE

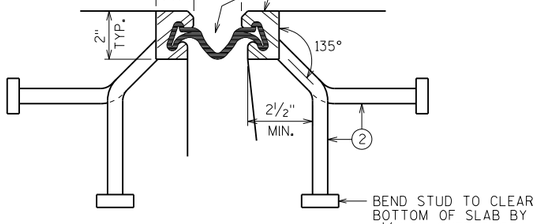


SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.

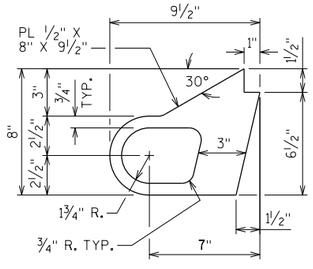
LEGEND

1. NEOPRENE STRIP SEAL (4-INCH) AND STEEL EXTRUSIONS.
2. STUDS 5/8"ϕ X 6 3/8" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS AND BEND AS SHOWN AFTER WELDING.
2A. ½" THICK ANCHOR PLATE WITH 5/8"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE, WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CENTERS BETWEEN GIRDERS.
3. ¾" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. GROUT THREADED ROD INTO FIELD DRILLED HOLES ON ℄ OF GIRDER. ON ABUTMENT SIDE GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. SHOP OR FIELD WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 AND 1" ϕ HOLE FOR NO. 4.



SECTION THRU JOINT

(EXTERIOR GIRDER TO EDGE OF DECK AND AT PARAPETS)



ALTERNATE STRIP SEAL ANCHOR

NOTES

FIELD SPLICE STEEL EXTRUSION TO EXISTING STEEL EXTRUSION AT EACH ABUTMENT. ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS, UNLESS MORE ARE REQUIRED FOR STAGED CONSTRUCTION, HANDLING OR GALVANIZING REQUIREMENTS. DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST AND SWEEP.

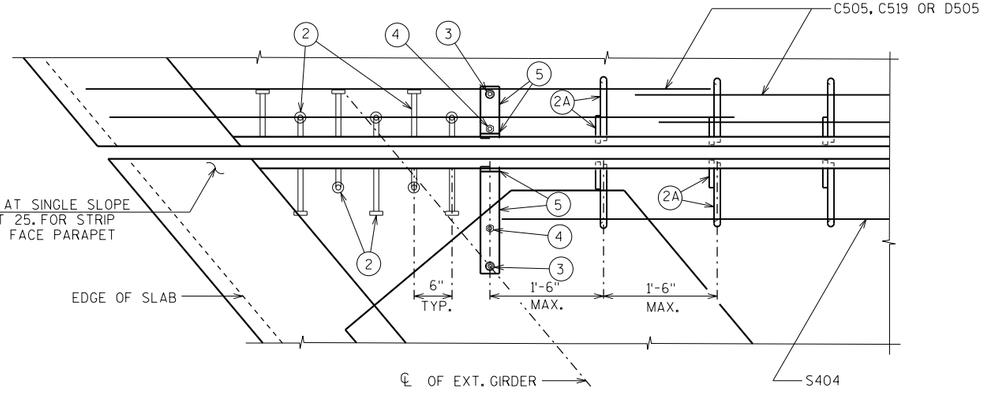
FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN AND SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES, SUPPORTS AND EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. #6 "COMMERCIAL BLAST CLEANING". AFTER BLAST CLEANING, THE PLATES, SUPPORTS AND EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 AND NO. 9 SHALL CONFORM TO ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C AND D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS AND HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-13-573".

EXISTING NEOPRENE STRIP SEAL GLAND TO BE REMOVED AND REPLACED. PAYMENT INCLUDES DETERMINING THE EXISTING GLAND DIMENSIONS AND PROVIDING A REPLACEMENT GLAND FOR THE WIDENED STRUCTURE PER BID ITEM "STRIP SEAL GLAND REPLACEMENT" AND AS APPROVED BY THE ENGINEER.



FOR STRIP SEAL DETAILS AT SINGLE SLOPE PARAPET 42SS, SEE SHEET 25. FOR STRIP SEAL DETAILS AT SLOPED FACE PARAPET 'LF', SEE SHEET 26.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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EXPANSION DEVICE

SHEET 24 OF 31
659

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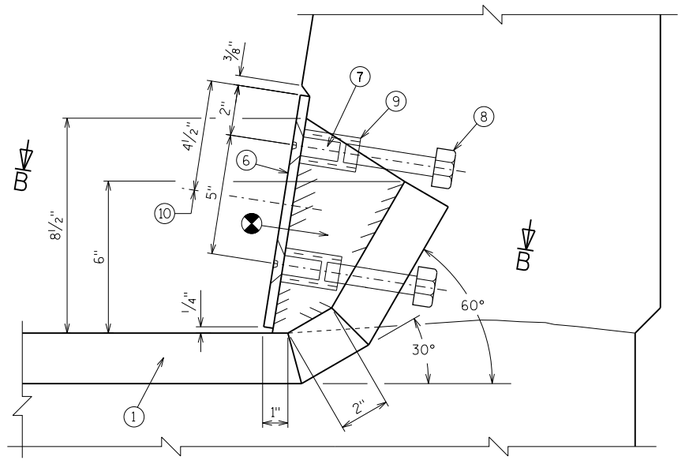
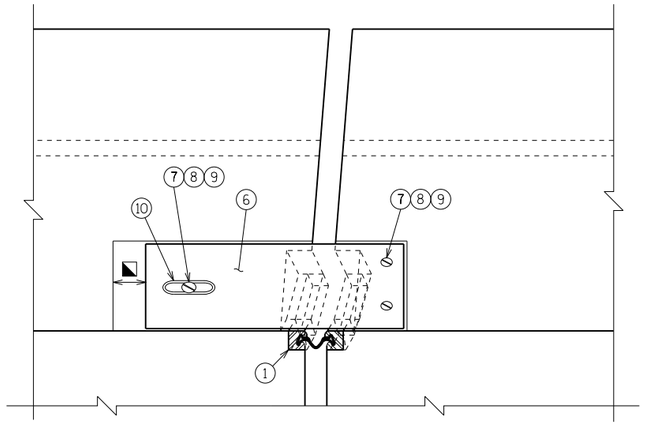
BATCH PRINT SHEET 25 OF 30

STATE PROJECT NUMBER

1204-08-74



SECTION A-A



VIEW OF PARAPET PLATE FROM ROADWAY

LEGEND

(1) NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.

(6) GALVANIZED PLATE 3/8" X 10" X 2'-2" LONG WITH HOLES FOR NO. 7.

(7) 3/4"Φ X 1 1/2" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.

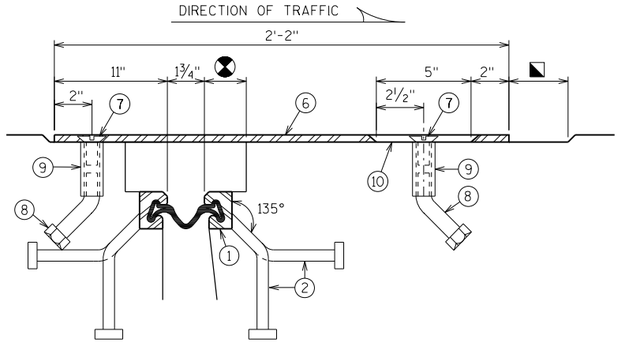
(8) 3/4"Φ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.

(9) 3/4"Φ X 2 1/4" GALVANIZED THREADED COUPLING.

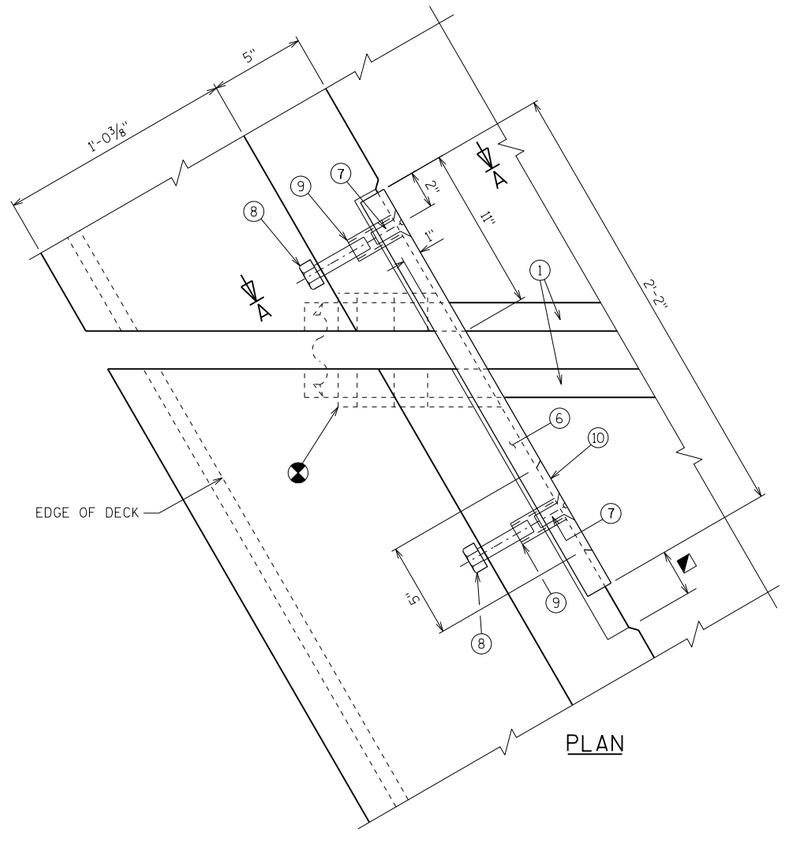
(10) 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.

⊗ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◥ JOINT OPENING DIMENSION ALONG SKEW PLUS 1/2".



SECTION B-B



PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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EXPANSION DEVICE - WINGS 1 & 4

SHEET 25 OF 31
660

8

8

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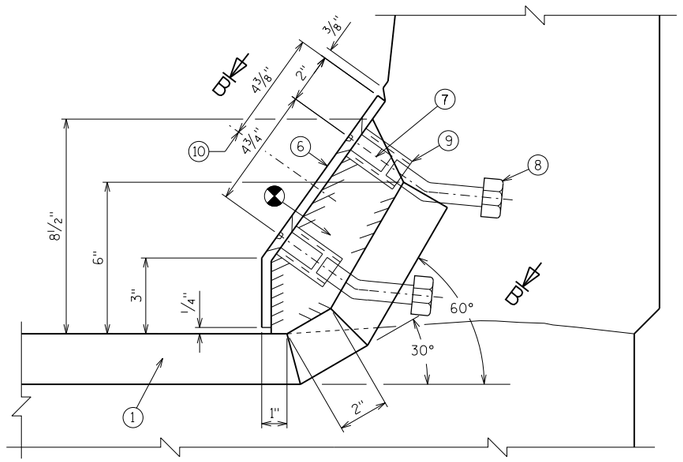
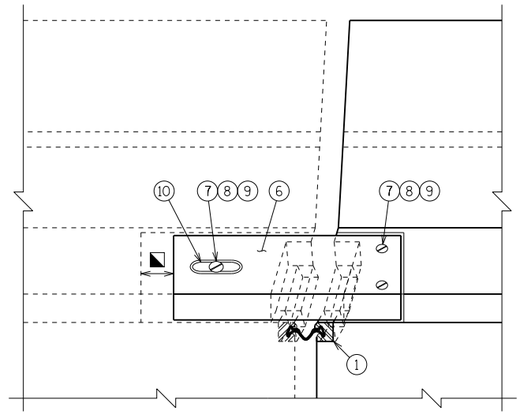
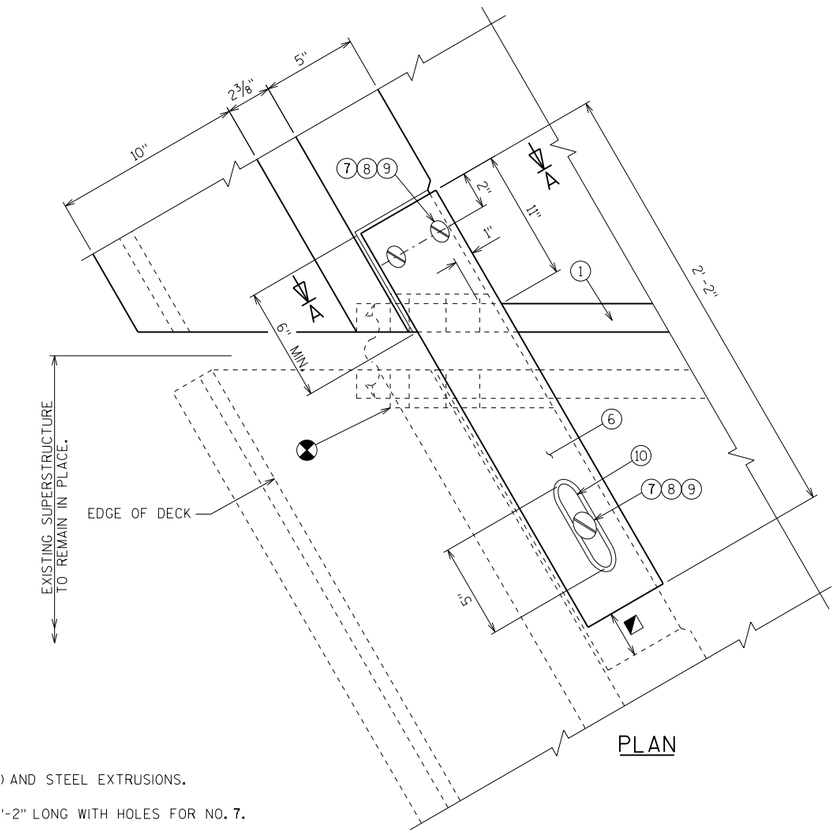


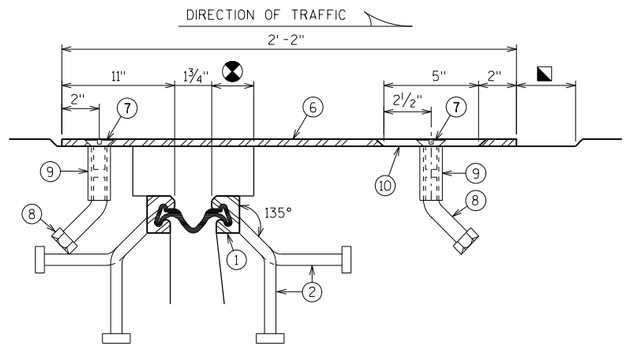
SECTION A-A



VIEW OF PARAPET PLATE FROM ROADWAY



PLAN



SECTION B-B

LEGEND

(1) NEOPRENE STRIP SEAL (4 - INCH) AND STEEL EXTRUSIONS.

(6) GALVANIZED PLATE 3/8" X 10" X 2'-2" LONG WITH HOLES FOR NO. 7.

(7) 3/4"Φ X 1 1/2" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLE. RECESS 1/16" BELOW PLATE SURFACE.

(8) 3/4"Φ X 4" GALVANIZED HEX HEAD BOLT. BEND 45°.

(9) 3/4"Φ X 2 1/4" GALVANIZED THREADED COUPLING.

(10) 1" X 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.

BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

JOINT OPENING DIMENSION ALONG SKEW PLUS 1/2".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

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EXPANSION DEVICE - WING 2

SHEET 26 OF 31
661

8

8

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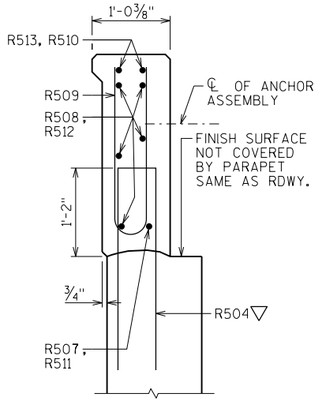
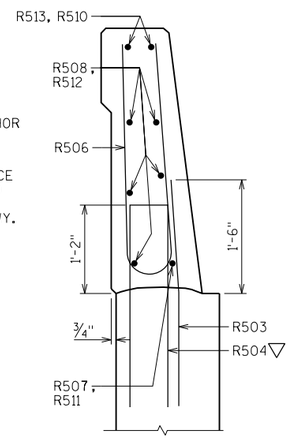
STATE PROJECT NUMBER

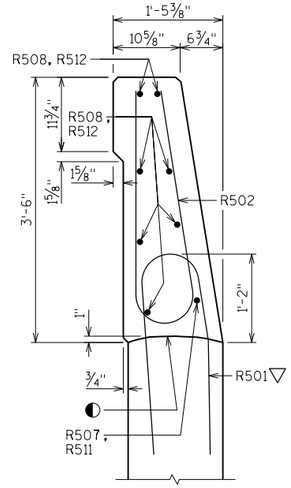
1204-08-74



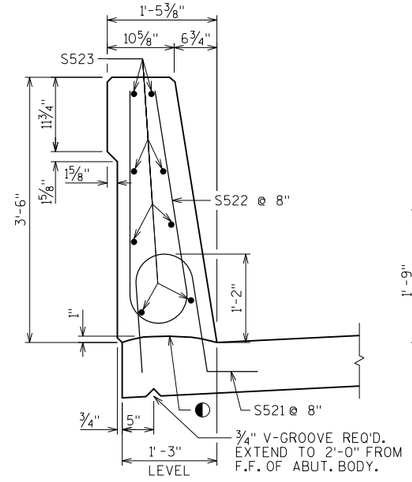
SECTION A-A



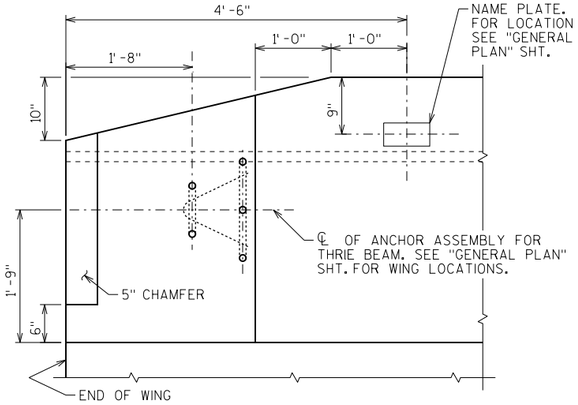
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON DECK



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR ABUTMENT PARAPETS

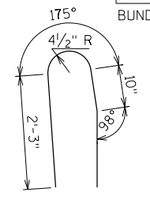
BAR MARK	COAT	WING 1	WING 4	LENGTH	BENT	BAR SERIES	LOCATION
TOTAL WEIGHT: WING 1 = 840 LBS; WING 4 = 730 LBS							
R501	X	27	18	5-10	X		PARAPET VERT.
R502	X	27	18	6-8	X		PARAPET VERT.
R503	X	12	12	3-0	X		PARAPET VERT.
R504	X	17	17	5-7	X		PARAPET VERT.
R505	X	5	5	6-5	X		PARAPET VERT.
R506	X	6	6	6-6	X		PARAPET VERT.
R507	X	1	---	25-7	X		PARAPET HORIZ.
R508	X	12	---	14-4			PARAPET HORIZ.
R509	X	6	6	5-5	X	⚠	PARAPET VERT.
R510	X	2	---	14-4	X		PARAPET HORIZ
R511	X	---	1	19-7	X		PARAPET HORIZ
R512	X	---	12	11-4			PARAPET HORIZ
R513	X	---	2	11-4	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.

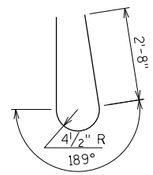
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"

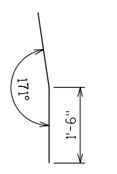
BUNDLE AND TAG EACH SERIES SEPARATELY.



R501

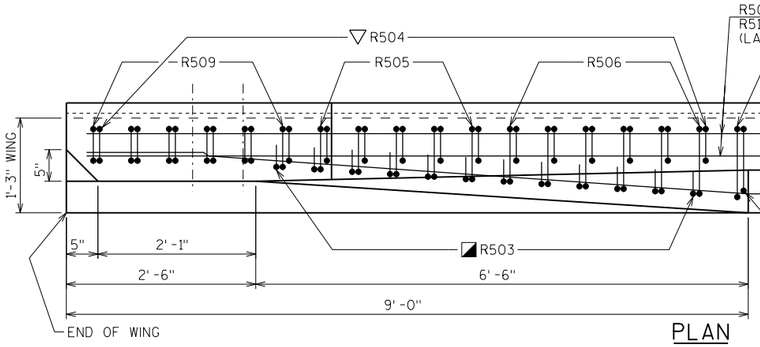


R502



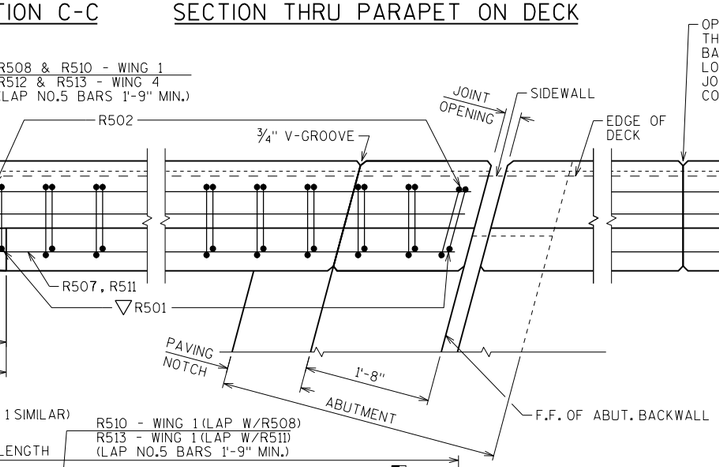
R503

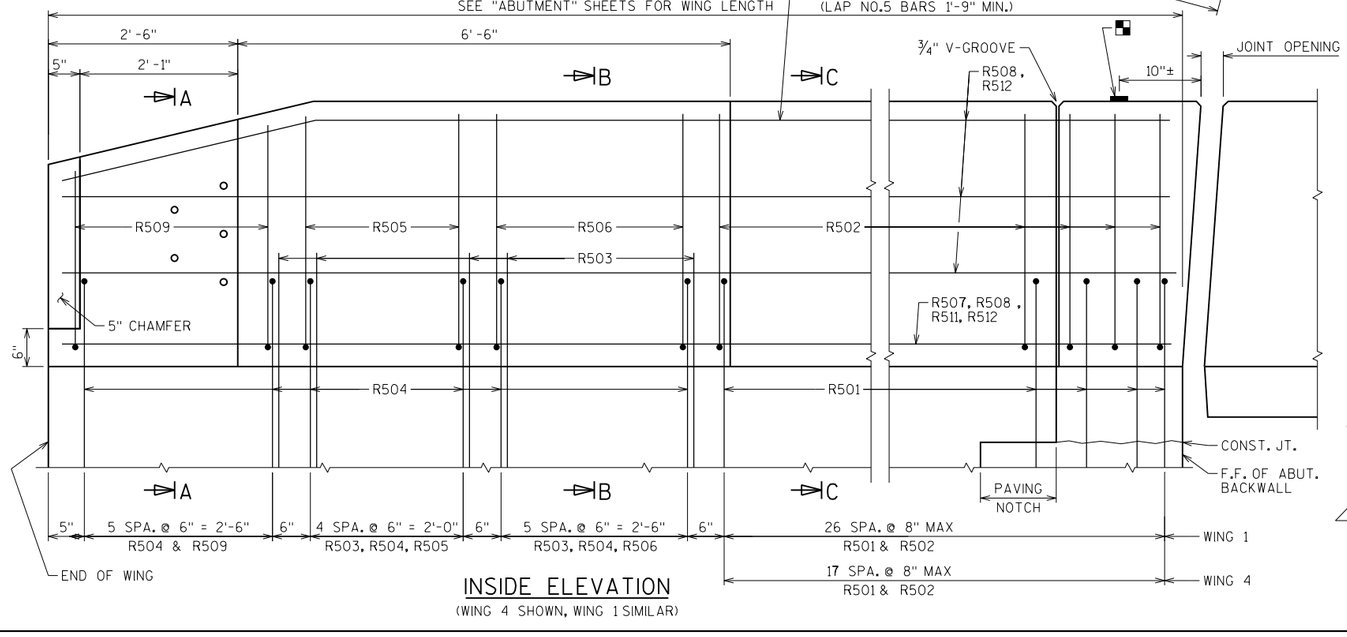
R504



PLAN

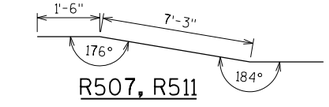
(WING 4 SHOWN, WING 1 SIMILAR)





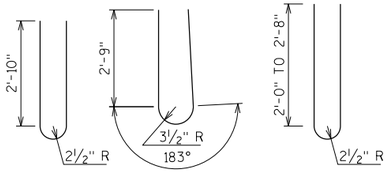
INSIDE ELEVATION

(WING 4 SHOWN, WING 1 SIMILAR)



R507, R511

R510, R513



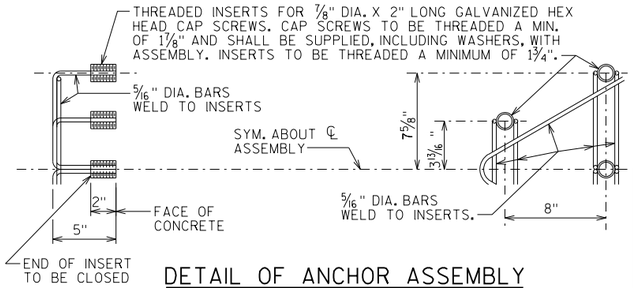
R505 R506 R509

BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.



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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

SINGLE SLOPE PARAPET 42SS

SHEET 27 OF 31
662

8

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PRINTER DRIVER: C:\ProgramData\Bentley\MicroStation CONNECT Edition\WorkSpaces\WisDOT Bridge MP Ver A\WorkSets\WisDOT Bridge\Plotdrv\AE_PDF_11 x 17.plt
PEN TABLE: C:\ProgramData\Bentley\MicroStation CONNECT Edition\WorkSpaces\WisDOT Bridge MP Ver A\WorkSets\WisDOT Bridge\Pen Tables\AE_WisDOT_Structure.tbl
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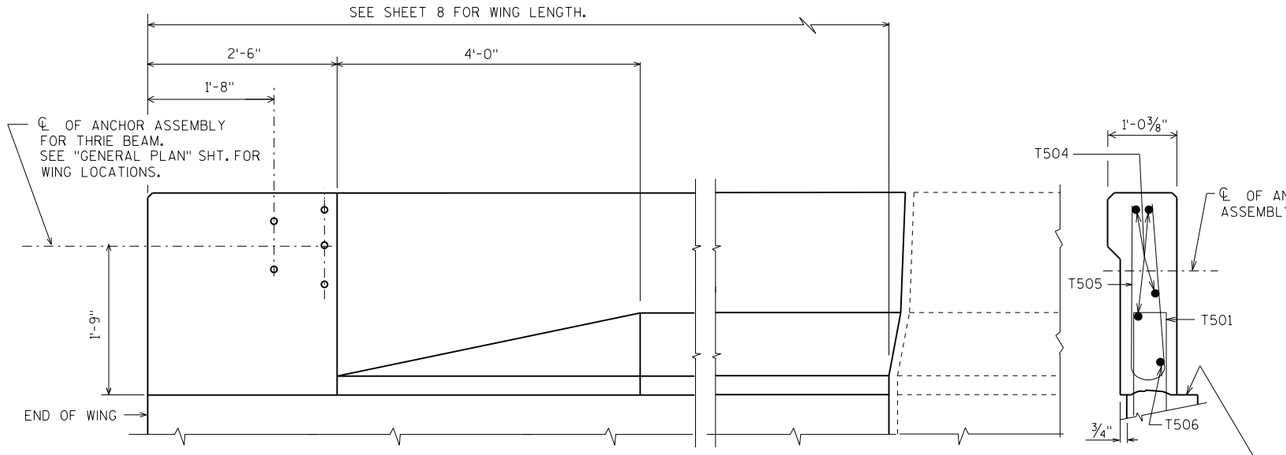
PLOT DATE: 11/14/2024 PLOT TIME: 5:42:01 PM BATCH PRINT SHEET 28 OF 30

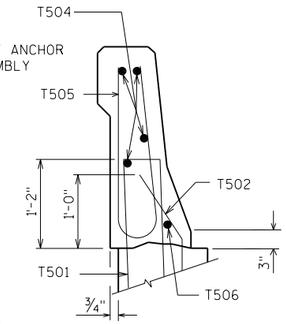
STATE PROJECT NUMBER

1204-08-74

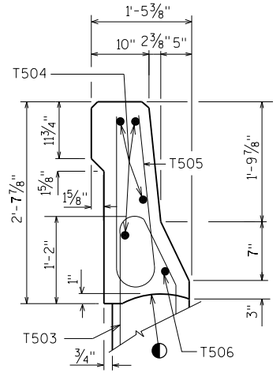


INSIDE ELEVATION - WING 2

SECTION A



SECTION B

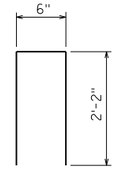


SECTION C

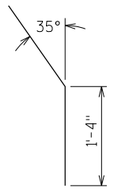
BILL OF BARS

FOR ABUTMENT PARAPETS

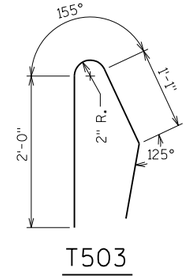
BAR MARK	COAT	WING 2	LENGTH	BENT	BAR SERIES	LOCATION
TOTAL WEIGHT = 470 LBS						
T501	X	14	4-7	X		PARAPET VERT.
T502	X	8	2-4	X		PARAPET VERT.
T503	X	20	4-7	X		PARAPET VERT.
T504	X	8	11-4			PARAPET HORIZ.
T505	X	34	4-10	X		PARAPET VERT.
T506	X	1	19-8	X		PARAPET HORIZ.



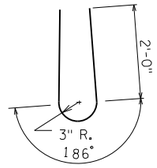
T501



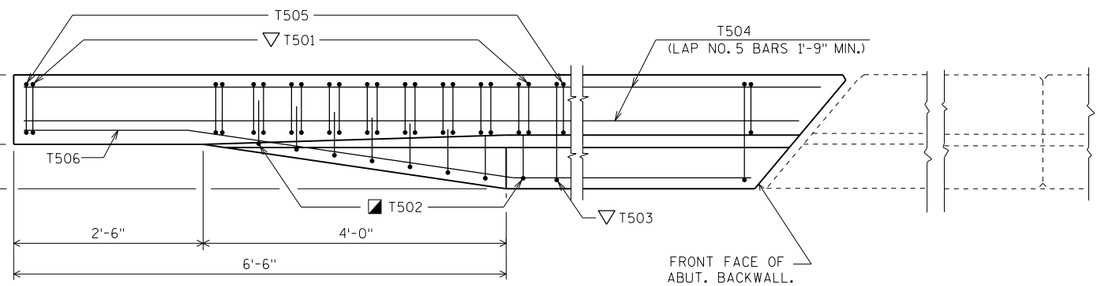
T502



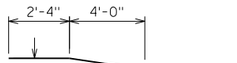
T503



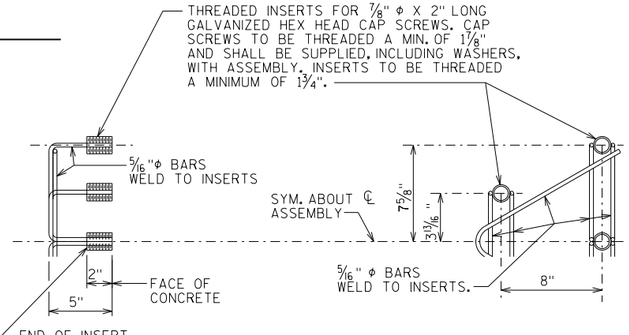
T505



PLAN - WING 2



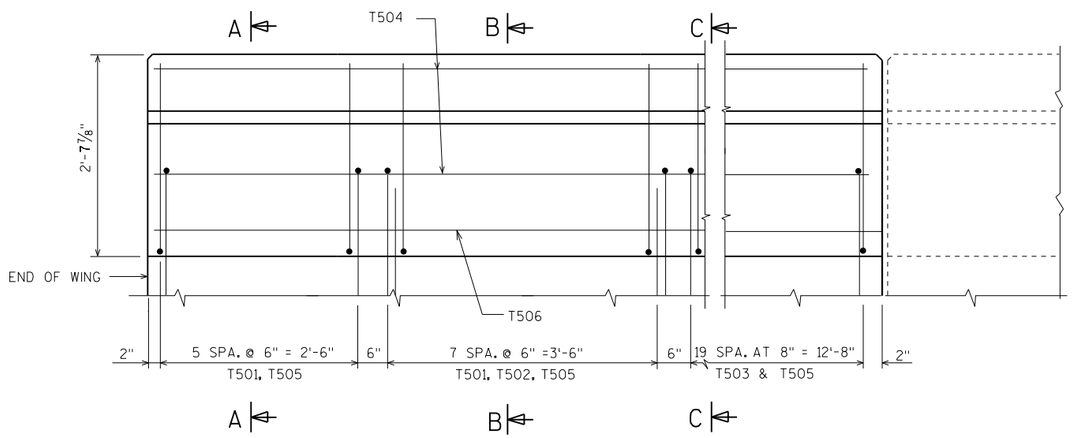
T506



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.



OUTSIDE ELEVATION - WING 2

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ T502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE T502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ T501 AND T503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

SLOPED FACE PARAPET 'LF'

SHEET 28 OF 31
663

8

8

PRINTER DRIVER: C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration\WorkSpaces\WisDOT Bridge MP Ver A\WorkSets\WisDOT Bridge\Plotdrv\AE_PDF_11 x 17.plt
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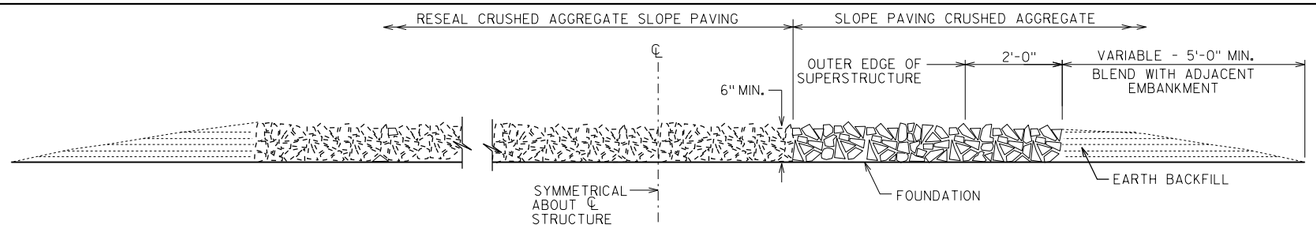
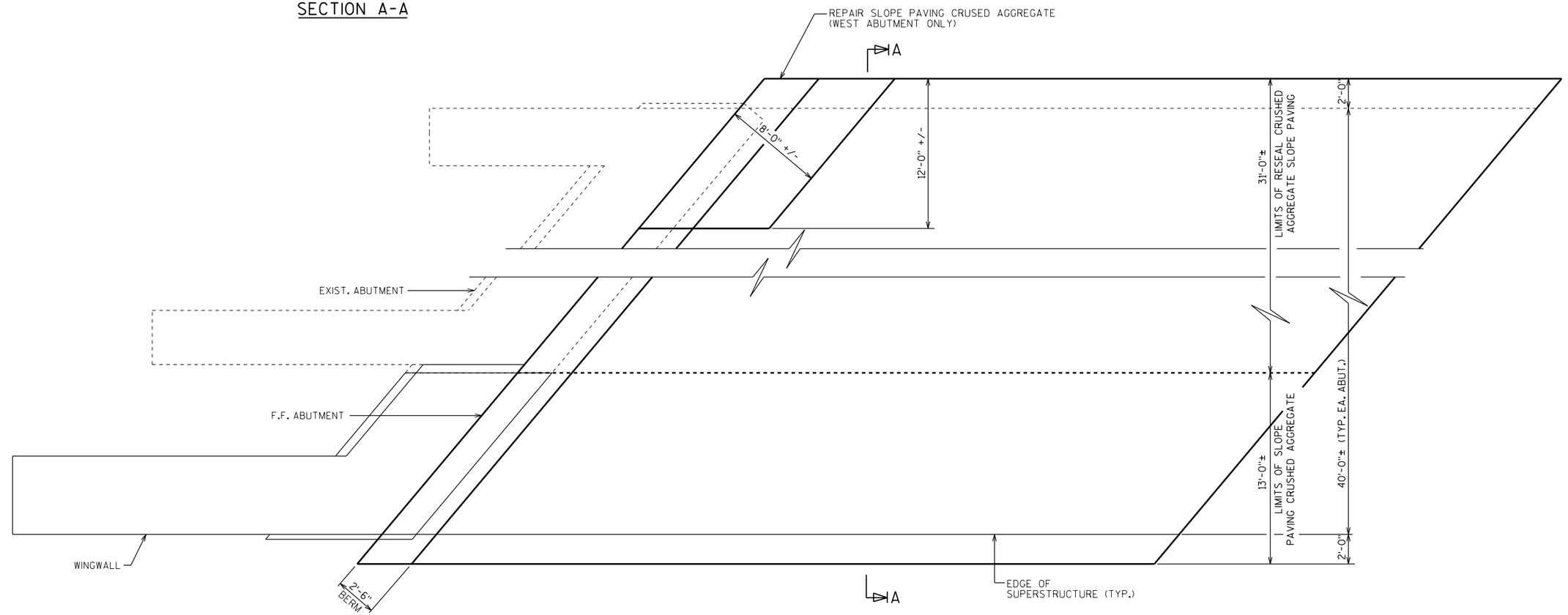
PLOT DATE: 11/14/2024 PLOT TIME: 5:42:02 PM BATCH PRINT SHEET 29 OF 30

STATE PROJECT NUMBER

1204-08-74

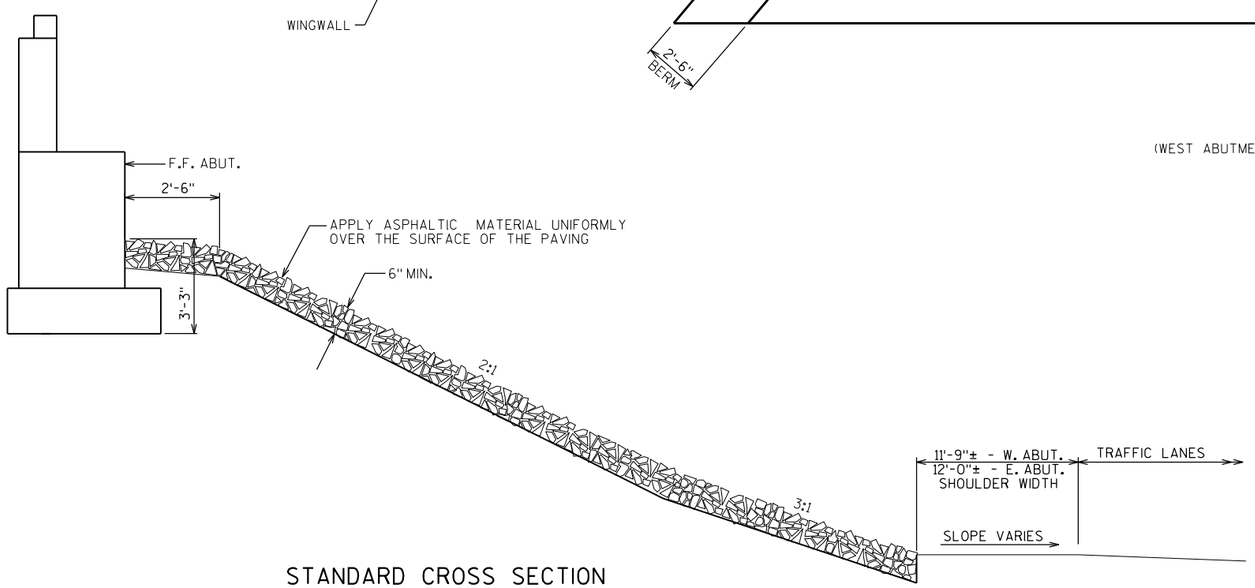


SECTION A-A



PLAN

(WEST ABUTMENT SHOWN, EAST ABUTMENT SIMILAR)



STANDARD CROSS SECTION

GENERAL NOTES

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

WOOD FORMS MAY BE LEFT IN PLACE WHEN OF A QUALITY ACCEPTABLE TO THE ENGINEER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

SLOPE PAVING CRUSHED AGGREGATE

SHEET 29 OF 31

664

8

8

PRINTER DRIVER: C:\ProgramData\Bentley\MicroStation CONNECT Edition\WorkSpaces\WisDOT Bridge MP Ver A\WorkSets\WisDOT Bridge\Plotdrv\AE_PDF.11 x 17.plt
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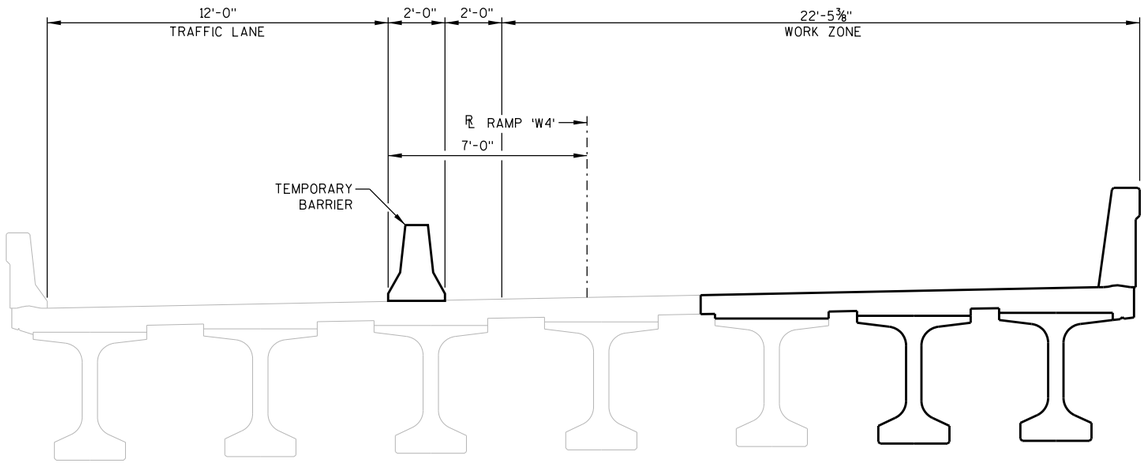
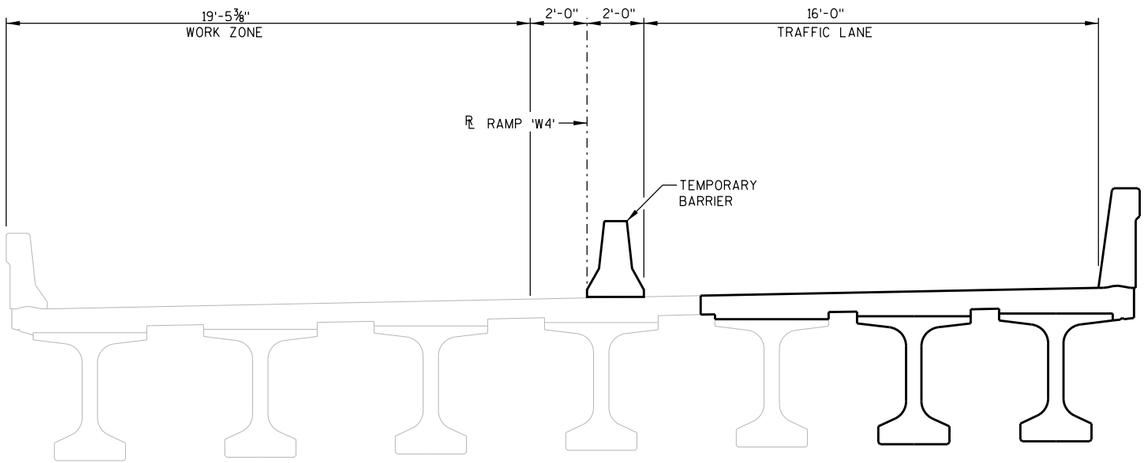
PLOT DATE: 11/14/2024 PLOT TIME: 5:42:08 PM
BATCH PRINT SHEET 30 OF 30



STAGE 3A & 3B TYPICAL SECTION
(LOOKING EAST)



STAGE 4 TYPICAL SECTION
(LOOKING EAST)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

CONSTRUCTION STAGING

SHEET 30 OF 31
665

PRINTER DRIVER: C:\ProgramData\Bentley\MicroStation CONNECT Edition\WorkSpaces\WisDOT Bridge MP Ver A\WorkSets\WisDOT Bridge\Plotdrv\AE_PDF_11 x 17.plt
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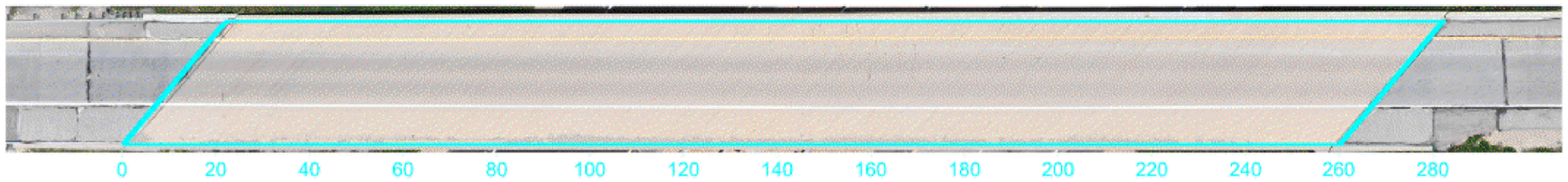
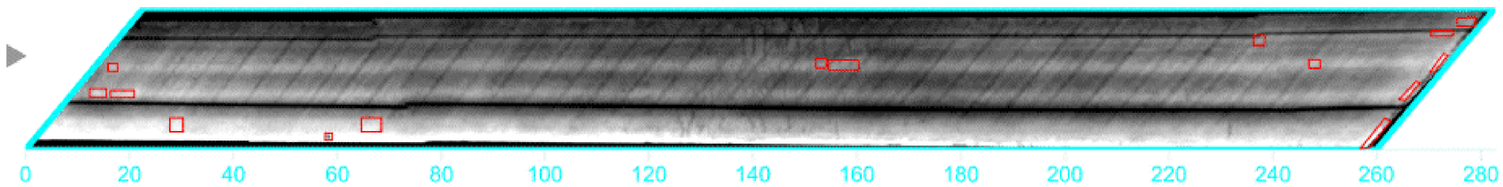
PLOT DATE: 11/14/2024 PLOT TIME: 5:44:13 PM BATCH PRINT SHEET 1 OF 1

STATE PROJECT NUMBER

1204-08-74





Orientation & Scale	Survey Information	Mapping Legend	Quantity Summary	ft²	%	General Information
1-in = 30-ft 0 30	Level 0 - Fixed Wing Aerial Scanned: 06/09/2024 01:54 PM ▶ Direction of Traffic Infrared Data (Temperature, F) Average 94.5 Standard Deviation 1.6	Delamination detected by IR; Concrete Patching; Asphalt Patching; Debonding; Spalling; Area Not Analyzed	8000 – Wearing Surface (Bare)	7020	100	**B130573** RAMP W-4 over USH 18/151
			Delaminations	82	1.2	Sheet 1 of 1 Analyzed By: RB Completed: 09/30/2024
			Debonding	0	0.0	
			Spalling	0	0.0	
			Concrete Patching	0	0.0	
			Asphalt Patching	0	0.0	
			Area Not Analyzed	0	0.0	

INFRASENSE

Note: The delamination % was calculated as (Delamination Area) / (Wearing Surface Area - Area Not Analyzed). The total deck area based on imagery is 7020 ft ².

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-13-573

DRAWN BY MEO | PLANS CK'D. MSK

IR DECK SCAN

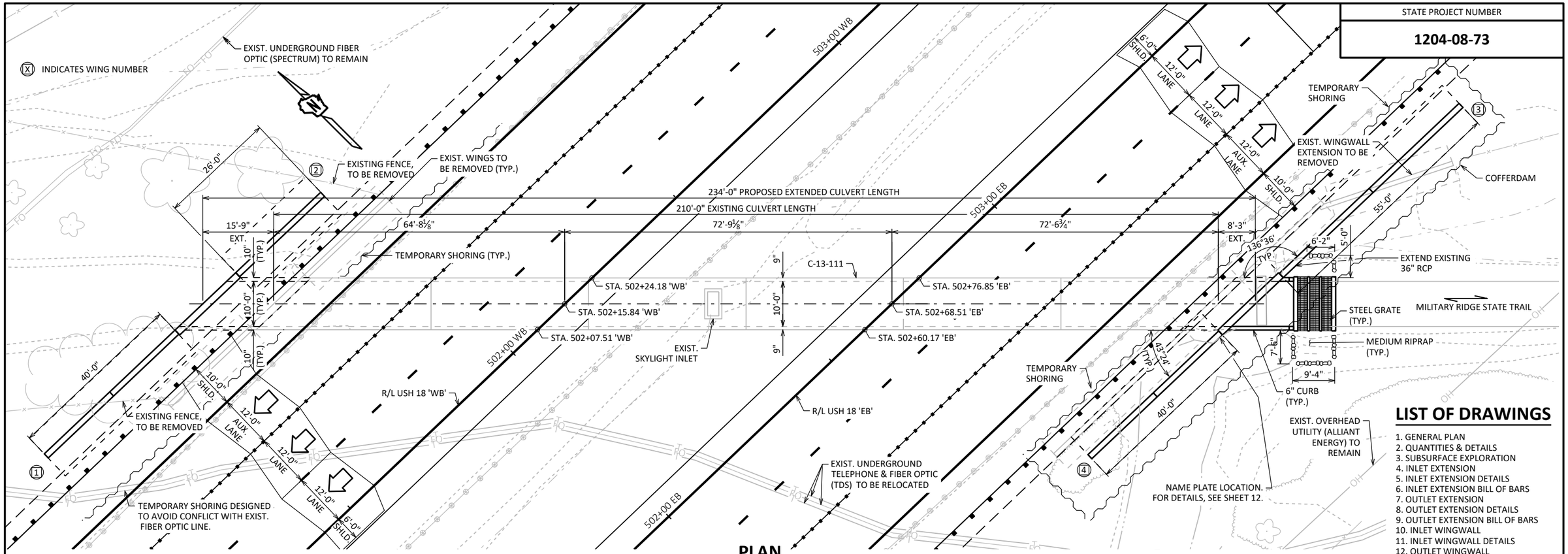
SHEET 31 OF 31
666

8

8

STATE PROJECT NUMBER

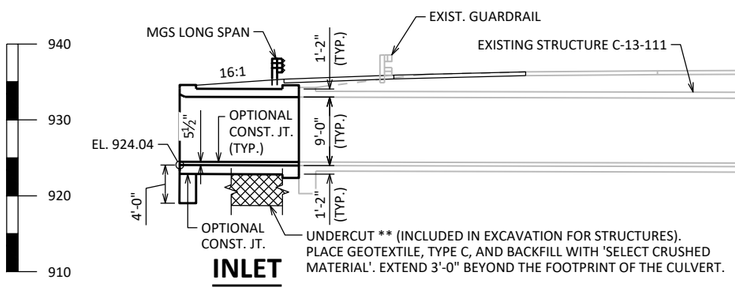
1204-08-73



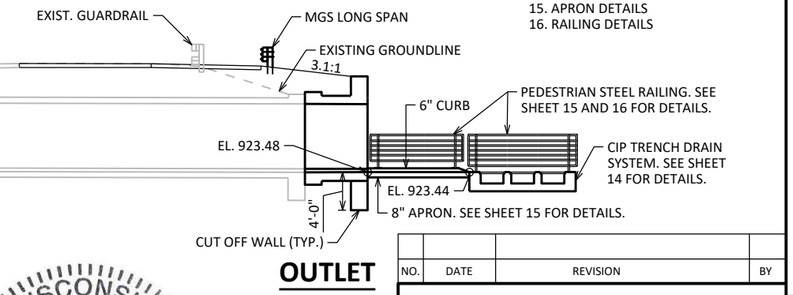
PLAN

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES & DETAILS
3. SUBSURFACE EXPLORATION
4. INLET EXTENSION
5. INLET EXTENSION DETAILS
6. INLET EXTENSION BILL OF BARS
7. OUTLET EXTENSION
8. OUTLET EXTENSION DETAILS
9. OUTLET EXTENSION BILL OF BARS
10. INLET WINGWALL
11. INLET WINGWALL DETAILS
12. OUTLET WINGWALL
13. OUTLET WINGWALL DETAILS
14. TRENCH DRAIN DETAILS
15. APRON DETAILS
16. RAILING DETAILS



INLET



OUTLET

SECTION

** UNDERCUT 5'-3" ± AT INLET (REMOVE LEAN CLAY TOPSOIL); UNDERCUT 1'-0" AT OUTLET (OUTLET INCLUDES BOX CULVERT EXTENSION, APRON, AND TRENCH DRAIN).

DESIGN DATA (ONLY FOR EXTENSION)

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: 1.14
OPERATING RATING: 1.48
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

EARTH LOAD:

DESIGNED FOR 1.5 TO 3.0 FT OF FILL.

MATERIAL PROPERTIES:

CONCRETE MASONRY ——— f'_c = 3,500 PSI
BAR STEEL REINFORCEMENT ——— f_y = 60,000 PSI

TRAFFIC DATA

FEATURE ON (USH 18/USH 151):

ADT = 25,400 (2024)
ADT = 43,200 (2044)
R.D.S. = 70 MPH

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 CULVERT C-13-111" SHALL BE THE EXISTING GROUNDLINE.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING THE FULL RETAINING WING WALLS.

THE QUANTITY FOR BACKFILL STRUCTURES IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

SHEET MEMBRANE WATERPROOFING REQUIRED ON THE WALLS AND ACROSS TOP SLAB FOR ENTIRE CULVERT LENGTH. EXTEND 9" MIN. ONTO EXISTING CULVERT ENDS AND 6" MIN. BELOW THE TOP OF BOTTOM SLAB.

LOCATE NAME PLATE ON NEAREST RIGHT WING TRAVELING UP STATION, FACE NAME PLATE UP STATION.

THE CONTRACTOR MAY ELECT TO SUBSTITUTE #1 OR #2 CONCRETE COARSE AGGREGATE OR OTHER GRANULAR MATERIAL AS APPROVED BY THE FIELD ENGINEER, IN LIEU OF THE SELECT CRUSHED MATERIAL, TO BE UTILIZED AS A CONSTRUCTION PLATFORM FOR THE BOX. THE CONTRACTOR IS RESPONSIBLE FOR BASE STABILITY WITH ANY SUBSTITUTED MATERIAL.

THE EXISTING STRUCTURE (C-13-0111) IS A SINGLE CELL, 10' SPAN X 9' RISE X 210' LONG, CONCRETE BOX CULVERT IS TO BE PARTIALLY REMOVED AND EXTENDED 8'-3" TO THE SOUTH AND 15'-9" TO THE NORTH.

WISCONSIN
MATTHEW S. KRIPPNER
E-42470
VERONA
WI
PROFESSIONAL ENGINEER

11/18/2024

STRUCTURE DESIGN CONTACT:

BUREAU OF STRUCTURES:
AARON BONK (608) 261-0261

CONSULTANT:
MATTHEW KRIPPNER (608) 828-8123

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/18/24
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-13-111

USH 18/151 OVER MILITARY RIDGE STATE TRAIL

COUNTY	TOWN
DANE	VERONA

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JAC	MSK	JAC	MSK

GENERAL PLAN

SHEET 1 OF 16
667

SCALE =

I.D. 1204-08-03

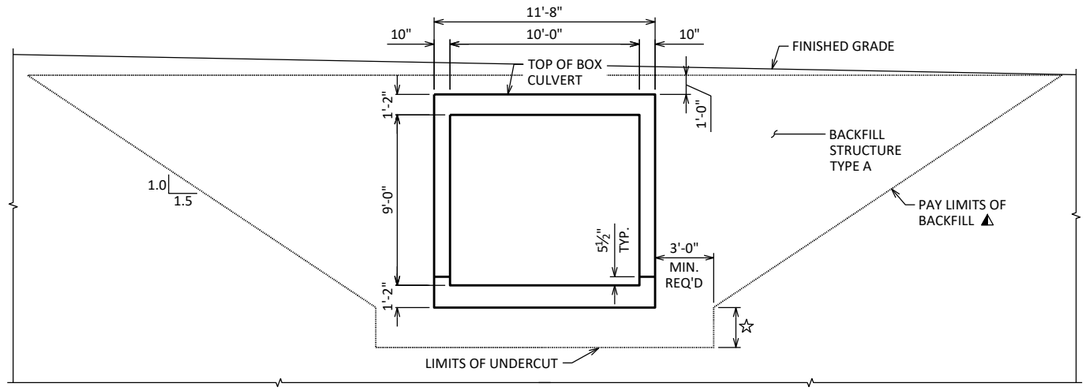
DATE: NOV 2024

STATE PROJECT NUMBER

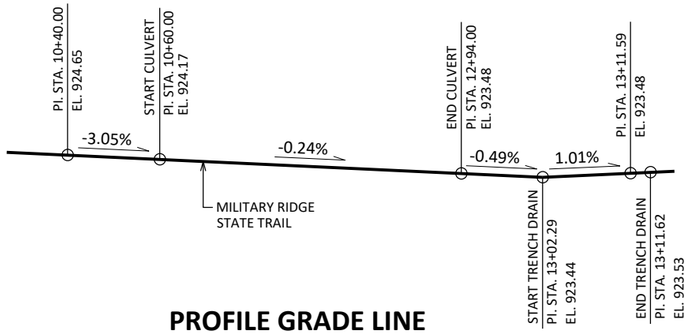
1204-08-73

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEM	UNIT	TOTALS
203.0220	REMOVING STRUCTURE C-13-0111	EACH	1
206.2001	EXCAVATION FOR STRUCTURES CULVERTS C-13-0111	EACH	1
206.5001	COFFERDAMS C-13-0111	EACH	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	1,640
312.0110	SELECT CRUSHED MATERIAL	TON	610
502.4205	ADHESIVE ANCHORS NO. 5 BAR	EACH	80
504.0100	CONCRETE MASONRY CULVERTS	CY	300
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	19,900
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	18,010
511.1200	TEMPORARY SHORING C-13-0111	SF	3,370
513.2001	RAILING PIPE	LF	35
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	43
516.0610.S	SHEET MEMBRANE WATERPROOFING C-13-111	SY	90
606.0200	RIPRAP MEDIUM	CY	9
645.0105	GEOTEXTILE TYPE C	SY	670
SPV.0060.505	TRENCH DRAIN AND GRATE	EACH	1
	NON-BID ITEMS		
	FILLER	SIZE	3/4"



TYPICAL SECTION THRU BOX CULVERT EXTENSION



PROFILE GRADE LINE

PROFILE FOR MILITARY RIDGE STATE TRAIL THROUGH CULVERT.

NOTES

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-13-111" SHALL BE THE EXISTING GROUNDLINE.

THE QUANTITY FOR BACKFILL STRUCTURES IS CALCULATED BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND THE WINGWALLS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

GROUNDWATER LEVEL IS REQUIRED TO BE LOWERED TO THE DESIGN SUBGRADE ELEVATION PRIOR TO EXCAVATION OF THE SOIL. THE FINE SAND ENCOUNTERED AT BORING "STRUC-12" IS ANTICIPATED TO BE SUBJECT TO "BOILING" IF WATER IS NOT LOWERED PRIOR TO EXCAVATION. THIS IS ALSO RECOMMENDED FOR THE SOIL ENCOUNTERED AT BORING "STRUC-13" AS THE SOIL WOULD BE SUBJECT TO LOOSENING. CONTRACTOR IS REQUIRED TO PROVIDE A DEWATERING PLAN. ALL WORK ASSOCIATED WITH DEWATERING TO BE INCIDENTAL TO STRUCTURE EXCAVATION BID ITEM.

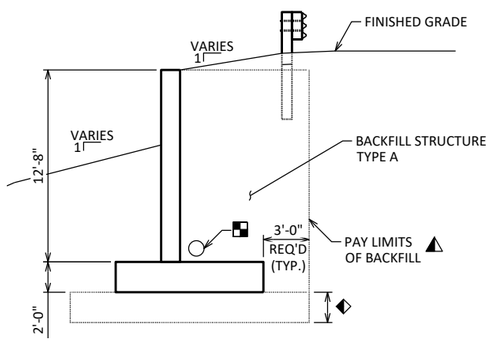
LEGEND

◭ 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.

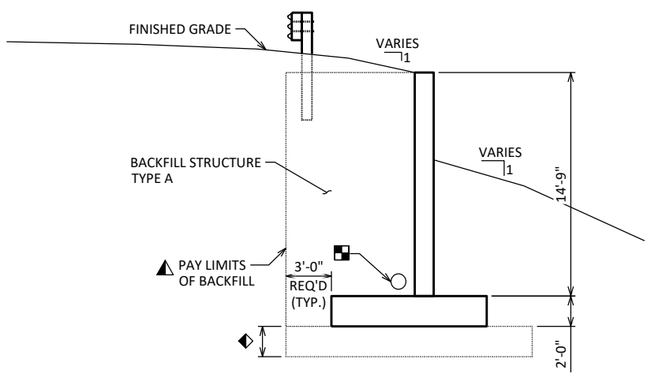
☆ UNDERCUT 5'-3" ± AT INLET (REMOVE LEAN CLAY TOPSOIL); REMOVE 1'-0" AT OUTLET. EXCAVATION FOR UNDERCUT IS TO BE INCLUDED IN "EXCAVATION FOR STRUCTURES CULVERTS C-13-0111". PLACE "GEOTEXTILE FABRIC TYPE C" AND BACKFILL WITH SELECT CRUSHED MATERIAL. EXTEND 3'-0" BEYOND THE FOOTPRINT OF THE CULVERT. FOR THE 5'-3" UNDERCUT, ADDITIONALLY EXTEND HORIZONTAL LIMITS OF SELECT CRUSHED MATERIAL AT A 1:1 SLOPE.

◆ UNDERCUT 2'-0" AT FOOTINGS FOR ALL RETAINING WALLS. EXCAVATION FOR UNDERCUT IS TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE FABRIC TYPE C" AND BACKFILL WITH SELECT CRUSHED MATERIAL. EXTEND 3'-0" BEYOND THE FOOTPRINT OF THE WALL FOOTINGS.



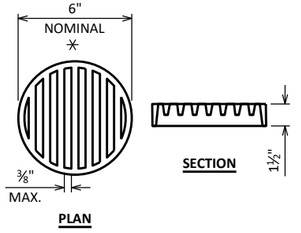
TYPICAL SECTION THRU INLET RETAINING WALL

LOOKING EAST



TYPICAL SECTION THRU OUTLET RETAINING WALL

LOOKING EAST



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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

QUANTITIES & DETAILS

SHEET 2 OF 16

668

SCALE =

8

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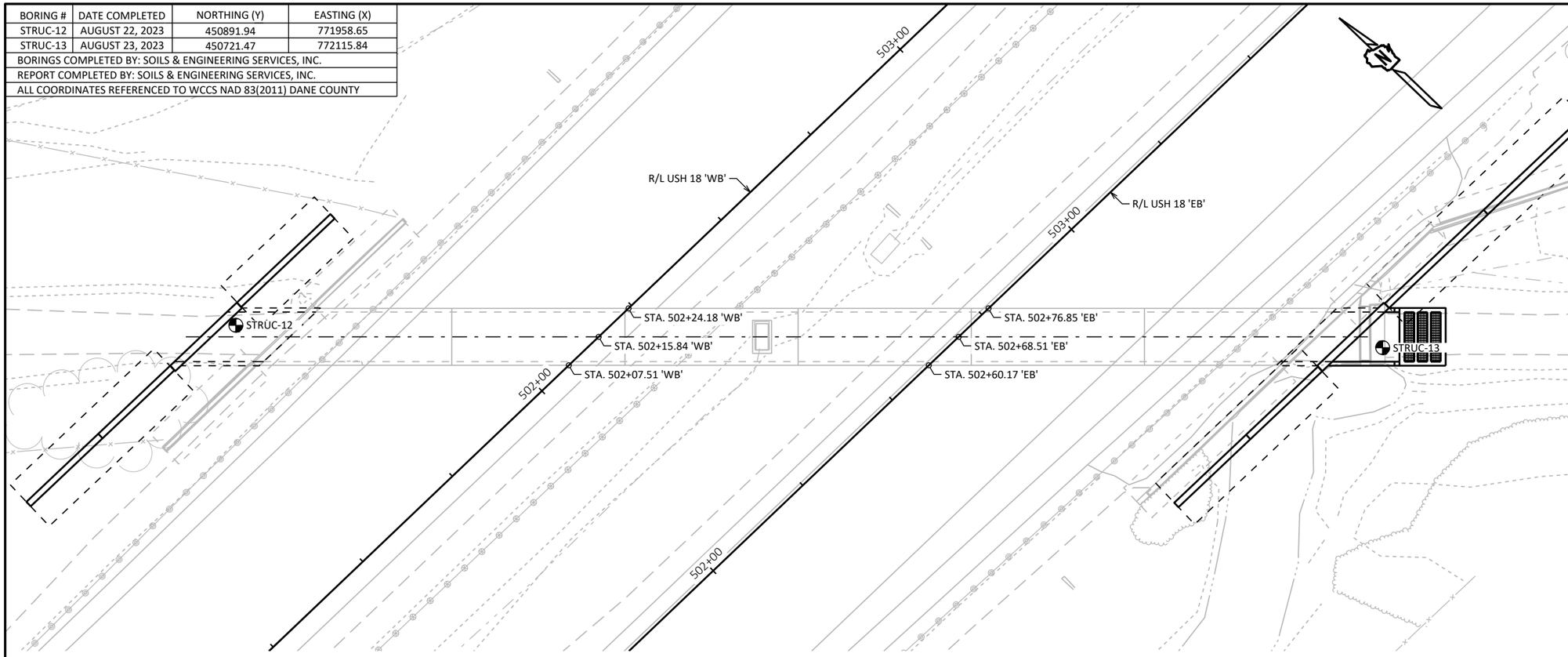
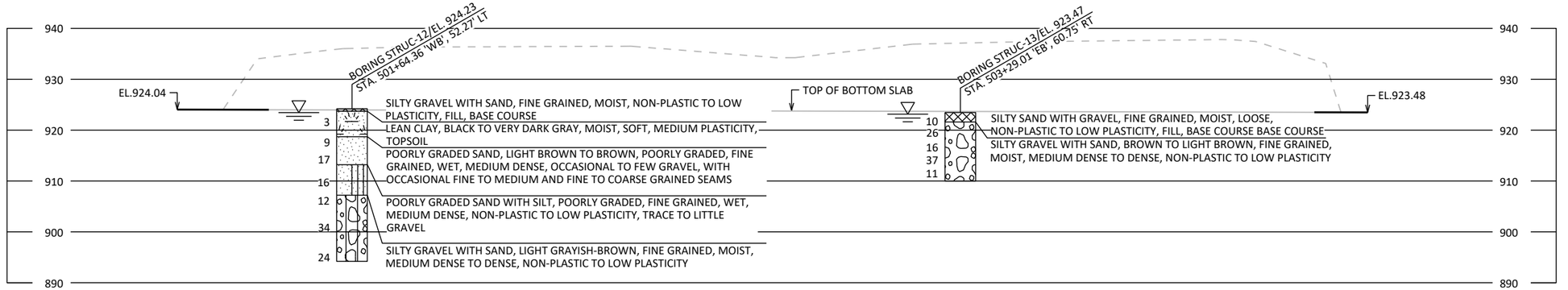
BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
STRUC-12	AUGUST 22, 2023	450891.94	771958.65
STRUC-13	AUGUST 23, 2023	450721.47	772115.84
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(2011) DANE COUNTY			





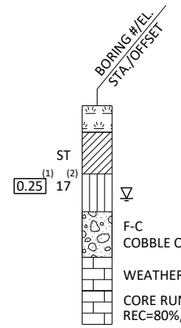
STATE PROJECT NUMBER

1204-08-73

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

STRUCTURE C-13-111

DRAWN BY DCH | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 3 OF 16

669

SCALE =

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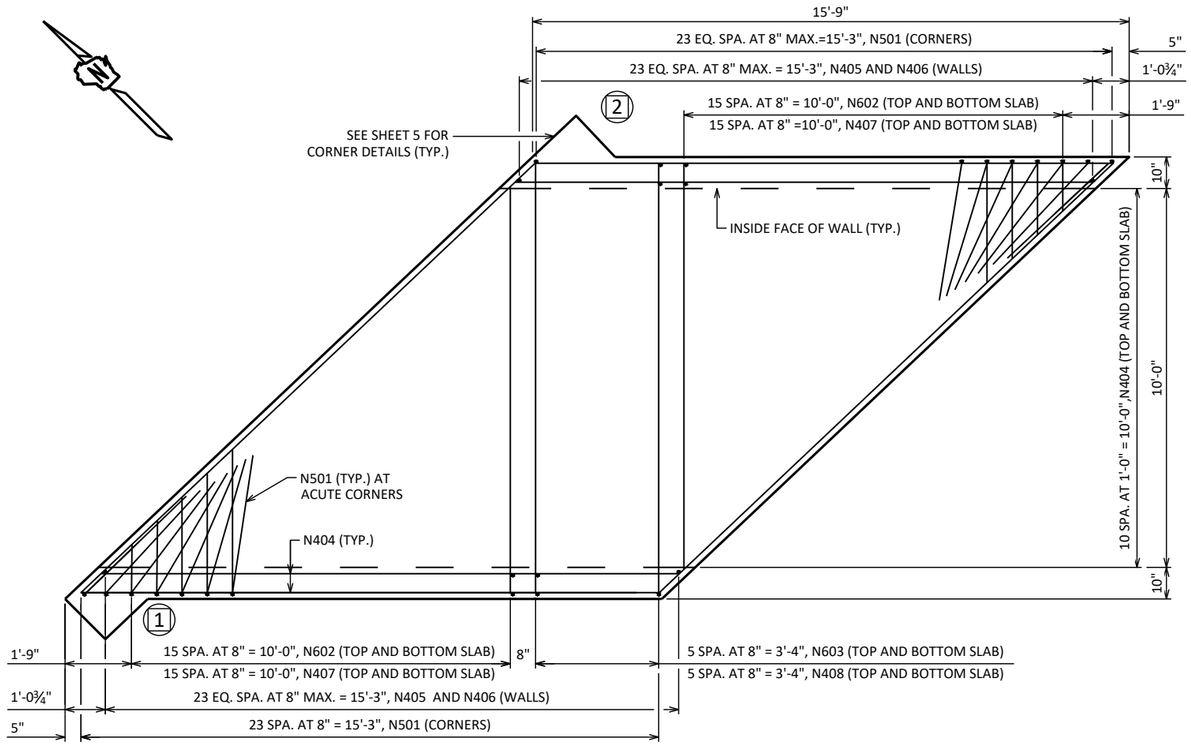
8

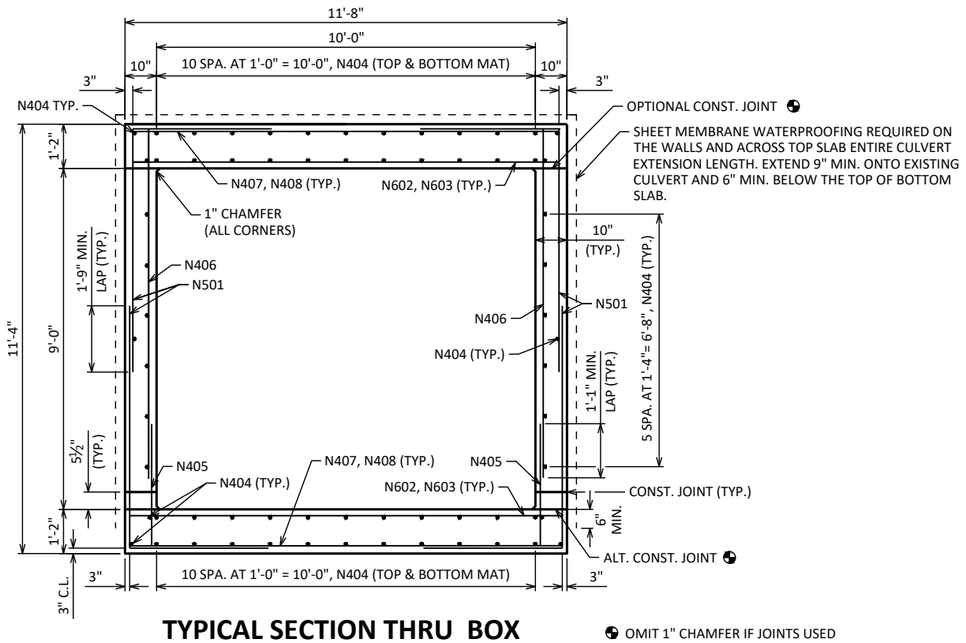
STATE PROJECT NUMBER

1204-08-73



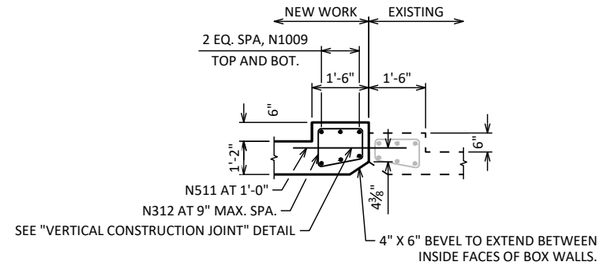
PLAN

APRON AND HEADER NOT SHOWN FOR CLARITY

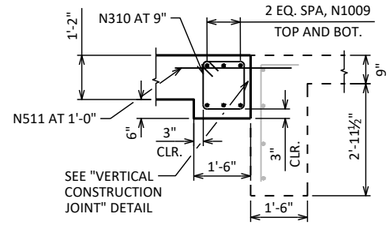


TYPICAL SECTION THRU BOX

OMIT 1" CHAMFER IF JOINTS USED



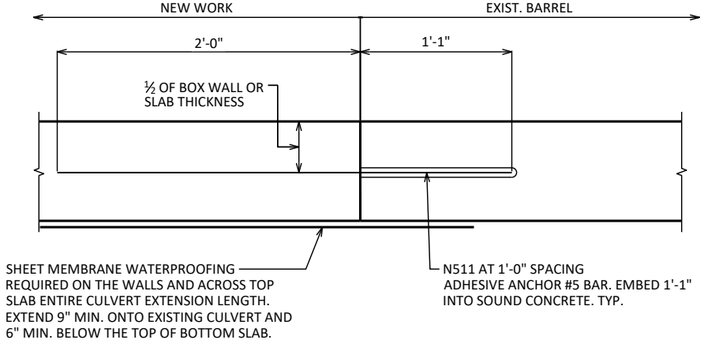
TOP SLAB



BOTTOM SLAB

SECTION THRU HEADER

DETAILS FOR INTERNAL HEADER CONNECTION BETWEEN EXISTING CULVERT AND PROPOSED EXTENSION



VERTICAL CONSTRUCTION JOINT

TYPICAL WALLS AND SLABS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

INLET EXTENSION

SHEET 4 OF 16

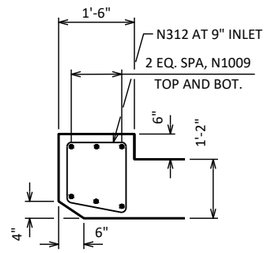
670

8

8

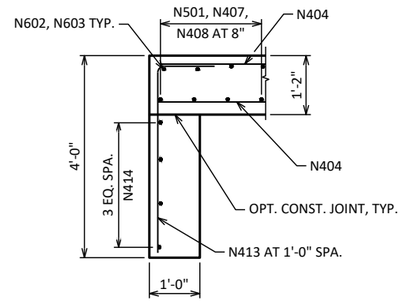
STATE PROJECT NUMBER

1204-08-73



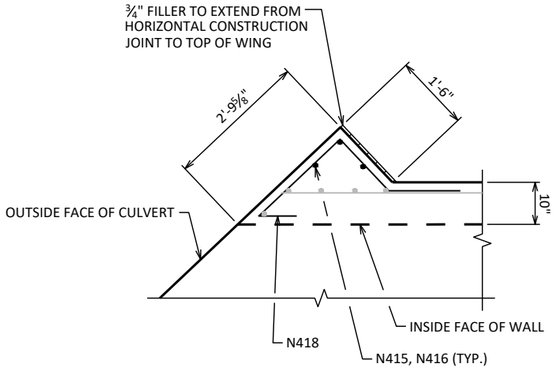
EXTERNAL HEADER

NORTH END OF EXTENSION



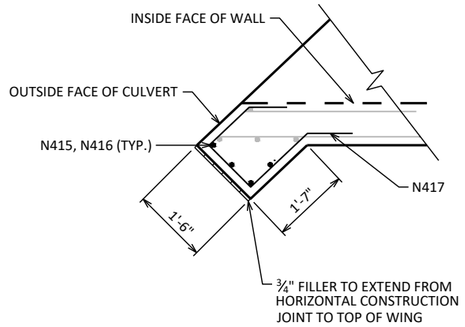
CUT-OFF WALL

NORTH END OF EXTENSION



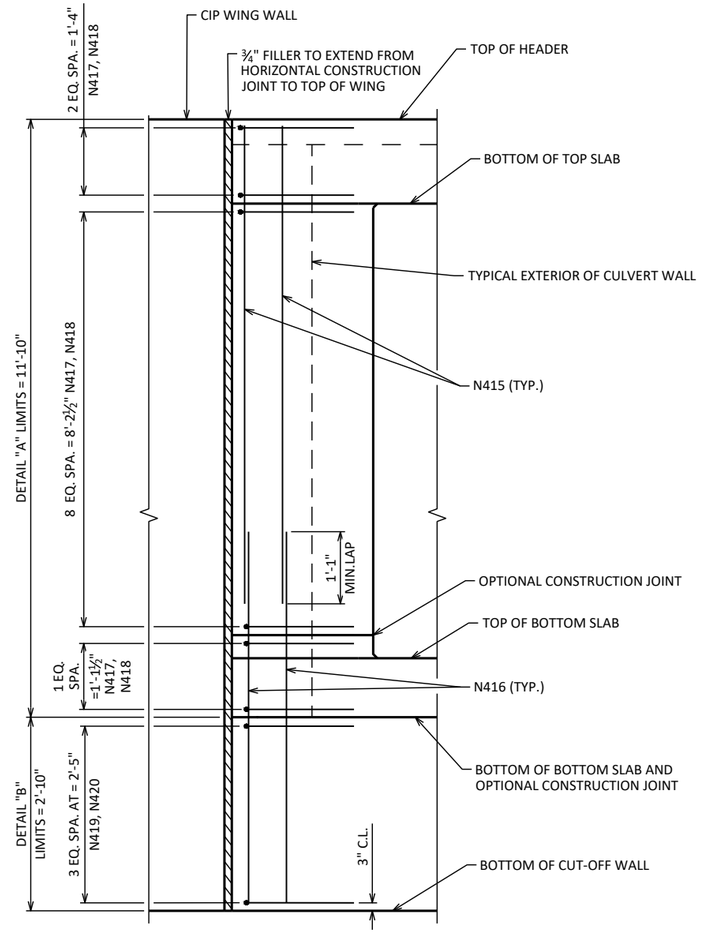
CORNER 2 DETAIL A

FROM TOP OF HEADER TO BOTTOM OF BOTTOM SLAB



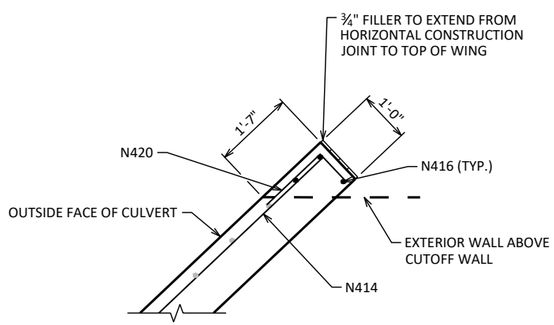
CORNER 1 DETAIL A

FROM TOP OF HEADER TO BOTTOM OF BOTTOM SLAB



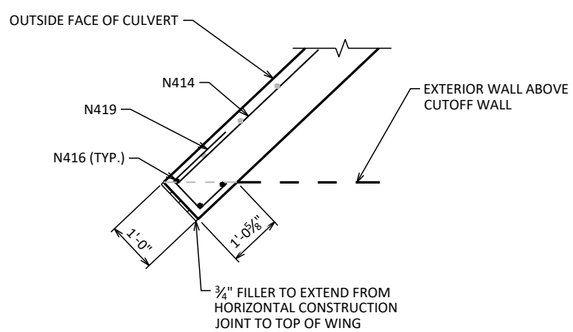
TYPICAL SECTION OF CORNERS

BOX REINFORCEMENT NOT SHOWN FOR CLARITY.
REINFORCEMENT 2" C.L. UNLESS SPECIFIED OTHERWISE.
LOOKING NORMAL TO CULVERT OPENING.
CORNER 2 SHOWN, CORNER 1 SIMILAR.



CORNER 2 DETAIL B

CUTOFF WALL BELOW BOTTOM OF BOTTOM SLAB



CORNER 1 DETAIL B

CUTOFF WALL BELOW BOTTOM OF BOTTOM SLAB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

INLET EXTENSION DETAILS

SHEET 5 OF 16

671

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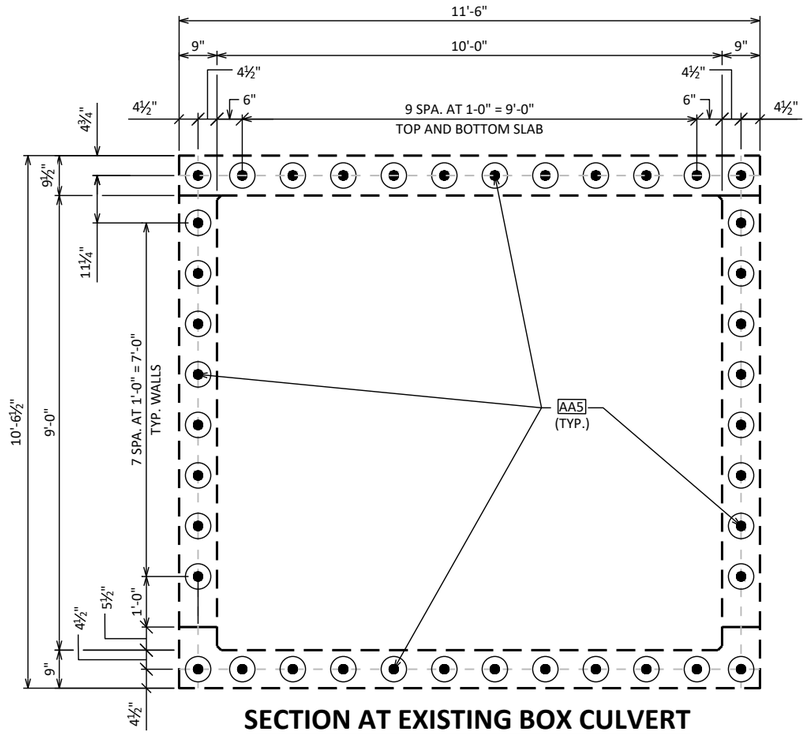
8

STATE PROJECT NUMBER

1204-08-73



SECTION AT EXISTING BOX CULVERT

AA5 ADHESIVE ANCHORS NO. 5 BARS, EMBED 1'-1". TOTAL NUMBER OF REQUIRED AT CULVERT = 40. (USE N511 BARS WITH ANCHORS).

(SHOWING EXISTING BOX CULVERT)

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

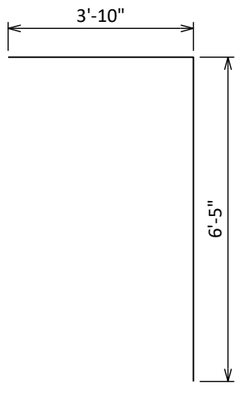
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 5150	
N501	96	10-1	X		CORNERS	VERT.
N602	64	6-0		◭	TOP AND BOTTOM SLAB	TRANS.
N603	12	11-4			TOP AND BOTTOM SLAB	TRANS.
N404	66	15-3			WALLS AND SLABS	LONGIT.
N405	48	2-7			DOWEL	VERT.
N406	48	9-6			WALL	VERT.
N407	64	6-0		◭	TOP SLAB	TRANS.
N408	12	11-4			TOP SLAB	TRANS.
N1009	18	18-3			HEADER	TRANS.
N310	17	5-7	X		TIE BAR HEADER	STIRRUP
N511	40	3-1			ADHESIVE ANCHORS	LONGIT.
N312	34	6-2	X		TIE BAR HEADER	STIRRUP
N413	13	4-6	X		CUT-OFF WALL	VERT.
N414	4	18-2			CUT-OFF WALL	TRANS.
N415	7	10-0			CORNER 1 & 2 WALL	VERT.
N416	6	5-5			CORNER 1 & 2 WALL/APRON	VERT.
N417	14	6-5	X		CORNER 1 - HEADER, SLABS, AND WALLS	HORIZ.
N418	14	6-4	X		CORNER 2 - HEADER, SLABS, AND WALLS	HORIZ.
N419	4	3-0	X		CORNER 1 - APRON	HORIZ.
N420	4	2-1	X		CORNER 2 - APRON	HORIZ.

◭ LENGTH SHOWN IS AN AVERAGE LENGTH FOR USE OF CALCULATING BAR WEIGHT ONLY, SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

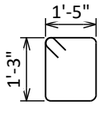
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
N602	4 SETS OF 16	1'-3" TO 10'-9"
N407	4 SETS OF 16	1'-3" TO 10'-9"

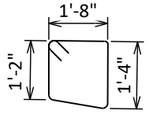
TAG AND BUNDLE EACH SERIES SEPARATELY



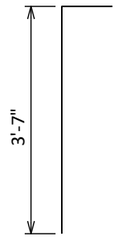
N501



N310



N312



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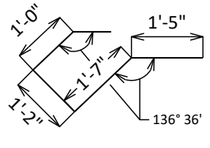

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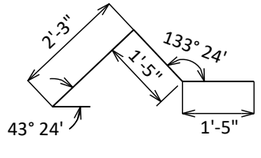
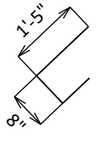


N418



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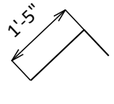


N420

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

INLET EXTENSION BILL OF BARS

SHEET 6 OF 16

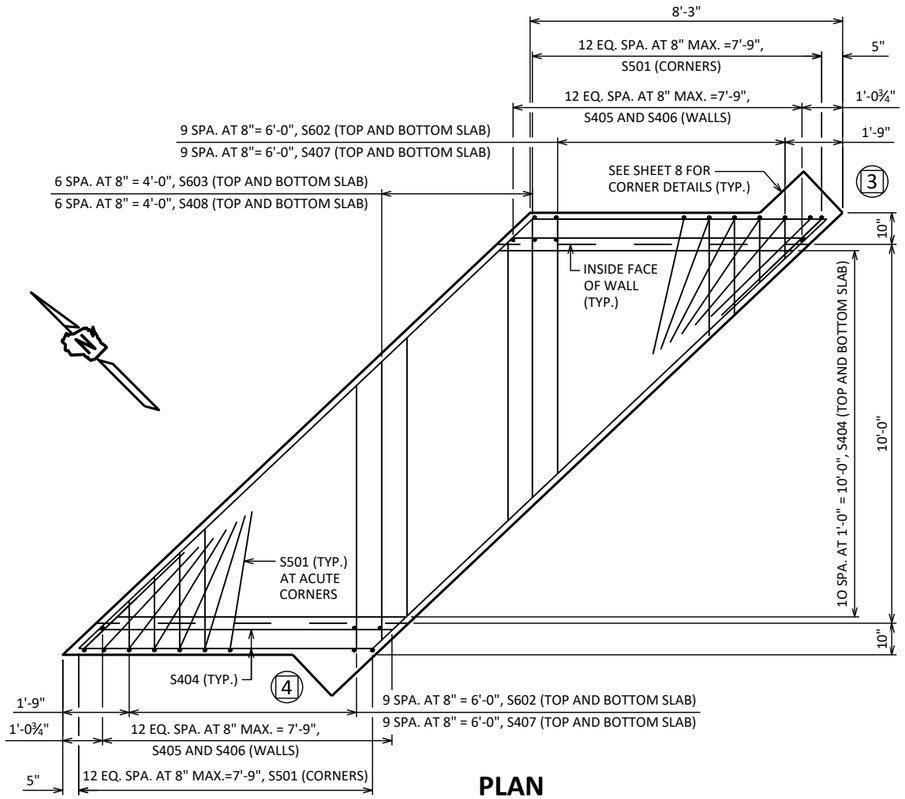
672

8

8

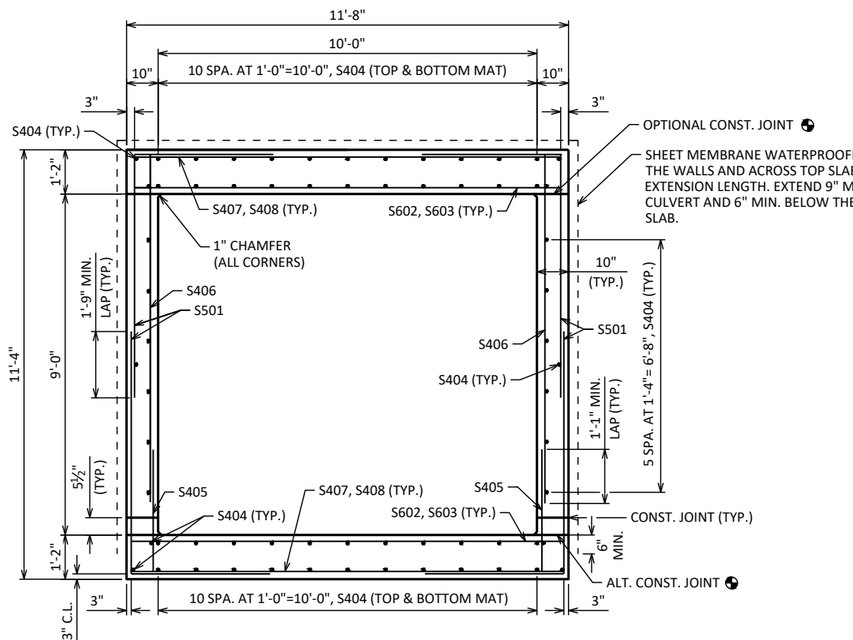
STATE PROJECT NUMBER

1204-08-73



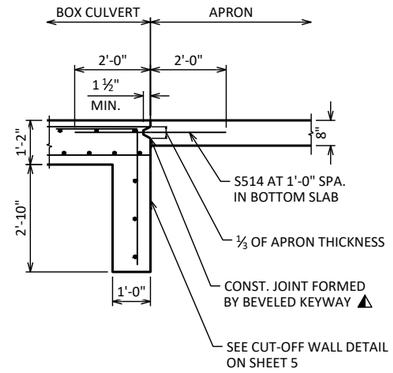
PLAN

APRON AND HEADER NOT SHOWN FOR CLARITY



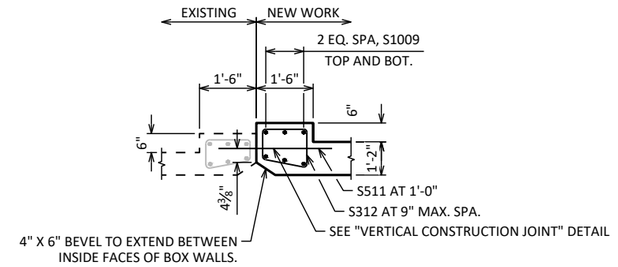
TYPICAL SECTION THRU BOX

OMIT 1" CHAMFER IF JOINTS USED

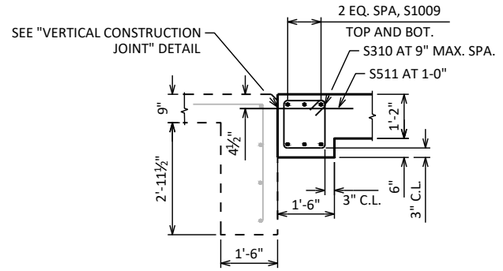


APRON CONNECTION DETAIL

⚠ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS 4'-0" AT 1'-0" CENTERS REQUIRED. (LOOKING NORMAL TO HEADER)



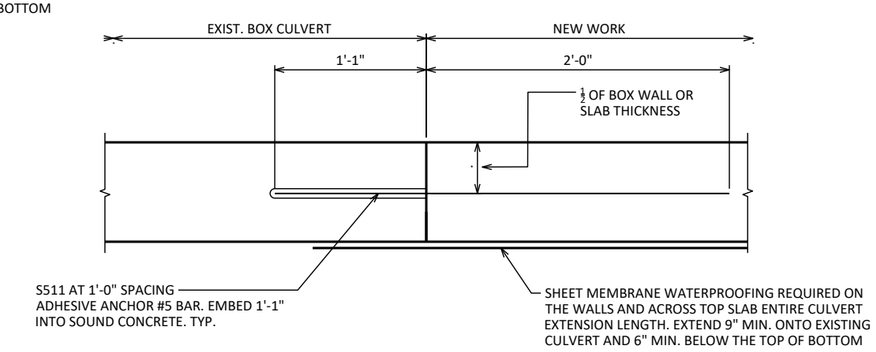
TOP SLAB



BOTTOM SLAB

SECTION THRU HEADER

DETAILS FOR INTERNAL HEADER CONNECTION BETWEEN EXISTING CULVERT AND PROPOSED EXTENSION (LOOKING NORMAL TO HEADER)



VERTICAL CONSTRUCTION JOINT

TYPICAL WALLS AND SLABS

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

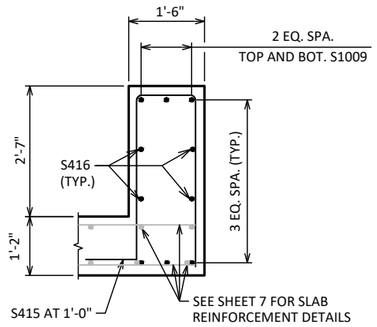
OUTLET EXTENSION

SHEET 7 OF 16

673

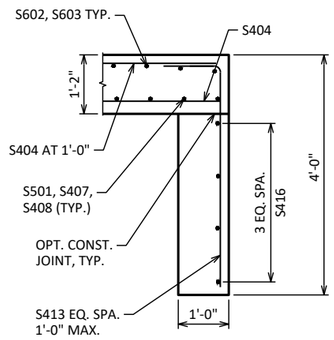
STATE PROJECT NUMBER

1204-08-73



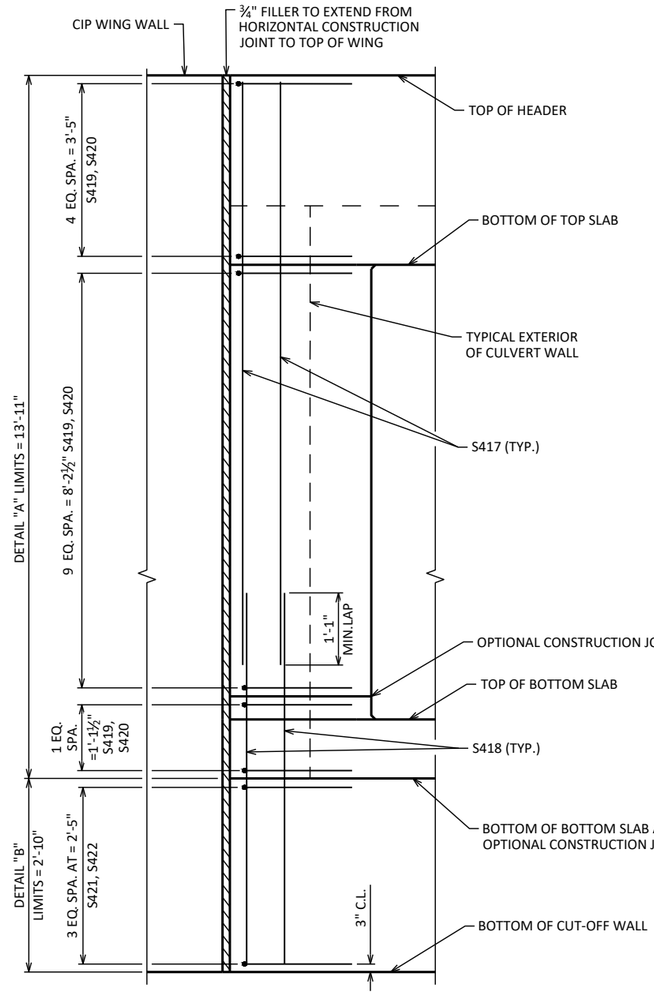
EXTERNAL HEADER

SOUTH END OF EXTENSION
(LOOKING NORMAL TO HEADER)



CUT-OFF WALL

SOUTH END OF EXTENSION
(LOOKING NORMAL TO CUT-OFF WALL)



TYPICAL SECTION OF CORNERS

BOX REINFORCEMENT NOT SHOWN FOR CLARITY.
REINFORCEMENT 2" C.L. UNLESS SPECIFIED OTHERWISE.
LOOKING NORMAL TO CULVERT OPENING.
CORNER 4 SHOWN, CORNER 3 SIMILAR.

CORNER 3 DETAIL A

FROM TOP OF HEADER TO BOTTOM OF BOTTOM SLAB

CORNER 3 DETAIL B

CUTOFF WALL BELOW BOTTOM OF BOTTOM SLAB

CORNER 4 DETAIL A

FROM TOP OF HEADER TO BOTTOM OF BOTTOM SLAB

CORNER 4 DETAIL B

CUTOFF WALL BELOW BOTTOM OF BOTTOM SLAB

8

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

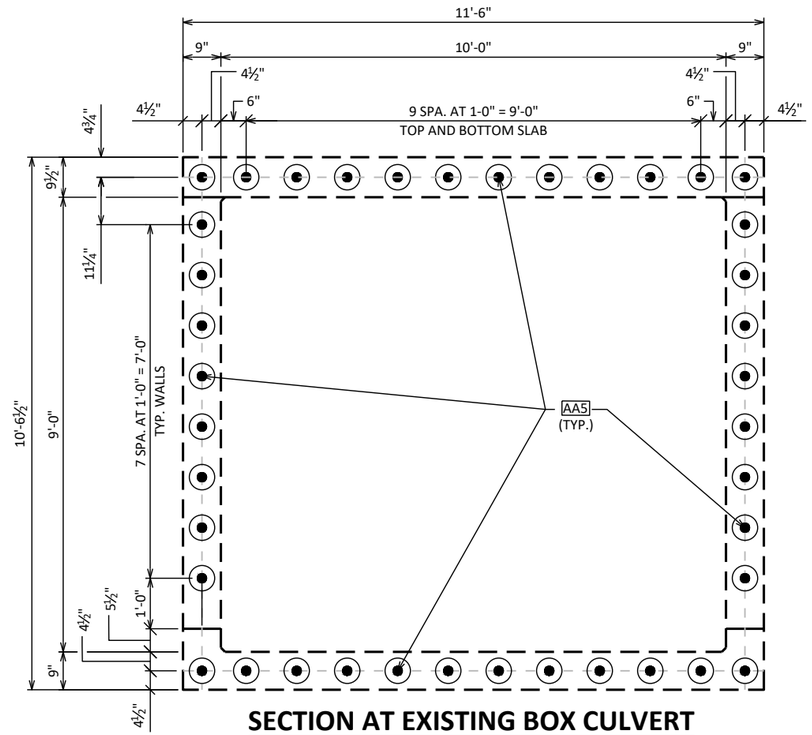
DRAWN BY JAC | PLANS CK'D MSK

OUTLET EXTENSION DETAILS

SHEET 8 OF 16
674

STATE PROJECT NUMBER

1204-08-73



SECTION AT EXISTING BOX CULVERT

AA5 ADHESIVE ANCHORS NO. 5 BARS, EMBED 1'-1". TOTAL NUMBER OF REQUIRED AT CULVERT = 40. (USE S511 BARS WITH ANCHORS).

(SHOWING EXISTING BOX CULVERT)

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

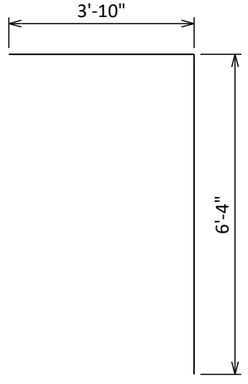
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 3820	
S501	52	10-1	X		CORNERS	VERT.
S602	40	4-2		⚠	TOP AND BOTTOM SLAB	TRANS.
S603	14	7-4			TOP AND BOTTOM SLAB	TRANS.
S404	66	7-9			WALLS AND SLABS	LONGIT.
S405	26	2-7	X		DOWEL	VERT.
S406	26	9-6			WALL	VERT.
S407	40	4-2		⚠	TOP SLAB	TRANS.
S408	14	7-4			TOP SLAB	TRANS.
S1009	18	18-3			HEADER	TRANS.
S310	17	5-10	X		TIE BAR HEADER	STIRRUP
S511	40	3-1			ADHESIVE ANCHOR	LONGIT.
S312	17	6-2	X		TIE BAR HEADER	STIRRUP
S413	13	4-6	X		CUT-OFF WALL	VERT.
S514	13	4-0			APRON - CONST. JOINT	LONGIT.
S415	13	10-1	X		EXTERNAL HEADER	STIRRUP
S416	8	18-2			CUT-OFF WALL AND OUTSIDE HEADER	TRANS.
S417	7	12-1			CORNER 3 & 4 WALL	VERT.
S418	6	5-5			CORNER 3 & 4 WALL/APRON	VERT.
S419	17	6-5	X		CORNER 3 - HEADER, SLABS, AND WALLS	HORIZ.
S420	17	6-4	X		CORNER 4 - HEADER, SLABS, AND WALLS	HORIZ.
S421	4	3-1	X		CORNER 3 - APRON	HORIZ.
S422	4	2-0	X		CORNER 4 - APRON	HORIZ.

⚠ LENGTH SHOWN IS AN AVERAGE LENGTH FOR USE OF CALCULATING BAR WEIGHT ONLY, SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

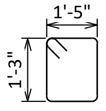
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
S602	4 SETS OF 10	1'-3" TO 7'-0"
S407	4 SETS OF 10	1'-3" TO 7'-0"

TAG AND BUNDLE EACH SERIES SEPARATELY



S501



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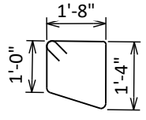

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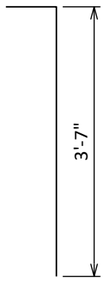

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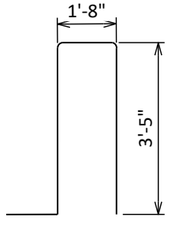

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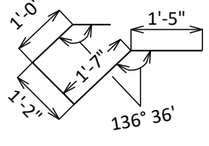

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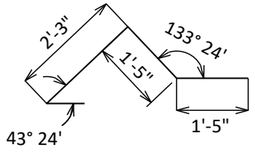

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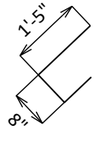

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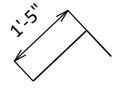

S422

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

OUTLET EXTENSION BILL OF BARS

SHEET 9 OF 16

675

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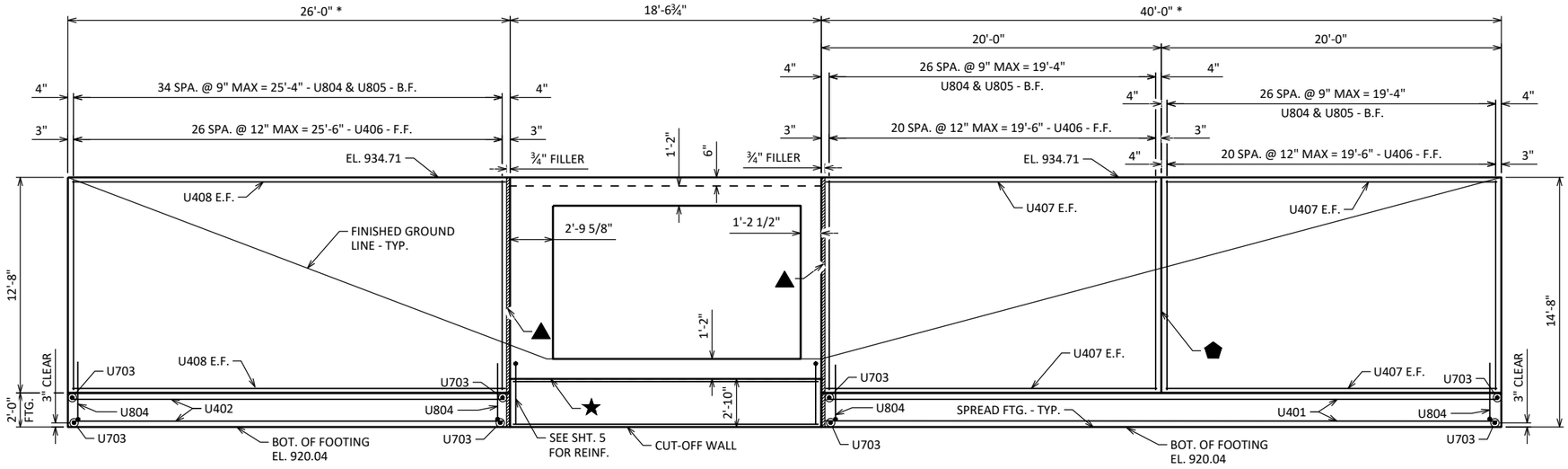
STATE PROJECT NUMBER

1204-08-73

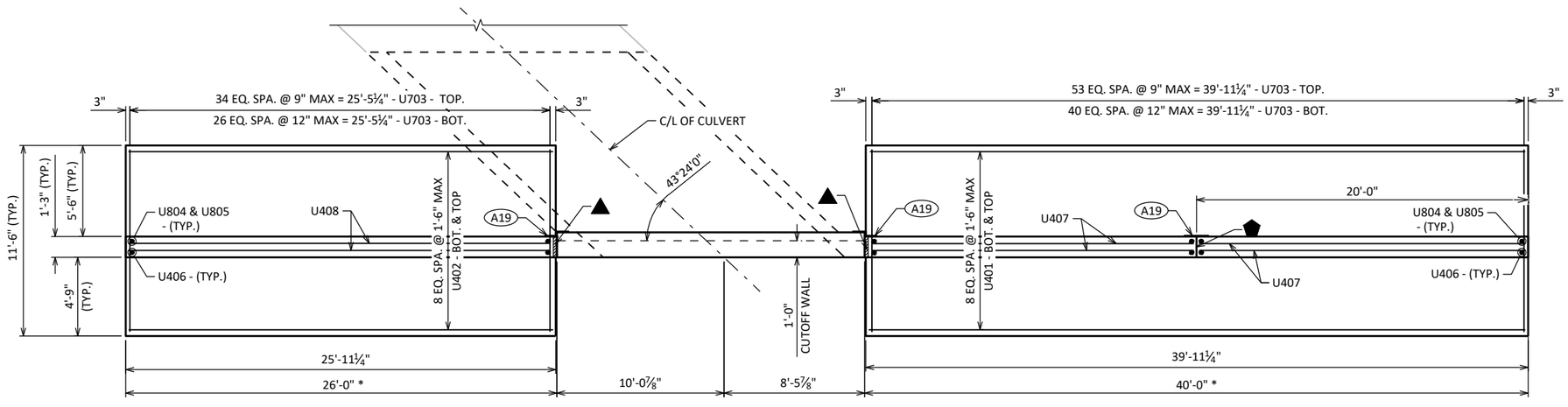


WING 2

INLET WINGWALL ELEVATION

LOOKING SOUTH AT FRONT FACE

WING 1



WING 2

INLET FOOTING PLAN

WING 1

LEGEND

- ▲ ¾" FILLER TO EXTEND FROM BOT. OF FOOTING TO TOP OF WING. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ¾" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)
- ⬟ VERTICAL CONTRACTION JOINT. SEE SHEET 13 FOR DETAIL.
- ★ OPTIONAL CONSTRUCTION JOINT
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- ⟊ MEASURED ALONG F.F. OF WALLS. DIM. INCLUDES ¾" FILLER.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY EHS | PLANS CK'D MSK

INLET WINGWALLS

SHEET 10 OF 16

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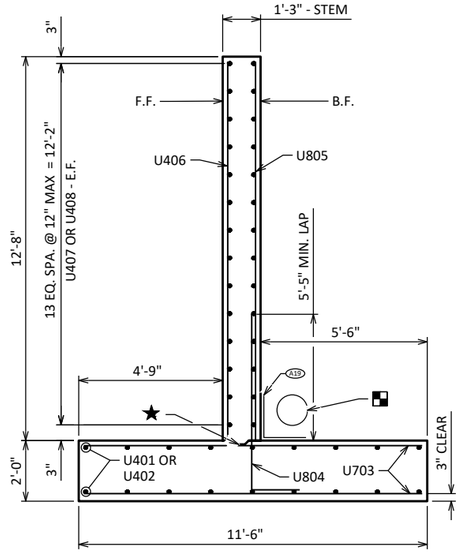
STATE PROJECT NUMBER

1204-08-73



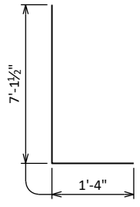
TYPICAL SECTION THRU INLET WALL

LOOKING EAST

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 4390	
U401	18	39-6			FOOTING - WING 1 - BOT. & TOP	LONGIT.
U402	18	25-6			FOOTING - WING 2 - BOT. & TOP	LONGIT.
U703	158	11-2			FOOTING - BOT. & TOP	TRANS.
COATED BARS					TOTAL WEIGHT = 6720	
U804	89	8-3	X		FOOTING DOWEL - B.F.	VERT.
U805	89	12-6			WING 1 & 2 - B.F.	VERT.
U406	69	12-6			WING 1 & 2 - F.F.	VERT.
U407	56	19-6			WING 1 - F.F. & B.F.	HORIZ.
U408	28	25-6			WING 2 - F.F.	HORIZ.



U804

LEGEND

★ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2" X 6". TYP. AT CENTER OF STEM.

A19 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE SHEET 2 FOR DETAIL.

NOTES

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

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY EHS | PLANS CK'D MSK

INLET WINGWALL DETAILS

SHEET 11 OF 16

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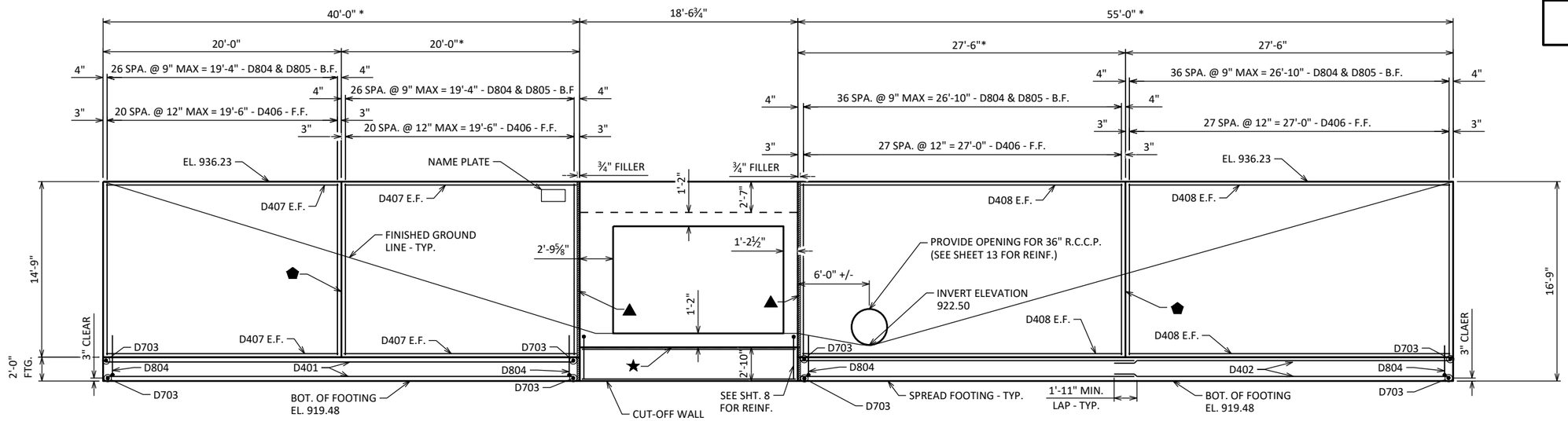
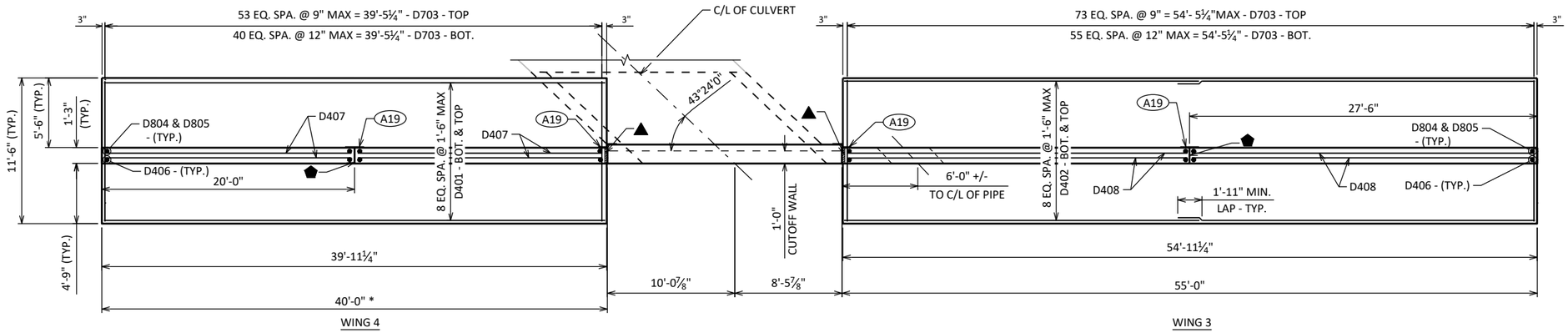
STATE PROJECT NUMBER

1204-08-73



WING 4 — **OUTLET WINGWALL ELEVATION** — WING 3

LOOKING NORTH AT FRONT FACE



WING 4 — **OUTLET FOOTING PLAN** — WING 3

LEGEND

- ▲ ¾" FILLER TO EXTEND FROM BOT. OF FOOTING TO TOP OF WING. SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ¾" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)
- ⬟ VERTICAL CONTRACTION JOINT. SEE SHEET 13 FOR DETAIL.
- ★ OPTIONAL CONSTRUCTION JOINT
- (A19) 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.
- ✳ MEASURED ALONG F.F. OF WALLS. DIM. INCLUDES ¾" FILLER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY EHS | PLANS CK'D MSK

OUTLET WINGWALLS

SHEET 12 OF 16

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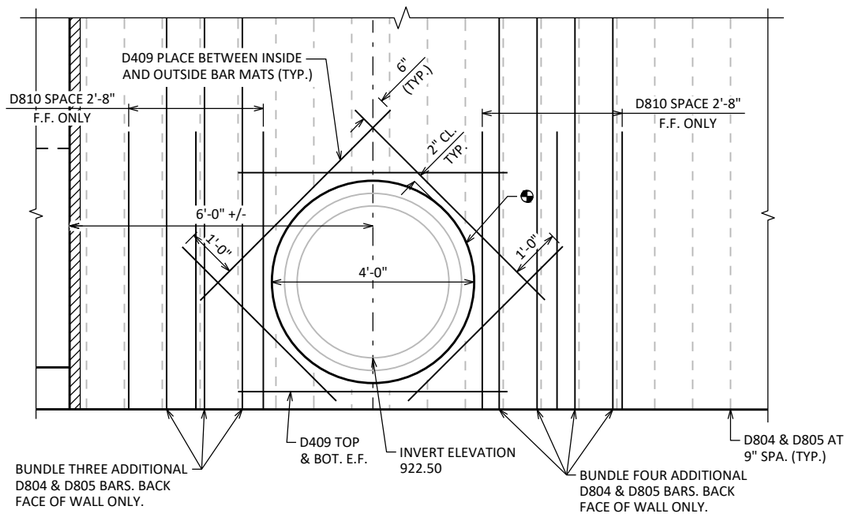
STATE PROJECT NUMBER

1204-08-73



WING 3 PIPE REINFORCEMENT DETAILS

SEE STORM SEWER SHEETS FOR PIPE DETAILS.
D406 NOT SHOWN FOR CLARITY. CUT REINFORCEMENT A NEEDED TO MAINTAIN 2" CLEAR FROM RCP BLOCK OUT.

UTILITY BOX OUT. AFTER PIPE HAS BEEN INSTALLED, THE BOX OUT NEEDS TO BE GROUTED CLOSED. A PIECE OF 18" RUBBERIZED MEMBRANE WATERPROOFING SHALL BE APPLIED TO THE BACK FACE OF WALL AT THE BOX OUT LOCATION.

LEGEND

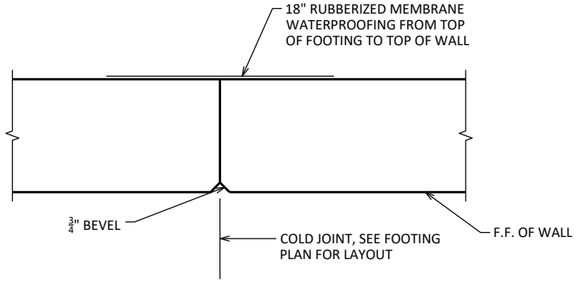
★ KEYED CONSTRUCTION JOINT FORMED BY BEVELED 2"X6". TYP. AT CENTER OF STEM.

A18 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN. SEE SHEET 2 FOR DETAIL.

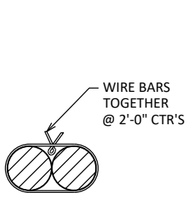
NOTES

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

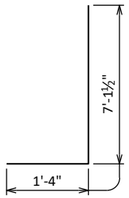


VERTICAL CONTRACTION JOINT AT WALL

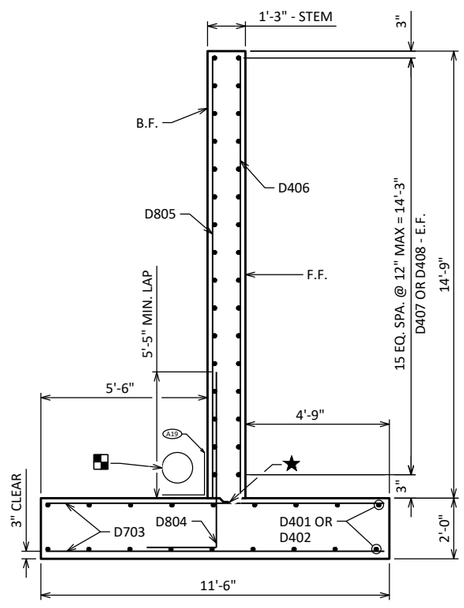
DO NOT RUN BAR STEEL THROUGH JOINT.



BUNDLING DETAIL



D804



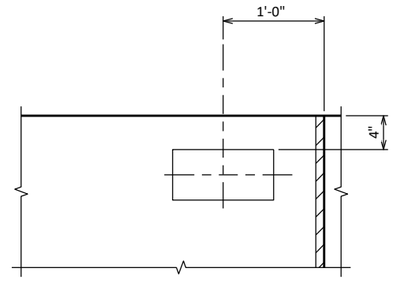
TYPICAL SECTION THRU OUTLET WALL

LOOKING EAST

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS					TOTAL WEIGHT = 6300	
D401	18	39-6			FOOTING - WING 4 - BOT. & TOP	LONGIT.
D402	36	28-4			FOOTING - WING 3 - BOT. & TOP	LONGIT.
D703	225	11-2			FOOTING - BOT. & TOP	TRANS.
COATED BARS					TOTAL WEIGHT = 11300	
D804	135	8-3	X		FOOTING DOWEL - B.F.	VERT.
D805	135	14-7			WING 3 & 4 - B.F.	VERT.
D406	97	14-7			WING 3 & 4 - F.F.	VERT.
D407	64	19-6			WING 4 - F.F. & B.F.	HORIZ.
D408	64	27-0			WING 3 - F.F. & B.F.	HORIZ.
D409	12	5-4			WING 3 - OPENING	HORIZ.
D810	6	5-6			WING 3 - OPENING	VERT.



NAME PLATE LOCATION

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY EHS | PLANS CK'D MSK

OUTLET WINGWALL DETAILS

SHEET 13 OF 16

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STATE PROJECT NUMBER

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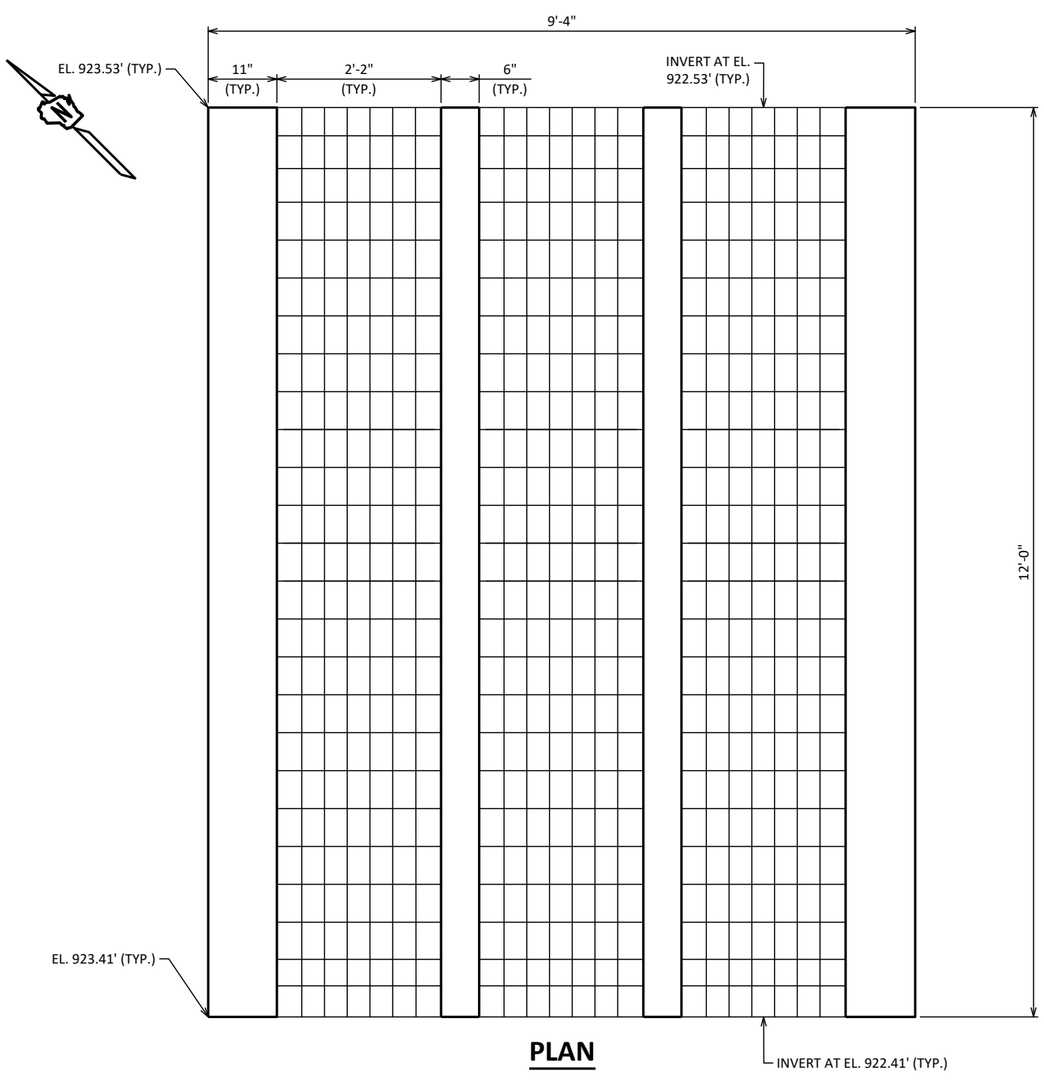
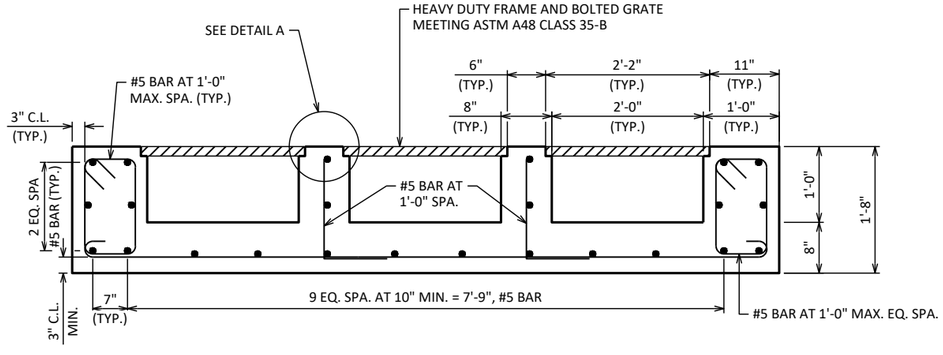
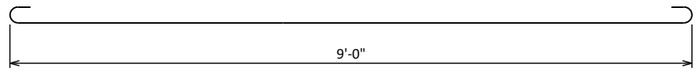


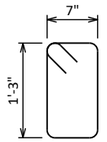
PLAN



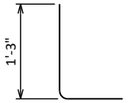
TYPICAL SECTION



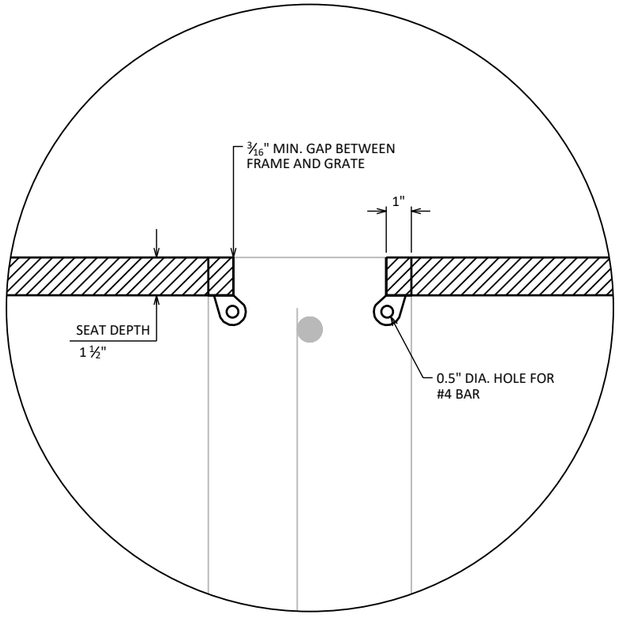
#5 HOOKED TRANSVERSE BAR IN SLAB



#5 STIRRUP BAR AT EXTERIOR WALLS



#5 L-SHAPED BAR AT INTERIOR WALLS



DETAIL A

NOTES:

BID ITEMS SHALL BE "TRENCH DRAIN AND GRATE" WHICH INCLUDES ALL ITEMS SHOWN.

STEEL REINFORCEMENT SHALL BE GRADE 60 DEFORMED BARS (FY = 60,000 PSI).

THE MINIMUM CONCRETE STRENGTH OF THE FIELD POURED CONCRETE SHALL BE 3,500 PSI.

ALTERNATE DETAILS OF EQUAL STRENGTH AND HYDRAULIC CAPACITY TO THE DETAILS SHOWN ON THIS SHEET MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

TRENCH DRAIN DETAILS

SHEET 14 OF 16

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STATE PROJECT NUMBER

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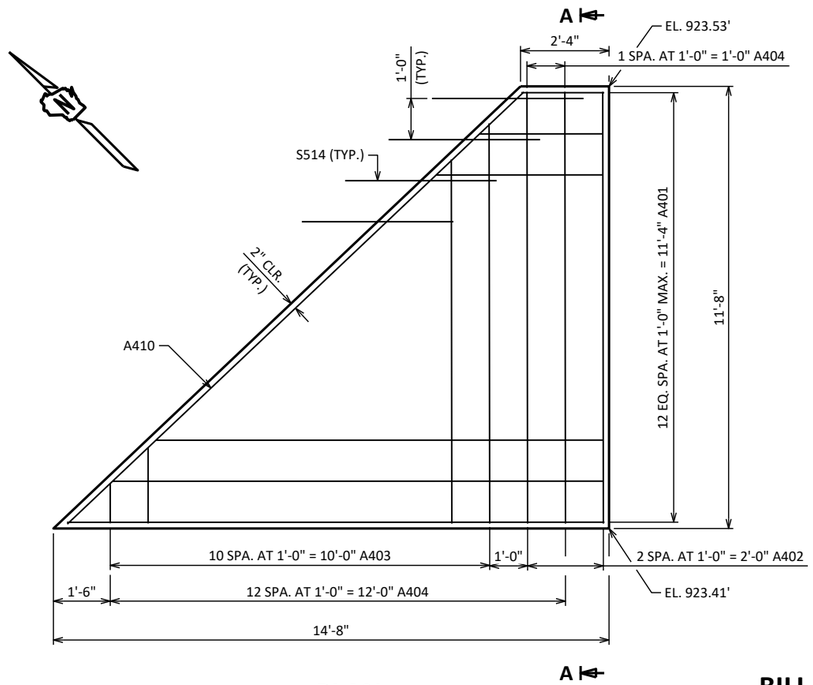
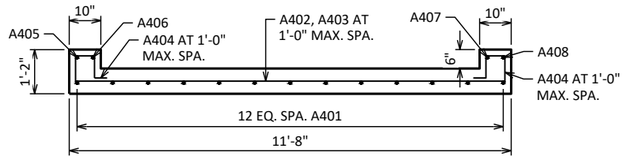
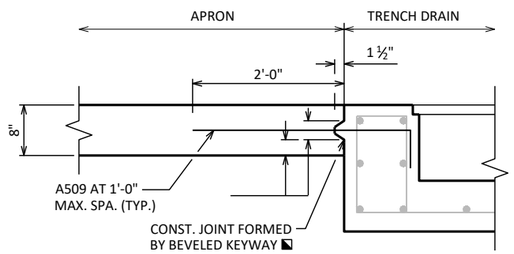


PLAN

CURBS NOT SHOWN FOR CLARITY.



SECTION A-A



APRON-TRENCH DRAIN CONSTRUCTION JOINT

IN LIEU OF CONSTRUCTION JOINTS IN THE APRON, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING. #5 BARS AT 1'-0" CENTERS REQUIRED.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	ORIEN.
NON-COATED BARS						TOTAL WEIGHT = 250
A401	13	8-1		⚠	APRON	LONGIT.
A402	3	11-4			APRON	TRANS.
A403	11	5-9		⚠	APRON	TRANS.
A404	21	2-1	X		APRON AND CURB	VERT.
A405	1	13-1			CURB	LONGIT.
A406	1	12-6			CURB	LONGIT.
A407	1	1-6			CURB	LONGIT.
A408	1	1-1			CURB	LONGIT.

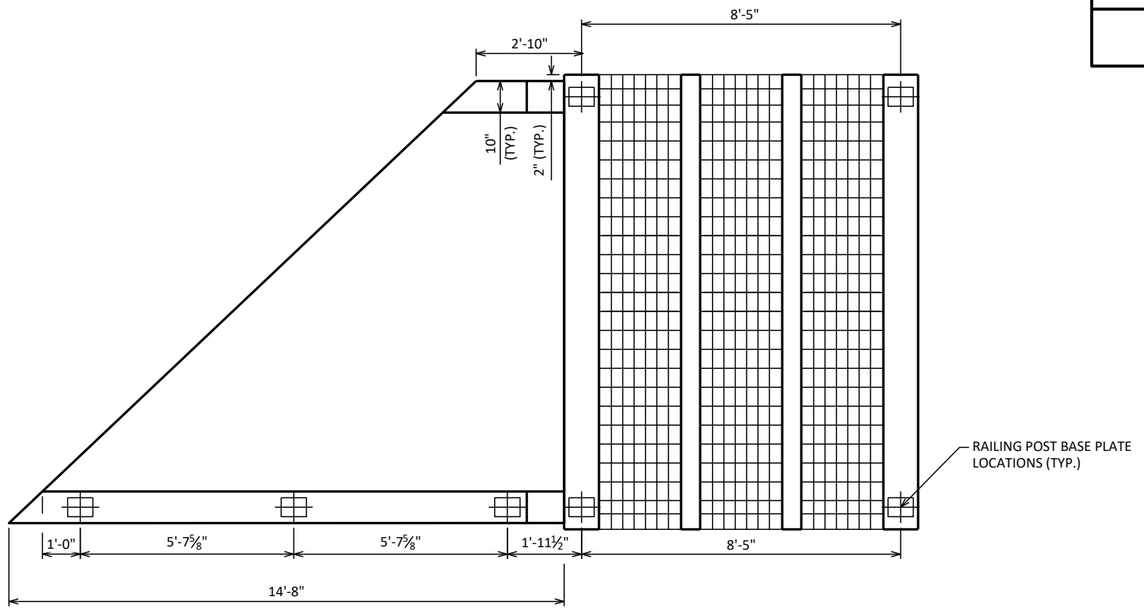
⚠ LENGTH SHOWN IS AN AVERAGE LENGTH FOR USE OF CALCULATING BAR WEIGHT ONLY, SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

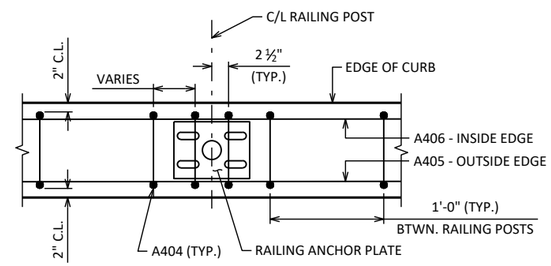
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
A401	1 SET OF 13	2'-1" TO 14'-1"
A403	1 SET OF 11	1'-0" TO 10'-6"

TAG AND BUNDLE EACH SERIES SEPARATELY

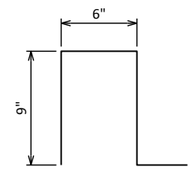
PEDESTRIAN RAILING POST SPACING



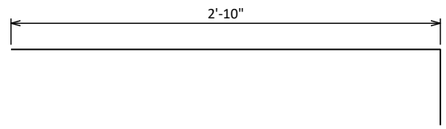


PART PLAN AT RAILING POSTS ON CURB

FOR RAILING ANCHORAGE DETAILS, SEE SHEET 16.



A404



A509

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

APRON DETAILS

SHEET 15 OF 16

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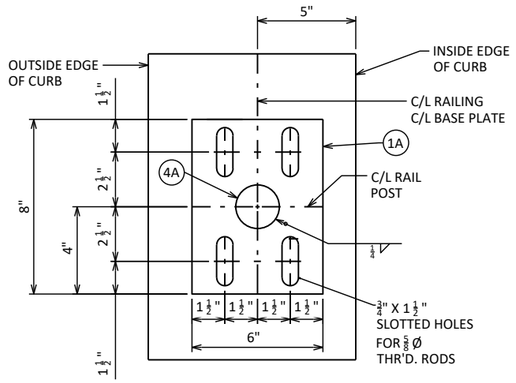
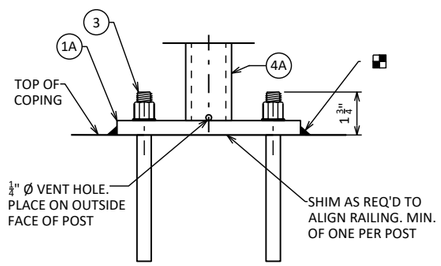
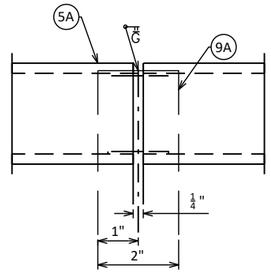


TYPICAL RAIL POST BASE PLATE

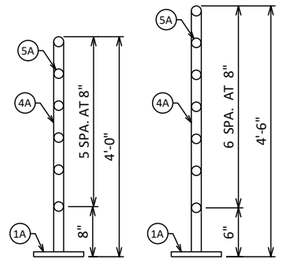


ANCHORAGE FOR RAIL POSTS



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)



TYPICAL SECTION THRU RAIL

TYP. CURB SECTION SHOWN ON LEFT.
TYP. TRENCH DRAIN SECTION SHOWN ON RIGHT.

RAILING NOTES

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

STEEL PIPE RAILING AND ALL OTHER STEEL ITEMS SHOWN SHALL BE GALVANIZED.

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

NO. 1A, 9A AND NO. 10A SHALL CONFORM TO ASTM A709 GRADE 36. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B (NO. 4A AND NO. 5A).

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

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

CAULK AROUND PERIMETER OF BASE PLATES, NO. 1A, AND FILL BOLT SLOT OPENINGS IN BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

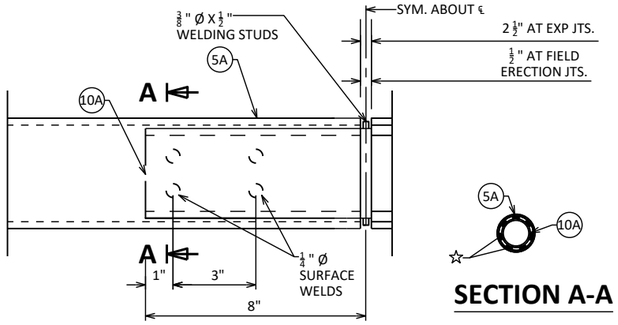
ALL JOINTS AND RECESSES IN CONCRETE ENDWALL ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS. RAILING SHALL FOLLOW CURVATURE OF WALL.

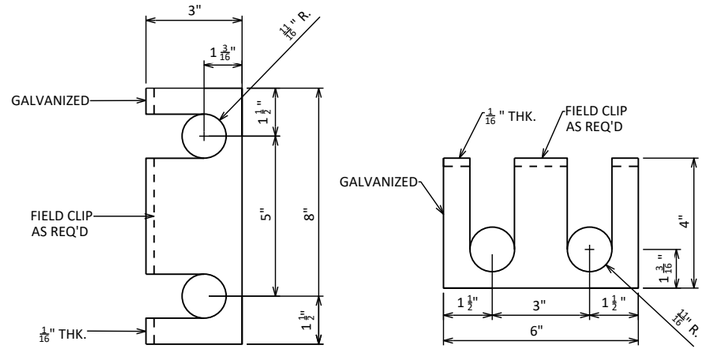
STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.



SECTION A-A

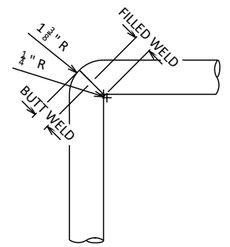
FIELD ERECTION JOINT DETAIL

☆ MIN. ⅜" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE

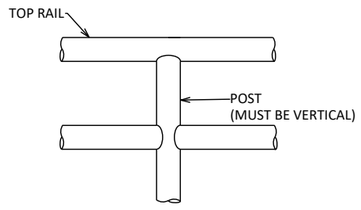


RAIL POST SHIM DETAIL

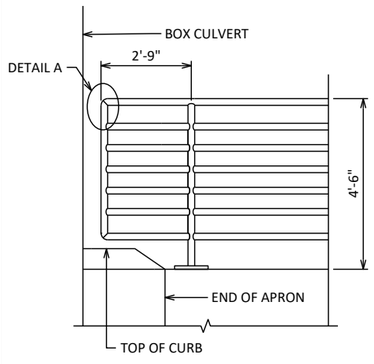
(2 SETS PER POST)



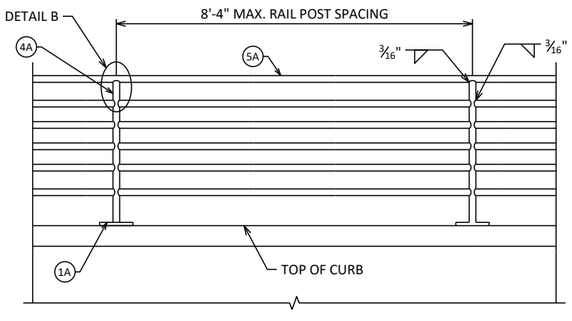
DETAIL A



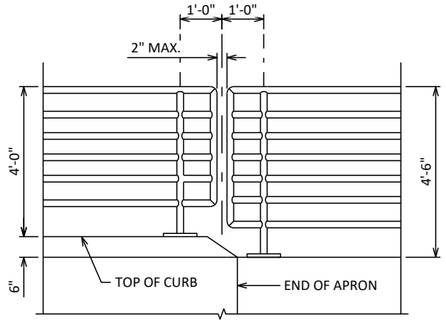
DETAIL B



EAST CURB



WEST CURB



AT WEST END OF JOINT

REFER TO FOR TYPICAL ENDS OF RAIL

LEGEND

(1A) PLATE ⅝" x 6" X 1½" SLOTTED HOLES.

(3) STAINLESS STEEL CONCRETE MASONRY ANCHORS. TYPE S (EPOXY), ⅝" Ø. MINIMUM PULLOUT CAPACITY OF 13 KIPS. EMBED A MIN OF 7" FOR RAIL POSTS AND 5" FOR END RAILS

(4A) 2" Ø STANDARD PIPE. PLACE VERTICAL. WELD TO NO. 1A & 5A.

(5A) 2" Ø STANDARD PIPE RAILS. WELD TO NO. 4A.

(9A) CIRCULAR SLEEVE FABRICATED FROM 1½" Ø STANDARD PIPE.

(10A) CIRCULAR SLEEVE FABRICATED FROM 1½" Ø STANDARD PIPE. (1'-4" @ FIELD ERECTION JTS.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-13-111

DRAWN BY JAC | PLANS CK'D MSK

RAILING DETAILS

SHEET 16 OF 16

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DESIGN DATA

DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

FOUNDATION DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBMERS (700 YEAR MEAN RECURRENCE INTERVAL)

WIND COMPONENTS	NORMAL	TRANSVERSE
LOAD CASE 1:	1.00	0.00
LOAD CASE 2:	0.00	1.00
LOAD CASE 3:	0.75	0.75

LOAD COMBINATIONS

STRENGTH I:	1.25 DC + 1.6 LL
EXTREME I (MAX DC):	1.1 DC + 1.0 W + 1.0 ICE
EXTREME I (MIN DC):	0.9 DC + 1.0 W
SERVICE I:	1.0 DC + 1.0 W
FATIGUE:	1.0 NW (NATURAL WIND GUST)
	1.0 TrG (TRUCK INDUCED GUST)

MATERIAL PROPERTIES

CONCRETE MASONRY — f'_c = 3,500 PSI

HIGH STRENGTH STEEL REINFORCEMENT, GRADE 60 — f_y = 60,000 PSI

STRUCTURAL ANGLES, PLATES & BARS - ASTM A709 GRADE 36 — f_y = 36,000 PSI

CHORD PIPE - ASTM A500 GRADE C — f_y = 46,000 PSI

COLUMN PIPE
DESIGN TRUSS TYPE I - ASTM A500 GRADE C — f_y = 46,000 PSI
DESIGN TRUSS TYPE II - API-5L PSL-2 GRADE 46 OR ASTM A1085 — f_y = 46,000 PSI

HIGH STRENGTH BOLTS - ASTM A3125 GRADE A325 — f_y = 92,000 PSI

ANCHOR RODS - ASTM F1554 GRADE 55 — f_y = 55,000 PSI

HEAVY HEX NUTS - ASTM A563 GRADE DH OR ASTM A194 GRADE 2H

WASHERS - ASTM F436

DTI WASHERS - ASTM F959 TYPE 325

FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGN FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING THE DRILLING OF THE SHAFT HOLE TO CONFIRM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

SHALLOW BEDROCK HAS BEEN IDENTIFIED IN THE LOCATION OF SIGN FOUNDATIONS S-13-612 AND S-13-615. SEE BORING LOGS FOR ASSOCIATED SIGNS. BORING INTO BEDROCK IS ANTICIPATED TO MEET THE REQUIRED FOUNDATION DEPTH.

ESTIMATED ROCK SOCKET DEPTH
S-13-612 4'-8"
S-13-615 5'-5"

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	S-13-612	S-13-613	S-13-614	S-13-615	S-13-616	S-13-617
531.1100	CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS	CY	14	---	---	12	---	---
531.1140	STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS	LB	1230	---	---	1010	---	---
531.1160	STEEL REINFORCEMENT HS COATED ANCILLARY STRUCTURES TYPE NS	LB	1100	---	---	1100	---	---
531.2036	DRILLING SHAFT 36-INCH	LF	24	32	32	18	32	32
531.6010	FOUNDATION TWO-SHAFT TYPE FC-I S-13-0613	EACH	---	1	---	---	---	---
531.6010	FOUNDATION TWO-SHAFT TYPE FC-I S-13-0614	EACH	---	---	1	---	---	---
531.6010	FOUNDATION TWO-SHAFT TYPE FC-I S-13-0616	EACH	---	---	---	---	1	---
531.6020	FOUNDATION TWO-SHAFT TYPE FC-II	EACH	---	---	---	---	---	1
531.8990	ANCHOR ASSEMBLIES POLES ON STRUCTURES	EACH	1	---	---	1	---	---
532.6010	TRUSS CANTILEVER 4-CHORD TYPE I S-13-0613	EACH	---	1	---	---	---	---
532.6010	TRUSS CANTILEVER 4-CHORD TYPE I S-13-0614	EACH	---	---	1	---	---	---
532.6010	TRUSS CANTILEVER 4-CHORD TYPE I S-13-0615	EACH	---	---	---	1	---	---
532.6010	TRUSS CANTILEVER 4-CHORD TYPE I S-13-0616	EACH	---	---	---	---	1	---
532.6020	TRUSS CANTILEVER 4-CHORD TYPE II S-13-0612	EACH	1	---	---	---	---	---
532.6020	TRUSS CANTILEVER 4-CHORD TYPE II S-13-0617	EACH	---	---	---	---	---	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DANE COUNTY ZONE, NAD 83 (2011). ALL STATIONS AND ELEVATIONS ARE IN FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "TRUSS CANTILEVER 4-CHORD (TYPE)" FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

CATWALKS ARE USED ON 4-CHORD STRUCTURES CARRYING DMS SIGNS. CATWALKS SHALL BE INCIDENTAL TO THE BID ITEM "TRUSS CANTILEVER 4-CHORD (TYPE)" FOR EACH DMS SIGN STRUCTURE IN THE PLAN SET.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH ¾" DIA A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA.)".

STRUCTURE DATA

STRUCTURE ID	SIGN AREA	SIGN DEPTH	FOUNDATION TYPE	TRUSS TYPE
S-13-612	235.0 SF	12'-6"	NS	CANTILEVER 4-CHORD TYPE II
S-13-613	243.5 SF	13'-0"	TYPE FC-I	CANTILEVER 4-CHORD TYPE I
S-13-614	155.5 SF	9'-6"	TYPE FC-I	CANTILEVER 4-CHORD TYPE I
S-13-615	162.5 SF	10'-0"	NS	CANTILEVER 4-CHORD TYPE I
S-13-616	197.5 SF	12'-6"	TYPE FC-I	CANTILEVER 4-CHORD TYPE I
S-13-617	204.5 SF	13'-0"	TYPE FC-II	CANTILEVER 4-CHORD TYPE II

LIST OF DRAWINGS:

1. GENERAL NOTES & DESIGN DATA
2. LAYOUT S-13-612
3. SUBSURFACE EXPLORATION
4. FOUNDATION
5. LAYOUT S-13-613
6. SUBSURFACE EXPLORATION
7. LAYOUT S-13-614
8. SUBSURFACE EXPLORATION
9. LAYOUT S-13-615
10. SUBSURFACE EXPLORATION
11. FOUNDATION
12. LAYOUT S-13-616
13. SUBSURFACE EXPLORATION
14. LAYOUT S-13-617
15. SUBSURFACE EXPLORATION

LIST OF STANDARD DESIGN DRAWINGS

16. I. 4-CHORD TRUSS CANTILEVER TRUSS DETAILS
17. II. 4-CHORD TRUSS CANTILEVER CONNECTIONS 1
18. III. 4-CHORD TRUSS CANTILEVER CONNECTIONS 2
19. IV. 4-CHORD TRUSS CANTILEVER CONNECTIONS 3
20. V. 4-CHORD TRUSS CANTILEVER CATWALK DETAILS
21. VI. 4-CHORD TRUSS CANTILEVER ELECTRICAL DETAILS
22. VII. 4-CHORD TRUSS CANTILEVER FOUNDATION

STATE PROJECT NUMBER

1204-08-73/74

TRAFFIC VOLUME

1204-08-73	1204-08-74
A.D.T. (2044) = 43,200	A.D.T. (2044) = 24,500
R.D.S. = 70 MPH	R.D.S. = 70 MPH

THESE ARE STANDARD DESIGN PLANS DEVELOPED AND MAINTAINED BY THE WISDOT. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISDOT BRIDGE MANUAL CHAPTER 39.

WISCONSIN
MATTHEW S. KRIPPNER
E-42470
VERONA
WI
PROFESSIONAL ENGINEER

10/18/2024

STRUCTURE DESIGN CONTACTS:
AARON BONK 608-261-0261
MATT KRIPPNER 608-828-8123

NO.	DATE	REVISION	BY

AECOM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORATION

ACCEPTED SDR 11/06/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

4-CHORD CANTILEVER

CTH G TO W VERONA AVE/EPIC LN TO STH 69

COUNTY: DANE | TOWN/CITY: VERONA

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION 9TH ED.

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
UD	MSK	UD	MSK

GENERAL NOTES & DESIGN DATA

SHEET 1 OF 22
683

I.D. 1204-08-03 DATE: OCT 2024

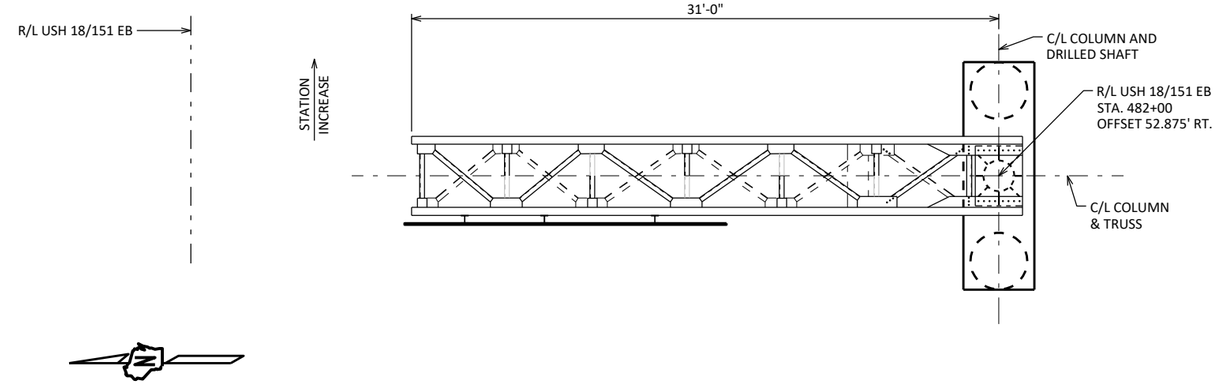
SCALE =

8

8

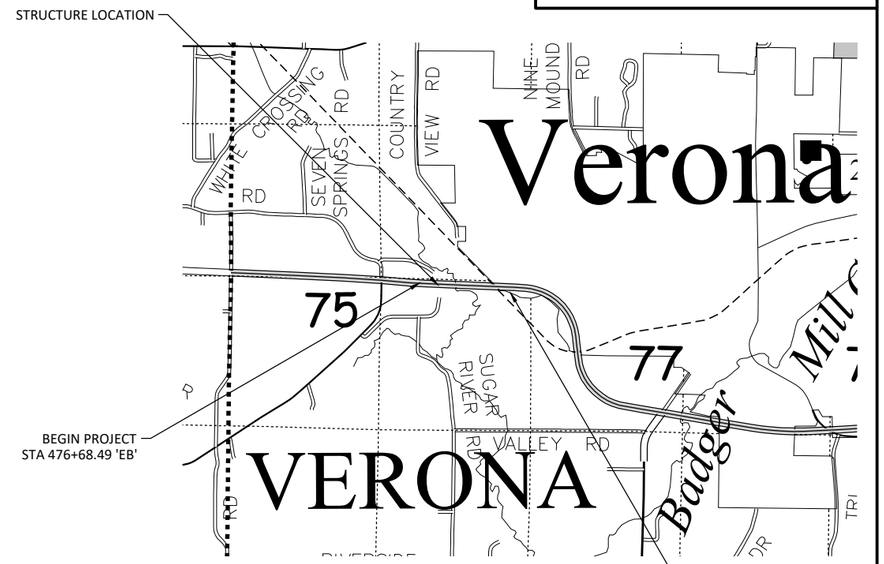
STATE PROJECT NUMBER

1204-08-73



PLAN

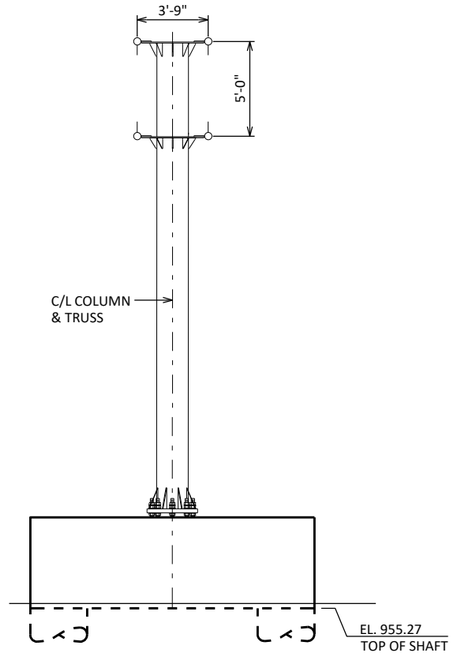
STA. 482+00 USH 18/151 EB
0.4 MILE EAST OF CTH G & USH 18/151 INTERCHANGE



LOCATION MAP

ELEVATION

LOOKING EAST AT F.F. OF SIGN



END VIEW

LOOKING NORTH AT END OF SIGN

LEGEND

☆ ELEVATIONS ALONG C/L OF TRUSS.

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN.

▲ POINT OF MIN. VERTICAL CLEARANCE
STA. 482+00 'EB', 21.50' RT.
ELEV. 958.20

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-612

DRAWN BY UD | PLANS CK'D MSK

LAYOUT

SHEET 2 OF 22

684

SCALE =

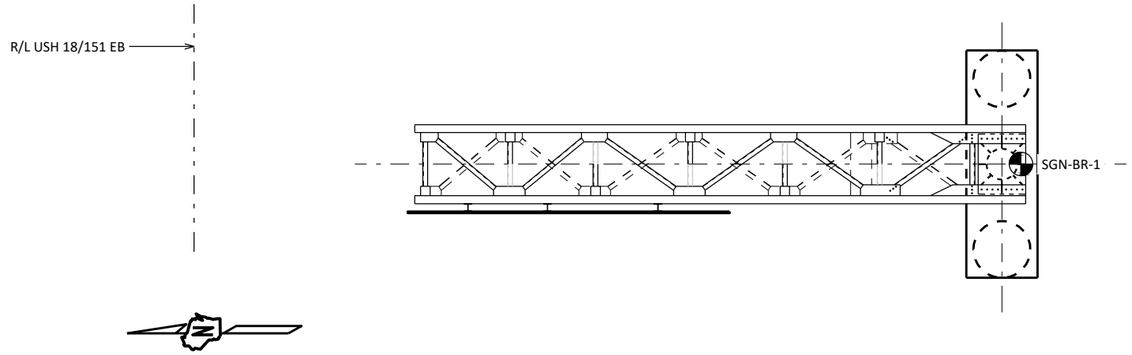
8

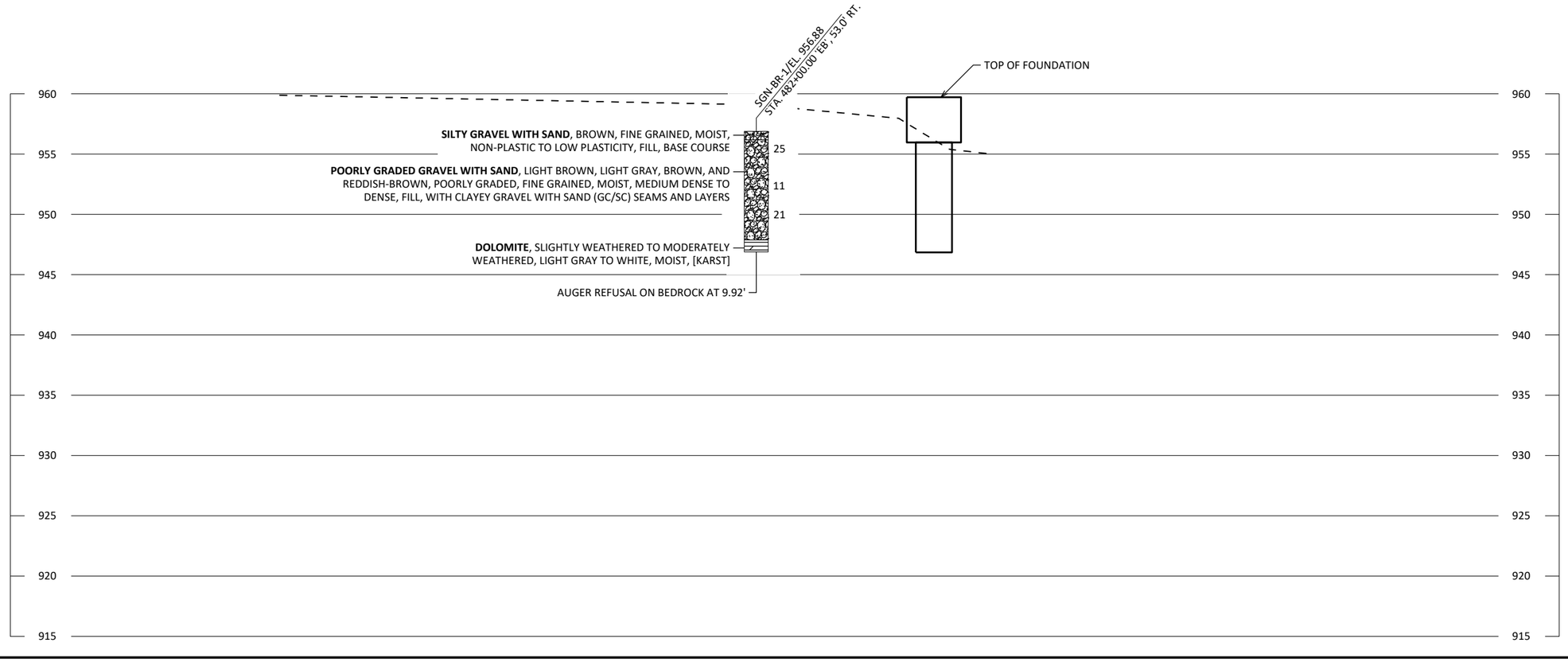
8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
SGN-BR-1	07/10/2023	450825.4384	769989.3004
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			

STATE PROJECT NUMBER

1204-08-73

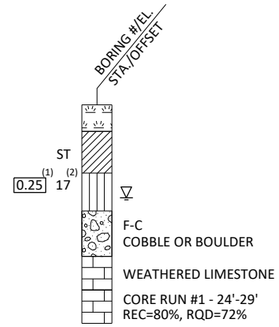




MATERIAL SYMBOLS

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

STRUCTURE S-13-612

DRAWN BY UD | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 3 OF 22

685

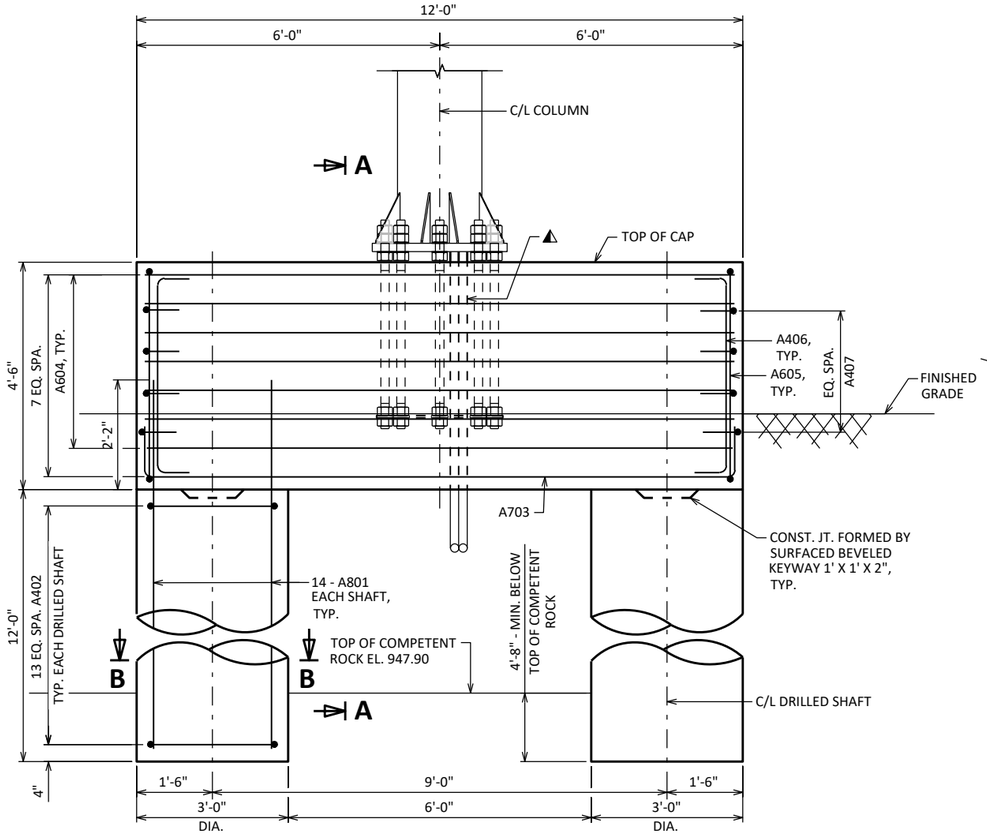
SCALE =

8

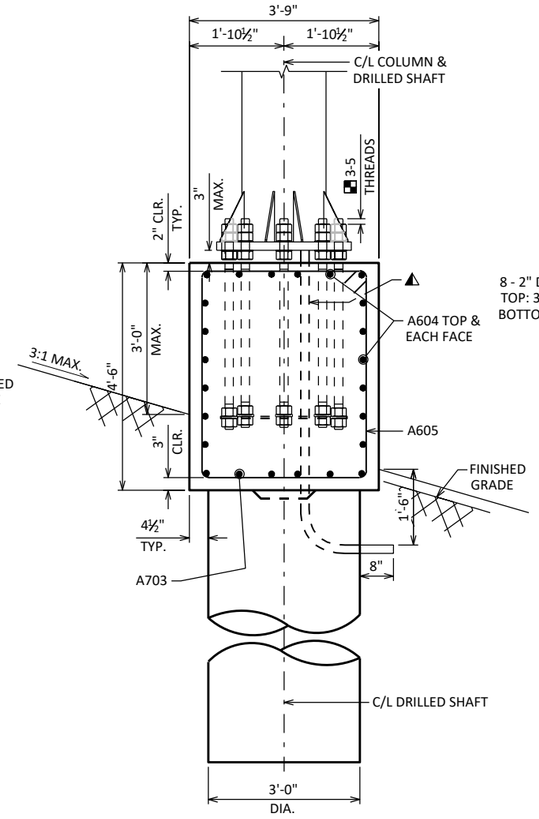
8

STATE PROJECT NUMBER

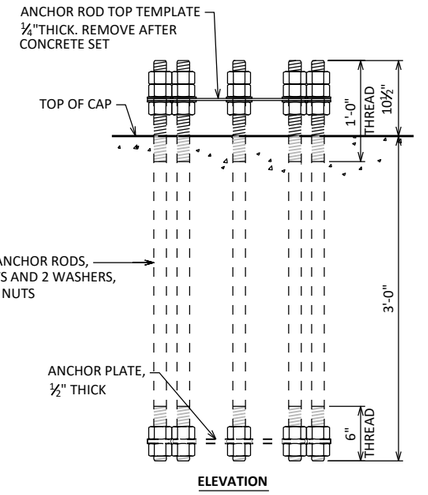
1204-08-73



ELEVATION



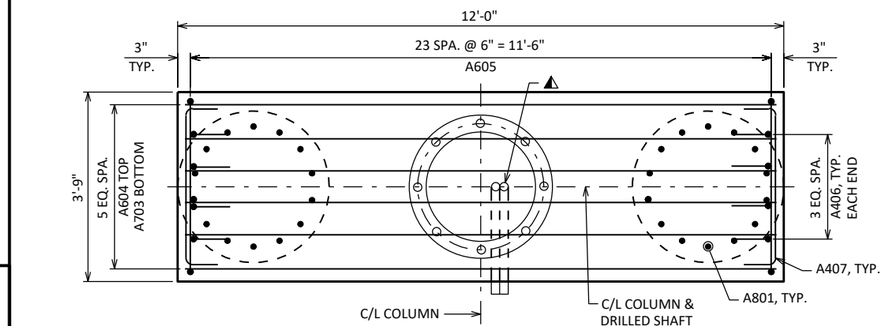
SECTION A-A



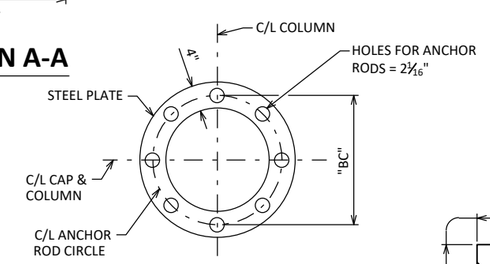
ANCHOR ROD ASSEMBLY DETAILS

SINGLE ANCHOR ASSEMBLY SHOWN, 8 ANCHOR RODS PER ASSEMBLY

CENTER ANCHOR ROD ASSEMBLY AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

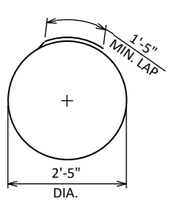


PLAN

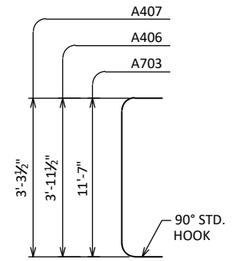


ANCHOR PLATE/ TOP TEMPLATE

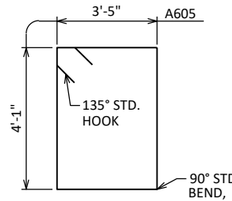
"BC"
2'-6"



A402



A703, A406, A407



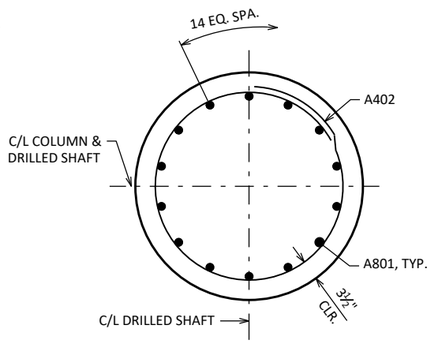
A605

LEGEND

- ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.
- ⚠ 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 2-INCH	FOUNDATION DRILLING 36" DIA.
	(CY)	(LBS)	(LBS)	(EACH)	(LF)
NS	14	1,230	1,100	1	24



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

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
A801		28	14'-2"			DRILLED SHAFT - VERTICAL
A402		28	9'-0"	X		DRILLED SHAFT - HORIZONTAL
A703	X	6	13'-7"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	18	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	24	15'-10"	X		CAP - STIRRUP
A406	X	8	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	8	3'-11"	X		CAP - HORIZONTAL - EACH END

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-612

DRAWN BY UD | PLANS CK'D MSK

FOUNDATION

SHEET 4 OF 22

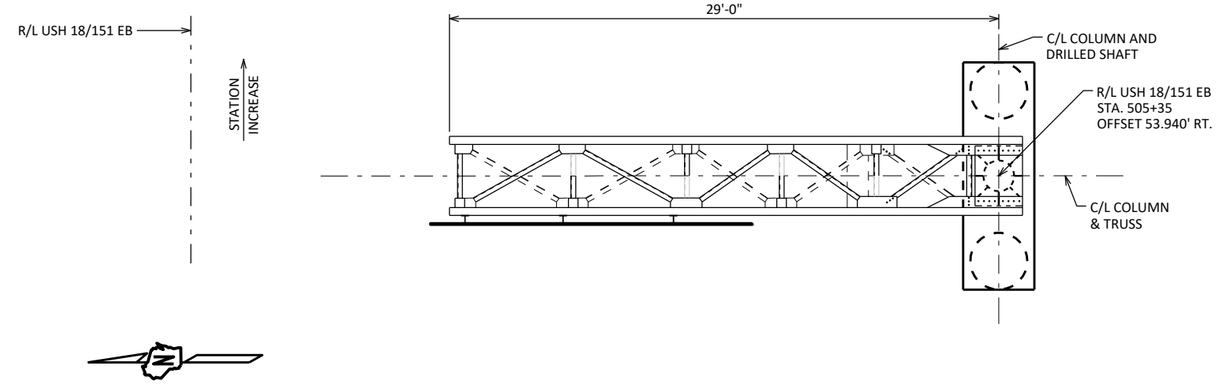
686

8

8

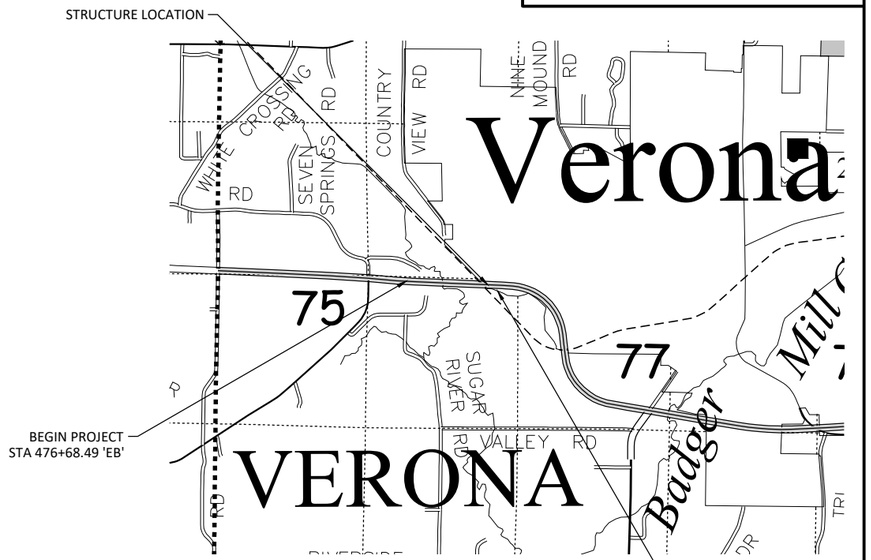
STATE PROJECT NUMBER

1204-08-73

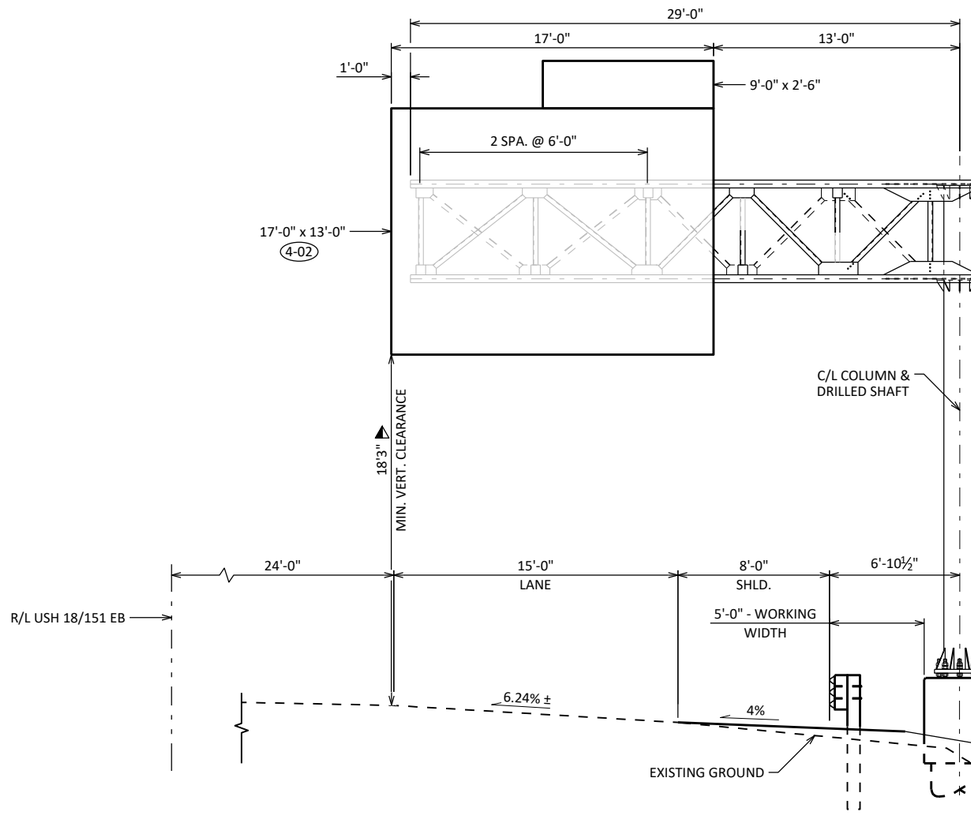


PLAN

STA. 505+35 USH 18/151 EB
0.5 MILES W OF EPIC LANE & W VERONA AVE INTERSECTION

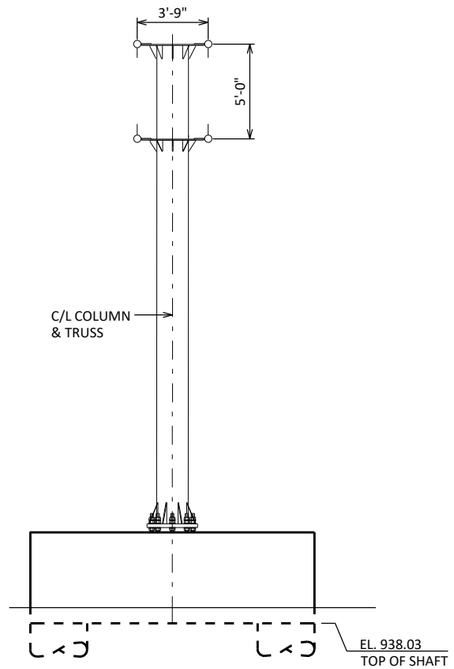


LOCATION MAP



ELEVATION

LOOKING EAST AT F.F. OF SIGN



END VIEW

LOOKING NORTH AT END OF SIGN

LEGEND

☆ ELEVATIONS ALONG C/L OF TRUSS.

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN.

