

WKE NOVEMBER 2024

PROJECT ID: 3842-00-70

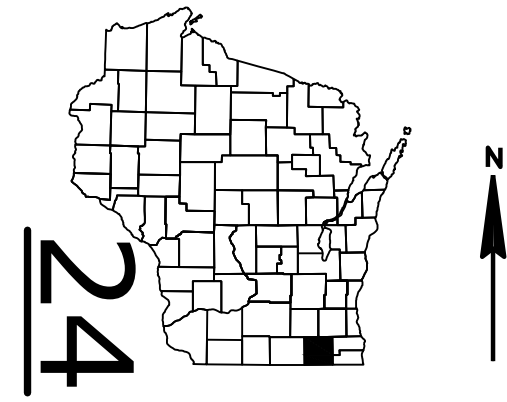
WITH: N/A

COUNTY: WALWORTH

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 = 106



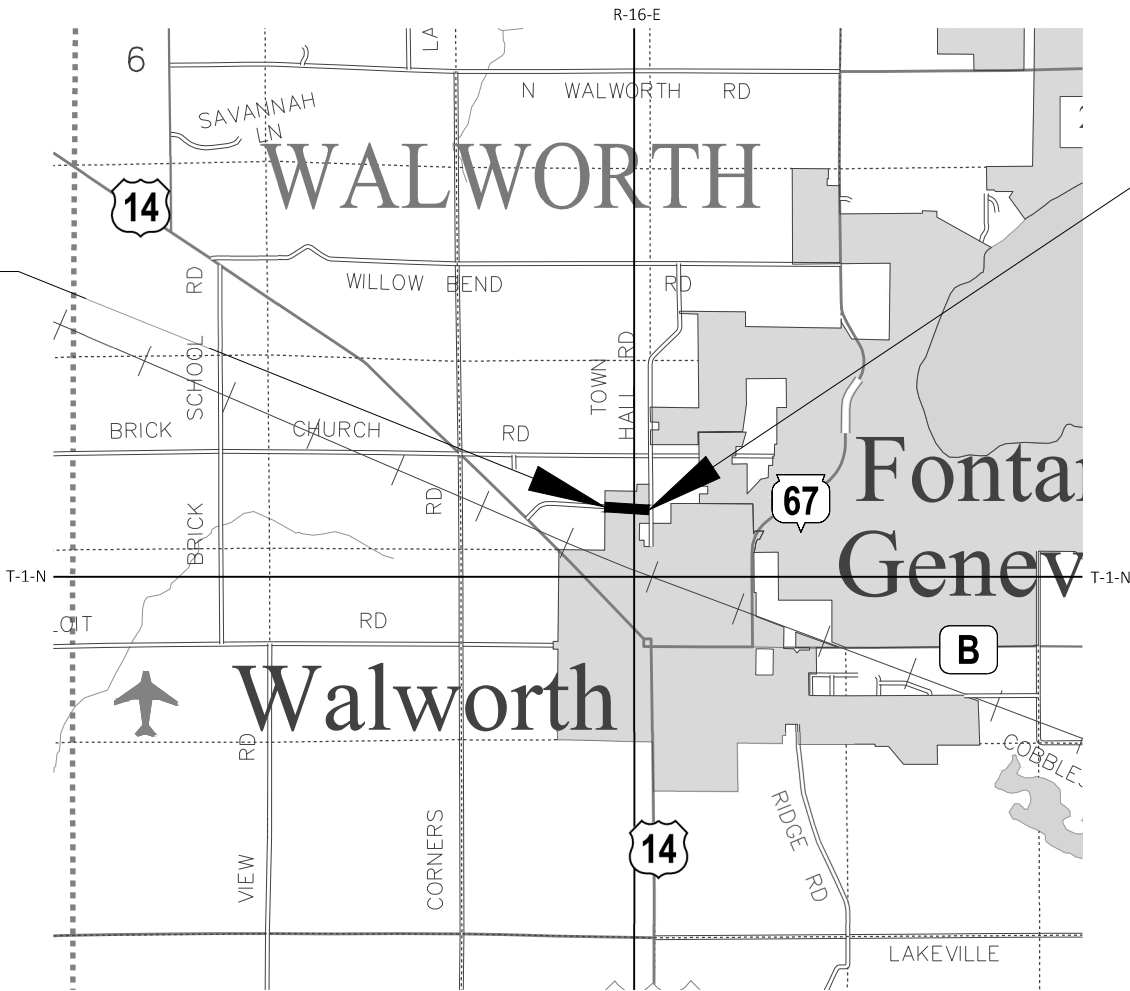
DESIGN DESIGNATION	3842-00-00
A.A.D.T. 2025	= 1,200
A.A.D.T. 2045	= 1,300
D.H.V.	= 168 (2045)
D.D.	= 60/40
T.	= 25.1%
DESIGN SPEED	= 30 MPH
ESALS	= 1,700,000

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
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	

BEGIN PROJECT
STA 20+77.53 'WI'
317907.2890
746082.0699



TOTAL NET LENGTH OF CENTERLINE = 0.235 MI.

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

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3842-00-70	WISC 2025038	1

ACCEPTED FOR

VILLAGE OF WALWORTH

Date: 07-17-2024 Mathew Nickels (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY

DATE: 07/17/24 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor: MEAD & HUNT, INC

Designer: MEAD & HUNT, INC

Project Manager: JOSEPH JELACIC

Regional Examiner: REGIONAL EXAMINER

Regional Supervisor: BRIAN BOOTHBY

APPROVED FOR THE DEPARTMENT

DATE: 7/24/2024 Joseph Jelacic (Signature)

UTILITIES CONTACTS

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ELECTRIC-LINE
BRODERICK HUNT
400 KOOPMAN LN.
ELKHORN, WI 53121
PHONE: 608-205-7237
EMAIL: BRODERICKHUNTALLIANTENERGY.COM

CHARTER COMMUNICATIONS, INC.
COMMUNICATION-LINE
CODY THOMPSON
1348 PLAINFIELD AVE.
JANESVILLE, WI 53545
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FRONTIER COMMUNICATIONS
COMMUNICATION-LINE
CHRIS BLUMER
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WE GAS
GAS
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WISCONSIN DNR LIAISON

CRAIG WEBSTER
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VILLAGE OF WALWORTH CONTACT

MAT NICKELS
PUBLIC WORKS OPERATION MANAGER
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EMAIL: MNICKELS@VI.WALWORTH.GOV

WISCONSIN DOT PROJECT MANAGER

JOE JELACIC
WIS-DOT SE REGION
141 NW BARSTOW STREET
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DESIGN PROJECT LEADER

BRIAN VEIT
MEAD & HUNT
2440 DEMING WAY
MIDDLETON, WI 53562
PHONE: 608-443-0412
EMAIL: BRIAN.VEIT@MEADHUNT.COM

GENERAL NOTES

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

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

CURVE DATA IS BASED ON THE RADIUS DEFINITION.

BEARINGS SHOWN ON THE PLAN ARE TRUE BEARINGS.

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

PIPE ELEVATIONS, LENGTHS AND LOCATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT OR A SAWED EDGE WILL BE REQUIRED AS DIRECTED BY THE ENGINEER.

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

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

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

FINAL RESTORATION SHALL BE COMPLETED WITHIN 10 CALENDAR DAYS OF GROUND DISTURBANCE. IF RESTORATION IS TO BE COMPLETED BEYOND 10 CALENDAR DAYS, TEMPORARY RESTORATION MEASURES SHALL BE COMPLETED WITHIN 72-HOURS OF ANY DISTURBANCE.

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 120 LBS/SY/IN.

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

RIGHT OF WAY INFORMATION SHOWN ON THE PLANS IS APPROXIMATE.

THE CONTRACTOR IS TO WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.

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

PRIOR TO PLACING THE NEW BASE AGGREGATE DENSE COURSE OR PAVED SHOULDERS EXISTING UNCOMPACTED SHOULDER MATERIAL SHALL BE REMOVED OR DEPOSITED ON THE OUTER PORTION OF THE EXISTING SHOULDER OR AS DIRECTED BY THE ENGINEER.

CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.

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

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

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

OTHER CONTACTS

VILLAGE OF WALWORTH
SANITARY SEWER
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NOVARES US ENGINE COMPONENTS, INC.
COMMUNICATION-LINE
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Dial **811** or (800)242-8511
www.DiggersHotline.com

ORDER OF SECTION 2 DETAIL SHEETS

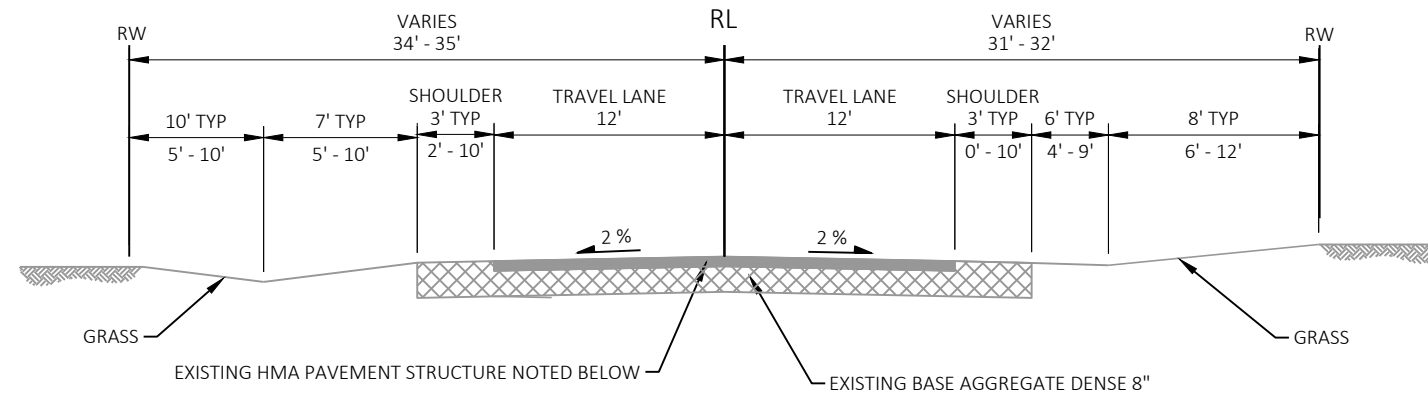
- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- INTERSECTION DETAIL
- CURB RAMP DETAILS
- EROSION CONTROL
- PERMANENT SIGNING/PAVEMENT MARKING
- TRAFFIC CONTROL
- STAGE CONSTRUCTION
- DETOUR
- ALIGNMENT DETAILS

RUNOFF COEFFICIENT TABLE

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

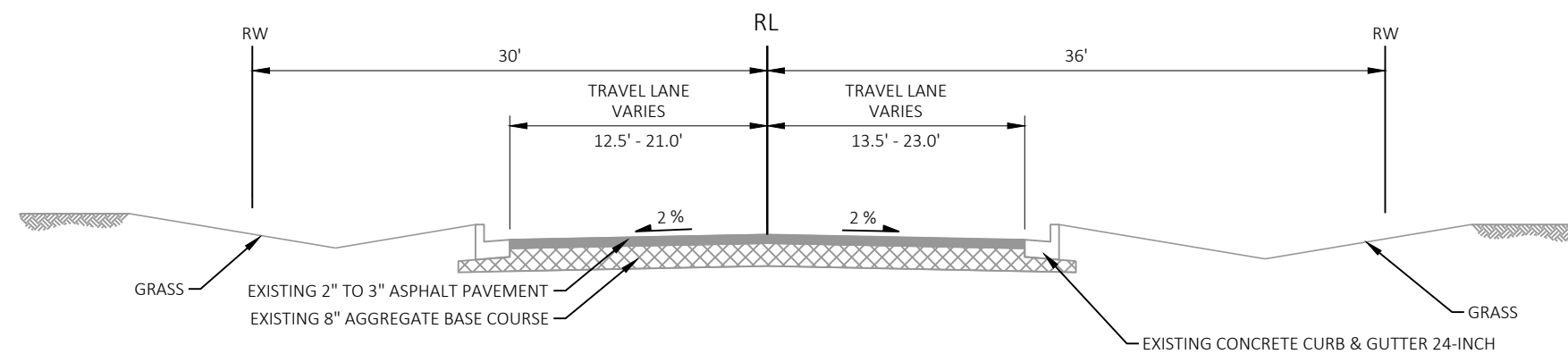
TOTAL PROJECT AREA = 1.979 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.801 ACRES





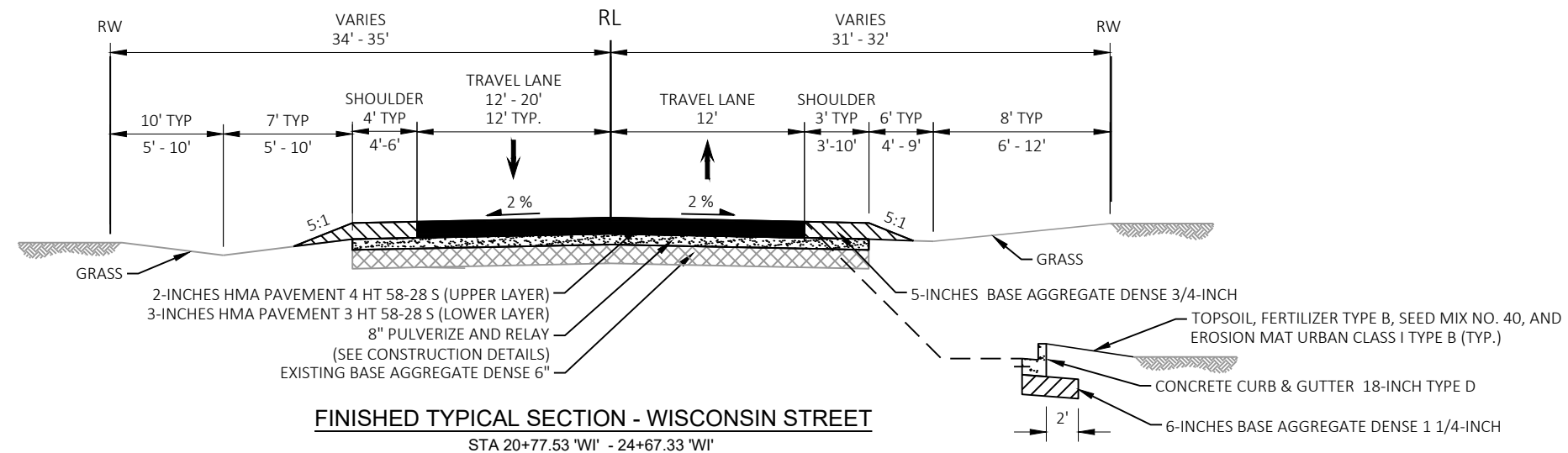
EXISTING TYPICAL SECTION - WISCONSIN STREET

STA 20+77.53 'WI' - STA 25+30 'WI': 5" TO 6" EXISTING HMA PAVEMENT
STA 25+30 'WI' - STA 32+21.39 'WI': 2" TO 3" EXISTING HMA PAVEMENT

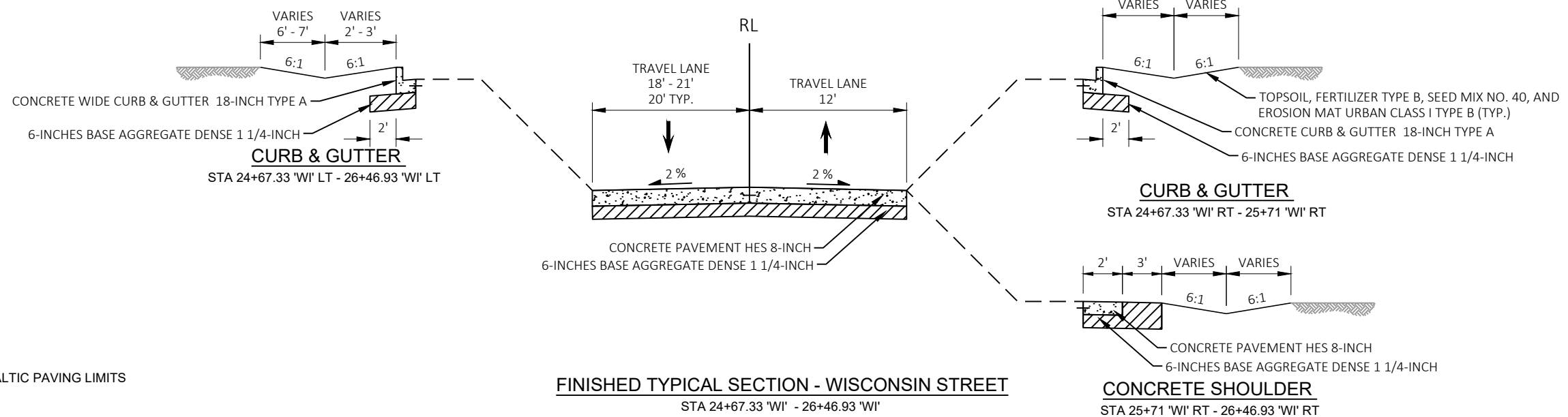


EXISTING TYPICAL SECTION - WISCONSIN STREET

STA 32+21.39 'WI' - 33+19.30 'WI'

**CURB & GUTTER**

STA 23+86.20 'WI' - 24+67.33 'WI' RT
STA 23+85.57 'WI' - 24+67.33 'WI' LT

**GENERAL NOTE:**

PREPARE FOUNDATION FOR ASPHALTIC PAVING LIMITS

STA 20+77.53 'WI' - 24+67.33 'WI'

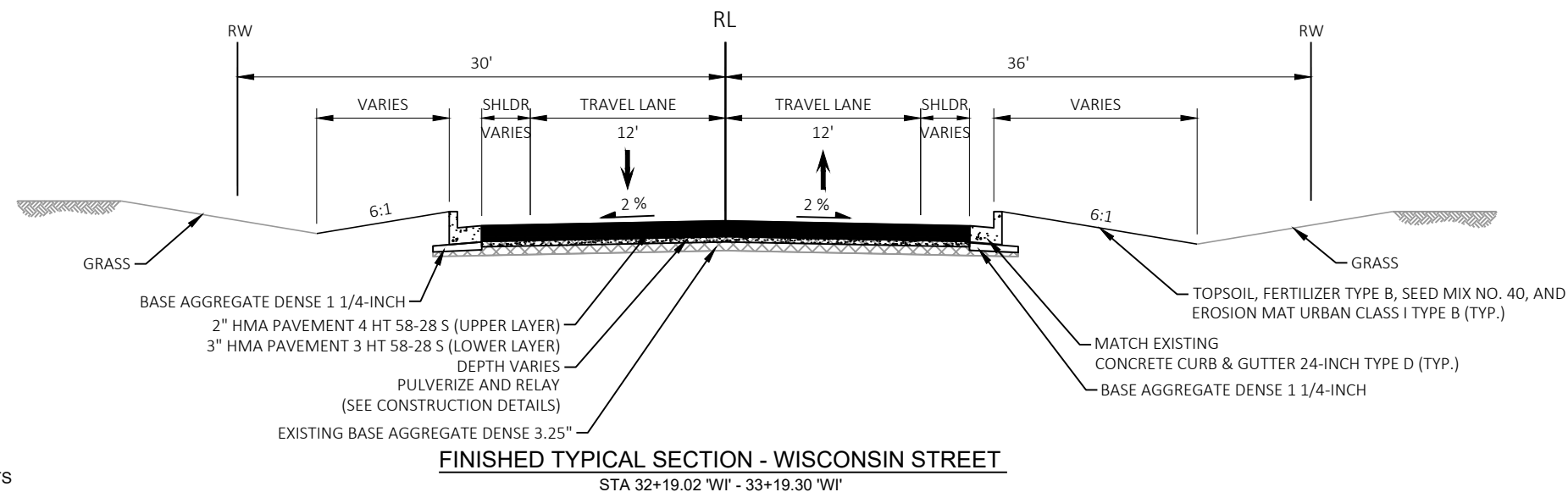
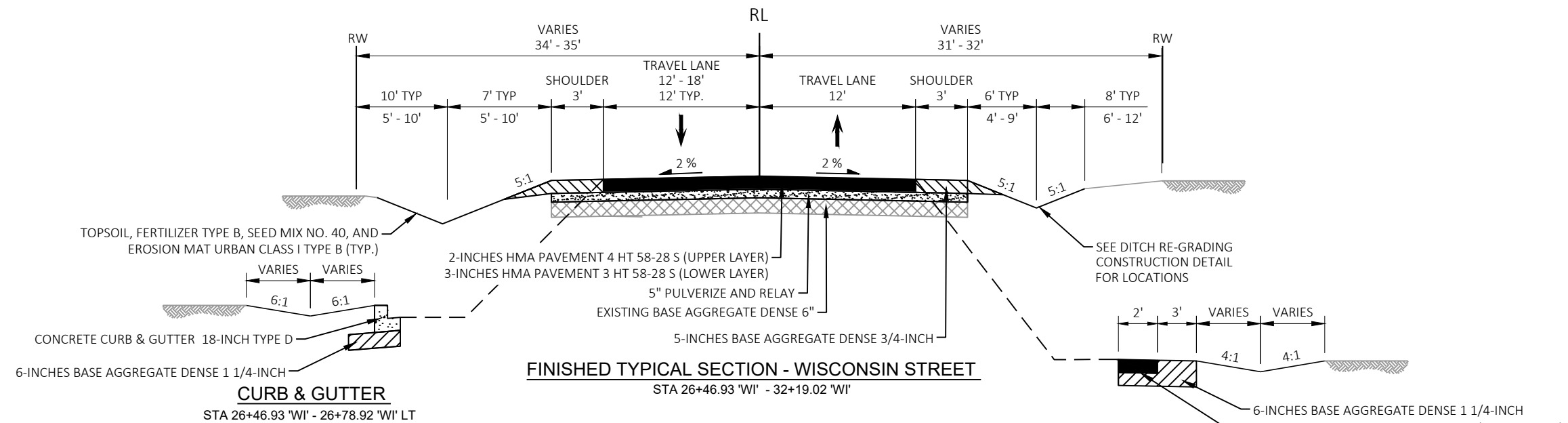
STA 26+46.93 'WI' - 33+19.30 'WI'

STA 127+00.00 'WA' - 127+29.74 'WA'

PREPARE FOUNDATION FOR CONCRETE PAVEMENT LIMITS

STA 24+67.33 'WI' - 26+46.93 'WI'

STA 127+29.74 'WA' - 127+78.71 'WA'



GENERAL NOTE:

PREPARE FOUNDATION FOR ASPHALTIC PAVING LIMITS

STA 20+77.53 'WI' - 24+67.33 'WI'

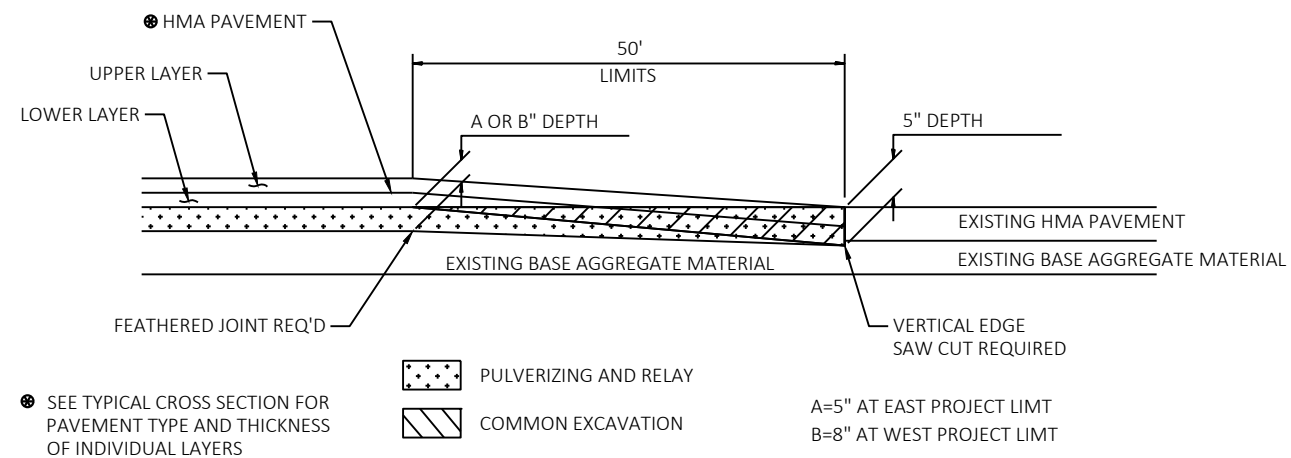
STA 26+46.93 'WI' - 33+19.30 'WI'

STA 127+00.00 'WA' - 127+29.74 'WA'

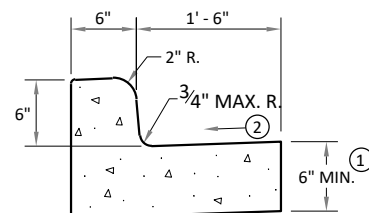
PREPARE FOUNDATION FOR CONCRETE PAVEMENT LIMITS

STA 24+67.33 'WI' - 26+46.93 'WI'

STA 127+29.74 'WA' - 127+78.71 'WA'

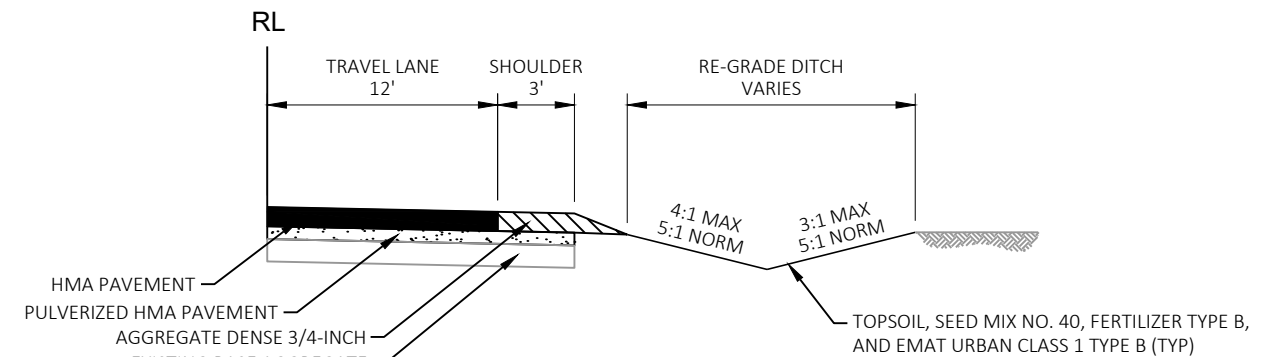


DETAIL FOR PULVERIZE AND RELAY AT PROJECT LIMITS

TYPE D
CONCRETE CURB AND GUTTER 24"
SPV.0090.01

NOTES:

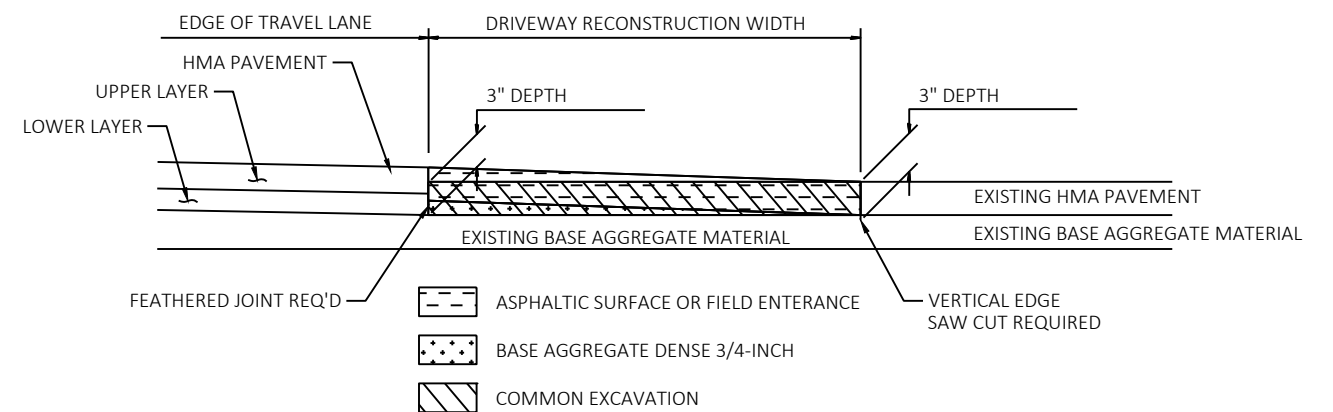
1. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
2. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS .



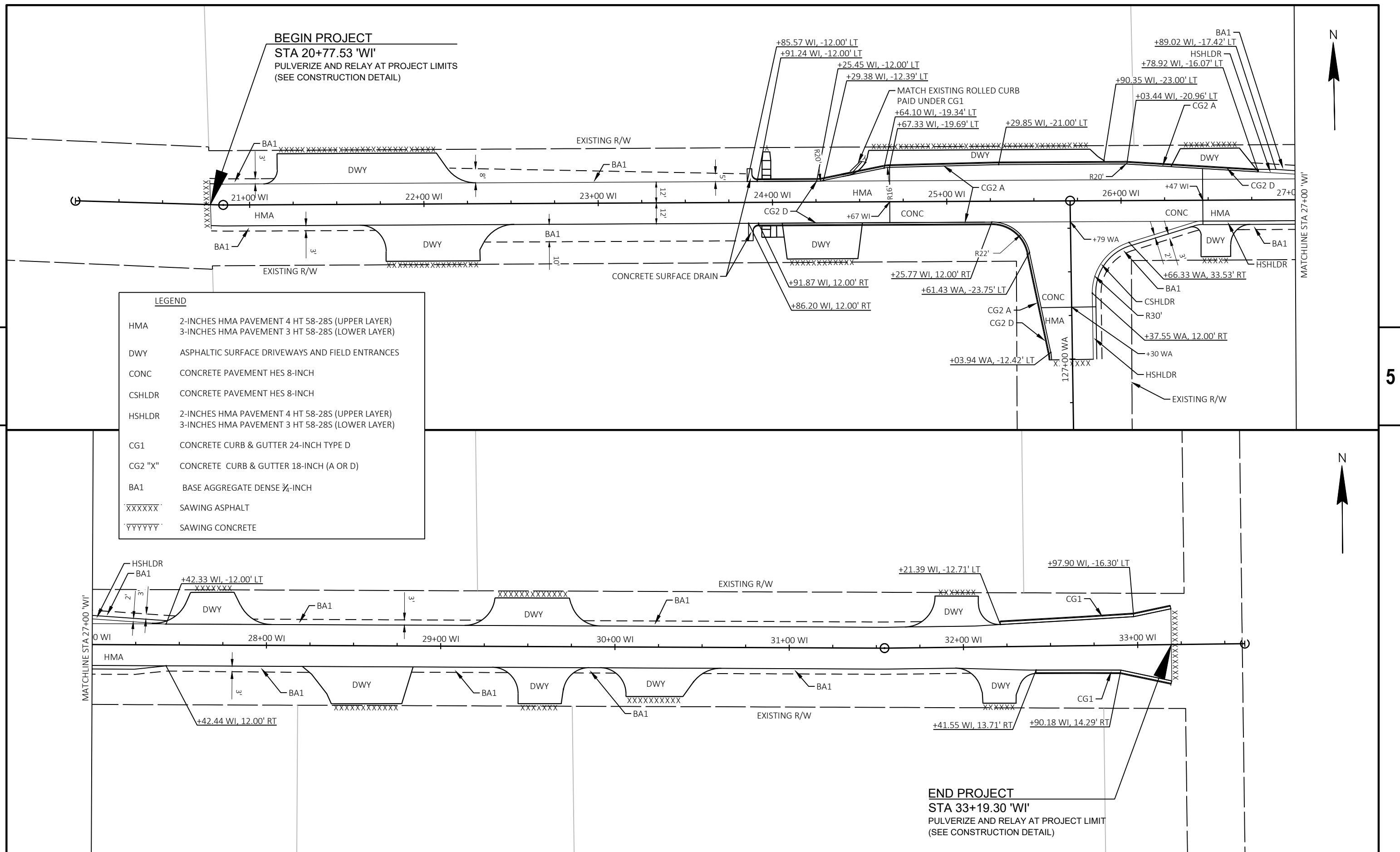
DITCH RE-GRADING DETAIL

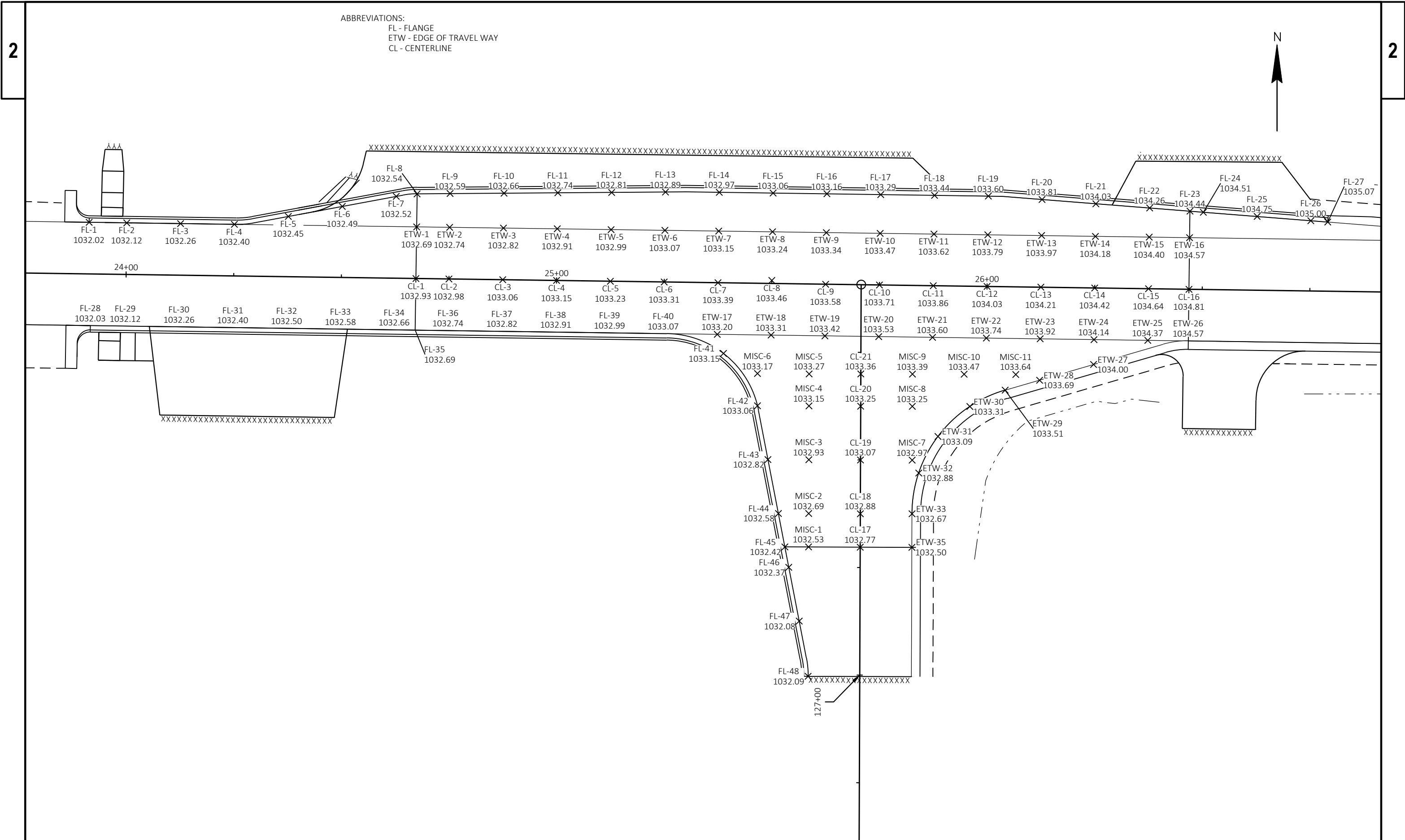
* LOCATIONS LISTED BELOW

STA 27+15 - 27+40 LT 'WI'
STA 27+65 - 28+20 RT 'WI'
STA 28+00 - 28+25 LT 'WI'
STA 28+60 - 29+20 LT 'WI'
STA 28+90 - 29+35 RT 'WI'
STA 29+75 - 30+05 RT 'WI'
STA 29+90 - 31+70 LT 'WI'
STA 31+55 - 32+05 RT 'WI'
STA 32+15 - 32+75 LT 'WI'
STA 32+30 - 32+65 RT 'WI'
STA 127+00 - 127+75 RT 'WA'



PULVERIZE AND RELAY DETAIL FOR DRIVEWAYS





PAVING GRADES WISCONSIN ST LT FL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
FL-1	23+91.24	12.00' LT	1032.02	317914.68	746395.91
FL-2	24+00.00	12.00' LT	1032.12	317914.56	746404.67
FL-3	24+12.50	12.00' LT	1032.26	317914.38	746417.16
FL-4	24+25.00	12.00' LT	1032.40	317914.21	746429.66
FL-5	24+37.50	14.01' LT	1032.45	317916.05	746442.19
FL-6	24+50.00	16.51' LT	1032.49	317918.37	746454.72
FL-7	24+62.50	19.01' LT	1032.52	317920.70	746467.26
FL-8	24+67.33	19.67' LT	1032.54	317921.29	746472.09
FL-9	24+75.00	19.85' LT	1032.59	317921.36	746479.77
FL-10	24+87.50	20.11' LT	1032.66	317921.45	746492.27
FL-11	25+00.00	20.37' LT	1032.74	317921.54	746504.77
FL-12	25+12.50	20.64' LT	1032.81	317921.63	746517.28
FL-13	25+25.00	20.90' LT	1032.89	317921.71	746529.78
FL-14	25+37.50	21.00' LT	1032.97	317921.64	746542.28
FL-15	25+50.00	21.00' LT	1033.06	317921.47	746554.78
FL-16	25+62.50	21.00' LT	1033.16	317921.29	746567.28
FL-17	25+75.00	21.00' LT	1033.29	317921.12	746579.77
FL-18	25+87.50	21.00' LT	1033.44	317920.95	746592.27
FL-19	26+00.00	21.00' LT	1033.60	317920.77	746604.77
FL-20	26+12.50	20.37' LT	1033.81	317919.97	746617.26
FL-21	26+25.00	19.56' LT	1034.03	317918.99	746629.75
FL-22	26+37.50	18.75' LT	1034.26	317918.00	746642.24
FL-23	26+46.88	18.14' LT	1034.44	317917.26	746651.61
FL-24	26+50.00	17.94' LT	1034.51	317917.02	746654.72
FL-25	26+62.50	17.13' LT	1034.75	317916.03	746667.21
FL-26	26+75.00	16.32' LT	1035.00	317915.05	746679.70
FL-27	26+78.92	16.07' LT	1035.07	317914.74	746683.62

PAVING GRADES WALWORTH ST LT FL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
FL-41	127+74.62	31.92' LT	1033.15	317884.20	746543.25
FL-42	127+62.50	23.99' LT	1033.06	317872.05	746551.15
FL-43	127+50.00	21.50' LT	1032.82	317859.54	746553.59
FL-44	127+37.50	19.03' LT	1032.58	317847.04	746556.01
FL-45	127+29.74	17.50' LT	1032.42	317839.27	746557.51
FL-46	127+25.00	16.57' LT	1032.37	317834.53	746558.43
FL-47	127+12.50	14.10' LT	1032.08	317822.02	746560.85
FL-48	126+99.68	12.00' LT	1032.09	317809.19	746562.90

PAVING GRADES WISCONSIN ST LT ETW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
ETW-1	24+67.34	12.00' LT	1032.69	317913.62	746472.00
ETW-2	24+75.00	12.00' LT	1032.74	317913.51	746479.66
ETW-3	24+87.50	12.00' LT	1032.82	317913.34	746492.16
ETW-4	25+00.00	12.00' LT	1032.91	317913.17	746504.66
ETW-5	25+12.50	12.00' LT	1032.99	317912.99	746517.15
ETW-6	25+25.00	12.00' LT	1033.07	317912.82	746529.65
ETW-7	25+37.50	12.00' LT	1033.15	317912.64	746542.15
ETW-8	25+50.00	12.00' LT	1033.24	317912.47	746554.65
ETW-9	25+62.50	12.00' LT	1033.34	317912.30	746567.15
ETW-10	25+75.00	12.00' LT	1033.47	317912.12	746579.65
ETW-11	25+87.50	12.00' LT	1033.62	317911.95	746592.15
ETW-12	26+00.00	12.00' LT	1033.79	317911.77	746604.65
ETW-13	26+12.50	12.00' LT	1033.97	317911.60	746617.15
ETW-14	26+25.00	12.00' LT	1034.18	317911.42	746629.64
ETW-15	26+37.50	12.00' LT	1034.40	317911.25	746642.14
ETW-16	26+46.89	12.00' LT	1034.57	317911.12	746651.53

PAVING GRADES WALWORTH ST CL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
CL-17	127+29.74	0.00'	1032.77	317839.20	746575.01
CL-18	127+37.50	0.00'	1032.88	317846.97	746575.04
CL-19	127+50.00	0.00'	1033.07	317859.47	746575.09
CL-20	127+62.50	0.00'	1033.25	317871.97	746575.13
CL-21	127+70.00	0.00'	1033.36	317879.47	746575.16

PAVING GRADES WISCONSIN ST CL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
CL-1	24+67.34	0.00'	1032.93	317901.62	746471.83
CL-2	24+75.00	0.00'	1032.98	317901.51	746479.49
CL-3	24+87.50	0.00'	1033.06	317901.34	746491.99
CL-4	25+00.00	0.00'	1033.15	317901.17	746504.49
CL-5	25+12.50	0.00'	1033.23	317900.99	746516.99
CL-6	25+25.00	0.00'	1033.31	317900.82	746529.49
CL-7	25+37.50	0.00'	1033.39	317900.64	746541.99
CL-8	25+50.00	0.70' LT	1033.46	317901.17	746554.49
CL-9	25+62.50	0.00'	1033.58	317900.30	746566.98
CL-10	25+75.00	0.00'	1033.71	317900.12	746579.48
CL-11	25+87.50	0.00'	1033.86	317899.95	746591.98
CL-12	26+00.00	0.00'	1034.03	317899.77	746604.48
CL-13	26+12.50	0.00'	1034.21	317899.60	746616.98
CL-14	26+25.00	0.00'	1034.42	317899.43	746629.48
CL-15	26+37.50	0.00'	1034.64	317899.25	746641.98
CL-16	26+46.91	0.00'	1034.81	317899.12	746651.38

PAVING GRADES WALWORTH ST RT ETW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
ETW-27	127+72.37	54.06' RT	1034.00	317881.64	746629.23
ETW-28	127+68.68	41.52' RT	1033.69	317877.99	746616.68
ETW-29	127+66.33	33.53' RT	1033.51	317875.67	746608.67
ETW-30	127+62.50	25.34' RT	1033.31	317871.87	746600.48
ETW-31	127+55.52	17.98' RT	1033.09	317864.92	746593.09
ETW-32	127+47.02	13.53' RT	1032.88	317856.43	746588.61
ETW-33	127+37.55	12.00' RT	1032.67	317846.97	746587.04
ETW-35	127+29.74	12.00' RT	1032.50	317839.16	746587.01

PAVING GRADES WISCONSIN ST RT ETW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
ETW-17	25+37.50	12.00' RT	1033.20	317888.65	746541.82
ETW-18	25+50.00	12.00' RT	1033.31	317888.47	746554.32
ETW-19	25+62.50	12.00' RT	1033.42	317888.30	746566.82
ETW-20	25+75.00	12.00' RT	1033.53	317888.12	746579.31
ETW-21	25+87.50	12.00' RT	1033.60	317887.95	746591.81
ETW-22	26+00.00	12.00' RT	1033.74	317887.78	746604.31
ETW-23	26+12.50	12.00' RT	1033.92	317887.60	746616.81
ETW-24	26+25.00	12.00' RT	1034.14	317887.43	746629.31
ETW-25	26+37.50	12.00' RT	1034.37	317887.25	746641.81
ETW-26	26+46.93	12.00' RT	1034.57	317887.12	746651.24

PAVING GRADES WISCONSIN ST RT FL					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
FL-28	23+91.87	12.00' RT	1032.03	317890.67	746396.20
FL-29	24+00.00	12.00' RT	1032.12	317890.56	746404.33
FL-30	24+12.50	12.00' RT	1032.26	317890.39	746416.83
FL-31	24+25.00	12.00' RT	1032.40	317890.21	746429.33
FL-32	24+37.50	12.00' RT	1032.50	317890.04	746441.83
FL-33	24+50.00	12.00' RT	1032.58	317889.86	746454.33
FL-34	24+62.50	12.00' RT	1032.66	317889.69	746466.83
FL-35	24+67.33	12.00' RT	1032.69	317889.62	746471.65
FL-36	24+75.00	12.00' RT	1032.74	317889.52	746479.32
FL-37	24+87.50	12.00' RT	1032.82	317889.34	746491.82
FL-38	25+00.00	12.00' RT	1032.91	317889.17	746504.32
FL-39	25+12.50	12.00' RT	1032.99	317888.99	746516.82
FL-40	25+25.00	12.00' RT	1033.07	317888.82	746529.32

PAVING GRADES WALWORTH ST MISC					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
MISC-1	127+29.74	12.00' LT	1032.53	317839.25	746563.01
MISC-2	127+37.50	12.00' LT	1032.69	317847.01	746563.04
MISC-3	127+50.00	12.00' LT	1032.93	317859.51	746563.09
MISC-4	127+62.50	12.00' LT	1033.15	317872.01	746563.13
MISC-5	127+69.96	12.00' LT	1033.27	317879.47	746563.16
MISC-6	127+70.00	24.00' LT	1033.17	317879.55	746551.16
MISC-7	127+50.00	12.00' RT	1032.97	317859.42	746587.09
MISC-8	127+62.50	12.00' RT	1033.25	317871.92	746587.13
MISC-9	127+70.00	12.00' RT	1033.39	317879.42	746587.16
MISC-10	127+70.00	24.00' RT	1033.47	317879.38	746599.16
MISC-11	127+70.00	36.00' RT	1033.64	317879.33	746611.16

NORTH CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	23+94.05	12.00' LT	1032.06	317914.64	746398.71
02	23+99.05	12.00' LT	1032.12	317914.57	746403.71
03	23+94.06	13.50' LT	1032.44	317916.14	746398.75
04	23+99.06	13.50' LT	1032.44	317916.07	746403.75
05	23+94.10	19.00' LT	1032.11	317921.64	746398.87
06	23+99.10	18.97' LT	1032.17	317921.53	746403.87
07	23+94.14	24.00' LT	1032.02	317926.64	746398.97
08	23+99.14	23.96' LT	1032.00	317926.53	746403.97
09	23+94.69	29.00' LT	1032.44	317931.63	746399.59
10	23+98.62	28.97' LT	1031.84	317931.54	746403.52



LEGEND

DIRECTION OF SLOPE

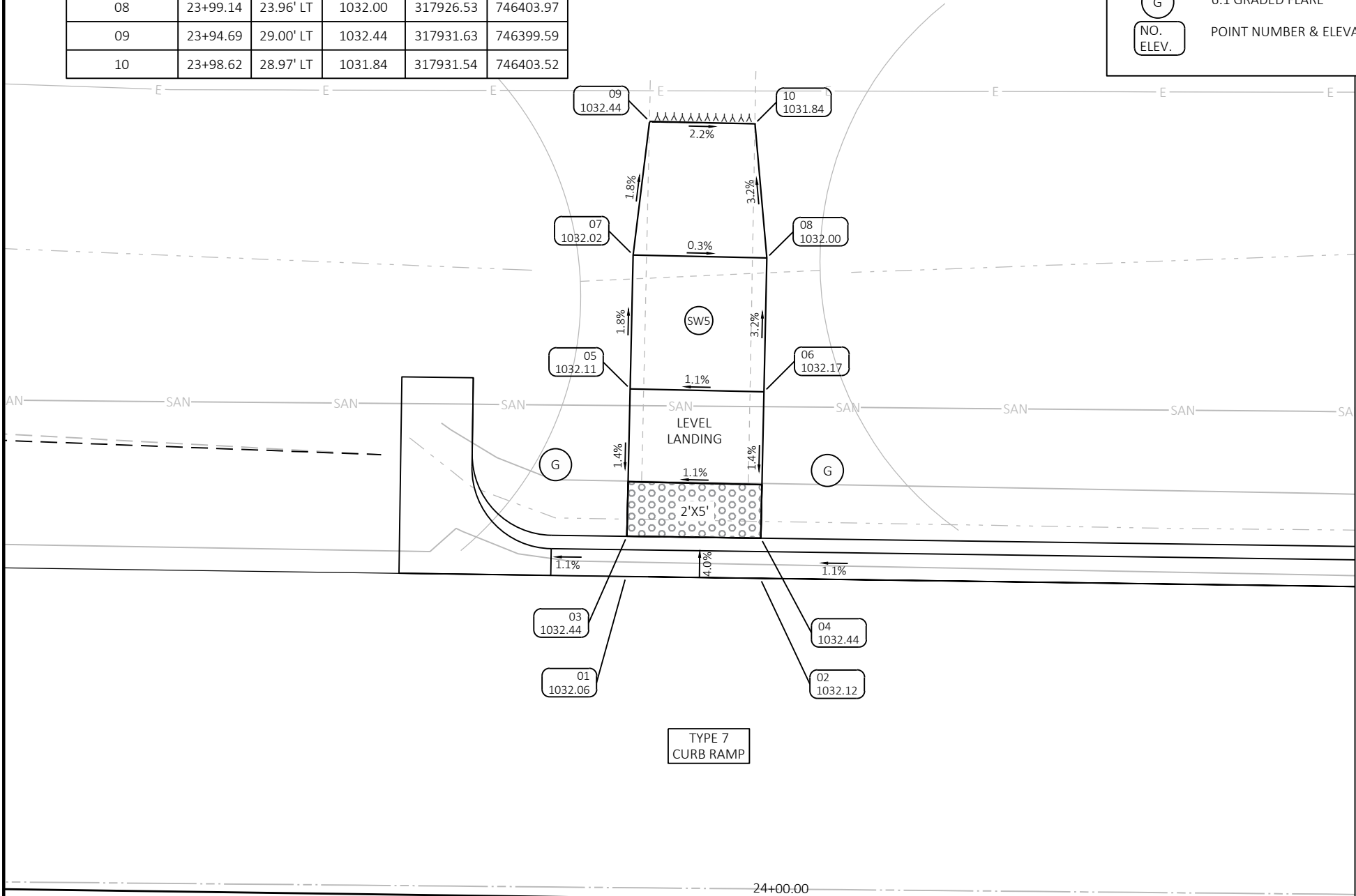
SAWCUT REQ'D (SAWCUTS TO BE AT NEAREST EXISTING JOINT)

DETECTABLE WARNING FIELD

CONCRETE SIDEWALK 5-INCH

6:1 GRADED FLARE

POINT NUMBER & ELEVATION



LEGEND



DIRECTION OF SLOPE



SAWCUT REQ'D (SAWCUTS TO BE AT NEAREST EXISTING JOINT)



