

EAU MAY 2016

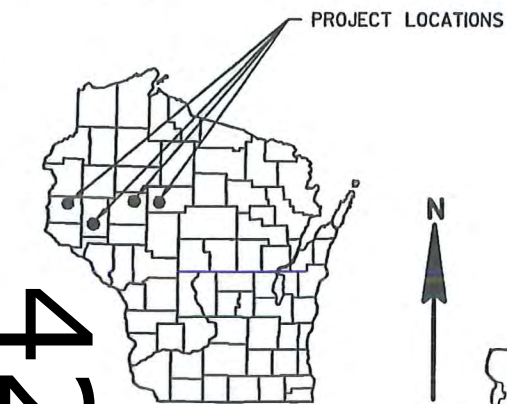
PROJECT ID: 1000-08-89

COUNTY: NORTHWEST REGION WIDE

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 = 116



DESIGN DESIGNATION

A.A.D.T.	= NA
A.A.D.T.	= NA
D.H.V.	= NA
D.D.	= NA
T.	= NA
DESIGN SPEED	= NA
ESALS	= NA

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	---
LIMITED HIGHWAY EASEMENT	---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	300'±
REFERENCE LINE	---
EXISTING CULVERT	---
PROPOSED CULVERT (Box or Pipe)	---
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	---
WOODED OR SHRUB AREA	---

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	---
CULVERT (Profile View)	---
UTILITIES	
ELECTRIC	---
FIBER OPTIC	---
GAS	---
SANITARY SEWER	---
STORM SEWER	---
TELEPHONE	---
WATER	---
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

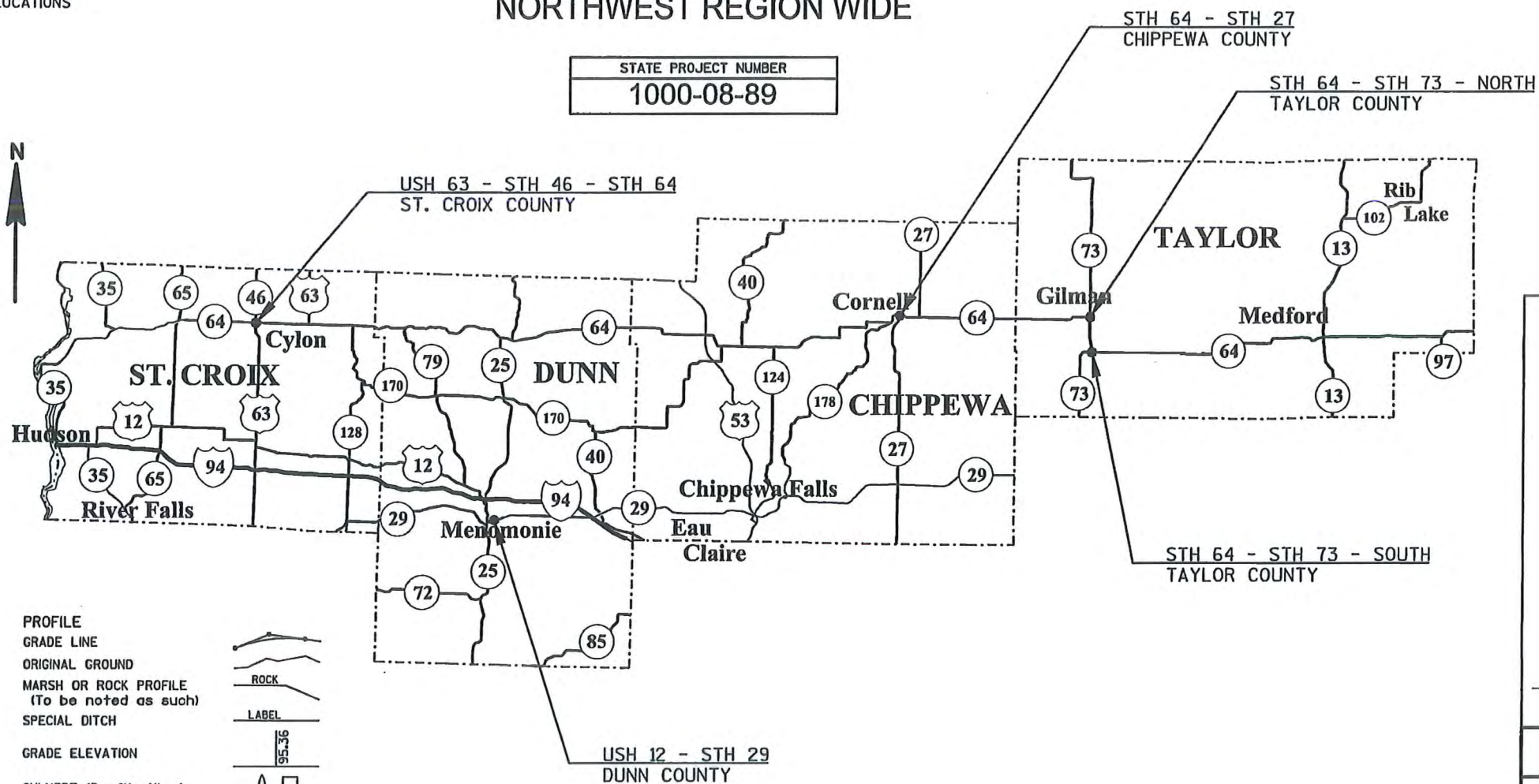
NW REGION, VAR HWY/FREIGHT MITIGATION

VARIOUS LOCATIONS - SOUTH

VAR HWY

NORTHWEST REGION WIDE

STATE PROJECT NUMBER  
1000-08-89



LAYOUT  
SCALE 0 12 MILES  
TOTAL NET LENGTH OF CENTERLINE = 0.00

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, ST. CROIX, DUNN, CHIPPEWA, AND TAYLOR COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1000-08-89		

ORIGINAL PLANS PREPARED BY



1-29-16 (Date) Ben C. Wilkinson (Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	FLEMING, ANDRE & ASSOCIATES
Designer	GHD INC.
Project Manager	NICOLE PASSUELLO
Regional Examiner	CHRIS KOSKI
Regional Supervisor	MARK FLOEDERER

APPROVED FOR THE DEPARTMENT  
DATE: 1/29/16 (Signature)

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
	VERTICAL CURVE

DESIGN CONTACTS

BEN WILKINSON  
GHD INC.  
5325 WALL ST, SUITE 2305  
MADISON, WI 53718  
(608 )216-2057  
BEN.WILKINSON@GHD.COM

NICOLE PASSUELLO  
WISDOT NW REGION  
718 W CLAIRMONT  
EAU CLAIRE, WI 54701  
(715)836-3920  
NICOLE.PASSUELLO@DOT.WI.GOV

WISCONSIN DNR CONTACT

AMY CRONK  
DNR NORTHERN REGION HQ  
810 W. MAPLE STREET  
SPOONER, WI 54801  
(715)-635-4229  
AMY.CRONK@WISCONSIN.GOV

GENERAL NOTES

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK.

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

THE LOCATIONS OF EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

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

DISTURBED AREAS WITHIN THE RIGHT OF WAY, SHALL BE TOPSOILED, FERTILIZED, AND SEEDED AS DIRECTED BY THE ENGINEER AND SHOWN IN THE QUANTITIES.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING PAVEMENTS AT REMOVAL LIMITS.

EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY GRUBBING OR TOPSOIL STRIPPING OPERATIONS.

CURB & GUTTER RADII AND ELEVATIONS ARE MEASRUED FROM FACE OF CURB AND CURB FLANGE, RESPECTIVELY.

UTILITY CONTACTS

USH 63-STH46-STH64 (ST. CROIX COUNTY)

TERRY DORR  
FRONTIER COMMUNICATIONS ST. CROIX LLC-  
COMMUNICATIONS LINE  
154 E 2ND STREET  
P.O. BOX 446  
NEW RICHMOND, WI 54017  
(715) 243-7014 MOBILE: (715) 781-1488  
TERRY.DORR@FRONTIERCORP.COM

ROB DOOLEY  
ST. CROIX ELECTRIC COOPERATIVE -  
ELECTRICITY  
1925 RIDGEWAY STREET  
P.O. BOX 160  
HAMMOND, WI 54015-5039  
(715) 796-7000 MOBILE: (715) 781-2295  
ROBDOO@SCEC.NET

USH 12-STH 29 (DUNN COUNTY)

GREG ADAMS (CEDAR CORPORATION)  
ON BEHALF OF  
CITY OF MENOMONIE  
SANITARY SEWER, ELECTRICITY, WATER  
604 WILSON AVENUE  
MENOMONIE, WI 54751-2734  
(715) 235-9081 MOBILE: (715) 308-6552  
GREG.ADAMS@CEDARCORP.COM

MEGAN BOLDIG  
XCEL ENERGY - GAS  
320 HELLER ROAD  
MENOMONIE, WI 54751  
(715) 232-7412  
MEGAN.BOLDIG@XCELENERGY.COM

XCEL ENERGY  
24-HOUR EMERGENCY (GAS)  
800-895-2999

STH 64-STH 27 (CHIPPEWA COUNTY)

JOHN WESTABY  
CITY OF CORNELL  
SANITARY SEWER, ELECTIRCITY, WATER  
P.O. BOX 796  
CORNELL, WI 54732-0796  
(715) 239-3710  
CORNELLUTILITYDEPT@CENTURYTEL.NET

LEWIS KNAPP  
WE ENERGIES - GAS  
104 W. SOUTH STREET  
RICE LAKE, WI 54868  
(715) 234-9605 MOBILE: (715) 419-2196  
LEWIS.KNAPP@WE-ENERGIES.COM

WE ENERGIES  
24-HOUR EMERGENCY (GAS)  
800-261-5325

STH 64-STH 73 NORTH (TAYLOR COUNTY)  
STH 64-STH 73 SOUTH (TAYLOR COUNTY)

JIM ARQUETTE  
CENTURYLINK - COMMUNICATION LINE  
TELEPHONE USA OF WISCONSIN, LLC  
SHELDON, WI 54766  
(715) 452-5168 MOBILE: (715) 563-8295  
JIM.ARQUETTE@CENTURYLINK.COM

KURT CHILDS  
DAIRYLAND POWER COOPERATIVE -  
ELECTRICITY  
3200 EAST AVENUE SOUTH  
P.O. BOX 817  
LA CROSSE, WI 54602  
(608) 788-4000  
KDC@DAIRYNET.COM

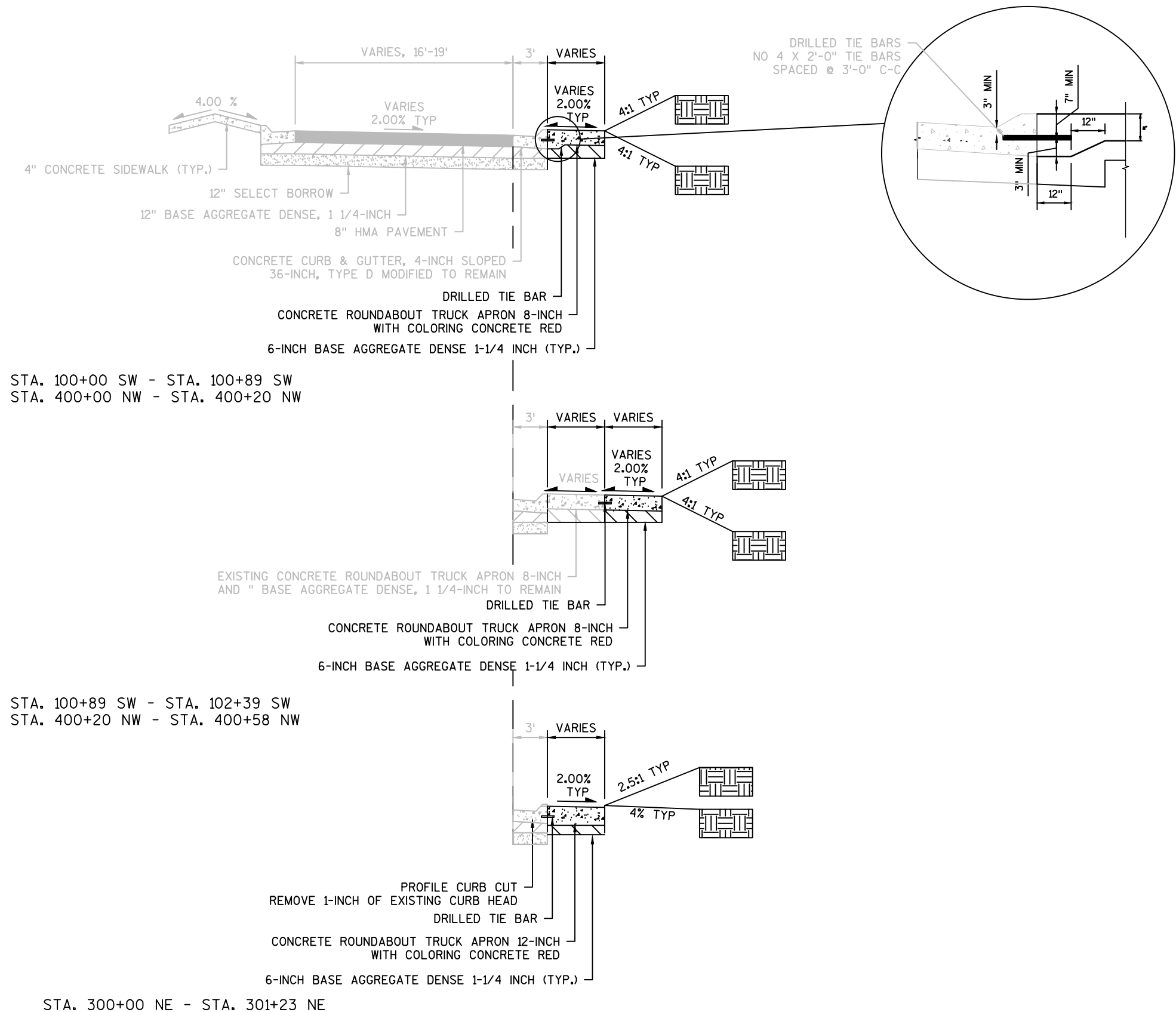
HANK LEW  
JUMP RIVER ELECTRIC COOPERATIVE -  
ELECTRICITY  
1102 WEST 9TH STREET NORTH  
P.O. BOX 99  
LADYSMITH, WI 54848  
(715) 532-5524  
HLEW@JREC.NET



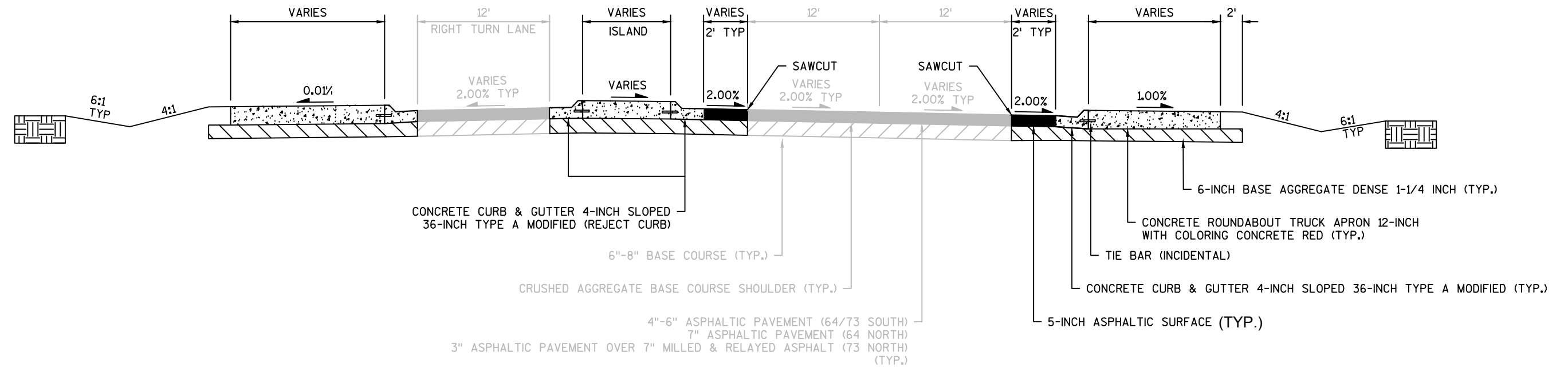
Dial 811 or (800)242-8511

www.DiggersHotline.com

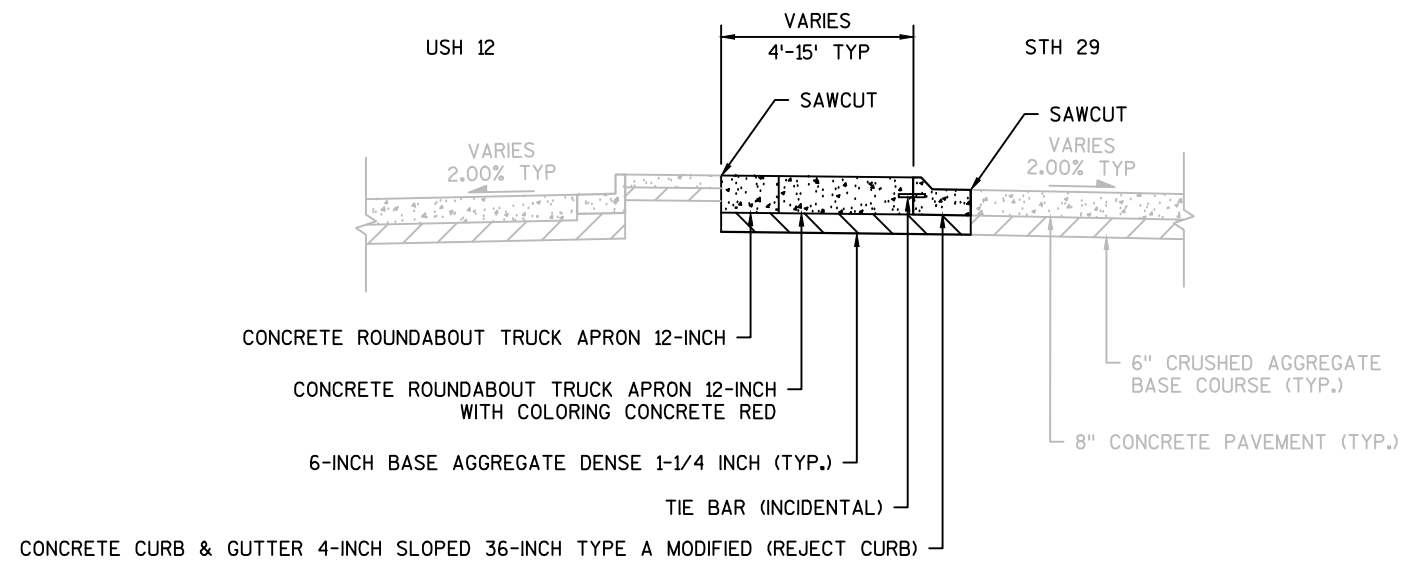




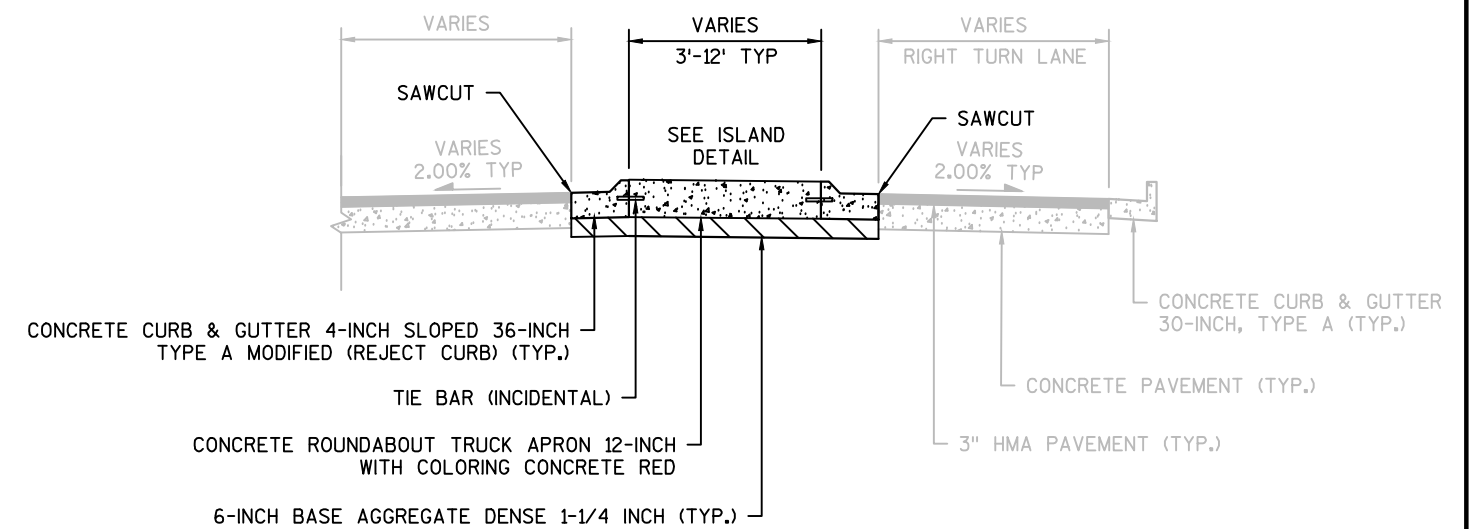
TYPICAL SECTION  
USH 63/STH 46/STH 64



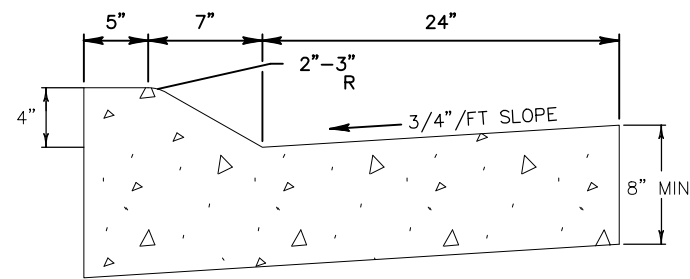
TYPICAL SECTION  
STH 64/STH 73



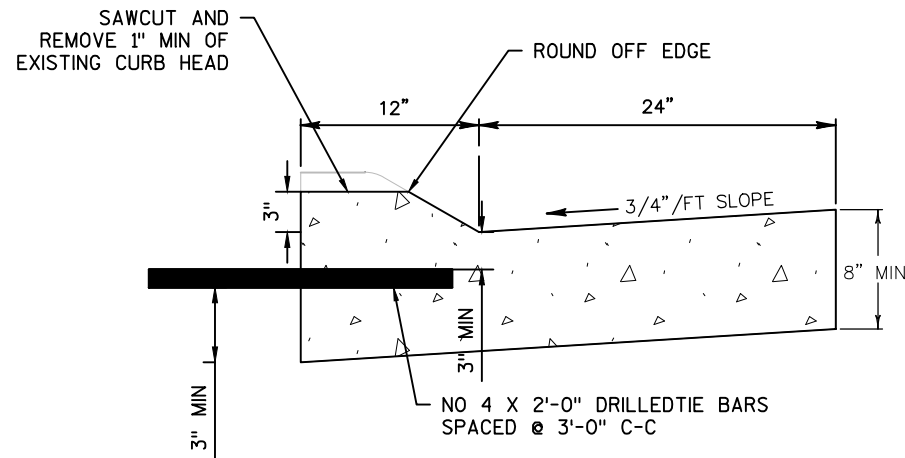
TYPICAL SECTION  
USH 12/STH 29



TYPICAL SECTION  
STH 27/STH 64



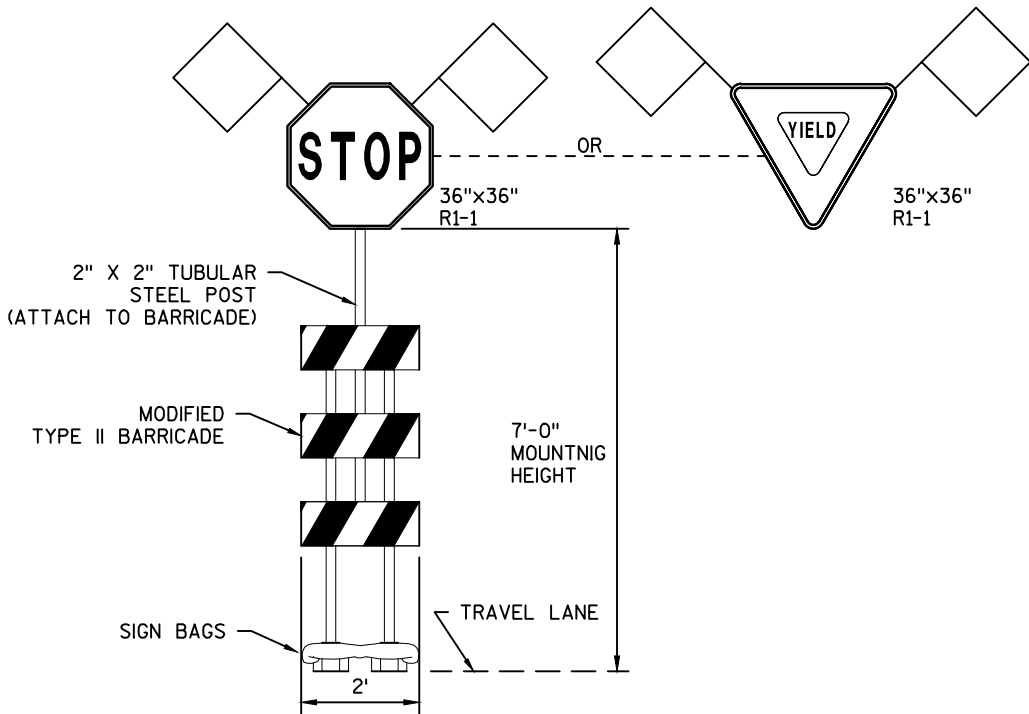
DETAIL FOR CONCRETE CURB & GUTTER,  
4-INCH SLOPED 36-INCH TYPE A MODIFIED



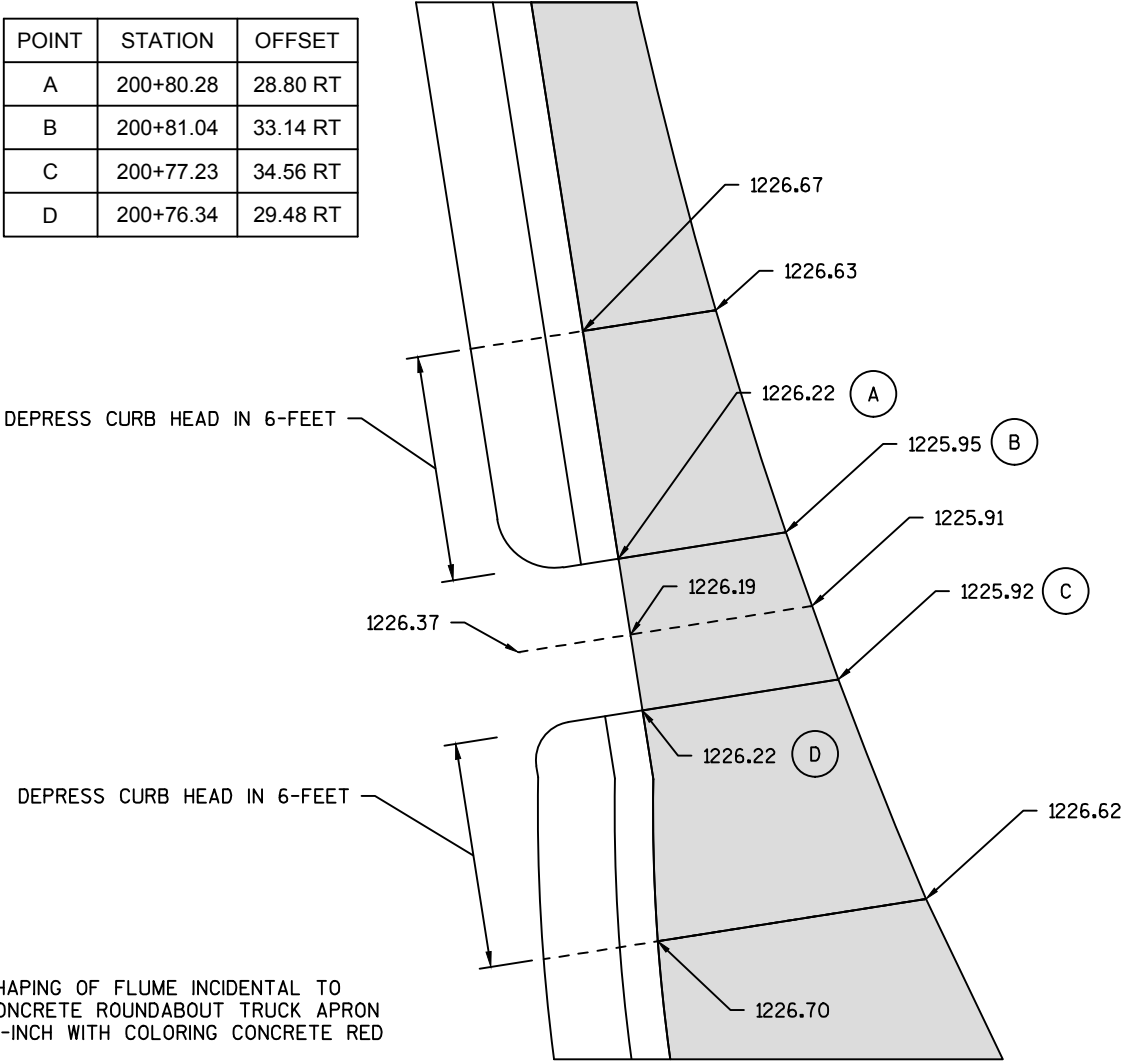
DETAIL FOR PROFILE CURB CUT  
FOR EXISTING CONCRETE CURB & GUTTER  
4-INCH SLOPED 36-INCH TYPE A

USH 63-STH 46-STH 64

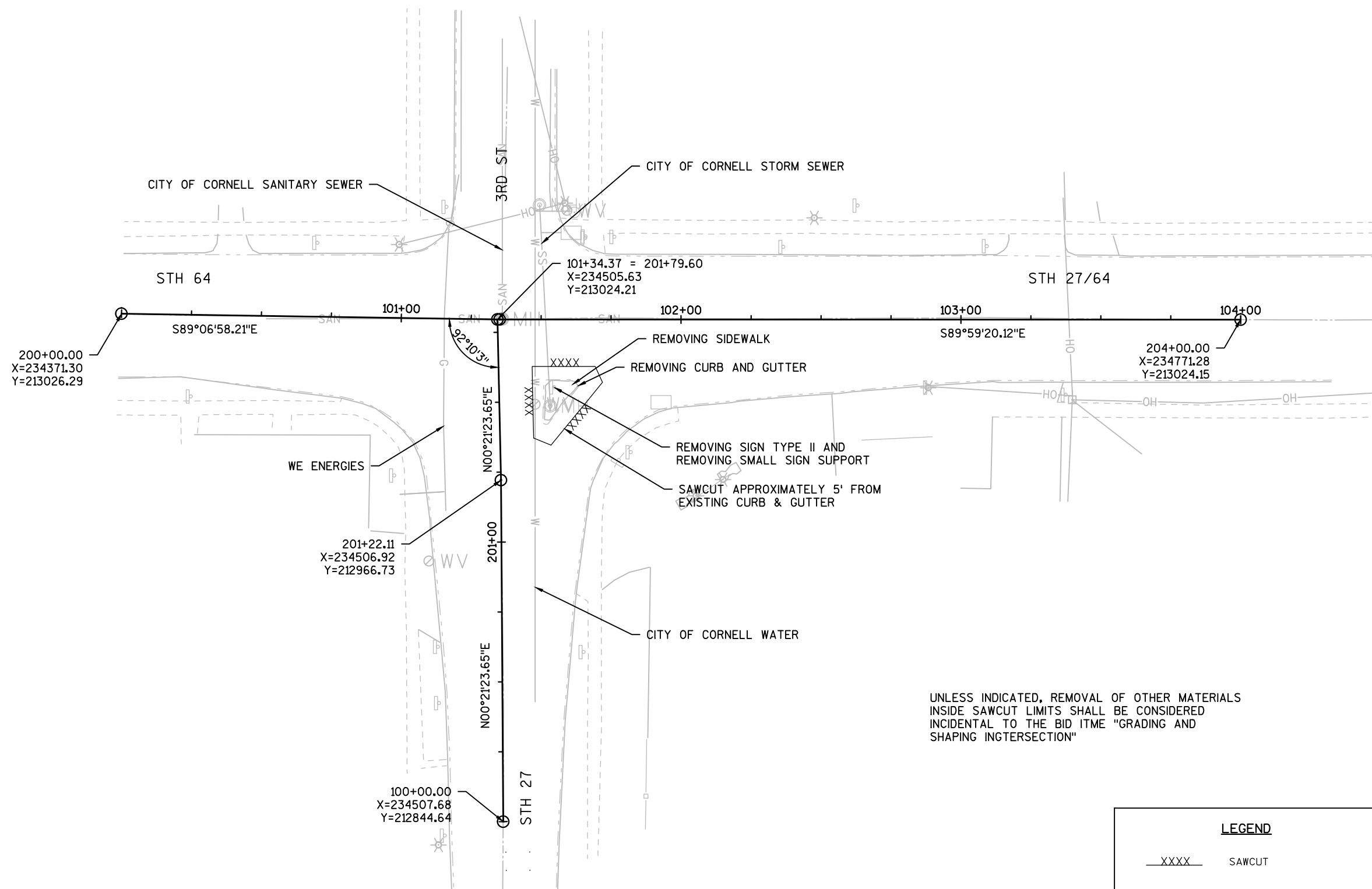
TEMPORARY STOP/YIELD SIGN DETAIL

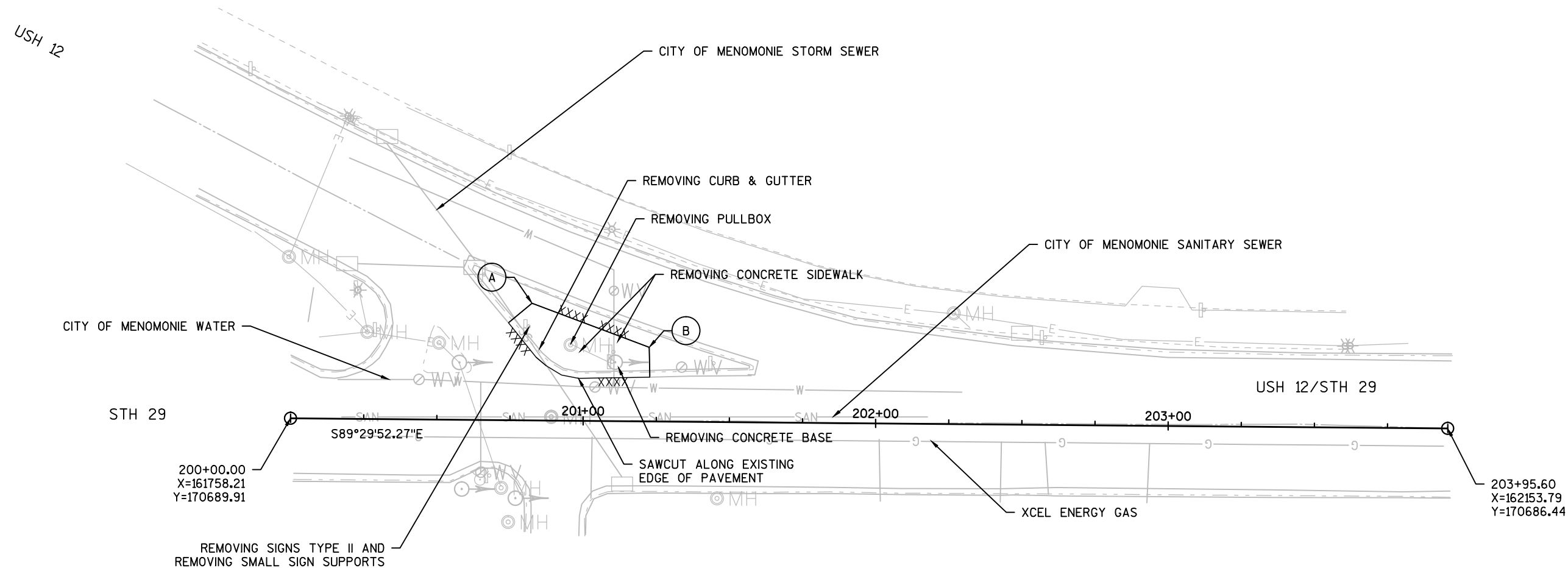


POINT	STATION	OFFSET
A	200+80.28	28.80 RT
B	200+81.04	33.14 RT
C	200+77.23	34.56 RT
D	200+76.34	29.48 RT



FLUME DETAIL  
STH 64 - STH 73 SOUTH

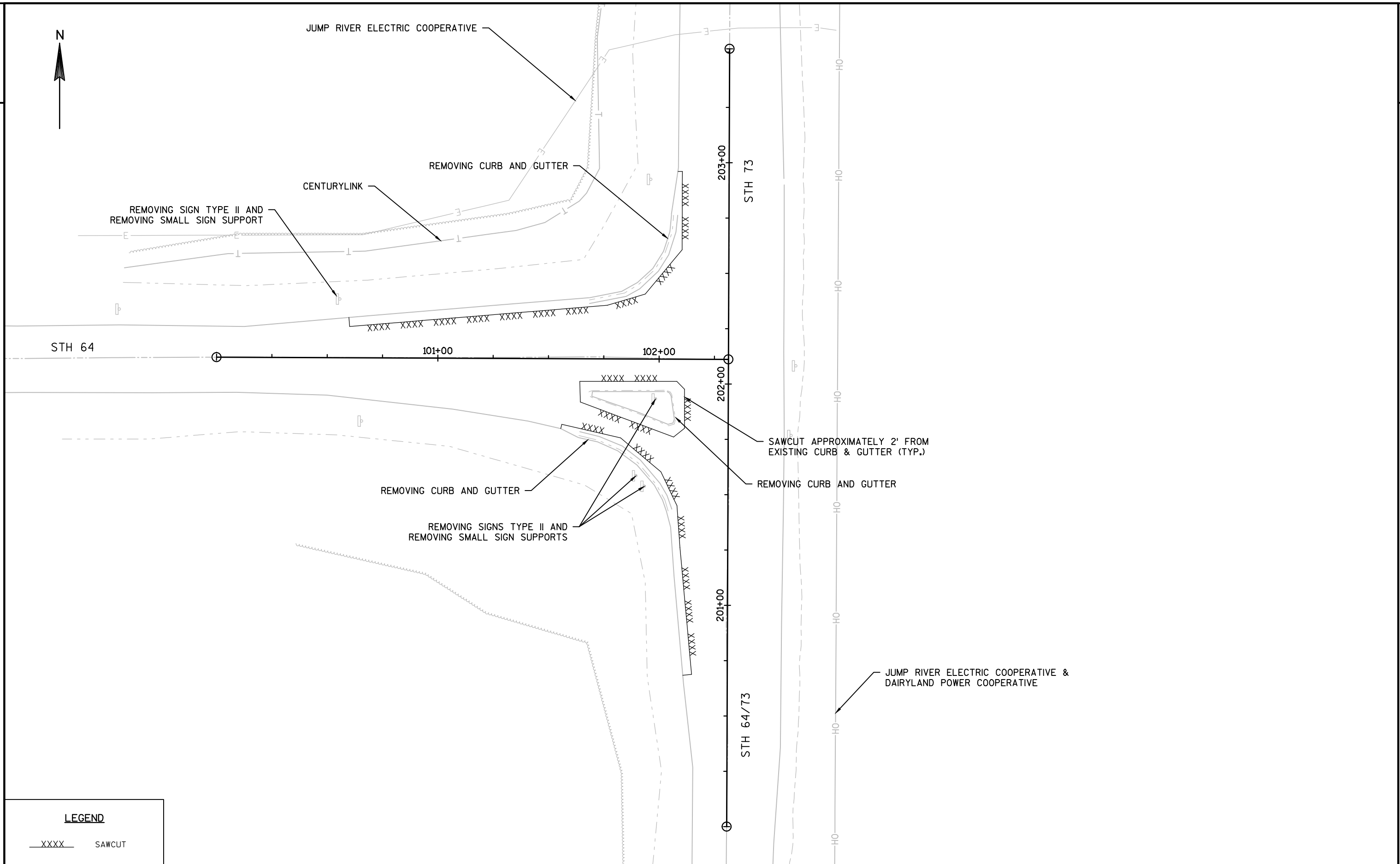




POINT	STATION	OFFSET	X	Y
A	200+82.19	40.05 LT	161840.75	170729.24
B	201+22.38	25.30 LT	161880.80	170714.14

LEGEND

XXXX SAWCUT



LEGEND

XXXX SAWCUT

PROJECT NO:1000-08-89

HWY:STH 64-STH 73-NORTH

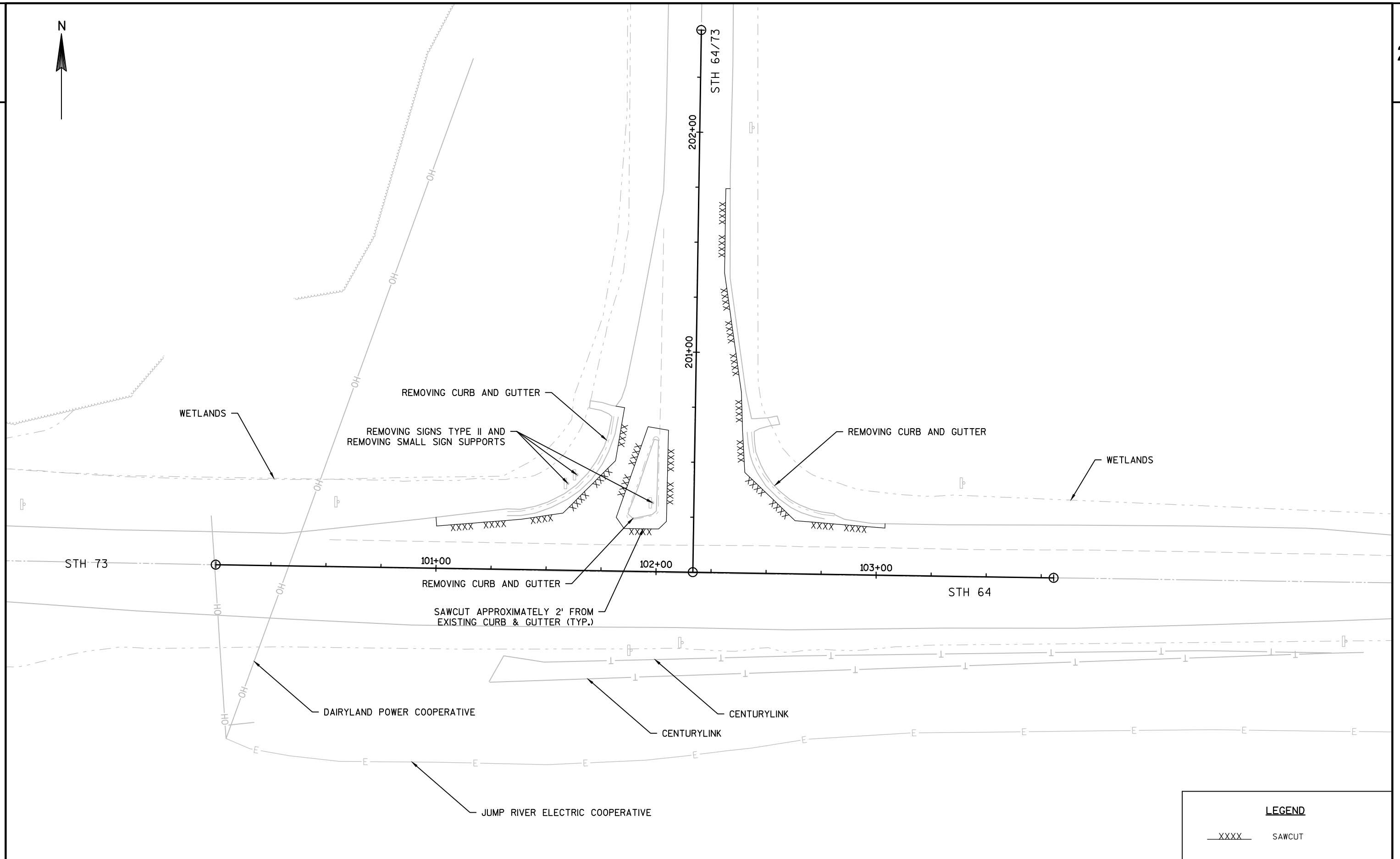
COUNTY:TAYLOR

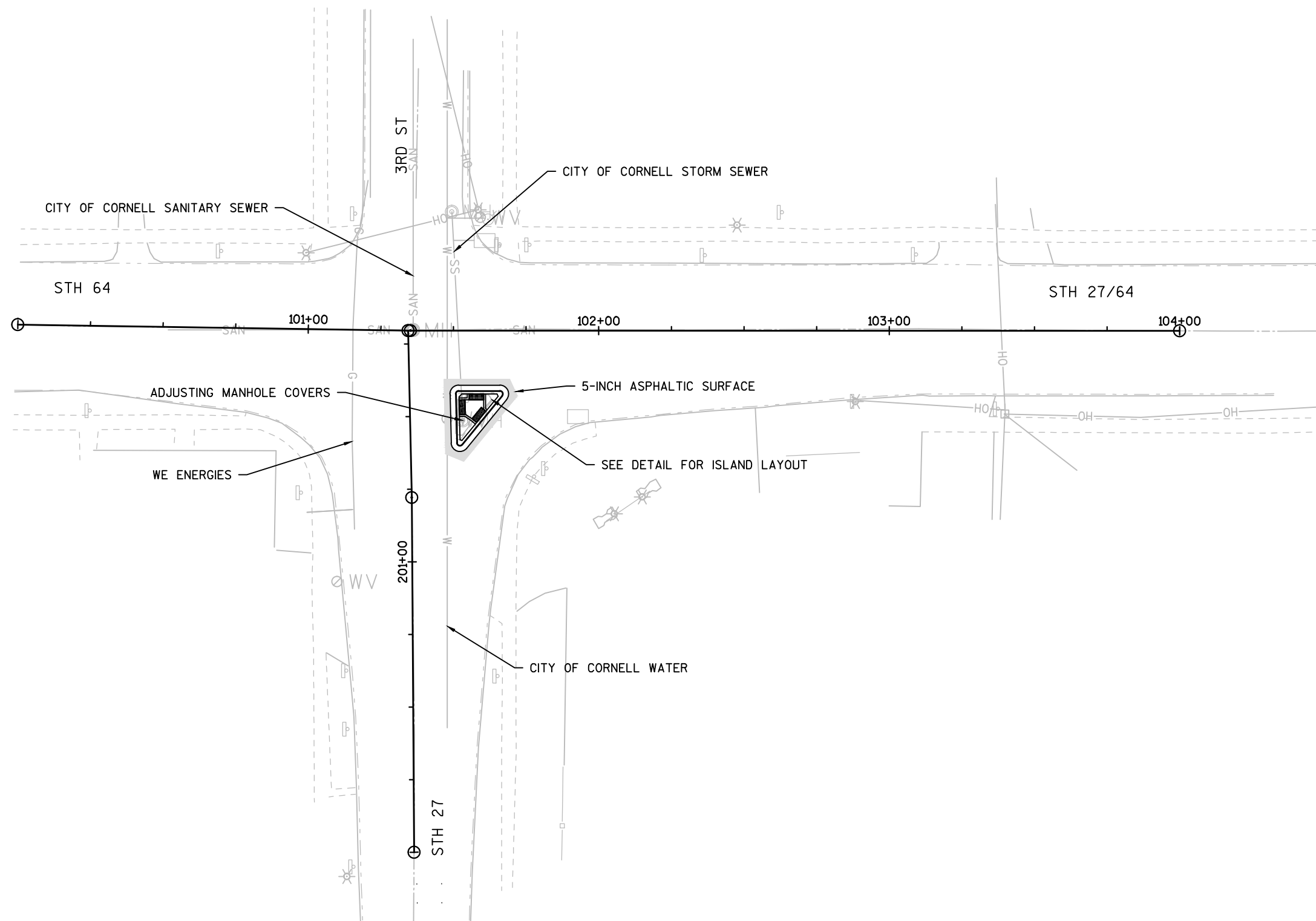
PLAN DETAILS - REMOVALS

SHEET

E



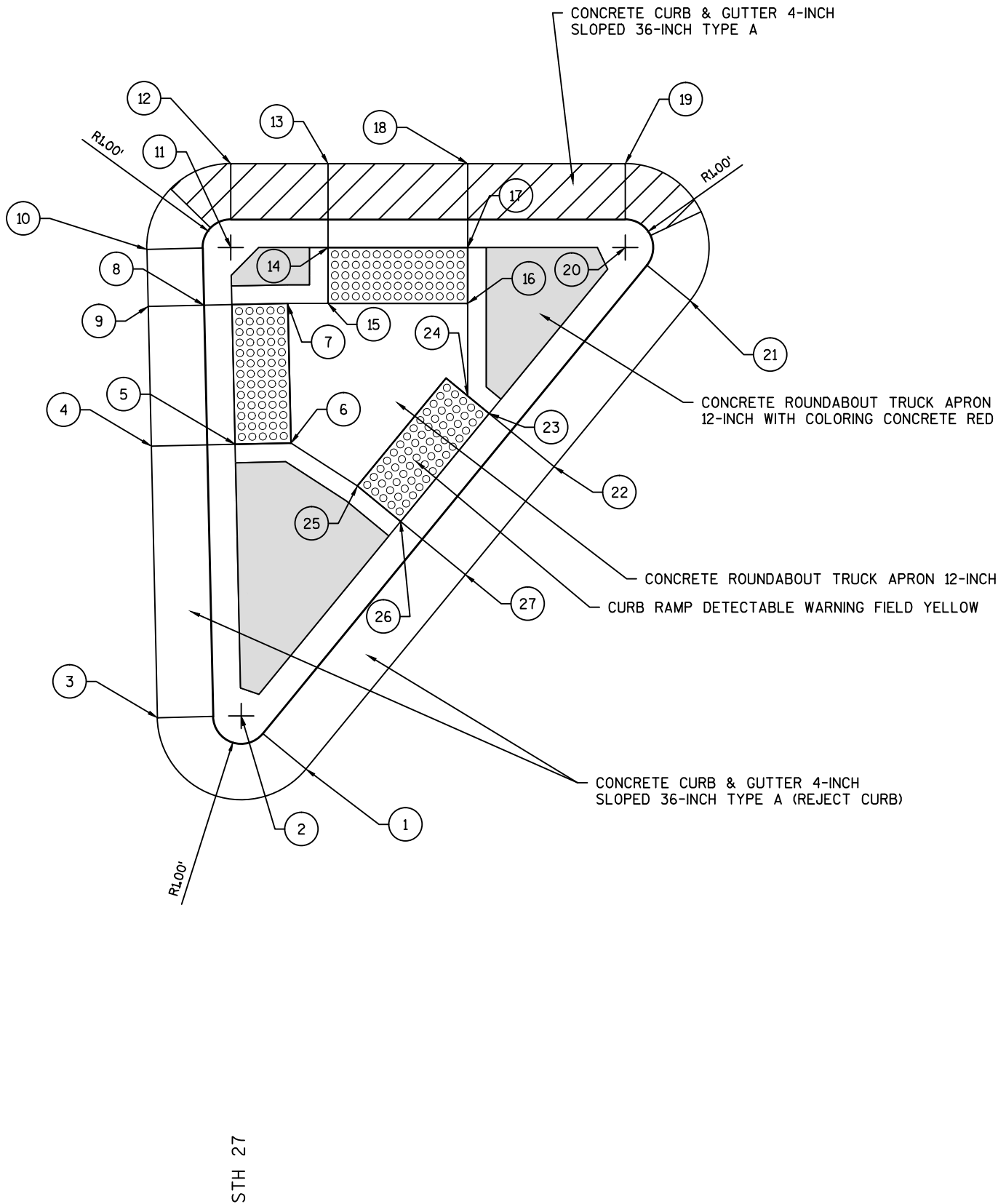




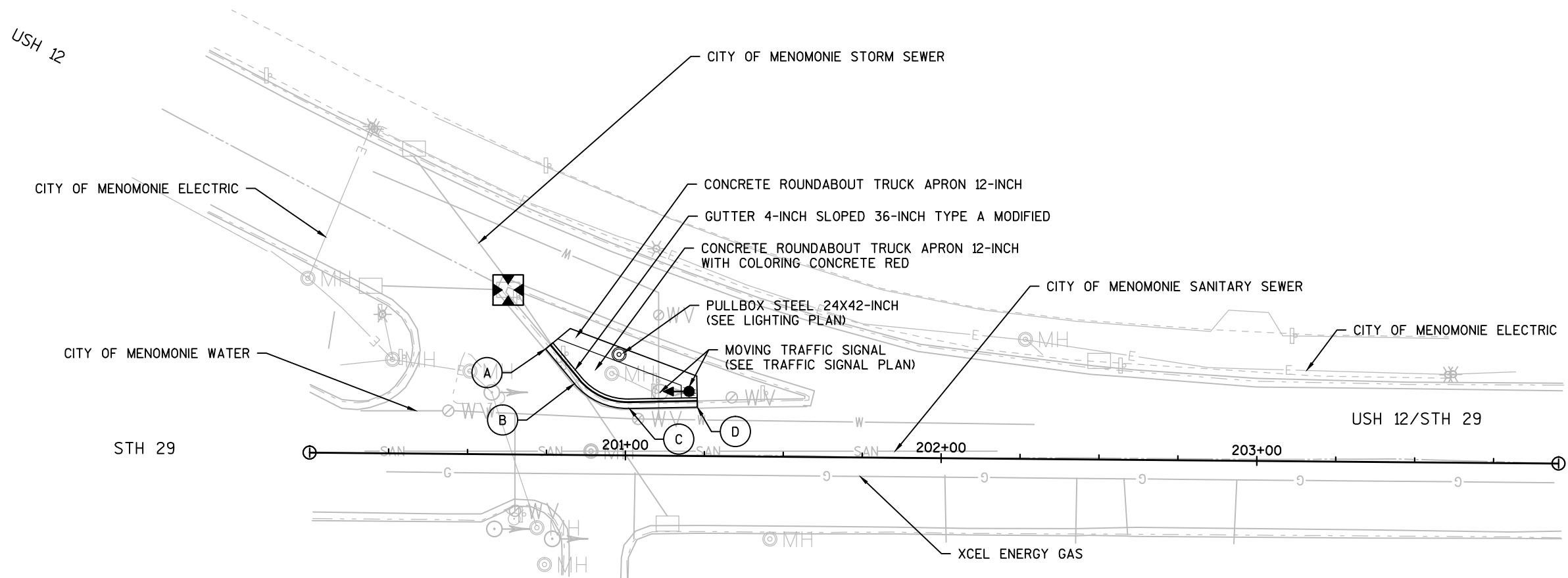
STH 64

NOTE: SHADED AREAS REPRESENT FULL CURB HEIGHT OF 4".

STH 27/64



POINT	STATION	OFFSET	ELEVATION
1	201+38.66	19.28 RT	1074.16
2	201+40.68	17.00 RT	--
3	201+40.68	14.00 RT	1074.26
4	201+50.34	14.00 RT	1074.68
5	201+50.34	17.00 RT	1074.80
6	201+50.33	19.00 RT	1074.93
7	201+55.34	19.00 RT	1075.15
8	201+55.34	17.00 RT	1075.02
9	201+55.34	14.00 RT	1074.90
10	201+57.38	14.00 RT	1075.02
11	201+57.38	17.00 RT	--
12	201+60.38	17.06 RT	1075.34
13	201+60.30	20.55 RT	1075.36
14	201+57.30	20.48 RT	1075.32
15	201+55.30	20.44 RT	1075.19
16	201+55.19	25.44 RT	1075.22
17	201+57.19	25.48 RT	1075.35
18	201+60.19	25.55 RT	1075.39
19	201+60.06	31.19 RT	1075.45
20	201+57.07	31.12 RT	--
21	201+55.11	33.40 RT	1075.21
22	201+49.49	28.40 RT	1074.79
23	201+51.23	26.12 RT	1074.91
24	201+51.89	25.36 RT	1074.98
25	201+48.74	21.34 RT	1074.79
26	201+47.44	22.86 RT	1074.65
27	201+45.49	25.14 RT	1074.53



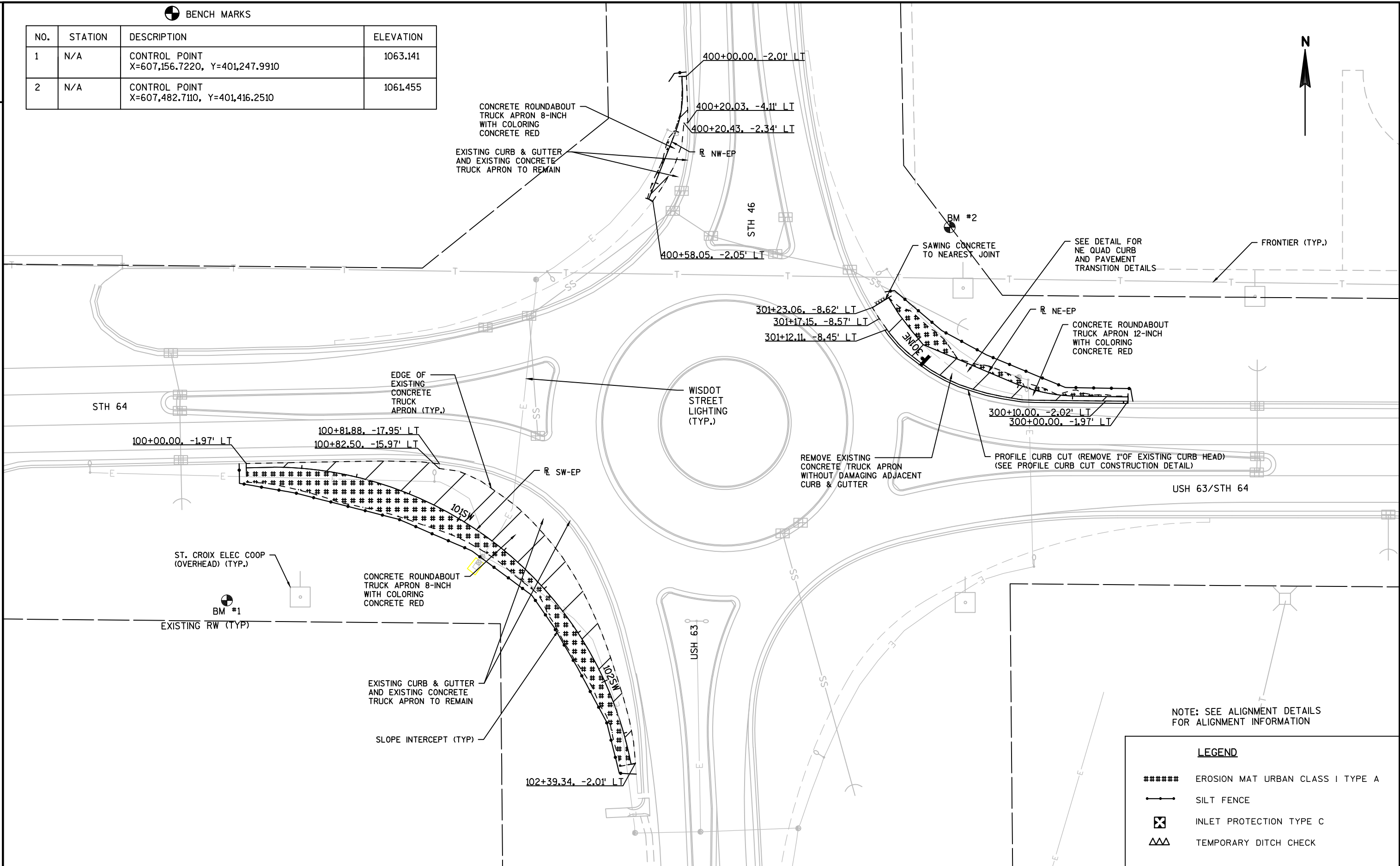
POINT	STATION	OFFSET	X	Y	ELEVATION
A	200+74.44	43.69 LT	161832.94	170722.73	873.95
B	200+83.66	22.60 LT	161842.07	170711.78	874.06
C	201+01.09	14.83 LT	161859.43	170703.86	874.26
D	201+22.67	15.51 LT	161881.01	170704.31	874.49

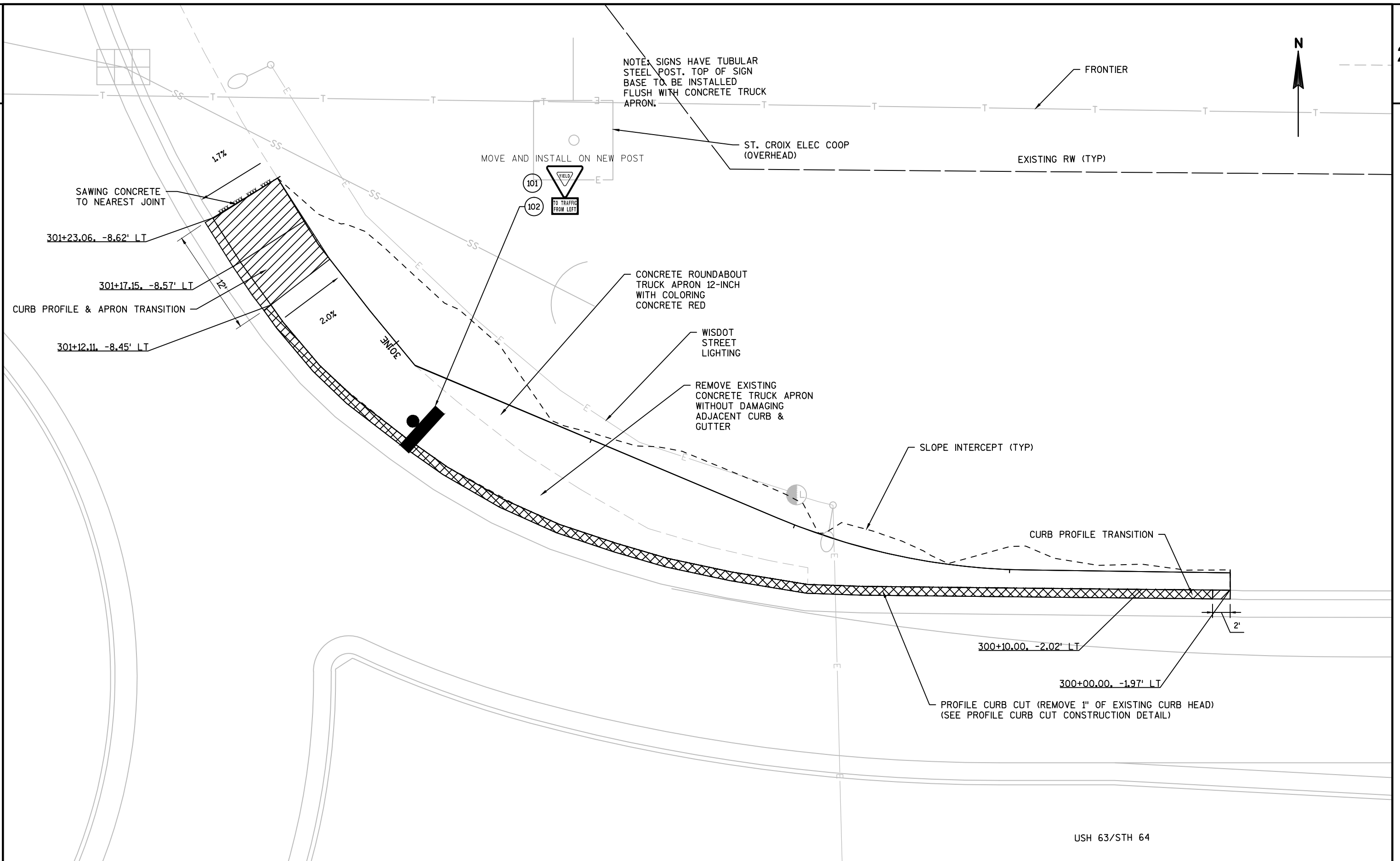
LEGEND



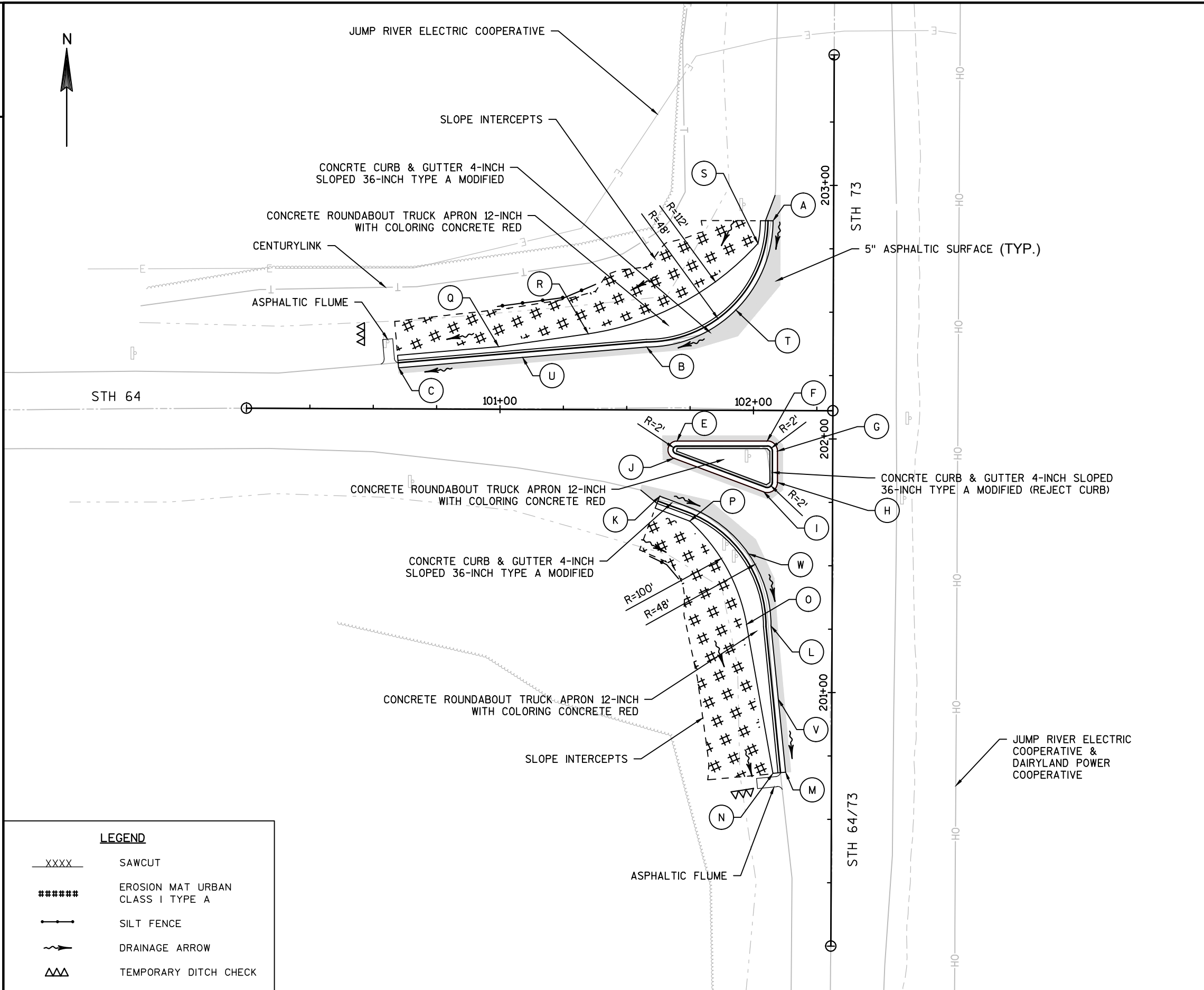
INLET PROTECTION

BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEVATION
1	N/A	CONTROL POINT X=607,156.7220, Y=401,247.9910	1063.141
2	N/A	CONTROL POINT X=607,482.7110, Y=401,416.2510	1061.455