▲ POINT OF MIN. VERTICAL CLEARANCE
STA. 505+35 'EB', 23.94' RT.
ELEV. 941.15

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-613

DRAWN BY UD | PLANS CK'D MSK

LAYOUT

SHEET 5 OF 20

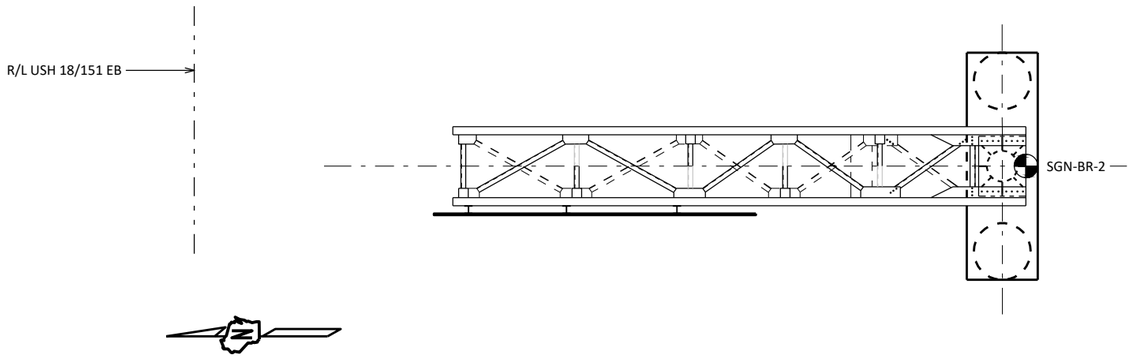
687

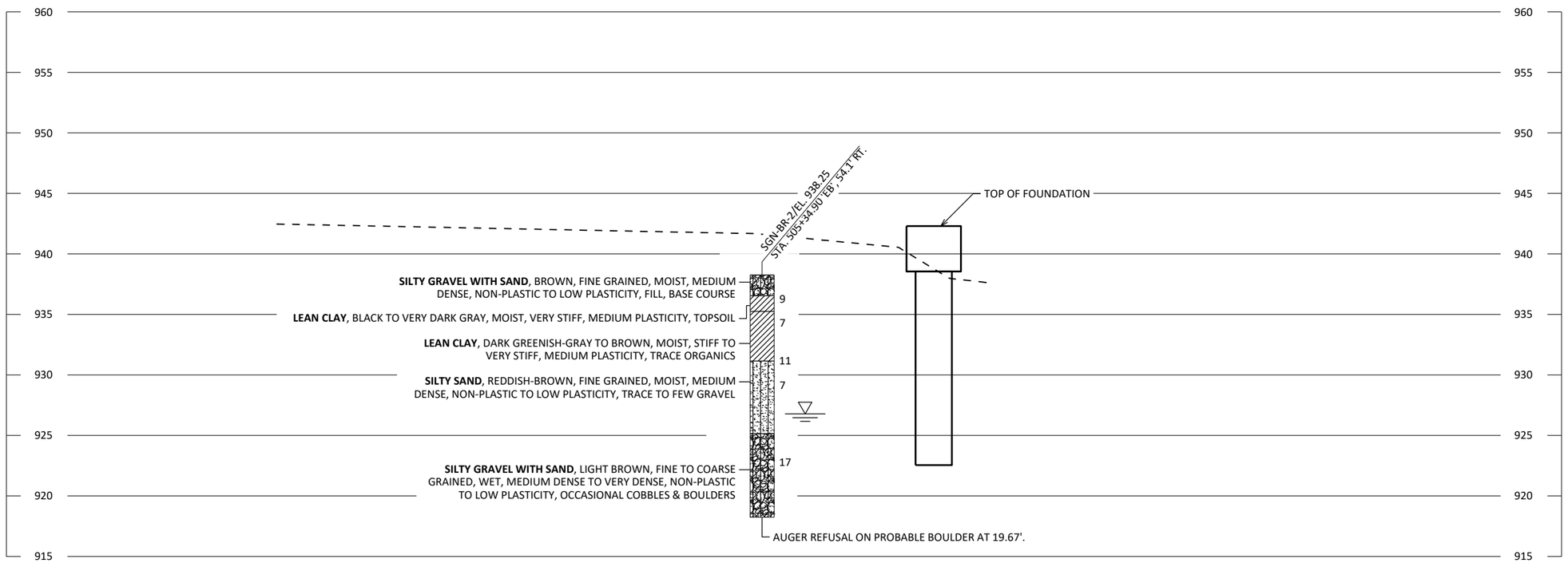
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
SGN-BR-2	07/11/2023	45071.8065	772321.7645
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			





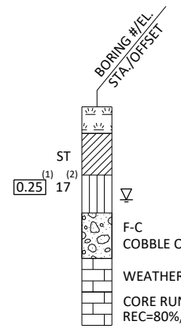
STATE PROJECT NUMBER

1204-08-73

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

STRUCTURE S-13-613

DRAWN BY UD | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 6 OF 22

688

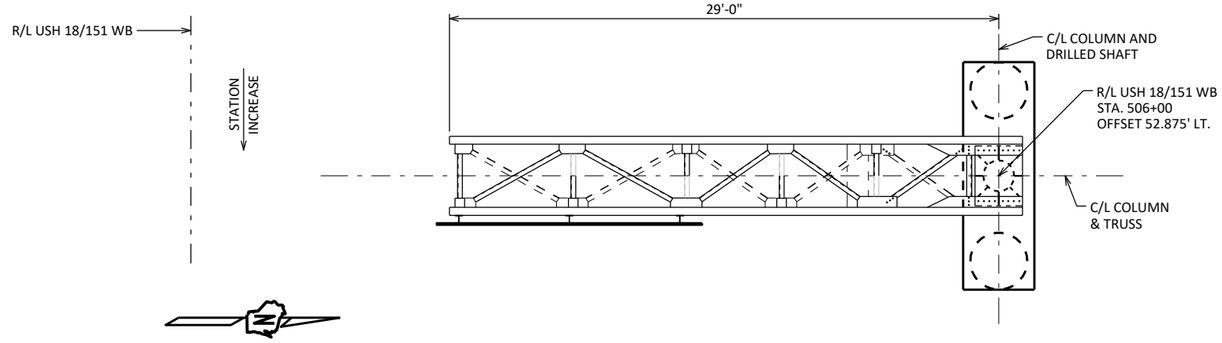
SCALE =

8

8

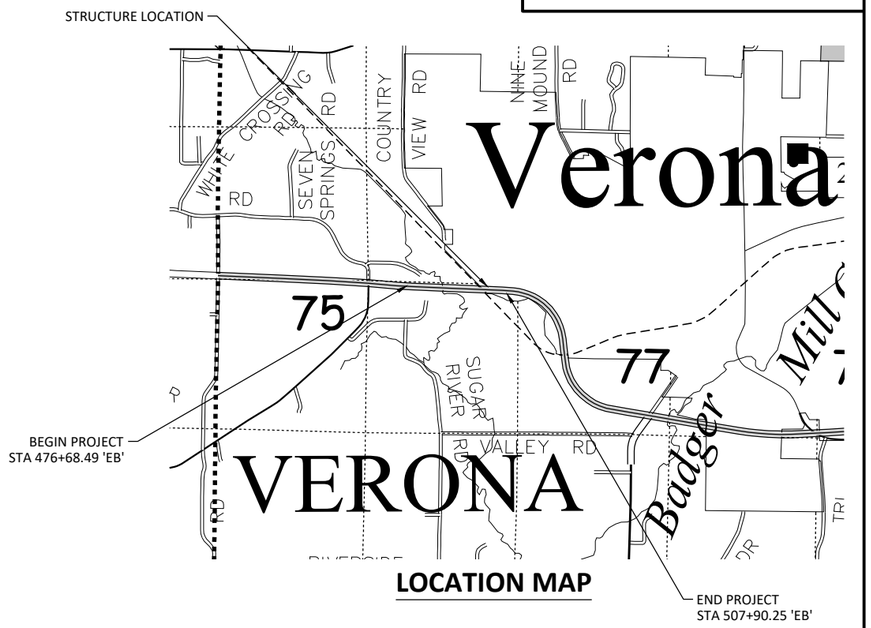
STATE PROJECT NUMBER

1204-08-73

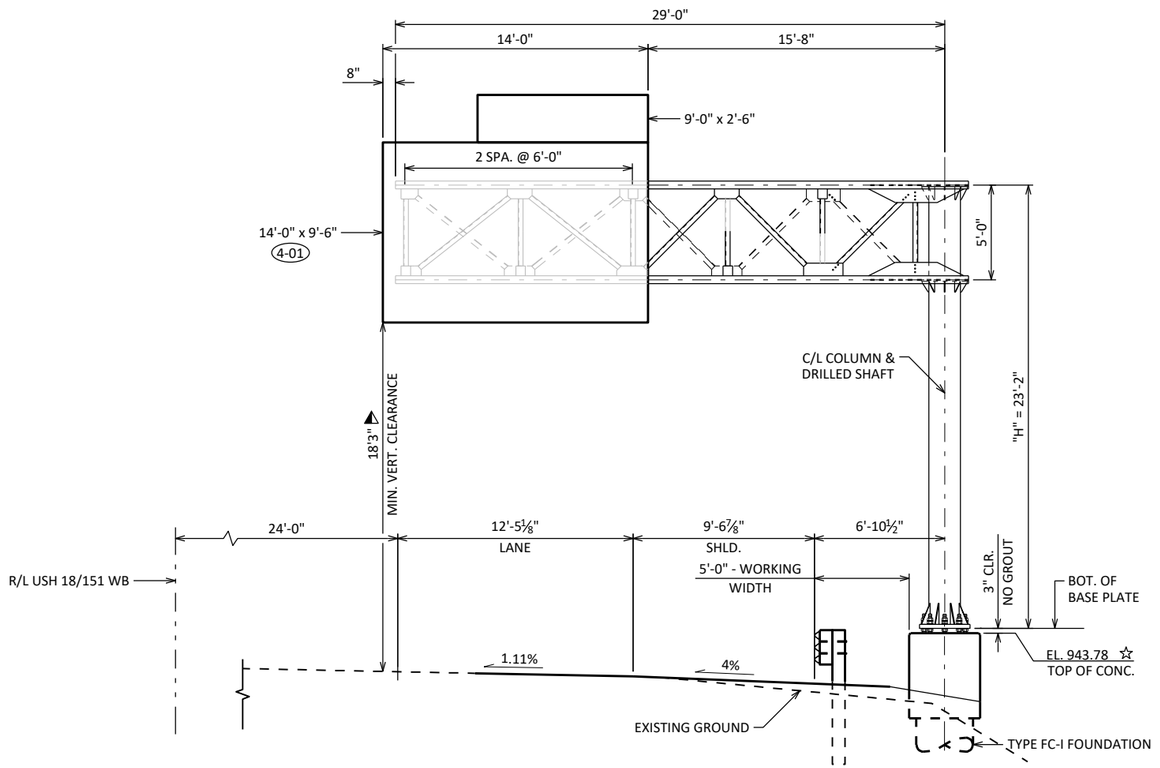


PLAN

STA. 506+00 USH 18/151 WB
0.5 MILES W OF EPIC LANE & W VERONA AVE INTERSECTION

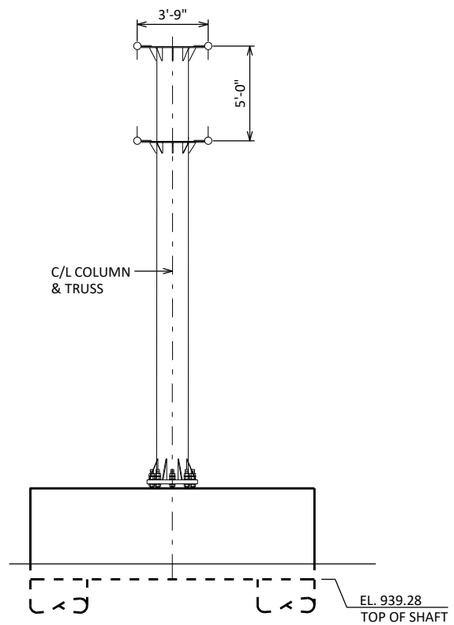


LOCATION MAP



ELEVATION

LOOKING WEST AT F.F. OF SIGN



END VIEW

LOOKING SOUTH AT END OF SIGN

LEGEND

☆ ELEVATIONS ALONG C/L OF TRUSS.

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN.

▲ POINT OF MIN. VERTICAL CLEARANCE
STA. 506+00 'WB', 23.21' LT.
ELEV. 941.69

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-614

DRAWN BY UD | PLANS CK'D MSK

LAYOUT

SHEET 7 OF 22

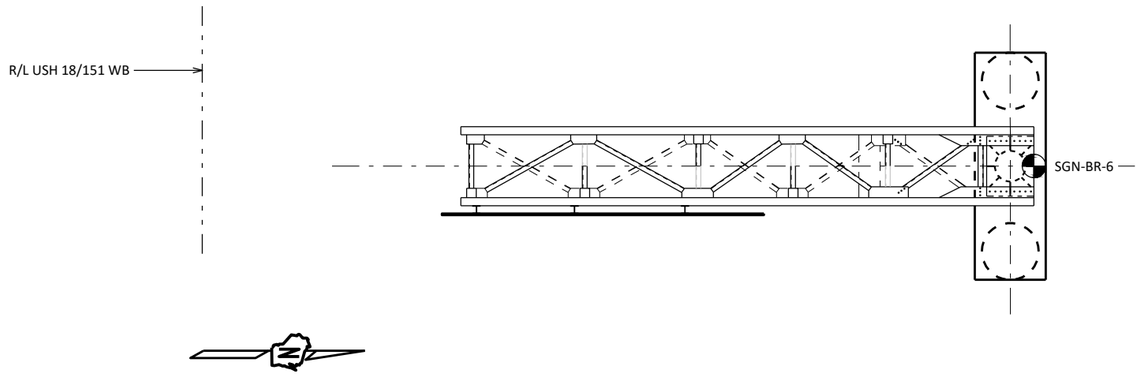
689

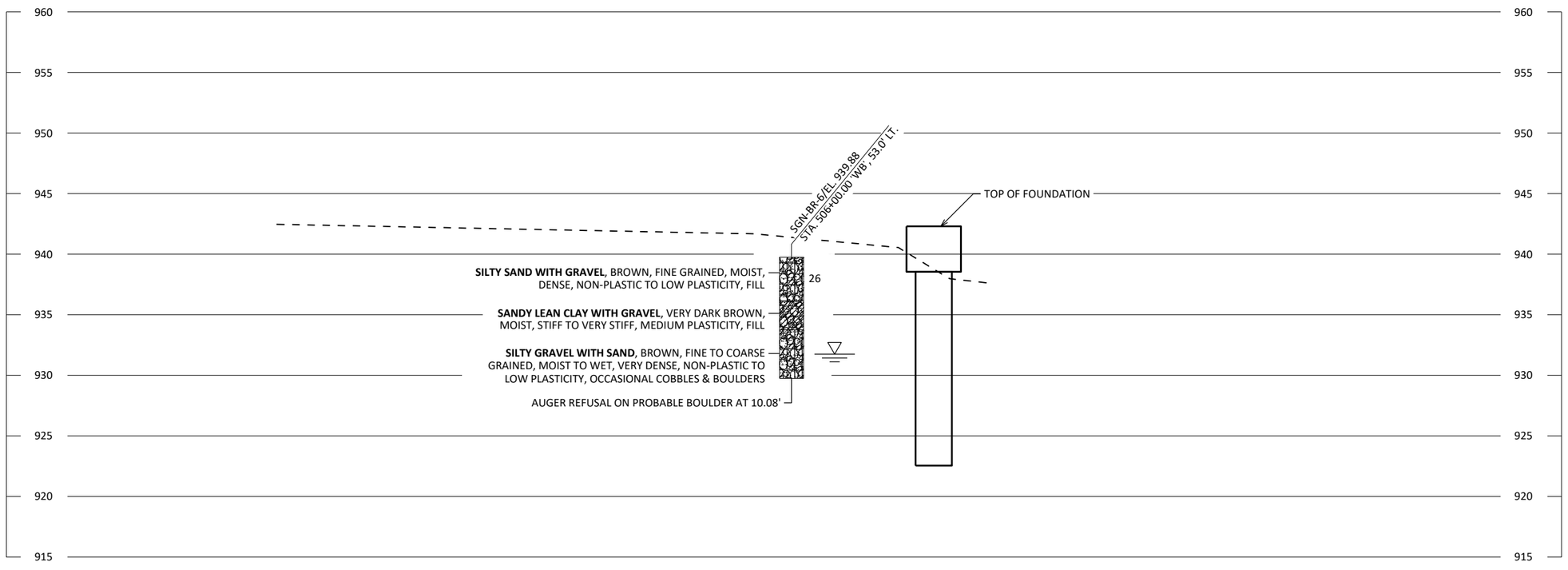
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
SGN-BR-6	07/10/2023	450873.0595	772393.883
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			





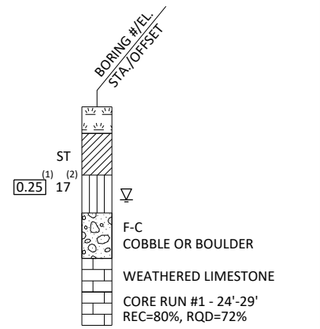
STATE PROJECT NUMBER

1204-08-73

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

STRUCTURE S-13-614

DRAWN BY UD | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 8 OF 22

690

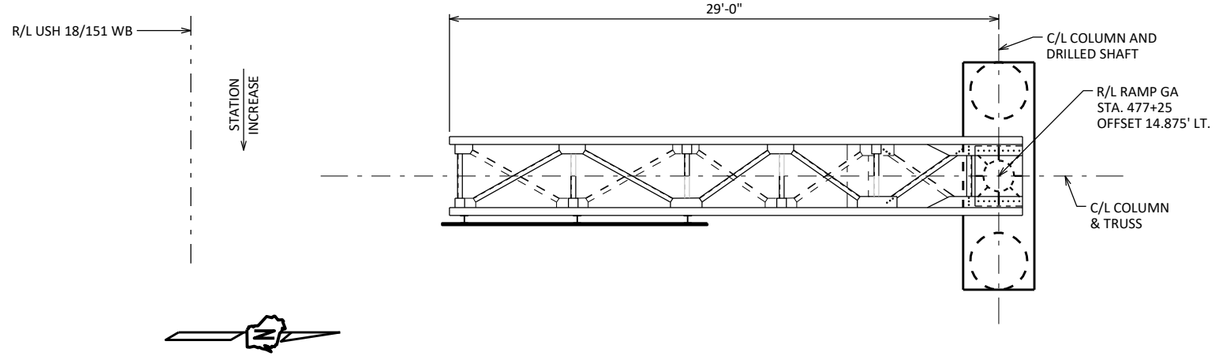
SCALE =

8

8

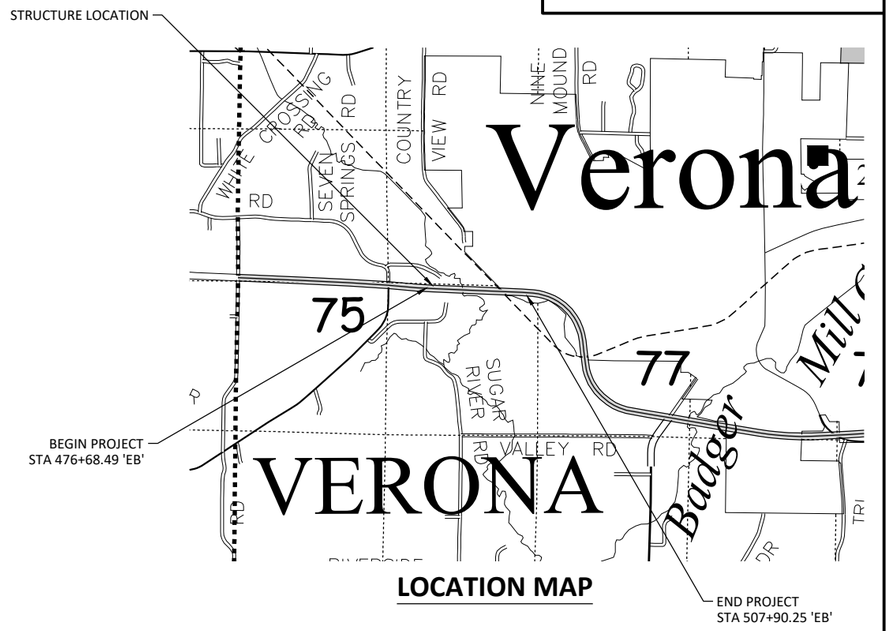
STATE PROJECT NUMBER

1204-08-73

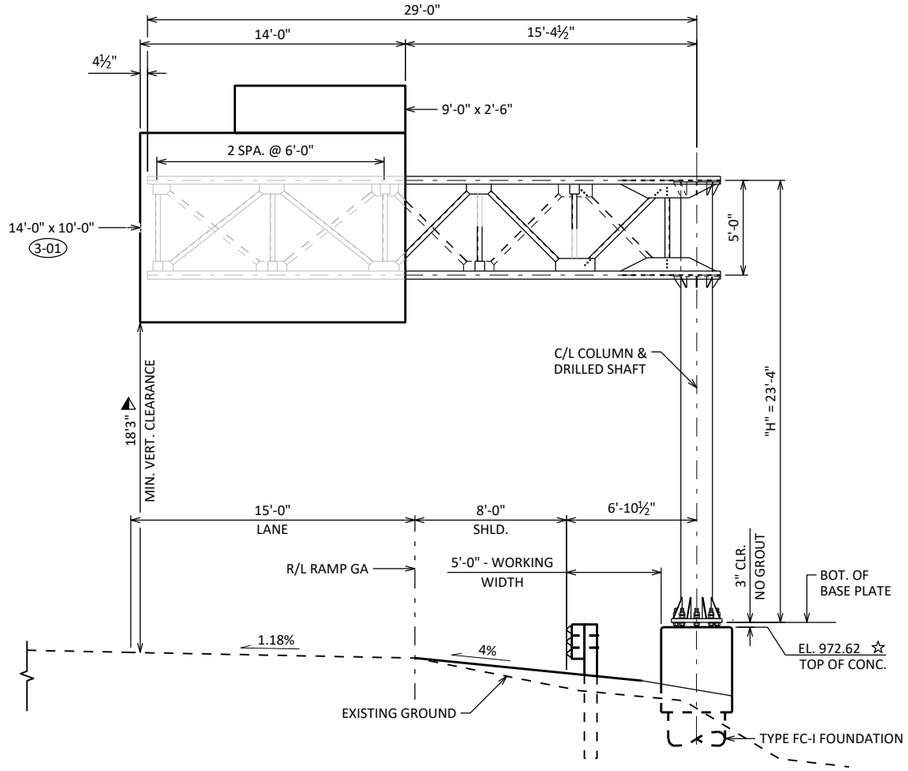


PLAN

STA. 477+25 RAMP GA
0.3 MILES E OF CTH G & USH 18/151 INTERCHANGE

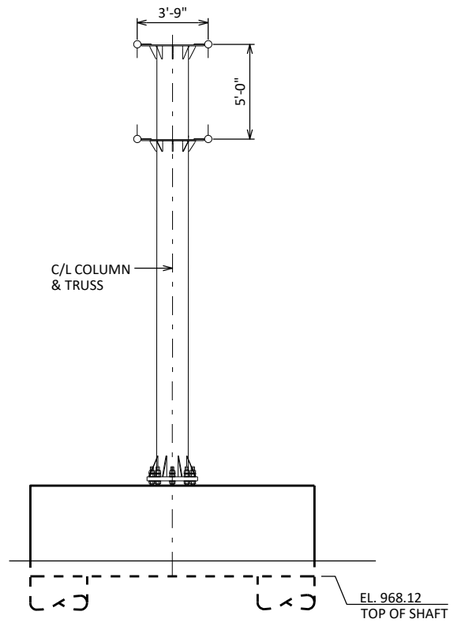


LOCATION MAP



ELEVATION

LOOKING WEST AT F.F. OF SIGN



END VIEW

LOOKING SOUTH AT END OF SIGN

LEGEND

☆ ELEVATIONS ALONG C/L OF TRUSS.

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN.

◭ POINT OF MIN. VERTICAL CLEARANCE
STA. 477+25 'GA', 14.50' LT.
ELEV. 970.45

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-615

DRAWN BY UD | PLANS CK'D MSK

LAYOUT

SHEET 9 OF 22

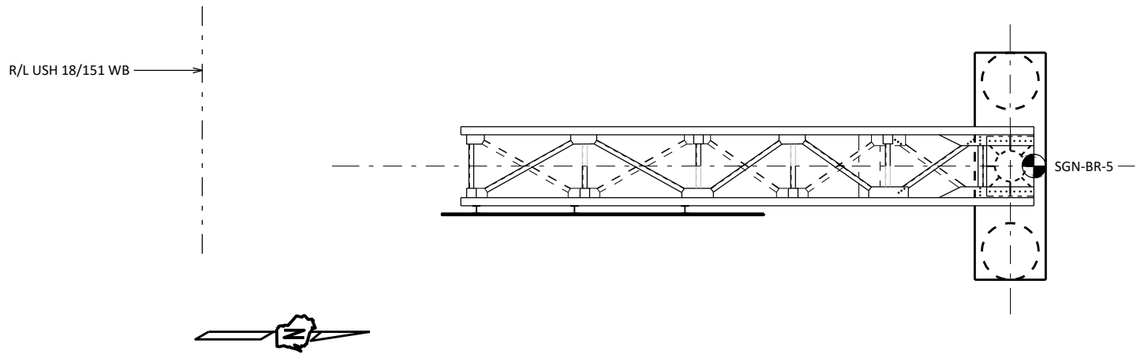
691

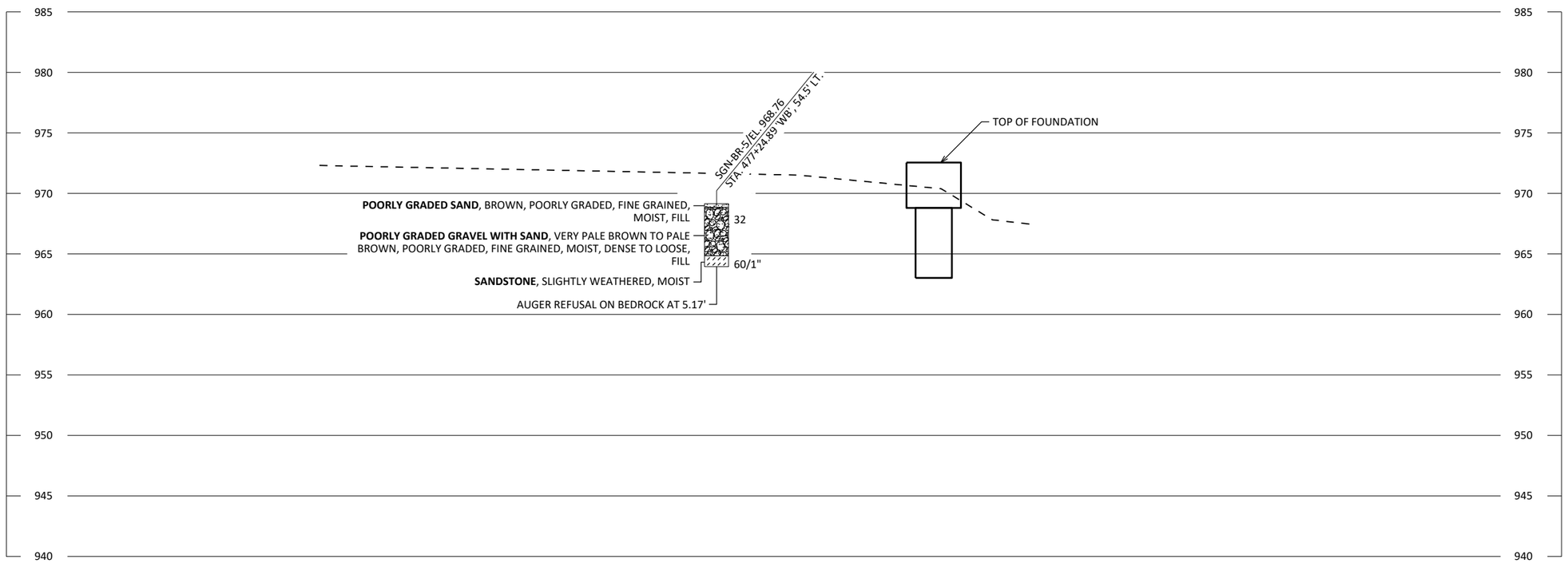
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
SGN-BR-4	07/10/2023	451004.1165	769523.9797
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			





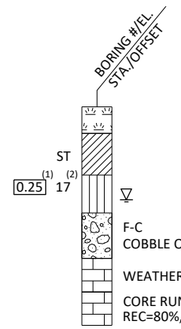
STATE PROJECT NUMBER

1204-08-73

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/ META

LEGEND OF BORING



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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-615

DRAWN BY UD | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 10 OF 22

692

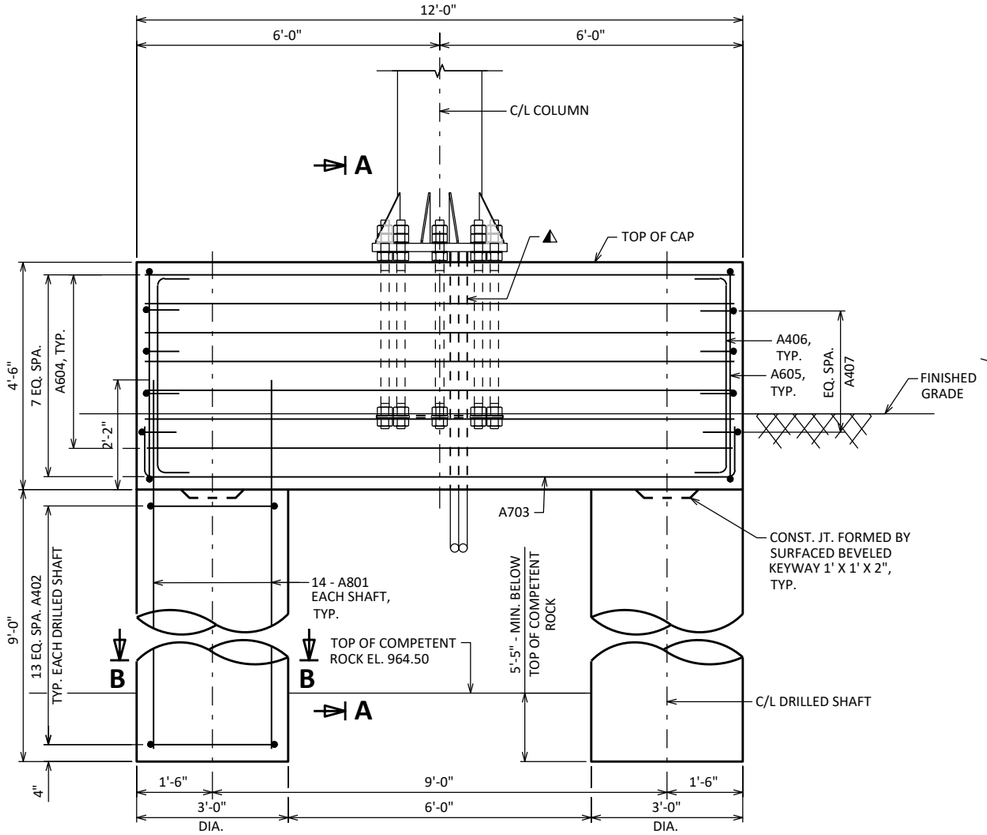
SCALE =

8

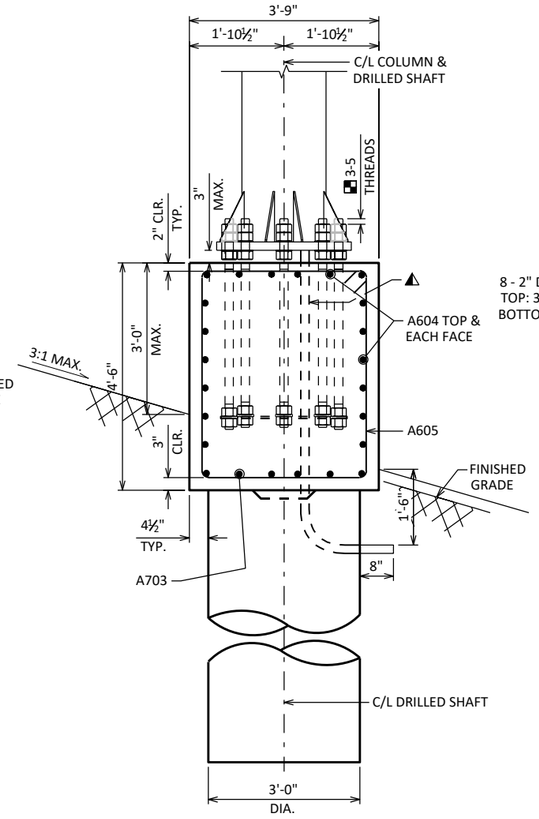
8

STATE PROJECT NUMBER

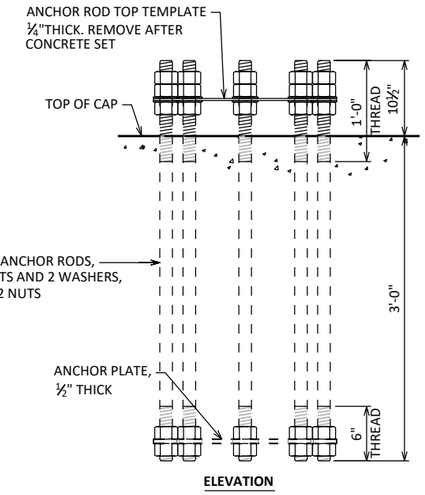
1204-08-73



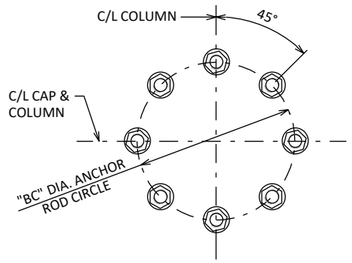
ELEVATION



SECTION A-A



ELEVATION

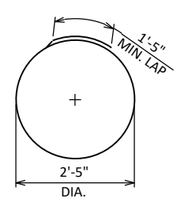


PLAN

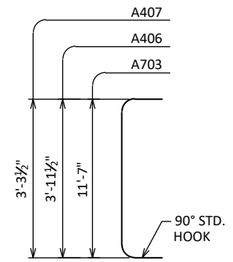
ANCHOR ROD ASSEMBLY DETAILS

SINGLE ANCHOR ASSEMBLY SHOWN, 8 ANCHOR RODS PER ASSEMBLY

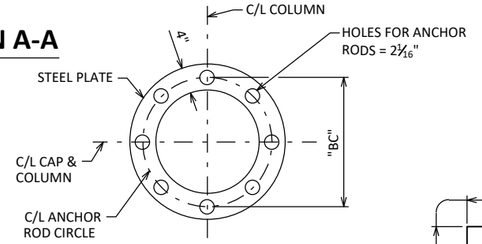
CENTER ANCHOR ROD ASSEMBLY AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.



A402

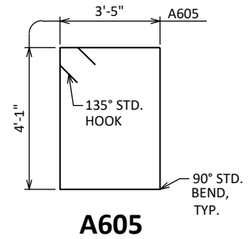


A703, A406, A407



ANCHOR PLATE/ TOP TEMPLATE

"BC"
2'-2"

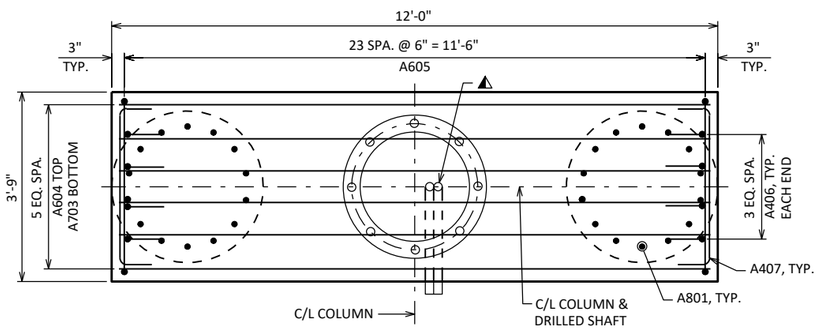


A605

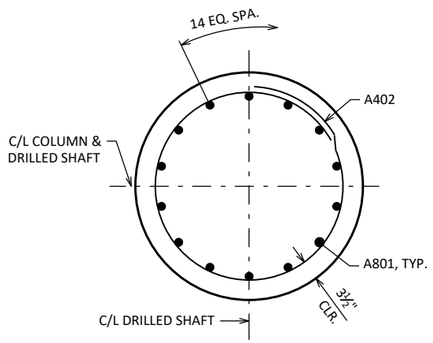
LEGEND

ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.

2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.



PLAN



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 2-INCH	FOUNDATION DRILLING 36" DIA.
	(CY)	(LBS)	(LBS)	(EACH)	(LF)
NS	12	1,010	1,100	1	18

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
A801		28	11'-2"			DRILLED SHAFT - VERTICAL
A402		28	9'-0"	X		DRILLED SHAFT - HORIZONTAL
A703	X	6	13'-7"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	18	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	24	15'-10"	X		CAP - STIRRUP
A406	X	8	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	8	3'-11"	X		CAP - HORIZONTAL - EACH END

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-615

DRAWN BY UD | PLANS CK'D MSK

FOUNDATION

SHEET 11 OF 22

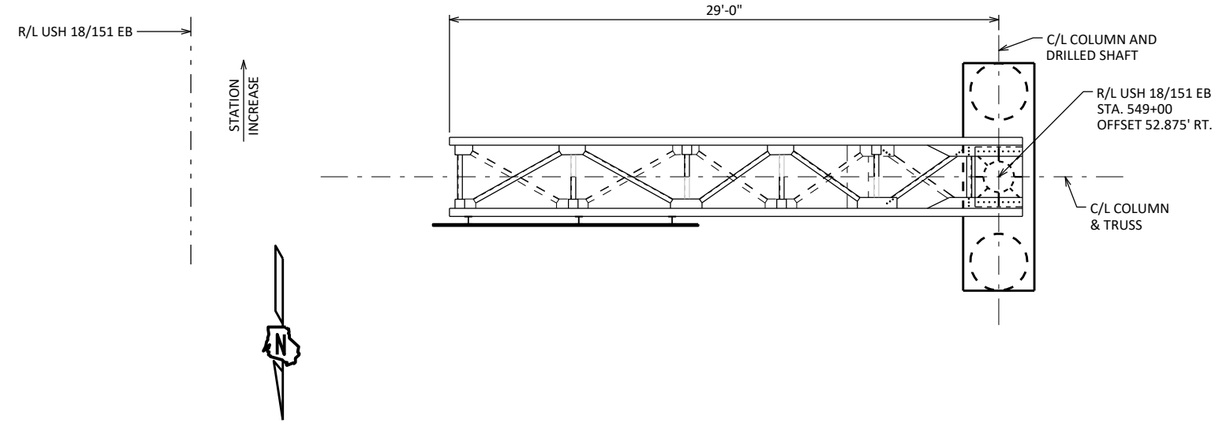
693

8

8

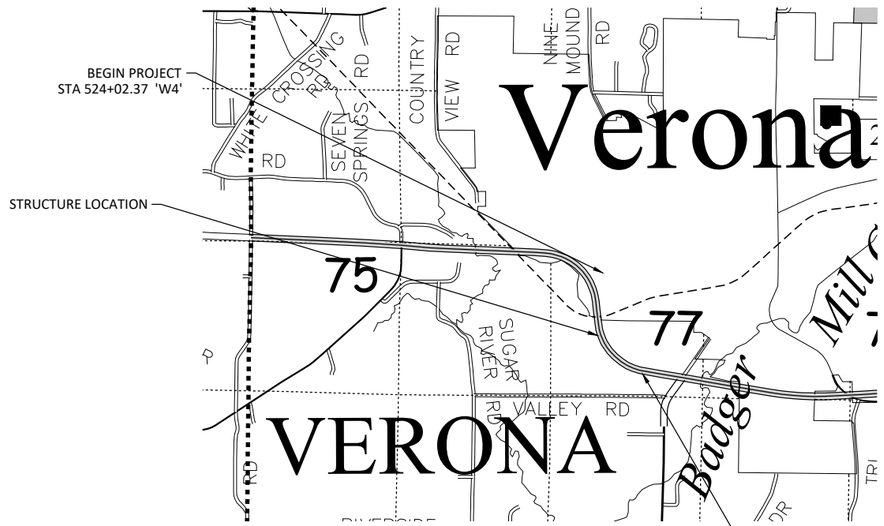
STATE PROJECT NUMBER

1204-08-74

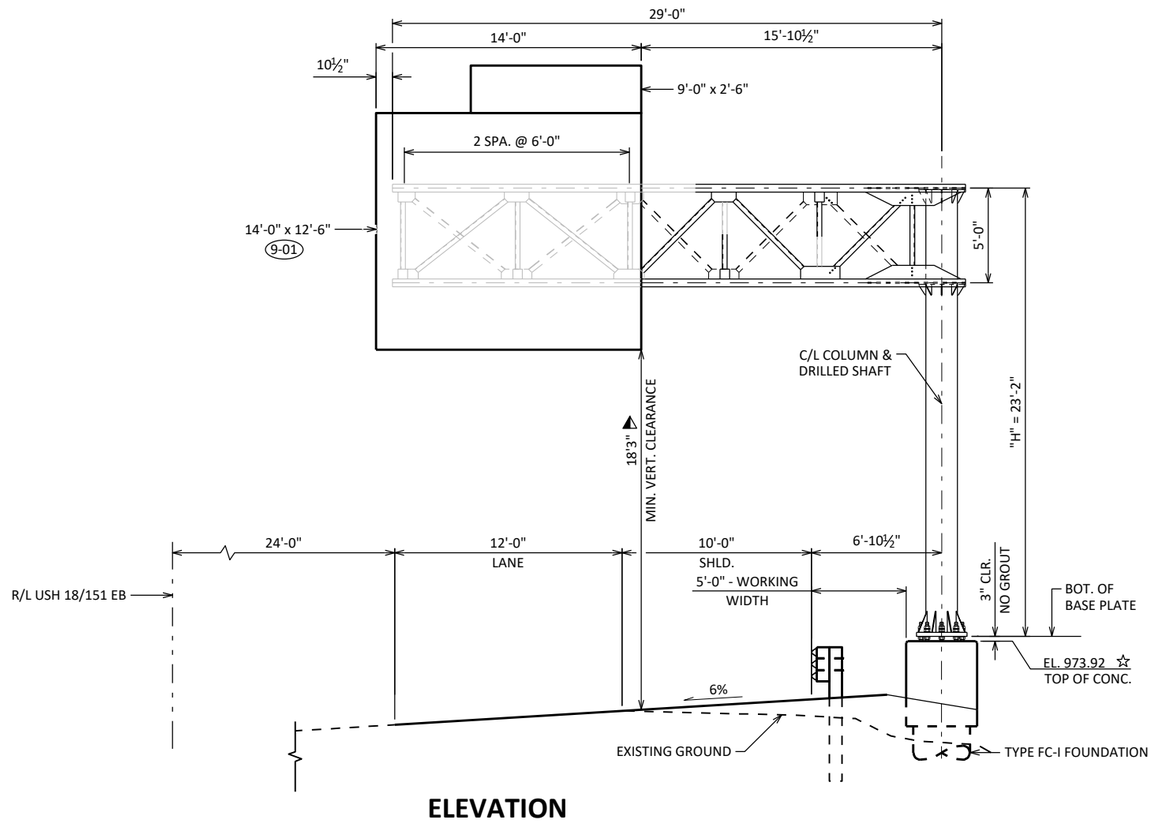


PLAN

STA. 549+00 USH 18/151 EB
0.6 MILES NW OF USH 18/151 & STH 69 INTERCHANGE

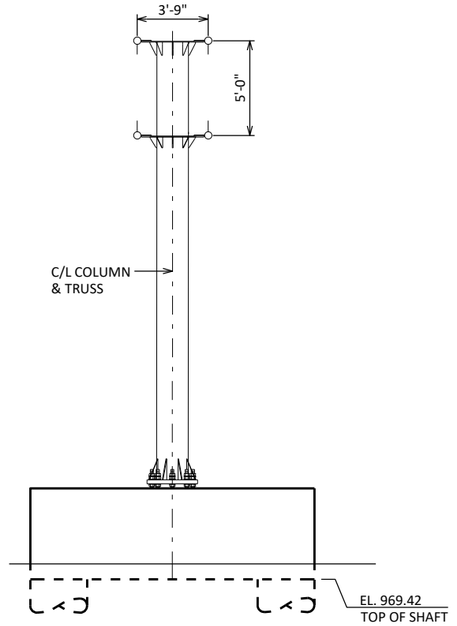


LOCATION MAP



ELEVATION

LOOKING SOUTH AT F.F. OF SIGN



END VIEW

LOOKING EAST AT END OF SIGN

LEGEND

☆ ELEVATIONS ALONG C/L OF TRUSS.

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN.

▲ POINT OF MIN. VERTICAL CLEARANCE
STA. 549+00 'EB', 37.00' RT.
ELEV. 970.30

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-616

DRAWN BY UD | PLANS CK'D MSK

LAYOUT

SHEET 12 OF 22

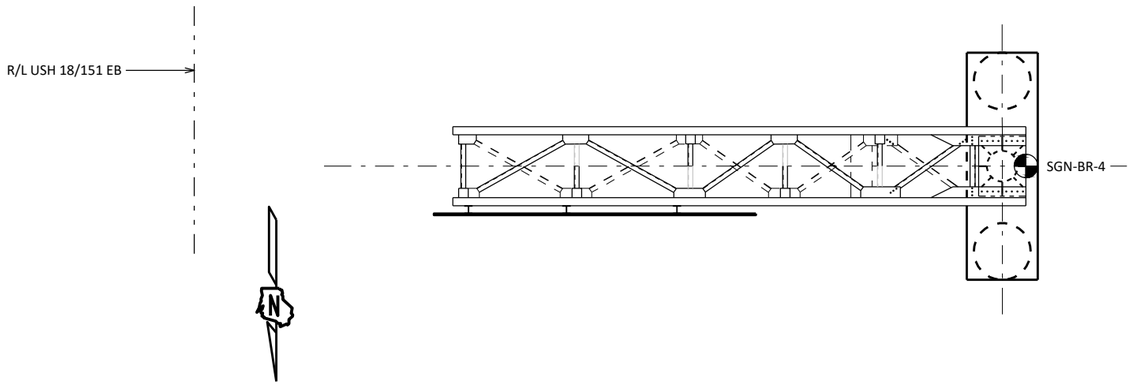
694

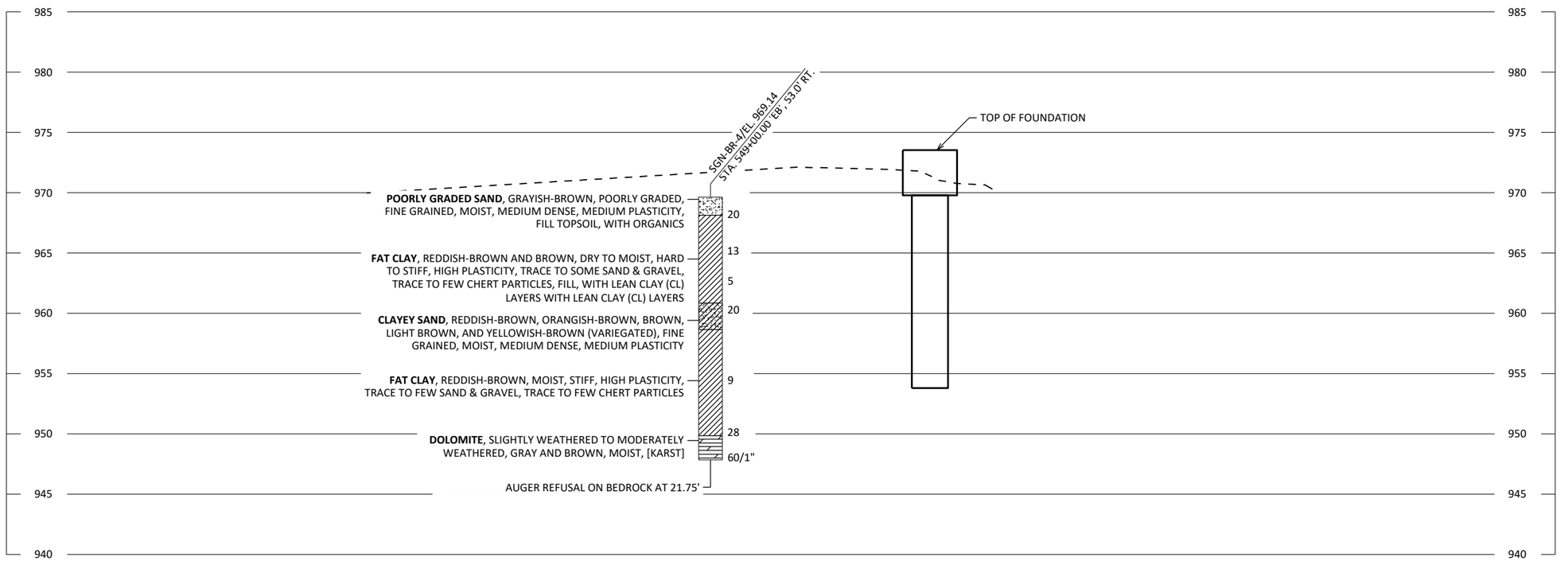
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
SGN-BR-4	07/13/2023	448085.978	774920.2908
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			





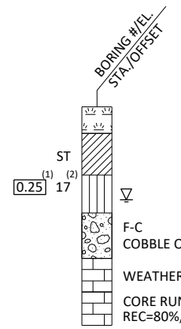
STATE PROJECT NUMBER

1204-08-74

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-616

DRAWN BY UD | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 13 OF 22

695

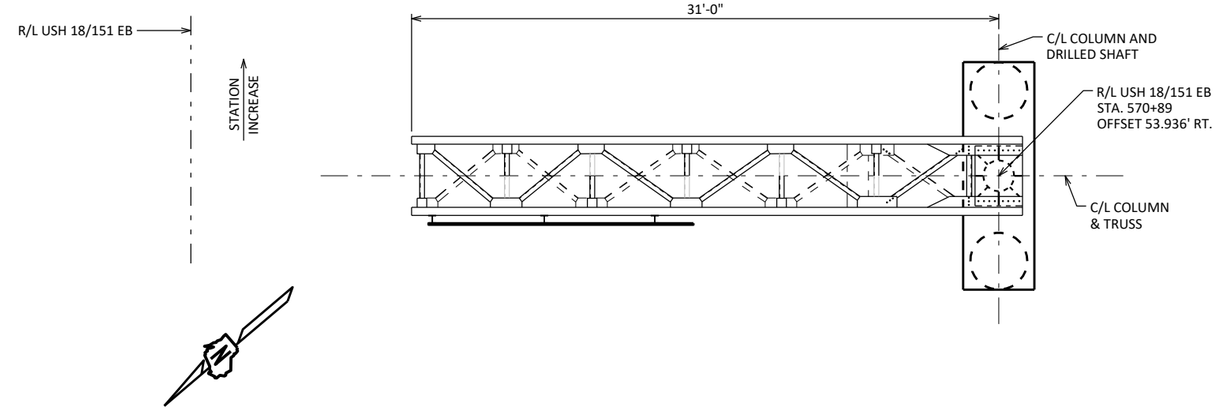
SCALE =

8

8

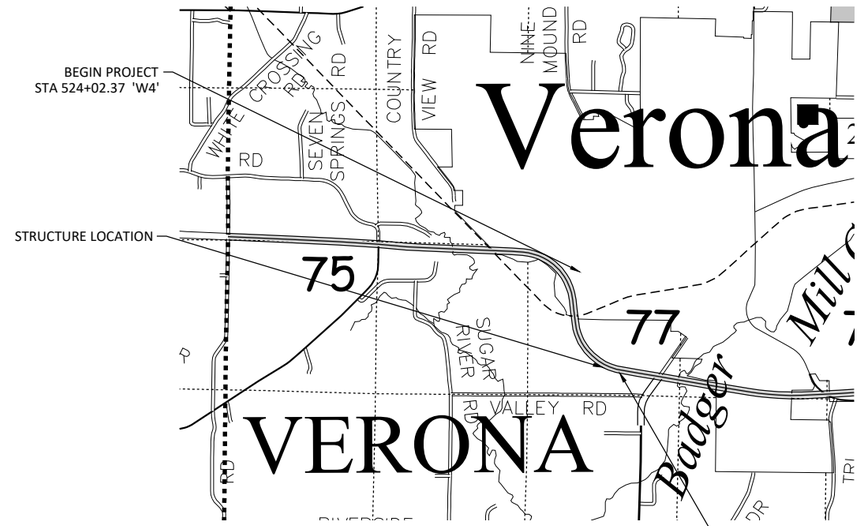
STATE PROJECT NUMBER

1204-08-74

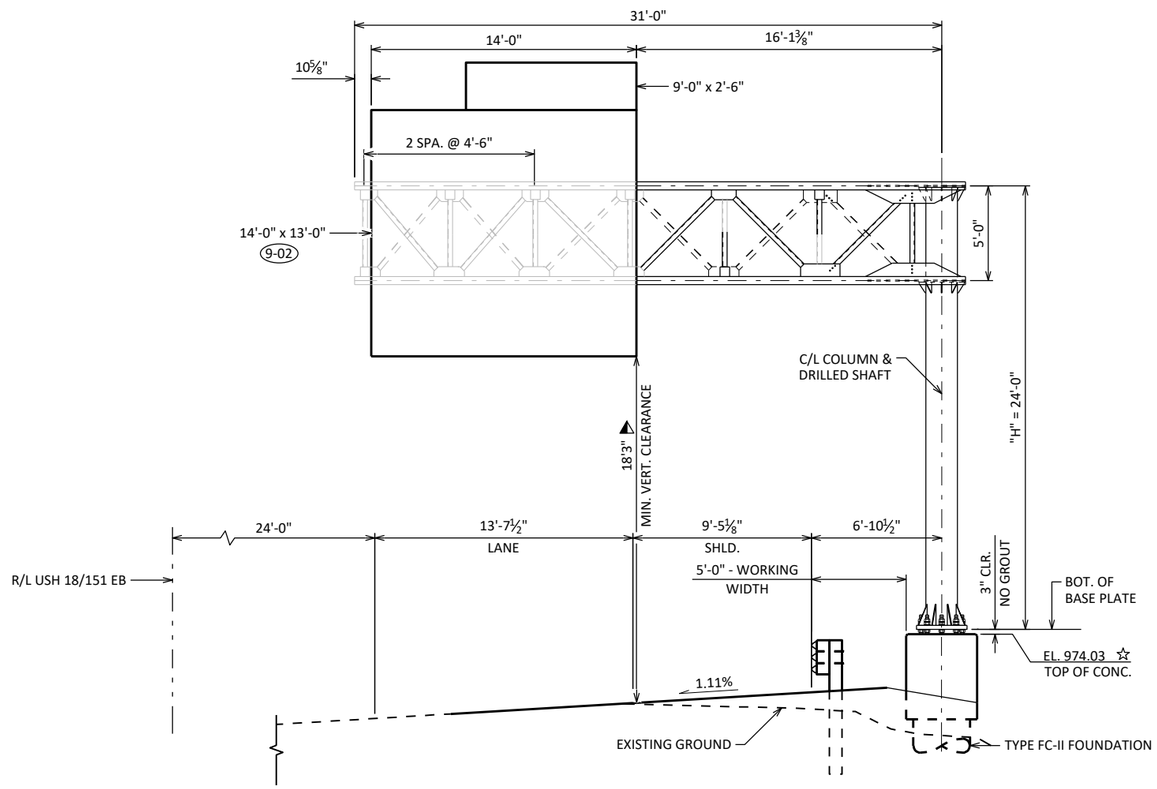


PLAN

STA. 570+89 USH 18/151 EB
0.3 MILES W OF USH 18/151 & STH 69 INTERCHANGE

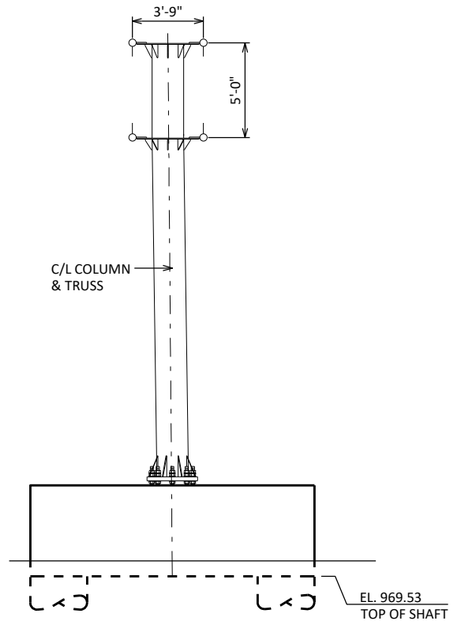


LOCATION MAP



ELEVATION

LOOKING SE AT F.F. OF SIGN



END VIEW

LOOKING NE AT END OF SIGN

LEGEND

☆ ELEVATIONS ALONG C/L OF TRUSS.

(XXX) SIGN NUMBER, SEE PERMANENT SIGNING PLAN.

▲ POINT OF MIN. VERTICAL CLEARANCE
STA. 570+89 'EB', 37.82' RT.
ELEV. 971.01

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE S-13-617

DRAWN BY UD | PLANS CK'D MSK

LAYOUT

SHEET 14 OF 22

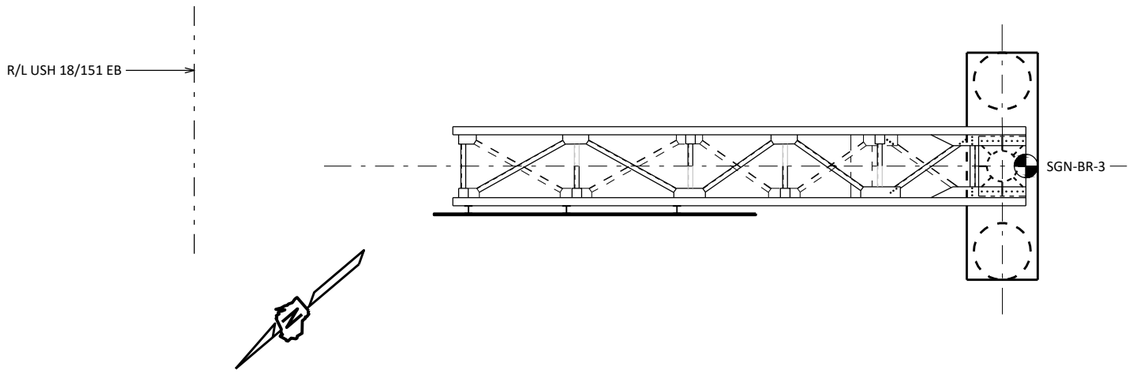
696

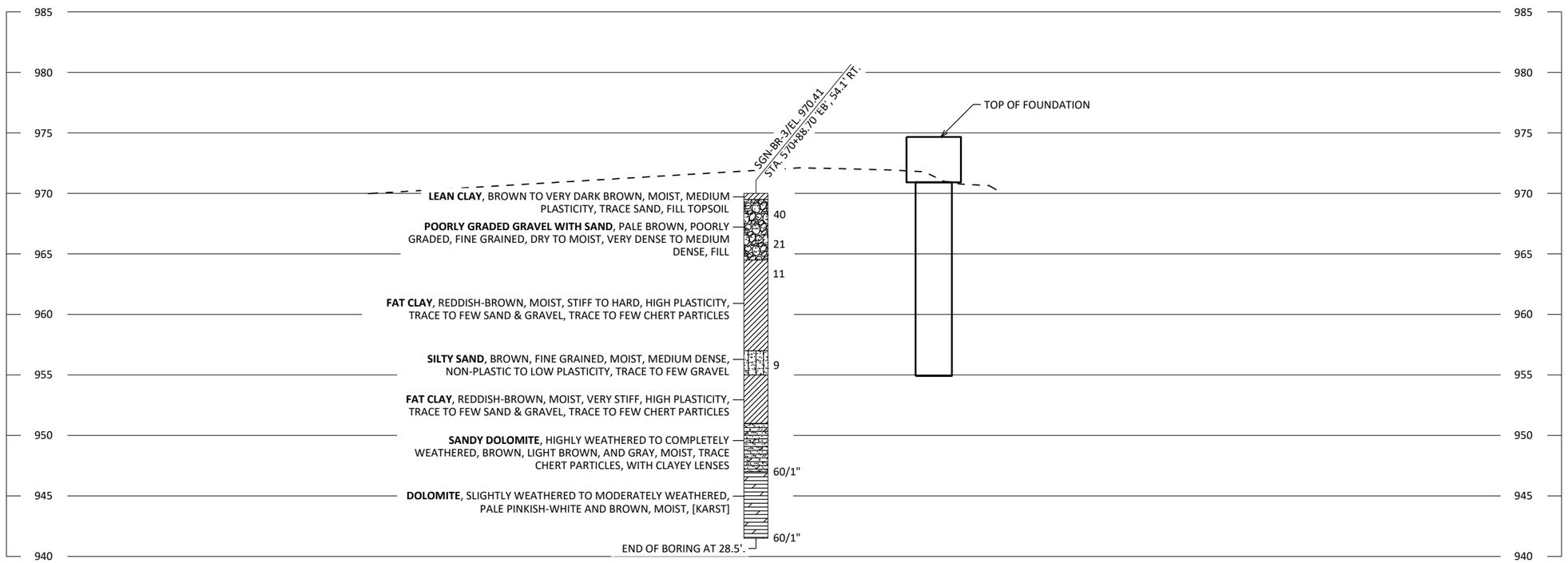
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
SGN-BR-3	07/13/2023	446572.4503	776420.771
BORINGS COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
REPORT COMPLETED BY: SOILS & ENGINEERING SERVICES, INC.			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) DANE COUNTY			





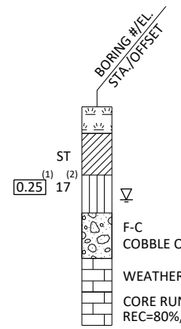
STATE PROJECT NUMBER

1204-08-74

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

STRUCTURE S-13-617

DRAWN BY UD | PLANS CK'D MSK

SUBSURFACE EXPLORATION

SHEET 15 OF 22

697

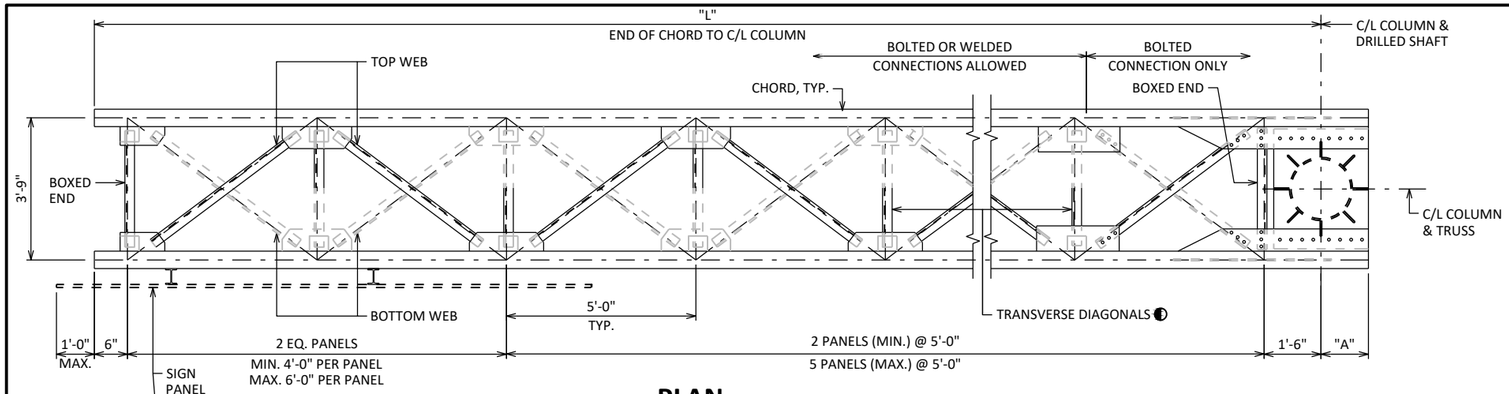
SCALE =

8

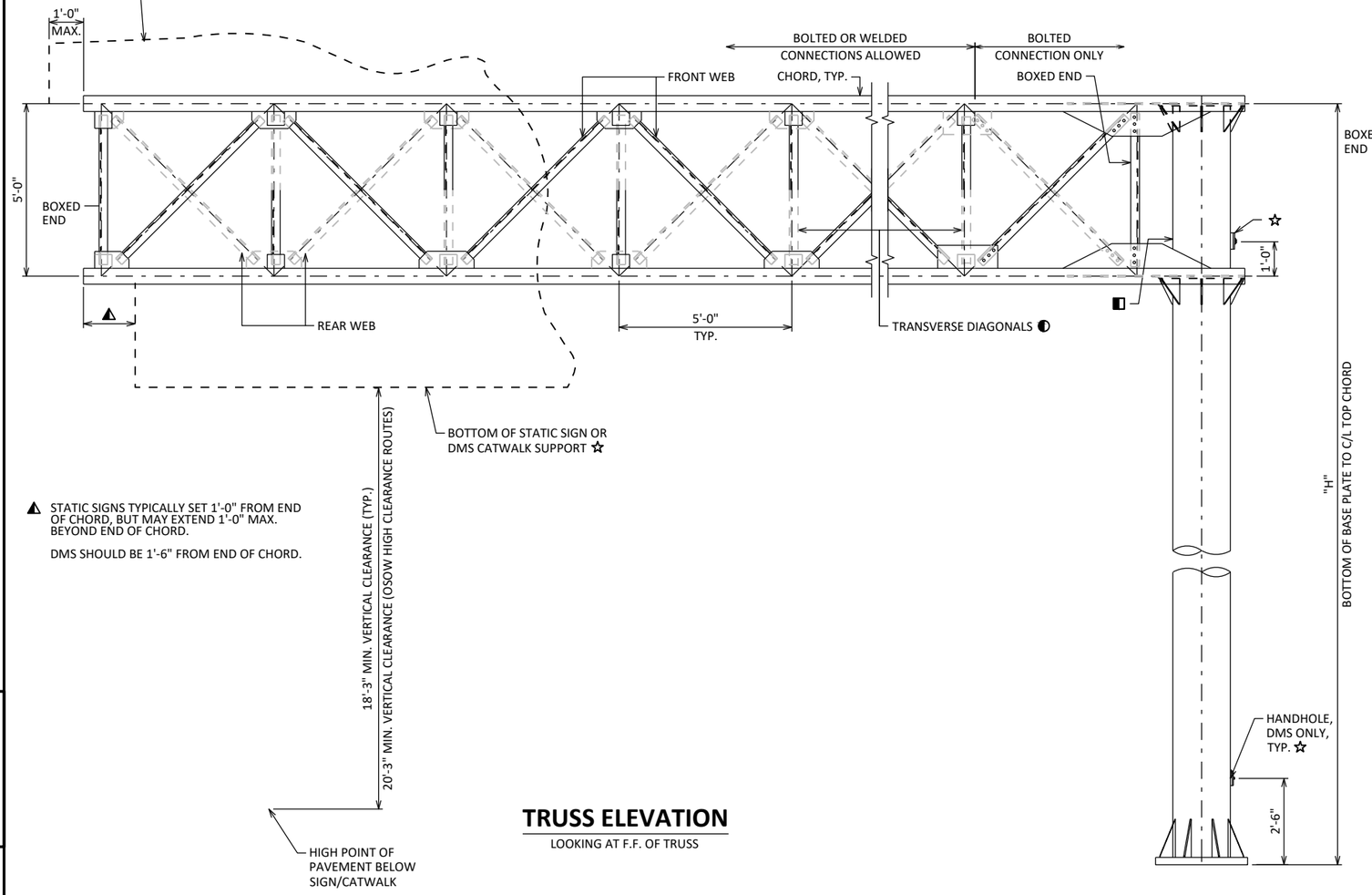
8

STATE PROJECT NUMBER

STANDARD



PLAN

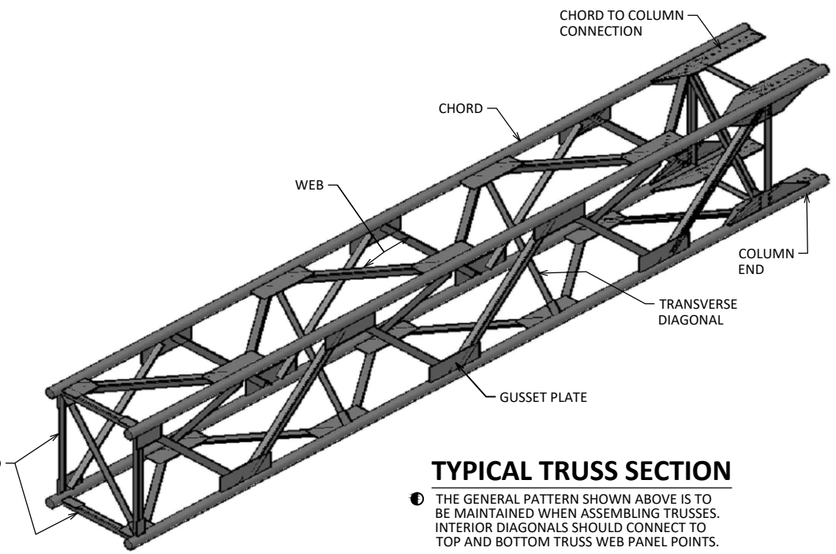


▲ STATIC SIGNS TYPICALLY SET 1'-0" FROM END OF CHORD, BUT MAY EXTEND 1'-0" MAX. BEYOND END OF CHORD.

DMS SHOULD BE 1'-6" FROM END OF CHORD.

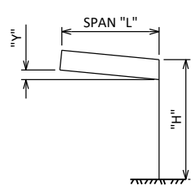
TRUSS ELEVATION

LOOKING AT F.F. OF TRUSS



TYPICAL TRUSS SECTION

◐ THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES. INTERIOR DIAGONALS SHOULD CONNECT TO TOP AND BOTTOM TRUSS WEB PANEL POINTS.



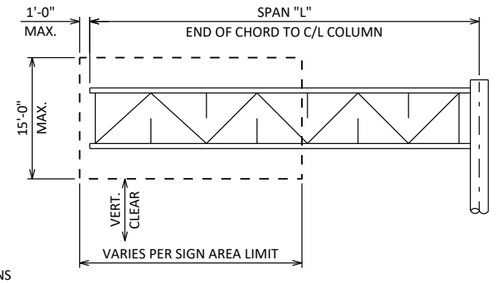
CAMBER DIAGRAM

CAMBER SHALL BE BUILT INTO THE TRUSS DURING FABRICATION. SHIM PLATES BETWEEN TRUSS SECTIONS TO CREATE CAMBER SHALL NOT BE ALLOWED.

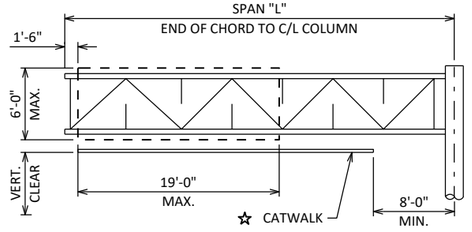
CAMBER VALUES

	"Y"			
SPAN "L"	30'-0"		38'-0"	
"H"	TYPE I	DMS	TYPE I	DMS
22'-0"	2¼"	3½"	2⅝"	4⅛"
24'-0"	2⅜"	3⅞"	2⅞"	4½"
26'-0"	2½"	4⅛"	3⅜"	4⅞"
28'-0"	2¾"	4½"	3¼"	5¼"
30'-0"	2⅞"	4¾"	3½"	5⅝"

INTERPOLATE FOR VALUES NOT SHOWN.
DMS VALUES INCLUDE DL OF CATWALK.



TYPE I SIGN LIMITS



DMS SIGN LIMITS

2,500 LB MAX DMS WEIGHT, INCLUDES DMS VERTICAL SUPPORT MEMBERS

LEGEND

☆ FOR OSS WITH DMS ONLY, PROVIDE HANDHOLES AS SHOWN. SEE "CATWALK DETAILS" AND "ELECTRICAL DETAILS" SHEETS.

◧ FOR OSS WITH DMS ONLY, DRILL AND TAP FOR 2 - 2" STD. PIPE THREADS. LOCATE CENTER OF BOTTOM HOLE 6" FROM TOP OF BOTTOM CHORD AND SPACE VERTICALLY AT 6" C/C. PLACE CONDUIT PLUG IN HOLES THAT ARE NOT USED FOR WIRING SIGN PANELS. SEE "ELECTRICAL DETAILS" SHEET.

CANTILEVER 4-CHORD TRUSS MEMBER TABLE

STANDARD DESIGN TYPE	TYPE I SIGN AREA (SQ. FT)	DMS AREA (SQ. FT.)	MAXIMUM SPAN "L"	MAXIMUM COLUMN HEIGHT "H"	DIM. "A"	COLUMN "OD" X THK.	CHORD "OD" X THK	WEB W X D X THK	BOXED END W X D X THK	TRANSVERSE DIAGONAL W X D X THK
I	264	114	30'-0"	30'-0"	1'-3"	20.00" X 0.500"	5.000" X 0.375"	L3 X 3 X ¼	L3 X 3 X ¼	L3 X 3 X ¼
II	240	114	38'-0"	30'-0"	1'-4½"	24.00" X 0.500"	5.563" X 0.375"	L3 X 3 X 5/16	L3 X 3 X ¼	L3 X 3 X ¼

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER DETAILS

SHEET 1
698

SCALE = 4.0

8

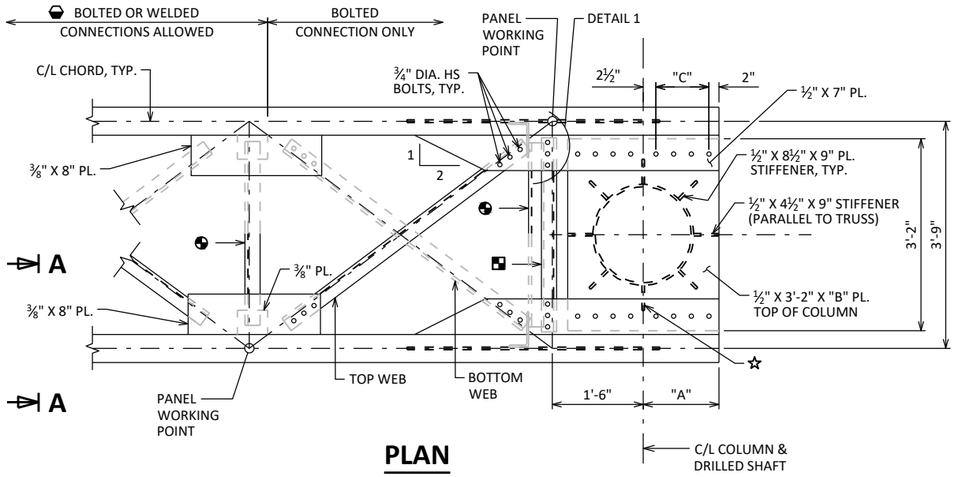
8

STATE PROJECT NUMBER

STANDARD

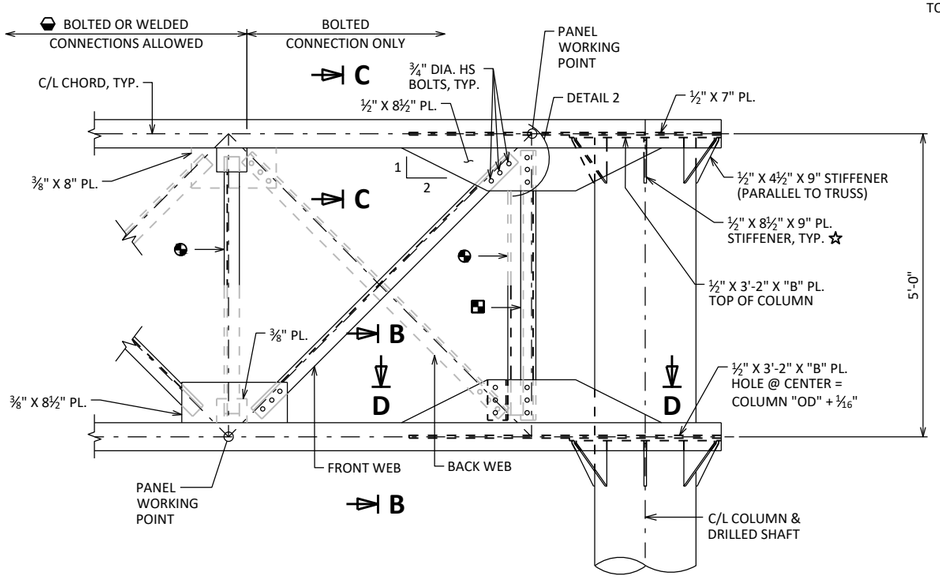
TRUSS TO COLUMN CONNECTION DATA

STANDARD DESIGN TYPE	"A"	"B"	"C"
I	1'-3"	2'-6"	3 SPA. @ 3½"
II	1'-4½"	2'-9"	4 SPA. @ 3"



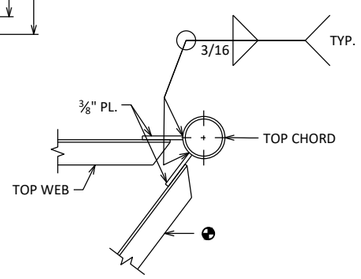
PLAN

TRUSS TO COLUMN CONNECTION

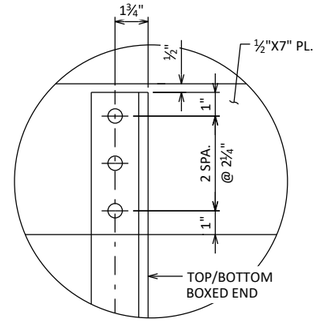


ELEVATION

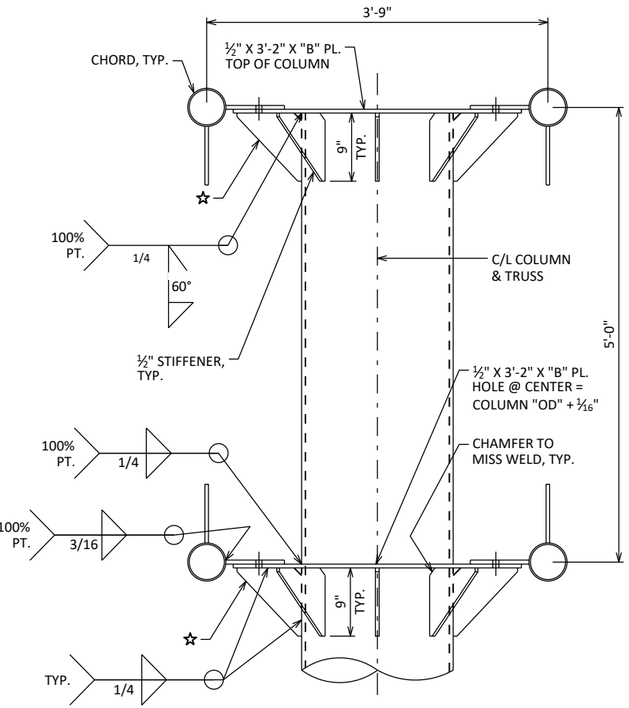
TRUSS TO COLUMN CONNECTION



SECTION A-A

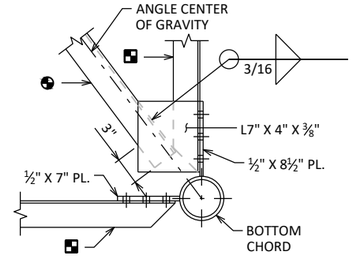


DETAIL 1



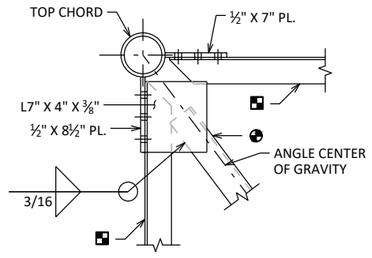
END VIEW

TRUSS TO COLUMN CONNECTION (WEB MEMBERS NOT SHOWN)



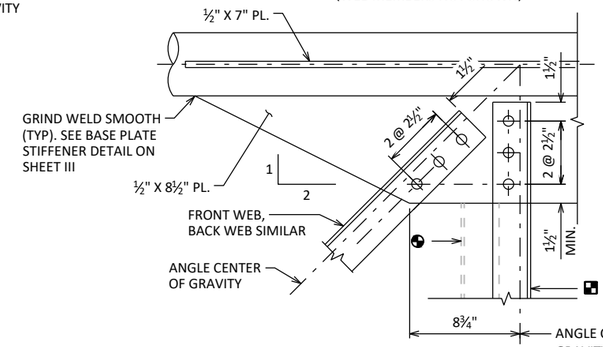
SECTION B-B

FRONT CHORD

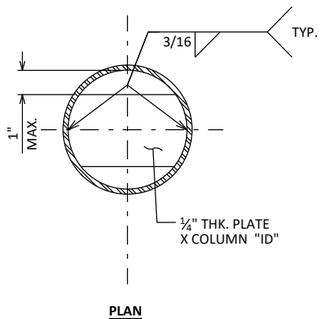


SECTION C-C

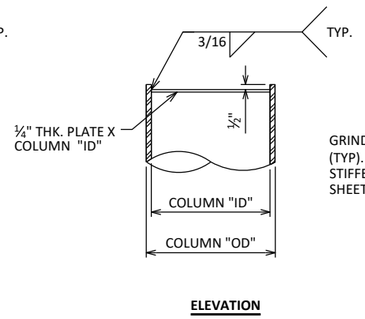
BACK CHORD



DETAIL 2

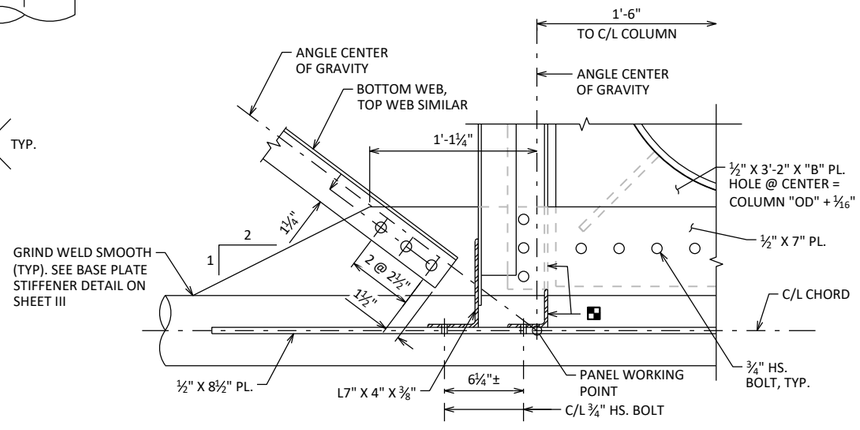


PLAN



ELEVATION

CHORD CAP DETAIL



SECTION D-D

LOOKING DOWN @ BOTTOM HORIZ. GUSSET @ FRONT CHORD

LEGEND

- TRANSVERSE DIAGONAL
- BOXED END AT SUPPORT
- WELDED CONNECTIONS MAY BE USED IF UNIT CAN BE GALVANIZED IN ONE PIECE. FIRST BAY MUST BE BOLTED.
- ☆ ½" X 7" X 9" STIFFENER TYPE II STANDARD DESIGN ONLY. TYP. OPPOSITE SIDE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

4-CHORD TRUSS CANTILEVER CONNECTIONS 1

SHEET II
699

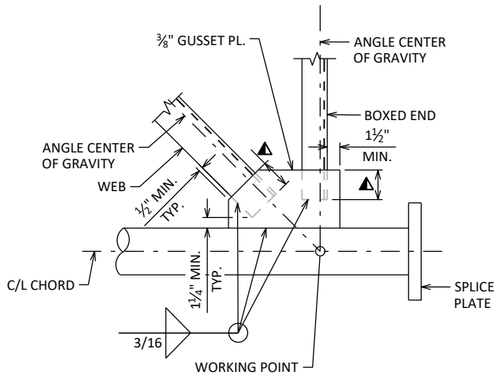
SCALE = 2.5

8

8

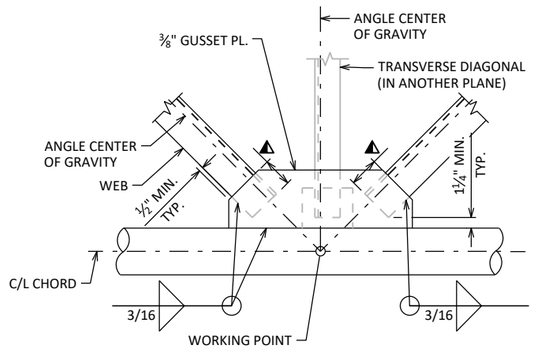
STATE PROJECT NUMBER

STANDARD

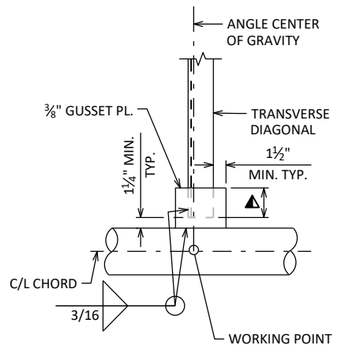


WELDED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE, CONNECTION AT COLUMN END SIMILAR

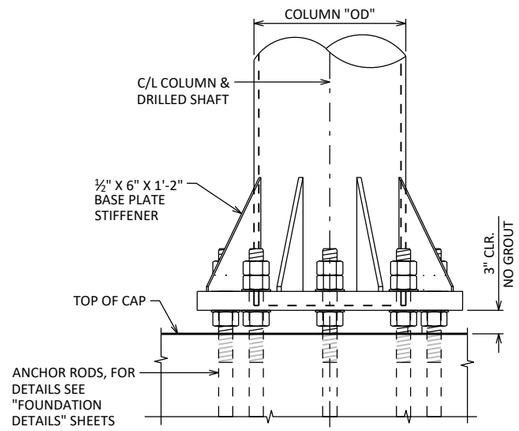


WELDED PANEL CONNECTION



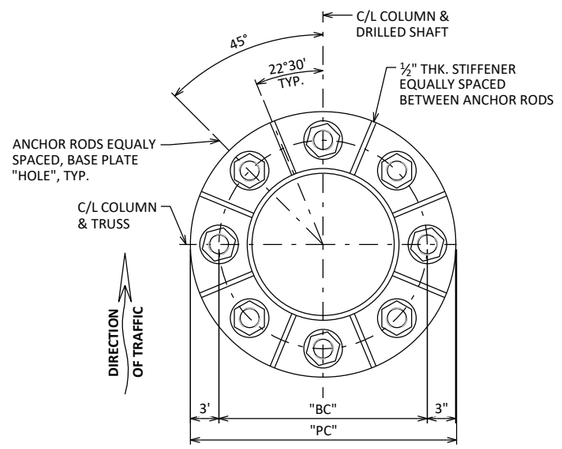
WELDED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY



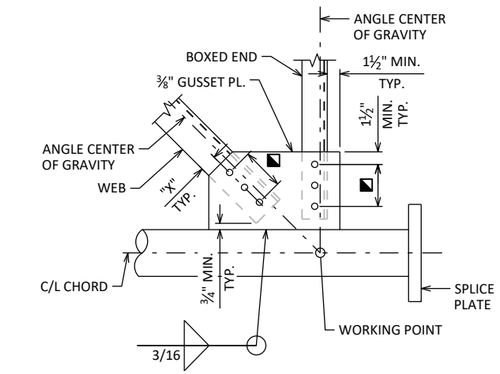
BASE PLATE & COLUMN DETAIL

LOOKING AT F.F. OF STRUCTURE



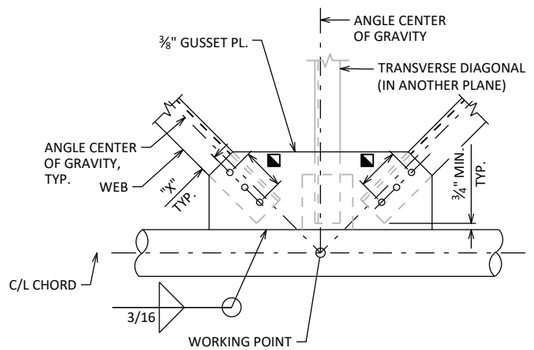
BASE PLATE

PLAN

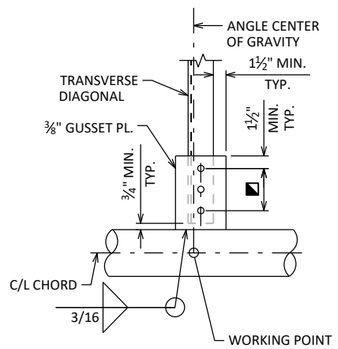


BOLTED BOXED END CONNECTION

CONNECTION SHOWN AT CHORD SPLICE, CONNECTION AT COLUMN END SIMILAR



BOLTED PANEL CONNECTION



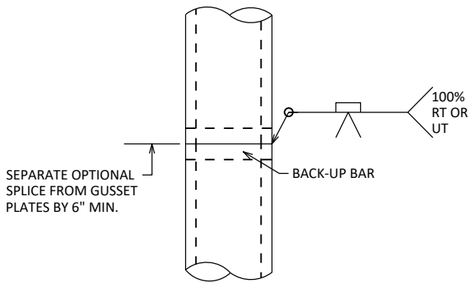
BOLTED TRANSVERSE DIAGONAL CONNECTION

WEB MEMBERS NOT SHOWN FOR CLARITY

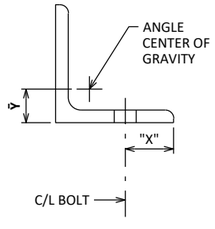
MEMBER CONNECTION DATA

STANDARD DESIGN TYPE	WELD LEG MIN. LENGTH ◭	NO. OF BOLTS ◪
I	3"	3
II	3"	3

FOR ALL ANGLE TO GUSSET CONNECTIONS, BOLT SPACING = 2½"

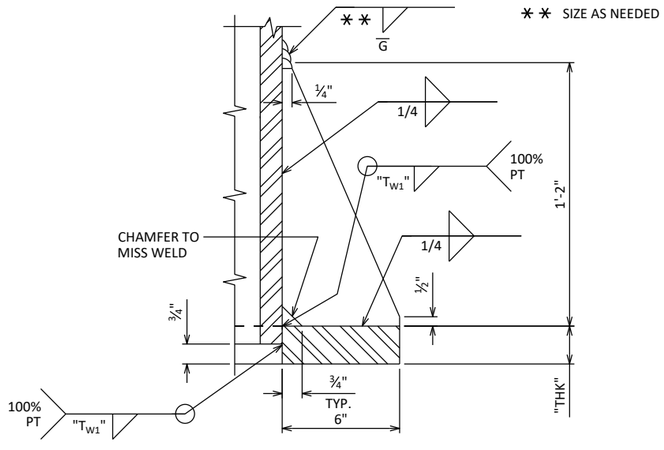


OPTIONAL COLUMN OR CHORD SPLICE DETAIL



ANGLE DATA

ANGLE SIZE	ȳ	"X"
L3 X 3 X ¼	0.84"	1¼"
L3 X 3 X 5/16	0.86"	1¼"



BASE PLATE STIFFENER DETAIL

CANTILEVER 4-CHORD COLUMN DATA

STANDARD DESIGN TYPE	COLUMN "OD" X THK	BASE PLATE "THK"	"T_{W1}"	"HOLE"	"BC"	"PC"
I	20.00" X 0.500"	2"	5/16"	2¼"	2'-2"	2'-8"
II	24.00" X 0.500"	2½"	5/16"	2¼"	2'-6"	3'-0"

NOTE:

FABRICATOR HAS THE OPTION TO USE NON-MITERED RECTANGULAR GUSSET PLATES IN LIEU OF MITERED PLATES SHOWN IN THESE DETAILS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER CONNECTIONS 2

SHEET III
700

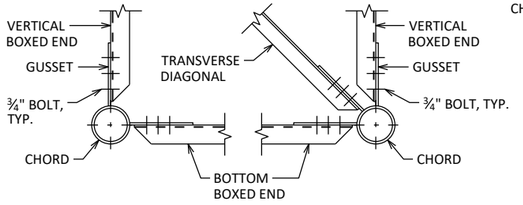
SCALE = 1.5

8

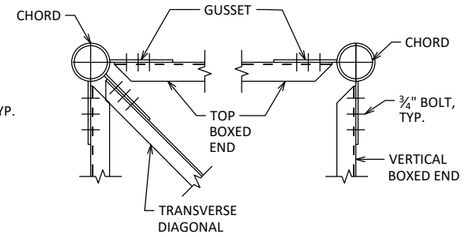
8

STATE PROJECT NUMBER

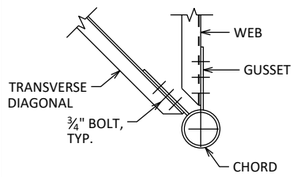
STANDARD



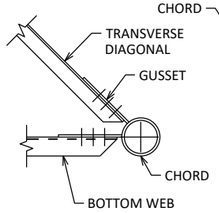
END VIEW 1 | END VIEW 2



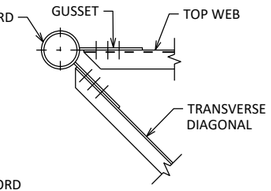
END VIEW 3 | END VIEW 4



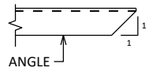
END VIEW 5



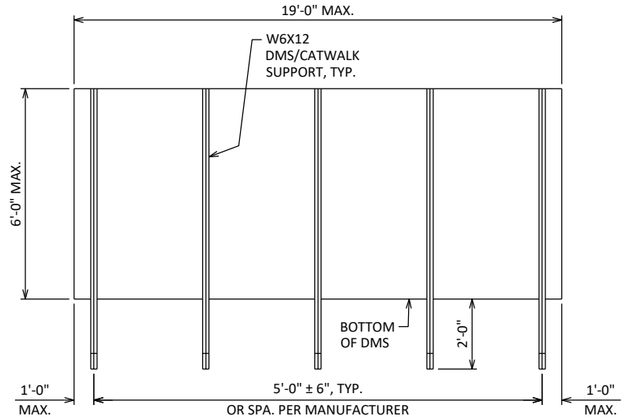
END VIEW 6



END VIEW 7



CLIP DETAIL



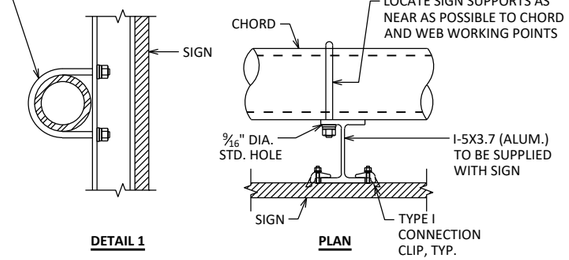
DMS MOUNTING POST SPACING DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF SPACING CONFLICTS WITH GUSSET PLATES OF TRUSS WITHIN TOLERANCES NOTED.

TRUSS CONNECTION DETAILS

MEMBER ORIENTATION FOR BOLTED CONNECTIONS SHOWN, WELDED CONNECTIONS SIMILAR

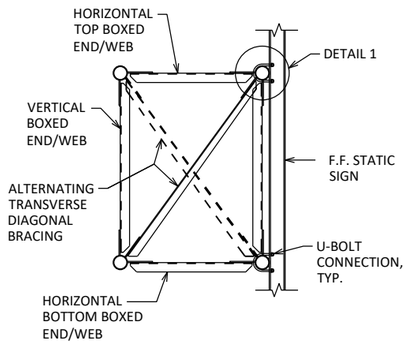
½" DIA. STAINLESS STEEL U-BOLT WITH 2 LOCK WASHERS, 2 FLAT WASHERS AND 2 HEX NUTS PER BOLT. 2 BOLTS REQUIRED PER I-BEAM. LOCATE TOP AND BOTTOM U-BOLTS ON OPPOSITE SIDES OF FLANGE.



DETAIL 1 | PLAN

TYPICAL SIGN CONNECTION

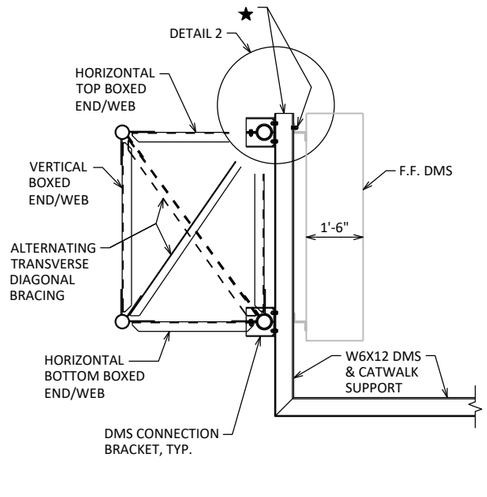
USE FOR TYPE I AND II SIGNS, TYPE I SIGN SHOWN.
SEE SIGN PLATE MANUAL A4-7A AND A4-7B FOR DETAILS.



SECTION THRU TRUSS - STATIC SIGN

FOR SIGN CONNECTION

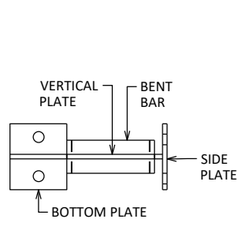
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL. HARDWARE TO BE SUPPLIED BY THE CONTRACTOR.



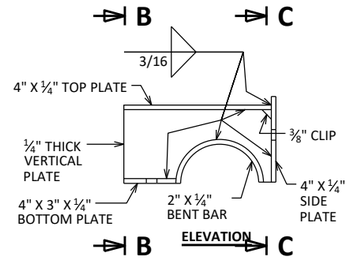
SECTION THRU TRUSS - DMS

FOR DMS/CATWALK CONNECTIONS

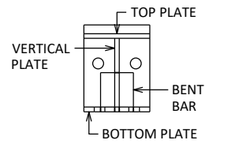
★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. ½" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12. FIELD DRILLED HOLES IN STEEL SUPPORTS MUST BE COLD GALVANIZED



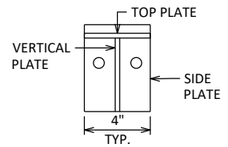
PLAN



ELEVATION



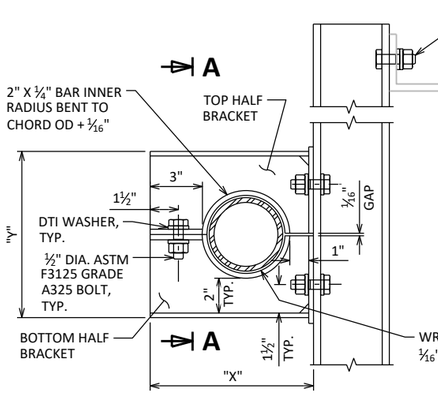
SECTION B-B



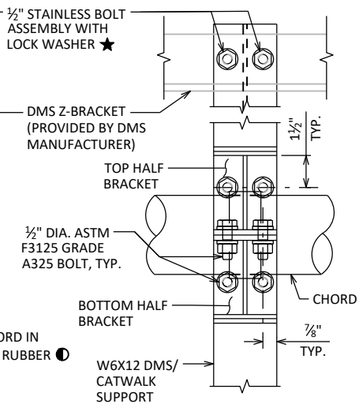
SECTION C-C

DMS WELDED PLATE CONNECTION DETAILS

TOP HALF OF BRACKET SHOWN, BOTTOM HALF SIMILAR.



DETAIL 2

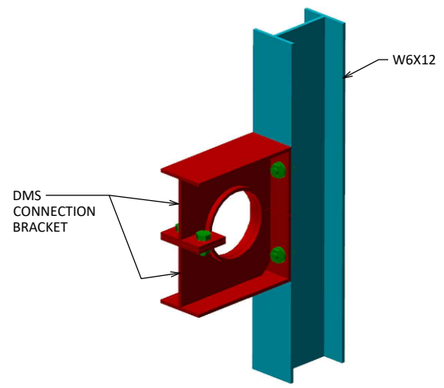


SECTION A-A

CHORD "OD"	"X"	"Y"
5.000"	9 13/16"	10 1/16"
5.563"	10 3/8"	10 5/8"

TYPICAL DMS CONNECTION

◐ NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD. SPEC. 506.2.6.1



3-D VIEW OF DMS CONNECTION

CHORD NOT SHOW FOR CLARITY

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

4-CHORD TRUSS CANTILEVER CONNECTIONS 3

SHEET IV 701

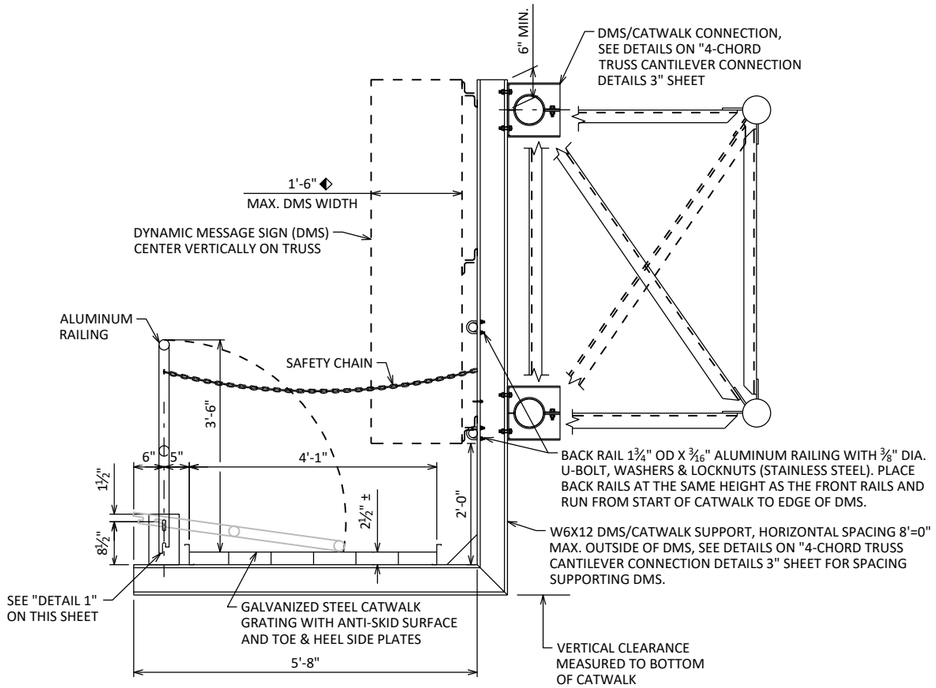
SCALE = 4.0

8

8

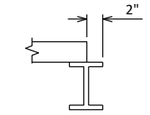
STATE PROJECT NUMBER

STANDARD

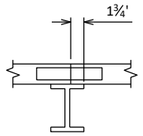


SECTION THRU WALKWAY

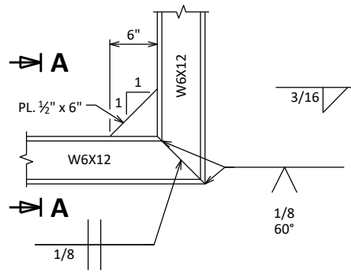
◆ DMS MAY BE RECTANGULAR OR TRAPEZOIDAL. IF DMS HAS A TRAPEZOIDAL SHAPE, THIS DIMENSION REPRESENTS THE AVERAGE WIDTH.



CATWALK TERMINATION DETAIL

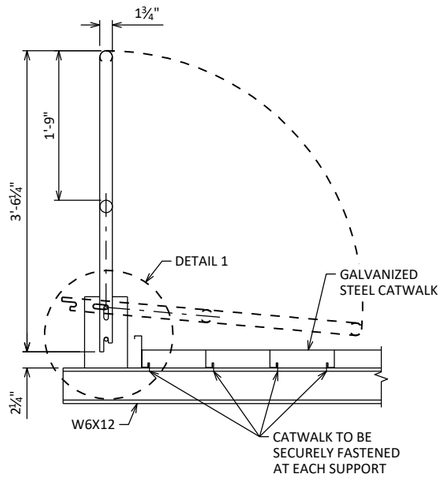


CATWALK SPLICE LOCATION DETAIL

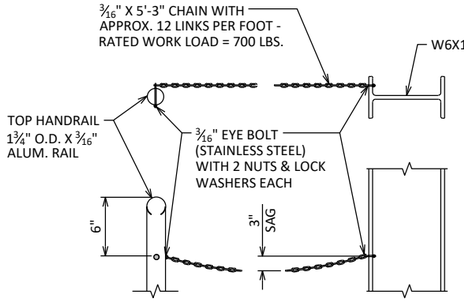


CATWALK BRACKET DETAIL

SECTION A-A

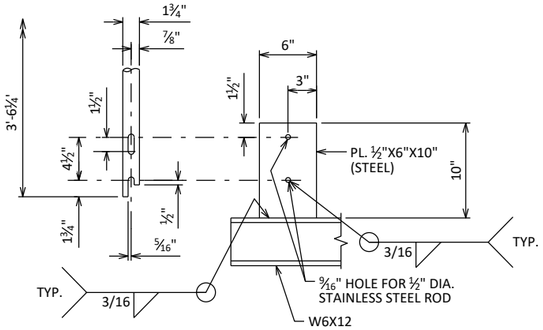


RAIL POST DETAIL

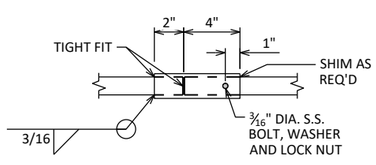


SAFETY CHAIN DETAIL

PROVIDE SAFETY CHAIN AT EACH END OF CATWALK

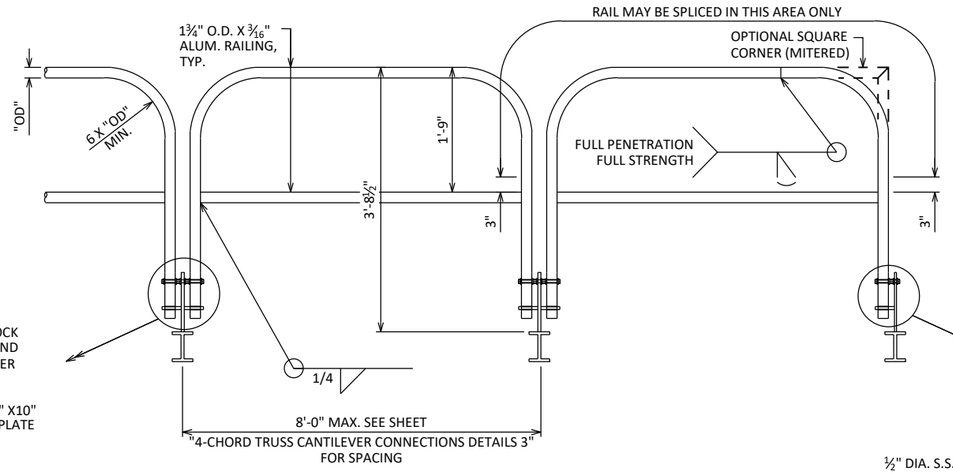


DETAIL 1



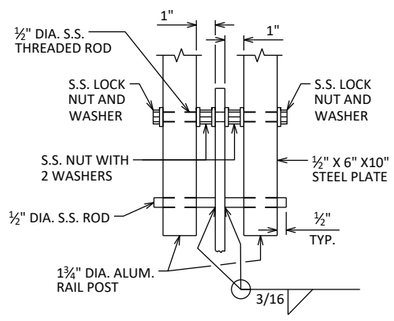
BACKRAIL SPLICE

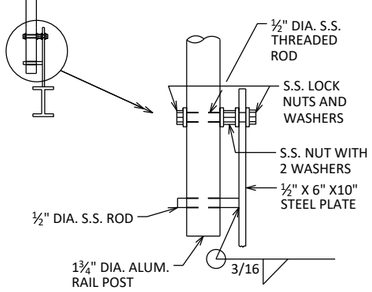
ONE SPLICE ALLOWED FOR LENGTHS OVER 30'-0"

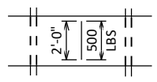


TYPICAL FRONT RAILING DETAILS

S.S. - STAINLESS STEEL







CATWALK LOADING DIAGRAM

NOTE:
CATWALK GRATING SHALL MEET THE CURRENT AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" WITH 500 LB LIVE LOAD DISTRIBUTED OVER 2'-0" TRANSVERSELY - MAX. SPAN IS 8'-0". CATWALK SHALL ALSO MEET CURRENT OSHA STD'S FOR WALKING-WORKING SURFACES.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY: BOS | PLANS CK'D: BOS

4-CHORD TRUSS CANTILEVER CATWALK DETAILS

SHEET V 702

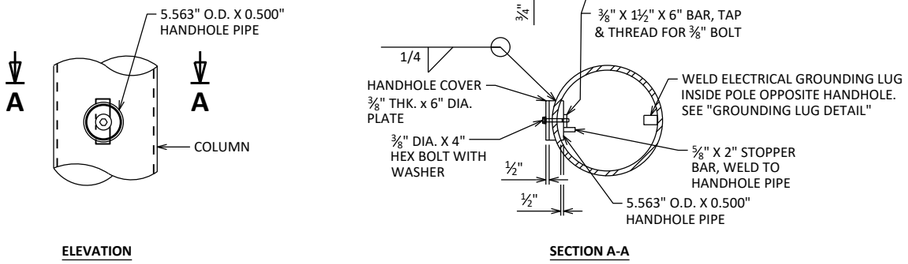
SCALE = 2.5

8

8

STATE PROJECT NUMBER

STANDARD

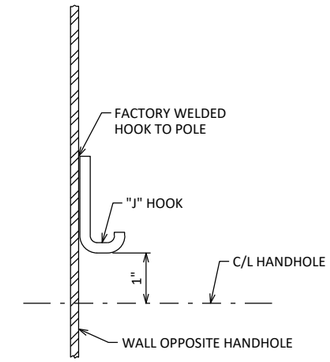


ELEVATION **SECTION A-A**

HANDHOLE DETAILS

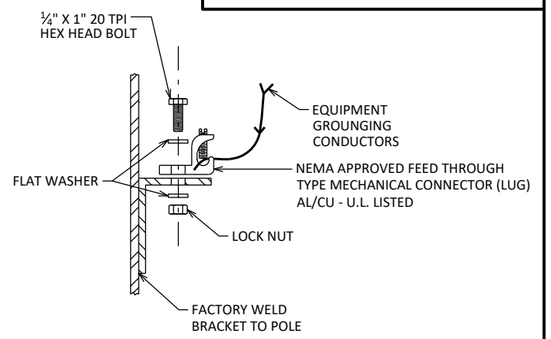
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN BRIDGE STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN BRIDGE COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS OTHERWISE NOTED, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



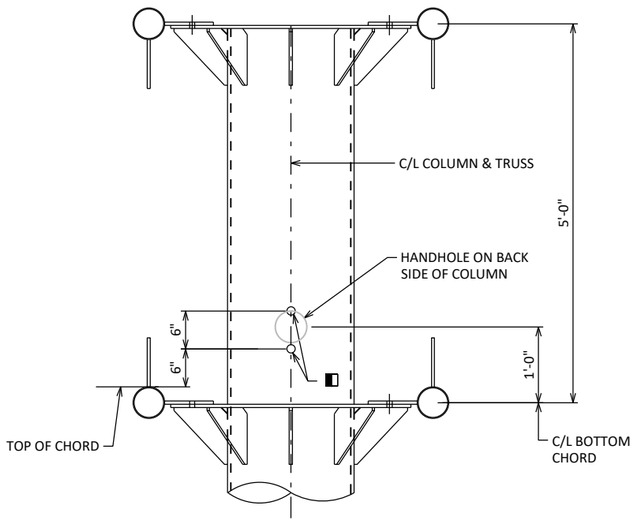
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



GROUNDING LUG DETAIL

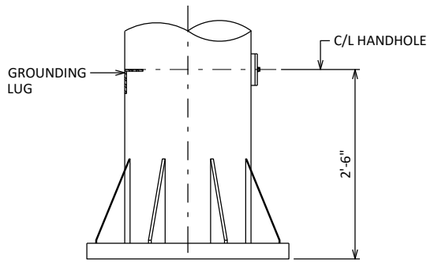
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



CONDUIT HOLE LOCATIONS

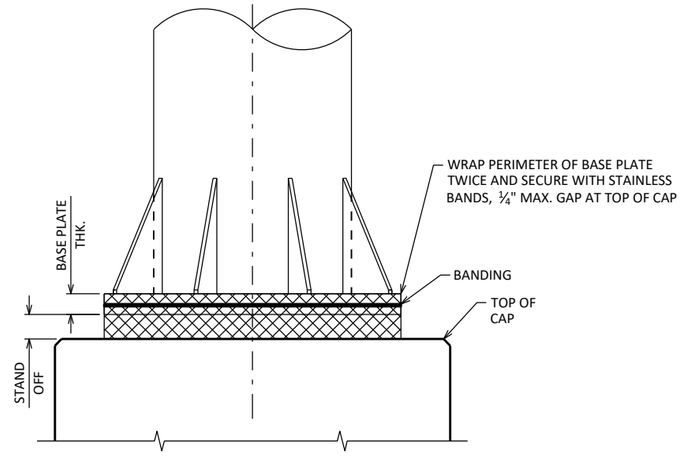
LOOKING AT INSIDE FACE OF COLUMN

◧ 2" HOLE WITH STANDARD PIPE THREADS, USE THREADED CONDUIT PLUG FOR UNUSED HOLES



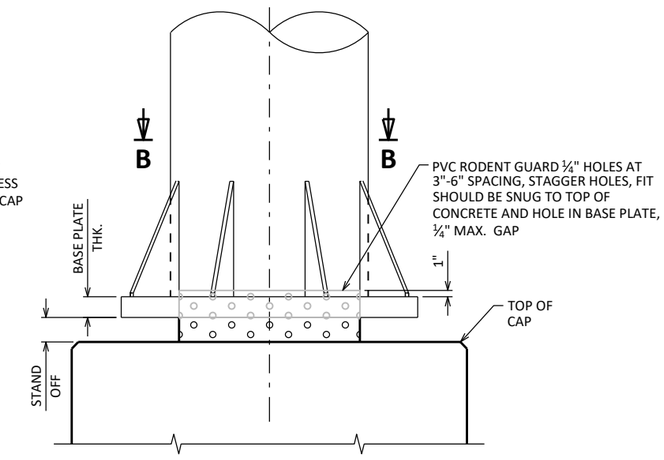
GROUNDING LUG LOCATION

LOOKING AT INSIDE F.F. OF STRUCTURE



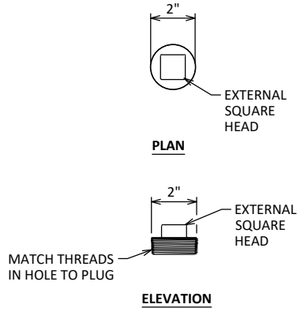
RODENT SCREEN

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN

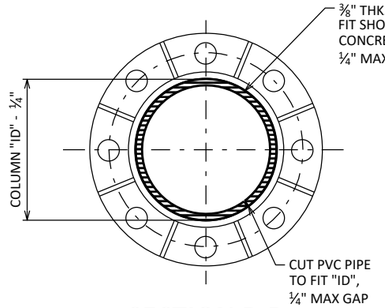


RODENT SCREEN - ALTERNATE

ONLY REQ'D WHEN ELECTRICAL DEVICES ARE PRESENT
ANCHOR RODS NOT SHOWN



CONDUIT PLUG DETAILS



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: JAN. 2023

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER ELECTRICAL DETAILS

SHEET VI
703

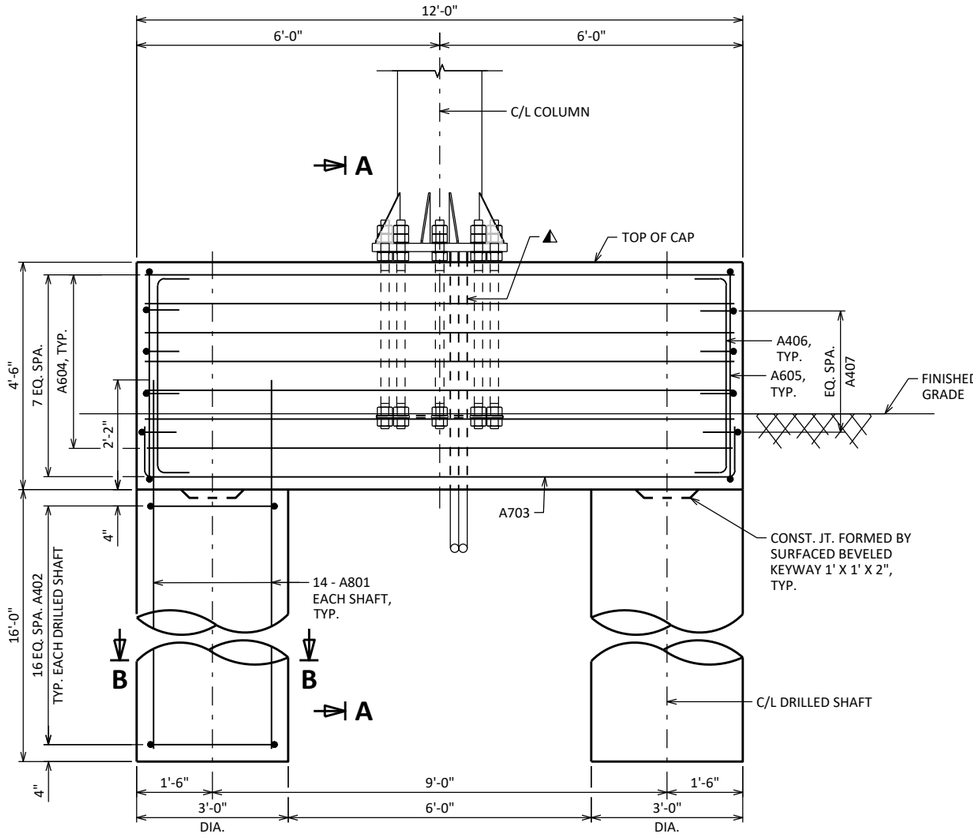
SCALE = 2.0

8

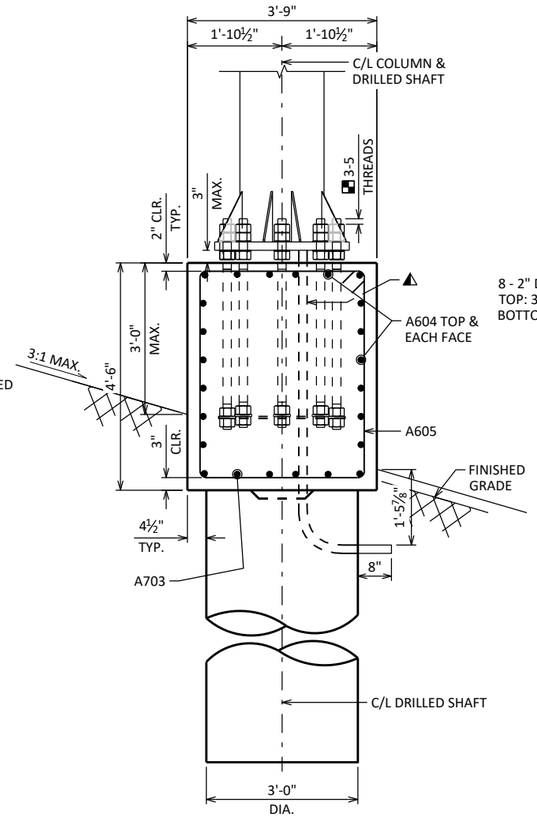
8

STATE PROJECT NUMBER

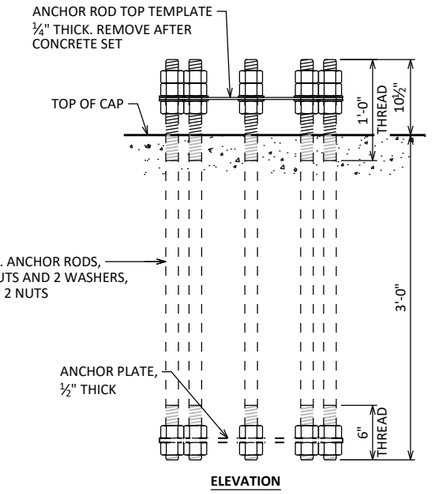
STANDARD



ELEVATION



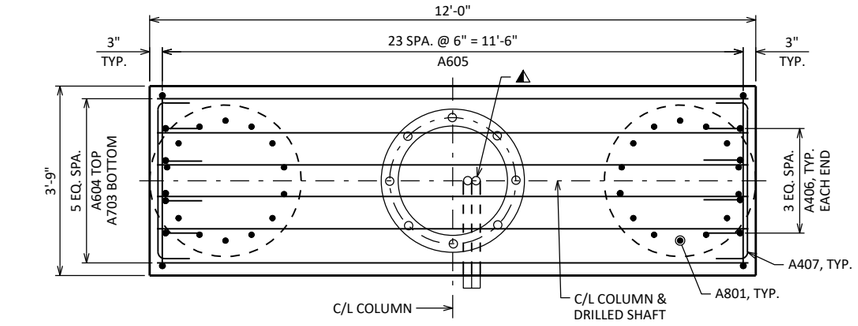
SECTION A-A



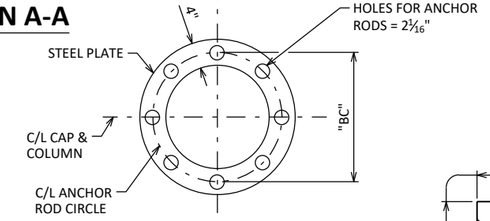
ANCHOR ROD ASSEMBLY DETAILS

SINGLE ANCHOR ASSEMBLY SHOWN, 8 ANCHOR RODS PER ASSEMBLY

CENTER ANCHOR ROD ASSEMBLY AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHORS.

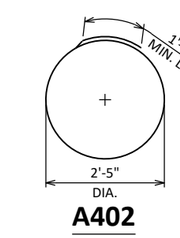


PLAN

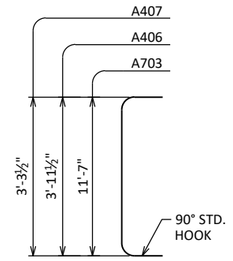


ANCHOR PLATE/ TOP TEMPLATE

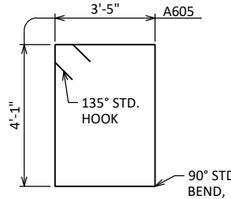
STANDARD DESIGN TYPE	"BC"
I	2'-2"
II	2'-6"



A402



A703, A406, A407



A605

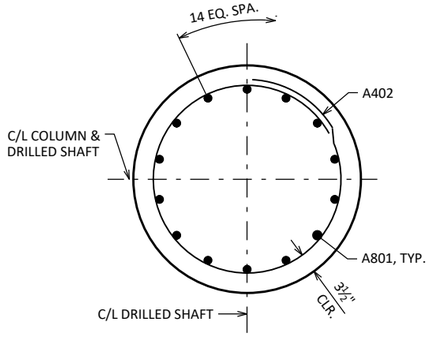
LEGEND

- ANCHOR ROD STICK OUT IN FINAL CONDITION. EXCESSIVE STICK OUT BEYOND DIMENSION SHOWN TO BE CUT OFF AFTER PLACING STRUCTURE. ANCHORS TO BE ULTRASONIC TESTED TO DETERMINE EMBEDDED LENGTH MEETS REQUIREMENTS PRIOR TO CUTTING. NOTE REMAINING LENGTH ON AS-BUILT.
- ⚠ 2 - 2" DIA. NON-METALLIC CONDUITS. INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

ESTIMATED QUANTITIES - FOUNDATION

STANDARD DESIGN TYPE	CONCRETE MASONRY	STEEL REINFORCEMENT HS	STEEL REINFORCEMENT HS COATED	ANCHOR ASSEMBLY 2-INCH	FOUNDATION DRILLING 36" DIA.
	(CY)	(LBS)	(LBS)	(EACH)	(LF)
I/II	15.9	1,550	1,100	1	32

✶✶ QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS.



SECTION B-B

TYPICAL FOR EACH DRILLED SHAFT FOOTING

BILL OF BARS - STANDARD DESIGN TYPE I OR II

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
A801		28	18'-0"			DRILLED SHAFT - VERTICAL
A402		34	9'-1"	X		DRILLED SHAFT - HORIZONTAL
A703	X	6	13'-7"	X		CAP - LONGITUDINAL - BOTTOM
A604	X	18	11'-8"			CAP - LONGITUDINAL - TOP & SIDES
A605	X	24	15'-10"	X		CAP - STIRRUP
A406	X	8	4'-7"	X		CAP - VERTICAL - EACH END
A407	X	8	3'-11"	X		CAP - HORIZONTAL - EACH END

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

UPDATED: OCT. 2024

DRAWN BY BOS | PLANS CK'D BOS

4-CHORD TRUSS CANTILEVER FOUNDATIONS

SHEET VII
704

SCALE = 3.0

8

8

STAGE 2 - USH 18 & 151 WB - STA 476+67'WB' to STA 500+00'WB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
476+67'WB'		29	1	0	0	0	0	0
477+00'WB'	33	156	2	112	2	112	2	111
477+25'WB'	25	143	1	138	1	250	3	247
477+50'WB'	25	133	1	128	1	378	4	375
478+00'WB'	50	107	0	223	1	601	4	597
478+39'WB'	39	92	3	145	2	747	7	740
478+50'WB'	11	90	4	36	1	782	8	774
478+68'WB'	18	88	6	58	3	840	12	828
478+82'WB'	15	114	8	55	4	895	16	879
478+93'WB'	10	111	8	44	3	938	19	919
479+00'WB'	7	101	9	29	2	968	21	946
479+50'WB'	50	84	22	172	29	1139	50	1089
480+00'WB'	50	81	41	153	58	1292	108	1185
480+50'WB'	50	63	70	134	102	1426	210	1216
481+00'WB'	50	63	97	117	154	1543	364	1179
481+50'WB'	50	63	115	117	196	1660	560	1100
482+00'WB'	50	60	116	114	214	1774	774	1000
482+50'WB'	50	54	67	106	169	1879	943	937
483+00'WB'	50	53	40	99	99	1978	1041	937
483+50'WB'	50	54	30	99	64	2077	1106	971
484+00'WB'	50	57	8	103	35	2180	1141	1039
484+50'WB'	50	53	3	102	10	2282	1151	1131
485+00'WB'	50	56	14	101	16	2383	1167	1217
485+50'WB'	50	52	34	100	44	2484	1211	1272
486+00'WB'	50	50	41	95	69	2578	1280	1298
486+50'WB'	50	48	47	91	81	2669	1361	1307
487+00'WB'	50	45	10	86	52	2754	1414	1341
487+50'WB'	50	46	12	84	20	2839	1433	1405
487+73'WB'	23	44	11	39	10	2878	1443	1434
487+96'WB'	22	0	0	18	5	2896	1448	1448
489+56'WB'	160	0	0	0	0	2896	1448	1448
489+79'WB'	23	38	84	16	36	2912	1484	1428
490+00'WB'	21	38	68	30	60	2942	1543	1398
490+50'WB'	50	43	60	75	119	3016	1662	1354
491+00'WB'	50	47	27	82	80	3099	1742	1356
491+50'WB'	50	57	0	96	25	3195	1767	1427
492+00'WB'	50	58	0	107	0	3301	1767	1534
492+50'WB'	50	50	20	100	19	3401	1786	1615
492+71'WB'	21	49	48	38	26	3439	1813	1626
493+00'WB'	29	50	31	53	43	3492	1856	1636
493+50'WB'	50	42	20	85	47	3578	1903	1674
494+00'WB'	50	39	19	76	36	3653	1939	1714
494+50'WB'	50	37	20	71	36	3724	1976	1748

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - USH 18 & 151 WB - STA 476+67'WB' to STA 500+00'WB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
494+80'WB'	30	39	20	42	22	3766	1998	1768
495+00'WB'	20	41	19	30	15	3796	2013	1784
495+08'WB'	8	42	19	12	5	3808	2018	1790
495+33'WB'	25	45	17	40	16	3849	2034	1815
495+50'WB'	17	43	17	28	11	3877	2045	1832
496+00'WB'	50	44	22	80	36	3957	2081	1876
496+50'WB'	50	44	22	81	40	4039	2121	1918
497+00'WB'	50	44	22	81	41	4120	2162	1958
497+50'WB'	50	40	19	78	38	4198	2200	1998
498+00'WB'	50	39	29	74	44	4271	2244	2028
498+50'WB'	50	33	33	67	57	4338	2301	2037
499+00'WB'	50	34	36	62	64	4400	2365	2035
499+50'WB'	50	39	32	68	63	4468	2428	2040
500+00'WB'	50	41	29	74	56	4543	2484	2058
				4543	2484			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - USH 18 & 151 EB - STA 479+31'EB' to STA 500+00'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
479+31'EB'		27	0	0	0	0	0	0
479+53'EB'	22	29	4	23	2	23	2	38
480+00'EB'	47	32	29	52	28	75	30	97
480+50'EB'	50	35	65	62	87	137	116	109
480+52'EB'	2	36	66	2	4	139	120	108
480+77'EB'	25	33	70	32	63	171	183	93
481+00'EB'	23	32	86	28	68	199	251	68
481+03'EB'	3	31	82	4	10	203	261	63
481+50'EB'	47	33	27	56	95	259	355	50
481+95'EB'	45	61	0	78	23	337	378	127
482+00'EB'	5	72	0	13	0	349	378	142
482+50'EB'	50	67	19	128	18	477	396	274
483+00'EB'	50	66	6	123	23	600	419	393
483+50'EB'	50	65	12	122	17	722	436	516
484+00'EB'	50	65	4	120	14	842	450	638
484+50'EB'	50	59	4	115	7	957	457	760
485+00'EB'	50	61	9	111	11	1069	468	872
485+50'EB'	50	58	11	110	18	1178	486	974
486+00'EB'	50	57	7	106	16	1284	502	1072
486+50'EB'	50	58	7	106	13	1390	515	1172
487+00'EB'	50	54	17	103	22	1493	537	1257
487+50'EB'	50	48	24	95	38	1588	574	1317
487+72'EB'	22	47	23	39	19	1627	594	1338
487+81'EB'	9	44	27	14	8	1642	602	1344
488+01'EB'	20	0	0	16	10	1658	612	1350
489+53'EB'	152	0	0	0	0	1658	612	1350
489+68'EB'	15	0	0	0	0	1658	612	1350
490+00'EB'	32	40	15	24	9	1682	621	1366
490+50'EB'	50	38	9	72	22	1754	642	1416
491+00'EB'	50	45	6	76	13	1830	656	1479
491+50'EB'	50	44	8	82	13	1913	668	1548
492+00'EB'	50	44	5	81	12	1994	680	1618
492+50'EB'	50	46	5	83	9	2077	688	1692
493+00'EB'	50	50	5	89	9	2165	697	1772

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - USH 18 & 151 EB - STA 479+31'EB' to STA 500+00'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
493+50'EB'	50	52	13	95	17	2260	714	1850
494+00'EB'	50	49	15	93	26	2353	740	1917
494+50'EB'	50	51	12	92	25	2446	765	1984
494+63'EB'	13	51	15	25	7	2470	772	2002
495+00'EB'	37	49	12	68	19	2538	791	2051
495+50'EB'	50	50	12	91	22	2629	813	2120
496+00'EB'	50	47	16	90	26	2719	839	2184
496+50'EB'	50	46	15	86	29	2805	868	2241
497+00'EB'	50	45	16	84	28	2889	896	2297
497+50'EB'	50	46	18	84	32	2973	928	2349
498+00'EB'	50	41	29	80	44	3054	972	2386
498+50'EB'	50	43	20	78	45	3131	1017	2418
499+00'EB'	50	42	24	78	41	3210	1057	2456
499+40'EB'	40	43	28	63	38	3272	1096	2481
499+50'EB'	10	46	29	17	11	3289	1106	2487
499+65'EB'	15	49	29	26	16	3315	1123	2497
499+91'EB'	26	45	24	45	26	3361	1148	2516
500+00'EB'	9	46	16	15	7	3376	1155	2525
				3376	1155			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - USH 18 & 151 Bullnose - STA 459+00'EB' to STA 466+00'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
459+00'EB'		0	30	0	0	0	0	0
459+50'EB'	50	1	0	0	28	0	28	-28
460+00'EB'	50	1	0	1	0	2	29	-27
460+50'EB'	50	1	1	2	2	3	30	-27
461+00'EB'	50	0	13	1	14	4	44	-40
461+50'EB'	50	0	13	1	25	5	69	-64
462+00'EB'	50	1	3	1	16	6	84	-78
462+50'EB'	50	6	0	7	3	13	88	-75
463+00'EB'	50	6	0	11	0	24	88	-64
463+50'EB'	50	5	1	10	1	34	89	-55
464+00'EB'	50	1	5	6	5	40	94	-54
464+50'EB'	50	2	1	3	6	43	100	-57
465+00'EB'	50	2	0	4	1	47	102	-54
465+50'EB'	50	2	0	3	0	51	102	-51
466+00'EB'	50	0	0	1	0	52	102	-50
				52	102			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - CTH G & Dairy Ridge Road - STA 32+00'G' to STA 48+53'G'

CTH G & DAIRY RIDGE NORTH OF STRUCTURE

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
32+00'G'		41	0	0	0	0	0	0
32+50'G'	50	102	4	132	4	132	4	128
33+00'G'	50	122	4	207	7	339	11	328
33+50'G'	50	129	1	232	4	571	15	555
34+00'G'	50	143	0	252	1	822	16	806
34+50'G'	50	162	0	283	0	1105	16	1089
35+00'G'	50	142	1	282	1	1387	17	1370
35+50'G'	50	114	19	237	18	1624	35	1589
36+00'G'	50	98	72	196	84	1820	119	1701
36+50'G'	50	100	81	183	142	2003	262	1741
37+00'G'	50	106	96	191	164	2194	426	1767
37+50'G'	50	141	122	229	202	2422	628	1795
38+00'G'	50	146	137	265	240	2688	868	1820
38+50'G'	50	121	122	247	240	2935	1108	1826
39+00'G'	50	134	99	237	205	3171	1313	1858
39+50'G'	50	124	70	239	156	3410	1469	1941
40+00'G'	50	111	55	217	116	3627	1585	2043
40+50'G'	50	108	26	202	75	3830	1660	2169
41+00'G'	50	0	57	100	77	3929	1737	2192
41+50'G'	50	109	56	101	105	4030	1842	2188
42+00'G'	50	117	0	209	52	4239	1894	2345
42+50'G'	50	119	0	218	0	4457	1894	2563
43+00'G'	50	119	4	220	4	4677	1898	2779
43+50'G'	50	119	14	221	17	4898	1915	2983
44+00'G'	50	140	22	240	34	5138	1949	3189
44+50'G'	50	184	27	300	45	5438	1994	3444
45+00'G'	50	262	57	413	78	5851	2072	3779
45+50'G'	50	325	69	543	117	6394	2189	4206
46+00'G'	50	397	137	668	190	7062	2379	4683
46+45'G'	45	297	135	577	226	7639	2605	5034
46+50'G'	5	257	124	53	25	7692	2629	5063
46+75'G'	25	76	87	154	98	7846	2727	5119
47+00'G'	25	78	0	71	40	7918	2768	5150
47+25'G'	25	81	0	74	0	7991	2768	5224
47+50'G'	25	66	0	68	0	8060	2768	5292
47+75'G'	25	57	0	57	0	8117	2768	5349
48+00'G'	25	72	2	61	1	8177	2768	5409
48+25'G'	25	59	45	59	22	8237	2790	5447
48+50'G'	25	56	174	53	102	8290	2892	5398
48+53'G'	3	57	198	6	20	8296	2912	5384
				8296	2912			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - CTH G & Dairy Ridge Road - STA 50+88'G' to STA 51+50'G'

CTH G & DAIRY RIDGE SOUTH OF STRUCTURE

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
50+88'G'		63	166	0	0	0	0	0
51+00'G'	12	67	95	29	59	29	59	-30
51+25'G'	25	65	58	61	71	90	130	-39
51+33'G'	8	52	0	17	8	107	138	-31
51+50'G'	17	54	0	34	0	141	138	3
				141	138			

STAGE 2 - Bobcat Lane - STA 37+90'BL' to STA 38+06'BL'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
37+90'BL'		76	0	0	0	0	0	0
38+00'BL'	10	72	3	27	1	27	1	27
38+06'BL'	6	73	2	16	1	44	1	42
				44	1			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - Bobcat Lane NB Curb Return - STA 10+00'BN' to STA 12+75'BN'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
10+00'BN'		0	24	0	0	0	0	0
10+05'BN'	5	5	23	1	4	1	4	-4
10+10'BN'	5	5	22	1	4	2	8	-7
10+15'BN'	5	5	22	1	4	3	13	-10
10+20'BN'	5	6	22	1	4	4	17	-13
10+25'BN'	5	6	22	1	4	5	21	-16
10+30'BN'	5	6	22	1	4	6	25	-19
10+35'BN'	5	6	21	1	4	7	29	-22
10+40'BN'	5	7	20	1	4	8	33	-25
10+45'BN'	5	7	19	1	4	9	36	-27
10+50'BN'	5	8	19	1	4	11	40	-29
10+55'BN'	5	8	18	1	3	12	43	-31
10+60'BN'	5	8	18	1	3	13	47	-33
10+65'BN'	5	8	18	1	3	15	50	-35
10+70'BN'	5	9	17	2	3	17	53	-37
10+75'BN'	5	9	17	2	3	18	56	-38
10+80'BN'	5	10	16	2	3	20	59	-39
10+85'BN'	5	11	16	2	3	22	62	-40
10+90'BN'	5	12	14	2	3	24	65	-41
10+95'BN'	5	14	12	2	2	27	67	-41
11+00'BN'	5	15	11	3	2	29	70	-40
11+05'BN'	5	17	10	3	2	32	71	-39
11+10'BN'	5	21	9	4	2	36	73	-38
11+15'BN'	5	26	9	4	2	40	75	-35
11+20'BN'	5	32	8	5	2	45	77	-31
11+25'BN'	5	40	8	7	2	52	78	-26
11+30'BN'	5	53	9	9	2	61	80	-19
11+35'BN'	5	72	8	12	2	72	81	-9
11+40'BN'	5	72	7	13	1	86	83	3
11+45'BN'	5	62	6	12	1	98	84	14
11+50'BN'	5	54	6	11	1	109	85	24
11+55'BN'	5	49	5	10	1	118	86	32
11+60'BN'	5	45	3	9	1	127	87	40
11+65'BN'	5	43	2	8	0	135	87	48
11+70'BN'	5	41	2	8	0	143	88	55
11+75'BN'	5	40	2	7	0	150	88	63
11+80'BN'	5	39	1	7	0	158	88	70
11+85'BN'	5	38	1	7	0	165	88	76
11+90'BN'	5	38	1	7	0	172	89	83
11+95'BN'	5	37	1	7	0	179	89	90
12+00'BN'	5	38	0	7	0	186	89	97
12+05'BN'	5	39	0	7	0	193	89	104
12+25'BN'	20	41	0	29	0	222	89	133
12+50'BN'	25	42	0	38	0	260	89	171
12+75'BN'	25	41	1	37	0	298	89	208
				298	89			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - Bobcat Lane SB Curb Return - STA 10+00'BS' to STA 13+13'BS'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
10+00'BS'		33	1	0	0	0	0	0
10+20'BS'	20	34	3	25	2	25	2	23
10+45'BS'	25	33	6	31	4	56	6	50
10+70'BS'	25	33	11	30	8	86	14	72
10+90'BS'	20	32	13	24	9	110	23	87
10+95'BS'	5	32	12	6	2	116	25	90
11+00'BS'	5	33	12	6	2	122	28	94
11+05'BS'	5	34	11	6	2	128	30	98
11+10'BS'	5	35	9	6	2	134	32	102
11+15'BS'	5	35	8	7	2	141	33	106
11+20'BS'	5	36	8	7	1	148	35	111
11+25'BS'	5	37	7	7	1	154	36	115
11+27'BS'	2	37	7	3	1	157	36	117
11+30'BS'	3	37	7	4	1	161	37	119
11+35'BS'	5	39	5	7	1	168	38	124
11+40'BS'	5	42	4	7	1	176	39	128
11+45'BS'	5	45	5	8	1	184	40	134
11+50'BS'	5	50	6	9	1	192	41	139
11+55'BS'	5	56	8	10	1	202	42	145
11+60'BS'	5	62	10	11	2	213	44	152
11+61'BS'	1	63	10	1	0	214	44	153
11+65'BS'	4	48	12	9	2	224	46	158
11+70'BS'	5	35	13	8	2	231	48	160
11+75'BS'	5	26	15	6	3	237	51	160
11+80'BS'	5	20	18	4	3	241	54	158
11+85'BS'	5	17	20	3	3	244	57	154
11+90'BS'	5	15	21	3	4	247	61	149
11+95'BS'	5	14	22	3	4	250	65	144
12+00'BS'	5	12	23	2	4	252	69	138
12+05'BS'	5	9	26	2	5	254	74	131
12+10'BS'	5	8	27	2	5	256	79	123
12+15'BS'	5	7	27	1	5	257	84	115
12+20'BS'	5	6	26	1	5	259	89	106
12+25'BS'	5	6	25	1	5	260	93	98
12+30'BS'	5	5	24	1	4	261	98	89
12+35'BS'	5	4	23	1	4	262	102	80
12+40'BS'	5	4	22	1	4	262	106	71

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - Bobcat Lane SB Curb Return - STA 10+00'BS' to STA 13+13'BS'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
12+45'BS'	5	3	23	1	4	263	110	62
12+50'BS'	5	3	24	1	4	264	115	52
12+55'BS'	5	2	24	0	4	264	119	42
12+60'BS'	5	2	24	0	4	264	124	31
12+65'BS'	5	2	24	0	4	265	128	21
12+70'BS'	5	3	25	1	5	265	133	10
12+75'BS'	5	3	25	1	5	266	137	-1
12+80'BS'	5	3	25	1	5	266	142	-12
12+85'BS'	5	2	25	0	5	267	146	-24
12+90'BS'	5	3	26	0	5	267	151	-36
12+95'BS'	5	3	29	1	5	268	156	-48
13+00'BS'	5	3	32	1	6	268	162	-61
13+05'BS'	5	3	36	1	6	269	168	-75
13+10'BS'	5	3	39	1	7	270	175	-89
13+13'BS'	3	3	39	0	4	270	179	-97
				458	179			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - GA Ramp - STA. 462+93'GA' TO STA. 468+00'GA'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
462+93'GA'		25	0	0	0	0	0	0
463+00'GA'	7	26	0	7	0	7	0	7
463+10'GA'	10	26	0	10	0	16	0	16
463+20'GA'	10	26	0	10	0	26	0	26
463+30'GA'	10	26	0	10	0	36	0	36
463+40'GA'	10	27	0	10	0	45	0	45
463+50'GA'	10	30	0	11	0	56	0	56
463+60'GA'	10	35	0	12	0	68	0	68
463+64'GA'	4	36	0	5	0	73	0	73
463+74'GA'	10	37	0	14	0	87	0	87
463+85'GA'	10	37	0	14	0	101	0	101
463+93'GA'	9	34	0	12	0	113	0	113
464+00'GA'	7	34	2	8	0	121	0	121
464+04'GA'	4	36	2	5	0	126	0	126
464+25'GA'	21	52	6	35	3	161	4	157
464+50'GA'	25	78	6	60	5	221	9	212
465+00'GA'	50	147	4	208	9	430	17	412
465+50'GA'	50	205	2	325	6	755	23	732
466+00'GA'	50	233	3	407	5	1162	28	1134
466+50'GA'	50	244	5	444	7	1606	34	1571
467+00'GA'	50	267	4	469	8	2075	42	2033
467+50'GA'	50	233	1	463	5	2538	47	2491
467+88'GA'	38	115	0	242	1	2780	48	2732
468+00'GA'	13	23	0	32	0	2812	48	2764
				2812	48			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - GA North Curb Return - STA 10+00'GAN' to STA 11+66'GAN'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
10+00'GAN'		28	6	0	0	0	0	0
10+05'GAN'	5	28	1	5	1	5	1	4
10+10'GAN'	5	28	1	5	0	10	1	10
10+15'GAN'	5	28	1	5	0	15	1	15
10+20'GAN'	5	28	1	5	0	21	1	20
10+25'GAN'	5	27	2	5	0	26	1	24
10+30'GAN'	5	27	2	5	0	31	2	29
10+35'GAN'	5	28	2	5	0	36	2	34
10+40'GAN'	5	27	3	5	0	41	3	38
10+45'GAN'	5	27	3	5	0	46	3	43
10+50'GAN'	5	28	2	5	0	51	3	47
10+55'GAN'	5	28	1	5	0	56	4	52
10+60'GAN'	5	30	5	5	1	62	4	57
10+65'GAN'	5	32	7	6	1	67	5	61
10+70'GAN'	5	34	7	6	1	74	7	66
10+75'GAN'	5	37	7	7	1	80	8	71
10+80'GAN'	5	34	8	7	1	87	9	76
10+85'GAN'	5	41	8	7	1	94	11	81
10+90'GAN'	5	51	9	9	2	102	12	88
10+85'GAN'	-5	61	10	-10	-2	92	11	79
10+98'GAN'	13	66	10	31	5	123	16	103
11+00'GAN'	2	61	10	5	1	127	16	107
11+05'GAN'	5	50	9	10	2	137	18	115
11+10'GAN'	5	41	11	8	2	146	20	120
11+15'GAN'	5	37	9	7	2	153	22	126
11+20'GAN'	5	34	7	7	2	160	23	131
11+25'GAN'	5	29	6	6	1	165	25	134
11+30'GAN'	5	24	6	5	1	170	26	138
11+34'GAN'	4	20	7	3	1	173	27	140
11+40'GAN'	6	16	8	4	2	178	28	141
11+45'GAN'	5	12	10	3	2	180	30	141
11+50'GAN'	5	9	13	2	2	182	32	141
11+55'GAN'	5	6	15	1	3	183	35	138
11+60'GAN'	5	5	16	1	3	184	37	137
11+66'GAN'	6	4	14	1	3	185	40	132
				185	40			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - GA South Curb Return - STA 10+00'GAS' to STA 10+63'GAS'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
10+00'GAS'		13	0	0	0	0	0	0
10+05'GAS'	5	12	0	2	0	2	0	2
10+10'GAS'	5	12	0	2	0	5	0	5
10+15'GAS'	5	13	0	2	0	7	0	7
10+20'GAS'	5	14	0	2	0	9	0	9
10+25'GAS'	5	17	0	3	0	12	0	12
10+30'GAS'	5	23	0	4	0	16	0	16
10+32'GAS'	2	17	0	1	0	17	0	17
10+35'GAS'	4	33	0	3	0	20	0	20
10+38'GAS'	3	41	0	4	0	24	0	24
10+40'GAS'	2	39	0	3	0	27	0	27
10+45'GAS'	5	33	0	7	0	34	0	33
10+50'GAS'	5	29	0	6	0	40	0	39
10+55'GAS'	5	26	0	5	0	45	0	44
10+60'GAS'	5	25	0	5	0	50	0	48
10+63'GAS'	3	25	0	3	0	53	0	51
				53	0			

STAGE 2 - GB North Curb Return - STA 10+85'GBN' to STA 11+04'GBN'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
10+85'GBN'		16	0	0	0	0	0	0
10+90'GBN'	5	14	0	3	0	74	0	72
10+95'GBN'	5	12	0	2	0	76	0	74
11+00'GBN'	5	12	1	2	0	79	0	77
11+04'GBN'	4	11	0	2	0	81	0	78
				9	0			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - GC North Curb Return - STA 9+91'GCN' to STA 10+10'GCN'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
9+91'GCN'		0	55	0	0	0	0	0
9+95'GCN'	4	0	75	0	10	0	10	-10
10+00'GCN'	5	0	43	0	11	0	21	-21
10+05'GCN'	5	0	34	0	7	0	28	-28
10+10'GCN'	5	0	24	0	5	0	33	-33
				0	33			

STAGE 2 - GD Ramp - STA 460+60'GD' to STA 461+80'GD'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
460+60'GD'		58	0	0	0	0	0	0
460+65'GD'	5	57	0	11	0	11	0	11
460+70'GD'	5	56	0	10	0	21	0	21
460+75'GD'	5	55	0	10	0	31	0	31
460+80'GD'	5	53	0	10	0	41	0	41
460+85'GD'	5	54	0	10	0	51	0	51
460+90'GD'	5	55	0	10	0	61	0	61
460+95'GD'	5	55	0	10	0	71	0	71
461+00'GD'	5	56	0	10	0	82	0	82
461+05'GD'	5	58	0	11	0	92	0	92
461+10'GD'	5	57	0	11	0	103	0	103
461+15'GD'	5	56	0	10	0	113	0	113
461+20'GD'	5	55	0	10	0	124	0	124
461+25'GD'	5	55	0	10	0	134	0	134
461+30'GD'	5	55	0	10	0	144	0	144
461+35'GD'	5	56	0	10	0	154	0	154
461+40'GD'	5	57	0	10	0	165	0	165
461+45'GD'	5	59	0	11	0	176	0	175
461+50'GD'	5	61	0	11	0	187	0	187
461+55'GD'	5	62	0	11	0	198	0	198
461+60'GD'	5	61	0	10	0	209	0	208
461+65'GD'	5	32	0	9	0	218	0	218
461+70'GD'	5	32	0	6	0	224	0	224
461+75'GD'	5	32	0	6	0	230	0	230
461+80'GD'	5	32	0	6	0	236	0	236
				236	0			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - GD North Curb Return - STA 10+00'GDN' to STA 10+90'GDN'

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Fill 1.00	Mass Ordinate Note 1
10+00'GDN'		0	44	0	0	0	0	0
10+05'GDN'	5	0	29	0	7	0	7	-7
10+10'GDN'	5	1	20	0	5	0	11	-11
10+15'GDN'	5	3	12	0	3	1	14	-14
10+20'GDN'	5	7	7	1	2	1	16	-15
10+25'GDN'	5	14	3	2	1	3	17	-14
10+30'GDN'	5	24	1	4	0	7	17	-10
10+35'GDN'	5	36	0	5	0	12	17	-5
10+40'GDN'	5	46	0	8	0	20	17	2
10+43'GDN'	3	53	0	6	0	26	17	8
10+45'GDN'	2	49	0	3	0	29	17	12
10+50'GDN'	5	39	0	8	0	37	17	19
10+55'GDN'	5	30	0	6	0	44	17	26
10+60'GDN'	5	28	2	5	0	49	18	31
10+65'GDN'	5	29	0	5	0	54	18	36
10+70'GDN'	5	29	0	5	0	60	18	41
10+75'GDN'	5	29	0	5	0	65	18	46
10+80'GDN'	5	22	0	5	0	70	18	50
10+85'GDN'	5	21	0	4	0	74	18	54
10+90'GDN'	5	19	0	4	0	77	18	58
				77	18			

STAGE 2 - GD South Curb Return - STA 10+00'GDS' to STA 10+65'GDS'

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Fill 1.00	Mass Ordinate Note 1
10+00'GDS'		32	0	0	0	0	0	0
10+05'GDS'	5	34	0	6	0	6	0	6
10+10'GDS'	5	36	0	6	0	13	0	13
10+15'GDS'	5	39	0	7	0	20	0	20
10+20'GDS'	5	41	0	7	0	27	0	27
10+25'GDS'	5	46	0	8	0	35	0	35
10+27'GDS'	2	48	0	3	0	38	0	38
10+30'GDS'	3	37	0	5	0	43	0	43
10+35'GDS'	5	24	1	6	0	49	0	48
10+40'GDS'	5	16	1	4	0	52	0	52
10+45'GDS'	5	12	1	3	0	55	0	54
10+50'GDS'	5	8	1	2	0	57	1	56
10+55'GDS'	5	6	2	1	0	58	1	57
10+60'GDS'	5	5	2	1	0	59	1	57
10+65'GDS'	5	3	4	1	1	60	2	57
				60	2			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - USH 18 & 151 WB - STA 500+00'WB' to STA 508+61'WB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
500+00'WB'		41	29	0	0	0	0	0
500+50'WB'	50	42	16	77	41	77	41	35
501+00'WB'	50	39	38	75	50	152	91	61
501+50'WB'	50	42	83	74	112	226	203	23
502+00'WB'	50	41	72	76	144	302	347	-45
502+50'WB'	50	40	25	75	90	378	437	-59
503+00'WB'	50	43	21	78	42	455	479	-23
503+50'WB'	50	46	15	82	33	538	511	26
504+00'WB'	50	50	7	89	20	627	531	95
504+50'WB'	50	57	2	99	8	726	540	186
505+00'WB'	50	57	2	105	3	831	543	288
505+50'WB'	50	61	1	109	2	939	545	394
505+78'WB'	28	62	1	64	1	1003	546	457
506+00'WB'	22	31	1	38	1	1040	546	494
506+50'WB'	50	33	0	60	1	1100	547	553
506+84'WB'	34	40	0	46	0	1146	548	598
507+00'WB'	17	45	0	26	0	1172	548	624
507+11'WB'	11	35	0	17	0	1189	548	641
507+37'WB'	25	40	0	35	0	1224	548	676
507+50'WB'	14	39	0	20	0	1244	548	696
508+00'WB'	50	31	0	64	0	1308	548	760
508+50'WB'	50	23	0	50	0	1358	548	811
508+61'WB'	11	21	0	9	0	1367	548	820
				1367	548			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - USH 18 & 151 EB - STA 505+18'EB' to STA 505+88'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
500+00'EB'		46	16	0	0	0	0	0
500+50'EB'	50	47	16	86	30	86	30	81
501+00'EB'	50	45	22	85	36	170	66	153
501+50'EB'	50	49	25	86	44	257	110	217
502+00'EB'	50	50	45	91	65	348	175	262
502+50'EB'	50	57	93	99	129	448	303	251
503+00'EB'	50	144	154	186	229	633	532	223
503+50'EB'	50	51	78	180	214	813	747	203
504+00'EB'	50	56	17	99	88	912	835	225
504+46'EB'	46	57	15	97	27	1009	862	304
504+50'EB'	4	27	16	6	2	1015	864	309
505+00'EB'	50	32	14	55	28	1070	892	342
505+18'EB'	18	31	6	21	7	1091	899	358
505+35'EB'	17	32	7	20	4	1110	903	375
505+50'EB'	15	32	5	18	3	1128	906	390
505+80'EB'	30	33	5	36	6	1165	912	420
505+88'EB'	8	29	0	9	1	1174	913	428
				1174	913			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - CTH G - STA 51+50'G' to STA 61+85'G'

CTH G SOUTH INTERSECTION

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
51+50'G'		54	0	0	0	0	0	0
51+75'G'	25	62	0	54	0	54	0	54
52+00'G'	25	74	0	63	0	117	0	117
52+25'G'	25	64	3	64	1	180	1	179
52+50'G'	25	74	99	64	47	245	48	196
52+64'G'	14	68	90	36	48	281	96	185
53+00'G'	36	66	95	90	124	371	220	151
53+50'G'	50	41	67	99	150	470	370	100
54+00'G'	50	42	59	77	117	547	488	59
54+50'G'	50	41	61	77	111	624	599	24
55+00'G'	50	36	77	72	128	696	727	-31
55+50'G'	50	34	112	66	175	761	902	-141
56+00'G'	50	37	105	66	201	827	1104	-276
56+50'G'	50	43	66	74	159	901	1262	-361
57+00'G'	50	41	49	78	107	979	1370	-391
57+50'G'	50	38	61	74	102	1053	1472	-419
58+00'G'	50	38	86	71	136	1123	1608	-485
58+50'G'	50	37	105	70	178	1193	1785	-592
59+00'G'	50	40	83	71	175	1264	1960	-696
59+50'G'	50	46	0	79	77	1343	2037	-694
60+00'G'	50	49	0	88	0	1431	2037	-606
60+50'G'	50	44	0	86	0	1517	2037	-520
61+00'G'	50	37	0	75	0	1592	2037	-445
61+50'G'	50	36	1	68	1	1660	2038	-379
61+85'G'	35	36	1	47	1	1706	2039	-333
				1706	2039			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - GB North Curb Return - STA 10+00'GBN' to STA 10+85'GBN'

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Fill 1.00	Mass Ordinate Note 1
10+00'GBN'		5	0	0	0	0	0	0
10+10'GBN'	10	8	0	2	0	2	0	2
10+20'GBN'	10	8	0	3	0	5	0	5
10+25'GBN'	5	27	0	3	0	9	0	9
10+30'GBN'	5	26	0	5	0	14	0	14
10+35'GBN'	5	26	0	5	0	18	0	18
10+40'GBN'	5	25	0	5	0	23	0	23
10+45'GBN'	5	25	0	5	0	28	0	28
10+50'GBN'	5	27	0	5	0	33	0	32
10+55'GBN'	5	31	0	5	0	38	0	38
10+60'GBN'	5	35	0	6	0	44	0	44
10+65'GBN'	5	42	0	7	0	51	0	51
10+66'GBN'	1	43	0	1	0	52	0	52
10+70'GBN'	4	33	0	6	0	58	0	58
10+75'GBN'	5	25	0	5	0	64	0	63
10+80'GBN'	5	20	0	4	0	68	0	67
10+85'GBN'	5	16	0	3	0	71	0	70
				71	0			

STAGE 3 - GB South Curb Return - STA 10+01'GBS' to STA 10+70'GBS'

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Fill 1.00	Mass Ordinate Note 1
10+01'GBS'		24	0	0	0	0	0	0
10+05'GBS'	4	25	0	4	0	4	0	4
10+10'GBS'	5	26	0	5	0	8	0	8
10+15'GBS'	5	30	0	5	0	14	0	14
10+20'GBS'	5	35	0	6	0	20	0	20
10+25'GBS'	5	40	0	7	0	27	0	27
10+30'GBS'	5	47	0	8	0	35	0	35
10+30'GBS'	0	47	0	1	0	35	0	35
10+35'GBS'	5	39	0	7	0	43	0	42
10+40'GBS'	5	32	0	7	0	49	0	49
10+45'GBS'	5	27	0	5	0	55	0	55
10+50'GBS'	5	23	0	5	0	59	0	59
10+55'GBS'	5	20	0	4	0	63	0	63
10+60'GBS'	5	18	0	4	0	67	0	66
10+65'GBS'	5	18	0	3	0	70	0	69
10+70'GBS'	5	18	0	3	0	74	0	72
10+70'GBS'	0	0	0	0	0	74	0	73
				74	0			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - GC Ramp - STA 459+30'GC' to STA 461+29'GC'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
459+30'GC'		29	0	0	0	0	0	0
459+50'GC'	20	29	5	22	2	22	2	20
459+67'GC'	17	30	3	19	2	40	4	36
460+00'GC'	33	30	0	36	2	77	6	70
460+42'GC'	42	30	1	47	1	123	7	116
460+50'GC'	8	29	1	8	0	132	7	125
461+00'GC'	50	21	1	46	1	178	8	169
461+29'GC'	29	19	2	21	1	199	10	189
				199	10			

STAGE 3 - GC North Curb Return - STA 10+10'GCN' to STA 10+80'GCN'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
10+10'GCN'		0	24	0	0	0	0	0
10+15'GCN'	5	1	16	0	4	0	36	-36
10+20'GCN'	5	2	9	0	2	0	38	-38
10+25'GCN'	5	4	4	1	1	1	39	-39
10+30'GCN'	5	10	3	1	1	2	40	-38
10+35'GCN'	5	22	3	3	1	5	41	-36
10+38'GCN'	3	31	3	3	0	8	41	-33
10+40'GCN'	2	29	2	3	0	10	41	-31
10+45'GCN'	5	26	2	5	0	15	42	-27
10+50'GCN'	5	24	1	5	0	20	42	-22
10+55'GCN'	5	23	1	4	0	24	42	-19
10+60'GCN'	5	22	0	4	0	29	42	-15
10+65'GCN'	5	23	0	4	0	33	42	-10
10+70'GCN'	5	23	0	4	0	37	42	-7
10+75'GCN'	5	23	0	4	0	41	42	-3
10+80'GCN'	5	23	0	4	0	46	42	2
				46	10			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - GC South Curb Return - STA 9+90'GCS' to STA 11+39'GCS'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
9+90'GCS'		19	2	0	0	0	0	0
9+95'GCS'	5	19	2	3	0	3	0	3
10+00'GCS'	5	18	2	3	0	7	1	6
10+05'GCS'	5	18	4	3	1	10	1	9
10+10'GCS'	5	17	6	3	1	13	2	11
10+15'GCS'	5	17	9	3	1	17	4	13
10+20'GCS'	5	17	11	3	2	20	5	14
10+25'GCS'	5	17	13	3	2	23	8	15
10+30'GCS'	5	17	16	3	3	26	10	16
10+35'GCS'	5	17	18	3	3	29	13	16
10+40'GCS'	5	17	20	3	4	32	17	15
10+45'GCS'	5	17	23	3	4	36	21	14
10+50'GCS'	5	17	26	3	5	39	26	13
10+55'GCS'	5	14	29	3	5	42	31	11
10+60'GCS'	5	14	32	3	6	44	36	7
10+65'GCS'	5	14	33	3	6	47	42	4
10+70'GCS'	5	15	37	3	7	50	49	0
10+75'GCS'	5	15	42	3	7	52	56	-5
10+80'GCS'	5	16	45	3	8	55	64	-11
10+85'GCS'	5	16	49	3	9	58	73	-17
10+90'GCS'	5	23	55	4	10	62	82	-23
10+91'GCS'	1	24	57	1	2	63	84	-24
10+95'GCS'	4	13	65	3	9	65	94	-31
11+00'GCS'	5	2	74	1	13	67	106	-42
11+05'GCS'	5	0	78	0	14	67	121	-56
11+10'GCS'	5	0	76	0	14	67	135	-72
11+15'GCS'	5	0	71	0	14	67	148	-85
11+20'GCS'	5	0	65	0	13	67	161	-98
11+25'GCS'	5	0	61	0	12	67	173	-110
11+30'GCS'	5	0	56	0	11	67	184	-122
11+35'GCS'	5	0	50	0	10	67	193	-131
11+39'GCS'	4	0	49	0	7	67	200	-138
				67	200			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - STH 69 Temp Pave - STA. 534+40'EB' TO STA. 577+10'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
534+40'EB'		3	1	0	0	0	0	0
534+50'EB'	10	4	1	1	0	1	0	1
535+00'EB'	50	6	1	9	2	10	2	8
535+50'EB'	50	6	3	11	3	21	5	16
536+00'EB'	50	7	4	12	6	32	11	22
536+50'EB'	50	6	7	12	10	44	20	24
537+00'EB'	50	5	12	10	18	55	38	16
537+50'EB'	50	5	12	10	22	64	60	4
538+00'EB'	50	5	11	10	21	74	82	-8
538+50'EB'	50	6	7	10	17	84	99	-16
538+70'EB'	20	6	6	4	5	88	104	-16
539+00'EB'	30	8	4	8	6	96	110	-15
539+50'EB'	50	8	3	15	7	110	117	-6
540+00'EB'	50	8	3	14	6	125	123	2
540+50'EB'	50	7	3	14	6	139	128	10
541+00'EB'	50	10	1	17	4	155	132	23
541+50'EB'	50	11	1	20	2	175	134	41
542+00'EB'	50	10	1	20	1	195	135	60
542+50'EB'	50	10	1	19	1	214	136	78
543+00'EB'	50	10	1	19	2	233	138	95
543+50'EB'	50	11	1	20	1	253	139	113
544+00'EB'	50	11	1	20	1	273	141	132
544+50'EB'	50	13	0	22	1	295	141	154
545+00'EB'	50	14	0	25	0	319	141	178
545+50'EB'	50	9	1	21	1	340	142	198
546+00'EB'	50	9	1	17	2	357	145	212
546+50'EB'	50	9	1	17	2	374	147	227
547+00'EB'	50	8	1	16	2	390	149	240
547+50'EB'	50	9	1	15	2	405	152	253
548+00'EB'	50	9	1	16	2	421	153	267
548+50'EB'	50	10	0	17	1	438	154	284
549+00'EB'	50	9	0	17	1	455	155	301
549+50'EB'	50	7	1	15	1	470	156	314
550+00'EB'	50	9	1	15	2	485	158	328
550+50'EB'	50	8	1	16	2	501	159	342
551+00'EB'	50	8	1	14	2	516	161	354
551+50'EB'	50	7	1	14	2	530	163	366
552+00'EB'	50	8	1	14	2	544	165	378
552+50'EB'	50	9	1	16	2	559	167	392
553+00'EB'	50	9	1	17	1	576	168	407
553+50'EB'	50	9	1	16	1	592	170	422
554+00'EB'	50	8	1	15	2	607	171	436
554+50'EB'	50	8	1	15	1	622	173	450
555+00'EB'	50	8	1	16	2	638	174	464
555+50'EB'	50	6	1	13	2	651	176	475

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - STH 69 Temp Pave - STA. 534+40'EB' TO STA. 577+10'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
556+00'EB'	50	7	1	12	2	664	179	485
556+50'EB'	50	7	1	13	3	677	181	495
557+00'EB'	50	7	1	13	2	690	184	506
557+50'EB'	50	8	1	14	2	704	186	519
558+00'EB'	50	8	1	15	2	719	187	532
558+50'EB'	50	8	1	15	2	734	189	544
559+00'EB'	50	7	1	14	3	748	192	556
559+50'EB'	50	7	1	13	2	761	194	567
560+00'EB'	50	9	1	15	1	776	195	581
560+50'EB'	50	8	0	16	1	792	196	596
561+00'EB'	50	10	0	17	0	809	196	612
561+50'EB'	50	8	0	16	0	825	197	629
562+00'EB'	50	9	0	15	0	840	197	644
562+50'EB'	50	10	0	17	0	857	197	660
563+00'EB'	50	10	0	18	0	875	197	678
563+50'EB'	50	10	0	18	0	894	197	697
564+00'EB'	50	10	0	18	0	912	197	715
564+50'EB'	50	10	0	18	0	931	198	733
565+00'EB'	50	13	0	21	0	952	198	754
565+50'EB'	50	9	0	21	0	973	198	775
566+00'EB'	50	11	0	19	0	992	198	793
566+50'EB'	50	9	0	18	0	1010	198	812
567+00'EB'	50	9	0	17	0	1027	198	828
567+50'EB'	50	10	0	18	0	1045	199	846
568+00'EB'	50	10	0	18	0	1063	199	864
568+50'EB'	50	10	0	19	0	1081	199	883
569+00'EB'	50	10	0	19	0	1100	199	901
569+50'EB'	50	9	0	17	0	1117	199	918
570+00'EB'	50	11	0	18	0	1135	199	936
570+50'EB'	50	9	0	18	0	1153	199	954
571+00'EB'	50	9	1	16	1	1169	200	969
571+50'EB'	50	7	2	15	2	1184	202	982
572+00'EB'	50	7	5	13	6	1197	208	989
572+50'EB'	50	8	4	14	8	1211	217	994
573+00'EB'	50	9	5	15	9	1226	225	1001
573+50'EB'	50	7	6	15	10	1241	236	1005
574+00'EB'	50	7	7	14	12	1254	248	1007
574+50'EB'	50	8	5	14	11	1269	259	1010
575+00'EB'	50	7	4	14	9	1282	267	1015
575+50'EB'	50	0	0	6	4	1289	271	1018
576+00'EB'	50	0	0	0	0	1289	271	1018
576+50'EB'	50	0	0	0	0	1289	271	1018
577+00'EB'	50	0	0	0	0	1289	271	1018
577+10'EB'	10	0	0	0	0	1289	271	1018
				1289	271			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 STH 69 Entrance Ramp W4 - STA. 530+00'W4' TO STA. 544+00'W4'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
530+00'W4'		1	0	0	0	0	0	0
530+25'W4'	25	12	0	6	0	6	0	6
530+50'W4'	25	11	1	11	1	17	1	16
531+00'W4'	50	11	28	20	27	38	27	10
531+33'W4'	33	12	17	14	28	51	56	-4
531+50'W4'	17	11	16	7	10	59	66	-7
532+00'W4'	50	12	16	22	30	81	95	-15
532+50'W4'	50	12	9	22	23	103	119	-16
533+00'W4'	50	12	5	22	14	125	132	-7
533+50'W4'	50	13	4	23	9	148	141	7
534+00'W4'	50	11	14	22	16	170	157	13
534+50'W4'	50	12	10	22	22	192	179	13
535+00'W4'	50	12	8	22	16	214	195	19
535+50'W4'	50	12	6	22	13	236	208	28
536+00'W4'	50	13	1	23	7	259	215	44
536+50'W4'	50	24	0	34	1	293	216	77
537+00'W4'	50	19	0	40	0	333	216	116
537+50'W4'	50	23	0	39	0	372	216	155
537+87'W4'	37	22	0	31	0	402	216	186
538+00'W4'	13	20	0	10	0	413	216	197
538+50'W4'	50	12	2	30	2	442	218	225
538+95'W4'	45	17	0	24	1	466	219	247
539+00'W4'	5	17	0	3	0	469	219	250
539+36'W4'	36	15	0	21	0	491	219	271
539+50'W4'	14	13	1	7	0	498	219	278
540+00'W4'	50	11	0	22	1	520	220	300
540+09'W4'	9	10	0	3	0	524	221	303
540+50'W4'	41	6	1	13	1	536	222	315
541+00'W4'	50	5	1	11	2	547	223	323
541+50'W4'	50	5	1	10	2	557	225	331
542+00'W4'	50	5	1	10	2	566	227	339
542+50'W4'	50	8	0	12	1	578	228	350
543+00'W4'	50	7	0	14	0	592	228	363
543+50'W4'	50	7	0	13	0	605	228	377
544+00'W4'	50	0	0	7	0	612	228	384
				612	228			

Note 1: Mass Ordinate = Cut - Fill

STAGE 2 - STH 69 Bullnose- STA. 526+65'EB' TO STA. 532+00'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
525+65'EB'		1	0	0	0	0	0	0
526+00'EB'	35	1	0	1	0	1	0	1
526+50'EB'	50	2	0	2	0	4	0	3
527+00'EB'	50	2	2	3	2	7	2	5
527+50'EB'	50	1	9	3	10	10	12	-2
528+00'EB'	50	1	10	1	17	11	30	-18
528+50'EB'	50	10	0	10	9	21	39	-18
529+00'EB'	50	14	0	22	0	43	39	4
529+50'EB'	50	13	0	25	0	68	39	29
530+00'EB'	50	1	16	14	15	82	54	28
530+50'EB'	50	2	4	3	18	85	72	12
531+00'EB'	50	1	1	2	5	87	77	10
531+50'EB'	50	0	0	1	1	88	78	10
532+00'EB'	50	0	0	0	1	89	79	10
				89	79			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - STH 69 Entrance Ramp W4 - STA. 523+56'W4' TO STA. 541+00'W4'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
523+56'W4'		0	0	0	0	0	0	0
524+00'W4'	44	0	0	0	0	0	0	0
524+02'W4'	2	8	0	0	0	0	0	0
524+50'W4'	48	8	8	14	7	14	7	7
525+00'W4'	50	28	21	34	27	48	34	14
525+19'W4'	19	27	29	20	18	67	52	16
525+45'W4'	26	25	21	25	24	93	76	17
525+50'W4'	5	25	12	5	3	97	79	19
525+55'W4'	5	25	10	4	2	102	81	21
525+68'W4'	13	24	15	12	6	114	87	27
525+70'W4'	2	23	15	2	1	115	88	27
525+80'W4'	10	22	21	8	6	124	95	29
525+93'W4'	13	21	26	10	11	134	106	28
526+00'W4'	7	21	25	5	7	139	112	27
526+05'W4'	5	19	27	4	5	143	117	26
526+18'W4'	13	19	21	9	11	152	128	24
526+50'W4'	32	17	45	21	39	174	168	6
526+70'W4'	20	14	143	11	70	185	238	-53
526+85'W4'	15	0	0	4	40	189	278	-89
530+00'W4'	315	0	0	0	0	189	278	-89
530+25'W4'	25	21	85	10	39	198	317	-119
530+50'W4'	25	18	75	18	74	217	391	-175
531+00'W4'	50	19	70	35	135	251	526	-274
531+33'W4'	33	16	81	22	94	274	620	-346
531+50'W4'	17	15	84	10	50	283	670	-387
532+00'W4'	50	21	1	34	79	317	749	-432
532+50'W4'	50	42	1	58	2	375	751	-376
533+00'W4'	50	18	4	55	5	430	755	-325
533+50'W4'	50	19	3	34	6	464	761	-297
534+00'W4'	50	19	5	35	7	499	769	-270
534+50'W4'	50	18	8	35	12	534	781	-247
535+00'W4'	50	16	24	32	30	566	811	-246
535+50'W4'	50	17	41	31	61	597	872	-275
536+00'W4'	50	19	27	33	63	630	935	-305

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - STH 69 Entrance Ramp W4 - STA. 523+56'W4' TO STA. 541+00'W4'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	Note 1
536+50'W4'	50	21	3	37	28	667	963	-296
537+00'W4'	50	21	6	39	9	706	972	-266
537+50'W4'	50	18	7	36	12	742	984	-242
537+87'W4'	37	20	10	26	11	768	995	-227
538+00'W4'	13	20	10	10	5	778	1000	-222
538+50'W4'	50	19	11	36	19	814	1019	-205
538+95'W4'	45	20	3	32	11	846	1030	-183
539+00'W4'	5	21	3	4	1	850	1030	-180
539+36'W4'	36	22	0	29	2	879	1032	-153
539+50'W4'	14	20	2	11	0	890	1033	-143
540+00'W4'	50	14	2	32	3	921	1036	-114
540+09'W4'	9	14	2	5	1	926	1036	-110
540+31'W4'	22	13	0	11	1	937	1037	-100
540+50'W4'	19	0	0	5	0	942	1037	-95
541+00'W4'	50	0	0	0	0	942	1037	-95
				942	1037			

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - STH 69 Aux Lane EB - STA. 545+11'EB' TO STA. 571+73'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
545+11'EB'		0	0	0	0	0	0	0
545+50'EB'	39	38	1	28	1	28	1	27
546+00'EB'	50	37	4	70	5	97	5	92
546+50'EB'	50	46	0	77	4	174	9	165
547+00'EB'	50	38	0	78	0	252	9	243
547+50'EB'	50	38	2	71	2	324	11	312
548+00'EB'	50	37	32	70	31	393	43	351
548+50'EB'	50	65	71	94	95	488	137	350
549+00'EB'	50	66	37	121	100	609	238	371
549+50'EB'	50	66	9	122	43	731	280	451
550+00'EB'	50	67	0	123	8	854	288	566
550+50'EB'	50	70	2	127	2	981	290	691
551+00'EB'	50	57	157	118	147	1099	437	661
551+50'EB'	50	58	83	107	222	1205	659	546
552+00'EB'	50	58	112	108	181	1313	840	473
552+50'EB'	50	53	170	103	262	1416	1102	314
553+00'EB'	50	49	267	94	405	1510	1507	4
553+50'EB'	50	47	291	89	516	1599	2022	-423
554+00'EB'	50	47	286	87	534	1686	2556	-870
554+50'EB'	50	46	263	86	508	1773	3064	-1291
555+00'EB'	50	47	244	86	470	1859	3533	-1675
555+50'EB'	50	44	261	84	468	1943	4001	-2058
556+00'EB'	50	45	262	83	484	2026	4485	-2459
556+50'EB'	50	47	249	85	473	2111	4958	-2847
557+00'EB'	50	48	221	87	435	2198	5393	-3195
557+50'EB'	50	45	169	86	361	2284	5753	-3469
558+00'EB'	50	48	93	86	242	2370	5996	-3625

Note 1: Mass Ordinate = Cut - Fill

STAGE 3 - STH 69 Aux Lane EB - STA. 545+11'EB' TO STA. 571+73'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
558+50'EB'	50	50	48	90	130	2461	6126	-3665
559+00'EB'	50	50	22	93	65	2554	6191	-3637
559+50'EB'	50	47	19	90	38	2643	6229	-3586
560+00'EB'	50	46	19	85	36	2729	6265	-3536
560+50'EB'	50	48	20	86	37	2815	6301	-3486
561+00'EB'	50	305	7	327	25	3142	6327	-3185
561+50'EB'	50	469	3	717	9	3859	6336	-2477
562+00'EB'	50	564	4	956	6	4815	6342	-1527
562+50'EB'	50	577	4	1056	7	5871	6349	-478
563+00'EB'	50	608	2	1097	5	6968	6355	613
563+50'EB'	50	587	3	1107	5	8074	6359	1715
564+00'EB'	50	595	5	1095	8	9169	6367	2802
564+50'EB'	50	589	3	1096	8	10265	6375	3890
565+00'EB'	50	527	5	1034	8	11299	6383	4916
565+50'EB'	50	448	6	903	10	12202	6394	5809
566+00'EB'	50	331	4	721	10	12923	6404	6519
566+50'EB'	50	244	6	532	9	13455	6413	7042
567+00'EB'	50	157	10	372	14	13828	6427	7400
567+50'EB'	50	130	10	266	18	14094	6445	7648
568+00'EB'	50	90	9	204	17	14298	6463	7835
568+50'EB'	50	60	10	139	17	14437	6480	7957
569+00'EB'	50	52	13	104	21	14541	6501	8040
569+50'EB'	50	56	25	100	35	14640	6536	8105
570+00'EB'	50	70	27	117	48	14758	6584	8174
570+20'EB'	20	78	28	54	20	14812	6603	8208
570+44'EB'	24	82	7	72	16	14884	6619	8265
570+50'EB'	6	83	5	18	1	14902	6620	8282
570+68'EB'	18	88	1	55	2	14957	6622	8335
570+89'EB'	21	52	0	55	0	15012	6623	8389
570+96'EB'	7	50	0	14	0	15026	6623	8403
571+32'EB'	36	53	0	69	0	15095	6623	8473
571+73'EB'	40	5	0	43	0	15139	6623	8516
				15139	6623			

Note 1: Mass Ordinate = Cut - Fill

STAGE 4 - STH 69 Median Reinstatement - STA. 534+40'EB' TO STA. 577+10'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
534+40'EB'		1	3	0	0	0	0	0
534+50'EB'	10	1	3	0	1	0	1	-1
535+00'EB'	50	2	5	3	7	3	8	-5
535+50'EB'	50	4	2	6	6	9	14	-5
536+00'EB'	50	9	0	12	2	21	15	6
536+50'EB'	50	13	0	20	0	41	15	26
537+00'EB'	50	17	0	27	0	68	15	53
537+50'EB'	50	16	0	30	0	98	15	83
538+00'EB'	50	16	0	30	0	128	15	113
538+50'EB'	50	14	0	28	0	155	15	140
538+70'EB'	20	13	0	10	0	165	15	150
539+00'EB'	30	12	0	14	0	179	15	164
539+50'EB'	50	9	0	19	0	198	15	183
540+00'EB'	50	8	0	16	0	214	15	199
540+50'EB'	50	7	0	14	0	228	15	213
541+00'EB'	50	6	0	13	0	241	15	226
541+50'EB'	50	5	0	10	0	251	15	236
542+00'EB'	50	4	0	9	0	260	15	244
542+50'EB'	50	6	0	10	0	269	15	254
543+00'EB'	50	4	0	10	0	279	15	264
543+50'EB'	50	5	0	8	0	287	15	272
544+00'EB'	50	5	0	8	0	296	15	280
544+50'EB'	50	1	0	5	0	301	15	286
545+00'EB'	50	1	0	2	0	303	16	288
545+50'EB'	50	5	0	5	0	309	16	293
546+00'EB'	50	6	0	10	0	319	16	303
546+50'EB'	50	6	0	11	0	330	16	314
547+00'EB'	50	5	0	10	0	339	16	324
547+50'EB'	50	6	0	10	0	349	16	333
548+00'EB'	50	4	0	9	0	358	16	343
548+50'EB'	50	3	0	7	0	365	16	349
549+00'EB'	50	4	0	6	0	371	16	355
549+50'EB'	50	5	0	8	0	379	16	363
550+00'EB'	50	6	0	10	0	388	16	373
550+50'EB'	50	6	0	11	0	399	16	383
551+00'EB'	50	5	0	10	0	409	16	393
551+50'EB'	50	5	0	9	0	418	16	403
552+00'EB'	50	4	0	9	0	427	16	411
552+50'EB'	50	5	0	9	0	436	16	420
553+00'EB'	50	5	0	9	0	445	16	429
553+50'EB'	50	4	0	8	0	453	16	437
554+00'EB'	50	4	0	8	0	461	16	445
554+50'EB'	50	5	0	8	0	469	16	453
555+00'EB'	50	5	0	9	0	478	16	462