DETECTABLE WARNING FIELD



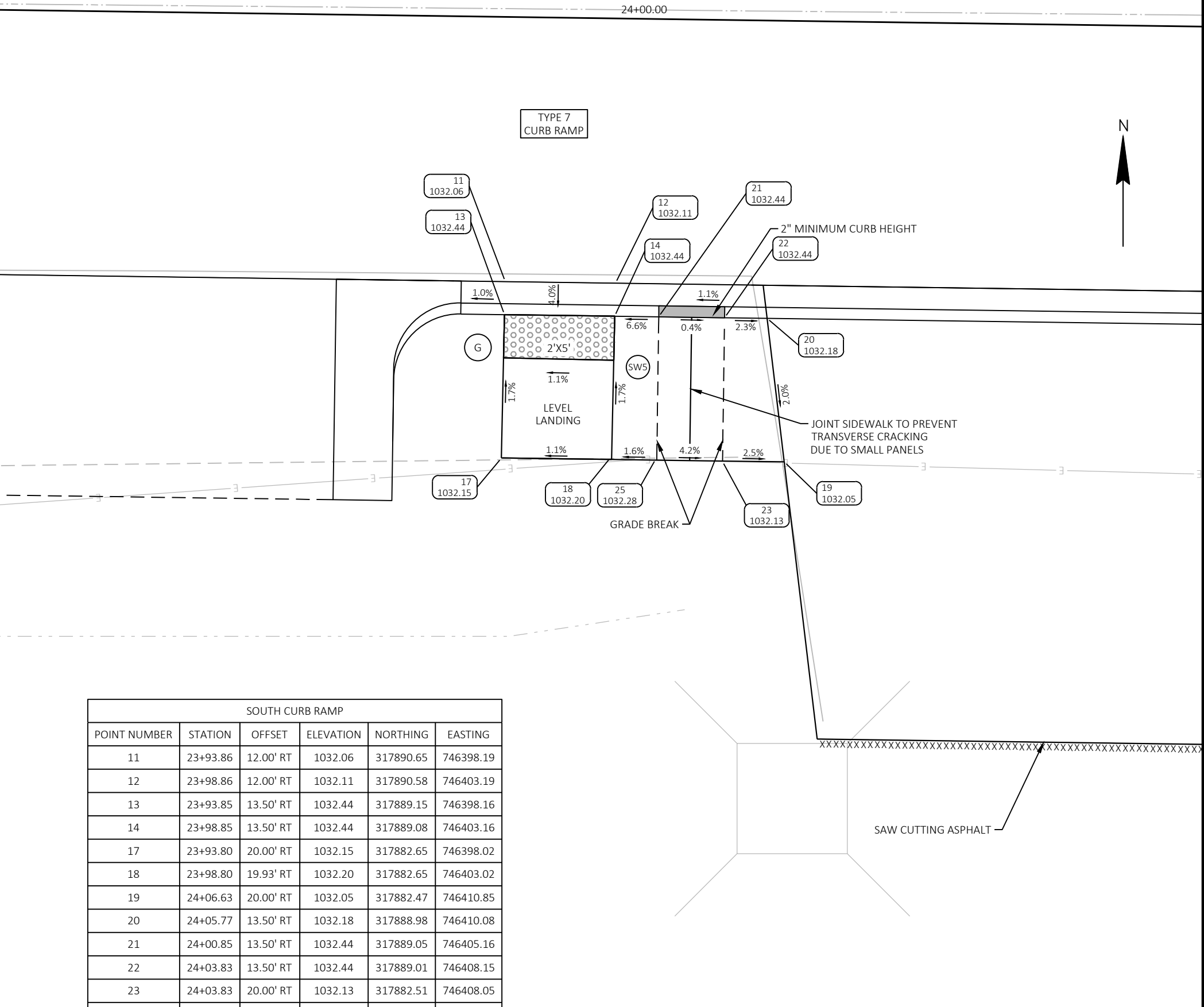
CONCRETE SIDEWALK 5-INCH



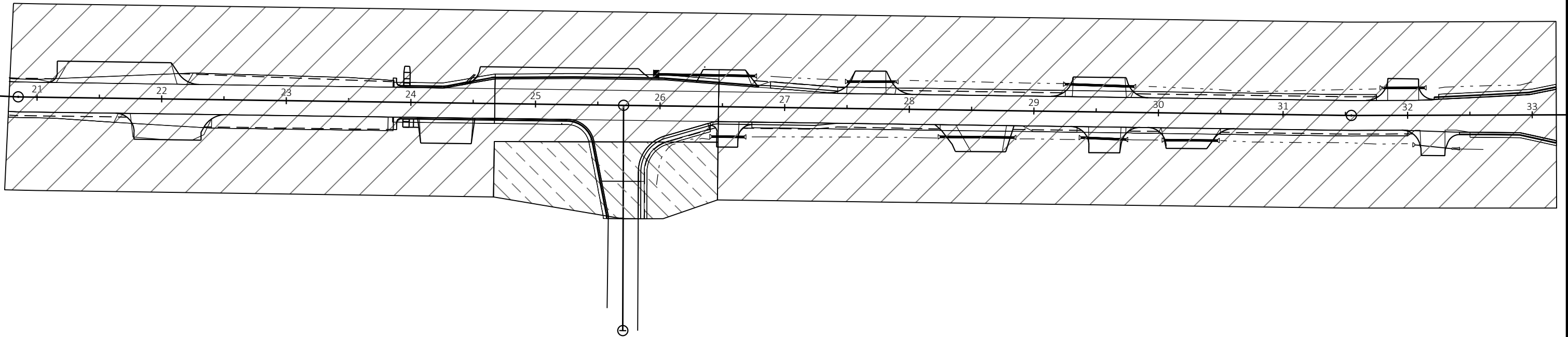
6:1 GRADED FLARE



POINT NUMBER & ELEVATION

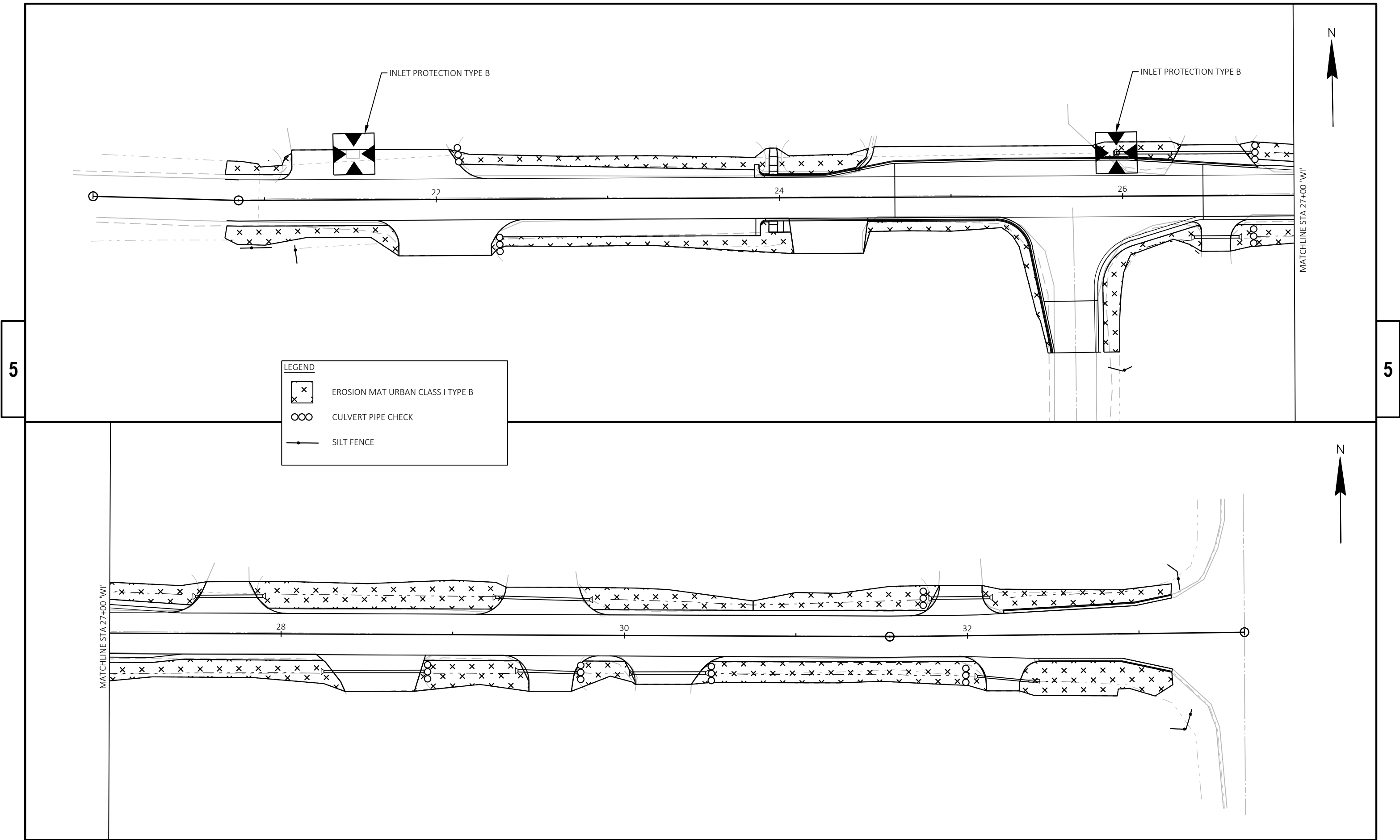


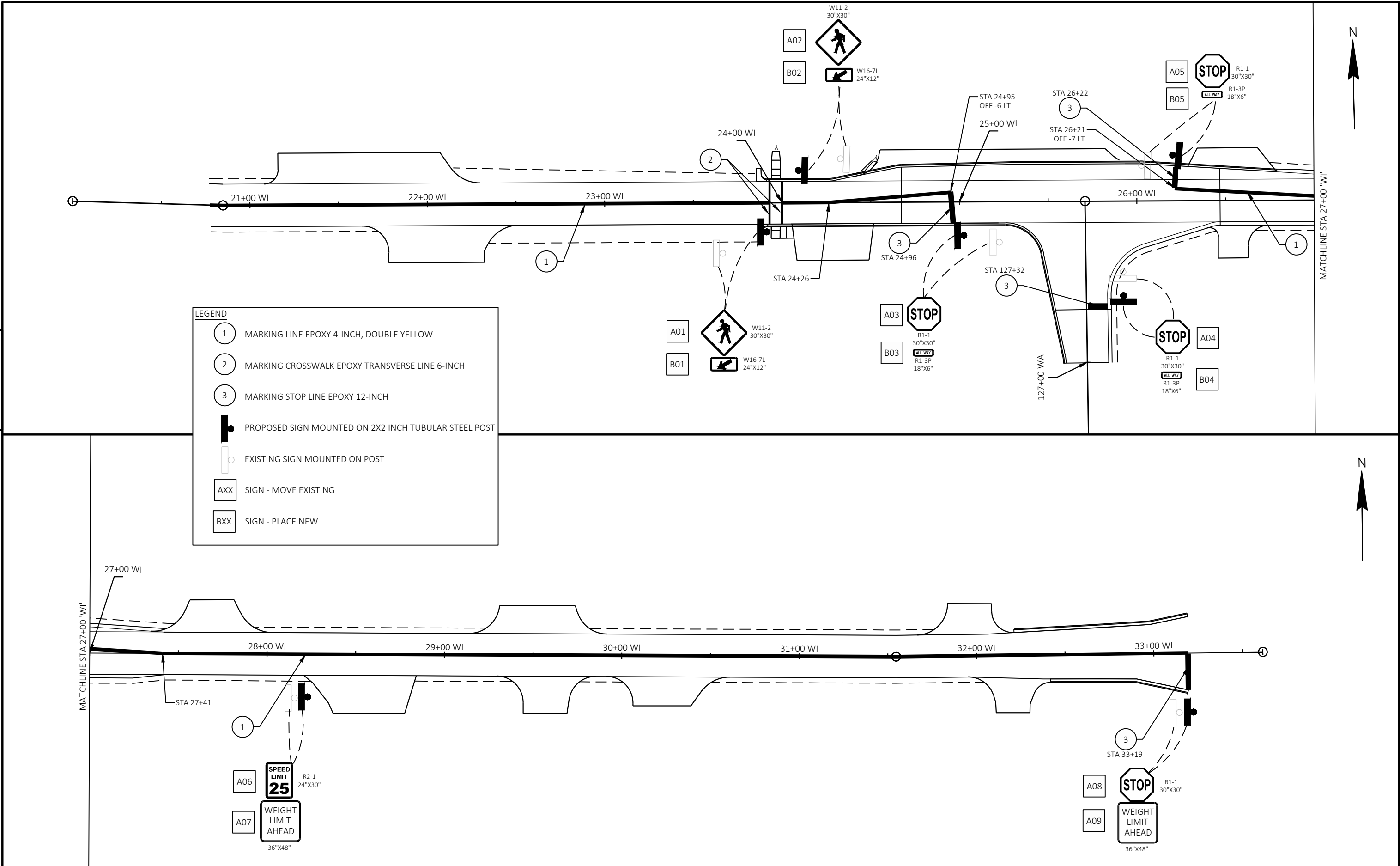
SOUTH CURB RAMP					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
11	23+93.86	12.00' RT	1032.06	317890.65	746398.19
12	23+98.86	12.00' RT	1032.11	317890.58	746403.19
13	23+93.85	13.50' RT	1032.44	317889.15	746398.16
14	23+98.85	13.50' RT	1032.44	317889.08	746403.16
17	23+93.80	20.00' RT	1032.15	317882.65	746398.02
18	23+98.80	19.93' RT	1032.20	317882.65	746403.02
19	24+06.63	20.00' RT	1032.05	317882.47	746410.85
20	24+05.77	13.50' RT	1032.18	317888.98	746410.08
21	24+00.85	13.50' RT	1032.44	317889.05	746405.16
22	24+03.83	13.50' RT	1032.44	317889.01	746408.15
23	24+03.83	20.00' RT	1032.13	317882.51	746408.05



LEGEND

-  DIVISION 1
-  DIVISION 2

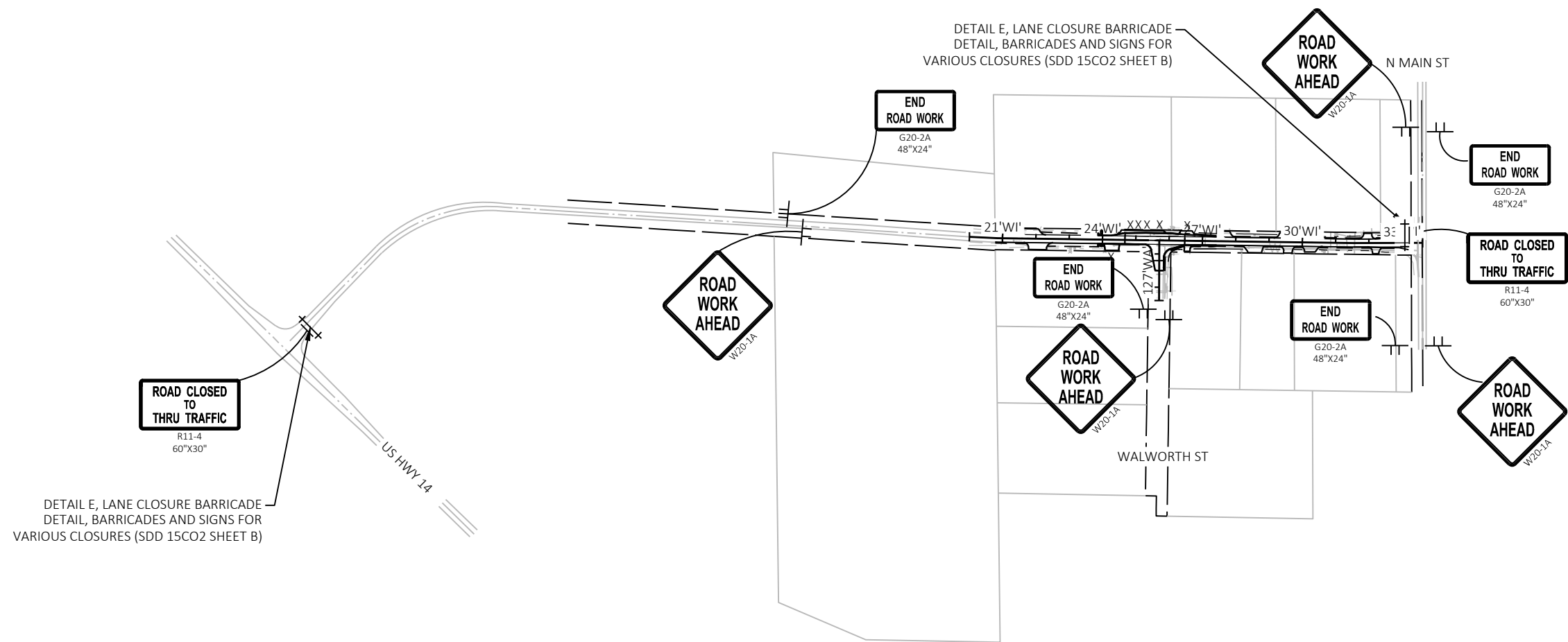


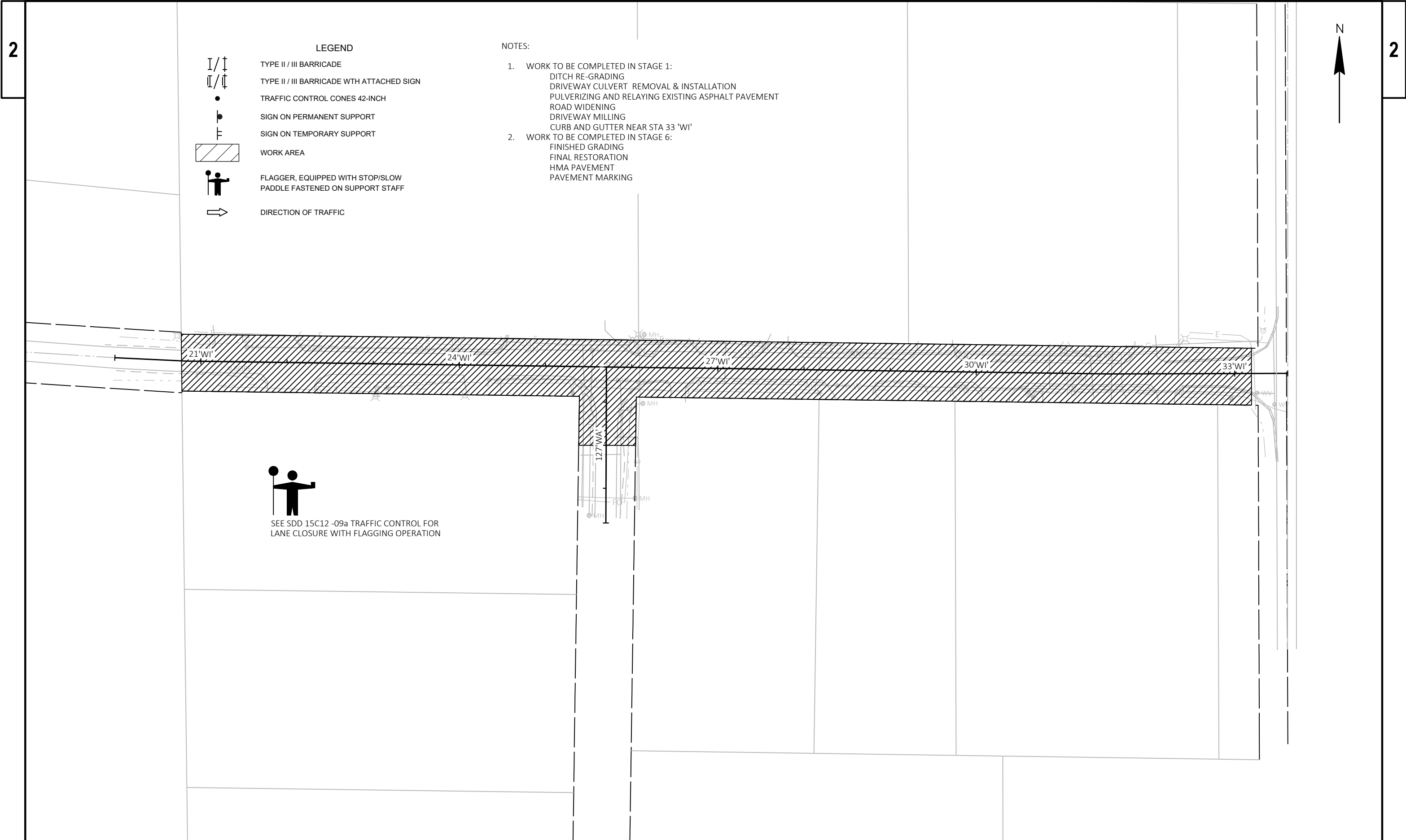




LEGEND	
	TYPE II / III BARRICADE
	TYPE II / III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL CONES 42-INCH
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK AREA

- NOTES:
- SEE CONSTRUCTION STAGING FOR TRAFFIC CONTROL SPECIFIC TO THE STAGE.
 - THIS SHEET SHOWS TRAFFIC CONTROL DEVICES TO BE IN PLACE THROUGHOUT THE DURATION OF THE PROJECT.





LEGEND

-  TYPE II / III BARRICADE
-  TYPE II / III BARRICADE WTH ATTACHED SIGN
-  TRAFFIC CONTROL CONES 42-INCH
-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
-  DIRECTION OF TRAFFIC

NOTES:

- WORK TO BE COMPLETED IN STAGE 1:
 - DITCH RE-GRADING
 - DRIVEWAY CULVERT REMOVAL & INSTALLATION
 - PULVERIZING AND RELAYING EXISTING ASPHALT PAVEMENT
 - ROAD WIDENING
 - DRIVEWAY MILLING
 - CURB AND GUTTER NEAR STA 33 'WI'
- WORK TO BE COMPLETED IN STAGE 6:
 - FINISHED GRADING
 - FINAL RESTORATION
 - HMA PAVEMENT
 - PAVEMENT MARKING



SEE SDD 15C12 -09a TRAFFIC CONTROL FOR
LANE CLOSURE WITH FLAGGING OPERATION

PROJECT NO: 3842-00-70

HWY: WISCONSIN STREET

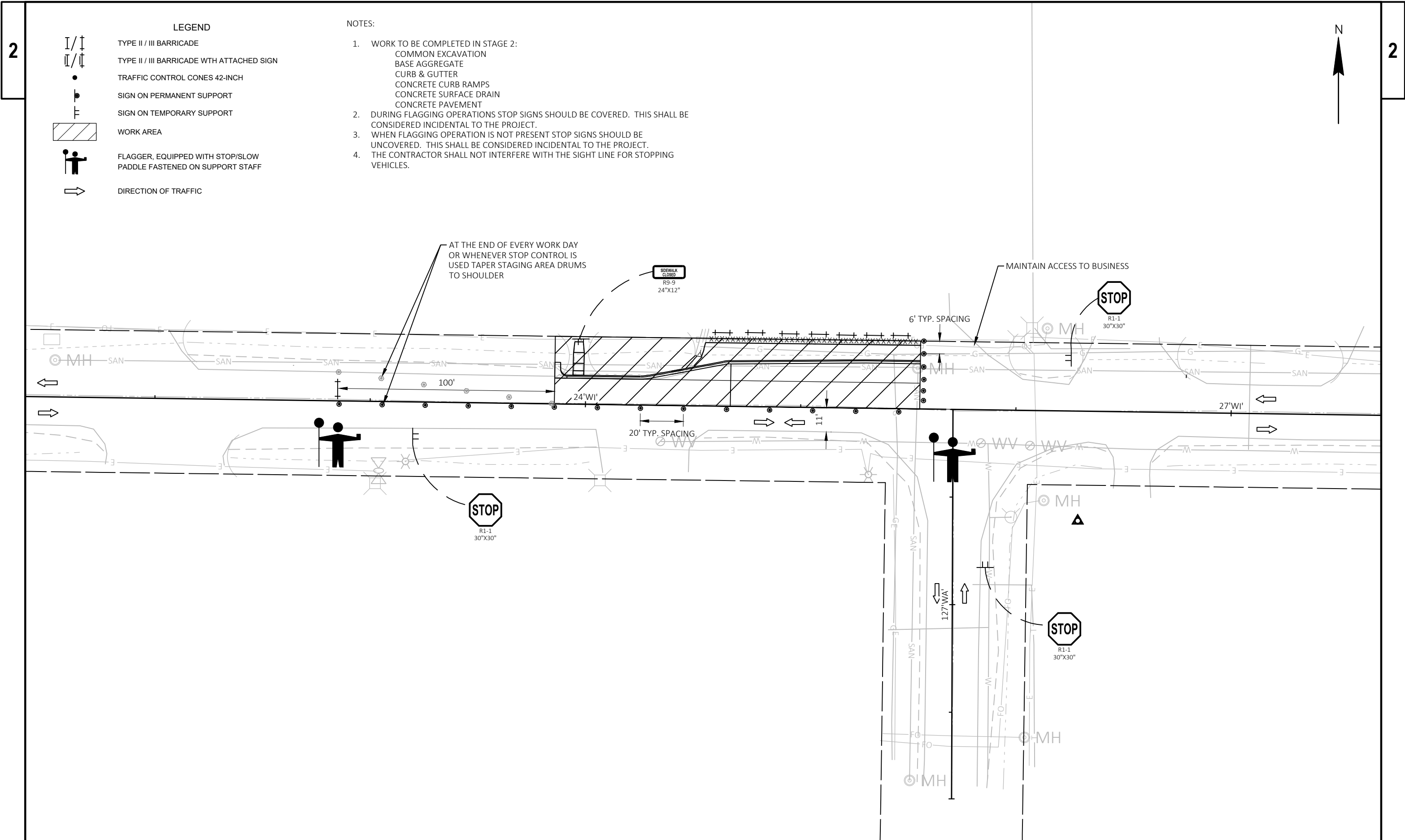
COUNTY: WALWORTH

TRAFFIC CONTROL STAGE 1 & 6

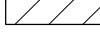
SHEET

17

E

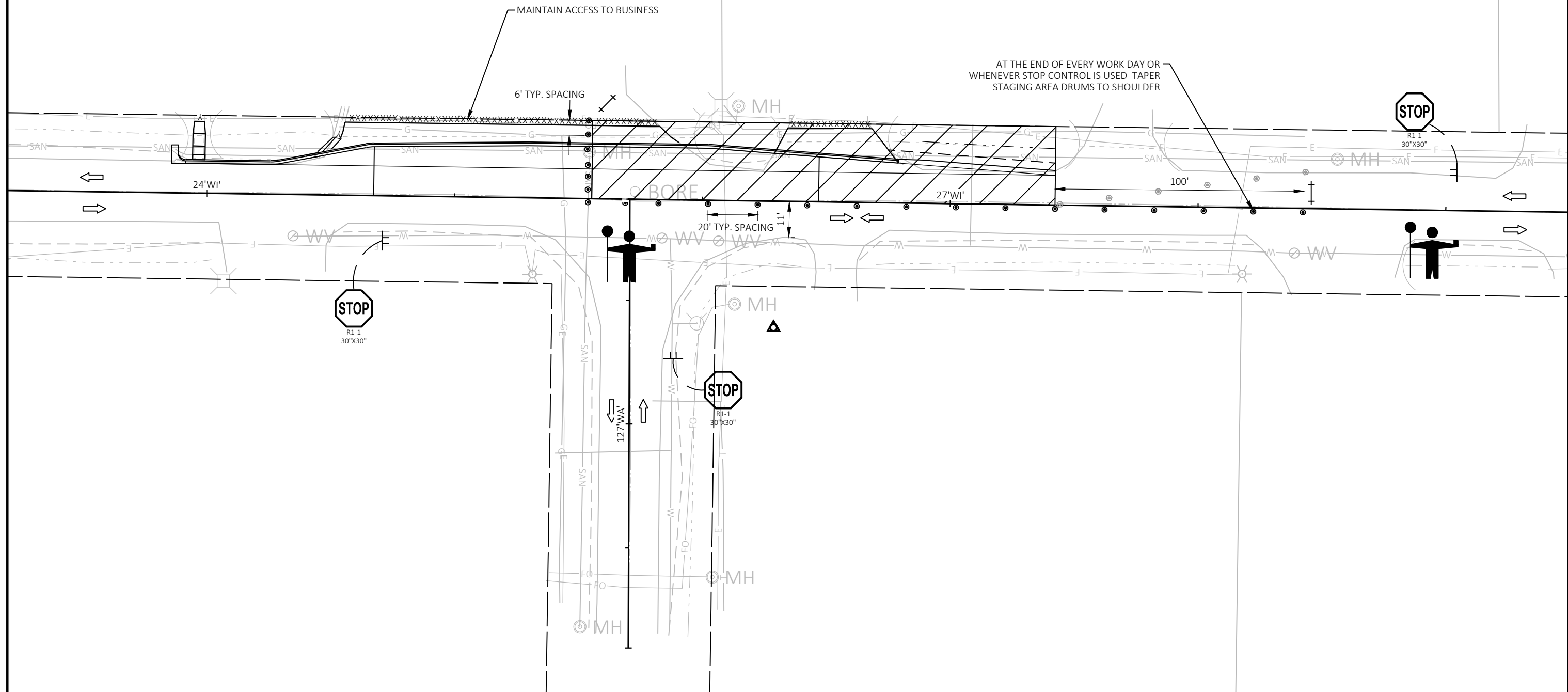


LEGEND

-  TYPE II / III BARRICADE
-  TYPE II / III BARRICADE WITH ATTACHED SIGN
-  TRAFFIC CONTROL CONES 42-INCH
-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
-  DIRECTION OF TRAFFIC

NOTES:

1. WORK TO BE COMPLETED IN STAGE 3:
COMMON EXCAVATION
BASE AGGREGATE
CURB & GUTTER
CONCRETE PAVEMENT
2. DURING FLAGGING OPERATIONS STOP SIGNS SHOULD BE COVERED. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
3. WHEN FLAGGING OPERATION IS NOT PRESENT STOP SIGNS SHOULD BE UNCOVERED. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
4. THE CONTRACTOR SHALL NOT INTERFERE WITH THE SIGH LINE FOR STOPPING VEHICLES.

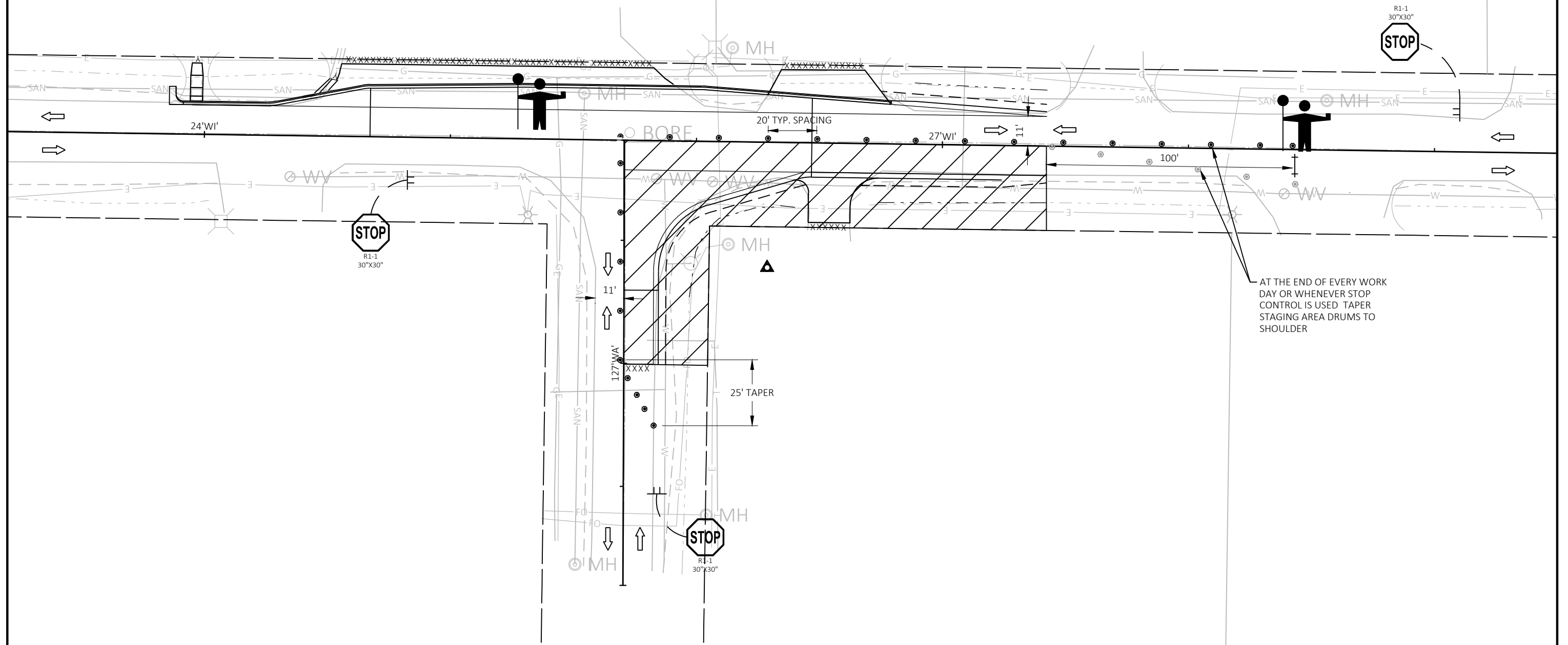


LEGEND

	TYPE II / III BARRICADE
	TYPE II / III BARRICADE WITH ATTACHED SIGN
	TRAFFIC CONTROL CONES 42-INCH
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
	WORK AREA
	FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
	DIRECTION OF TRAFFIC

NOTES:

1. WORK TO BE COMPLETED IN STAGE 4:
COMMON EXCAVATION
BASE AGGREGATE
CONCRETE PAVEMENT
2. DURING FLAGGING OPERATIONS STOP SIGNS SHOULD BE COVERED.
THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
3. WHEN FLAGGING OPERATION IS NOT PRESENT STOP SIGNS SHOULD BE
UNCOVERED. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
4. THE CONTRACTOR SHALL NOT INTERFERE WITH THE SIGH LINE FOR
STOPPING VEHICLES.



PROJECT NO: 3842-00-70

HWY: WISCONSIN STREET

COUNTY: WALWORTH

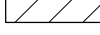
TRAFFIC CONTROL STAGE 4

SHEET

20

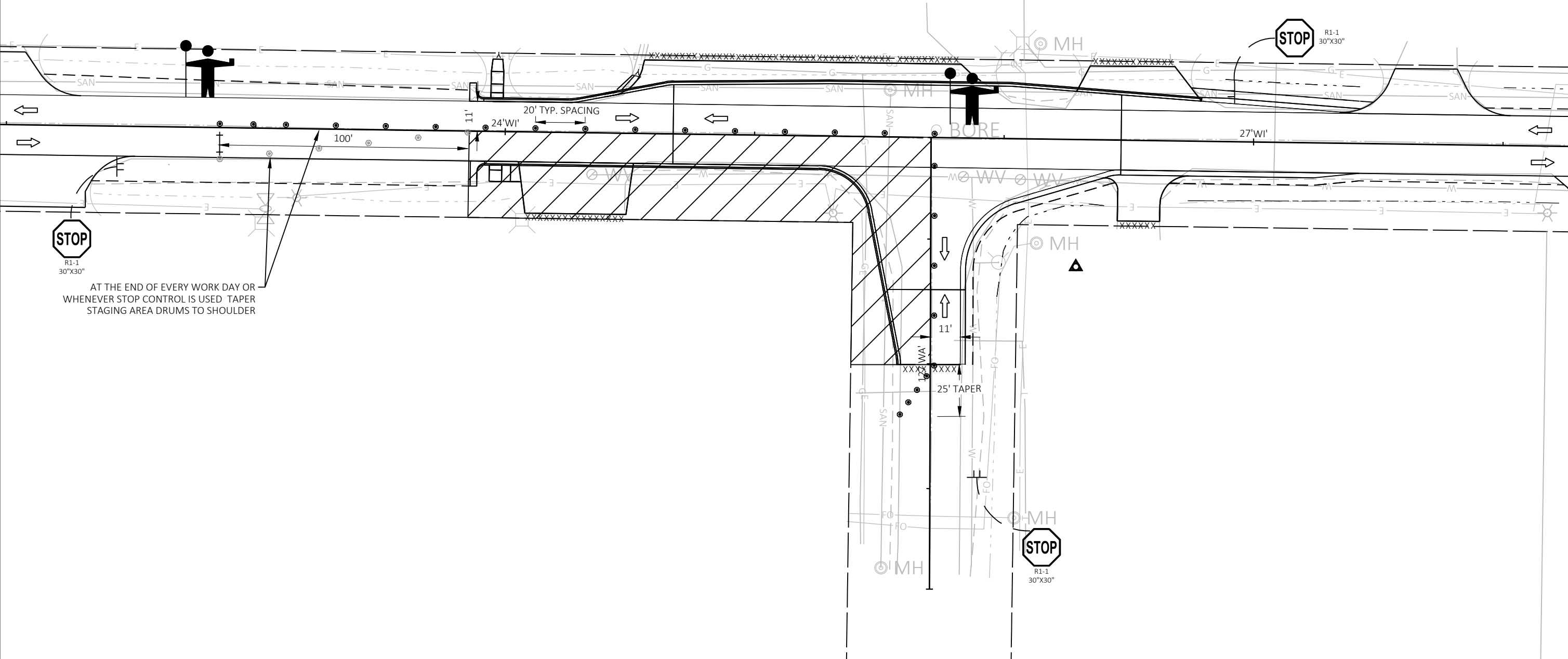
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LEGEND

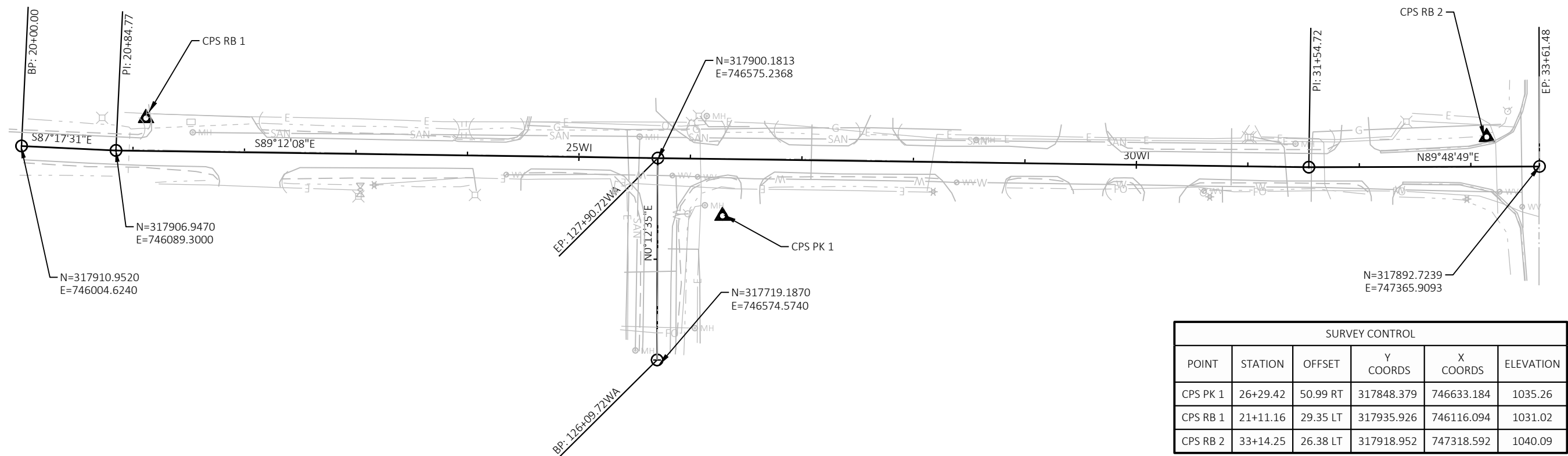
-  TYPE II / III BARRICADE
-  TYPE II / III BARRICADE WTH ATTACHED SIGN
-  TRAFFIC CONTROL CONES 42-INCH
-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
-  DIRECTION OF TRAFFIC

NOTES:

1. WORK TO BE COMPLETED IN STAGE 5:
COMMON EXCAVATION
CURB & GUTTER
CONCRETE CURB RAMPS
CONCRETE SURFACE DRAIN
CONCRETE PAVEMENT
2. DURING FLAGGING OPERATIONS STOP SIGNS SHOULD BE COVERED.
THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
3. WHEN FLAGGING OPERATION IS NOT PRESENT STOP SIGNS SHOULD BE UNCOVERED. THIS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.







SURVEY CONTROL					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CPS PK 1	26+29.42	50.99 RT	317848.379	746633.184	1035.26
CPS RB 1	21+11.16	29.35 LT	317935.926	746116.094	1031.02
CPS RB 2	33+14.25	26.38 LT	317918.952	747318.592	1040.09

Estimate Of Quantities

3842-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	8.000	8.000
0004	204.0150	Removing Curb & Gutter	LF	258.000	258.000
0006	204.0155	Removing Concrete Sidewalk	SY	6.000	6.000
0008	205.0100	Excavation Common	CY	747.000	747.000
0010	208.0100	Borrow	CY	26.000	26.000
0012	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 3842-00-70	EACH	1.000	1.000
0014	211.0201	Prepare Foundation for Concrete Pavement (project) 01. 3842-00-70	EACH	1.000	1.000
0016	213.0100	Finishing Roadway (project) 01. 3842-00-70	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	400.000	400.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	600.000	600.000
0022	325.0100	Pulverize and Relay	SY	5,838.000	5,838.000
0024	415.1080	Concrete Pavement HES 8-Inch	SY	936.000	936.000
0026	455.0605	Tack Coat	GAL	896.000	896.000
0028	460.2000	Incentive Density HMA Pavement	DOL	556.800	556.800
0030	460.7223	HMA Pavement 3 HT 58-28 S	TON	520.000	520.000
0032	460.7224	HMA Pavement 4 HT 58-28 S	TON	347.000	347.000
0034	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	201.000	201.000
0036	521.1704	Apron Endwalls for Pipe Arch Sloped Side Drains Steel 17x13-Inch 4 to 1	EACH	20.000	20.000
0038	521.3717	Pipe Arch Corrugated Steel 17x13-Inch	LF	401.000	401.000
0040	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	299.000	299.000
0042	601.0407	Concrete Curb & Gutter 18-Inch Type D	LF	215.000	215.000
0044	602.0410	Concrete Sidewalk 5-Inch	SF	148.000	148.000
0046	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	20.000	20.000
0048	602.3010	Concrete Surface Drains	CY	3.000	3.000
0050	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0052	611.3230	Inlets 2x3-FT	EACH	1.000	1.000
0054	618.0100	Maintenance and Repair of Haul Roads (project) 01. 3842-00-70	EACH	1.000	1.000
0056	619.1000	Mobilization	EACH	1.000	1.000
0058	624.0100	Water	MGAL	23.000	23.000
0060	625.0100	Topsoil	SY	2,705.000	2,705.000
0062	627.0200	Mulching	SY	319.000	319.000
0064	628.1504	Silt Fence	LF	105.000	105.000
0066	628.1520	Silt Fence Maintenance	LF	105.000	105.000
0068	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0070	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0072	628.2008	Erosion Mat Urban Class I Type B	SY	2,705.000	2,705.000
0074	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0076	628.7555	Culvert Pipe Checks	EACH	36.000	36.000
0078	629.0210	Fertilizer Type B	CWT	5.000	5.000
0080	630.0140	Seeding Mixture No. 40	LB	134.000	134.000
0082	630.0200	Seeding Temporary	LB	68.000	68.000
0084	630.0500	Seed Water	MGAL	55.000	55.000
0086	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	7.000	7.000
0088	637.2210	Signs Type II Reflective H	SF	5.000	5.000
0090	637.2230	Signs Type II Reflective F	SF	4.000	4.000
0092	638.2102	Moving Signs Type II	EACH	9.000	9.000
0094	638.3000	Removing Small Sign Supports	EACH	7.000	7.000
0096	642.5001	Field Office Type B	EACH	1.000	1.000
0098	643.0420	Traffic Control Barricades Type III	DAY	350.000	350.000

Estimate Of Quantities

3842-00-70

Line	Item	Item Description	Unit	Total	Qty
0100	643.0900	Traffic Control Signs	DAY	1,344.000	1,344.000
0102	643.1000	Traffic Control Signs Fixed Message	SF	56.250	56.250
0104	643.1050	Traffic Control Signs PCMS	DAY	8.000	8.000
0106	643.1070	Traffic Control Cones 42-Inch	DAY	1,875.000	1,875.000
0108	643.5000	Traffic Control	EACH	1.000	1.000
0110	645.0130	Geotextile Type R	SY	7.000	7.000
0112	646.1020	Marking Line Epoxy 4-Inch	LF	2,216.000	2,216.000
0114	646.6020	Marking Stop Line Epoxy 12-Inch	LF	61.000	61.000
0116	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	48.000	48.000
0118	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000
0120	650.4500	Construction Staking Subgrade	LF	229.000	229.000
0122	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	707.000	707.000
0124	650.6000	Construction Staking Pipe Culverts	EACH	10.000	10.000
0126	650.7000	Construction Staking Concrete Pavement	LF	229.000	229.000
0128	650.9000	Construction Staking Curb Ramps	EACH	2.000	2.000
0130	650.9911	Construction Staking Supplemental Control (project) 01. 3842-00-70	EACH	1.000	1.000
0132	650.9920	Construction Staking Slope Stakes	LF	719.000	719.000
0134	690.0150	Sawing Asphalt	LF	663.000	663.000
0136	690.0250	Sawing Concrete	LF	13.000	13.000
0138	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	600.000	600.000
0140	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,200.000	1,200.000
0142	SPV.0060	Special 01. Adjusting Sanitary Manhole Covers	EACH	4.000	4.000
0144	SPV.0060	Special 02. Adjusting Water Service Curb Stops	EACH	5.000	5.000
0146	SPV.0060	Special 03. Adjusting Water Valve Boxes	EACH	2.000	2.000
0148	SPV.0075	Special 01. Street Sweeping	HRS	50.000	50.000
0150	SPV.0090	Special 01. Concrete Curb and Gutter 24-Inch Type D	LF	193.000	193.000

REMOVALS

203.0100 REMOVING SMALL PIPE CULVERTS EACH						
STATION	TO	STATION		LOCATION		REMARKS
26+31	-	26+75	LT	WISCONSIN ST	1	DRIVEWAY
26+40	-	26+71	RT	WISCONSIN ST	1	DRIVEWAY
27+52	-	27+86	LT	WISCONSIN ST	1	DRIVEWAY
28+27	-	28+84	RT	WISCONSIN ST	1	DRIVEWAY
29+26	-	29+81	LT	WISCONSIN ST	1	DRIVEWAY
29+37	-	29+71	RT	WISCONSIN ST	1	DRIVEWAY
31+79	-	32+14	LT	WISCONSIN ST	1	DRIVEWAY
32+05	-	32+35	RT	WISCONSIN ST	1	DRIVEWAY
TOTAL 0010					8	

204.0150 REMOVING CURB & GUTTER LF						
STATION	TO	STATION		LOCATION		REMARKS
23+86	-	24+53	LT	WISCONSIN ST	77	NOVARES DRIVEWAY
32+19	-	33+19	LT	WISCONSIN ST	100	END OF PROJECT
32+39	-	33+19	RT	WISCONSIN ST	81	END OF PROJECT
TOTAL 0010					258	

204.0155 REMOVING CONCRETE SIDEWALK SY						
STATION	TO	STATION		LOCATION		REMARKS
23+95	-	23+99	LT	WISCONSIN ST	6	NOVARES ENTERANCE
TOTAL 0010					6	

EARTHWORK

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	EXPANDED EBS BACKFILL (11)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
			CUT (2)	EBS EXCAVATION (3)			FACTOR 1.30		FACTOR 1.25				
DIVISION 1	20+78'WI' - 33+19'WI'	Wisconsin Street	664	19	285	379	24	60	75	304	323	19	
DIVISION 1 SUBTOTAL			664	19	285	379	24	60	75	304	323	19	
DIVISION 2													
	127+00'WA' - 127+61'WA'	Walworth Street	57	7	16	41	9	3	4	37	44	7	
DIVISION 2 SUBTOTAL			57	7	16	41	9	3	4	37	44	7	
GRAND TOTAL			721	26	301	420	33	63	79	341	367	26	
TOTAL COMMON EXC			747										

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH BORROW MATERIAL, OR SALVAGED PAVEMENT MATERIAL. EBS EXCAVATION IS NOT USABLE IN FILL SLOPES
(4) SALVAGED PAVEMENT MATERIAL MAY BE USE AS BASE AGGREGATE DENSE 3/4-INCH
(5) AVAILABLE MATERIAL = CUT - SALVAGED PAVEMENT MATERIAL
(11) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH BORROW MATERIAL. EBS BACKFILL FACTOR = 1.25. ITEM NUMBER 208.1100
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

ROADWAY, BASE, & FOUNDATION ITEMS

						305.0110 BASE AGGREGATE DENSE 3/4-INCH	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH	624.0100 WATER
STATION	TO	STATION	LOCATION	TON	TON	MGAL		
20+77	-	23+86	LT WISCONSIN ST	67		2		
20+77	-	23+86	RT WISCONSIN ST	82		2		
26+75	-	31+75	LT WISCONSIN ST	84		2		
26+54	-	32+20	RT WISCONSIN ST	90		2		
23+95			LT WISCONSIN ST	19		1		
23+95			RT WISCONSIN ST	19		1		
20+90	-	22+11	WISCONSIN ST	39		1		
23+50	-	26+47	CL WISCONSIN ST		213	4		
23+20	-	33+19	LT WISCONSIN ST		47	1		
32+20	-	33+19	RT WISCONSIN ST		47	1		
			LT WALWORTH ST		148	3		
			RT WALWORTH ST		145	3		
TOTAL 0010				400	600	23		

						325.0100 PULVERIZE AND RELAY SY	REMARKS
STATION	TO	STATION	LOCATION				
20+77	-	23+88	LT WISCONSIN ST			1,298	
21+14	-	22+15	RT WISCONSIN ST			128	DRIVEWAY
21+75	-	22+34	CL WISCONSIN ST			74	DRIVEWAY
23+88	-	27+00	RT WISCONSIN ST			1,448	
24+06	-	24+51	LT WISCONSIN ST			72	DRIVEWAY
24+47	-	25+99	LT WISCONSIN ST			205	DRIVEWAY
26+27	-	26+88	RT WISCONSIN ST			75	DRIVEWAY
26+44	-	26+68	RT WISCONSIN ST			31	DRIVEWAY
27+00	-	32+19	CL WISCONSIN ST			28	DRIVEWAY
27+00	-	33+19	LT WISCONSIN ST			2,041	
27+41	-	27+93	RT WISCONSIN ST			64	DRIVEWAY
28+23	-	28+83	LT WISCONSIN ST			103	DRIVEWAY
29+20	-	29+82	RT WISCONSIN ST			76	DRIVEWAY
29+38	-	29+74	RT WISCONSIN ST			50	DRIVEWAY
30+03	-	30+48	LT WISCONSIN ST			46	DRIVEWAY
31+77	-	32+19	RT WISCONSIN ST			51	DRIVEWAY
32+04	-	32+39	CL WISCONSIN ST			48	DRIVEWAY
TOTAL 0010						5,838	

		211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVEMENT (PROJECT) (01. 3842-00-70)	211.0201.01 PREPARE FOUNDATION FOR CONCRETE PAVEMENT (PROJECT) (01. 3842-00-70)
LOCATION	EACH	EACH	
PROJECT	1	1	
TOTAL 0010	1	1	

PAVEMENT ITEMS

						455.0605 TACK COAT	460.7223 HMA PAVEMENT 3 HT 58-28 S	460.7224 HMA PAVEMENT 4 HT 58-28 S	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
STATION	TO	STATION	LOCATION	GAL	TON	TON	TON	TON	
20+77	-	24+67	CL WISCONSIN ST	233	325				
20+77	-	24+67	CL WISCONSIN ST	233		217			
21+08	-	22+30	LT WISCONSIN ST	24				32	
21+63	-	22+53	RT WISCONSIN ST	17				24	
24+06	-	24+51	RT WISCONSIN ST	12				16	
24+49	-	25+89	LT WISCONSIN ST	14				19	
26+30	-	26+79	LT WISCONSIN ST	7				8	
26+39	-	26+74	RT WISCONSIN ST	5				7	
26+47	-	33+19	CL WISCONSIN ST	128	178				
26+47	-	33+19	CL WISCONSIN ST	128			119		
27+35	-	28+03	LT WISCONSIN ST	10				13	
28+21	-	28+88	RT WISCONSIN ST	15				21	
29+14	-	29+92	LT WISCONSIN ST	12				16	
29+30	-	29+85	RT WISCONSIN ST	9				12	
29+92	-	30+61	RT WISCONSIN ST	10				13	
31+67	-	32+19	LT WISCONSIN ST	8				10	
31+95	-	32+39	RT WISCONSIN ST	7				10	
127+00	-	127+30	CL WISCONSIN ST	12	17				
127+00	-	127+30	CL WISCONSIN ST	12			11		
TOTAL 0010				896	520	347		201	

						415.1080 CONCRETE PAVEMENT HES 8-INCH	REMARKS
STATION	TO	STATION	LOCATION	SY			
24+67	-	25+71	WISCONSIN ST	201			STAGE 2
25+71	-	26+47	WISCONSIN ST	207			STAGE 3
25+71	-	26+47	WISCONSIN ST	261			STAGE 4
24+67	-	25+71	WISCONSIN ST	267			STAGE 5
TOTAL 0010				936			
		601.0405	601.0407	SPV.0090.01 SPECIAL (01. CONCRETE CURB AND GUTTER 24-INCH TYPE D)			
		CONCRETE CURB & GUTTER 18-INCH TYPE A	CONCRETE CURB & GUTTER 18-INCH TYPE D				
STATION	TO	STATION	LOCATION	LF	LF	LF	REMARKS
24+46	-	24+53	LT WISCONSIN ST			12	MATCH NOVARES DRIVEWAY C&G
32+19	-	33+19	LT WISCONSIN ST			100	
32+39	-	33+19	RT WISCONSIN ST			81	
23+91	-	24+67	LT WISCONSIN ST		77		
23+91	-	24+67	RT WISCONSIN ST		75		
24+67	-	26+47	LT WISCONSIN ST	180			
24+67	-	25+53	RT WISCONSIN ST	119			
25+53	-	25+59	RT WISCONSIN ST		31		SW WISCONSIN & WALWORTH
26+47	-	26+79	LT WISCONSIN ST		32		
TOTAL 0010				299	215	193	

3

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DRAINAGE ITEMS

				521.1012	521.1704	521.3112	521.3717	611.0612	611.3230	
				APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS STEEL 17X13-INCH 4 TO 1	CULVERT PIPE CORRUGATED STEEL 12-INCH	PIPE ARCH CORRUGATED STEEL 17X13-INCH	INLET COVERS TYPE C	INLETS 2X3-FT	
STATION	TO	STATION	LOCATION	EACH	EACH	LF	LF	EACH	EACH	REMARKS
25+95			LT WISCONSIN ST					1	1	USE SHALLOW COVER
25+97	-	26+29	LT WISCONSIN ST		2		32			
26+29	-	26+76	LT WISCONSIN ST		2		47			
26+42	-	26+68	RT WISCONSIN ST		2		26			
27+50	-	27+89	LT WISCONSIN ST		2		39			
28+25	-	28+84	RT WISCONSIN ST		2		59			
29+25	-	29+80	LT WISCONSIN ST		2		55			
29+38	-	29+74	RT WISCONSIN ST		2		36			
30+05	-	30+48	RT WISCONSIN ST		2		43			
31+79	-	32+13	LT WISCONSIN ST		2		34			
32+06	-	32+36	RT WISCONSIN ST	2		30				
TOTAL 0010				2	18	30	371	1	1	

CONCRETE SIDEWALK & CURB RAMP ITEMS

		602.0410		602.0515				602.3010		645.0130	
		CONCRETE SIDEWALK 5-INCH SF		CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF				CONCRETE SURFACE DRAINS CY		GEOTEXTILE TYPE R SY	
STATION	TO	STATION	LOCATION								
23+94	-	23+99	LT WISCONSIN ST	73		10		1		3	
23+94	-	24+07	RT WISCONSIN ST	75		10		2		4	
TOTAL 0010				148		20		3		7	

STATION	TO	STATION	LOCATION	CY	SY
23+86	-	23+92	RT WISCONSIN ST	1	3
23+86	-	23+92	LT WISCONSIN ST	2	4
TOTAL 0010				3	7

EROSION CONTROL ITEMS

		628.1504		628.1520			
		SILT FENCE		SILT FENCE MAINTENANCE			
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	
0010	20+64	-	21+02	WISCONSIN ST	19	19	
0010	21+19	-	21+19	WISCONSIN ST	11	11	
0010	25+91	-	26+05	WISCONSIN ST	15	15	
0010	33+17	-	33+24	WISCONSIN ST	18	18	
0010	33+18	-	33+00	WISCONSIN ST	21	21	
				UNDISTRIBUTED	21	21	
TOTAL 0010					105	105	

		628.1905		628.1910			
		MOBILIZATIONS EROSION CONTROL EACH		MOBILIZATIONS EMERGENCY EROSION CONTROL EACH			
STATION	TO	STATION	LOCATION				
BOP	-	EOP	STAGE 1	1			
BOP	-	EOP	STAGE 2	1			
BOP	-	EOP	STAGE 3	1			
BOP	-	EOP	STAGE 4	1			
BOP	-	EOP	STAGE 5	1			
BOP	-	EOP	STAGE 6	1			
			PROJECT			3	
TOTAL 0010				6		3	

		628.7555	
		CULVERT PIPE CHECKS EACH	
STATION	LOCATION		
20+97	WISCONSIN ST	3	
22+13	WISCONSIN ST	3	
22+37	WISCONSIN ST	3	
26+76	WISCONSIN ST	3	
26+77	WISCONSIN ST	3	
27+90	WISCONSIN ST	3	
28+85	WISCONSIN ST	3	
29+75	WISCONSIN ST	3	
29+81	WISCONSIN ST	3	
30+51	WISCONSIN ST	3	
31+75	WISCONSIN ST	3	
31+99	WISCONSIN ST	3	
TOTAL 0010		36	

		628.7010	
		INLET PROTECTION TYPE B	
STATION	LOCATION		
25+95	LT WISCONSIN ST	1	
21+50	LT WISCONSIN ST	1	
TOTAL 0010		2	

3

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EROSION CONTROL ITEMS CONTINUED

					RESTORATION ITEMS						
					625.0100	627.0200	628.2008 EROSION MAT URBAN CLASS I	629.0210	630.0140	630.0200	630.0500
					TOPSOIL	MULCHING	TYPE B	FERTILIZER TYPE B	SEEDING MIXTURE	SEEDING	SEED WATER
STATION	TO	STATION		LOCATION	SY	SY	SY	CWT	NO. 40	TEMPORARY	MGAL
									LB	LB	
20+78	-	21+78	RT	WISCONSIN ST	99	10	99	0.2	5	1	2
22+07	-	23+95	LT	WISCONSIN ST	137	14	137	0.2	7	1	3
22+32	-	24+08	RT	WISCONSIN ST	138	14	138	0.2	7	1	3
23+99	-	24+52	LT	WISCONSIN ST	58	6	58	0.1	3	1	2
24+49	-	25+58	RT	WISCONSIN ST	86	9	86	0.2	4	1	2
25+82	-	26+34	LT	WISCONSIN ST	47	5	47	0.1	3	1	1
25+88	-	26+46	RT	WISCONSIN ST	94	9	94	0.2	5	1	2
26+63	-	28+37	RT	WISCONSIN ST	208	21	208	0.3	10	1	4
26+68	-	27+56	LT	WISCONSIN ST	95	10	95	0.2	5	1	2
28+78	-	29+45	RT	WISCONSIN ST	109	11	109	0.2	5	1	3
29+69	-	30+06	RT	WISCONSIN ST	43	4	43	0.1	2	1	1
29+74	-	30+75	LT	WISCONSIN ST	116	12	116	0.2	6	1	2
30+39	-	32+11	RT	WISCONSIN ST	232	23	232	0.3	11	1	4
32+09	-	33+19	LT	WISCONSIN ST	117	12	117	0.2	6	1	2
32+30	-	33+19	RT	WISCONSIN ST	171	17	171	0.3	8	1	3
20+77	-	21+16	LT	WISCONSIN ST	37	4	37	0.1	2	1	1
27+81	-	29+31	LT	WISCONSIN ST	247	25	247	0.4	12	1	5
30+75	-	31+84	LT	WISCONSIN ST	130	13	130	0.2	6	1	2
UNDISTRIBUTED					541	100	541	0.9	27	50	11
TOTAL 0010					2,705	319	2,705	5	134	68	55

PERMANENT SIGNING ITEMS

				634.0814	637.2210	637.2230	638.2102	638.3000		
				SIGN NO.	POSTS TUBULAR STEEL 2X2-INCH X 14-FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	MOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
STATION		LOCATION								SIGN CODE
										REMARKS
23+50	RT	WISCONSIN ST	A01	1				1	1	W11-2
23+50	RT	WISCONSIN ST	B01				2.0			W16-7L
24+50	LT	WISCONSIN ST	A02	1				1	1	W11-2
24+50	LT	WISCONSIN ST	B02				2.0			W16-7L
25+00	RT	WISCONSIN ST	A03	1				1	1	R1-1
25+00	RT	WISCONSIN ST	B03			1.5				R1-3P
127+32	RT	WISCONSIN ST	A04	1				1	1	R1-1
127+32	RT	WISCONSIN ST	B04			1.5				R1-3P
26+22	LT	WISCONSIN ST	A05	1				1	1	R1-1
26+22	LT	WISCONSIN ST	B05			1.5				R1-3P
26+05	RT	WISCONSIN ST	A06	1				1	1	R2-1
26+05	RT	WISCONSIN ST	A07					1		"WEIGHT LIMIT AHEAD"
33+19	RT	WISCONSIN ST	A08	1				1	1	R1-1
33+19	RT	WISCONSIN ST	A09					1		"WEIGHT LIMIT AHEAD"
TOTAL 0010					7	5	4	9	7	

TRAFFIC CONTROL ITEMS

LOCATION	643.0420	643.1050	643.1070	643.5000
	TRAFFIC CONTROL BARRICADES TYPE III DAY	TRAFFIC CONTROL SIGNS PCMS DAY	TRAFFIC CONTROL CONES 42-INCH DAY	TRAFFIC CONTROL EACH
US HWY 14 & WISCONSIN ST	75	8		
WISCONSIN ST & N MAIN ST	75			
STAGE 2 WORK AREA	128		400	
STAGE 3 WORK AREA	26		325	
STAGE 4 WORK AREA	29		725	
STAGE 5 WORKA AREA	17		425	
PROJECT				1
TOTAL 0010	350	8	1,875	1