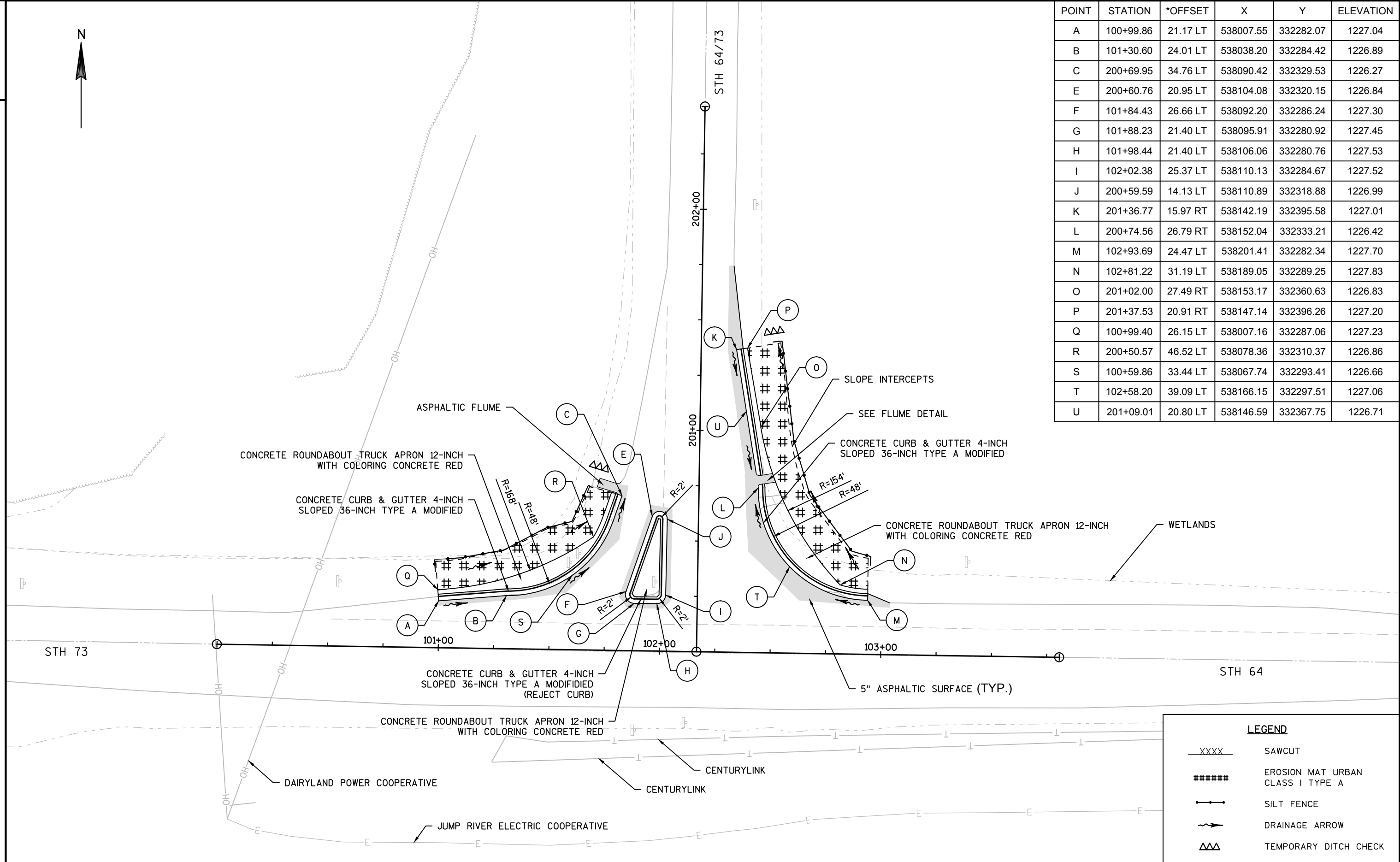
POINT	STATION	*OFFSET	X	Y	ELEVATION
A	202+85.95	23.89 LT	536969.47	349585.69	1240.38
B	101+57.77	24.78 LT	536919.62	349535.87	1238.91
C	100+59.95	16.16 LT	536821.77	349527.67	1237.67
E	101+69.88	12.22 RT	536931.63	349498.82	1239.50
F	201+99.08	25.82 LT	536967.18	349498.82	1239.89
G	201+95.09	21.81 LT	536971.20	349494.82	1239.85
H	201+82.77	21.76 LT	536971.20	349482.51	1239.68
I	201.79.00	27.14 LT	536965.82	349478.75	1239.57
J	101+68.70	19.01 RT	536930.37	349492.04	1239.39
K	101+63.13	34.01 RT	536924.74	349477.06	1238.84
L	201+26.18	24.03 LT	536968.72	349425.92	1238.31
M	200+68.53	18.10 LT	536974.43	349368.25	1237.88
N	200+68.02	23.07 LT	536969.45	349367.76	1238.07
O	201+26.73	33.70 LT	536959.05	349426.51	1238.45
P	101+75.04	43.81 RT	536936.61	349467.21	1238.92
Q	100+99.40	24.70 LT	536860.25	349535.04	1238.37
R	101+34.64	29.92 LT	536896.52	349541.11	1238.79
S	202+76.94	29.81 LT	536963.52	349576.70	1240.37
T	202+50.71	38.41 LT	536954.82	349550.50	1239.61
U	101+08.86	20.47 LT	536870.70	349531.77	1238.29
V	200+97.28	21.06 LT	536971.57	349397.02	1238.09
W	201+54.57	33.00 LT	536959.85	34945.35	1238.53

LEGEND

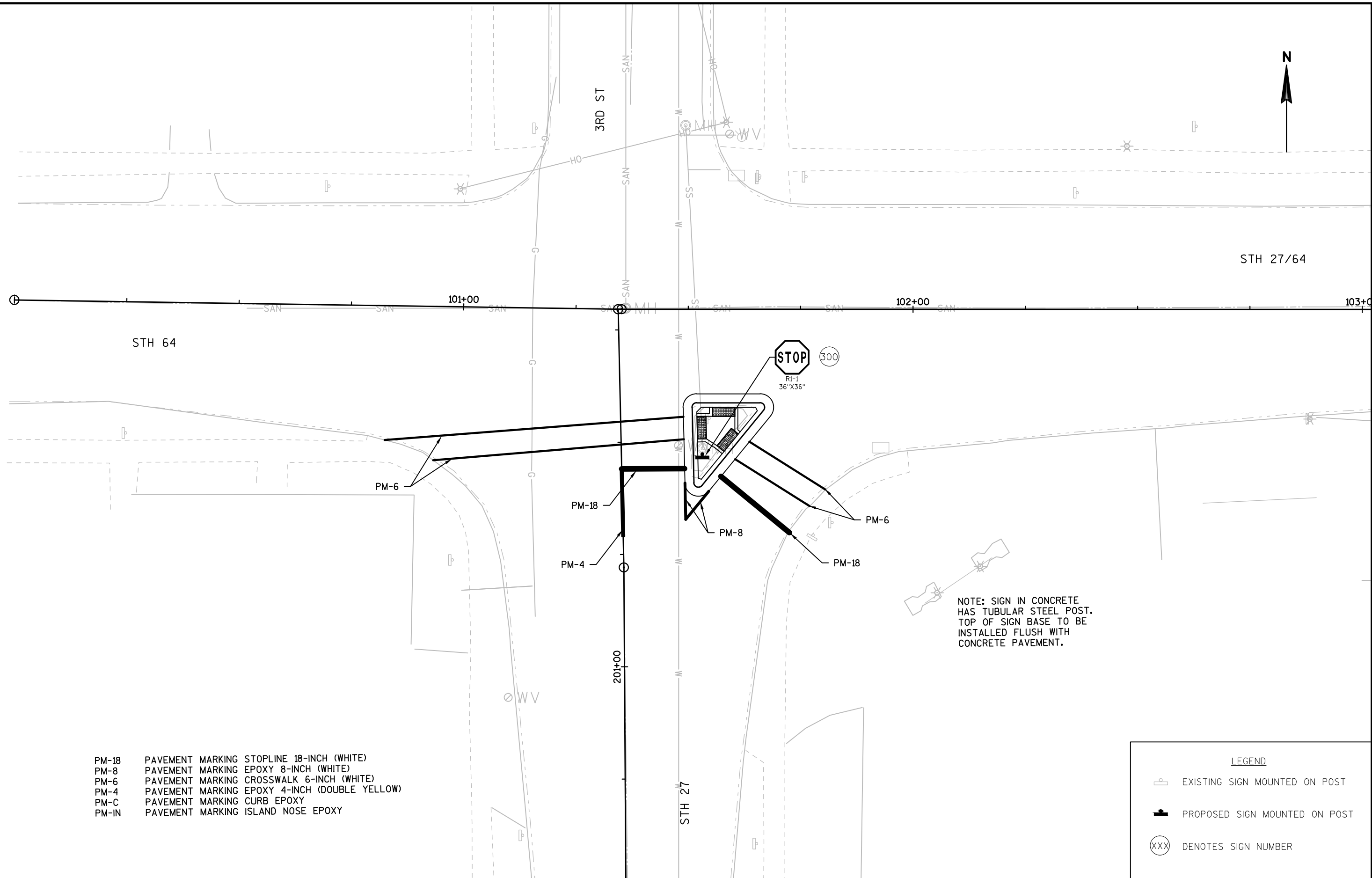
- XXXX SAWCUT
- ##### EROSION MAT URBAN CLASS I TYPE A
- SILT FENCE
- ~> DRAINAGE ARROW
- ΔΔΔ TEMPORARY DITCH CHECK



POINT	STATION	*OFFSET	X	Y	ELEVATION
A	100+99.86	21.17 LT	538007.55	332282.07	1227.04
B	101+30.60	24.01 LT	538038.20	332284.42	1226.89
C	200+69.95	34.76 LT	538090.42	332329.53	1226.27
E	200+60.76	20.95 LT	538104.08	332320.15	1226.84
F	101+84.43	26.66 LT	538092.20	332286.24	1227.30
G	101+88.23	21.40 LT	538095.91	332280.92	1227.45
H	101+98.44	21.40 LT	538106.06	332280.76	1227.53
I	102+02.38	25.37 LT	538110.13	332284.67	1227.52
J	200+59.59	14.13 LT	538110.89	332318.88	1226.99
K	201+36.77	15.97 RT	538142.19	332395.58	1227.01
L	200+74.56	26.79 RT	538152.04	332333.21	1226.42
M	102+93.69	24.47 LT	538201.41	332282.34	1227.70
N	102+81.22	31.19 LT	538189.05	332289.25	1227.83
O	201+02.00	27.49 RT	538153.17	332360.63	1226.83
P	201+37.53	20.91 RT	538147.14	332396.26	1227.20
Q	100+99.40	26.15 LT	538007.16	332287.06	1227.23
R	200+50.57	46.52 LT	538078.36	332310.37	1226.86
S	100+59.86	33.44 LT	538067.74	332293.41	1226.66
T	102+58.20	39.09 LT	538166.15	332297.51	1227.06
U	201+09.01	20.80 LT	538146.59	332367.75	1226.71





LEGEND	
XXXX	SAWCUT
#####	EROSION MAT URBAN CLASS I TYPE A
—●—	SILT FENCE
~>	DRAINAGE ARROW
△△△	TEMPORARY DITCH CHECK




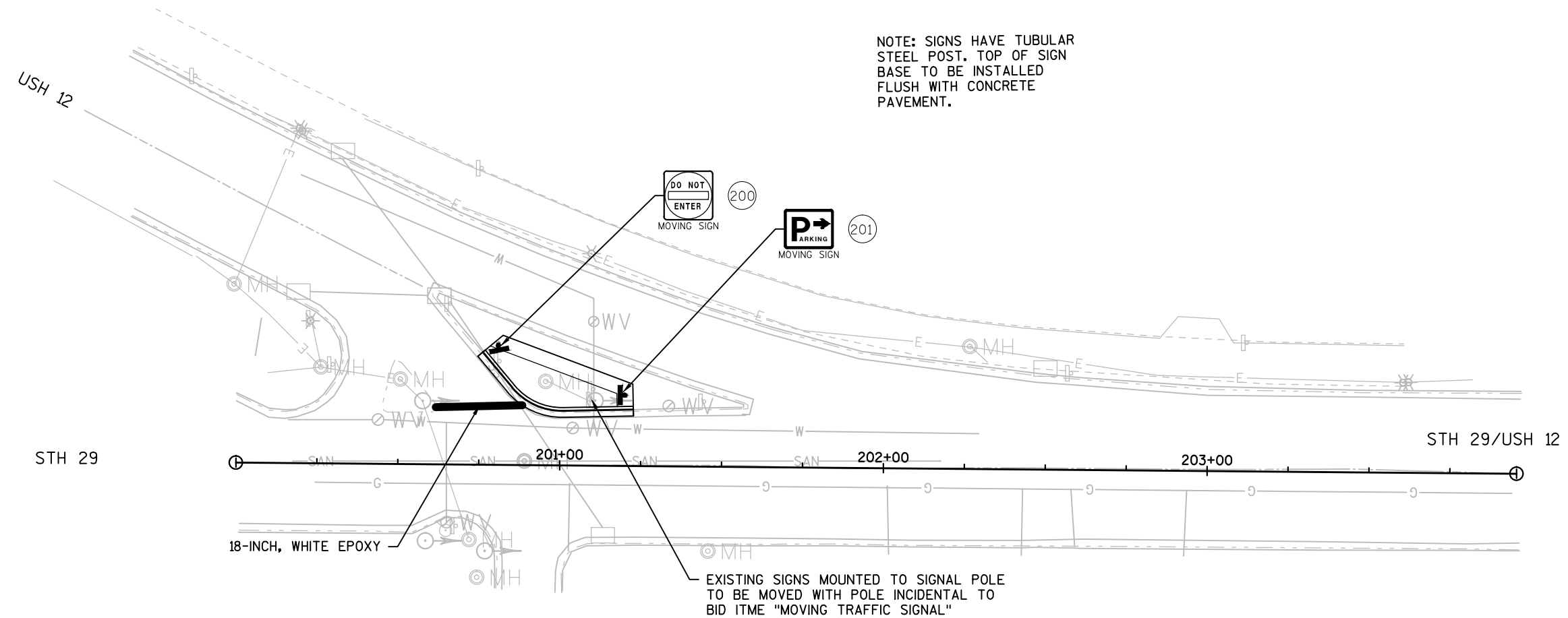
- PM-18 PAVEMENT MARKING STOPLINE 18-INCH (WHITE)
- PM-8 PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- PM-6 PAVEMENT MARKING CROSSWALK 6-INCH (WHITE)
- PM-4 PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)
- PM-C PAVEMENT MARKING CURB EPOXY
- PM-IN PAVEMENT MARKING ISLAND NOSE EPOXY

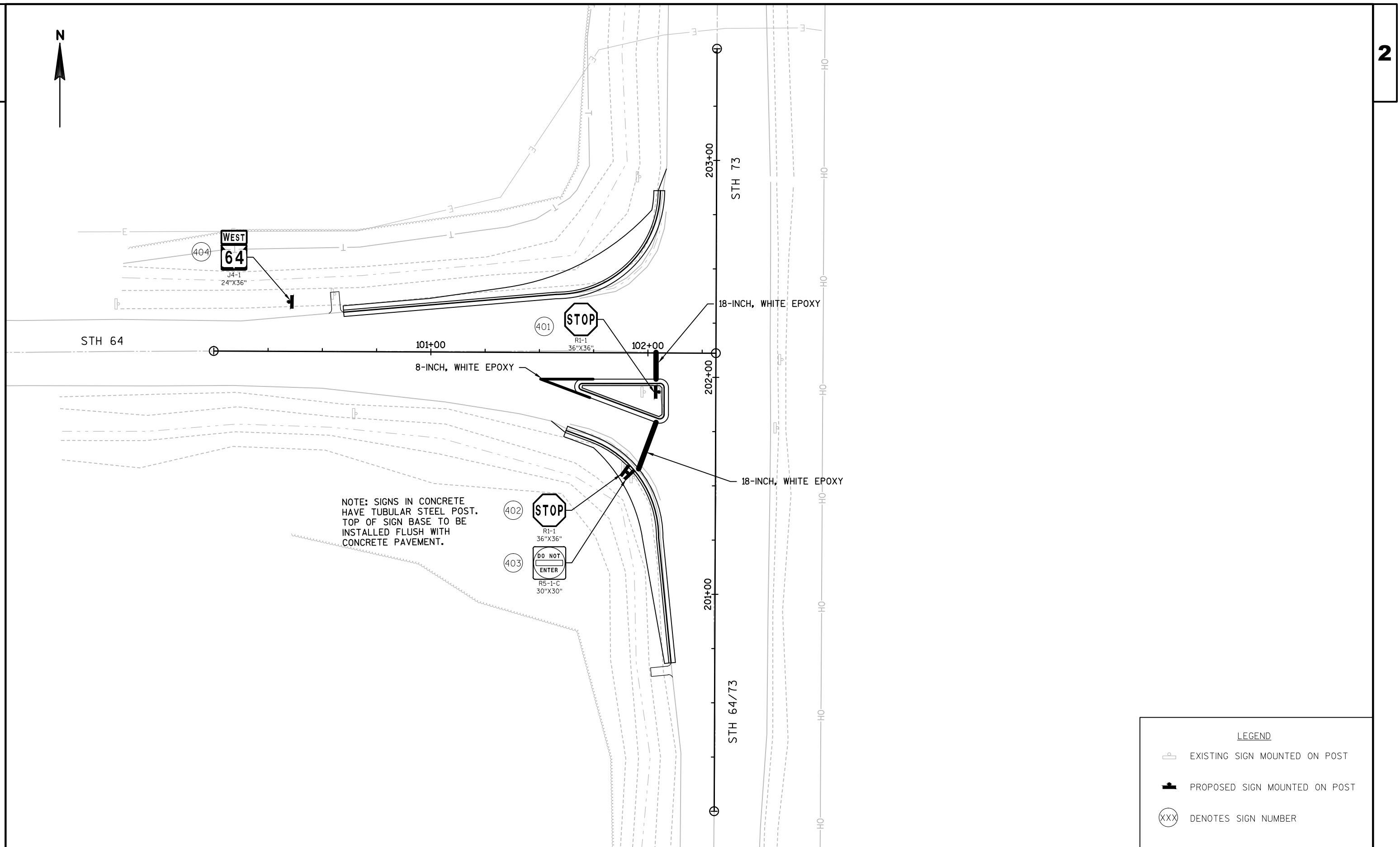
LEGEND

 EXISTING SIGN MOUNTED ON POST

 PROPOSED SIGN MOUNTED ON POST

 DENOTES SIGN NUMBER





PROJECT NO:1000-08-89

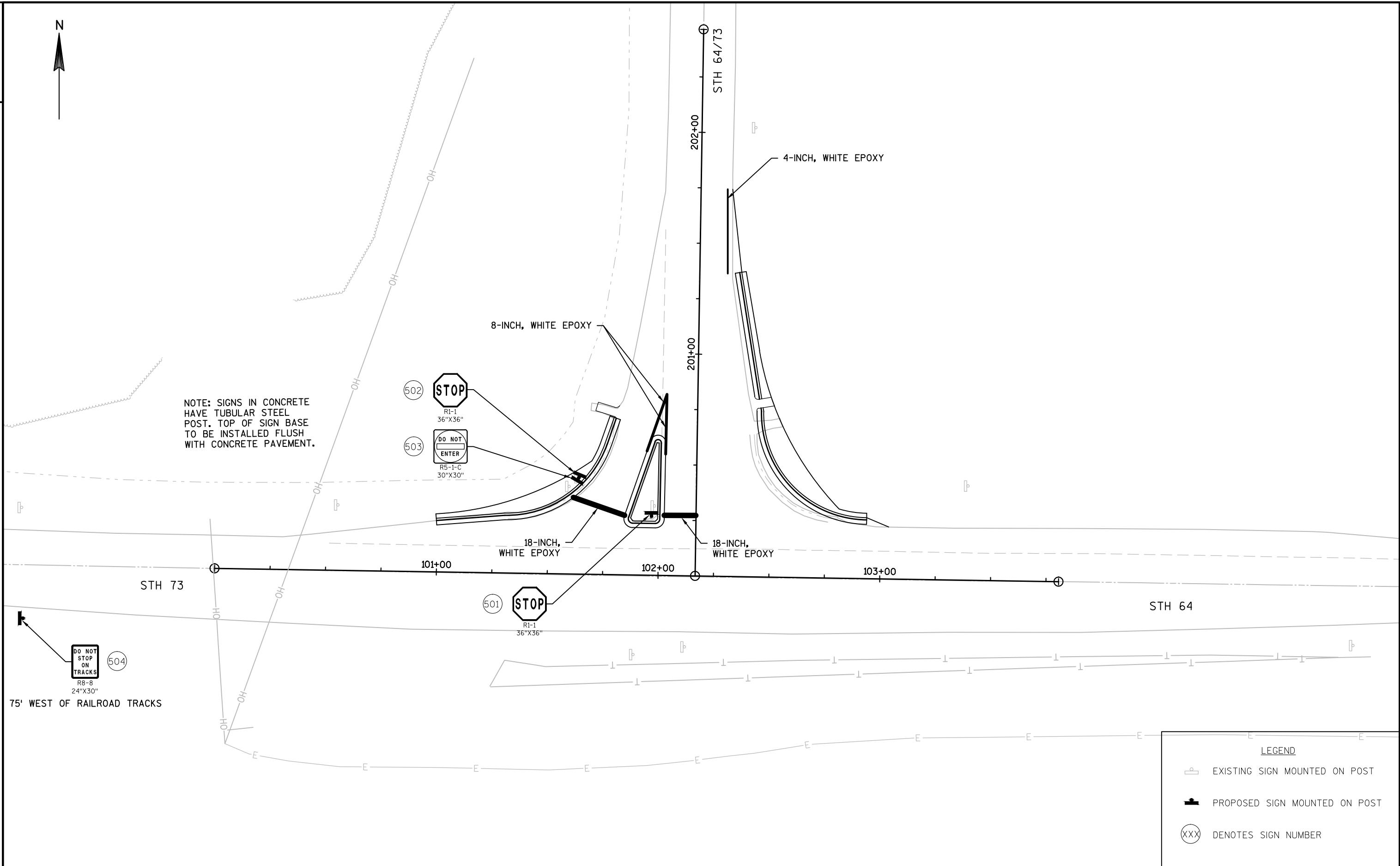
HWY:STH 64-STH 73-NORTH

COUNTY:TAYLOR

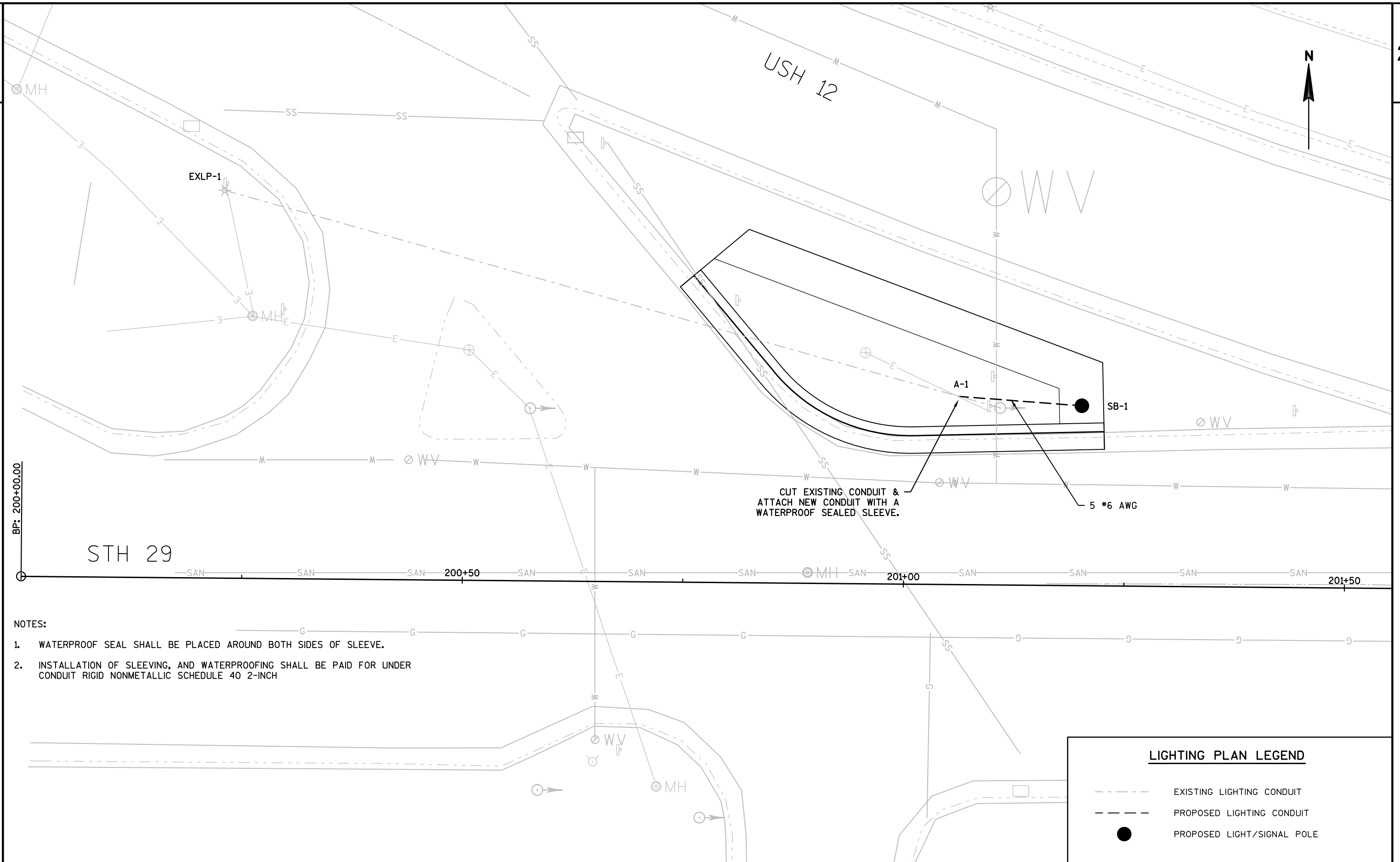
SIGNING AND MARKING

SHEET

E







- NOTES:
- 1. WATERPROOF SEAL SHALL BE PLACED AROUND BOTH SIDES OF SLEEVE.
  - 2. INSTALLATION OF SLEEVING, AND WATERPROOFING SHALL BE PAID FOR UNDER CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH

LIGHTING PLAN LEGEND

EXISTING LIGHTING CONDUIT

PROPOSED LIGHTING CONDUIT

PROPOSED LIGHT/SIGNAL POLE

PROJECT NO:1000-08-89

HWY:USH 12 - STH 29

COUNTY:DUNN

LIGHTING PLAN

SHEET

E

FILE NAME : G:\86\8618812 WISDOT NW REGION INTERSECTIONS\CADD\C3D\10000809 - USH12-STH29 MENOMONIE\SHEETSP\PLAN\023601-LP.DWG

LAYOUT NAME - 023601-LP

PLOT DATE : 1/22/2016 4:21 PM

PLOT BY : TYLER BALSIGER

PLOT NAME :

PLOT SCALE : 1 IN:10 FT

WISDOT/CADDs SHEET 42

## LIGHTING PLAN LEGEND

- ☒ EXISTING DISTRIBUTION CENTER
- CONDUIT- (2" UNLESS OTHERWISE NOTED)
- EXISTING CONDUIT
- CONCRETE BASE TYPE 5 WITH EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE
- EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE
- PULL BOX- (24"X42" UNLESS OTHERWISE NOTED)
- EXISTING PULL BOX

EXISTING CONCRETE BASE  
AND LIGHT POLE ASSEMBLY  
TO REMAIN

STH 46



STA. 100+83.02'SW', 9.7' LT  
REMOVE CONCRETE BASE  
AND MOVING LIGHTING  
ASSEMBLY

STH 64

ABANDON CONDUIT  
BETWEEN EXA-1 AND PB-3

EXB-1

REMOVE WIRE BETWEEN  
LIGHT POLE EXB-1  
AND LIGHT POLE EXA-1

EXL800

EXPB-1

REMOVE WIRE BETWEEN  
LIGHT POLE EXA-1,  
PULL BOX EXPB-1  
AND CABINET EXL800,  
ABANDON CONDUIT

EXISTING RW (TYP)

ST. CROIX  
ELEC COOP  
(OVERHEAD)  
(TYP.)

WISDOT  
STREET  
LIGHTING  
(TYP.)

USH 63/STH 64

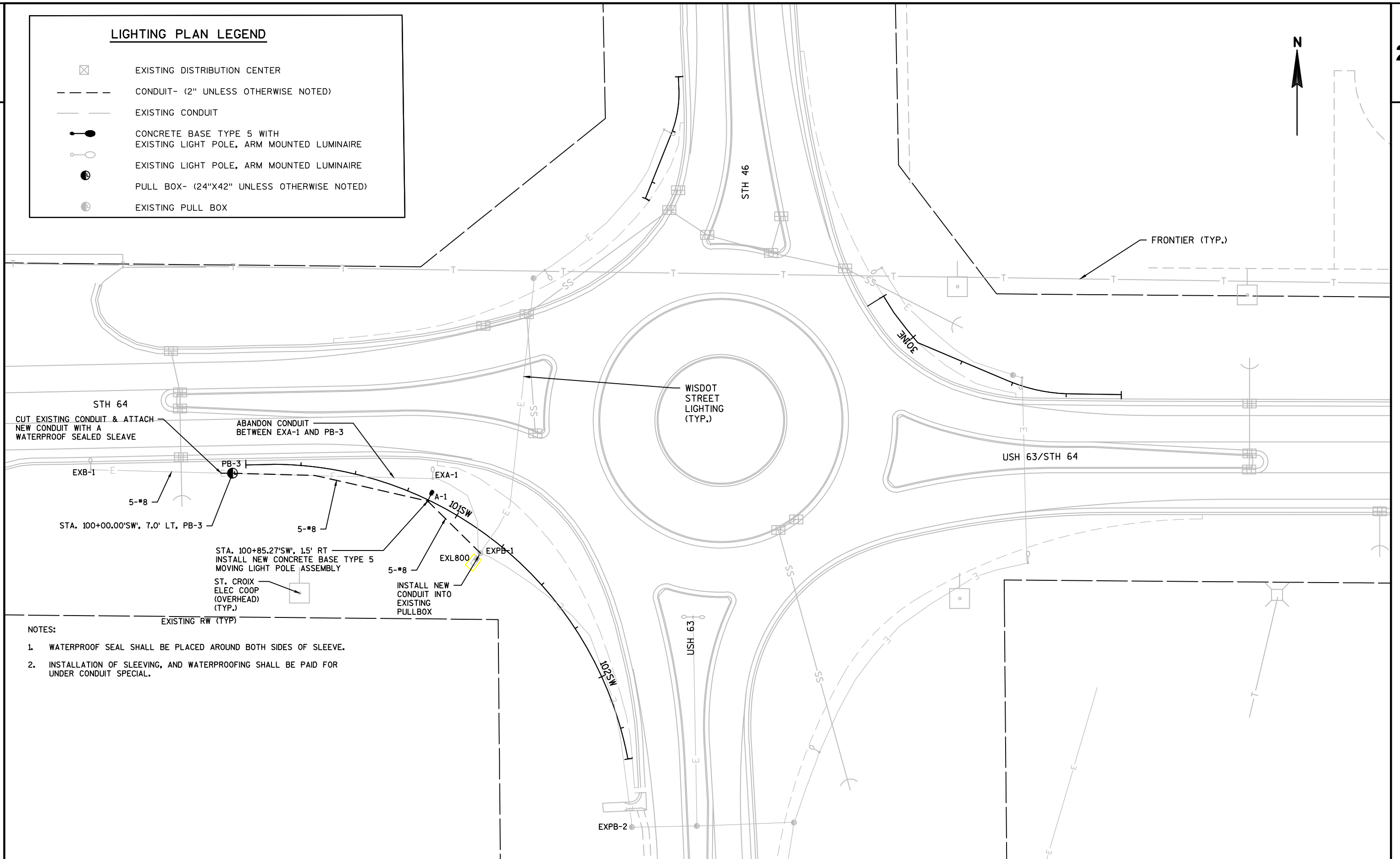
EXISTING PULLBOX AND  
LIGHT POLE ASSEMBLY  
TO REMAIN

FRONTIER (TYP.)

EXPB-2

## LIGHTING PLAN LEGEND

- ☒ EXISTING DISTRIBUTION CENTER
- CONDUIT- (2" UNLESS OTHERWISE NOTED)
- EXISTING CONDUIT
- CONCRETE BASE TYPE 5 WITH  
EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE
- EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE
- PULL BOX- (24"X42" UNLESS OTHERWISE NOTED)
- EXISTING PULL BOX



PROJECT NO:1000-08-89

HWY:USH 63-STH 46-STH 64

COUNTY:ST. CROIX

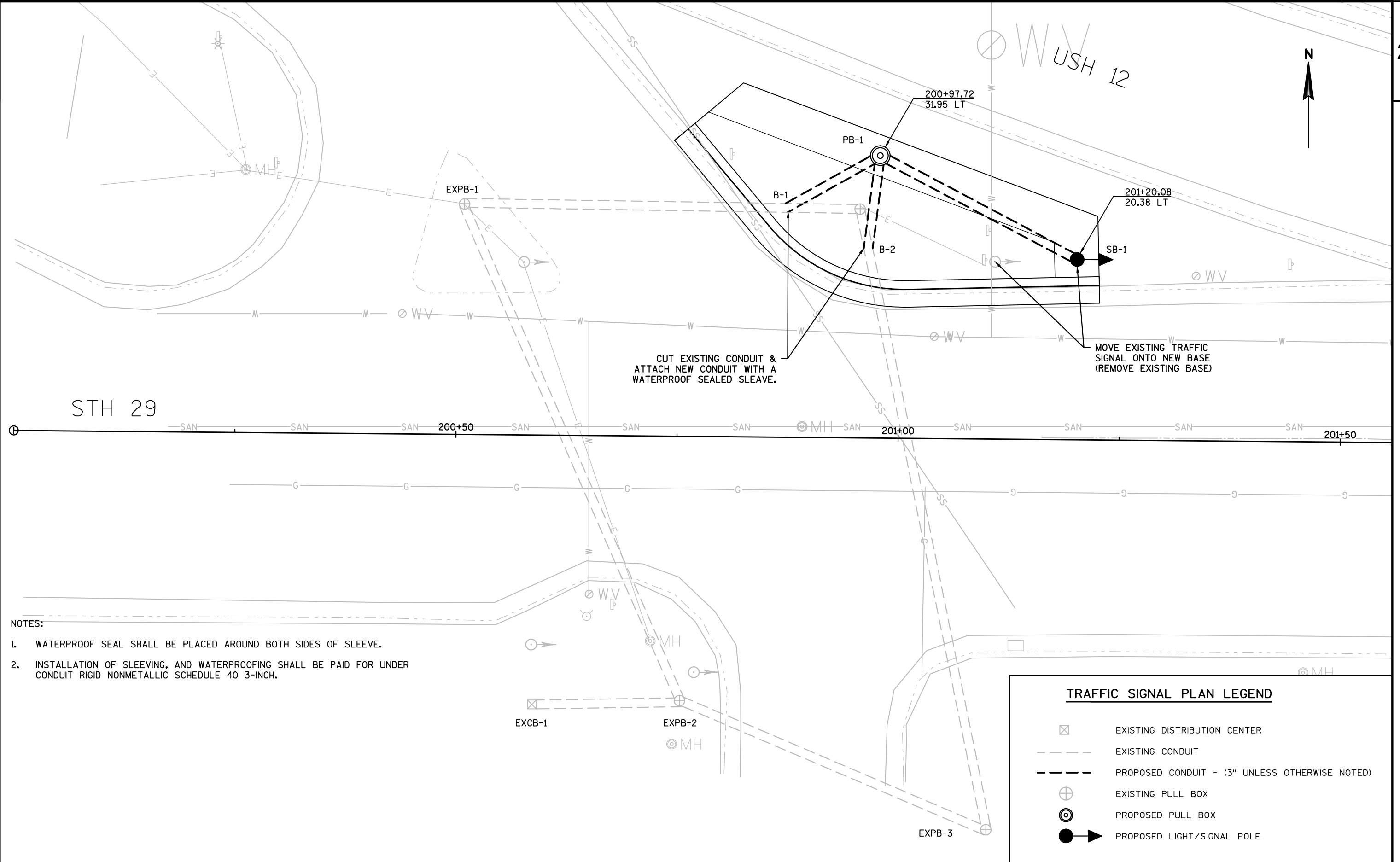
LIGHTING PLAN

SHEET

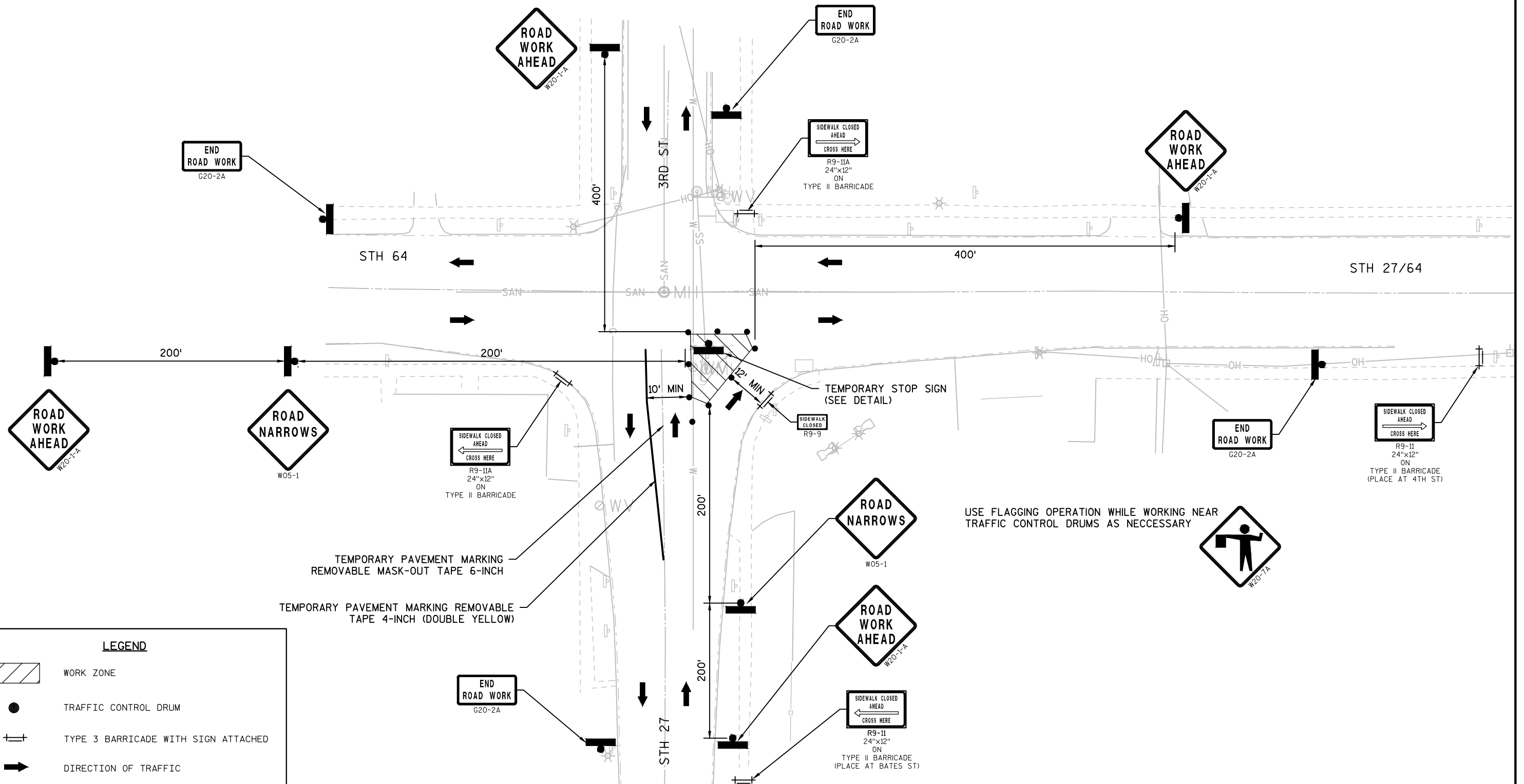
E





2

2



PROJECT NO:1000-08-89	HWY:USH 12 - STH 29	COUNTY:DUNN	TRAFFIC SIGNAL PLAN	SHEET	<b>E</b>
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**LEGEND**

-  WORK ZONE
-  TRAFFIC CONTROL DRUM
-  TYPE 3 BARRICADE WITH SIGN ATTACHED
-  DIRECTION OF TRAFFIC

PROJECT NO:1000-08-89

HWY:STH 27 - STH 64

COUNTY:CHIPPEWA

TRAFFIC CONTROL

SHEET

**E**FILE NAME : G:\86\8618812 WISDOT NW REGION INTERSECTIONS\CADD\C3D\10000809 - STH64\_STH27 CORNELL\SHEETSP\AN\025001-TC.DWG  
LAYOUT NAME - 025001-TC

PLOT DATE : 1/29/2016 1:09 PM

PLOT BY : TYLER BALSIGER

PLOT NAME :

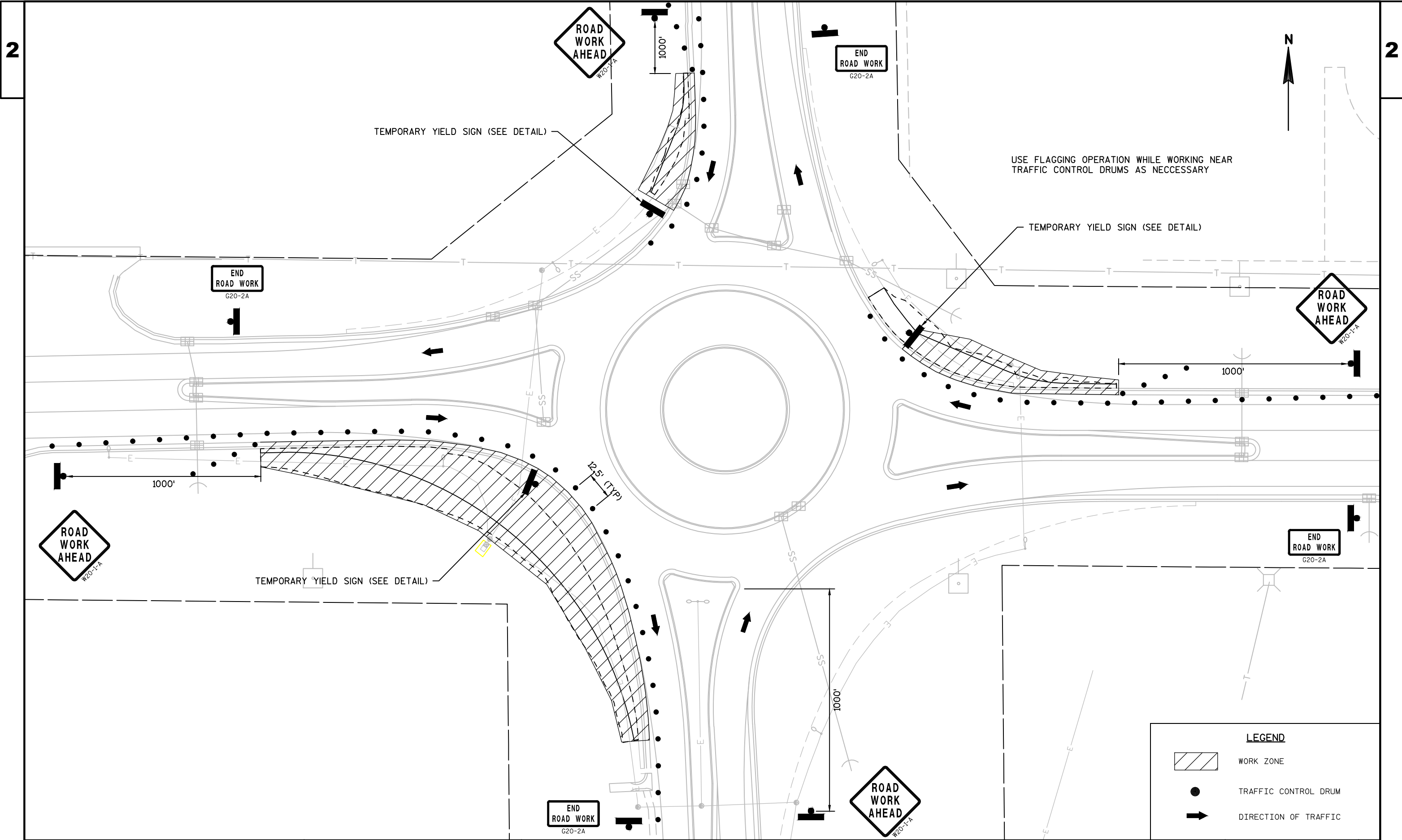
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDs SHEET 42



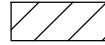



DIRECTION OF TRAFFIC

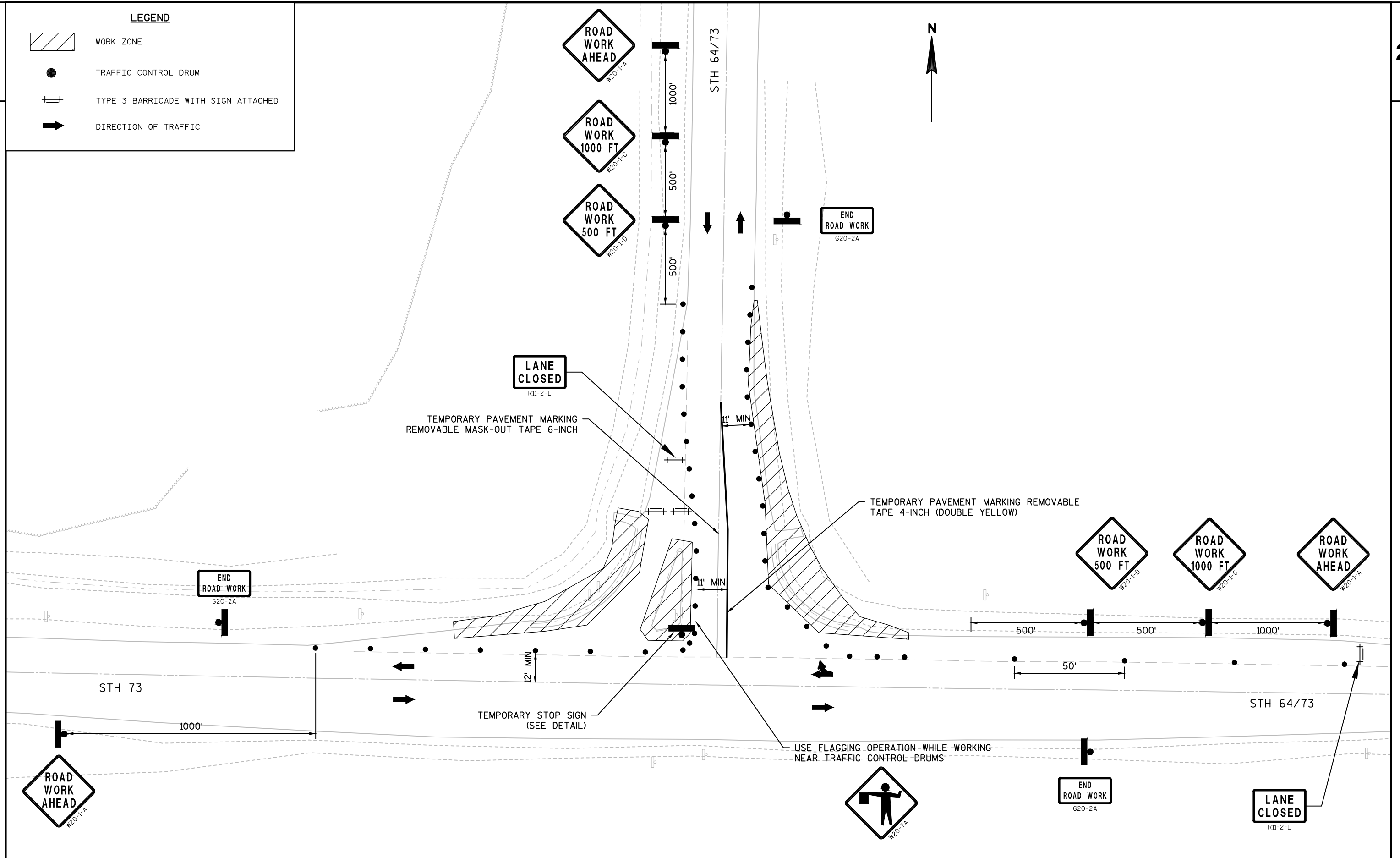






LEGEND

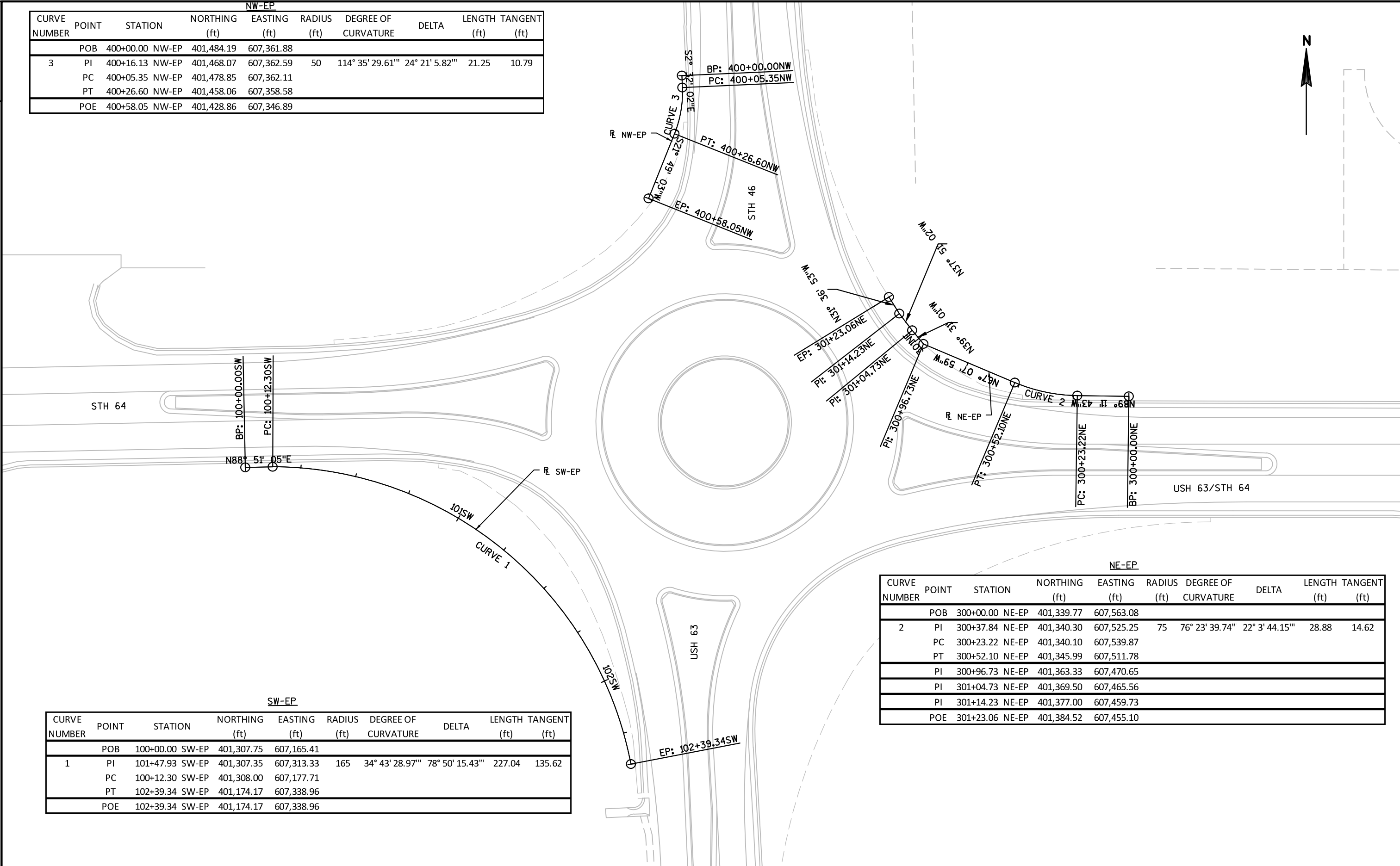
-  WORK ZONE
-  TRAFFIC CONTROL DRUM
-  TYPE 3 BARRICADE WITH SIGN ATTACHED
-  DIRECTION OF TRAFFIC

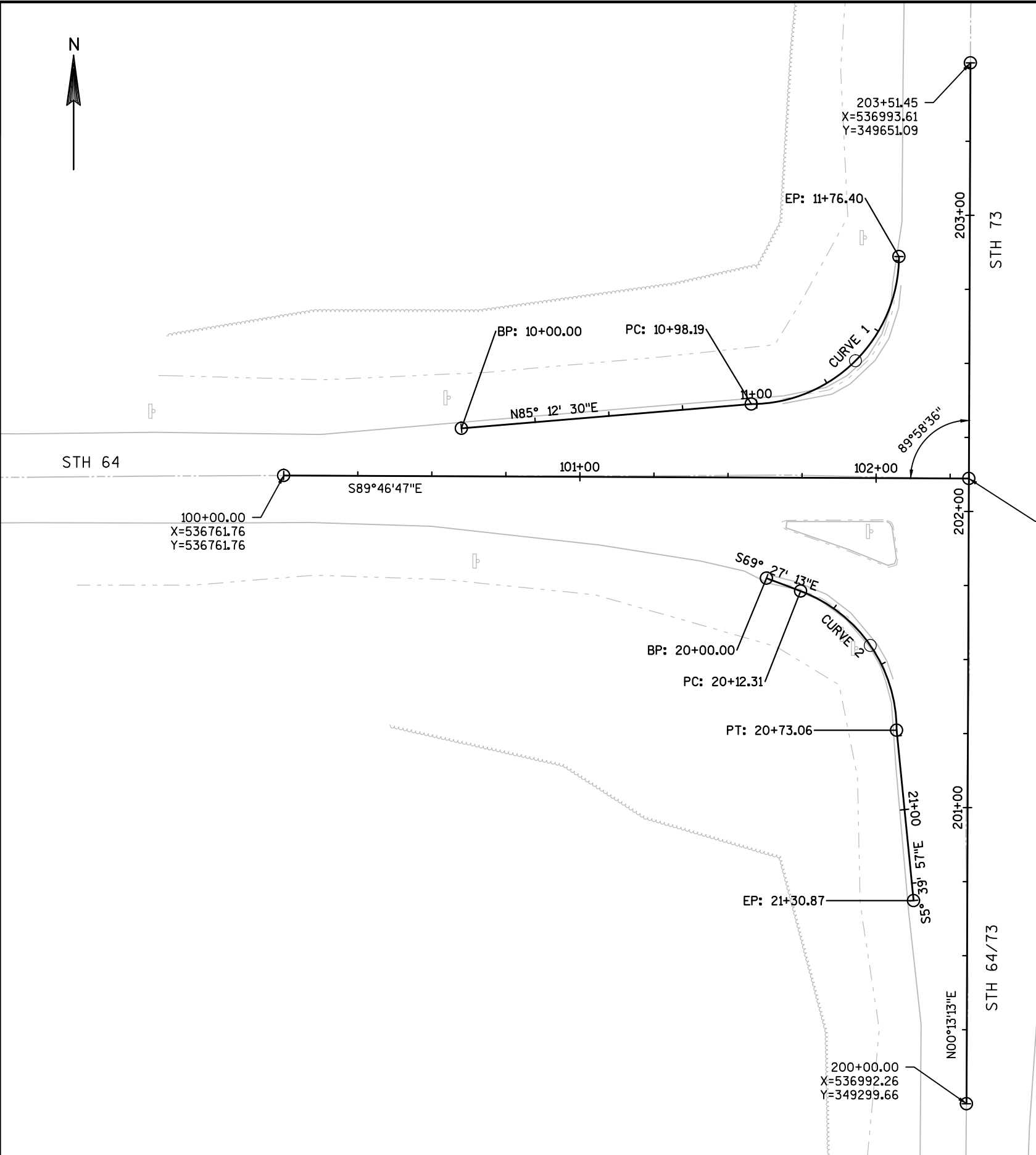


NW-EP									
CURVE NUMBER	POINT	STATION	NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH (ft)	TANGENT (ft)
	POB	400+00.00	NW-EP	401,484.19	607,361.88				
3	PI	400+16.13	NW-EP	401,468.07	607,362.59	50	114° 35' 29.61"	24° 21' 5.82"	21.25
	PC	400+05.35	NW-EP	401,478.85	607,362.11				
	PT	400+26.60	NW-EP	401,458.06	607,358.58				
	POE	400+58.05	NW-EP	401,428.86	607,346.89				

NE-EP									
CURVE NUMBER	POINT	STATION	NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH (ft)	TANGENT (ft)
	POB	300+00.00	NE-EP	401,339.77	607,563.08				
2	PI	300+37.84	NE-EP	401,340.30	607,525.25	75	76° 23' 39.74"	22° 3' 44.15"	28.88
	PC	300+23.22	NE-EP	401,340.10	607,539.87				
	PT	300+52.10	NE-EP	401,345.99	607,511.78				
	PI	300+96.73	NE-EP	401,363.33	607,470.65				
	PI	301+04.73	NE-EP	401,369.50	607,465.56				
	PI	301+14.23	NE-EP	401,377.00	607,459.73				
	POE	301+23.06	NE-EP	401,384.52	607,455.10				

SW-EP									
CURVE NUMBER	POINT	STATION	NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH (ft)	TANGENT (ft)
	POB	100+00.00	SW-EP	401,307.75	607,165.41				
1	PI	101+47.93	SW-EP	401,307.35	607,313.33	165	34° 43' 28.97"	78° 50' 15.43"	227.04
	PC	100+12.30	SW-EP	401,308.00	607,177.71				
	PT	102+39.34	SW-EP	401,174.17	607,338.96				
	POE	102+39.34	SW-EP	401,174.17	607,338.96				





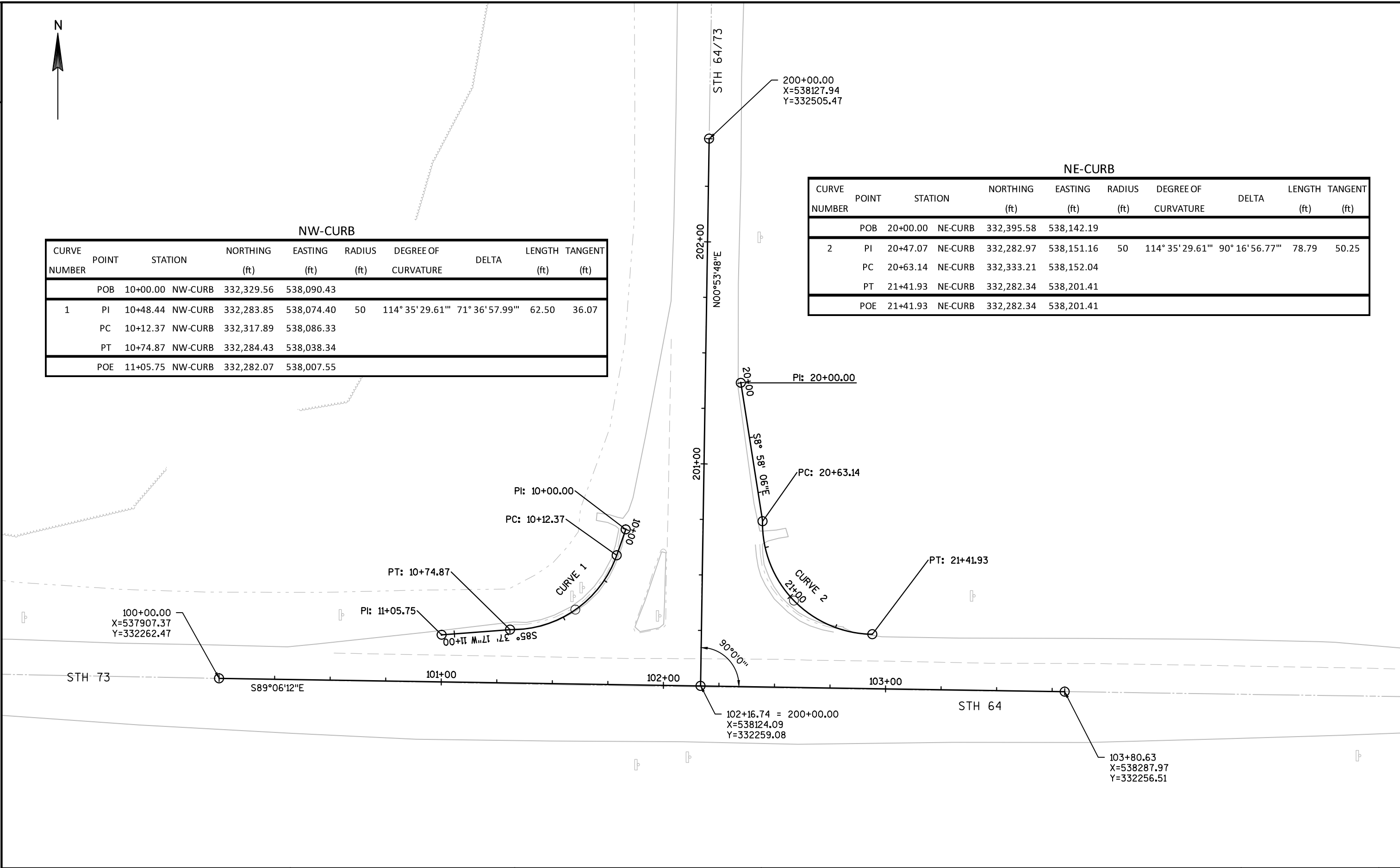
NW-CURB									
CURVE NUMBER	POINT	STATION		NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH TANGENT (ft)
	POB	10+00.00	NW-EP	349,527.67	536,821.77				
1	PI	11+47.86	NW-CURB	349,536.02	536,969.29	50	114° 35' 29.61"	87° 37' 11.97"	78.21
	PC	10+98.19	NW-CURB	349,535.87	536,919.47				49.67
	PT	11+76.40	NW-CURB	349,585.69	536,969.47				
	POE	11+76.40	NW-CURB	401,428.86	607,346.89				

SW-CURB									
CURVE NUMBER	POINT	STATION		NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH TANGENT (ft)
	POB	20+00.00	NW-CURB	349,477.06	536,924.74				
2	PI	20+47.07	NW-CURB	349,460.54	536,968.82	50	114° 35' 29.61"	69° 36' 50.36"	60.75
	PC	20+12.31	NW-CURB	349,472.74	536,936.27				34.76
	PT	20+73.06	NW-CURB	349,425.92	536,918.72				
	PI	20+73.06	NW-CURB	349,425.78	536,968.72				
	POE	21+30.87	NW-CURB	349,368.25	536,974.43				



NW-CURB									
CURVE NUMBER	POINT	STATION		NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH TANGENT (ft)
	POB	10+00.00	NW-CURB	332,329.56	538,090.43				
1	PI	10+48.44	NW-CURB	332,283.85	538,074.40	50	114° 35' 29.61"	71° 36' 57.99"	62.50
	PC	10+12.37	NW-CURB	332,317.89	538,086.33				36.07
	PT	10+74.87	NW-CURB	332,284.43	538,038.34				
	POE	11+05.75	NW-CURB	332,282.07	538,007.55				

NE-CURB									
CURVE NUMBER	POINT	STATION		NORTHING (ft)	EASTING (ft)	RADIUS (ft)	DEGREE OF CURVATURE	DELTA	LENGTH TANGENT (ft)
	POB	20+00.00	NE-CURB	332,395.58	538,142.19				
2	PI	20+47.07	NE-CURB	332,282.97	538,151.16	50	114° 35' 29.61"	90° 16' 56.77"	78.79
	PC	20+63.14	NE-CURB	332,333.21	538,152.04				50.25
	PT	21+41.93	NE-CURB	332,282.34	538,201.41				
	POE	21+41.93	NE-CURB	332,282.34	538,201.41				





DATE 01MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					1000-08-89
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0150	Removing Curb & Gutter	LF	520.000	520.000
0020	204.0155	Removing Concrete Sidewalk	SY	70.000	70.000
0030	204.0195	Removing Concrete Bases	EACH	2.000	2.000
0040	205.9010.S	Grading and Shaping Intersection (location) 01. STH 27 - STH 64	LS	1.000	1.000
0050	205.9010.S	Grading and Shaping Intersection (location) 02. USH 12 - STH 29	LS	1.000	1.000
0060	205.9015.S	Grading Shaping and Finishing Intersection (location) 01. USH 63-STH 46-STH 64	LS	1.000	1.000
0070	205.9015.S	Grading Shaping and Finishing Intersection (location) 02. STH 64 - STH 73 North	LS	1.000	1.000
0080	205.9015.S	Grading Shaping and Finishing Intersection (location) 03. STH 64 - STH 73 South	LS	1.000	1.000
0090	213.0100	Finishing Roadway (project) 01. 1000-08-89	EACH	1.000	1.000
0100	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	630.000	630.000
0110	405.0100	Coloring Concrete Red	CY	240.000	240.000
0120	416.0508	Concrete Roundabout Truck Apron 8-Inch	SY	310.000	310.000
0130	416.0512	Concrete Roundabout Truck Apron 12-Inch	SY	505.000	505.000
0140	416.0610	Drilled Tie Bars	EACH	175.000	175.000
0150	455.0605	Tack Coat	GAL	8.000	8.000
0160	465.0105	Asphaltic Surface	TON	100.000	100.000
0170	465.0315	Asphaltic Flumes	SY	12.000	12.000
0180	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	30.000	30.000
0190	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0200	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1000-08-89	EACH	1.000	1.000
0210	619.1000	Mobilization	EACH	1.000	1.000
0220	620.0300	Concrete Median Sloped Nose	SF	130.000	130.000
0230	624.0100	Water	MGAL	8.000	8.000
0240	628.1504	Silt Fence	LF	820.000	820.000
0250	628.1520	Silt Fence Maintenance	LF	820.000	820.000
0260	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0270	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0280	628.2006	Erosion Mat Urban Class I Type A	SY	1,140.000	1,140.000
0290	628.7015	Inlet Protection Type C	EACH	6.000	6.000
0300	628.7504	Temporary Ditch Checks	LF	3.000	3.000
0310	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0320	634.0816	Posts Tubular Steel 2x2-Inch X 16-FT	EACH	7.000	7.000
0330	637.2210	Signs Type II Reflective H	SF	74.750	74.750
0340	638.2102	Moving Signs Type II	EACH	3.000	3.000
0350	638.2602	Removing Signs Type II	EACH	9.000	9.000
0360	638.3000	Removing Small Sign Supports	EACH	9.000	9.000
0370	638.4000	Moving Small Sign Supports	EACH	1.000	1.000
0380	643.0100	Traffic Control (project) 01. 1000-08-89	EACH	1.000	1.000
0390	646.0106	Pavement Marking Epoxy 4-Inch	LF	68.000	68.000
0400	646.0126	Pavement Marking Epoxy 8-Inch	LF	133.000	133.000
0410	647.0456	Pavement Marking Curb Epoxy	LF	114.000	114.000
0420	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	143.000	143.000
0430	647.0606	Pavement Marking Island Nose Epoxy	EACH	3.000	3.000
0440	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	163.000	163.000