Note 1: Mass Ordinate = Cut - Fill

STAGE 4 - STH 69 Median Reinstatement - STA. 534+40'EB' TO STA. 577+10'EB'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
555+50'EB'	50	5	0	9	0	487	16	471
556+00'EB'	50	5	0	10	0	497	16	481
556+50'EB'	50	5	0	10	0	506	16	490
557+00'EB'	50	5	0	9	0	516	16	500
557+50'EB'	50	6	0	10	0	526	16	510
558+00'EB'	50	5	0	10	0	535	16	519
558+50'EB'	50	5	0	9	0	545	16	529
559+00'EB'	50	5	0	9	0	554	16	538
559+50'EB'	50	4	0	8	0	562	16	547
560+00'EB'	50	4	0	8	0	570	16	554
560+50'EB'	50	3	0	7	0	577	16	561
561+00'EB'	50	3	0	5	0	582	16	566
561+50'EB'	50	3	0	5	0	587	16	571
562+00'EB'	50	3	0	6	0	593	16	577
562+50'EB'	50	3	0	6	0	599	16	583
563+00'EB'	50	2	0	5	0	604	16	588
563+50'EB'	50	2	0	4	0	608	16	592
564+00'EB'	50	2	0	4	0	611	16	595
564+50'EB'	50	3	0	4	0	616	16	600
565+00'EB'	50	4	0	6	0	622	16	606
565+50'EB'	50	2	0	6	0	628	16	612
566+00'EB'	50	2	0	5	0	633	16	617
566+50'EB'	50	3	0	5	0	638	16	622
567+00'EB'	50	2	0	5	0	643	16	627
567+50'EB'	50	3	0	5	0	647	16	631
568+00'EB'	50	3	0	5	0	652	16	636
568+50'EB'	50	3	0	5	0	657	16	641
569+00'EB'	50	3	0	5	0	662	16	646
569+50'EB'	50	3	0	5	0	667	16	651
570+00'EB'	50	3	0	5	0	672	16	657
570+50'EB'	50	3	0	6	0	678	16	662
571+00'EB'	50	4	0	7	0	685	16	669
571+50'EB'	50	5	0	9	0	694	16	678
572+00'EB'	50	7	0	12	0	705	16	689
572+50'EB'	50	7	0	13	0	718	16	702
573+00'EB'	50	7	1	13	1	732	17	714
573+50'EB'	50	7	1	13	1	745	19	726
574+00'EB'	50	7	1	13	2	758	20	738
574+50'EB'	50	7	0	13	1	771	21	750
575+00'EB'	50	5	1	11	1	782	22	760
575+50'EB'	50	0	0	4	1	786	23	763
576+00'EB'	50	0	0	0	0	786	23	763
576+50'EB'	50	0	0	0	0	786	23	763
577+00'EB'	50	0	0	0	0	787	23	764
577+10'EB'	10	0	0	0	0	787	23	764
				787	23			

Note 1: Mass Ordinate = Cut - Fill

9

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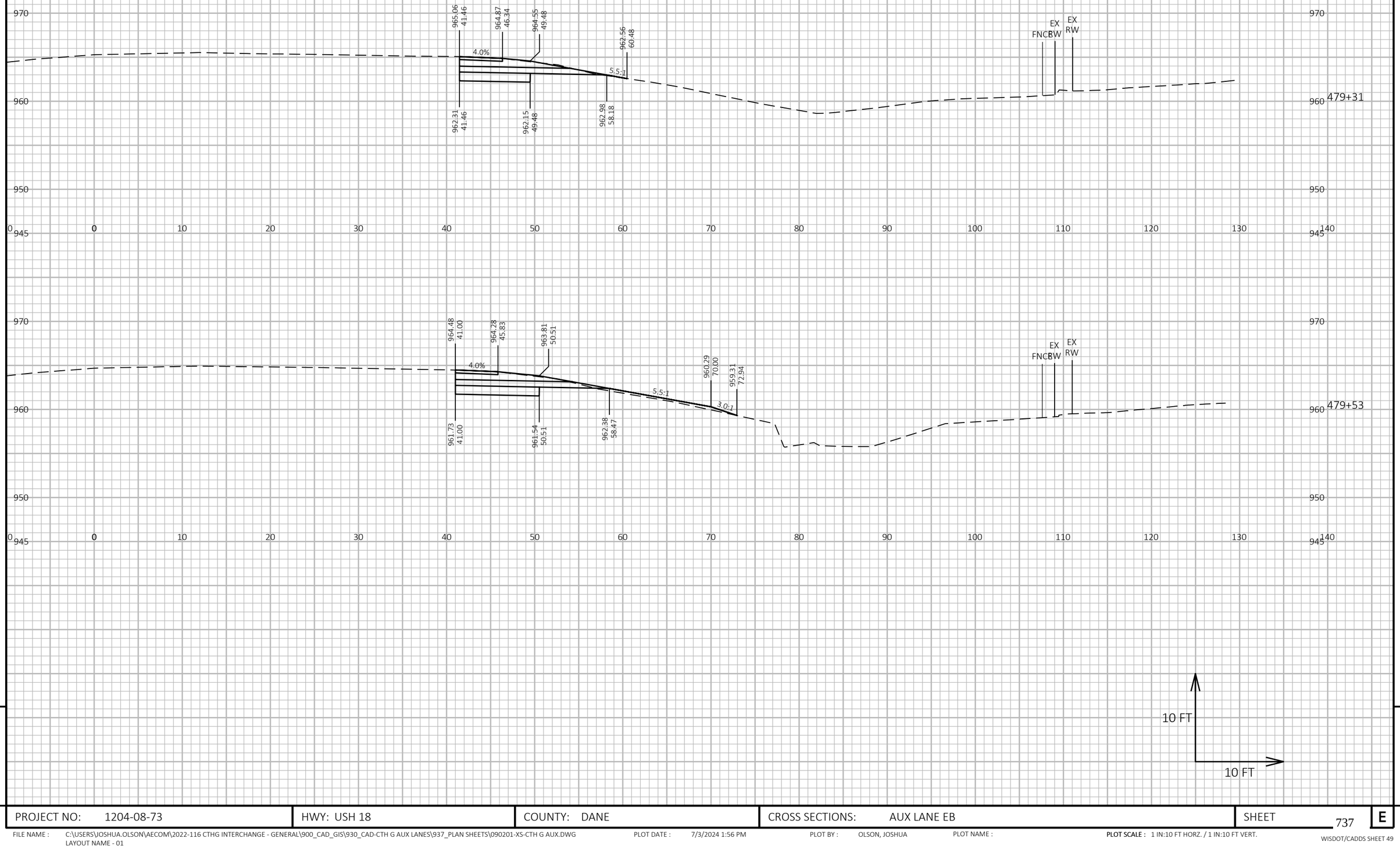
PROJECT NO: 1204-08-73/-74	HWY: USH 18	COUNTY: DANE	EARTHWORK DATA	SHEET 735	E

STAGE 4 - STH 69 Entrance Ramp W4 - STA. 522+88'W4' TO STA. 526+85'W4'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
522+88'W4'		8	0	0	0	0	0	0
523+00'W4'	12	8	0	4	0	4	0	4
523+50'W4'	50	7	0	14	0	17	0	17
523+56'W4'	6	7	0	2	0	19	0	19
524+00'W4'	44	6	2	11	1	30	1	28
524+02'W4'	2	8	1	1	0	30	2	29
524+50'W4'	48	8	8	14	8	45	10	35
525+00'W4'	50	12	12	18	19	63	28	35
525+20'W4'	20	12	13	9	9	72	37	34
525+45'W4'	25	14	16	12	13	84	51	34
525+50'W4'	5	14	18	3	3	87	54	33
525+68'W4'	18	14	23	10	14	96	67	29
525+70'W4'	2	15	22	1	2	98	69	28
525+80'W4'	10	16	18	6	7	103	76	27
525+93'W4'	13	13	18	7	8	110	85	26
526+00'W4'	7	13	17	3	4	114	89	24
526+05'W4'	5	12	19	2	3	116	93	23
526+18'W4'	13	17	17	7	8	123	101	22
526+50'W4'	32	20	17	22	20	145	121	24
526+70'W4'	20	19	22	15	15	160	136	24
526+85'W4'	15	0	0	5	6	165	142	23
				165	142			

Note 1: Mass Ordinate = Cut - Fill

BEGIN CONSTRUCTION
1204-08-73



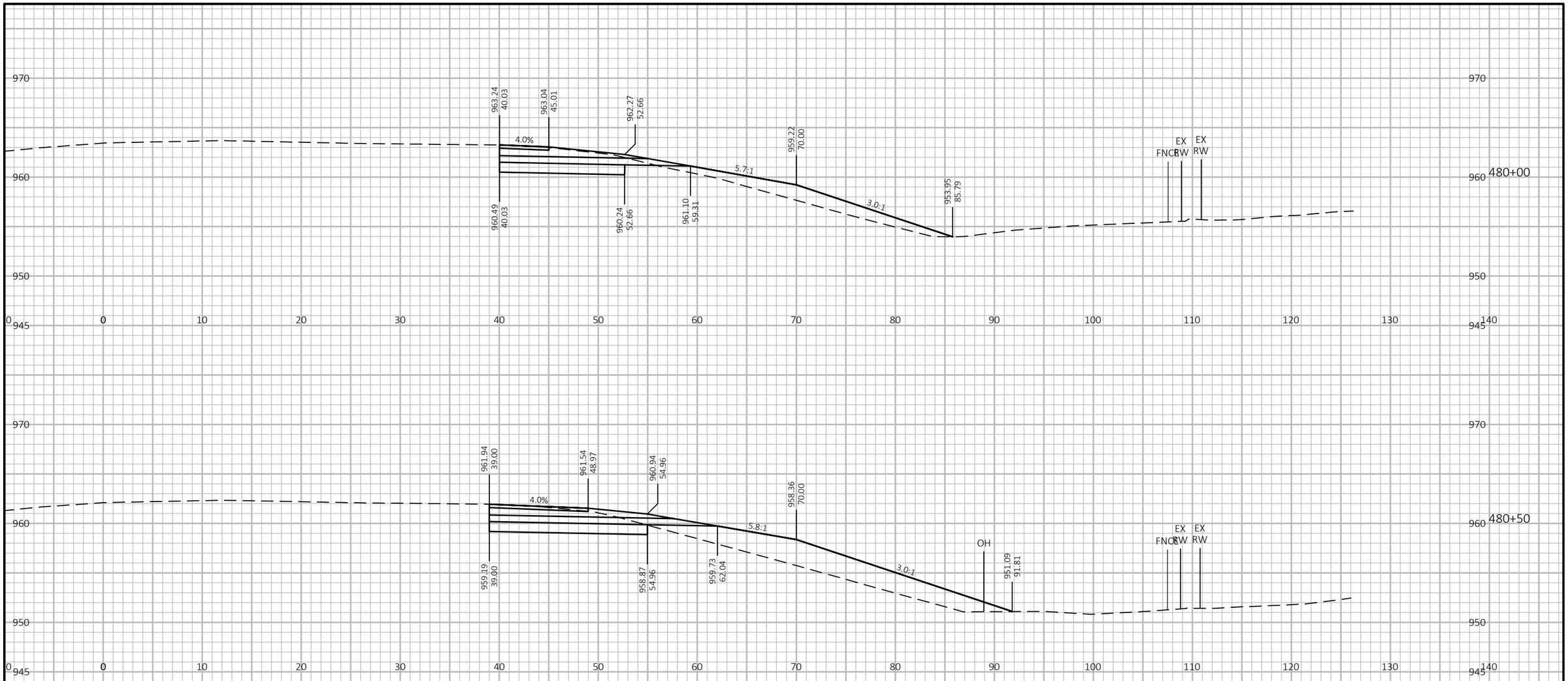
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 737	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 01

PLOT DATE : 7/3/2024 1:56 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

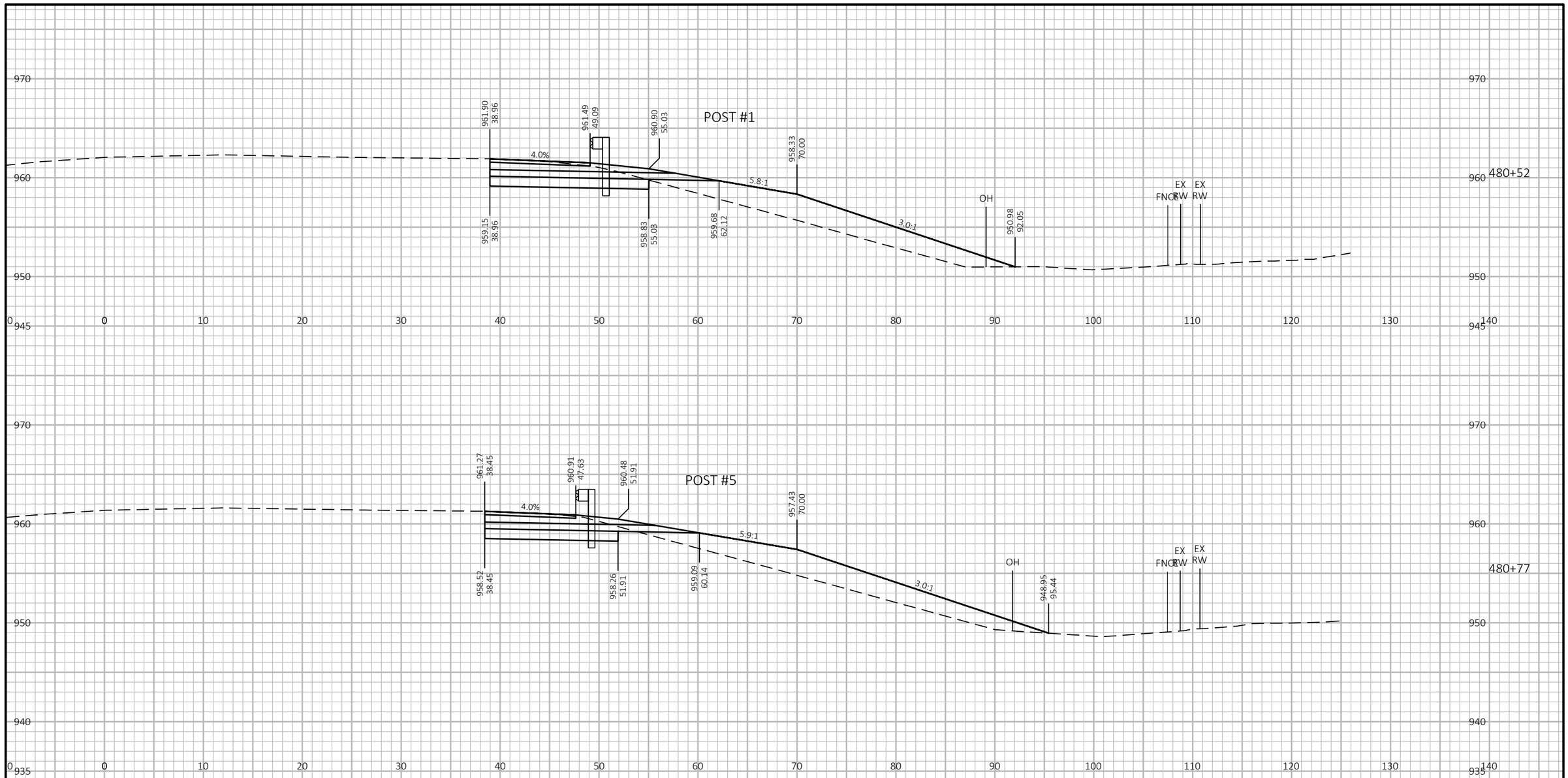


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 738	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 02

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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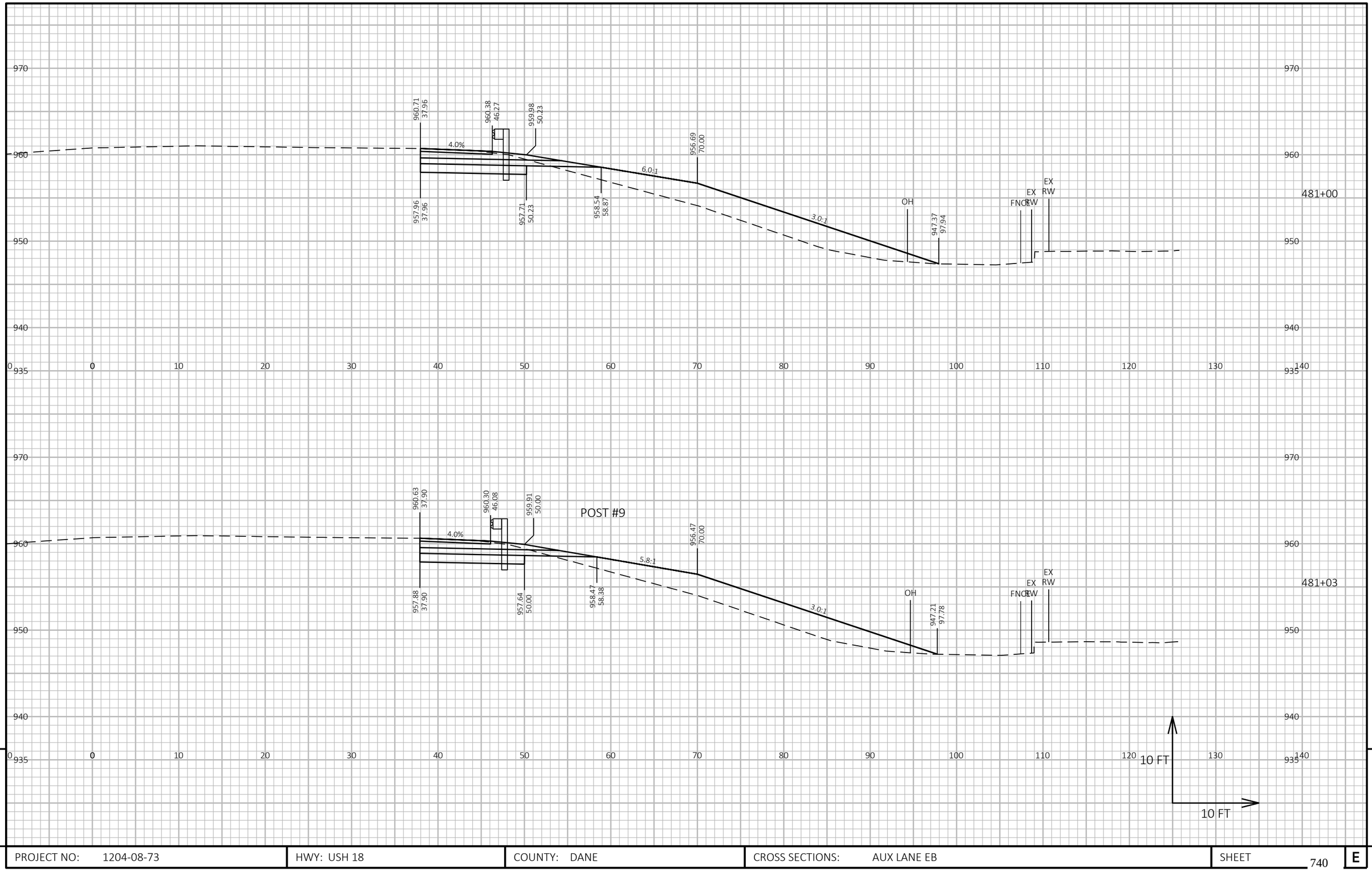
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 739	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 03

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

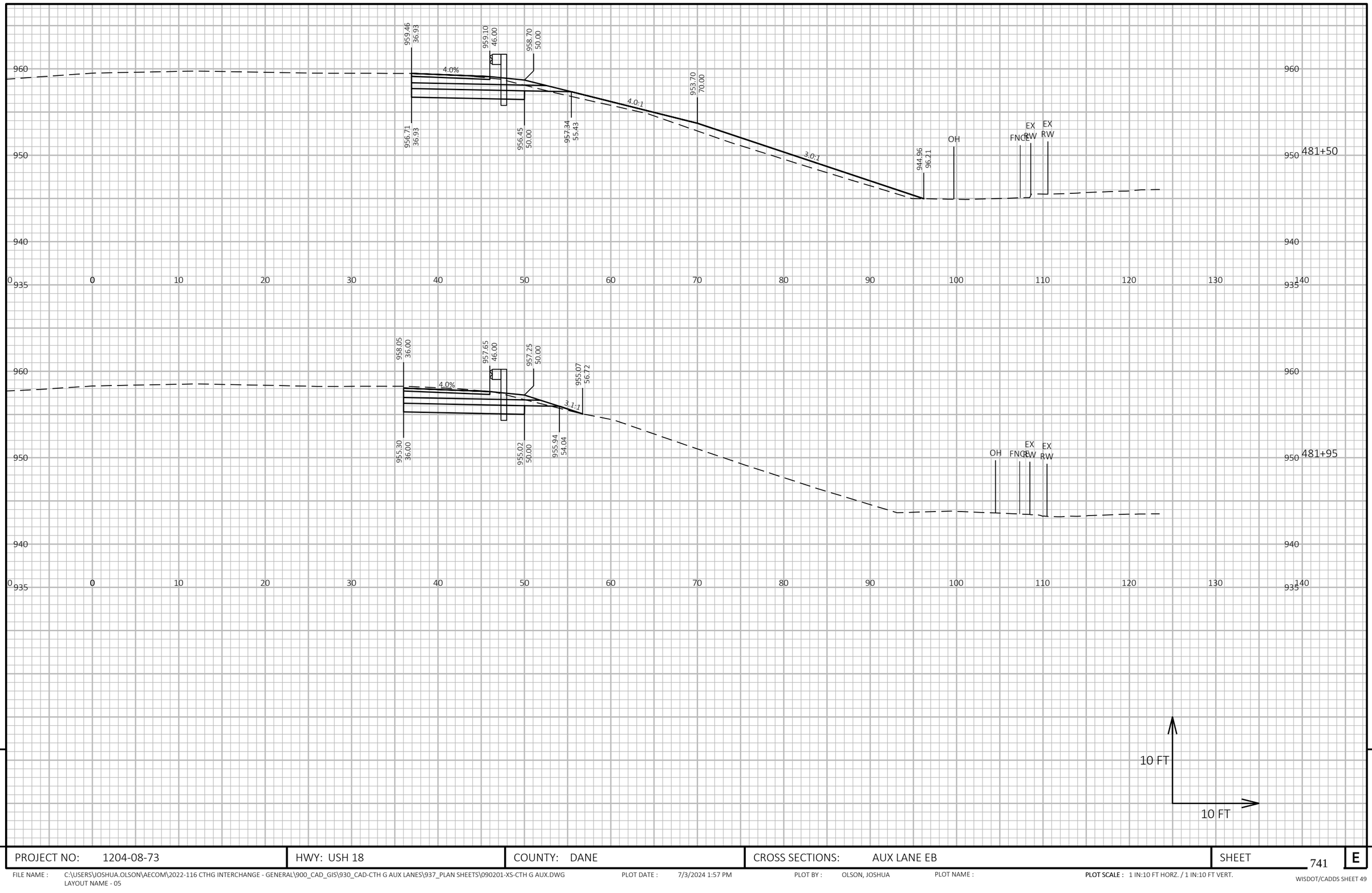


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 740	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 04

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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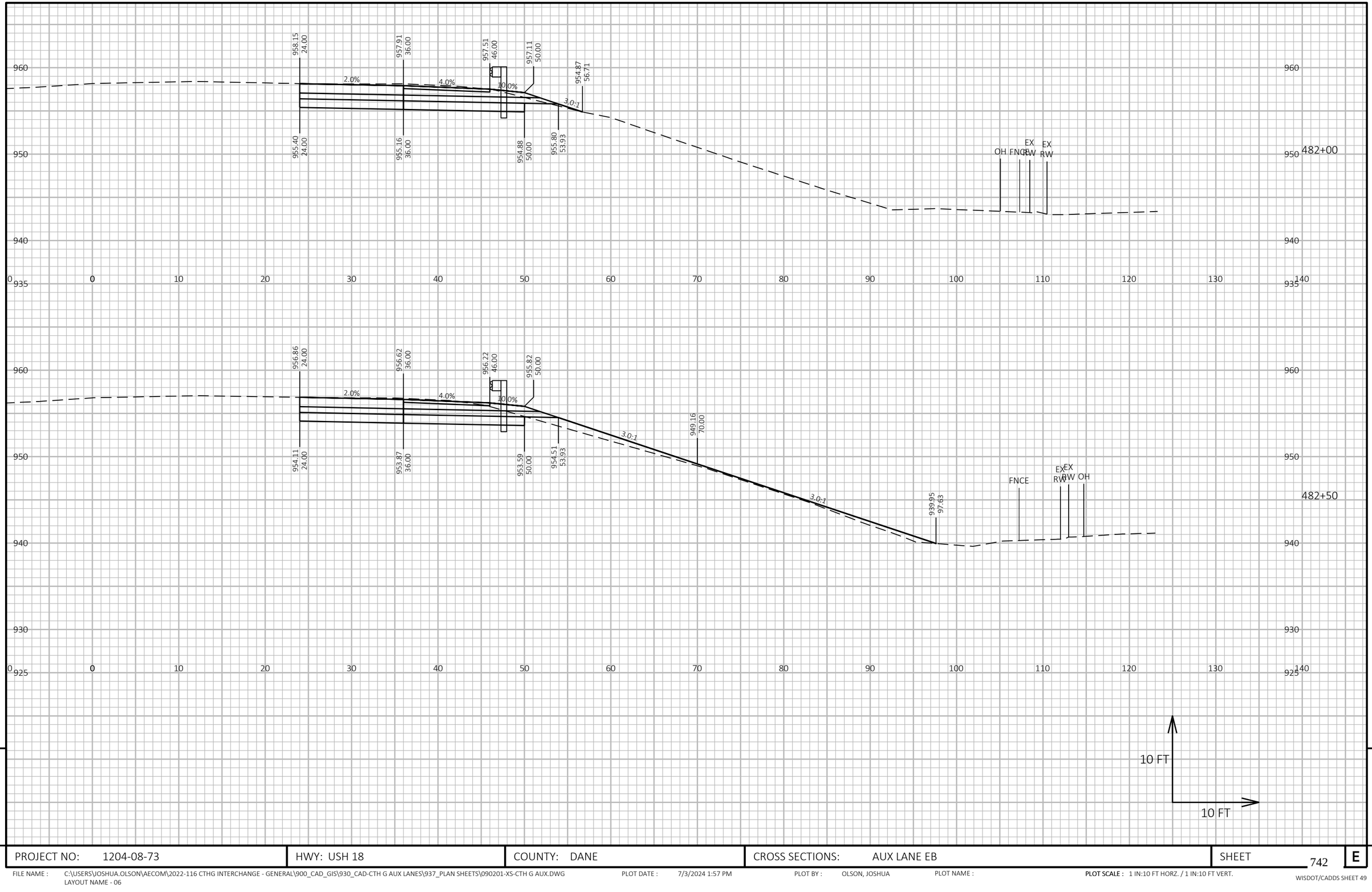
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 741	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 05

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

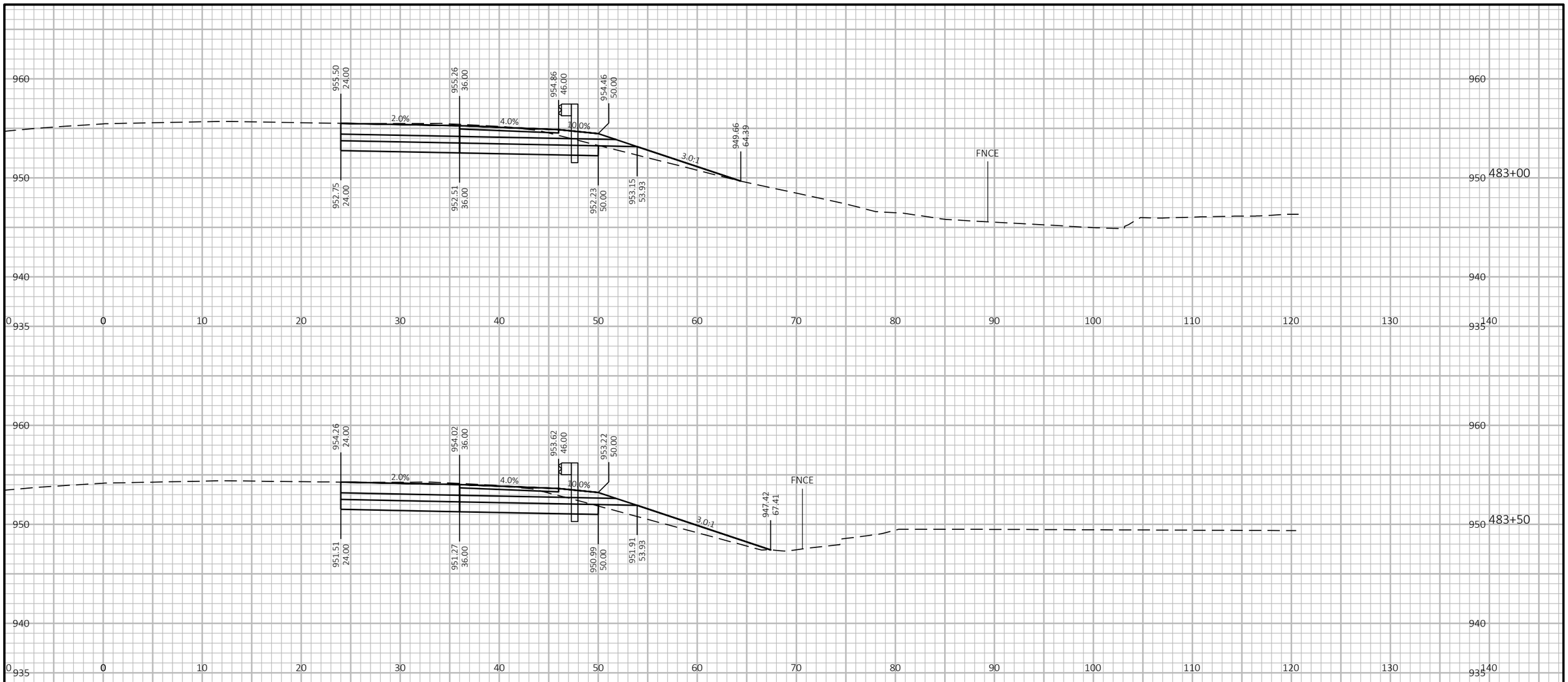
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 742	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 06

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

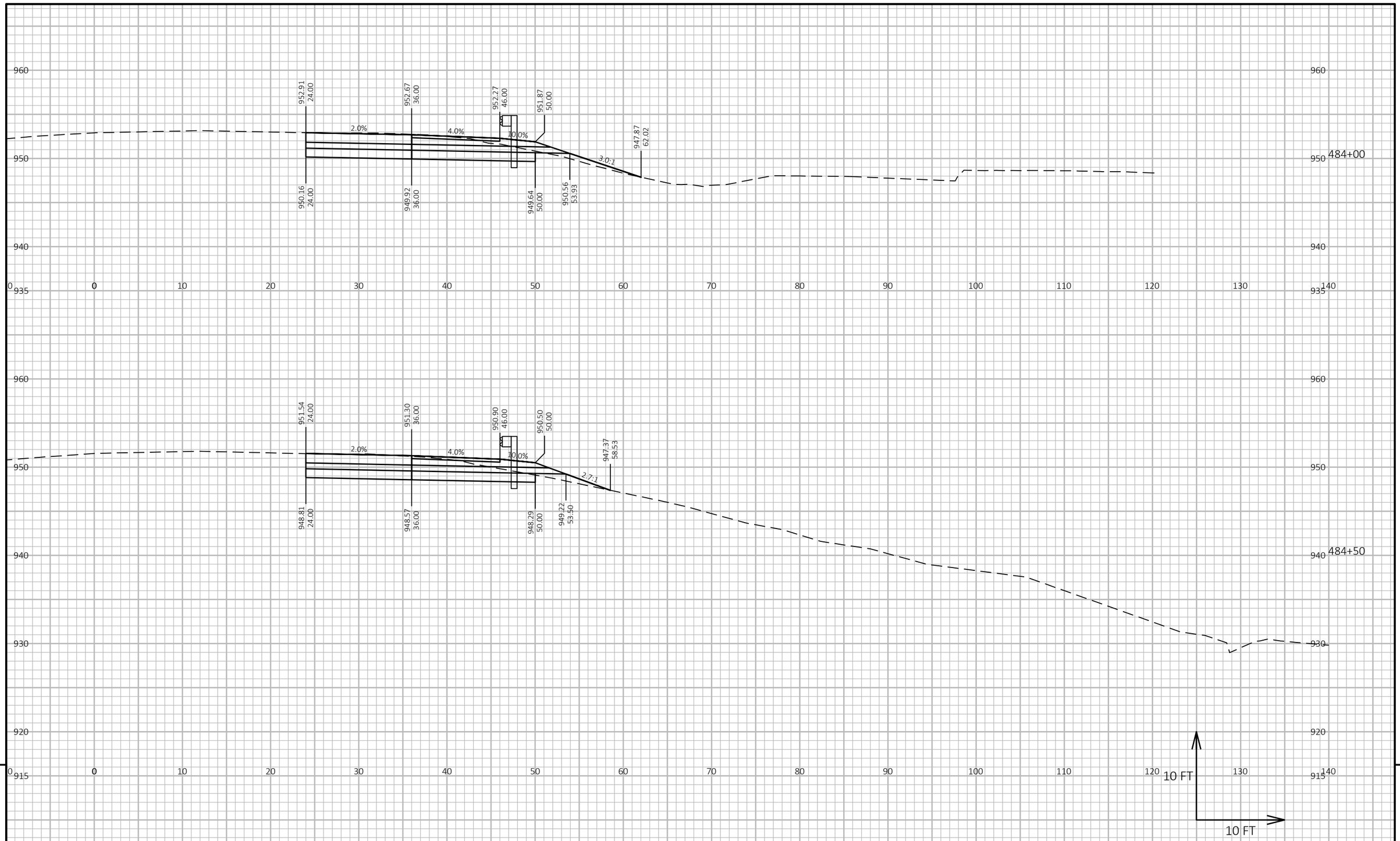
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 743	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 07

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

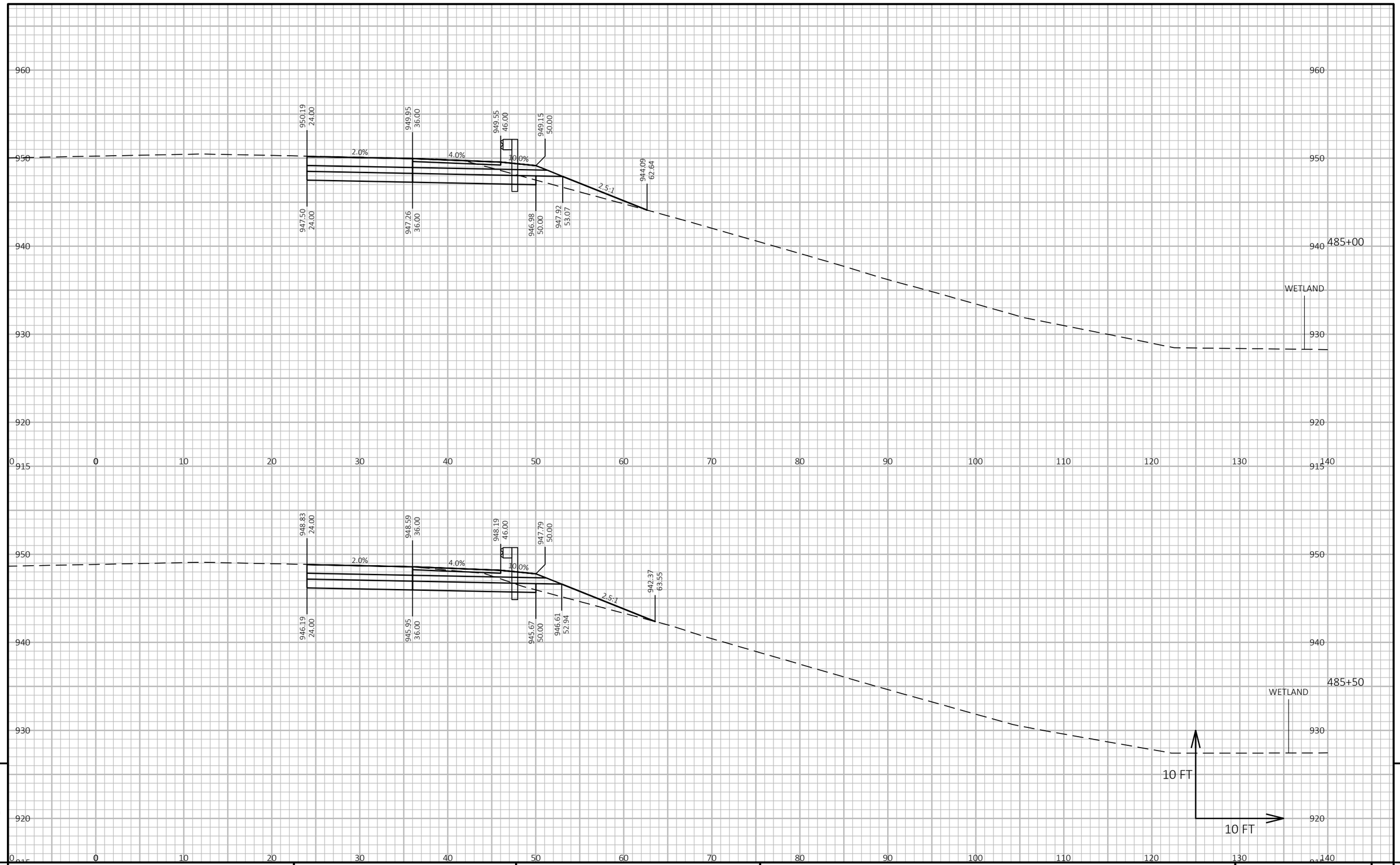


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 744	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 08

PLOT DATE : 7/3/2024 1:57 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 745	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 09

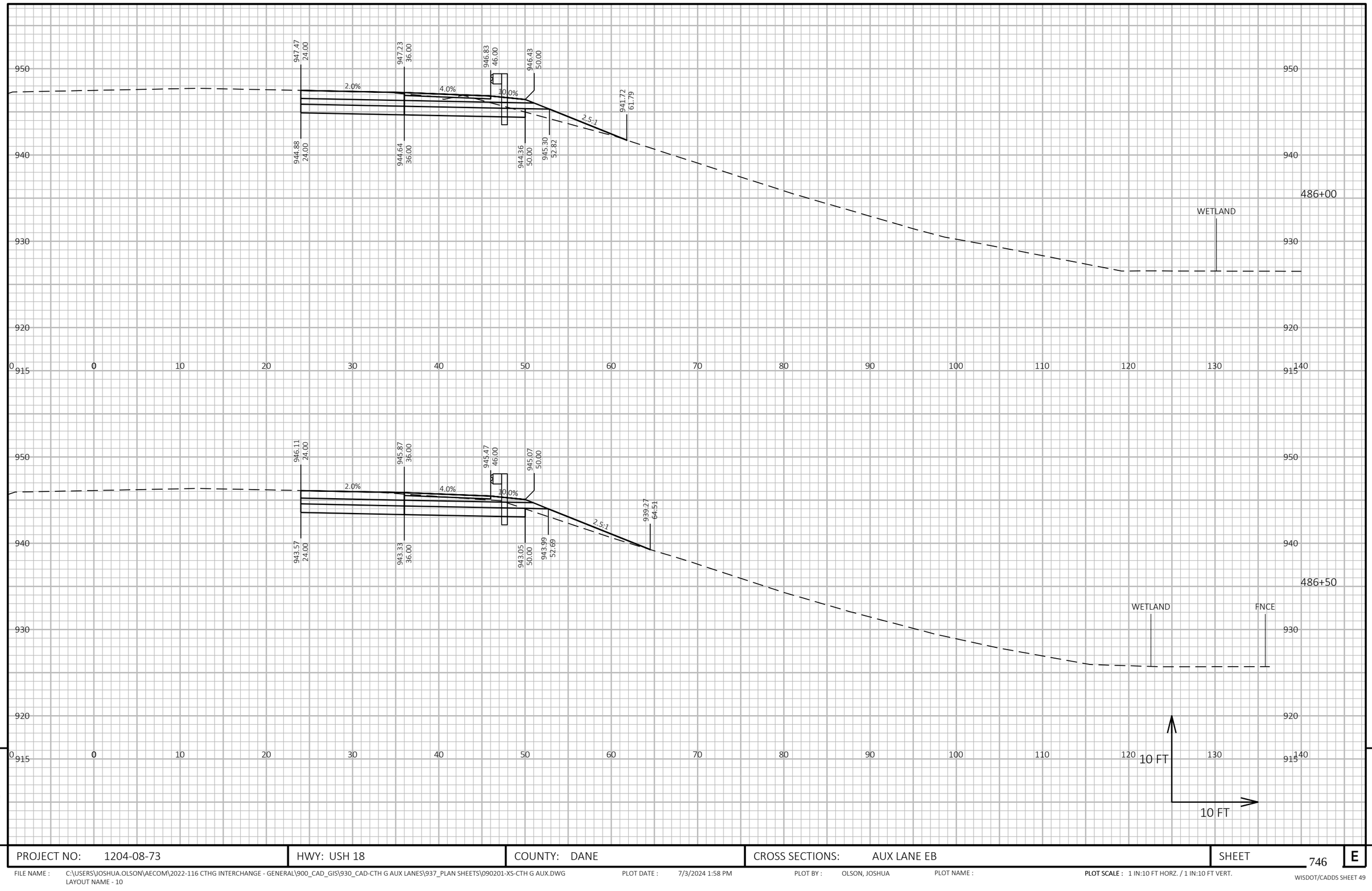
PLOT DATE : 7/3/2024 1:58 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

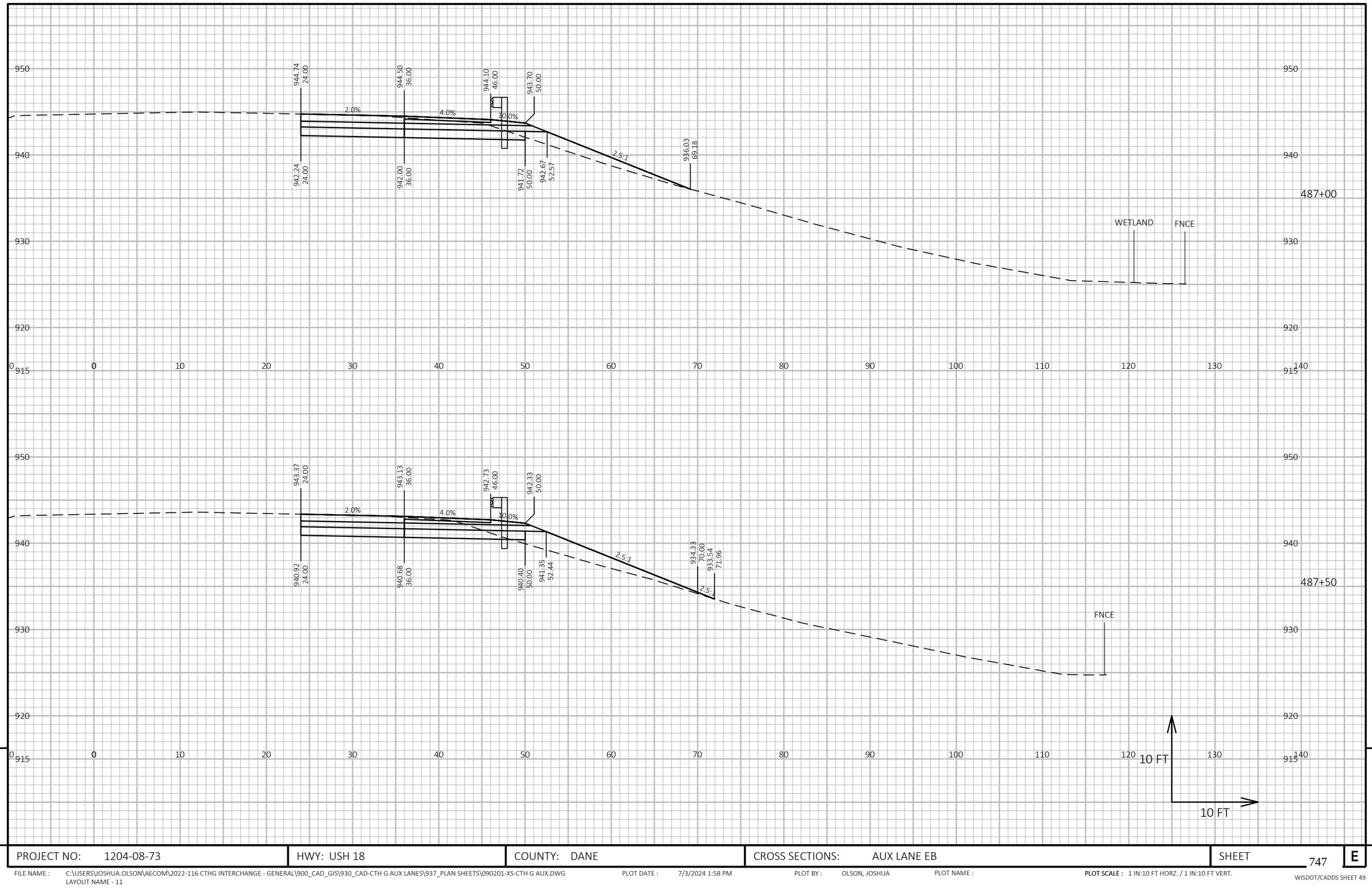
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 746	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 10

PLOT DATE : 7/3/2024 1:58 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 747	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 11

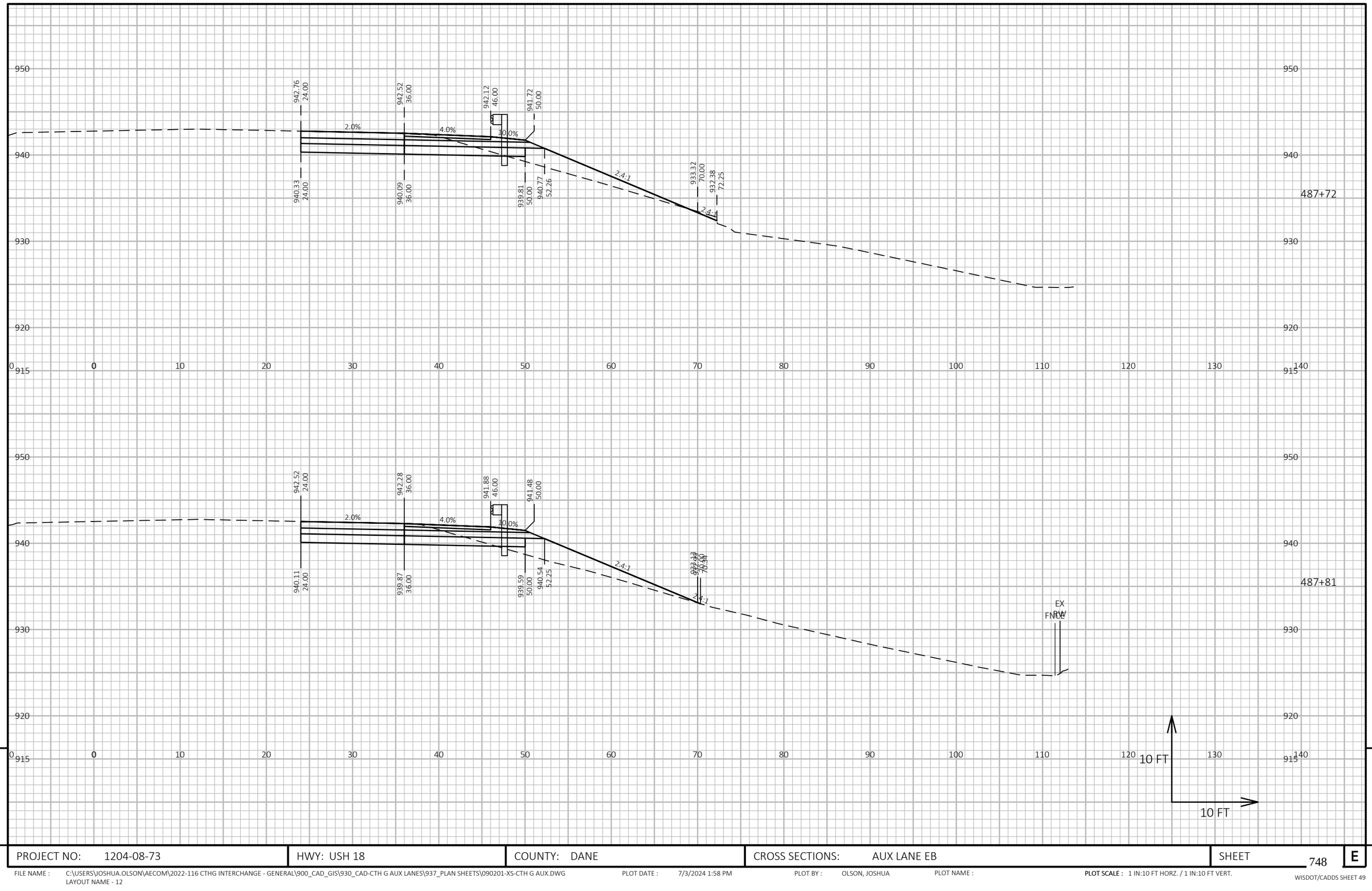
PLOT DATE : 7/3/2024 1:58 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

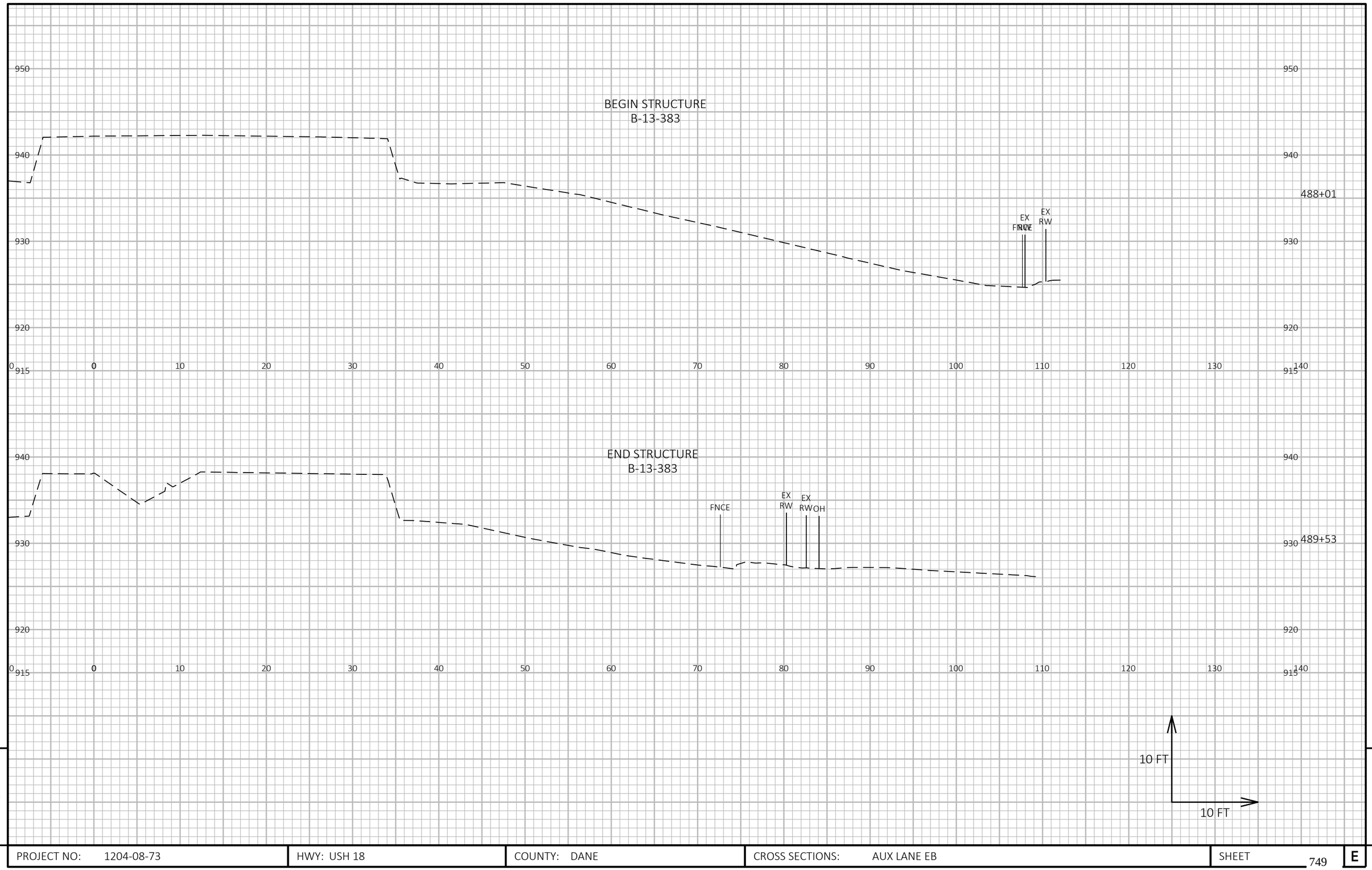


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 748	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 12

PLOT DATE : 7/3/2024 1:58 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

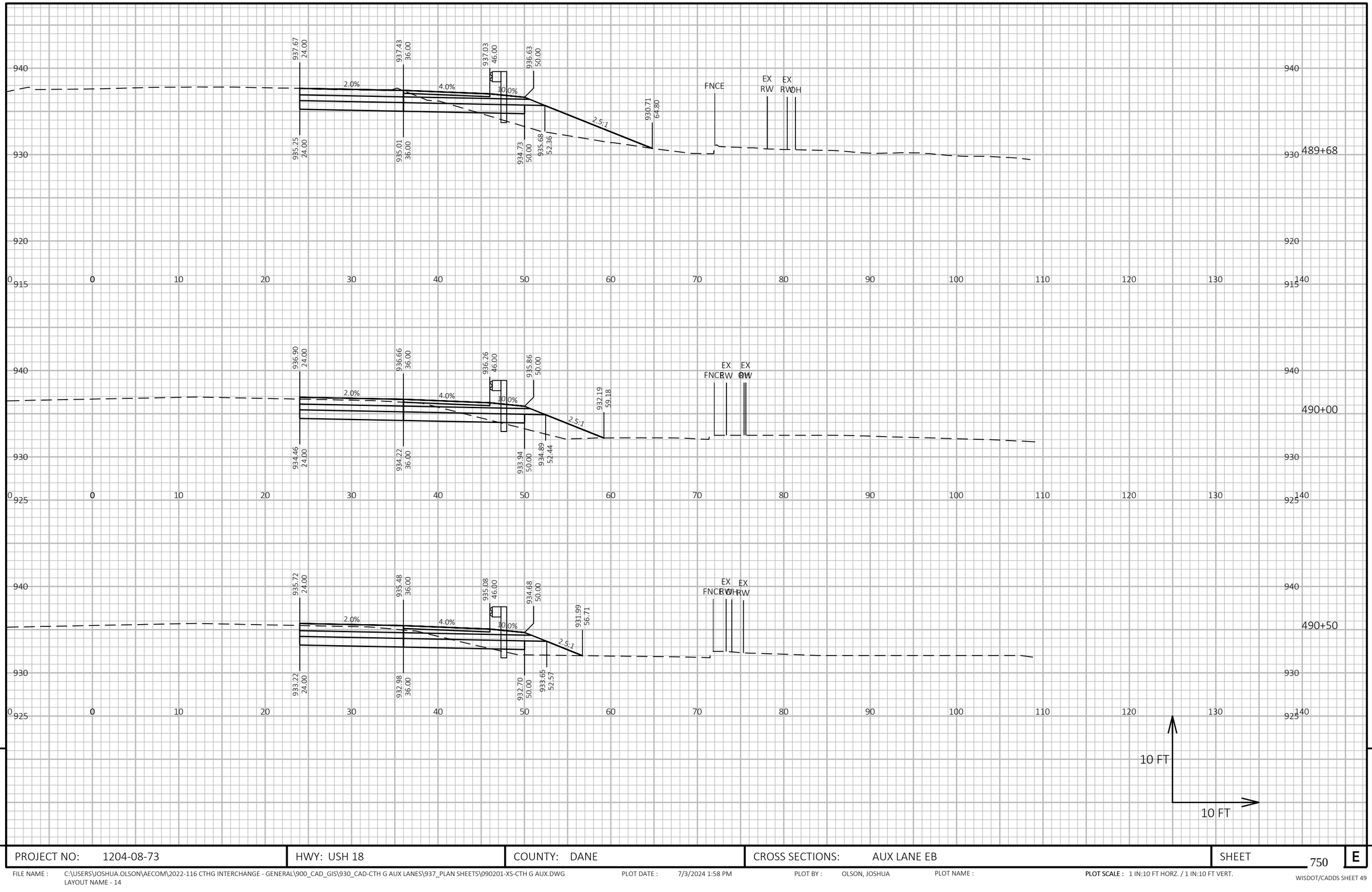
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 749	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 13

PLOT DATE : 7/3/2024 1:58 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

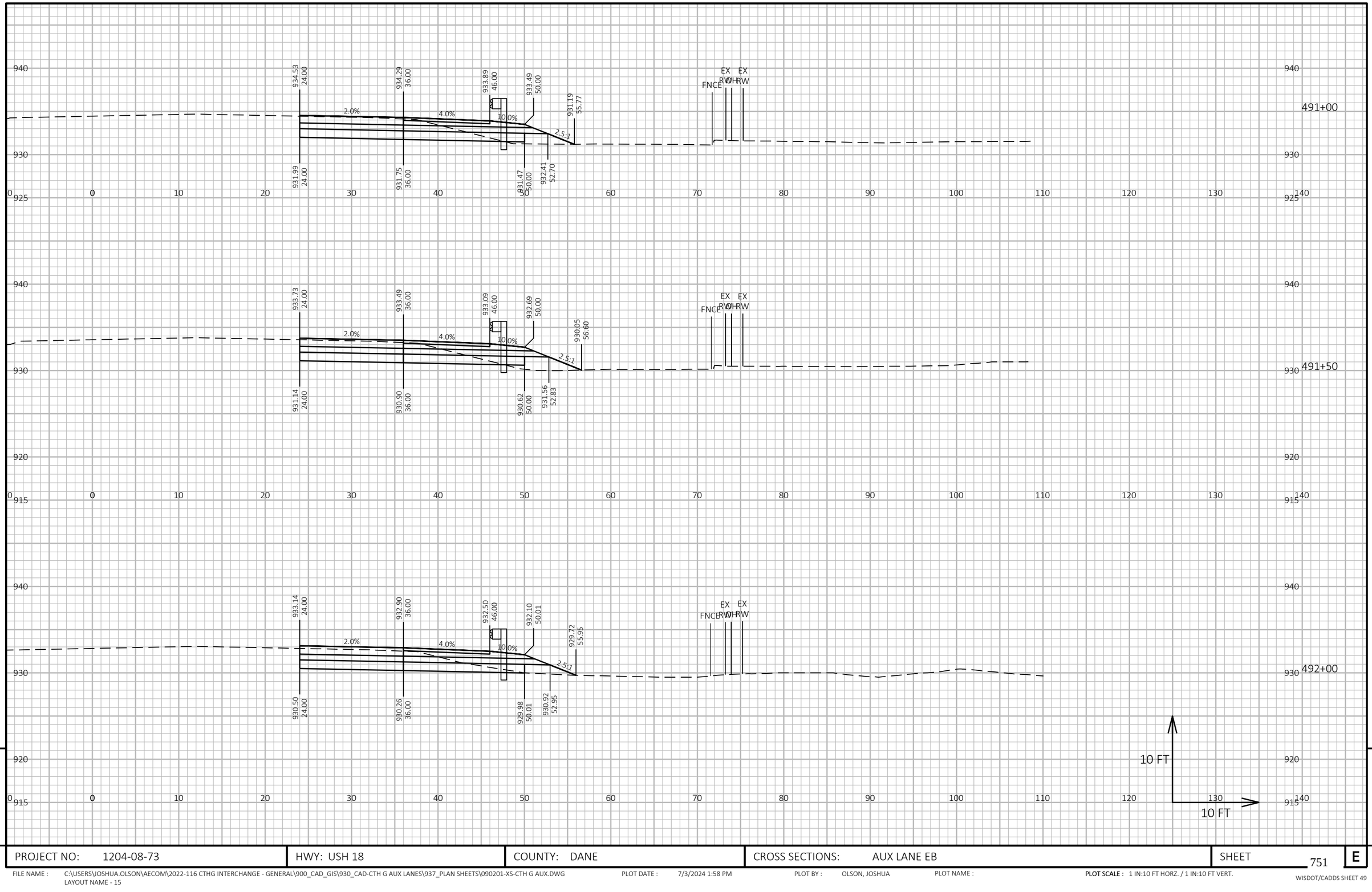


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 750	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 14

PLOT DATE : 7/3/2024 1:58 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

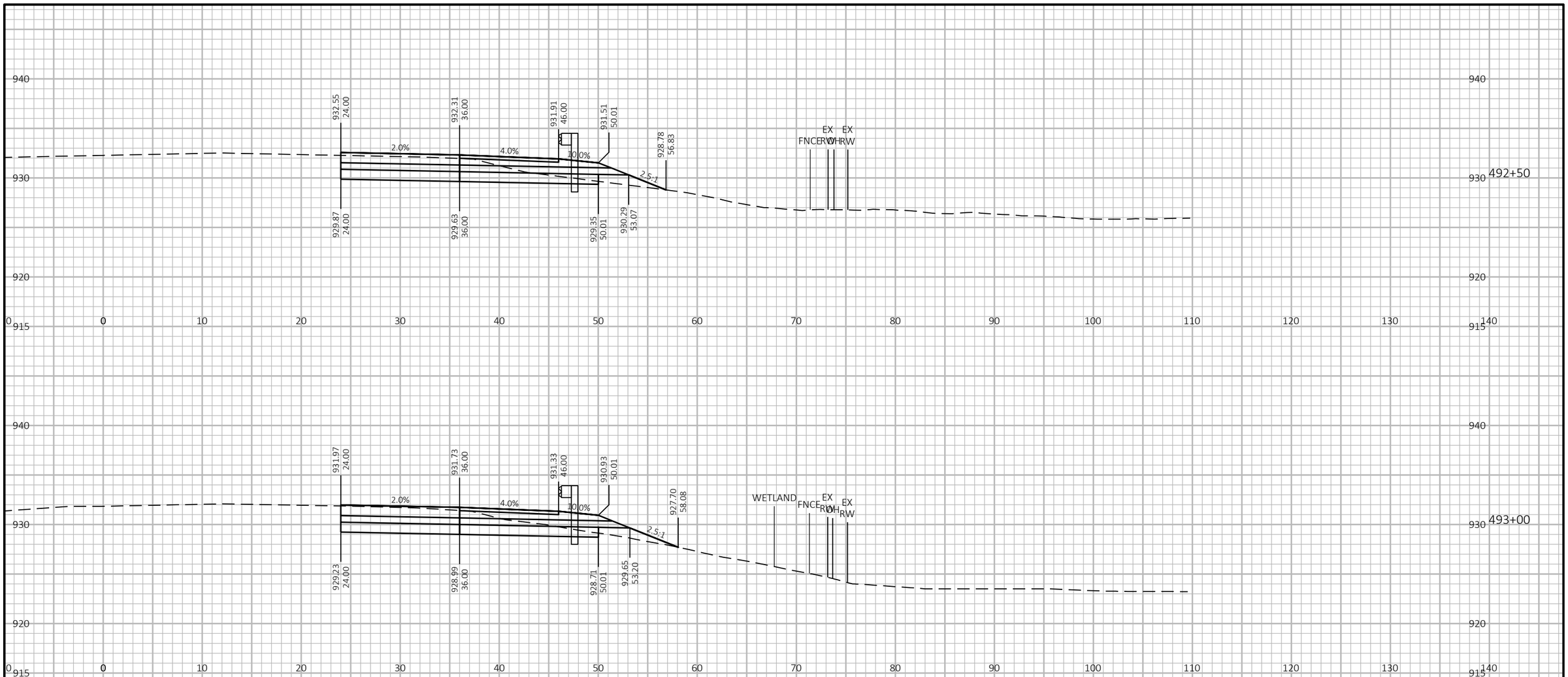


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 751 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 15

PLOT DATE : 7/3/2024 1:58 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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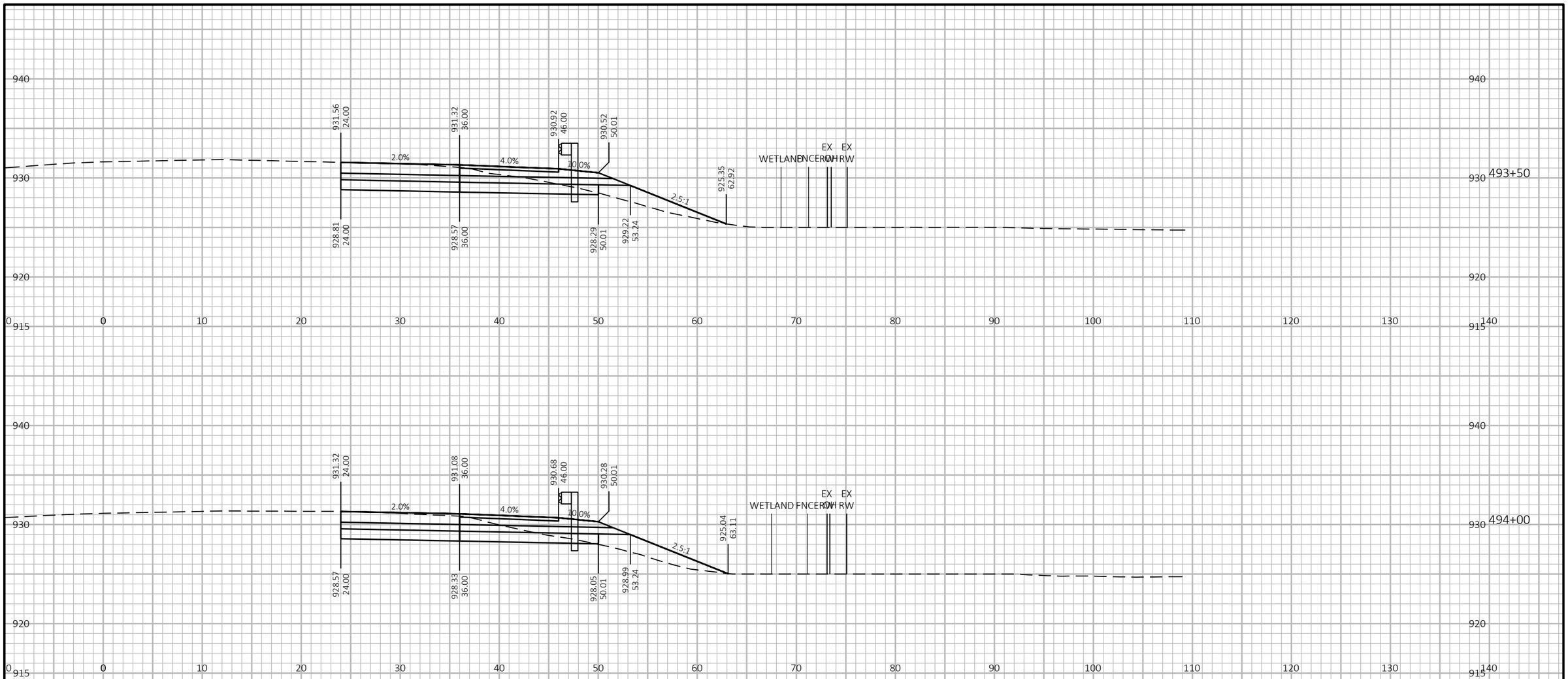
9

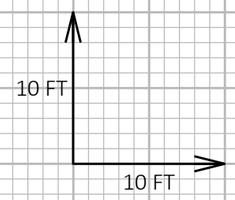
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 752	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 16

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

9

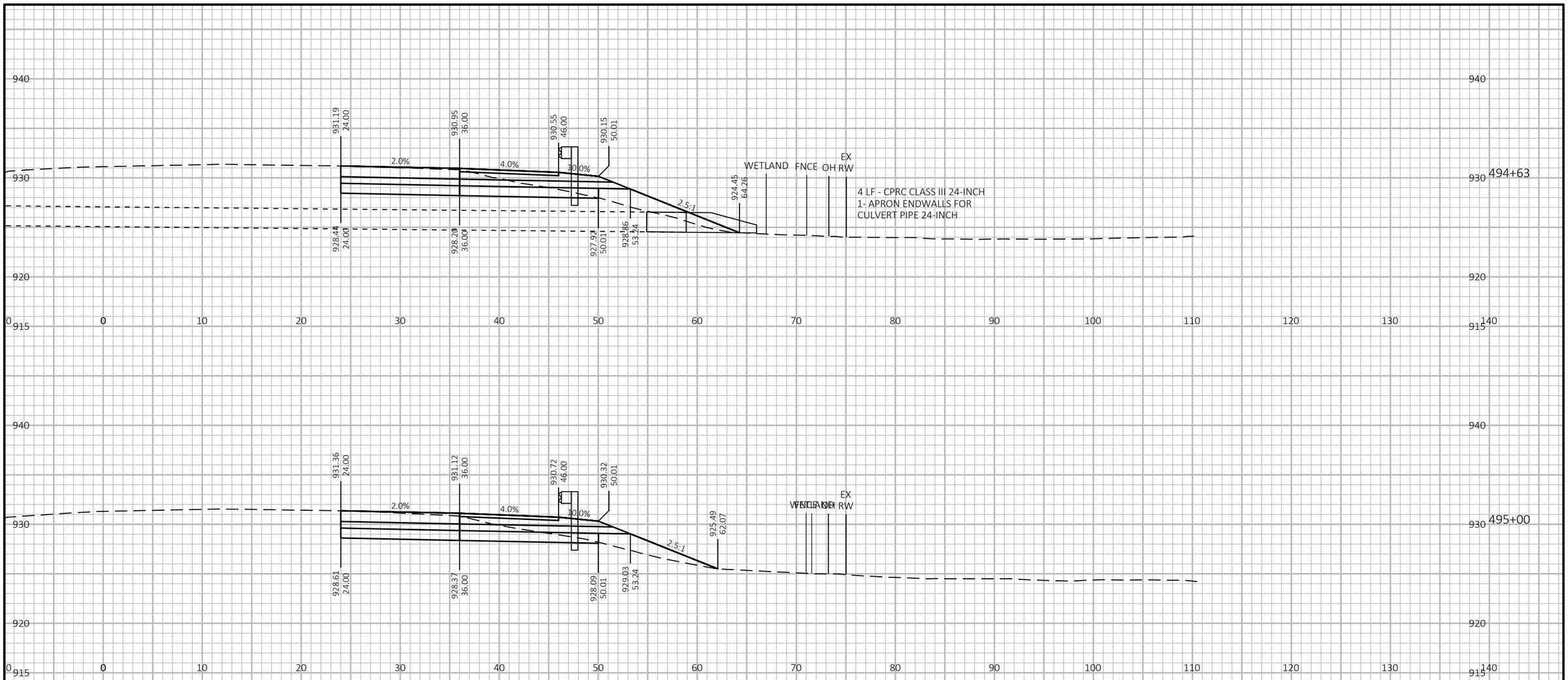
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 753	E

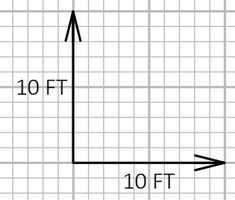
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 17

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 754	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 18

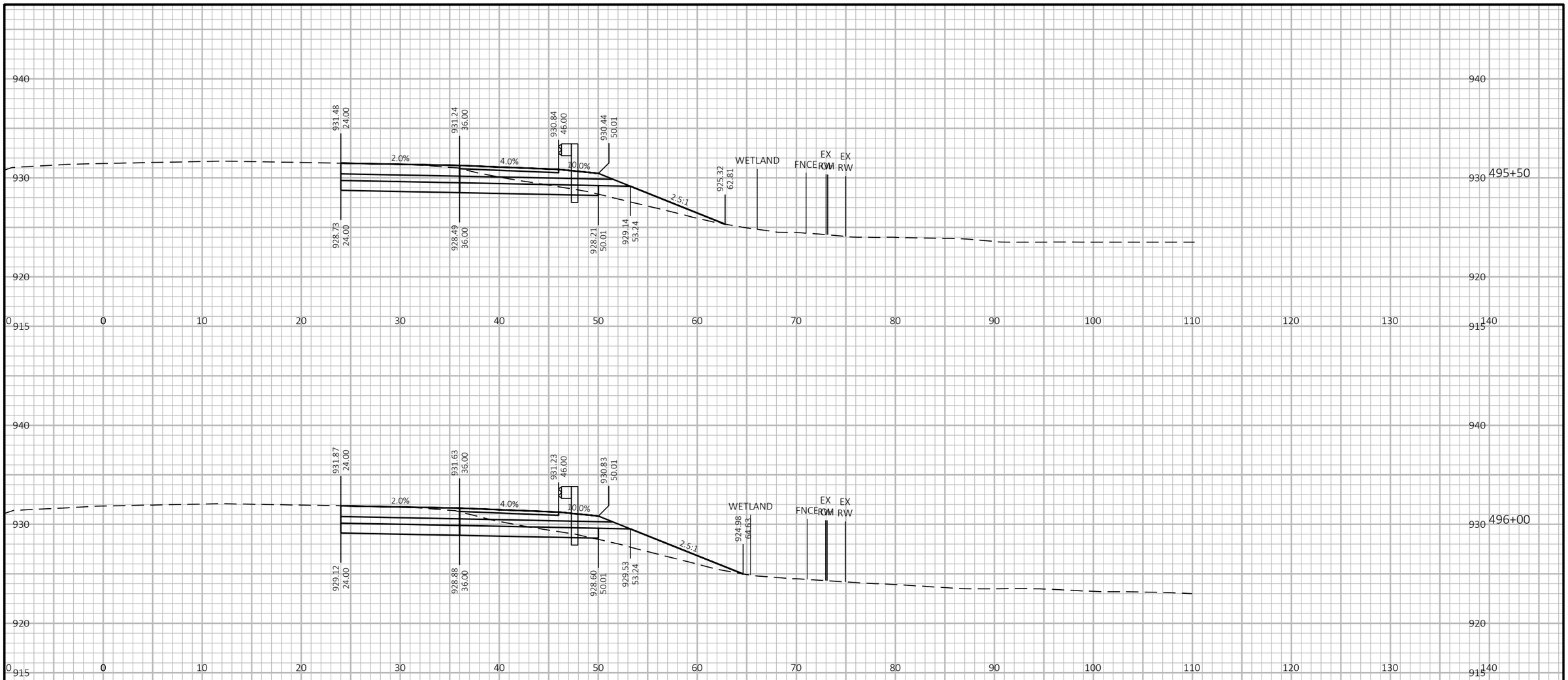
PLOT DATE : 7/3/2024 1:59 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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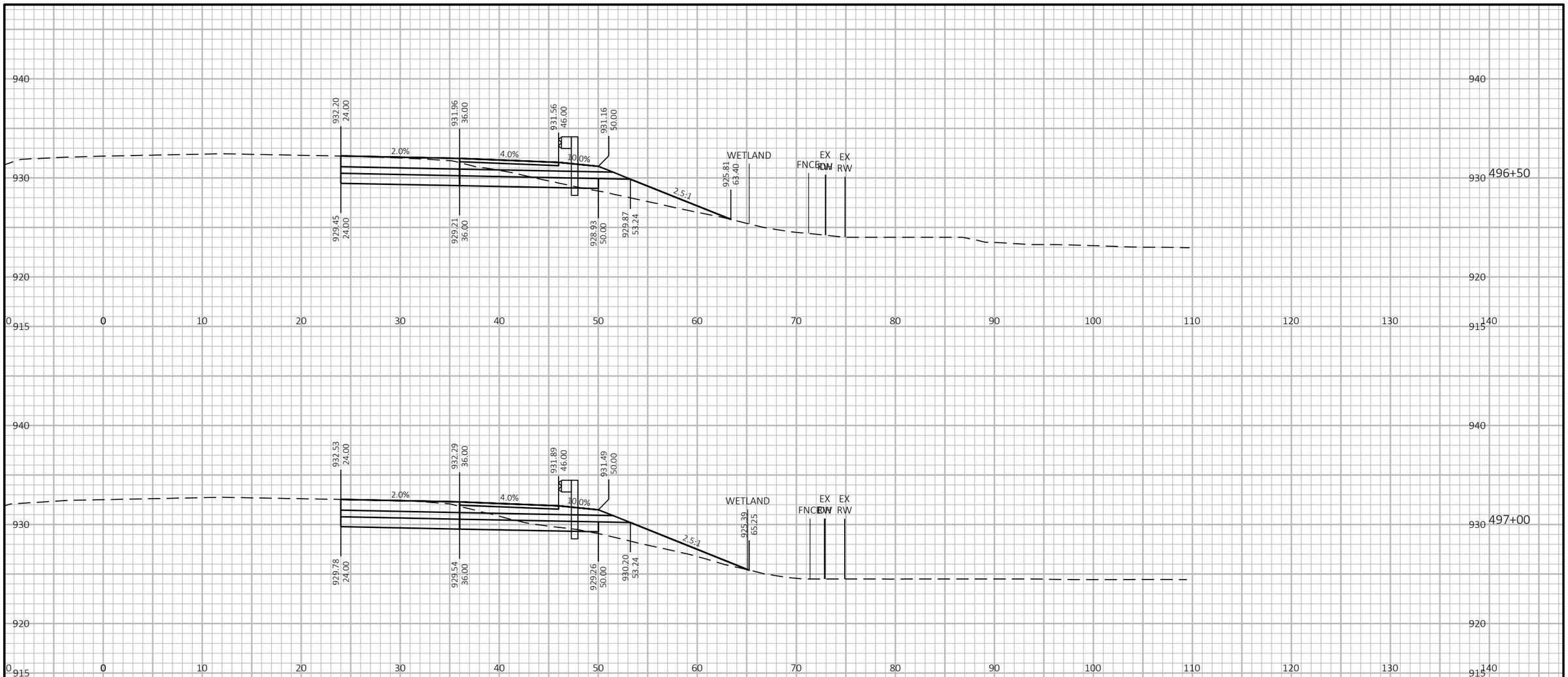
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 755	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 19

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

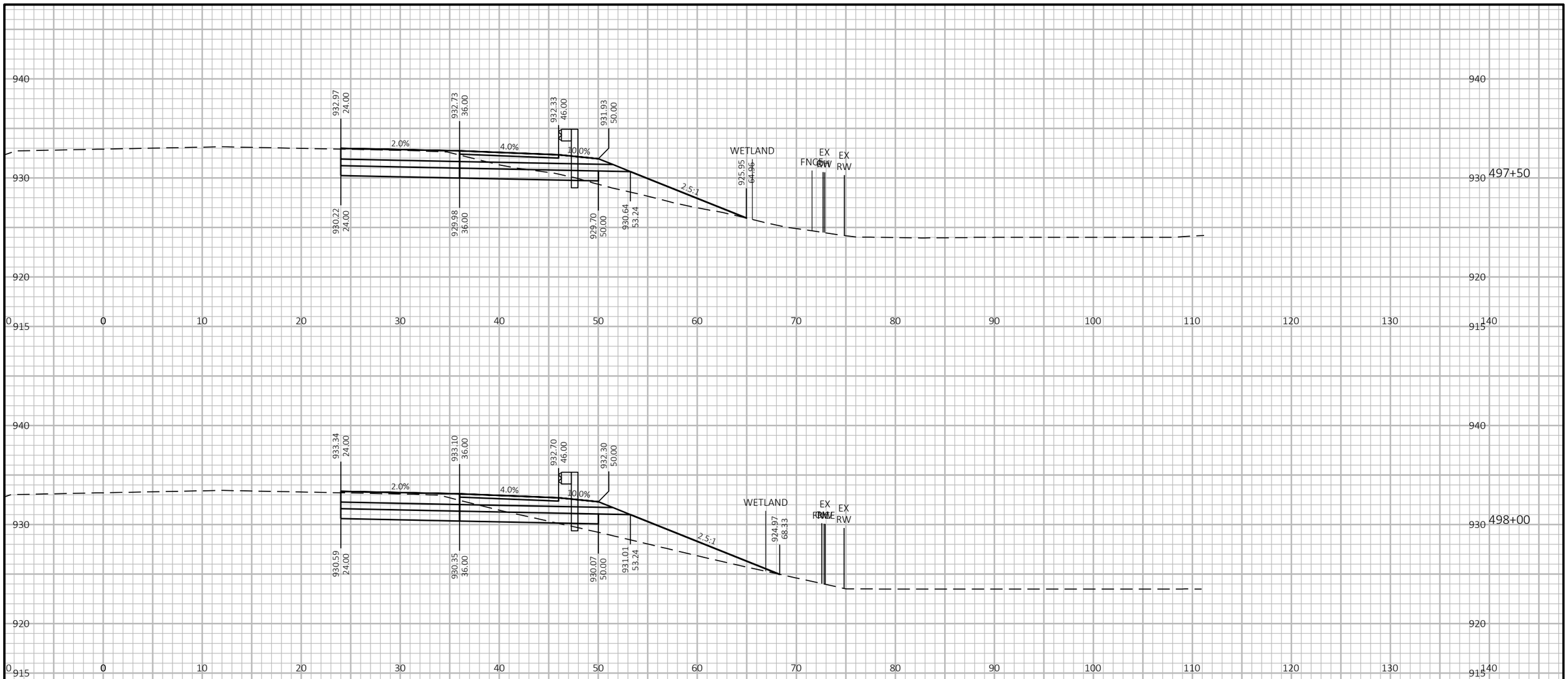
10 FT

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 756	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 20

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

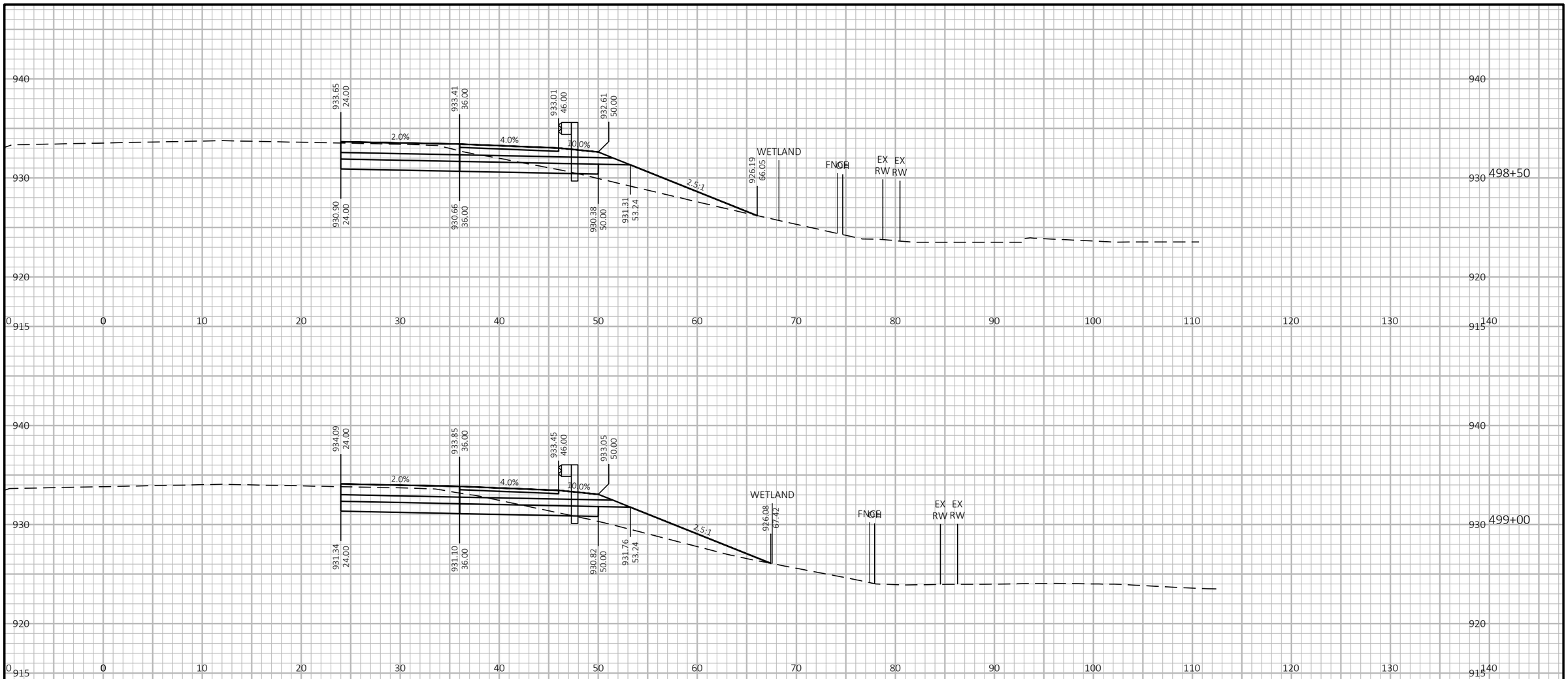


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 757	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 21

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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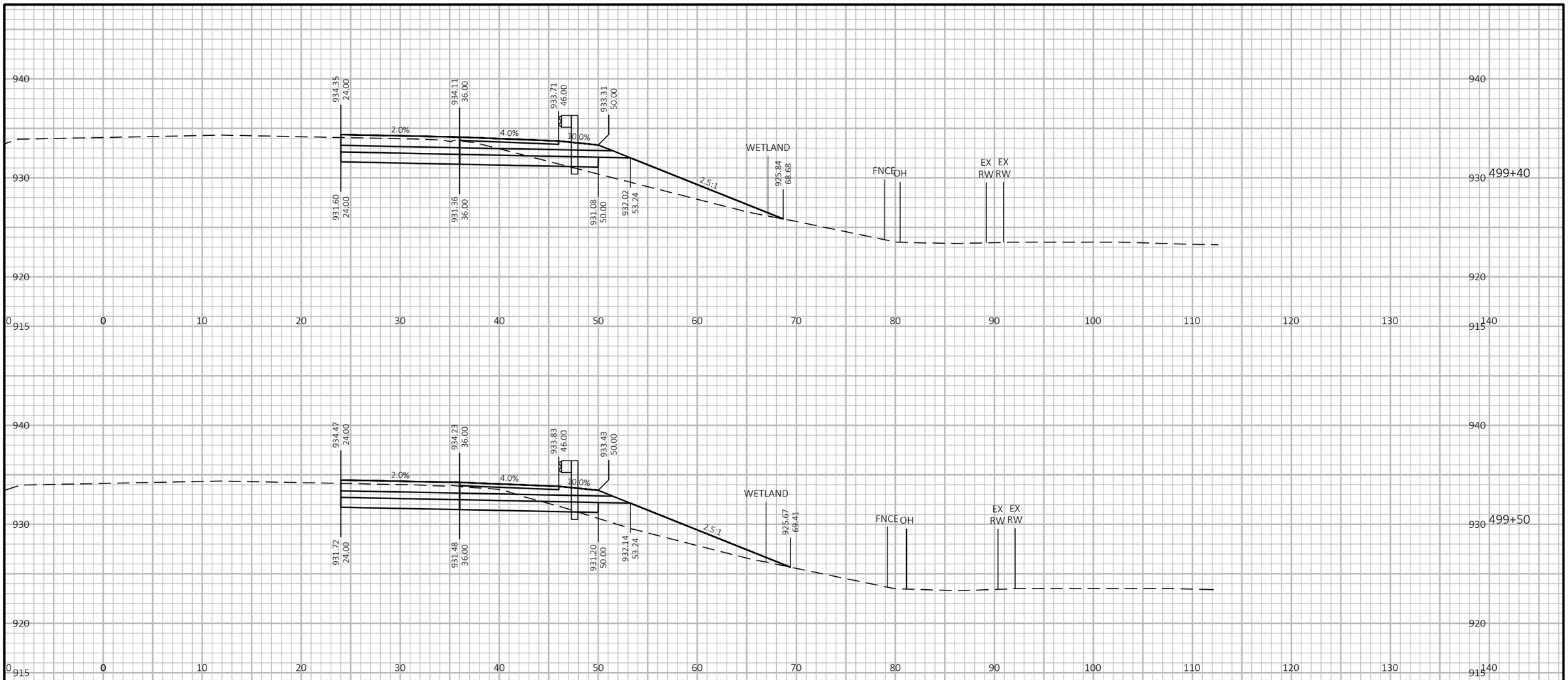
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 758	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 22

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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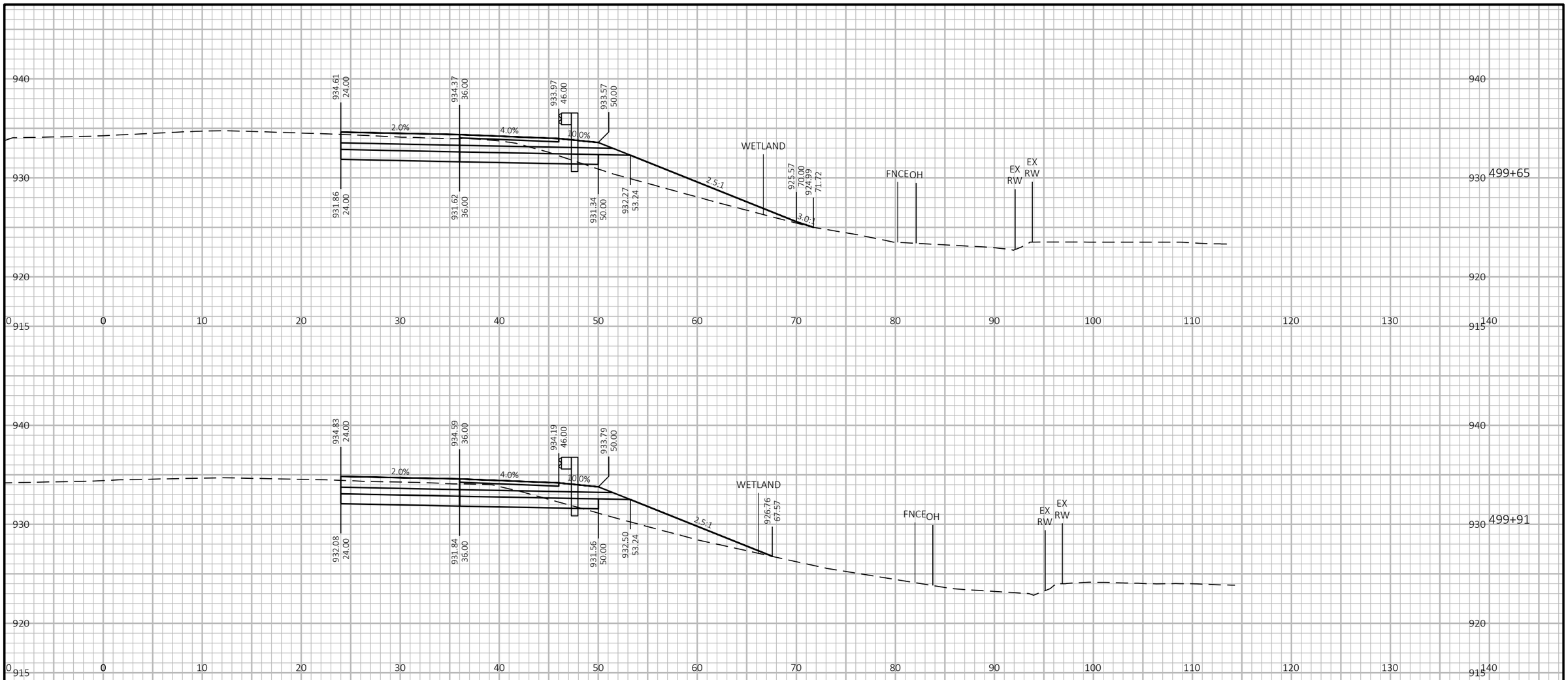
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 759	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 23

PLOT DATE : 7/3/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

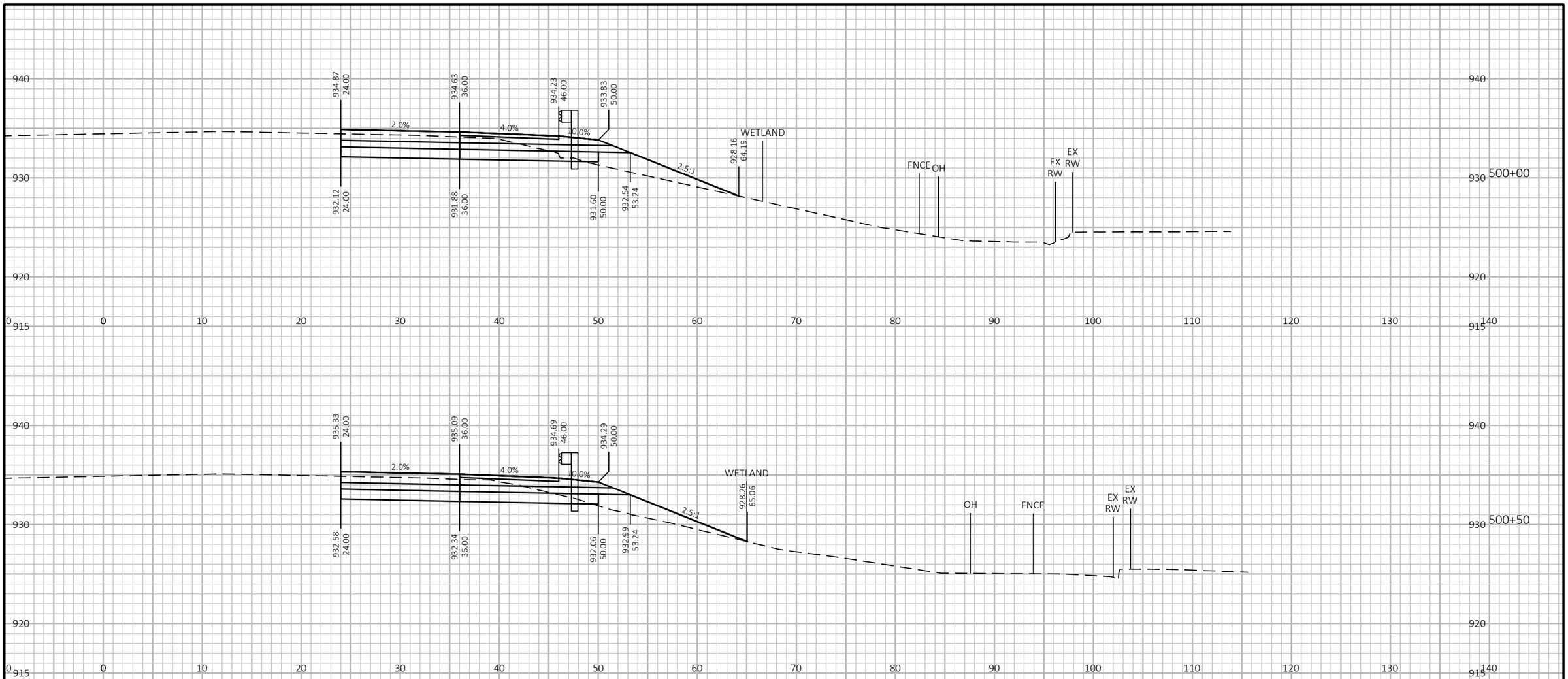
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 760	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 24

PLOT DATE : 7/3/2024 2:00 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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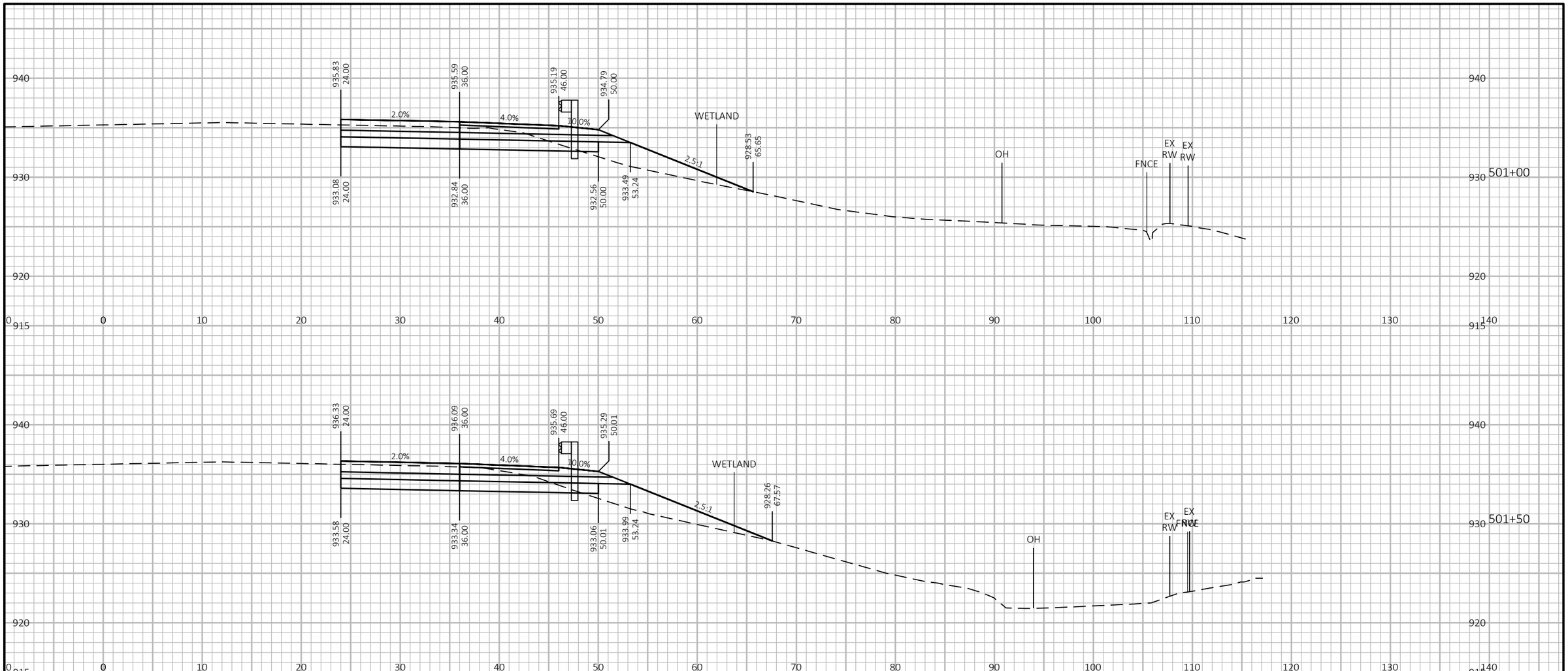
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 761	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 25

PLOT DATE : 7/3/2024 2:00 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

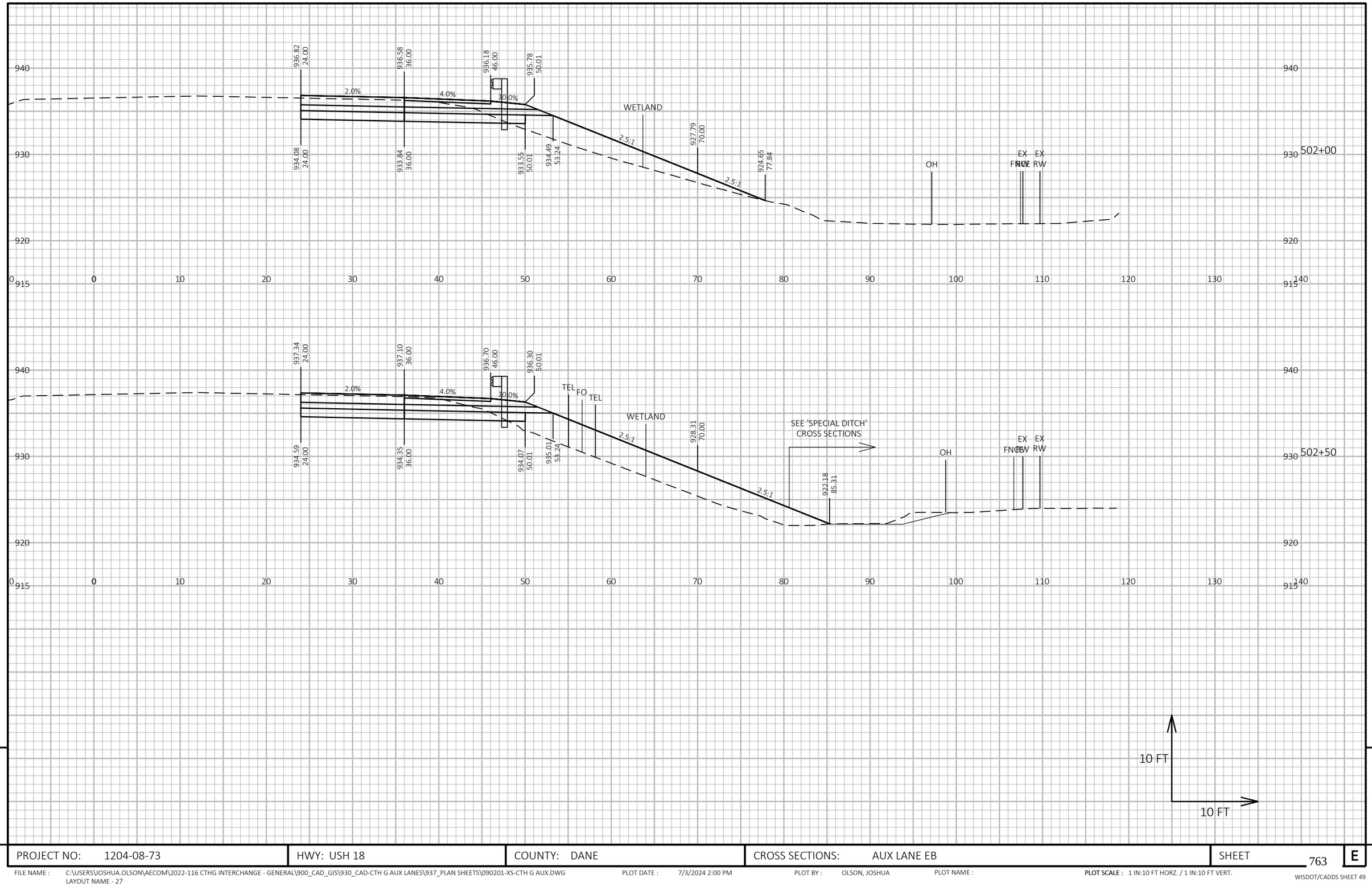


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 762	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 26

PLOT DATE : 7/3/2024 2:00 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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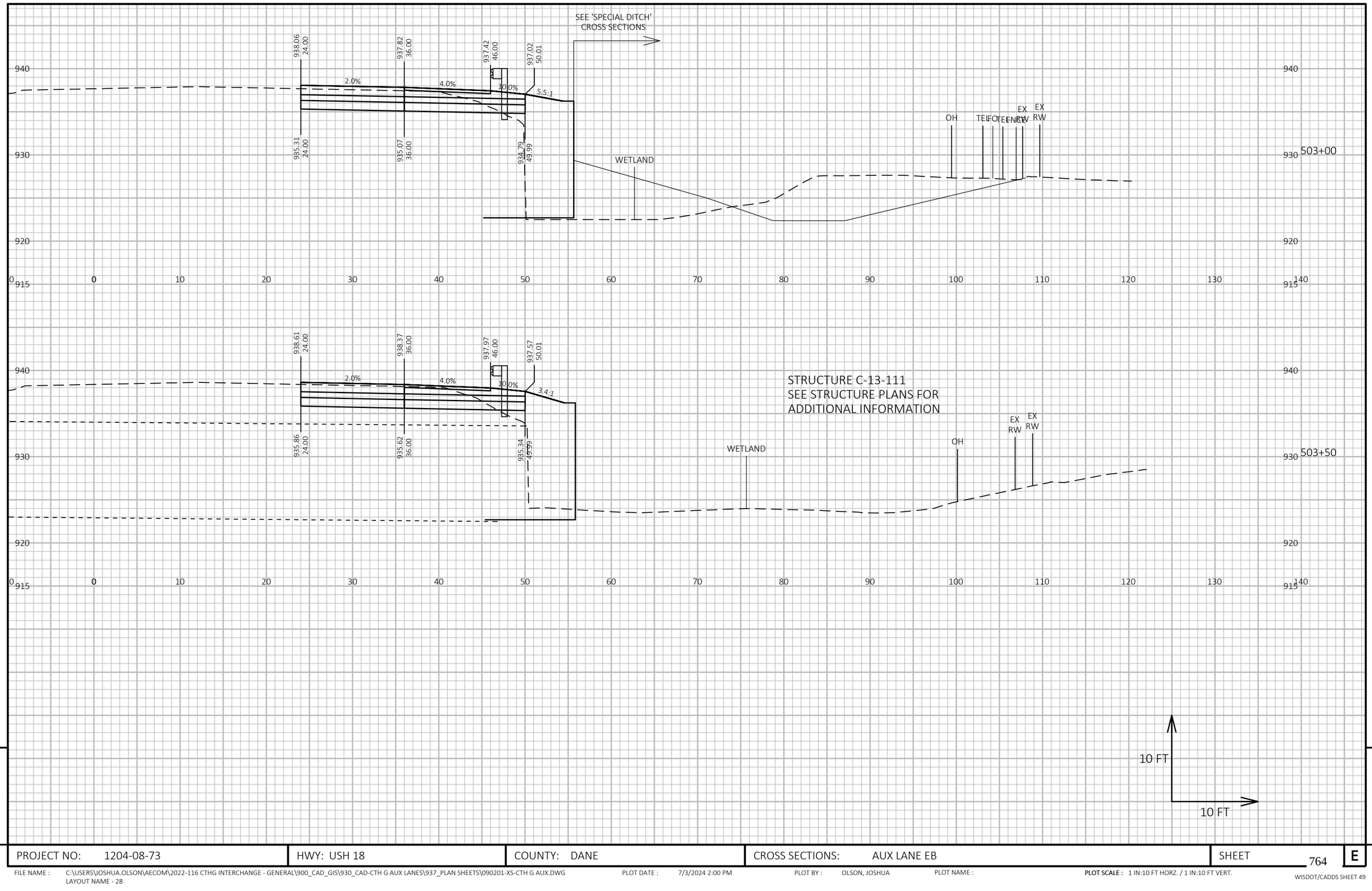
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 763	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 27

PLOT DATE : 7/3/2024 2:00 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

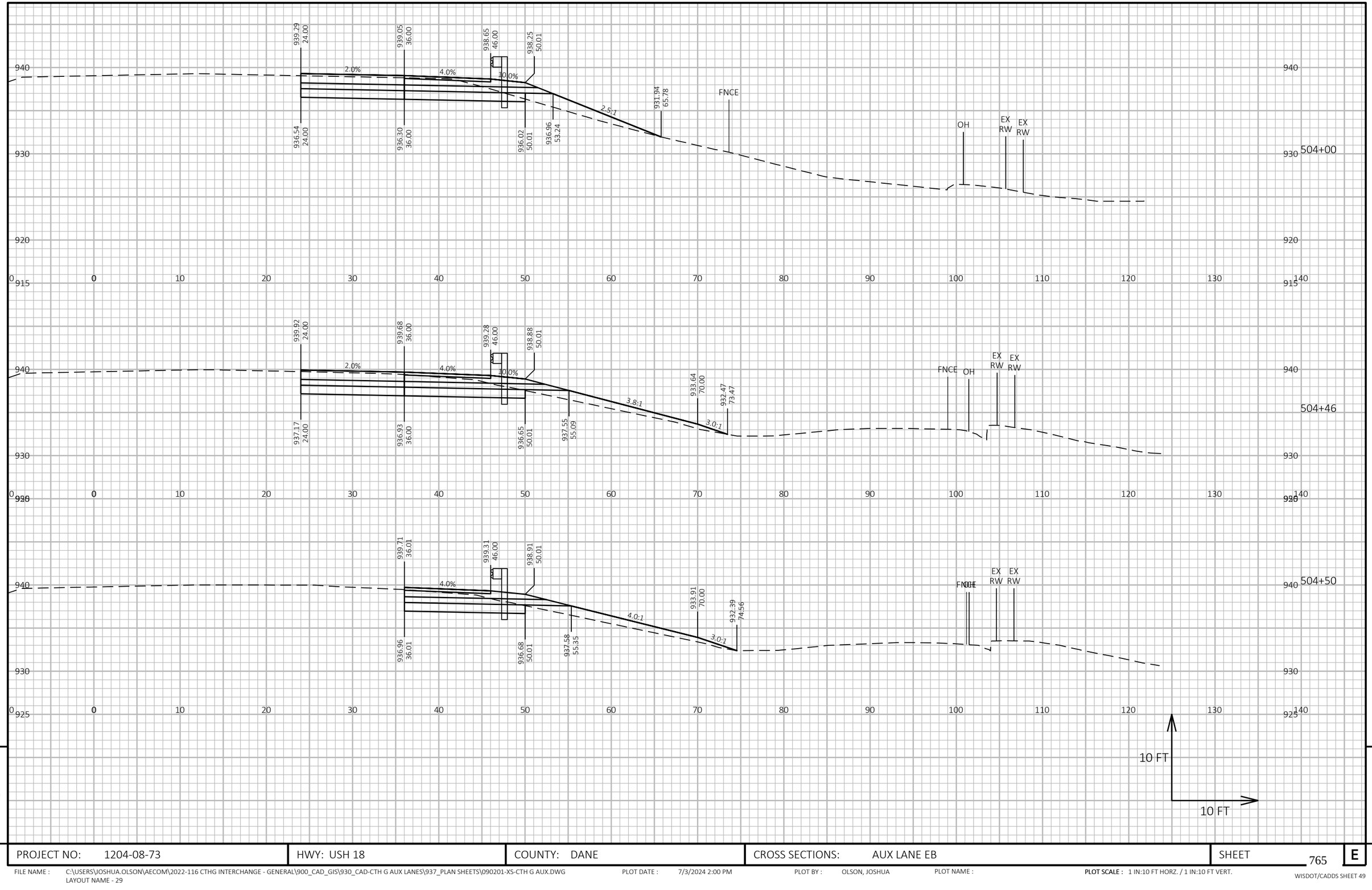


9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 764	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 28
PLOT DATE : 7/3/2024 2:00 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

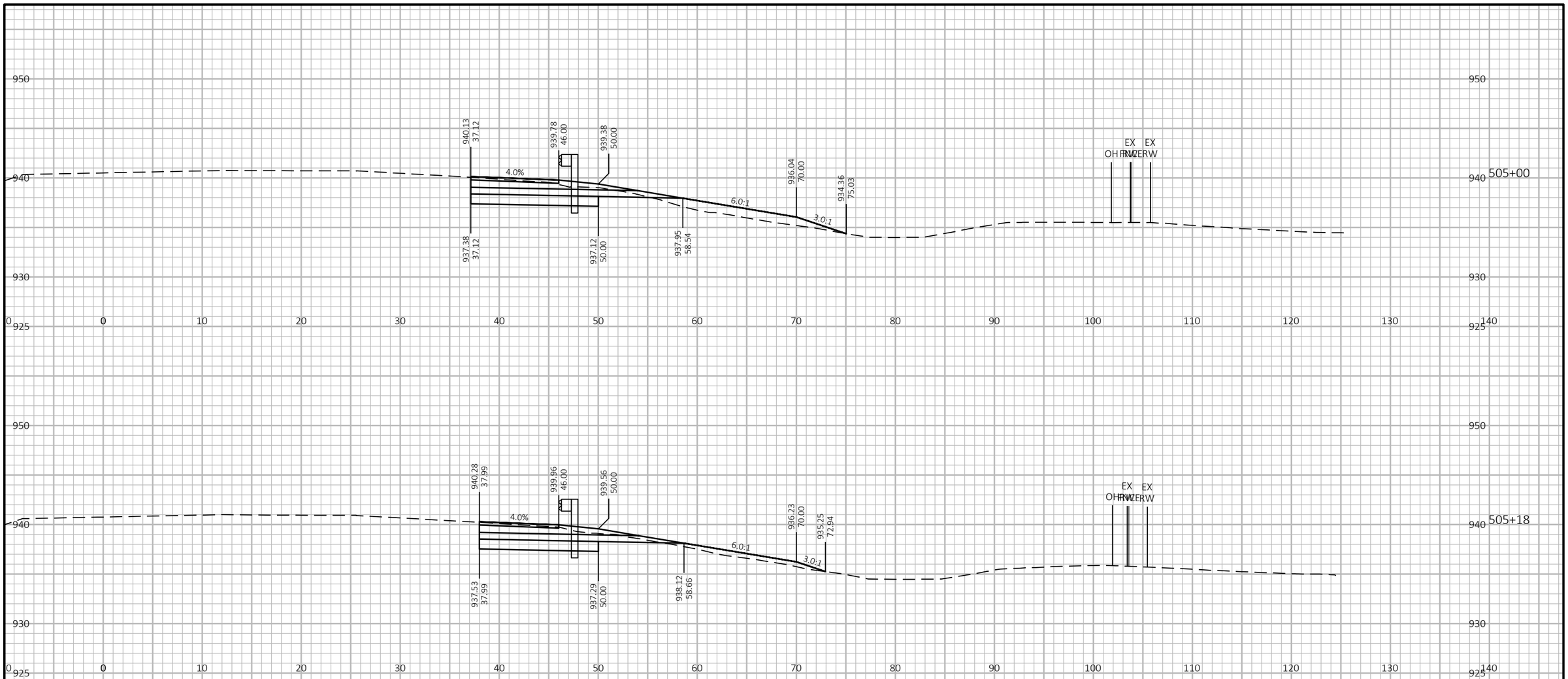


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 765	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 29

PLOT DATE : 7/3/2024 2:00 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

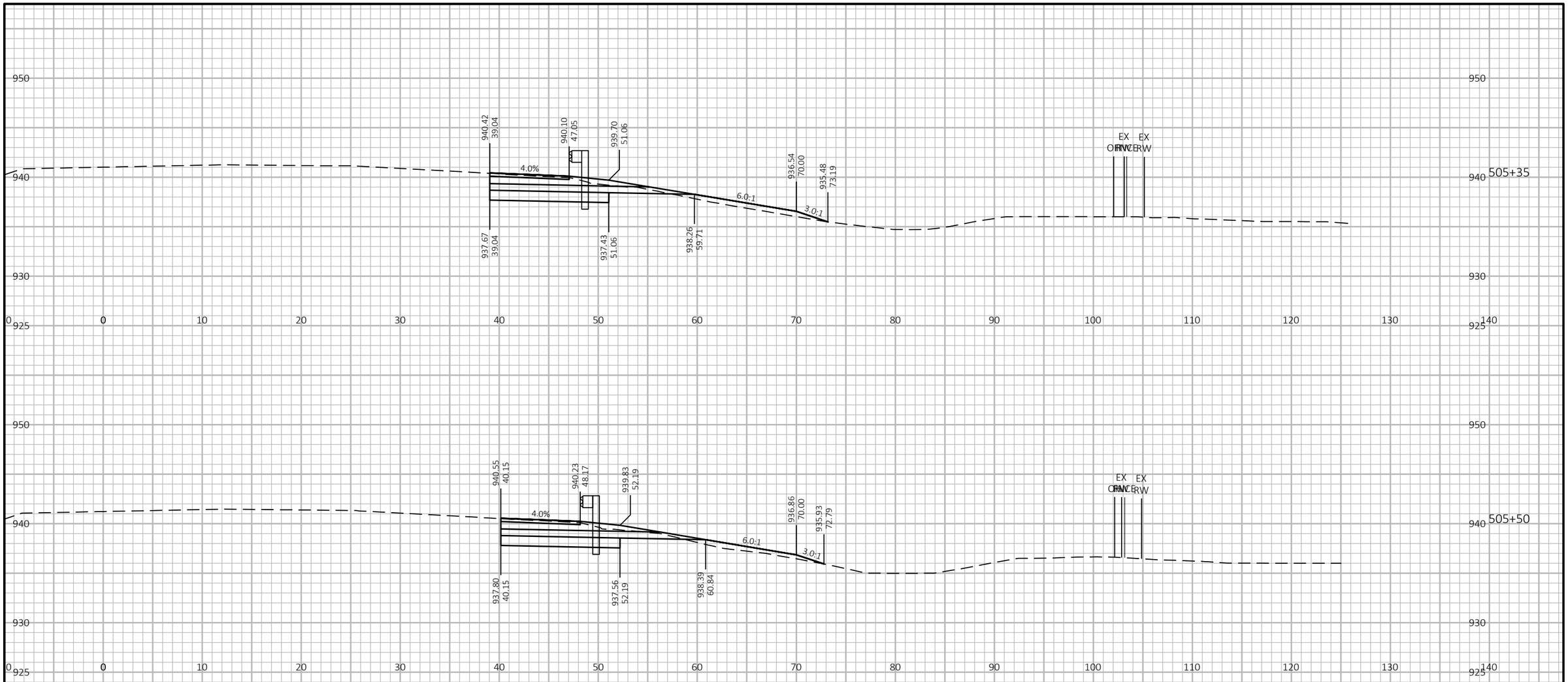
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 766	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 30

PLOT DATE : 7/3/2024 2:00 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 767	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 31

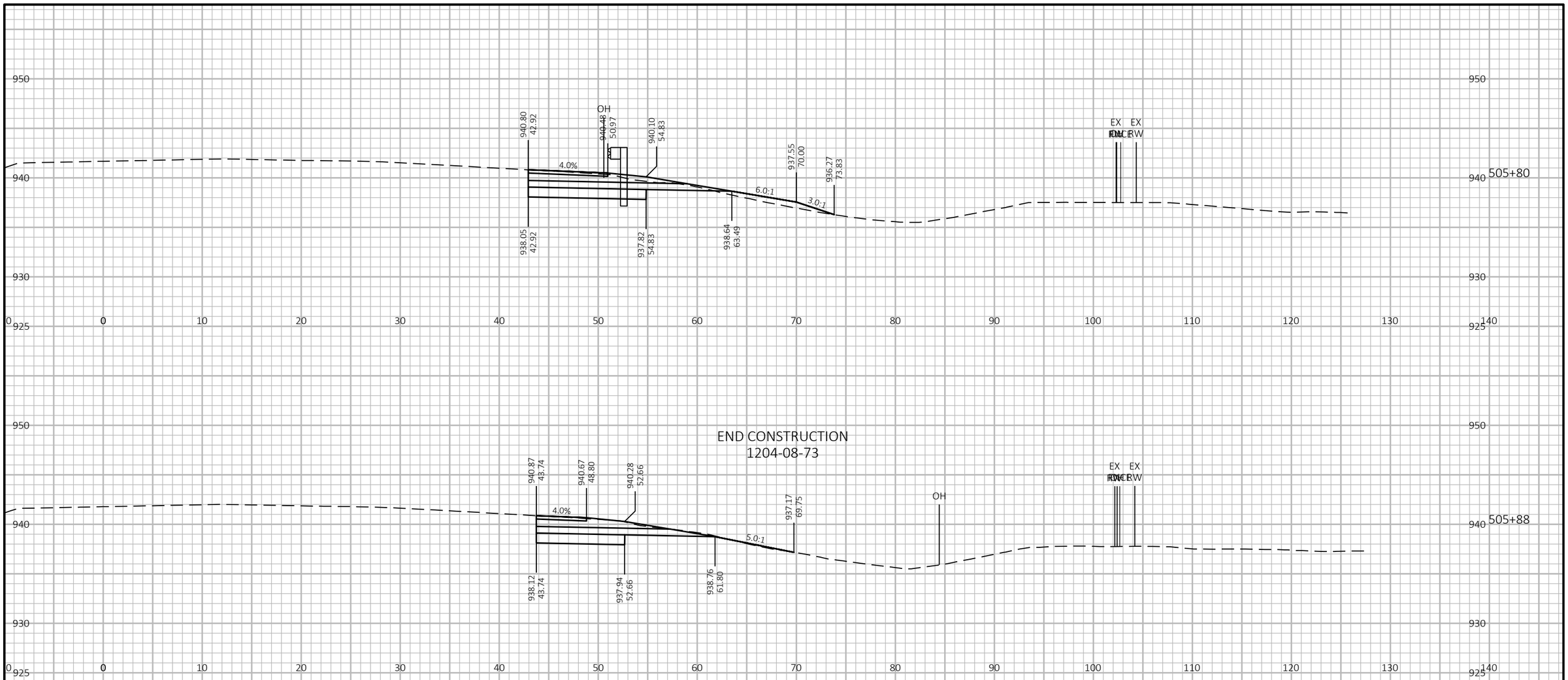
PLOT DATE : 7/3/2024 2:01 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

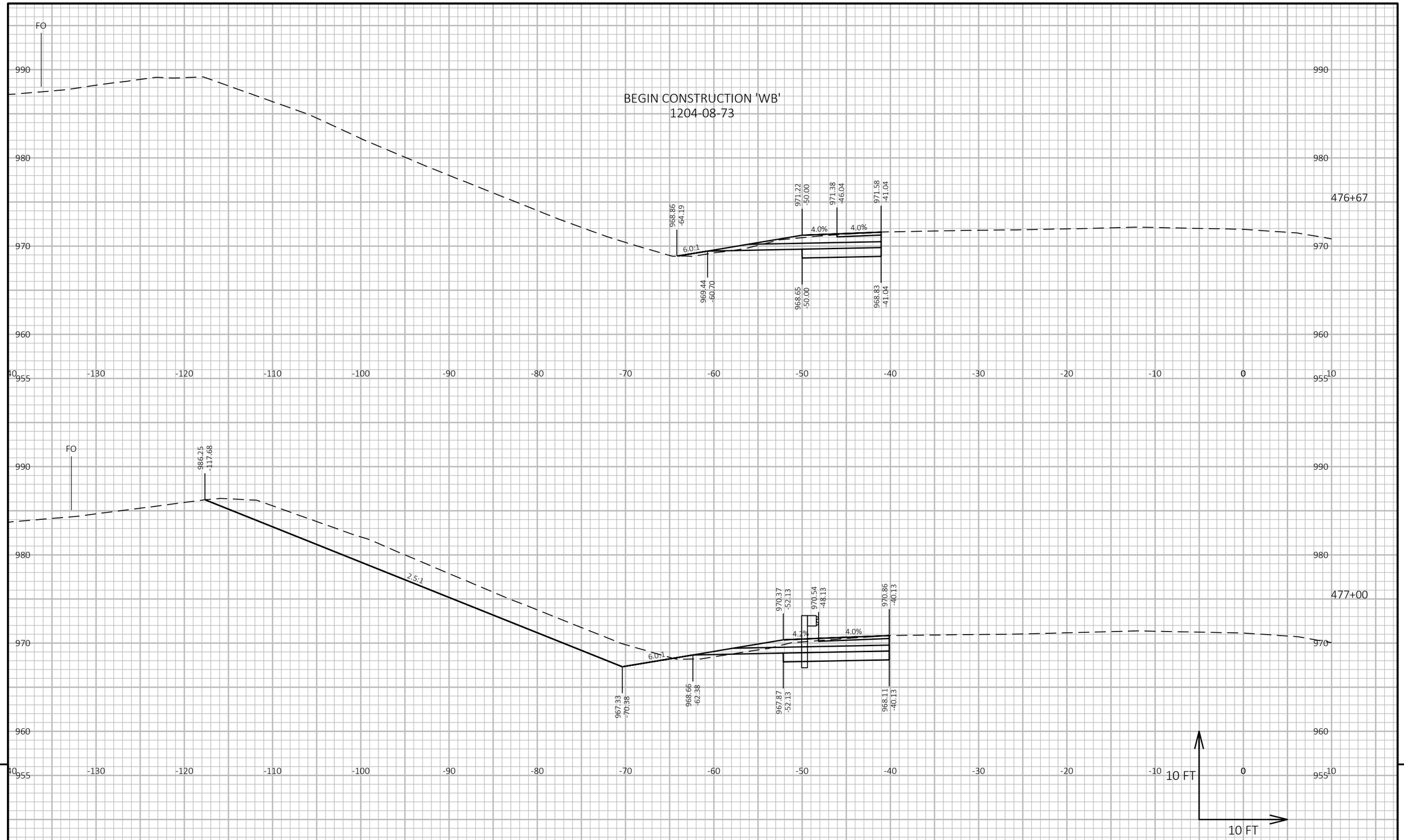
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB	SHEET 768	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 32

PLOT DATE : 7/3/2024 2:01 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

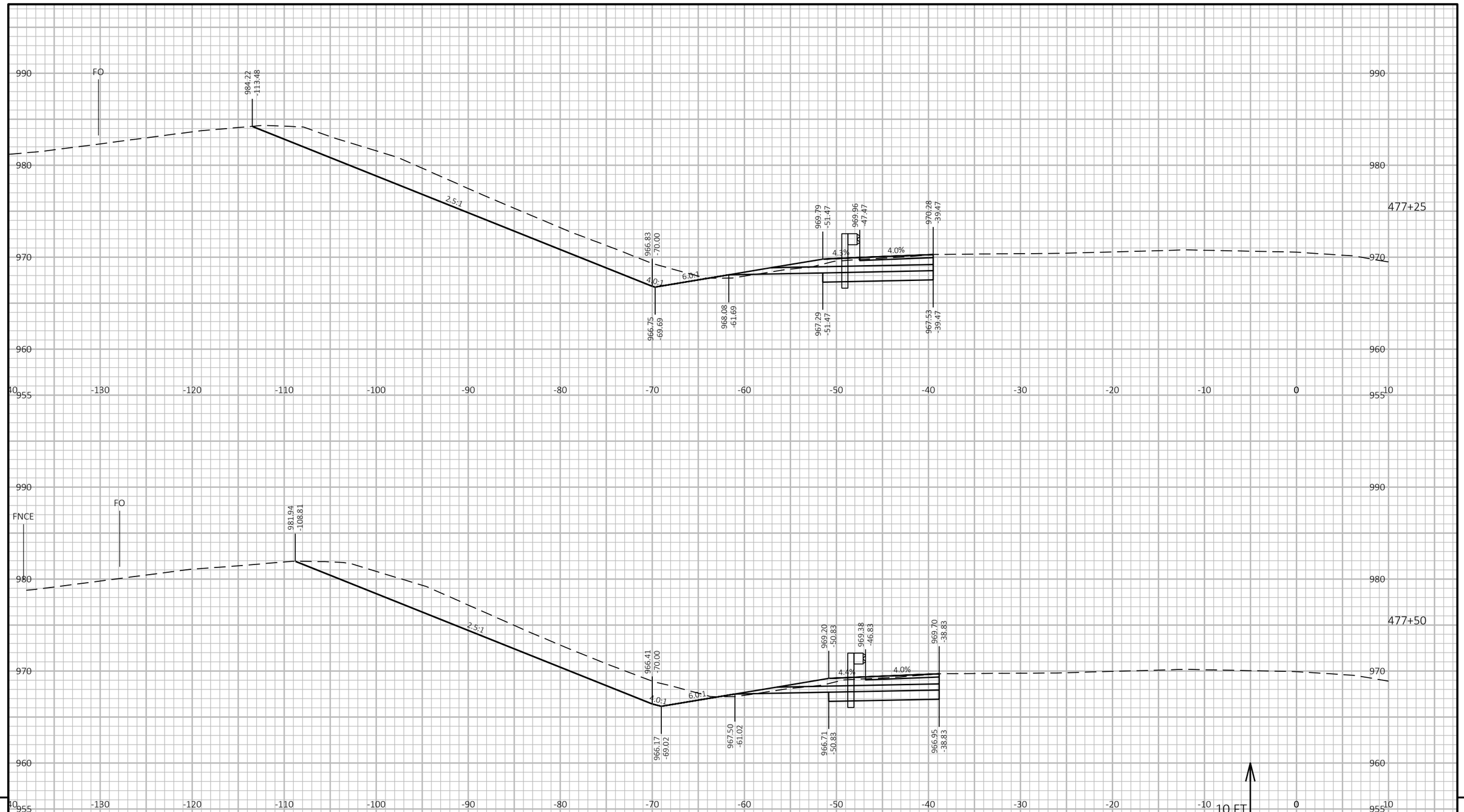


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 769	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 01 WB

PLOT DATE : 7/3/2024 2:01 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



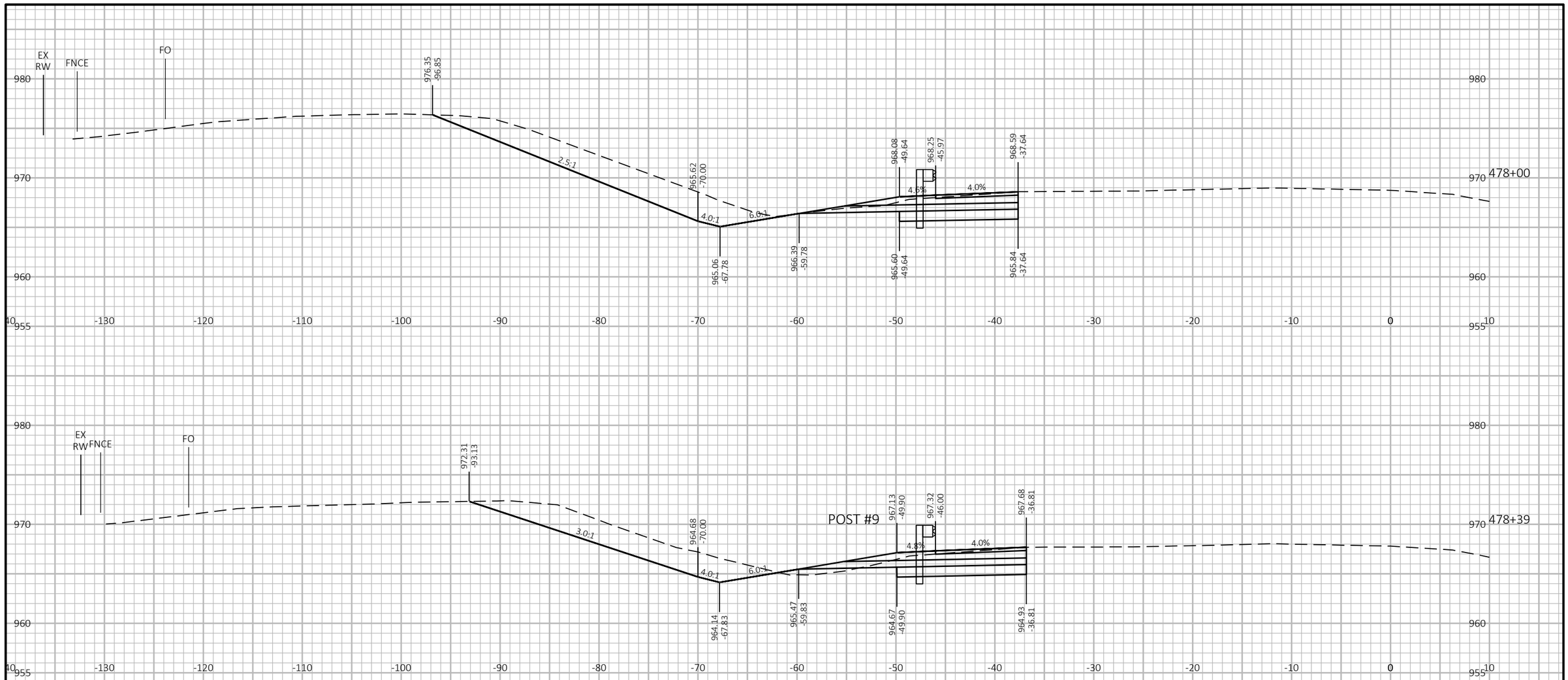
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 770 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 02 WB

PLOT DATE : 7/3/2024 2:01 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9



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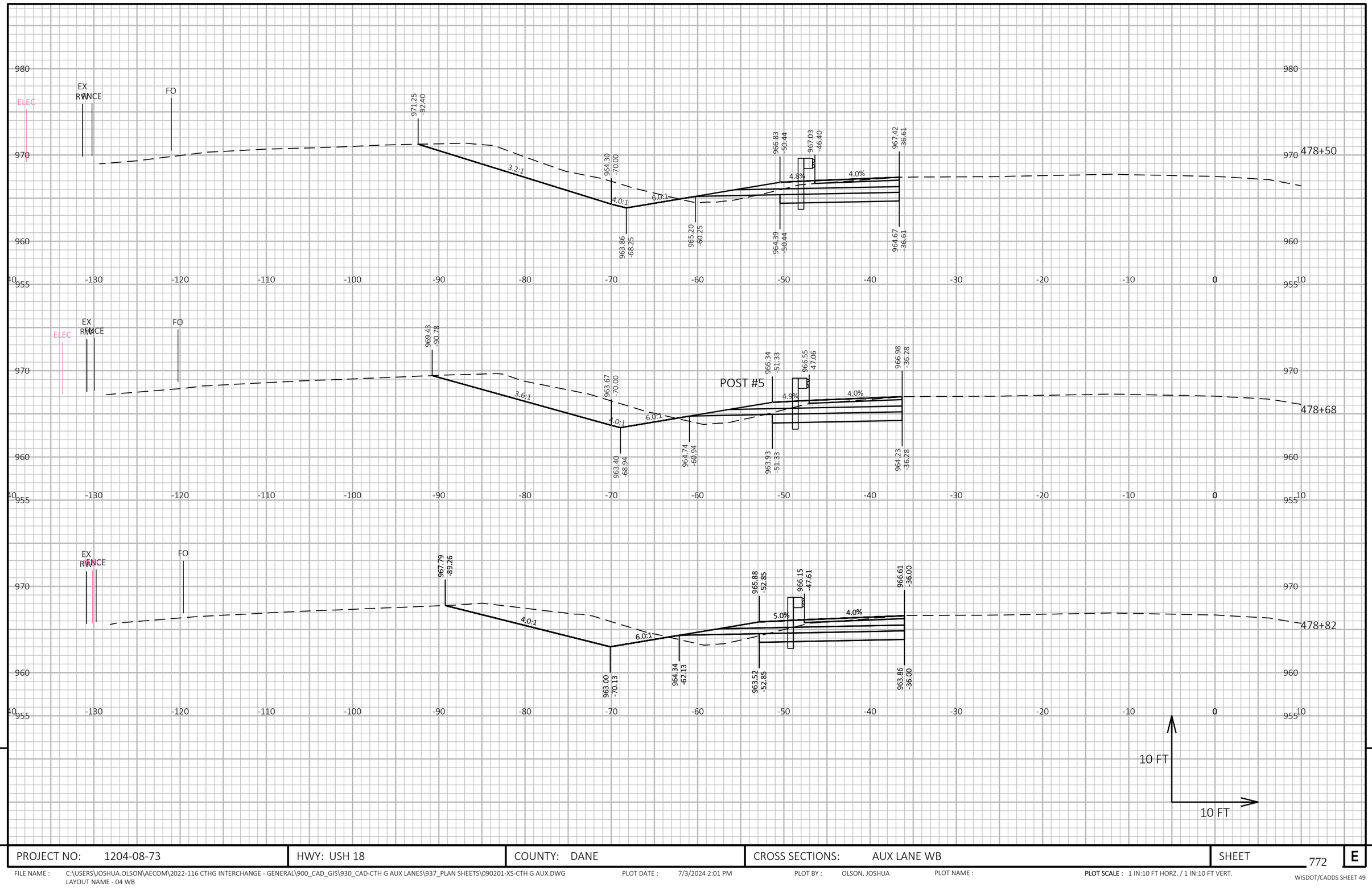
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 771	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 03 WB

PLOT DATE : 7/3/2024 2:01 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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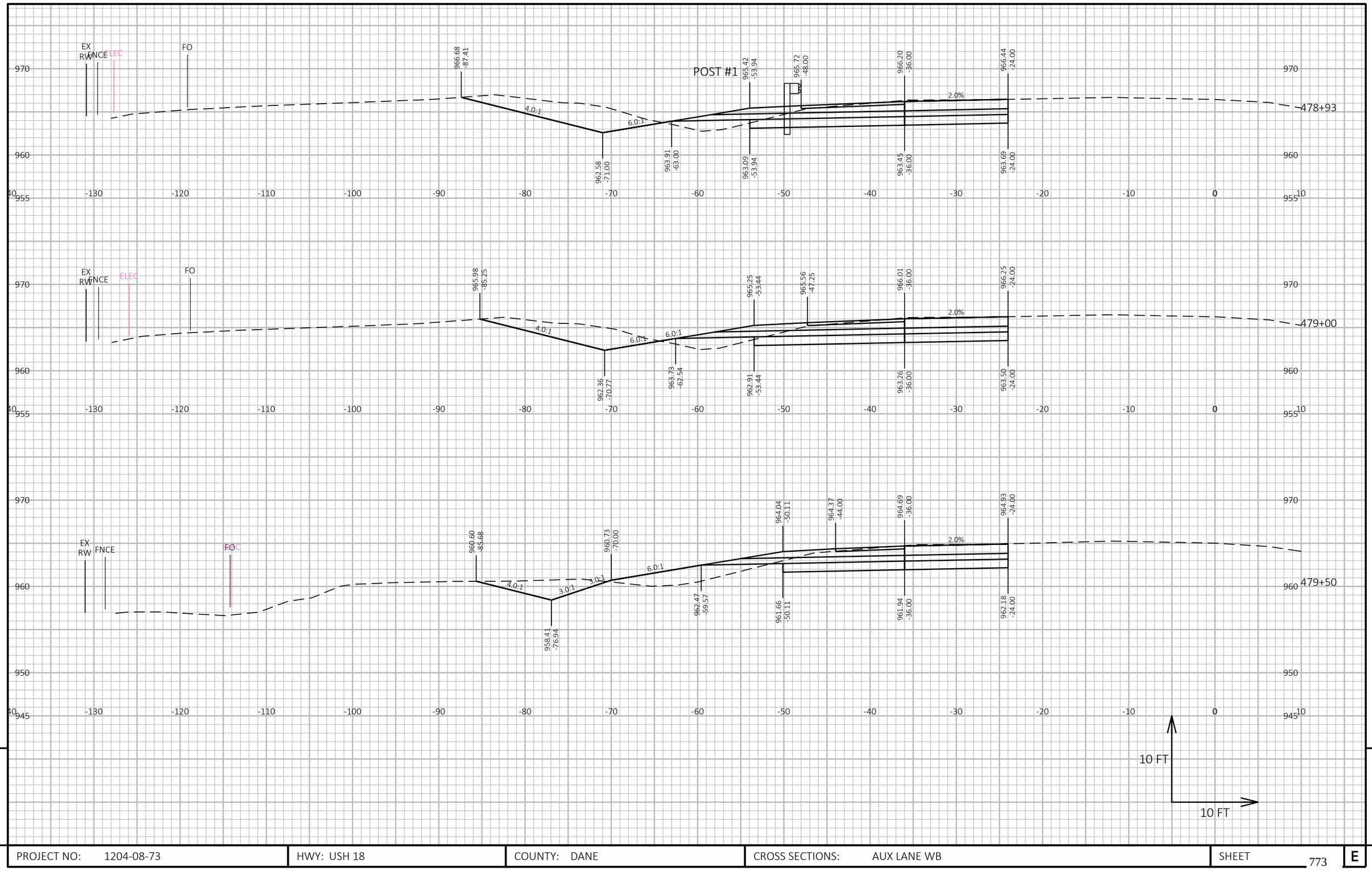
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 772	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 04 WB

PLOT DATE : 7/3/2024 2:01 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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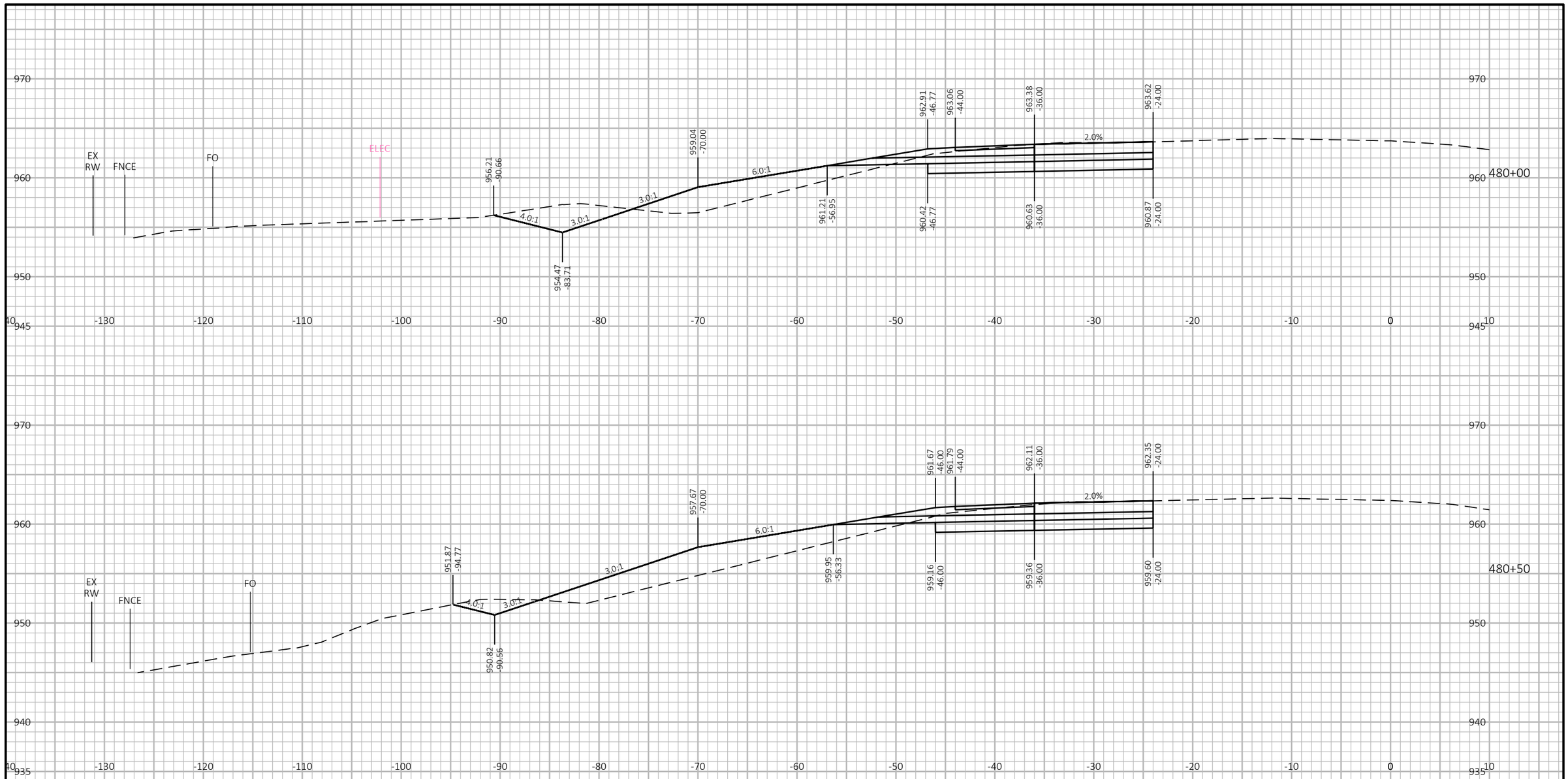
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 773	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 05 WB

PLOT DATE : 7/3/2024 2:02 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

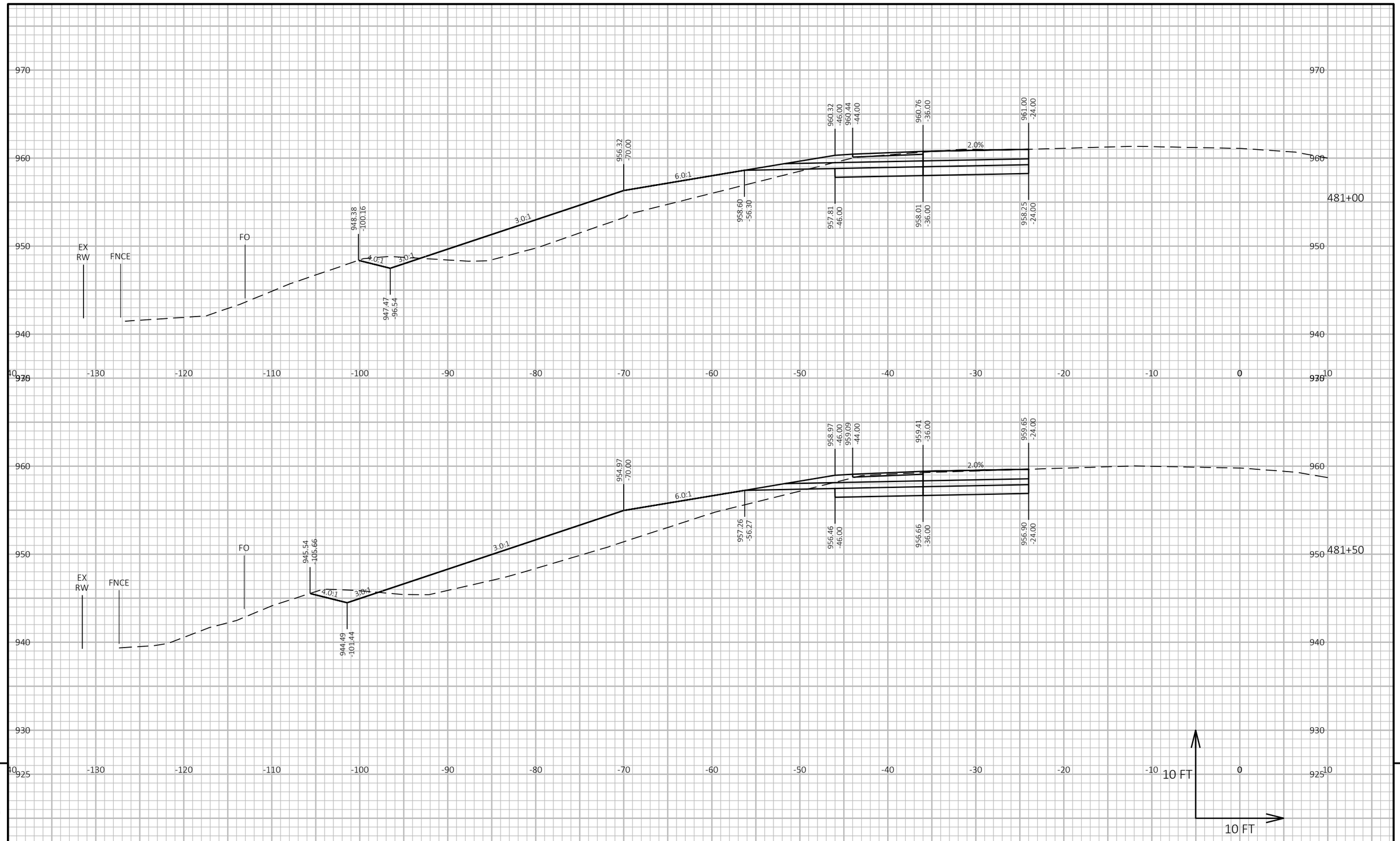


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 774	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 06 WB

PLOT DATE : 7/3/2024 2:02 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

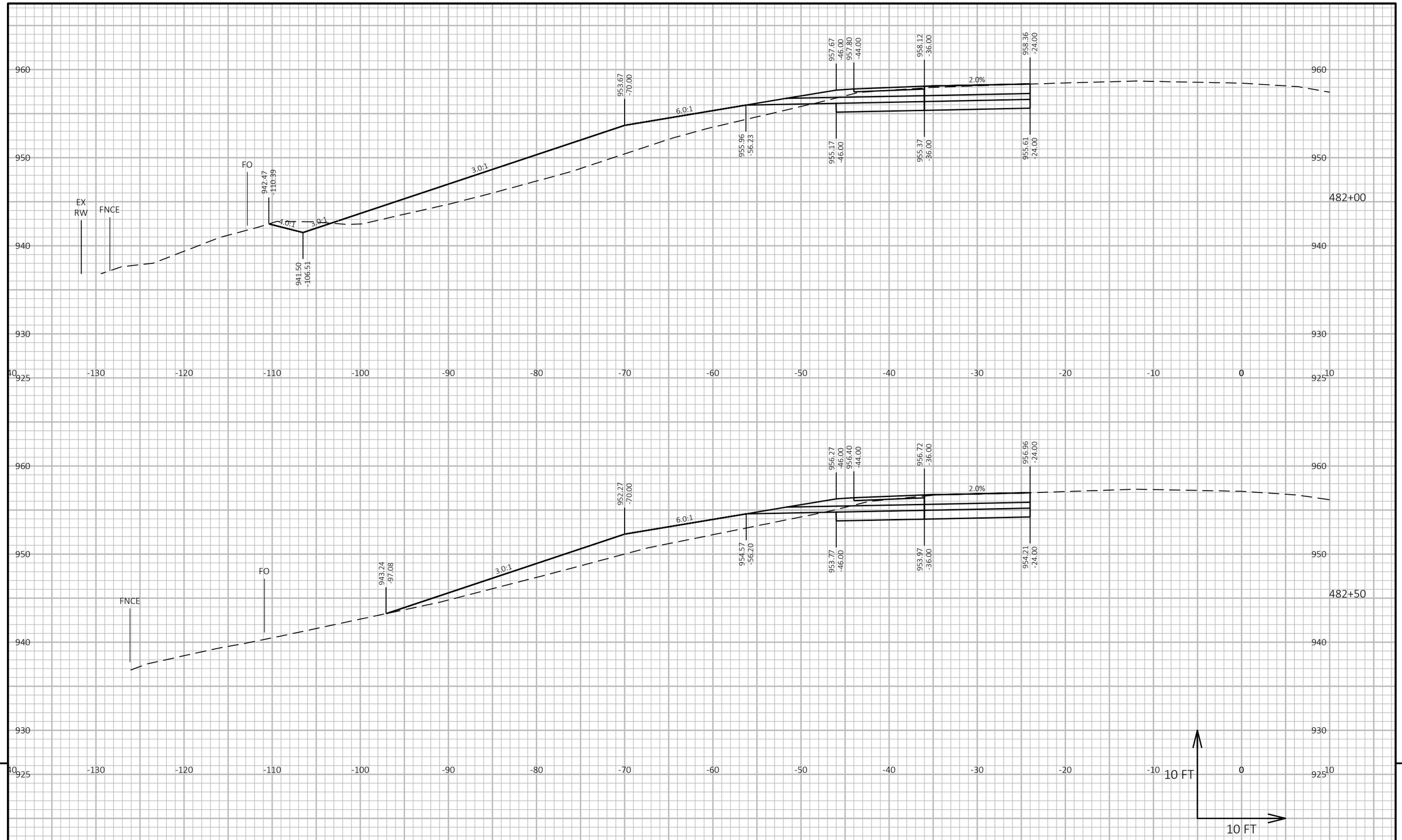


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 775	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 07 WB

PLOT DATE : 7/3/2024 2:02 PM PLOT BY : OLSON, JOSHUA 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: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 776	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 08 WB

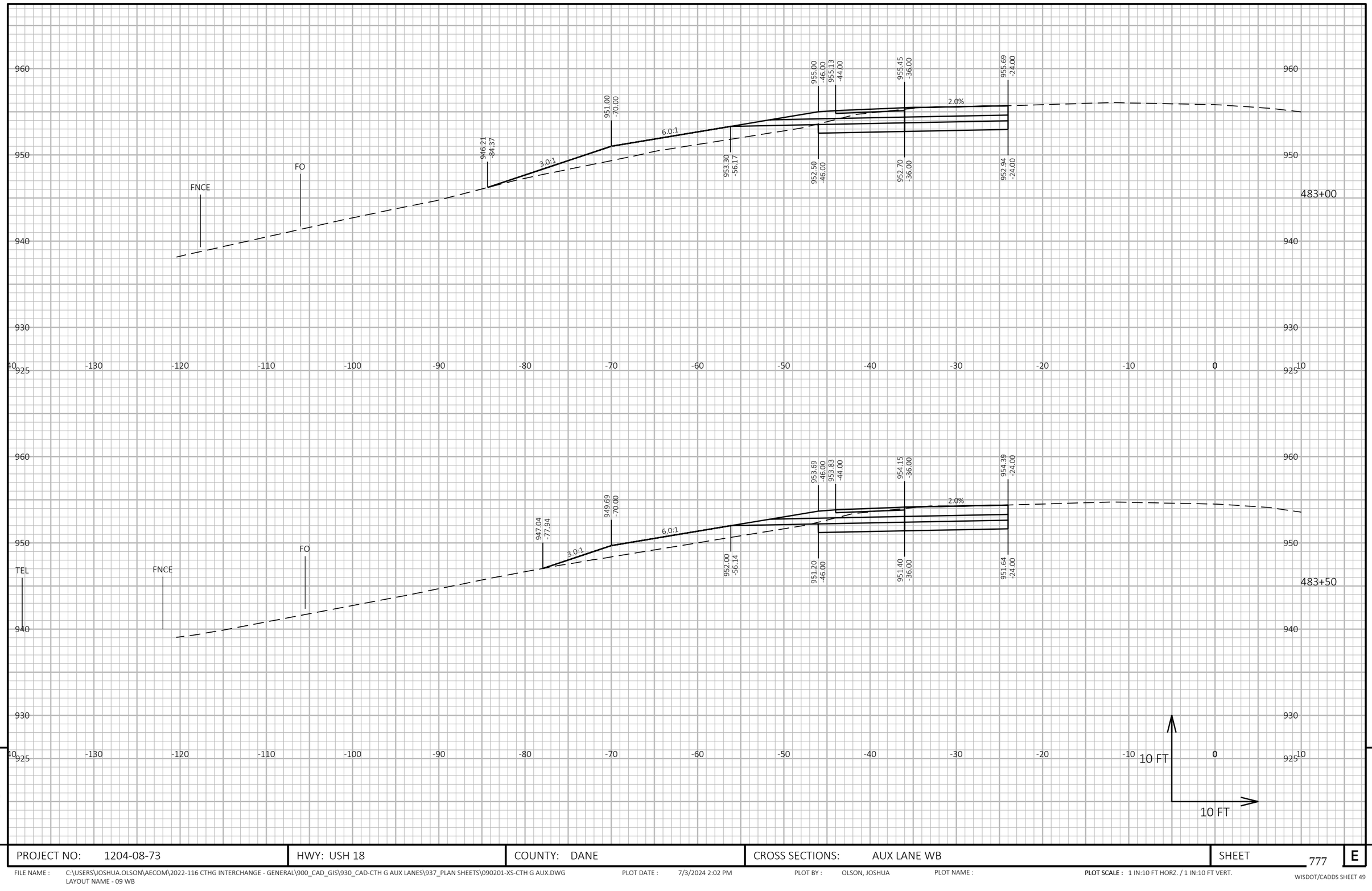
PLOT DATE : 7/3/2024 2:02 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 777	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 09 WB

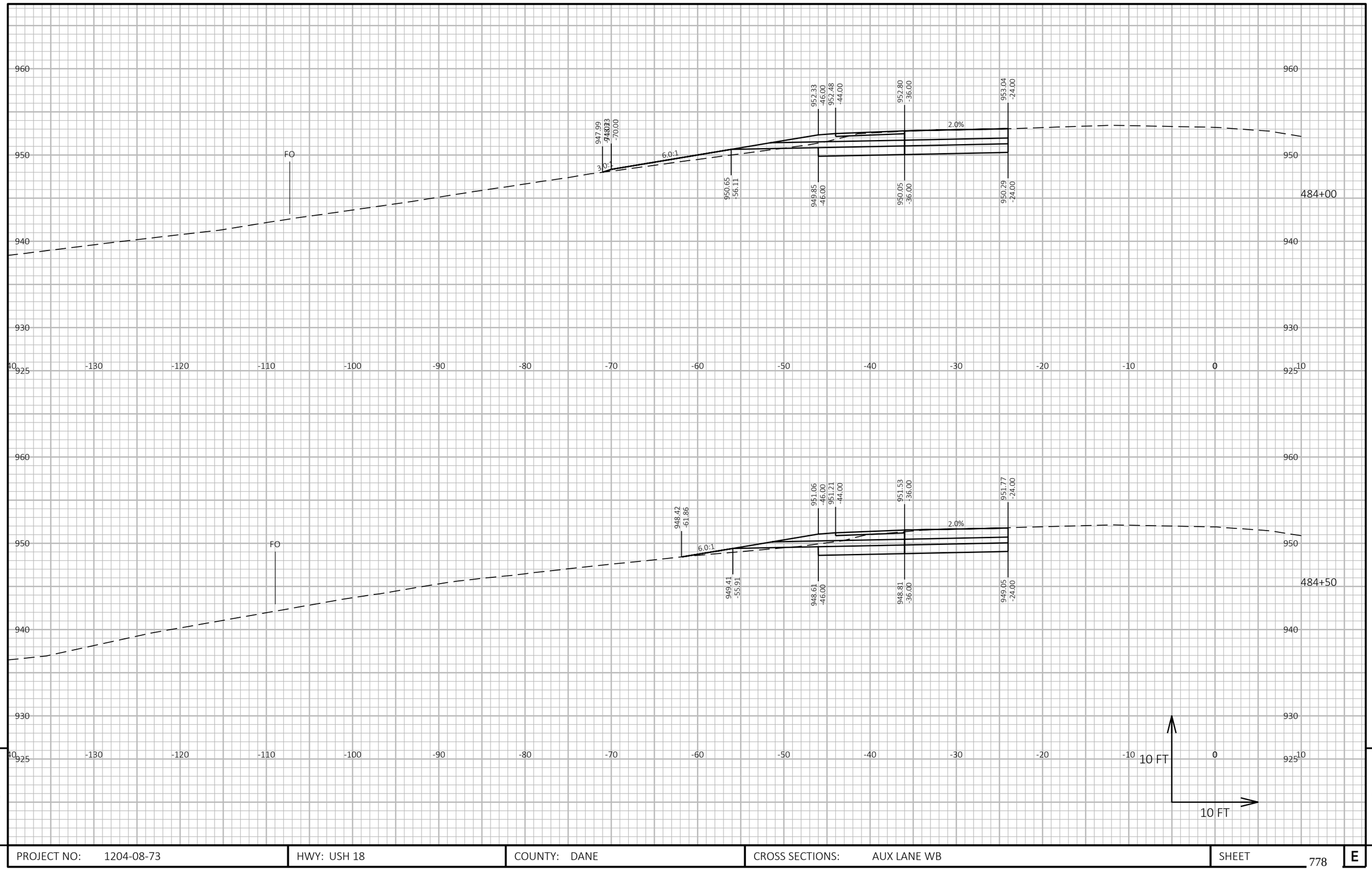
PLOT DATE : 7/3/2024 2:02 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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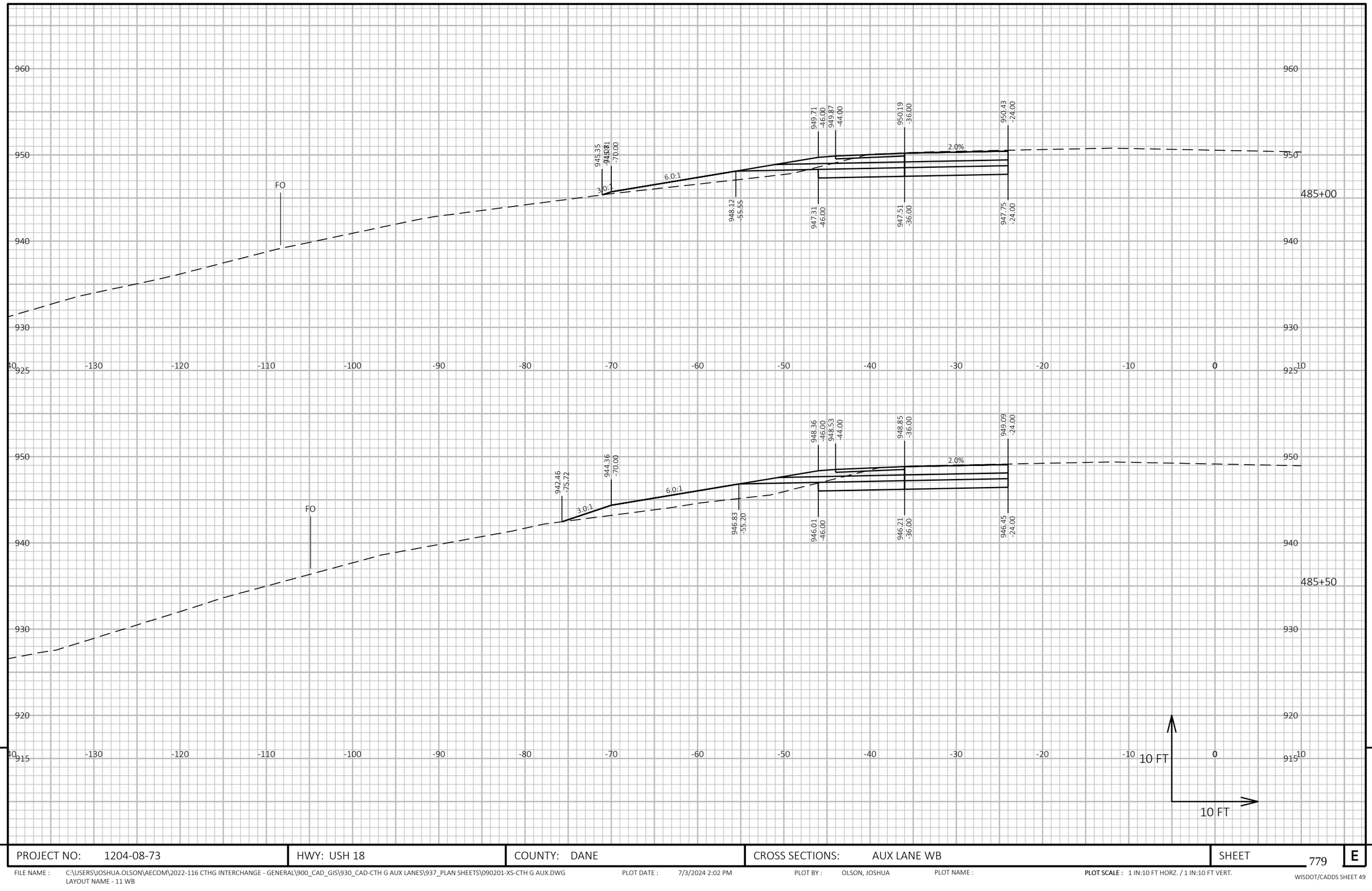
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 778	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 10 WB

PLOT DATE : 7/3/2024 2:02 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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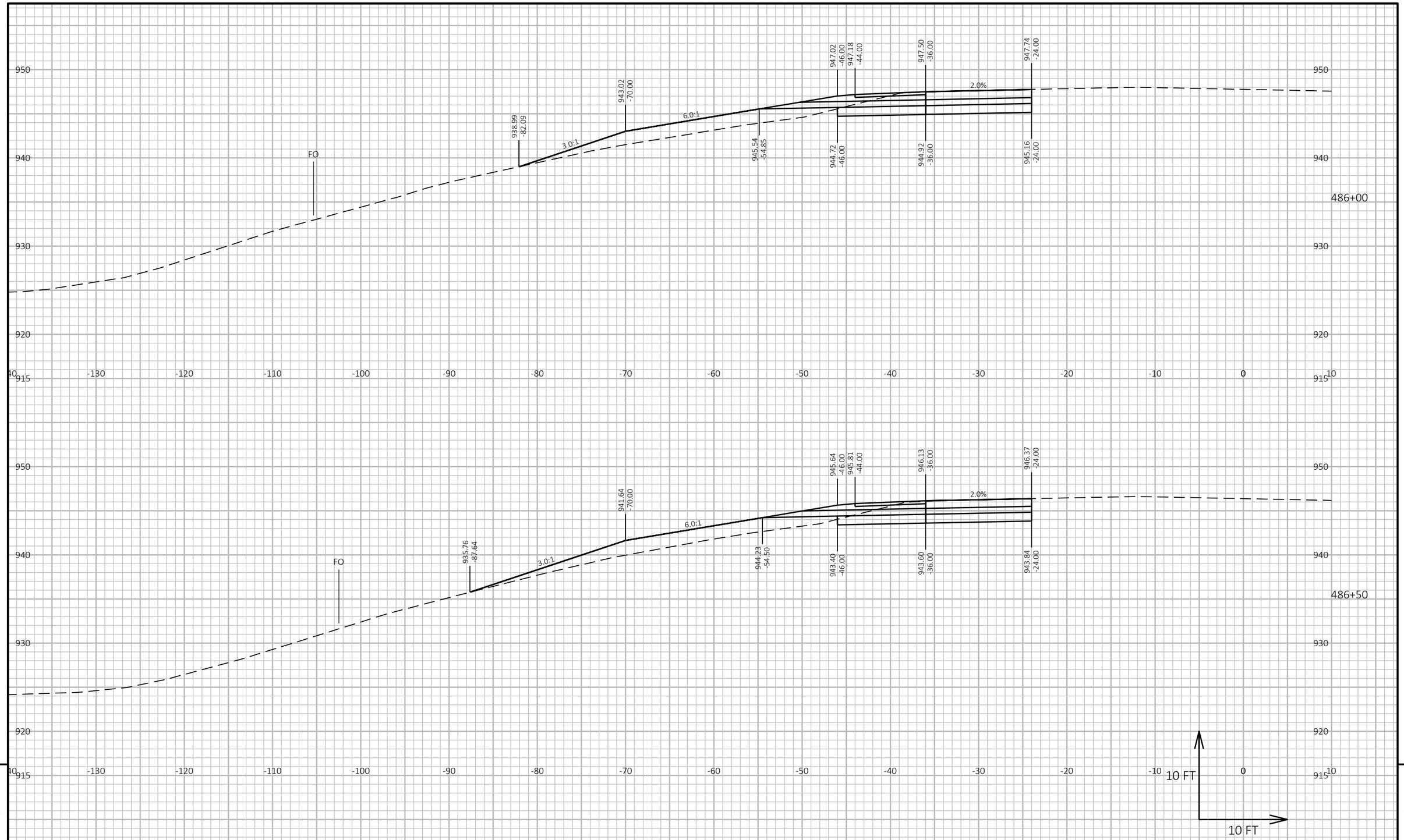
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 779	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 11 WB

PLOT DATE : 7/3/2024 2:02 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 780	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 12 WB

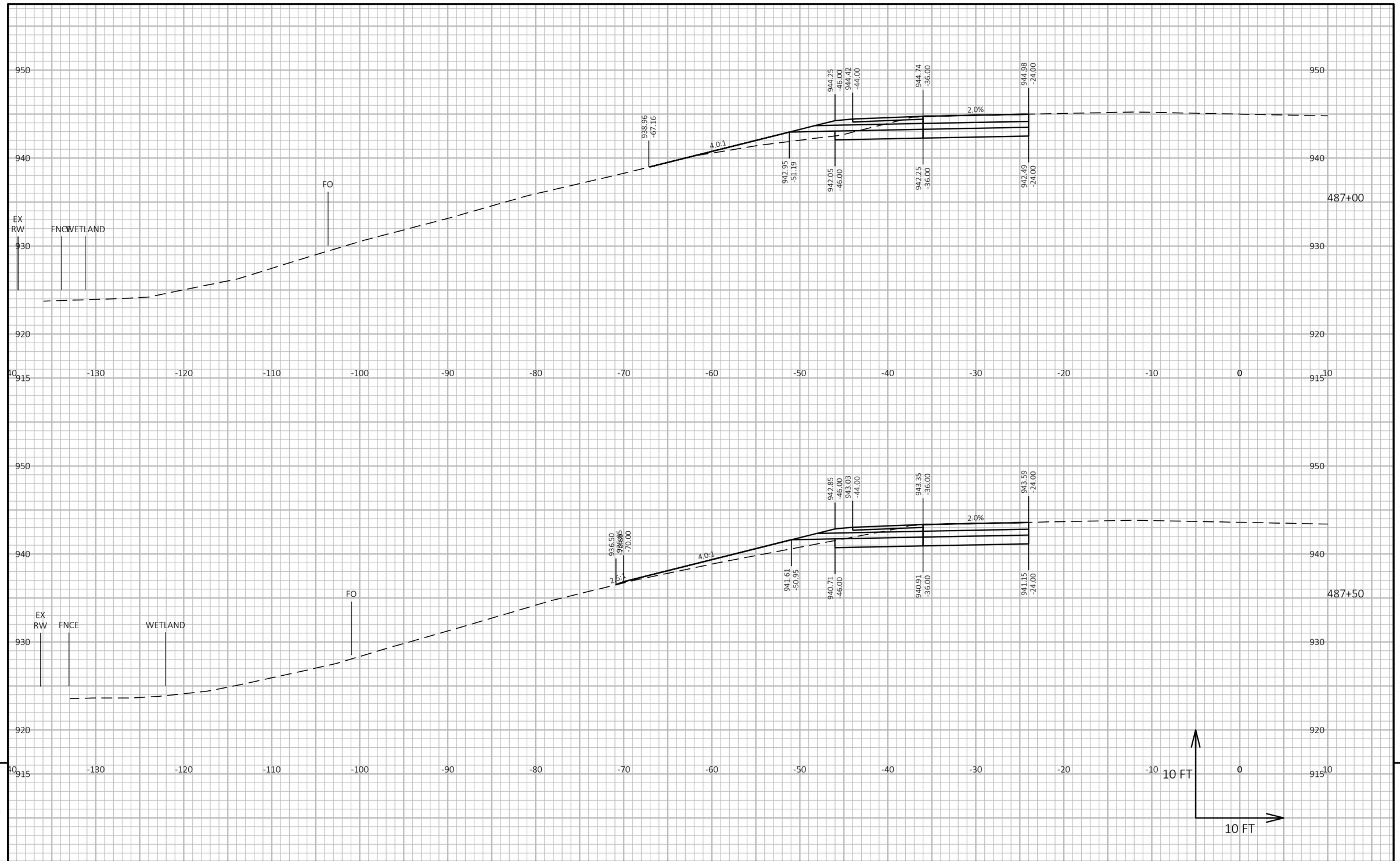
PLOT DATE : 7/3/2024 2:02 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 781	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 13 WB

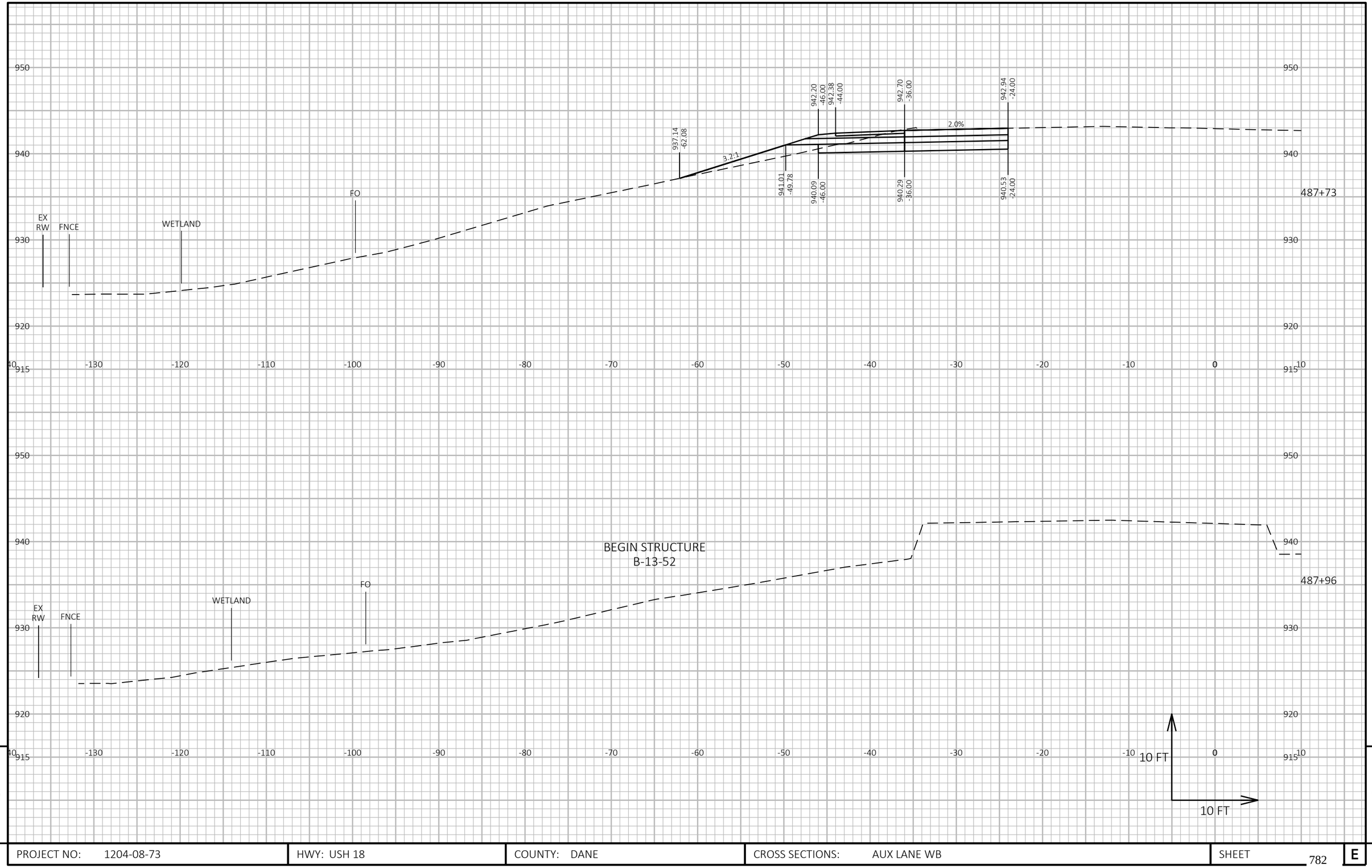
PLOT DATE : 7/3/2024 2:03 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



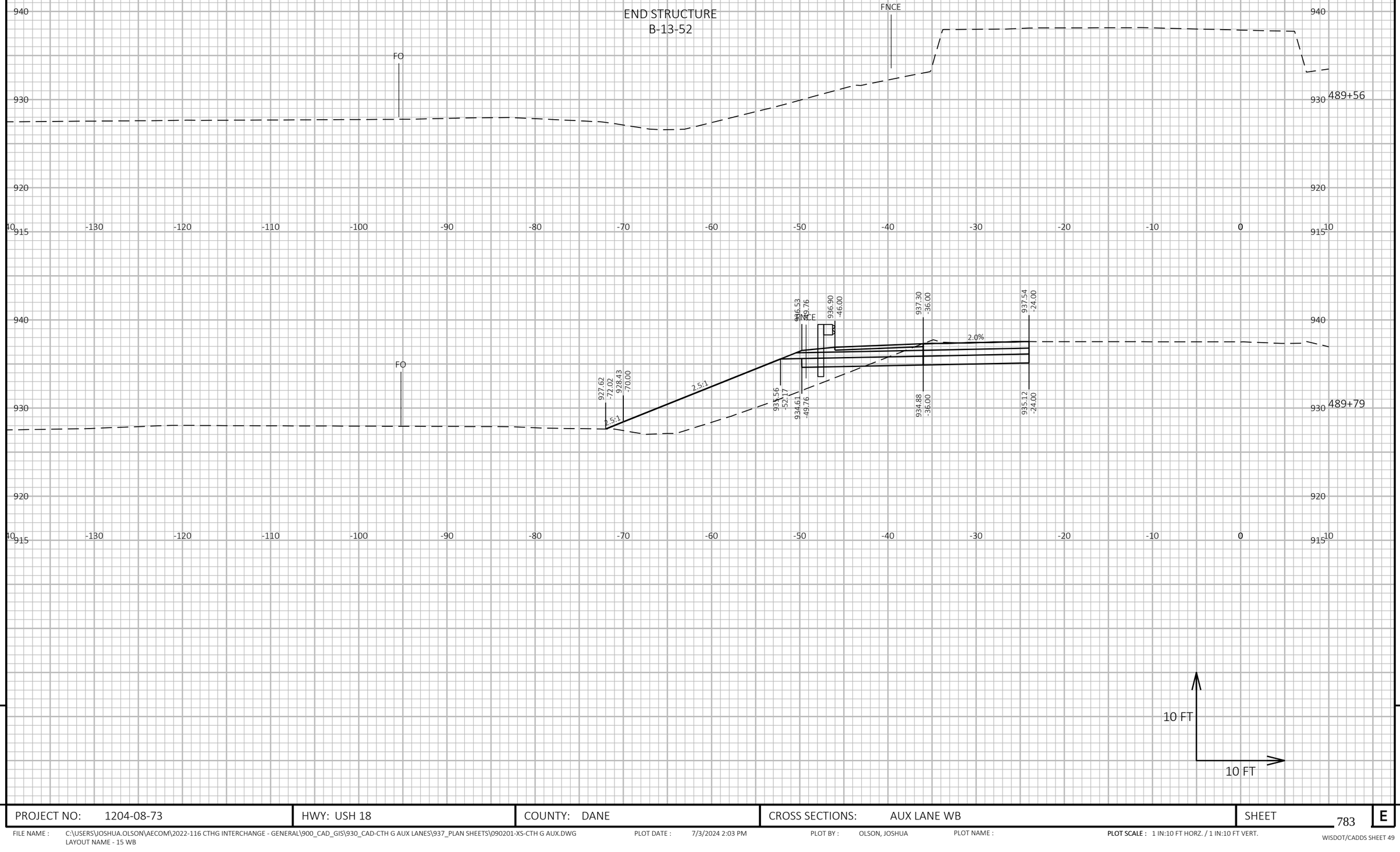
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 782 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 14 WB

