

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 = 162



DESIGN DESIGNATION

A.A.D.T.	2023	=	4,160
A.A.D.T.	2043	=	4,730
D.H.V.		=	N/A
D.D.		=	50/50
T.		=	11.0% (AADT)
DESIGN SPEED		=	35/40 MPH
ESALS		=	1,100,000

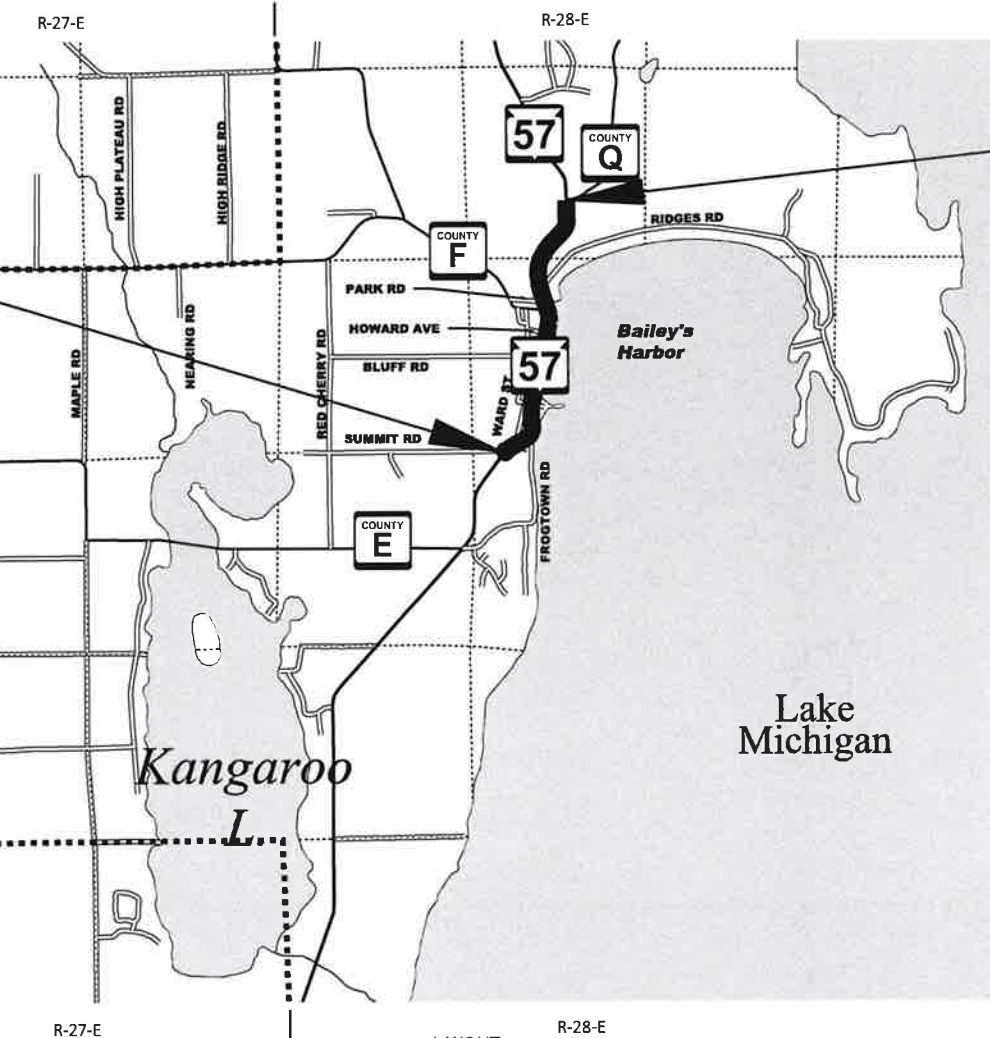
CONVENTIONAL SYMBOLS

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

COMBUSTIBLE FLUIDS
UNDERGROUND UTILITIES
GAS
SANITARY SEWER
STORM SEWER
WATER
ELECTRIC
TELEPHONE
FIBER OPTIC
CABLE TELEVISION
FORCE MAIN
MANHOLE
UTILITY PEDESTAL
FIBER OPTIC HAND HOLE
POWER POLE
TELEPHONE POLE

RAILROAD
HYDRANT
LIGHT POLE
RAILROAD SIGNAL
SIGN
TRANSMISSION TOWER
VALVE
CURB STOP
EXISTING CULVERT
PROPOSED CULVERT (Box or Pipe)

CAUTION
(SIZE) G
(SIZE) SAN
(SIZE) SS
(SIZE) W
E
T
FO
TV
FM
MH
HH
T-29-N
T-30-N
(TYPE)
CS
(SIZE, TYPE)



LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 1.449 MI

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

VERTICAL POSITIONS SHOWN ON THIS PLAN ARE VERTICAL DATUM NAVD 88 (2012).

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SUMMIT RD - BAILEYS HARBOR
SUMMIT RD - CTH Q
STH 57
DOOR COUNTY

STATE PROJECT NUMBER
4150-14-71

END PROJECT 4150-14-71
STA. 839+67.89

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4150-14-71	WISC 2025105	1

ORIGINAL PLANS PREPARED BY

raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

WISCONSIN
LUKE S. SIEBERT
E-41762
APPLETON
WI
PROFESSIONAL ENGINEER

8/13/2024 (Date) *Paul Brauer* (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	COLEMAN ENGINEERING COMPANY
Designer	raSmith
Project Manager	PAUL BRAUER
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	DAN SEGERSTROM

APPROVED FOR THE DEPARTMENT

DATE: 8/14/2024 *Paul Brauer, P.E.* (Signature)

E

UTILITY CONTACTS

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WISDOT SURVEY COORDINATOR

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COUNTY HIGHWAY COMMISSIONER

THAD ASH
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TASH@CO.DOOR.WI.US

GENERAL NOTES

- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT LIMITS THAT ARE NOT SHOWN ON THE PLANS.
- TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. NO WORK SHALL BEGIN UNTIL PROPER TRAFFIC CONTROL DEVICES ARE PLACED AND APPROVED BY THE ENGINEER.
- EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
- RIGHT OF WAY DIMENSIONS ON THE TYPICAL SECTIONS ARE BASED ON AS-BUILT AND COUNTY GIS INFORMATION. THEY HAVE NOT BEEN VERIFIED.
- SUPERELEVATION LISTED IN THE PLANS IS BASED ON FIELD SURVEY. MATCH EXISTING SUPERELEVATION.
- VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.
- BACKFILL OF REMOVALS BELOW SUBGRADE SHALL BE WITH NATIVE MATERIAL IN ACCORDANCE WITH SECTION 204 OF THE STANDARD SPECIFICATIONS. UNLESS SPECIFIED OTHERWISE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL SIDEWALK ARCS ARE MEASURED TO THE INSIDE RADII.

WISDOT PROJECT MANAGER

PAUL BRAUER
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TOWN CHAIRPERSON

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2392 COUNTY F
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(920) 839-9509
CHAIR@BAILEYSHARBORWI.ORG

ORDER OF SECTION 2 SHEETS

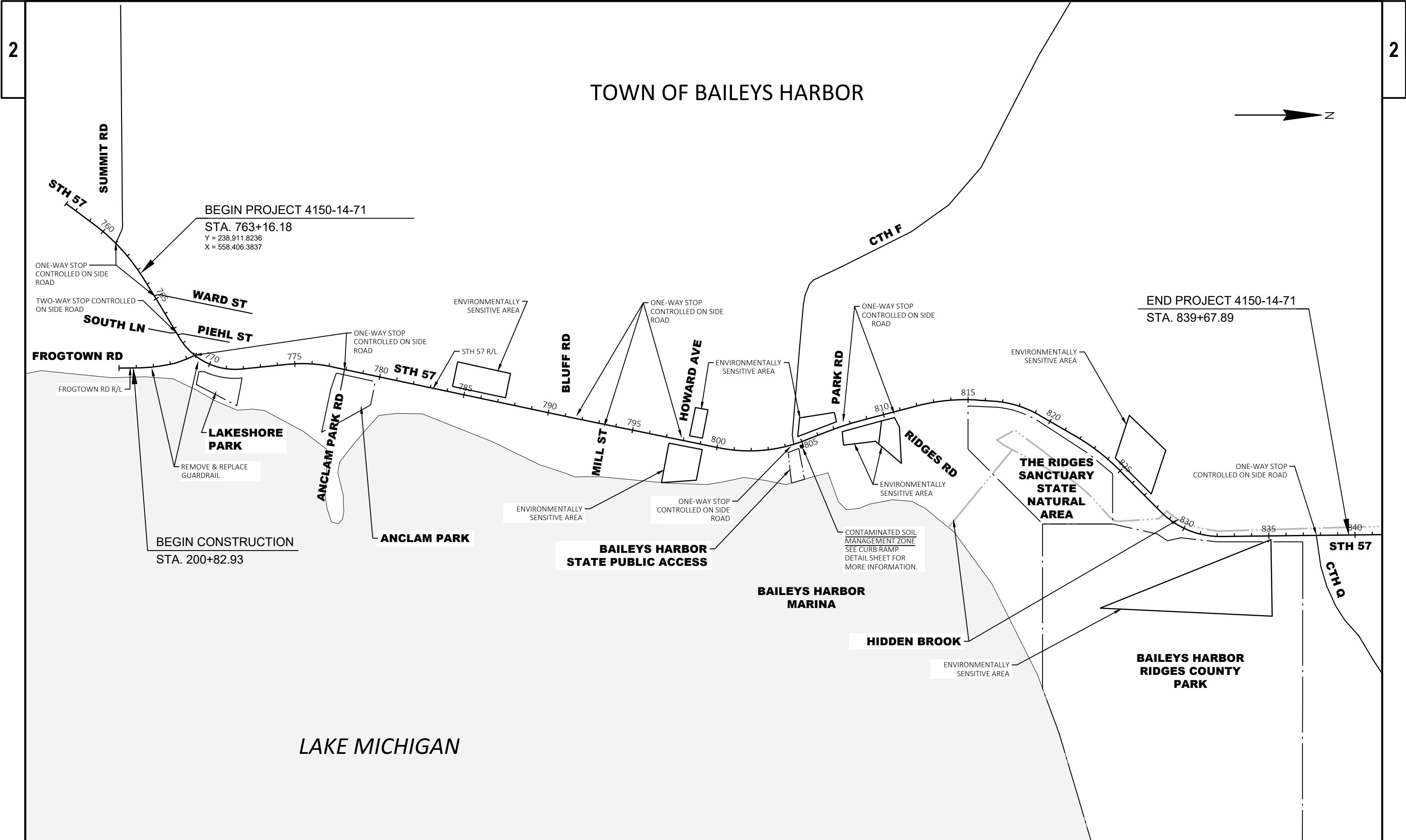
- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- CURB RAMP DETAILS
- PAVEMENT MARKING
- TRAFFIC CONTROL
- TEMPORARY PEDESTRIAN ACCOMMODATIONS

BORING SUMMARY (APPROXIMATE LOCATIONS)			
BORING NUMBER	STATION & ALIGNMENT	OFFSET	DEPTH TO BEDROCK (FT)
B-01	771+60 (STH 57)	8.9' LT	1.00
B-02	771+60 (STH 57)	23.2' RT	6.00
B-03	201+24 (FROGTOWN RD)	11.8' RT	1.30
B-04	201+72 (FROGTOWN RD)	11.6' RT	4.50
B-05	202+47 (FROGTOWN RD)	11.6' RT	7.40

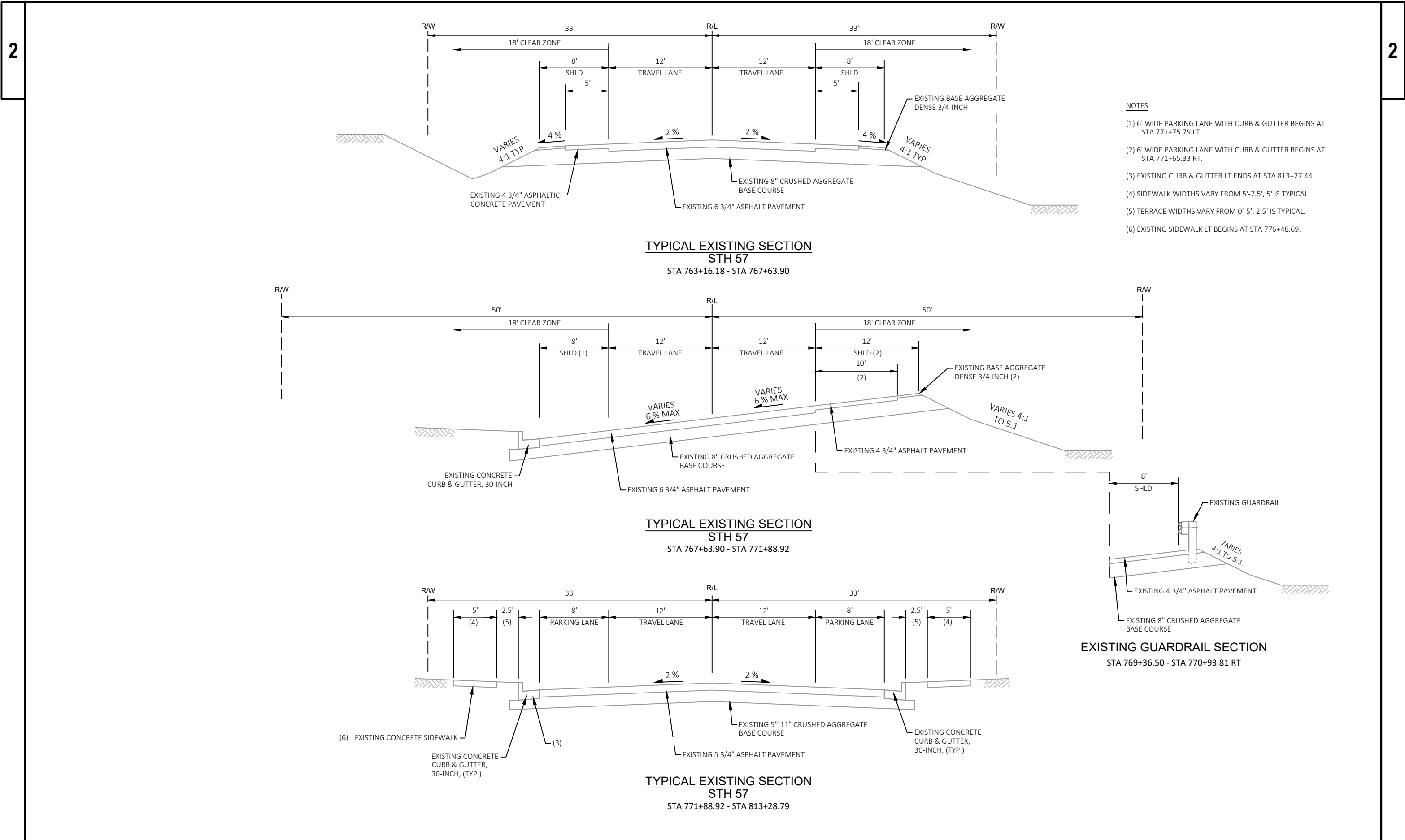
DIGGERSHOTLINE

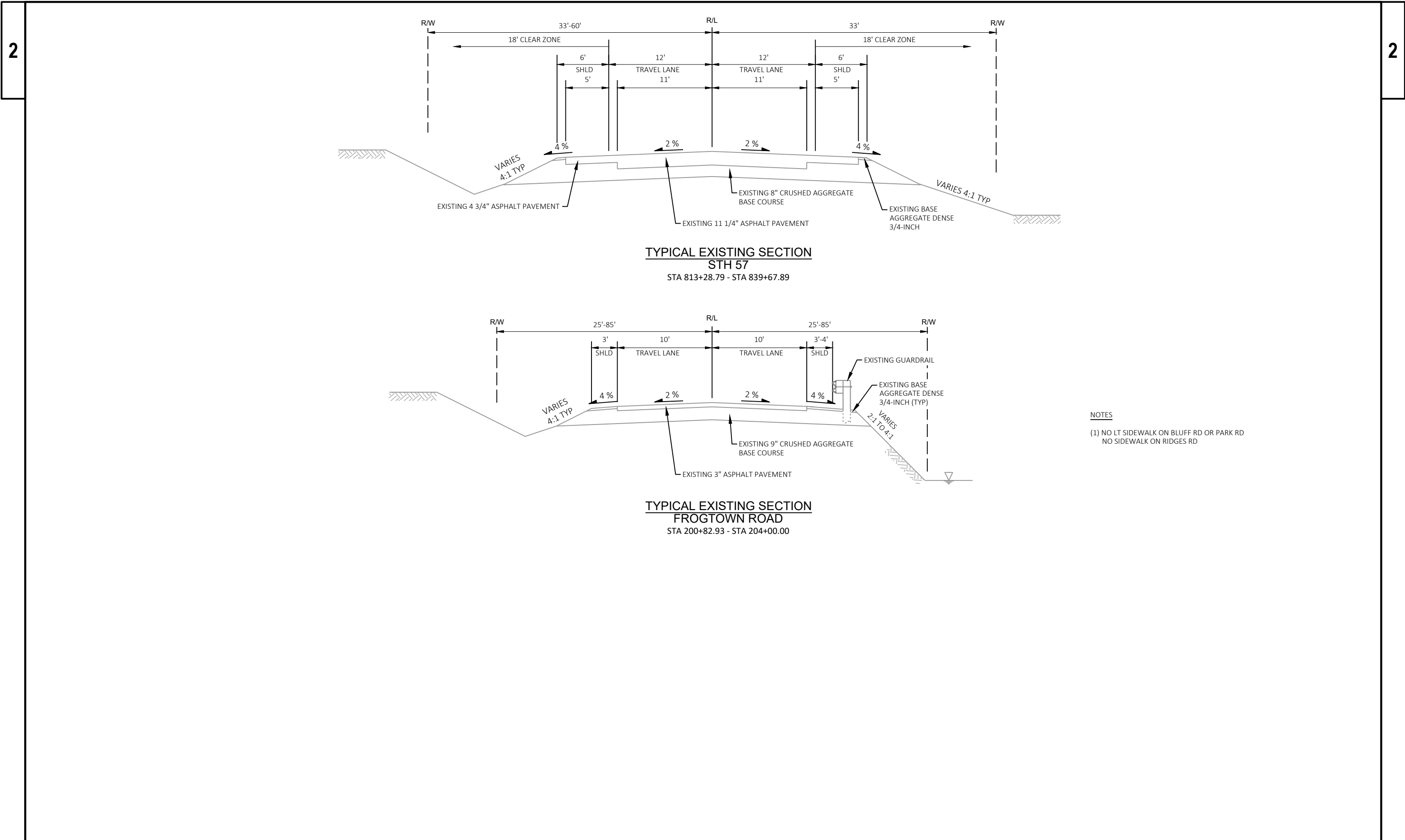
Dial 811 or (800)242-8511

www.DiggersHotline.com



PROJECT NO: 4150-14-71	HWY: STH 57	COUNTY: DOOR	PROJECT OVERVIEW	SHEET 3	E
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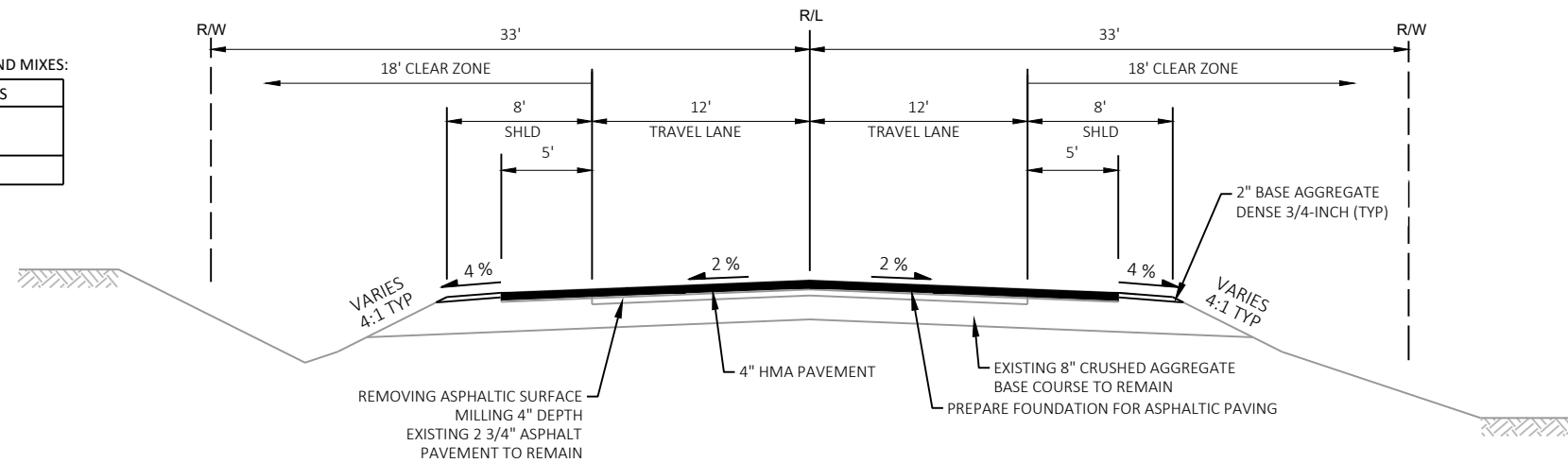




HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND MIXES:

THICKNESS	LAYERS	MIX SPECIFICATIONS
4-INCH	ONE 1 3/4" UPPER LAYER ONE 2 1/4" LOWER LAYER	4 MT 58-28 S 3 MT 58-28 S
3-INCH*	ONE 3" LAYER	4 MT 58-28 S

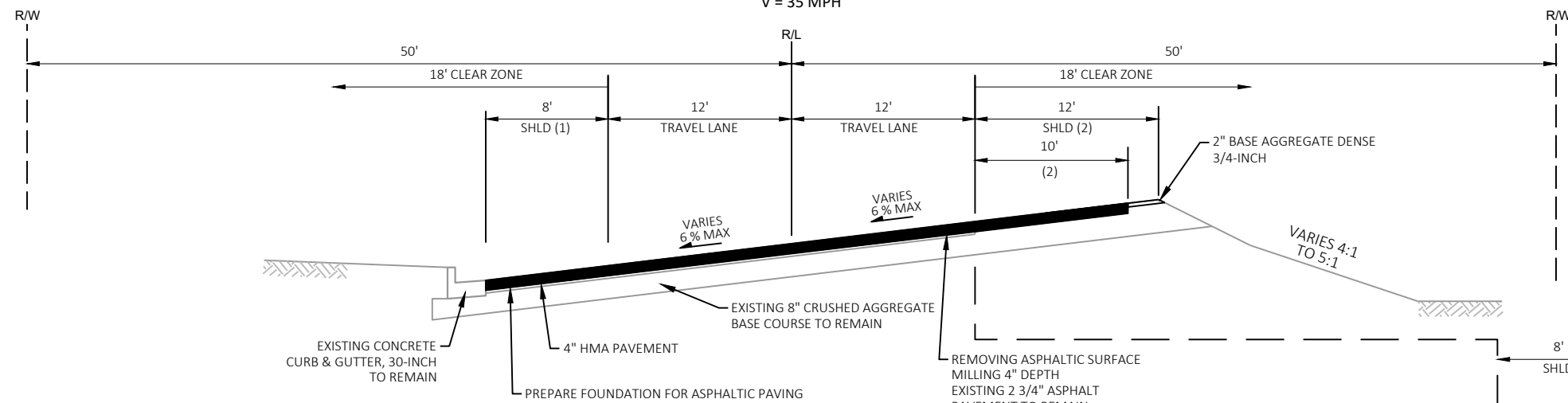
*FOR USE ON FROGTOWN ROAD SHOULDER



TYPICAL FINISHED SECTION

STH 57

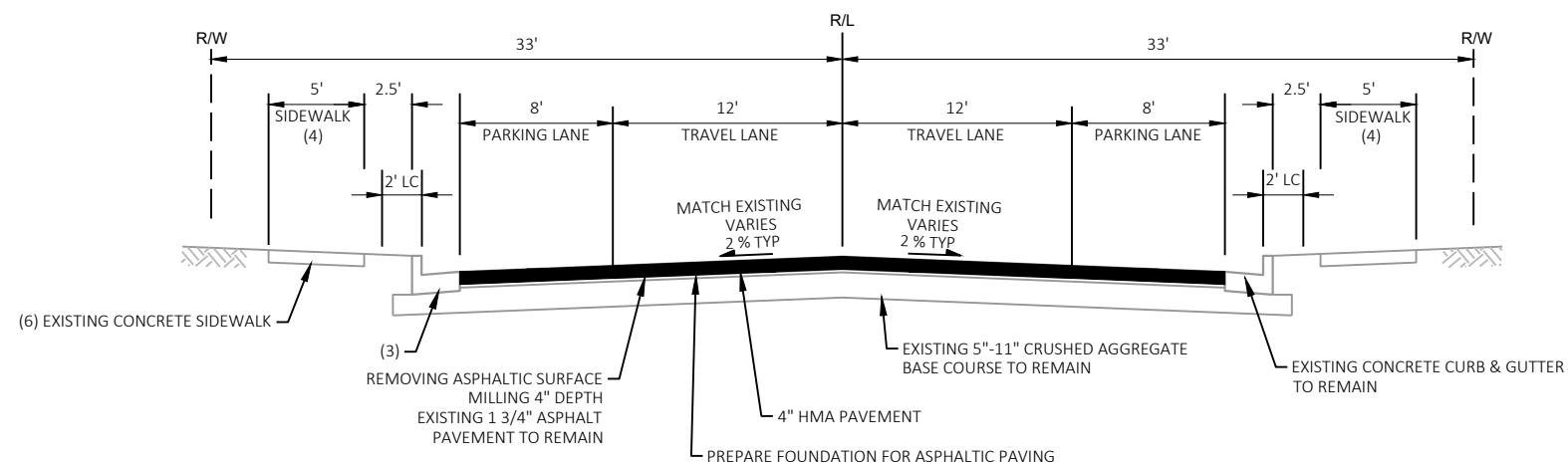
STA 763+16.18 - STA 767+63.90
V = 35 MPH



TYPICAL FINISHED SECTION

STH 57

STA 767+63.90 - STA 771+88.92
V = 35 MPH



TYPICAL FINISHED SECTION

STH 57

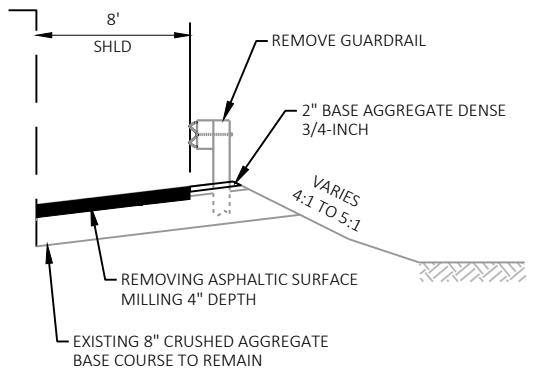
STA 771+88.92 - STA 813+28.79
V = 35 MPH

NOTES

- (1) 6' WIDE PARKING LANE WITH CURB & GUTTER BEGINS AT STA 771+75.79 LT.
- (2) 6' WIDE PARKING LANE WITH CURB & GUTTER BEGINS AT STA 771+65.33 RT.
- (3) EXISTING CURB & GUTTER LT ENDS AT STA 813+27.44.
- (4) SIDEWALK WIDTHS VARY FROM 5'-7.5', 5' IS TYPICAL.
- (5) TERRACE WIDTHS VARY FROM 0'-5', 2.5' IS TYPICAL.
- (6) EXISTING SIDEWALK LT BEGINS AT STA 776+48.69.

TYPICAL FINISHED SECTION

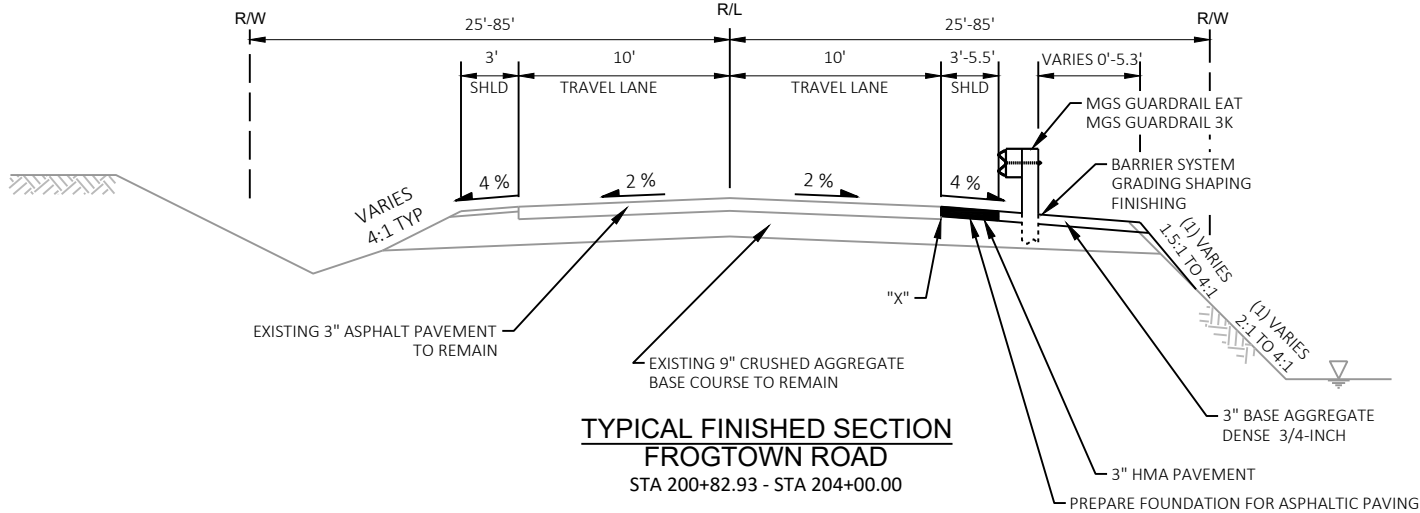
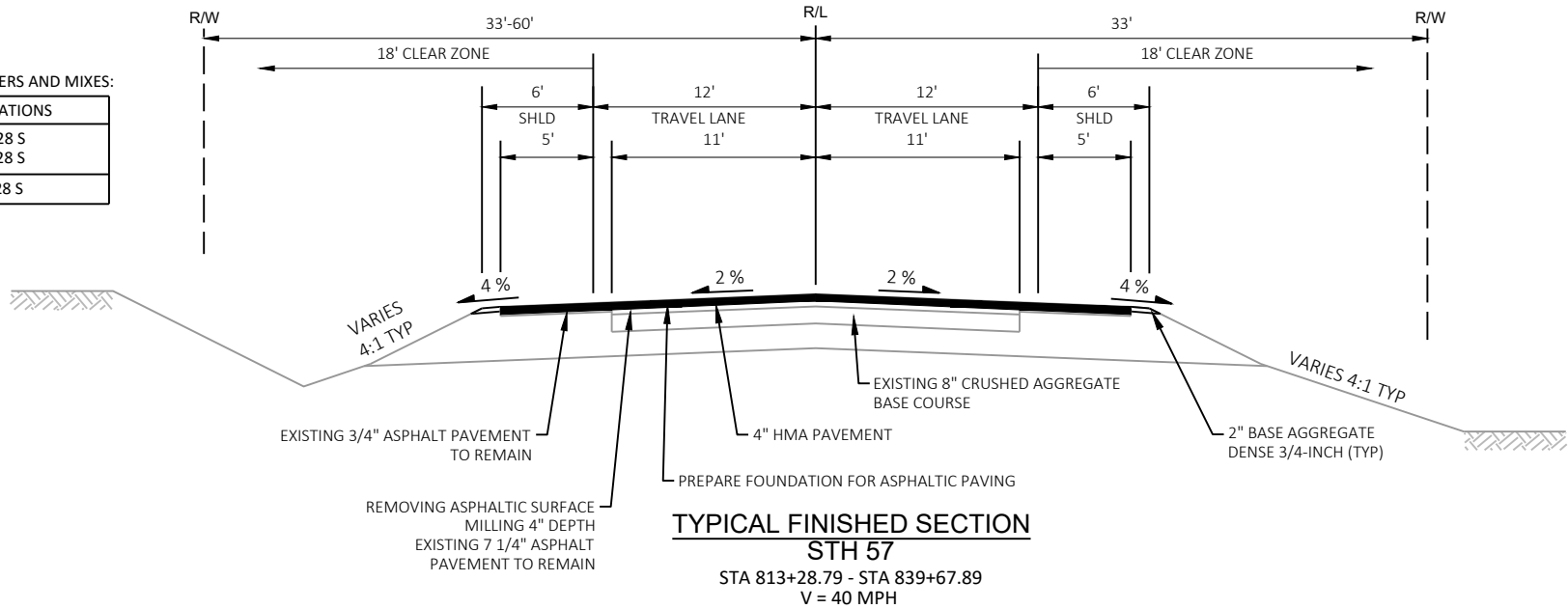
STA 769+36.50 - STA 770+93.81 RT



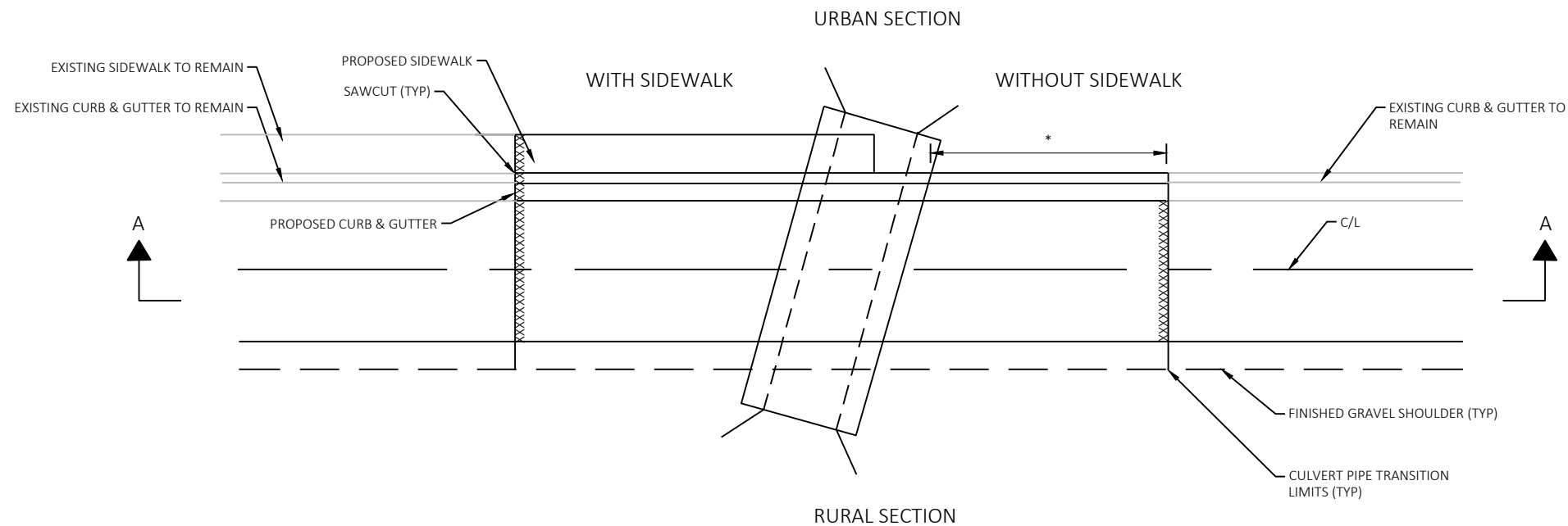
HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND MIXES:

THICKNESS	LAYERS	MIX SPECIFICATIONS
4-INCH	ONE 1 3/4" UPPER LAYER ONE 2 1/4" LOWER LAYER	4 MT 58-28 S 3 MT 58-28 S
3-INCH*	ONE 3" LAYER	4 MT 58-28 S

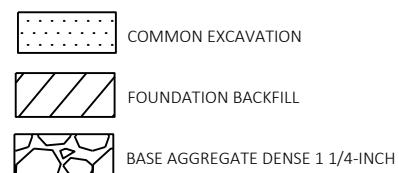
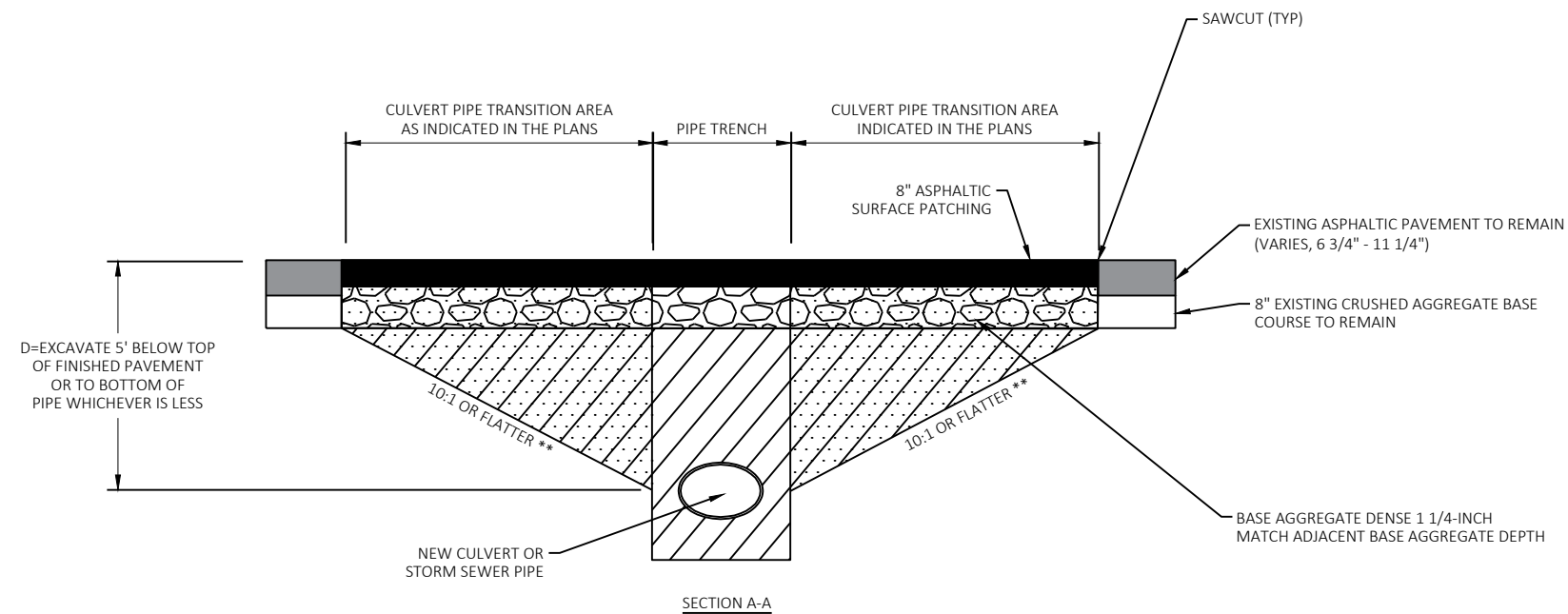
*FOR USE ON FROGTOWN ROAD SHOULDER



NOTES
(1) SLOPES STEEPER THAN 3:1 REPRESENT THE BEDROCK LEDGE.
"X" = POINT REFERRED TO ON CROSS SECTIONS



* SEE PLAN DETAILS AND EARTHWORK SUMMARY IN MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.

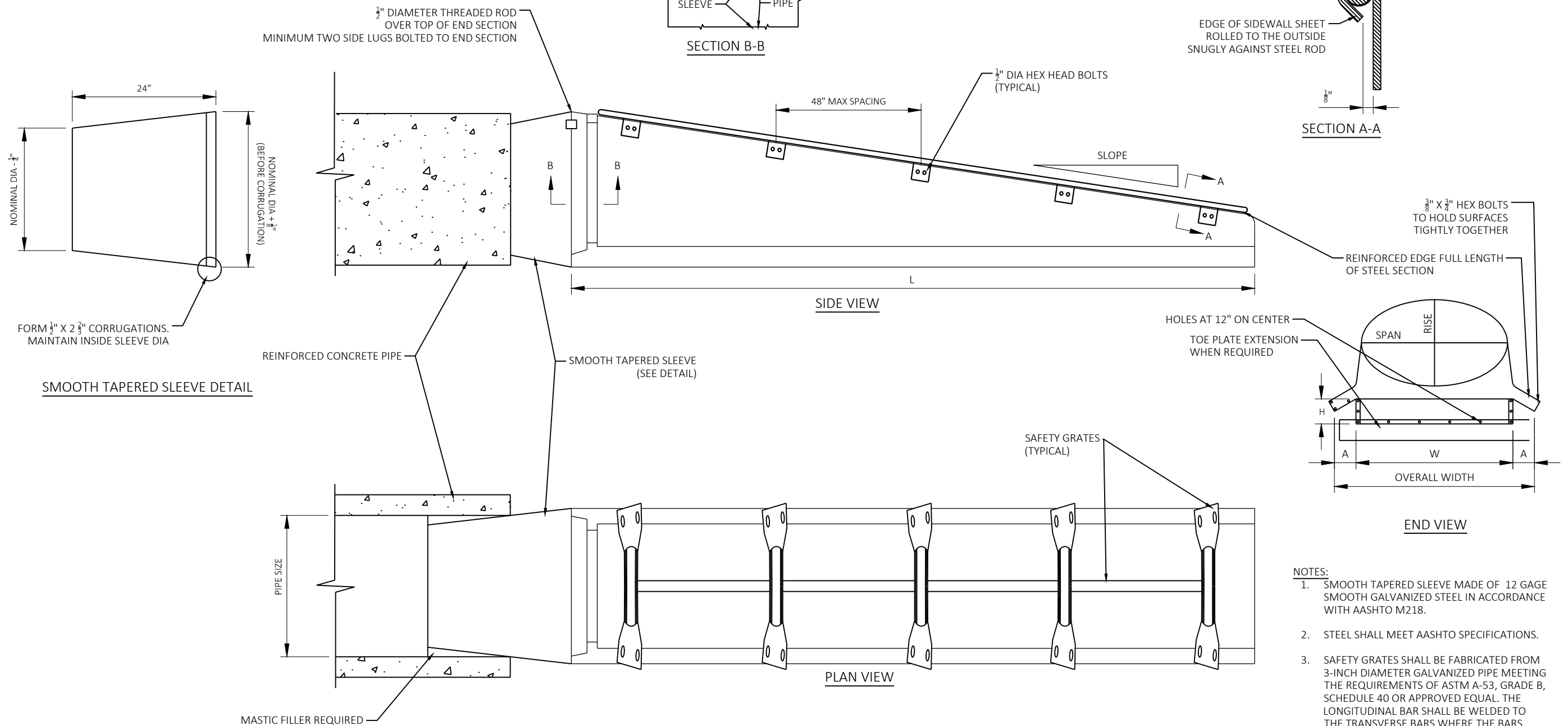


- NOTES:
1. PERFORM WORK IN ACCORDANCE WITH STANDARD SPEC 520.
 2. CULVERT PIPE TRANSITION AREAS WILL BE PAID BY COMMON EXCAVATION & FOUNDATION BACKFILL.
 3. FOUNDATION BACKFILL WITHIN THE PIPE TRENCH IS INCIDENTAL TO THE PIPE ITEMS.
 4. PAVEMENT SAWCUT TO BE PERPENDICULAR TO ROADWAY PAVEMENT.
 5. REPLACE SIDEWALK AND CURB & GUTTER WITHIN TRANSITION AREA AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
 6. CONTINUE MILLING OPERATION THROUGH ASPHALTIC PATCH.

**SUBGRADE TRANSITION DETAIL FOR PROPOSED CULVERTS
OR STORM SEWER CROSSING STH 57**

** MAY VARY IF ROCK IS ENCOUNTERED. ROCK TO REMAIN IN PLACE.

DIMENSIONS									
INCHES		MIN. THICK.		INCHES					SLOPE
SPAN	RISE	IN.	GAGE	A	H	W	TOTAL WIDTH	L	
38	24	0.079	14	12	9	44	68	56	4:1



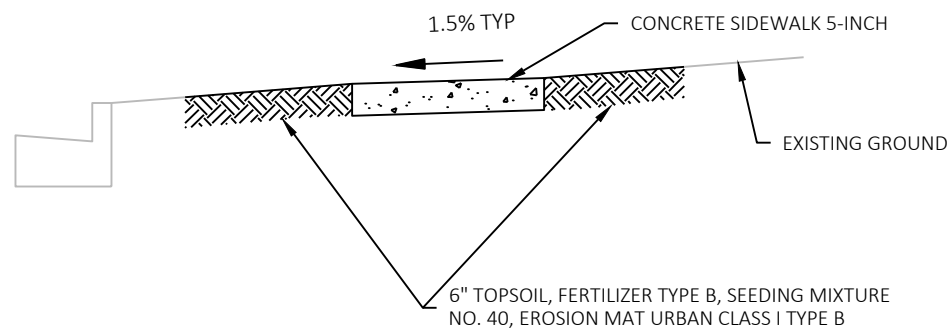
- NOTES:
- SMOOTH TAPERED SLEEVE MADE OF 12 GAGE SMOOTH GALVANIZED STEEL IN ACCORDANCE WITH AASHTO M218.
 - STEEL SHALL MEET AASHTO SPECIFICATIONS.
 - SAFETY GRATES SHALL BE FABRICATED FROM 3-INCH DIAMETER GALVANIZED PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL. THE LONGITUDINAL BAR SHALL BE WELDED TO THE TRANSVERSE BARS WHERE THE BARS CROSS. THE NUMBER OF TRANSVERSE BARS REQUIRED WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.
 - TOE PLATE IS 8" HIGH.
 - TOE PLATE OVERLAP IS 2".
 - SEE SDD FOR STEEL APRON ENDWALLS FOR CULVERT PIPE ARCH SLOPED CROSS DRAINS FOR ADDITIONAL INFORMATION.

Diagram illustrating the repair of a longitudinal lane joint. The diagram shows a cross-section of the pavement structure. The existing pavement base is shown at the bottom, with a cross-hatched pattern. Above the base, four passes of repair material are applied, labeled as follows:

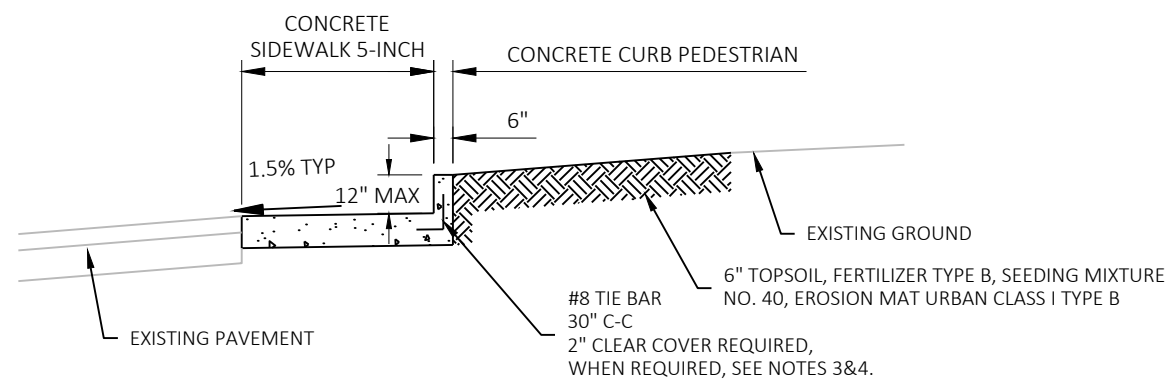
- PASS #1 - LOWER LAYER
- PASS #2 - LOWER LAYER
- PASS #3 - UPPER LAYER
- PASS #4 - UPPER LAYER

The repair material is applied in a stepped fashion, with the upper layers (Passes #3 and #4) being wider than the lower layers (Passes #1 and #2). A longitudinal lane joint is shown on the left side of the repair area. A temporary pavement marking, 4 inches wide, is shown on the right side of the repair area, extending across the upper layers.

SEE SDD HMA LONGITUDINAL JOINTS FOR TYPICAL NOTCHED WEDGE JOINT DETAILS.

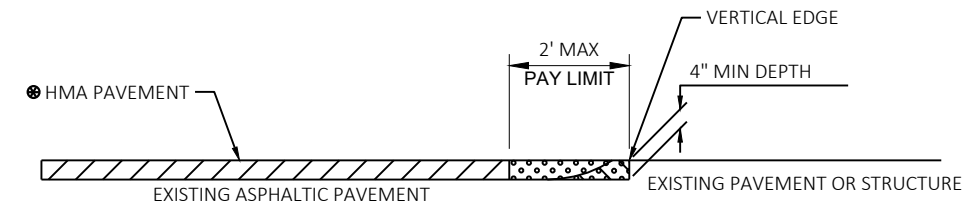


TYPICAL SIDEWALK SECTION



CONCRETE CURB PEDESTRIAN SECTION

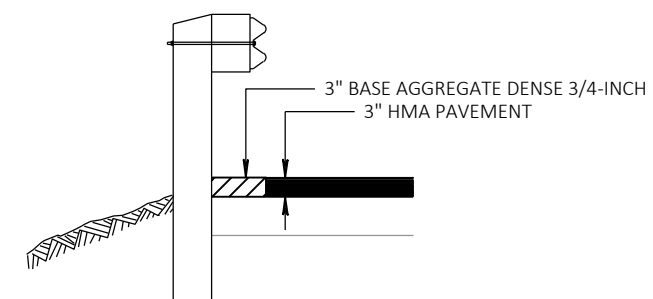
1. PAYMENT FOR CONCRETE CURB PEDESTRIAN SHALL BE MADE USING THE BID ITEM CONCRETE CURB PEDESTRIAN
2. THE HEIGHT OF THE CURB SHALL VARY BETWEEN 0 INCHES AND 12 INCHES BASED ON THE GRADES SHOWN ON THE CURB RAMP DETAILS.
3. WHEN THE HEIGHT OF THE PEDESTRIAN CURB IS GREATER THAN 6 INCHES IN HEIGHT THE CURB SHALL BE POURED MONOLITHICALLY WITH THE CONCRETE SIDEWALK AND SHALL BE TIED TO THE SIDEWALK USING A #8 TIE BAR SPACED 30" CENTER TO CENTER. THE TIE BARS ARE INCIDENTAL TO THE CONCRETE CURB PEDESTRIAN.
4. WHEN THE HEIGHT OF THE PEDESTRIAN CURB IS 6 INCHES OR LESS IT MAY BE POURED MONOLITHICALLY WITH THE CONCRETE SIDEWALK OR POURED SEPARATELY. WHEN POURED SEPARATELY EXPANSION FELT IS REQUIRED BETWEEN THE CONCRETE SIDEWALK AND CONCRETE CURB PEDESTRIAN. TIE BARS ARE NOT REQUIRED WHEN THE HEIGHT OF THE PEDESTRIAN CURB IS 6 INCHES OR LESS.



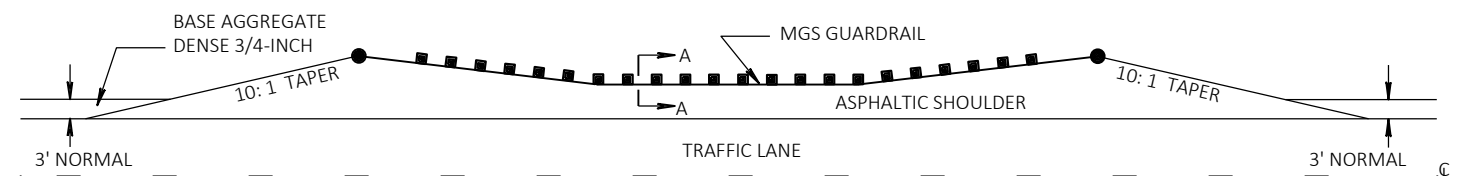
• SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

 REMOVING ASPHALTIC SURFACE, MILLING REMOVING ASPHALTIC SURFACE, BUTT JOINTS REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)

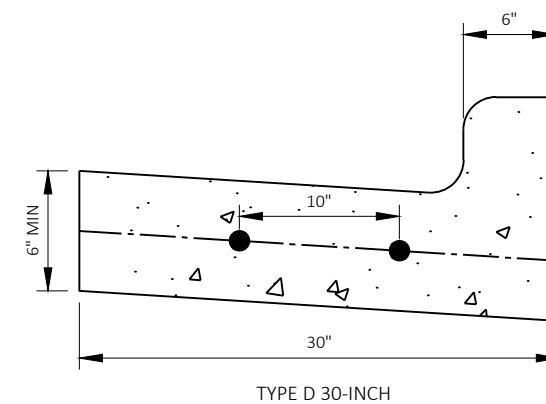


SECTION A-A



DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL

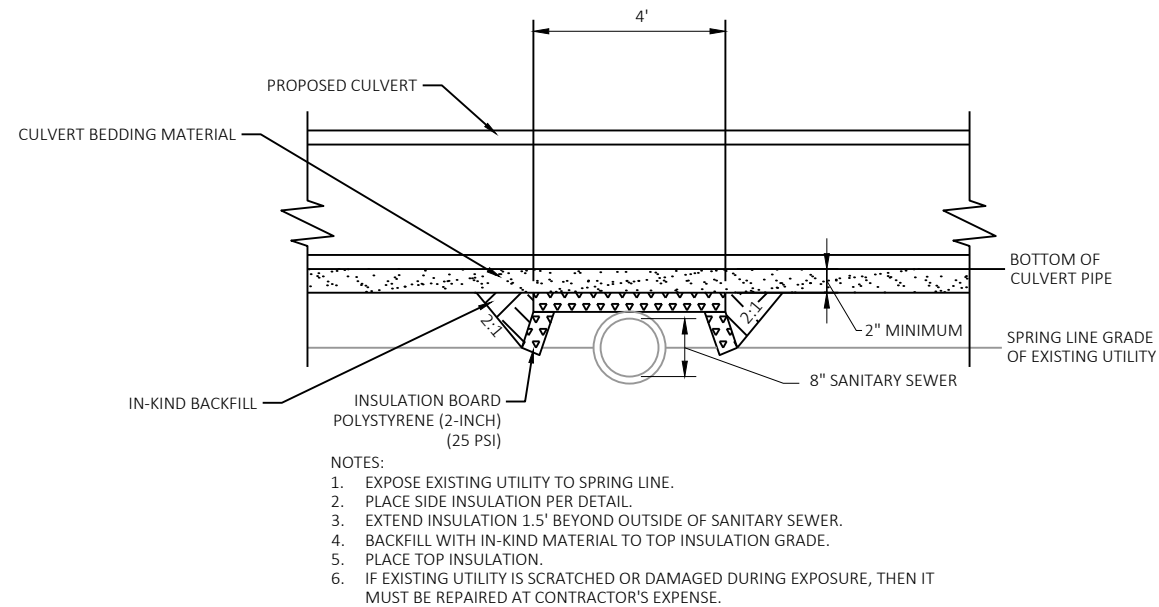
FROGTOWN RD STA 200+82.93 - 204+27.00 RT



DRILLED TIE BAR DETAIL AT CURB & GUTTER MATCH POINT

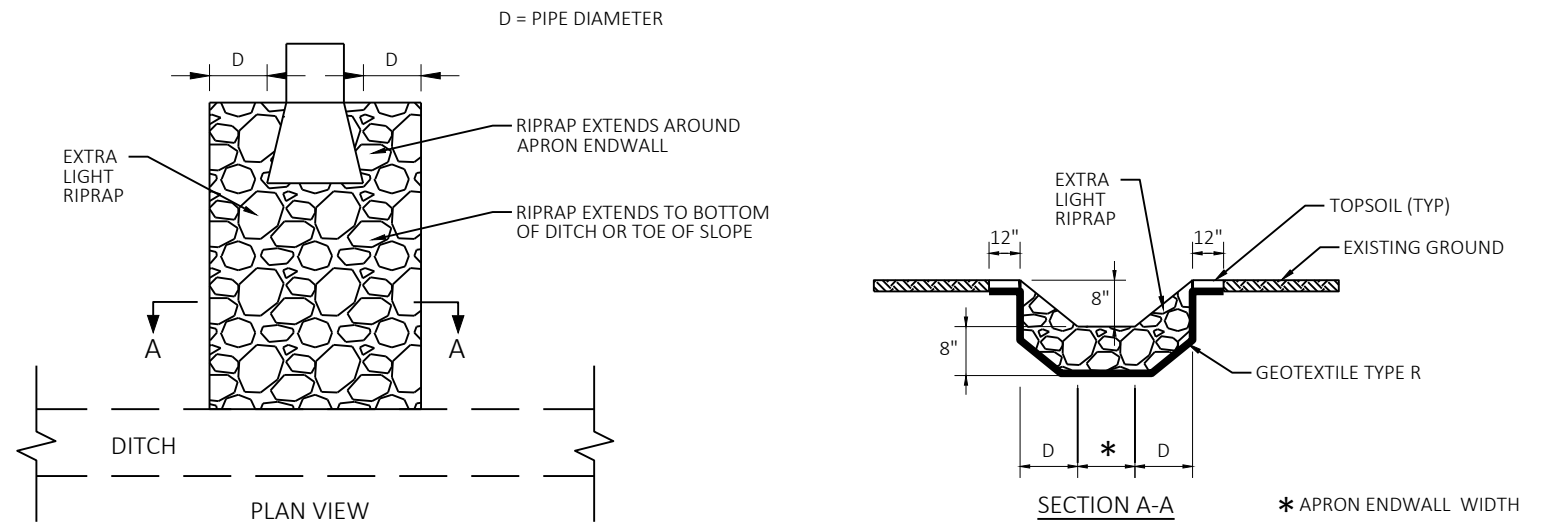
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WISDOT/CADDS SHEET 42



PIPE INSULATION FOR EXISTING UTILITY DETAIL

STA 828+14 - 828+28 LT



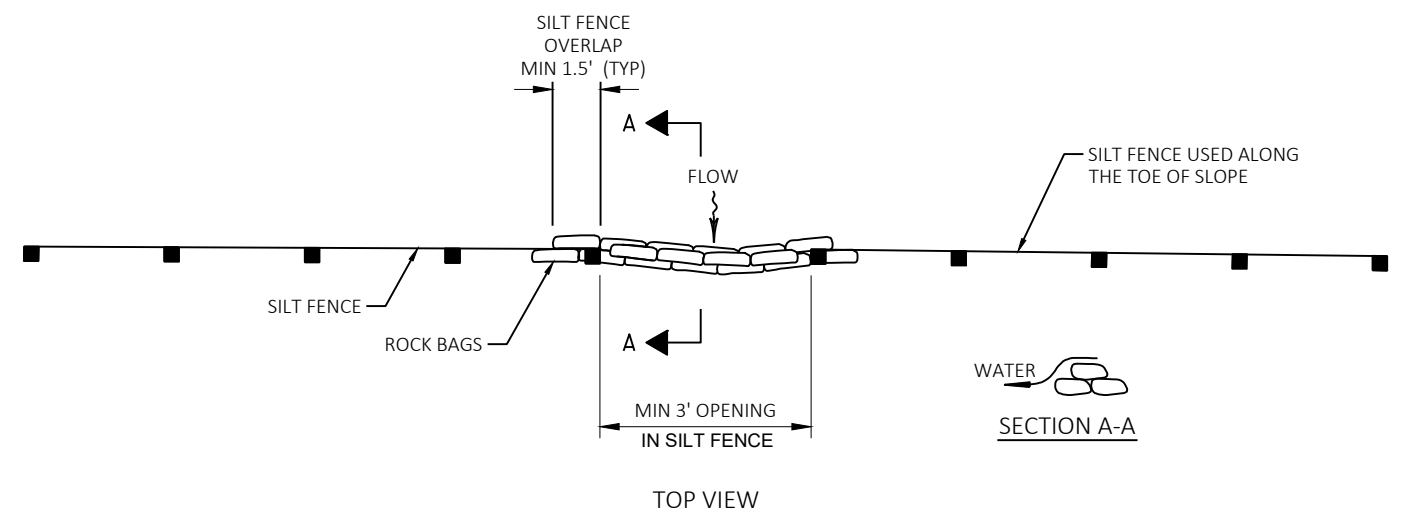
EXTRA-LIGHT RIPRAP TREATMENT AT PIPE OUTFALLS

SEE PLAN DETAILS FOR LOCATIONS.

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIP-TURF	.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 SLOPE-TURF			.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											

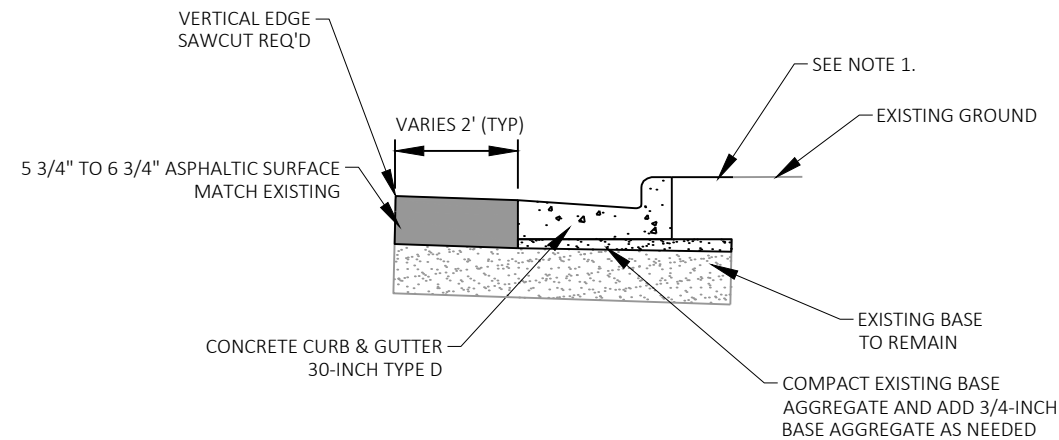
TOTAL PROJECT AREA = 13.325 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 7.908 ACRES



ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

PIPE SIZE	NUMBER OF BAGS REQUIRED
19" X 30"	6
24" X 38"	8

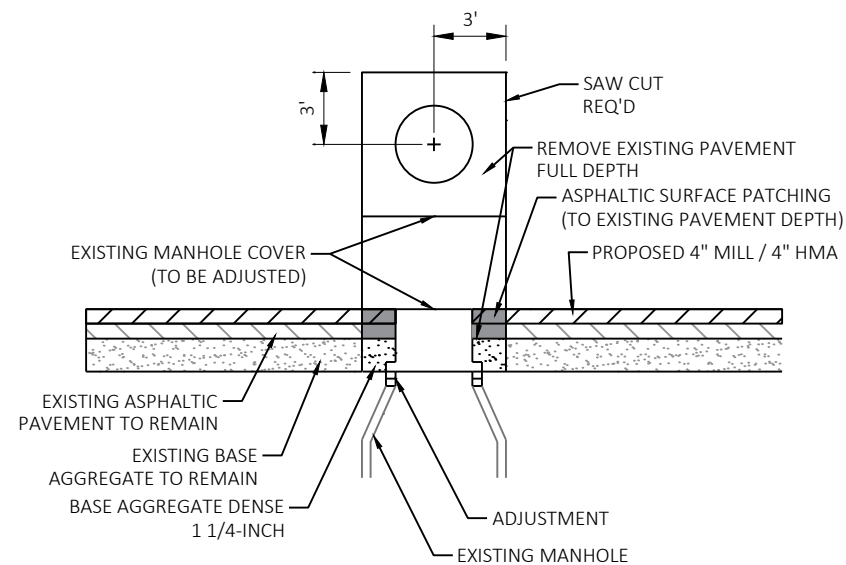
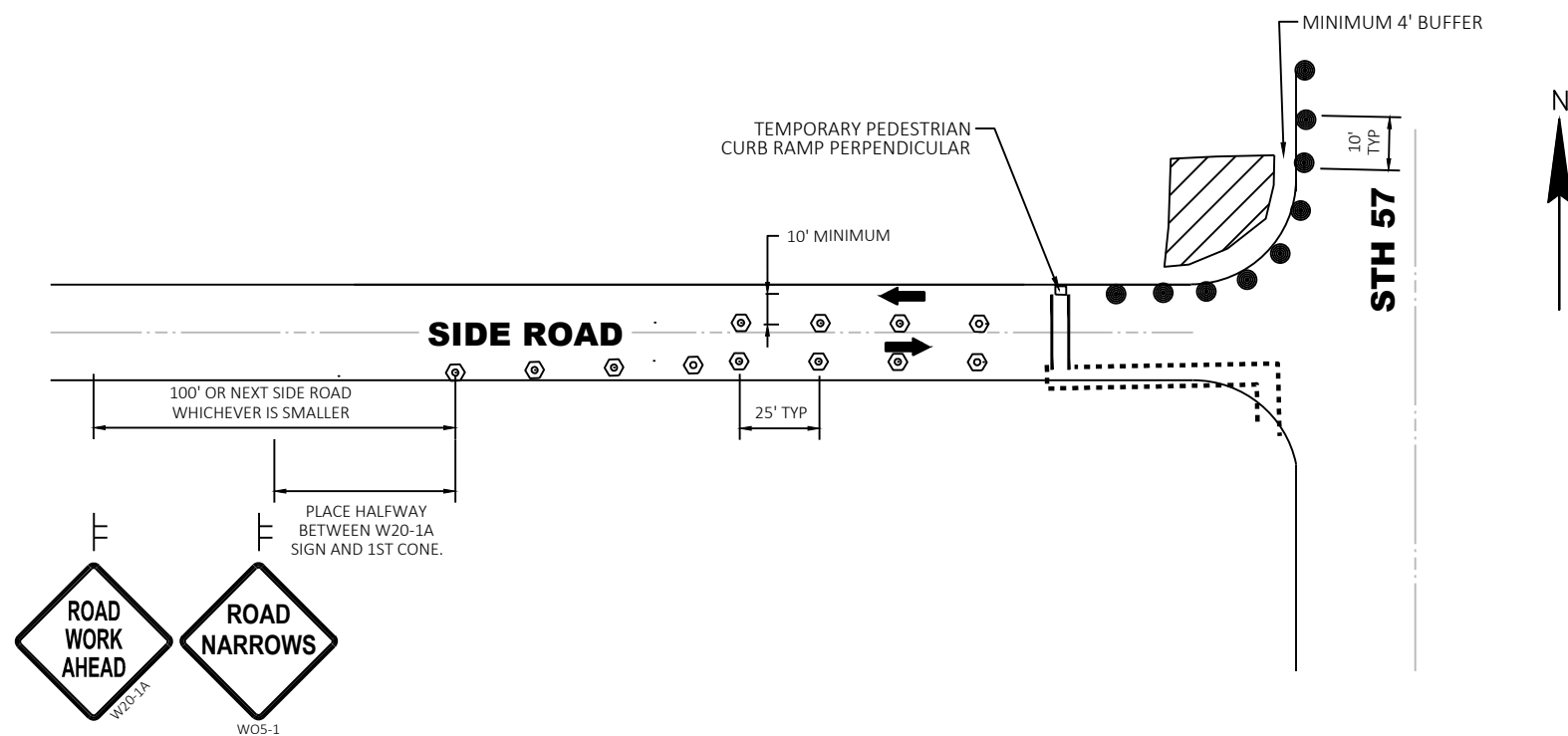
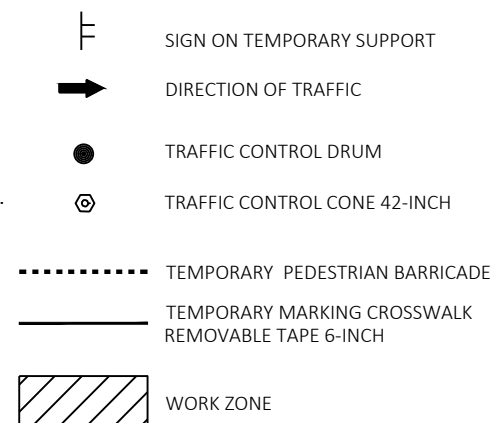
CULVERT PIPE CHECK REQUIREMENTS

**NOTES:**

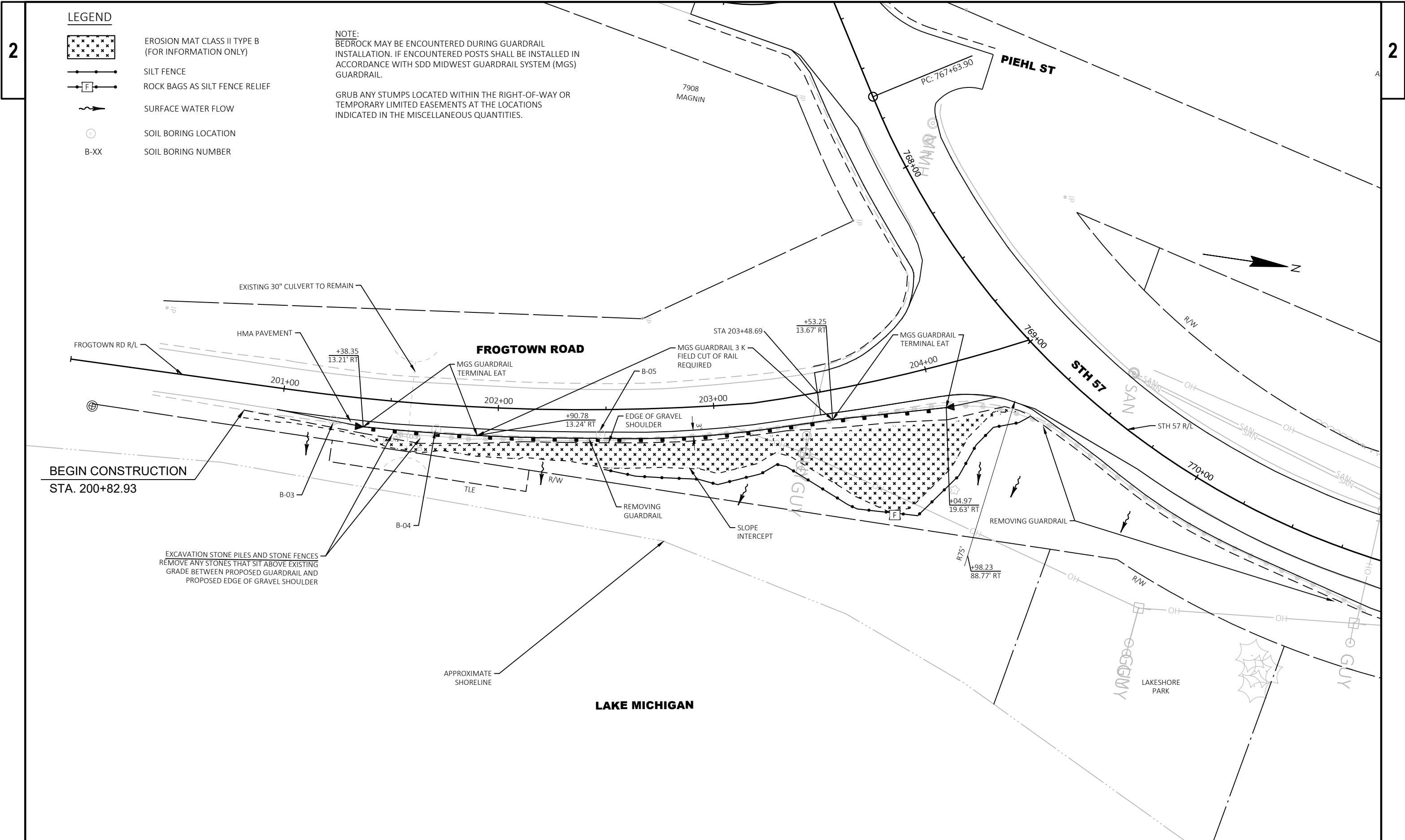
1. SEE CURB RAMP DETAILS FOR MATERIAL TYPE BEHIND CURB & GUTTER.
2. ASPHALT REMOVAL IN FRONT OF CURB PAID AS REMOVING ASPHALTIC SURFACE.
3. COMPLETE CURB & GUTTER REPLACEMENT AND PAVEMENT PATCHING PRIOR TO MILLING AND HMA PAVING.

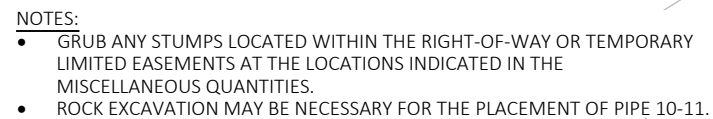
DETAIL FOR CURB AND GUTTER REMOVAL/REPLACEMENT

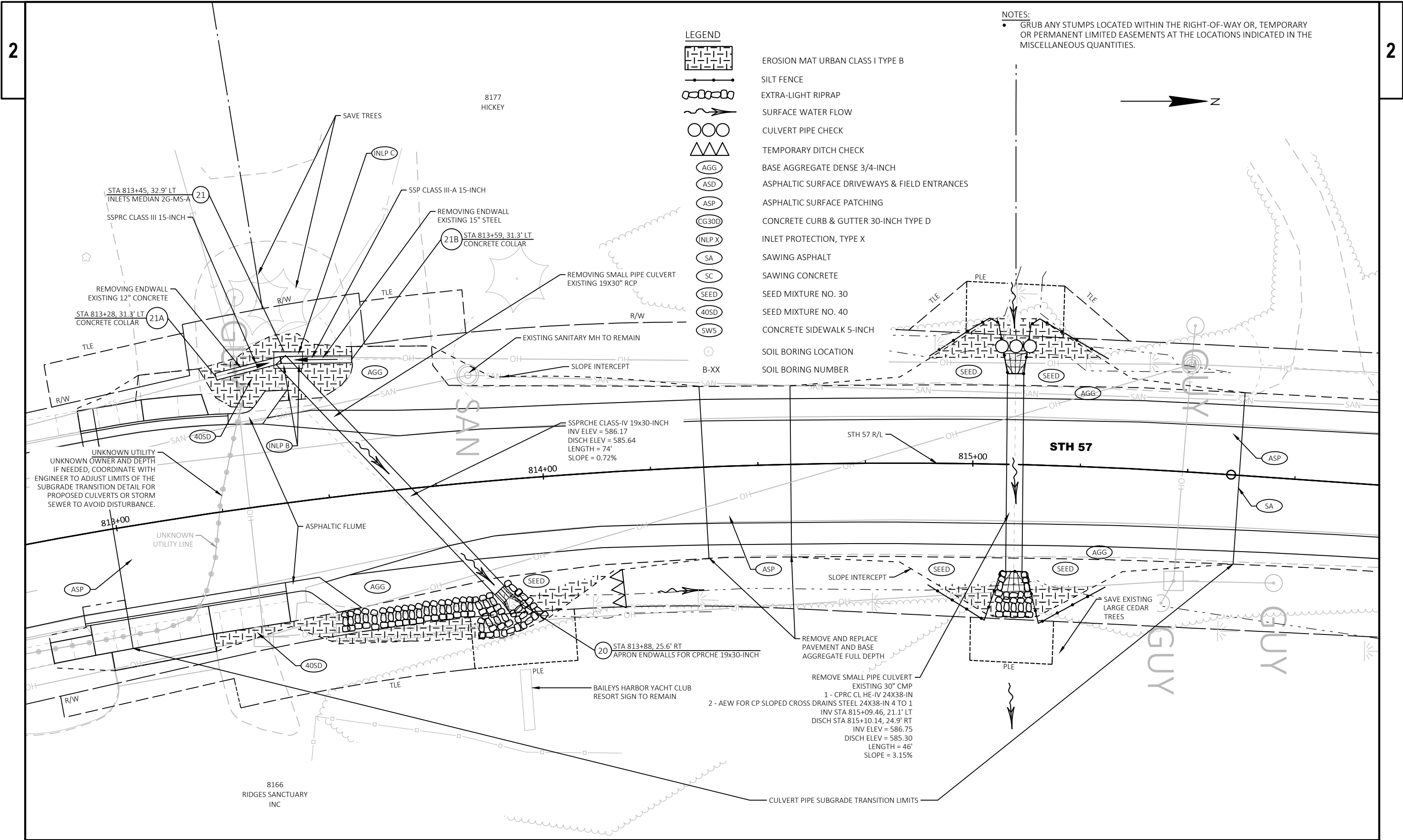
SEE CURB RAMP DETAILS FOR LOCATIONS

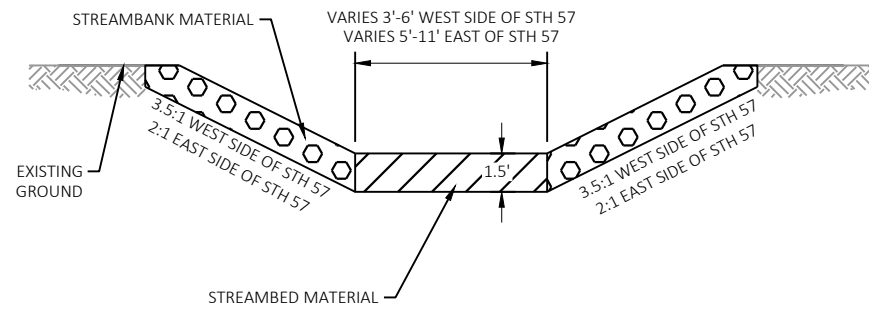
**ADJUSTING MANHOLE COVERS**ADJUSTING TO TAKE PLACE PRIOR TO MILL AND PAVE.
MAINTAIN TWO WAY TRAFFIC OPERATIONS DURING ADJUSTMENTS. USE FLAGGING AS NECESSARY.**LEGEND****TRAFFIC SHIFT AT TEMPORARY PEDESTRIAN BARRICADES**

NTS









RELOCATED HIDDEN BROOK CROSS SECTION

STA 828+21
2 - CPRC CL HE-IV 24X38-IN
4 - AEW FOR CPRCHE 24X38-IN
INV STA
828+17.89, 28.9' LT
828+23.88, 28.9' LT
DISCH STA
828+18.08, 31.1' RT
828+24.08, 31.1' RT
INV ELEV = 587.05
DISCH ELEV 586.50
LENGTH = 60'
SLOPE = 0.92%

SANITARY LATERAL
NOT FIELD VERIFIED

HIDDEN BROOK

8252
HOFFMAN

SA

SANITARY LATERAL
NOT FIELD VERIFIED

REMOVE STRUCTURE, STA 828+55

SLOPE INTERCEPT

ASD
ASD

REMOVE SMALL PIPE CULVERT

ASP

SA

HIDDEN BROOK

8263
STEFFEN

CULVERT PIPE SUBGRADE TRANSITION LIMITS

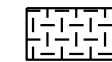
830+00

CULVERT PIPE SUBGRADE TRANSITION LIMITS.

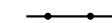
INSULATION REQUIRED BETWEEN EXISTING
SANITARY SEWER AND PROPOSED CULVERT
SEE PIPE INSULATION CONSTRUCTION DETAIL.

SLOPE INTERCEPT

LEGEND



EROSION MAT URBAN CLASS I TYPE B



SILT FENCE



EXTRA-LIGHT RIPRAP



SURFACE WATER FLOW



CULVERT PIPE CHECK



TEMPORARY DITCH CHECK



BASE AGGREGATE DENSE 3/4-INCH



ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES



ASPHALTIC SURFACE PATCHING



CONCRETE CURB & GUTTER 30-INCH TYPE D



INLET PROTECTION, TYPE X



SAWING ASPHALT



SAWING CONCRETE



SEED MIXTURE NO. 30



SEED MIXTURE NO. 40



CONCRETE SIDEWALK 5-INCH



SOIL BORING LOCATION



SOIL BORING NUMBER



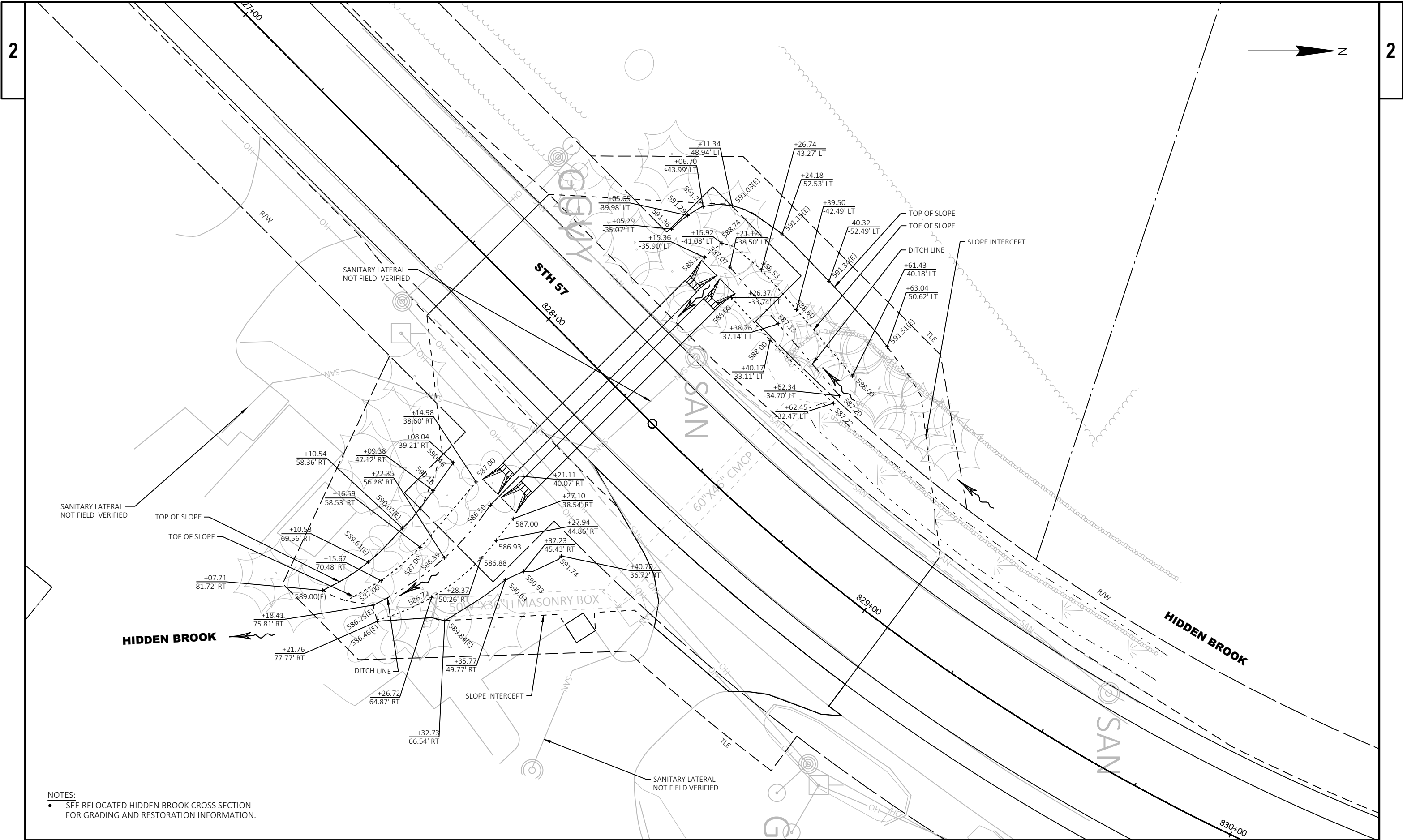
STREAMBED MATERIAL



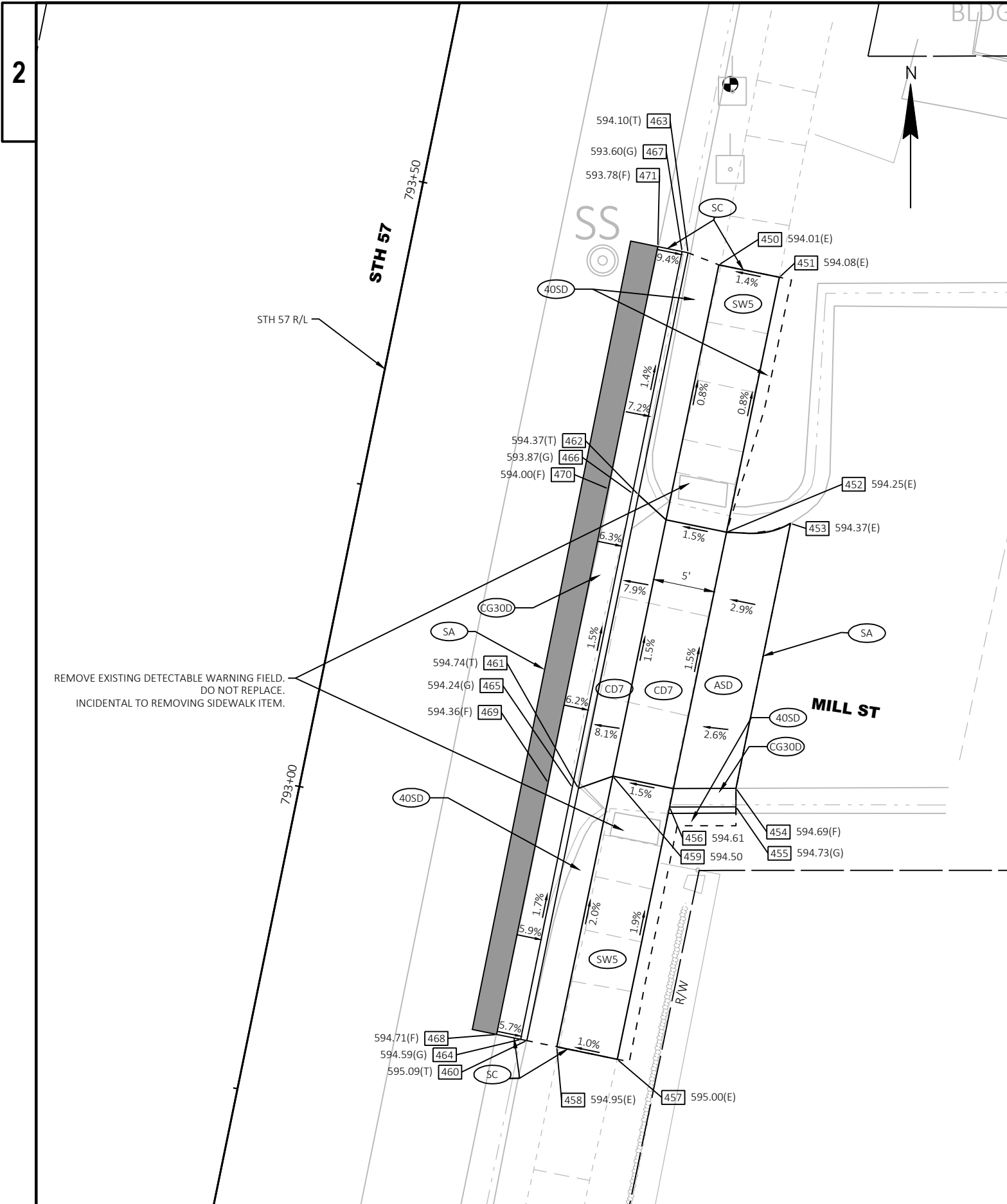
STREAMBANK MATERIAL

NOTES:

- THE EXISTING HYBRID CULVERT STARTING AT THE NORTHWEST SIDE OF STH 57 CONSISTS OF 63 LF OF 46X60-IN CORRUGATED STEEL PIPE ARCH PERPENDICULAR TO THE STH 57 CL AT STA 828+47. THE PIPE ARCH IS WEDGED INTO TO A 50WX36H-IN CONCRETE BOX CULVERT AT AN APPROXIMATELY 45° BEND AND EXTENDS FOR 41 LF TO THE SOUTH. AT THE HYBRID CULVERT JUNCTION, THERE IS A SHALLOW 6" SANITARY SEWER LATERAL WITH A CROWN THAT IS APPROXIMATELY 2-3" BELOW THE BOTTOM OF THE CULVERT. THE ITEMS REMOVING SMALL PIPE CULVERT AND REMOVING STRUCTURE (01. 828+55) INCLUDE ANY INCIDENTALS TO COMPLETELY REMOVE THE HYBRID CULVERT.
- GRUB ANY STUMPS LOCATED WITHIN THE RIGHT-OF-WAY OR TEMPORARY LIMITED EASEMENTS AT THE LOCATIONS INDICATED IN THE MISCELLANEOUS QUANTITIES.



NOTES:
• SEE RELOCATED HIDDEN BROOK CROSS SECTION FOR GRADING AND RESTORATION INFORMATION.