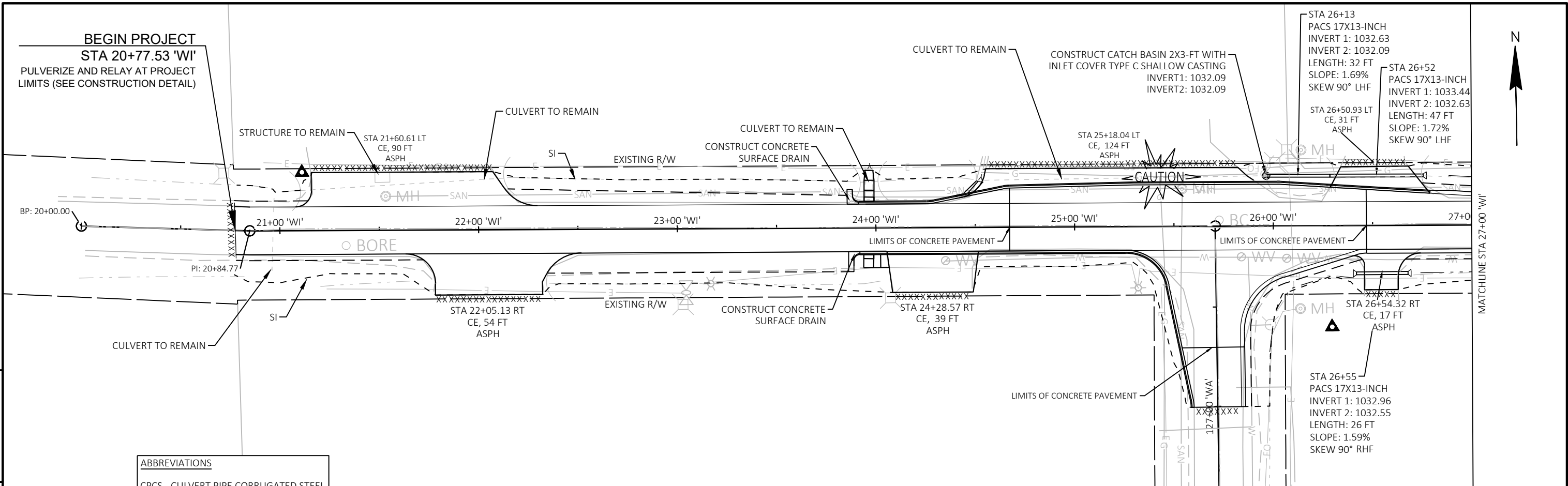
TEMPORARY TRAFFIC CONTROL BY SHEET, CODE, SIZE & STAGE

SHOWN ON SHEET NUMBER	SIGN CODE	SIGN SIZE W" X H"	NUMBER IN SERVICE	USE IN STAGE	APPROX. STAGE LENGTH DAYS	643.0900	643.1000	REMARKS
						TRAFFIC CONTROL SIGNS DAYS	TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	
026001-tc	G20-2A	48 X 24	3	DURATION	75	225		
026001-tc	W20-1A	STD	4	DURATION	75	300		
026001-tc	R11-4	60 X 30	2	DURATION	75	150		
026102-s2	R1-1	30 X 30	3	STAGE 2	16	48		
026102-s2	R9-9	24 X 12	1	STAGE 2	16	16		
026103-s3	R1-1	30 X 30	3	STAGE 3	13	39		
026104-s4	R1-1	30 X 30	3	STAGE 4	13	39		
026105-s5	R1-1	30 X 30	3	STAGE 5	17	51		
027001-dt	CUSTOM	30 X 18	15	STAGE 5	17		56.25	"WISCONSIN STREET"
027007-dt	M4-4	24 X 12	15	STAGE 5	17	255		
027001-dt	M4-8A	24 X 18	2	STAGE 5	17	34		
027001-dt	M4-9L	30 X 24	5	STAGE 5	17	85		
027001-dt	M4-9R	30 X 24	3	STAGE 5	17	34		
027001-dt	M4-9RA	30 X 24	3	STAGE 5	17	51		
027001-dt	W20-2A	48 X 48	1	STAGE 5	17	17		
TOTAL 0010						1344	56.25	

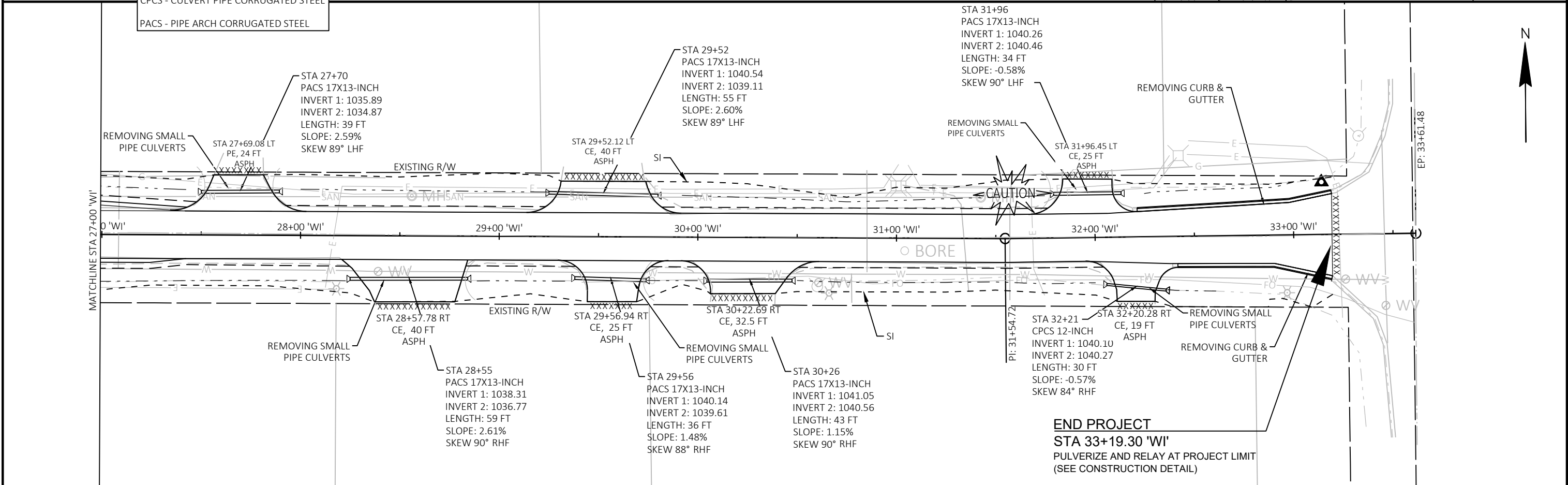
STREET SWEEPING

SPV.0075.01 SPECIAL (01. STREET SWEEPING)			
CATEGORY	LOCATION	HRS	REMARKS
0010	Project	50	AS DIRECTED BY FIELD ENGINEER
TOTAL 0010		50	

618.0100.01			SPV.0060.01	SPV.0060.02	SPV.0060.03
MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) (01. 3842-00-70)			SPECIAL (01. ADJUSTING SANITARY MANHOLE COVERS)	SPECIAL (02. ADJUSTING WATER SERVICE CURB STOPS)	SPECIAL (03. ADJUSTING WATER VALVE BOXES)
STATION	LOCATION	EACH	EACH	EACH	EACH
PROJECT		1			
21+50	LT	WISCONSIN ST	1		
24+40	RT	WISCONSIN ST		1	
25+55	LT	WISCONSIN ST	1		
25+75	RT	WISCONSIN ST			1
26+10	RT	WISCONSIN ST		1	
28+40	RT	WISCONSIN ST		1	
28+55	LT	WISCONSIN ST	1		
30+60	RT	WISCONSIN ST			1
30+75	RT	WISCONSIN ST		1	
30+80	LT	WISCONSIN ST		1	
31+40	LT	WISCONSIN ST	1		
TOTAL 0020		1	4	5	2

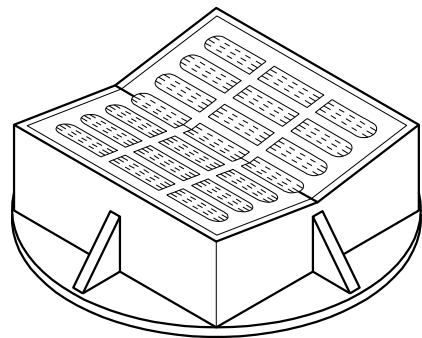
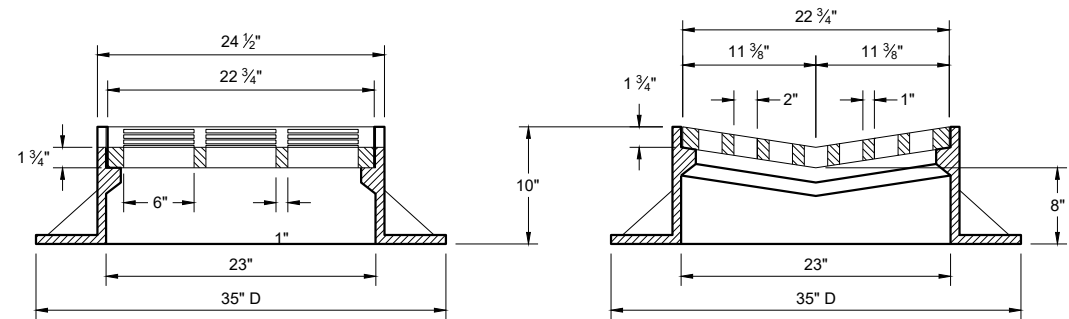


ABBREVIATIONS
CPCS - CULVERT PIPE CORRUGATED STEEL
PACS - PIPE ARCH CORRUGATED STEEL



Standard Detail Drawing List

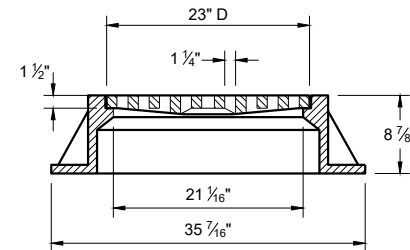
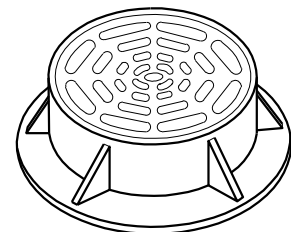
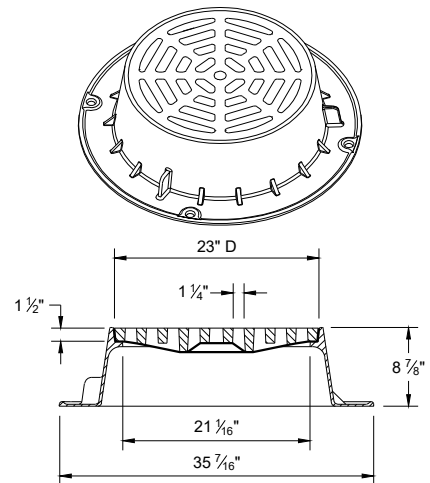
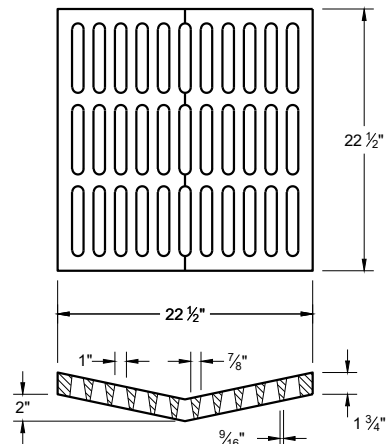
08A05-20B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-21A	CURB RAMPS TYPES 1 AND 1-A
08D05-21B	CURB RAMPS TYPES 2 AND 3
08D05-21C	CURB RAMPS TYPES 4A AND 4A1
08D05-21D	CURB RAMPS TYPE 4B AND 4B1
08D05-21E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
13A03-07	CONCRETE PAVEMENT SHOULDERS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING



TYPE "B"

**ALTERNATIVE GRATE FOR
TYPE "B" COVER**

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE
NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

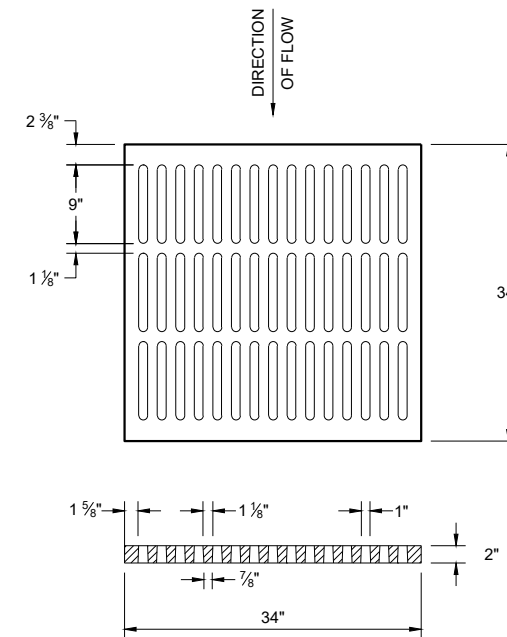
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

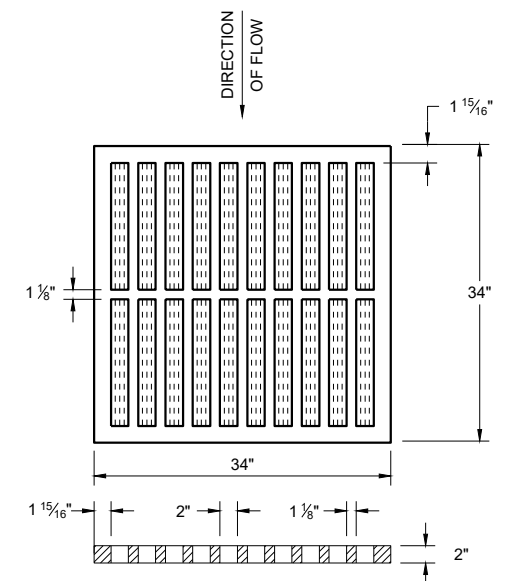
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



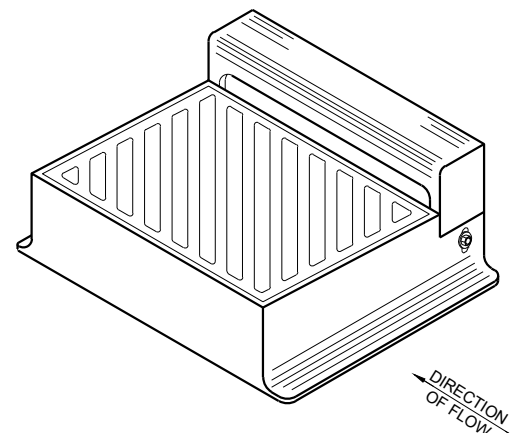
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

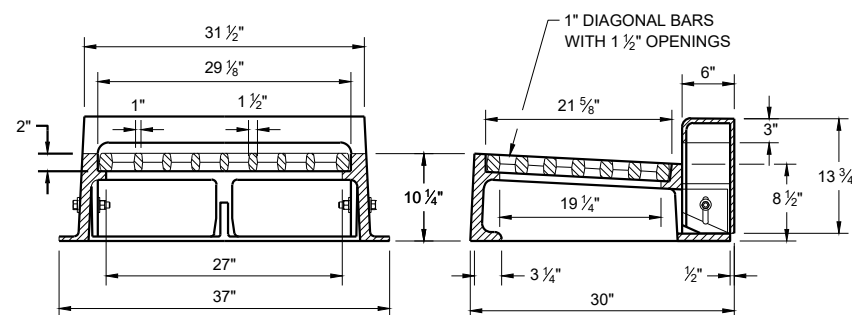


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



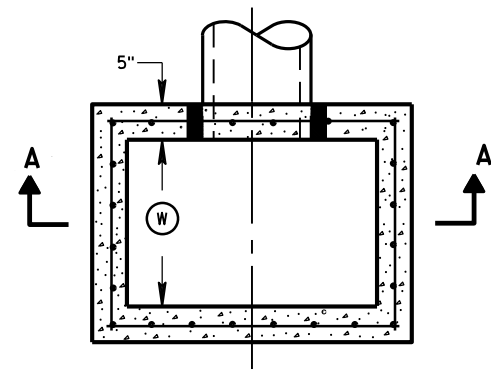
TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

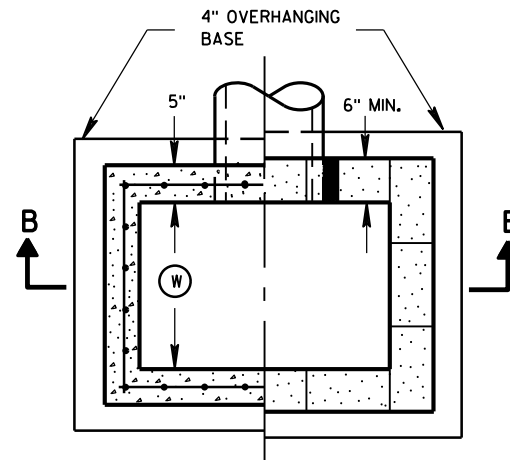
**INLET COVERS
TYPES B, B-A, C,
MS, MS-A AND WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

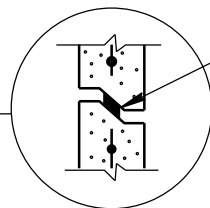
APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



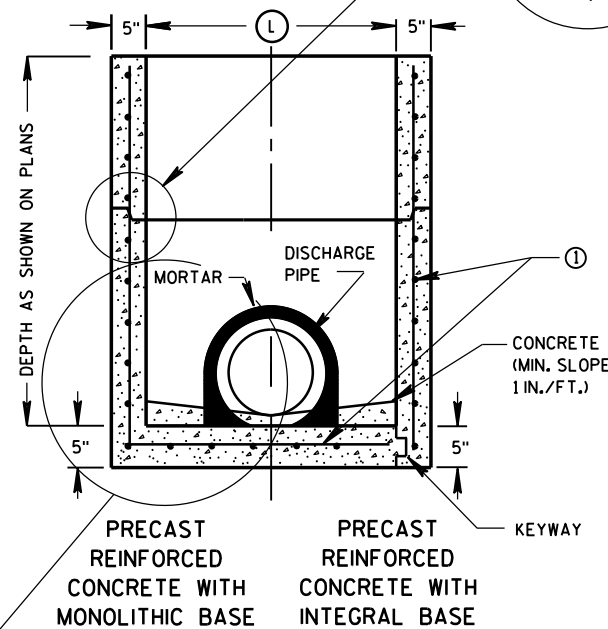
PLAN VIEW



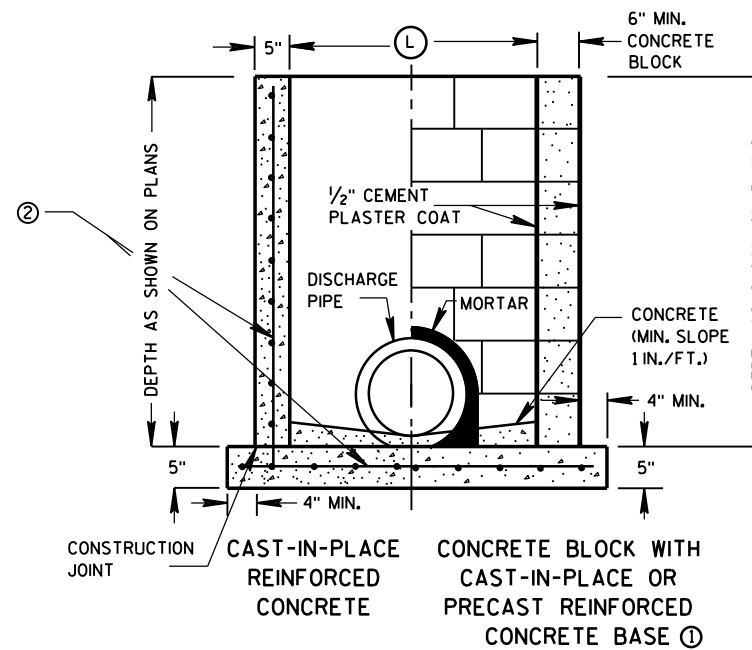
PLAN VIEW



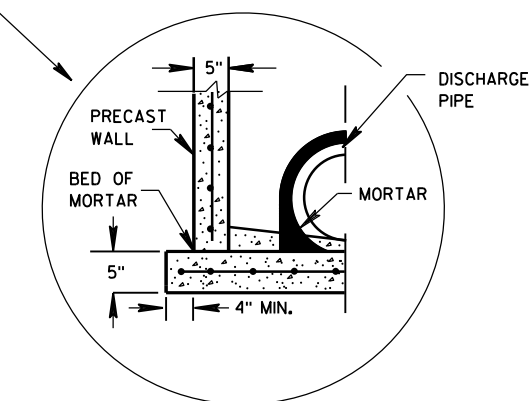
RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

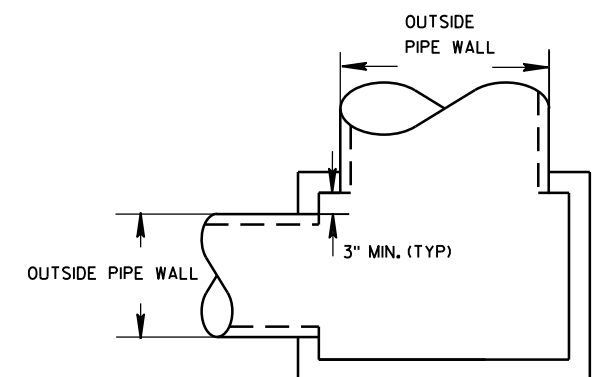
- FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (1) (FT)	LENGTH (2) (FT)								
2X2-FT	2	2	X	X			X		X	
2X2.5-FT	2	2.5			X		X	X	X	X
2X3-FT	2	3				X				
2.5X3-FT	2.5	3			X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

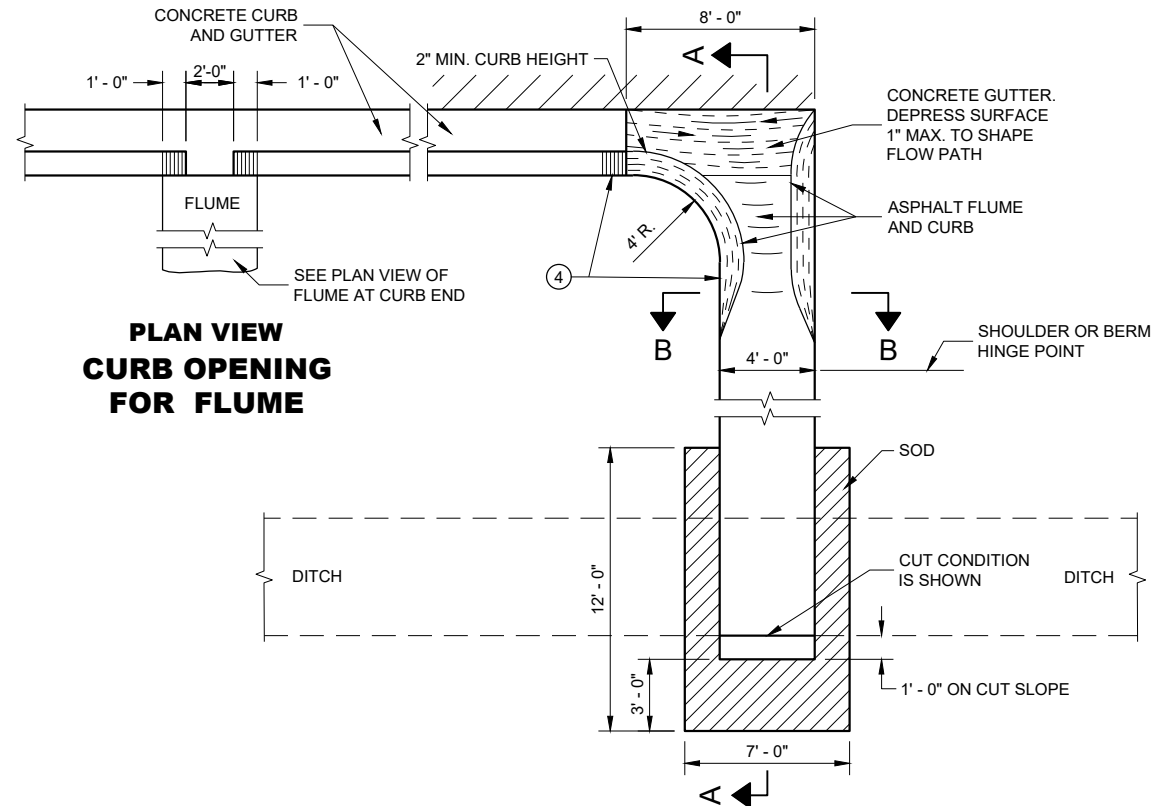
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS D 36 IT
FHWA UNIT SUPERVIS

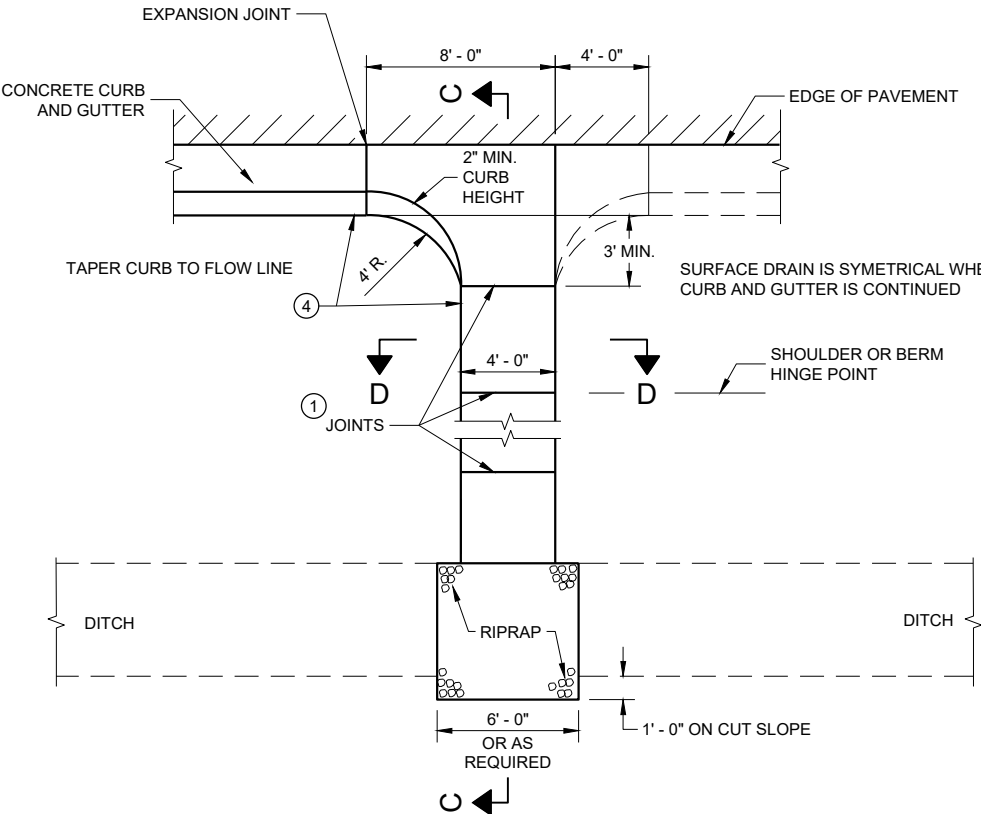
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING
FOR FLUME

PLAN VIEW
FLUME AT CURB END



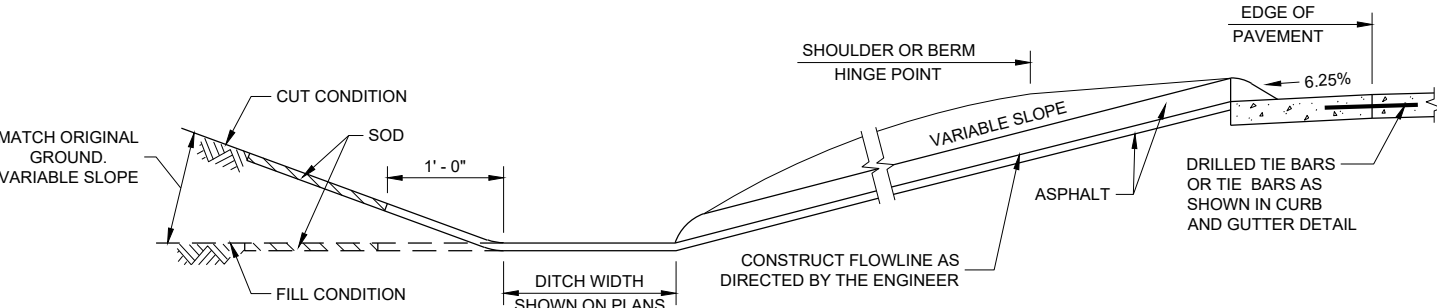
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

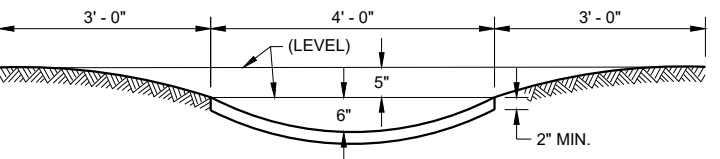
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

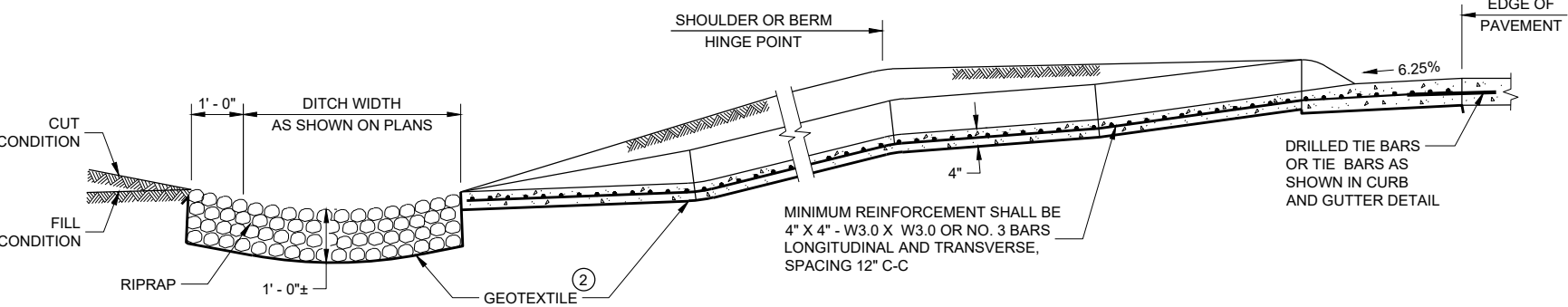
- ① JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- ④ ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



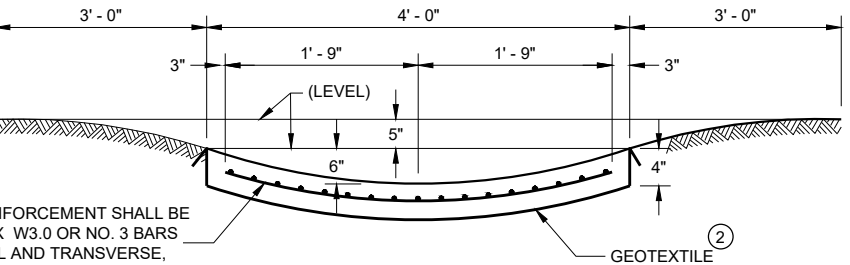
SECTION A - A



SECTION B - B



SECTION C - C



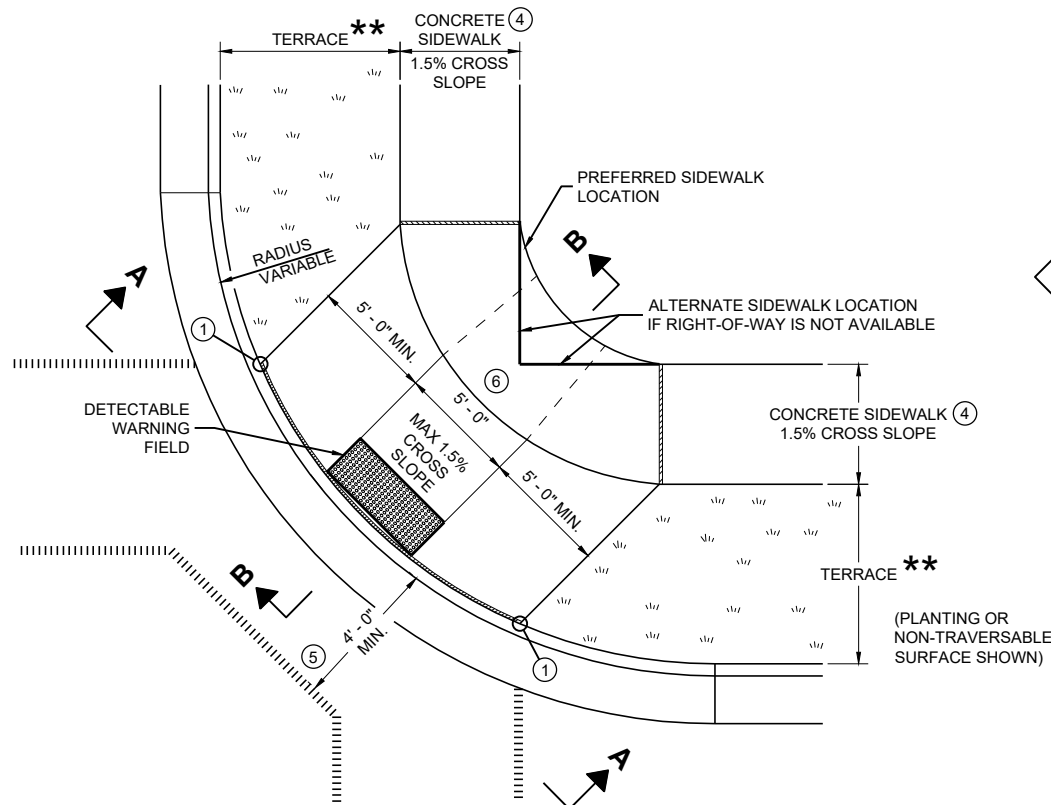
SECTION D - D

CONCRETE SURFACE
DRAINS AND
ASPHALTIC FLUMES

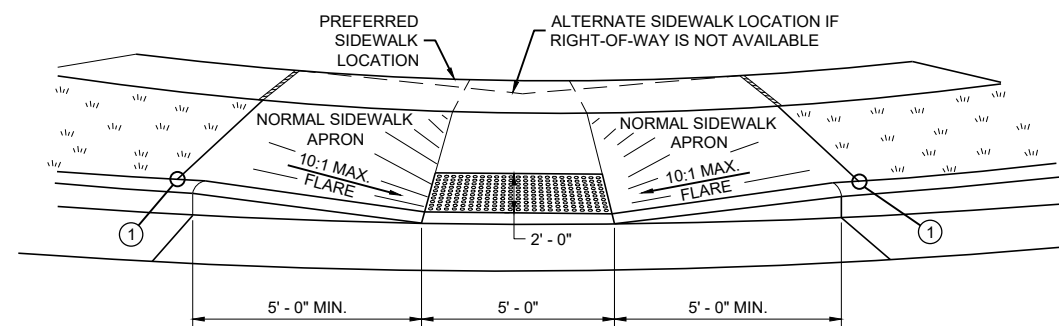
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER
37

FHWA

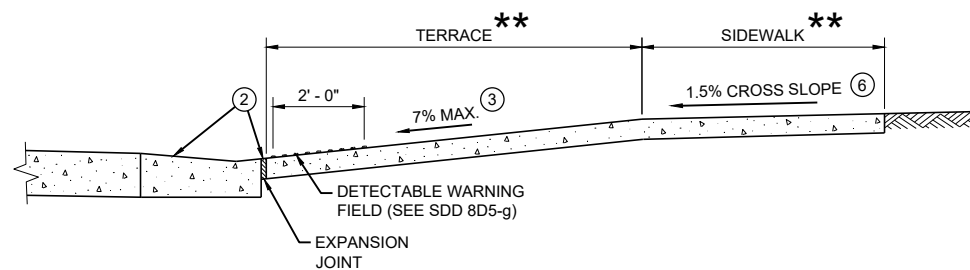


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

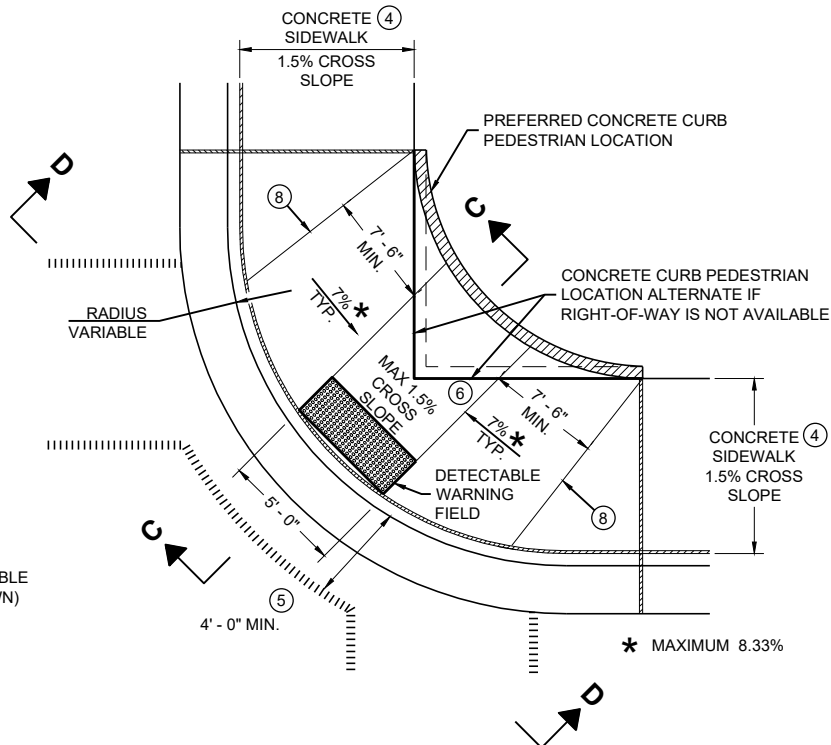


VIEW A - A FOR TYPE 1

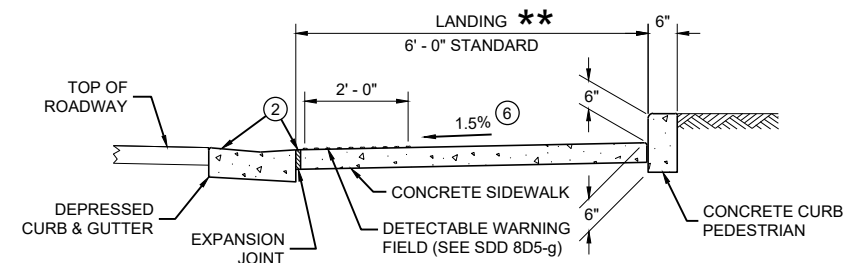
** WIDTH SHOWN ELSEWHERE
 IN THE PLANS



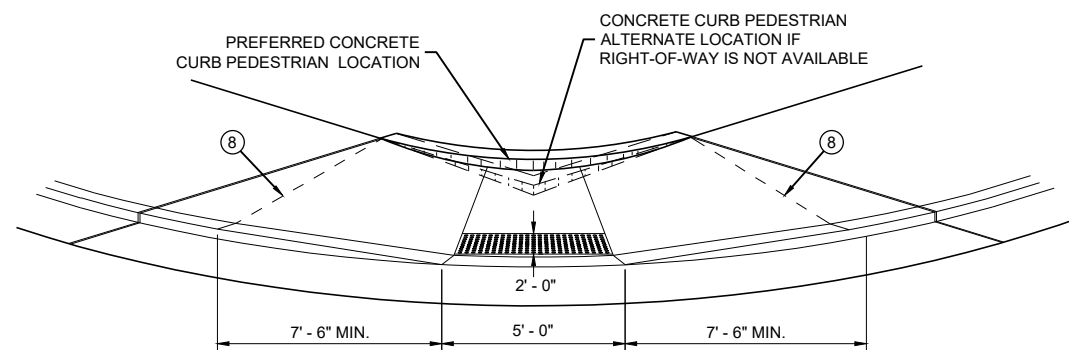
SECTION B - B FOR TYPE 1



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



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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 CURB 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 LINEAR 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.

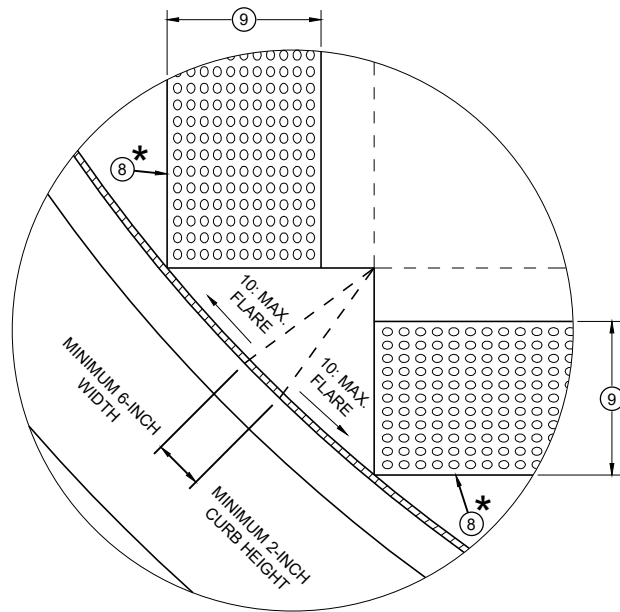
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ MAXIMUM 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. 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

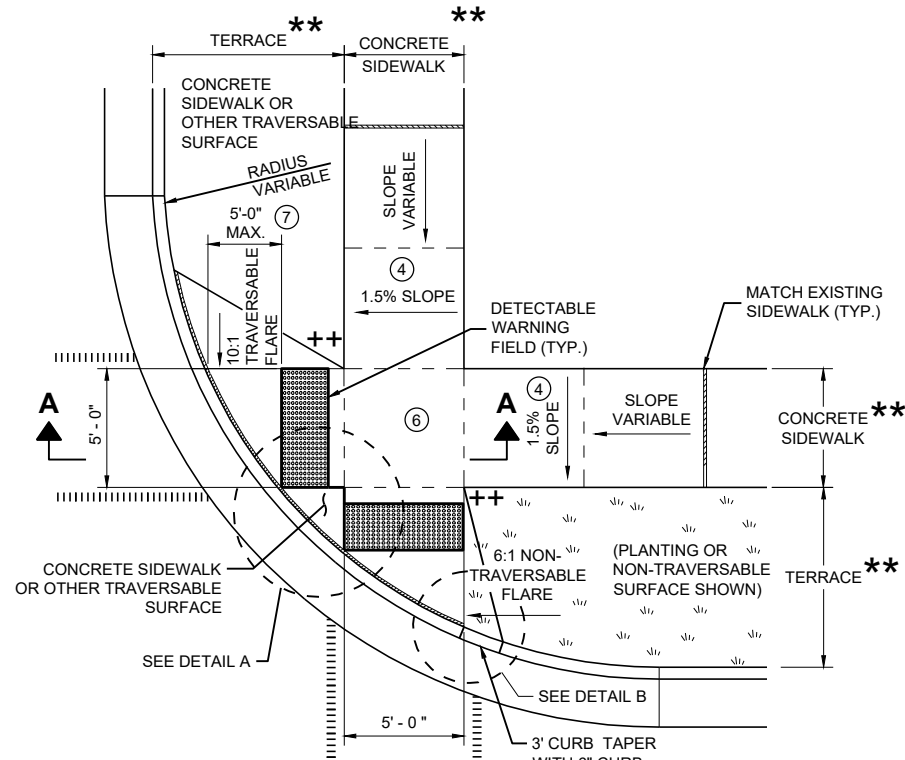
- ===== 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 1 AND 1-A

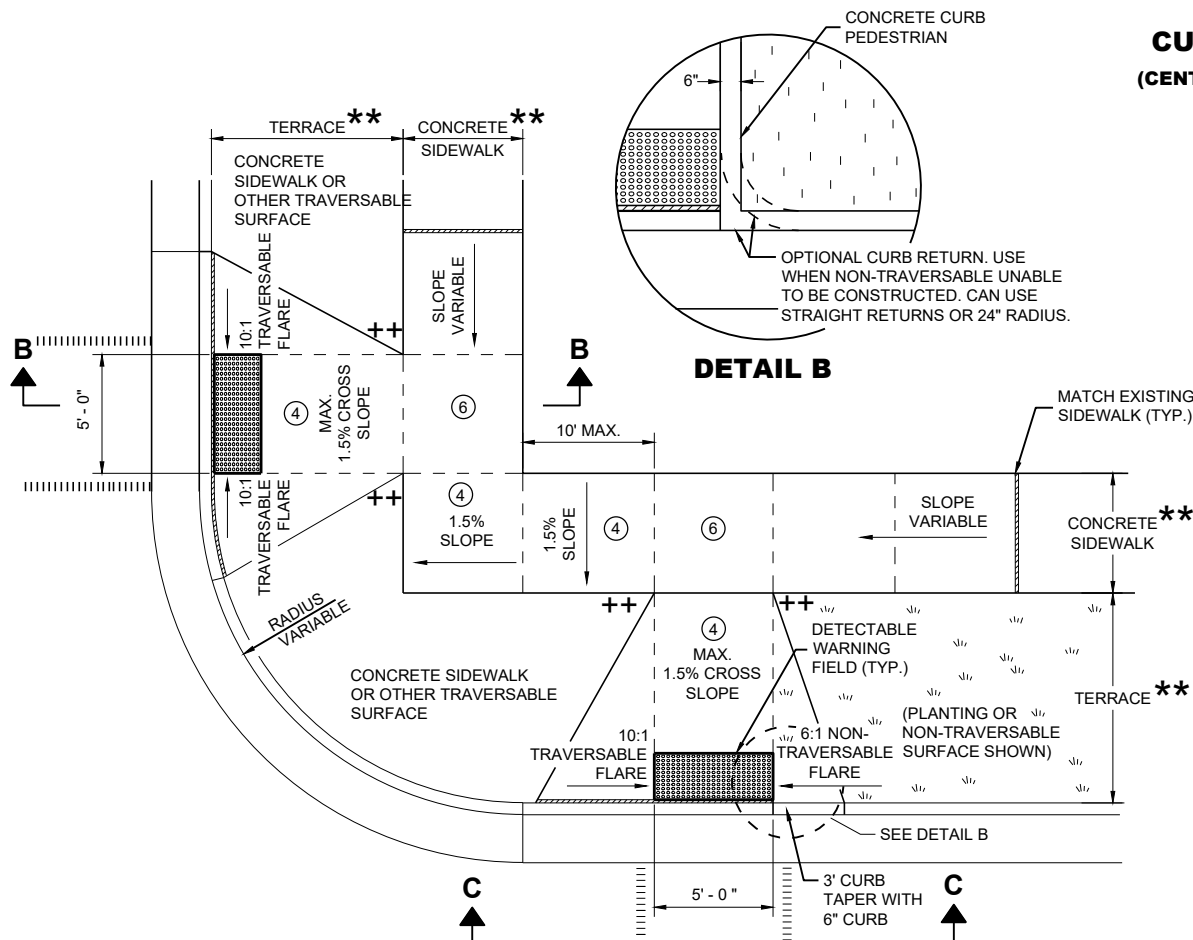
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION



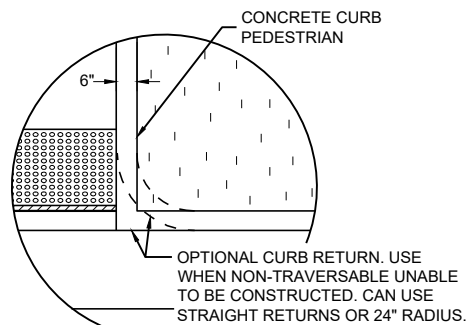
DETAIL A



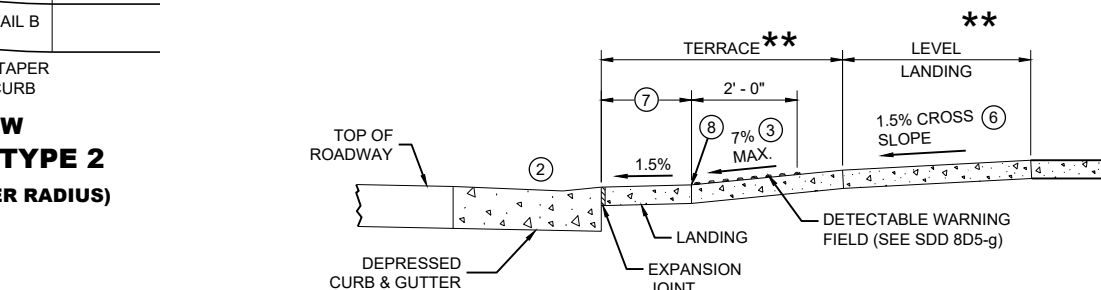
PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



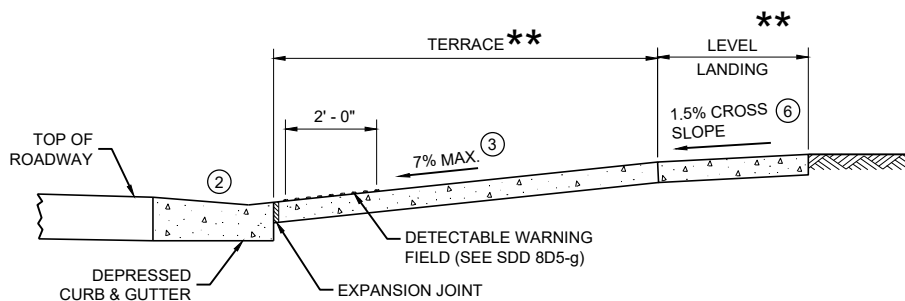
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



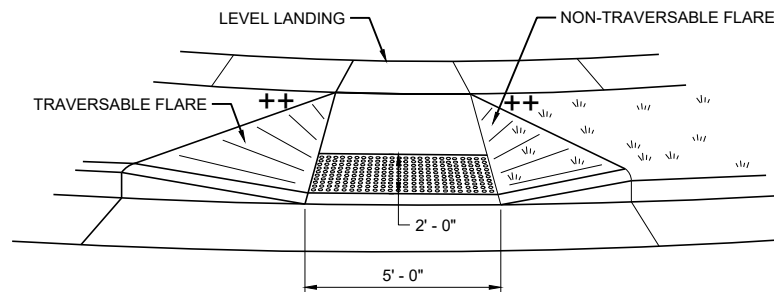
DETAIL B



SECTION A - A FOR TYPE 2



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- 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.
- 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 LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) 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 LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
 - WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - WHEN 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. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

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

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

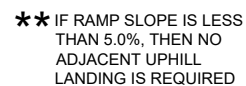
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

LEGEND

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

CURB RAMPS
TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SECTION B - B FOR TYPE 4A AND TYPE 4A1

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



GENERAL NOTES

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

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.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ 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 LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

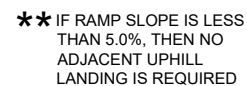
LEGEND

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



CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SECTION B - B FOR TYPE 4B AND TYPE 4B1

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¾"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¾"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ½"
20 FEET			4' - 11 ½"	5' - 1 ¾"	4' - 3 ¾"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¾"	2' - 1 ¾"	10' - 9"
30 FEET									4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ½"
40 FEET															4' - 10 ¾"	19' - 8 ½"

INTERMEDIATE RADII CAN BE INTERPOLATED
 DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
 DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

GENERAL NOTES

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

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.

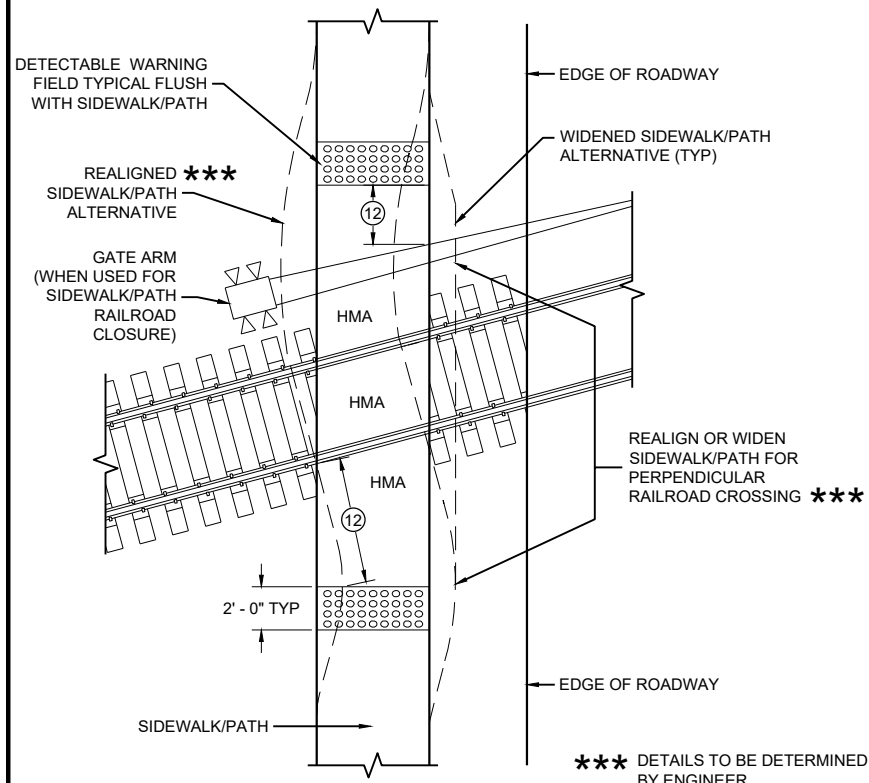
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ 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 LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



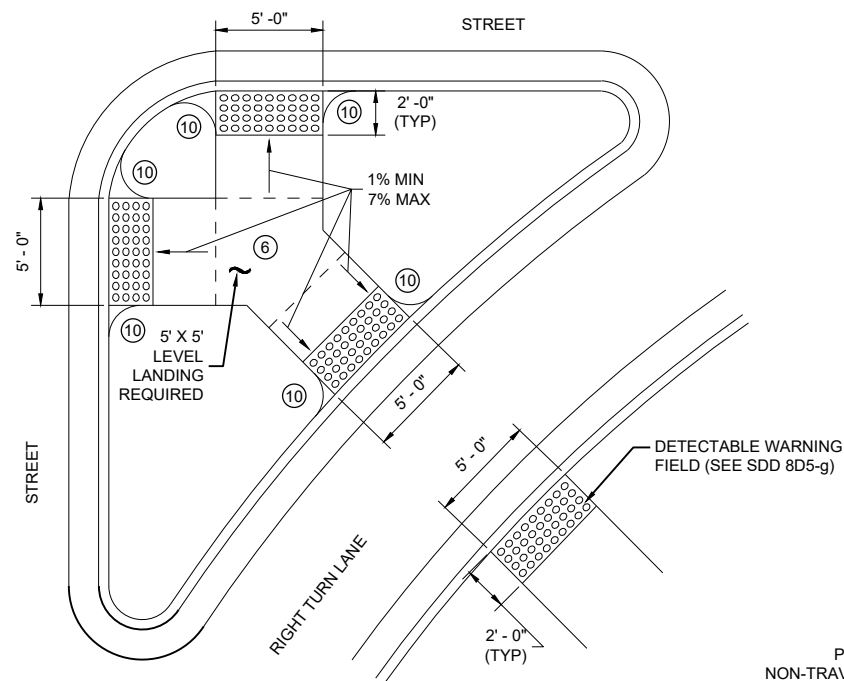
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

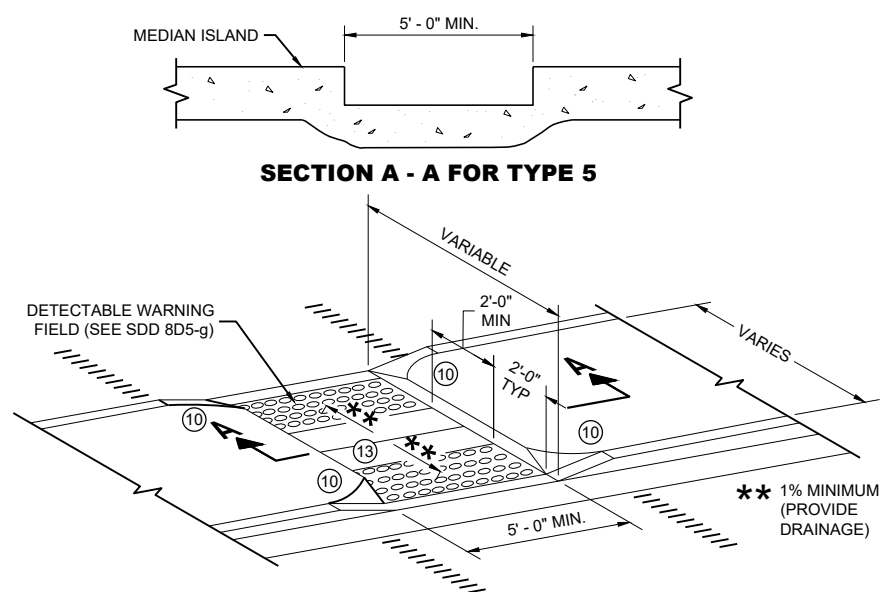
DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

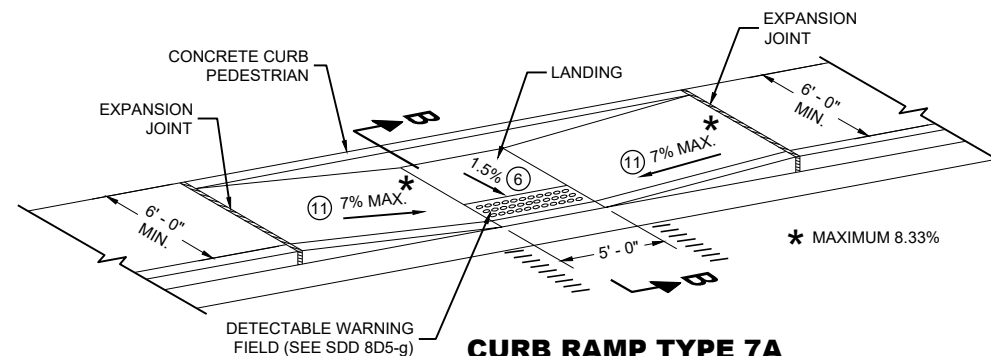
REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMPS



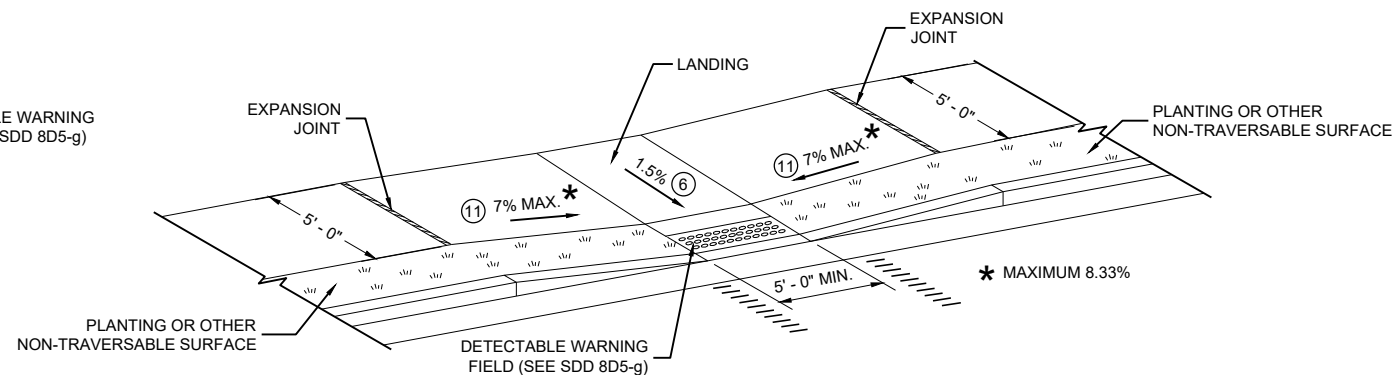
SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A FOR INTERSECTIONS AND MID BLOCK CROSSINGS



CURB RAMP TYPE 7B FOR INTERSECTIONS AND MID BLOCK CROSSINGS

GENERAL NOTES

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

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.