PLOT DATE : 7/3/2024 2:03 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END STRUCTURE
B-13-52



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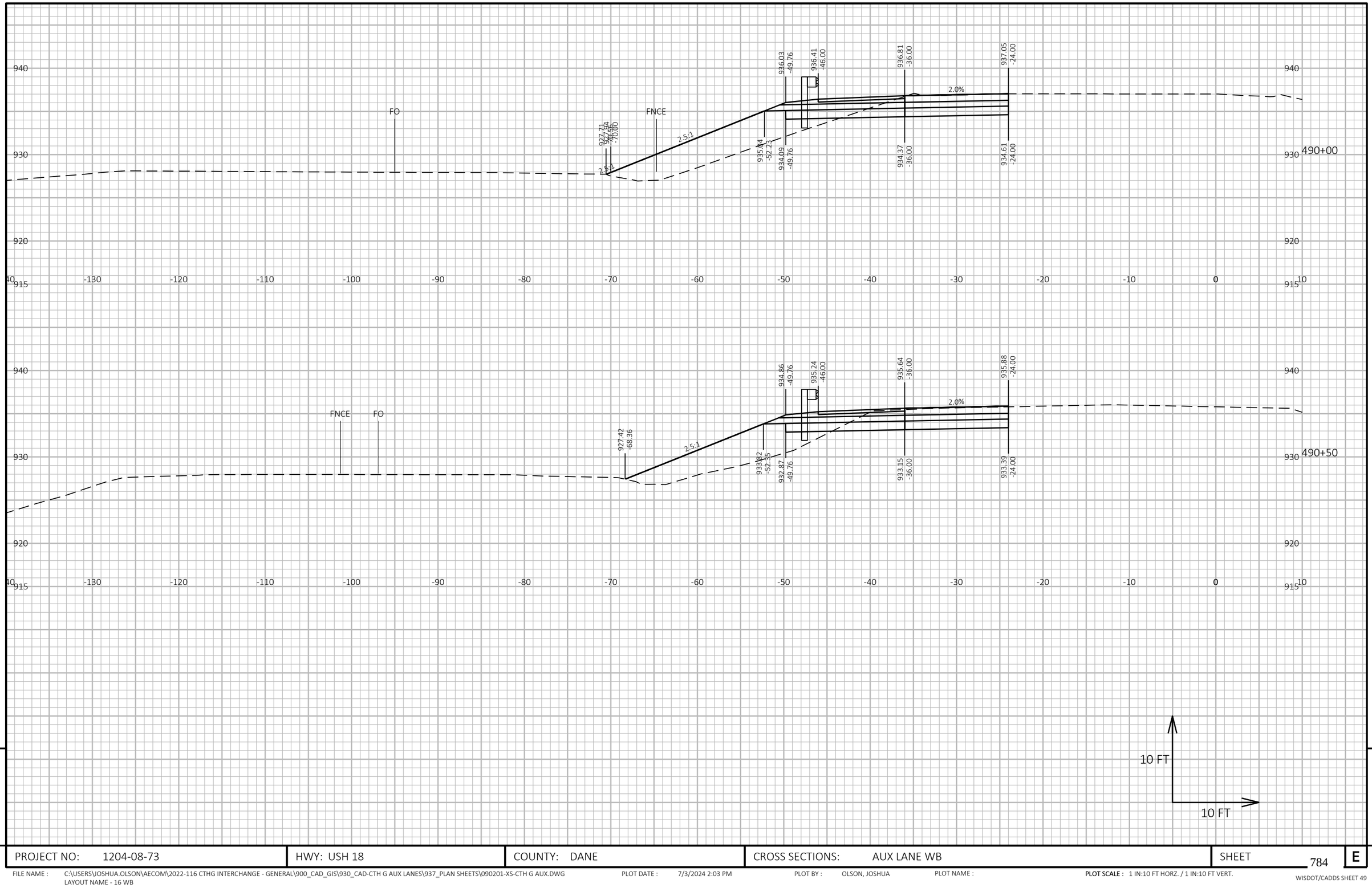
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 783	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 15 WB

PLOT DATE : 7/3/2024 2:03 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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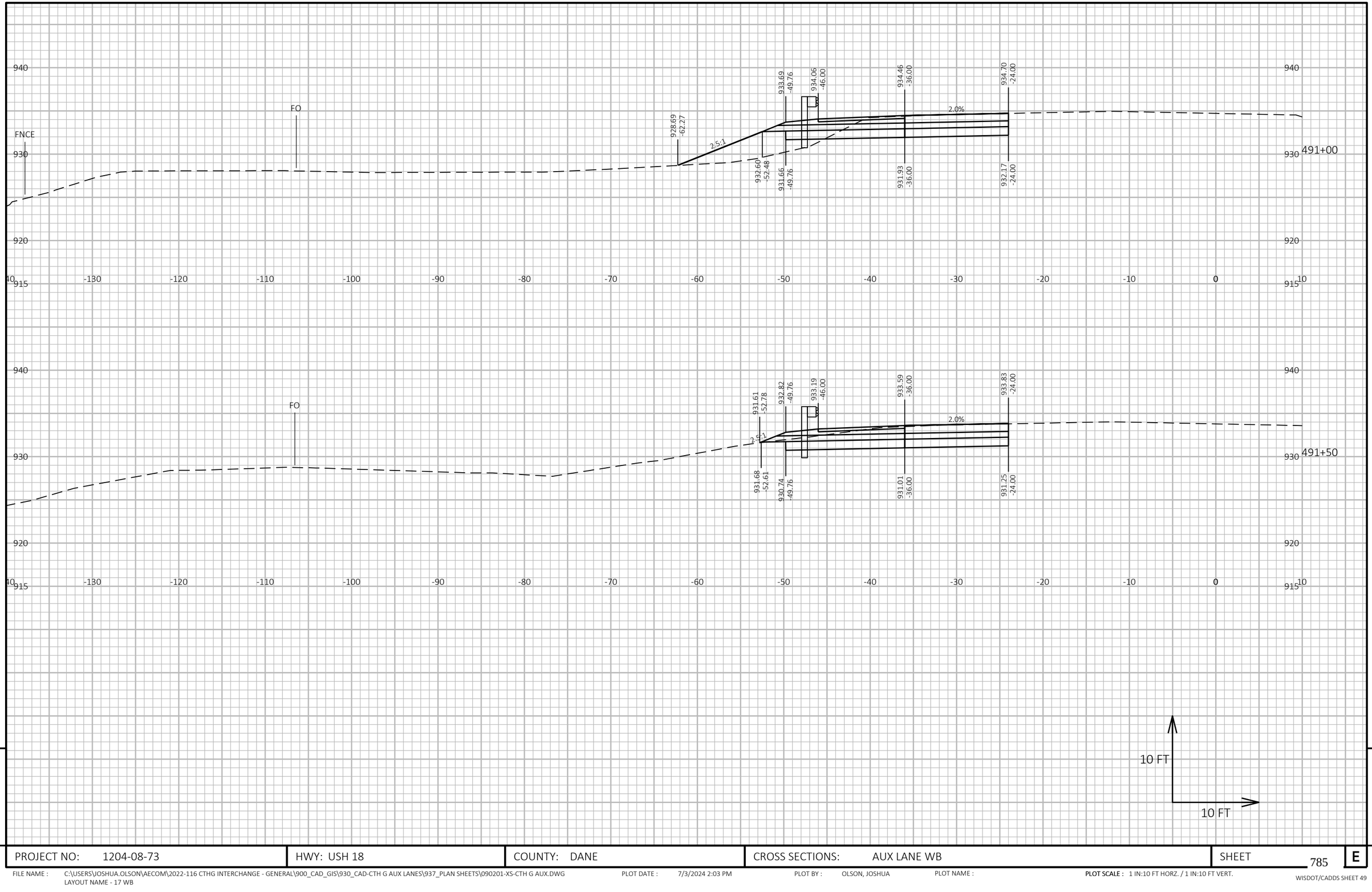
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 784	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 16 WB

PLOT DATE : 7/3/2024 2:03 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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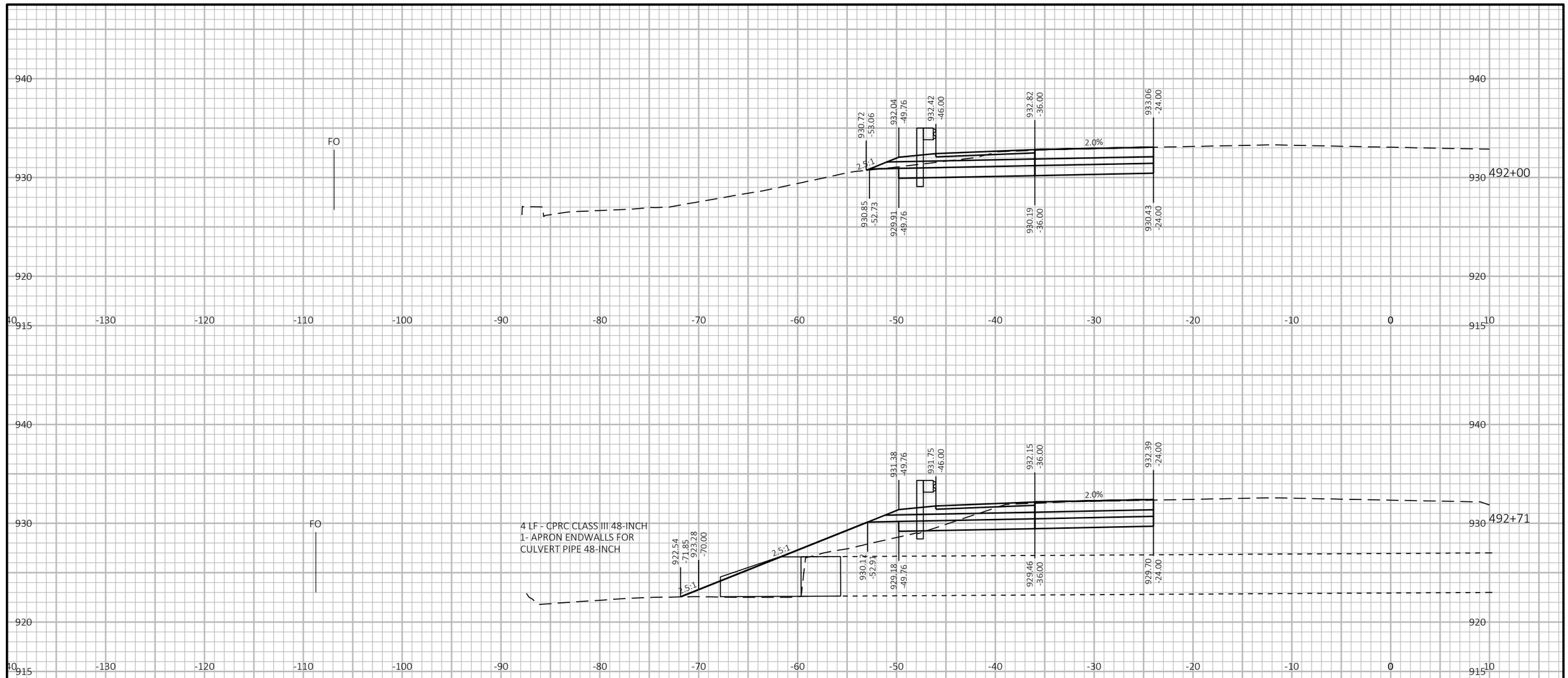
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 785	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 17 WB

PLOT DATE : 7/3/2024 2:03 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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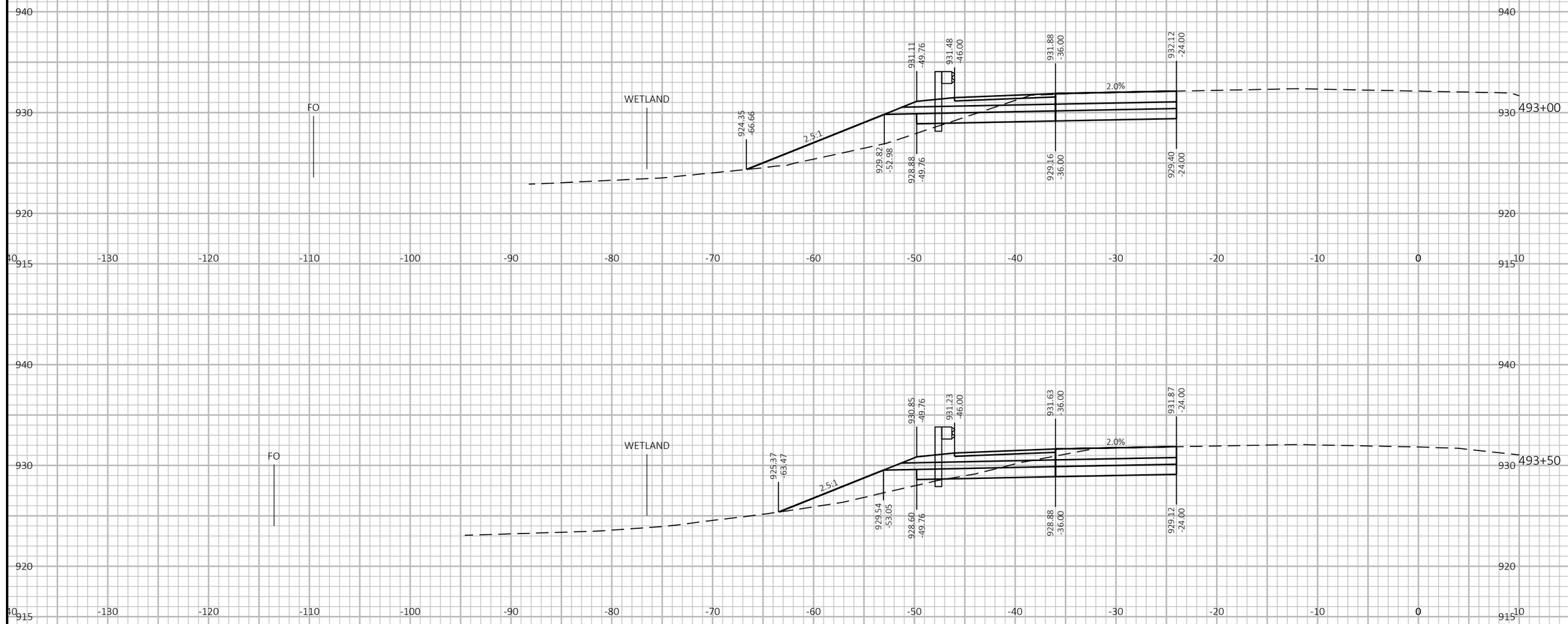
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 786	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 18 WB

PLOT DATE : 7/3/2024 2:03 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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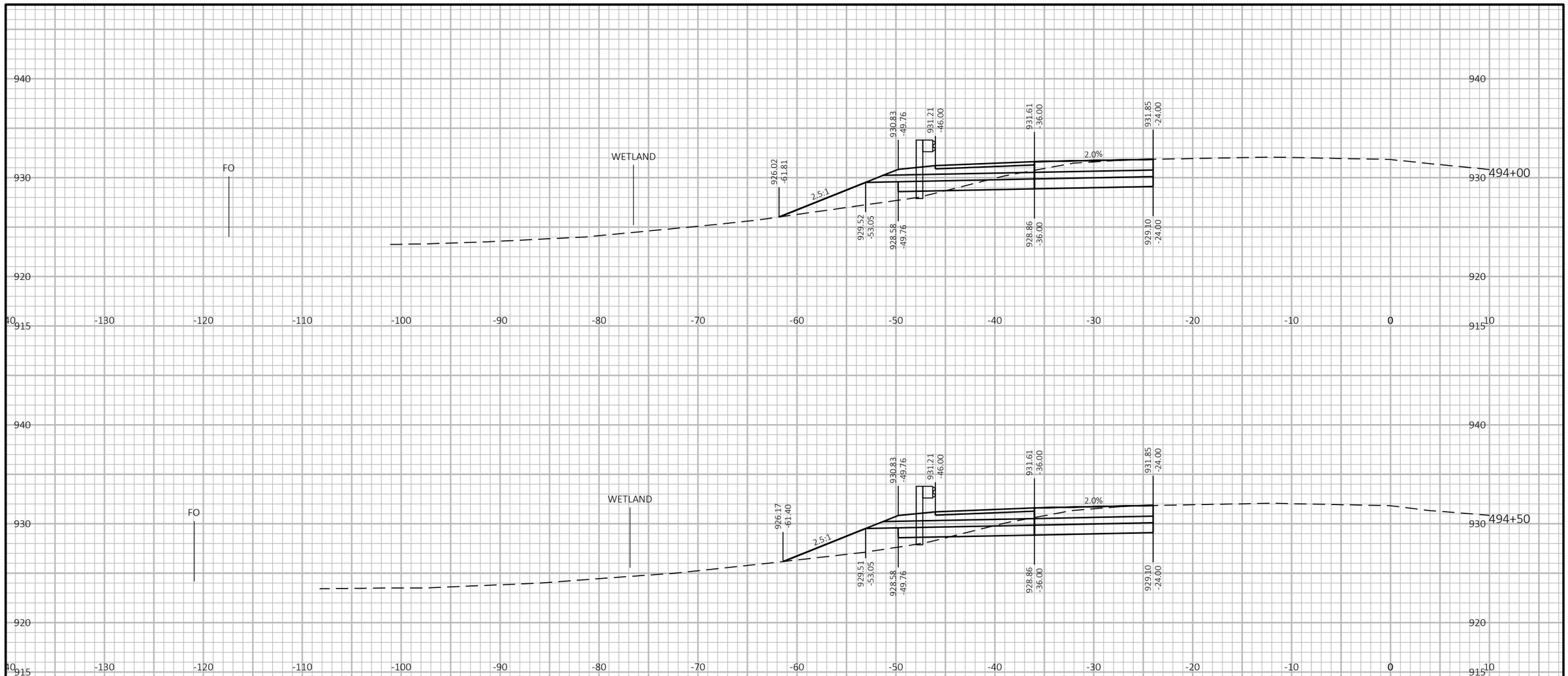
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 787	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 19 WB

PLOT DATE : 7/3/2024 2:03 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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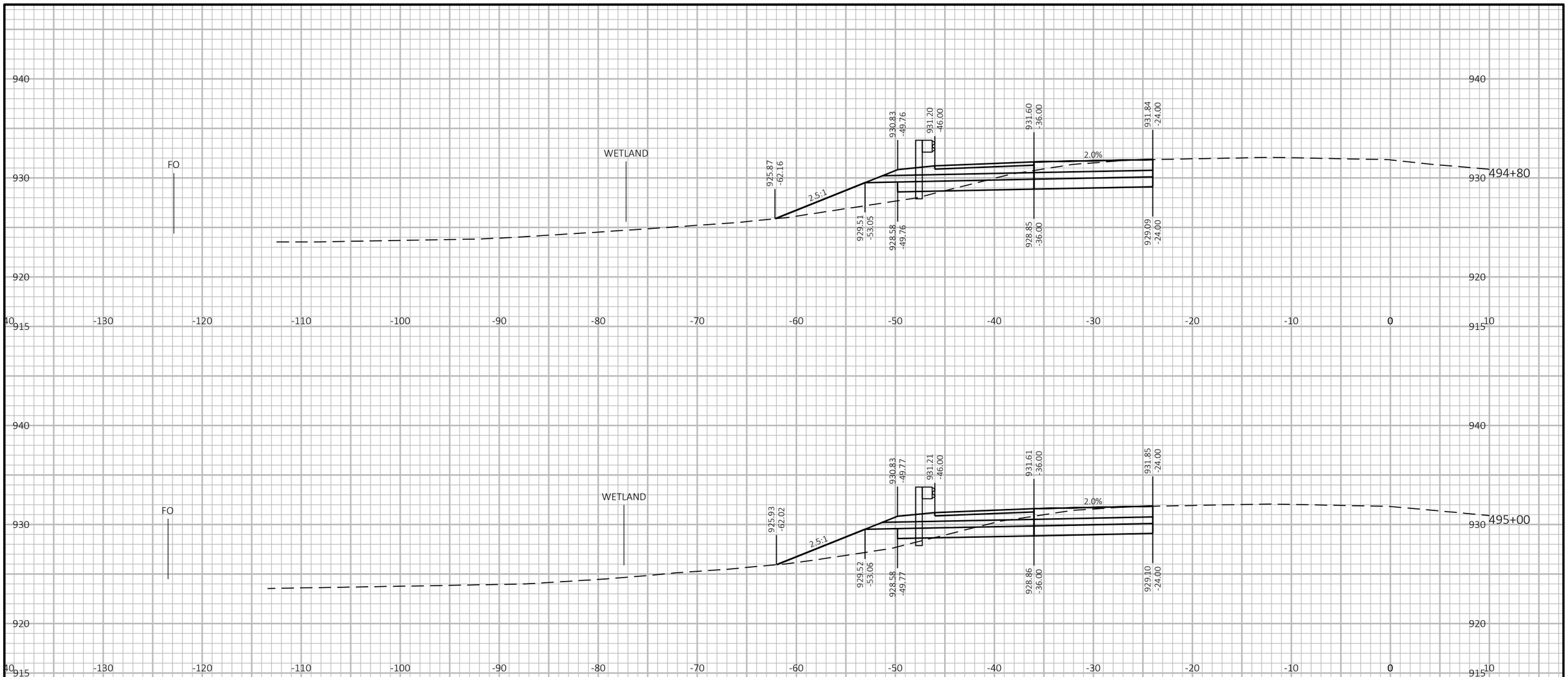
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 788	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 20 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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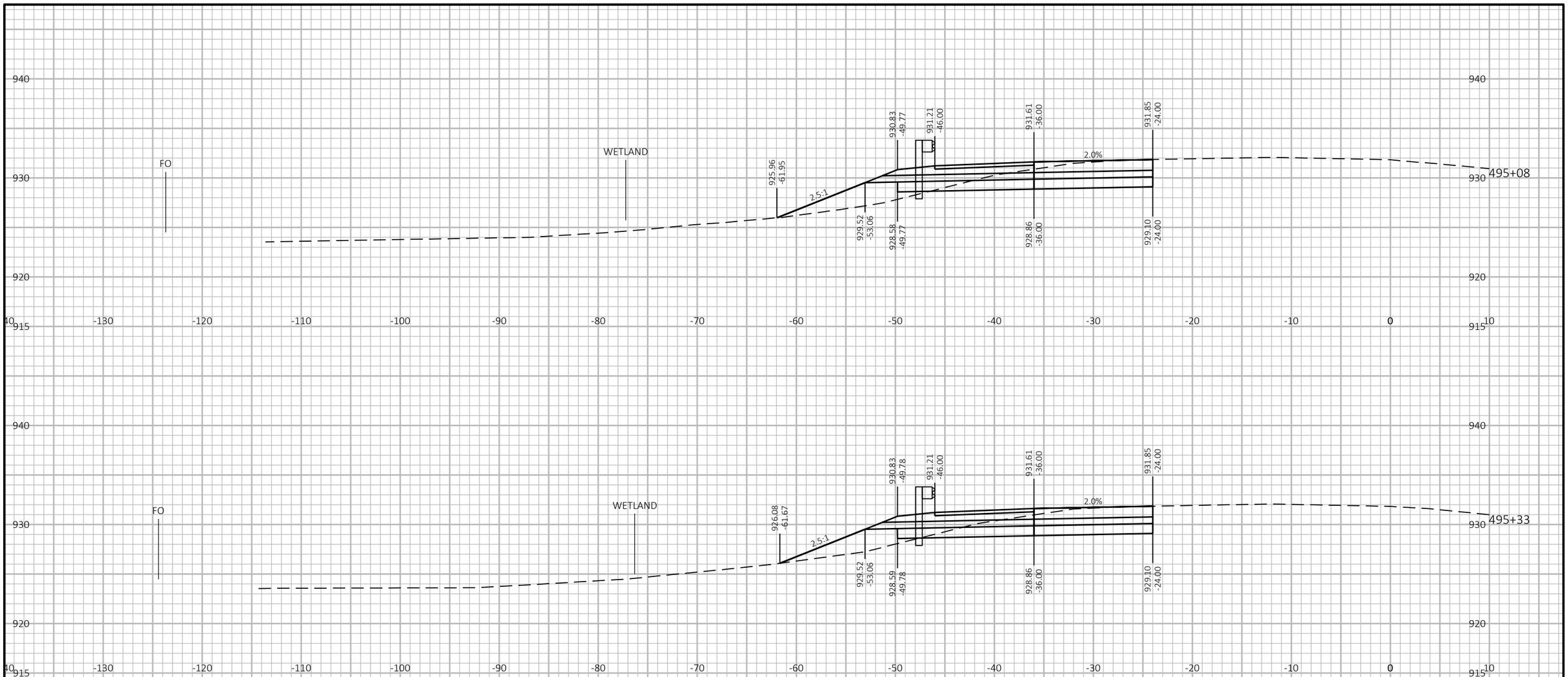
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 789	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 21 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



10 FT

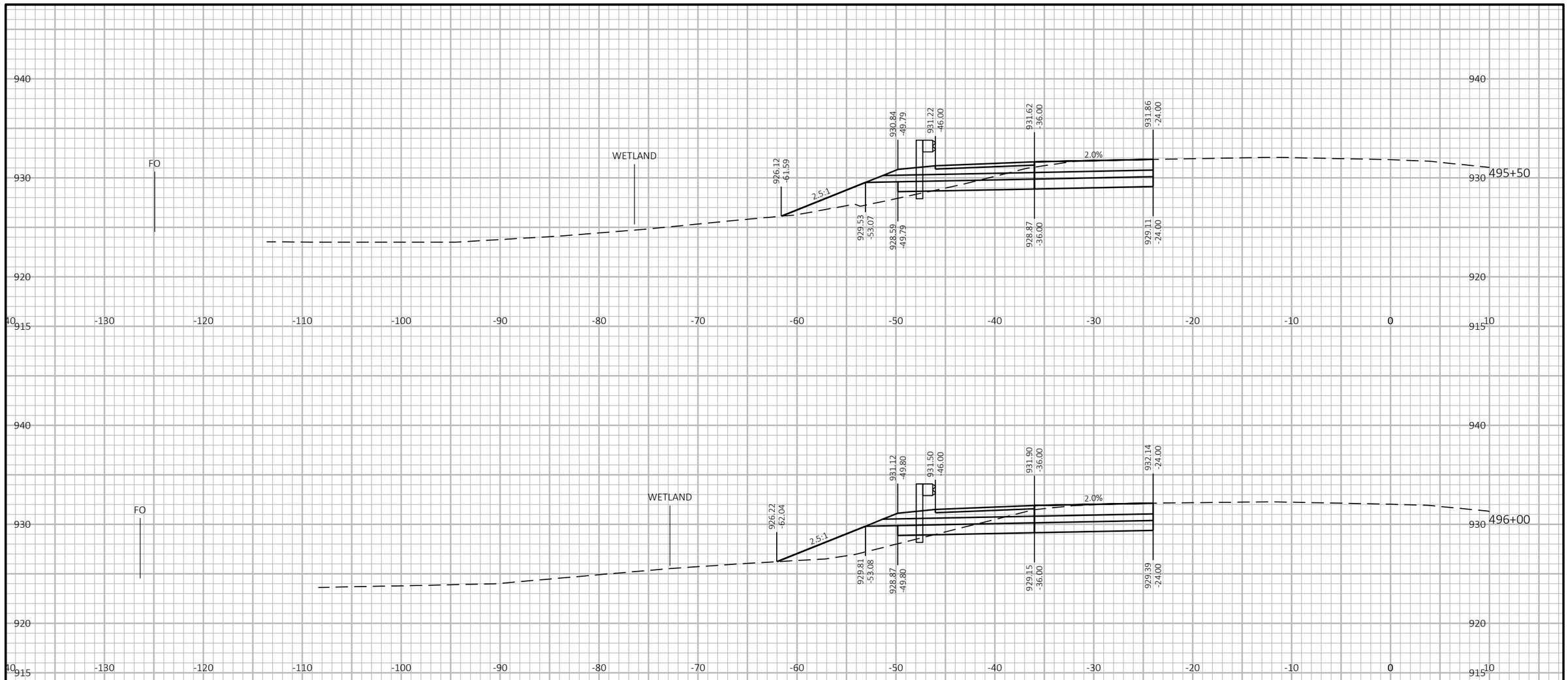
10 FT

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 790	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 22 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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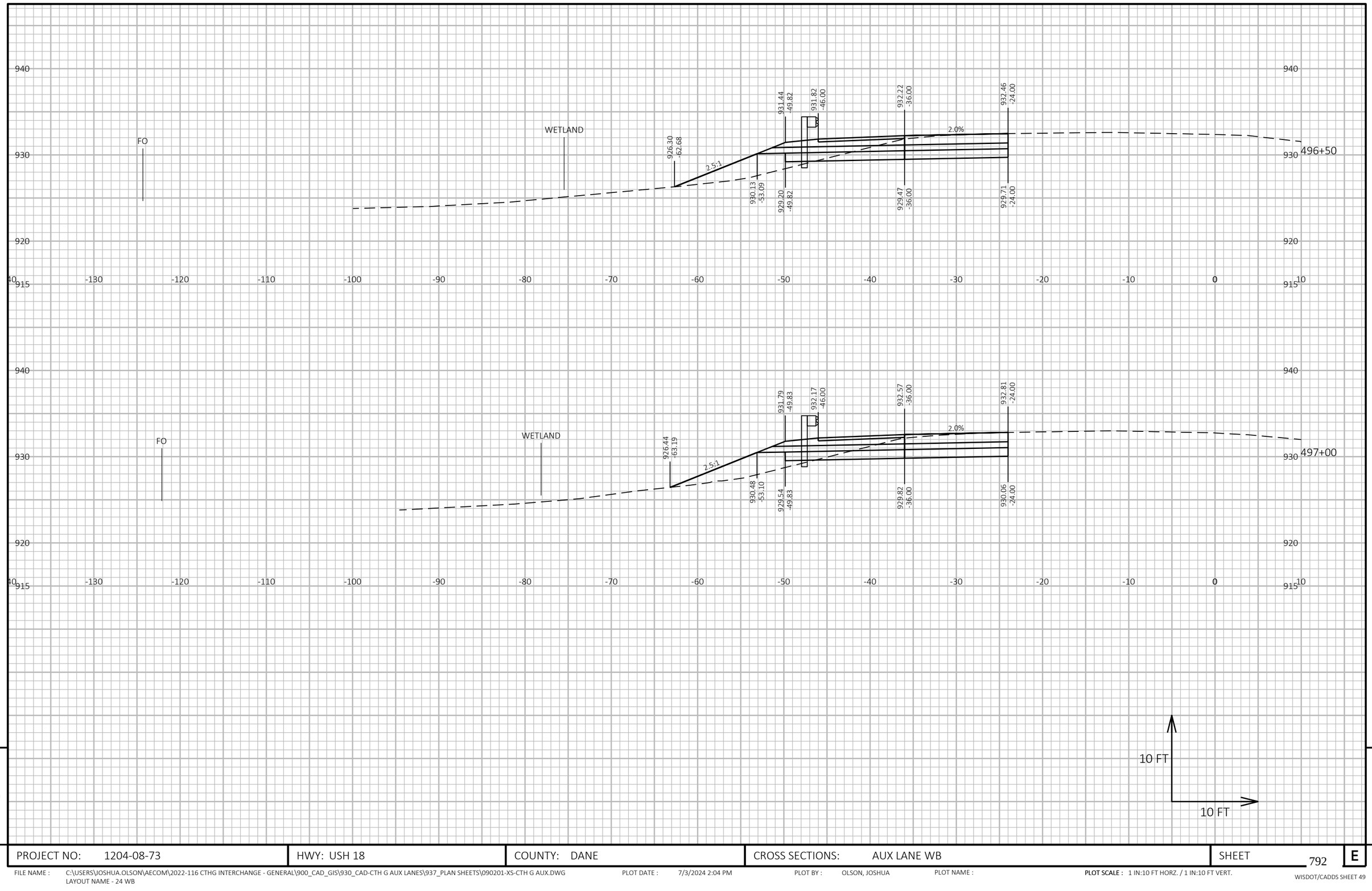
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 791	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 23 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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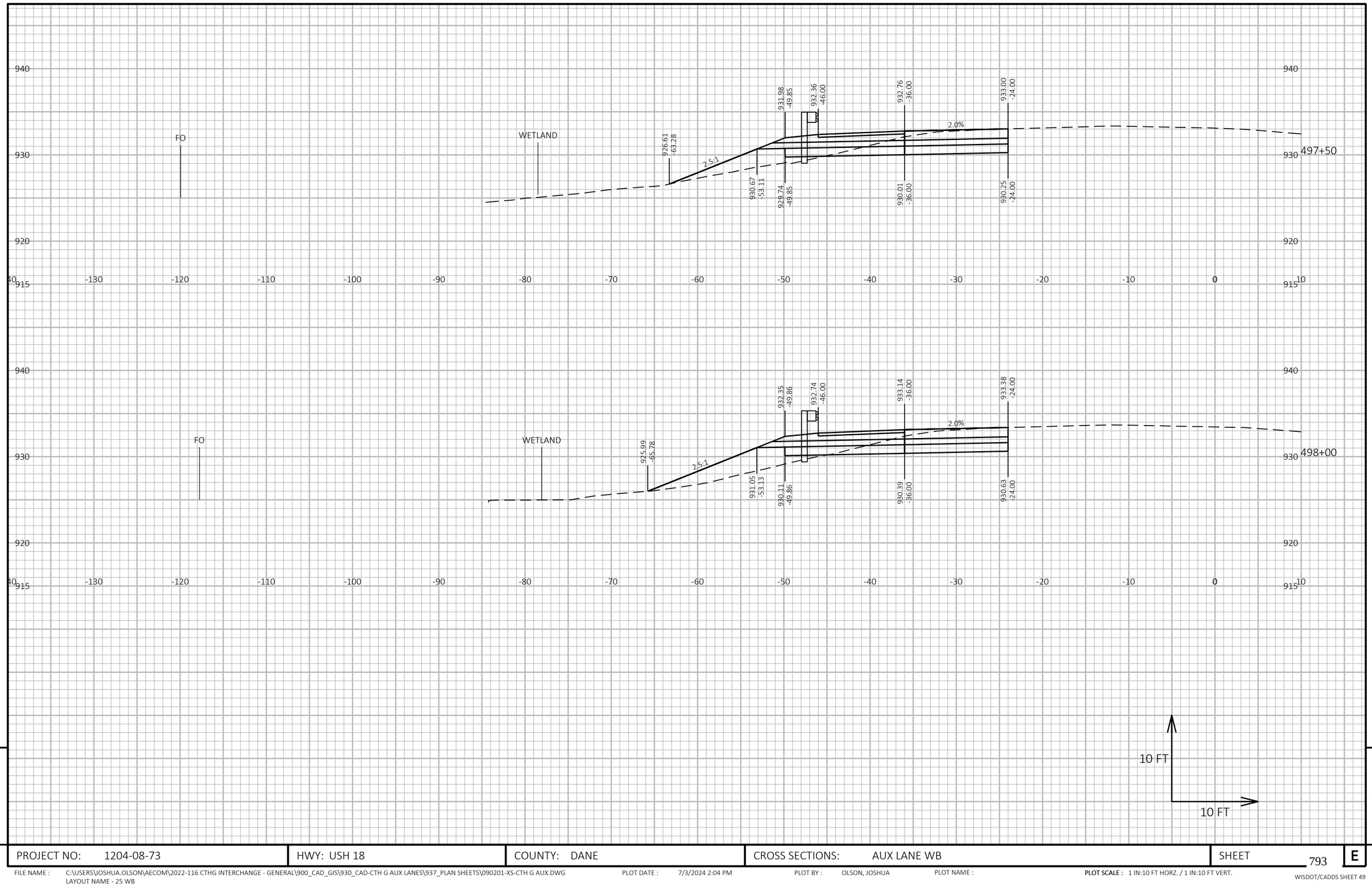
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 792	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 24 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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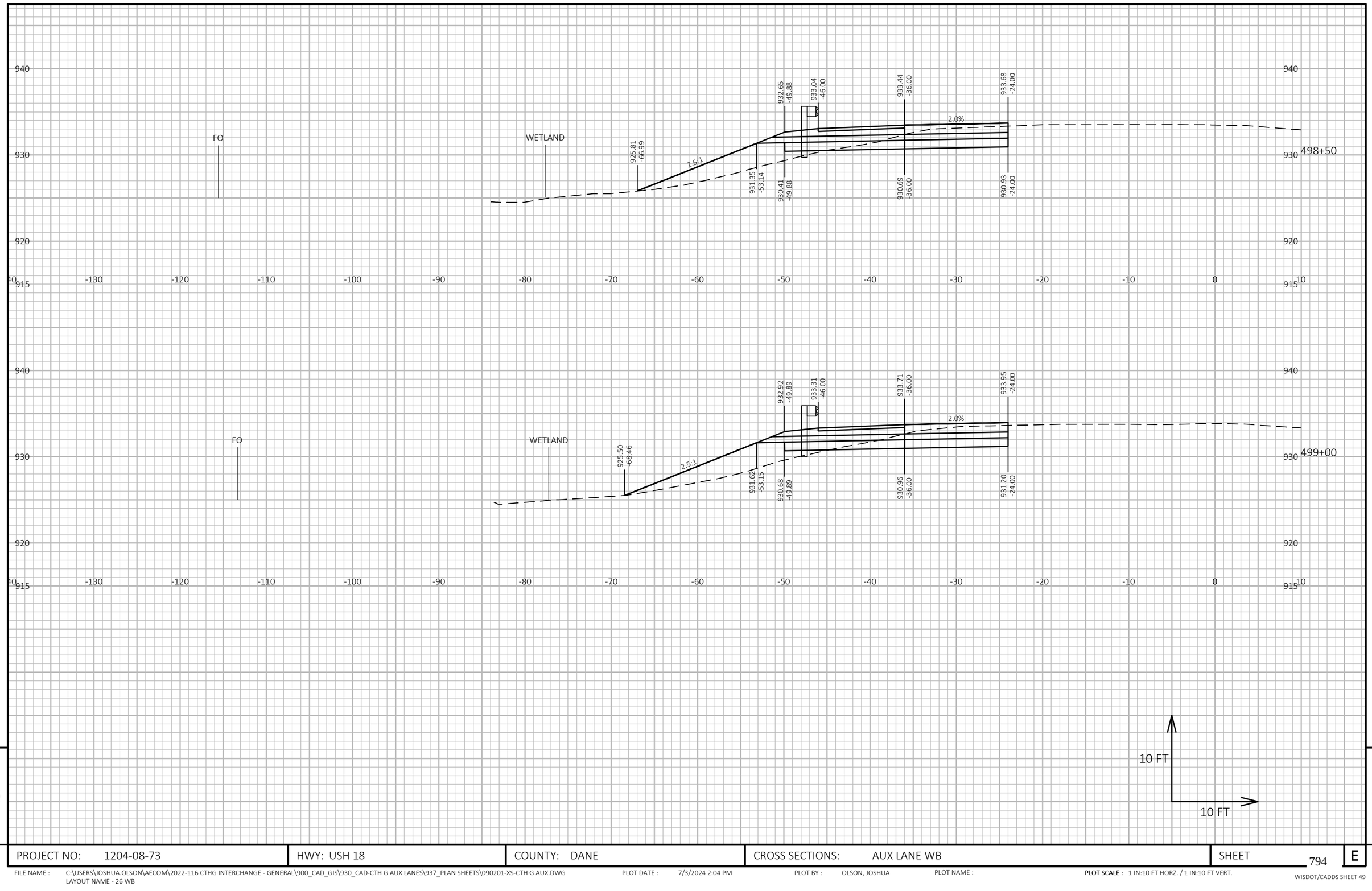
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 793	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 25 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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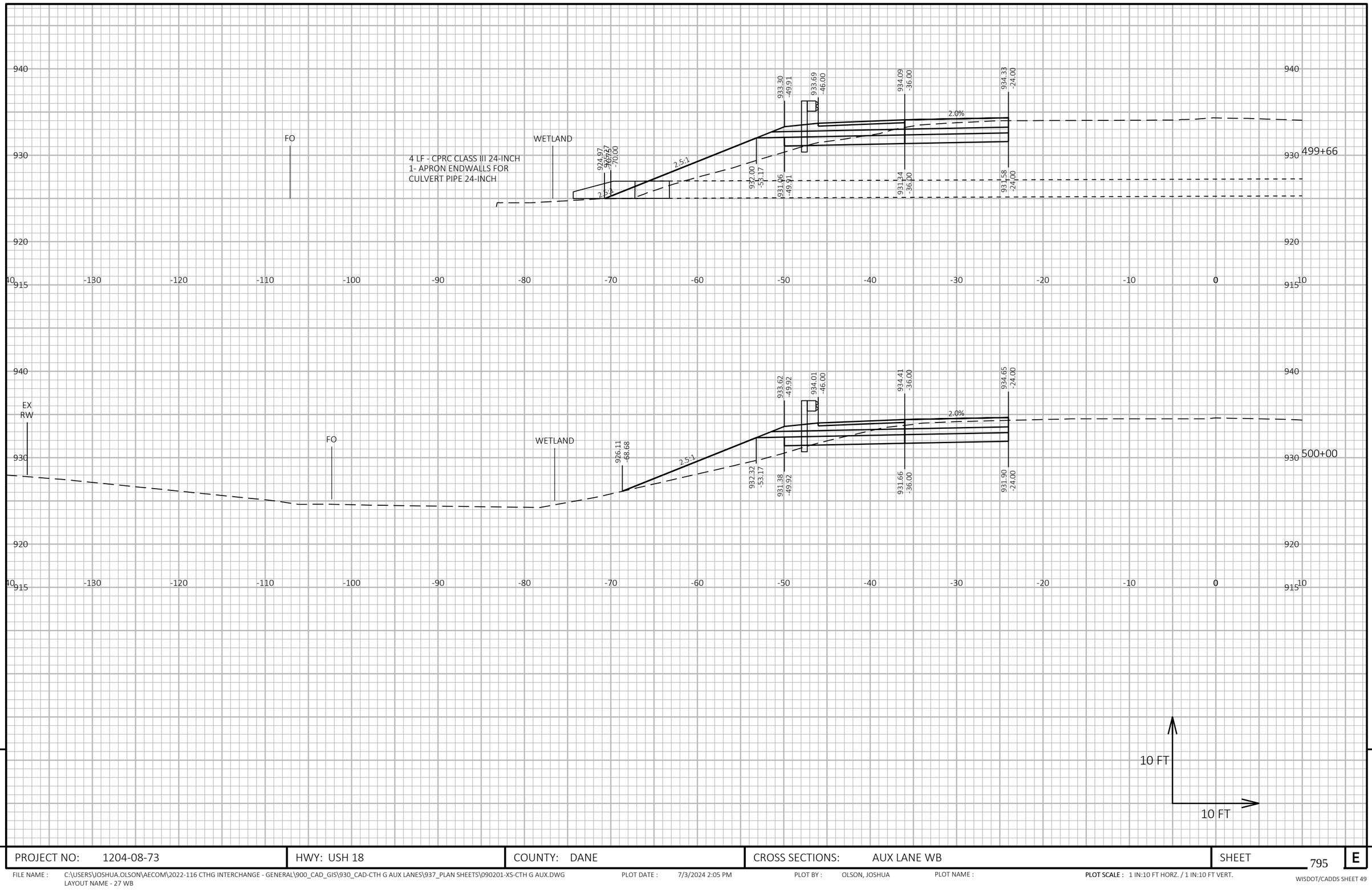
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 794	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 26 WB

PLOT DATE : 7/3/2024 2:04 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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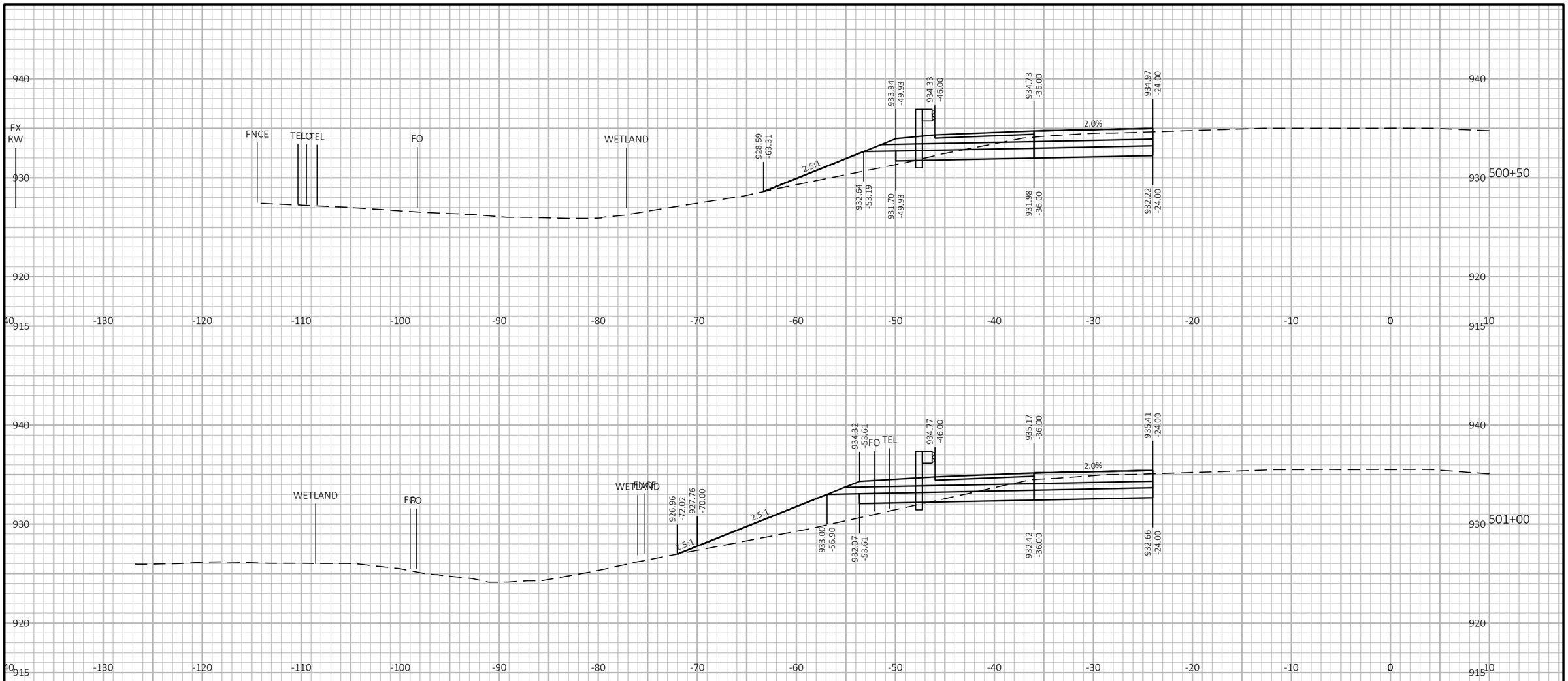
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 795	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 27 WB
PLOT DATE : 7/3/2024 2:05 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



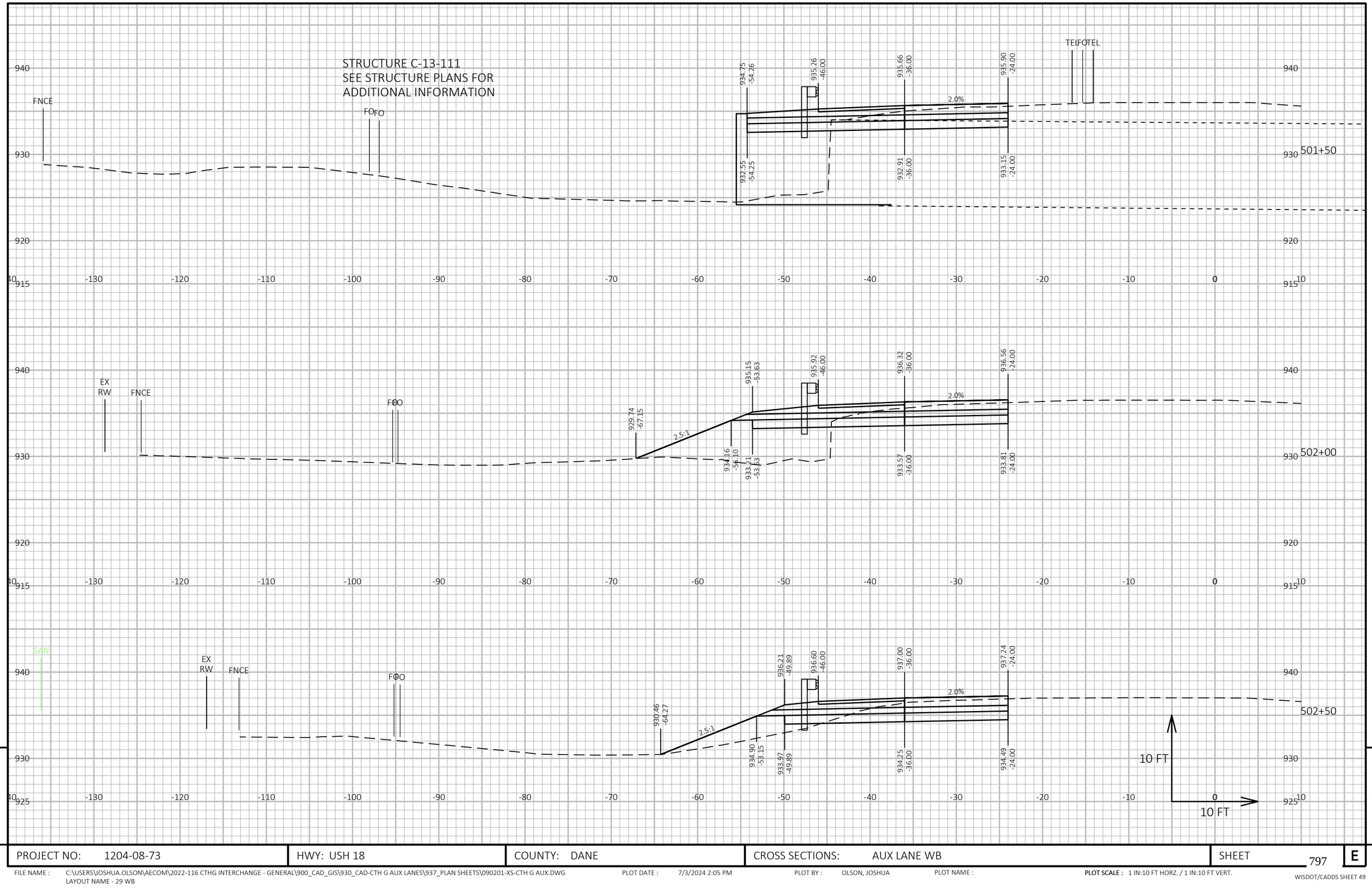
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 796	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 28 WB

PLOT DATE : 7/3/2024 2:05 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STRUCTURE C-13-111
SEE STRUCTURE PLANS FOR
ADDITIONAL INFORMATION

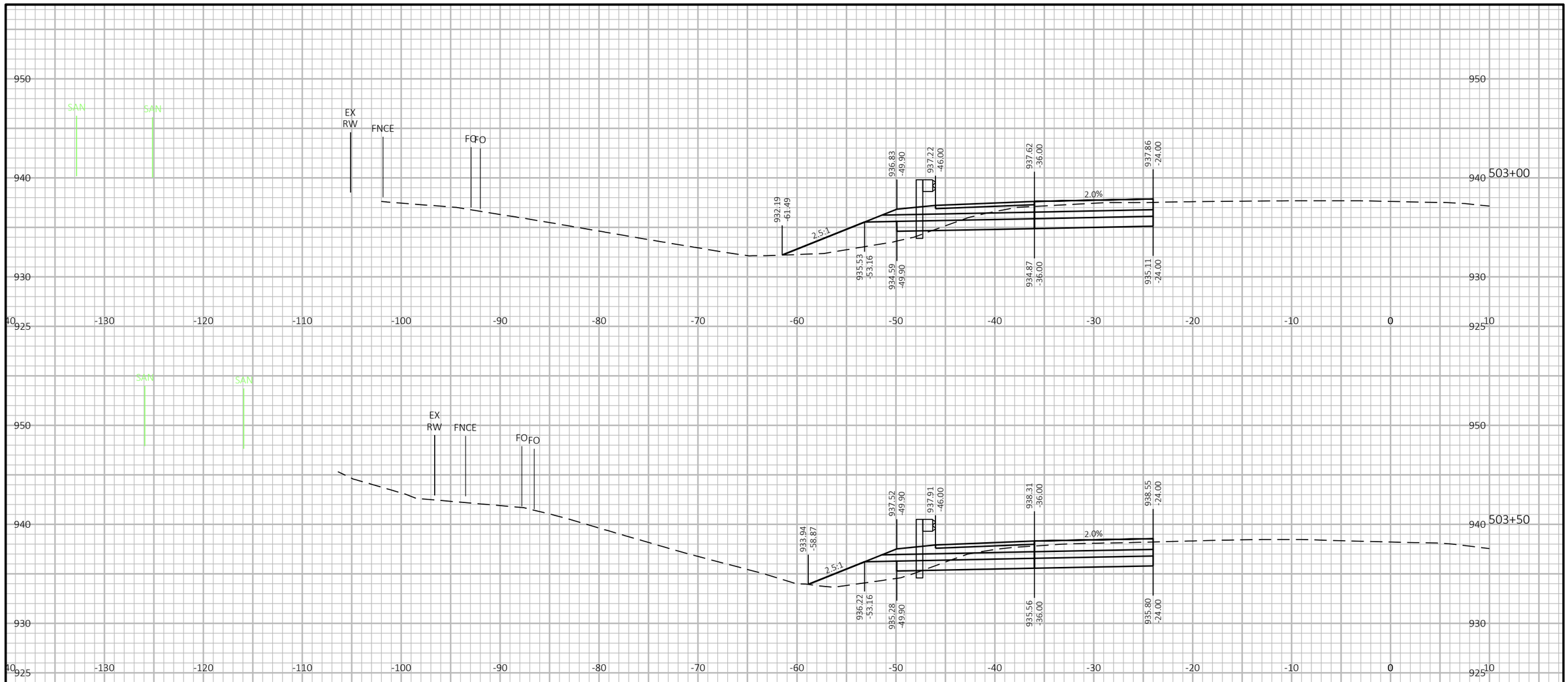


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 797	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 29 WB

PLOT DATE : 7/3/2024 2:05 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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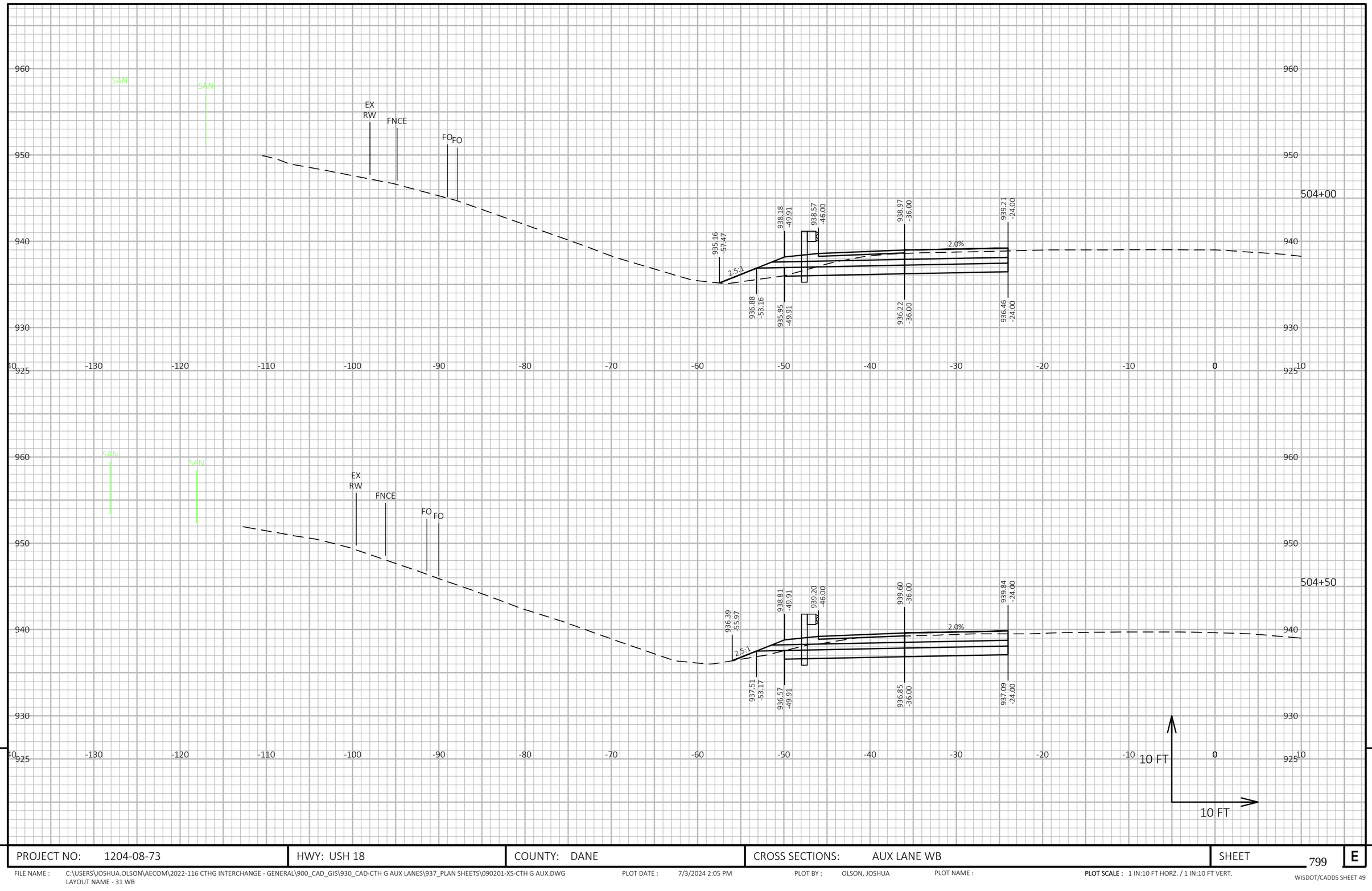
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 798	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 30 WB

PLOT DATE : 7/3/2024 2:05 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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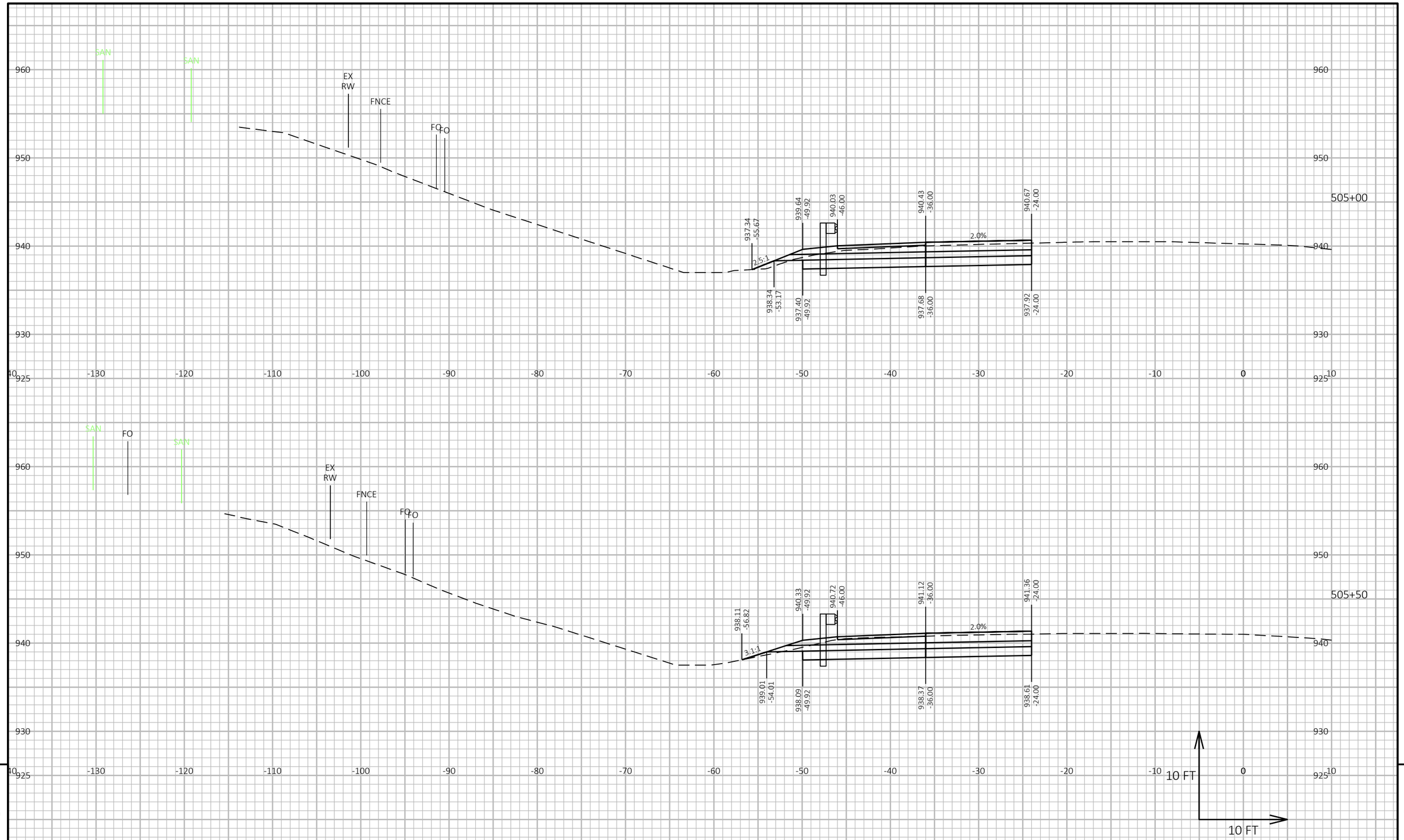
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 799	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 31 WB

PLOT DATE : 7/3/2024 2:05 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 800	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 32 WB

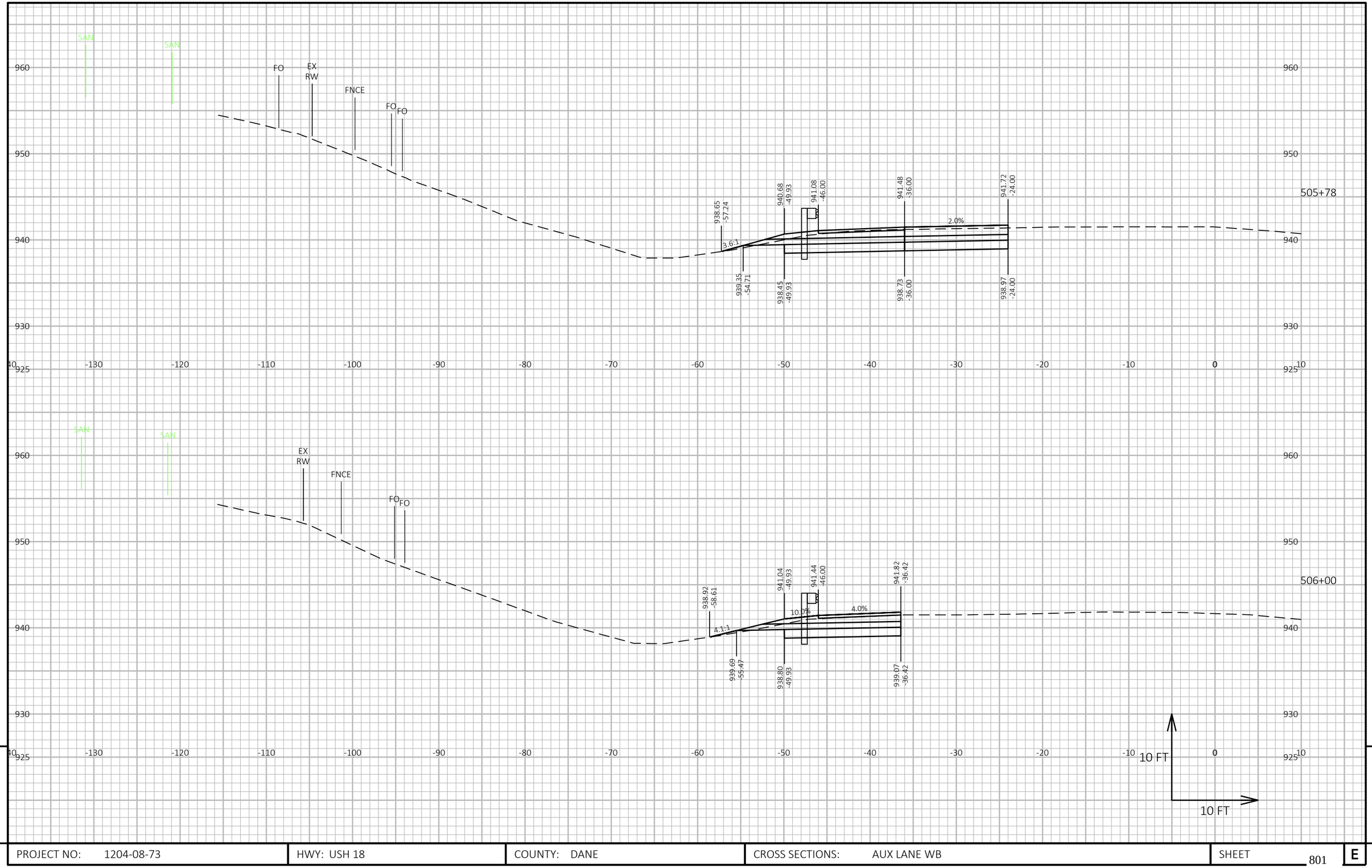
PLOT DATE : 7/3/2024 2:05 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

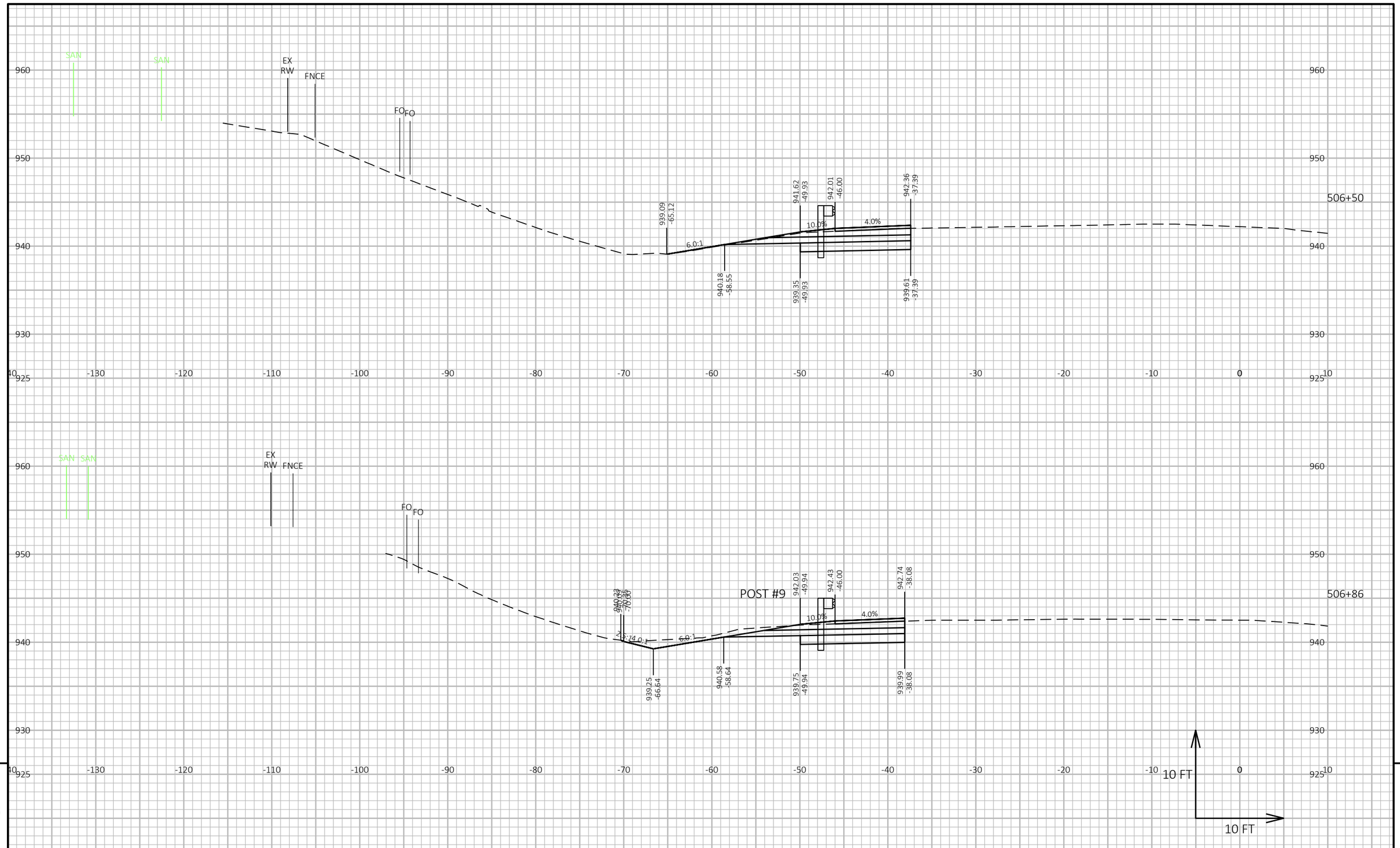


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 801	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 33 WB

PLOT DATE : 7/3/2024 2:05 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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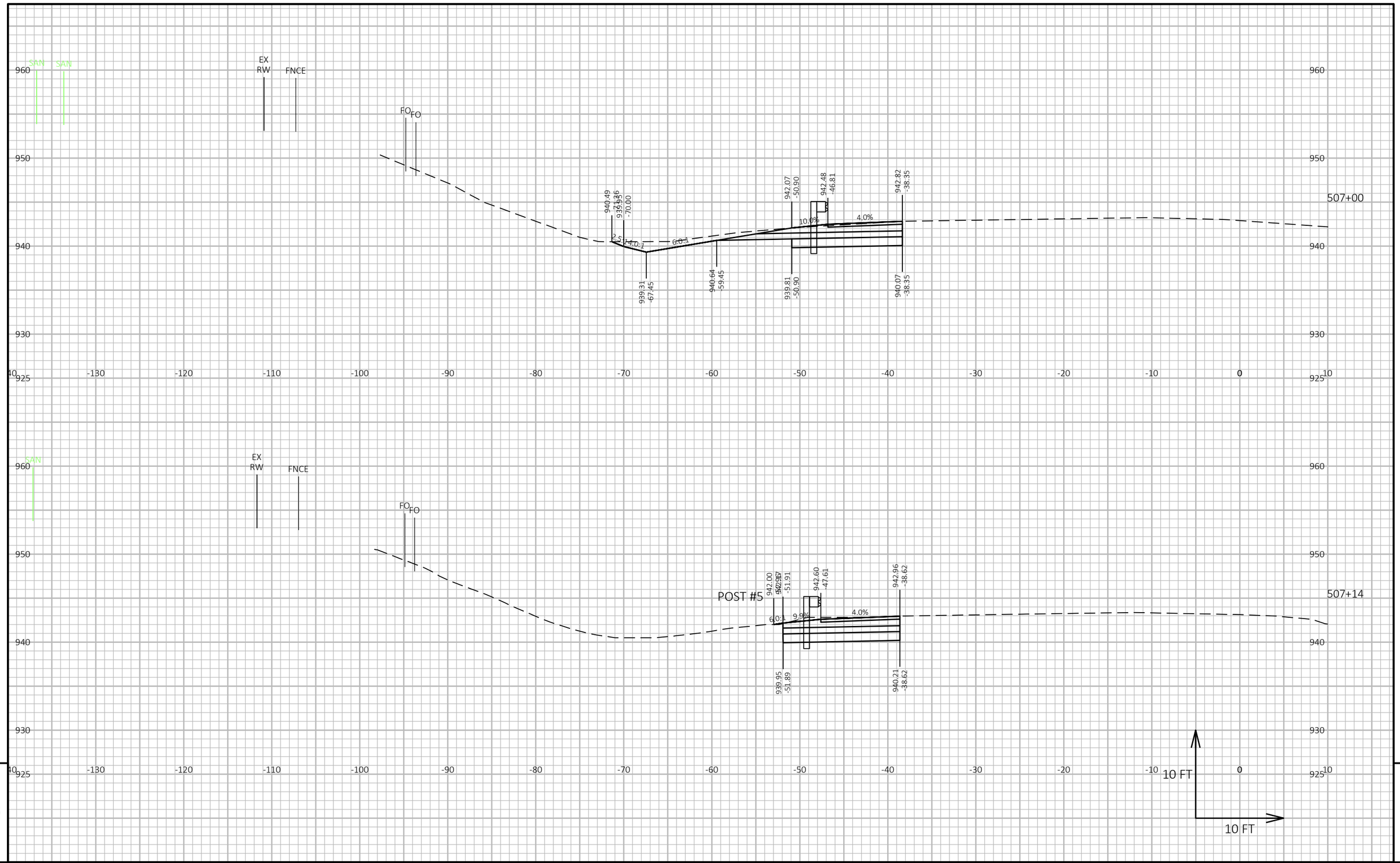
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 802	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 34 WB

PLOT DATE : 7/3/2024 2:05 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

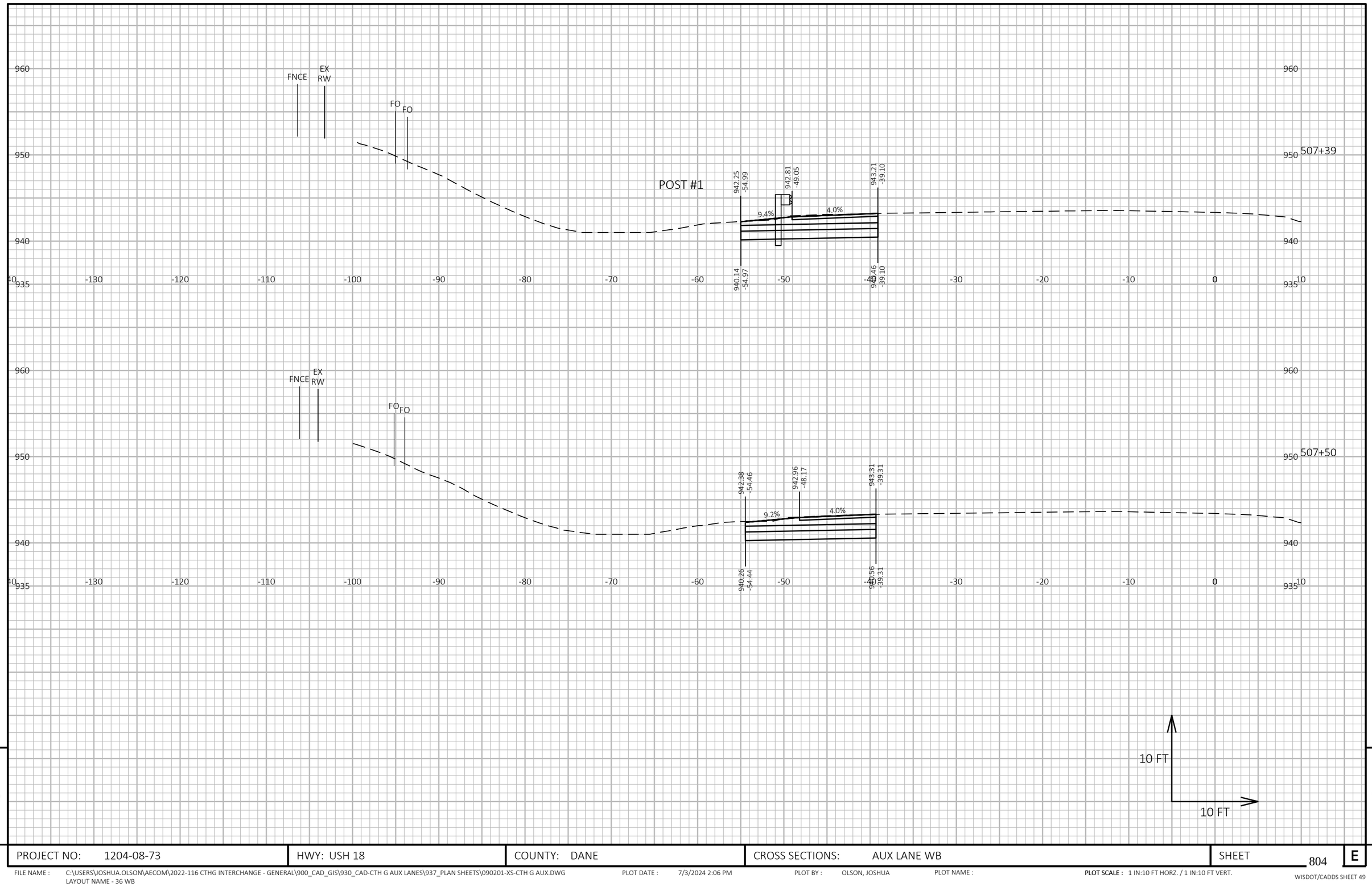


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 803 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 35 WB

PLOT DATE : 7/3/2024 2:06 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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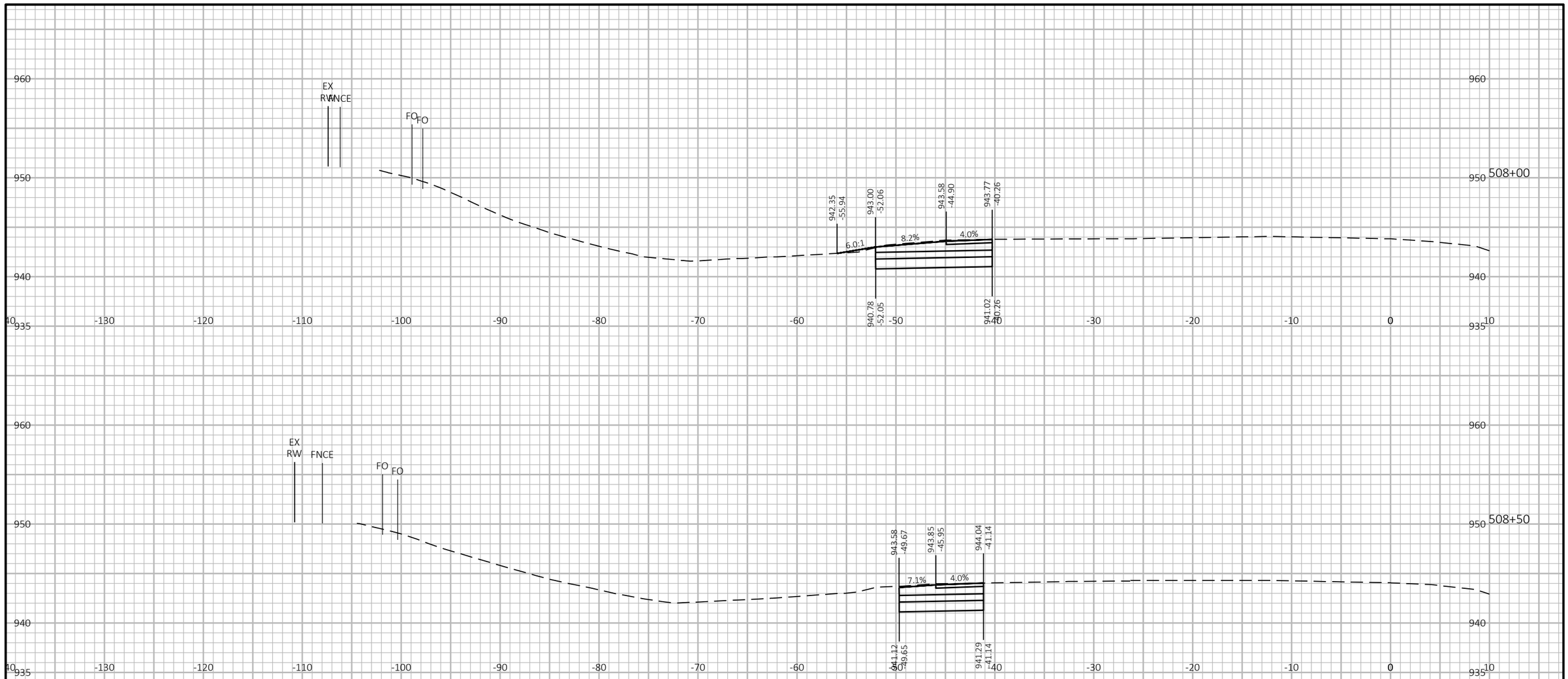
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 804	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 36 WB

PLOT DATE : 7/3/2024 2:06 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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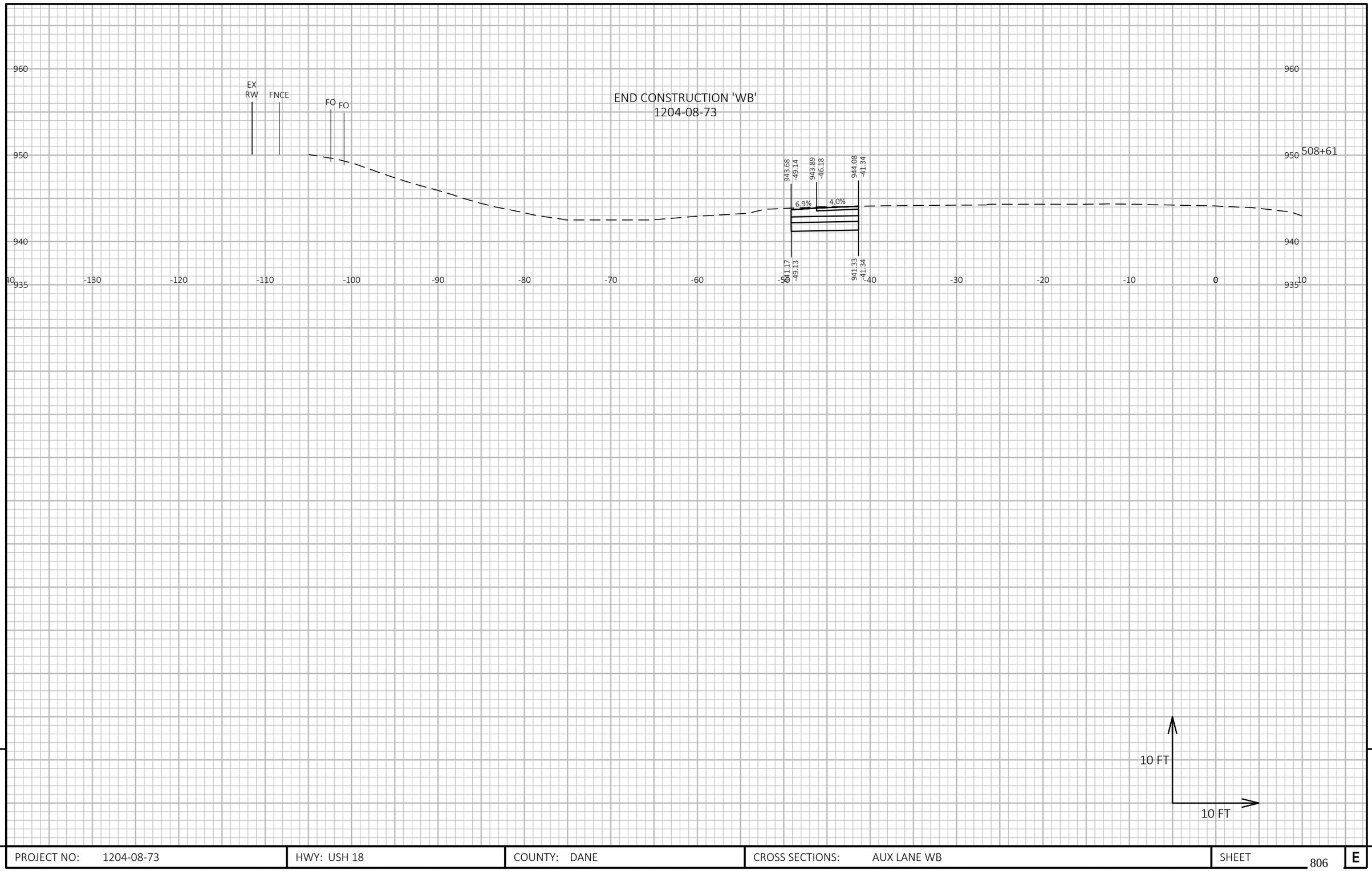
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 805	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 37 WB
PLOT DATE : 7/3/2024 2:06 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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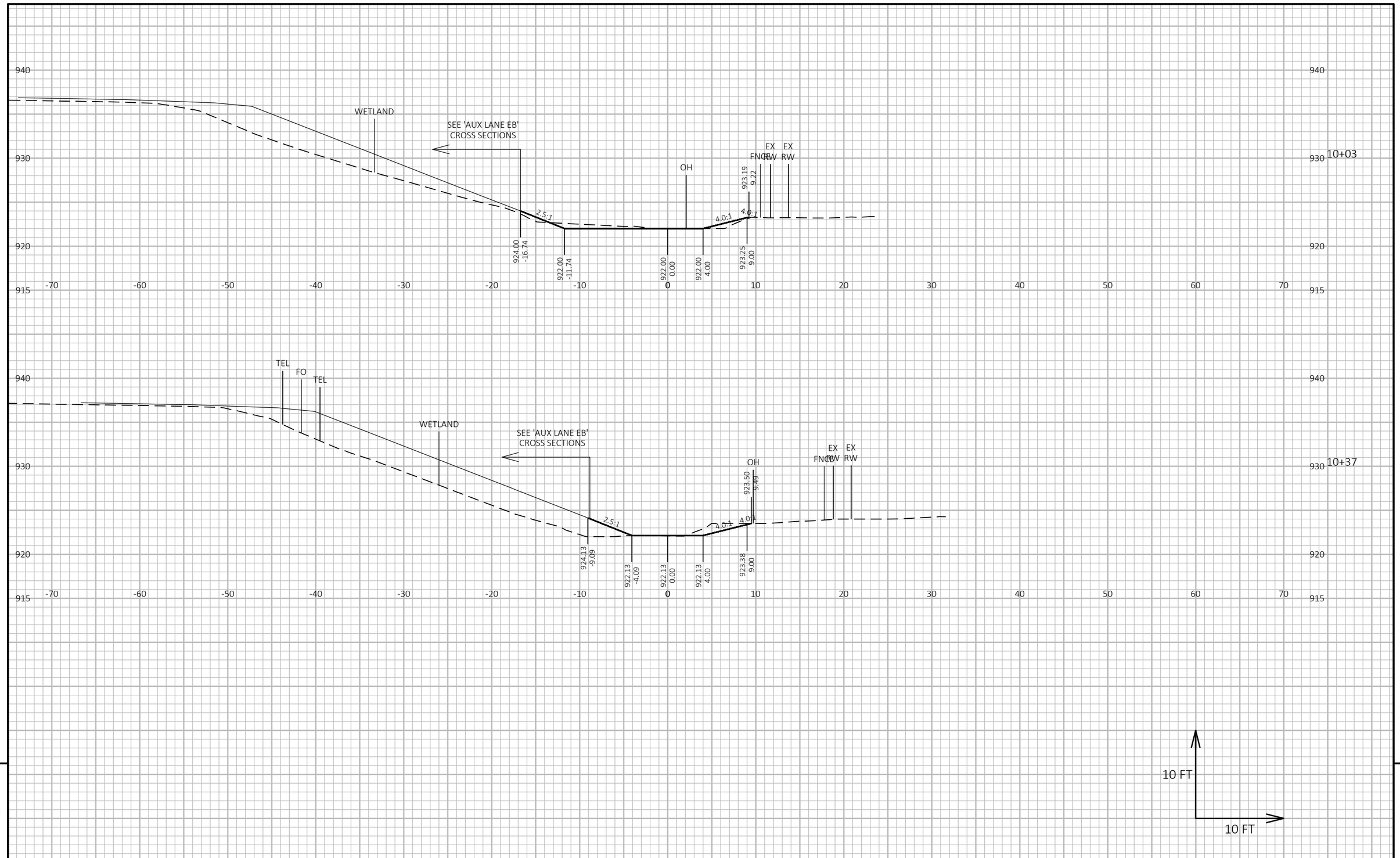
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE WB	SHEET 806	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - 38 WB

PLOT DATE : 7/3/2024 2:06 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

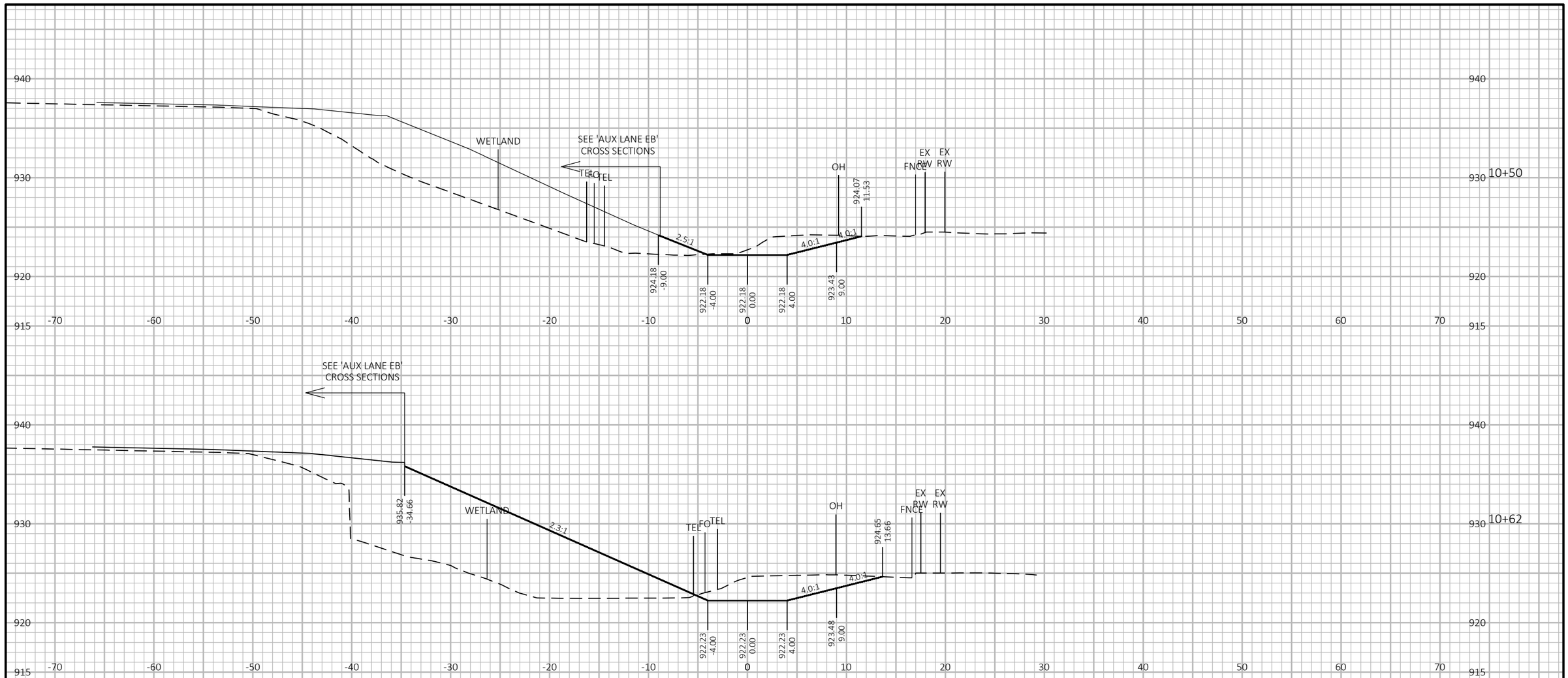


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: SPECIAL DITCH	SHEET 807	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - Ditch-1

PLOT DATE : 7/23/2024 11:57 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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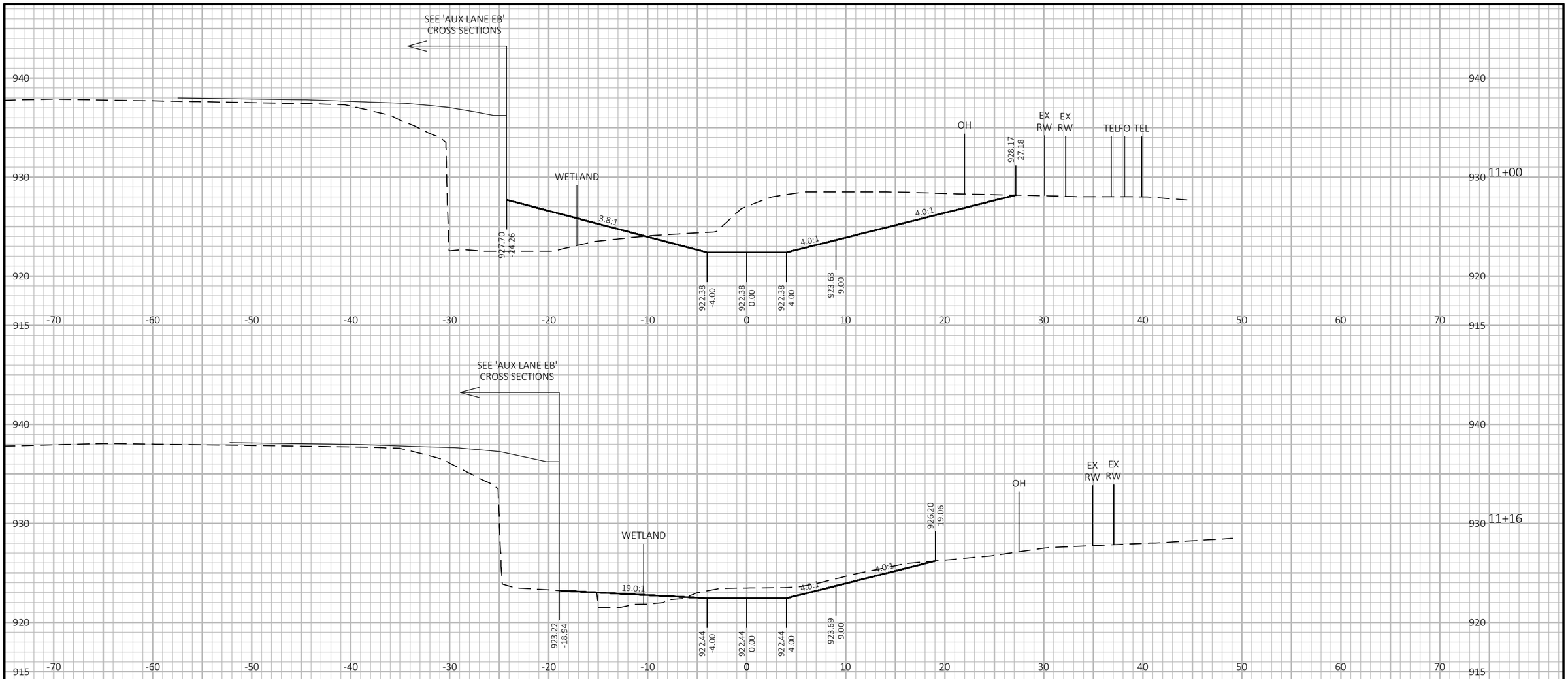
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: SPECIAL DITCH	SHEET 808	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - Ditch-2

PLOT DATE : 7/23/2024 11:57 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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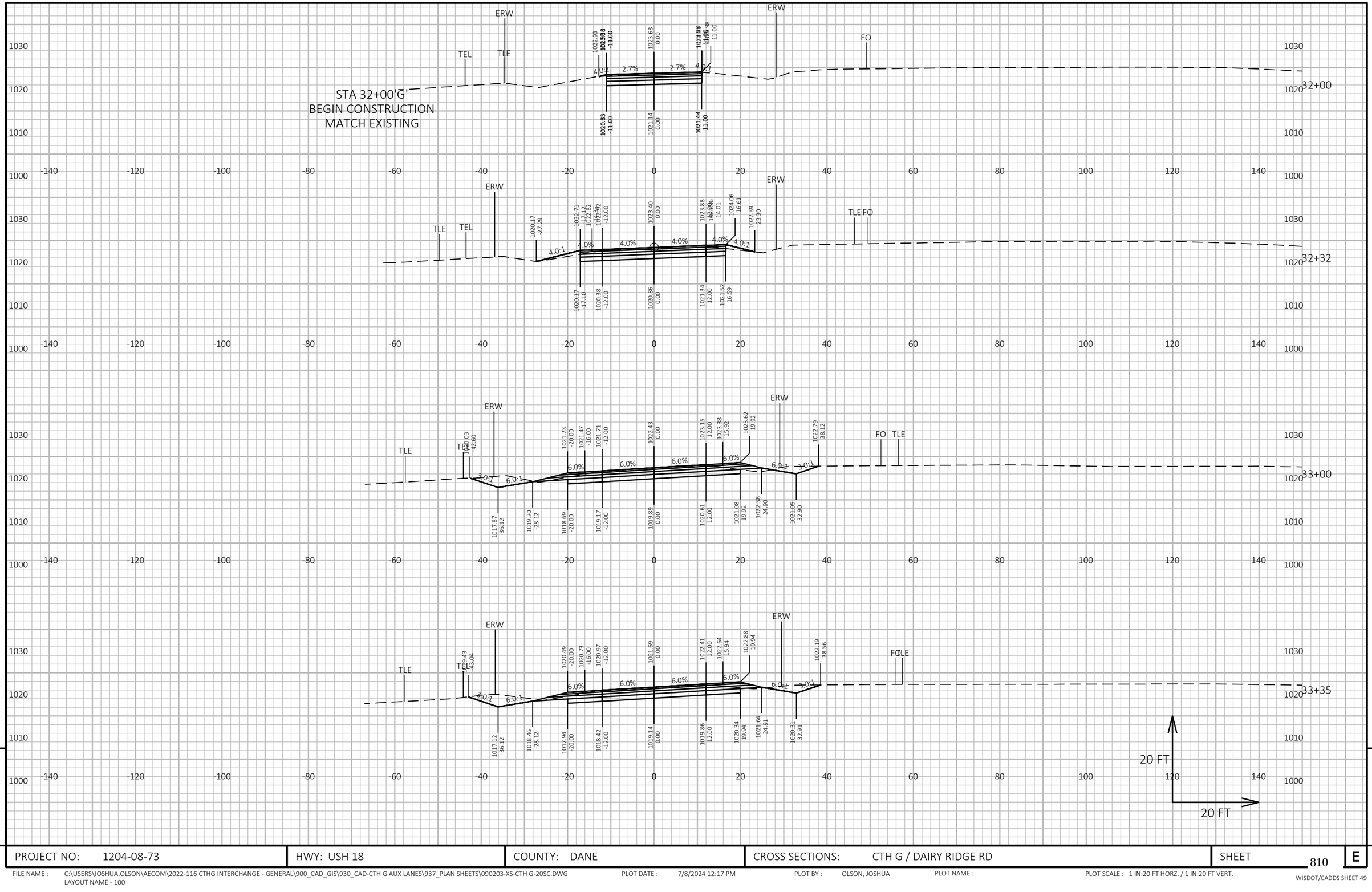
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: SPECIAL DITCH	SHEET 809	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090201-XS-CTH G AUX.DWG
LAYOUT NAME - Ditch-3

PLOT DATE : 7/23/2024 11:57 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

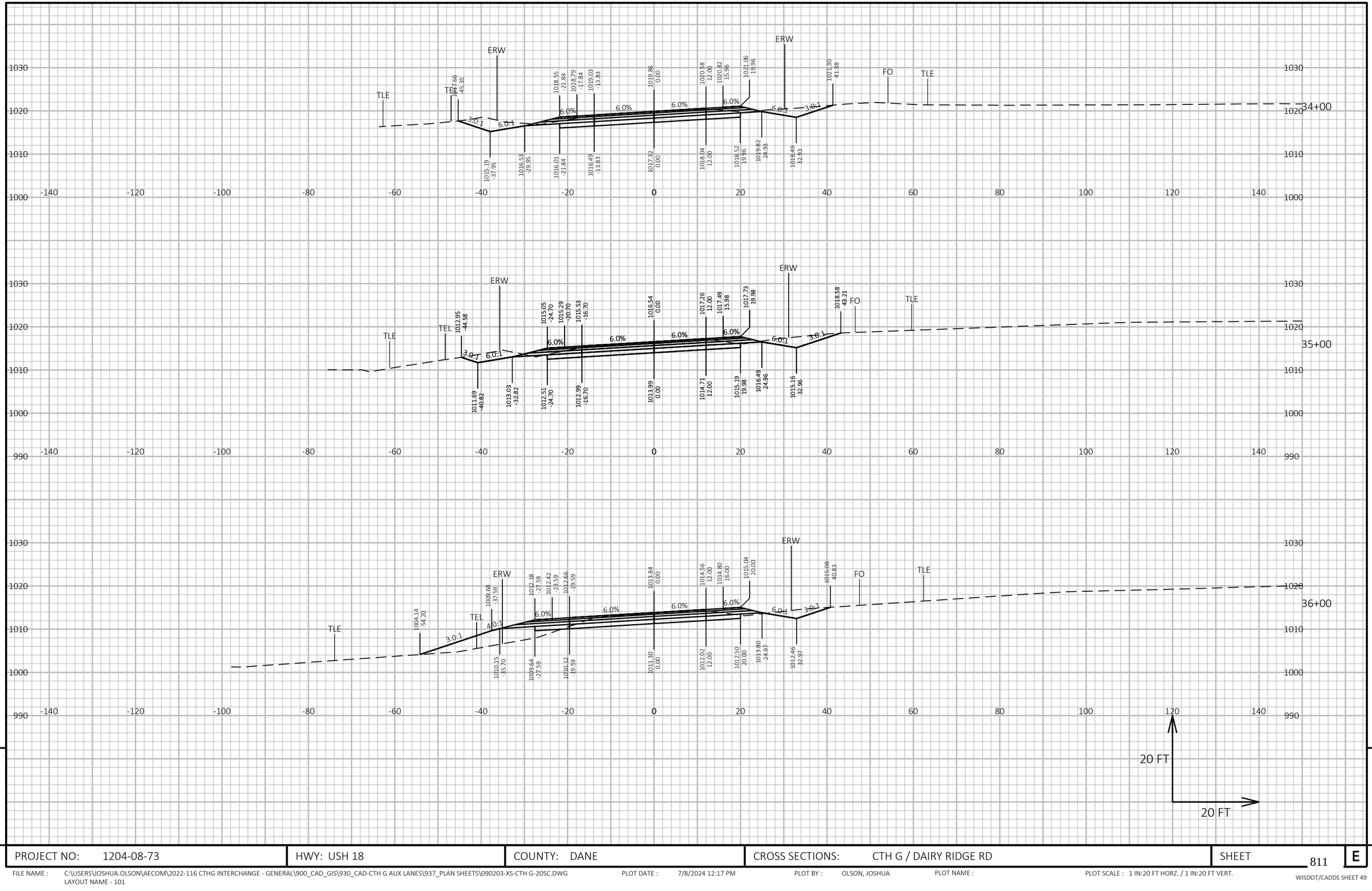
WISDOT/CADDS SHEET 49

STA 32+00 'G'
BEGIN CONSTRUCTION
MATCH EXISTING



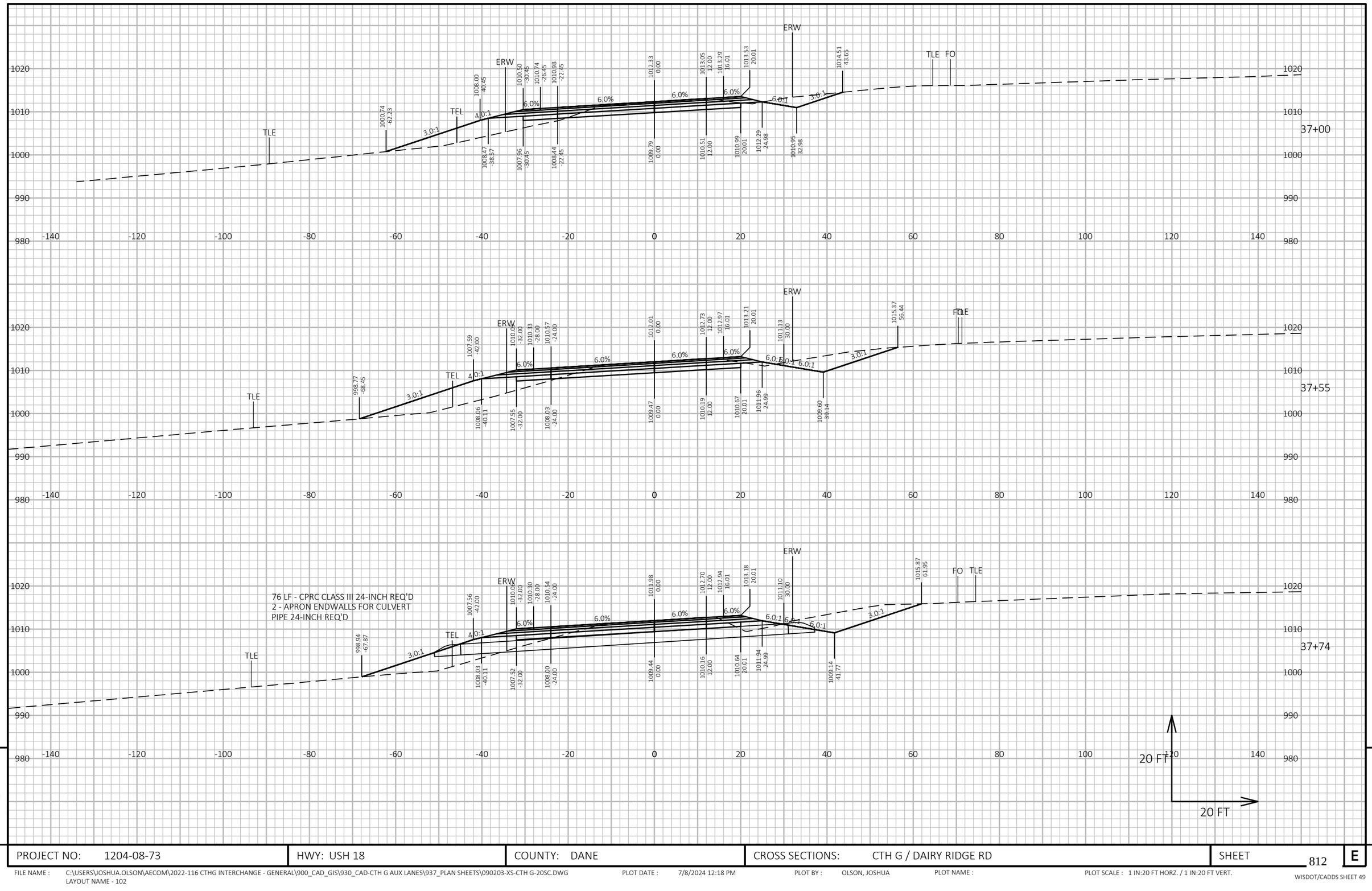
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 810	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 100
PLOT DATE : 7/8/2024 12:17 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 811 E

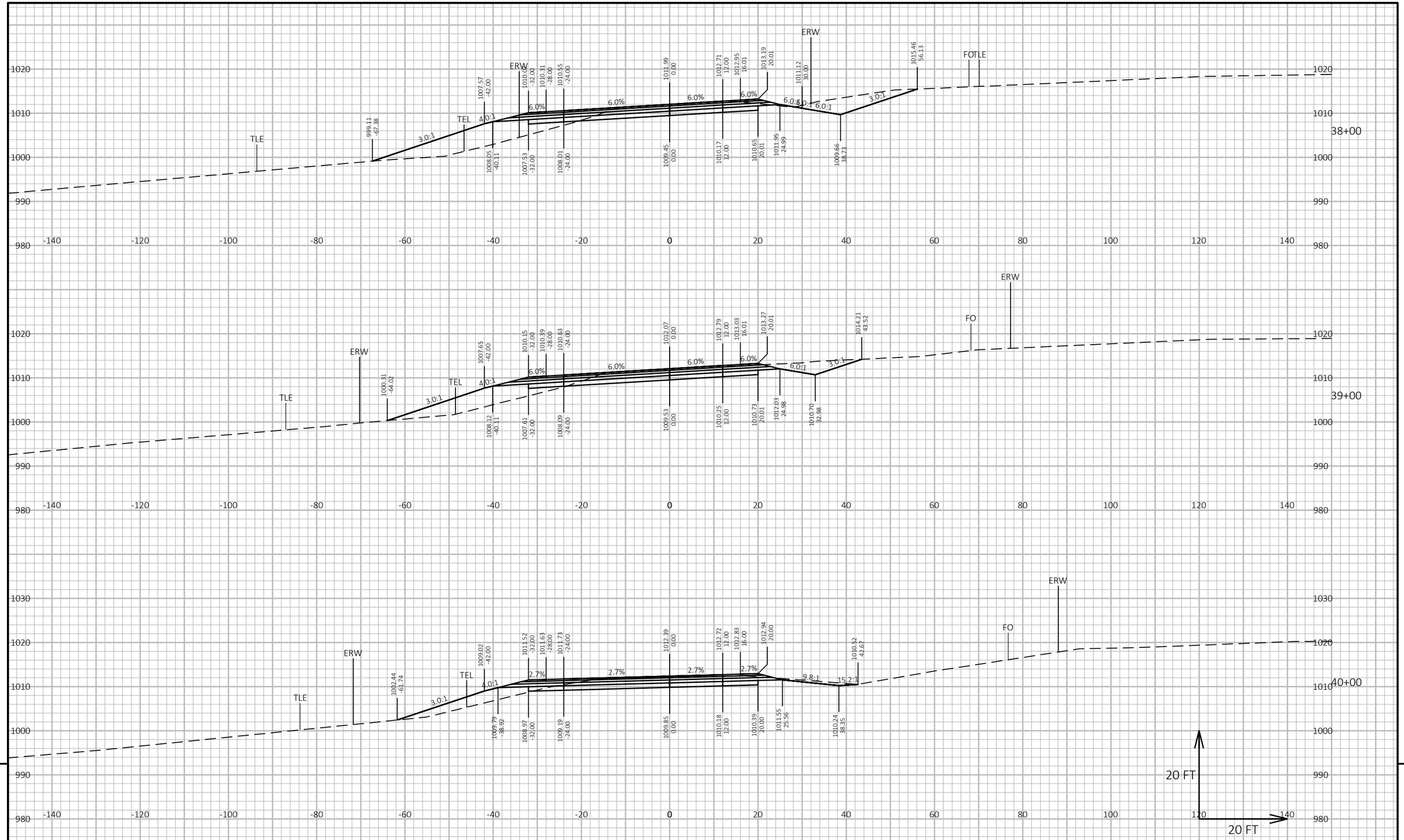
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 101
PLOT DATE : 7/8/2024 12:17 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 812	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 102
PLOT DATE : 7/8/2024 12:18 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



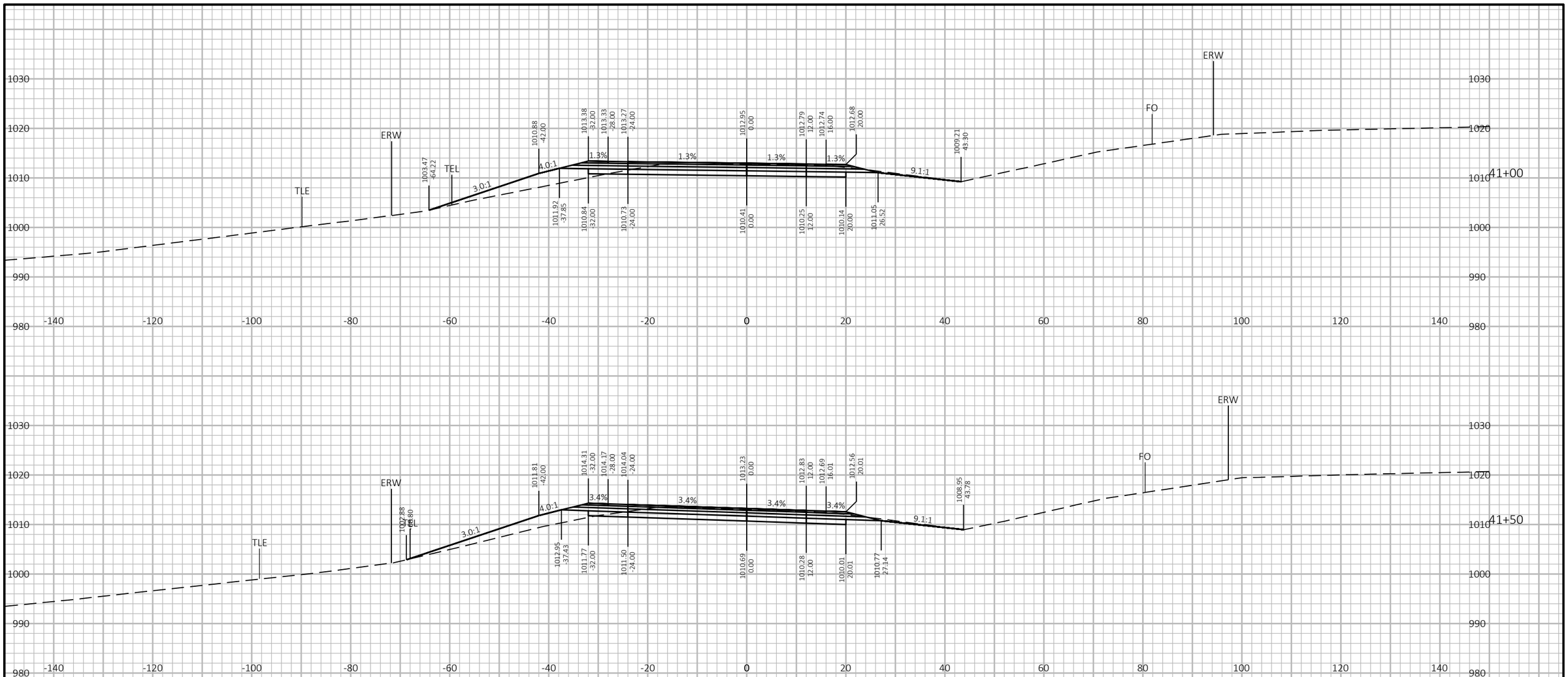
9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 813	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 103

PLOT DATE : 7/8/2024 12:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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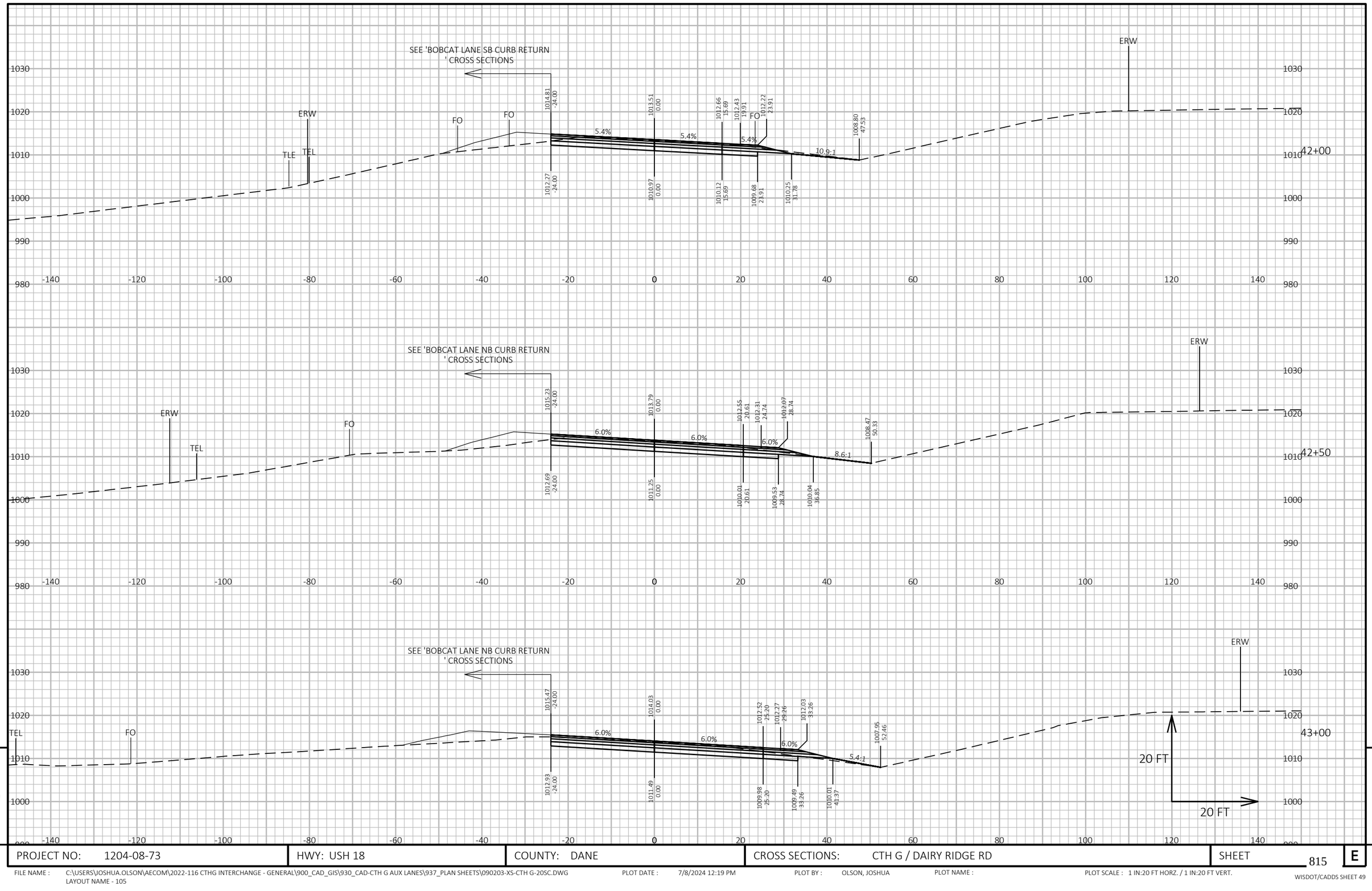
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 814	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 104

PLOT DATE : 7/8/2024 12:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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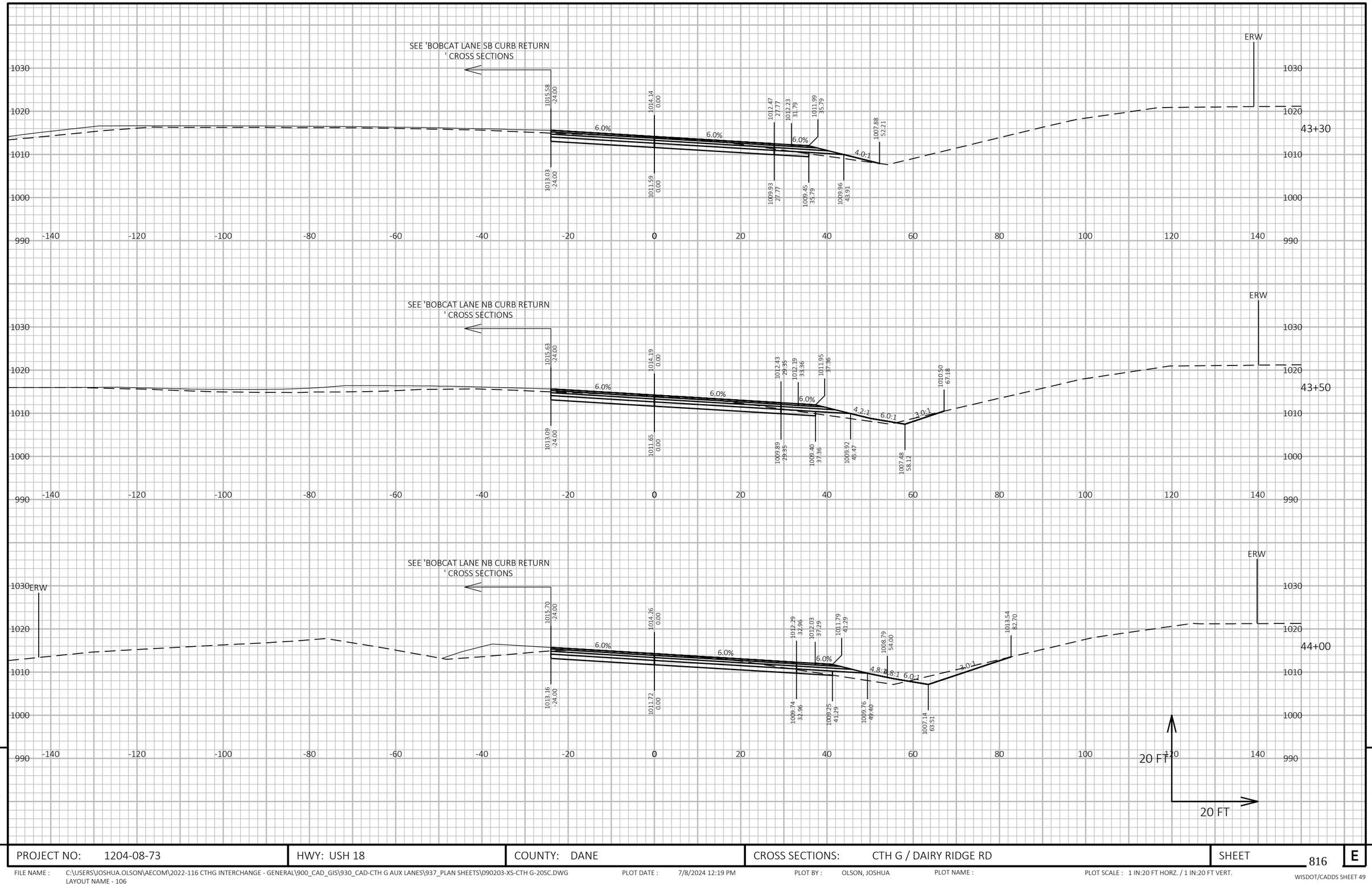
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 815	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 105
PLOT DATE : 7/8/2024 12:19 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



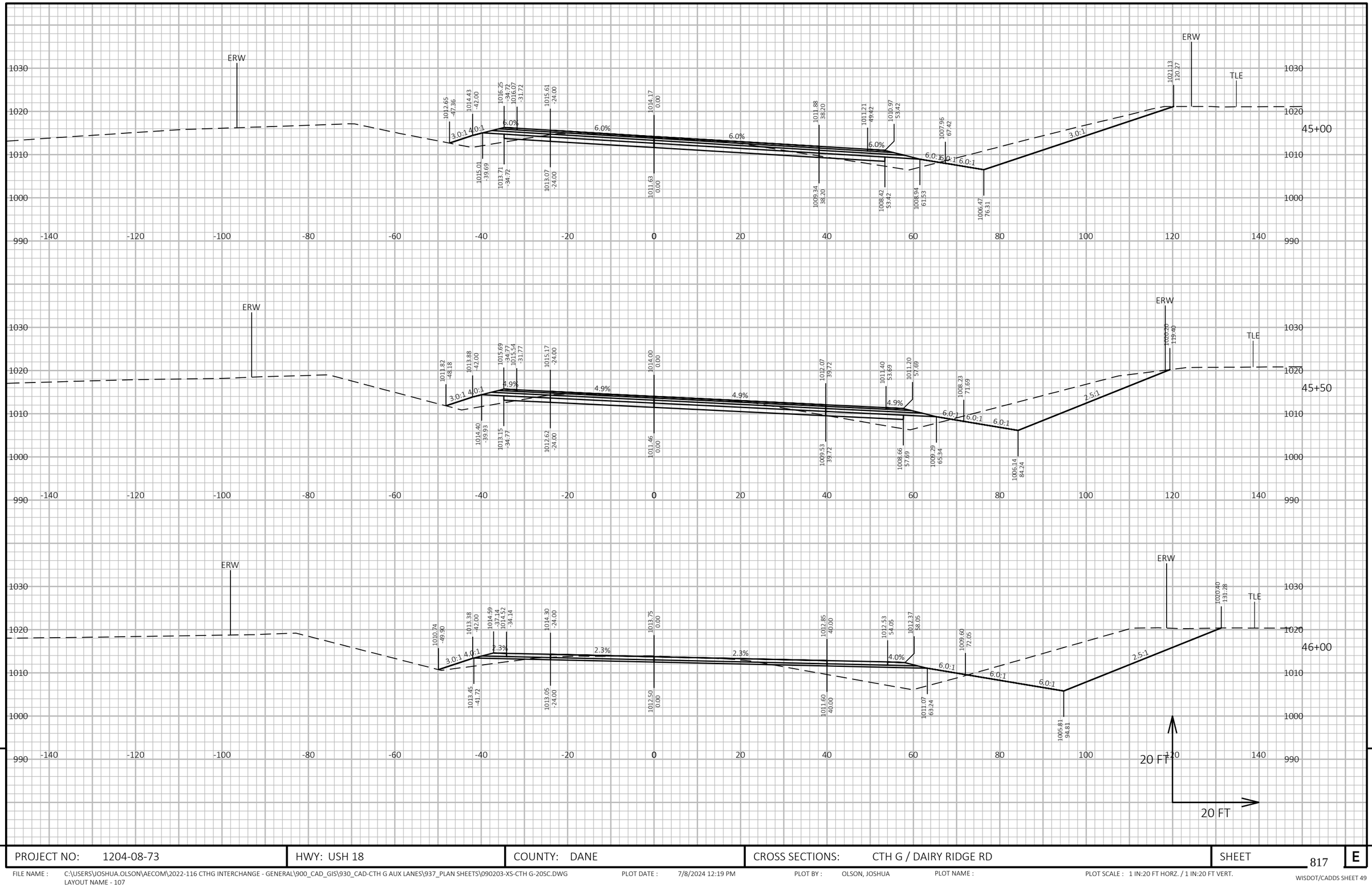
9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 816	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 106

PLOT DATE : 7/8/2024 12:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

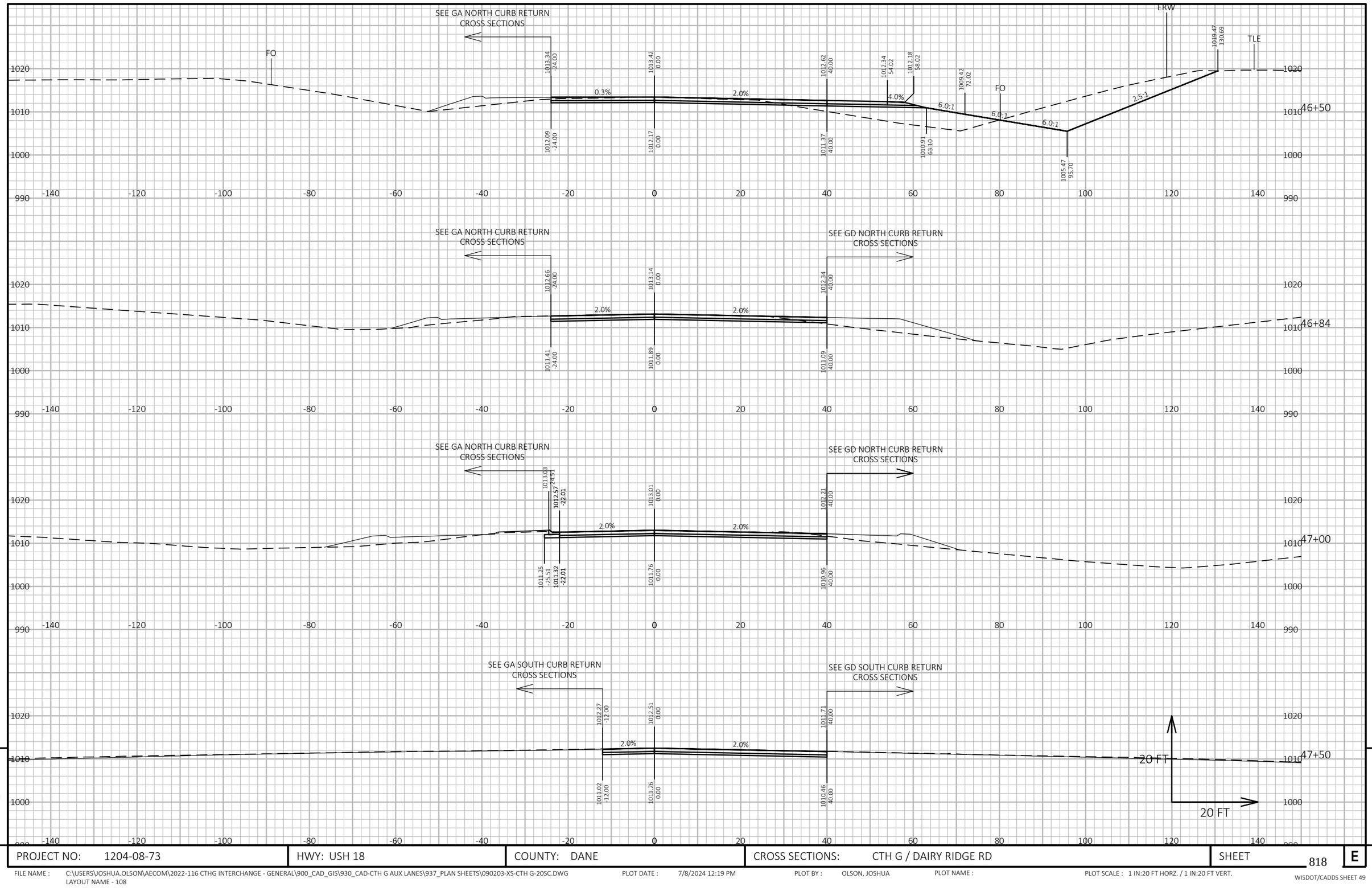


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 817	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 107

PLOT DATE : 7/8/2024 12:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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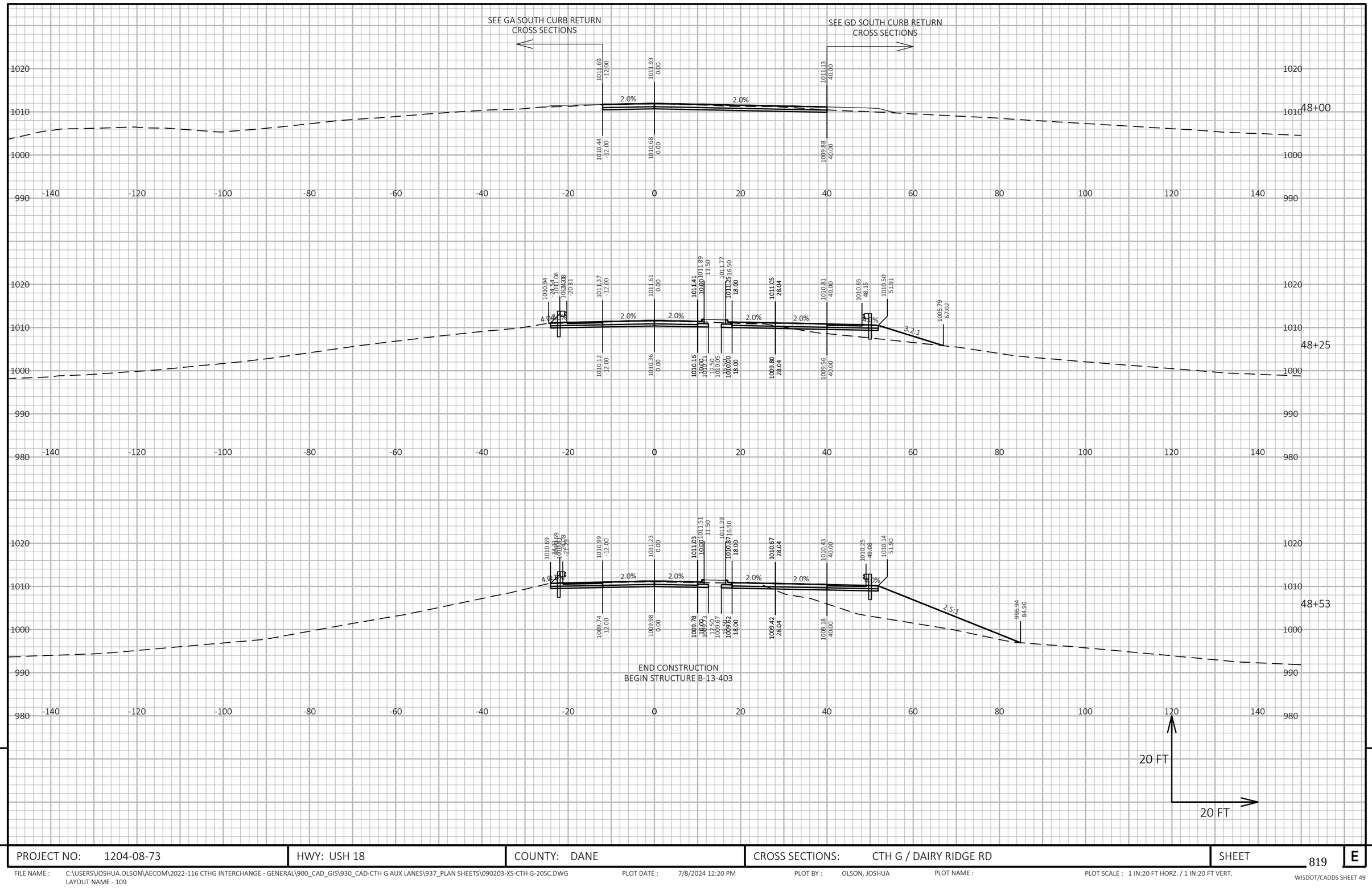
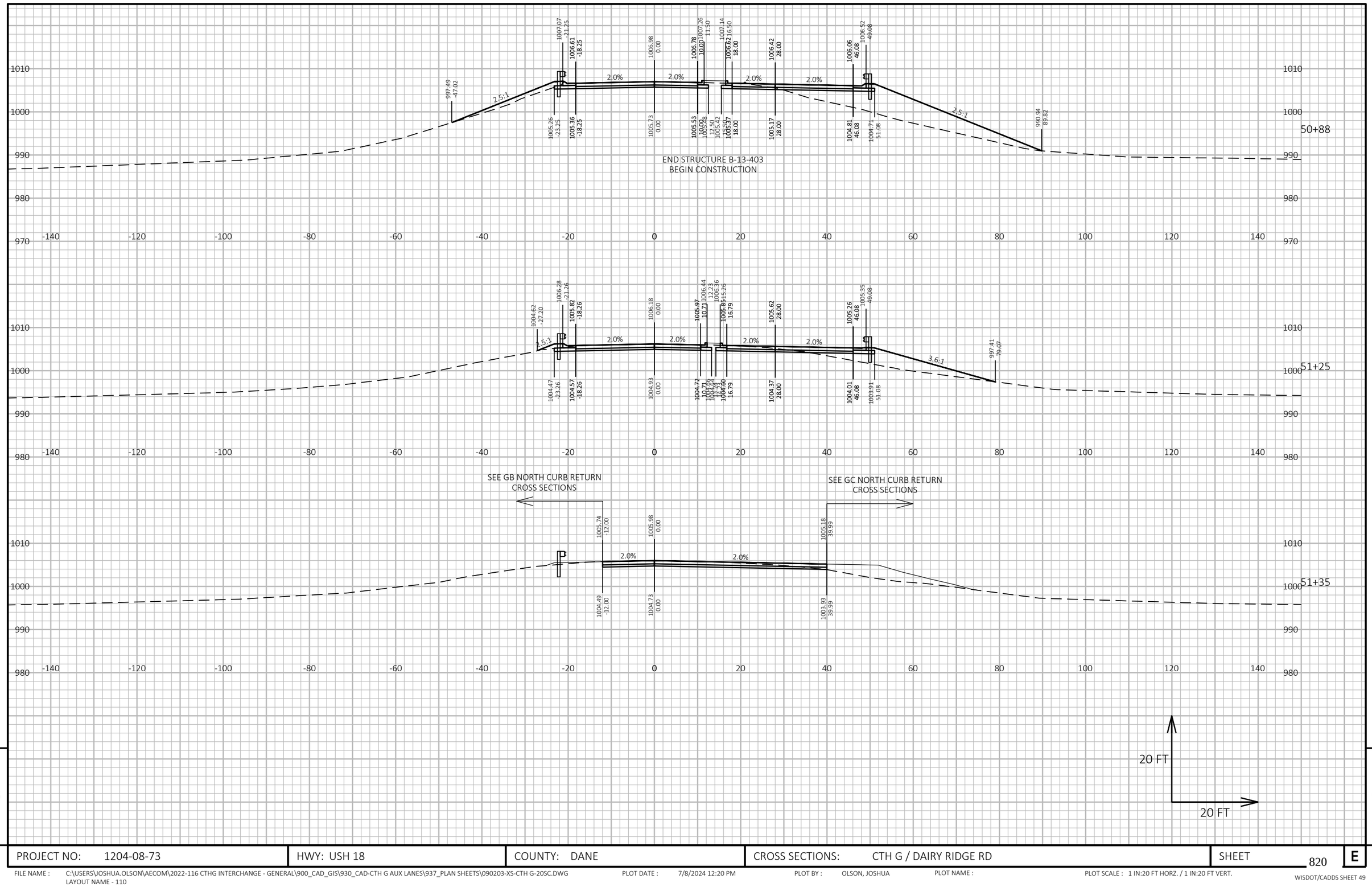
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 818	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 108
PLOT DATE : 7/8/2024 12:19 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 819 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 109
PLOT DATE : 7/8/2024 12:20 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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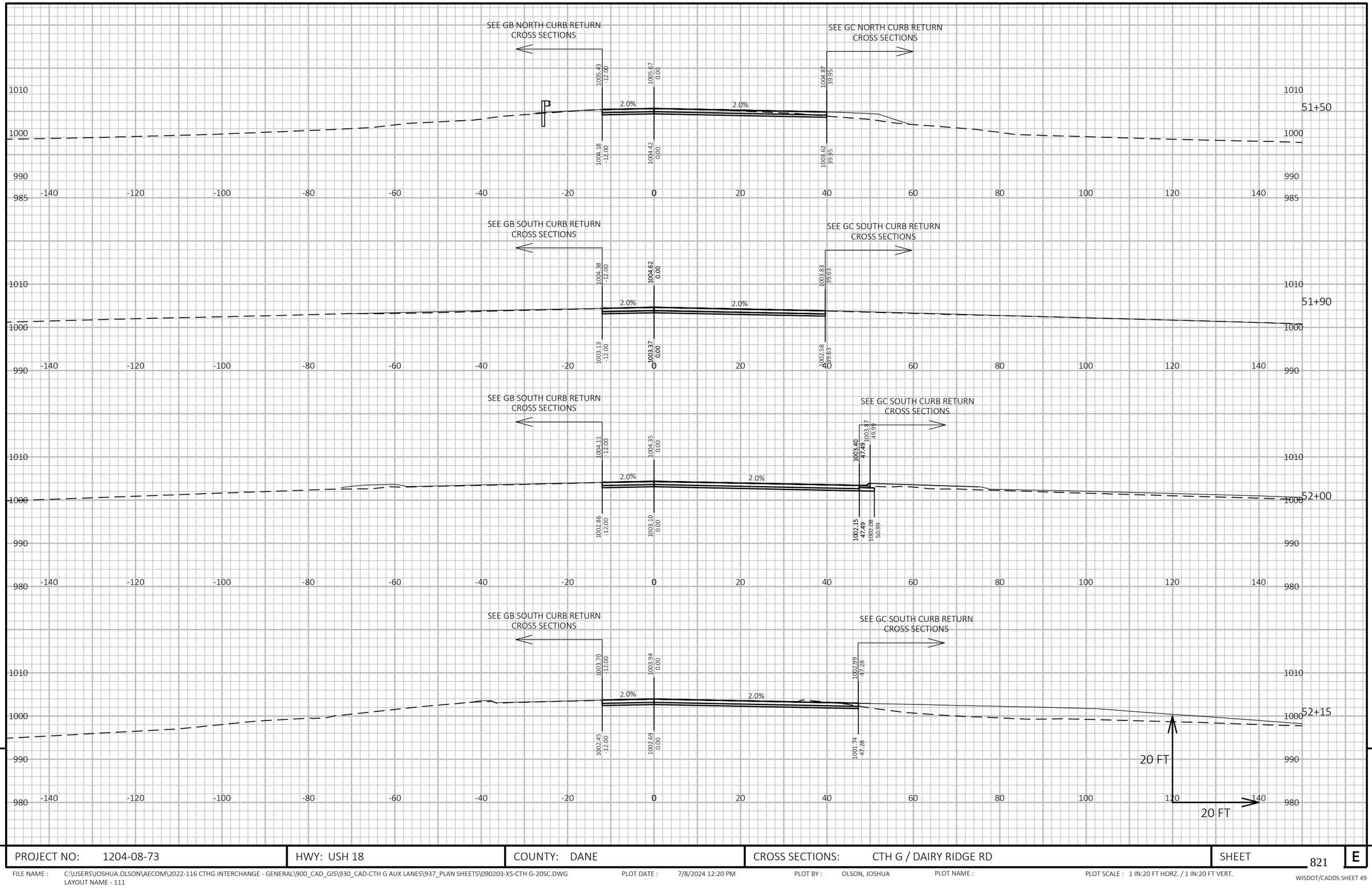
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 820	E

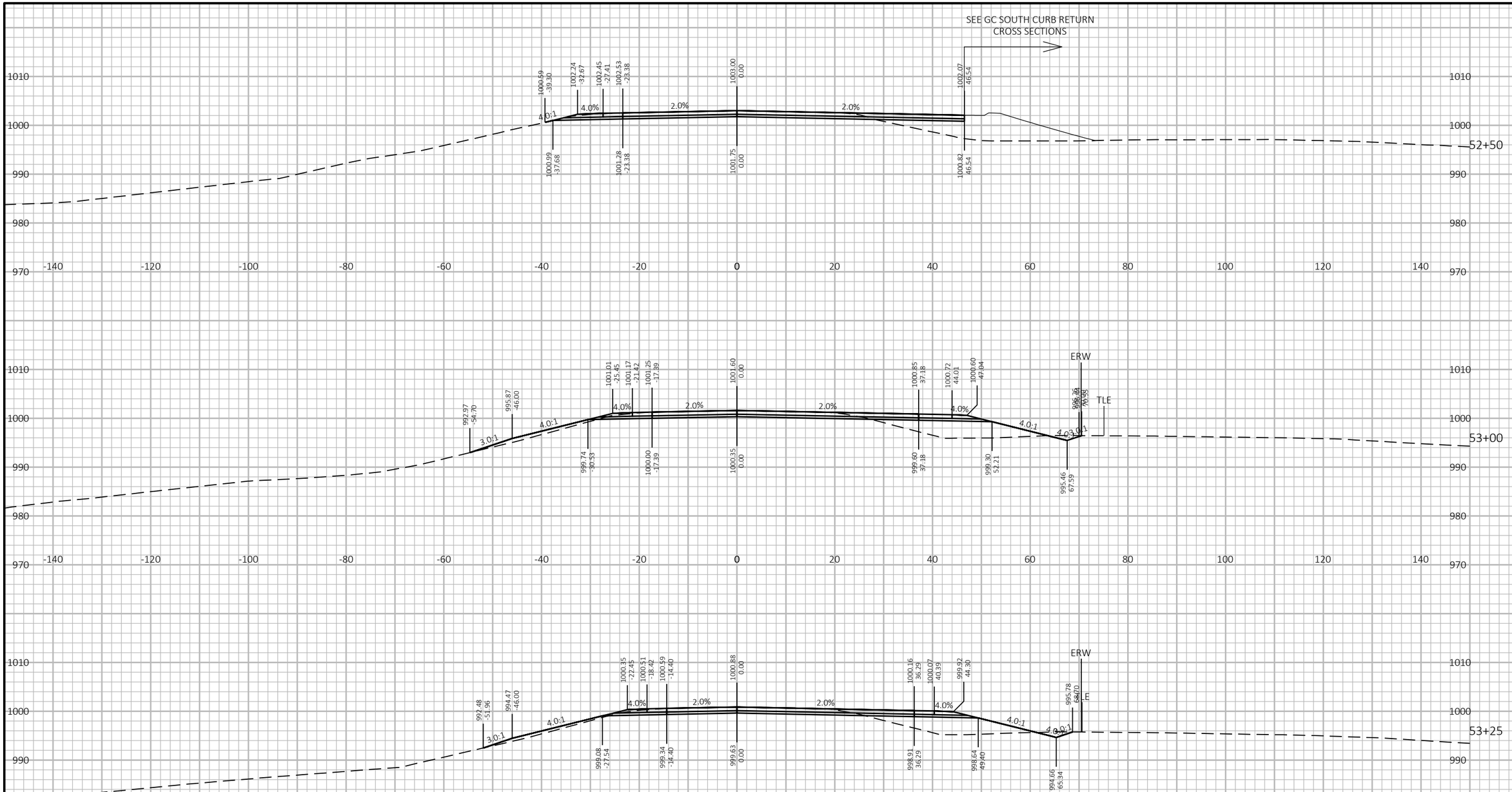
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 110
PLOT DATE : 7/8/2024 12:20 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 821	E

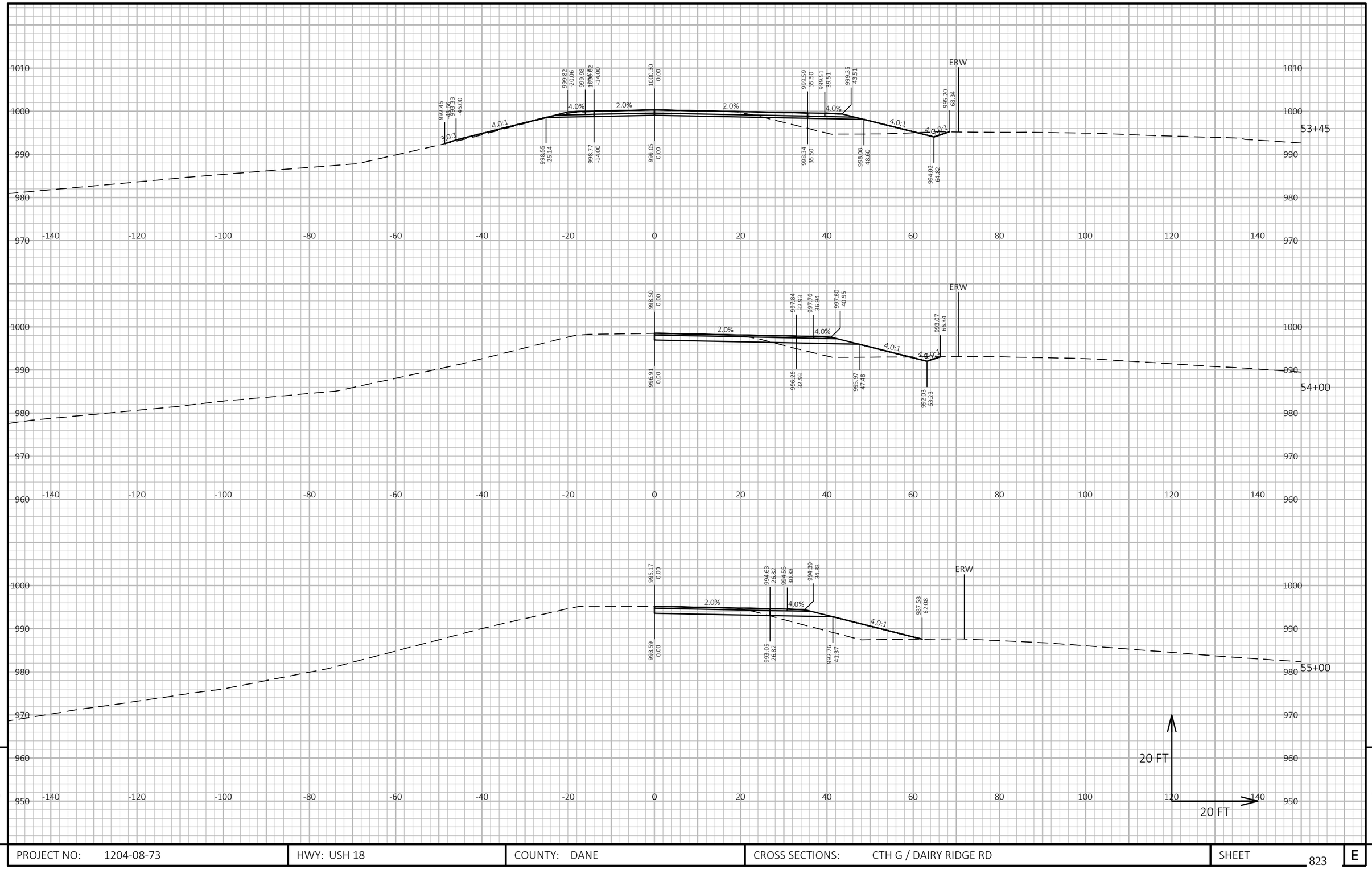
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 111
PLOT DATE : 7/8/2024 12:20 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

SEE GC SOUTH CURB RETURN
CROSS SECTIONS



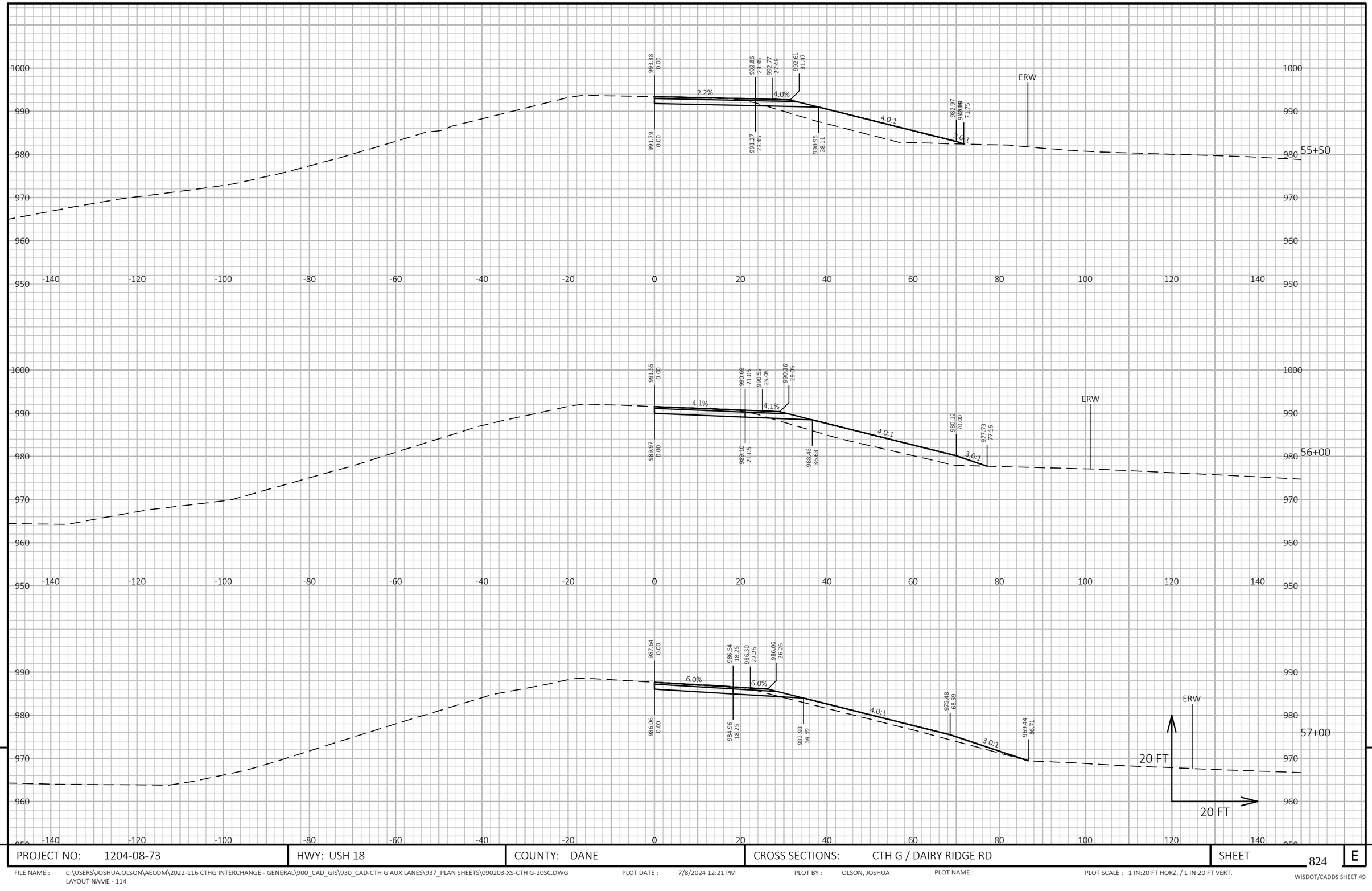
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 822	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 112
PLOT DATE : 7/8/2024 12:21 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 823	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 113
PLOT DATE : 7/8/2024 12:21 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

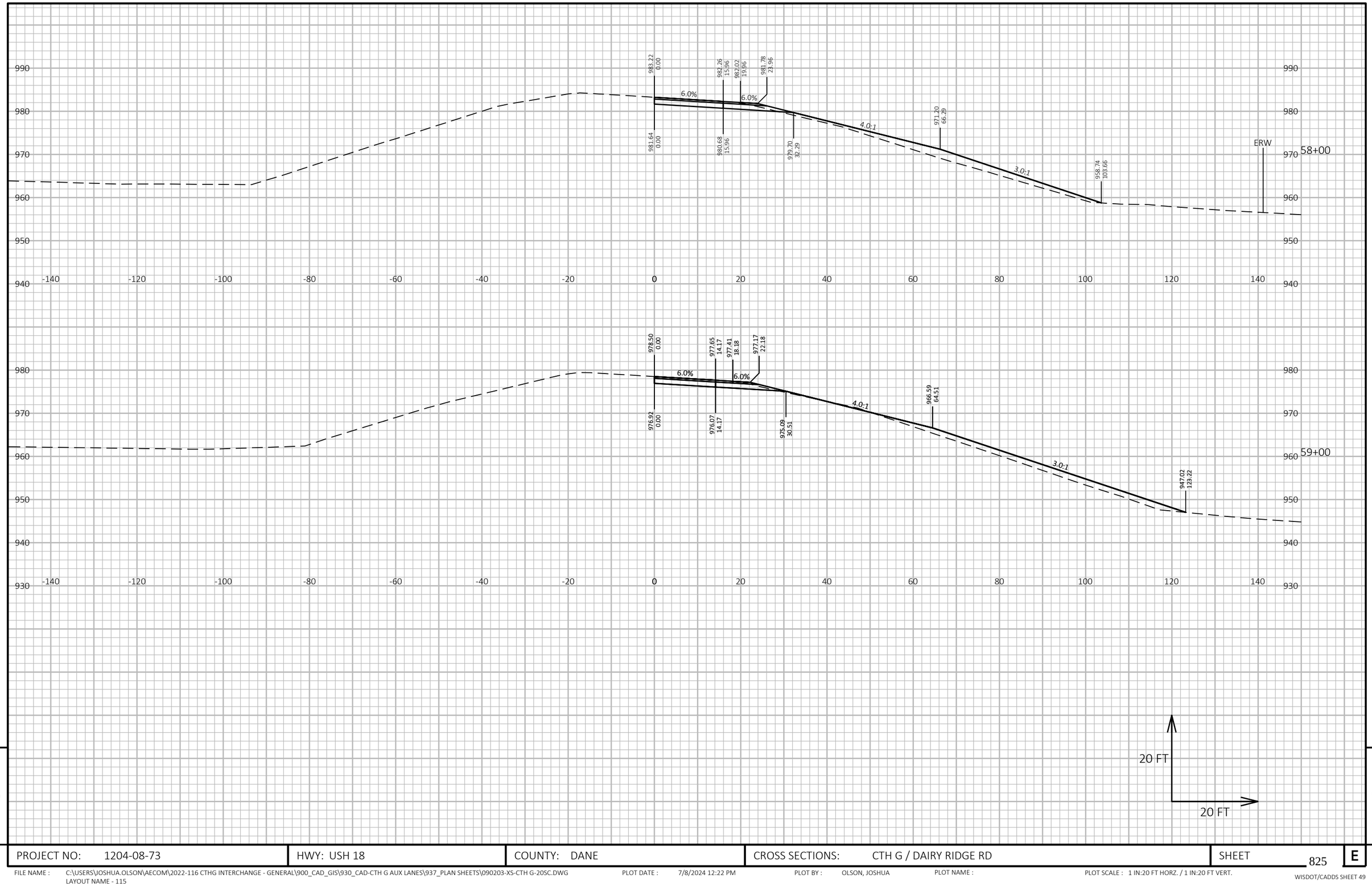


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 824	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 114

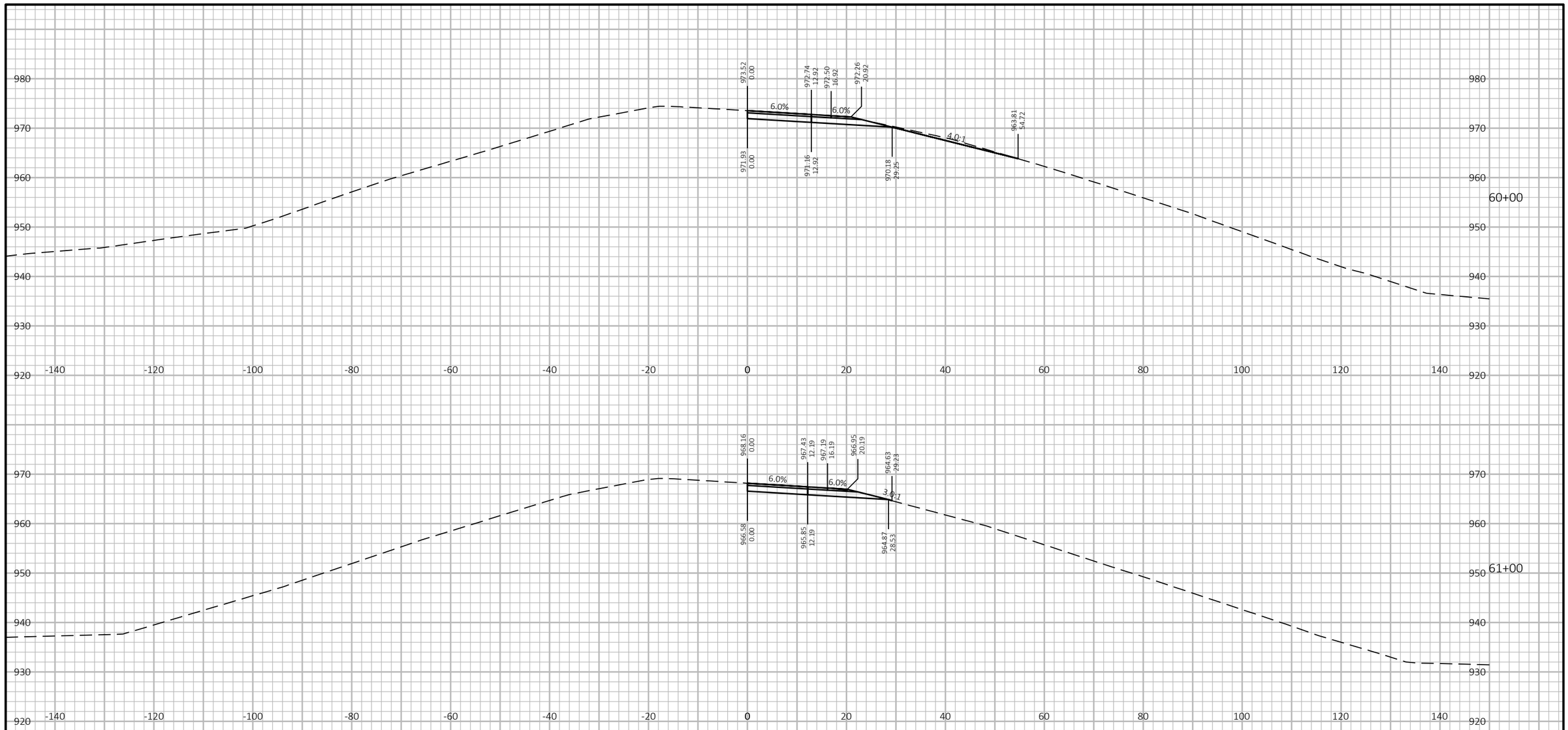
PLOT DATE : 7/8/2024 12:21 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 825 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 115
PLOT DATE : 7/8/2024 12:22 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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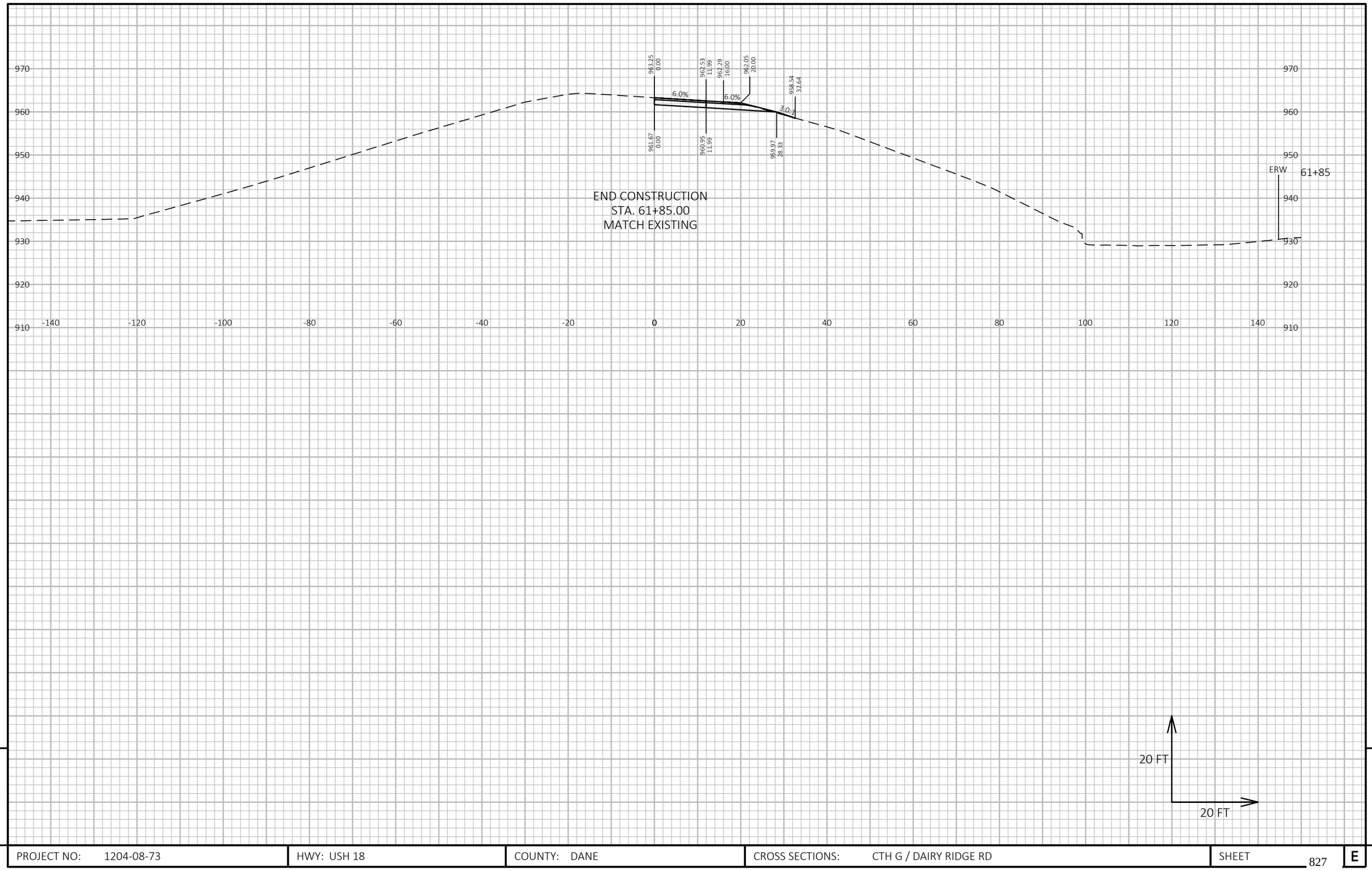
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 826	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 116

PLOT DATE : 7/8/2024 12:22 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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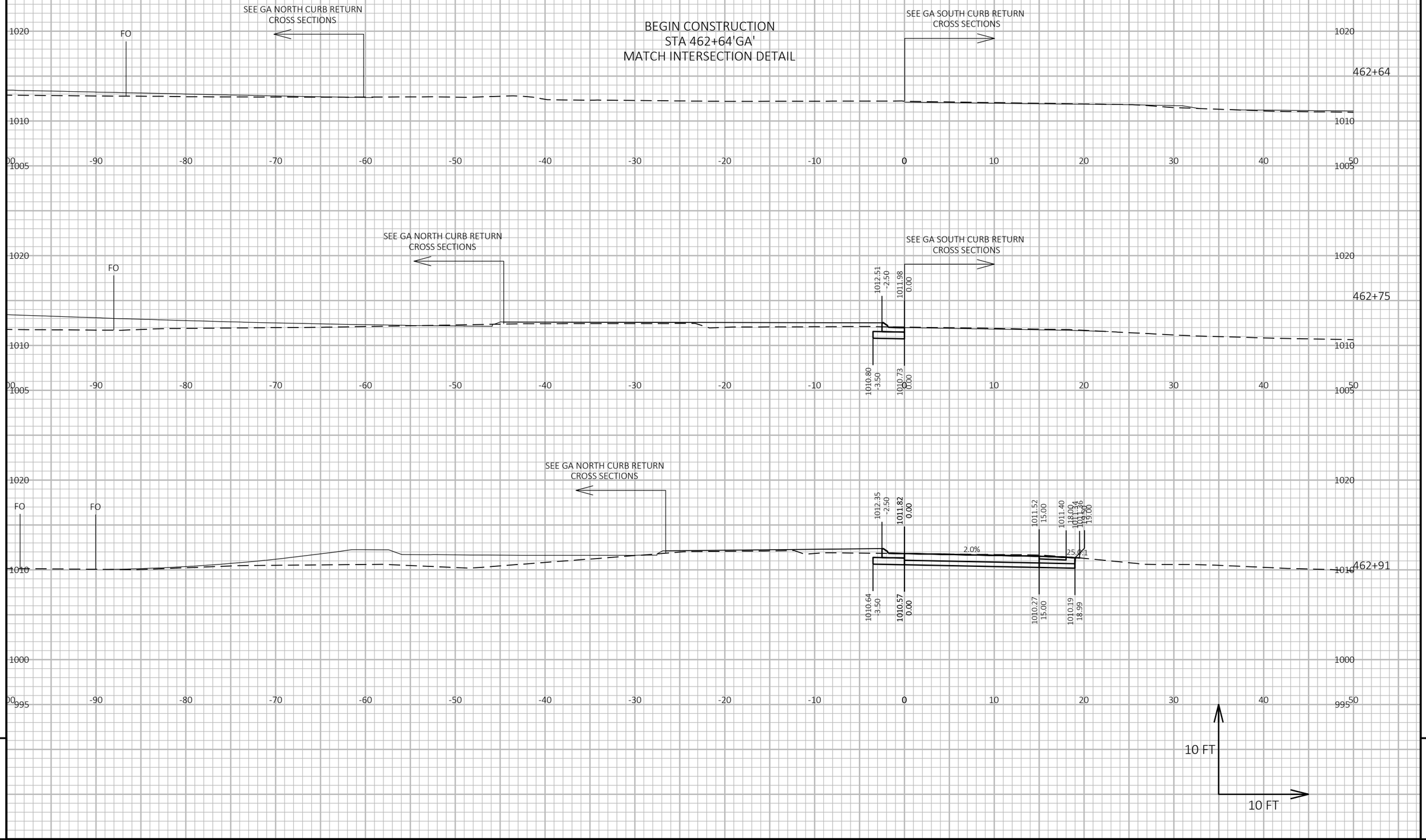
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: CTH G / DAIRY RIDGE RD	SHEET 827	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090203-XS-CTH G-20SC.DWG
LAYOUT NAME - 117

PLOT DATE : 7/8/2024 12:22 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN CONSTRUCTION
STA 462+64'GA'
MATCH INTERSECTION DETAIL

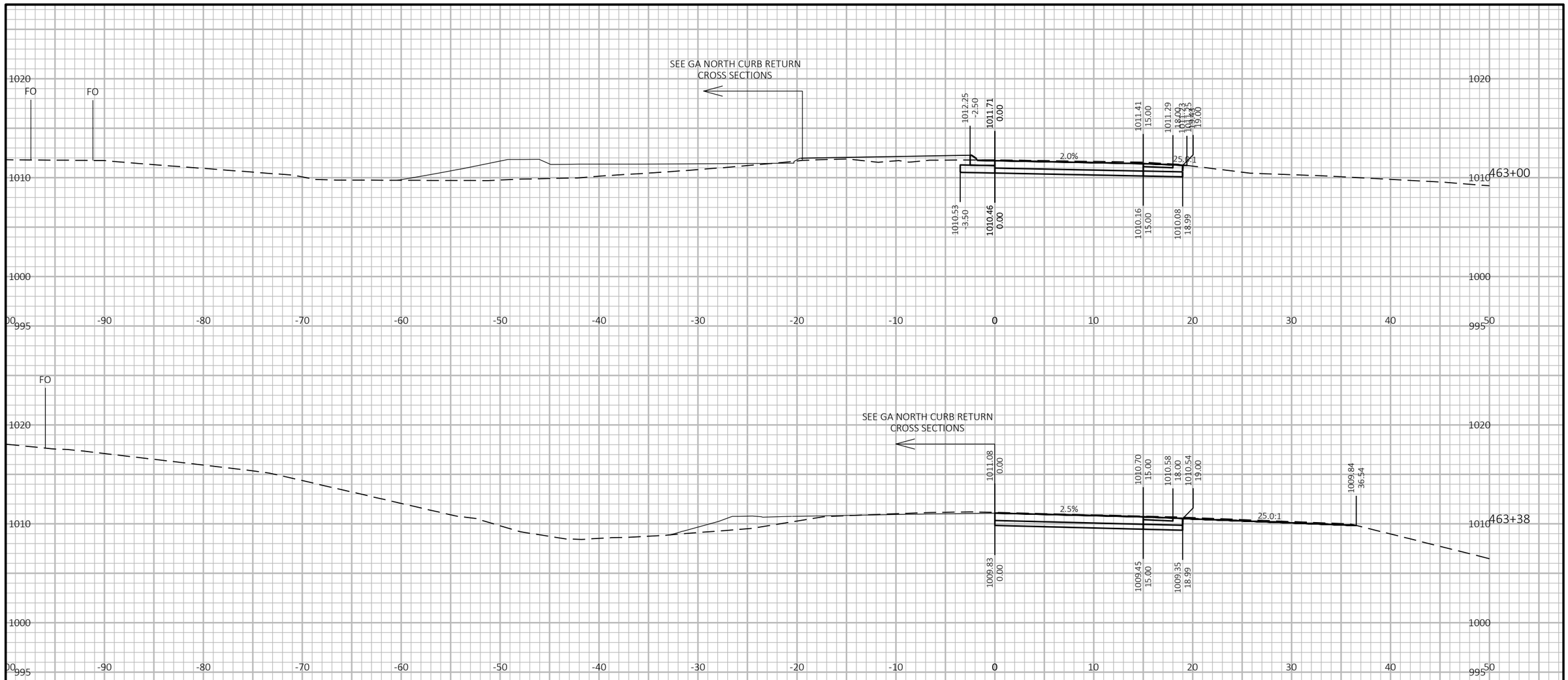


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 828 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 10

PLOT DATE : 7/8/2024 1:40 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

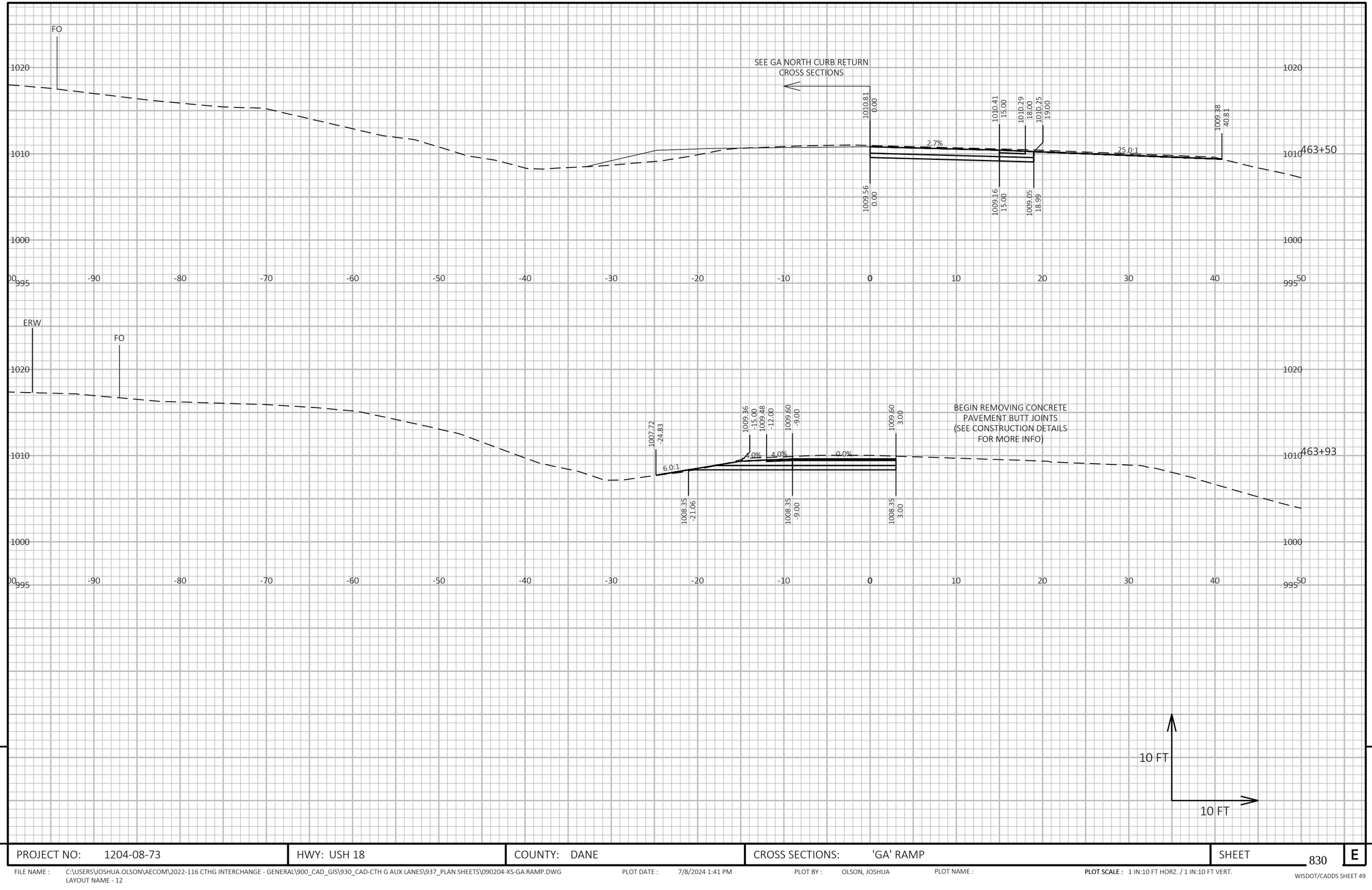


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 829	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 11