- LEGEND
- AGG

BASE AGGREGATE DENSE 3/4-INCH
- ASD

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- ASPHALTIC SURFACE PATCHING
- CCP

CONCRETE CURB PEDESTRIAN
- CD7

CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
- CG30D

CONCRETE CURB & GUTTER 30-INCH TYPE D
- G

FLARE GRADED
- P

FLARE PAVED
- LL

LEVEL LANDING
- MEF

MAXIMUM EXTENT FEASIBLE TECHNICAL INFEEASIBILITY PRESENT
- RCR

REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
- SA

SAWING ASPHALT
- SC

SAWING CONCRETE
- 40SD

SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
- SW5

CONCRETE SIDEWALK 5-INCH
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- SLOPE INTERCEPT

- POINTS LEGEND
- XXX.XX

SIDEWALK ELEVATION
- XXX.XX(F)

CURB FLANGE ELEVATION
- XXX.XX(G)

GUTTER FLOWLINE ELEVATION
- XXX.XX(T)

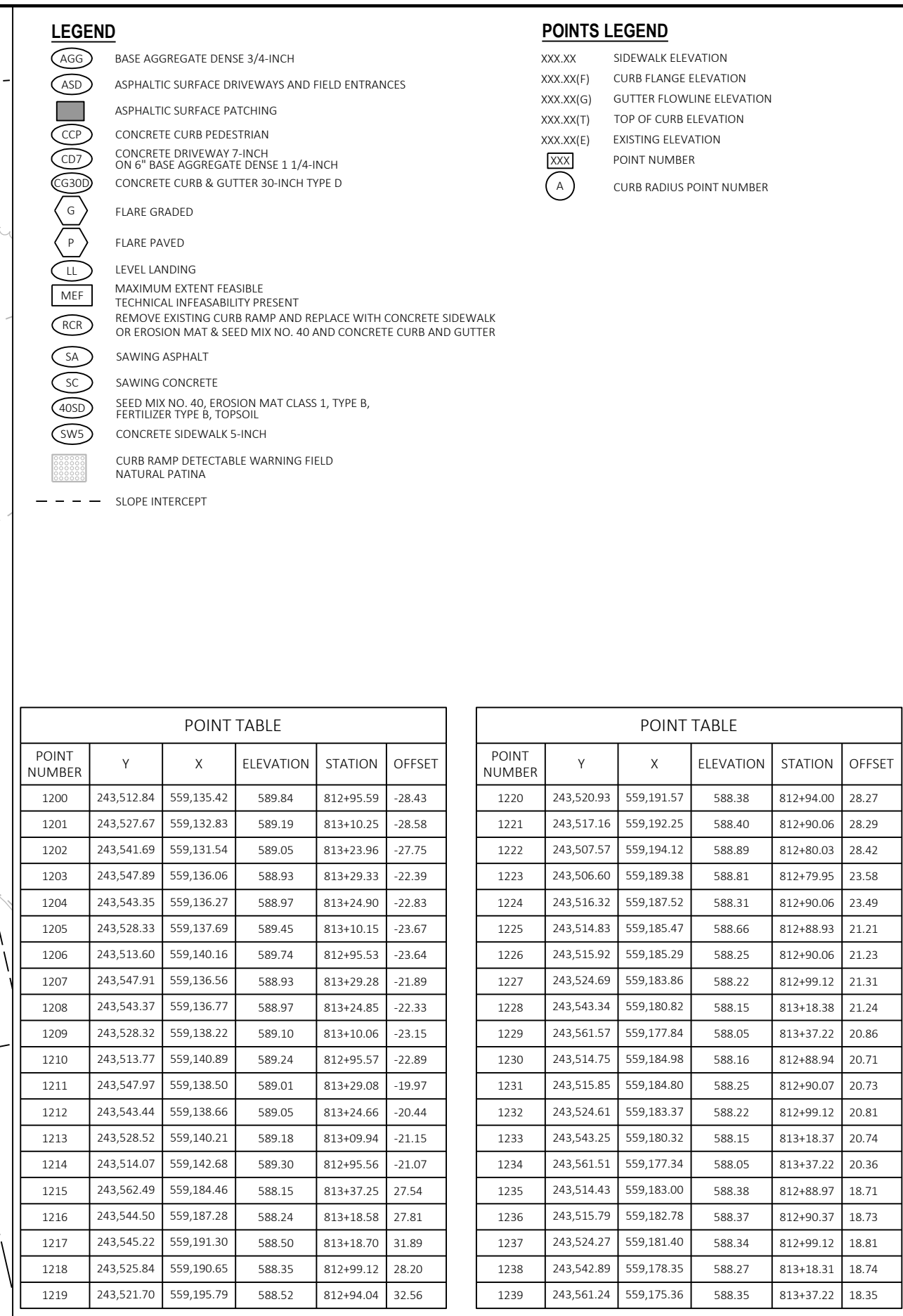
TOP OF CURB ELEVATION
- XXX.XX(E)

EXISTING ELEVATION
- XXX

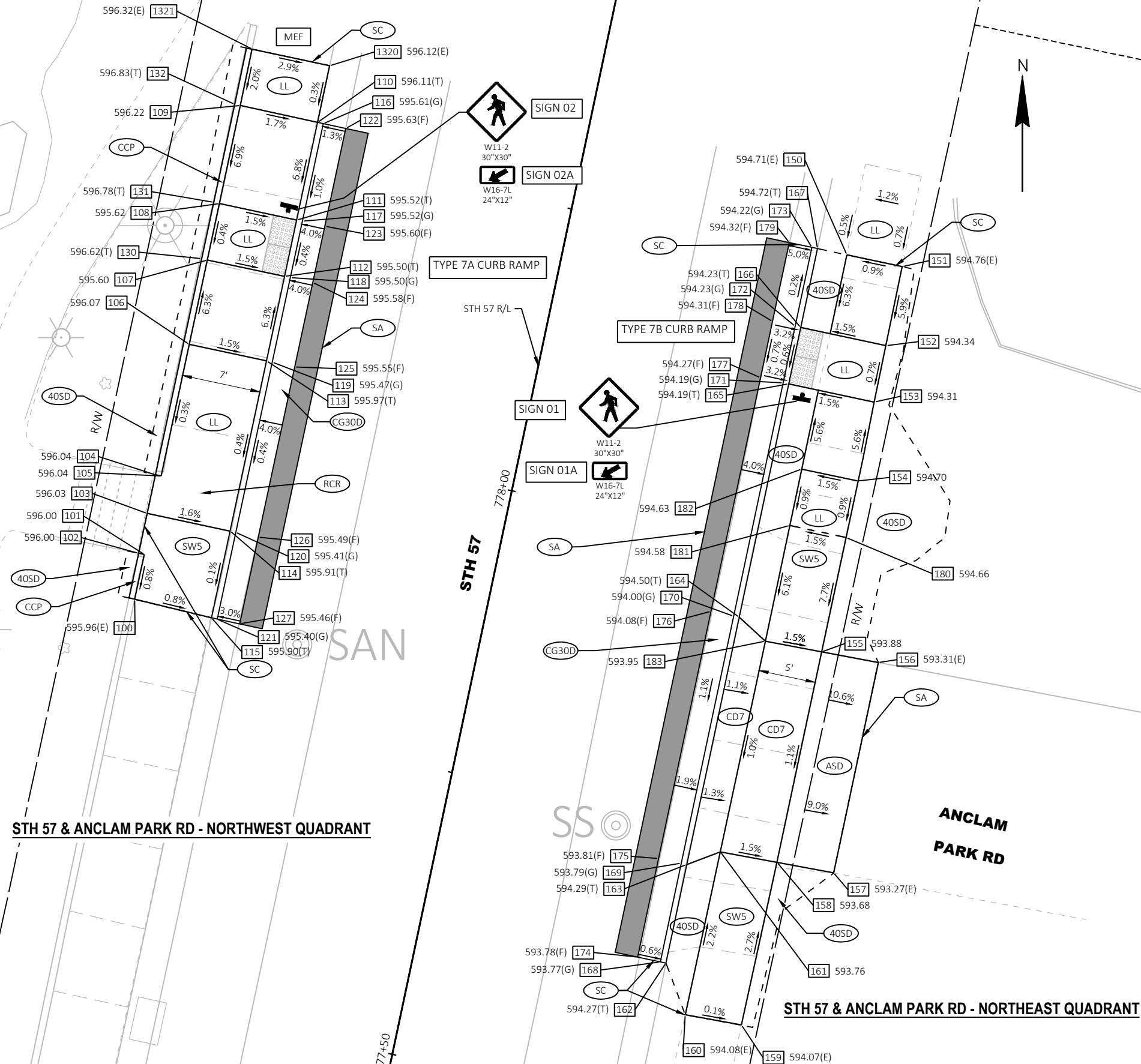
POINT NUMBER
- A

CURB RADIUS POINT NUMBER

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
450	241,620.88	559,318.12	594.01	793+48.24	24.83
451	241,619.86	559,323.02	594.08	793+48.23	29.83
452	241,599.21	559,318.74	594.25	793+27.13	29.78
453	241,599.93	559,323.93	594.37	793+28.88	34.72
454	241,578.46	559,319.51	594.69	793+06.96	34.70
455	241,576.96	559,319.51	594.73	793+05.49	35.00
456	241,576.93	559,314.12	594.61	793+04.38	29.73
457	241,556.49	559,309.88	595.00	792+83.51	29.67
458	241,557.51	559,304.99	594.95	792+83.52	24.67
459	241,579.43	559,309.53	594.50	793+05.91	24.73
460	241,558.00	559,302.55	595.09	792+83.52	22.19
461	241,578.45	559,306.74	594.74	793+04.39	22.19
462	241,602.24	559,311.61	594.37	793+28.68	22.19
463	241,621.87	559,315.63	594.10	793+48.71	22.19
464	241,558.10	559,302.06	594.59	792+83.52	21.69
465	241,578.53	559,306.24	594.24	793+04.37	21.69
466	241,602.36	559,311.12	593.87	793+28.70	21.69
467	241,621.97	559,315.14	593.60	793+48.71	21.69
468	241,558.51	559,300.10	594.71	792+83.52	19.69
469	241,578.91	559,304.28	594.36	793+04.35	19.69
470	241,602.73	559,309.16	594.00	793+28.67	19.69
471	241,622.37	559,313.18	593.78	793+48.71	19.69



POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1220	243,520.93	559,191.57	588.38	812+94.00	28.27
1221	243,517.16	559,192.25	588.40	812+90.06	28.29
1222	243,507.57	559,194.12	588.89	812+80.03	28.42
1223	243,506.60	559,189.38	588.81	812+79.95	23.58
1224	243,516.32	559,187.52	588.31	812+90.06	23.49
1225	243,514.83	559,185.47	588.66	812+88.93	21.21
1226	243,515.92	559,185.29	588.25	812+90.06	21.23
1227	243,524.69	559,183.86	588.22	812+99.12	21.31
1228	243,543.34	559,180.82	588.15	813+18.38	21.24
1229	243,561.57	559,177.84	588.05	813+37.22	20.86
1230	243,514.75	559,184.98	588.16	812+88.94	20.71
1231	243,515.85	559,184.80	588.25	812+90.07	20.73
1232	243,524.61	559,183.37	588.22	812+99.12	20.81
1233	243,543.25	559,180.32	588.15	813+18.37	20.74
1234	243,561.51	559,177.34	588.05	813+37.22	20.36
1235	243,514.43	559,183.00	588.38	812+88.97	18.71
1236	243,515.79	559,182.78	588.37	812+90.37	18.73
1237	243,524.27	559,181.40	588.34	812+99.12	18.81
1238	243,542.89	559,178.35	588.27	813+18.31	18.74
1239	243,561.24	559,175.36	588.35	813+37.22	18.35

**LEGEND**

- (AGG) BASE AGGREGATE DENSE 3/4-INCH
(ASD) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
[Pattern] ASPHALTIC SURFACE PATCHING
(CCP) CONCRETE CURB PEDESTRIAN
(CD7) CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
(CG30D) CONCRETE CURB & GUTTER 30-INCH TYPE D
(G) FLARE GRADED
(P) FLARE PAVED
(LL) LEVEL LANDING
(MEF) MAXIMUM EXTENT FEASIBLE TECHNICAL INFEASIBILITY PRESENT
(RCR) REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
(SA) SAWING ASPHALT
(SC) SAWING CONCRETE
(40SD) SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
(SW5) CONCRETE SIDEWALK 5-INCH
[Pattern] CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
--- SLOPE INTERCEPT

NOTES

- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
- DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
- THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
- SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
- SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

POINTS LEGEND

- XXX.XX SIDEWALK ELEVATION
XXX.XX(F) CURB FLANGE ELEVATION
XXX.XX(G) GUTTER FLOWLINE ELEVATION
XXX.XX(T) TOP OF CURB ELEVATION
XXX.XX(E) EXISTING ELEVATION
[Box] XXX POINT NUMBER
(A) CURB RADIUS POINT NUMBER

MAXIMUM EXTENT FEASIBLE NOTES

- | INTERSECTING ROAD--QUADRANT | REASON FOR TECHNICALLY INFEASIBLE |
|-----------------------------|--|
| 1. ANCLAM PARK RD--WEST | LEVEL LANDING SLOPE EXCEEDS 2%.
MATCHING EXISTING CROSS SLOPE EXCEEDS 2%. |

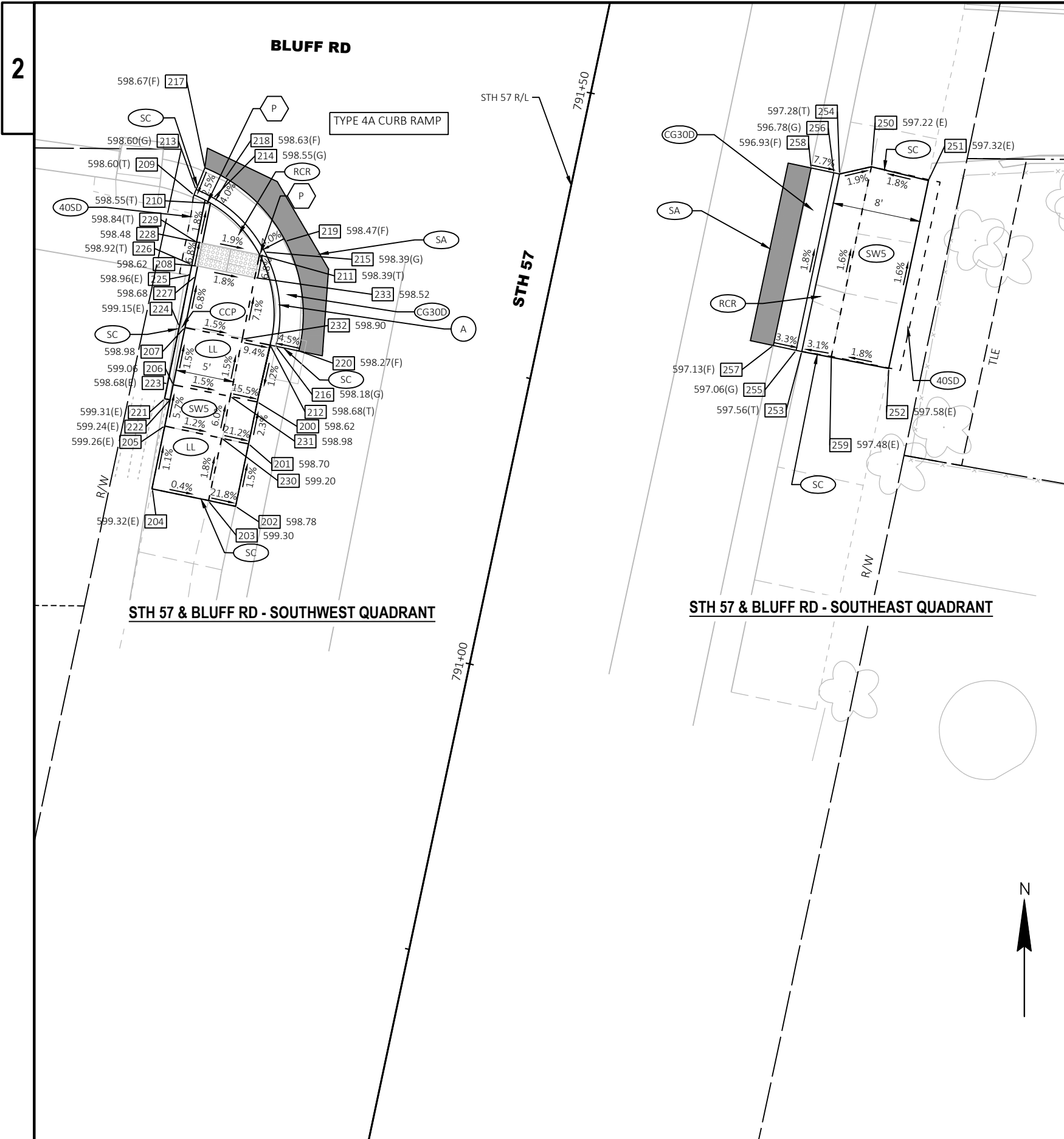
SEE POINT TABLES ON NEXT SHEET.

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
100	240,101.61	558,941.27	595.96	777+84.01	-30.06
101	240,105.48	558,942.10	596.00	777+87.97	-30.05
102	240,105.58	558,941.61	596.00	777+87.97	-30.55
103	240,109.05	558,942.35	596.03	777+91.52	-30.54
104	240,112.40	558,943.07	596.04	777+94.95	-30.53
105	240,112.30	558,943.55	596.04	777+94.95	-30.03
106	240,123.71	558,946.00	596.07	778+06.61	-30.01
107	240,131.04	558,947.58	595.60	778+14.11	-29.98
108	240,135.92	558,948.64	595.62	778+19.11	-29.96
109	240,144.44	558,950.43	596.22	778+27.81	-29.97
110	240,142.97	558,957.14	596.11	778+27.77	-23.11
111	240,134.50	558,955.33	595.52	778+19.10	-23.12
112	240,129.61	558,954.28	595.50	778+14.10	-23.14
113	240,122.28	558,952.71	595.97	778+06.60	-23.15
114	240,107.51	558,949.54	595.91	777+91.50	-23.18
115	240,099.98	558,947.93	595.90	777+83.80	-23.20
116	240,142.87	558,957.62	595.61	778+27.77	-22.61
117	240,134.40	558,955.81	595.52	778+19.10	-22.63
118	240,129.51	558,954.76	595.50	778+14.10	-22.64
119	240,122.17	558,953.19	595.47	778+06.60	-22.65
120	240,107.40	558,950.03	595.41	777+91.50	-22.68
121	240,099.88	558,948.42	595.40	777+83.80	-22.70
122	240,142.45	558,959.58	595.63	778+27.76	-20.61
123	240,133.98	558,957.77	595.60	778+19.10	-20.63
124	240,129.09	558,956.72	595.58	778+14.10	-20.64
125	240,121.76	558,955.15	595.55	778+06.60	-20.65
126	240,106.99	558,951.99	595.49	777+91.50	-20.68
127	240,099.46	558,950.38	595.46	777+83.80	-20.70

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
128	240,123.80	558,945.50	596.60	778+06.60	-30.51
129	240,123.80	558,945.50	596.60	778+06.60	-30.51
130	240,131.15	558,947.08	596.62	778+14.12	-30.50
131	240,136.04	558,948.12	596.78	778+19.11	-30.49
132	240,144.54	558,949.94	596.83	778+27.81	-30.47

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
150	240,131.48	559,003.05	594.71	778+26.05	24.19
151	240,130.46	559,007.86	594.76	778+26.05	29.11
152	240,123.60	559,006.47	594.34	778+19.05	29.17
153	240,118.71	559,005.43	594.31	778+14.05	29.17
154	240,111.86	559,003.97	594.70	778+07.05	29.16
155	240,097.03	559,000.87	593.88	777+91.90	29.20
156	240,096.10	559,005.79	593.31	777+92.01	34.20
157	240,077.85	559,001.91	593.27	777+73.35	34.20
158	240,078.77	558,996.99	593.68	777+73.22	29.20
159	240,064.66	558,993.91	594.07	777+58.78	29.10
160	240,065.54	558,989.04	594.08	777+58.64	24.15
161	240,079.68	558,992.08	593.76	777+73.09	24.20
162	240,070.03	558,987.36	594.27	777+62.68	21.58
163	240,078.58	558,989.17	594.29	777+71.42	21.58
164	240,100.03	558,993.72	594.50	777+93.35	21.59
165	240,120.29	558,998.02	594.19	778+14.05	21.59
166	240,125.18	558,999.06	594.23	778+19.05	21.60
167	240,132.02	559,000.51	594.72	778+26.05	21.59

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
168	240,070.13	558,986.87	593.77	777+62.68	21.08
169	240,078.69	558,988.68	593.79	777+71.43	21.08
170	240,100.13	558,993.23	594.00	777+93.35	21.09
171	240,120.38	558,997.53	594.19	778+14.05	21.09
172	240,125.28	558,998.57	594.23	778+19.06	21.09
173	240,132.13	559,000.02	594.22	778+26.05	21.09
174	240,070.55	558,984.91	593.78	777+62.68	19.08
175	240,079.10	558,986.73	593.81	777+71.42	19.08
176	240,100.55	558,991.28	594.08	777+93.35	19.09
177	240,120.81	558,995.58	594.27	778+14.06	19.09
178	240,125.70	558,996.61	594.31	778+19.06	19.09
179	240,132.54	558,998.06	594.32	778+26.05	19.09
180	240,106.95	559,003.00	594.66	778+02.04	29.22
181	240,108.00	558,998.11	594.58	778+02.05	24.23
182	240,112.89	558,999.14	594.63	778+07.05	24.22
183	240,097.96	558,995.99	593.95	777+91.79	24.23
1320	240,147.90	558,958.19	596.12	778+32.81	-23.11
1321	240,149.33	558,951.45	596.32	778+32.81	-29.99



LEGEND

AGG

BASE AGGREGATE DENSE 3/4-INCH

ASD

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

ASPHALTIC SURFACE PATCHING

CCP

CONCRETE CURB PEDESTRIAN

CD7

CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH

CG30D

CONCRETE CURB & GUTTER 30-INCH TYPE D

G

FLARE GRADED

P

FLARE PAVED

LL

LEVEL LANDING

MEF

MAXIMUM EXTENT FEASIBLE TECHNICAL INFASABILITY PRESENT

RCR

REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER

SA

SAWING ASPHALT

SC

SAWING CONCRETE

40SD

SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL

SW5

CONCRETE SIDEWALK 5-INCH

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

- - -

SLOPE INTERCEPT

POINTS LEGEND

XXX.XX

SIDEWALK ELEVATION

XXX.XX(F)

CURB FLANGE ELEVATION

XXX.XX(G)

GUTTER FLOWLINE ELEVATION

XXX.XX(T)

TOP OF CURB ELEVATION

XXX.XX(E)

EXISTING ELEVATION

XXX

POINT NUMBER

A

CURB RADIUS POINT NUMBER

NOTES

1.

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

2.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.

3.

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.

4.

THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.

5.

SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.

6.

SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

POINT TABLE

POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
200	241,405.20	559,225.38	598.62	791+18.18	-22.45
201	241,401.60	559,224.64	598.70	791+14.51	-22.43
202	241,396.26	559,223.53	598.78	791+09.05	-22.41
203	241,396.73	559,221.21	599.30	791+09.03	-24.78
204	241,397.75	559,216.36	599.32	791+09.02	-29.74
205	241,403.14	559,217.46	599.26	791+14.52	-29.78
206	241,406.67	559,218.18	599.06	791+18.13	-29.80
207	241,411.57	559,219.19	598.98	791+23.13	-29.84
208	241,416.85	559,220.27	598.62	791+28.52	-29.87
209	241,422.93	559,219.95	598.60	791+34.40	-31.44
210	241,422.23	559,221.37	598.55	791+34.01	-29.91
211	241,417.81	559,225.57	598.39	791+30.56	-24.88
212	241,410.07	559,226.49	598.68	791+23.18	-22.38
213	241,423.39	559,220.14	598.60	791+34.89	-31.35
214	241,422.66	559,221.63	598.55	791+34.49	-29.75
215	241,418.04	559,226.02	598.39	791+30.88	-24.50
216	241,409.97	559,226.98	598.18	791+23.18	-21.88
217	241,425.24	559,220.90	598.67	791+36.86	-31.00
218	241,424.38	559,222.64	598.63	791+36.38	-29.12
219	241,418.96	559,227.79	598.47	791+32.15	-22.95
220	241,409.57	559,228.94	598.27	791+23.20	-19.88
221	241,405.48	559,217.45	599.31	791+16.81	-30.27
222	241,405.38	559,217.92	599.24	791+16.82	-29.79
223	241,406.76	559,217.71	598.68	791+18.12	-30.28
224	241,411.67	559,218.71	599.15	791+23.13	-30.32

POINT TABLE

POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
225	241,416.07	559,219.61	598.96	791+27.62	-30.36
226	241,416.95	559,219.79	598.92	791+28.52	-30.36
227	241,415.97	559,220.09	598.68	791+27.62	-29.86
228	241,418.81	559,220.67	598.48	791+30.52	-29.88
229	241,418.91	559,220.19	598.84	791+30.51	-30.38
230	241,402.09	559,222.33	599.20	791+14.51	-24.79
231	241,405.67	559,223.08	598.98	791+18.17	-24.80
232	241,410.58	559,224.09	598.90	791+23.18	-24.84
233	241,415.85	559,225.17	598.52	791+28.56	-24.87

POINT TABLE

POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
250	241,425.36	559,277.99	597.22	791+48.81	24.83
251	241,424.16	559,282.87	597.32	791+48.66	29.85
252	241,408.08	559,279.47	597.58	791+32.22	29.86
253	241,409.52	559,272.03	597.56	791+32.08	22.28
254	241,424.72	559,275.26	597.28	791+47.63	22.29
255	241,409.62	559,271.54	597.06	791+32.09	21.78
256	241,424.83	559,274.77	596.78	791+47.63	21.79
257	241,410.04	559,269.58	597.13	791+32.09	19.78
258	241,425.24	559,272.81	596.93	791+47.63	19.79
259	241,409.10	559,274.55	597.48	791+32.19	24.84

RADIUS TABLE

POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
A	241,412.74	559,215.81	11.5'	791+23.57	-33.38

NOTES		
2	1.	CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
	2.	THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
	3.	DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
	4.	THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
	5.	SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
	6.	SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).
LEGEND		
	AGG	BASE AGGREGATE DENSE 3/4-INCH
	ASD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
		ASPHALTIC SURFACE PATCHING
	CCP	CONCRETE CURB PEDESTRIAN
	CD7	CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
	CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
	G	FLARE GRADED
	P	FLARE PAVED
	LL	LEVEL LANDING
	MEF	MAXIMUM EXTENT FEASIBLE TECHNICAL INFEASIBILITY PRESENT
	RCR	REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
	SA	SAWING ASPHALT
	SC	SAWING CONCRETE
	40SD	SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
	SW5	CONCRETE SIDEWALK 5-INCH
		CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
	---	SLOPE INTERCEPT
POINTS LEGEND		
XXX.XX		SIDEWALK ELEVATION
XXX.XX(F)		CURB FLANGE ELEVATION
XXX.XX(G)		GUTTER FLOWLINE ELEVATION
XXX.XX(T)		TOP OF CURB ELEVATION
XXX.XX(E)		EXISTING ELEVATION
	XXX	POINT NUMBER
	A	CURB RADIUS POINT NUMBER
MAXIMUM EXTENT FEASIBLE NOTES		
INTERSECTING ROAD--QUADRANT		REASON FOR TECHNICALLY INFEASIBLE
1.	BLUFF RD--NORTHWEST	NO LEVEL LANDING ADJACENT TO RUNNING SLOPE GREATER THAN 5%.
2.	BLUFF RD--NORTHEAST	MATCHING EXISTING CROSS SLOPE EXCEEDS 2%.
		MATCHING EXISTING CROSS SLOPE EXCEEDS 2%.
SEE POINT TABLES ON NEXT SHEET.		
PROJECT NO: 4150-14-71		HWY: STH 57

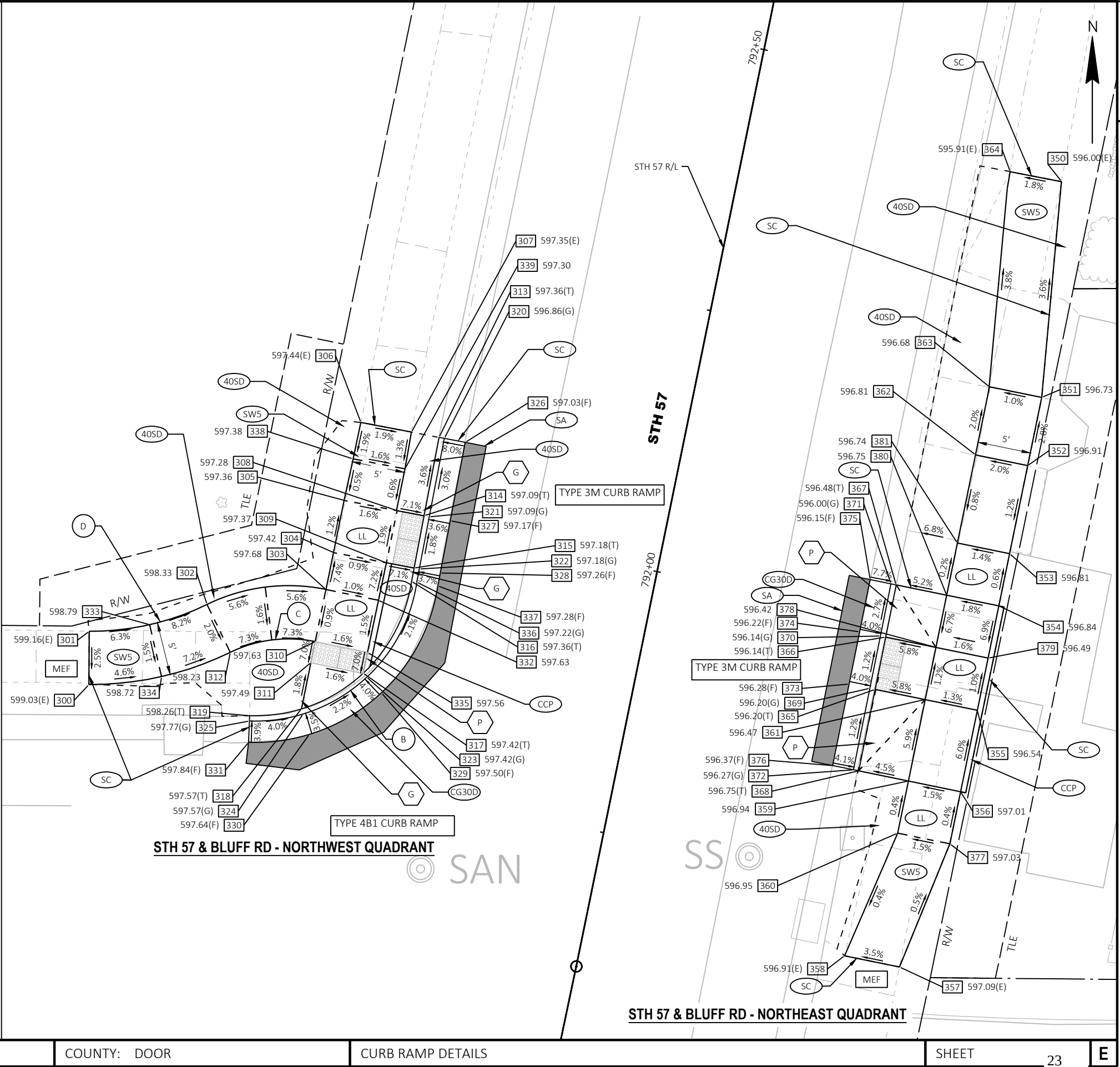
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
5. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
6. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

AGG	BASE AGGREGATE DENSE 3/4-INCH
ASD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
	ASPHALTIC SURFACE PATCHING
CCP	CONCRETE CURB PEDESTRIAN
CD7	CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
G	FLARE GRADED
P	FLARE PAVED
LL	LEVEL LANDING
MEF	MAXIMUM EXTENT FEASIBLE TECHNICAL INFEASIBILITY PRESENT
RCR	REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
SA	SAWING ASPHALT
SC	SAWING CONCRETE
40SD	SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
SW5	CONCRETE SIDEWALK 5-INCH
	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
---	SLOPE INTERCEPT

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
XXX	POINT NUMBER
A	CURB RADIUS POINT NUMBER

1. INTERSECTING ROAD--QUADRANT	REASON FOR TECHNICALLY INFEASIBLE
BLUFF RD--NORTHWEST	NO LEVEL LANDING ADJACENT TO RUNNING SLOPE GREATER THAN 5%.
2. BLUFF RD--NORTHEAST	MATCHING EXISTING CROSS SLOPE EXCEEDS 2%.
	MATCHING EXISTING CROSS SLOPE EXCEEDS 2%.

SEE POINT TABLES ON NEXT SHEET.



STH 57 & BLUFF RD - NORTHWEST QUADRANT

STH 57 & BLUFF RD - NORTHEAST QUADRANT

COUNTY: DOOR

CURB RAMP DETAILS

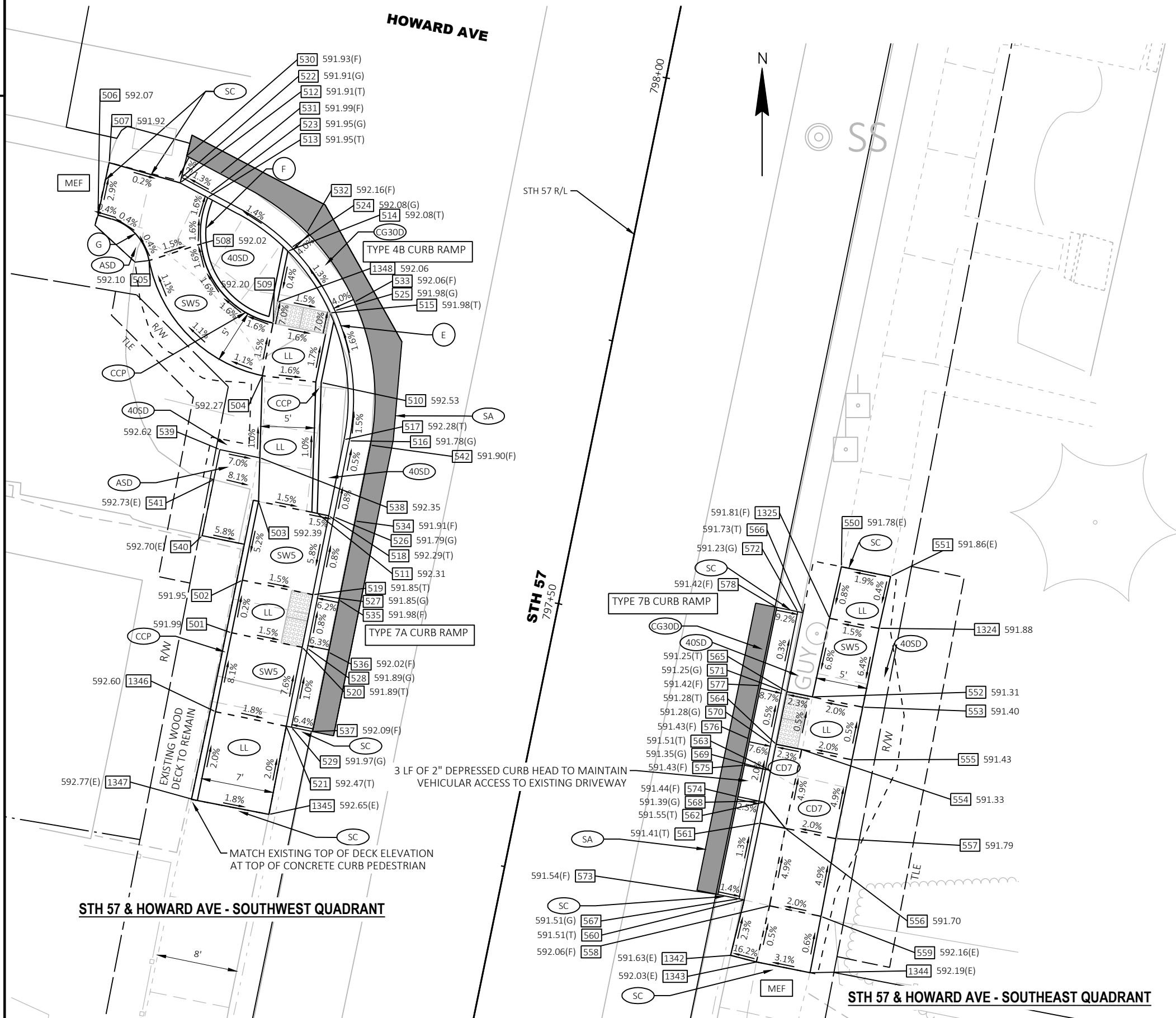
SHEET 23

E

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
300	241,470.03	559,210.73	599.03	791+78.92	-50.11
301	241,475.03	559,210.76	599.16	791+83.82	-51.09
302	241,477.55	559,221.82	598.33	791+88.50	-40.76
303	241,478.95	559,232.97	597.68	791+92.12	-30.11
304	241,482.40	559,233.74	597.42	791+95.65	-30.05
305	241,487.30	559,234.75	597.36	792+00.65	-30.05
306	241,494.63	559,236.26	597.44	792+08.14	-30.05
307	241,493.73	559,241.00	597.35	792+08.20	-25.22
308	241,486.37	559,239.60	597.28	792+00.71	-25.12
309	241,481.46	559,238.64	597.37	791+95.71	-25.06
310	241,474.05	559,231.97	597.63	791+87.12	-30.11
311	241,472.09	559,231.57	597.49	791+85.12	-30.11
312	241,473.05	559,224.01	598.23	791+84.53	-37.72
313	241,493.23	559,243.59	597.36	792+08.23	-22.57
314	241,485.87	559,242.19	597.09	792+00.74	-22.48
315	241,480.96	559,241.25	597.18	791+95.75	-22.41
316	241,479.71	559,241.01	597.36	791+94.48	-22.40
317	241,471.09	559,236.47	597.42	791+85.12	-25.11
318	241,467.75	559,230.68	597.57	791+80.68	-30.11
319	241,467.11	559,225.81	598.26	791+79.08	-34.75
320	241,493.13	559,244.09	596.86	792+08.24	-22.07
321	241,485.78	559,242.68	597.09	792+00.75	-21.98
322	241,480.87	559,241.74	597.18	791+95.75	-21.91
323	241,470.72	559,236.81	597.42	791+84.83	-24.70
324	241,467.27	559,230.84	597.57	791+80.24	-29.86
325	241,466.61	559,225.79	597.77	791+78.58	-34.67
326	241,492.76	559,246.05	597.03	792+08.27	-20.07
327	241,485.40	559,244.64	597.17	792+00.78	-19.98
328	241,480.49	559,243.68	597.26	791+95.78	-19.93
329	241,469.26	559,238.18	597.50	791+83.67	-23.07
330	241,465.35	559,231.41	597.64	791+78.48	-28.92
331	241,464.61	559,225.72	597.84	791+76.61	-34.34
332	241,477.95	559,237.87	597.63	791+92.12	-25.11
333	241,475.65	559,216.44	598.79	791+85.57	-45.66
334	241,470.78	559,217.54	598.72	791+81.01	-43.59
335	241,473.05	559,236.87	597.56	791+87.12	-25.11
336	241,479.63	559,241.50	597.22	791+94.49	-21.90
337	241,479.29	559,243.47	597.28	791+94.56	-19.90
338	241,491.21	559,235.52	597.38	792+04.64	-30.08
339	241,490.28	559,240.39	597.30	792+04.70	-25.12

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
350	241,517.23	559,301.98	596.00	792+43.46	29.81
351	241,496.97	559,300.14	596.73	792+23.25	32.07
352	241,490.57	559,298.83	596.91	792+16.71	32.07
353	241,482.31	559,297.13	596.81	792+08.28	32.06
354	241,477.41	559,296.12	596.84	792+03.28	32.05
355	241,467.62	559,294.10	596.54	791+93.28	32.04
356	241,459.98	559,292.53	597.01	791+85.47	32.03
357	241,443.52	559,286.79	597.09	791+68.21	29.72
358	241,444.58	559,281.64	596.91	791+68.21	24.46
359	241,460.98	559,287.63	596.94	791+85.48	27.03
360	241,456.08	559,286.62	596.95	791+80.48	27.03
361	241,468.62	559,289.20	596.47	791+93.28	27.04
362	241,491.58	559,293.93	596.81	792+16.72	27.07
363	241,497.98	559,295.24	596.68	792+23.25	27.07
364	241,518.17	559,297.18	595.91	792+43.41	24.91
365	241,469.58	559,284.51	596.20	791+93.28	22.25
366	241,474.48	559,285.50	596.14	791+98.28	22.24
367	241,479.39	559,286.48	596.48	792+03.28	22.21
368	241,461.93	559,282.97	596.75	791+85.48	22.28
369	241,469.68	559,284.02	596.20	791+93.27	21.75
370	241,474.58	559,285.01	596.14	791+98.27	21.74
371	241,479.48	559,286.00	596.00	792+03.27	21.73
372	241,462.03	559,282.48	596.27	791+85.47	21.78
373	241,470.08	559,282.06	596.28	791+93.27	19.75
374	241,474.98	559,283.05	596.22	791+98.27	19.74
375	241,479.88	559,284.04	596.15	792+03.27	19.73
376	241,462.43	559,280.52	596.37	791+85.47	19.78
377	241,455.08	559,291.52	597.03	791+80.48	32.03
378	241,473.52	559,290.21	596.42	791+98.28	27.05
379	241,472.52	559,295.10	596.49	791+98.28	32.04
380	241,478.42	559,291.22	596.75	792+03.28	27.05
381	241,483.31	559,292.23	596.74	792+08.28	27.06

RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
B	241,481.92	559,226.35	15.32'	791+93.70	-37.20
C	241,461.81	559,229.47	12.5'	791+74.62	-30.11
D	241,500.03	559,210.90	25'	792+08.34	-55.97

**NOTES**

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
5. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
6. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

POINTS LEGEND

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
XXX	POINT NUMBER
A	CURB RADIUS POINT NUMBER

MAXIMUM EXTENT FEASIBLE NOTES

INTERSECTING ROAD--QUADRANT	REASON FOR TECHNICALLY INFEASIBLE MATCHING CROSS SLOPE AT SOUTH END EXCEEDS 2.0%.
1. HOWARD AV--SOUTHEAST	
2. HOWARD AV--SOUTHWEST	MATCHING EXISTING CROSS SLOPE AT WEST END EXCEEDS 2%.

LEGEND

AGG	BASE AGGREGATE DENSE 3/4-INCH
ASD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
ASPH	ASPHALTIC SURFACE PATCHING
CCP	CONCRETE CURB PEDESTRIAN
CD7	CONCRETE DRIVEWAY 7-INCH ON 6\"
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
G	FLARE GRADED
P	FLARE PAVED
LL	LEVEL LANDING
MEF	MAXIMUM EXTENT FEASIBLE TECHNICAL INFEASIBILITY PRESENT
RCR	REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
SA	SAWING ASPHALT
SC	SAWING CONCRETE
40SD	SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
SW5	CONCRETE SIDEWALK 5-INCH
CD7	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
---	SLOPE INTERCEPT

SEE POINT TABLES ON NEXT SHEET.

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
501	242,016.74	559,343.94	591.99	797+41.24	-29.29
502	242,021.64	559,344.94	591.95	797+46.24	-29.29
503	242,028.99	559,346.45	592.39	797+53.74	-29.29
504	242,040.69	559,346.80	592.27	797+65.27	-31.29
505	242,051.41	559,336.24	592.10	797+73.66	-43.79
506	242,055.60	559,331.49	592.07	797+76.80	-49.28
507	242,060.54	559,332.53	591.92	797+81.86	-49.25
508	242,052.96	559,341.06	592.02	797+76.14	-39.37
509	242,045.59	559,347.80	592.20	797+70.27	-31.29
510	242,040.05	559,352.28	592.53	797+65.74	-25.79
511	242,027.86	559,351.91	592.31	797+53.73	-23.71
512	242,058.66	559,339.15	591.91	797+81.34	-42.39
513	242,057.28	559,341.71	591.95	797+80.51	-39.61
514	242,052.29	559,349.18	592.08	797+77.11	-31.29
515	242,046.54	559,353.10	591.98	797+72.27	-26.29
516	242,034.63	559,354.90	591.78	797+60.96	-22.13
517	242,034.73	559,354.41	592.28	797+60.95	-22.63
518	242,027.64	559,352.98	592.29	797+53.73	-22.62
519	242,020.30	559,351.50	591.85	797+46.24	-22.60
520	242,015.40	559,350.51	591.89	797+41.24	-22.58
521	242,008.04	559,349.02	592.47	797+33.73	-22.56
522	242,059.16	559,339.27	591.91	797+81.86	-42.37
523	242,057.72	559,341.95	591.95	797+80.98	-39.46
524	242,052.64	559,349.53	592.08	797+77.53	-31.01
525	242,046.74	559,353.56	591.98	797+72.56	-25.88
526	242,027.54	559,353.47	591.79	797+53.73	-22.12

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
527	242,020.20	559,351.99	591.85	797+46.24	-22.10
528	242,015.30	559,351.00	591.89	797+41.24	-22.08
529	242,007.94	559,349.51	591.97	797+33.73	-22.06
530	242,061.17	559,339.77	591.93	797+83.92	-42.29
531	242,059.50	559,342.86	591.99	797+82.91	-38.93
532	242,054.04	559,350.95	592.16	797+79.19	-29.90
533	242,047.56	559,355.39	592.06	797+73.72	-24.26
534	242,027.15	559,355.43	591.91	797+53.74	-20.12
535	242,019.80	559,353.95	591.98	797+46.24	-20.10
536	242,014.93	559,352.97	592.02	797+41.28	-20.08
537	242,007.55	559,351.47	592.09	797+33.74	-20.06
538	242,033.05	559,346.57	592.35	797+57.74	-29.98
539	242,033.81	559,342.84	592.62	797+57.74	-33.79
540	242,025.79	559,341.20	592.70	797+49.55	-33.79
541	242,031.01	559,342.27	592.73	797+54.88	-33.79
542	242,034.23	559,356.86	591.90	797+60.96	-20.13
1345	241,999.82	559,347.42	592.65	797+25.36	-22.49
1346	242,009.40	559,342.43	592.60	797+33.74	-29.29
1347	242,001.11	559,340.74	592.77	797+25.28	-29.29
1348	242,047.55	559,348.21	592.06	797+72.27	-31.29

RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
E	242,038.59	559,335.30	20'	797+60.90	-42.13
F	242,053.91	559,349.51	8.5'	797+78.77	-31.29
G	242,050.49	559,331.33	5'	797+71.77	-48.41

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
550	242,022.90	559,400.74	591.78	797+58.66	25.12
551	242,021.98	559,405.32	591.86	797+58.68	29.80
552	242,010.77	559,398.04	591.31	797+46.24	24.91
553	242,009.81	559,402.73	591.40	797+46.24	29.70
554	242,005.87	559,397.03	591.33	797+41.24	24.90
555	242,004.91	559,401.73	591.43	797+41.24	29.70
556	241,998.52	559,395.52	591.70	797+33.74	24.90
557	241,997.56	559,400.23	591.79	797+33.74	29.70
558	241,991.31	559,394.05	592.06	797+26.38	24.90
559	241,990.33	559,398.83	592.16	797+26.38	29.78
560	241,991.86	559,391.69	591.51	797+26.44	22.48
561	241,999.01	559,393.15	591.41	797+33.74	22.48
562	242,000.97	559,393.55	591.55	797+35.74	22.48
563	242,003.91	559,394.16	591.51	797+38.74	22.48
564	242,006.36	559,394.66	591.28	797+41.24	22.48
565	242,011.26	559,395.66	591.25	797+46.24	22.48
566	242,018.60	559,397.17	591.73	797+53.74	22.48
567	241,991.96	559,391.20	591.51	797+26.44	21.98
568	242,001.07	559,393.06	591.39	797+35.74	21.98
569	242,004.01	559,393.67	591.35	797+38.74	21.98
570	242,006.43	559,394.16	591.28	797+41.20	21.98
571	242,011.36	559,395.17	591.25	797+46.24	21.98
572	242,018.70	559,396.68	591.23	797+53.74	21.98
573	241,992.36	559,389.24	591.54	797+26.44	19.98
574	242,001.47	559,391.11	591.44	797+35.74	19.98
575	242,004.41	559,391.71	591.43	797+38.74	19.98
576	242,006.83	559,392.20	591.43	797+41.21	19.98
577	242,011.82	559,393.22	591.42	797+46.30	19.98
578	242,019.11	559,394.72	591.42	797+53.74	19.98
1324	242,017.16	559,404.24	591.88	797+53.74	29.70
1325	242,018.10	559,399.64	591.81	797+53.74	25.01
1342	241,986.70	559,390.43	591.63	797+21.13	22.28
1343	241,986.08	559,392.82	592.03	797+21.01	24.75
1344	241,985.09	559,397.82	592.19	797+21.03	29.85

LEGEND

- AGG BASE AGGREGATE DENSE 3/4-INCH
- ASD ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- ASPHALTIC SURFACE PATCHING
- CCP CONCRETE CURB PEDESTRIAN
- CD7 CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
- CG30D CONCRETE CURB & GUTTER 30-INCH TYPE D
- G FLARE GRADED
- P FLARE PAVED
- LL LEVEL LANDING
- MEF MAXIMUM EXTENT FEASIBLE TECHNICAL INFASABILITY PRESENT
- RCR REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
- SA SAWING ASPHALT
- SC SAWING CONCRETE
- 40SD SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
- SW5 CONCRETE SIDEWALK 5-INCH
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

POINTS LEGEND

- XXX.XX SIDEWALK ELEVATION
- XXX.XX(F) CURB FLANGE ELEVATION
- XXX.XX(G) GUTTER FLOWLINE ELEVATION
- XXX.XX(T) TOP OF CURB ELEVATION
- XXX.XX(E) EXISTING ELEVATION
- XXX POINT NUMBER
- A CURB RADIUS POINT NUMBER

NOTES

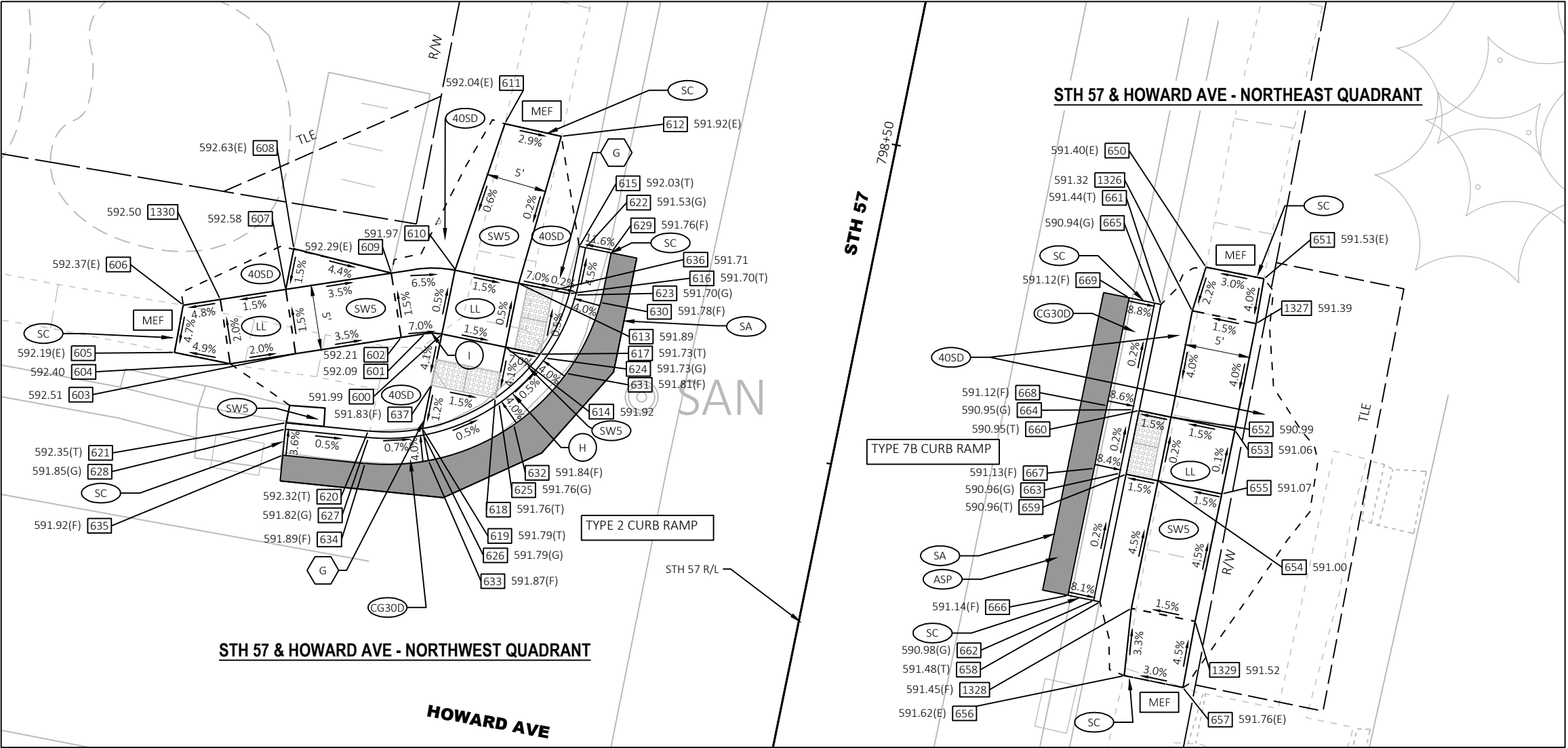
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
- DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
- THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
- SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
- SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

MAXIMUM EXTENT FEASIBLE NOTES

- | INTERSECTING ROAD--QUADRANT | REASON FOR TECHNICALLY INFEASIBLE |
|-----------------------------|--|
| 1. HOWARD AV--NORTHWEST | MATCHING CROSS SLOPE AT NORTH AND WEST ENDS EXCEEDS 2.0%. |
| 2. HOWARD AV--NORTHEAST | MATCHING CROSS SLOPE AT NORTH AND SOUTH ENDS EXCEEDS 2.0%. |



SEE POINT TABLES ON NEXT SHEET.



POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
600	242,102.90	559,359.54	591.99	798+28.77	-31.29
601	242,102.92	559,358.22	592.09	798+28.52	-32.59
602	242,102.64	559,356.41	592.21	798+27.89	-34.30
603	242,101.39	559,348.31	592.51	798+25.04	-41.99
604	242,100.62	559,343.28	592.40	798+23.28	-46.76
605	242,101.48	559,339.00	592.19	798+23.26	-51.13
606	242,105.12	559,339.67	592.37	798+26.97	-51.20
607	242,106.34	559,347.55	592.58	798+29.73	-43.73
608	242,109.46	559,348.16	592.63	798+32.92	-43.75
609	242,107.58	559,355.65	592.29	798+32.58	-36.04
610	242,107.78	559,360.63	591.97	798+33.77	-31.20
611	242,119.05	559,364.38	592.04	798+45.56	-29.79
612	242,118.09	559,368.71	591.92	798+45.49	-25.35
613	242,106.80	559,365.44	591.89	798+33.77	-26.29
614	242,101.90	559,364.44	591.92	798+28.77	-26.29
615	242,109.63	559,370.10	592.03	798+37.48	-22.30
616	242,106.00	559,369.32	591.70	798+33.77	-22.33
617	242,101.36	559,367.08	591.73	798+28.77	-23.59
618	242,097.98	559,363.64	591.76	798+24.77	-26.29
619	242,095.63	559,358.05	591.79	798+21.35	-31.29

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
650	242,108.04	559,418.25	591.40	798+45.58	25.19
651	242,107.15	559,422.70	591.53	798+45.61	29.73
652	242,096.54	559,415.56	590.99	798+33.77	24.87
653	242,095.53	559,420.46	591.06	798+33.77	29.87
654	242,091.64	559,414.56	591.00	798+28.77	24.87
655	242,090.63	559,419.45	591.07	798+28.77	29.87
656	242,076.68	559,411.96	591.62	798+13.60	25.32
657	242,075.76	559,416.47	591.76	798+13.60	29.93
658	242,082.34	559,410.10	591.48	798+18.77	22.36
659	242,092.14	559,412.11	590.96	798+28.77	22.37
660	242,097.03	559,413.11	590.95	798+33.77	22.37
661	242,105.18	559,414.79	591.44	798+42.09	22.37
662	242,082.44	559,409.61	590.98	798+18.77	21.86
663	242,092.22	559,411.61	590.96	798+28.75	21.87
664	242,097.09	559,412.61	590.95	798+33.73	21.87
665	242,105.28	559,414.30	590.94	798+42.09	21.87
666	242,082.85	559,407.65	591.14	798+18.77	19.86
667	242,092.59	559,409.65	591.13	798+28.72	19.87
668	242,097.41	559,410.64	591.12	798+33.64	19.87
669	242,105.68	559,412.34	591.12	798+42.09	19.87

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
620	242,095.45	559,353.89	592.32	798+20.34	-35.34
621	242,096.10	559,347.57	592.35	798+19.70	-41.65
622	242,109.53	559,370.59	591.53	798+37.48	-21.80
623	242,105.90	559,369.81	591.70	798+33.77	-21.83
624	242,101.06	559,367.49	591.73	798+28.57	-23.14
625	242,097.57	559,363.92	591.76	798+24.43	-25.93
626	242,095.14	559,358.14	591.79	798+20.89	-31.10
627	242,094.90	559,353.89	591.82	798+19.80	-35.22
628	242,095.60	559,347.52	591.85	798+19.21	-41.60
629	242,109.13	559,372.55	591.76	798+37.49	-19.80
630	242,105.33	559,371.73	591.78	798+33.60	-19.83
631	242,099.89	559,369.10	591.81	798+27.74	-21.31
632	242,095.93	559,365.07	591.84	798+23.05	-24.48
633	242,093.18	559,358.51	591.87	798+19.04	-30.35
634	242,092.97	559,353.63	591.89	798+17.86	-35.08
635	242,093.61	559,347.32	591.92	798+17.22	-41.40
636	242,106.25	559,368.09	591.71	798+33.77	-23.59
637	242,098.98	559,358.74	591.83	798+24.77	-31.29
1330	242,105.56	559,342.52	592.50	798+27.97	-48.50

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1326	242,104.68	559,417.19	591.32	798+42.08	24.83
1327	242,103.70	559,422.09	591.39	798+42.11	29.83
1328	242,081.85	559,412.50	591.45	798+18.77	24.82
1329	242,080.84	559,417.40	591.52	798+18.77	29.82

RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
H	242,109.88	559,355.35	15'	798+34.77	-36.79
I	242,098.96	559,358.82	4'	798+24.77	-31.20

LEGEND

AGG	BASE AGGREGATE DENSE 3/4-INCH
ASD	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
	ASPHALTIC SURFACE PATCHING
CCP	CONCRETE CURB PEDESTRIAN
CD7	CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
CG30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
G	FLARE GRADED
P	FLARE PAVED
LL	LEVEL LANDING
MEF	MAXIMUM EXTENT FEASIBLE TECHNICAL INFEASIBILITY PRESENT
RCR	REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
SA	SAWING ASPHALT
SC	SAWING CONCRETE
40SD	SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
SW5	CONCRETE SIDEWALK 5-INCH
	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
---	SLOPE INTERCEPT

NOTES

- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
- DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
- THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
- SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
- SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

MAXIMUM EXTENT FEASIBLE NOTES

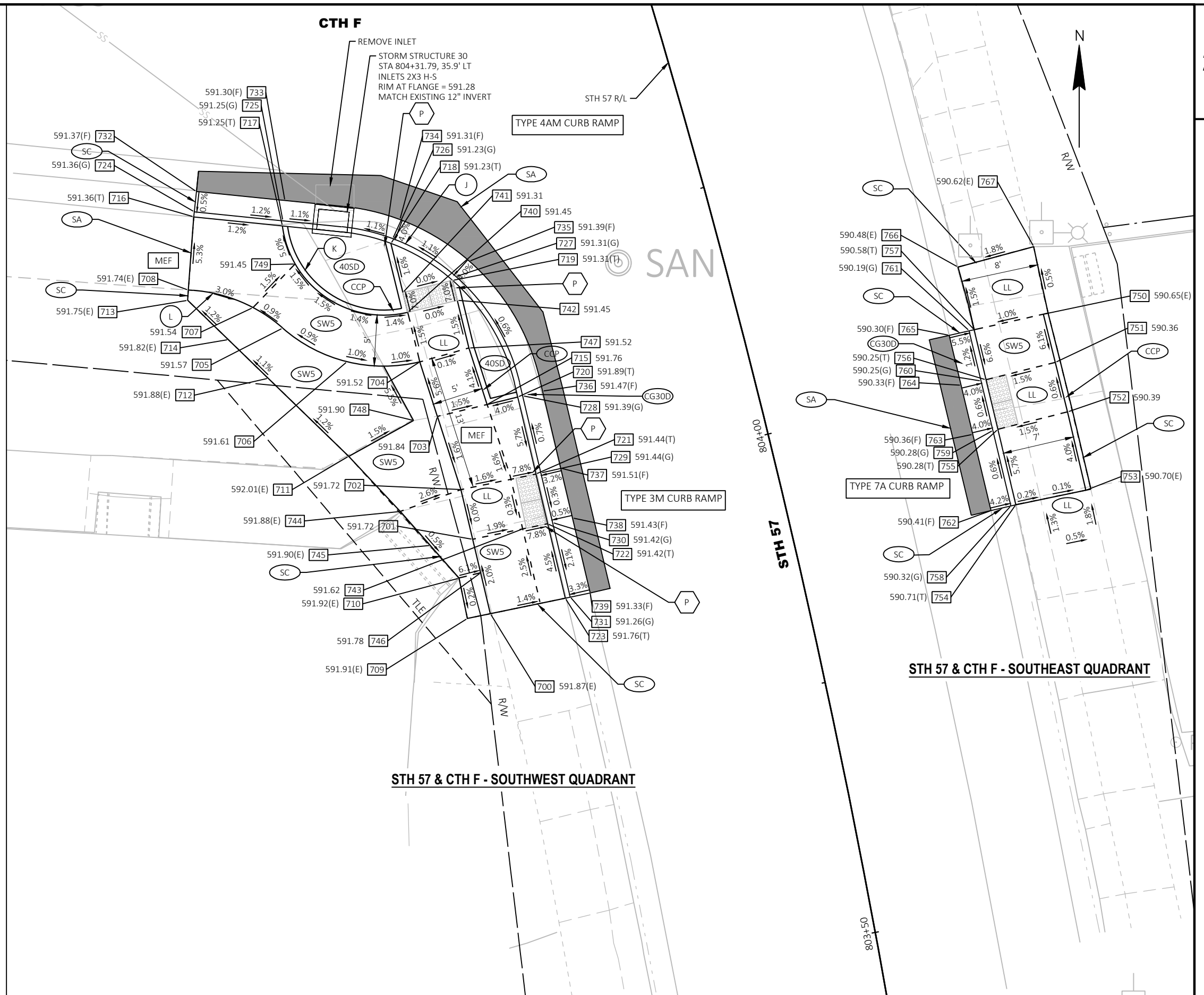
- | INTERSECTING ROAD--QUADRANT | REASON FOR TECHNICALLY INFEASIBLE
MATCHING CROSS SLOPE AT WEST END
EXCEEDS 2.0%.
SIDEWALK TO CROSSWALK OFFSET GREATER
THAN 10'. |
|-----------------------------|---|
| 1. CTH F--SOUTHWEST | |

POINTS LEGEND

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
XXX	POINT NUMBER
A	CURB RADIUS POINT NUMBER

SEE POINT TABLES ON NEXT SHEET.

CTH F

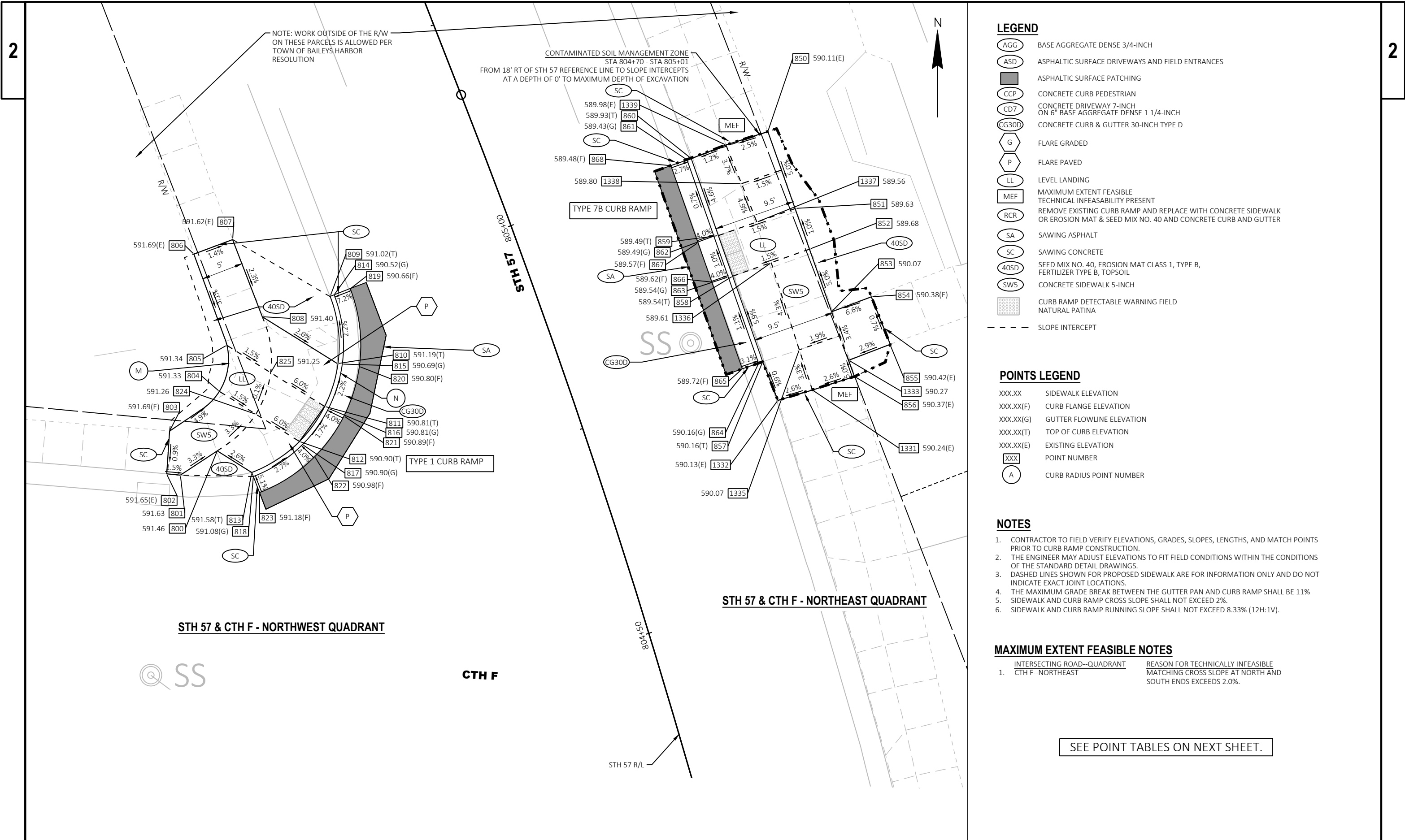


POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
700	242,643.27	559,392.52	591.87	803+88.99	-30.58
701	242,650.57	559,390.79	591.72	803+96.77	-30.58
702	242,655.44	559,389.64	591.72	804+01.95	-30.54
703	242,662.63	559,387.33	591.84	804+09.75	-31.03
704	242,667.98	559,385.60	591.52	804+15.57	-31.35
705	242,671.28	559,372.14	591.57	804+22.56	-43.49
706	242,667.98	559,378.47	591.61	804+17.48	-38.24
707	242,673.29	559,369.23	591.54	804+25.41	-45.77
708	242,675.01	559,362.91	591.74	804+28.96	-51.40
709	242,642.81	559,390.27	591.91	803+89.05	-32.87
710	242,646.76	559,389.45	591.92	803+93.24	-32.77
711	242,658.71	559,378.63	592.01	804+08.05	-40.43
712	242,666.36	559,370.73	591.88	804+17.94	-46.14
713	242,674.01	559,362.83	591.75	804+27.96	-51.74
714	242,670.16	559,366.81	591.82	804+22.89	-48.93
715	242,663.79	559,392.20	591.76	804+09.67	-26.02
716	242,682.19	559,363.44	591.36	804+36.13	-48.92
717	242,681.31	559,372.12	591.25	804+32.71	-40.82
718	242,679.58	559,382.77	591.23	804+27.96	-31.04
719	242,675.96	559,388.80	591.31	804+22.69	-26.19
720	242,664.53	559,395.20	591.89	804+09.63	-22.93
721	242,656.97	559,396.98	591.44	804+01.66	-23.05
722	242,652.10	559,398.14	591.42	803+96.51	-23.08
723	242,644.80	559,399.86	591.76	803+88.81	-23.08
724	242,682.69	559,363.49	591.36	804+36.62	-48.73

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
725	242,681.81	559,372.18	591.25	804+33.20	-40.63
726	242,680.05	559,382.94	591.23	804+28.38	-30.75
727	242,676.34	559,389.13	591.31	804+22.98	-25.77
728	242,664.64	559,395.68	591.39	804+09.62	-22.43
729	242,657.08	559,397.47	591.44	804+01.65	-22.55
730	242,652.21	559,398.62	591.42	803+96.51	-22.58
731	242,644.91	559,400.35	591.26	803+88.81	-22.58
732	242,684.68	559,363.69	591.37	804+38.58	-47.98
733	242,683.80	559,372.38	591.30	804+35.14	-39.89
734	242,681.92	559,383.64	591.31	804+30.05	-29.57
735	242,677.84	559,390.45	591.39	804+24.11	-24.10
736	242,665.10	559,397.63	591.47	804+09.58	-20.43
737	242,657.55	559,399.42	591.51	804+01.63	-20.55
738	242,652.67	559,400.57	591.43	803+96.50	-20.58
739	242,645.37	559,402.30	591.33	803+88.82	-20.58
740	242,672.83	559,384.42	591.45	804+20.76	-31.24
741	242,674.78	559,383.94	591.31	804+22.83	-31.19
742	242,674.02	559,389.27	591.45	804+20.63	-26.24
743	242,651.59	559,395.69	591.62	803+96.60	-25.58
744	242,653.30	559,383.74	591.88	804+01.25	-36.79
745	242,649.97	559,386.64	591.90	803+97.17	-34.75
746	242,647.29	559,391.57	591.78	803+93.26	-30.59
747	242,669.34	559,390.42	591.52	804+15.66	-26.34
748	242,662.22	559,384.98	591.90	804+09.95	-33.40
749	242,677.57	559,373.37	591.45	804+28.58	-40.63

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
750	242,672.65	559,446.74	590.65	804+04.83	29.02
751	242,667.92	559,447.92	590.36	804+00.12	29.03
752	242,663.07	559,449.13	590.39	803+95.28	29.07
753	242,655.39	559,450.92	590.70	803+87.65	29.05
754	242,653.97	559,444.05	590.71	803+87.80	22.04
755	242,661.36	559,442.29	590.28	803+95.21	22.01
756	242,666.22	559,441.12	590.25	804+00.09	22.02
757	242,671.13	559,439.96	590.58	804+05.01	22.08
758	242,653.85	559,443.57	590.32	803+87.80	21.54
759	242,661.25	559,441.80	590.28	803+95.22	21.51
760	242,666.11	559,440.64	590.25	804+00.09	21.53
761	242,671.04	559,439.46	590.19	804+05.04	21.58
762	242,653.39	559,441.62	590.41	803+87.78	19.54
763	242,660.86	559,439.84	590.36	803+95.29	19.51
764	242,665.68	559,438.69	590.33	804+00.15	19.53
765	242,670.58	559,437.52	590.30	804+05.07	19.58
766	242,677.27	559,438.38	590.48	804+11.20	22.06
767	242,679.28	559,445.80	590.62	804+11.27	29.75

RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
J	242,661.33	559,375.92	20'	804+11.42	-42.40
K	242,682.55	559,382.04	9.5'	804+31.12	-30.93
L	242,660.02	559,362.23	15'	804+13.73	-55.97



POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
800	242,730.28	559,356.34	591.46	804+86.69	-40.98
801	242,727.45	559,352.06	591.63	804+85.38	-45.95
802	242,727.61	559,350.47	591.65	804+86.09	-47.40
803	242,732.57	559,350.81	591.69	804+90.92	-45.42
804	242,737.19	559,356.59	591.33	804+93.42	-38.42
805	242,742.54	559,357.45	591.34	804+98.36	-35.77
806	242,753.14	559,353.63	591.69	805+10.10	-35.62
807	242,754.82	559,358.13	591.62	805+10.06	-30.82
808	242,745.86	559,361.58	591.40	805+00.11	-30.75
809	242,748.20	559,369.44	591.02	804+99.56	-22.56
810	242,740.42	559,370.35	591.19	804+91.73	-24.37
811	242,735.44	559,368.82	590.81	804+87.42	-27.50
812	242,731.37	559,365.89	590.90	804+84.46	-31.61
813	242,727.76	559,360.36	591.58	804+82.80	-38.02
814	242,748.38	559,369.91	590.52	804+99.57	-22.06
815	242,740.35	559,370.85	590.69	804+91.49	-23.93
816	242,735.20	559,369.26	590.81	804+87.04	-27.16
817	242,731.02	559,366.25	590.90	804+83.99	-31.39
818	242,727.29	559,360.54	591.08	804+82.28	-38.01
819	242,749.10	559,371.78	590.66	804+99.59	-20.06
820	242,740.09	559,372.83	590.80	804+90.54	-22.16
821	242,734.32	559,371.05	590.89	804+85.57	-25.76
822	242,729.61	559,367.66	590.98	804+82.13	-30.51
823	242,725.42	559,361.25	591.18	804+80.19	-37.94
824	242,734.54	559,360.82	591.26	804+89.32	-35.33
825	242,739.36	559,362.55	591.25	804+93.43	-32.07

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
850	242,767.37	559,420.29	590.11	804+99.89	31.77
851	242,758.44	559,423.49	589.63	804+90.73	31.73
852	242,753.72	559,425.15	589.68	804+85.91	31.71
853	242,746.44	559,427.71	590.07	804+78.46	31.74
854	242,748.17	559,432.31	590.38	804+78.60	36.66
855	242,742.67	559,434.45	590.42	804+72.94	36.92
856	242,738.91	559,430.34	590.37	804+70.76	31.83
857	242,740.63	559,419.68	590.16	804+75.64	22.27
858	242,750.57	559,416.19	589.54	804+85.91	22.21
859	242,755.29	559,414.53	589.49	804+90.79	22.23
860	242,764.24	559,411.39	589.93	805+00.04	22.34
861	242,764.07	559,410.91	589.43	805+00.05	21.84
862	242,755.22	559,414.03	589.49	804+90.89	21.73
863	242,750.48	559,415.69	589.54	804+85.99	21.71
864	242,740.47	559,419.23	590.16	804+75.63	21.78
865	242,739.80	559,417.33	589.72	804+75.61	19.77
866	242,749.89	559,413.78	589.62	804+86.06	19.71
867	242,754.46	559,412.17	589.57	804+90.80	19.73
868	242,763.41	559,409.03	589.48	805+00.08	19.84
1331	242,737.34	559,425.46	590.24	804+70.81	26.70
1332	242,736.14	559,421.45	590.13	804+70.94	22.52
1333	242,740.80	559,429.68	590.27	804+72.69	31.80
1335	242,742.02	559,423.94	590.07	804+75.59	26.74
1336	242,752.15	559,420.67	589.61	804+85.91	26.96
1337	242,756.86	559,419.01	589.56	804+90.76	26.98
1338	242,761.31	559,417.23	589.80	804+95.41	26.82
1339	242,765.81	559,415.42	589.98	805+00.11	26.67

RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
M	242,740.90	559,350.65	7'	804+99.21	-42.72
N	242,742.53	559,354.66	16.34'	804+99.36	-38.40

	BASE AGGREGATE DENSE 3/4-INCH
	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
	ASPHALTIC SURFACE PATCHING
	CONCRETE CURB PEDESTRIAN
	CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
	CONCRETE CURB & GUTTER 30-INCH TYPE D
	FLARE GRADED
	FLARE PAVED
	LEVEL LANDING
	MAXIMUM EXTENT FEASIBLE TECHNICAL INFEASIBILITY PRESENT
	REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
	SAWING ASPHALT
	SAWING CONCRETE
	SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
	CONCRETE SIDEWALK 5-INCH
	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
	SLOPE INTERCEPT

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
5. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
6. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
XXX	POINT NUMBER
A	CURB RADIUS POINT NUMBER

<u>INTERSECTING ROAD--QUADRANT</u>	<u>REASON FOR TECHNICALLY INFEASIBLE</u>
1. <u>PARK RD--SOUTHWEST</u>	<u>MATCHING CROSS SLOPE EXCEEDS 2.0%.</u>

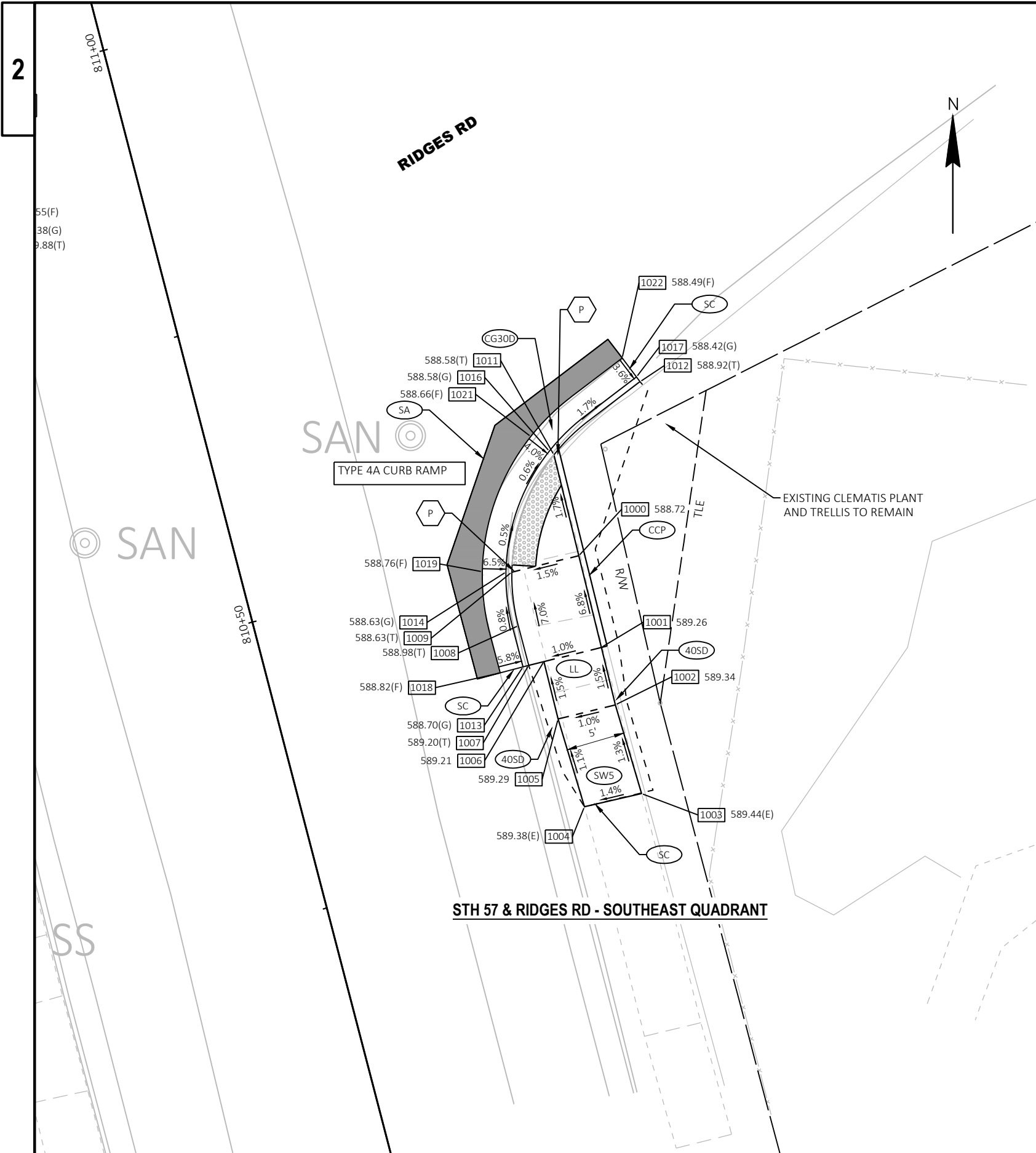
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POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
900	242,955.85	559,283.53	590.65	807+23.70	-28.17
901	242,951.14	559,285.21	590.72	807+18.78	-28.15
902	242,940.14	559,289.77	591.26	807+07.05	-27.57
903	242,938.48	559,285.16	591.39	807+07.05	-32.46
904	242,949.47	559,280.50	590.80	807+18.77	-33.15
905	242,954.18	559,278.82	590.72	807+23.68	-33.17
906	242,959.82	559,276.79	590.48	807+29.58	-33.22
907	242,963.07	559,273.37	590.99	807+33.70	-35.38
908	242,963.03	559,275.63	590.51	807+32.94	-33.26
909	242,961.50	559,281.50	590.41	807+29.61	-28.22
910	242,952.17	559,290.41	590.69	807+18.01	-22.90
911	242,963.63	559,273.37	590.50	807+34.22	-35.20
912	242,963.53	559,275.67	590.51	807+33.39	-33.05
913	242,961.95	559,281.70	590.41	807+29.97	-27.87
914	242,952.36	559,290.88	590.19	807+18.03	-22.40
915	242,965.57	559,273.25	590.67	807+36.05	-34.67
916	242,965.53	559,275.83	590.64	807+35.19	-32.25
917	242,963.77	559,282.54	590.53	807+31.39	-26.49
918	242,953.11	559,292.73	590.30	807+18.12	-20.40

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
950	242,992.97	559,237.48	591.37	807+72.47	-59.93
951	242,997.86	559,236.25	591.42	807+77.35	-59.59
952	243,001.15	559,244.32	591.35	807+78.00	-50.91
953	243,008.50	559,252.70	591.12	807+82.36	-40.70
954	243,011.32	559,258.24	590.99	807+83.35	-34.56
955	243,018.50	559,256.80	591.05	807+90.50	-33.78
956	243,027.45	559,257.83	591.12	807+98.60	-30.14
957	243,038.74	559,256.45	591.10	808+09.64	-28.17
958	243,040.14	559,261.22	591.02	808+09.60	-23.19
959	243,027.42	559,265.12	591.01	807+96.45	-23.18
960	243,026.66	559,262.77	591.05	807+96.42	-25.65
961	243,013.02	559,262.95	590.91	807+83.54	-29.56
962	243,004.74	559,260.61	590.79	807+76.48	-34.30
963	243,006.62	559,259.94	590.91	807+78.44	-34.37
964	243,001.08	559,251.76	591.14	807+75.72	-43.85
965	242,997.02	559,247.13	591.27	807+73.33	-49.50
966	242,995.43	559,247.52	591.25	807+71.74	-49.61

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
967	243,008.31	559,264.64	590.84	807+78.62	-29.37
968	243,021.80	559,266.86	590.98	807+90.64	-23.19
969	243,006.43	559,265.32	590.72	807+76.65	-29.30
970	243,001.75	559,261.69	590.78	807+73.36	-34.19
971	242,998.87	559,257.78	591.06	807+71.85	-38.80
972	243,021.97	559,267.32	590.55	807+90.66	-22.70
973	243,006.19	559,265.76	590.72	807+76.29	-28.96
974	243,001.39	559,262.03	590.78	807+72.91	-33.97
975	242,998.43	559,258.02	590.88	807+71.37	-38.70
976	243,022.55	559,269.24	590.61	807+90.65	-20.70
977	243,005.22	559,267.50	590.80	807+74.85	-27.59
978	242,999.94	559,263.41	590.86	807+71.14	-33.11
979	242,996.69	559,259.00	590.92	807+69.45	-38.31
980	243,035.36	559,262.69	591.01	808+04.66	-23.18
981	243,033.93	559,257.80	591.09	808+04.71	-28.27

RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
O	243,017.68	559,233.06	20'	807+96.62	-56.68
P	242,987.80	559,266.71	20'	807+58.80	-33.75
Q	243,015.89	559,248.27	20'	807+90.56	-42.70
R	243,019.79	559,281.76	20'	807+84.31	-9.57
S	243,030.60	559,238.08	20'	808+07.21	-48.10
T	242,945.59	559,274.20	18'	807+17.26	-40.38



LEGEND

- AGG BASE AGGREGATE DENSE 3/4-INCH
- ASD ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- ASPHALTIC SURFACE PATCHING
- CCP CONCRETE CURB PEDESTRIAN
- CD7 CONCRETE DRIVEWAY 7-INCH ON 6" BASE AGGREGATE DENSE 1 1/4-INCH
- CG30D CONCRETE CURB & GUTTER 30-INCH TYPE D
- G FLARE GRADED
- P FLARE PAVED
- LL LEVEL LANDING
- MEF MAXIMUM EXTENT FEASIBLE TECHNICAL INFESABILITY PRESENT
- RCR REMOVE EXISTING CURB RAMP AND REPLACE WITH CONCRETE SIDEWALK OR EROSION MAT & SEED MIX NO. 40 AND CONCRETE CURB AND GUTTER
- SA SAWING ASPHALT
- SC SAWING CONCRETE
- 40SD SEED MIX NO. 40, EROSION MAT CLASS 1, TYPE B, FERTILIZER TYPE B, TOPSOIL
- SW5 CONCRETE SIDEWALK 5-INCH
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA
- SLOPE INTERCEPT

POINTS LEGEND

- XXX.XX SIDEWALK ELEVATION
- XXX.XX(F) CURB FLANGE ELEVATION
- XXX.XX(G) GUTTER FLOWLINE ELEVATION
- XXX.XX(T) TOP OF CURB ELEVATION
- XXX.XX(E) EXISTING ELEVATION
- XXX POINT NUMBER
- A CURB RADIUS POINT NUMBER

NOTES

- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
- DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
- THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
- SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
- SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

POINT TABLE

POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1000	243,284.74	559,249.13	588.72	810+48.48	28.15
1001	243,276.97	559,251.04	589.26	810+40.48	28.05
1002	243,272.12	559,252.23	589.34	810+35.48	27.98
1003	243,264.61	559,254.45	589.44	810+27.66	28.23
1004	243,263.50	559,249.61	589.38	810+27.80	23.27
1005	243,270.92	559,247.38	589.29	810+35.55	22.98
1006	243,275.78	559,246.18	589.21	810+40.55	23.05
1007	243,275.46	559,244.90	589.20	810+40.56	21.72
1008	243,278.80	559,244.01	588.98	810+44.02	21.71
1009	243,283.35	559,243.46	588.63	810+48.56	22.32
1011	243,293.28	559,247.03	588.58	810+57.27	28.27
1012	243,299.48	559,254.32	588.92	810+61.43	36.89

POINT TABLE

POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1013	243,275.33	559,244.41	588.70	810+40.56	21.22
1014	243,283.36	559,242.96	588.63	810+48.69	21.84
1016	243,293.59	559,246.63	588.58	810+57.67	27.97
1017	243,299.87	559,254.02	588.42	810+61.89	36.70
1018	243,274.82	559,242.48	588.82	810+40.55	19.22
1019	243,283.39	559,240.96	588.76	810+49.23	19.91
1021	243,294.83	559,245.07	588.66	810+59.27	26.77
1022	243,301.46	559,252.80	588.49	810+63.74	35.93

RADIUS TABLE

POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
U	243,283.03	559,259.96	17'	810+44.10	38.21

RADIAL WARNING FIELD PANEL LAYOUT TABLE

QUADRANT	BACK OF CURB RADIUS (FT)	LANDING LENGTH 'XR'	RADIAL WARNING FIELD AREA (SF)	RADIAL LONG CHORD (FT)
SOUTHEAST	16.5	8.79'	17.4 SF	9.97'

PROJECT NO: 4150-14-71

HWY: STH 57

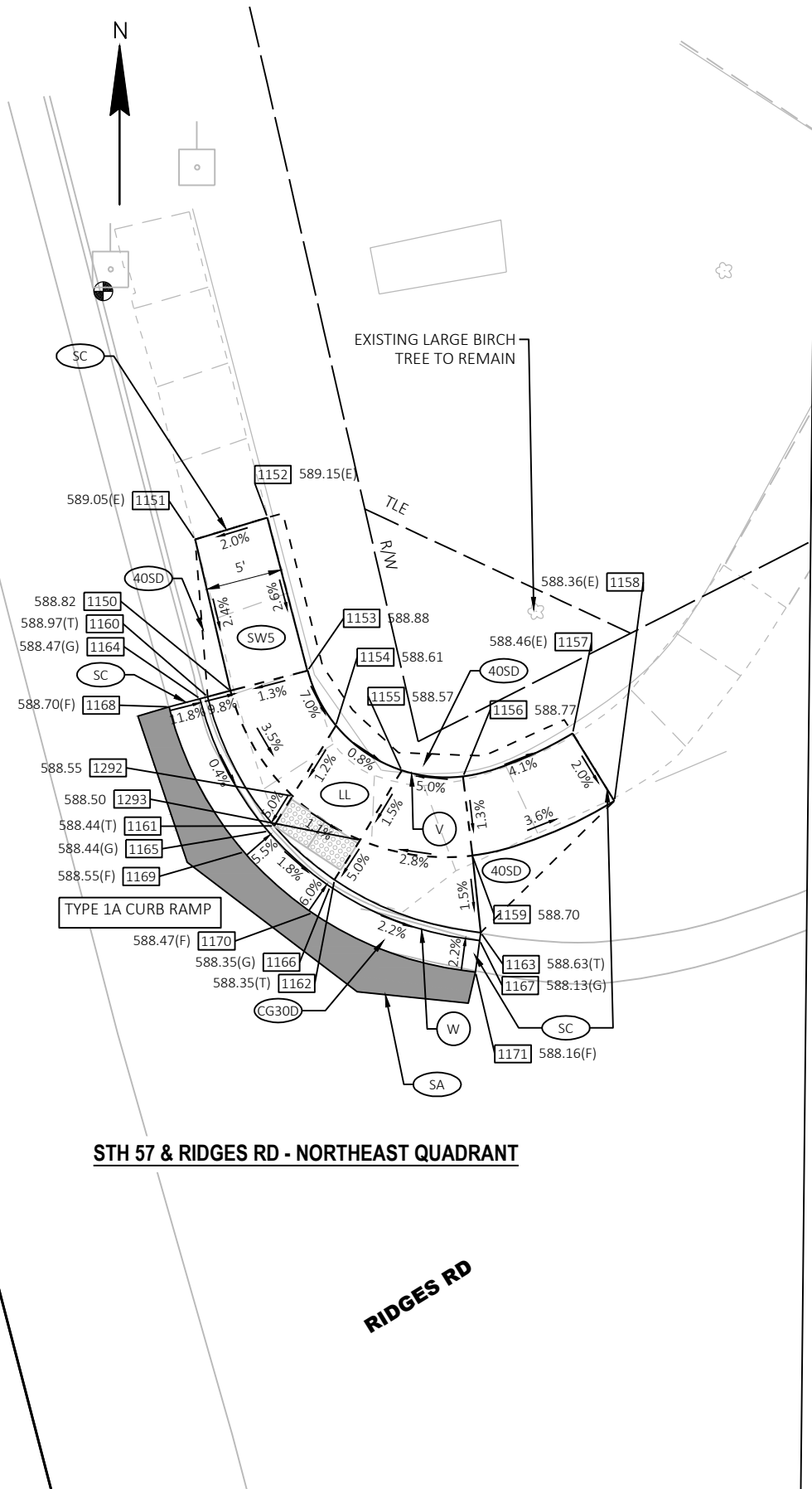
COUNTY: DOOR

CURB RAMP DETAILS

SHEET

35

E



1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
5. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
6. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

SEE POINT TABLES ON NEXT SHEET.