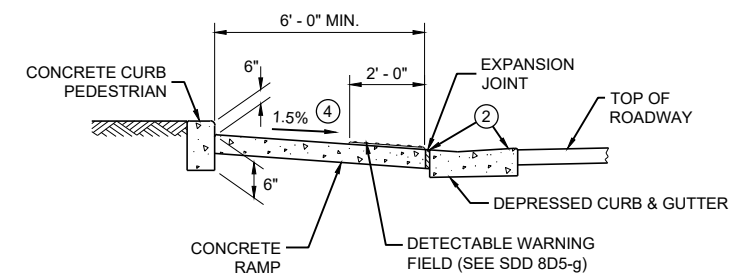
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/8 INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ 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 LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm 0.1'$ FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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



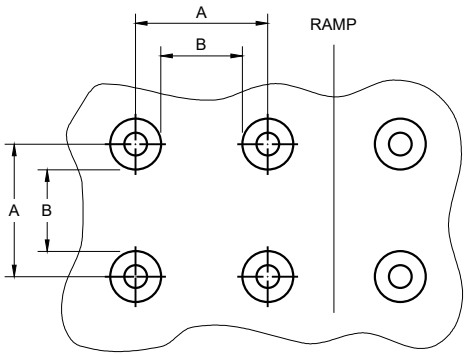
SECTION B - B FOR TYPE 7A

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

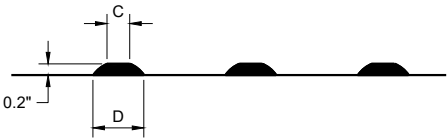
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

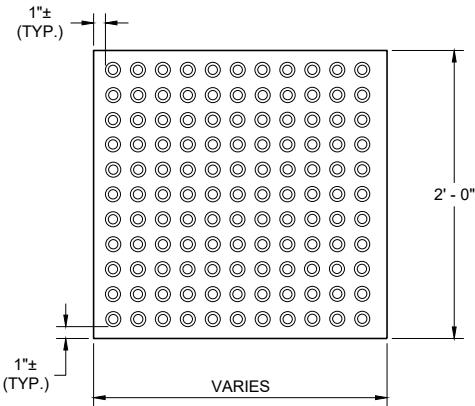


PLAN VIEW

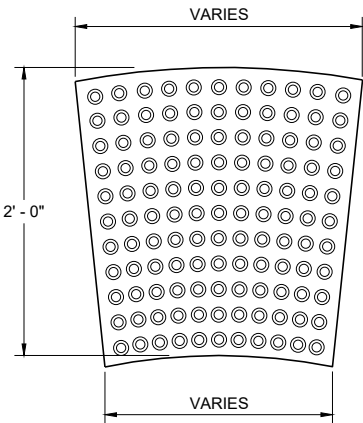


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

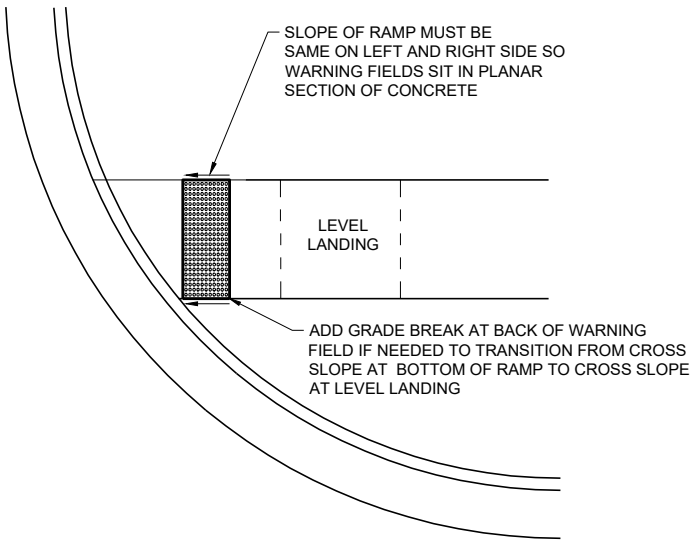


RECTANGULAR
PLATES

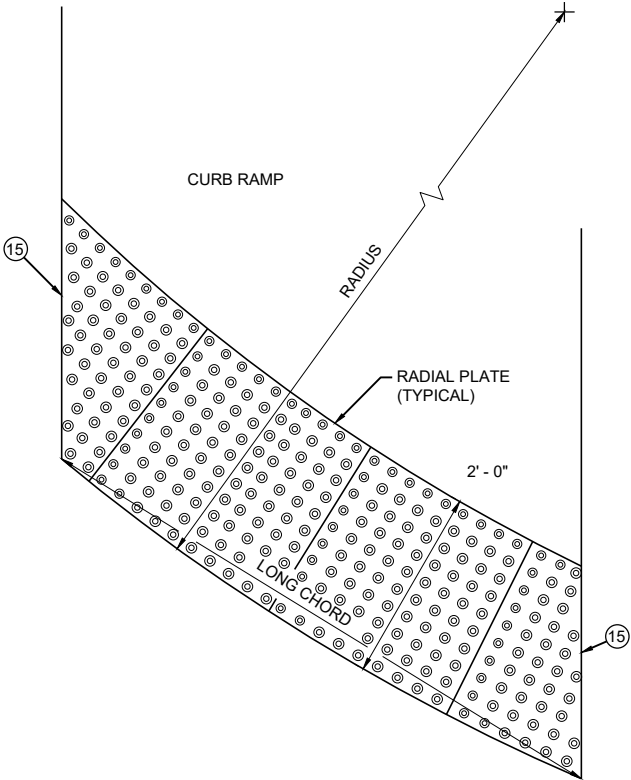


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

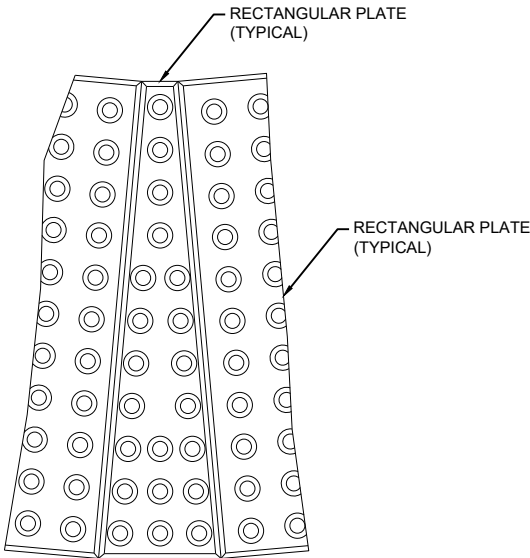
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

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



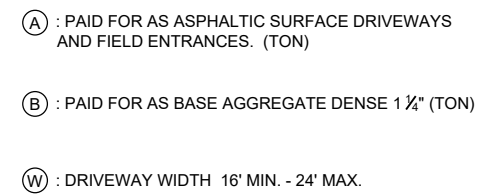
PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

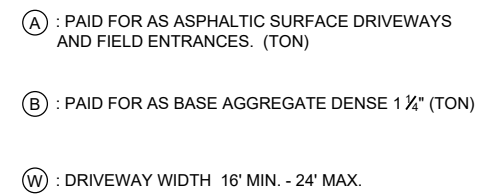
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

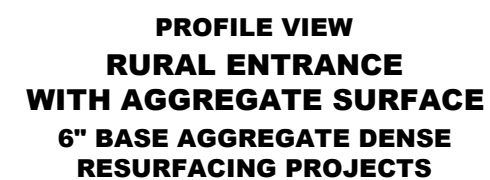
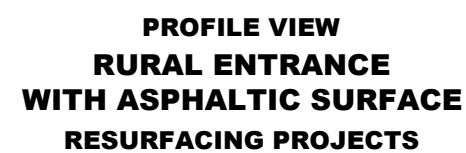
① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW
HALF SECTION



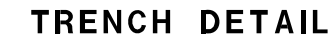
PLAN VIEW
HALF SECTION



APPROVED
December 2016 _____ /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER 44



- 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.

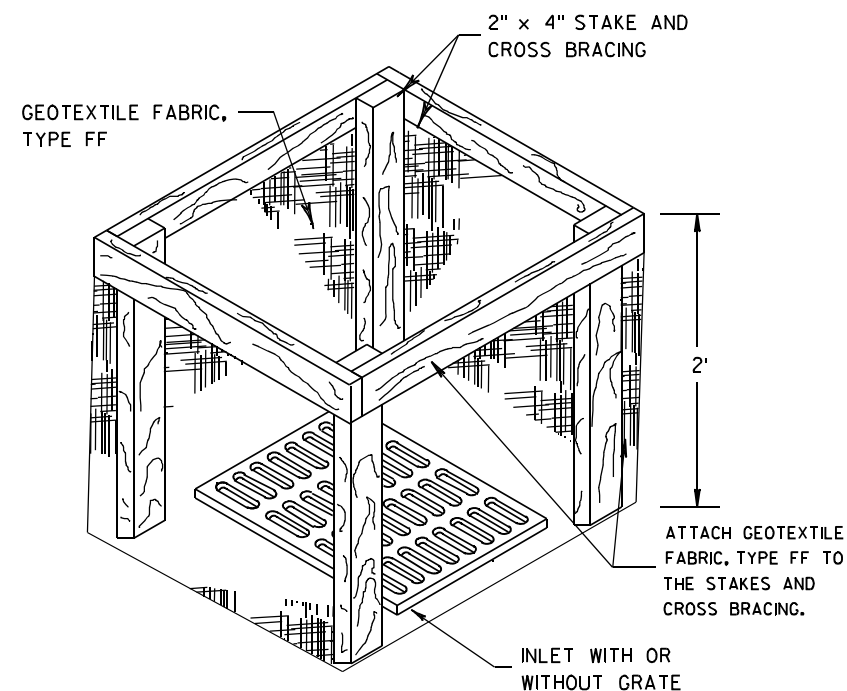
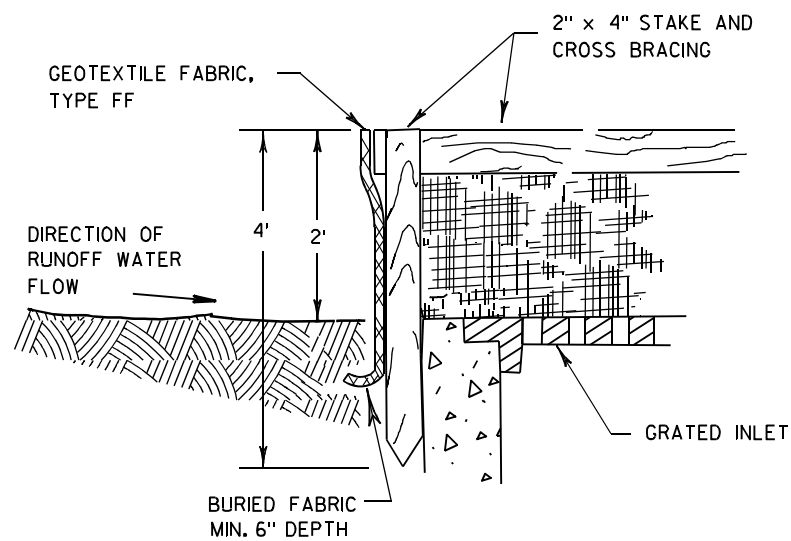


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE _____ /S/ Beth Cannata _____
CHIEF ROADWAY DEVELOPMENT 45 INCHES

FHWA



INLET PROTECTION, TYPE A

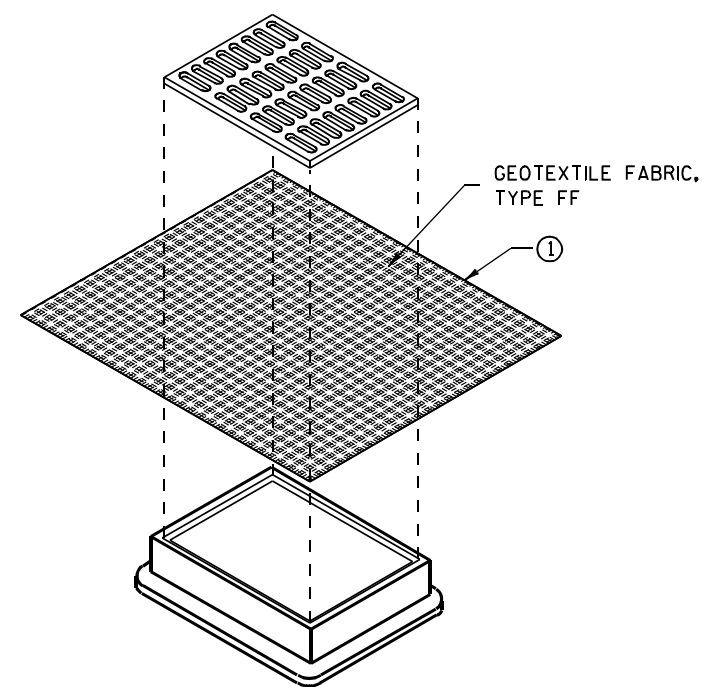
GENERAL NOTES

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.

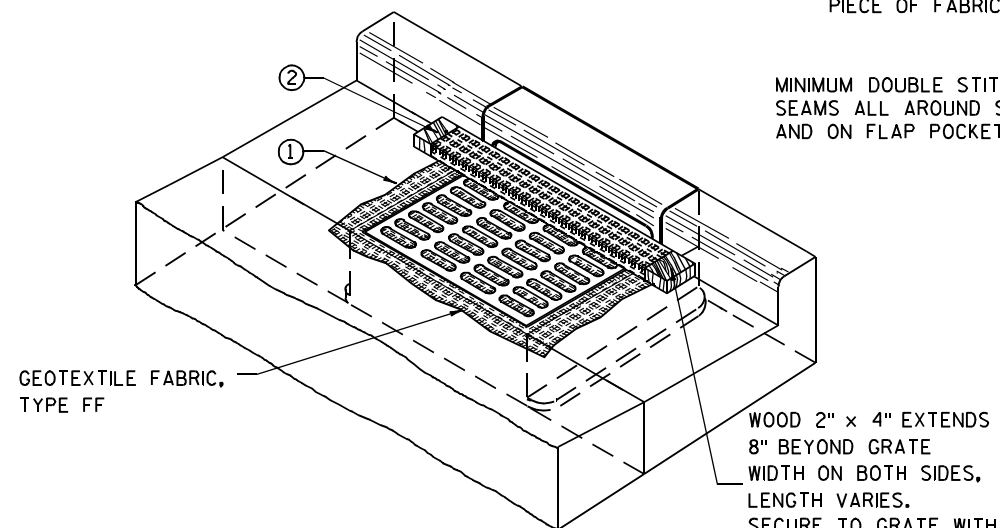
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

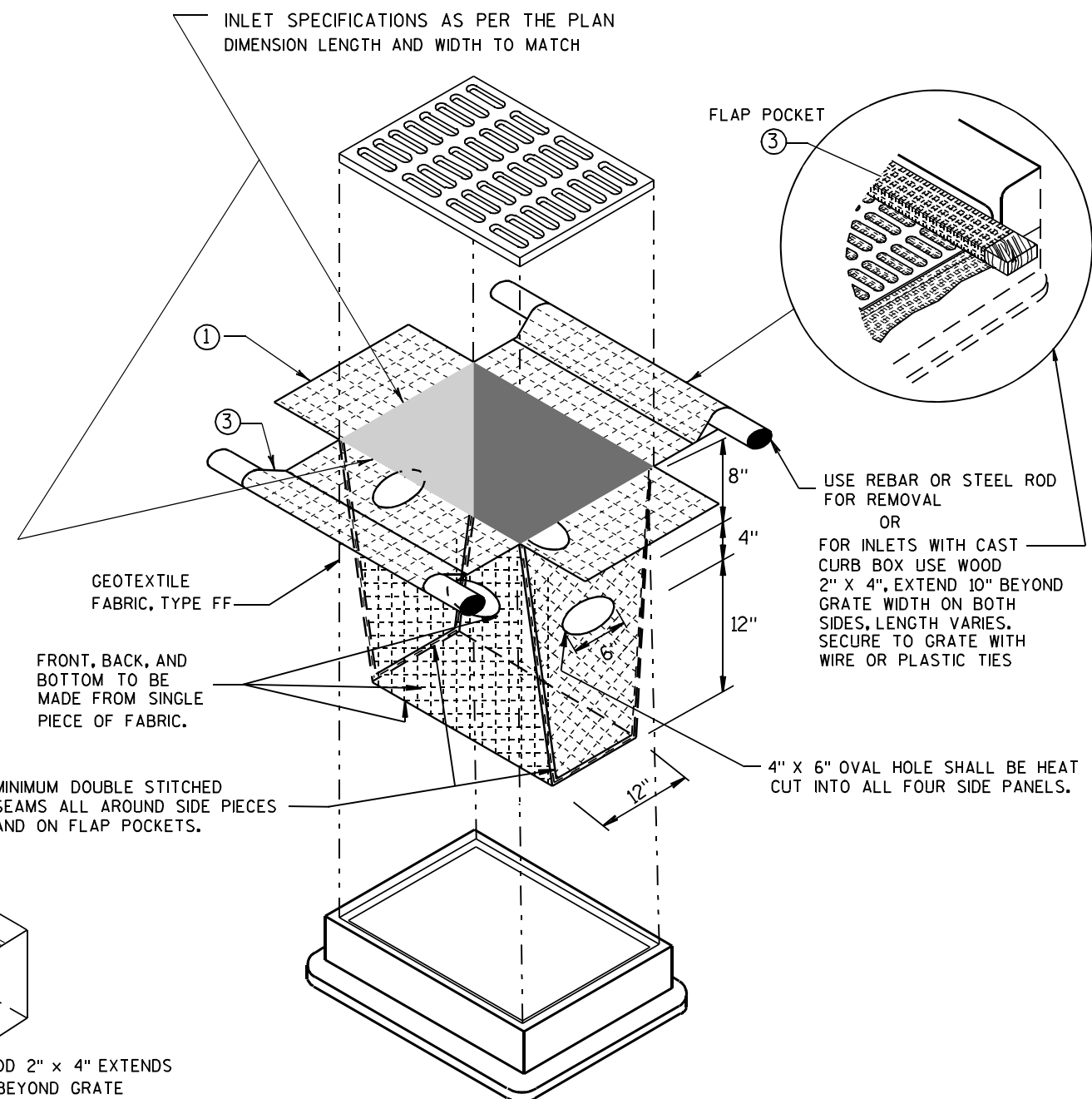
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



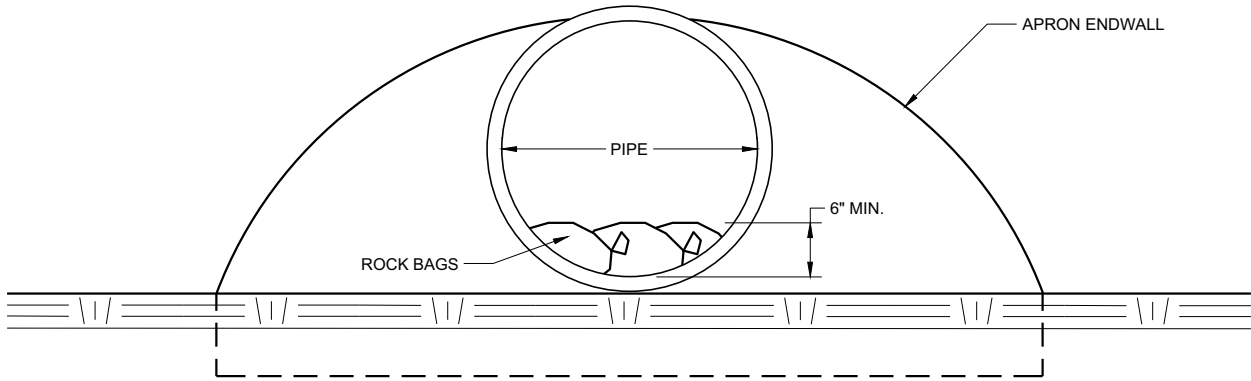
INLET PROTECTION, TYPE D

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

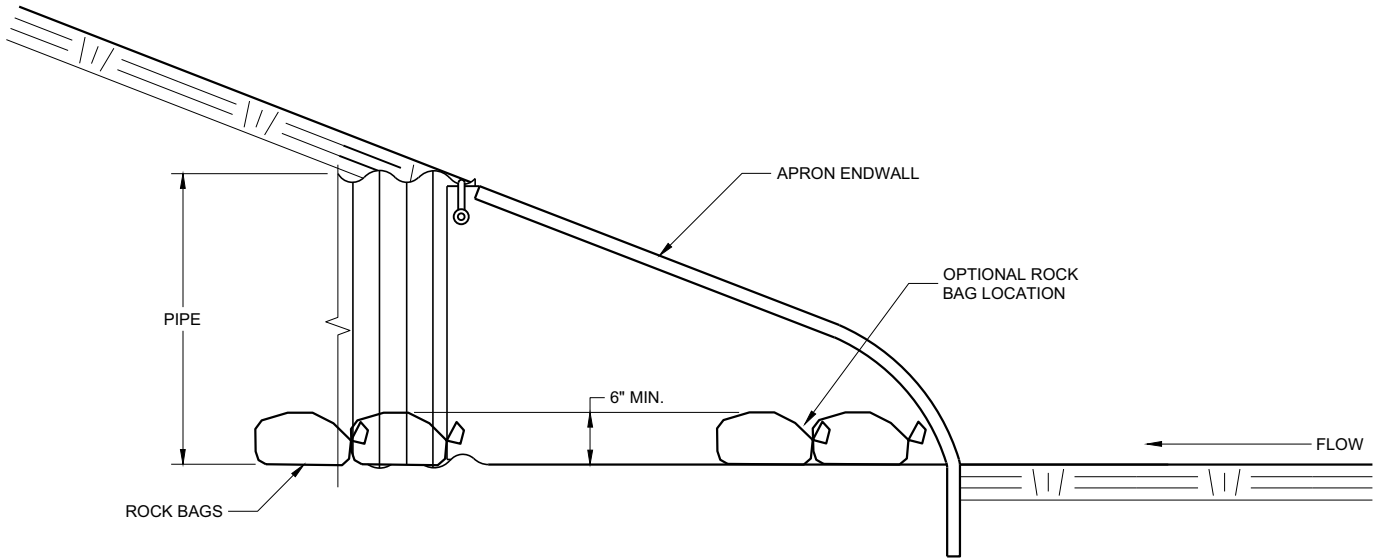
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 46
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



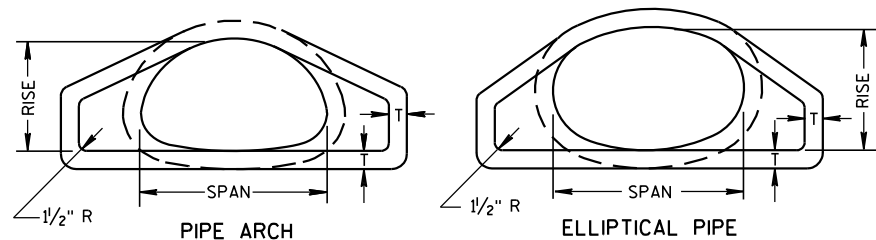
END VIEW



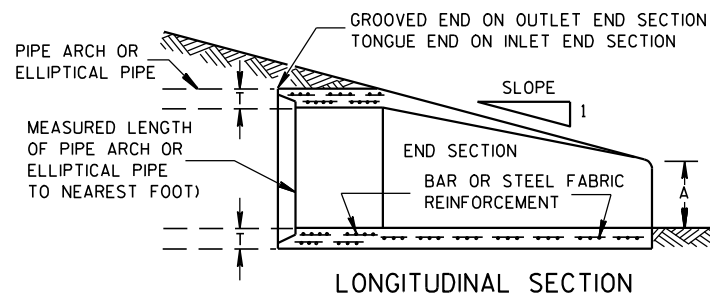
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED			
May 2019	/S/ Daniel Schave		
DATE	EROSION CONTROL ENGI	47	
FHWA			

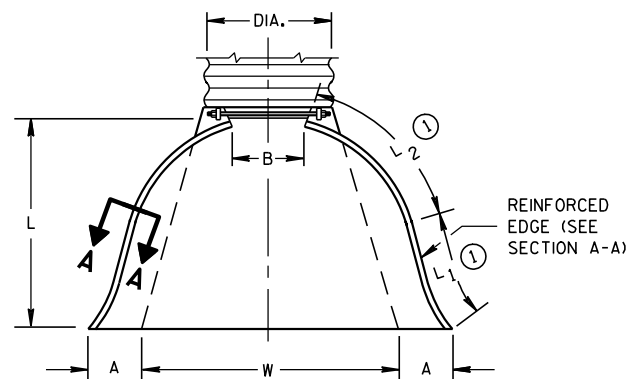


END VIEW



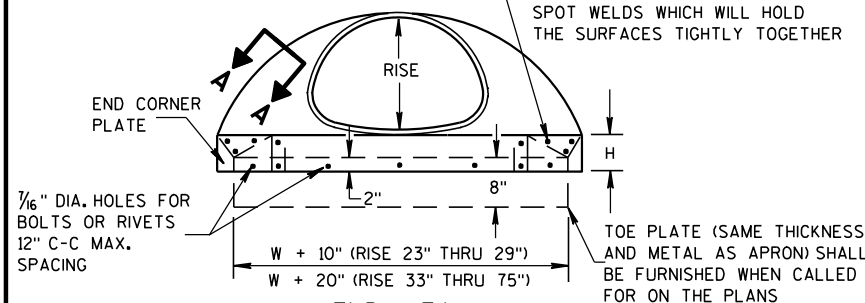
LONGITUDINAL SECTION

CONCRETE ENDWALLS

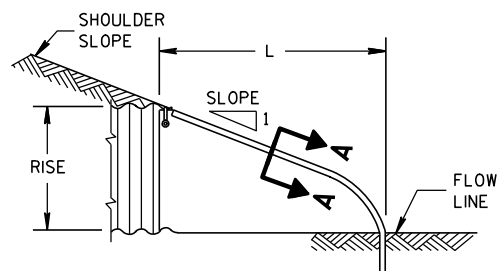
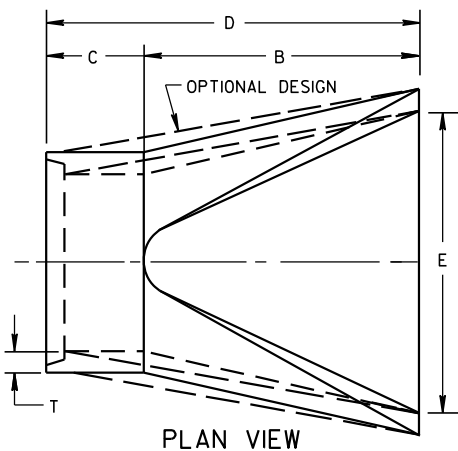


PLAN VIEW

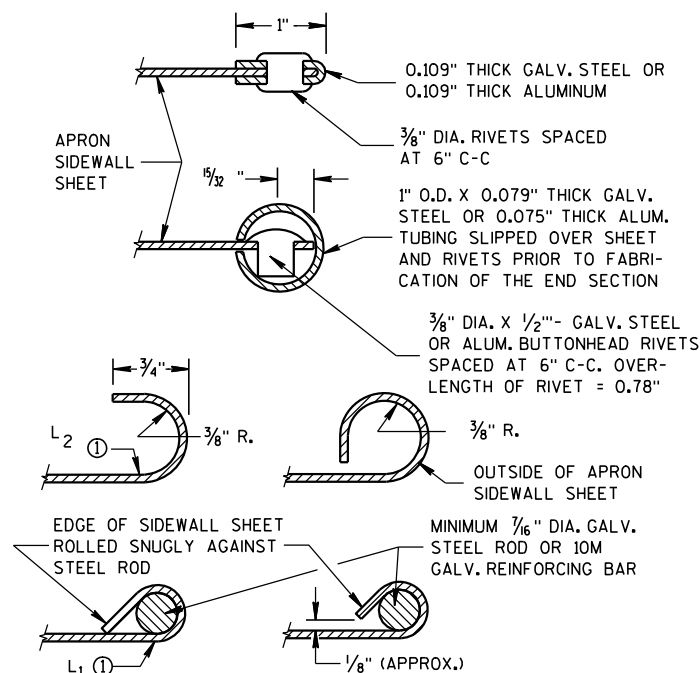
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW



SECTION A-A

2- 2 2/3" X 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

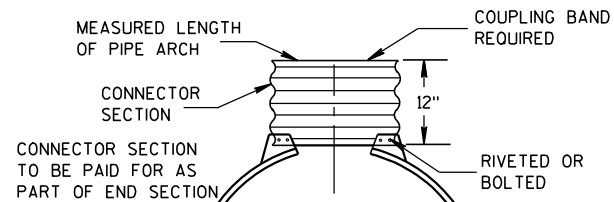
3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

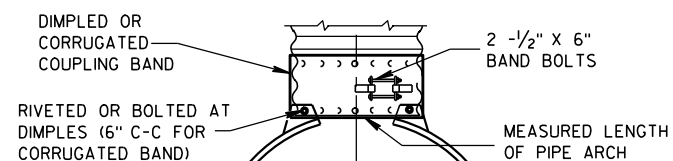
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHESNOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

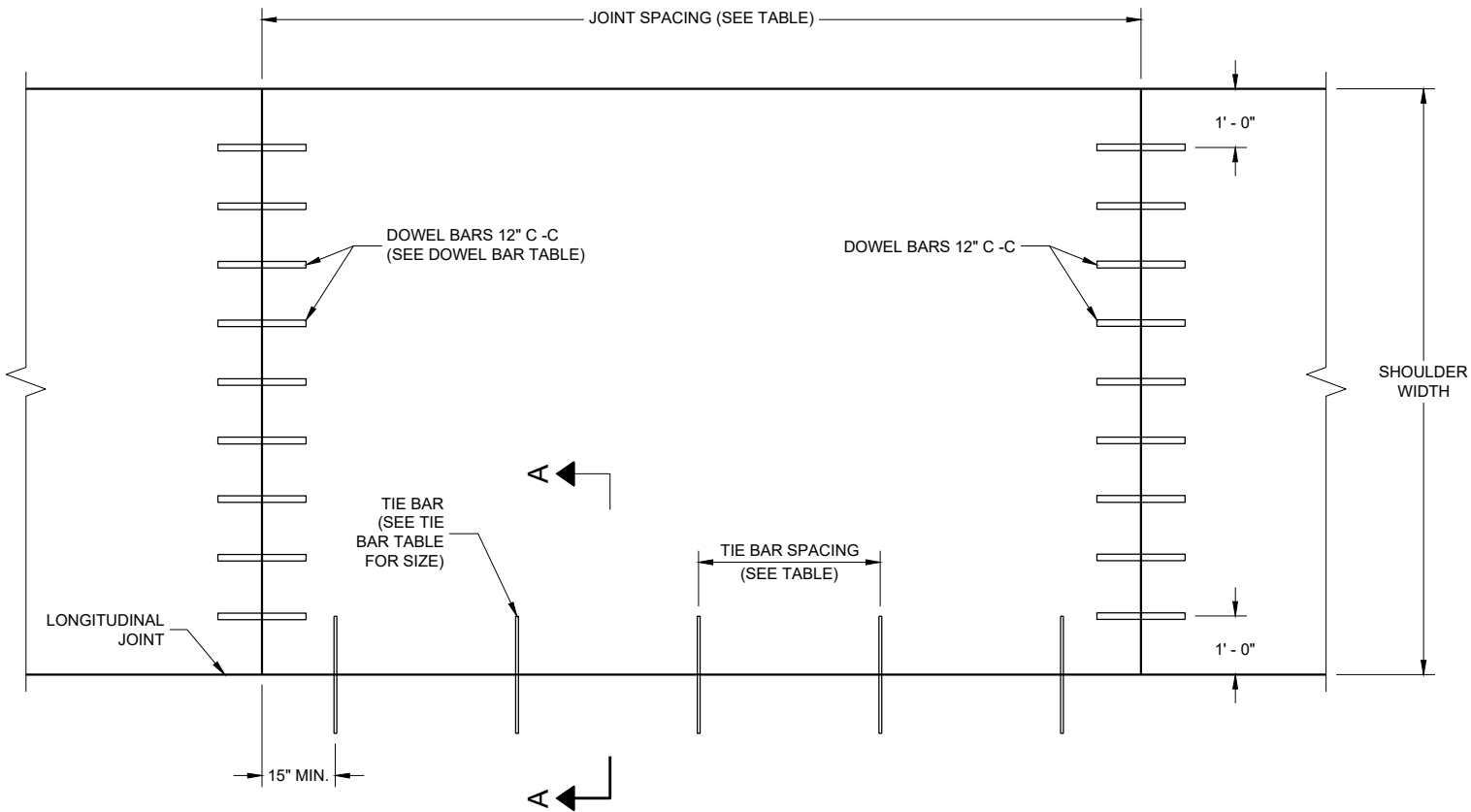
APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPESTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94
DATE/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPER

ENGINEER

FHWA



PLAN VIEW
CONCRETE PAVEMENT SHOULDER

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 BATS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES).

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

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER ***	CONTRACTION JOINT SPACING
6", 6 1/2"	NONE	12"
7", 7 1/2"	1"	14"
8" & ABOVE	1 1/4"	15"

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

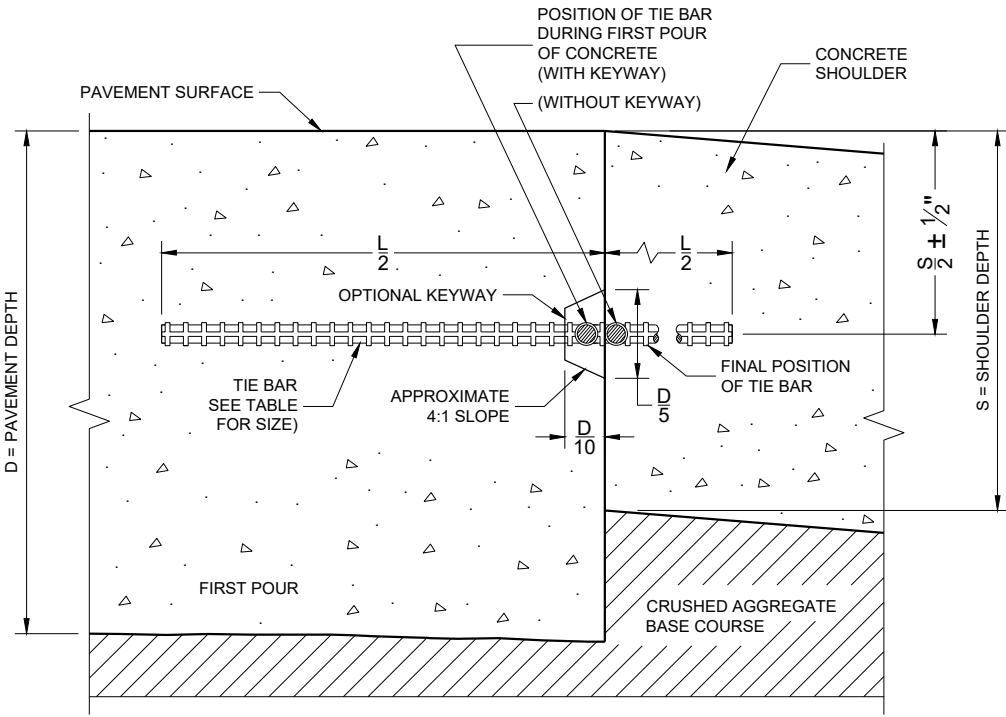
GENERAL NOTES

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

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

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

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

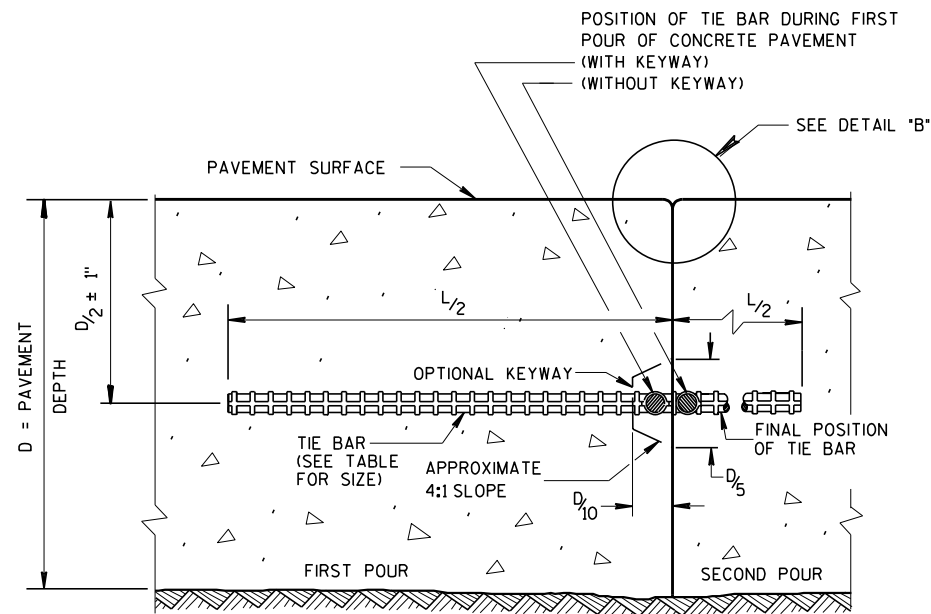


SECTION A - A
LONGITUDINAL CONSTRUCTION JOINT

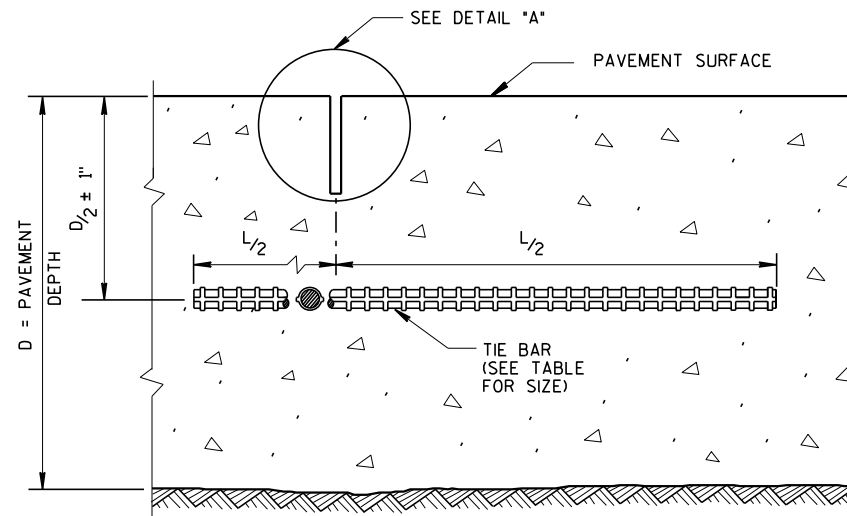
CONCRETE PAVEMENT
SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Peter Kemp
DATE PAVEMENT SUPERVISOR 49
FHWA



CONSTRUCTION JOINT



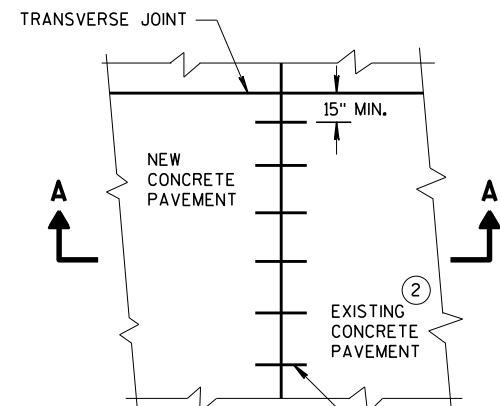
SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

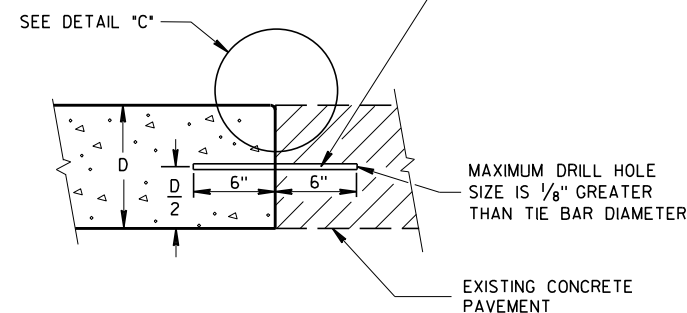
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

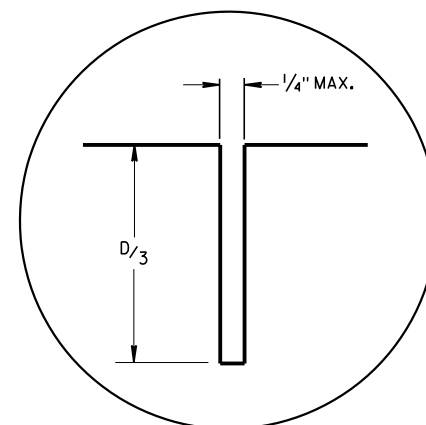


PLAN VIEW

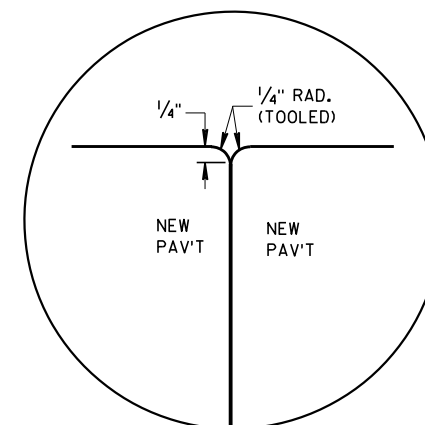
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



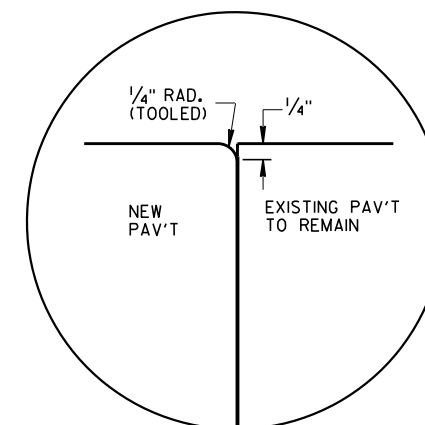
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



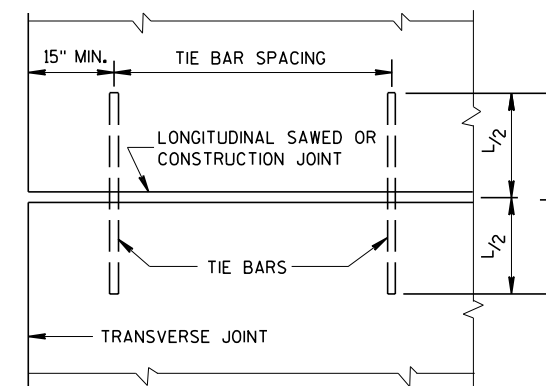
DETAIL "C"

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.

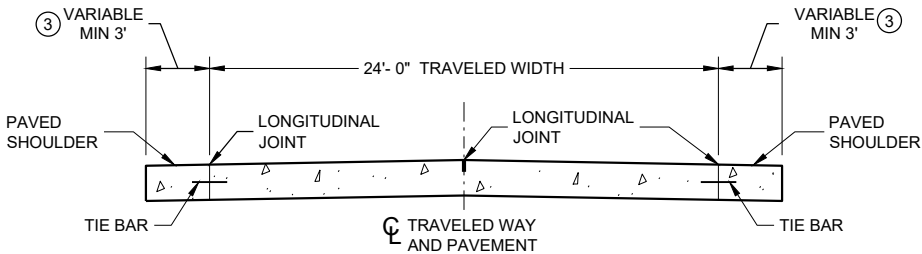


PLAN VIEW
SHOWING LOCATION OF TIE BARS

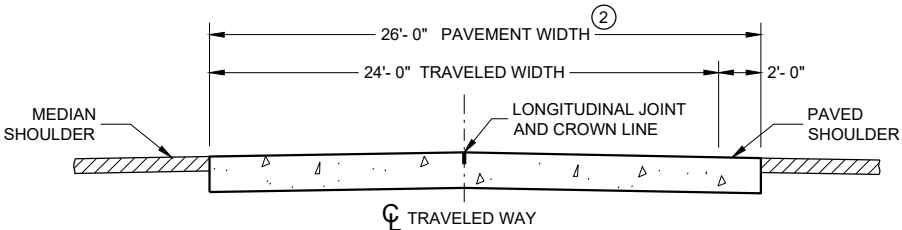
CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

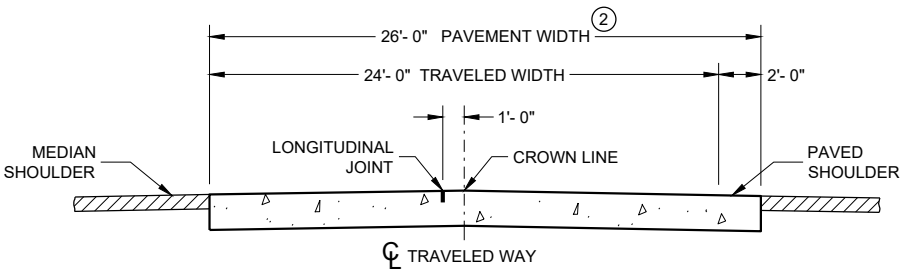
APPROVED
March 2018 /S/ Peter Kern
DATE PAVEMENT SUPE 50
FHWA



SECTION A - A
TWO-LANE TWO-WAY HIGHWAY ①



SECTION B - B



ALTERNATIVE SECTION B - B
DIVIDED HIGHWAY ①

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

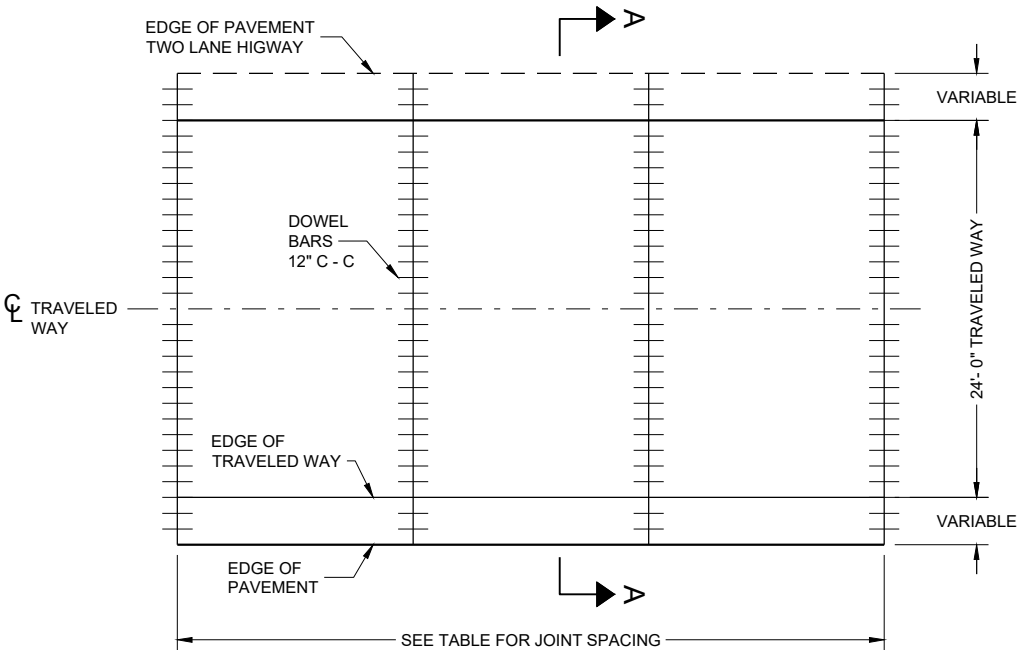
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

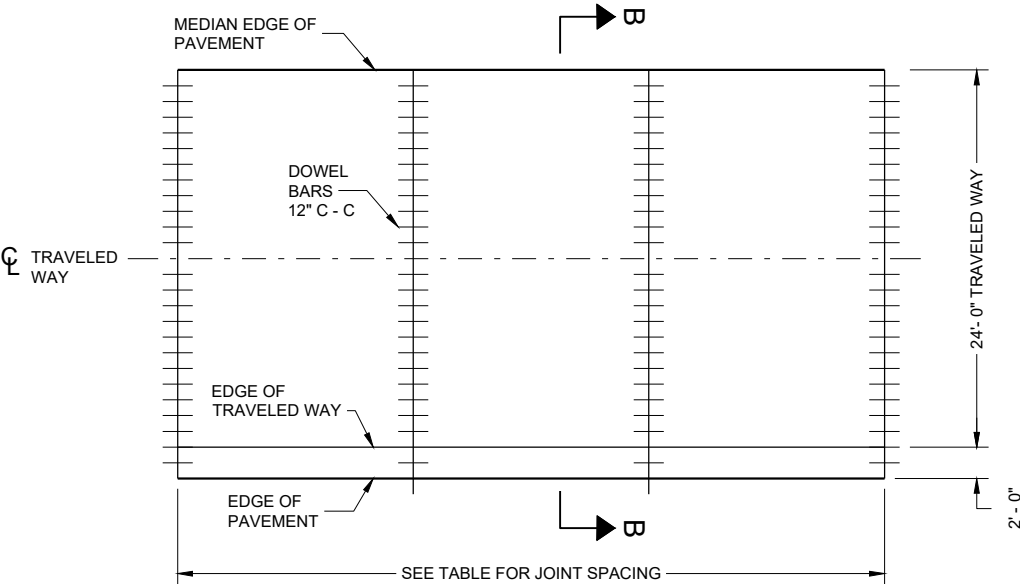
- ① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.
- ② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.
- ③ SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



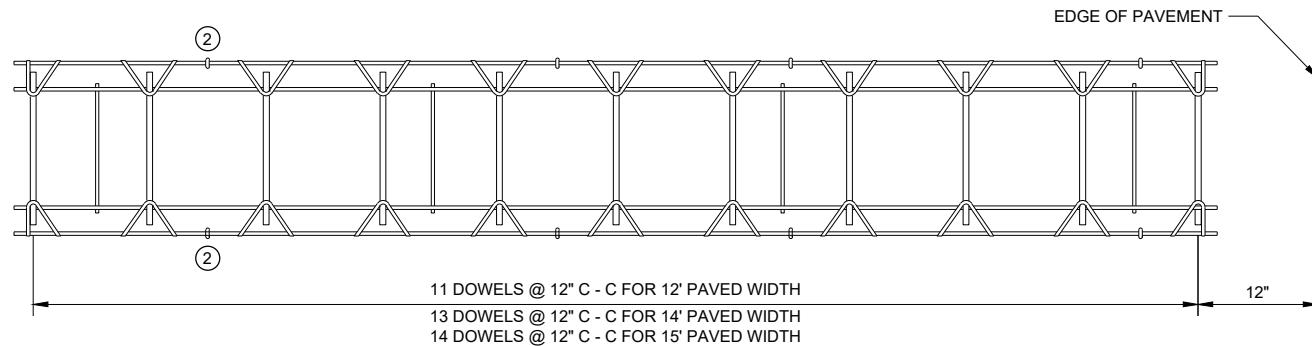
CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



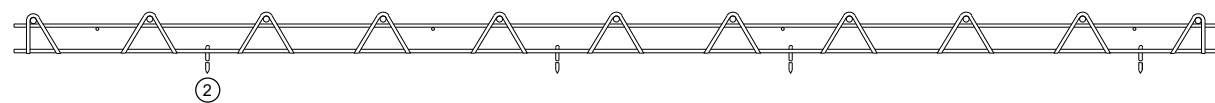
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

**RURAL DOWELED
CONCRETE PAVEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 51

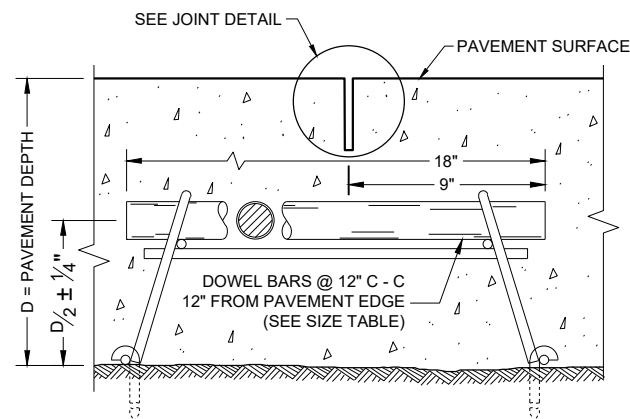


PLAN VIEW

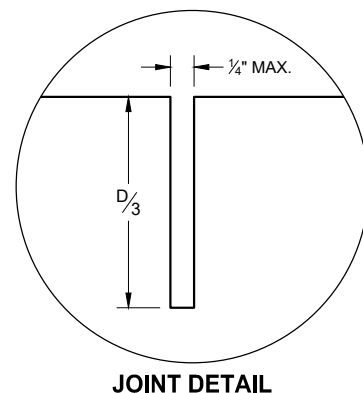


SIDE VIEW
(NORMAL TO CENTERLINE)