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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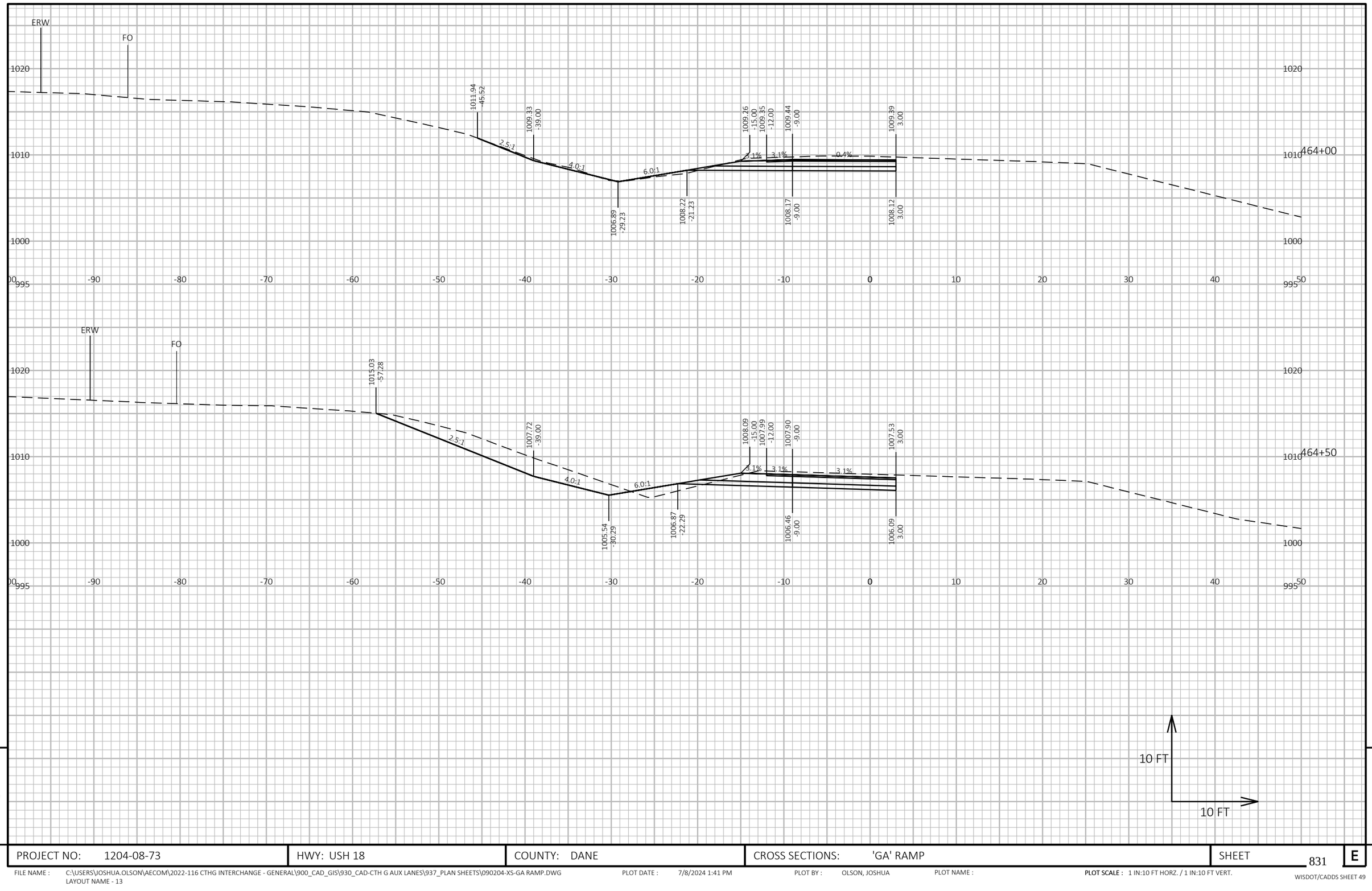
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 830	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 12

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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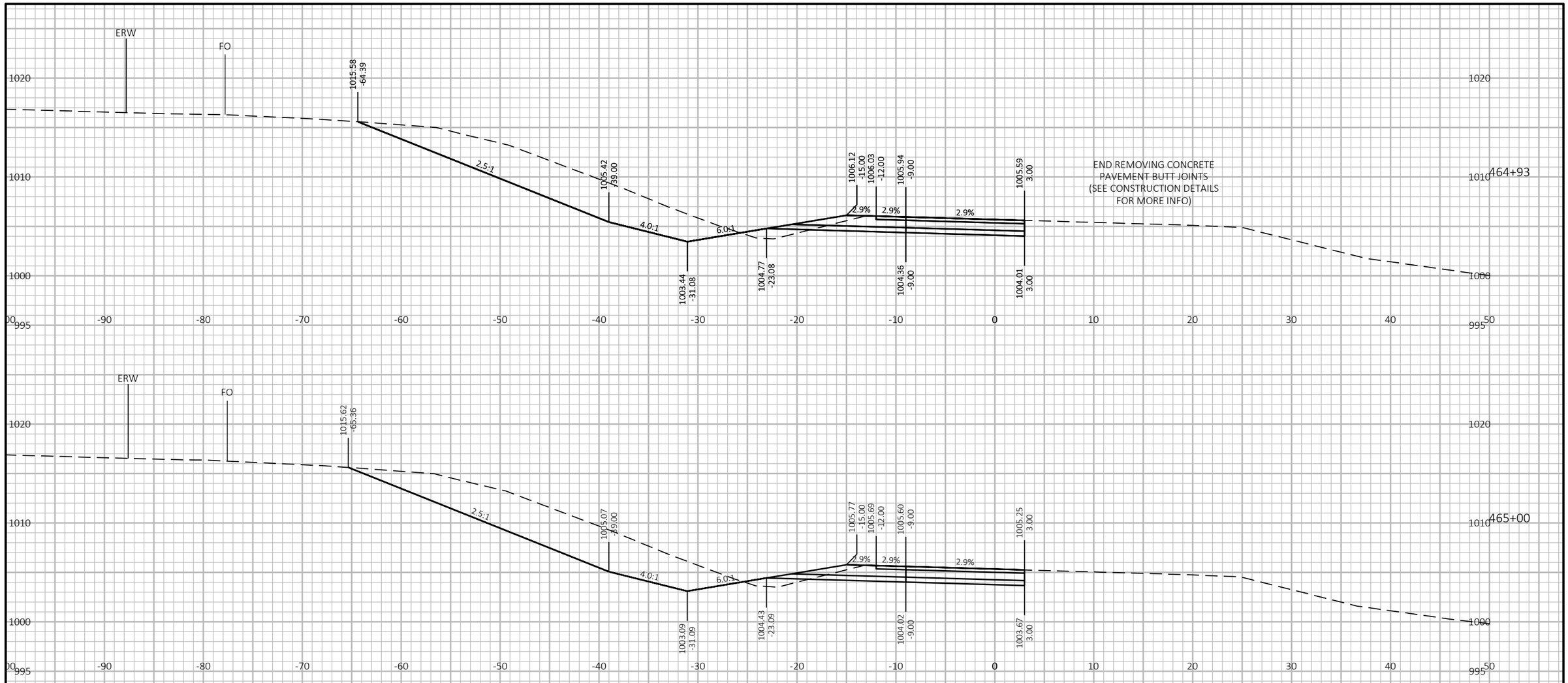
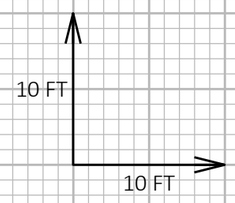
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 831	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 13
PLOT DATE : 7/8/2024 1:41 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49





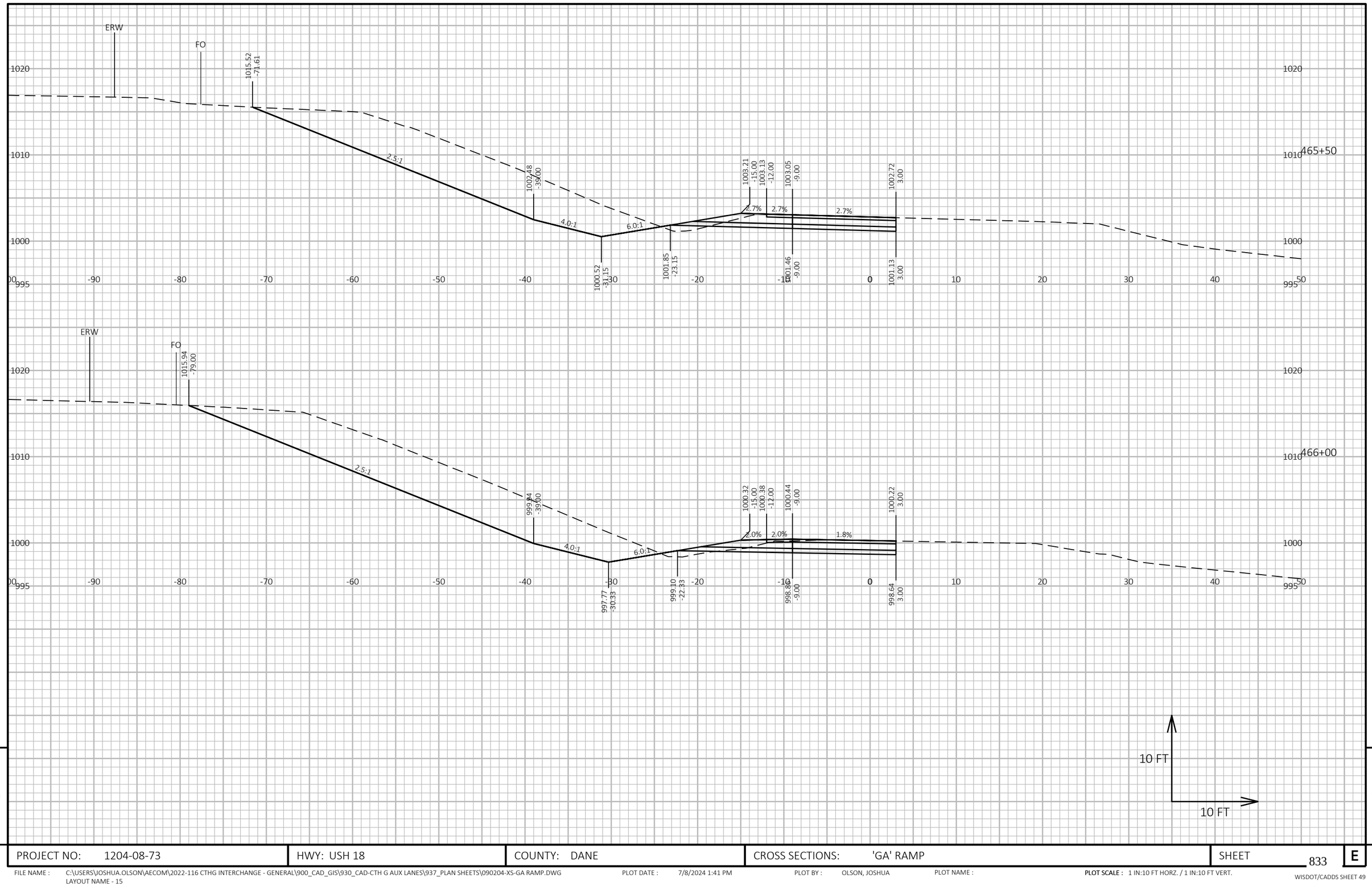
9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 832	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 14

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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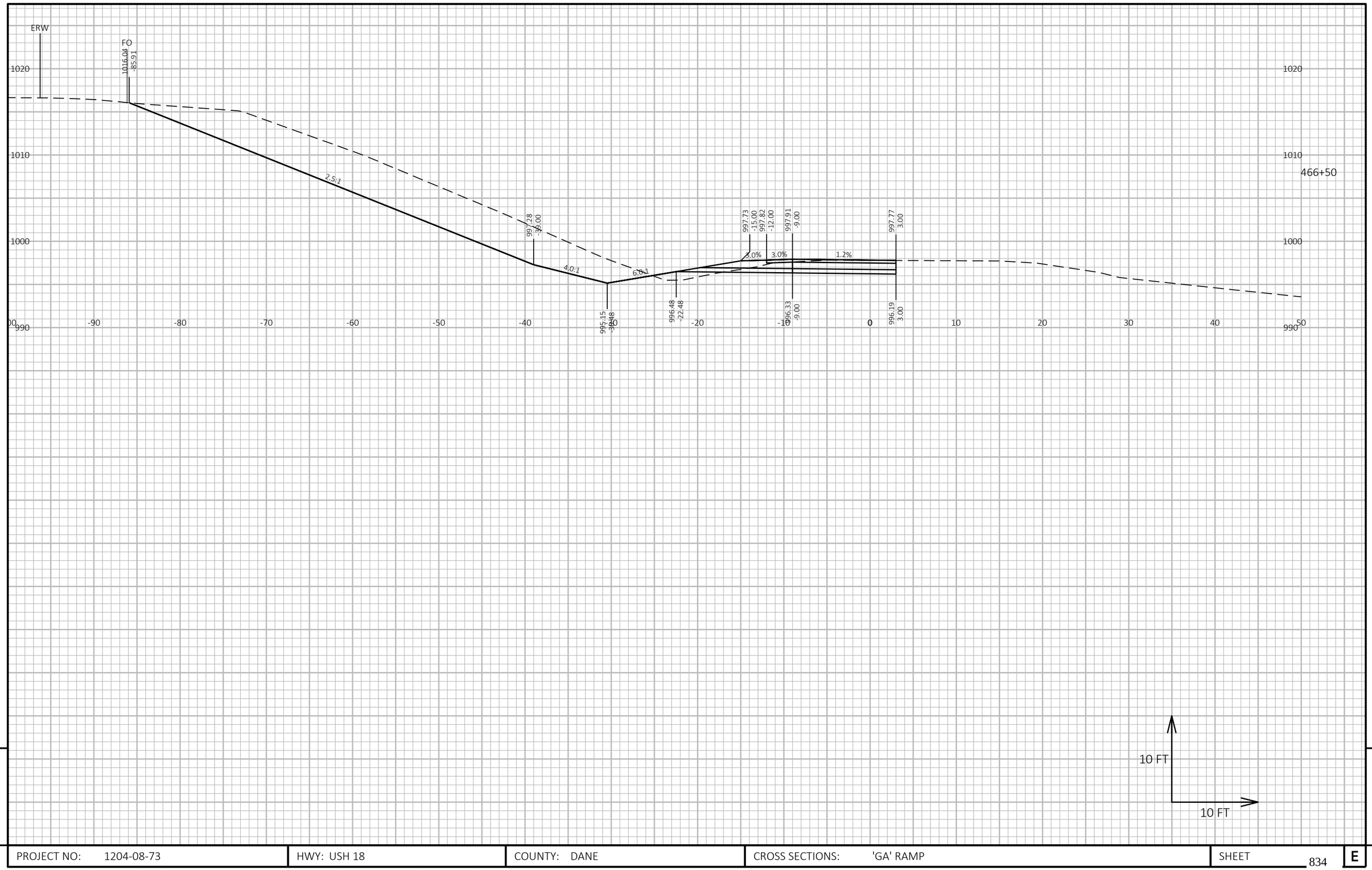
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 833	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 15

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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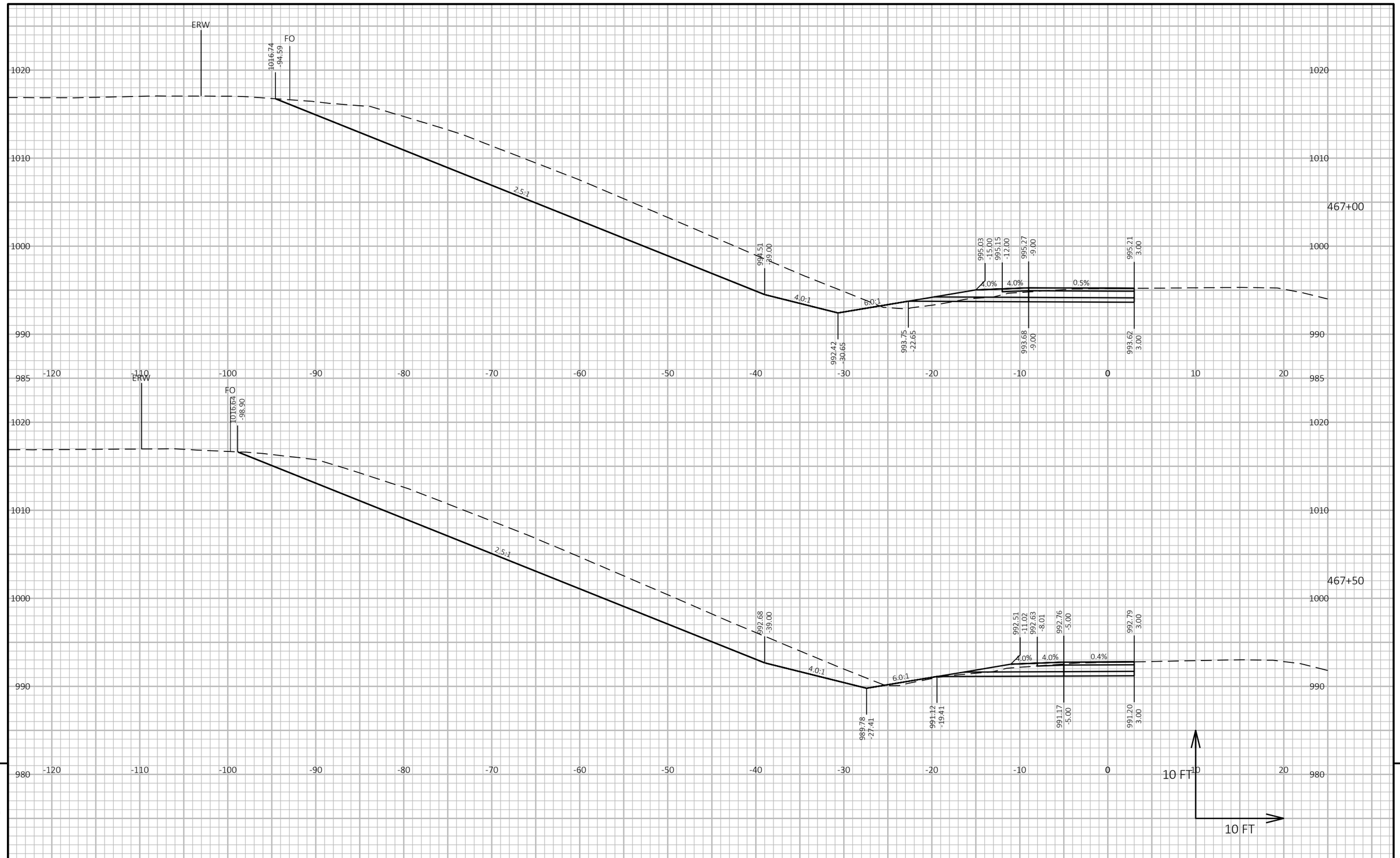
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 834	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 16

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 835	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 17

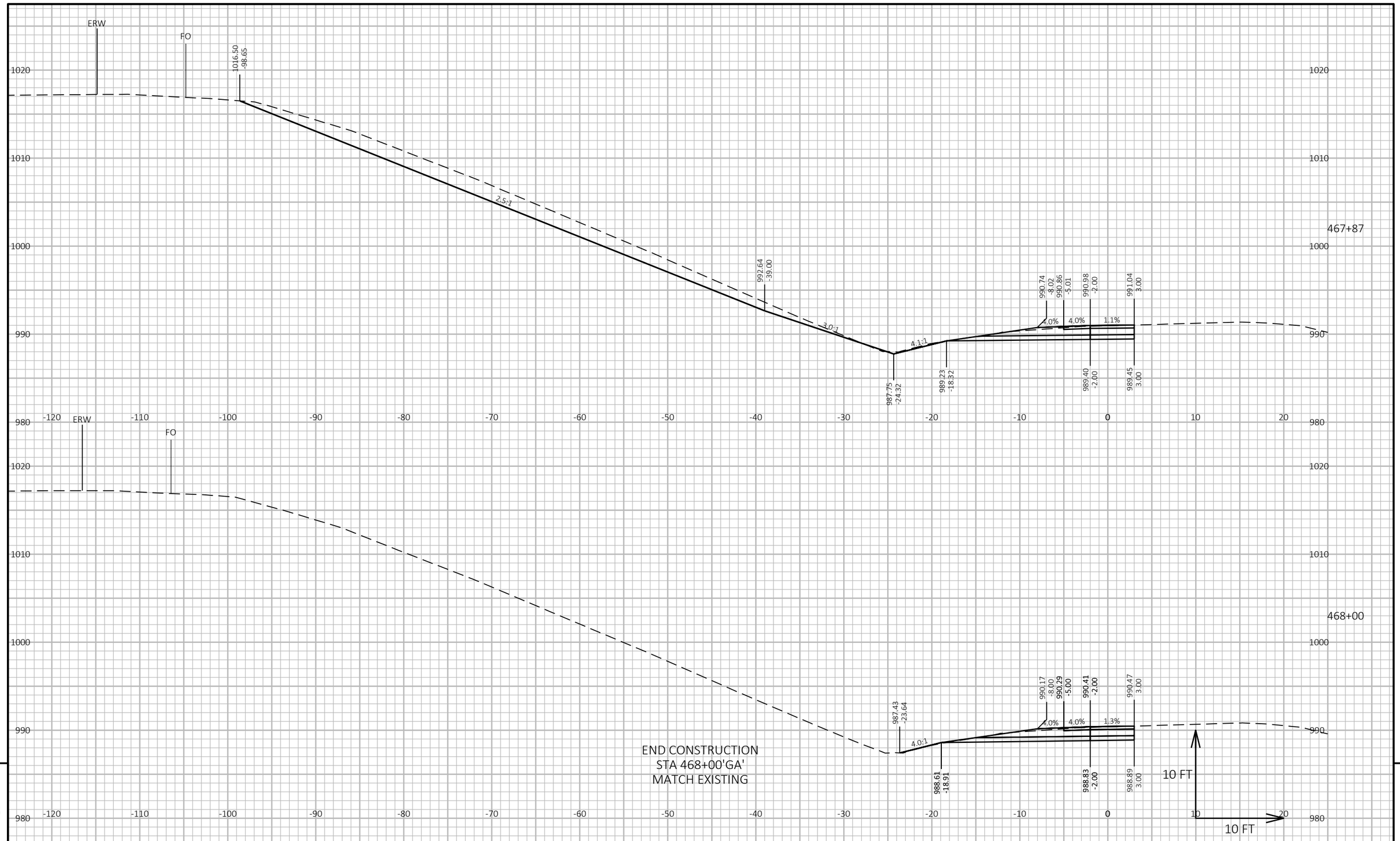
PLOT DATE : 7/8/2024 1:41 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



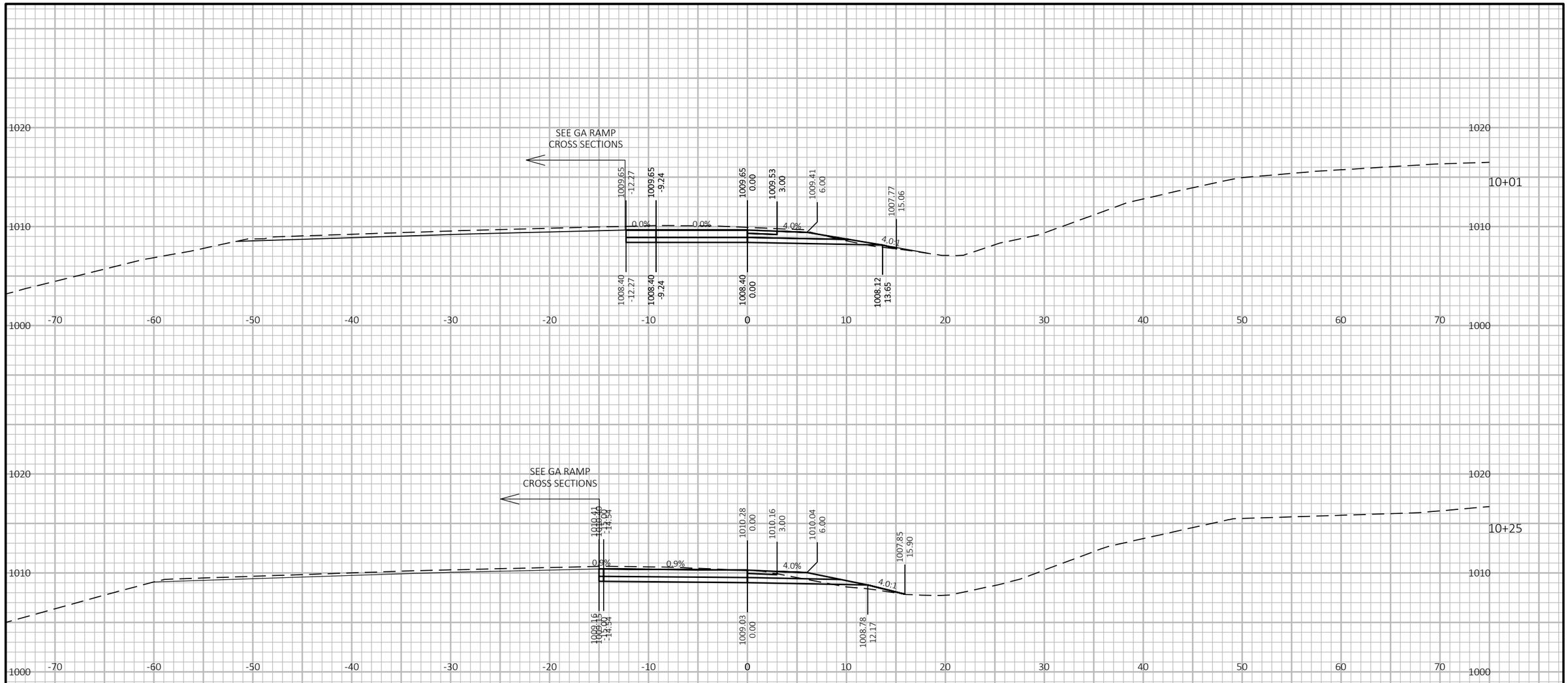
9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GA' RAMP	SHEET 836	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - 18

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

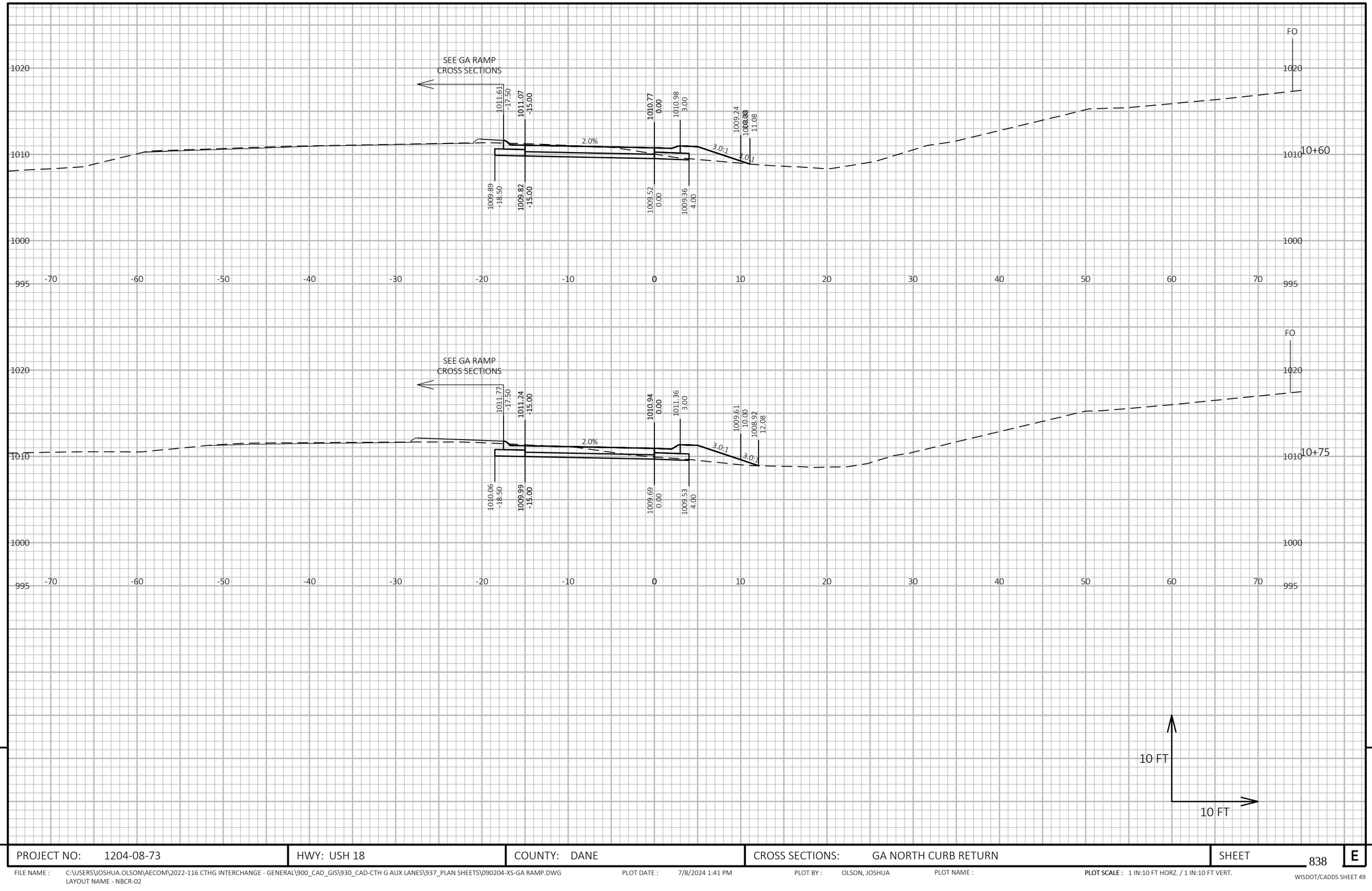


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA NORTH CURB RETURN	SHEET 837	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - NBCR-01

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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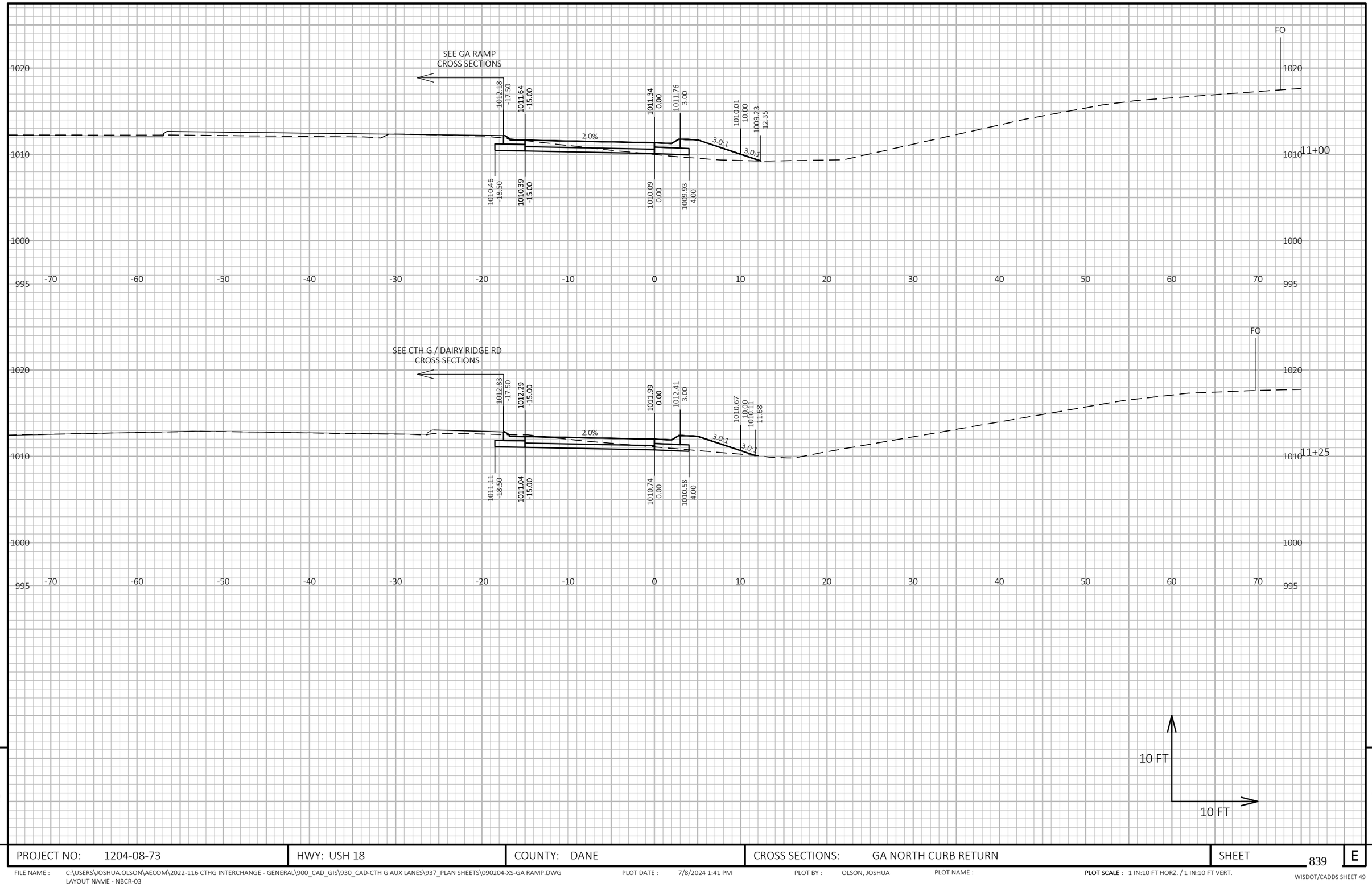
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA NORTH CURB RETURN	SHEET 838	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - NBCR-02

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA NORTH CURB RETURN	SHEET 839	E

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1012.66
-20.80

1012.28
0.00

1012.70
3.00

1010.95
10.00

1010.32
11.91

1.8%

3.0:1

3.0:1

1011.41
-20.80

1011.03
0.00

1010.87
4.00

FO

11+34

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1013.07
-14.77

1012.86
0.00

1013.28
3.00

1011.54
10.00

1010.05
14.46

1.4%

3.0:1

3.0:1

1011.82
-14.77

1011.61
0.00

1011.45
4.00

FO

FO

11+50

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1013.31
-13.23

1013.22
0.00

1013.63
3.00

1011.89
10.00

1010.09
15.39

0.6%

3.0:1

3.0:1

1012.06
-13.23

1011.97
0.00

1011.81
4.00

FO

11+60

10 FT

10 FT

9

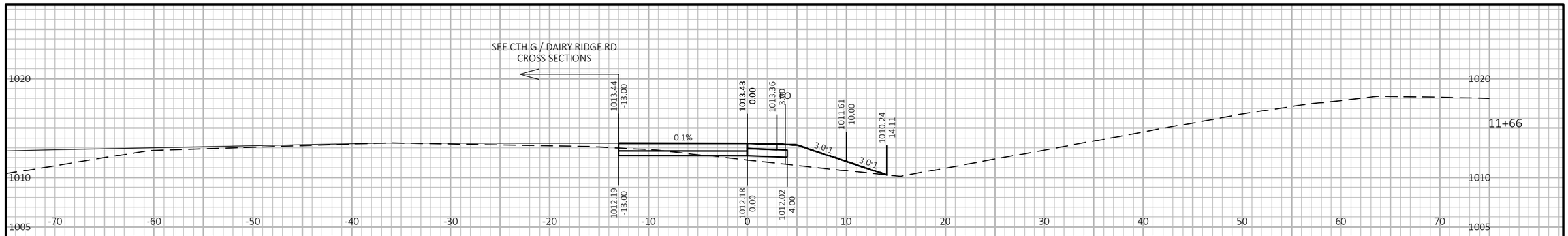
9

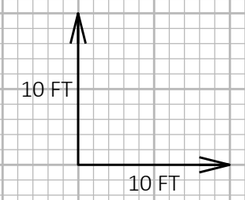
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA NORTH CURB RETURN	SHEET 840	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - NBCR-04

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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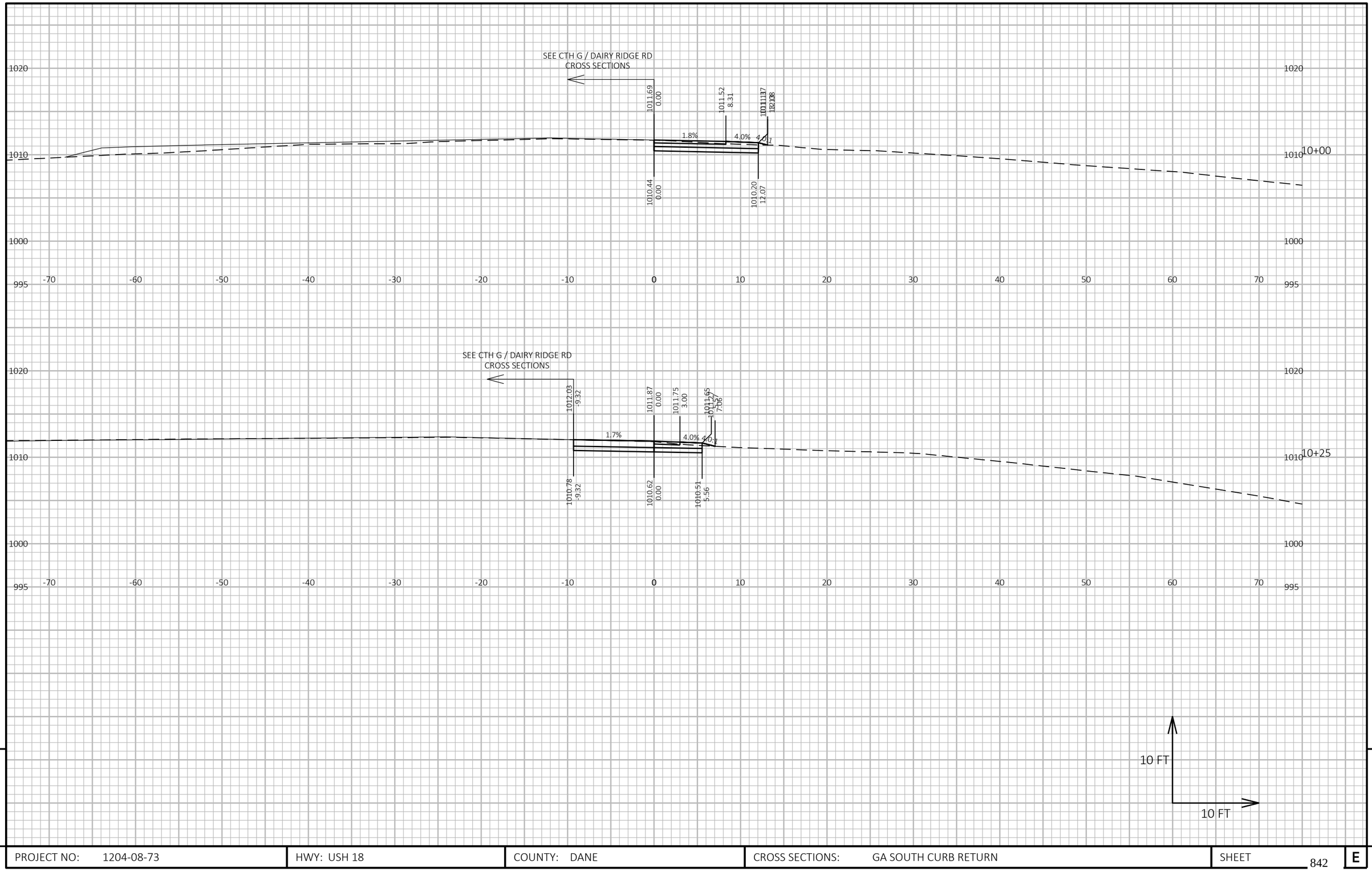
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA NORTH CURB RETURN	SHEET 841	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - NBCR-05

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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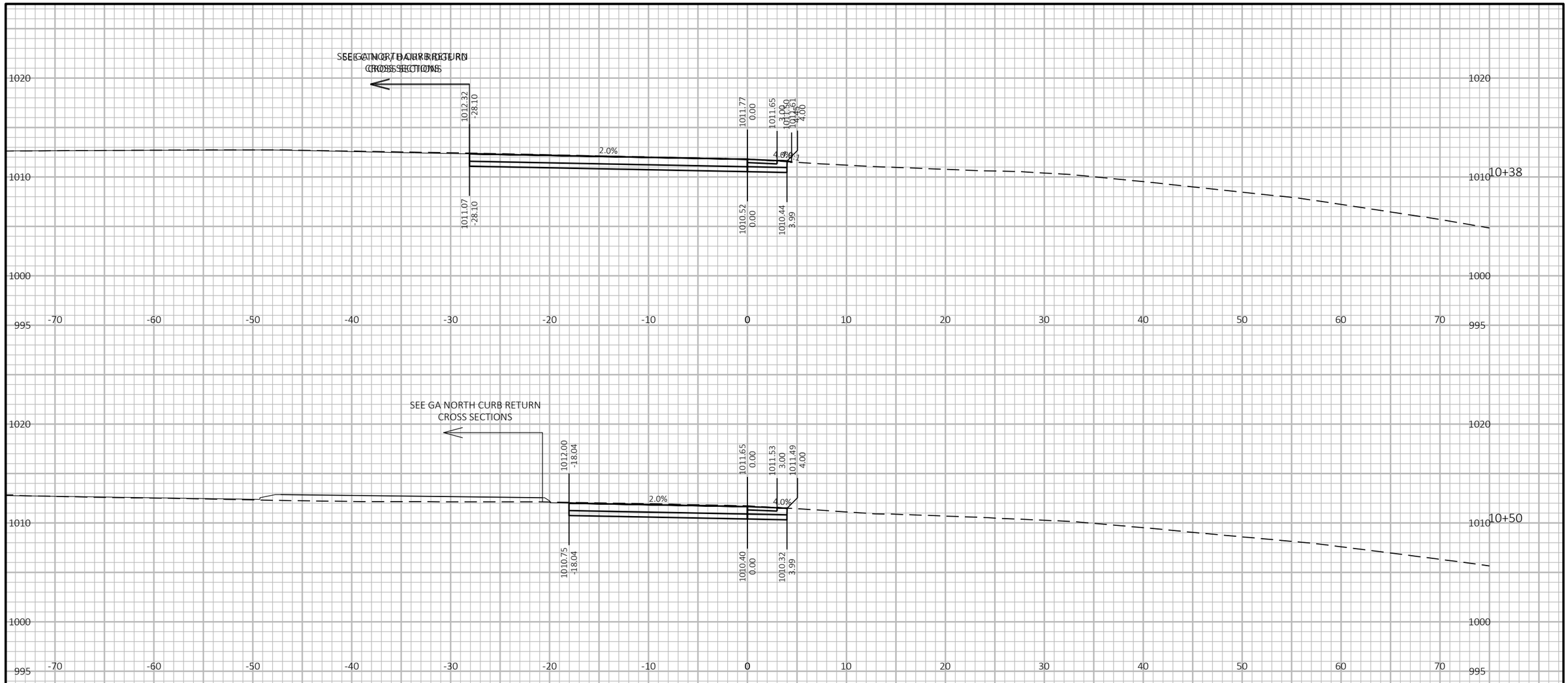
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA SOUTH CURB RETURN	SHEET 842	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - SBCR-01

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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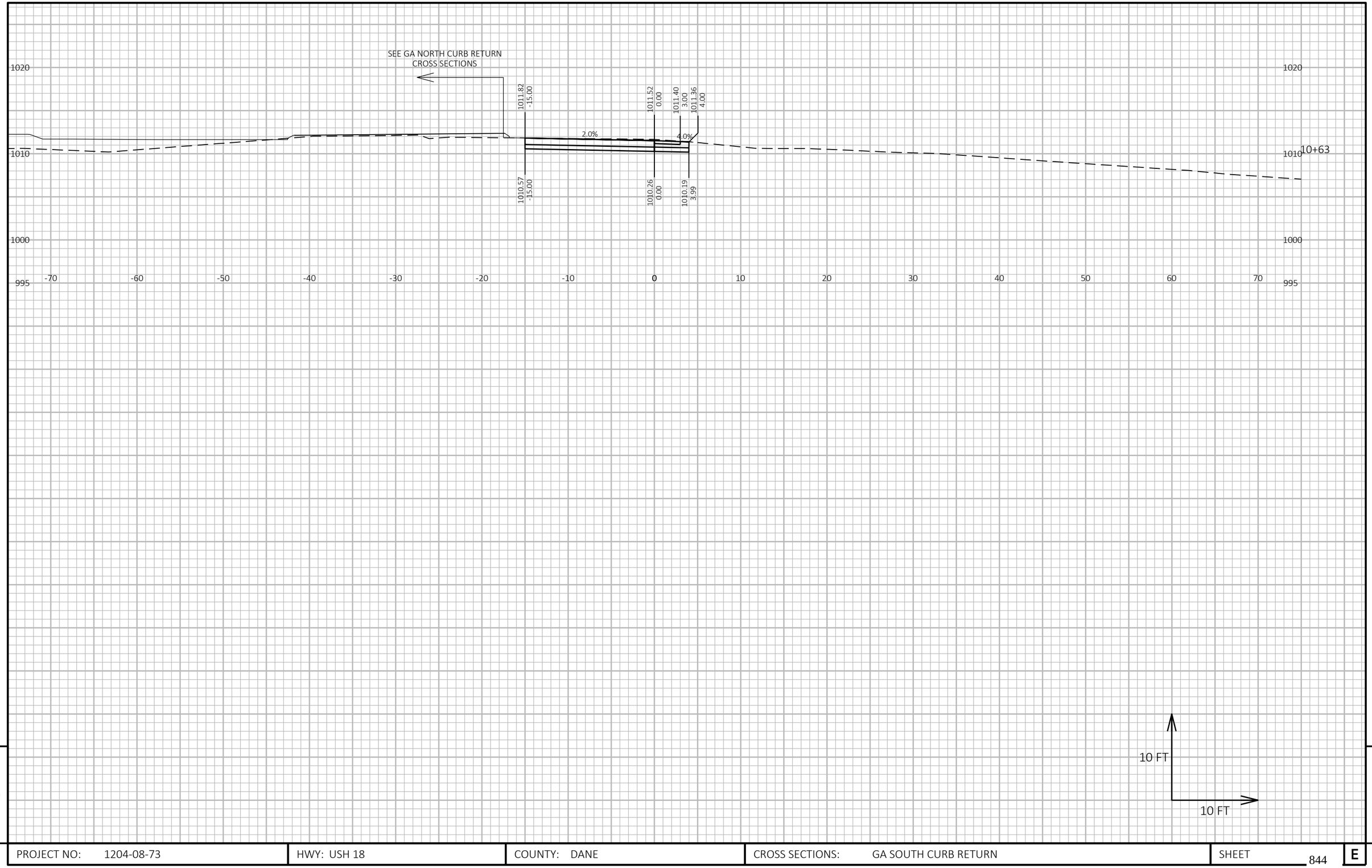
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA SOUTH CURB RETURN	SHEET 843	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - SBCR-02

PLOT DATE : 7/8/2024 1:41 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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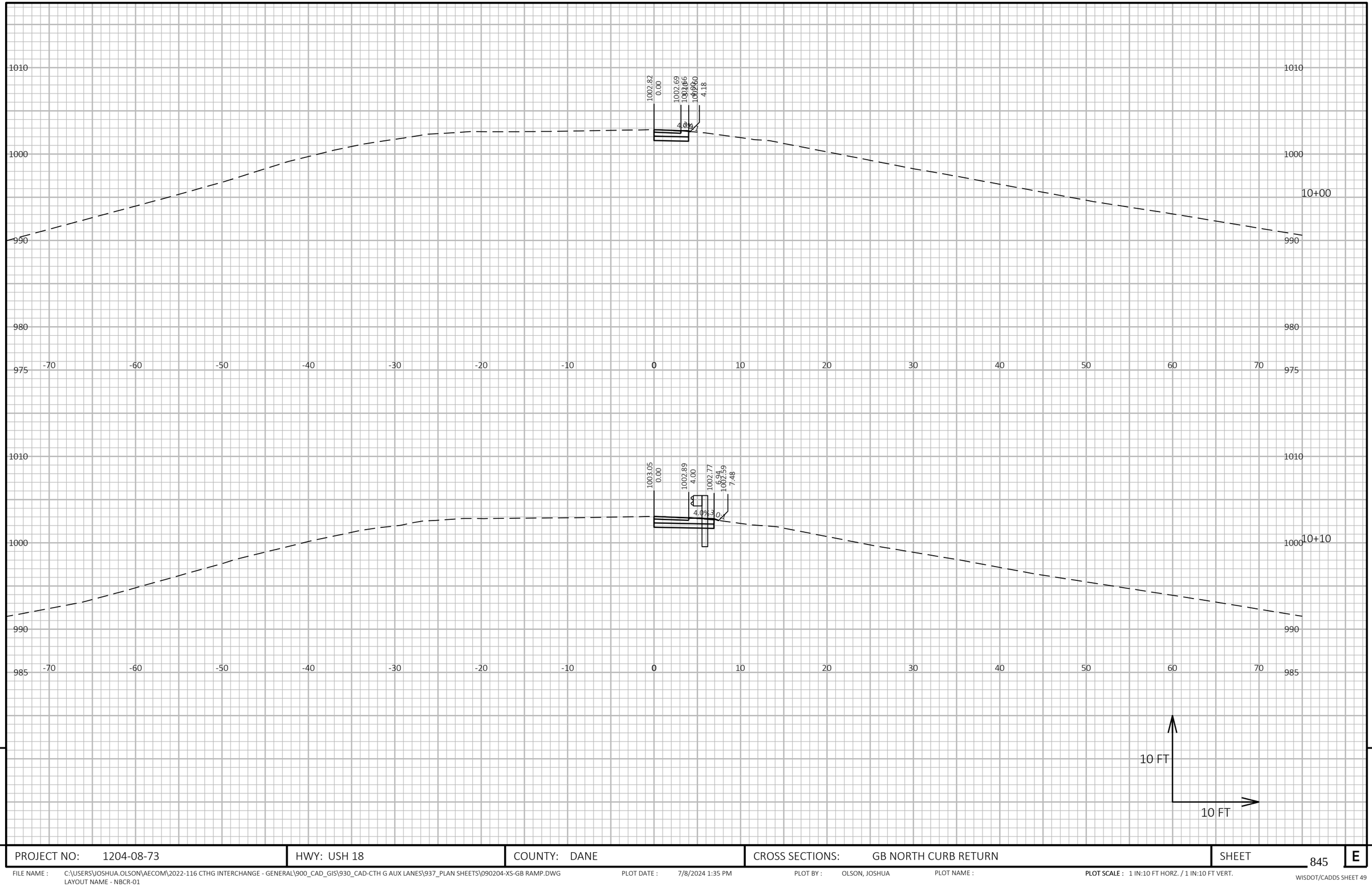
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GA SOUTH CURB RETURN	SHEET 844	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GA RAMP.DWG
LAYOUT NAME - SBCR-03

PLOT DATE : 7/8/2024 1:42 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB NORTH CURB RETURN	SHEET 845	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - NBCR-01

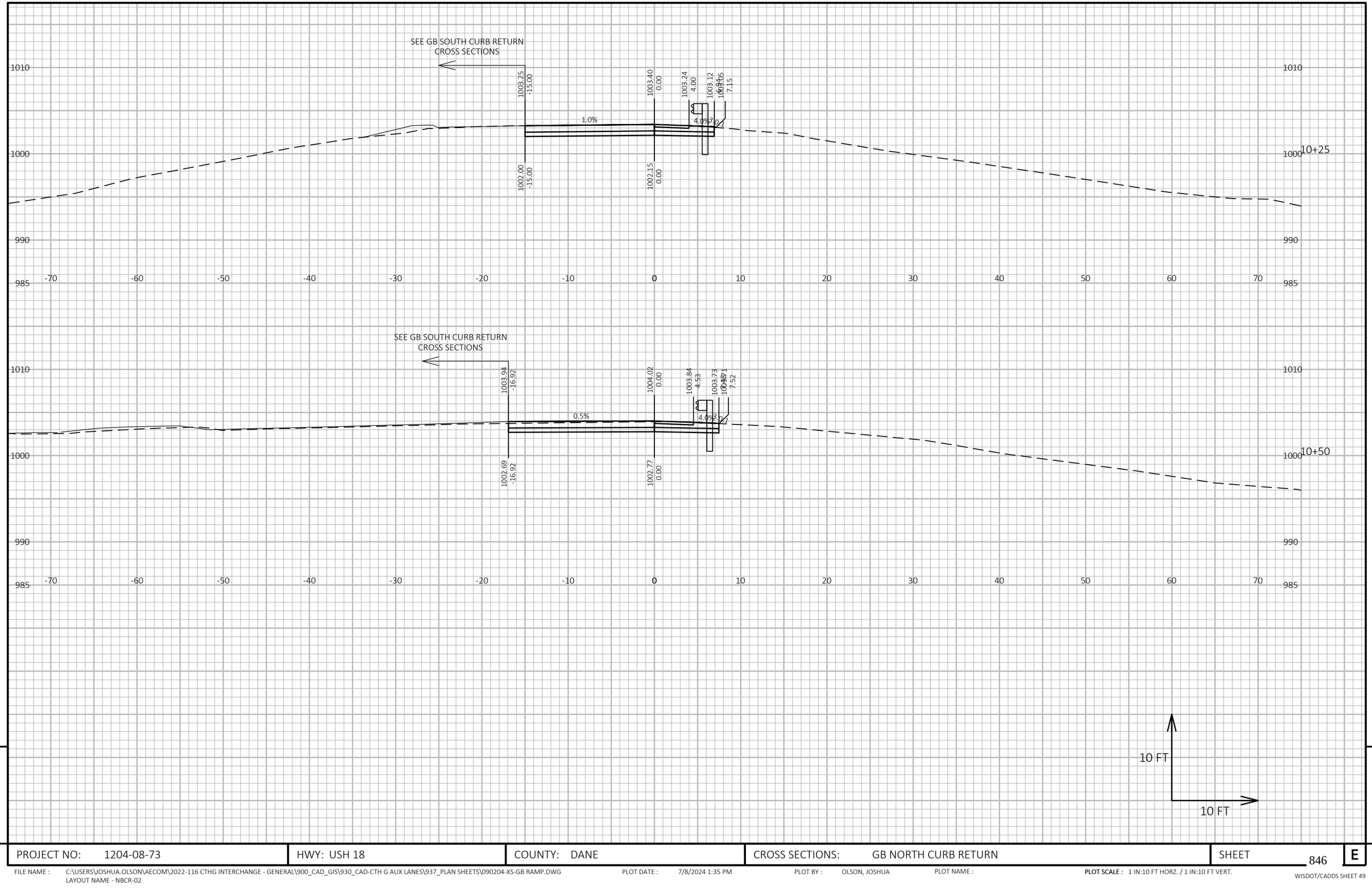
PLOT DATE : 7/8/2024 1:35 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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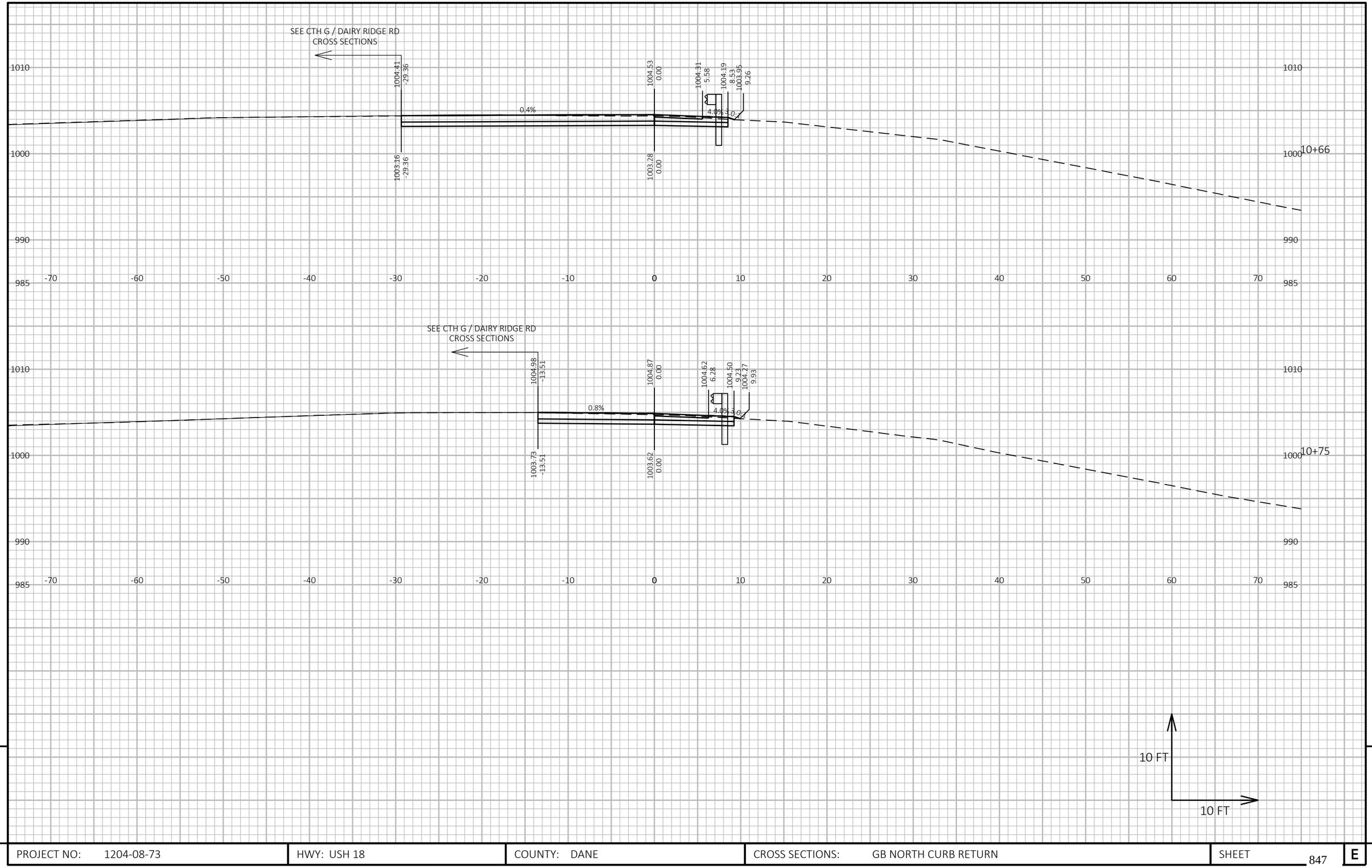
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB NORTH CURB RETURN	SHEET 846	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - NBCR-02

PLOT DATE : 7/8/2024 1:35 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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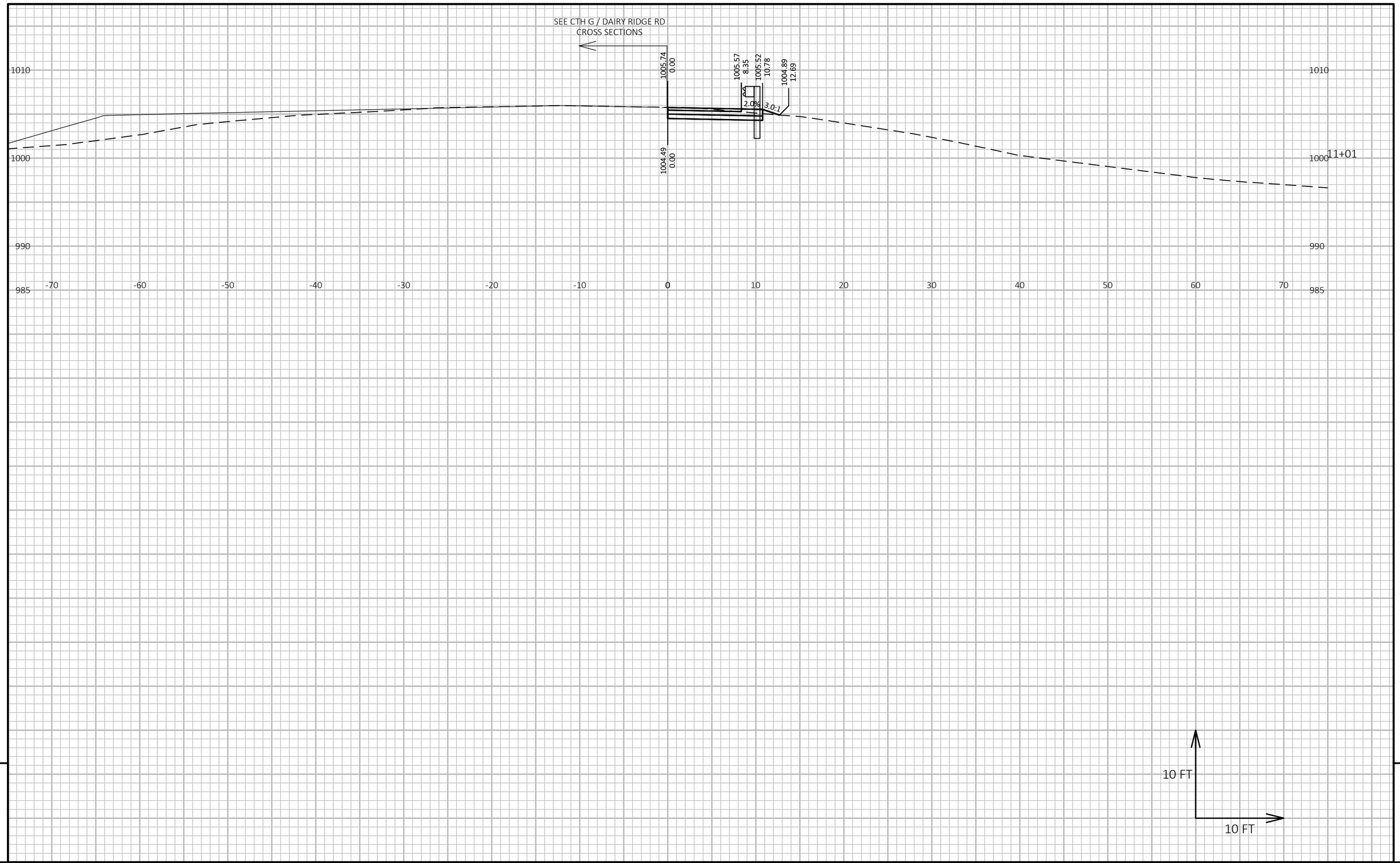
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB NORTH CURB RETURN	SHEET 847	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - NBCR-03

PLOT DATE : 7/8/2024 1:35 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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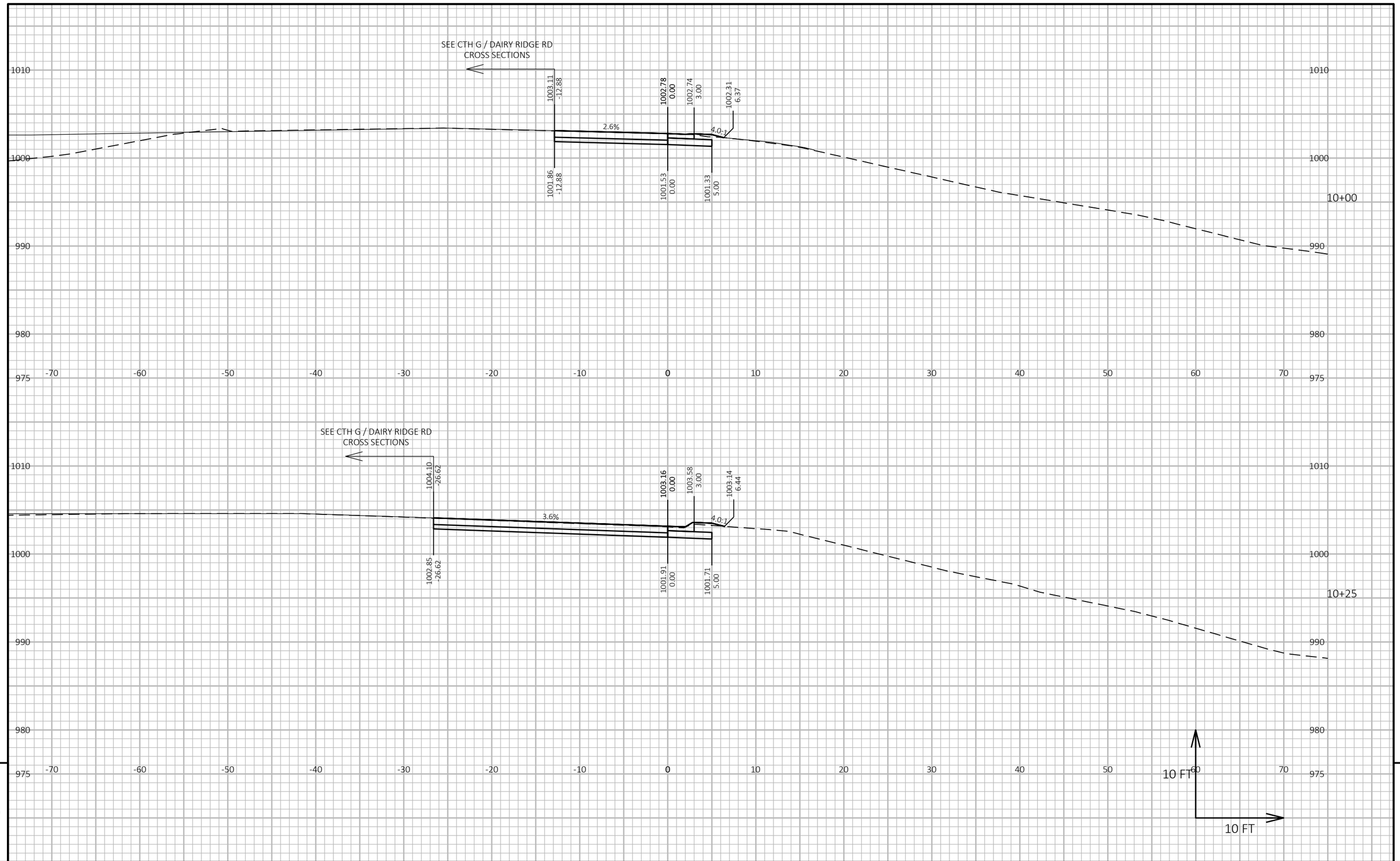
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB NORTH CURB RETURN	SHEET 848	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - NBCR-04

PLOT DATE : 7/8/2024 1:35 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB SOUTH CURB RETURN	SHEET 849	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - SBCR-01

PLOT DATE : 7/8/2024 1:35 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1004.41
-33.47

1003.16
-33.47

1003.20
0.00

1001.95
0.00

1003.62
3.00

1001.75
5.00

1003.17
6.47

3.6%

4.0:1

10+30

SEE GB NORTH CURB RETURN
CROSS SECTIONS

1003.80
-13.23

1002.55
-13.23

1003.24
0.00

1001.99
0.00

1003.66
3.00

1001.79
5.00

1002.79
8.15

4.2%

4.0:1

10+50

10 FT

10 FT

1010
1000
990
980
975

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB SOUTH CURB RETURN	SHEET 850	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - SBCR-02

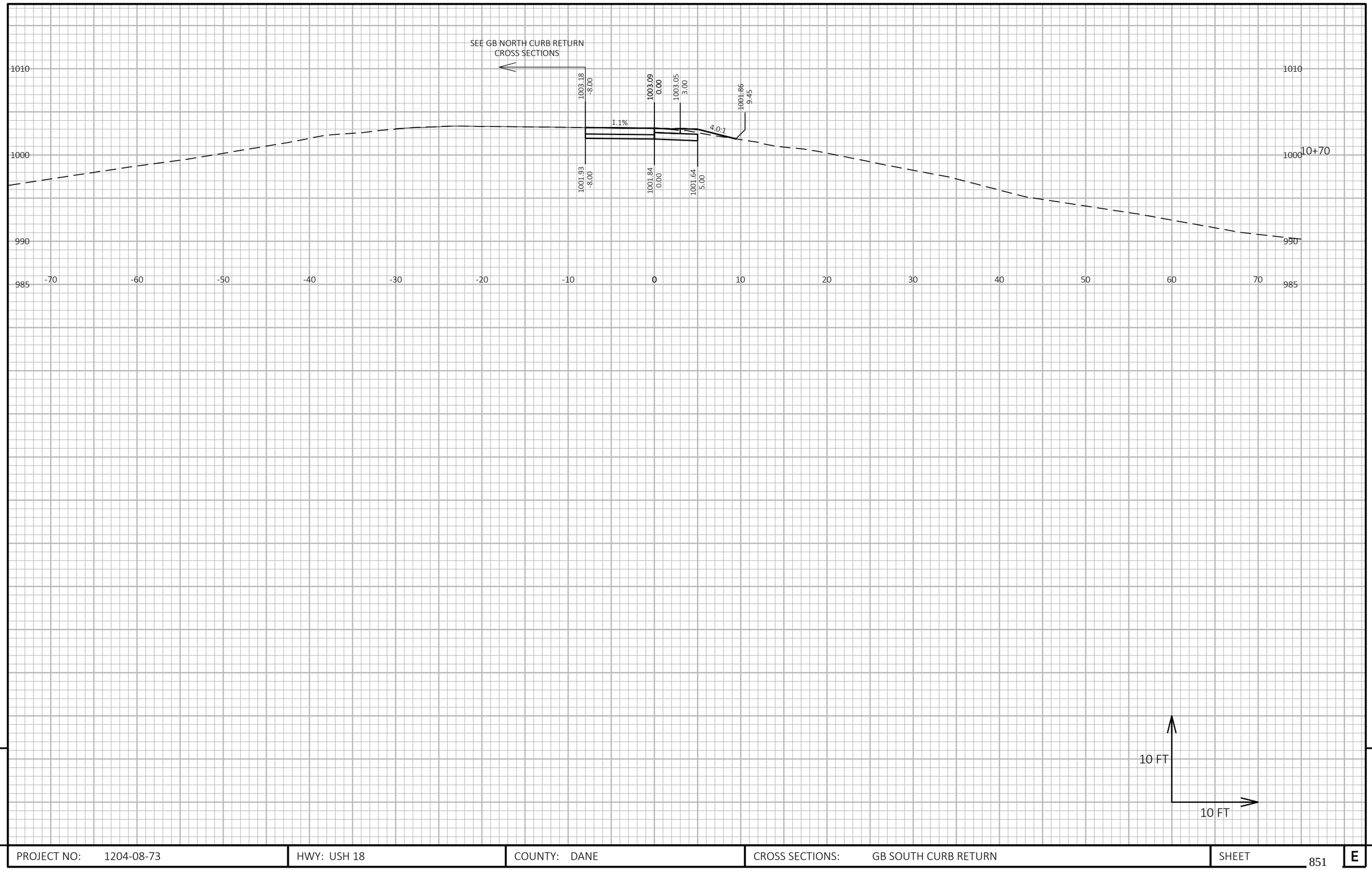
PLOT DATE : 7/8/2024 1:35 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

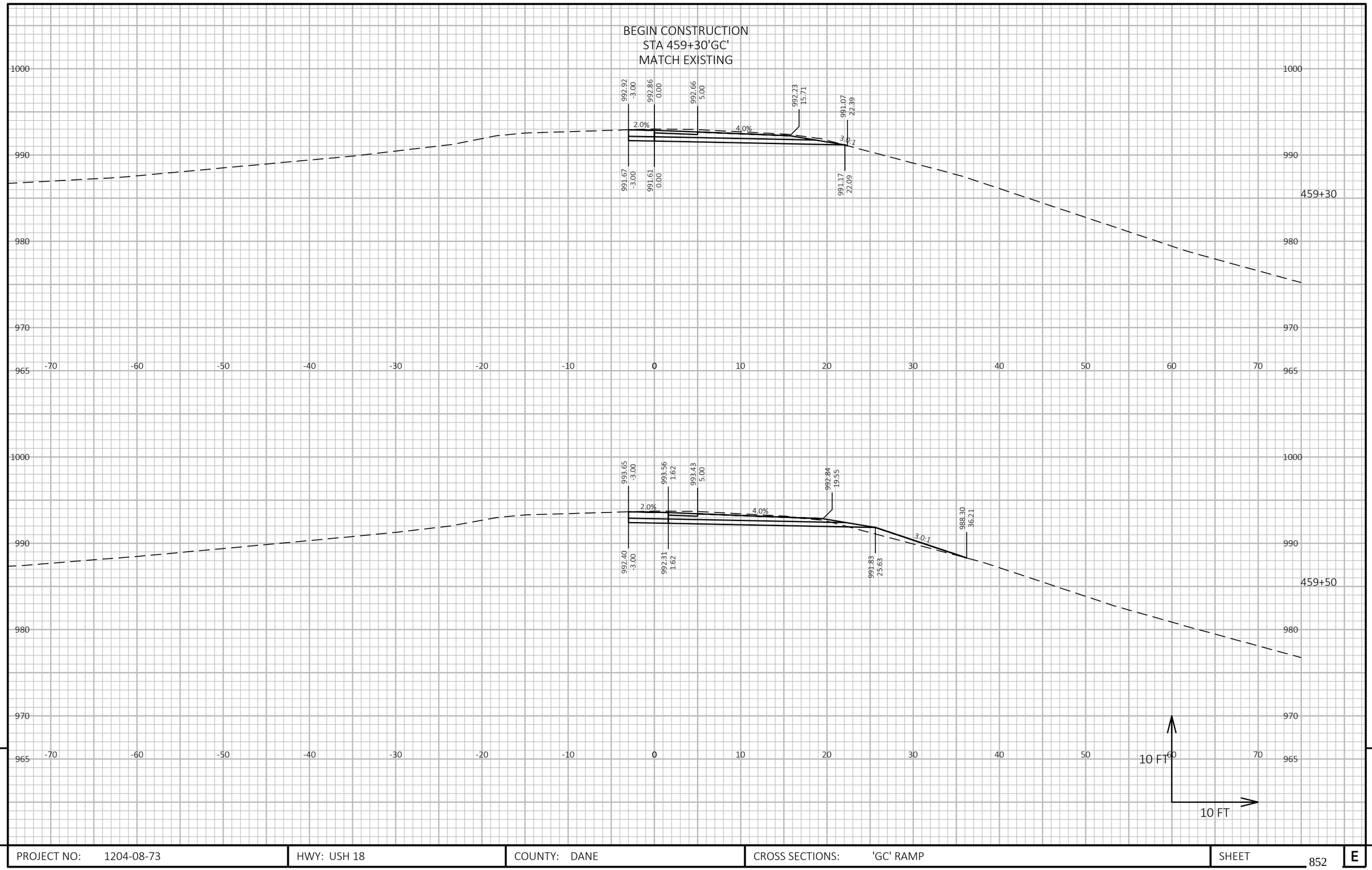


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GB SOUTH CURB RETURN	SHEET 851 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090204-XS-GB RAMP.DWG
LAYOUT NAME - SBCR-03

PLOT DATE : 7/8/2024 1:35 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GC' RAMP	SHEET 852 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - 01

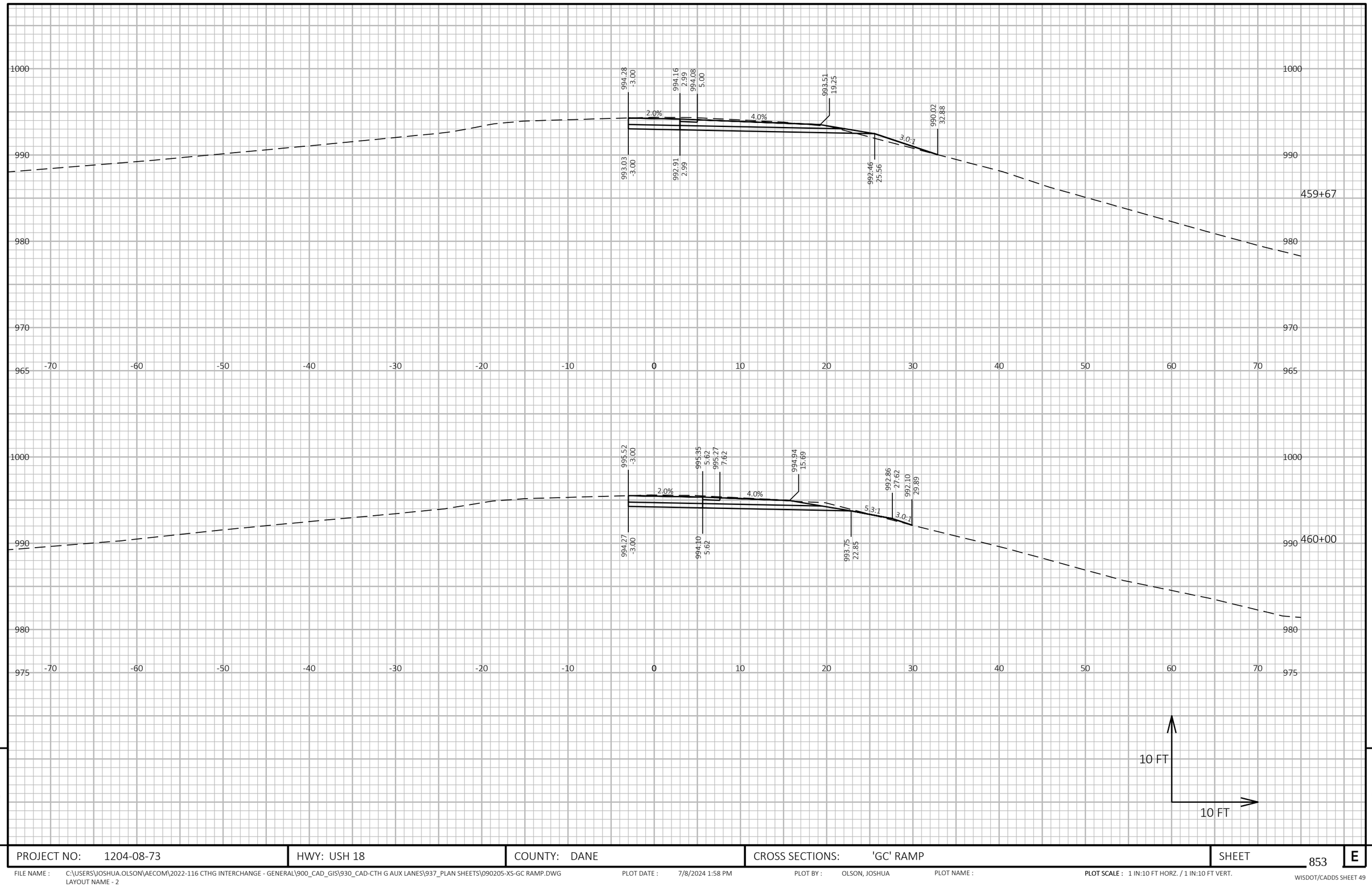
PLOT DATE : 7/8/2024 1:58 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

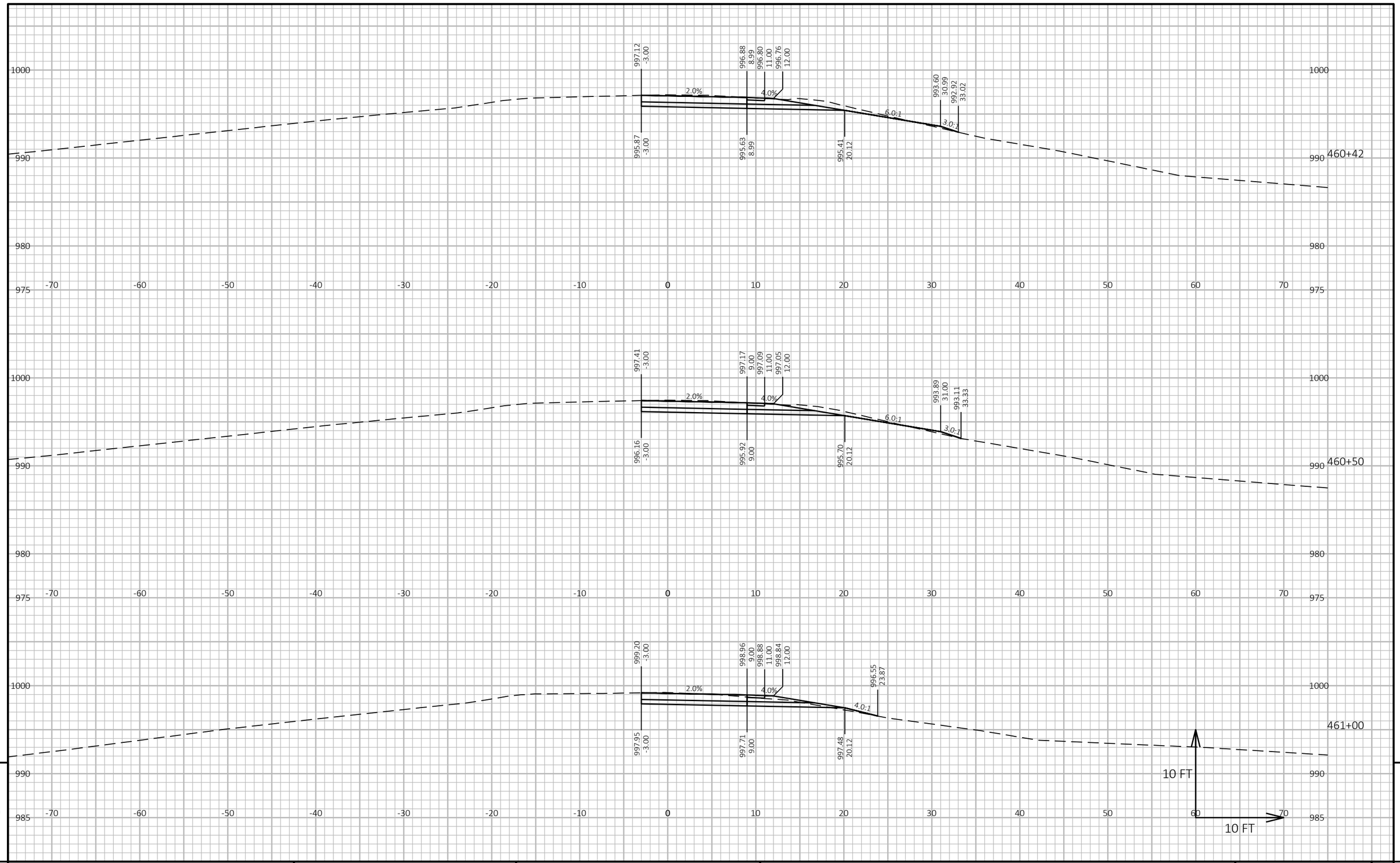
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GC' RAMP	SHEET 853	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - 2
PLOT DATE : 7/8/2024 1:58 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

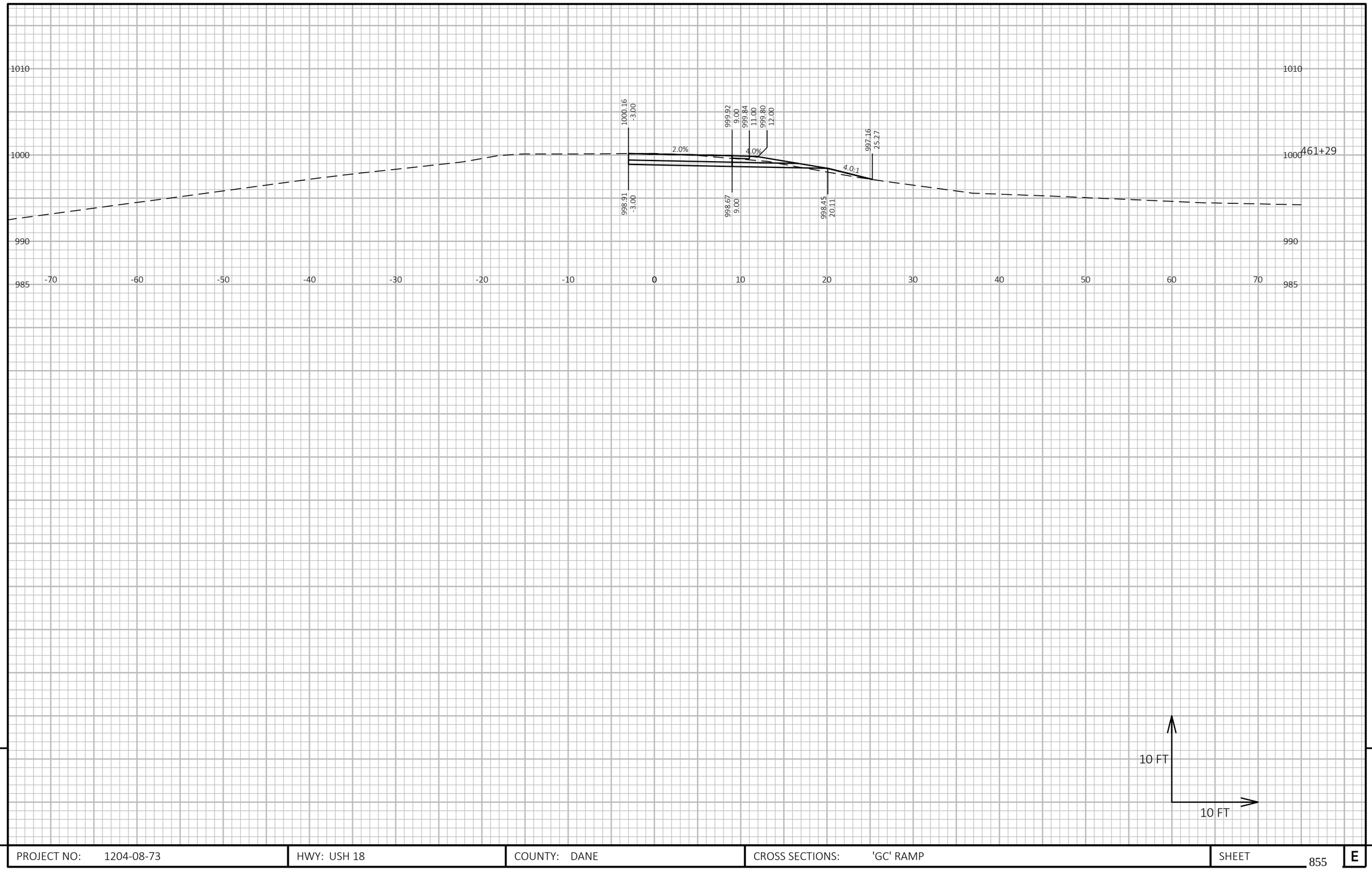


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GC' RAMP	SHEET 854	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - 03

PLOT DATE : 7/8/2024 1:58 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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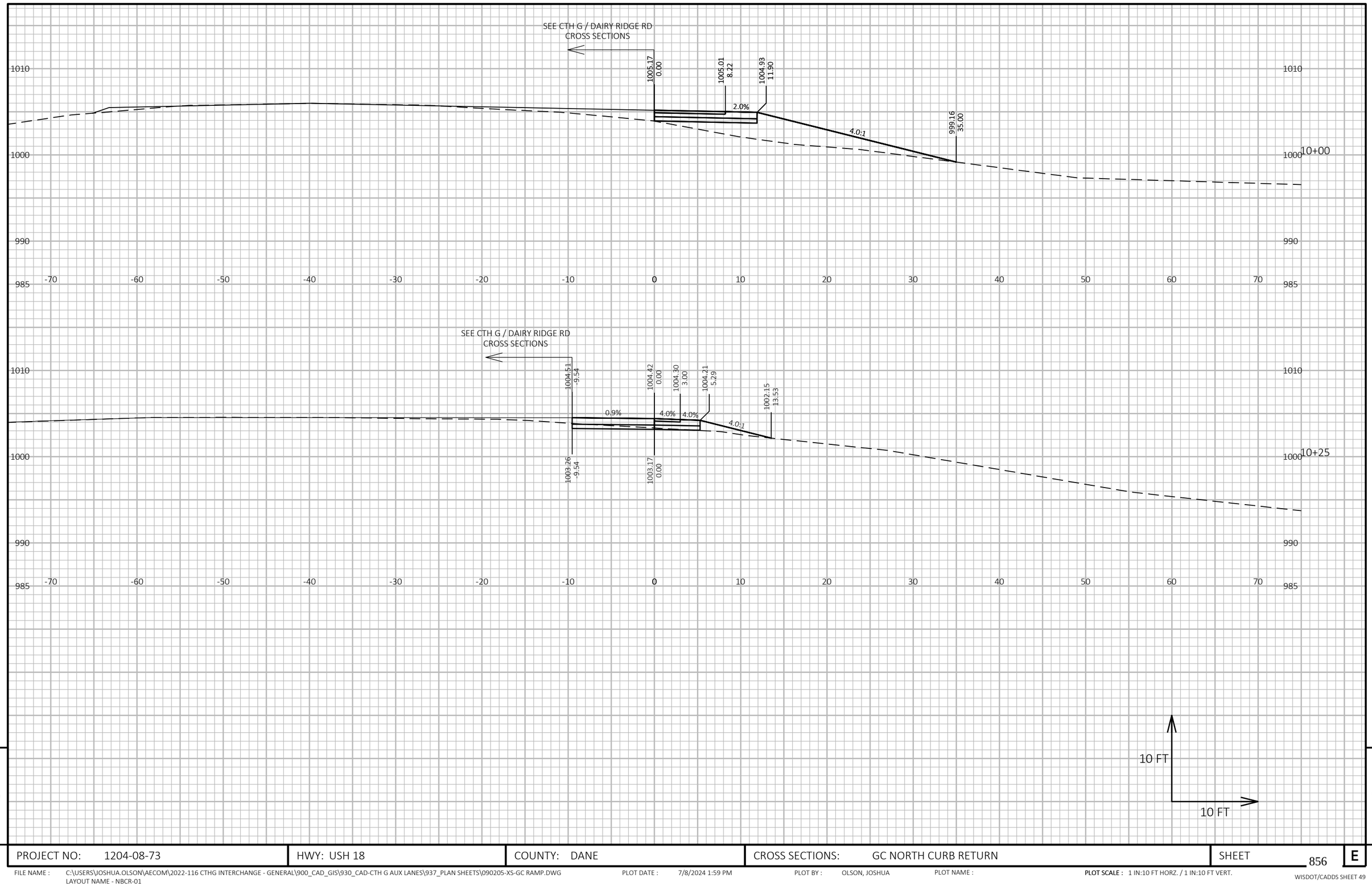
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GC' RAMP	SHEET 855	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - 04

PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA 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: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC NORTH CURB RETURN	SHEET 856	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - NBCR-01
PLOT DATE : 7/8/2024 1:59 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1003.81
-28.45

1003.99
0.00

1003.87
3.00

1003.83
4.00

1002.47
9.44

0.6%

4.0%

4.0%

4.0:1

1002.56
-28.45

1002.74
0.00

10+38

SEE GC SOUTH CURB RETURN
CROSS SECTIONS

1003.75
-20.78

1003.26
-18.14

1003.56
0.00

1003.44
3.00

1003.40
4.00

1002.16
8.94

1.6%

4.0%

4.0%

4.0:1

1001.98
-21.84

1002.01
-18.14

1002.31
0.00

10+50

1010
1000
990
985
-70
-60
-50
-40
-30
-20
-10
0
10
20
30
40
50
60
70

10 FT

10 FT

9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC NORTH CURB RETURN	SHEET 857	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - NBCR-02

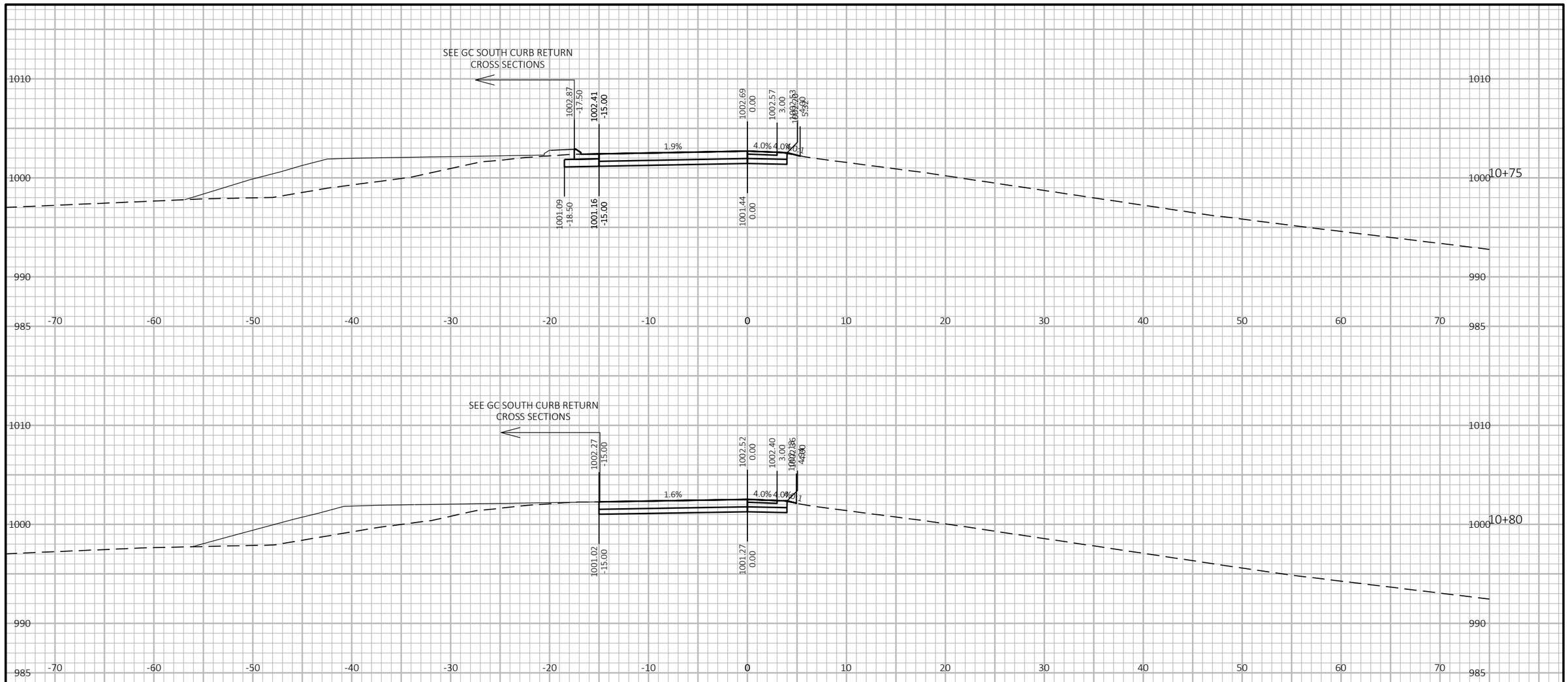
PLOT DATE : 7/8/2024 1:59 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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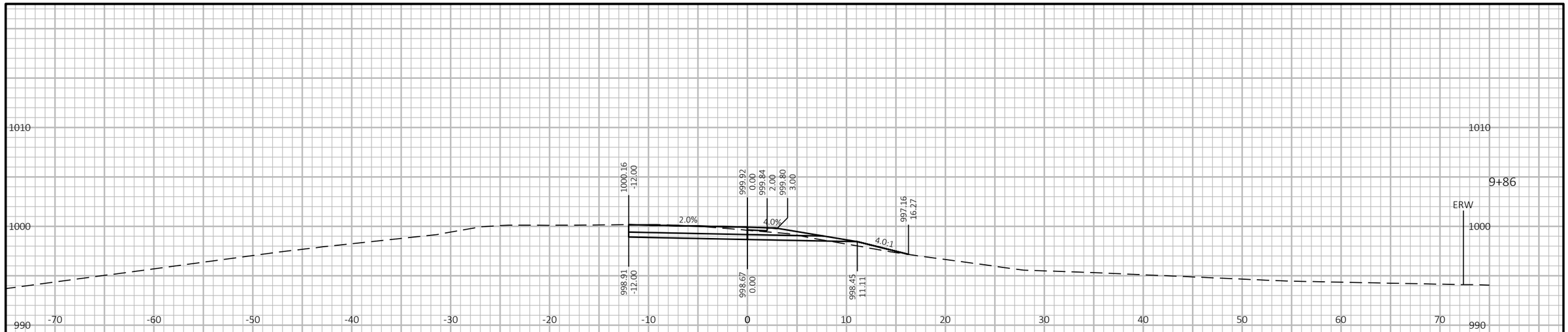
9

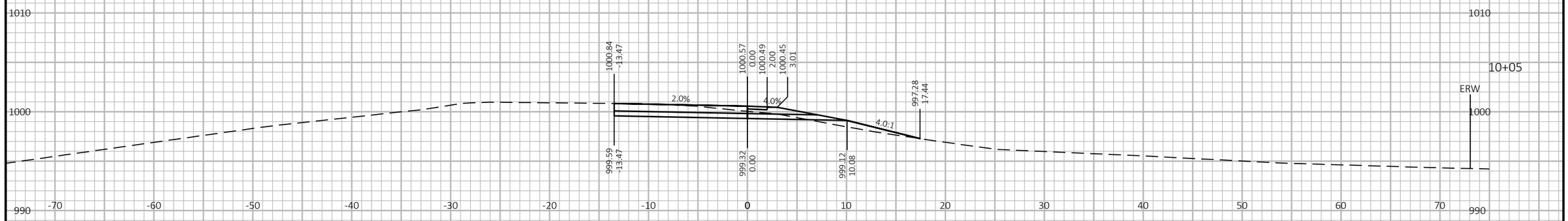
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC NORTH CURB RETURN	SHEET 858	E

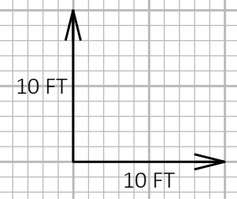
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - NBCR-03

PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







9

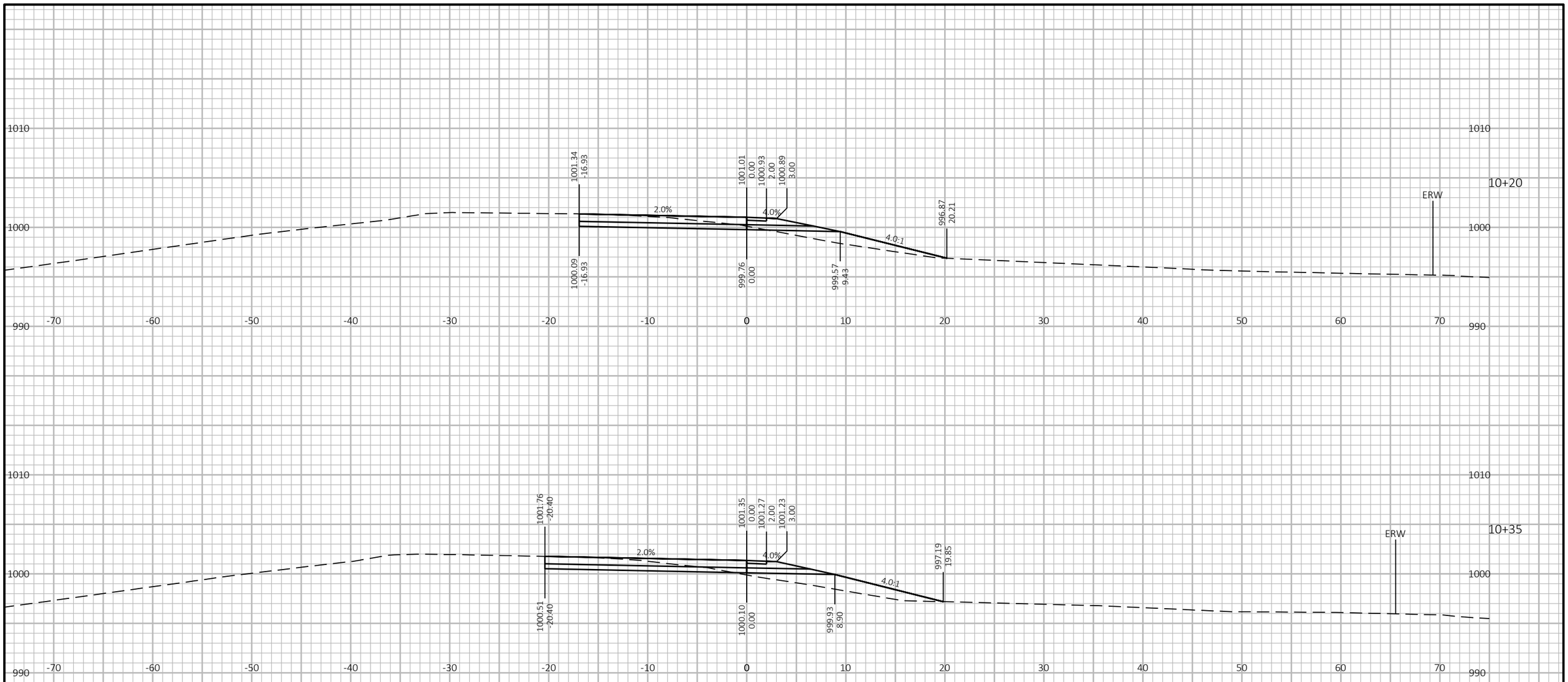
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 859	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-4

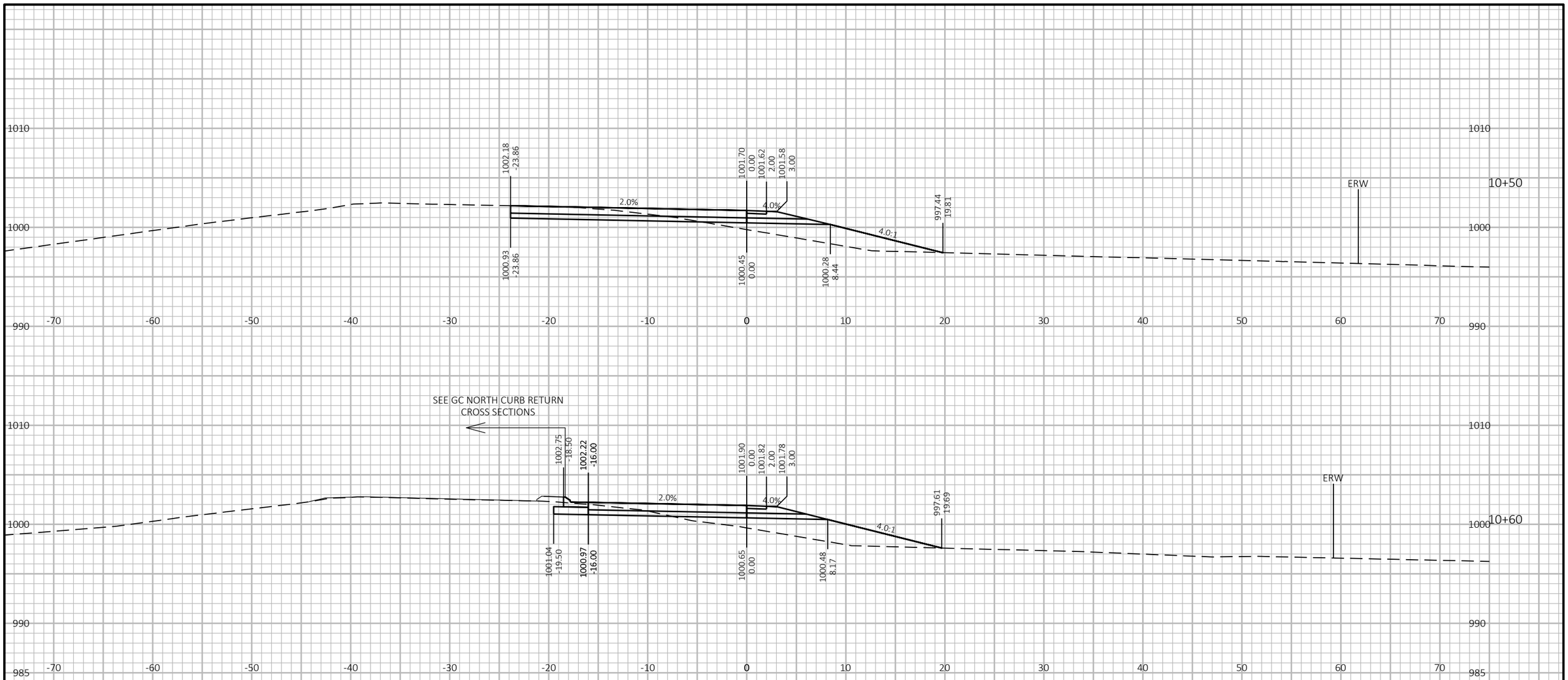
PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 860	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-5
PLOT DATE : 7/8/2024 1:59 PM
PLOT BY : OLSON, JOSHUA
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: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 861	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-6

PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE GC NORTH CURB RETURN
CROSS SECTIONS

1002.84
-18.50
1002.30
-16.00
1001.98
0.00
1001.91
2.09
1001.87
3.18
997.73
17.99
1001.12
-19.50
1001.05
-16.00
1000.73
0.00
1000.58
7.81
2.0%
4.0%
3.6:1
ERW
10+65

1010
1000
990
985
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

SEE GC NORTH CURB RETURN
CROSS SECTIONS

1003.01
-18.42
1002.47
-15.92
1002.15
0.00
1002.19
3.00
997.70
18.24
1001.29
-19.42
1001.22
-15.92
1000.90
0.00
1000.80
5.00
2.0%
3.0:1
ERW
10+75

1010
1000
990
985
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT
10 FT

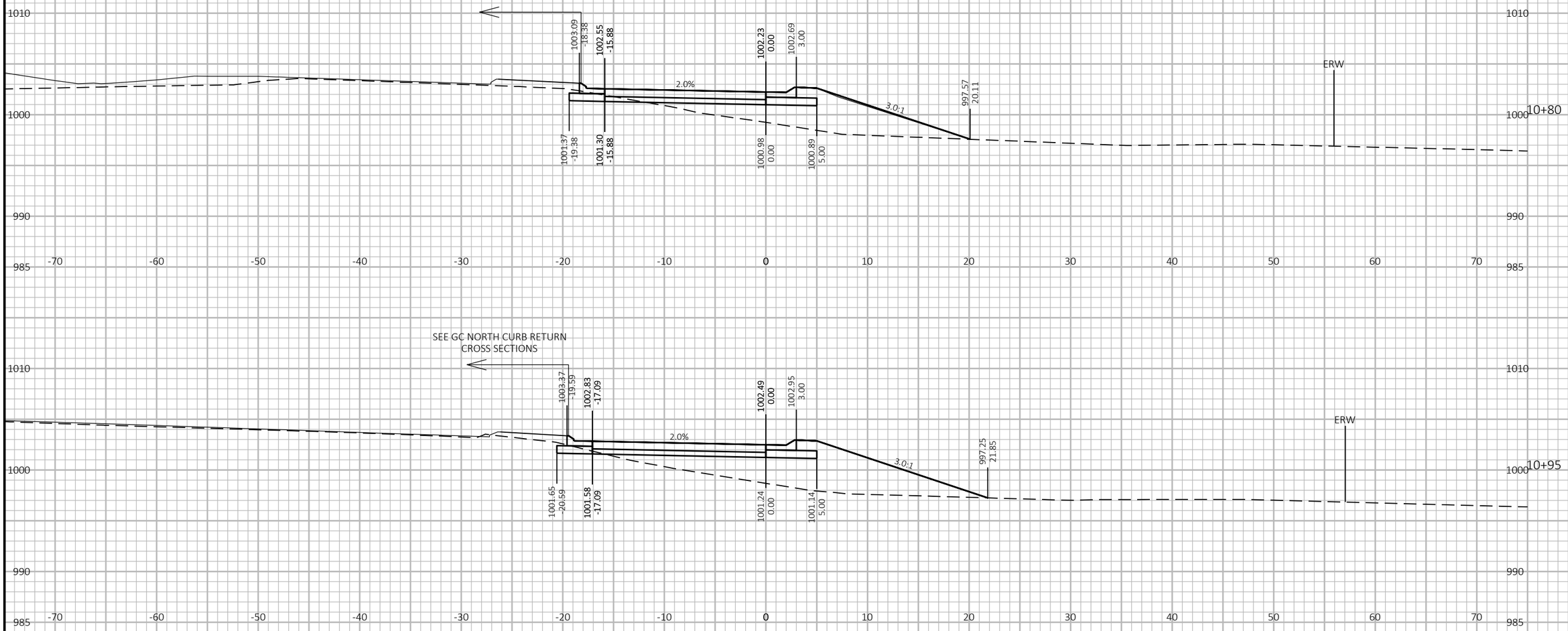
9

9

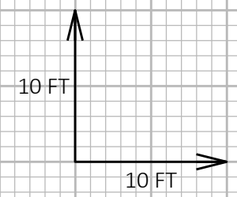
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 862	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-7
PLOT DATE : 7/8/2024 1:59 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

SEE GC NORTH CURB RETURN
CROSS SECTIONS



SEE GC NORTH CURB RETURN
CROSS SECTIONS



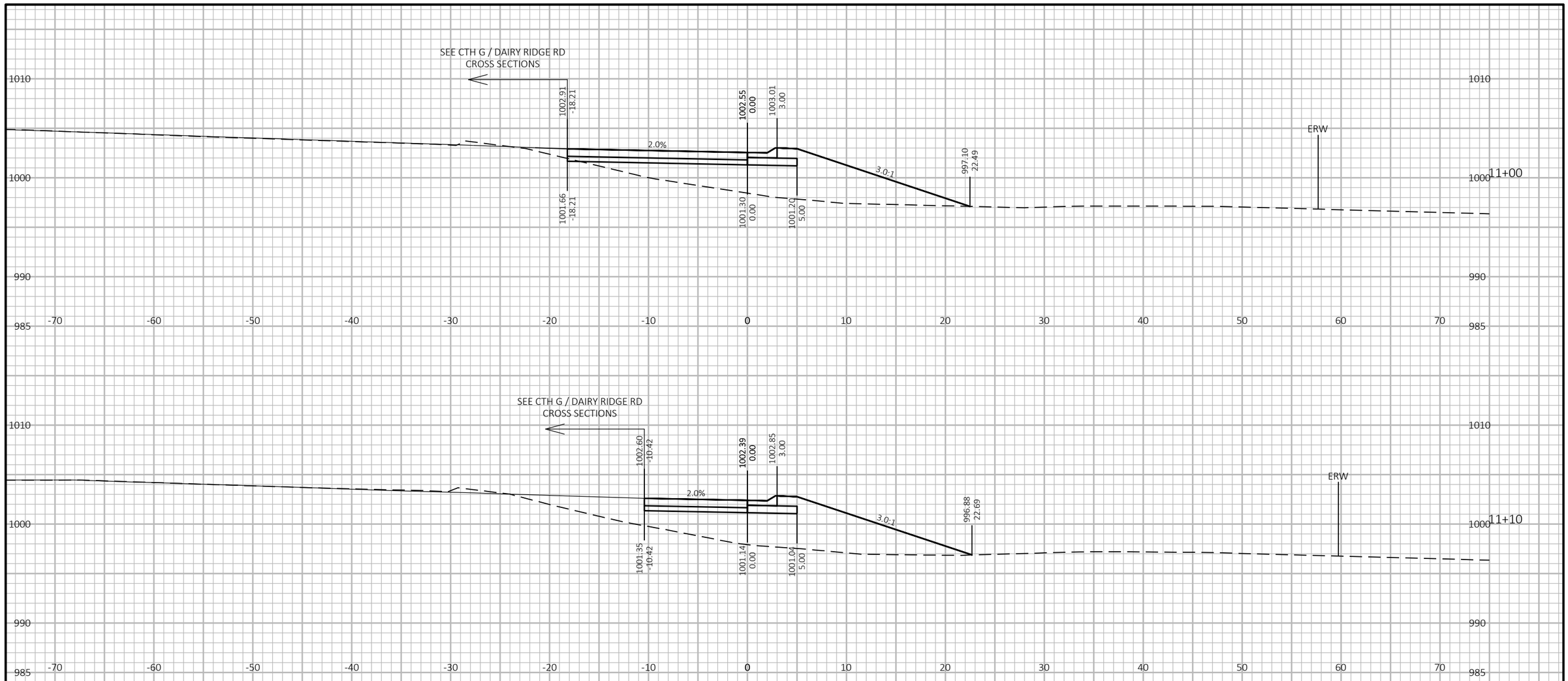
9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 863	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-8

PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

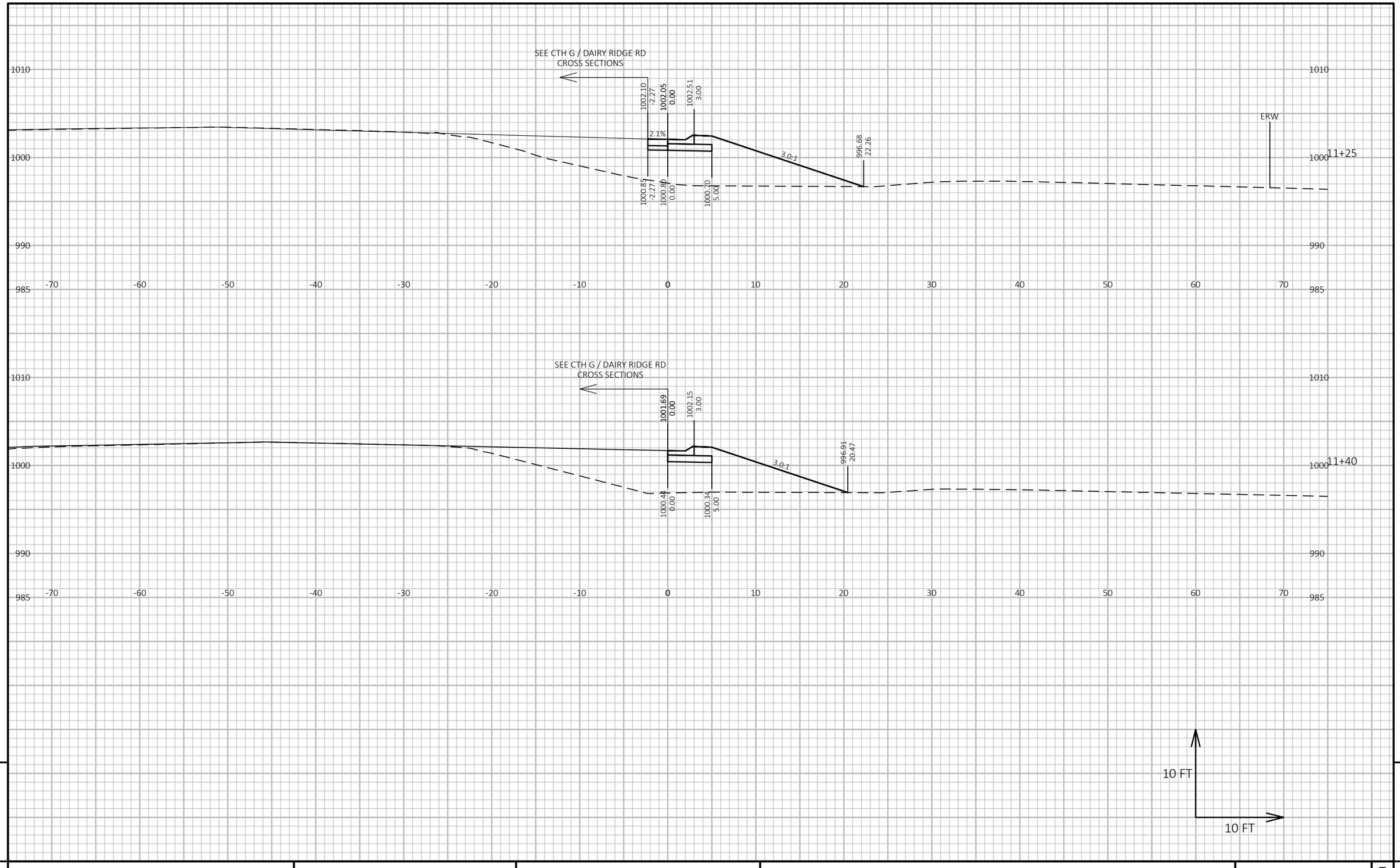
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 864	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-9

PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

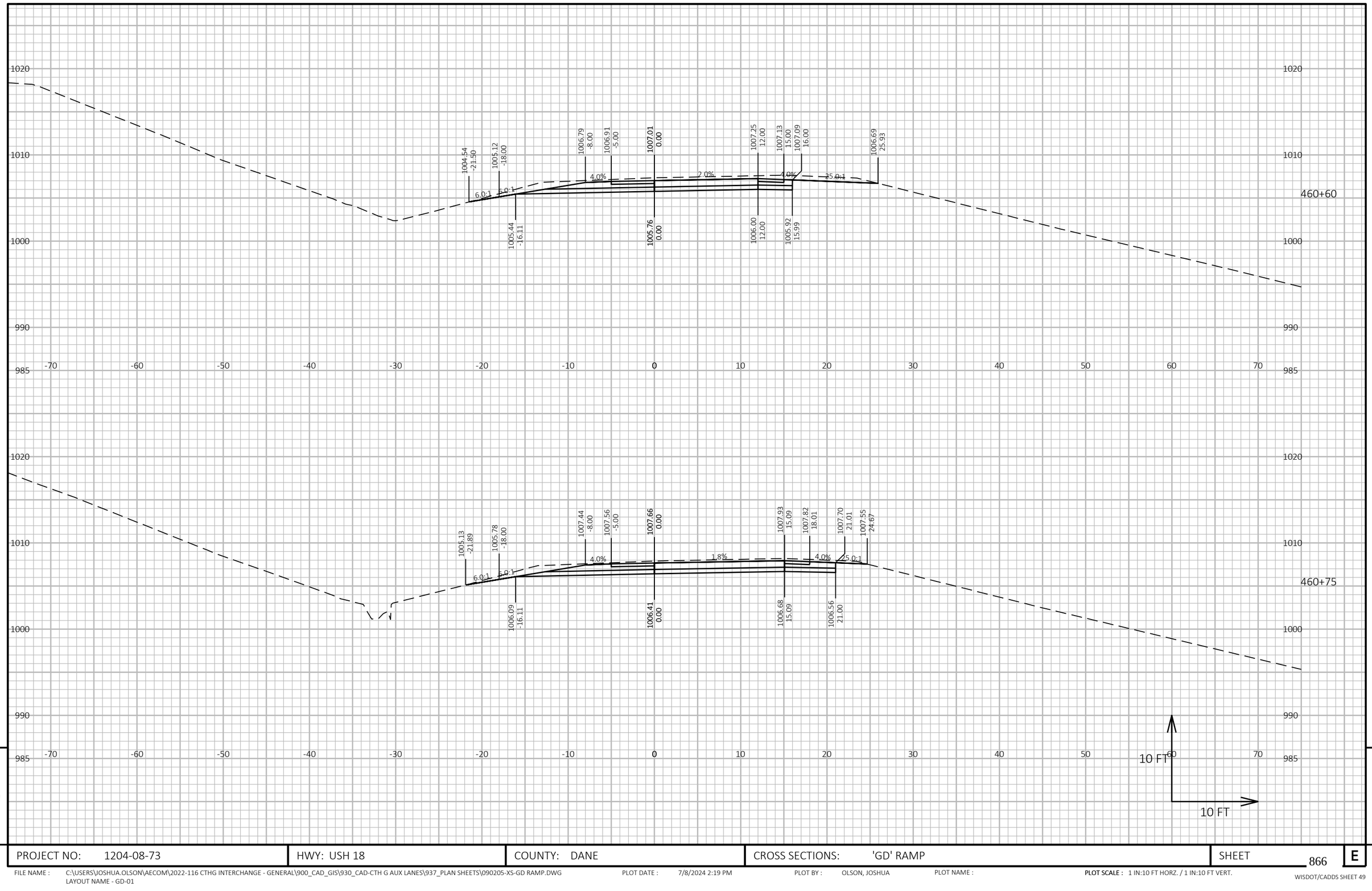
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GC SOUTH CURB RETURN	SHEET 865	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GC RAMP.DWG
LAYOUT NAME - SBCR-10

PLOT DATE : 7/8/2024 1:59 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GD' RAMP	SHEET 866	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - GD-01

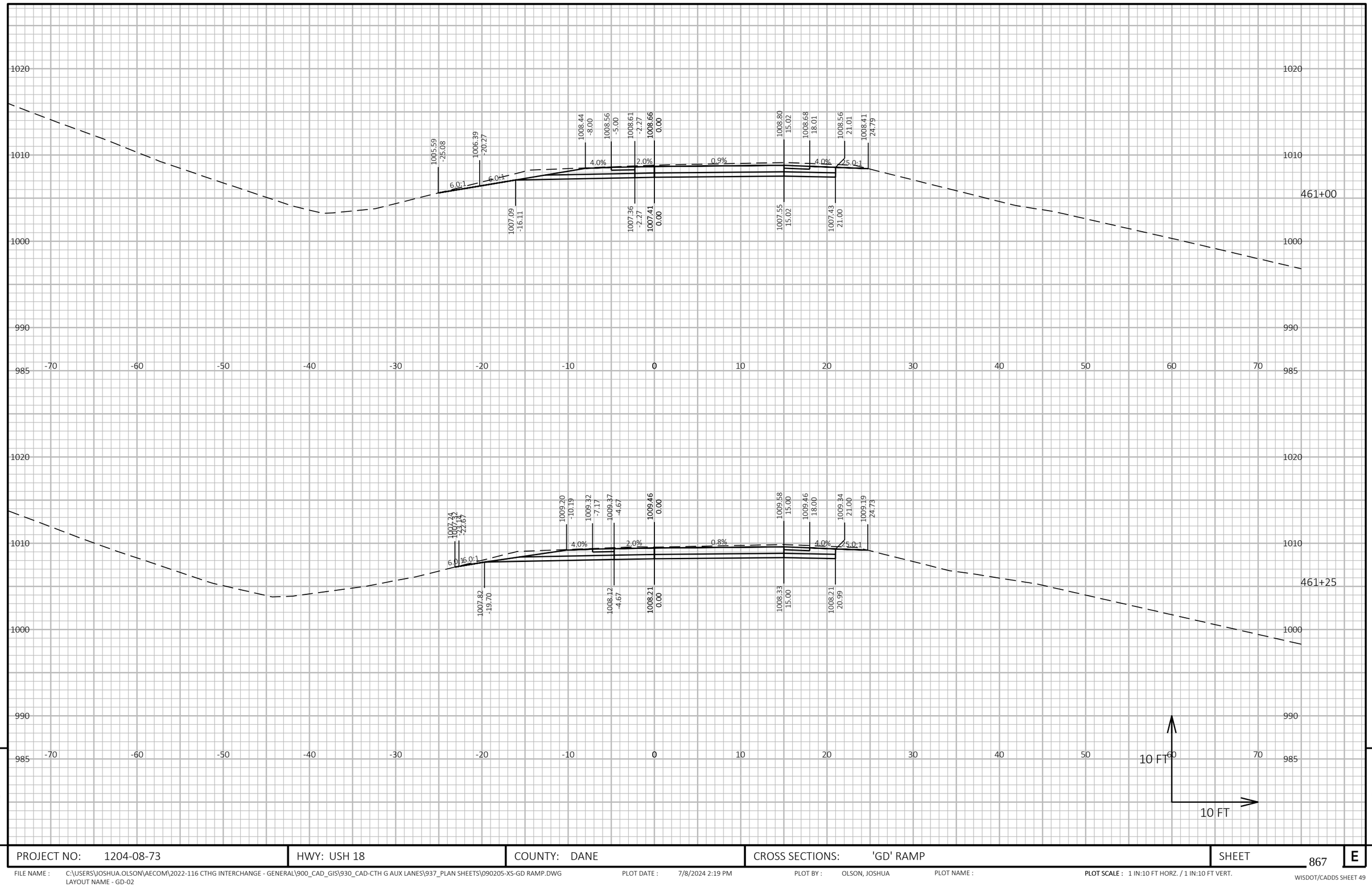
PLOT DATE : 7/8/2024 2:19 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

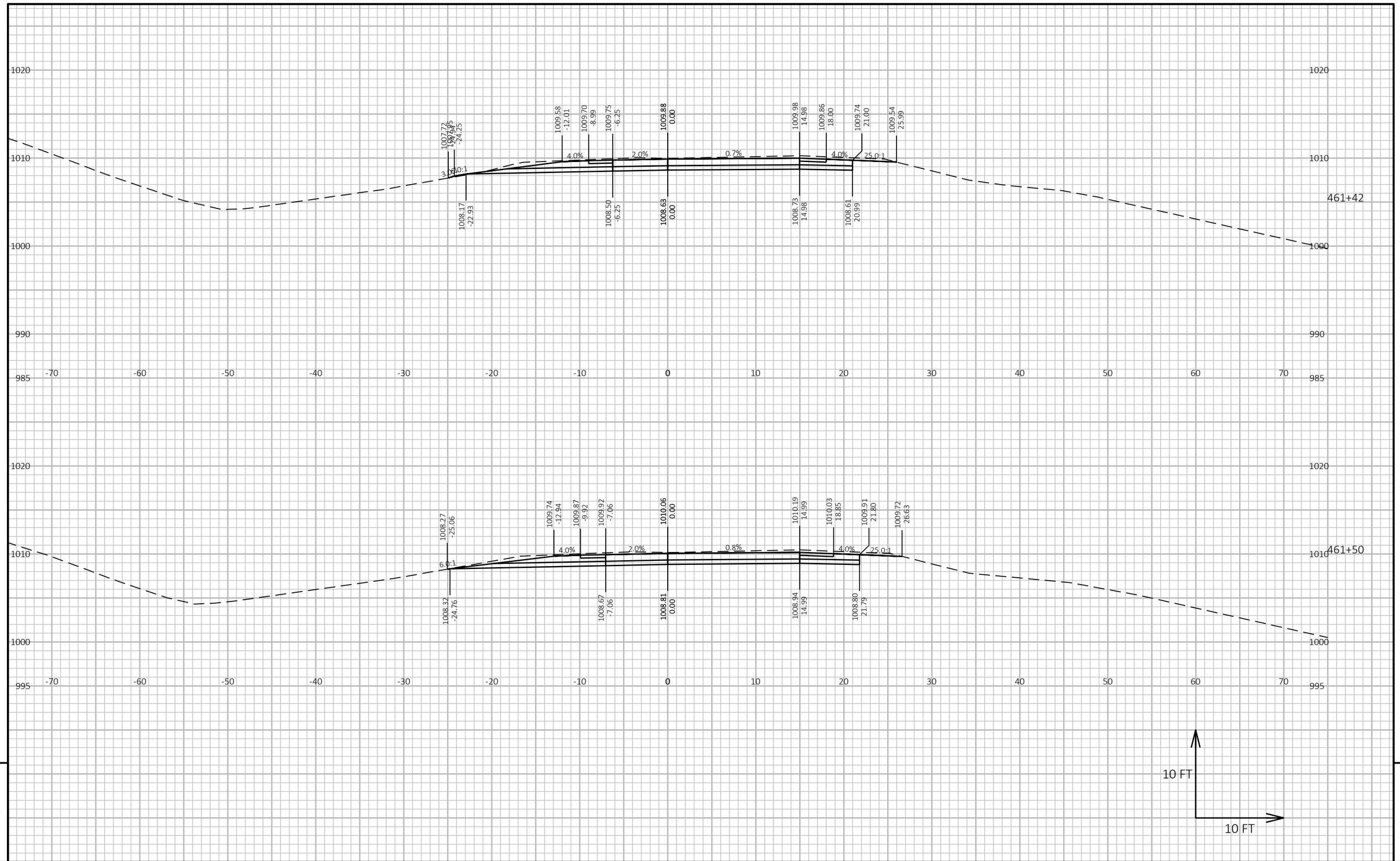


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GD' RAMP	SHEET 867	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - GD-02

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

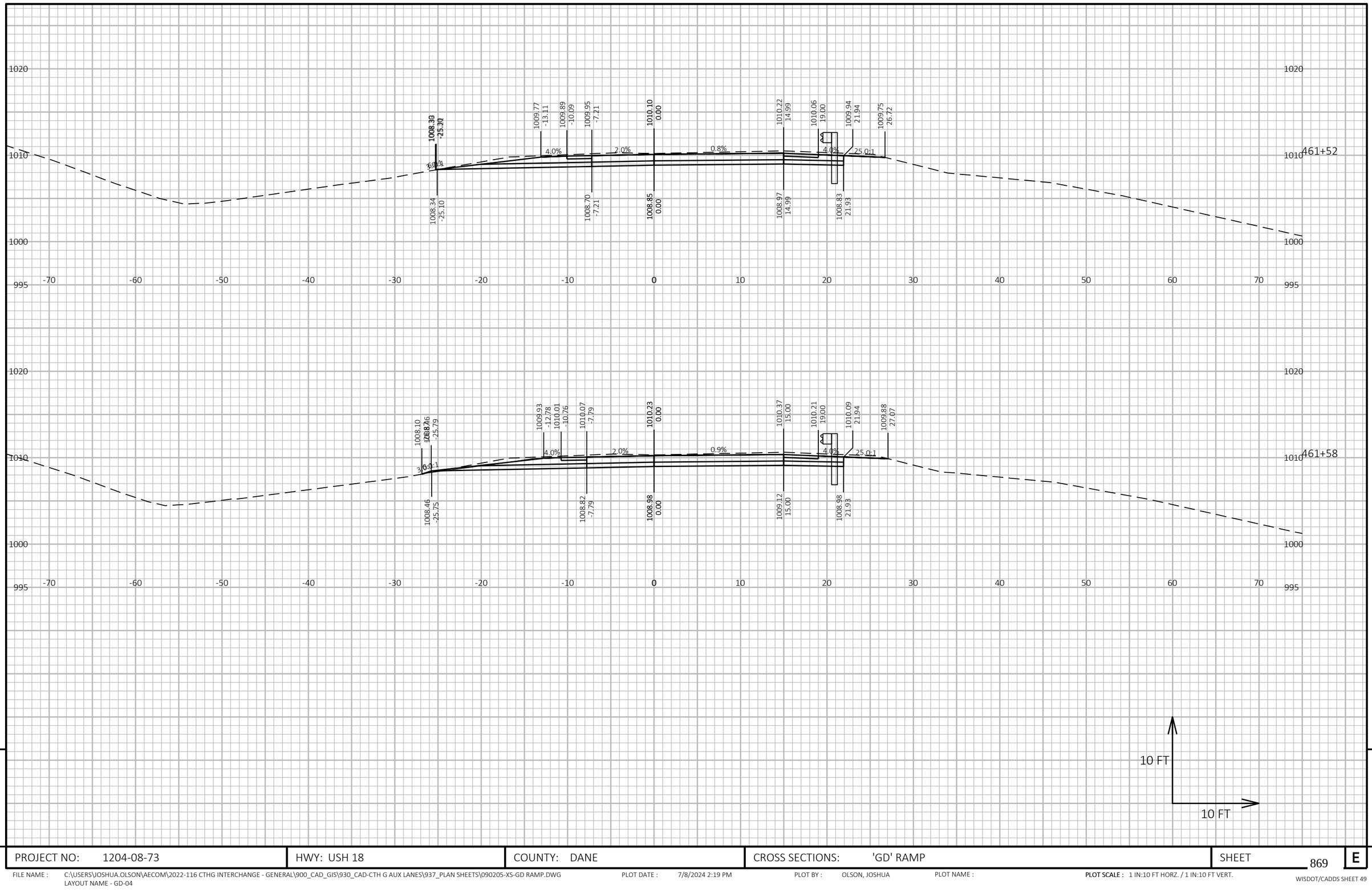


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GD' RAMP	SHEET 868	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - GD-03

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GD' RAMP	SHEET 869	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - GD-04

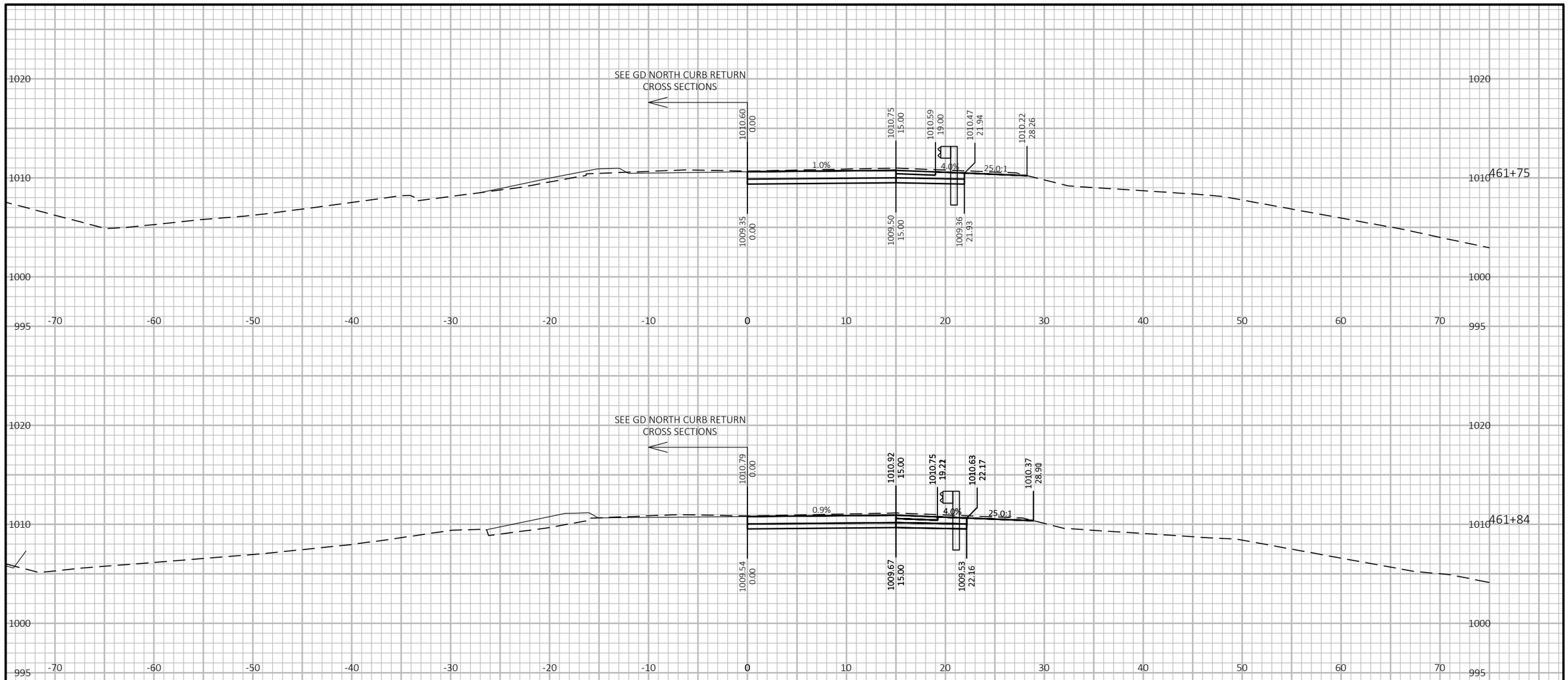
PLOT DATE : 7/8/2024 2:19 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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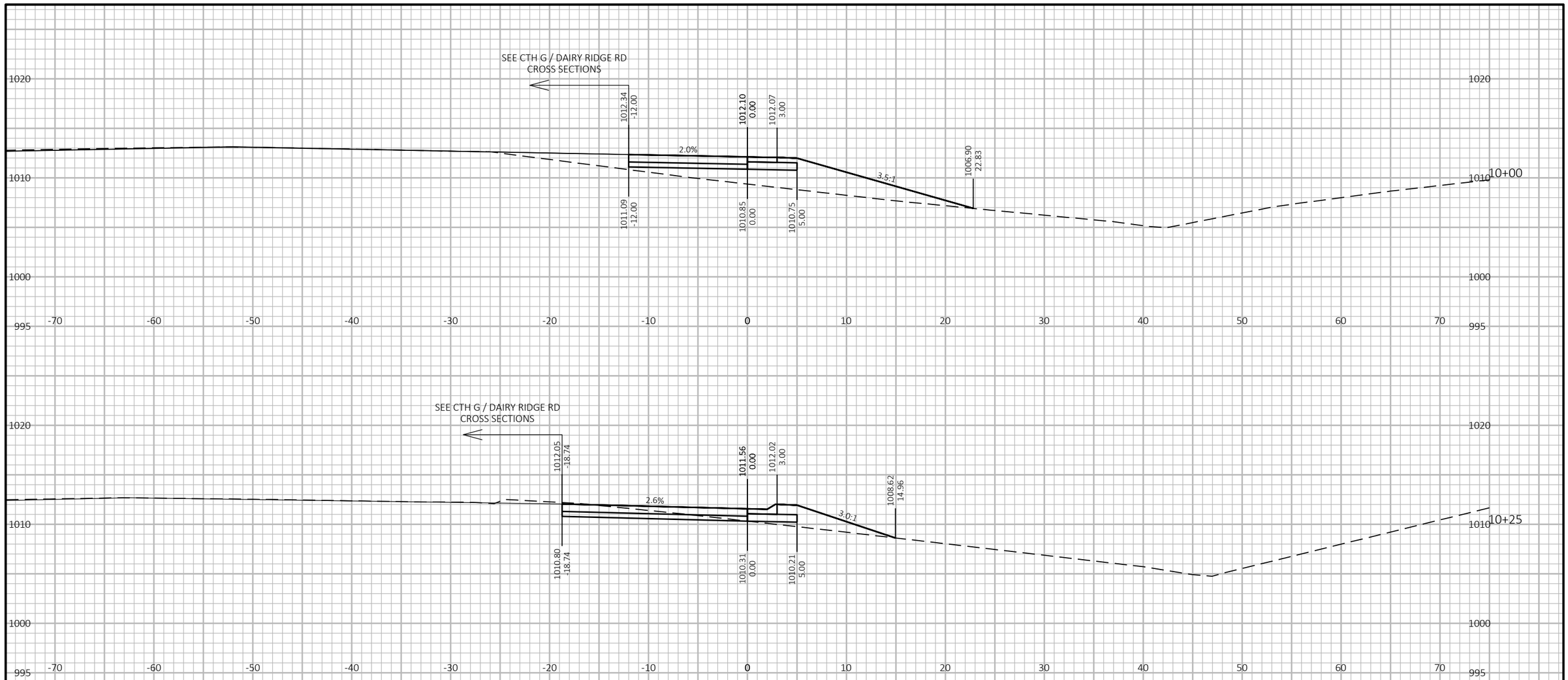
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: 'GD' RAMP	SHEET 870	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - GD-05

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

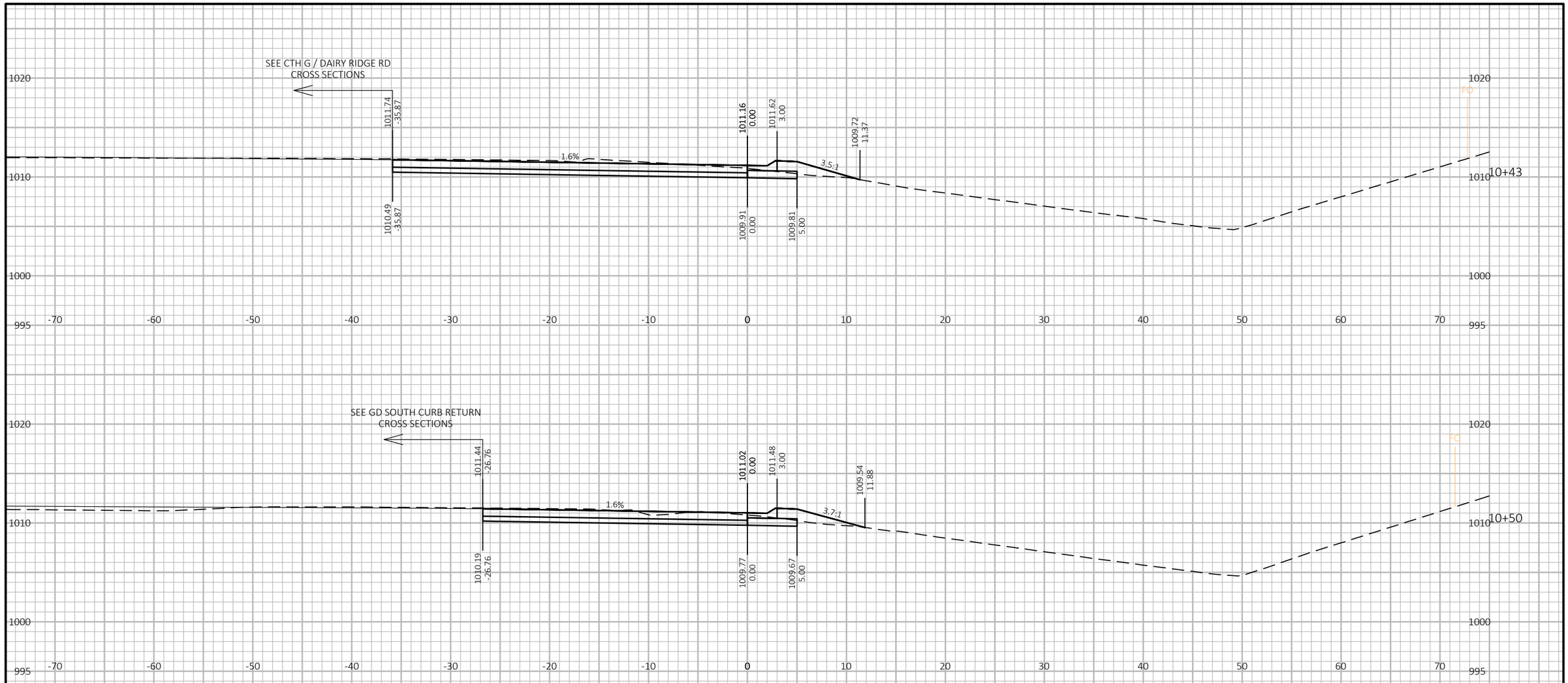
9

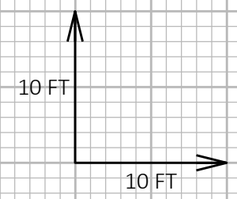
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GD NORTH CURB RETURN	SHEET 871	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - NBCR-01

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





9

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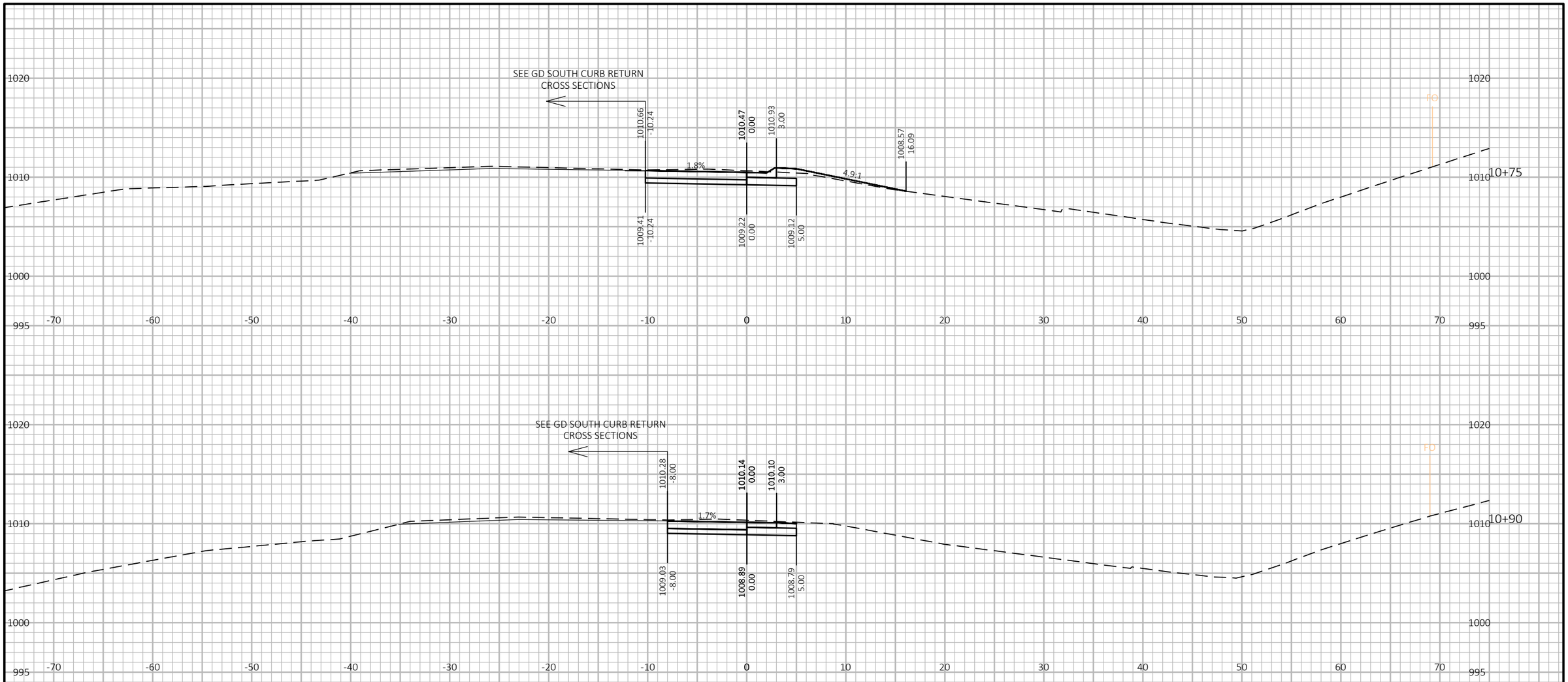
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GD NORTH CURB RETURN	SHEET 872	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - NBCR-02

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

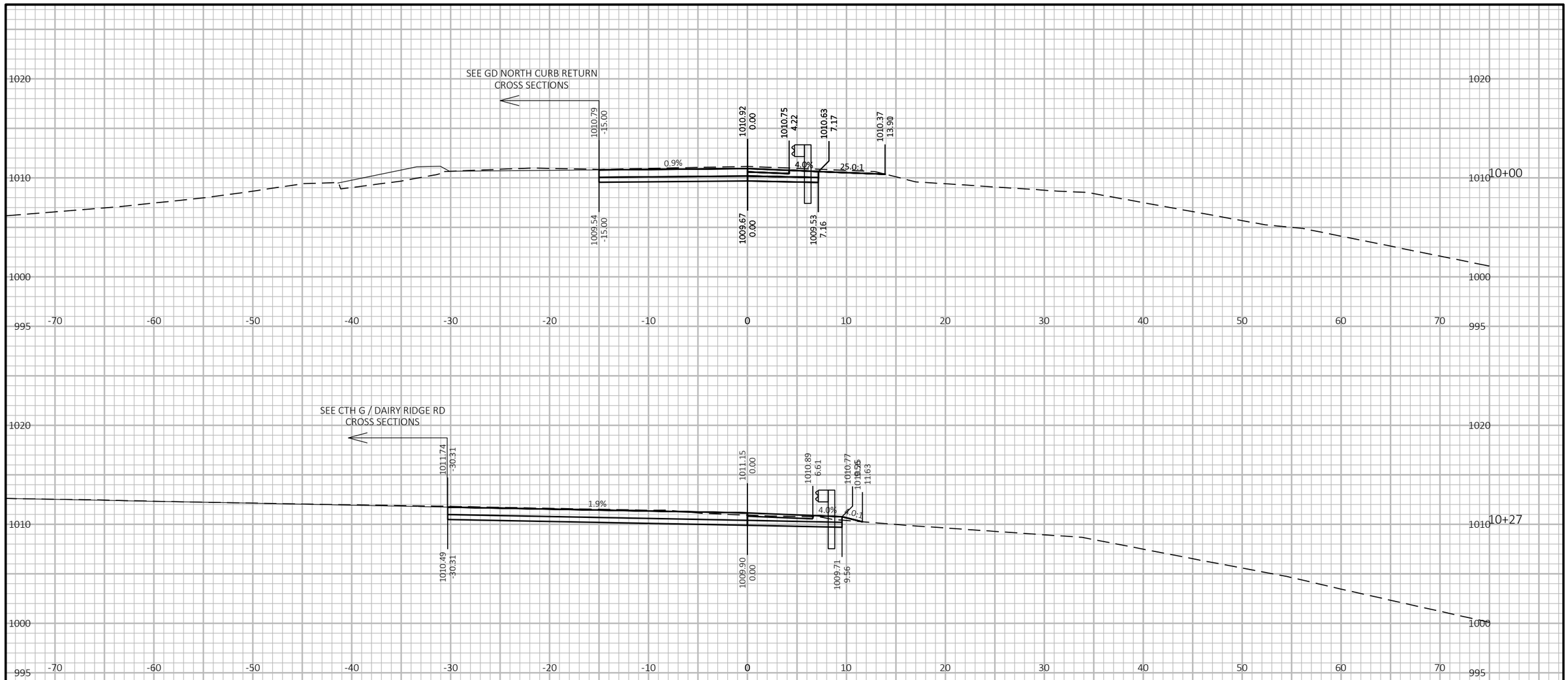
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GD NORTH CURB RETURN	SHEET 873	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - NBCR-03

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GD SOUTH CURB RETURN	SHEET 874 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - SBCR-01

PLOT DATE : 7/8/2024 2:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1011.26
-3.22

1011.21
0.00

1010.93
7.89

1010.82
10.83

1009.91
14.44

1.6%

4.0%

4.0:1

1010.01
-3.22

1009.96
0.00

1009.74
10.82

10+50

1020
1010
1000
995

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1011.07
0.00

1010.90
8.15

1010.75
11.91

1008.92
19.22

4.0%

4.0:1

1009.82
0.00

1009.58
11.90

10+66

1020
1010
1000
995

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: GD SOUTH CURB RETURN	SHEET 875	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090205-XS-GD RAMP.DWG
LAYOUT NAME - SBCR-02

PLOT DATE : 7/8/2024 2:19 PM

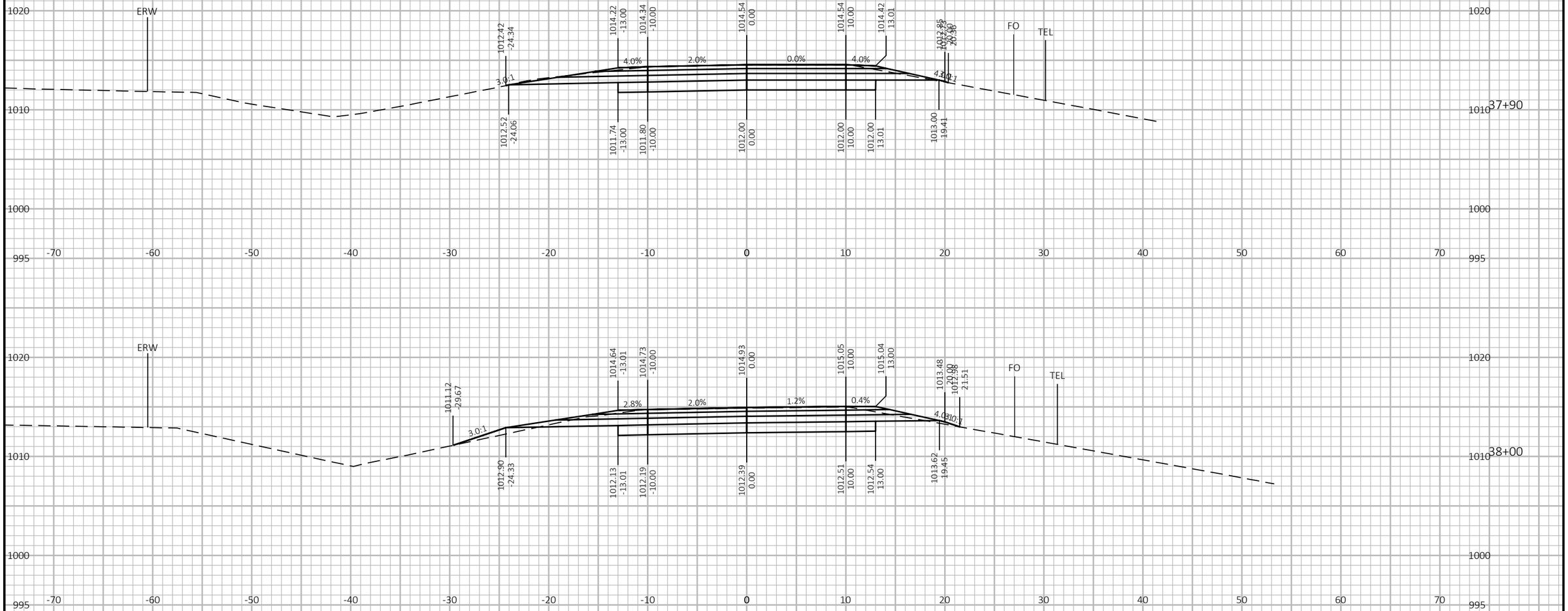
PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

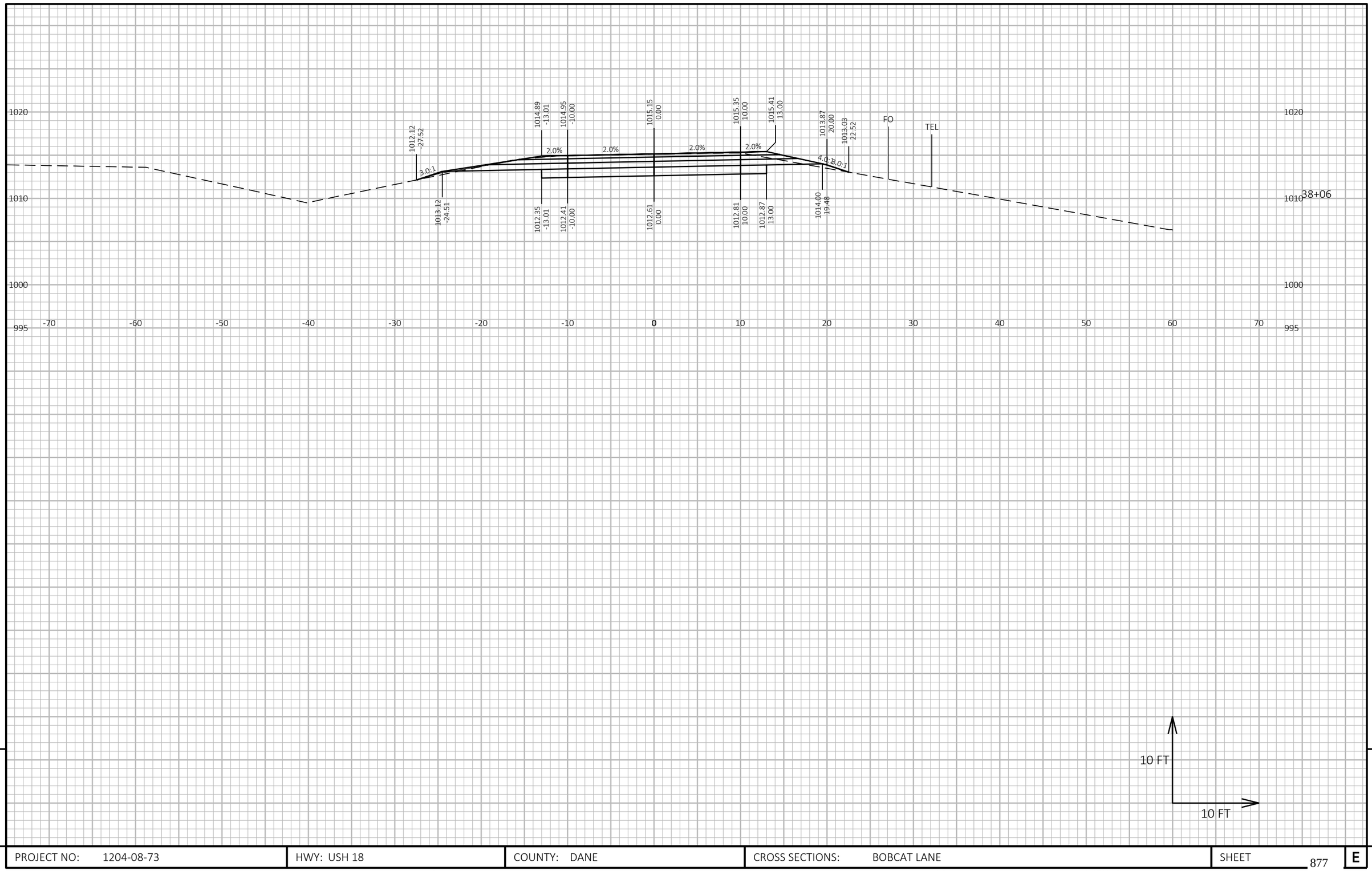
WISDOT/CADDS SHEET 49

BEGIN CONSTRUCTION
STA 37+90'BL'



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE	SHEET 876	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - 01
PLOT DATE : 7/18/2024 2:14 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

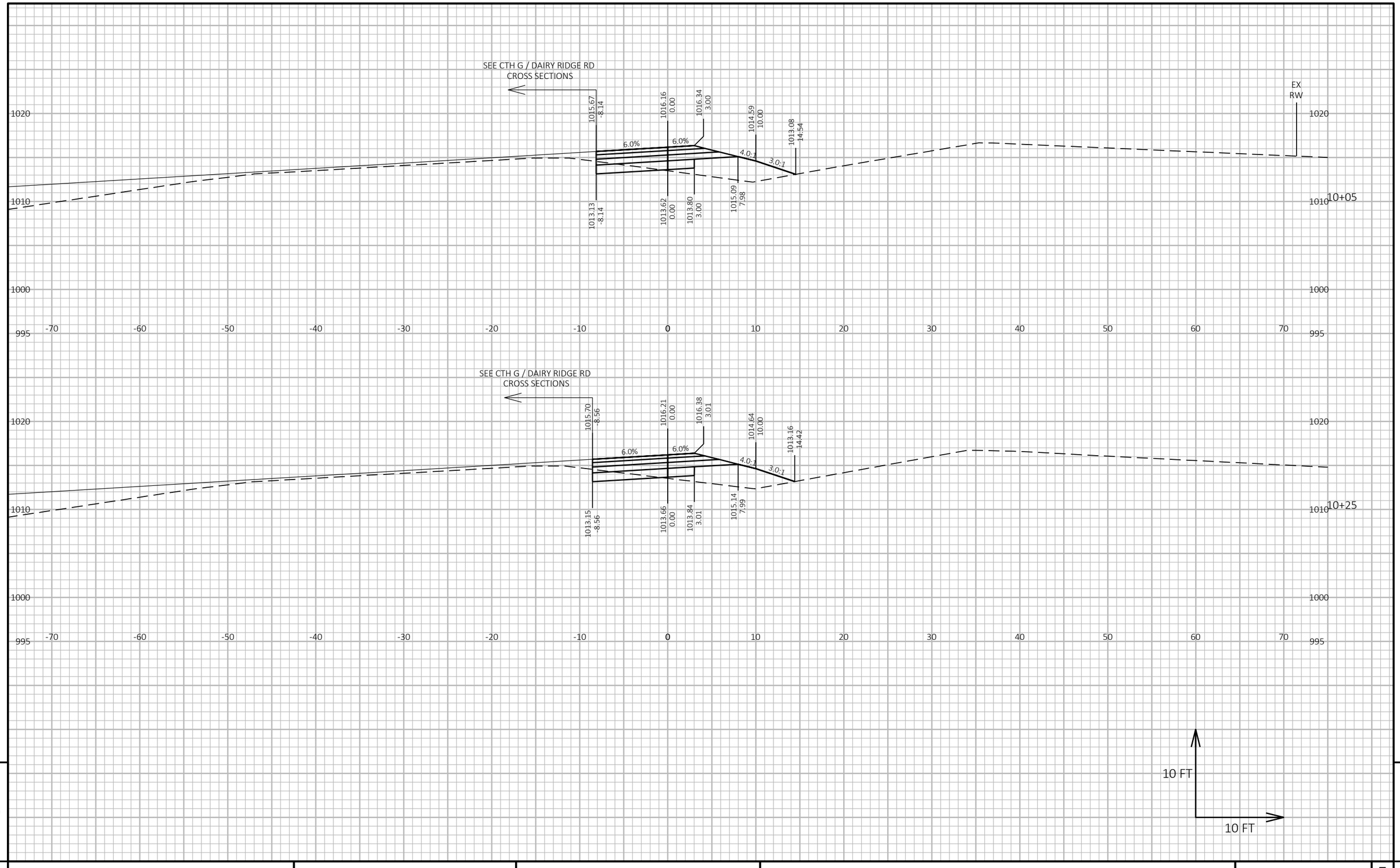
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE	SHEET 877	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - 02

PLOT DATE : 7/18/2024 2:14 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

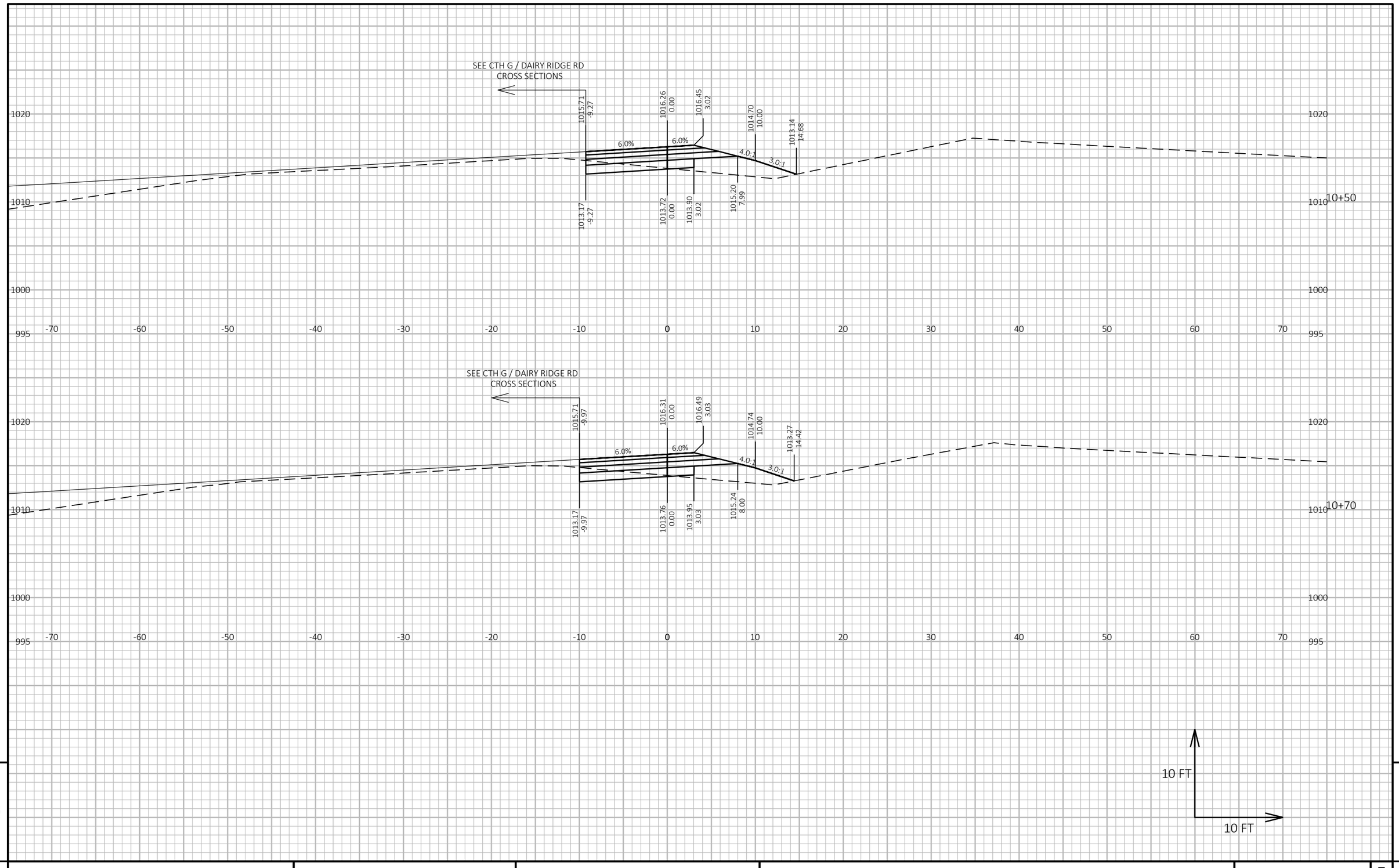


9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE NB CURB RETURN	SHEET 878	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - NB-1
PLOT DATE : 7/18/2024 2:14 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

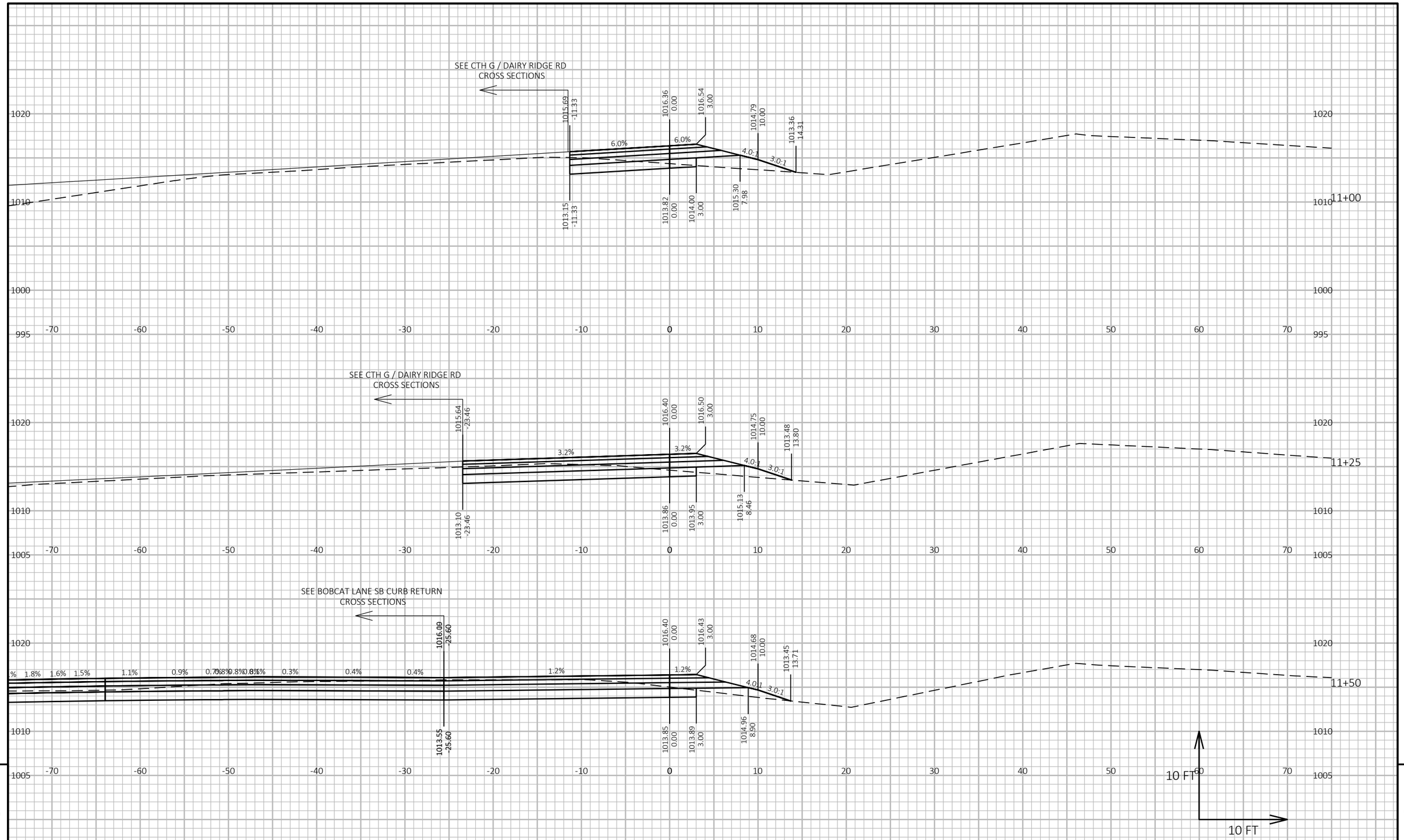
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE NB CURB RETURN	SHEET 879	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - NB-2

PLOT DATE : 7/18/2024 2:14 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE NB CURB RETURN	SHEET 880

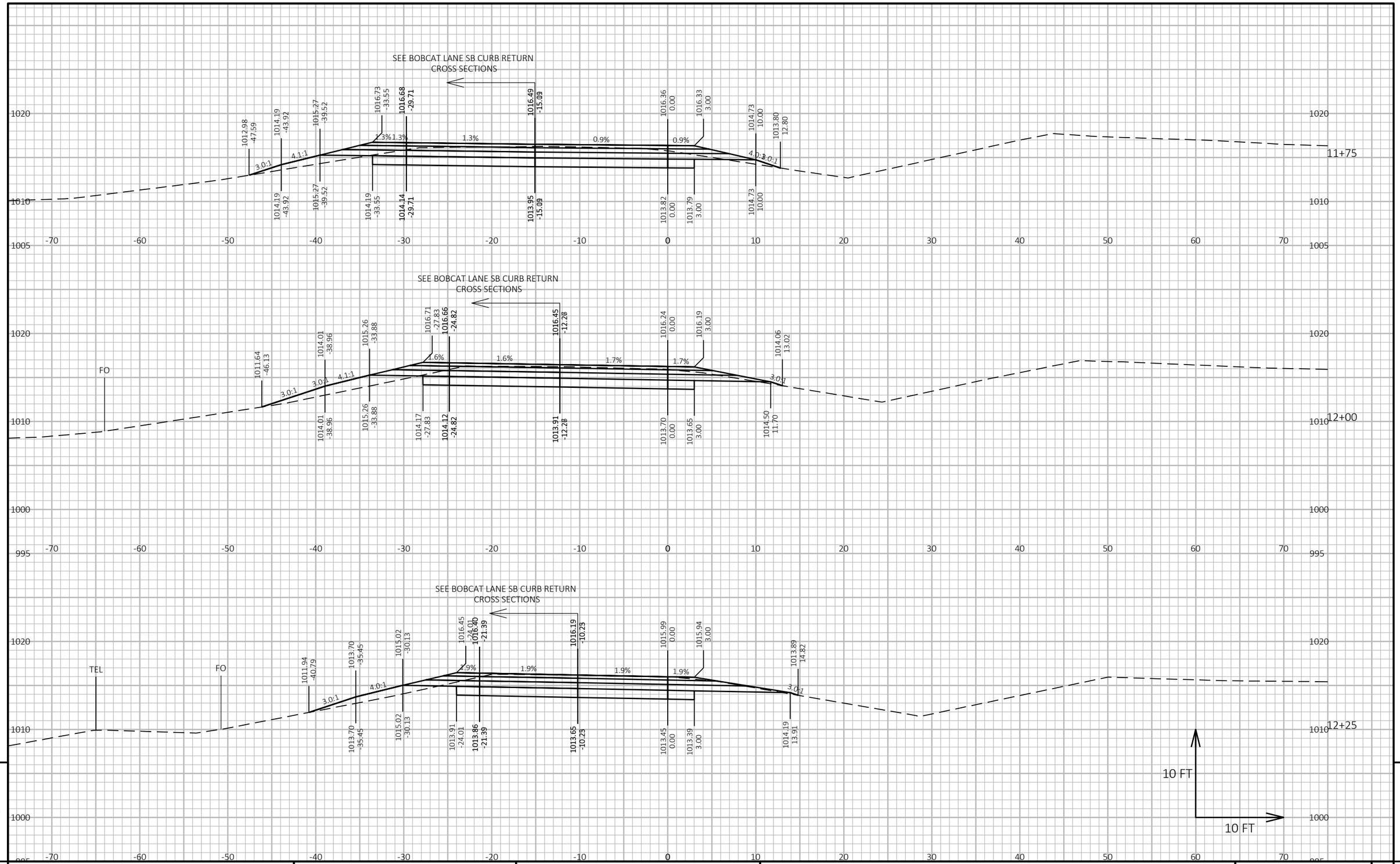
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - NB-3

PLOT DATE : 7/18/2024 2:14 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9 9

E



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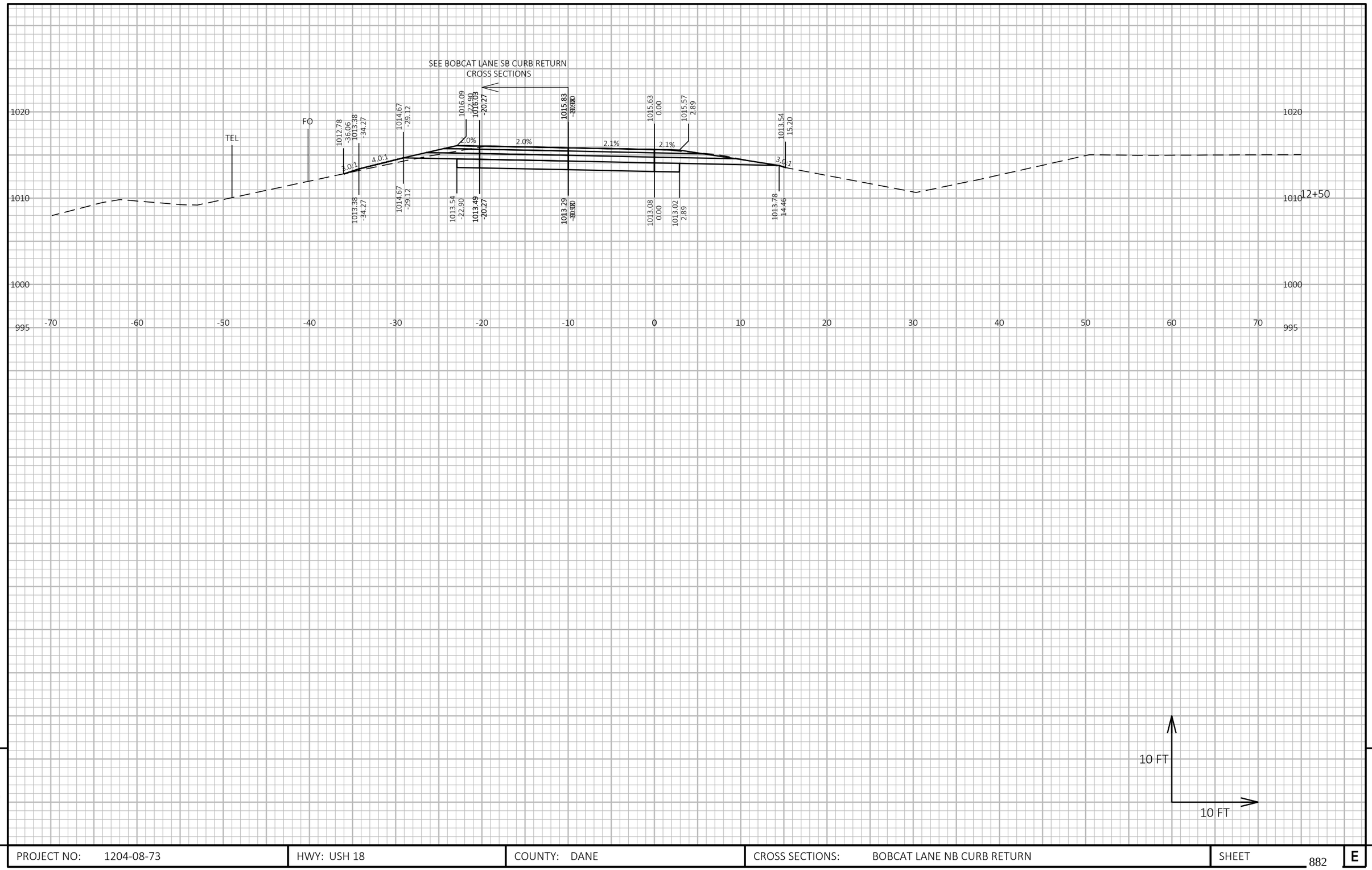
9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE NB CURB RETURN	SHEET 881	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - NB-4

PLOT DATE : 7/18/2024 2:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

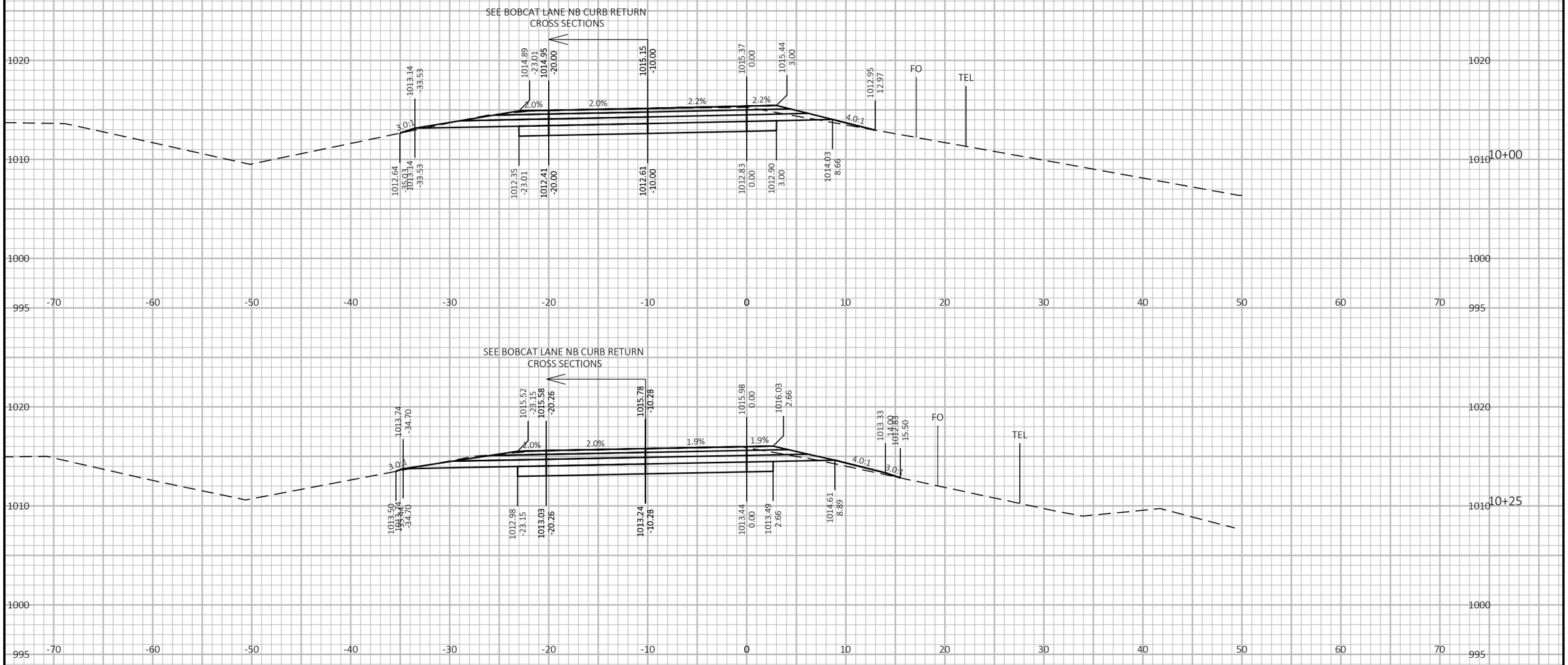
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE NB CURB RETURN	SHEET 882	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - NB-5