DATE 01MAR16		E S T I M A T E O F Q U A N T I T I E S			
LINE					1000-08-89
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0450	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	630.000	630.000
0460	649.0506	Temporary Pavement Marking Removable Mask-Out Tape 6-Inch	LF	630.000	630.000
0470	650.4500	Construction Staking Subgrade	LF	990.000	990.000
0480	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	820.000	820.000
0490	650.7000	Construction Staking Concrete Pavement	LF	940.000	940.000
0500	650.9910	Construction Staking Supplemental Control (project) 01. 1000-08-89	LS	1.000	1.000
0510	650.9920	Construction Staking Slope Stakes	LF	990.000	990.000
0520	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	138.000	138.000
0530	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	96.000	96.000
0540	653.0140	Pull Boxes Steel 24x42-Inch	EACH	2.000	2.000
0550	653.0905	Removing Pull Boxes	EACH	1.000	1.000
0560	654.0102	Concrete Bases Type 2	EACH	1.000	1.000
0570	654.0105	Concrete Bases Type 5	EACH	1.000	1.000
0580	655.0260	Cable Traffic Signal 12-14 AWG	LF	210.000	210.000
0590	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	210.000	210.000
0600	655.0620	Electrical Wire Lighting 8 AWG	LF	1,157.000	1,157.000
0610	655.0625	Electrical Wire Lighting 6 AWG	LF	560.000	560.000
0620	690.0150	Sawing Asphalt	LF	1,016.000	1,016.000
0630	690.0250	Sawing Concrete	LF	130.000	130.000
0640	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0650	SPV.0060	Special 01. Moving Lighting Assembly	EACH	1.000	1.000
0660	SPV.0060	Special 02. MovingTraffic Signal Assembly	EACH	1.000	1.000
0670	SPV.0090	Special 01. Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A Modified	LF	820.000	820.000
0680	SPV.0090	Special 02. Profile Curb Cut	LF	135.000	135.000
0690	SPV.0090	Special 03. Concrete Curb & Gutter Cure and Seal Treatment	LF	820.000	820.000

3

REMOVAL ITEMS AND SAWCUT ITEMS								
STATION - STATION	LOCATION	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULLBOXES EACH	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
CATEGORY CODE 0010 STH 27-STH 64								
201+38 - 201+61	RT	36	7	--	--	90	--	ISLAND
STH 27-STH 64 SUBTOTAL		36	7	--	--	90	--	
CATEGORY CODE 0020 USH 12-STH 29								
200+76 - 201+23	LT	54	63	1	1	--	120	ISLAND
USH 12-STH 29 SUBTOTAL		54	63	1	1	--	120	
CATEGORY CODE 0030 USH 63-STH 46-STH 64								
300+46'NE - 301+23'NE 100+83'SW	LT	--	--	--	--	--	10	NE CURB
	RT	--	--	1	0	--	--	
USH 63-STH 46-STH 64 SUBTOTAL		--	--	1	--	--	10	
CATEGORY CODE 0040 STH 64-STH 73 NORTH								
100+60 - 102+10	LT	60	--	--	--	200	--	NW CURB
101+56 - 102+15	RT	56	--	--	--	150	--	SW CURB
101+64 - 102+12	RT	94	--	--	--	127	--	ISLAND
STH 64-STH 73 NORTH SUBTOTAL		210	--	--	--	477	--	
CATEGORY CODE 0050 STH 64-STH 73 SOUTH								
200+19 - 200+74	LT	71	--	--	--	122	--	NW CURB
200+21 - 201+75	RT	59	--	--	--	206	--	NE CURB
200+19 - 200+66	RT	90	--	--	--	121	--	ISLAND
STH 64-STH 73 SOUTH SUBTOTAL		220	--	--	--	449	--	
1000-08-89 TOTALS		520	70	2	1	1,016	130	

BASE AGGREGATE DENSE AND WATER ITEMS			
STATION - STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
CATEGORY CODE 0010 STH 27-STH 64			
	ISLAND	15	0.2
STH 27-STH 64 SUBTOTAL		15	0.2
CATEGORY CODE 0020 USH 12-STH 29			
	ISLAND	27	0.3
USH 12-STH 29 SUBTOTAL		27	0.3
CATEGORY CODE 0030 USH 63-STH 46-STH64			
100+00'SW - 102+39'SW	LT/RT	115	1.2
301+00'NE - 301+23'NE	LT/RT	40	0.4
400+00'NW - 400+58'NW	LT/RT	12	0.1
USH 63-STH 46-STH 64 SUBTOTAL		167	1.7
CATEGORY CODE 0040 STH 64-STH 73 NORTH			
100+60 - 102+10	LT	101	1
101+56 - 102+15	RT	72	0.7
101+64 - 102+12	RT (ISLAND)	54	0.5
STH 64-STH 73 NORTH SUBTOTAL		227	2.2
CATEGORY CODE 0050 STH 64-STH 73 SOUTH			
200+19 - 200+74	LT	52	1.2
200+21 - 201+75	RT	110	1.2
200+19 - 200+66	LT (ISLAND)	32	1.2
STH 64-STH 73 SOUTH SUBTOTAL		194	3.6
1000-08-89 TOTAL		630	8.0

3

3

CONCRETE PAVEMENT ITEMS

STATION - STATION	LOCATION	405.0100 COLORING CONCRETE RED CY	416.0508 CONCRETE ROUNDAABOUT TRUCK APRON 8-INCH SY	416.0512 CONCRETE ROUNDAABOUT TRUCK APRON 12-INCH SY	COMMENTS
CATEGORY CODE 0010 STH 27-STH 64					
201+45 - 201+56	RT	2	--	6	ISLAND
201+45 - 201+57	RT	2	--	7	ISLAND: COLORED SECTION
STH 27-STH 64 SUBTOTAL		4	--	13	
CATEGORY CODE 0020 USH 12-STH 29					
200+76 - 201+23	LT	13	--	40	ISLAND: COLORED SECTION
200+76 - 201+23	LT	8	--	22	ISLAND
USH 12-STH 29 SUBTOTAL		21	--	62	
CATEGORY CODE 0030 USH 63-STH 46-STH 64					
100+00'SW - 102+39'SW	LT	65	287	--	SW CURB
301+00'NE - 301+23'NE	LT	30	--	90	NE CURB
400+00'NW - 400+58'NW	LT	5	23	--	NW CURB
USH 63-STH46-STH 64 SUBTOTAL		100	310	90	
CATEGORY CODE 0040 STH 64-STH 73 NORTH					
100+60 - 102+04	LT	32	--	95	NW CURB
101+62 - 102+10	RT/LT	22	--	65	SW CURB
101+70 - 102+07	RT/LT	11	--	35	ISLAND
STH 64-STH 73 NORTH SUBTOTAL		65	--	195	
CATEGORY CODE 0050 STH 64-STH 73 SOUTH					
200+24 - 200+72	RT/LT	15	--	45	NW CURB
200+27 - 201+38	RT/LT	25	--	70	NE CURB
200+24 - 200+60	RT/LT	10	--	30	ISLAND
STH 64-STH 73 SOUTH SUBTOTAL		50	--	145	
1000-08-89 TOTALS		240	310	505	

GRADING AND SHAPING INTERSECTIONS

STATION - STATION	205.9010.S GRADING AND SHAPING INTERSECTIONS LS	205.9015.S GRADING, SHAPING, AND FINISHING INTERSECTIONS ** LS	COMMENTS
CATEGORY CODE 0010 STH 27-STH 64			
STH 27-STH 64	1	--	205.9010.S.01
CATEGORY CODE 0020 USH 12-STH 29			
USH 12-STH 29	1	--	205.9010.S.02
CATEGORY CODE 0030 USH 63-STH 46-STH 64			
USH 63-STH 46-STH 64	--	1	205.9015.S.01
CATEGORY CODE 0040 STH 64-STH 73 NORTH			
STH 64-STH 73 NORTH	--	1	205.9015.S.02
CATEGORY CODE 0050 STH 64-STH 73 SOUTH			
STH 64-STH 73 SOUTH	--	1	205.9015.S.03
1000-08-89 TOTALS	2	3	

\*\* FINISHING ITEMS INCLUDE EXCA VATION, TOPSOIL, FERTILIZER TYPE B, SEED MIX #20 AND TEMPORARY SEEDING.  
ESTIMATED QUA NTITIES FOR BIDDING PURPOSES PROVIDED BELOW

LOCATION	EXCA VATION	BORROW	TOPSOIL	FERTILIZER	SEED MIX	SEED
	COMMON CY			TYPE B CWT	NO. 20 LBS	TEMPORARY LBS
USH 63-STH 46-STH64	120	20	280	0.2	10	10
STH 64-STH 73 NORTH	110	100	610	0.5	20	20
STH 64-STH 73 SOUTH	80	0	310	0.3	10	10
TOTALS	310	120	1,200	1	40	40

FINISHING ROADWAY

STATION - STATION	213.0100 FINISHING ROADWAY PROJECT EACH
CATEGORY CODE 0010 STH 27-STH 64	
STH 27-STH 64	0.2
CATEGORY CODE 0020 USH 12-STH 29	
USH 12-STH 29	0.2
CATEGORY CODE 0030 USH 63-STH 46-STH 64	
USH 63-STH 46-STH 64	0.2
CATEGORY CODE 0040 STH 64-STH 73 NORTH	
STH 64-STH 73 NORTH	0.2
CATEGORY CODE 0050 STH 64-STH 73 SOUTH	
STH 64-STH 73 SOUTH	0.2
1000-08-89 TOTALS	1

3

3

ASPHALTIC ITEMS

STATION - STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	455.0605 TACK COAT GAL	465.0315 ASPHALTIC FLUMES SY	COMMENTS
CATEGORY CODE 0010 STH 27-STH 64					
201+37 - 201+61	RT	5	1	--	
STH 27-STH 64 SUBTOTALS		5	1	--	
CATEGORY CODE 0040 STH 64-STH 73 NORTH					
100+60 - 102+10	LT	20	2	4	NW CURB
101+56 - 102+15	RT	15	1	4	SW CURB
101+64 - 102+12	RT	10	1	--	ISLAND
STH 64-STH 73 NORTH SUBTOTALS		45	4	8	
CATEGORY CODE 0050 STH 64-STH 73 SOUTH					
200+21 - 201+75	LT	30	3	--	NE CURB
200+19 - 200+74	RT	10	1	4	NW CURB
200+19 - 200+66	LT	10	1	--	ISLAND
STH 64-STH 73 SOUTH SUBTOTALS		50	3	4	
1000-08-89 TOTALS		100	8	12	

DRILLED TIE BARS

STATION	LOCATION	416.0610 DRILLED TIE BARS EACH
CATEGORY CODE 0020 USH 12-STH 29		
200+75 - 201+24	LT	25
USH12-STH29 SUBTOTAL		25
CATEGORY CODE 0030 USH 63-STH 46-STH 64		
100+00'SW' - 102+39'SW	LT	85
300+00'NE' - 301+23'NE	LT	45
400+00'NW' - 400+58'NW	LT	20
USH63-STH46-STH64 SUBTOTAL		150
1000-08-89 TOTAL		175

DECTABLE WARNING FIELDS

602.0505 CURB RAMP DECTABLE WARNING FIELD YELLOW SF	
STATION - STATION	
CATEGORY CODE 0010	
STH 27-STH 64	
201+45 - 201+56	30
1000-08-89 TOTALS	
	30

CONCRETE CURB AND GUTTER ITEMS

STATION - STATION	LOCATION	SPV.0090.01 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A MODIFIED LF	SPV.0090.02 PROFILE CURB CUT LF	SPV.0090.03 CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT LF	650.5500 CONSTRUCTION STAKING CURB, GUTTER AND CURB & GUTTER LF	COMMENTS
CATEGORY CODE 0010 STH 27-STH 64						
201+43 - 201+57	RT	60	--	60	60	ISLAND
STH 27-STH 64SUBTOTALS		60	--	60	60	
CATEGORY CODE 0020 USH 12-STH 29						
200+76 - 201+23	LT	55	--	55	55	ISLAND
USH 12-STH 29 SUBTOTALS		55	--	55	55	
CATEGORY CODE 0030 USH 63-STH 46-STH64						
300+00'NE' - 301+23'NE	LT	--	135	--	--	NE CURB
USH 63-STH 46-STH64 SUBTOTALS		--	135	--	--	
CATEGORY CODE 0040 STH 64-STH 73 NORTH						
100+60 - 102+05	LT	175	--	175	175	NW CURB
101+62 - 102+11	RT	130	--	130	130	SW CURB
101+68 - 102+08	RT	95	--	95	95	ISLAND
STH 64-STH 73 NORTH SUBTOTALS		400	--	400	400	
CATEGORY CODE 0050 STH 64-STH 73 SOUTH						
200+23 - 200+71	LT	105	--	105	105	NW CURB
200+26 - 201+37	RT	110	--	110	110	NE CURB
200+23 - 200+61	LT	90	--	90	90	ISLAND
STH 64-STH 73 SOUTH SUBTOTALS		305	--	305	305	
		820	135	820	820	

3

PROJECT NO:1000-08-89

HWY: VARIOUS

COUNTY: VARIOUS

MISCELLANEOUS QUANTITIES

SHEET

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SILT FENCE ITEMS

STATION - STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 MAINTENANCE LF
CATEGORY CODE 0030 USH 63-STH 46-STH64			
100+00 'SW' - 102+40 'SW'	RT	250	250
300+00 'NE' - 301+23 'NE'	RT	130	130
400+00 'NW' - 400+58 'NW'	RT	10	10
UNDISTRIBUTED		100	100
63/46/64 SUBTOTALS		490	490
CATEGORY CODE 0040 STH 64-STH 73 NORTH			
100+98 - 101+37	LT	40	40
101+60 - 101+700	RT	16	16
UNDISTRIBUTED		14	14
64/73 NORTH SUBTOTALS		70	70
CATEGORY CODE 0050 STH 64-STH 73 SOUTH			
200+29 - 200+72	LT	90	90
200+36 - 201+41	RT	120	120
UNDISTRIBUTED		50	50
64/73 SOUTH SUBTOTALS		260	260
1000-08-89 TOTALS		820	820

INLET PROTECTION

LOCATION	628.7015 TYPE C EA	COMMENT
CATEGORY CODE 0020		
USH 12-STH 29		
USH 12-STH 29	1	EXISTING INLET
USH 12-STH 29 SUBTOTAL	1	
CATEGORY CODE 0030		
USH 63-STH 46-STH 64		
USH 63-STH 46-STH 64	5	EXISTING INLETS
USH 63-STH 46-STH 64 SUBTOTAL	5	
1000-08-89 TOTAL	6	

MOBILIZATION EROSION CONTROL ITEMS

STATION - STATION	628.1905	628.1910
	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
CATEGORY CODE 0010 STH 27-STH 64		
STH 27-STH 64	1	--
CATEGORY CODE 0020 USH 12-STH 29		
USH 12-STH 29	1	--
CATEGORY CODE 0030 USH 63-STH 46-STH 64		
USH 63-STH 46-STH 64	1	1
CATEGORY CODE 0040 STH 64-STH 73 NORTH		
STH 64-STH 73 NORTH	1	1
CATEGORY CODE 0050 STH 64-STH 73 SOUTH		
STH 64-STH 73 SOUTH	1	1
1000-08-89 TOTALS		5 3

EROSION CONTROL ITEMS

		628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.7504 TEMPORARY DITCH CHECKS EACH
STATION - STATION	LOCATION		
CATEGORY CODE 0030 USH 63-STH 46-STH 64			
100+00'SW' - 102+39'SW'	RT	185	--
300+00'NE' - 301+23'NE'	RT	35	--
400+00'NW' - 400+58'NW'	RT	5	--
UNDISTRIBUTED		45	--
USH 63-STH 46-STH 64 SUBTOTALS		270	--
CATEGORY CODE 0040 STH 64-STH 73 NORTH			
100+98 - 102+05	LT	247	1
101+60 - 102+08	RT	240	1
UNDISTRIBUTED		83	1
STH 64-STH 73 NORTH SUBTOTALS		570	3
CATEGORY CODE 0050 STH 64-STH 73 SOUTH			
200+28 - 200+70	LT	103	--
200+27 - 201+41	RT	143	--
UNDISTRIBUTED		54	--
STH 64-STH 73 SOUTH SUBTOTALS		300	--
1000-08-89 TOTALS		1,140	3

ADJUSTING MANHOLE COVERS

		611.8110	
STATION	LOCATION	EA	COMMENTS
CATEGORY CODE 0010			
STH 27-STH 64			
201+50	RT	1	STORM SEWER MANHOLE
STH 27-STH 64 SUBTOTAL		1	
1000-08-89 TOTAL		1	

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TRAFFIC CONTROL PROJECT	
STATION - STATION	643.0100 TRAFFIC CONTROL PROJECT EACH
CATEGORY CODE 0010 STH 27-STH 64	
STH 27-STH 64	0.2
CATEGORY CODE 0020 USH 12-STH 29	
USH 12-STH 29	0.2
CATEGORY CODE 0030 USH 63-STH 46-STH 64	
USH 63-STH 46-STH 64	0.2
CATEGORY CODE 0040 STH 64-STH 73 NORTH	
STH 64-STH 73 NORTH	0.2
CATEGORY CODE 0050 STH 64-STH 73 SOUTH	
STH 64-STH 73 SOUTH	0.2
1000-08-89 TOTALS	
1	

TEMPORARY PAVEMENT MARKING ITEMS		
INTERSECTION	649.0400 REMOVABLE TAPE 4-INCH (YELLOW) L.F.	649.0506 REMOVABLE MASK-OUT TAPE 6-INCH L.F.
CATEGORY CODE 0010 STH 27-STH 64		
SOUTH LEG	170	170
STH 27-STH 64 SUBTOTALS:	170	170
CATEGORY CODE 0040 STH 64-STH 73 NORTH		
WEST LEG	220	220
STH 64-STH 73 NORTH SUBTOTALS:	220	220
CATEGORY CODE 0050 STH 64-STH 73 SOUTH		
NORTH LEG	240	240
STH 64-STH 73 SOUTH SUBTOTALS:	240	240
1000-08-89 TOTALS:	630	630

PAVEMENT MARKING							
LOCATION	646.0106		647.0606	647.0766	646.0126	647.0456	647.0566
	4-INCH	4-INCH	ISLAND NOSE	CROSSWALK	EPOXY	CURB	STOP LINE
	WHITE	YELLOW	EPOXY	EPOXY	8-INCH	EPOXY	EPOXY
	LF	LF	YELLOW	6-INCH	WHITE	YELLOW	18-INCH
			EACH	WHITE	LF	LF	WHITE
CATEGORY CODE 0010 STH 27-STH 64							
ISLAND	--	--	3	--	16	59	--
THROUGH LANE	--	30	--	123	14	--	14
RIGHT TURN LANE	--	--	--	40	--	--	20
STH 27-STH 64 SUBTOTALS	0	30	3	163	30	59	34
CATEGORY CODE 0020 USH 12-STH 29							
ISLAND	--	--	--	--	--	55	--
THROUGH LANE	--	--	--	--	--	--	36
USH 12-STH 29 SUBTOTALS	0	0	0	0	0	55	36
CATEGORY CODE 0040 STH 64-STH 73 NORTH							
ISLAND	-	-	-	-	49	-	-
LEFT TURN LANE	-	-	-	-	-	-	12
RIGHT TURN LANE	-	-	-	-	-	-	23
STH 64-STH 73 NORTH SUBTOTALS	0	0	0	0	49	0	35
CATEGORY CODE 0050 STH 64-STH 73 SOUTH							
ISLAND	-	-	-	-	54	-	-
LEFT TURN LANE	-	-	-	-	-	-	14
RIGHT TURN LANE	-	-	-	-	-	-	24
NORTHBOUND LANE	38	-	-	-	-	-	-
STH 64-STH 73 SOUTH SUBTOTALS	38	0	0	0	54	0	38
1000-08-89 TOTALS	68		3	163	133	114	143

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SIGNING ITEMS

SIGN NO.	LOCATION	SIGN CODE	SIGN MESSAGE	STRUCTURE ID OR MOUNTED ON SAME POST/ SIGN AS	637.2210 SIGNS TYPE II REFLECTIVE H			634.0616 POSTS WOOD	634.0816 POSTS TUBULAR STEEL	638.2102 MOVING SIGNS TYPE II	638.4000 MOVING SMALL SIGN SUPPORTS	638.2602 REMOVING SIGNS TYPE II	638.3000 REMOVING SMALL SIGN SUPPORTS	
					W"	x	H"	S.F.	4"x6"x16' EACH	2"x2"x16' EACH	EACH	EACH	EACH	EACH
CATEGORY 0010 STH 27-STH 64														
300	ISLAND	R1-1	STOP		36	x	36	9.00	0	1	0	0	1	1
STH 27-STH 64 SUBTOTALS								9.00	0	1	0	0	1	1
CATEGORY 0020 USH 12-STH 29														
200	ISLAND	R5-1	DO NOT ENTER		30	x	30	6.25	0	1	0	0	1	1
201	ISLAND	R4-1 (MOD)	PARKING W/ A ROW		--	x	--	--	0	0	1	1	0	0
USH 12-STH 29 SUBTOTALS								6.25	0	1	1	1	1	1
CATEGORY 0030 USH 63-STH 46-STH 64														
101	NE QUADRANT	R1-2	YIELD		--	x	--	--	--	1	1	0	--	1
102	NE QUADRANT	R1-54	TO TRAFFIC FROM LEFT	101	--	x	--	--	--	--	1	--	--	--
USH 63-STH 46-STH 64 SUBTOTALS								0.00	0	1	2	0	0	1
CATEGORY 0040 STH 64-STH 73 NORTH														
401	ISLAND	R1-1	STOP		36	x	36	9.00	--	1	--	--	1	1
402	SW QUADRANT	R1-1	STOP		36	x	36	9.00	--	1	--	--	1	1
403	SW QUADRANT	R5-1-C	DO NOT ENTER	402	30	x	30	6.25	--	--	--	--	1	1
404	STH 64	J4-1			24	x	36	6.00	1	--	--	--	1	1
		M3-2	WEST		24	x	12	0.00	--	--	--	--	--	--
		M1-6	64		24	x	24	0.00	--	--	--	--	--	--
STH 64-STH 73 NORTH SUBTOTALS								30.25	1	2	0	0	4	4
CATEGORY 0050 STH 64-STH 73 SOUTH														
501	ISLAND	R1-1	STOP		36	x	36	9.00	--	1	--	--	1	1
502	NW QUADRANT	R1-1	STOP		36	x	36	9.00	--	1	--	--	1	1
503	NW QUADRANT	R5-1-C	DO NOT ENTER	502	30	x	30	6.25	--	--	--	--	1	--
504	WEST STH 73	R8-8	DO NOT STOP ON TRACKS		24	x	30	5.00	1	--	--	--	--	--
STH 64-STH 73 SOUTH SUBTOTALS								29.25	1	2	0	0	3	2
1000-08-89 TOTALS								74.75	2	7	3	1	9	9

CONCRETE MEDIAN SLOPED NOSE

620.0300 CONCRETE MEDIAN SLOPED NOSE		
STATION	LOCATION	SF
CATEGORY CODE 0010		
STH 27-STH 64		
201+45	RT	16
201+55	RT	12
201+56	RT	14
STH 27-STH 64 SUBTOTAL		42
CATEGORY CODE 0040		
STH 64-STH 73 NORTH		
101+70	RT	17
102+06	RT	12
102+06	RT	15
STH 64-STH 73 NORTH SUBTOTAL		44
CATEGORY CODE 0050		
STH 64-STH 73 SOUTH		
102+03	LT	17
102+02	LT	12
101+02	LT	15
STH 64-STH 73 SOUTH SUBTOTAL		44
1000-08-89 TOTAL		130

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LIGHTING CONDUIT AND WIRE

		652.0225	655.0620	655.0625
		CONDUIT RIGID NONMETALLIC	ELECTRICAL WIRE	ELECTRICAL WIRE
		SCHEDULE 40	LIGHTING	LIGHTING
		2-INCH	8 AWG	6 AWG
FROM	TO	LF	LF	LF
CATEGORY CODE 0020				
USH 12-STH 29				
SB-1	- EXLP-1	13	--	560
USH 12-STH 29 TOTALS		13	0	560
CATEGORY CODE 0030				
USH 63-STH 46-STH64				
EXPB-1	- A-1	35	245	--
A-1	- PB-3	90	520	--
PB-3	- EXB-1	--	392	--
USH 63-STH 46-STH 64 TOTALS		125	1157	0
1000-08-89 TOTALS		138	1157*	560*

STREET LIGHTS & SIGNALS

				654.0102	654.0105	SPV.0060.01	SPV.0060.02
				CONCRETE BASES	CONCRETE BASES	MOVING	MOVING
				TYPE 2	TYPE 5	LIGHTING	TRAFFIC SIGNAL
				EACH	EACH	ASSEMBLY	ASSEMBLY
LIGHT	STATION	OFFSET	R/L			EACH	EACH
CATEGORY CODE 0020							
USH 12-STH 29							
LP-1	201+20	20.4	LT	1	--	--	1
USH 12-STH 29 TOTALS				1	--	--	1
CATEGORY CODE 0030							
USH 63-STH 46-STH64							
A-1	100+85'SW	1.5	RT	--	1	1	--
USH 63-STH 46-STH64 TOTALS				--	1	1	--
1000-08-89 TOTALS				1	1	1	1

SIGNAL CONDUIT AND WIRE

		652.0235	655.0515	655.0260
		CONDUIT RIGID NONMETALLIC	ELECTRICAL WIRE	CABLE
		SCHEDULE 40	TRAFFIC SIGNALS	TRAFFIC SIGNALS
		3-INCH	10 AWG*	12-14 AWG*
FROM	TO	LF	LF	LF
CATEGORY CODE 0020				
USH 12-STH 29				
EXCB-1	- SB-1	--	210	210
PB-1	- B-1	24	--	--
PB-1	- B-2	22	--	--
PB-1	- SB-1	50	--	--
USH 12-STH 29 TOTALS		96	210	210
1000-08-89 TOTALS		96	210*	210*

PULLBOXES

				653.0140		
				PULLBOXES STEEL		
				24X42-INCH		
PULLBOX				EACH		
NUMBER	STATION	OFFSET	LOCATION		COMMENTS	
CATEGORY CODE 0020						
USH 12-STH 29						
PB-1	200+98	32	LT	1	SIGNAL PULL BOX	
USH 12-STH 29 TOTALS				1		
CATEGORY CODE 0030						
USH 63-STH 46-STH64						
PB-3	100+00'SW	7	LT	1	LIGHTING PULL BOX	
USH 63-STH 46-STH 64 TOTALS				1		
1000-08-89 TOTAL				2		

\* WIRE QUANTITIES TO BE FIELD  
VERIFIED TO ENSURE ROUTING  
AND LENGTH

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CONSTRUCTION STAKING ITEMS

STATION - STATION	LOCATION	650.4500 SUBGRADE LF	650.7000 CONCRETE PAVEMENT LF	650.9920 SLOPE STAKES LF
CATEGORY CODE 0030 USH 63-STH 46-STH 64				
100+00'SW - 102+39'SW	RT/LT	239	239	239
301+00'NE - 301+23'NE	RT/LT	123	123	123
400+00'NW - 400+58'NW	RT/LT	58	58	58
USH 63-STH 46-STH 64 SUBTOTALS		420	420	420
CATEGORY CODE 0040 STH 64-STH 73 NORTH				
100+60 - 102+04	LT	180	180	180
101+62 - 102+10	RT	140	140	140
STH 64-STH 73 NORTH SUBTOTALS		320	320	320
CATEGORY CODE 0050 STH 64-STH 73 SOUTH				
200+24 - 200+72	LT	110	80	110
200+27 - 201+38	RT	140	120	140
STH 64-STH 73 SOUTH SUBTOTALS		250	200	250
1000-08-89 TOTALS		990	940	990

CONSTRUCTION STAKING  
SUPPLEMENTAL CONTROL

STATION - STATION	650.9910 EACH	
CATEGORY CODE 0010 STH 27-STH 64		
STH 27-STH 64	0.2	
CATEGORY CODE 0020 USH 12-STH 29		
USH 12-STH 29	0.2	
CATEGORY CODE 0030 USH 63-STH 46-STH 64		
USH 63-STH 46-STH 64	0.2	
CATEGORY CODE 0040 STH 64-STH 73 NORTH		
STH 64-STH 73 NORTH	0.2	
CATEGORY CODE 0050 STH 64-STH 73 SOUTH		
STH 64-STH 73 SOUTH	0.2	
1000-08-89 TOTALS		1

MOBILIZATION

STATION - STATION	619.1000 MOBILIZATION PROJECT EACH
CATEGORY CODE 0010 <b>STH 27-STH 64</b>	
STH 27-STH 64	0.2
CATEGORY CODE 0020 <b>USH 12-STH 29</b>	
USH 12-STH 29	0.2
CATEGORY CODE 0030 <b>USH 63-STH 46-STH 64</b>	
USH 63-STH 46-STH 64	0.2
CATEGORY CODE 0040 <b>STH 64-STH 73 NORTH</b>	
STH 64-STH 73 NORTH	0.2
CATEGORY CODE 0050 <b>STH 64-STH 73 SOUTH</b>	
STH 64-STH 73 SOUTH	0.2
<b>1000-08-89 TOTALS</b>	
	<b>1</b>

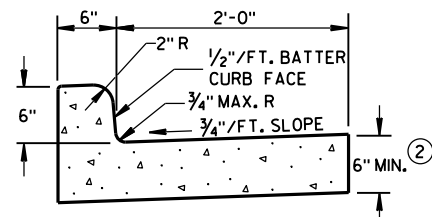
MAINTENANCE AND REPAIR OF HAUL  
ROADS

STATION - STATION	618.0100 PROJECT 1000-08-89 EACH	
CATEGORY CODE 0010 STH 27-STH 64		
STH 27-STH 64	0.2	
CATEGORY CODE 0020 USH 12-STH 29		
USH 12-STH 29	0.2	
CATEGORY CODE 0030 USH 63-STH 46-STH 64		
USH 63-STH 46-STH 64	0.2	
CATEGORY CODE 0040 STH 64-STH 73 NORTH		
STH 64-STH 73 NORTH	0.2	
CATEGORY CODE 0050 STH 64-STH 73 SOUTH		
STH 64-STH 73 SOUTH	0.2	
1000-08-89 TOTALS		1

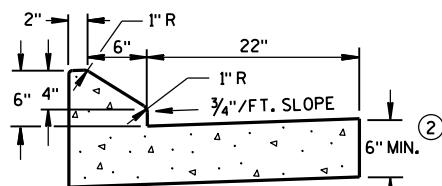
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Standard Detail Drawing List

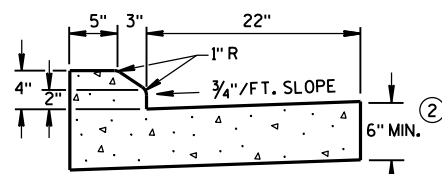
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-16A	CURB RAMPS TYPES 1 AND 1-A
08D05-16B	CURB RAMPS TYPES 2 AND 3
08D05-16C	CURB RAMPS TYPES 4A AND 4A1
08D05-16D	CURB RAMPS TYPE 4B AND 4B1
08D05-16E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-09	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
11B02-02	CONCRETE MEDIAN NOSE
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-02A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-02B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-02C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



TYPES A & D ①

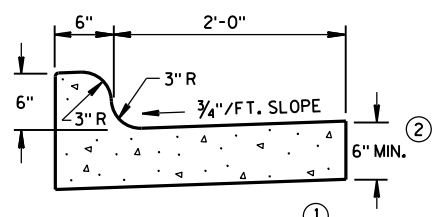


6" SLOPED CURB TYPES G & J ①



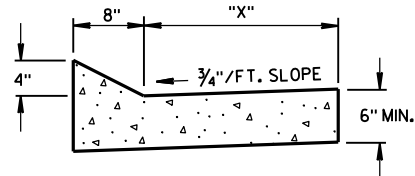
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"



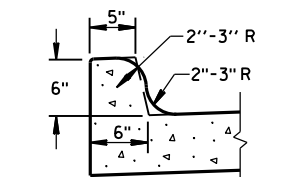
TYPES K & L ①

CONCRETE CURB & GUTTER 30"

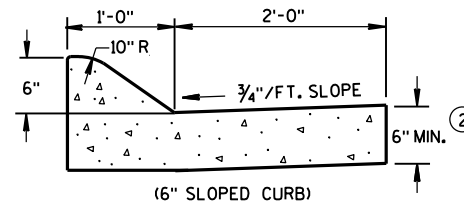


TYPES TBT & TBT ①  
CONCRETE CURB & GUTTER

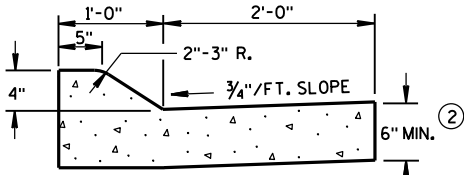
TBT & TBT	"X"
30"	22"
36"	28"



OPTIONAL CURB SHAPE  
FOR TYPES K & L ①

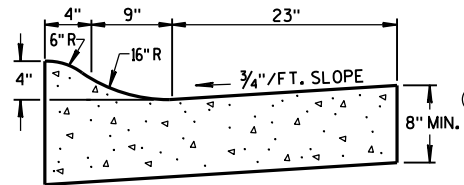


(6" SLOPED CURB)



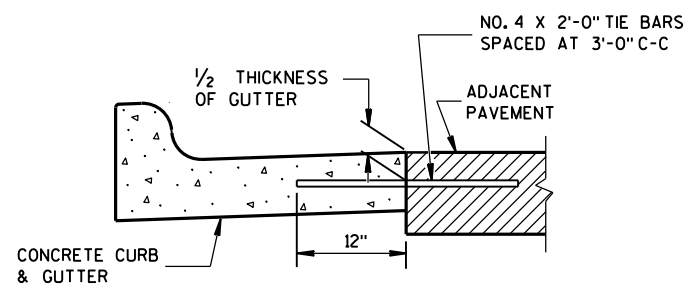
(4" SLOPED CURB)

TYPES A & D ①

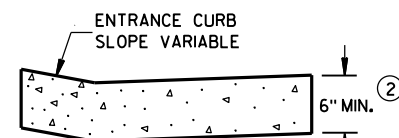


4" SLOPED CURB TYPES R & T ① ④

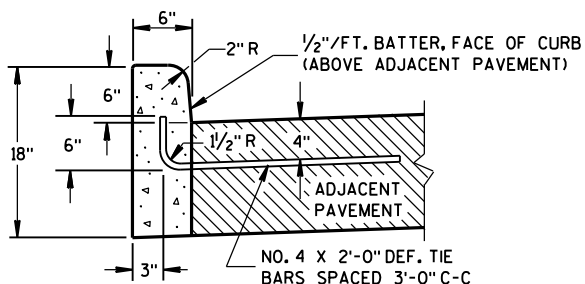
CONCRETE CURB & GUTTER 36"



TYPICAL TIE BAR LOCATION ①

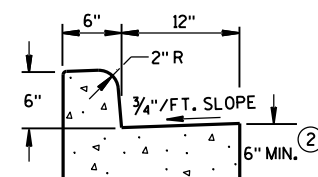


DRIVEWAY ENTRANCE CURB  
(WHEN DIRECTED BY THE ENGINEER)

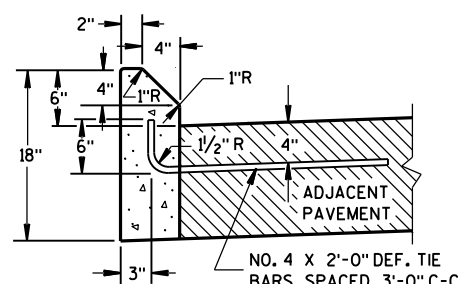


TYPES A & D ①

CONCRETE CURB



TYPES A & D  
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

## GENERAL NOTES

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

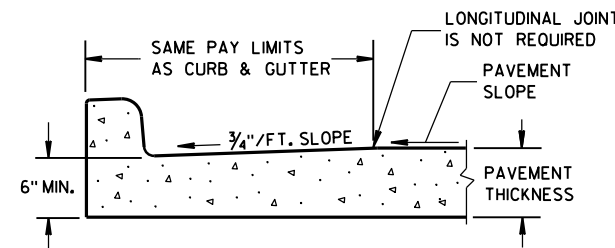
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

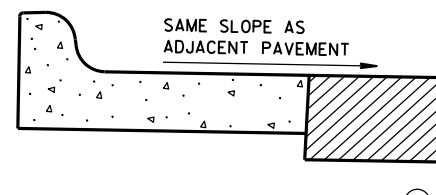
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

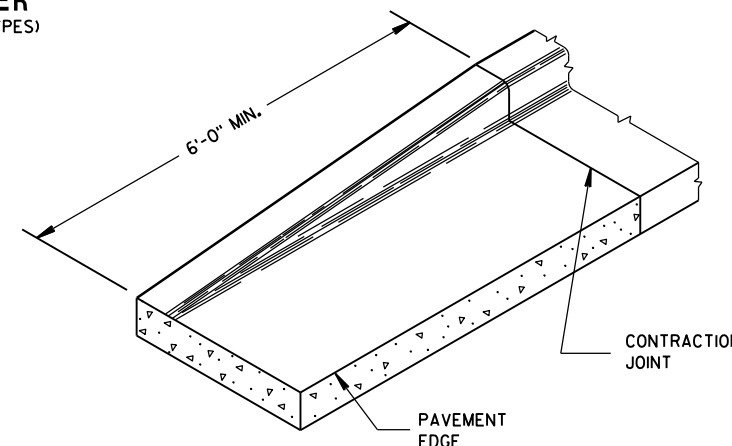
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



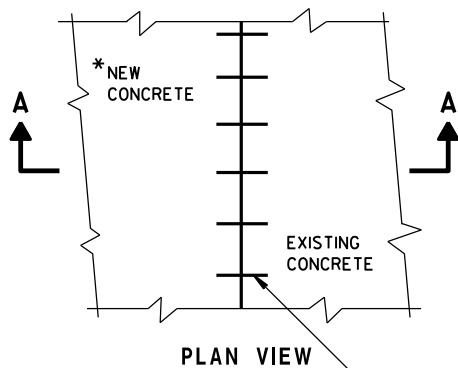
PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER



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



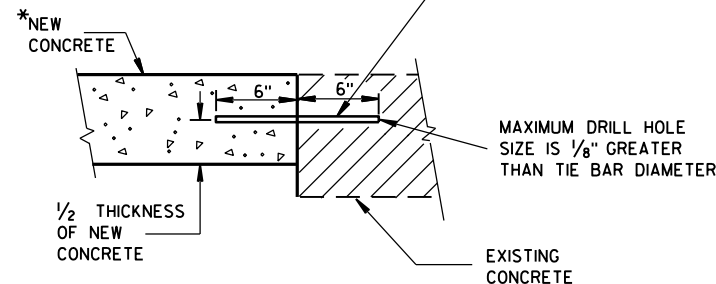
END SECTION CURB & GUTTER



PLAN VIEW

\*NEW CURB & GUTTER,  
SURFACE DRAINS,  
CONCRETE PAVEMENT  
OR OTHER NEW CONCRETE.

NO. 6 TIE BARS SPACED 2'-6" C-C,  
INSTALLED PERPENDICULAR  
TO THE LONGITUDINAL JOINT.



SECTION A-A  
TIE BARS DRILLED  
INTO EXISTING PAVEMENT

CONCRETE CURB, CONCRETE  
CURB & GUTTER AND TIES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June, 2015  
DATE  
FHWA

/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

## 6



PLAN VIEW  
FLUME AT CURB END

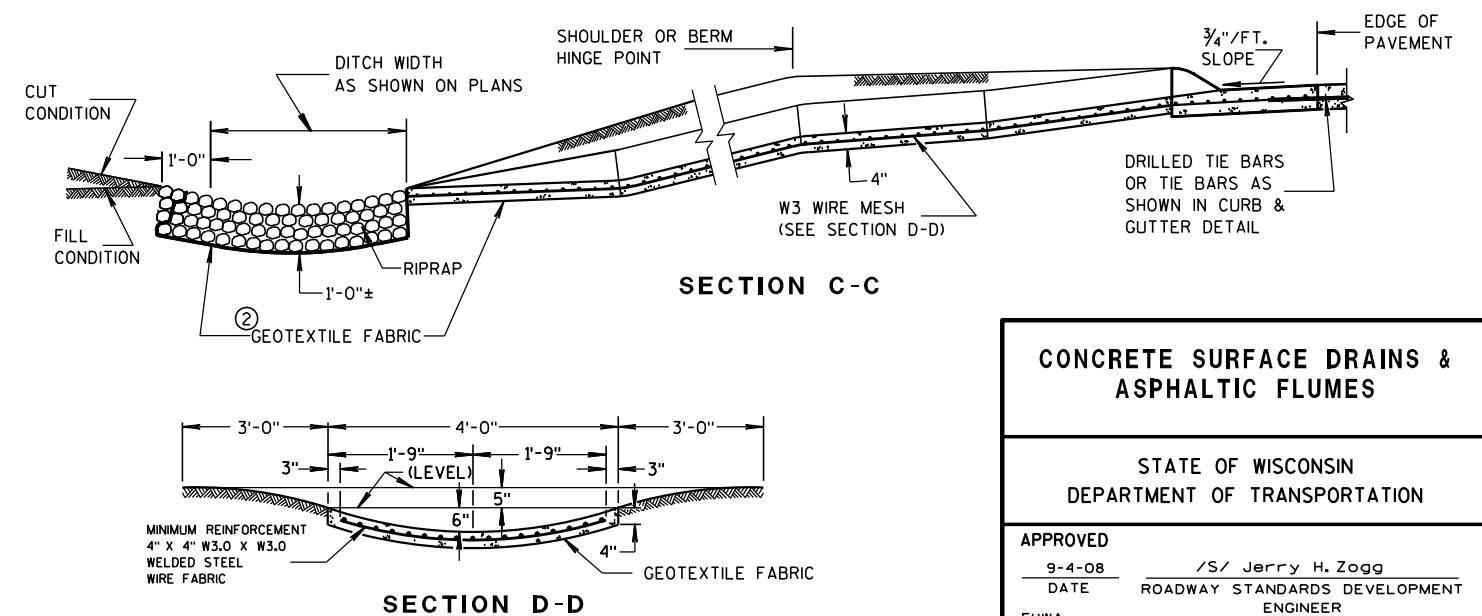


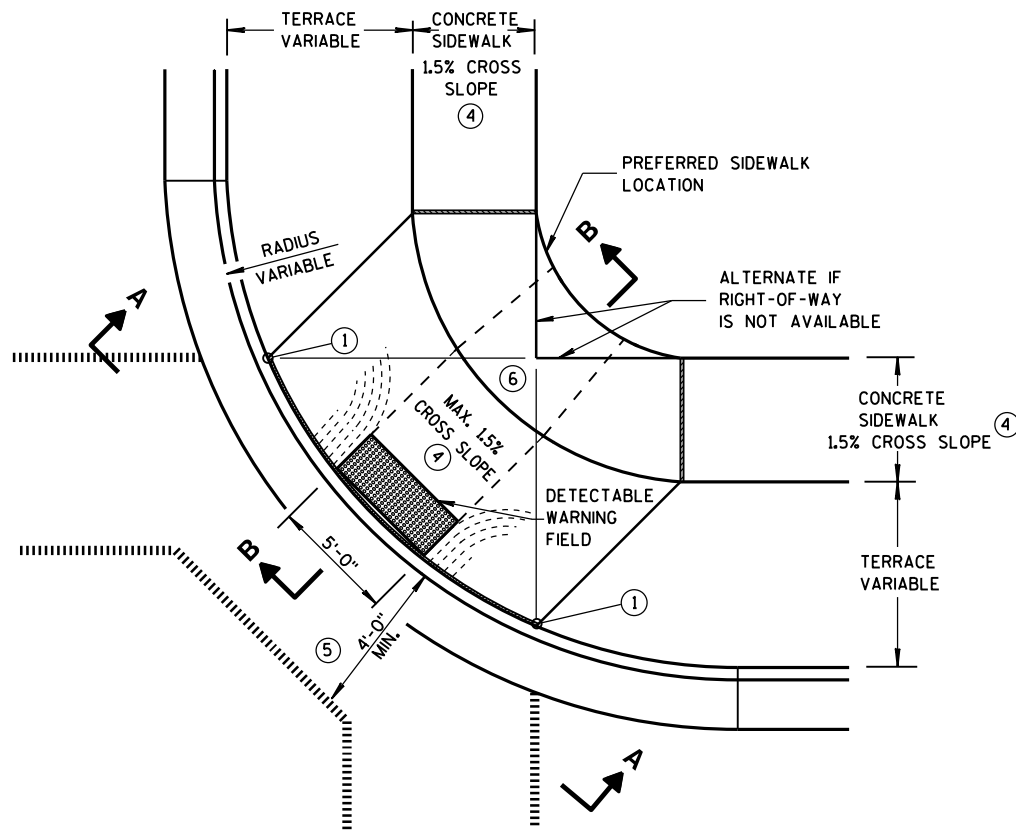
## 6

S.D.D. 8 D 4-5

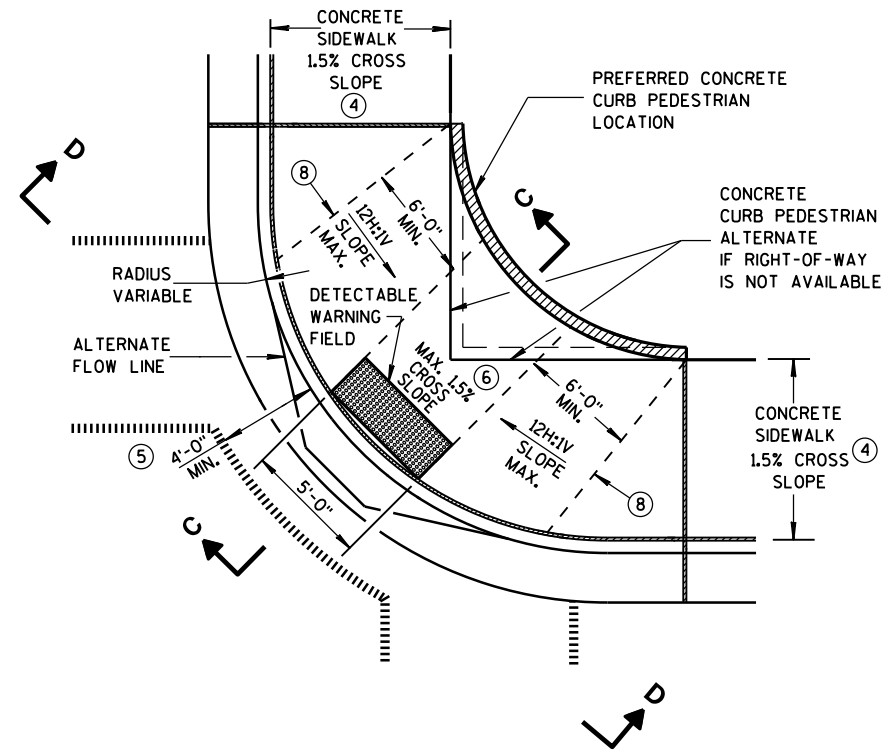
③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

**SECTION C-C**

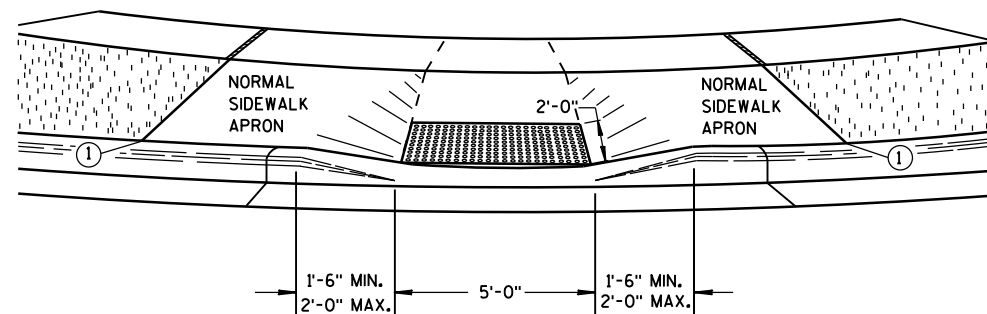




**PLAN VIEW  
TYPE 1 RAMP**  
(CENTER OF CORNER RADIUS)

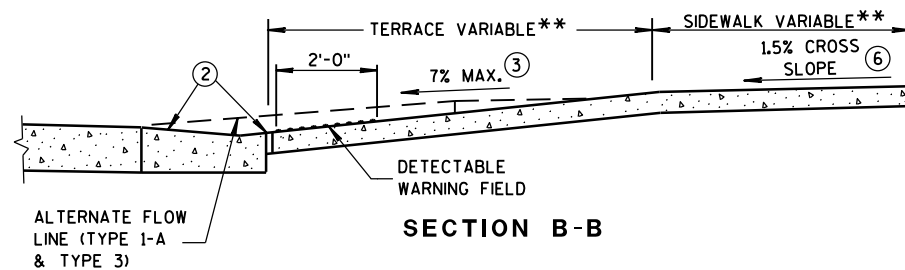


**PLAN VIEW  
TYPE 1-A RAMP**  
(NO TERRACE)

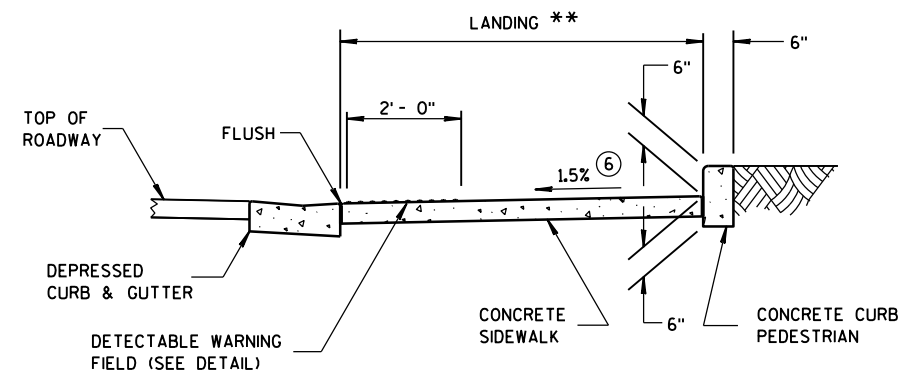


**VIEW A-A**

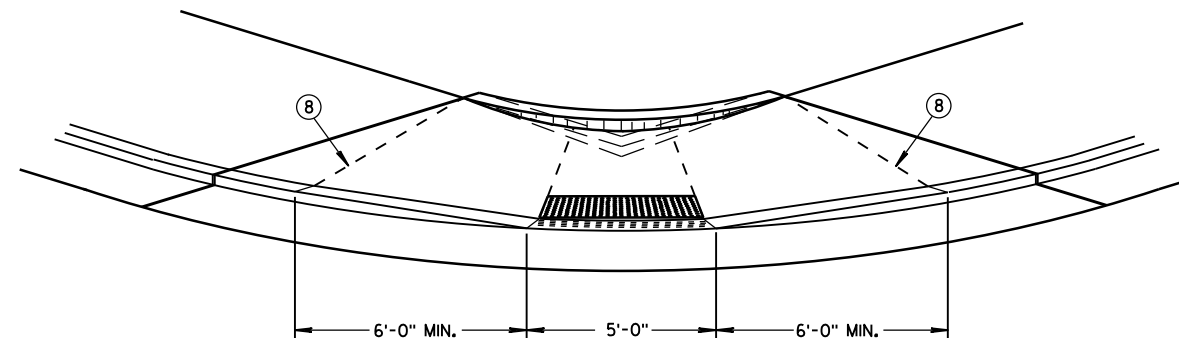
\*\* WIDTH SHOWN ELSEWHERE  
IN THE PLANS



**SECTION B-B**



**SECTION C-C**



**VIEW D-D**

## GENERAL NOTES

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

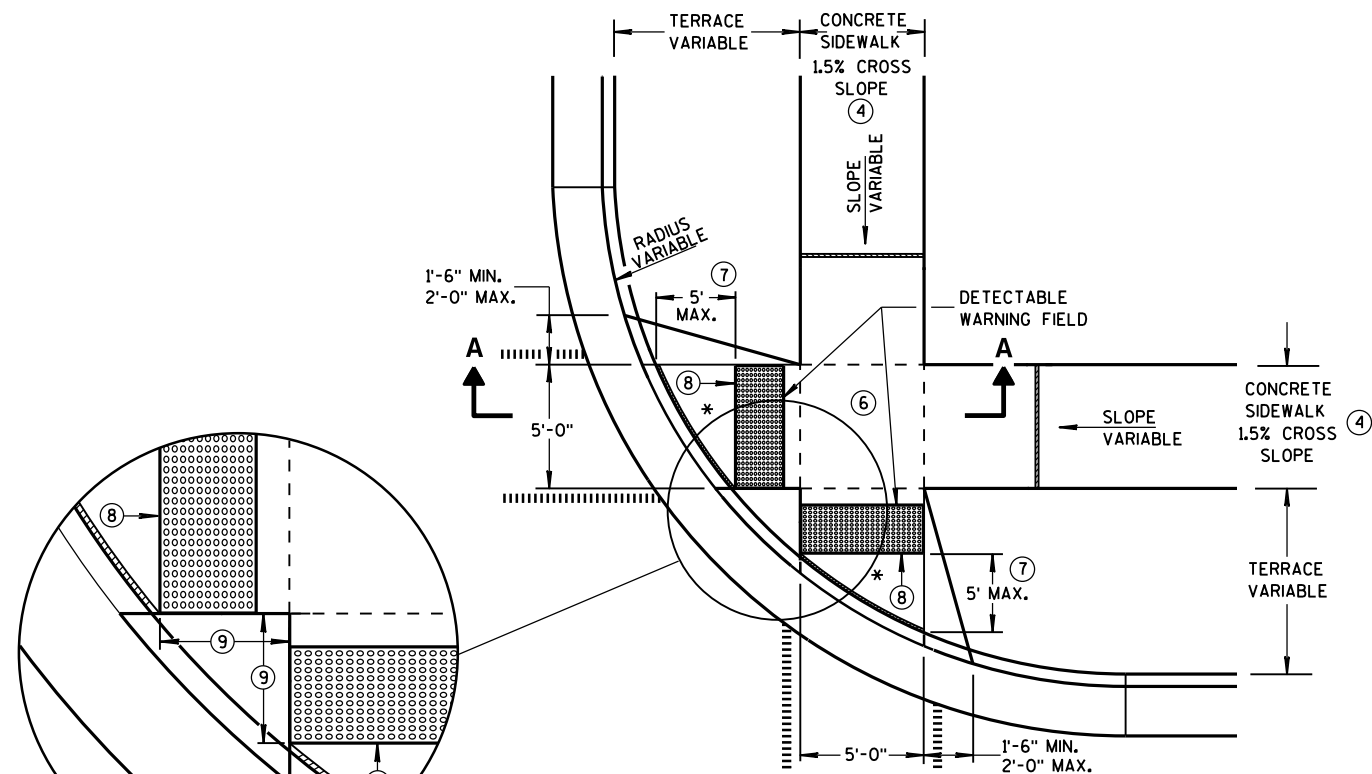
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑦ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

## LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

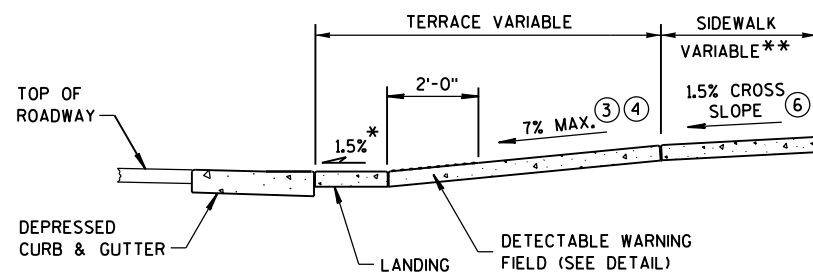
**CURB RAMPS  
TYPES 1 AND 1-A**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



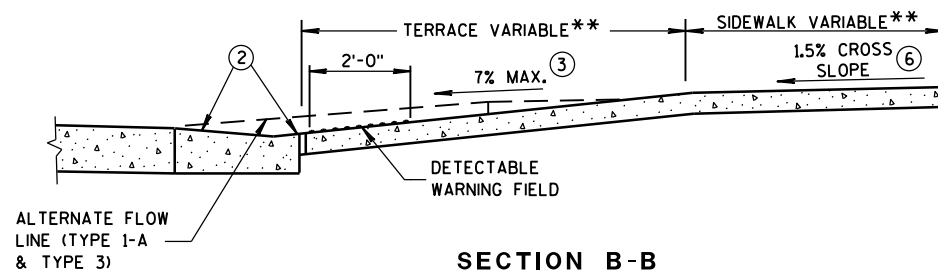
**PLAN VIEW  
TYPE 2 RAMP**  
(ON LINE WITH SIDEWALK)

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



**SECTION A-A**

\*\* WIDTH SHOWN ELSEWHERE  
IN THE PLANS



**SECTION B-B**

## GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

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

⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

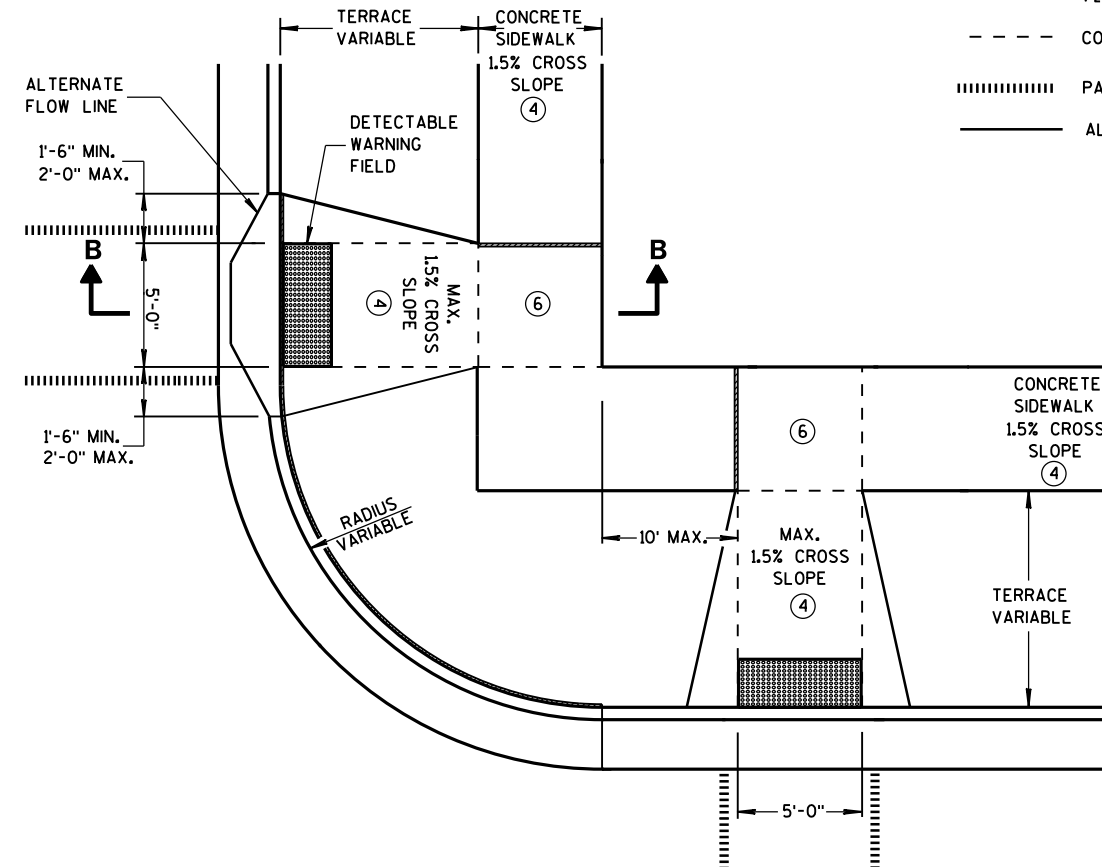
⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. 2" MINIMUM CURB HEIGHT.

## LEGEND

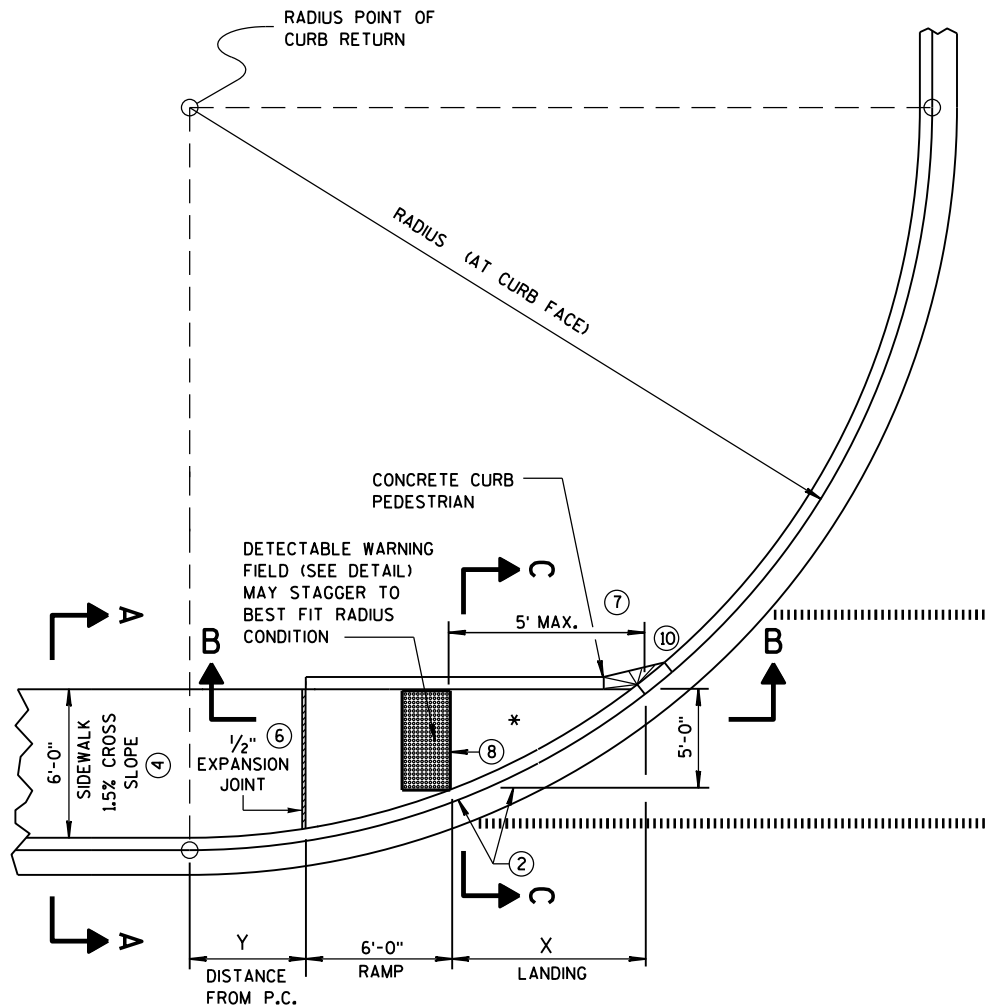
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



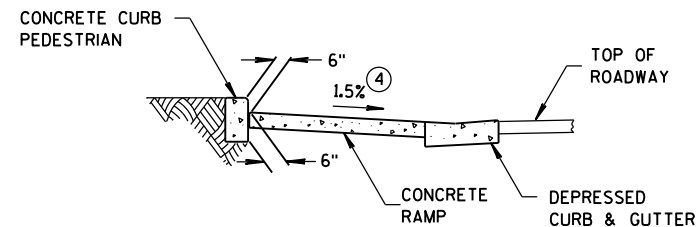
**PLAN VIEW  
TYPE 3 RAMP**  
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS  
TYPES 2 AND 3**

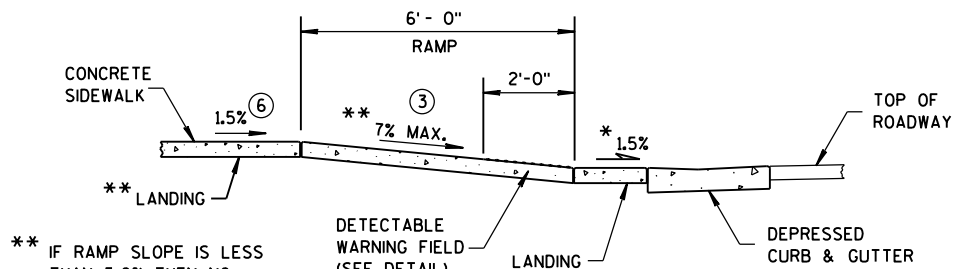
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 4A  
PLAN VIEW



SECTION C-C FOR TYPE 4A



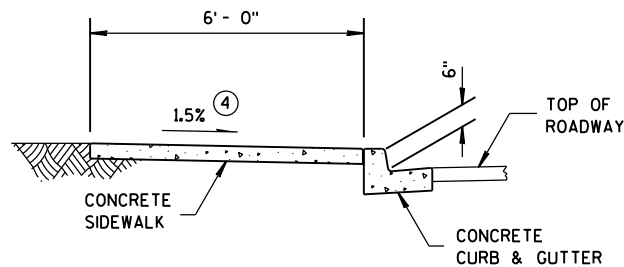
SECTION B-B FOR TYPE 4A

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

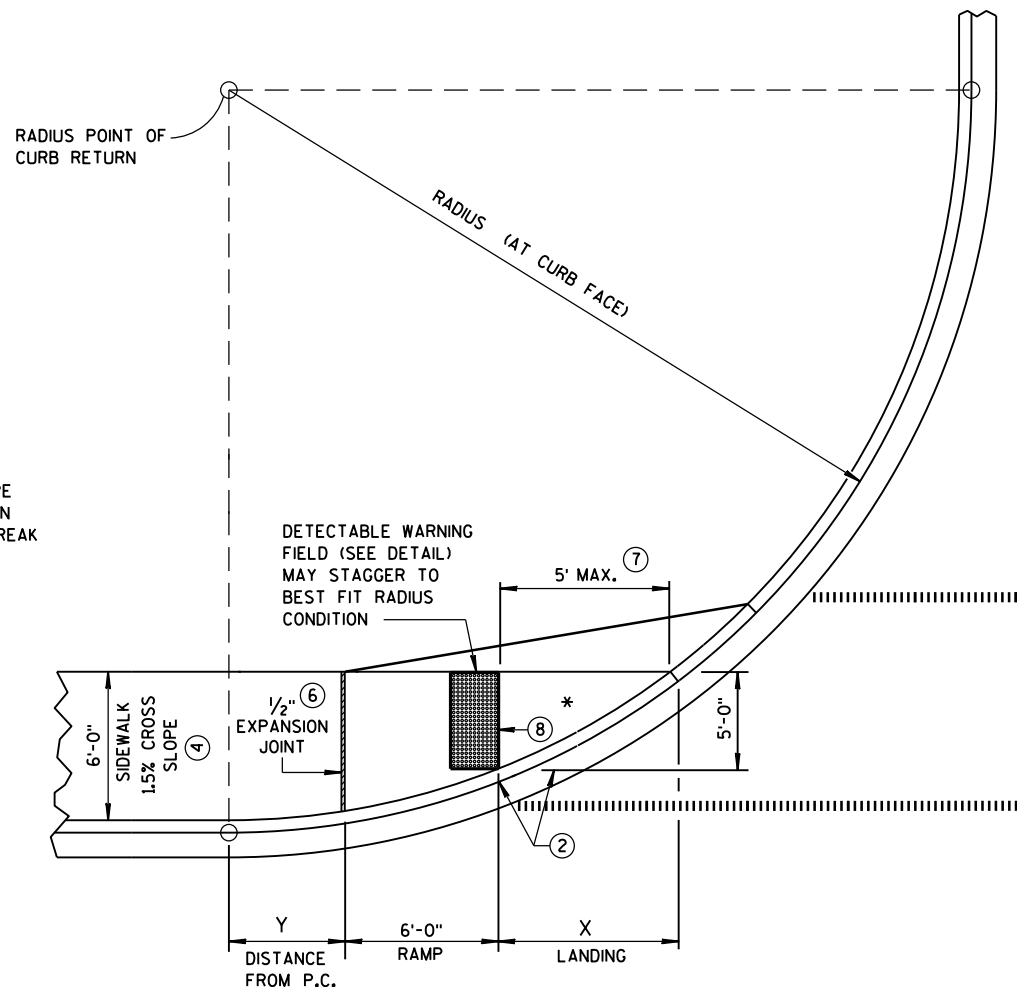
\* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
30 FEET	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
40 FEET	9'-5 $\frac{1}{4}$ "	6'-5"
50 FEET	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
60 FEET	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



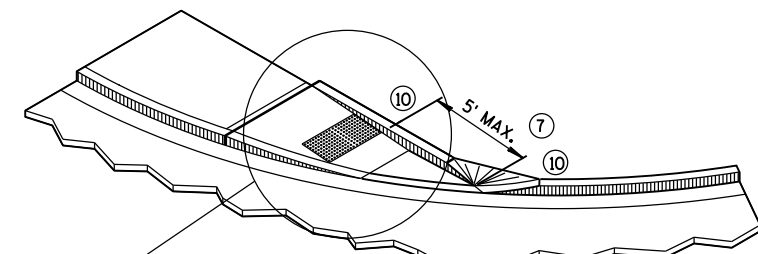
CURB RAMP TYPE 4A1  
PLAN VIEW

## GENERAL NOTES

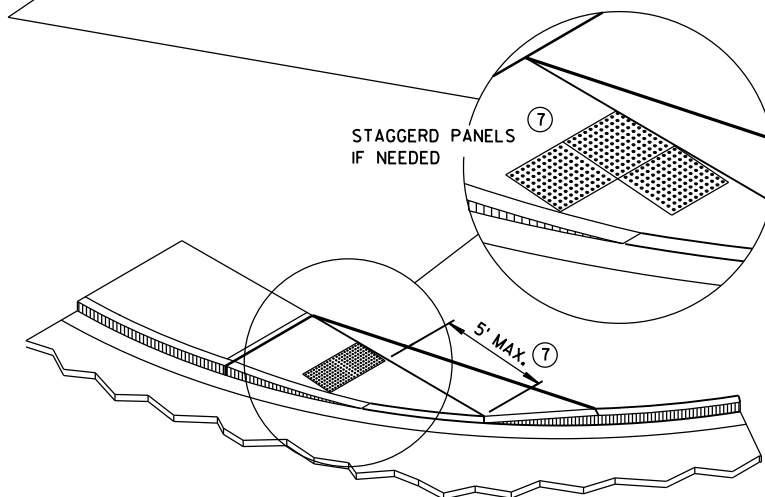
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

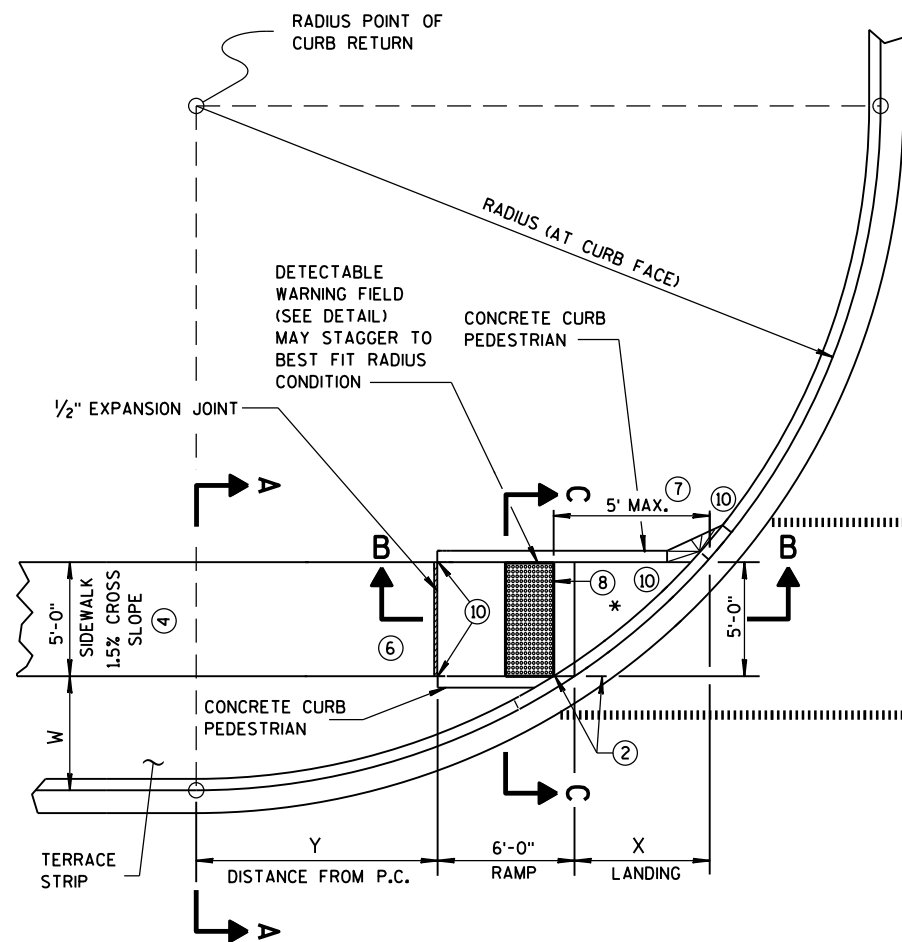
## LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

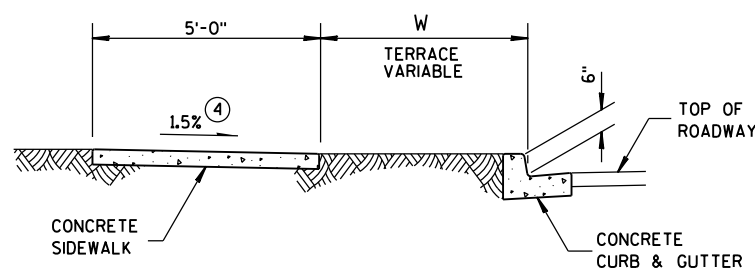
CURB RAMPS  
TYPES 4A AND 4A1

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

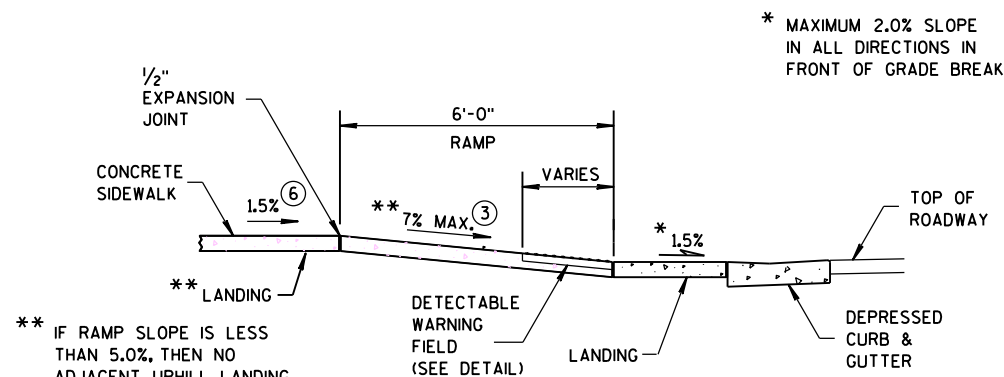




CURB RAMP TYPE 4B  
PLAN VIEW

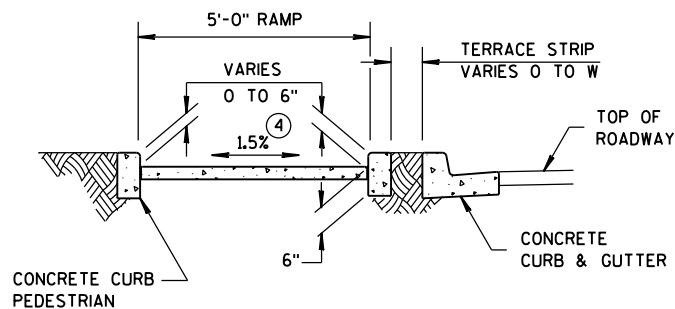


SECTION A-A FOR TYPE 4B

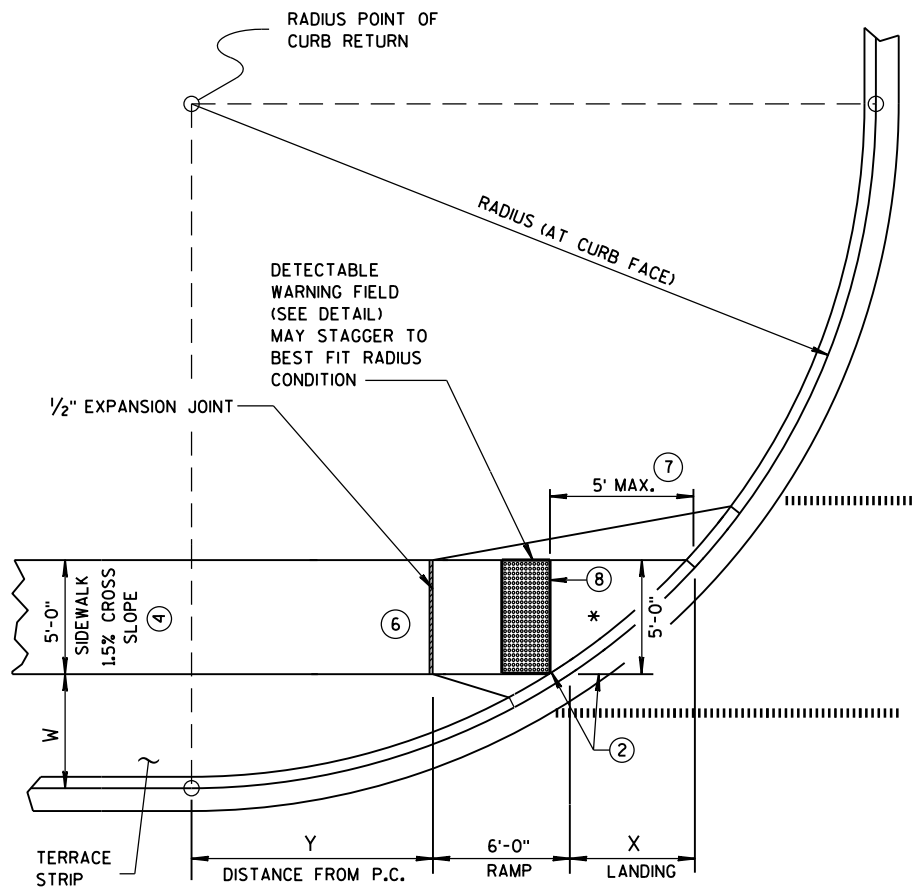


SECTION B-B FOR TYPE 4B

- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
  - CONTRACTION JOINT FIELD LOCATED
  - PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

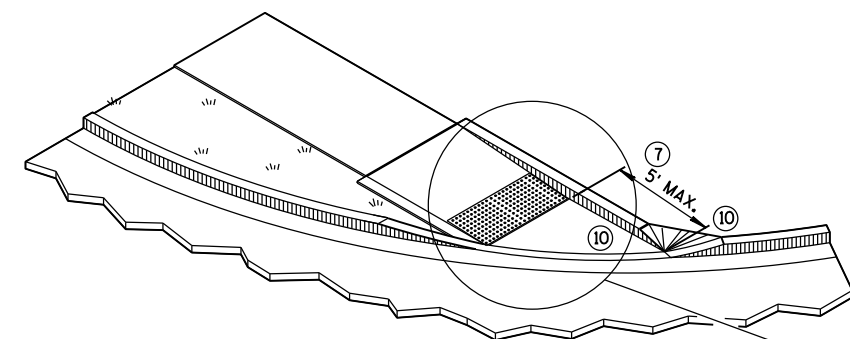


CURB RAMP TYPE 4B1  
PLAN VIEW

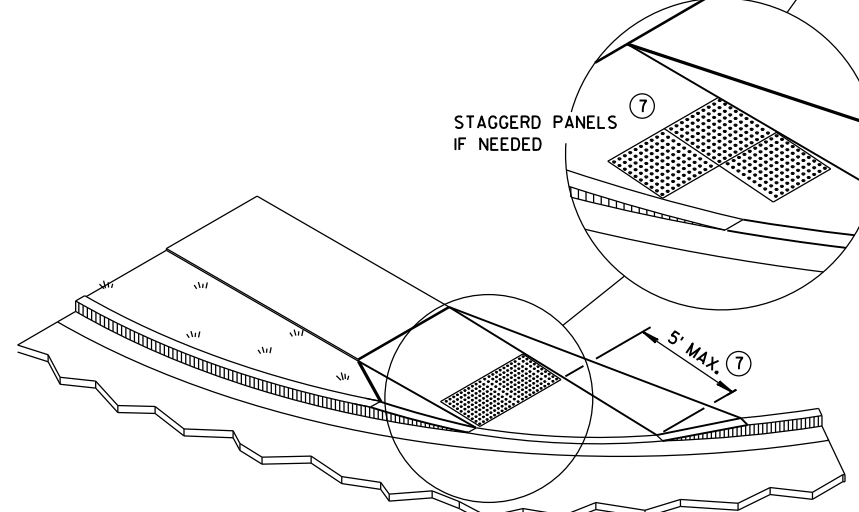
RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

**GENERAL NOTES**

- INTERMEDIATE RADII CAN BE INTERPOLATED
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
  - 3 ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
  - 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
  - 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
  - 7 WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
  - 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
  - 10 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS  
TYPE 4B AND 4B1

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



\*\*\* DETAILS TO BE DETERMINED  
BY DESIGNER



NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS  
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 15 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



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

\* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



### TRUNCATED DOMES DETECTABLE WARNING PATTERN DETAIL



### DETECTABLE WARNING FIELD (TYPICAL)

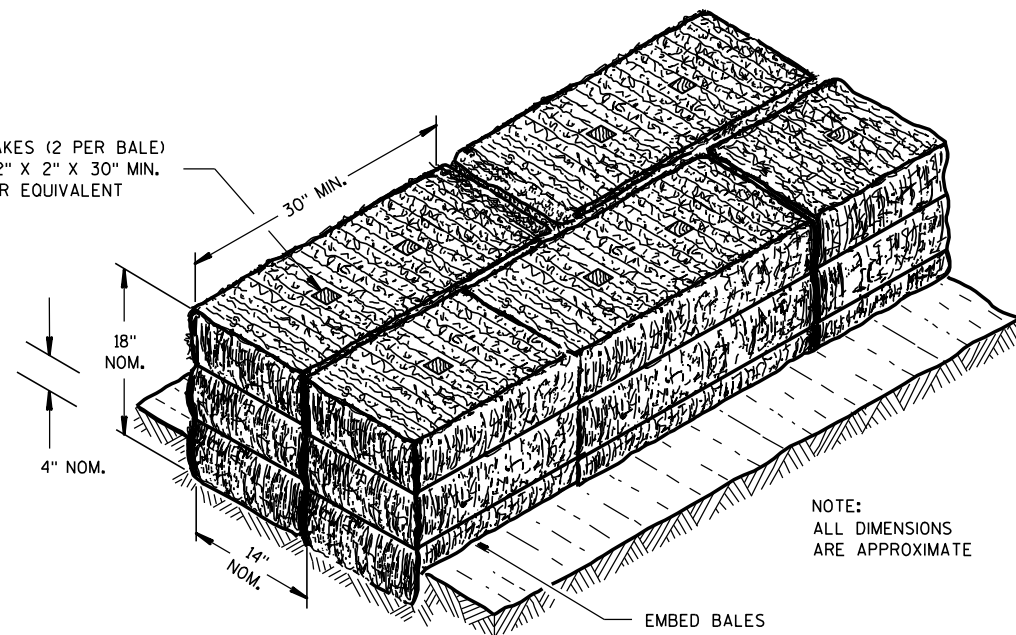
## CURB RAMPS TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June, 2015  
DATE  
FHWA

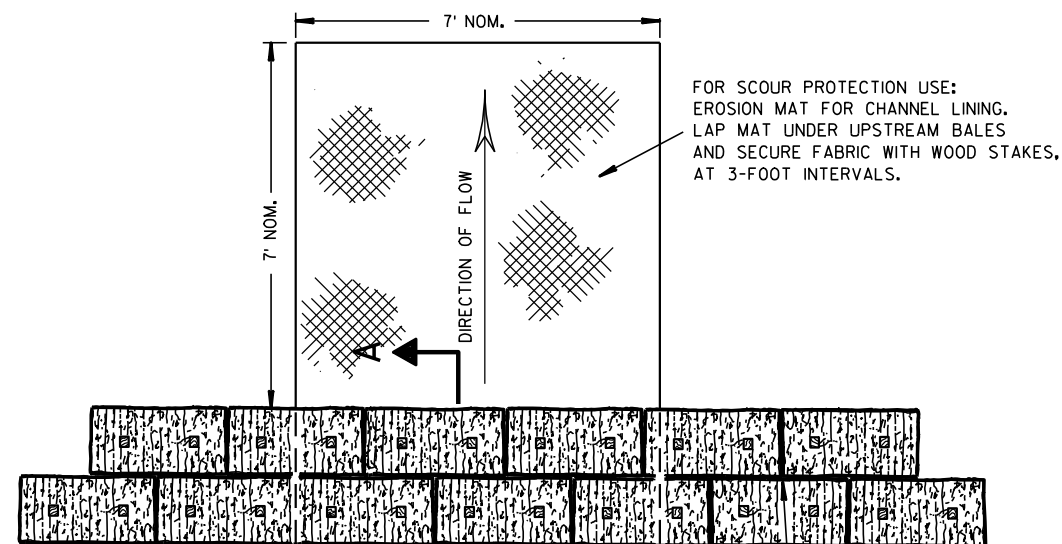
/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

WOOD STAKES (2 PER BALE)  
NOMINAL 2" X 2" X 30" MIN.  
LENGTH OR EQUIVALENT



NOTE:  
ALL DIMENSIONS  
ARE APPROXIMATE

SECTION A-A

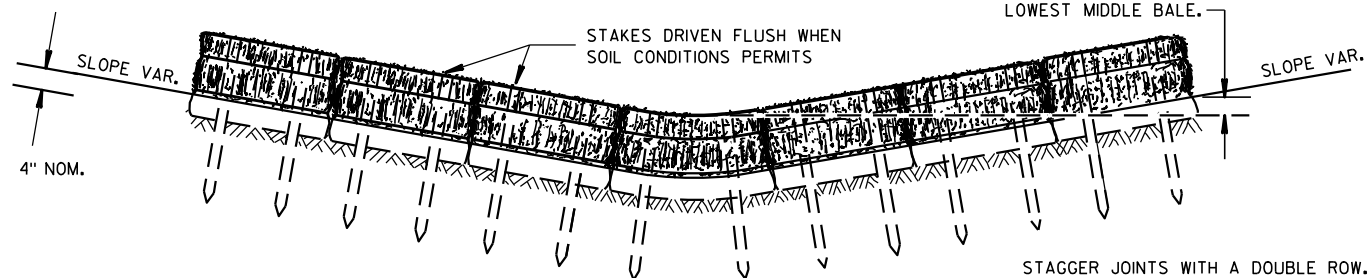


FOR SCOUR PROTECTION USE:  
EROSION MAT FOR CHANNEL LINING.  
LAP MAT UNDER UPSTREAM BALES  
AND SECURE FABRIC WITH WOOD STAKES,  
AT 3-FOOT INTERVALS.

PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT  
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL  
BE EQUAL TO OR GREATER THAN TOP OF  
LOWEST MIDDLE BALE.



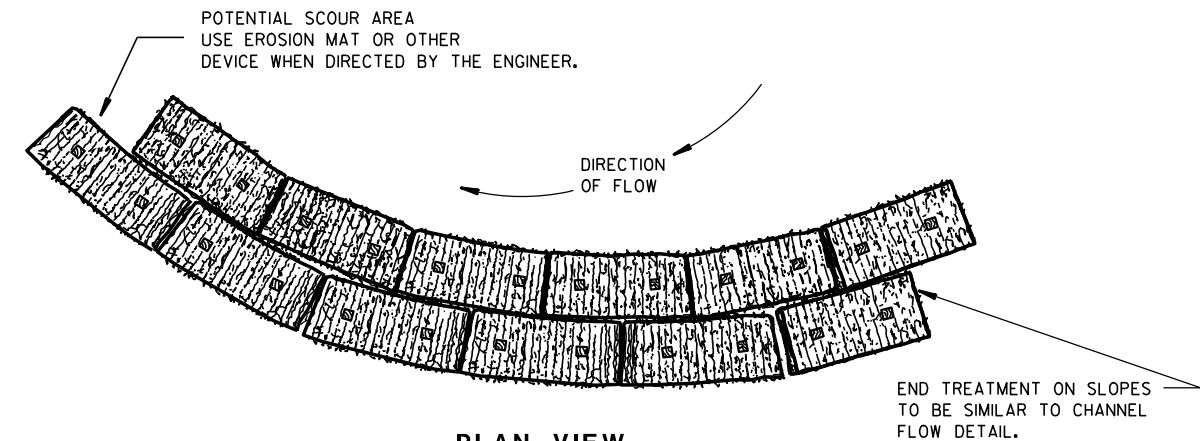
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

## GENERAL NOTES

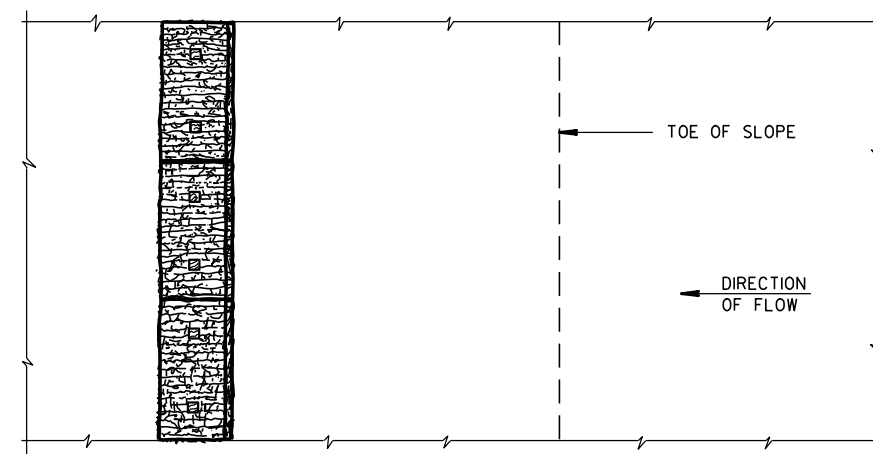
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- 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.

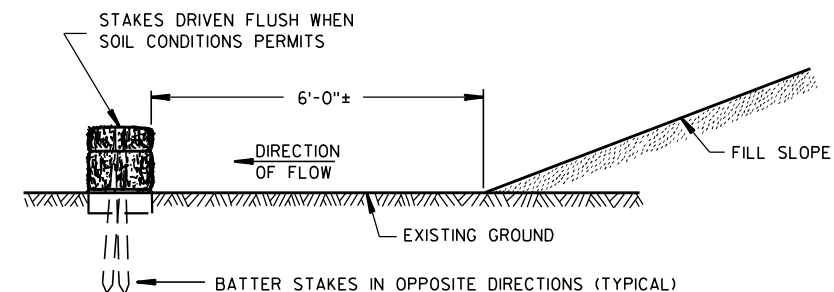


PLAN VIEW

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

FHWA

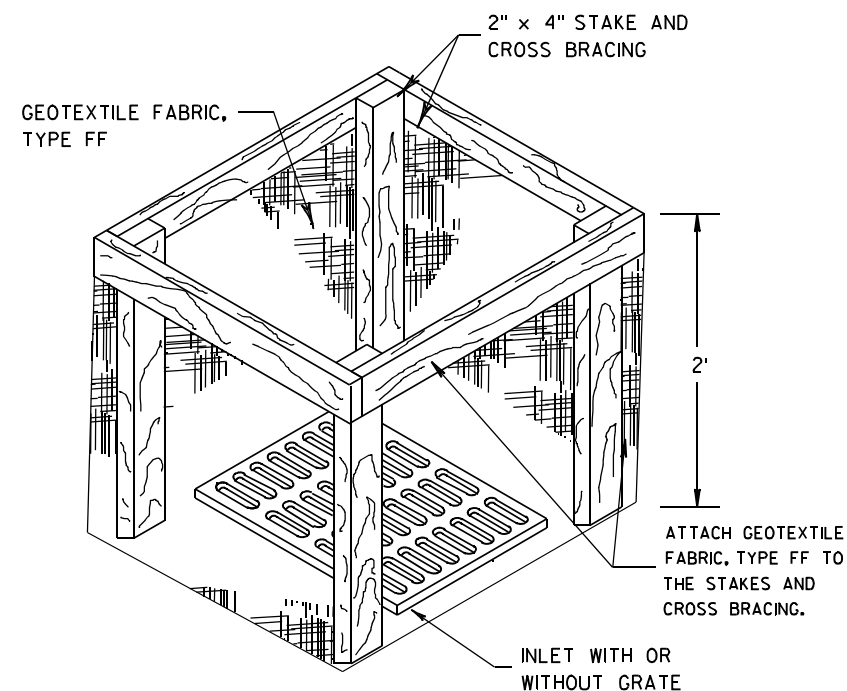
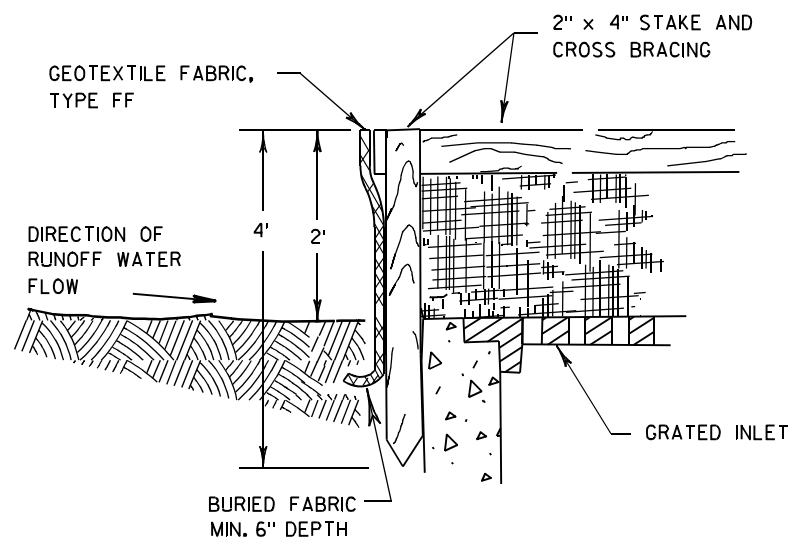
/S/ Beth Canestra  
CHIEF ROADWAY DEVELOPMENT ENGINEER



- 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 1½" X 1½" 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.



<b>SILT FENCE</b>	
<b>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</b>	
<b>APPROVED</b> <u>4-29-05</u> <b>DATE</b>	<u>/S/ Beth Cannestra</u> <b>CHIEF ROADWAY DEVELOPMENT ENGINEER</b>



**INLET PROTECTION, TYPE A**

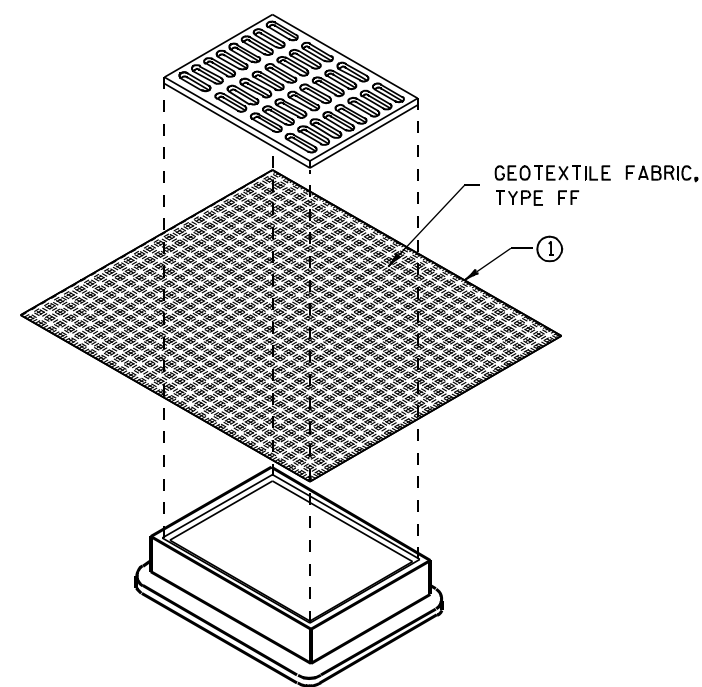
**GENERAL NOTES**

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.

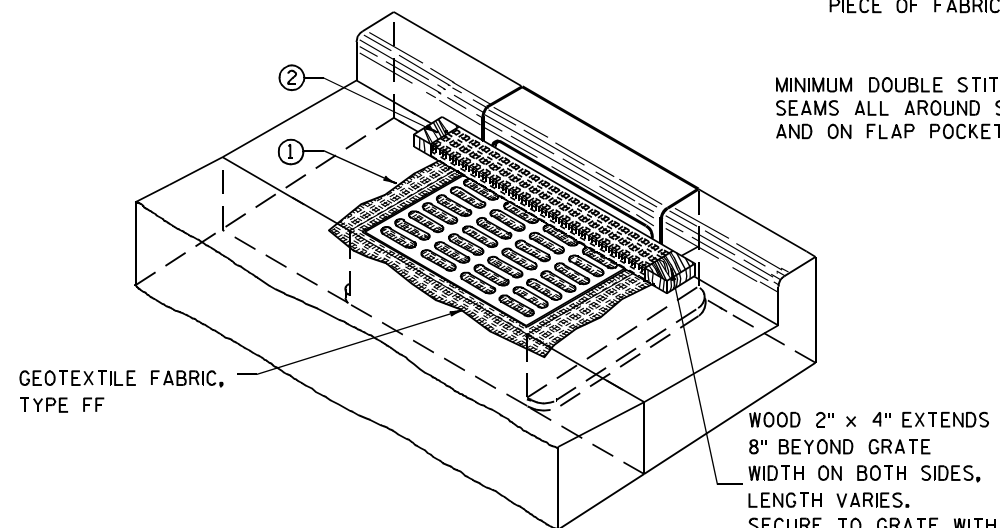
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B  
(WITHOUT CURB BOX)**

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



**INLET PROTECTION, TYPE C (WITH CURB BOX)**

**INSTALLATION NOTES**

**TYPE B & C**

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

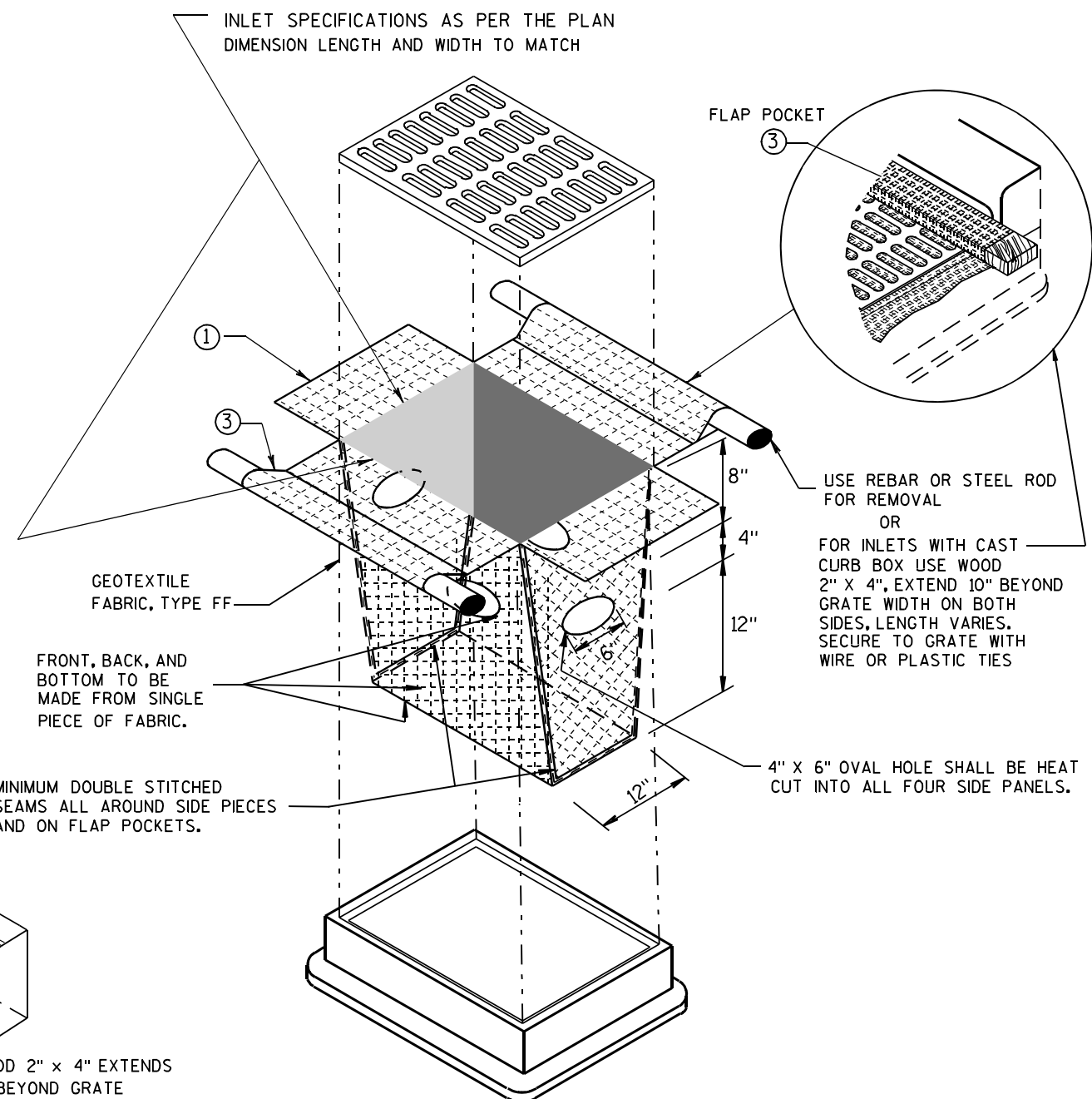
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

**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 D**

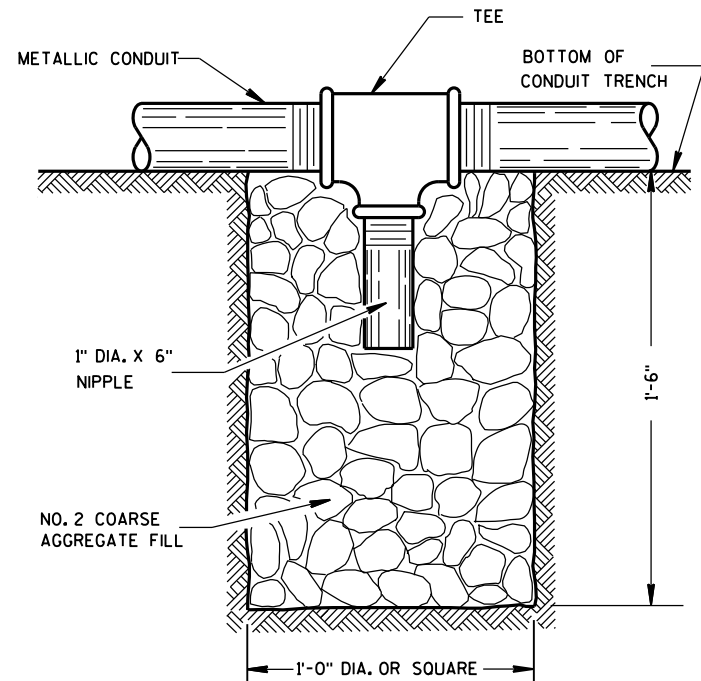
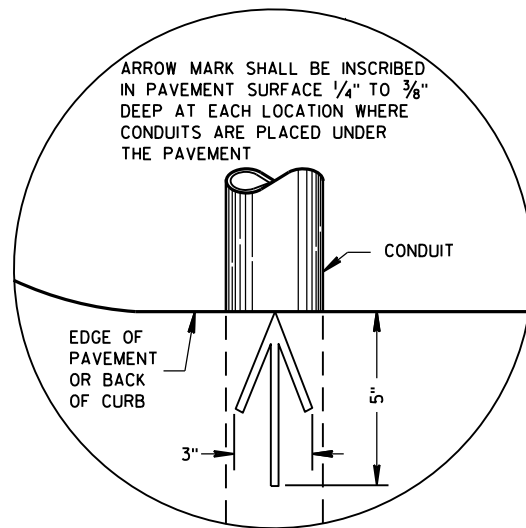
(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

**INLET PROTECTION  
TYPE A, B, C, AND D**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

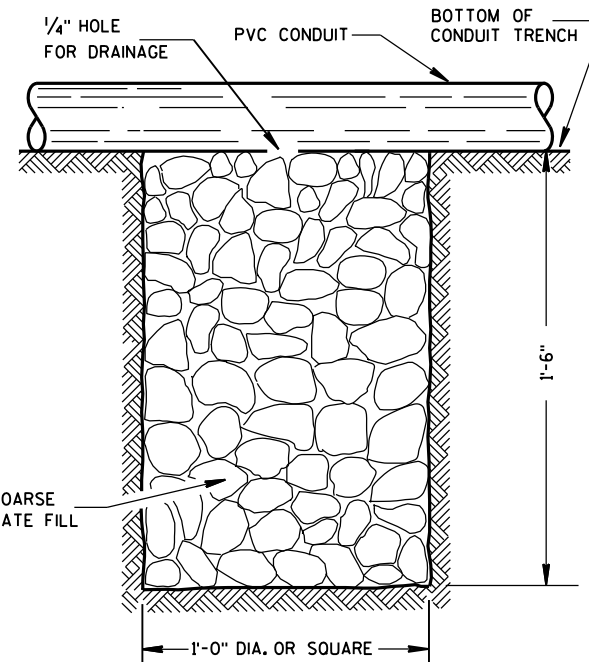
APPROVED  
10/16/02 /S/ Beth Cannestra  
DATE  
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER





NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS  
CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

## DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS  
CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

## DRAIN SUMP FOR PVC CONDUIT

## 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.

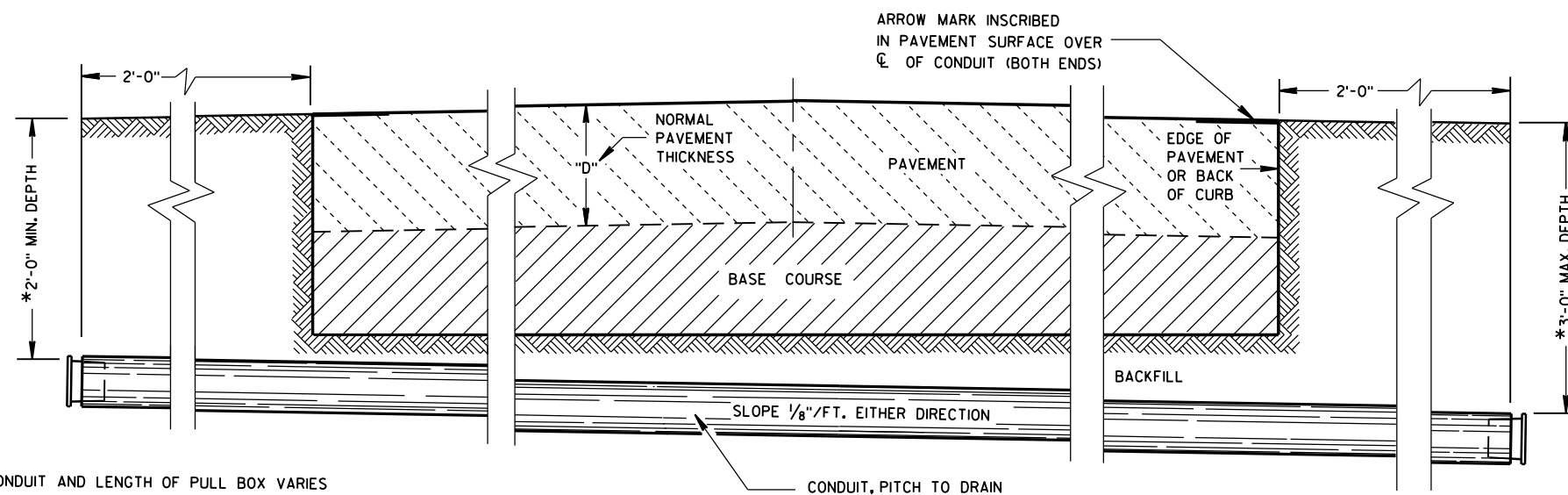
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.



\*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

<b>CONDUIT</b>	
<b>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</b>	
<b>APPROVED</b> <b>June, 2015</b> <hr/> <b>DATE</b>	<b>/S/ Ahmet Demirbilek</b> <hr/> <b>STATE ELECTRICAL ENGINEER</b>
<b>FHWA</b>	

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

\* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

\*\* NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

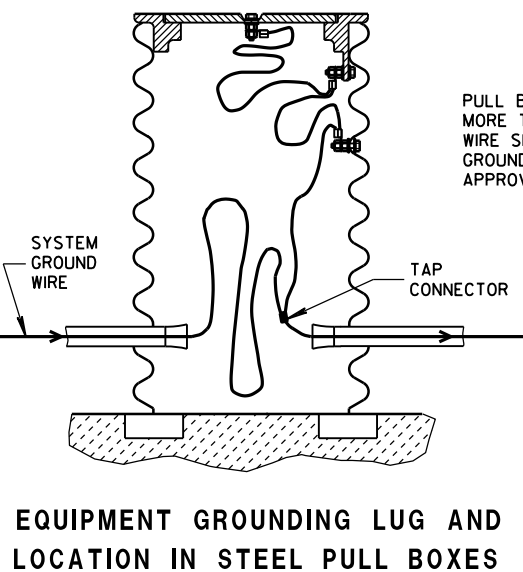
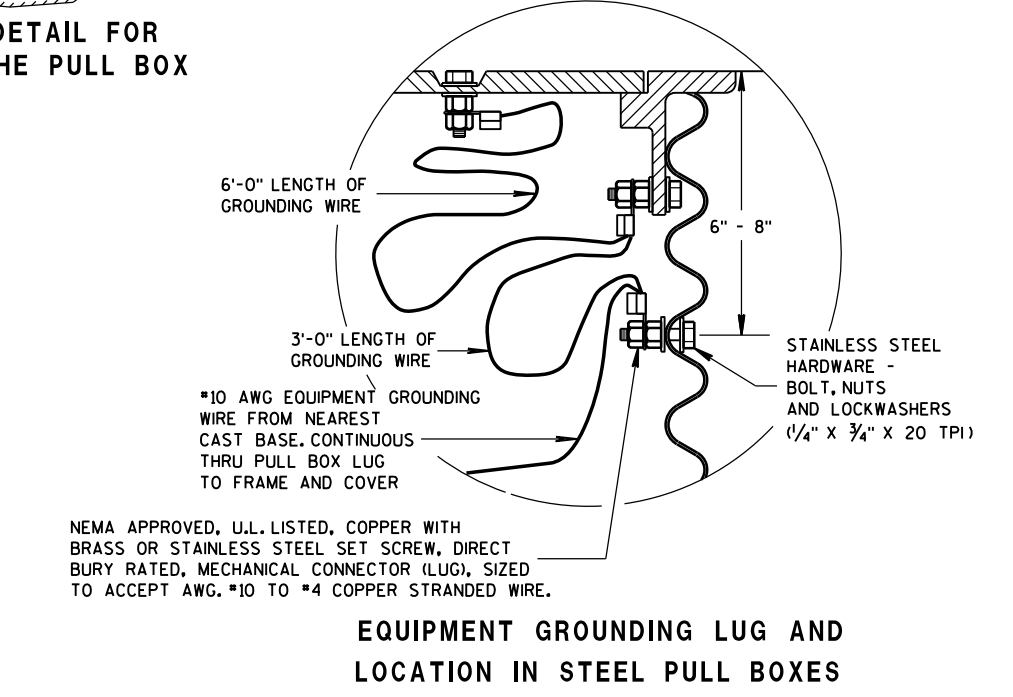
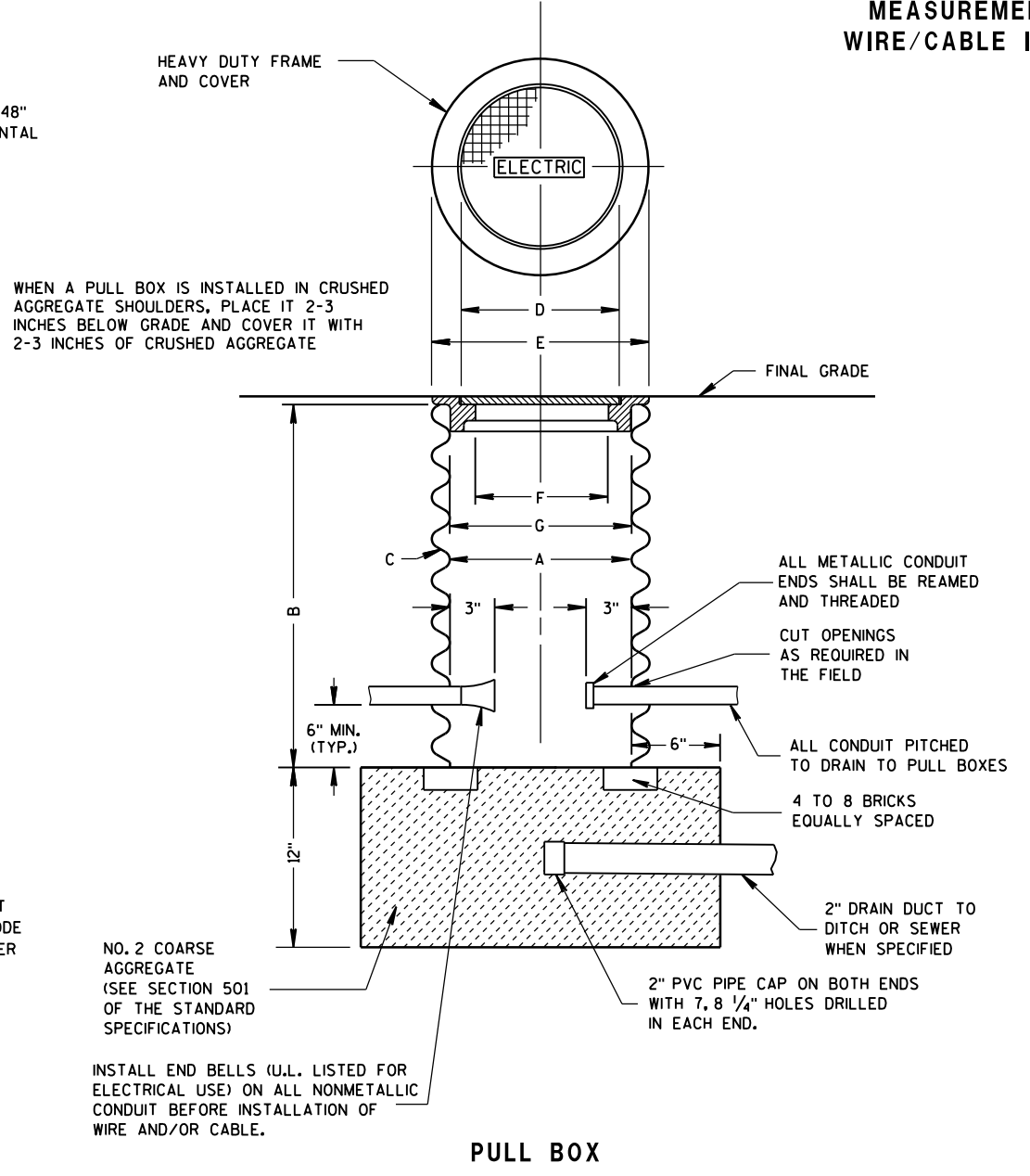
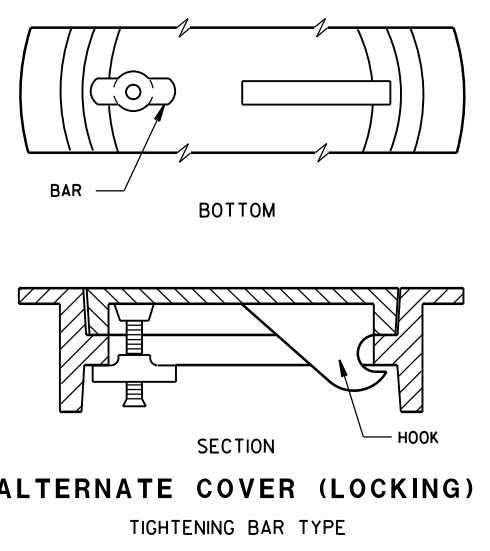
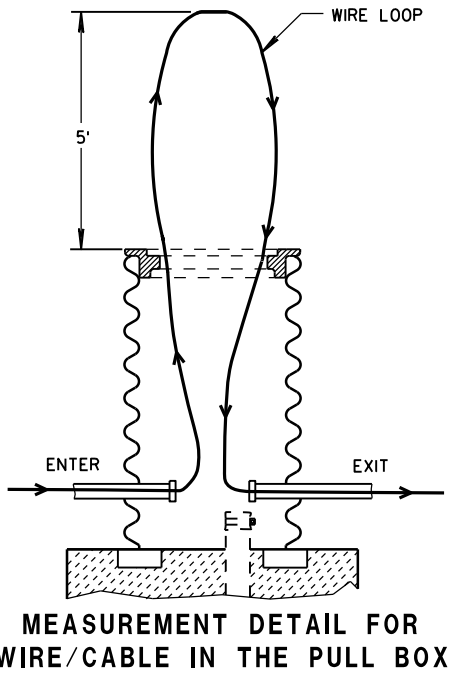
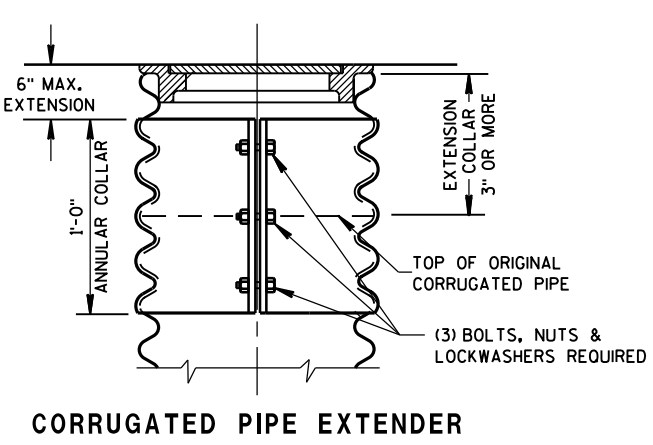
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

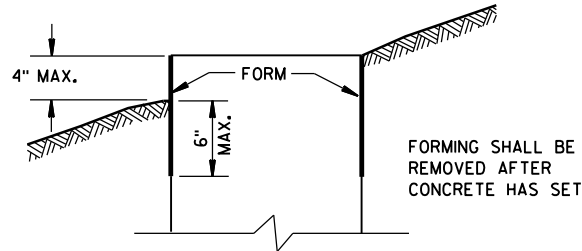
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirelek STATE ELECTRICAL ENGINEER
FHWA	

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 DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

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

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

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

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

## GENERAL NOTES (CONTINUED)

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

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

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

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

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

2 (4) 1" DIA. X 3'-6" ANCHOR RODS.

3 (4) 1" DIA. X 5'-0" ANCHOR RODS.

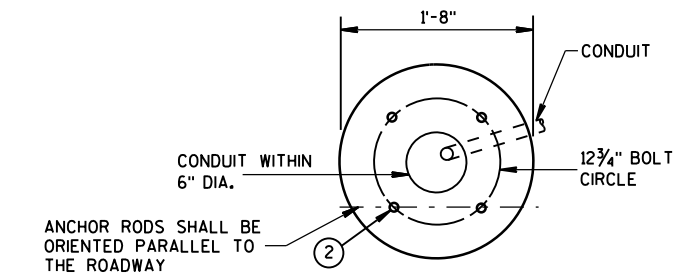
4 (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

6 (4) 1" DIA. X 3'-6" ANCHOR RODS.

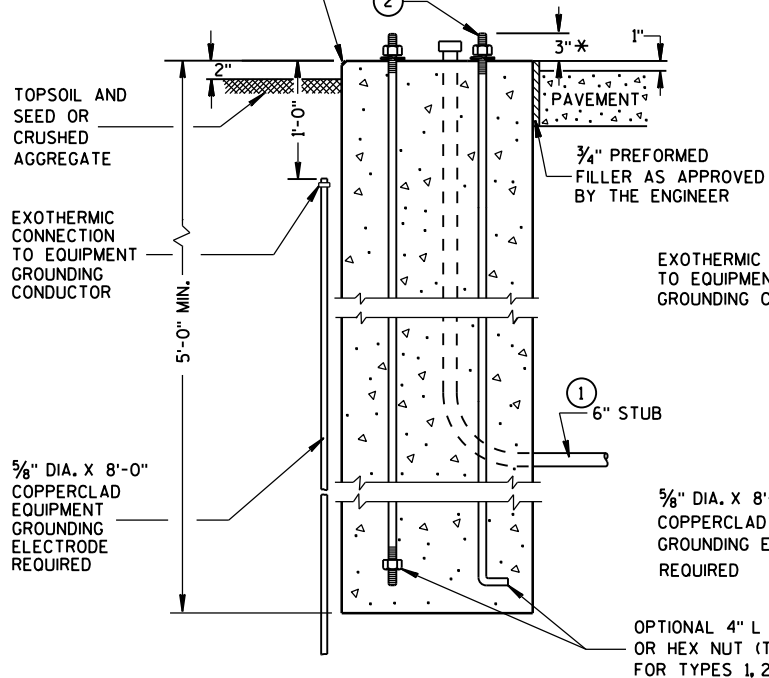
7 (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

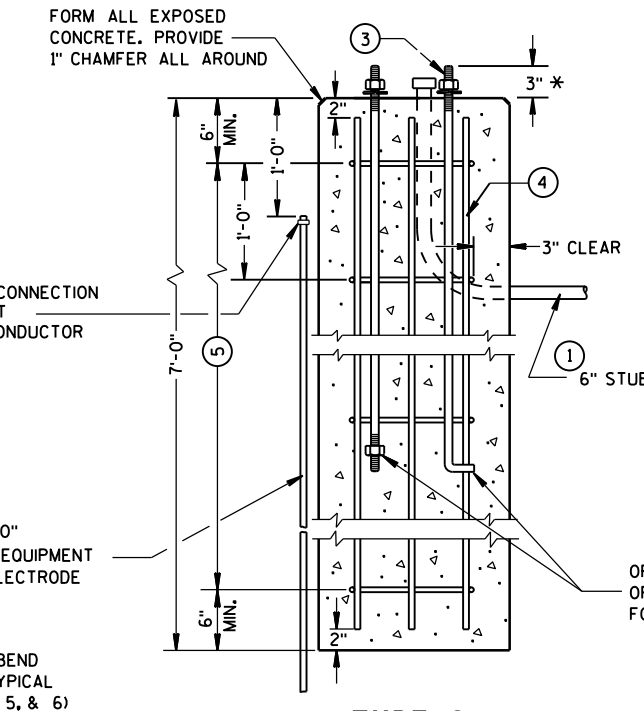
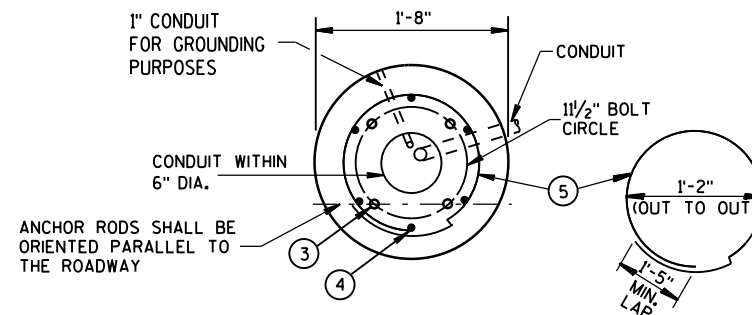
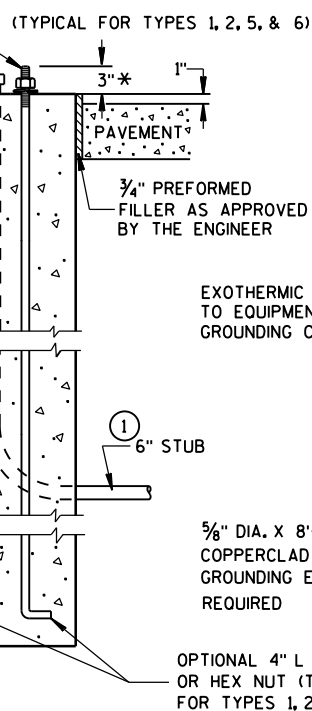


FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

## HALF SECTION IN UNPAVED AREA (TYPICAL FOR TYPES 1, 2, 5, & 6)

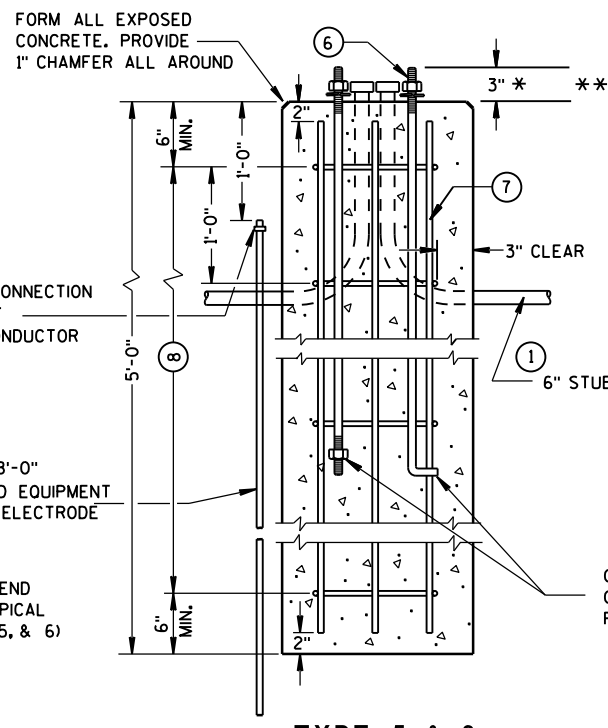
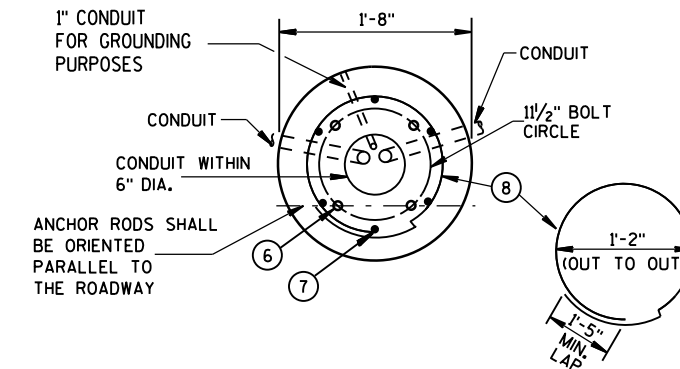


## HALF SECTION IN PAVEMENT (TYPICAL FOR TYPES 1, 2, 5, & 6)



## TYPE 2

## CONCRETE BASES



## TYPE 5 & 6

\* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 3/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

\*\* FOR NONBREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

## CONCRETE BASES, TYPES 1, 2, 5, & 6

## STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

### APPROVED

Sept. 2014

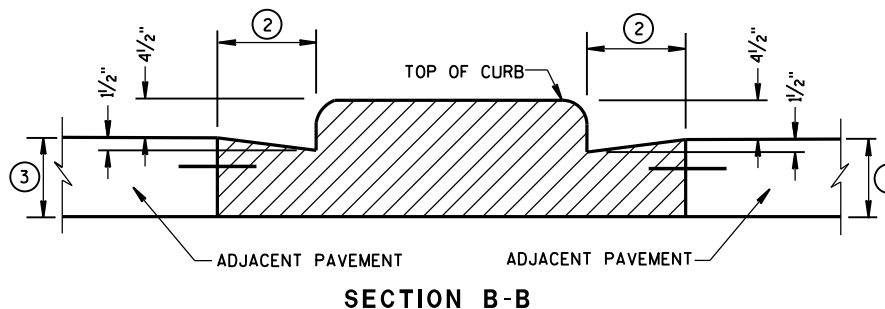
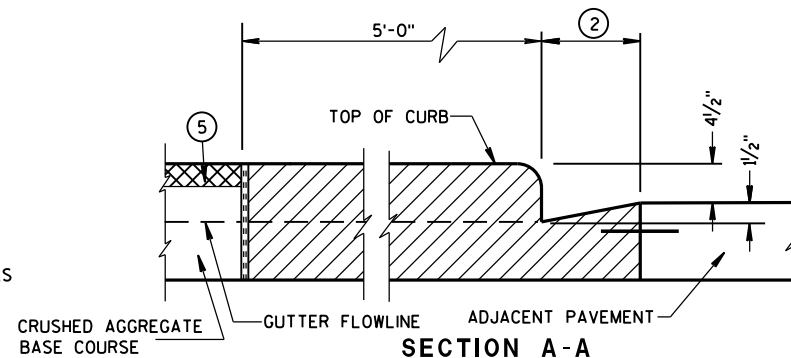
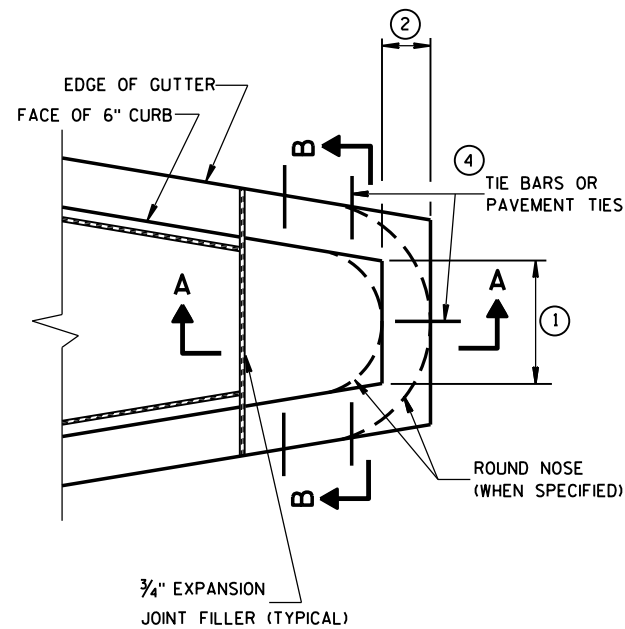
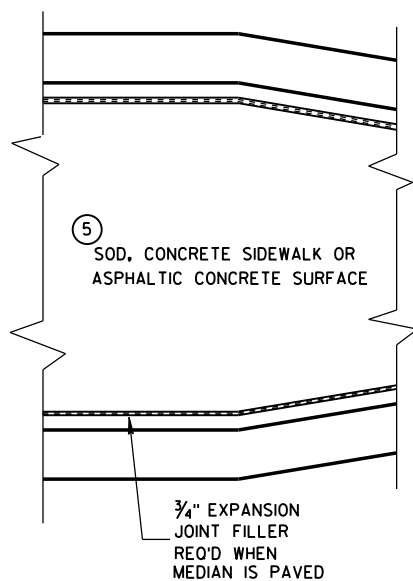
DATE

FHWA

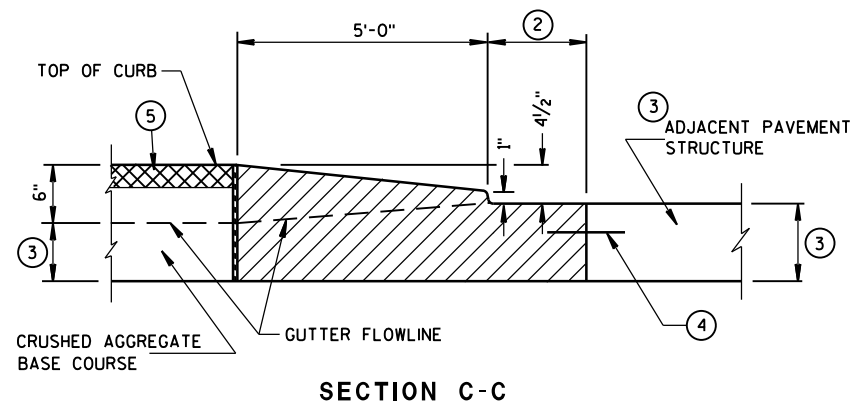
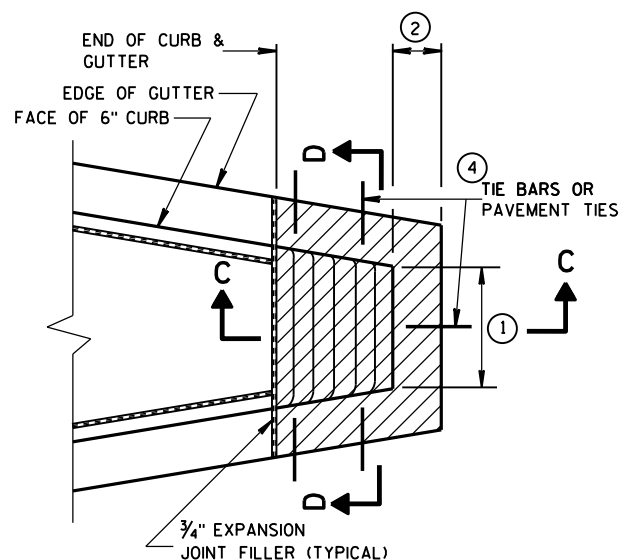
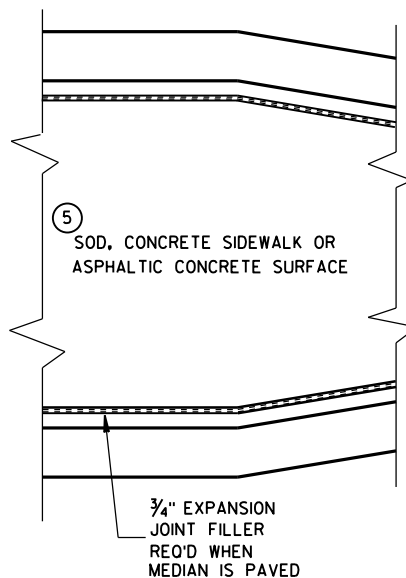
/S/ Ahmet Demirbilek

STATE ELECTRICAL ENGINEER

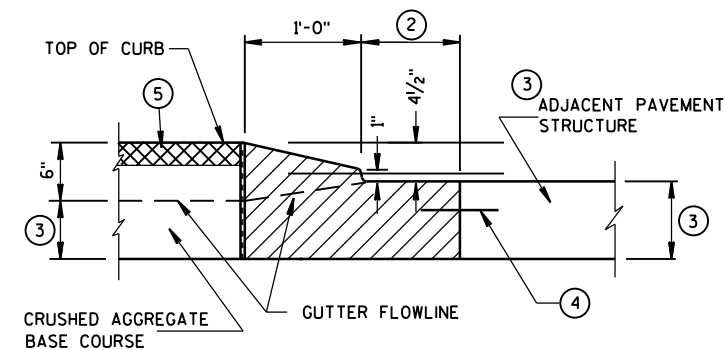
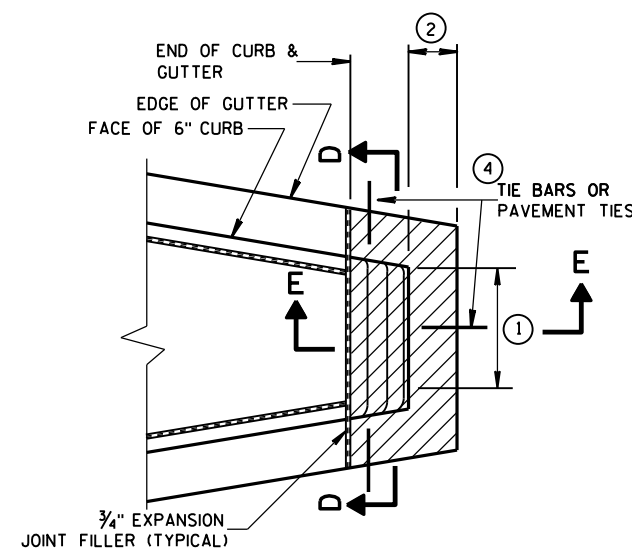




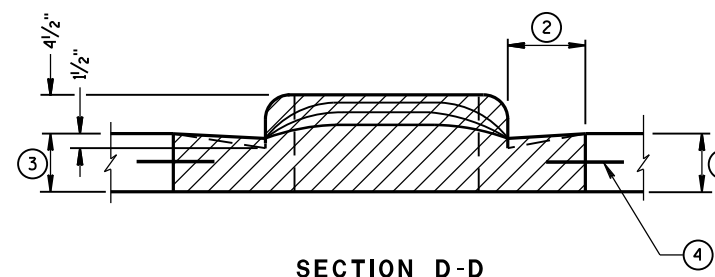
CONCRETE MEDIAN BLUNT NOSE DETAIL



CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN SLOPED NOSE TYPE 2



## 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 NOSE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

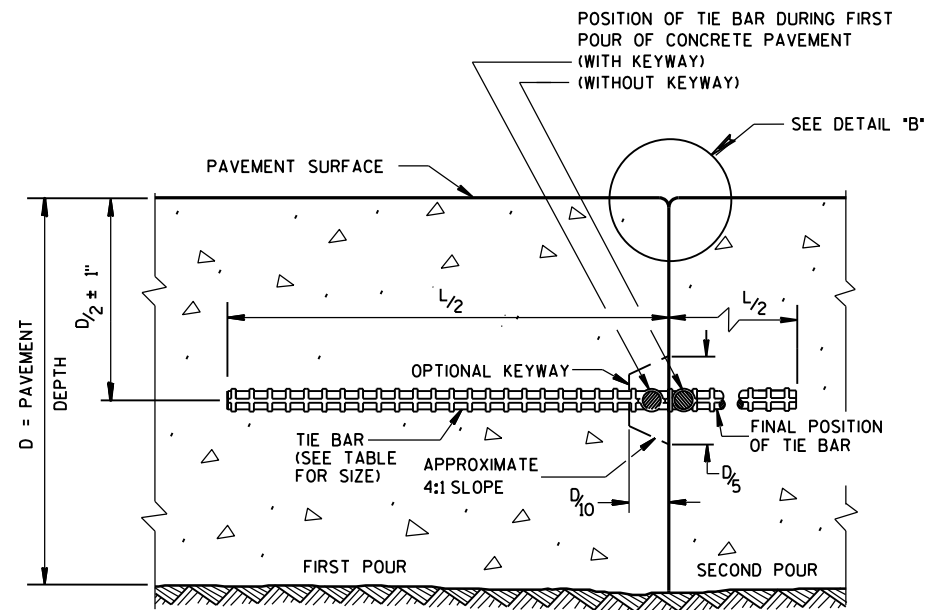
APPROVED

6/8/2006

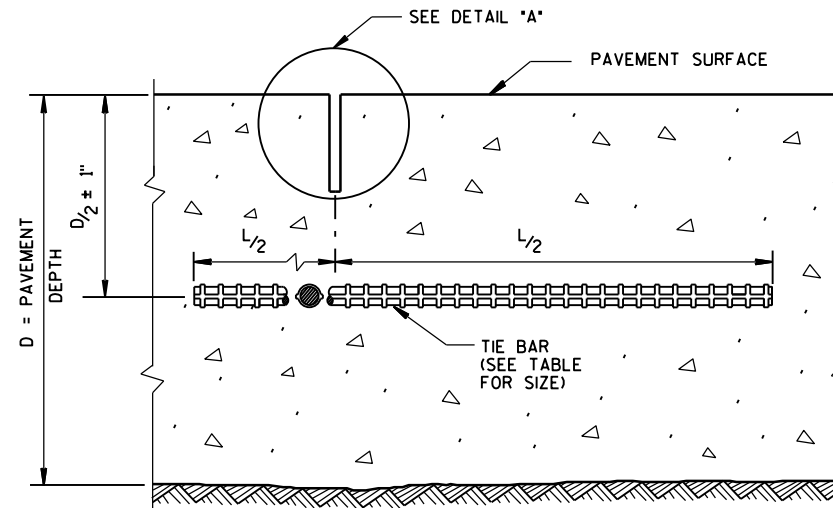
DATE

FHWA

/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



CONSTRUCTION JOINT



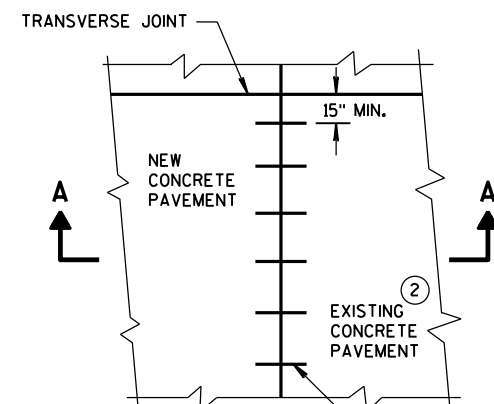
SAWED JOINT

## GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.  
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

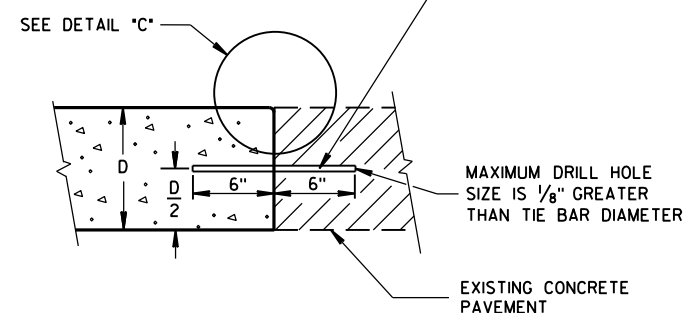
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

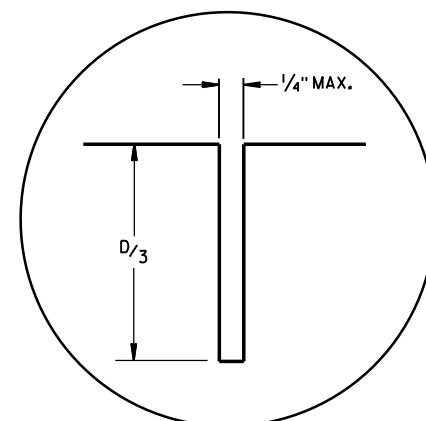


PLAN VIEW

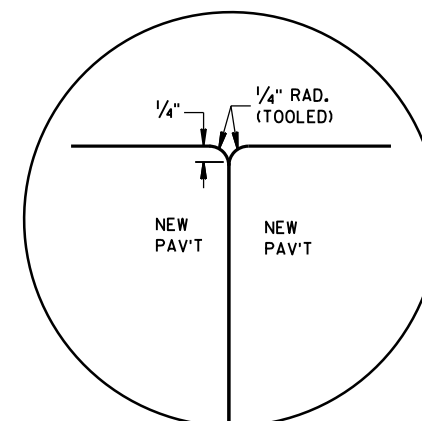
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



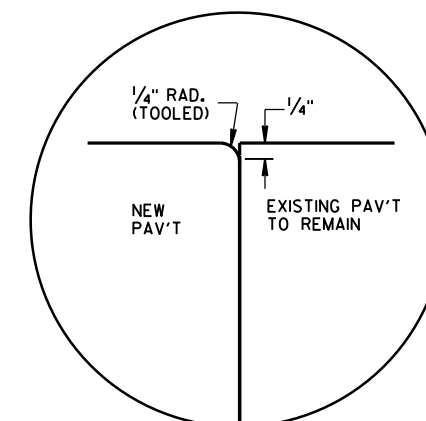
SECTION A-A  
LONGITUDINAL CONSTRUCTION JOINT  
TIE BARS ANCHORED  
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



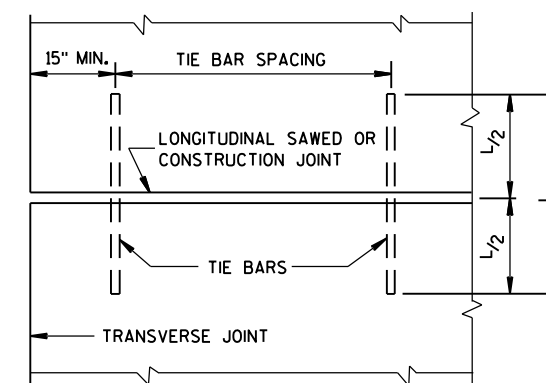
DETAIL "C"

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" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

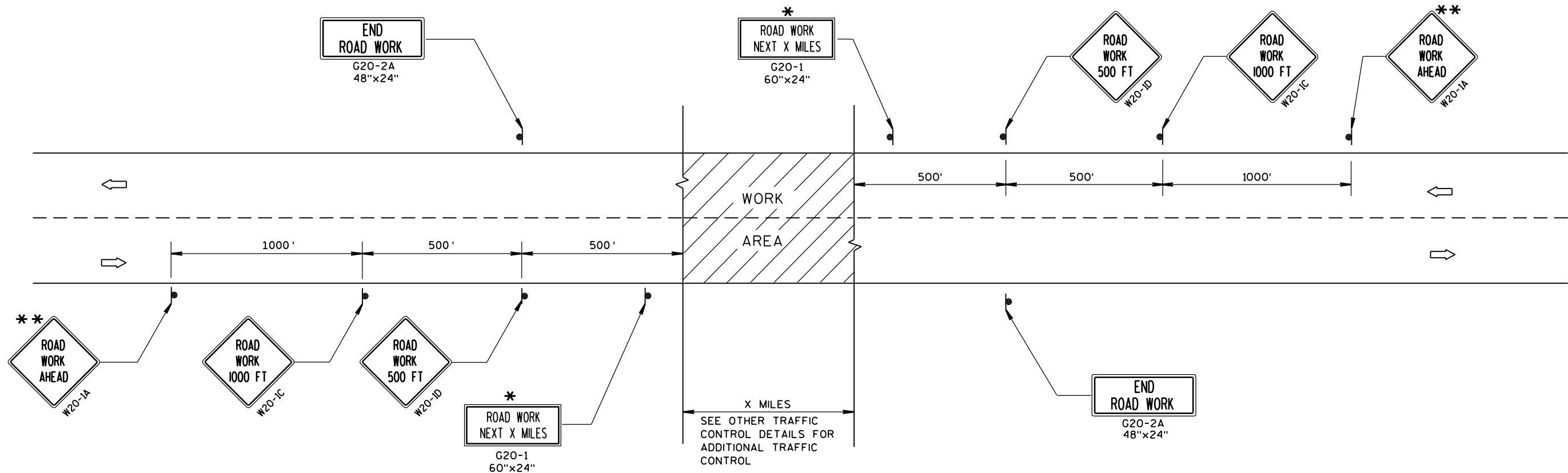


PLAN VIEW  
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT  
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

## GENERAL NOTES

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

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

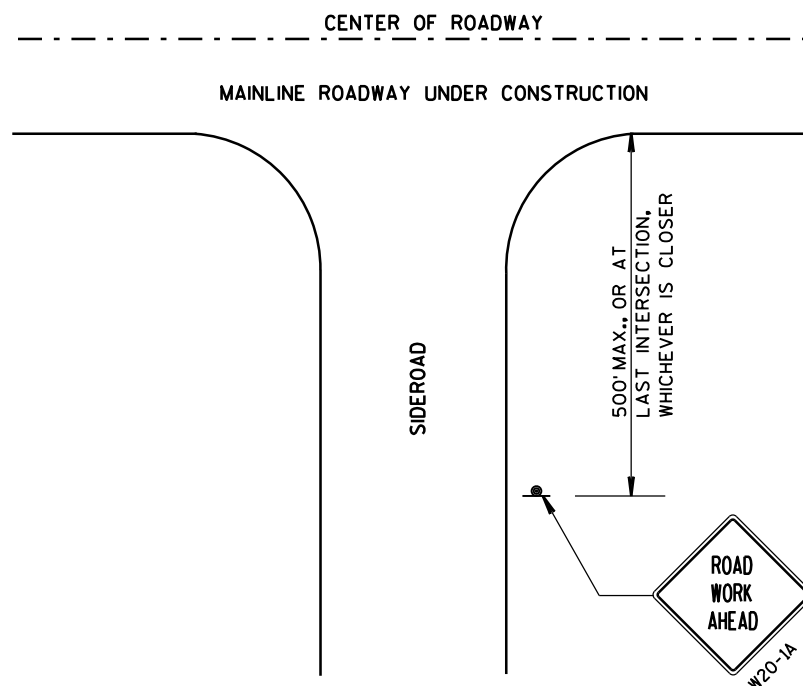
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



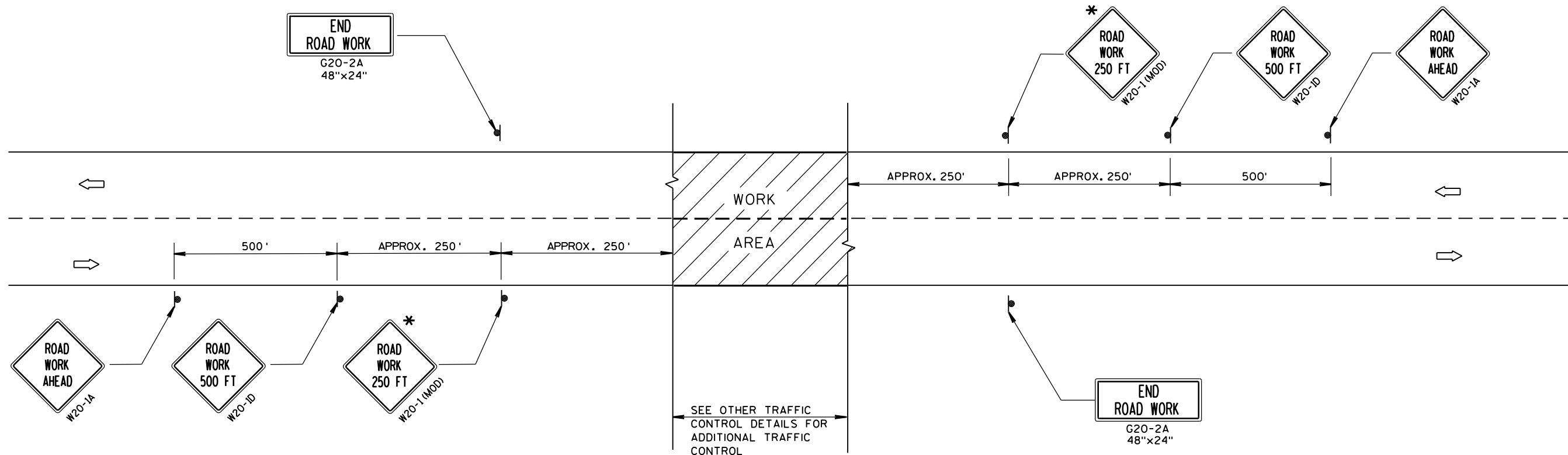
## LEGEND

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

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE /S/ Peter Amokobe Atepe  
STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER  
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

## GENERAL NOTES

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

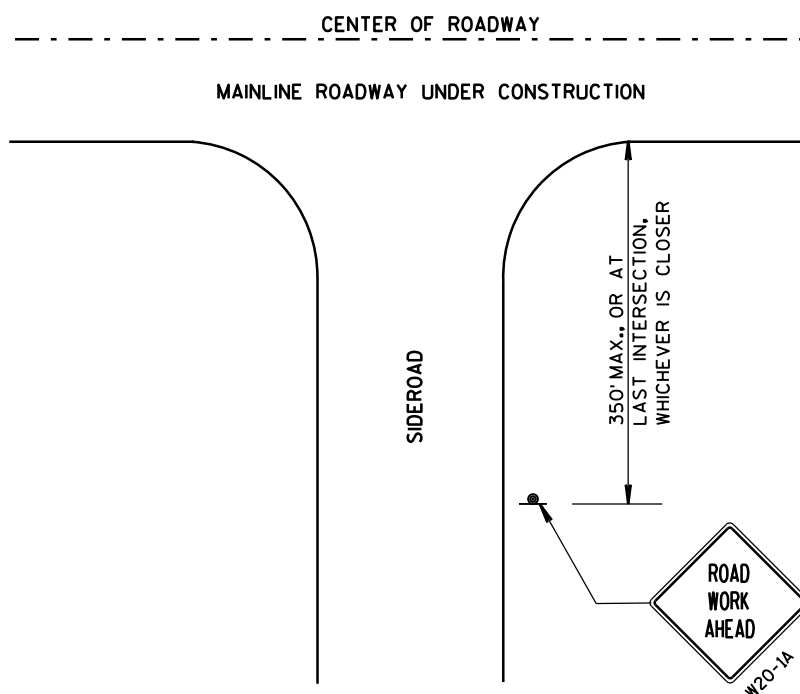
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



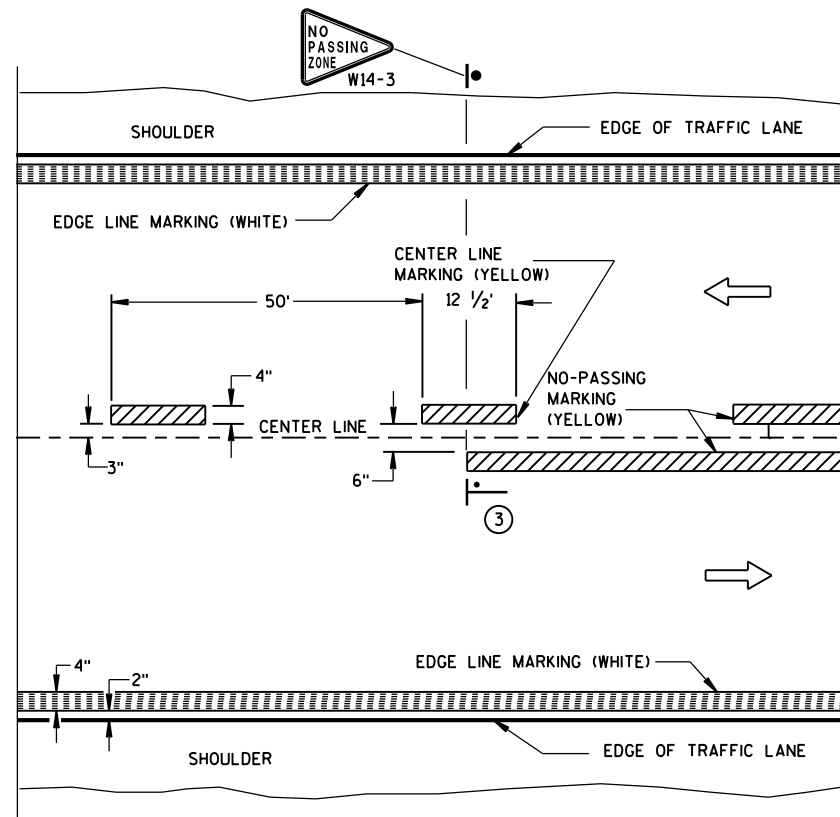
## LEGEND

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

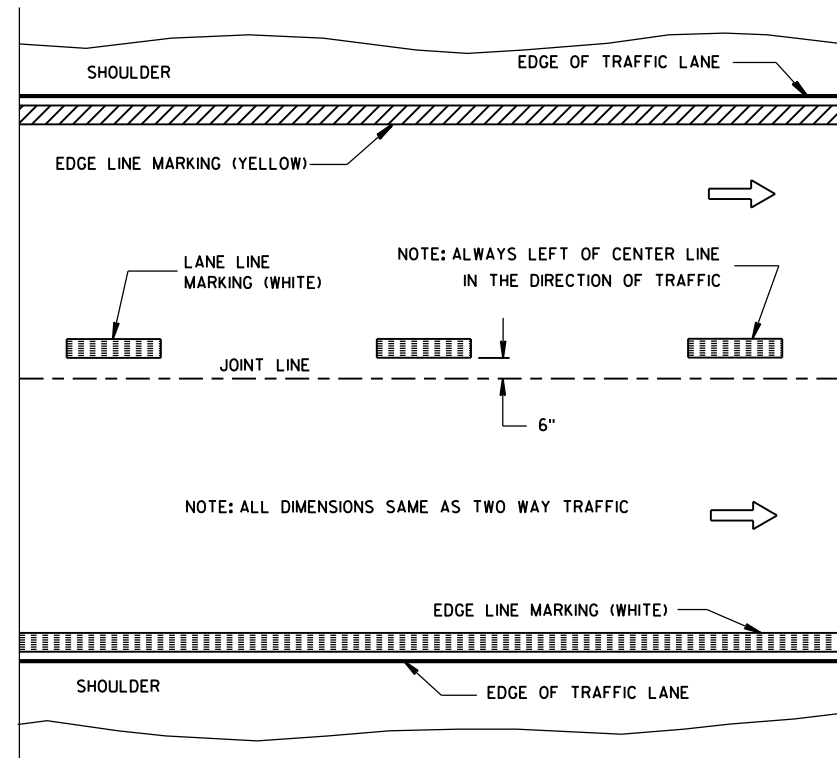
TRAFFIC CONTROL, ADVANCE  
WARNING SIGNS 40 M.P.H.  
OR LESS TWO-WAY UNDIVIDED  
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

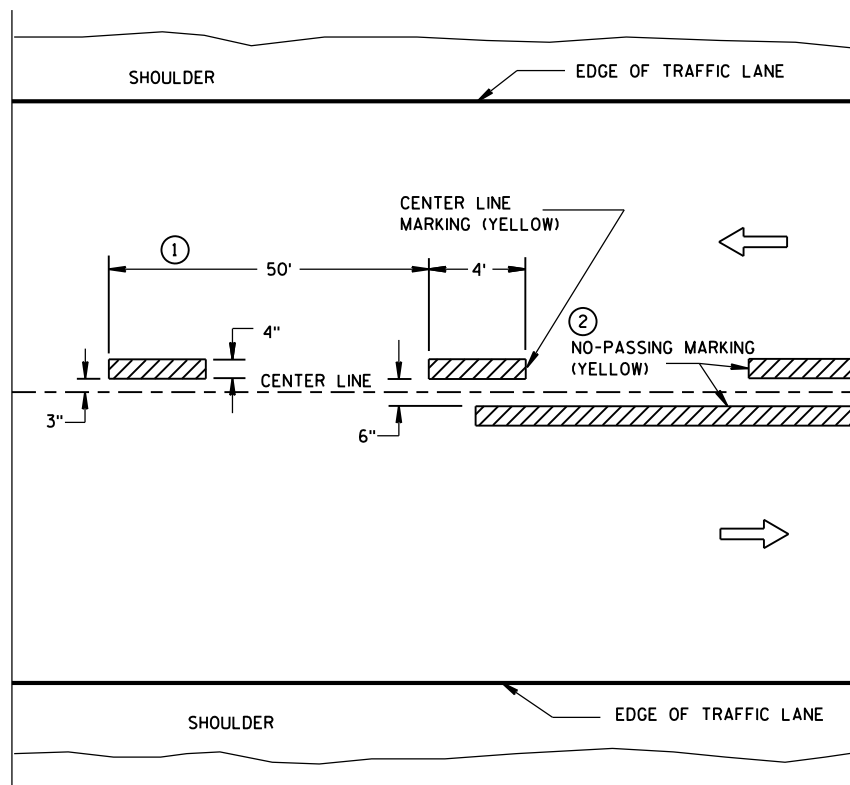


TWO WAY TRAFFIC

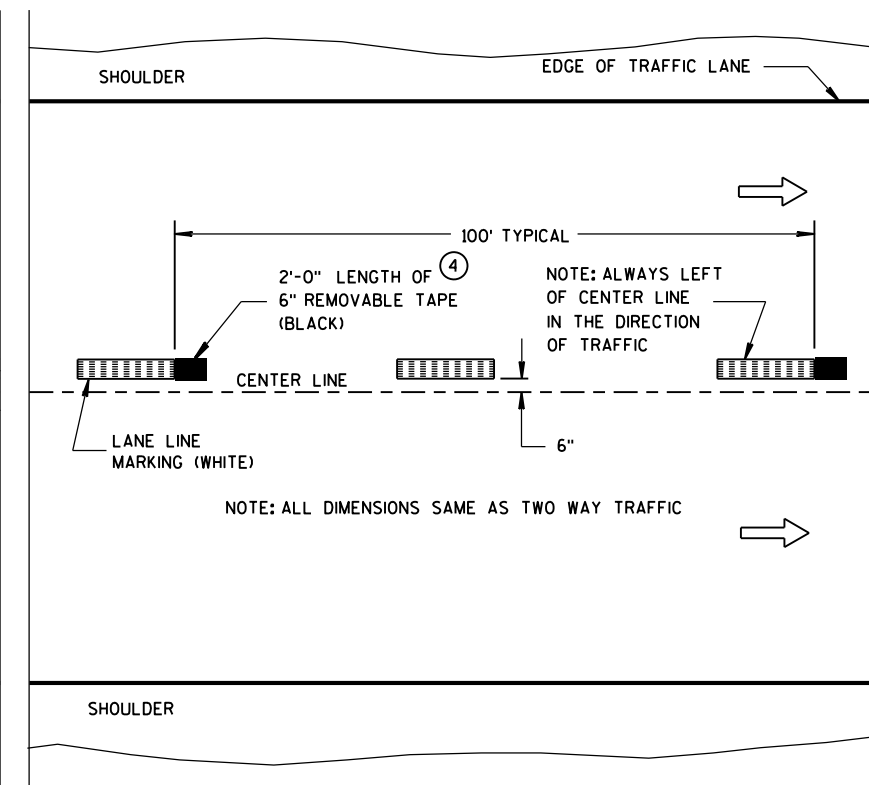


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING  
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

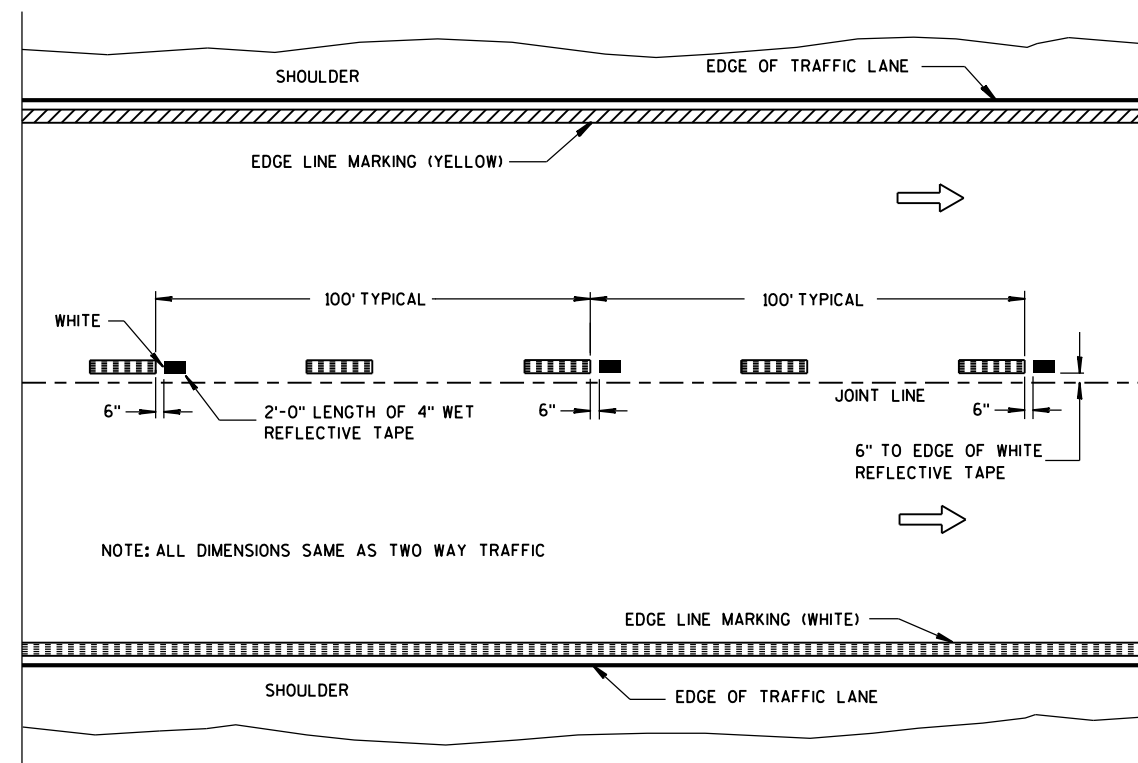
## GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

## NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO  
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

## LEGEND

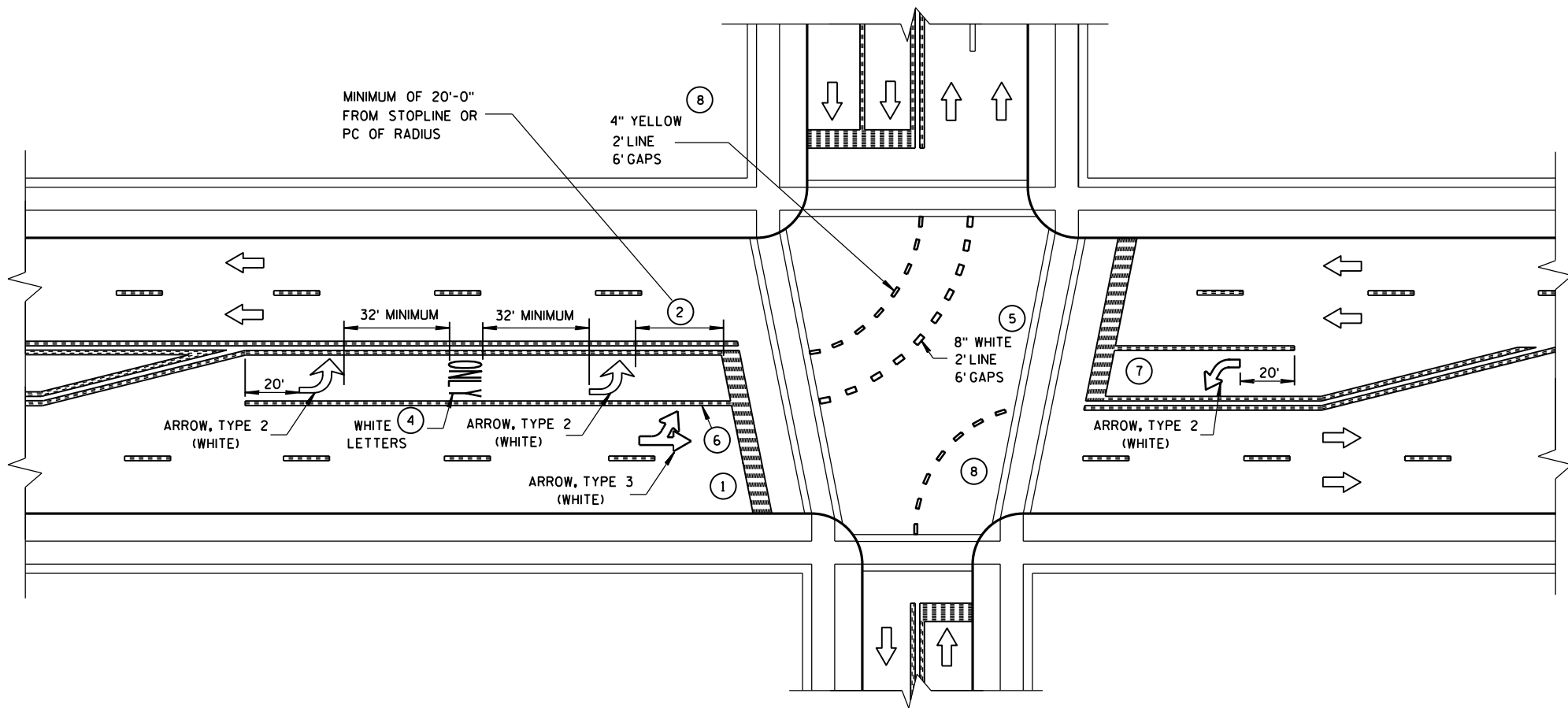
- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
5-13-2013  
DATE  
FHWA

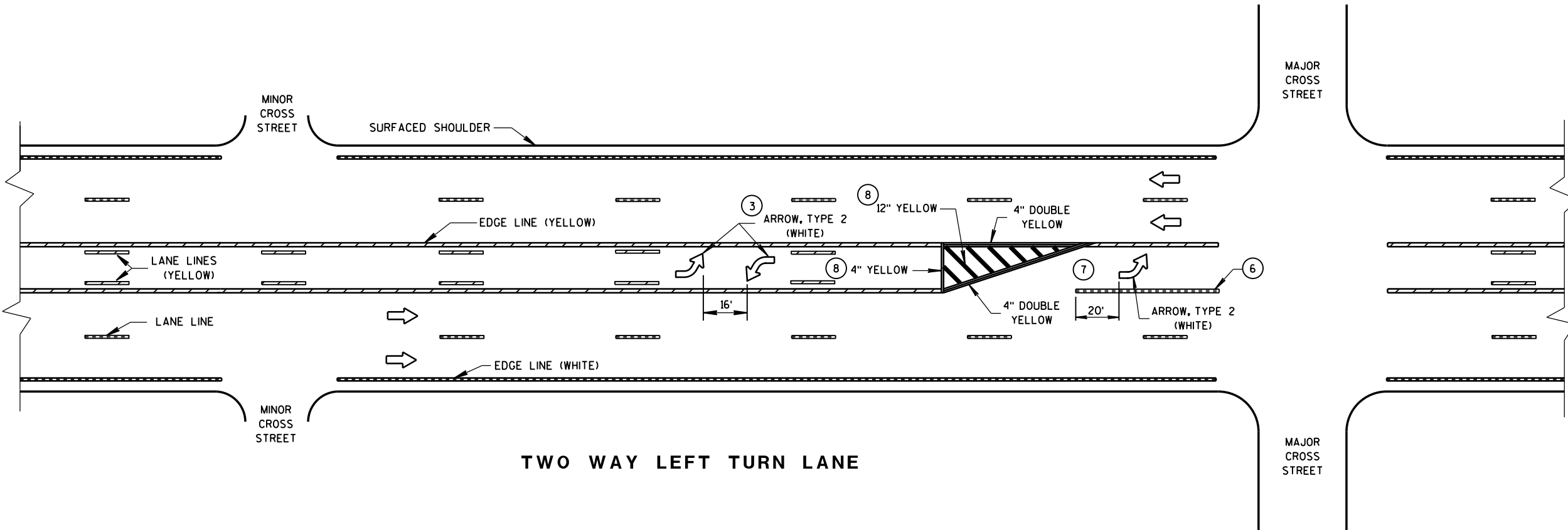
/S/ Travis Feltes  
STATE TRAFFIC ENGINEER



# GENERAL NOTES

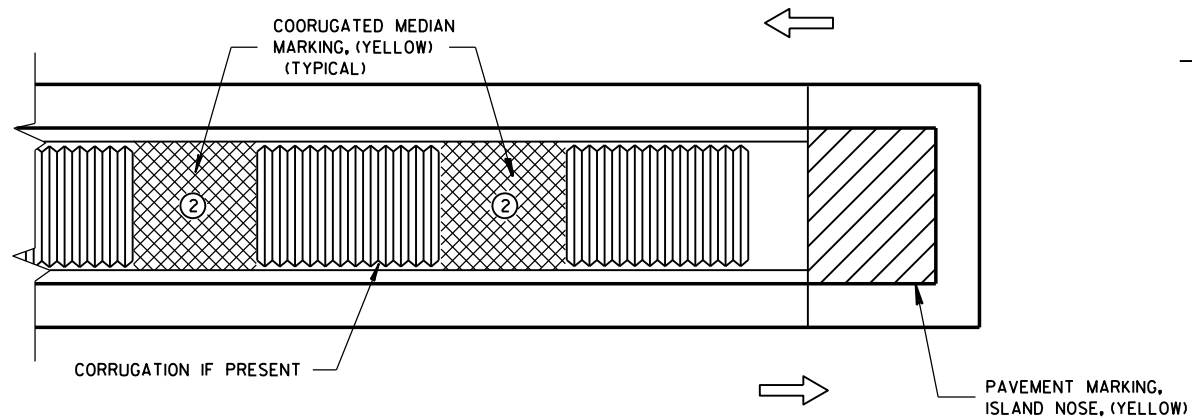
- ① STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ④ ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
- ⑤ 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
- ⑥ 8" WHITE
- ⑦ ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
- ⑧ REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:  
ARROW SYMBOL (➡)  
SHOWS DIRECTION OF TRAVEL

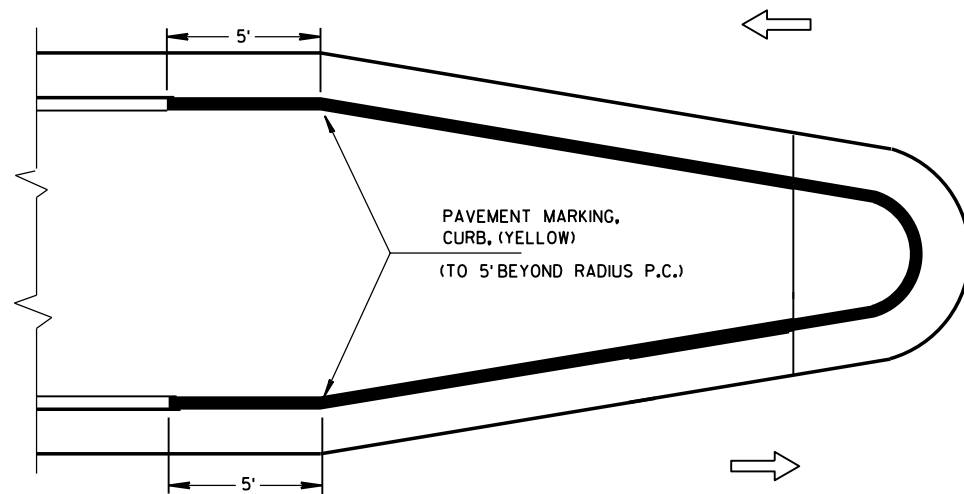


PAVEMENT MARKING  
(LEFT TURN LANE)

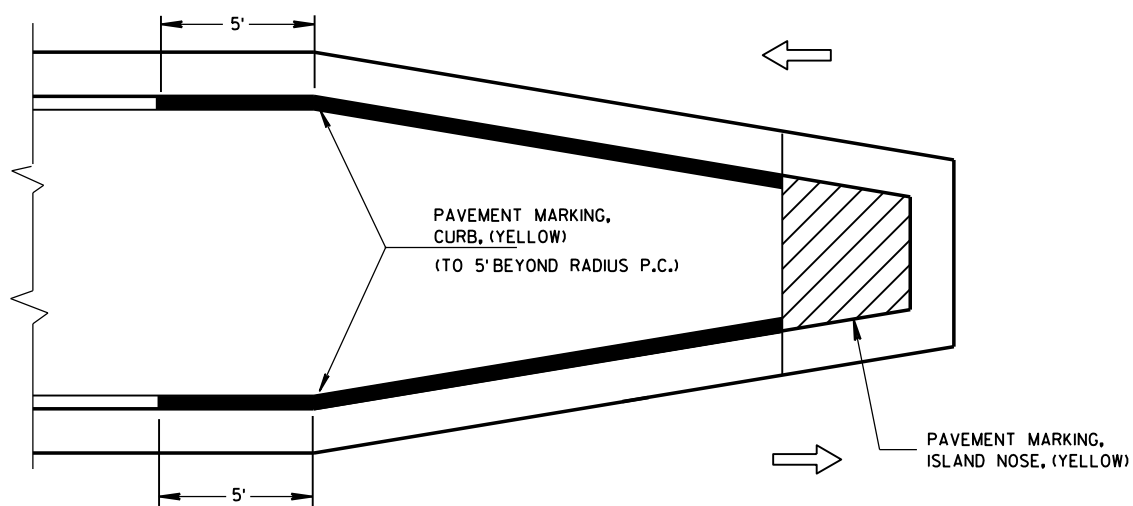
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**MEDIAN ISLAND WITH SQUARE BLUNT NOSE**

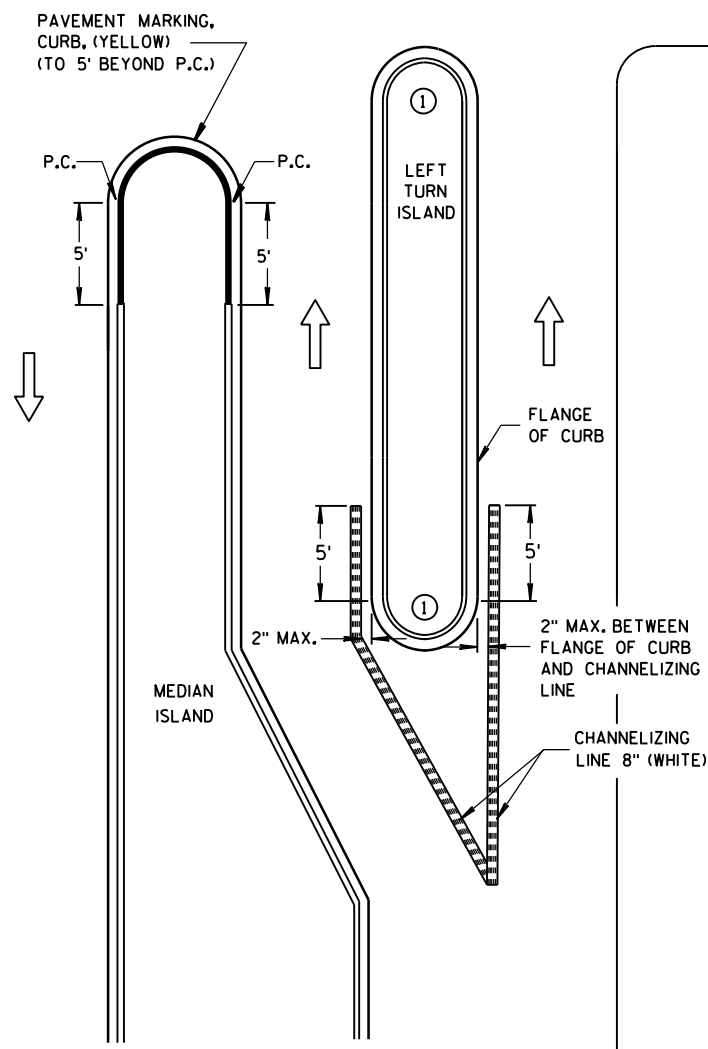


**MEDIAN ISLAND WITH ROUND BLUNT NOSE**



**MEDIAN ISLAND WITH SLOPED NOSE**

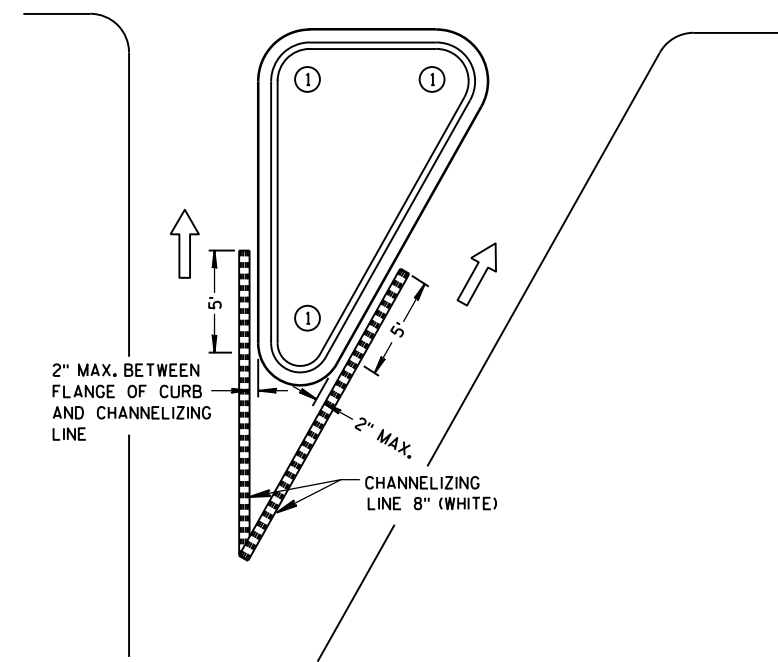
**TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS**



**LEFT TURN & MEDIAN ISLAND**

## GENERAL NOTES

- DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- 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.



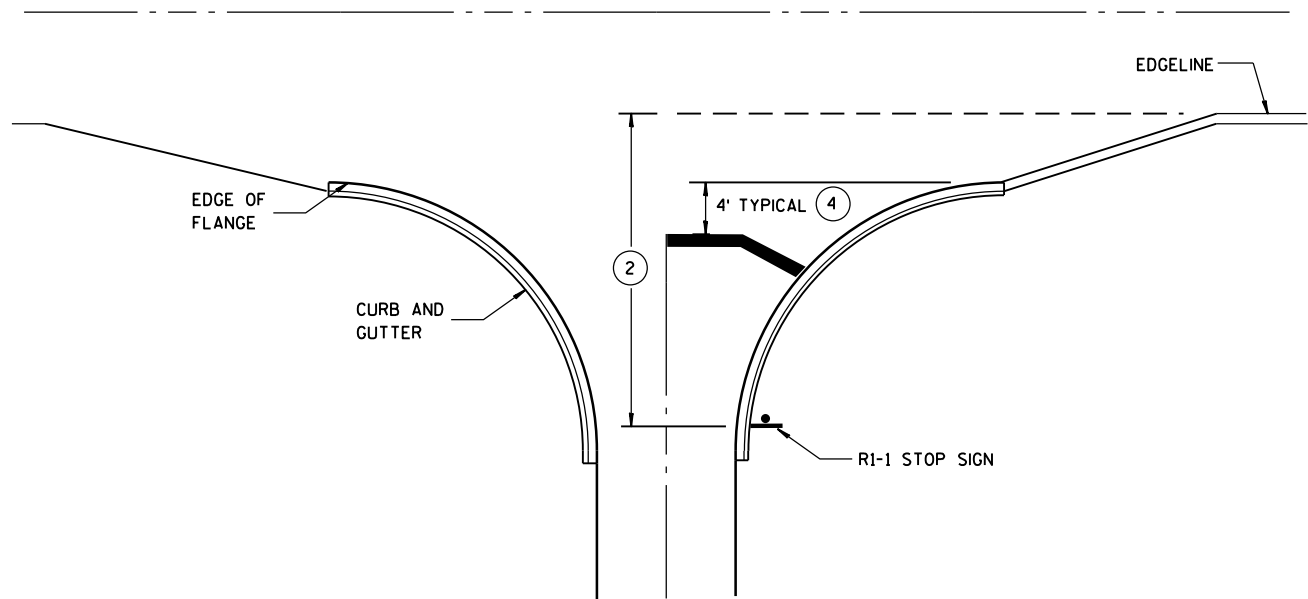
**RIGHT TURN ISLAND**

## LEGEND

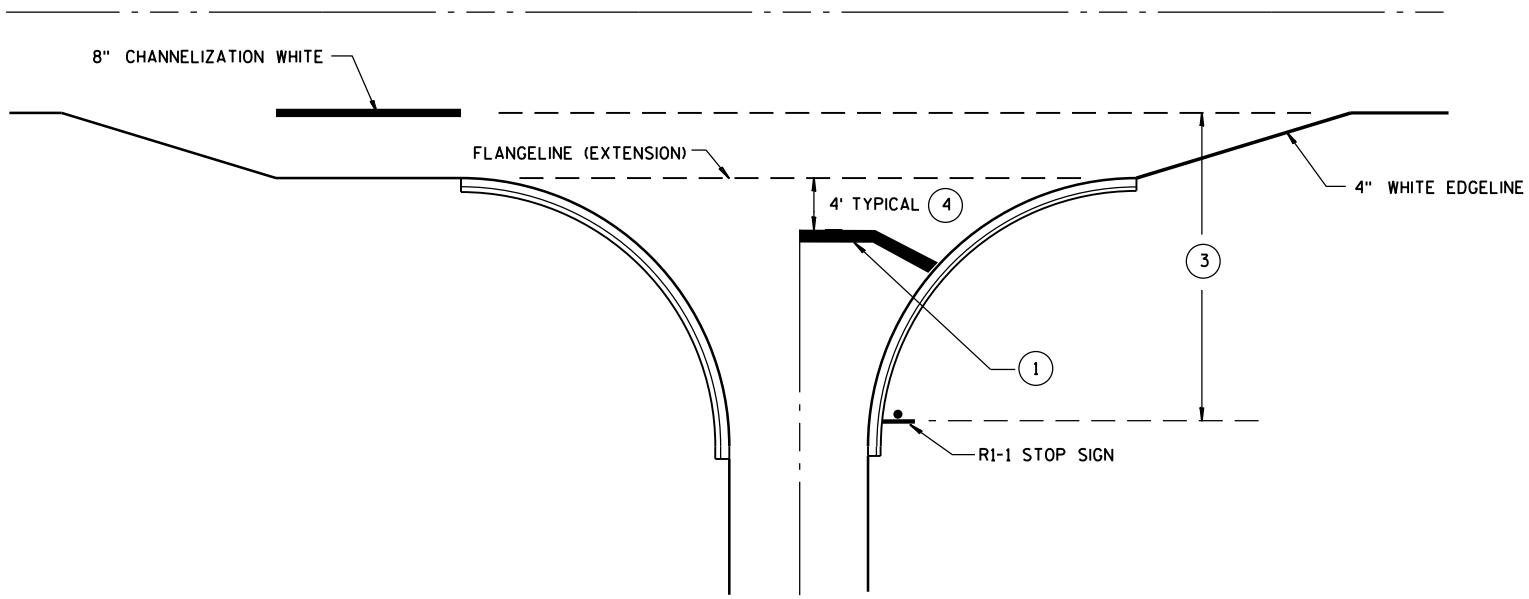
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

**PAVEMENT MARKING (ISLANDS)**

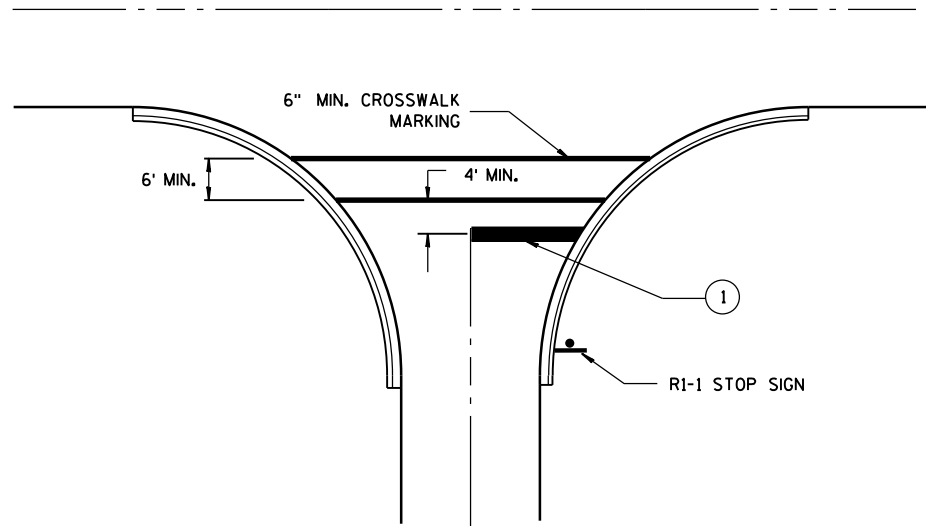
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



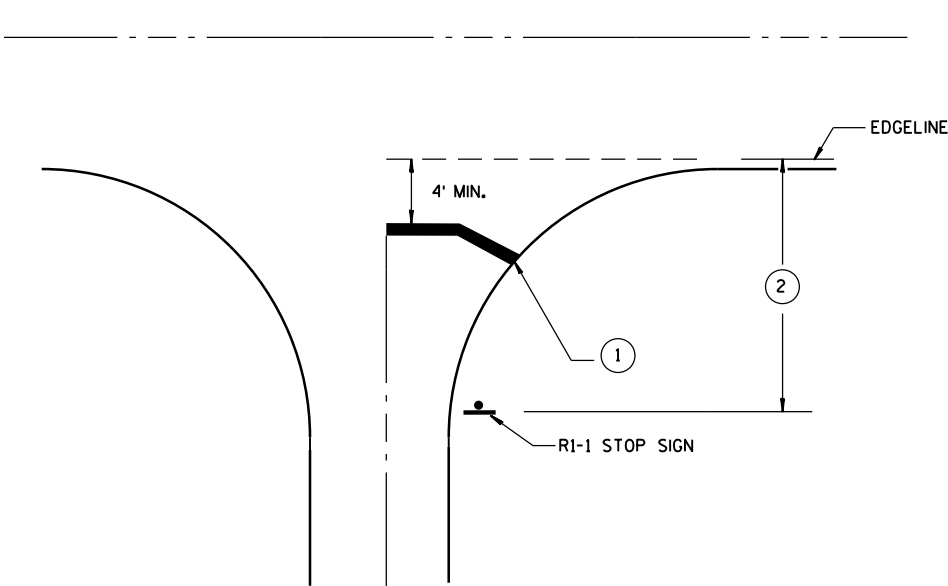
TYPICAL STOP LINE PAVEMENT MARKING  
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING  
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING  
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING  
WITHOUT CURB AND GUTTER

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK  
PAVEMENT MARKING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
4/30/2013 DATE /S/ Travis Feltz  
STATE TRAFFIC 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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS 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.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

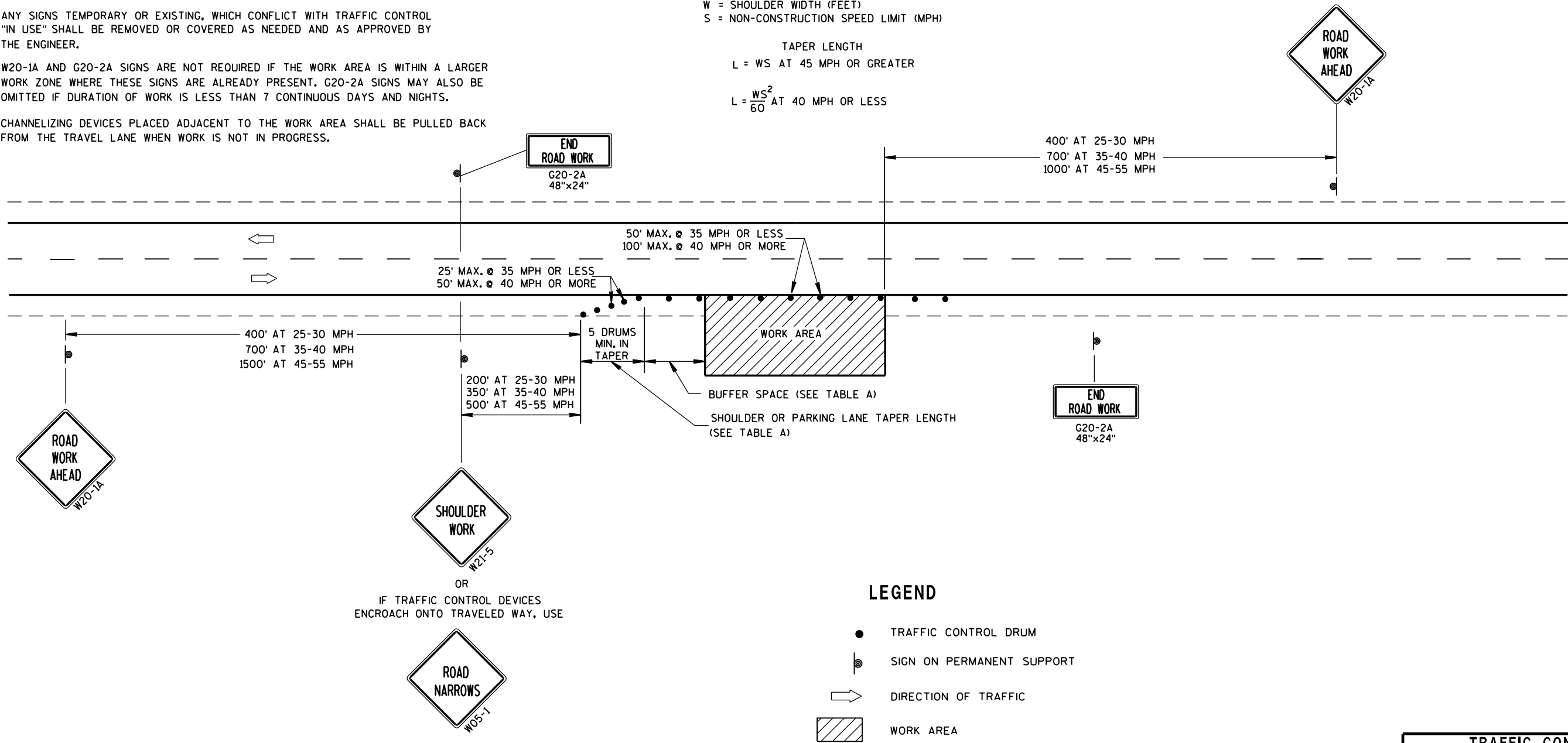
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)  
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH  
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$  AT 40 MPH OR LESS

SHOULDER TAPER LENGTH =  $\frac{1}{3}L$

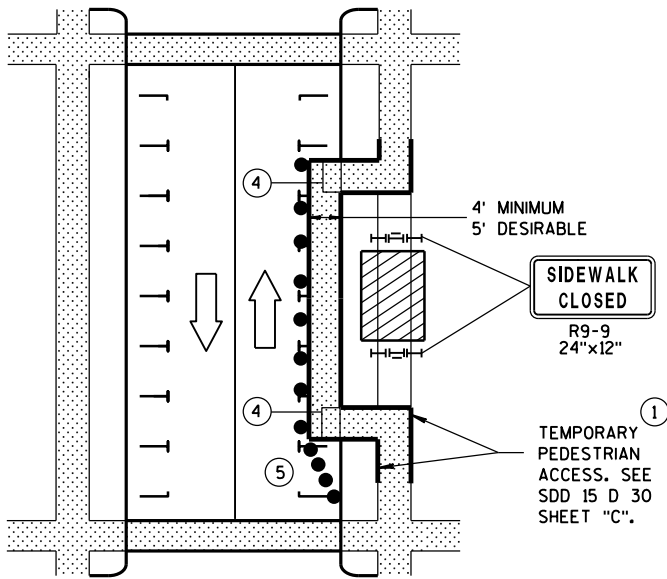


LEGEND

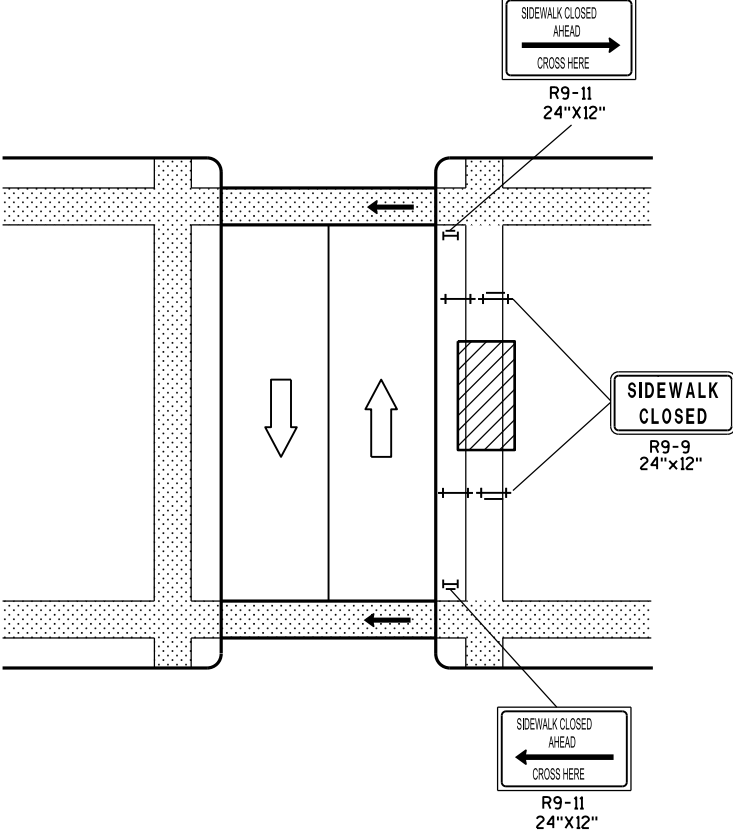
- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

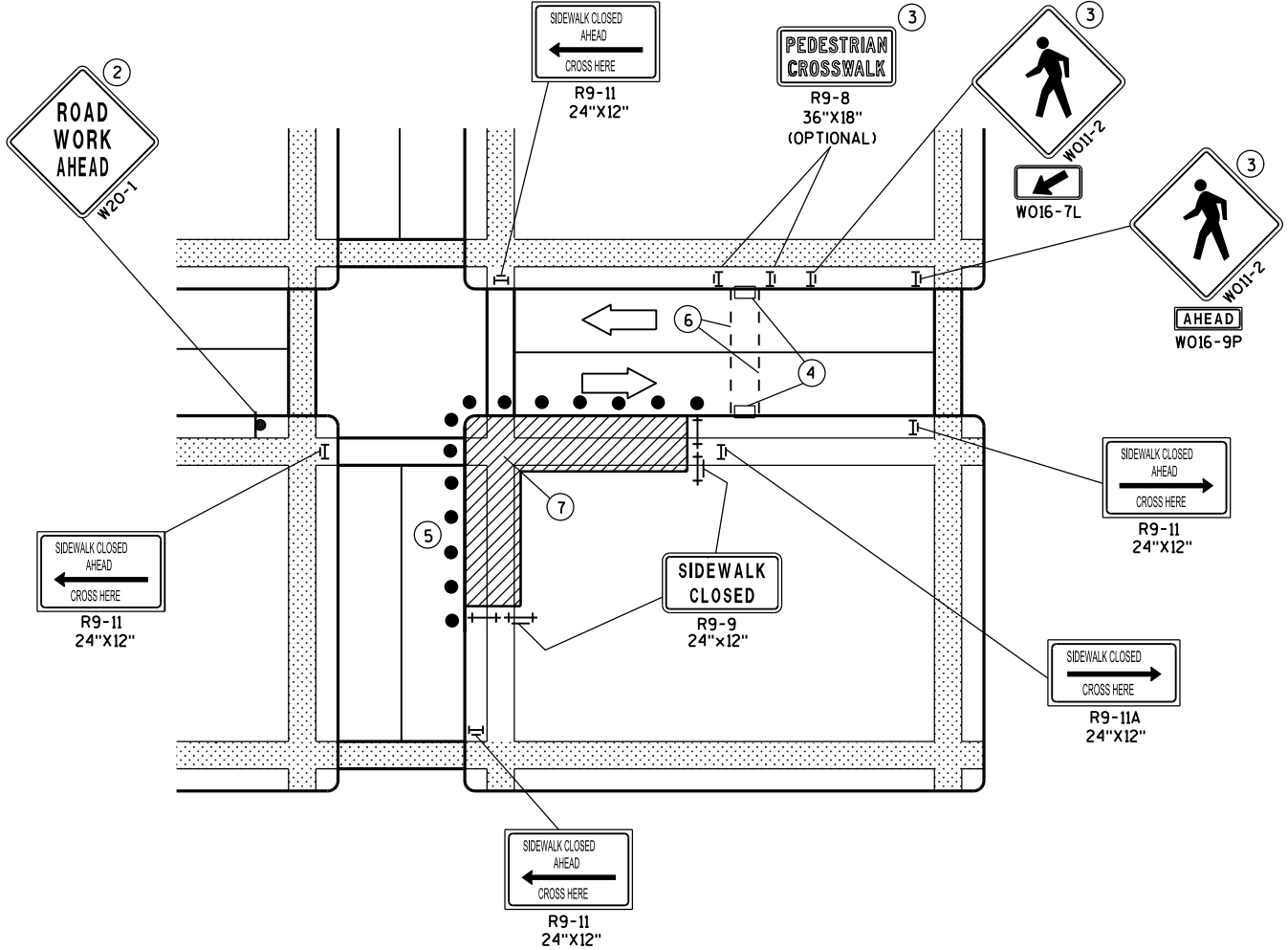
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE  
IN PARKING LANE

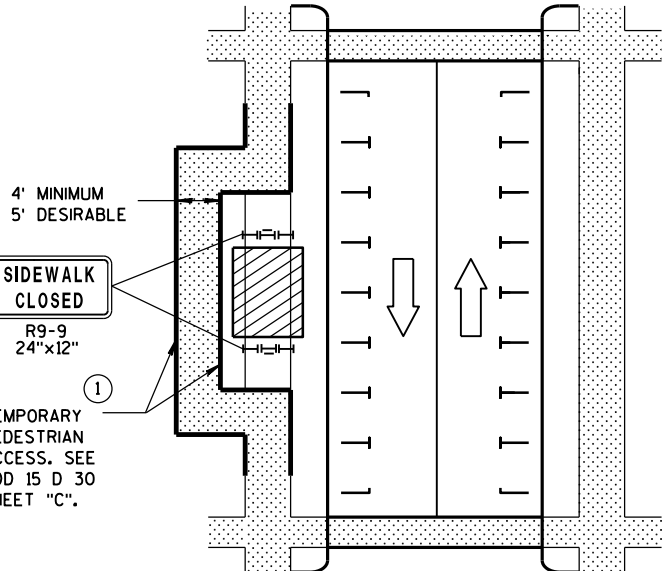


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

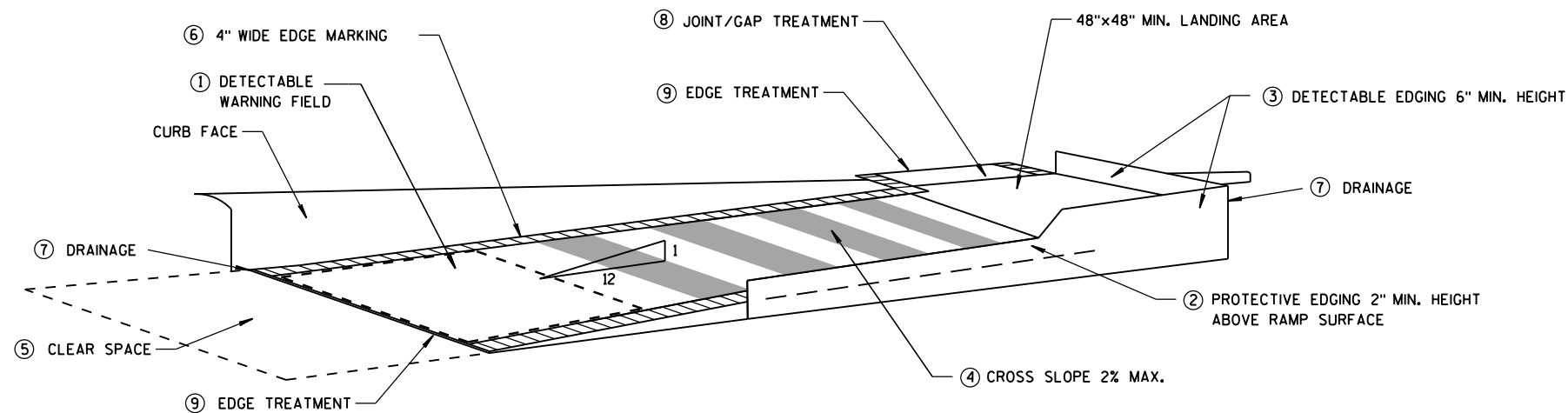
- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

**LEGEND**

	SIGN ON PERMANENT SUPPORT		DIRECTION OF TRAFFIC
	UNDER PEDESTRIAN TRAFFIC		TRAFFIC CONTROL DRUM
	WORK AREA		
	PEDESTRIAN CHANNELIZATION DEVICE		
	TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)		
	TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)		

TRAFFIC CONTROL,  
PEDESTRIAN ACCOMMODATION

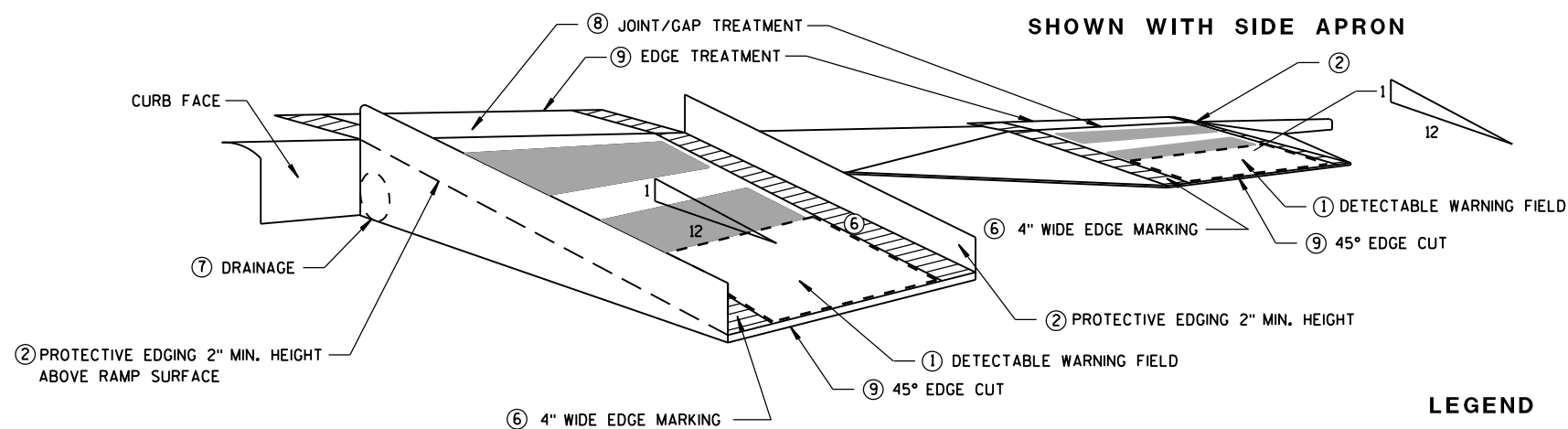
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



TEMPORARY CURB RAMP  
PARALLEL TO CURB

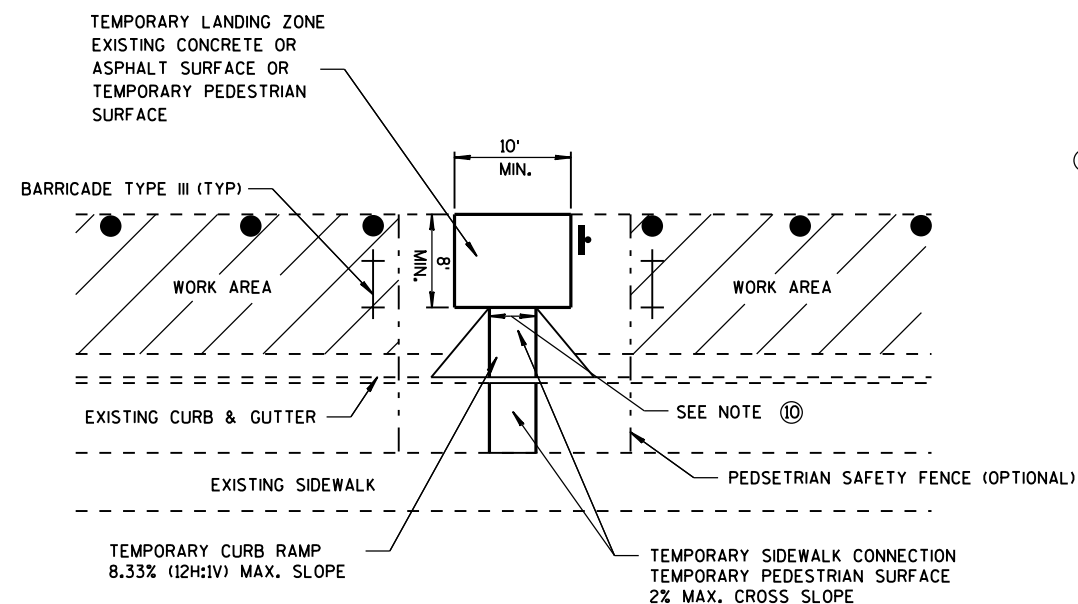
GENERAL NOTES

- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.  
ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY  
TO MAINTAIN PEDESTRIAN ACCESS.
- 1 CURB RAMP SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
  - 2 PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMP OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
  - 3 DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
  - 4 CURB RAMP AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
  - 5 CLEAR SPACE OF 48"x48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
  - 6 THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
  - 7 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
  - 8 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
  - 9 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
  - 10 5' WIDE MIN. WITH PEDESTRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP  
PERPENDICULAR TO CURB



TEMPORARY BUS STOP PAD

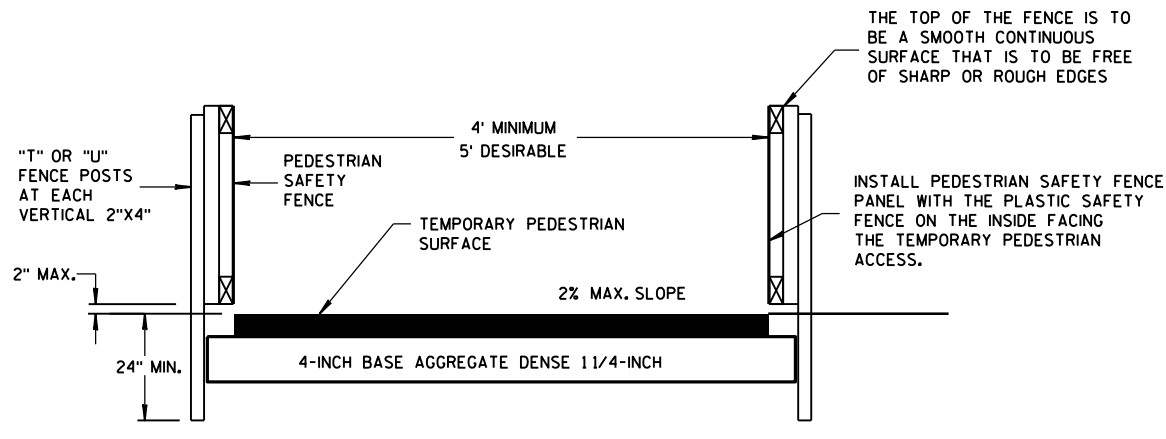
LEGEND

- WORK AREA
- TYPE III BARRICADE
- TRAFFIC CONTROL DRUM

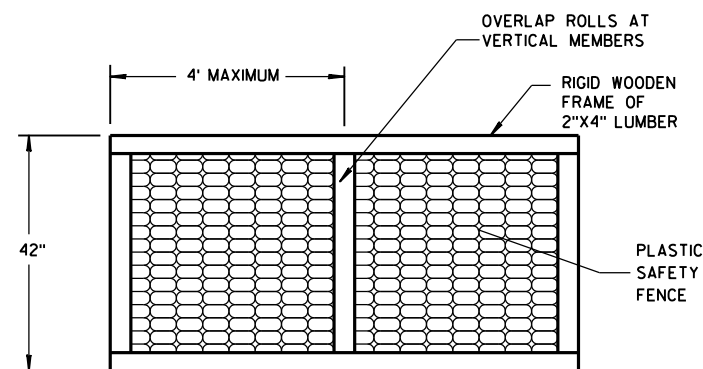
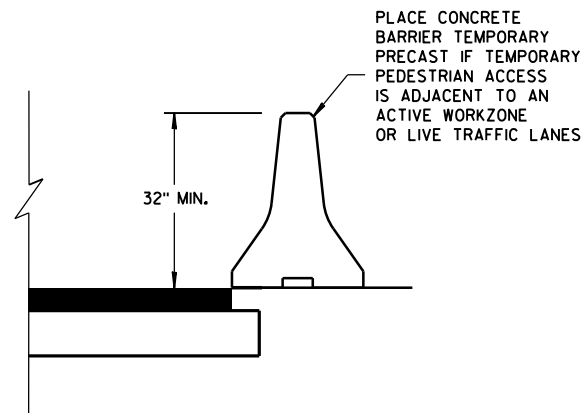
TRAFFIC CONTROL,  
TEMPORARY ADA COMPLIANT  
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

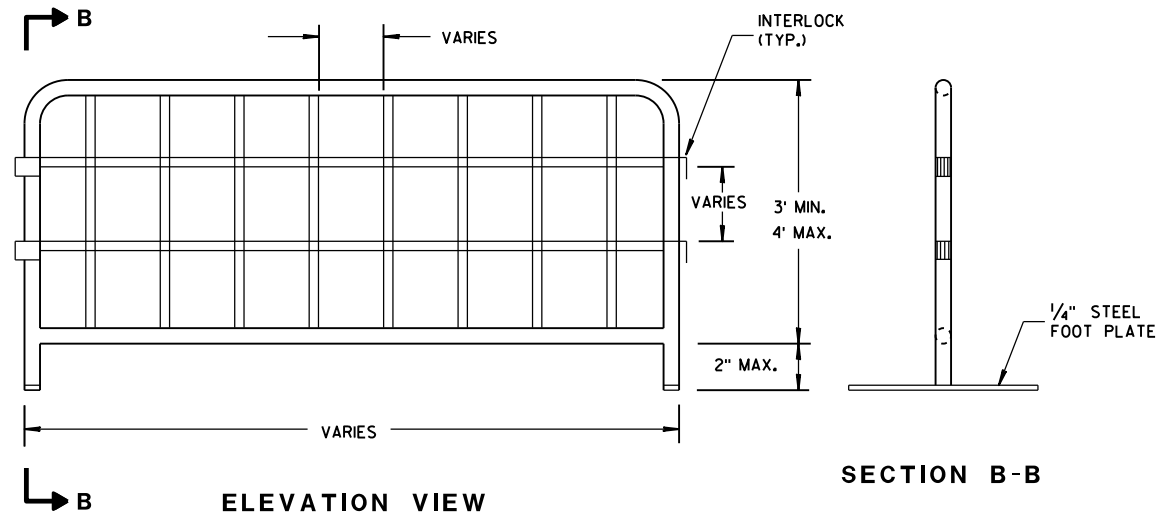
APPROVED  
March 2015 /S/ Travis Fettes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



TEMPORARY PEDESTRIAN ACCESS

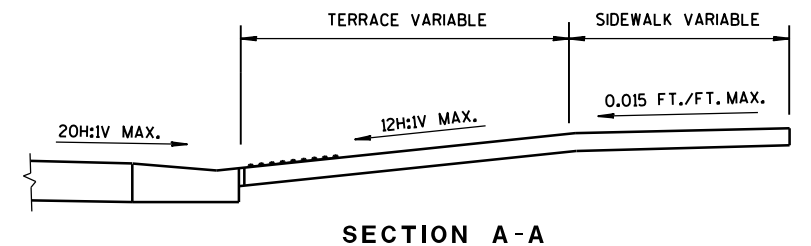


PEDESTRIAN SAFETY FENCE

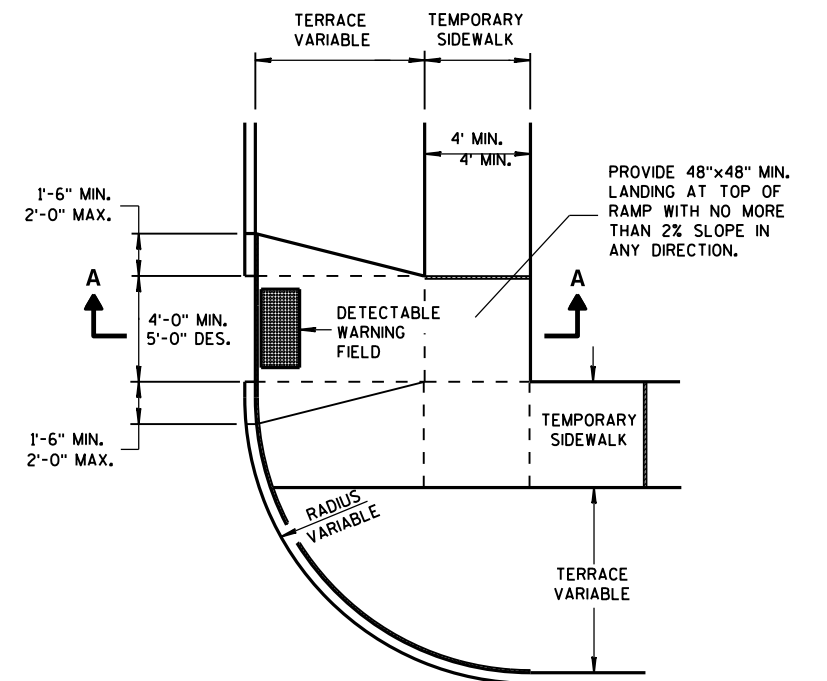


TEMPORARY PEDESTRIAN STEEL BARRICADE

GENERAL NOTES  
① INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.

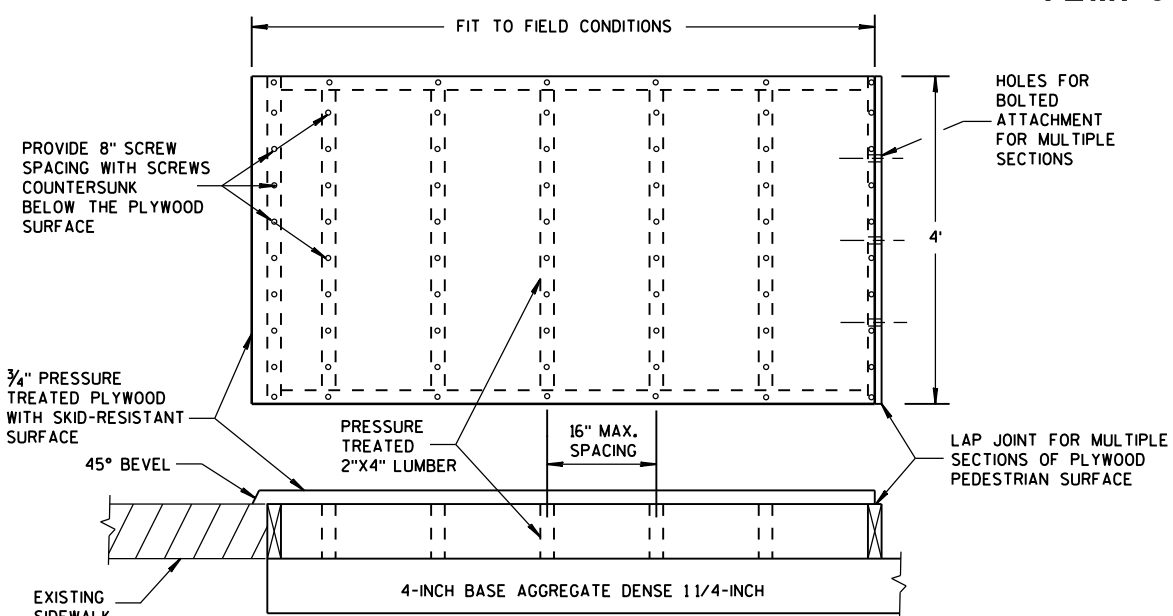


SECTION A-A

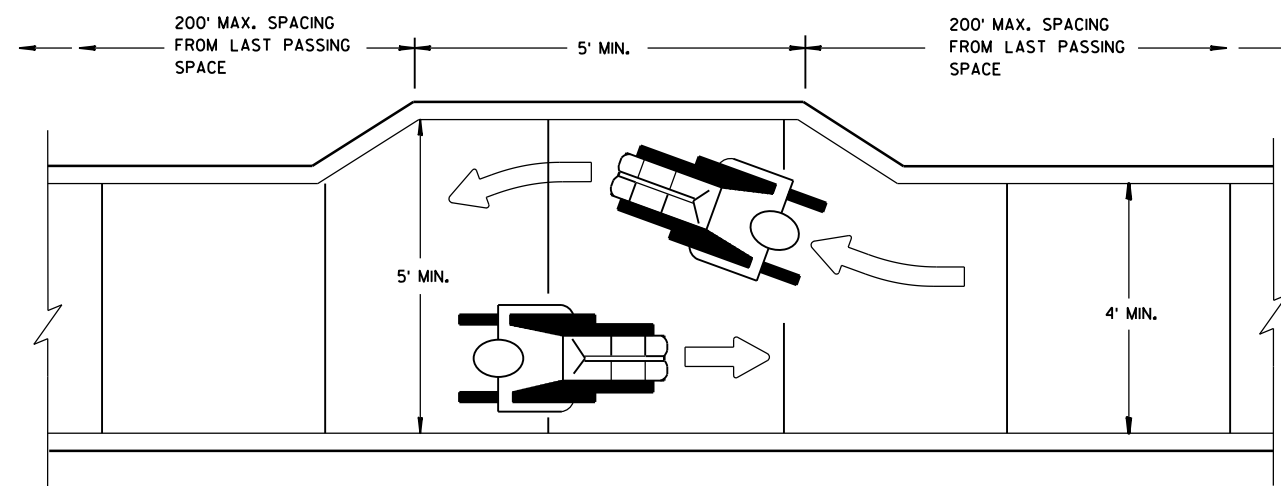


PLAN VIEW

TEMPORARY TYPE 3 RAMP  
(OUTSIDE OF CROSSWALK AREA)



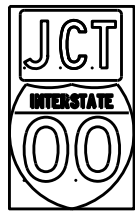
TEMPORARY PEDESTRIAN SURFACE PLYWOOD



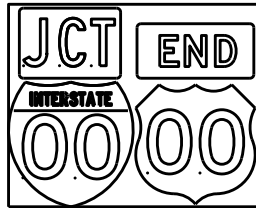
NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2015 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

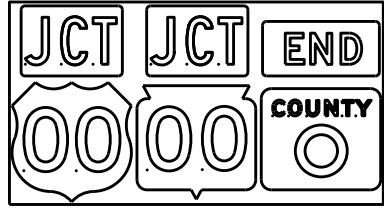
TYPICAL ASSEMBLIES



J1-1



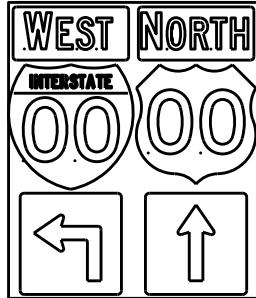
J1-2



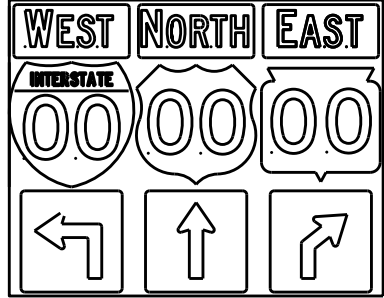
J1-3



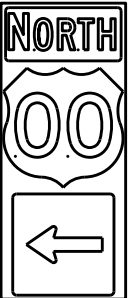
J2-1



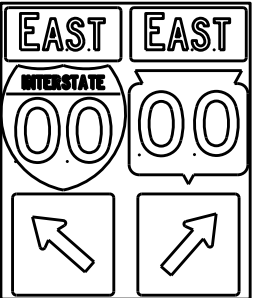
J2-2



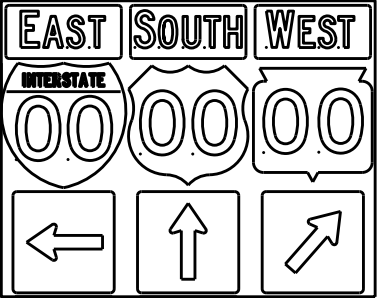
J2-3



J3-1



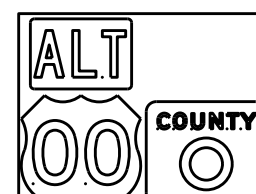
J3-2



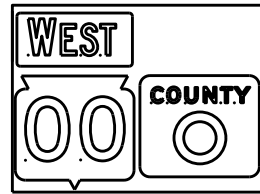
J3-3



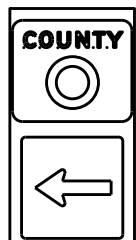
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

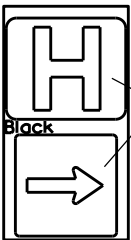


J22-1



JV

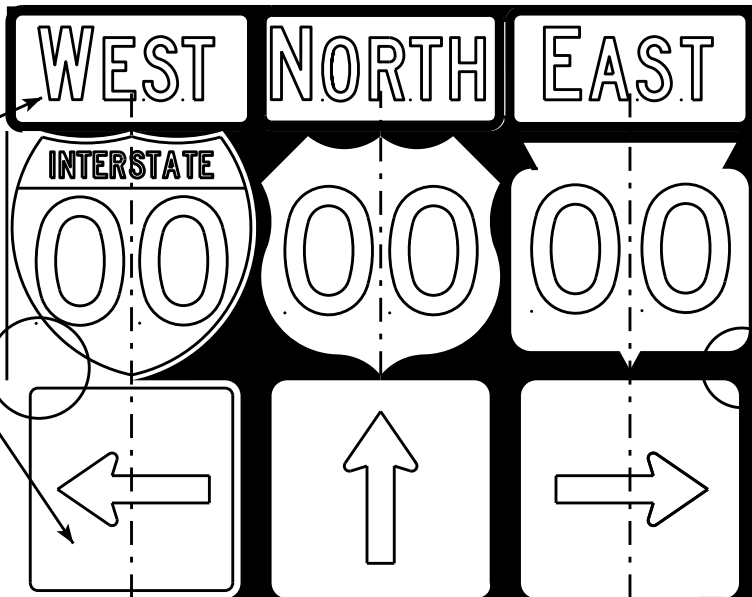
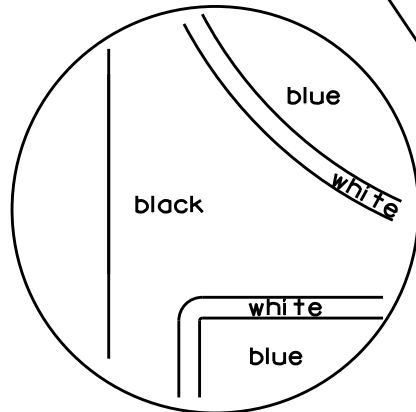
( Typical Vertical J-Assembly  
See Note 10 and 11)



JH-1

Blue Background

[blue background  
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS  
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Black Non-reflective  
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr\_stdplate\A21S.DGN

PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

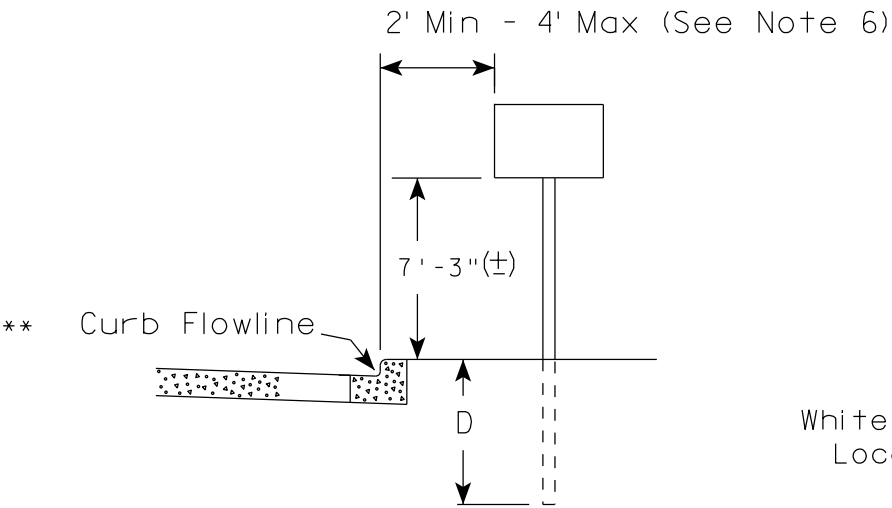
PLOT NAME :

SHEET NO:

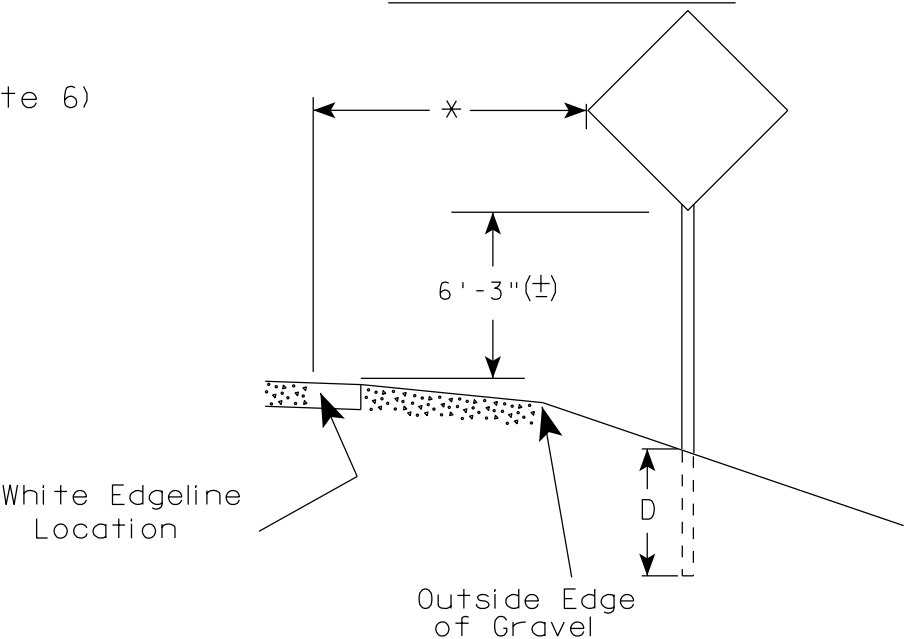
E

WISDOT/CADDs SHEET 42

URBAN AREA



RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
  2. If signs are mounted on barrier wall, see A4-10 sign plate.
  3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
  4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
  5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
  6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
  7. The (±) tolerance for mounting height is 3 inches.
  8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
  9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation ( Sq.Ft. )	D ( Min )
20 or Less	4'
Greater than 20	5'

×× The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

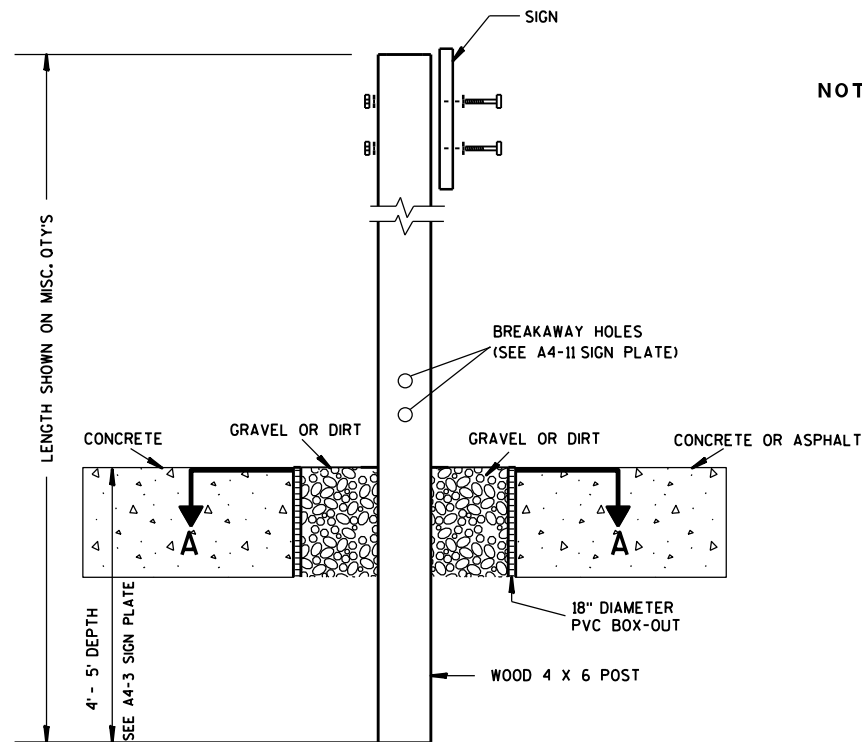
\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

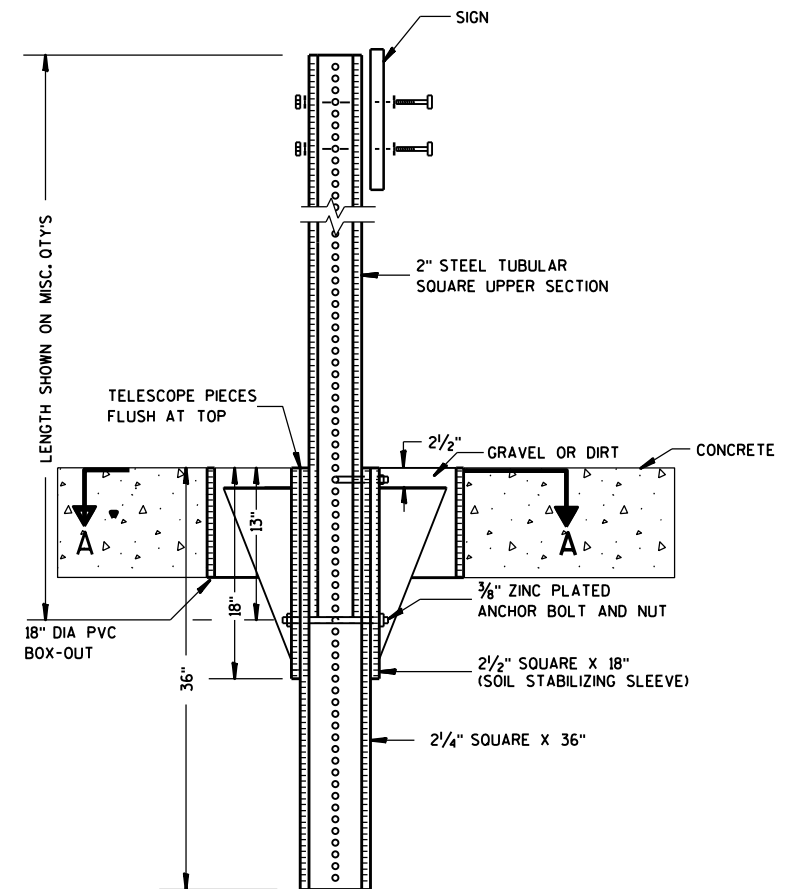
DATE 7/23/15 PLATE NO. A4-3.20



### ELEVATION VIEW

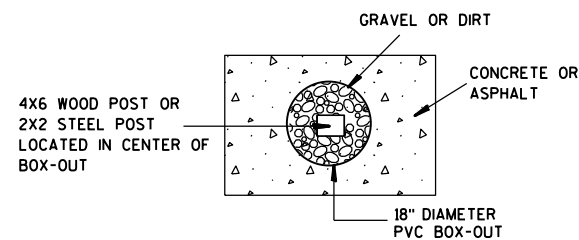
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

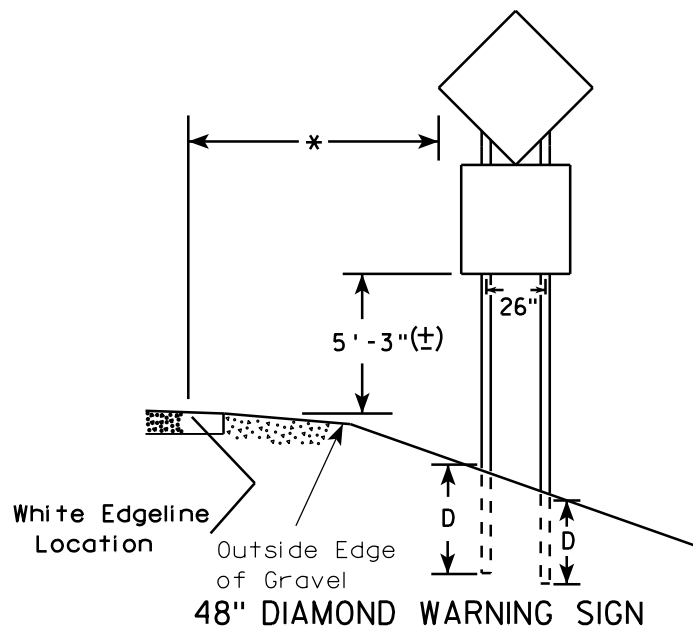
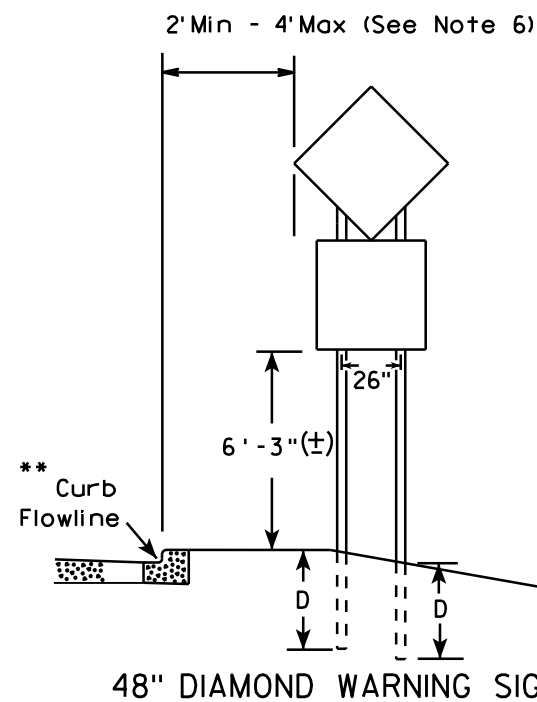
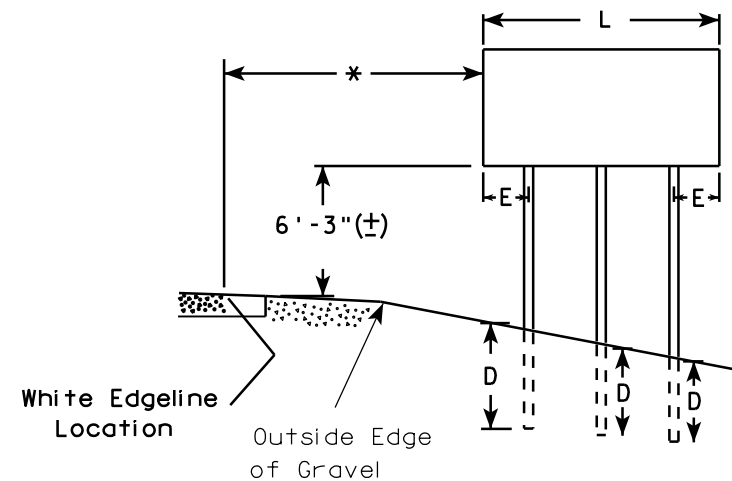
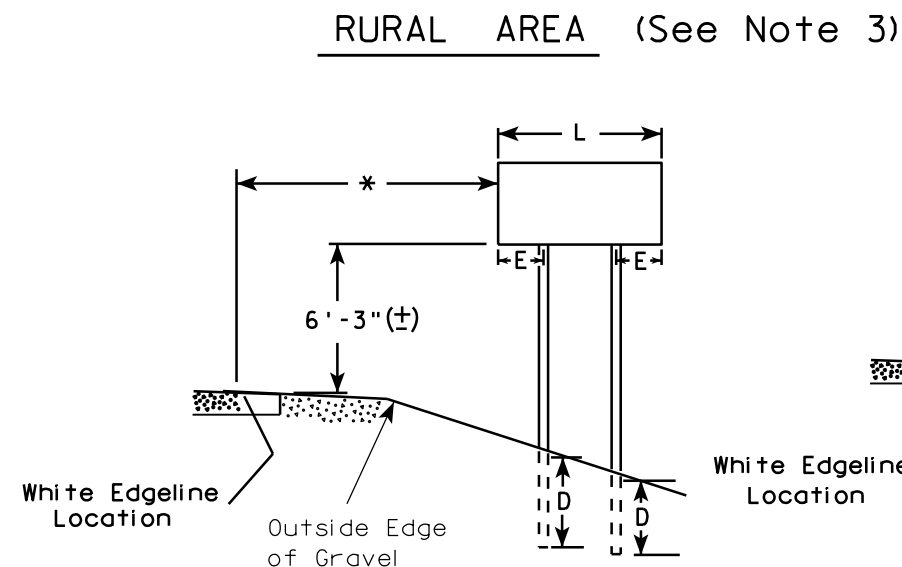
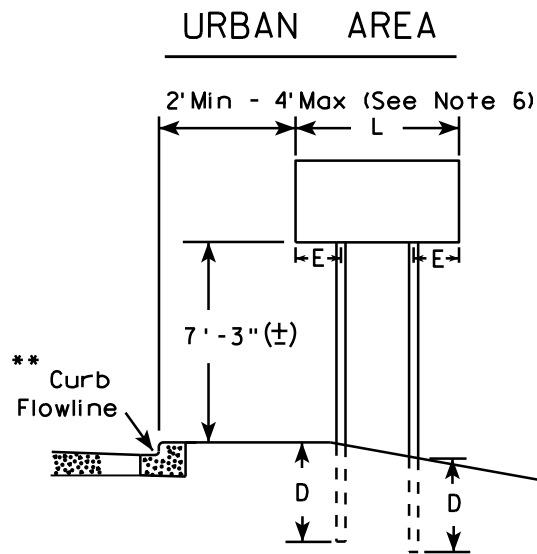
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

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



- GENERAL NOTES**
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
  2. See tables below for required number of posts.
  3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
  4. The (±) tolerance for mounting height is 3 inches.
  5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
  6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
  7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
  8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

\* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

\*\* The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

\*\*\* See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

\*\*\*

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

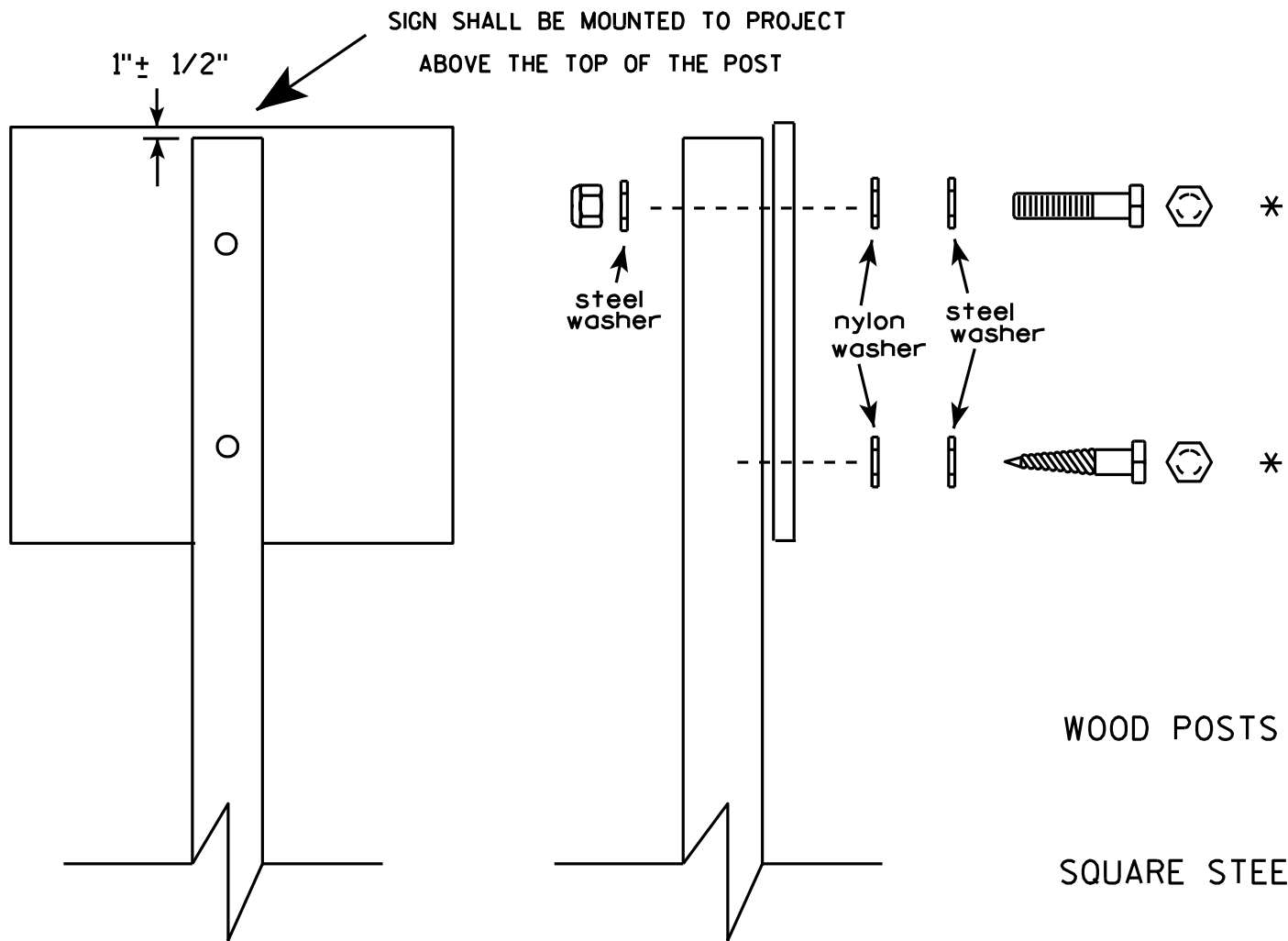
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/23/15	PLATE NO. A4-4.14



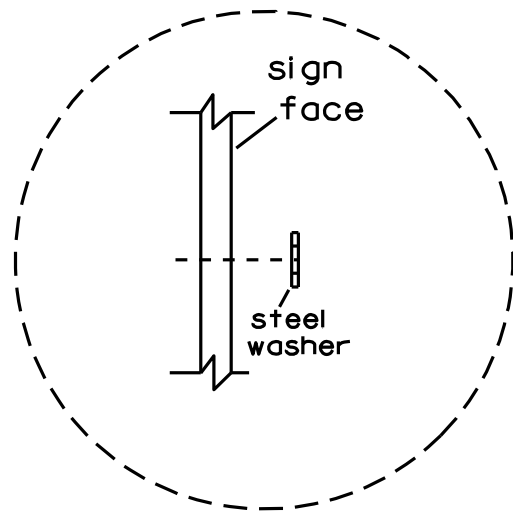


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- WOOD POSTS (4" x 4" or 4" x 6")  
LAG SCREWS - 3/8" X 3"  
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")  
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts  
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL  
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -  
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL  
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

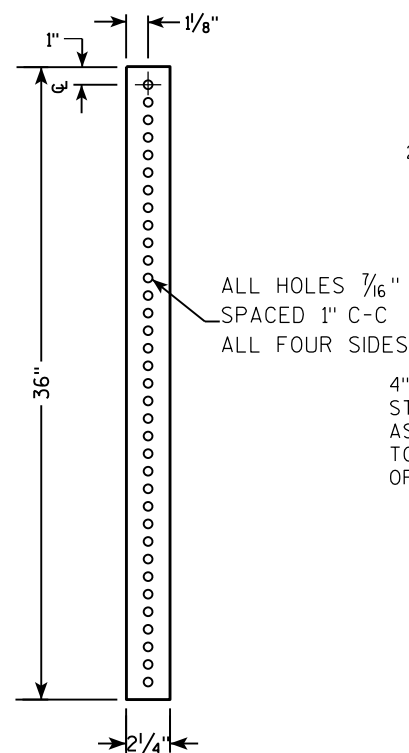


Washer Placement when Sign Has Other Than Type H or Type F Face

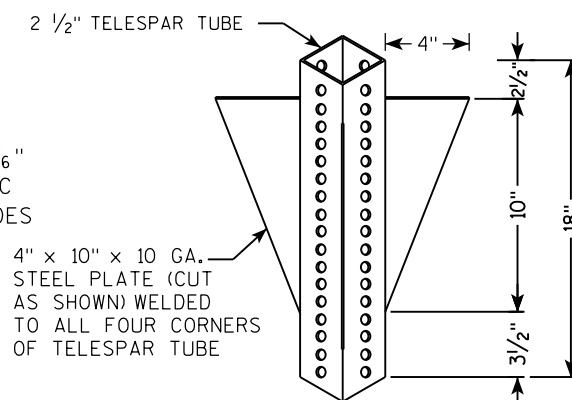
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

**2 1/4 " SQUARE  
12 GAUGE  
PERFORATED  
GALVANIZED FINISH**



**2 1/2" SQUARE  
12 GAUGE  
OMNI-DIRECTIONAL  
PERFORATED  
SOIL STABILIZING SLEEVE  
GALVANIZED FINISH**



TECHNICAL DRAWING OF A VERTICAL SIGNPOST ASSEMBLY.

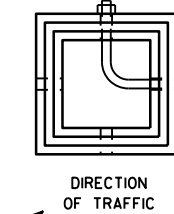
**Labels and Dimensions:**

- 18" DIA SCHEDULE 40 PVC BOX-OUT**: The base container for the assembly.
- 36"**: Total height of the PVC box-out.
- 18"**: Height of the gravel/dirt section at the base.
- 13"**: Height of the soil stabilizing sleeve section.
- 2 1/2" GRAVEL OR DIRT**: The base layer within the box-out.
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)**: The sleeve supporting the upper section.
- 2 1/4" SQUARE X 36"**: The main vertical support structure.
- 2" STEEL TUBULAR SQUARE UPPER SECTION**: The upper part of the main support.
- ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES**: Specification for the holes in the steel tubular section.
- 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT**: Hardware securing the sleeve to the main support.
- 3/16" ZINC PLATED ANCHOR BOLT AND NUT**: Hardware securing the sleeve to the box-out.
- SIGN**: The sign plate at the top.
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL**: Reference to a specific sign plate for hardware details.
- TELESCOPE PIECES FLUSH AT TOP**: Instruction for the top of the assembly.
- LONGER SHOWN ON MISC. QTY'S**: Note indicating that the length of the PVC box-out is shown as an example.

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- TELESCOPE PIECES FLUSH AT TOP**: Indicated by a dimension line on the left.
- 2" STEEL TUBULAR SQUARE UPPER SECTION**: The main vertical support.
- ALL HOLES  $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES**: Specification for the perforations in the tubular section.
- SIGN**: Attached to the top of the post.
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL**: Reference to a sign plate for hardware details.
- 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT**: Hardware used to secure the post to the base.
- 1"**: Dimension for the offset of the anchor bolt from the post face.
- 3/8" ZINC PLATED ANCHOR BOLT AND NUT**: Hardware used to secure the base plate to the ground.
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)**: The base plate of the post.
- 2 1/4" SQUARE X 36"**: The main base plate.
- 36"**: Dimension for the height of the main base plate.
- 18"** and **12"**: Dimensions for the offset of the anchor bolt from the post face.
- A**: Downward arrows indicating load or weight.

3/8" ZINC PLATED CORNER  
ANCHOR BOLT AND NUT



**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 NO. A4-9.9

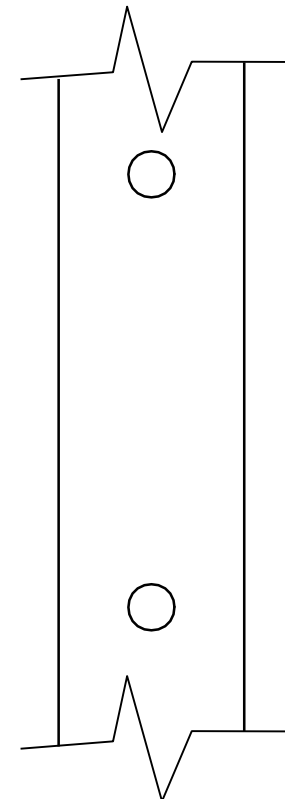
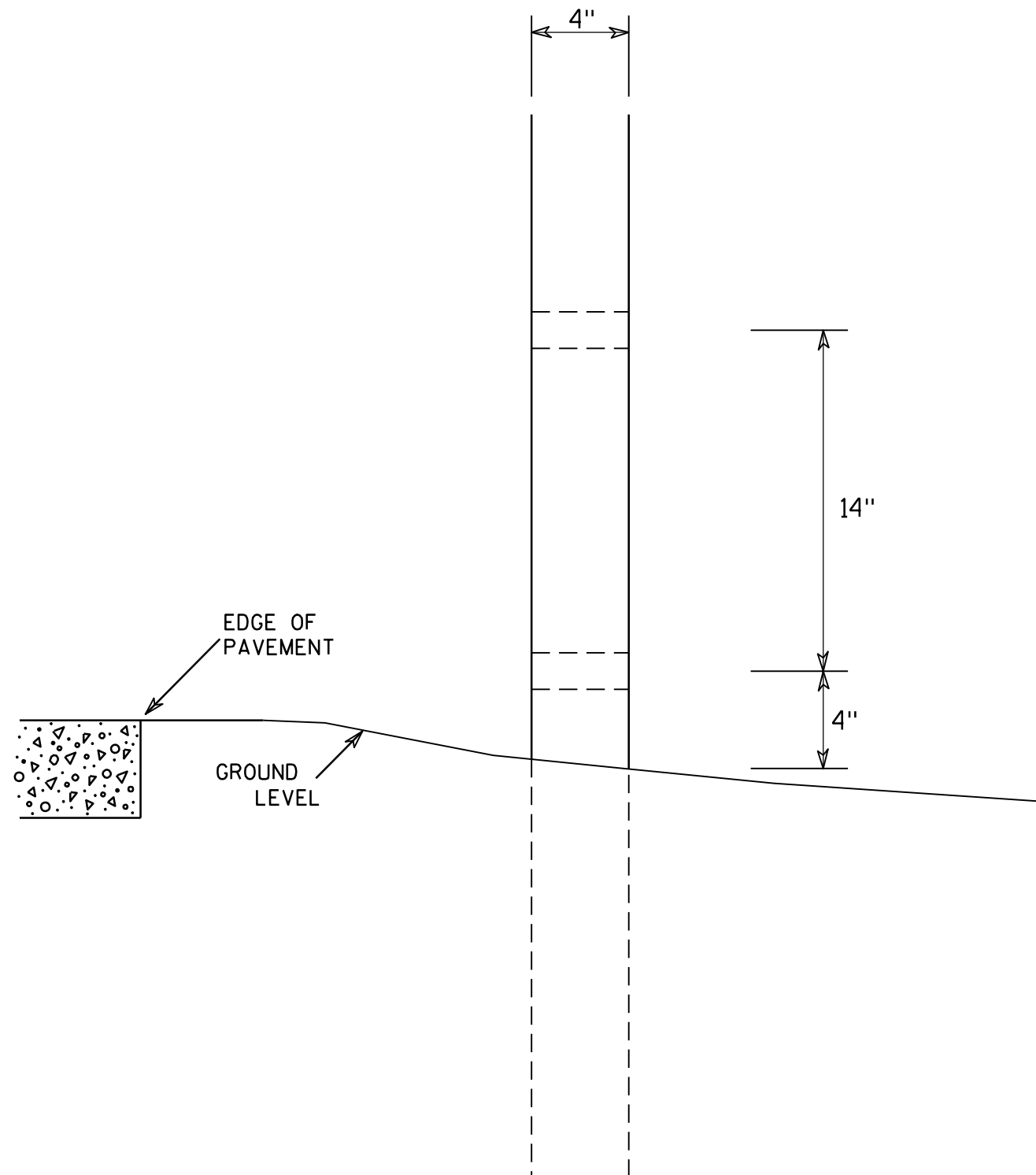
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



SIDE VIEW

# GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1 1/2" diameter holes drilled perpendicular to the roadway centerline.

## 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:

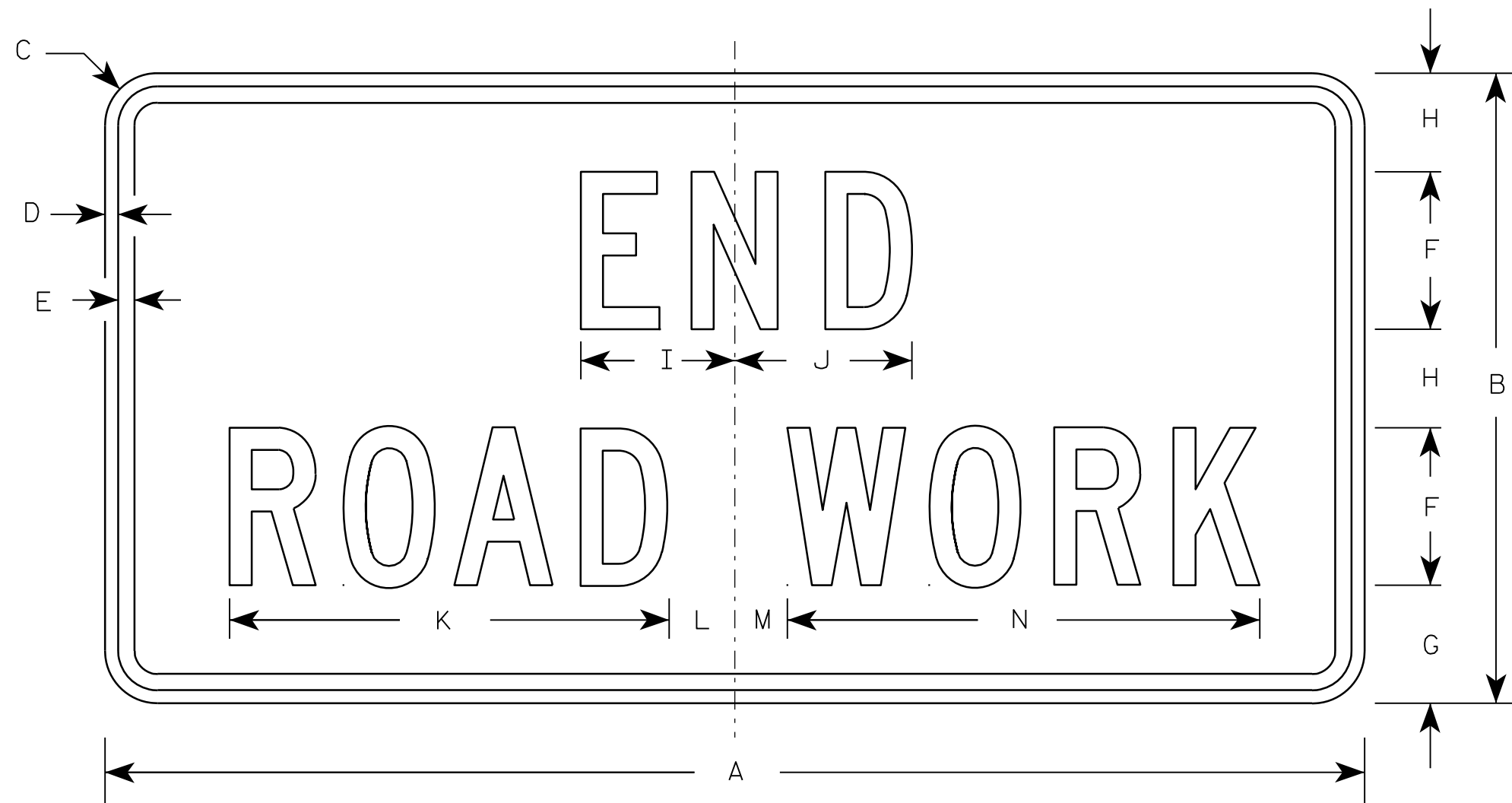
HWY:

COUNTY:

SHEET NO:

E

7



G20-2A

Metric equivalent  
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

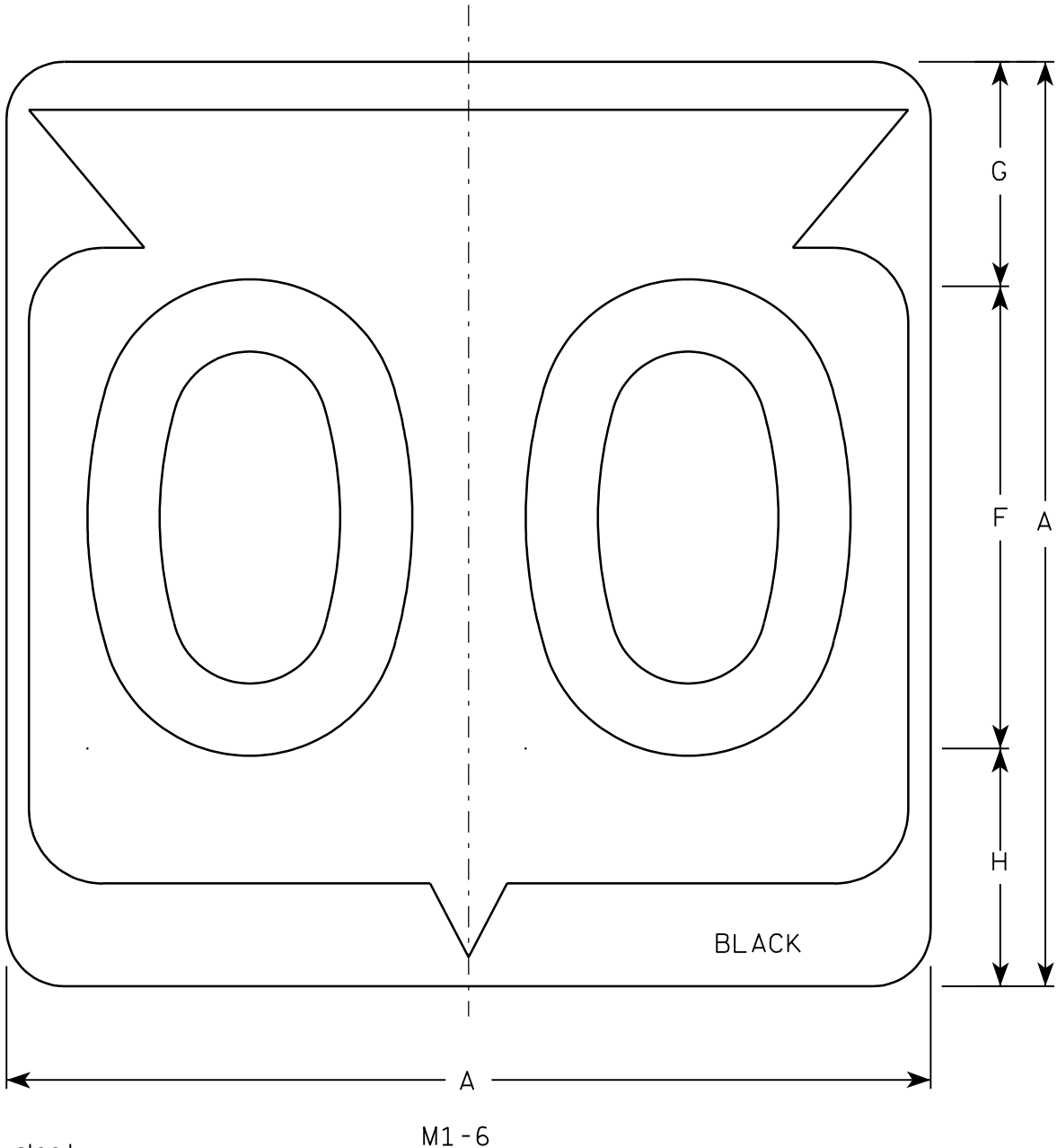
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:  
Background - Orange  
Message - Black
- Message Series - C
- 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.

7

7



Metric equivalent  
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m <sup>2</sup>
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	.36
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	.81
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	.81
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	.81

PROJECT NO:

HWY:

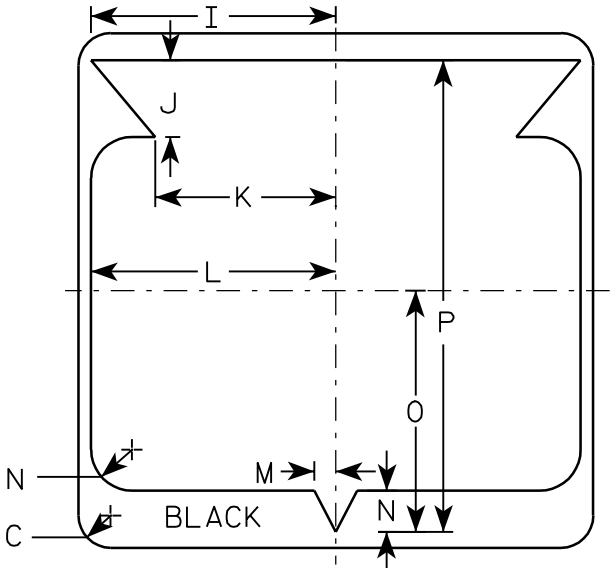
COUNTY:

SHEET NO:

E

NOTES

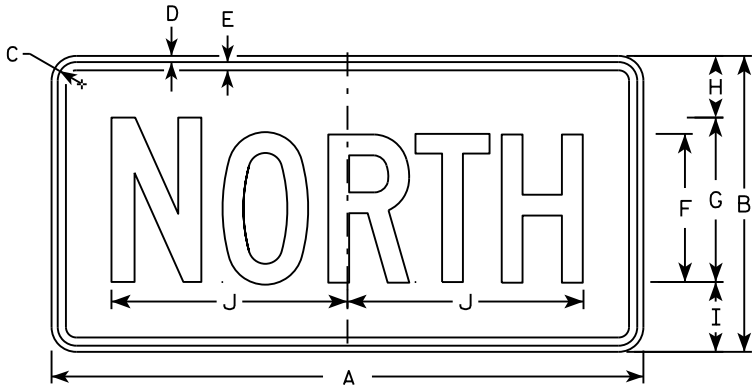
- Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:  
Background - White & Black - See Note 6  
Message - Black
- Message Series - See note 5
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
- Permanent Signs  
Background - Type H Reflective  
Detour or temporary Signs  
Background - Reflective



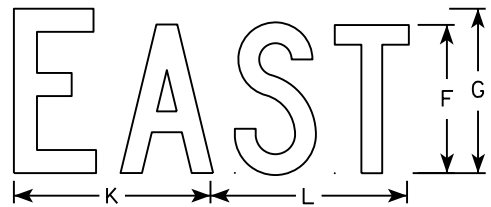
STATE ROUTE MARKER  
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

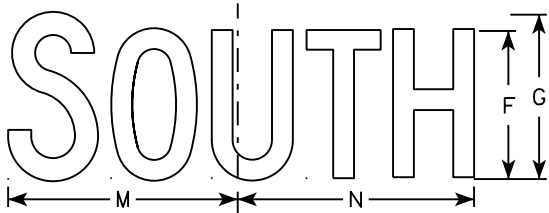
APPROVED  
*Chester J. Spang*  
for State Traffic Engineer  
DATE 3/20/02 PLATE NO. M1-6.9



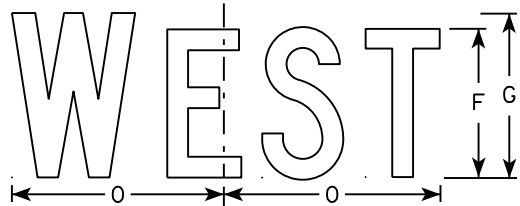
M3-1  
MM3-1  
MP3-1



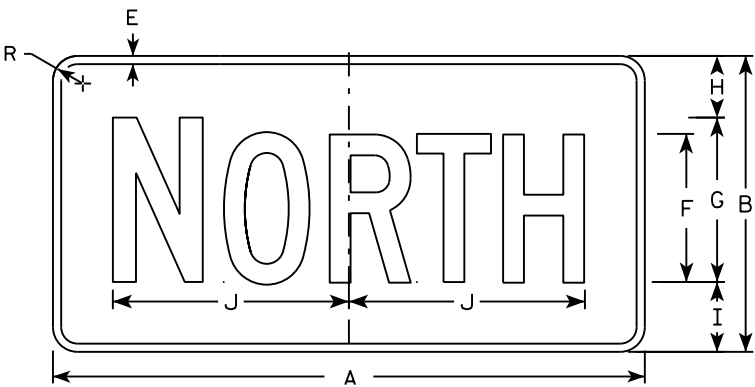
M3-2  
MM3-2  
MP3-2



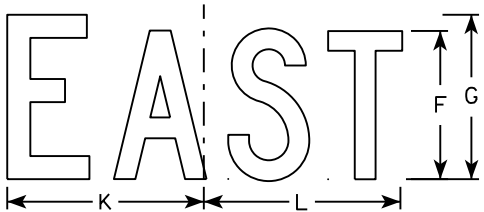
M3-3  
MM3-3  
MP3-3



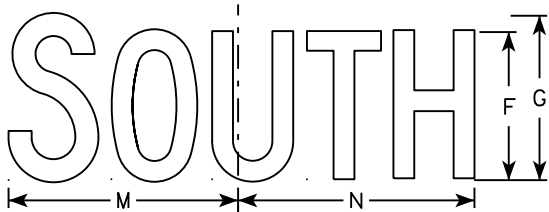
M3-4  
MM3-4  
MP3-4



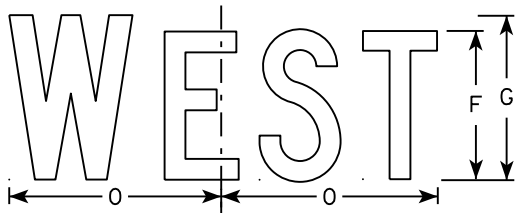
MB3-1  
MK3-1  
MN3-1



MB3-2  
MK3-2  
MN3-2



MB3-3  
MK3-3  
MN3-3



MB3-4  
MK3-4  
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:  
Background - See note 5  
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White  
Message - Black  
MB3-1 thru MB3-4 Background - Blue  
Message - White  
MK3-1 thru MK3-4 Background - Green  
Message - White  
MM3-1 thru MM3-4 Background - White  
Message - Green  
MN3-1 thru MN3-4 Background - Brown  
Message - White  
MP3-1 thru MP3-4 Background - White  
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

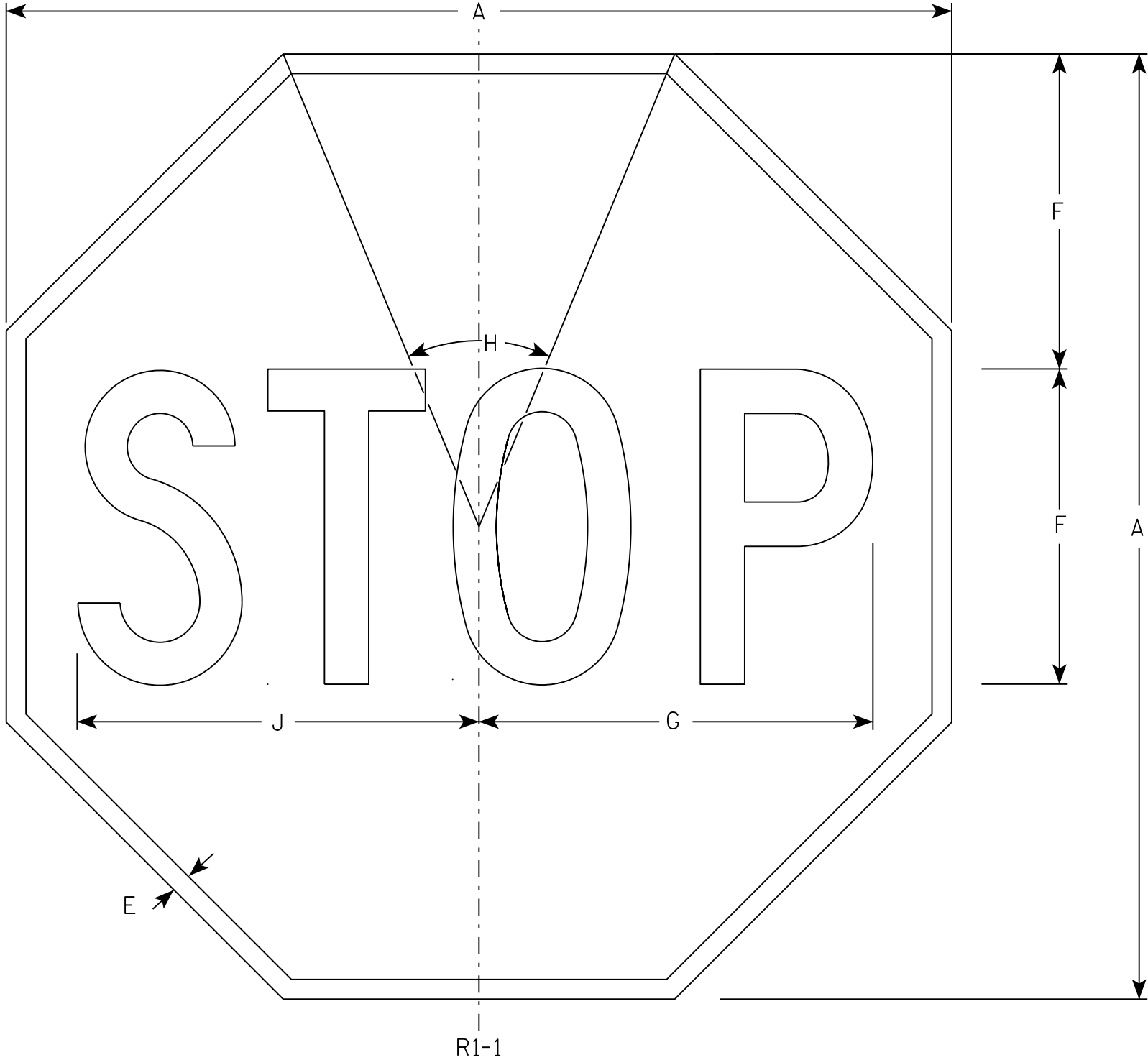
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS  
M3-1 thru M3-4  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
  - Background - Red
  - Message - White
- 3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

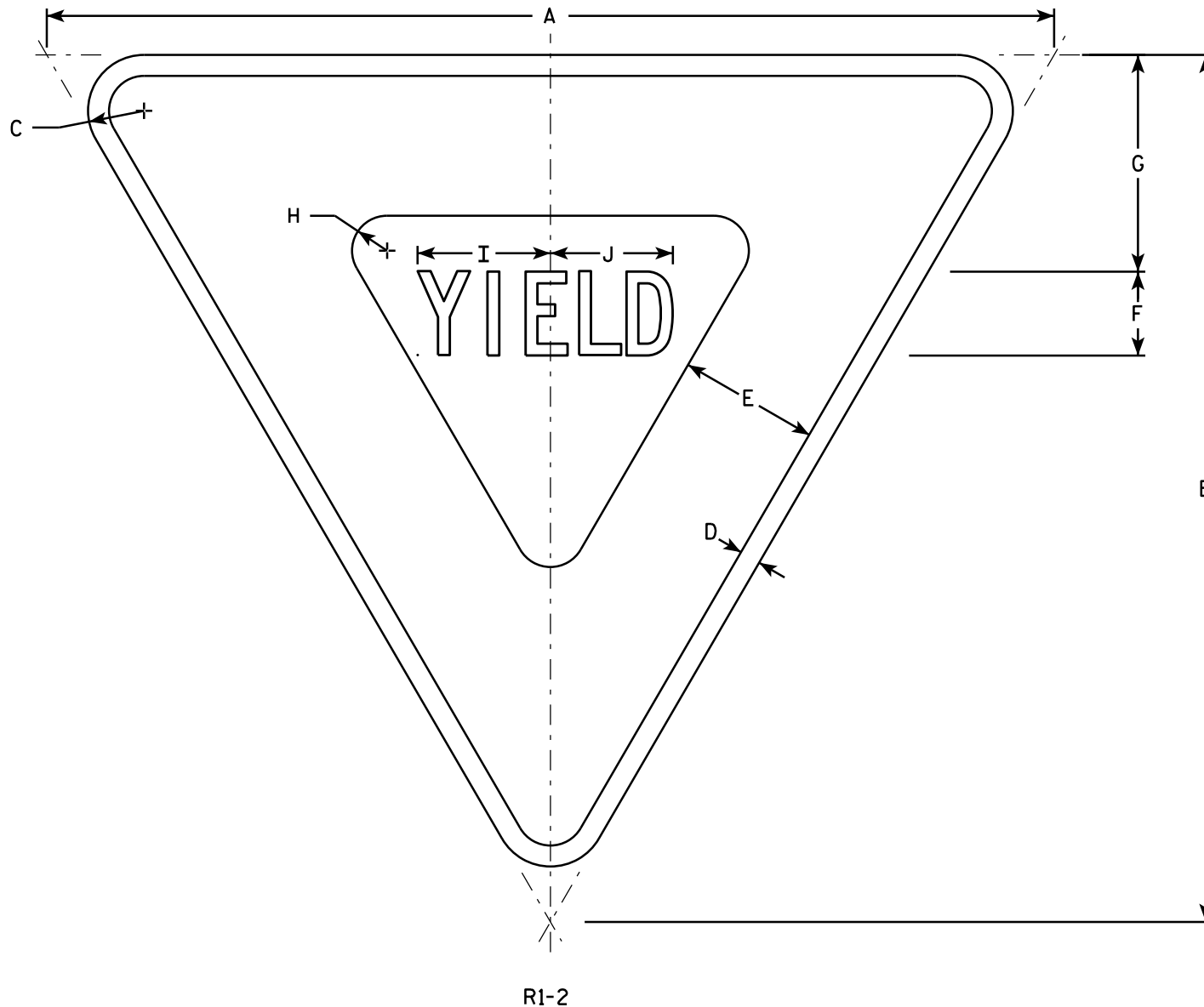
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



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

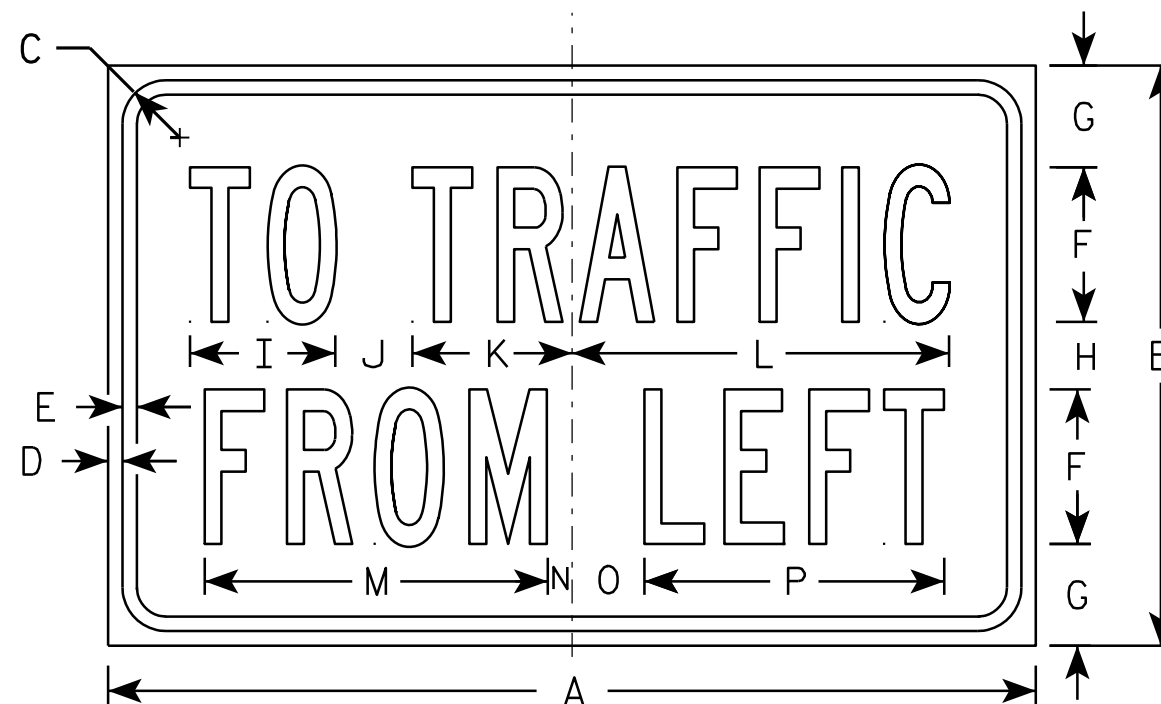
STANDARD SIGN  
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/13/14 PLATE NO. R1-2.12





R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

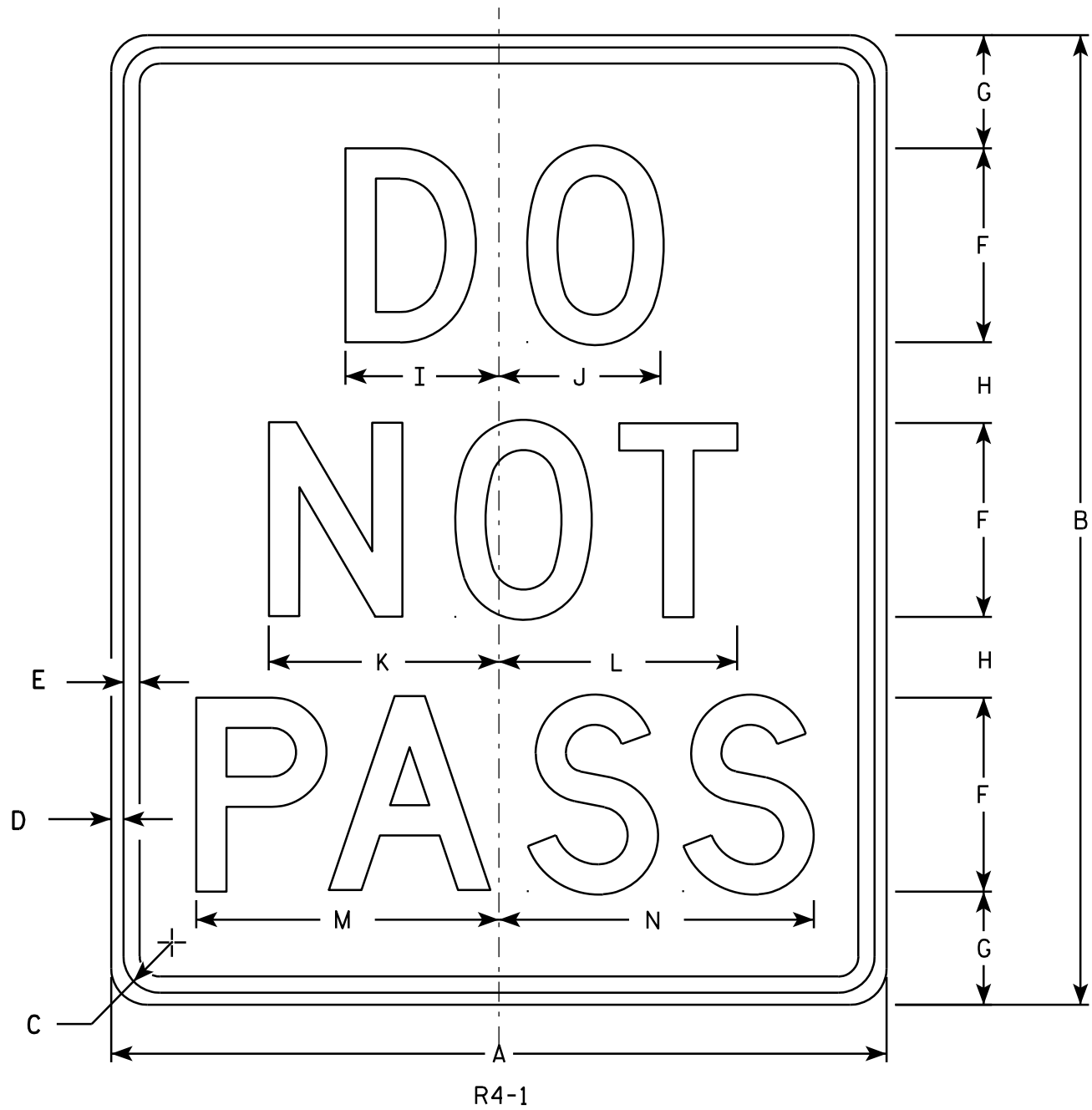
STANDARD SIGN  
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch  
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

STANDARD SIGN  
R4 - 1

WISCONSIN DEPT OF TRANSPORTATION

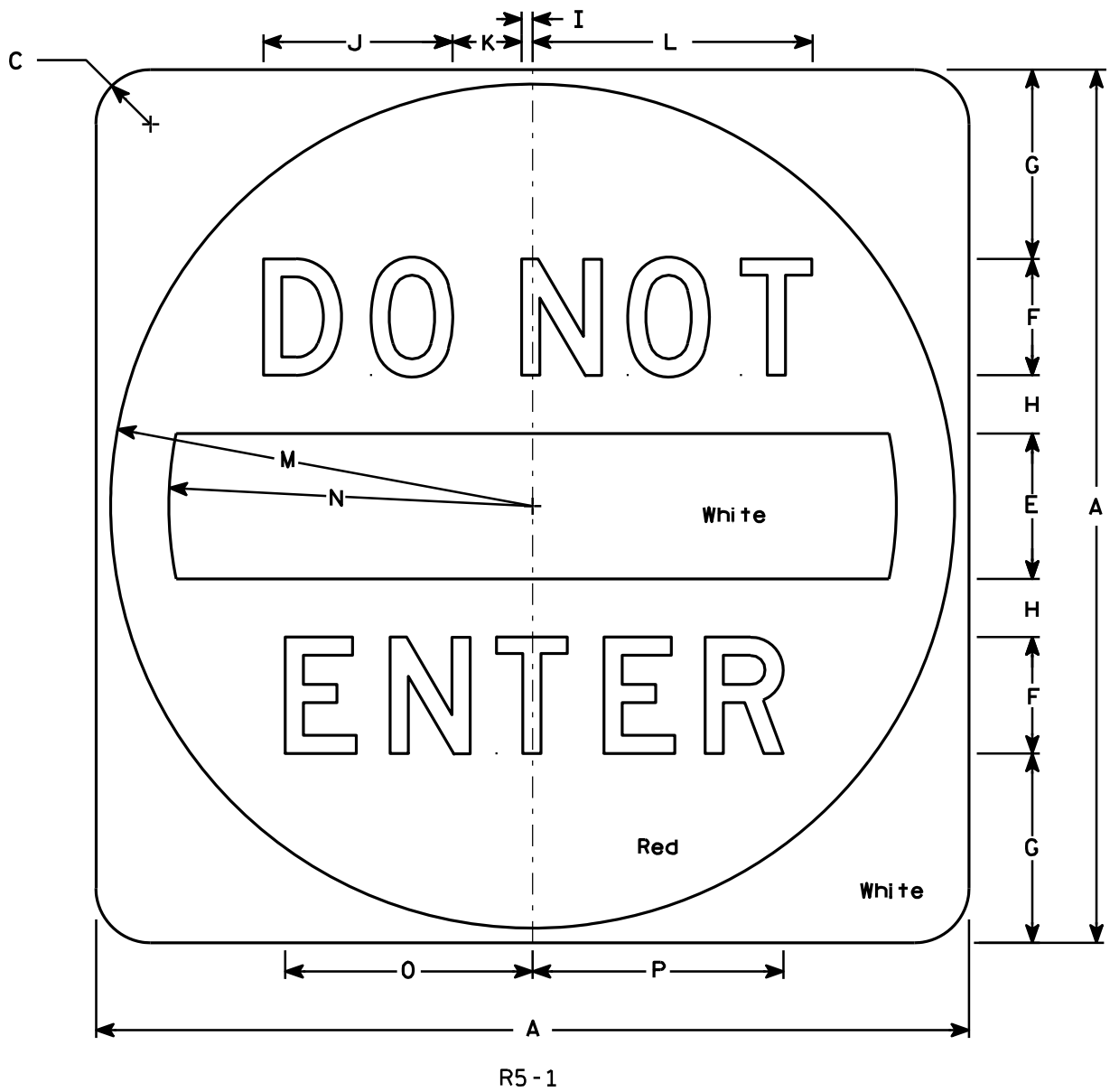
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
  - Background - See detail
  - Message - White - Type H Reflective
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



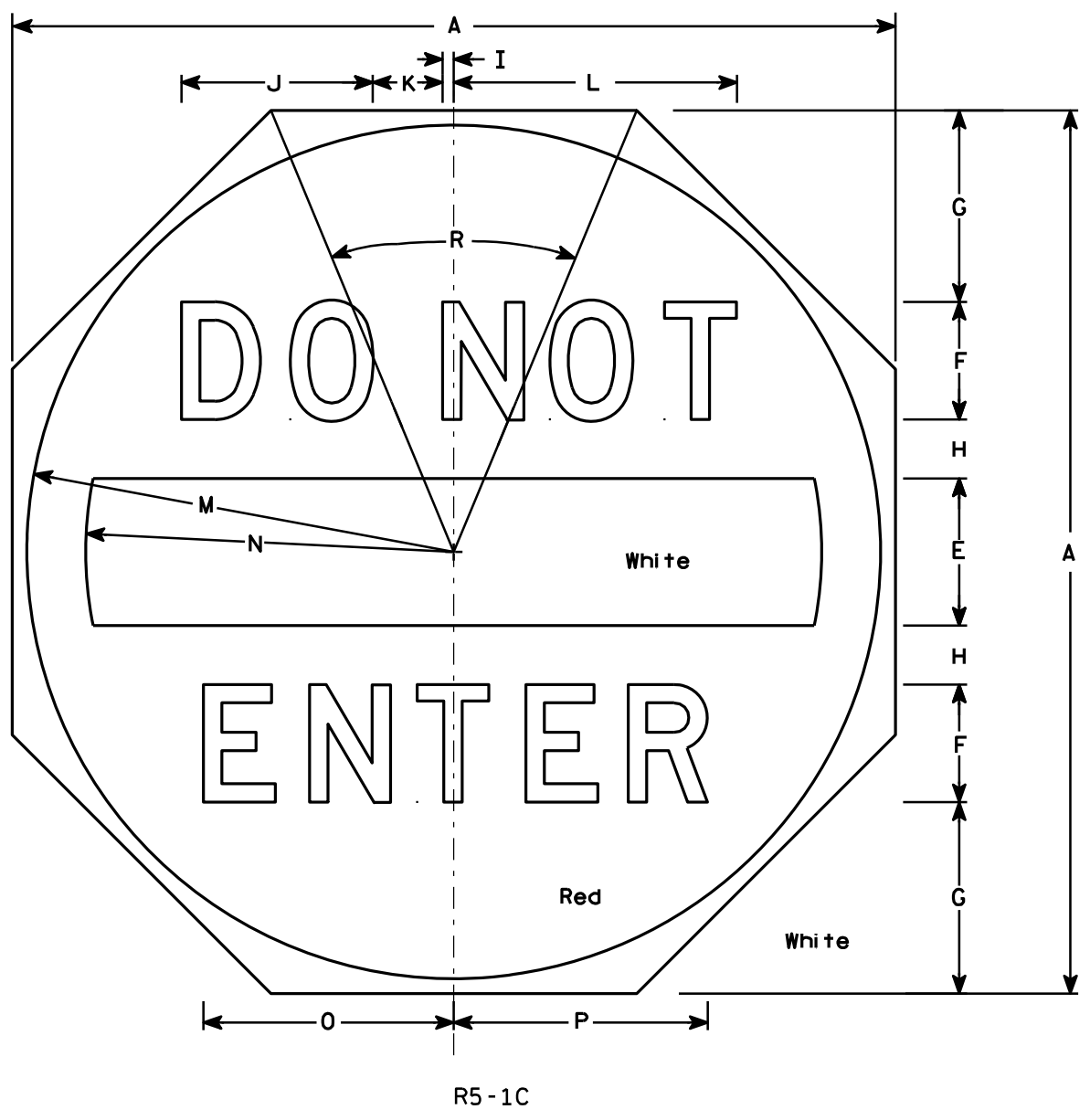
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	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 12/17/10 PLATE NO. R5-1.15



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - See detail  
Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.

7

7

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		45°									5.18
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		45°									7.46
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		45°									7.46
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		45°									13.25
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		45°									13.25

STANDARD SIGN  
R5-1C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED \_\_\_\_\_  
State Traffic Engineer

DATE 3/23/11 PLATE NO. R5-1C.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



R8-8

### NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 1/4	9 5/8	6 5/8	3 5/8	10														5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 1/4	9 5/8	6 5/8	3 5/8	10														5.0
3	36	48	1 3/8	1/2	5/8	6	6	4	13 7/8	14 3/8	9 7/8	5 3/8	15														12.0
4	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	18 1/2	19 1/4	13 1/4	7 1/4	20														20.0
5																											

### STANDARD SIGN R8-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R8-8.4

PROJECT NO:

HWY:

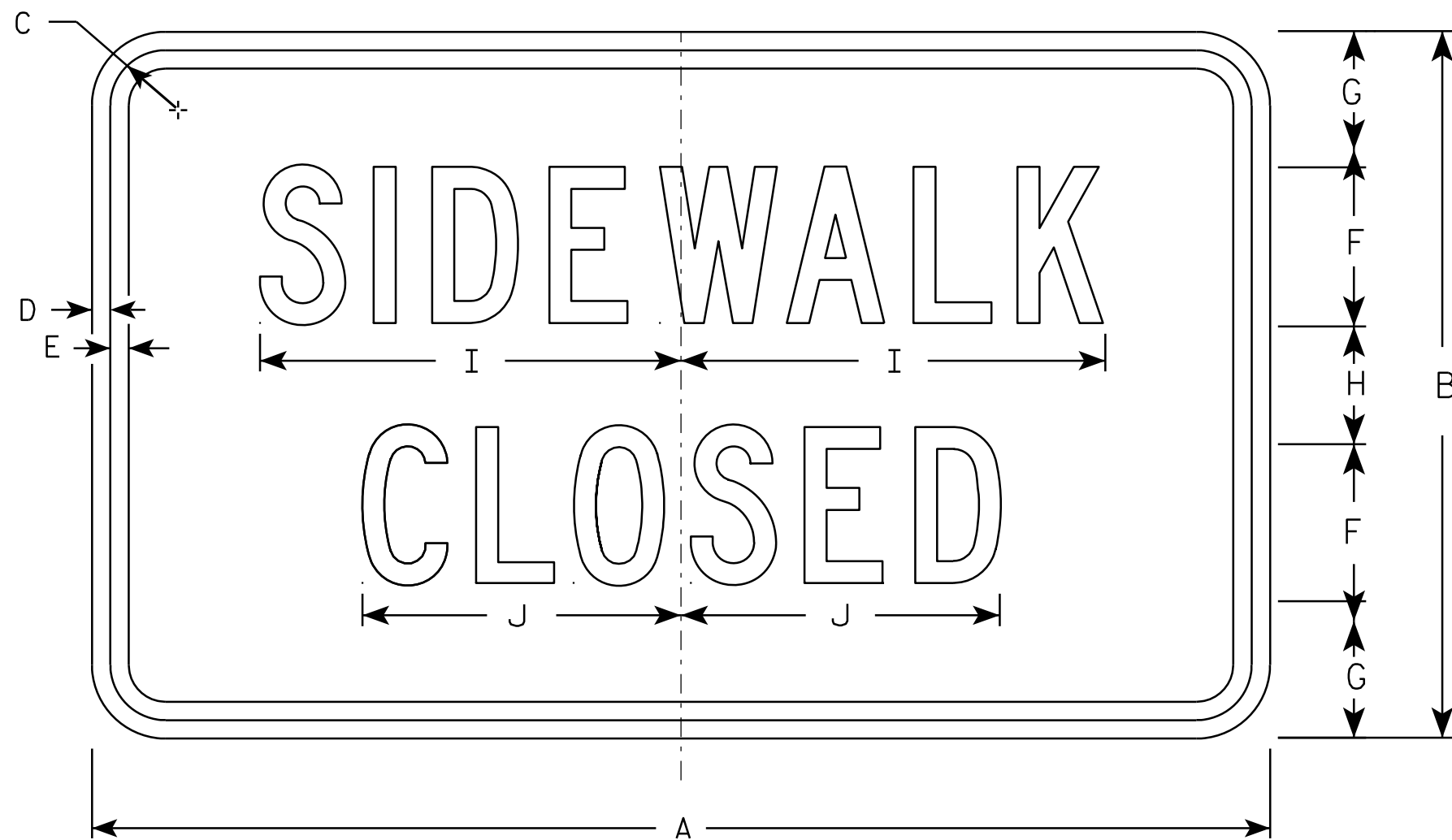
COUNTY:

SHEET NO:

E

# NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - 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.



R9-9

7

7

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	18	1 ¾	½	½	4	3 ½	3	10 ¾	8 ⅛																	3.75
2M	30	18	1 ¾	½	½	4	3 ½	3	10 ¾	8 ⅛																	3.75
3																											
4																											
5																											

## STANDARD SIGN

R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 4/1/2011 PLATE NO. R9-9.5

PROJECT NO:

HWY:

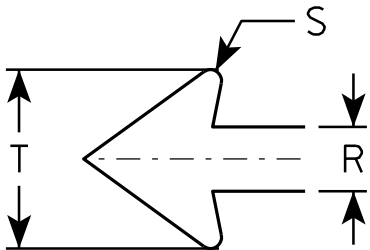
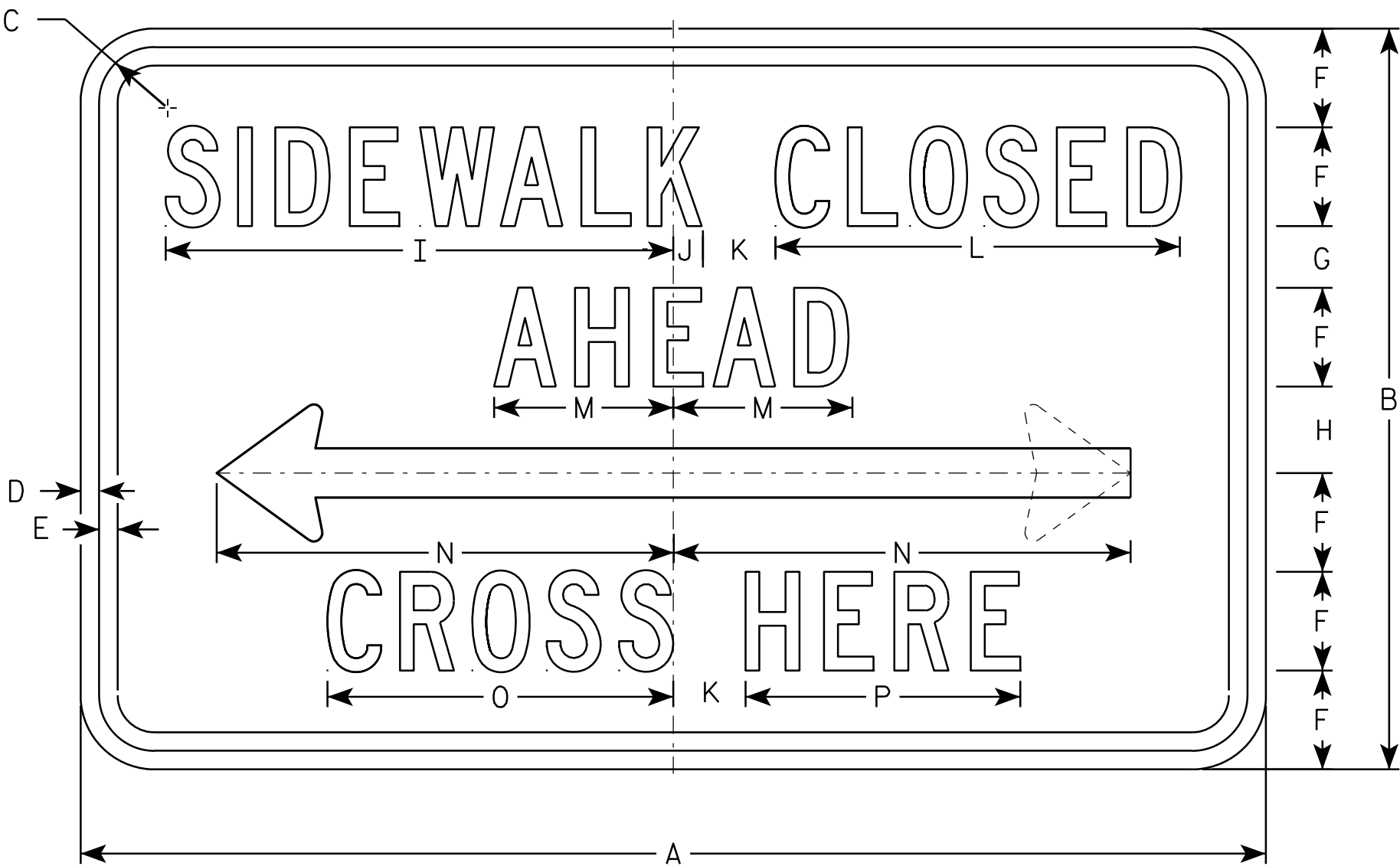
COUNTY:

SHEET NO:

E

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - White  
Message - Black
- 3. Message Series - C except Size 1 is 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.



R9-11

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	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2S	48	30	2 3/4	3/4	3/4	4	2 1/2	3 1/2	20 1/2	1 1/4	3	16 3/8	7 1/4	18 1/2	14	11 1/8		2	3/8	5 1/2							10.0
2M	48	30	2 3/4	3/4	3/4	4	2 1/2	3 1/2	20 1/2	1 1/4	3	16 3/8	7 1/4	18 1/2	14	11 1/8		2	3/8	5 1/2							10.0
3																											
4																											
5																											

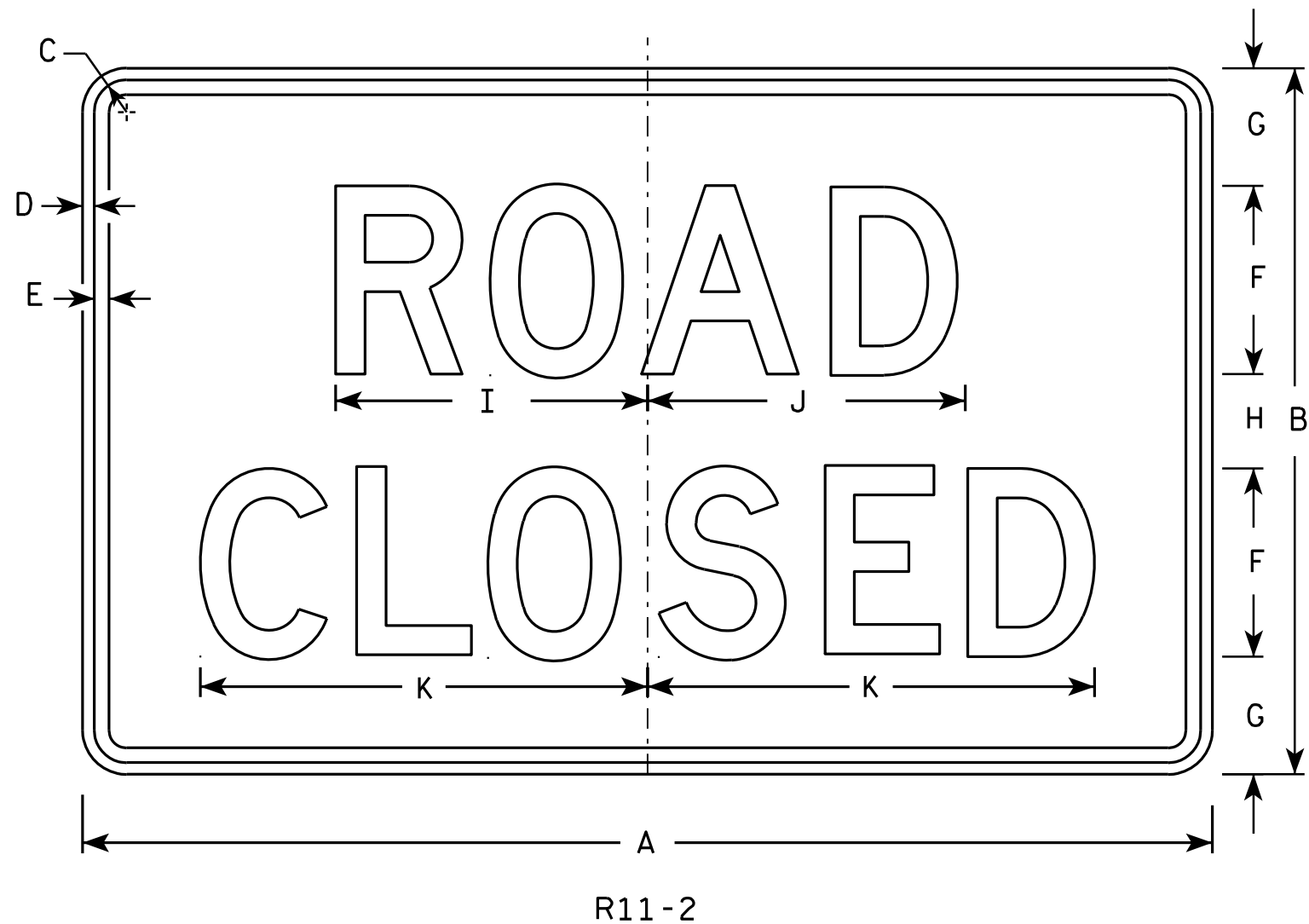
STANDARD SIGN

R9-11

WISCONSIN DEPT OF TRANSPORTATION

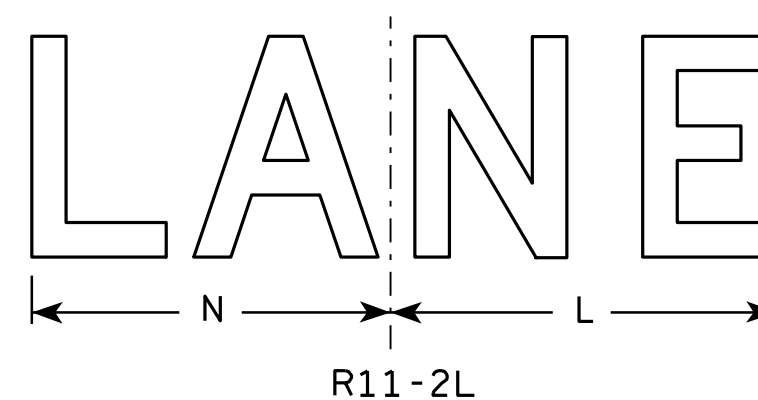
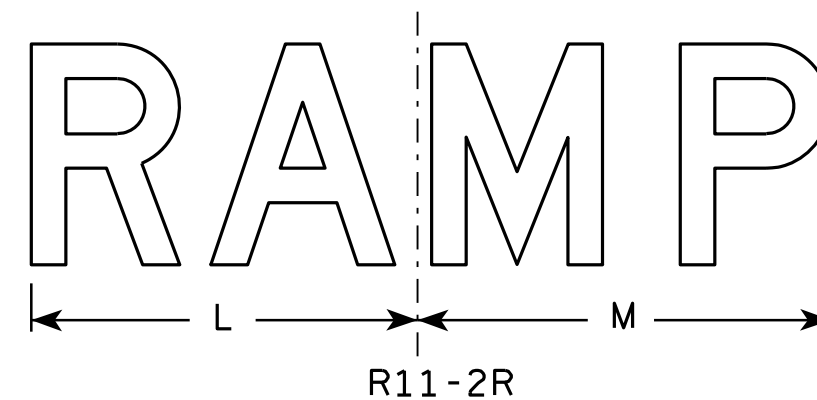
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 8/17/2012 PLATE NO. R9-11.2



### NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

### STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:

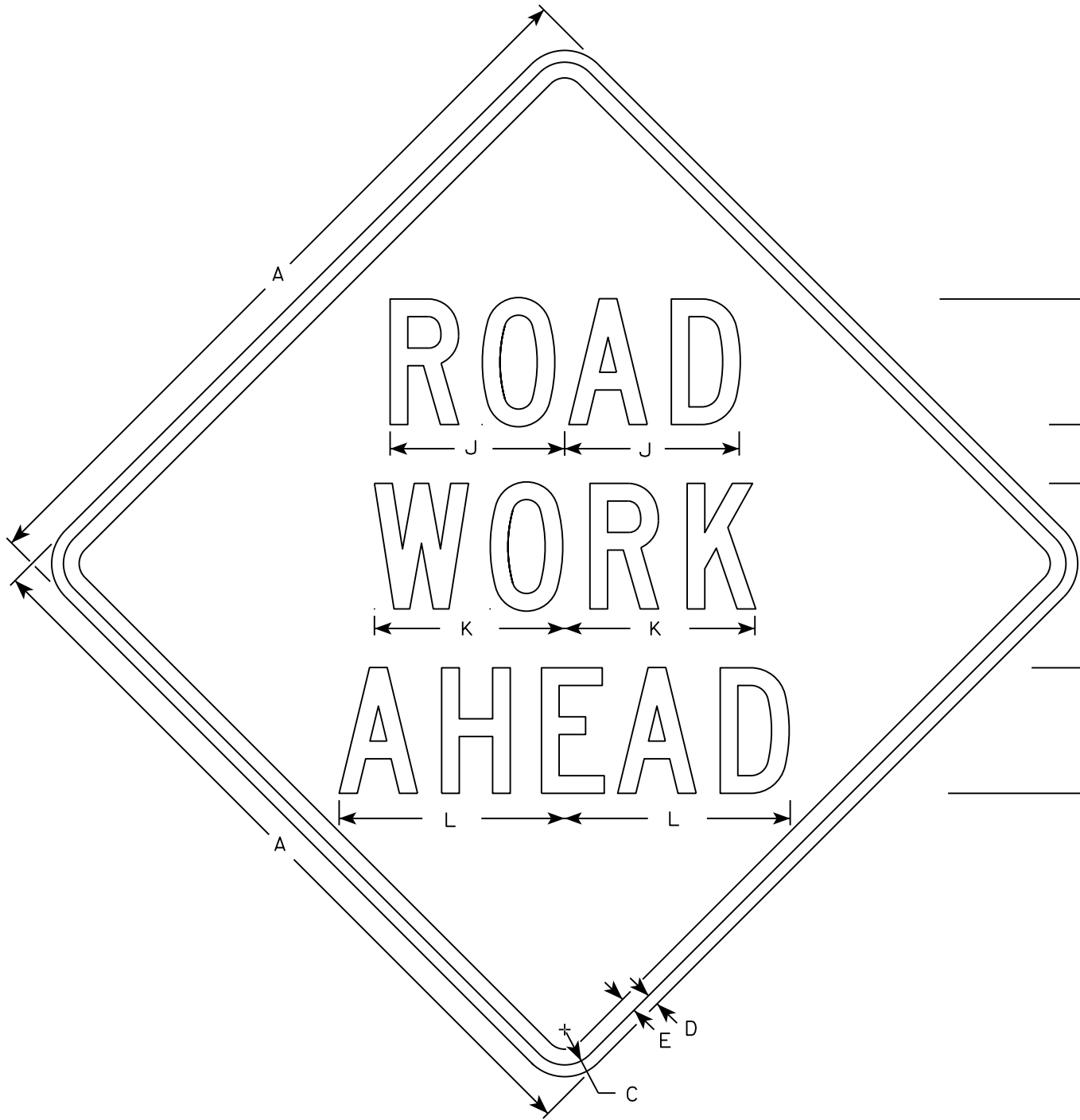
HWY:

COUNTY:

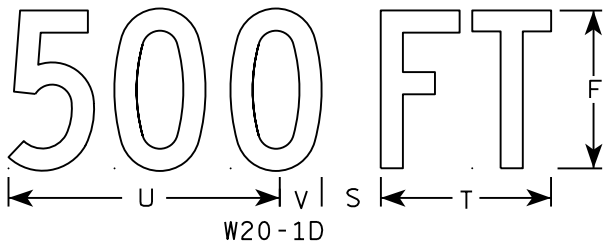
SHEET NO:

E

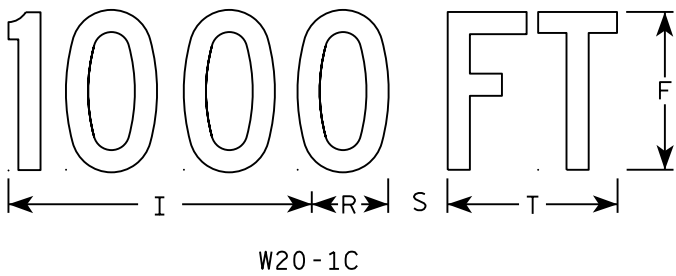




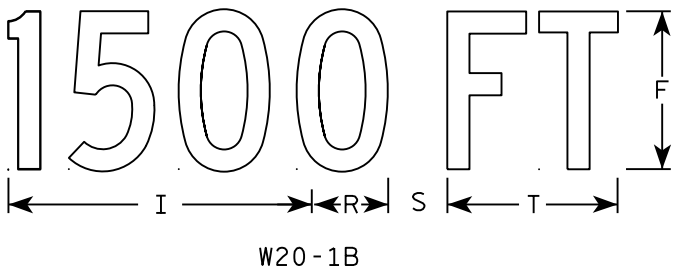
W20-1A



W20-1D



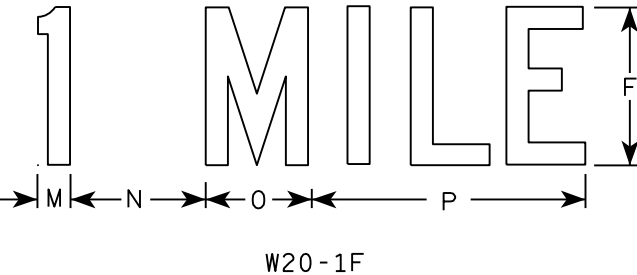
W20-1C



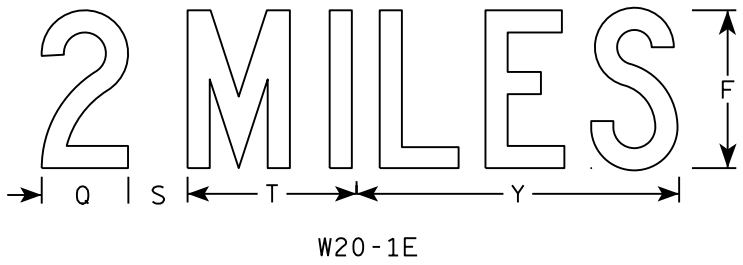
W20-1B



W20-1G



W20-1F



W20-1E

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.

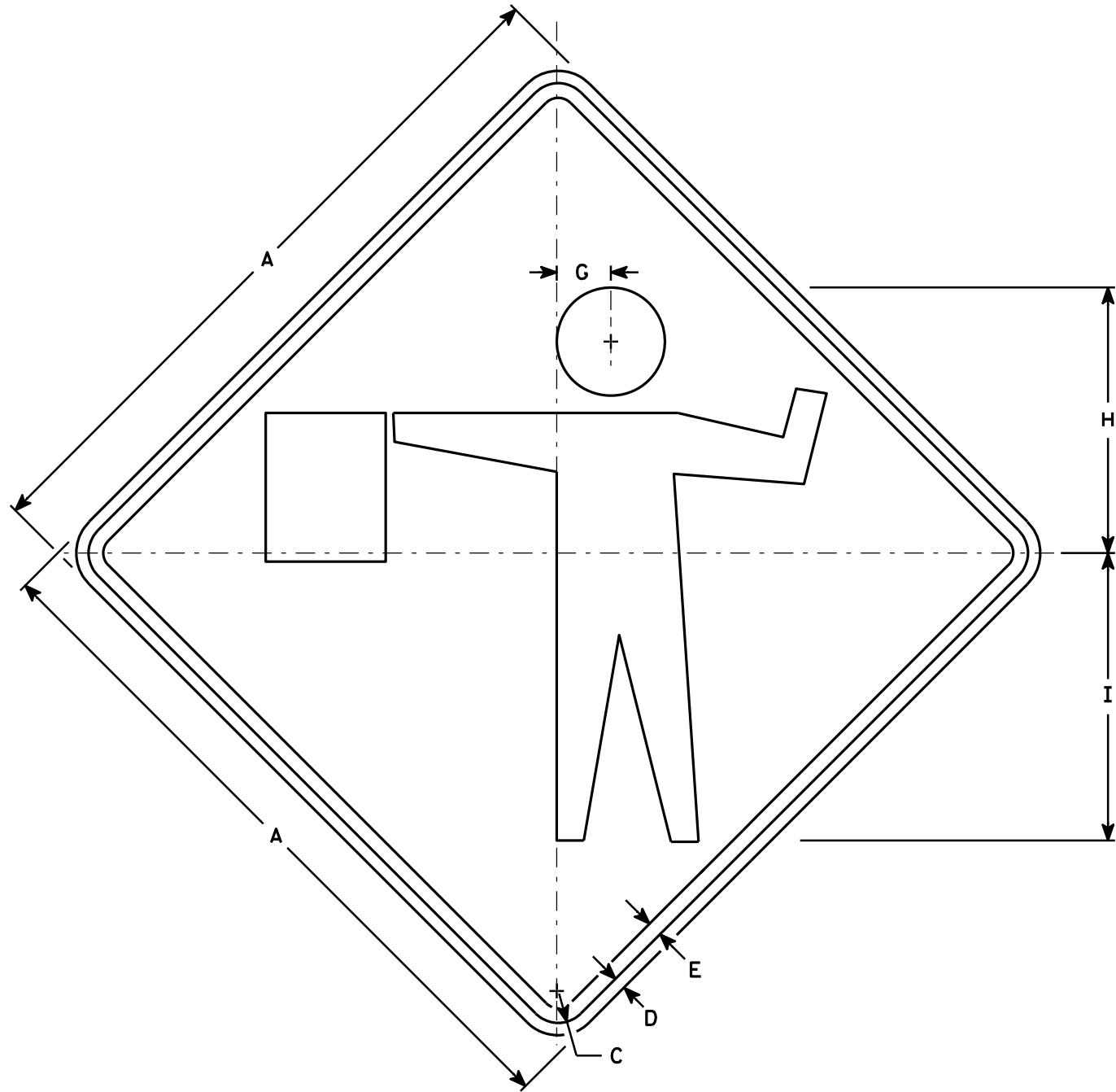
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	1/2	5/8	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9		2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	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		2 1/4	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		2 1/4	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		2 1/4	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, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10



W20-7A

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - Orange  
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		2 3/4	13 1/2	14 5/8																		9.00
2S	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
2M	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
3	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
4	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00
5	48		2 1/4	3/4	1		3 3/4	18	19 1/2																		16.00

STANDARD SIGN  
W20-7A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-7A.5

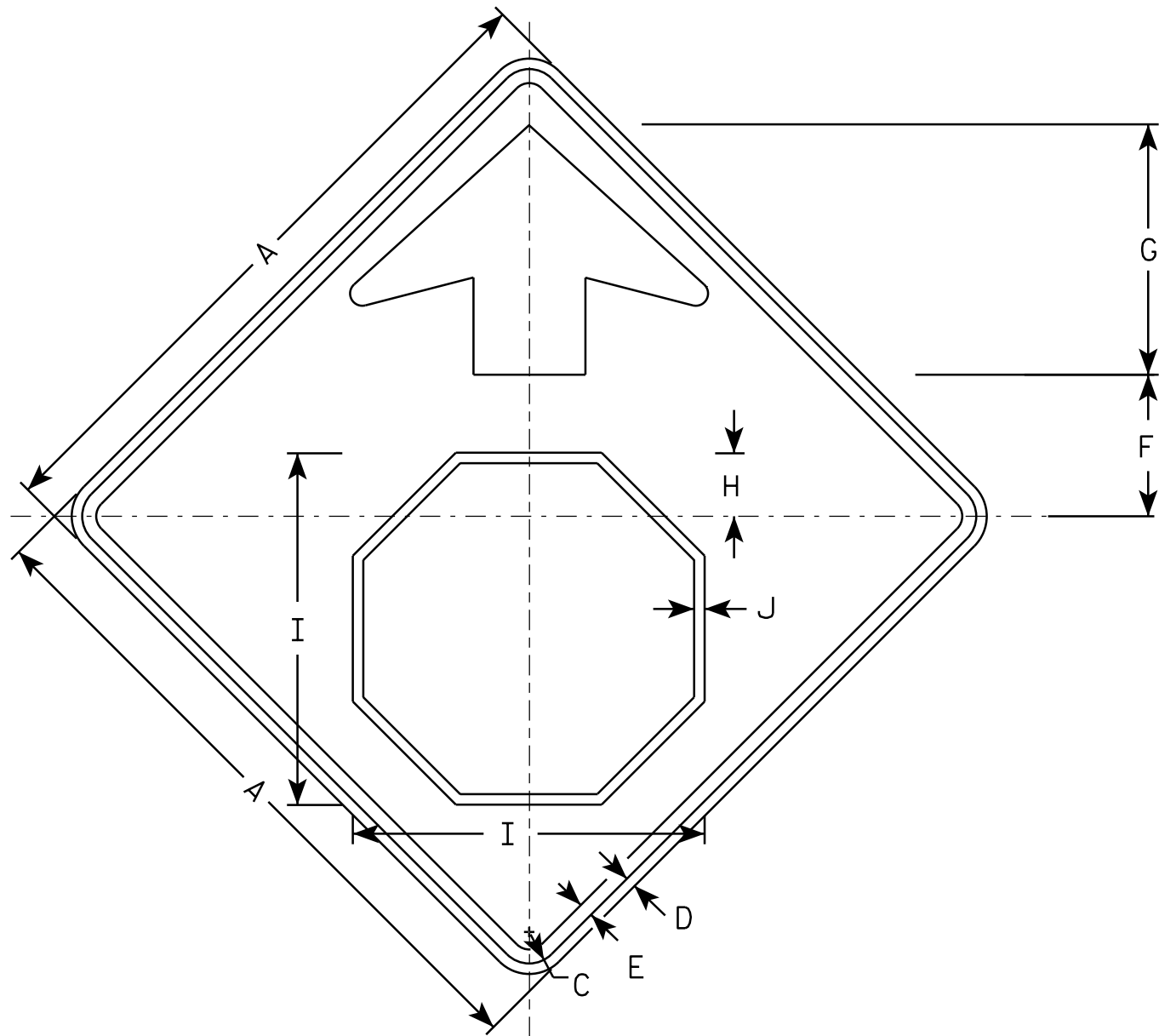
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

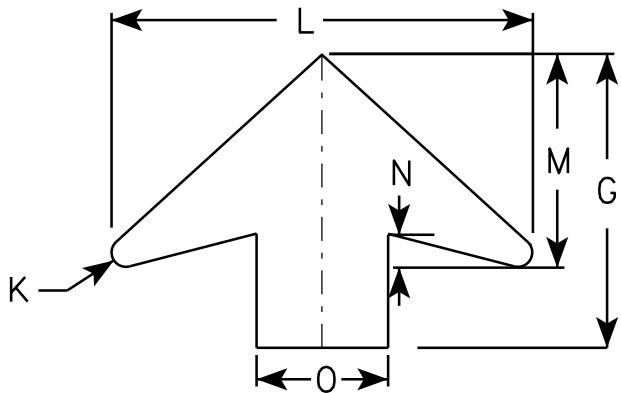
E



W03-1

NOTES

- 1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
  - Background - ORANGE
  - 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	36		1 5/8	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
2S	48		2 1/4	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
2M	48		2 1/4	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
3	48		2 1/4	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
4	48		2 1/4	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		2 1/4	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

PROJECT NO:

SHEET NO:

E

STANDARD SIGN

W03-1

WISCONSIN DEPT OF TRANSPORTATION

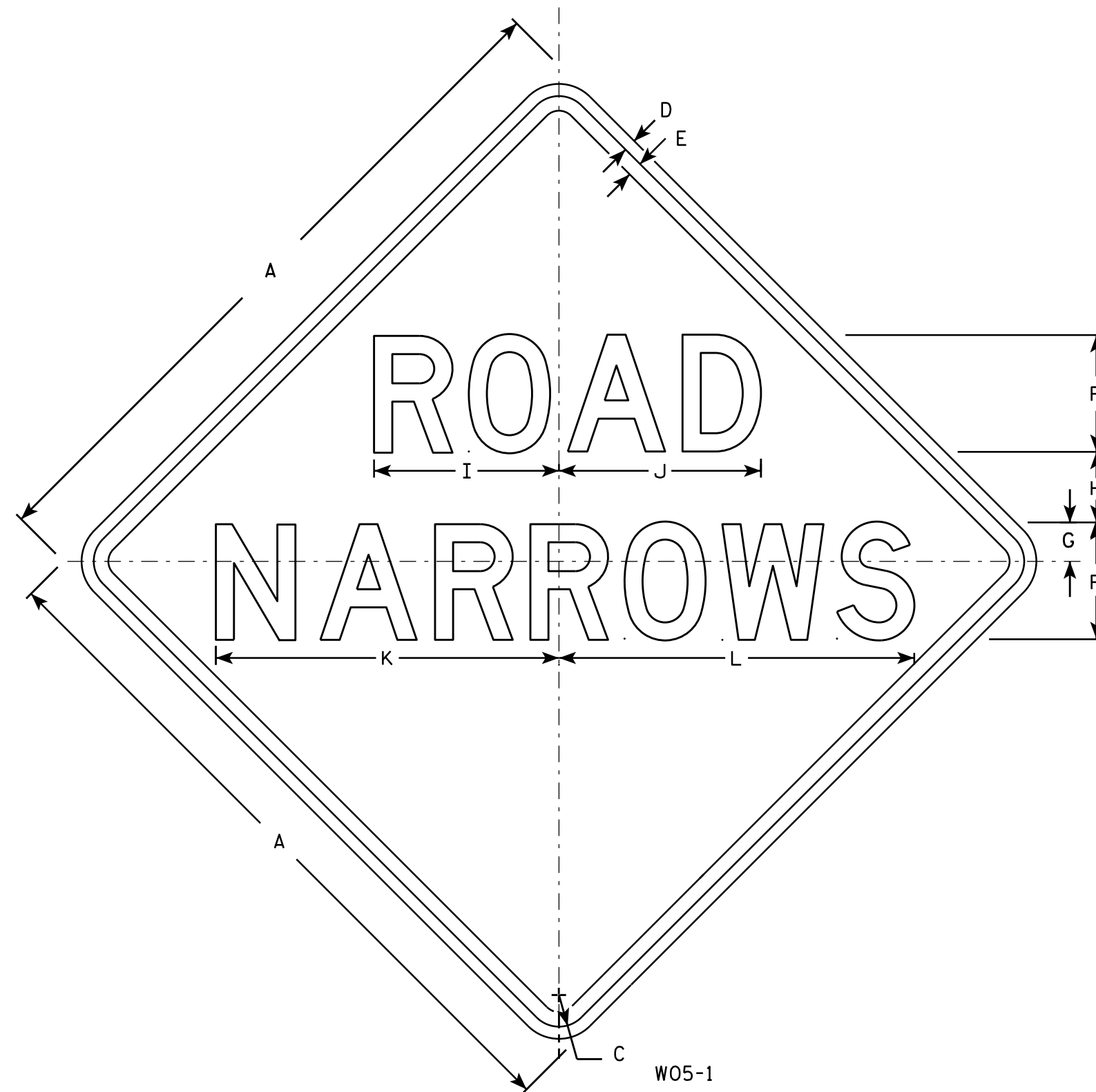
APPROVED

Matthew R. Rauch

for State Traffic Engineer

DATE 11/20/13

PLATE NO. W03-1.1



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - 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		1 5/8	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		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
2M	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
3	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
4	48		2 1/4	3/4	1	8	3	4	12 3/4	13 3/4	23 1/2	24 3/8															16.0
5	48		2 1/4	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 11/20/13

PLATE NO. W05-1.1

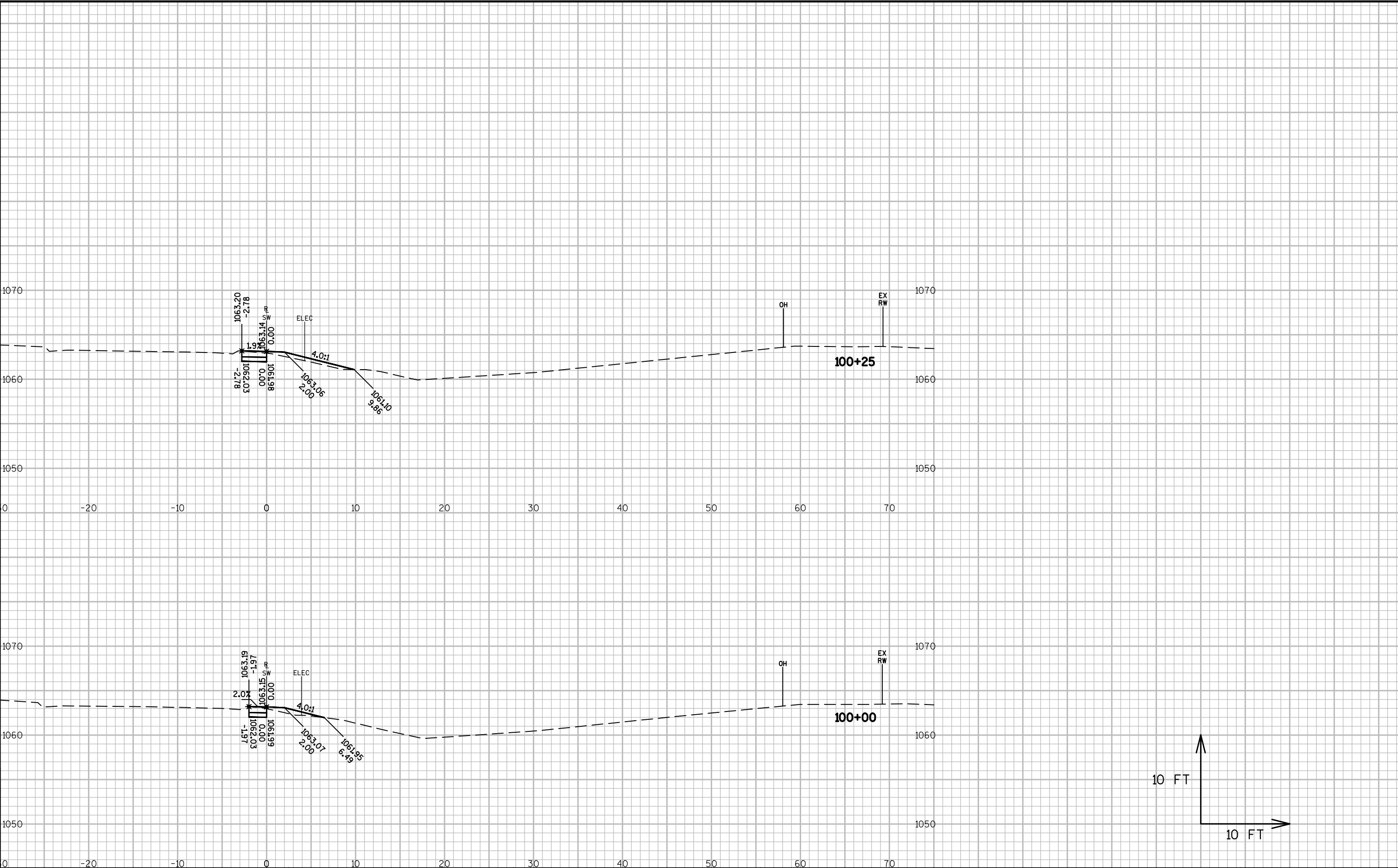
PROJECT NO:

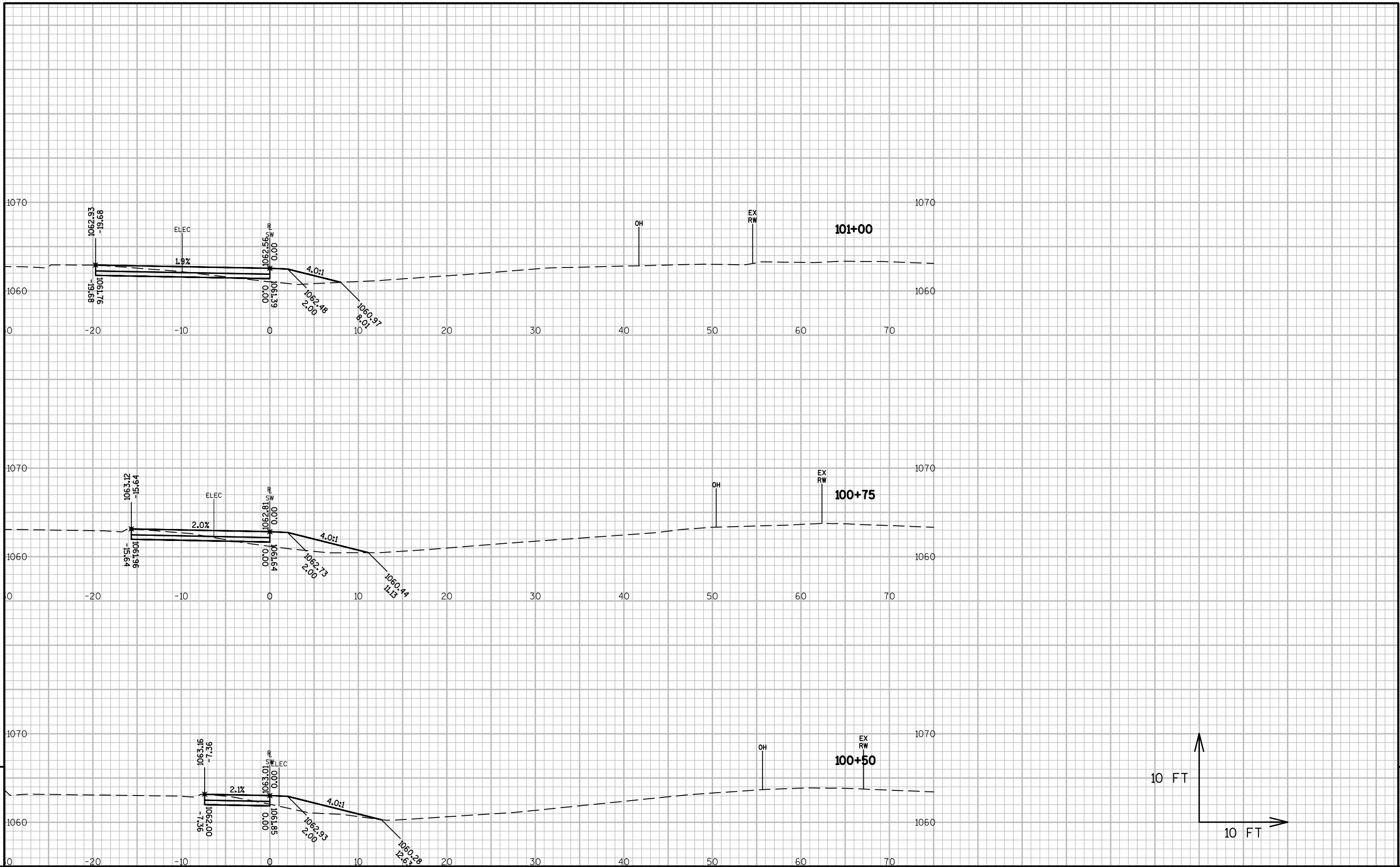
HWY:

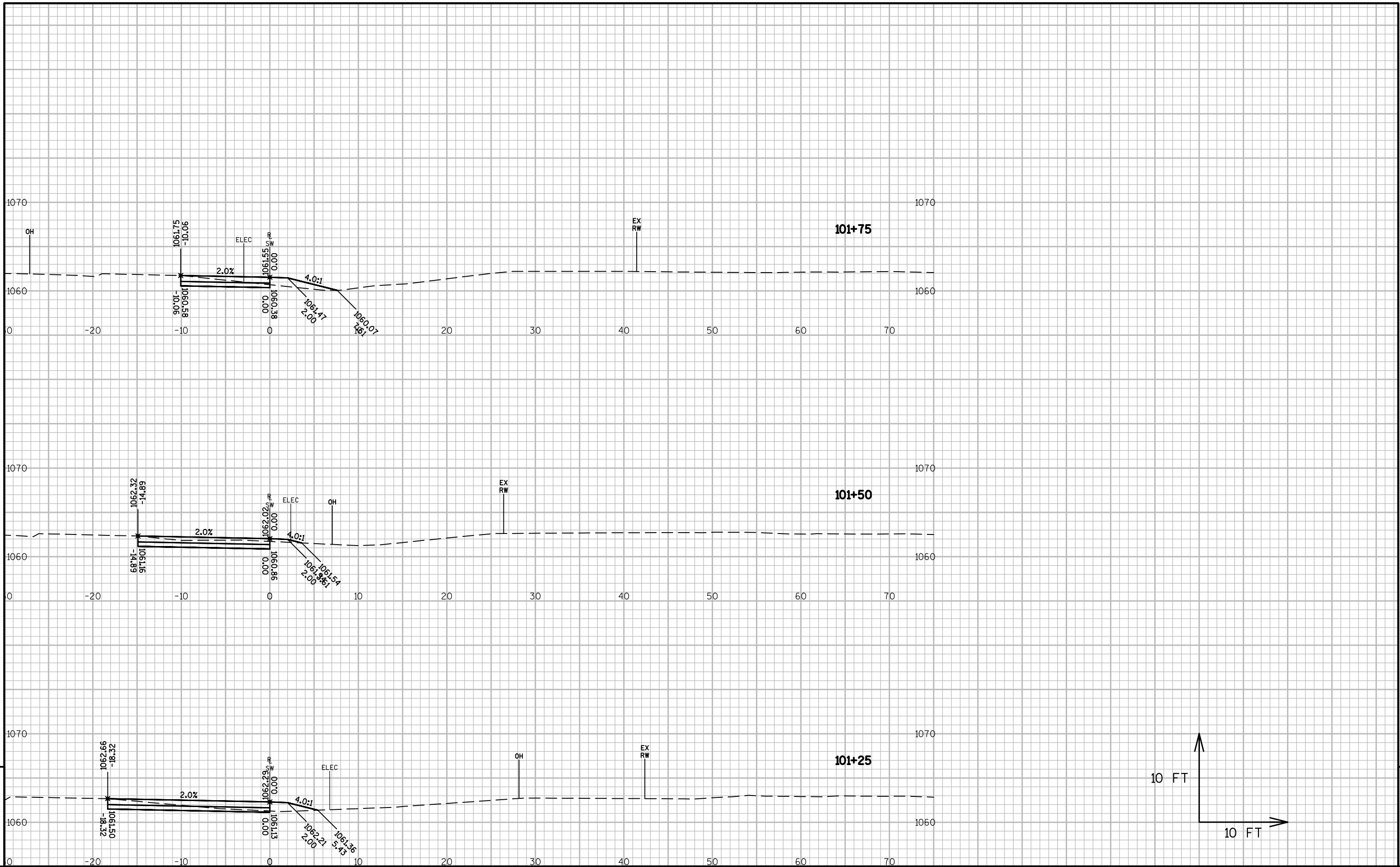
COUNTY:

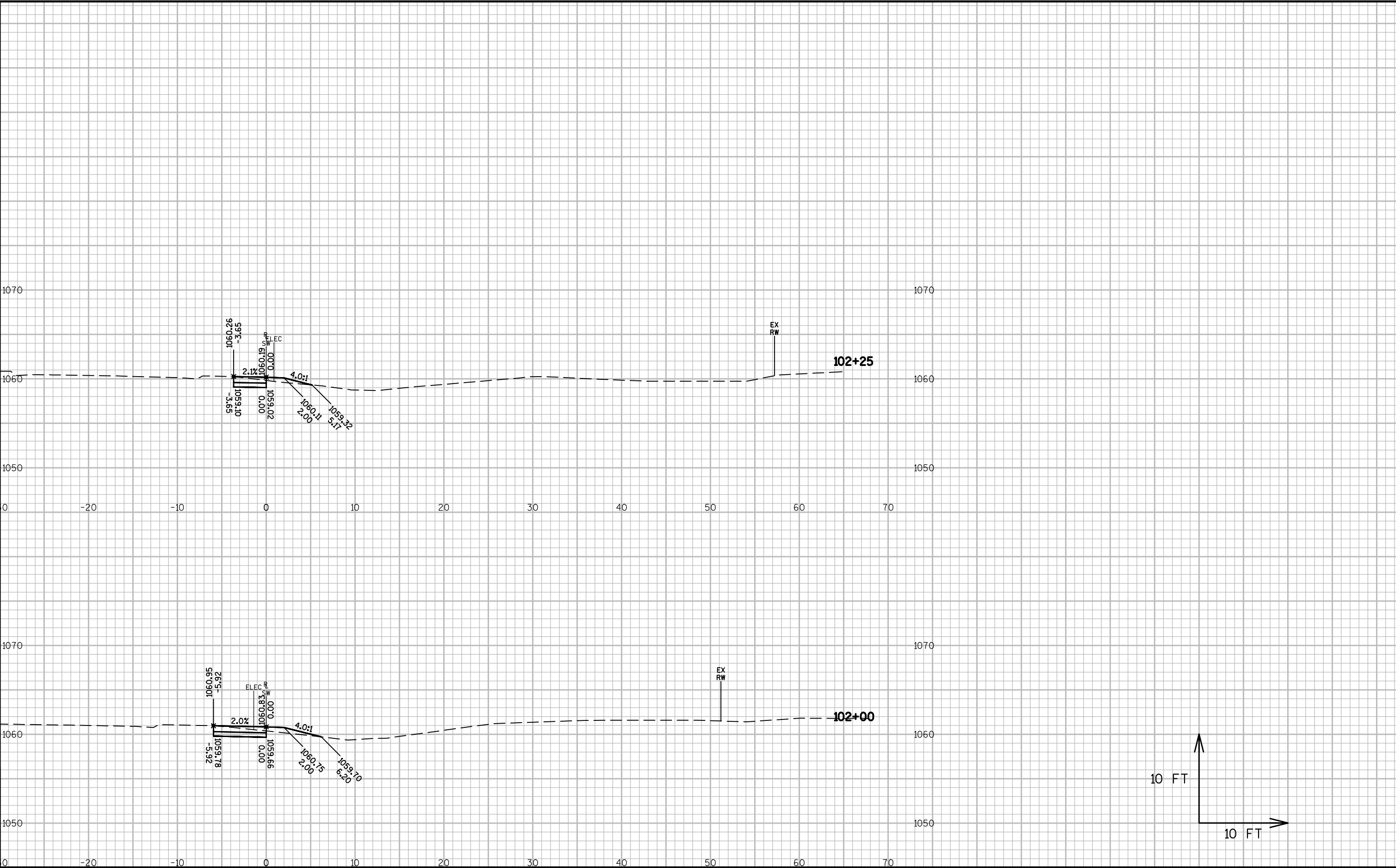
SHEET NO:

E

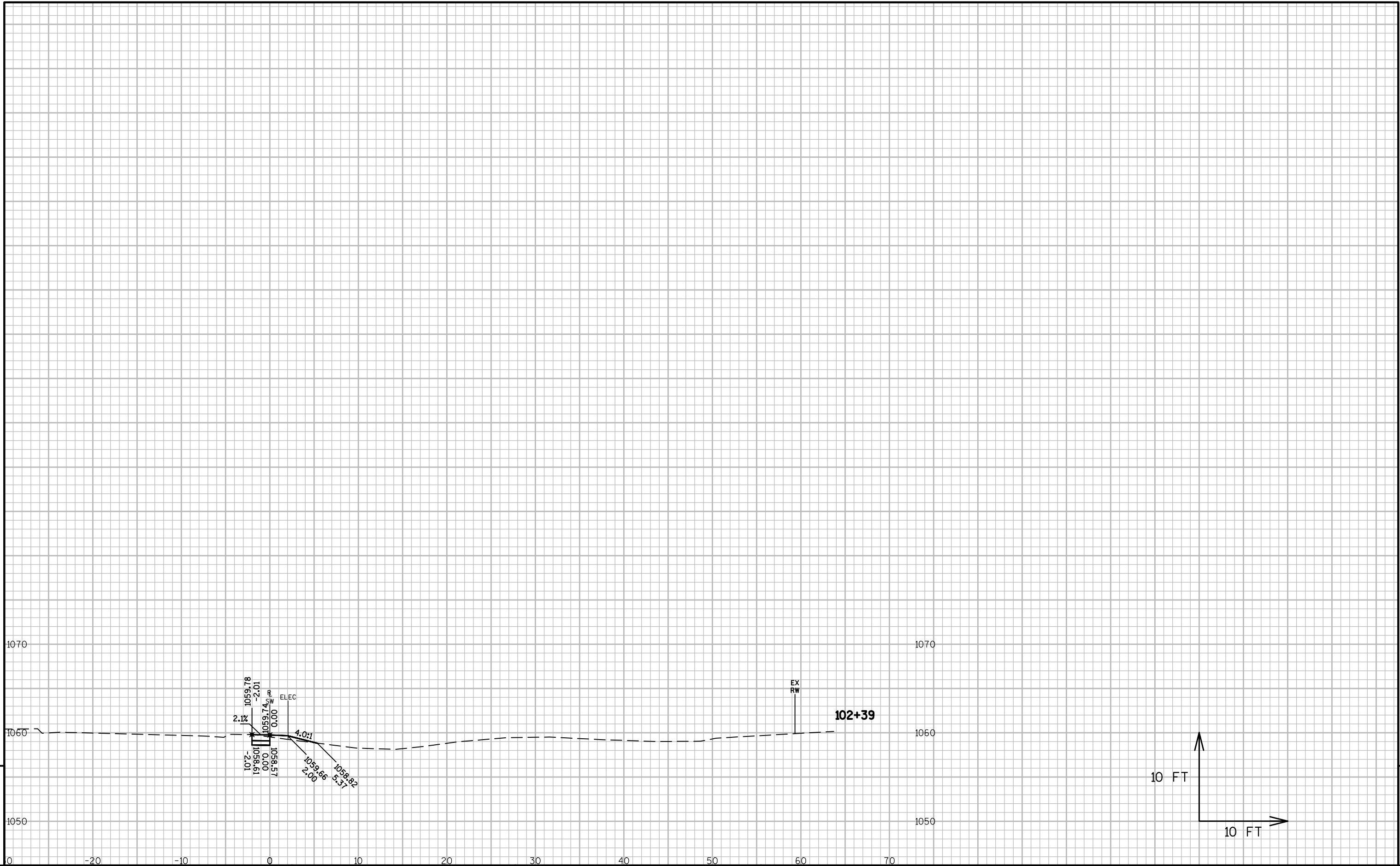


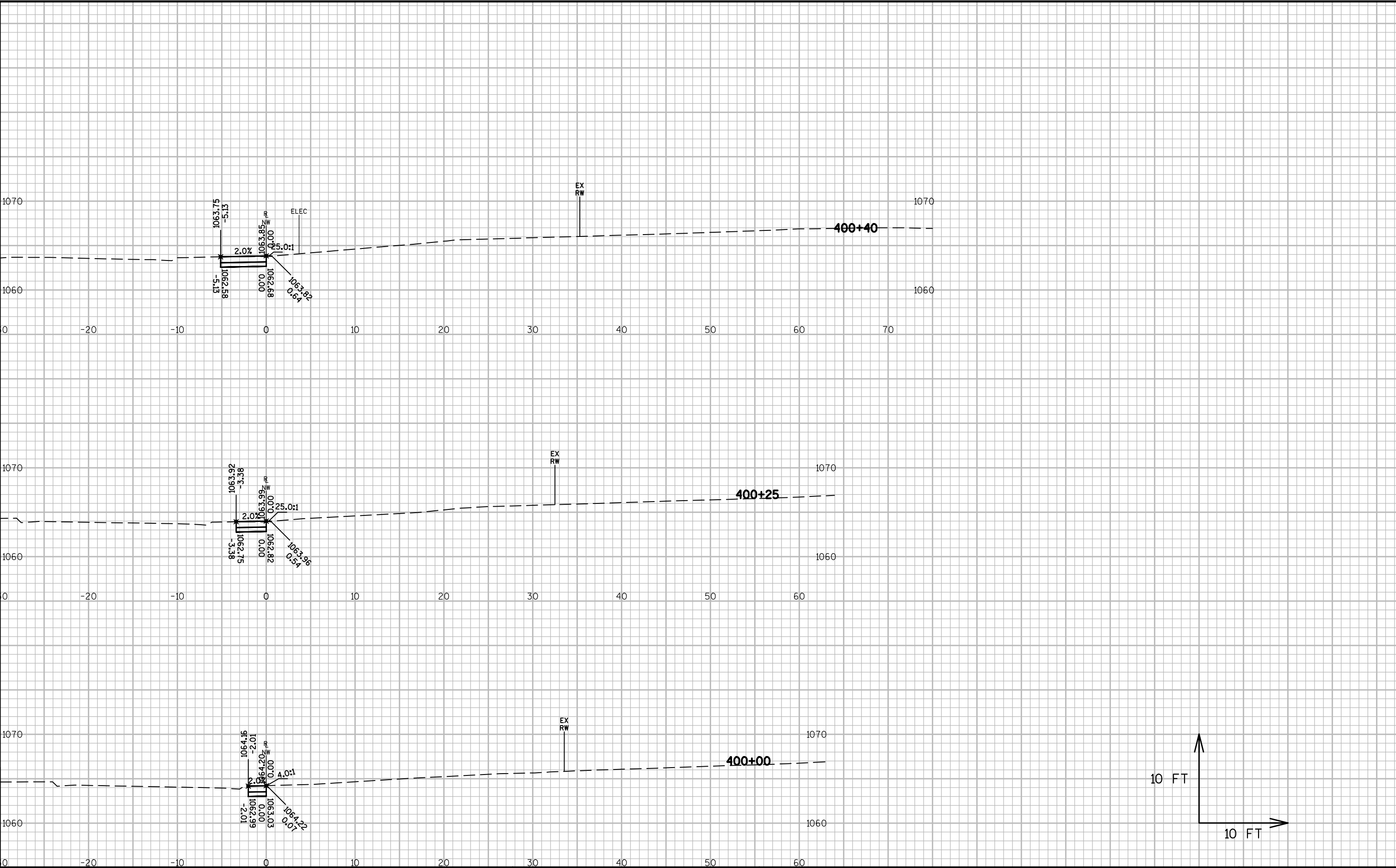




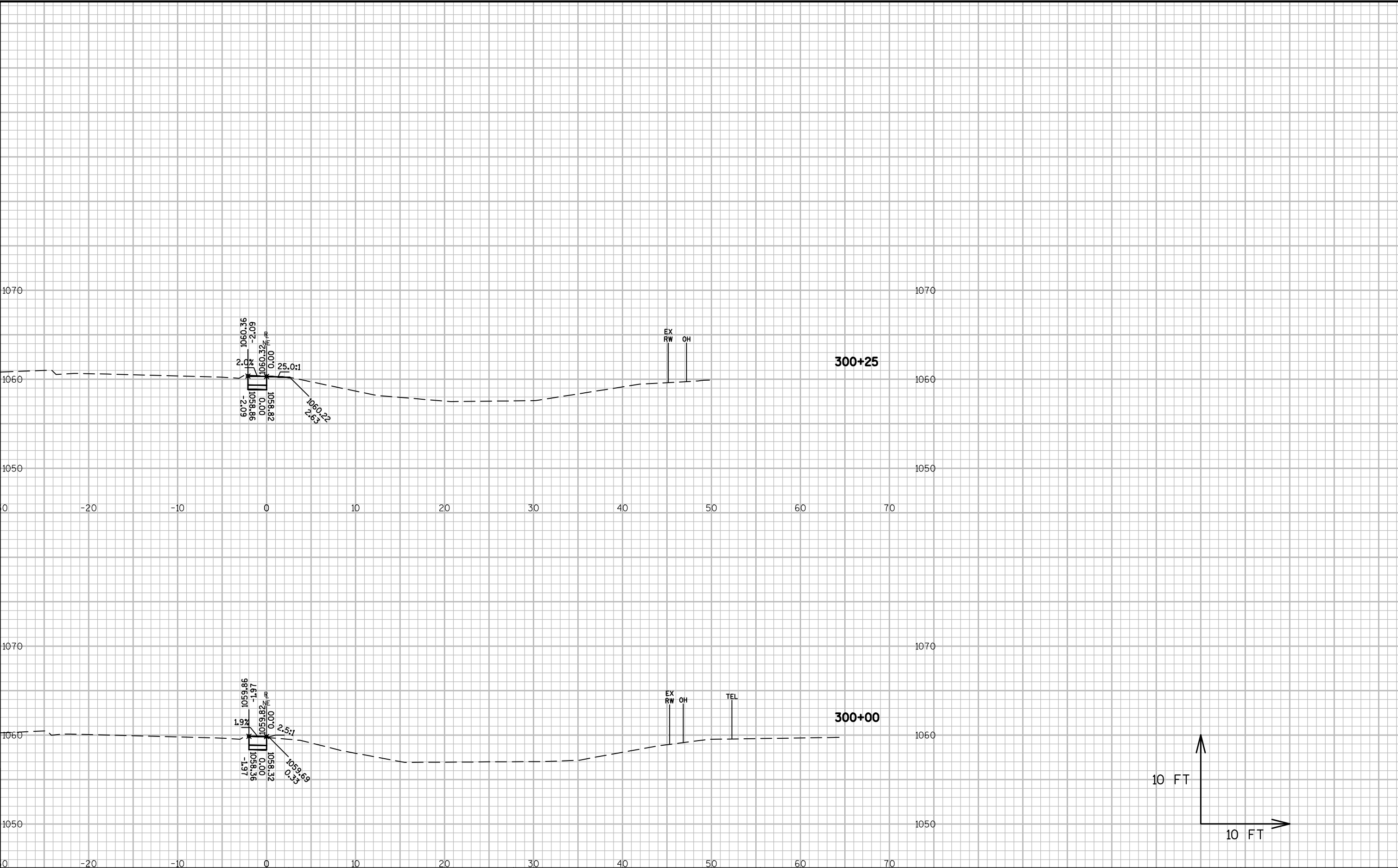


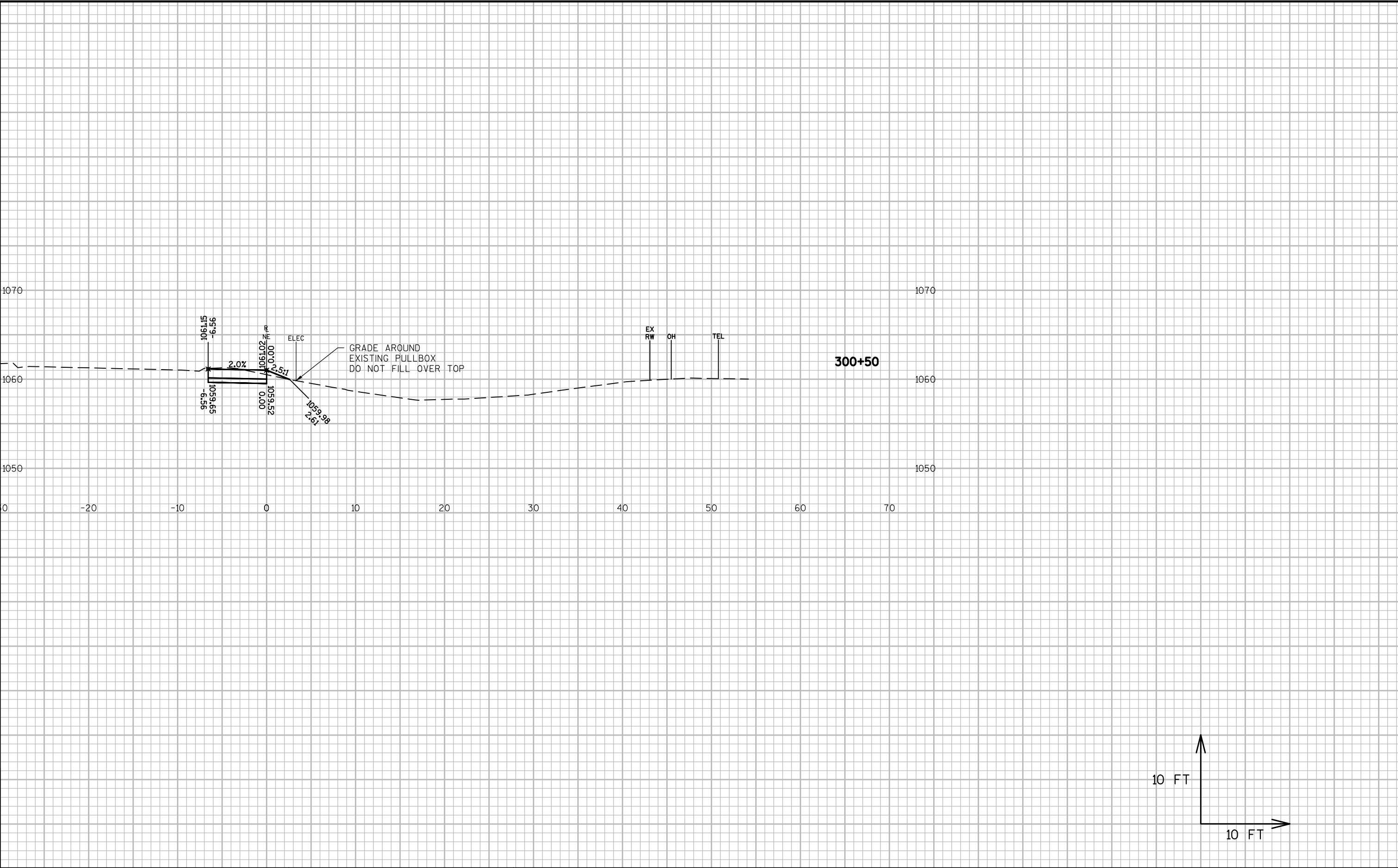


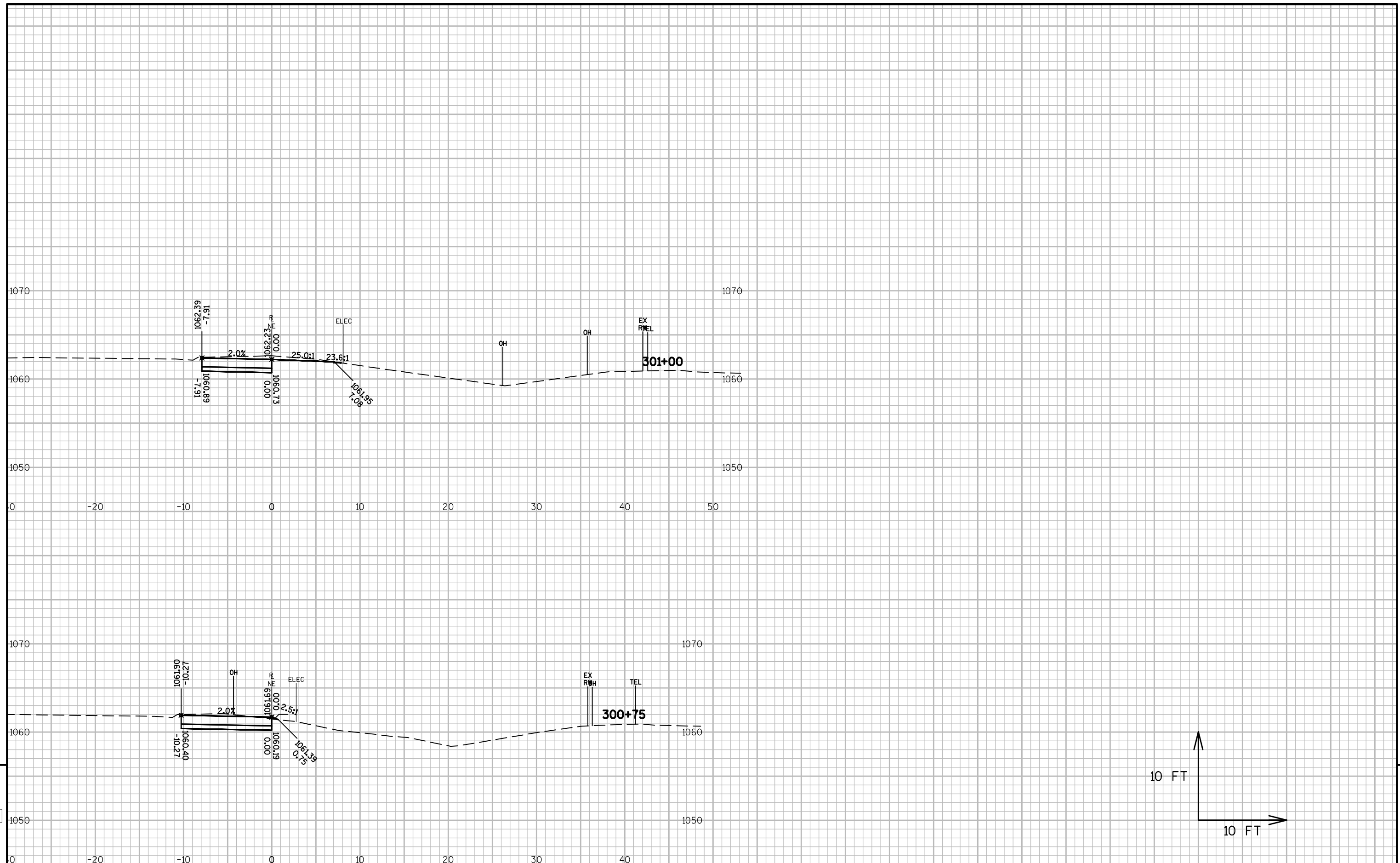


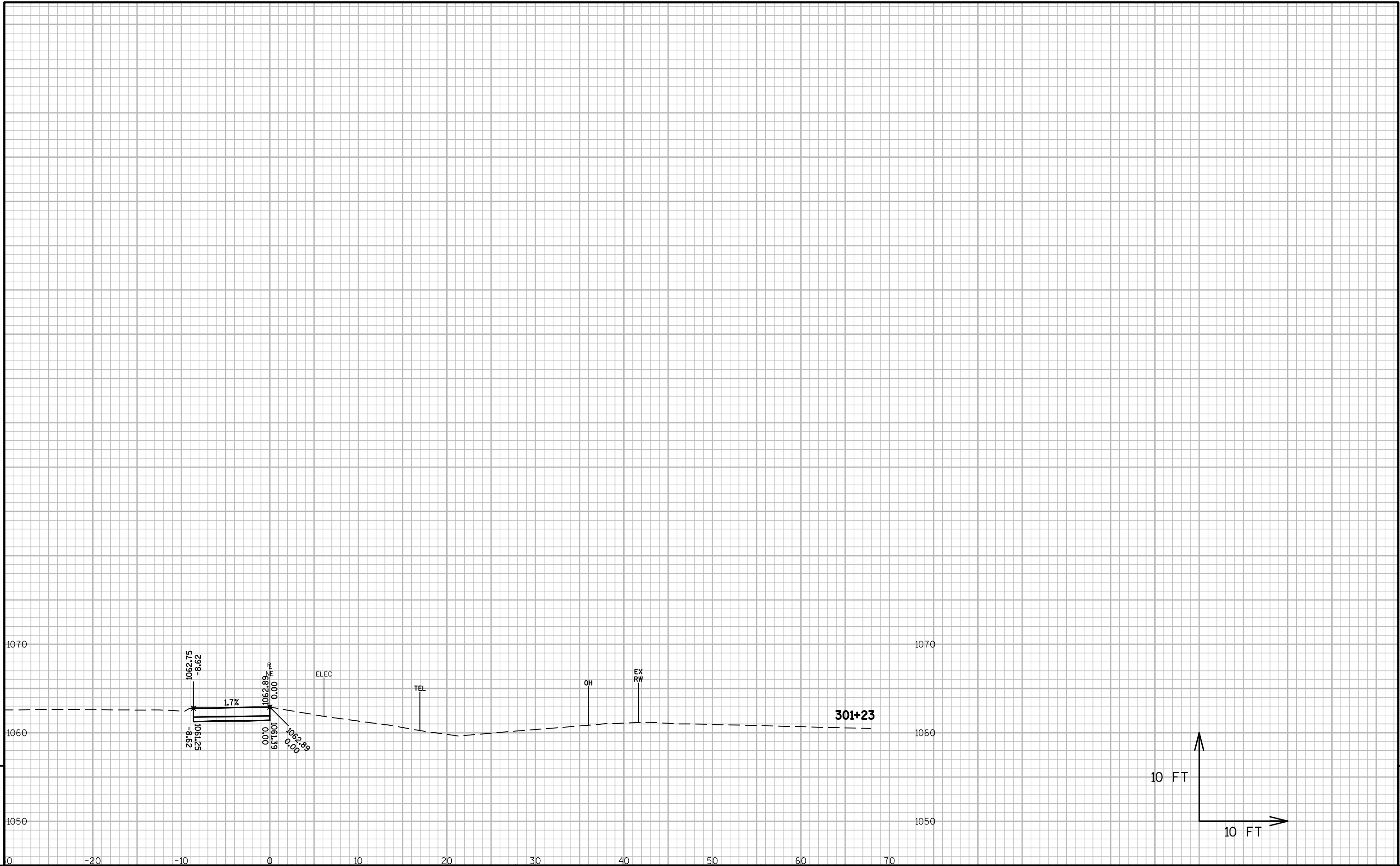


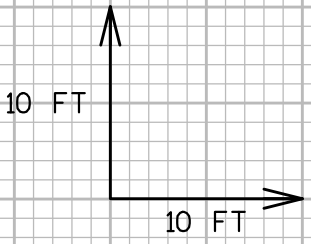
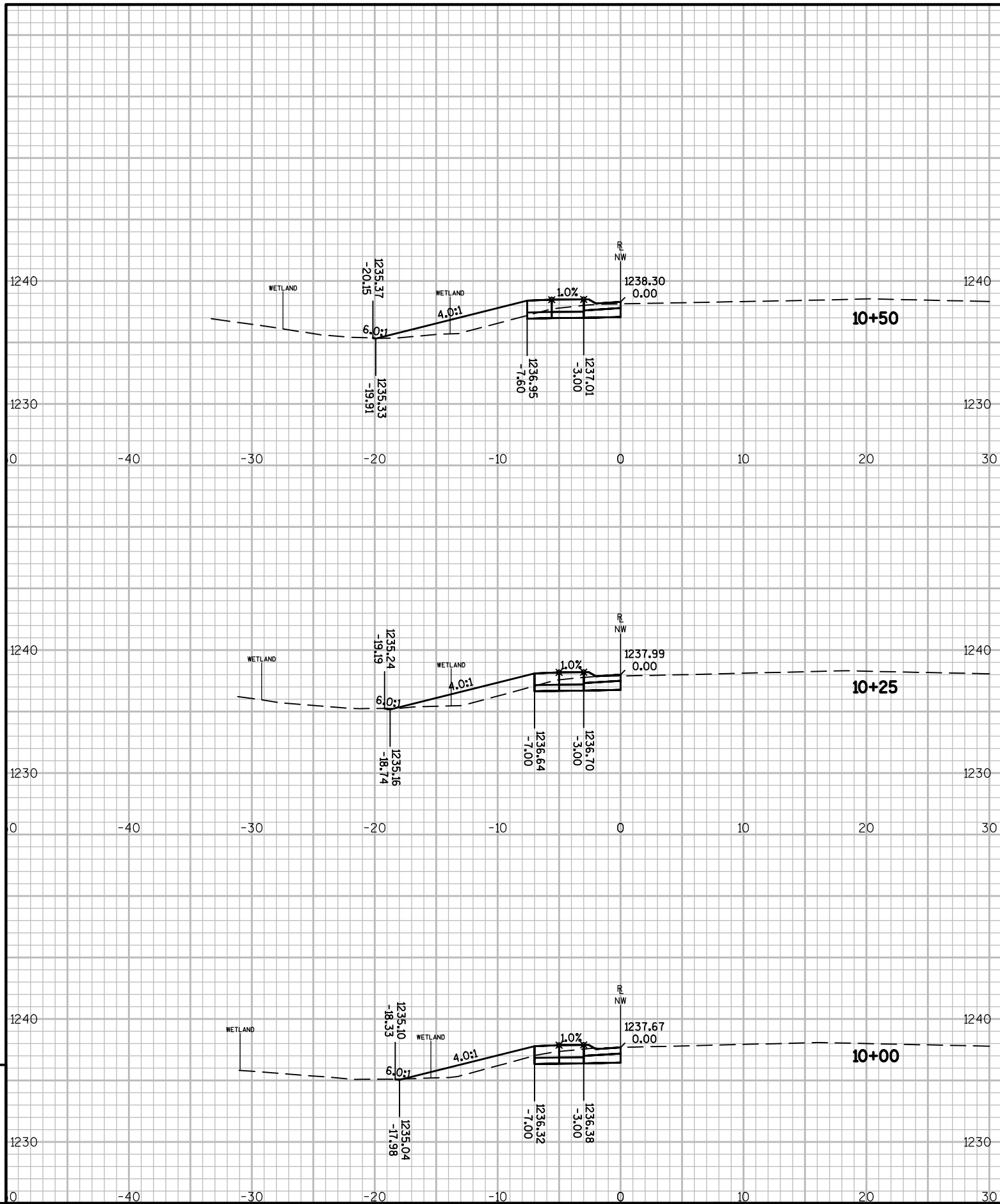




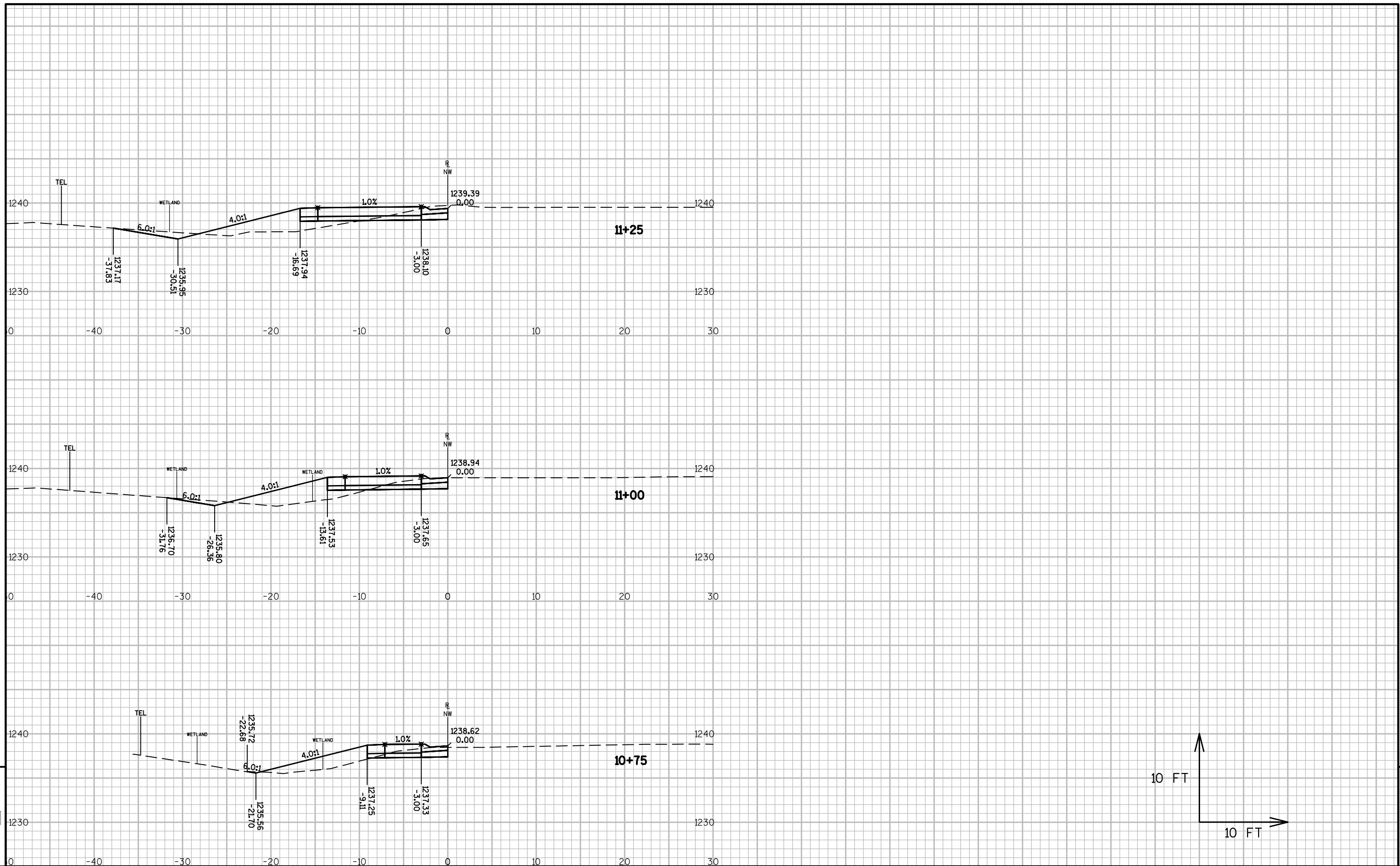


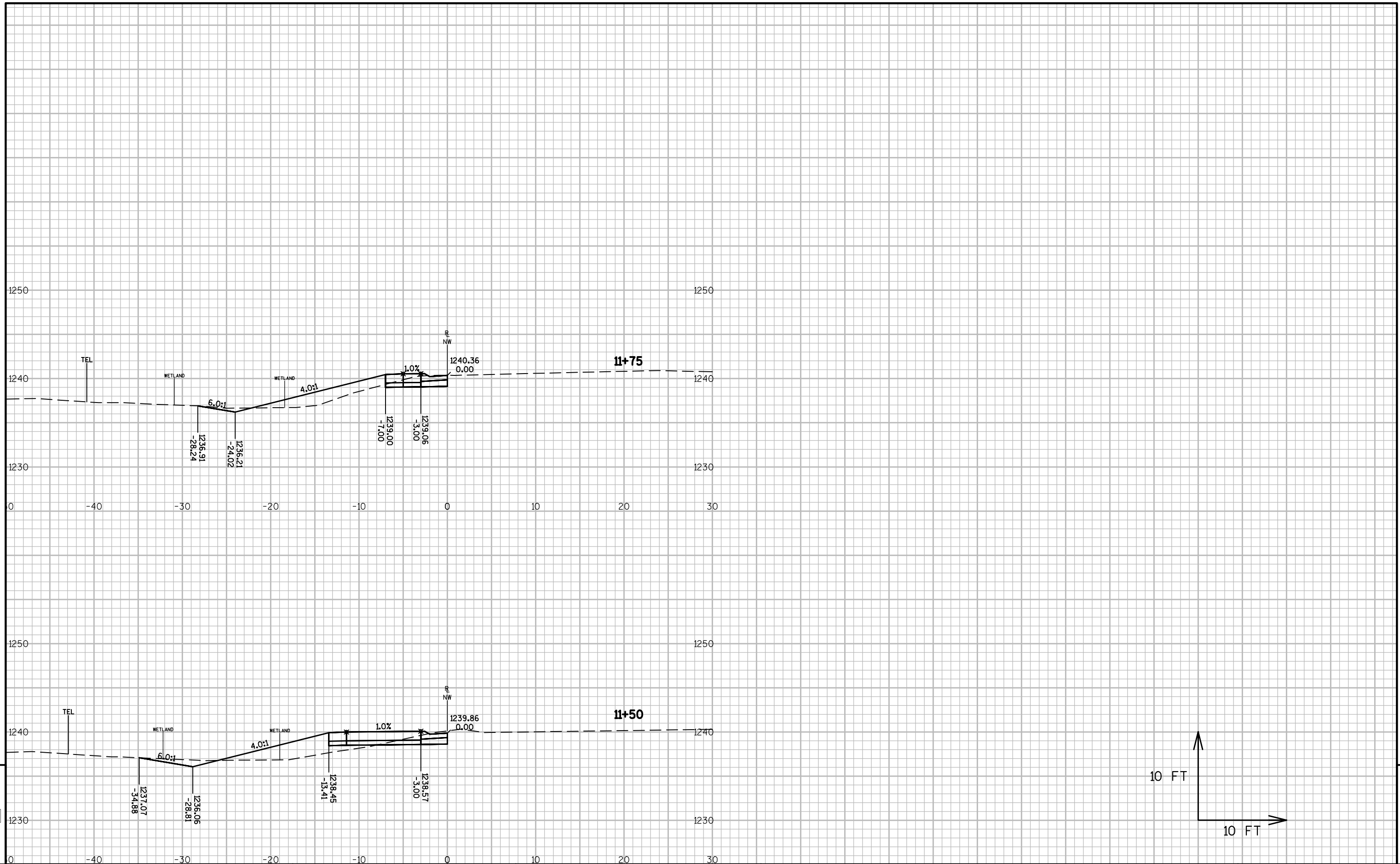




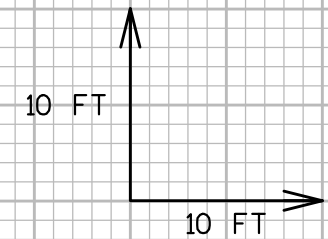
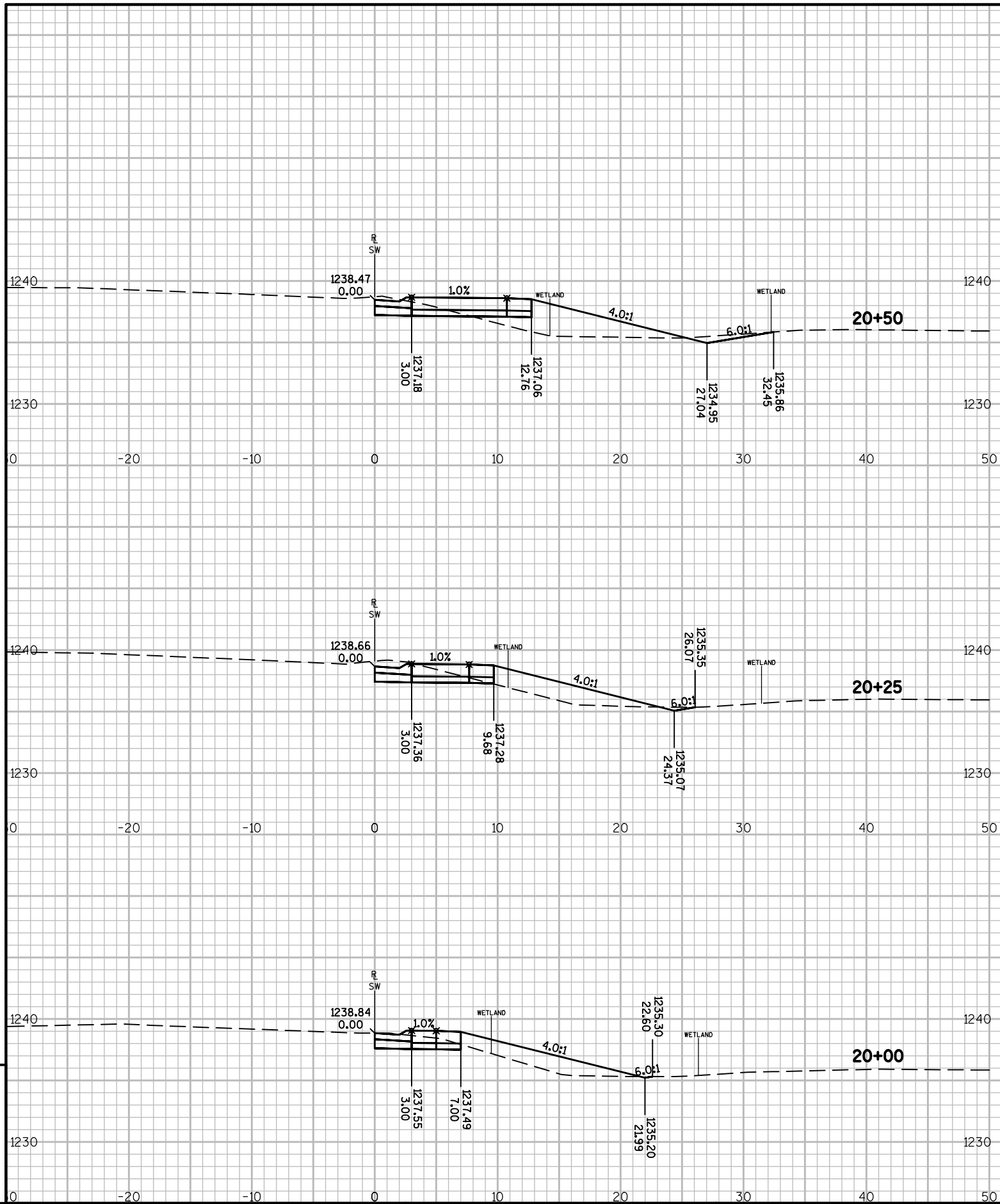


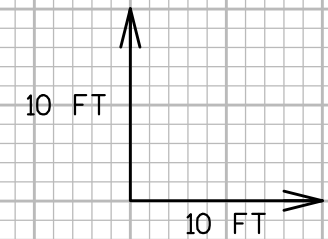
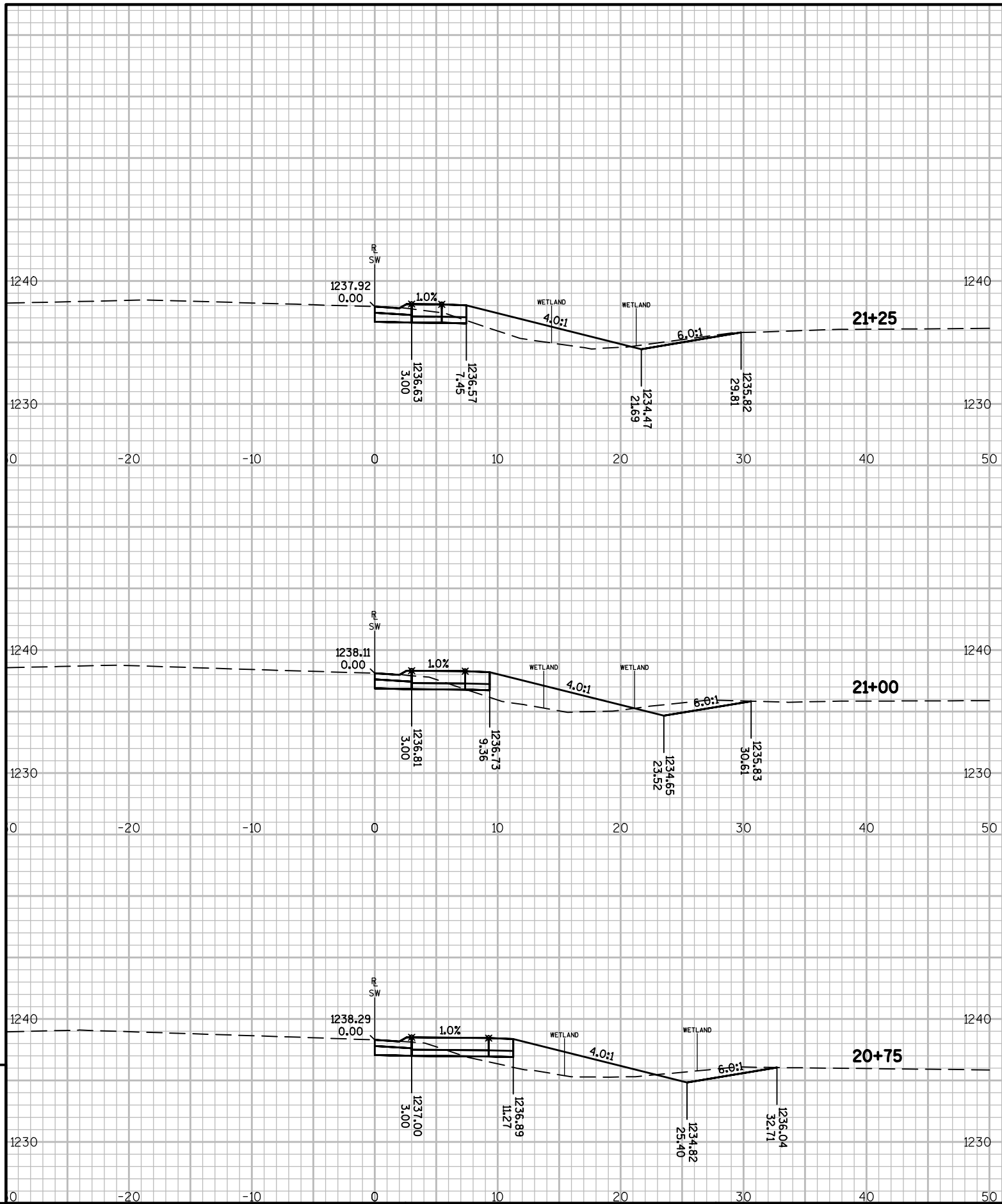


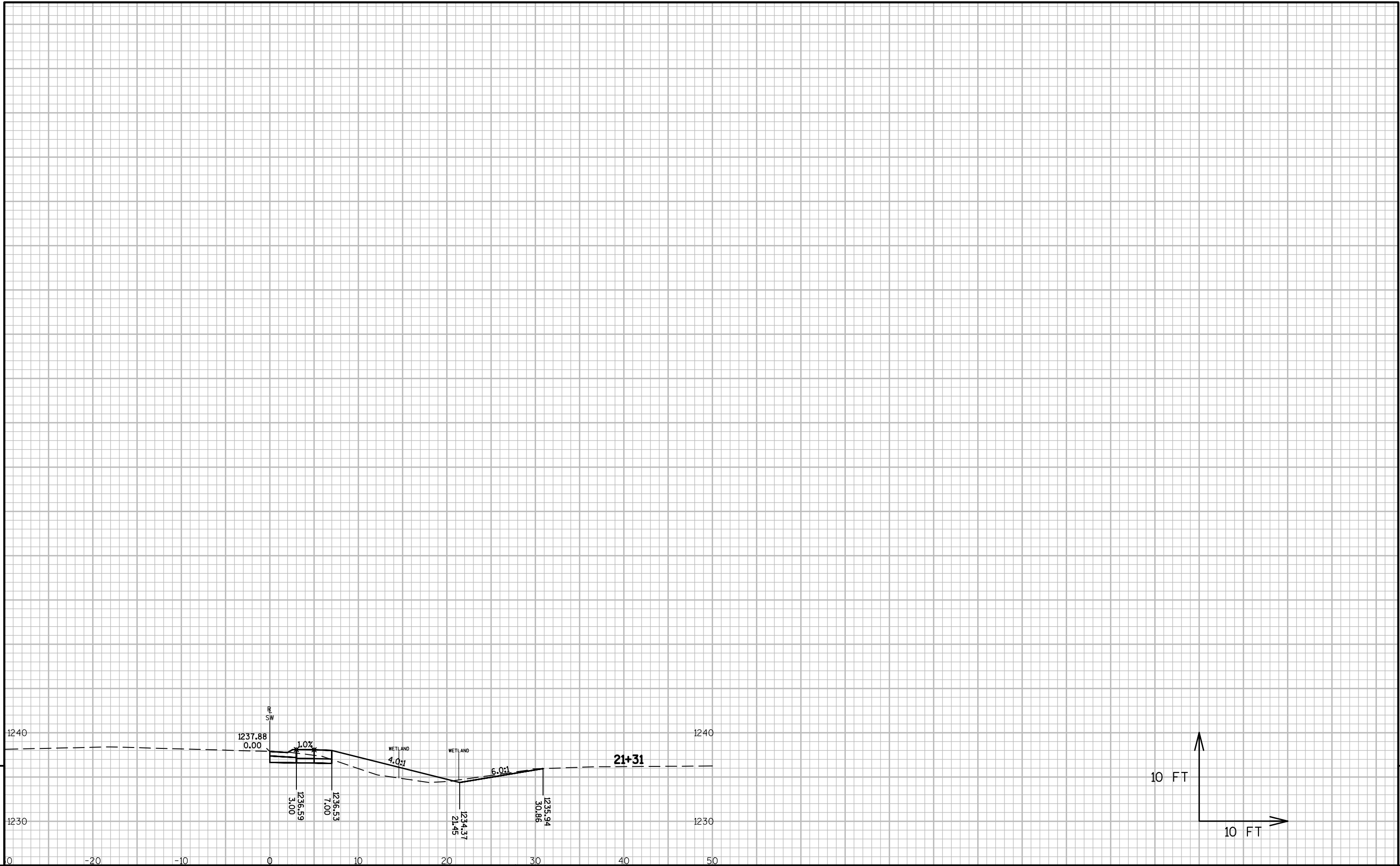


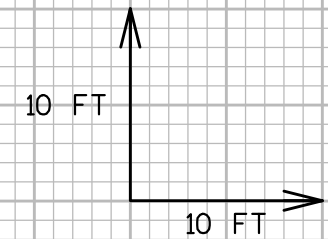
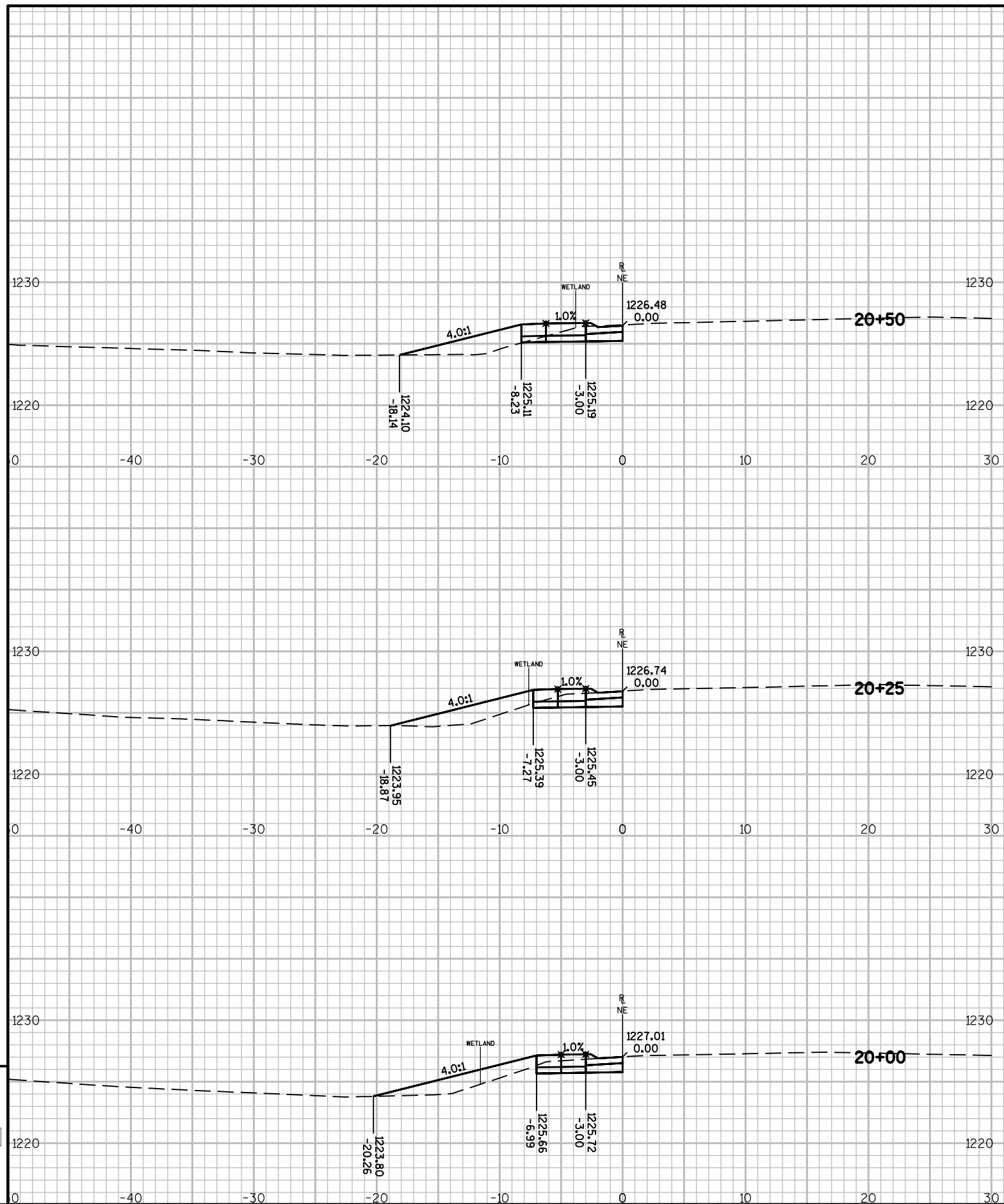


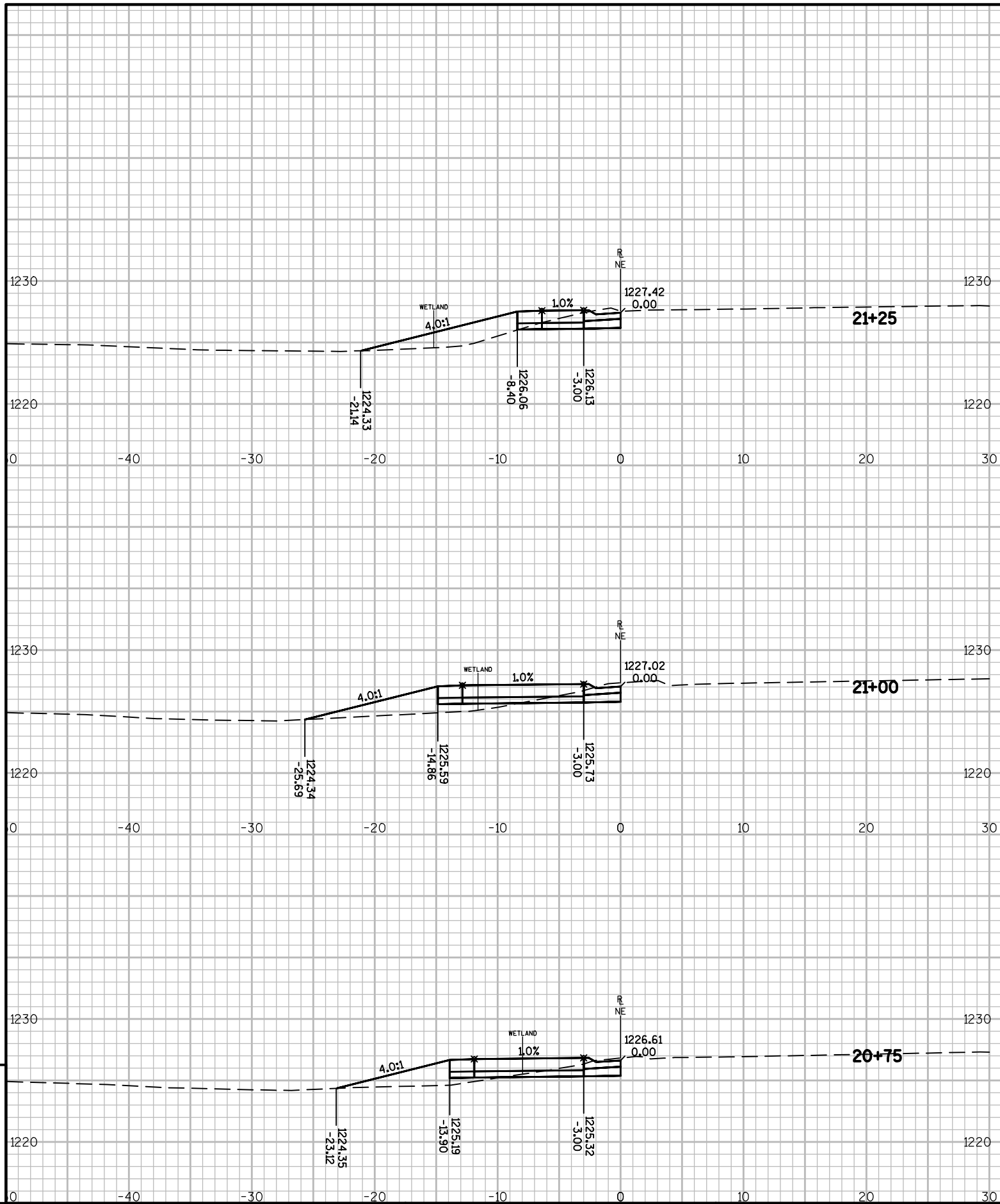
PROJECT NO:1000-08-89	HWY:STH 64-STH 73-NORTH	COUNTY:TAYLOR	CROSS SECTIONS: NW TRUCK PAD	SHEET	E
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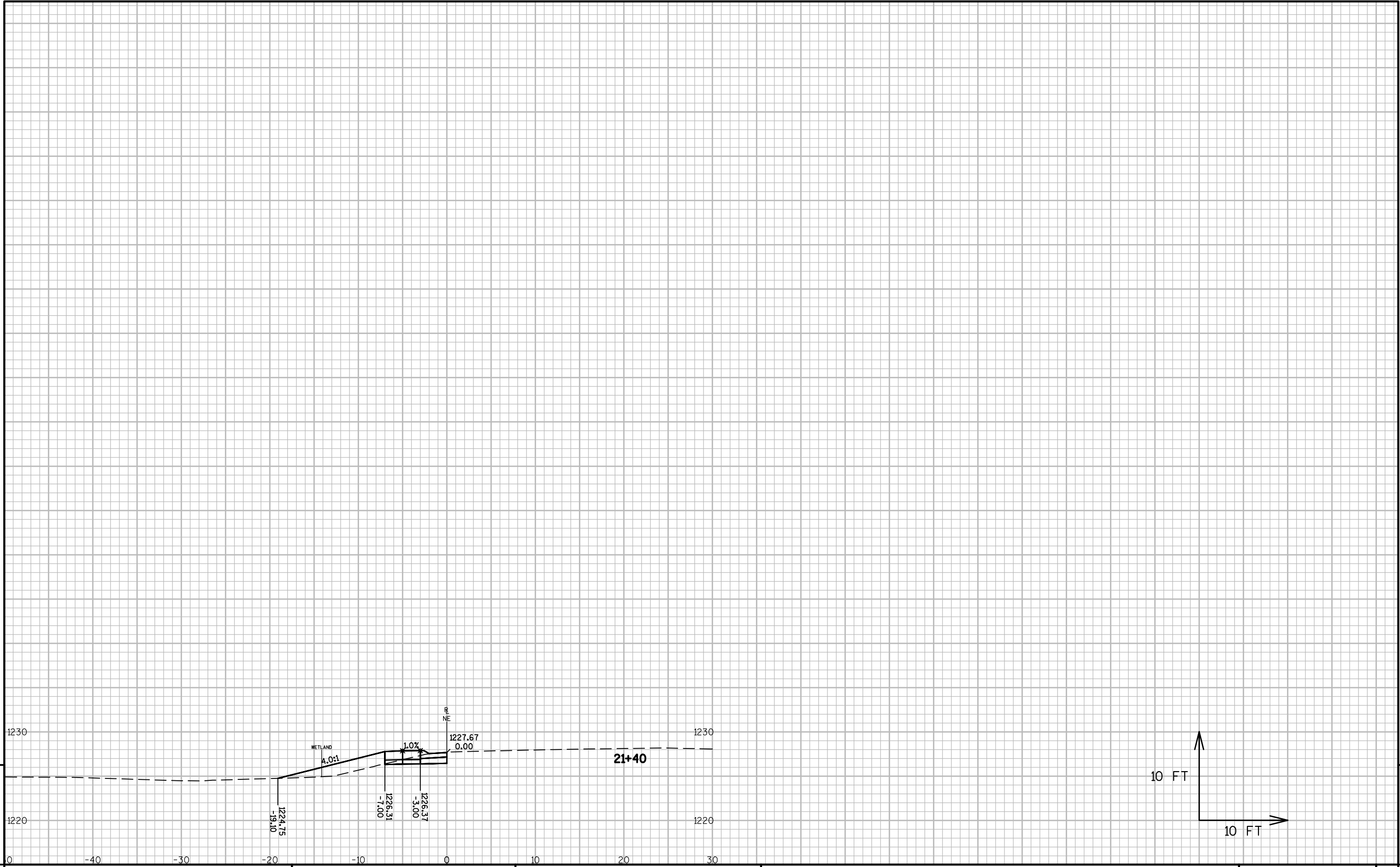




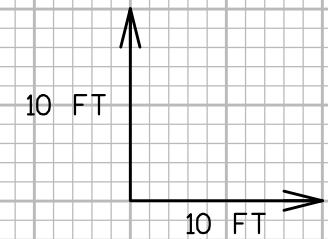
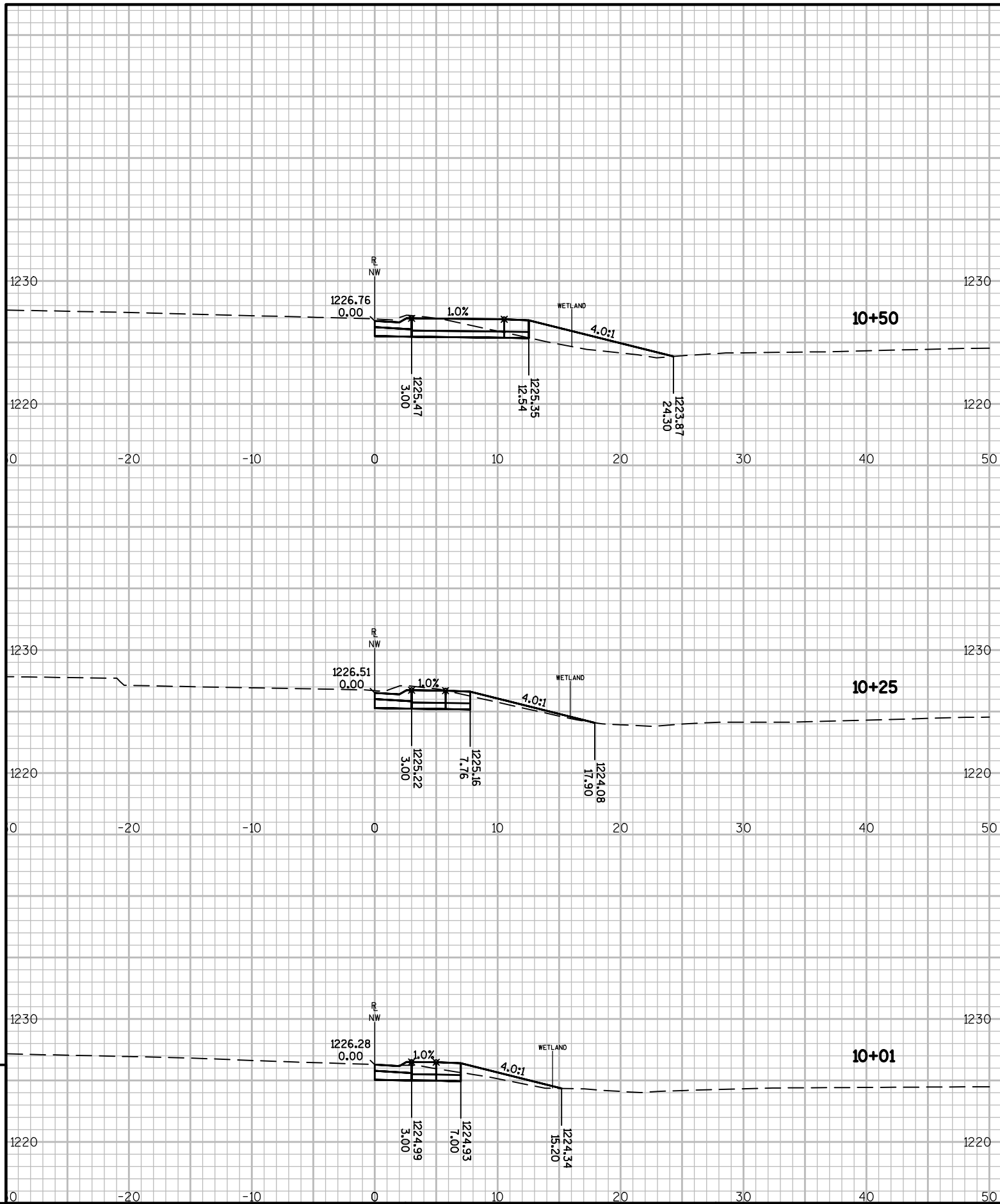


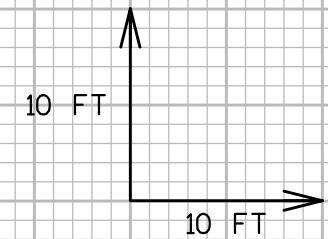
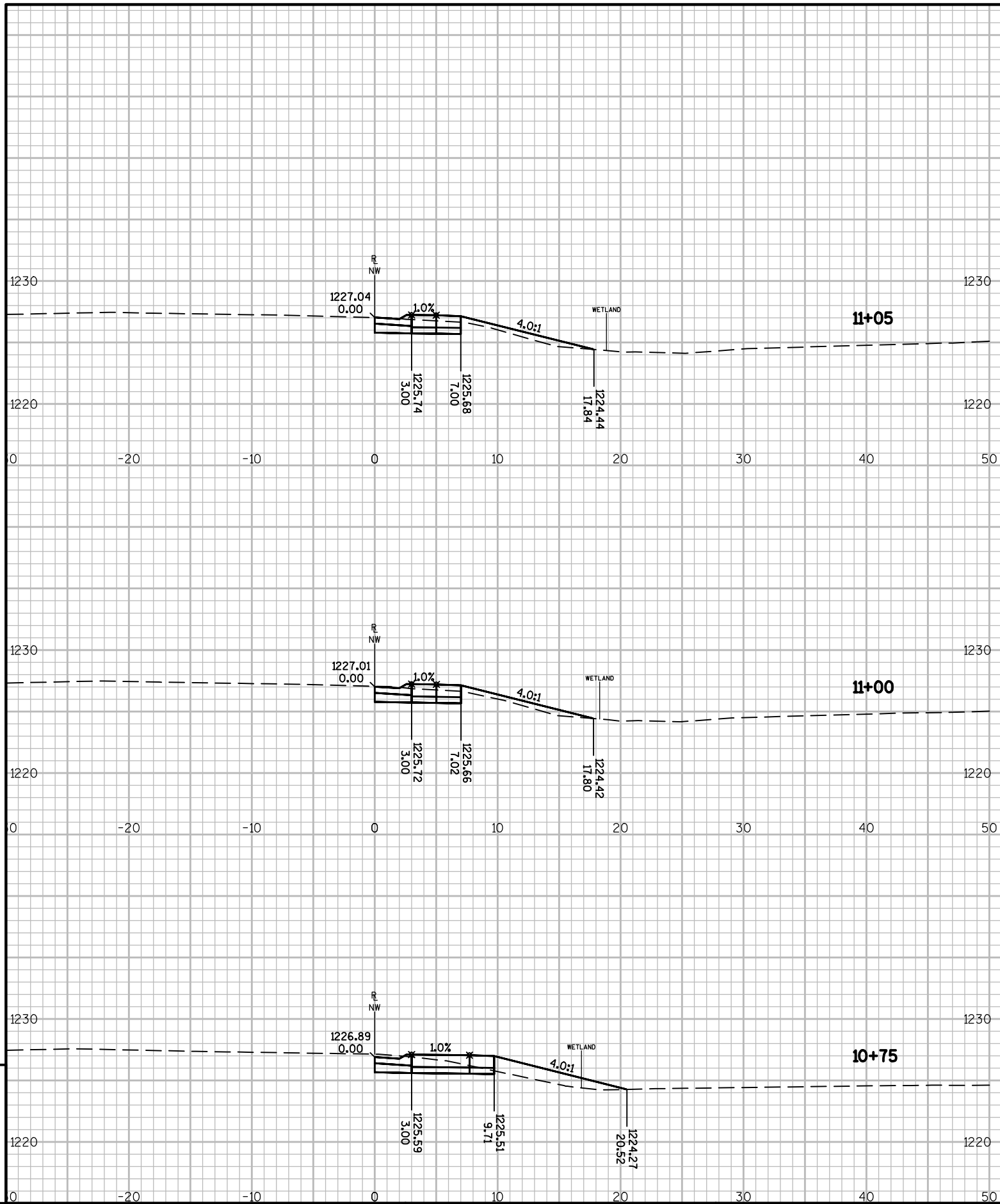












## Notes



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