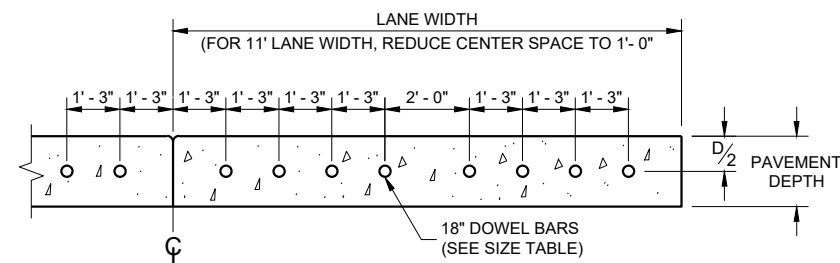
CONTRACTION JOINT DOWEL ASSEMBLY ①



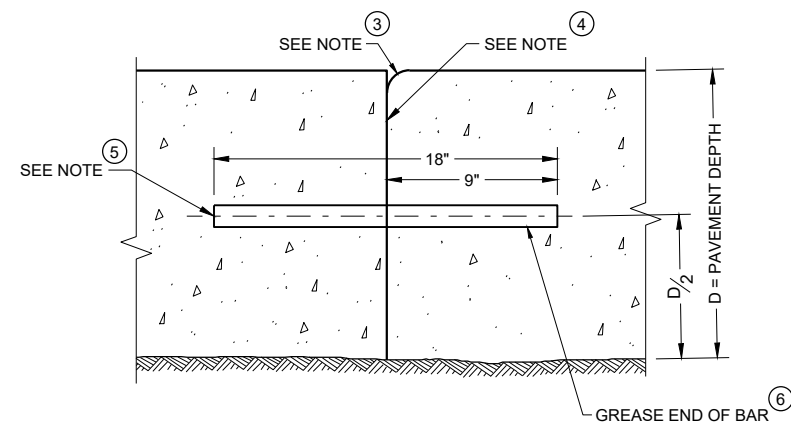
DOWELED CONTRACTION JOINT



JOINT DETAIL



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



TRANSVERSE CONSTRUCTION JOINT

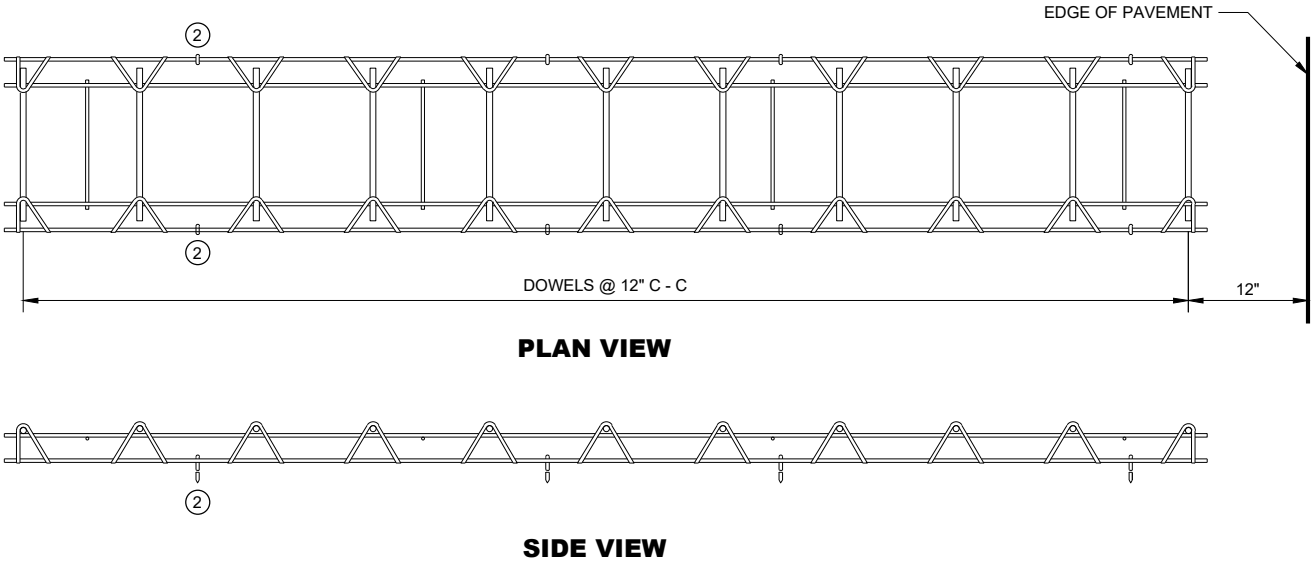
GENERAL NOTES

- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A $1/4"$ RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ⑦ ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS $1/8"$ GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

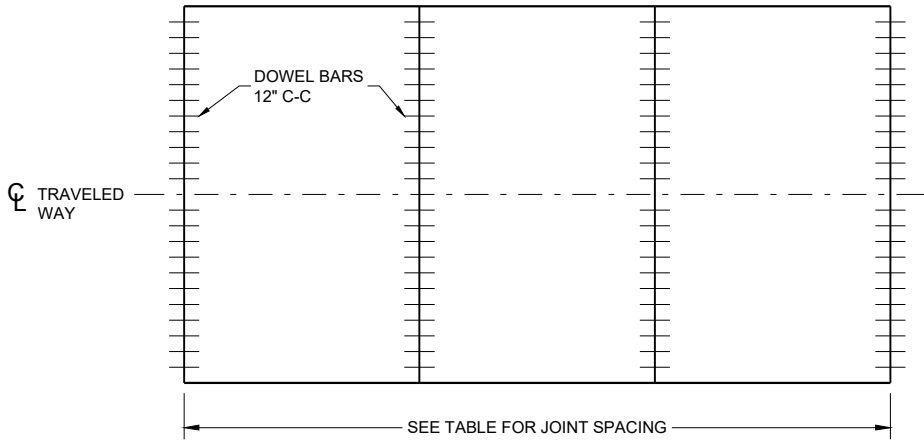
RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

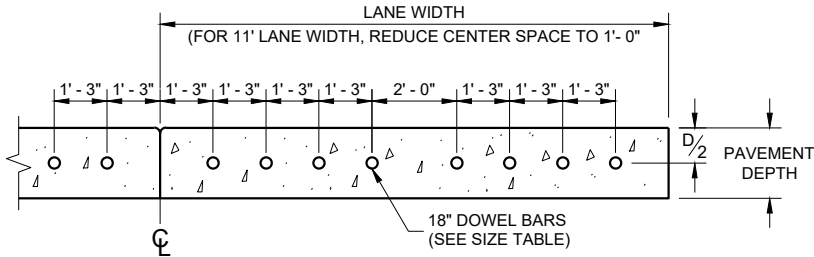
APPROVED
November 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR 52
FHWA



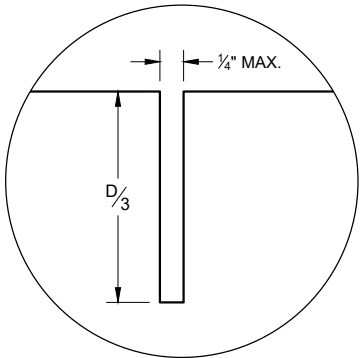
CONTRACTION JOINT DOWEL ASSEMBLY ①



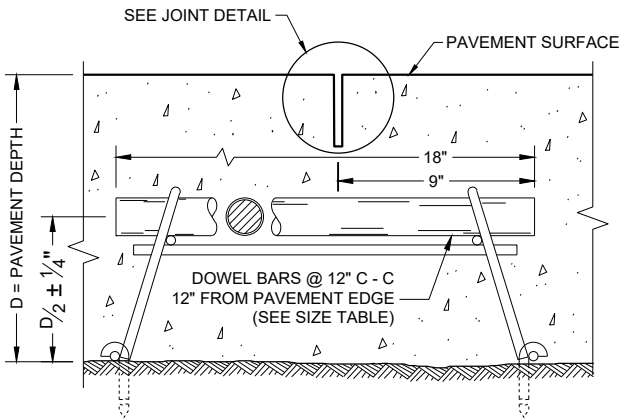
CONTRACTION JOINT LOCATIONS



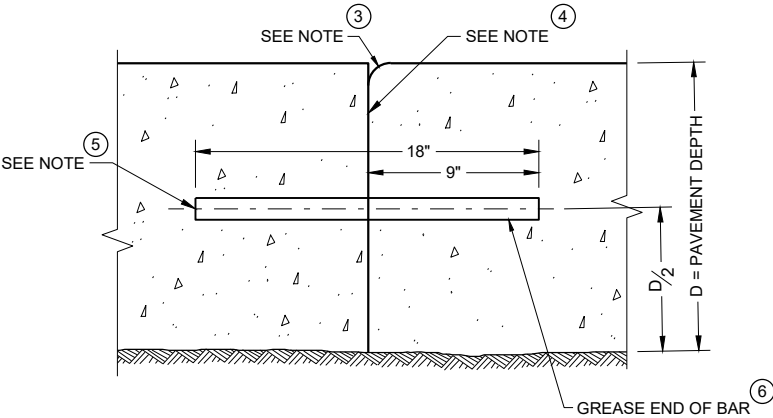
DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



JOINT DETAIL



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4" RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ⑦ ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

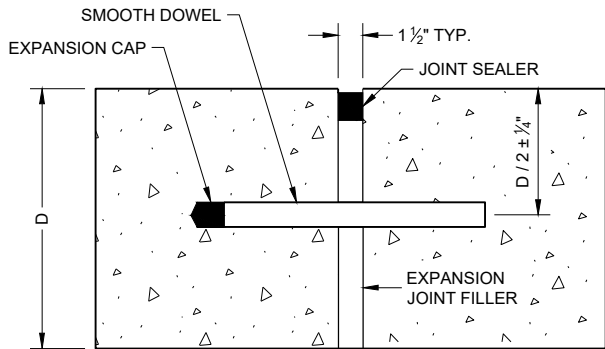
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8" & ABOVE	1 1/4"	15'

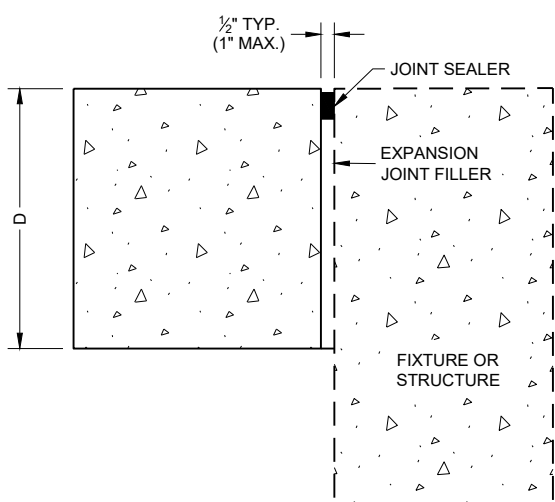
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR 53
FHWA

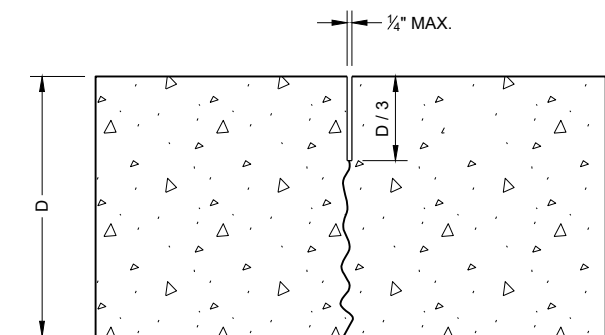


DOWELED TRANSVERSE ①

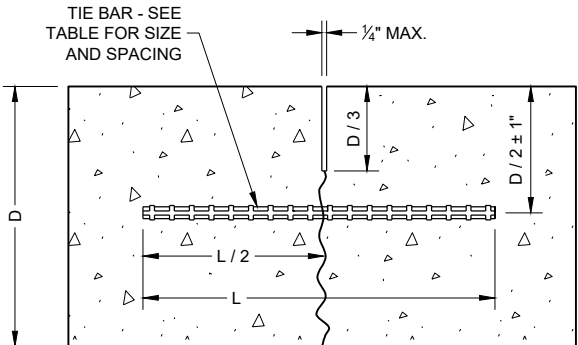


UNTIED - LONGITUDINAL

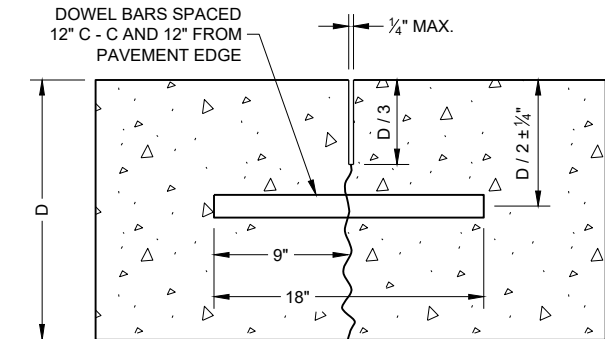
EXPANSION JOINTS



UNDOWELED TRANSVERSE



TIED LONGITUDINAL



DOWELED TRANSVERSE

CONTRACTION JOINTS ②

TIE BAR TABLE

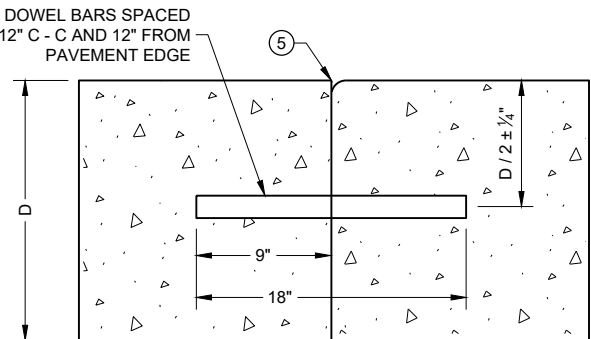
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

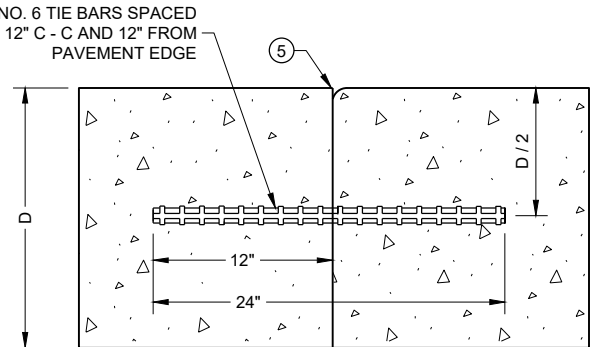
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

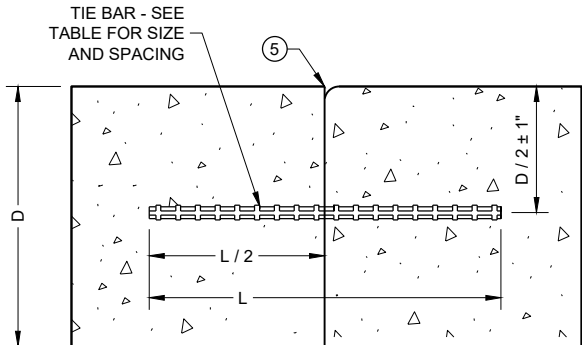
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
- ④ CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
- ⑤ IF JOINT IS FORMED, PROVIDE A 1/4" RADIUS.
- ⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



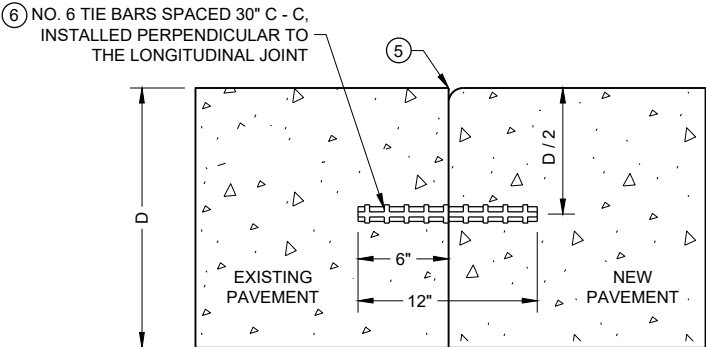
DOWELED TRANSVERSE ③



TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL

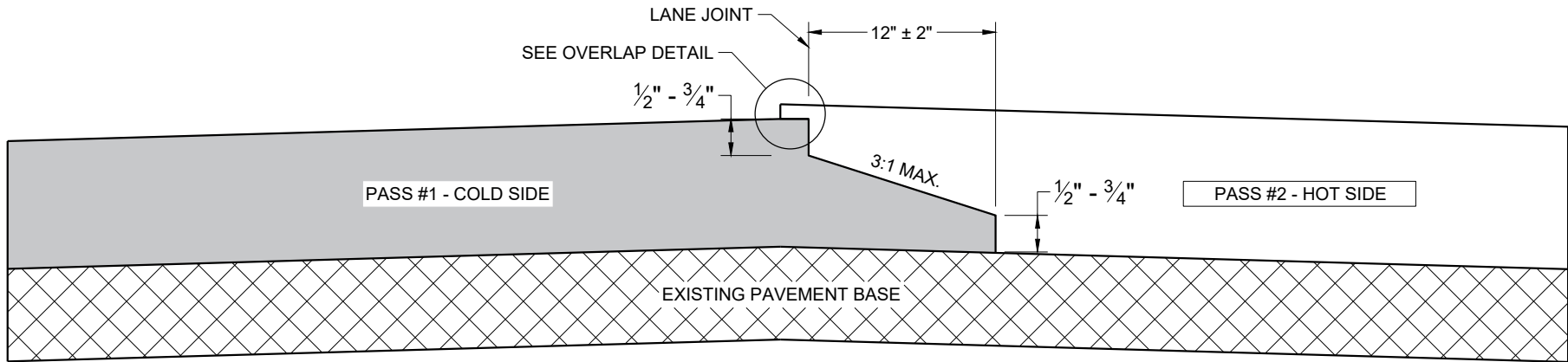


TIED LONGITUDINAL TO EXISTING

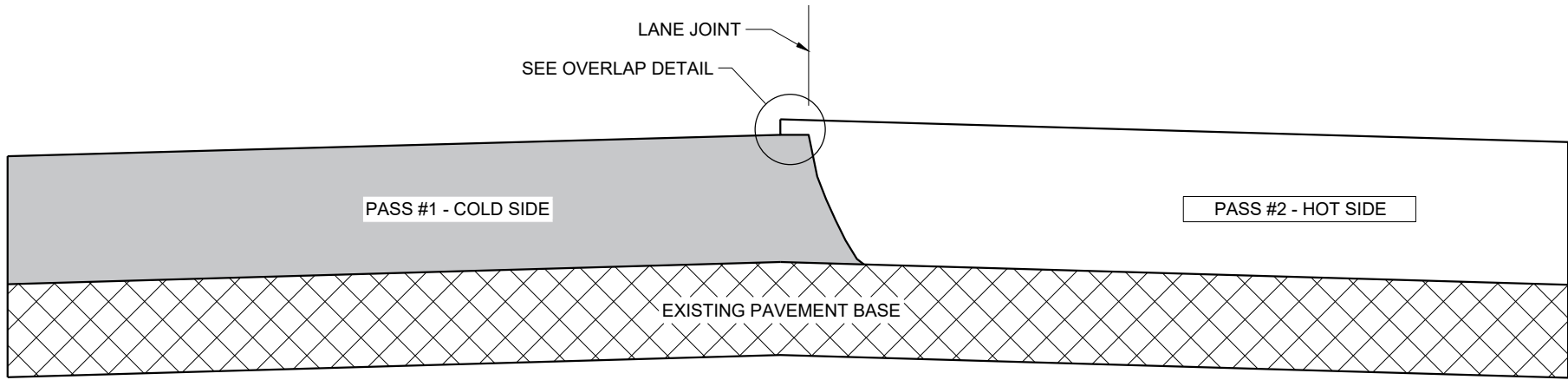
CONSTRUCTION JOINTS ④

CONCRETE PAVEMENT
JOINT TYPES

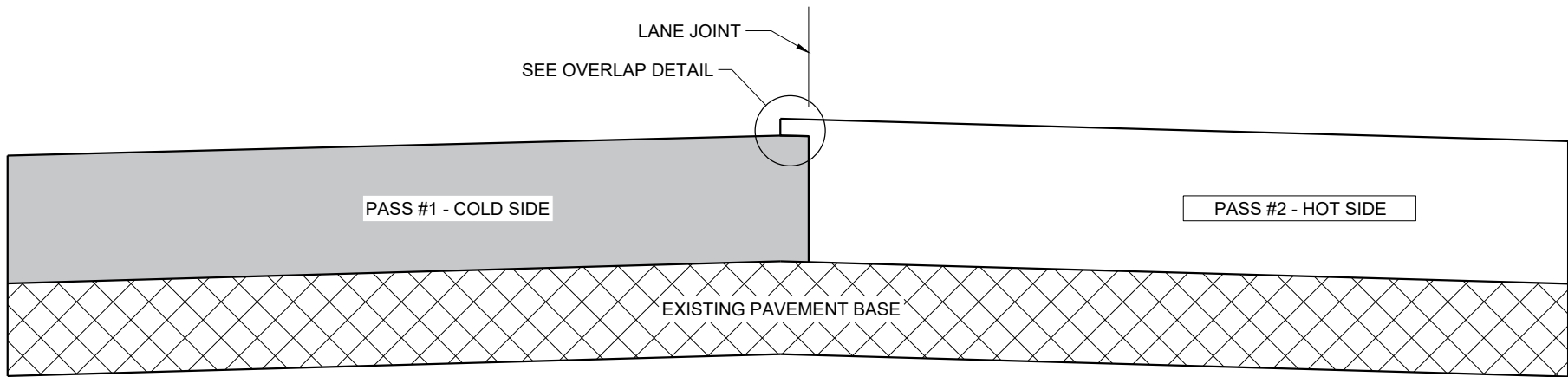
STATE OF WISCONSIN
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TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

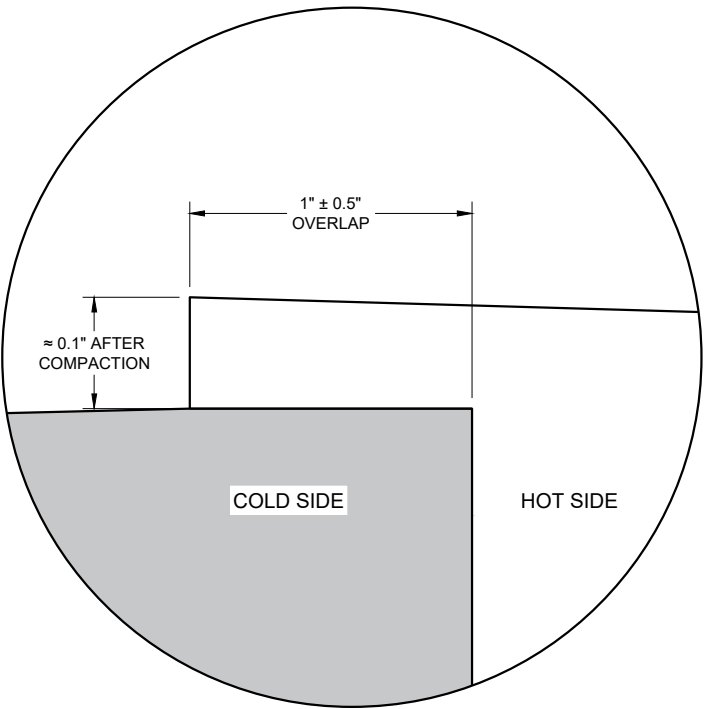
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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

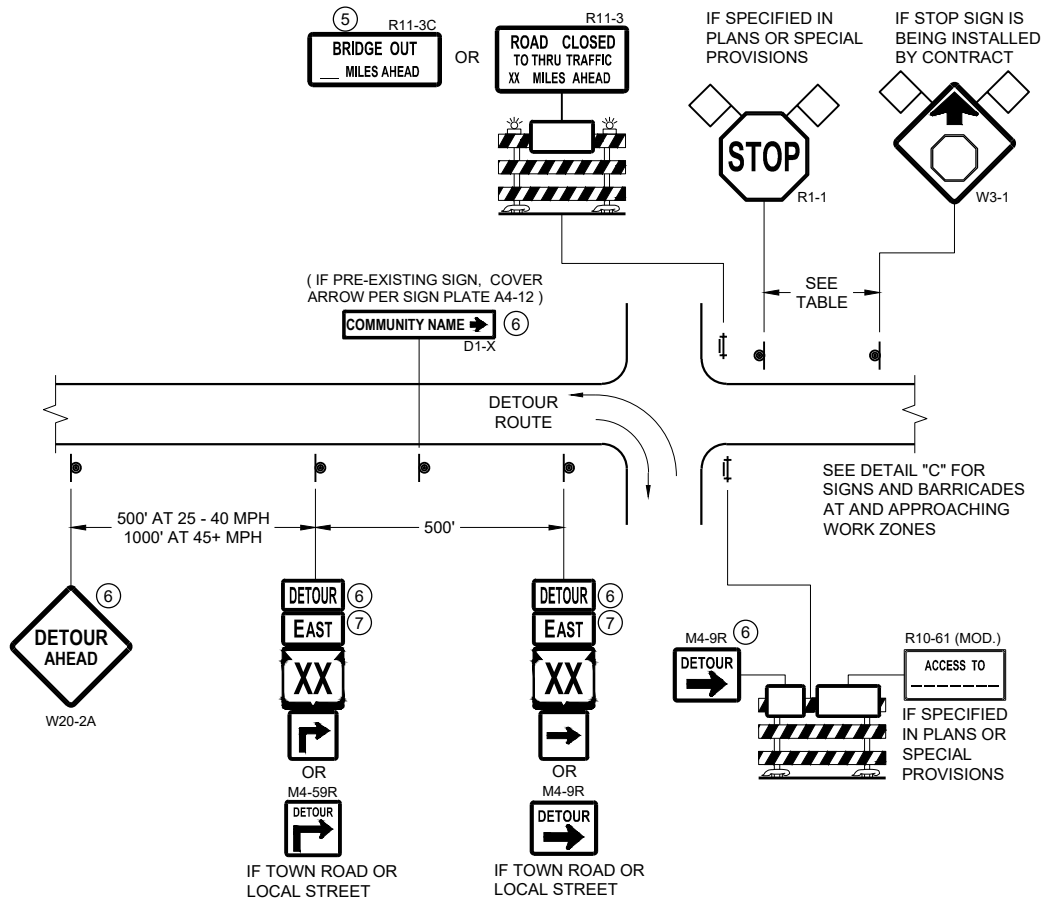


OVERLAP DETAIL (TYPICAL)

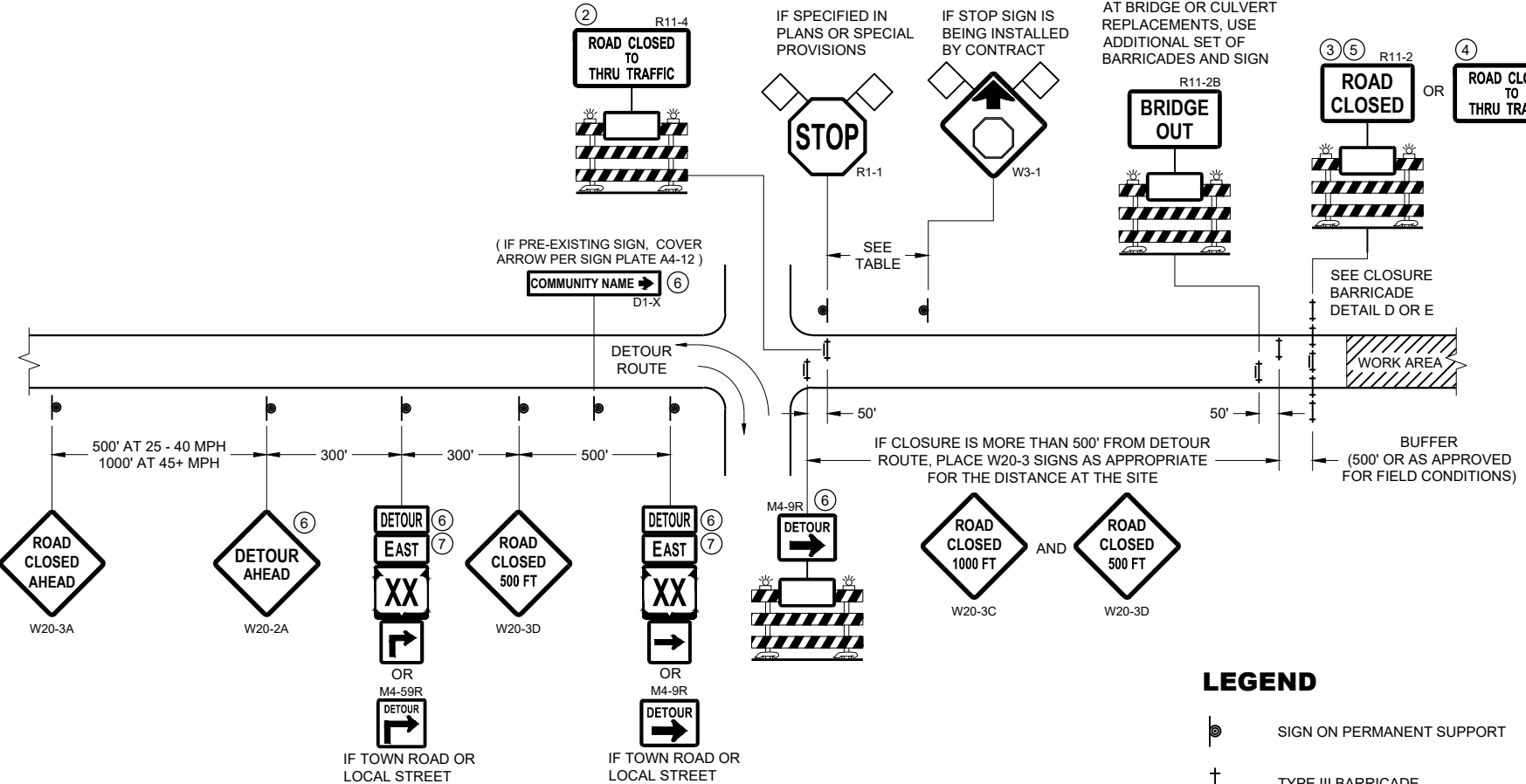
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 55
FHWA



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



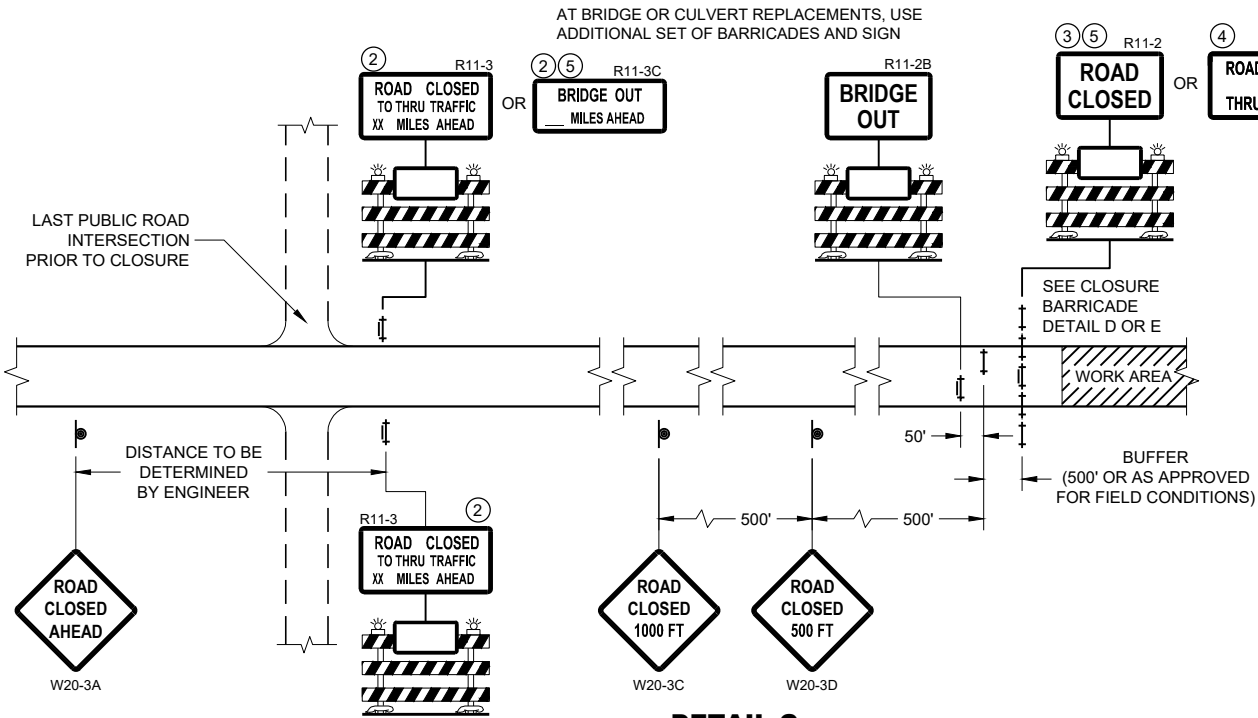
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- LEGEND**
- SIGN ON PERMANENT SUPPORT
 - TYPE III BARRICADE
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TYPE "A" WARNING LIGHT (FLASHING)
 - WORK AREA
 - FLAGS, 16" X 16" MIN. (ORANGE)

- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- OR M05 - 1 OR M06 - 1

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

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 56
FHWA



SEE SDD 15C2 - SHEET "a" FOR LEGEND

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

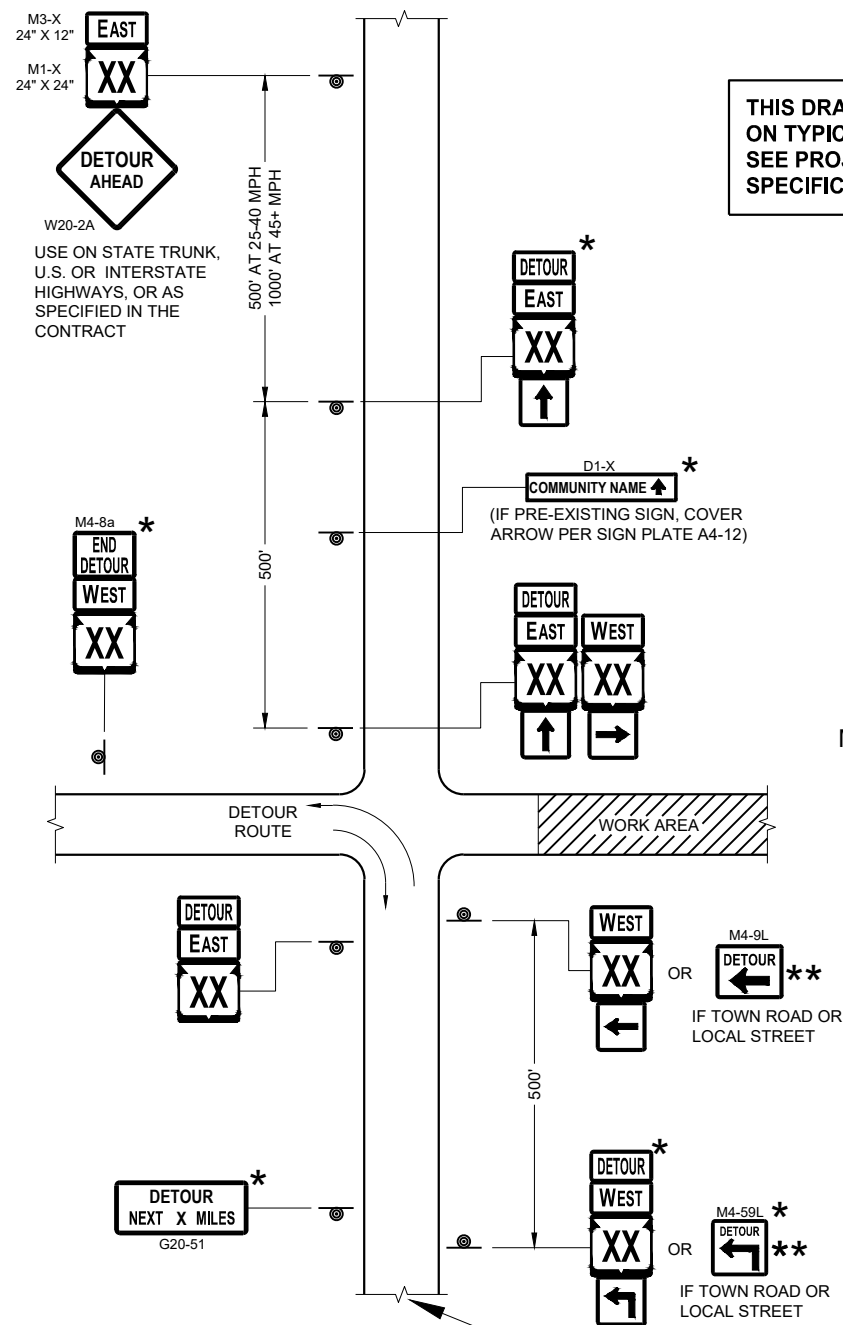
THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

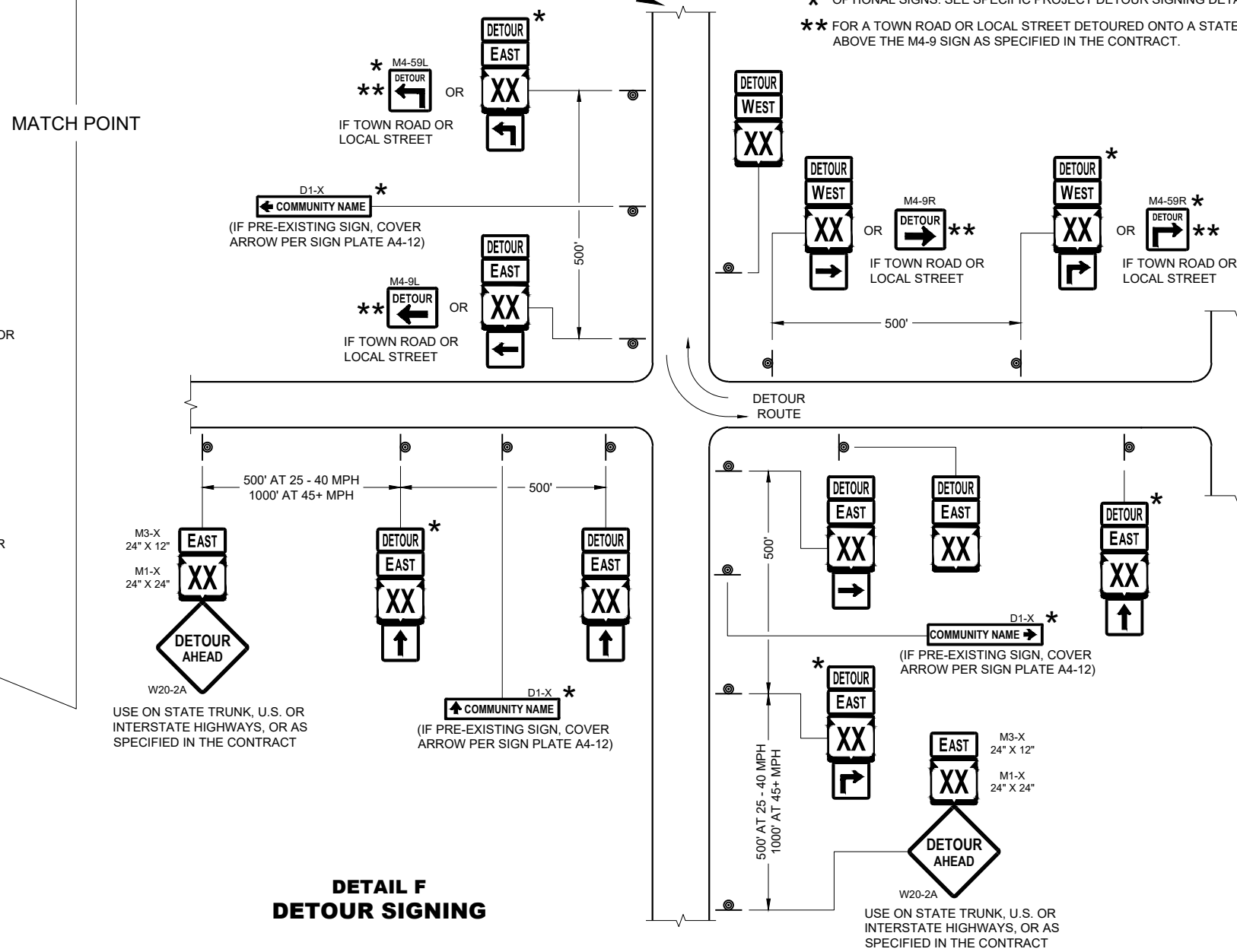
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11 - 2 SHALL BE 48" X 30"
R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
M4 - 9 SHALL BE 30" X 24"
M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
R1 - 1 SHALL BE 36" X 36"

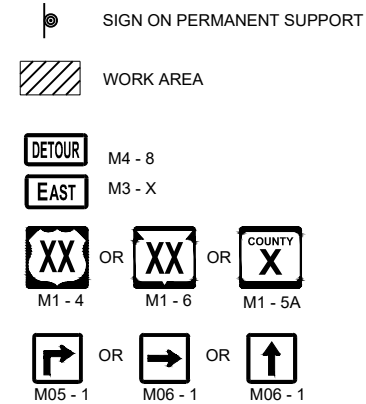
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.



**THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.**



LEGEND



GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
M4-9 AND M4-59 SHALL BE 30" X 24"
M4-8a SHALL BE 24" X 18"
G20-51 SHALL BE 60" X 24"
W20-2A SHALL BE 48" X 48"
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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

SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

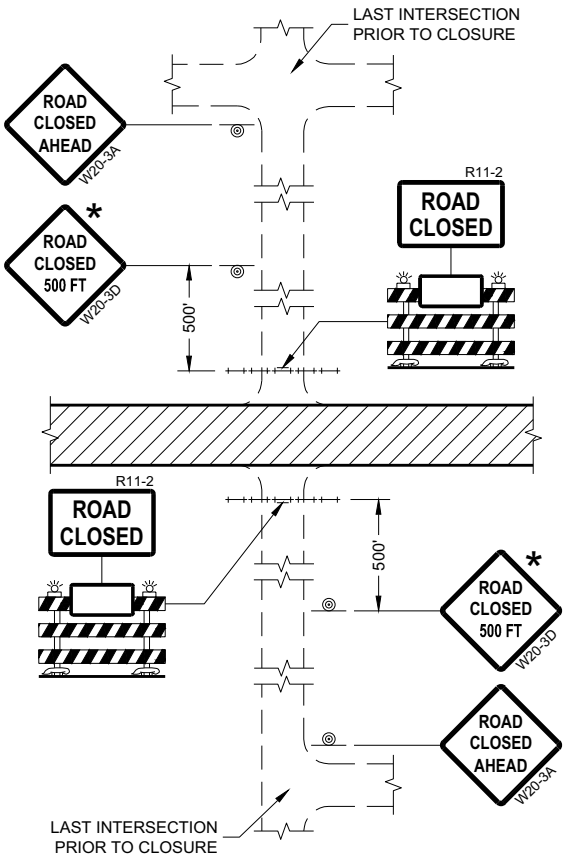
APPROVED
May 2023
 DATE

/S/ Andrew Heidtke
 WORK ZONE ENGINEER 58

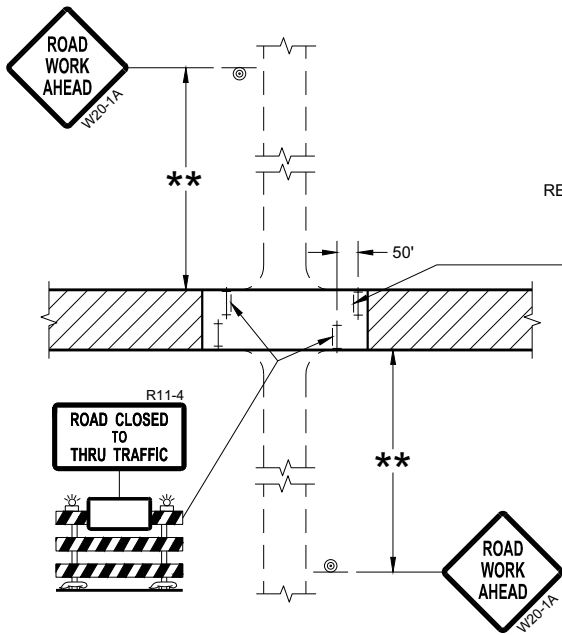
FHWA

SDD 15C02 - 09c

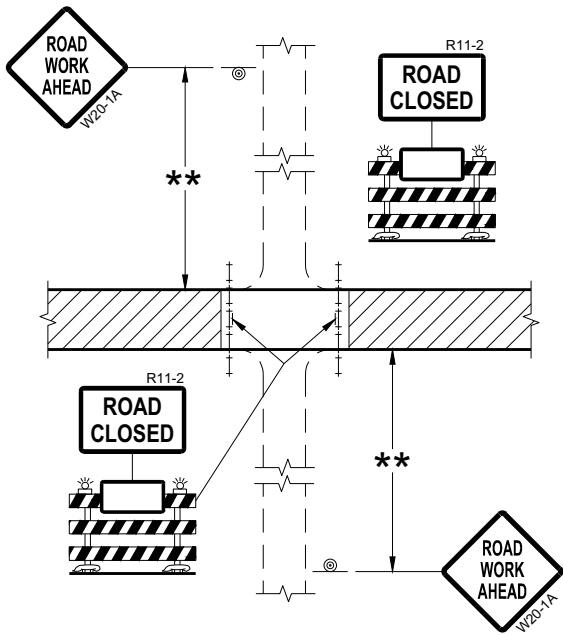
SDD15C02 - 09c



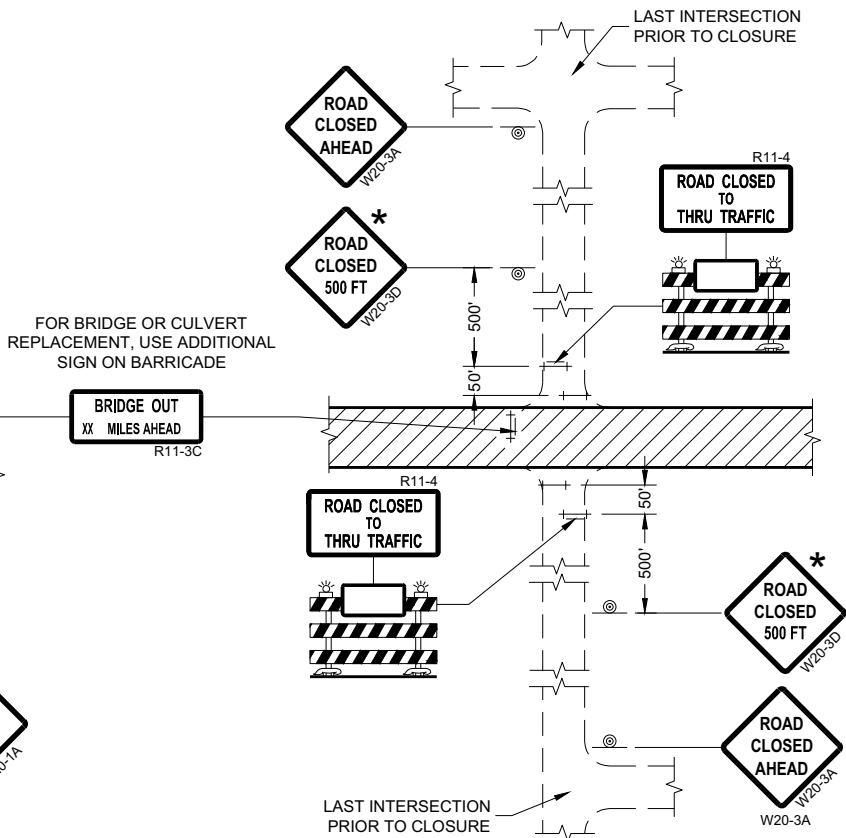
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

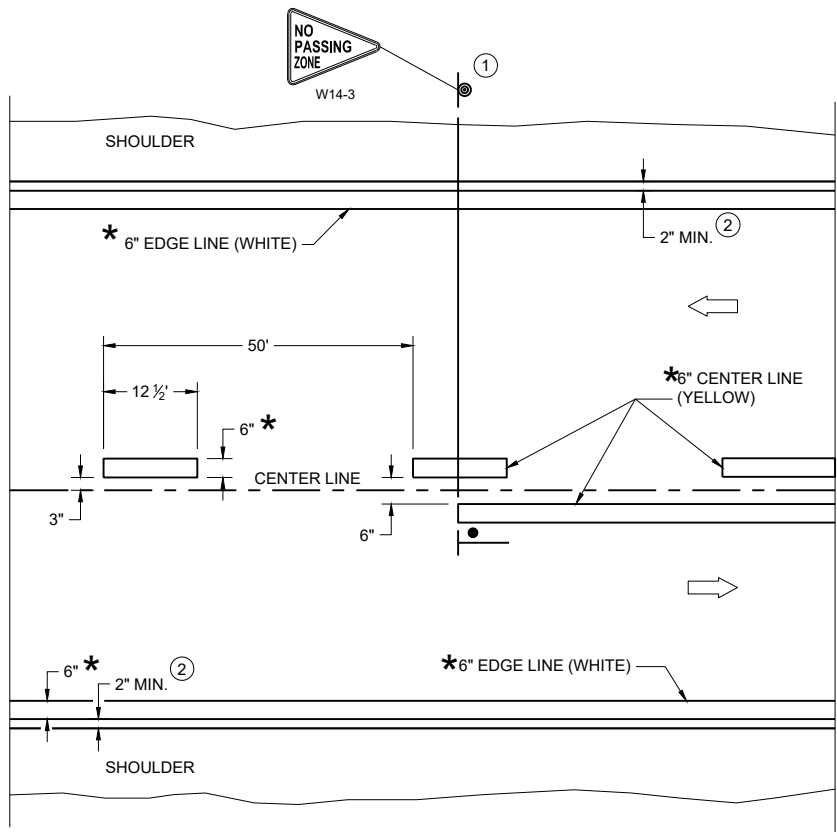
LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

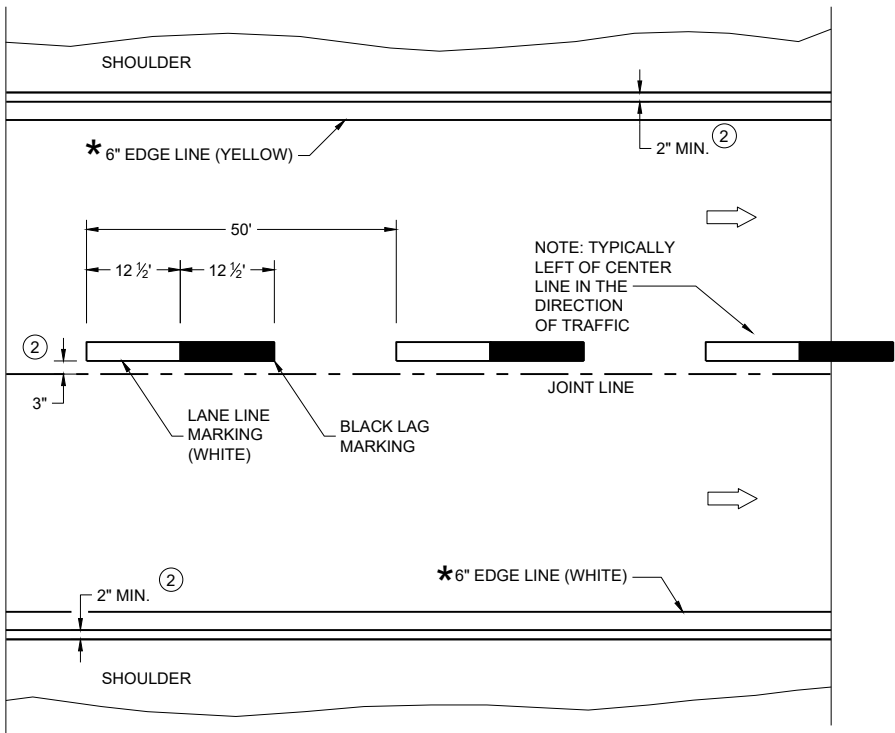
**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 59
FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

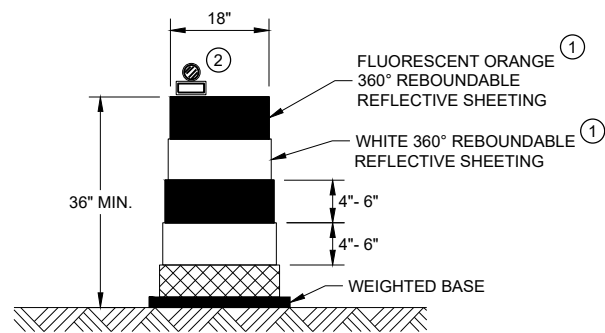
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

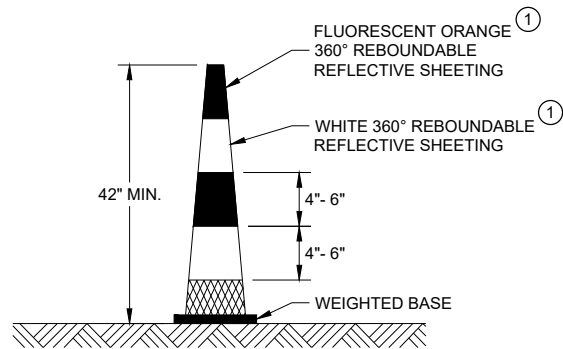
LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

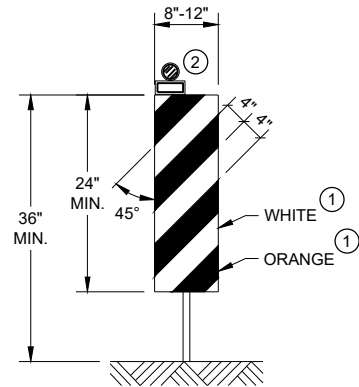
PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	60



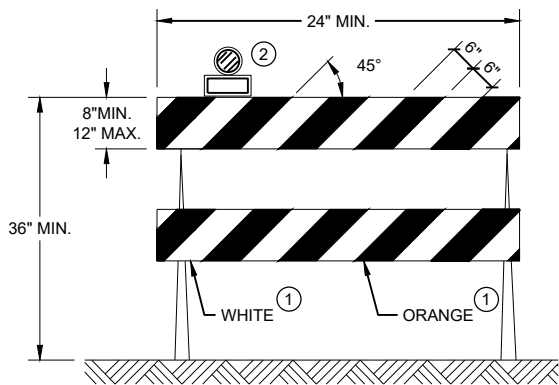
DRUM
BALLAST WIDTHS
RANGE FROM 24"-36"



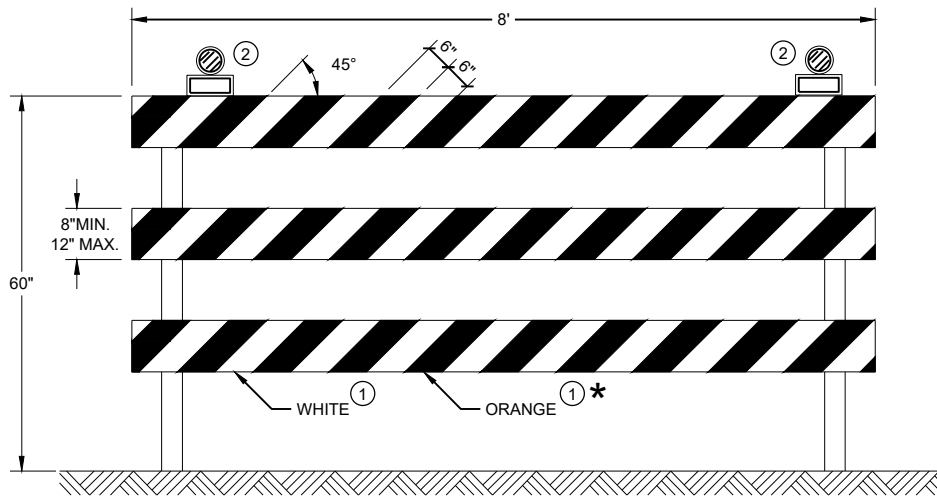
42" CONE
DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



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



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



TYPE III BARRICADE
IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.
* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

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

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 61
FHWA	

LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

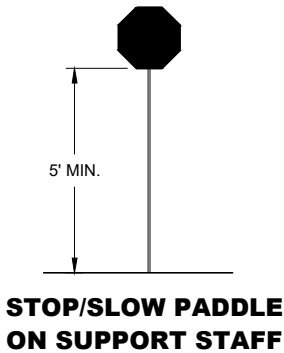
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

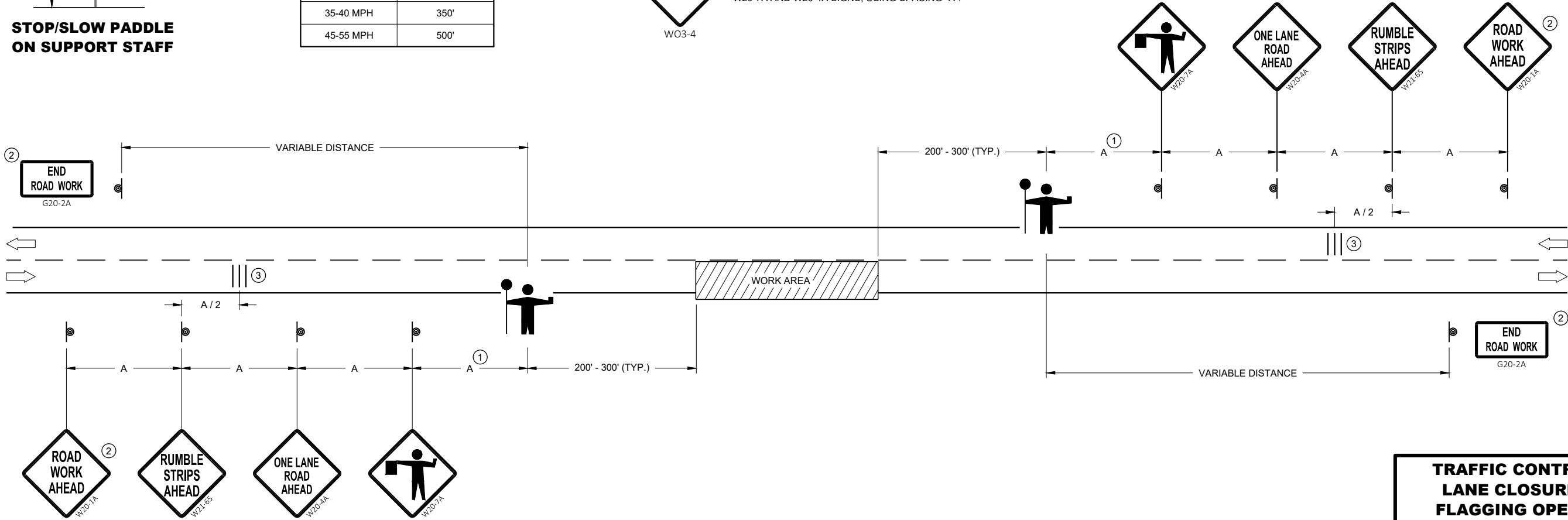


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

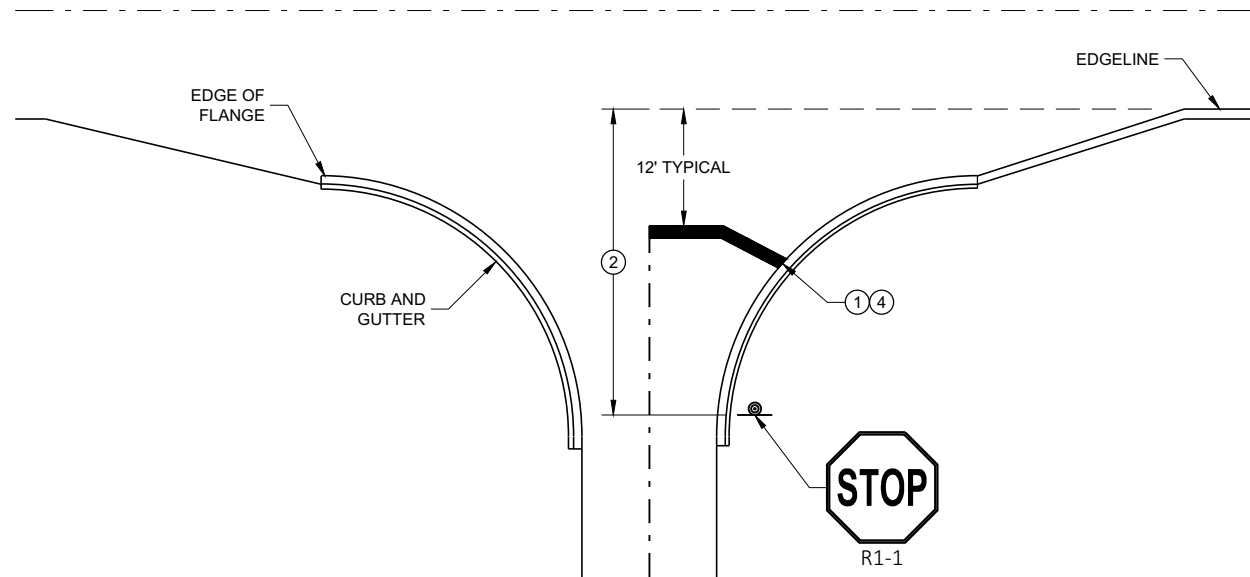
SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



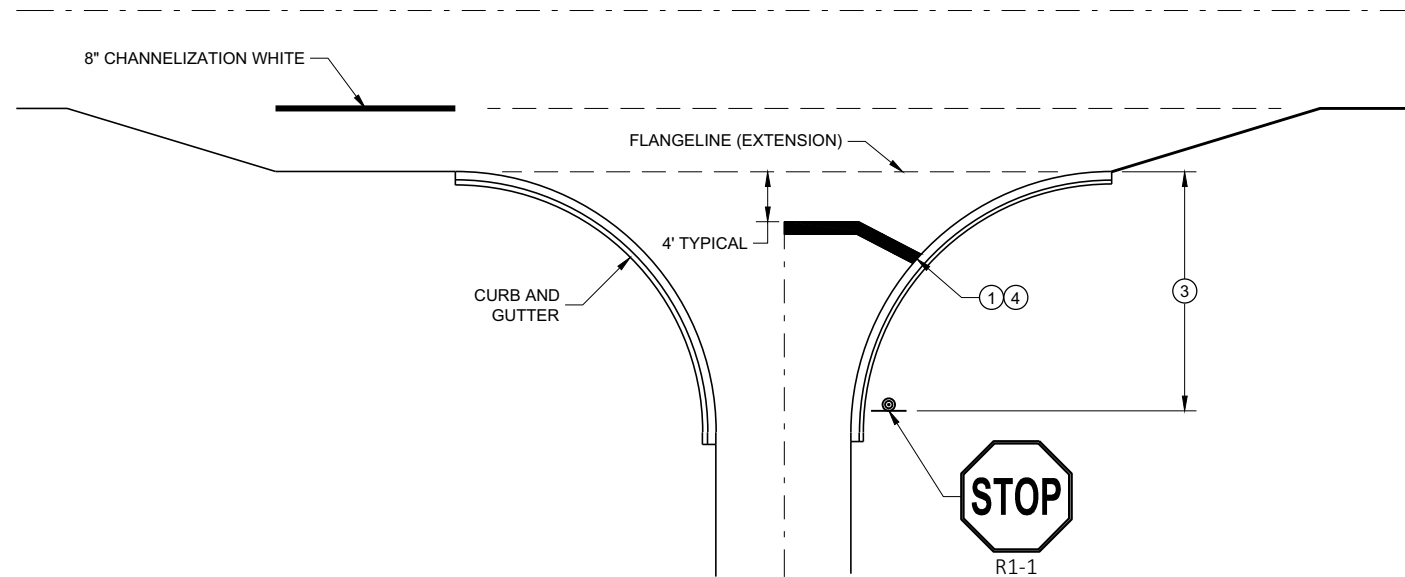
USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



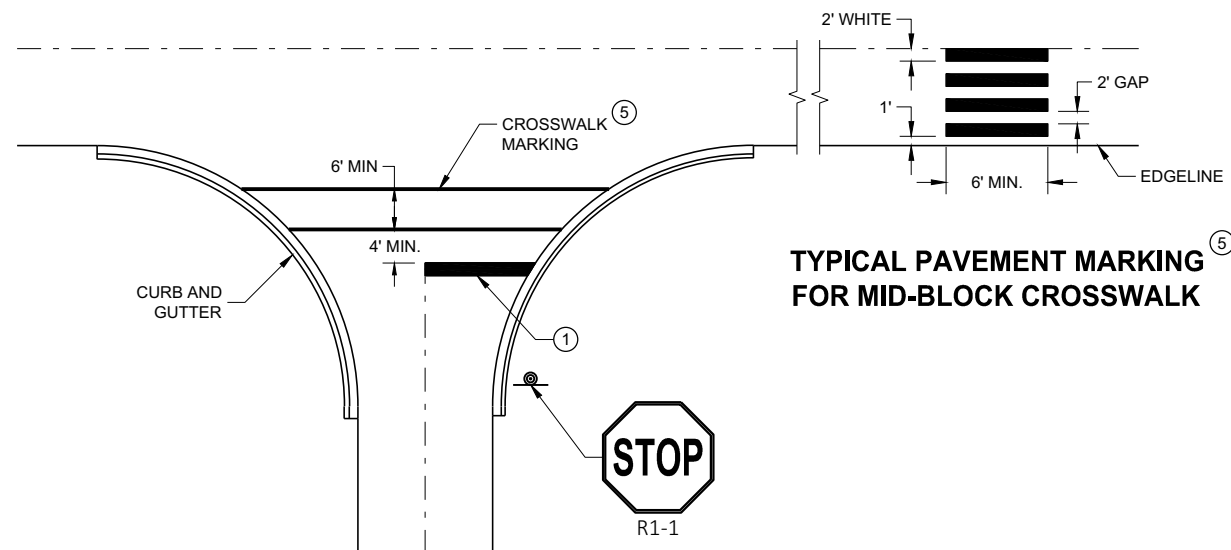
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 62
FHWA	



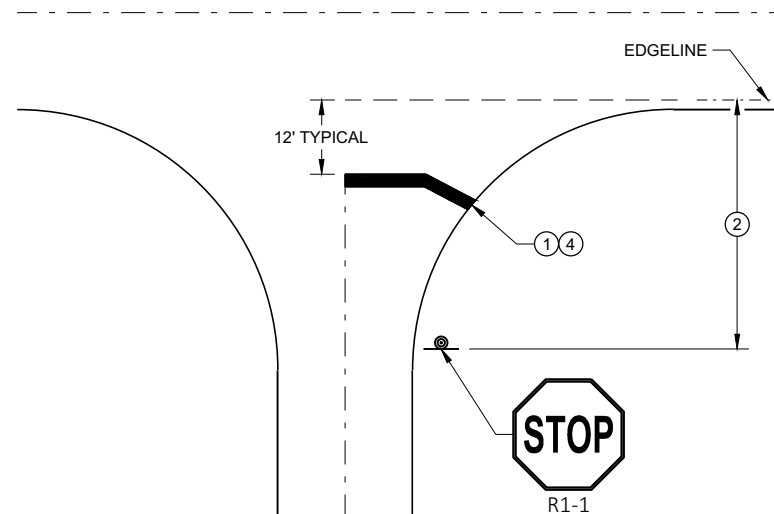
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 1 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- 2 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE.
- 3 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
- 4 MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- 5 LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.

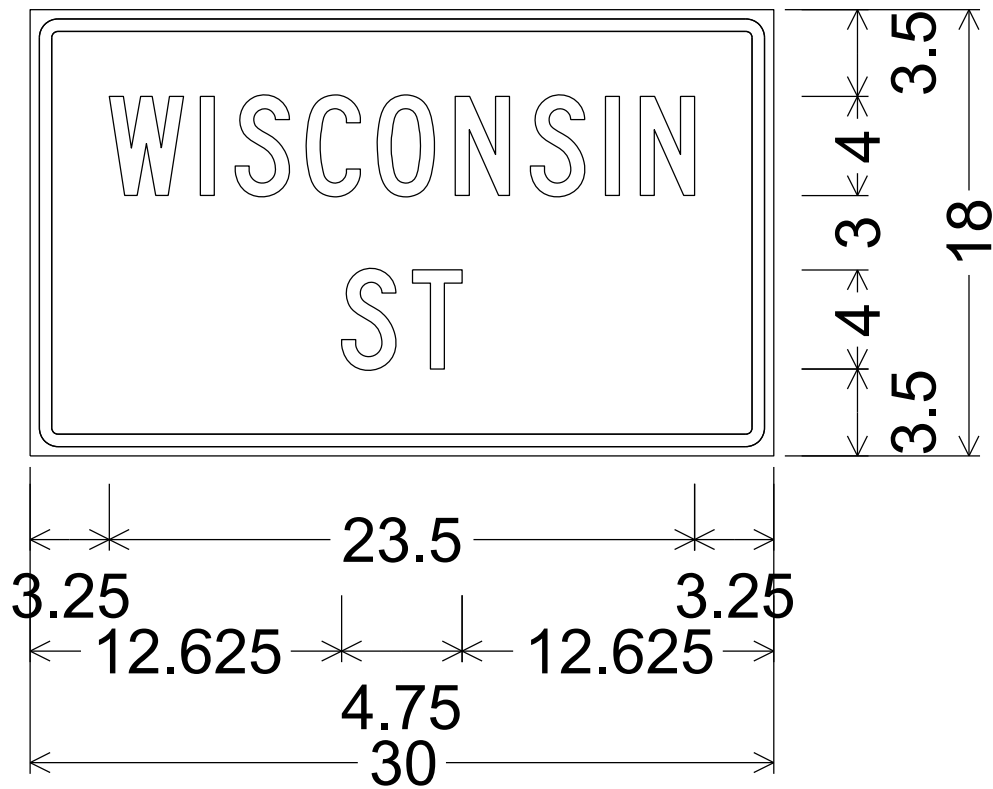
STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MAP ENGINEER 63
FHWA

NOTES

- 1. Fixed Message Sign Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C

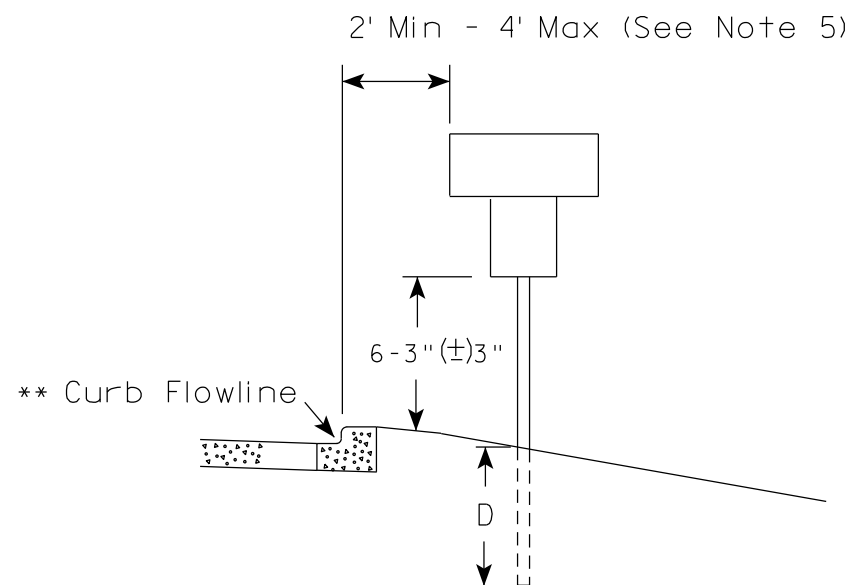
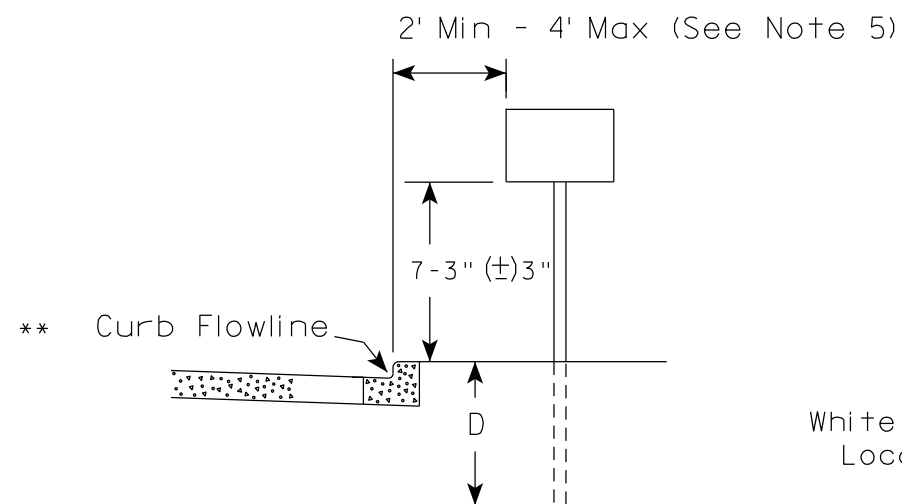


1.125" Radius, 0.500" Border, 0.375" Indent

7

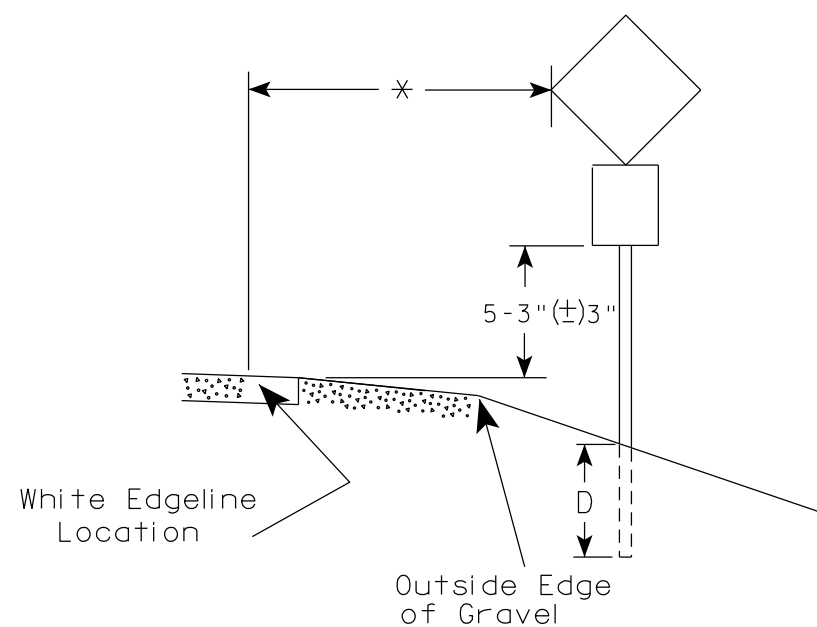
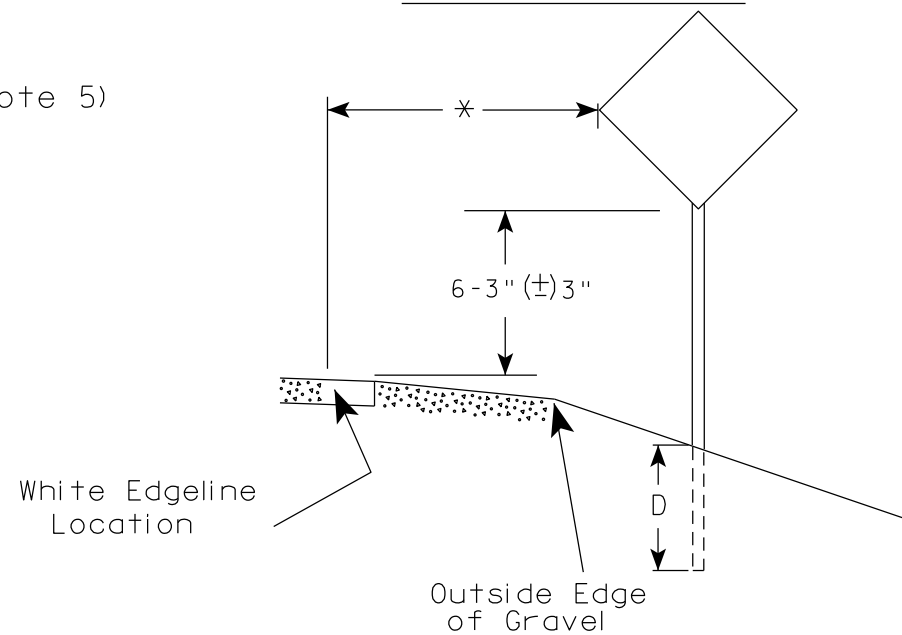
7

URBAN AREA



* * 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.

RURAL AREA (See Note 2)



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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 12/6/23

PLATE NO. A4-3.23

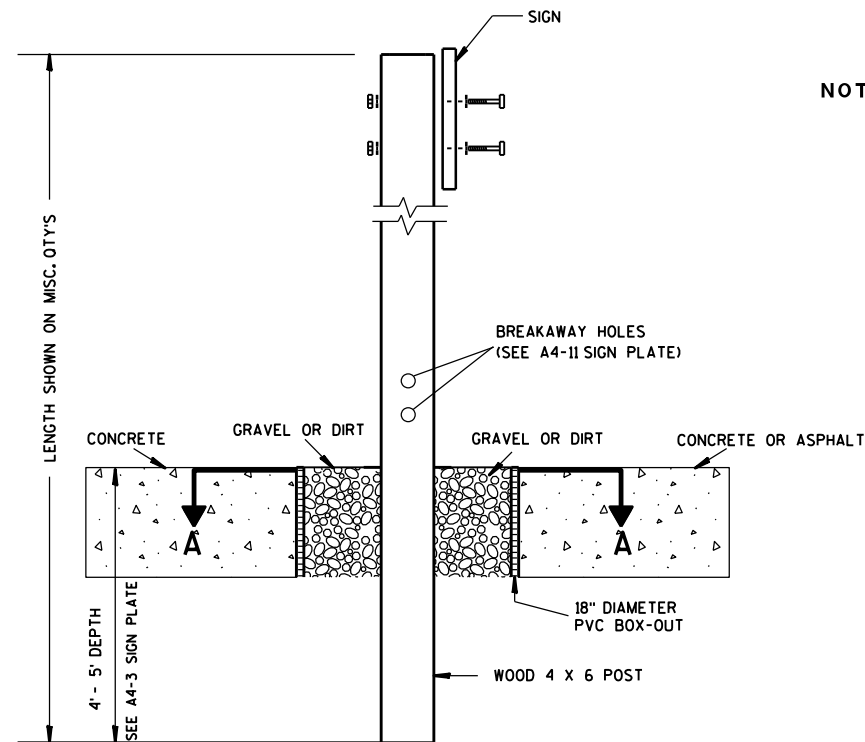
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 65

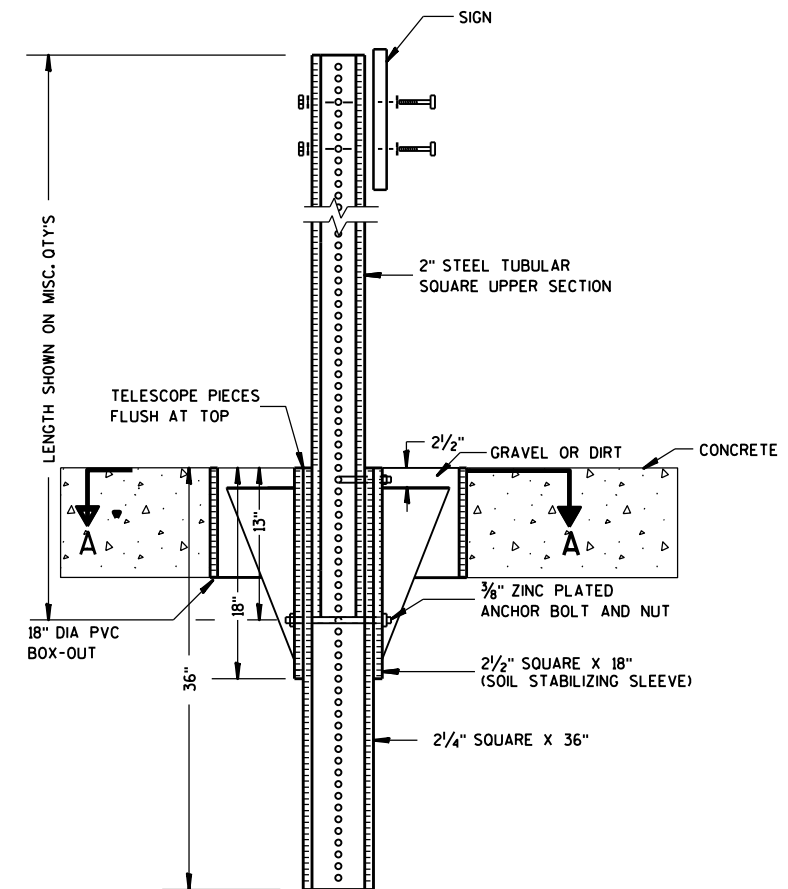
E



ELEVATION VIEW

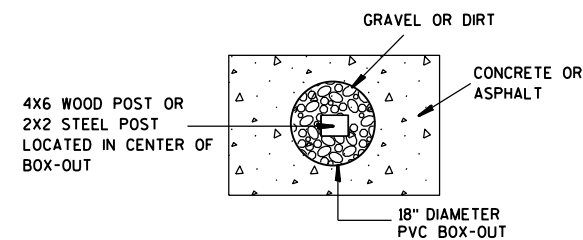
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 66 A4-3B.1

PROJECT NO:

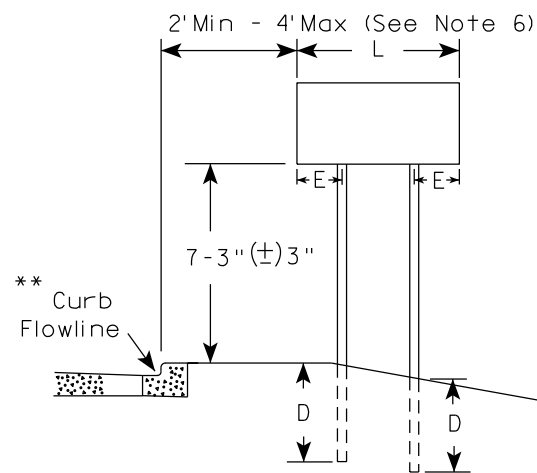
HWY:

COUNTY:

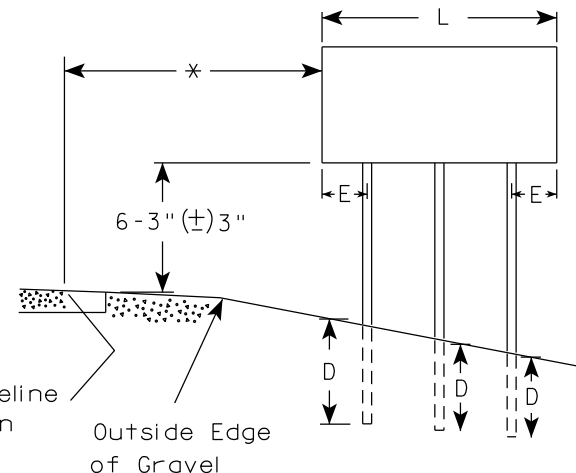
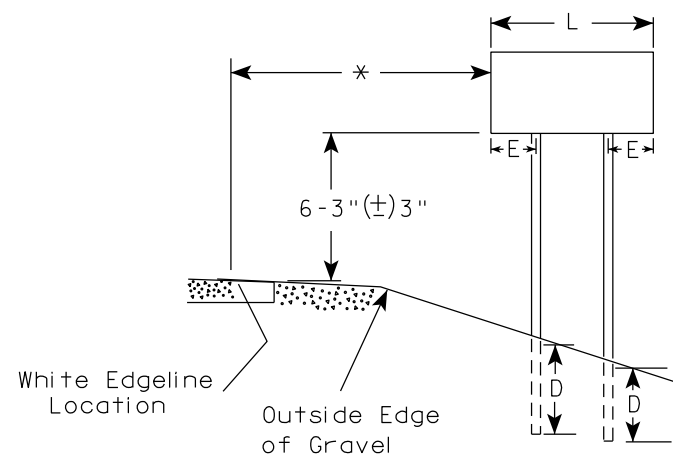
SHEET NO:

E

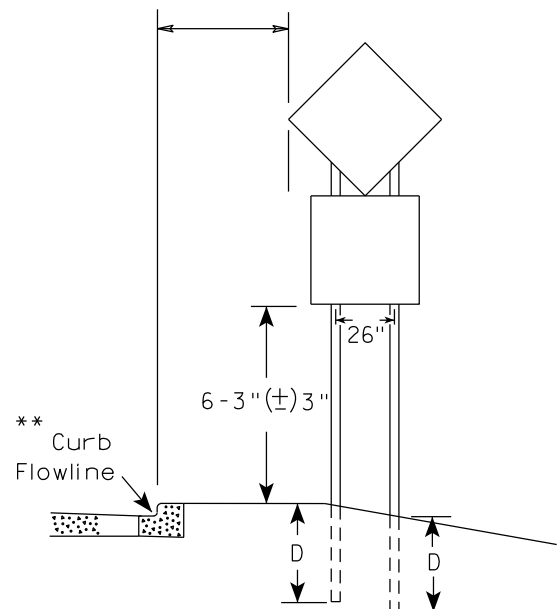
URBAN AREA



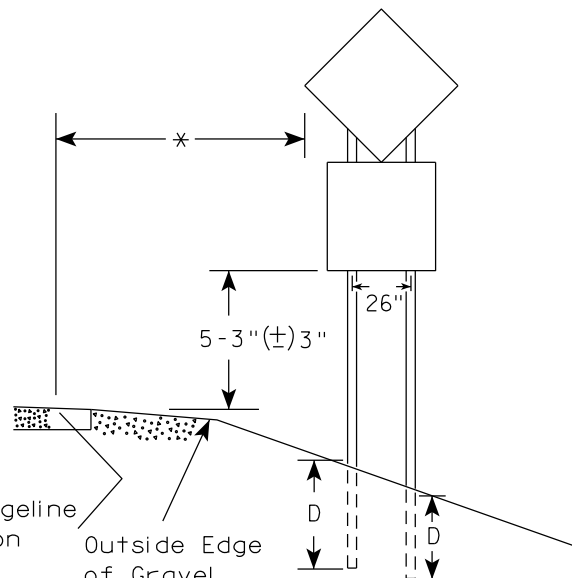
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

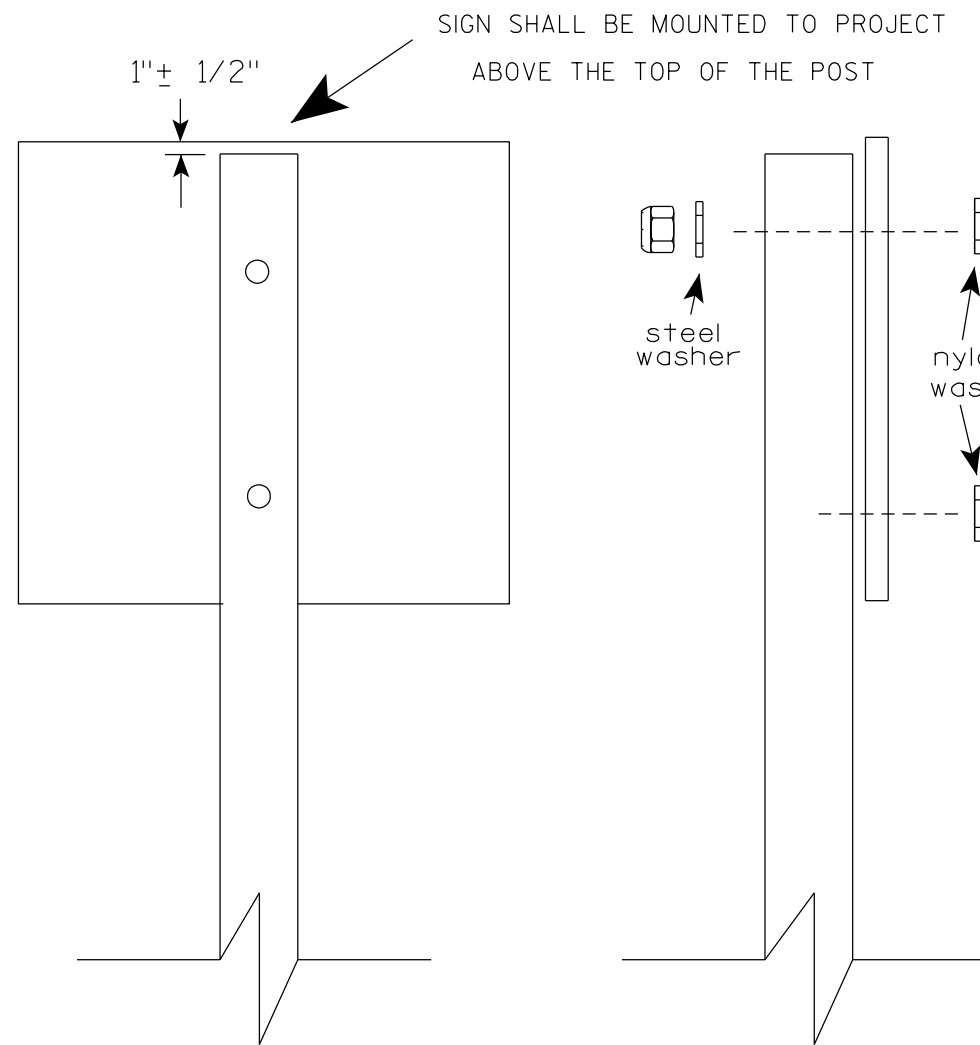
GENERAL NOTES

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

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

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

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



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

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

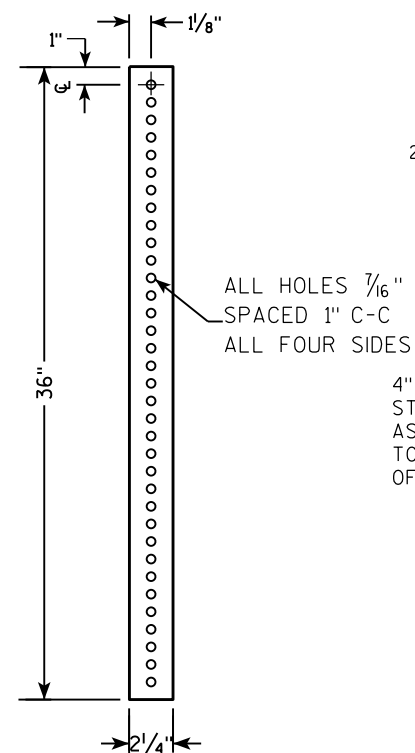
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
- $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
- $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

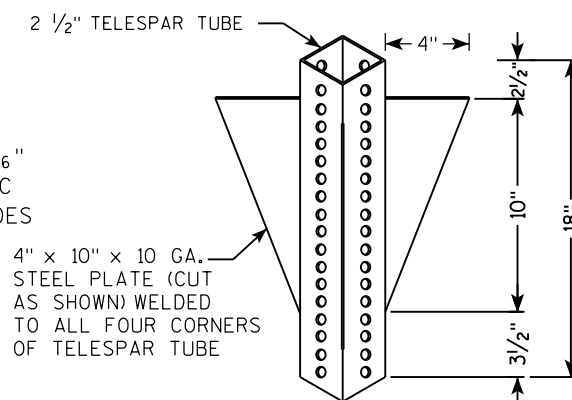
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

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



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

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

Side View Dimensions:

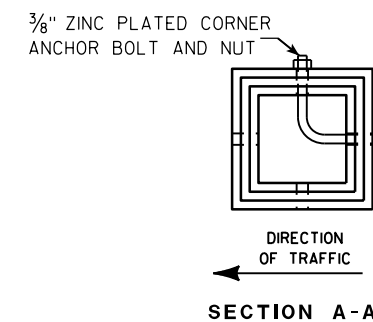
- Overall height: 36"
- Section A: 18"
- Section B: 12"

End View Dimensions:

- Overall width: 2 1/4" SQUARE X 36"
- Section A: 18"
- Section B: 12"

Material and Assembly Specifications:

- 2" STEEL TUBULAR SQUARE UPPER SECTION
- ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES
- 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT
- 3/8" ZINC PLATED ANCHOR BOLT AND NUT
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
- SIGN



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 PLAT 69 14-9.9

SHEET NO:	E
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PROJECT NO:	HWY:	COUNTY:	SHEET NO:
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FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN

PLOT DATE : 05-FEB-2015 17:09

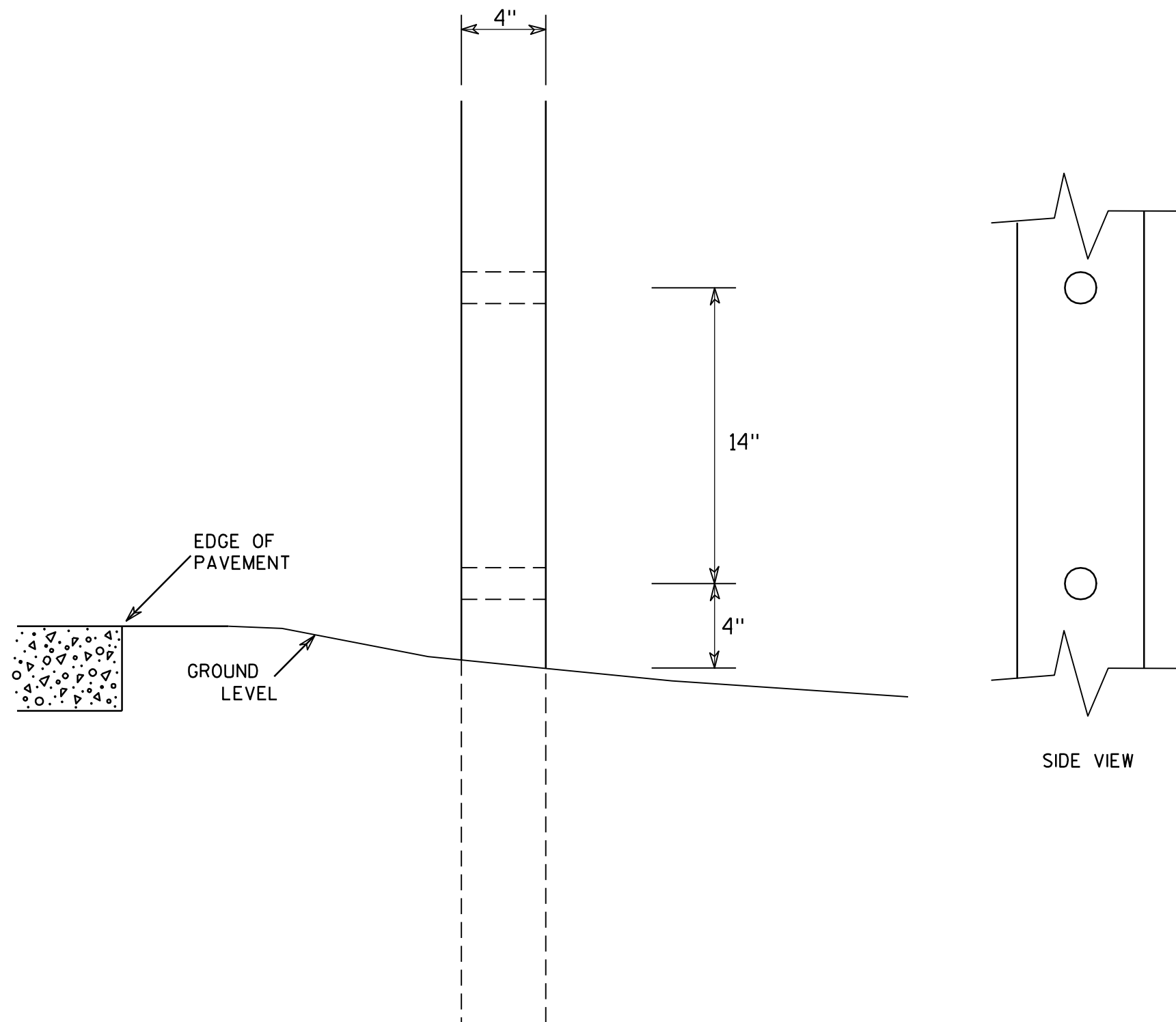
PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

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:

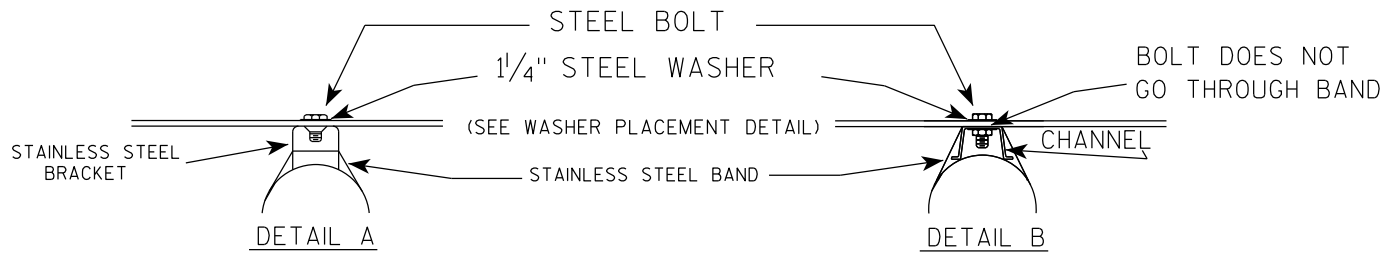
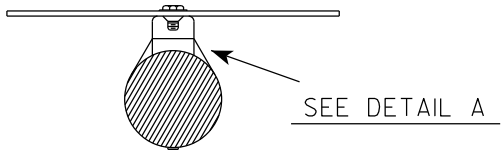
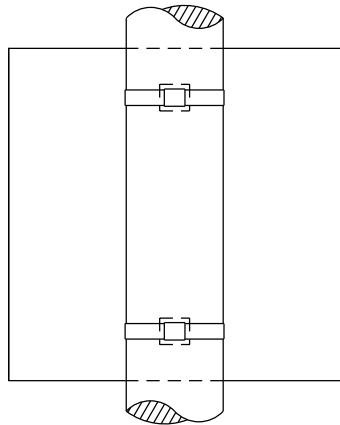
COUNTY:

SHEET NO: 70

E

BANDING

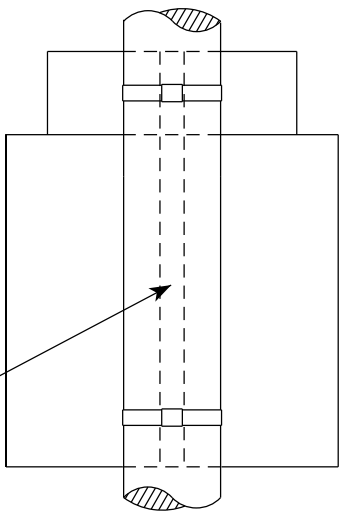
SINGLE SIGN



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

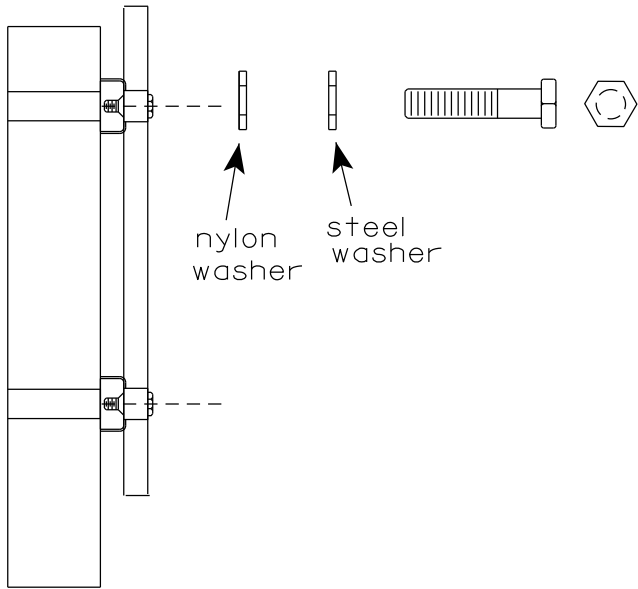
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

WASHER PLACEMENT

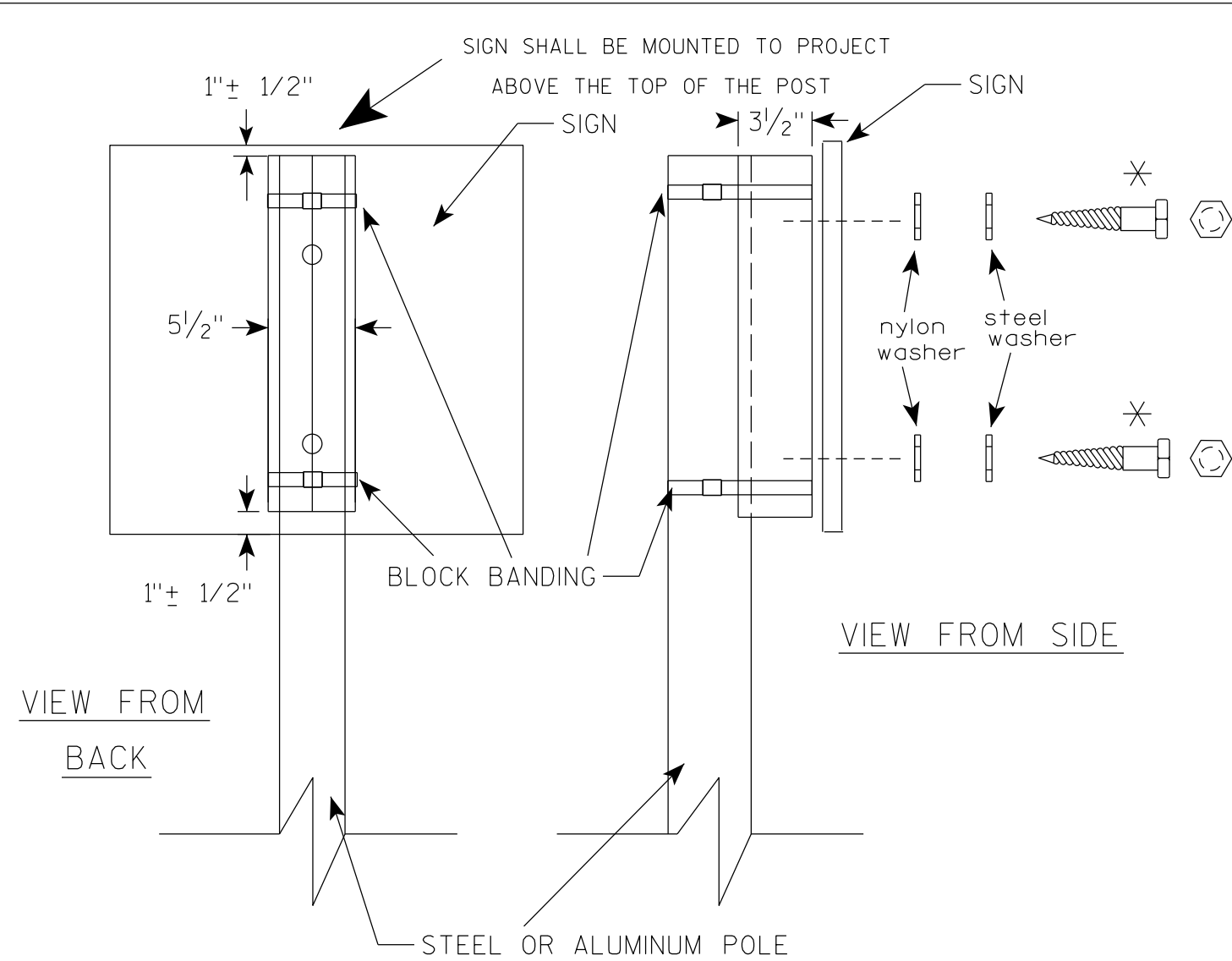


WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

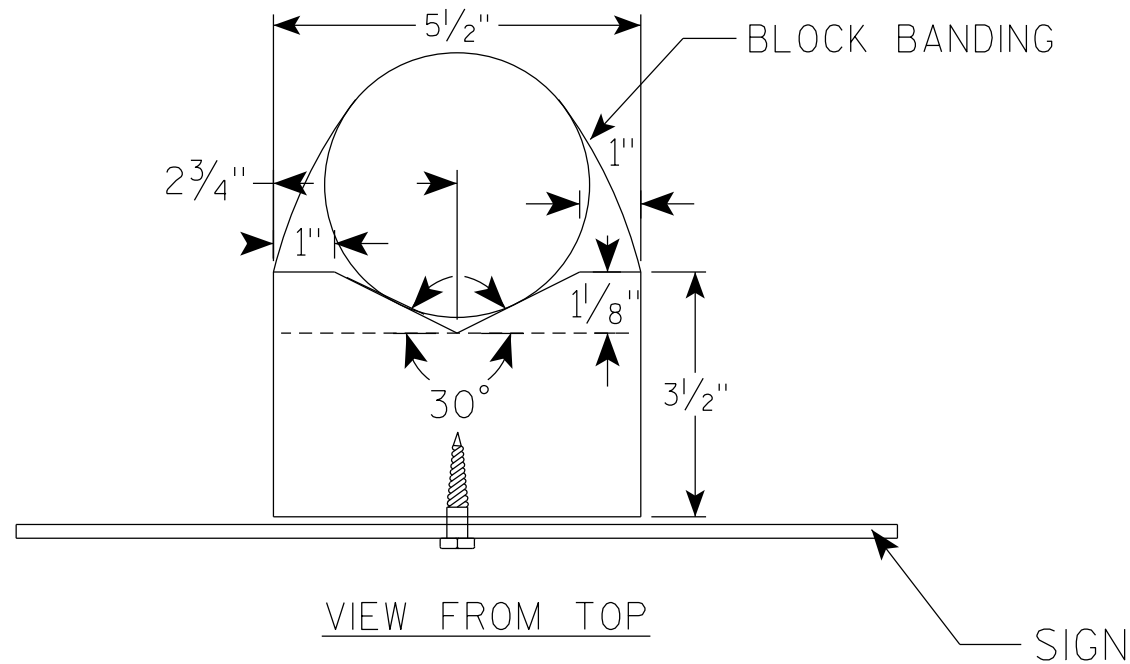
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

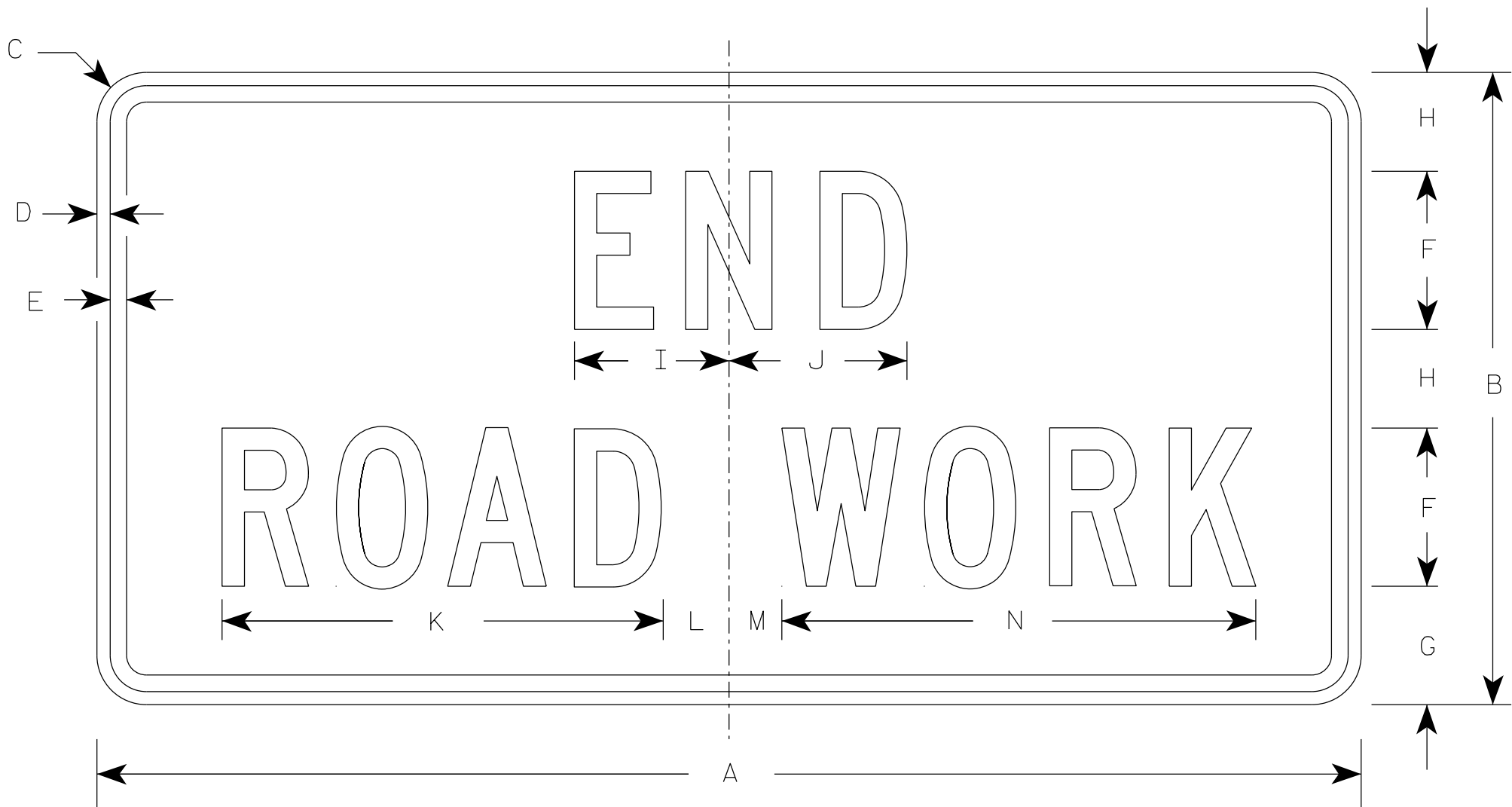
PROJECT NO:

SHEET NO: 72

E

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.



G20-2A

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

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

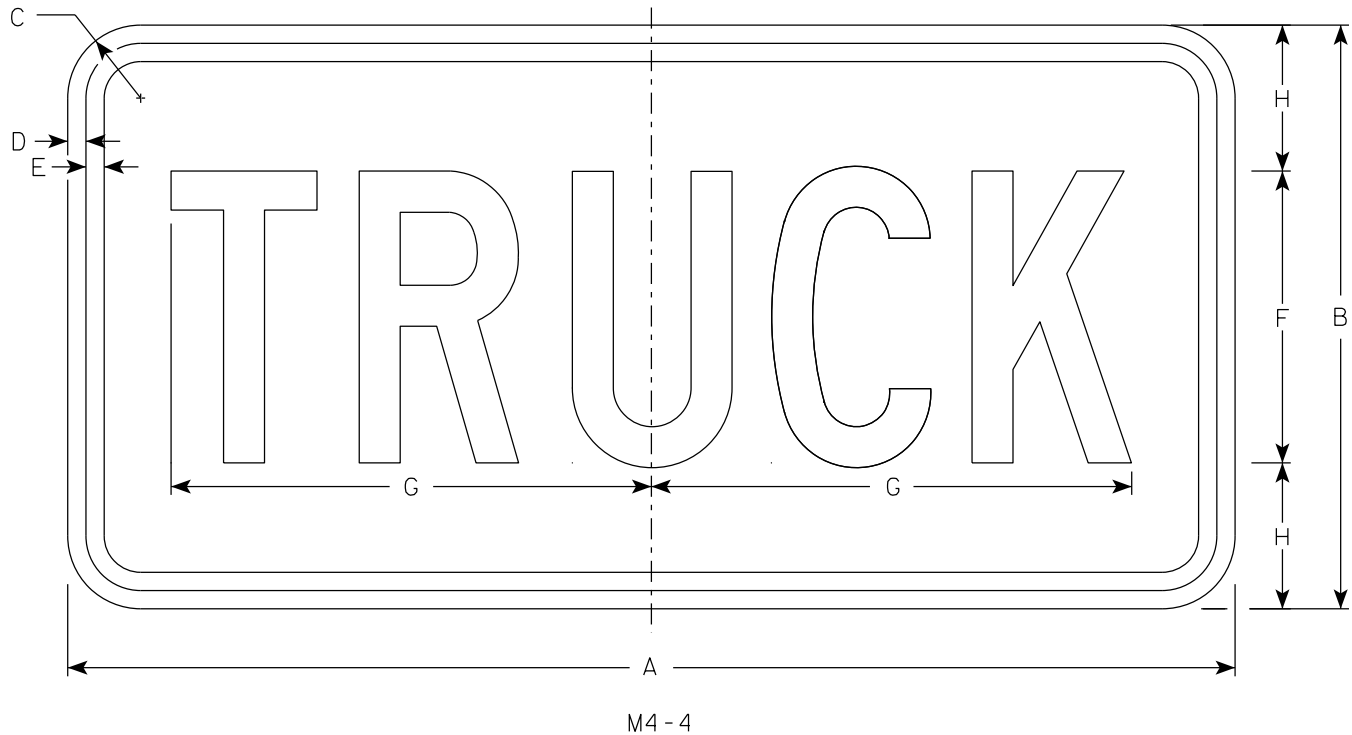
DATE 1/26/2023 PLATE NO. G20-2A.10

7

7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 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																											
2	24	12	1 1/2	3/8	3/8	6	9 7/8	3																			2.0
2M	24	12	1 1/2	3/8	3/8	6	9 7/8	3																			2.0
3	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5
4	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5
5	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5

STANDARD SIGN

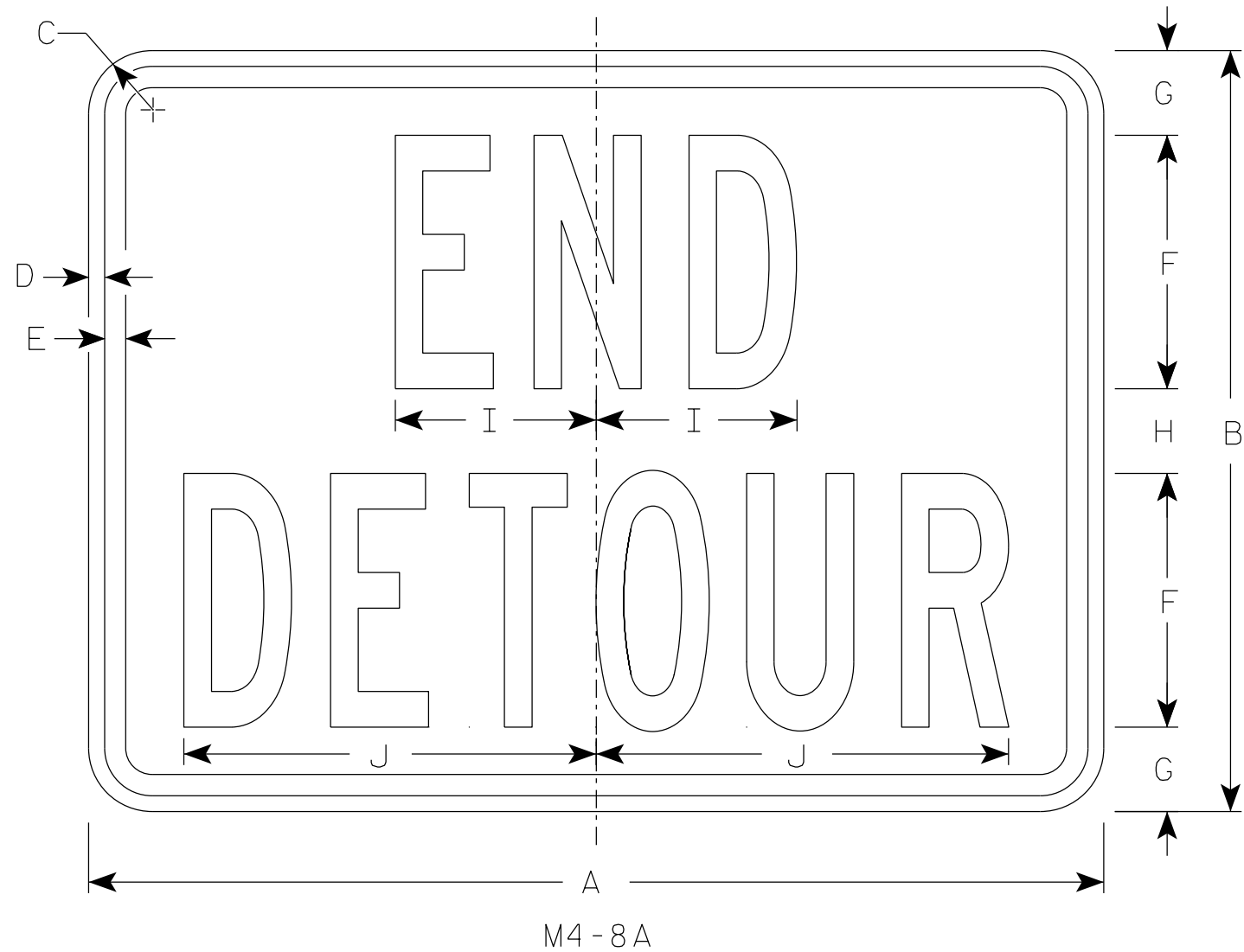
M4 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/21/2022 PLATE NO. M4-4.4

7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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																											
2	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
2M	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
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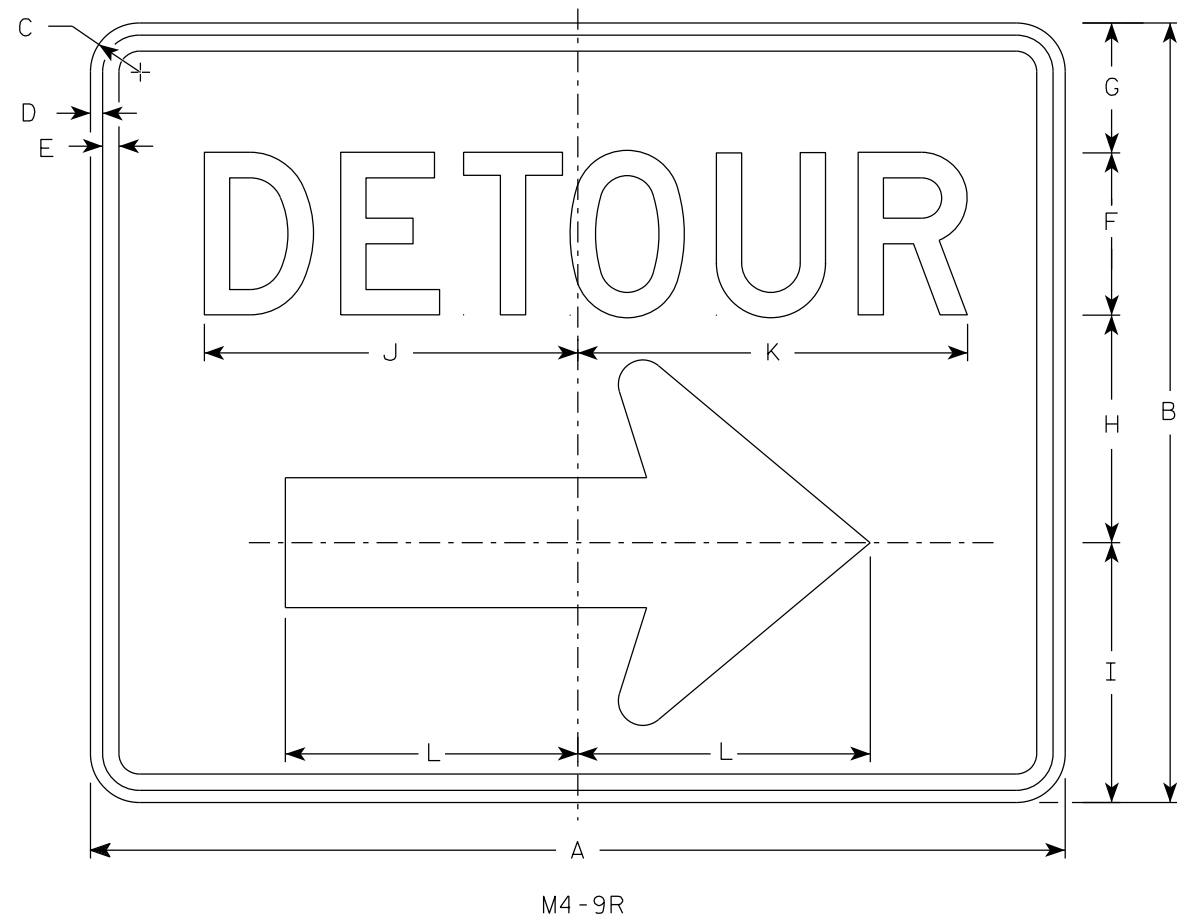
STANDARD SIGN

M4-8A

WISCONSIN DEPT OF TRANSPORTATION

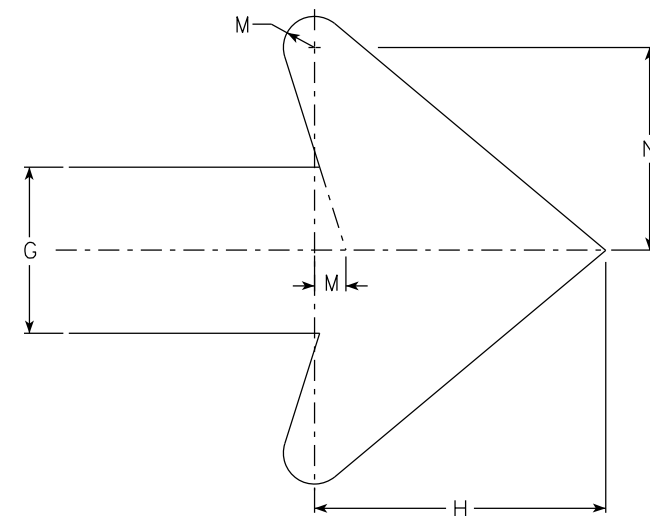
APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
2M	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9R.6

PROJECT NO: HWY: COUNTY: SHEET NO: 76 E

7

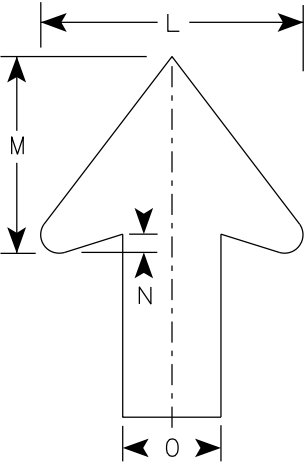
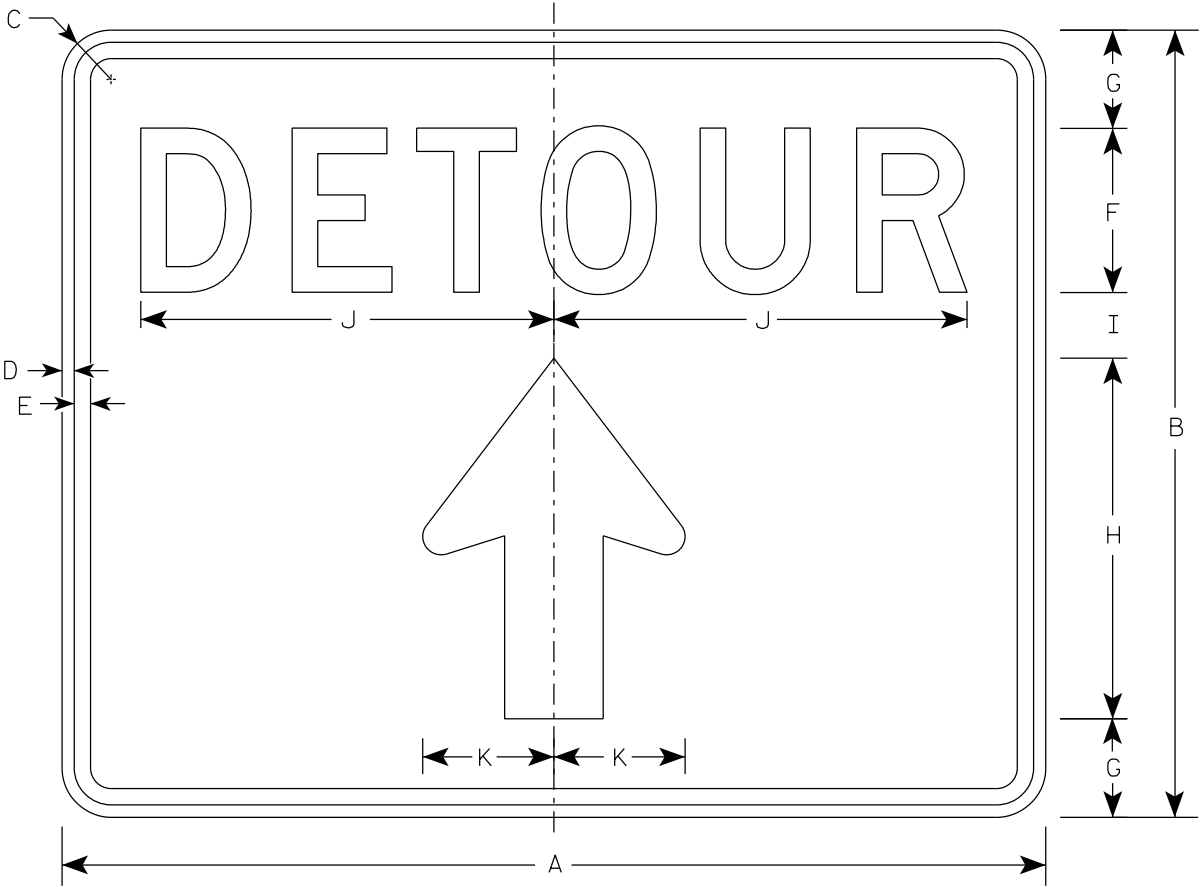
7

NOTES

1. Sign is Type II-Type F Reflective
2. Color:

Background - Orange

Message - Black
3. Message Series - D



Arrow Detail

M4 - 9RA

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	3	11	2	12 5/8	4	8	6	1/2	3												5.00
2M	30	24	1 1/2	3/8	1/2	5	3	11	2	12 5/8	4	8	6	1/2	3												5.00
3																											
4																											
5																											

STANDARD SIGN

M4-9RA

WISCONSIN DEPT OF TRANSPORTATION

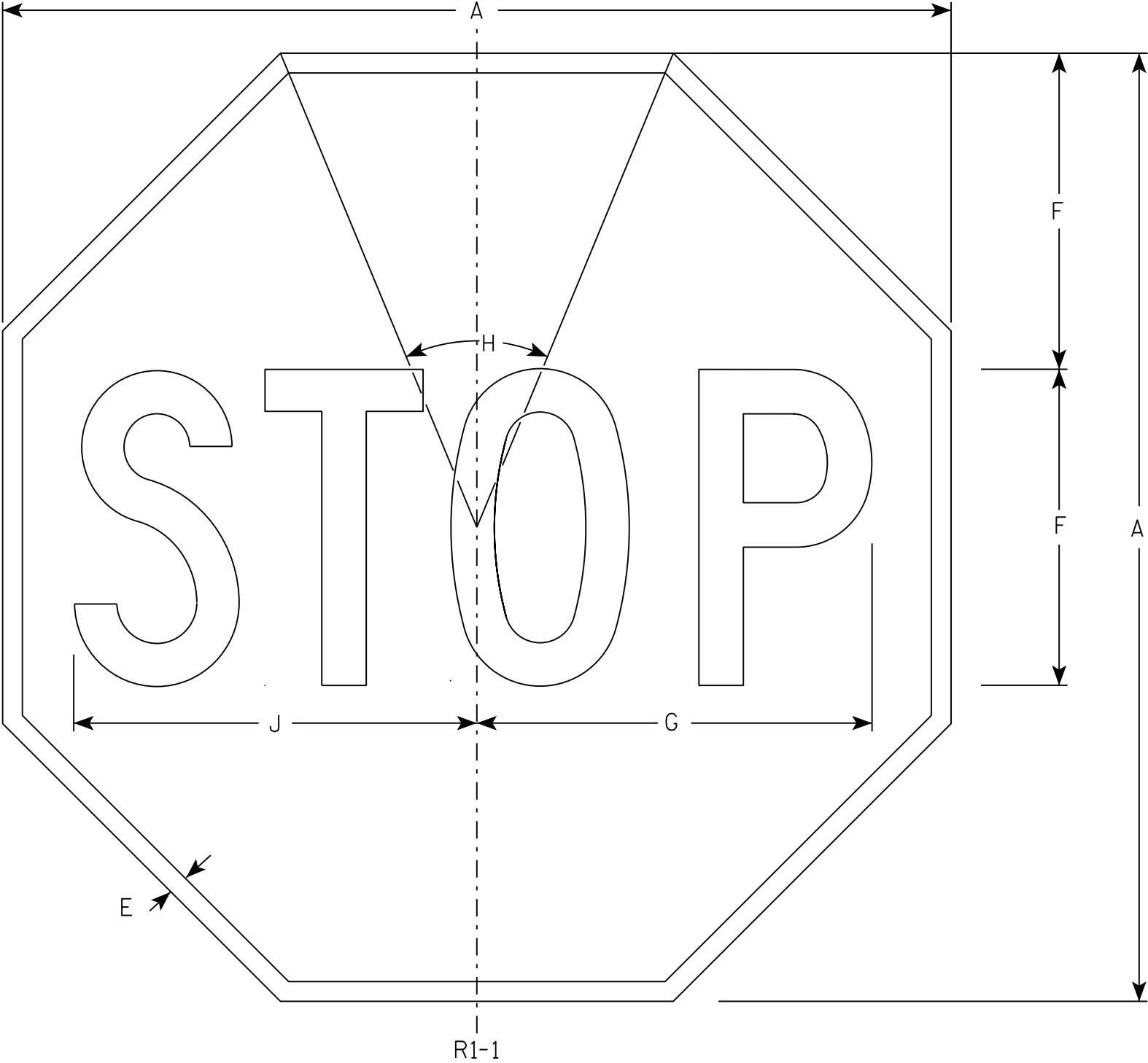
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 2/9/2023

PLATE NO. M4-9RA.3

7



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

7

R1-1

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

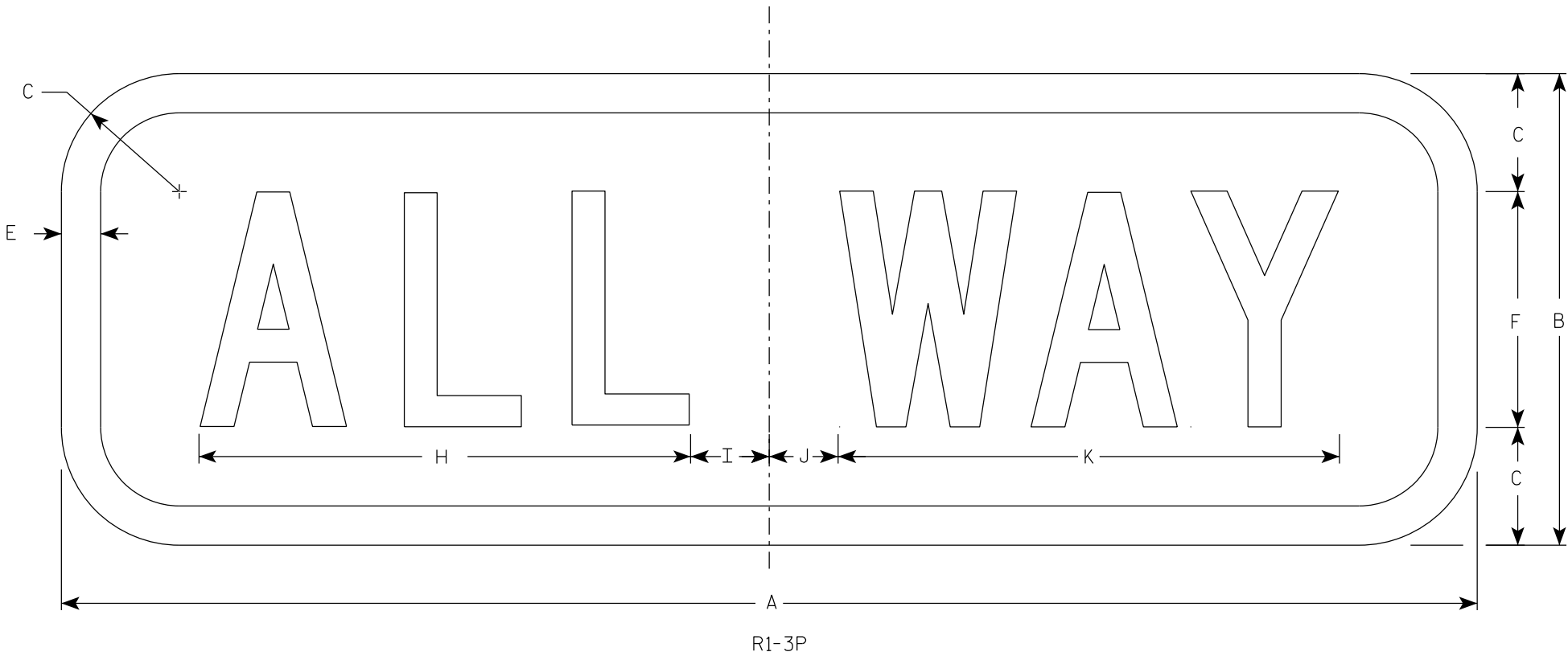
DATE 11/12/15 PLATE NO. R1-1.13

7

7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C
- 4. For 30"x30" R1-1 use 18"x6" R1-3P sign
For 36"x36" R1-1 use 24"x9" R1-3P sign
For 48"x48" R1-1 use 30"x12" R1-3P sign



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	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	1 1/2		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	1 1/2		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

PROJECT NO:

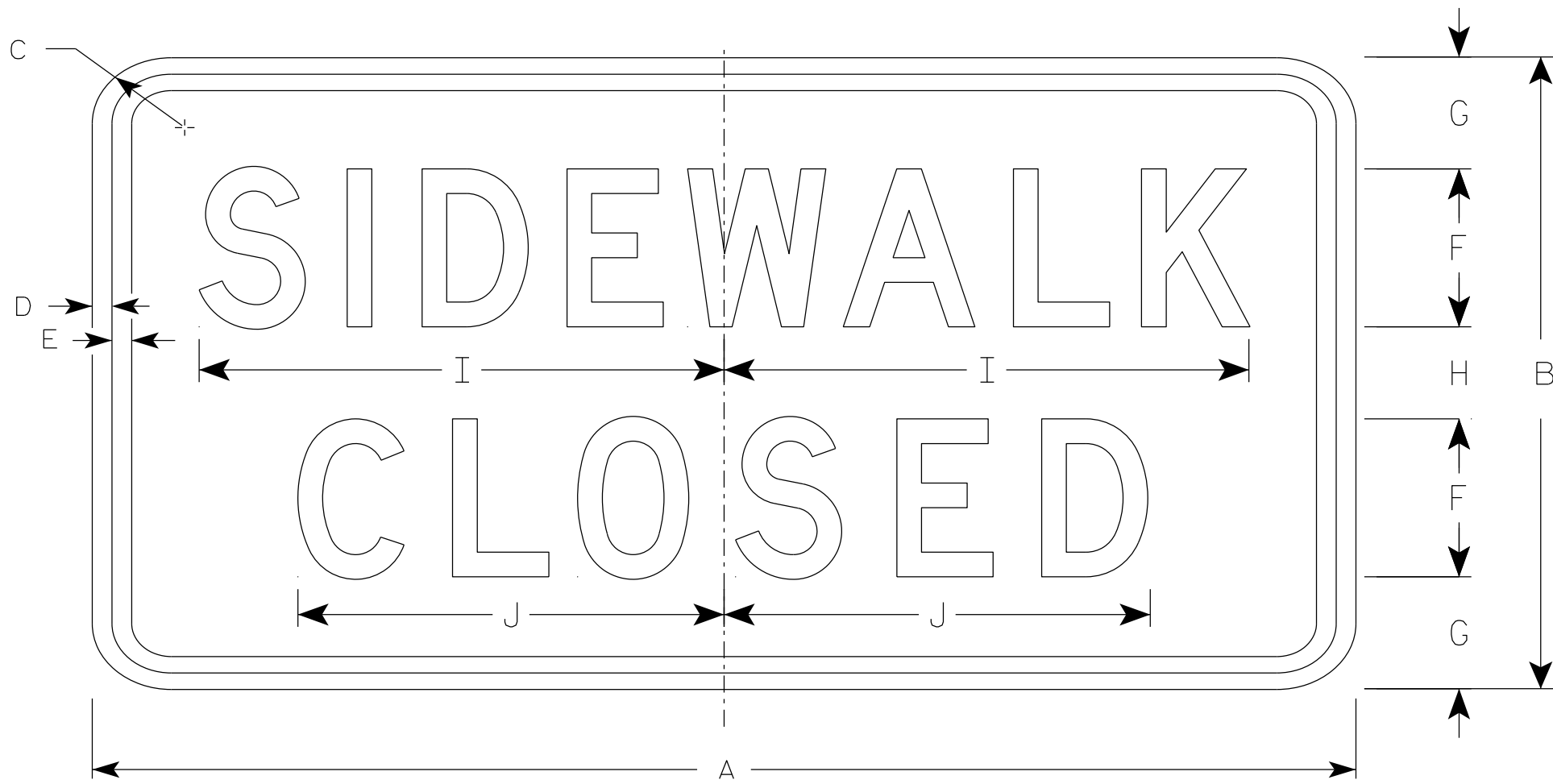
HWY:

COUNTY:

SHEET NO: 79

E

7



R9-9

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - C
- 4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	24	12	1 1/2	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 1/2	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 1/2	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 80

E

STANDARD SIGN

R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

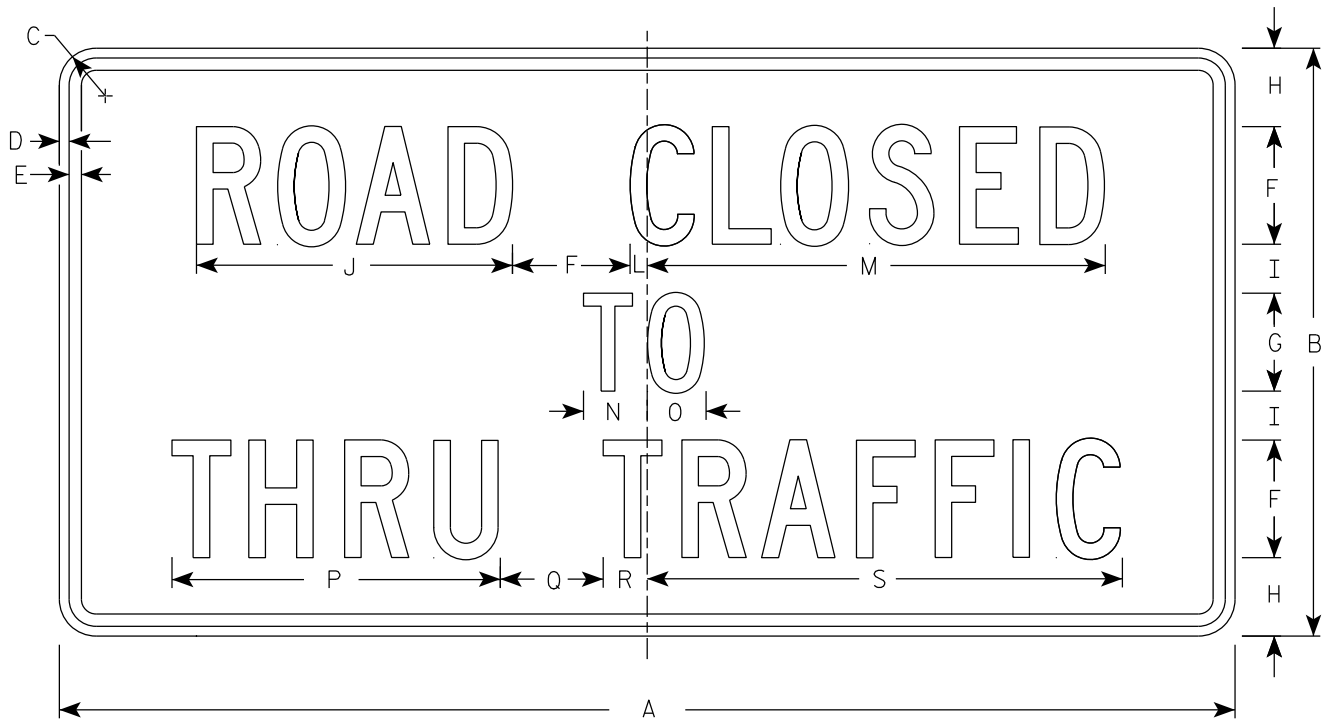
For State Traffic Engineer

DATE 1/24/24

PLATE NO. R9-9.7

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R11-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 81

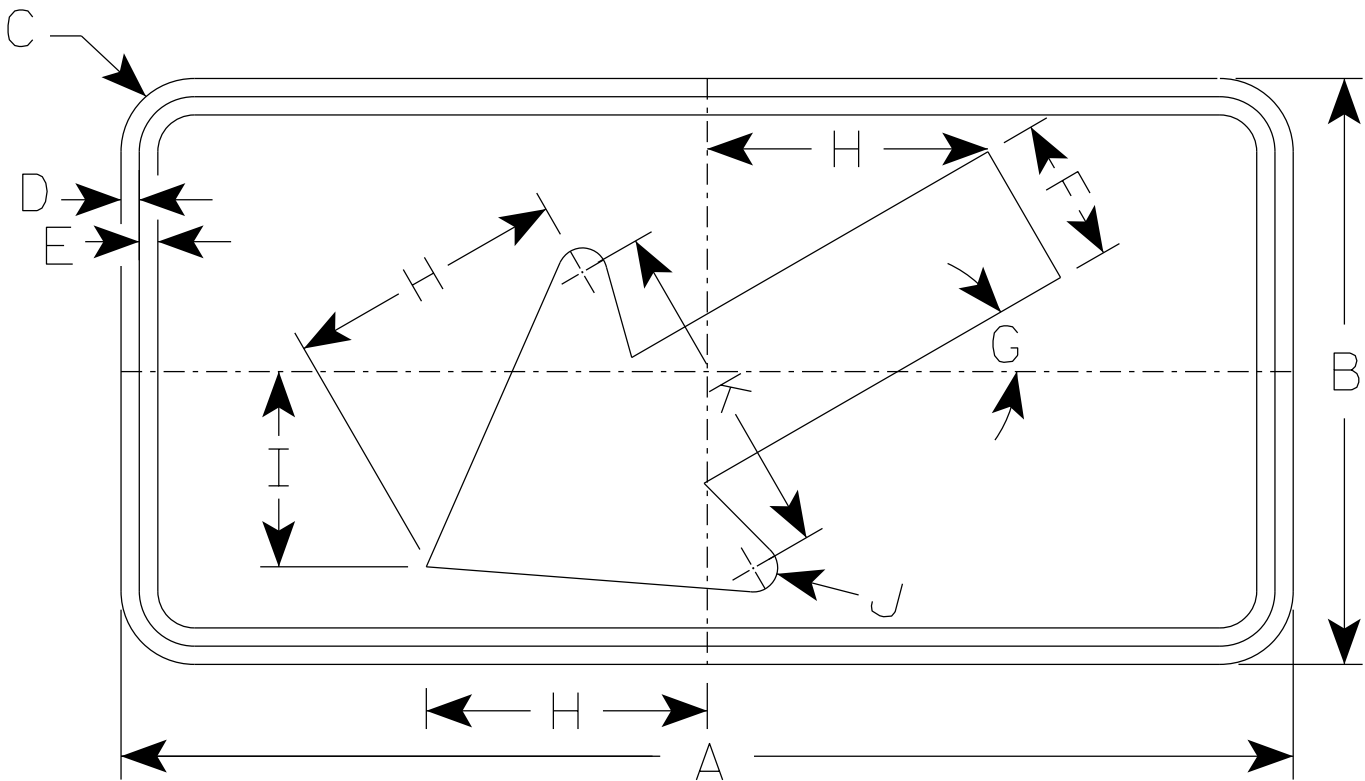
E

7

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. W16-7R is the same as W16-7L
except the arrow is reversed along
the vertical centerline.



W16-7L

- * For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
- * For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN

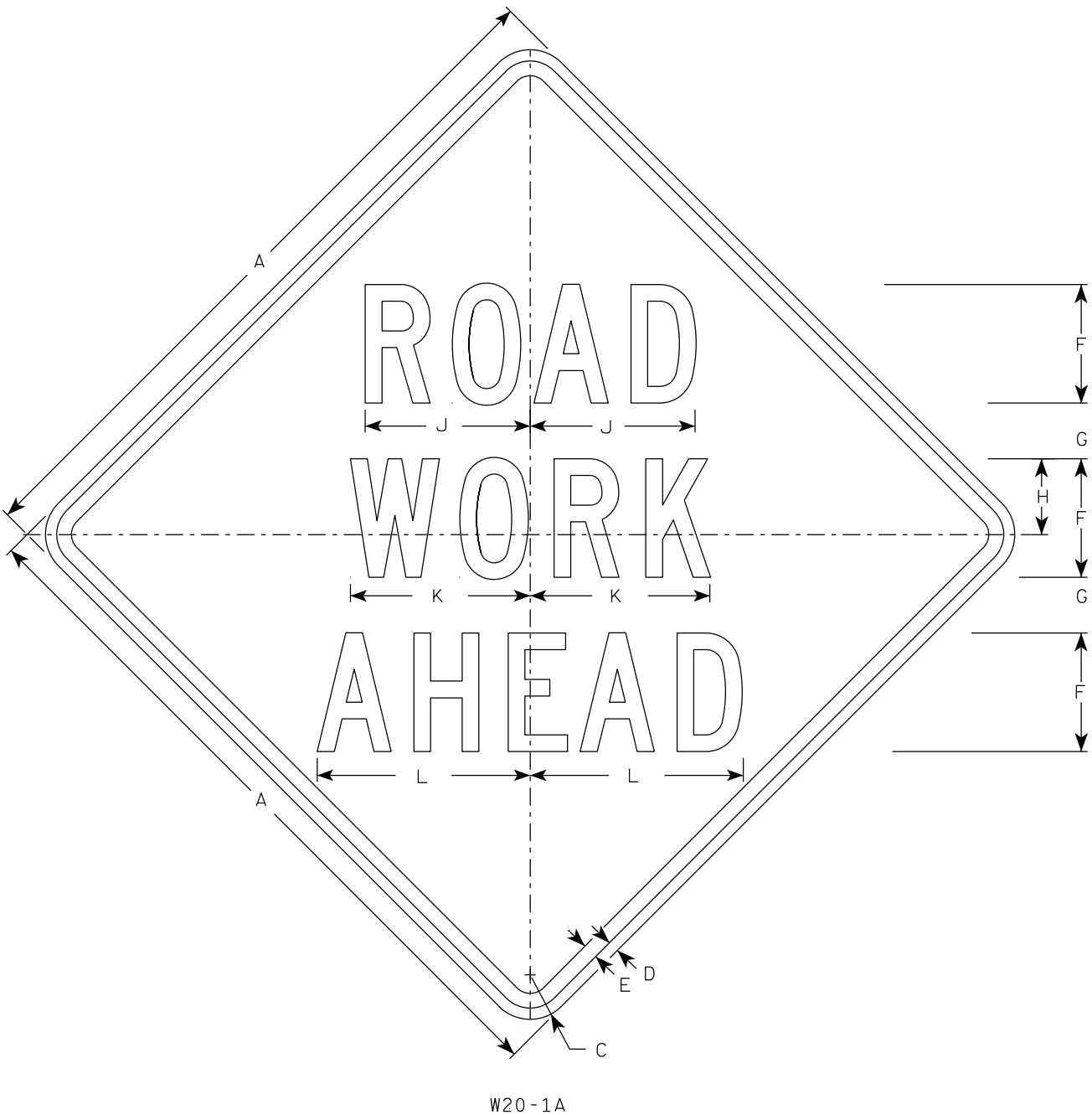
W16-7

WISCONSIN DEPT OF TRANSPORTATION

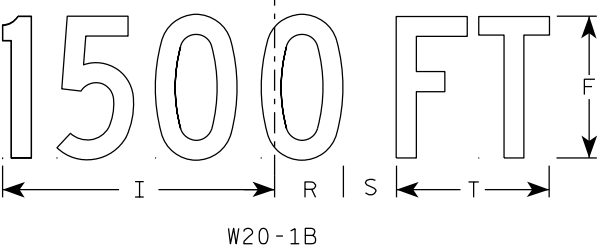
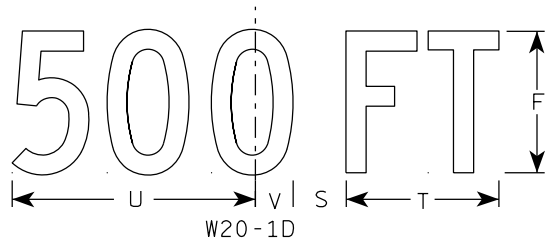
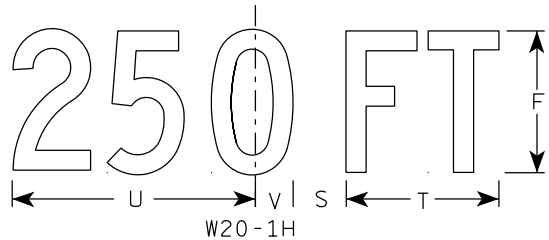
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/9/2024 PLATE NO. W16-7.9

7

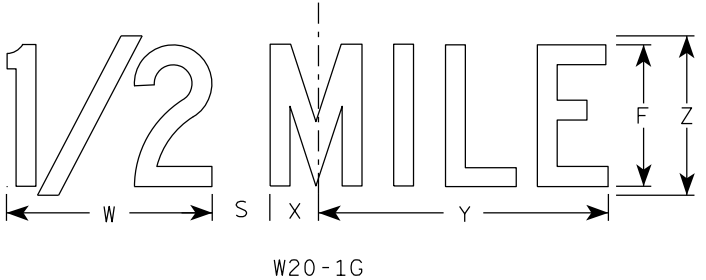


W20-1A

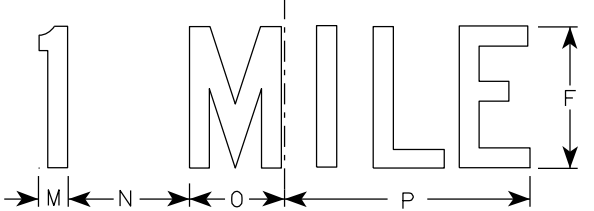


W20-1B

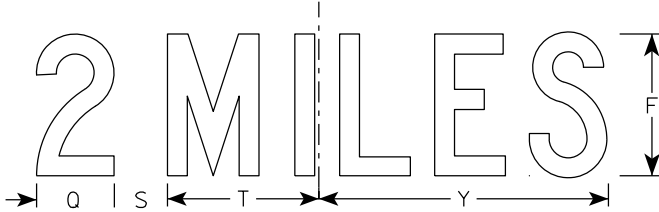
- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



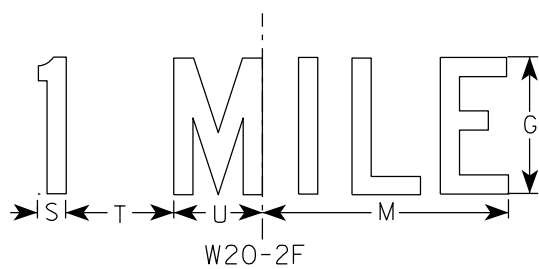
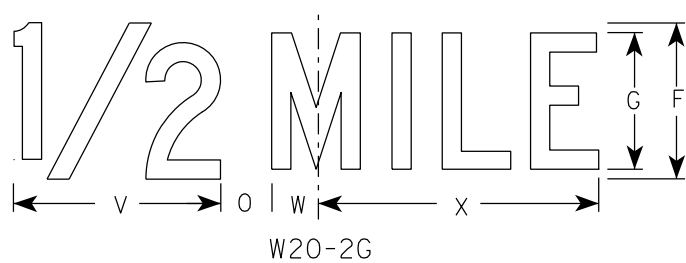
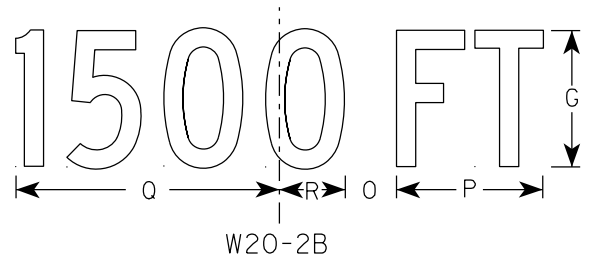
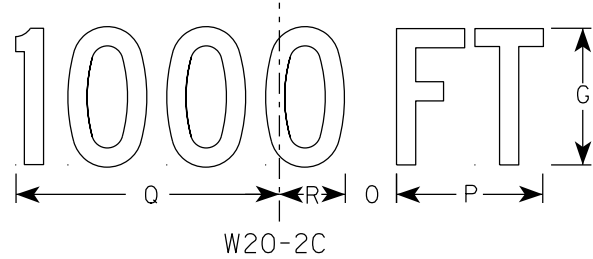
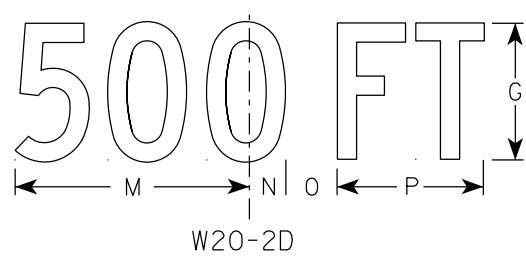
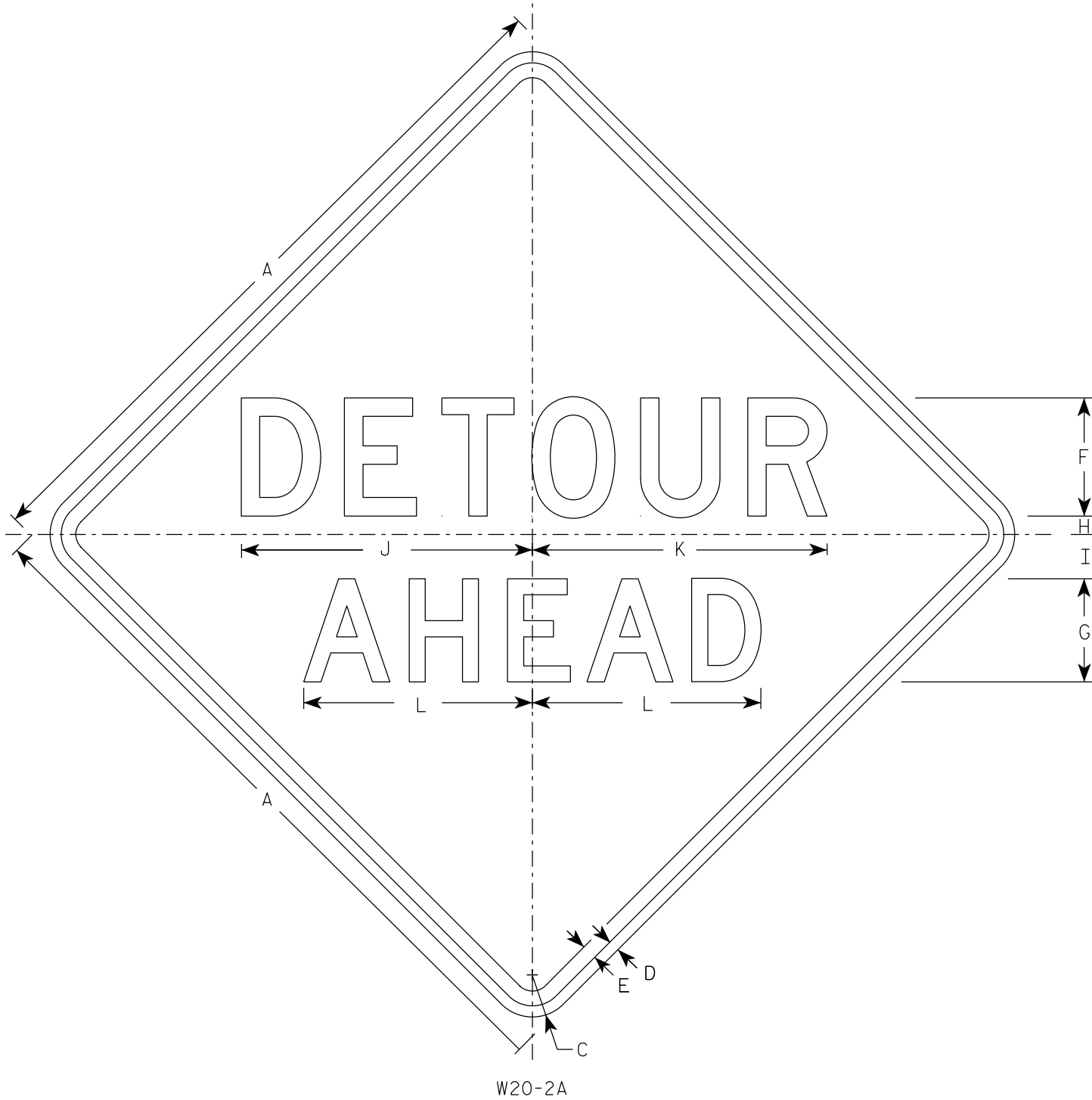
W20-1F



W20-1E

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	36		2 1/4	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		3	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0



NOTES

- Sign is Type II - Type F Reflective
- Color:
Background - Orange
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.
- Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN W20-2A,B,C,D,F & G	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 1/10/2024	PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 84	E
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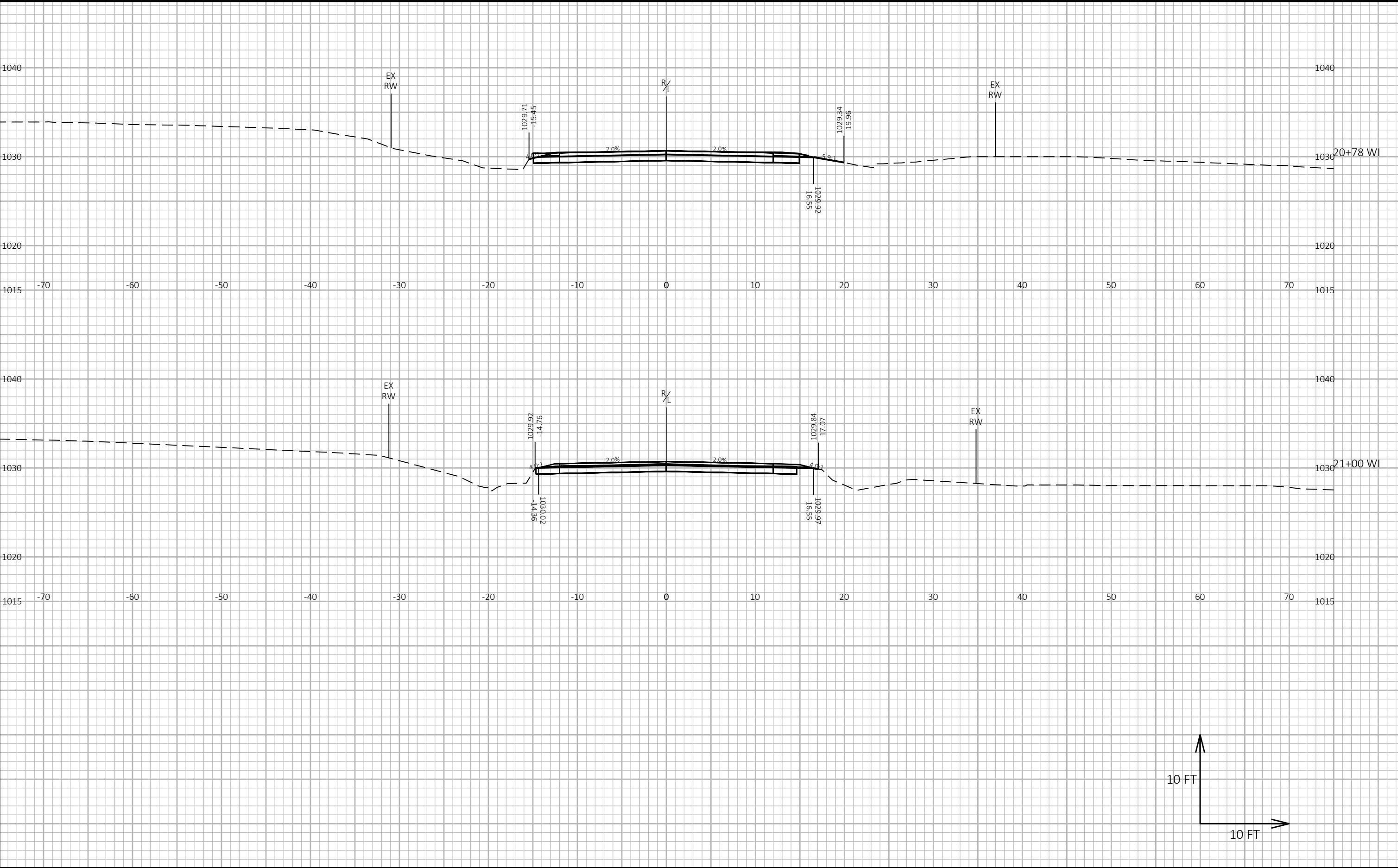
DIVISION 1															
STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL 1.25	EXPANDED EBS BACKFILL 1.30	REDUCED EBS IN FILL 0.80	MASS ORDINATE
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
20+78	2077.54		14	13	0	0	0	0	0	0	0	0	0	0	0
21+00	2100	22	4	4	0	0	7	7	0	0	0	0	0	0	0
21+50	2150	50	4	4	2	0	7	7	2	0	0	3	0	0	-2
21+62	2162	12	5	5	2	0	2	2	1	0	0	4	0	0	-4
22+00	2200	38	10	11	0	0	11	11	2	0	0	6	0	0	-6
22+05	2205	5	10	11	0	0	2	2	0	0	0	6	0	0	-7
22+25	2225	20	6	7	1	0	6	6	0	0	0	7	0	0	-8
22+50	2250	25	1	1	2	0	3	3	1	0	0	8	0	0	-10
23+00	2300	50	1	1	2	0	1	1	4	0	0	13	0	0	-14
23+50	2350	50	6	6	0	0	6	6	2	0	0	15	0	0	-16
23+86	2386	36	9	1	1	0	10	5	1	0	0	16	0	0	-12
24+00	2400	14	12	1	4	0	5	1	1	0	0	17	0	0	-8
24+29	2429	29	10	2	3	0	12	2	4	0	0	22	0	0	-3
24+67	2467	39	10	1	1	2	15	2	3	0	0	26	1	0	6
25+00	2500	33	34	23	1	2	27	15	1	3	0	24	5	3	20
25+19	2519	19	31	22	0	2	23	16	0	3	0	22	8	5	29
25+50	2550	31	78	31	3	3	63	31	2	7	0	17	18	11	66
26+00	2600	50	47	20	5	2	115	47	8	4	0	22	23	14	128
26+47	2647	47	8	7	3	2	47	23	7	1	0	30	24	15	144
26+54	2654	7	8	7	3	0	2	2	1	0	0	31	24	15	144
26+76	2676	21	6	0	6	0	5	3	4	0	0	35	24	15	142
27+00	2700	24	5	0	3	0	5	0	4	0	0	40	24	15	142
27+42	2742	42	5	0	3	0	8	0	5	0	0	46	24	15	144
27+50	2750	8	1	1	2	0	1	0	1	0	0	47	24	15	143
27+69	2769	19	4	3	2	0	2	1	1	0	0	49	24	15	142
27+89	2789	20	7	1	0	0	4	2	1	0	0	50	24	15	143
28+00	2800	11	10	1	0	0	3	0	0	0	0	50	24	15	146
28+23	2823	23	20	1	0	0	12	1	0	0	0	50	24	15	158
28+50	2850	27	17	10	0	0	19	6	0	0	0	51	24	15	170
28+66	2866	16	19	10	1	0	11	6	0	0	0	51	24	15	175
29+00	2900	34	14	0	1	0	21	6	1	0	0	52	24	15	188
29+25	2925	25	15	2	0	0	13	1	0	0	0	52	24	15	200
29+50	2950	25	15	15	0	0	14	8	0	0	0	52	24	15	206
29+52	2952	2	15	15	0	0	1	1	0	0	0	52	24	15	206
29+57	2957	5	15	15	0	0	3	3	0	0	0	52	24	15	206
29+80	2980	23	12	2	0	0	12	7	0	0	0	52	24	15	211
30+00	3000	20	14	2	0	0	10	1	0	0	0	52	24	15	219
30+25	3025	25	12	8	0	0	12	4	0	0	0	52	24	15	227
30+50	3050	25	11	1	1	0	11	4	0	0	0	53	24	15	234
31+00	3100	50	8	1	0	0	17	2	1	0	0	54	24	15	248
31+50	3150	50	8	0	0	0	15	1	0	0	0	54	24	15	261
31+75	3175	25	8	1	0	0	8	1	0	0	0	54	24	15	268
31+96	3196	21	8	4	0	0	7	2	0	0	0	54	24	15	273
32+00	3200	4	8	3	0	0	1	0	0	0	0	54	24	15	273
32+25	3225	25	16	7	0	0	11	5	0	0	0	54	24	15	280
32+50	3250	25	16	1	0	0	15	4	0	0	0	54	24	15	290
33+00	3300	50	25	12	1	0	37	13	1	0	0	56	24	15	314
33+19	3319	19	36	21	0	0	22	12	0	0	0	56	24	15	323
Column totals							664	285	60	19					

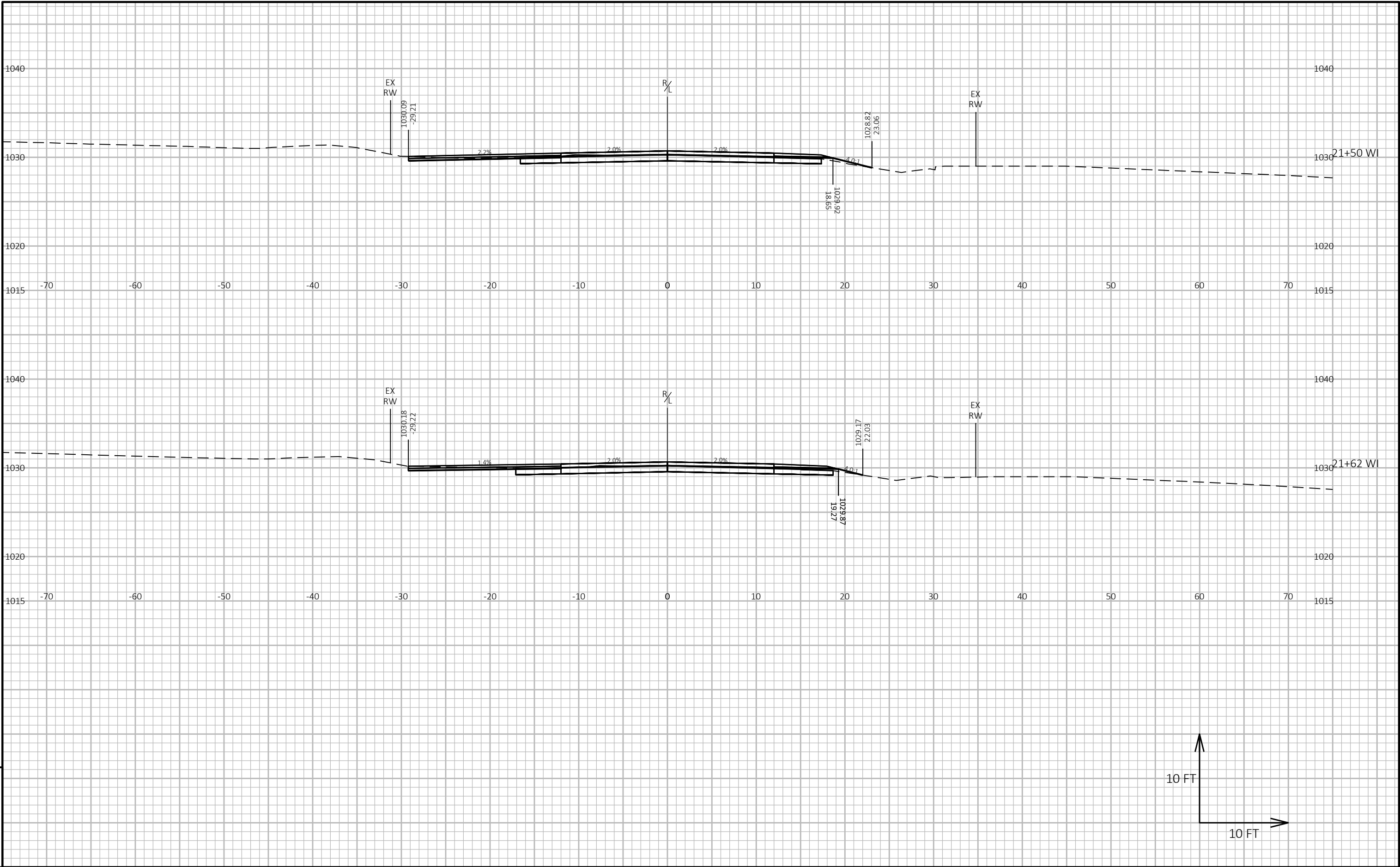
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE USABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH BORROW OR SALVAGED PAVEMENT MATERIAL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	EBS TO BE BACKFILLED WITH BORROW OR SALVAGED PAVEMENT MATERIAL: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