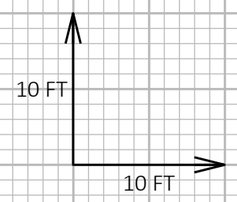
PLOT DATE : 7/18/2024 2:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE BOBCAT LANE NB CURB RETURN
CROSS SECTIONS



SEE BOBCAT LANE NB CURB RETURN
CROSS SECTIONS



9 9

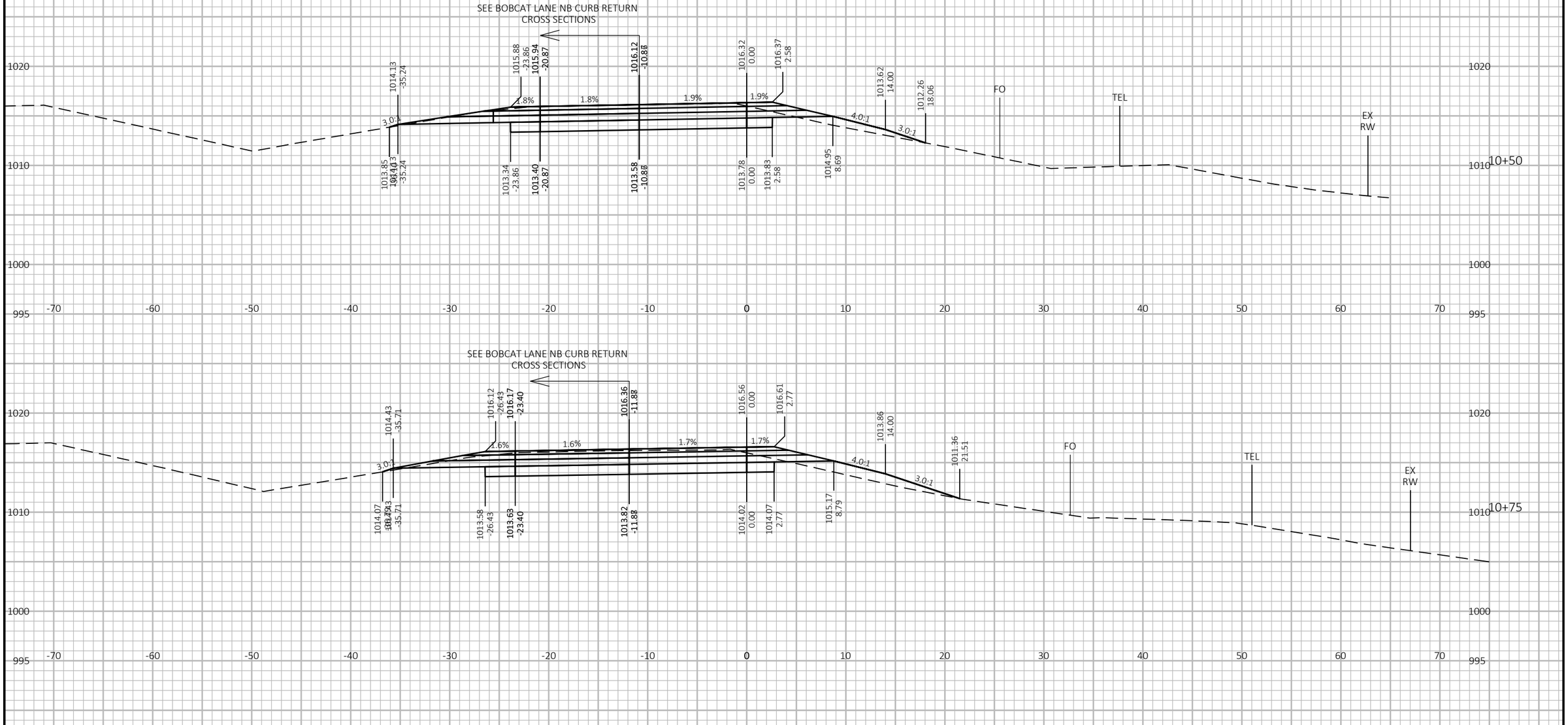
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 883	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-1

PLOT DATE : 7/18/2024 2:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE BOBCAT LANE NB CURB RETURN CROSS SECTIONS



SEE BOBCAT LANE NB CURB RETURN CROSS SECTIONS

10 FT

10 FT

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 884	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-2

PLOT DATE : 7/18/2024 2:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE BOBCAT LANE NB CURB RETURN
CROSS SECTIONS

1014.66
-37.68
1016.29
-29.96
1016.33
-26.92
1016.51
-13.28
1016.71
0.00
1016.75
3.22
1014.09
14.00
1011.93
20.47

3.0:1
4.2%
1.3%
1.5%
1.5%
4.0:1
3.0:1

1013.92
-39.93
1014.66
-37.68
1013.75
-29.96
1013.79
-26.92
1013.97
-13.28
1014.16
0.00
1014.21
3.22
1015.30
9.16

FO
TEL
11+00

1020
1010
1000
995
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

SEE BOBCAT LANE NB CURB RETURN
CROSS SECTIONS

1013.67
-45.75
1014.65
-41.66
1016.38
-35.07
1016.38
-31.86
1016.49
-14.91
1016.65
0.00
1016.71
3.92
1014.19
14.00
1013.05
17.41

3.3:1
3.2:1
4.2:1
0.0%
0.1%
0.4%
1.4%
1.4%
4.0:1
3.0:1

1014.65
-41.66
1013.84
-35.07
1013.84
-31.86
1013.90
-14.91
1014.11
0.00
1014.17
3.92
1015.25
9.76

FO
11+25

1020
1010
1000
995
-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT
10 FT

9 9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 885	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-3
PLOT DATE : 7/18/2024 2:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

SEE BOBCAT LANE NB CURB RETURN
CROSS SECTIONS

1015.67
-67.85

1015.98
-22.51

1016.48
0.00

1016.57
4.00

1014.07
14.00

1013.56
15.54

1.6% 1.5% 1.2% 1.0% 0.9% 0.8% 0.6% 0.5% 0.1% 0.2% 0.4% 2.2% 2.2%

4.0:1

3.0:1

FO

11+50

1013.12
-67.85

1013.44
-22.51

1013.94
0.00

1014.03
4.00

1015.15
9.66

1020 1010 1000 995

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1015.49
-16.19

1016.22
0.00

1016.40
4.00

1013.90
14.00

1012.66
17.73

4.5% 4.5%

4.0:1

3.0:1

FO

11+75

1012.95
-16.19

1013.68
0.00

1013.86
4.00

1015.09
9.23

1020 1010 1000 995

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 886	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-4

PLOT DATE : 7/18/2024 2:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1015.38
-8.44

1015.87
0.00

1016.10
4.01

1013.61
14.00

1011.56
20.13

5.8%

5.8%

4.0:1

3.0:1

FO

1012.84
-8.44

1013.33
0.00

1013.56
4.01

1014.85
9.02

12+00

1020
1010
1000
995

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

SEE CTH G / DAIRY RIDGE RD
CROSS SECTIONS

1015.26
-5.30

1015.58
0.00

1015.82
4.04

1013.33
14.00

1011.33
20.01

6.0%

6.0%

4.0:1

3.0:1

FO

1012.72
-5.30

1013.04
0.00

1013.28
4.04

1014.58
9.02

12+25

1020
1010
1000
995

-70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70

10 FT

10 FT

9

9

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 887	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-5

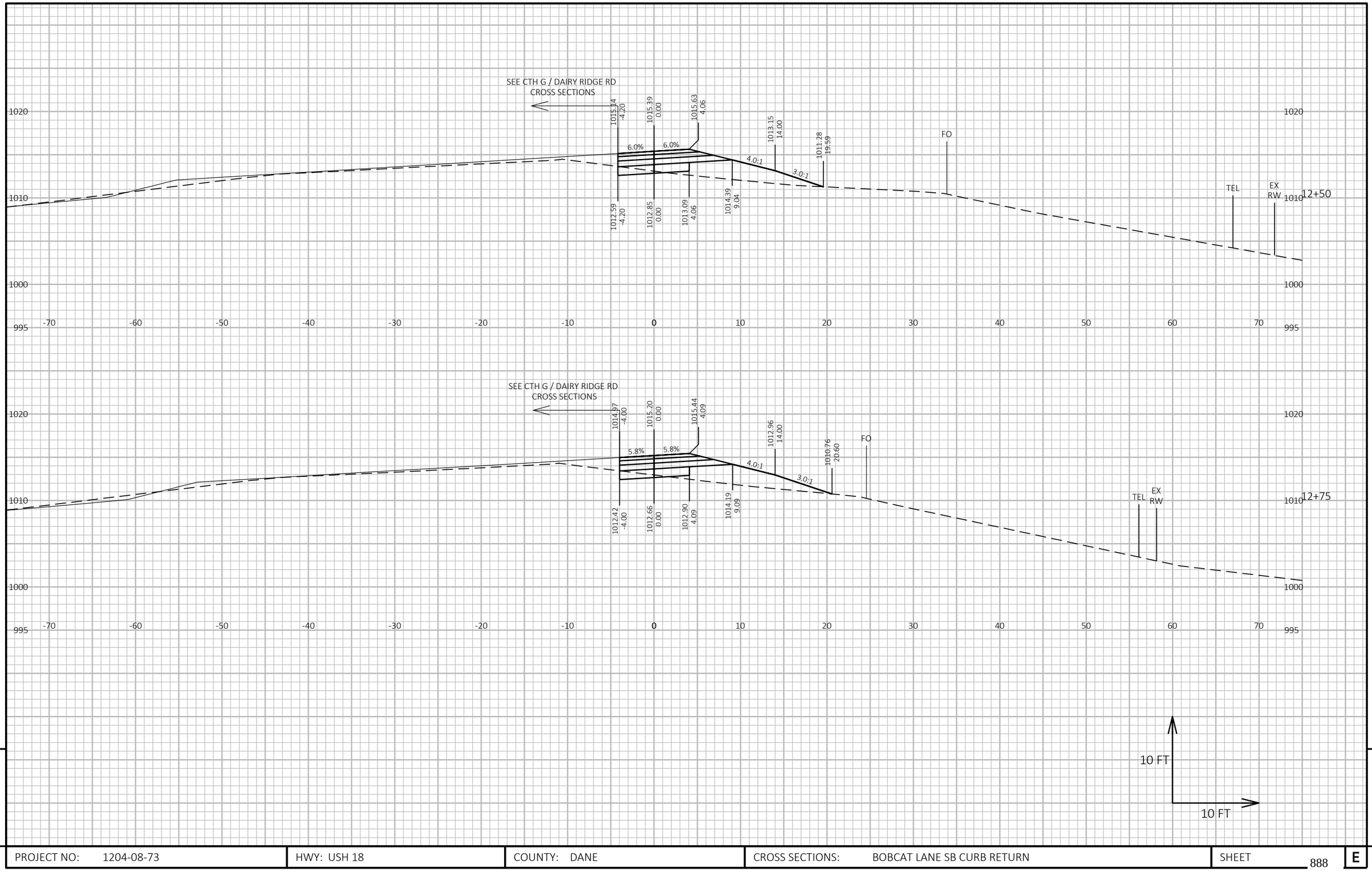
PLOT DATE : 7/18/2024 2:16 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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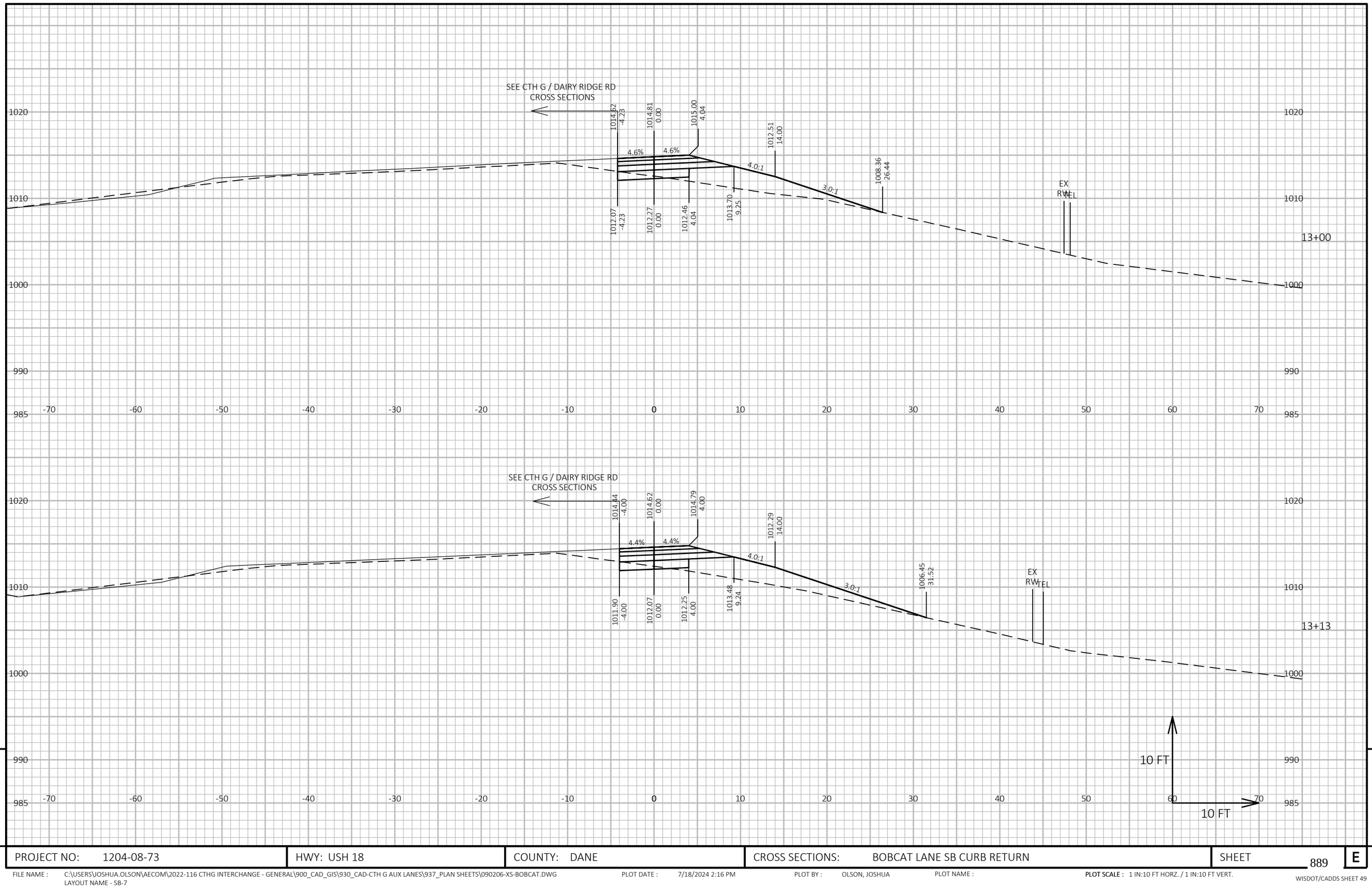
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 888	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-6

PLOT DATE : 7/18/2024 2:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: BOBCAT LANE SB CURB RETURN	SHEET 889	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090206-XS-BOBCAT.DWG
LAYOUT NAME - SB-7

PLOT DATE : 7/18/2024 2:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN CONSTRUCTION - 'RAMP W4'
1204-08-74

985.03 -23.48
984.97 -21.00
984.89 -19.00
984.73 -15.00
983.48 -15.00
21.9:1
3.9%
522+88

984.84 -23.48
984.74 -21.00
984.69 -19.00
984.58 -15.00
983.33 -15.00
23.6:1
2.6%
523+00

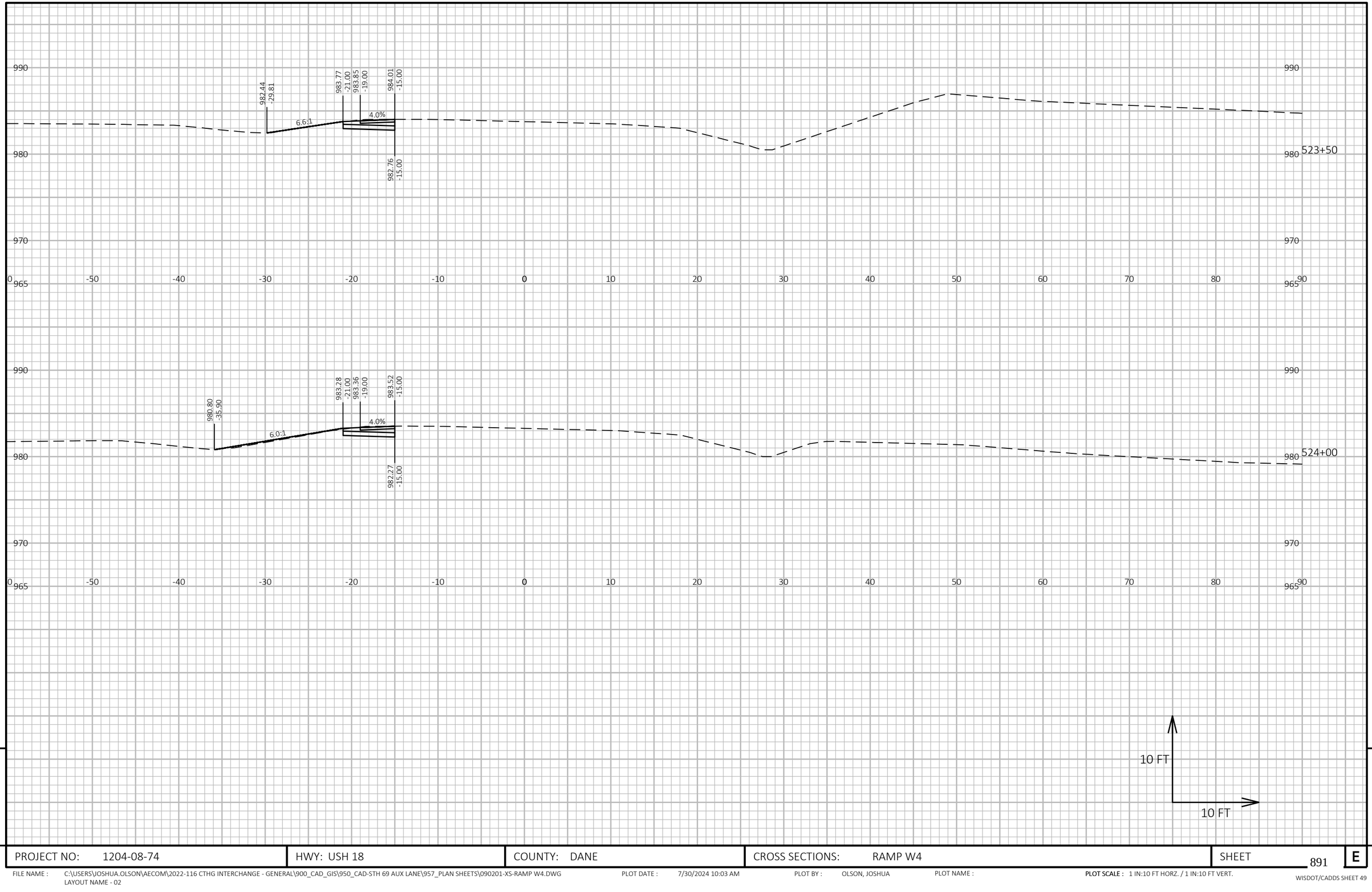
1000
990
980
970
965
0 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90

10 FT
10 FT

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 890	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 01
PLOT DATE : 7/30/2024 10:03 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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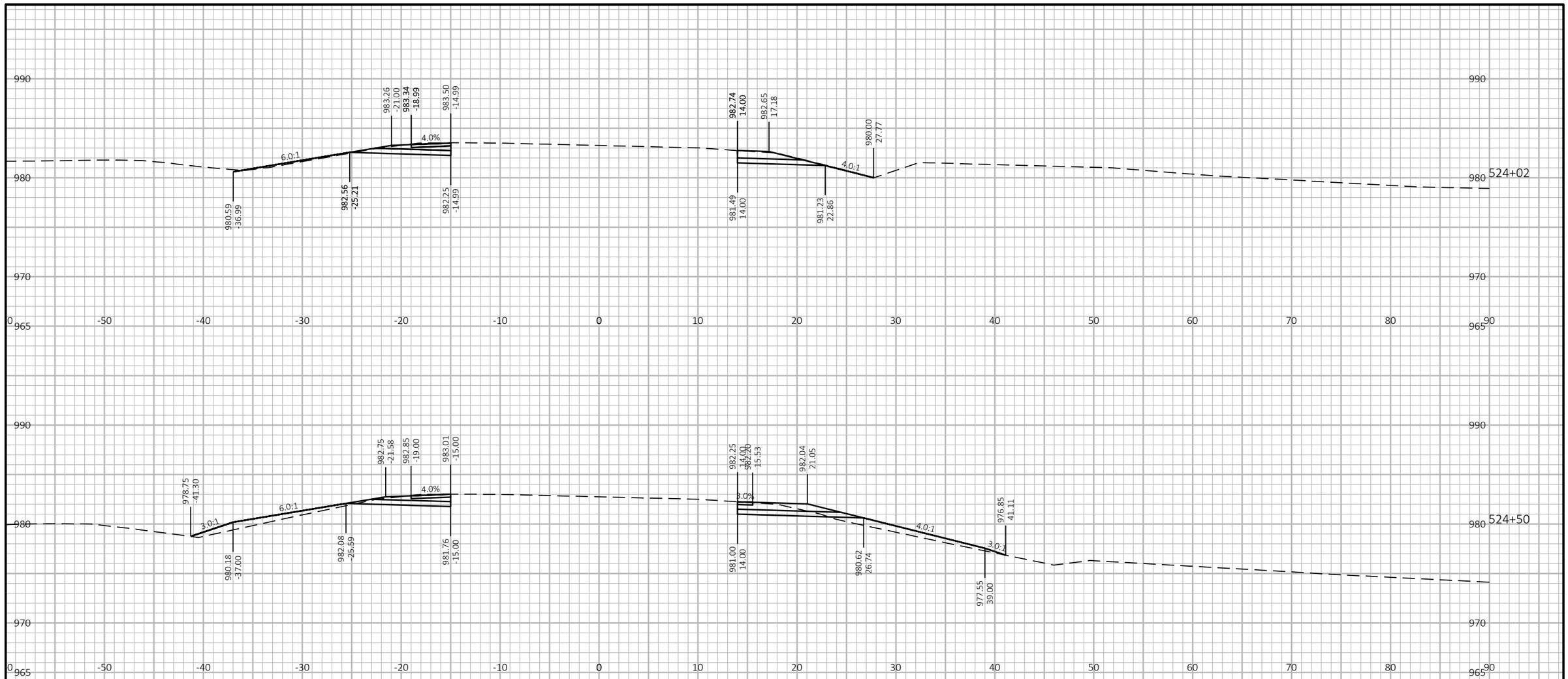
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 891	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 02

PLOT DATE : 7/30/2024 10:03 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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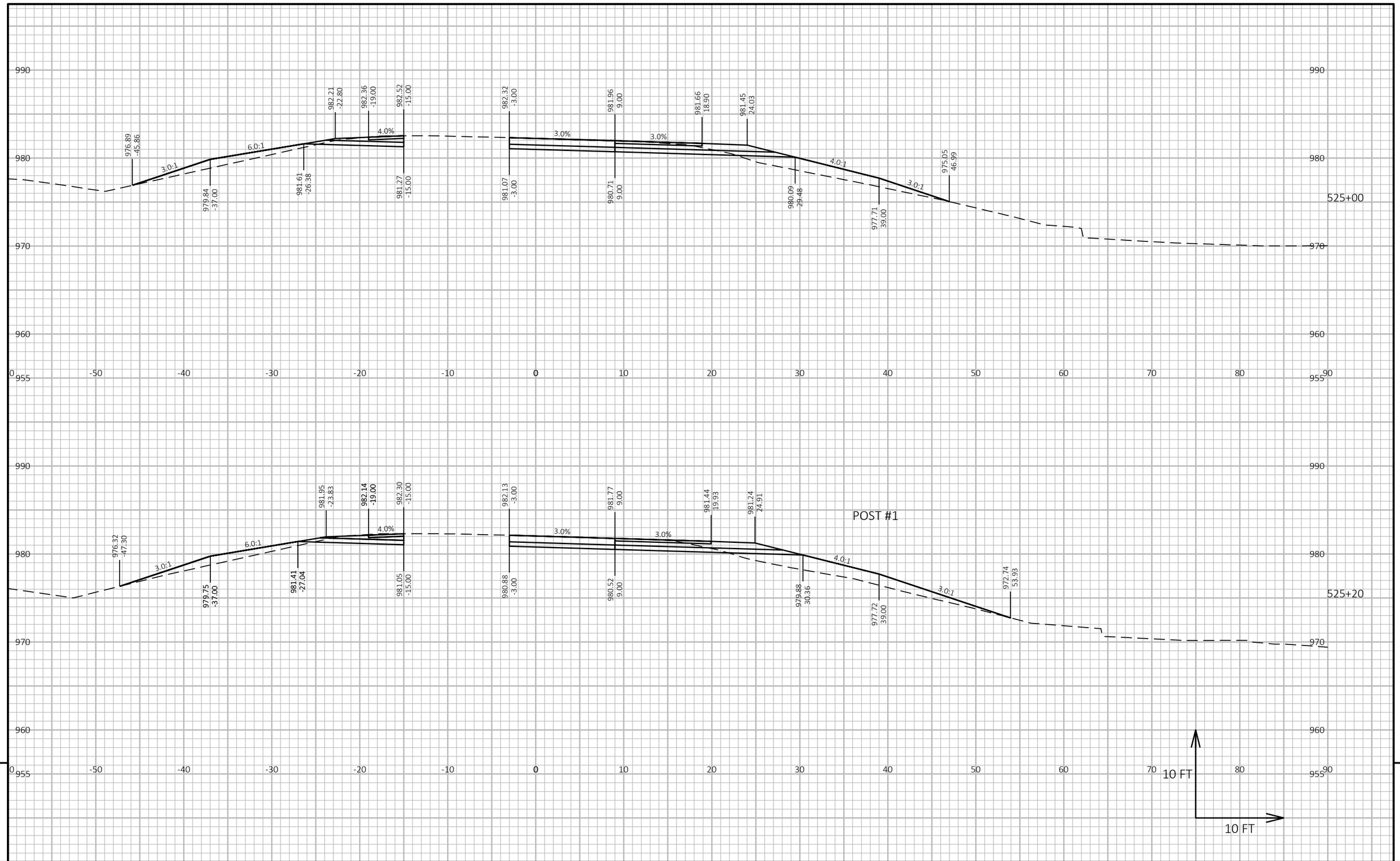
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 892	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 03

PLOT DATE : 7/30/2024 10:03 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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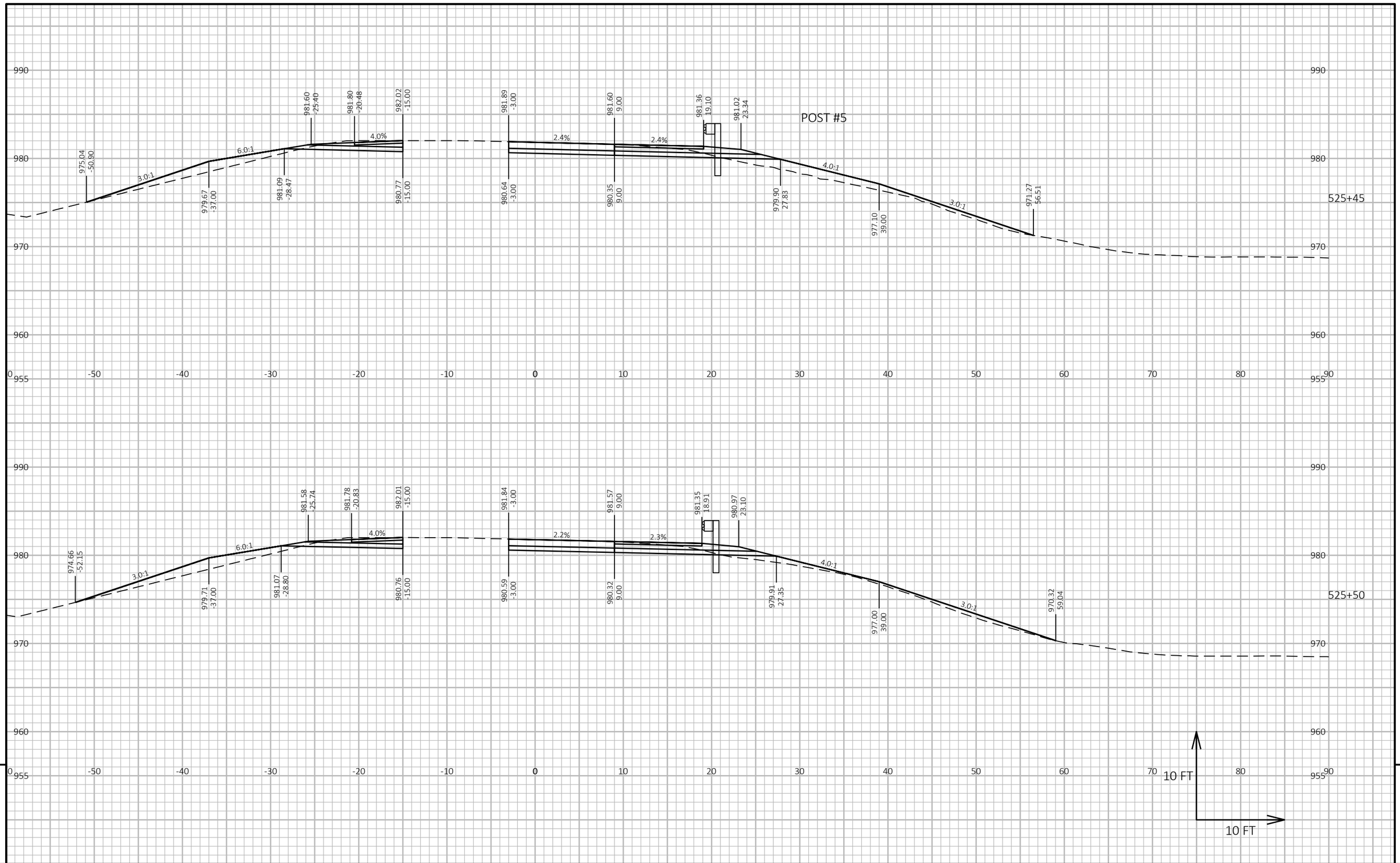
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 893	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 04

PLOT DATE : 7/30/2024 10:03 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 894	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 05

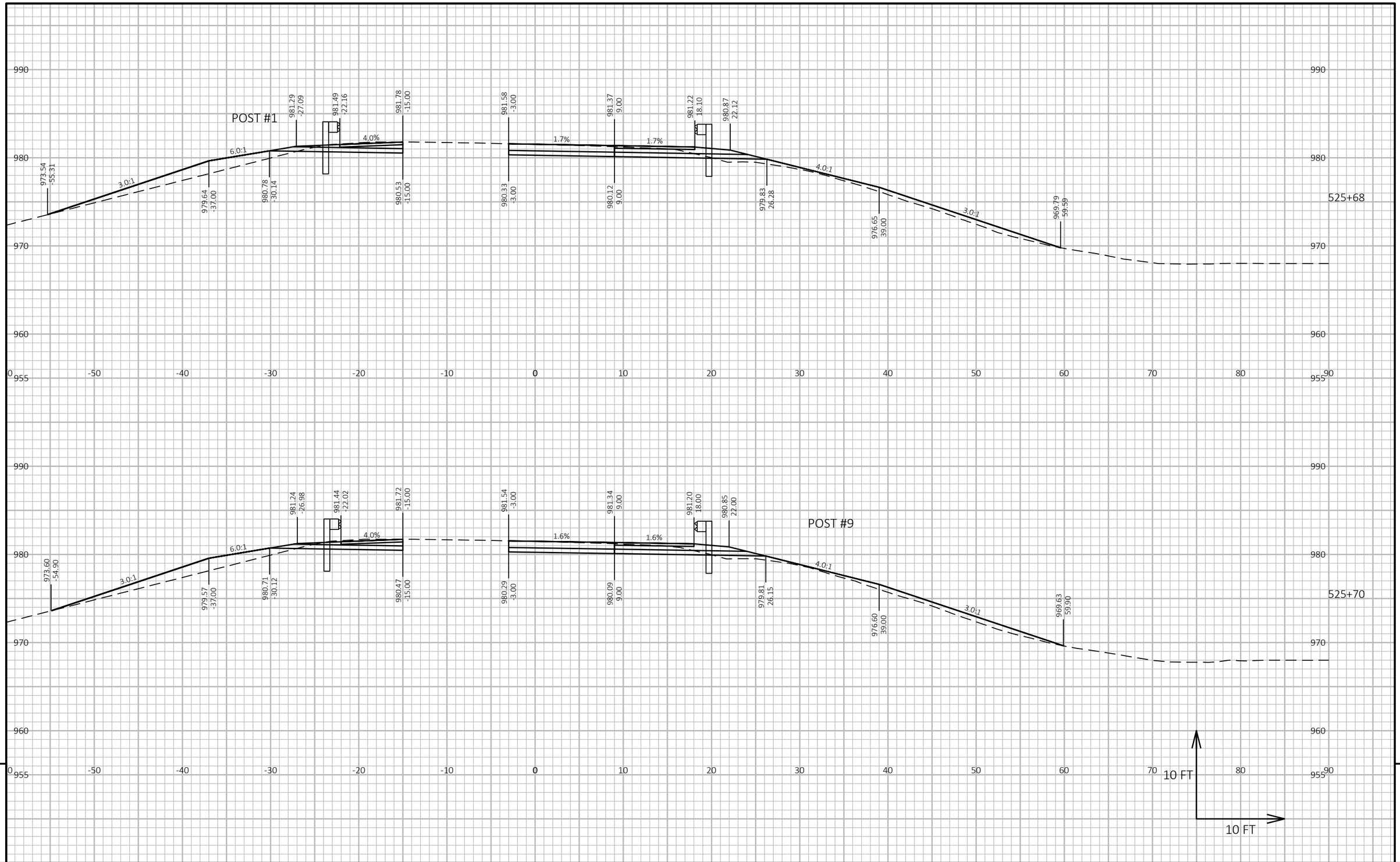
PLOT DATE : 7/30/2024 10:04 AM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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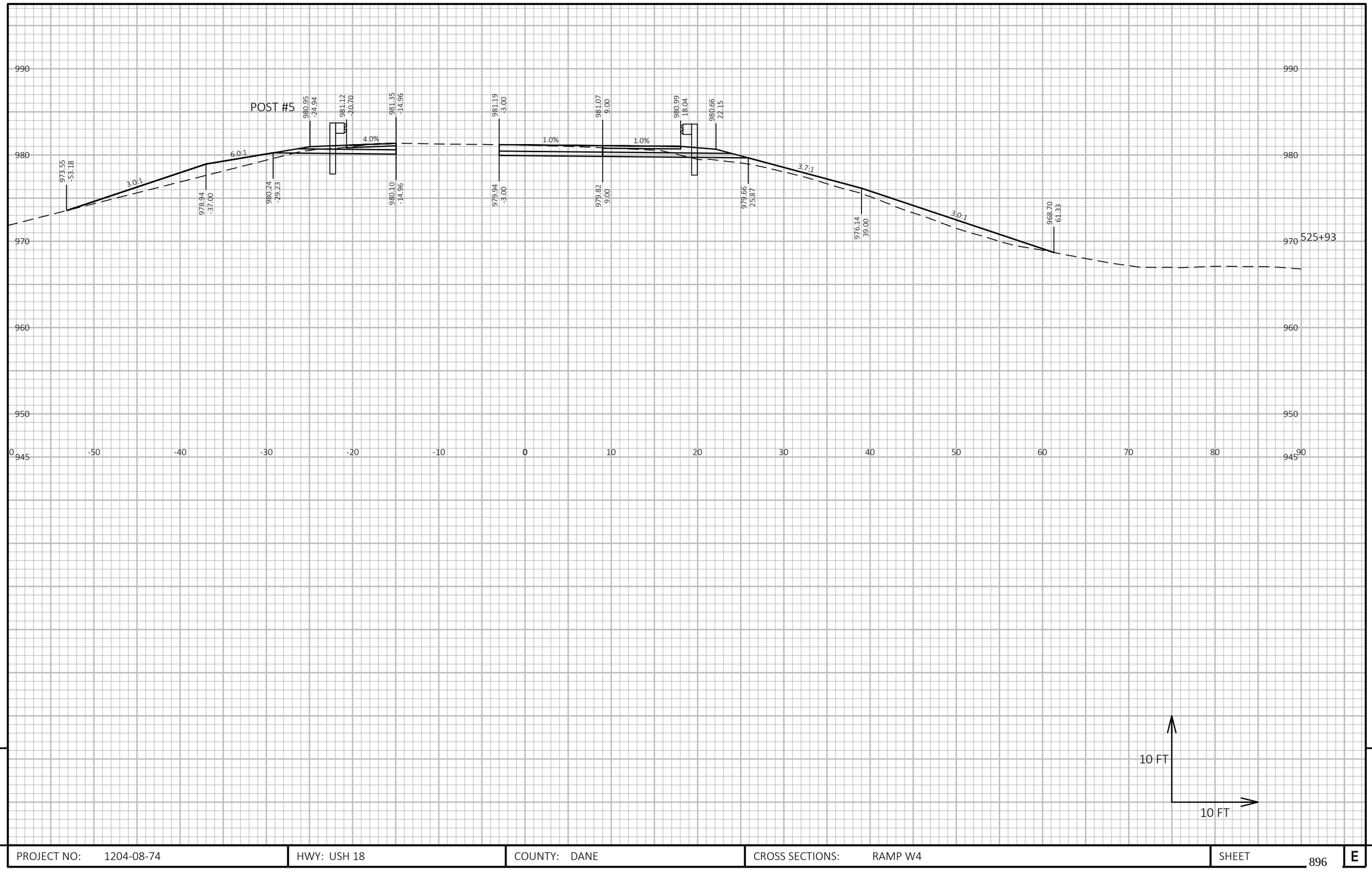
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 895	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 06

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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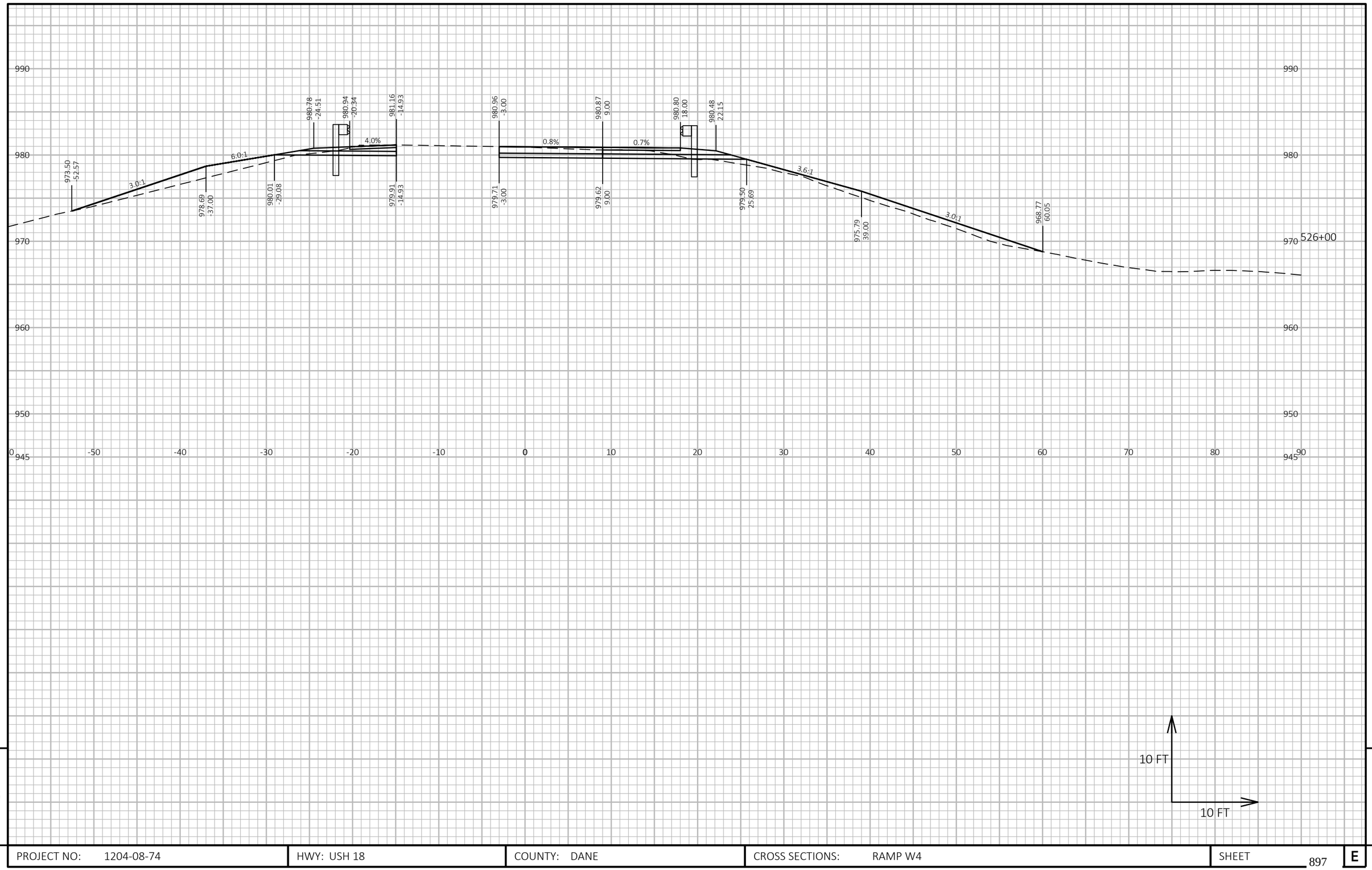
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 896	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 07

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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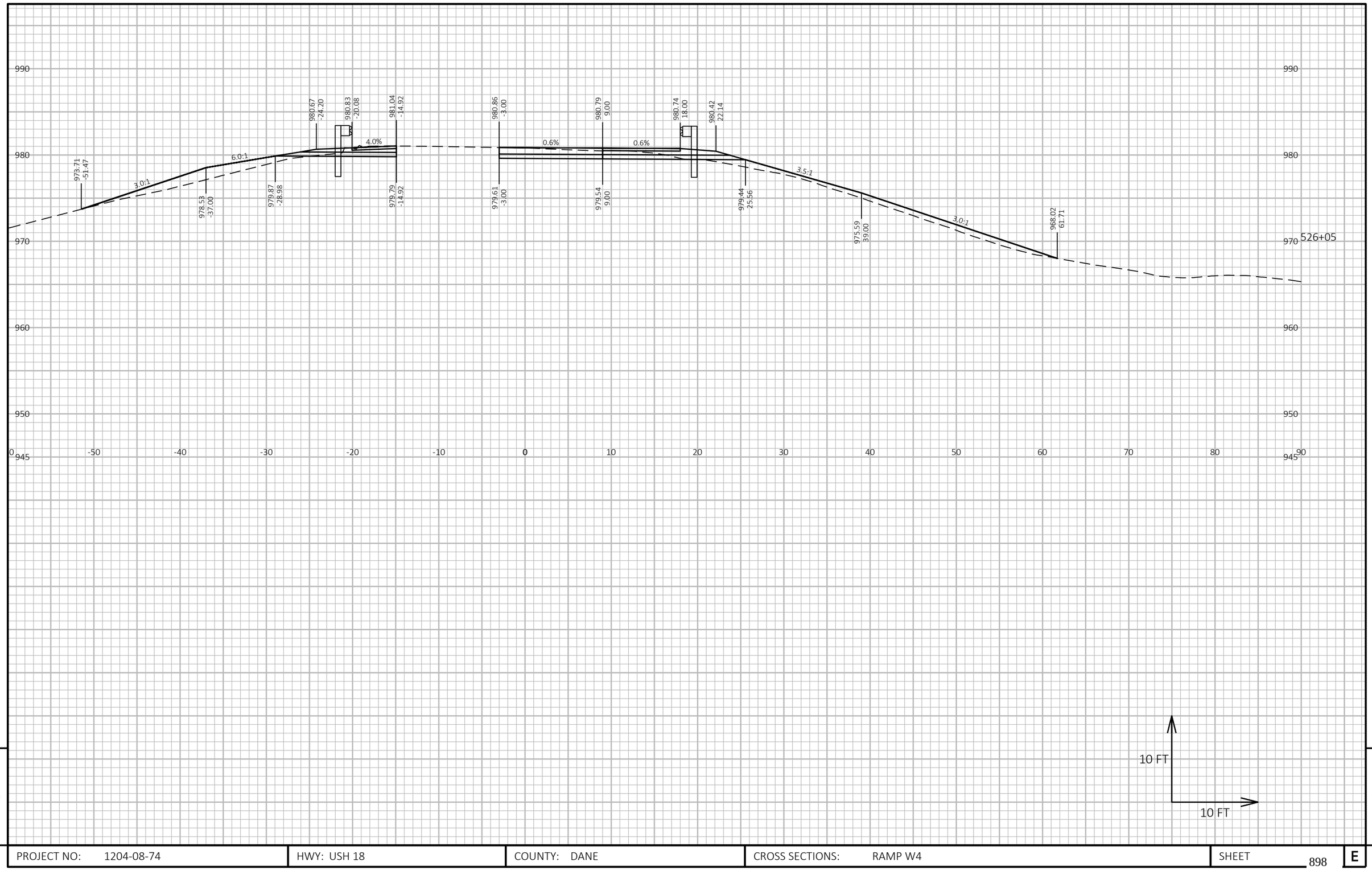
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 897	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 08

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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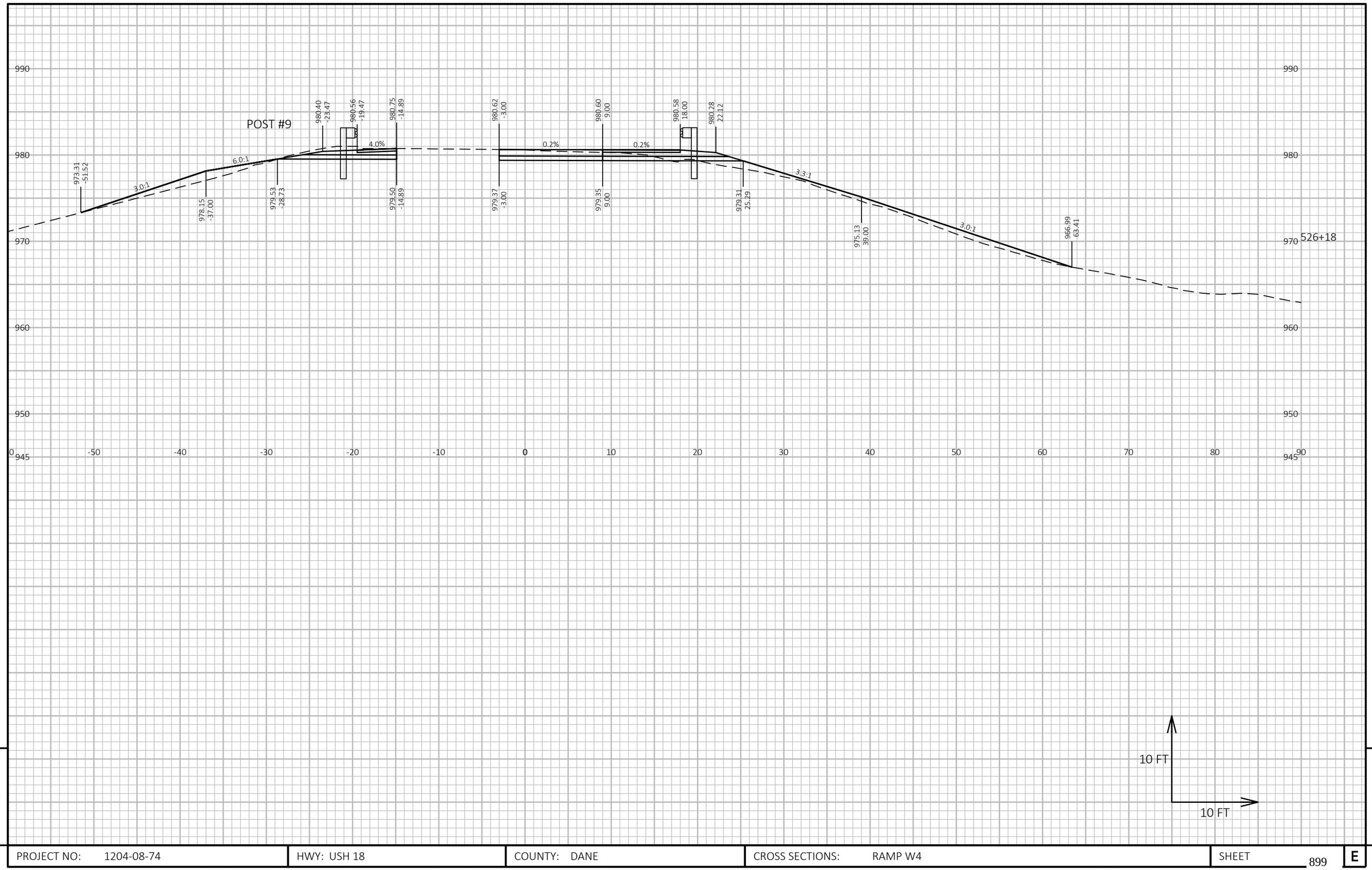
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 898	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 09

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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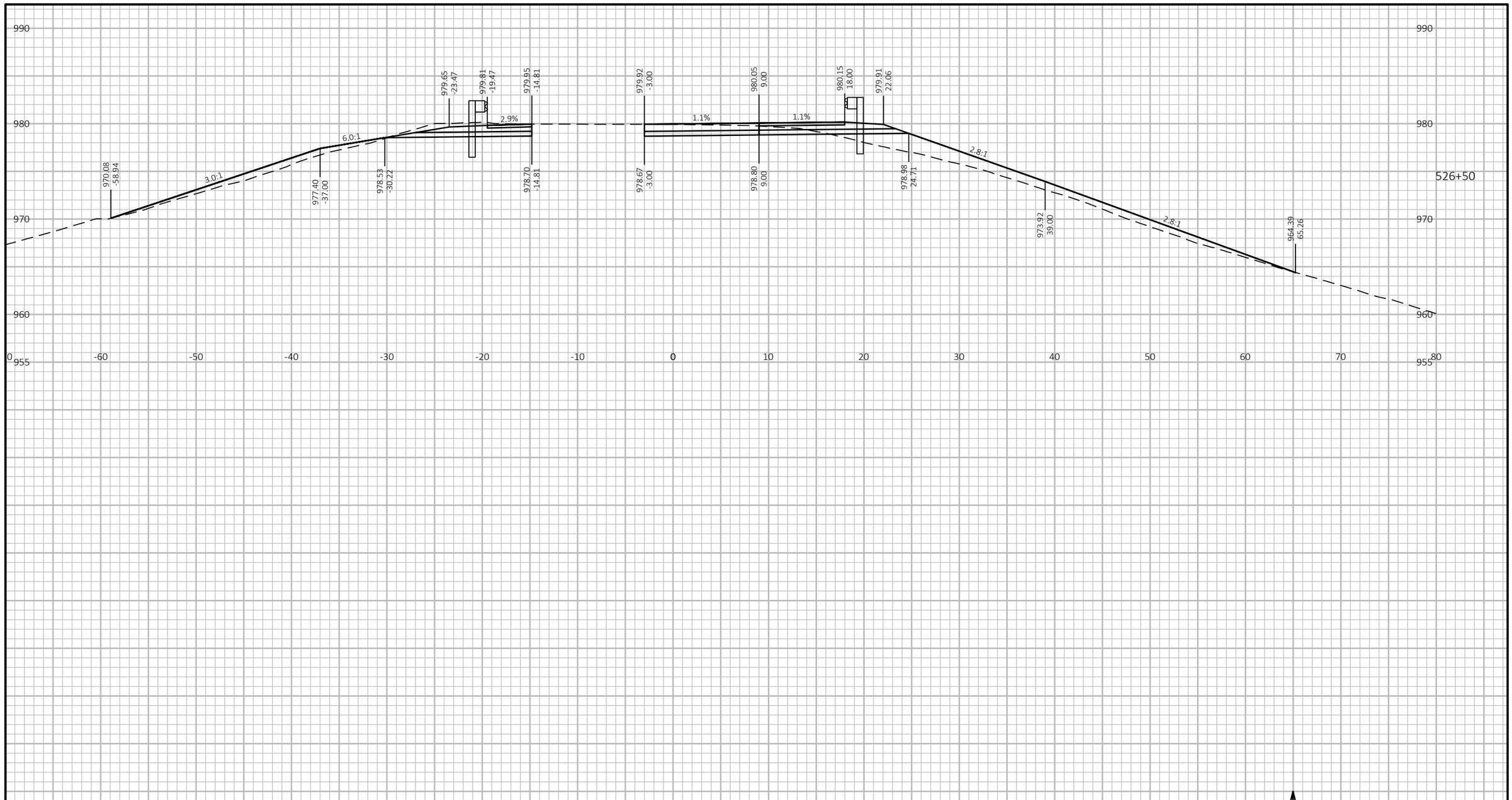
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 899	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 10

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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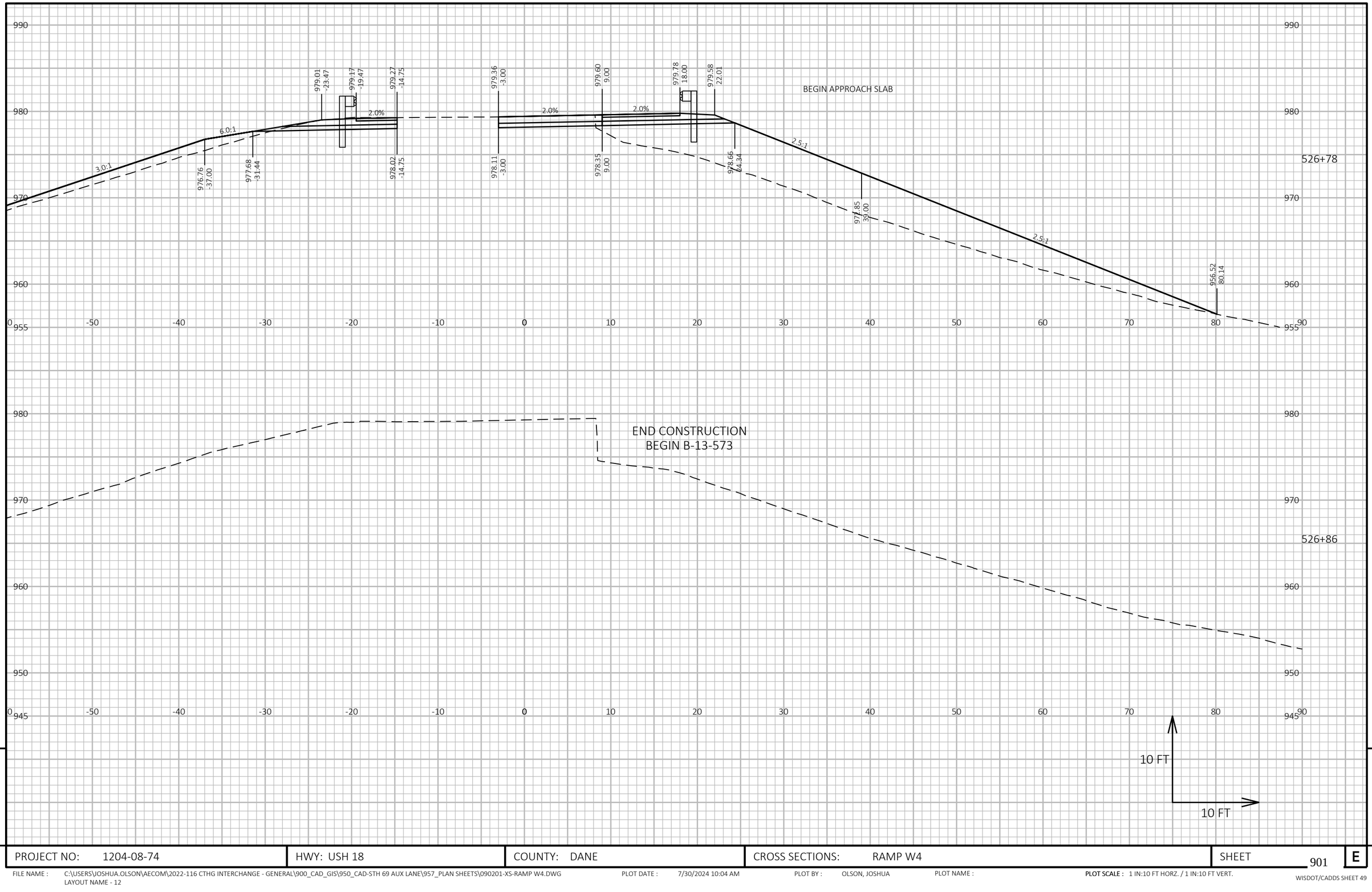
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 900	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 11

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

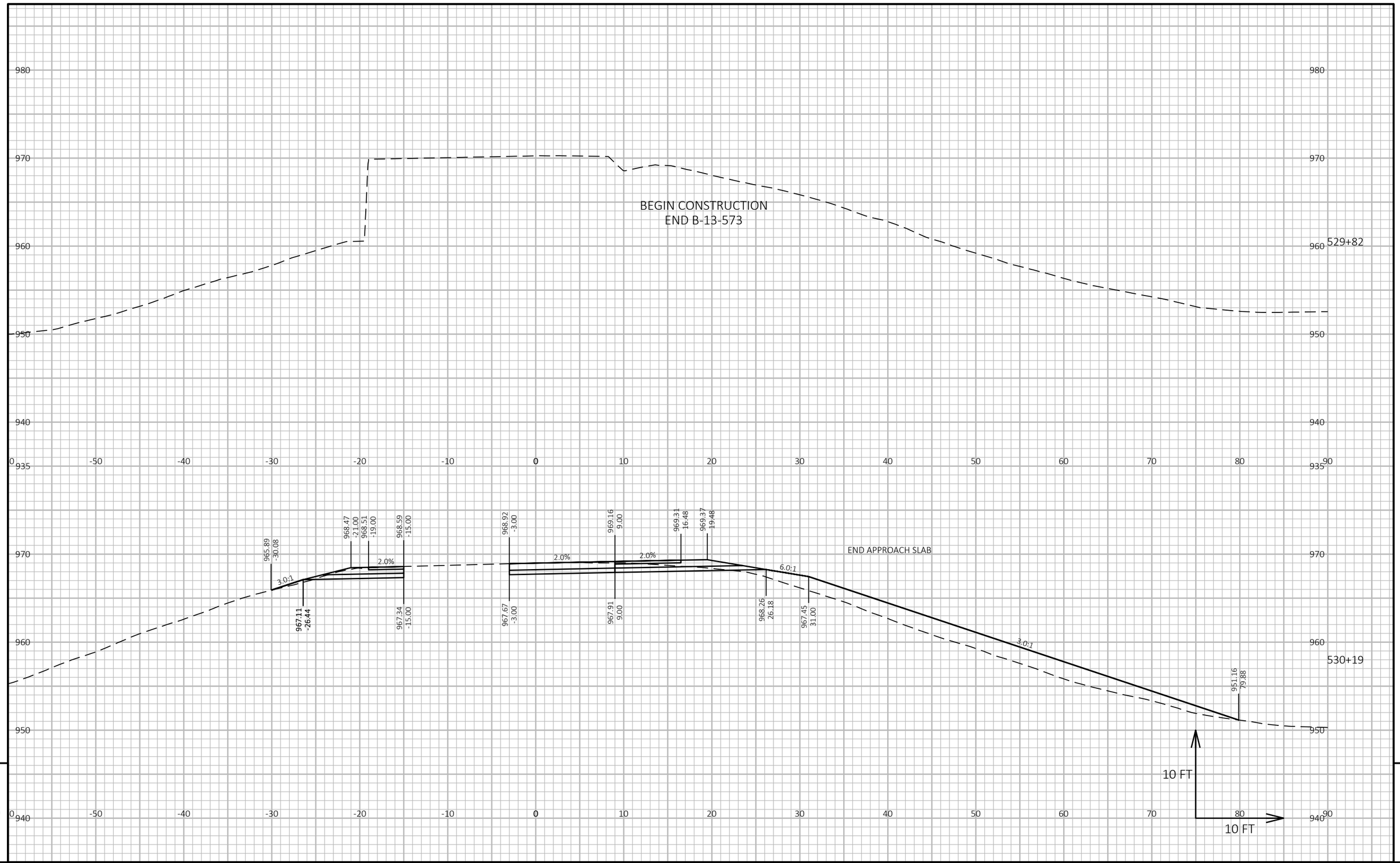


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 901 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 12

PLOT DATE : 7/30/2024 10:04 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

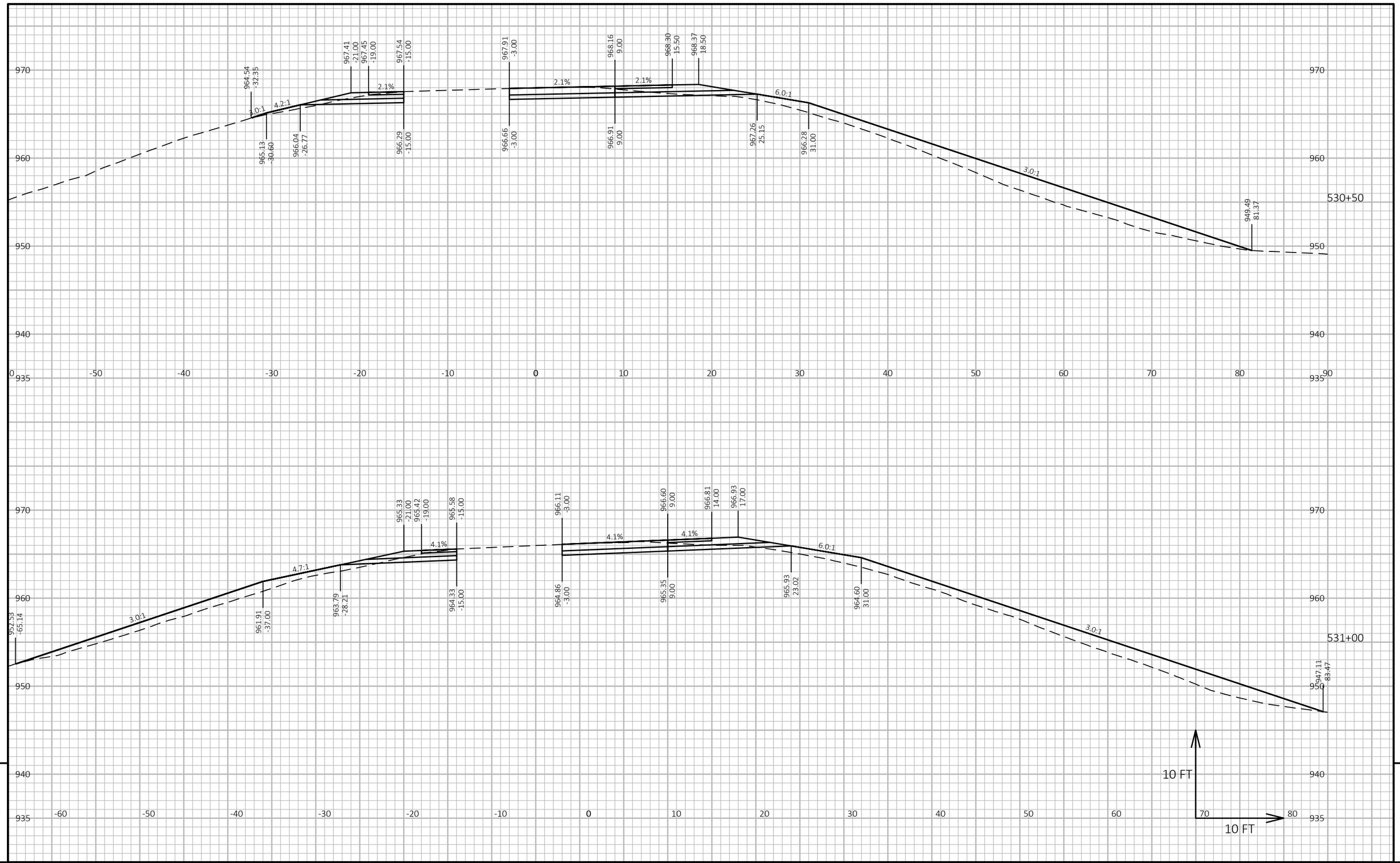


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 902 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 13

PLOT DATE : 7/30/2024 10:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

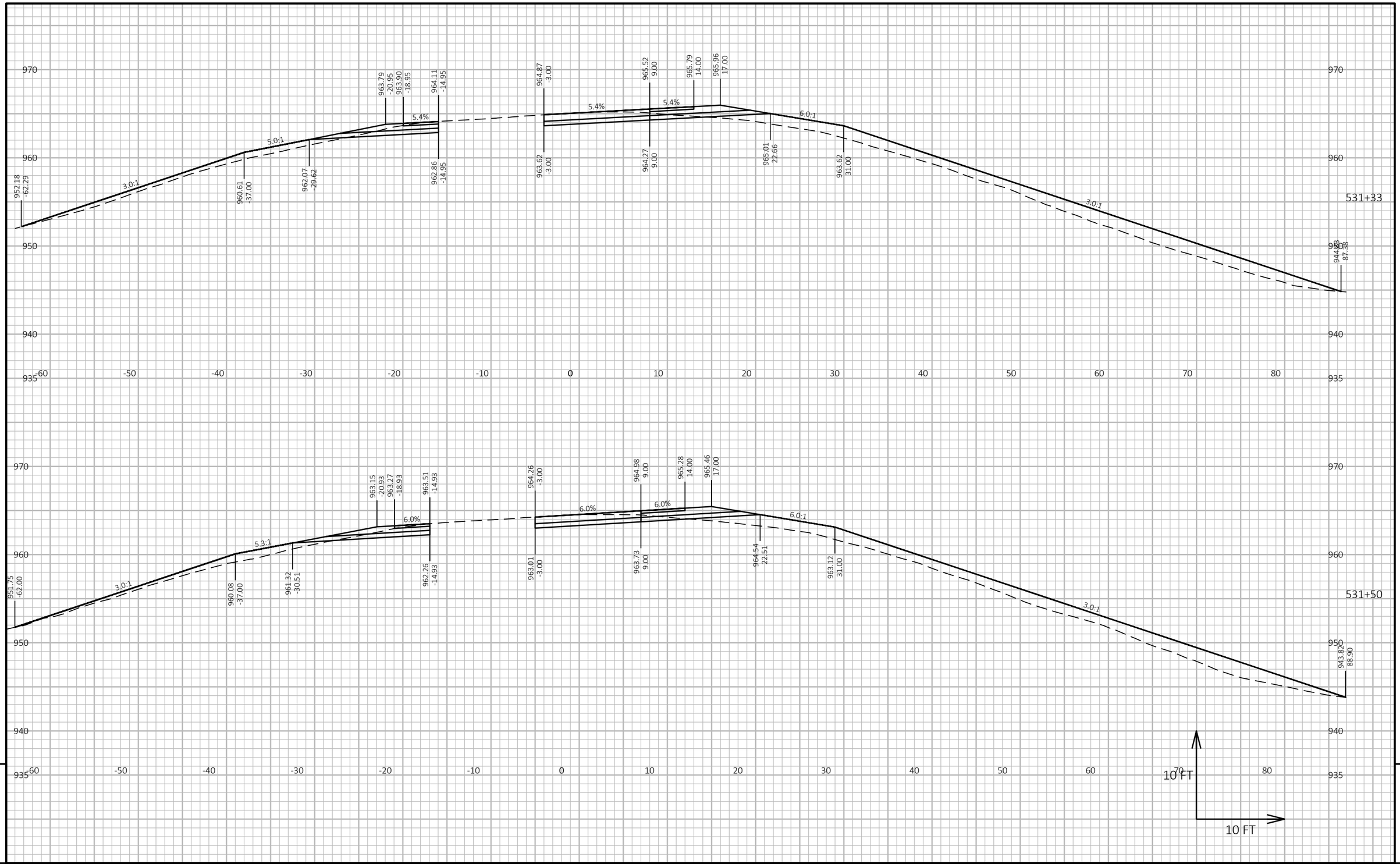


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 903	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 14

PLOT DATE : 7/30/2024 10:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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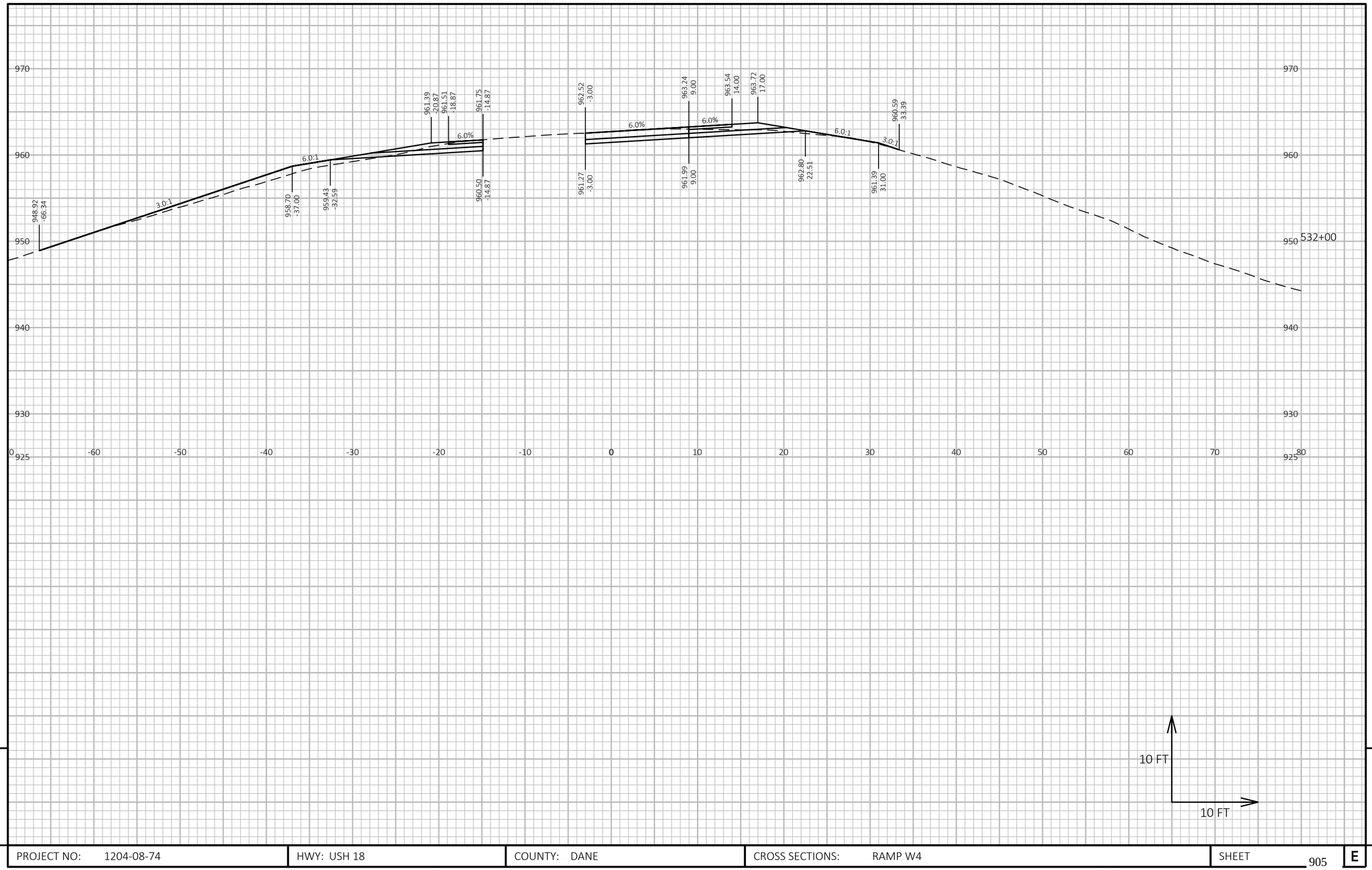
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 904	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 15

PLOT DATE : 7/30/2024 10:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

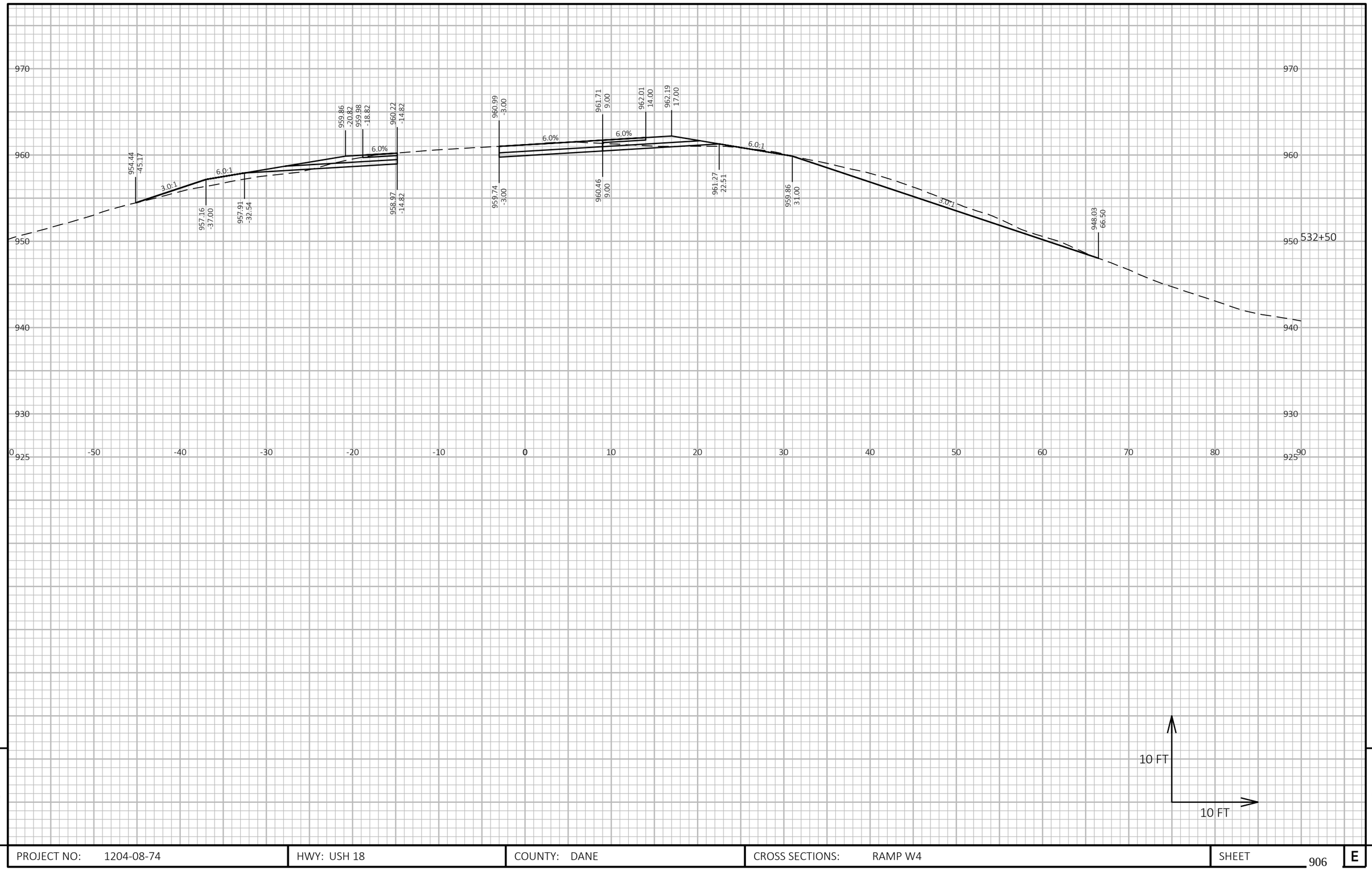


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 905	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 16

PLOT DATE : 7/30/2024 10:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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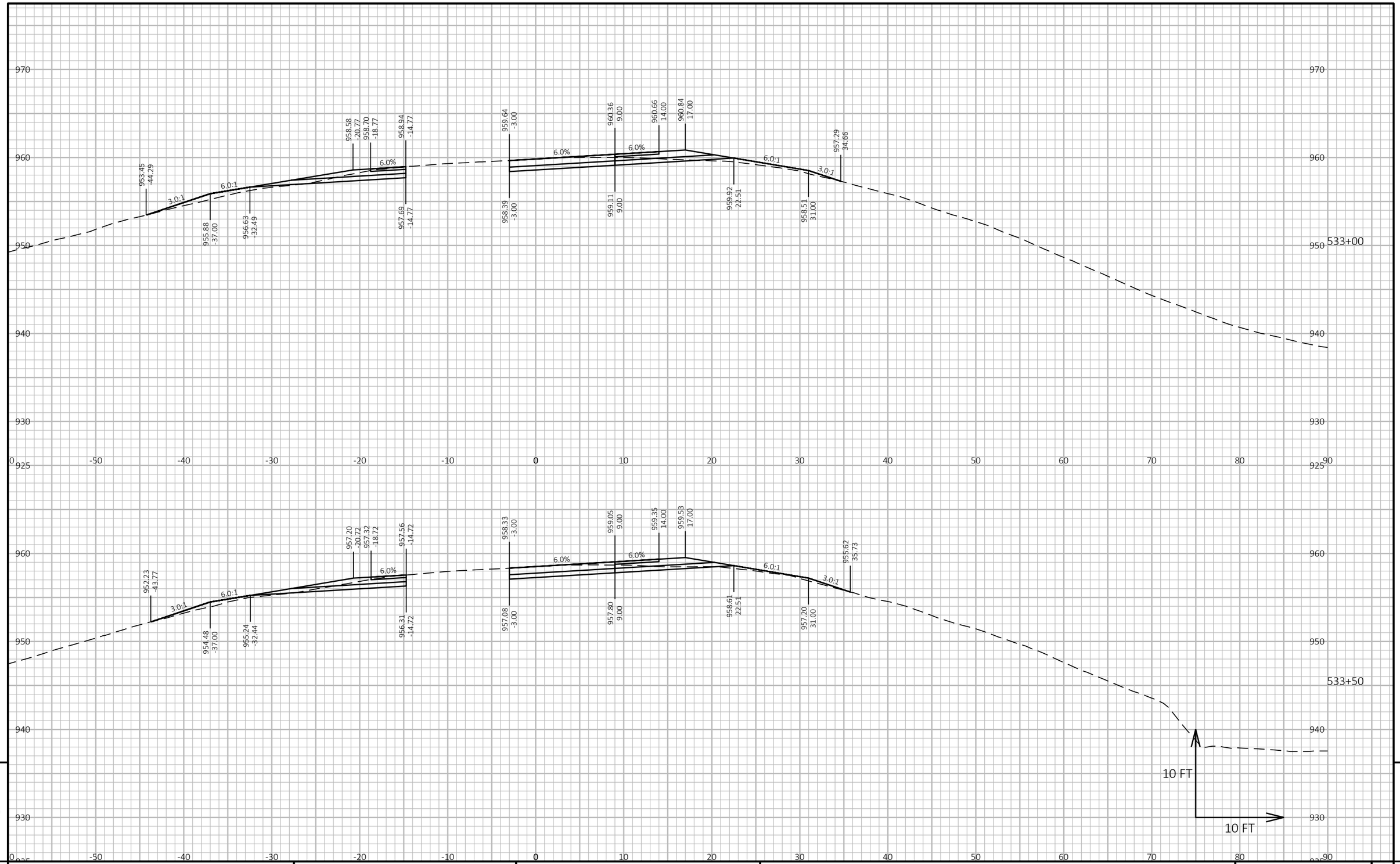
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 906	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 17

PLOT DATE : 7/30/2024 10:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 907	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 18

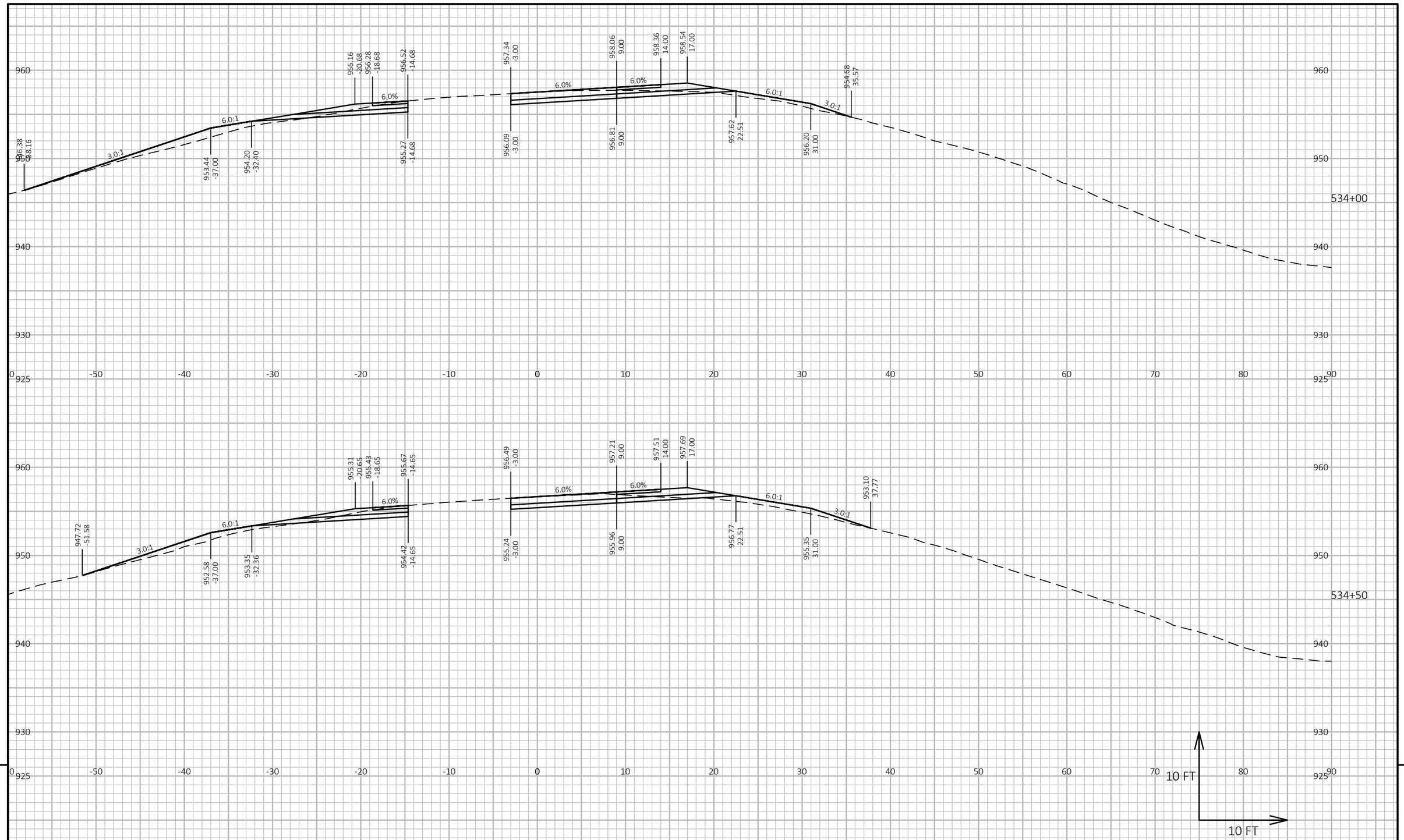
PLOT DATE : 7/30/2024 10:05 AM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

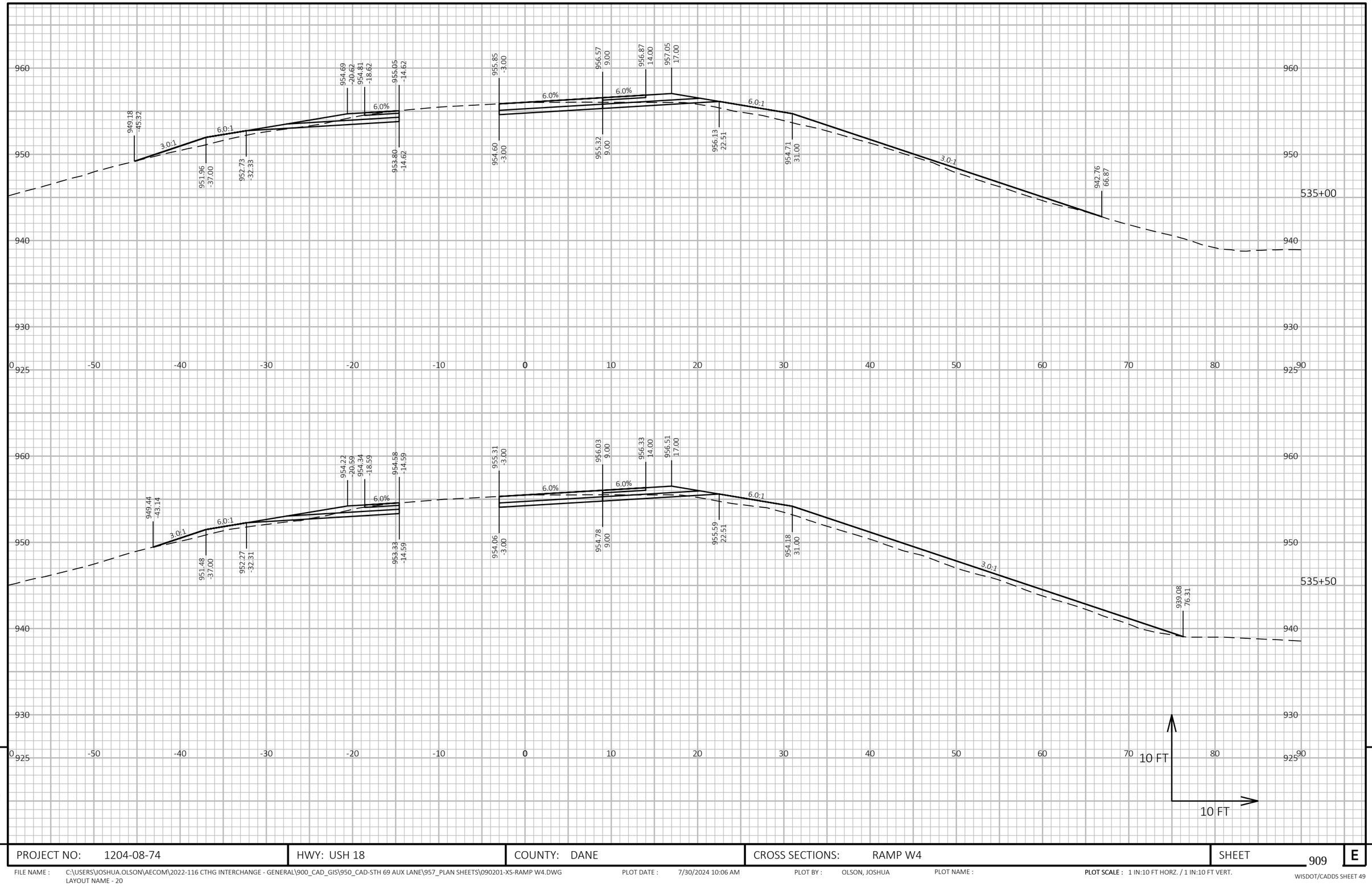


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 908	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 19

PLOT DATE : 7/30/2024 10:05 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

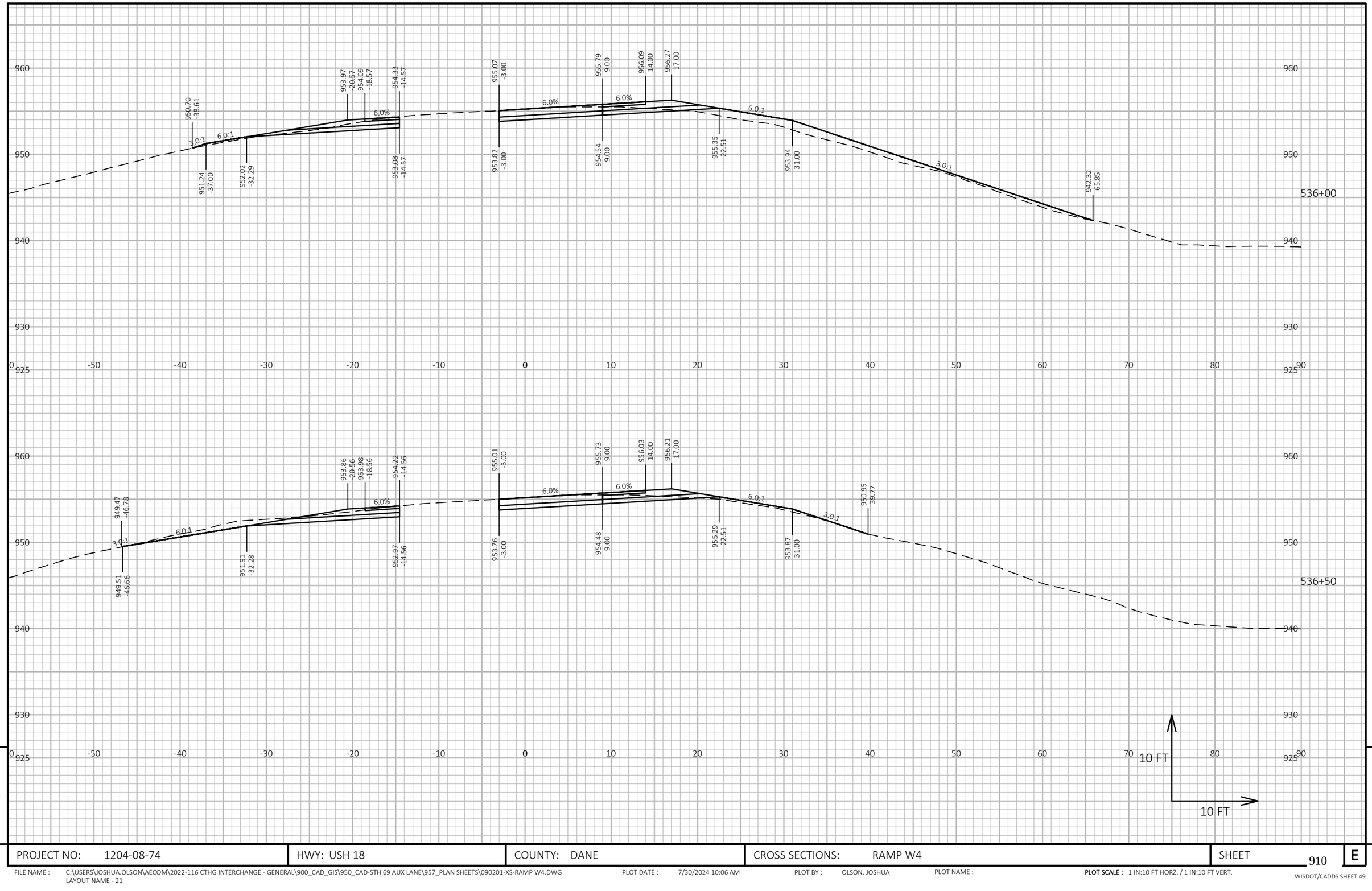


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 909	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 20

PLOT DATE : 7/30/2024 10:06 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

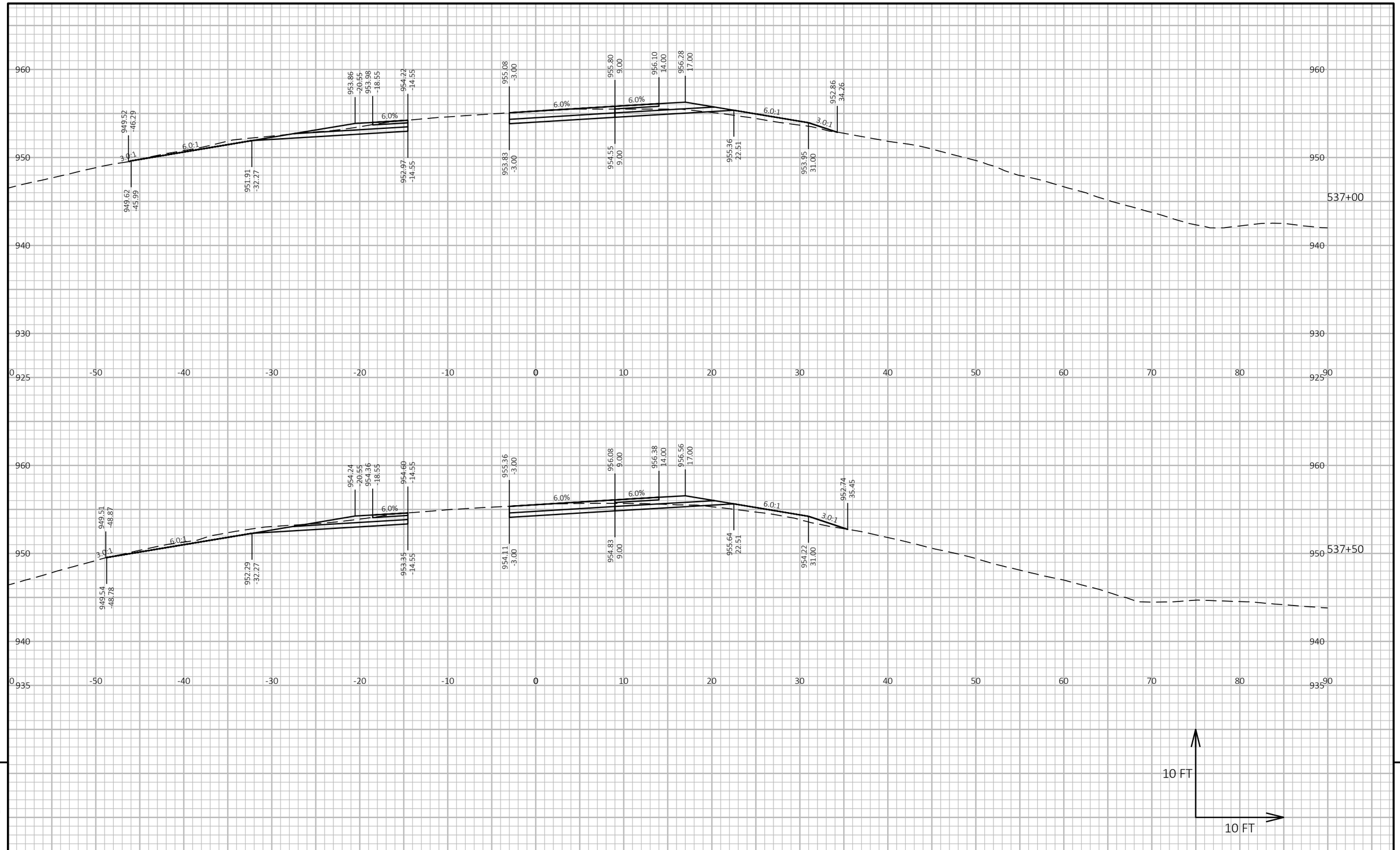


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 910	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 21

PLOT DATE : 7/30/2024 10:06 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 911	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 22

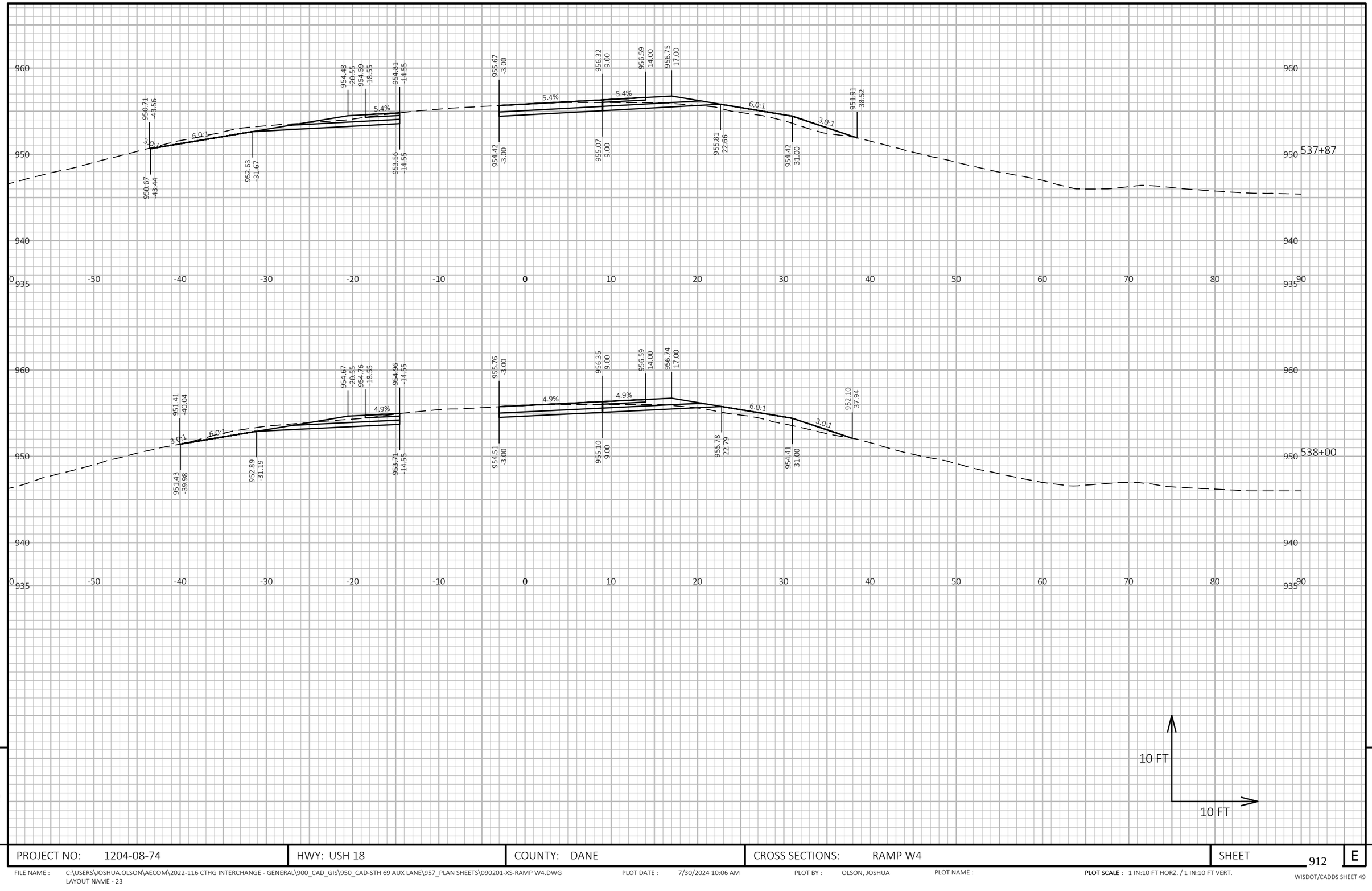
PLOT DATE : 7/30/2024 10:06 AM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

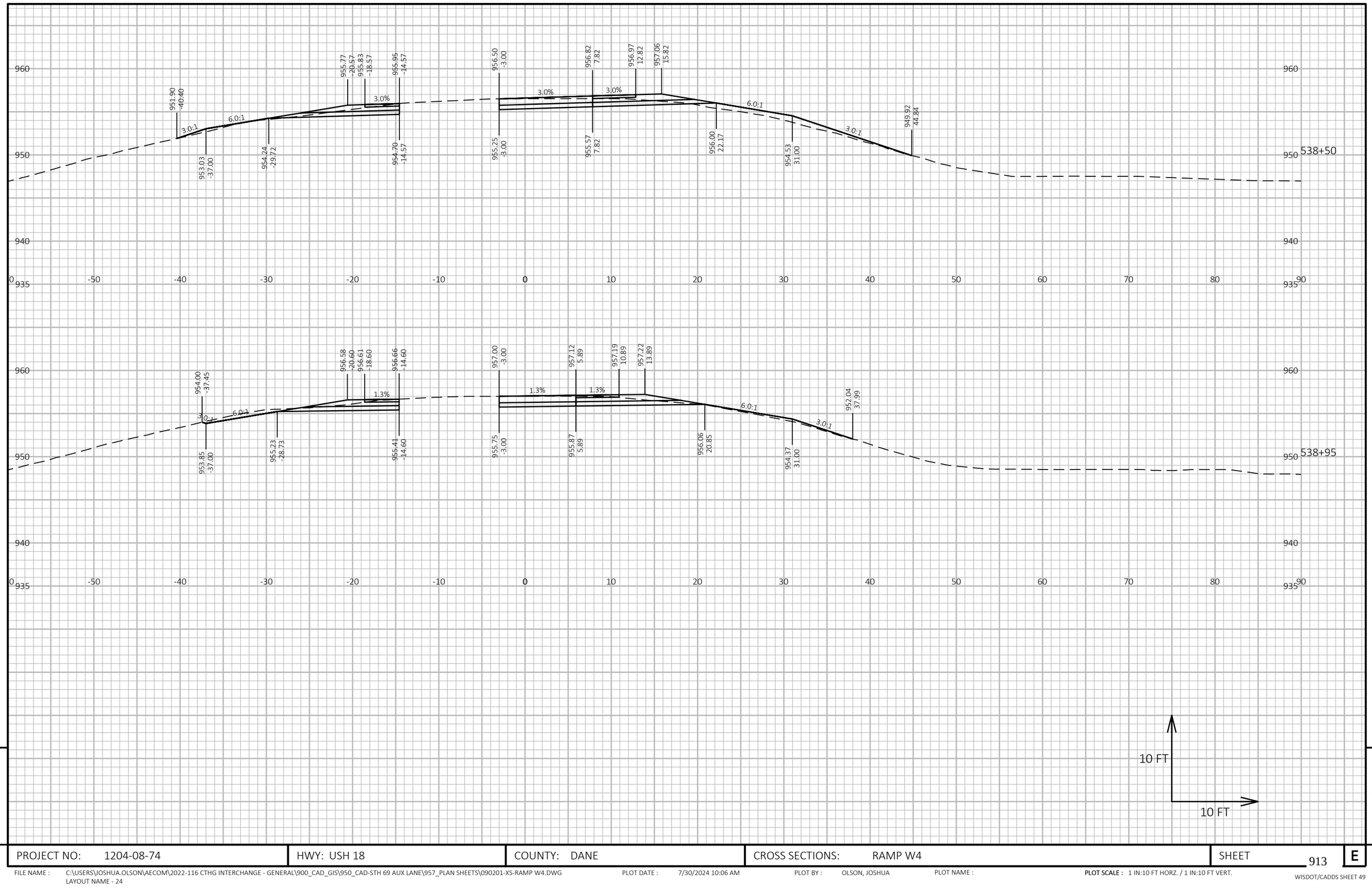
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 912	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 23

PLOT DATE : 7/30/2024 10:06 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

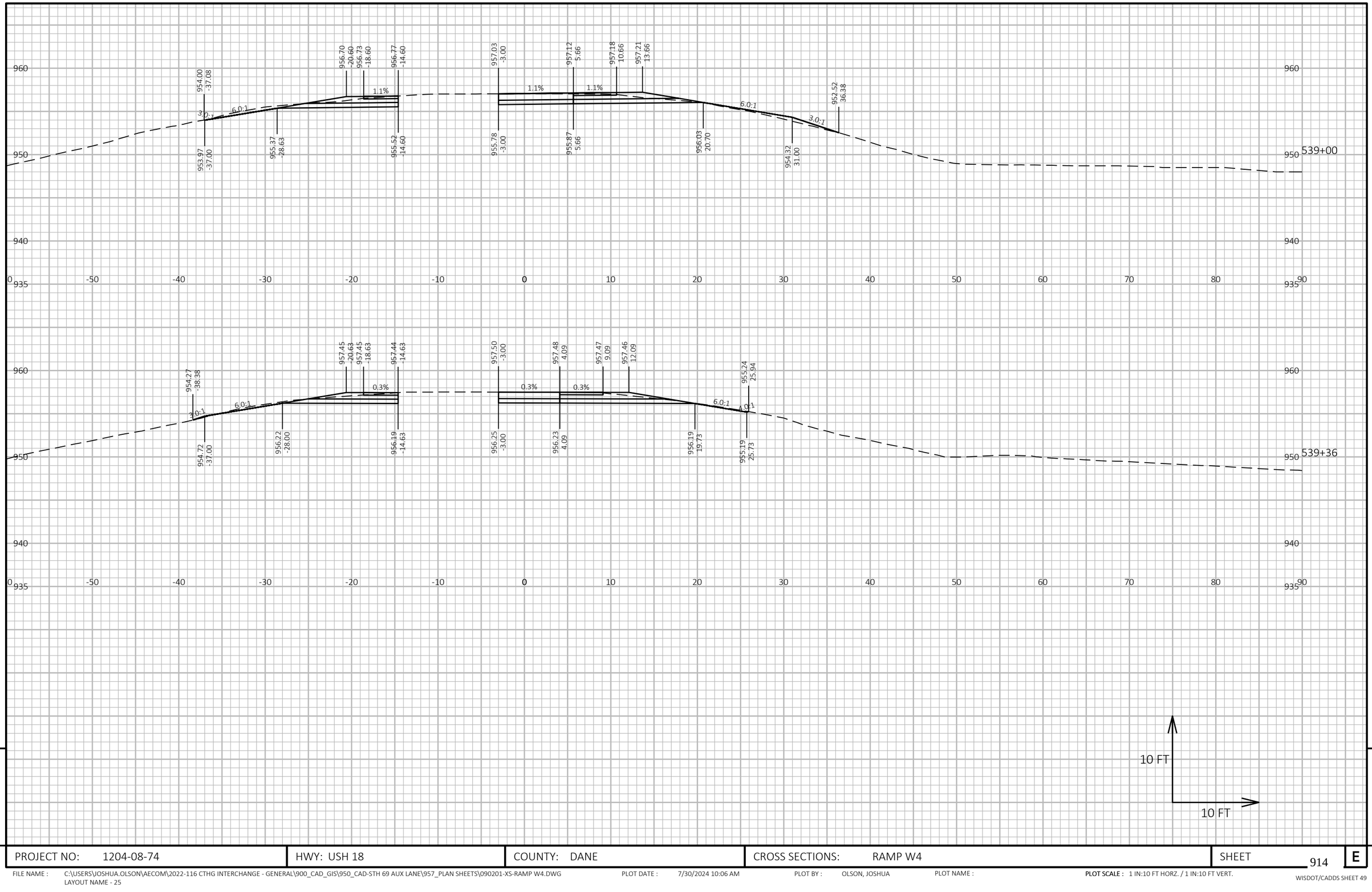
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 913	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 24

PLOT DATE : 7/30/2024 10:06 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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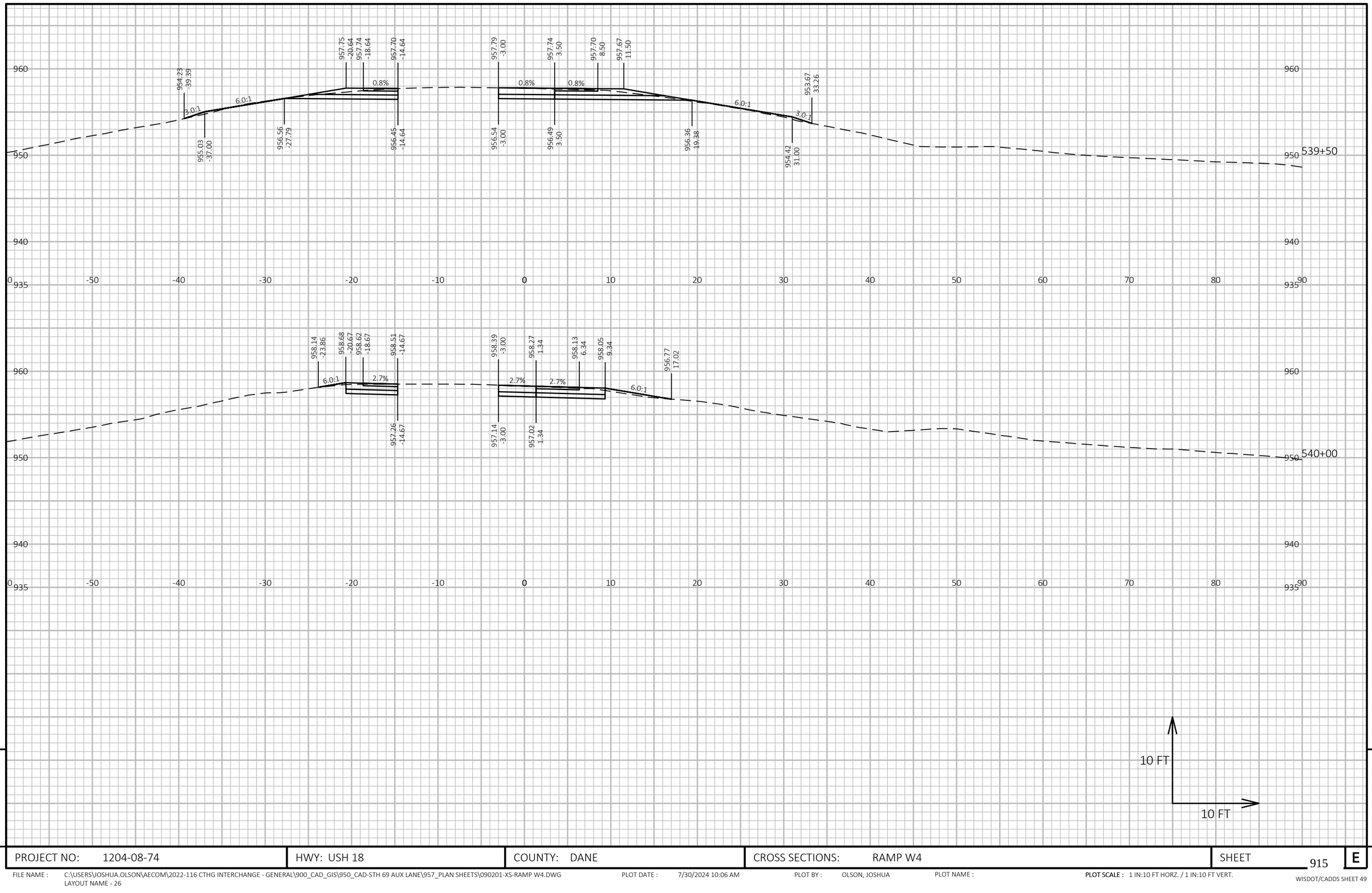
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 914	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 25

PLOT DATE : 7/30/2024 10:06 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

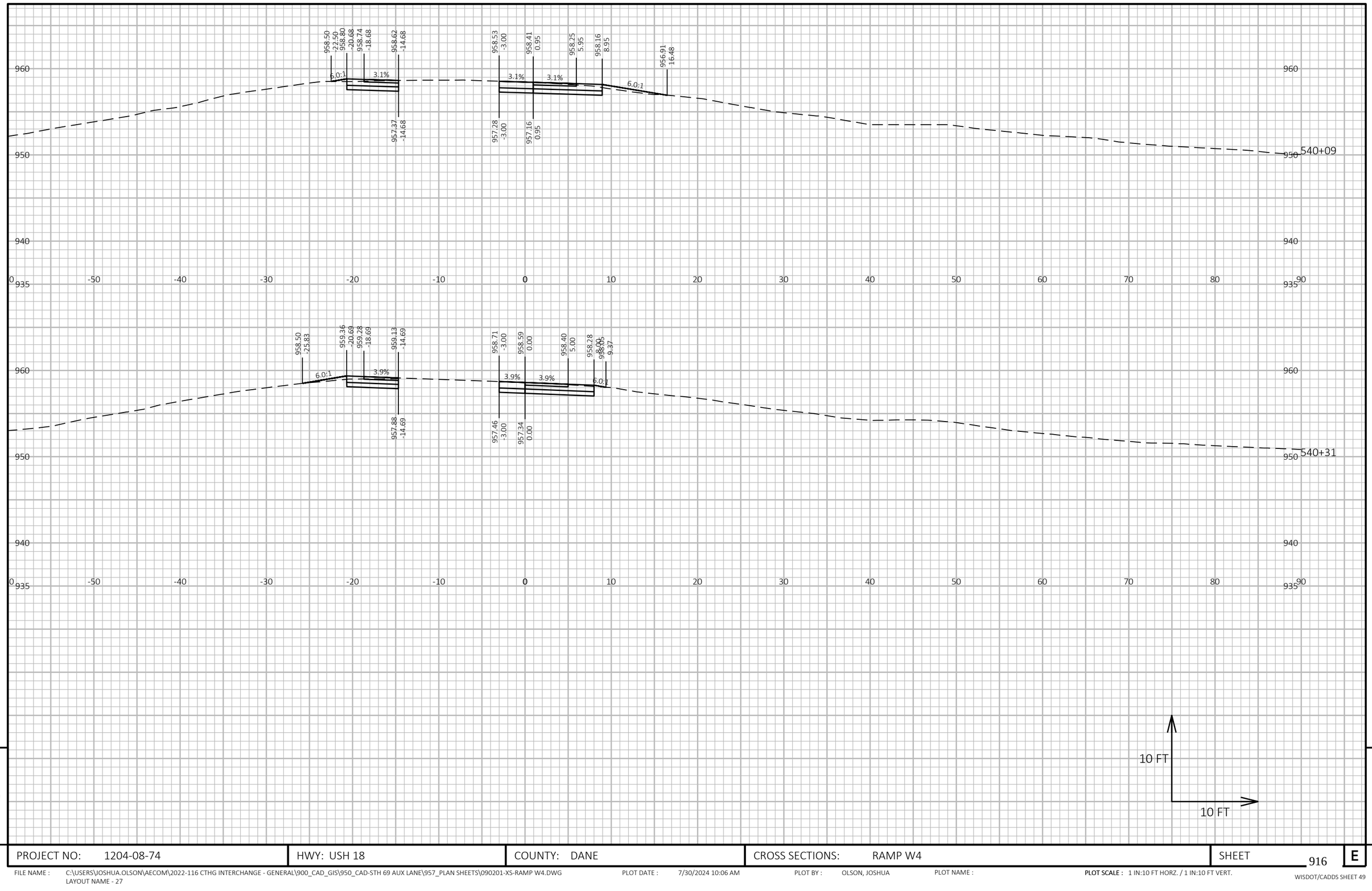


9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 915	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 26
PLOT DATE : 7/30/2024 10:06 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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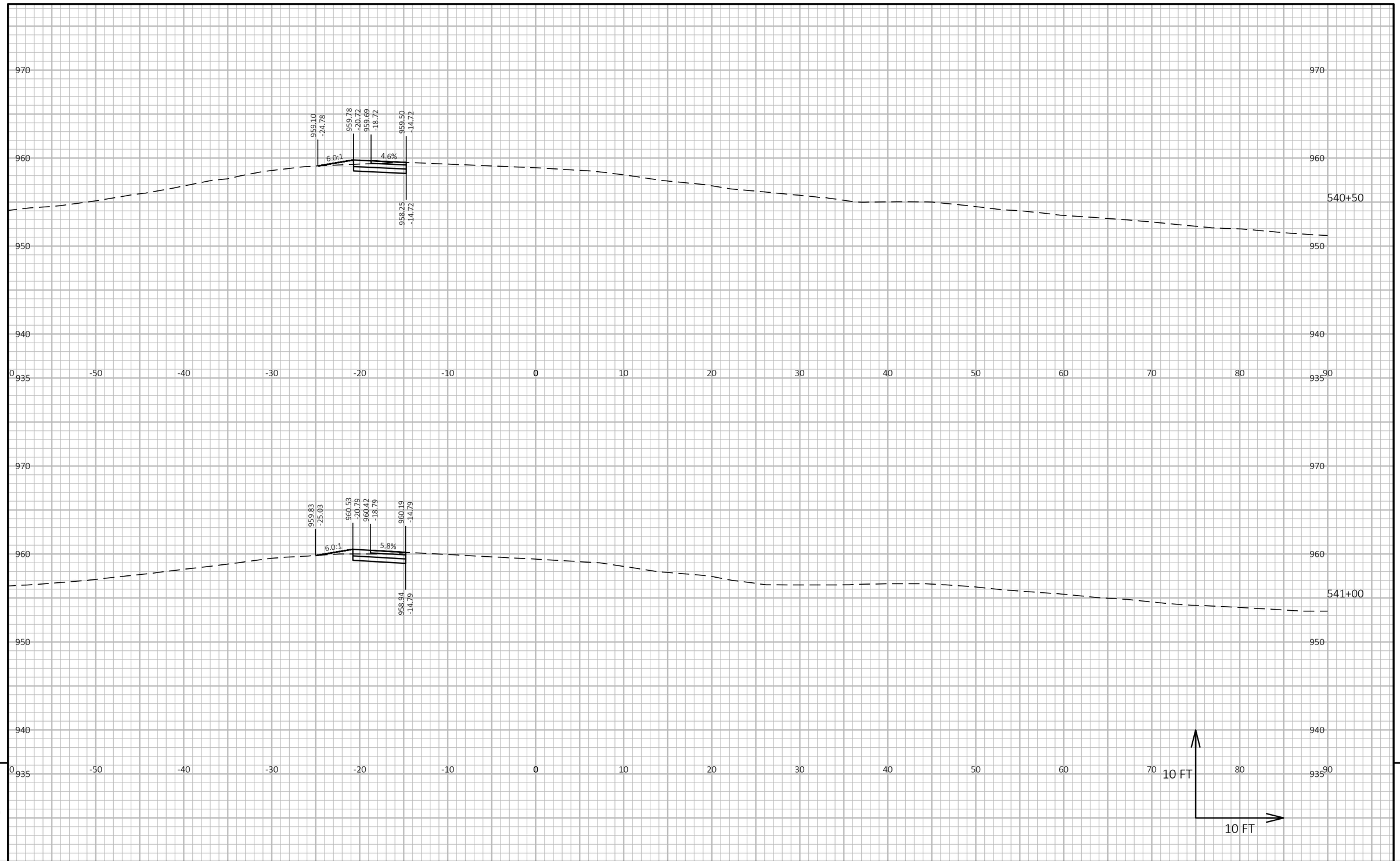
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 916	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 27
PLOT DATE : 7/30/2024 10:06 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

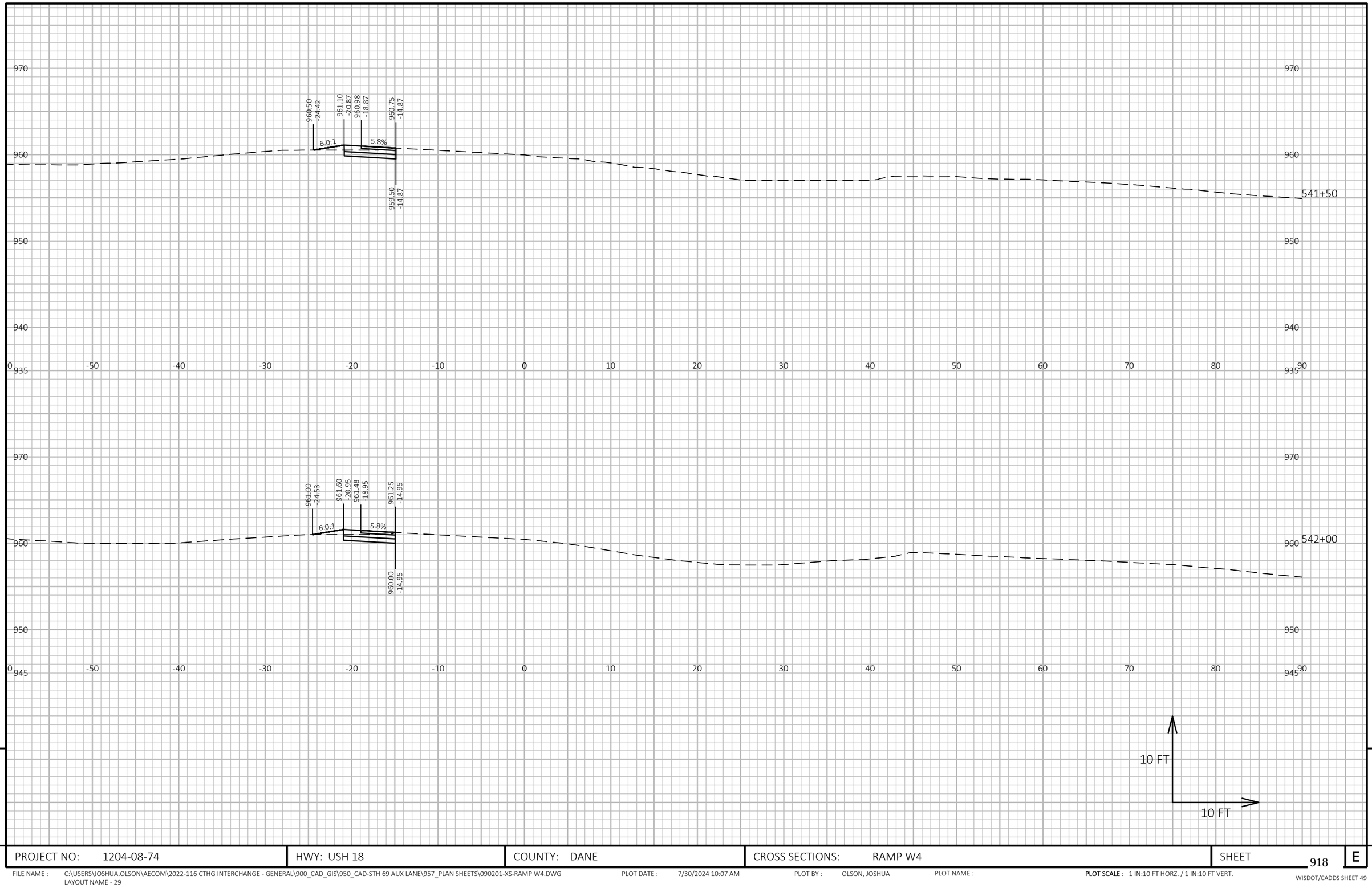
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 917	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 28

PLOT DATE : 7/30/2024 10:07 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

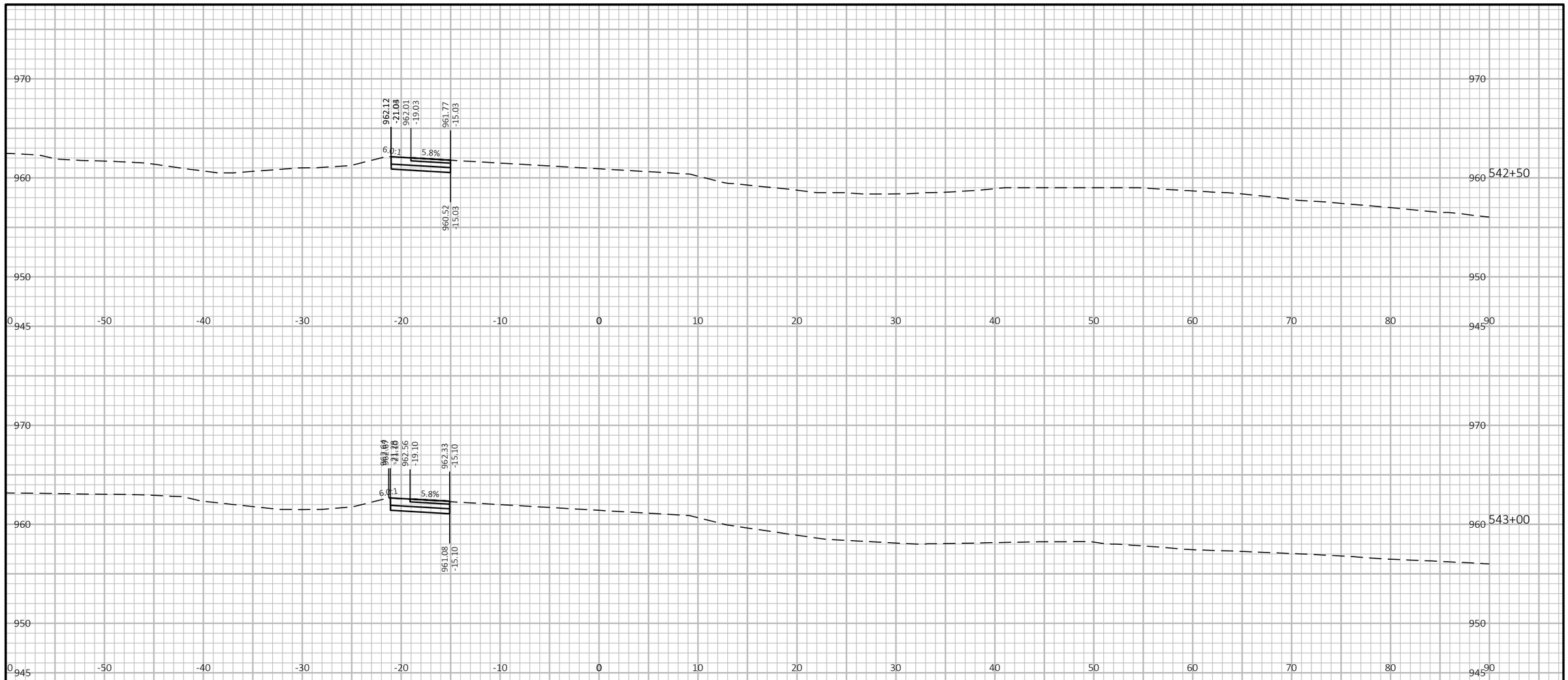
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 918	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 29

PLOT DATE : 7/30/2024 10:07 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

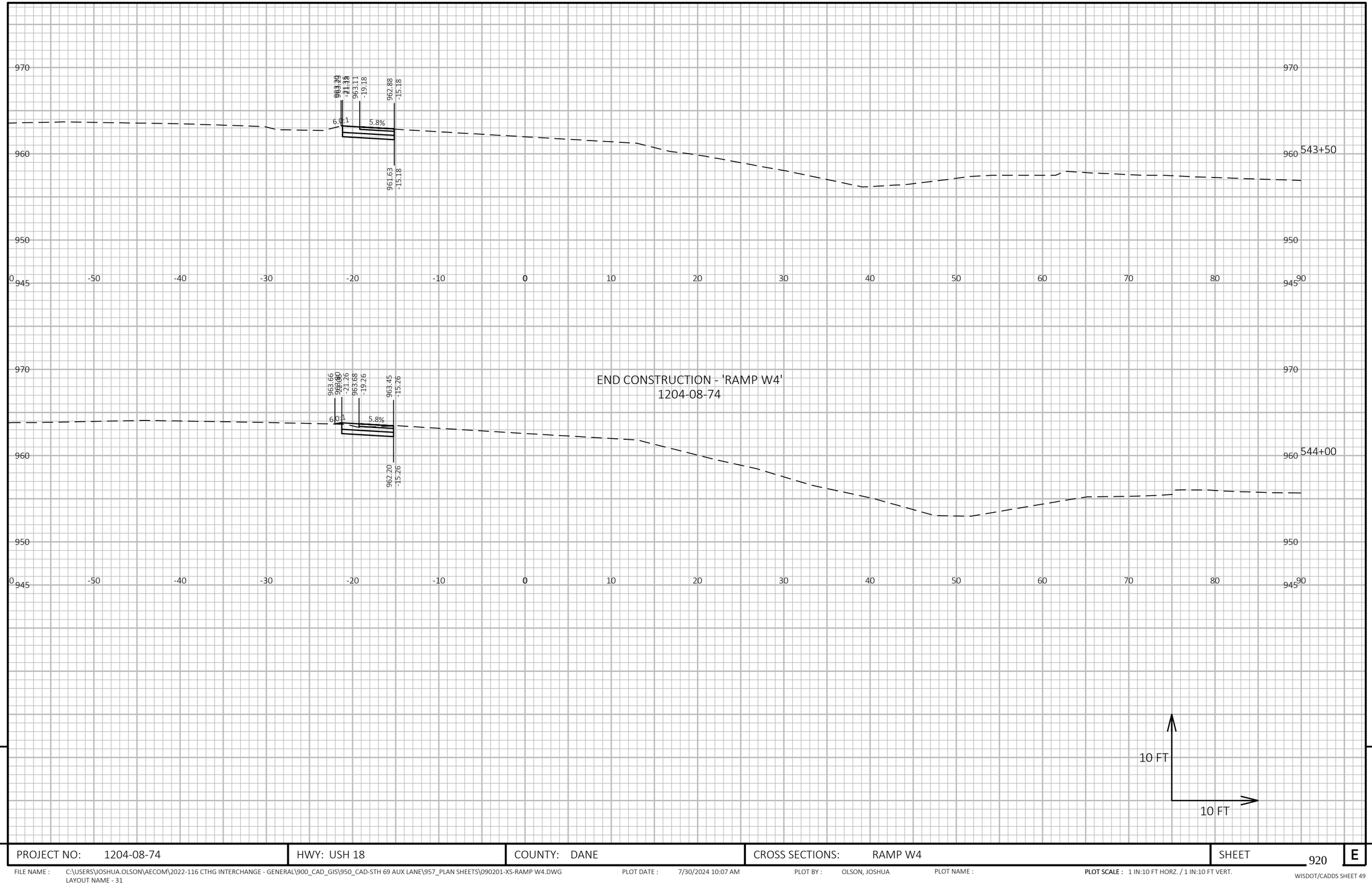
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 919	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090201-XS-RAMP W4.DWG
LAYOUT NAME - 30

PLOT DATE : 7/30/2024 10:07 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: RAMP W4	SHEET 920	E

BEGIN CONSTRUCTION
1204-08-74

545+11

545+50

964.79
42.29

964.31
50.29

964.07
54.43

961.07
63.47

961.03
68.03

6.0%

4.0%

962.04
42.29

961.32
54.43

961.77
63.65

10 FT

20 FT

9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 921	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 01

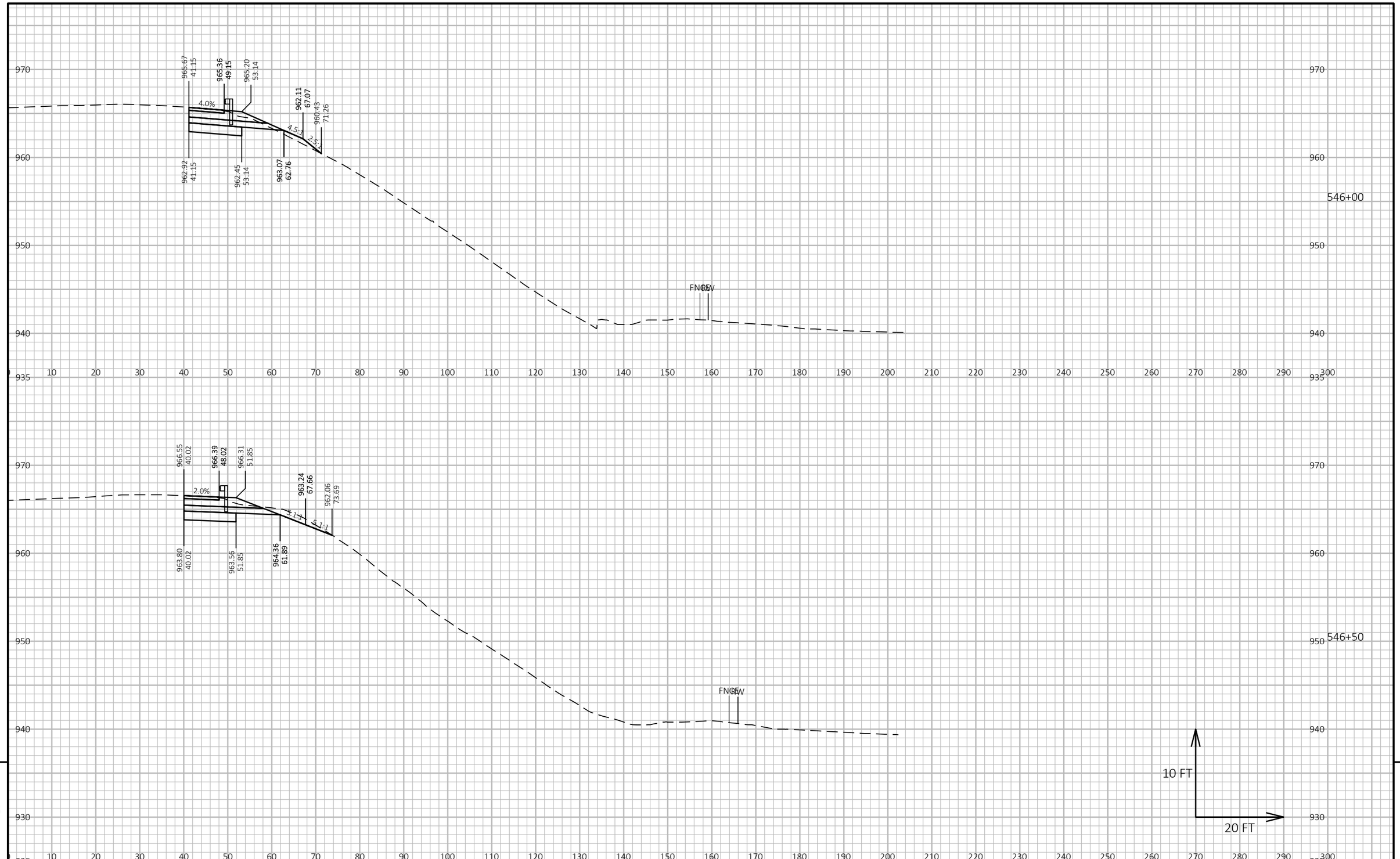
PLOT DATE : 7/3/2024 4:14 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 922	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 02

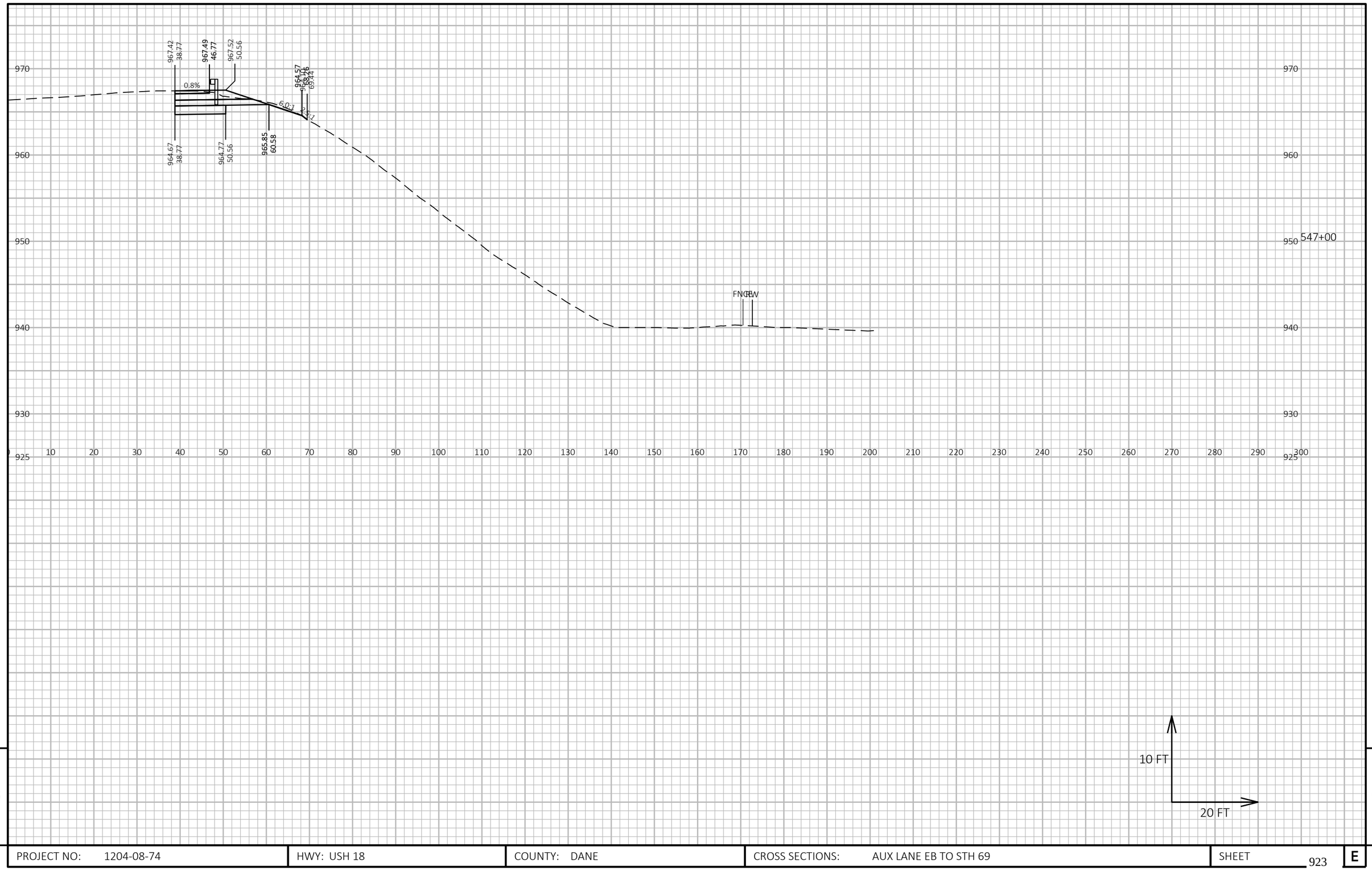
PLOT DATE : 7/3/2024 4:14 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

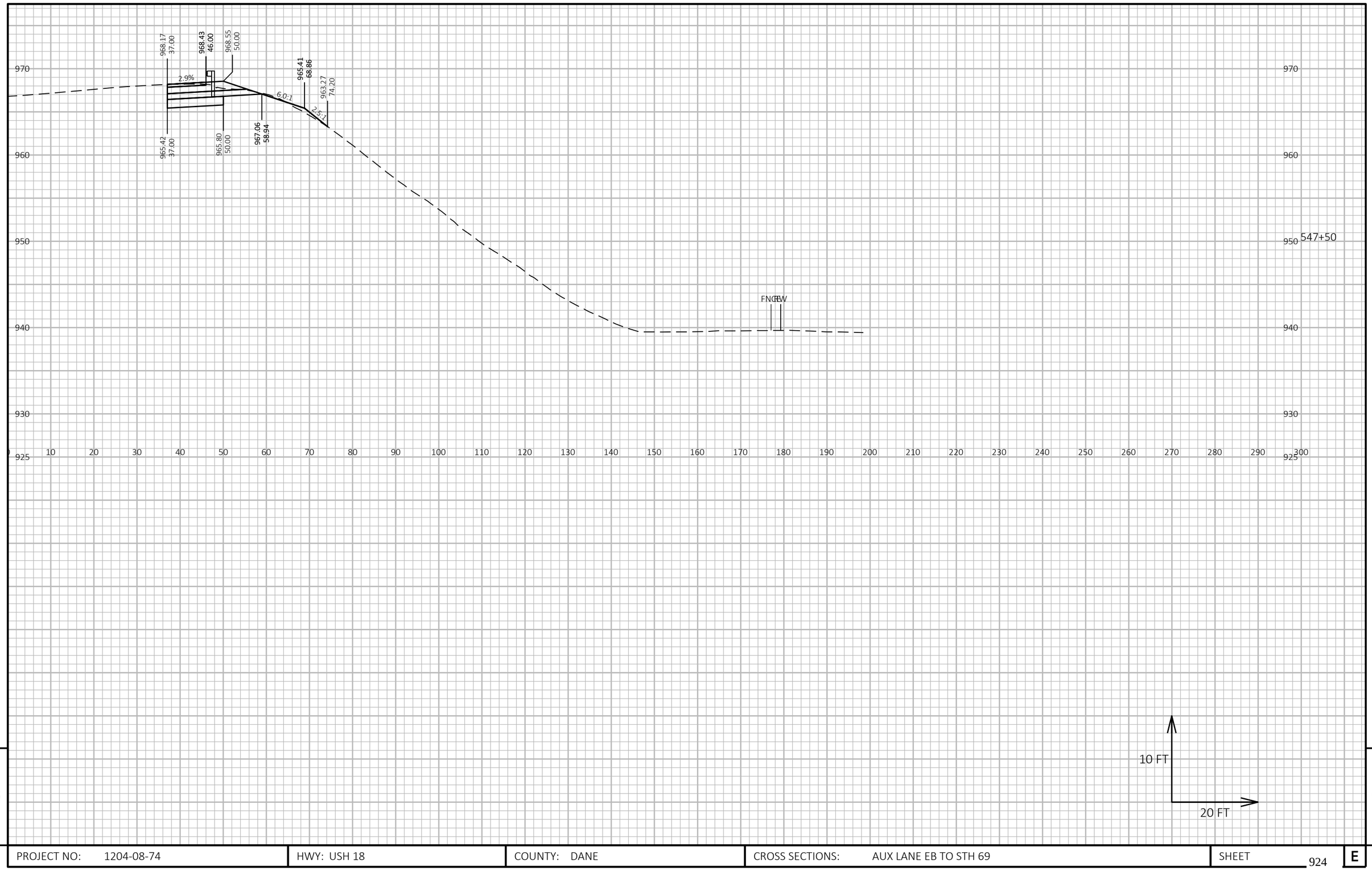


9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 923	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 03
PLOT DATE : 7/3/2024 4:14 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 924	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 04

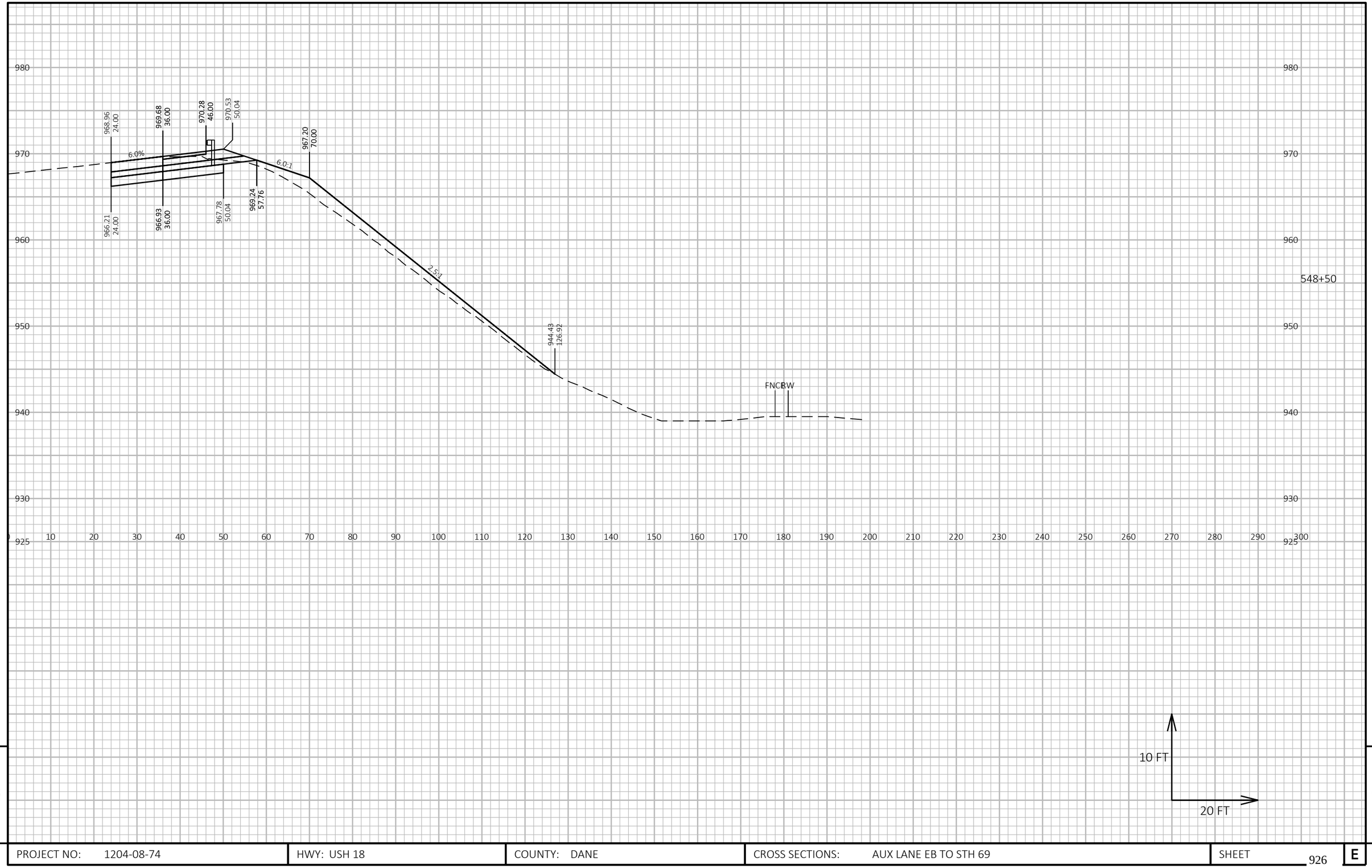
PLOT DATE : 7/3/2024 4:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

968.95
35.88
969.40
46.00
969.59
50.03
966.35
69.46
4.5%
6.0:1
966.20
35.88
966.84
50.03
968.21
58.29
2.5:1
951.11
107.55
FNCE
970
960
950
940
930
925
548+00
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
280
290
300
10 FT
20 FT
9
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 925	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 05
PLOT DATE : 7/3/2024 4:15 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 926 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 06

PLOT DATE : 7/3/2024 4:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

980
970
960
950
940
930
925

969.42
24.00

970.14
36.00

970.74
46.00

970.99
50.03

967.66
70.00

6.0%

6.0:1

2.5:1

966.67
24.00

967.39
36.00

968.24
50.03

969.70
57.75

957.45
95.52

FNC

RW

549+00

10 FT

20 FT

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 927	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 07

PLOT DATE : 7/3/2024 4:15 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 928	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 08

PLOT DATE : 7/3/2024 4:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

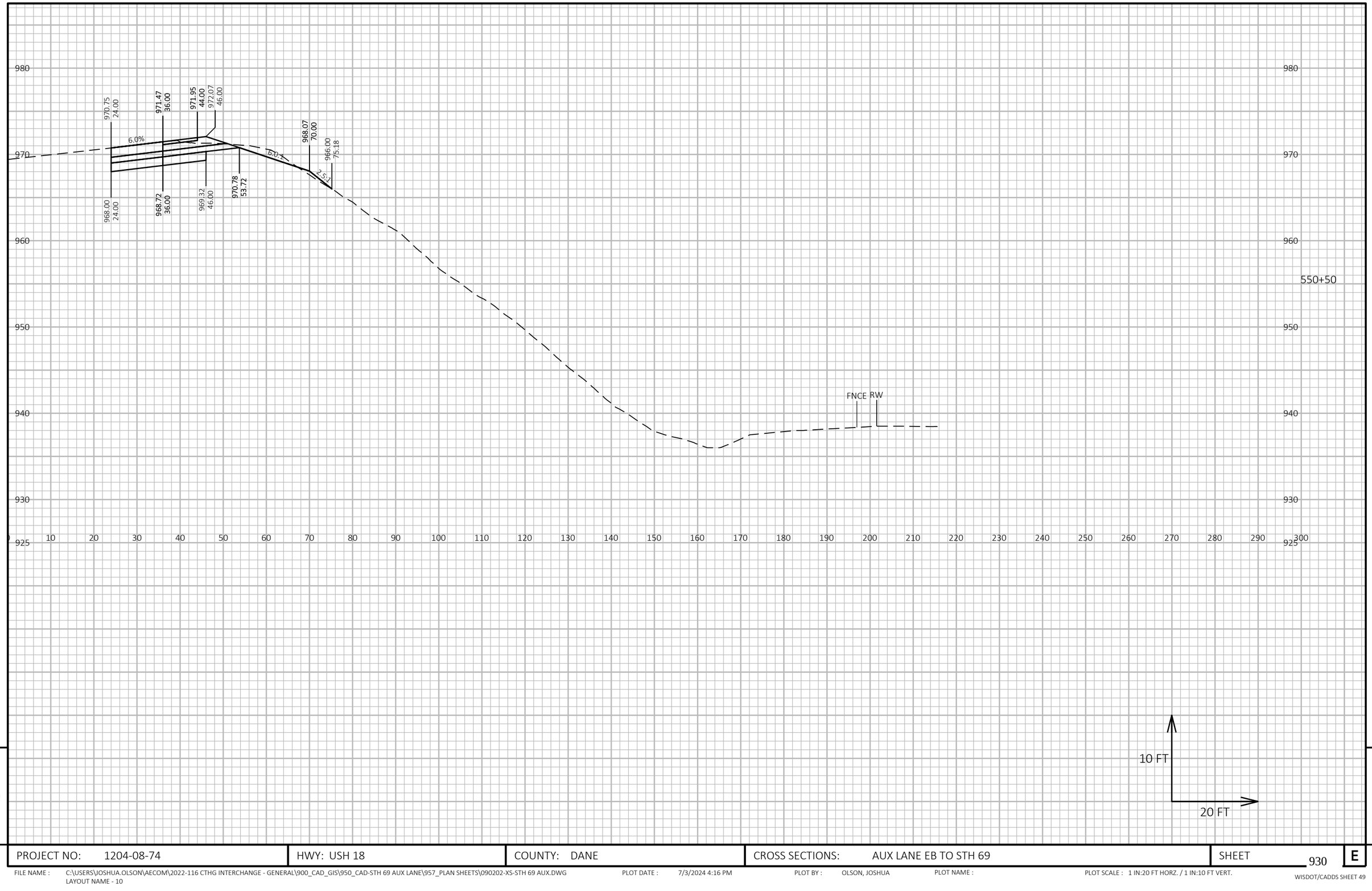
WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 929	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 09
PLOT DATE : 7/3/2024 4:16 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 930	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 10

PLOT DATE : 7/3/2024 4:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 931	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 11

PLOT DATE : 7/3/2024 4:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

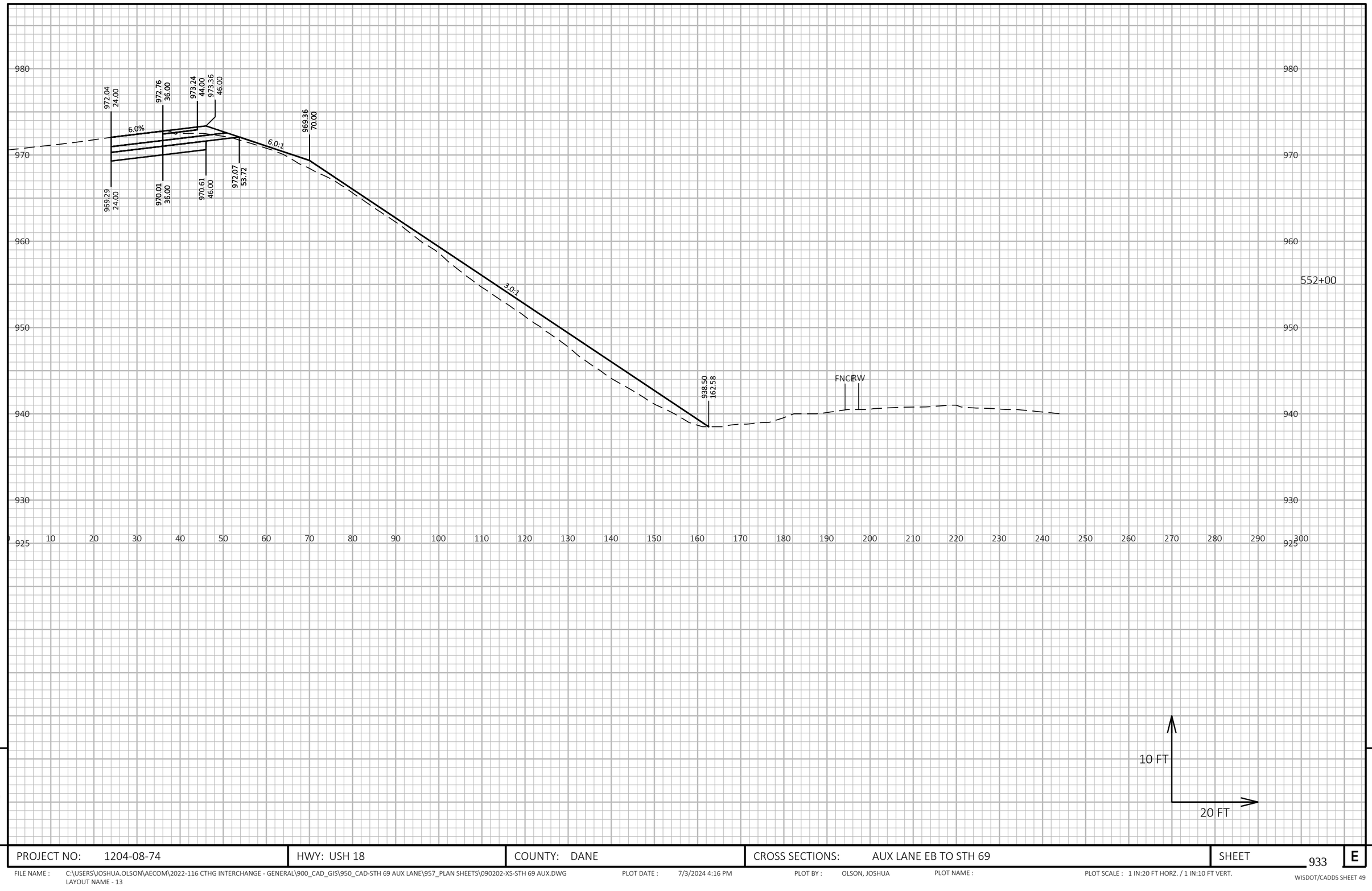
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 932	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 12

PLOT DATE : 7/3/2024 4:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 933	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 13

PLOT DATE : 7/3/2024 4:16 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 934 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 14

PLOT DATE : 7/3/2024 4:17 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 935 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 15

PLOT DATE : 7/3/2024 4:17 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 936 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 16

PLOT DATE : 7/3/2024 4:17 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

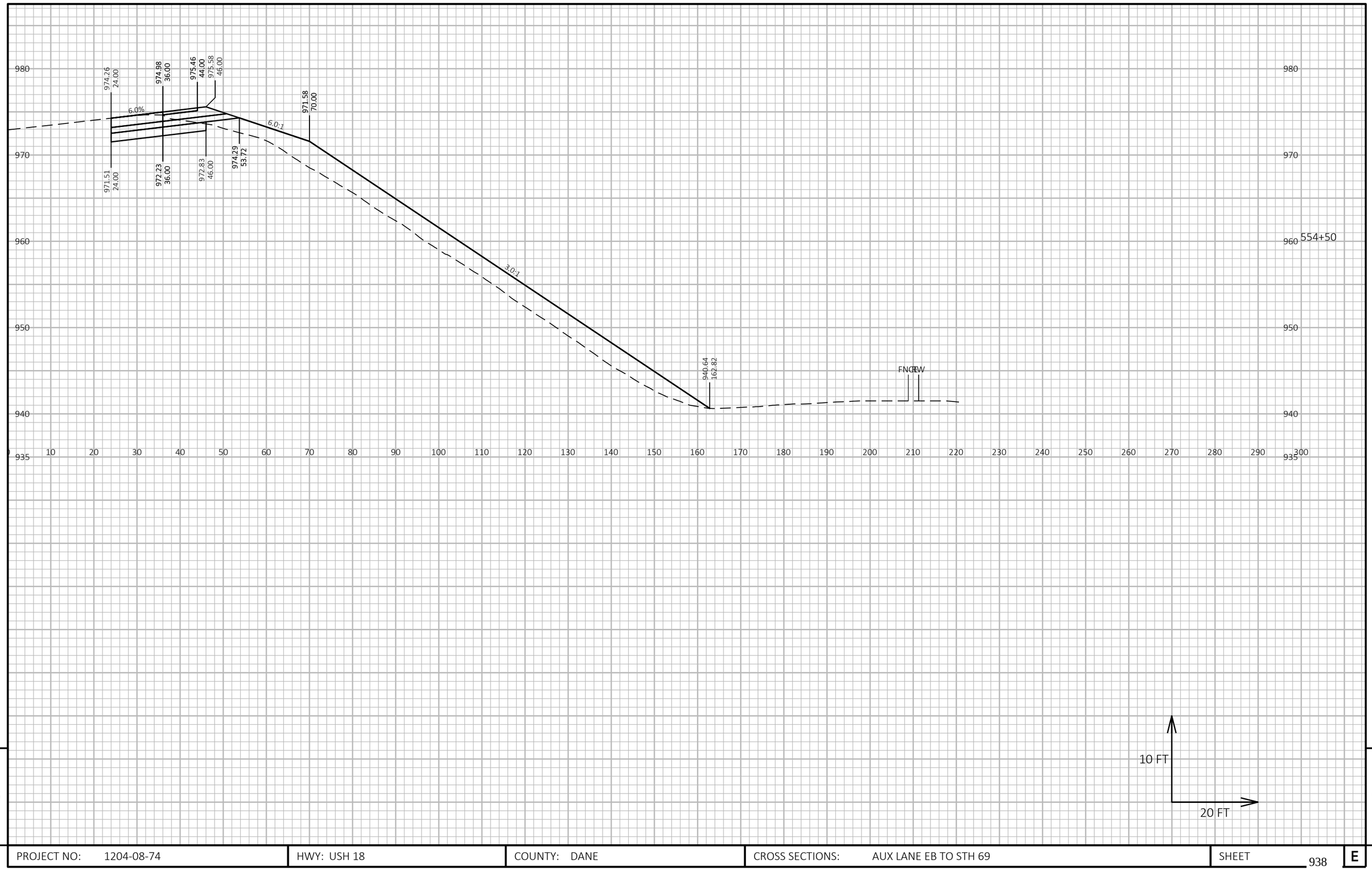
WISDOT/CADDS SHEET 49

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 937 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 17

PLOT DATE : 7/3/2024 4:17 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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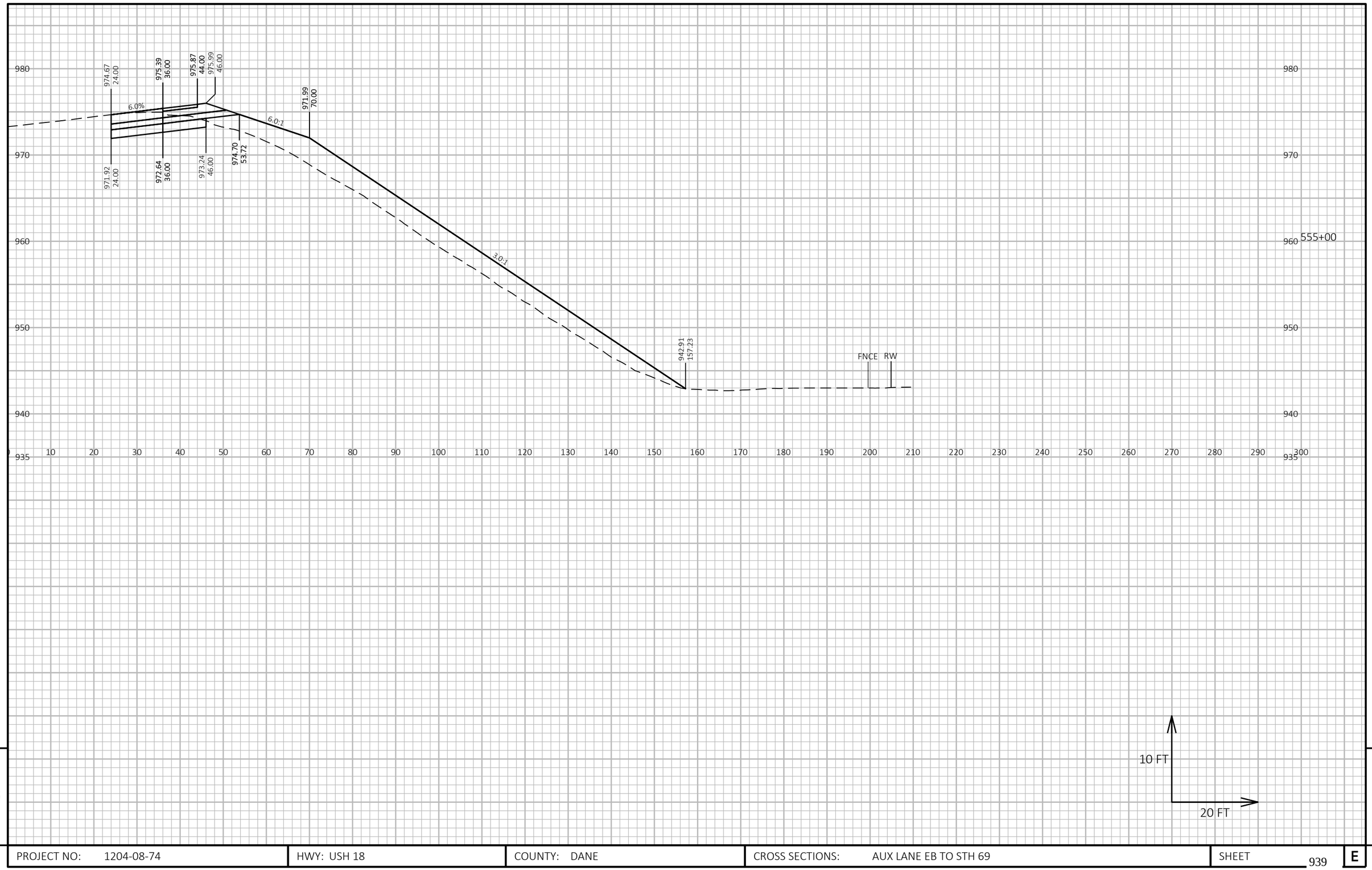
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 938	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 18

PLOT DATE : 7/3/2024 4:17 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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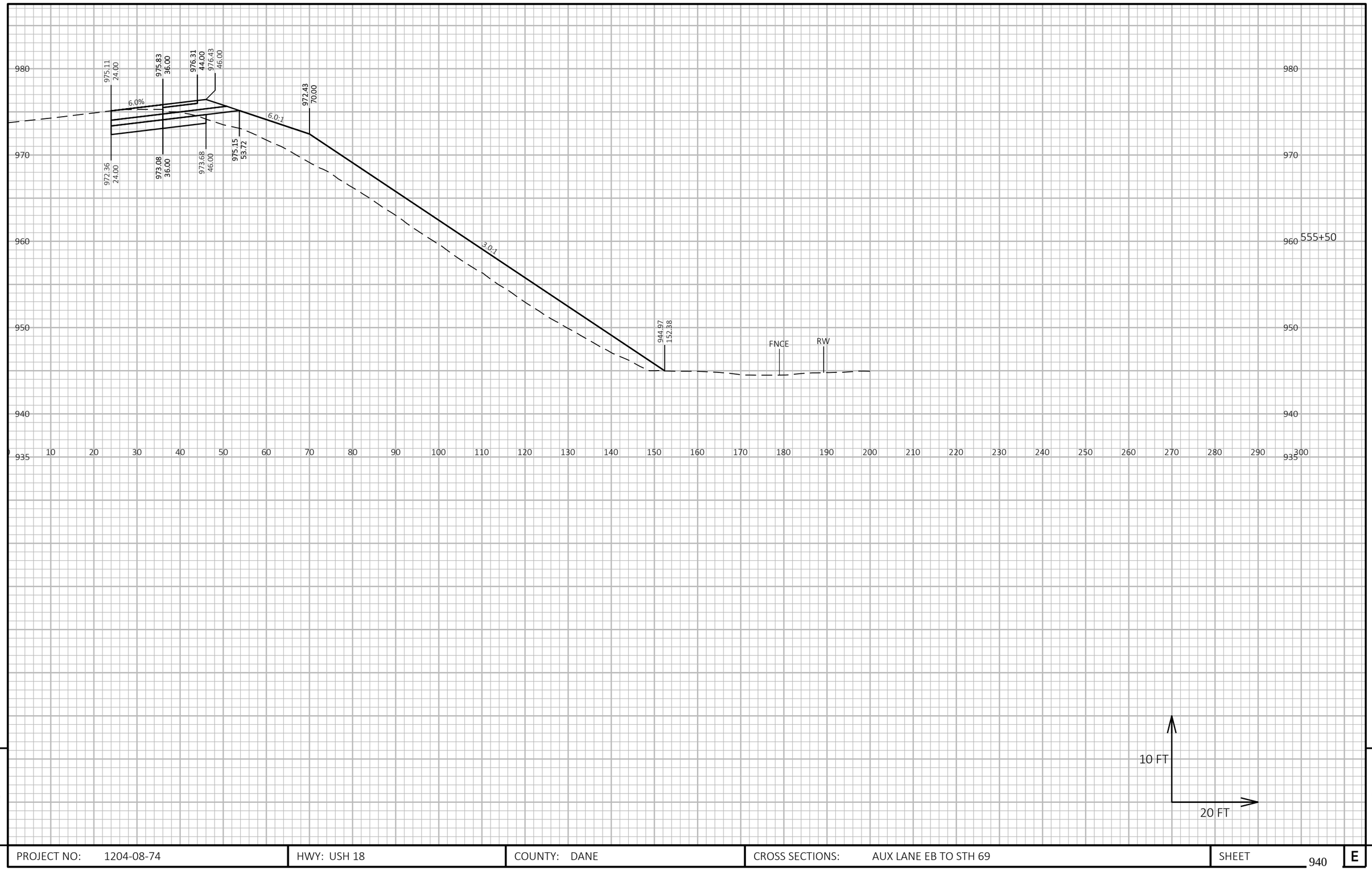
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 939	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 19

PLOT DATE : 7/3/2024 4:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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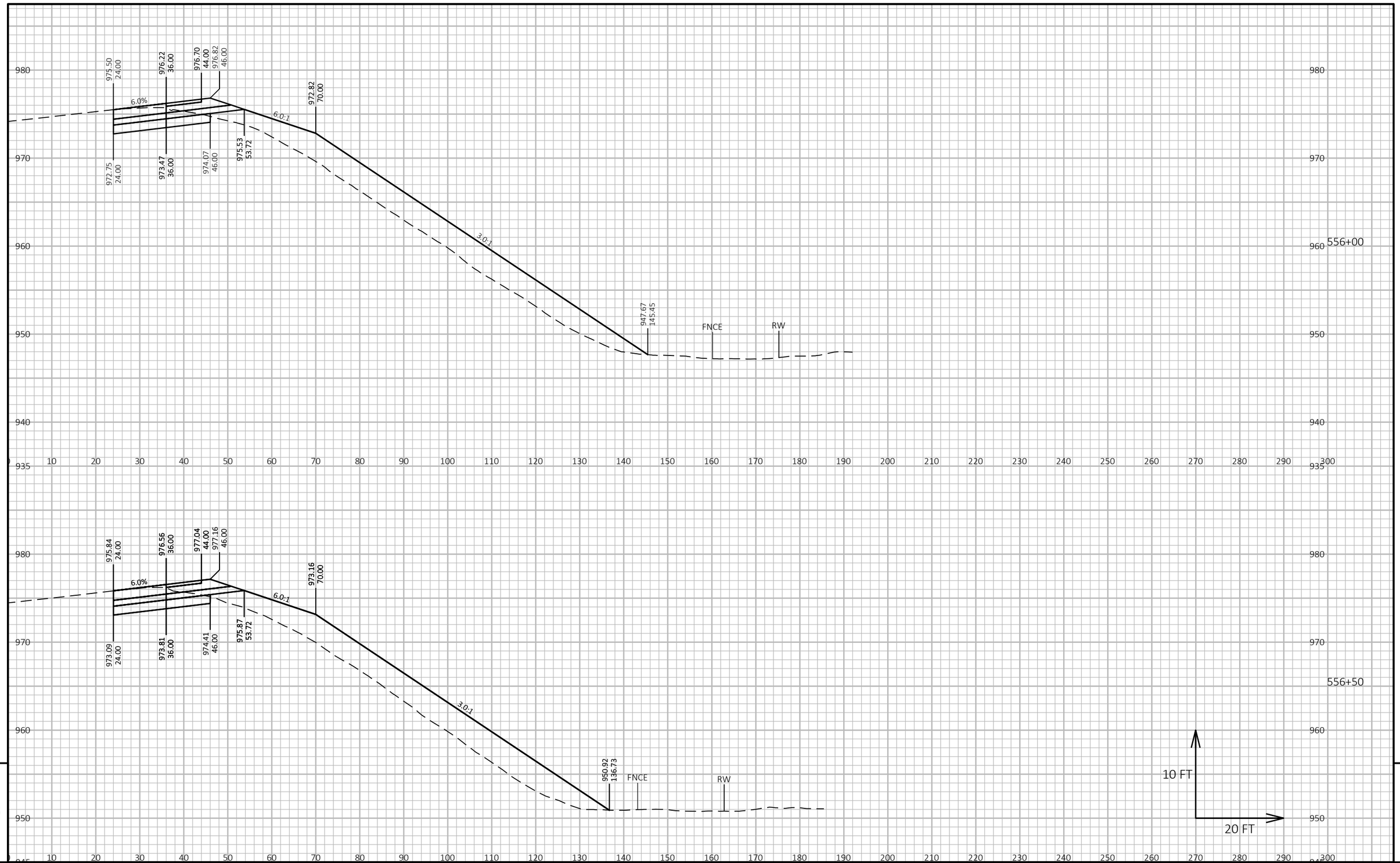
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 940	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 20

PLOT DATE : 7/3/2024 4:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 941	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 21

PLOT DATE : 7/3/2024 4:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

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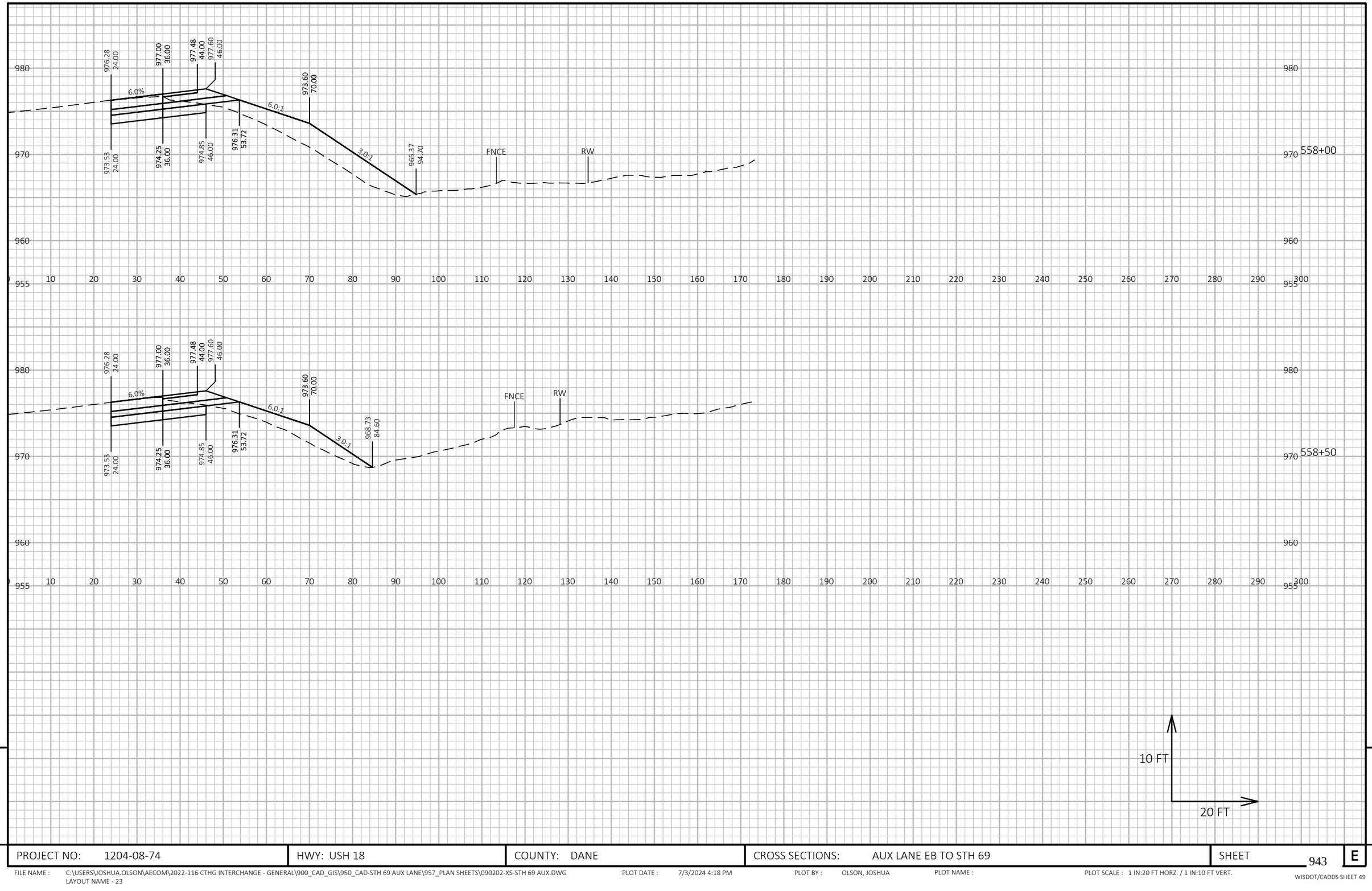
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 942	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 22

PLOT DATE : 7/3/2024 4:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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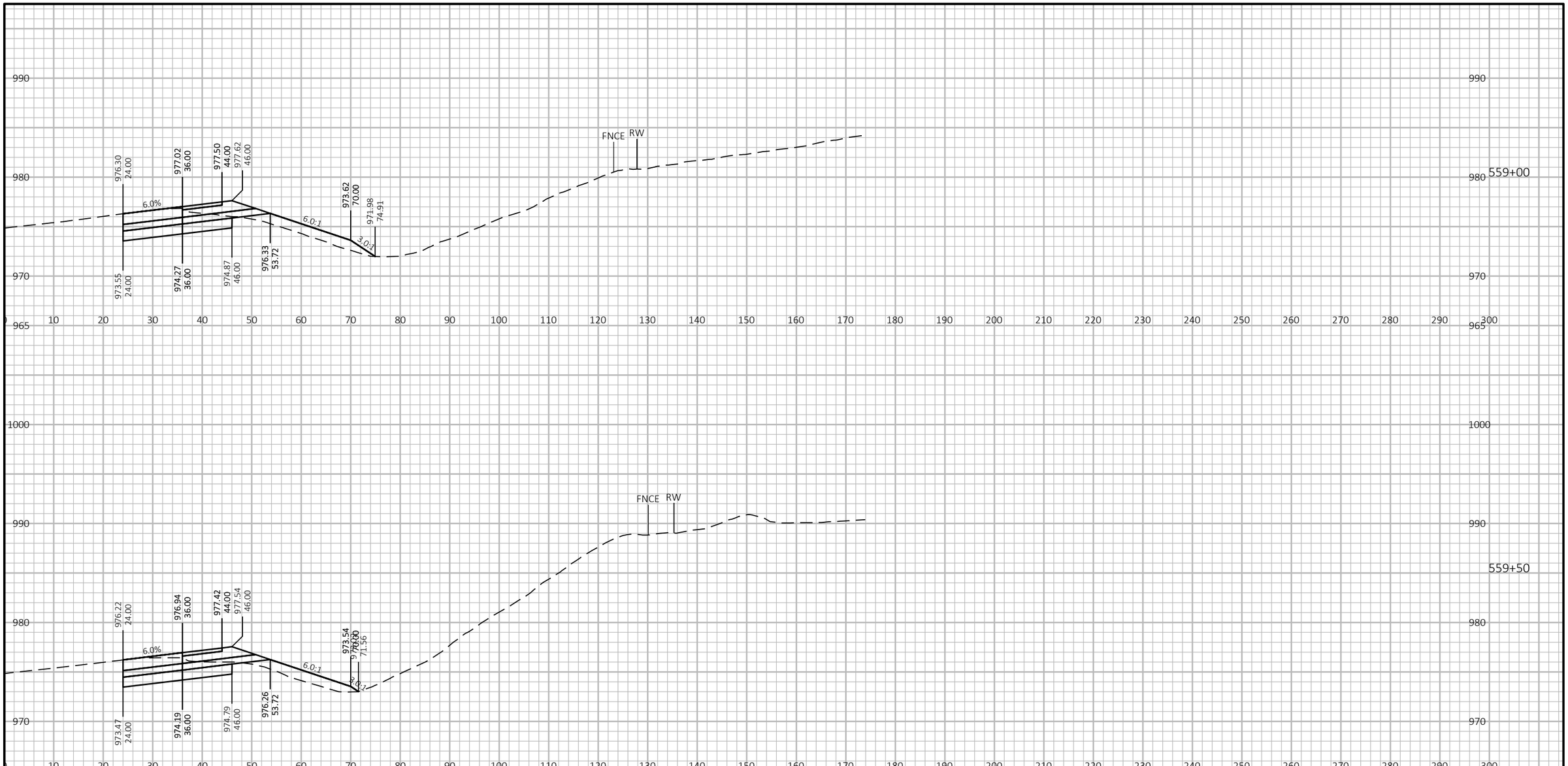
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 943	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 23