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1100	243,311.77	559,183.97	589.96	810+91.05	-28.09
1101	243,319.47	559,180.84	589.61	810+99.30	-29.18
1102	243,324.32	559,179.60	589.65	811+04.30	-29.16
1103	243,328.35	559,178.57	589.82	811+08.46	-29.14
1104	243,328.21	559,178.09	590.15	811+08.45	-29.64
1105	243,332.38	559,177.54	589.72	811+12.62	-29.12
1106	243,332.26	559,177.06	589.73	811+12.62	-29.62
1107	243,331.30	559,165.09	590.61	811+14.71	-41.44
1108	243,344.37	559,161.88	590.78	811+28.17	-41.26
1109	243,346.43	559,173.95	589.85	811+27.12	-29.05
1110	243,353.44	559,173.10	590.38	811+34.11	-28.11
1111	243,358.23	559,171.88	590.34	811+39.06	-28.09
1112	243,359.54	559,176.80	590.29	811+39.09	-23.00
1113	243,354.70	559,178.03	590.30	811+34.09	-23.02
1114	243,347.92	559,179.77	589.76	811+27.09	-23.05
1115	243,333.87	559,183.36	589.63	811+12.59	-23.12
1116	243,329.84	559,184.39	589.72	811+08.43	-23.14

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1117	243,329.96	559,184.87	589.59	811+08.43	-22.64
1118	243,325.83	559,185.41	589.56	811+04.30	-23.16
1119	243,320.99	559,186.65	589.52	810+99.30	-23.18
1120	243,312.98	559,188.69	589.88	810+91.03	-23.22
1121	243,359.67	559,177.28	589.79	811+39.09	-22.50
1122	243,348.04	559,180.25	589.76	811+27.09	-22.55
1123	243,333.99	559,183.84	589.63	811+12.59	-22.62
1124	243,325.93	559,185.90	589.56	811+04.27	-22.66
1125	243,321.11	559,187.13	589.52	810+99.30	-22.68
1126	243,313.10	559,189.18	589.38	810+91.03	-22.72
1127	243,360.16	559,179.22	589.86	811+39.08	-20.50
1128	243,348.39	559,182.23	589.84	811+26.93	-20.55
1129	243,334.44	559,185.79	589.71	811+12.54	-20.62
1130	243,326.41	559,187.84	589.64	811+04.24	-20.66
1131	243,321.57	559,189.08	589.60	810+99.25	-20.68
1132	243,313.60	559,191.12	589.55	810+91.02	-20.72
1133	243,354.82	559,178.52	589.80	811+34.09	-22.52

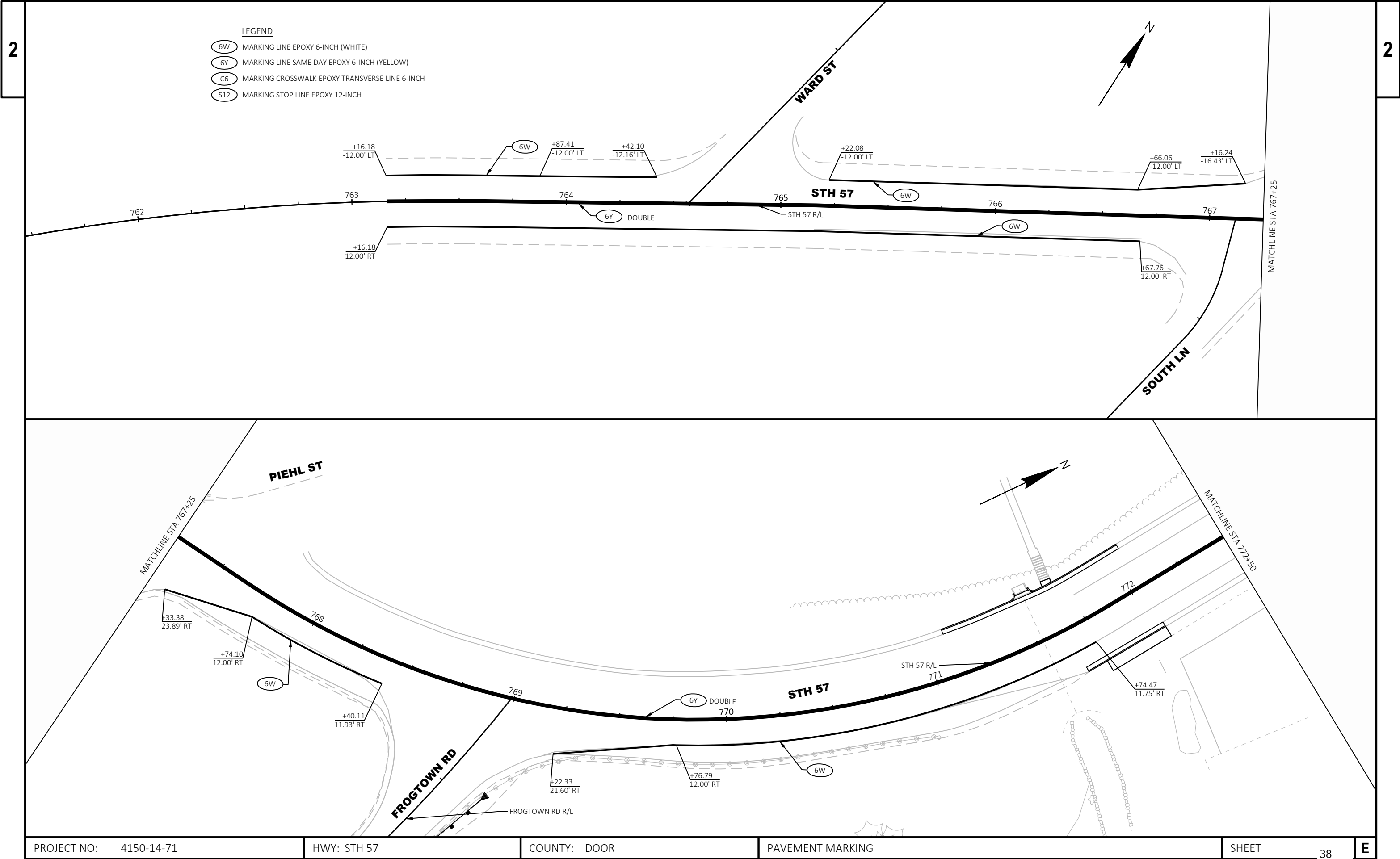
POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1134	243,324.19	559,179.12	590.15	811+04.30	-29.66

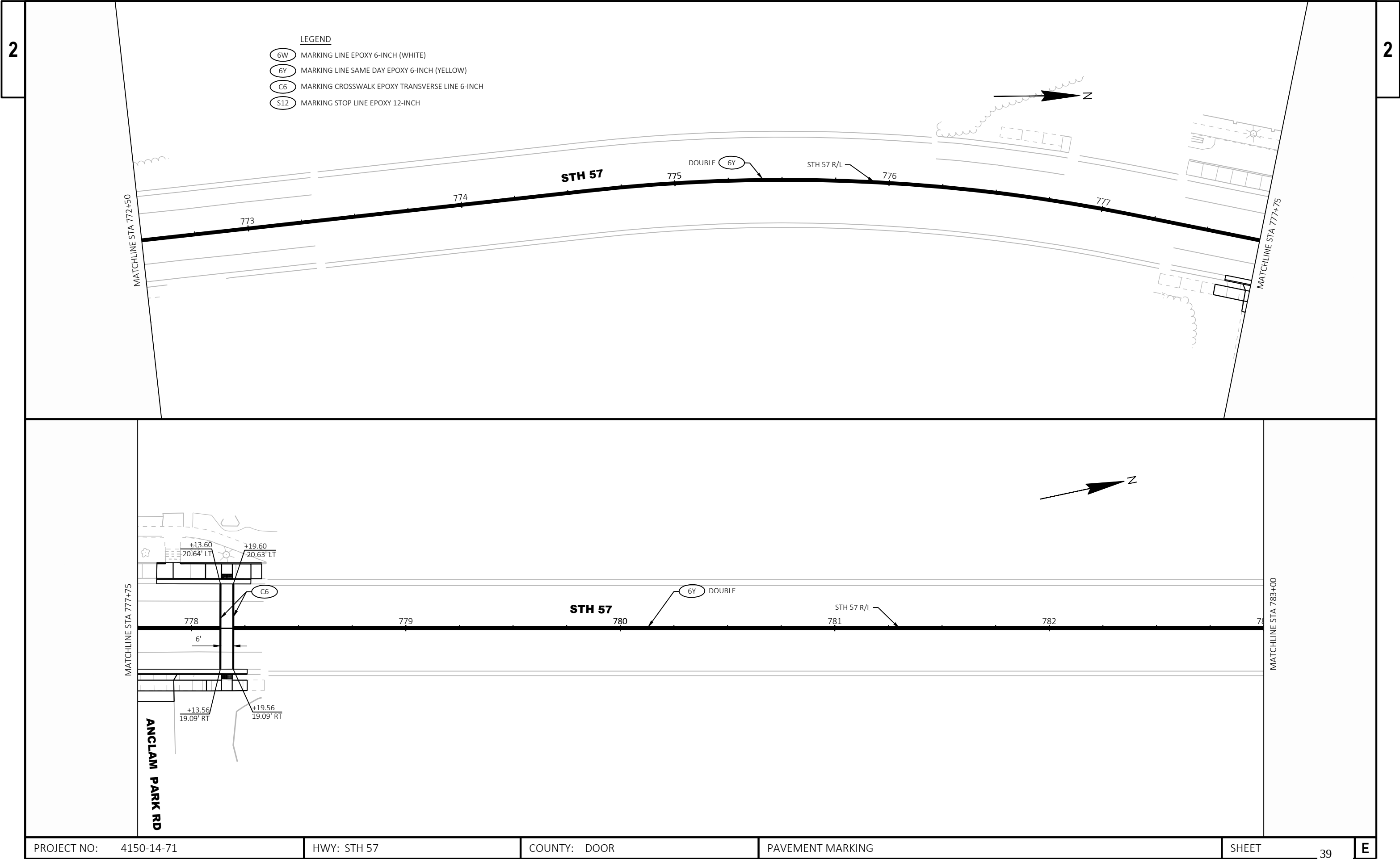
RADIUS TABLE					
POINT NUMBER	Y	X	RADIUS	STATION	OFFSET
V	243,361.22	559,238.93	9'	811+25.06	37.55
W	243,361.91	559,242.90	20'	811+24.73	41.57

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1150	243,357.68	559,225.39	588.82	811+25.05	23.55
1151	243,367.19	559,223.16	589.05	811+34.81	23.80
1152	243,368.56	559,227.71	589.15	811+34.99	28.54
1153	243,358.94	559,230.22	588.88	811+25.05	28.55
1154	243,355.47	559,232.00	588.61	811+21.24	29.40
1155	243,352.66	559,236.14	588.57	811+17.48	32.70
1156	243,352.28	559,240.00	588.77	811+16.14	36.34
1157	243,355.00	559,246.89	588.46	811+17.04	43.69
1158	243,350.75	559,249.52	588.36	811+12.26	45.16
1159	243,347.32	559,240.59	588.70	811+11.19	35.66
1160	243,357.30	559,223.95	588.97	811+25.04	22.07

POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1161	243,349.18	559,228.13	588.44	811+16.13	24.07
1162	243,345.80	559,231.92	588.35	811+11.90	26.88
1163	243,342.48	559,241.11	588.63	811+06.38	34.95
1164	243,357.18	559,223.46	588.47	811+25.04	21.57
1165	243,348.85	559,227.75	588.44	811+15.91	23.62
1166	243,345.37	559,231.65	588.35	811+11.56	26.52
1167	243,341.99	559,241.05	588.13	811+05.91	34.76
1168	243,356.67	559,221.53	588.70	811+25.04	19.57
1169	243,347.54	559,226.24	588.55	811+15.02	21.82
1170	243,343.72	559,230.53	588.47	811+10.24	25.01
1171	243,340.00	559,240.79	588.16	811+04.06	34.01

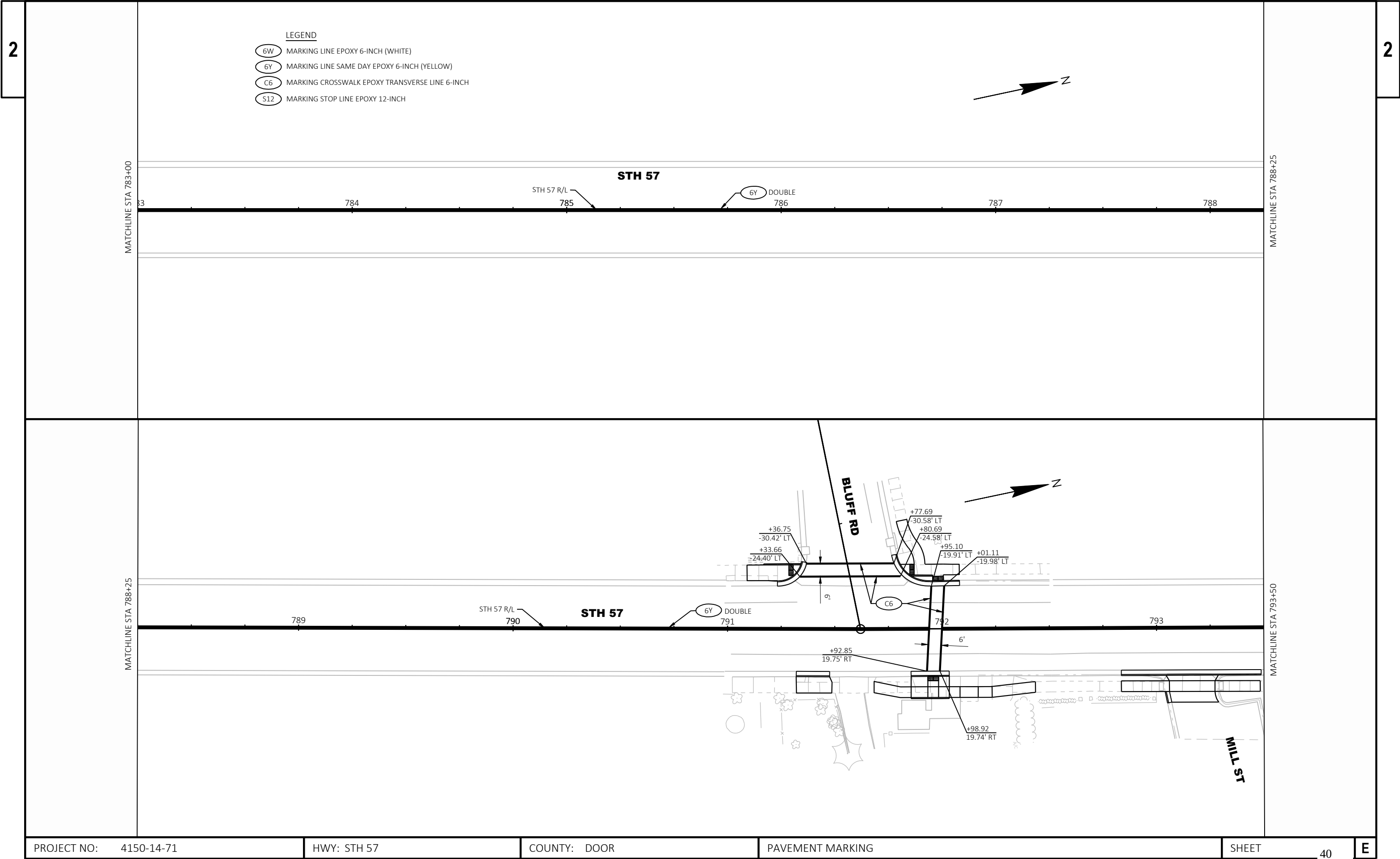
POINT TABLE					
POINT NUMBER	Y	X	ELEVATION	STATION	OFFSET
1292	243,351.06	559,229.29	588.55	811+17.66	25.67
1293	243,348.30	559,233.54	588.50	811+13.91	29.08



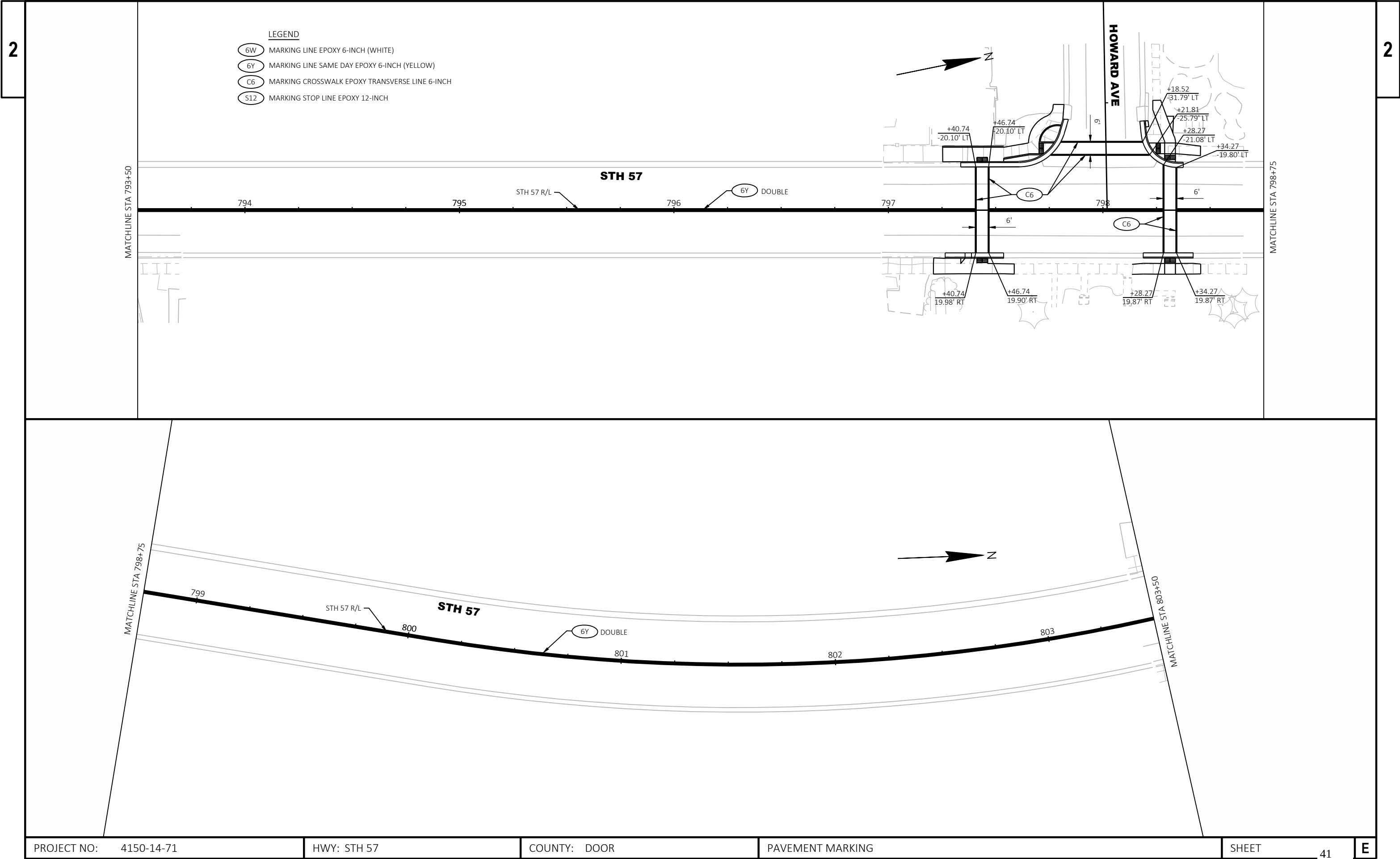


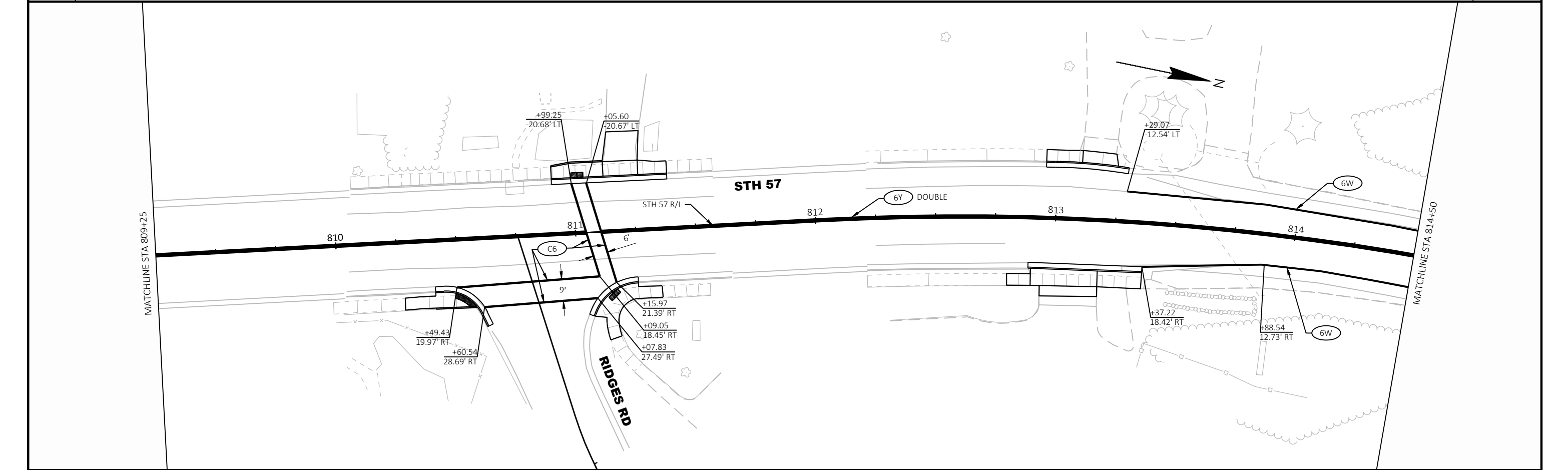
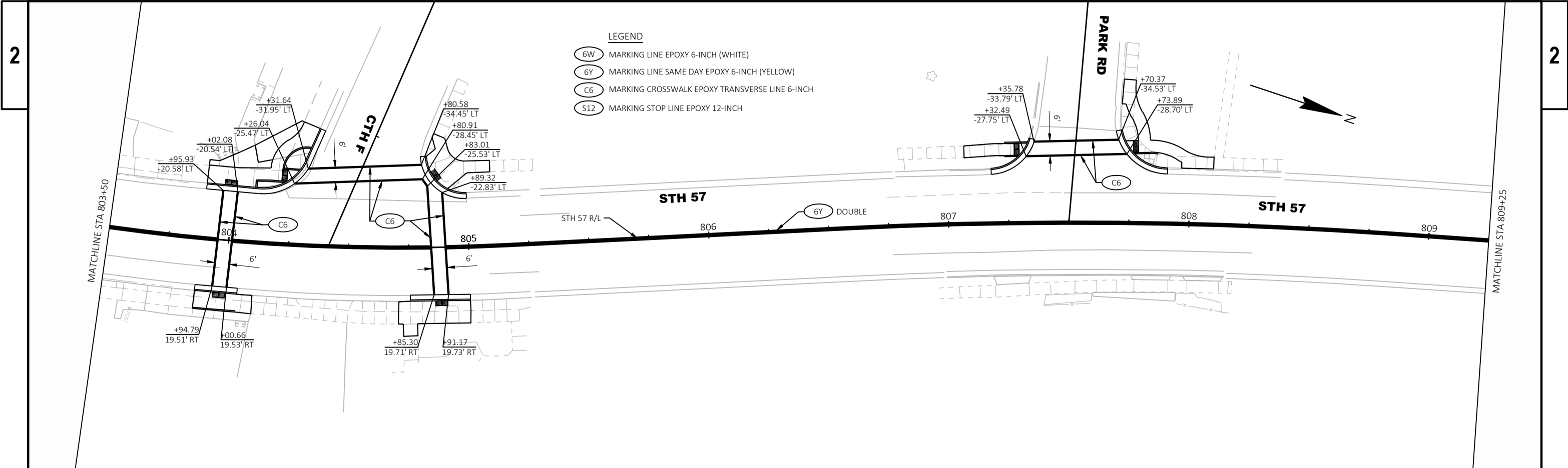
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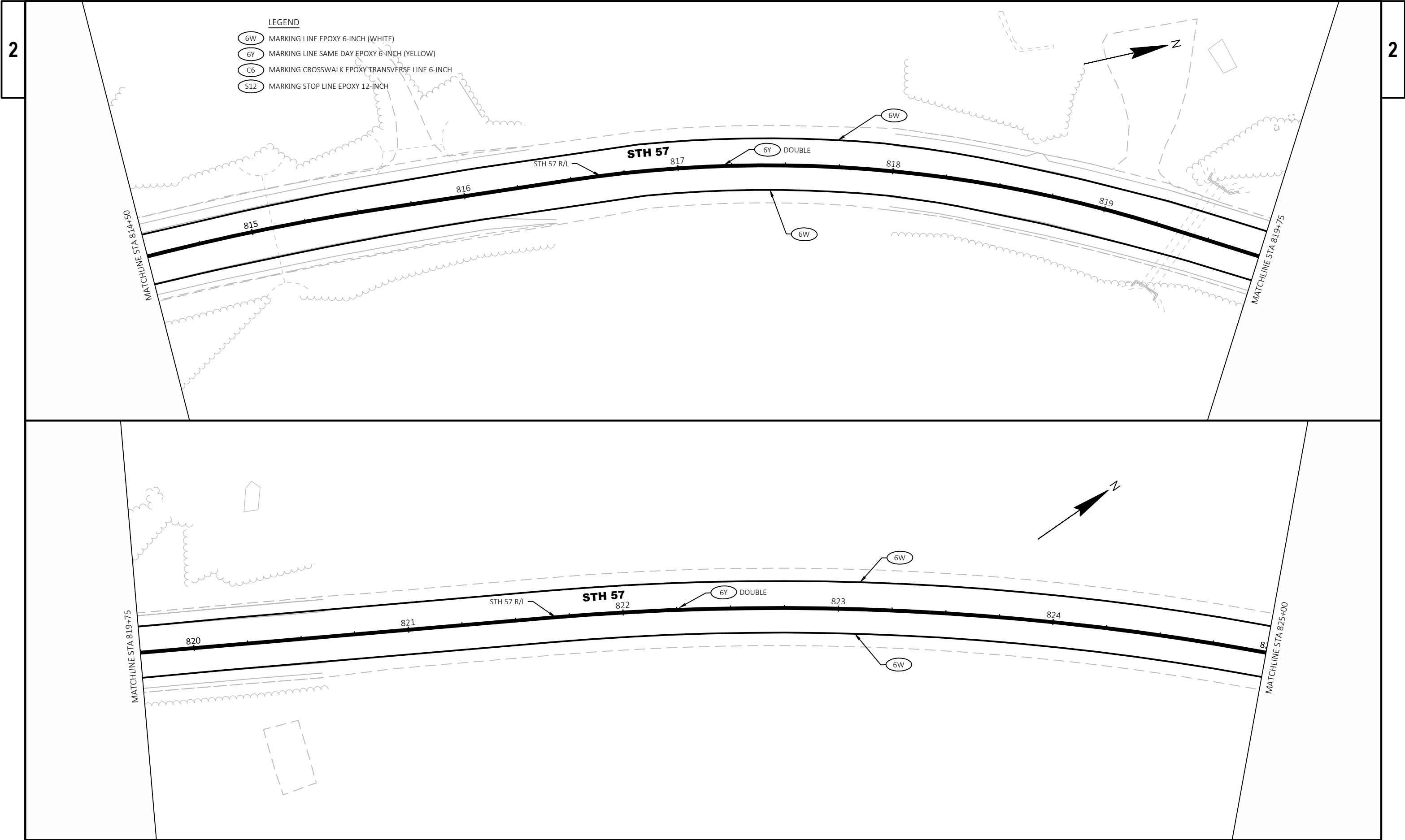


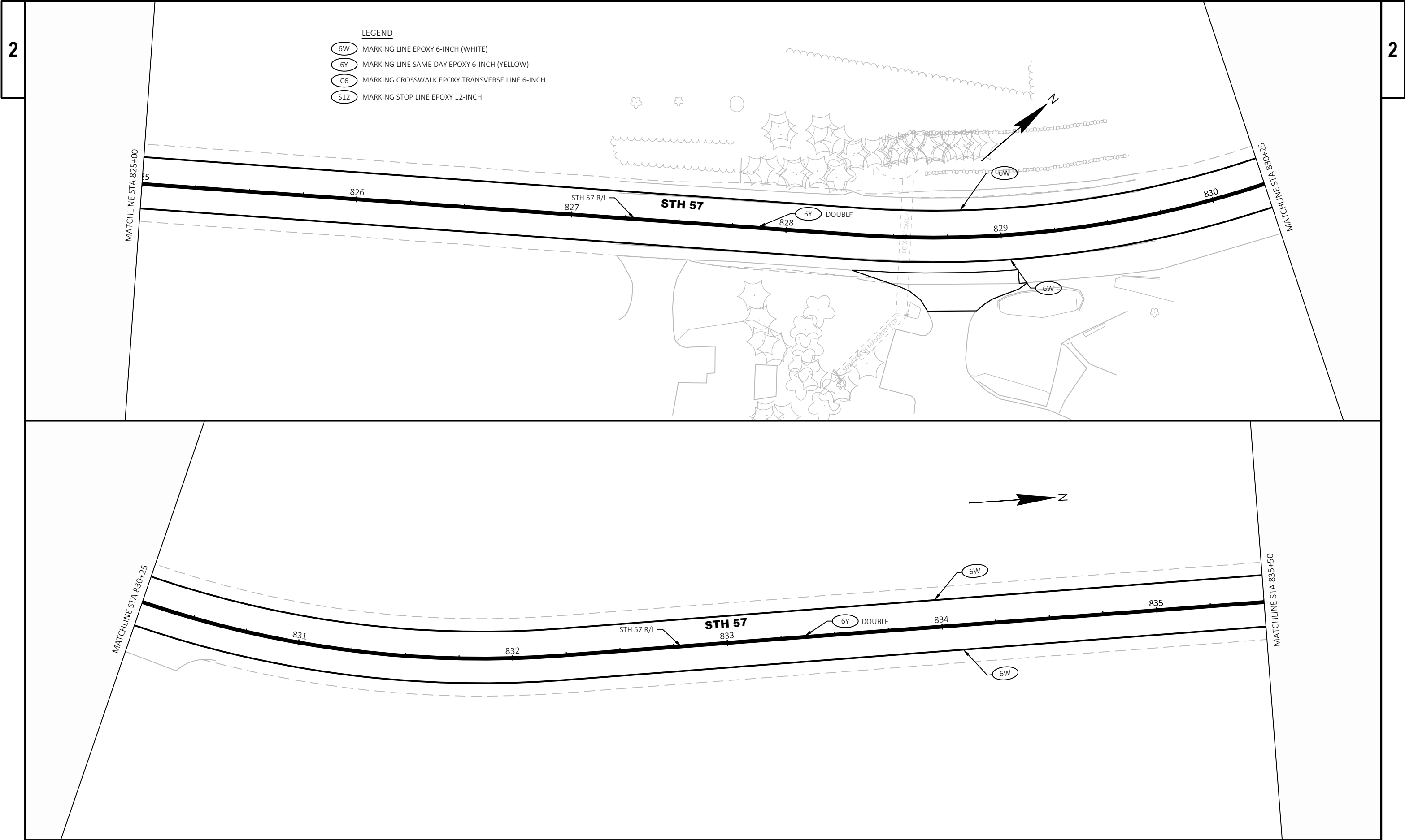
PROJECT NO: 4150-14-71	HWY: STH 57	COUNTY: DOOR	PAVEMENT MARKING	SHEET 40	E
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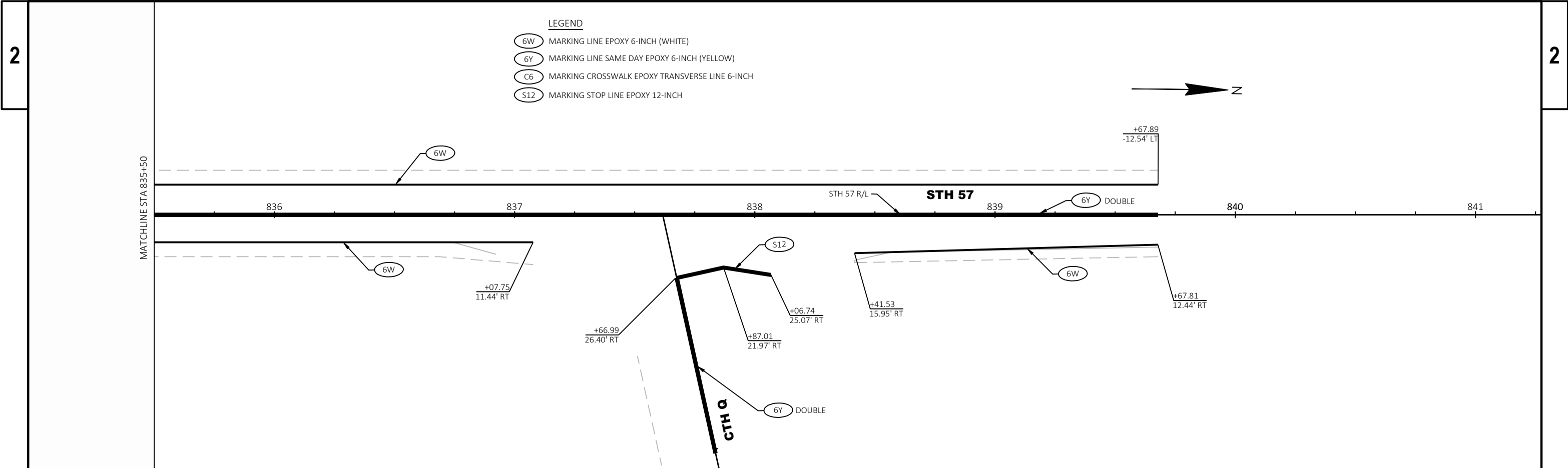


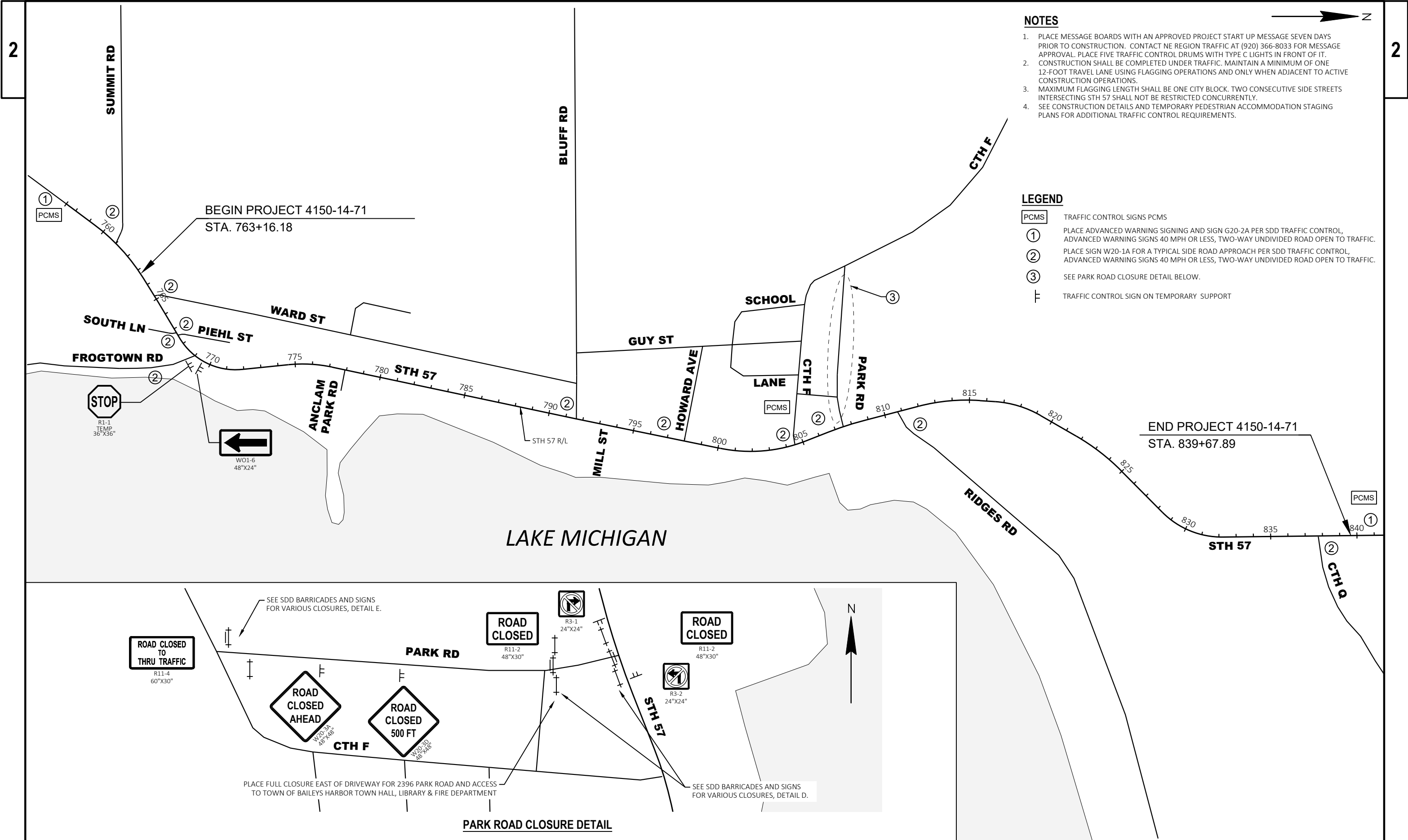


PROJECT NO: 4150-14-71	HWY: STH 57	COUNTY: DOOR	PAVEMENT MARKING	SHEET 42	E
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- NOTES
1.

PLACE MESSAGE BOARDS WITH AN APPROVED PROJECT START UP MESSAGE SEVEN DAYS PRIOR TO CONSTRUCTION. CONTACT NE REGION TRAFFIC AT (920) 366-8033 FOR MESSAGE APPROVAL. PLACE FIVE TRAFFIC CONTROL DRUMS WITH TYPE C LIGHTS IN FRONT OF IT.
2.

CONSTRUCTION SHALL BE COMPLETED UNDER TRAFFIC. MAINTAIN A MINIMUM OF ONE 12-FOOT TRAVEL LANE USING FLAGGING OPERATIONS AND ONLY WHEN ADJACENT TO ACTIVE CONSTRUCTION OPERATIONS.
3.

MAXIMUM FLAGGING LENGTH SHALL BE ONE CITY BLOCK. TWO CONSECUTIVE SIDE STREETS INTERSECTING STH 57 SHALL NOT BE RESTRICTED CONCURRENTLY.
4.

SEE CONSTRUCTION DETAILS AND TEMPORARY PEDESTRIAN ACCOMMODATION STAGING PLANS FOR ADDITIONAL TRAFFIC CONTROL REQUIREMENTS.

- LEGEND
- PCMS

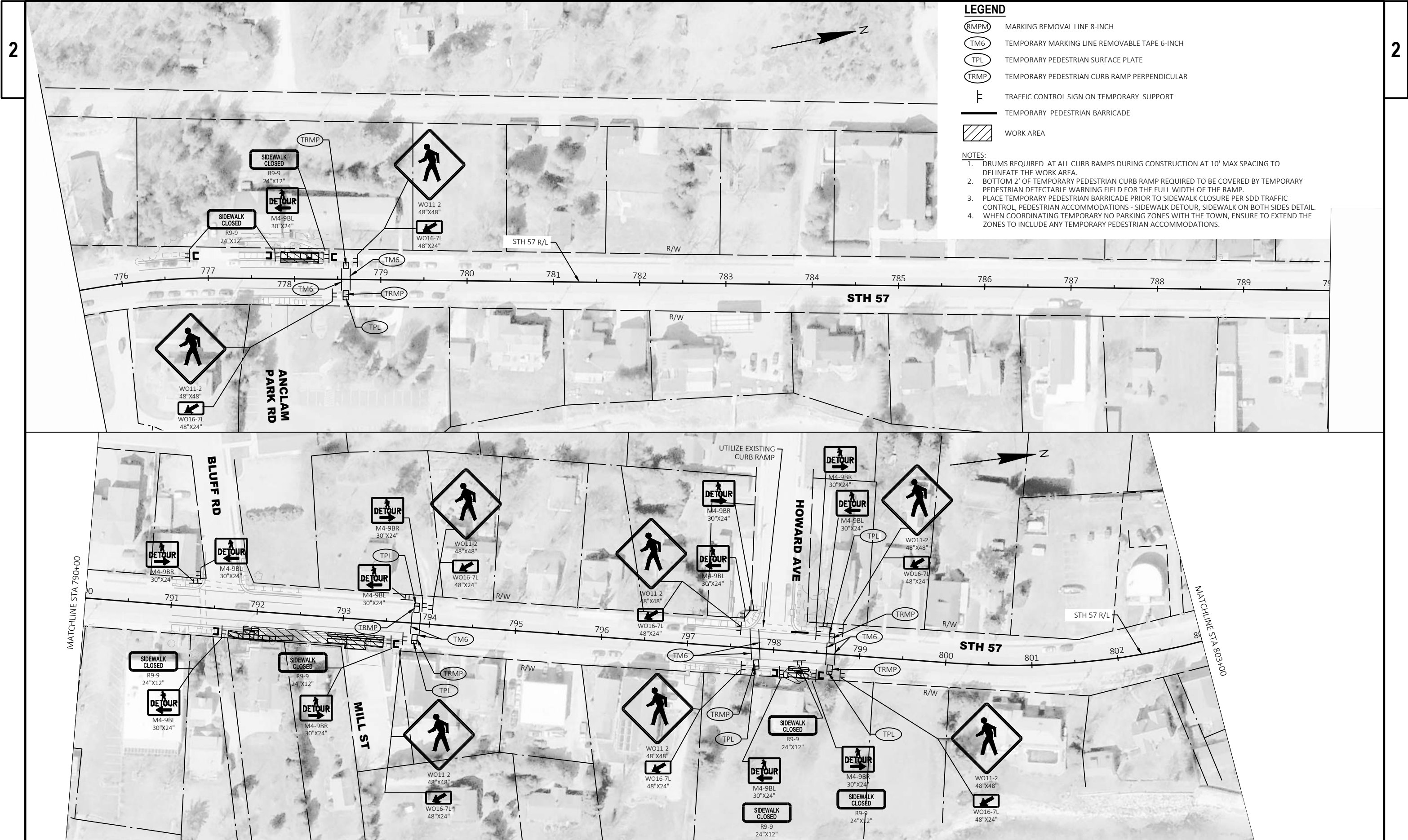
TRAFFIC CONTROL SIGNS PCMS
- 1

PLACE ADVANCED WARNING SIGNING AND SIGN G20-2A PER SDD TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC.
- 2

PLACE SIGN W20-1A FOR A TYPICAL SIDE ROAD APPROACH PER SDD TRAFFIC CONTROL, ADVANCED WARNING SIGNS 40 MPH OR LESS, TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC.
- 3

SEE PARK ROAD CLOSURE DETAIL BELOW.
- F

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT



LEGEND

- (RMPM) MARKING REMOVAL LINE 8-INCH
- (TM6) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- (TPL) TEMPORARY PEDESTRIAN SURFACE PLATE
- (TRMP) TEMPORARY PEDESTRIAN CURB RAMP PERPENDICULAR
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

NOTES:

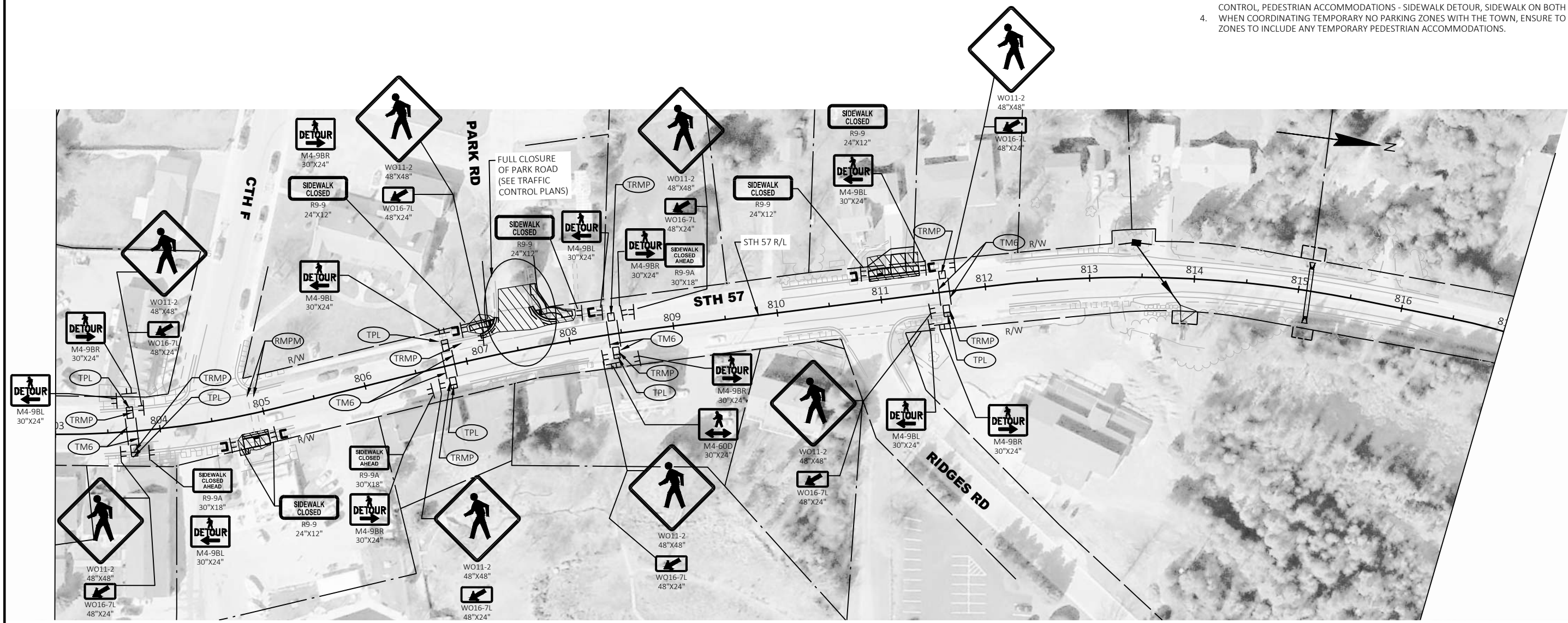
1. DRUMS REQUIRED AT ALL CURB RAMP DURING CONSTRUCTION AT 10' MAX SPACING TO DELINEATE THE WORK AREA.
2. BOTTOM 2' OF TEMPORARY PEDESTRIAN CURB RAMP REQUIRED TO BE COVERED BY TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD FOR THE FULL WIDTH OF THE RAMP.
3. PLACE TEMPORARY PEDESTRIAN BARRICADE PRIOR TO SIDEWALK CLOSURE PER SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS - SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES DETAIL.
4. WHEN COORDINATING TEMPORARY NO PARKING ZONES WITH THE TOWN, ENSURE TO EXTEND THE ZONES TO INCLUDE ANY TEMPORARY PEDESTRIAN ACCOMMODATIONS.

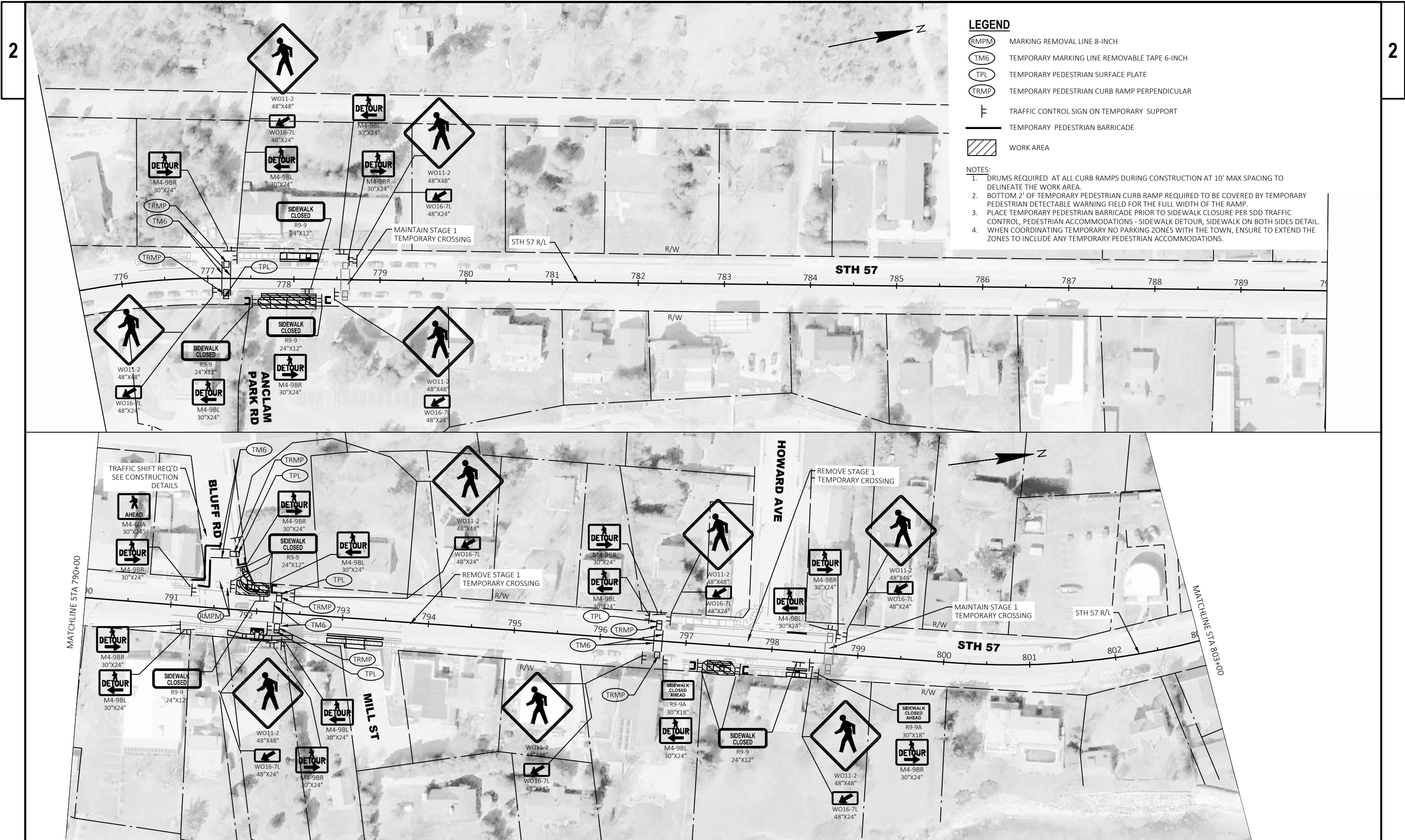
LEGEND

- (RMPL) MARKING REMOVAL LINE 8-INCH
- (TM6) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- (TPL) TEMPORARY PEDESTRIAN SURFACE PLATE
- (TRMP) TEMPORARY PEDESTRIAN CURB RAMP PERPENDICULAR
- ⌋ TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN BARRICADE
- ▨ WORK AREA

NOTES:

1. DRUMS REQUIRED AT ALL CURB RAMP DURING CONSTRUCTION AT 10' MAX SPACING TO DELINEATE THE WORK AREA.
2. BOTTOM 2' OF TEMPORARY PEDESTRIAN CURB RAMP REQUIRED TO BE COVERED BY TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD FOR THE FULL WIDTH OF THE RAMP.
3. PLACE TEMPORARY PEDESTRIAN BARRICADE PRIOR TO SIDEWALK CLOSURE PER SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS - SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES DETAIL.
4. WHEN COORDINATING TEMPORARY NO PARKING ZONES WITH THE TOWN, ENSURE TO EXTEND THE ZONES TO INCLUDE ANY TEMPORARY PEDESTRIAN ACCOMMODATIONS.





LEGEND

- (RMPM) MARKING REMOVAL LINE 8-INCH
- (TM6) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- (TPL) TEMPORARY PEDESTRIAN SURFACE PLATE
- (TRMP) TEMPORARY PEDESTRIAN CURB RAMP PERPENDICULAR
- ⊥ TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- ▬ TEMPORARY PEDESTRIAN BARRICADE
- ▨ WORK AREA

NOTES:

1. DRUMS REQUIRED AT ALL CURB RAMP DURING CONSTRUCTION AT 10' MAX SPACING TO DELINEATE THE WORK AREA.
2. BOTTOM 2' OF TEMPORARY PEDESTRIAN CURB RAMP REQUIRED TO BE COVERED BY TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD FOR THE FULL WIDTH OF THE RAMP.
3. PLACE TEMPORARY PEDESTRIAN BARRICADE PRIOR TO SIDEWALK CLOSURE PER SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS - SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES DETAIL.
4. WHEN COORDINATING TEMPORARY NO PARKING ZONES WITH THE TOWN, ENSURE TO EXTEND THE ZONES TO INCLUDE ANY TEMPORARY PEDESTRIAN ACCOMMODATIONS.

PROJECT NO: 4150-14-71

HWY: STH 57

COUNTY: DOOR

TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 2

SHEET

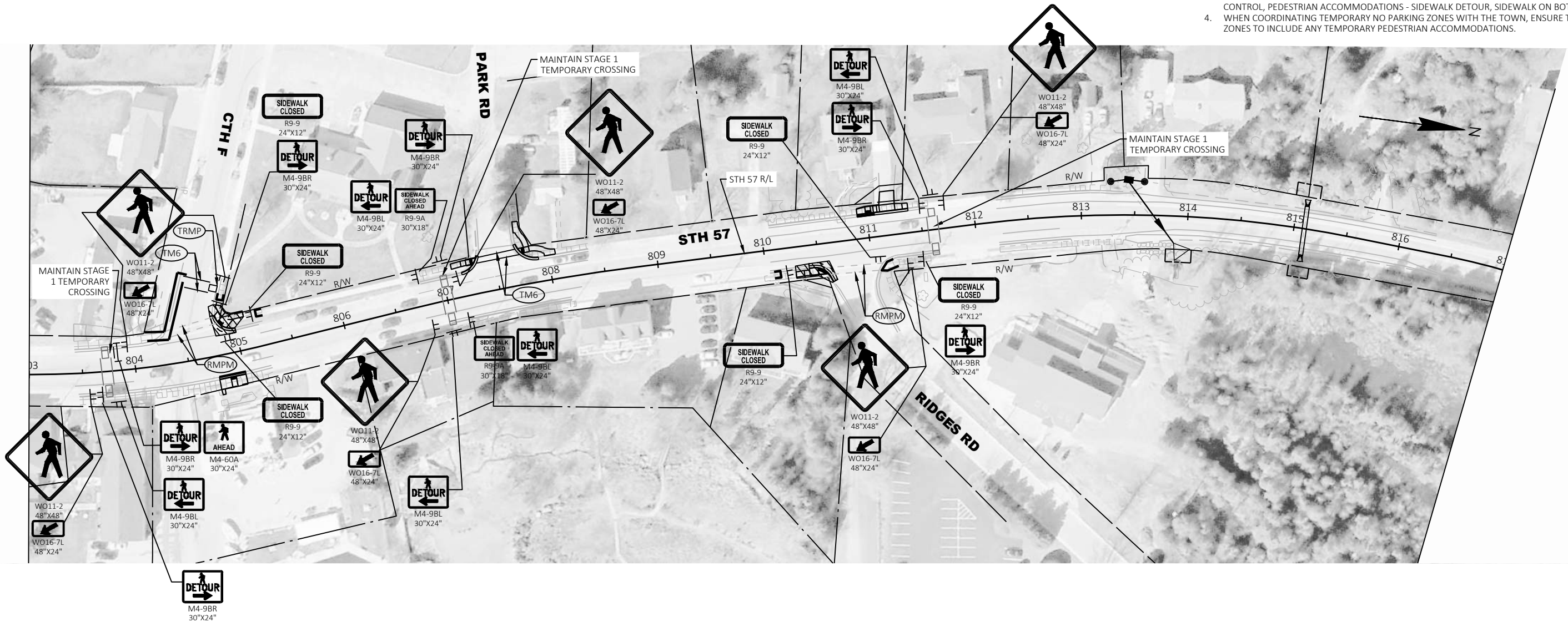
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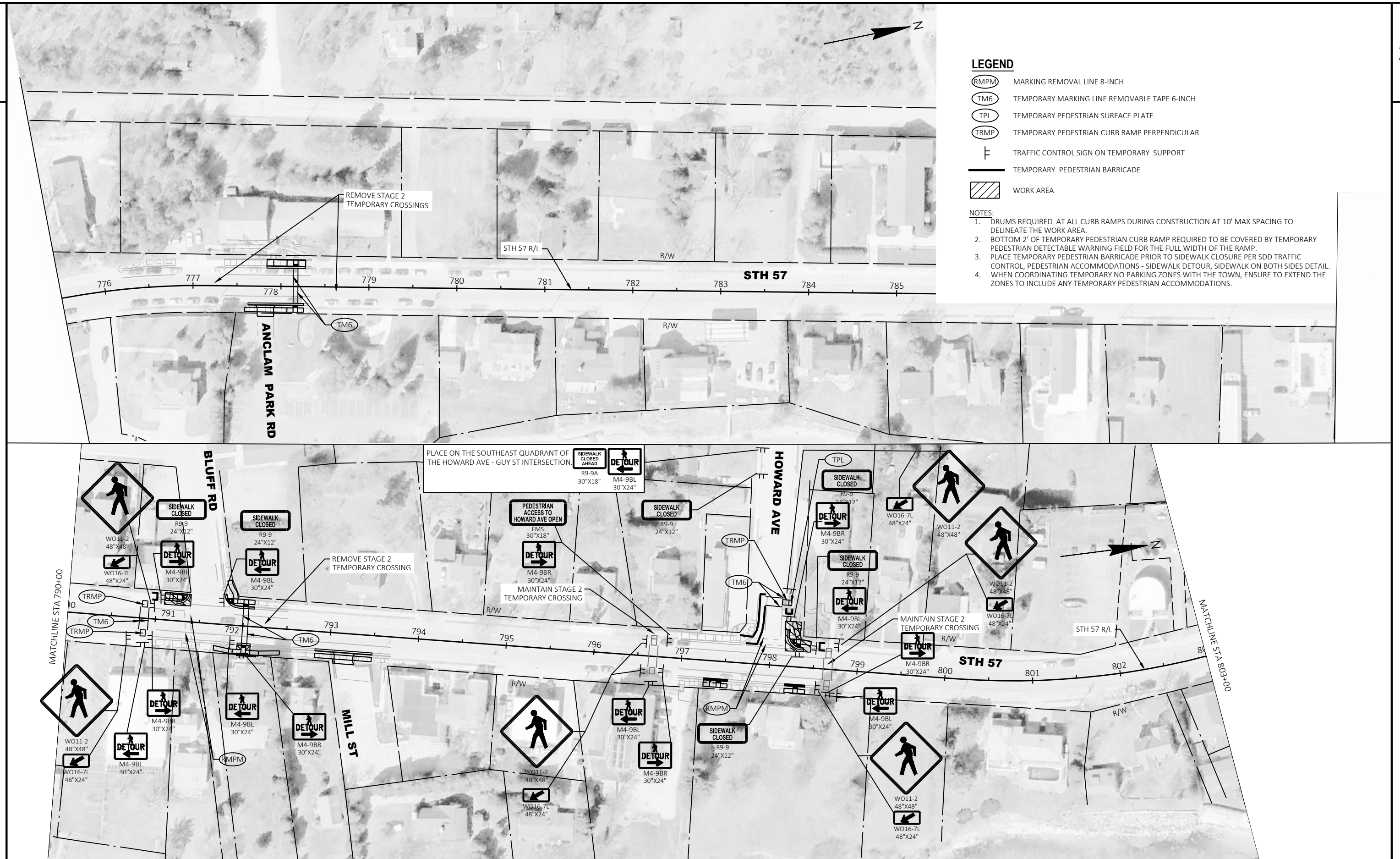
E

LEGEND

- (RMPLM) MARKING REMOVAL LINE 8-INCH
- (TM6) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- (TPL) TEMPORARY PEDESTRIAN SURFACE PLATE
- (TRMP) TEMPORARY PEDESTRIAN CURB RAMP PERPENDICULAR
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

- NOTES:
1. DRUMS REQUIRED AT ALL CURB RAMP DURING CONSTRUCTION AT 10' MAX SPACING TO DELINEATE THE WORK AREA.
 2. BOTTOM 2' OF TEMPORARY PEDESTRIAN CURB RAMP REQUIRED TO BE COVERED BY TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD FOR THE FULL WIDTH OF THE RAMP.
 3. PLACE TEMPORARY PEDESTRIAN BARRICADE PRIOR TO SIDEWALK CLOSURE PER SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS - SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES DETAIL.
 4. WHEN COORDINATING TEMPORARY NO PARKING ZONES WITH THE TOWN, ENSURE TO EXTEND THE ZONES TO INCLUDE ANY TEMPORARY PEDESTRIAN ACCOMMODATIONS.





PROJECT NO: 4150-14-71

HWY: STH 57

COUNTY: DOOR

TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 3

SHEET

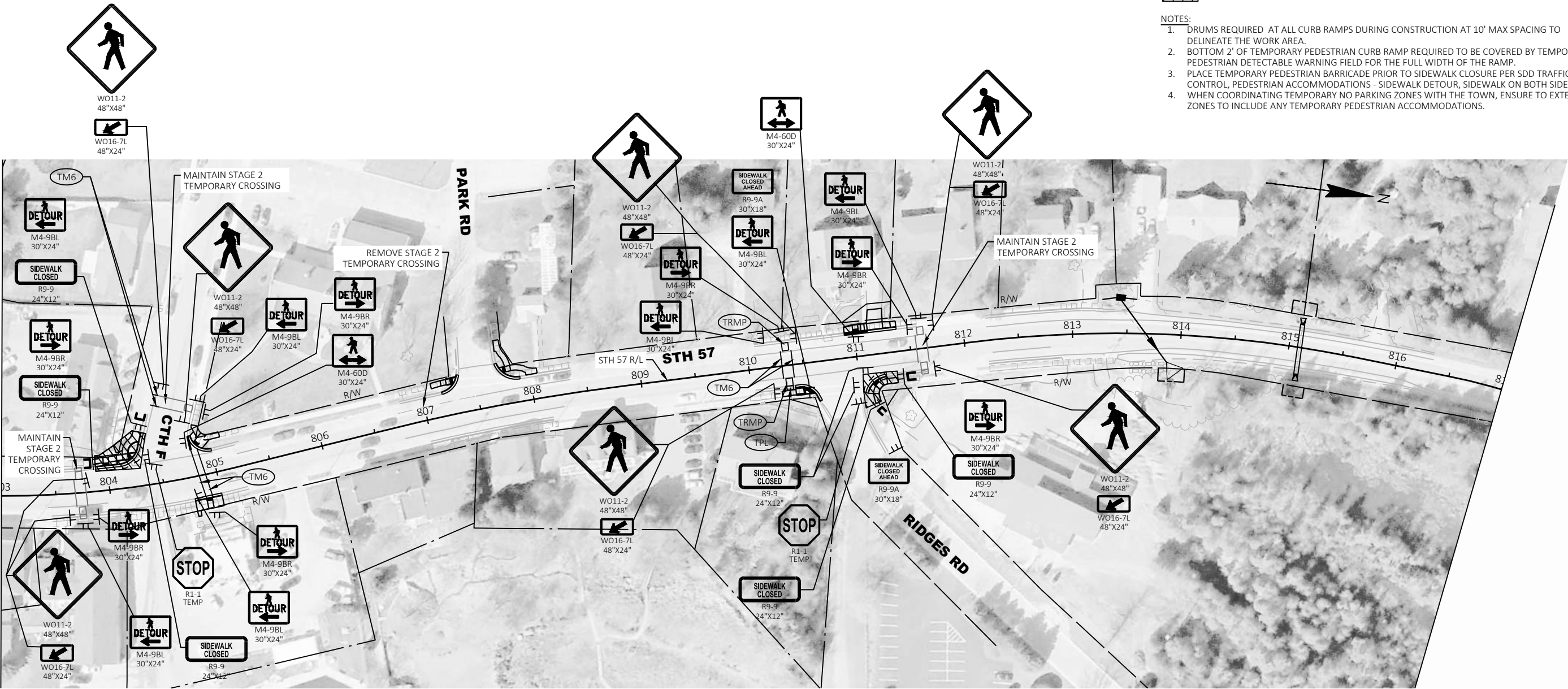
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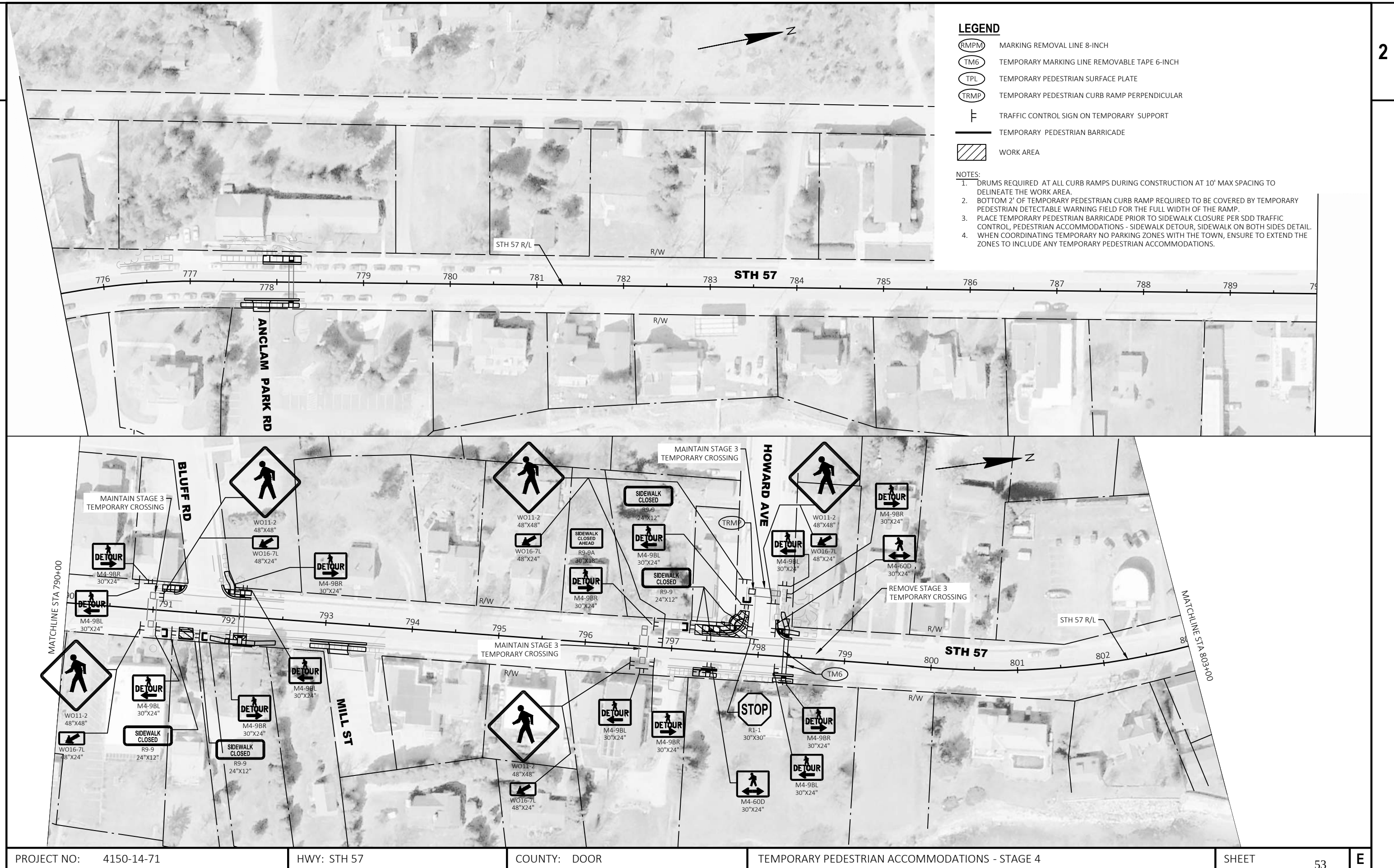
E

LEGEND

- (RMPM) MARKING REMOVAL LINE 8-INCH
- (TM6) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- (TPL) TEMPORARY PEDESTRIAN SURFACE PLATE
- (TRMP) TEMPORARY PEDESTRIAN CURB RAMP PERPENDICULAR
- ⊥ TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN BARRICADE
- ▨ WORK AREA

- NOTES:
1. DRUMS REQUIRED AT ALL CURB RAMP DURING CONSTRUCTION AT 10' MAX SPACING TO DELINEATE THE WORK AREA.
 2. BOTTOM 2' OF TEMPORARY PEDESTRIAN CURB RAMP REQUIRED TO BE COVERED BY TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD FOR THE FULL WIDTH OF THE RAMP.
 3. PLACE TEMPORARY PEDESTRIAN BARRICADE PRIOR TO SIDEWALK CLOSURE PER SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS - SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES DETAIL.
 4. WHEN COORDINATING TEMPORARY NO PARKING ZONES WITH THE TOWN, ENSURE TO EXTEND THE ZONES TO INCLUDE ANY TEMPORARY PEDESTRIAN ACCOMMODATIONS.





PROJECT NO: 4150-14-71

HWY: STH 57

COUNTY: DOOR

TEMPORARY PEDESTRIAN ACCOMMODATIONS - STAGE 4

SHEET

53

E

LEGEND

- (RMPM) MARKING REMOVAL LINE 8-INCH
- (TM6) TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH
- (TPL) TEMPORARY PEDESTRIAN SURFACE PLATE
- (TRMP) TEMPORARY PEDESTRIAN CURB RAMP PERPENDICULAR
- TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN BARRICADE
- WORK AREA

NOTES:

1. DRUMS REQUIRED AT ALL CURB RAMP DURING CONSTRUCTION AT 10' MAX SPACING TO DELINEATE THE WORK AREA.
2. BOTTOM 2' OF TEMPORARY PEDESTRIAN CURB RAMP REQUIRED TO BE COVERED BY TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD FOR THE FULL WIDTH OF THE RAMP.
3. PLACE TEMPORARY PEDESTRIAN BARRICADE PRIOR TO SIDEWALK CLOSURE PER SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATIONS - SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES DETAIL.
4. WHEN COORDINATING TEMPORARY NO PARKING ZONES WITH THE TOWN, ENSURE TO EXTEND THE ZONES TO INCLUDE ANY TEMPORARY PEDESTRIAN ACCOMMODATIONS.



Estimate Of Quantities

4150-14-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	6.000	6.000
0004	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0006	203.0220	Removing Structure (structure) 01. 828+55	EACH	1.000	1.000
0008	204.0110	Removing Asphaltic Surface	SY	273.000	273.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	77.000	77.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	31,930.000	31,930.000
0014	204.0150	Removing Curb & Gutter	LF	903.000	903.000
0016	204.0155	Removing Concrete Sidewalk	SY	750.000	750.000
0018	204.0165	Removing Guardrail	LF	479.000	479.000
0020	204.0220	Removing Inlets	EACH	2.000	2.000
0022	204.0245	Removing Storm Sewer (size) 01. 19x30-Inch	LF	64.000	64.000
0024	205.0100	Excavation Common	CY	3,760.000	3,760.000
0026	205.0300	Excavation Stone Piles and Stone Fences	CY	5.000	5.000
0028	205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	TON	12.000	12.000
0030	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 4150-14-71	EACH	1.000	1.000
0032	213.0100	Finishing Roadway (project) 01. 4150-14-71	EACH	1.000	1.000
0034	305.0110	Base Aggregate Dense 3/4-Inch	TON	370.000	370.000
0036	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,280.000	2,280.000
0038	416.0610	Drilled Tie Bars	EACH	88.000	88.000
0040	450.4000	HMA Cold Weather Paving	TON	1,740.000	1,740.000
0042	455.0605	Tack Coat	GAL	4,090.000	4,090.000
0044	460.2000	Incentive Density HMA Pavement	DOL	5,180.000	5,180.000
0046	460.6223	HMA Pavement 3 MT 58-28 S	TON	4,530.000	4,530.000
0048	460.6224	HMA Pavement 4 MT 58-28 S	TON	3,550.000	3,550.000
0050	465.0110	Asphaltic Surface Patching	TON	1,230.000	1,230.000
0052	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	50.000	50.000
0054	465.0315	Asphaltic Flumes	SY	13.000	13.000
0056	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0058	522.2424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	166.000	166.000
0060	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0062	522.2624	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	4.000	4.000
0064	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	903.000	903.000
0066	601.0600	Concrete Curb Pedestrian	LF	274.000	274.000
0068	602.0410	Concrete Sidewalk 5-Inch	SF	5,658.000	5,658.000
0070	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	210.000	210.000
0072	602.0615	Curb Ramp Detectable Warning Field Radial Natural Patina	SF	17.400	17.400
0074	602.0815	Concrete Driveway 7-Inch	SY	99.000	99.000
0076	606.0050	Riprap Extra-Light	CY	10.000	10.000
0078	608.0005	Storm Sewer Rock Excavation	CY	10.000	10.000
0080	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	16.000	16.000
0082	608.2419	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	134.000	134.000
0084	608.3015	Storm Sewer Pipe Class III-A 15-Inch	LF	16.000	16.000
0086	611.0639	Inlet Covers Type H-S	EACH	1.000	1.000
0088	611.0642	Inlet Covers Type MS	EACH	4.000	4.000
0090	611.3230	Inlets 2x3-FT	EACH	1.000	1.000
0092	611.3902	Inlets Median 2 Grate	EACH	2.000	2.000
0094	611.8110	Adjusting Manhole Covers	EACH	9.000	9.000
0096	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0098	612.0902.S	Insulation Board Polystyrene (inch) 01. 2-Inch	SY	10.000	10.000

Estimate Of Quantities

4150-14-71

Line	Item	Item Description	Unit	Total	Qty
0100	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000	2.000
0102	614.2330	MGS Guardrail 3 K	LF	166.000	166.000
0104	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0106	618.0100	Maintenance and Repair of Haul Roads (project) 01. 4150-14-71	EACH	1.000	1.000
0108	619.1000	Mobilization	EACH	1.000	1.000
0110	624.0100	Water	MGAL	100.000	100.000
0112	625.0100	Topsoil	SY	1,027.000	1,027.000
0114	628.1504	Silt Fence	LF	630.000	630.000
0116	628.1520	Silt Fence Maintenance	LF	946.000	946.000
0118	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0120	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0122	628.2008	Erosion Mat Urban Class I Type B	SY	811.000	811.000
0124	628.2023	Erosion Mat Class II Type B	SY	80.000	80.000
0126	628.7010	Inlet Protection Type B	EACH	22.000	22.000
0128	628.7015	Inlet Protection Type C	EACH	34.000	34.000
0130	628.7504	Temporary Ditch Checks	LF	40.000	40.000
0132	628.7555	Culvert Pipe Checks	EACH	34.000	34.000
0134	628.7570	Rock Bags	EACH	30.000	30.000
0136	629.0210	Fertilizer Type B	CWT	1.400	1.400
0138	630.0130	Seeding Mixture No. 30	LB	39.000	39.000
0140	630.0140	Seeding Mixture No. 40	LB	22.000	22.000
0142	630.0200	Seeding Temporary	LB	93.000	93.000
0144	630.0500	Seed Water	MGAL	45.000	45.000
0146	633.5200	Markers Culvert End	EACH	6.000	6.000
0148	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0150	637.2230	Signs Type II Reflective F	SF	16.500	16.500
0152	638.2102	Moving Signs Type II	EACH	10.000	10.000
0154	638.4000	Moving Small Sign Supports	EACH	2.000	2.000
0156	642.5001	Field Office Type B	EACH	1.000	1.000
0158	643.0300	Traffic Control Drums	DAY	6,377.000	6,377.000
0160	643.0420	Traffic Control Barricades Type III	DAY	55.000	55.000
0162	643.0705	Traffic Control Warning Lights Type A	DAY	110.000	110.000
0164	643.0715	Traffic Control Warning Lights Type C	DAY	77.000	77.000
0166	643.0900	Traffic Control Signs	DAY	9,961.000	9,961.000
0168	643.1000	Traffic Control Signs Fixed Message	SF	3.750	3.750
0170	643.1050	Traffic Control Signs PCMS	DAY	16.000	16.000
0172	643.1070	Traffic Control Cones 42-Inch	DAY	696.000	696.000
0174	643.3165	Temporary Marking Line Paint 6-Inch	LF	23,100.000	23,100.000
0176	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	1,618.000	1,618.000
0178	643.5000	Traffic Control	EACH	1.000	1.000
0180	644.1430	Temporary Pedestrian Surface Plate	SF	306.000	306.000
0182	644.1601	Temporary Pedestrian Curb Ramp	DAY	996.000	996.000
0184	644.1605	Temporary Pedestrian Detectable Warning Field	SF	408.000	408.000
0186	644.1810	Temporary Pedestrian Barricade	LF	1,415.000	1,415.000
0188	645.0130	Geotextile Type R	SY	52.000	52.000
0190	646.2020	Marking Line Epoxy 6-Inch	LF	6,180.000	6,180.000
0192	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	15,369.000	15,369.000
0194	646.6020	Marking Stop Line Epoxy 12-Inch	LF	38.000	38.000
0196	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	21,549.000	21,549.000

Estimate Of Quantities

4150-14-71

Line	Item	Item Description	Unit	Total	Qty
0198	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,032.000	1,032.000
0200	646.9100	Marking Removal Line 8-Inch	LF	580.000	580.000
0202	650.4000	Construction Staking Storm Sewer	EACH	7.000	7.000
0204	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	903.000	903.000
0206	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0208	650.8000	Construction Staking Resurfacing Reference	LF	7,652.000	7,652.000
0210	650.9000	Construction Staking Curb Ramps	EACH	19.000	19.000
0212	650.9500	Construction Staking Sidewalk (project) 01. 4150-14-71	EACH	1.000	1.000
0214	650.9911	Construction Staking Supplemental Control (project) 01. 4150-14-71	EACH	1.000	1.000
0216	690.0150	Sawing Asphalt	LF	1,546.000	1,546.000
0218	690.0250	Sawing Concrete	LF	595.000	595.000
0220	740.0440	Incentive IRI Ride	DOL	11,600.000	11,600.000
0222	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0224	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0226	SPV.0035	Special 01. Foundation Backfill	CY	1,267.000	1,267.000
0228	SPV.0035	Special 02. Streambed Material	CY	29.000	29.000
0230	SPV.0035	Special 03. Streambank Material	CY	74.000	74.000
0232	SPV.0060	Special 01. Apron Endwalls For Culvert Pipe Sloped Cross Drains Steel 24x38-Inch	EACH	2.000	2.000
0234	SPV.0075	Special 01. Street Sweeping	HRS	20.000	20.000

3

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

GRUBBING

					201.0205 GRUBBING STA
ROADWAY	STATION	TO	STATION	CATEGORY	
STH 57					
	814+95	-	815+22	0010	2
	827+79	-	828+91	0010	2
TOTAL 0010					4
FROGTOWN ROAD					
	201+40	-	202+11	0020	2
TOTAL 0020					2
PROJECT TOTAL					6

NOTE: CLEARING TO BE DONE BY OTHERS PRIOR TO CONSTRUCTION.

REMOVING CONCRETE ITEMS

		204.0150		204.0155			
		REMOVING		REMOVING			
		CURB & GUTTER		CONCRETE			
ROADWAY	STATION	TO	STATION	LOCATION	LF	SY	REMARKS
STH 57							
	771+09	-	772+06	LT	91	3	---
	771+65	-	772+06	RT	42	19	---
	777+58	-	778+27	RT	64	46	ANCLAM RD - EAST
	777+83	-	778+32	LT	44	40	ANCLAM RD - WEST
	791+09	-	791+39	LT	17	20	BLUFF RD - SW
	791+32	-	791+49	RT	16	14	BLUFF RD - SE
	791+68	-	792+44	RT	18	74	BLUFF RD - NE
	791+75	-	792+12	LT	36	29	BLUFF RD - NW
	792+83	-	793+49	RT	71	43	MILL ST - EAST
	797+26	-	797+54	RT	28	25	HOWARD AVE - SE
	797+33	-	797+86	LT	60	55	HOWARD AVE - SW
	798+15	-	798+46	LT	32	25	HOWARD AVE - NW
	798+19	-	798+43	RT	24	17	HOWARD AVE - NE
	803+87	-	804+07	RT	18	21	CTH F - SE
	803+89	-	804+41	LT	62	74	CTH F - SW
	804+75	-	805+00	RT	26	34	CTH F - NE
	804+78	-	805+10	LT	26	31	CTH F - NW
	807+09	-	807+38	LT	23	13	PARK RD - SW
	807+67	-	808+07	LT	28	36	PARK RD - NW
	810+27	-	810+66	RT	30	15	RIDGES RD - SE
	810+91	-	811+40	LT	49	27	RIDGES RD - NW
	811+02	-	811+35	RT	25	23	RIDGES RD - NE
	812+80	-	813+38	RT	40	48	RIDGES SANCTUARY - EAST
	812+99	-	813+38	LT	33	18	RIDGES SANCTUARY - WEST
TOTAL 0010					903	750	

REMOVING SMALL PIPE CULVERTS

				203.0100
				REMOVING SMALL PIPE CULVERTS
ROADWAY	STATION	DESCRIPTION	EACH	
STH57				REMARKS
	813+64	19"X30" RCP, 71 LF	1	
	815+10	30" CMP, 51 LF	1	
	828+55	46"X60" CMP, 63 LF	1	SOUTHEAST END IS WEDGED INTO 50"X36" CONCRETE MASONRY BOX CULVERT
TOTAL 0010			3	

REMOVING STRUCTURE

			203.0220.01
			36"X50" BOX CULVERT, STA 828+55
ROADWAY	STATION	DESCRIPTION	EACH
STH57			
	828+55	36"X50" CONC BOX CULVERT, 42 LF	1
TOTAL 0010			1

REMOVING ASPHALTIC SURFACE

204.0110						
REMOVING ASPHALTIC SURFACE						
ROADWAY	STATION	TO	STATION	LOCATION	SY	REMARKS
STH 57						
	777+53	-	778+32	RT	28	ANCLAM RD - EAST, ADJUSTING MH
	777+83	-	778+28	LT	10	ANCLAM RD - WEST
	785+76	-	785+81	RT	3	ADJUSTING MH
	791+09	-	791+39	LT	5	BLUFF RD - SW
	791+32	-	791+49	RT	4	BLUFF RD - SE
	791+68	-	792+44	RT	4	BLUFF RD - NE
	791+75	-	792+12	LT	12	BLUFF RD - NW
	792+83	-	793+49	RT	27	MILL ST - EAST
	794+12	-	794+18	RT	3	ADJUSTING MH
	797+10	-	797+54	RT	9	HOWARD AVE - SE, ADJUSTING MH
	797+33	-	797+97	LT	26	HOWARD AVE - SW, ADJUSTING MH
	798+15	-	798+46	LT	10	HOWARD AVE - NW
	798+19	-	798+43	RT	6	HOWARD AVE - NE
	803+87	-	804+07	RT	5	CTH F - SE
	803+89	-	804+41	LT	29	CTH F - SW
	804+75	-	805+00	RT	6	CTH F - NE
	804+63	-	805+10	LT	9	CTH F - NW, ADJUSTING MH
	806+27	-	806+33	RT	3	ADJUSTING MH
	807+09	-	807+38	LT	7	PARK RD - SW
	807+67	-	808+35	LT	15	PARK RD - NW, ADJUSTING MH
	810+27	-	810+66	RT	9	RIDGES RD - SE
	810+91	-	811+40	LT	32	RIDGES RD - NW
	811+02	-	811+35	RT	8	RIDGES RD - NE
	812+80	-	813+38	RT	3	RIDGES SANCTUARY - EAST
TOTAL 0010					273	

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

REMOVING GUARDRAIL						
CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF
STH 57						
0010		769+34	-	770+95	RT	169
FROGTOWN ROAD						
0010		203+48.69	-	204+27	RT	110
TOTAL 0010						279
FROGTOWN ROAD						
0020		200+82.93	-	203+48.69	RT	200
TOTAL 0020						200
PROJECT TOTAL						479

REMOVING ASPHALTIC SURFACE MILLING

ROADWAY	STATION	TO	STATION	CATEGORY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
STH 57						
	763+16.18	-	790+00	0010	20	9,220
	790+00	-	817+00	0010	38	8,850
	817+00	-	839+67.89	0010	15	8,570
FROGTOWN ROAD						
	203+49	-	204+27	0010	4	310
TOTAL 0010					77	26,950
STH 57						
	772+05	-	790+00	0020	---	2,380
	790+00	-	812+99	0020	---	2,600
TOTAL 0020					---	4,980
PROJECT TOTAL					77	31,930

REMOVING INLETS

ROADWAY	LOCATION	204.0220 REMOVING INLETS EACH
STH 57		
	771+53, 26' LT	1
	804+34, 35' LT	1
TOTAL 0010		2

REMOVING STORM SEWER

ROADWAY	STATION	TO	STATION	204.0245.01 REMOVING STORM SEWER 19X30-INCH LF
STH 57				
	771+53, 26' LT	-	771+53, 38' RT	64
TOTAL 0010				64

EXCAVATION STONE PILES AND STONE FENCES

ROADWAY	STATION	TO	STATION	LOCATION	205.0300 EXCAVATION STONE PILES AND STONE FENCES CY
FROGTOWN ROAD					
	201+51	-	201+65	RT	5
TOTAL 0020					5

EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL

ROADWAY	STATION	TO	STATION	LOCATION	205.0501.S EXCAVATION, HAULING, AND DISPOSAL OF PETROLEUM CONTAMINATED SOIL TON
STH 57					
	804+76	-	805+01	18' RT TO SLOPE INTERCEPTS	12
TOTAL 0010					12

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

EARTHWORK SUMMARY

DIVISION	STATION - STATION	DESCRIPTION	205.0100	*	*	608.0005	*	*	SPV.0035.01 FOUNDATION BACKFILL (5) [CY]	*	*	
			COMMON EXCAVATION (1) [CY]	SALVAGED/UNUSABLE PAVEMENT MATERIAL (2) [CY]	AVAILABLE MATERIAL (3) [CY]	STORM SEWER ROCK EXCAVATION (4) [CY]	UNEXPANDED FILL [CY]	EXPANDED FILL	EXPANSION FACTOR	EXPANSION FACTOR	MASS ORDINATE +/- (6) [CY]	WASTE (7) [CY]
								EXPANSION FACTOR				
								1.25	1.15			
1	771+10 - 772+05	SHALLOW PIPE TRANSITION	540	20	520	10	---	---	390	530	530	
	812+79 - 814+48	SHALLOW PIPE TRANSITION	1,160	370	790	---	---	---	305	790	790	
	814+48 - 815+62	SHALLOW PIPE TRANSITION	760	240	520	---	---	---	226	520	520	
	827+79 - 829+07	SHALLOW PIPE TRANSITION	1,300	240	1,060	---	---	---	346	1,060	1,060	
QUANTITY TOTALS			3,760	870	2,890	10	---	---	1,267	2,900	2,900	

NOTES:
*INDICATES FOR INFORMATION ONLY (NOT A BID ITEM)
(1) COMMON EXCAVATION IS THE CUT. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUALE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUALE PAVEMENT MATERIAL
(4) STORM SEWER ROCK EXCAVATION IS INCLUDED IN THE SALVAGED/UNSUALE PAVEMENT MATERIAL. ROCK EXCAVATION NECESSARY TO PLACE PIPES SHALL BE PAID AS STORM SEWER ROCK EXCAVATION.
STORM SEWER ROCK EXCAVATION TO BE BACKFILLED WITH FOUNDATION BACKFILL.
(5) SHALLOW PIPE TRANSITIONS BELOW THE PAVEMENT SECTION PER THE DETAIL ARE TO BE BACKFILLED WITH ITEM SPV.0035.01 FOUNDATION BACKFILL. FOUNDATION BACKFILL IN PIPE TRENCH IS INCIDENTAL TO THE PIPE ITEMS.
(6) MASS ORDINATE = AVAILABLE MATERIAL, (+) PLUS INDICATES AN EXCESS OF MATERIAL AT A LOCATION, (-) MINUS INDICATES A SHORTAGE OF MATERIAL AT A LOCATION
(7) WASTE = MASS ORDINATE
(8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME ARE FOR GENERAL INFORMATION ONLY.

3

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

ALL ITEMS CATEGORY 0010
UNLESS NOTED OTHERWISE.

					BASE AGGREGATE DENSE			
					305.0110	305.0120	624.0100	
							WATER	
					BASE AGGREGATE DENSE 3/4-INCH	BASE AGGREGATE DENSE 1 1/4-INCH	AGGREGATE COMPACTION	DUST CONTROL
ROADWAY	STATION	TO	STATION	CATEGORY	TON	TON	MGAL	MGAL
STH 57								
	763+16.18	-	790+00	0010	90	240	10	5
	790+00	-	817+00	0010	60	1,110	20	5
	817+00	-	839+67.89	0010	120	470	10	5
FROGTOWN ROAD								
	203+48.69	-	204+27	0010	10	---	15	5
UNDISTRIBUTED								
					70	460	15	10
				SUBTOTAL	350	2,280	70	30
				TOTAL 0010	350	2,280	100	
FROGTOWN ROAD								
	200+82.93	-	203+48.69	0020	20	---	---	---
				SUBTOTAL	20	---	---	---
				TOTAL 0020	20	---	---	
				PROJECT TOTAL	370	2,280	100	

HMA PAVEMENT ITEMS									
ROADWAY	STATION	TO	STATION	CATEGORY	450.4000	455.0605	460.6223	460.6224	465.0110
					HMA COLD WEATHER PAVING TON	TACK COAT GAL	HMA PAVEMENT 3 MT 58-28 S TON	HMA PAVEMENT 4 MT 58-28 S TON	ASPHALTIC SURFACE PATCHING TON
STH 57									
	763+16.18	-	790+00	0010	580	1,170	1,290	1,010	220
	790+00	-	817+00	0010	590	1,190	1,320	1,030	570
	817+00	-	839+67.89	0010	540	1,080	1,200	930	230
FROGTOWN ROAD									
	203+49	-	204+27	0010	30	40	50	40	---
*									
UNDISTRIBUTED									
				0010	---	---	---	---	210
				TOTAL 0010	1,740	3,480	3,860	3,010	1,230
STH 57									
	763+16.18	-	790+00	0020	---	290	320	250	---
	790+00	-	817+00	0020	---	320	350	270	---
FROGTOWN ROAD									
	200+82.93	-	203+48.69	0020	---	---	---	20	---
				TOTAL 0020	---	610	670	540	---
				PROJECT TOTAL	1,740	4,090	4,530	3,550	1,230
*UNDISTRIBUTED QUANTITY TO ACCOUNT FOR MINOR REPAIRS (PATCHING AND POPOUTS) AND FOR RAMPING AT MATCH POINTS AS DIRECTED BY THE ENGINEER.									

ASPHALTIC FLUMES			
ROADWAY	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY
STH 57			
	813+33	LT	6
	813+41	RT	7
		TOTAL 0010	13

PREPARE FOUNDATION FOR ASPHALTIC PAVING	
	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING 4150-14-71 EACH
LOCATION	
PROJECT WIDE	1
TOTAL 0010	1

CULVERT ITEMS														
								522.2424 CULVERT PIPE		522.2624 APRON ENDWALLS FOR		633.5200	650.6000	SPV.0060.01
								REINFORCED CONCRETE		CULVERT PIPE REINFORCED		MARKERS	CONSTRUCTION	APRON ENDWALLS FOR
								HORIZONTAL ELLIPTICAL		CONCRETE HORIZONTAL		CULVERT	STAKING PIPE	CULVERT PIPE SLOPED
								CLASS HE-IV 24X38-INCH		ELLIPTICAL 24X38-INCH		END	CULVERTS	CROSS DRAINS STEEL 24X38-
ROADWAY	INLET	OFFSET	ELEV	DISCHARGE	OFFSET	ELEV	SLOPE	LF	EACH	EACH	EACH	EACH	EACH	
	STATION			STATION			FT/FT							
STH 57														
	815+09.46	21.12' LT	586.75	815+10.14	24.88' RT	585.30	0.0315	46	---	2	1	2		
	828+17.89	28.91' LT	587.05	828+18.08	31.09' RT	586.50	0.0092	60	2	2	1	---		
	828+23.88	28.94' LT	587.05	828+24.08	31.06' RT	586.50	0.0092	60	2	---	1	---		
TOTALS								166	4	4	3	2		

*ADDITIONAL QUANTITIES SHOWN ON THE STORM SEWER STRUCTURE TABLE.

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES			
ROADWAY	STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
STH 57			
	765+75	RT	3
	777+80	RT	3
	793+20	RT	3
	797+65	LT	3
	811+20	LT	5
	825+95	LT	3
	827+40	RT	3
	828+80	RT	27
		TOTAL 0010	50

NOTES:
1. ASSUME 4" THICKNESS.
2. SEE PLANS FOR LIMITS.

3

3

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

CONCRETE ITEMS												
ROADWAY	STATION	TO	STATION	LOCATION	416.0610	601.0411	601.0600	602.0410	602.0515	602.0615	602.0815	REMARKS
					DRILLED TIE	CONCRETE CURB	CONCRETE CURB	CONCRETE	CURB RAMP DETECTABLE	CURB RAMP DETECTABLE	CONCRETE DRIVEWAY 7-	
					BARS	& GUTTER 30-	PEDESTRIAN	SIDEWALK 5-	WARNING FIELD NATURAL	WARNING FIELD RADIAL	INCH	
					EACH	LF	LF	INCH	PATINA	NATURAL PATINA	SY	
STH 57												
	771+09	-	772+06	LT	4	91	---	8	---	---	---	---
	771+65	-	772+06	RT	2	42	---	165	---	---	---	---
	777+58	-	778+27	RT	4	64	---	254	10	---	17	ANCLAM RD - EAST
	777+83	-	778+32	LT	6	44	42	334	10	---	---	ANCLAM RD - WEST
	791+09	-	791+39	LT	4	16	18	164	10	---	---	BLUFF RD - SW
	791+32	-	791+49	RT	4	16	---	124	---	---	---	BLUFF RD - SE
	791+68	-	792+44	RT	4	18	18	462	10	---	---	BLUFF RD - NE
	791+75	-	792+12	LT	4	36	10	271	20	---	---	BLUFF RD - NW
	792+83	-	793+49	RT	6	71	---	218	---	---	19	MILL ST - EAST
	797+26	-	797+54	RT	4	28	---	198	10	---	11	HOWARD AVE - SE
	797+33	-	797+86	LT	2	59	67	421	20	---	---	HOWARD AVE - SW
	798+15	-	798+46	LT	2	31	---	247	20	---	---	HOWARD AVE - NW
	798+19	-	798+43	RT	4	24	---	169	10	---	---	HOWARD AVE - NE
	803+87	-	804+07	RT	4	18	18	173	10	---	---	CTH F - SE
	803+89	-	804+41	LT	4	61	36	623	20	---	---	CTH F - SW
	804+75	-	805+00	RT	4	25	---	309	10	---	---	CTH F - NE
	804+78	-	805+10	LT	4	26	---	253	10	---	---	CTH F - NW
	807+09	-	807+38	LT	4	23	16	123	10	---	---	PARK RD - SW
	807+67	-	808+07	LT	4	28	10	329	10	---	---	PARK RD - NW
	810+27	-	810+66	RT	2	30	17	150	---	17.4	---	RIDGES RD - SE
	810+91	-	811+40	LT	4	48	22	188	10	---	11	RIDGES RD - NW
	811+02	-	811+35	RT	4	25	---	234	10	---	---	RIDGES RD - NE
	812+80	-	813+38	RT	2	48	---	169	---	---	33	RIDGES SANCTUARY - EAST
	812+99	-	813+38	LT	2	31	---	72	---	---	8	RIDGES SANCTUARY - WEST
TOTAL 0010					88	903	274	5,658	210	17.4	99	

3

RIPRAP						
ROADWAY	STATION	TO	STATION	LOCATION	606.0050	645.0130
					RIPRAP EXTRA- LIGHT CY	GEOTEXTILE TYPE R SY
STH 57						
	813+49	-	814+00	RT	8	42
	815+05	-	815+15	RT	2	10
TOTAL 0010					10	52

3

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

				STORM SEWER STRUCTURES												
							520.8000 CONCRETE COLLARS FOR PIPE	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	611.0639 INLET COVERS TYPE H-S	611.0642 INLET COVERS TYPE MS	611.3230 INLETS 2X3-FT	611.3902 INLETS MEDIAN 2 GRATE	**** 633.5200 MARKERS CULVERT END	650.4000 CONSTRUCTION STAKING STORM SEWER		
STRUCTURE	STATION	OFFSET*	LOCATION	RIM ELEVATION	INVERT** ELEVATION	DEPTH** FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	REMARKS	
10	771+52.62	33.54' RT	STH 57	---	592.67	---	---	1	---	---	---	---	1	1	---	
11	771+53.46	26.46' LT	STH 57	595.89	592.85	3.31	---	---	---	2	---	1	---	1	NO SLOPE ON TYPE MS COVERS	
20	813+87.58	25.57' RT	STH 57	---	585.64	---	---	1	---	---	---	---	1	1	---	
21	813+44.50	32.91' LT	STH 57	588.50	586.17	2.60	---	---	---	2	---	1	---	1	TWO SLOPES ON TYPE MS COVERS	
30	804+31.79	35.91' LT	STH 57	591.28	586.65***	3.79***	---	---	1	---	1	---	---	1	---	
21A	813+27.78	31.33' LT	STH 57	---	---	---	1	---	---	---	---	---	---	1	---	
21B	813+58.75	31.32' LT	STH 57	---	---	---	1	---	---	---	---	---	---	1	---	
TOTALS							2	2	1	4	1	2	2	7		

REMARKS
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
**DEPTH = RIM ELEV - INVERT ELEV + PIPE THICKNESS
***DEPTH = RIM ELEV - INVERT - 6" CASTING - 6" ADJUSTMENT + PIPE THICKNESS, VERIFY EXISTING INVERT
****ADDITIONAL QUANTITIES SHOWN ON THE CULVERT ITEMS TABLE.

3

STORM SEWER PIPES								
FROM STR		TO STR	INLET ELEV	DISCHARGE ELEV	SLOPE FT/FT	608.0315	608.2419	608.3015
						STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	STORM SEWER PIPE CLASS III-A 15-INCH LF
11	-	10	592.85	592.67	0.0030	---	60	---
21	-	20	586.17	585.64	0.0072	---	74	---
15	-	21	586.30	586.21	0.0056	16	---	---
16	-	21	586.66	586.27	0.0244	---	---	16
TOTALS						16	134	16

ADJUSTING STRUCTURE COVERS			
ROADWAY	STATION, OFFSET	611.8110	611.8115
		ADJUSTING MANHOLE COVERS EACH	ADJUSTING INLET COVERS EACH
STH 57			
	777+53, 15' RT	1	---
	785+79, 14' RT	1	---
	794+15, 16' RT	1	---
	797+10, 18' RT	1	---
	797+58, 21' LT	---	1
	797+97, 15' RT	1	---
	804+63, 57' LT	1	---
	806+30, 17' RT	1	---
	807+71, 21' LT	1	---
	808+35, 16' LT	1	---
TOTAL 0010		9	1

MGS GUARDRAIL ITEMS														
ROADWAY	STATION	TO	STATION	CATEGORY	614.0010	614.2330	614.2610	*FOR INFORMATION ONLY						
					BARRIER SYSTEM GRADING SHAPING FINISHING EACH	MGS GUARDRAIL 3 K LF	MGS GUARDRAIL TERMINAL EAT EACH	* EXCAVATION COMMON CY	* BORROW CY	* SALVAGED TOPSOIL SY	* FERTILIZER TYPE B CWT	* SEEDING MIXTURE NO. 20 LB	* EROSION MAT CLASS II TYPE B SY	* SEED WATER MGAL
FROGTOWN ROAD														
	203+48.69	-	204+27	0010	1	---	1	3	57	240	0.1	1	240	8
TOTAL 0010					1	---	1	3	57	240	0.1	1	240	8
FROGTOWN ROAD														
	200+82.93	-	203+48.69	0020	1	166	1	6	60	214	0.1	1	214	7
TOTAL 0020					1	166	1	6	60	214	0.1	1	214	7
PROJECT TOTAL					2	166	2	9	117	454	0.2	2	454	15

<u>INSULATION BOARD POLYSTYRENE 2-INCH</u>				
612.0902.S.01				
INSULATION BOARD POLYSTYRENE				
2-INCH				
ROADWAY	STATION	TO	STATION	LOCATION
SY				
STH 57				
	828+14	-	828+28	19' LT
				10
TOTAL 0010				10

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

EROSION CONTROL ITEMS

					628.1504	628.1520	628.1905	628.1910	628.2008	628.2023	628.7010	628.7015	628.7504	628.7555	628.7570
					SILT FENCE		MOBILIZATIONS	MOBILIZATIONS	EROSION MAT	EROSION MAT	INLET	INLET	TEMPORARY	CULVERT PIPE	ROCK BAGS
ROADWAY	STATION	TO	STATION	LOCATION	LF	LF	EROSION	EROSION	URBAN CLASS I	CLASS II TYPE B	PROTECTION	PROTECTION	DITCH CHECKS	CHECKS	EACH
							CONTROL	CONTROL	TYPE B	TYPE B	TYPE B	TYPE C	LF	EACH	EACH
STH 57															
	771+09	-	772+06	LT	---	---	---	---	29	---	4	---	---	---	---
	771+65	-	772+06	RT	92	138	---	---	9	60	---	---	---	---	---
	772+06	-	778+32	LT+RT	---	---	---	---	34	---	---	2	---	---	---
	778+28	-	791+08	LT+RT	---	---	---	---	---	---	---	6	---	---	---
	791+09	-	791+39	LT	---	---	---	---	1	---	1	1	---	---	---
	791+32	-	793+48	RT	---	---	---	---	43	---	---	1	---	---	---
	791+75	-	792+12	LT	---	---	---	---	21	---	1	---	---	---	---
	793+49	-	798+42	RT	---	---	---	---	27	---	---	1	---	---	---
	797+33	-	797+86	LT	---	---	---	---	15	---	2	1	---	---	---
	798+15	-	798+46	LT	---	---	---	---	17	---	2	---	---	---	---
	798+19	-	798+43	RT	---	---	---	---	17	---	---	1	---	---	---
	798+43	-	803+87	LT+RT	---	---	---	---	---	---	---	4	---	---	---
	803+89	-	804+41	LT	---	---	---	---	9	---	---	1	---	---	---
	804+78	-	805+10	LT+RT	---	---	---	---	19	---	---	1	---	---	---
	805+10	-	807+09	LT+RT	---	---	---	---	---	---	---	2	---	---	---
	807+09	-	807+38	LT	---	---	---	---	19	---	---	1	---	---	---
	807+67	-	808+07	LT	---	---	---	---	23	---	---	1	---	---	---
	808+07	-	810+27	LT	---	---	---	---	---	---	---	1	---	---	---
	810+28	-	815+62	RT	62	93	---	---	55	---	---	---	15	---	---
	810+90	-	815+62	LT	78	117	---	---	84	---	2	---	---	8	---
	827+79	-	829+07	RT	---	---	---	---	145	---	---	---	15	---	---
	827+79	-	829+07	LT	40	60	---	---	74	---	---	---	---	16	---
FROGTOWN ROAD															
	203+48.69	-	204+27		115	173	---	---	---	---	---	---	---	---	15
UNDISTRIBUTED					100	150	6	3	170	20	10	10	10	10	15
TOTAL 0010					487	731	6	3	811	80	22	34	40	34	30
FROGTOWN ROAD															
	200+82.93	-	203+48.69		113	170	---	---	---	---	---	---	---	---	---
UNDISTRIBUTED					30	45	---	---	---	---	---	---	---	---	---
TOTAL 0020					143	215	---	---	---	---	---	---	---	---	---
PROJECT TOTAL					630	946	6	3	811	80	22	34	40	34	30

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

RESTORATION ITEMS											
*											
					625.0100	629.0210	630.0130	630.0140	630.0200	630.0500	
						FERTILIZER	SEEDING	SEEDING			
					TOPSOIL	TYPE B	MIXTURE NO. 30	MIXTURE	SEEDING	SEED	
ROADWAY	STATION	TO	STATION	LOCATION	SY	CWT	LB	NO. 40	TEMPORARY	WATER	REMARKS
STH 57											
	771+09	-	772+06	LT	29	---	---	---	---	---	---
	771+65	-	772+06	RT	80	---	5	---	8	4	---
	777+58	-	778+27	RT	30	---	---	---	---	---	ANCLAM RD - EAST
	777+83	-	778+32	LT	4	---	---	---	---	---	ANCLAM RD - WEST
	791+09	-	791+39	LT	1	---	---	---	---	---	BLUFF RD - SW
	791+32	-	791+49	RT	2	---	---	---	---	---	BLUFF RD - SE
	791+68	-	792+44	RT	25	---	---	---	---	---	BLUFF RD - NE
	791+75	-	792+12	LT	21	---	---	---	---	---	BLUFF RD - NW
	792+83	-	793+49	RT	17	---	---	---	---	---	MILL ST - EAST
	797+26	-	797+54	RT	10	---	---	---	---	---	HOWARD AVE - SE
	797+33	-	797+86	LT	15	---	---	---	---	---	HOWARD AVE - SW
	798+15	-	798+46	LT	17	---	---	---	---	---	HOWARD AVE - NW
	798+19	-	798+43	RT	17	---	---	---	---	---	HOWARD AVE - NE
	803+87	-	804+07	RT	---	---	---	---	---	---	CTH F - SE
	803+89	-	804+41	LT	9	---	---	---	---	---	CTH F - SW
	804+75	-	805+00	RT	6	---	---	---	---	---	CTH F - NE
	804+78	-	805+10	LT	14	---	---	---	---	---	CTH F - NW
	807+09	-	807+38	LT	19	---	---	---	---	---	PARK RD - SW
	807+67	-	808+07	LT	23	---	---	---	---	---	PARK RD - NW
	810+27	-	810+66	RT	10	---	---	---	---	---	RIDGES RD - SE
	810+91	-	811+40	LT	12	---	---	---	---	---	RIDGES RD - NW
	811+02	-	811+35	RT	7	---	---	---	---	---	RIDGES RD - NE
	812+80	-	815+62	RT	120	---	6	---	9	4	RIDGES SANCTUARY - EAST
	812+99	-	815+62	LT	114	---	4	---	6	3	RIDGES SANCTUARY - WEST
	827+79		829+07	RT	145	---	9	---	14	7	---
	827+79		829+07	LT	74	---	7	---	11	5	---
			CULVERT LOCATIONS		---	0.2	---	5	8	4	PROJECT WIDE
			CURB RAMP LOCATIONS		---	0.2	---	12	18	9	PROJECT WIDE
UNDISTRIBUTED											
					206	1.0	8	5	19	9	
TOTAL 0010					1,027	1.4	39	22	93	45	

*FERTILIZER SHALL NOT BE USED WITHIN 20' OF WETLANDS OR WATERWAYS.