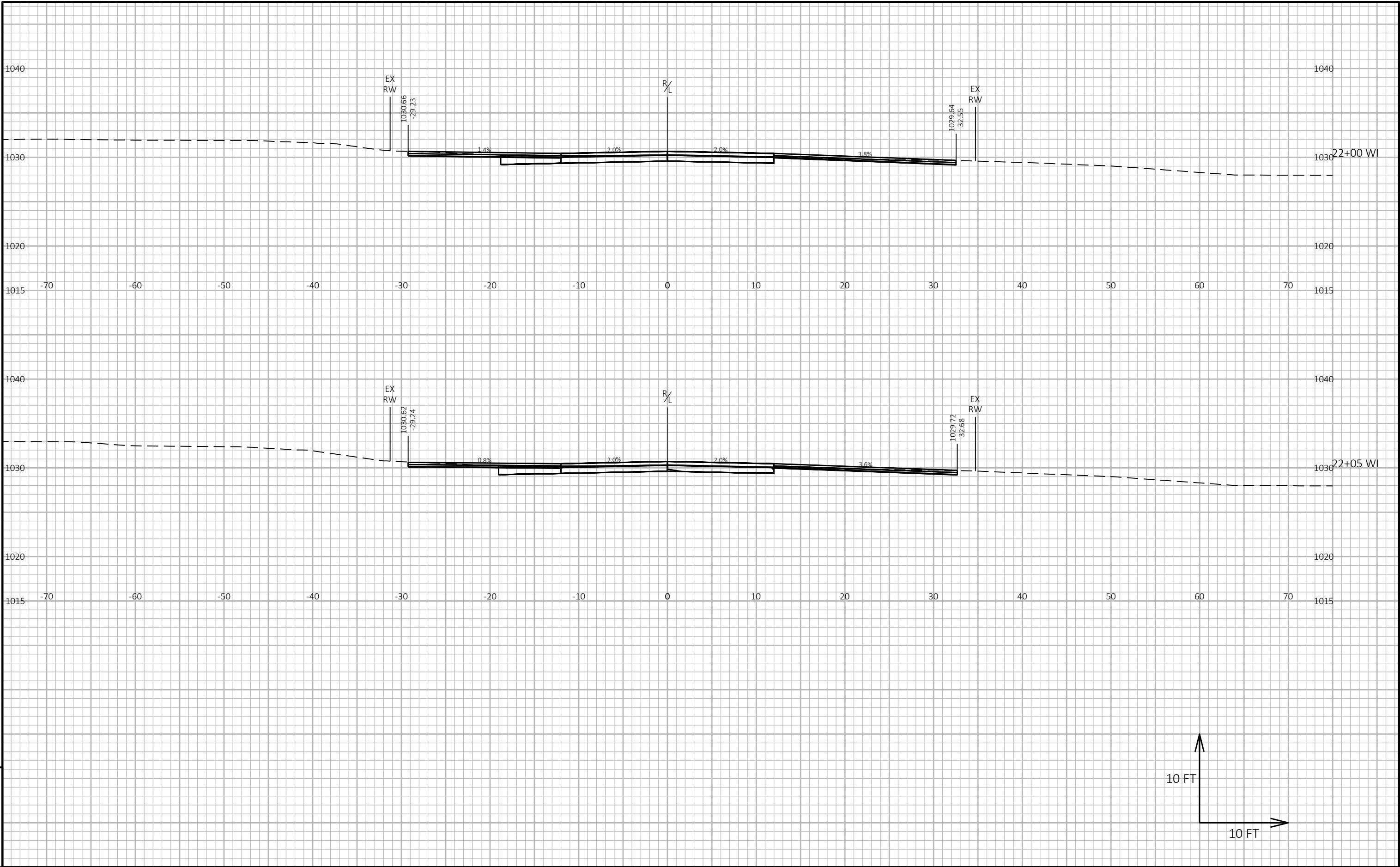
DIVISION 2

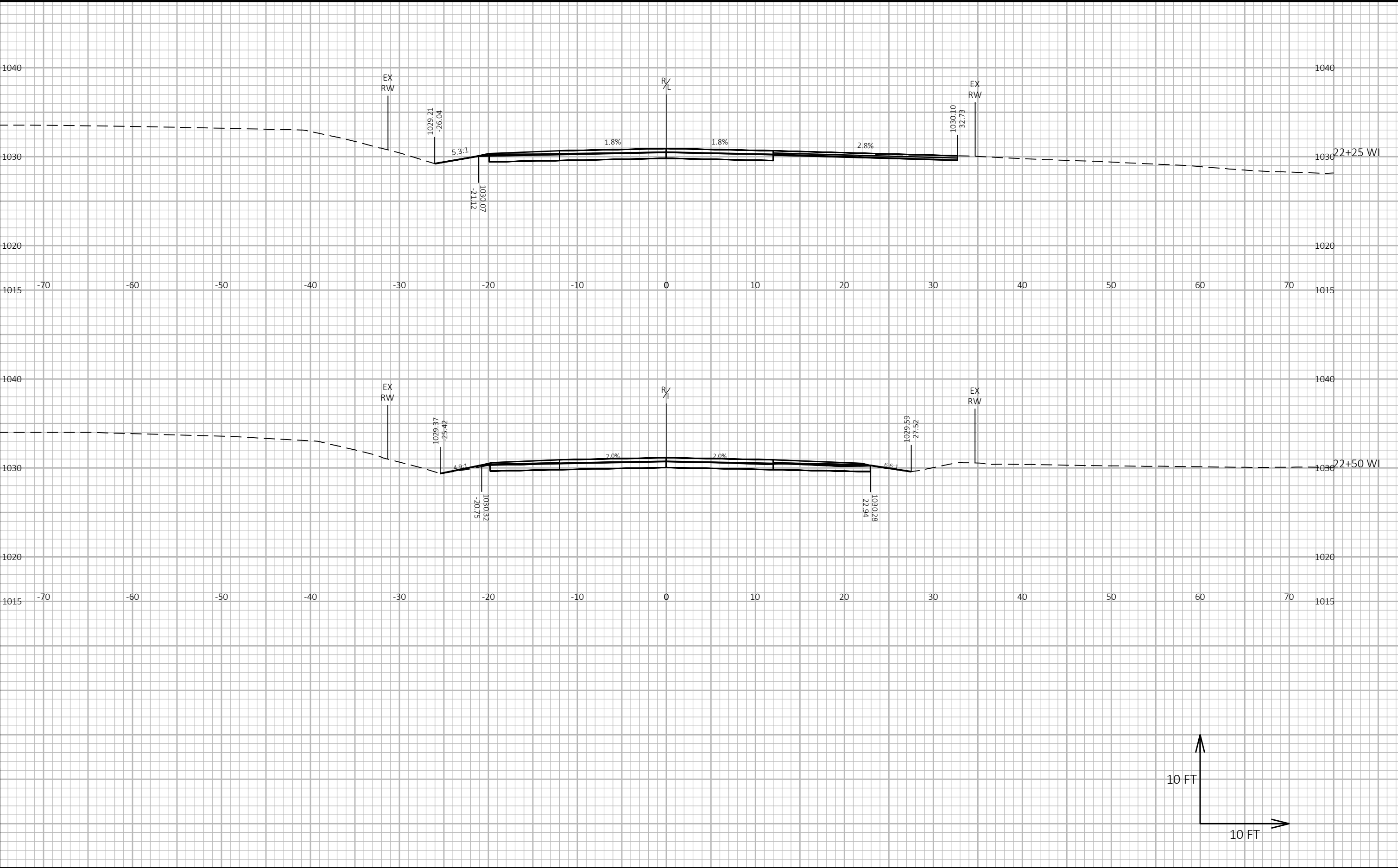
STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL 1.25	EXPANDED EBS BACKFILL 1.30 NOTE 5	REDUCED EBS IN FILL 0.80 NOTE 7	MASS ORDINATE NOTE 8
127+00	12700.00		48	11	0	3	0	0	0	0	0	0	0	0	0
127+20	12720	20	49	10	1	3	36	8	0	6	0	-5	8	5	34
127+38	12738	18	4	4	2	3	17	5	1	0	0	-5	8	5	46
127+61	12761	24	5	5	2	3	4	4	2	1	0	-3	9	5	44
			Column totals				57	16	3	7					

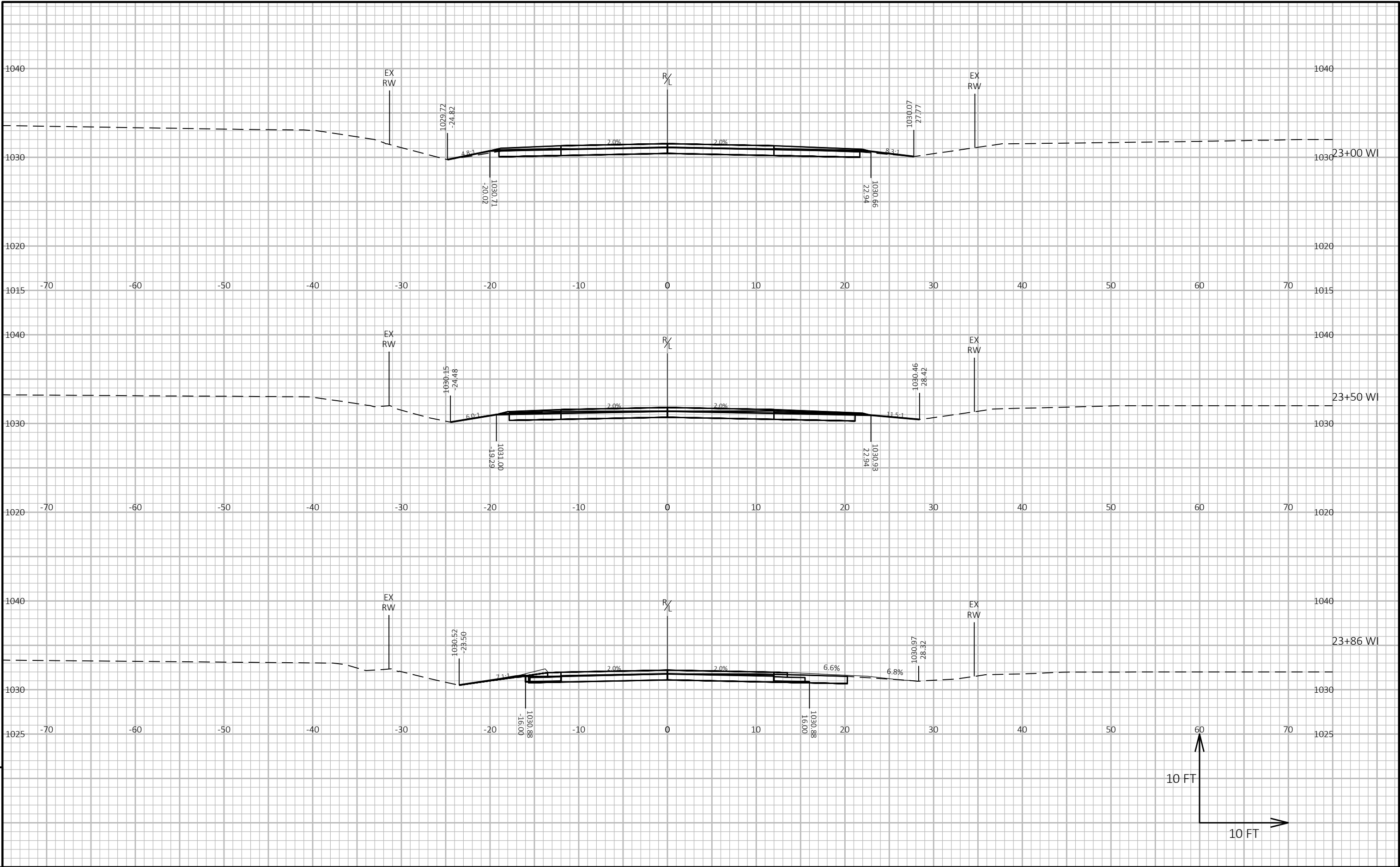
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE USABLE PAVEMENT EXC VOLUME
5 - EXPANDED EBS	WILL BE BACKFILLED WITH BORROW OR SALVAGED PAVEMENT MATERIAL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	EBS TO BE BACKFILLED WITH BORROW OR SALVAGED PAVEMENT MATERIAL: [(CUT - SALVAGED PAVT - EXPANDED EBS) - ((FILL - REDUCED EBS IN FILL) * FILL FACTOR)]

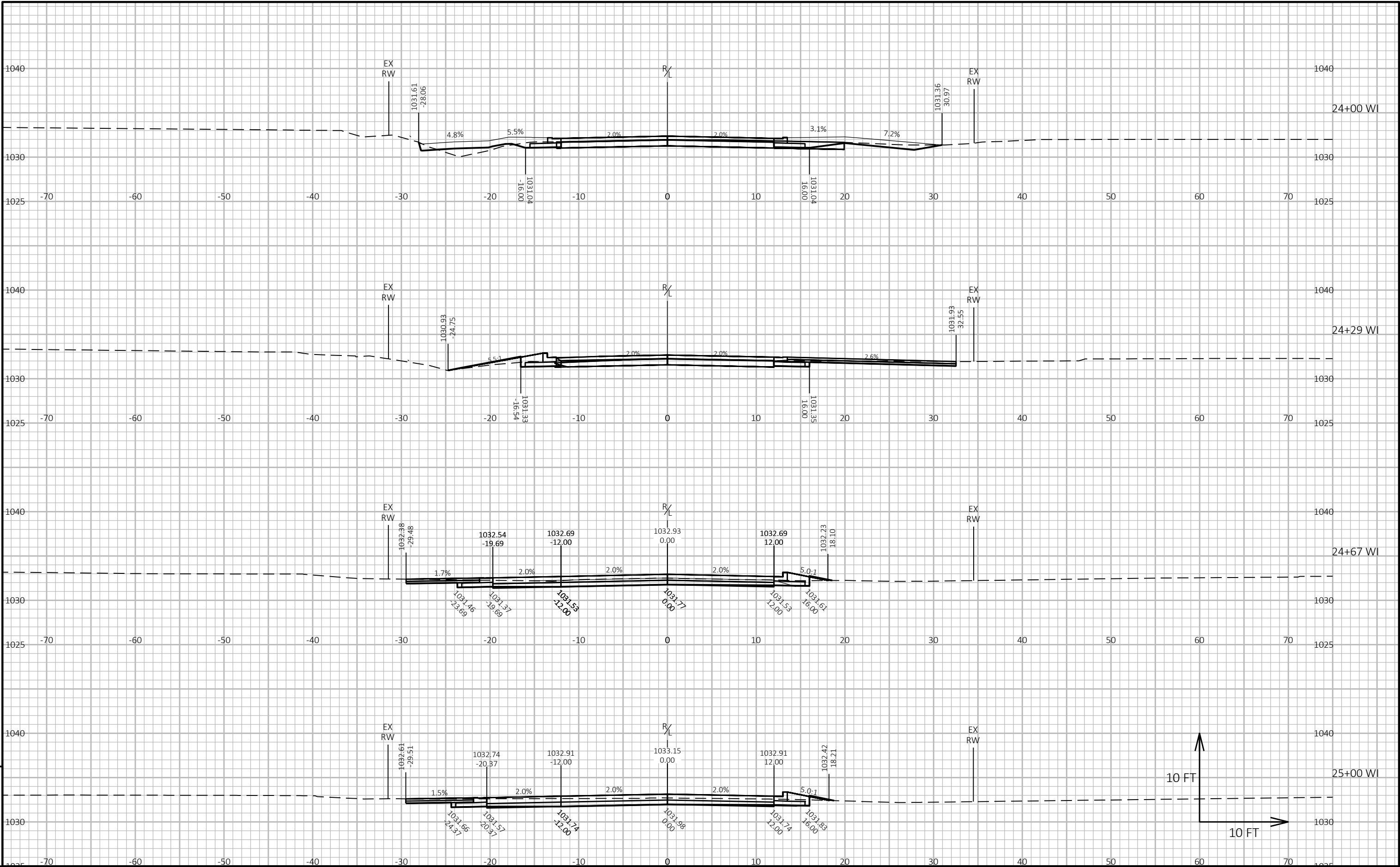












PROJECT NO: 3842-00-70

HWY: WISCONSIN STREET

COUNTY: WALWORTH

CROSS SECTIONS: WISCONSIN STREET

SHEET 92

E

FILE NAME : X:\4666775\230963.01\TECH\CAD\38420000\090201-XS.DWG
LAYOUT NAME - 090206-xs WISCONSIN STREET

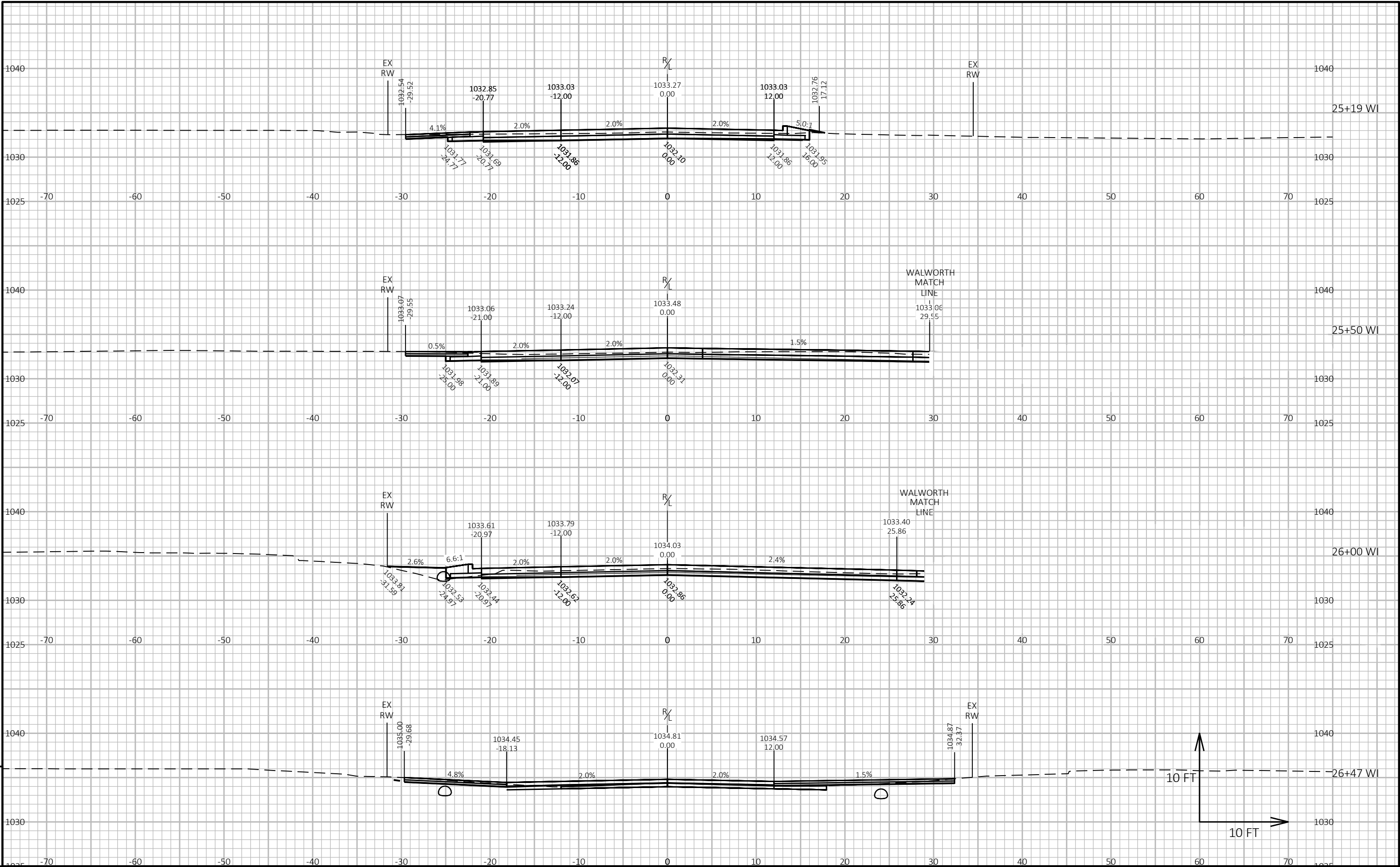
PLOT DATE : 7/16/2024 7:31 AM

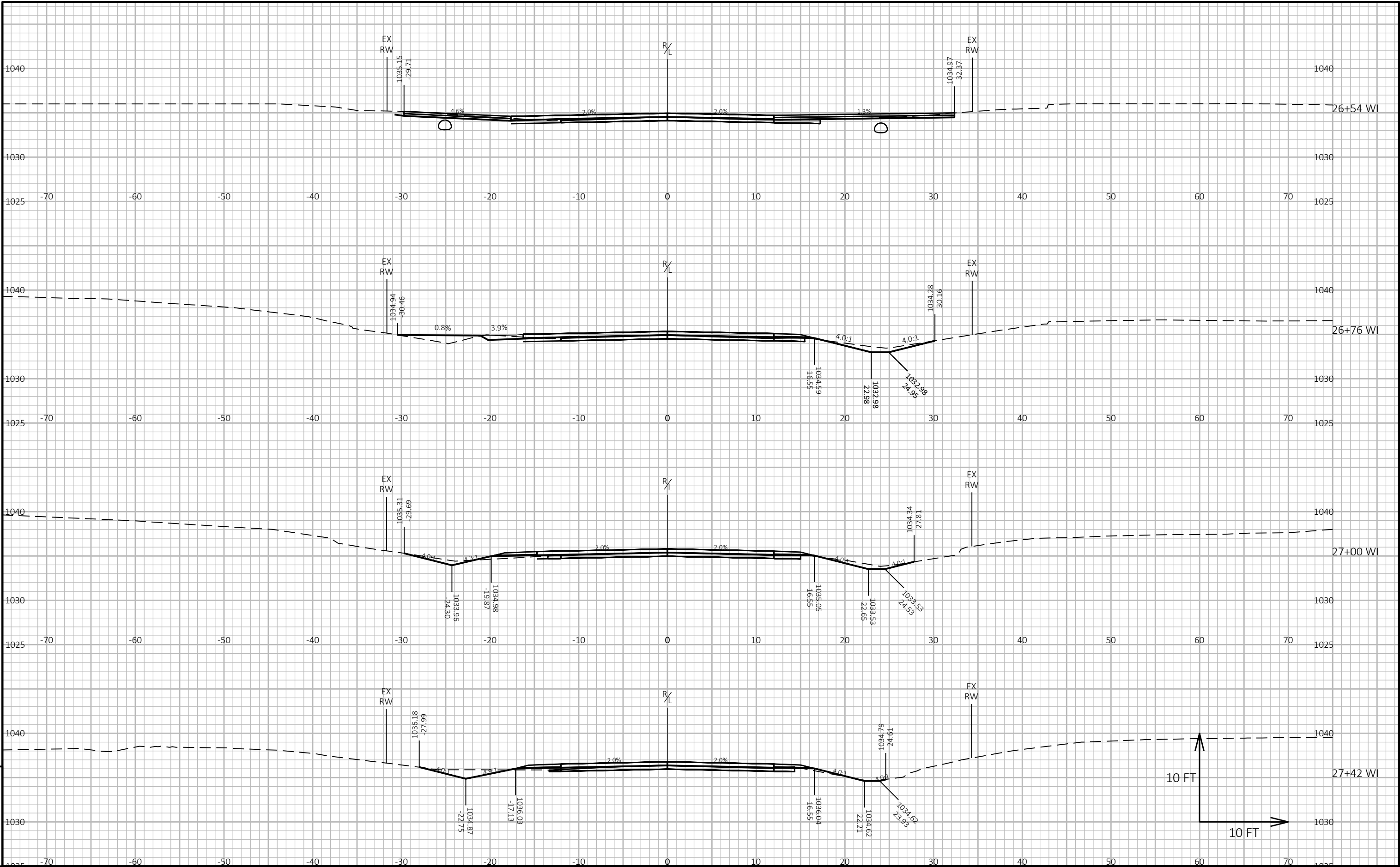
PLOT BY : BROCK BEHNKE

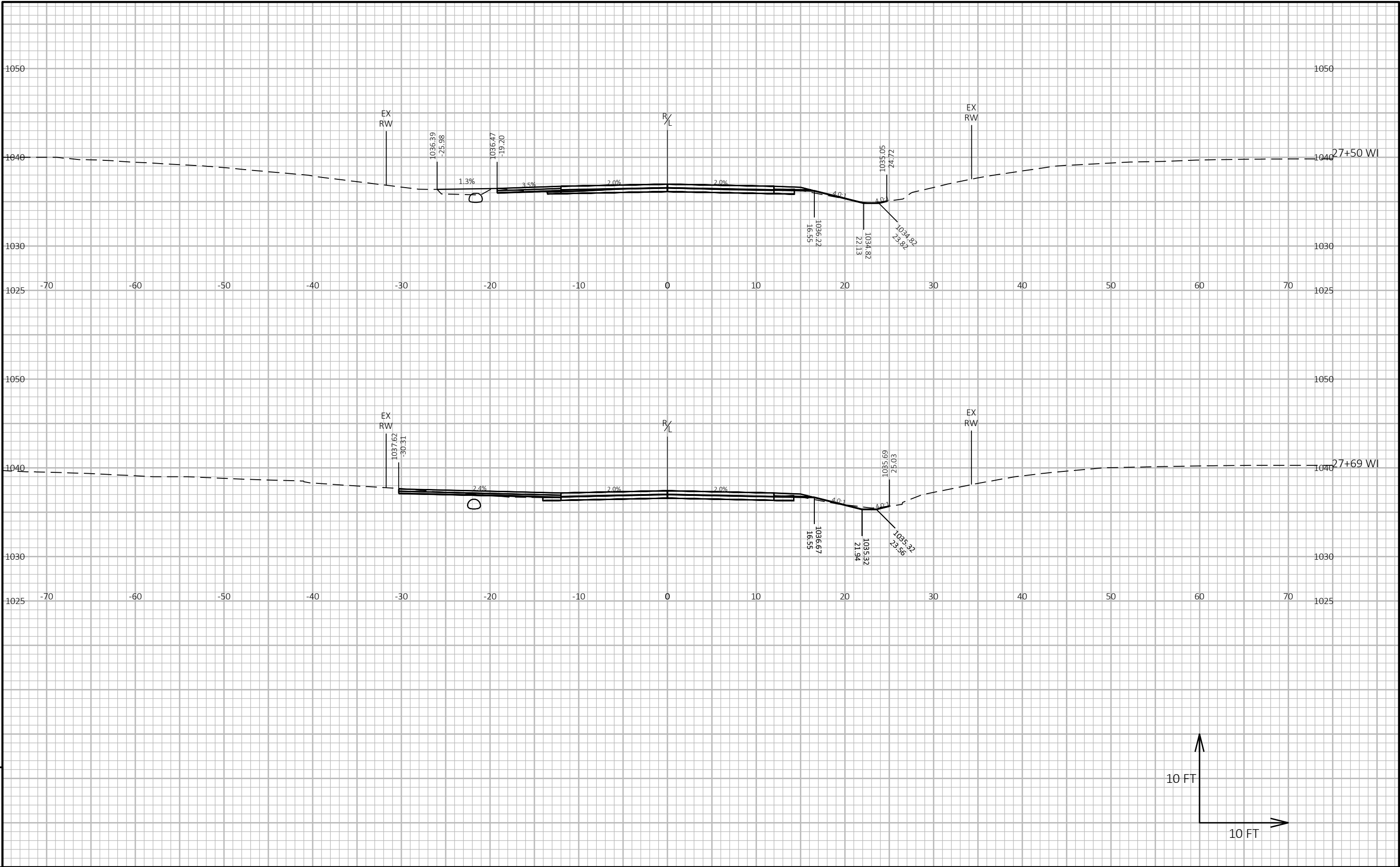
PLOT NAME :

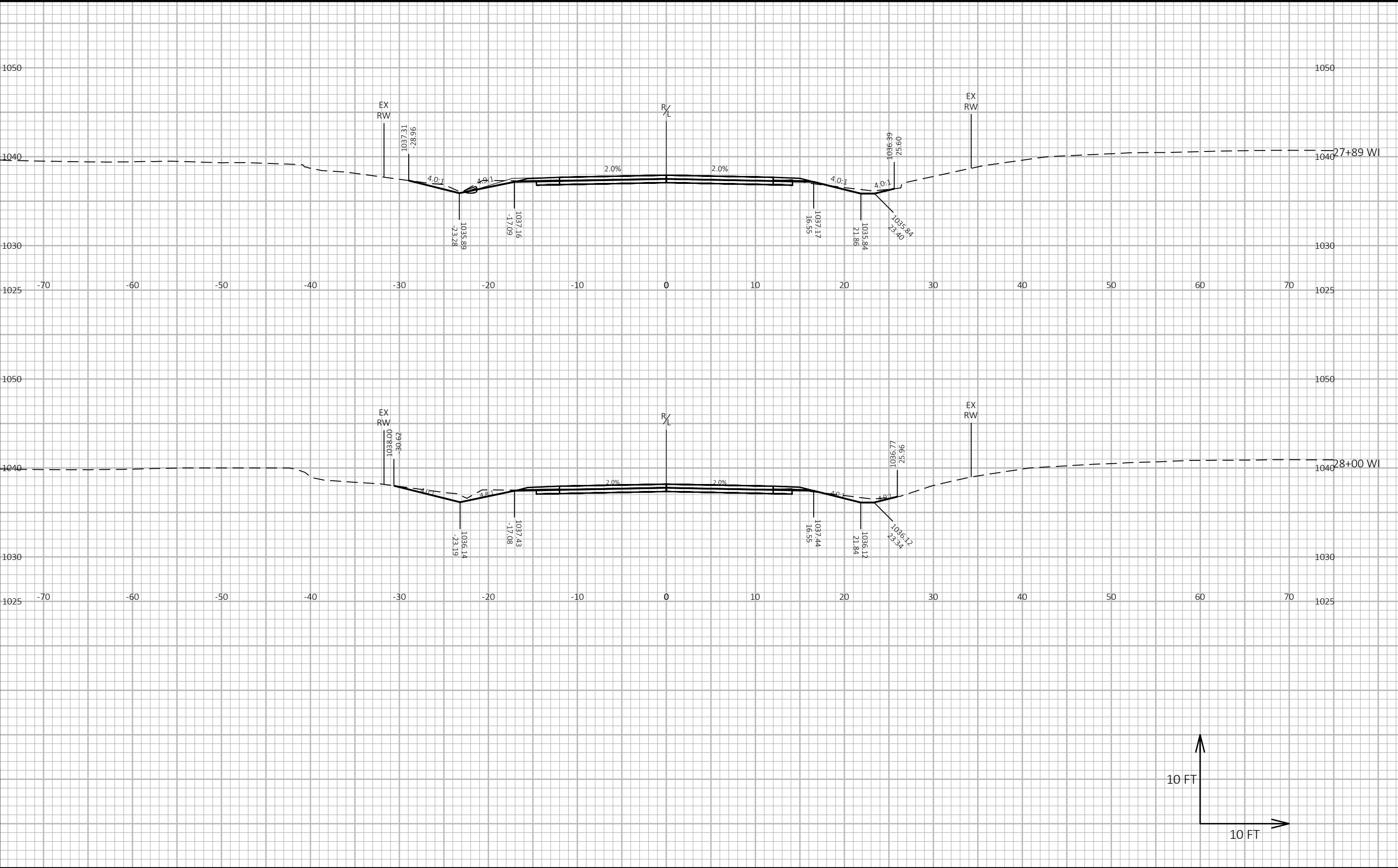
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

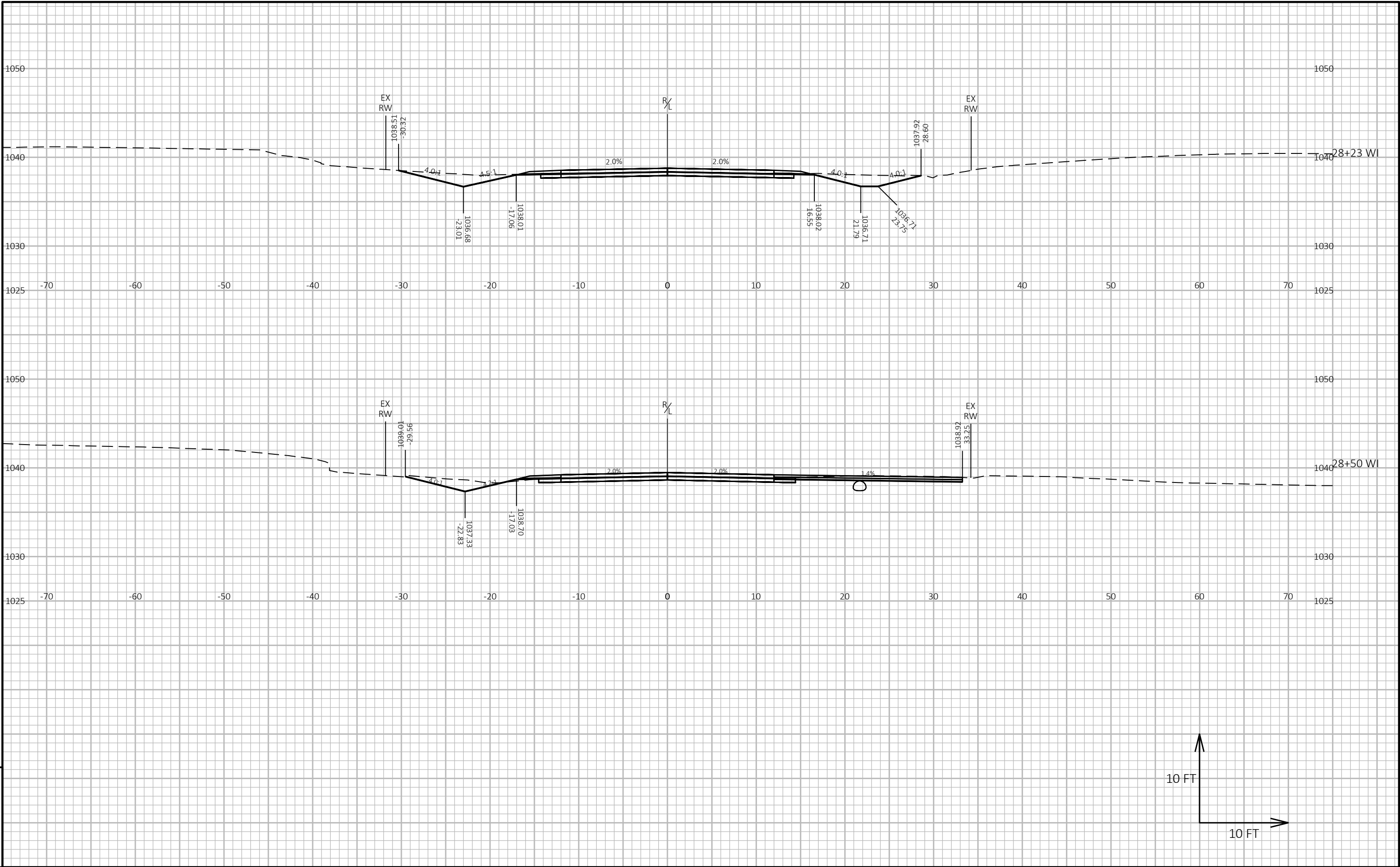
WISDOT/CADDs SHEET 49

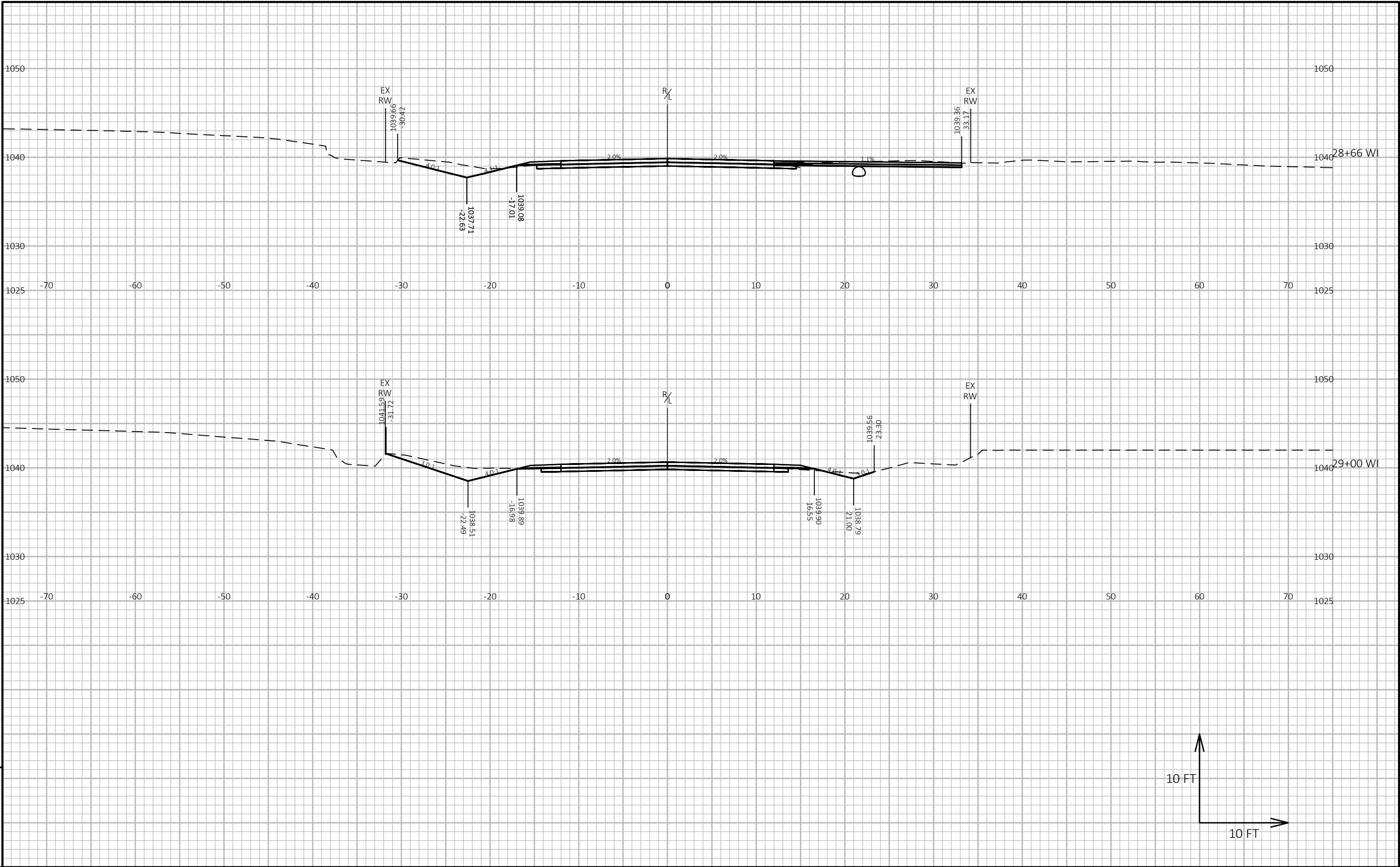


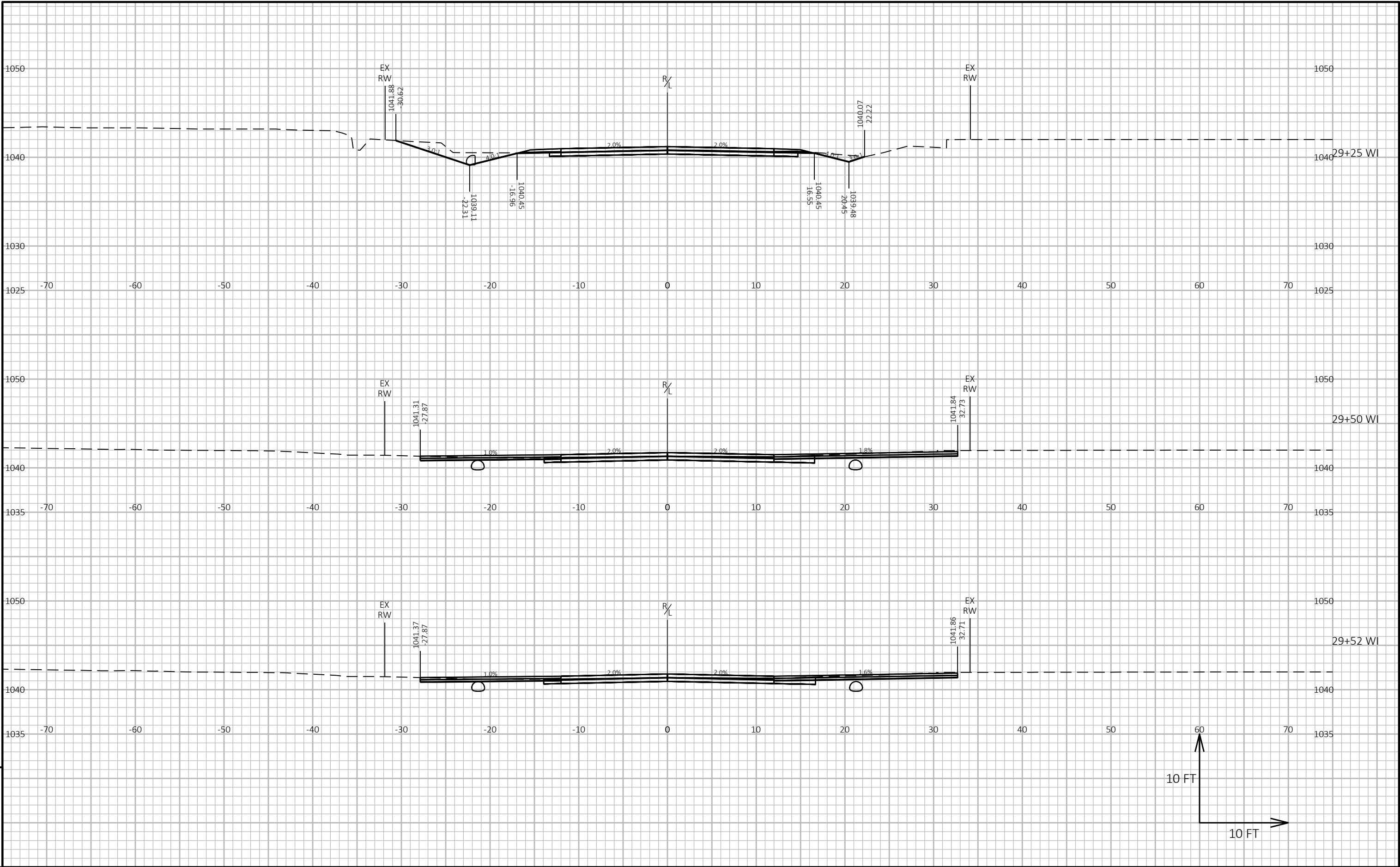


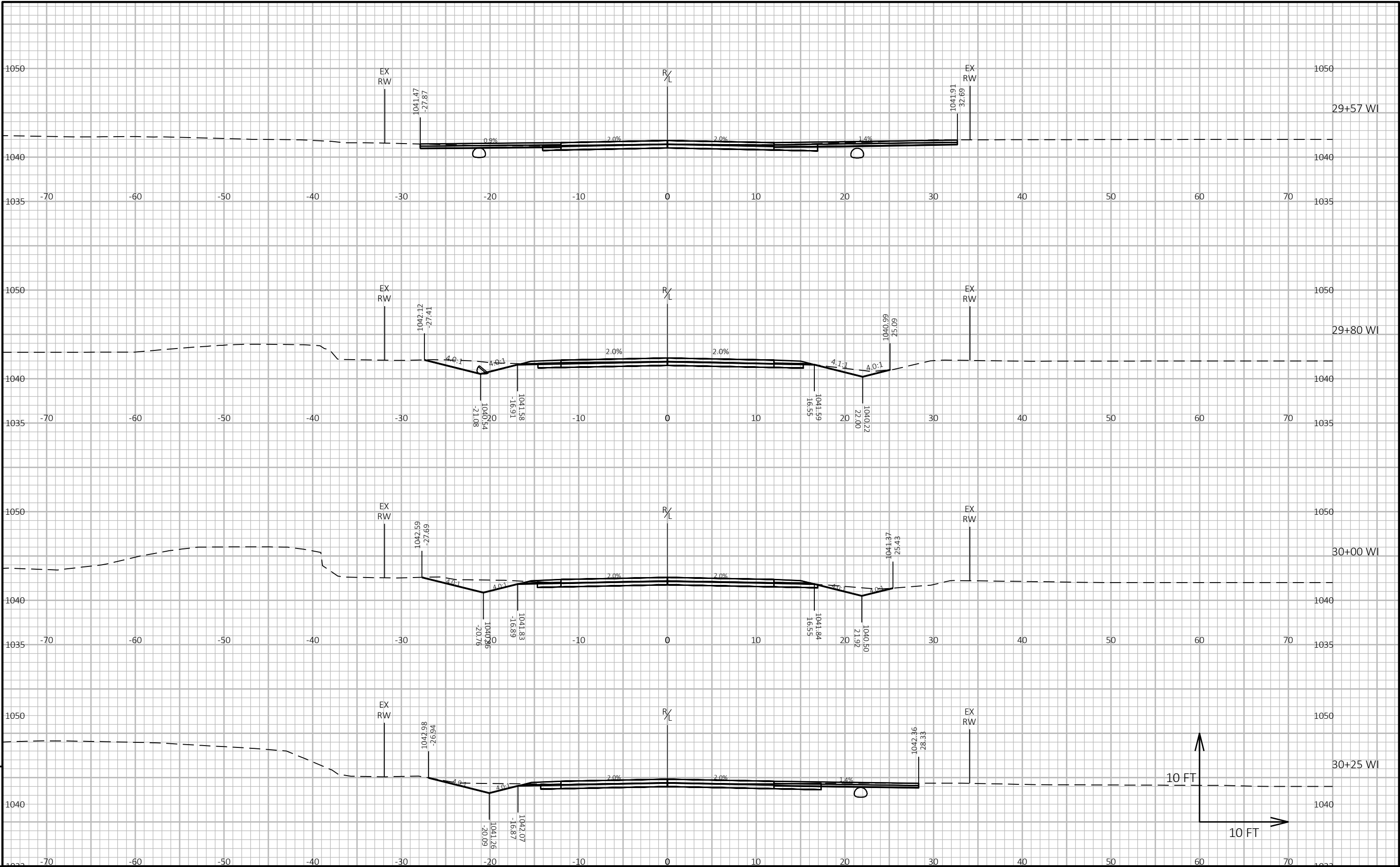


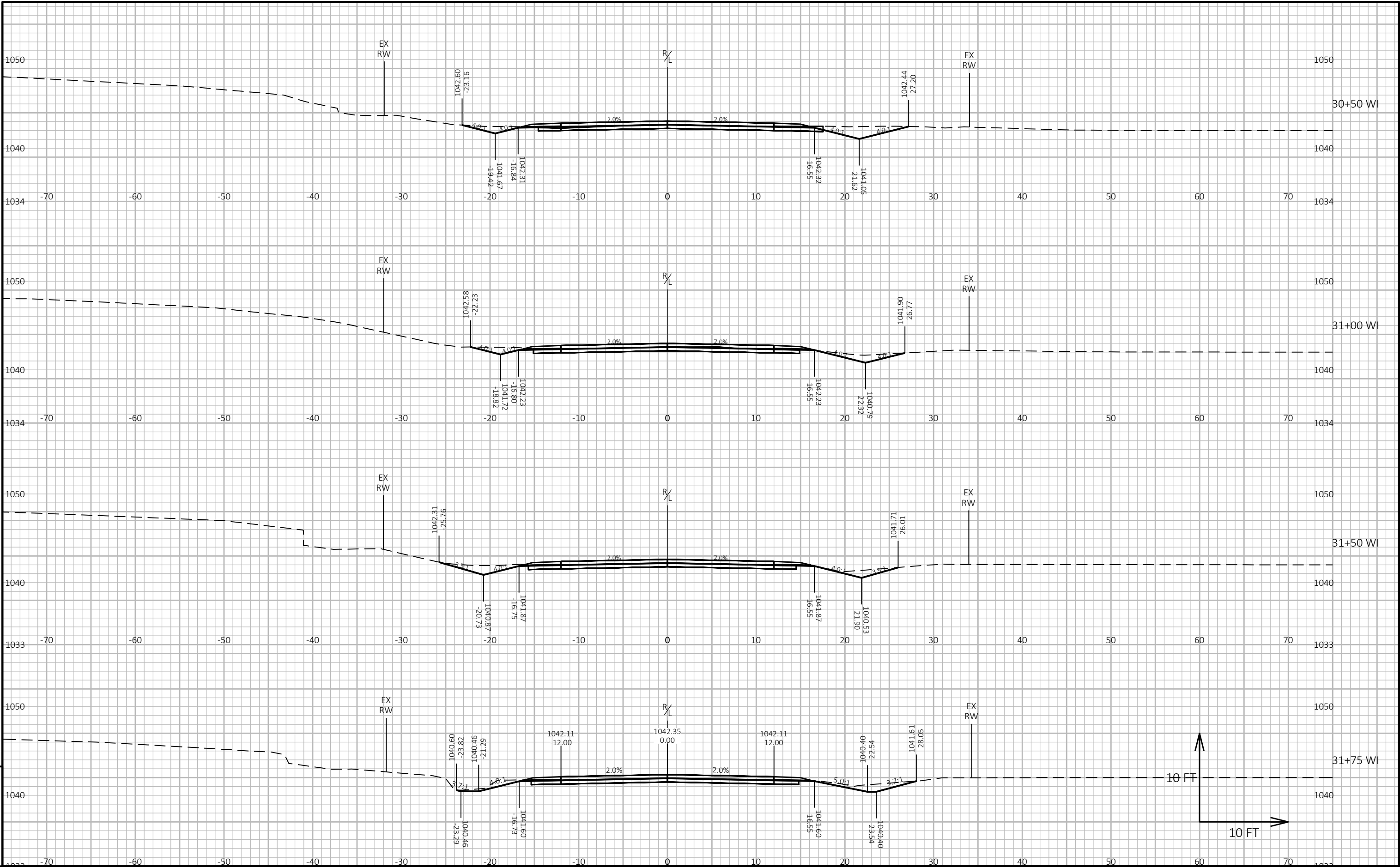


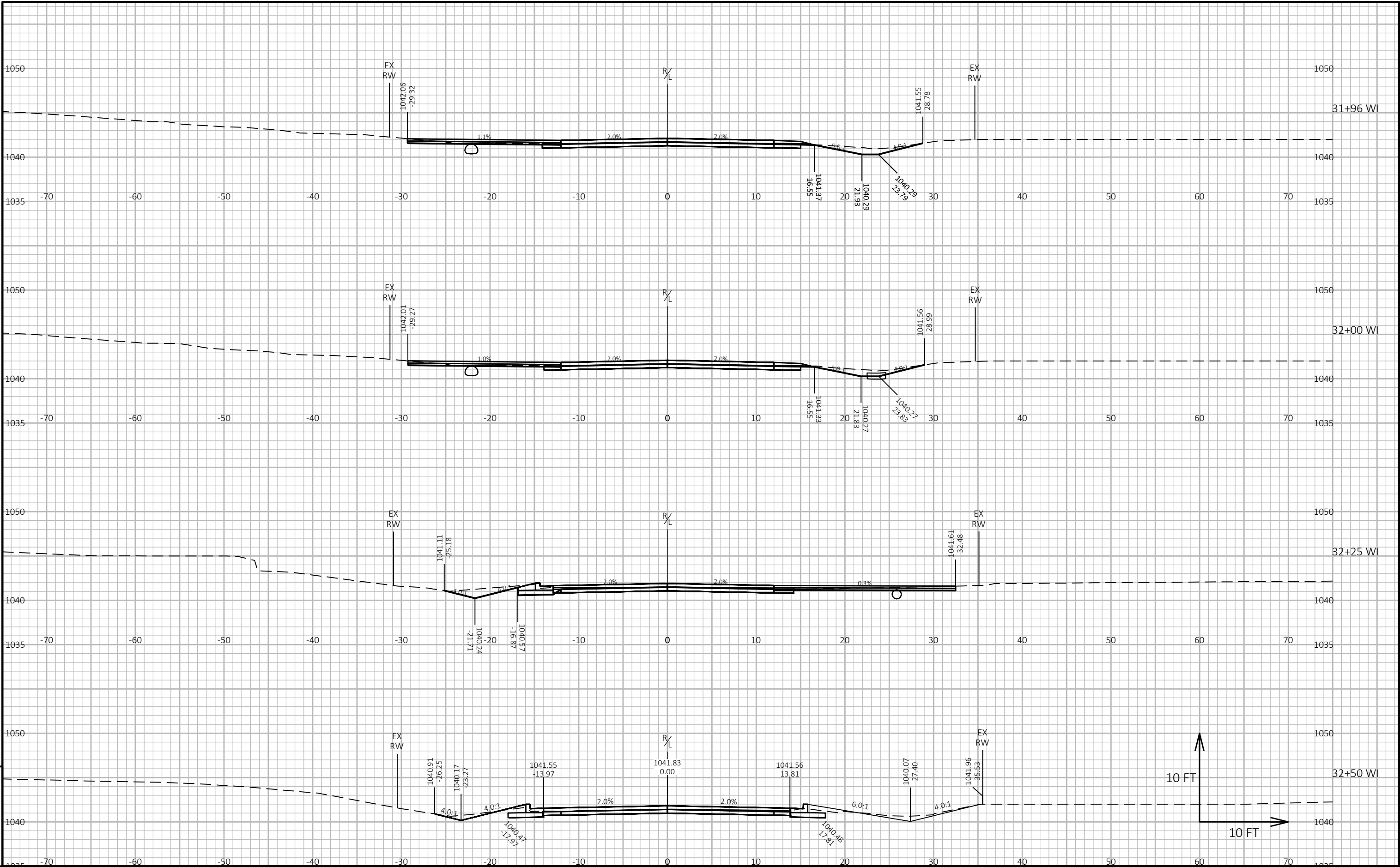


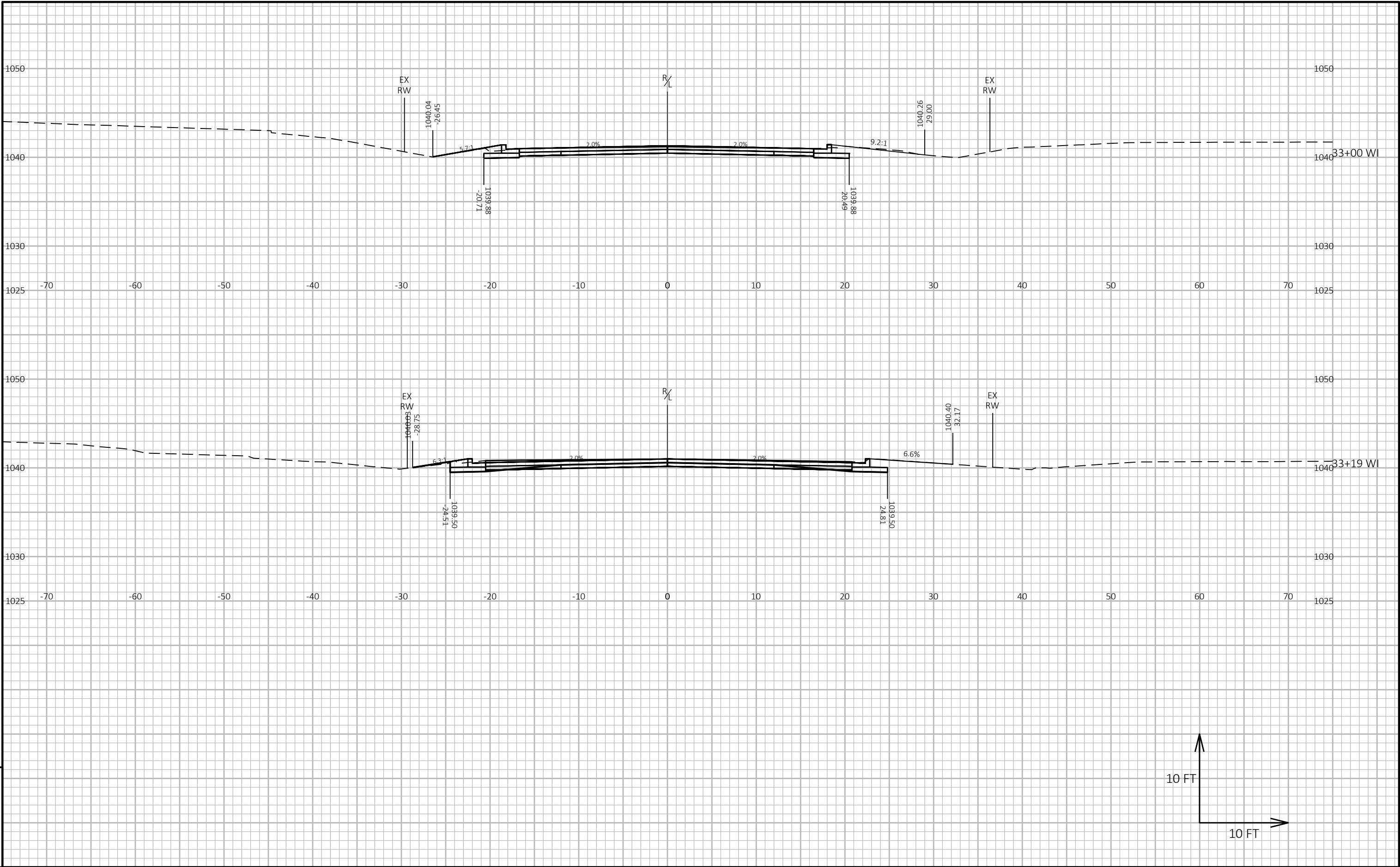




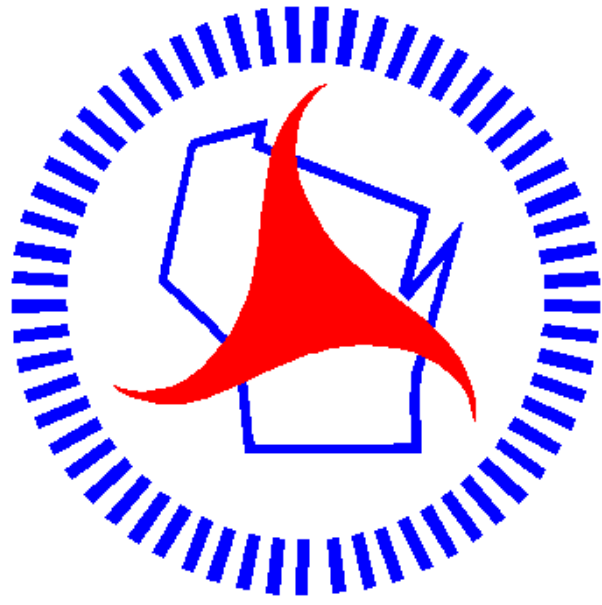








Notes



Wisconsin Department of Transportation

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