PLOT DATE : 7/3/2024 4:18 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

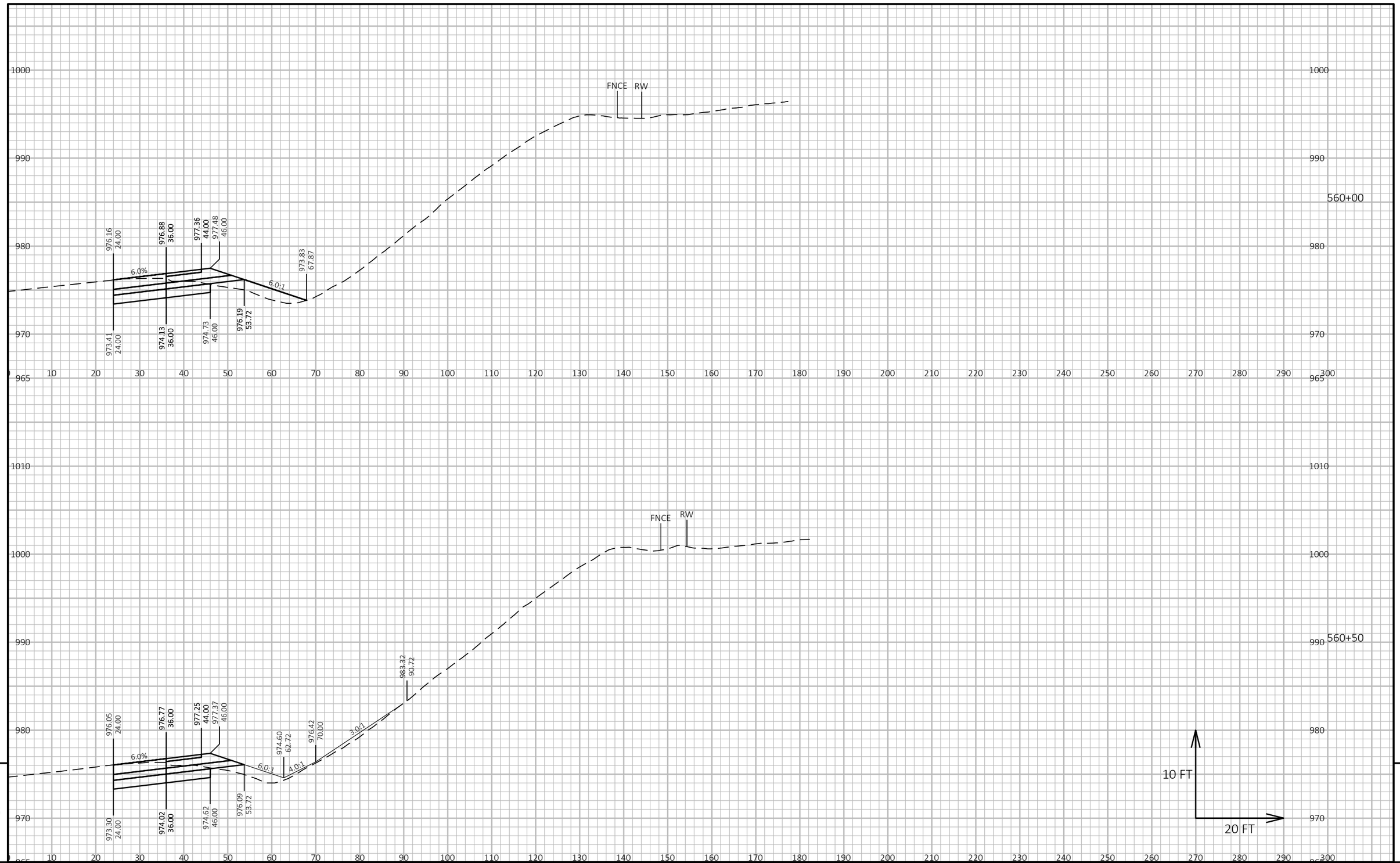


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 944 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 24

PLOT DATE : 7/3/2024 4:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 945	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 25

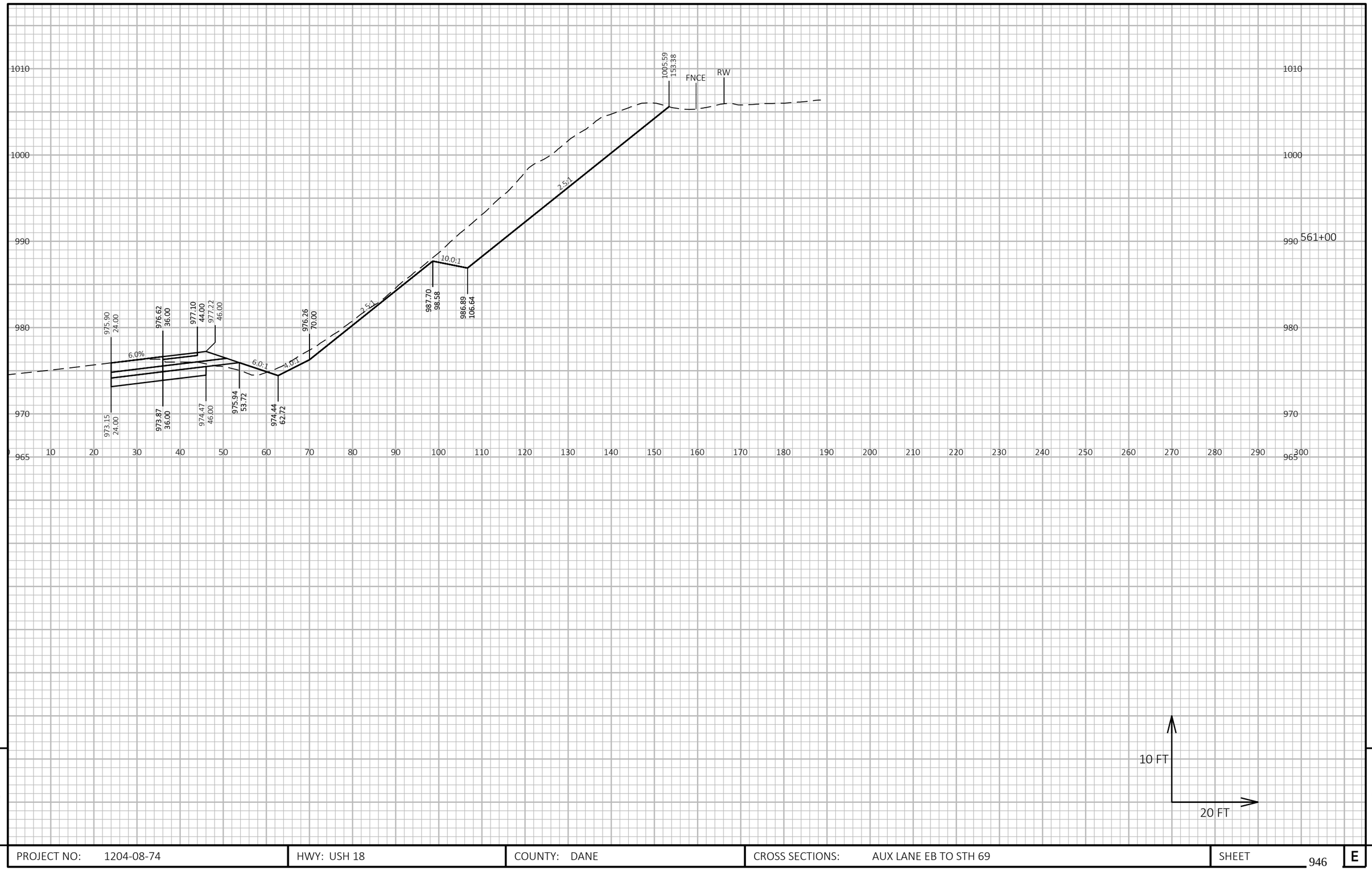
PLOT DATE : 7/3/2024 4:19 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 946 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 26

PLOT DATE : 7/3/2024 4:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

1020
1010
1000
990
980
970
965
10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

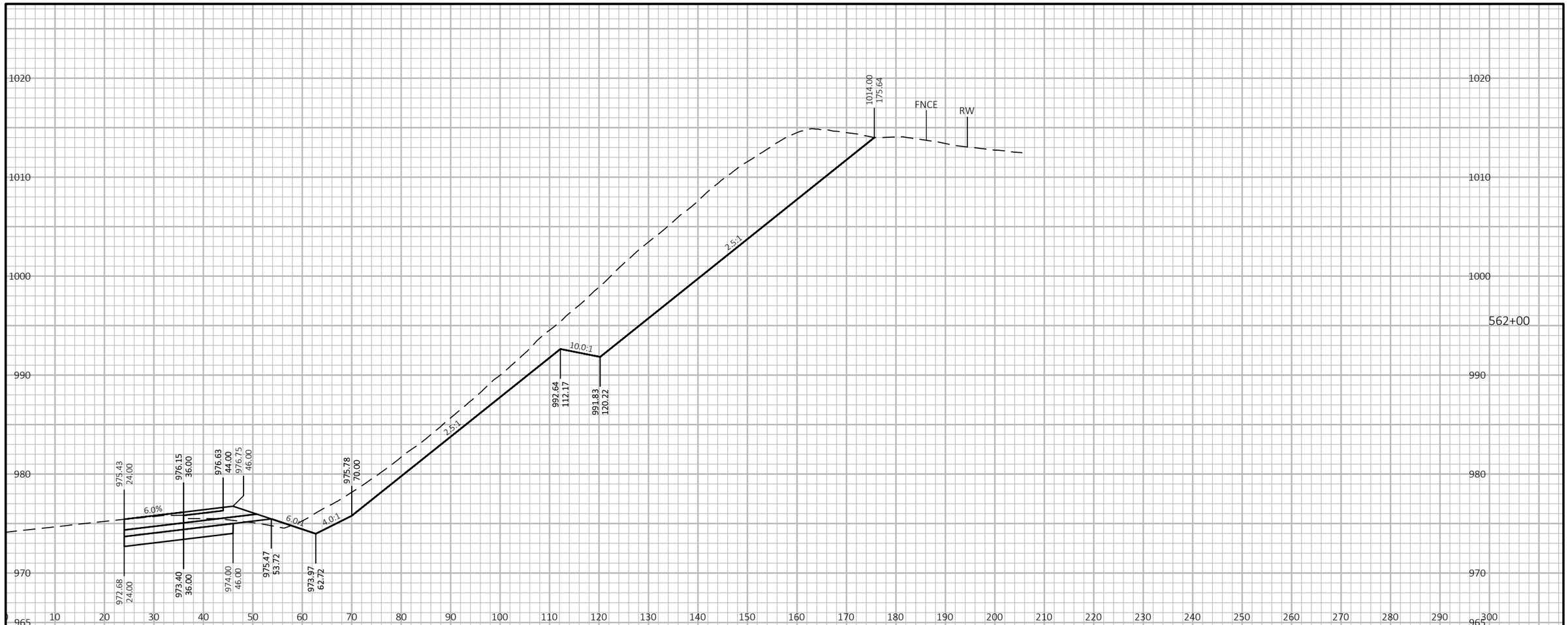
1010.11
165.39
FNCE
RW
561+50
2.5:1
10.0:1
990.18
105.51
989.38
113.56
976.07
70.00
975.71
24.00
976.43
36.00
976.91
44.00
977.03
46.00
6.0%
6.0:1
4.0:1
975.75
53.72
974.25
62.72
972.96
24.00
973.68
36.00
974.28
46.00

10 FT
20 FT

9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 947	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 27
PLOT DATE : 7/3/2024 4:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 948	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 28

PLOT DATE : 7/3/2024 4:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 949	E

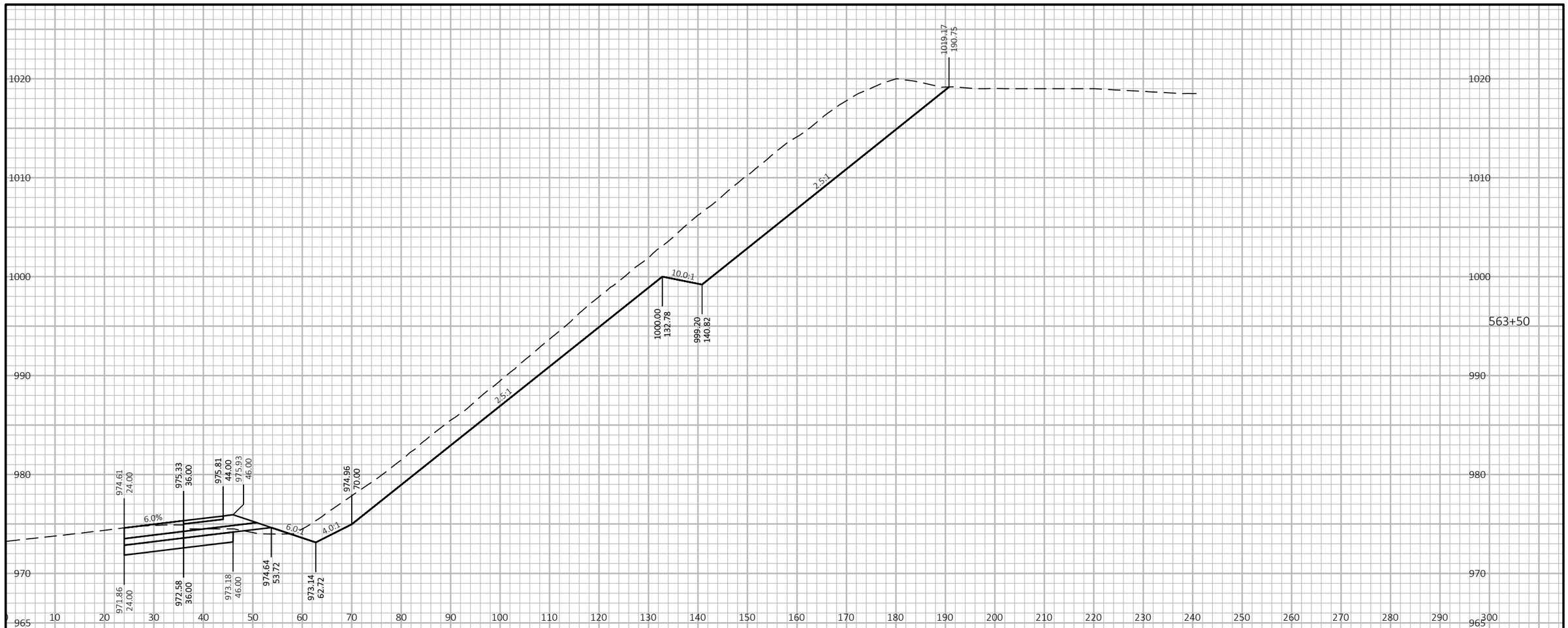
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 29

PLOT DATE : 7/3/2024 4:19 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 950	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 30
PLOT DATE : 7/3/2024 4:20 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

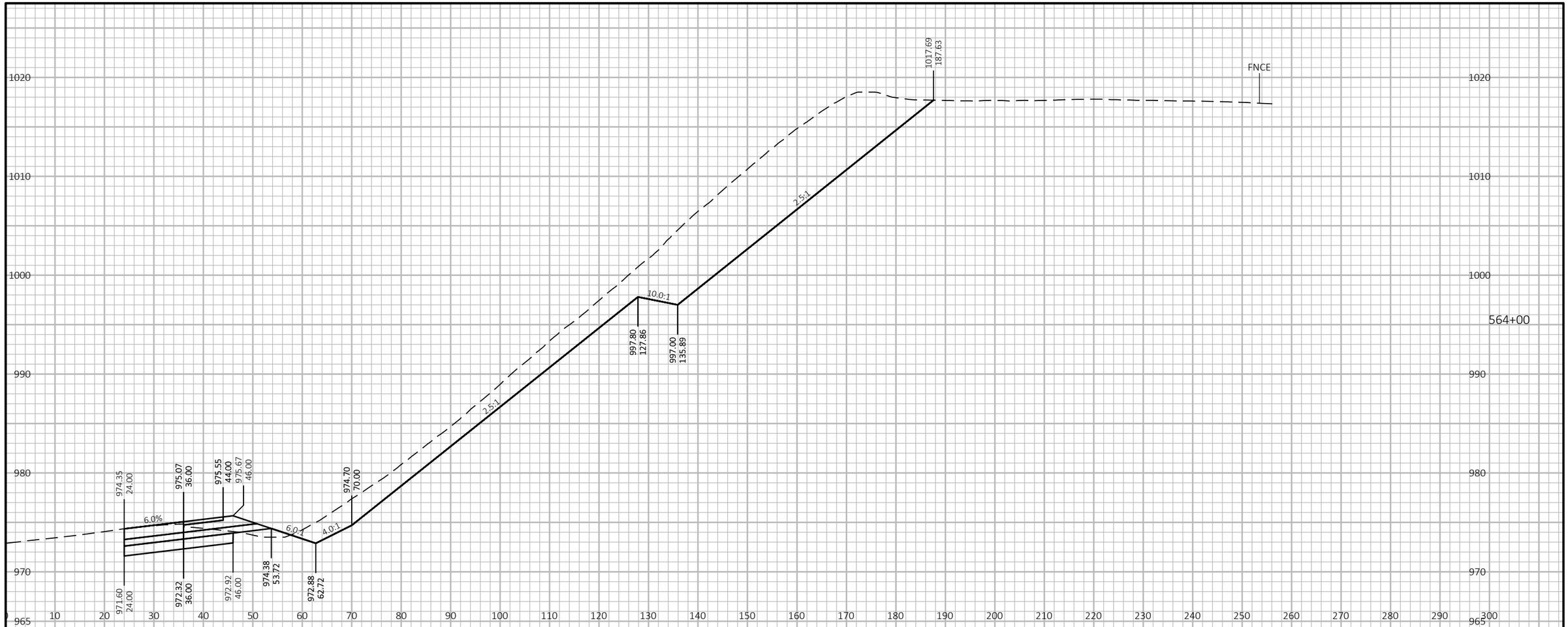


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 951	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 31

PLOT DATE : 7/3/2024 4:20 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 952	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 32

PLOT DATE : 7/3/2024 4:20 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

10 FT

20 FT

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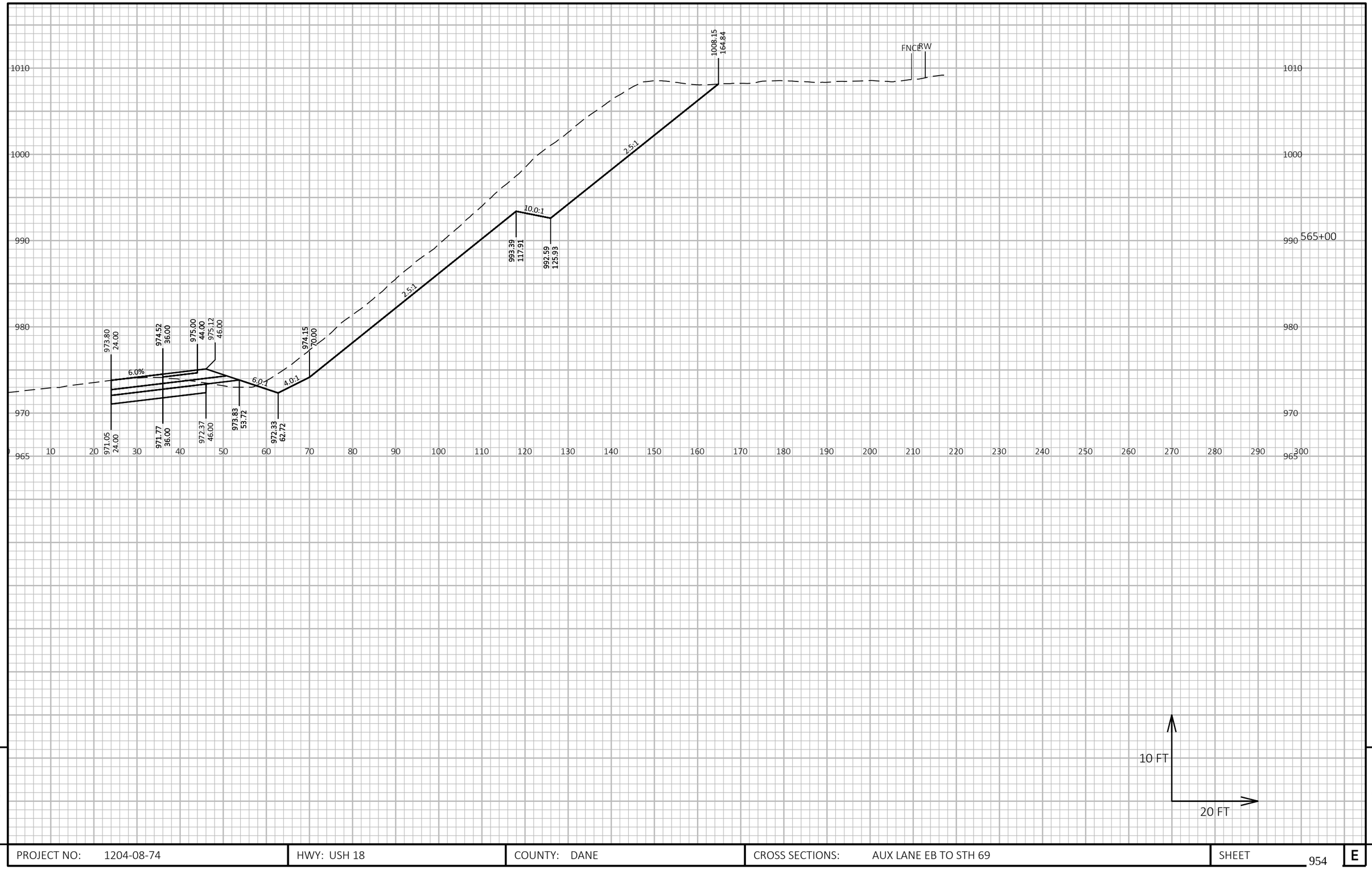
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 953	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 33

PLOT DATE : 7/3/2024 4:20 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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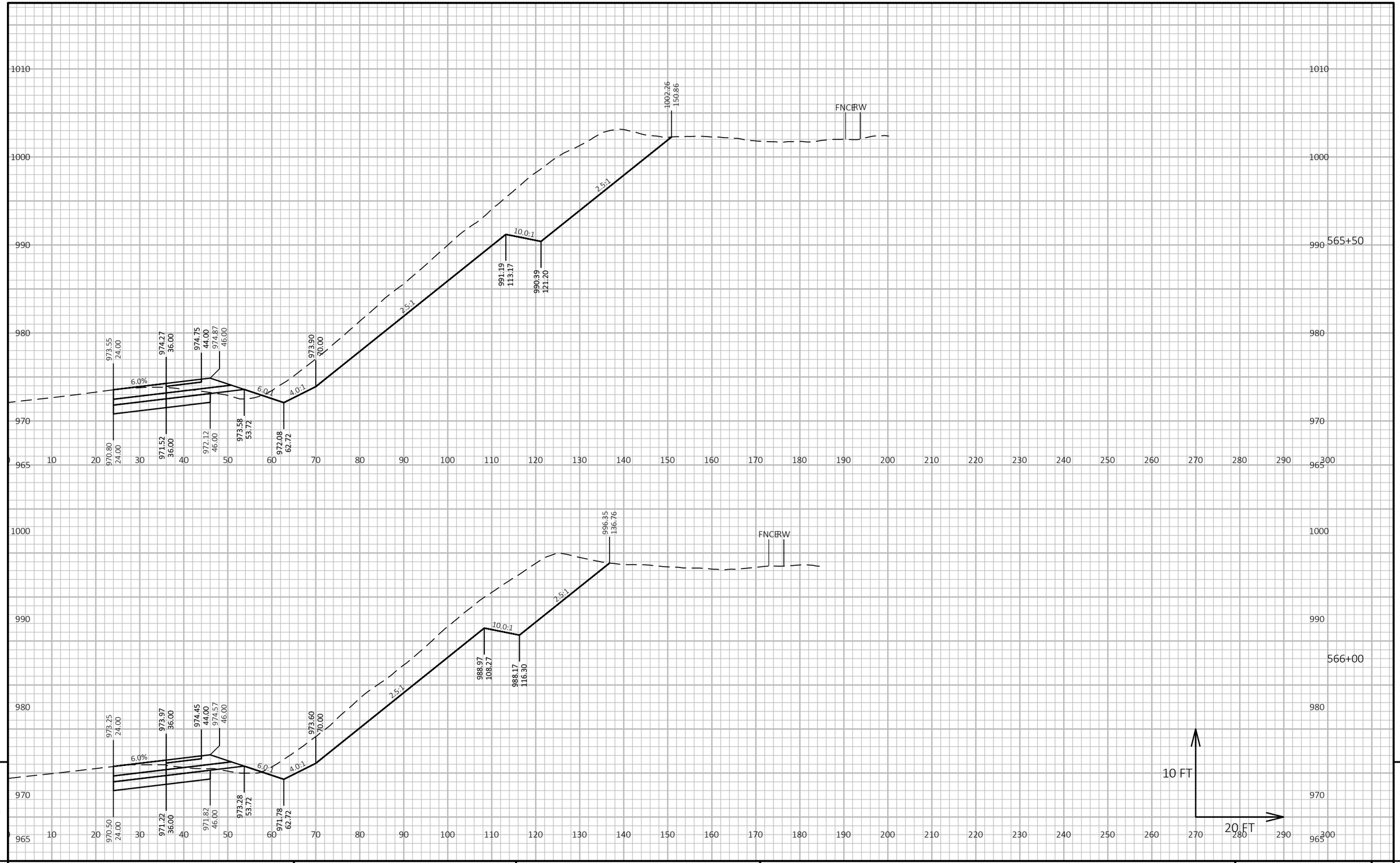
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 954	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 34

PLOT DATE : 7/3/2024 4:20 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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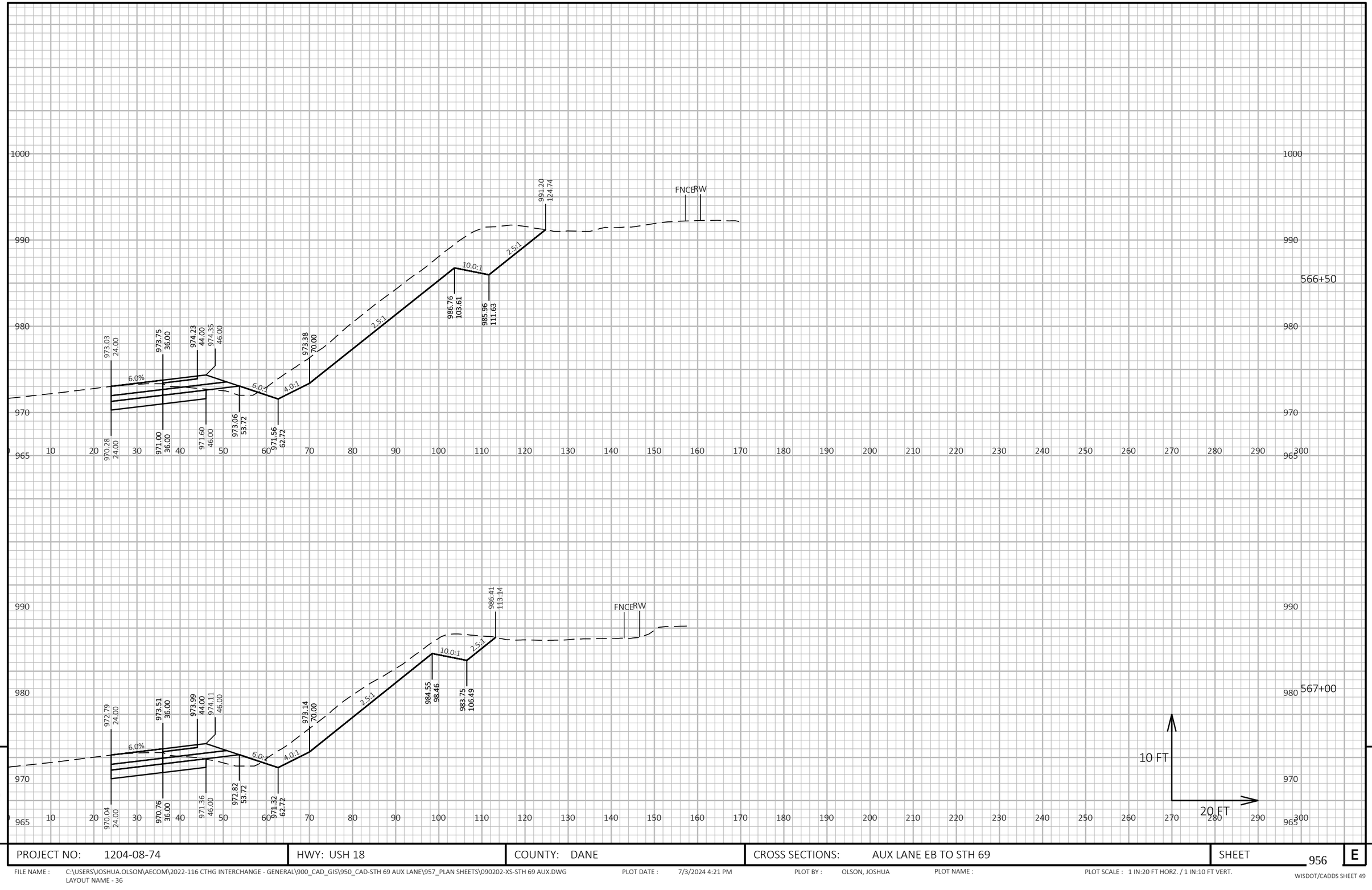
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 955	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 35

PLOT DATE : 7/3/2024 4:21 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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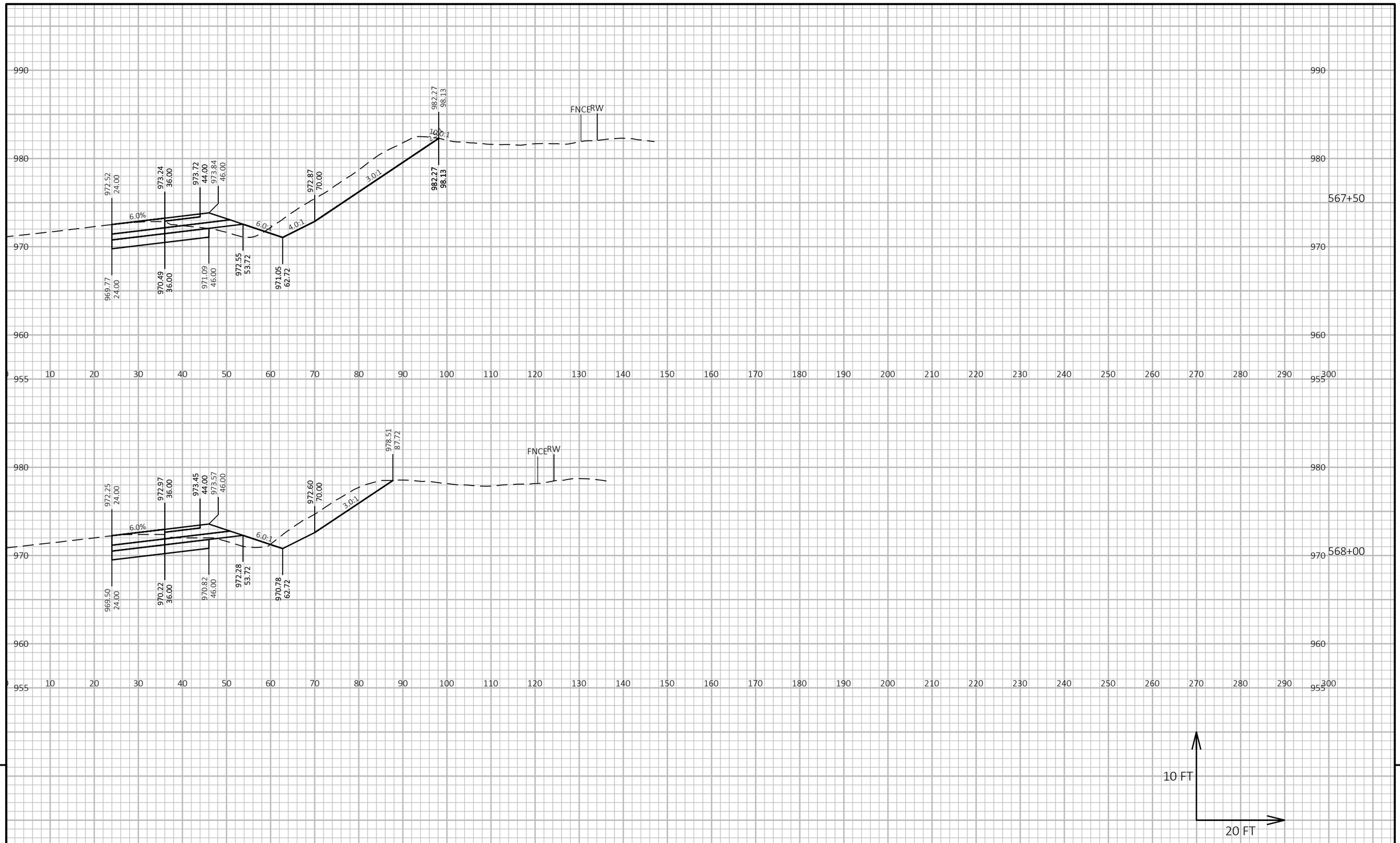
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 956	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 36

PLOT DATE : 7/3/2024 4:21 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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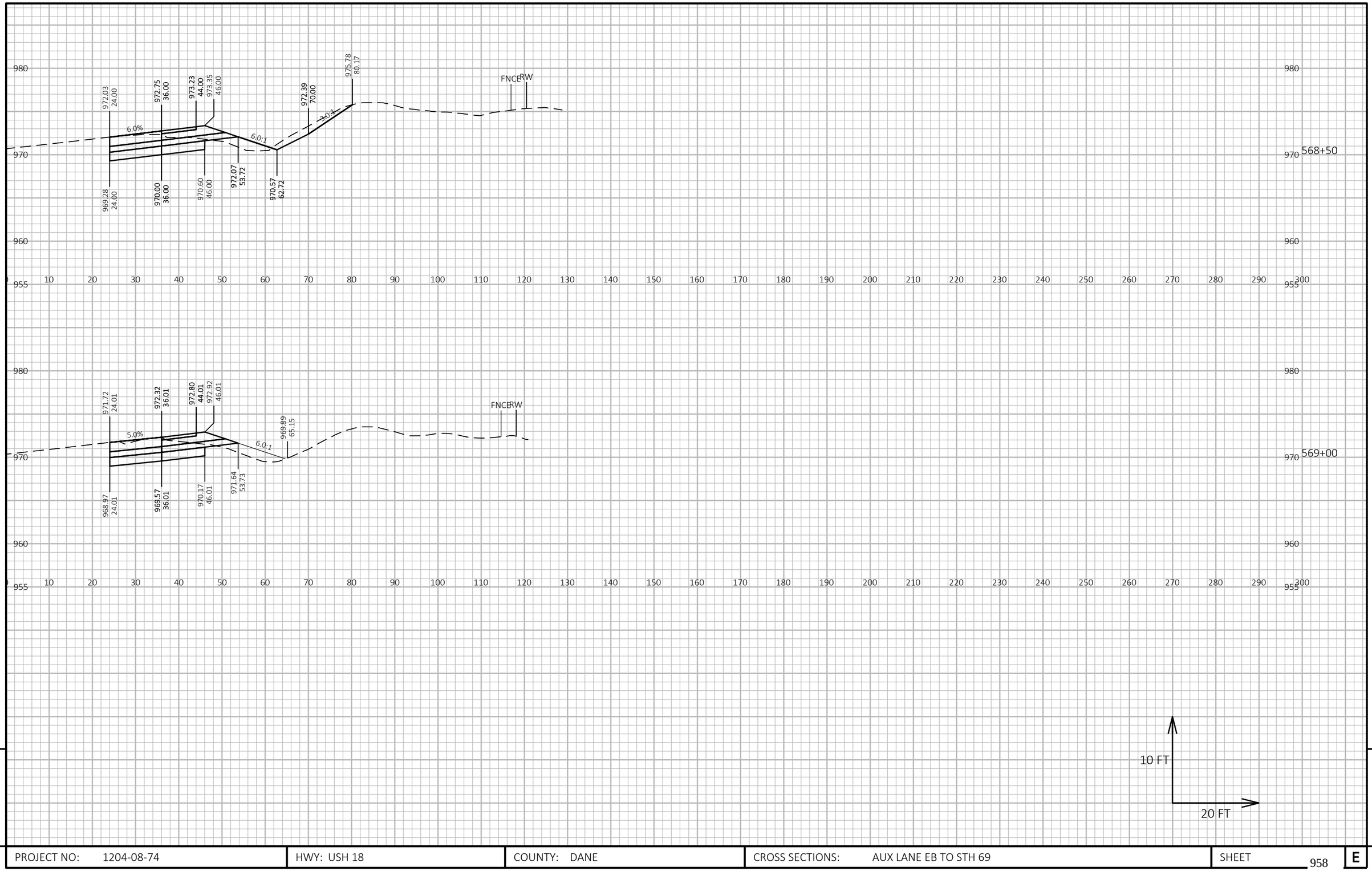
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 957	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 37

PLOT DATE : 7/3/2024 4:21 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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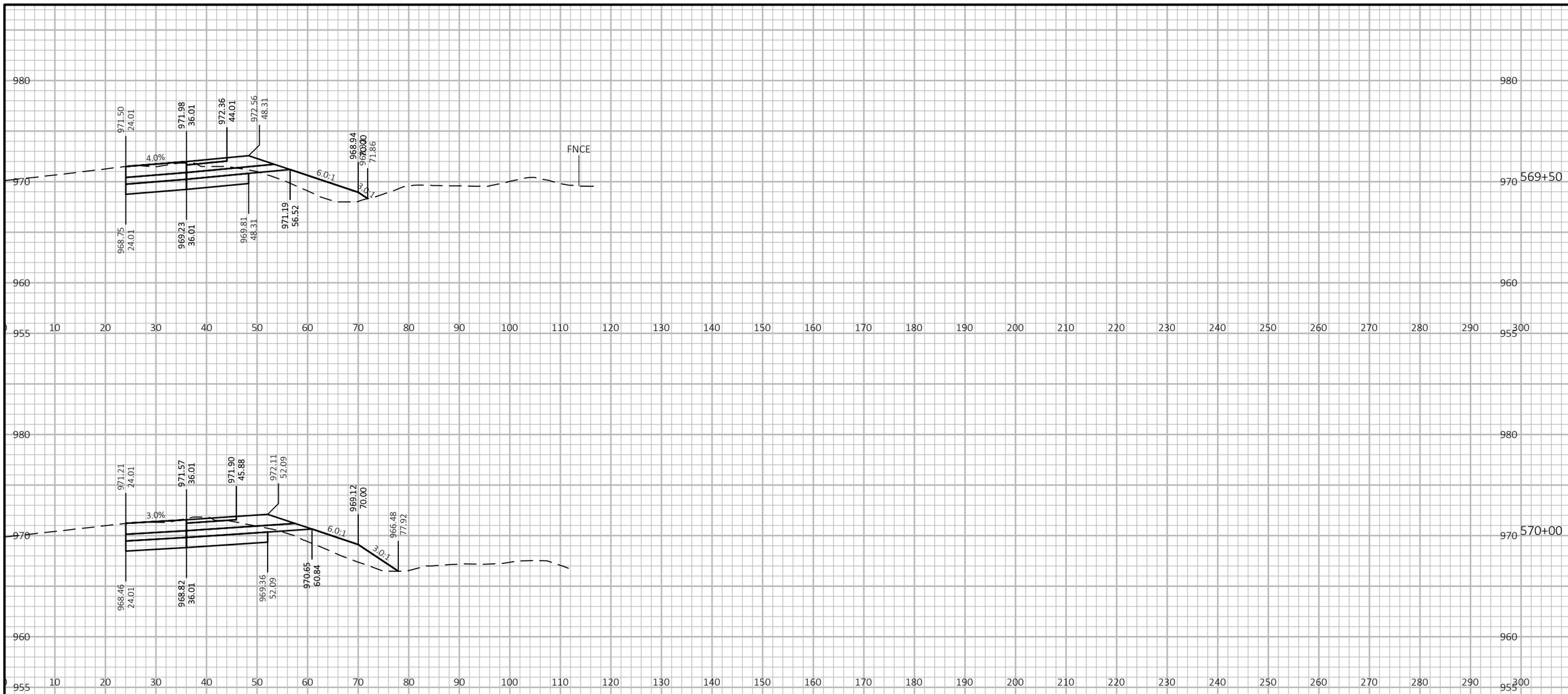
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 958	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 38
PLOT DATE : 7/3/2024 4:21 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



10 FT

20 FT

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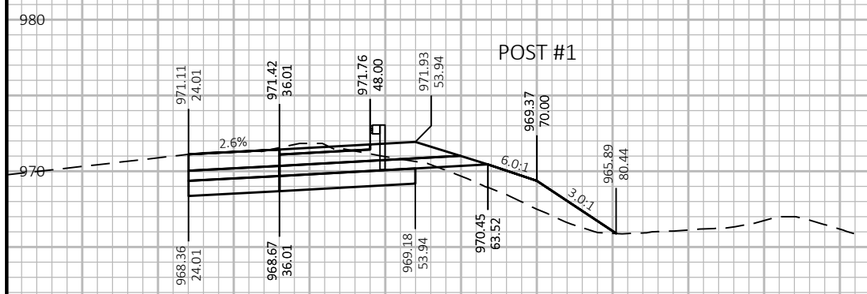
9

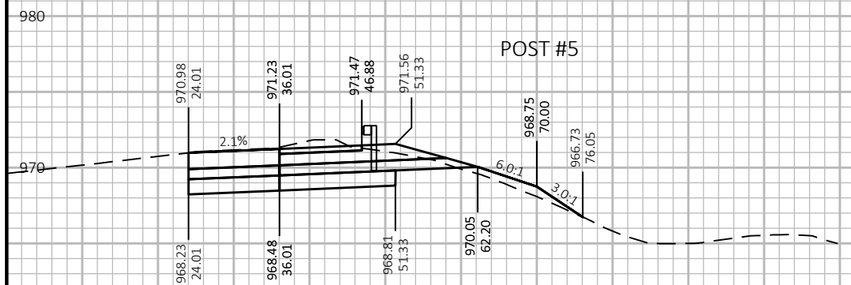
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 959	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 39

PLOT DATE : 7/3/2024 4:21 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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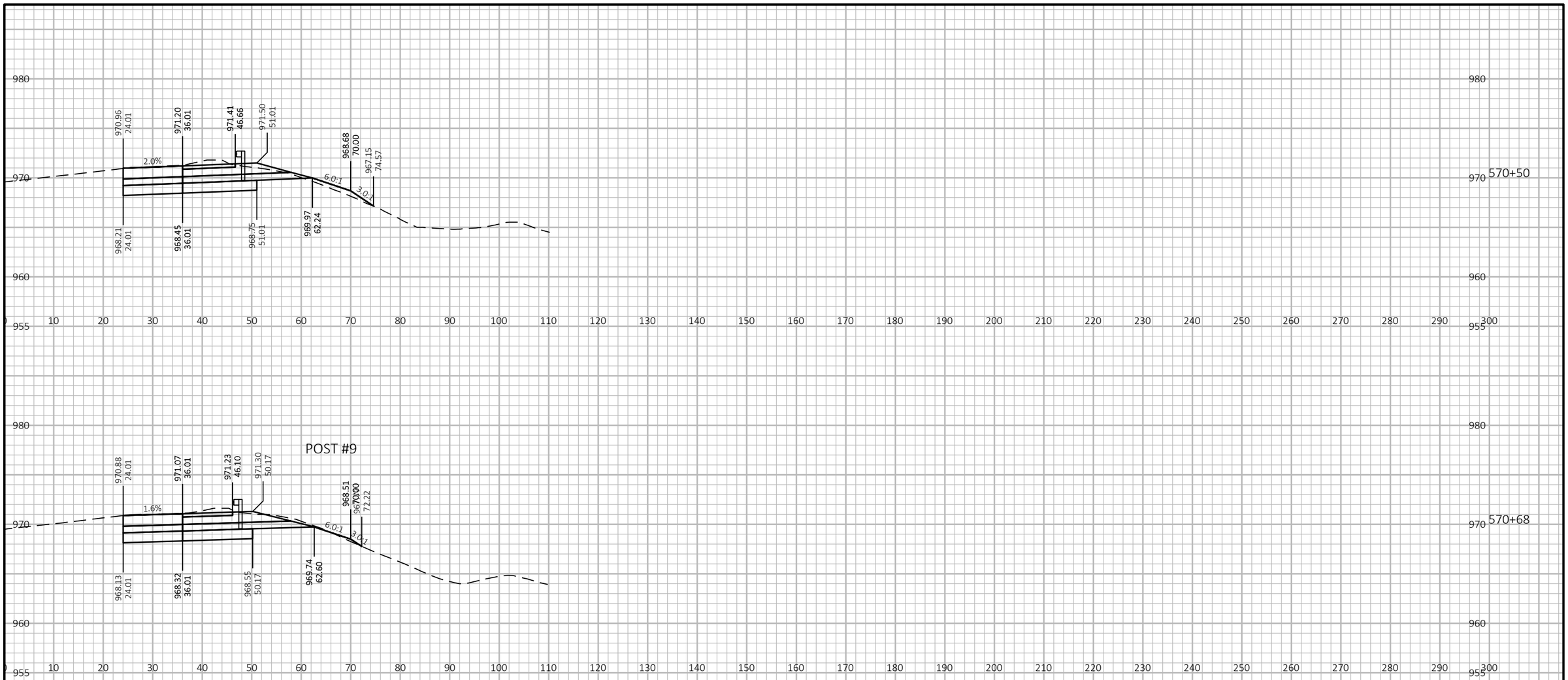
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 960	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 40
PLOT DATE : 7/3/2024 4:22 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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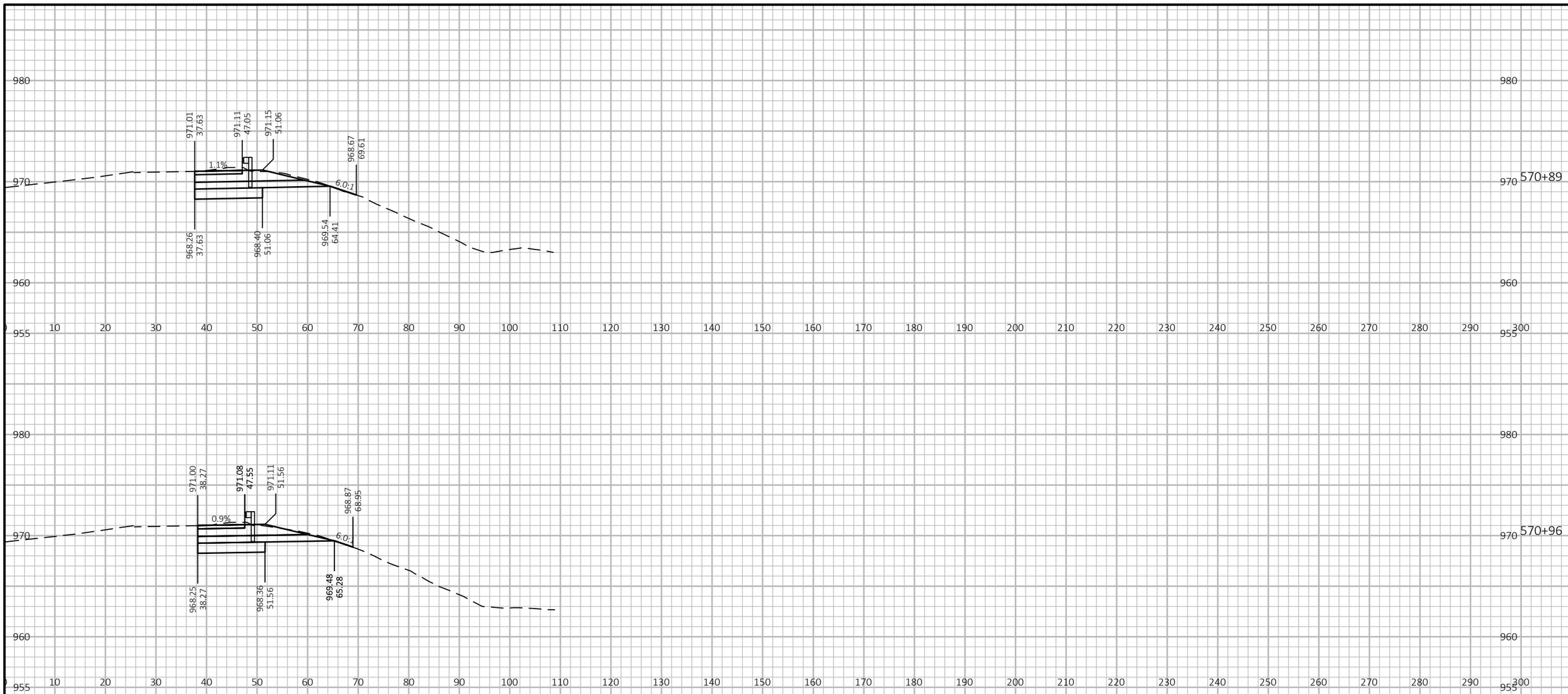
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 961	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 41

PLOT DATE : 7/3/2024 4:22 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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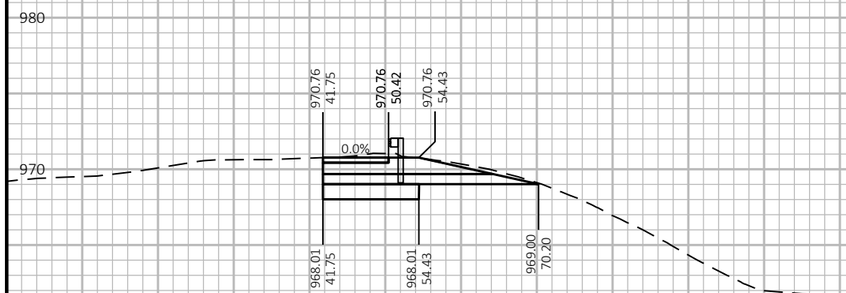
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 962	E

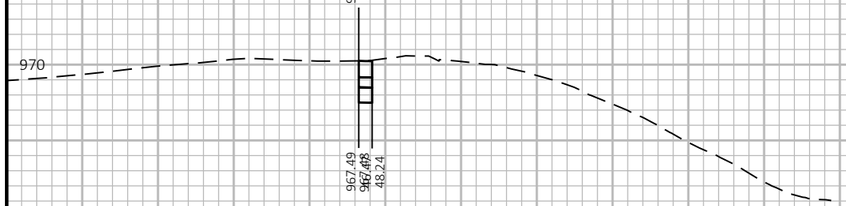
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 42

PLOT DATE : 7/3/2024 4:22 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



END CONSTRUCTION
1204-08-74



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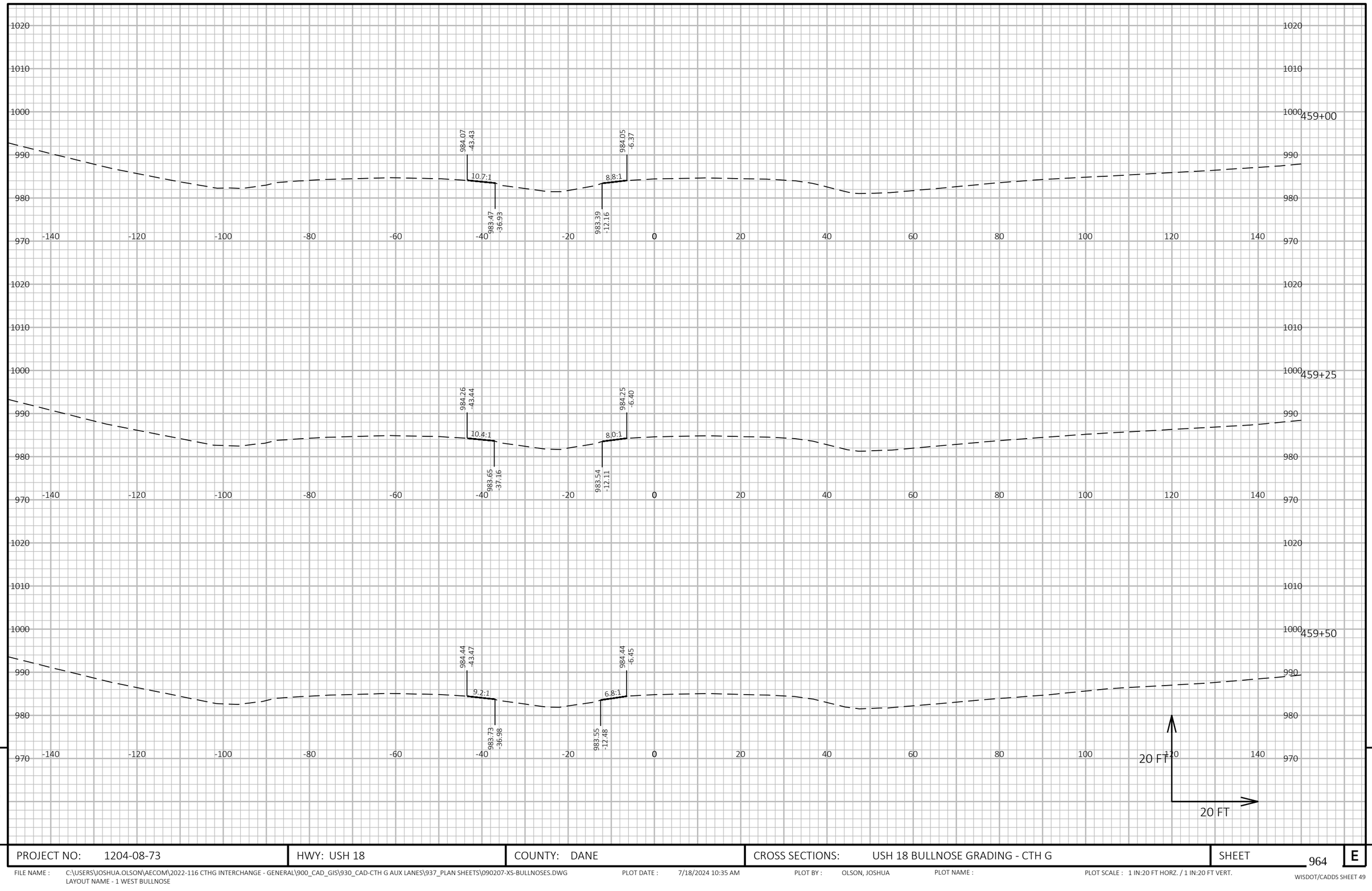
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: AUX LANE EB TO STH 69	SHEET 963	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090202-XS-STH 69 AUX.DWG
LAYOUT NAME - 43

PLOT DATE : 7/3/2024 4:22 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 964	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 1 WEST BULLNOSE
PLOT DATE : 7/18/2024 10:35 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

459+75

984.62
-43.52

7.4:1

983.45
-34.88

984.62
-6.54

5.5:1

983.16
-14.60

460+00

984.80
-43.57

7.2:1

983.30
-32.78

984.77
-6.66

5.9:1

983.06
-16.71

460+25

984.97
-43.58

6.8:1

983.08
-30.68

984.92
-6.78

6.3:1

983.02
-18.82

20 FT

20 FT

9

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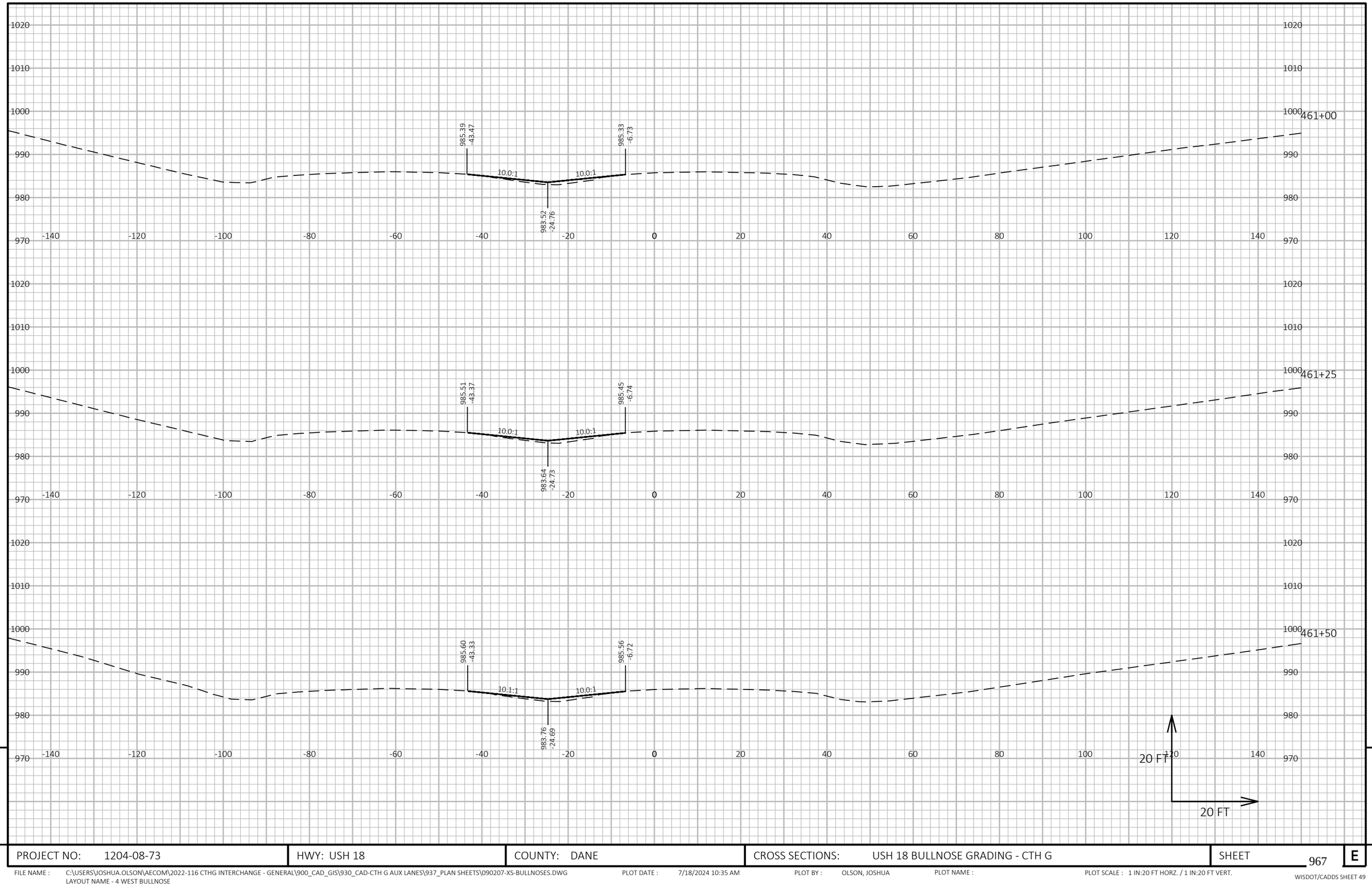
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 965	E

PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 966	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 3 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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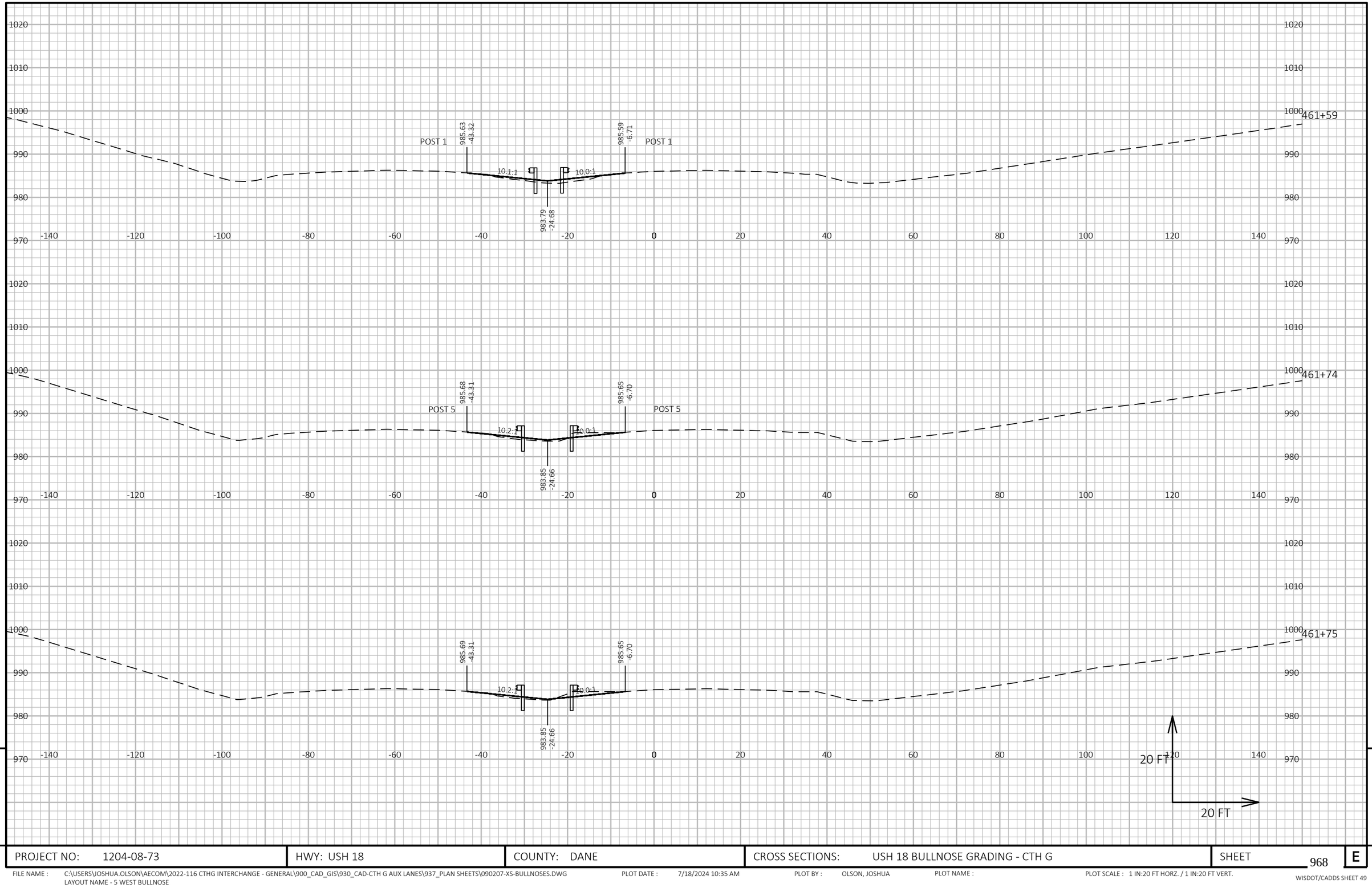
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 967	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 4 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

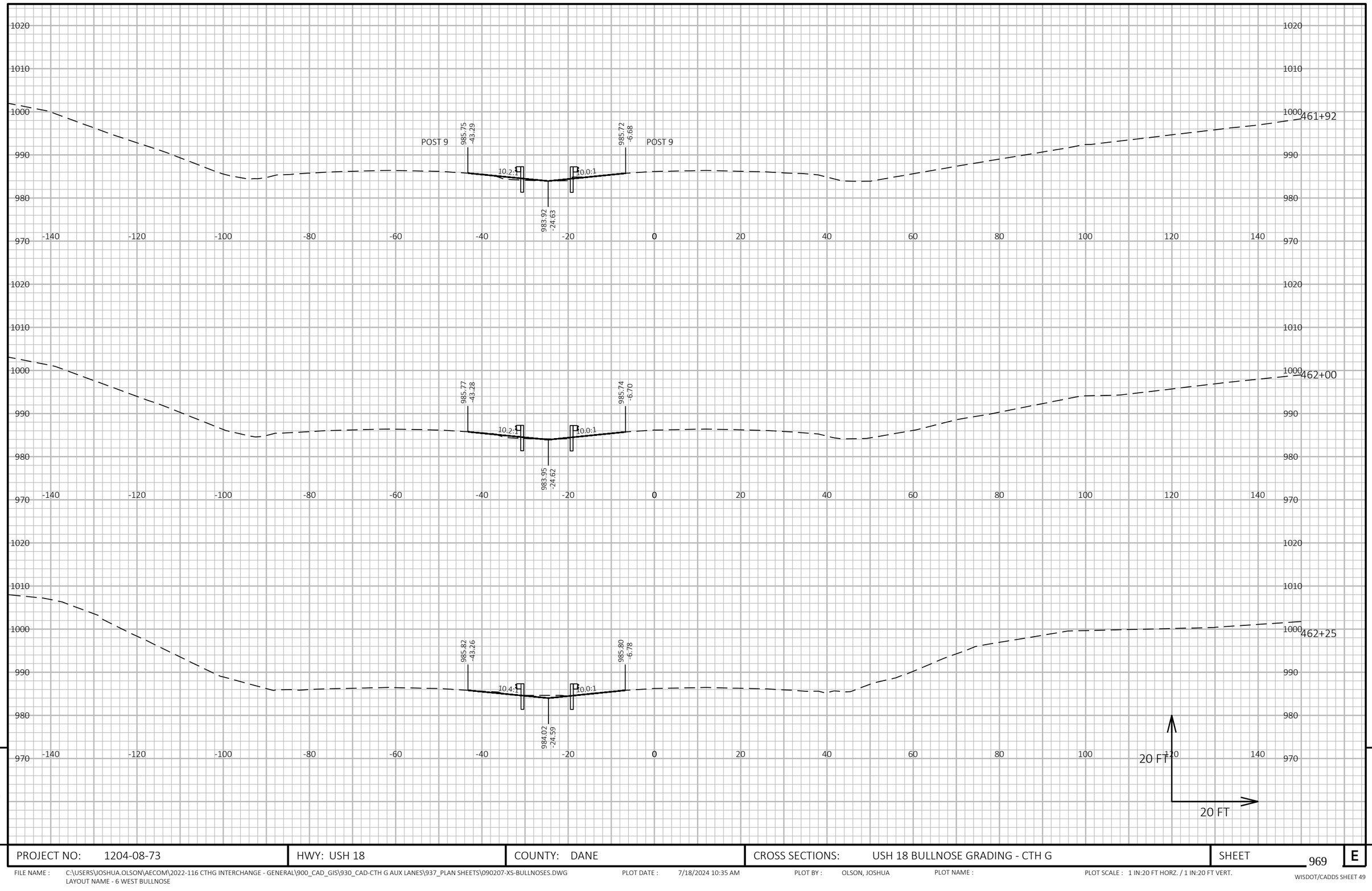


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 968	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 5 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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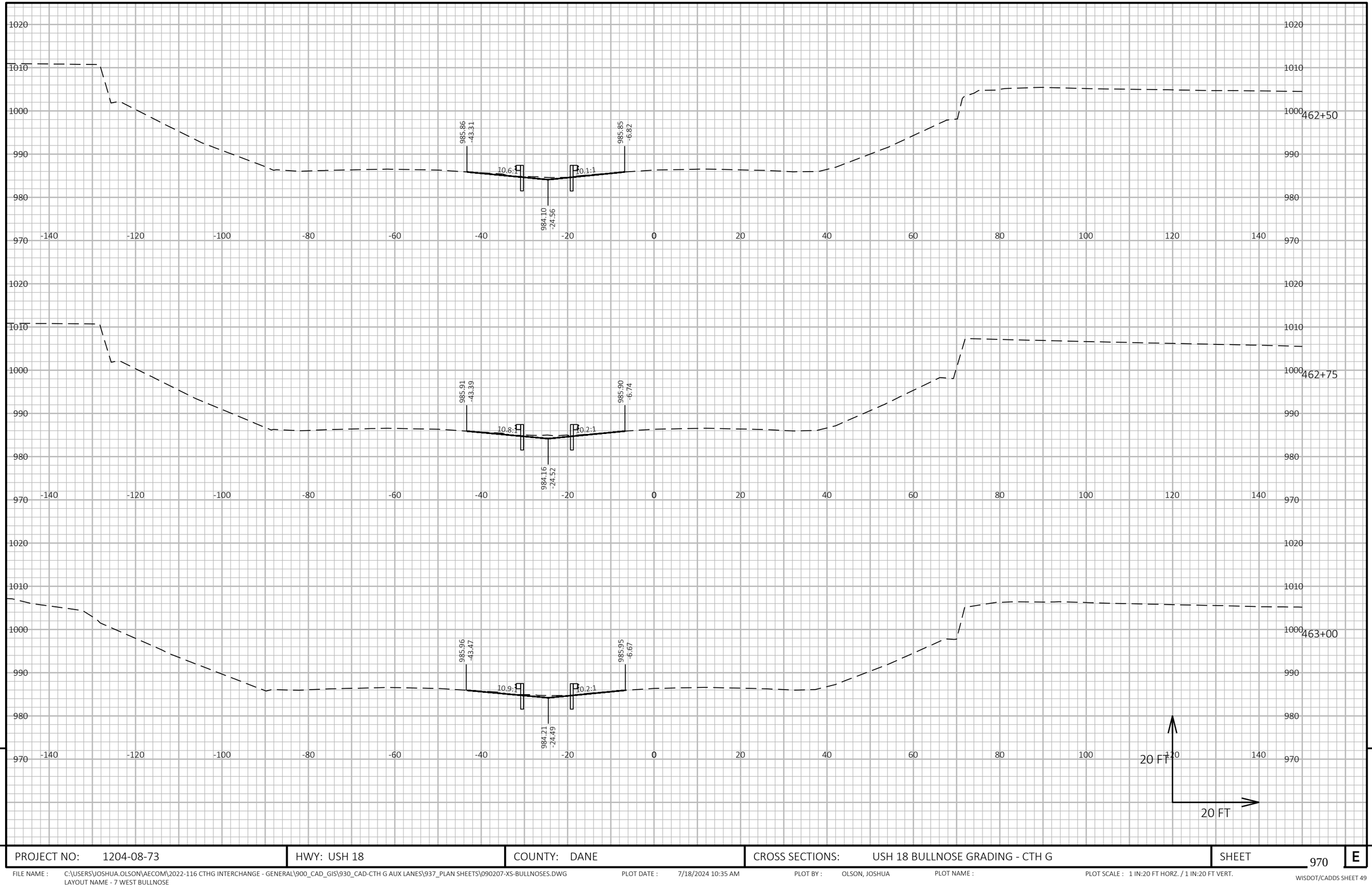
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 969	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 6 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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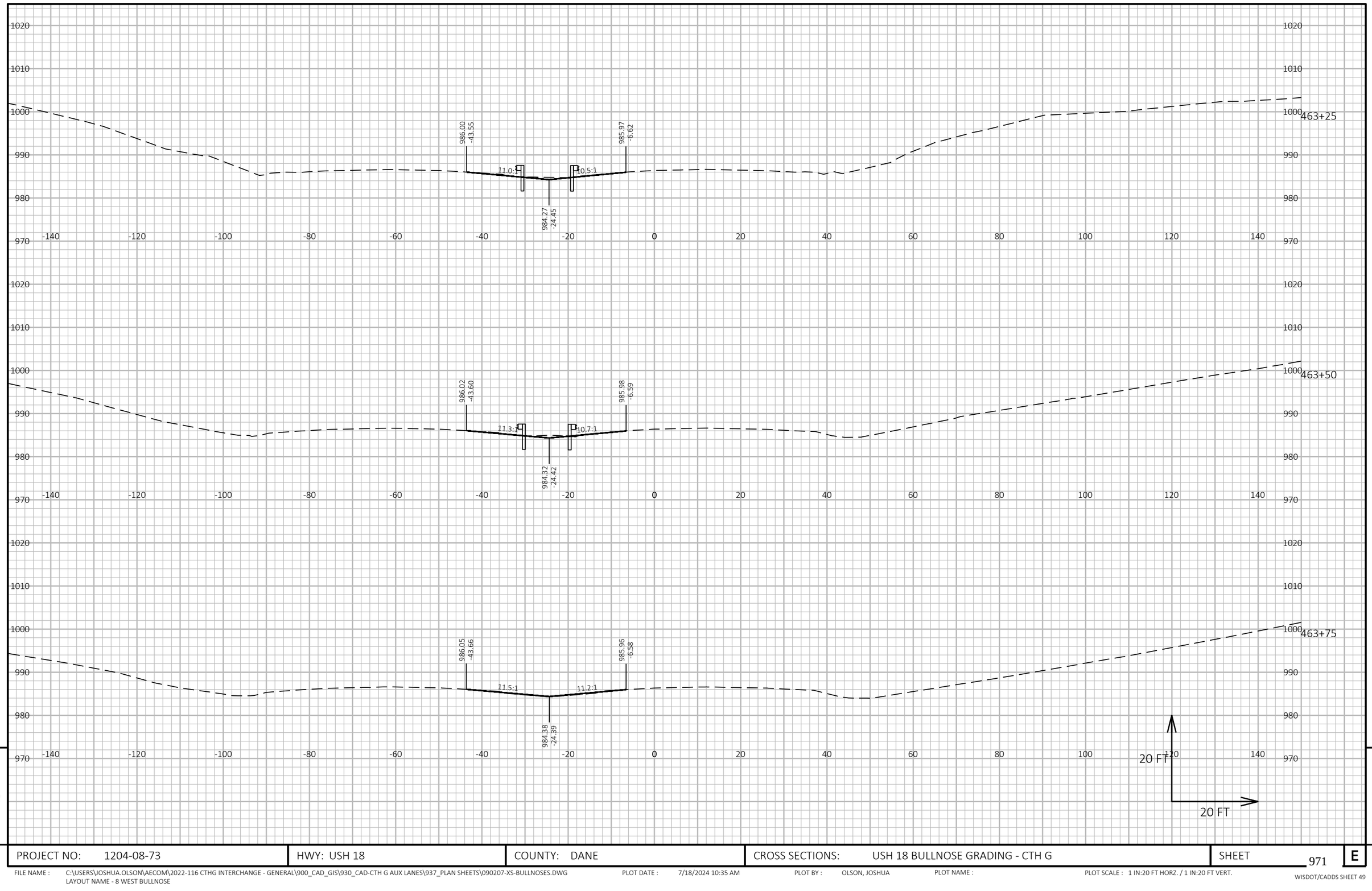
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 970	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 7 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

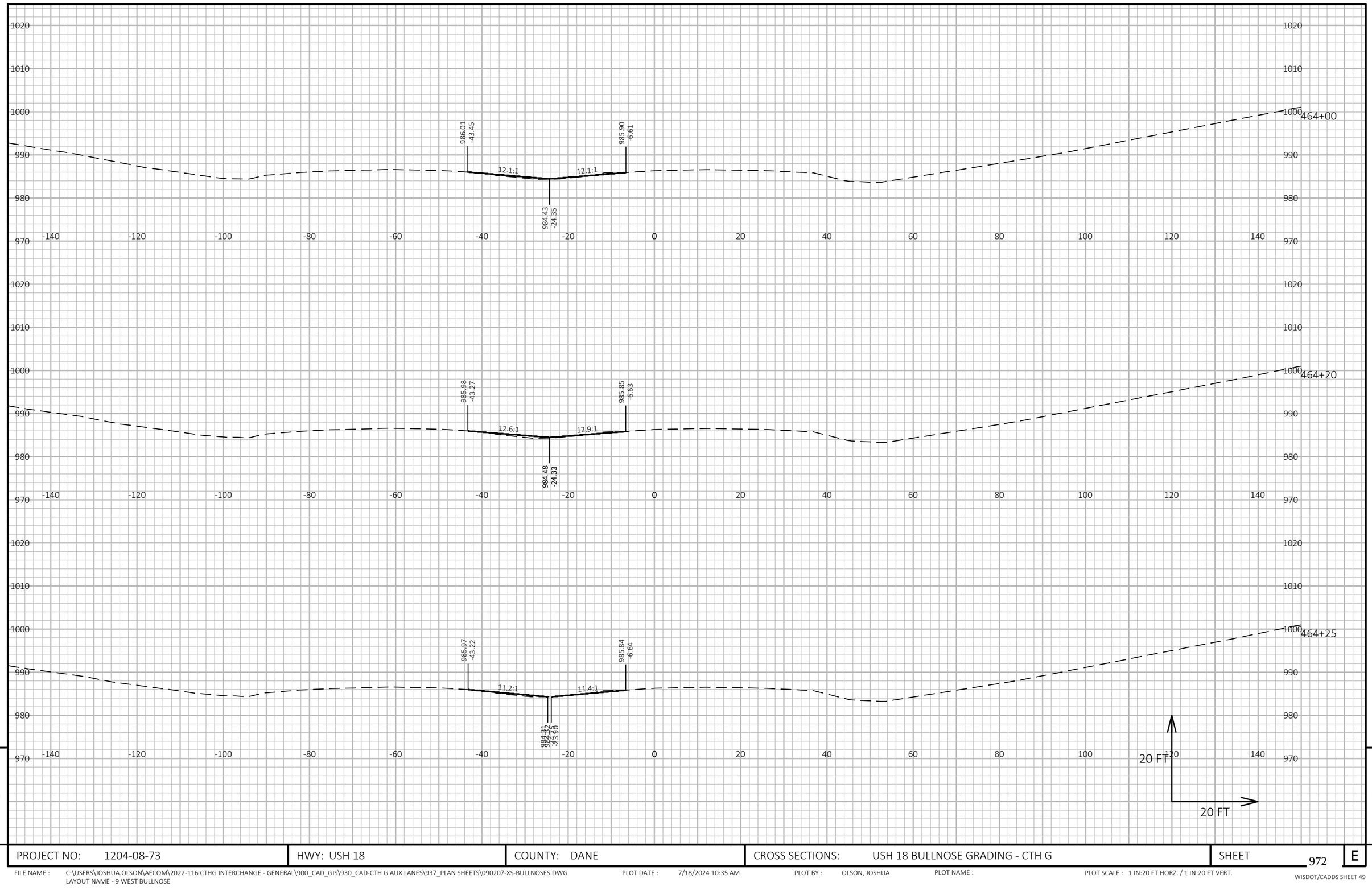


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 971	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 8 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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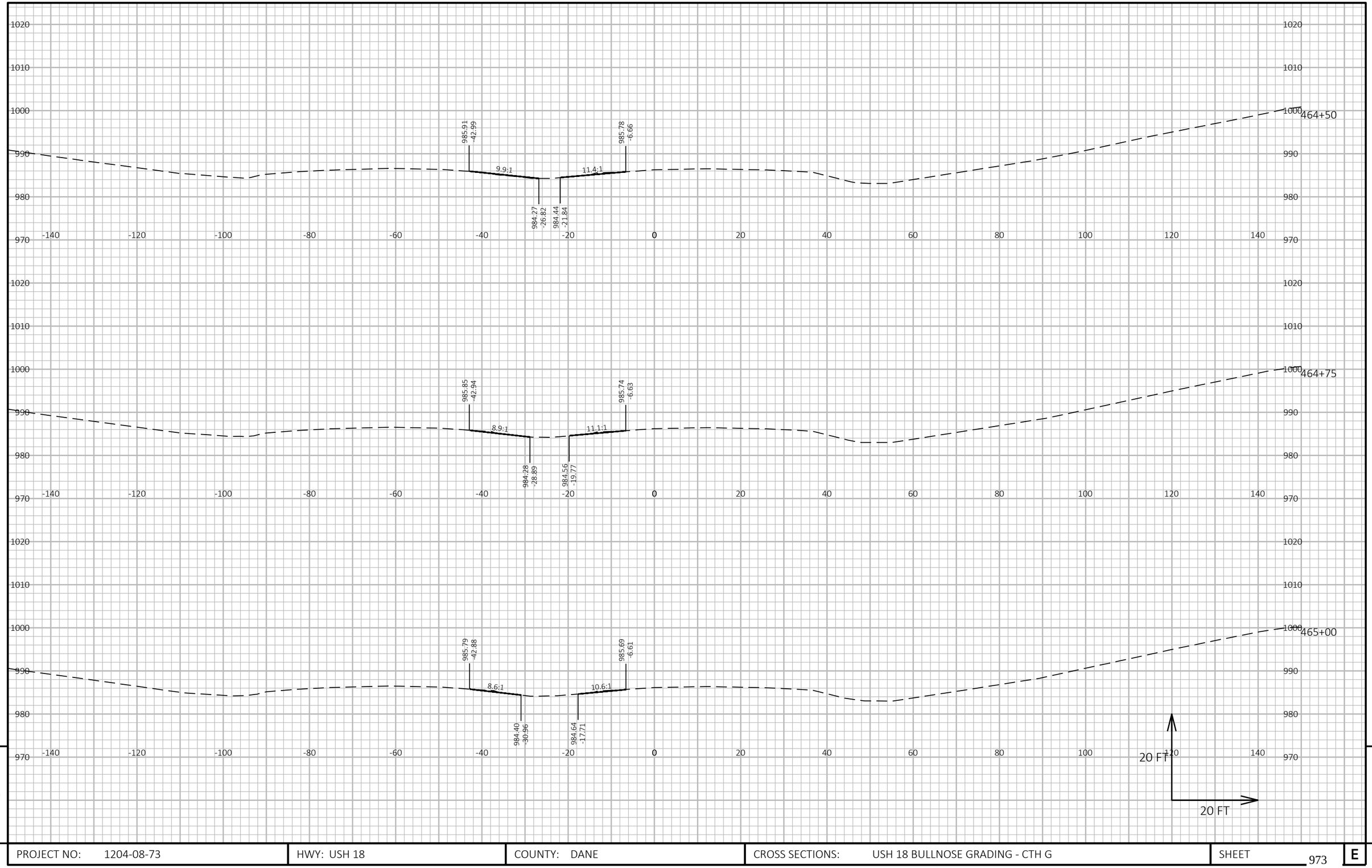
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 972	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 9 WEST BULLNOSE
PLOT DATE : 7/18/2024 10:35 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

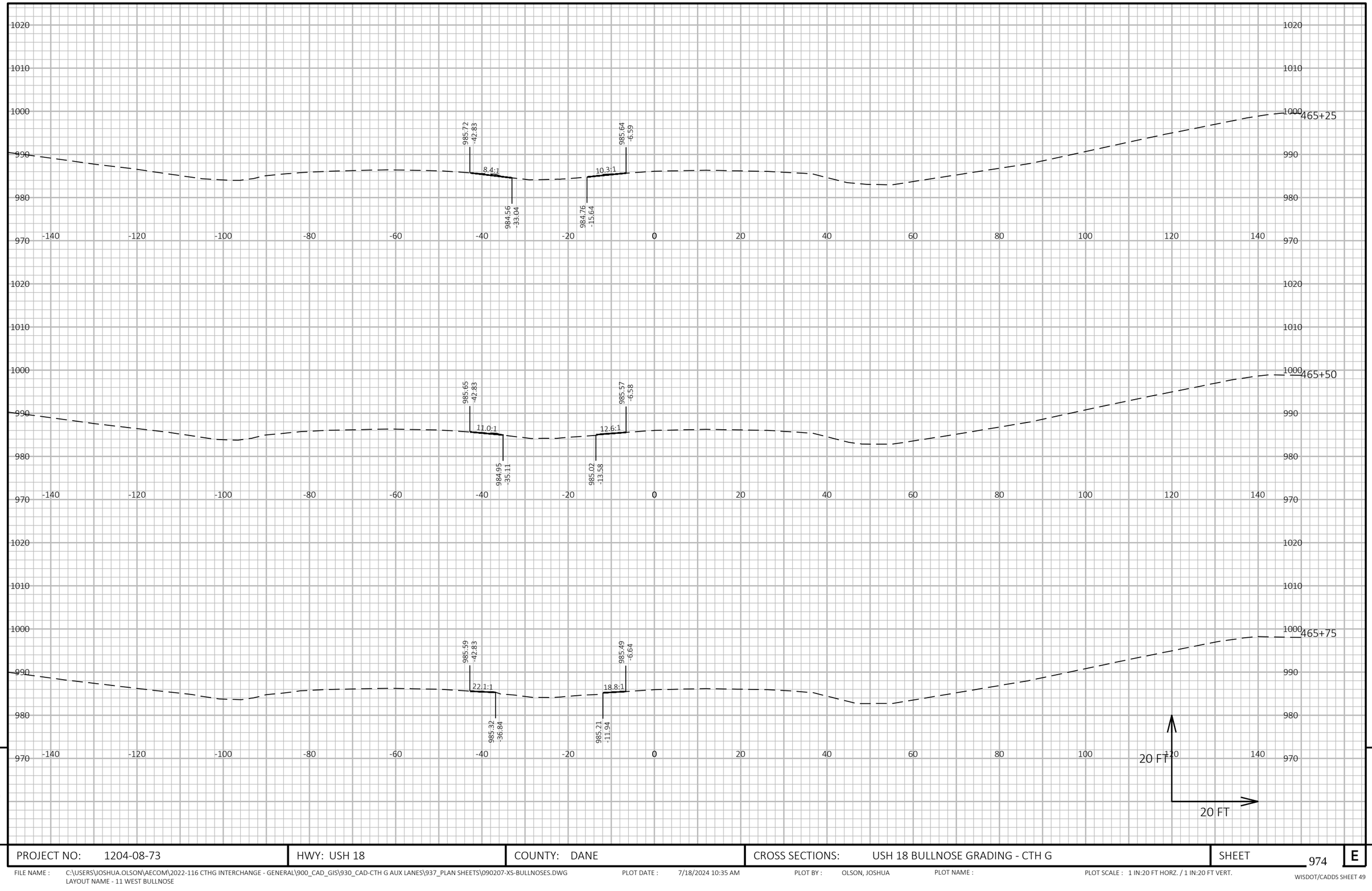


PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 973	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 10 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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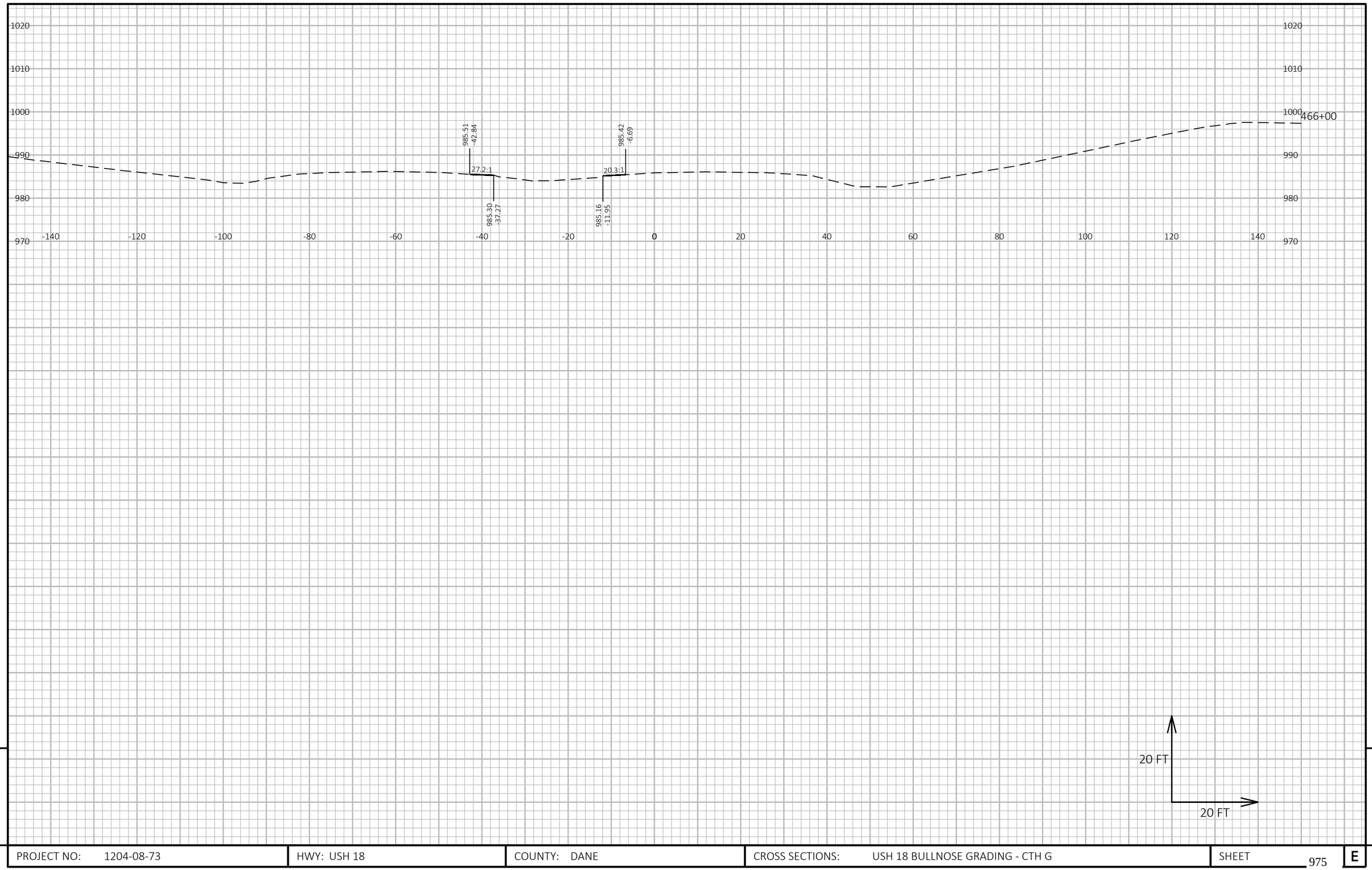
PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 974	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 11 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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PROJECT NO: 1204-08-73	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - CTH G	SHEET 975	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 12 WEST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 976	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 1 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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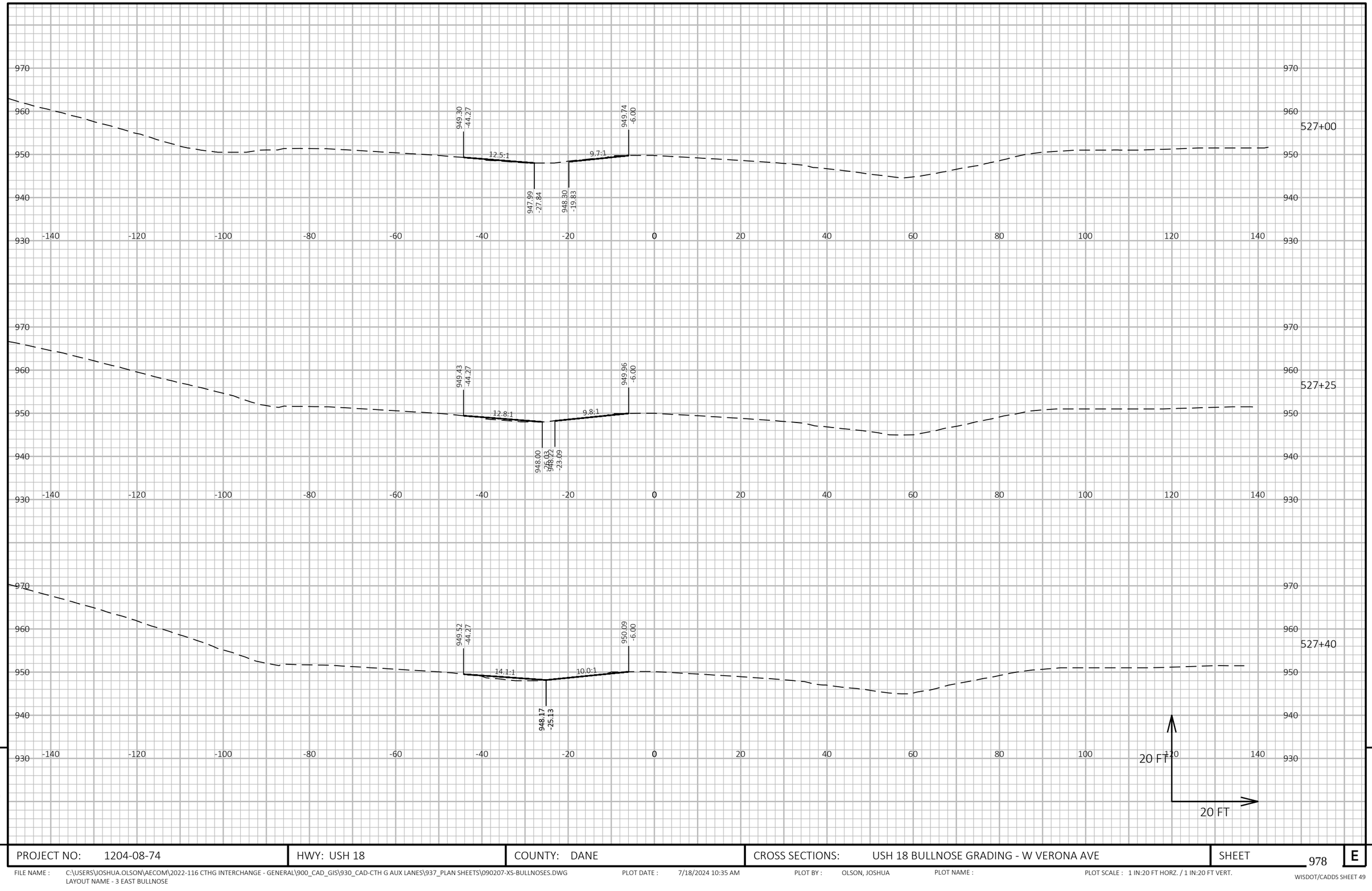
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 977	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 2 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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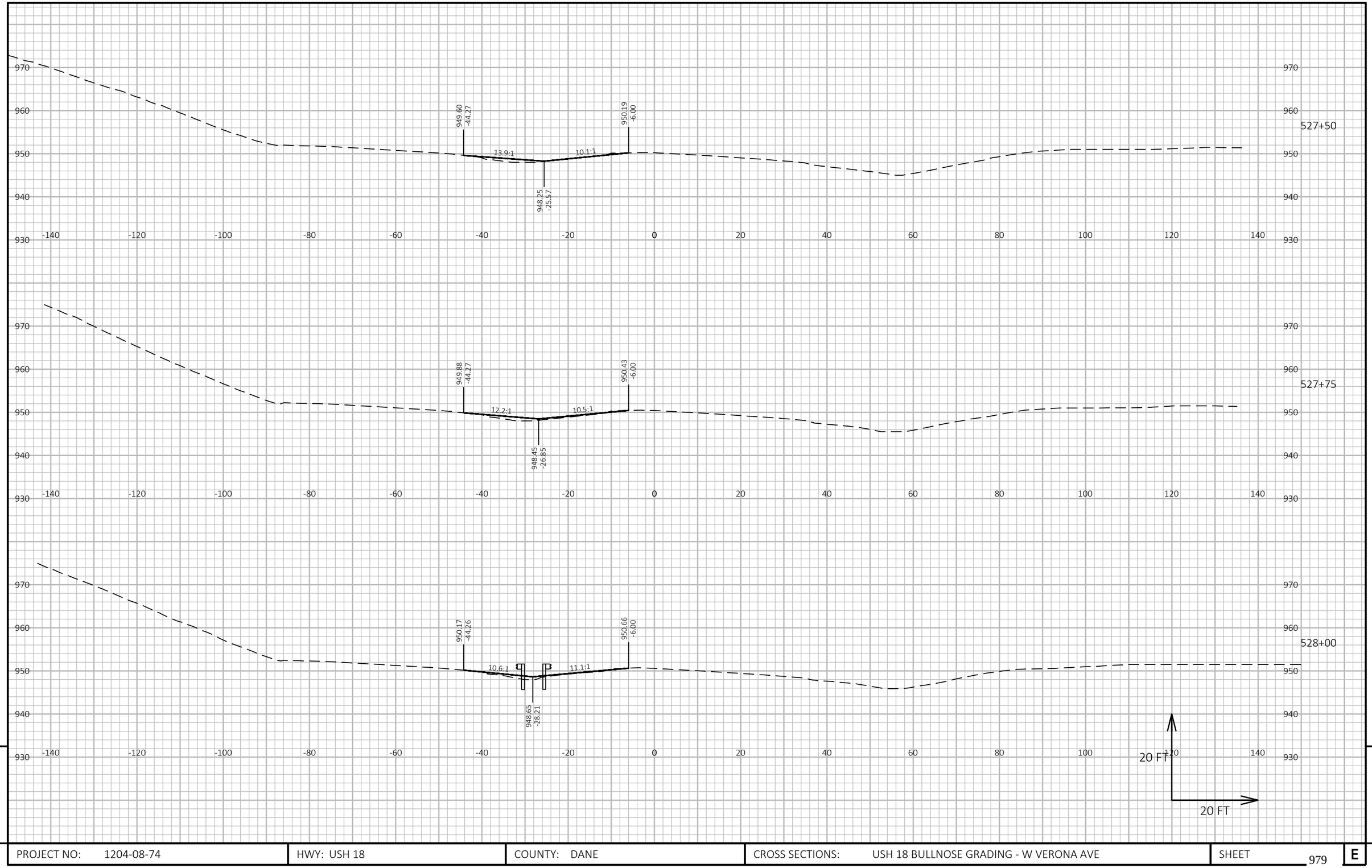
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 978	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 3 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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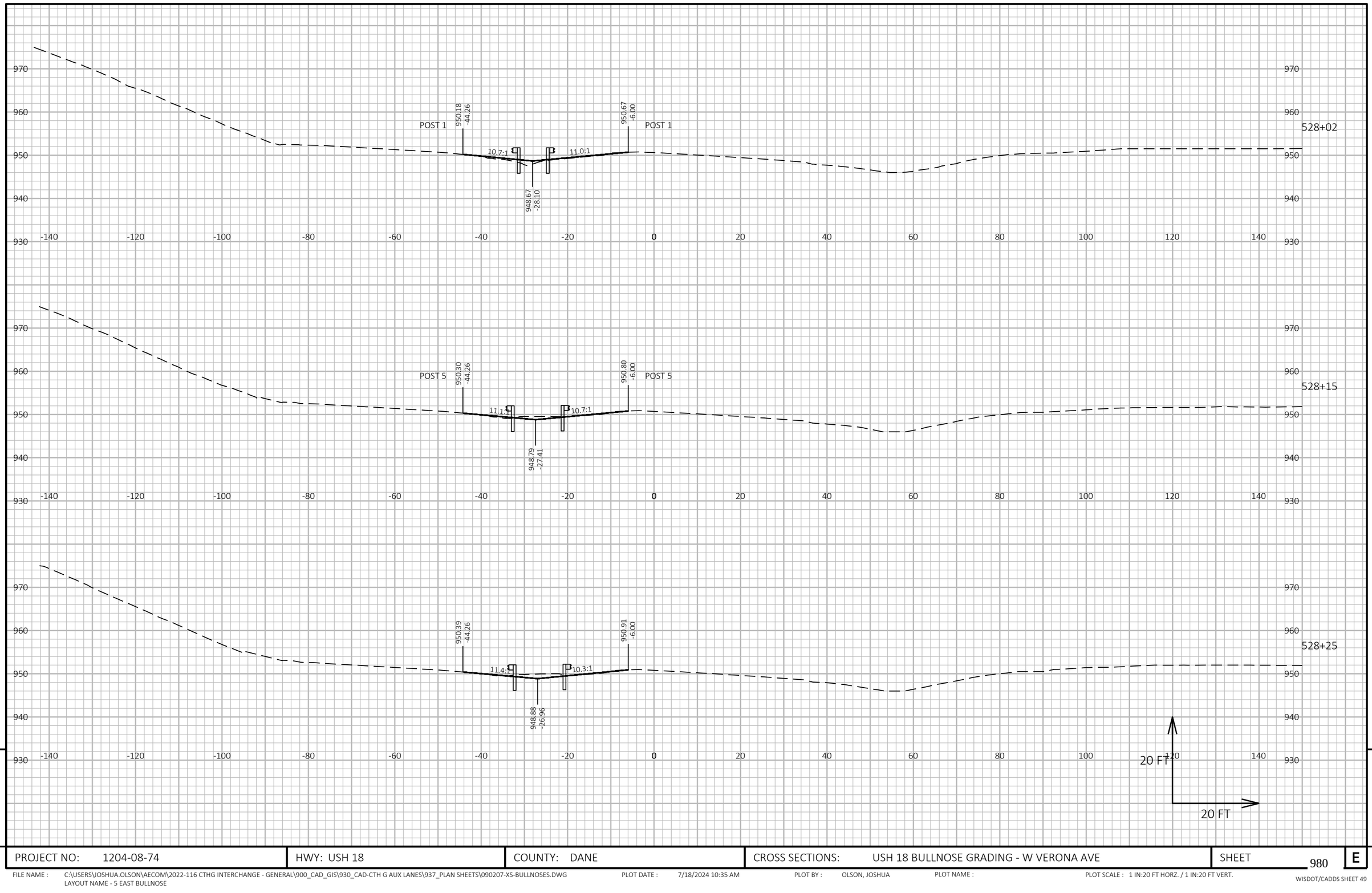
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 979	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 4 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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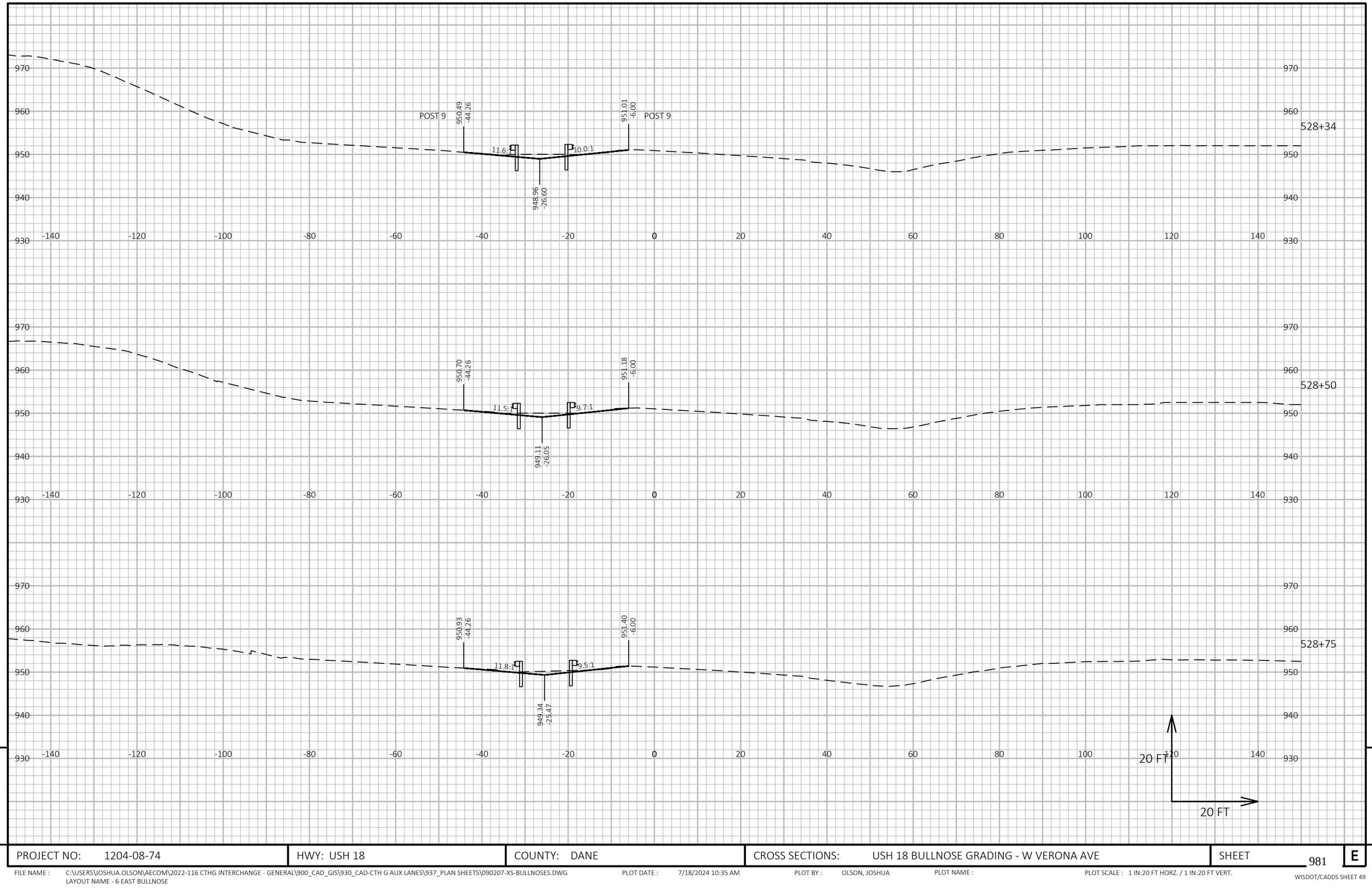
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 980	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 5 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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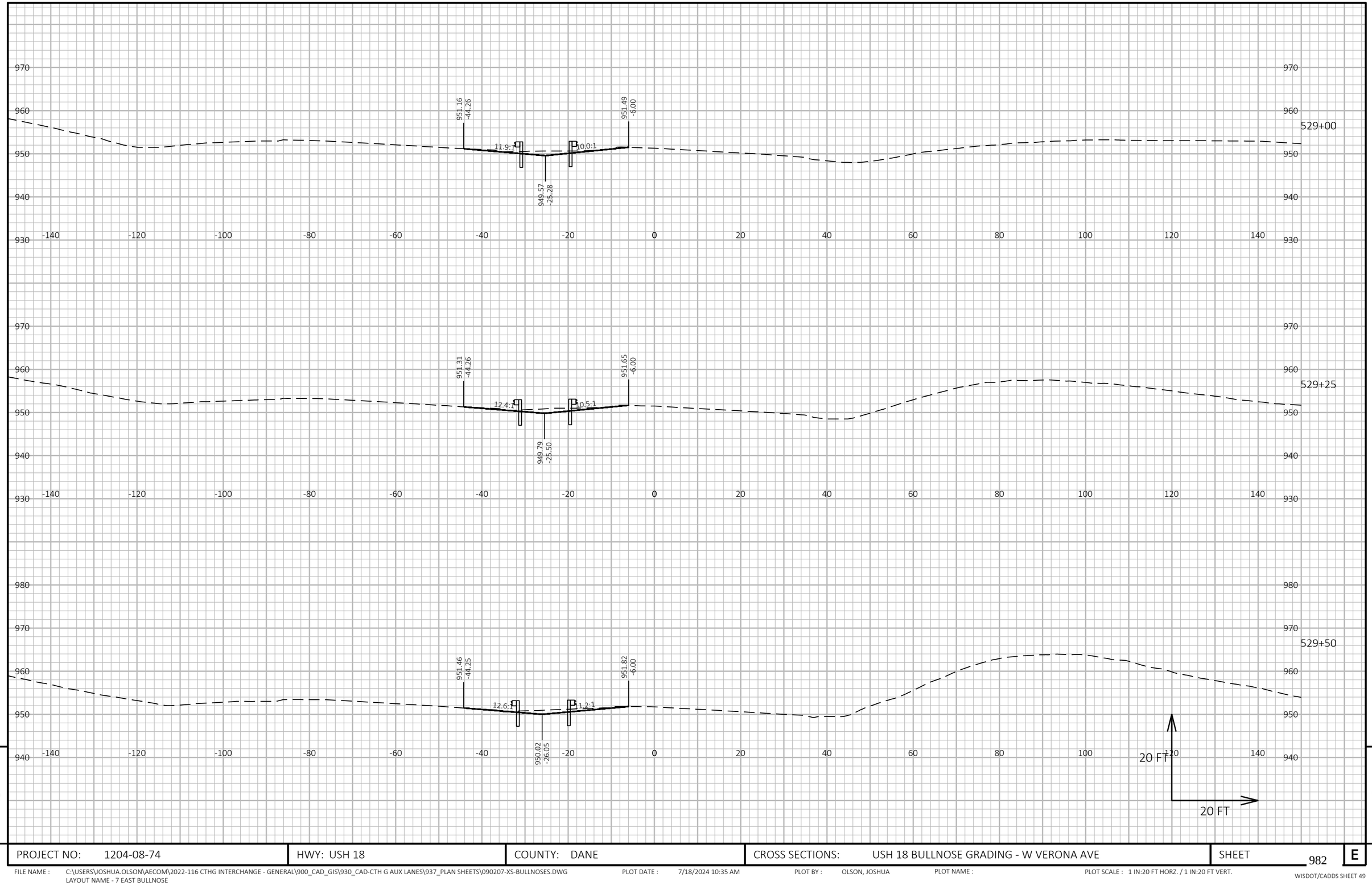
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 981	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 6 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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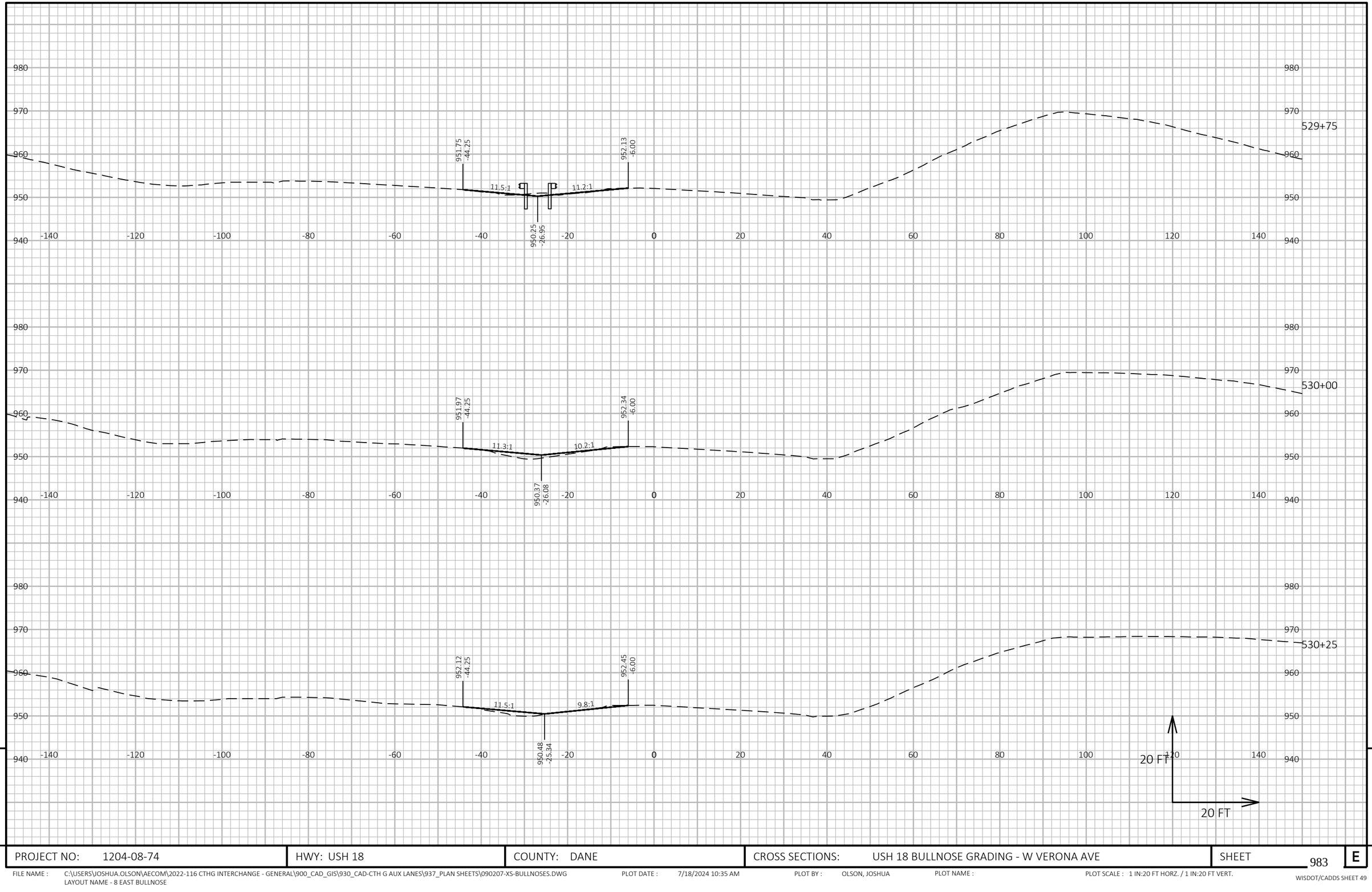
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 982	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 7 EAST BULLNOSE
PLOT DATE : 7/18/2024 10:35 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

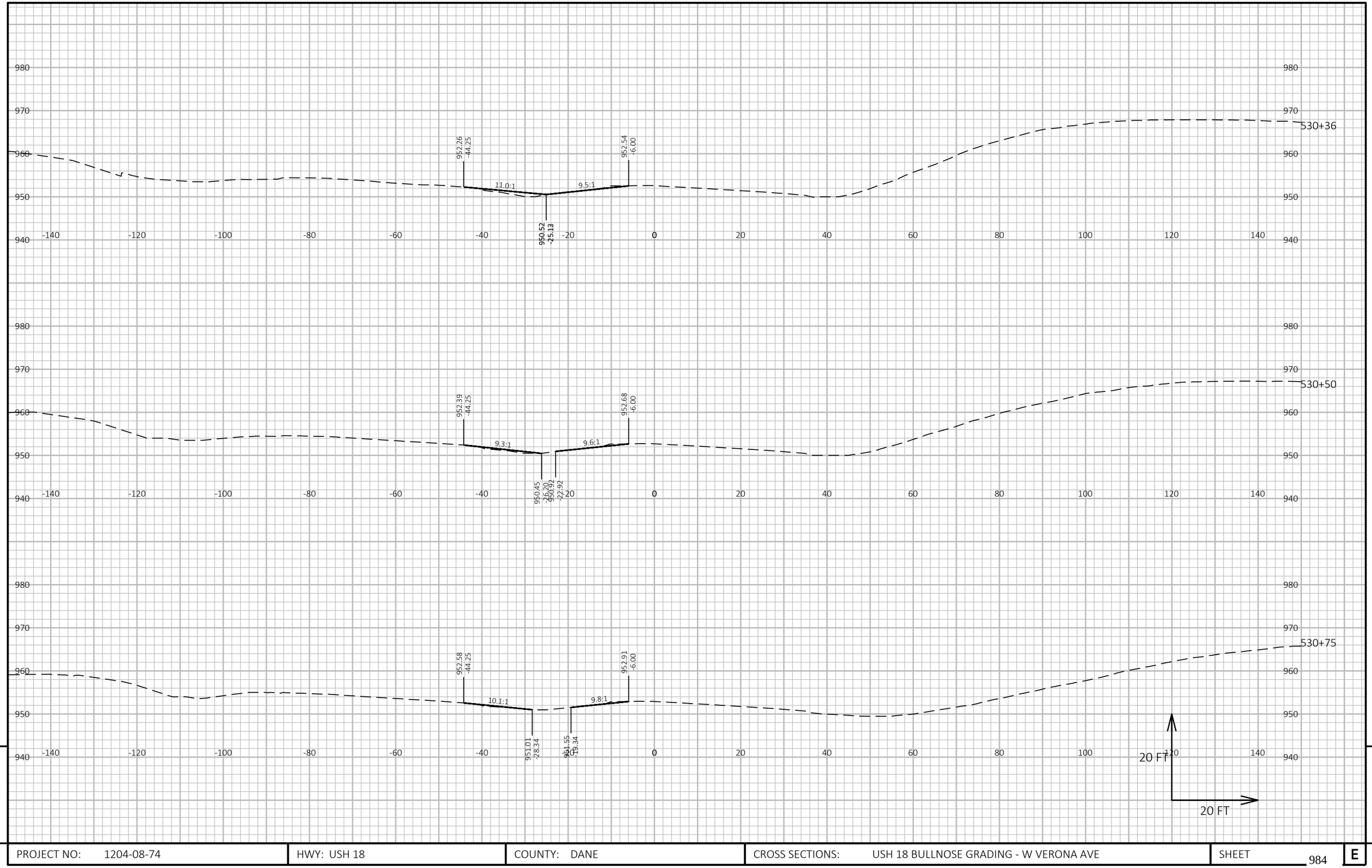


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 983	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 8 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:35 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 984	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 9 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:36 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

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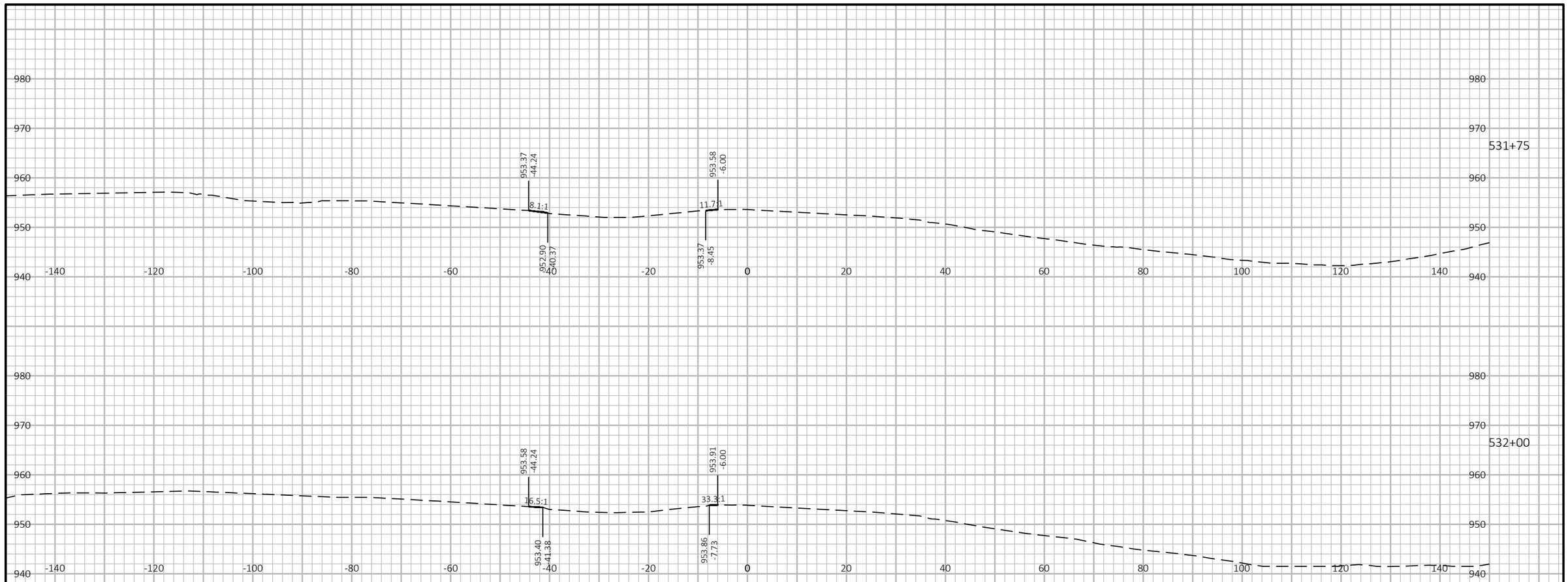
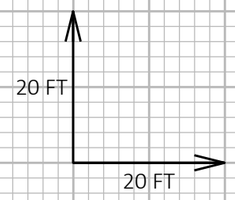
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 985	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 10 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:36 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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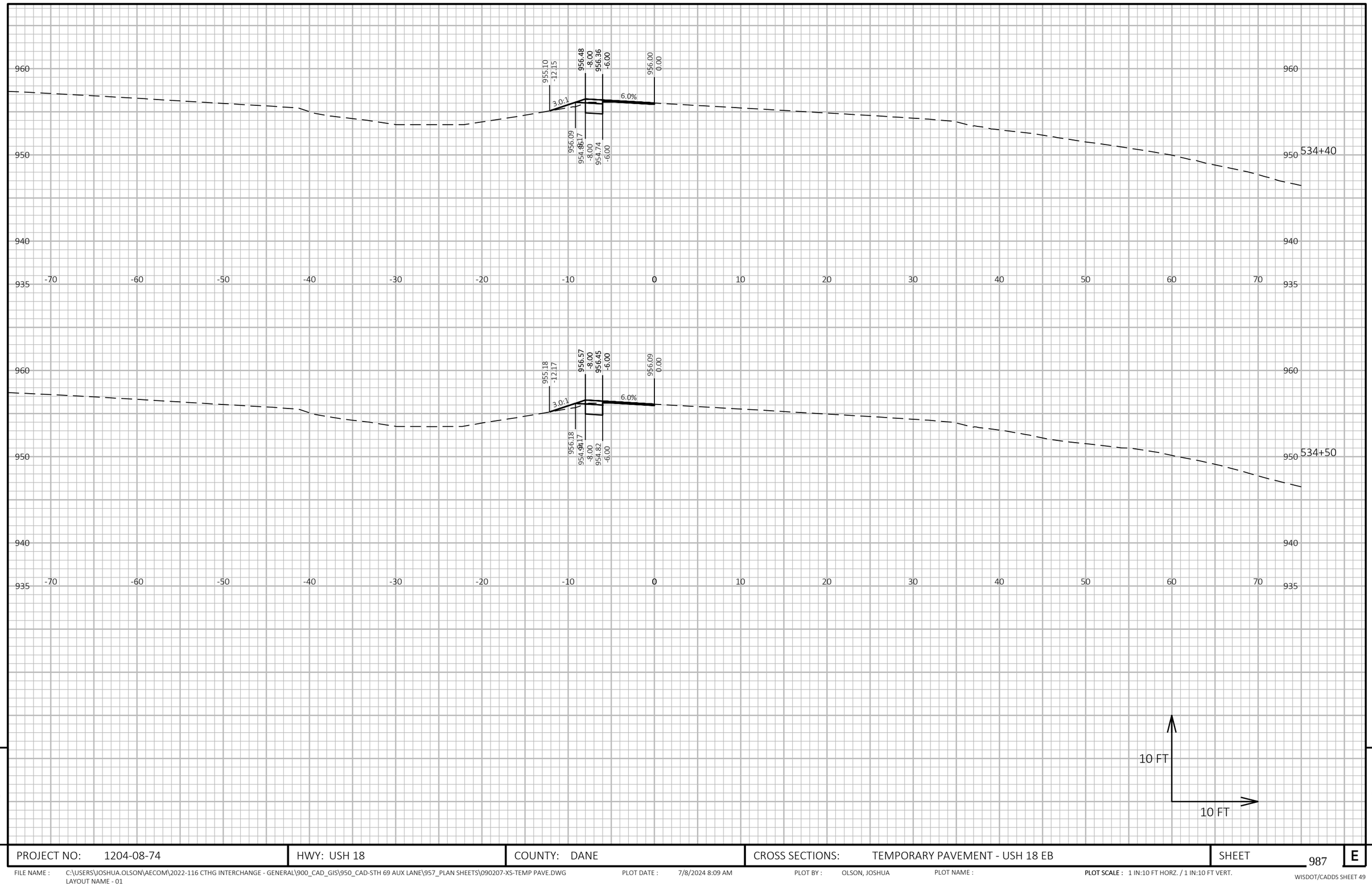
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: USH 18 BULLNOSE GRADING - W VERONA AVE	SHEET 986	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\930_CAD-CTH G AUX LANES\937_PLAN SHEETS\090207-XS-BULLNOSES.DWG
LAYOUT NAME - 11 EAST BULLNOSE

PLOT DATE : 7/18/2024 10:36 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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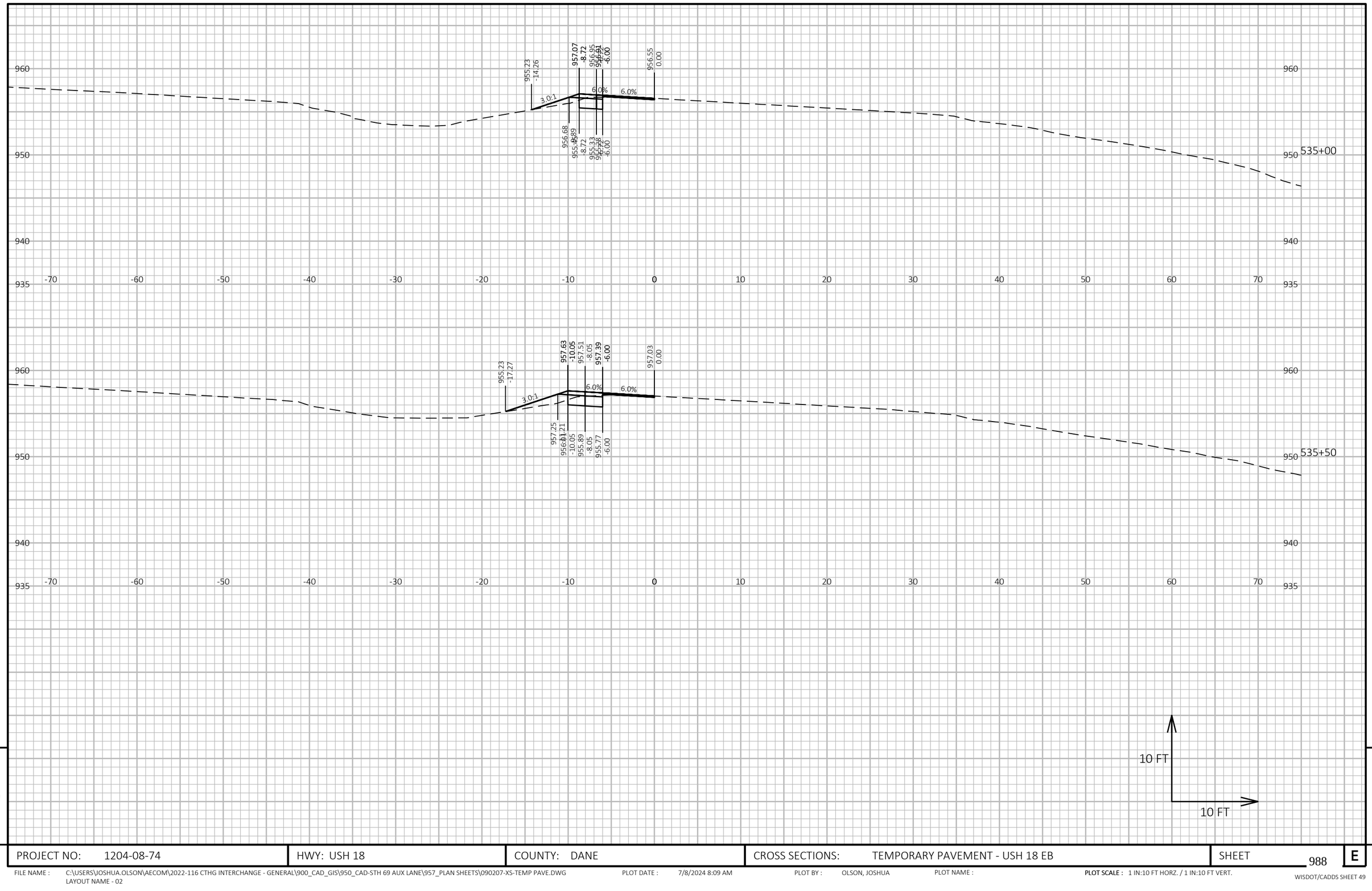
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 987	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 01

PLOT DATE : 7/8/2024 8:09 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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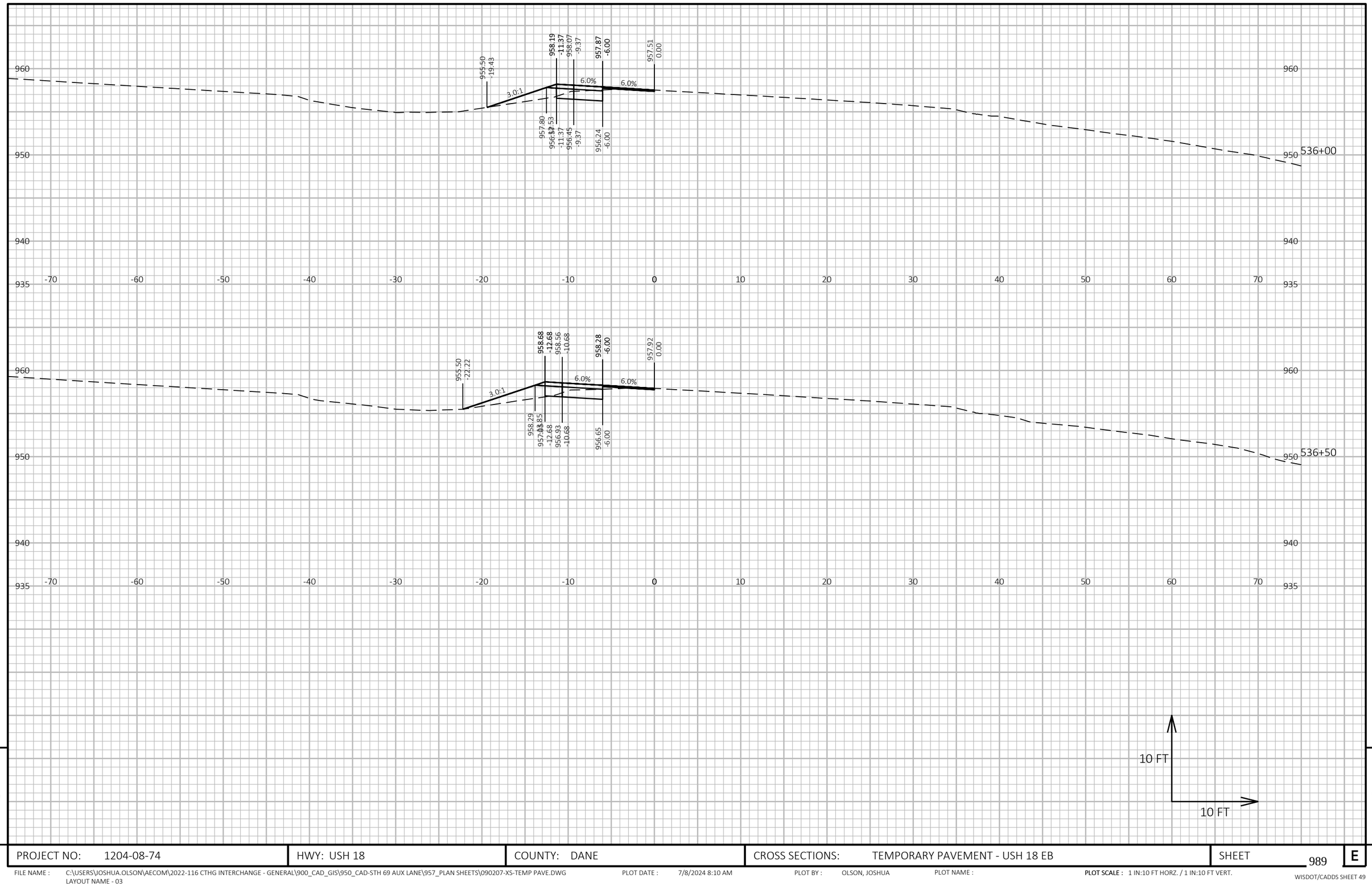
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 988	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 02

PLOT DATE : 7/8/2024 8:09 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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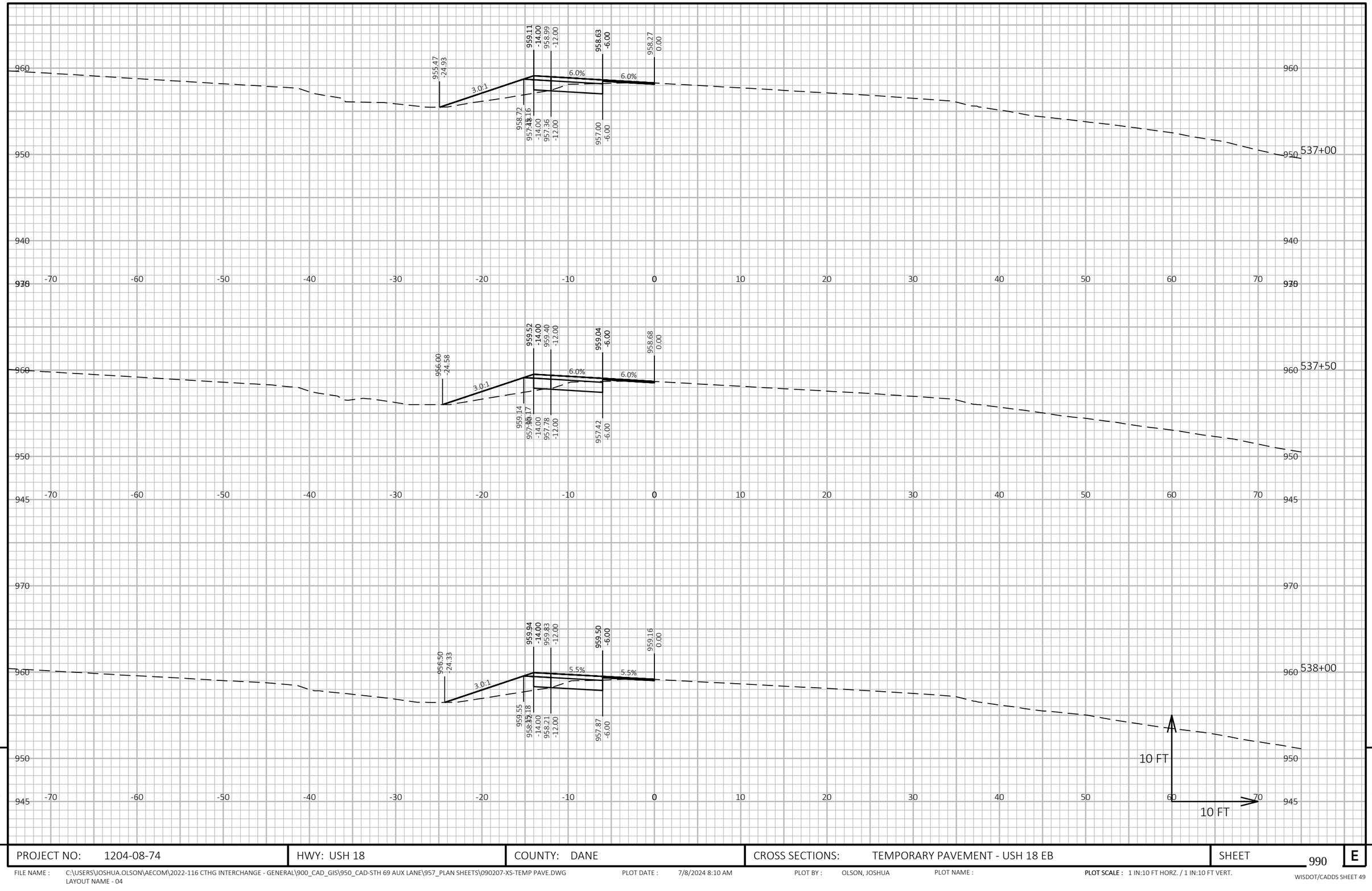
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 989	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 03

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

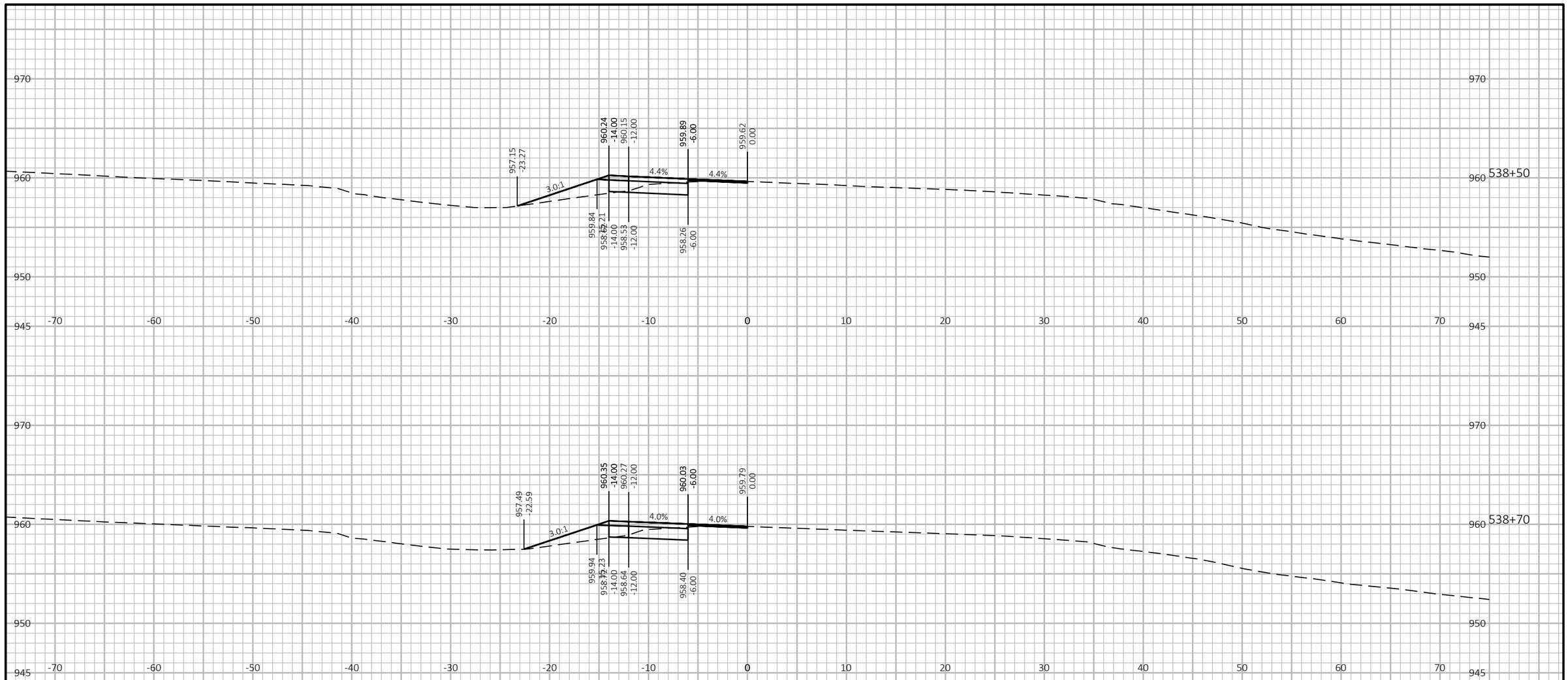


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 990 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 04

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 991	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 05

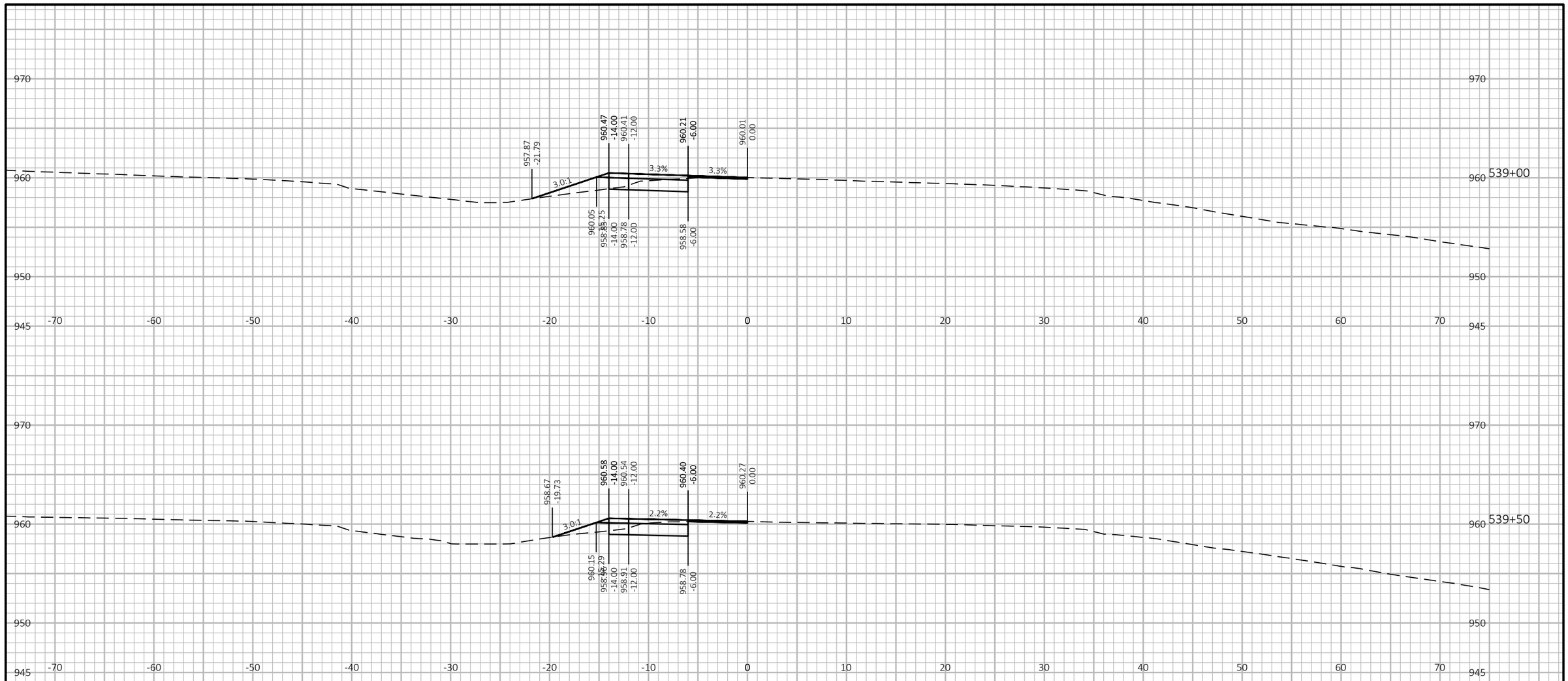
PLOT DATE : 7/8/2024 8:10 AM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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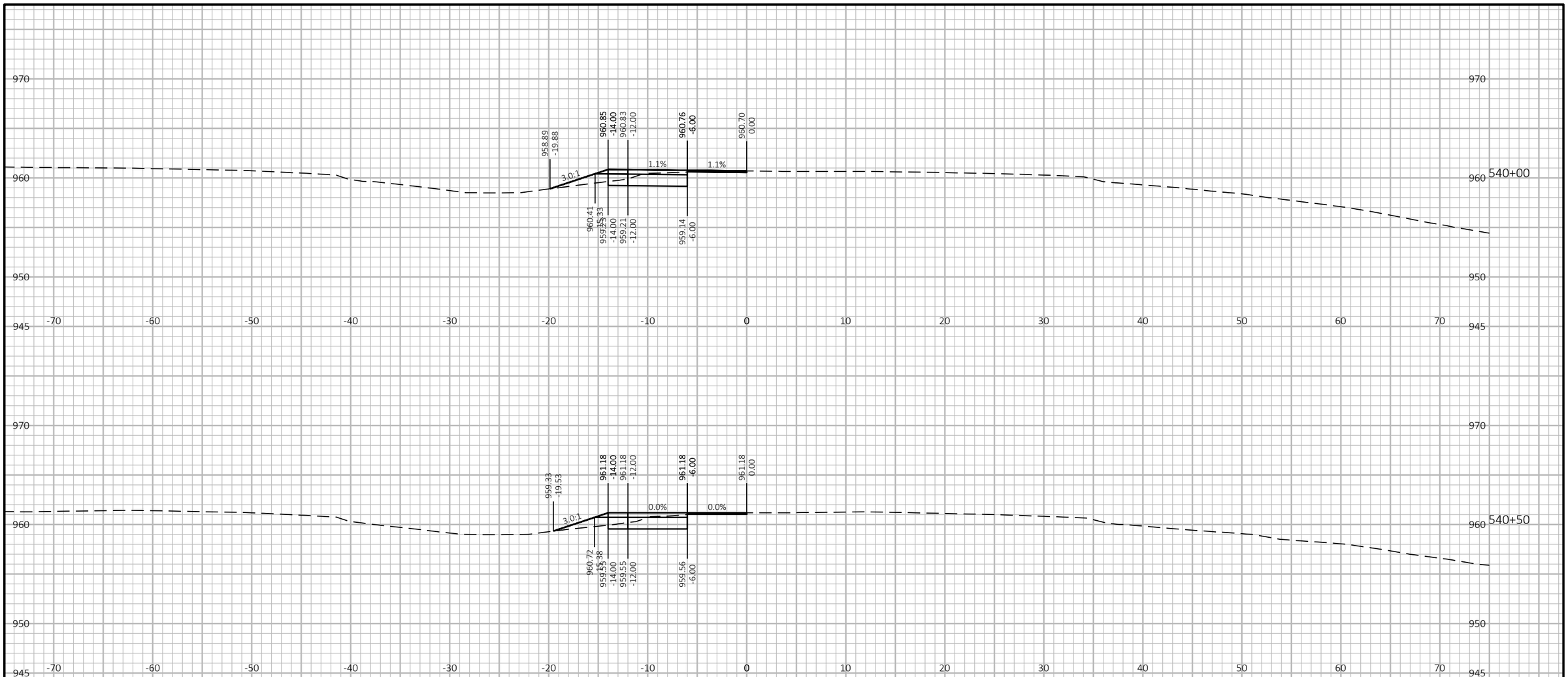
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 992	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 06

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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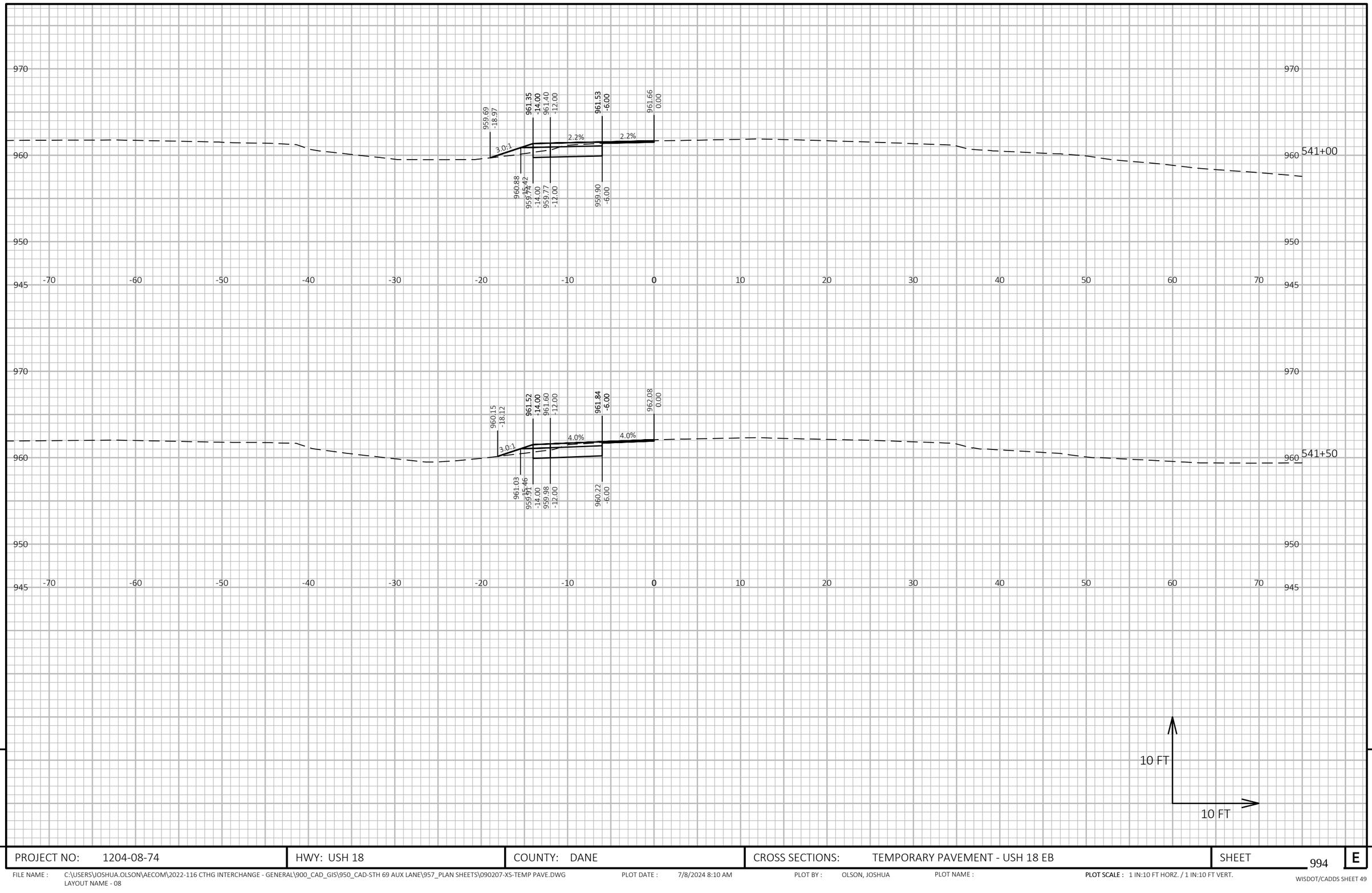
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 993	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 07

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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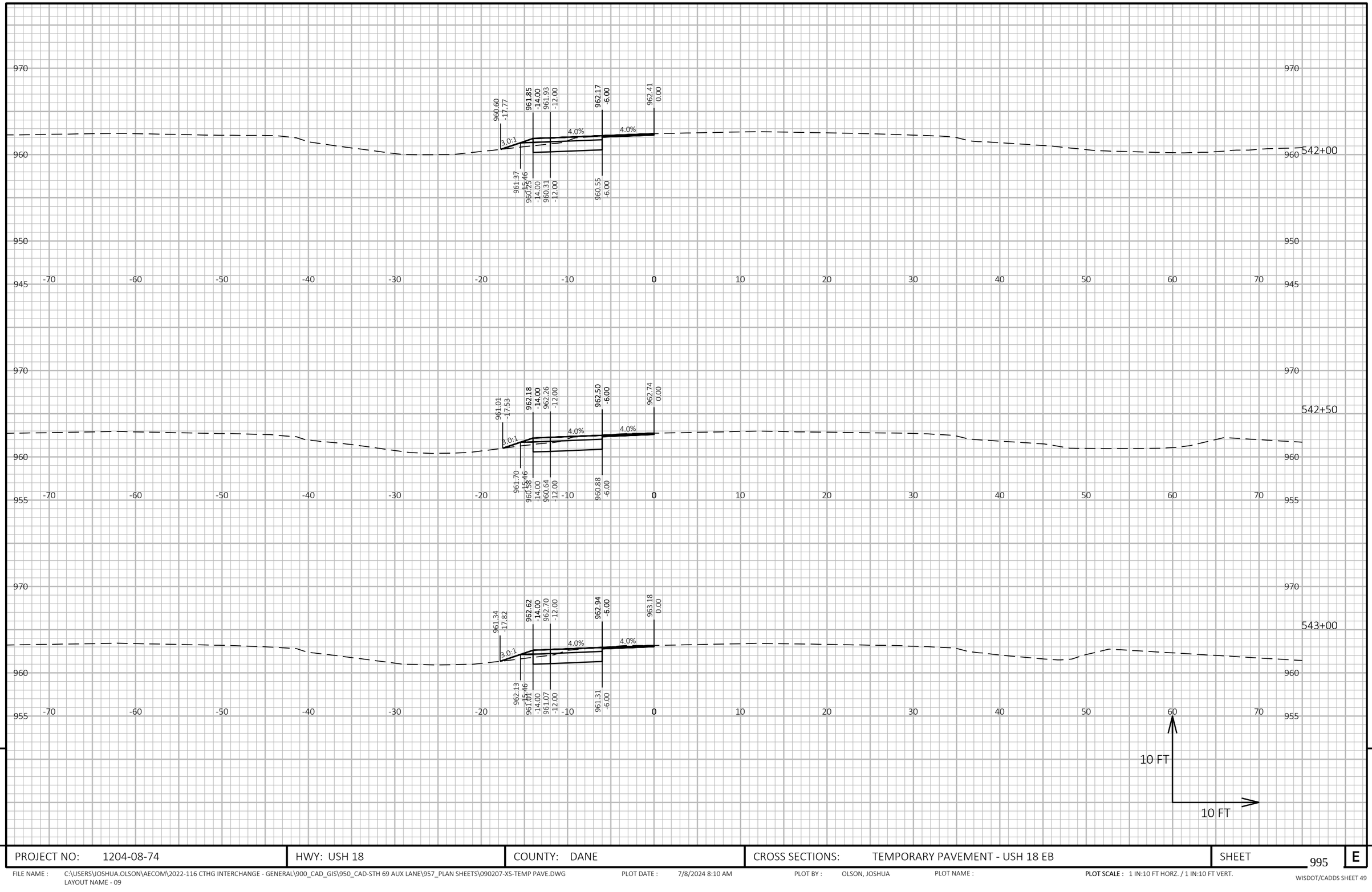
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 994	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 08

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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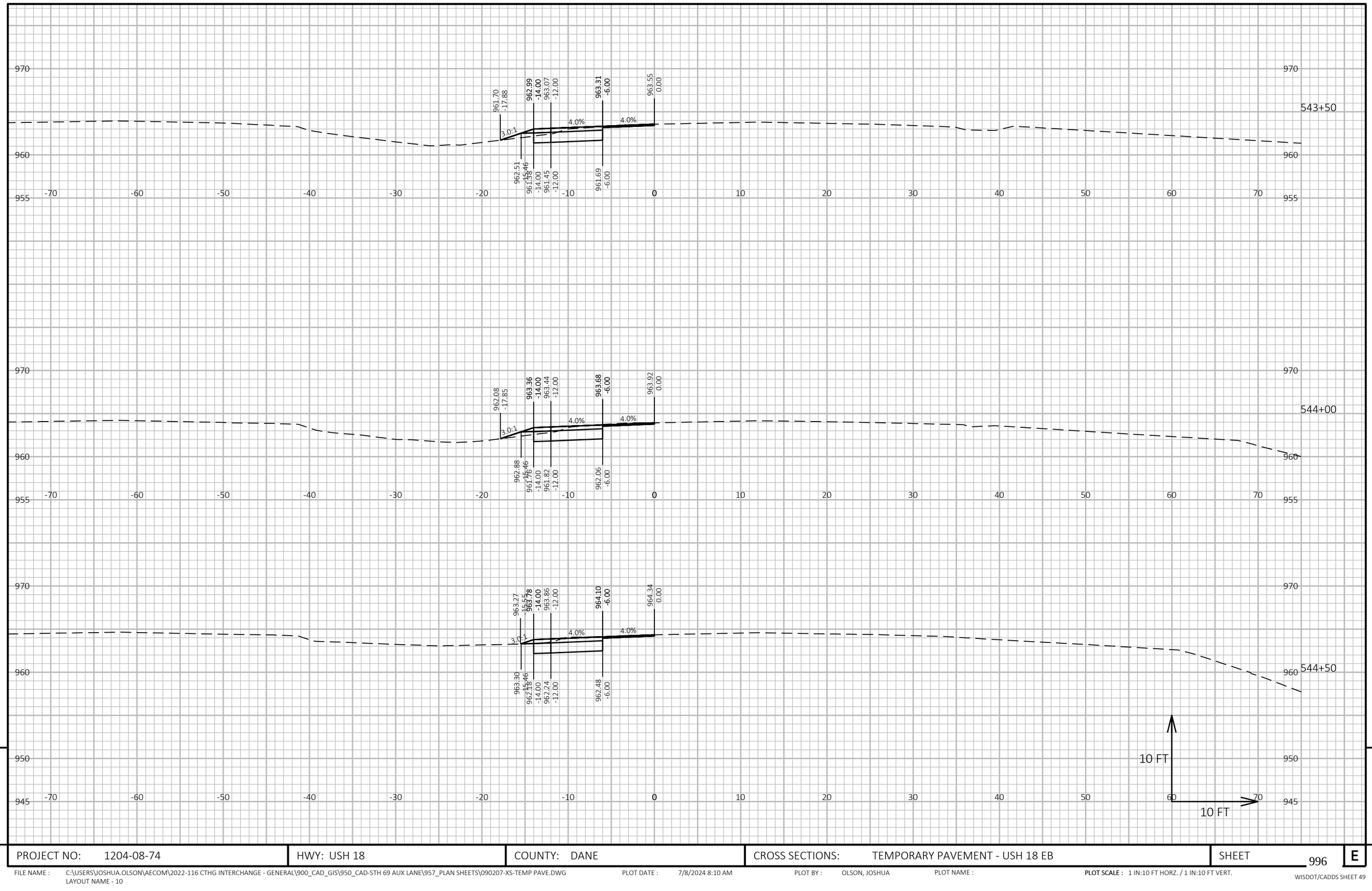
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 995	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 09
PLOT DATE : 7/8/2024 8:10 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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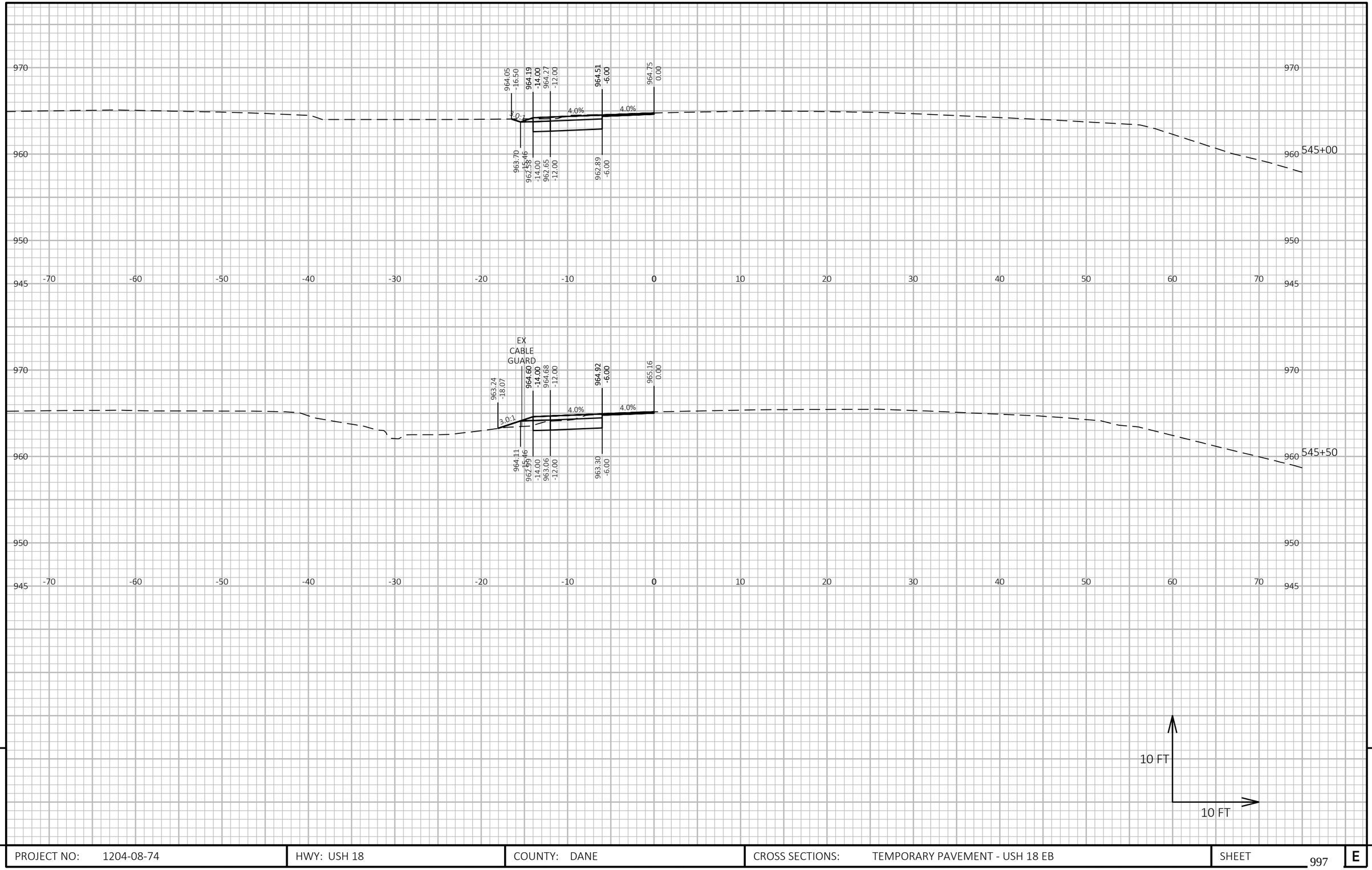
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 996	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 10

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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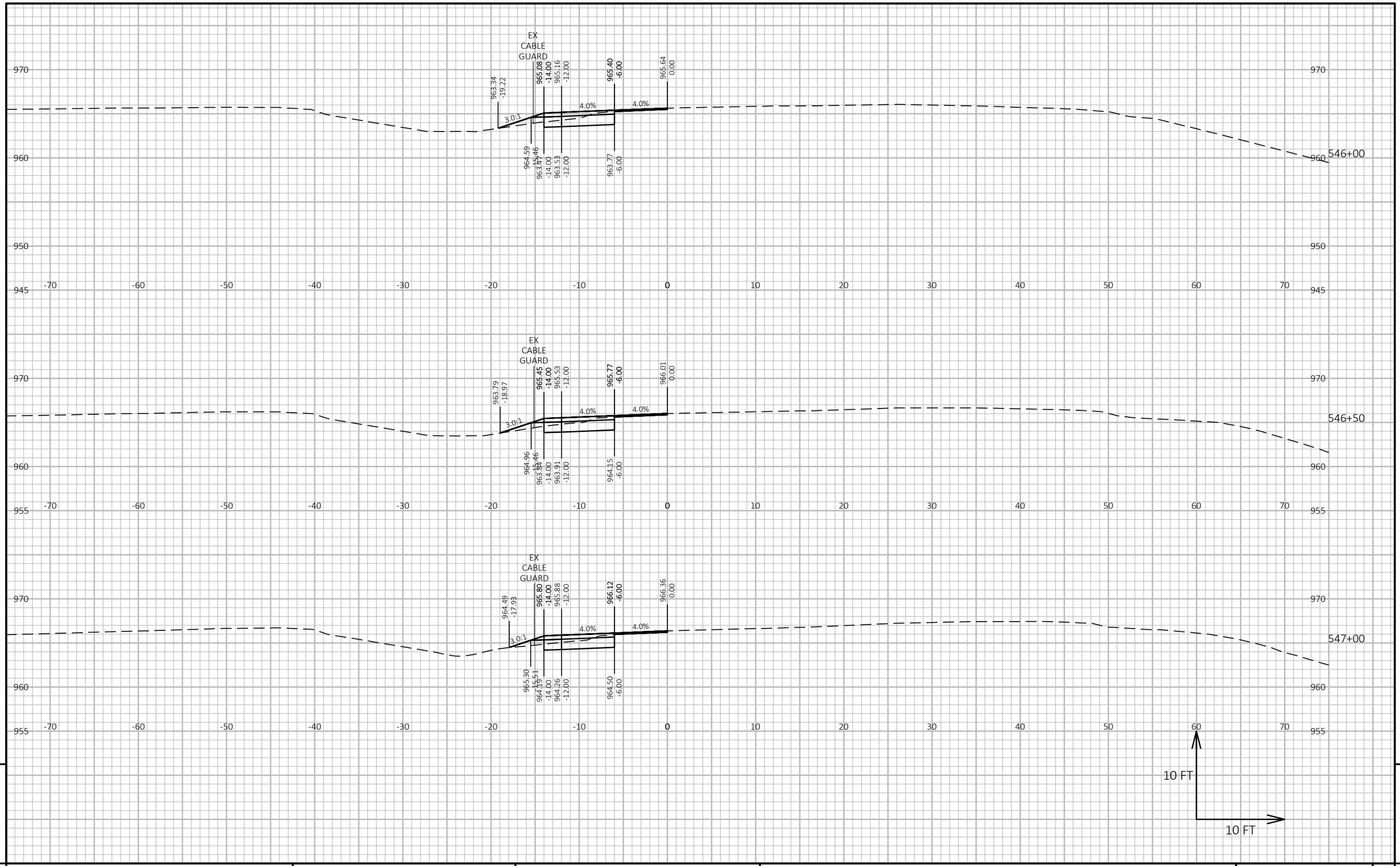
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 997	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 11

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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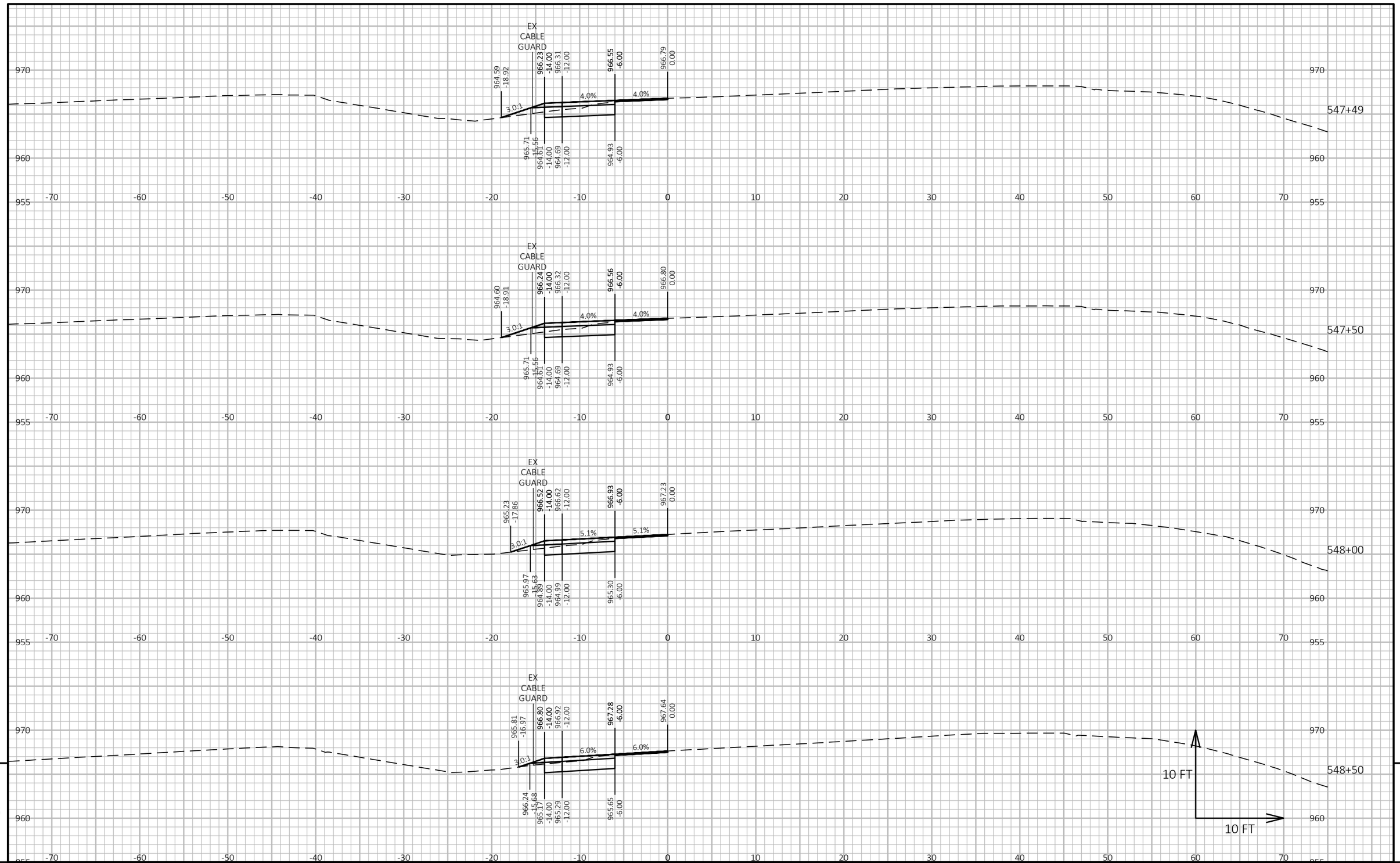
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 998	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 12

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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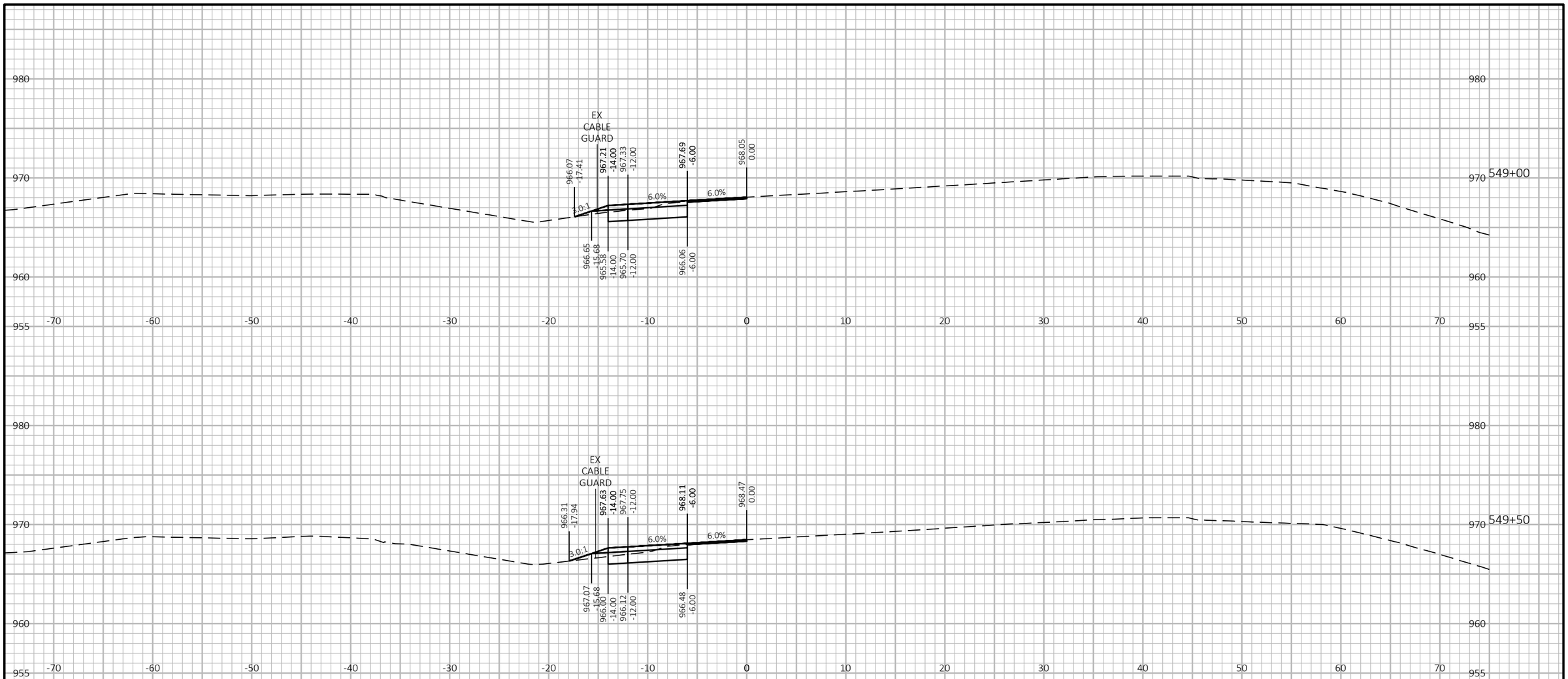
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 999	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 13

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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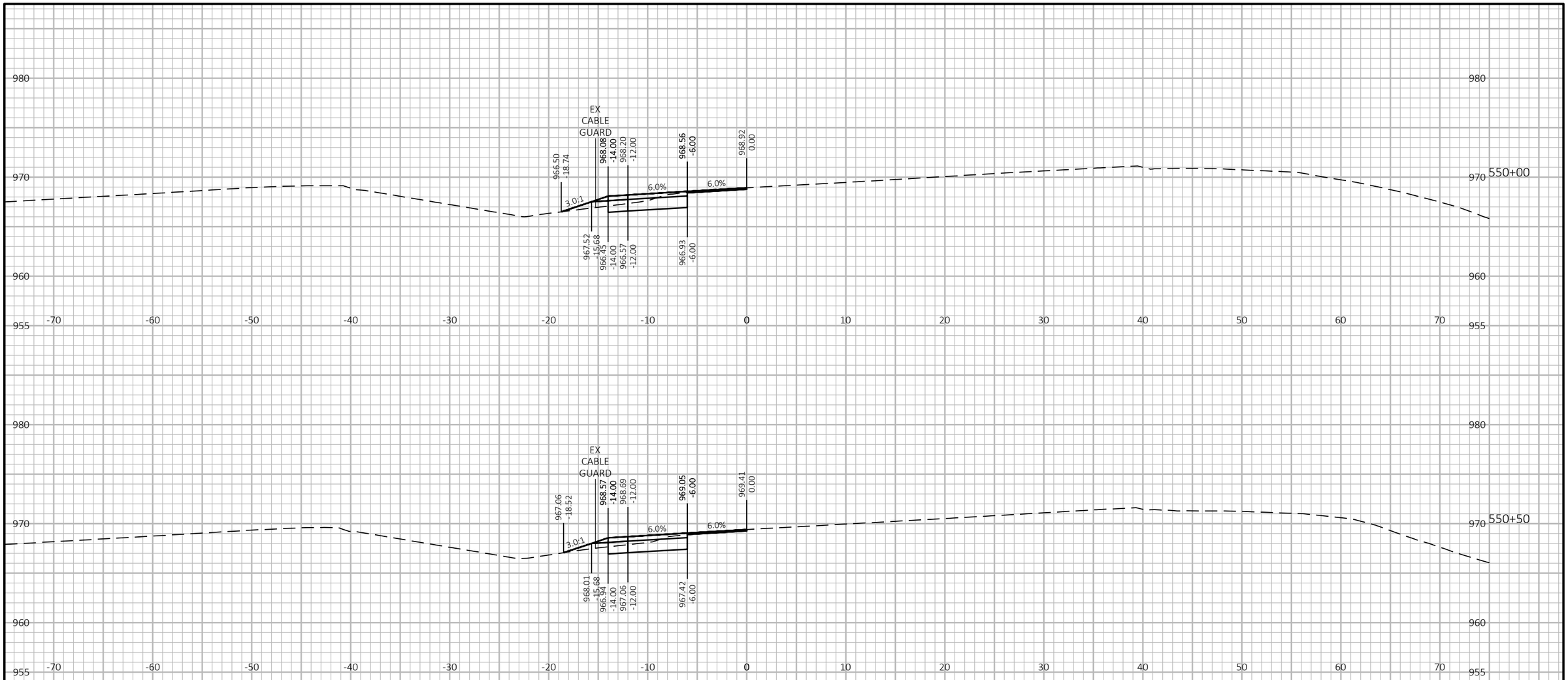
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1000	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 14

PLOT DATE : 7/8/2024 8:10 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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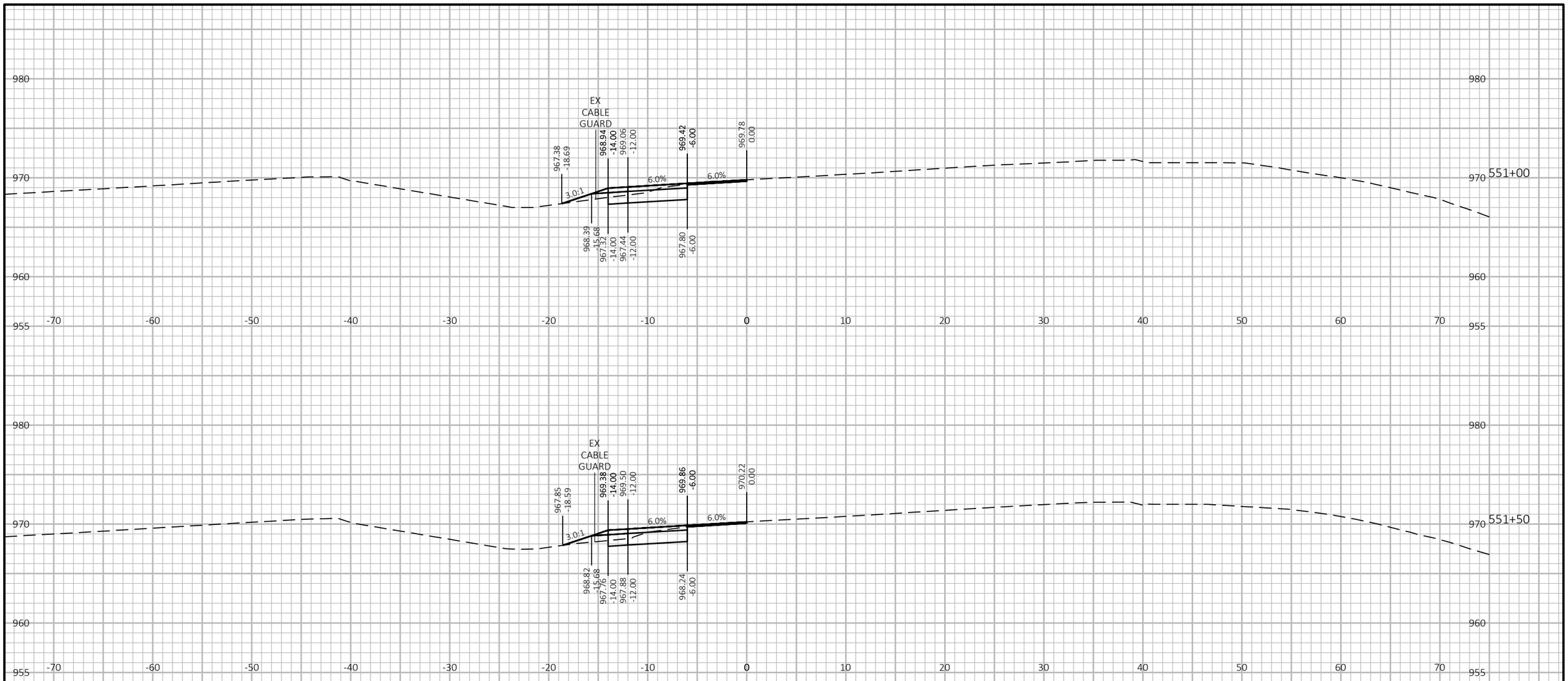
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1001	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 15