MOVING SIGNS

			638.2102	638.4000	REMARKS
			MOVING	MOVING	
			SIGNS	SMALL SIGN	
			TYPE II	SUPPORTS	
ROADWAY	STATION	LOCATION	EACH	EACH	
STH 57					
	797+81	LT	1	---	STOP SIGN (R1-1)
	804+28	LT	1	---	STOP SIGN (R1-1)
	805+00	LT	1	---	CTH EE/F (M1-5A), ARROWS (M3-X), ATV ROUTE (D11-10)
	807+25	LT	1	---	STOP SIGN (R1-1)
	811+10	RT	1	---	STOP SIGN (R1-1)
	813+25	RT	1	---	NO PARKING, 7AM - 7PM, NOV 1 - MAY 1 (R8-3hP), 35 MPH (R2-1)
	815+00	LT	1	---	30 MPH (R2-1)
	828+39	LT	1	2	BAILEYS HARBOR, UNINCORPORATED
FROGTOWN ROAD					
	204+05	RT	1	---	STOP SIGN (R1-1)
	204+20	RT	1	---	LEFT ARROW (W1-6L)

TOTAL 0010 10 2

NOTE: CONTACT TOWN OF BAILEYS HARBOR PUBLIC WORKS SUPERVISOR
RYAN WEISGERBER AT 920-421-0704 FOR THE MOVING OF THE FOLLOWING SIGNS:
-PARK ROAD STREET SIGN, 807+26 LT
-RIDGES ROAD STREET SIGN, 811+09 RT
-FROGTOWN ROAD, HWY 57 STREET SIGNS, 204+00 RT
-NO PARKING, 7AM - 7PM, NOV 1 - MAY 1 (R8-3hP)
771+75 LT
772+05 RT

PERMANENT SIGNING

							SIGN SIZE		634.0616	637.2230	
							W	X	H	POSTS WOOD 4X6-INCH X 16-FT	SIGNS TYPE II REFLECTIVE F
ROADWAY	STATION	SIDE	SIGN NO.	SIGN CODE	SIGN SIZE	IN		IN	EACH	SF	
STH 57											
	778+13	RT	01	W11-2	2S	30	X	30	1	6.25	
			01A	W16-7L	2S	24	X	12	---	2.00	
	778+20	LT	02	W11-2	2S	30	X	30	1	6.25	
			02A	W16-7L	2S	24	X	12	---	2.00	
TOTAL 0010								2		16.50	

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

TRAFFIC CONTROL

			**								**					
			643.0300		643.0420		643.0705		643.0715		643.0900		643.1050		643.5000	
			TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL	
			DRUMS		BARRICADES TYPE III		WARNING LIGHTS TYPE A		WARNING LIGHTS TYPE C		TRAFFIC CONTROL SIGNS		PCMS		CONTROL	
STAGE	DURATION	LOCATION	*NO.	DAY	*NO.	DAY	*NO.	DAY	*NO.	DAY	*NO.	DAY	*NO.	DAY	EACH	
PRIOR TO CONSTRUCTION	7	PROJECT WIDE	5	70	---	---	---	---	5	70		---	2	14	---	
PARK ROAD CLOSURE	5	PROJECT WIDE	---	---	10	50	20	100	---	---	7	35	---	---	---	
DURING CONSTRUCTION	130	PROJECT WIDE	---	---	---	---	---	---	---	---	22	2,860	---	---	---	
UNDISTRIBUTED																
PROJECT WIDE			7		5		10		7		290		2		1	
TOTAL 0010			77		55		110		77		3,185		16		1	

*FOR INFORMATION ONLY
**ADDITIONAL QUANTITIES SHOW UP ELSEWHERE IN PLANS. SEE TEMPORARY PEDESTRIAN ACCOMMODATIONS TABLE.

TEMPORARY PEDESTRIAN ACCOMMODATIONS

			**		**											
			643.0300		643.0900		643.1000		643.1070		643.3350		644.1430		644.1601	
			TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TEMPORARY MARKING		TEMPORARY		TEMPORARY	
			DRUMS		CONTROL SIGNS		CONTROL SIGNS		CONTROL CONES		CROSSWALK		PEDESTRIAN		PEDESTRIAN	
									42-INCH		REMOVABLE		CURB RAMP		DETECTABLE	
											TAPE 6-INCH				WARNING FIELD	
STAGE	*DURATION		*NO	DAY	*NO	DAY	SF	*NO	DAY	LF	SF	*NO	DAY	SF	LF	LF
1	24		95	2,280	74	1,776	---	12	288	433	180	13	312	104	270	95
2	18		75	1,350	88	1,584	---	12	288	358	90	18	324	144	590	295
3	18		55	990	79	1,422	3.75	---	---	419	36	13	234	104	400	190
4	18		35	630	48	864	---	---	---	408	---	7	126	56	155	---
UNDISTRIBUTED																
			1,050		1,130		---		120		---		---		---	
TOTAL 0010			6,300		6,776		3.75		696		1,618		306		996	

*FOR INFORMATION ONLY
**ADDITIONAL QUANTITIES SHOW UP ELSEWHERE IN PLANS. SEE TRAFFIC CONTROL TABLE.
RESET EXISTING PERMANENT STOP SIGNS BEFORE MOVING ON TO NEXT STAGE.

ALL ITEMS CATEOGRY 0010
UNLESS NOTED OTHERWISE.

PAVEMENT MARKING									
				643.3165	646.2020	646.4720	646.6020	646.6466	646.7420
				TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)	MARKING LINE EPOXY 6-INCH (WHITE)	MARKING LINE SAME DAY EPOXY 6-INCH (YELLOW)	MARKING STOP LINE EPOXY 12-INCH	COLD WEATHER MARKING EPOXY 6-INCH	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH
ROADWAY	STATION	TO	STATION	LF	LF	LF	LF	LF	LF
STH 57									
	763+16.18	-	790+00	8,100	1,045	5,356	---	6,401	80
	790+00	-	817+00	8,100	734	5,328	---	6,062	952
	817+00	-	839+67.89	6,900	4,401	4,685	38	9,086	---
TOTAL 0010				23,100	6,180	15,369	38	21,549	1,032

SAWING PAVEMENT

		690.0150		690.0250	
		SAWING		SAWING	
		ASPHALT		CONCRETE	
ROADWAY	STATION	TO	STATION	LF	LF
STH 57					
	763+16.18	-	790+00	242	65
	790+00	-	817+00	1202	530
	817+00	-	839+67.89	102	---
TOTAL 0010				1,546	595

CONSTRUCTION STAKING

		650.5500		650.8000		650.9000		650.9500.01	
		CONSTRUCTION STAKING CURB		CONSTRUCTION STAKING		CONSTRUCTION		CONSTRUCTION	
		GUTTER AND CURB & GUTTER		RESURFACING REFERENCE		STAKING CURB		STAKING SIDEWALK	
		LF		LF		EACH		EACH	
ROADWAY	STATION	TO	STATION	LF	LF	EACH	EACH	EACH	EACH
STH 57									
	763+16.18	-	771+09	---	793	---	---	---	---
	771+09.00		772+06	133	97	---	---	---	---
	772+06.00		790+00	108	1,794	2	---	---	---
	790+00	-	791+09	---	109	---	---	---	---
	791+09		792+43	86	134	3	---	---	---
	792+43		812+89	497	2,046	14	---	---	---
	812+89		813+37	---	48	---	---	---	---
	813+37		817+00	79	363	---	---	---	---
	817+00	-	839+67.89	---	2,268	---	---	---	---
PROJECT WIDE									
				---	---	---	1	1	
TOTAL 0010				903	7,652	19	1	1	

FOR ITEM 650.4000 CONSTRUCTION STAKING STORM SEWER SYSTEM, SEE STORM SEWER STRUCTURE TABLE.
FOR ITEM 650.6000 CONSTRUCTION STAKING PIPE CULVERT, SEE CULVERT ITEMS TABLE.

STREET SWEEPING

		SPV.0075.01
		STREET SWEEPING
ROADWAY	LOCATION	HRS
STH 57		
PROJECT WIDE		20
TOTAL 0010		20

STREAMBED & STREAM BANK MATERIAL

		SPV.0035.02		SPV.0035.03	
		STREAMBED		STREAMBANK	
		MATERIAL		MATERIAL	
ROADWAY	STATION	TO	STATION	LOCATION	CY
STH 57					
	827+79	-	829+07	RT	17
	827+79	-	829+07	LT	12
TOTAL 0010				29	74

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
4150-14-21



SUMMIT ROAD - BAILEYS HARBOR
SUMMIT ROAD TO CTH Q
STH 57
DOOR COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE, AND OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMP. LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
ELECTRIC POLE
TELEPHONE POLE
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)
ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER
UTILITY NUMBER
PARALLEL OFFSETS

R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)
COMPENSABLE
NON-COMPENSABLE

CONVENTIONAL UTILITY SYMBOLS

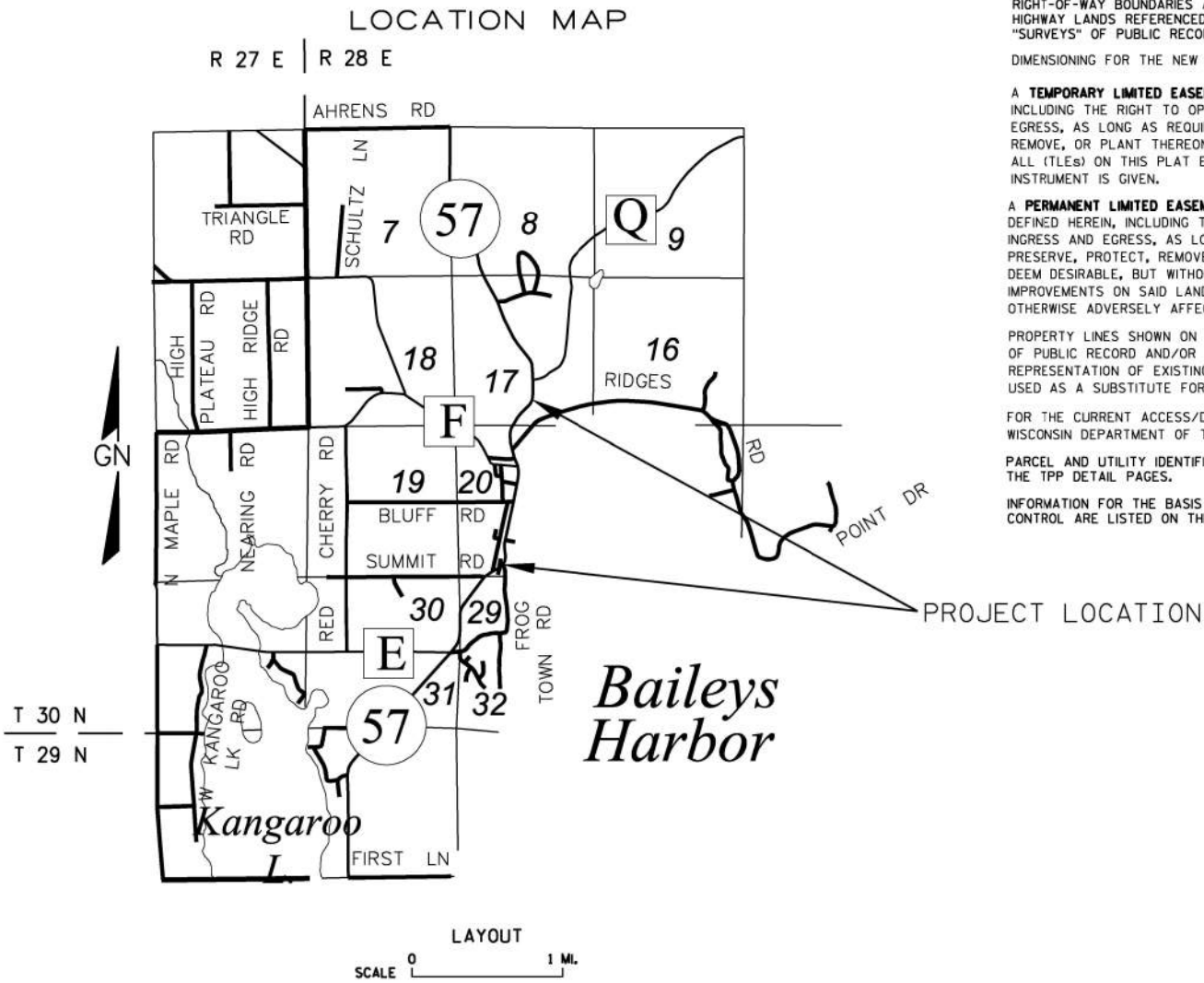
WATER
GAS
TELEPHONE
OVERHEAD
TRANSMISSION LINES
ELECTRIC
CABLE TELEVISION
FIBER OPTIC
SANITARY SEWER
STORM SEWER

CURVE DATA

LONG CHORD
LONG CHORD BEARING
RADIUS
DEGREE OF CURVE
CENTRAL ANGLE
LENGTH OF CURVE
TANGENT
DIRECTION AHEAD
DIRECTION BACK

LCH
LCB
R
D
Δ/DELTA
L
T
DA
DB

CONVENTIONAL ABBREVIATIONS			
ACCESS RIGHTS	AR	OUTLOT	OL
ACRES	AC	PAGE	P
AHEAD	AH	POINT OF TANGENCY	PT
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
CENTERLINE	C/L	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	POINT OF BEGINNING	POB
CONCRETE	CONC	POINT OF CURVATURE	PC
COUNTY	CO	POINT OF COMPOUND CURVE	PCC
COUNTY TRUNK HIGHWAY	CTH	POINT OF INTERSECTION	PI
DISTANCE	DIST	REMAINING	REM
CORNER	COR	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
DOCUMENT NUMBER	DOC	RIGHT	RT
EASEMENT	EASE	RIGHT OF WAY	R/W
EXISTING	EX	SECTION	SEC
GAS VALVE	GV	SEPTIC VENT	SEPV
GRID NORTH	GN	SQUARE FEET	SF
HIGHWAY EASEMENT	HE	STATE TRUNK HIGHWAY	STH
IDENTIFICATION	ID	STATION	STA
LAND CONTRACT	LC	TELEPHONE PEDESTAL	TP
LEFT	LT	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	TRANSPORTATION PROJECT PLAT	TPP
NATIONAL GEODETIC SURVEY	NGS	UNITED STATES HIGHWAY	USH
NUMBER	NO	VOLUME	V



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4150-14-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DOOR COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A **TEMPORARY LIMITED EASEMENT (TLE)** IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT (PLE)** IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

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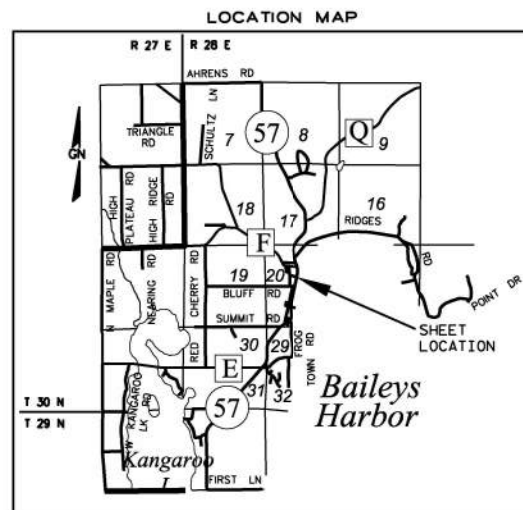
TRANSPORTATION PROJECT PLAT NO: 4150-14-21 - 4.02

PART OF LOTS 7 AND 10, BLOCK 6 AND LOT 7, BLOCK 5, PLAT OF CITIZENS ADDITION TO VILLAGE PLAT OF BAILEYS HARBOR, BEING A PART OF GOVERNMENT LOT 2, SECTION 20, TOWNSHIP 30 NORTH, RANGE 28 EAST, TOWN OF BAILEYS HARBOR, DOOR COUNTY, WISCONSIN.

RELOCATION ORDER STH 57 SUMMIT ROAD - BAILEYS HARBOR
(SUMMIT ROAD TO CTH Q), DOOR COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



raSmith
CREATIVITY BEYOND
ENGINEERING

I, SHANE M. ZODROW, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

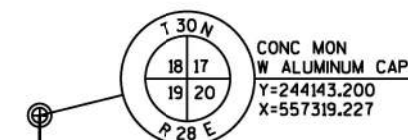


Shane M. Zodrow 10/14/2021
DATE
SHANE M. ZODROW
AGENT FOR R.A. SMITH
P.L.S. NUMBER 2869

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE
WISCONSIN DEPARTMENT OF TRANSPORTATION.
CURT VAN EREM 10/15/2021
PRINTED NAME SIGNATURE DATE:

DOC #: 847383
RECORDED ON:
10/18/2021 08:16:38 AM
CAREY PETERSILKA
REGISTER OF DEEDS
DOOR COUNTY, WI
FEE AMOUNT PAID: 25.00
**The above recording information
verifies that this document has
been electronically recorded and
returned to the submitter.**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4150-14-21 - 4.02
AMENDMENT NO:
SHEET 1 OF 1



TOWN

LOT 11
BLOCK 6
PLAT OF
CITIZENS ADDITION
TO VILLAGE PLAT
OF BAILEYS
HARBOR

LOT 10
BLOCK 6
PLAT OF
CITIZENS ADDITION
TO VILLAGE PLAT
OF BAILEYS
HARBOR

LOT 12
BLOCK 6
PLAT OF
CITIZENS ADDITION
TO VILLAGE PLAT
OF BAILEYS
HARBOR

BIKE RACK
EXEMPT FROM
TLE

TLE-
SLOPES

BLDG

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TRANSPORTATION PROJECT PLAT NO: 4150-14-21 - 4.03

PART OF LOT 1 OF CERTIFIED SURVEY MAP 3406, BEING A PART OF GOVERNMENT LOT 2, ALSO THAT PART OF LOT 3, BLOCK 7, PLAT OF CITIZENS ADDITION TO VILLAGE PLAT OF BAILEYS HARBOR, BEING A PART OF GOVERNMENT LOT 1, ALL IN SECTION 20, TOWNSHIP 30 NORTH, RANGE 28 EAST, TOWN OF BAILEYS HARBOR, DOOR COUNTY, WISCONSIN.

RELOCATION ORDER STH 57 SUMMIT ROAD - BAILEYS HARBOR
(SUMMIT ROAD TO CTH O), DOOR COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

R/L STH 57
CURVE DATA
PI = 802+71.76
Y = 242,530.605
X = 559,479.060
PC = 800+12.91
DELTA = 32°57'34" LT
BACK = S11°34'21"W
AHEAD = N21°23'14"W
D = 06°32'53"
T = 258.85'
L = 503.35'
R = 875.00'

R/L STH 57
CURVE DATA
PI = 807+70.22
Y = 243008.111
X = 559292.051
DELTA = 06°47'42" RT
BACK = S21°23'14"E
AHEAD = N14°35'31"W
D = 03°00'56"
T = 112.80'
L = 225.34'
R = 1900.00'

raSmith
CREATIVITY BEYOND
ENGINEERING

I, SHANE M. ZODROW, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



Shane M. Zodrow 10/14/2021
DATE
SHANE M. ZODROW
AGENT FOR R.A. SMITH
P.L.S. NUMBER 2869

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE
WISCONSIN DEPARTMENT OF TRANSPORTATION.

CURT VAN EREM 10/15/2021
PRINTED NAME SIGNATURE DATE

DOC #: 847384
RECORDED ON:
10/18/2021 08:18:52 AM
CAREY PETERSILKA
REGISTER OF DEEDS
DOOR COUNTY, WI
FEE AMOUNT PAID: 25.00
**The above recording information
verifies that this document has
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returned to the submitter.**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4150-14-21 - 4.03
AMENDMENT NO:
SHEET 1 OF 1

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
STH 57	4150-II-00 - 4.03	66'	2010
STH 57	4150-II-00 - 4.04	66'	2010
CTH F	CSM 3406	66'	2020
CTH F	CITIZENS ADDITION TO VILLAGE PLAT OF BAILEYS HARBOR	66'	UNKNOWN
PARK ROAD	4150-II-00 - 4.04	VARIES	2010

COURSE	LENGTH	RADIUS	CHORD BEARING	CHORD
515-PC	147.58'	1900.00'	S19°09'43"E	147.54'
515-PT	77.76'	1900.00'	N15°45'52"W	77.75'
PT-516	136.25'	875.00'	S16°55'34"E	136.12'
516-PC	367.10'	875.00'	S00°26'47"E	364.41'

RW STATION & OFFSET TABLE			
509	811+16.90	1933.92' LT	
510	804+11.80	31.99' LT	
511	804+87.24	34.81' LT	
512	807+27.46	35.28' LT	
513	807+78.21	53.48' LT	
514	807+86.00	35.58' LT	
515	808+05.00	0.00'	
516	803+80.00	0.00'	
517	803+89.00	31.53' LT	
559	808+05.00	31.26' RT	
560	807+63.19	29.33' RT	
561	804+07.73	37.27' RT	
562	803+80.00	33.93' RT	

TLE STATION & OFFSET TABLE			
T732	803+80.00	32.45' LT	
T733	804+19.12	51.00' LT	
T734	807+79.02	63.92' LT	
T735	808+05.00	34.79' LT	

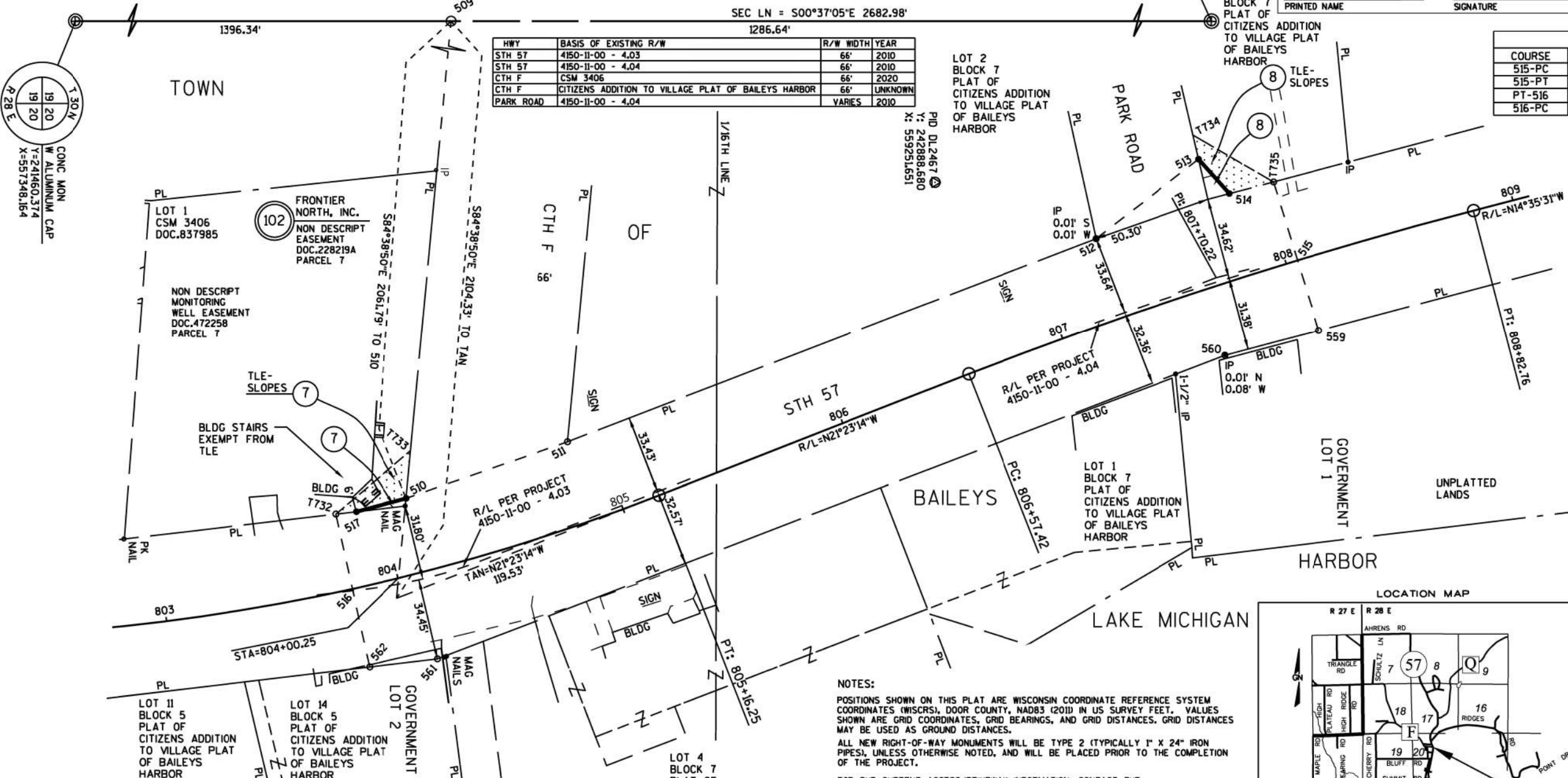
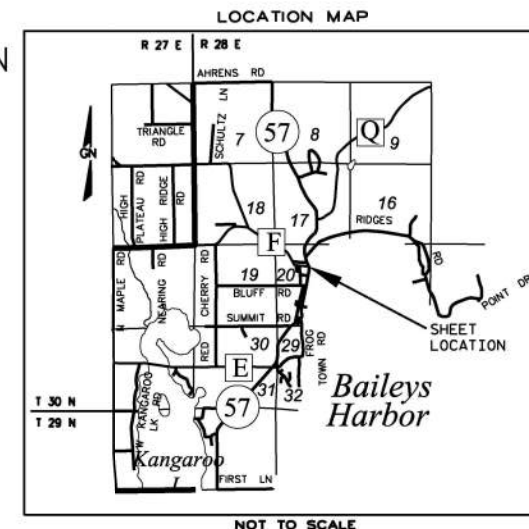
R/W COURSE TABLE			
510-511	N19°14'34"W	72.59'	
511-512	N21°04'26"W	240.35'	
512-513	N37°49'22"W	55.03'	
513-514	N48°21'19"E	19.59'	
514-T735	N14°52'40"W	19.37'	
T735-515	N73°03'47"E	34.79'	
515-559	N73°03'47"E	31.26'	
559-560	S14°52'40"E	41.19'	
560-561	S21°04'26"E	358.11'	
561-562	S06°46'32"E	29.05'	
562-516	S77°32'06"W	33.93'	
516-T732	S77°32'06"W	32.45'	
T732-517	N06°41'04"W	8.72'	
517-510	N14°59'56"W	21.98'	

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WICRS), DOOR COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN DOOR COUNTY AS SHEET 2 OF 2 OF DOCUMENT # 847152.



UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
102	FRONTIER NORTH, INC.	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED					
PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	AREAS S.F. REQUIRED	TLE S.F.	PLE S.F.
7	RPS III, LLC.	FEE, TLE	33	-	33
8	TOWN OF BAILEYS HARBOR	FEE, TLE	82	-	82

TRANSPORTATION PROJECT PLAT NO: 4150-14-21 - 4.04

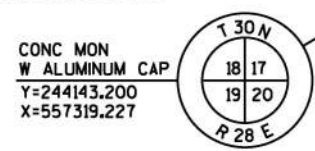
PART OF LOTS 1, 2 & 3, CSM 1497, IN AND INCLUDING PART OF GOVERNMENT LOT 1, SECTION 20, TOWNSHIP 30 NORTH, RANGE 28 EAST, TOWN OF BAILEYS HARBOR, DOOR COUNTY, WISCONSIN.

RELOCATION ORDER STH 57 SUMMIT ROAD - BAILEYS HARBOR
(SUMMIT ROAD TO CTH O), DOOR COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02, (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS Laid OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.

2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



R/W CURVE TABLE

COURSE	LENGTH	RADIUS	CHORD BEARING	CHORD
524-529	130.35'	475.72'	S05°03'42"E	129.94'
530-531	5.69'	541.72'	N12°36'37"W	5.69'
532-533	41.71'	553.72'	N10°04'00"W	41.70'
534-535	101.47'	541.72'	N02°34'42"W	101.32'
524-P525	49.22'	475.72'	S00°10'33"E	49.19'
P526-P527	24.02'	463.72'	S04°35'59"E	24.02'
P528-P529	24.29'	475.72'	N04°36'09"W	24.29'
P528-529	56.84'	475.72'	S09°29'18"E	56.80'
563-PC	325.70'	1100.00'	S06°06'35"E	324.51'
563-PT	31.64'	1100.00'	N03°11'49"E	31.64'

R/W COURSE TABLE

T759-563	S74°53'20"E	30.41'
563-P520	S74°53'20"E	37.15'
P520-524	S02°47'16"W	62.38'
524-529	SEE CURVE DATA	
529-558	S12°54'40"E	198.75'
558-R/L	S75°24'29"W	34.16'
R/L-PC	N14°35'31"W	83.79'
PC-TAN	N14°35'31"W	83.45'
TAN-T739	S88°13'03"W	27.47'
T739-530	N12°54'40"W	27.29'
530-531	SEE CURVE DATA	
531-532	S81°37'06"W	12.03'
532-533	SEE CURVE DATA	
533-534	N83°42'07"E	12.00'
534-535	SEE CURVE DATA	
535-T759	N02°47'16"E	76.79'
P520-P521	S88°04'06"E	10.00'
P521-P522	S02°47'16"W	19.17'
P522-P523	N89°06'36"W	10.01'
P523-P520	N02°47'16"E	19.35'
P523-524	S02°47'16"W	43.03'
524-P525	SEE CURVE DATA	
P525-P526	N85°56'30"E	12.00'
P526-P527	SEE CURVE DATA	
P527-P528	S84°38'22"W	12.00'
P528-P529	SEE CURVE DATA	
P529-530	S02°47'16"W	15.40'
P530-P536	S02°47'16"W	22.61'
P536-P537	N89°12'51"W	12.01'
P537-P538	N02°47'16"E	22.85'
P538-P539	S88°04'06"E	12.00'
539-P536	N02°47'16"E	38.78'

SCHEDULE OF SIGN STRUCTURES

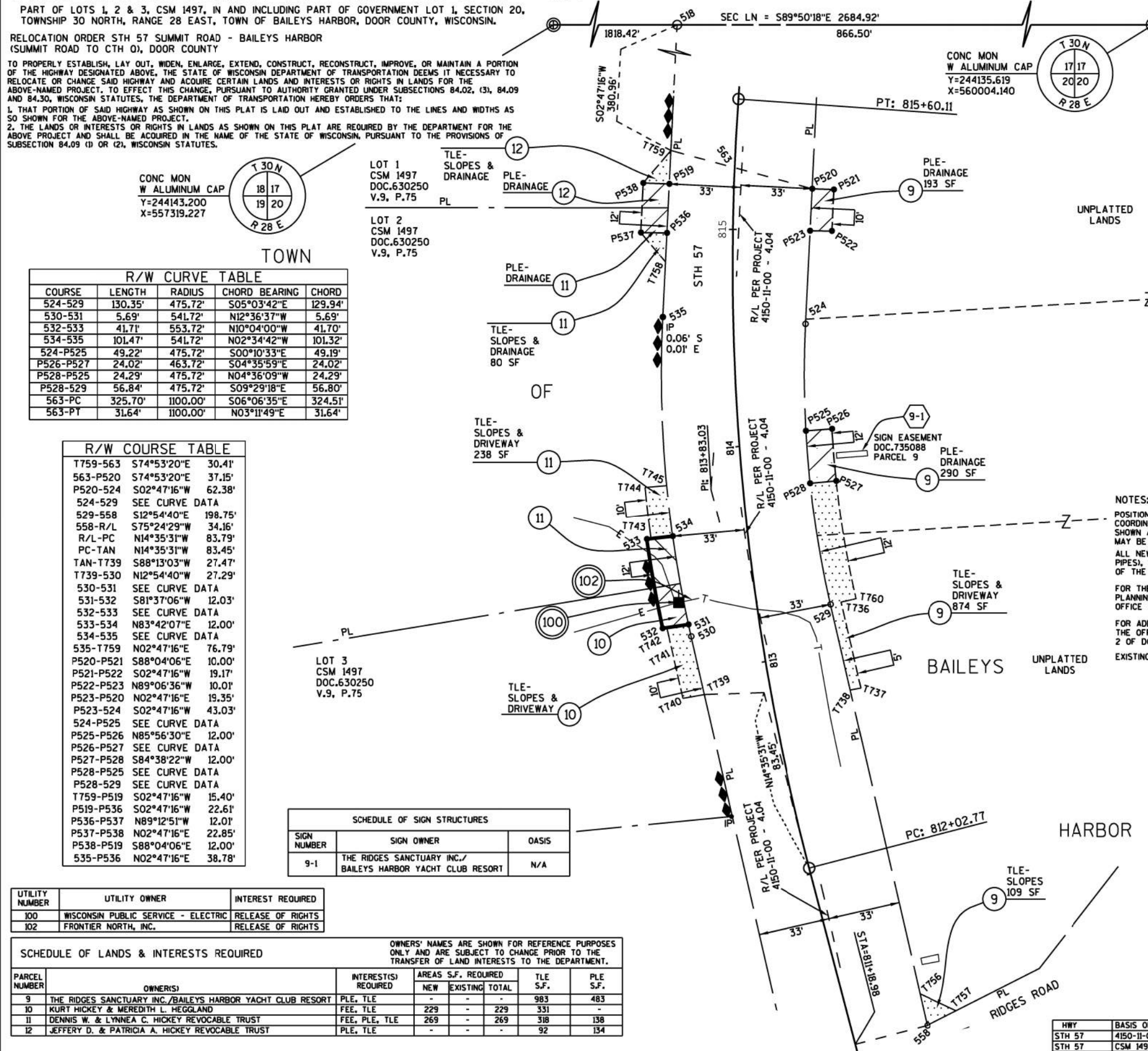
SIGN NUMBER	SIGN OWNER	OASIS
9-1	THE RIDGES SANCTUARY INC./ BAILEYS HARBOR YACHT CLUB RESORT	N/A

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
100	WISCONSIN PUBLIC SERVICE - ELECTRIC	RELEASE OF RIGHTS
102	FRONTIER NORTH, INC.	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	AREAS S.F. REQUIRED	TLE S.F.	PLE S.F.
9	THE RIDGES SANCTUARY INC./BAILEYS HARBOR YACHT CLUB RESORT	PLE, TLE	-	983	483
10	KURT HICKEY & MEREDITH L. HEGGLAND	FEE, TLE	229	331	-
11	DENNIS W. & LYNNEA C. HICKEY REVOCABLE TRUST	FEE, PLE, TLE	269	318	138
12	JEFFERY D. & PATRICIA A. HICKEY REVOCABLE TRUST	PLE, TLE	-	92	134

OWNERS' NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

raSmith
CREATIVITY BEYOND
ENGINEERING

I, SHANE M. ZODROW, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.



Shane M. Zodrow 10/14/2021
DATE
SHANE M. ZODROW
AGENT FOR R.A. SMITH
P.L.S. NUMBER 2869

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE
WISCONSIN DEPARTMENT OF TRANSPORTATION.CURT VAN EREM
PRINTED NAME

SIGNATURE

10/15/2021
DATE

- 100 WISCONSIN PUBLIC SERVICE - ELECTRIC
NO RECORD OF EASEMENT PARCEL 10
- 102 FRONTIER NORTH, INC.
NO RECORD OF EASEMENT PARCEL 10

R/L STH 57
CURVE DATA
PI = 813+83.03
Y = 243,601.407
X = 559,137.597
DELTA = 18°36'47" RT
BACK = S14°35'31"E
AHEAD = N04°01'16"E
D = 05°12'31"
T = 180.26'
L = 357.34'
R = 1100.00'

RW STATION & OFFSET TABLE

518	818+87.03	89.90' LT
P519	815+20.00	29.81' LT
P520	815+20.00	36.20' RT
P521	815+20.00	46.20' RT
P522	815+00.00	45.74' RT
P523	815+00.00	35.74' RT
524	814+55.64	33.45' RT
P525	814+05.00	31.24' RT
P526	814+05.00	43.25' RT
P527	813+80.00	43.20' RT
P528	813+80.00	31.20' RT
529	813+21.52	33.78' RT
530	813+16.49	32.03' LT
531	813+22.00	32.44' LT
532	813+22.00	44.46' LT
533	813+62.00	46.45' LT
534	813+62.00	34.44' LT
535	814+60.35	32.39' LT
P536	814+98.00	30.37' LT
P537	814+98.00	42.38' LT
P538	815+20.00	41.81' LT
558	811+18.98	34.16' RT
563	815+28.47	0.00'

TLE STATION & OFFSET TABLE

T760	813+22.50	45.74' RT
T736	813+21.93	38.77' RT
T737	812+80.00	41.19' RT
T738	812+80.00	36.19' RT
T756	811+33.98	34.60' RT
T757	811+22.20	48.81' RT
T739	812+90.00	30.34' LT
T740	812+90.00	40.35' LT
T741	813+15.78	42.00' LT
T742	813+22.00	42.46' LT
T743	813+62.00	44.45' LT
T744	813+85.00	44.85' LT
T745	813+85.00	34.85' LT
T758	814+85.00	30.92' LT
T759	815+35.00	29.68' LT

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DOOR COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

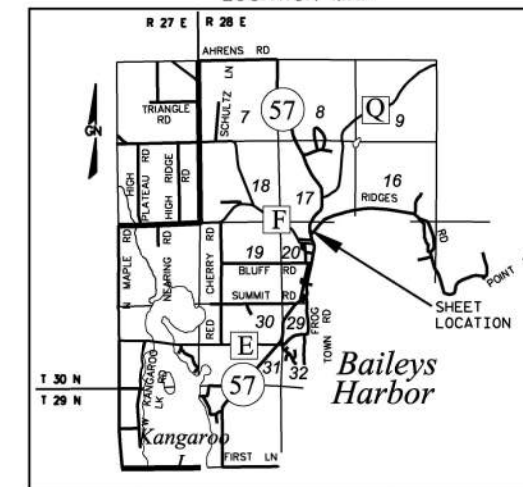
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN DOOR COUNTY AS SHEET 2 OF 2 OF DOCUMENT# 847152.

EXISTING ACCESS CONTROL ALONG STH 57 ESTABLISHED FROM CSM 1497.

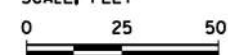
LOCATION MAP



NOT TO SCALE

HWY	BASIS OF EXISTING R/W	R/W WIDTH YEAR
STH 57	4150-11-00 - 4.04	66' 2010
STH 57	CSM 1497	66' 2002

SCALE, FEET



GN

TRANSPORTATION PROJECT PLAT NO: 4150-14-21 - 4.05

PART OF GOVERNMENT LOTS 2 AND 3, SECTION 17, TOWNSHIP 30 NORTH, RANGE 28 EAST, TOWN OF
BAILEYS HARBOR, DOOR COUNTY, WISCONSIN.RELOCATION ORDER STH 57 SUMMIT ROAD - BAILEYS HARBOR
(SUMMIT ROAD TO CTH O), DOOR COUNTYTO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION
OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO
RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE
ABOVE-NAMED PROJECT. TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTIONS 84.02, (3), 84.09
AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS
SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE
ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF
SUBSECTION 84.09 (1) OR (2), WISCONSIN STATUTES.R/L STH 57
CURVE DATA
PI = 830+39.33
Y = 244,983.640
X = 559,943.376
PT = 832+22.30
DELTA = 45°50'38" LT
BACK = S45°11'44"W
AHEAD = N00°38'54"W
D = 11°48'49"
T = 205.09'
L = 388.06'
R = 485.00'COMPUTED FROM STATE
CARTOGRAPHER'S OFFICE
SURVEY CONTROL FINDER
WEBSITE.
NAD 83/91 STATE PLANE
COORDINATES
TRANSLATED/ROTATED
TO ADJACENT SECTION
CORNER MONUMENTS
Y=246827.907
X=559667.524raSmith
CREATIVITY BEYOND
ENGINEERINGI, SHANE M. ZODROW, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL
COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND
UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND
MAILED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS
ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.Shane M. Zodrow 10/14/2021
DATE
SHANE M. ZODROW
AGENT FOR R.A. SMITH
P.L.S. NUMBER 2869THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE
WISCONSIN DEPARTMENT OF TRANSPORTATION.

CURT VAN EREM

10/15/2021
DATE

PRINTED NAME

SIGNATURE

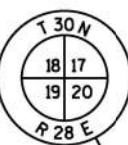
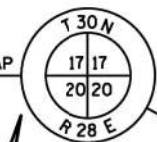
DATE

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM
COORDINATES (WISCRS), DOOR COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES
SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES
MAY BE USED AS GROUND DISTANCES.ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON
PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION
OF THE PROJECT.FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE
PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION
OFFICE IN GREEN BAY.FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN
THE OFFICE OF REGISTER OF DEEDS, IN DOOR COUNTY AS SHEET 2 OF
2 OF DOCUMENT# 847152.DOC #: 847386
RECORDED ON:
10/18/2021 08:21:09 AM
CAREY PETERSILKA
REGISTER OF DEEDS
DOOR COUNTY, WI
FEE AMOUNT PAID: 25.00
**The above recording information
verifies that this document has
been electronically recorded and
returned to the submitter.**RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4150-14-21 - 4.05
AMENDMENT NO:
SHEET 1 OF 1

R/W CURVE TABLE				
COURSE	LENGTH	RADIUS	CHORD BEARING	CHORD
544-564	218.16'	442.26'	N31°00'23"E	215.95'
564-550	34.25'	442.26'	N14°39'23"E	34.24'
552-565	102.88'	508.26'	S24°25'40"W	102.71'
565-553	132.28'	508.26'	S37°40'56"W	131.90'
551-SEC LN	100.25'	485.00'	S18°22'46"W	100.07'
SEC LN-PC	176.87'	485.00'	S34°44'54"W	175.89'
551-PT	110.94'	485.00'	N05°54'16"E	110.70'

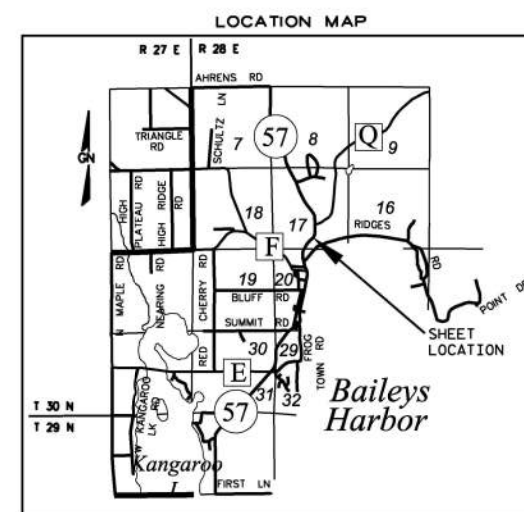
R/W COURSE TABLE		
540-541	N50°44'36"W	32.60'
541-542	N50°44'36"W	33.75'
542-545	N45°08'17"E	225.14'
545-546	N44°48'16"W	15.00'
546-547	N45°08'17"E	29.24'
547-548	S44°48'16"E	15.00'
548-544	N45°08'17"E	5.98'
544-564	SEE CURVE DATA	
564-550	SEE CURVE DATA	
550-551	S77°33'44"E	32.25'
551-552	S16°53'06"E	62.87'
552-565	SEE CURVE DATA	
565-553	SEE CURVE DATA	
553-554	S45°08'17"W	6.05'
554-555	S44°48'16"E	20.00'
555-556	S45°08'17"W	29.24'
556-557	N44°48'16"W	20.00'
557-540	S45°08'17"W	218.28'

101 TOWN OF BAILEYS
HARBOR - SANITARY
NO RECORD
OF EASEMENT
PARCEL 14CONC MON
W ALUMINUM CAP
Y=244143.200
X=557319.227CONC MON
W ALUMINUM CAP
Y=244135.619
X=560004.140

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
101	TOWN OF BAILEYS HARBOR - SANITARY	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

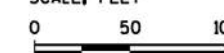
PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	AREAS S.F. REQUIRED			TLE S.F.	PLE S.F.
			NEW	EXISTING	TOTAL		
13	KARLA JEAN WEISS ROTH	FEE, TLE	439	6,496	6,935	1,855	-
14	RICHARD W. & JEANNIE A. HOFFMAN REVOCABLE TRUST	FEE, TLE	585	16,734	17,319	3,146	-

OWNERS' NAMES ARE SHOWN FOR REFERENCE PURPOSES
ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE
TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

NOT TO SCALE

HWY	BASIS OF EXISTING R/W	R/W WIDTH YEAR
STH 57	BY STATUTE	66'

SCALE, FEET

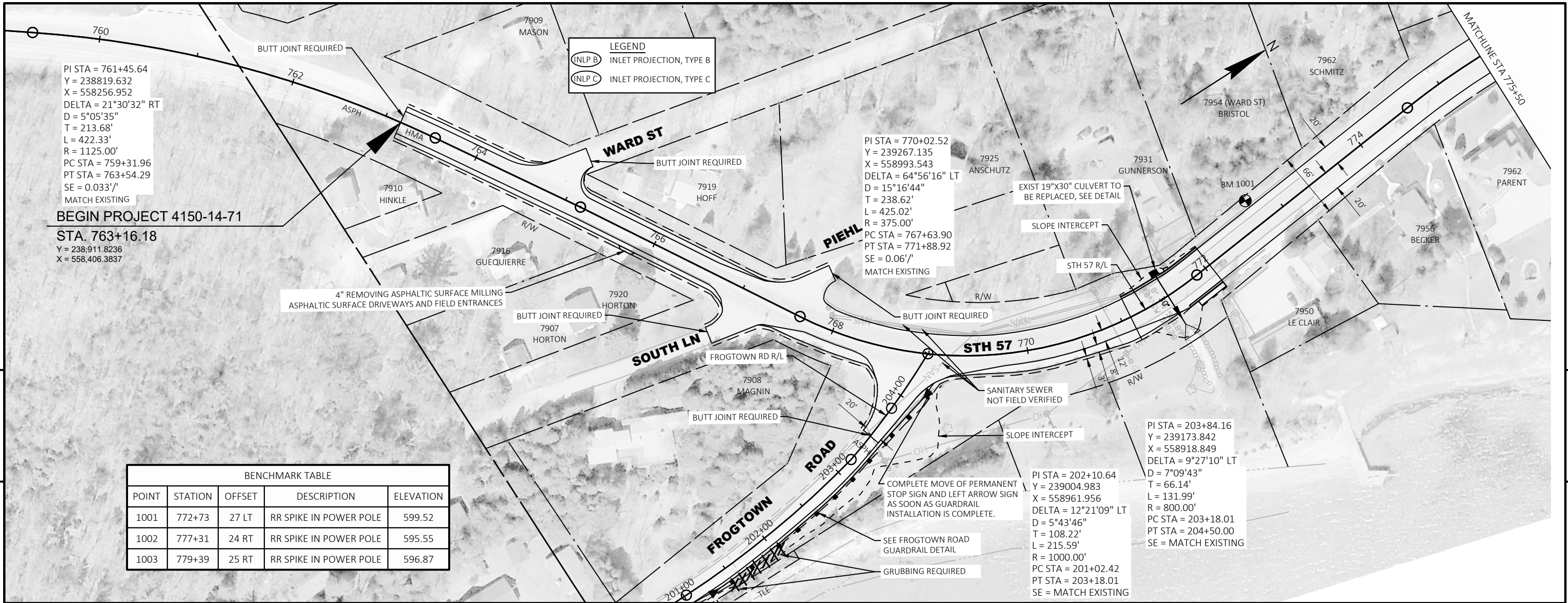


R/W PROJECT NUMBER: 4150-14-21		EXHIBIT NUMBER:1	
TLE ACQUISITION EXHIBIT			
SUMMIT ROAD - BAILEYS HARBOR			
SUMMIT ROAD TO CTH Q			
STH 57		DOOR COUNTY	
PART OF GOVERNMENT LOT 4, BEING A PART OF SECTION 20, T30N, R28E, TOWN OF BAILEYS HARBOR, DOOR COUNTY, WISCONSIN.			
NOTES: THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS. PURPOSE FOR ALL TLEs IS FOR GRADING, UNLESS OTHERWISE NOTED.			
SCALE, FEET 0 50 100			
GN			
THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTHEAST REGION - GREEN BAY			
SIGNATURE: <i>Curt Van Erem</i> DATE: 10/04/2021			
PRINT NAME: CURT VAN EREM			

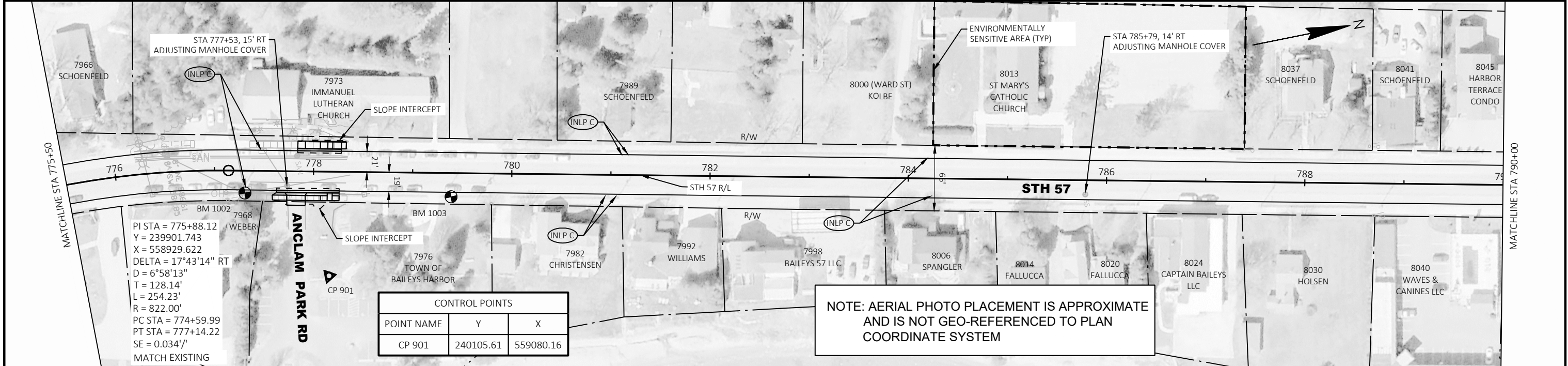
SCHEDULE OF LANDS & INTERESTS REQUIRED		OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT	
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
21	TIMOTHY MAGNIN	TLE	925

UTILITY INTERESTS REQUIRED	
UTILITY NUMBER	UTILITY OWNER(S)
N/A	N/A

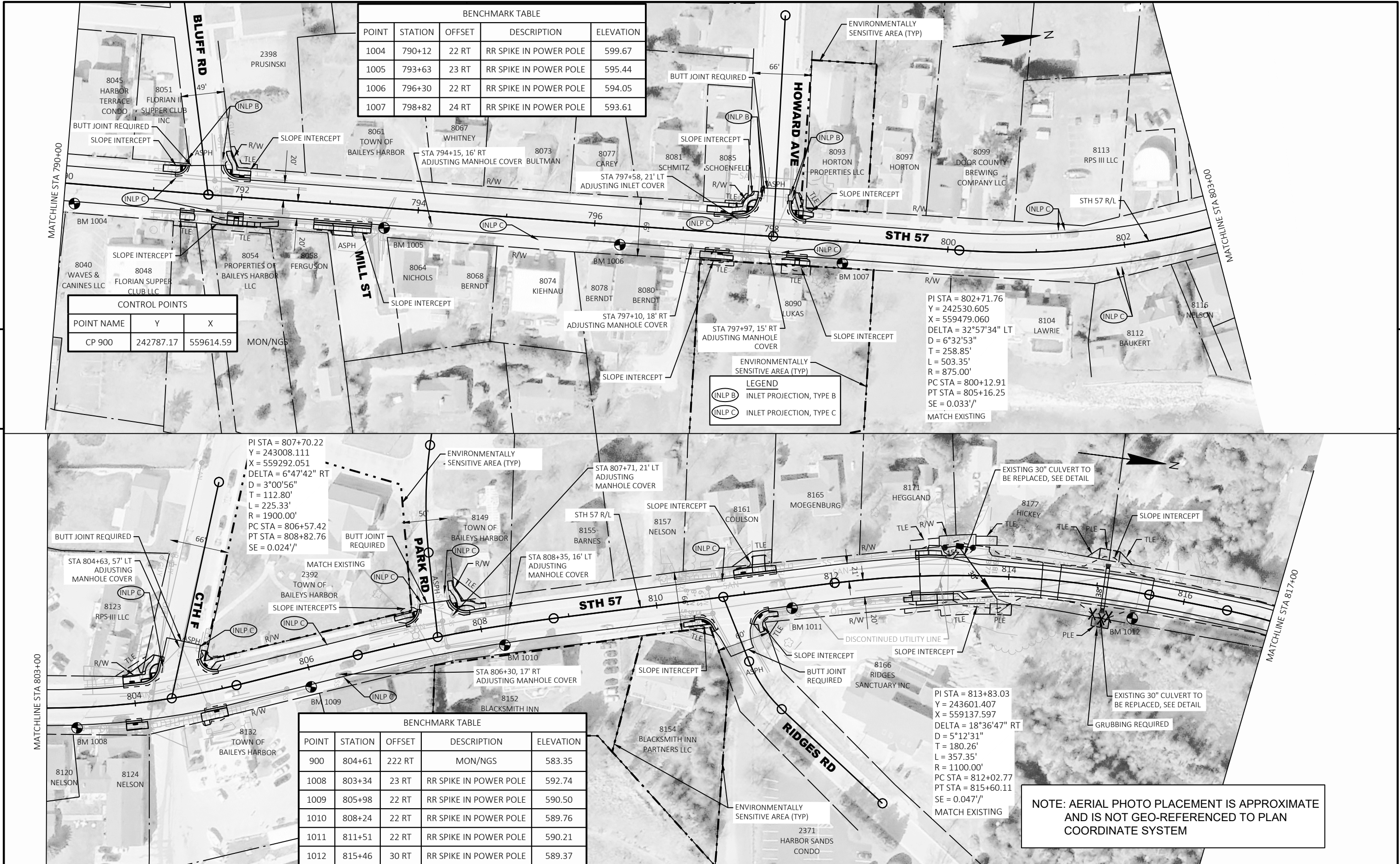
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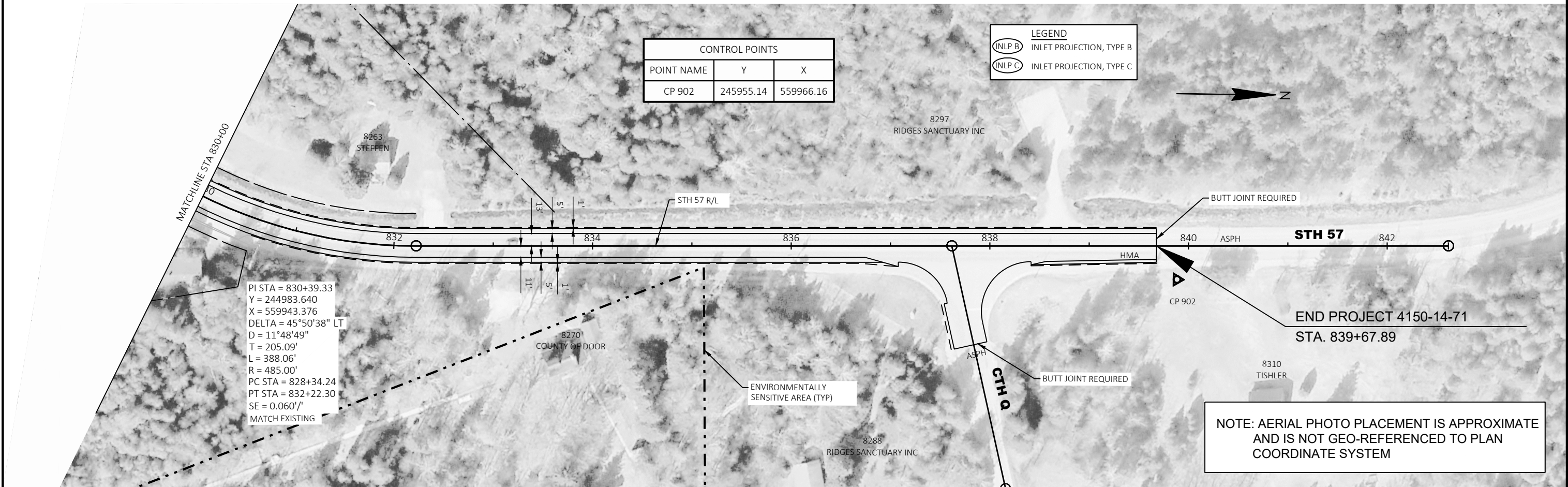


BENCHMARK TABLE				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
1001	772+73	27 LT	RR SPIKE IN POWER POLE	599.52
1002	777+31	24 RT	RR SPIKE IN POWER POLE	595.55
1003	779+39	25 RT	RR SPIKE IN POWER POLE	596.87



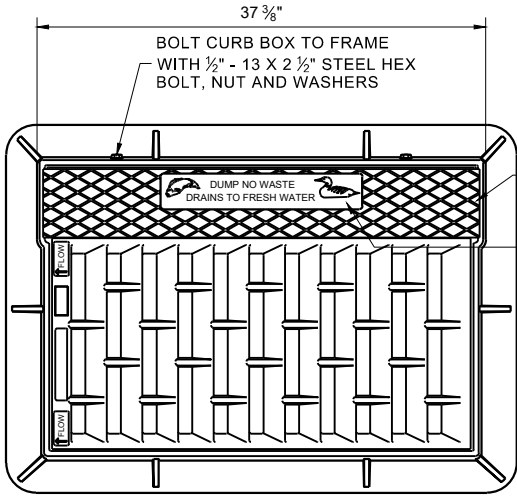
CONTROL POINTS		
POINT NAME	Y	X
CP 901	240105.61	559080.16





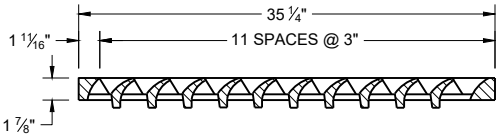
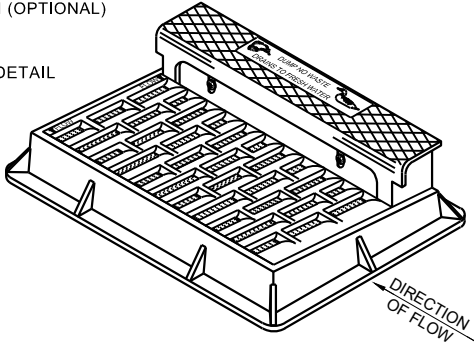
Standard Detail Drawing List

08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
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
08D05-21F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-21G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
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
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

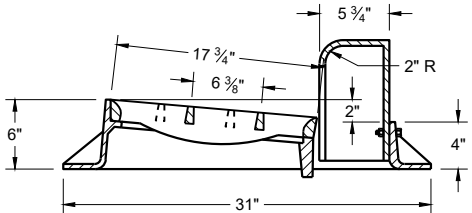
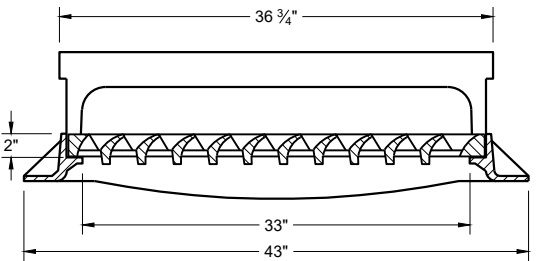
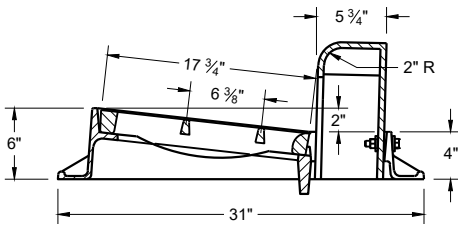
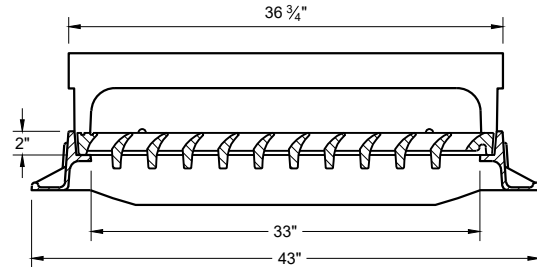


NOTE: EITHER CASTING IS ACCEPTABLE

TYPE "C" CHECKERED TOP DESIGN (OPTIONAL)
SEE LOGO DETAIL

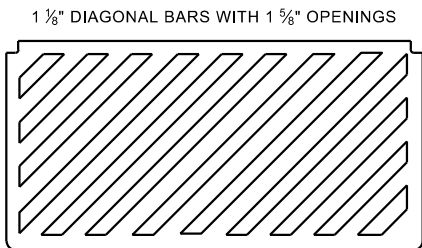


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

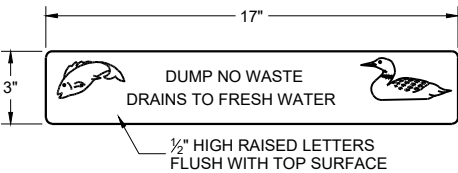


TYPE "H"

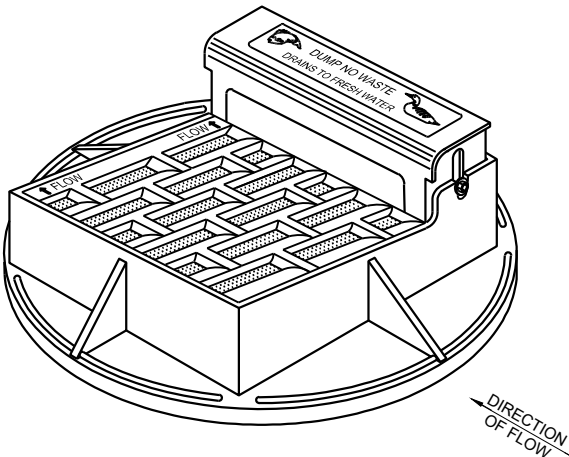
NOTE: EITHER CASTING IS ACCEPTABLE



SPECIAL GRATE FOR TYPE "H" COVER
(MEASURES 35" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

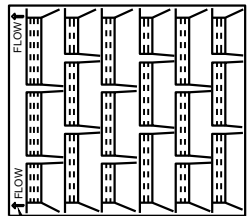


LOGO DETAIL

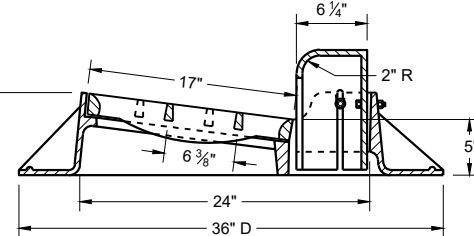
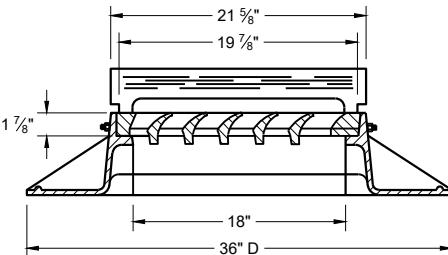
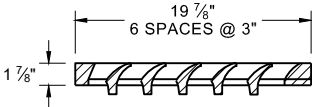


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

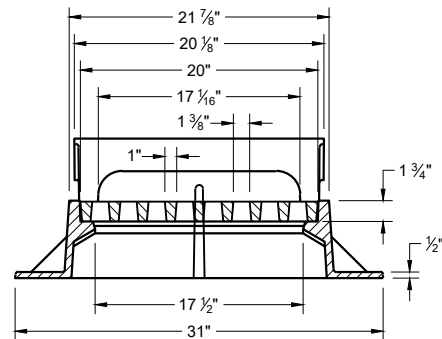
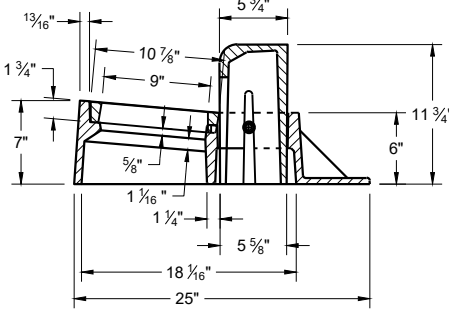
NOTE: EITHER CASTING IS ACCEPTABLE



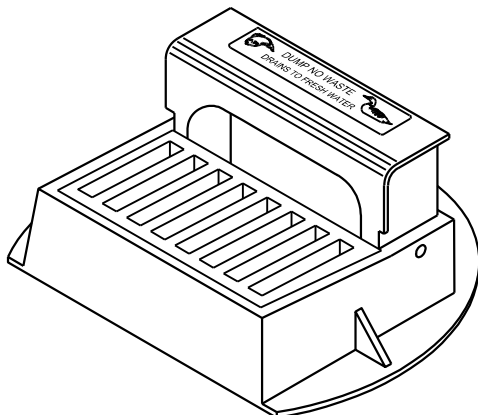
DIRECTION OF FLOW ARROWS



TYPE "A"



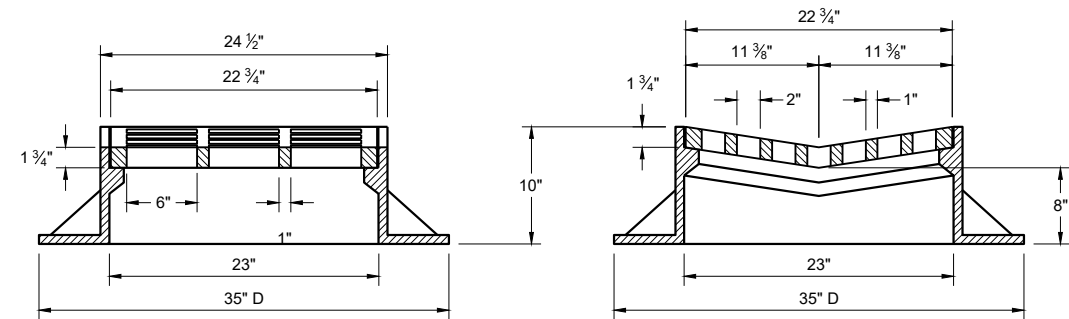
TYPE "Z"



**INLET COVERS
TYPES A, H, A-S, H-S AND Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

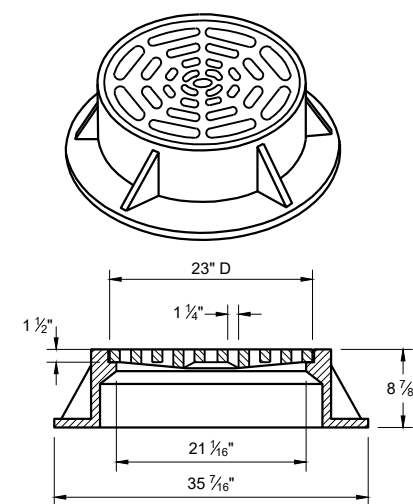
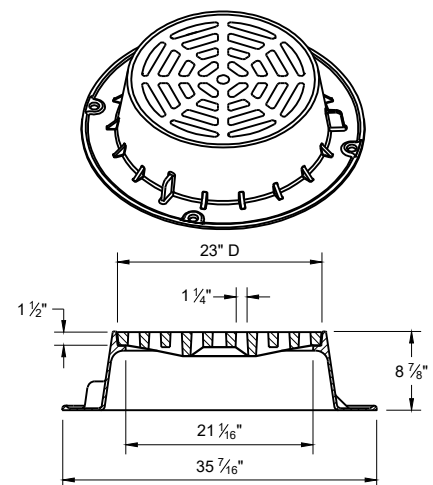
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TYPE "B"

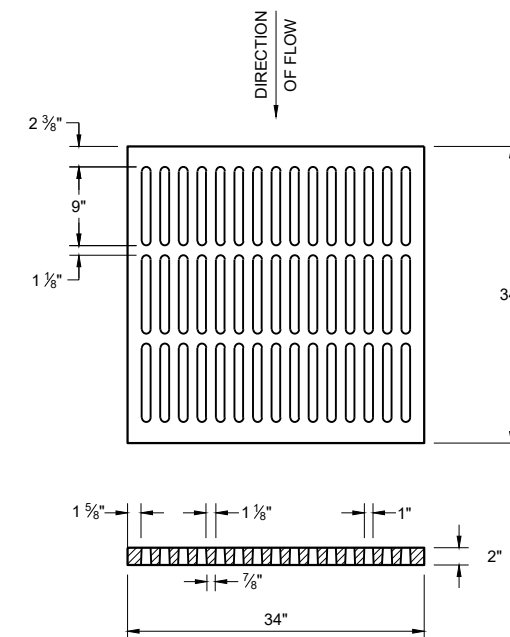
**ALTERNATIVE GRATE FOR
TYPE "B" COVER**

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



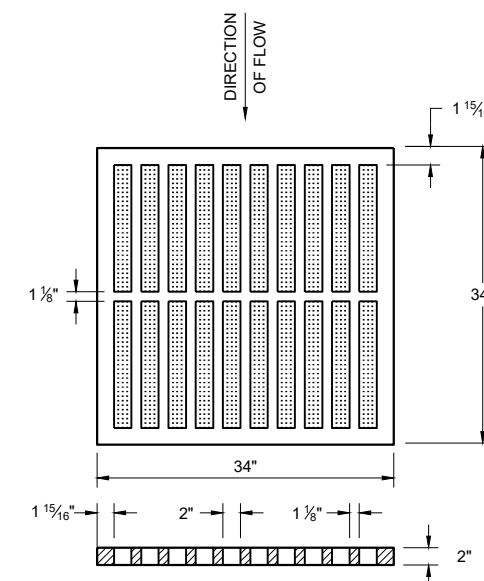
TYPE "C"

NOTE: EITHER CASTING IS ACCEPTABLE



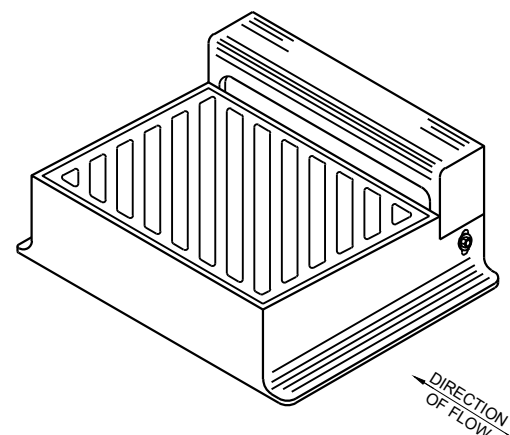
ALTERNATIVE TYPE "MS"

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

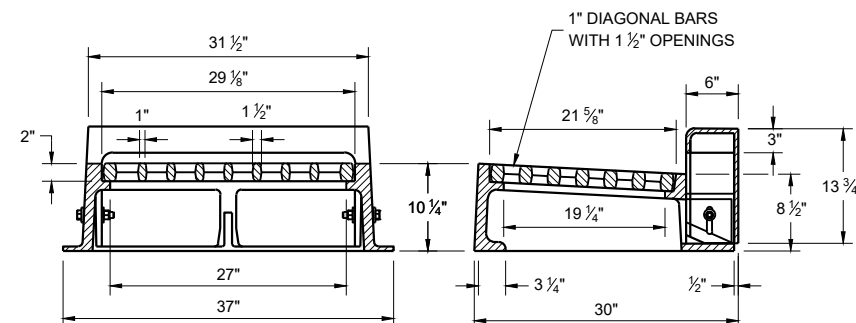


TYPE "MS"

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.



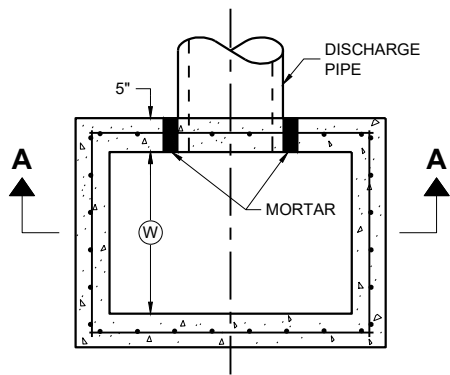
TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

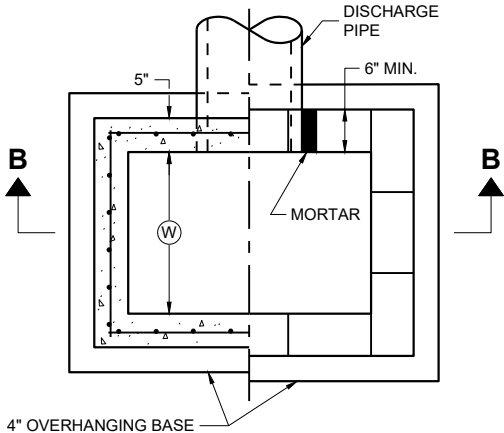
**INLET COVERS
TYPES B, B-A, C,
MS, MS-A AND WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

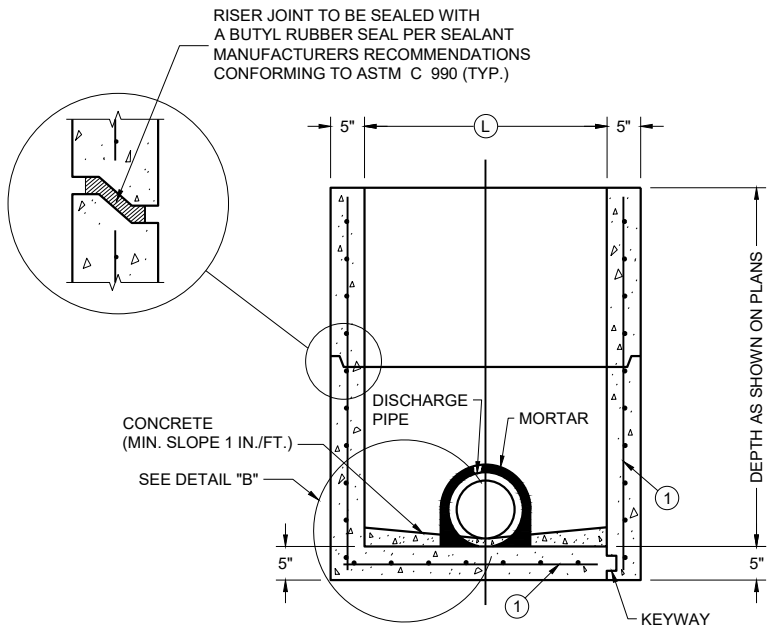
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PLAN VIEW



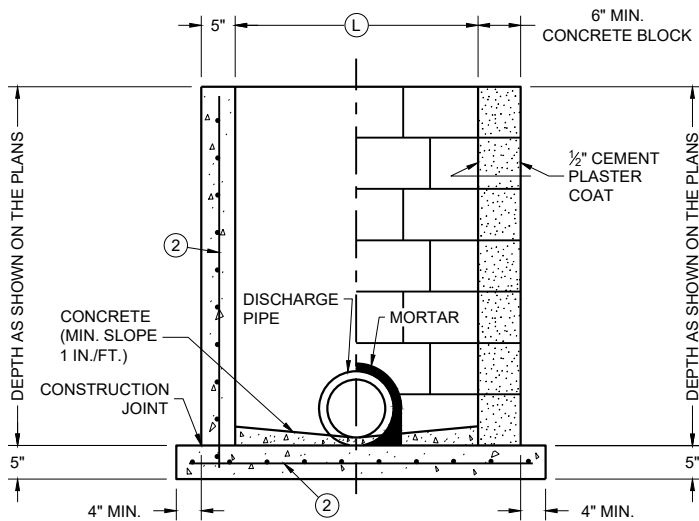
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

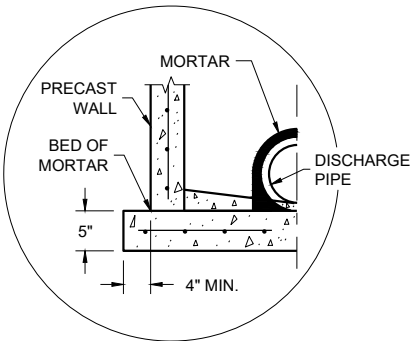
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

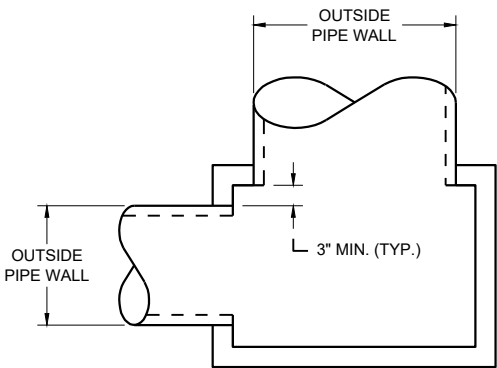
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE ①

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-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" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

- ① FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

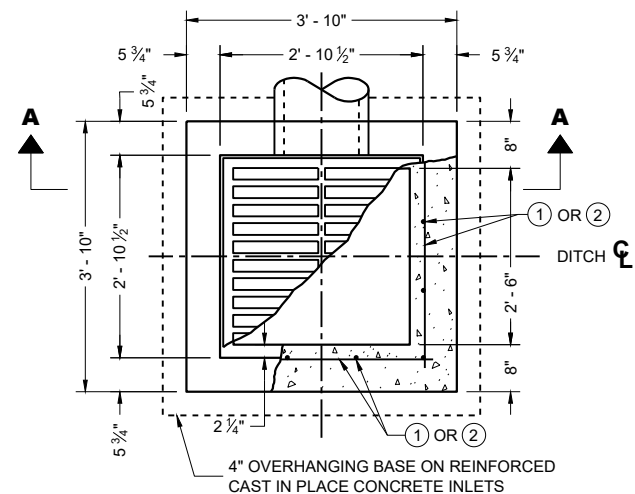
PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

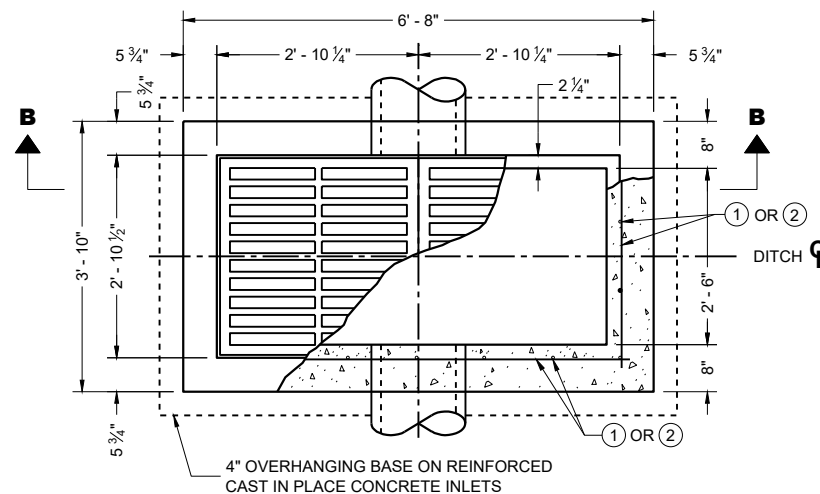
INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

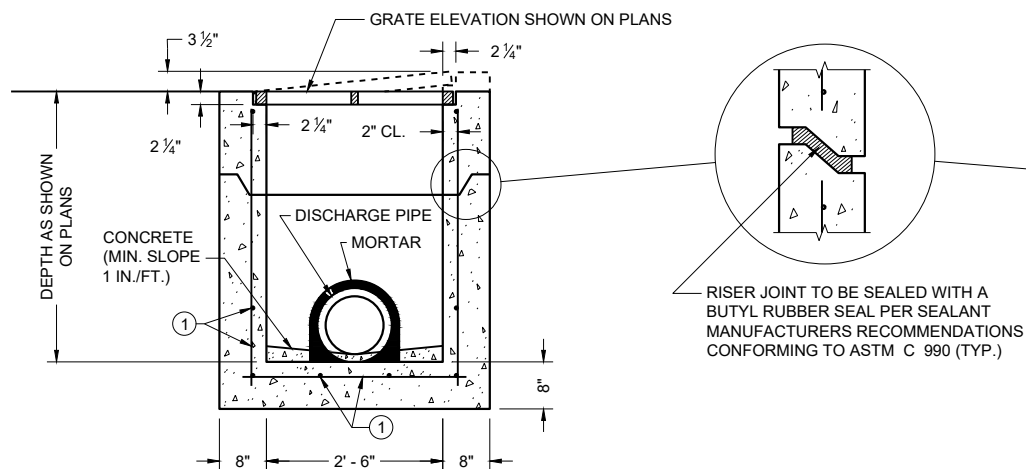
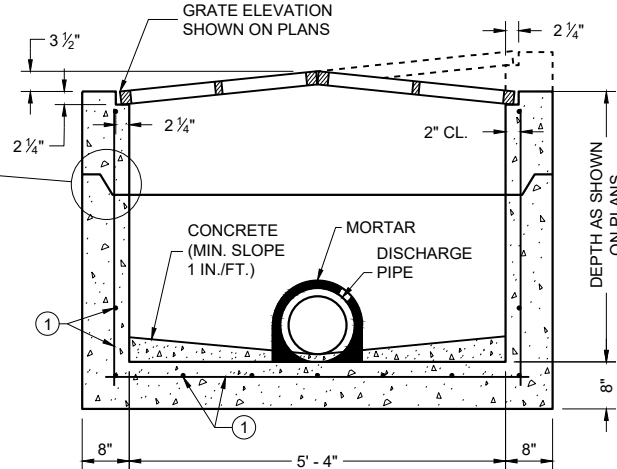
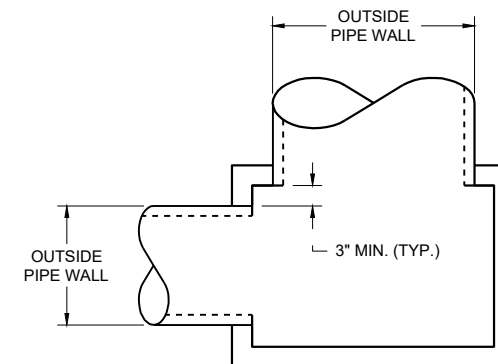
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DATE ROADWAY STANDARDS DEVELOPMENT
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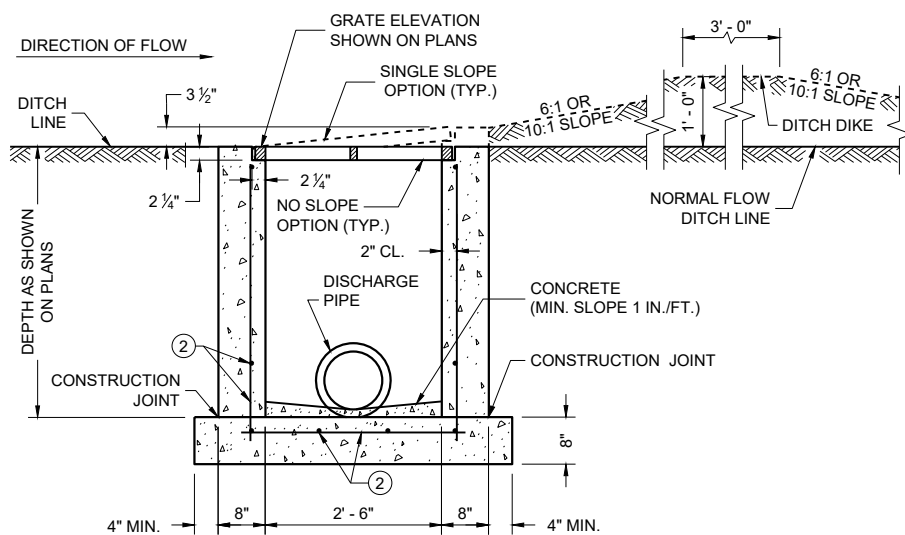
PLAN VIEW



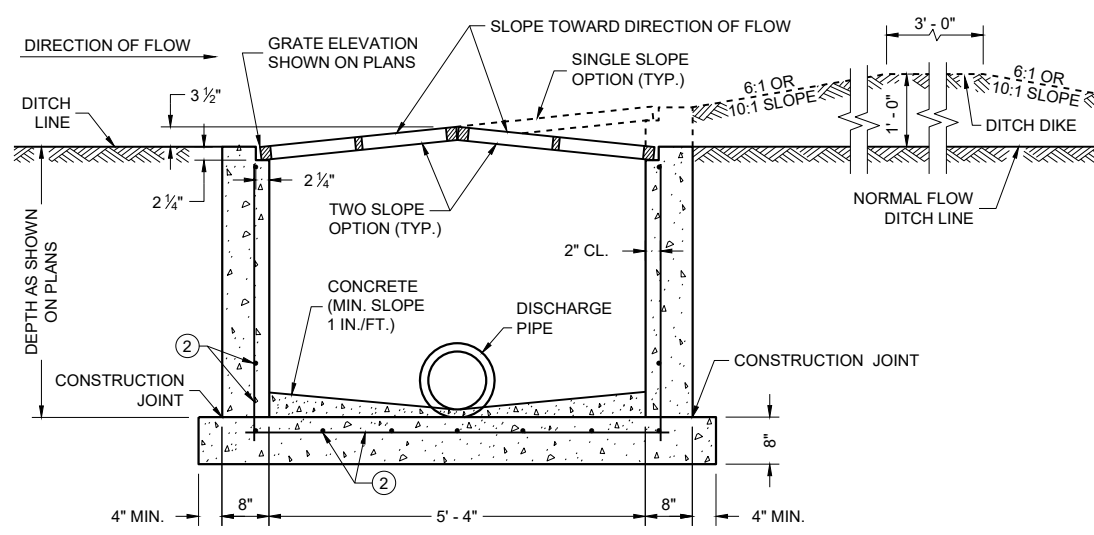
PLAN VIEW

PRECAST REINFORCED CONCRETE
SECTION A - APRECAST REINFORCED CONCRETE
SECTION B - B

DETAIL "A"

REINFORCED CAST IN PLACE CONCRETE
SECTION A - A

INLETS MEDIAN 1 GRATE

REINFORCED CAST IN PLACE CONCRETE
SECTION B - B

INLETS MEDIAN 2 GRATE

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 INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE 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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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.

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

- ① FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- ② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

INLETS
MEDIAN 1 AND 2 GRATE

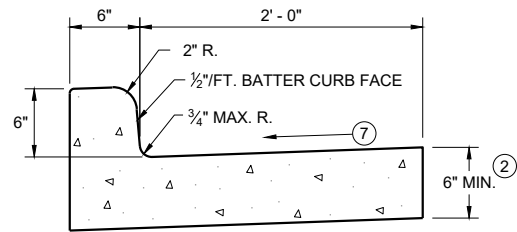
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

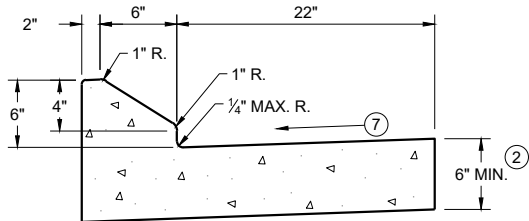
December 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

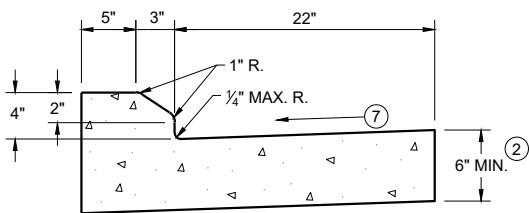
FHWA



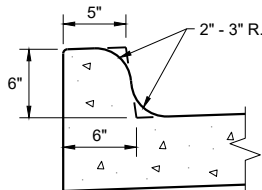
TYPES A^① & D



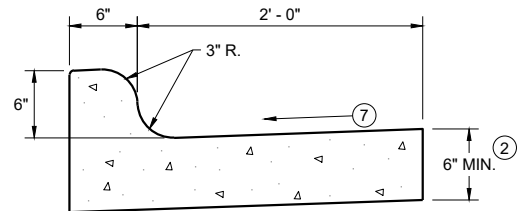
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

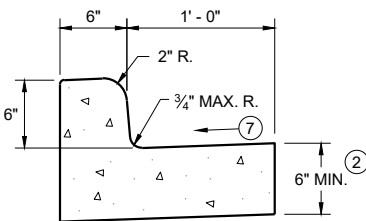


TYPES K^① & L
(OPTIONAL CURB SHAPE)



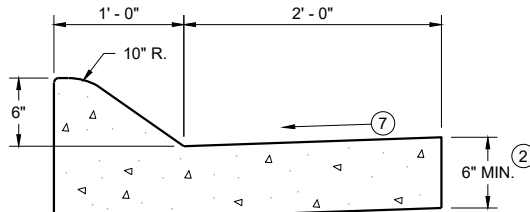
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

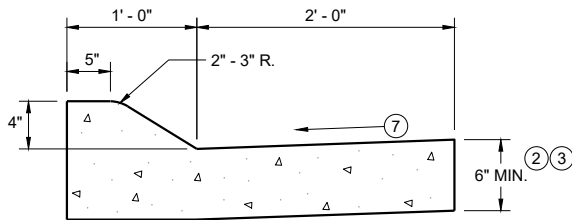


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

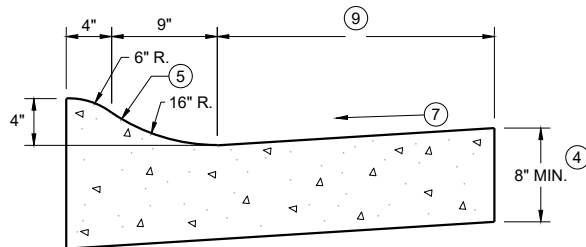


6" SLOPED CURB TYPES A^① & D



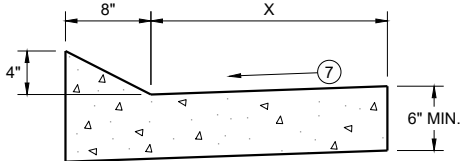
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

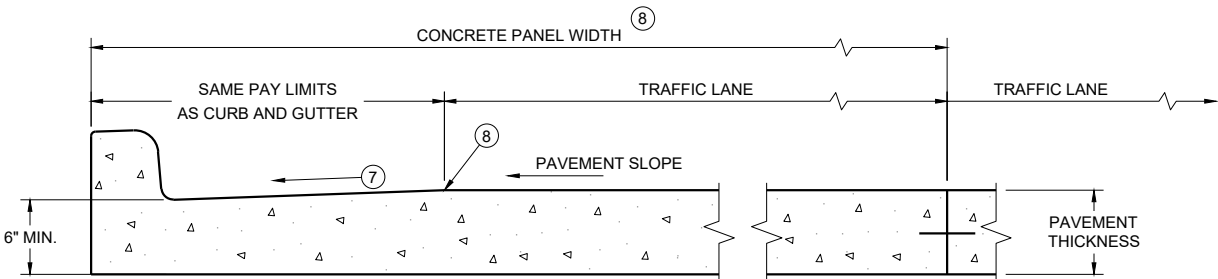


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

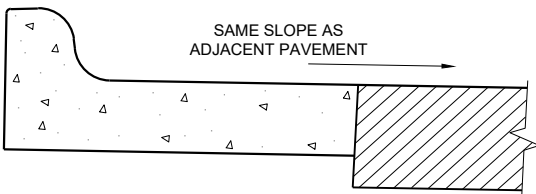
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

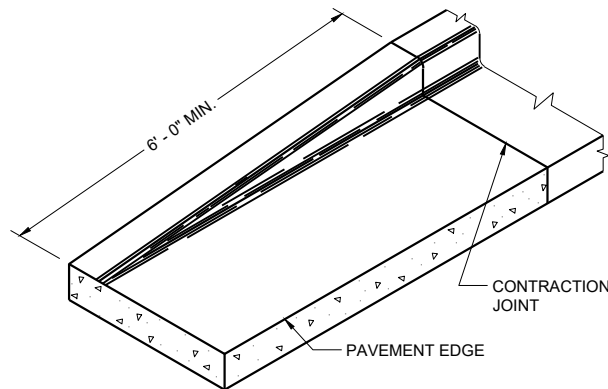
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

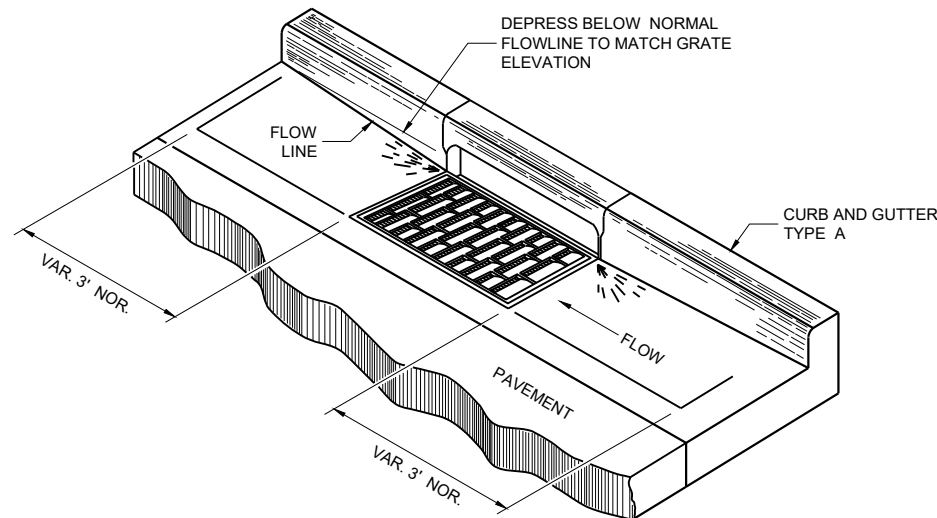
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

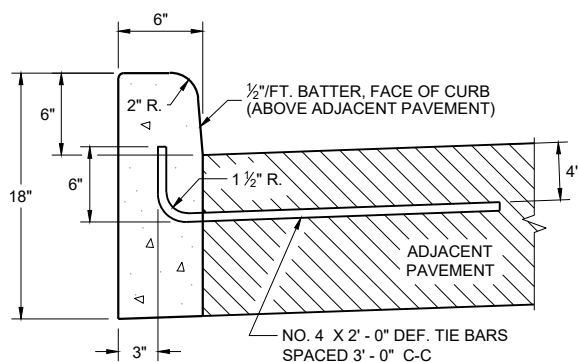


END SECTION CURB AND GUTTER

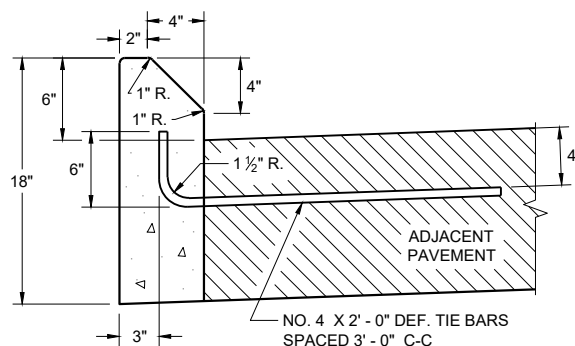


DETAIL OF CURB AND GUTTER AT INLETS

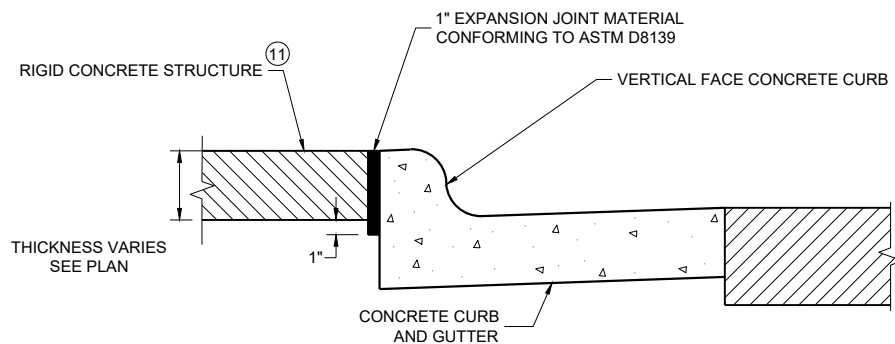
(TYPICAL H INLET COVER SHOWN)



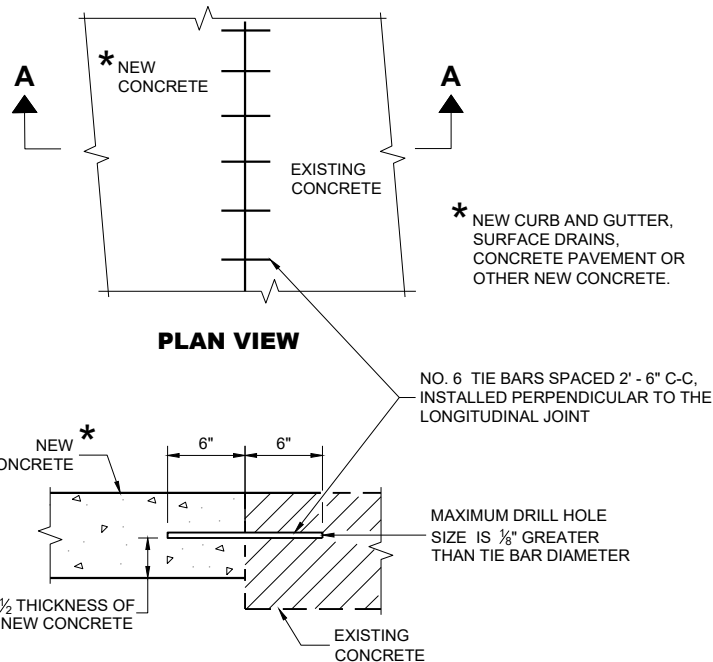
TYPES A^① & D



**TYPES G^① & J
CONCRETE CURB**



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



**SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT**

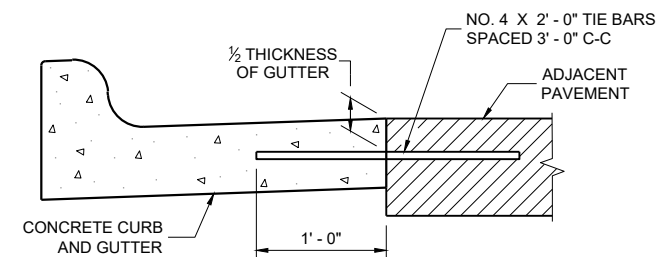
GENERAL NOTES

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

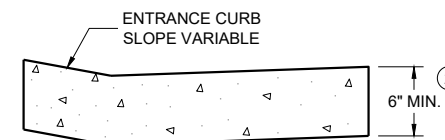
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



TYPICAL TIE BAR LOCATION^①



**DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)**

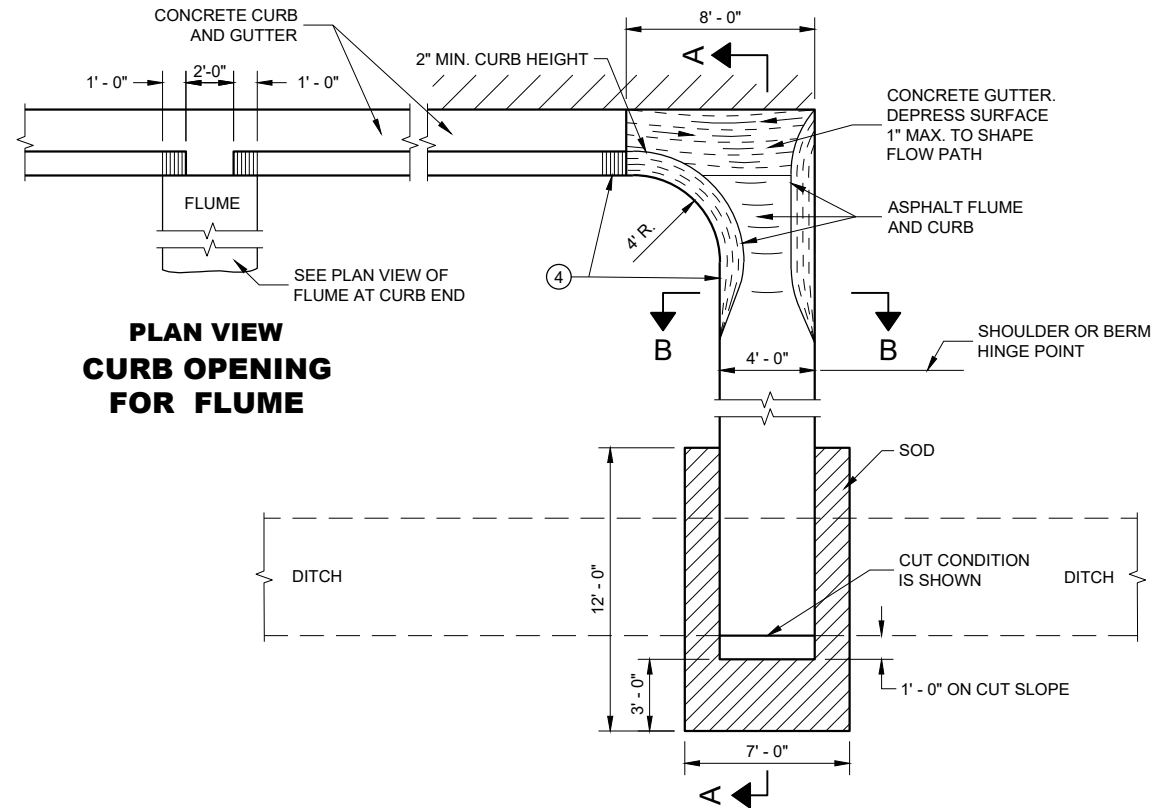
**CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

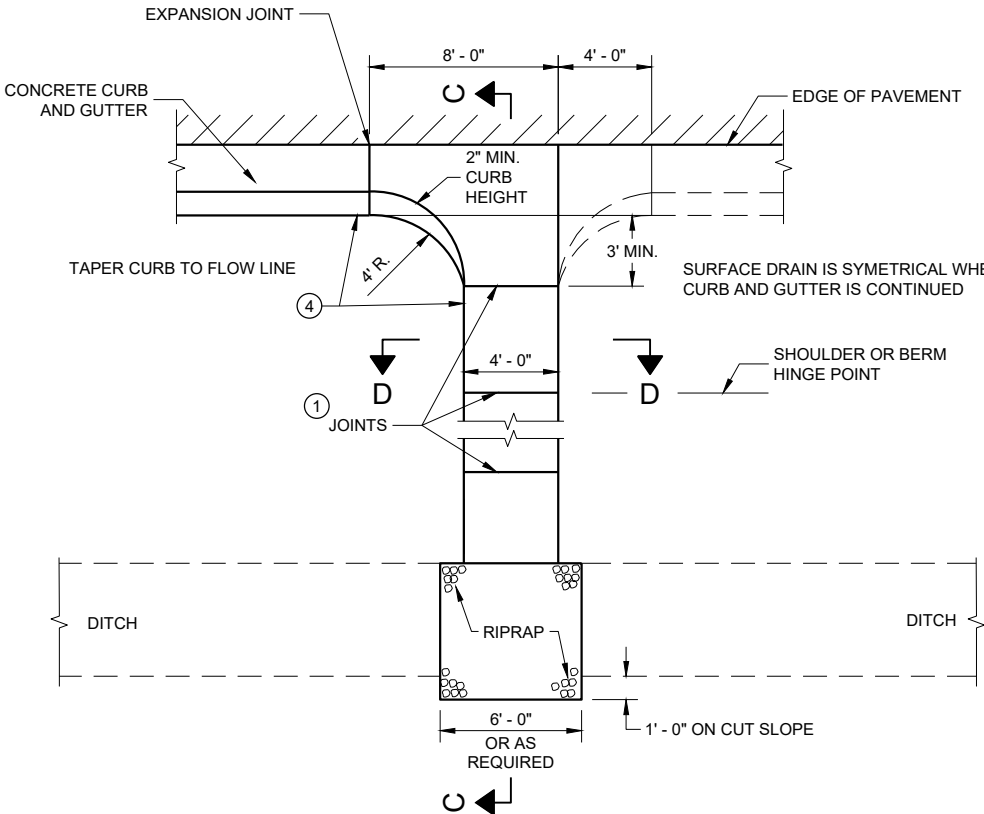
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING
FOR FLUME

PLAN VIEW
FLUME AT CURB END



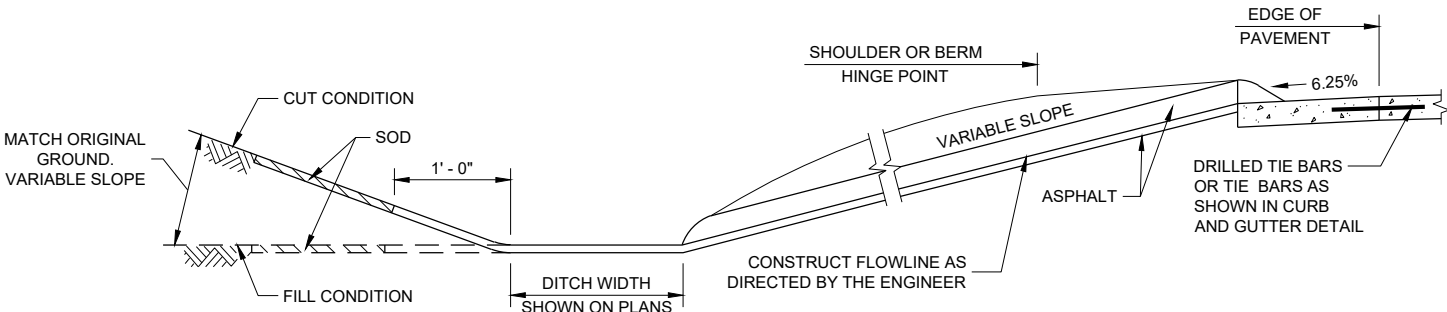
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

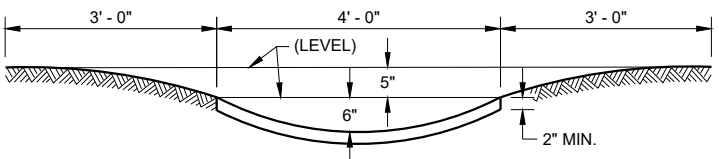
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

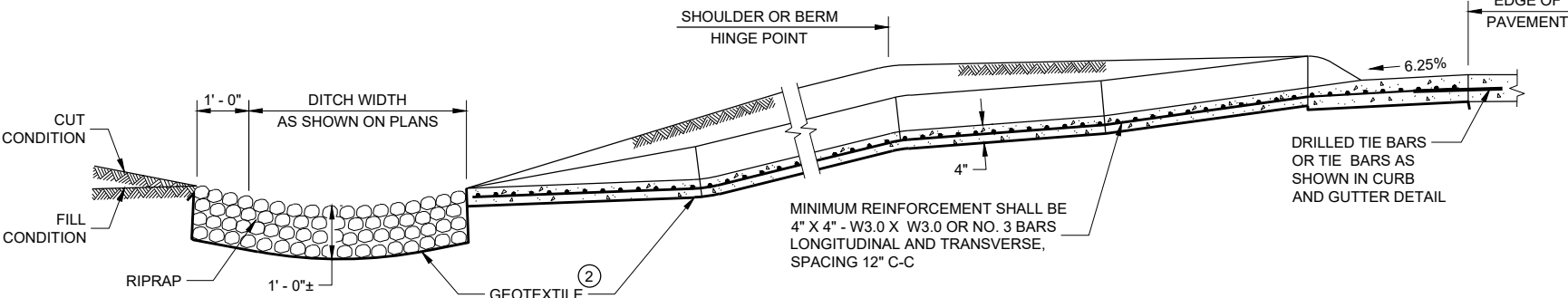
- JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- 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.



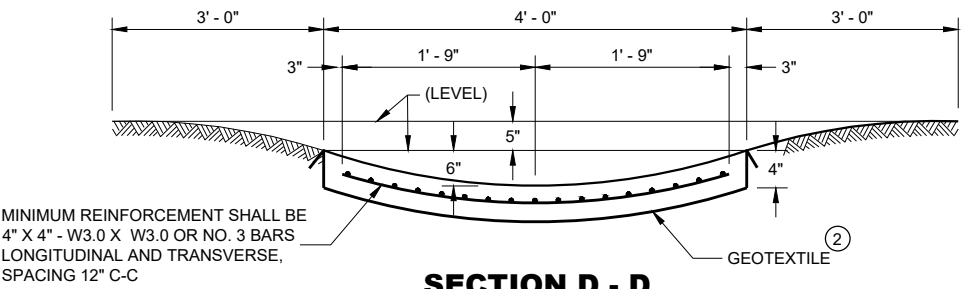
SECTION A - A



SECTION B - B



SECTION C - C

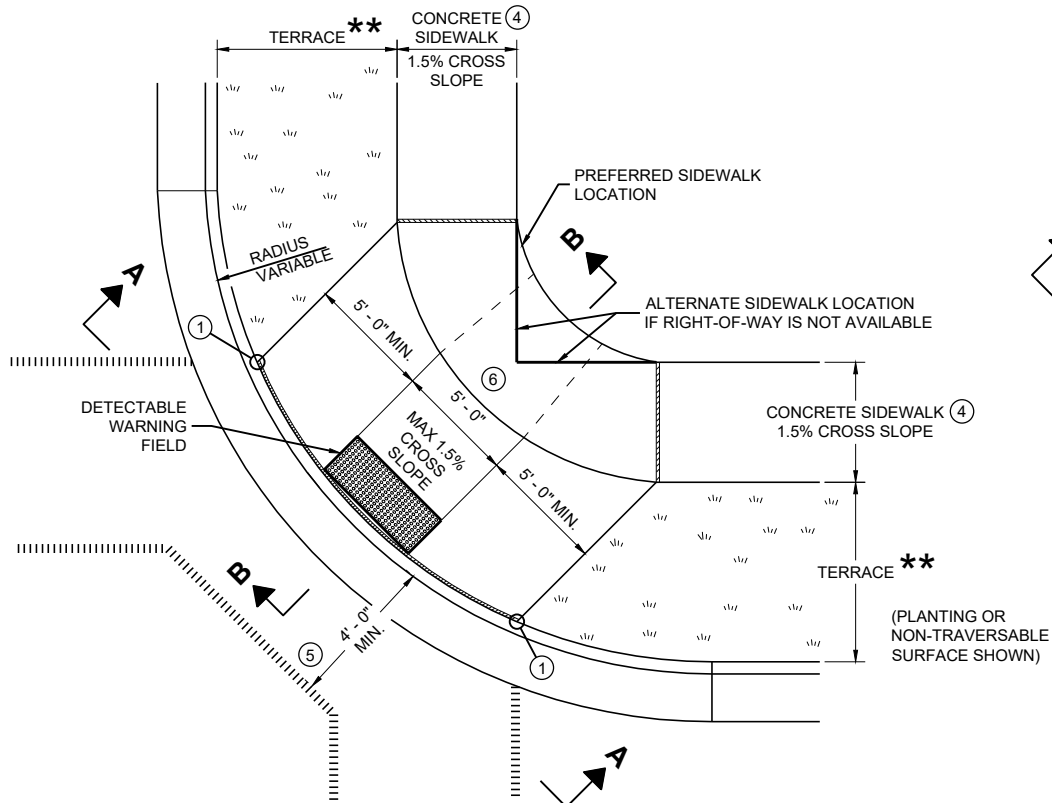


SECTION D - D

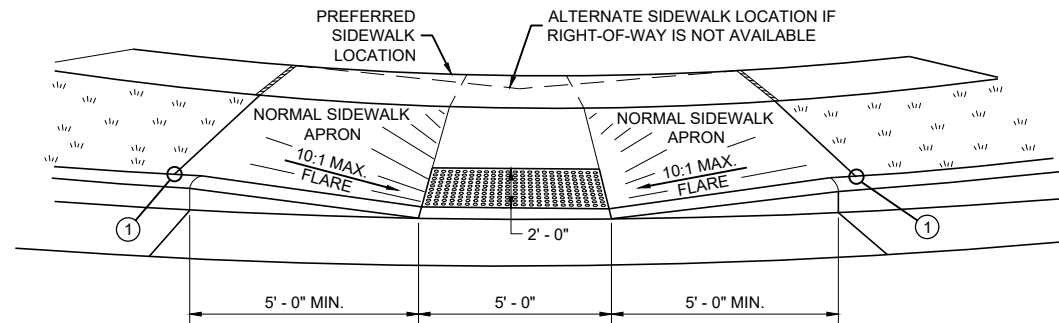
CONCRETE SURFACE
DRAINS AND
ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA 86

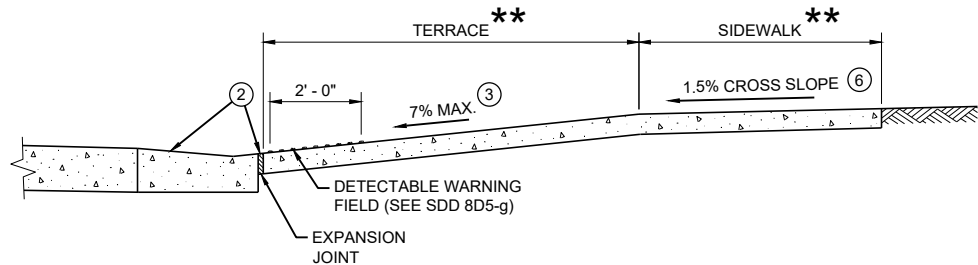


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

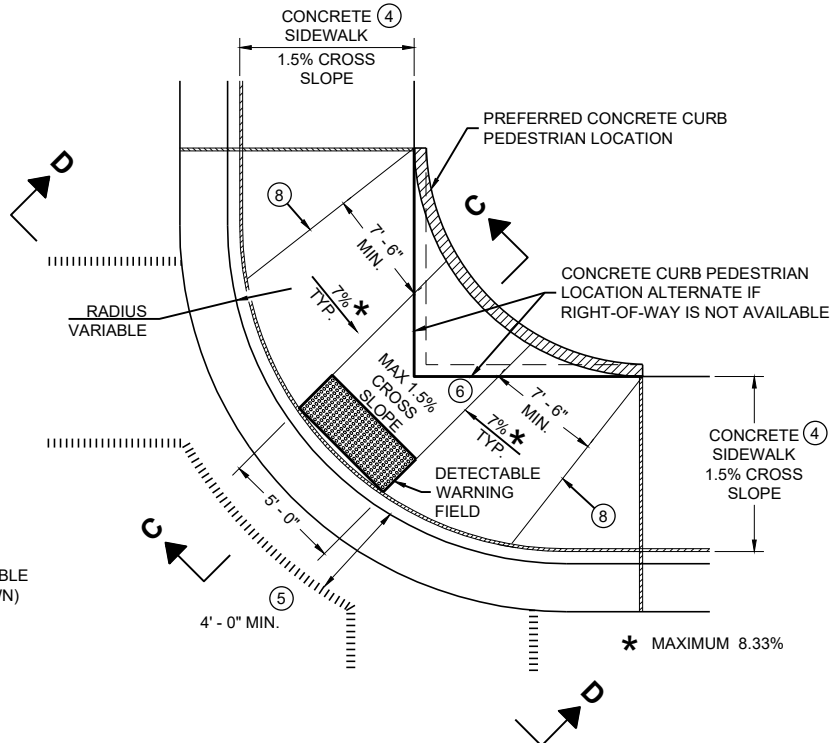


VIEW A - A FOR TYPE 1

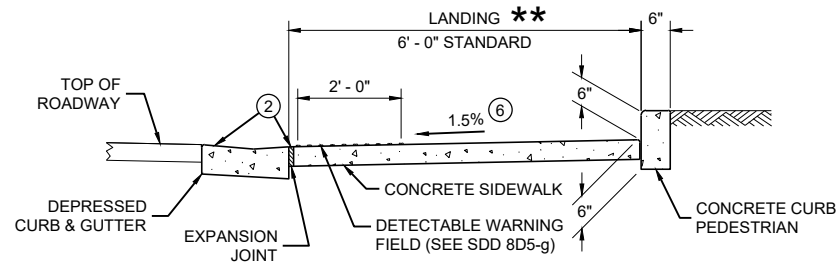
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



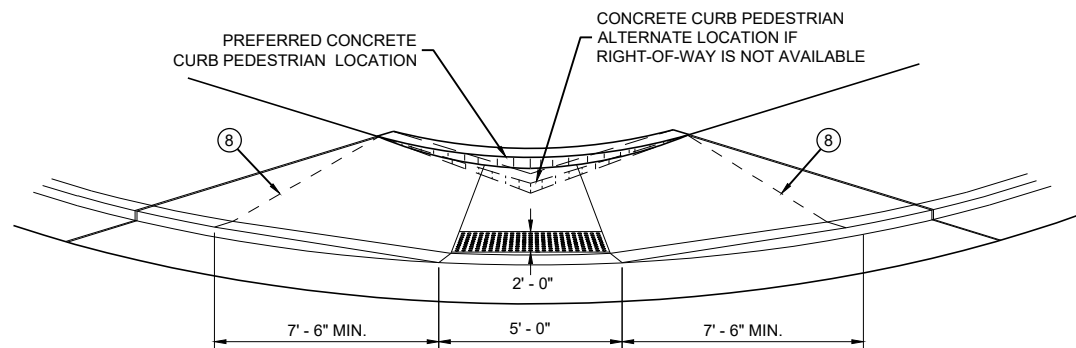
SECTION B - B FOR TYPE 1



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

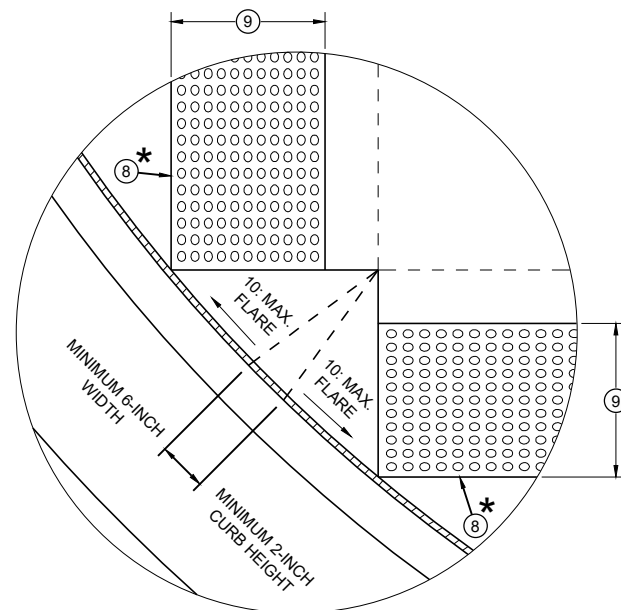
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- WHEN 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.
- 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.
 - 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.
 - MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - PROVIDE A LEVEL LANDING 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
 - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
 - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

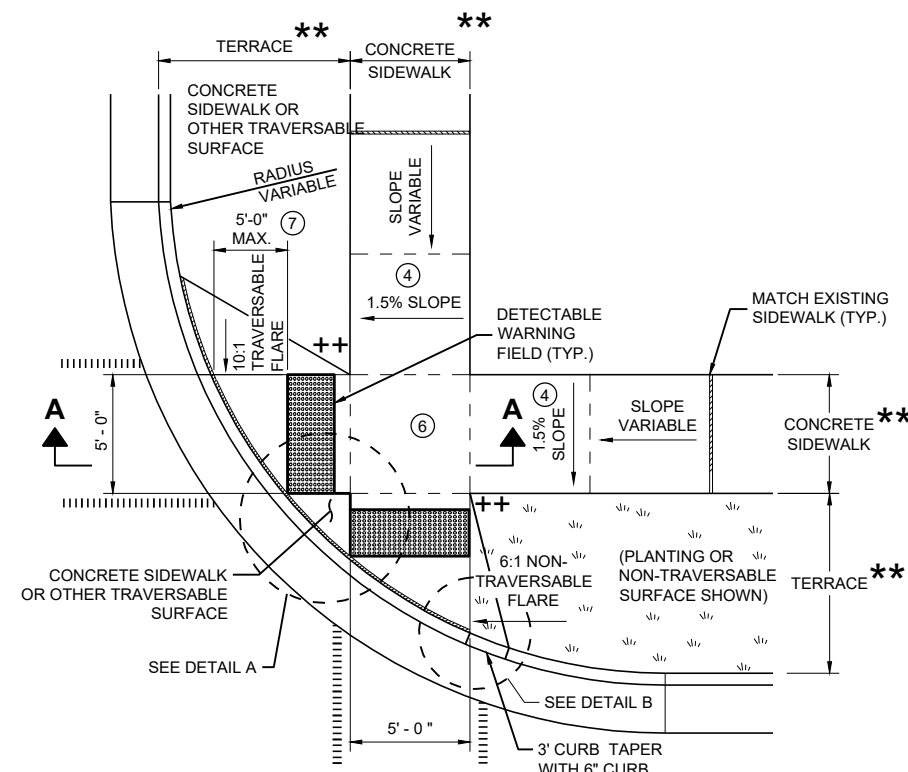
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

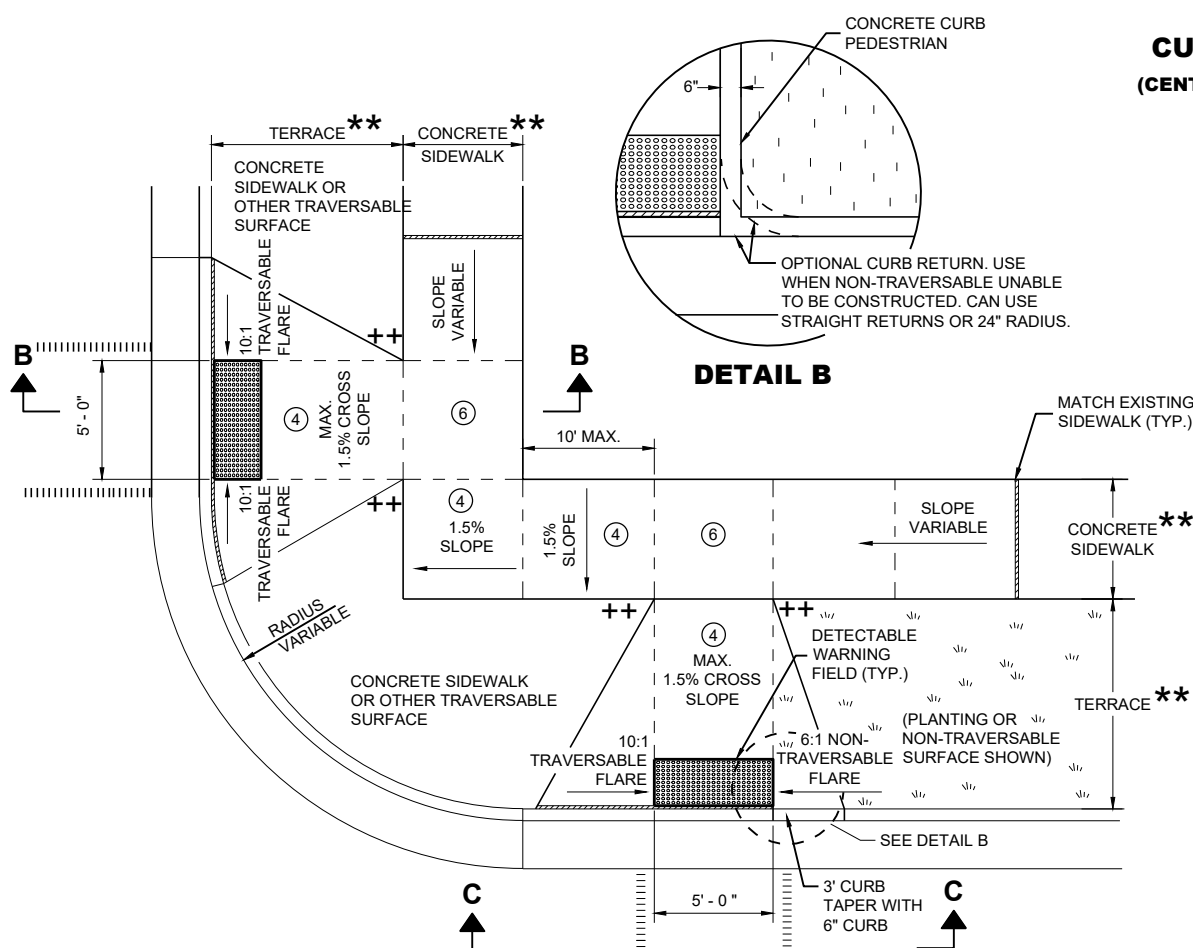
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



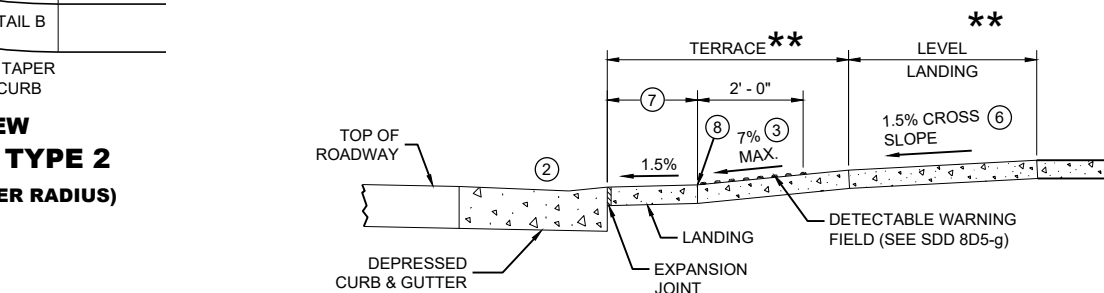
DETAIL A



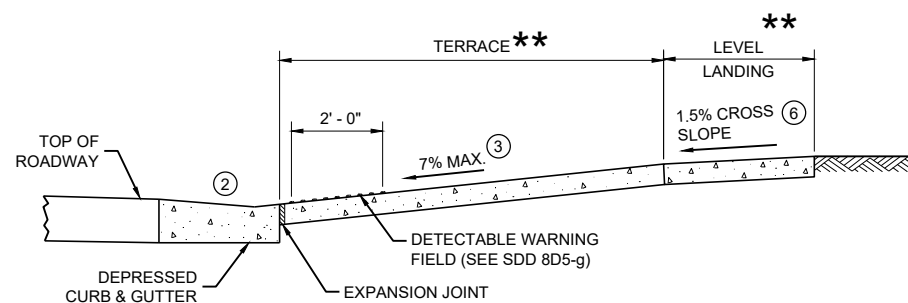
**PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)**



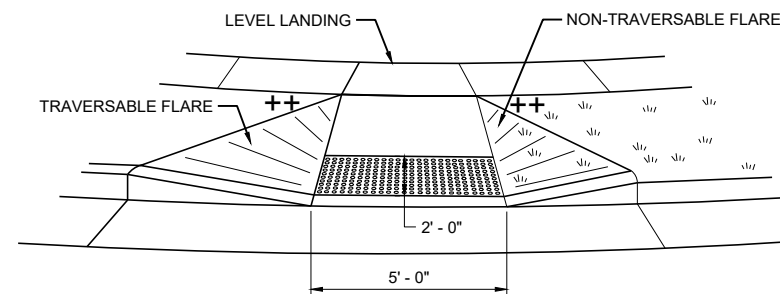
**PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)**



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.

- 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 AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN 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.
- ⑨ 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

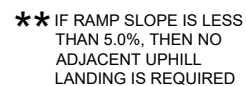
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

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 $\frac{1}{8}$ - 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.
- 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

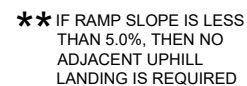
- | | |
|---|------------------------------------|
|  | 1/2" EXPANSION JOINT SIDEWALK |
|  | CONTRACTION JOINT SIDEWALK |
|  | PAVEMENT MARKING CROSSWALK (WHITE) |



++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

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 ¼"						
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 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ½"	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.

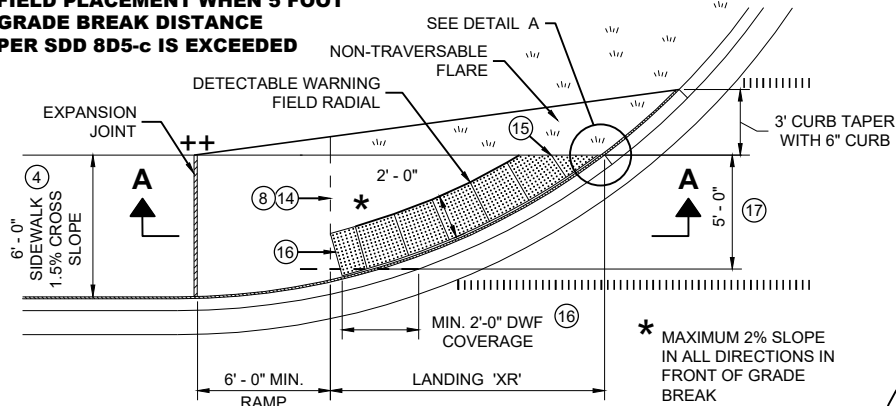


CURB RAMPS TYPE 4B AND 4B1

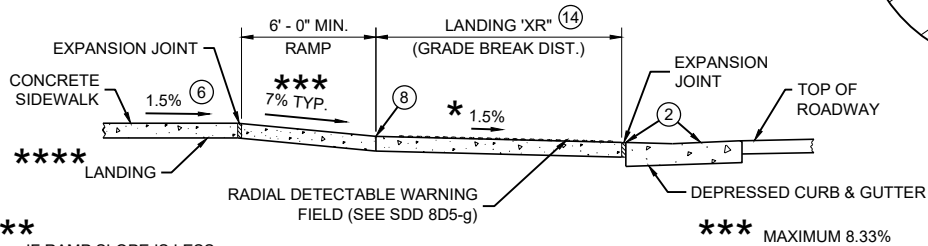
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-c IS EXCEEDED**

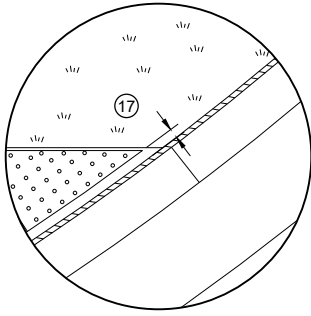


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

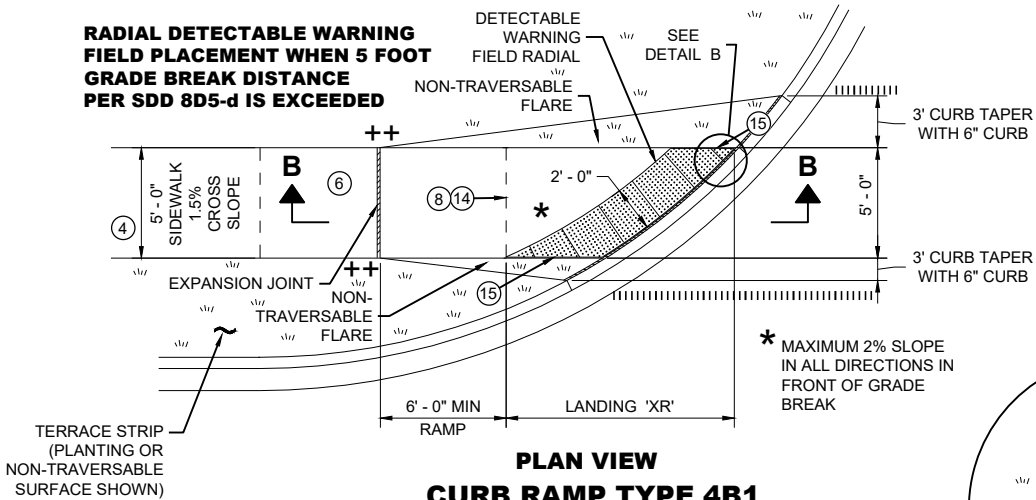


SECTION A - A FOR TYPE 4A1

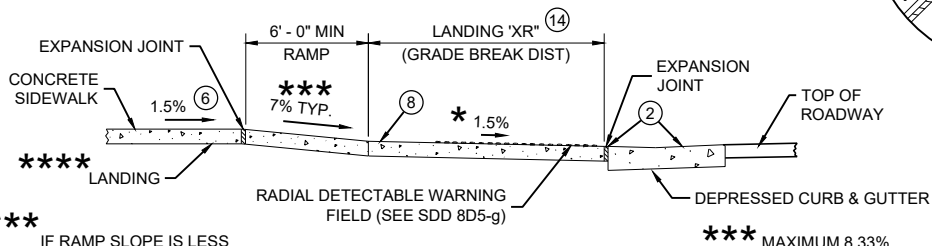
DETAIL A



**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-d IS EXCEEDED**

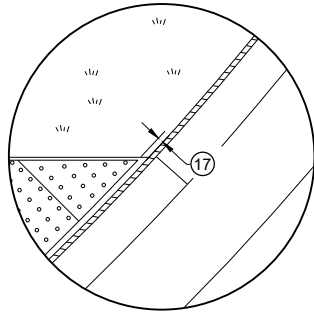


**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



SECTION B - B FOR TYPE 4B1

DETAIL B



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.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

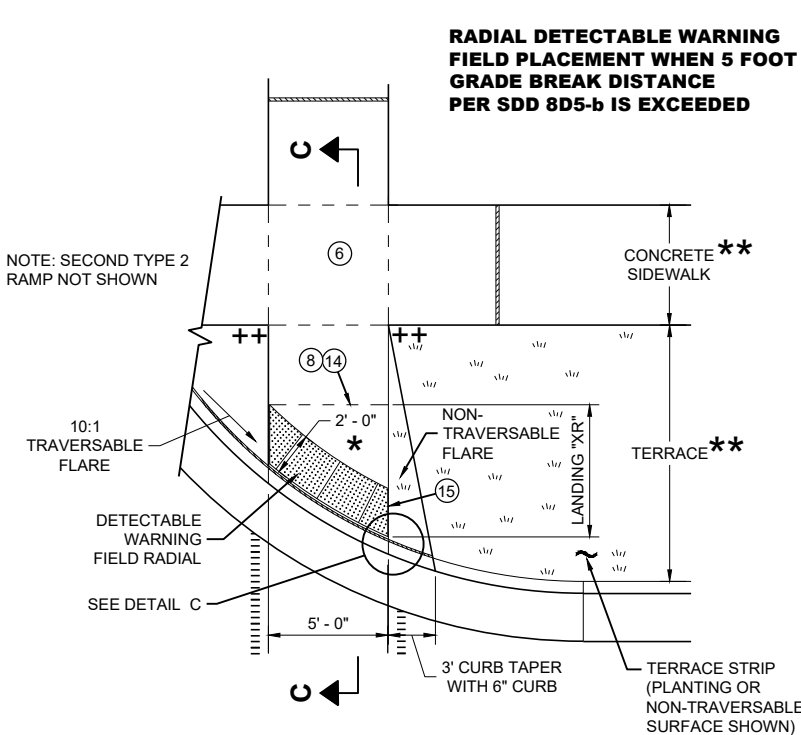
REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

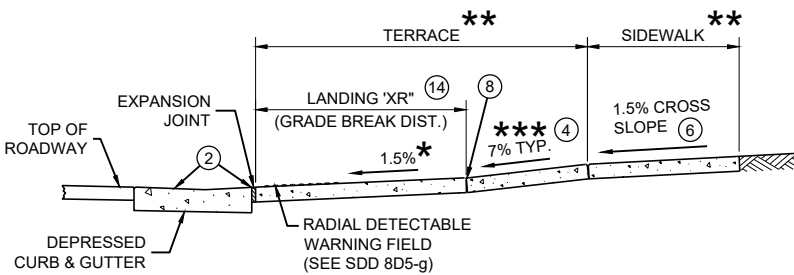
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

- (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) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- (8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- (14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- (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 1/2" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- (16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- (17) A MAXIMUM 3 INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

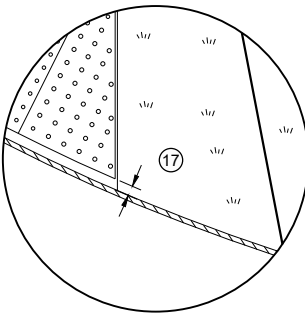
**RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED**



**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



SECTION C - C FOR TYPE 2



DETAIL C

*** MAXIMUM 2% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE
BREAK

** WIDTH SHOWN ELSEWHERE
IN THE PLANS

*** MAXIMUM 8.33%

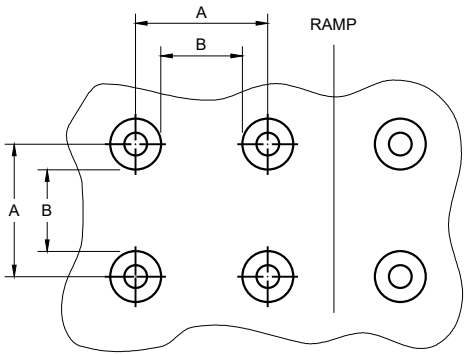
++ CONSTRUCT 6" WEDGE TO
AVOID CONCRETE BREAKAGE

**CURB RAMPS
RADIAL DETECTABLE WARNING**

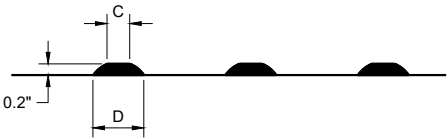
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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.

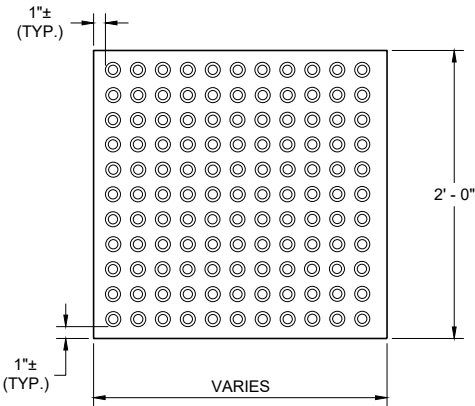


PLAN VIEW

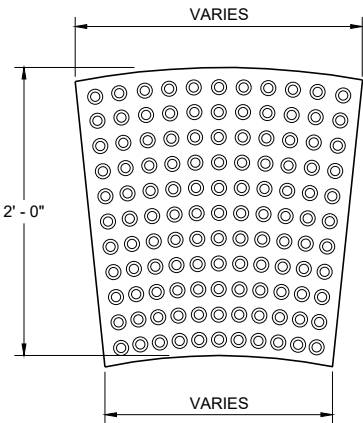


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

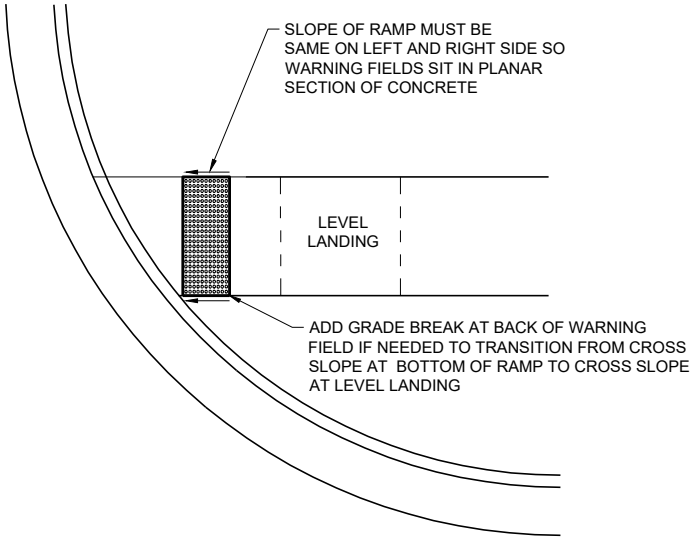


RECTANGULAR
PLATES

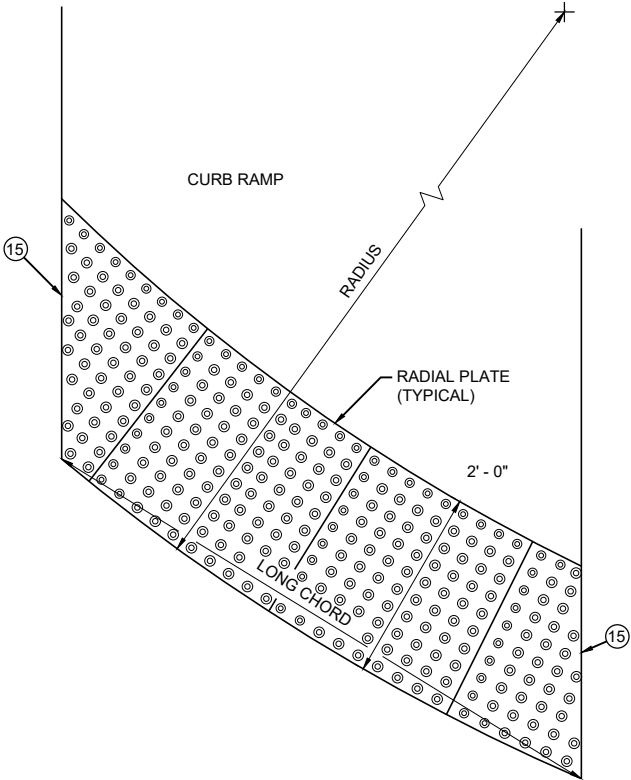


RADIAL
PLATES

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.

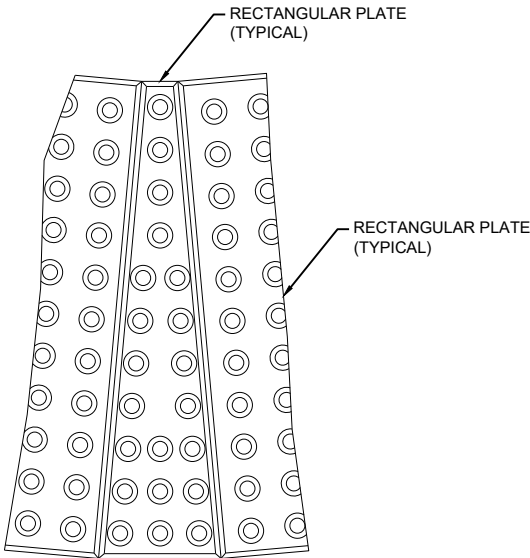
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

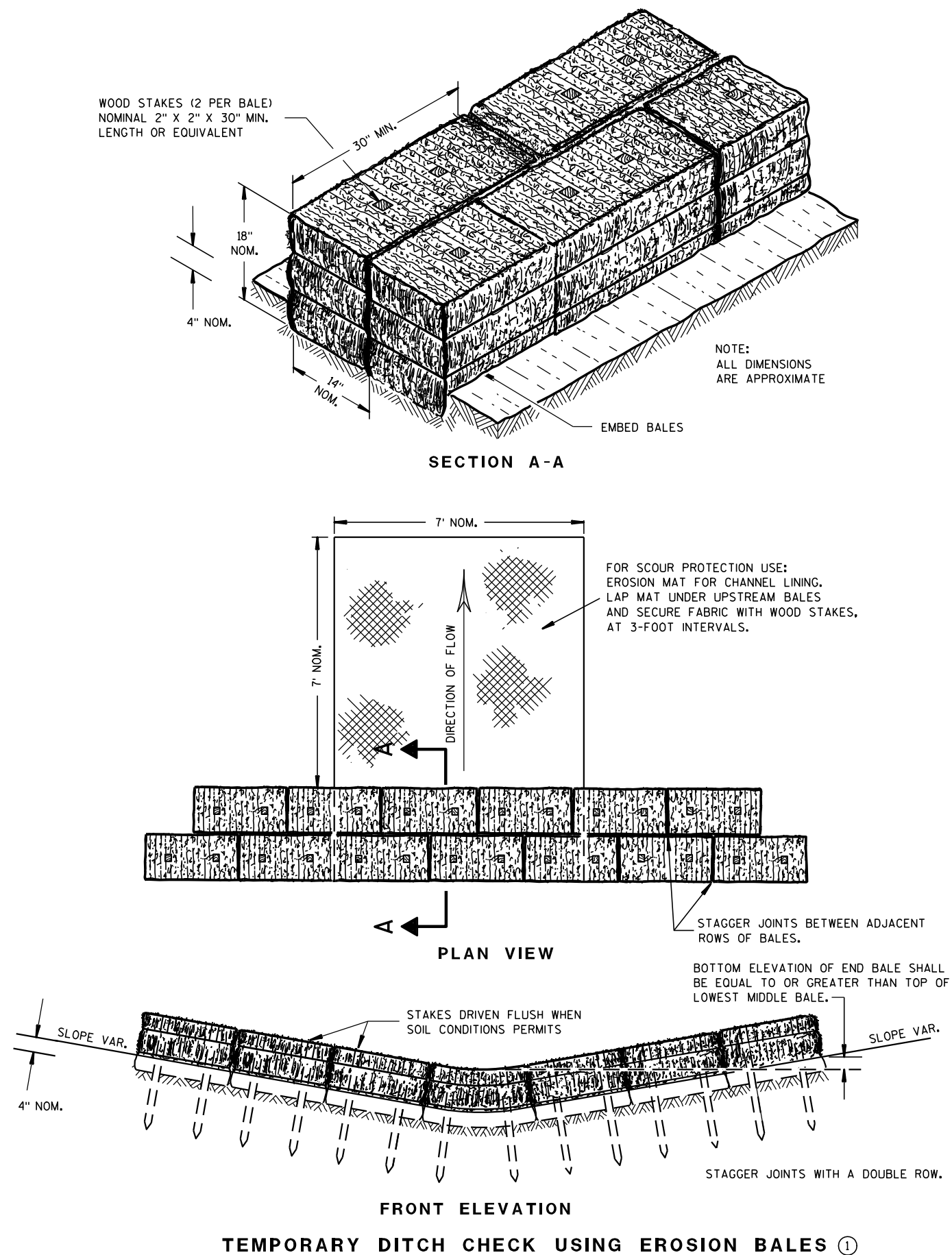


PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

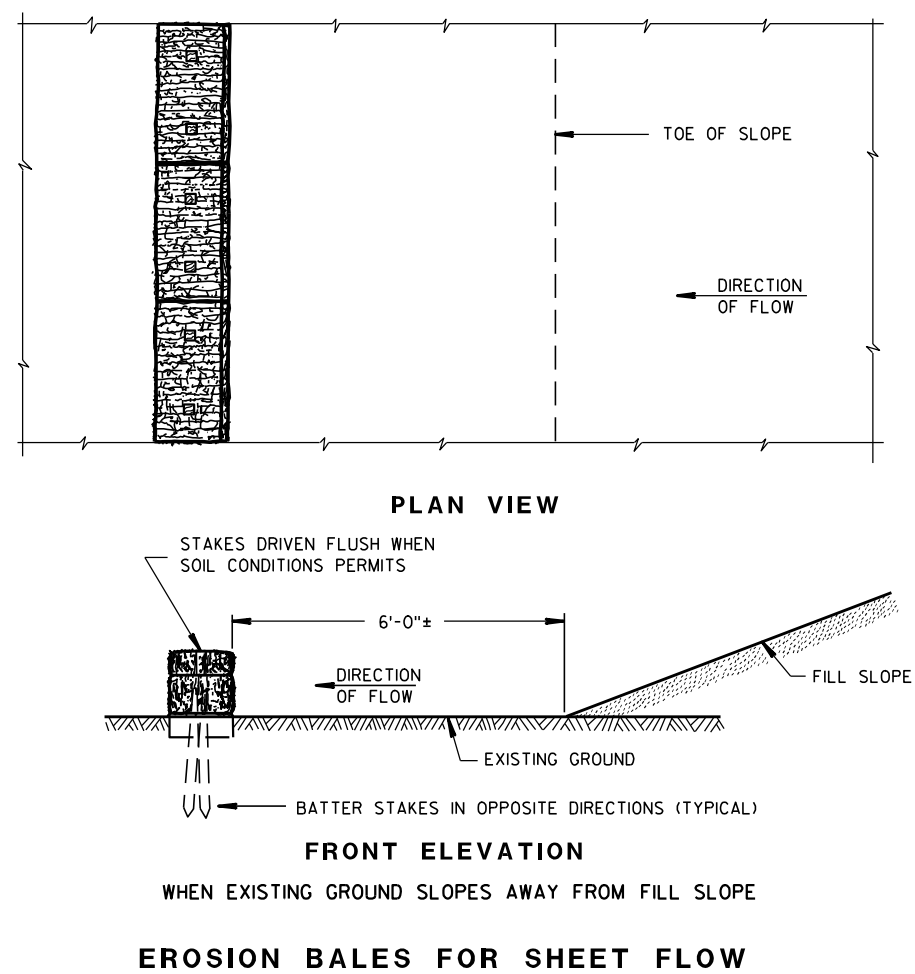
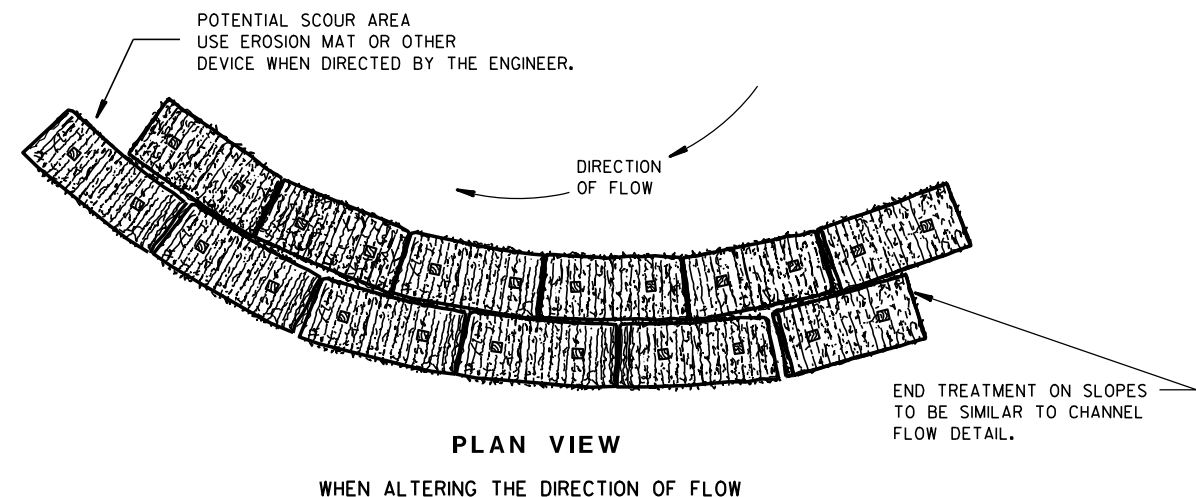
APPROVED
July 2023
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR



GENERAL NOTES

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

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

TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

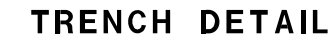
6/04/02
DATE

/S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER 94 ENGINEER

FHWA



- 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.

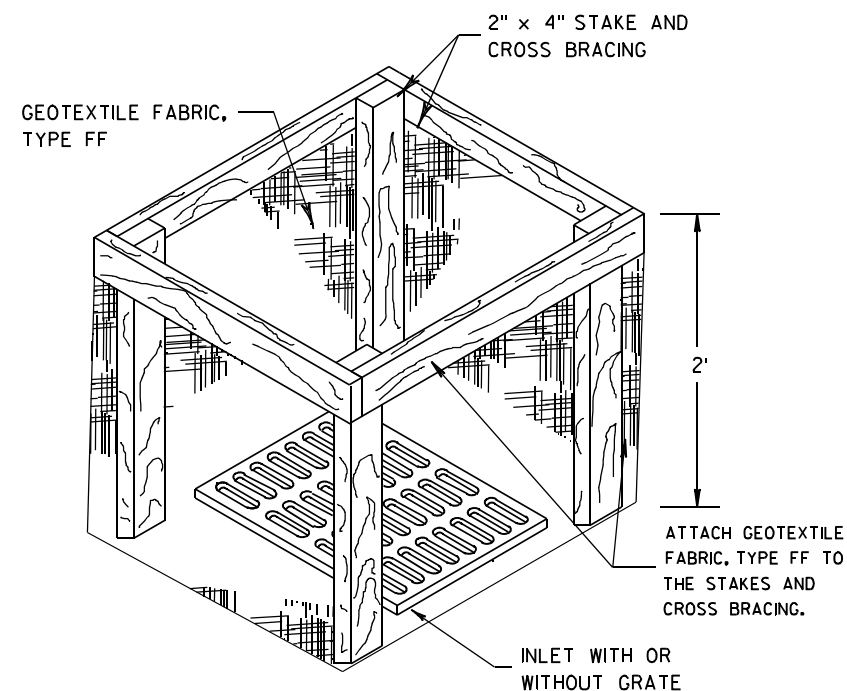
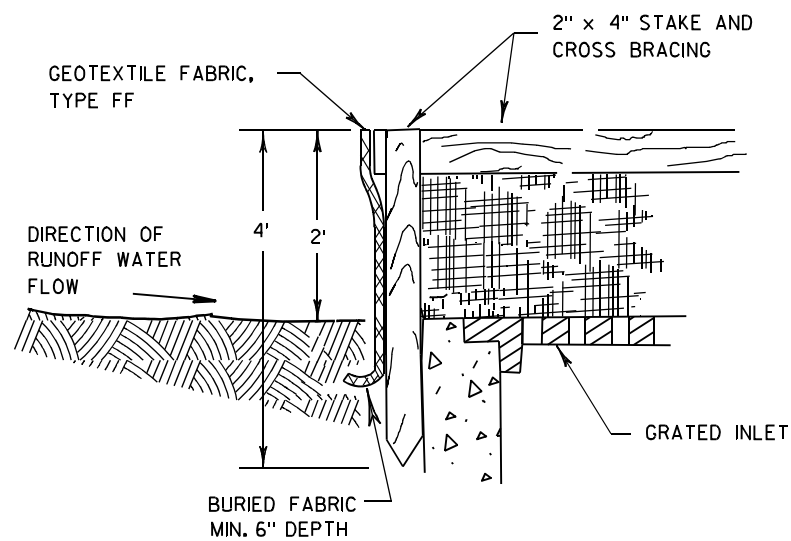


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



INLET PROTECTION, TYPE A

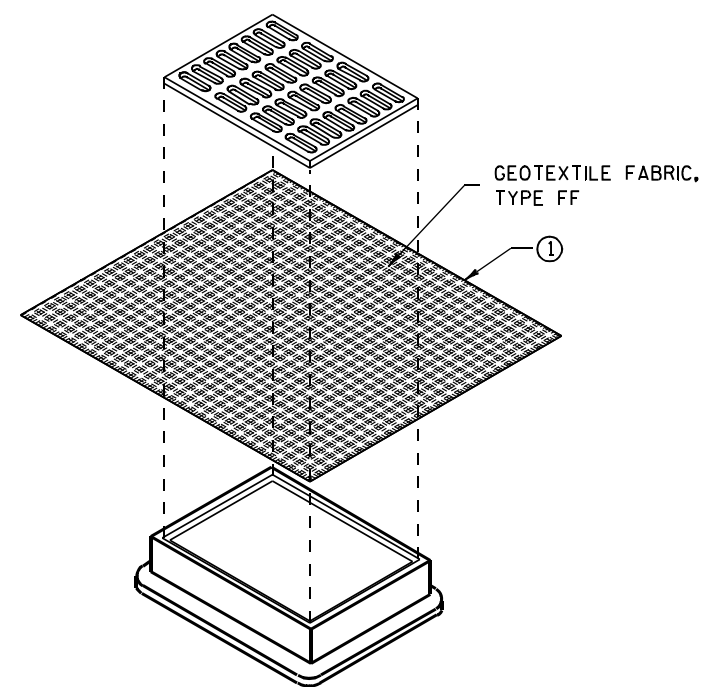
GENERAL NOTES

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.

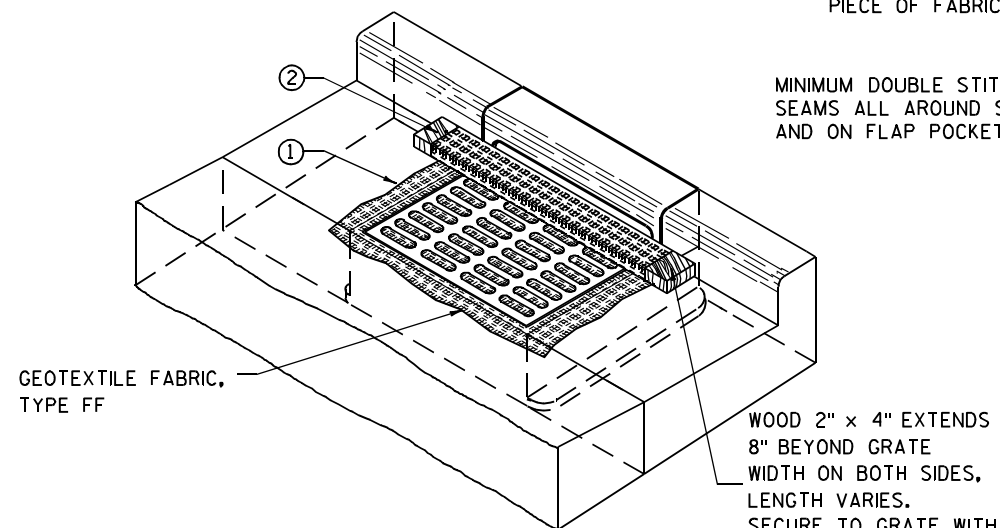
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.

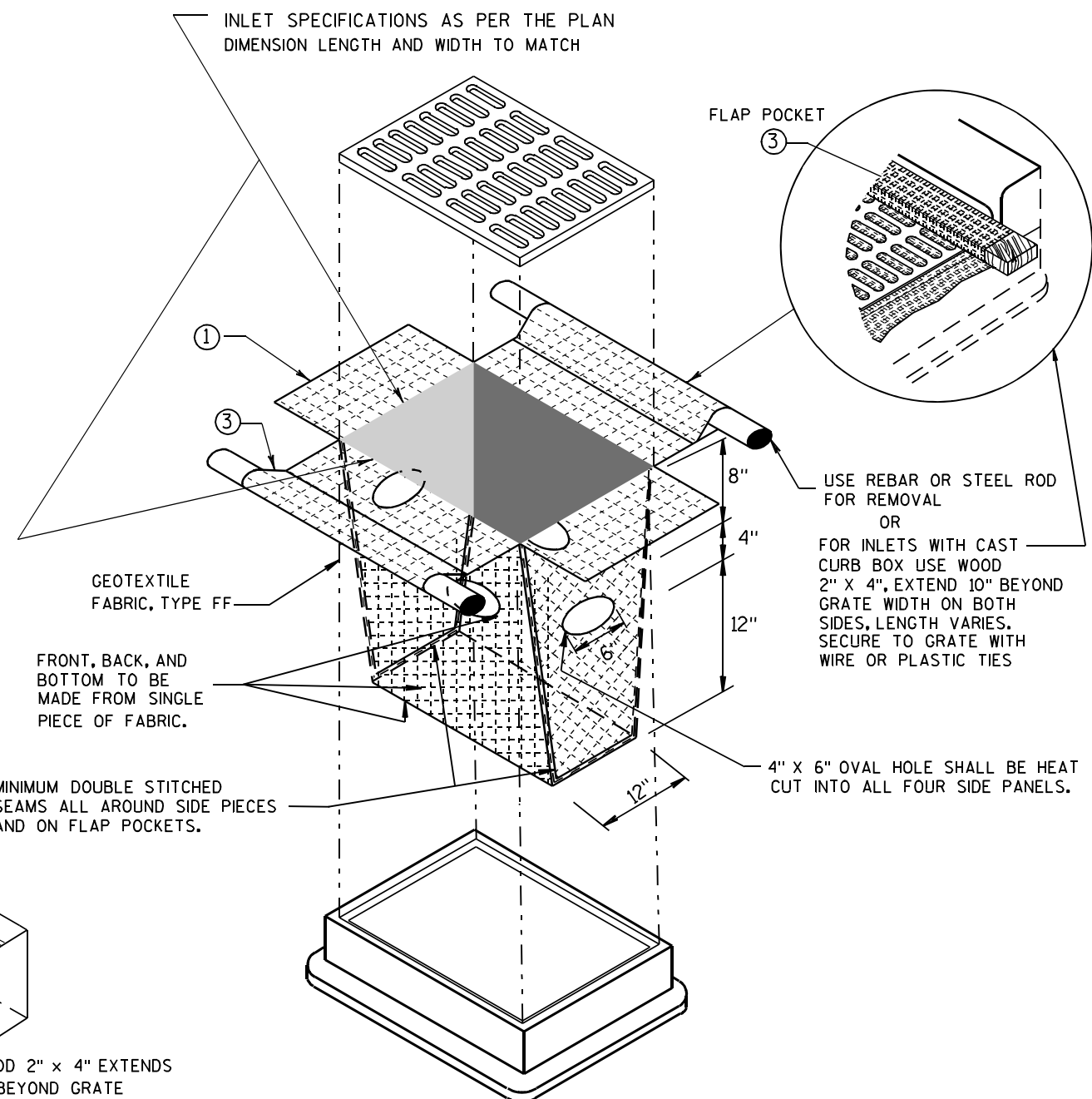
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



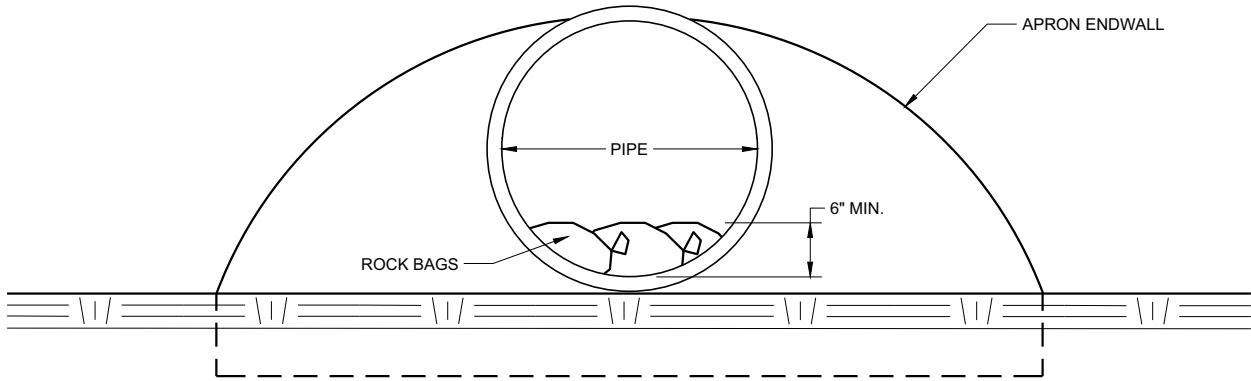
INLET PROTECTION, TYPE D

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

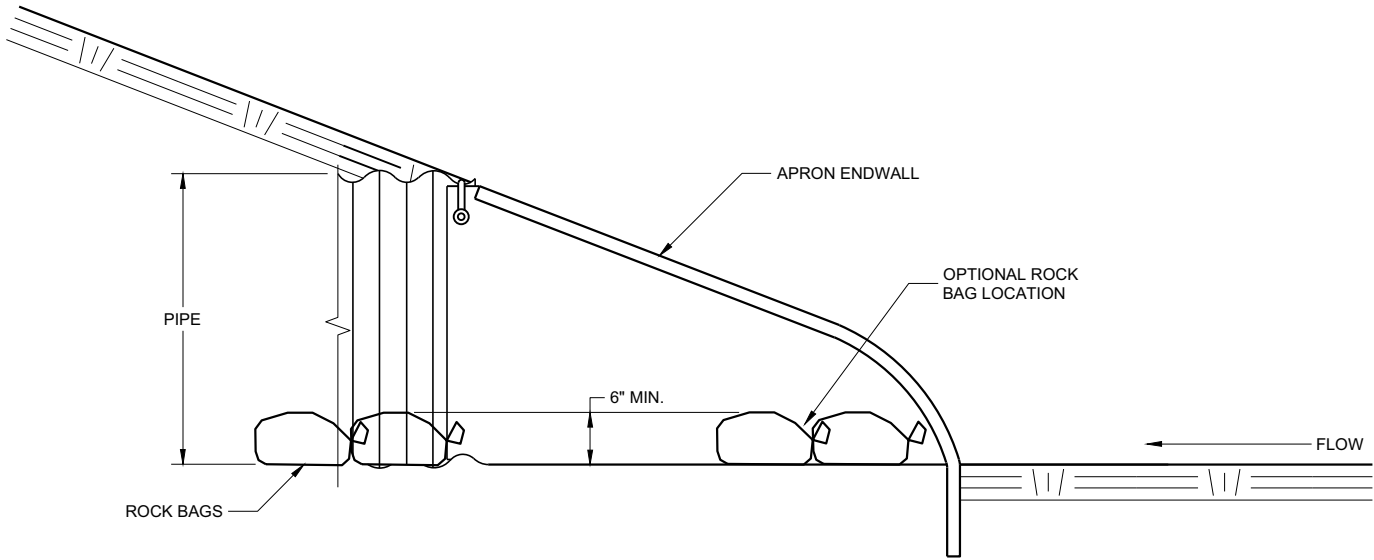
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 96
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



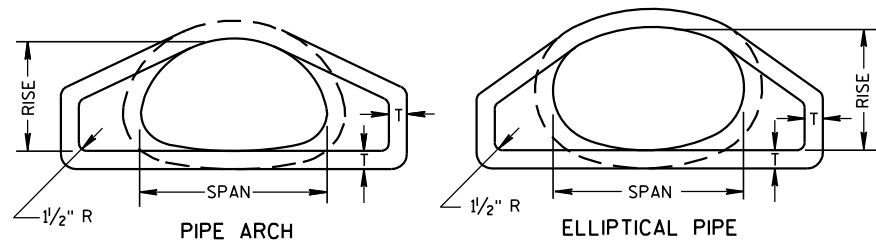
END VIEW



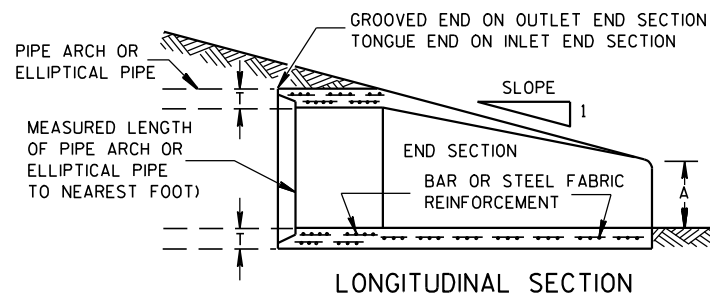
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGR 97
FHWA	

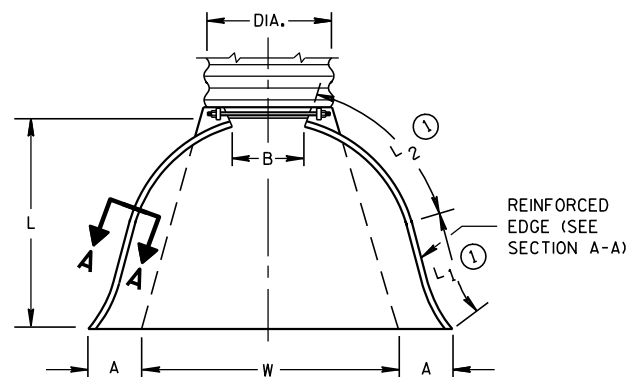


END VIEW



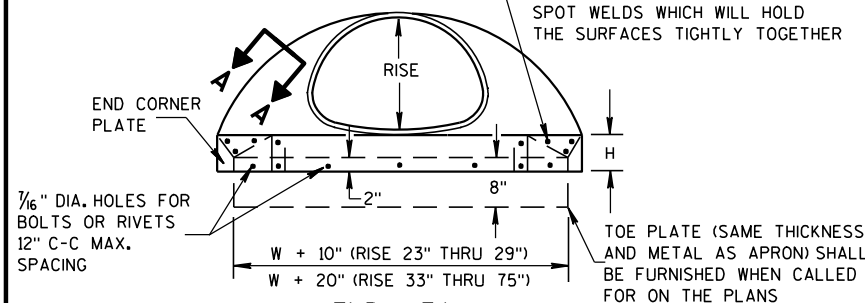
LONGITUDINAL SECTION

CONCRETE ENDWALLS



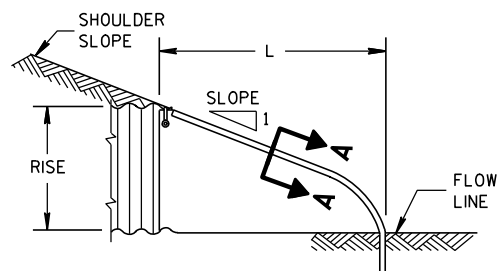
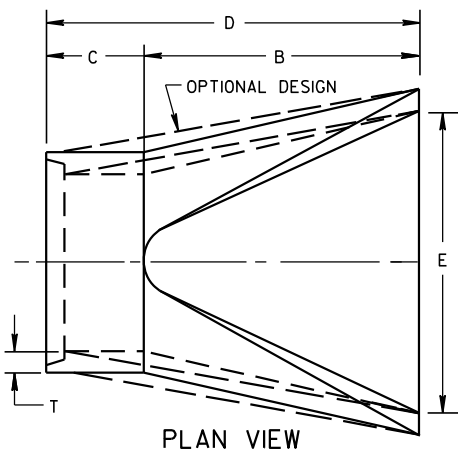
PLAN VIEW

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

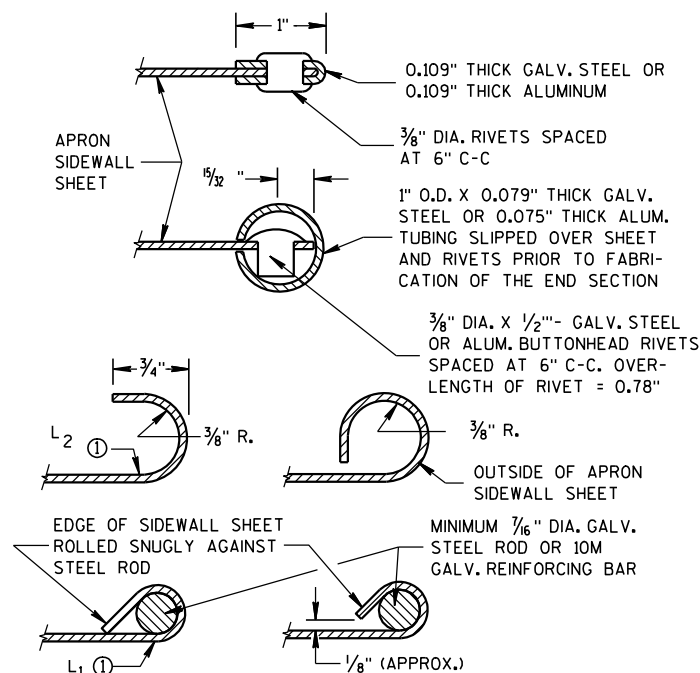


END VIEW

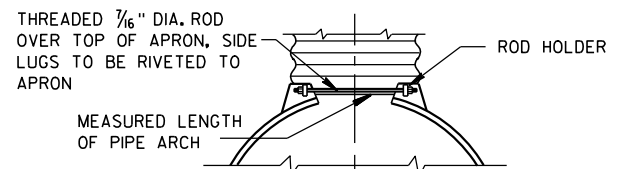
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW

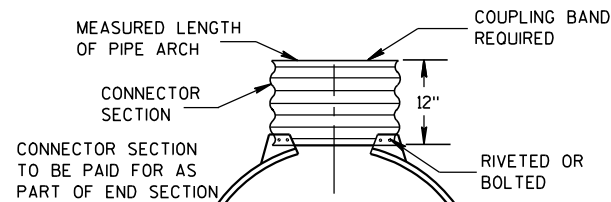


SECTION A-A



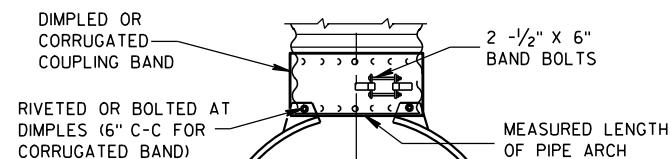
TYPE 2

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 ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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

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

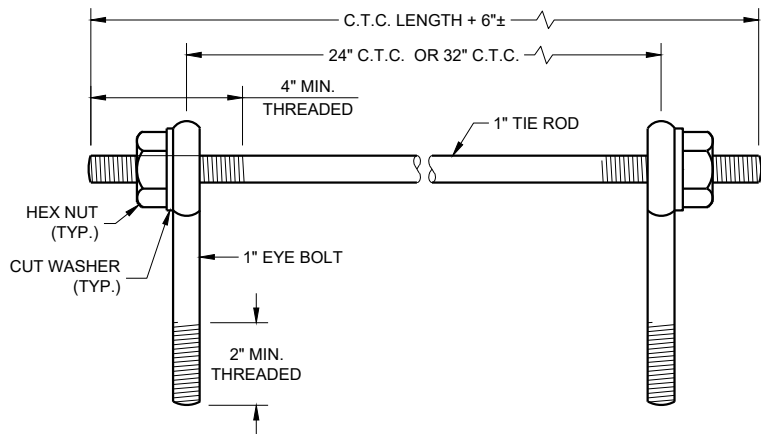
DATE

/S/ Rory L. Rhinehart

CHIEF ROADWAY DEVELOPER

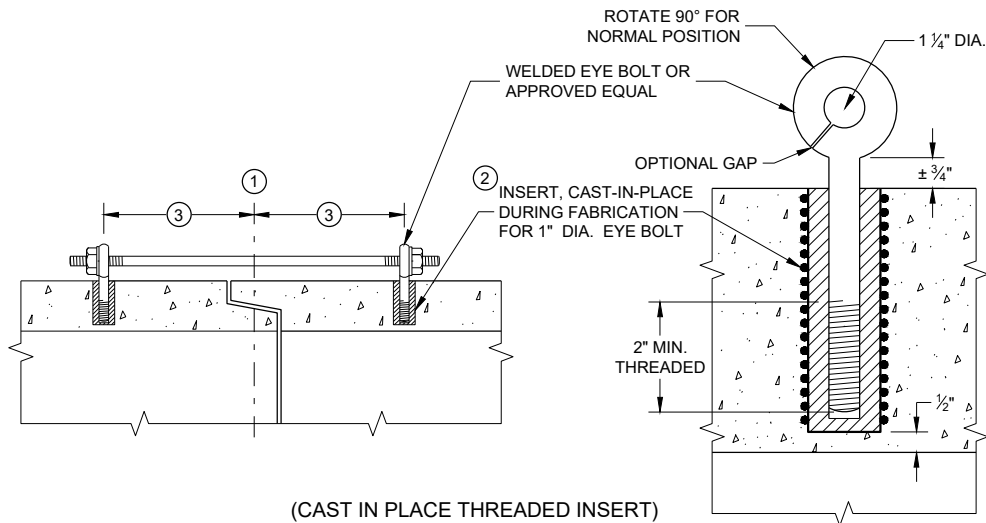
FHWA

ENGINEER



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

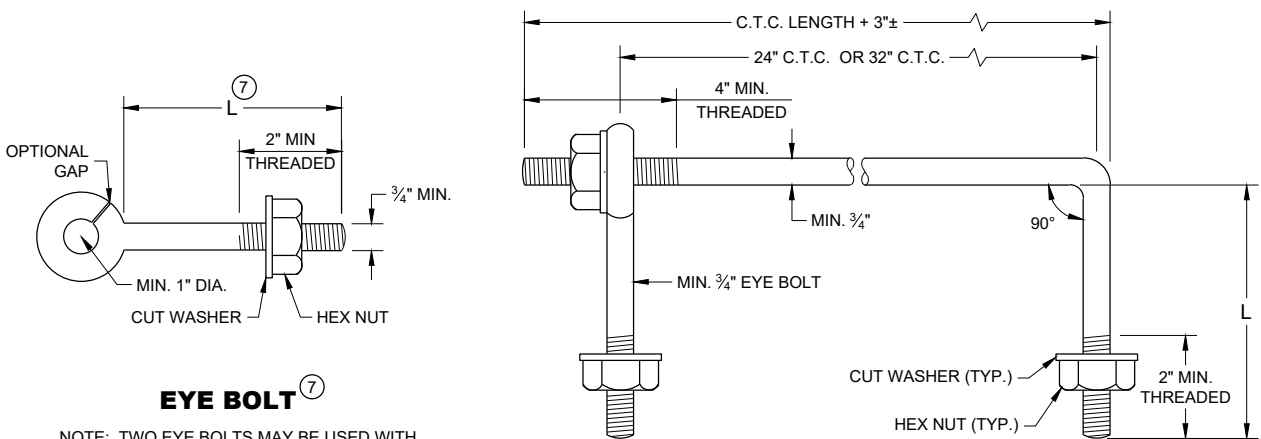
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

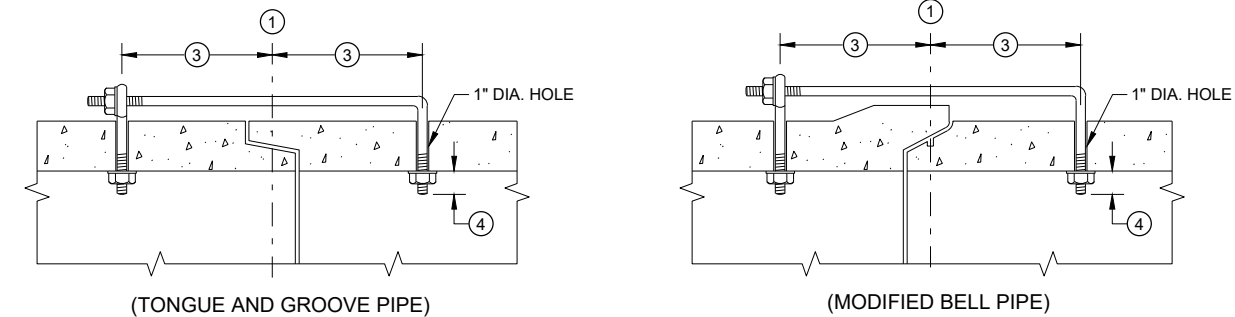
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- 2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- 3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- 5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- 6 LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.



EYE BOLT AND TIE ROD

EYE BOLT
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



LONGITUDINAL SECTION

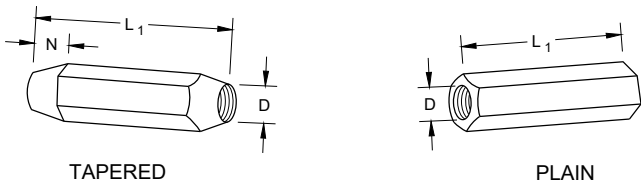
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

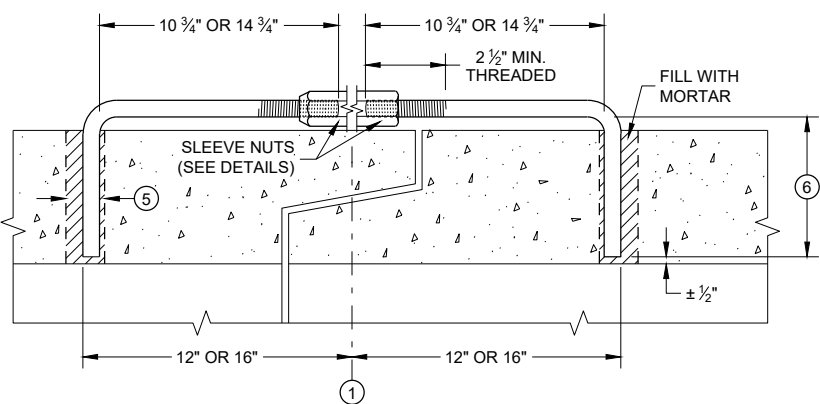
DIMENSIONS SHOWN ARE IN INCHES



TAPERED

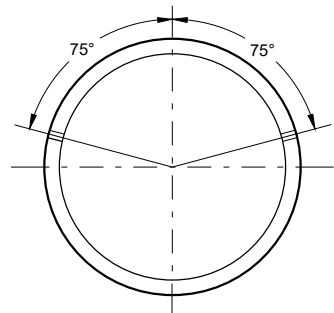
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



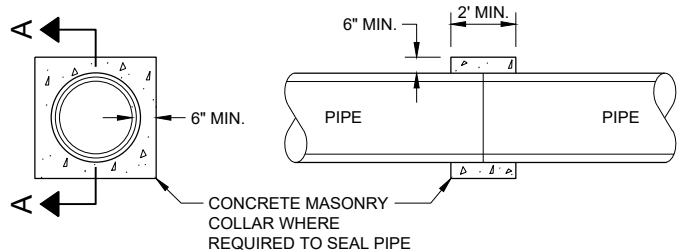
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



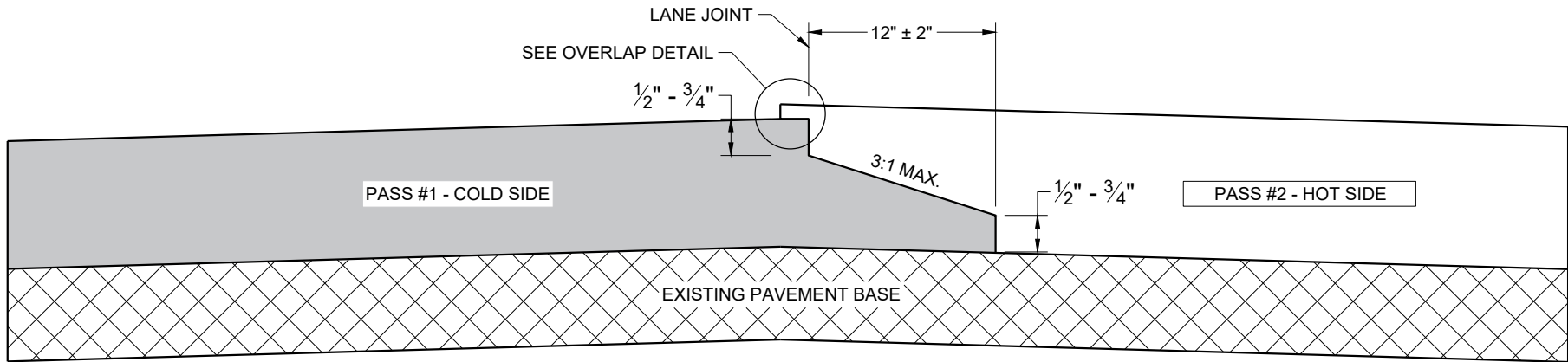
SECTION A - A

CONCRETE COLLAR DETAIL

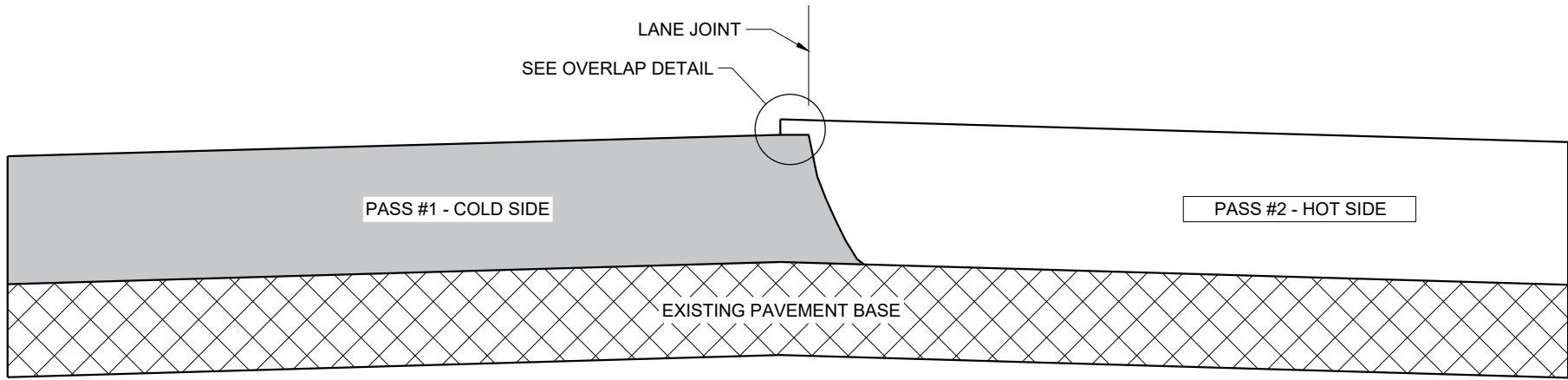
JOINT TIES FOR CONCRETE
PIPE AND CONCRETE
COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

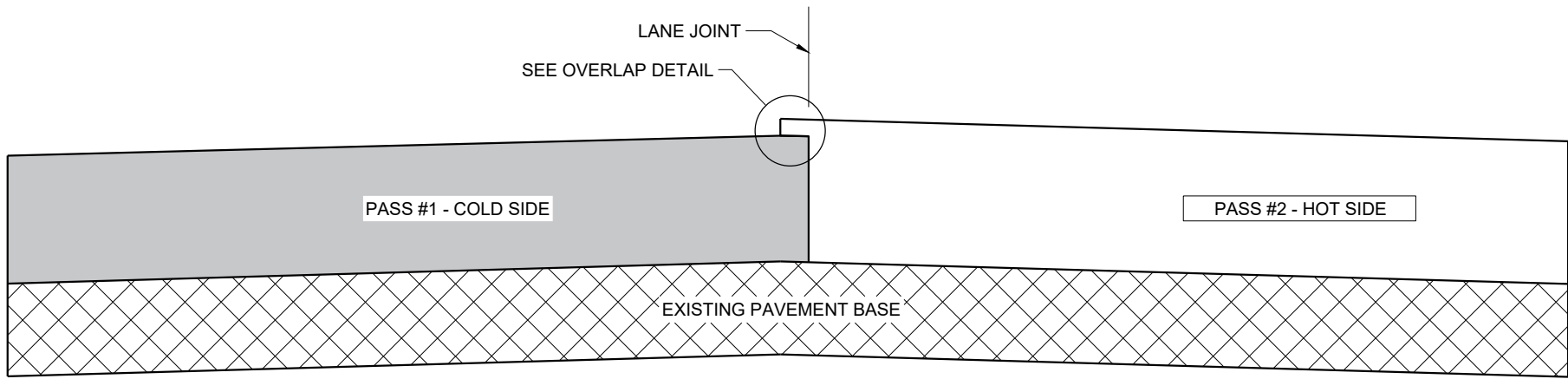
APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER
99
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

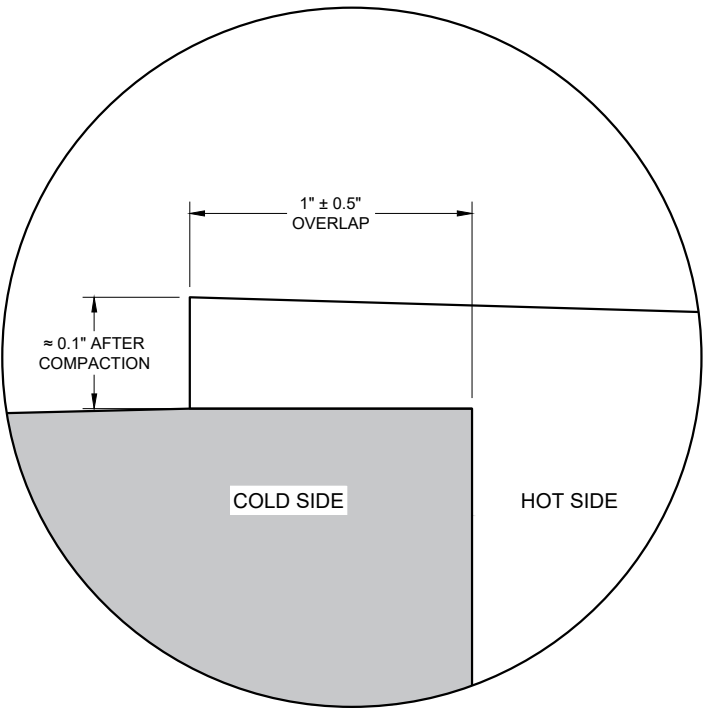
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.



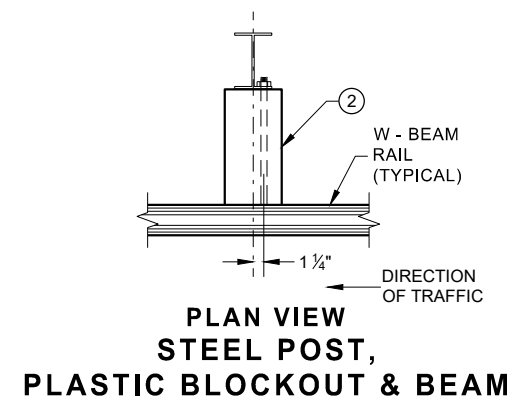
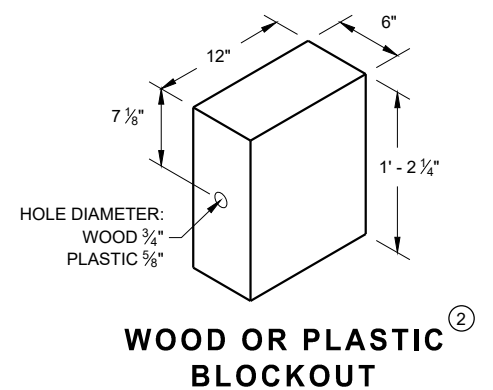
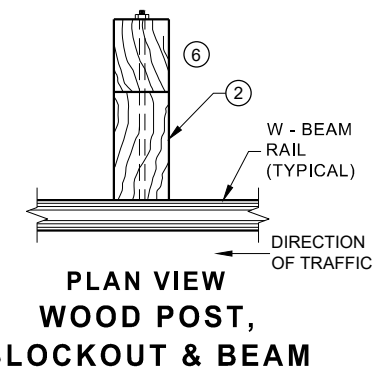
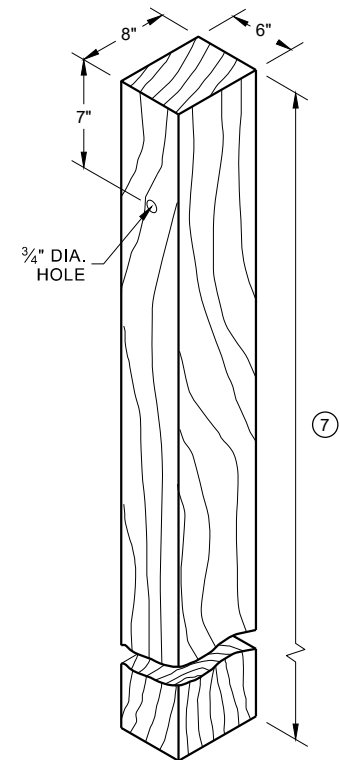
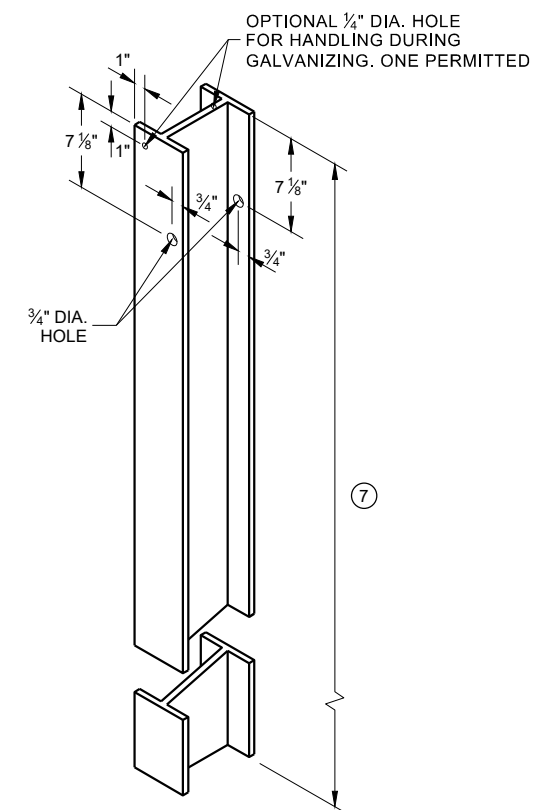
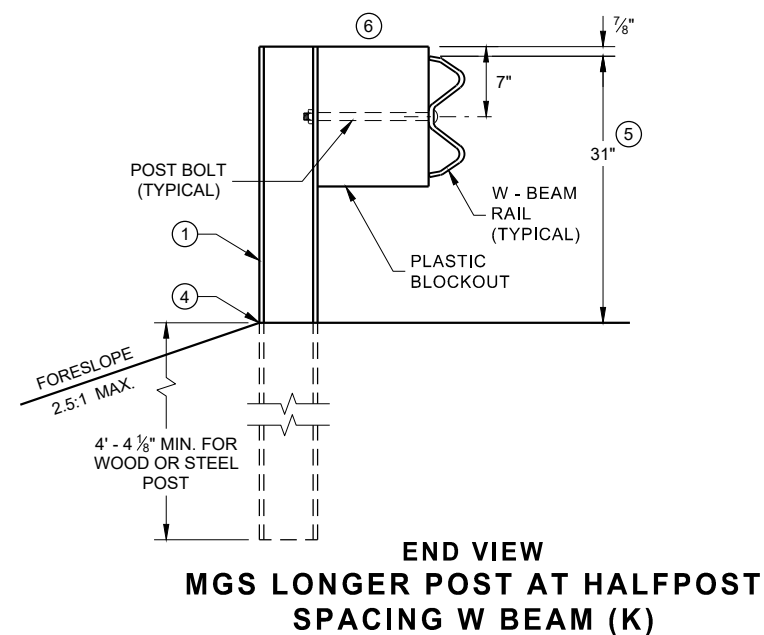
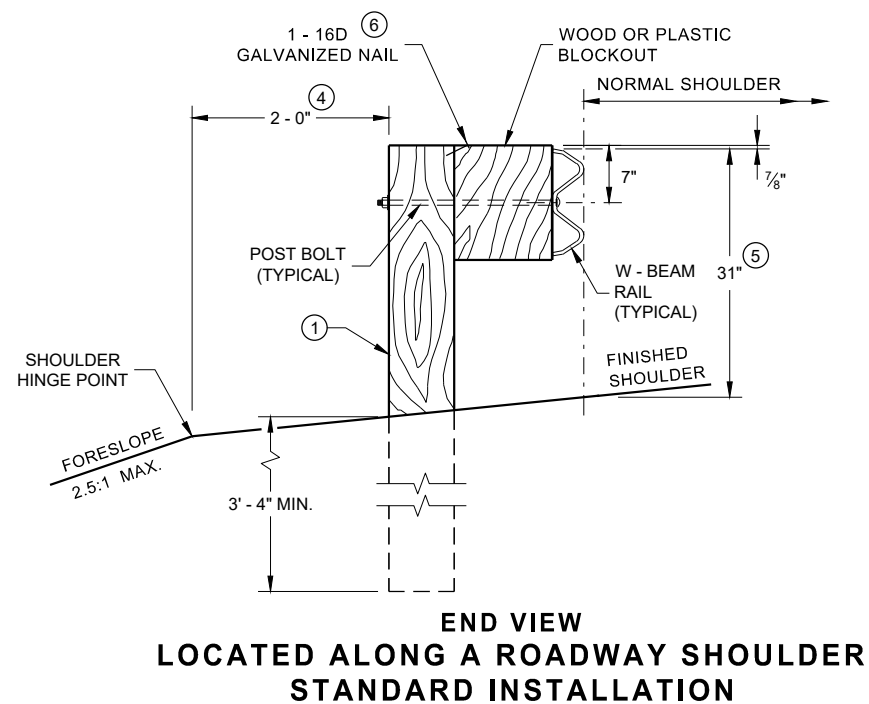
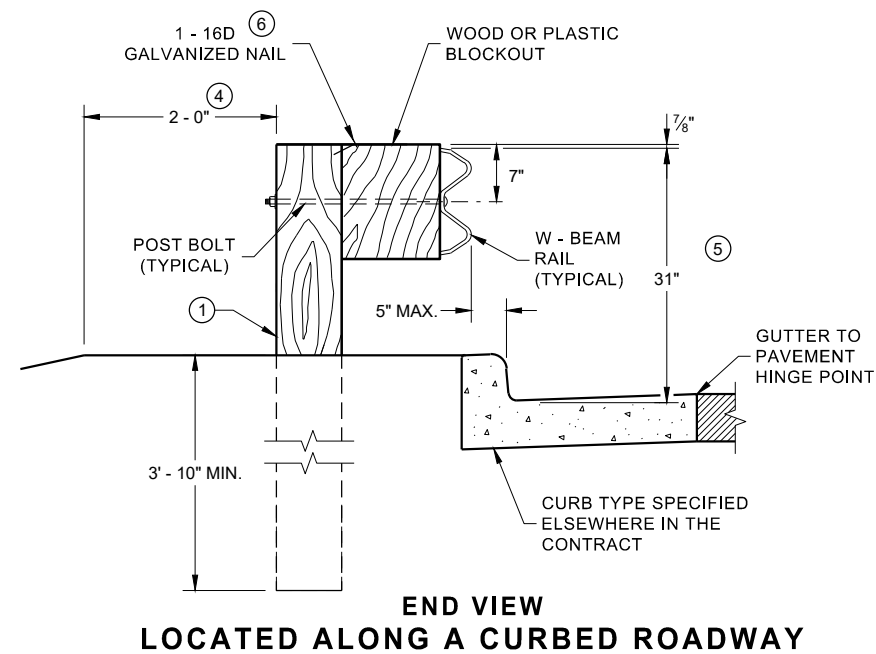
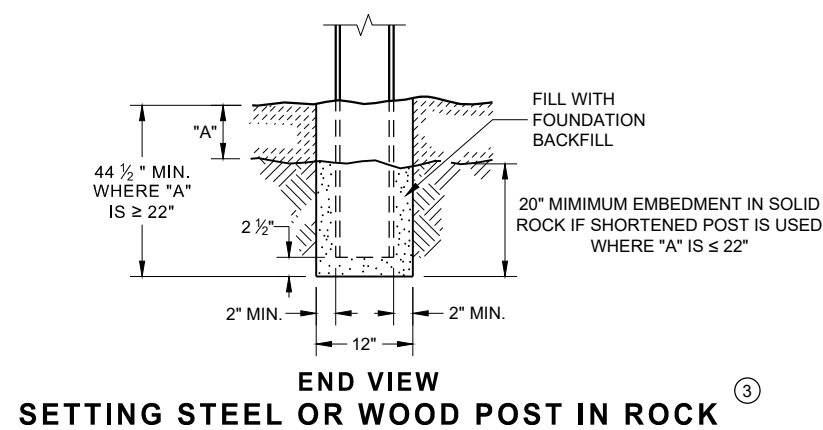
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

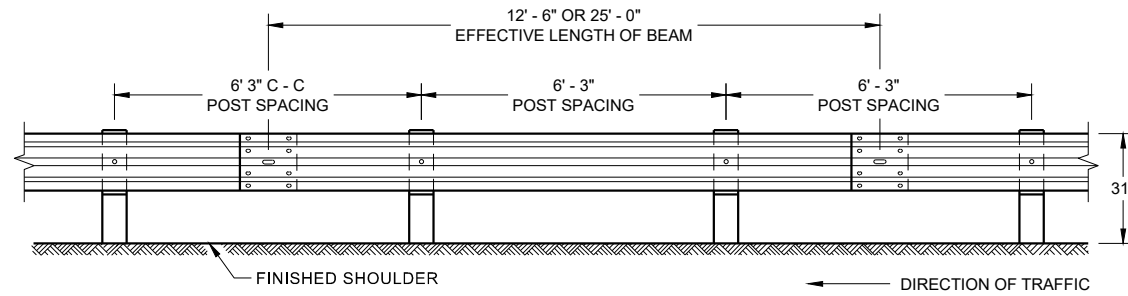
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 100
FHWA

- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS $\pm 1"$. FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.
- ⑦ TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".

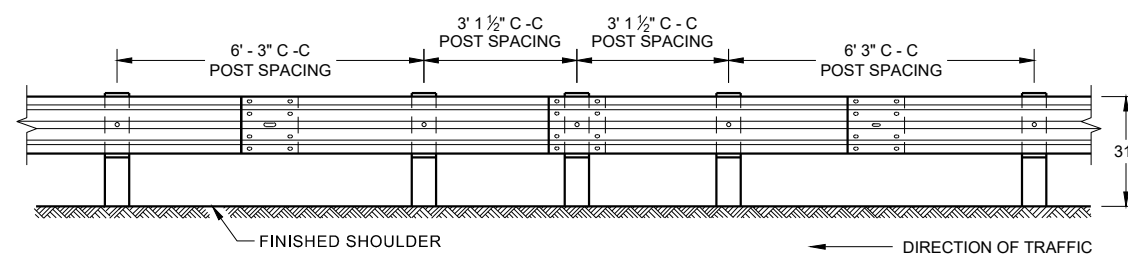


MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

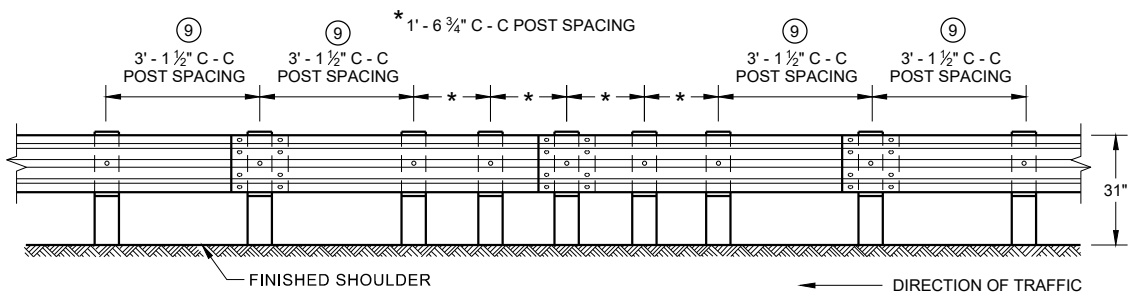
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 101



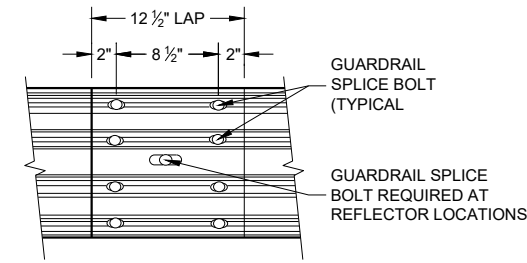
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



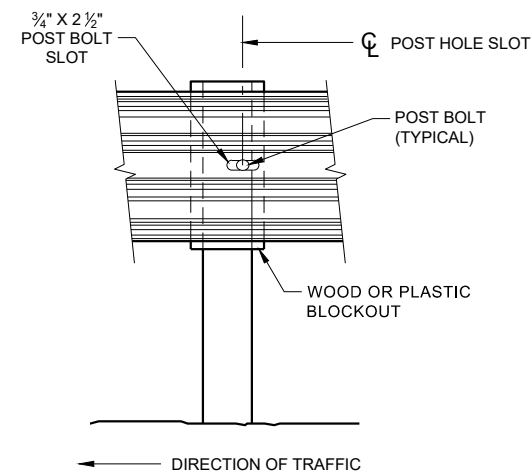
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



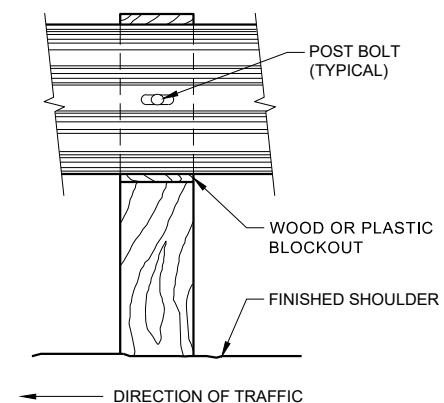
**FRONT VIEW
QUARTER POST SPACING (QS)**



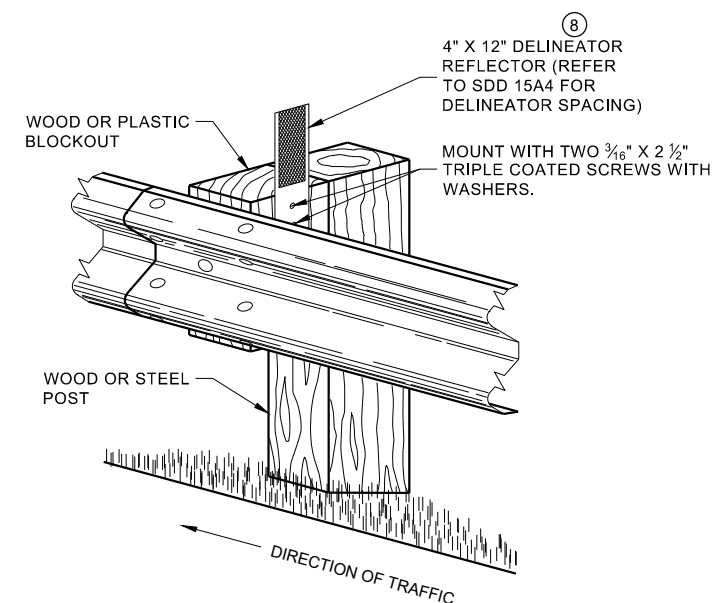
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



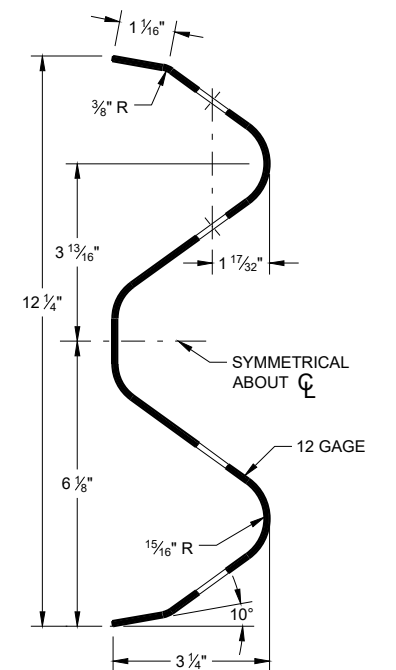
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

- 8 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- 9 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 3/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 3/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 102



IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

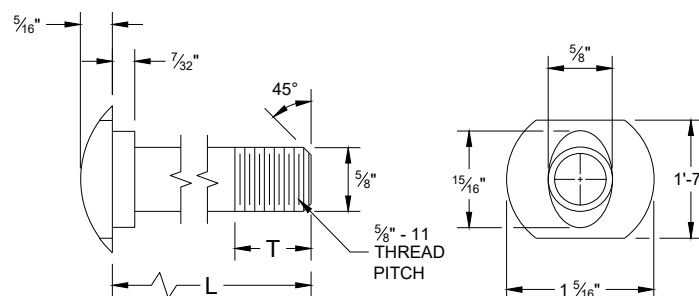


NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

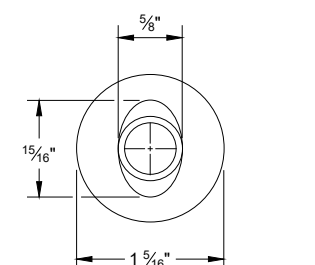
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF $\frac{3}{16}$ ".
2. IF THE BOLT EXTENDS MORE THAN $\frac{1}{4}$ " FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

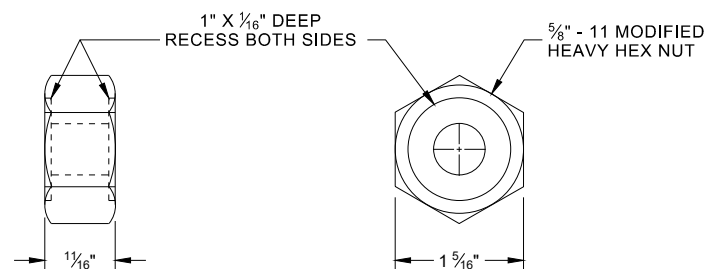


POST BOLT TABLE

L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"

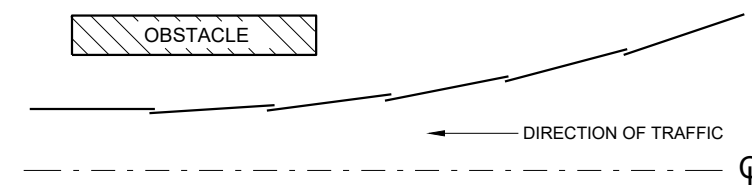


ALTERNATE BOLT HEAD

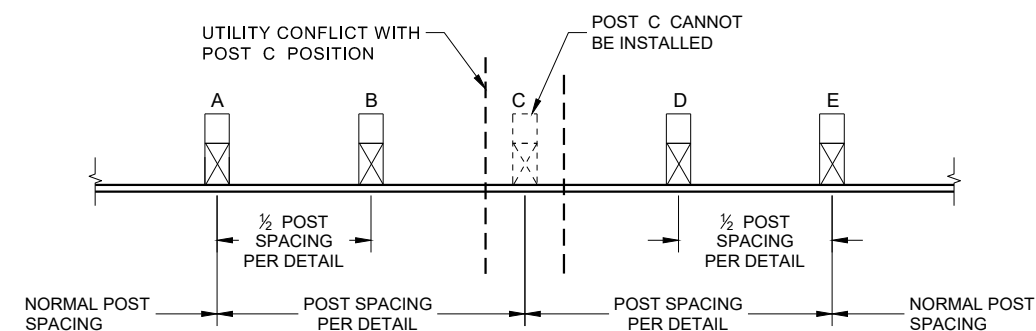


POST BOLT, SPLICE BOLT AND RECESS NUT

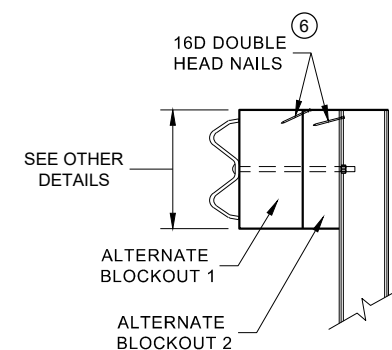
⑥ WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



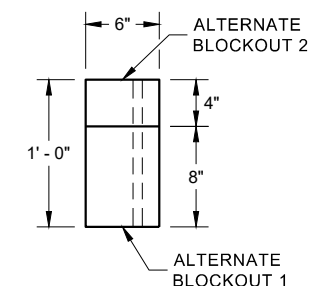
PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW

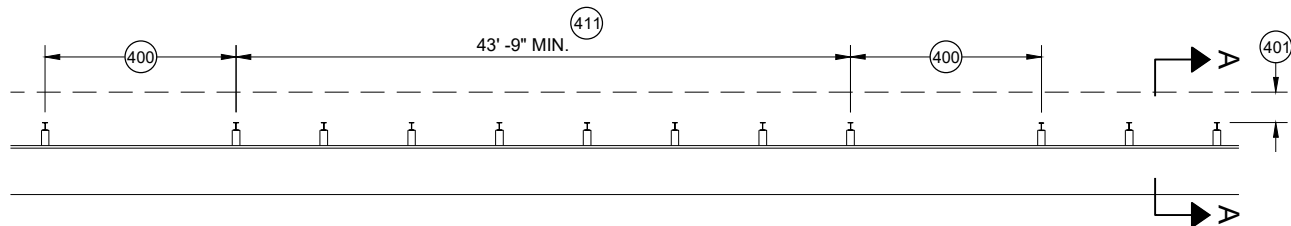


PLAN VIEW

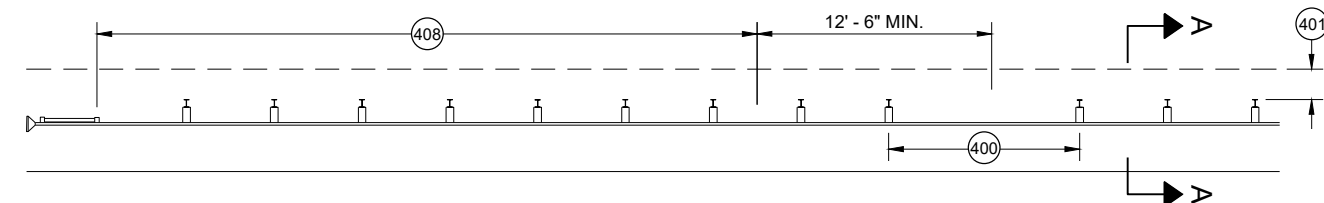
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

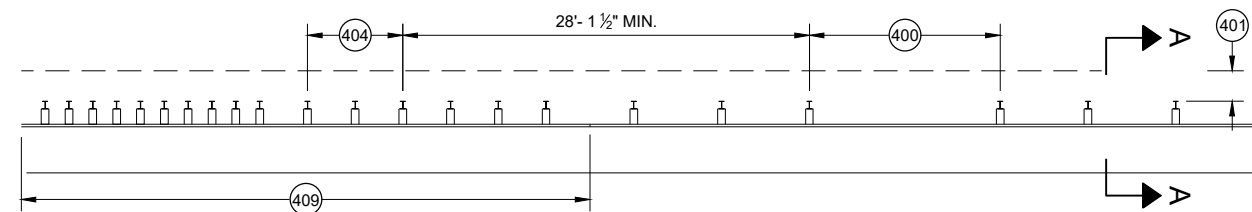
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 103



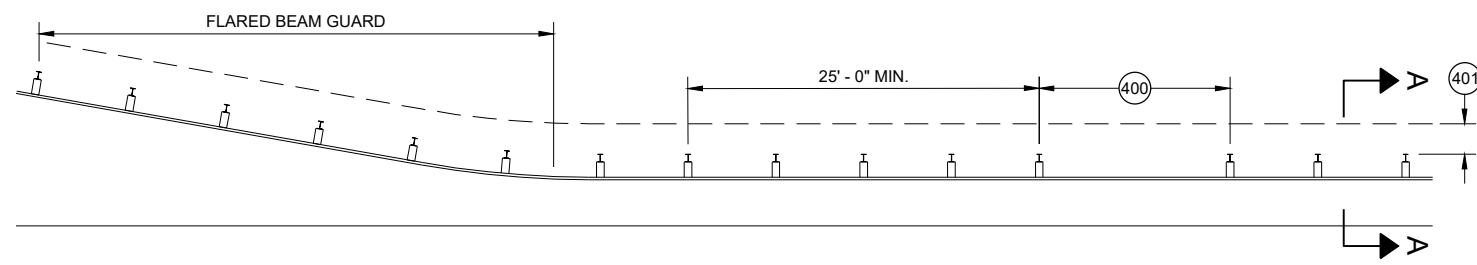
MISSING POST IN MGS GUARDRAIL



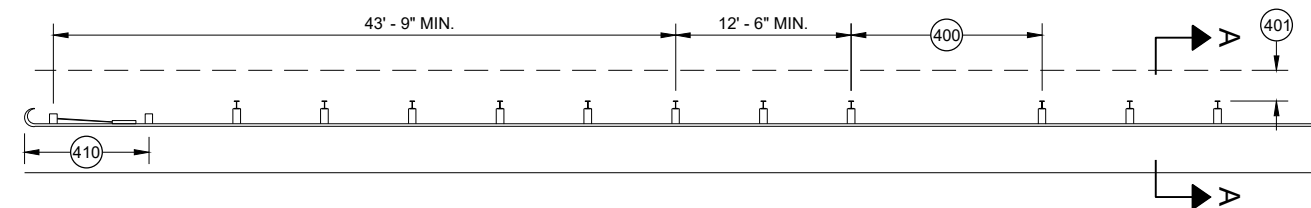
MISSING POST IN MGS GUARDRAIL NEAR EAT



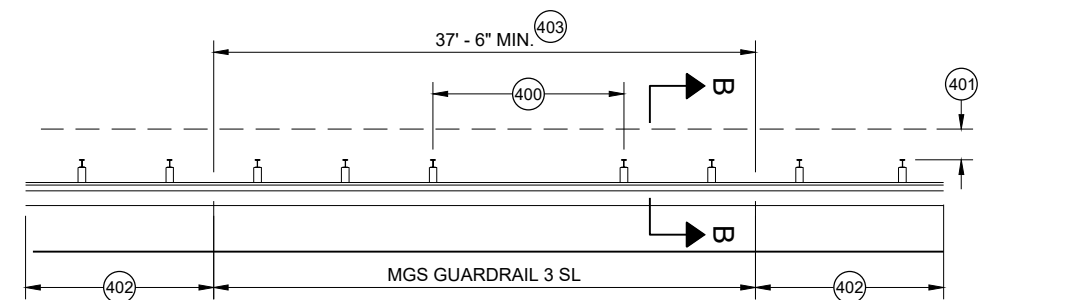
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

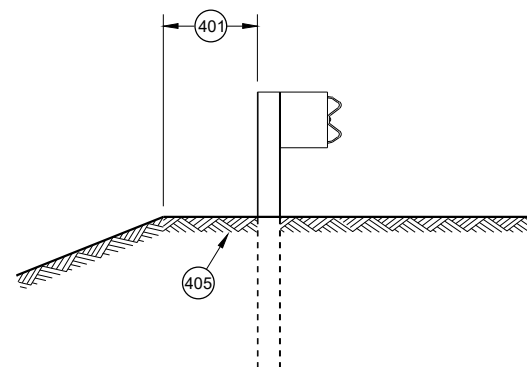


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

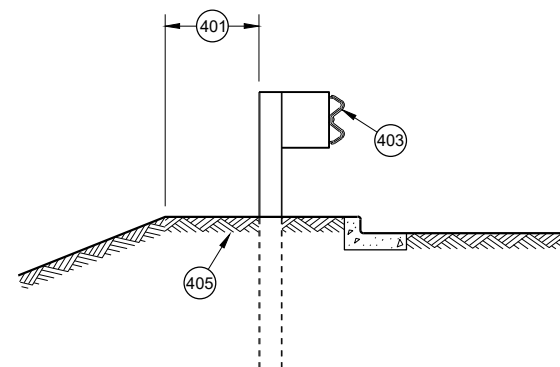


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)

- (400) MAX SPAN 12' - 6"
- (401) 2' MIN.
- (402) MGS GUARDRAIL 3
- (403) NESTING BEAM GUARD
- (404) ASYMMETRIC TRANSITION
- (405) SOIL WELL DRAINED AND COMPACTED
- (406) SEE OTHER DRAWINGS IN THIS SDD
- (407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
- (408) SEE SDD 14B44
- (409) SEE SDD 14B45
- (410) SEE SDD 14B47
- (411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A



SECTION B - B

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

104

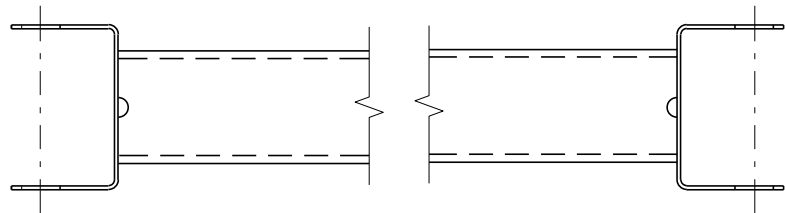
- A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED
- C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.
- D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.
- E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.

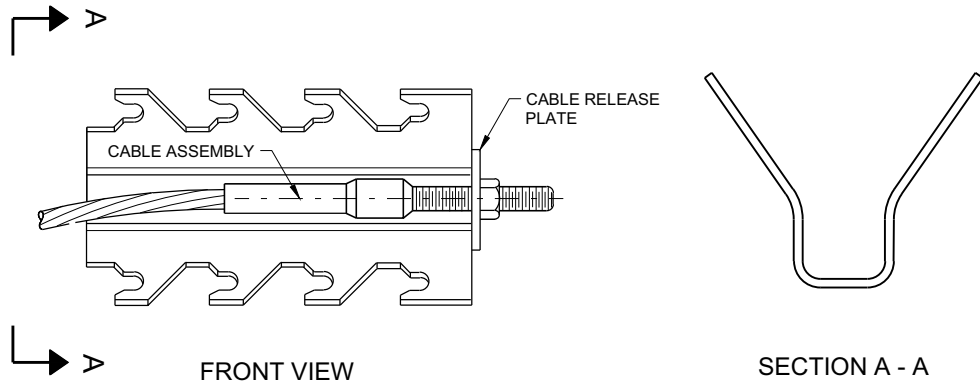


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 105

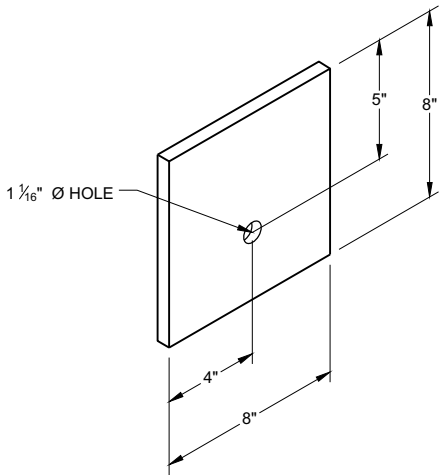


GENERIC GROUND STRUT 9 E

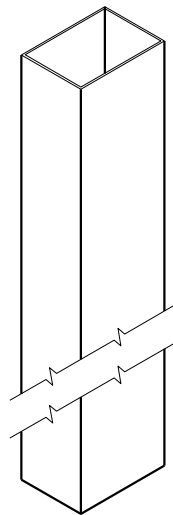
BILL OF MATERIALS	
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
11	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
12	IMPACT HEAD
13	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
14	SOIL PLATE
15	UPPER POST NO. 2
16	LOWER POST NO. 2



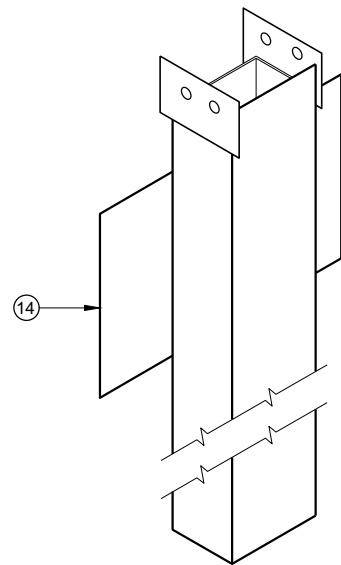
GENERIC ANCHOR CABLE BOX 9 E



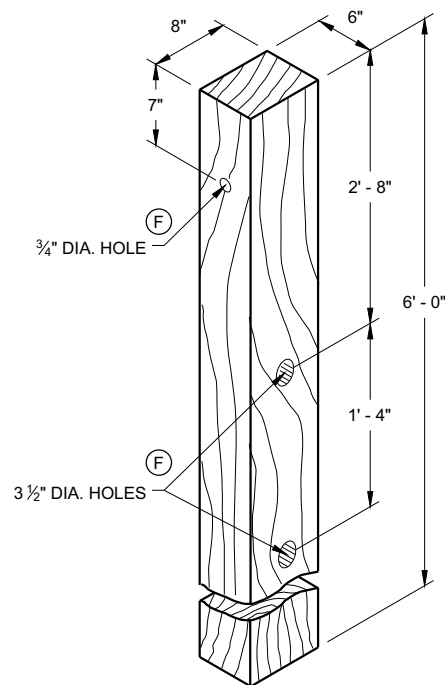
BEARING PLATE 6 E



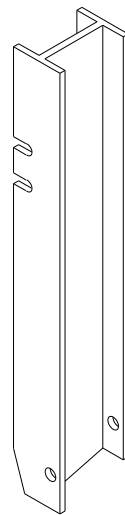
UPPER POST NO. 1 ⁽¹⁾ (E)



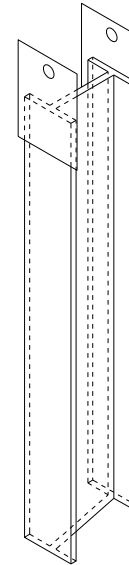
LOWER POST NO. 1 ⁽²⁾ (E)



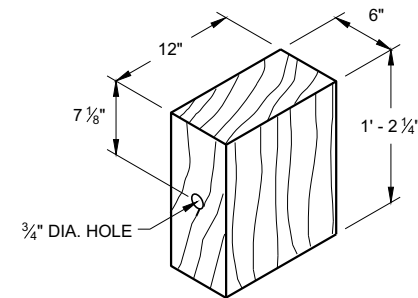
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



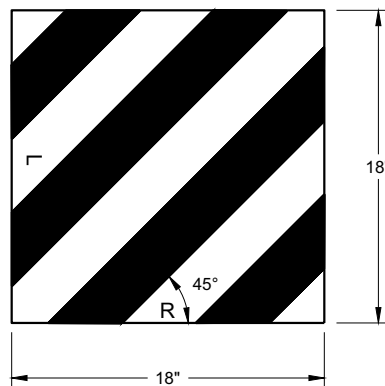
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



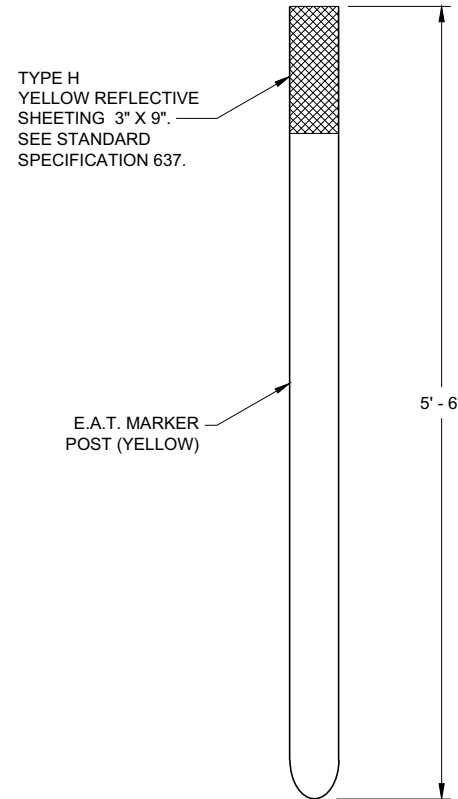
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



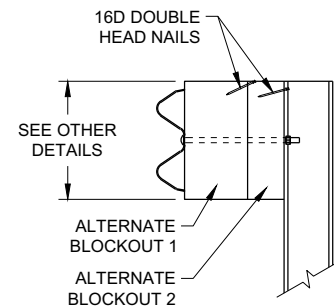
WOOD BLOCKOUT ⁽⁴⁾
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



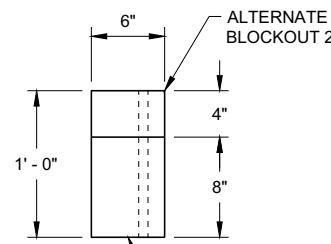
W5 - 59
REFLECTIVE SHEETING DETAIL ^(E)



FRONT VIEW
SIDE VIEW
E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW



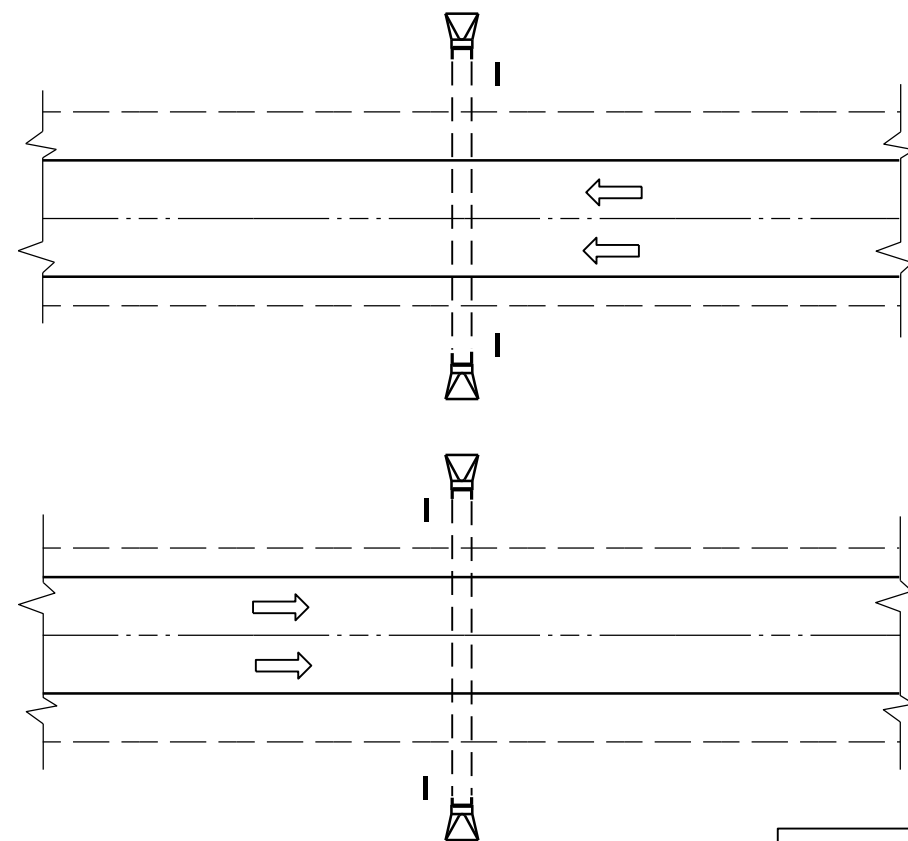
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

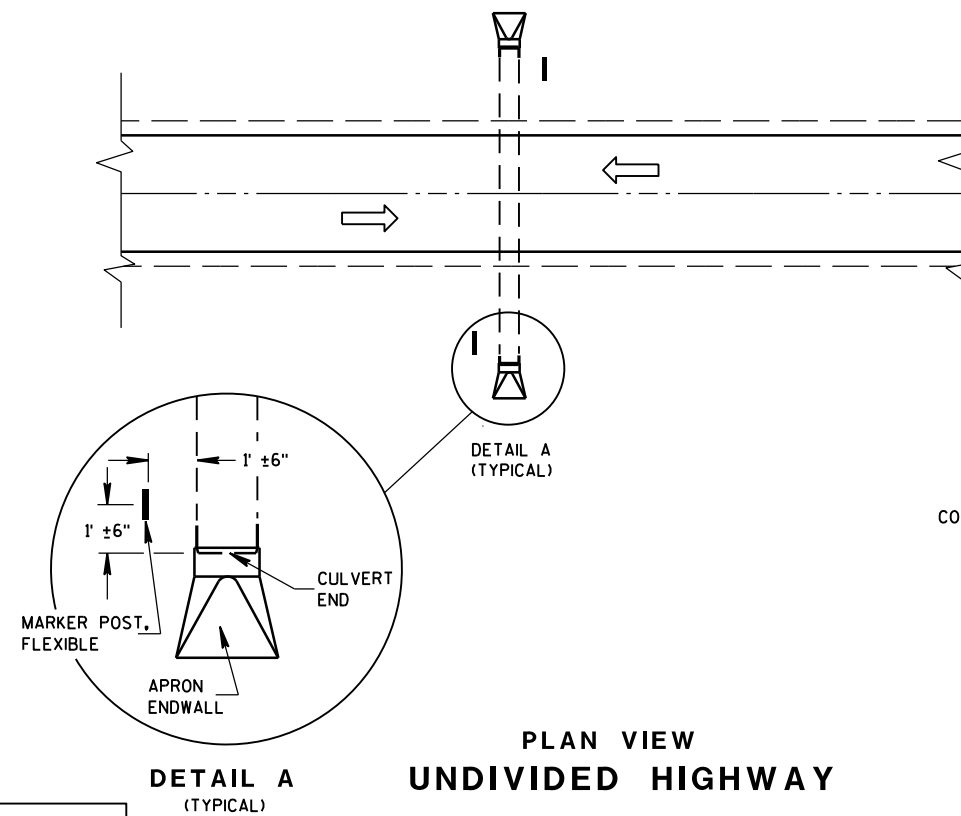
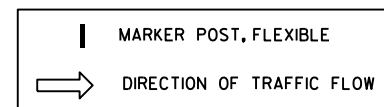
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
107
FHWA



PLAN VIEW
DIVIDED HIGHWAY

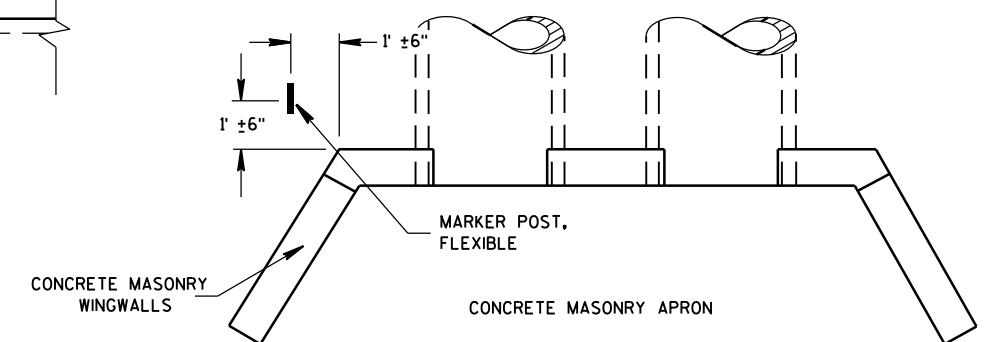


PLAN VIEW
UNDIVIDED HIGHWAY

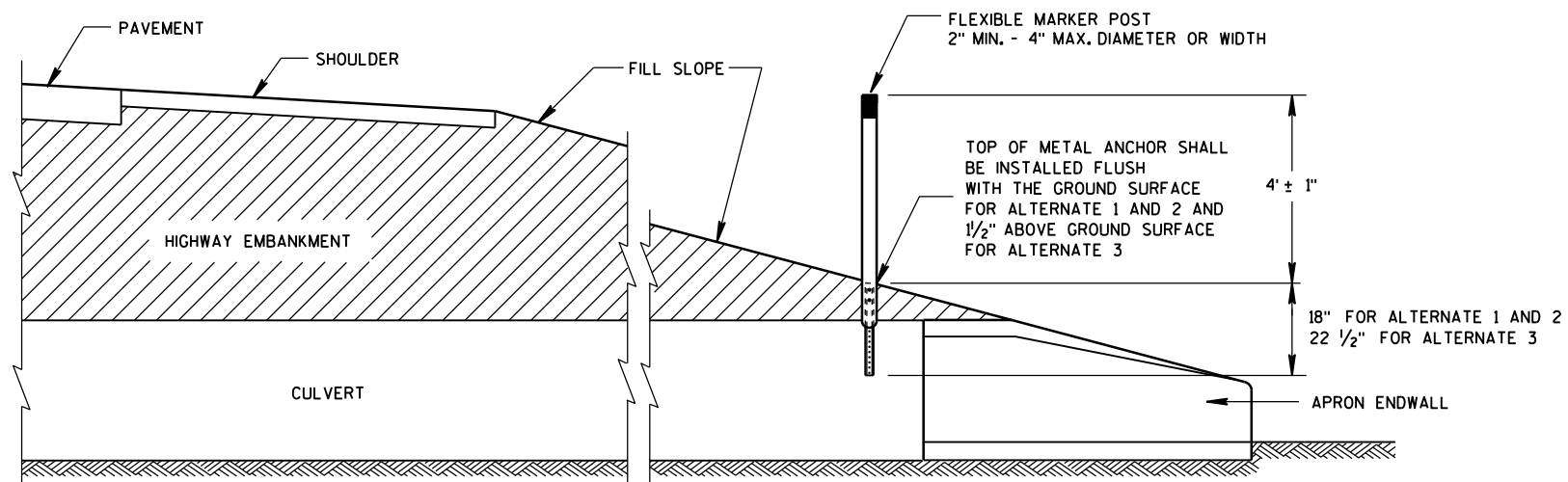
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



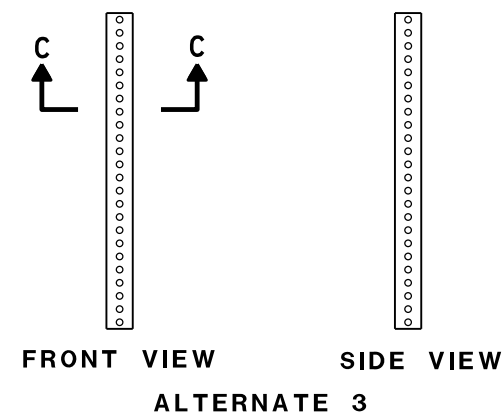
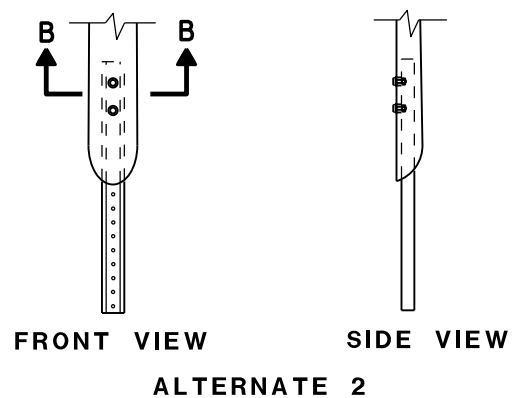
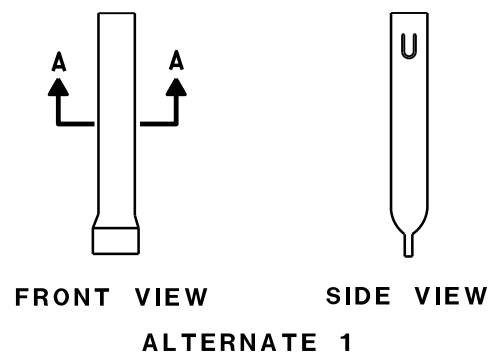
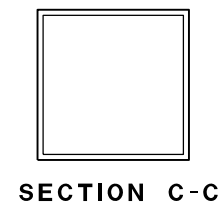
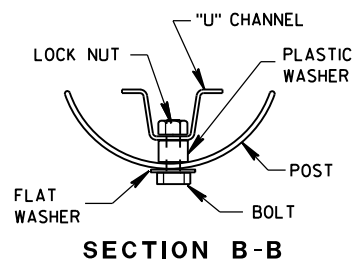
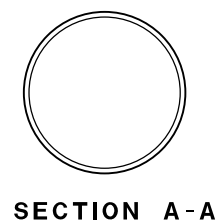
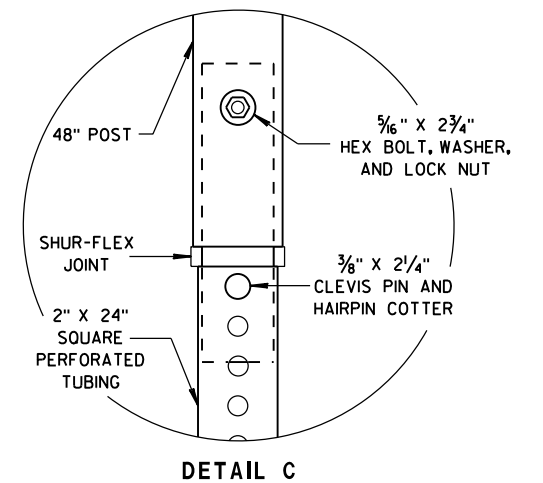
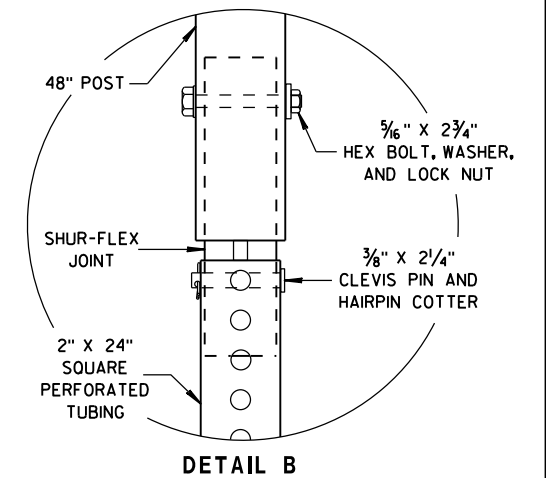
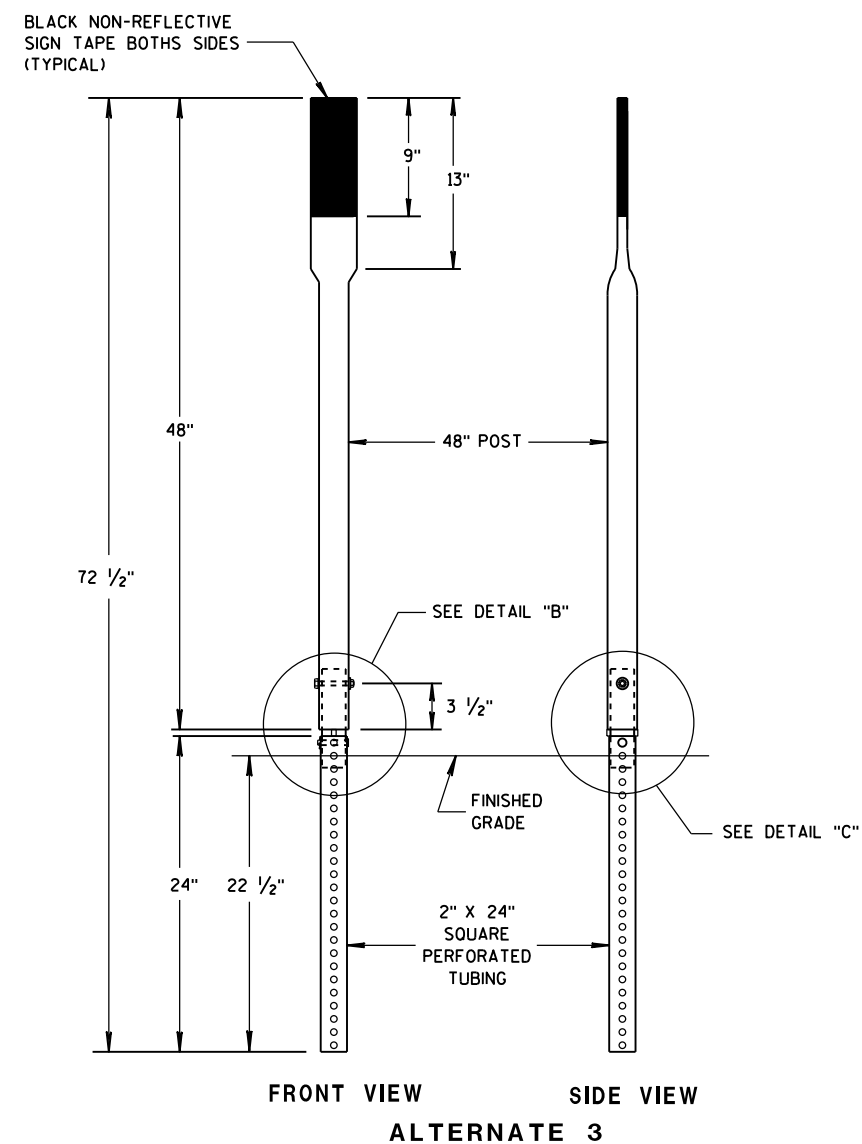
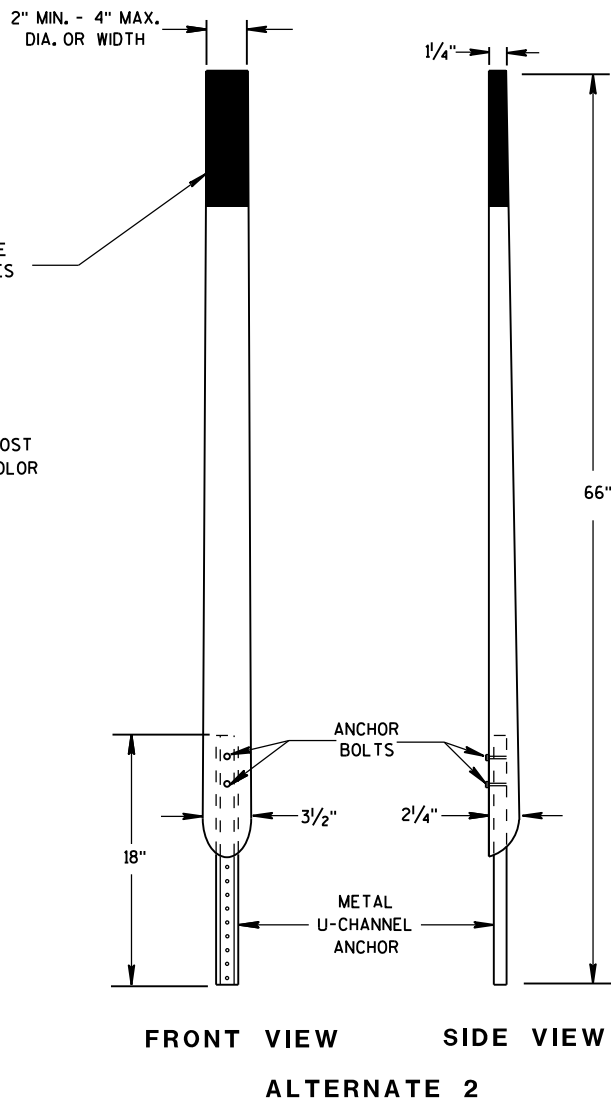
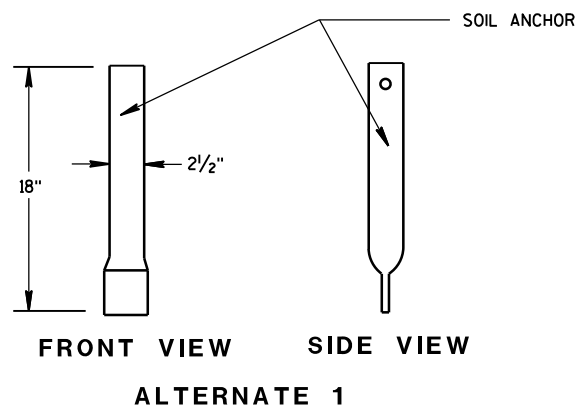
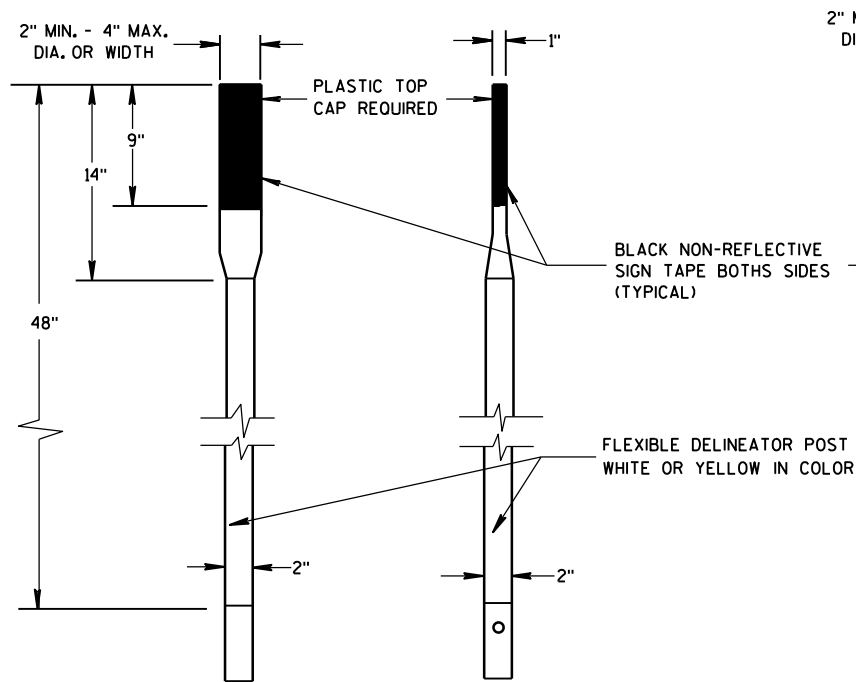
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 108



FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END

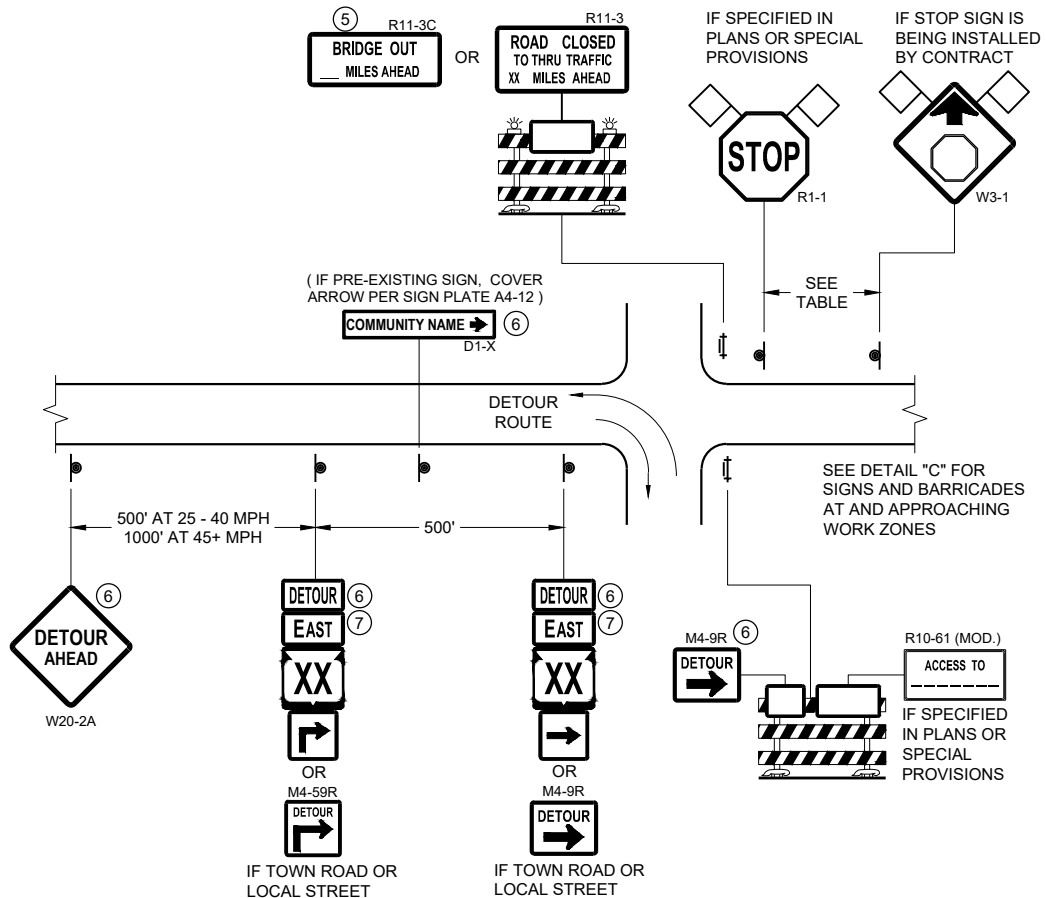
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

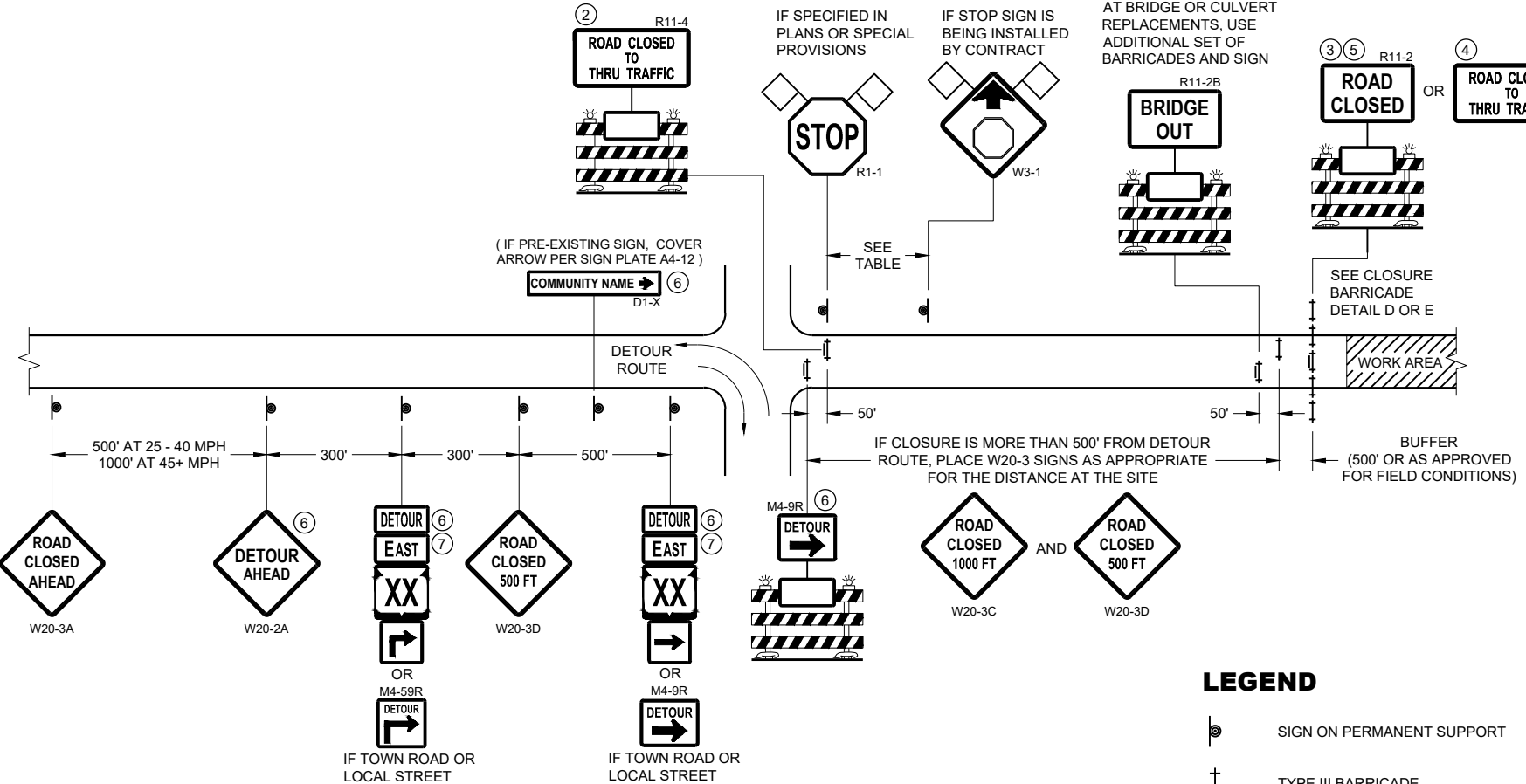
10/1/2012
DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER 109 IGN



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



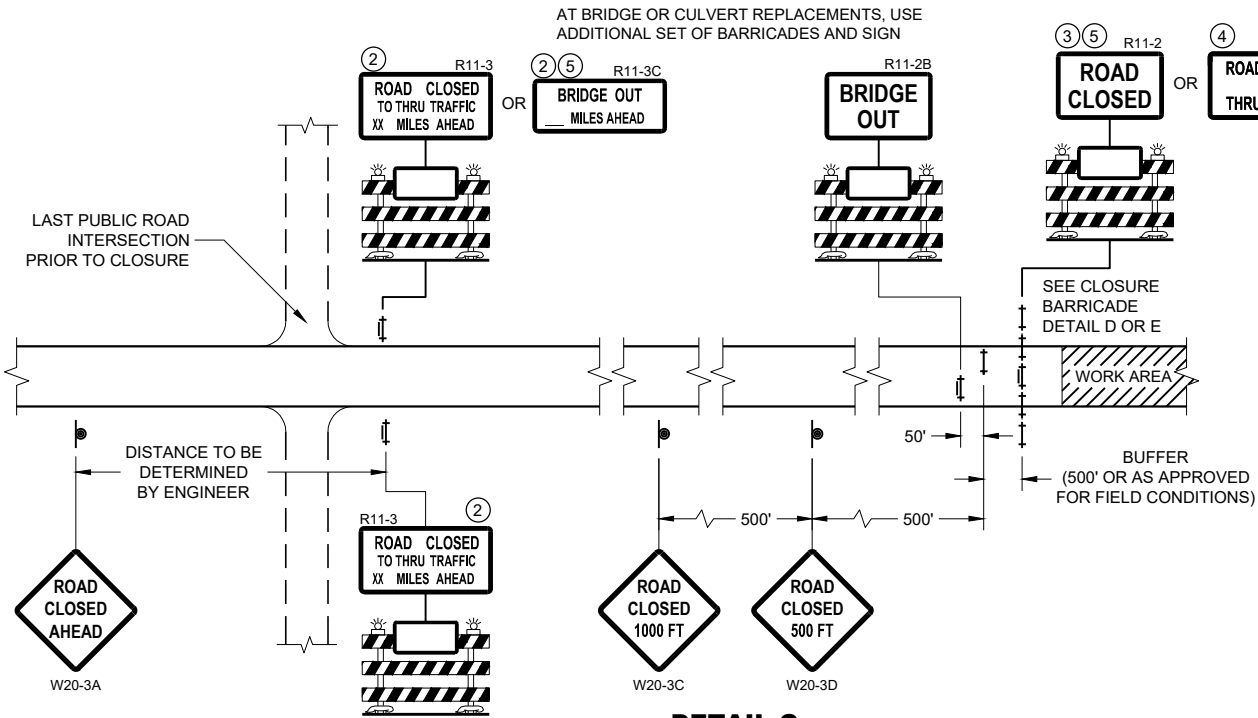
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

- 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



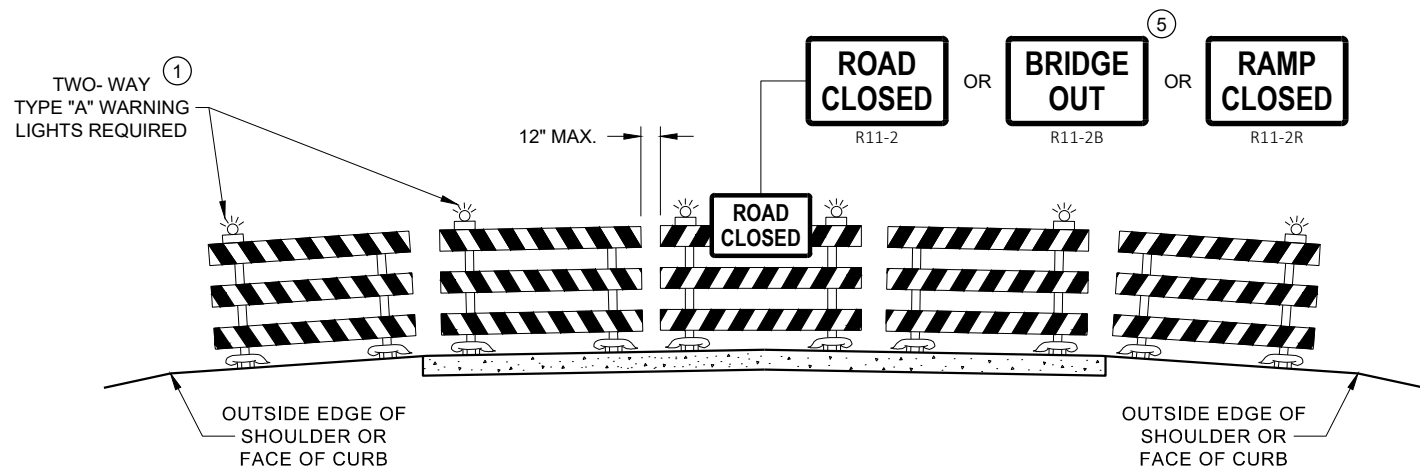
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

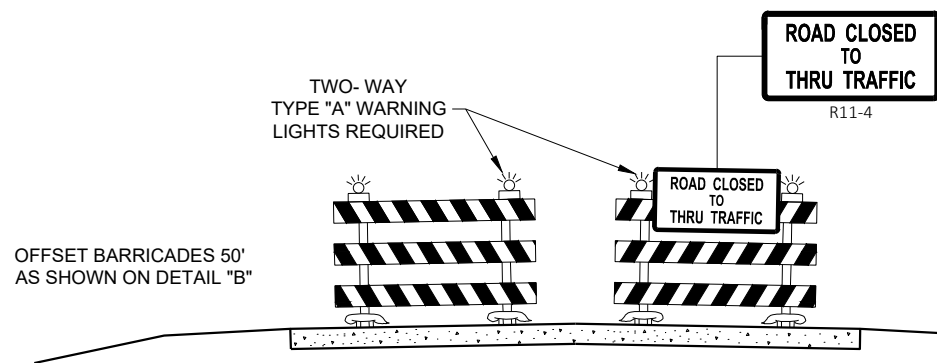
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 110

FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 111
FHWA

GENERAL NOTES

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

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

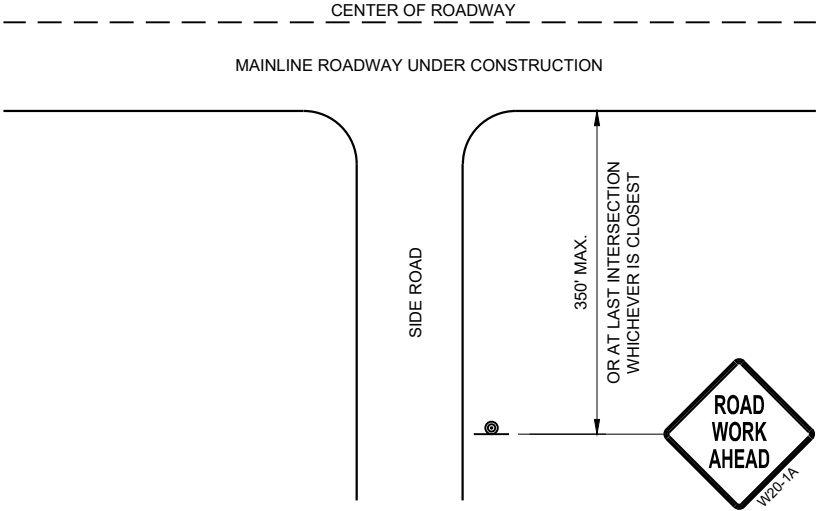
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

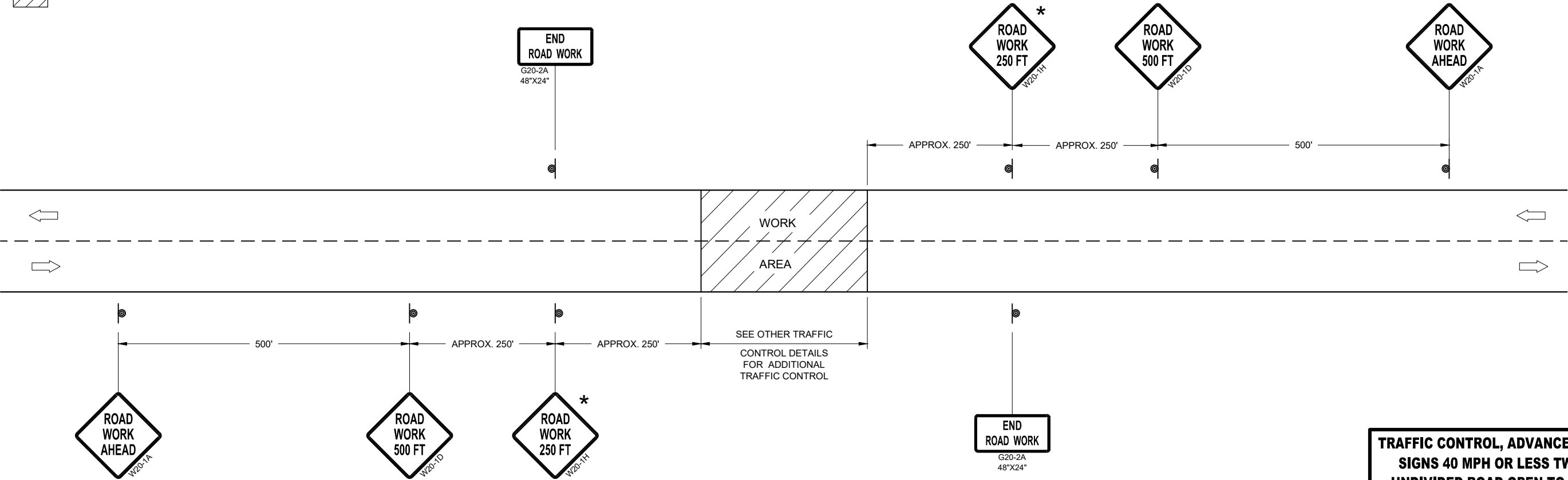
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



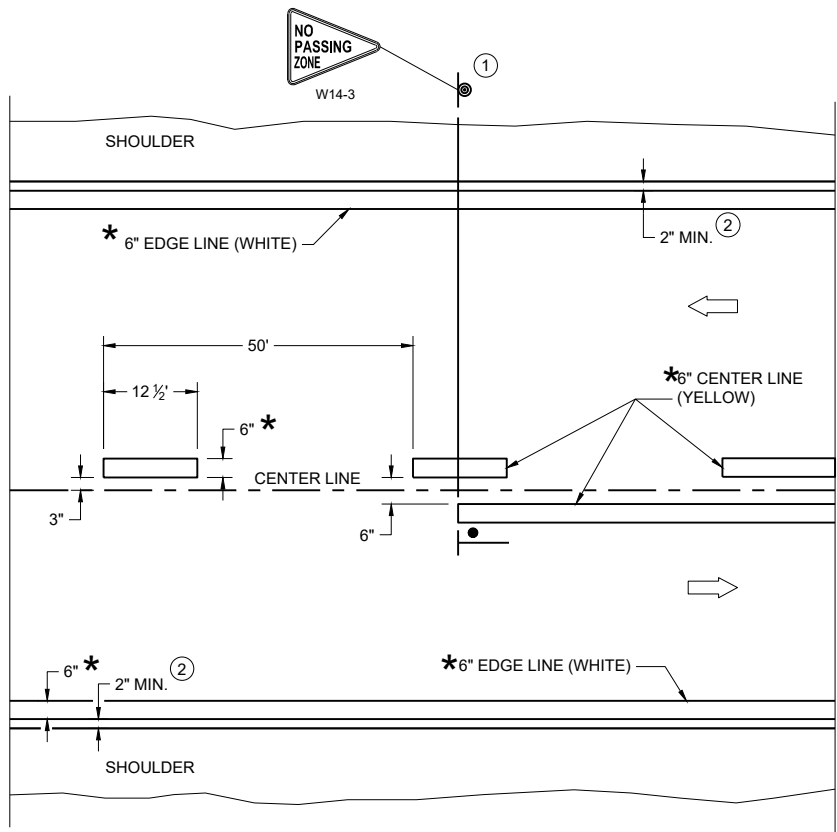
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

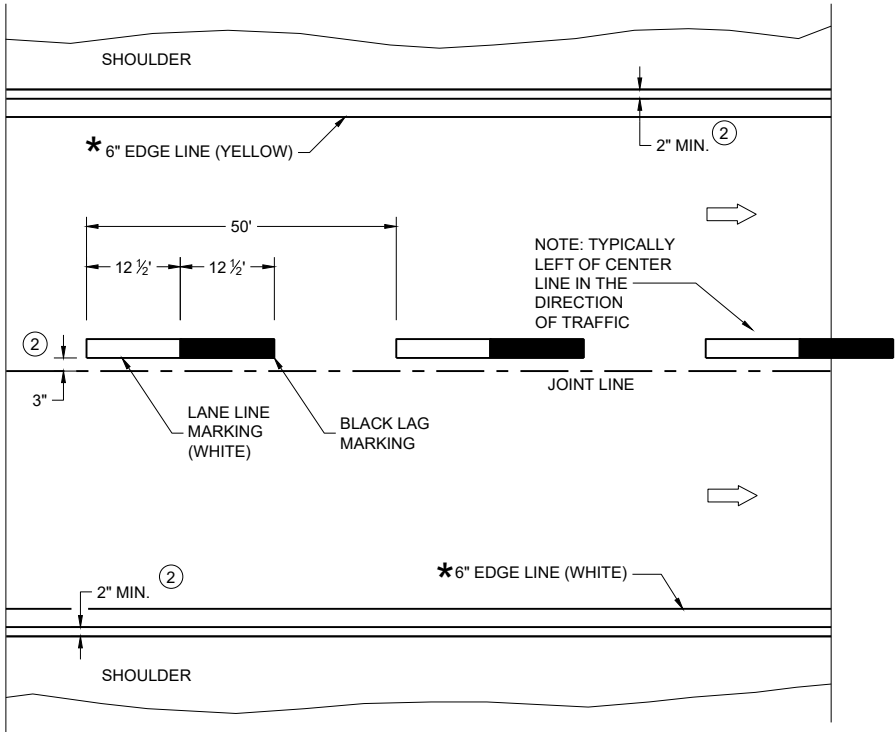
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 112

FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

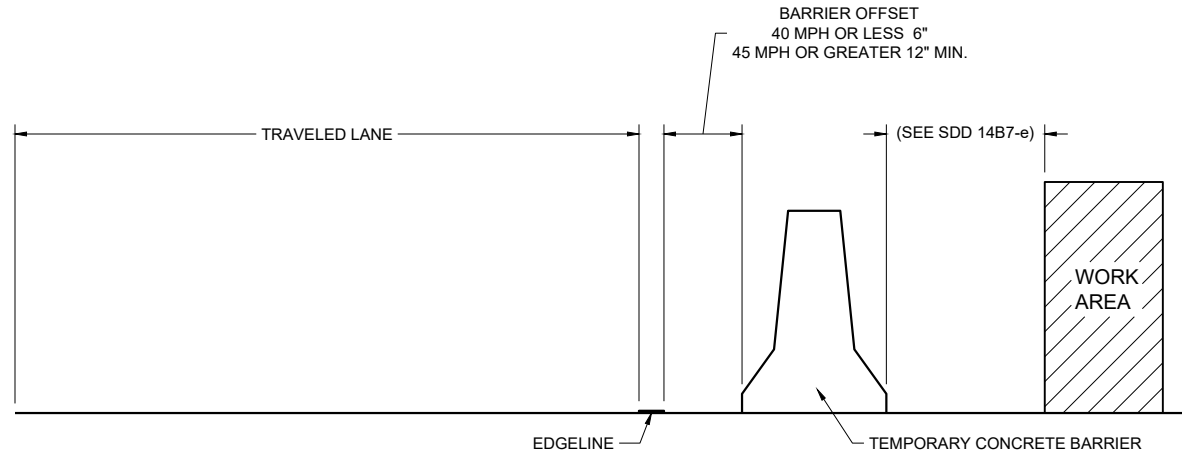
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- 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



TEMPORARY BARRIER OFFSET FROM EDGE LINE

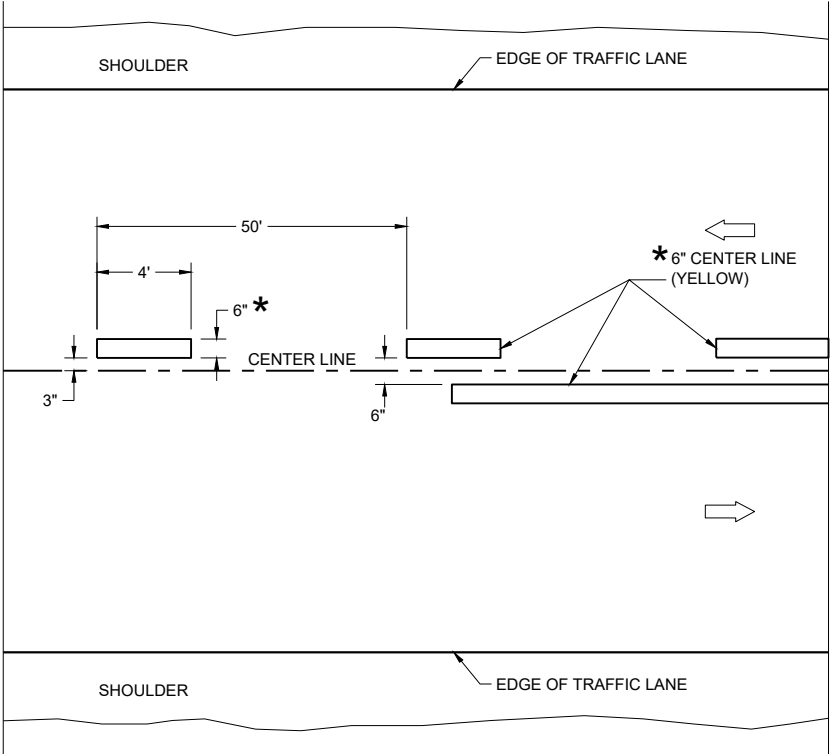
GENERAL NOTES

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

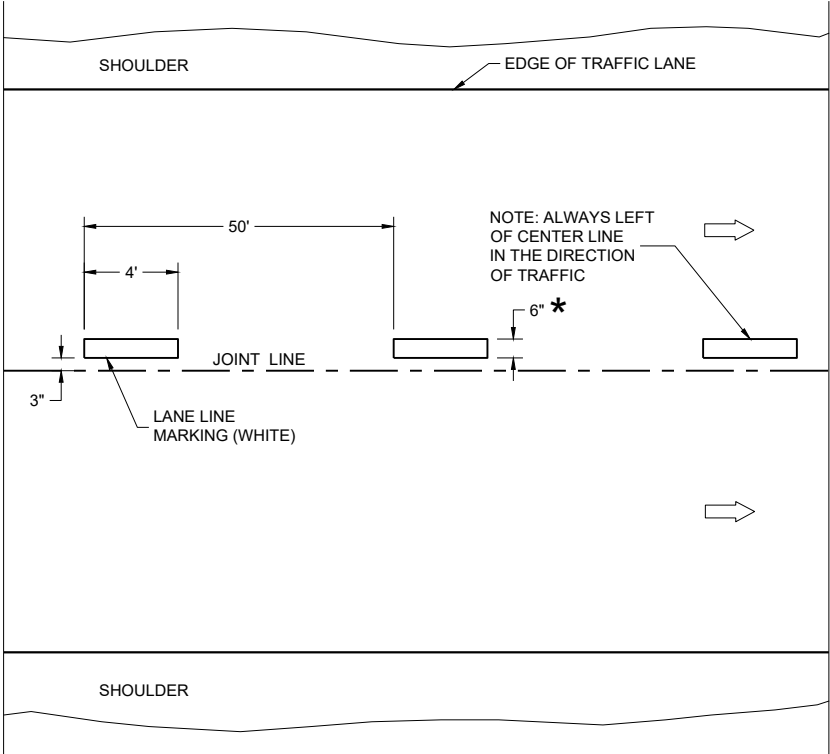
LEGEND

➡ DIRECTION OF TRAFFIC

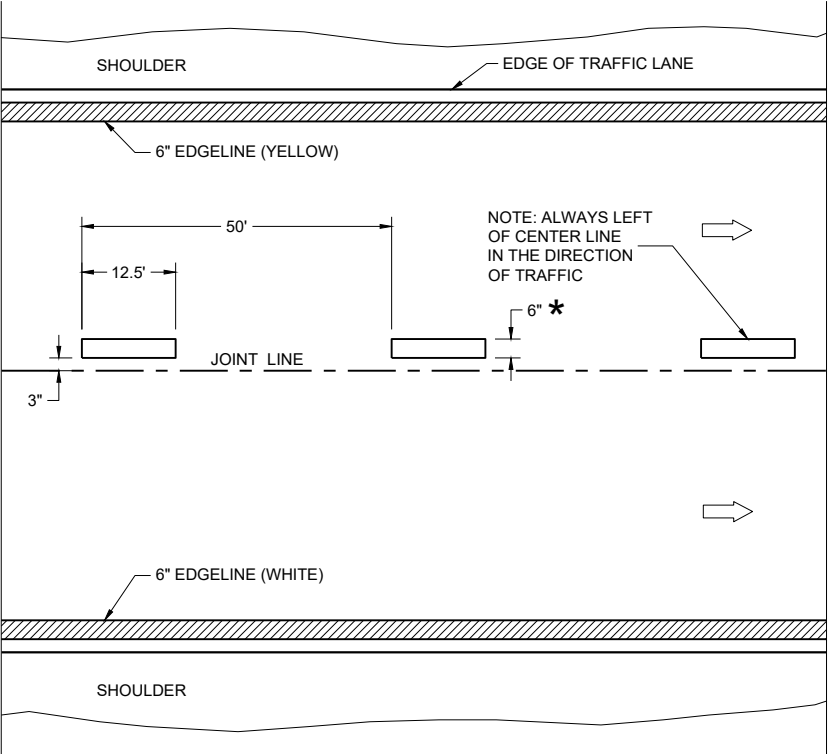
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



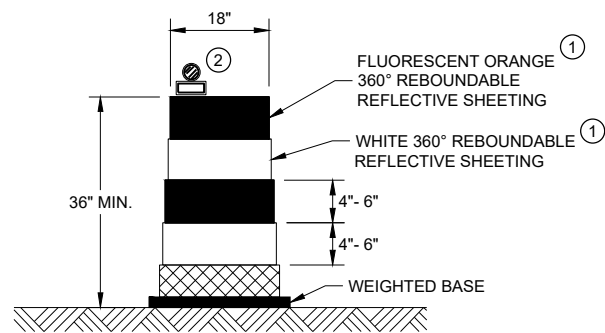
ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

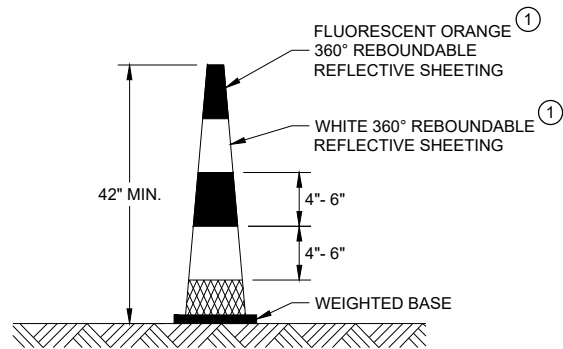
TEMPORARY PAVEMENT MARKING

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



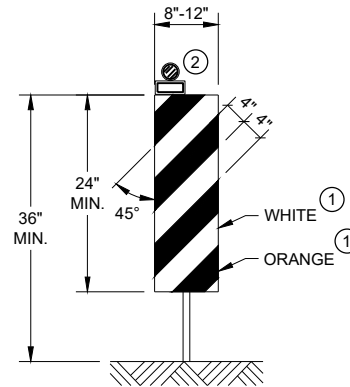
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



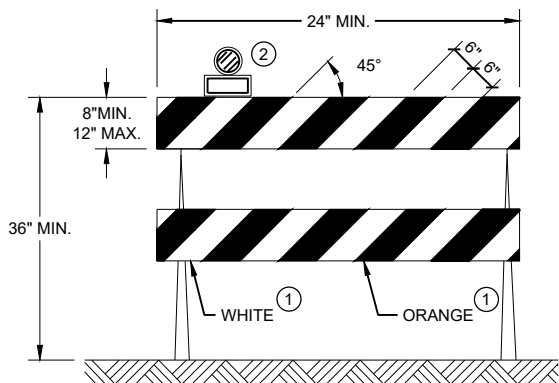
42" CONE

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



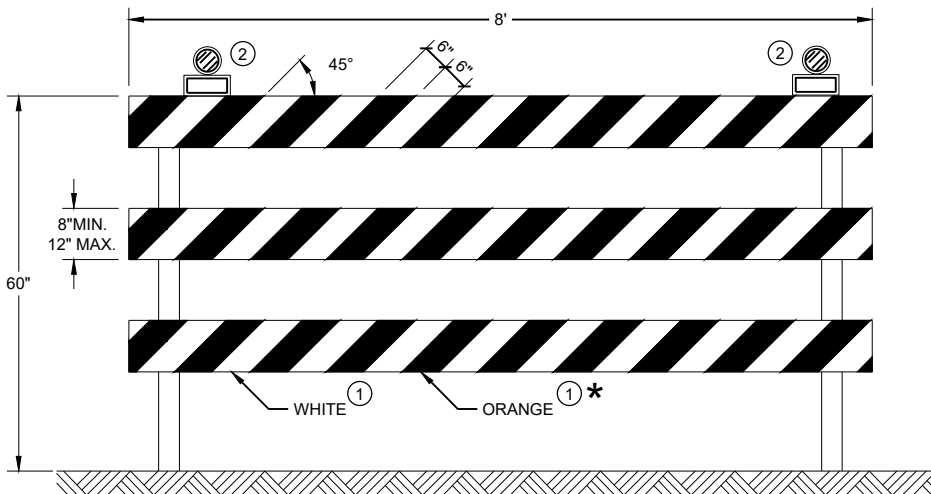
VERTICAL PANEL

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 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 115
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

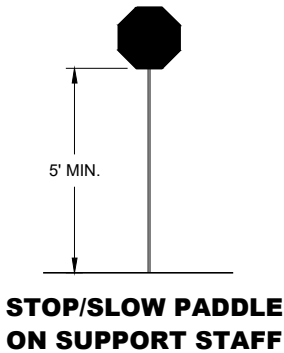
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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.

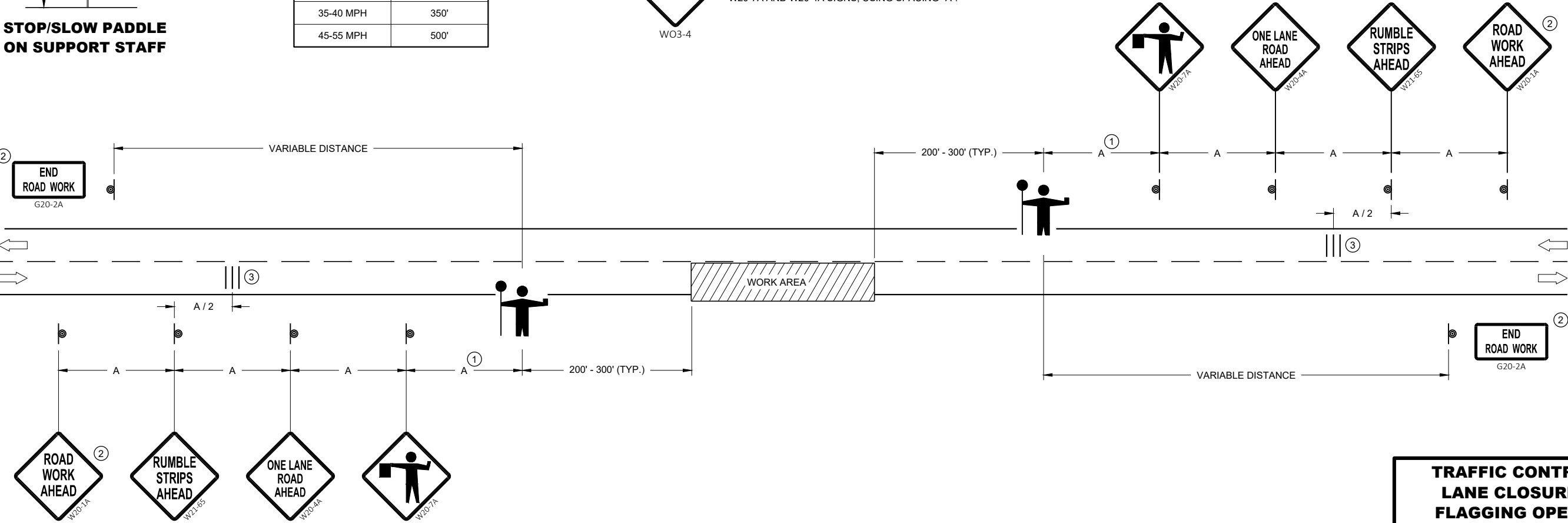


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

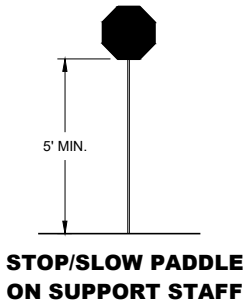


USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 116
FHWA	

- **GENERAL NOTES**
SIGN ON PERMANENT SUPPORT
- 
TRAFFIC CONTROL CONE 42-INCH
- 
TRAFFIC CONTROL DRUM
- 
TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- 
DIRECTION OF TRAFFIC
- 
WORK AREA
- 
AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)



- 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.

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

- FLAGGING**
IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, 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.

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.
- ①

SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- ②

IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

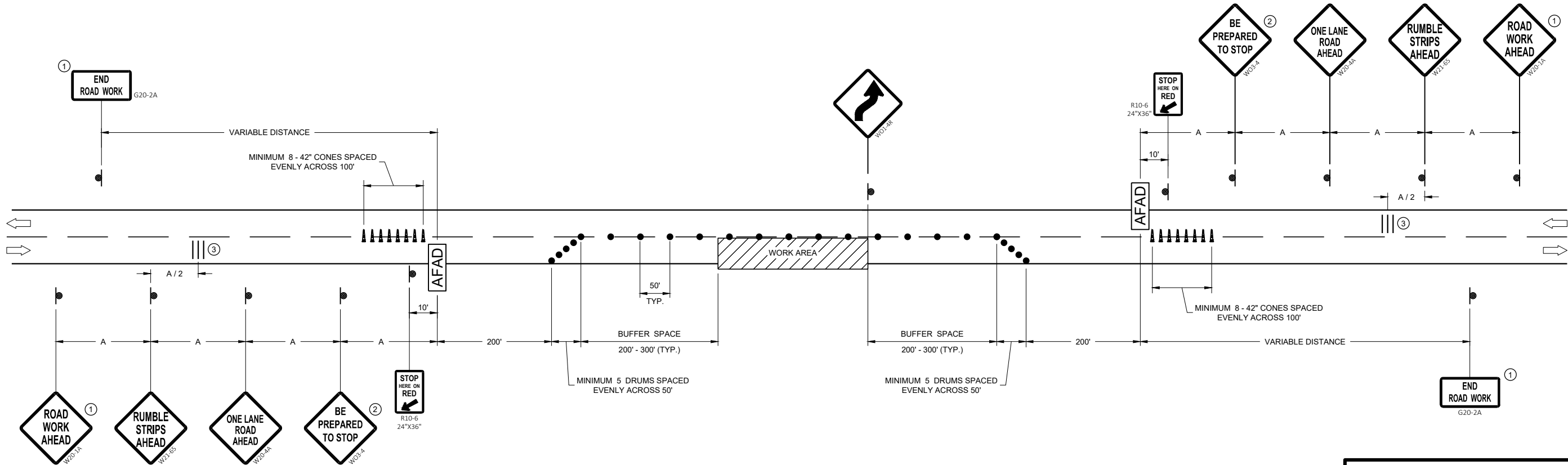
ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

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.

③

EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 117

FHWA

V1	LEAD VEHICLE
V2	MARKING VEHICLE
V3	SHADOW VEHICLE



 DIRECTION OF TRAFFIC

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

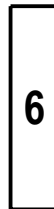
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

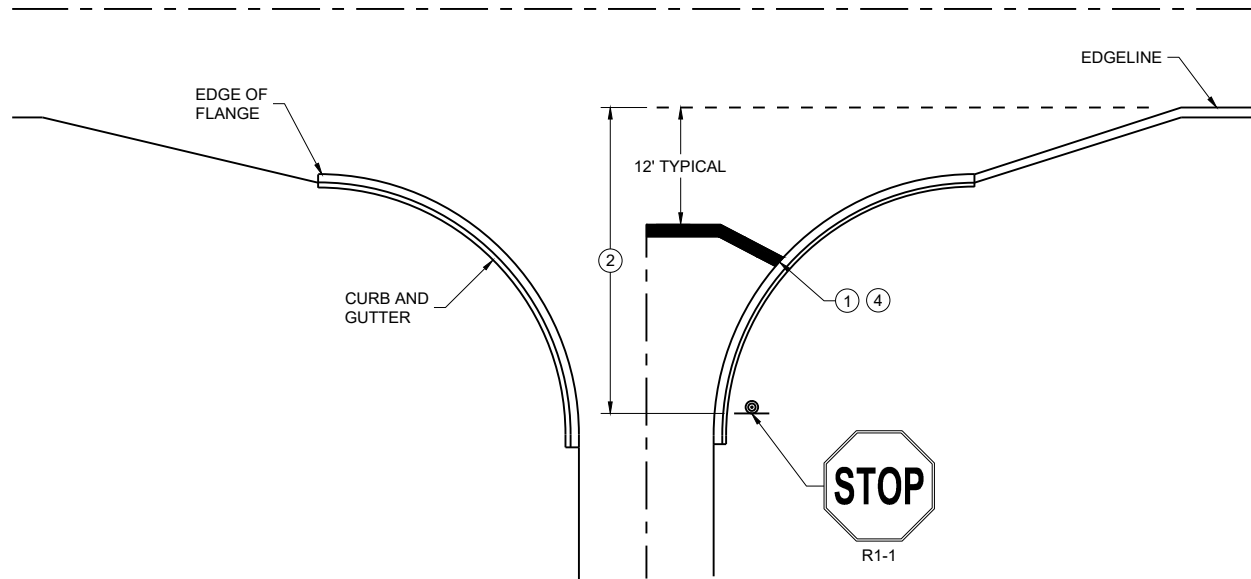
UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

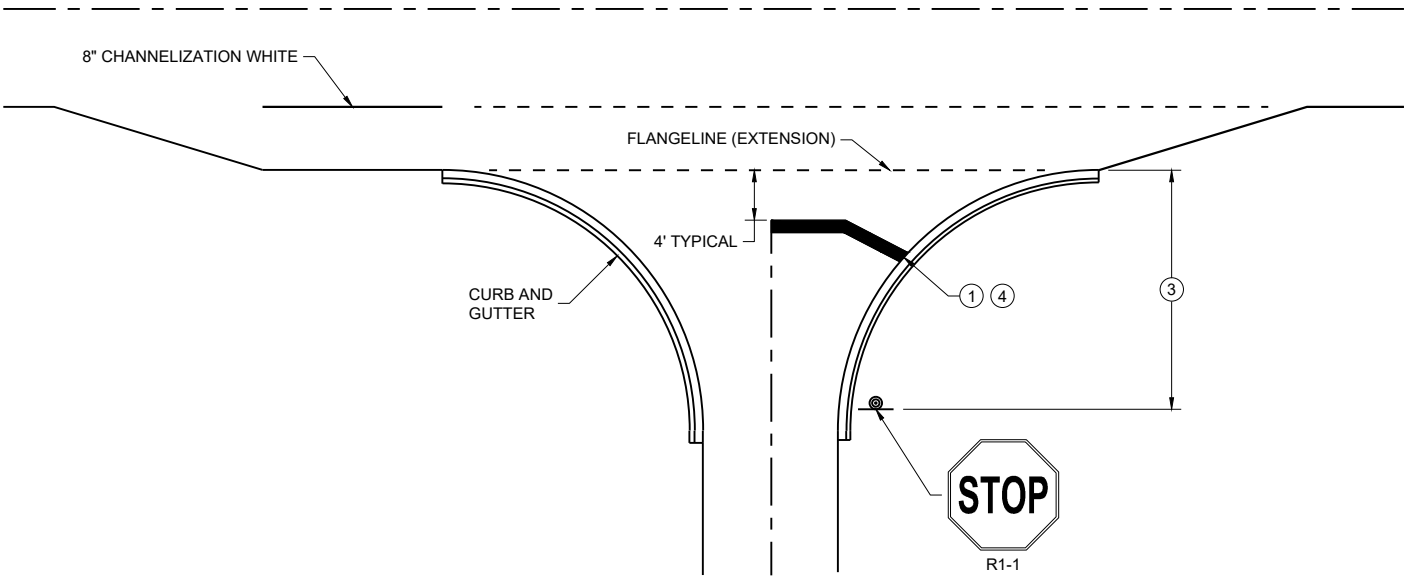
CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.

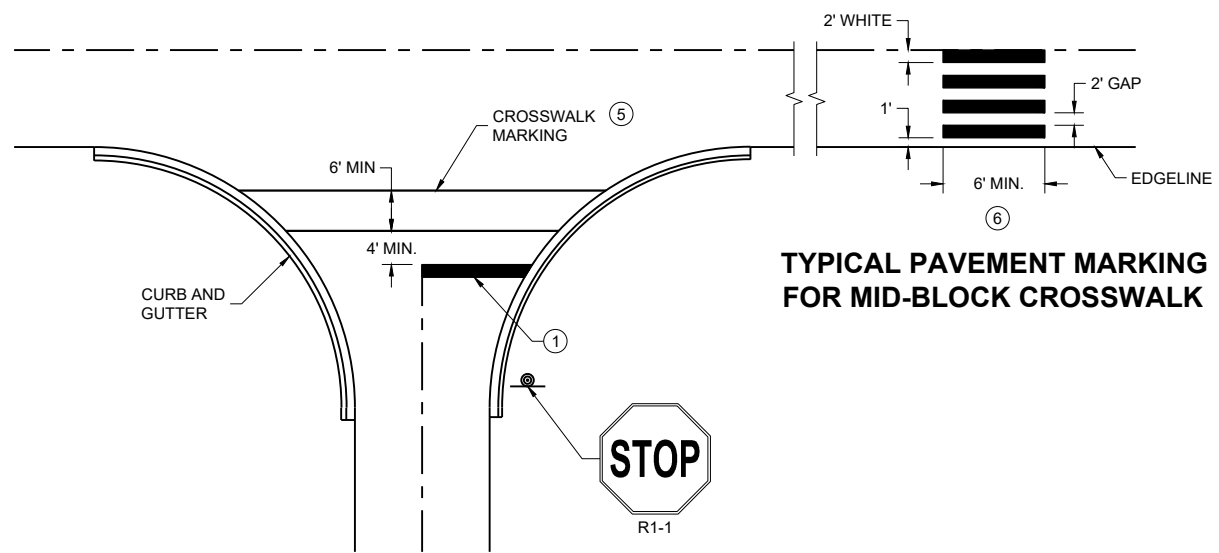




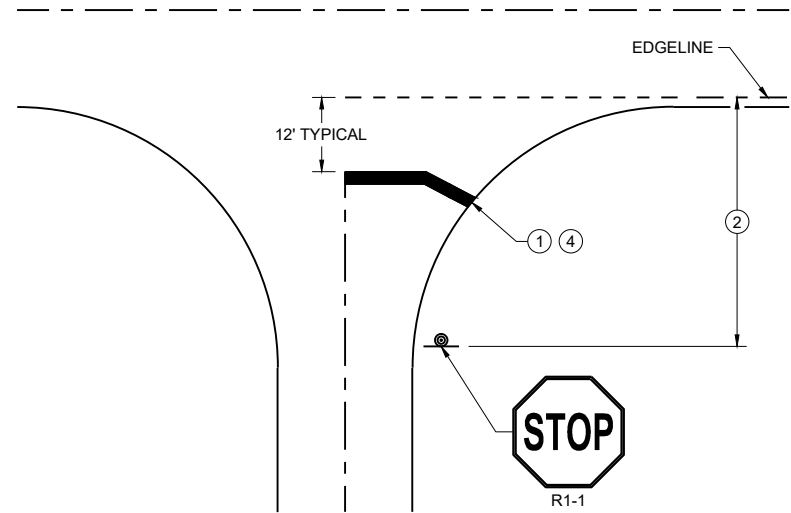
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDE ROADS 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 EDGELINE LOCATION.

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
- ④ MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- ⑤ LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
- ⑥ POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS

STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER

FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

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

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

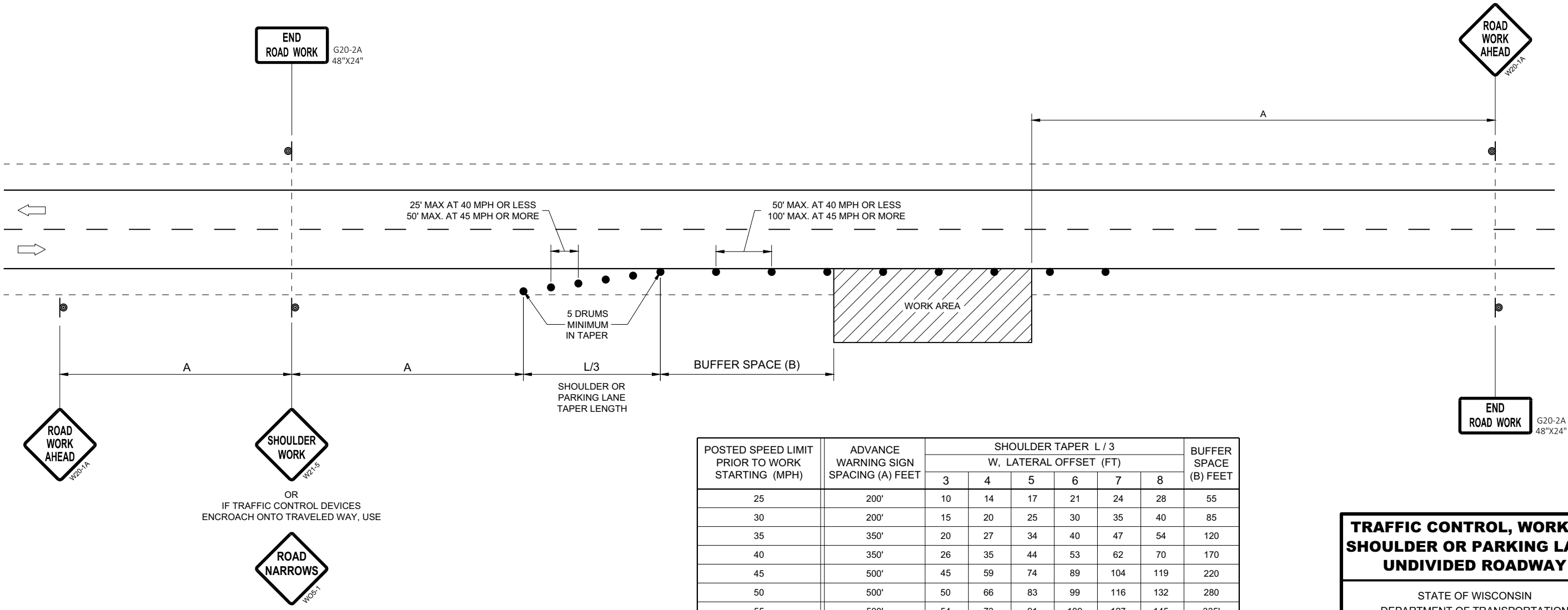
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

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

6

SDD 15D28 - 04



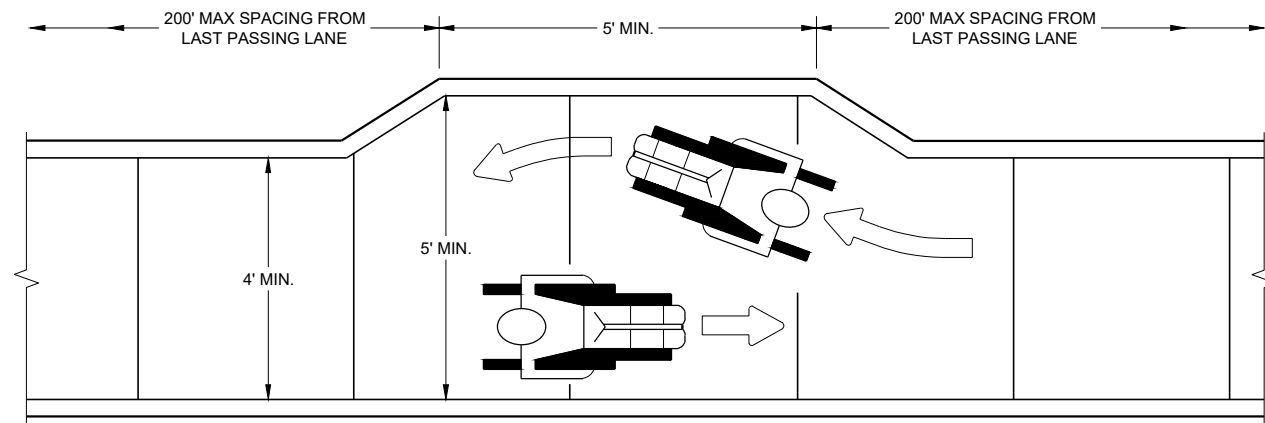
6

SDD 15D28 - 04

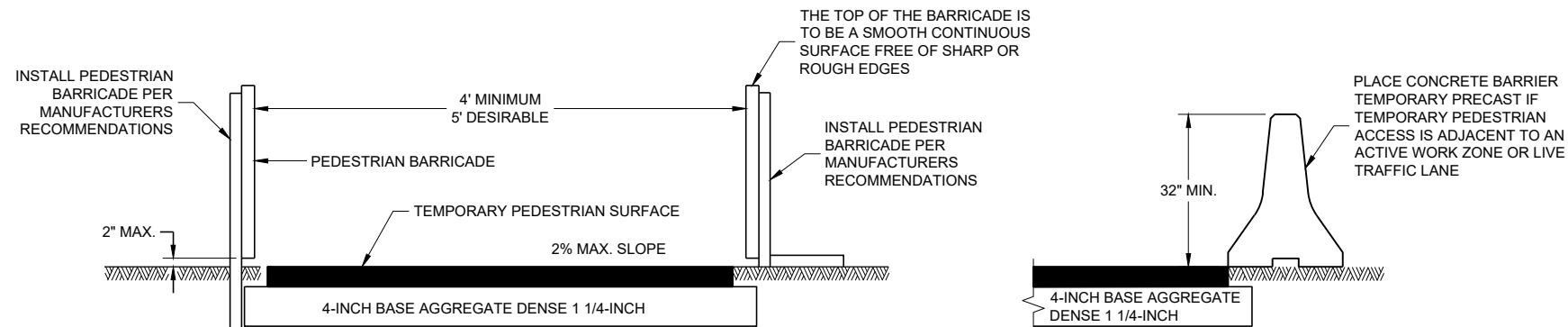
TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T
SAFETY ENGINEER 120
FHWA



NARROW SIDEWALK PASSING DETAIL



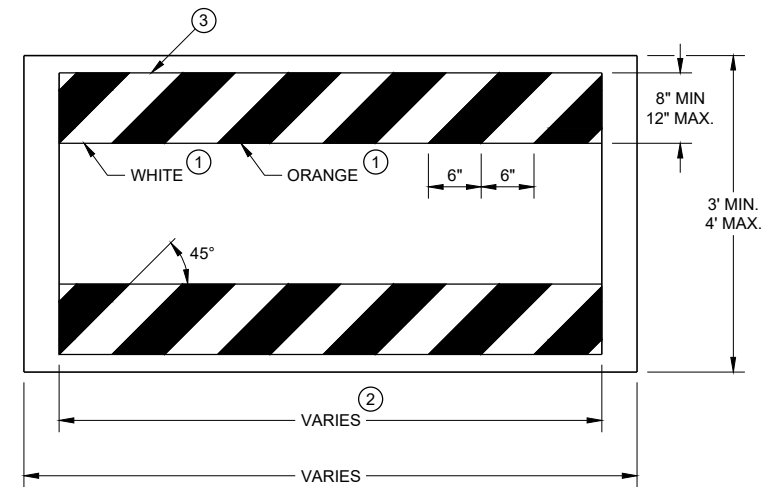
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

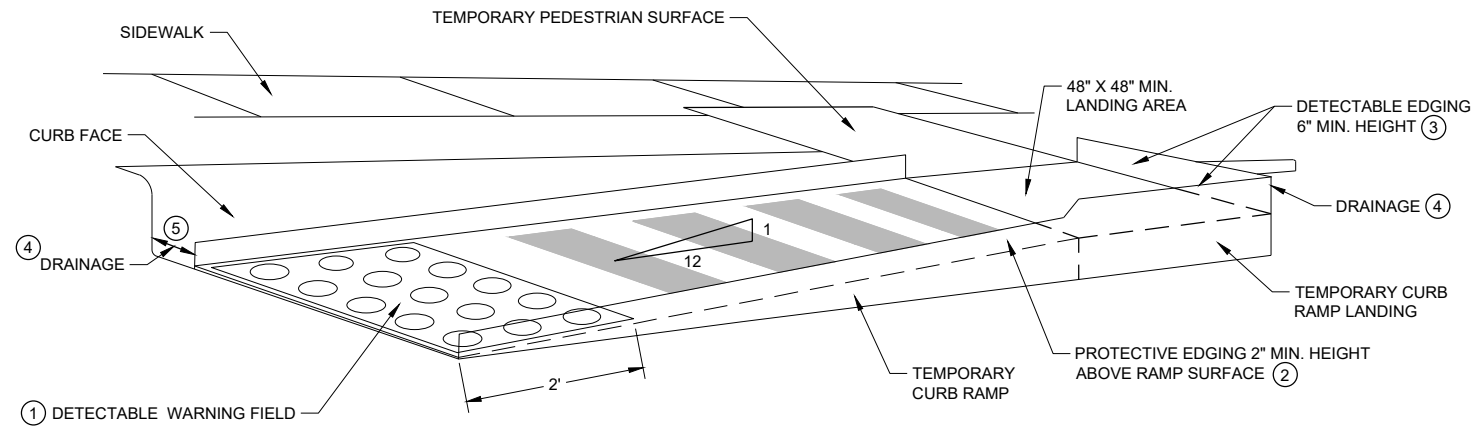
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

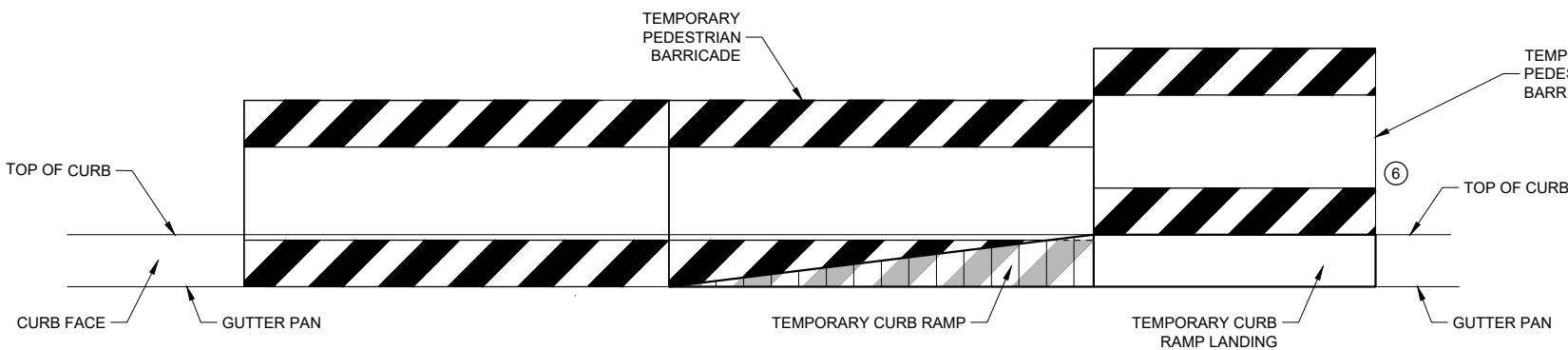
★ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



TEMPORARY PEDESTRIAN BARRICADE*

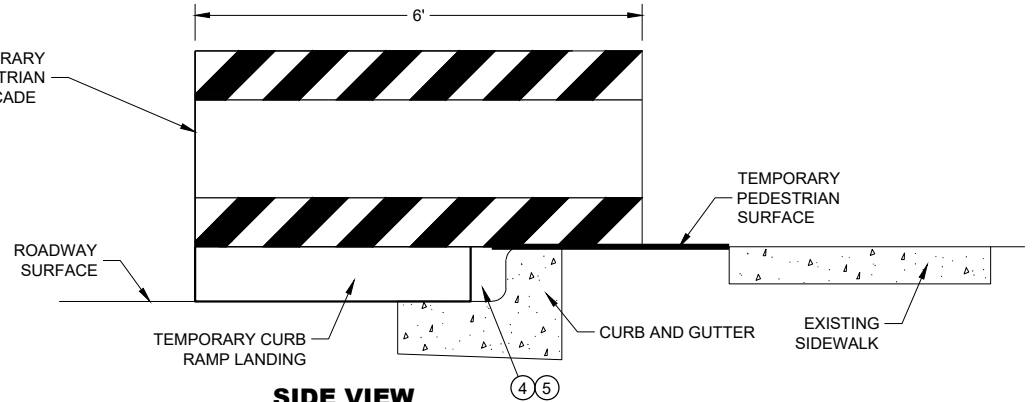


PERSPECTIVE VIEW



FRONT VIEW

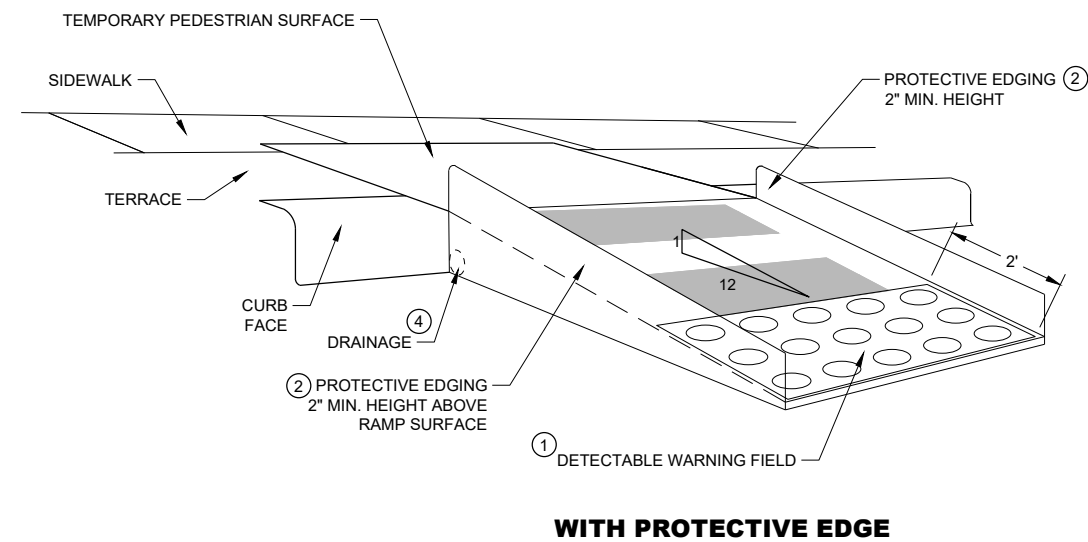
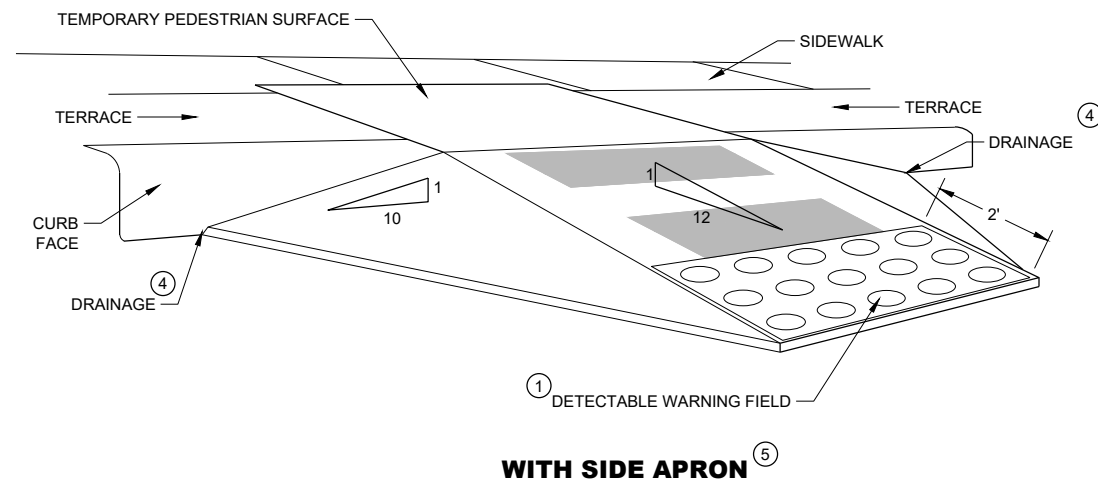
TEMPORARY CURB RAMP PARALLEL TO CURB



SIDE VIEW

GENERAL NOTES

- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.
- ② CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- ③ CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- ④ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
- ⑥ IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

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

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

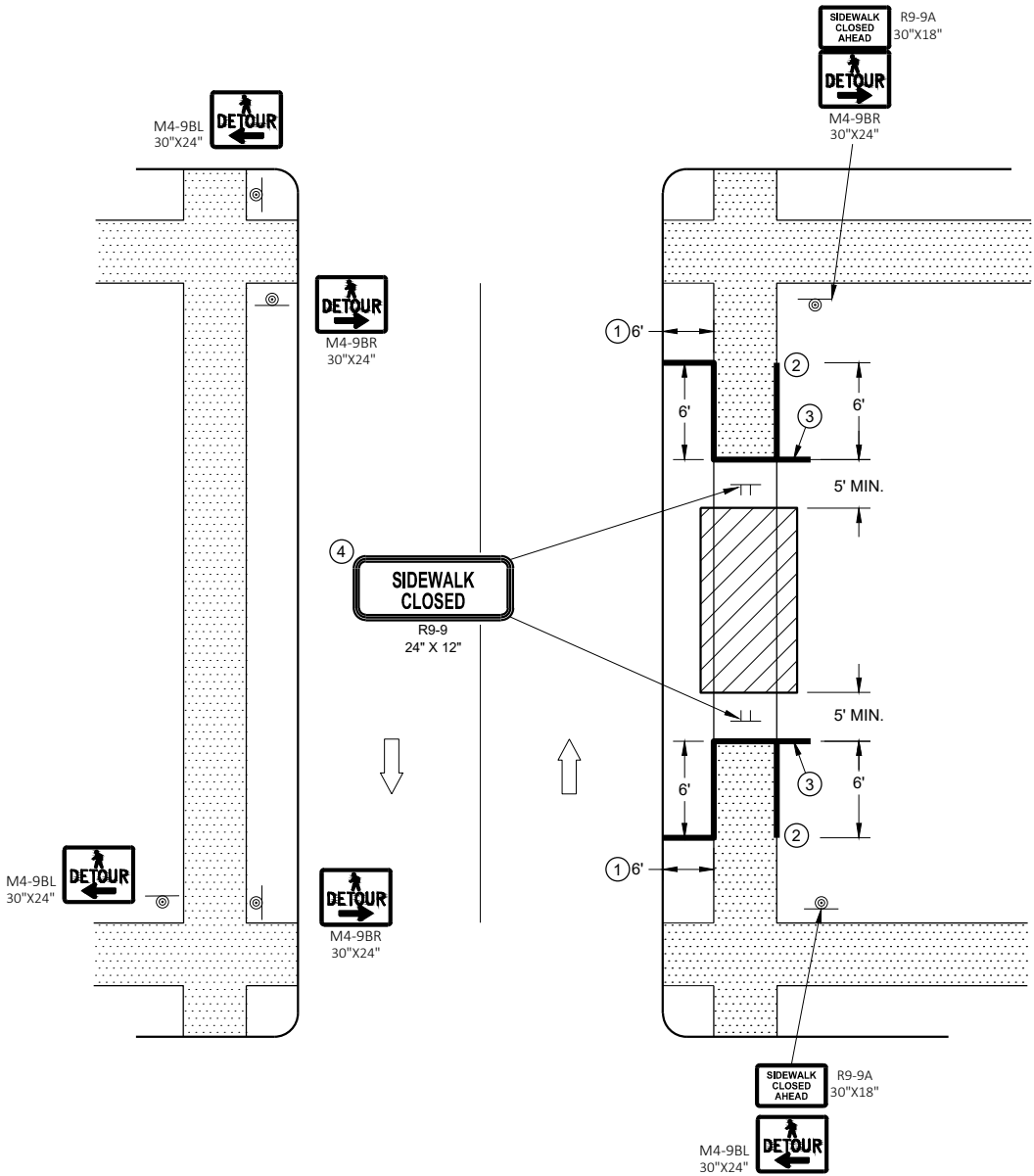
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 123

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  UNDER PEDESTRIAN TRAFFIC
-  WORK AREA
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

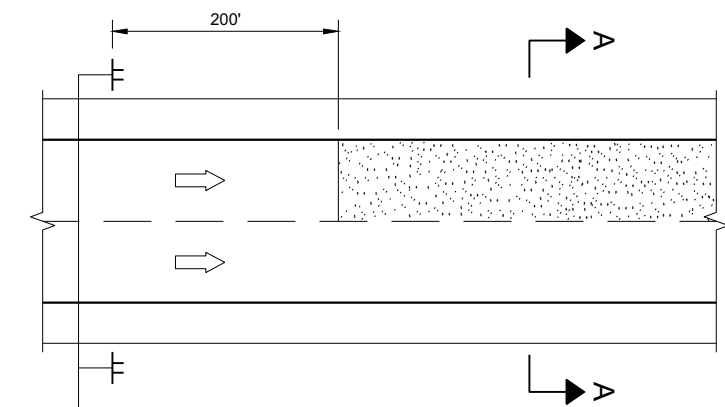
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

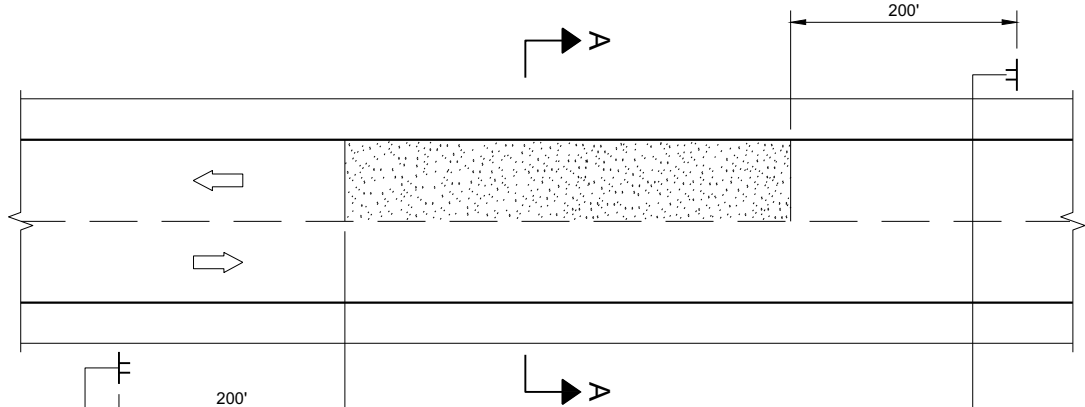
SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

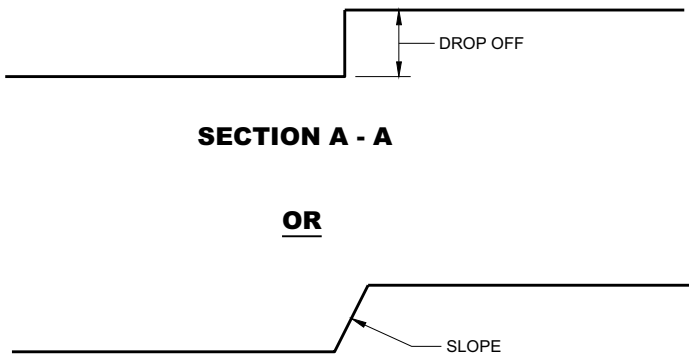
- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



MULTI-LANE



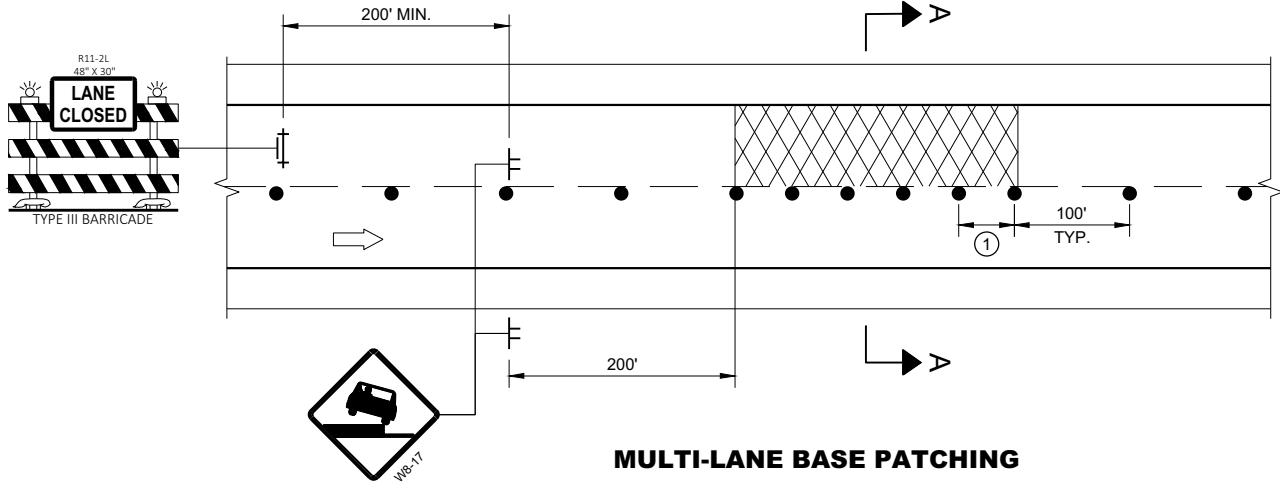
TWO-WAY TWO LANE



SECTION A - A

OR

SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

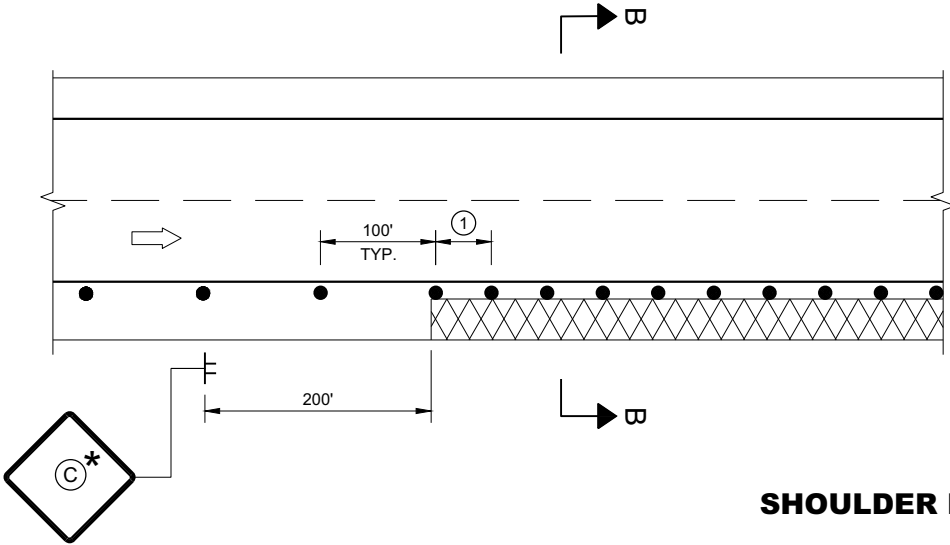
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

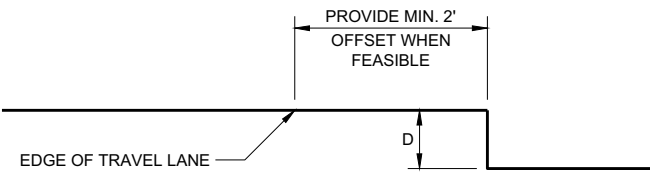
① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF WB-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL,
DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 125

FHWA

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

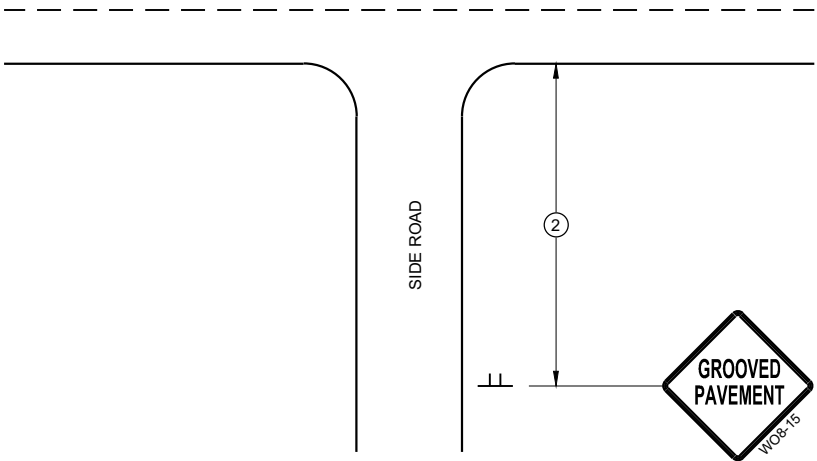
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

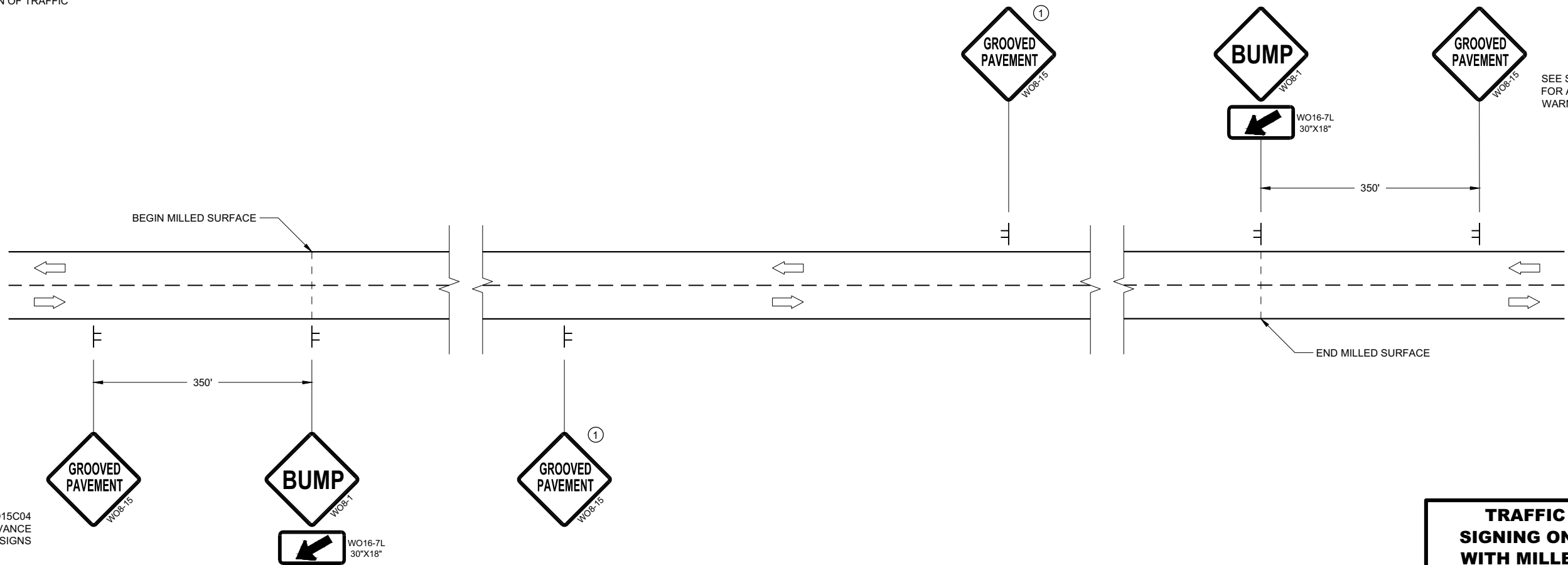
- 1 PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 2 PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 126

FHWA

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

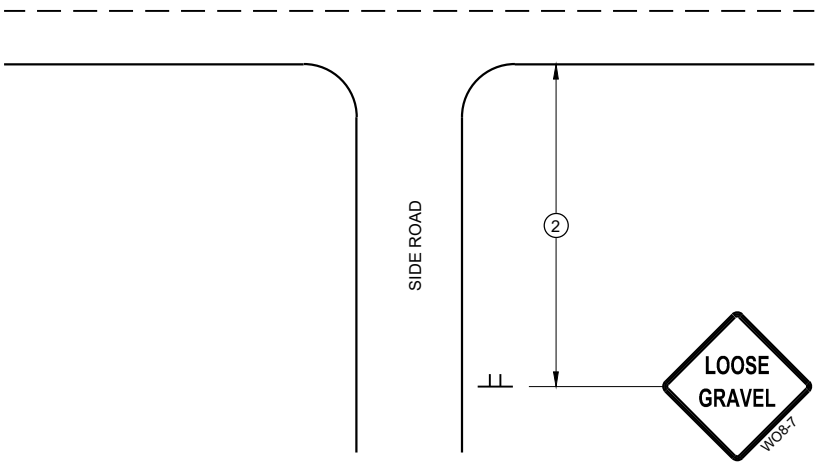
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

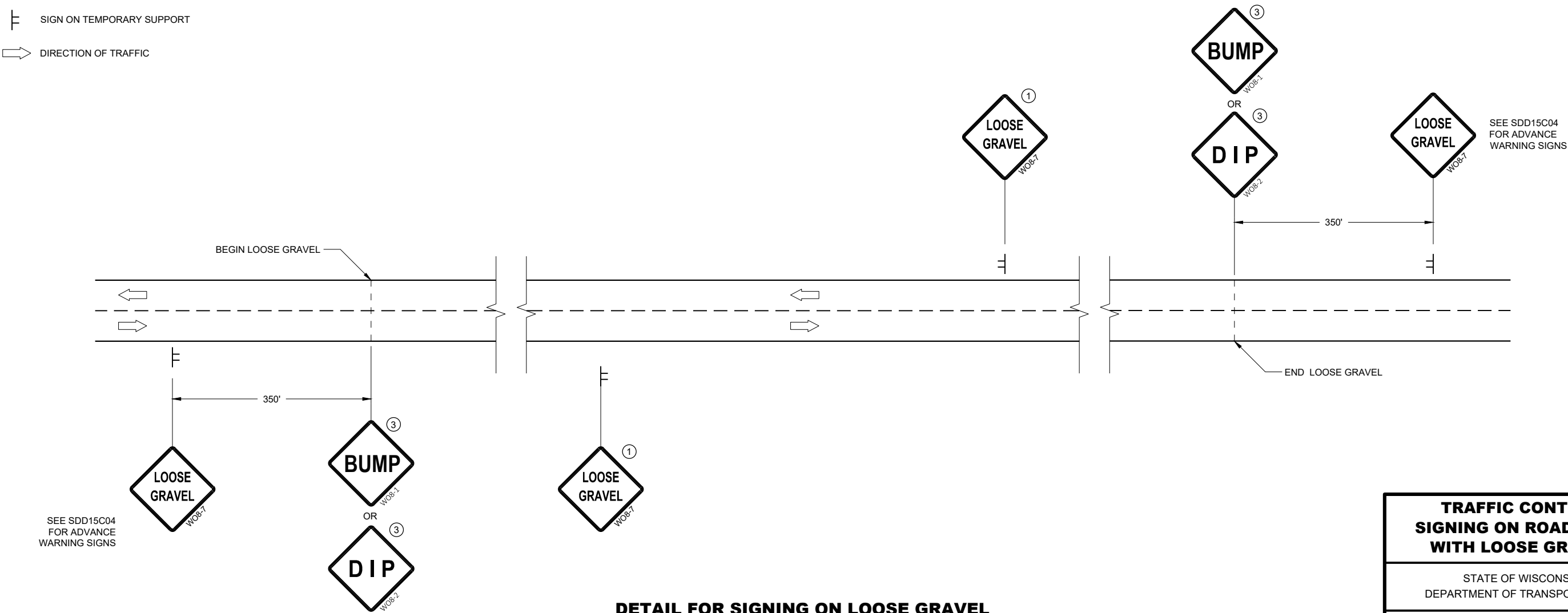
- ① PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- ③ ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL
OR CHIP SEALED SURFACES

TRAFFIC CONTROL
SIGNING ON ROADWAYS
WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 127
FHWA

LEGEND

- V1

WORK VEHICLE
- V2

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

FLASHING ARROW PANEL (CAUTION)
- 

WORK AREA
- 

DIRECTION OF TRAFFIC

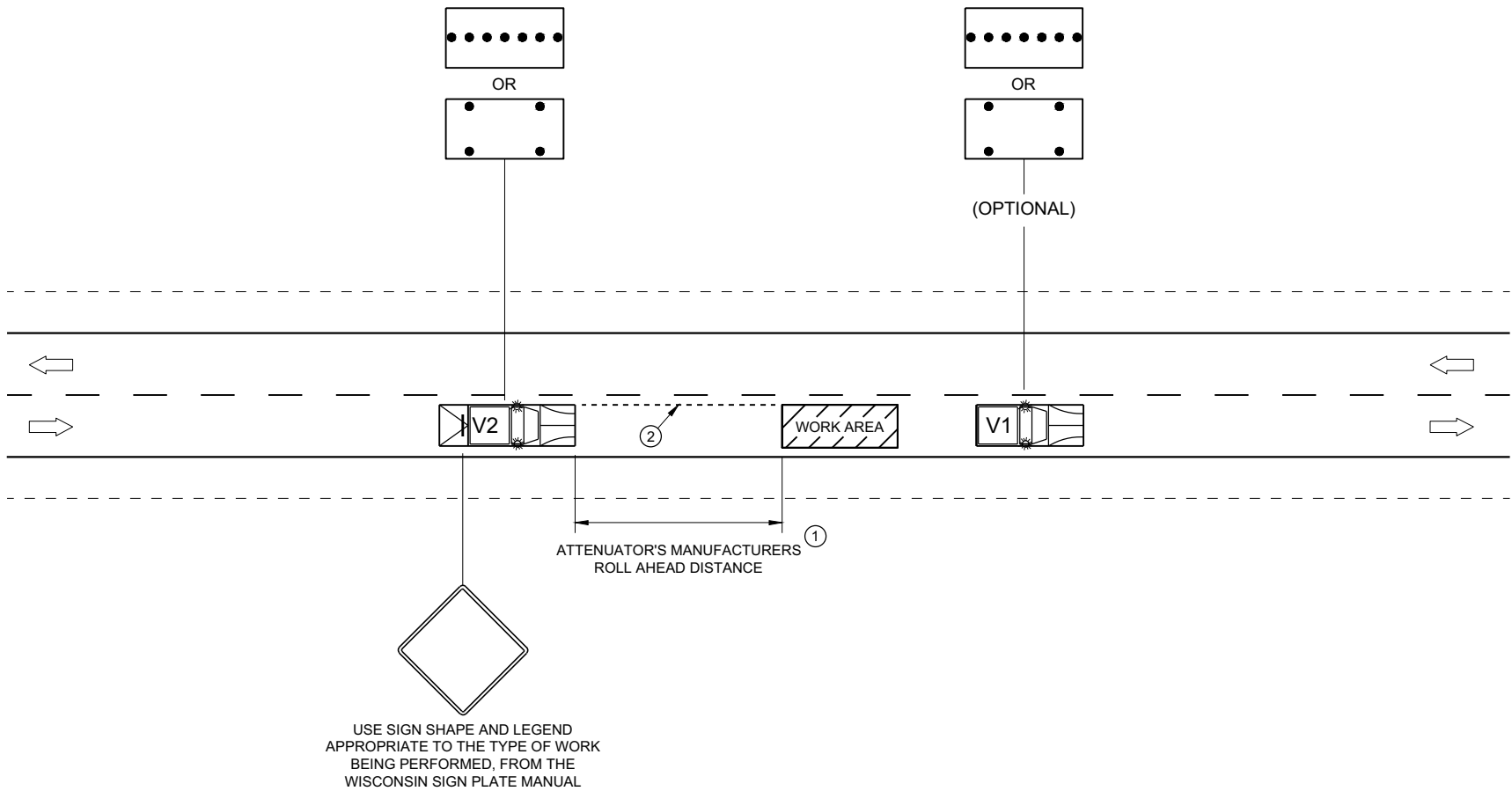
POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.
- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- ①

DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- ②

ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL,
MOBILE OPERATIONS ON
AN UNDIVIDED ROADWAY

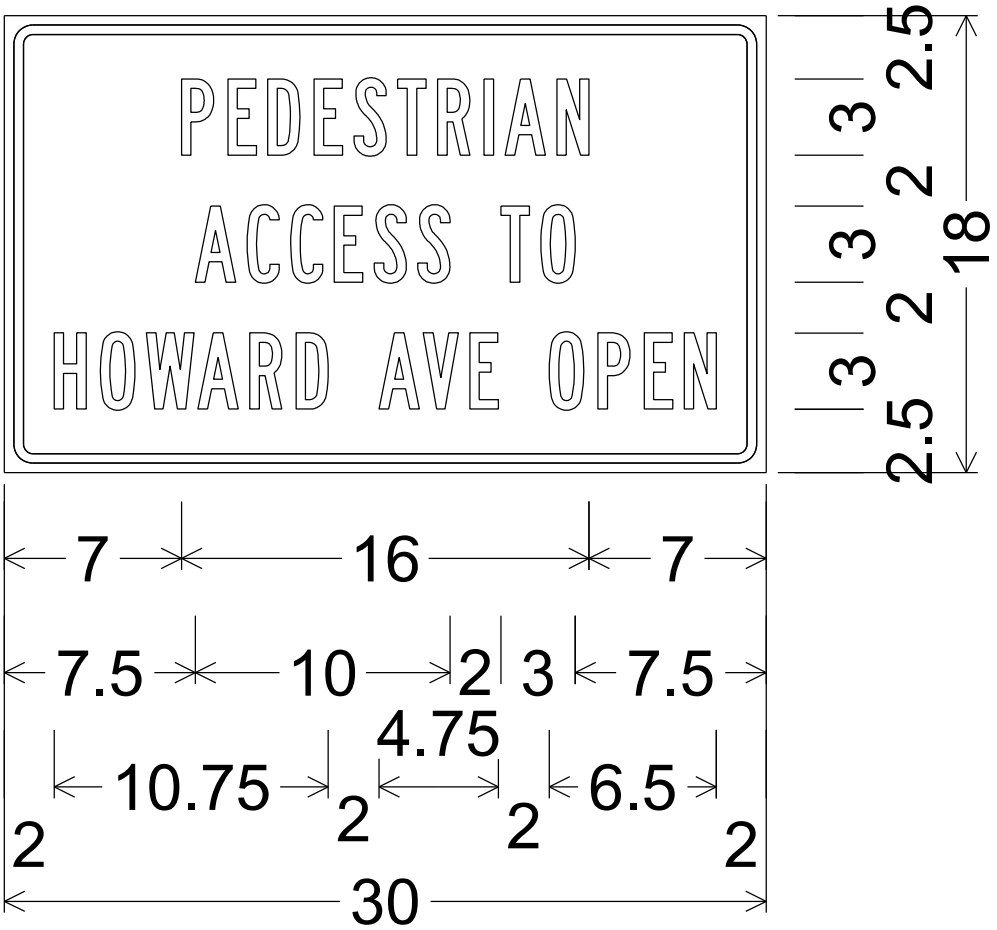
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T
SAFETY ENGINEER

FHWA 128

7



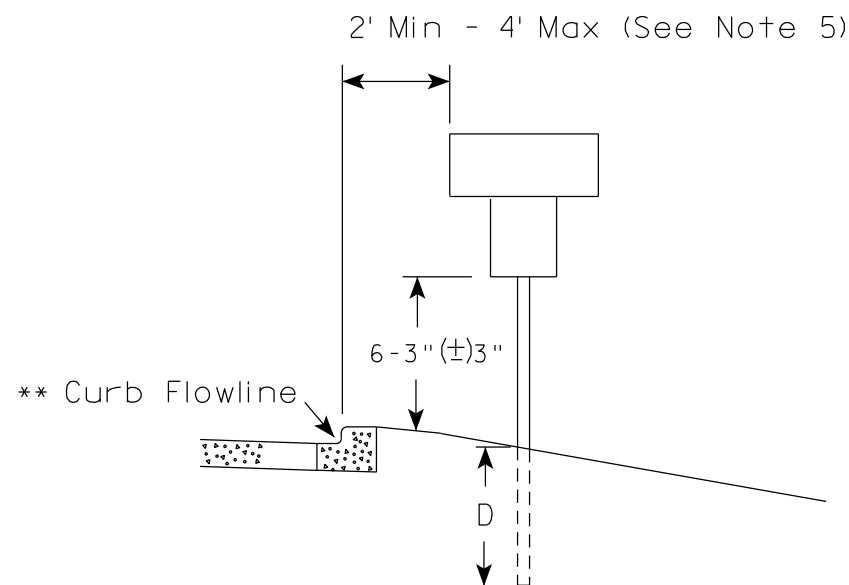
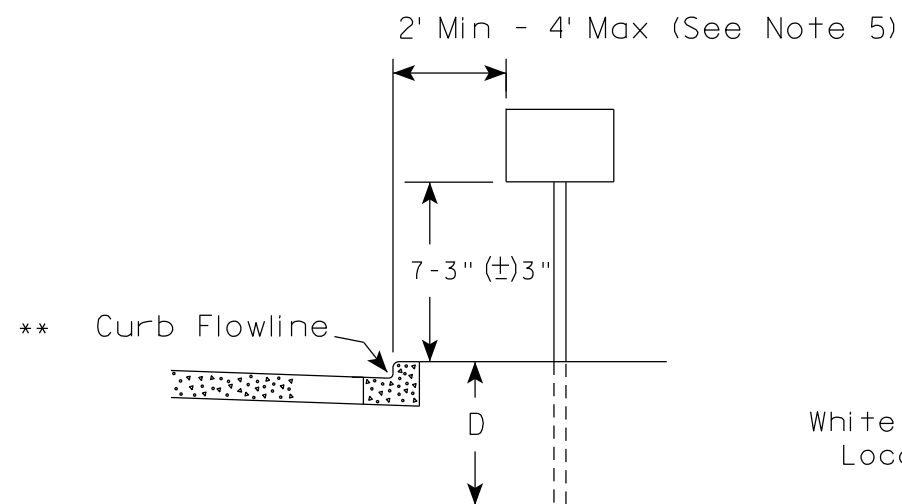
1.125" Radius, 0.375" Border, 0.375" Indent

NOTES

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

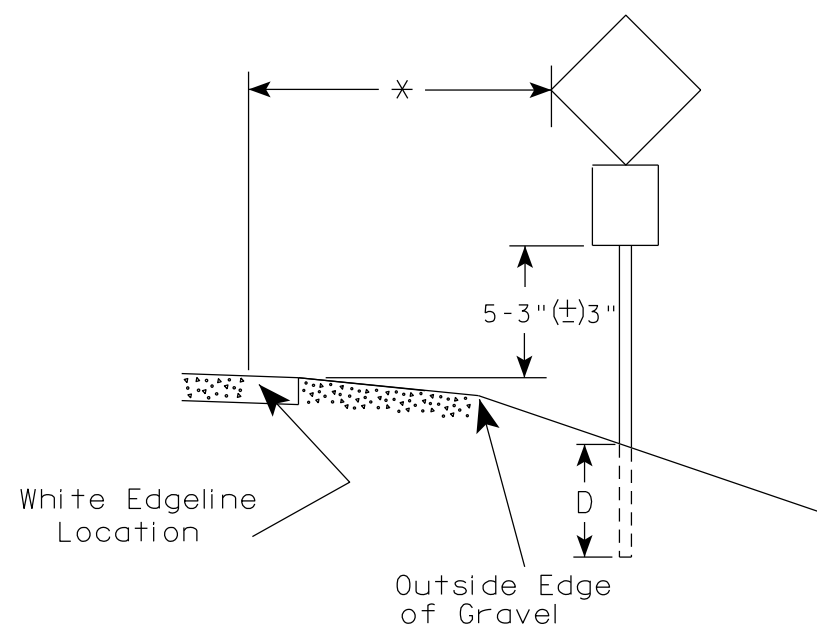
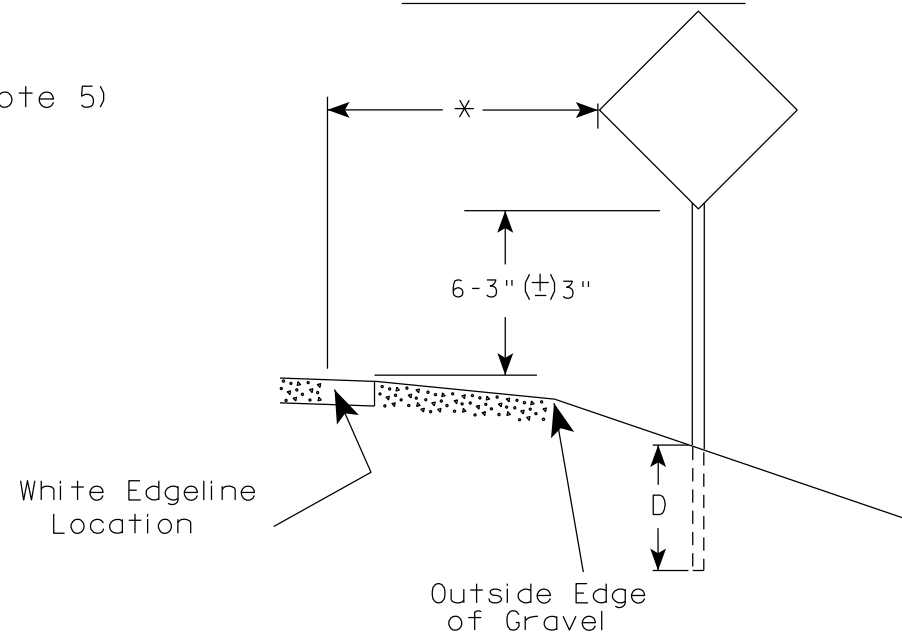
7

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.

GENERAL NOTES

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

POST EMBEDMENT DEPTH

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

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:

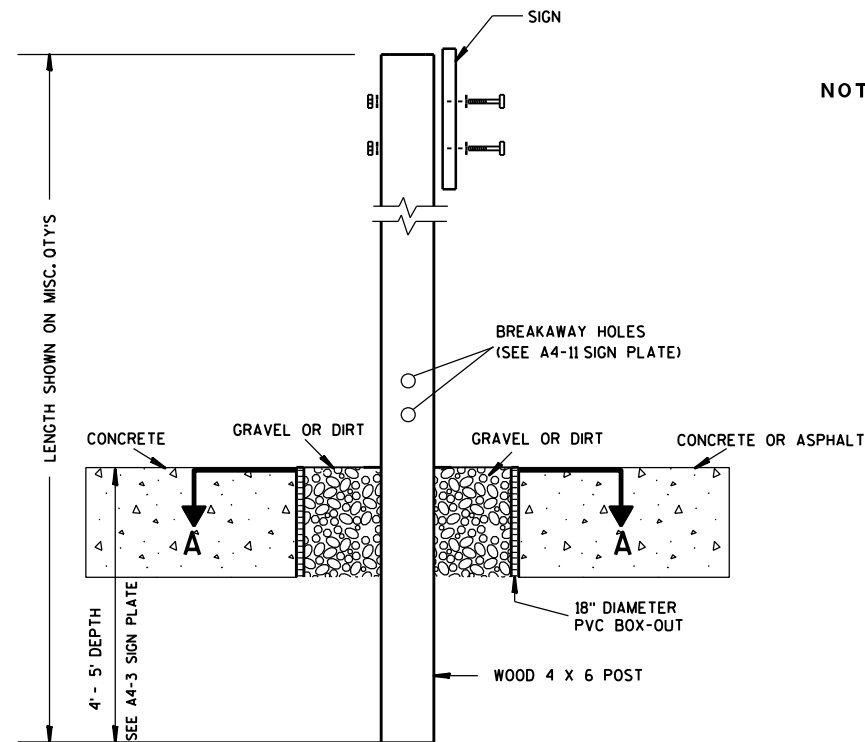
HWY:

COUNTY:

SHEET NO:

130

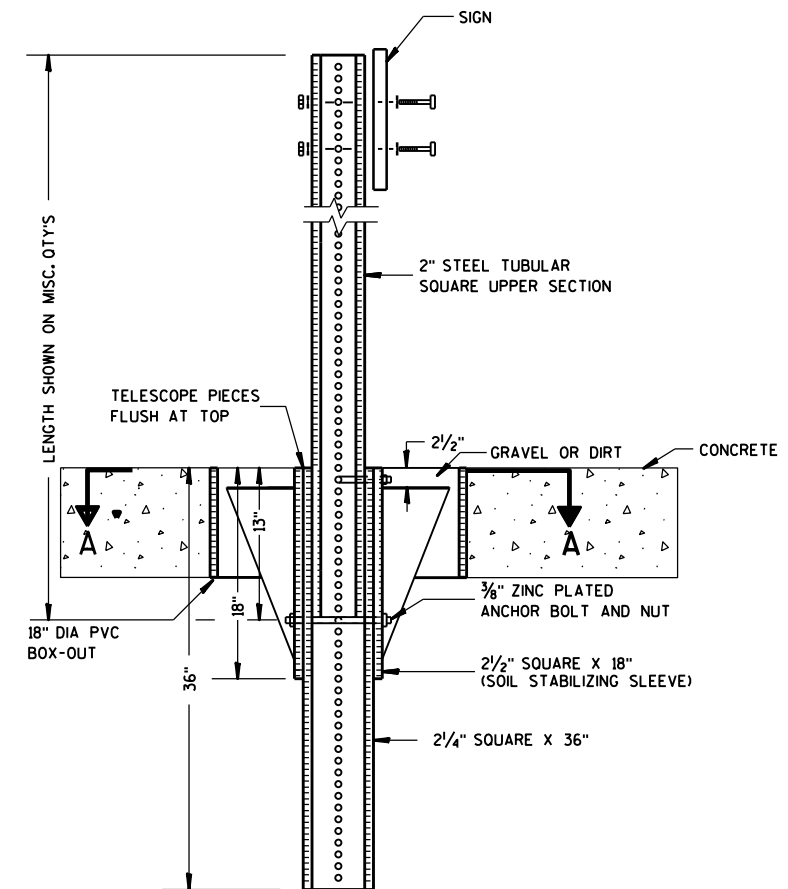
E



ELEVATION VIEW

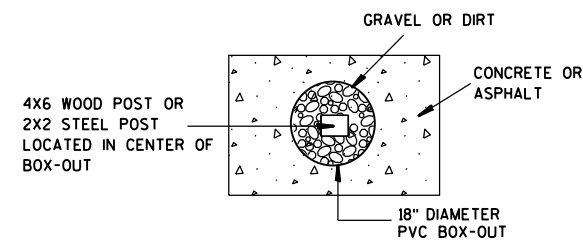
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 131 A4-3B.1

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

GENERAL NOTES

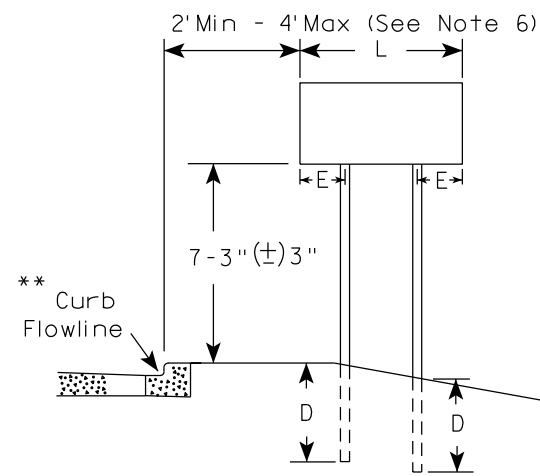
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
- See tables below for required number of posts.
- For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
- The (±) tolerance for mounting height is 3 inches.
- J-Assemblies are considered to be one sign for mounting height.
- 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.
- 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.

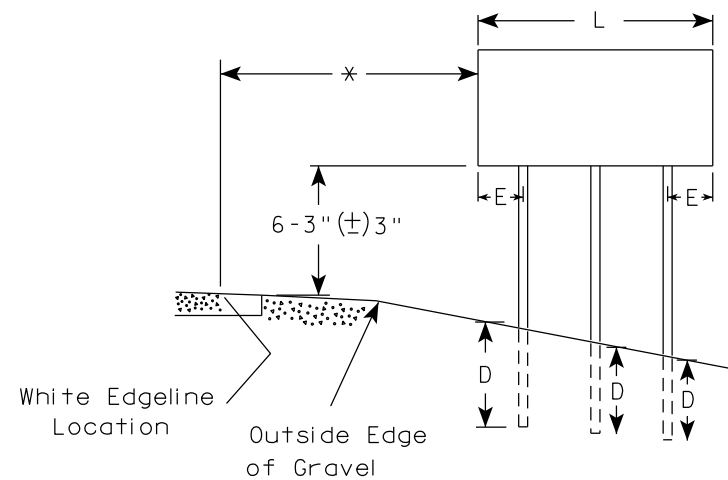
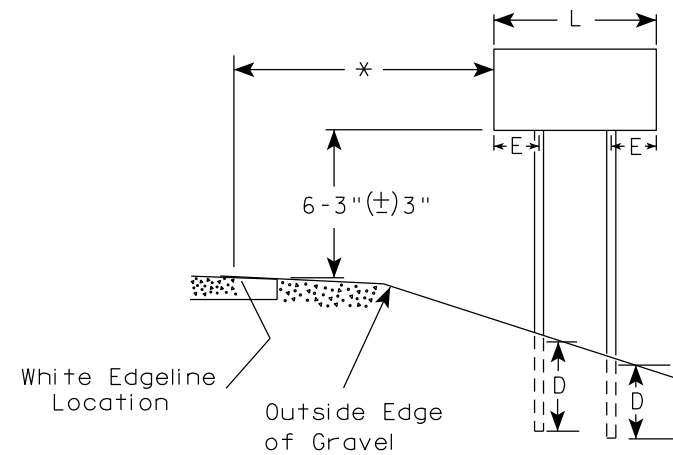
** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs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

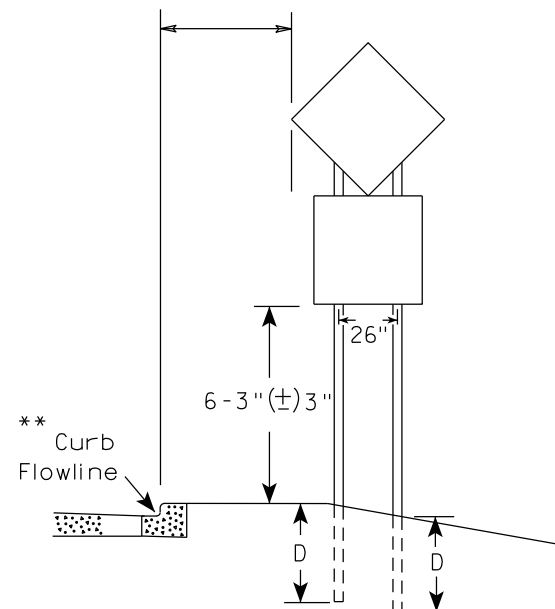
URBAN AREA



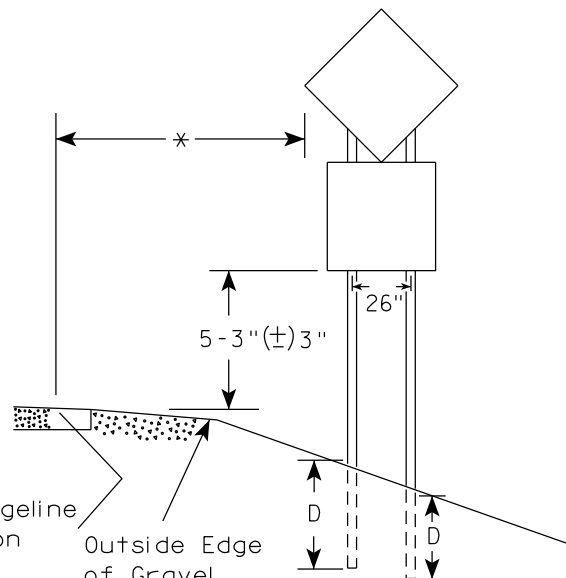
RURAL AREA (See Note 3)



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

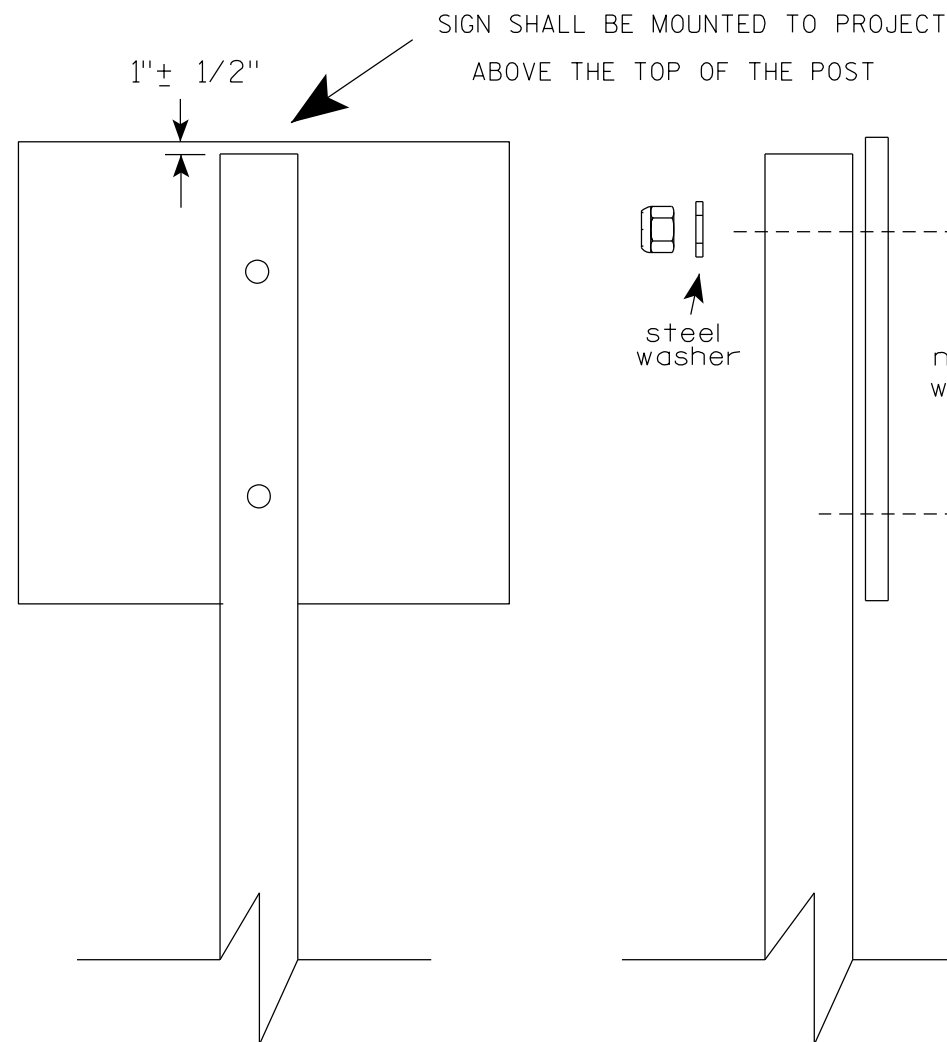
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 132

E



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

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

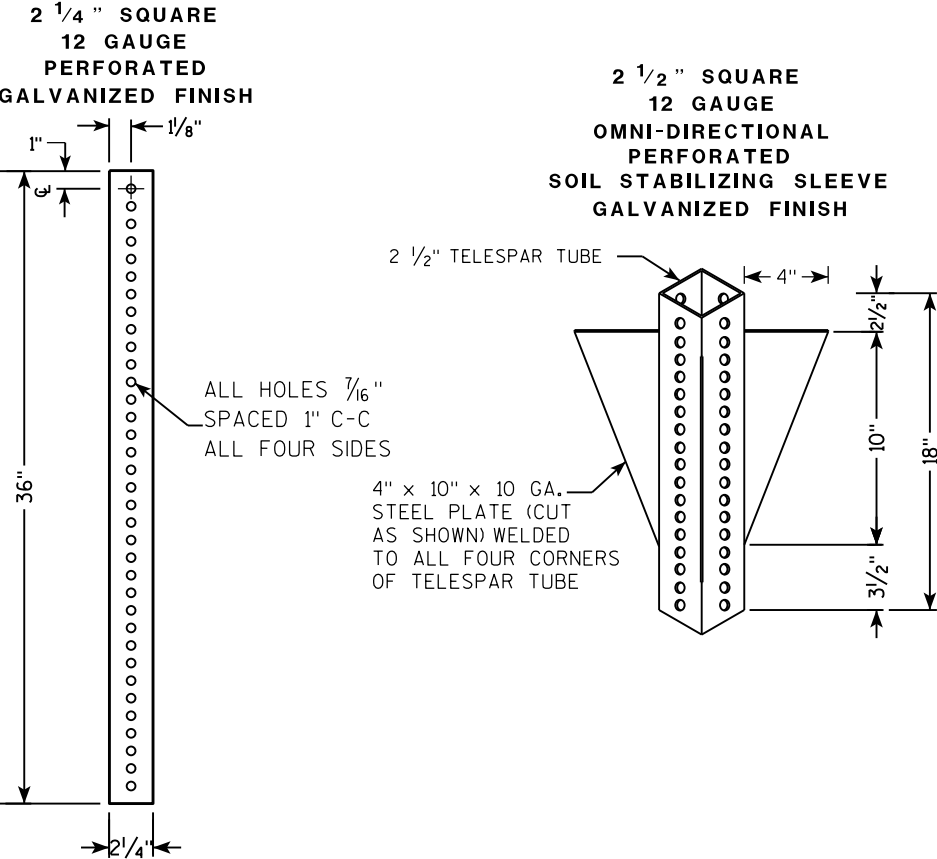
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " 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

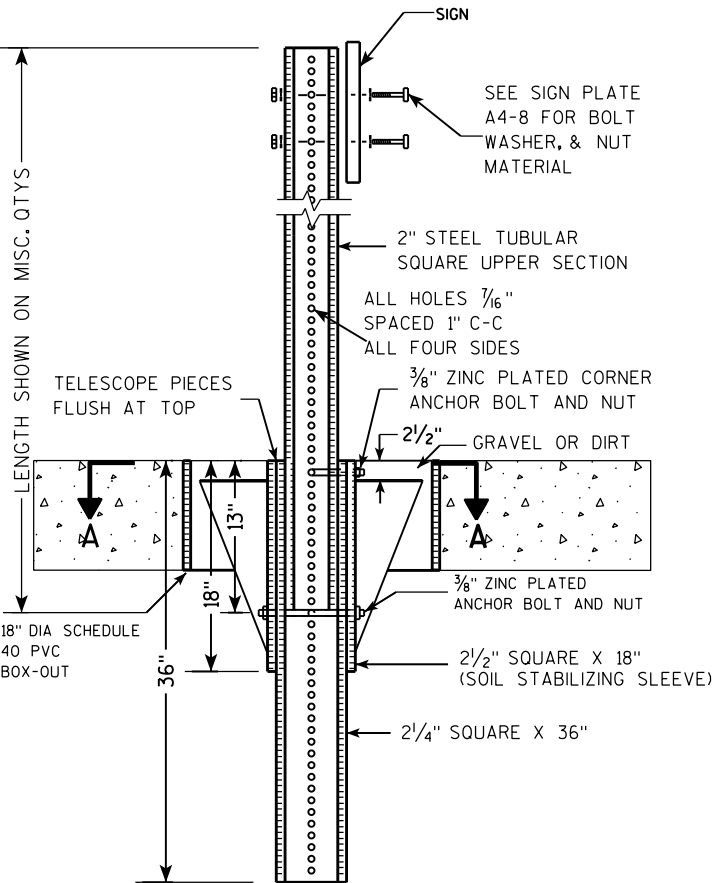
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

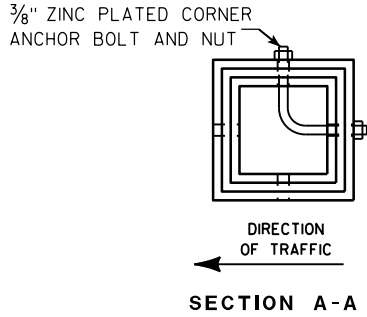
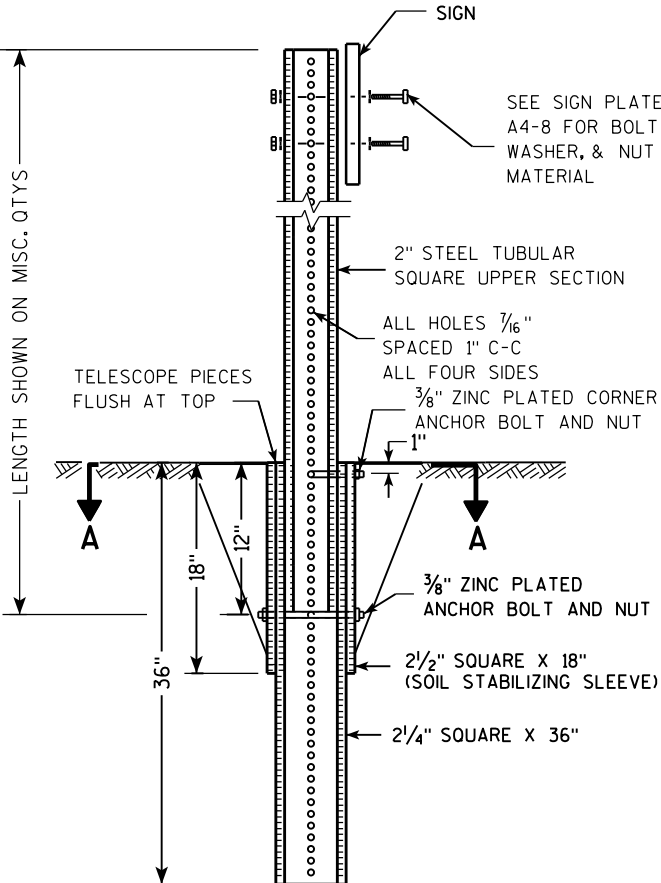
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



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

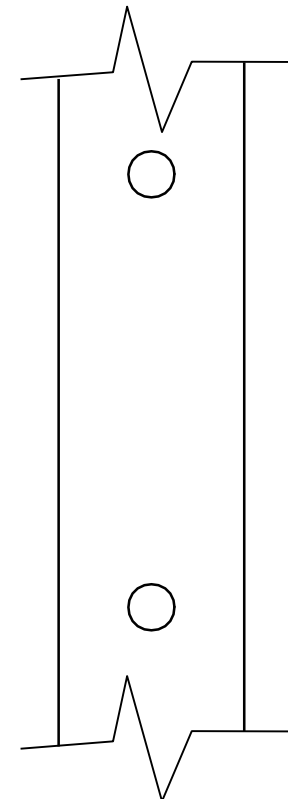
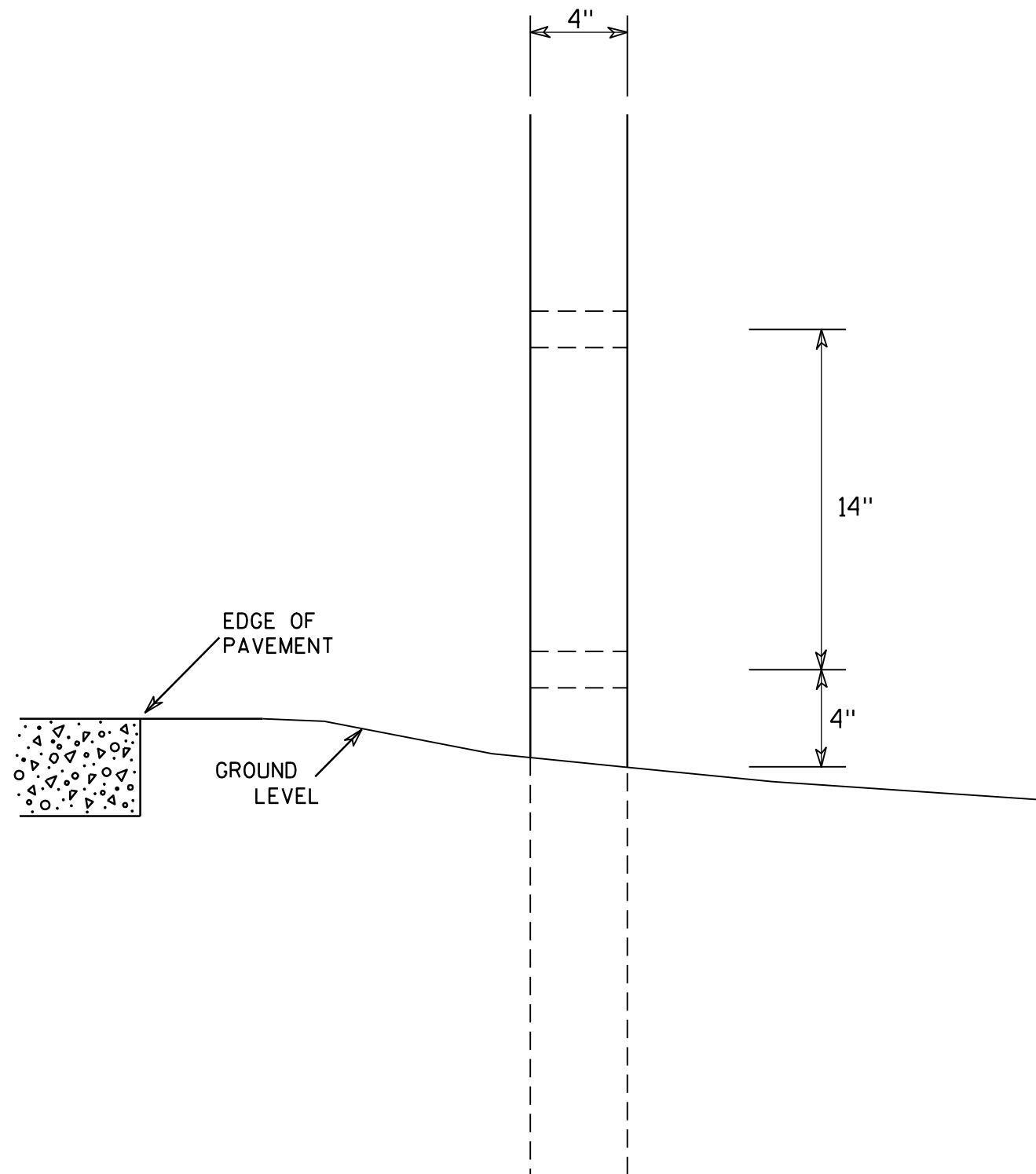
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 134 14-9.9



SIDE VIEW

GENERAL NOTES

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

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:

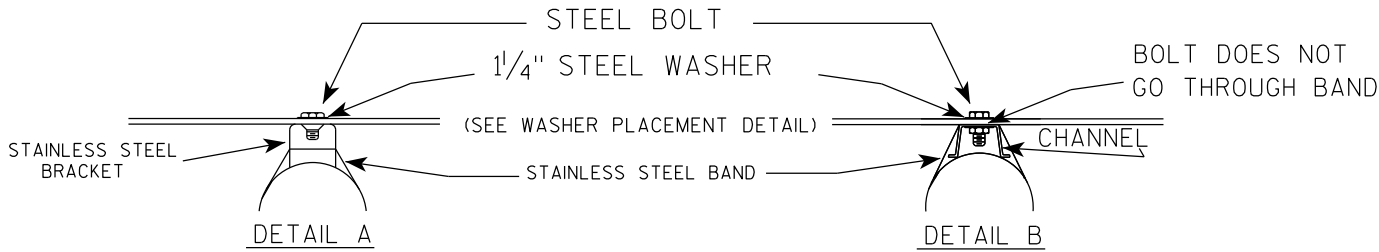
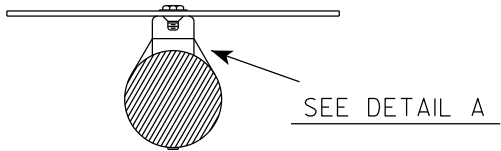
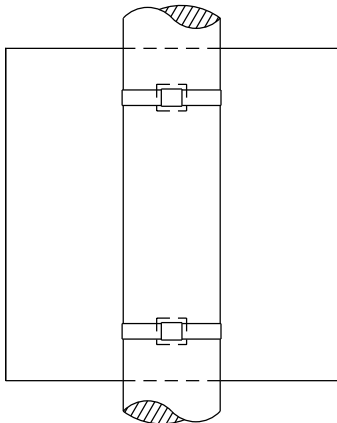
COUNTY:

SHEET NO: 135

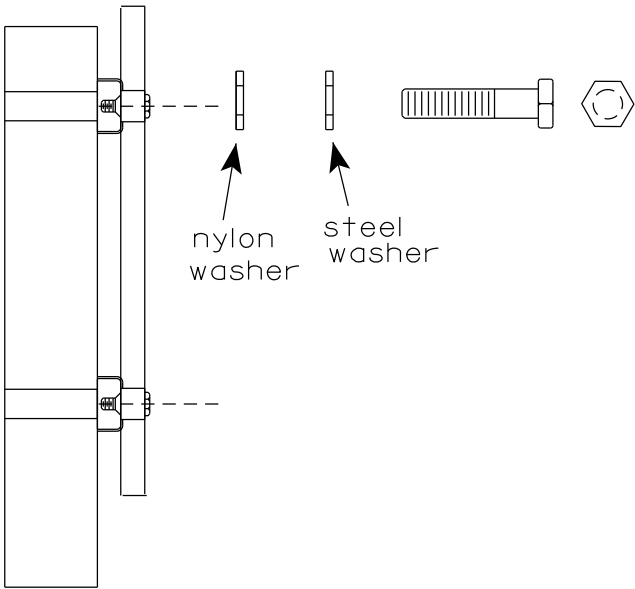
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

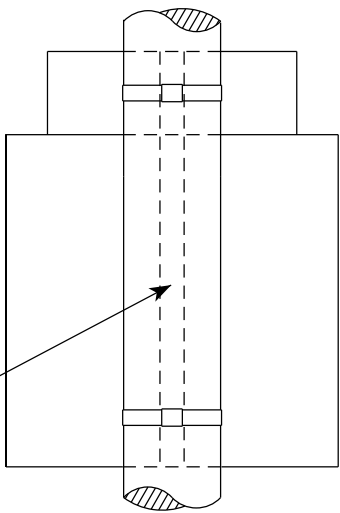


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

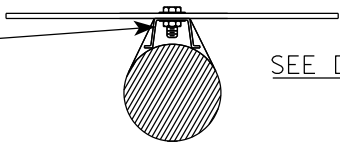
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 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



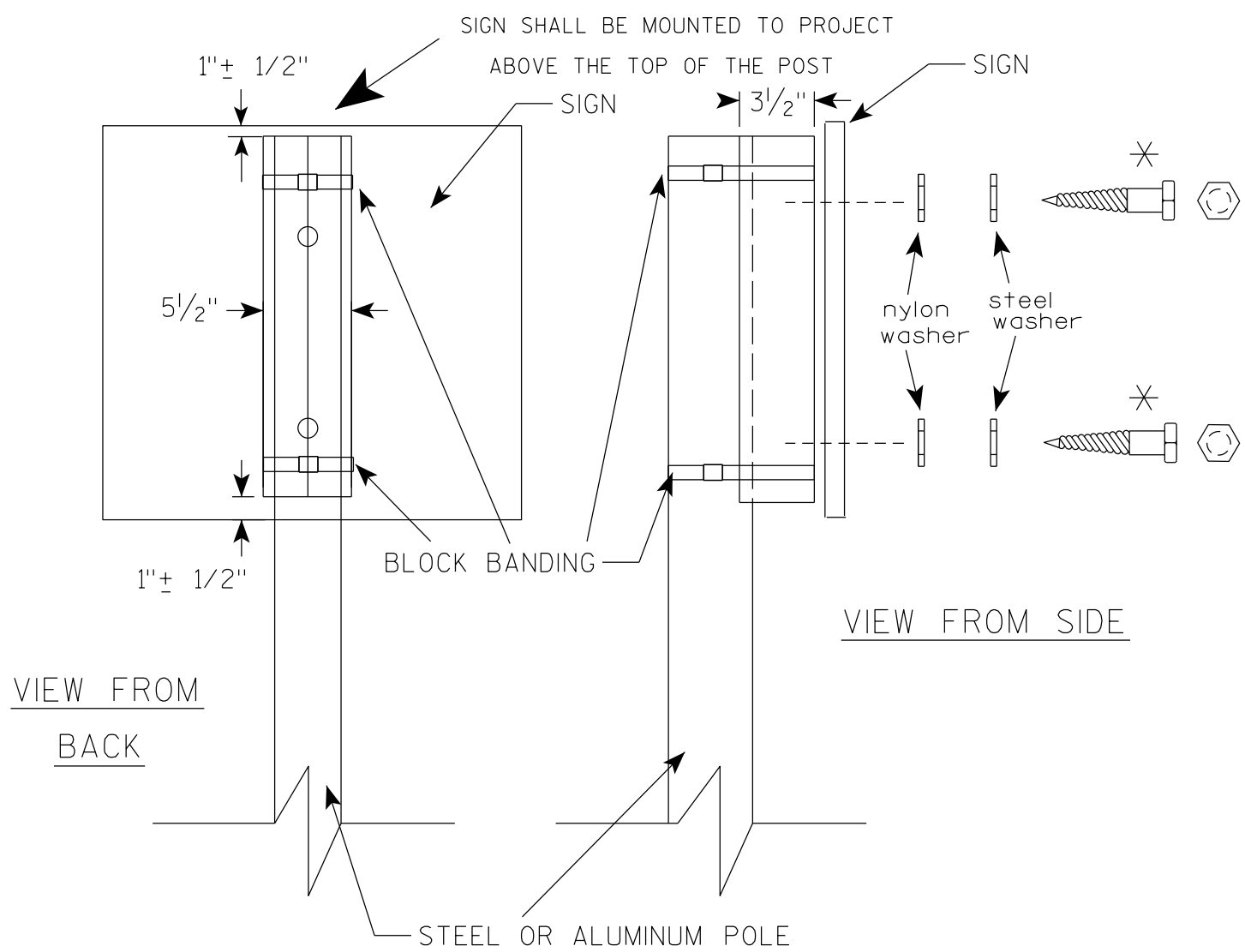
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

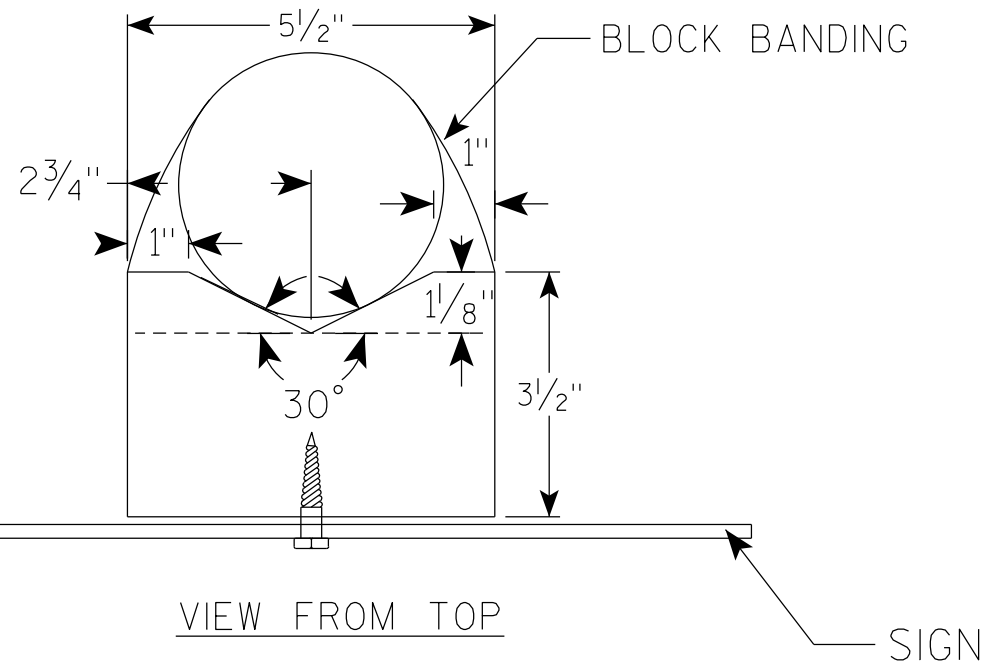
WISCONSIN DEPT OF TRANSPORTATION

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

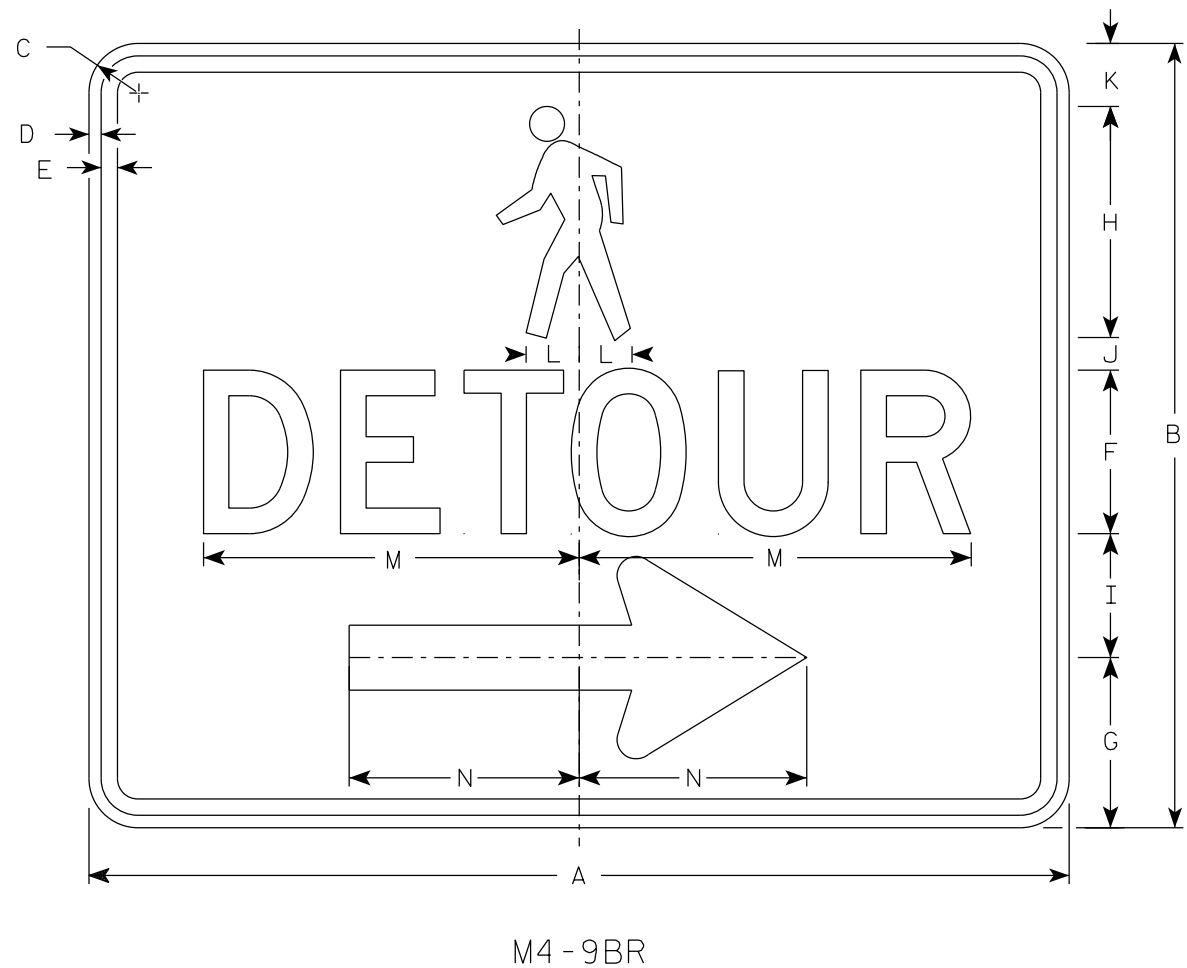
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 137

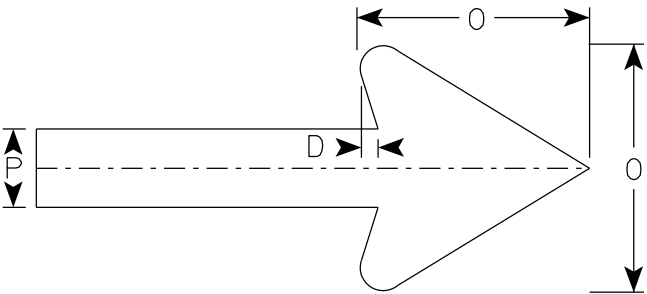
E

7



NOTES

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



Arrow Detail

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

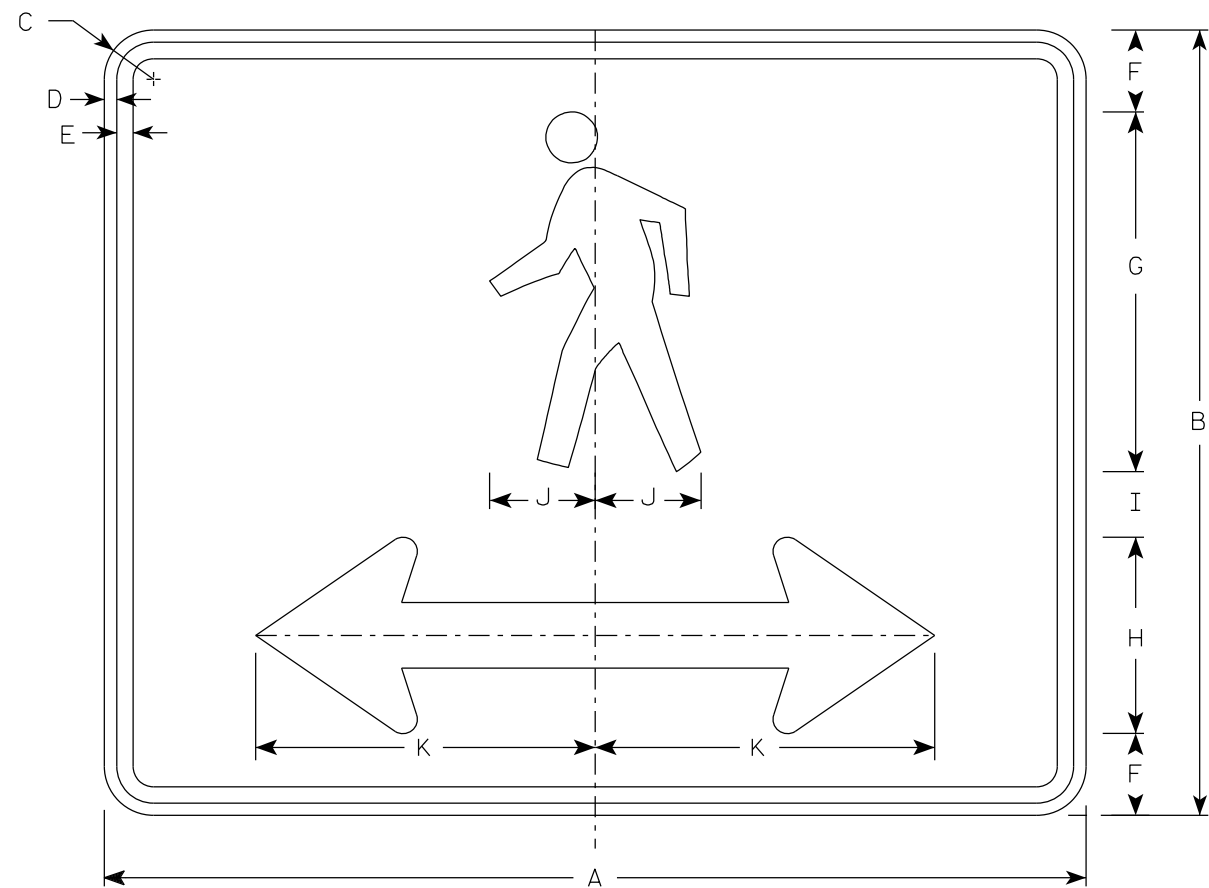
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

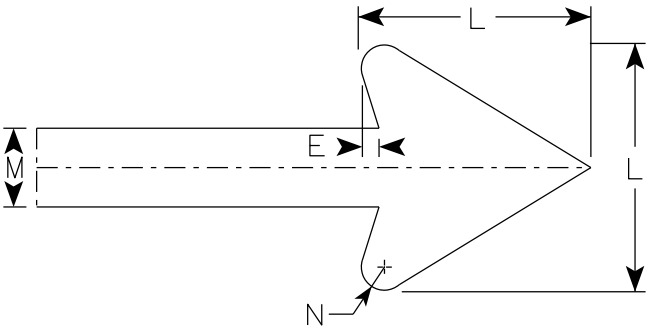
7



M4-60D

NOTES

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

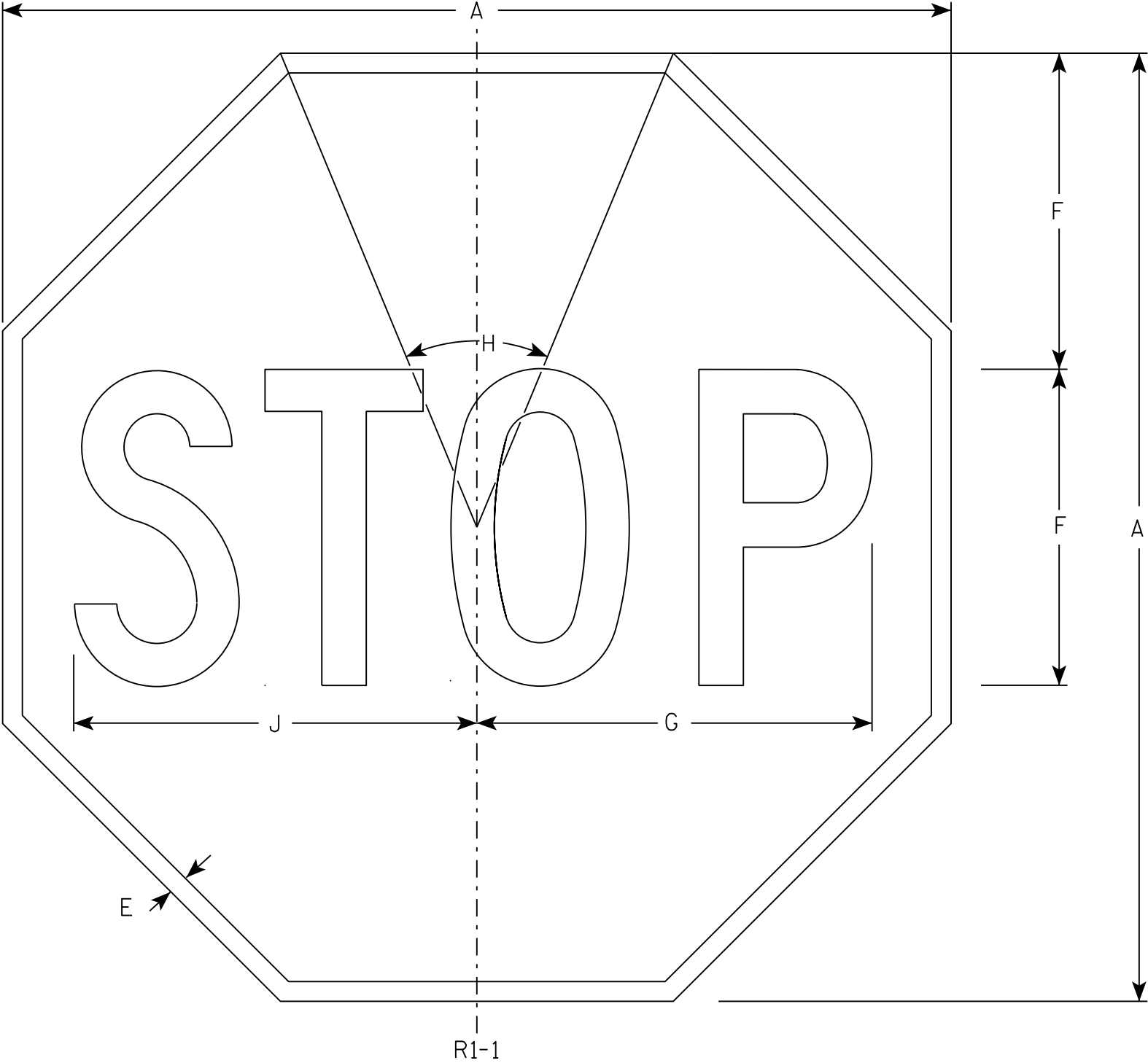


Arrow Detail

7

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

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

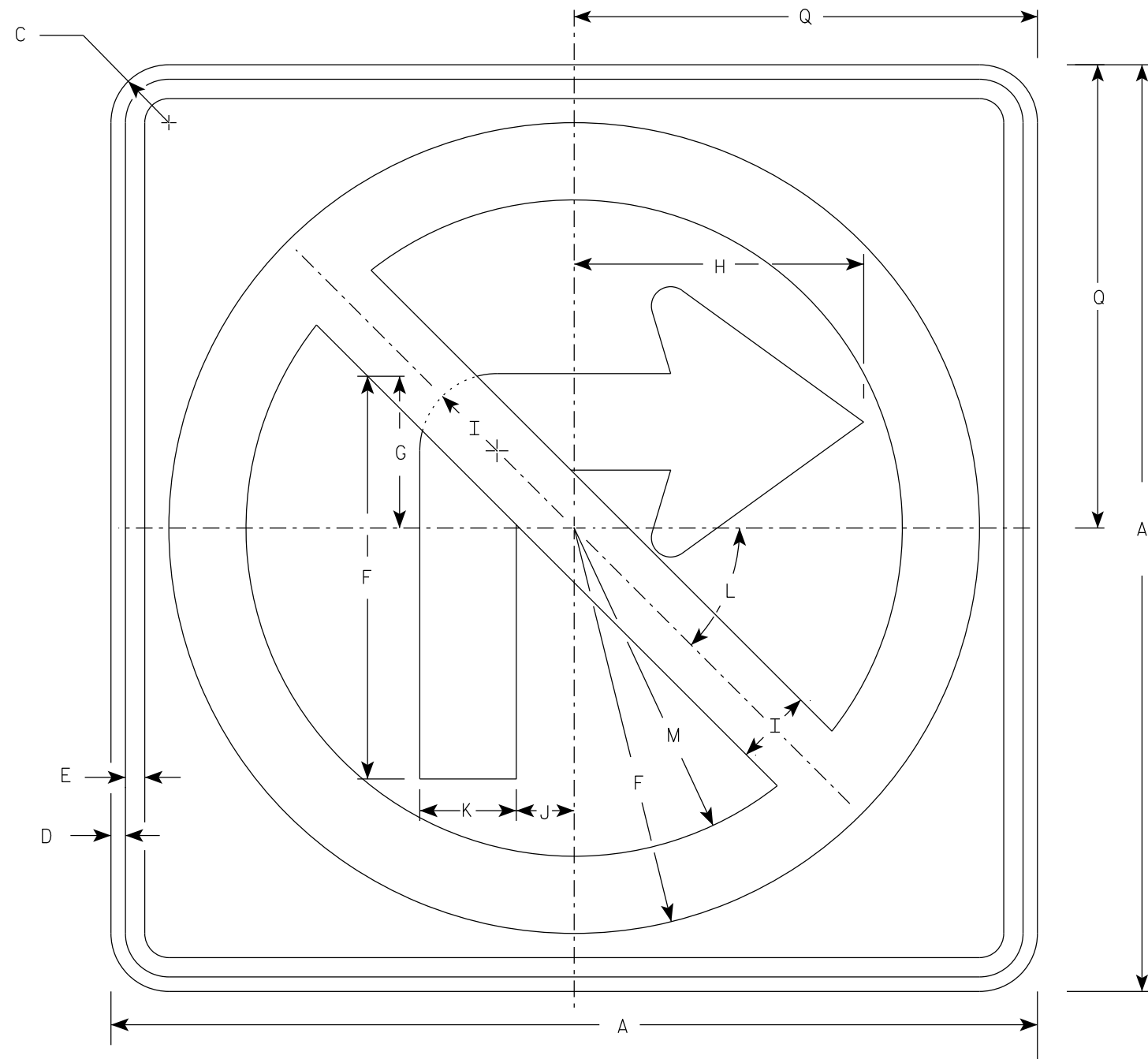
STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

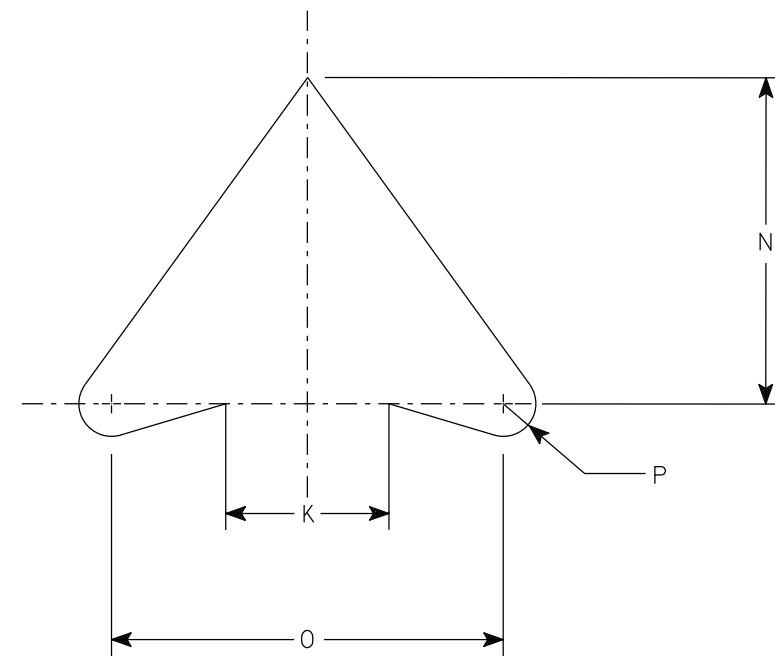
7



R3-1

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - See note 3
- 3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

PROJECT NO:

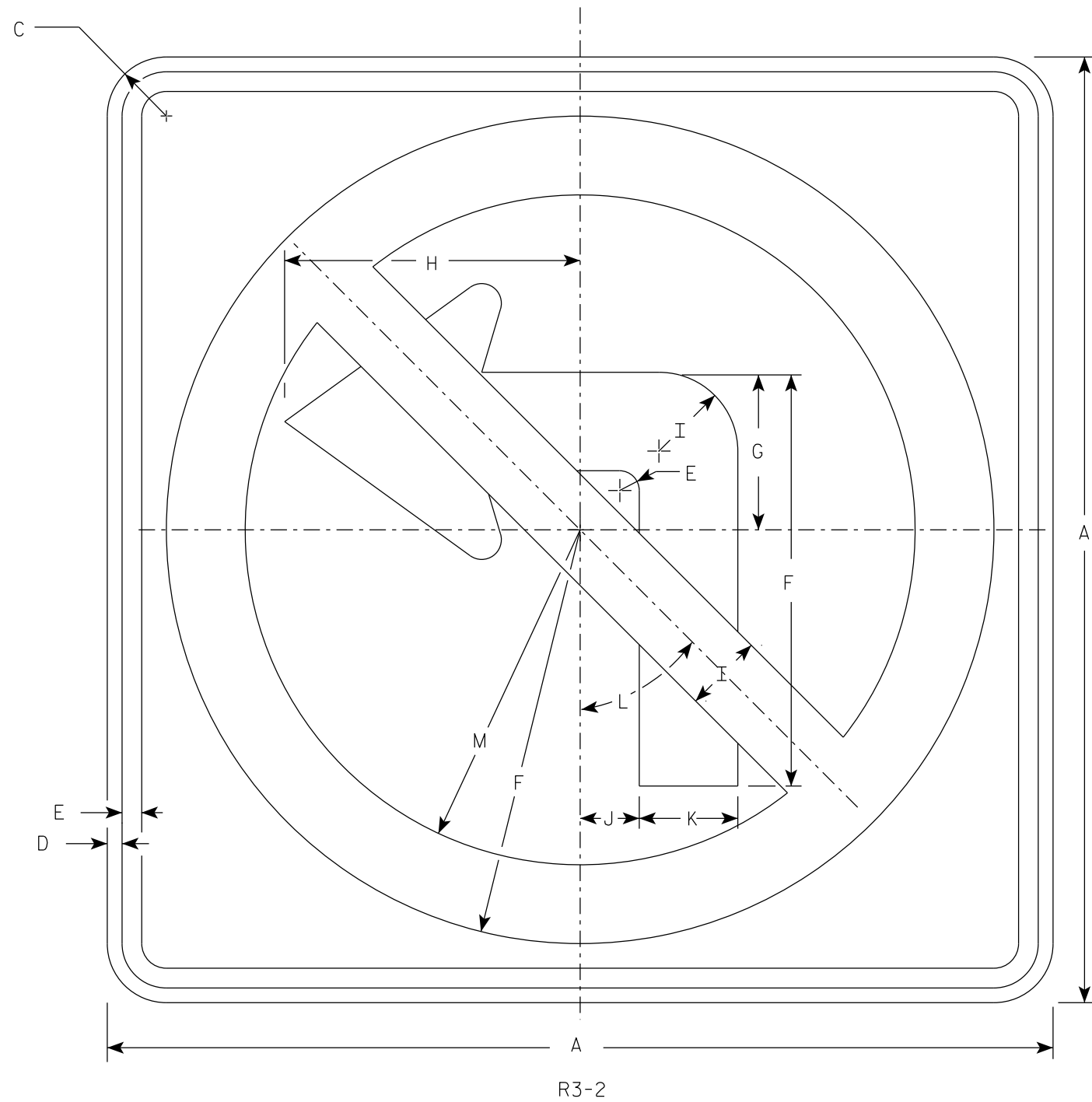
HWY:

COUNTY:

SHEET NO: 141

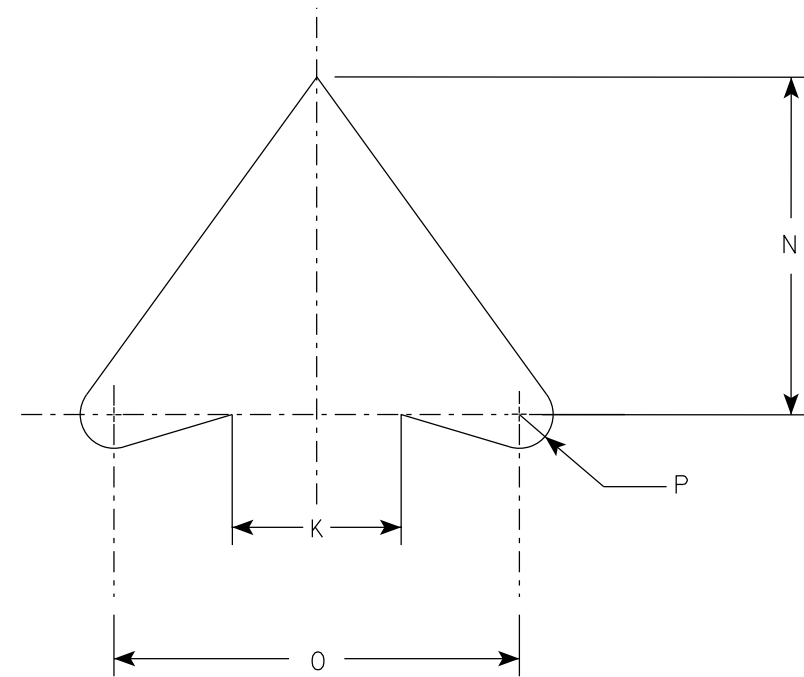
E

7



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/2	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		2 1/4	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

PROJECT NO:

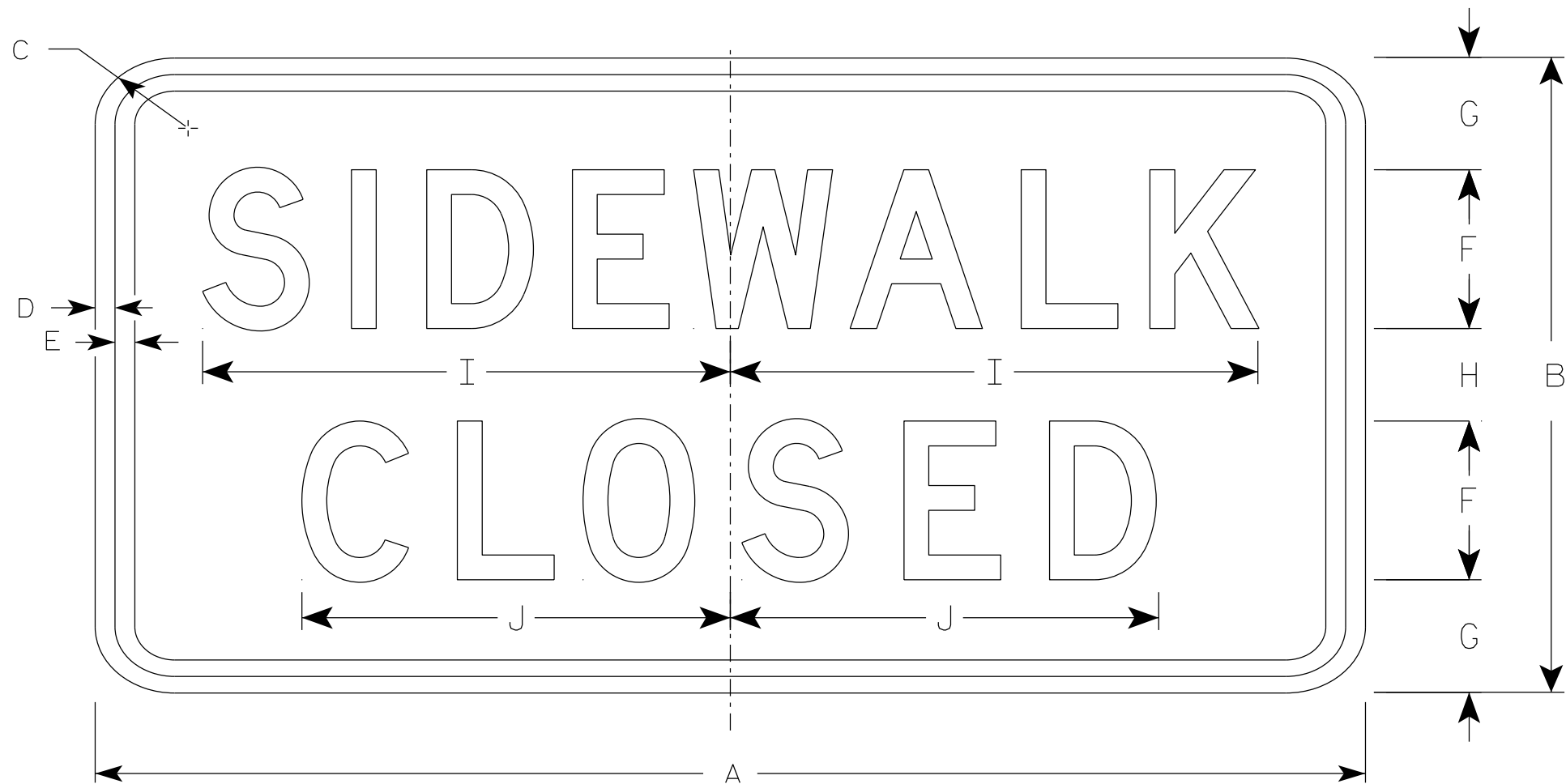
HWY:

COUNTY:

SHEET NO: 142

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:

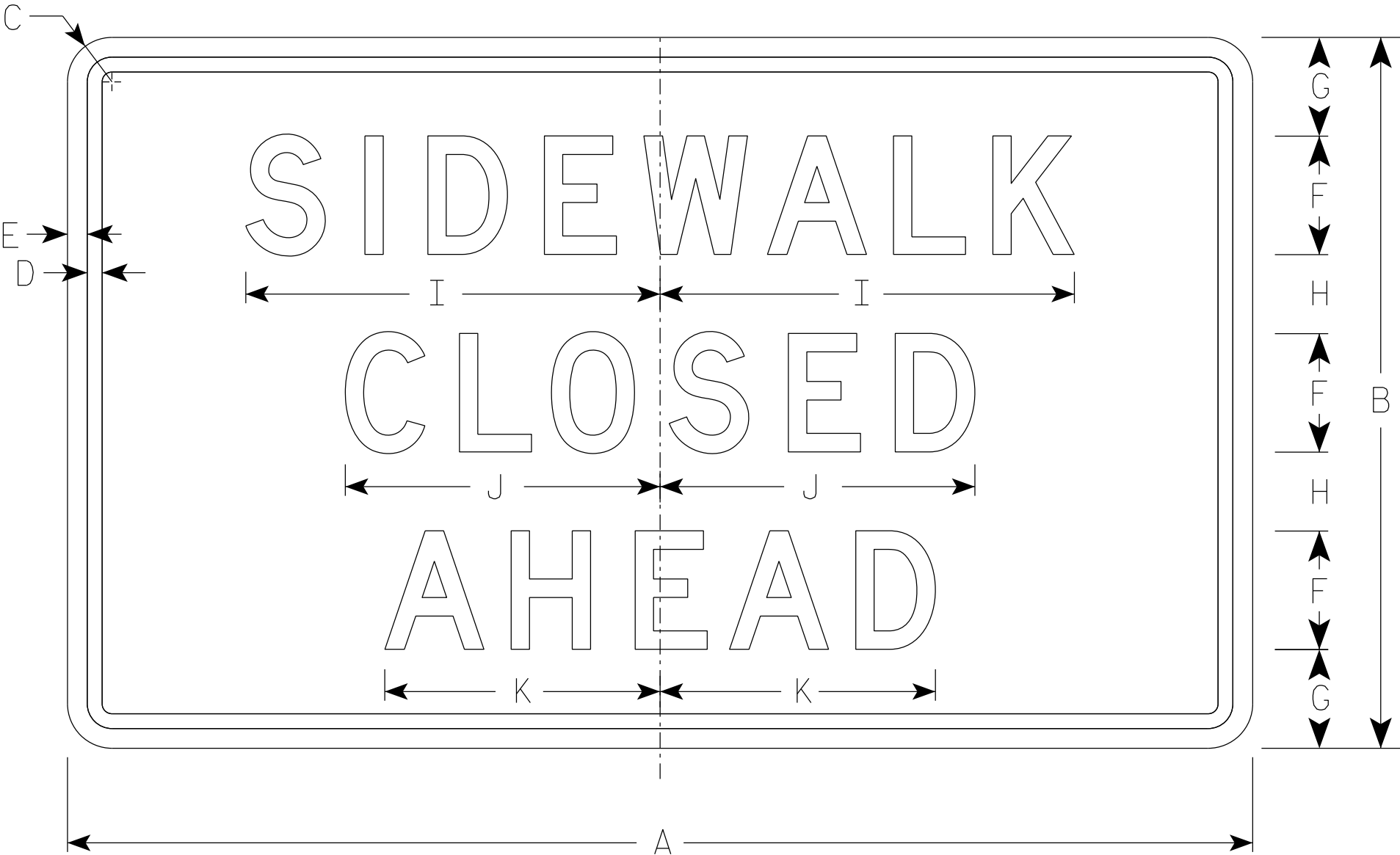
COUNTY:

SHEET NO: 143

E

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - D



R9-9A

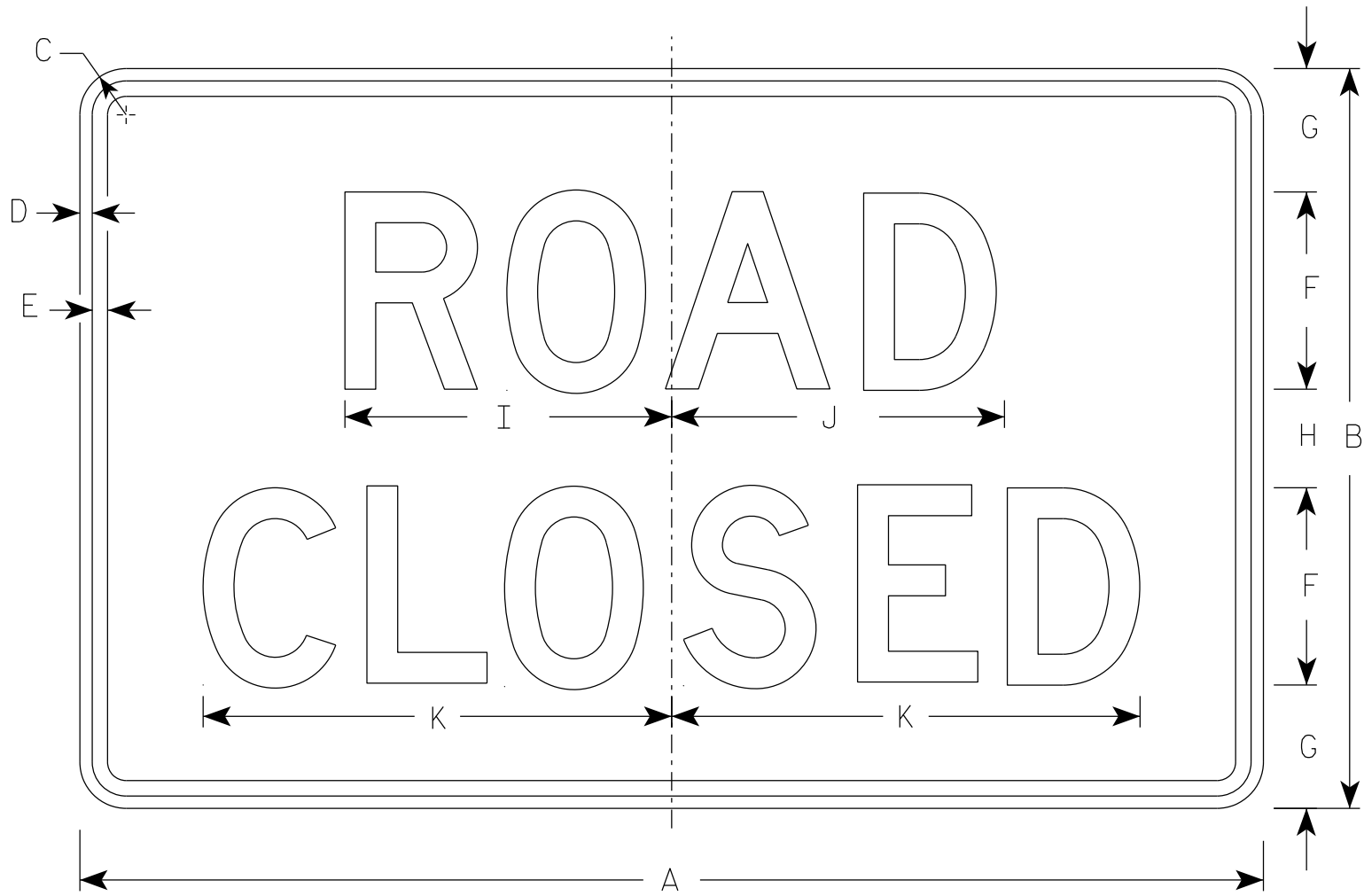
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/2	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

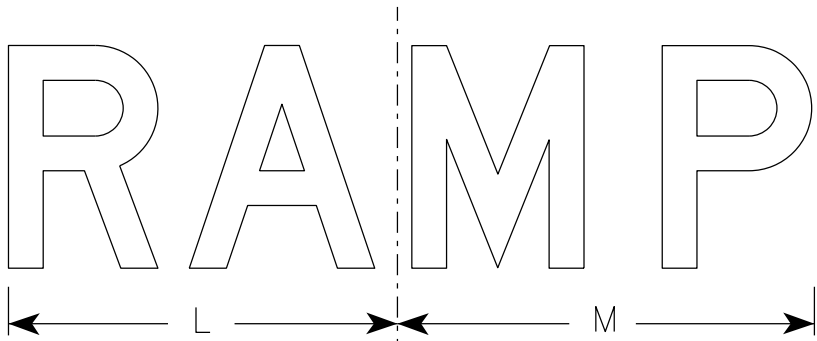
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

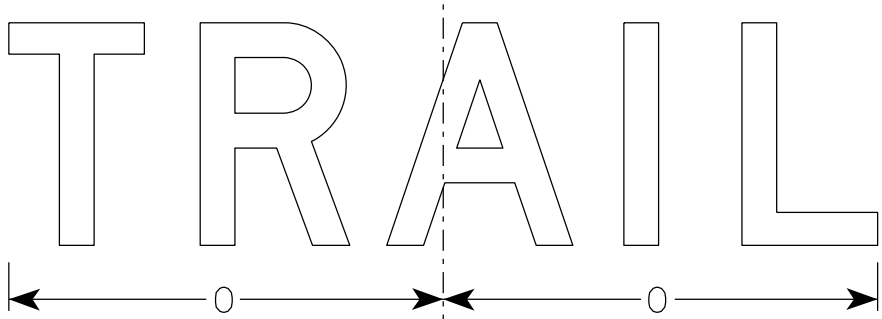


R11-2

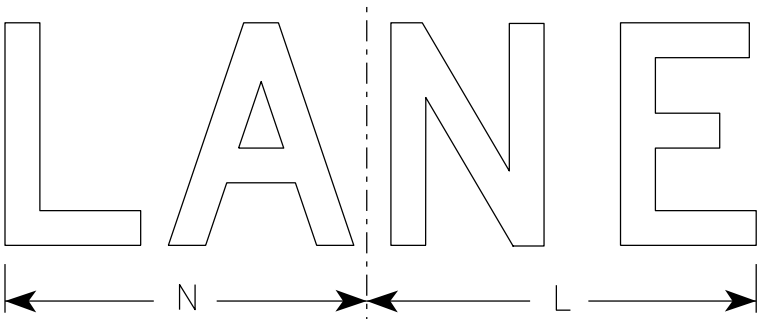
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify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



R11-2R



R11-2T



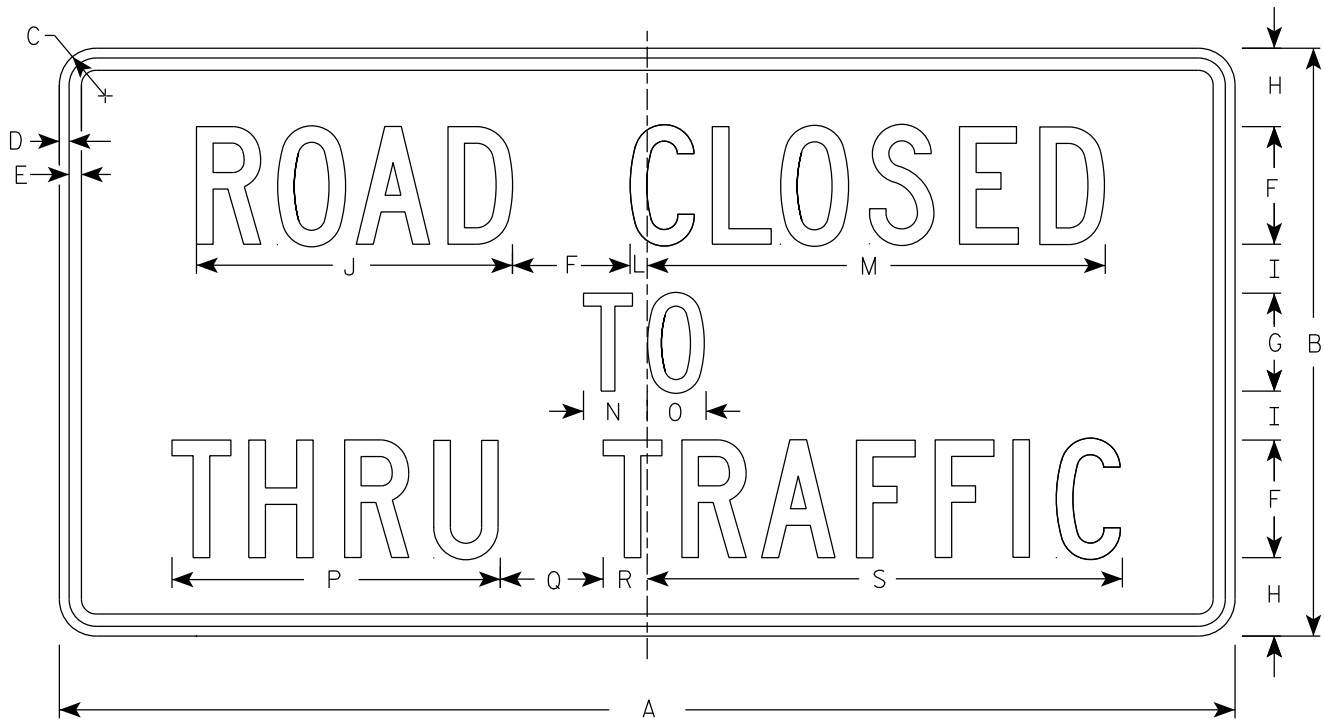
R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 2/5/24	PLATE NO. R11-2.12

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: 146

E

STANDARD SIGN

R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

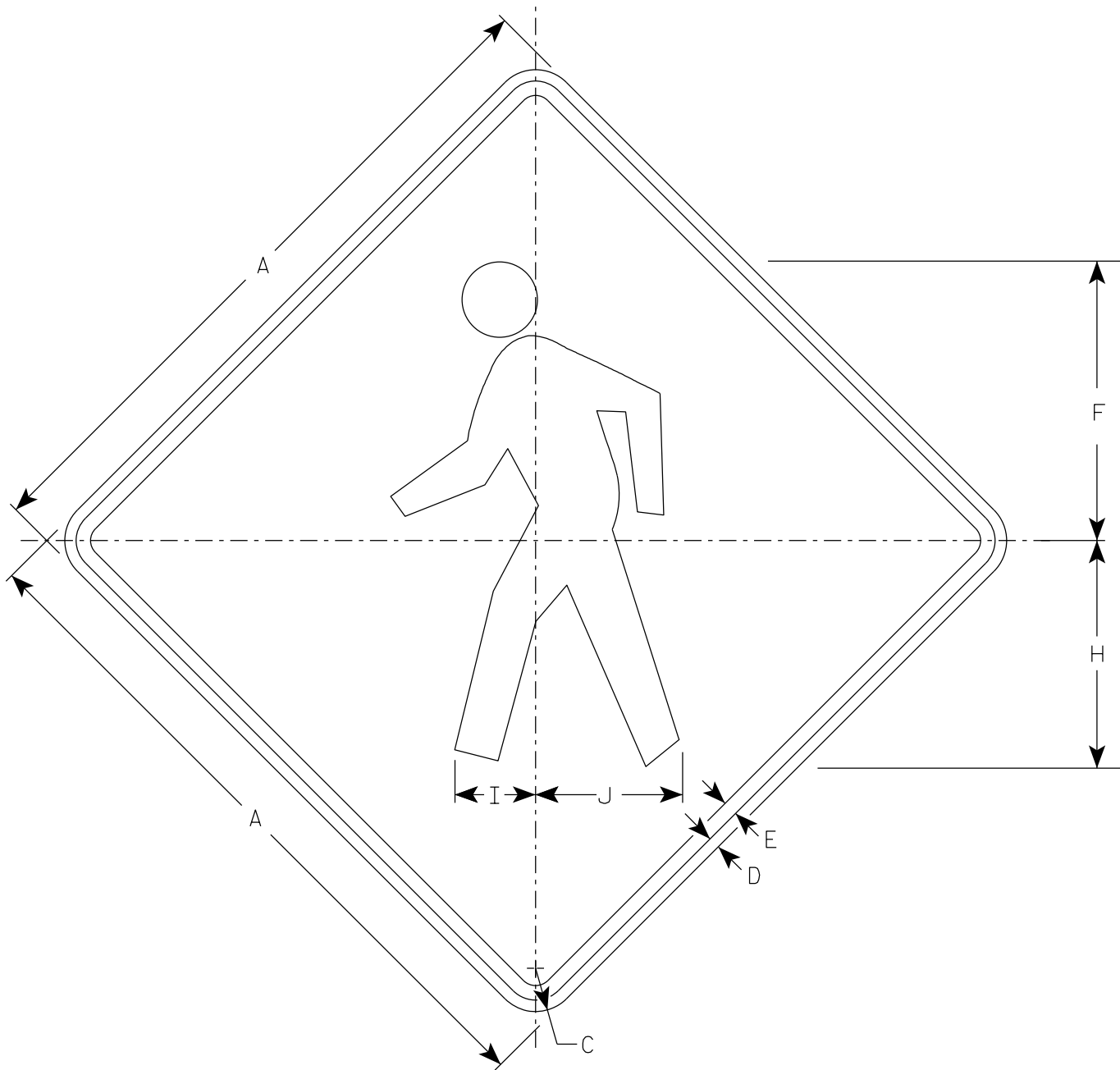
APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 2/5/24

PLATE NO. R11-4.4

7



W11-2

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Yellow
 - Message - Black

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	24		1 1/2	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 7/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

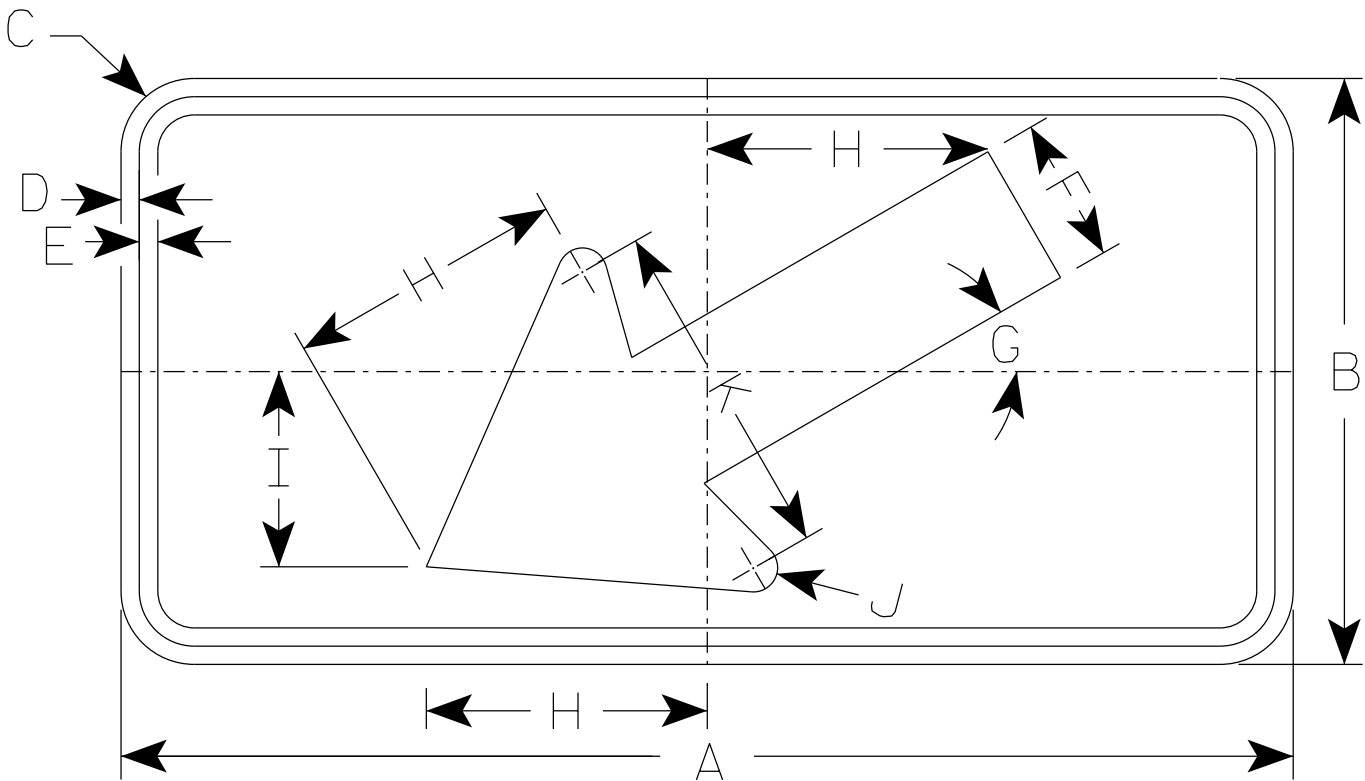
DATE 6/15/2023 PLATE NO. W11-2.9

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

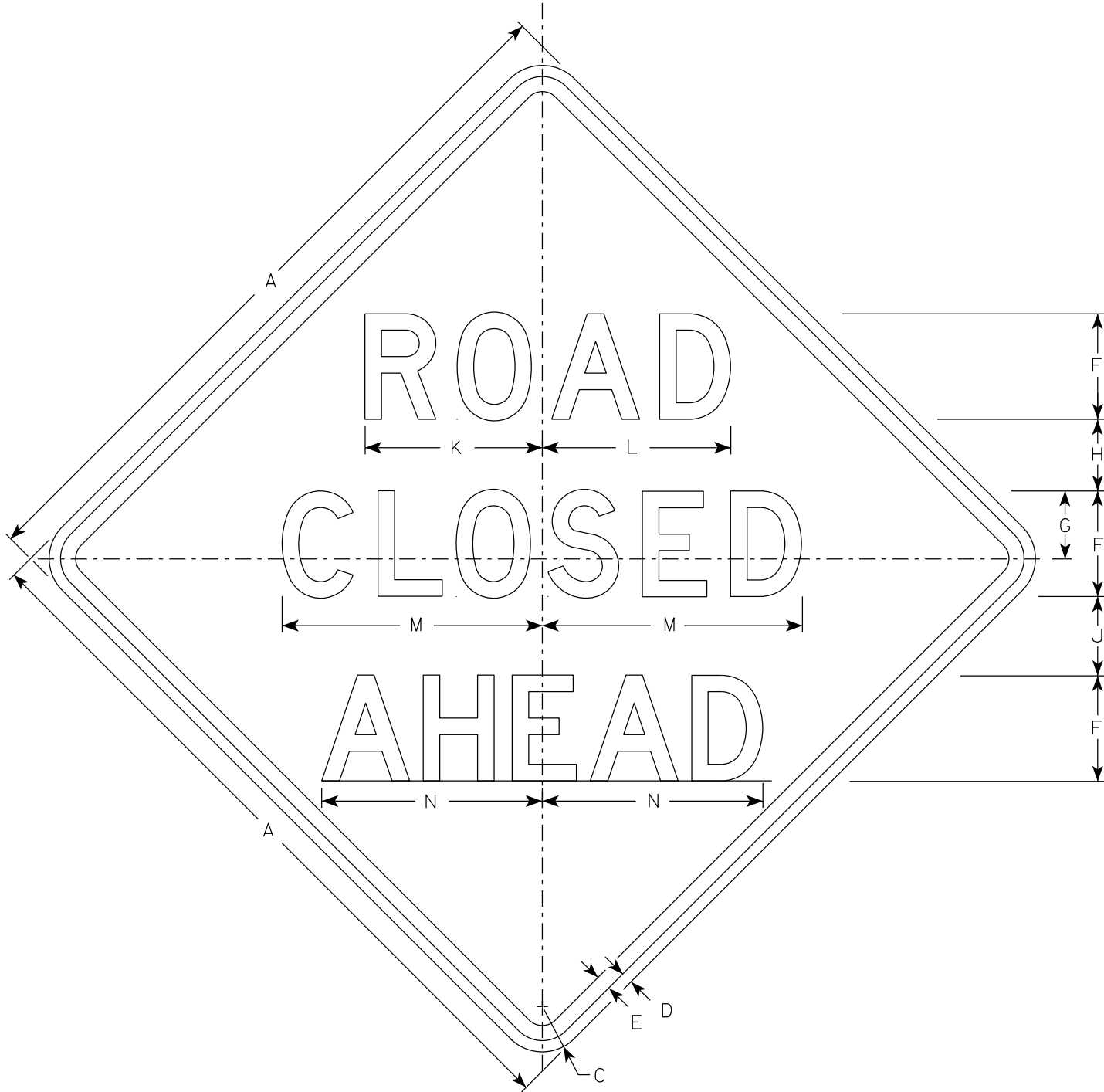
W16-7

WISCONSIN DEPT OF TRANSPORTATION

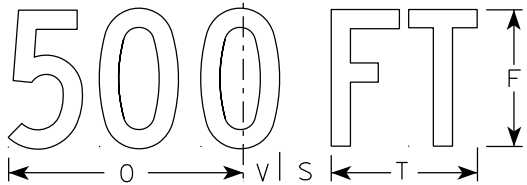
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

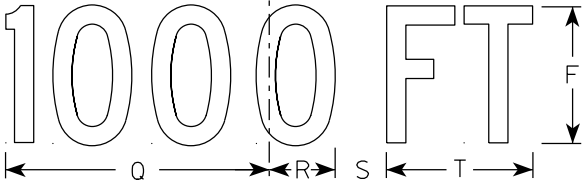
7



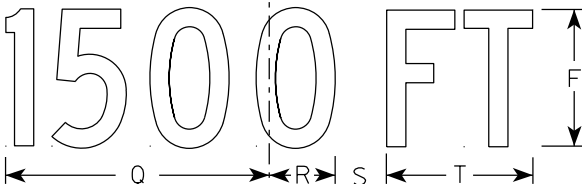
W20-3A



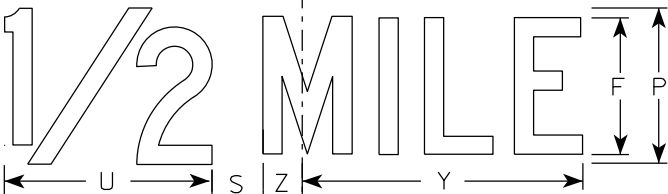
W20-3D



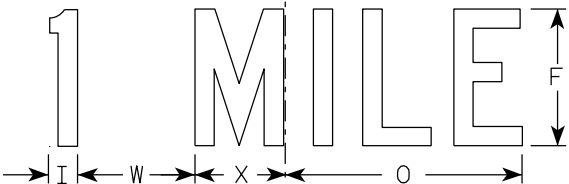
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - see note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

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	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

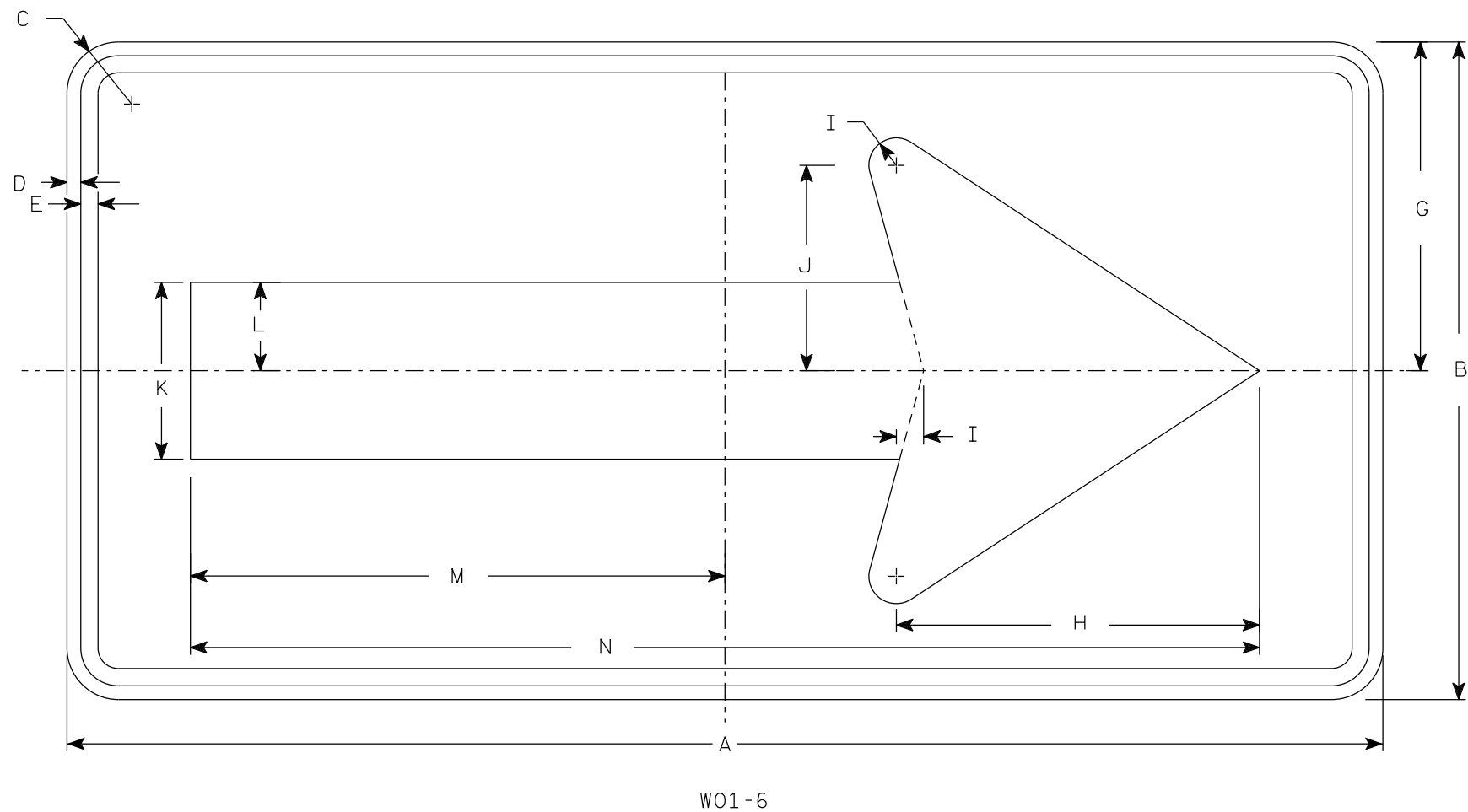
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

7



NOTES

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

7

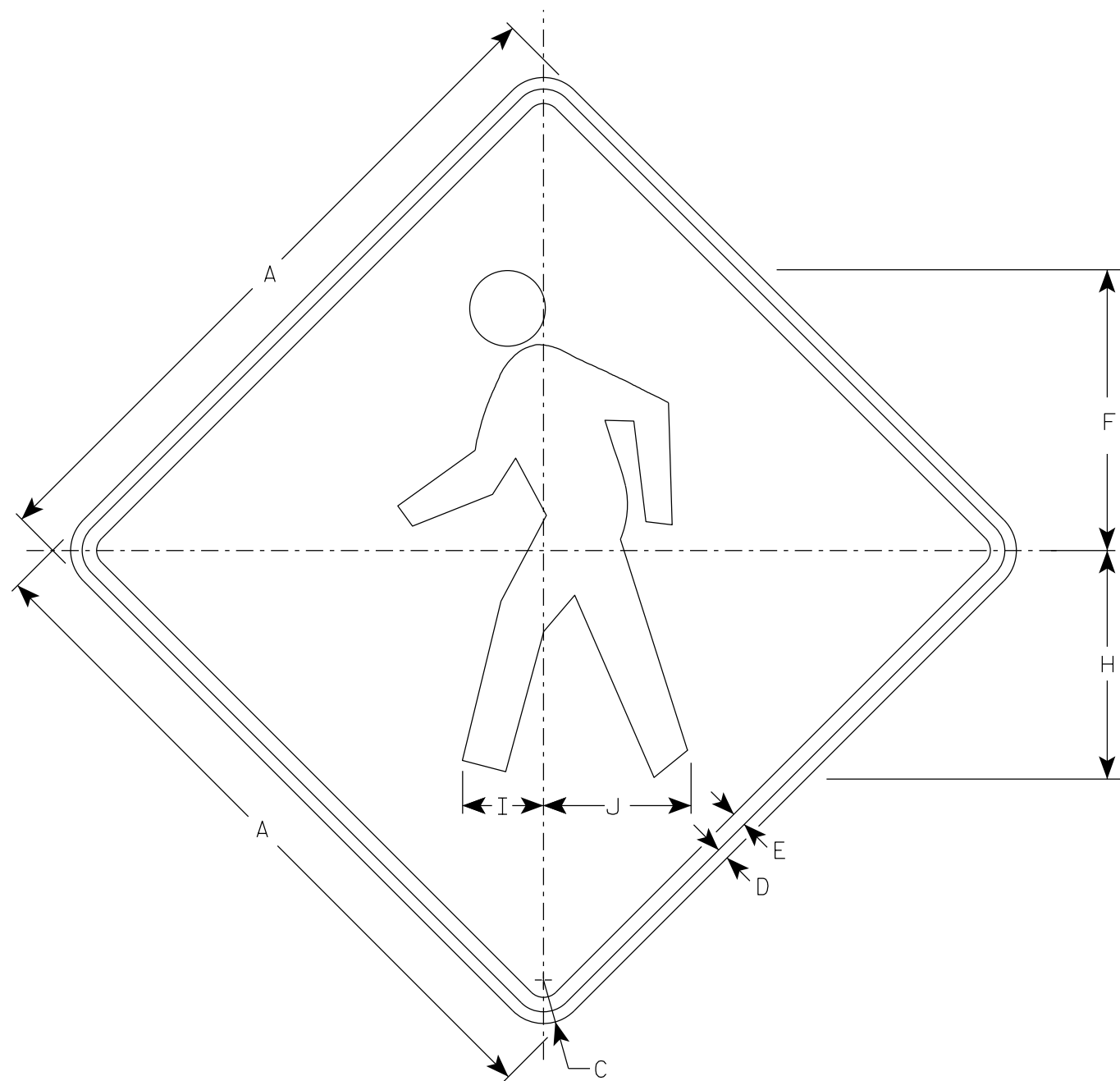
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 7/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-6.2



W011-2

NOTES

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

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

PROJECT NO:		HWY:		COUNTY:		PLOT DATE : 1-FEB 2024 7:02		PLOT BY : dotc4c		PLOT NAME :		PLOT SCALE :		SHEET NO: 151		E	
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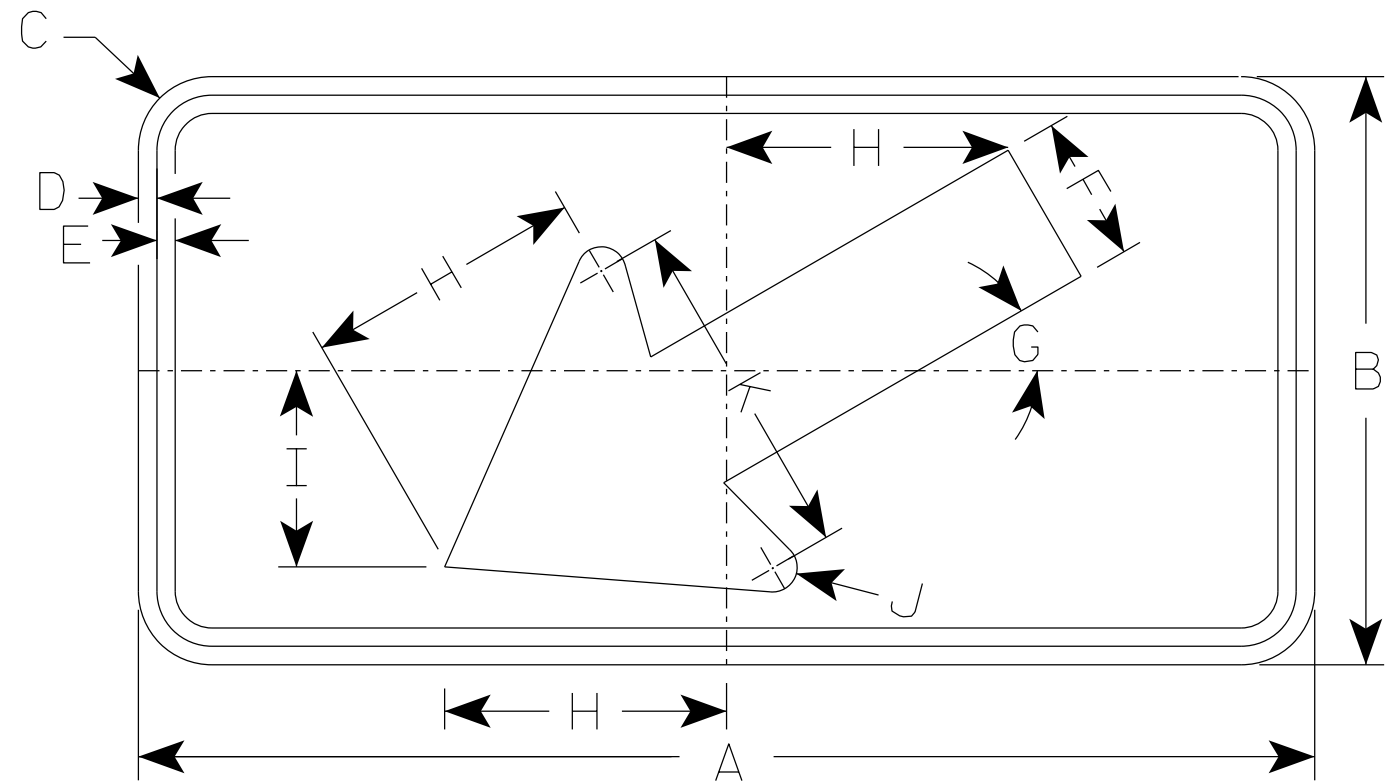
STANDARD SIGN

W011-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W011-2.2



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

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

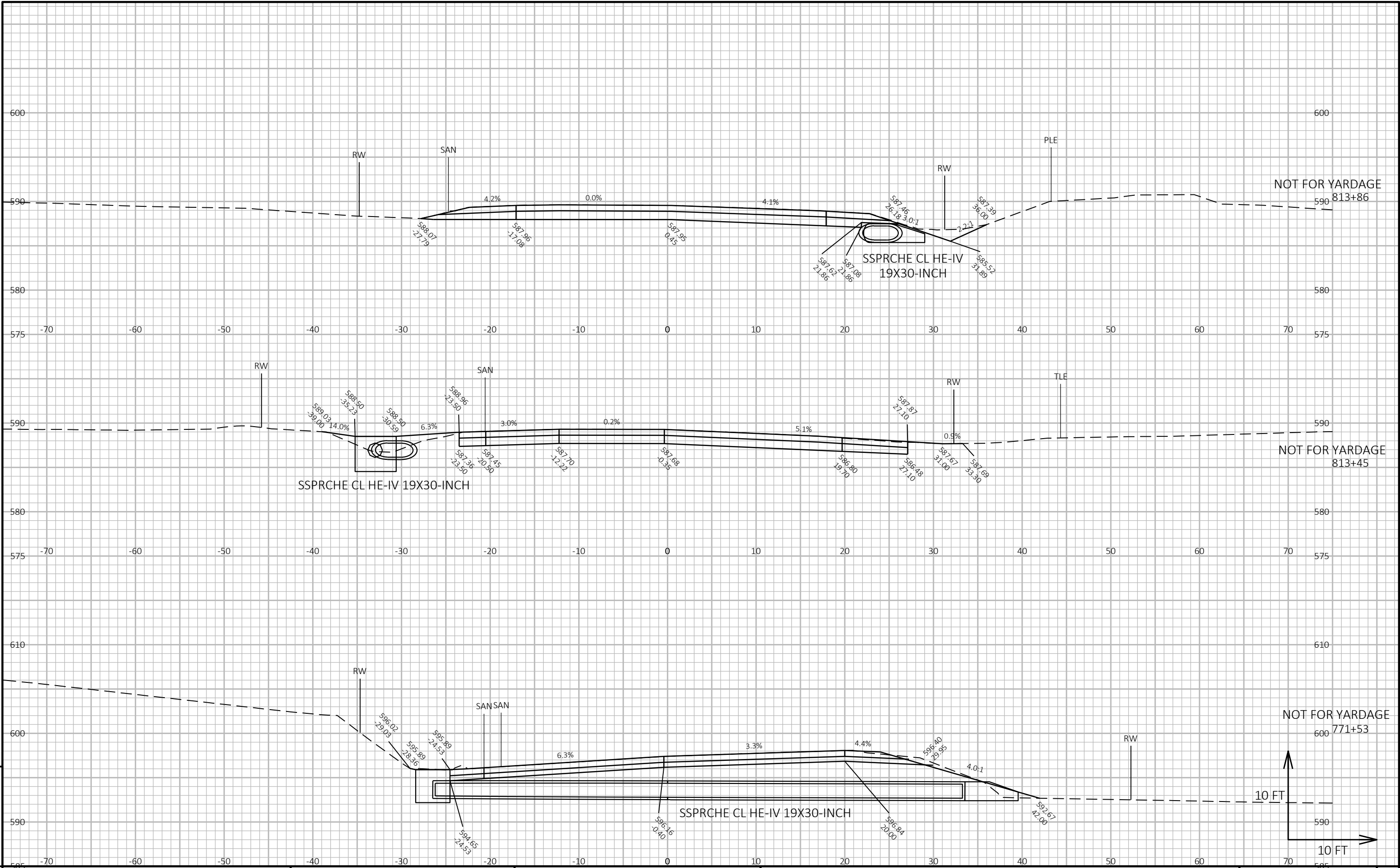
PROJECT NO:			HWY:			COUNTY:													SHEET NO: 152			E
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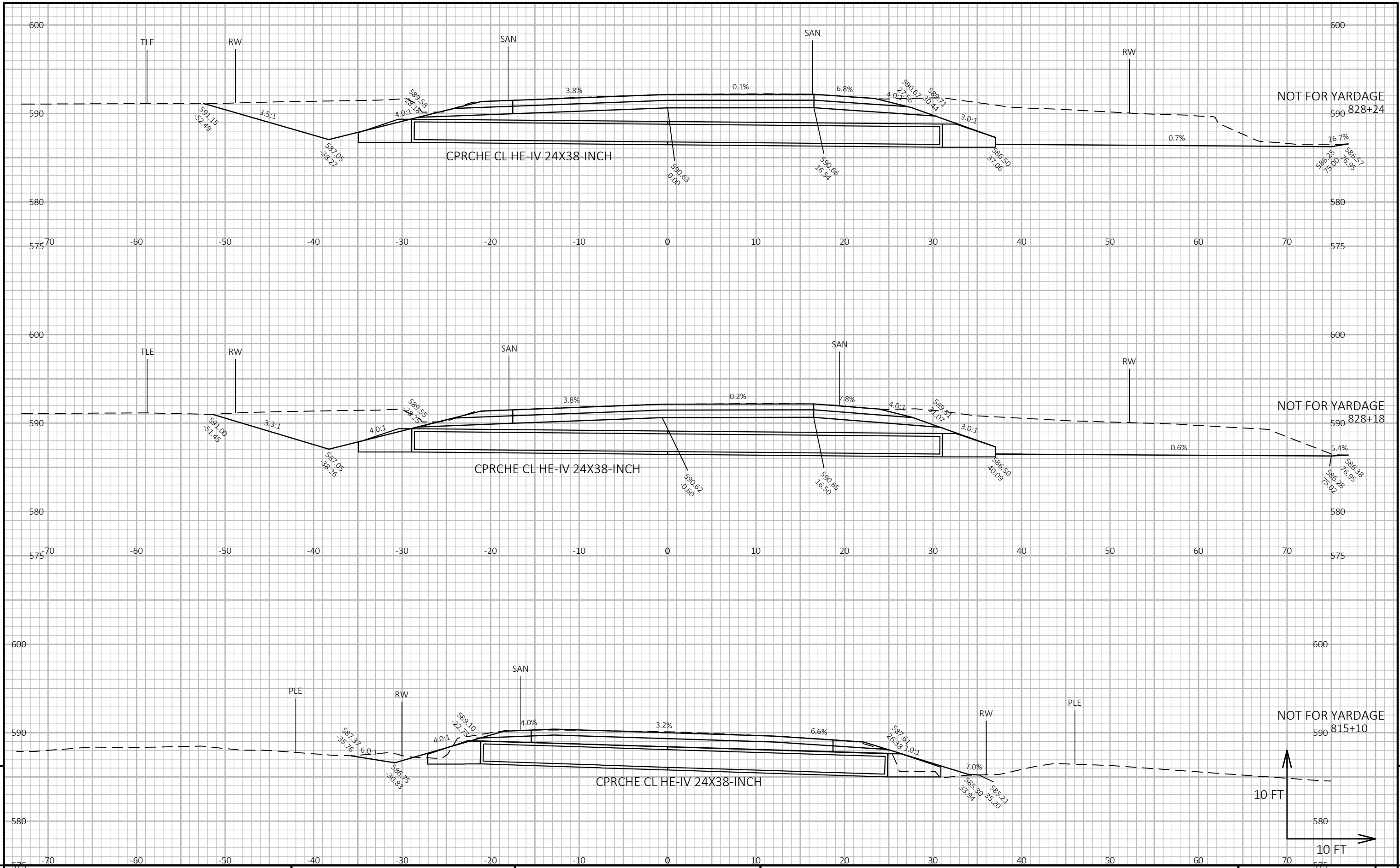
STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

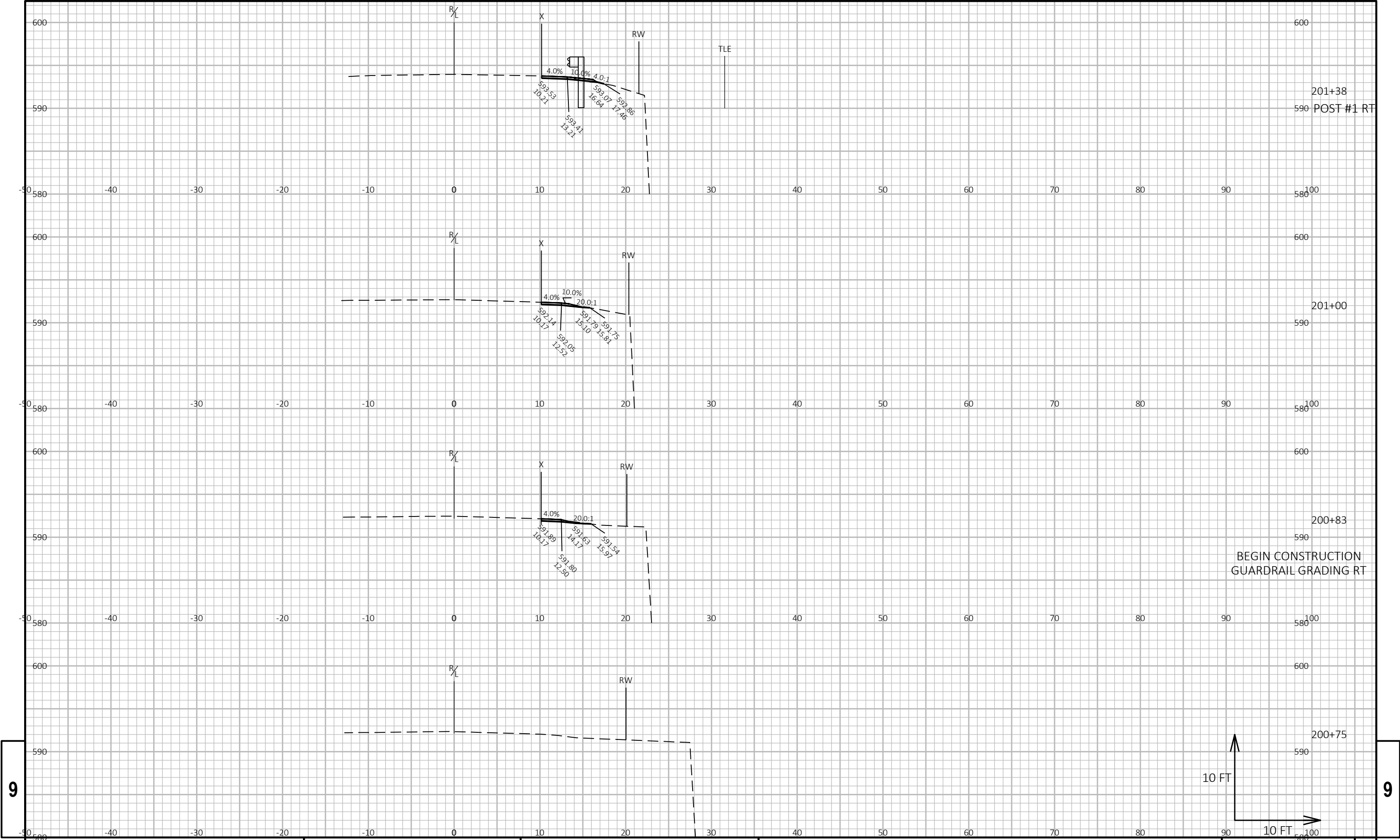
DATE 2/1/2024 PLATE NO. W016-7.3

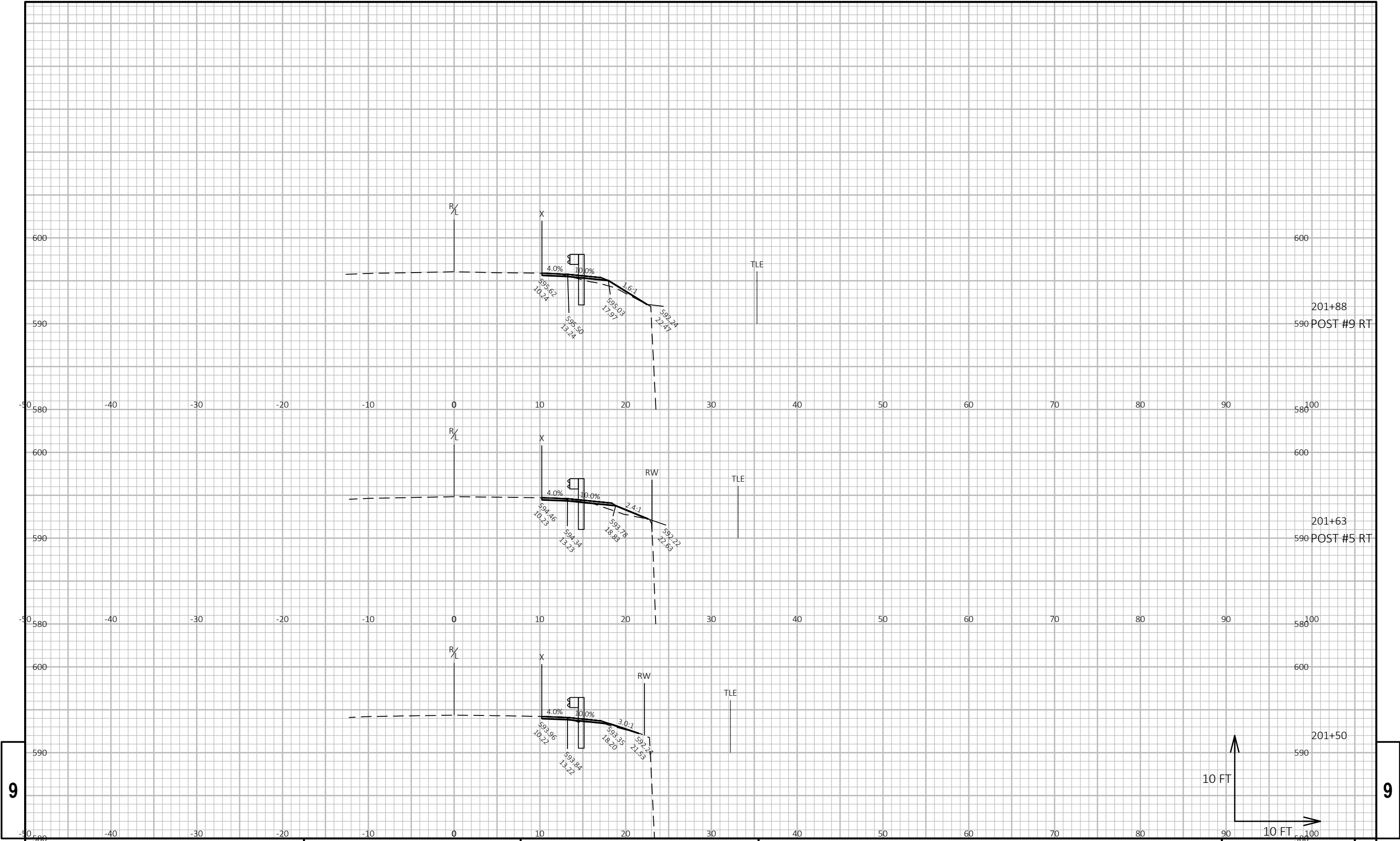


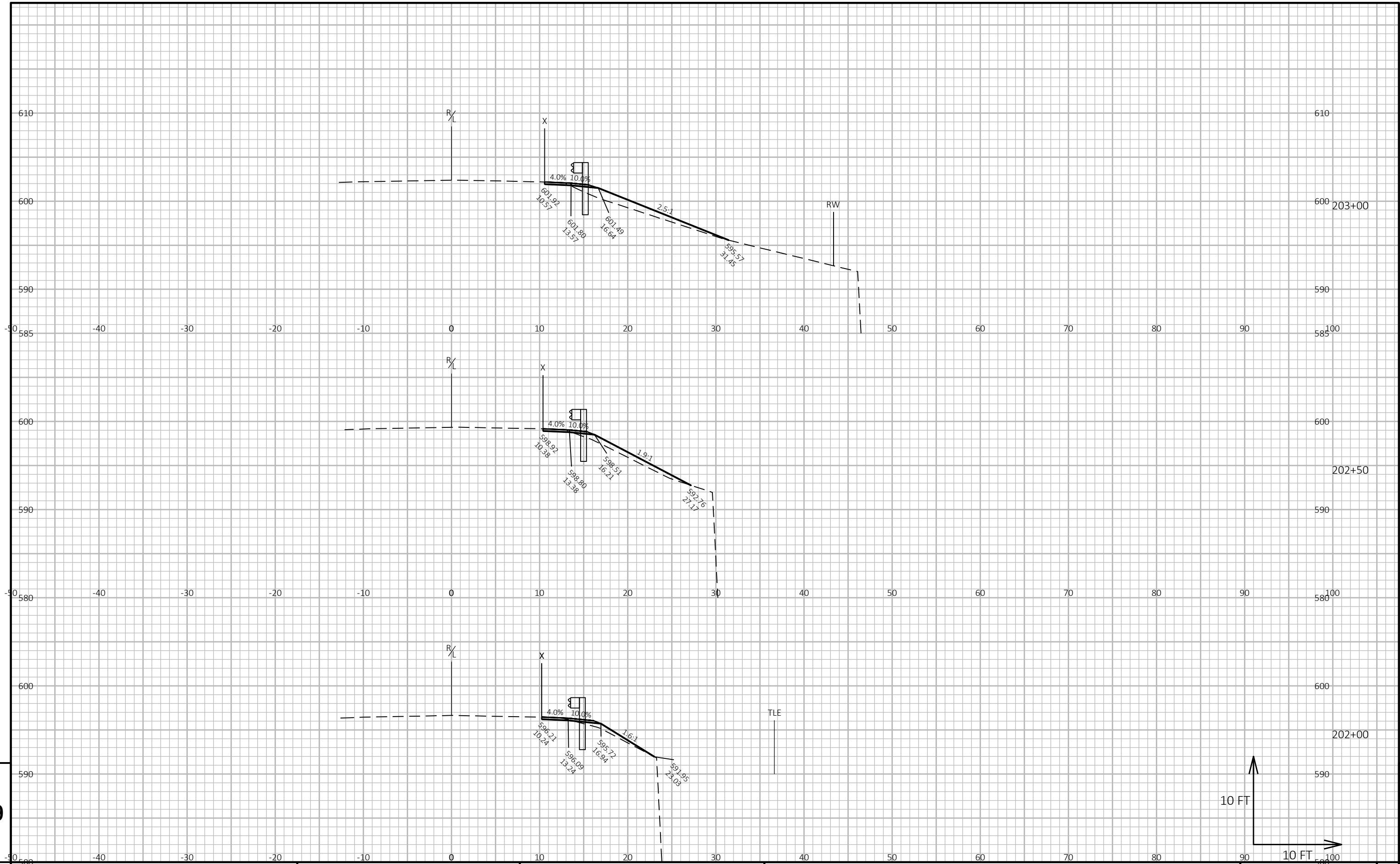


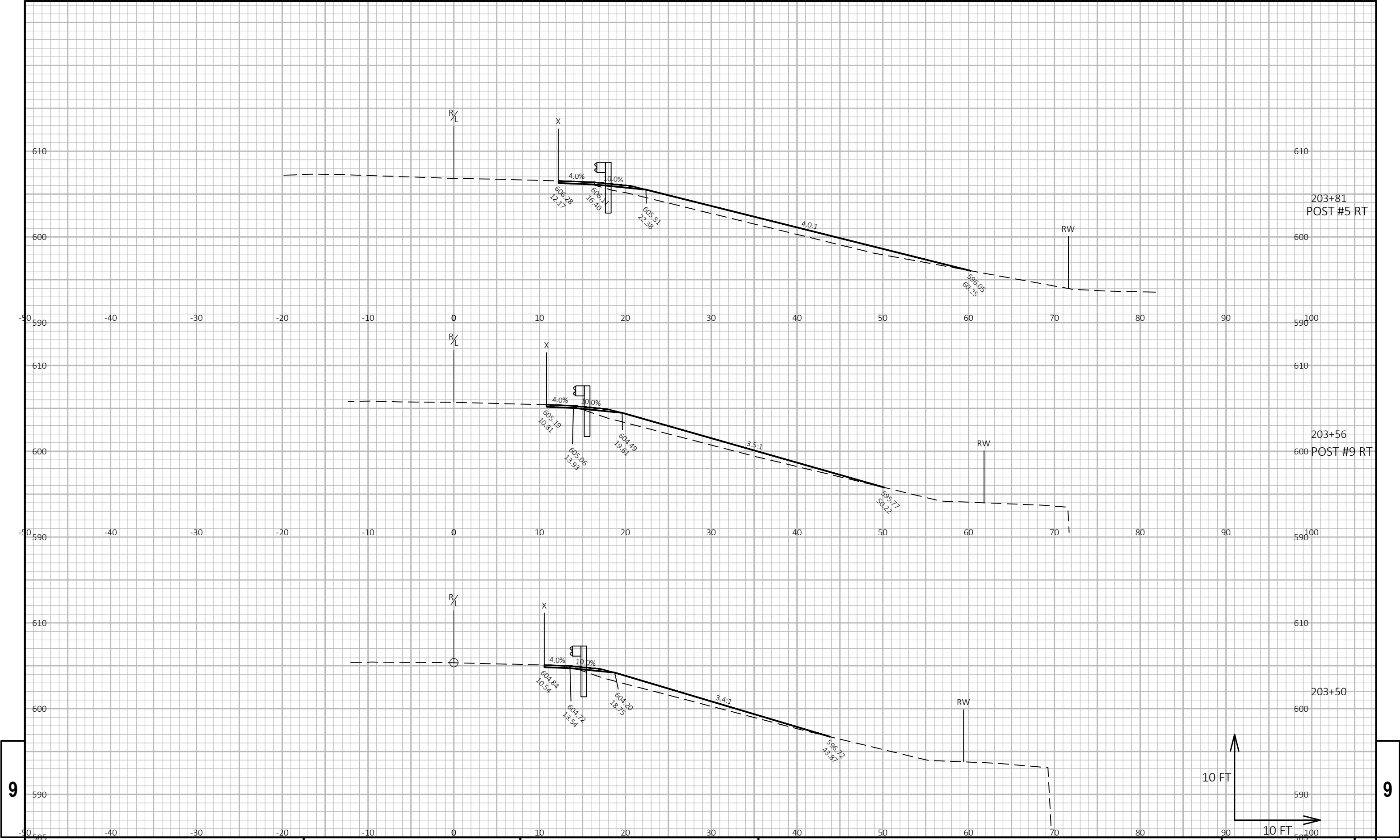
9

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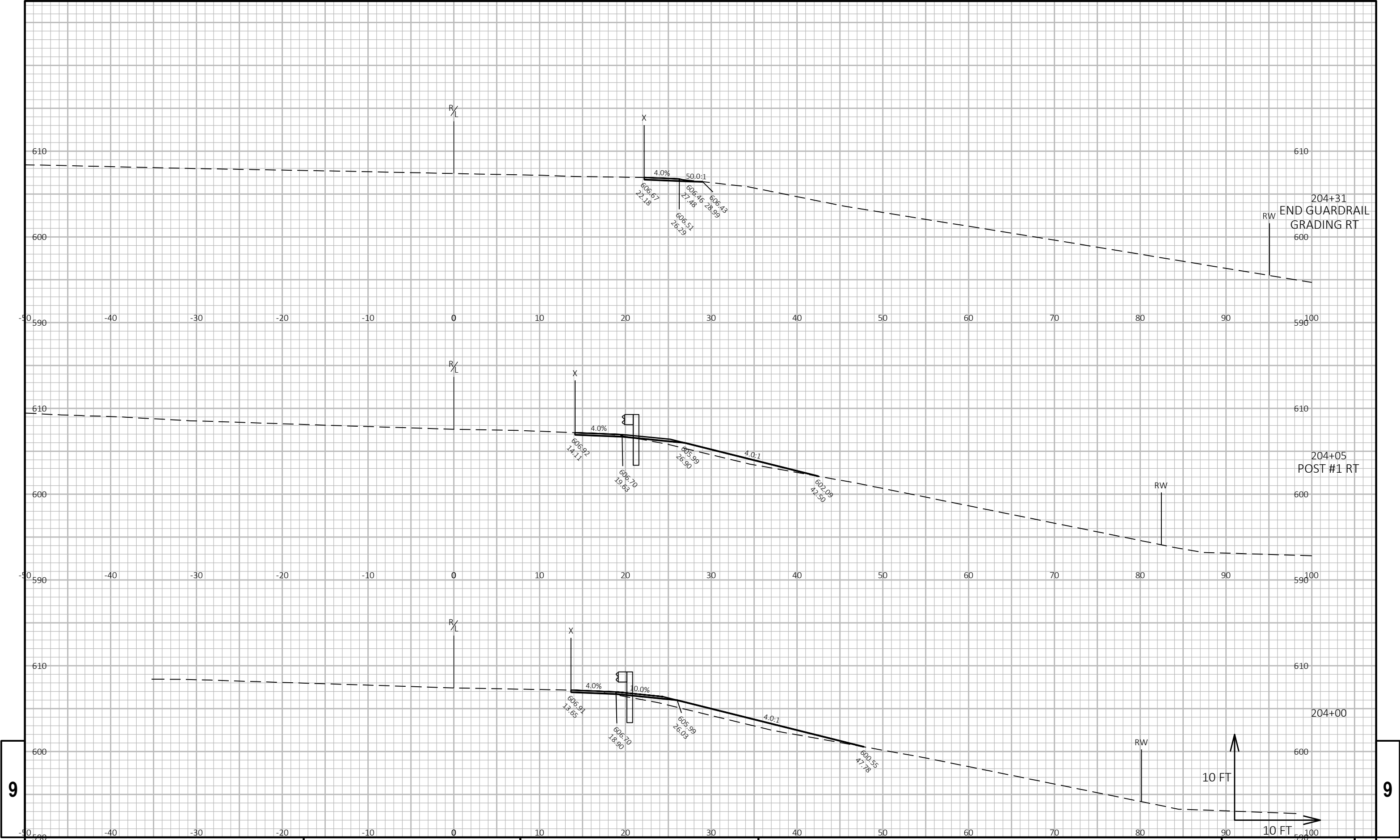


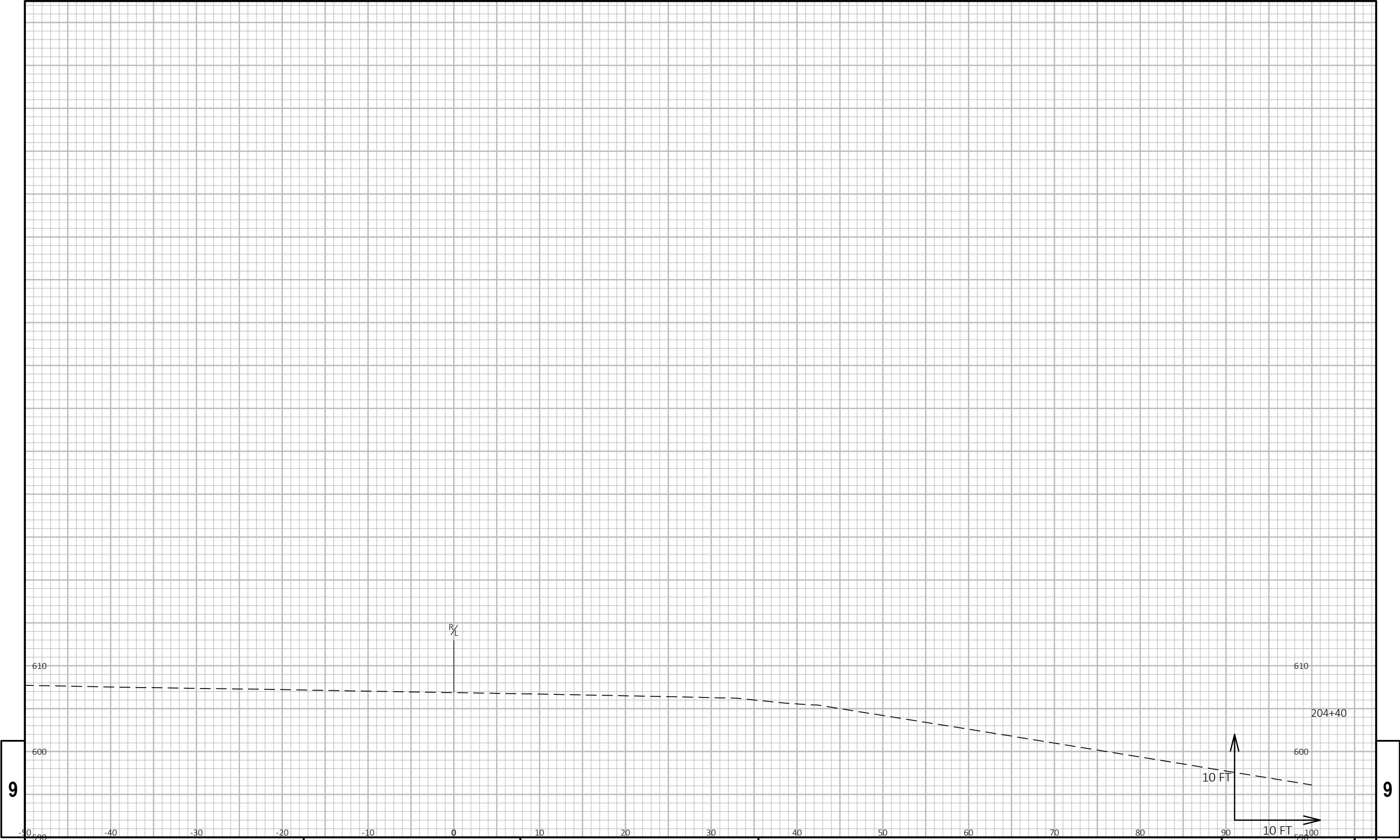




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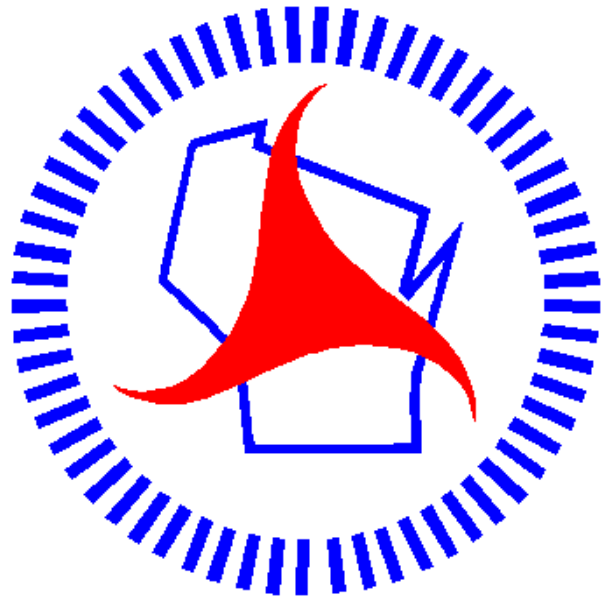


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PROJECT NO:	4150-14-71	HWY:	STH 57	COUNTY:	DOOR	CROSS SECTIONS:	FROGTOWN ROAD - GUARDRAIL	SHEET	160	E
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Notes



Wisconsin Department of Transportation

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