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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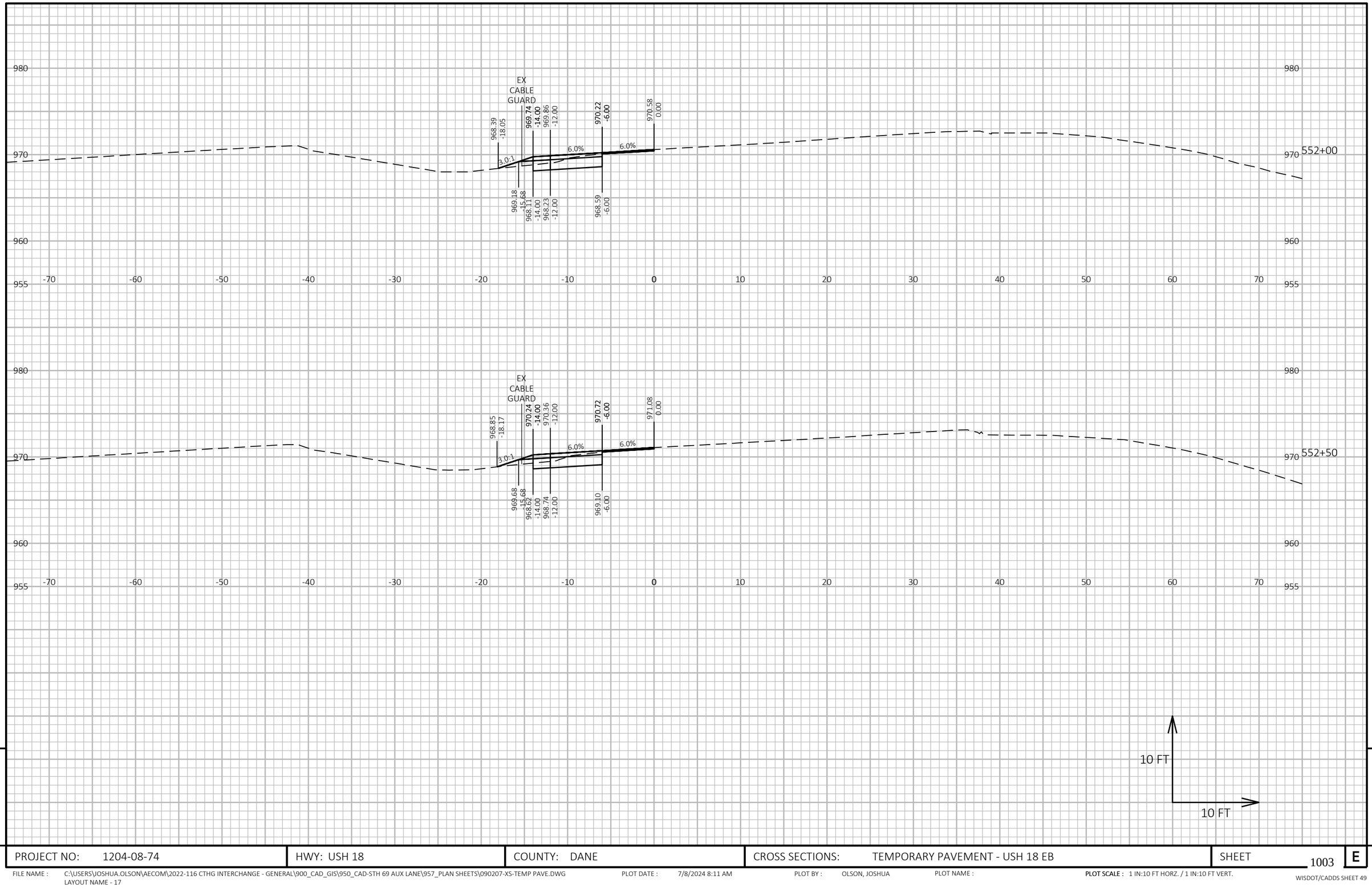
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1002	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 16

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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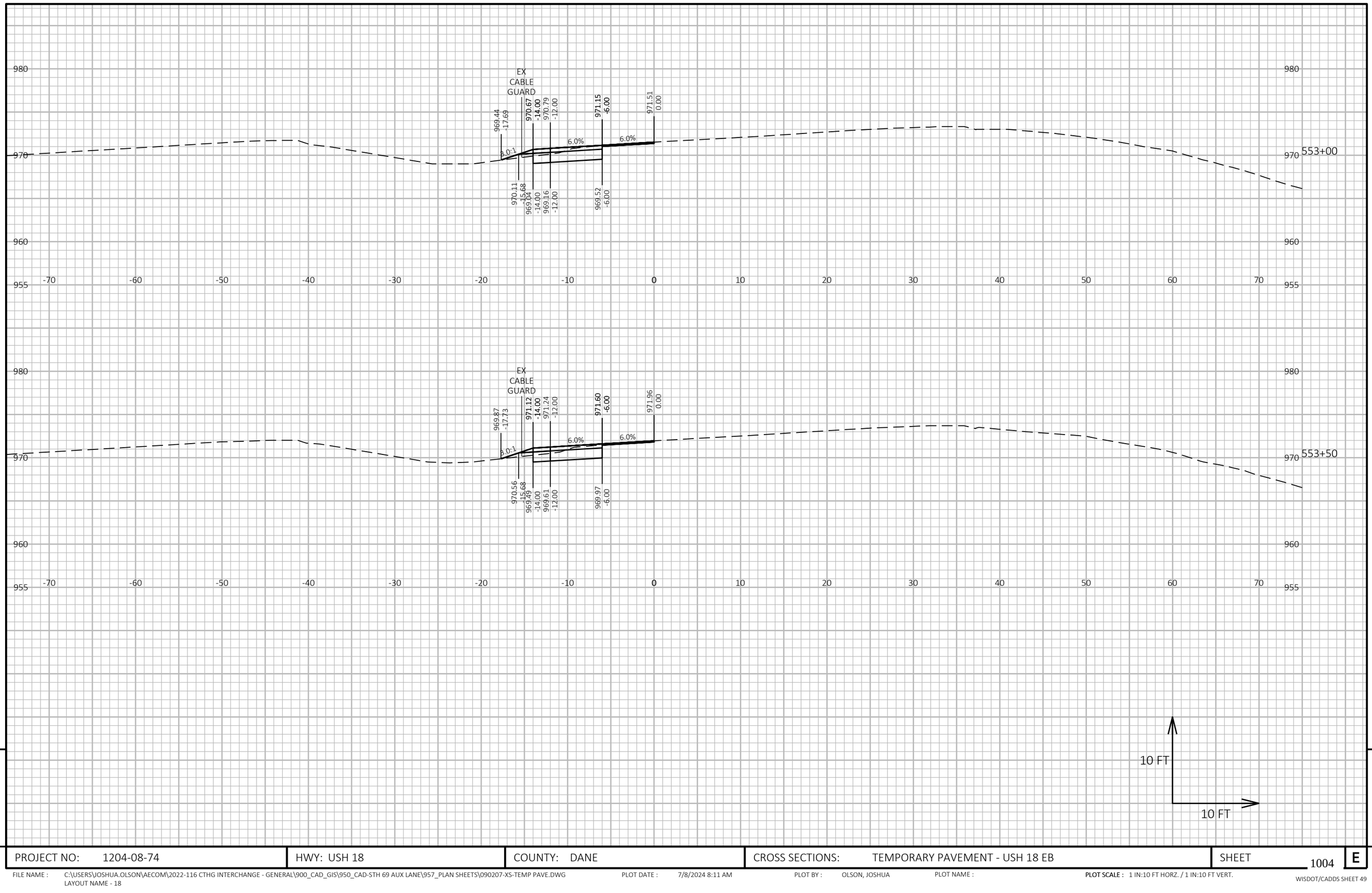
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1003	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 17

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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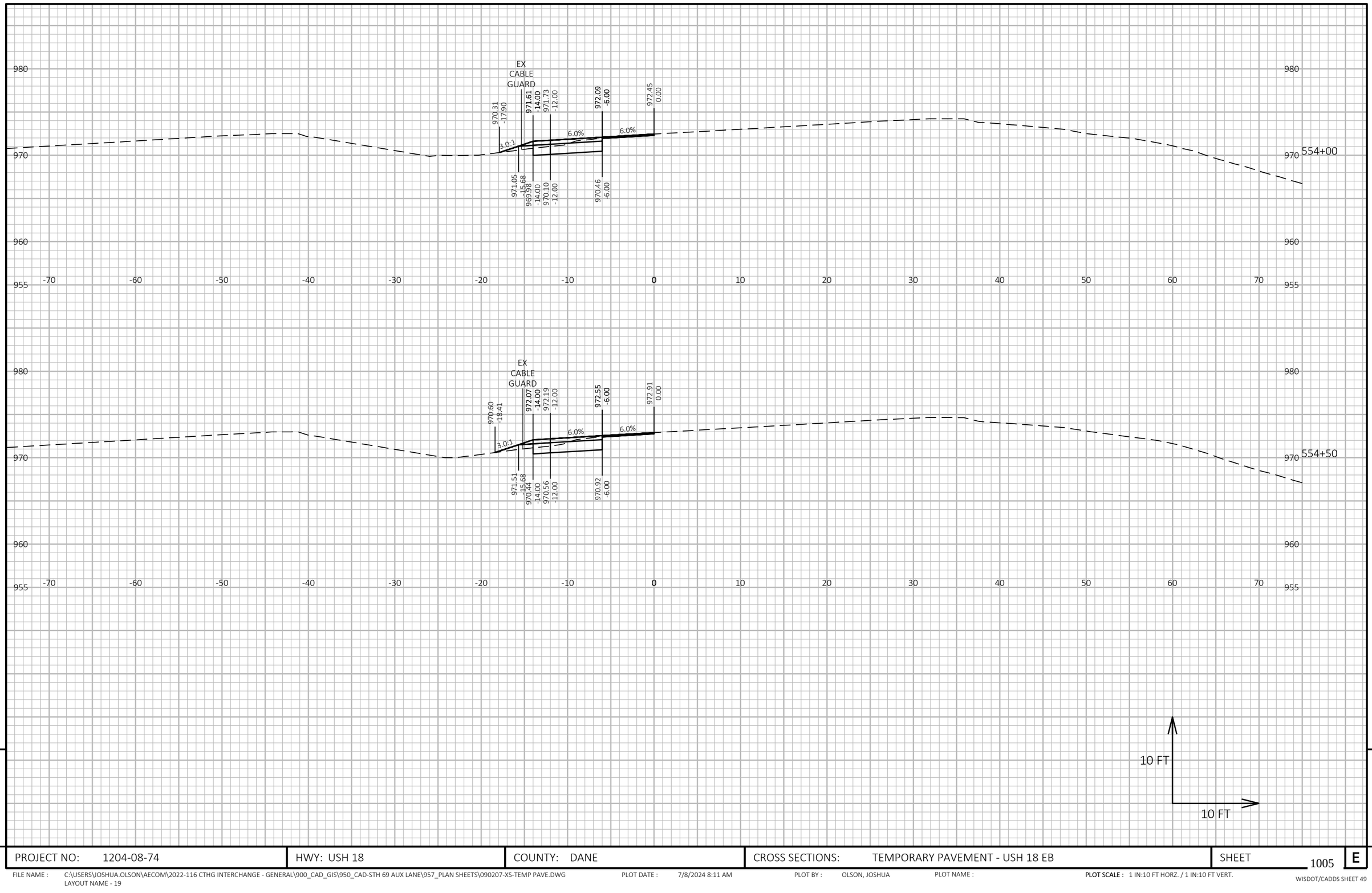
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1004	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 18
PLOT DATE : 7/8/2024 8:11 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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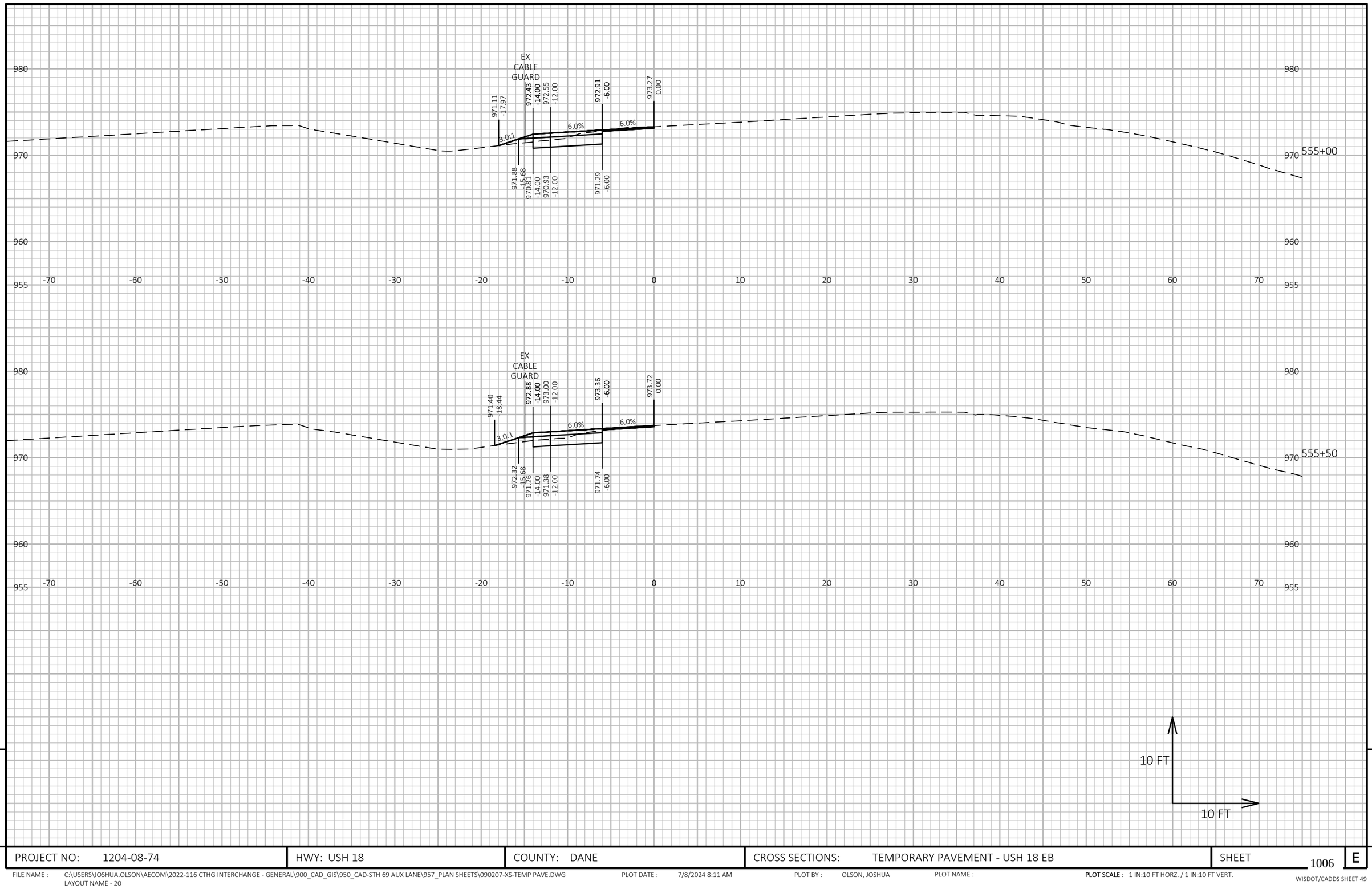
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1005	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 19

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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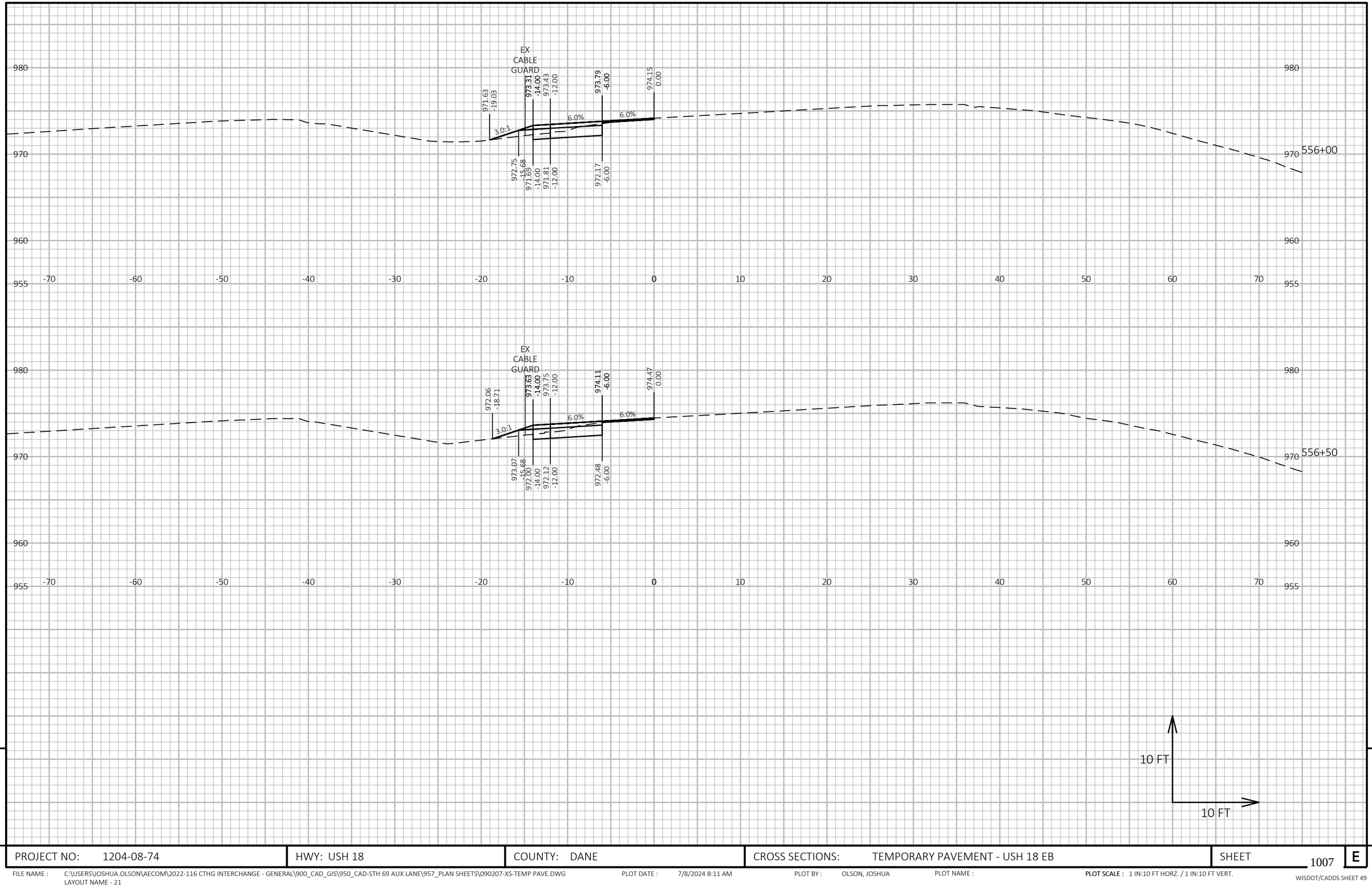
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1006	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 20

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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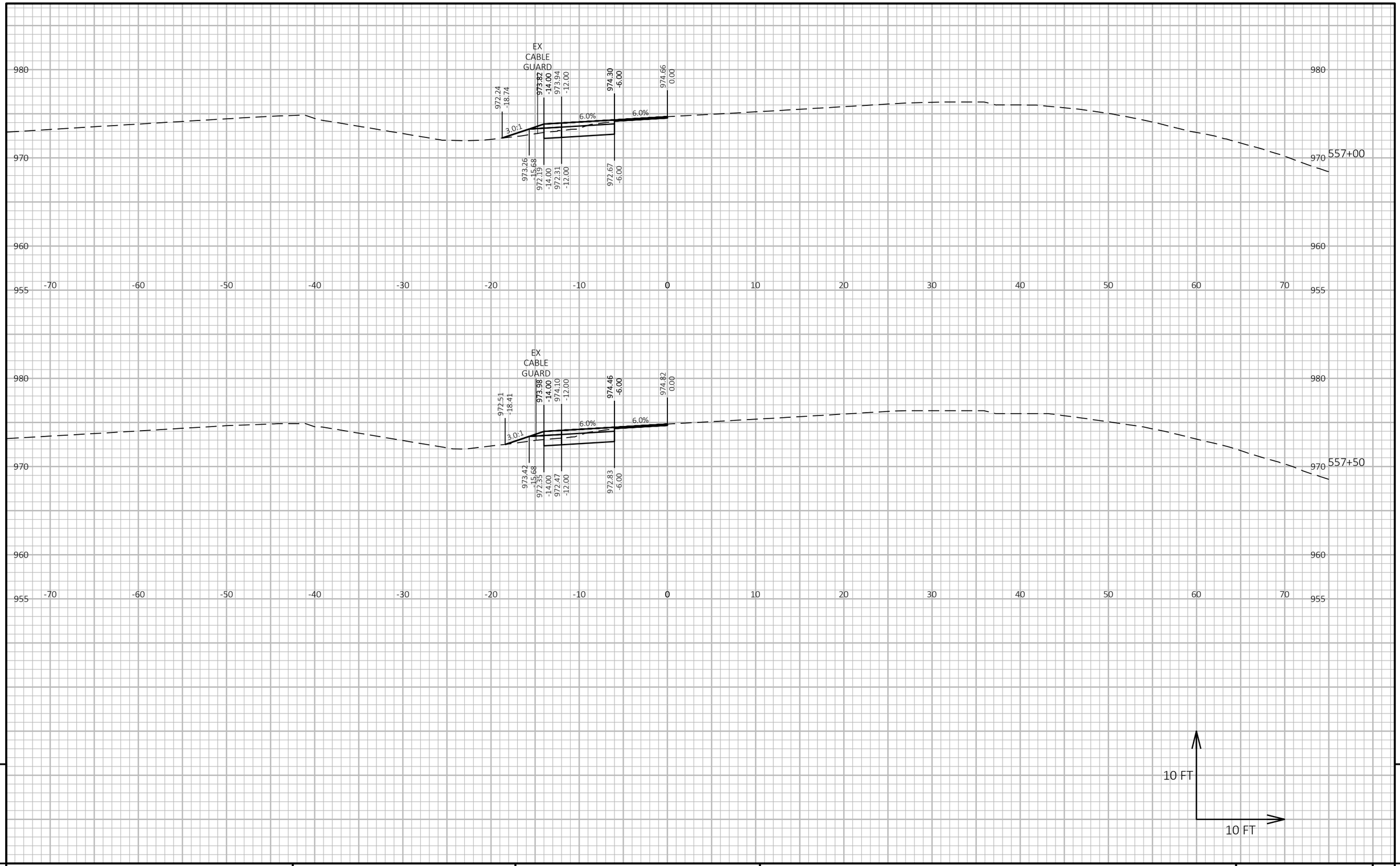
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1007	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 21

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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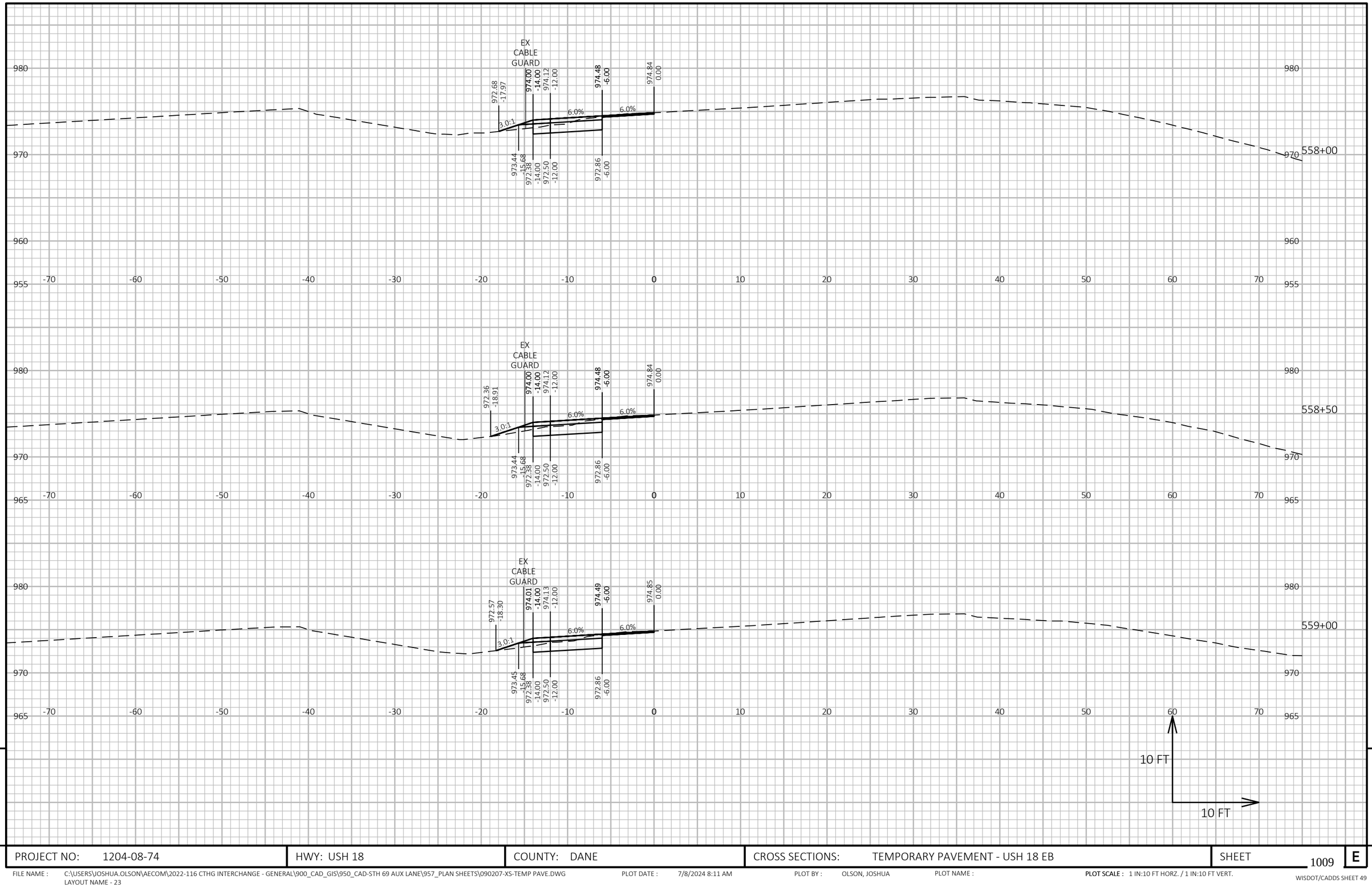
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1008	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 22

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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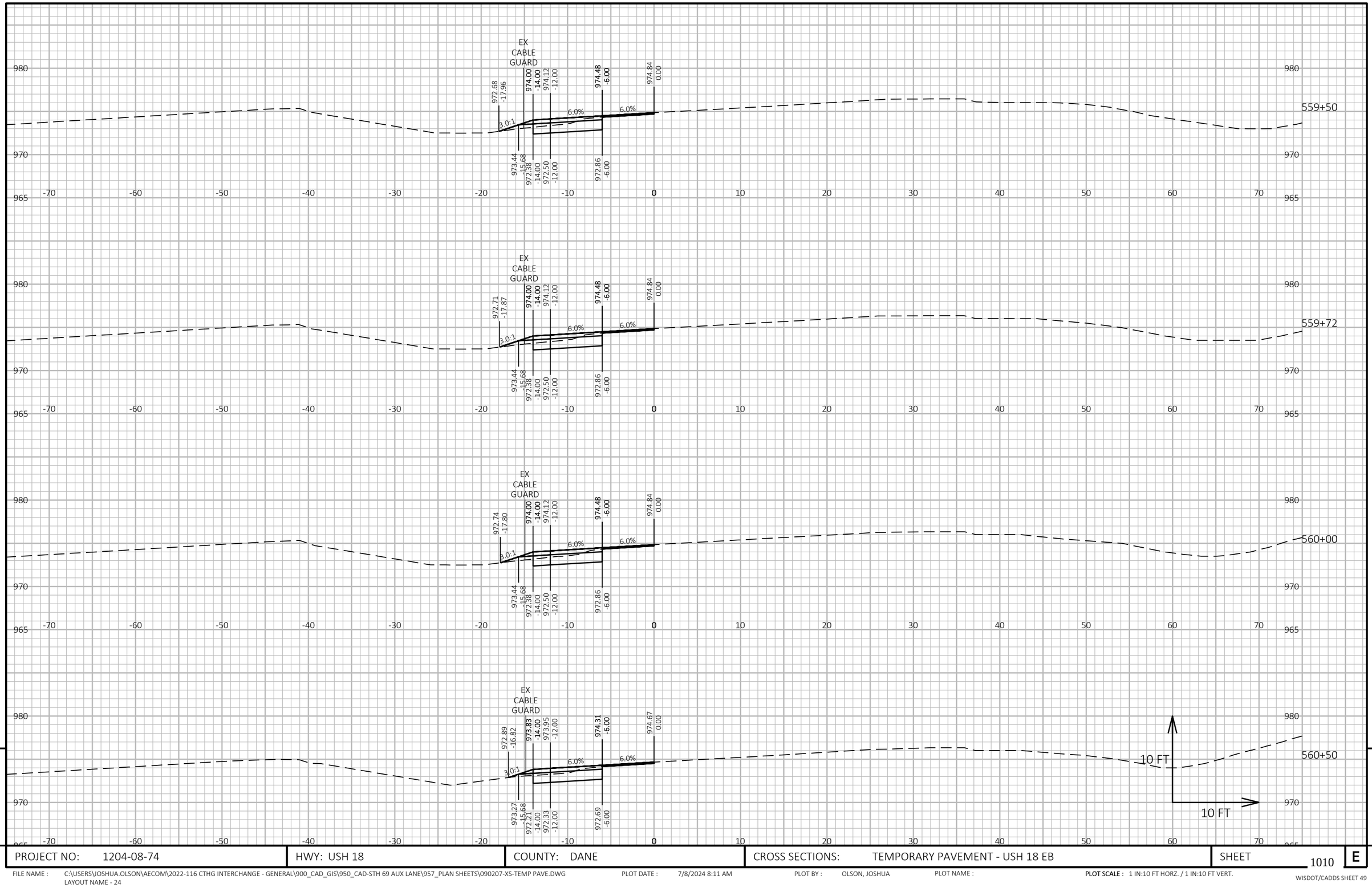
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1009	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 23

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

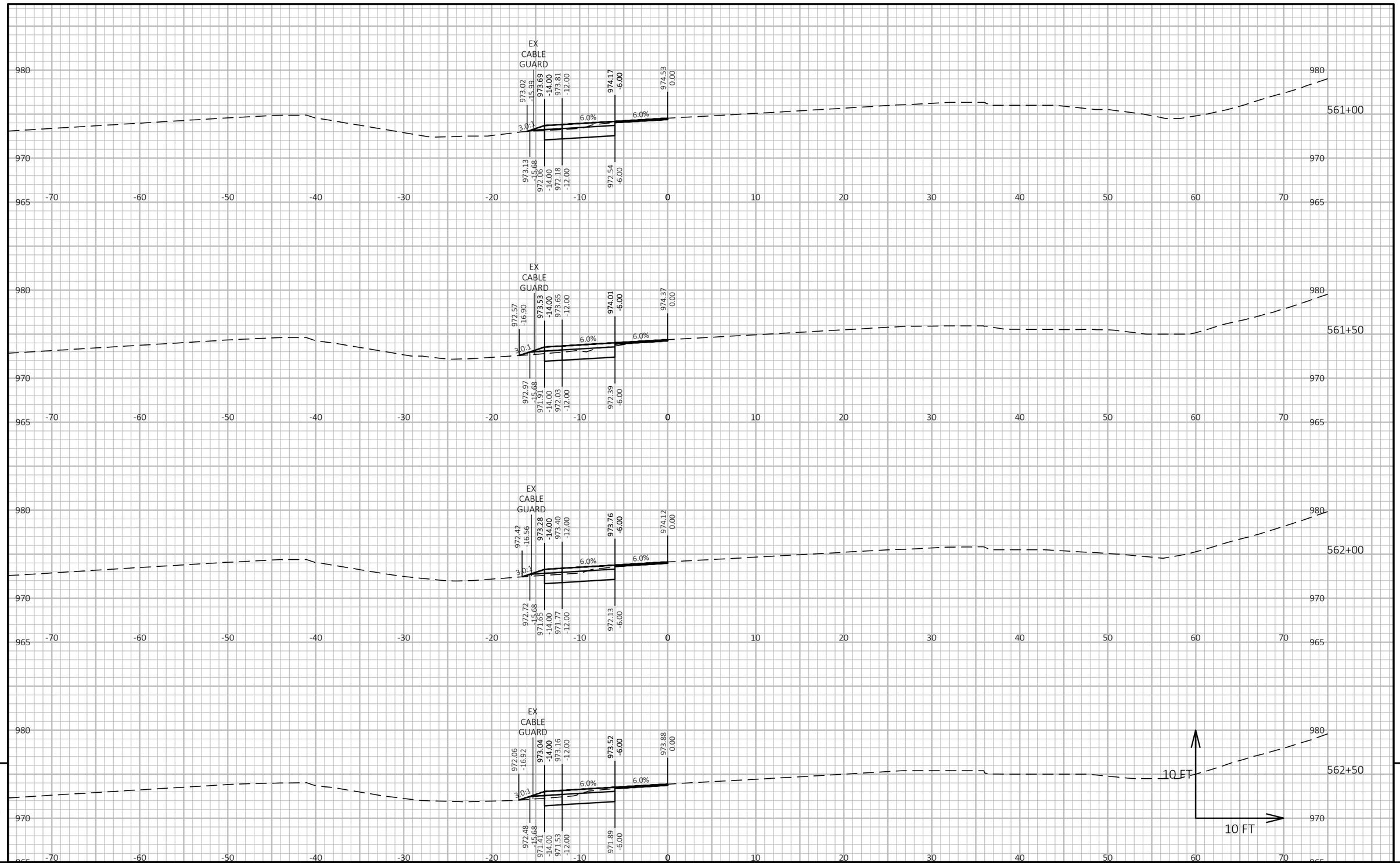


PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1010	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 24

PLOT DATE : 7/8/2024 8:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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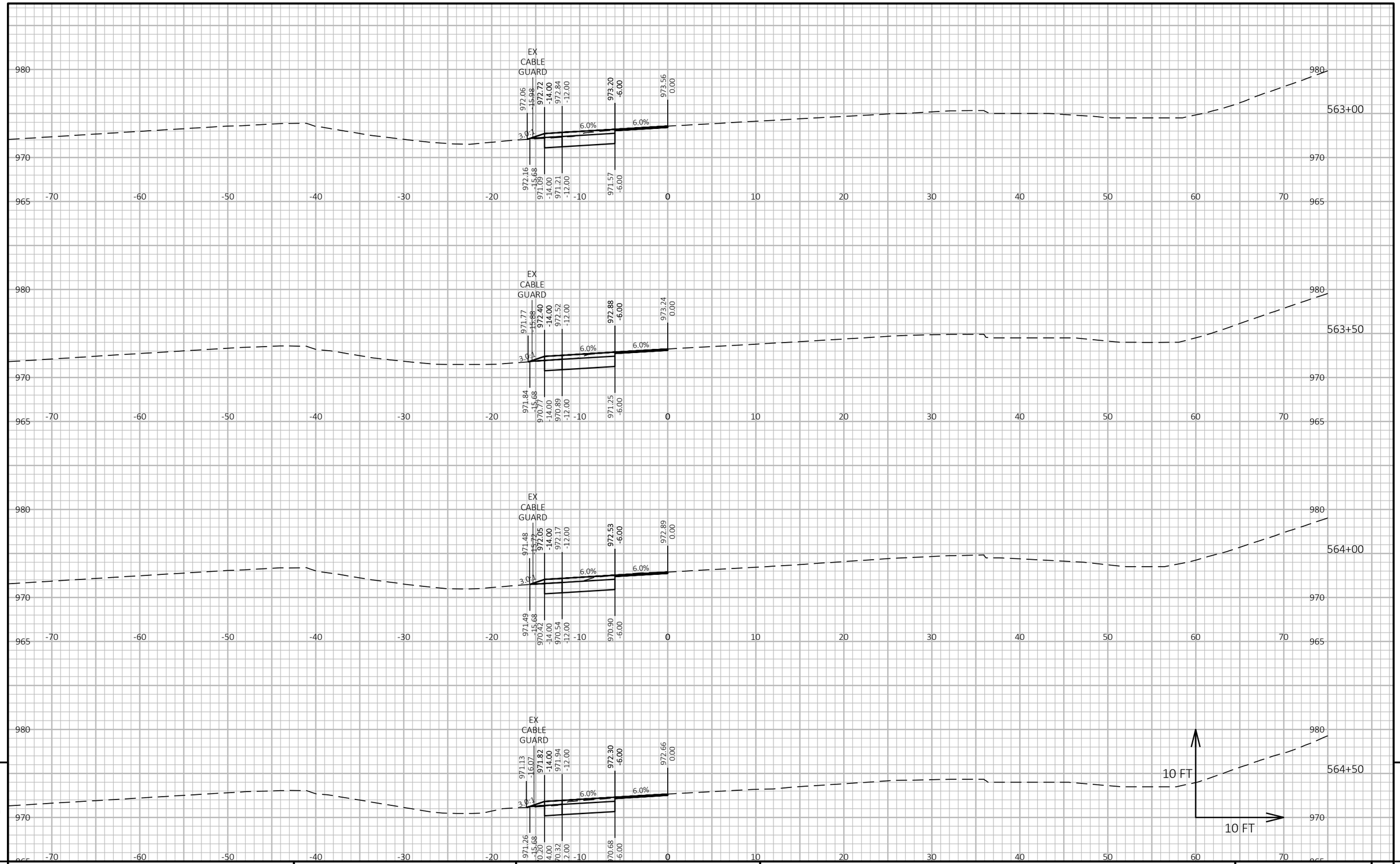
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1011	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 25
PLOT DATE : 7/8/2024 8:11 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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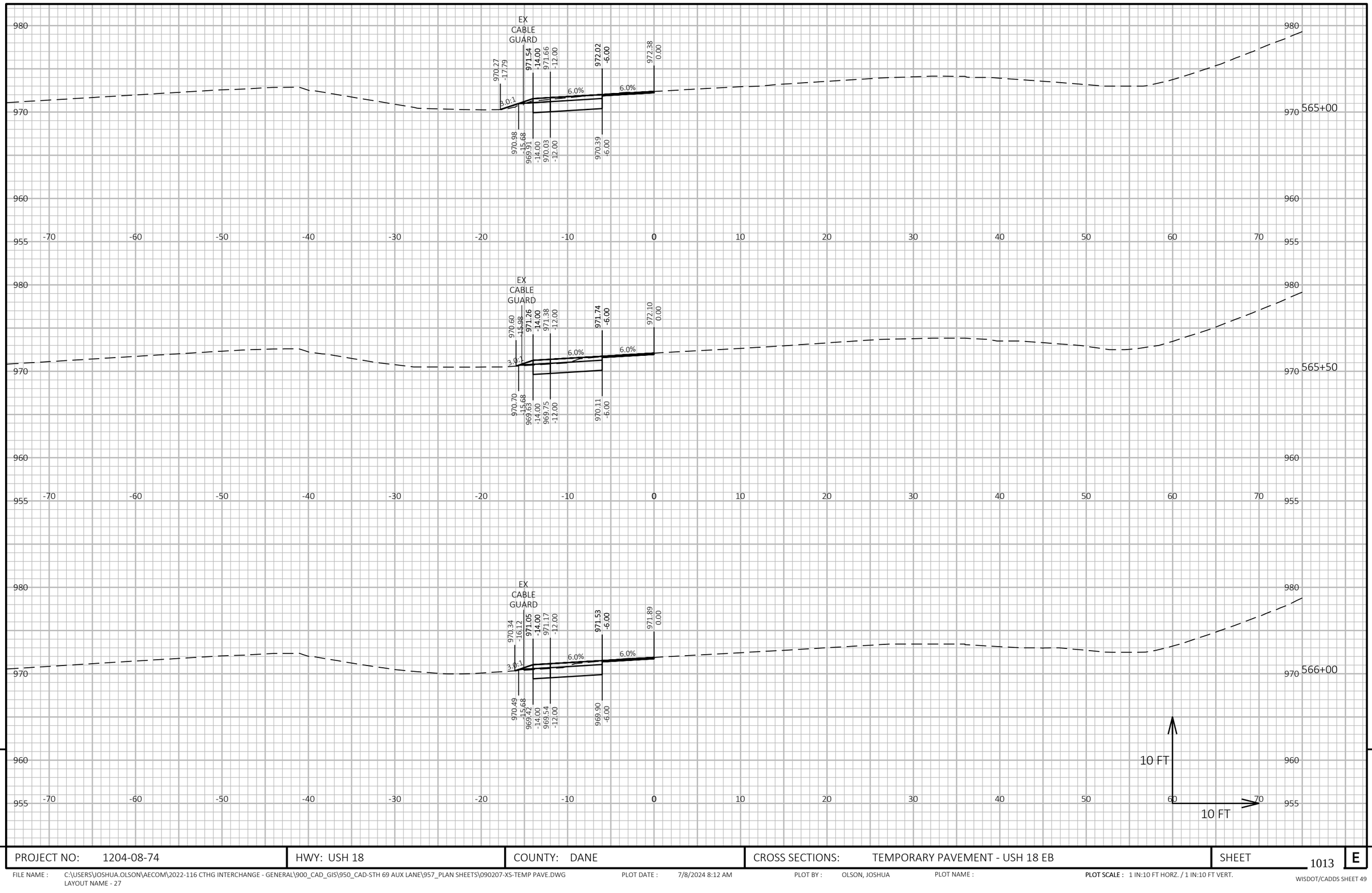
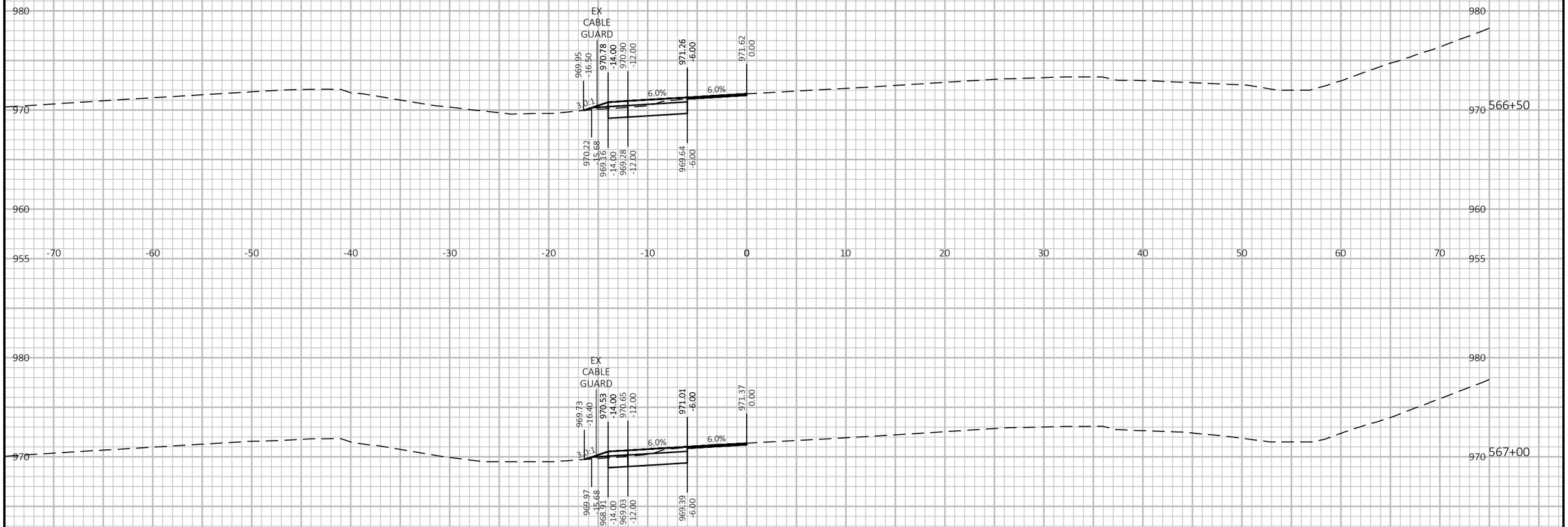
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1012	E

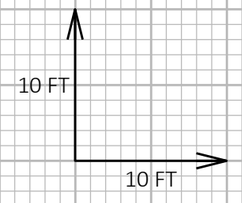
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 26
PLOT DATE : 7/8/2024 8:12 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1013	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 27
PLOT DATE : 7/8/2024 8:12 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49





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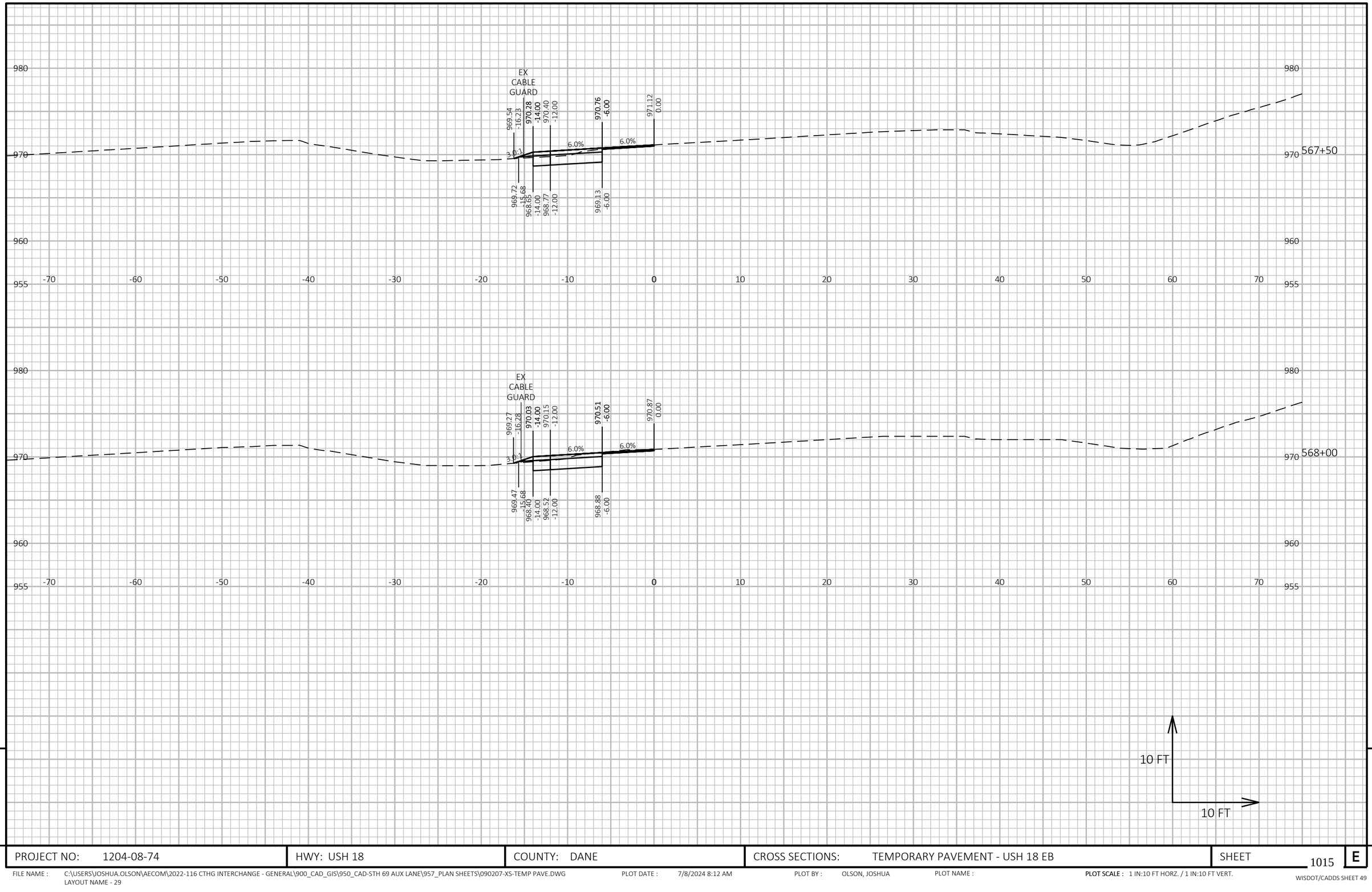
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1014	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 28

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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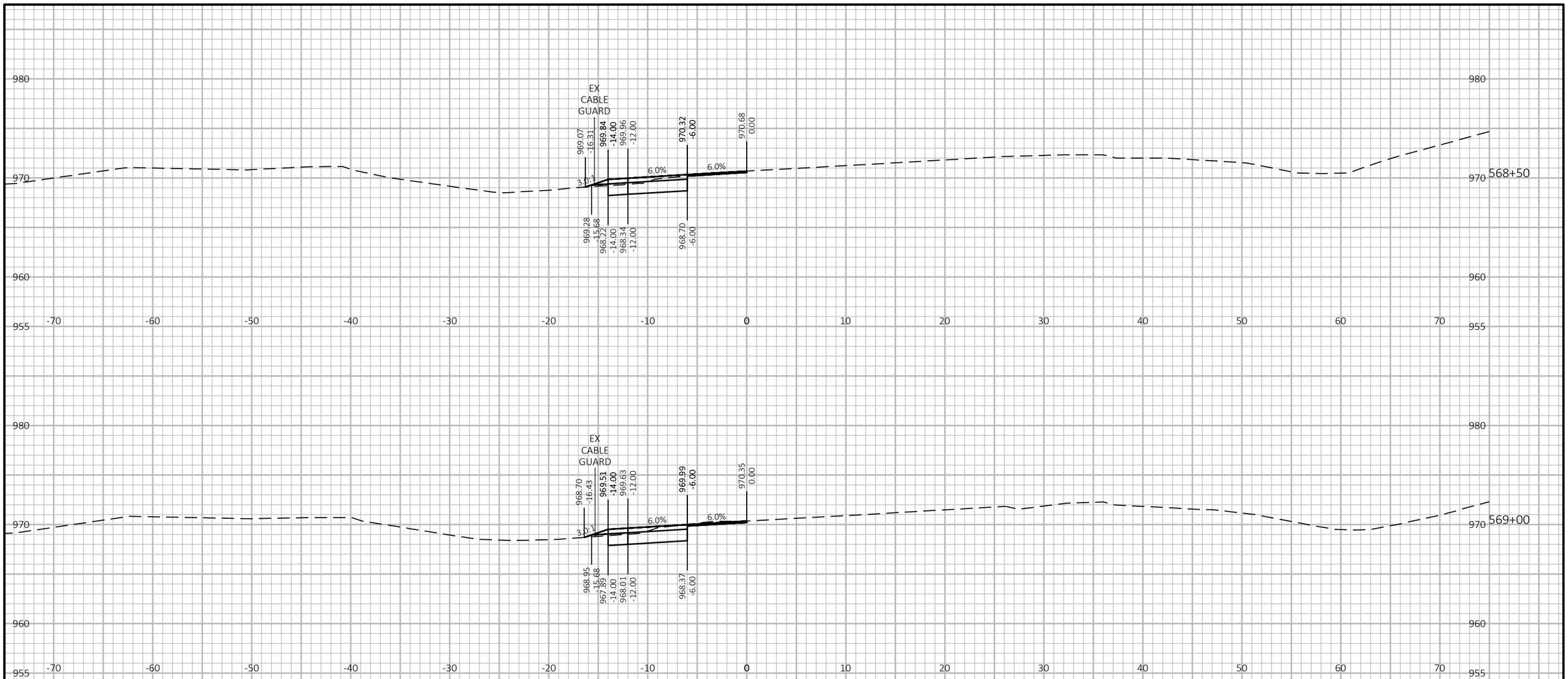
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1015	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 29

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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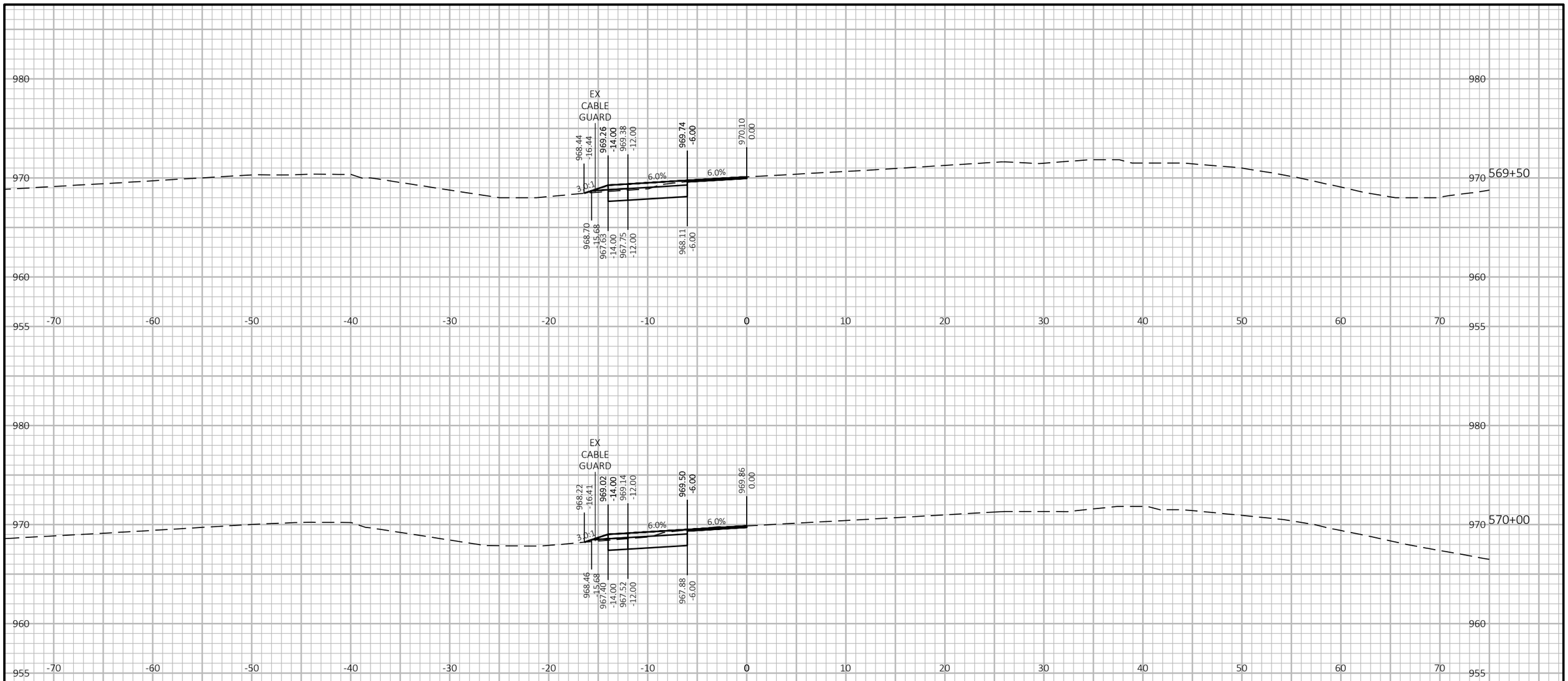
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1016	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 30

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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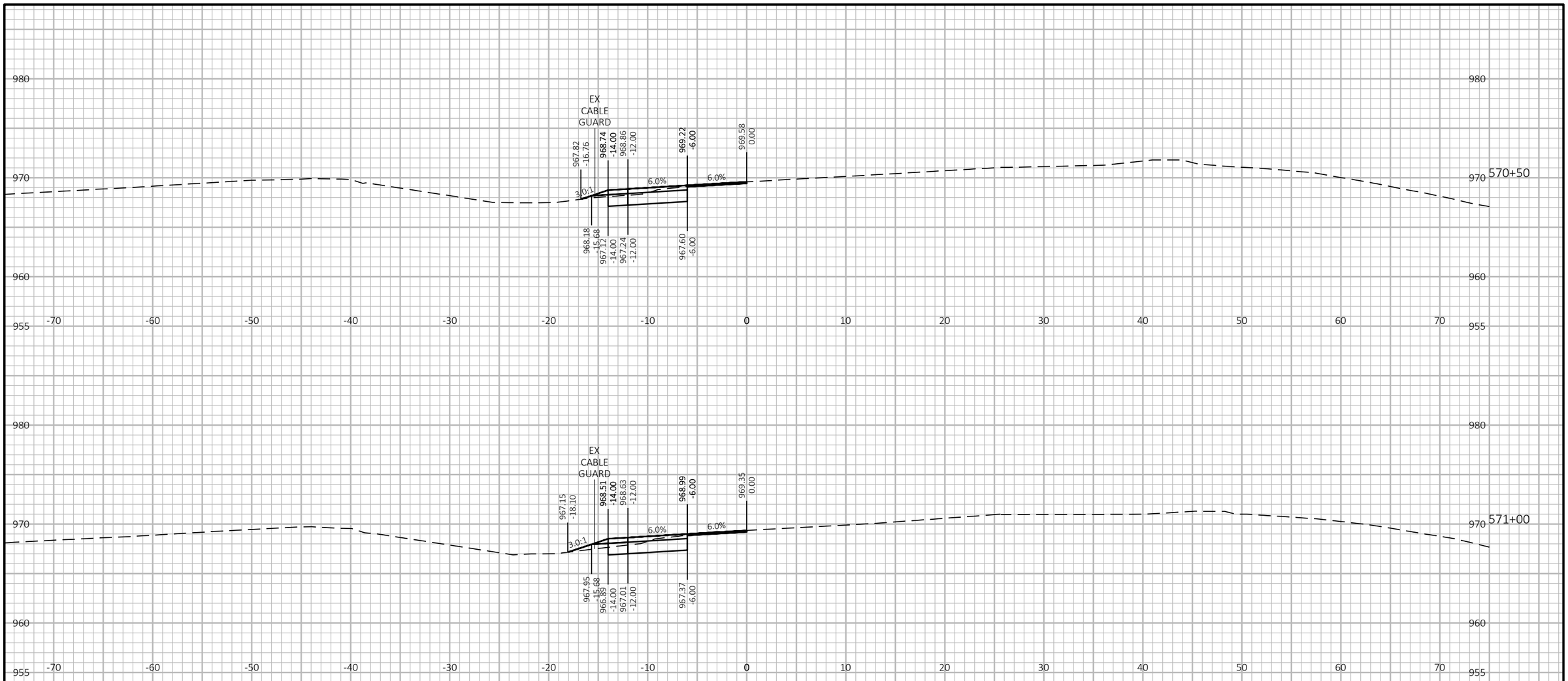
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1017	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 31

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1018	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 32

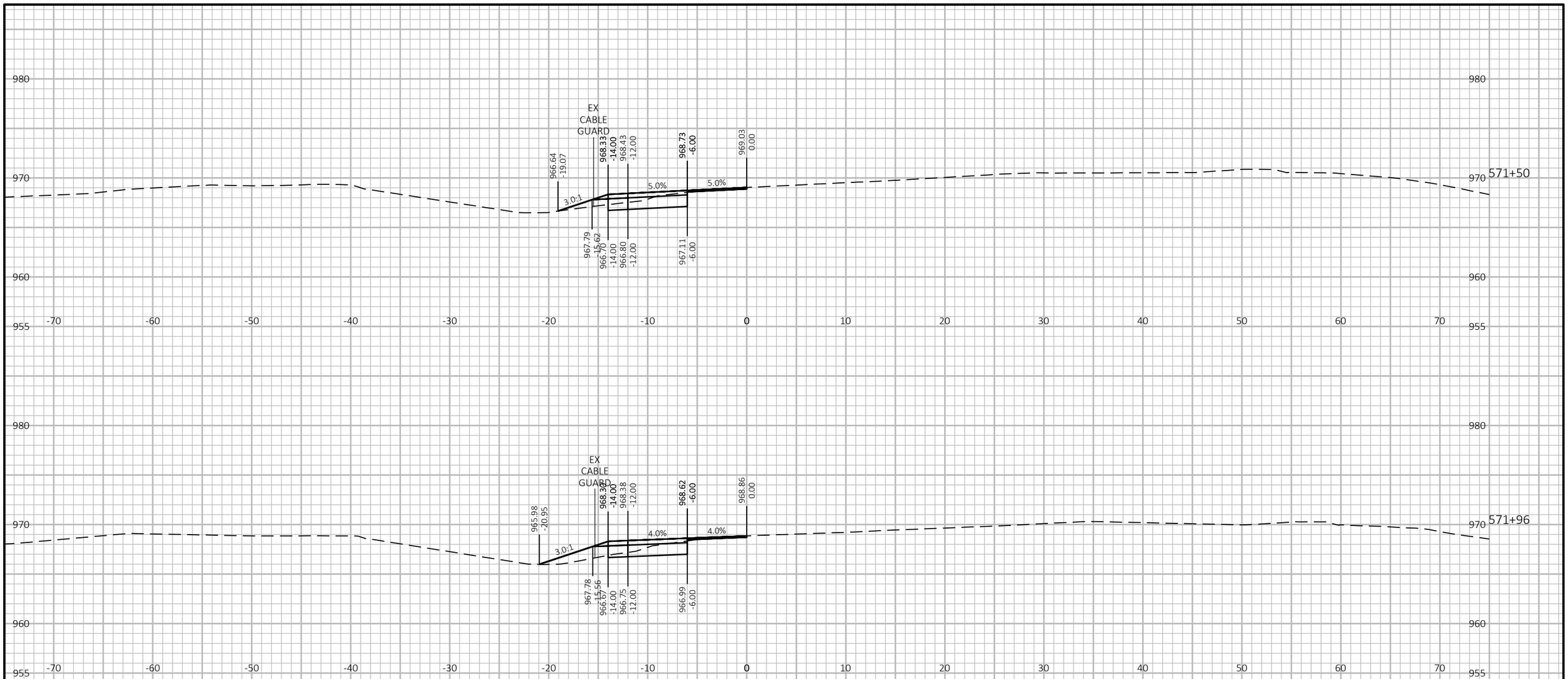
PLOT DATE : 7/8/2024 8:12 AM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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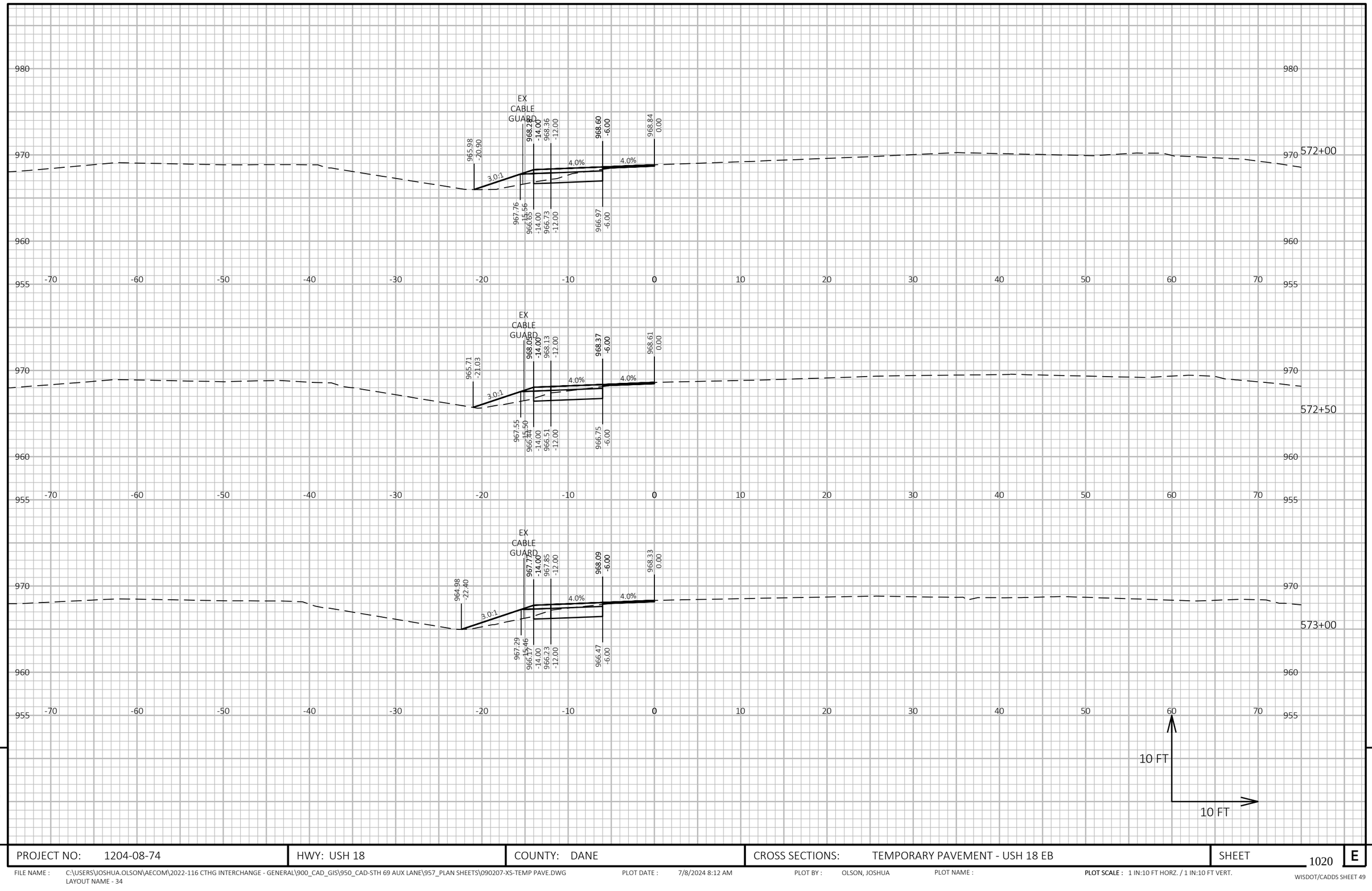
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1019	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 33

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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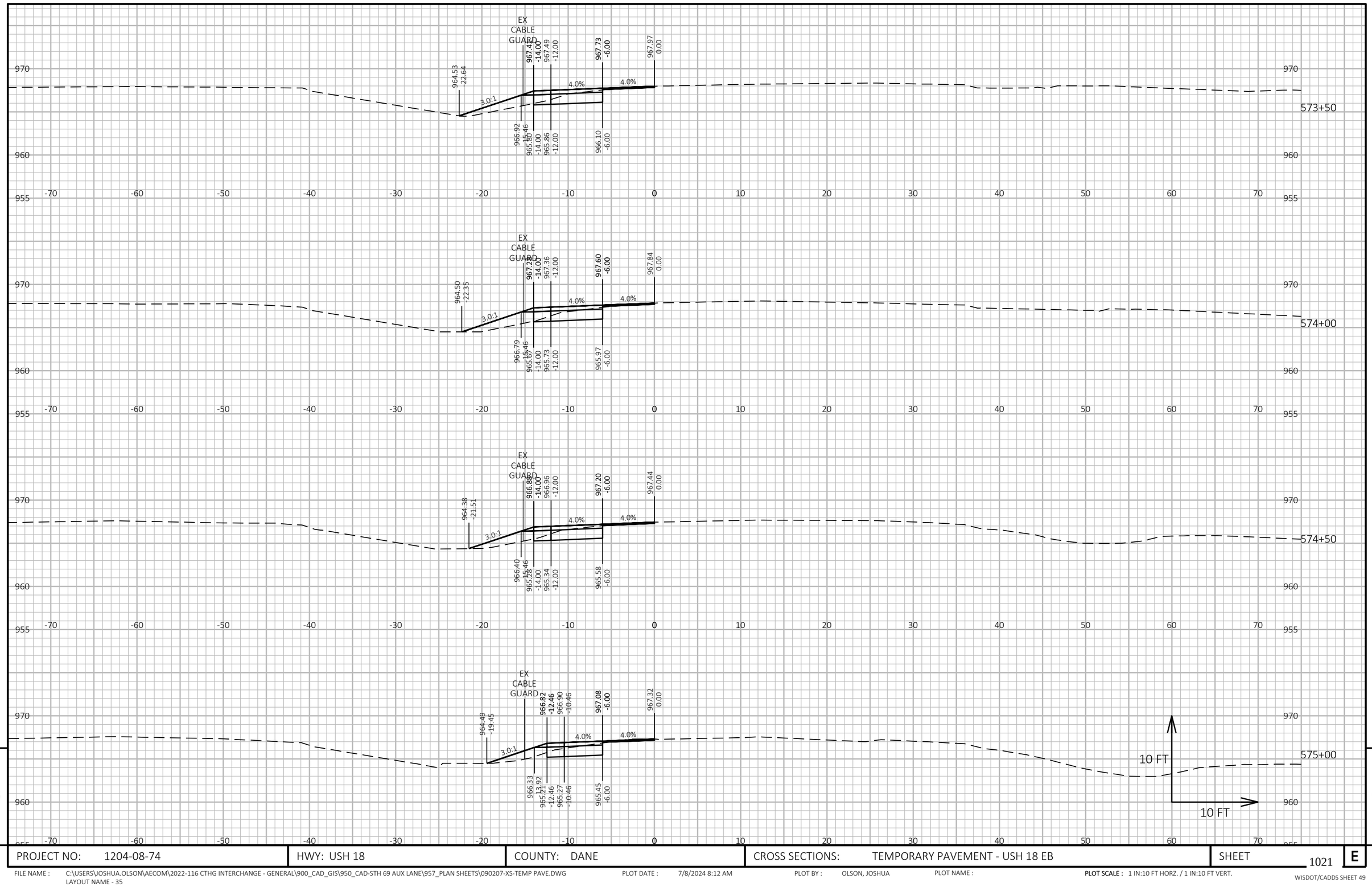
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1020	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 34

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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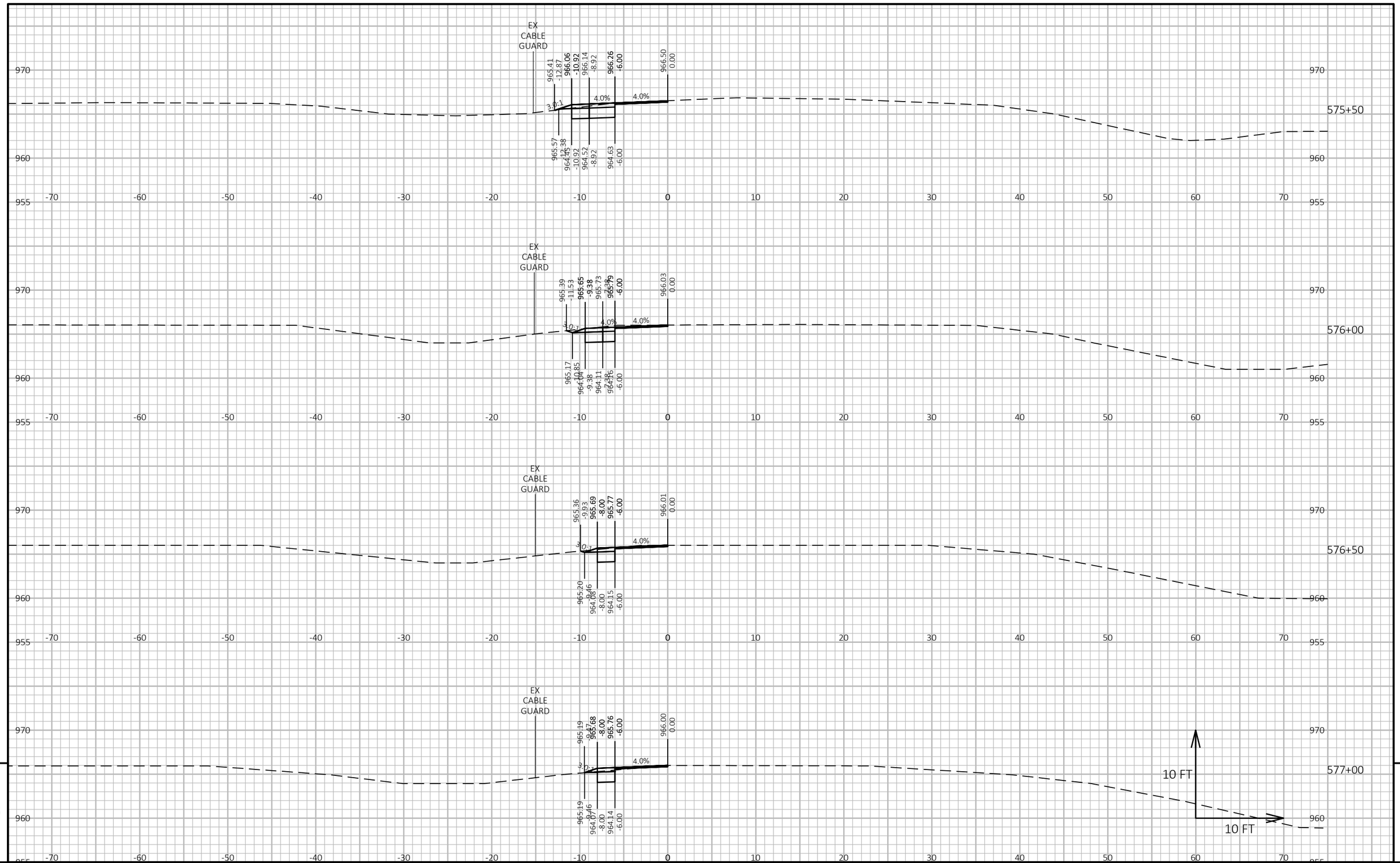
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1021	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 35
PLOT DATE : 7/8/2024 8:12 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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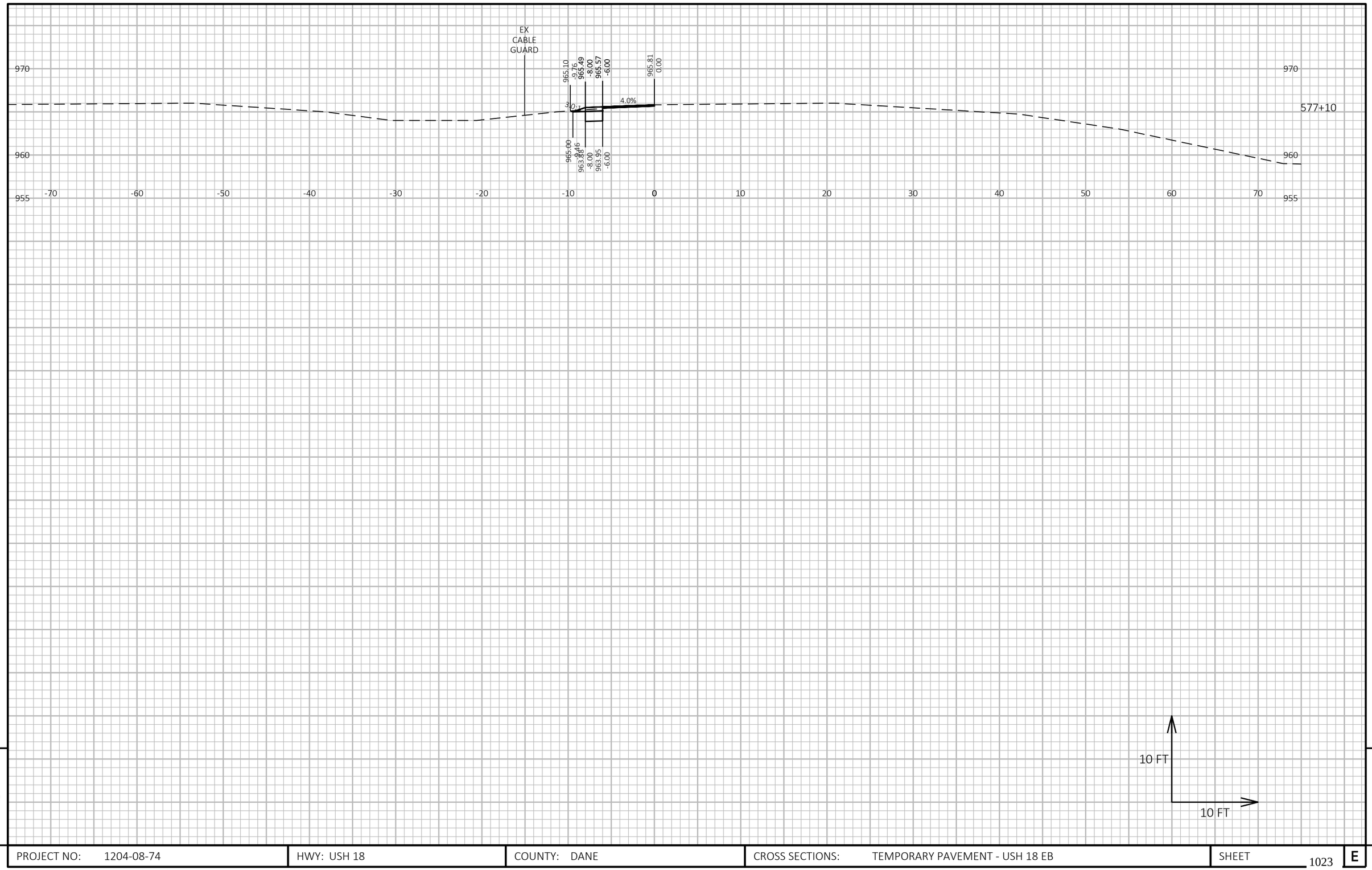
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1022	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 36
PLOT DATE : 7/8/2024 8:12 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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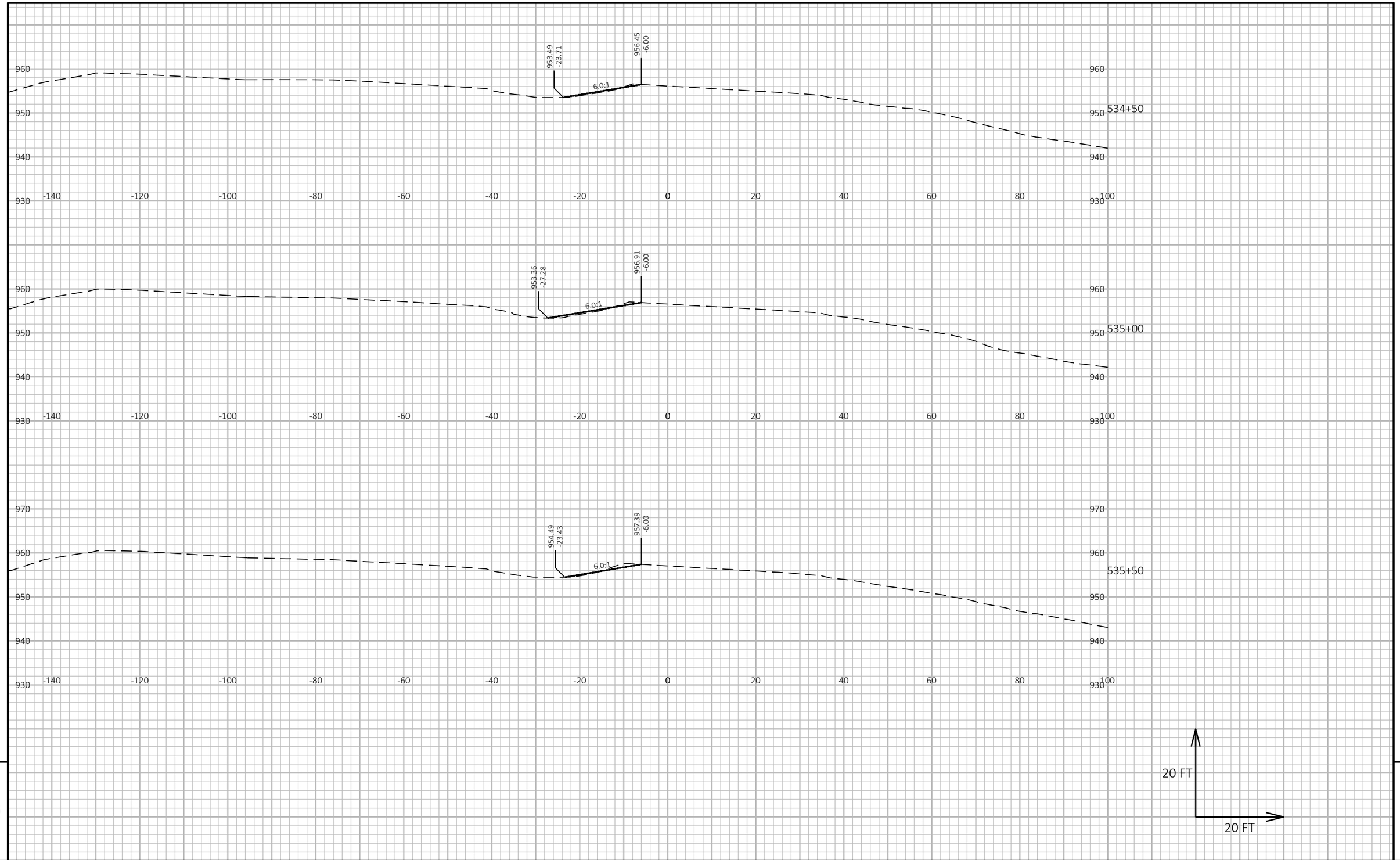
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: TEMPORARY PAVEMENT - USH 18 EB	SHEET 1023	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090207-XS-TEMP PAVE.DWG
LAYOUT NAME - 37

PLOT DATE : 7/8/2024 8:12 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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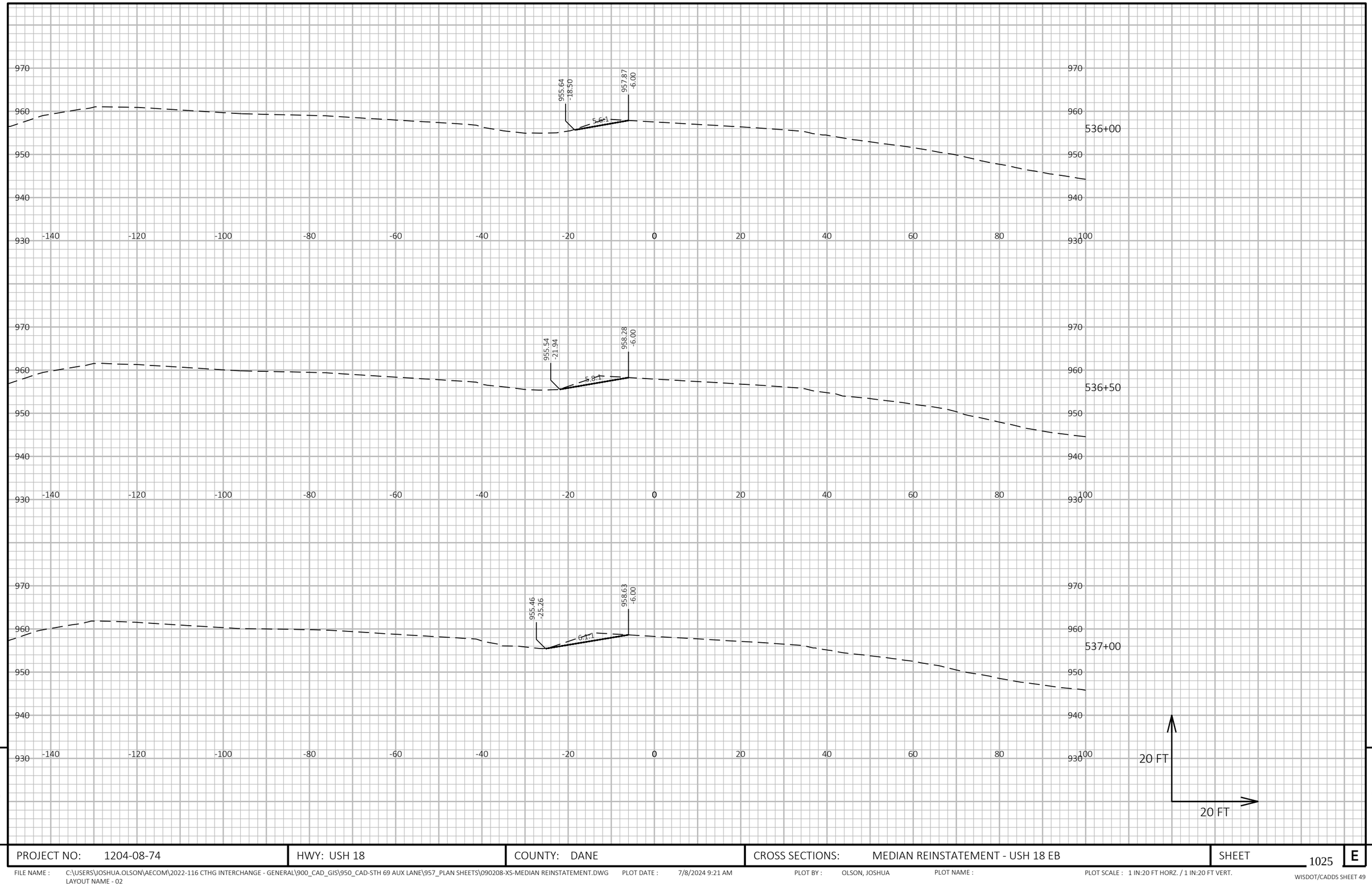
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1024	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 01
PLOT DATE : 7/8/2024 9:19 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1025	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 02
PLOT DATE : 7/8/2024 9:21 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

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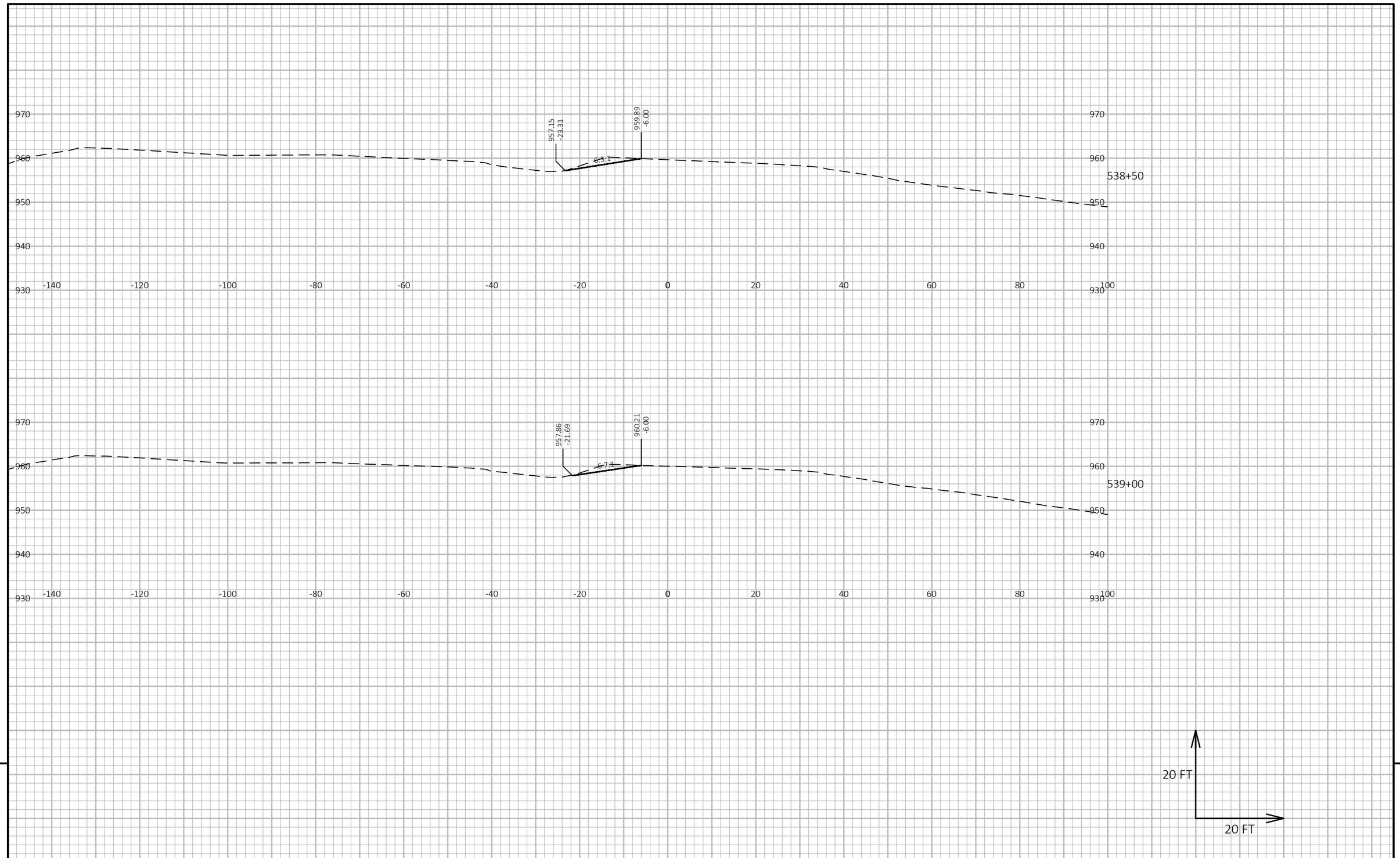
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1026	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG PLOT DATE : 7/8/2024 9:23 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
LAYOUT NAME - 03
WISDOT/CADDS SHEET 49



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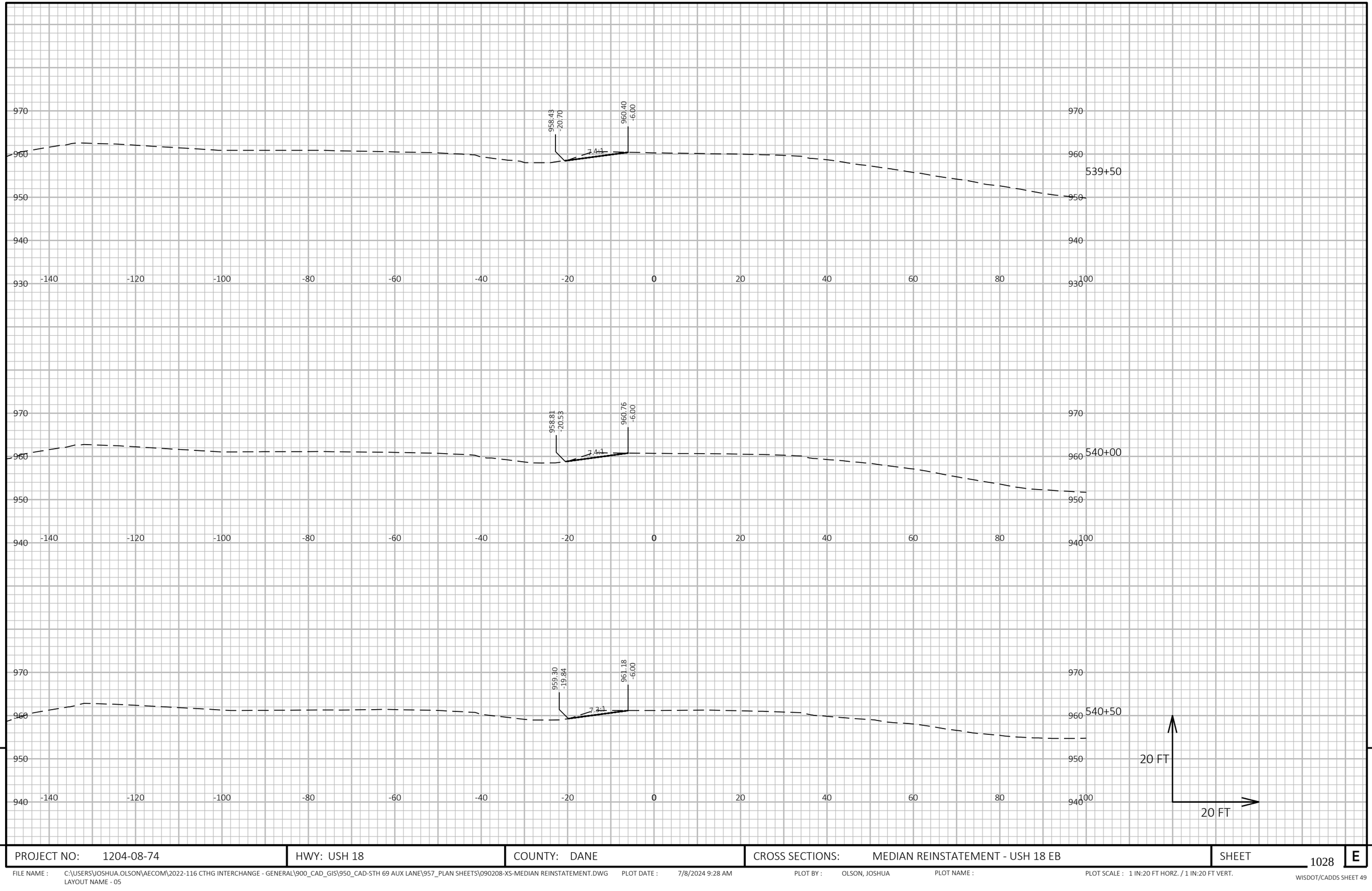
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1027	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 04

PLOT DATE : 7/8/2024 9:26 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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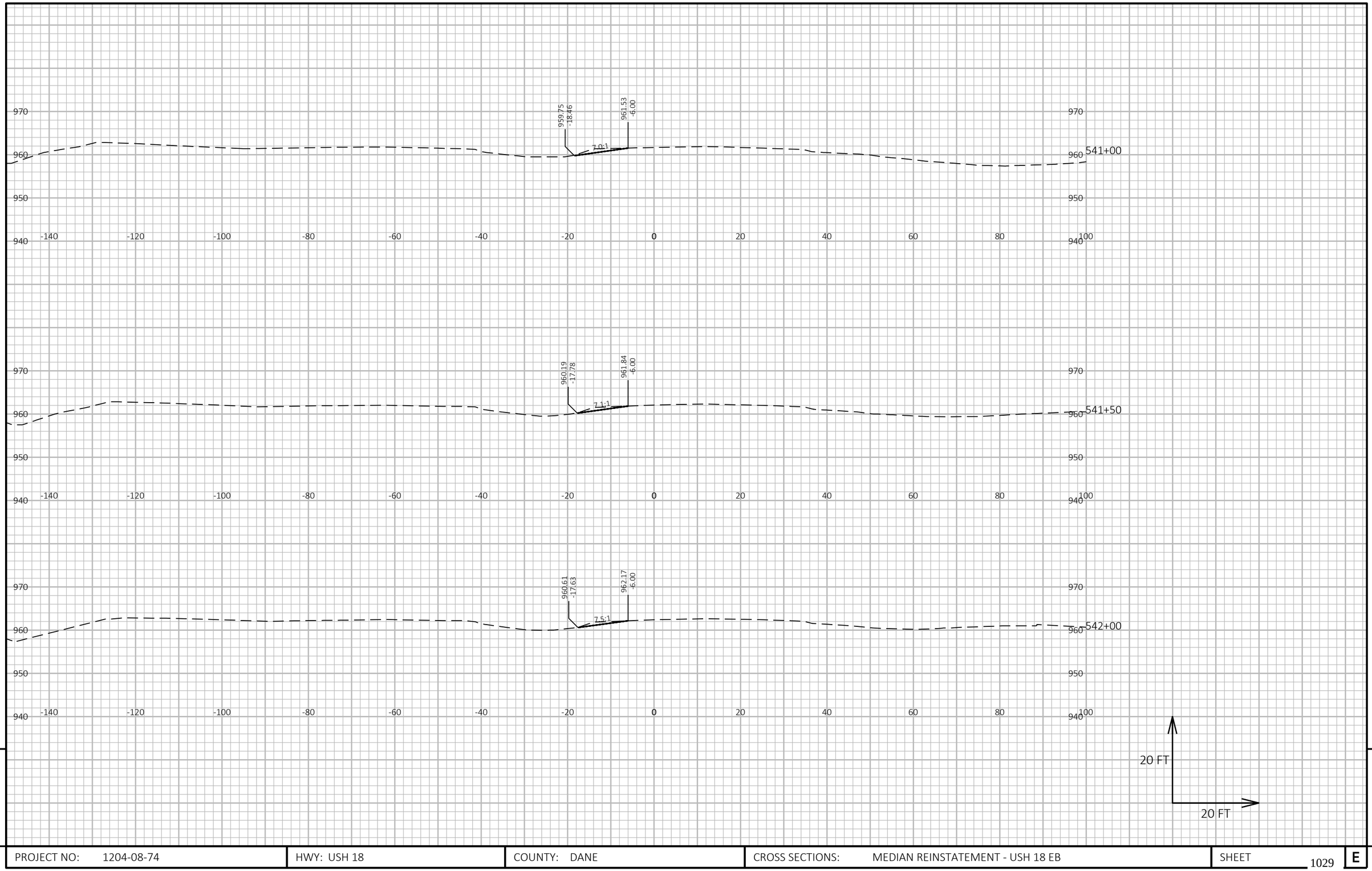
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1028	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 05

PLOT DATE : 7/8/2024 9:28 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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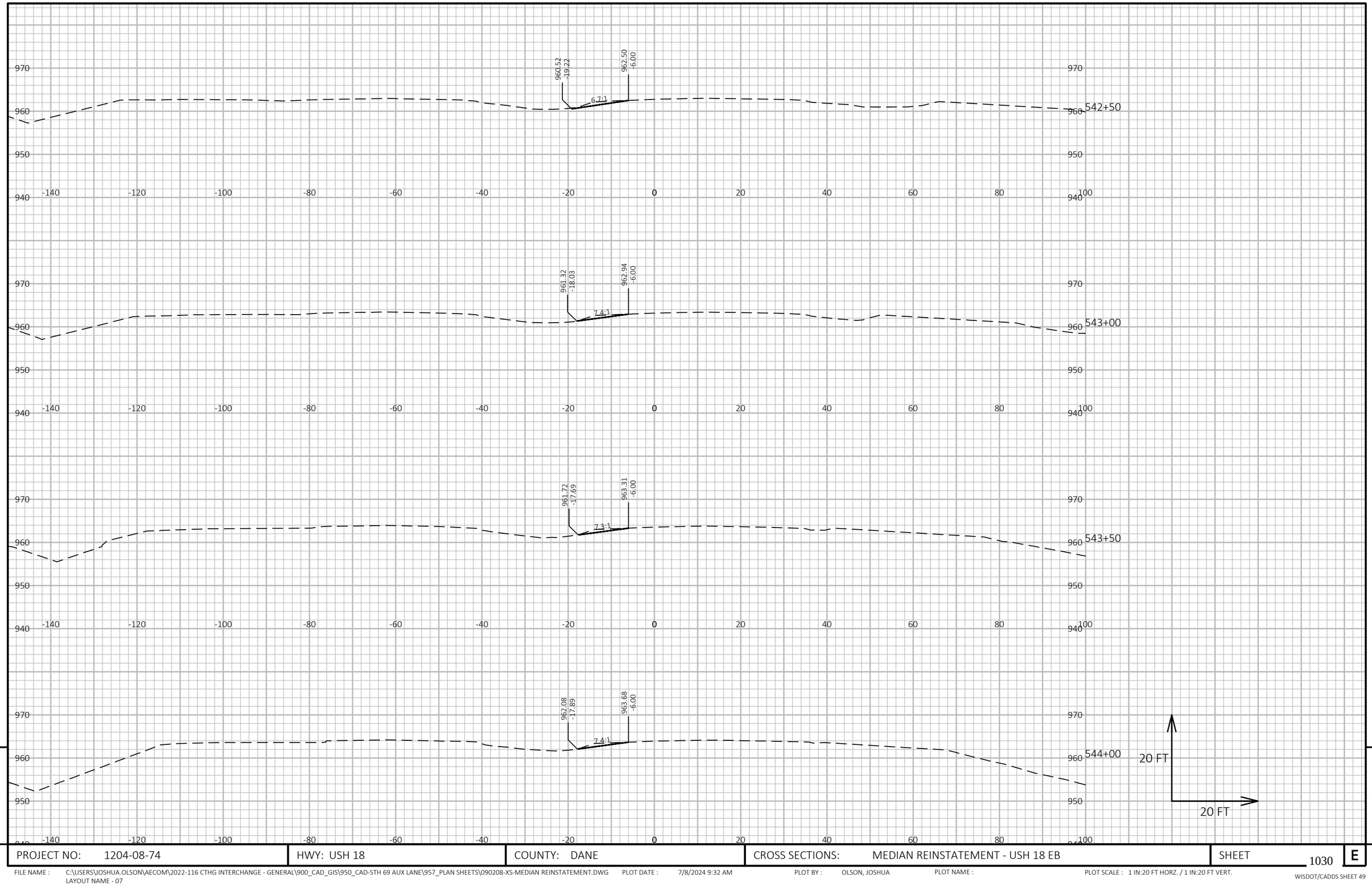
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1029	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 06
PLOT DATE : 7/8/2024 9:30 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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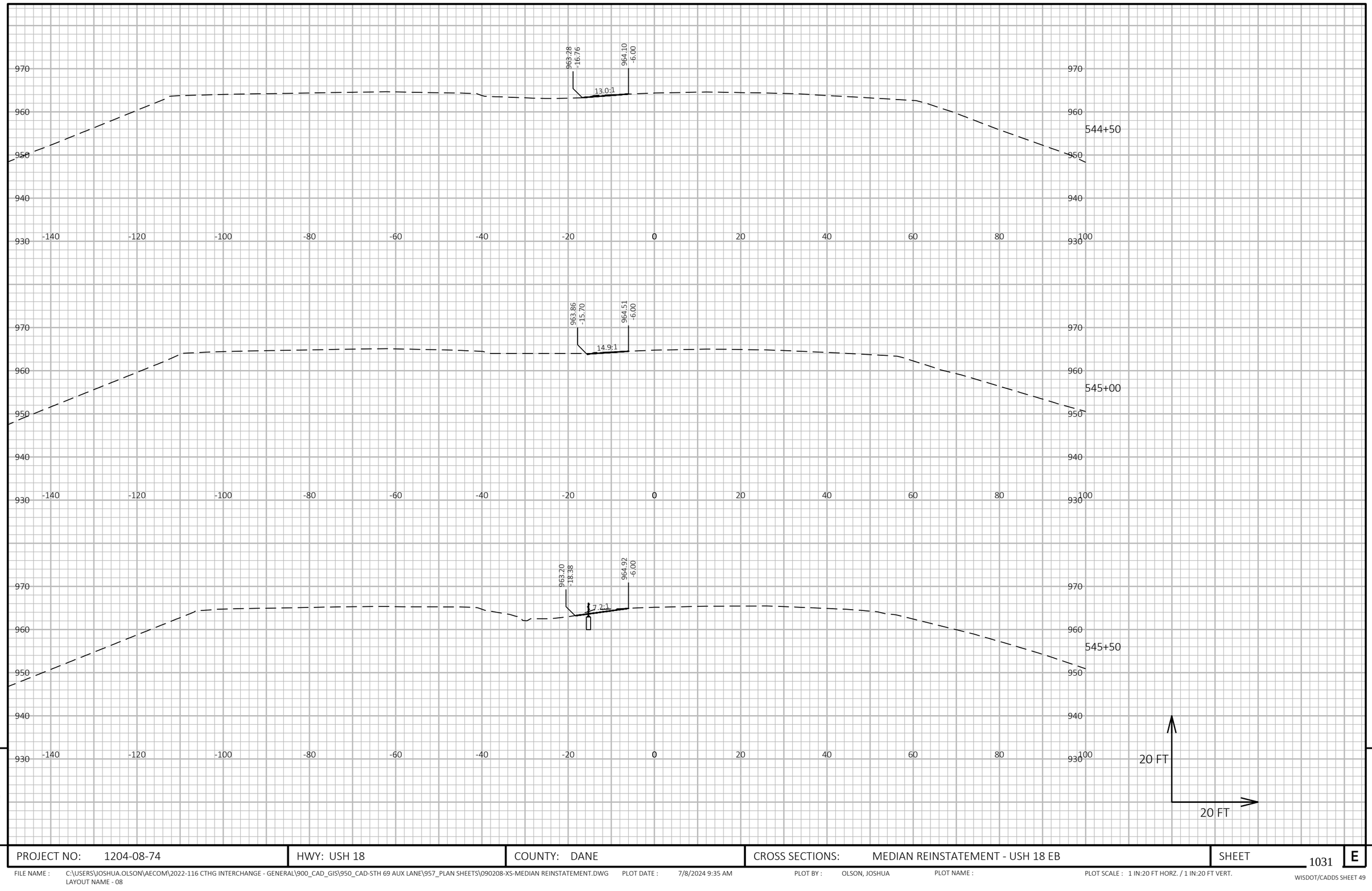
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1030	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 07
PLOT DATE : 7/8/2024 9:32 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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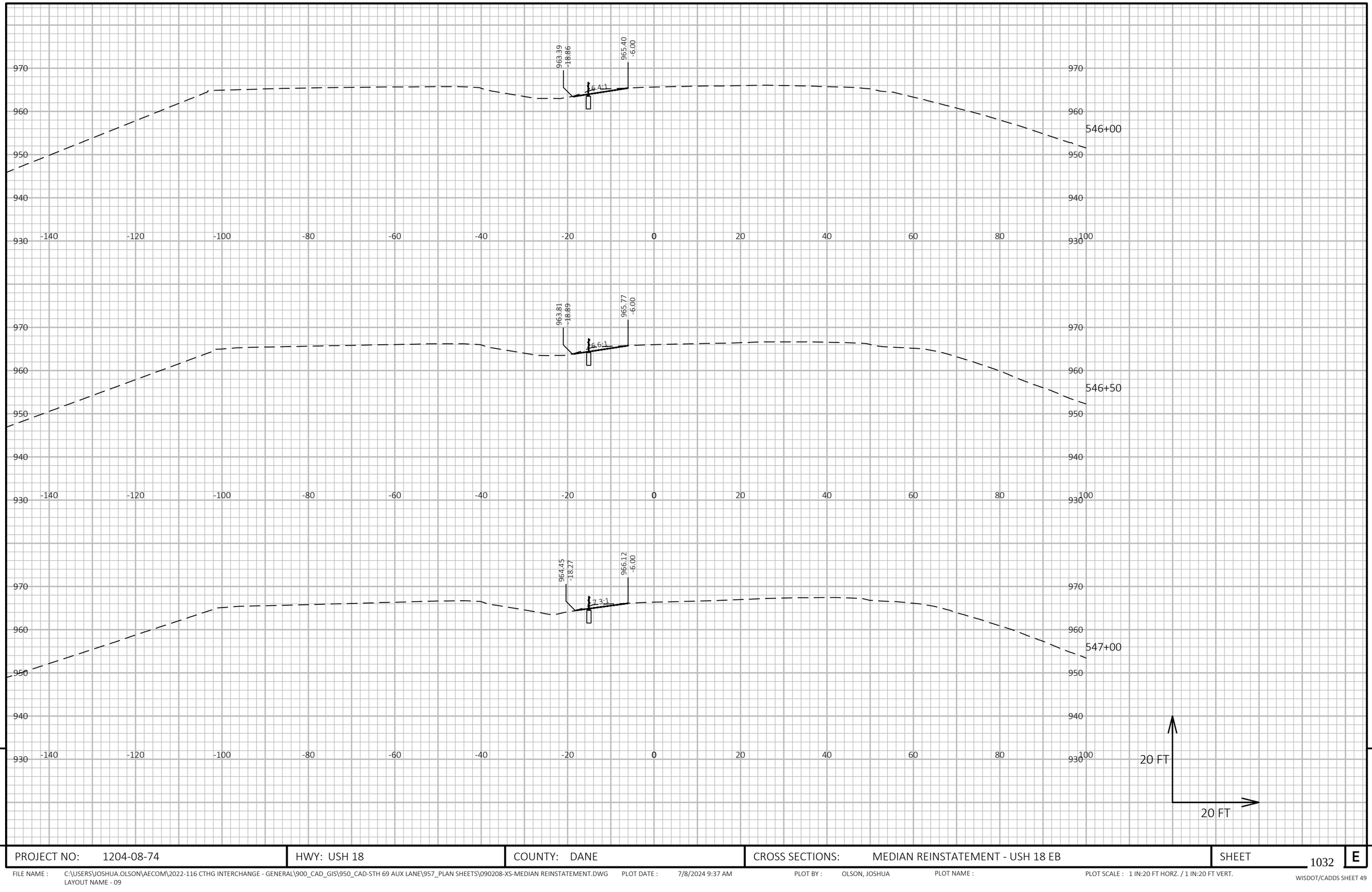
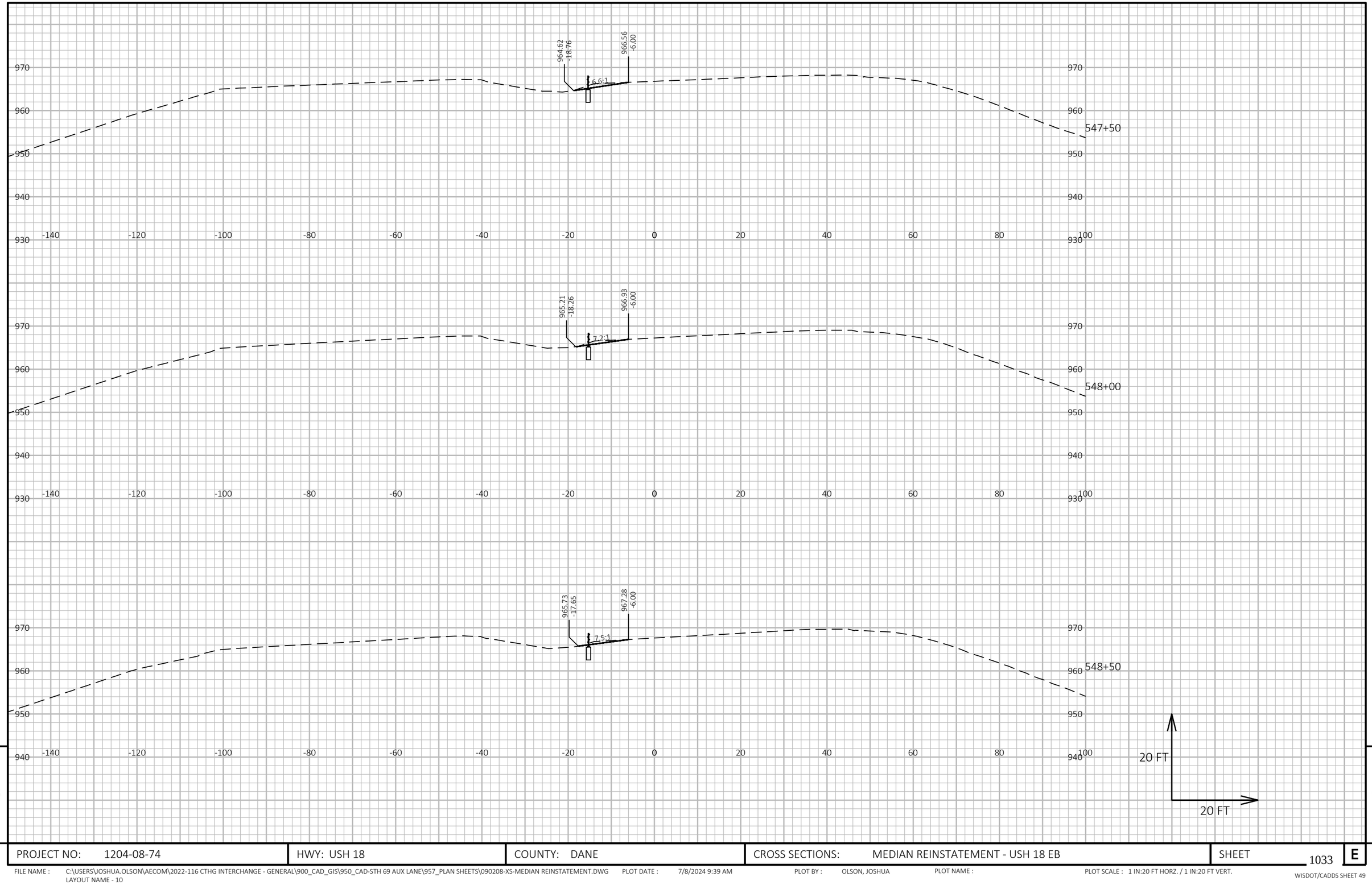
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1031	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 08
PLOT DATE : 7/8/2024 9:35 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1032	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 09
PLOT DATE : 7/8/2024 9:37 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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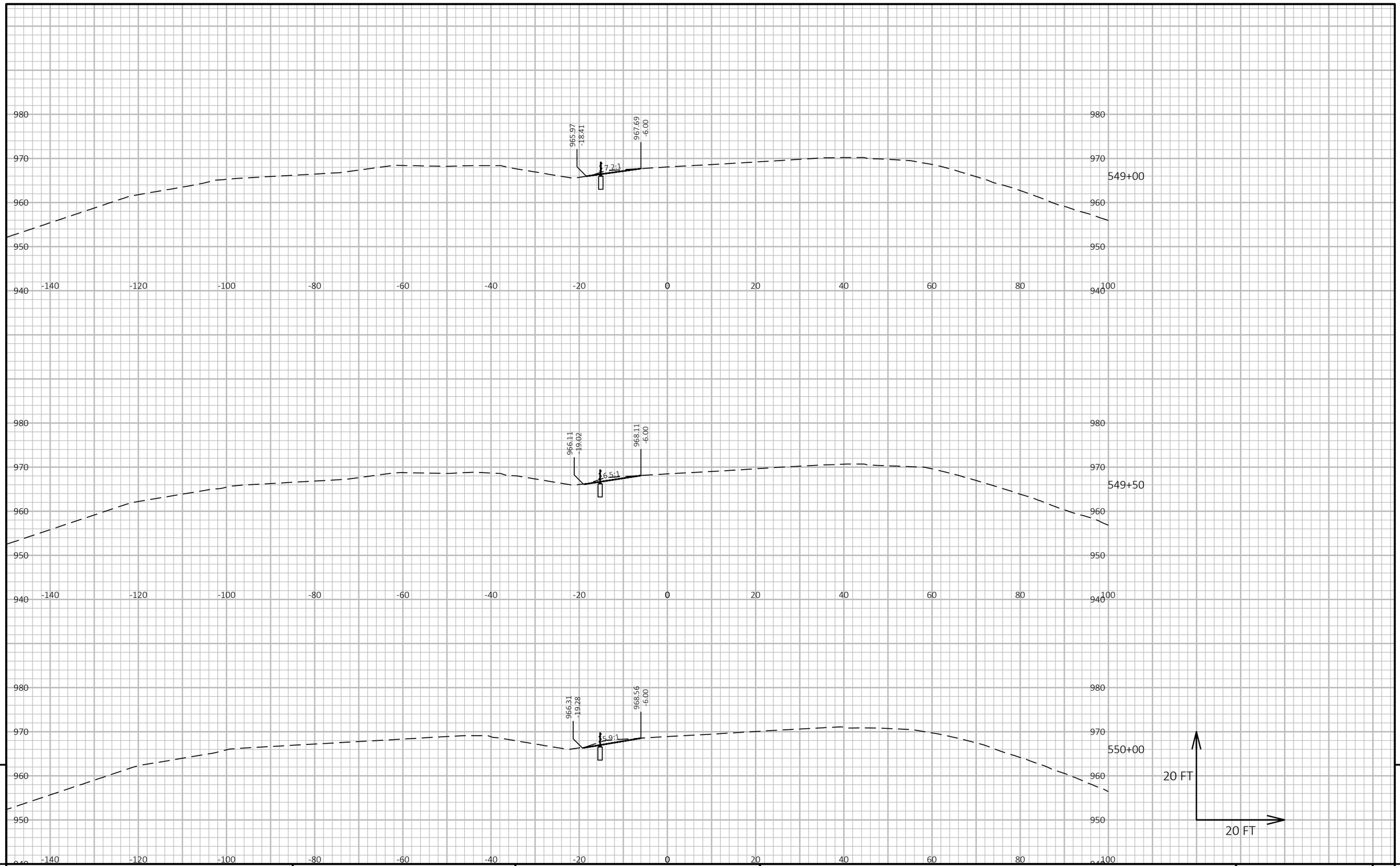
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1033	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 10
PLOT DATE : 7/8/2024 9:39 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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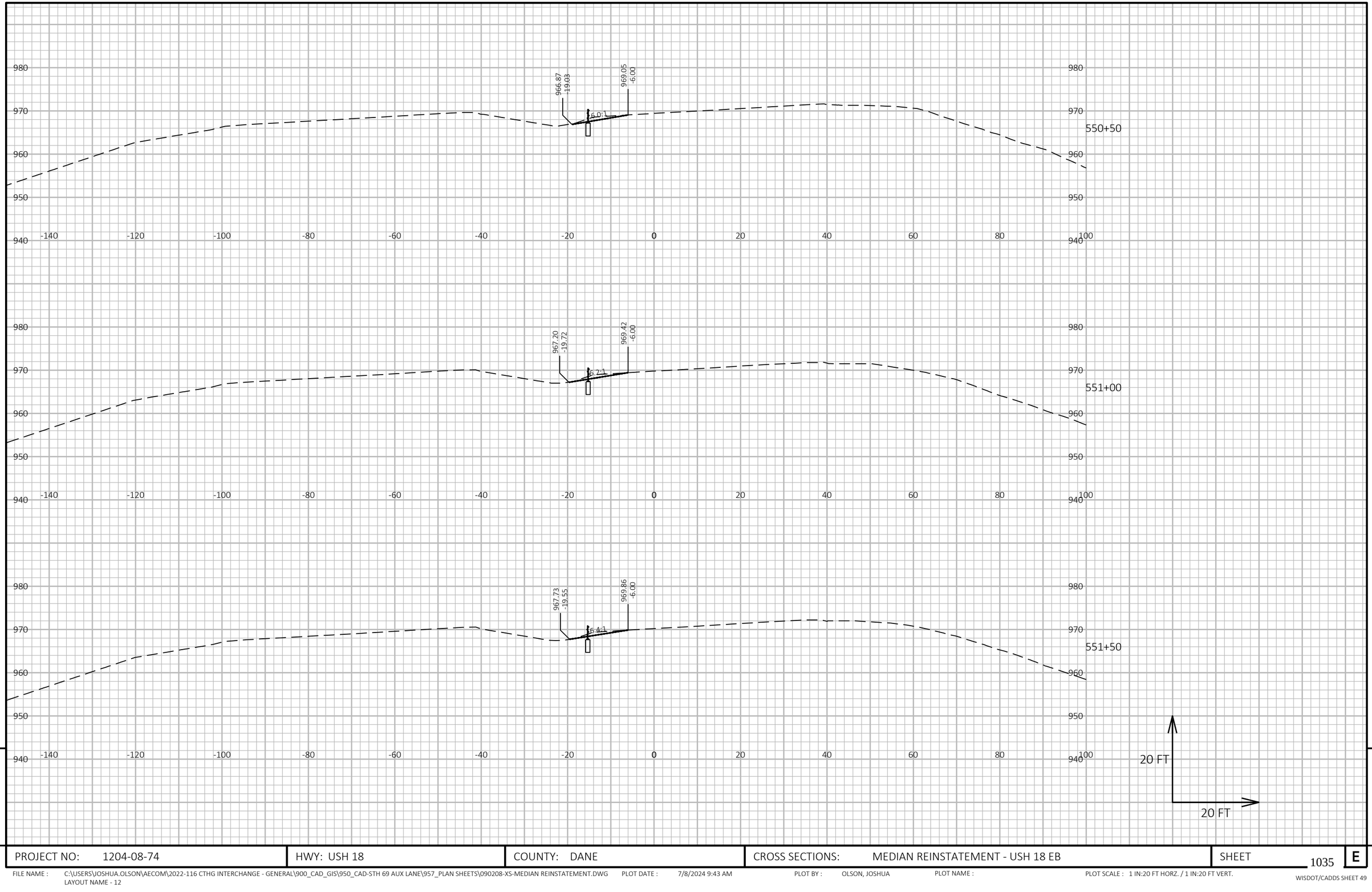
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1034	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 11
PLOT DATE : 7/8/2024 9:41 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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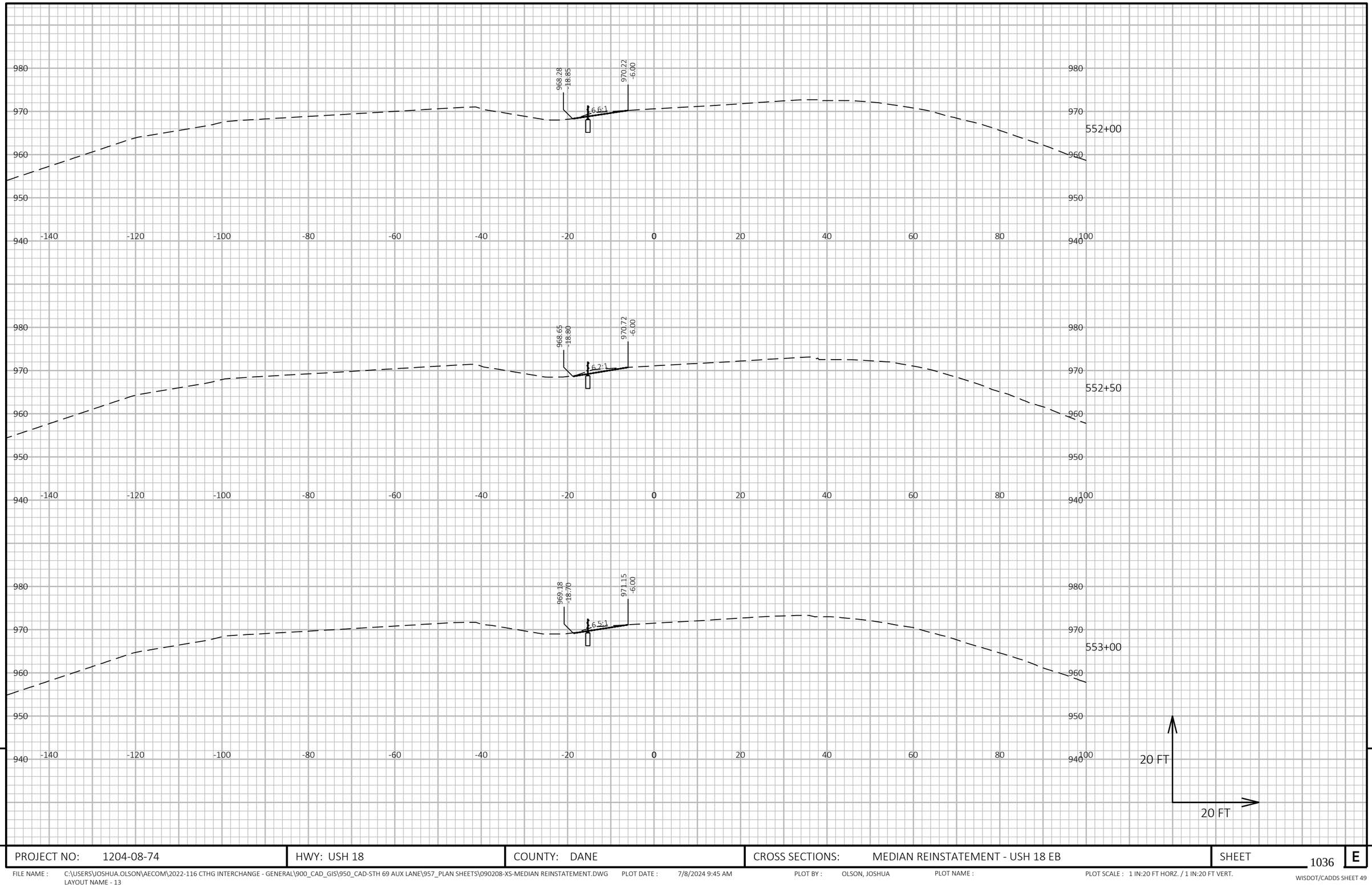
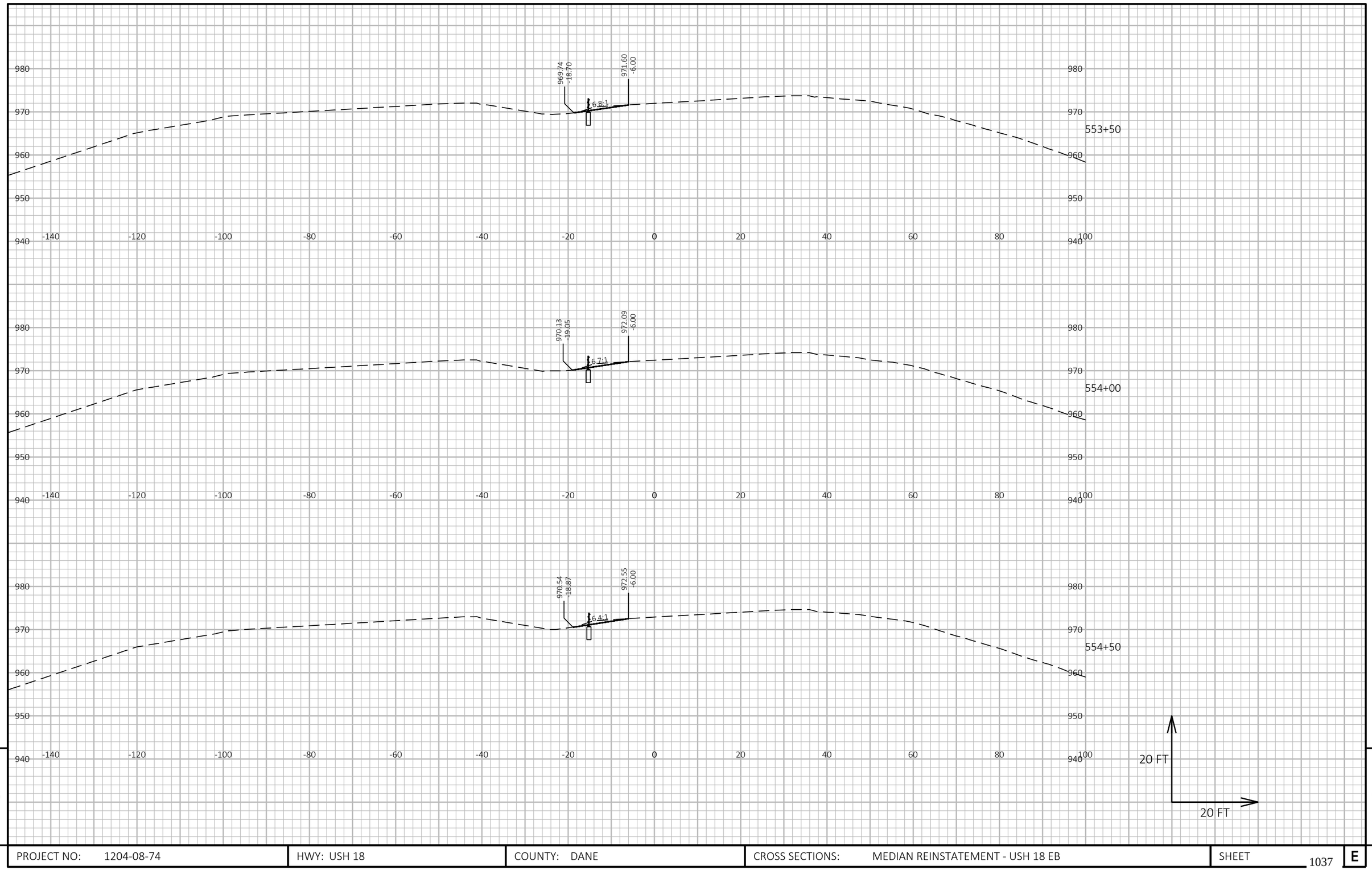
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1035	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 12
PLOT DATE : 7/8/2024 9:43 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1036	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 13
PLOT DATE : 7/8/2024 9:45 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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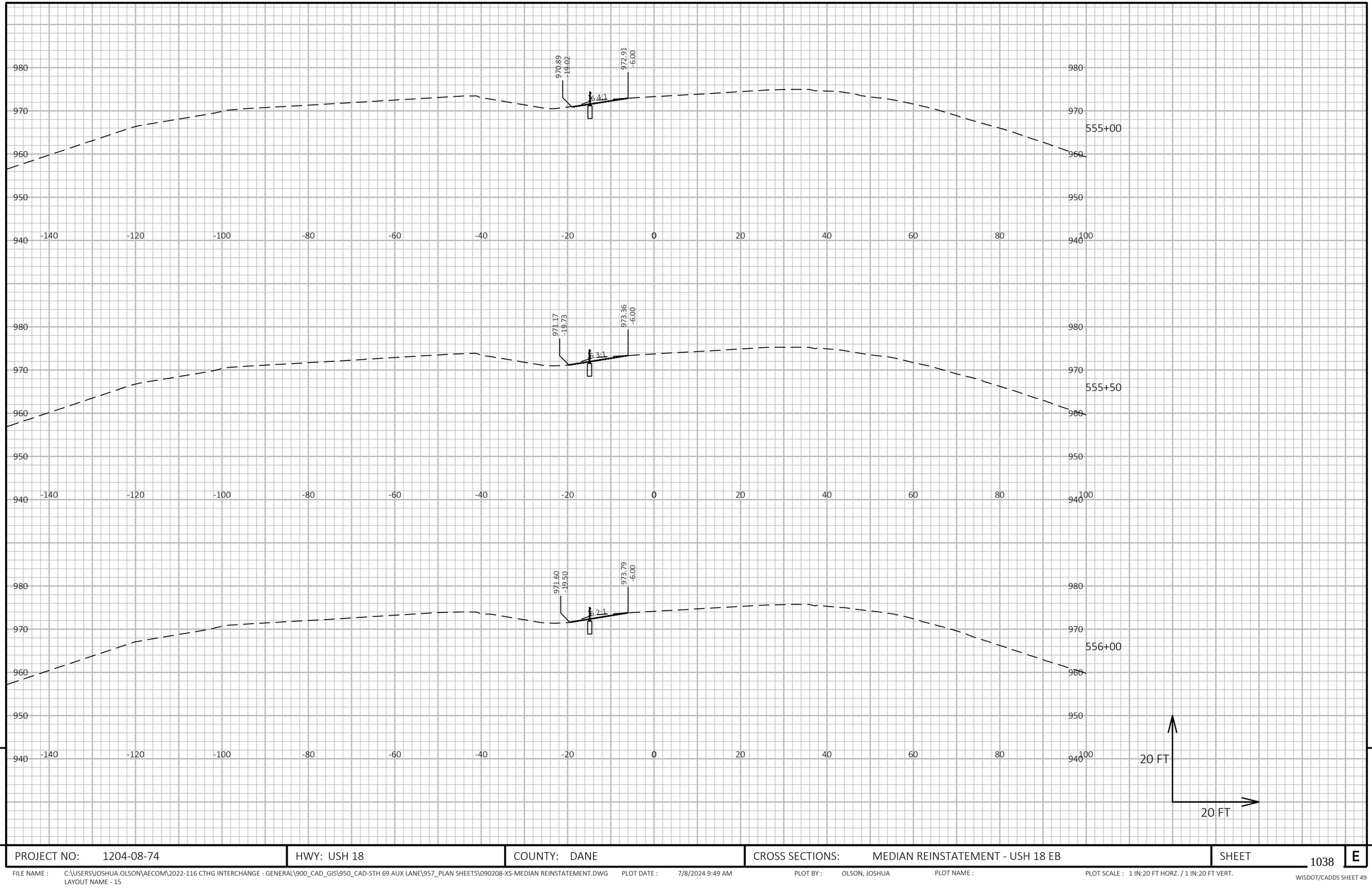
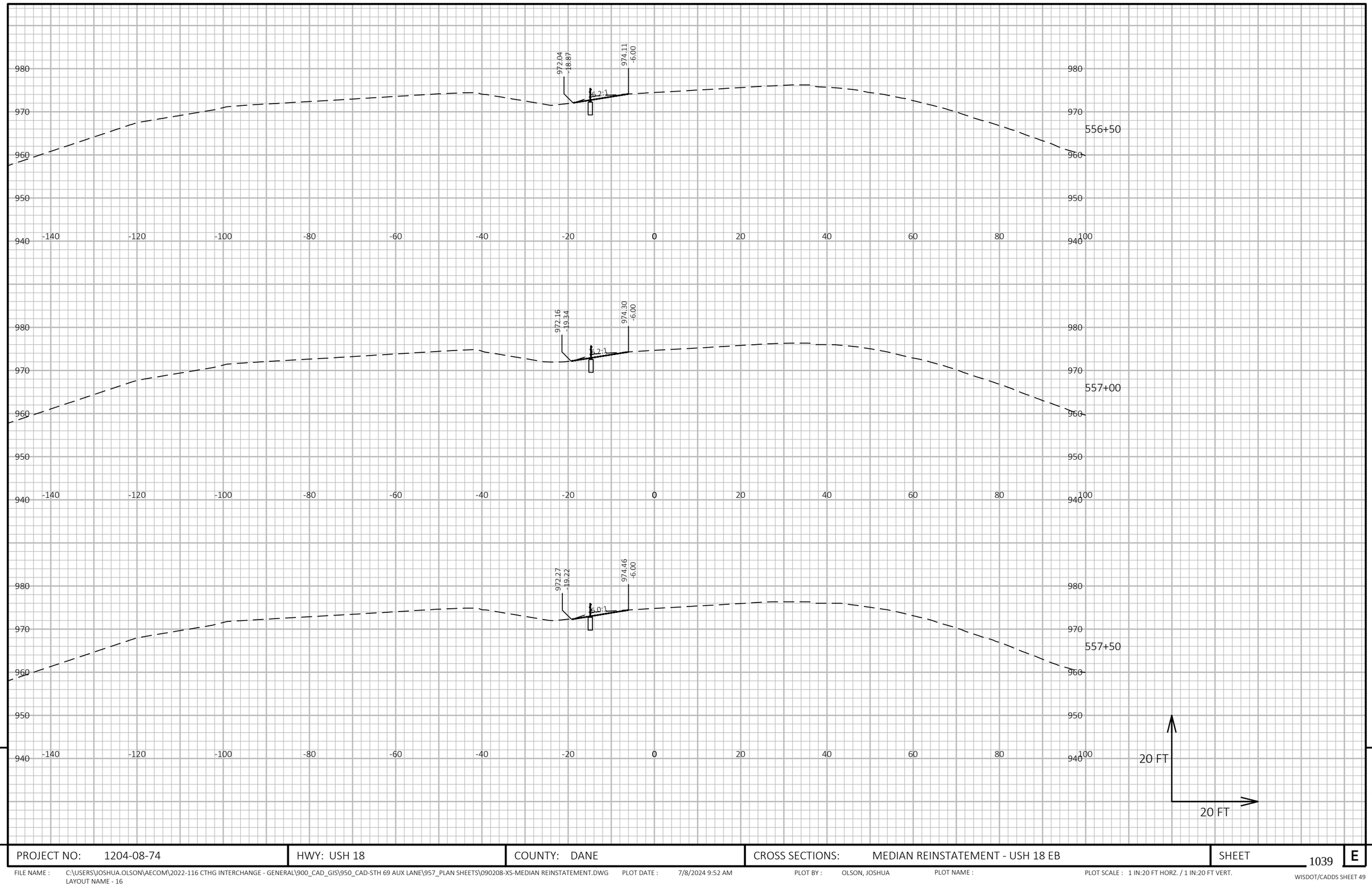
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1037	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 14
PLOT DATE : 7/8/2024 9:47 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1038	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 15
PLOT DATE : 7/8/2024 9:49 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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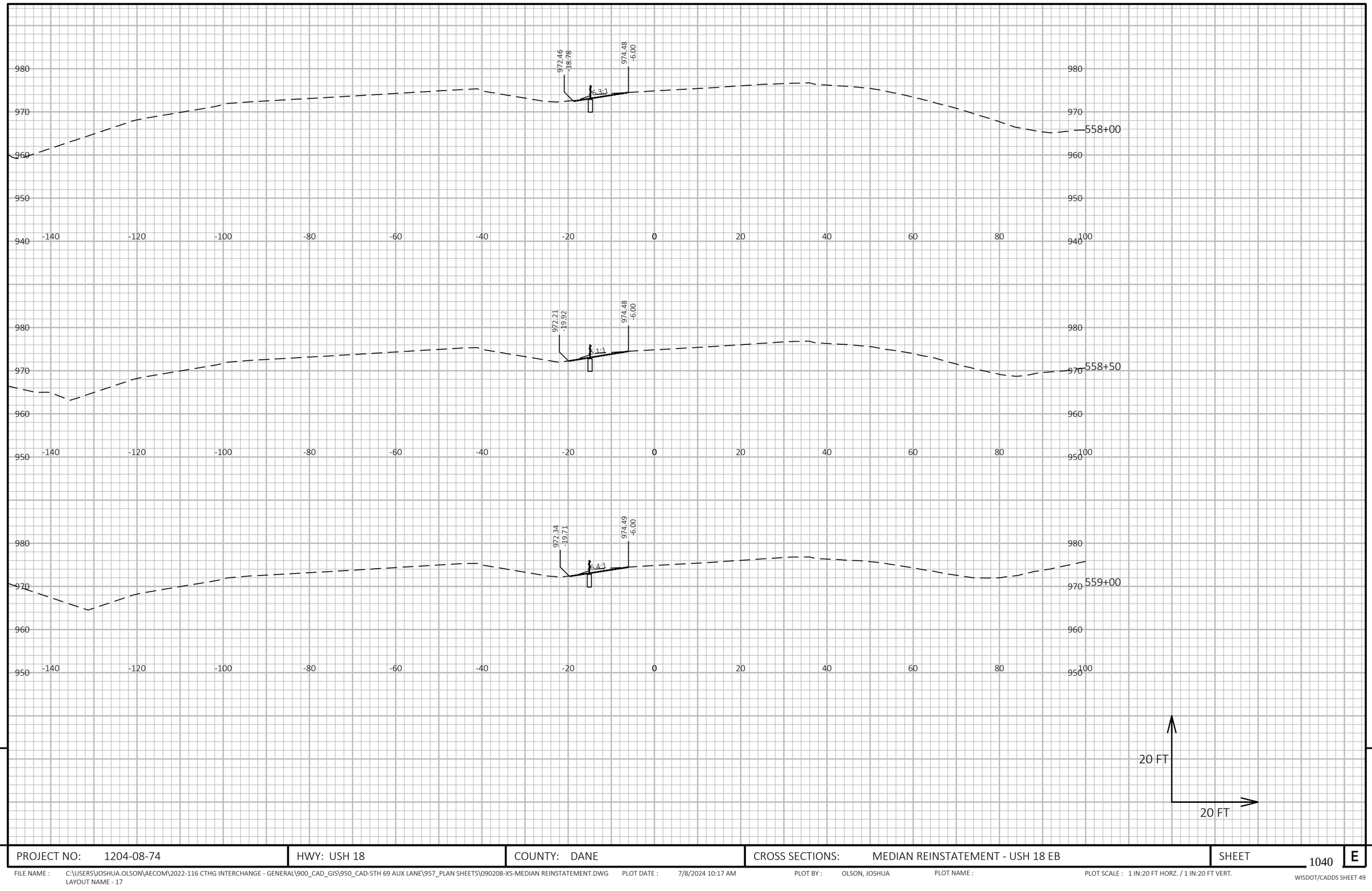
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1039	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 16
PLOT DATE : 7/8/2024 9:52 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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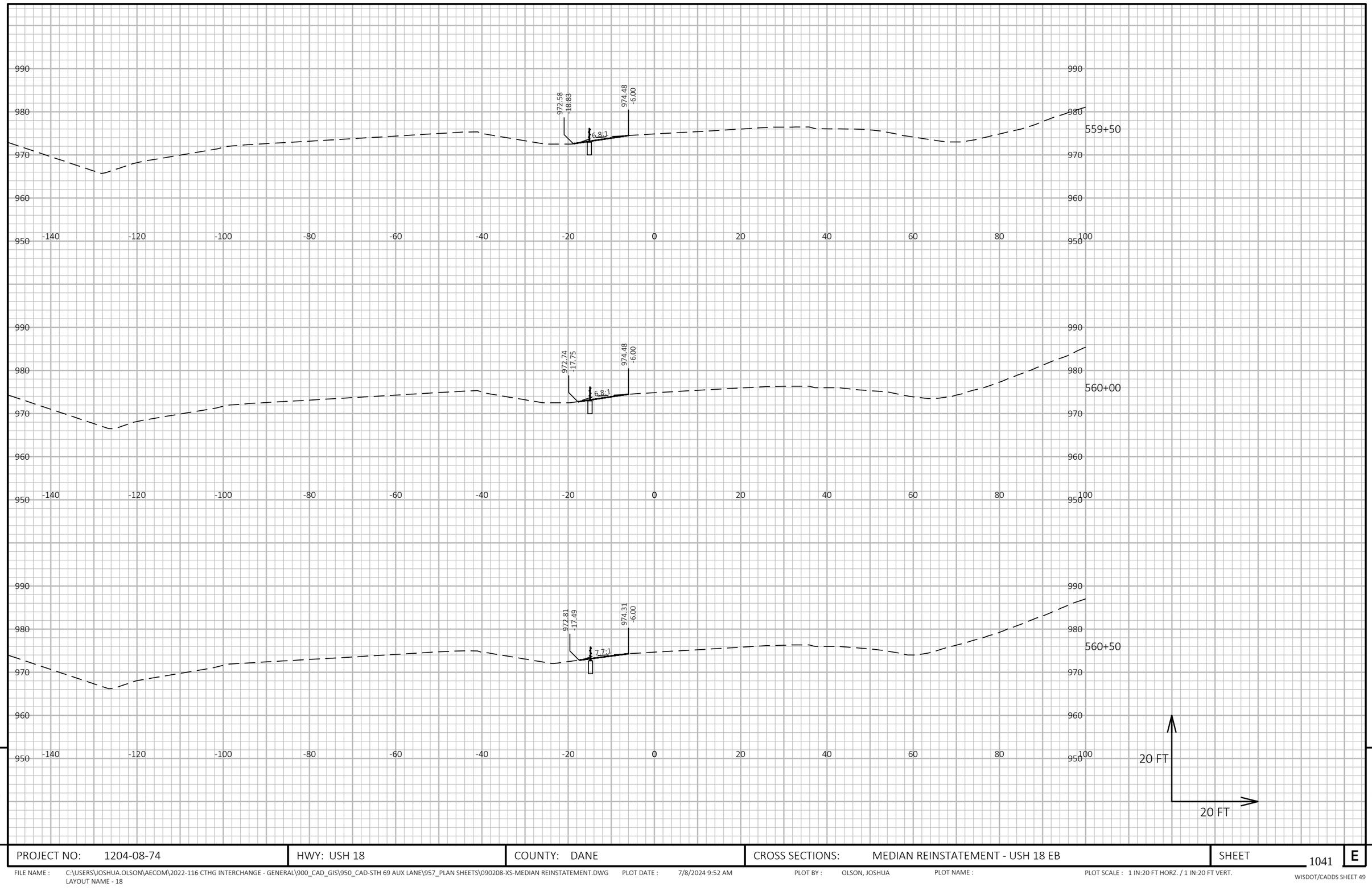
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1040	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 17
PLOT DATE : 7/8/2024 10:17 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1041	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 18
PLOT DATE : 7/8/2024 9:52 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49

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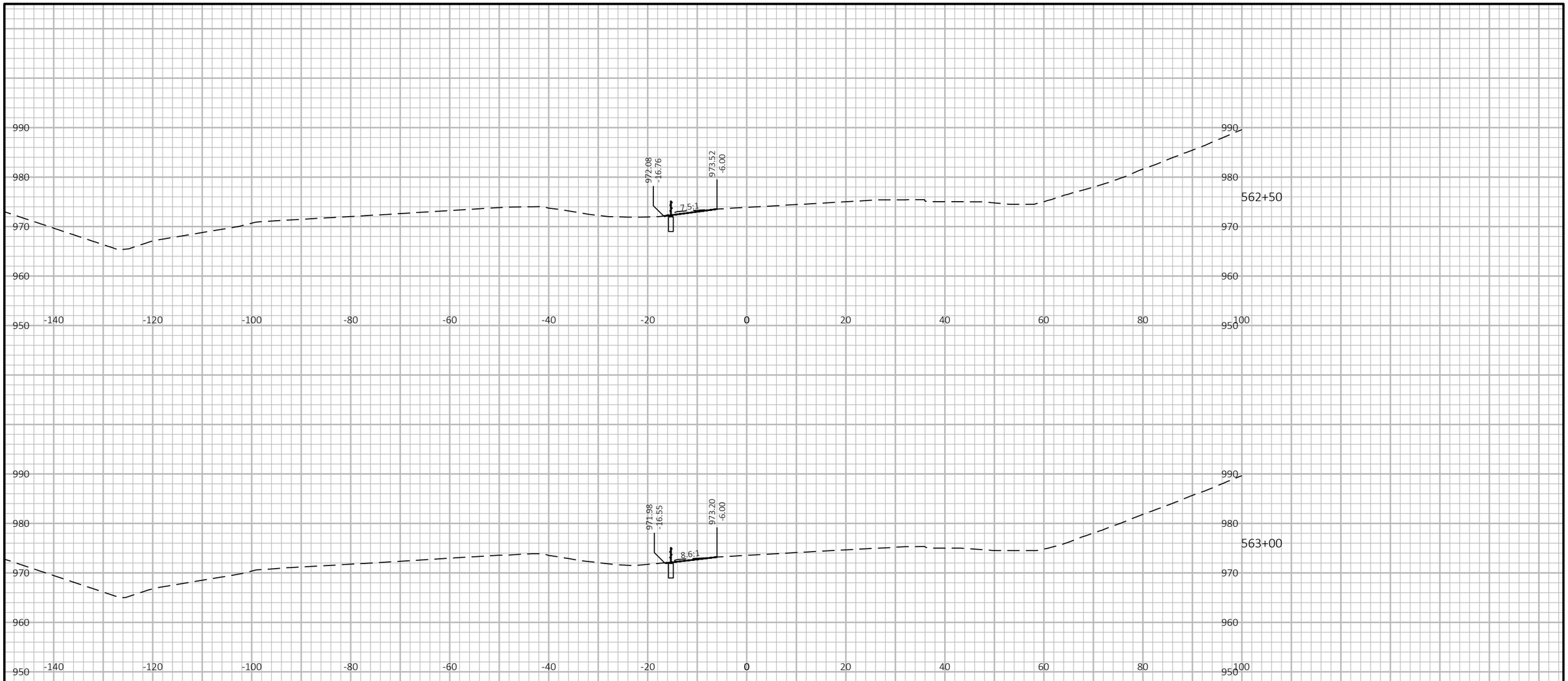
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1042	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 19
PLOT DATE : 7/8/2024 9:52 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



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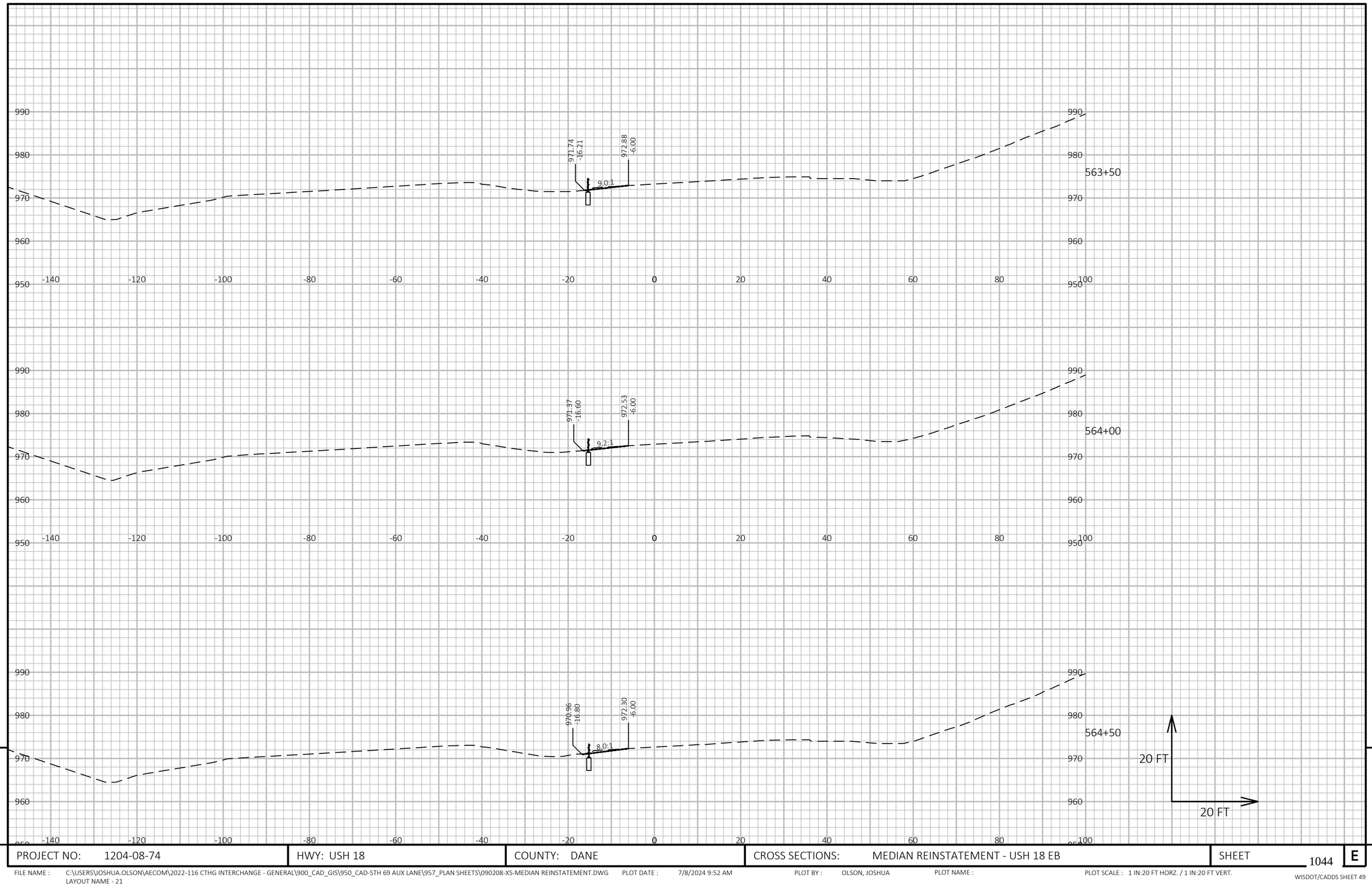
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1043	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG PLOT DATE : 7/8/2024 9:52 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
LAYOUT NAME - 20



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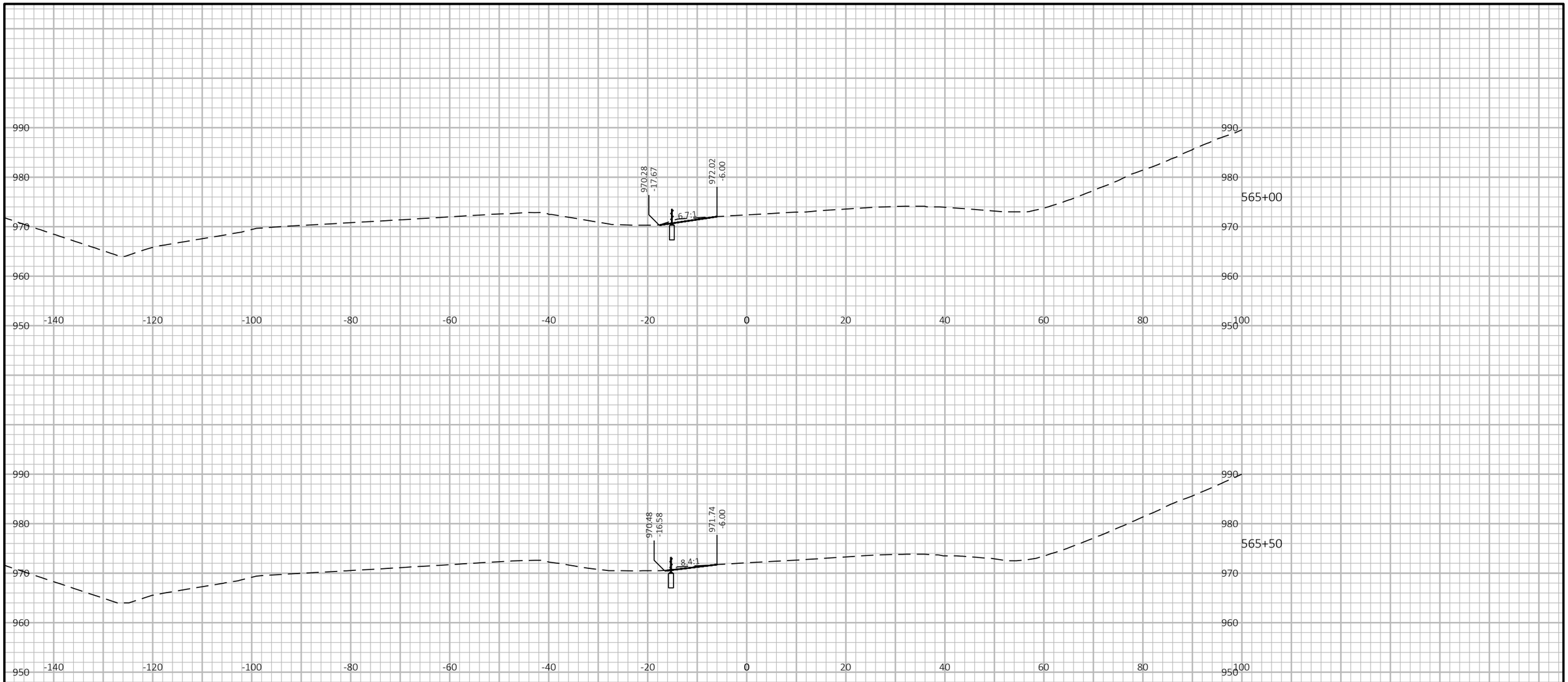
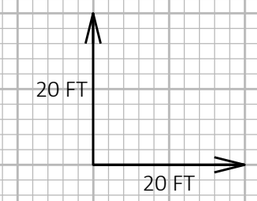
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1044	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 21

PLOT DATE : 7/8/2024 9:52 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49





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PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1045	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG PLOT DATE : 7/8/2024 9:53 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
LAYOUT NAME - 22

WISDOT/CADDS SHEET 49

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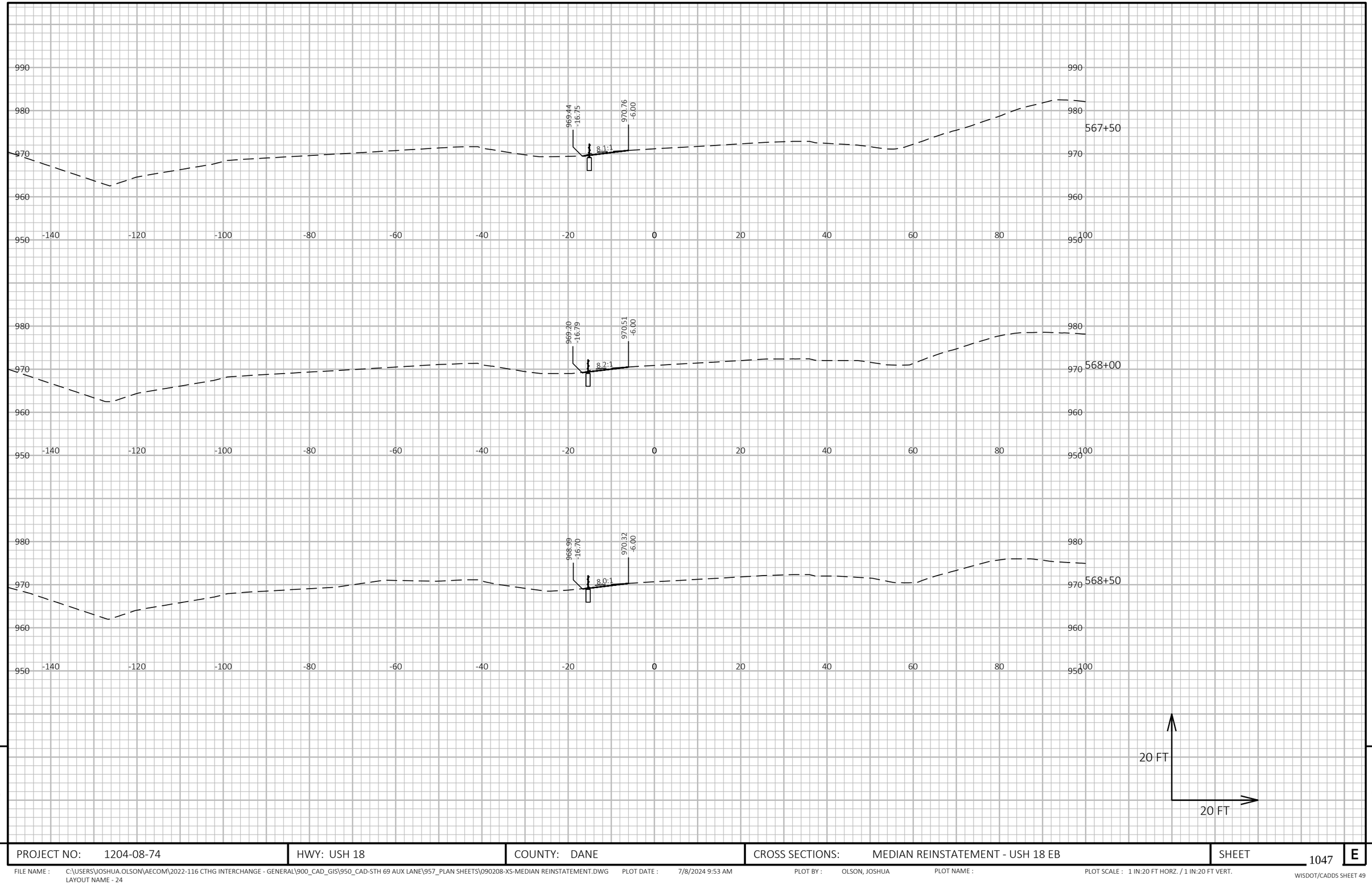
9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1046	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 23
PLOT DATE : 7/8/2024 9:53 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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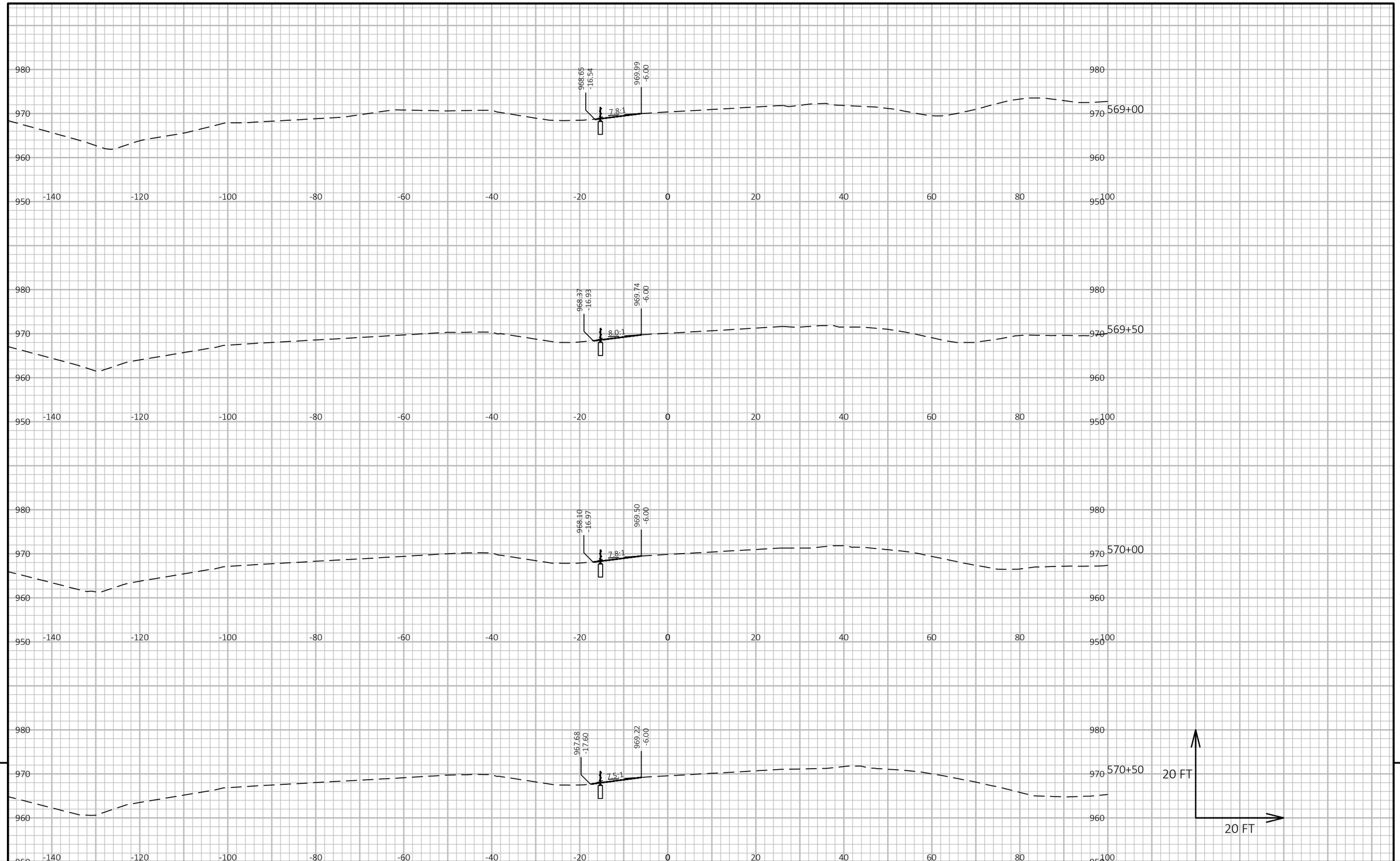
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1047	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 24

PLOT DATE : 7/8/2024 9:53 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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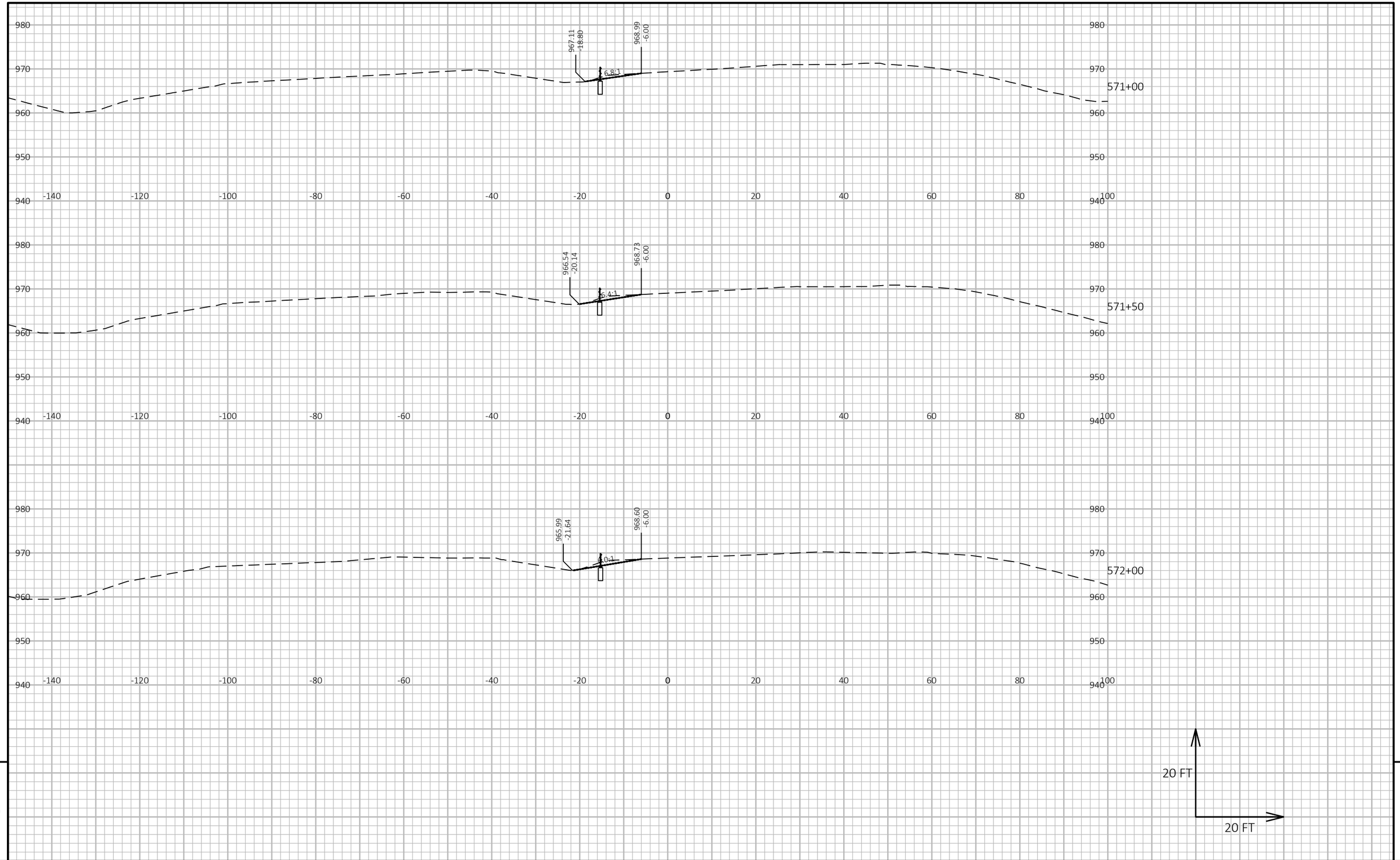
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1048	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 25

PLOT DATE : 7/8/2024 9:53 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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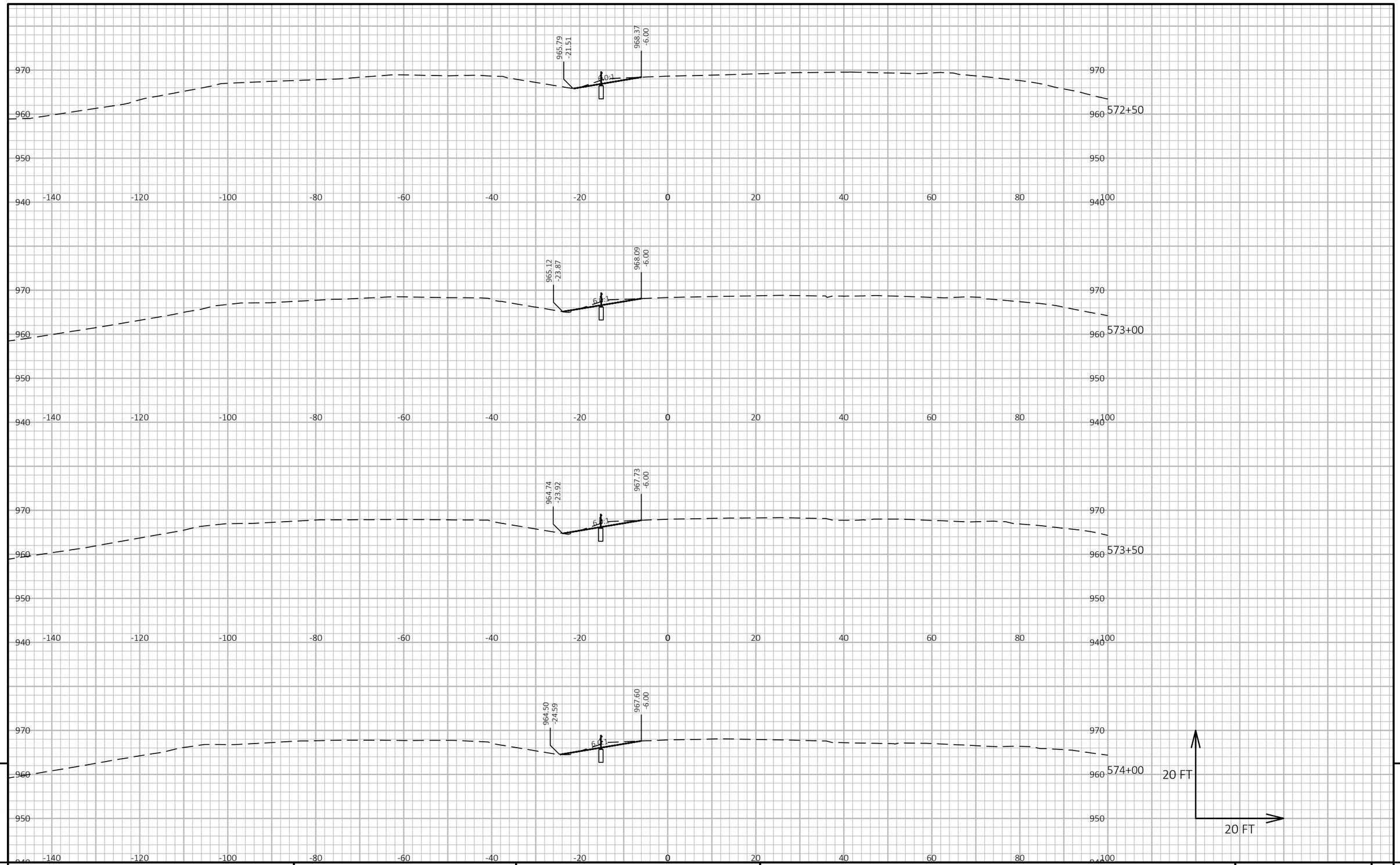
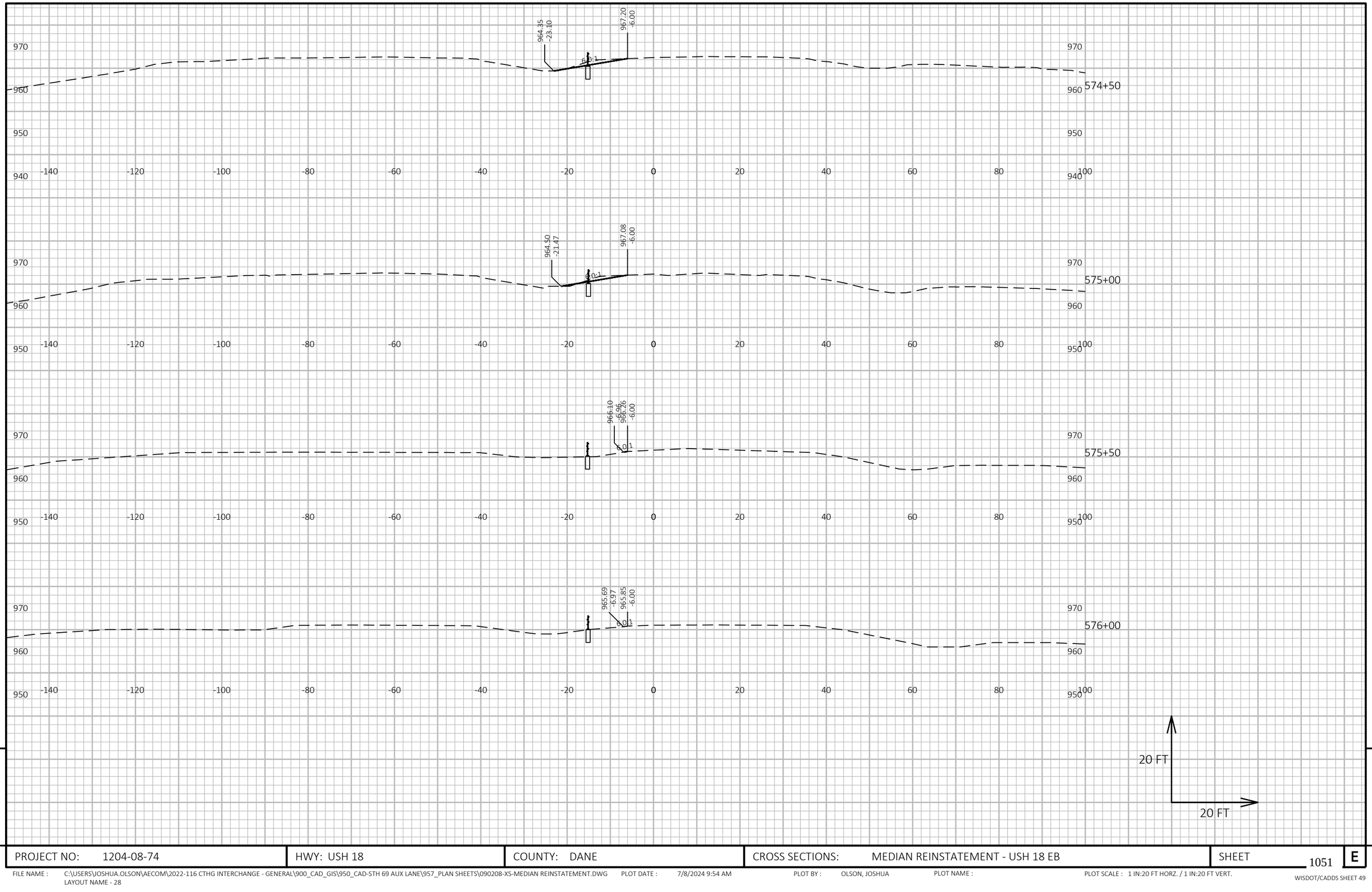
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1049	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 26
PLOT DATE : 7/8/2024 9:53 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1050 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 27
PLOT DATE : 7/8/2024 9:53 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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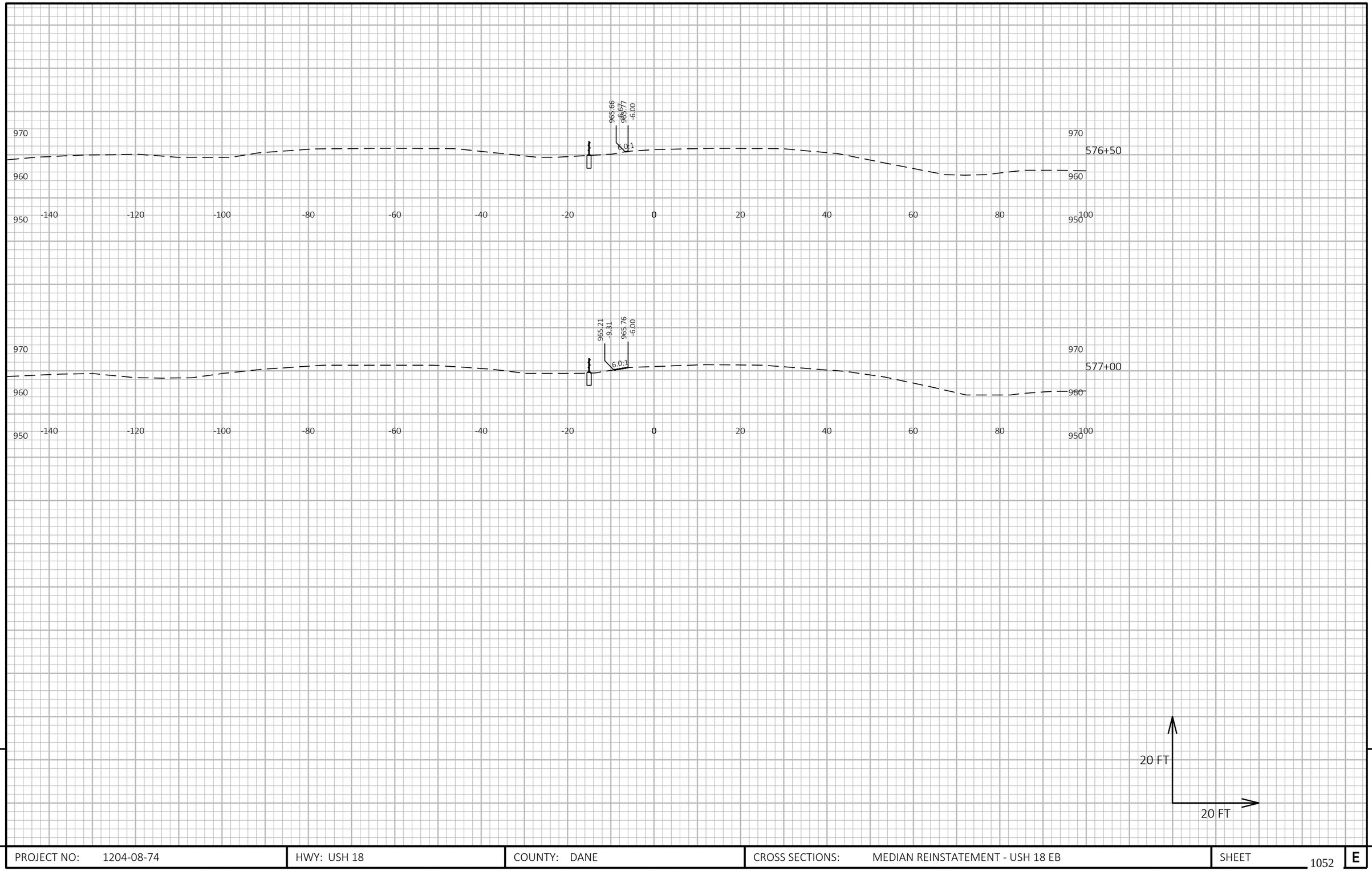
PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1051	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 28
PLOT DATE : 7/8/2024 9:54 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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9

PROJECT NO: 1204-08-74	HWY: USH 18	COUNTY: DANE	CROSS SECTIONS: MEDIAN REINSTATEMENT - USH 18 EB	SHEET 1052	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\2022-116 CTHG INTERCHANGE - GENERAL\900_CAD_GIS\950_CAD-STH 69 AUX LANE\957_PLAN SHEETS\090208-XS-MEDIAN REINSTATEMENT.DWG
LAYOUT NAME - 29
PLOT DATE : 7/8/2024 9:54 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov