

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WARREN - ARGYLE

STH 11 TO CTH D

STH 78

LAFAYETTE COUNTY

STATE PROJECT NUMBER

5590-00-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5590-00-72	WISC 2022482	1

ORDER OF SHEETS

Section No.	Title
1	Title
2	Typical Sections and Details
3	Estimate of Quantities
3	Miscellaneous Quantities
4	Right of Way Plan
5	Plan and Profile
6	Standard Detail Drawings
7	Sign Plates
8	Structure Plans
9	Computer Earthwork Data
9	Cross Sections

TOTAL SHEETS = 74



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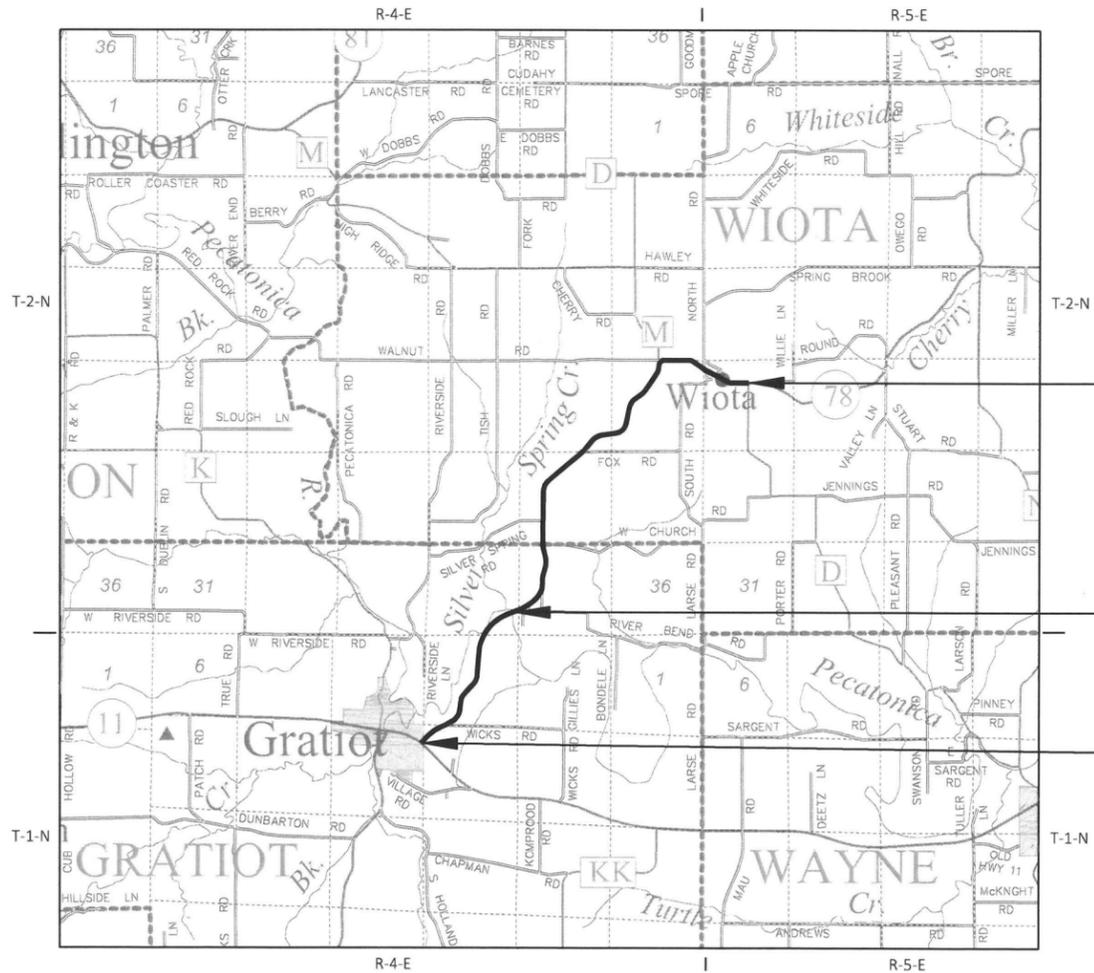
DESIGN DESIGNATION

A.A.D.T.	2022	=	370
A.A.D.T.	2042	=	420
D.H.V.		=	160
D.D.		=	0.5
T.		=	16.6%
DESIGN SPEED		=	60,30
ESALS		=	140,000

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

	ROCK
	LABEL
	95.36
	E
	FO
	G
	SAN
	SS
	T
	W



LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 6.344 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), LAFAYETTE COUNTY NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012).

END PROJECT
STA 439+24.91

NET EXCEPTION TO CL LENGTH
STA 197+78.17 - STA 201+14.17

BEGIN PROJECT
STA 100+90.13
X = 510325.346
Y = 128913.284

ORIGINAL PLANS PREPARED BY



Rachel Burnham
4/20/22

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	JT ENGINEERING
Designer	SRF CONSULTING GROUP, INC.
Project Manager	CHRIS HAZARD
Regional Examiner	SW REGION
Regional Supervisor	KURT JOHNSON

APPROVED FOR THE DEPARTMENT
DATE: 4/29/22
Chris Hazard
(Signature)

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GENERAL NOTES

THE ALIGNMENT IN THIS PLAN IS BASED ON THE EXISTING AS BUILTS. THE ACTUAL ROADWAY CENTERLINE MAY DEVIATE FROM THE PLAN. NEW HMA PAVEMENT SHALL FOLLOW EXISTING ROADWAY CENTERLINE. ANY ADJUSTMENTS SHALL BE INCIDENTAL TO OTHER ITEMS IN THE CONTRACT.

EXISTING CURVE SUPER ELEVATION SHALL BE RESTORED IN KIND UNLESS OTHERWISE NOTED IN THE PLANS.

WHEN THE QUANTITY OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON THE DEPTH OR THICKNESS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL DEPTH WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL BY THE ENGINEER IN THE FIELD.

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

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

ALL WASTE MATERIAL RESULTING FROM THE VARIOUS CONSTRUCTION OPERATIONS SHALL BE ENTIRELY REMOVED AND PROPERLY DISPOSED OF IMMEDIATELY OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND RESTORATION (INCLUDING, BUT NOT LIMITED TO, SEED, FERTILIZER, MULCH, AND EROSION MAT) OF ANY DISTURBED AREAS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AS DETERMINED BY THE ENGINEER.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF ALL LANDMARKS, BENCHMARKS, AND OTHER CONTROL POINTS IN ALL AREAS WHERE SUCH LANDMARKS, BENCHMARKS, OR OTHER CONTROL POINTS MAY EXIST.

THE CONTRACTOR SHALL PROTECT ALL SURVEY MARKERS. SURVEY MARKERS SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

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

EROSION CONTROL FEATURES SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS AS NEEDED. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURES NOT LONGER NECESSARY.

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

DO NOT PLACE FERTILIZER WITHIN 20 FEET OF WETLANDS OR WET DRAINAGE CHANNEL.

HMA PAVEMENT WEIGHT CALCULATIONS BASED ON 112 LB/SY/IN.

APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED PAVEMENT SURFACES. APPLY TACK COAT AT A RATE OF 0.05 GAL/SY BETWEEN LAYERS OF NEW HMA.

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESS:

PAVEMENT THICKNESS	LOWER (INCH)	UPPER (INCH)
3.5	1.75	1.75

HMA PAVEMENT SHALL BE CONSTRUCTED 4 LT 58-28S UPPER LAYER AND 4 LT 58-28S LOWER LAYER.

CONTRACTOR TO PROTECT NJ0047 AND NH1600GPS AND KEEP CONSTRUCTION EQUIPMENT AT LEAST 10 FEET AWAY FROM NJ0047 AND NH1600GPS.

ENSURE THAT NJ0047 AND NH1600GPS ARE NOT DISTURBED, BUMPED, OR MOVED DURING THE DURATION OF THE PROJECT. NOTIFY JACOB ROCKWEILER IMMEDIATELY IN NJ0047 AND NH1600GPS ARE DISTURBED, BUMPED OR MOVED DURING CONSTRUCTION OPERATIONS.

JACOB ROCKWEILER, P.E., WISCONSIN HEIGHT MODERNIZATION PROGRAM MANAGER WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION WHOSE NUMBER IS (608) 516-6362 AND EMAIL IS jacob.rockweiler@dot.wi.gov.

DNR CONTACT

SHELLEY NELSON
DNR SOUTH CENTRAL REGION HQ
3911 FISH HATCHERY RD
FITCHBURG, WI 53711
(608) 444-2835
shelley.nelson@wisconsin.gov

WISDOT CONTACT

CHRISTOPHER HAZARD
WISCONSIN DEPARTMENT OF TRANSPORTATION, SW REGION
2101 WRIGHT STREET
MADISON, WI 53704-2583
(608) 245-2652
christopher.hazard@dot.wi.gov

DESIGN CONTACT

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SRF CONSULTING GROUP
6720 FRANK LLOYD WRIGHT AVENUE, SUITE 100
MIDDLETON, WI 53562
(608) 298-5402
rburnham@srfconsulting.com

UTILITIES

ALLIANT ENERGY - ELECTRICITY
BETSI BASS
1915 STATE ROAD 69 S
MONROE, WI 53566
PHONE: (608) 328-5323
PHONE: (306) 333-4343
EMAIL: betsibass@alliantenergy.com

ALLIANT ENERGY - GAS/PETROLEUM
BETSI BASS
1915 STATE ROAD 69 S
MONROE, WI 53566
PHONE: (608) 328-5323
PHONE: (306) 333-4343
EMAIL: betsibass@alliantenergy.com

ATC MANAGEMENT, INC - ELECTRICITY-TRANSMISSION
DOUG VOSSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: (608) 877-7650
EMAIL: dvosberg@atcllc.com

CENTURYLINK - COMMUNICATION LINE
DOUG MCGOWAN
135 N BRONSON STREET
PLATTEVILLE, WI 53818
PHONE: (608) 482-5377
EMAIL: doug.mcgowan1@lumen.com

DAIRYLAND POWER COOPERATIVE - ELECTRICITY
MIKE LYDON
3200 EAST AVE S, P.O. BOX 817
LA CROSSE, WI 54602
PHONE: (608) 787-1381
EMAIL: mike.lydon@dairylandpower.com

MID-AMERICA PIPELINE COMPANY - GAS/PETROLEUM
JOE ORTEGA
1100 LOUISIANA STREET
HOUSTON, TX 77002
PHONE: (281) 887-3345
EMAIL: jaortega@eprod.com

SCENIC RIVERS ENERGY COOPERATIVE (SREC) - ELECTRICITY
CHAD OLMSTEAD
231 N SHERIDAN ST
LANACASTER, WI 53813
PHONE: (608) 723-2121
EMAIL: colmstead@srec.net

WIOTA SANITARY DISTRICT #1 - WATER
JEFF MONSON
6835 MINERAL ST
SOUTH WAYNE, WI 53587
PHONE: (608) 482-0563
EMAIL: wiota@mhtc.net

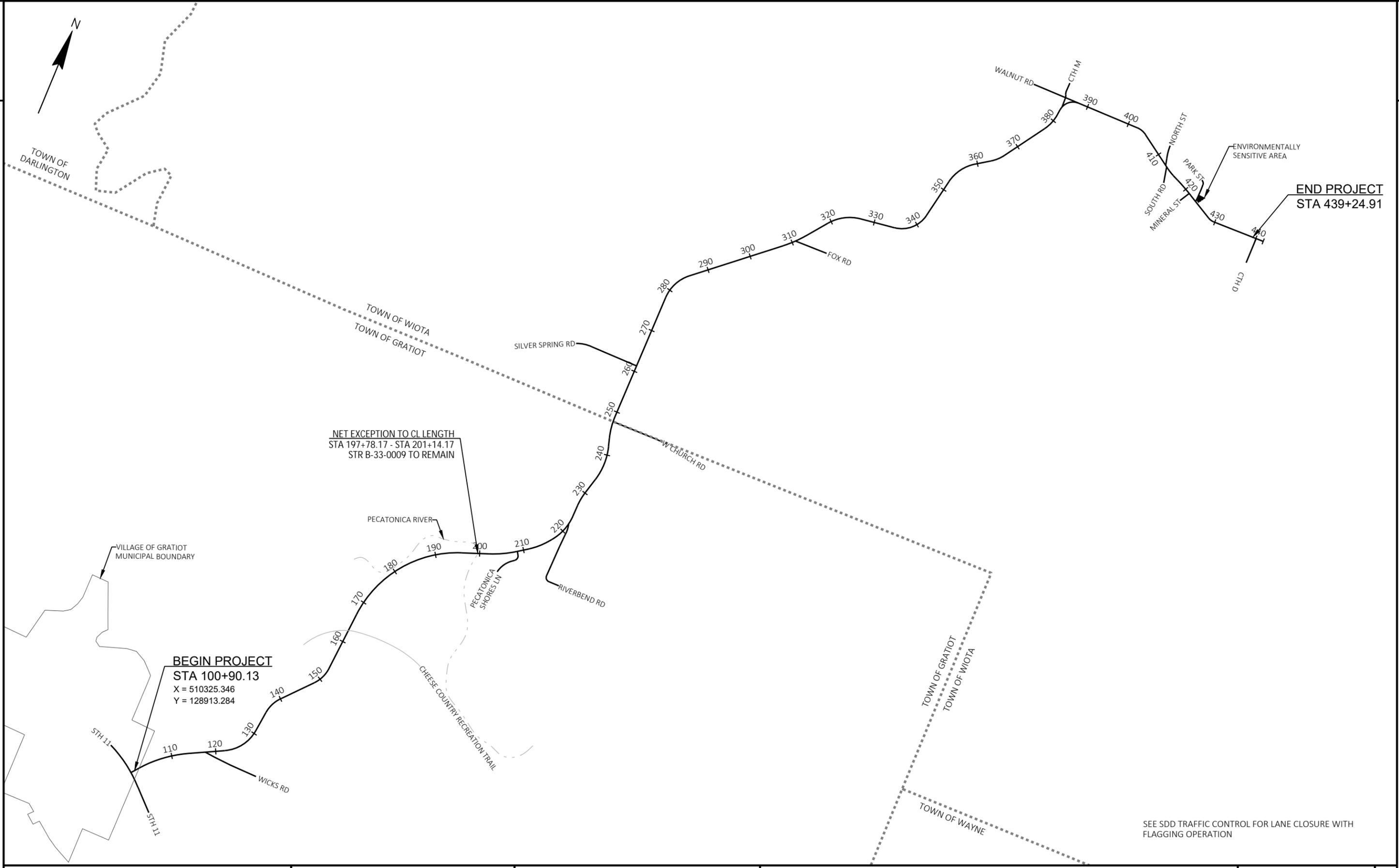
ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAIL
CURB RAMP DETAILS
PAVEMENT MARKING



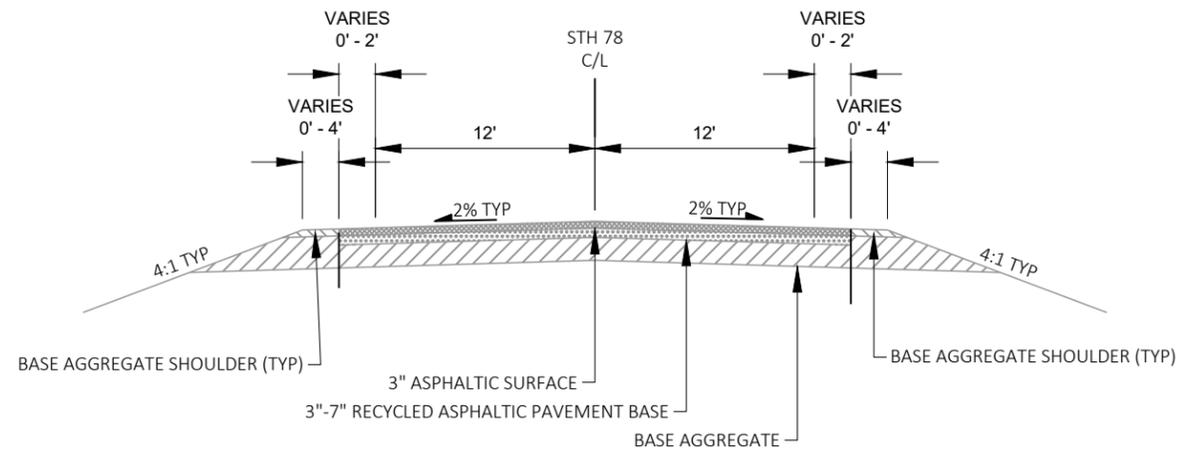
STANDARD ABBREVIATIONS

AP	Access Point	LT	Left
AC	Acre	LF	Linear Foot
AGG	Aggregate	ML or M/L	Match Line
AADT	Annual Average Daily Traffic	MH	Manhole
ASPH	Asphaltic	MP	Marker Post
BL	Base Line	MB	Message Board
BM	Bench Mark	NOM	Nominal
CE	Commercial Entrance	NC	Normal Crown
CL	Center Line	NB	Northbound
CONC	Concrete	PAVT	Pavement
CO	County	PERM	Permanent
CABC	Crushed Aggregate Base Course	PE	Private Entrance
CTH	County Trunk Highway	PCC	Portland Cement Concrete
CY	Cubic Yard	PLE	Permanent Limited Easement
CULV	Culvert	PROJ	Project
CP	Culvert Pipe	PL	Property Line
C&G	Curb & Gutter	RL	Reference Line
DIA	Diameter	RT	Right
DHV	Design Hour Volume	R/W	Right-of-Way
DD	Directional	RD	Road
DWY	Driveway	RDWY	Roadway
EB	Eastbound	SHLDR	Shoulder
ELEC	Electric (al)	SB	Southbound
EL or ELEV	Elevation	STH	State Trunk Highways
EW	Endwall	STA	Station
ESALS	Equivalent Single Axle Loads	SE	Superelevation
EXC	Excavation	SI	Slope Intercept
EBS	Excavation Below Subgrade	SS	Storm Sewer
FP	Fence Post	TEL	Telephone
FERT	Fertilizer	TEMP	Temporary
F	Fill	TLE	Temporary Limited Easement
FG	Finished Grade	TV	Television
FL or F/L	Flow Line	UG	Underground
FO	Fiber Optic	USH	United States Highway
FT	Foot	VOL	Volume
CWT	Hundredweight	W	Water
HYD	Hydrant	WB	Westbound
IN DIA	Inch Diameter		
INL	Inlet		
INV	Invert		
IP	Iron Pipe or Pin		



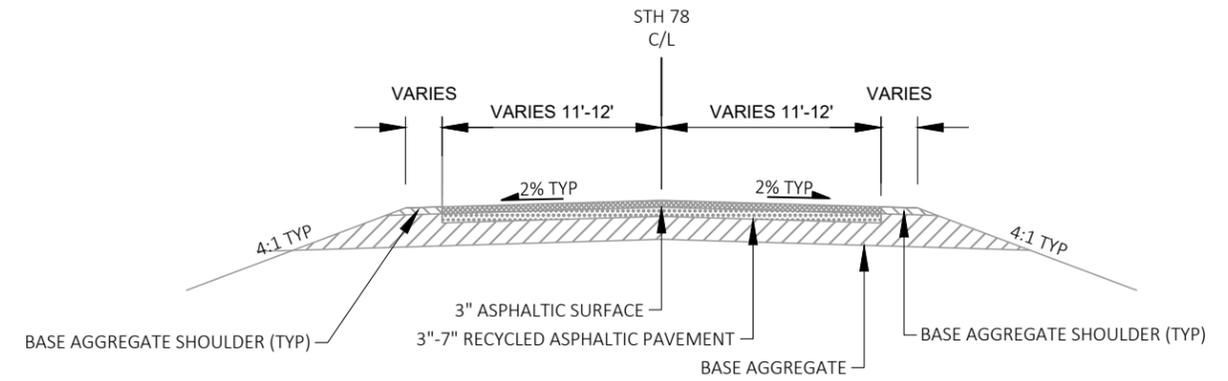
SEE SDD TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PROJECT OVERVIEW	SHEET	E
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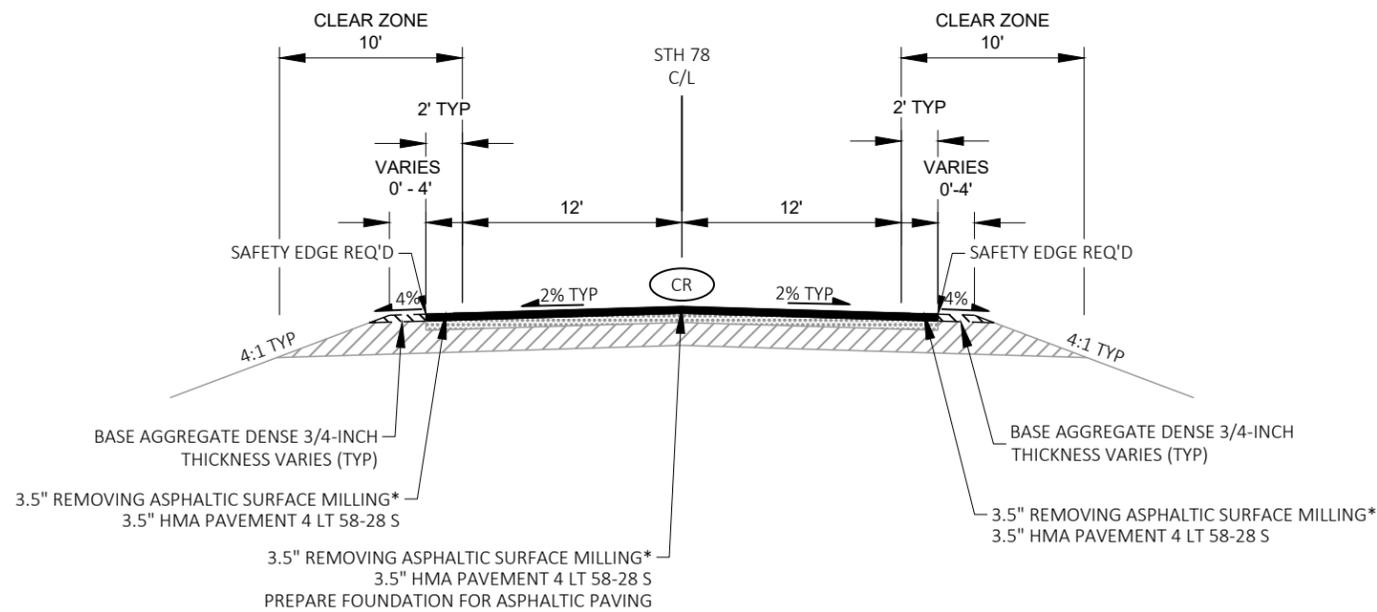
TYPICAL EXISTING SECTION

STA 100+90.13 - STA 197+78.17
STA 201+14.17 - STA 390+00.00



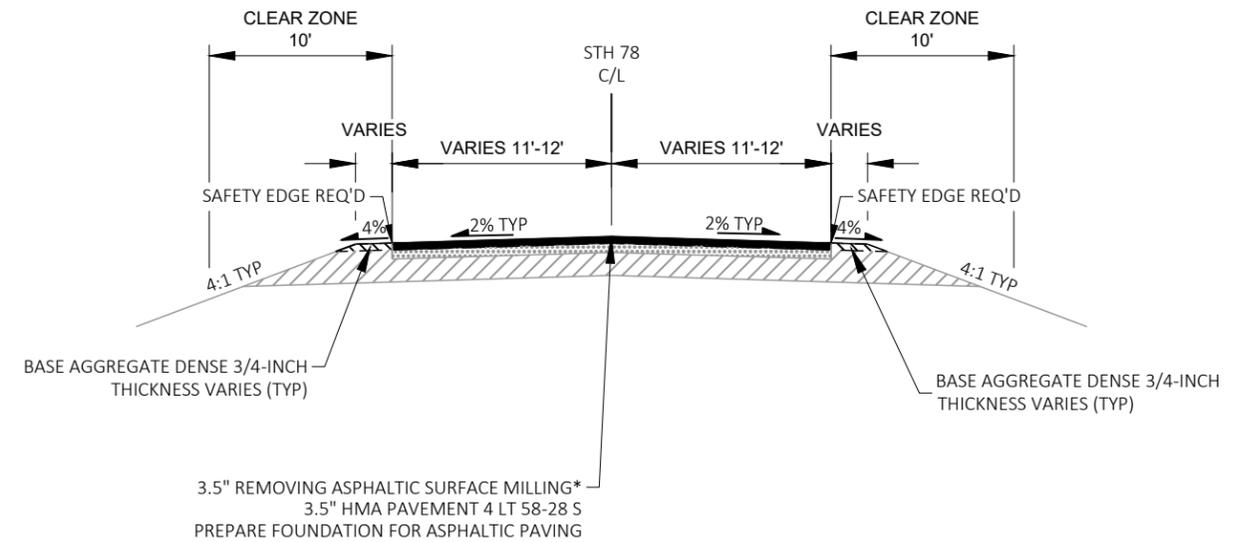
TYPICAL EXISTING SECTION

STA 390+00.00 - STA 439+24.91



TYPICAL FINISHED SECTION

STA 100+90.13 - STA 197+78.17
STA 201+14.17 - STA 390+00.00

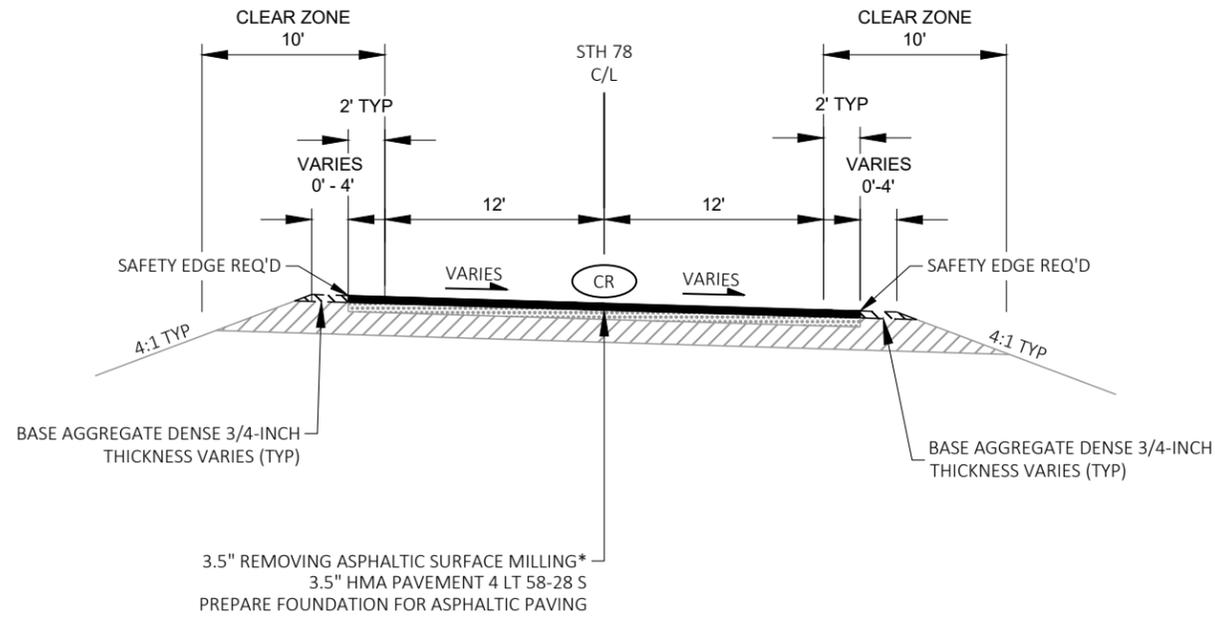


TYPICAL FINISHED SECTION

STA 390+00.00 - STA 439+24.91

CR STA 100+90.14 - STA 390+00.00: ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL. SEE SDD FOR "2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING" FOR ADDITIONAL INFORMATION.

* MILLING INCLUDES FULL REMOVAL OF EXISTING 3" PAVEMENT STRUCTURE AND 0.5" OF RECYCLED ASPHALT PAVEMENT

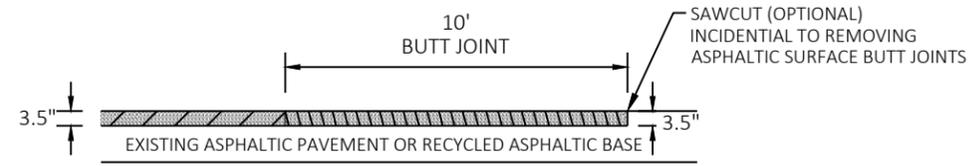


TYPICAL FINISHED SUPERELEVATED SECTION

SEE PLAN SHEETS FOR LOCATIONS
SUPERELEVATION TO MATCH EXISTING

CR STA 100+90.14 - STA 390+00.00: ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL. SEE SDD FOR "2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING" FOR ADDITIONAL INFORMATION.

* MILLING INCLUDES FULL REMOVAL OF EXISTING 3" PAVEMENT STRUCTURE AND 0.5" OF RECYCLED ASPHALT PAVEMENT



-  HMA PAVEMENT
-  REMOVING ASPHALTIC SURFACE MILLING
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS

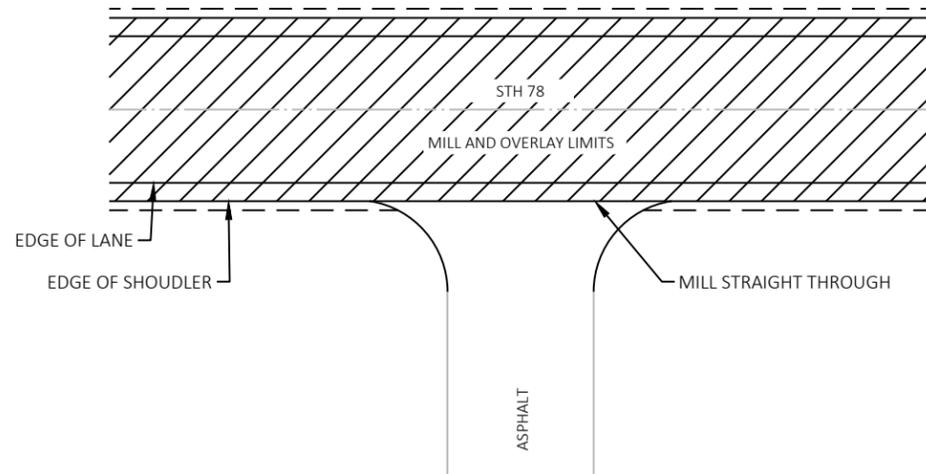
BUTT JOINT

- MAINLINE
- SIDEROADS

RUNOFF COEFFICIENT TABLE

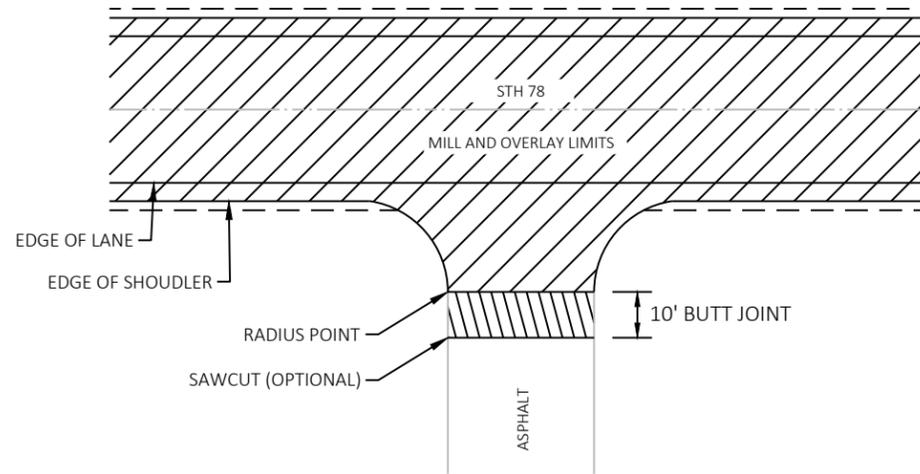
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER									
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF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

TOTAL PROJECT AREA = 20.2 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.05 ACRES



DETAIL FOR MISCELLANEOUS MILLING LIMITS

- APPLY DETAIL AT:
- PAVED DRIVEWAYS
 - COUNTY M
 - WALNUT ROAD
 - NORTH ROAD
 - SOUTH ROAD
 - MINERAL STREET
 - PARK STREET
 - RIVER ROAD



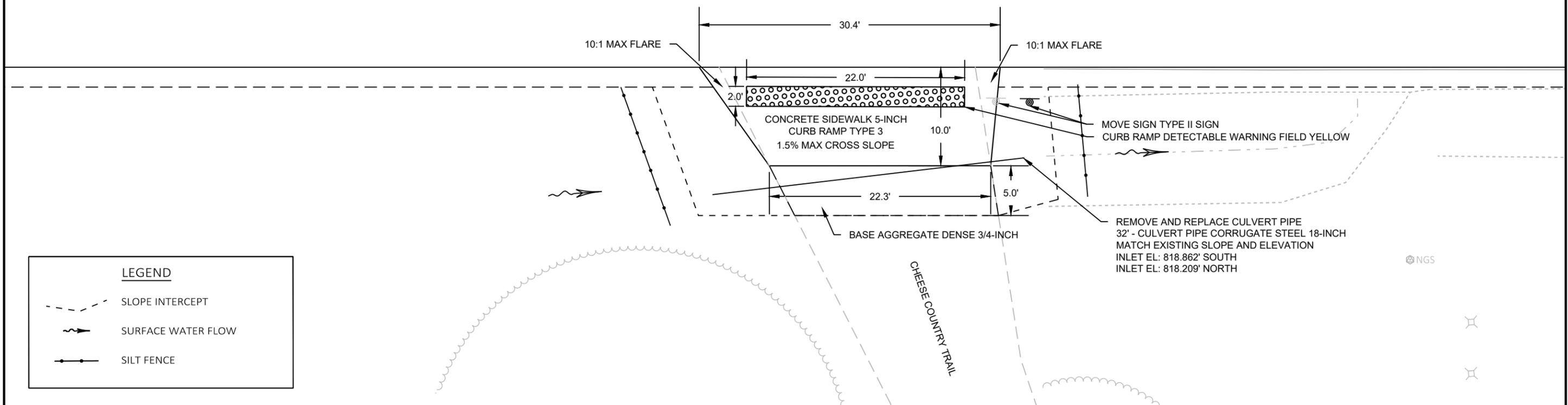
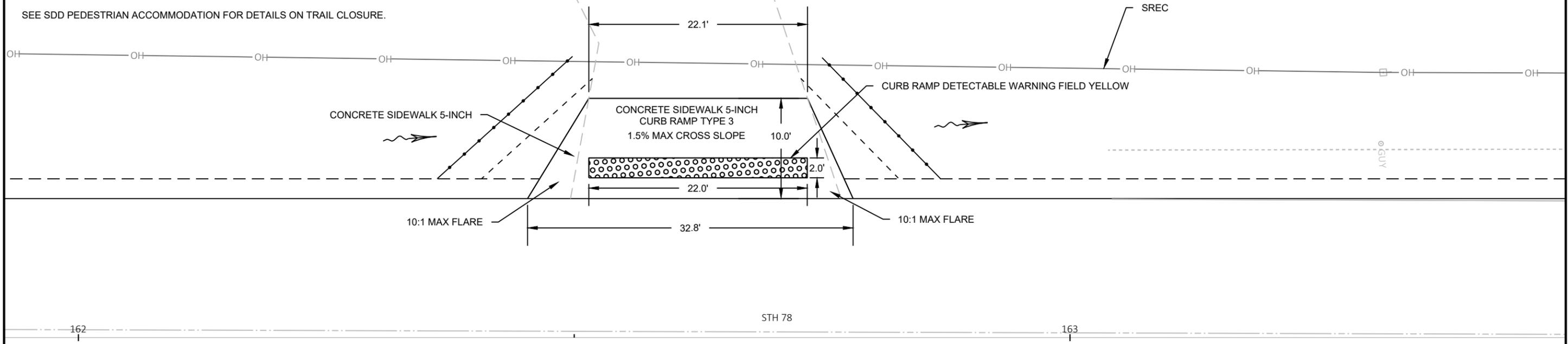
SIDE ROAD MILLING LIMITS

- APPLY DETAIL AT:
- WICKS ROAD
 - PECATONICA SHORES LANE
 - CHURCH ROAD
 - SILVER SPRINGS ROAD
 - FOX ROAD

-  REMOVING ASPHALTIC SURFACE MILLING AND OVERLAY LIMITS
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

NOTES:
 SEE SDD CURB RAMP TYPE 3 FOR ADDITIONAL INFORMATION
 RAMP MAX CROSS SLOPE OF 1.5%
 RAMP MAX FLARE OF 10:1 FOR CONCRETE SURFACE
 RAMP MAX RUNNING SLOPE OF 7.0%
 GRADE CHANGE BETWEEN THE ROADWAY CROSS SLOPE AND THE RAMP SHALL NOT EXCEED 11% MAX.
 FINISHING ITEMS FOR TOPSOIL, SEED, FERTILIZER, MULCH, AND EROSION MAT ARE SHOWN IN THE MISCELLANEOUS QUANTITIES TABLES
 SEE SDD PEDESTRIAN ACCOMMODATION FOR DETAILS ON TRAIL CLOSURE.



LEGEND	
	SLOPE INTERCEPT
	SURFACE WATER FLOW
	SILT FENCE

NORTH RD WEST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	411+59.54	27.49' LT	989.70	150541.27	526544.88
02	411+59.79	23.59' LT	989.64	150537.90	526542.89
03	411+64.19	27.79' LT	989.01	150538.91	526548.89
04	411+63.69	22.82' LT	989.05	150535.07	526545.69
05	411+83.62	25.84' LT	986.06	150526.38	526563.87
06	411+84.07	20.87' LT	985.96	150522.00	526561.45
07	411+88.55	26.29' LT	985.96	150523.98	526568.20

NORTH RD WEST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
08	411+89.05	21.34' LT	985.86	150519.60	526565.83
09	411+82.16	17.56' LT	986.67	150520.34	526558.00
10	411+89.87	25.43' LT	985.82	150522.52	526568.81

NOTES:

REFER TO SDD CURB RAMPS FOR JOINT LOCATIONS AND ADDITIONAL DETAILS

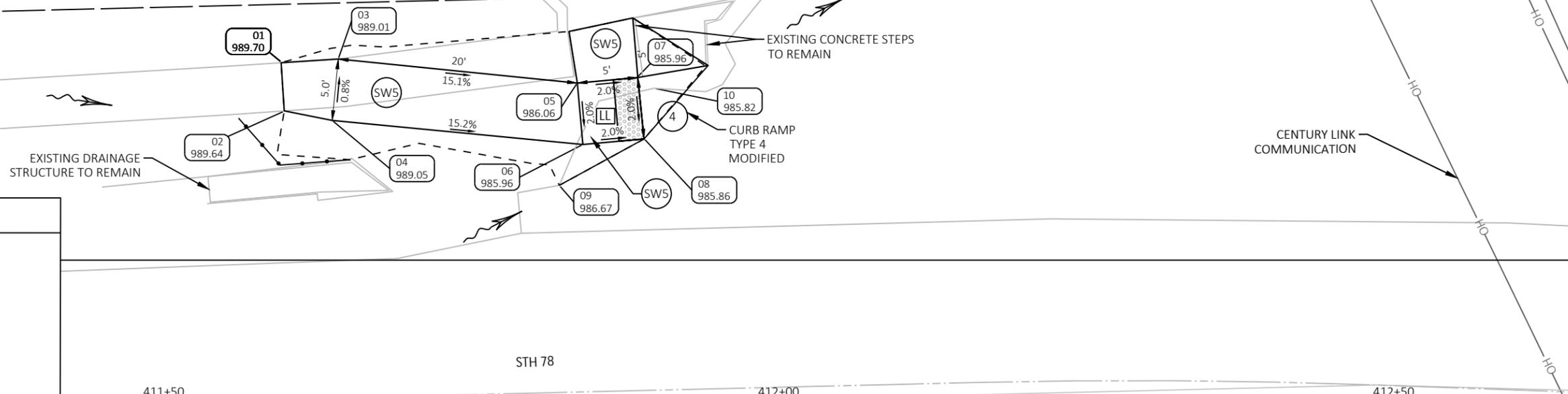
CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

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

FINISHING ITEMS FOR TOPSOIL, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN IN THE MISCELLANEOUS QUANTITIES TABLES.

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

REFER TO SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR SIDEWALK CLOSURE DETAILS.



LEGEND	
	SLOPE INTERCEPT
	SURFACE WATER FLOW
	SILT FENCE
	INLET PROTECTION
	TEMPORARY DITCH CHECKS
	EROSION MAT CLASS I TYPE B
	CURB RAMP TYPE
	CONCRETE SIDEWALK 5-INCH
	POINT NUMBER ELEVATION
	CURB RAMP DETECTABLE WARNING FIELD
	LEVEL LANDING

NORTH RD EAST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
20	413+07.68	16.68' LT	977.39	150449.09	526661.35
21	413+07.89	11.68' LT	977.48	150444.84	526658.72
22	413+09.69	16.51' LT	977.28	150447.83	526662.92
23	413+09.90	11.52' LT	977.25	150443.58	526660.29
24	413+14.69	16.72' LT	977.18	150445.20	526667.17
25	413+14.89	11.73' LT	977.15	150440.95	526664.54

NOTES:

PLACE 5'X5' CONCRETE SLAB WITH DETECTABLE WARNING FIELD.

REFER TO SDD CURB RAMPS FOR JOINT LOCATIONS AND ADDITIONAL DETAILS

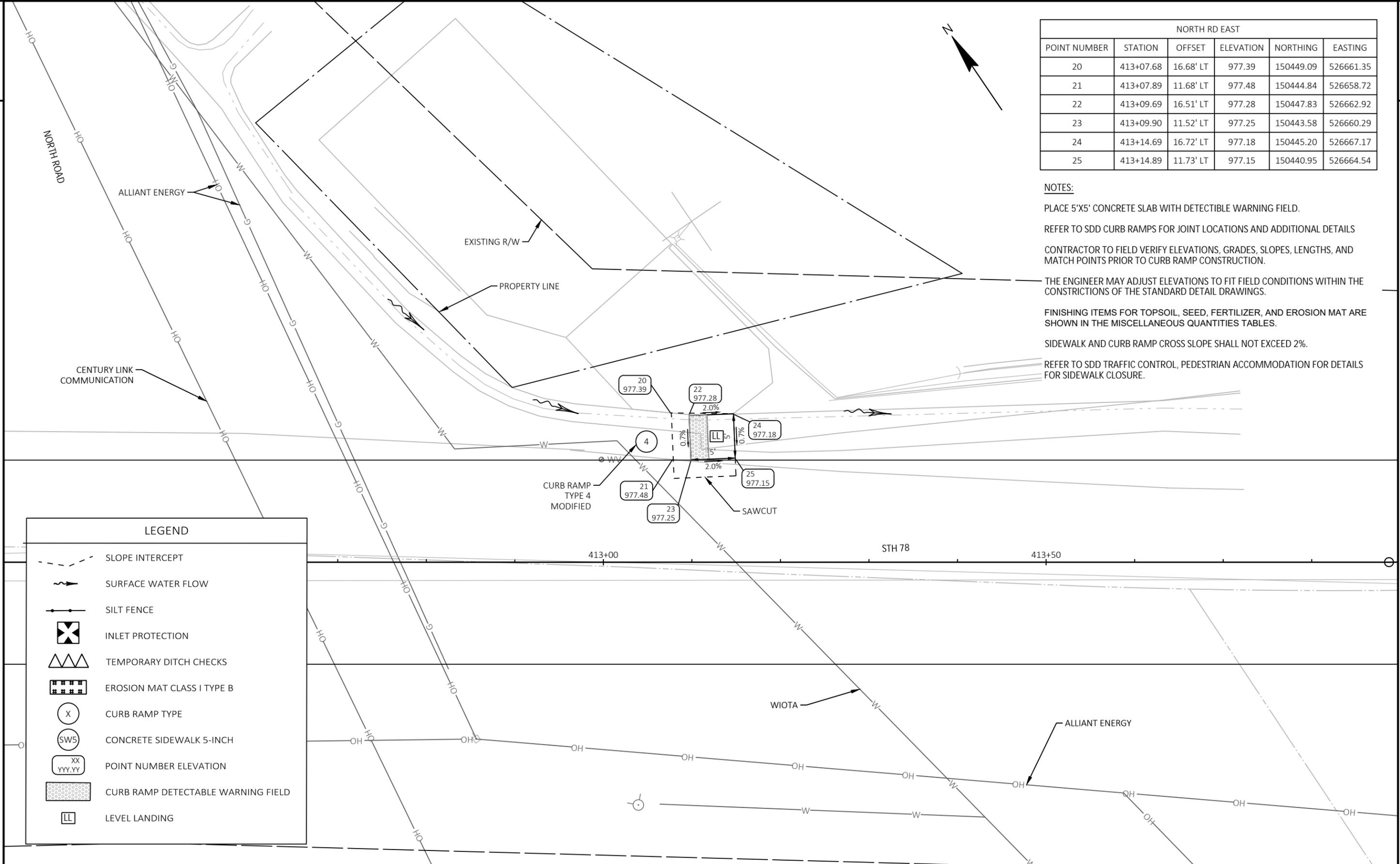
CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.

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

FINISHING ITEMS FOR TOPSOIL, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN IN THE MISCELLANEOUS QUANTITIES TABLES.

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

REFER TO SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR DETAILS FOR SIDEWALK CLOSURE.



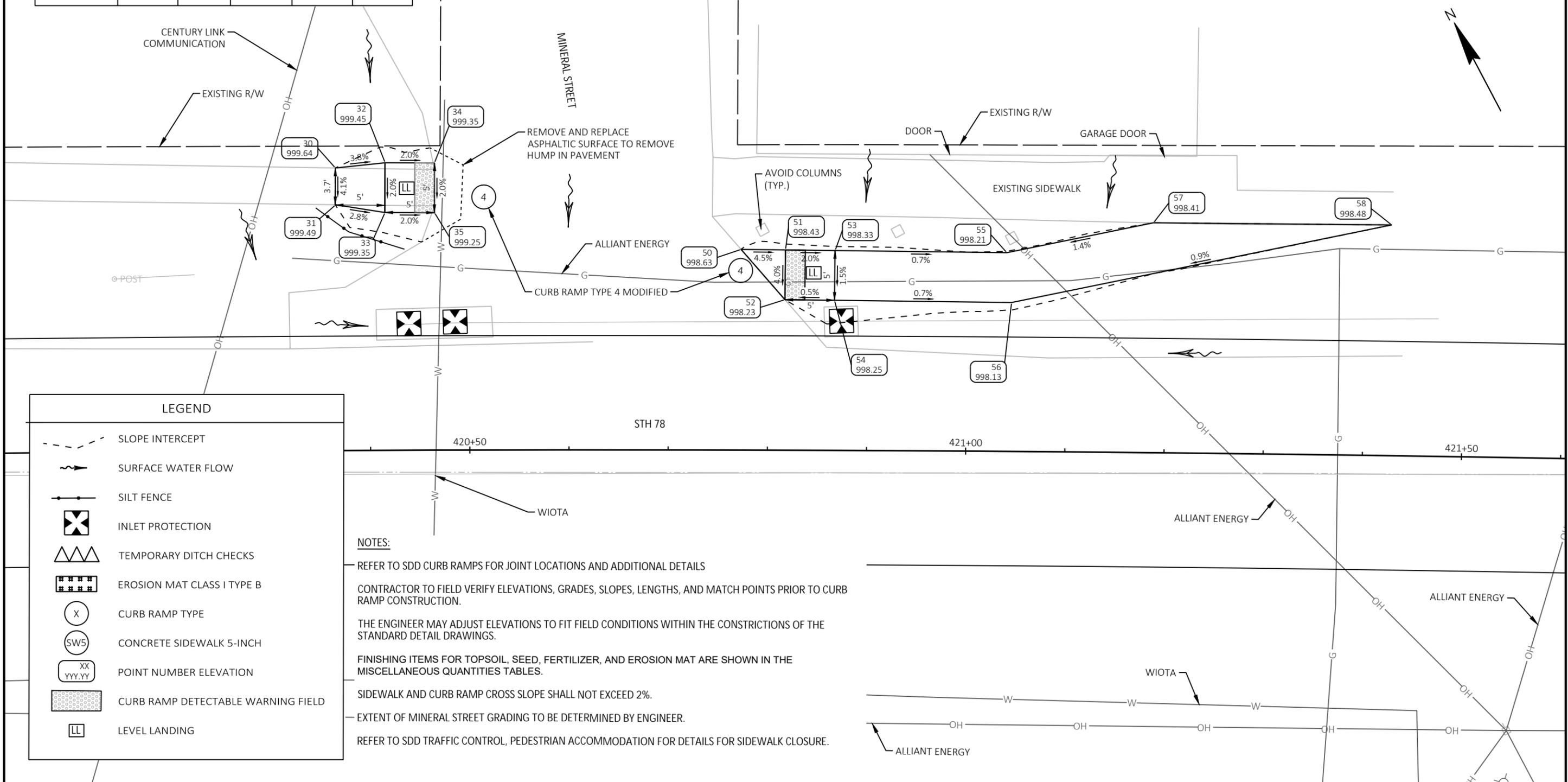
LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SILT FENCE
- INLET PROTECTION
- TEMPORARY DITCH CHECKS
- EROSION MAT CLASS I TYPE B
- CURB RAMP TYPE
- CONCRETE SIDEWALK 5-INCH
- POINT NUMBER ELEVATION
- CURB RAMP DETECTABLE WARNING FIELD
- LEVEL LANDING

MINERAL WEST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
30	420+36.58	28.40' LT	999.64	150125.65	527311.18
31	420+36.55	24.71' LT	999.49	150122.40	527309.44
32	420+41.56	28.91' LT	999.45	150123.78	527315.85
33	420+41.52	23.91' LT	999.35	150119.37	527313.49
34	420+46.53	28.88' LT	999.35	150121.43	527320.26
35	420+46.50	23.88' LT	999.25	150117.02	527317.91

MINERAL EAST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
50	420+77.31	20.17' LT	998.63	150099.28	527343.52
51	420+81.77	20.13' LT	998.43	150097.14	527347.45
52	420+81.72	15.13' LT	998.23	150092.75	527345.05
53	420+86.75	20.09' LT	998.33	150094.74	527351.84
54	420+86.71	15.09' LT	998.25	150090.35	527349.44

MINERAL EAST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
55	421+04.01	19.97' LT	998.21	150086.45	527367.04
56	421+04.51	14.97' LT	998.13	150081.81	527365.12
57	421+18.71	23.11' LT	998.41	150082.19	527381.52
58	421+42.63	23.19' LT	998.48	150070.76	527402.65



LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SILT FENCE
- INLET PROTECTION
- TEMPORARY DITCH CHECKS
- EROSION MAT CLASS I TYPE B
- CURB RAMP TYPE
- CONCRETE SIDEWALK 5-INCH
- POINT NUMBER ELEVATION
- CURB RAMP DETECTABLE WARNING FIELD
- LEVEL LANDING

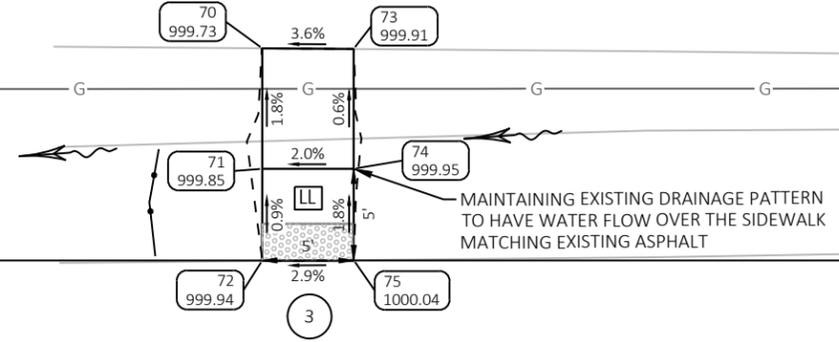
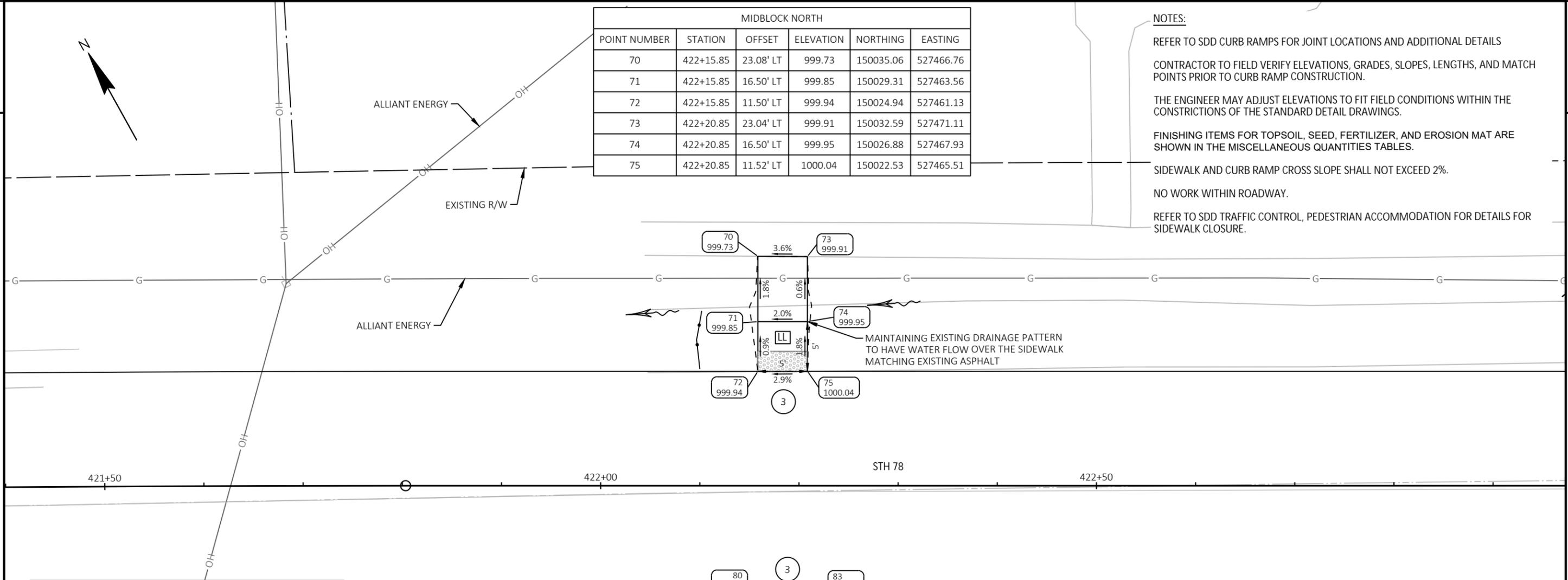
NOTES:

- REFER TO SDD CURB RAMPS FOR JOINT LOCATIONS AND ADDITIONAL DETAILS
- 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 CONSTRUCTIONS OF THE STANDARD DETAIL DRAWINGS.
- FINISHING ITEMS FOR TOPSOIL, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN IN THE MISCELLANEOUS QUANTITIES TABLES.
- SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
- EXTENT OF MINERAL STREET GRADING TO BE DETERMINED BY ENGINEER.
- REFER TO SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR DETAILS FOR SIDEWALK CLOSURE.

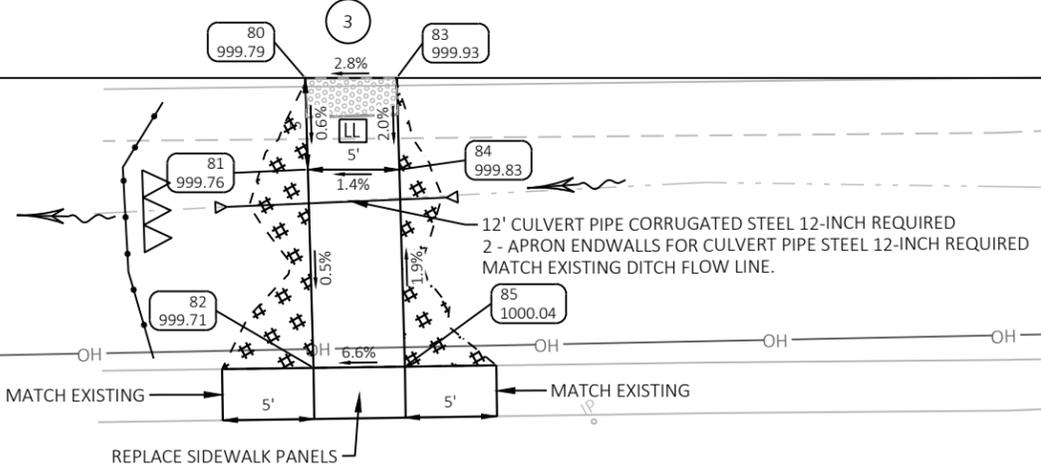
MIDBLOCK NORTH					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
70	422+15.85	23.08' LT	999.73	150035.06	527466.76
71	422+15.85	16.50' LT	999.85	150029.31	527463.56
72	422+15.85	11.50' LT	999.94	150024.94	527461.13
73	422+20.85	23.04' LT	999.91	150032.59	527471.11
74	422+20.85	16.50' LT	999.95	150026.88	527467.93
75	422+20.85	11.52' LT	1000.04	150022.53	527465.51

NOTES:

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- 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 CONSTRUCTIONS OF THE STANDARD DETAIL DRAWINGS.
- FINISHING ITEMS FOR TOPSOIL, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN IN THE MISCELLANEOUS QUANTITIES TABLES.
- SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
- NO WORK WITHIN ROADWAY.
- REFER TO SDD TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR DETAILS FOR SIDEWALK CLOSURE.



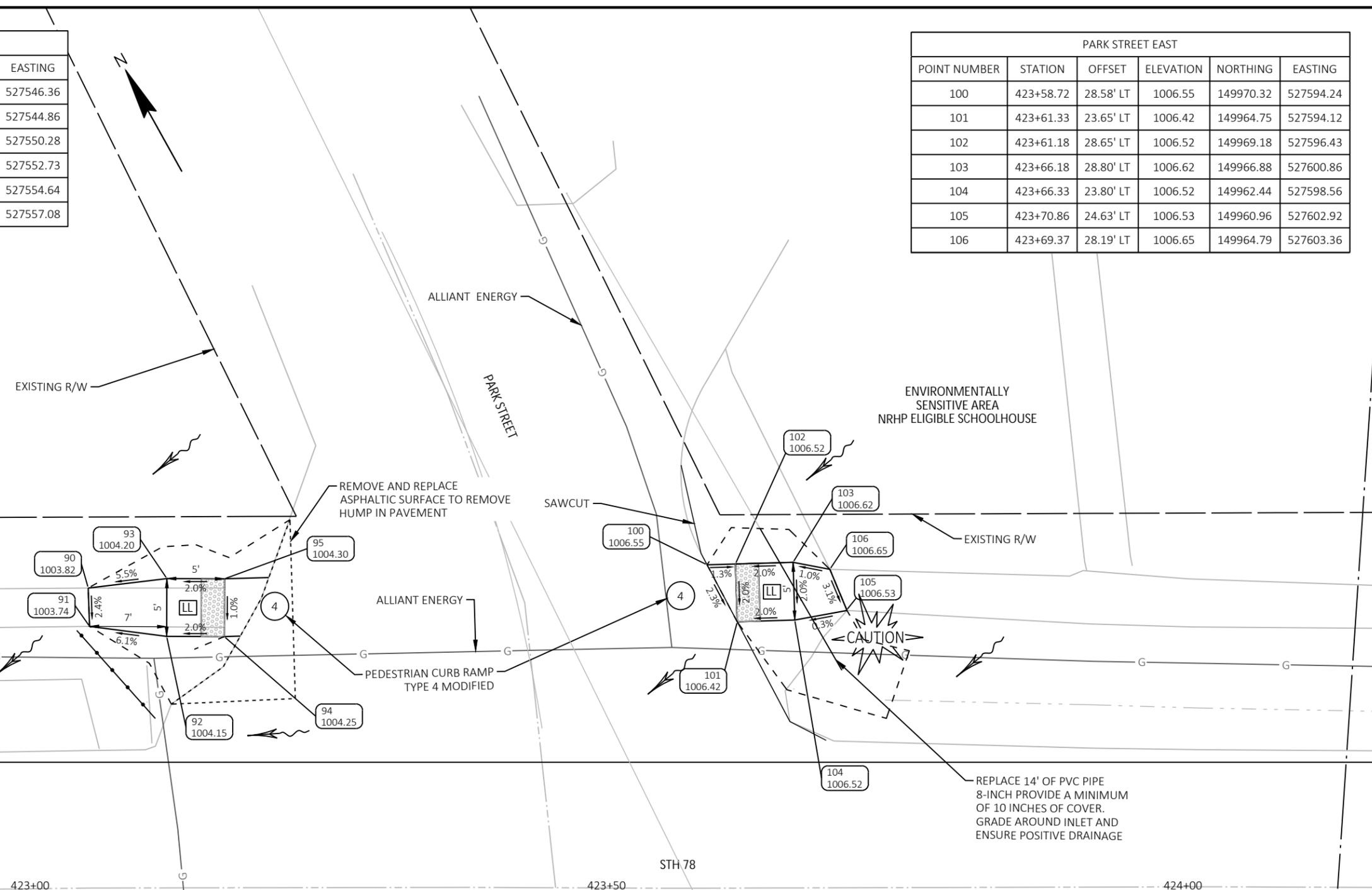
LEGEND	
	SLOPE INTERCEPT
	SURFACE WATER FLOW
	SILT FENCE
	INLET PROTECTION
	TEMPORARY DITCH CHECKS
	EROSION MAT CLASS I TYPE B
	CURB RAMP TYPE
	CONCRETE SIDEWALK 5-INCH
	POINT NUMBER ELEVATION
	CURB RAMP DETECTABLE WARNING FIELD
	LEVEL LANDING



MIDBLOCK SOUTH					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
80	422+16.51	11.51' RT	999.79	150004.53	527450.50
81	422+16.65	16.50' RT	999.76	150000.10	527448.20
82	422+16.96	27.31' RT	999.71	149990.50	527443.20
83	422+21.51	11.50' RT	999.93	150002.10	527454.87
84	422+21.65	16.50' RT	999.83	149997.66	527452.57
85	422+21.96	27.24' RT	1000.04	149988.13	527447.60

PARK STREET WEST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
90	423+05.03	26.57' LT	1003.82	149994.70	527546.36
91	423+05.15	23.25' LT	1003.74	149991.74	527544.86
92	423+11.84	22.39' LT	1004.15	149987.73	527550.28
93	423+11.86	27.39' LT	1004.20	149992.09	527552.73
94	423+16.84	22.37' LT	1004.25	149985.28	527554.64
95	423+16.86	27.37' LT	1004.30	149989.64	527557.08

PARK STREET EAST					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	423+58.72	28.58' LT	1006.55	149970.32	527594.24
101	423+61.33	23.65' LT	1006.42	149964.75	527594.12
102	423+61.18	28.65' LT	1006.52	149969.18	527596.43
103	423+66.18	28.80' LT	1006.62	149966.88	527600.86
104	423+66.33	23.80' LT	1006.52	149962.44	527598.56
105	423+70.86	24.63' LT	1006.53	149960.96	527602.92
106	423+69.37	28.19' LT	1006.65	149964.79	527603.36



LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SILT FENCE
- INLET PROTECTION
- TEMPORARY DITCH CHECKS
- EROSION MAT CLASS I TYPE B
- CURB RAMP TYPE
- CONCRETE SIDEWALK 5-INCH
- POINT NUMBER ELEVATION
- CURB RAMP DETECTABLE WARNING FIELD
- LEVEL LANDING

NOTES:

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LEGEND

- ① MARKING LINE EPOXY 4-INCH (WHITE)
- ② MARKING LINE EPOXY 4-INCH (SKIPS 3' LINE, 9' GAP; WHITE)
- ③ MARKING LINE EPOXY 4-INCH (SKIPS 12.5' LINE, 37.5' GAP; YELLOW)
- ④ MARKING LINE EPOXY 4-INCH (YELLOW)
- ⑤ MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)



PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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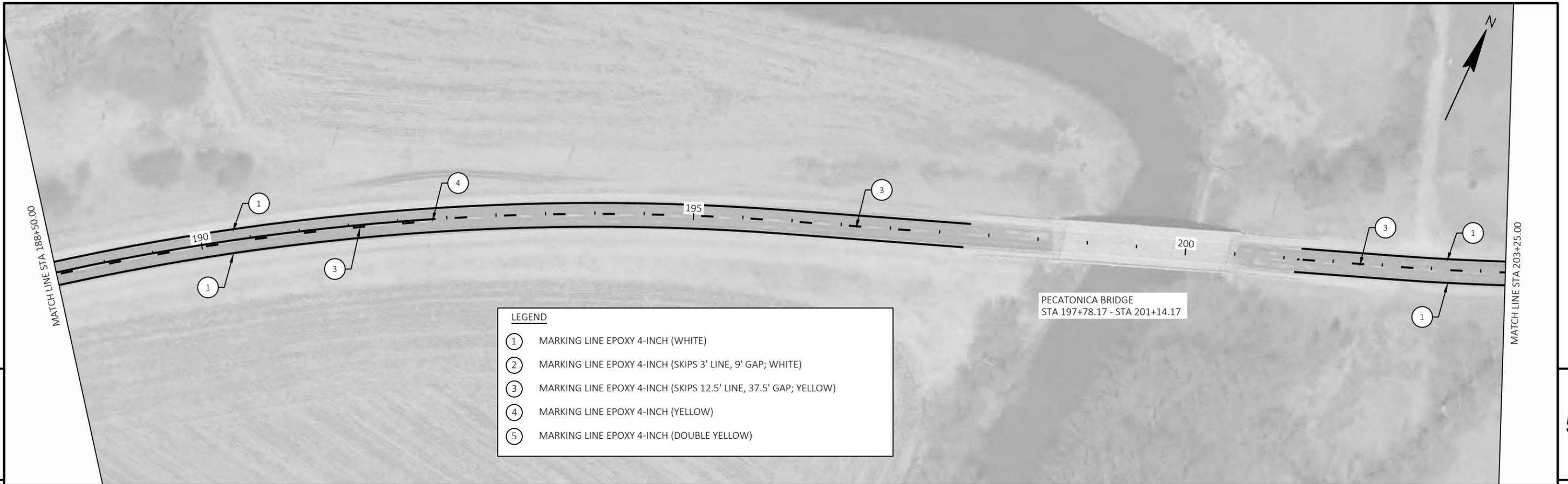


LEGEND

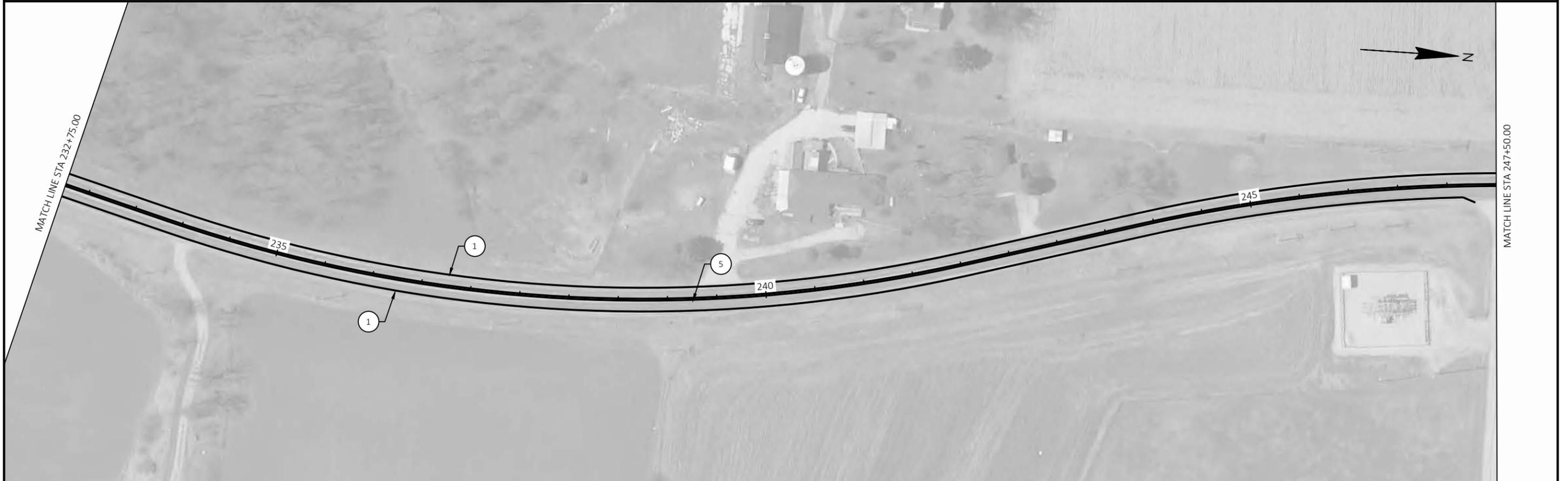
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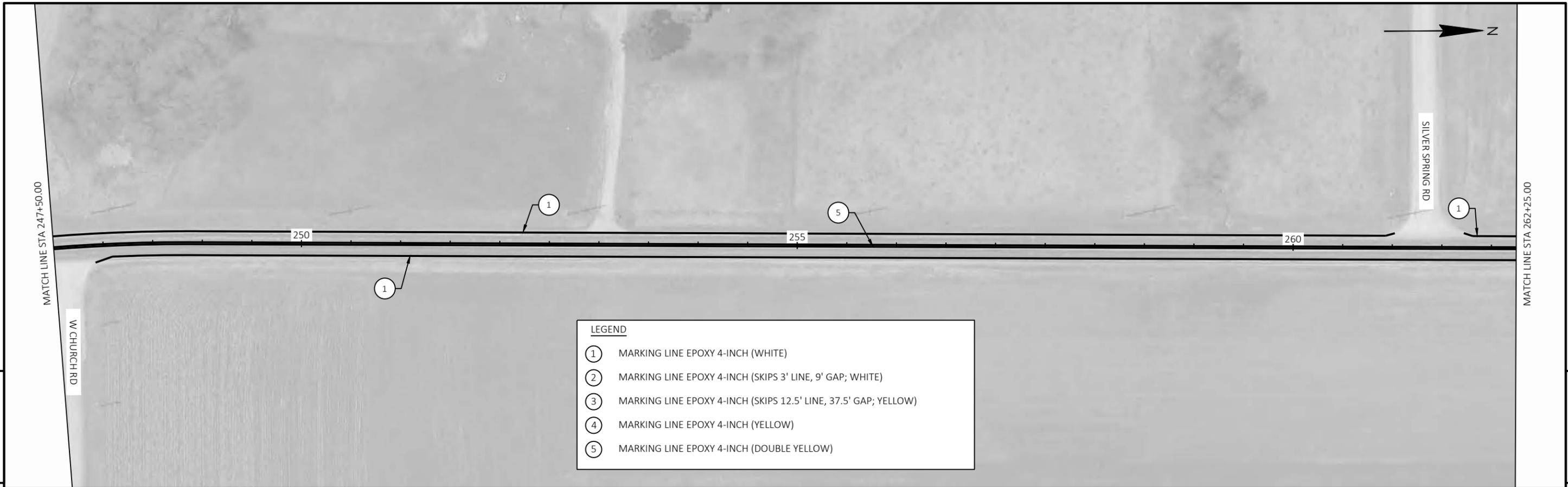
PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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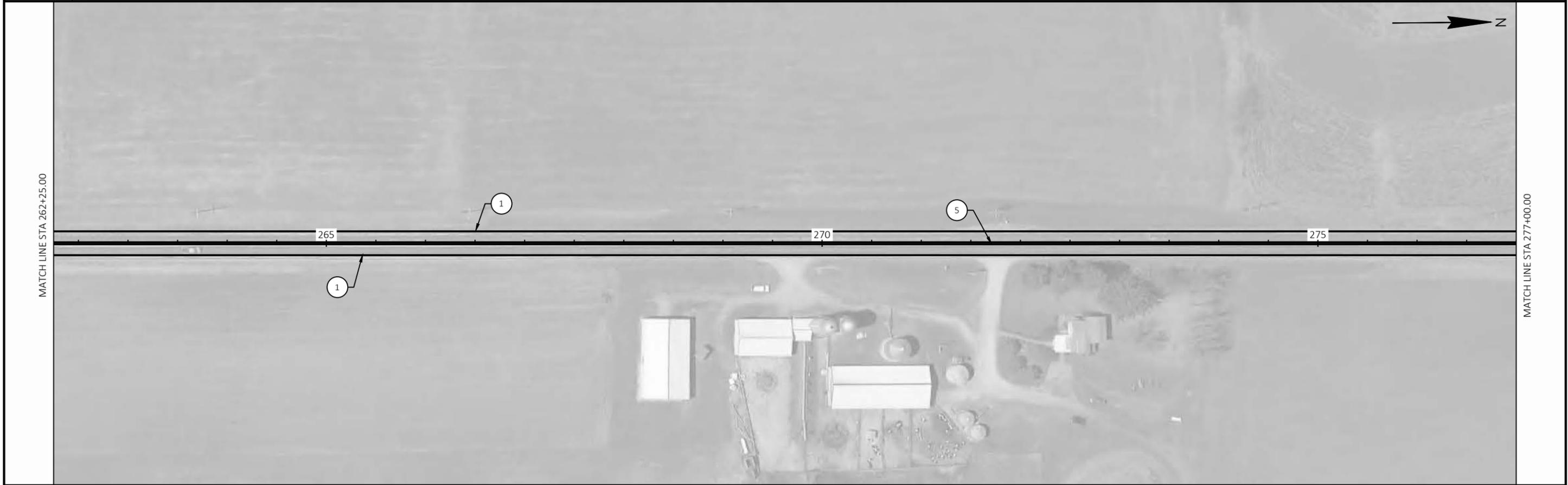
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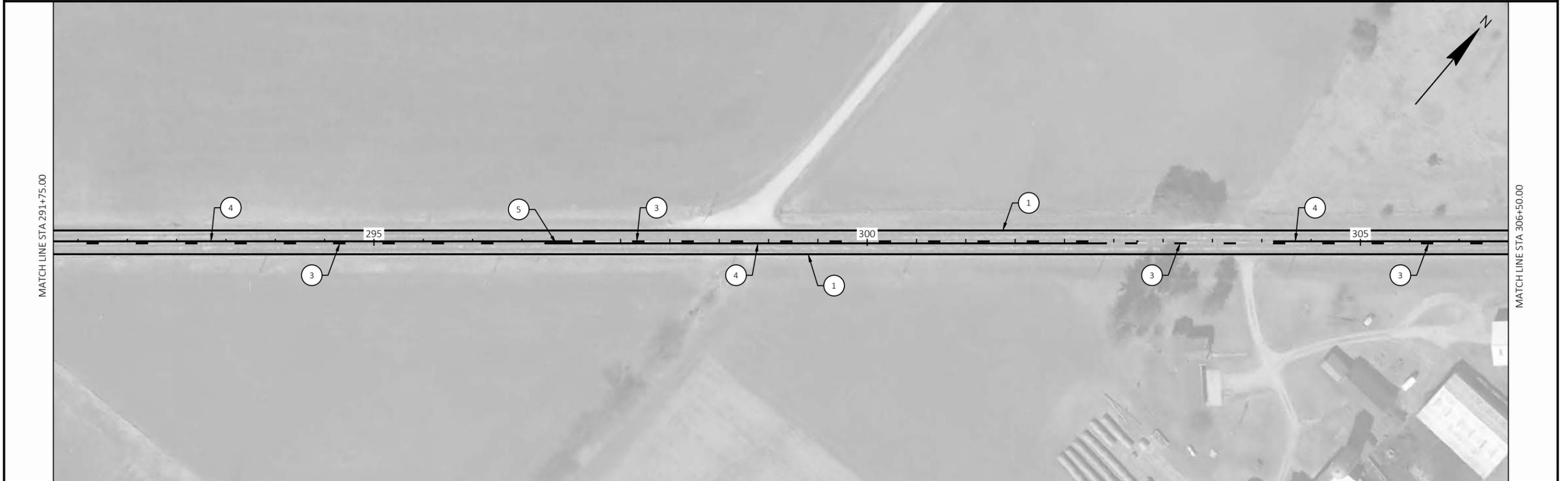
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PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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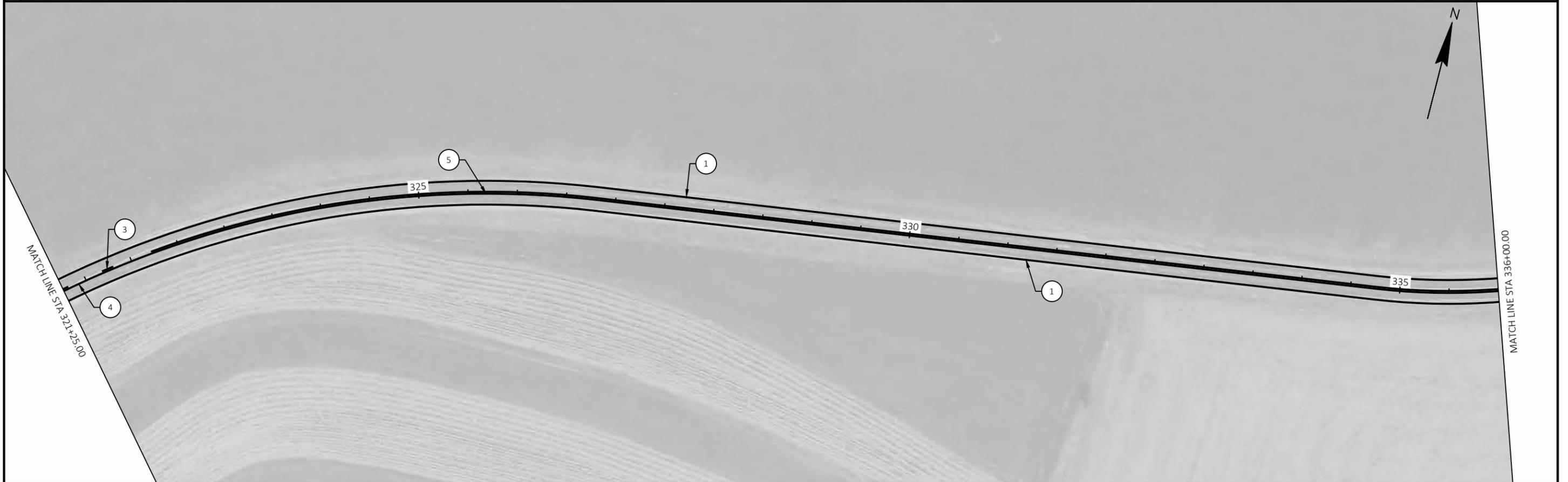


PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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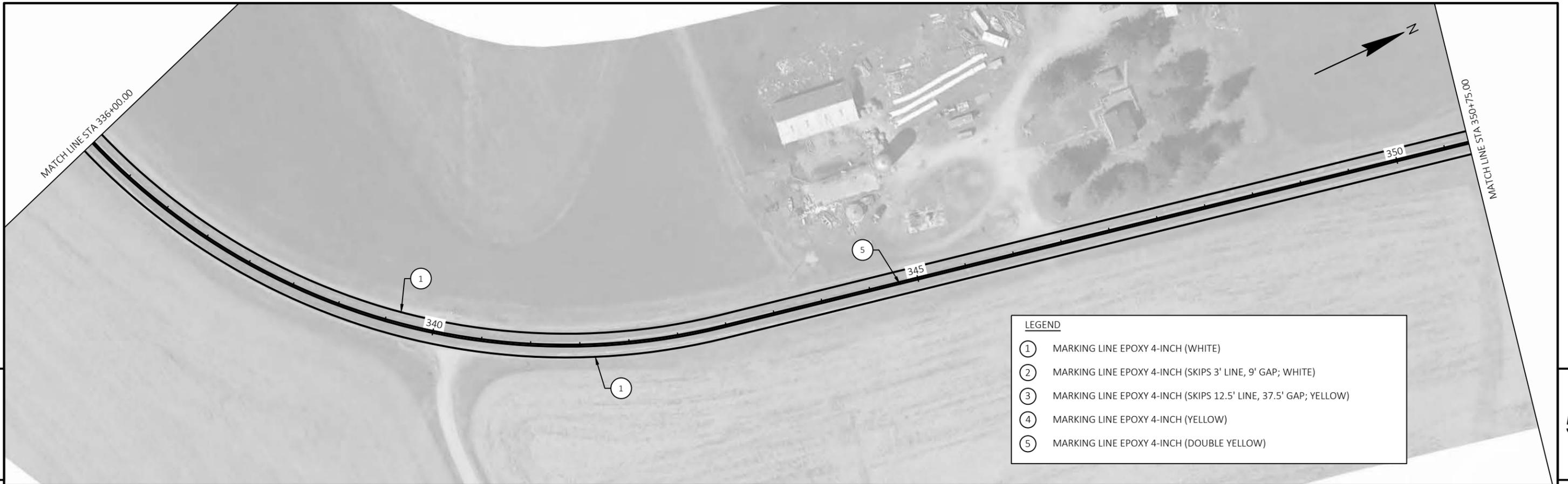


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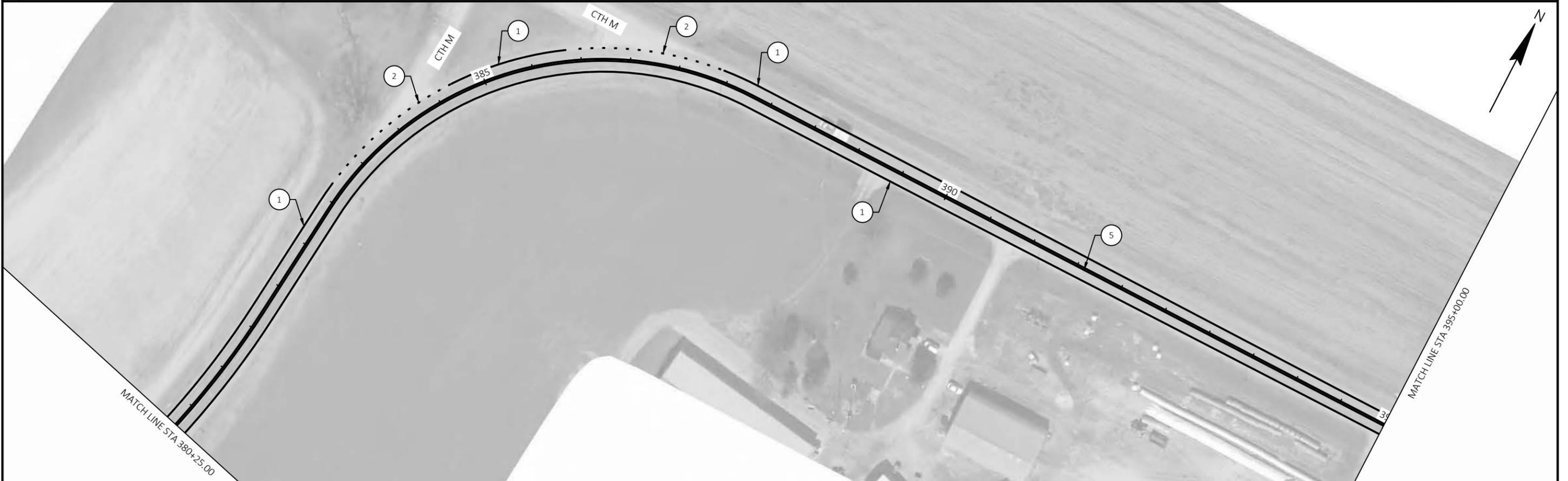
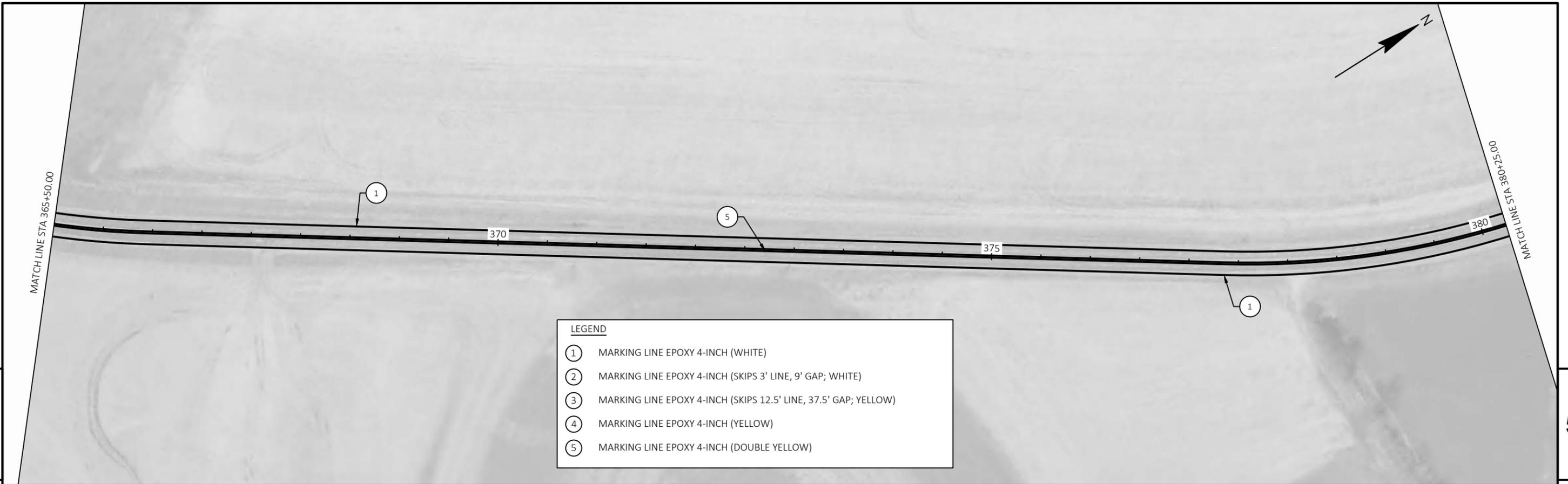
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PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PAVEMENT MARKING	SHEET	E
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Estimate Of Quantities

5590-00-72

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	690.000	690.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	102,330.000	102,330.000
0008	204.0155	Removing Concrete Sidewalk	SY	33.000	33.000
0010	205.0100	Excavation Common	CY	80.000	80.000
0012	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 5590-00-72	LS	1.000	1.000
0014	213.0100	Finishing Roadway (project) 01. 5590-00-72	EACH	1.000	1.000
0016	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,566.000	3,566.000
0018	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	25.000	25.000
0020	455.0605	Tack Coat	GAL	5,131.000	5,131.000
0022	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0024	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0026	460.2005	Incentive Density PWL HMA Pavement	DOL	17,010.000	17,010.000
0028	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	14,290.000	14,290.000
0030	460.2010	Incentive Air Voids HMA Pavement	DOL	20,070.000	20,070.000
0032	460.5224	HMA Pavement 4 LT 58-28 S	TON	20,063.000	20,063.000
0034	465.0105	Asphaltic Surface	TON	8.000	8.000
0036	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	33,835.000	33,835.000
0038	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	2.000	2.000
0040	521.3112	Culvert Pipe Corrugated Steel 12-Inch	LF	12.000	12.000
0042	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	32.000	32.000
0044	602.0410	Concrete Sidewalk 5-Inch	SF	1,328.000	1,328.000
0046	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	200.000	200.000
0048	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5590-00-72	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0052	624.0100	Water	MGAL	36.000	36.000
0054	625.0100	Topsoil	SY	75.000	75.000
0056	627.0200	Mulching	SY	65.000	65.000
0058	628.1504	Silt Fence	LF	114.000	114.000
0060	628.1520	Silt Fence Maintenance	LF	114.000	114.000
0062	628.2004	Erosion Mat Class I Type B	SY	7.000	7.000
0064	628.7010	Inlet Protection Type B	EACH	3.000	3.000
0066	628.7504	Temporary Ditch Checks	LF	8.000	8.000
0068	629.0210	Fertilizer Type B	CWT	1.100	1.100
0070	630.0130	Seeding Mixture No. 30	LB	2.400	2.400
0072	630.0500	Seed Water	MGAL	2.000	2.000
0074	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	3.000	3.000
0076	637.2210	Signs Type II Reflective H	SF	18.500	18.500
0078	638.2102	Moving Signs Type II	EACH	1.000	1.000
0080	642.5001	Field Office Type B	EACH	1.000	1.000
0082	643.0300	Traffic Control Drums	DAY	250.000	250.000
0084	643.0420	Traffic Control Barricades Type III	DAY	90.000	90.000
0086	643.0900	Traffic Control Signs	DAY	475.000	475.000
0088	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0090	643.5000	Traffic Control	EACH	1.000	1.000
0092	646.1020	Marking Line Epoxy 4-Inch	LF	125,631.000	125,631.000
0094	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	59,593.000	59,593.000
0096	648.0100	Locating No-Passing Zones	MI	6.344	6.344
0098	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	59,593.000	59,593.000

Estimate Of Quantities

5590-00-72

Line	Item	Item Description	Unit	Total	Qty
0100	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0102	650.8000	Construction Staking Resurfacing Reference	LF	33,834.000	33,834.000
0104	650.9000	Construction Staking Curb Ramps	EACH	10.000	10.000
0106	650.9910	Construction Staking Supplemental Control (project) 01. 5590-00-72	LS	1.000	1.000
0108	690.0150	Sawing Asphalt	LF	423.000	423.000
0110	690.0250	Sawing Concrete	LF	39.000	39.000
0112	740.0440	Incentive IRI Ride	DOL	25,378.000	25,378.000
0114	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0116	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	900.000	900.000
0118	SPV.0090	Special 01. PVC Pipe 8-Inch	LF	14.000	14.000
0120	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	200.000	200.000

NOTE: ALL TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVALS

STATION - STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0115 REMOVING ASHPALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASHPALTIC SURFACE MILLING SY	204.0155 REMOVING CONCRETE SIDEWALK SY	REMARKS
100+90 - 197+78	STH 78	--	310	30100	--	
201+14 - 439+25	STH 78	--	230	71500	--	
WICKS ROAD	RT	--	30	235	--	
PECATONICA SHORES DRIVE	RT	--	30	55	--	
CHURCH ROAD	RT	--	30	185	--	
SILVER SPRINGS ROAD	LT	--	30	120	--	
FOX ROAD	RT	--	30	135	--	
CHEESE COUNTRY TRAIL CROSSING	LT	1	--	--	--	32 FEET OF CORRUGATED STEEL 18-INCH
NW NORTH ROAD CURB RAMP	LT	--	--	--	12	
NE NORTH ROAD CURB RAMP	LT	--	--	--	2	
NW MINERAL STREET CURB RAMP	LT	--	--	--	4	
NE MINERAL STREET CURB RAMP	LT	--	--	--	--	EXISTING SIDEWALK TO REMAIN
N STH 78 MID-BLOCK CROSSING	LT	--	--	--	3	
S STH 78 MID-BLOCK CROSSING	RT	--	--	--	5	
NW PARK STREET CURB RAMP	LT	--	--	--	5	
NE PARK STREET CURB RAMP	LT	1	--	--	2	14 FEET OF 8-INCH PVC
ITEM TOTAL		2	690	102330	33	

EXCAVATION COMMON

STATION - STATION	LOCATION	205.0100 CY	UNUSEABLE MATERIAL CY	REMARKS
CHEESE COUNTRY TRAIL CROSSING	LT	11	9	
CHEESE COUNTRY TRAIL CROSSING	RT	20	9	
NW NORTH ROAD CURB RAMP	LT	10	8	
NE NORTH ROAD CURB RAMP	LT	2	2	
NW MINERAL STREET CURB RAMP	LT	4	3	
NE MINERAL STREET CURB RAMP	LT	11	11	
N STH 78 MID-BLOCK CROSSING	LT	7	6	
S STH 78 MID-BLOCK CROSSING	RT	2	1	
NW PARK STREET CURB RAMP	LT	7	5	
NE PARK STREET CURB RAMP	LT	6	5	
ITEM TOTAL		80	59	

LOCATING NO-PASSING ZONES

STATION - STATION	LOCATION	648.0100 MI
100+90 - 439+25	CENTERLINE	6.344
ITEM TOTAL		6.344

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
100+90 - 197+78	RT & LT	1200	--	12	SHOULDERS
201+14 - 390+00	RT & LT	2350	--	24	SHOULDERS
CHEESE COUNTRY TRAIL CROSSING	LT	3	5	--	
CHEESE COUNTRY TRAIL CROSSING	RT	13	5	--	
NW NORTH ROAD CURB RAMP	LT	--	3	--	
NE NORTH ROAD CURB RAMP	LT	--	1	--	
NW MINERAL STREET CURB RAMP	LT	--	1	--	
NE MINERAL STREET CURB RAMP	LT	--	5	--	
N STH 78 MID-BLOCK CROSSING	LT	--	1	--	
S STH 78 MID-BLOCK CROSSING	RT	--	2	--	
NW PARK STREET CURB RAMP	LT	--	1	--	
NE PARK STREET CURB RAMP	LT	--	1	--	
ITEM TOTALS		3566	25	36	

ASPHALTIC PAVEMENT ITEMS

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.5224 4 LT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0475 ASPHALTIC CENTER LINE RUMBLE STRIPS 2-LANE RURAL LF	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING SY
100+90 - 439+25	STH 78	--	--	--	33835	
100+90 - 197+78	STH 78	1510	5910	--	--	
201+14 - 439+25	STH 78	3570	14010	--	--	
WICKS RD	RT	16	46	--	--	
PECATONICA SHORES DR	RT	4	10	--	--	
W CHURCH RD	RT	13	36	--	--	
SILVER SPRINGS RD	LT	9	24	--	--	
FOX RD	RT	9	27	--	--	
NW NORTH ROAD CURB RAMP	LT	--	--	1	--	
NE NORTH ROAD CURB RAMP	LT	--	--	1	--	
NW MINERAL STREET CURB RAMP	LT	--	--	1	--	
NE MINERAL STREET CURB RAMP	LT	--	--	1	--	
N STH 78 MID-BLOCK CROSSING	LT	--	--	--	--	
S STH 78 MID-BLOCK CROSSING	RT	--	--	--	--	
NW PARK STREET CURB RAMP	LT	--	--	2	--	
NE PARK STREET CURB RAMP	LT	--	--	2	--	
UNDISTRIBUTED	STH 78	--	--	--	--	200
ITEM TOTALS		5131	20063	8	33835	200

PROJECT NO: 5590-00-72

HWY: STH 78

COUNTY: LAFAYETTE

MISCELLANEOUS QUANTITIES

SHEET

E

NOTE: ALL TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CULVERT PIPES

STATION	LOCATION	SPV.0090 PVC PIPE 8-INCH LF	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	521.3112 CULVERT PIPE CORRUGATED STEEL 12-INCH 0.064-INCH THICKNESS LF	521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH 0.064-INCH THICKNESS LF	REMARKS
162+78	RT	--	--	--	32	E CHEESE COUNTRY TRAIL
422+25	RT	--	2	12	--	S MINERAL ST CURB RAMP
423+70	LT	14	--	--	--	NE PARK ST CURB RAMP
		14	2	12	32	

EROSION CONTROL ITEMS

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2004 EROSION MAT CLASS 1 TYPE B SY	628.7010 INLET PROTECTION TYPE B LF	628.7504 TEMPORARY DITCH CHECKS LF	REMARKS
162+43 - 162+78	LT	35	35	--	--	--	W CHEESE COUNTRY TRAIL CONCRETE APRON
162+61 - 162+96	RT	26	26	--	--	--	E CHEESE COUNTRY TRAIL CONCRETE APRON
411+65 - 411+89	LT	12	12	--	--	--	NW NORTH RD CURB RAMP
413+10 - 413+15	LT	--	--	--	--	--	NE NORTH RD CURB RAMP
420+37 - 420+47	LT	10	10	--	2	--	NW MINERAL ST CURB RAMP
420+77 - 421+43	LT	--	--	--	1	--	NE MINERAL ST CURB RAMP
422+16 - 422+21	LT	6	6	--	--	--	N MAINLINE CURB RAMP
422+17 - 422+22	RT	15	15	7	--	8	S MINERAL ST CURB RAMP
423+05 - 423+21	LT	10	10	--	--	--	NW PARK ST CURB RAMP
423+35 - 423+71	LT	--	--	--	--	--	NE PARK ST CURB RAMP
ITEM TOTALS		114	114	7	3	8	

CURB RAMPS ITEMS

STATION - STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	REMARKS
162+43 - 162+78	LT	277	62	W CHEESE COUNTRY TRAIL CONCRETE APRON
162+61 - 162+96	RT	261	58	E CHEESE COUNTRY TRAIL CONCRETE APRON
411+65 - 411+89	LT	166	10	NW NORTH RD CURB RAMP
413+10 - 413+15	LT	25	10	NE NORTH RD CURB RAMP
420+37 - 420+47	LT	47	10	NW MINERAL ST CURB RAMP
420+77 - 421+43	LT	259	10	NE MINERAL ST CURB RAMP
422+16 - 422+21	LT	58	10	N MAINLINE CURB RAMP
422+17 - 422+22	RT	121	10	S MINERAL ST CURB RAMP
423+05 - 423+21	LT	66	10	NW PARK ST CURB RAMP
423+35 - 423+71	LT	48	10	NE PARK ST CURB RAMP
ITEM TOTALS		1328	200	

SIGN SUMMARY

SIGN LOCATION	SIGN NUMBER	SIGN TYPE	SIZE	SIZE	634.0614 POSTS WOOD 4x6-INCH 14-FT EACH	637.2210 SIGN TYPE II REFLECTIVE 14-FT SF	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
162+50 RT	1-01	W11-15	30	X 30	1	6.25	--	COMBINED BICYCLE/PEDESTRAIN SIGN
162+50 RT	1-02	W11-15P	24	X 18	--	3	--	TRAIL X-ING SIGN, MOUNTED ON SAME POST AS SIGN 1-01
163+00 RT	--	--	--	--	1	--	1	CHEESE COUNTRY DNR TRAIL SIGN
163+50 LT	2-01	W11-15	30	X 30	1	6.25	--	COMBINED BICYCLE/PEDESTRAIN
163+50 LT	2-02	W11-15P	24	X 18	--	3	--	TRAIL X-ING SIGN, MOUNTED ON SAME POST AS SIGN 2-01
TOTAL					3	18.5	1	

FINISHING ITEMS

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0500 SEED WATER MGAL	REMARKS
162+43 - 162+78	LT	7	7	0.1	0.2	0.1	W CHEESE COUNTRY TRAIL CONCRETE APRON
162+61 - 162+96	RT	20	20	0.1	0.6	0.3	E CHEESE COUNTRY TRAIL CONCRETE APRON
411+60 - 411+90	LT	12	12	0.1	0.3	0.2	NW NORTH RD CURB RAMP
413+10 - 413+20	LT	1	1	0.1	0.1	0.1	NE NORTH RD CURB RAMP
420+37 - 420+47	LT	3	3	0.1	0.1	0.1	NW MINERAL ST CURB RAMP
420+80 - 421+20	LT	1	1	0.1	0.1	0.1	NE MINERAL ST CURB RAMP
422+16 - 422+21	LT	1	1	0.1	0.1	0.1	N MAINLINE CURB RAMP
422+17 - 422+22	RT	9	--	0.1	0.3	0.1	S MINERAL ST CURB RAMP
423+05 - 423+21	LT	8	8	0.1	0.2	0.1	NW PARK ST CURB RAMP
423+35 - 423+71	LT	6	6	0.1	0.2	0.1	NE PARK ST CURB RAMP
UNDISTRIBUTED		7	6	0.1	0.2	0.2	UNDISTRIBUTED
ITEM TOTALS		75	65	1.1	2.4	2	

PROJECT NO: 5590-00-72

HWY: STH 78

COUNTY: LAFAYETTE

MISCELLANEOUS QUANTITIES

SHEET

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NOTE: ALL TABLE QUANTITIES ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

TRAFFIC CONTROL

STATION - STATION	LOCATION	643.0300 TRAFFIC CONTROL		643.0420 BARRICADES		SIGNS EA	643.0900 SIGNS DAYS	SIGNS PCMS EA	643.1050 SIGNS DAYS	643.5000 TRAFFIC CONTROL EACH
		DRUMS EA	DRUMS DAYS	BARRICADES EA	TYPE III DAYS					
PROJECT 5590-00-72	STH 78	--	--	2	70	10	400	2	14	1
SIDEWALK CLOSURES	VARIOUS	40	200	--	--	10	50	--	--	--
UNDISTRIBUTED		10	50	2	20	5	25	--	--	--
ITEM TOTALS		50	250	4	90	25	475	2	14	1

NOTE: ASSUMED CONSTRUCTION TIME- 40 DAYS

PAVEMENT MARKING

STATION - STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH				646.4520 MARKING LINE SAME DAY EPOXY 4-INCH		649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH	
		* SKIPS YELLOW LF	* NO PASSING YELLOW LF	SKIPS WHITE LF	SOLID WHITE LF	SKIPS YELLOW LF	NO PASSING YELLOW LF	SKIPS YELLOW LF	NO PASSING YELLOW LF
		100+90 - 151+13	CL	--	10046	--	--	--	10046
151+13 - 158+71	CL	190	758	--	--	190	758	190	758
158+71 - 169+42	CL	268	1071	--	--	268	1071	268	1071
169+42 - 183+88	CL	--	2892	--	--	--	2892	--	2892
183+88 - 192+37	CL	212	849	--	--	212	849	212	849
192+37 - 197+78	CL	135	--	--	--	135	--	135	--
201+14 - 206+69	CL	139	--	--	--	139	--	139	--
206+69 - 215+24	CL	214	855	--	--	214	855	214	855
215+24 - 288+44	CL	--	14640	--	--	--	14640	--	14640
288+44 - 296+74	CL	208	830	--	--	208	830	208	830
296+74 - 297+00	CL	--	52	--	--	--	52	--	52
297+00 - 302+41	CL	135	541	--	--	135	541	135	541
302+41 - 304+12	CL	43	--	--	--	43	--	43	--
304+12 - 311+65	CL	188	753	--	--	188	753	188	753
311+65 - 313+19	CL	39	--	--	--	39	--	39	--
313+19 - 322+22	CL	226	903	--	--	226	903	226	903
322+22 - 439+25	CL	--	23406	--	--	--	23406	--	23406
100+90 - 117+57	RT	--	--	--	1662	--	--	--	--
100+90 - 197+78	LT	--	--	--	9698	--	--	--	--
118+40 - 197+78	RT	--	--	--	7935	--	--	--	--
201+14 - 220+14	RT	--	--	--	1913	--	--	--	--
201+14 - 261+03	LT	--	--	--	5971	--	--	--	--
220+14 - 220+67	RT	--	--	14	--	--	--	--	--
220+67 - 221+43	RT	--	--	--	77	--	--	--	--
221+43 - 222+67	RT	--	--	31	--	--	--	--	--
222+67 - 247+29	RT	--	--	--	2466	--	--	--	--
247+91 - 310+93	RT	--	--	--	6294	--	--	--	--
261+72 - 383+17	LT	--	--	--	12147	--	--	--	--
311+48 - 412+96	RT	--	--	--	10134	--	--	--	--
383+17 - 384+69	LT	--	--	40	--	--	--	--	--
384+69 - 385+87	LT	--	--	--	122	--	--	--	--
385+87 - 387+43	LT	--	--	41	--	--	--	--	--
387+43 - 411+82	LT	--	--	--	2448	--	--	--	--
412+81 - 420+38	LT	--	--	--	758	--	--	--	--
414+37 - 439+25	RT	--	--	--	2494	--	--	--	--
420+75 - 423+11	LT	--	--	--	237	--	--	--	--
423+64 - 439+25	LT	--	--	--	1556	--	--	--	--
ITEM TOTALS		1,997	57,596	126	65,912	1,997	57,596	1,997	57,596
		TOTAL		TOTAL		TOTAL		TOTAL	
		125,631		59,593		59,593		59,593	

* TO BE APPLIED AFTER RUMBLE STRIPS

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.6000 PIPE CULVERTS EACH	650.8000 RESURFACING REFERENCE LF	650.9000 CURB RAMPS EACH	650.9910 SUPPLEMENTAL CONTROL (6630-00-70) LS	REMARKS
100+90 - 439+24	LT & RT	--	33834	--	--	--
162+43 - 162+78	LT	--	--	1	--	W CHEESE COUNTRY TRAIL CONCRETE APRON
162+61 - 162+96	RT	1	--	1	--	E CHEESE COUNTRY TRAIL CONCRETE APRON
411+65 - 411+89	LT	--	--	1	--	NW NORTH RD CURB RAMP
413+10 - 413+15	LT	--	--	1	--	NE NORTH RD CURB RAMP
420+37 - 420+47	LT	--	--	1	--	NW MINERAL ST CURB RAMP
420+77 - 421+43	LT	--	--	1	--	NE MINERAL ST CURB RAMP
422+16 - 422+21	LT	--	--	1	--	N MAINLINE CURB RAMP
422+17 - 422+22	RT	1	--	1	--	S MINERAL ST CURB RAMP
423+05 - 423+21	LT	--	--	1	--	NW PARK ST CURB RAMP
423+35 - 423+71	LT	1	--	1	--	NE PARK ST CURB RAMP
ITEM TOTALS		3	33834	10	1	

SAWING ITEMS

STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
197+78	--	29	--	NET EXCLUSION START
201+14	--	29	--	NET EXCLUSION END
439+25	--	83	--	PROJECT END
117+81	RT	25	--	WICKS ROAD
208+58	RT	25	--	PECTONICA SHORES DRIVE
247+67	RT	27	--	CHURCH ROAD
261+32	LT	27	--	SILVER SPRINGS ROAD
311+08	RT	25	--	FOX ROAD
411+65 - 411+89	LT	16	17	NW NORTH RD CURB RAMP
413+10 - 413+15	LT	18	4	NE NORTH RD CURB RAMP
420+37 - 420+47	LT	16	4	NW MINERAL ST CURB RAMP
420+77 - 421+43	LT	--	--	NE MINERAL ST CURB RAMP
422+16 - 422+21	LT	20	-	N MAINLINE CURB RAMP
422+17 - 422+22	RT	--	6	S MINERAL ST CURB RAMP
423+05 - 423+21	LT	25	4	NW PARK ST CURB RAMP
423+35 - 423+71	LT	30	4	NE PARK ST CURB RAMP
ITEM TOTAL		423	39	

PROJECT NO: 5590-00-72

HWY: STH 78

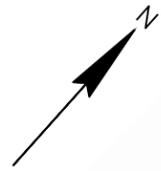
COUNTY: LAFAYETTE

MISCELLANEOUS QUANTITIES

SHEET

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HMA PWL MIXTURE ACCEPTANCE TABLE							QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	100+90 TO 197+78 201+17 TO 439+25	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	8501	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	100+90 TO 197+78 201+17 TO 439+25	LOWER LAYER	MILLED EXISTING RECYCLED ASPHALT PAVEMENT	4 LT 58-28 S	8501	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
2 FOOT SHOULDER	100+90 TO 197+78 201+17 TO 439+25	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	1459	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
2 FOOT SHOULDER	100+90 TO 197+78 201+17 TO 439+25	LOWER LAYER	MILLED EXISTING RECYCLED ASPHALT PAVEMENT	4 LT 58-28 S	1459	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
SIDE ROADS		UPPER LAYER	4 LT 58-28 S	4 MT 58-28 S	72	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
SIDE ROADS		LOWER LAYER	MILLED EXISTING RECYCLED ASPHALT PAVEMENT	4 MT 58-28 S	72	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE



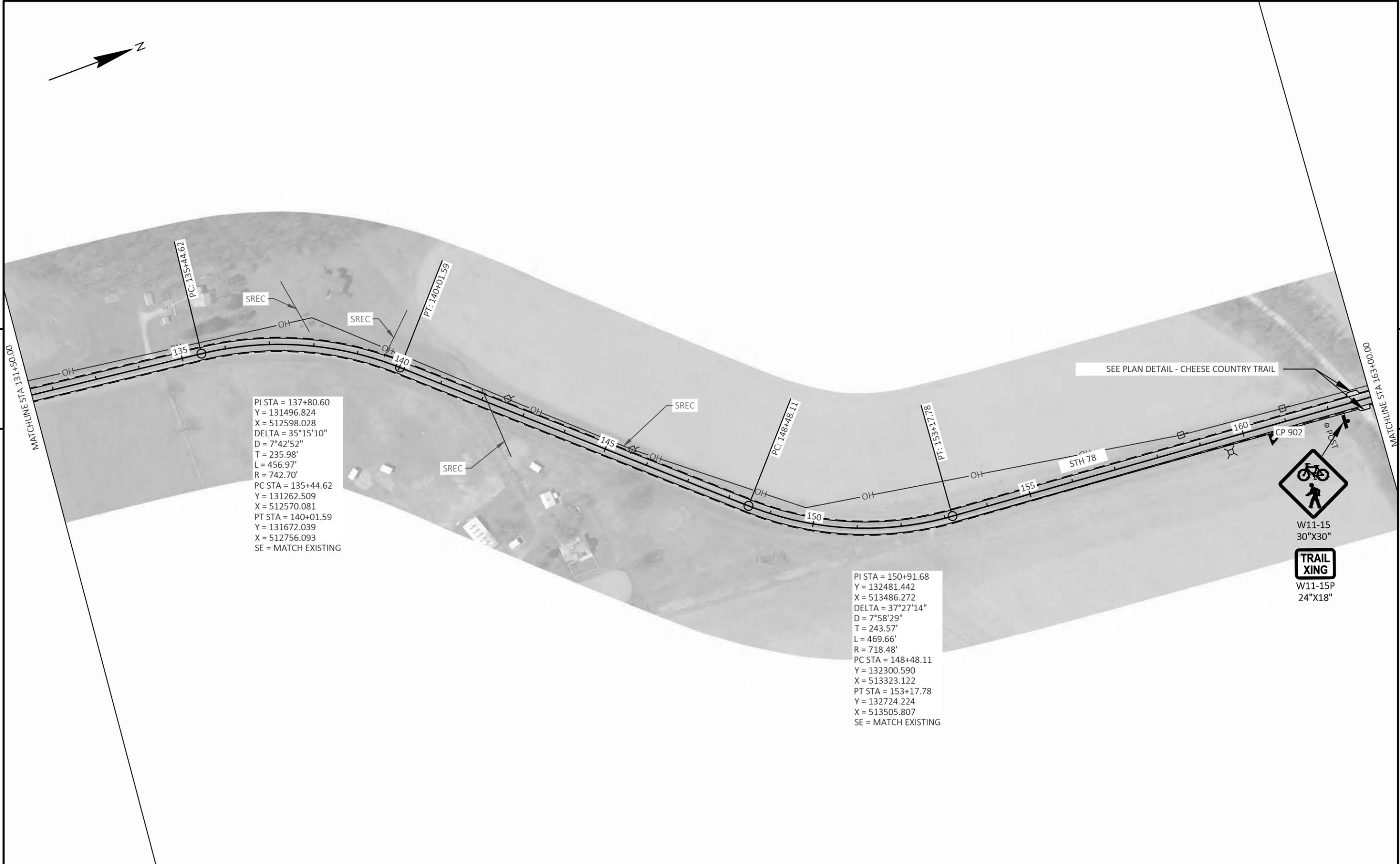
BEGIN PROJECT
STA 100+90.13
 X = 510325.346
 Y = 128913.284
 BUTT JOINT REQ'D

PI STA = 107+98.11
 Y = 129465.778
 X = 510768.047
 DELTA = 24°23'28"
 D = 2°04'40"
 T = 595.94'
 L = 1173.83'
 R = 2757.38'
 PC STA = 102+02.16
 Y = 129000.716
 X = 510395.403
 PT STA = 113+75.99
 Y = 129735.445
 X = 511299.486
 SE = MATCH EXISTING

PI STA = 126+75.20
 Y = 130323.341
 X = 512458.067
 DELTA = 56°17'38"
 D = 6°33'42"
 T = 467.16'
 L = 857.92'
 R = 873.19'
 PC STA = 122+08.04
 Y = 130111.948
 X = 512041.471
 PT STA = 130+65.96
 Y = 130787.214
 X = 512513.393
 SE = MATCH EXISTING

CONTROL POINT TABLE

POINT NAME	STATION	Y	X	ELEVATION	DESCRIPTION
NJ0047	163+34.30, 38.52' RT	133734.382	513625.731	818.99	BENCH MARK DISK IN CONCRETE MONUMENT
NH1600 GPS	304+73.19, 86.43' RT	145193.292	519165.258	997.00	TRIANGULATION STATION DISK IN CONCRETE MONUMENT
CP 901	101+80.63, -51.09' RT	129015.855	510342.064	895.95	FENO
CP 902	160+63.33, 29.11' RT	133465.043	513594.625	822.86	FENO
CP 903	220+79.29, 27.31' RT	137675.020	517257.183	914.45	FENO
CP 904	276+22.77, 27.24' RT	143178.982	517363.281	958.99	FENO
CP 905	325+37.22, 26.56' RT	146633.862	520596.671	999.66	FENO
CP 906	375+82.34, 25.61' RT	150020.941	523732.502	1036.14	FENO
CP 907	408+79.08, -426.23 LT	151028.701	526536.884	988.03	FENO



PI STA = 137+80.60
 Y = 131496.824
 X = 512598.028
 DELTA = 35°15'10"
 D = 7°42'52"
 T = 235.98'
 L = 456.97'
 R = 742.70'
 PC STA = 135+44.62
 Y = 131262.509
 X = 512570.081
 PT STA = 140+01.59
 Y = 131672.039
 X = 512756.093
 SE = MATCH EXISTING

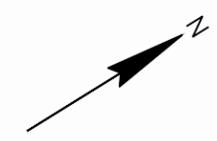
PI STA = 150+91.68
 Y = 132481.442
 X = 513486.272
 DELTA = 37°27'14"
 D = 7°58'29"
 T = 243.57'
 L = 469.66'
 R = 718.48'
 PC STA = 148+48.11
 Y = 132300.590
 X = 513323.122
 PT STA = 153+17.78
 Y = 132724.224
 X = 513505.807
 SE = MATCH EXISTING



W11-15
30"X30"



W11-15P
24"X18"



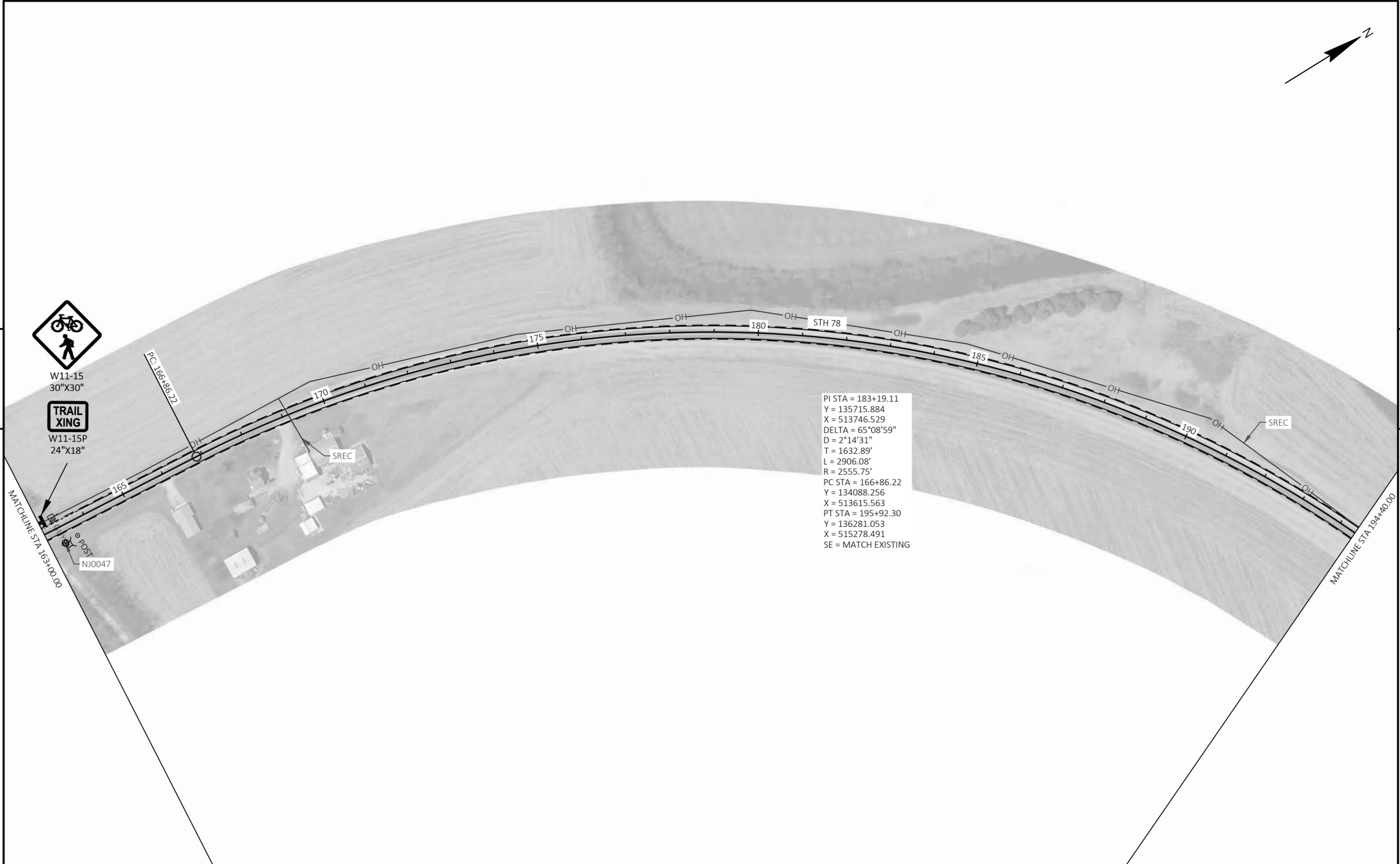
W11-15
30"X30"



W11-15P
24"X18"

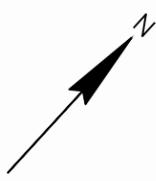
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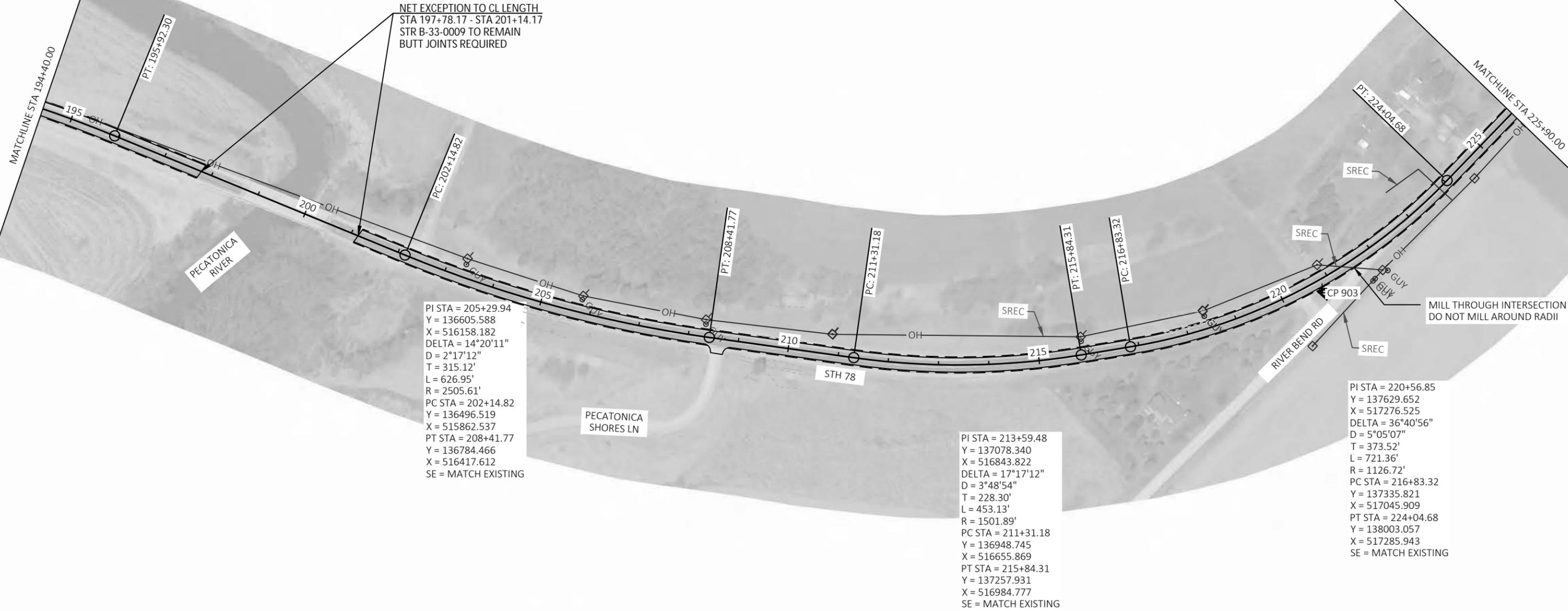
PI STA = 183+19.11
 Y = 135715.884
 X = 513746.529
 DELTA = 65°08'59"
 D = 2°14'31"
 T = 1632.89'
 L = 2906.08'
 R = 2555.75'
 PC STA = 166+86.22
 Y = 134088.256
 X = 513615.563
 PT STA = 195+92.30
 Y = 136281.053
 X = 515278.491
 SE = MATCH EXISTING

PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PLAN SHEETS	SHEET	E
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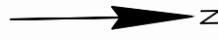


NET EXCEPTION TO CL LENGTH
 STA 197+78.17 - STA 201+14.17
 STR B-33-0009 TO REMAIN
 BUTT JOINTS REQUIRED

PI STA = 205+29.94
 Y = 136605.588
 X = 516158.182
 DELTA = 14°20'11"
 D = 2°17'12"
 T = 315.12'
 L = 626.95'
 R = 2505.61'
 PC STA = 202+14.82
 Y = 136496.519
 X = 515862.537
 PT STA = 208+41.77
 Y = 136784.466
 X = 516417.612
 SE = MATCH EXISTING

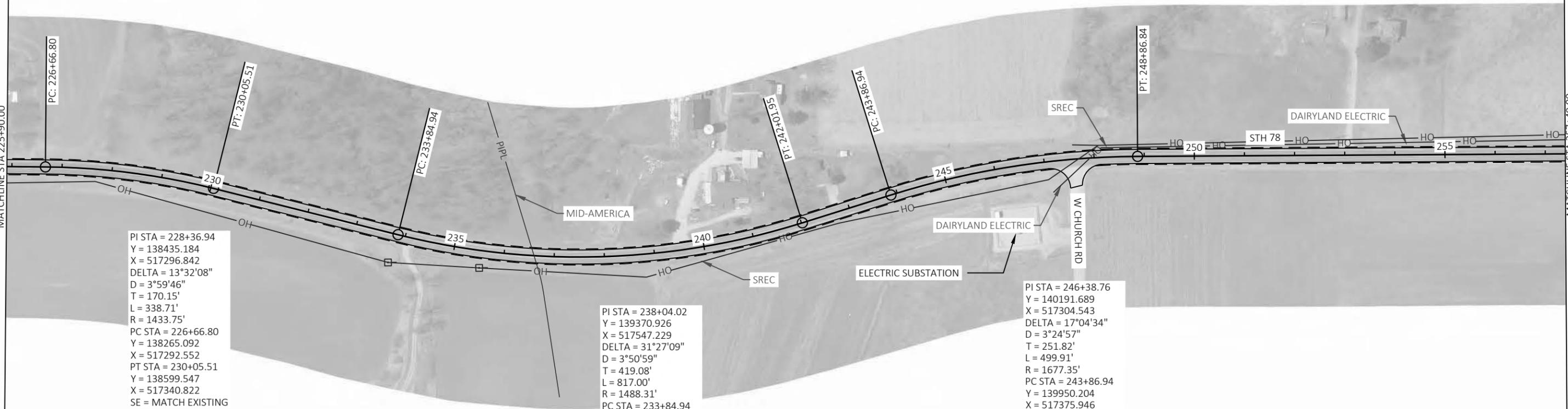
PI STA = 213+59.48
 Y = 137078.340
 X = 516843.822
 DELTA = 17°17'12"
 D = 3°48'54"
 T = 228.30'
 L = 453.13'
 R = 1501.89'
 PC STA = 211+31.18
 Y = 136948.745
 X = 516655.869
 PT STA = 215+84.31
 Y = 137257.931
 X = 516984.777
 SE = MATCH EXISTING

PI STA = 220+56.85
 Y = 137629.652
 X = 517276.525
 DELTA = 36°40'56"
 D = 5°05'07"
 T = 373.52'
 L = 721.36'
 R = 1126.72'
 PC STA = 216+83.32
 Y = 137335.821
 X = 517045.909
 PT STA = 224+04.68
 Y = 138003.057
 X = 517285.943
 SE = MATCH EXISTING



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MATCHLINE STA 225+90.00



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MATCHLINE STA 257+40.00

PI STA = 228+36.94
 Y = 138435.184
 X = 517296.842
 DELTA = 13°32'08"
 D = 3°59'46"
 T = 170.15'
 L = 338.71'
 R = 1433.75'
 PC STA = 226+66.80
 Y = 138265.092
 X = 517292.552
 PT STA = 230+05.51
 Y = 138599.547
 X = 517340.822
 SE = MATCH EXISTING

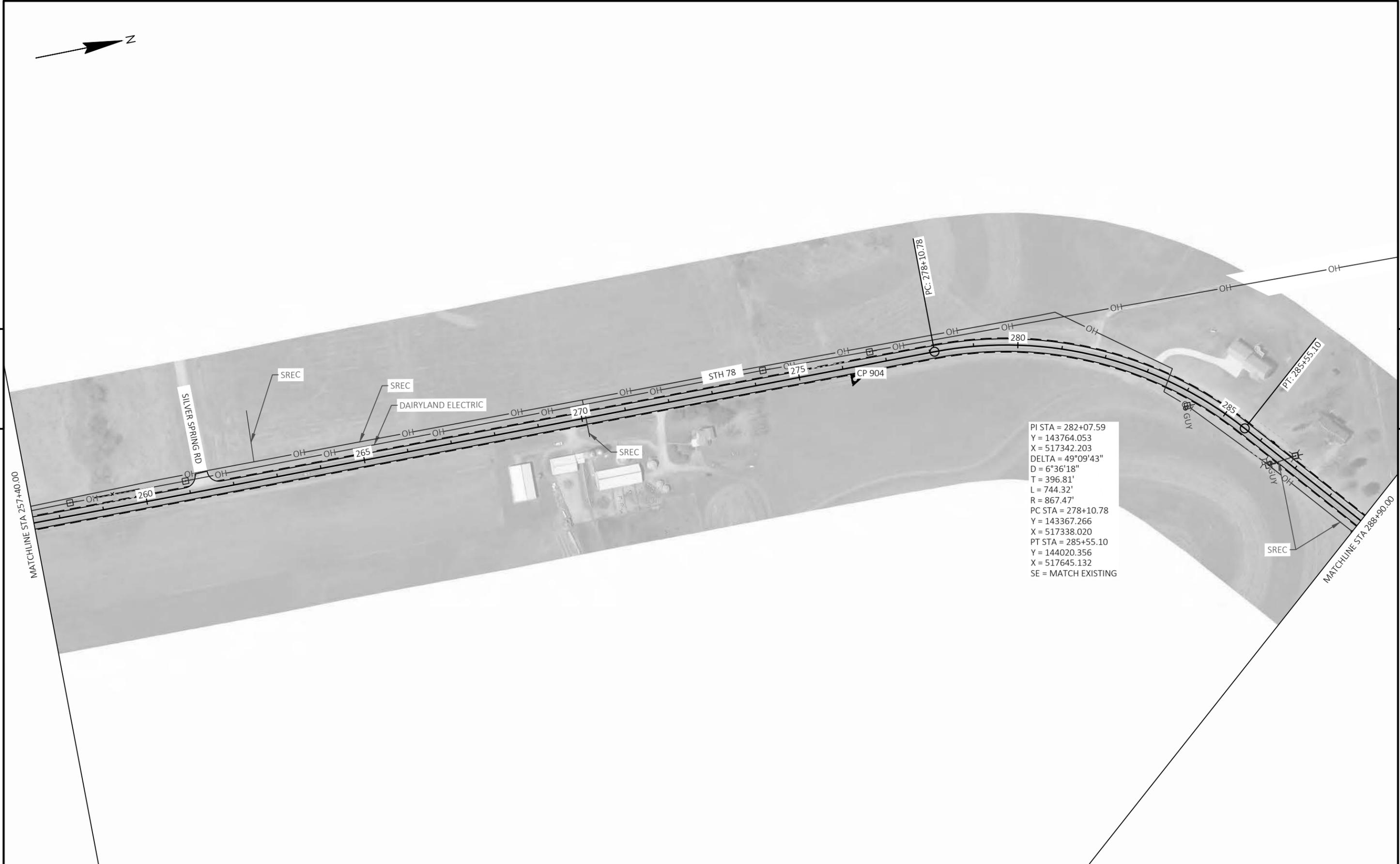
PI STA = 238+04.02
 Y = 139370.926
 X = 517547.229
 DELTA = 31°27'09"
 D = 3°50'59"
 T = 419.08'
 L = 817.00'
 R = 1488.31'
 PC STA = 233+84.94
 Y = 138966.090
 X = 517438.902
 PT STA = 242+01.95
 Y = 139772.806
 X = 517428.400
 SE = MATCH EXISTING

PI STA = 246+38.76
 Y = 140191.689
 X = 517304.543
 DELTA = 17°04'34"
 D = 3°24'57"
 T = 251.82'
 L = 499.91'
 R = 1677.35'
 PC STA = 243+86.94
 Y = 139950.204
 X = 517375.946
 PT STA = 248+86.84
 Y = 140443.495
 X = 517307.198
 SE = MATCH EXISTING



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PROJECT NO: 5590-00-72 HWY: STH 78 COUNTY: LAFAYETTE PLAN SHEETS SHEET E

FILE NAME : H:\PROJECTS\13000\13654.01\CAD_BIM\55900002\SHEETSPLAN\050201-PN.DWG PLOT DATE : 4/19/2022 2:35 PM PLOT BY : MORGAN JOHNSON PLOT NAME : PLOT SCALE : 1 IN:200 FT WISDOT/CADD SHEET 44

LAYOUT NAME - 021206_pd



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PI STA = 310+71.68
 Y = 145645.843
 X = 519566.323
 DELTA = 12°00'21"
 D = 2°09'12"
 T = 279.80'
 L = 557.55'
 R = 2660.85'
 PC STA = 307+91.88
 Y = 145465.117
 X = 519352.720
 PT STA = 313+49.43
 Y = 145867.048
 X = 519737.662
 SE = MATCH EXISTING

PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PLAN SHEETS	SHEET	E
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FILE NAME : H:\PROJECTS\13000\13654.01\CAD_BIM\55900002\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 021207_pd

PLOT DATE : 4/19/2022 2:35 PM

PLOT BY : MORGAN JOHNSON

PLOT NAME :

PLOT SCALE : 1 IN:200 FT

WISDOT/CADD SHEET 44



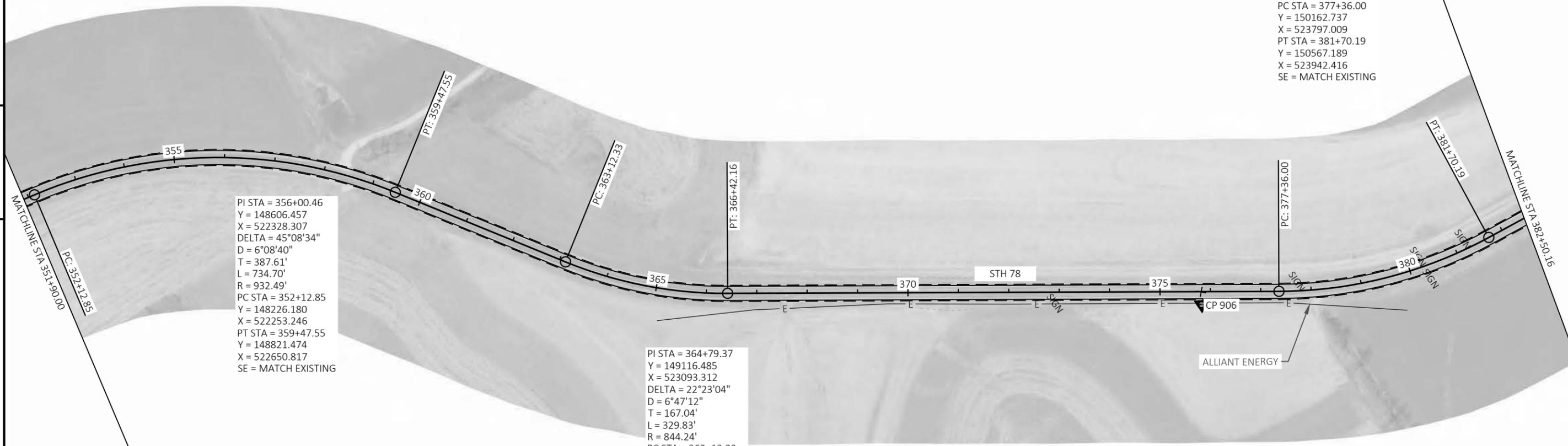
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PI STA = 379+57.62
 Y = 150346.634
 X = 523920.695
 DELTA = 28°17'59"
 D = 6°31'04"
 T = 221.62'
 L = 434.20'
 R = 879.07'
 PC STA = 377+36.00
 Y = 150162.737
 X = 523797.009
 PT STA = 381+70.19
 Y = 150567.189
 X = 523942.416
 SE = MATCH EXISTING

PI STA = 356+00.46
 Y = 148606.457
 X = 522328.307
 DELTA = 45°08'34"
 D = 6°08'40"
 T = 387.61'
 L = 734.70'
 R = 932.49'
 PC STA = 352+12.85
 Y = 148226.180
 X = 522253.246
 PT STA = 359+47.55
 Y = 148821.474
 X = 522650.817
 SE = MATCH EXISTING

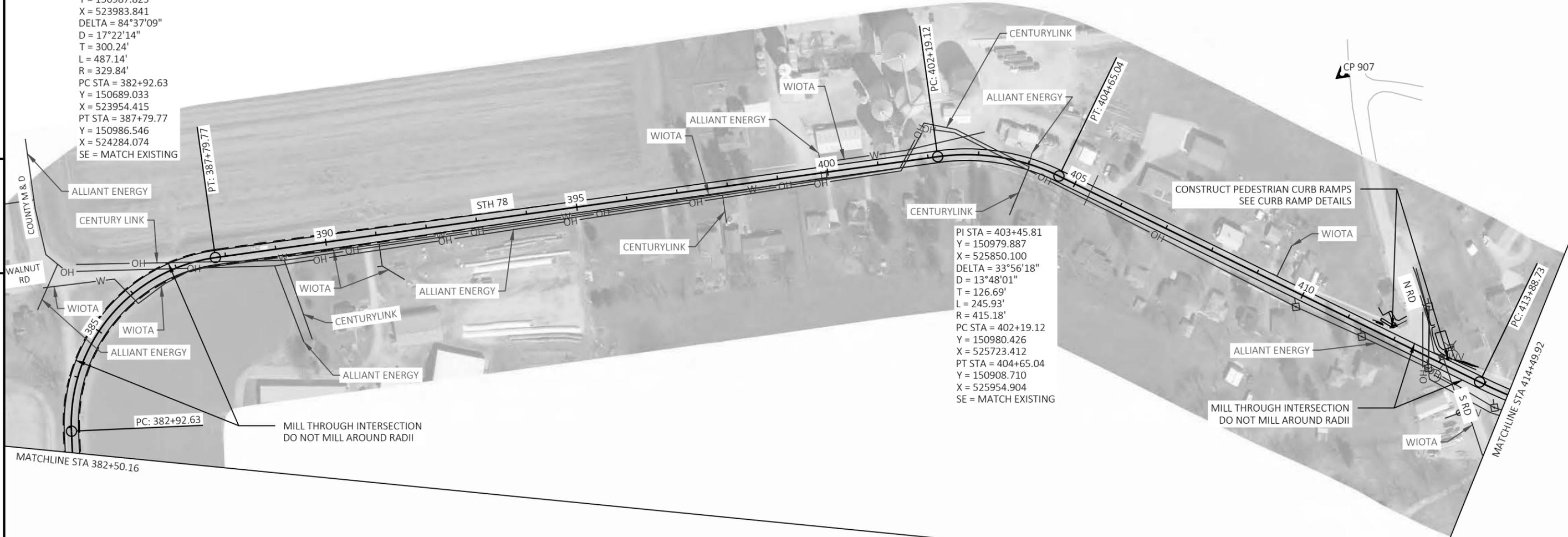
PI STA = 364+79.37
 Y = 149116.485
 X = 523093.312
 DELTA = 22°23'04"
 D = 6°47'12"
 T = 167.04'
 L = 329.83'
 R = 844.24'
 PC STA = 363+12.33
 Y = 149023.823
 X = 522954.325
 PT STA = 366+42.16
 Y = 149255.094
 X = 523186.539
 SE = MATCH EXISTING





PI STA = 385+92.86
 Y = 150987.823
 X = 523983.841
 DELTA = 84°37'09"
 D = 17°22'14"
 T = 300.24'
 L = 487.14'
 R = 329.84'
 PC STA = 382+92.63
 Y = 150689.033
 X = 523954.415
 PT STA = 387+79.77
 Y = 150986.546
 X = 524284.074
 SE = MATCH EXISTING

PI STA = 403+45.81
 Y = 150979.887
 X = 525850.100
 DELTA = 33°56'18"
 D = 13°48'01"
 T = 126.69'
 L = 245.93'
 R = 415.18'
 PC STA = 402+19.12
 Y = 150980.426
 X = 525723.412
 PT STA = 404+65.04
 Y = 150908.710
 X = 525954.904
 SE = MATCH EXISTING



5

5

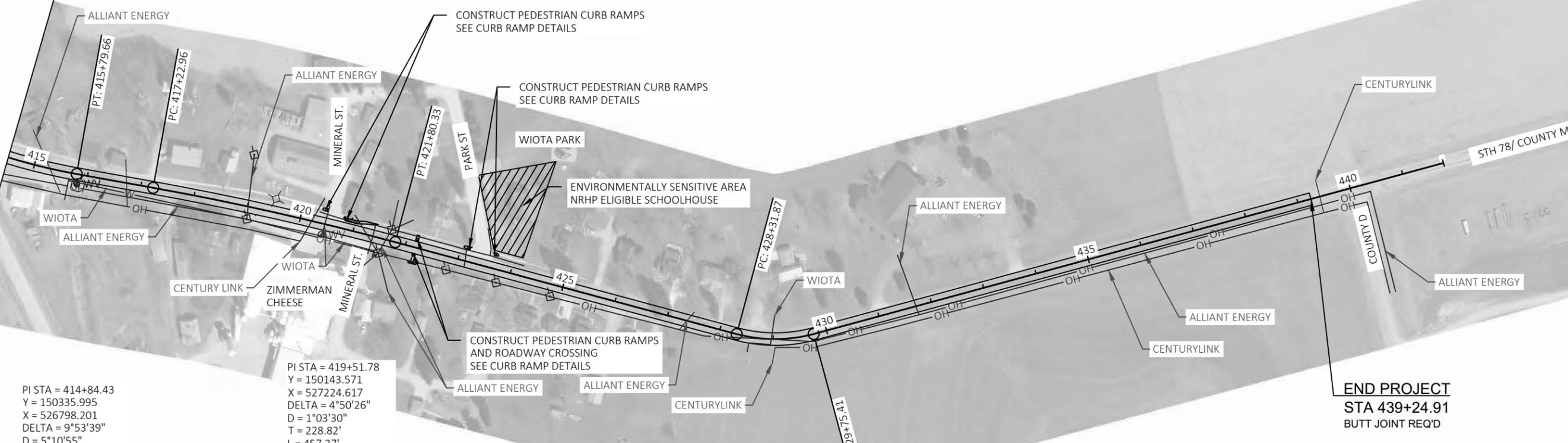
PROJECT NO: 5590-00-72	HWY: STH 78	COUNTY: LAFAYETTE	PLAN SHEETS	SHEET	E
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NOTE:
FOR MINERAL STREET AND PARK STREET,
MILL THROUGH INTERSECTION
DO NOT MILL AROUND RADII



5

5



PI STA = 414+84.43
Y = 150335.995
X = 526798.201
DELTA = 9°53'39"
D = 5°10'55"
T = 95.71'
L = 190.94'
R = 1105.68'
PC STA = 413+88.73
Y = 150389.765
X = 526719.027
PT STA = 415+79.66
Y = 150296.629
X = 526885.436
SE = MATCH EXISTING

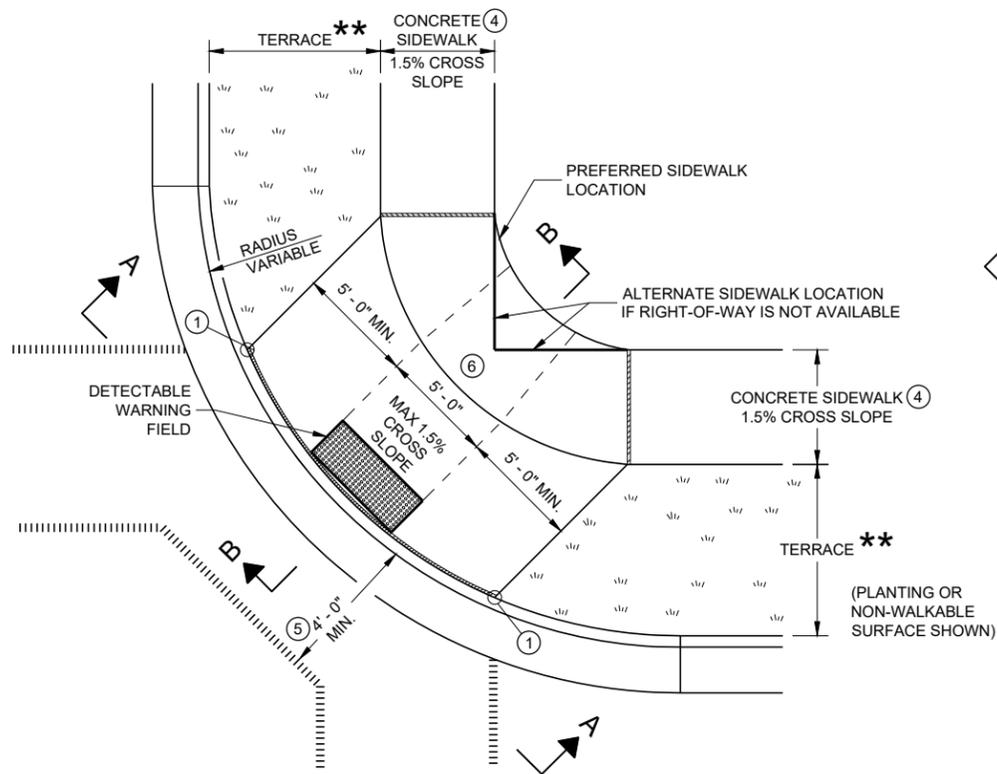
PI STA = 419+51.78
Y = 150143.571
X = 527224.617
DELTA = 4°50'26"
D = 1°03'30"
T = 228.82'
L = 457.37'
R = 5413.68'
PC STA = 417+22.96
Y = 150237.689
X = 527016.048
PT STA = 421+80.33
Y = 150032.188
X = 527424.499
SE = MATCH EXISTING

PI STA = 429+05.35
Y = 149679.274
X = 528057.826
DELTA = 30°10'30"
D = 21°01'20"
T = 73.48'
L = 143.54'
R = 272.55'
PC STA = 428+31.87
Y = 149715.039
X = 527993.643
PT STA = 429+75.41
Y = 149680.616
X = 528131.290
SE = MATCH EXISTING

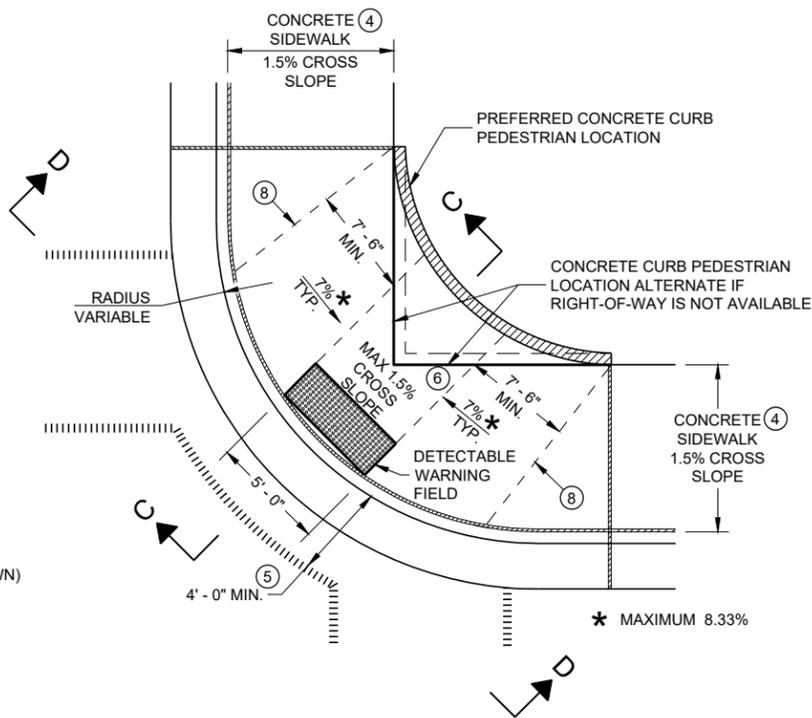
END PROJECT
STA 439+24.91
BUTT JOINT REQ'D

Standard Detail Drawing List

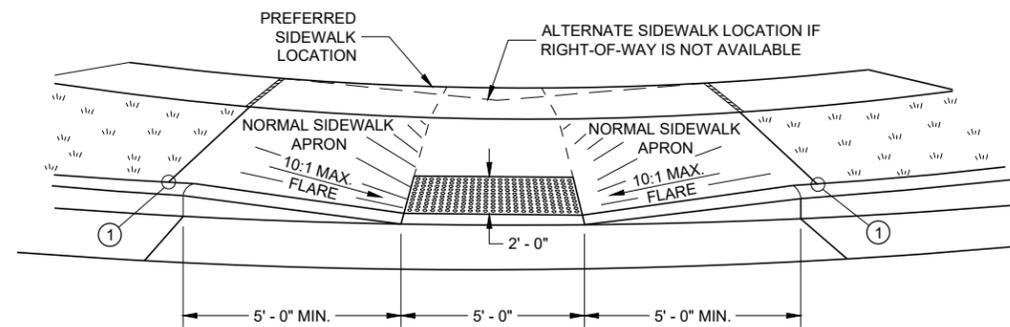
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C12-08	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION



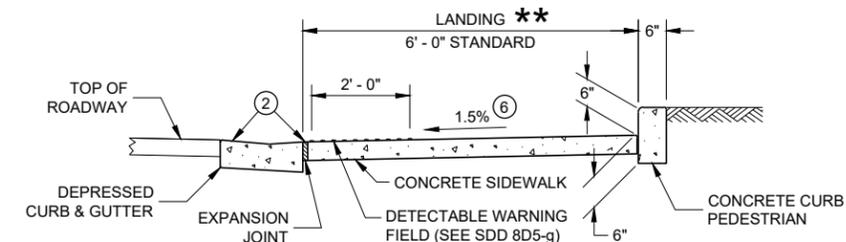
PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)



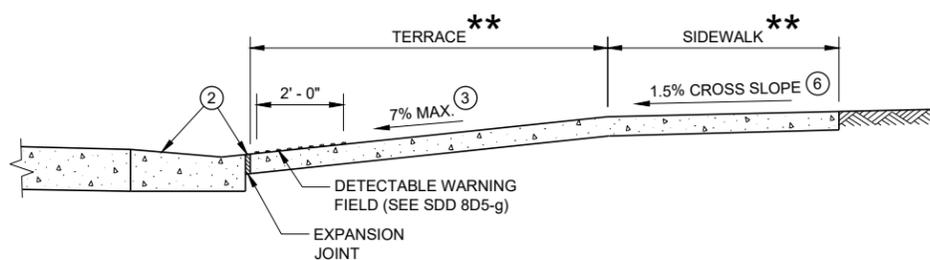
PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



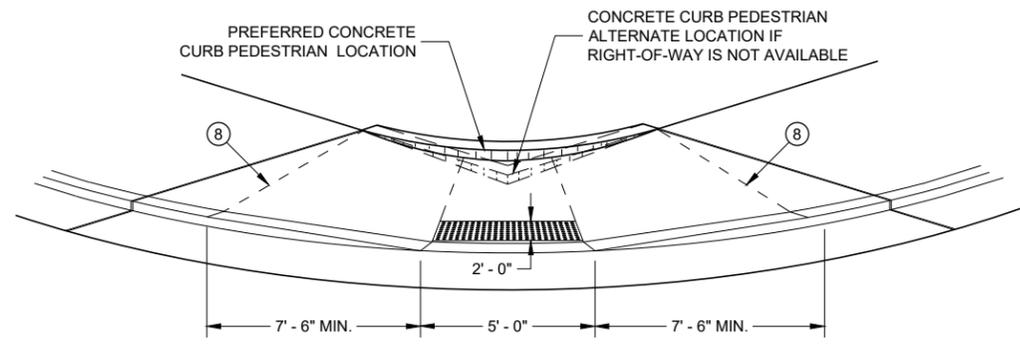
VIEW A - A FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

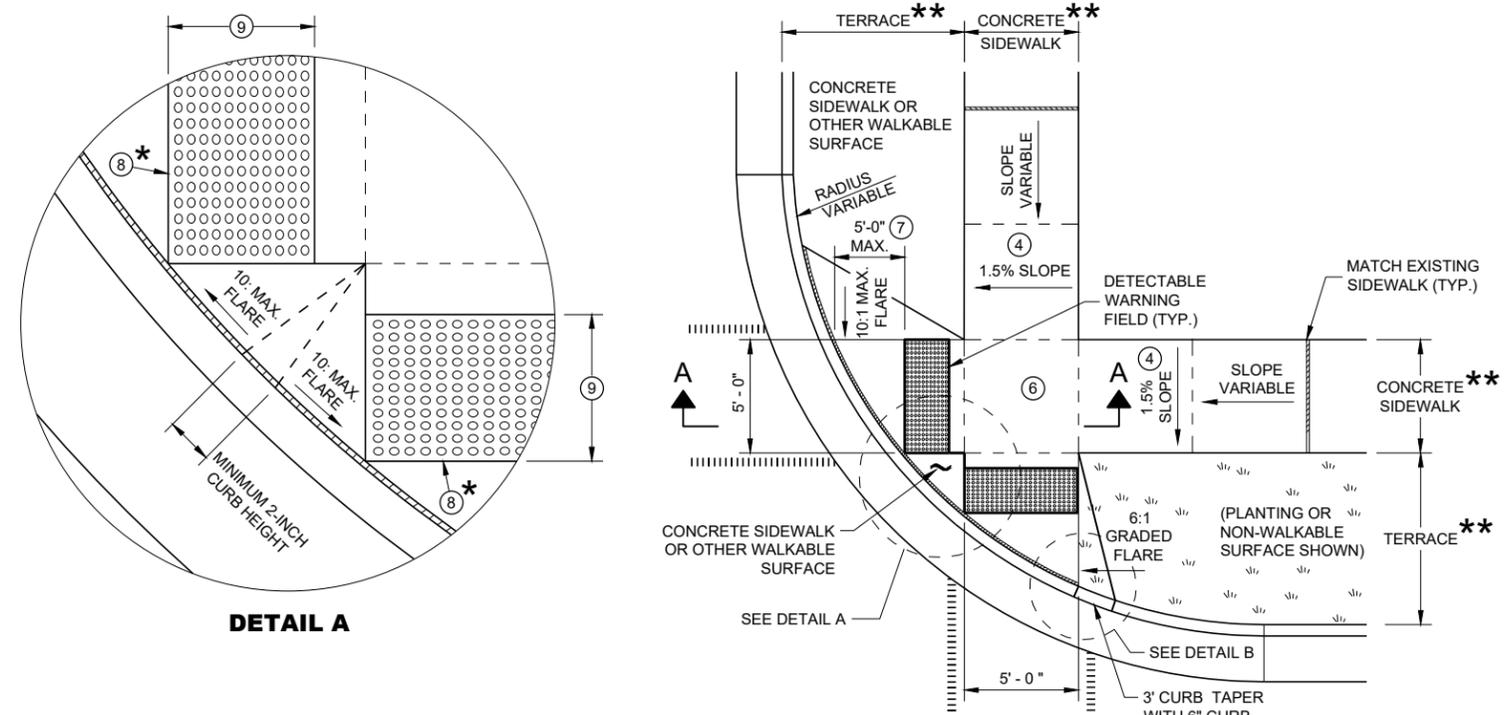
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.
- TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.
- DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.
- SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

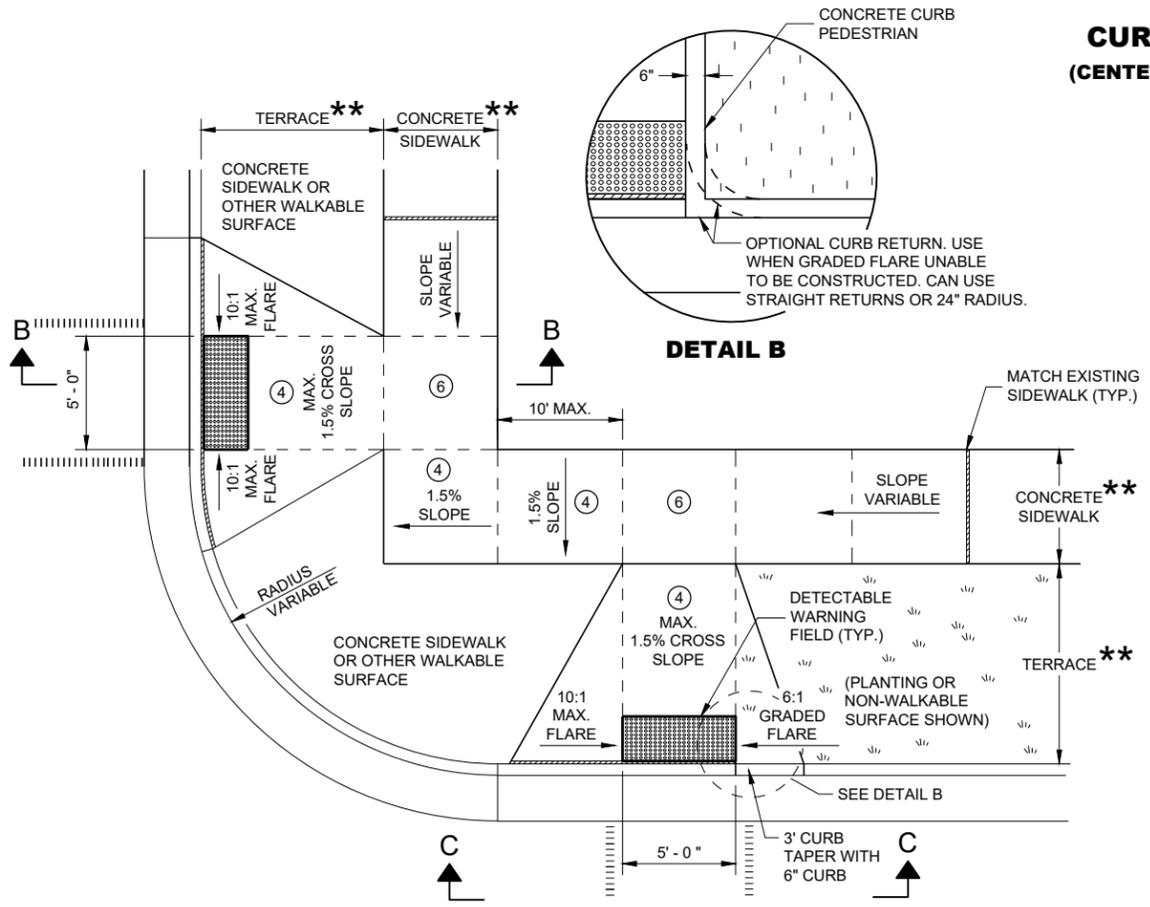
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

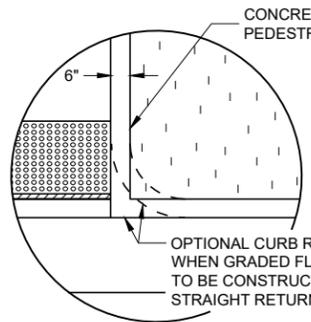
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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



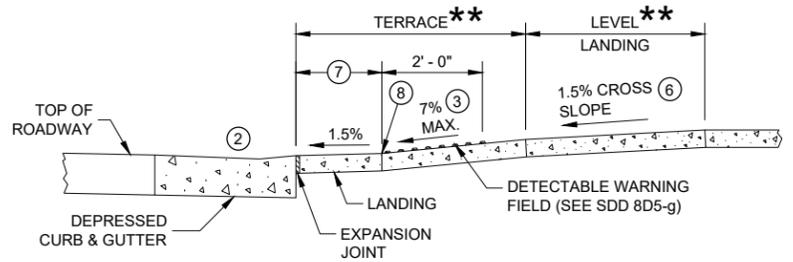
PLAN VIEW CURB RAMP TYPE 3 (OUTSIDE OF CROSSWALK AREA)



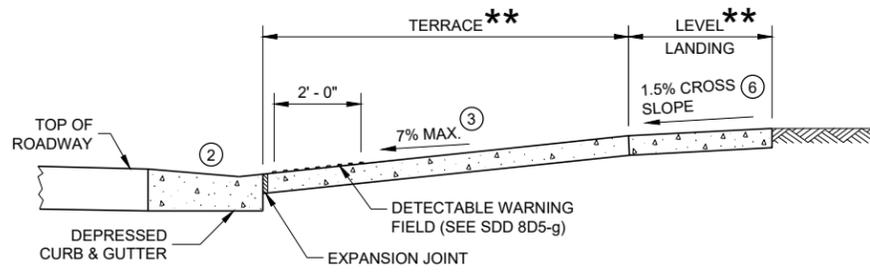
DETAIL B

GENERAL NOTES

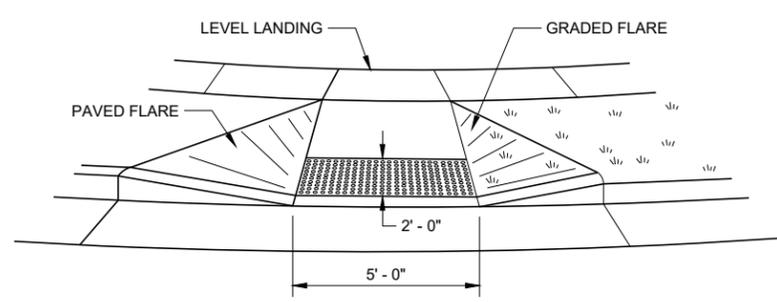
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- 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.



SECTION A - A FOR TYPE 2



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

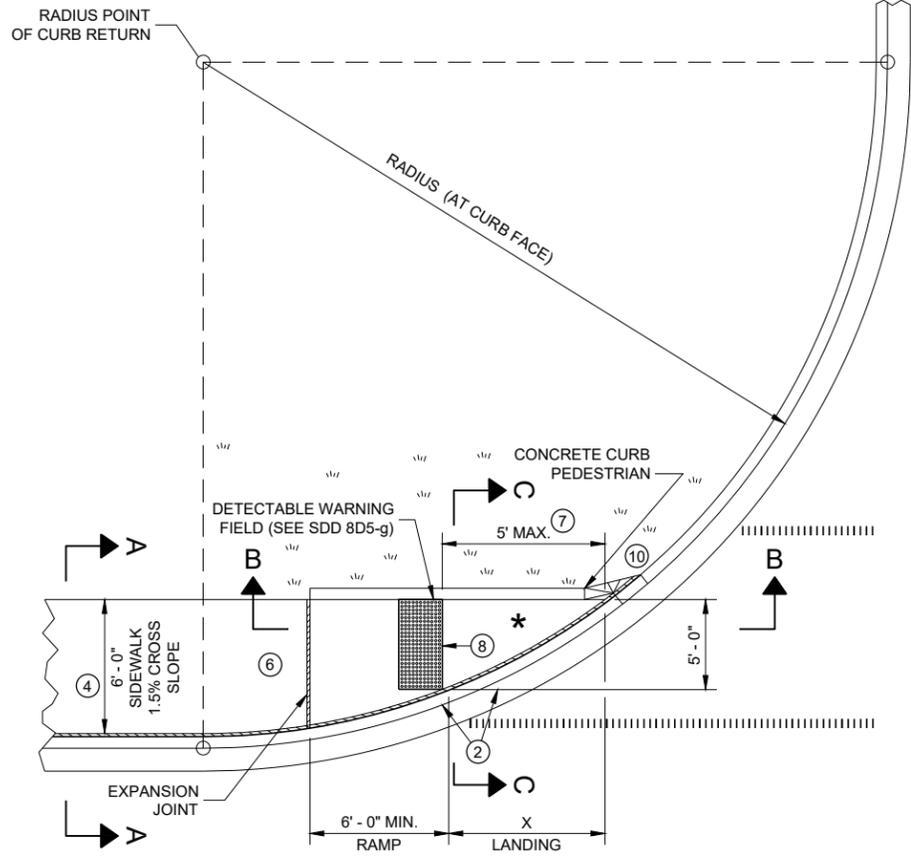
- * MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS

LEGEND

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

**CURB RAMPS
TYPE 2 AND 3**

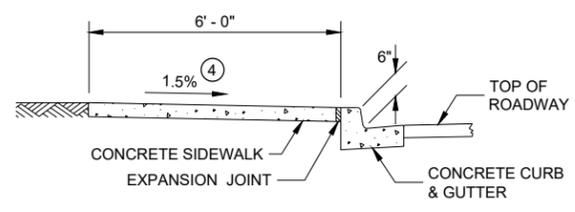
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW
CURB RAMP TYPE 4A**

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



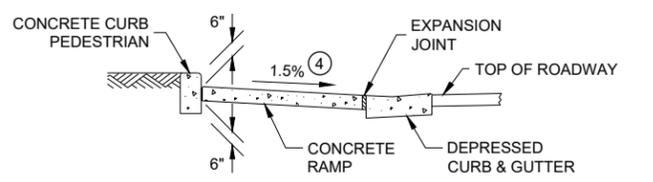
SECTION A - A FOR TYPE 4A

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 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 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.

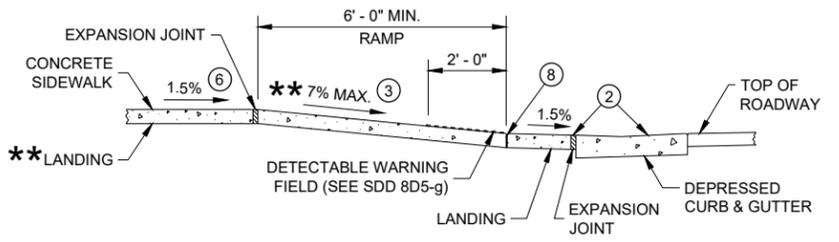
LEGEND

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



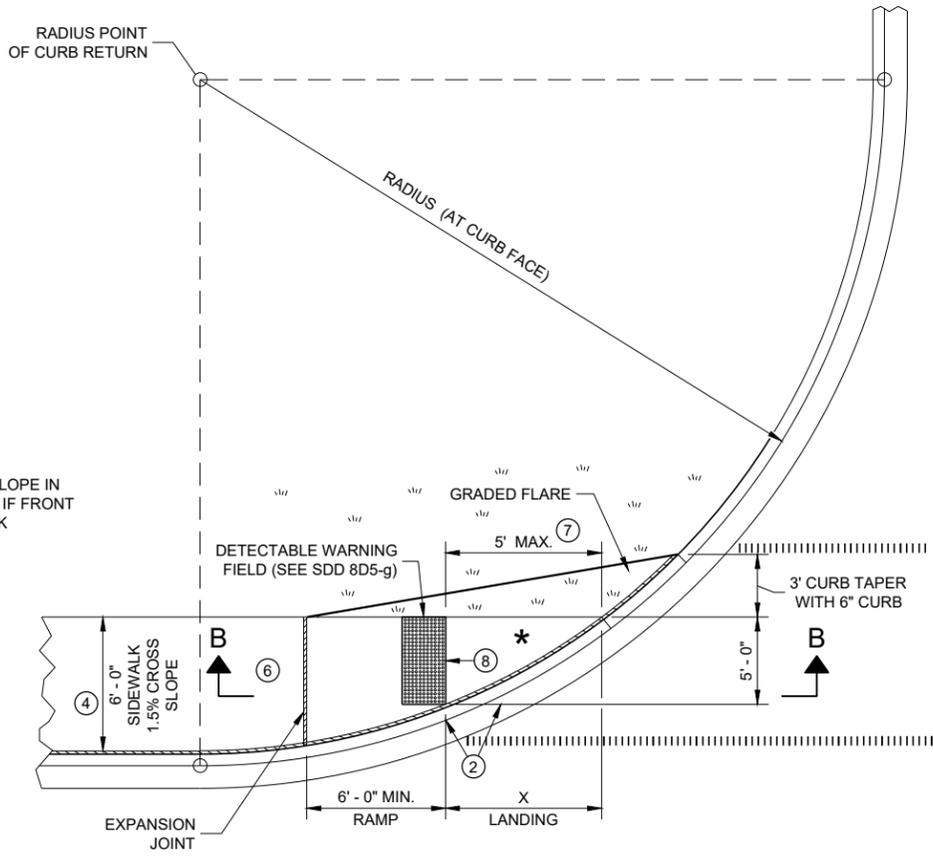
SECTION C - C FOR TYPE 4A

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

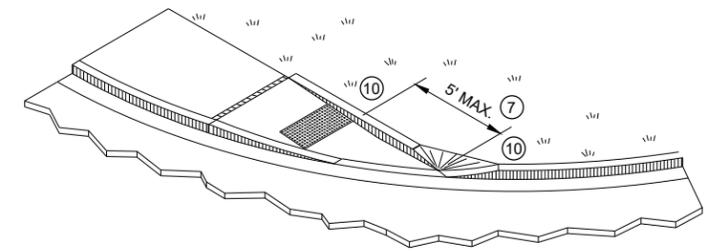


**SECTION B - B FOR
TYPE 4A AND TYPE 4A1**

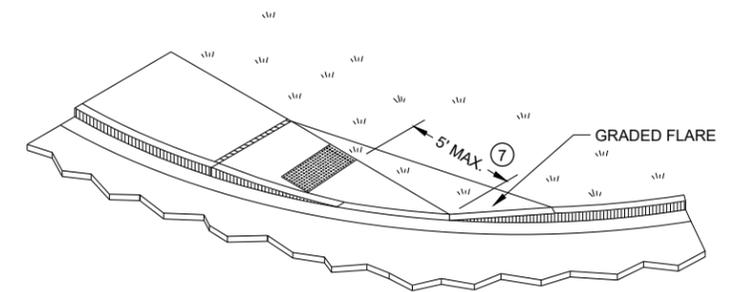
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



**PLAN VIEW
CURB RAMP TYPE 4A1**



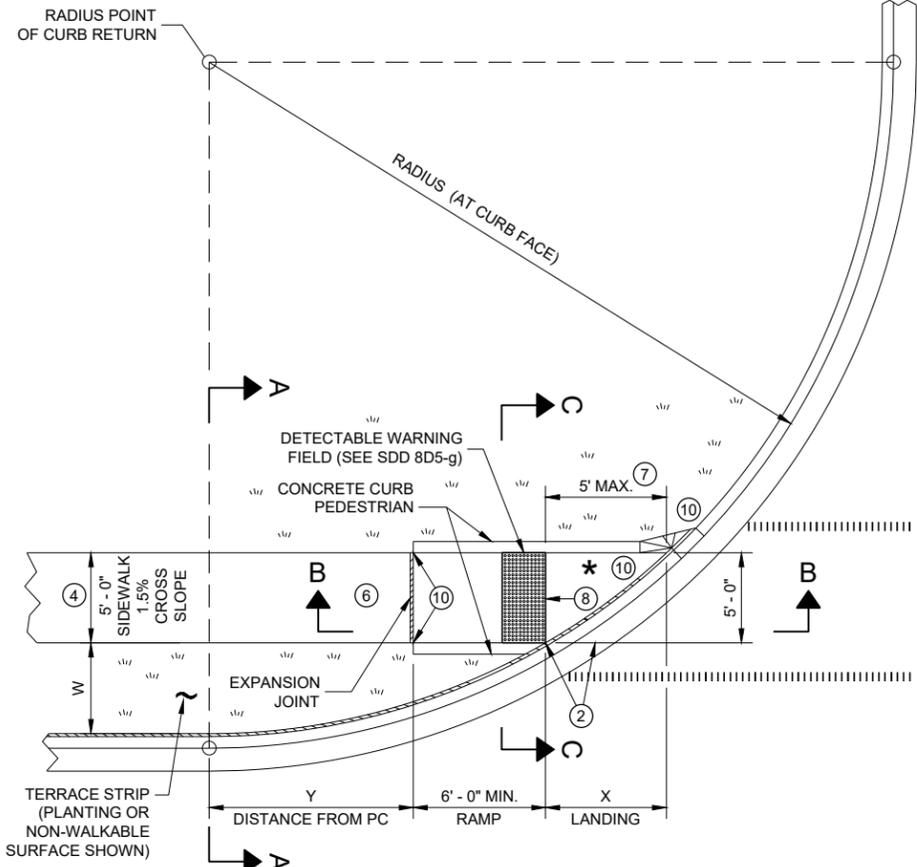
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

**CURB RAMPS
TYPE 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW
CURB RAMP TYPE 4B**

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 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET	5' - 9 3/4"	3' - 6 1/2"	4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET			6' - 9 1/4"	7' - 11 1/4"	6' - 0 1/4"	9' - 8"	5' - 5"	11' - 1 3/4"	4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET									6' - 1 3/4"	15' - 8 1/2"	5' - 8"	17' - 2"	5' - 3"	18' - 5 3/4"	4' - 10 3/4"	19' - 8 1/4"
50 FEET															5' - 10 1/4"	23' - 2"

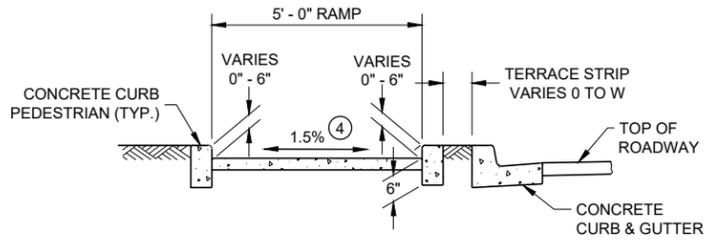
INTERMEDIATE RADII CAN BE INTERPOLATED
 DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
 DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

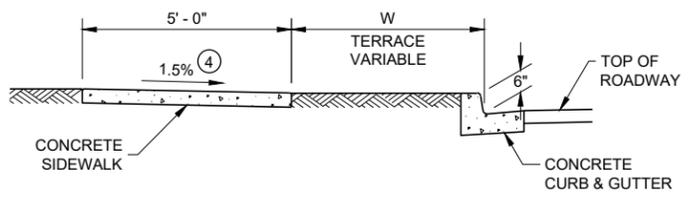
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

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 1/2 - 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 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.

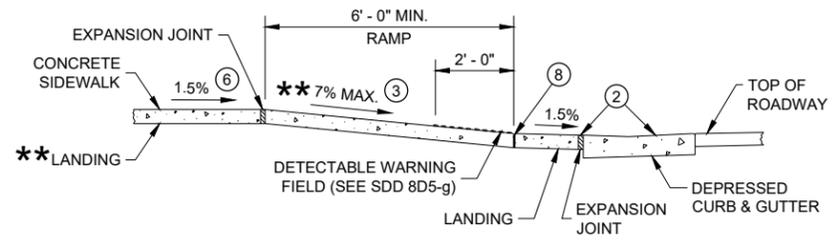


SECTION C - C FOR TYPE 4B



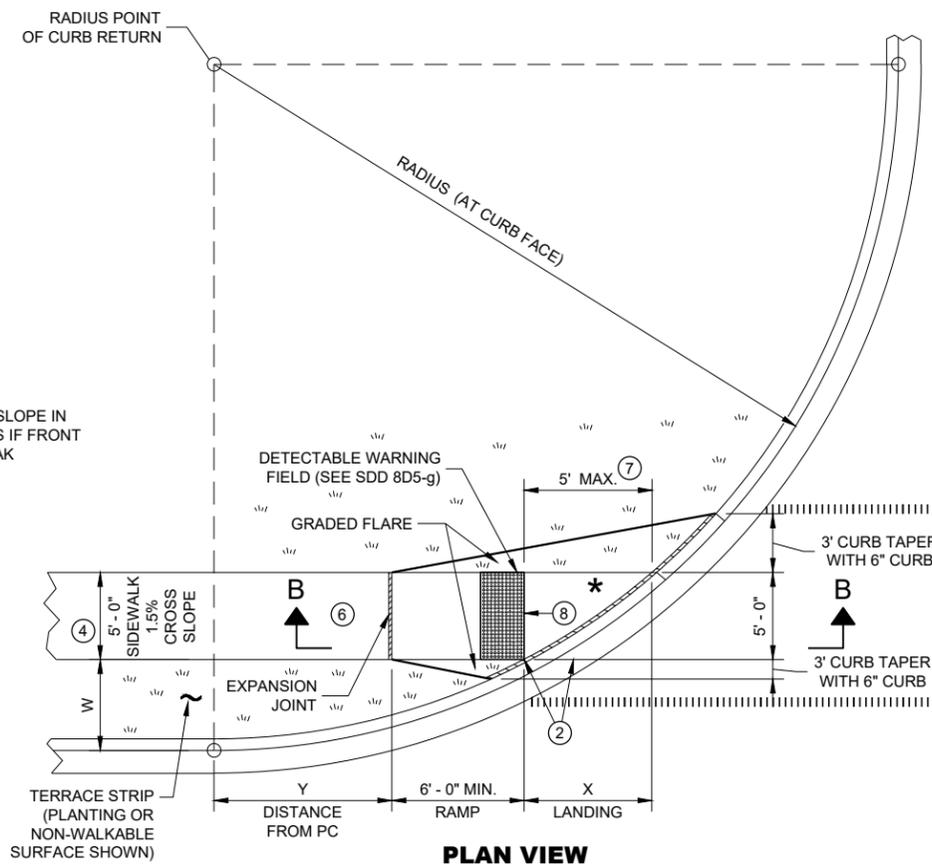
SECTION A - A FOR TYPE 4B

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

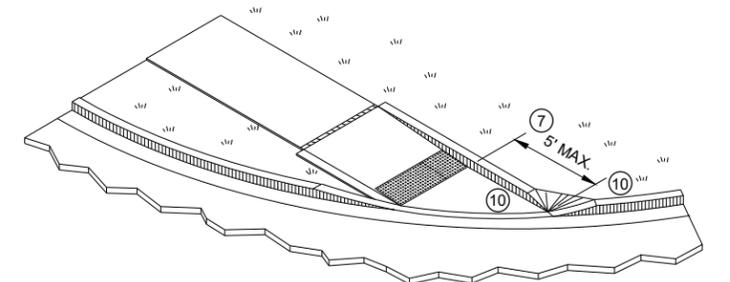


**SECTION B - B FOR
TYPE 4B AND TYPE 4B1**

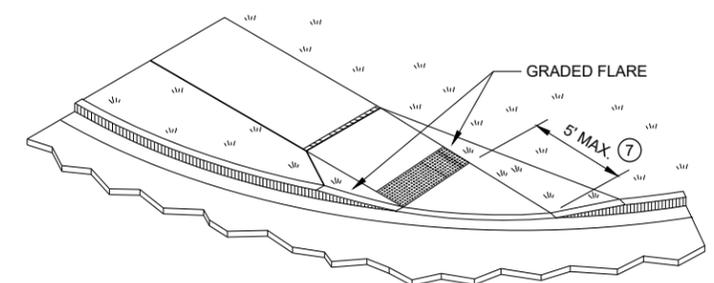
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



**PLAN VIEW
CURB RAMP TYPE 4B1**



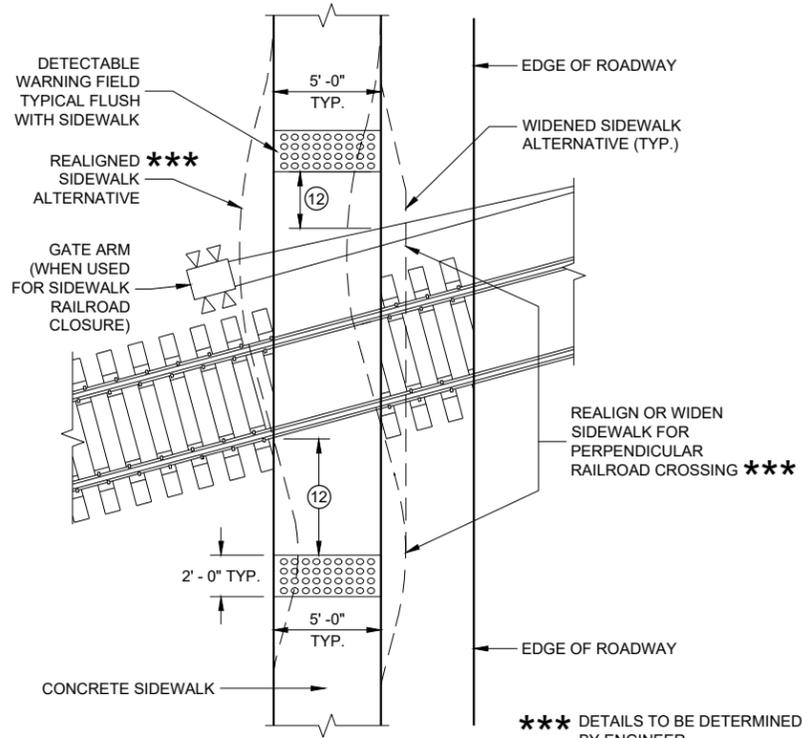
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

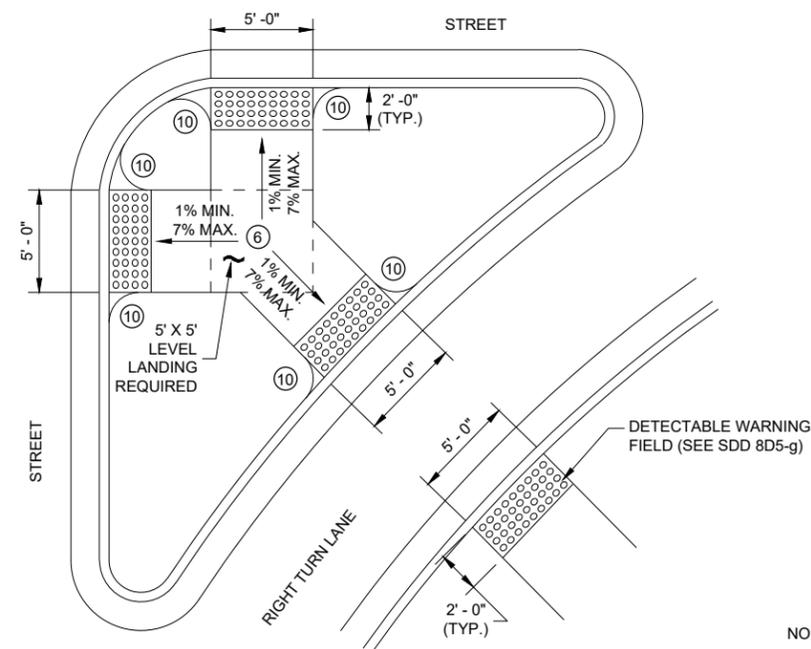
**CURB RAMPS
TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

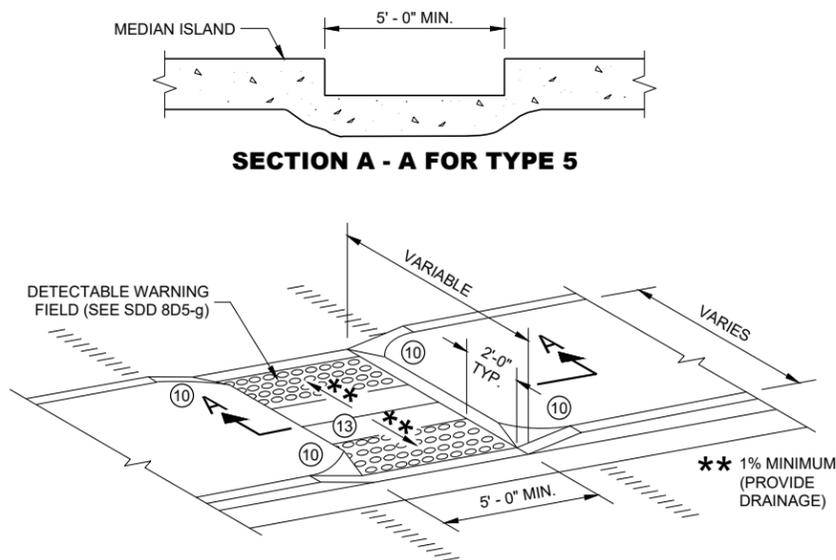
DETECTABLE WARNINGS AT RAILROAD CROSSING



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

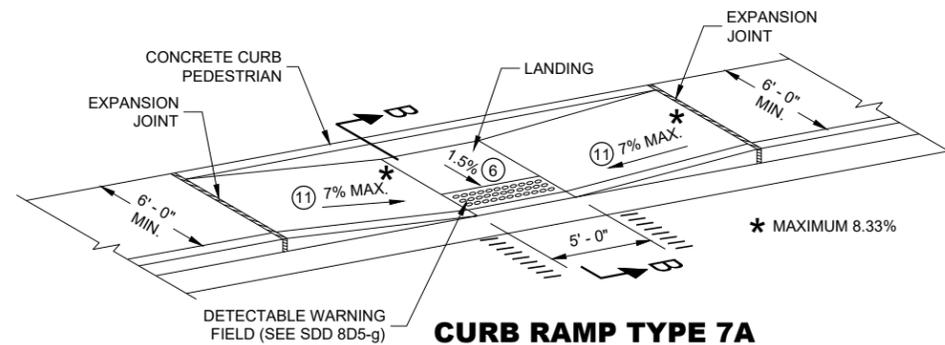
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



SECTION A - A FOR TYPE 5

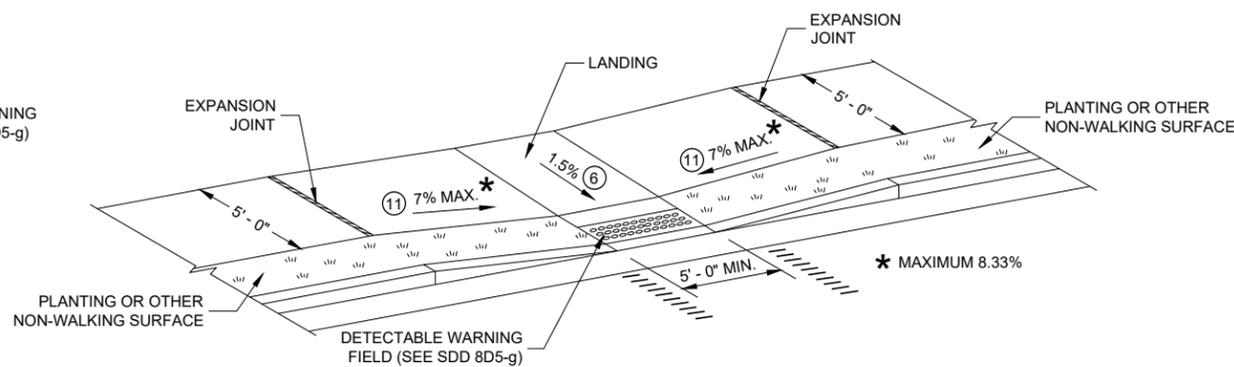
CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



CURB RAMP TYPE 7A

MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

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

GENERAL NOTES

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

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

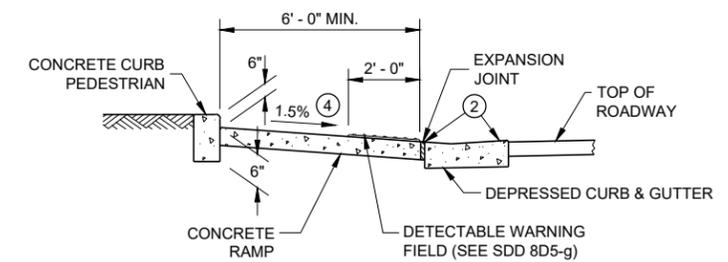
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - 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 LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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

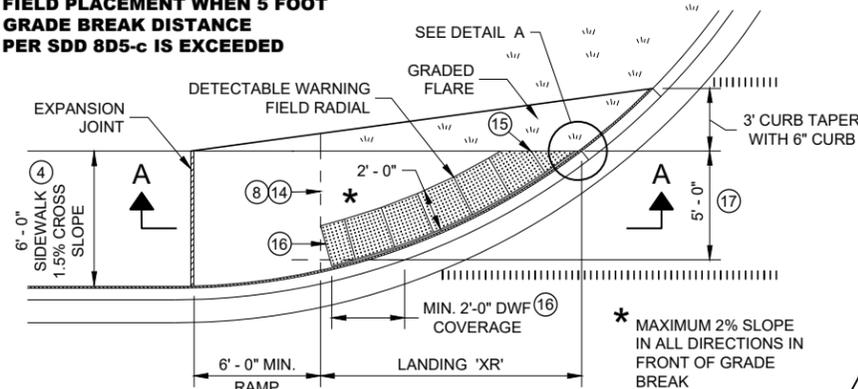


SECTION B - B FOR TYPE 7A

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

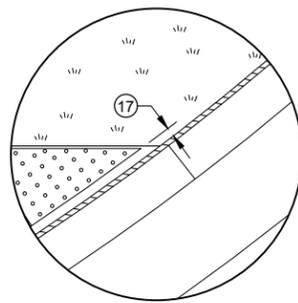
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

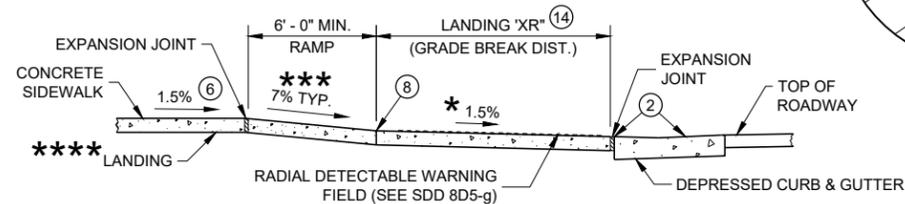


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

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



DETAIL A



SECTION A - A FOR TYPE 4A1

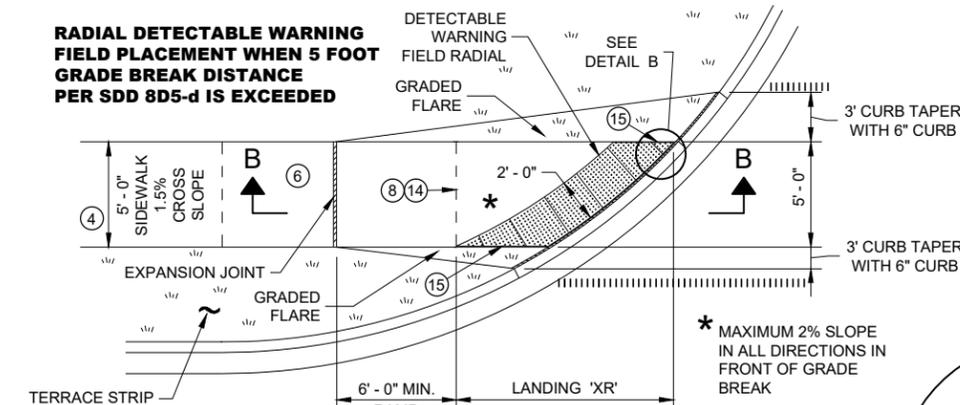
**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

GENERAL NOTES

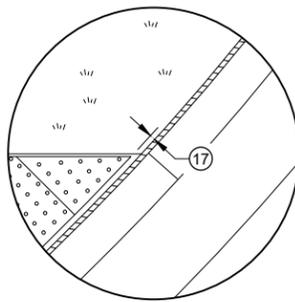
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE 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 RAMPS ARE NOT SHOWN.
- REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.
- 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.
- 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 1/8" 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 WITH IS ALLOWABLE IN FROM 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-d IS EXCEEDED

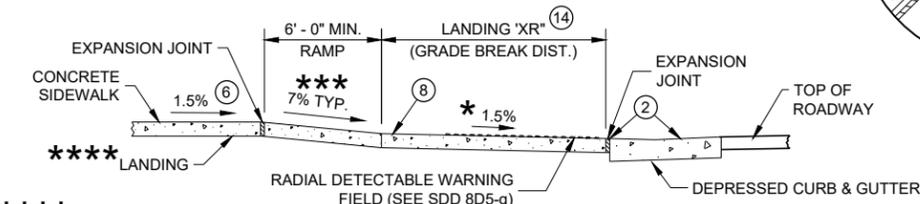


**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

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



DETAIL B

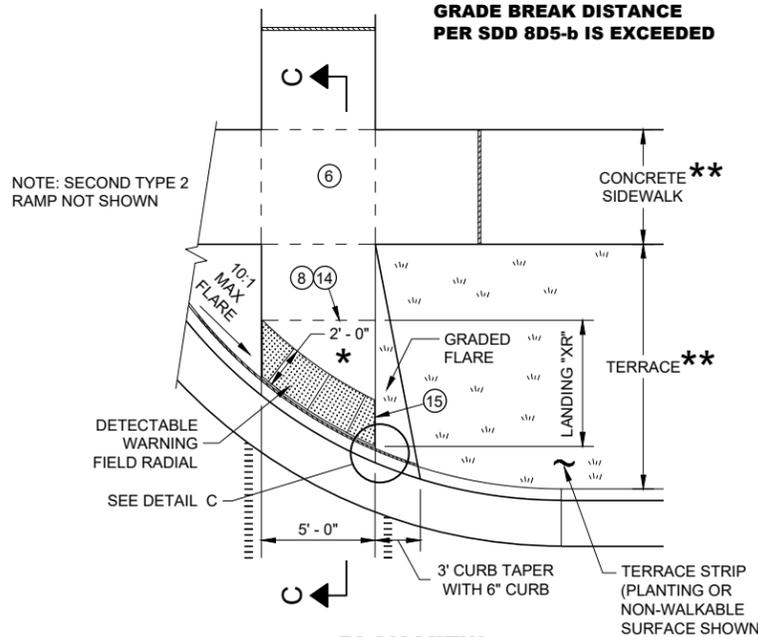


SECTION B - B FOR TYPE 4B1

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

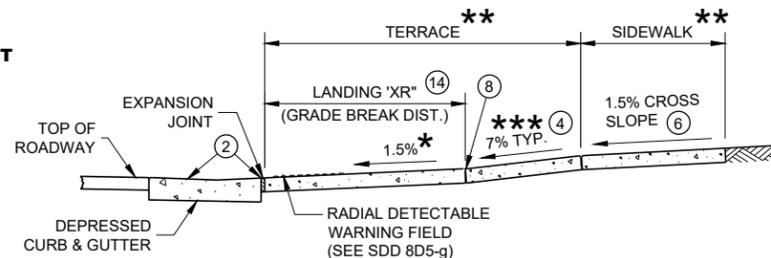
*** MAXIMUM 8.33%

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)**

NOTE: SECOND TYPE 2 RAMP NOT SHOWN

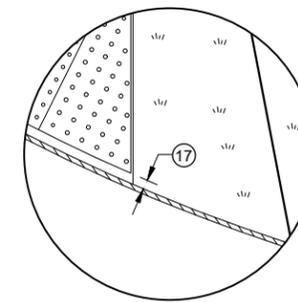


SECTION C - C FOR TYPE 2

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

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



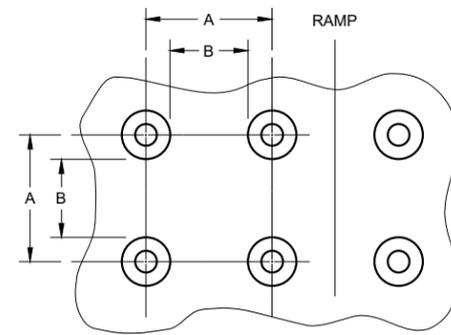
DETAIL C

**CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS**

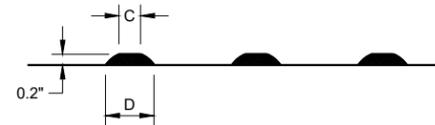
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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.

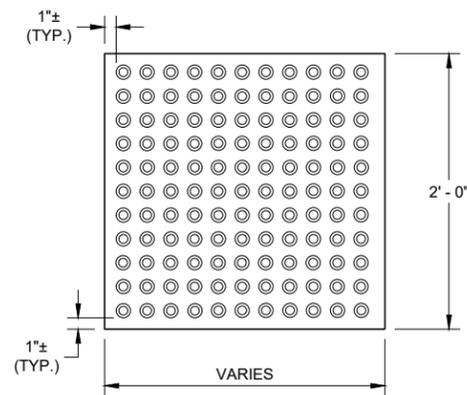


PLAN VIEW

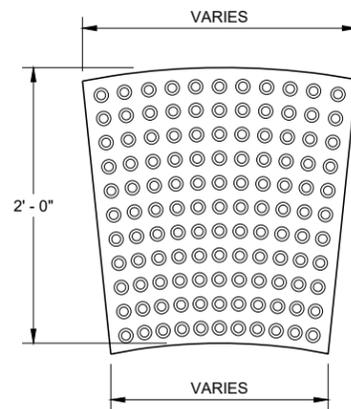


ELEVATION VIEW

**TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL**

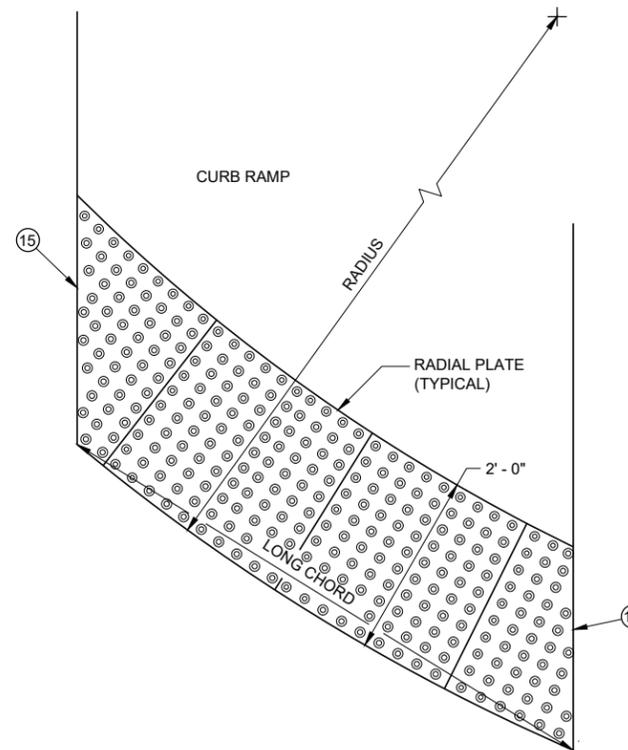


RECTANGULAR
PLATES

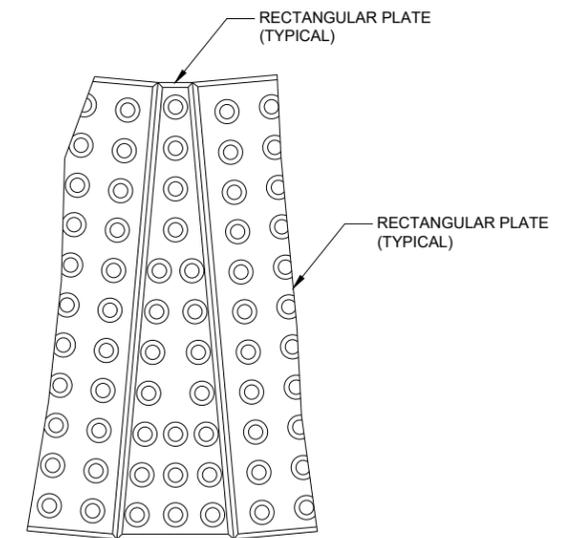


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

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 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.

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.

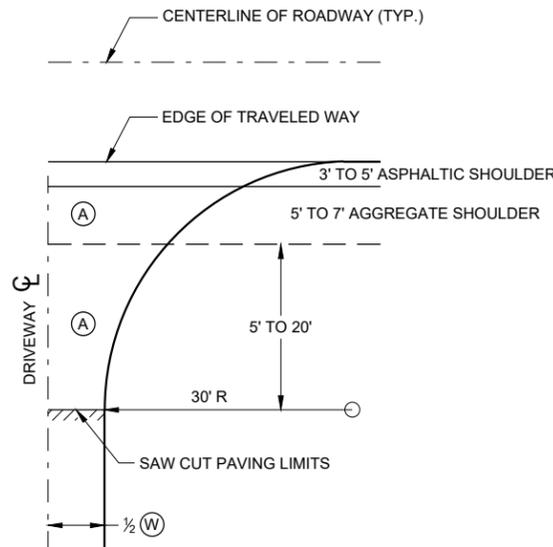
DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

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.

CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
<small>FHWA</small>	

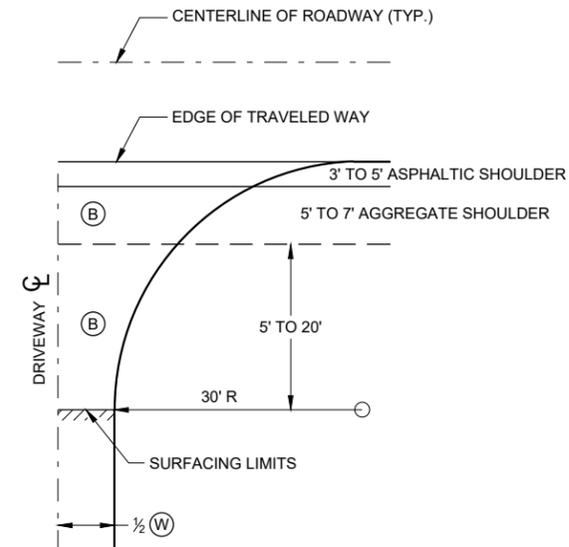
GENERAL NOTES

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

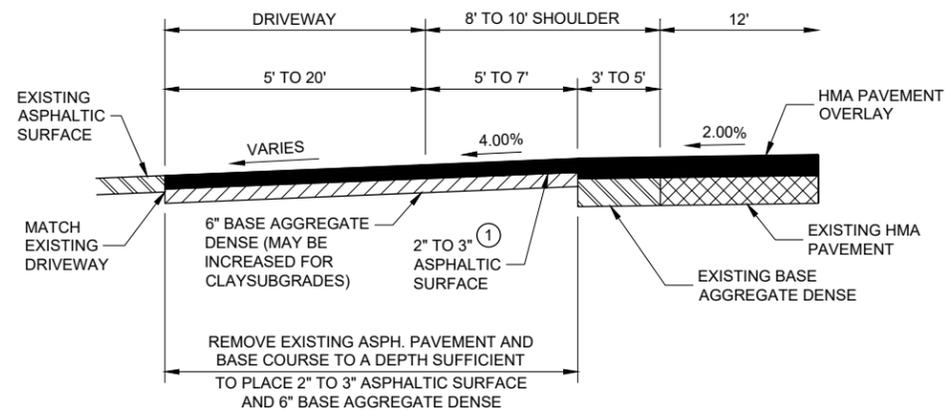


- Ⓐ : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)
- Ⓑ : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)
- ⒲ : DRIVEWAY WIDTH 16' MIN. - 24' MAX.

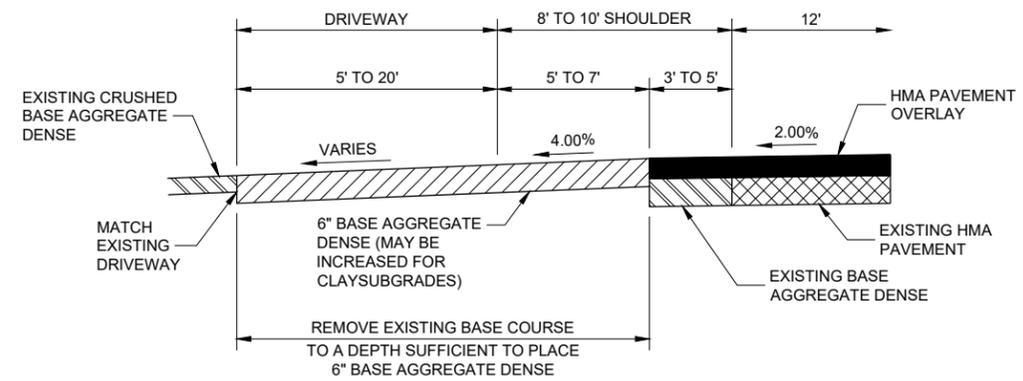
**PLAN VIEW
HALF SECTION**



**PLAN VIEW
HALF SECTION**



**PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS**



**PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS**

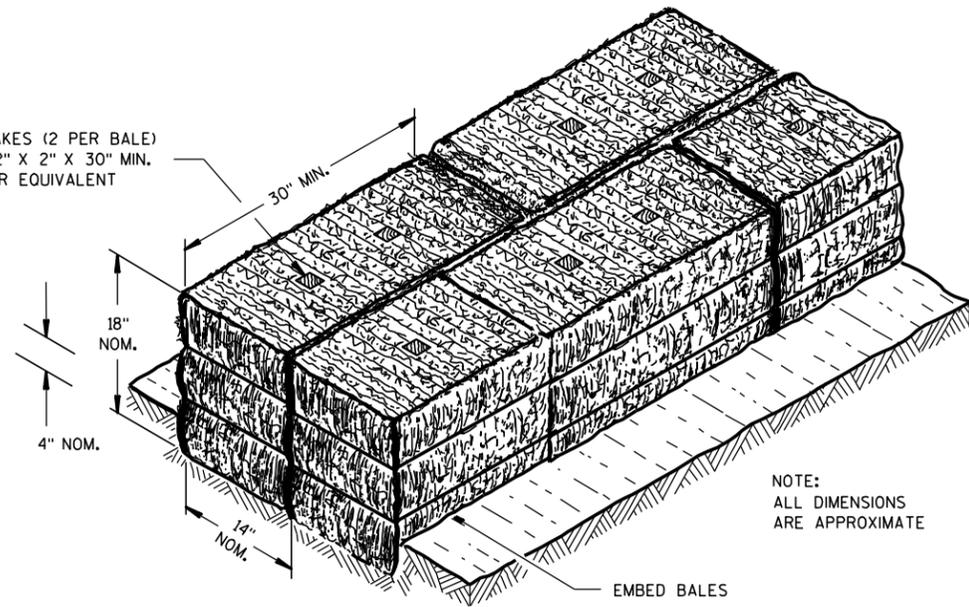
**DRIVEWAYS WITHOUT CURB
AND GUTTER RESURFACING
PROJECTS RURAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

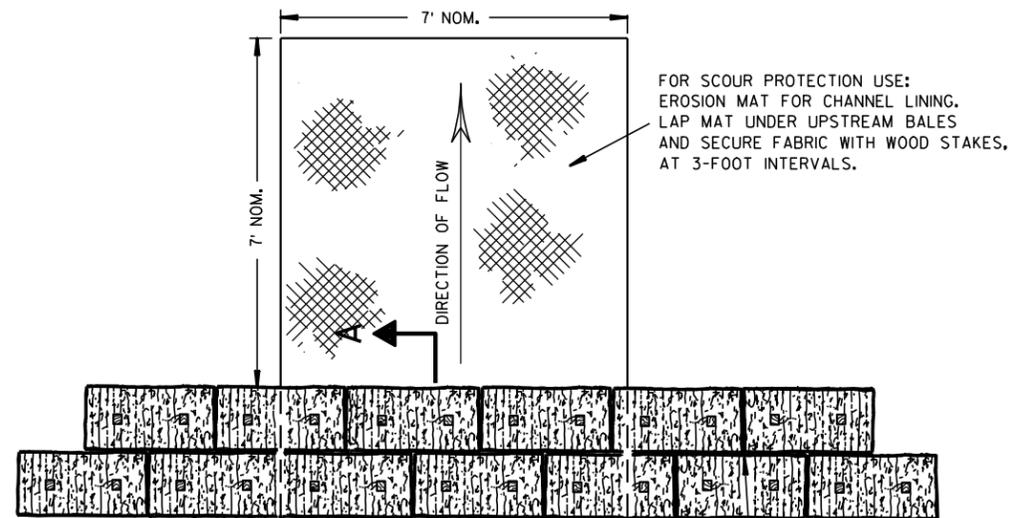
FHWA

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



NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

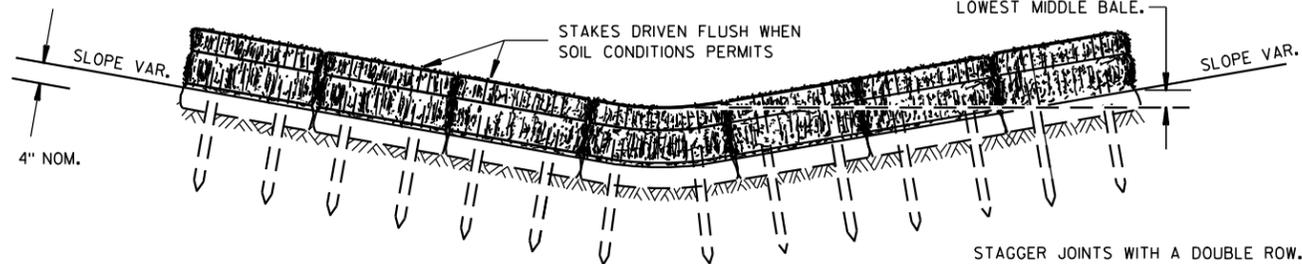
SECTION A-A



PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

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



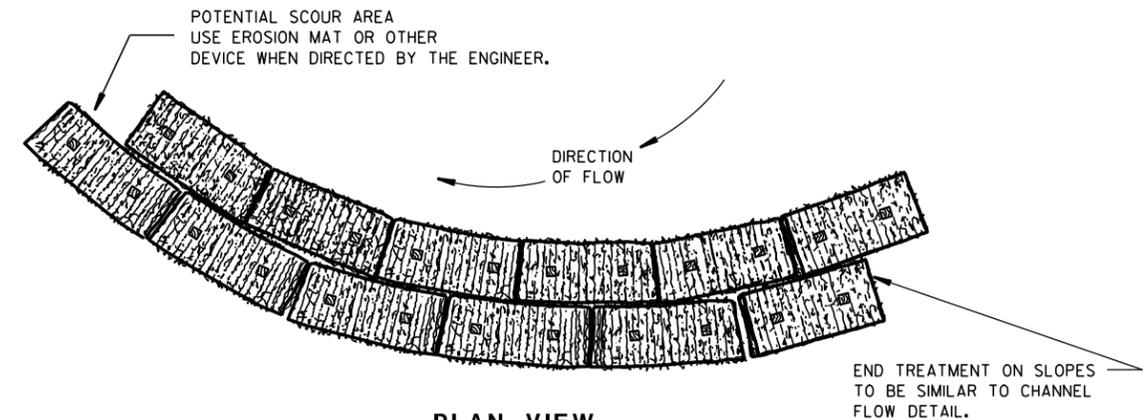
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

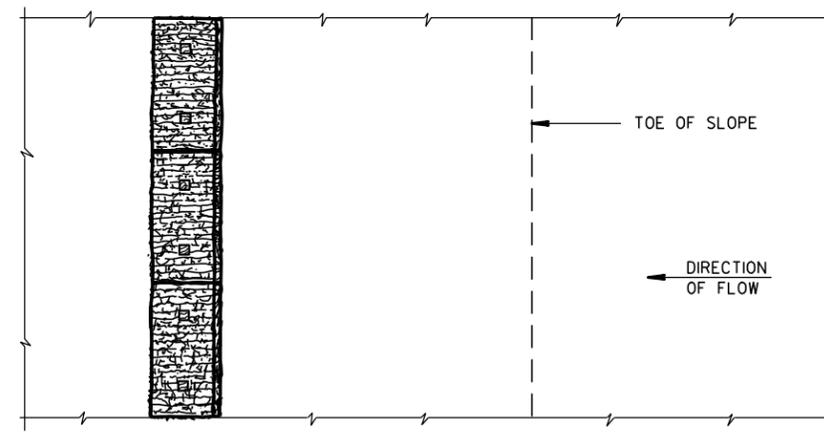
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

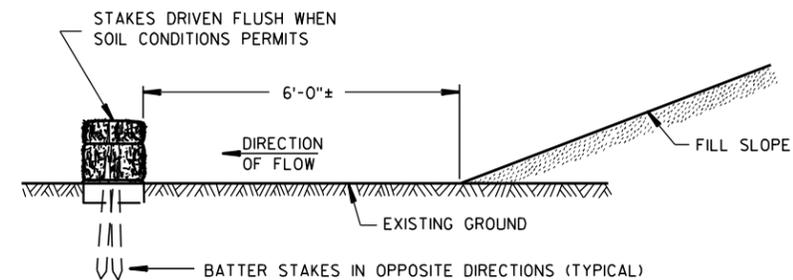


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

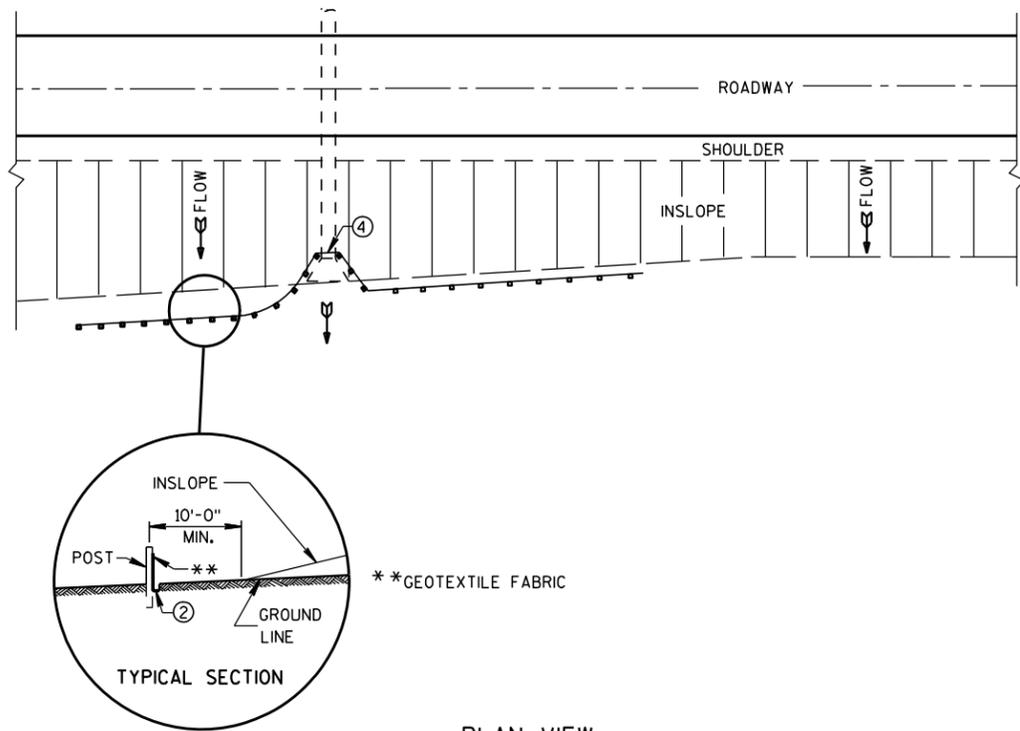
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

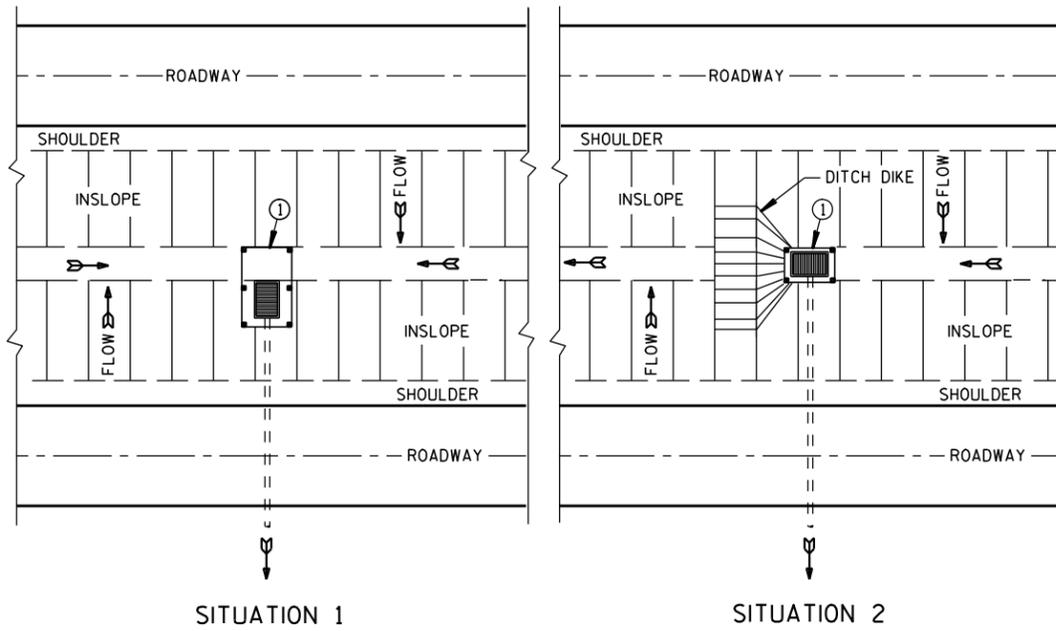
TYPICAL INSTALLATIONS OF
EROSION BALES / TEMPORARY
DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
 6/04/02 /S/ Beth Canestra
 DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
 FHWA



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

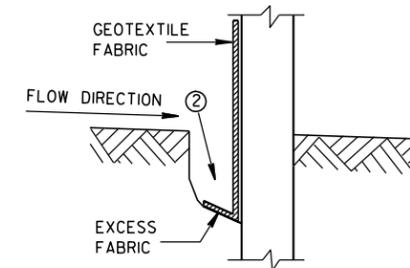


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

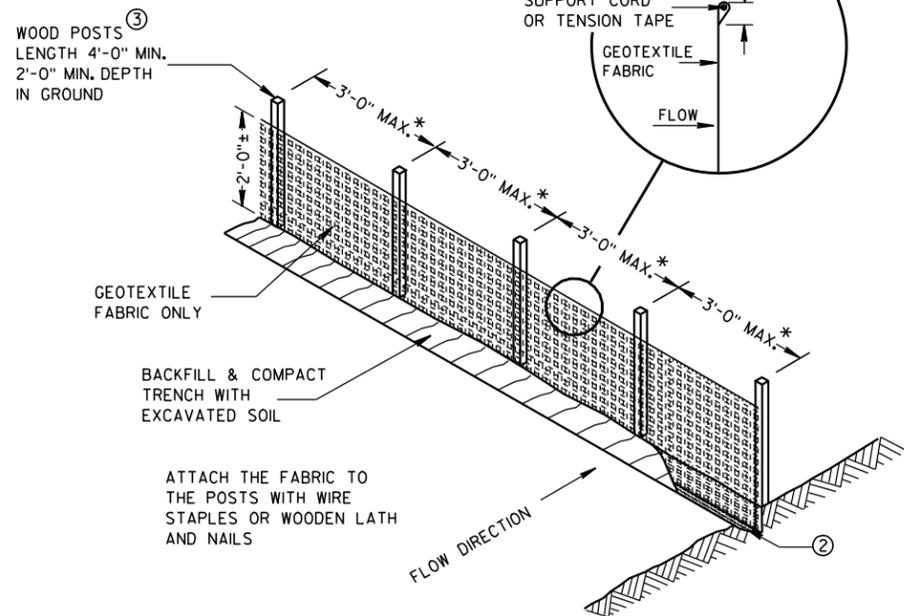
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



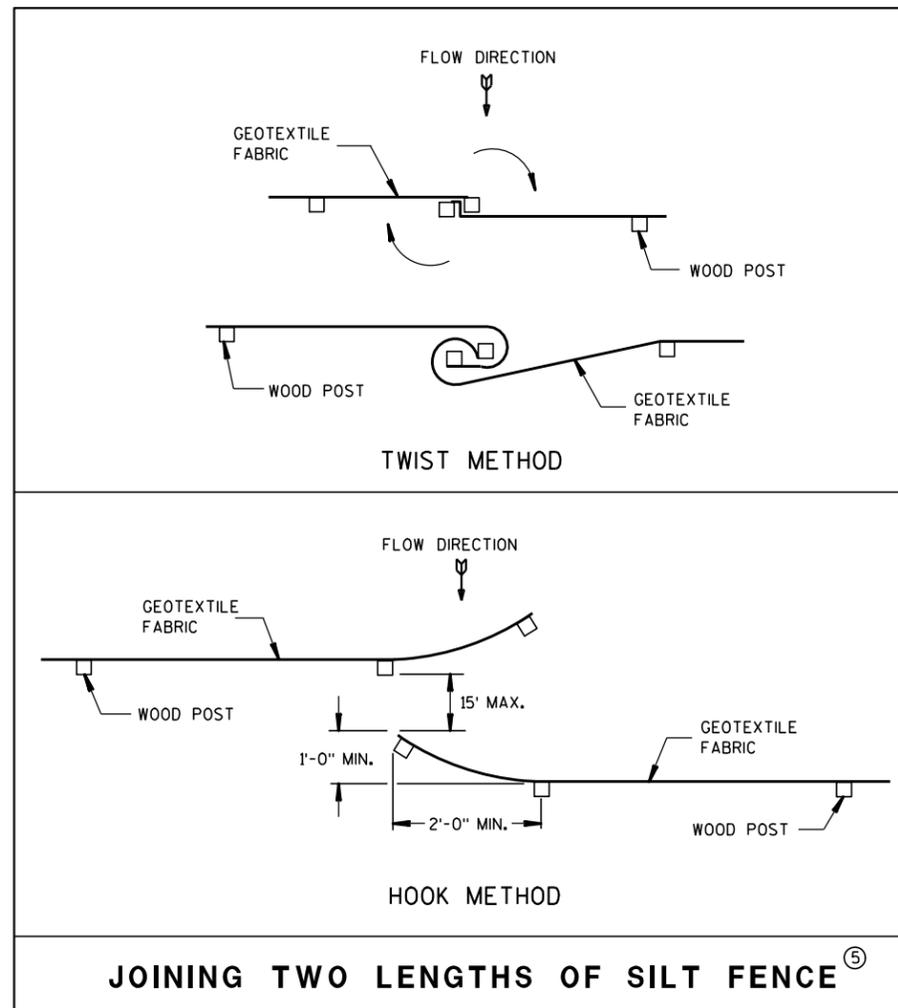
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

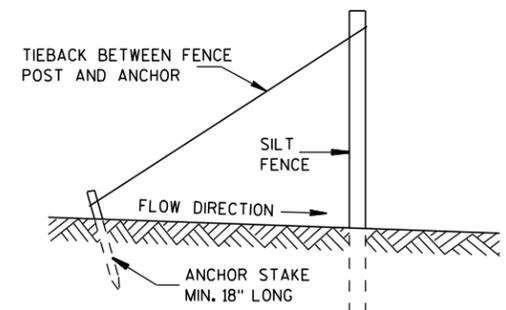


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

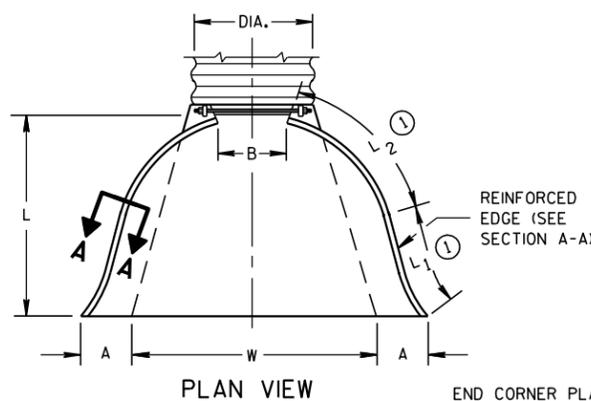
APPROVED
4-29-05 /S/ Beth Cannestra
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1	L2	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

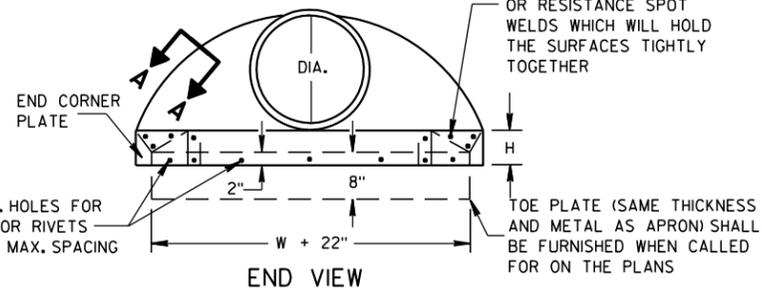
* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	72 1/8	24	2	3 to 1	
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1	
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1	
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1	
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1	
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1	
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1	
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1	
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1	
48	5	24	72	26	98	84	5	3 to 1	
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 1/2 to 1	
60	6	30-35	60	39	99	96	5	2 to 1	
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1	
72	7	24-36	78	21	99	108	6	2 to 1	
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1	
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1	
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1	

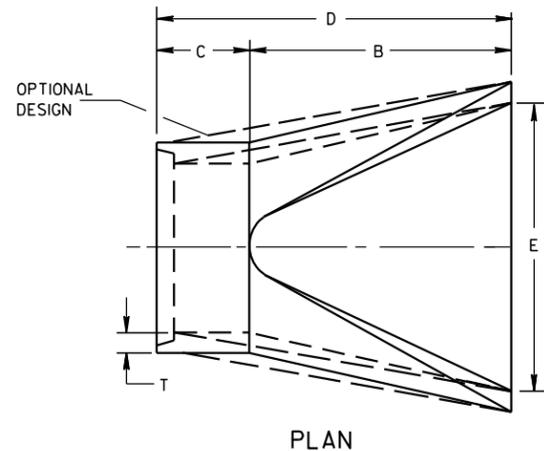
* MINIMUM
** MAXIMUM



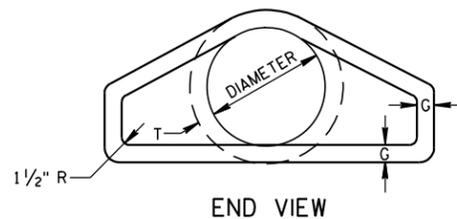
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



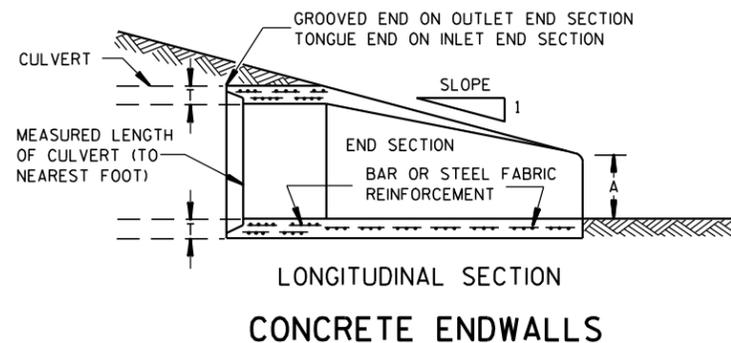
SIDE ELEVATION
METAL ENDWALLS



PLAN

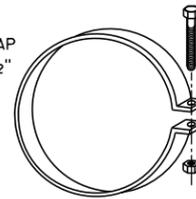


END VIEW

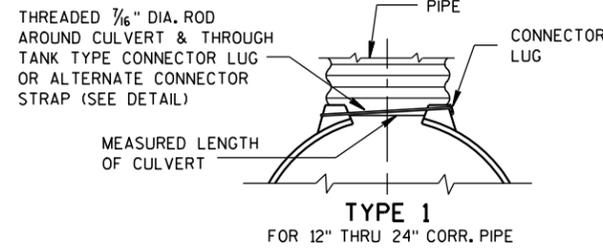


LONGITUDINAL SECTION
CONCRETE ENDWALLS

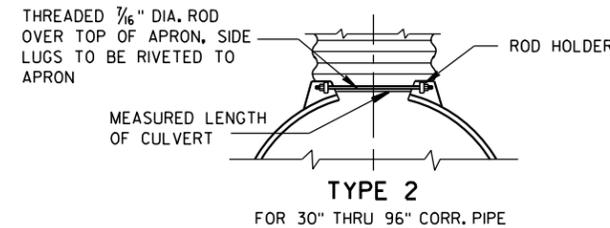
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



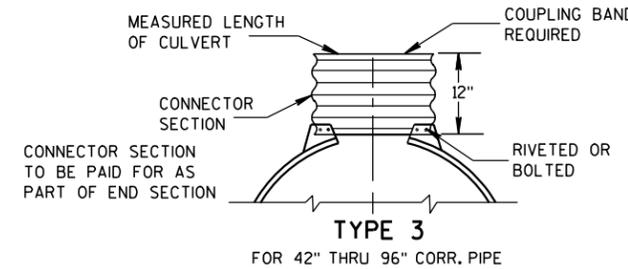
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



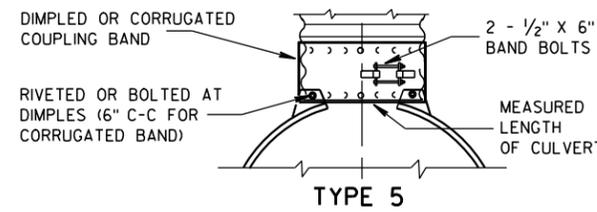
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

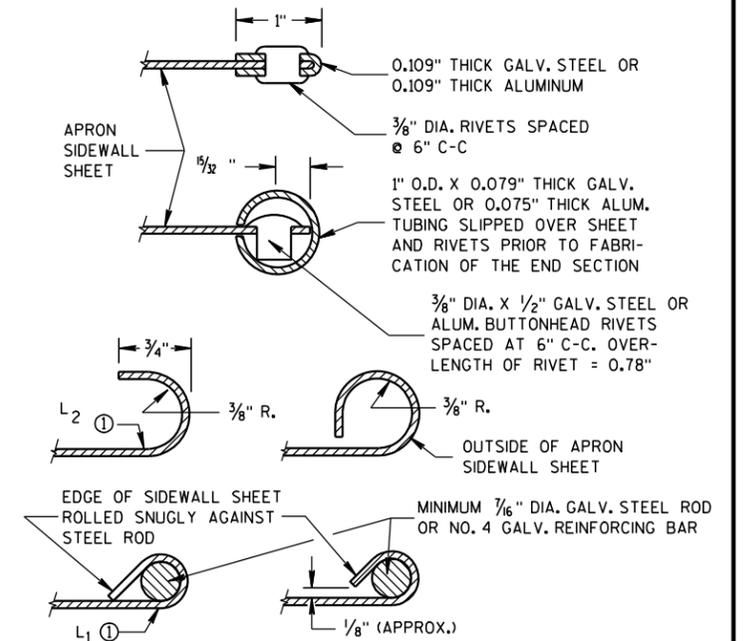
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

GENERAL NOTES

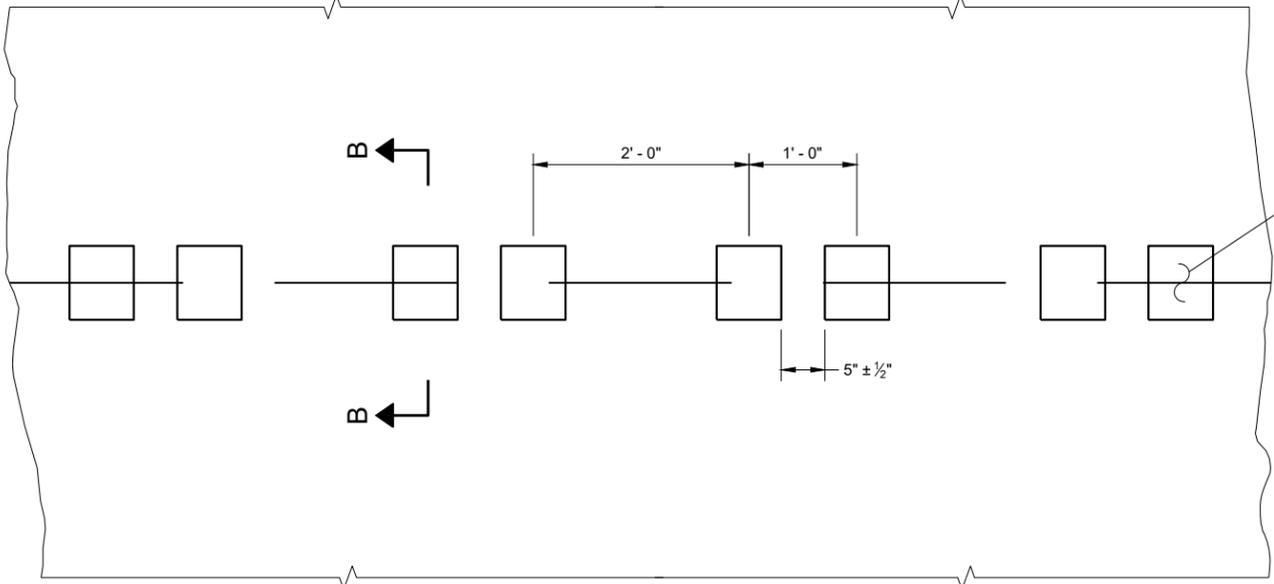
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

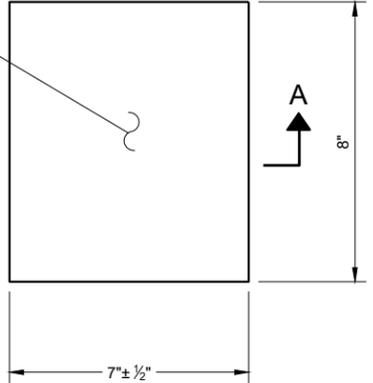
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

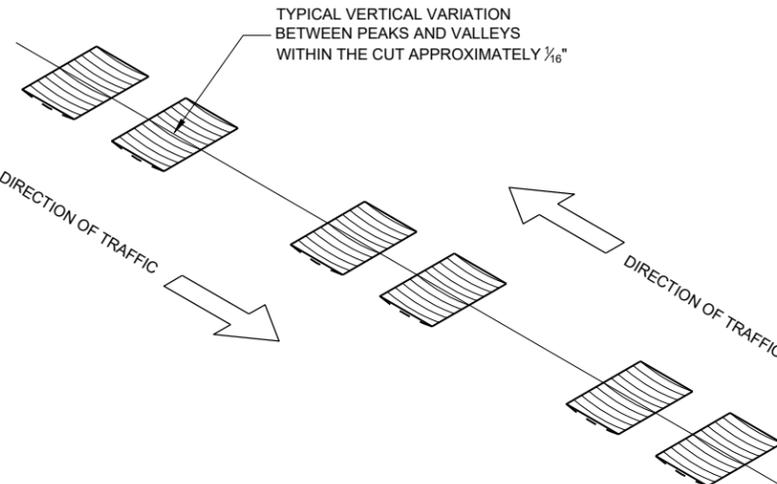
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



**PLAN VIEW
SHOULDER WITH GROOVES**

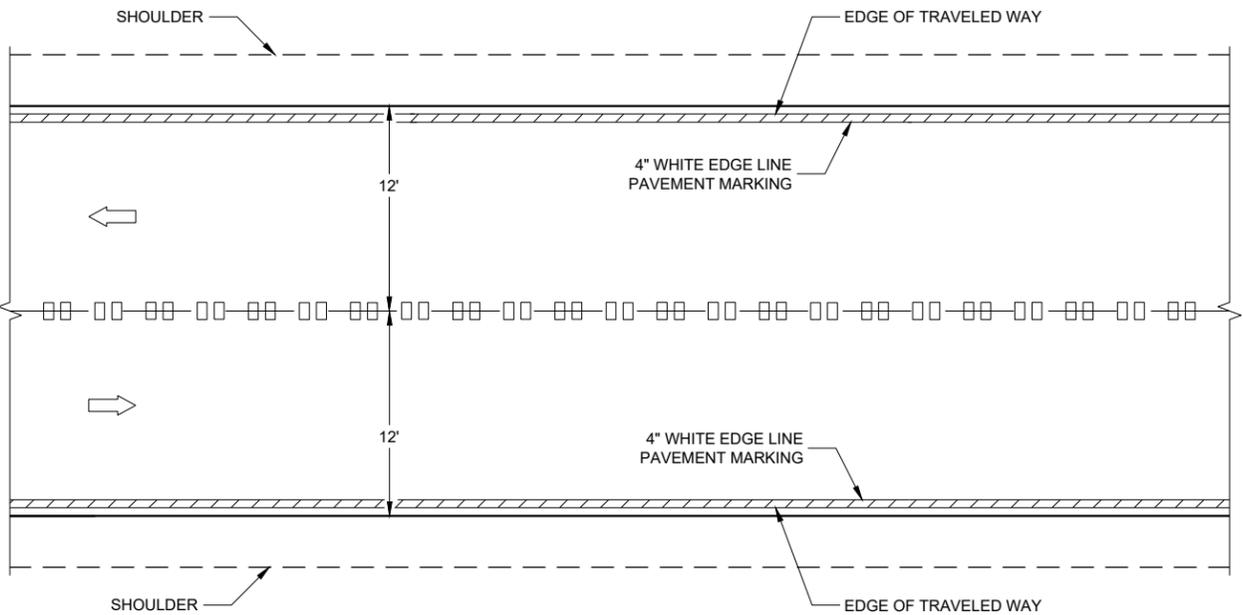


**PLAN VIEW
(SINGLE GROOVE)**

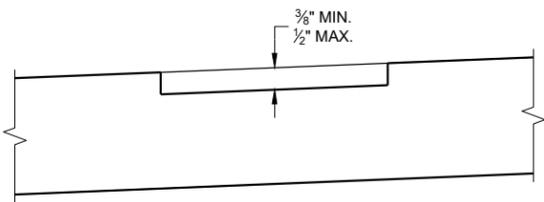


ISOMETRIC

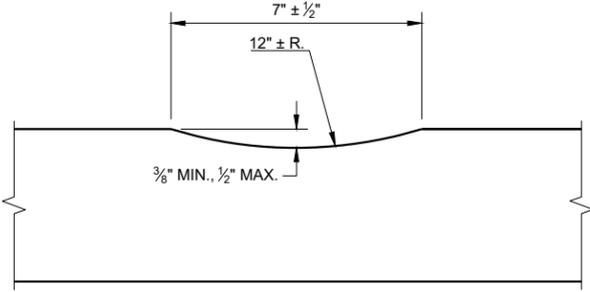
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



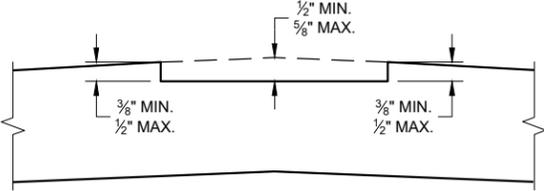
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



**SECTION B - B
SUPERELEVATED ROADWAY**



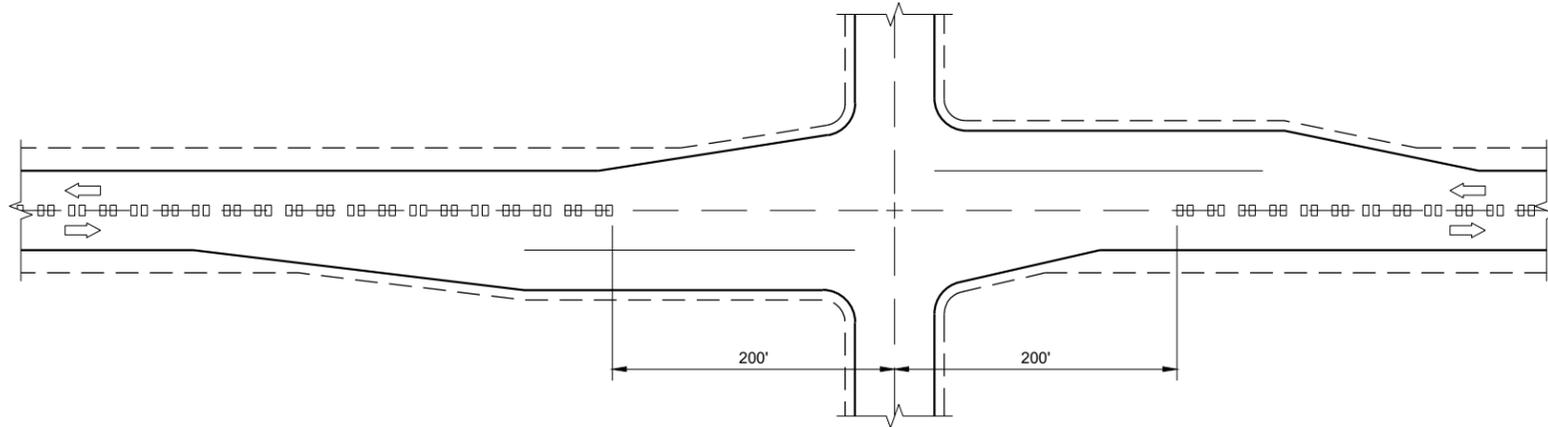
SECTION A - A



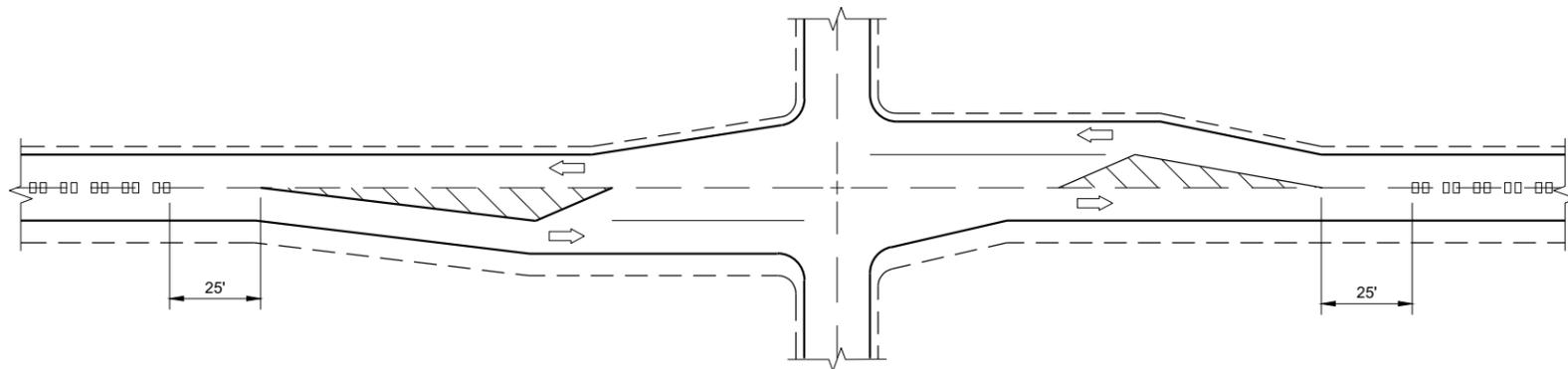
**SECTION B - B
CROWNED ROADWAY**

**2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING**

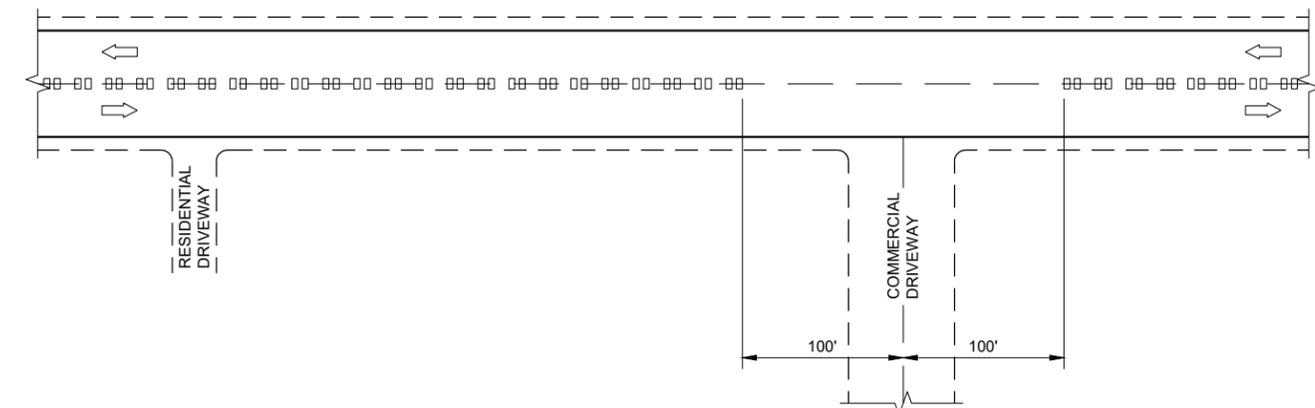
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



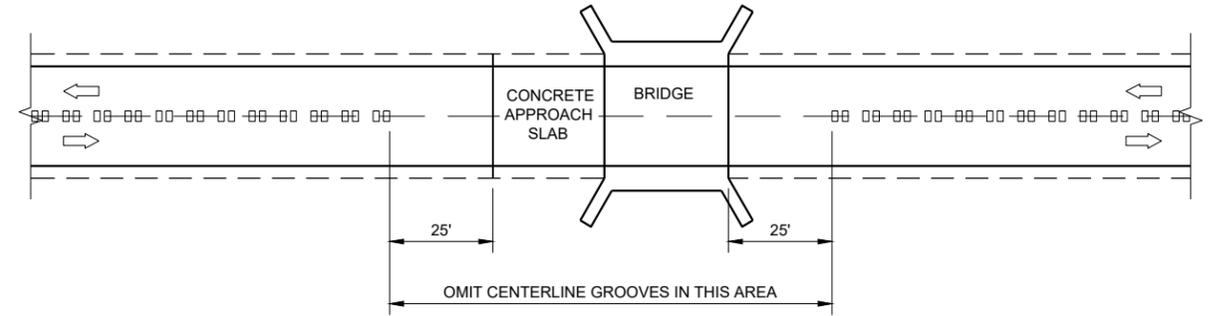
**CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)**



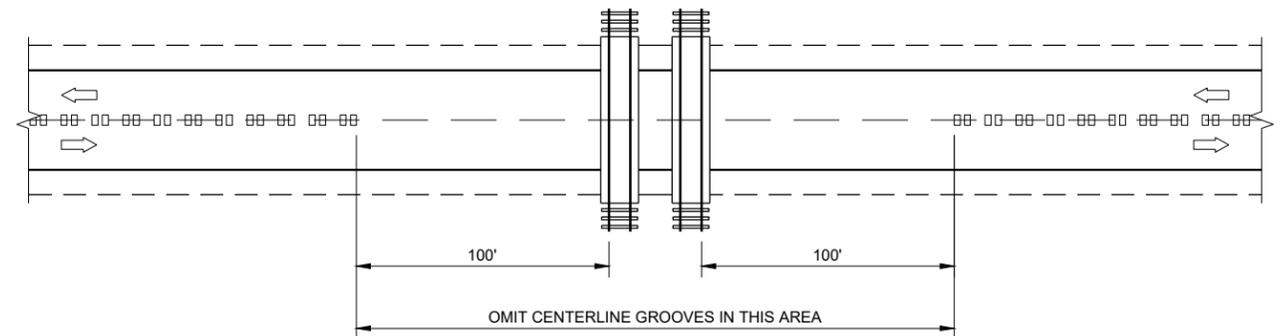
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

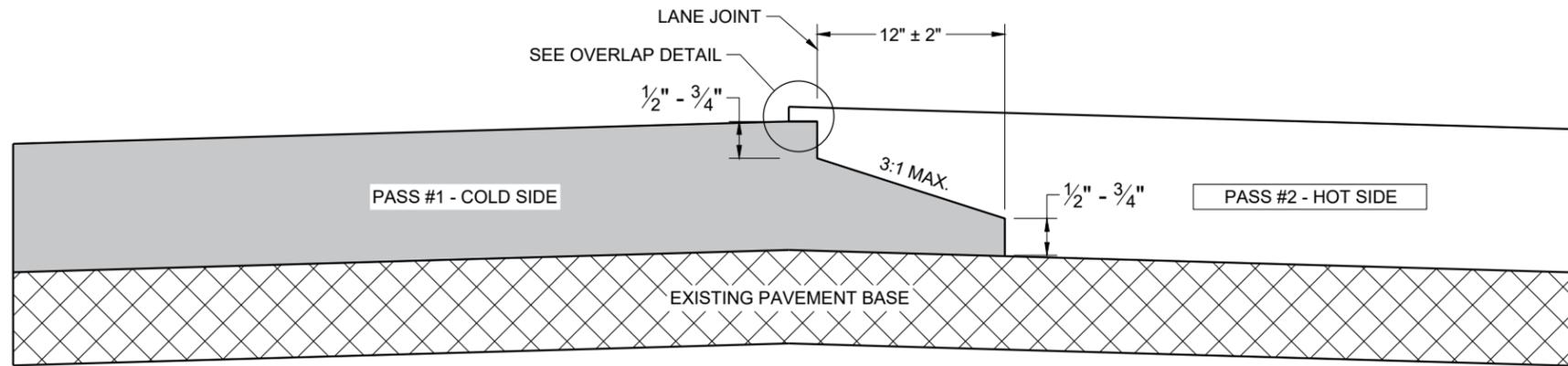
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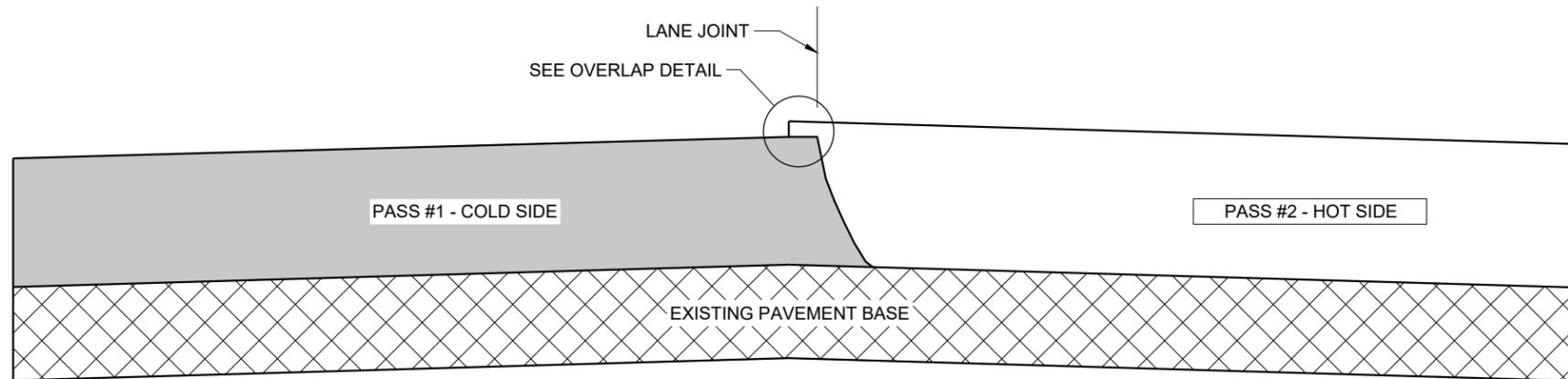
SDD 13A11 - 03b

SDD 13A11 - 03b

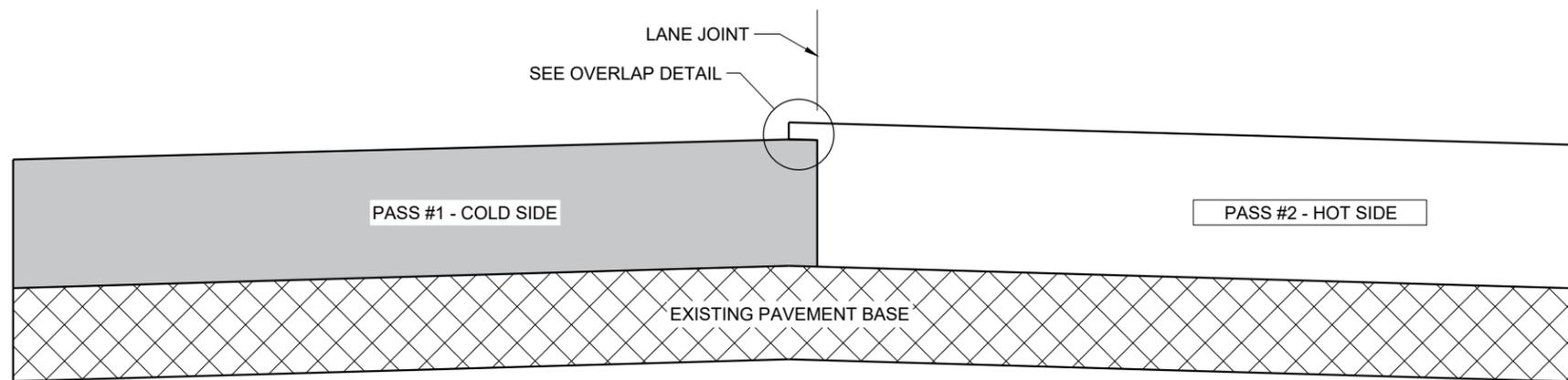
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/2018 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

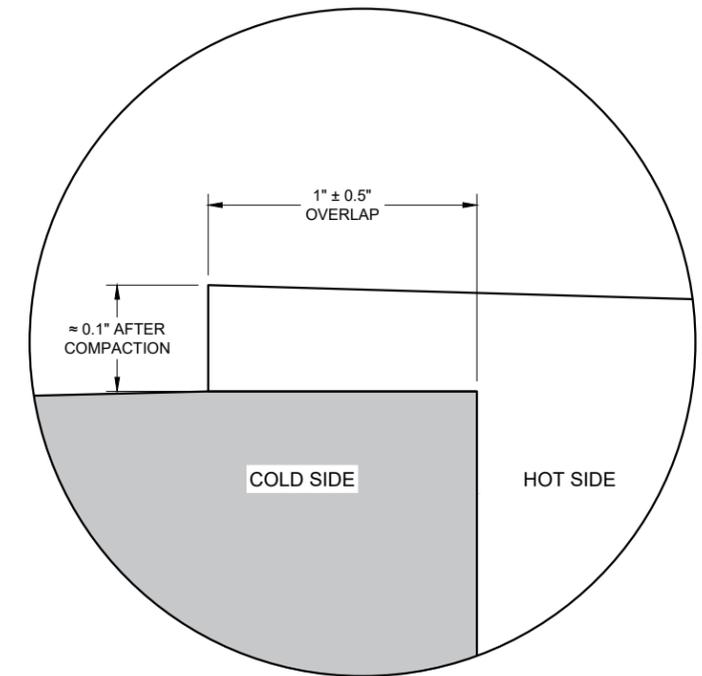
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

6

6

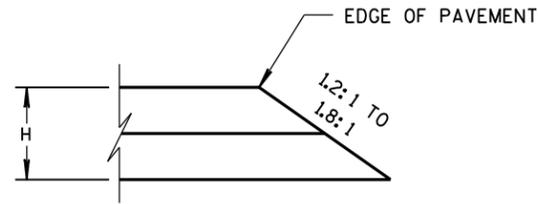
SDD 13C19 - 03

SDD 13C19 - 03

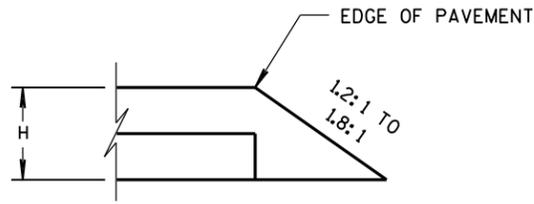
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

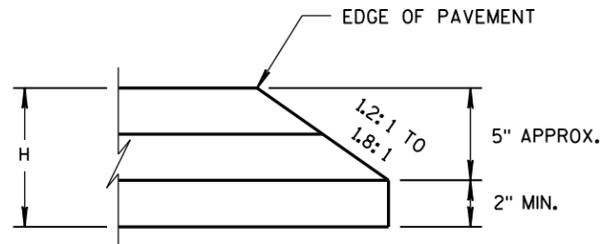
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



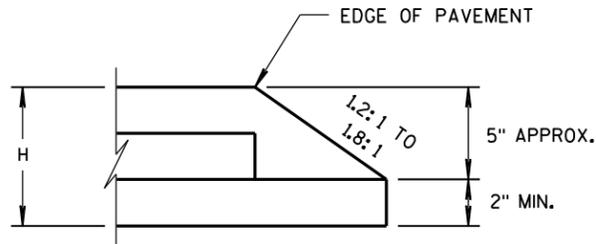
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

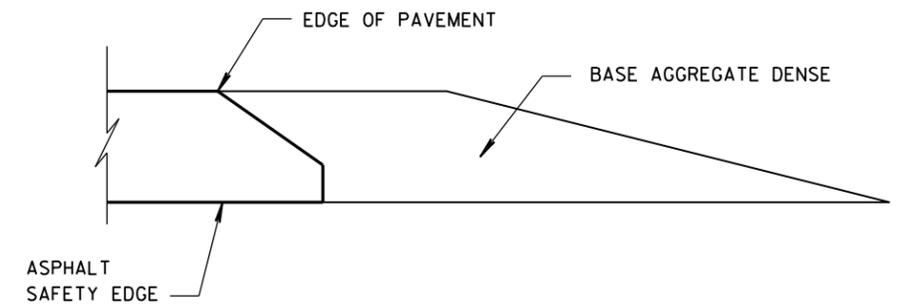


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

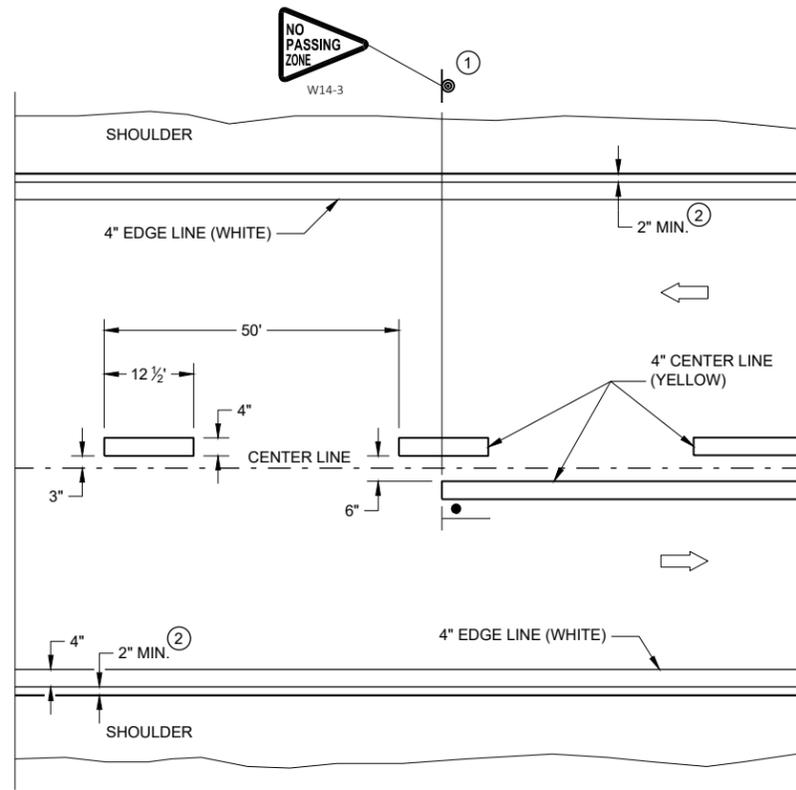
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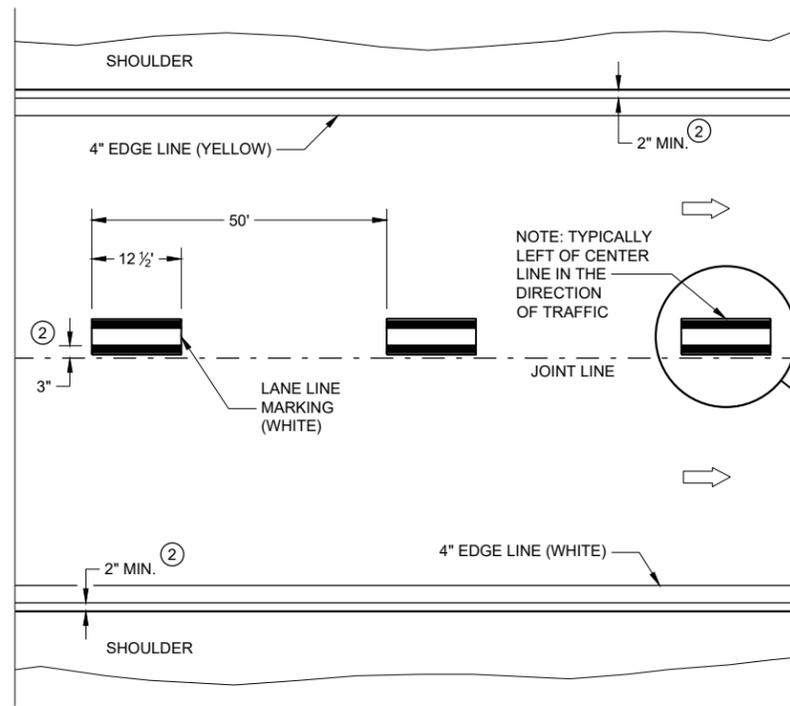
S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE _{SM}	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 11/30/2012	/s/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

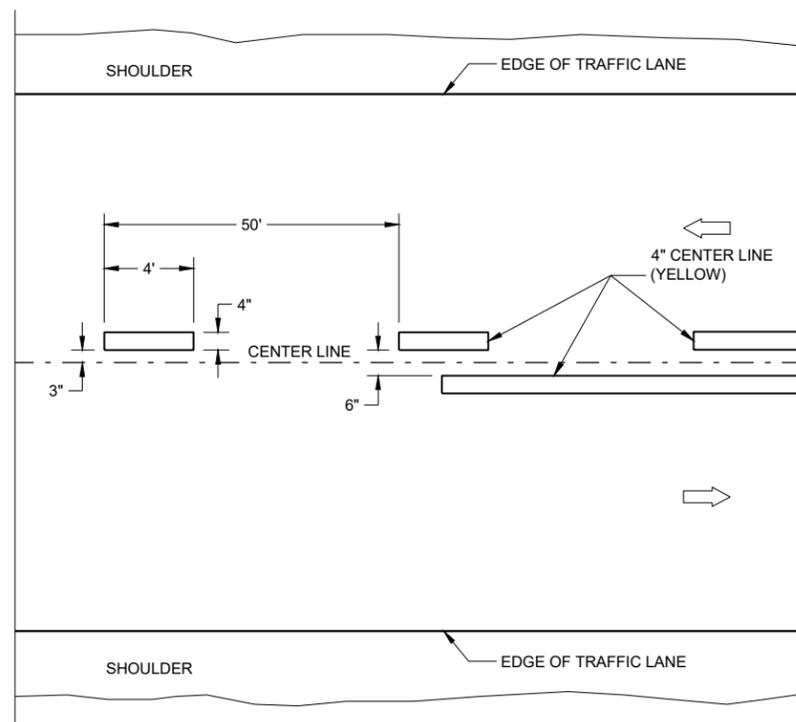


TWO WAY TRAFFIC

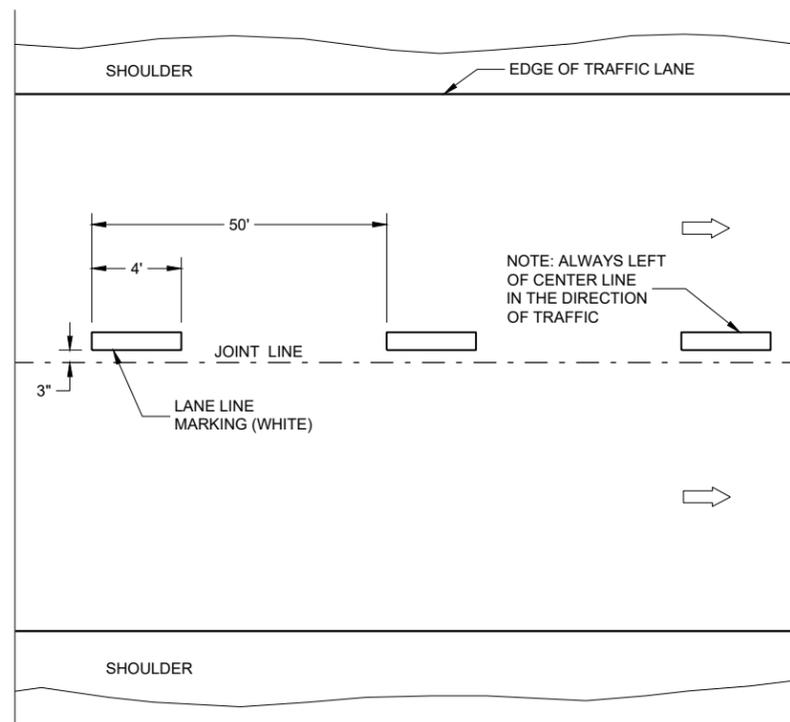


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

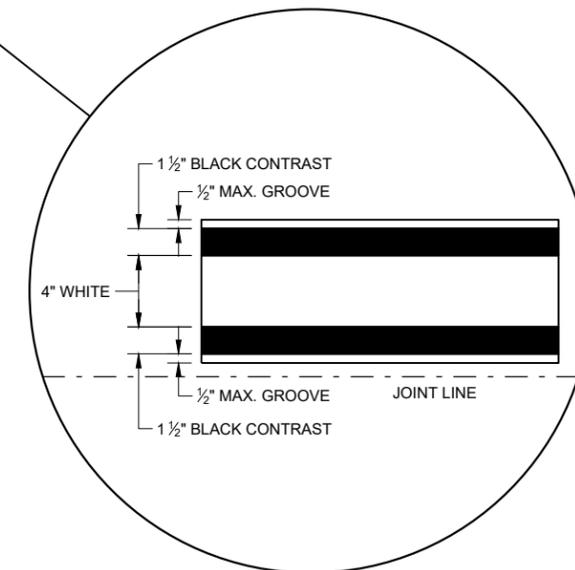
GENERAL NOTES

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



**LONGITUDINAL MARKING
(MAINLINE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Matthew Rauch
DATE STATEWIDE SIGNING AND MARKING
ENGINEER

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.

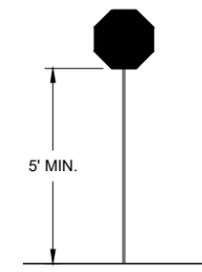
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



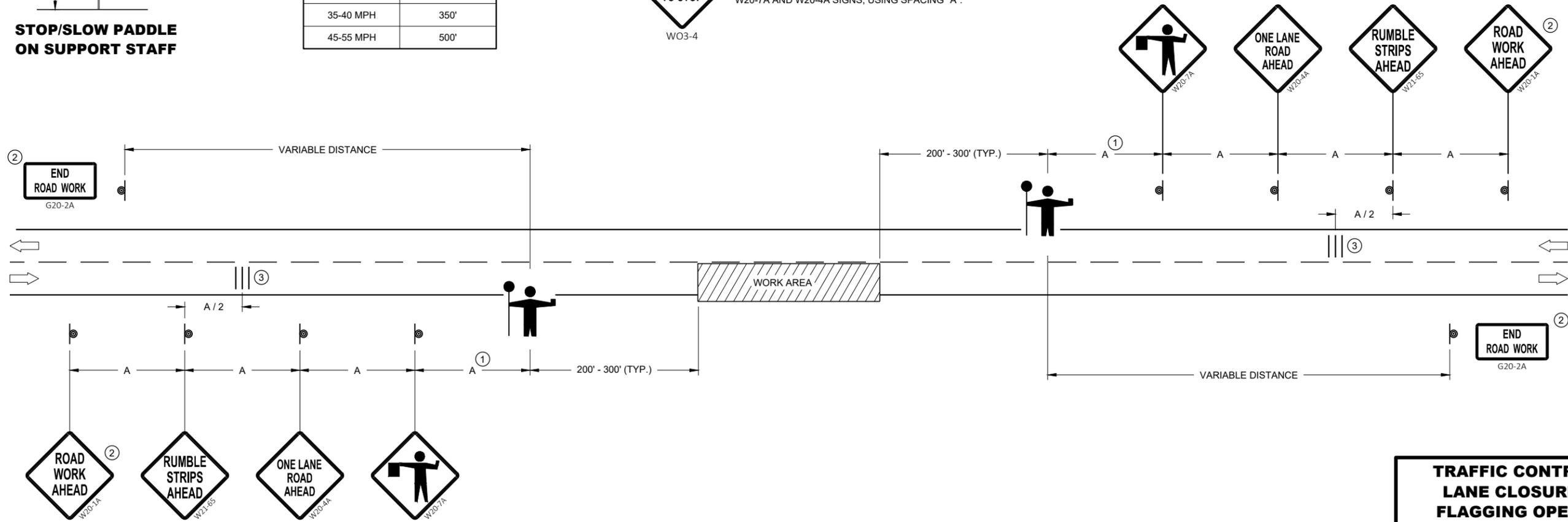
STOP/SLOW PADDLE ON SUPPORT STAFF

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
November 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

LEGEND

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

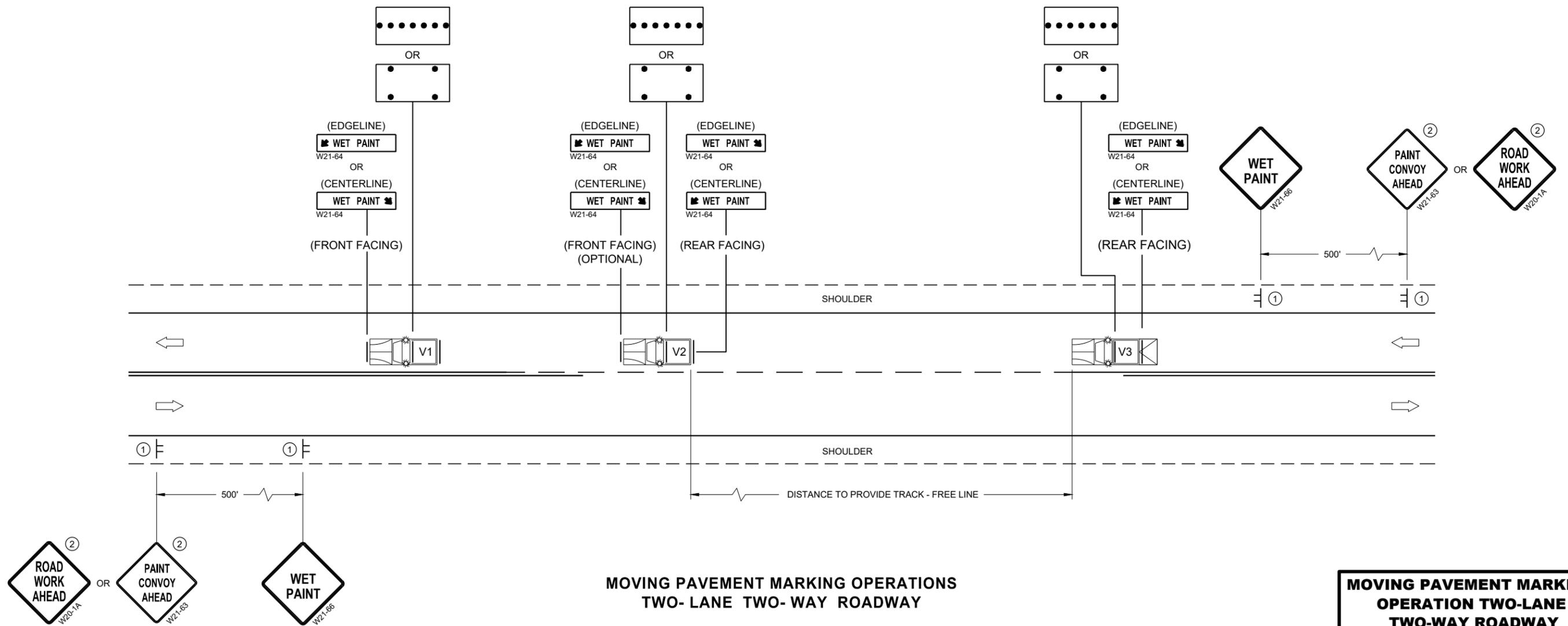
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

6

6



**MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY**

SDD 15C19 - 06a

SDD 15C19 - 06a

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

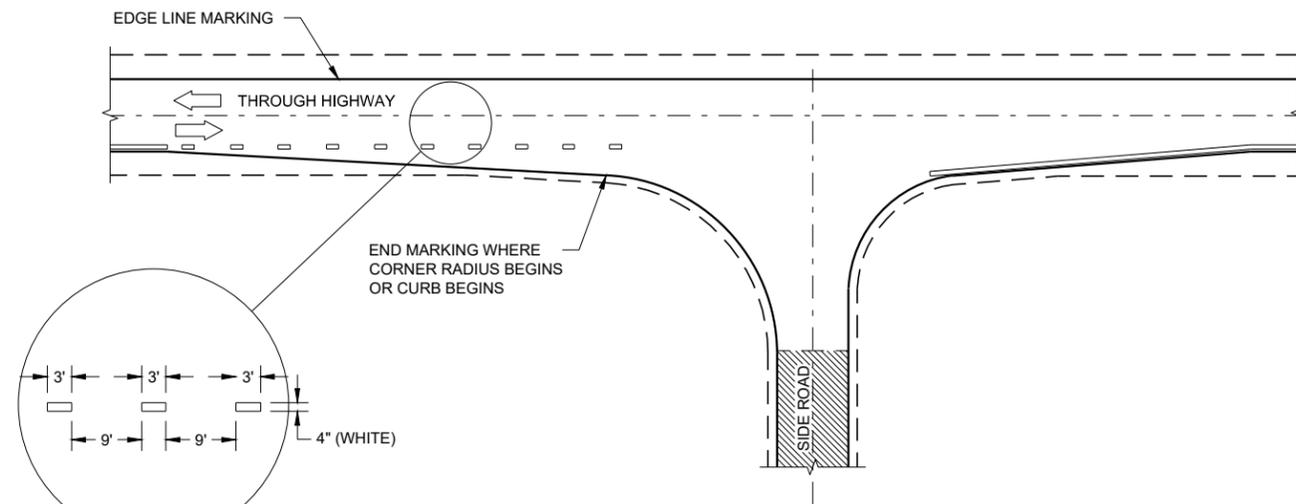
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

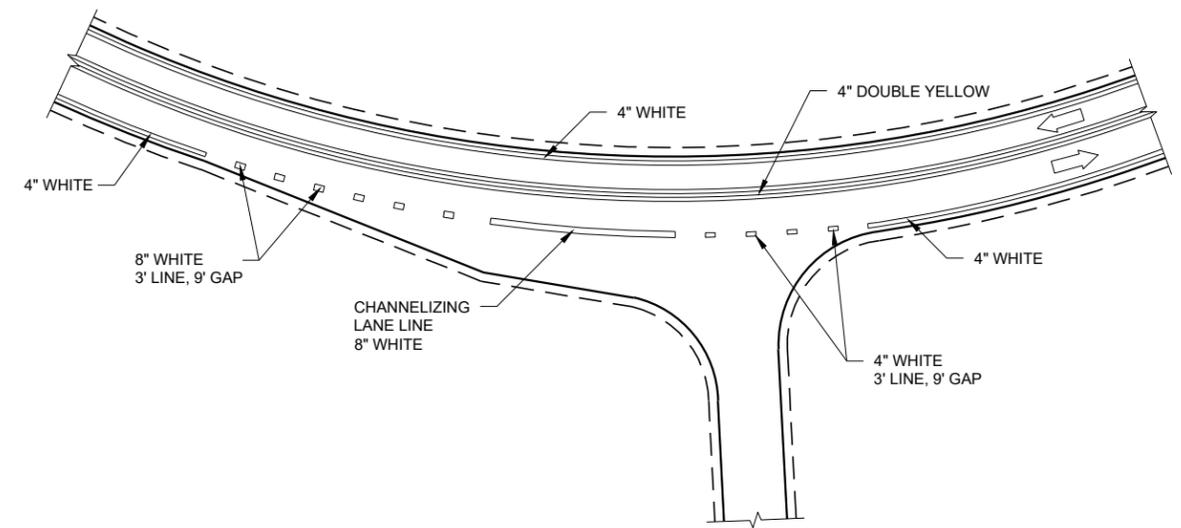
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

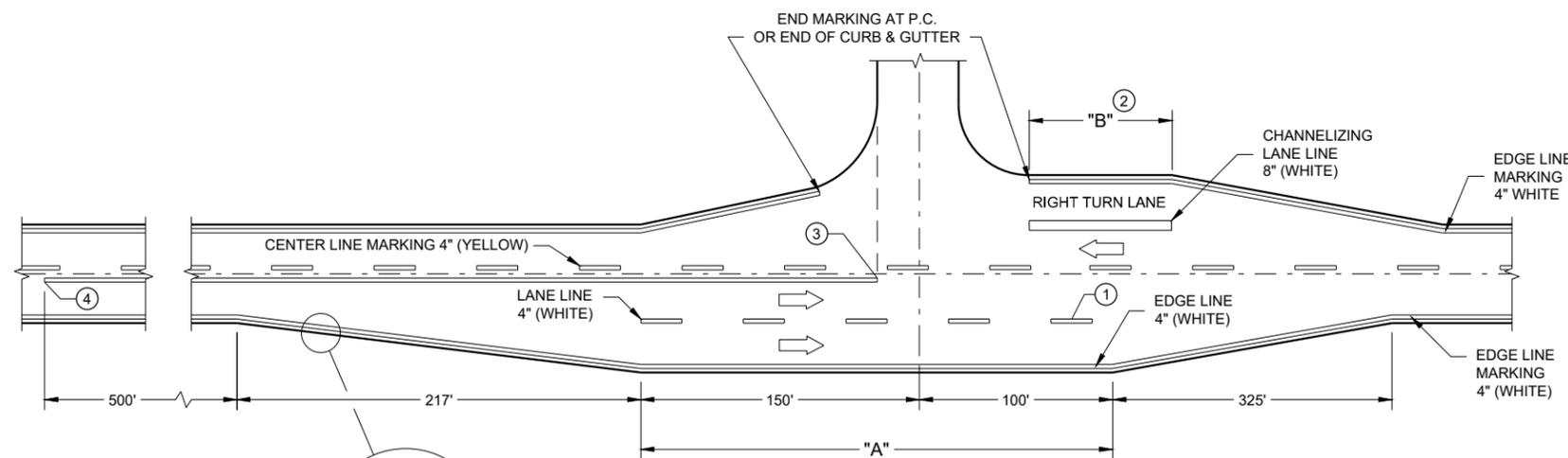
➡ DIRECTION OF TRAVEL



MINOR INTERSECTION



INTERSECTION ON OUTSIDE OF CURVE

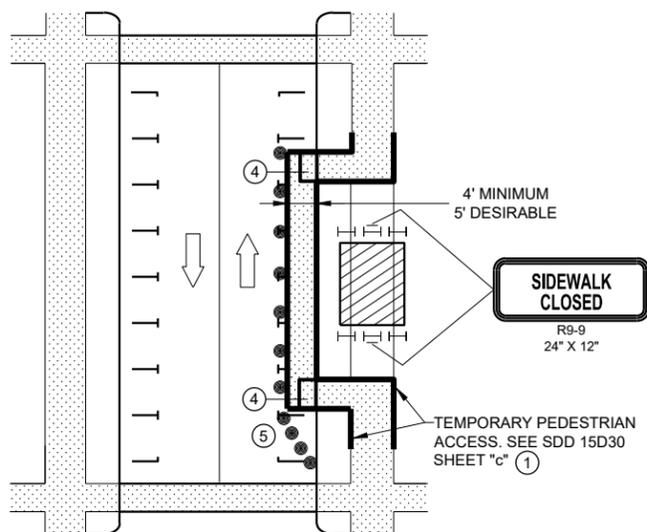


**MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**

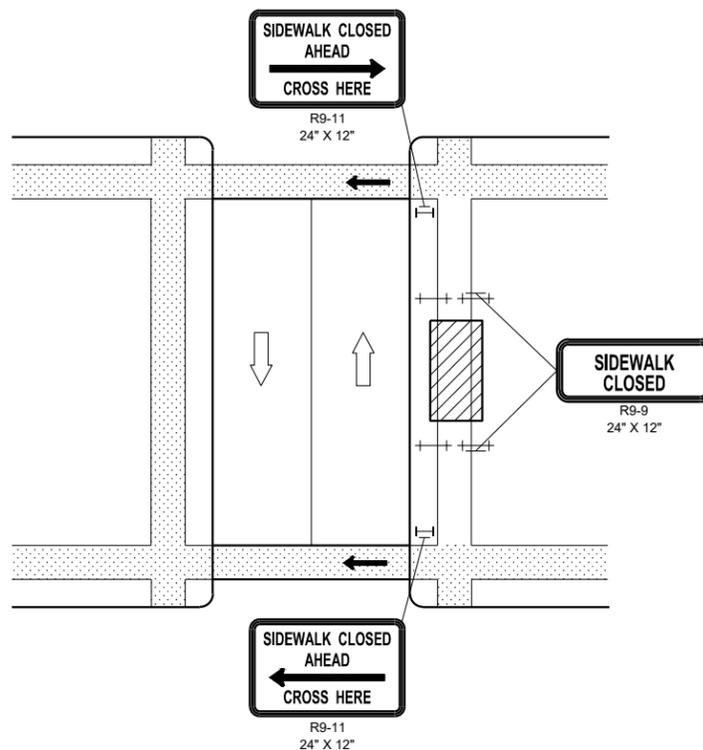
**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

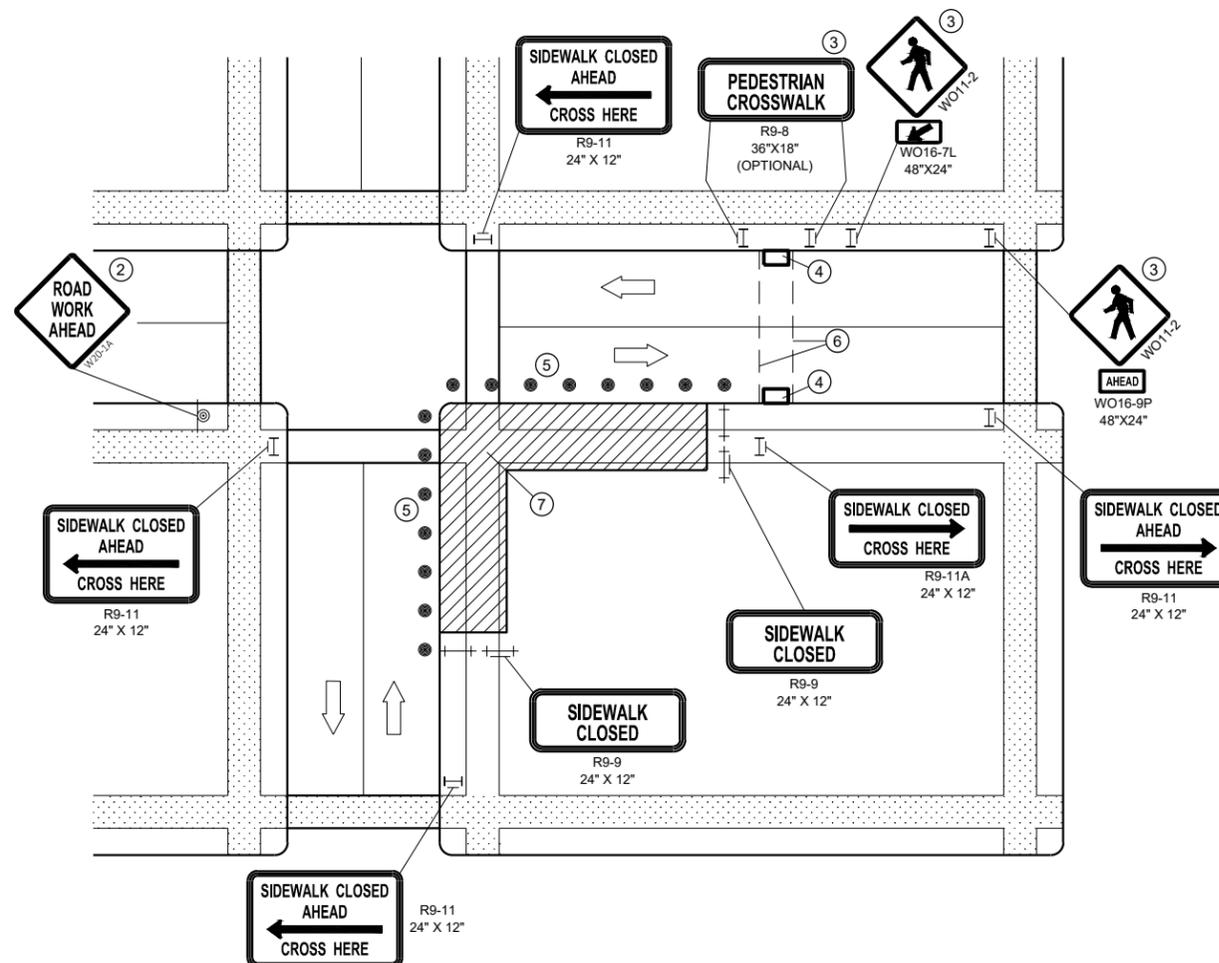
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

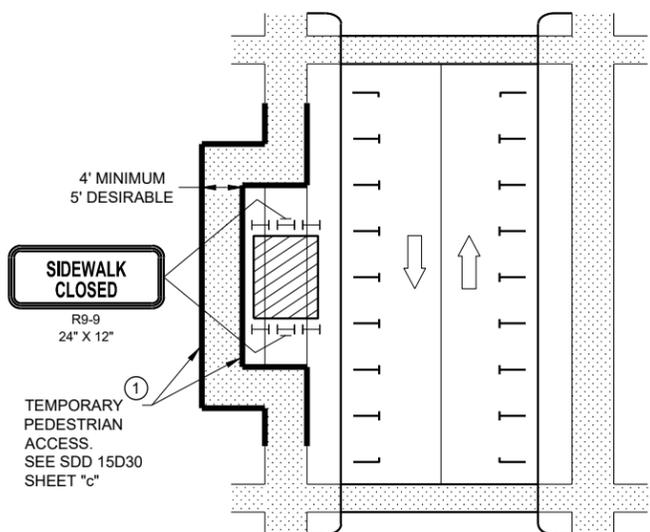


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

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

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

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

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

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

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

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

- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b".
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

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

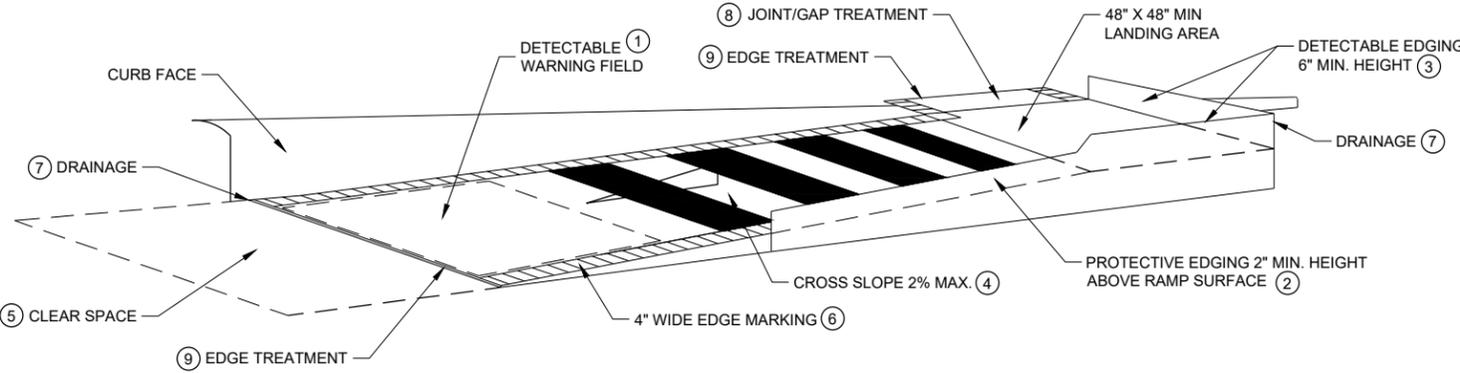
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

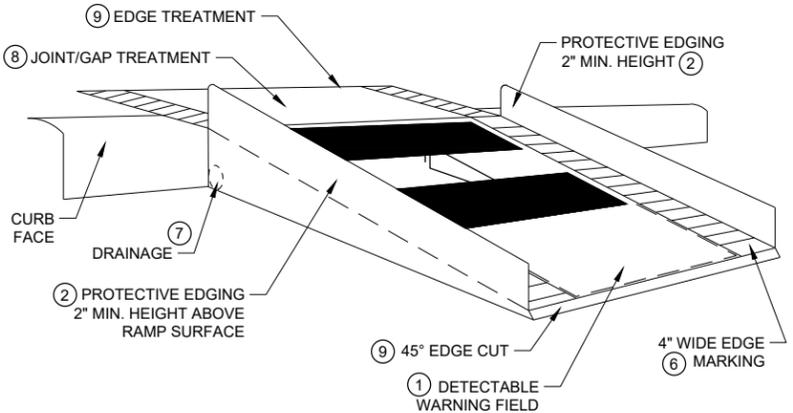
GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
 ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

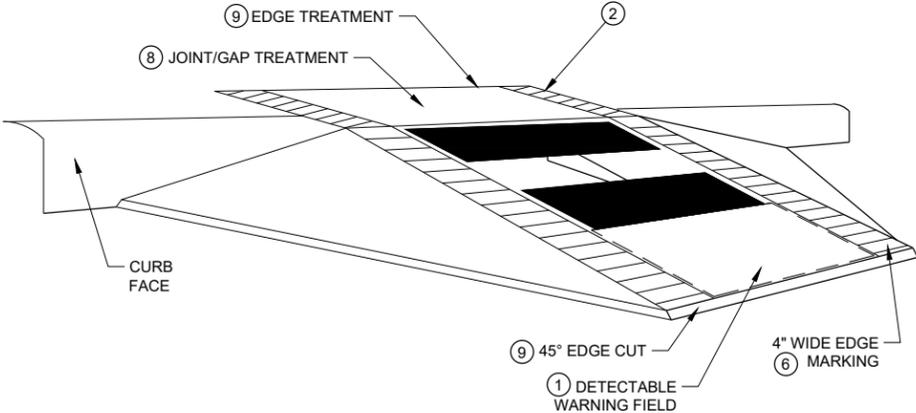
- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB 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 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- ⑤ CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- ⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
- ⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- ⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
- ⑩ 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



TEMPORARY CURB RAMP PARALLEL TO CURB

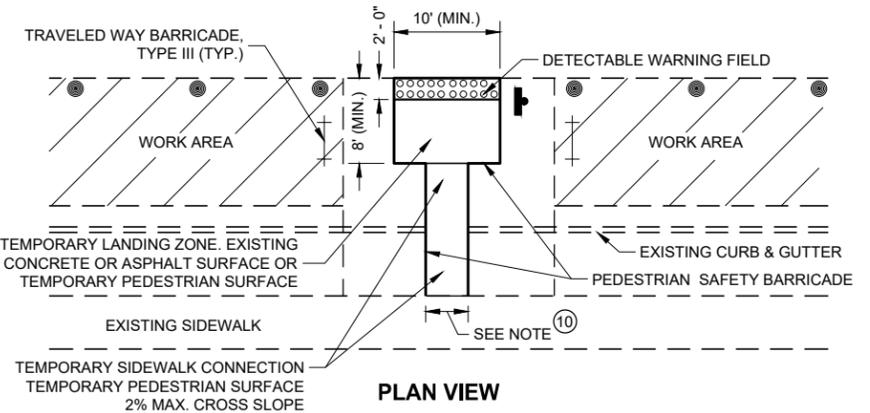


WITH PROTECTIVE EDGE

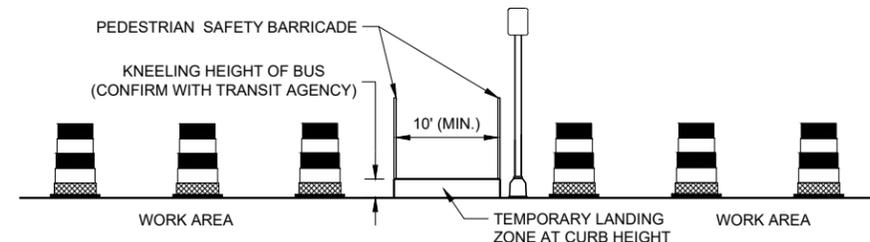


WITH SIDE APRON

TEMPORARY CURB RAMP PERPENDICULAR TO CURB



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

- LEGEND**
- TRAFFIC CONTROL DRUM
 - ⊥ TYPE III BARRICADE
 - ▨ WORK AREA

**TRAFFIC CONTROL,
 PEDESTRIAN ACCOMMODATION**

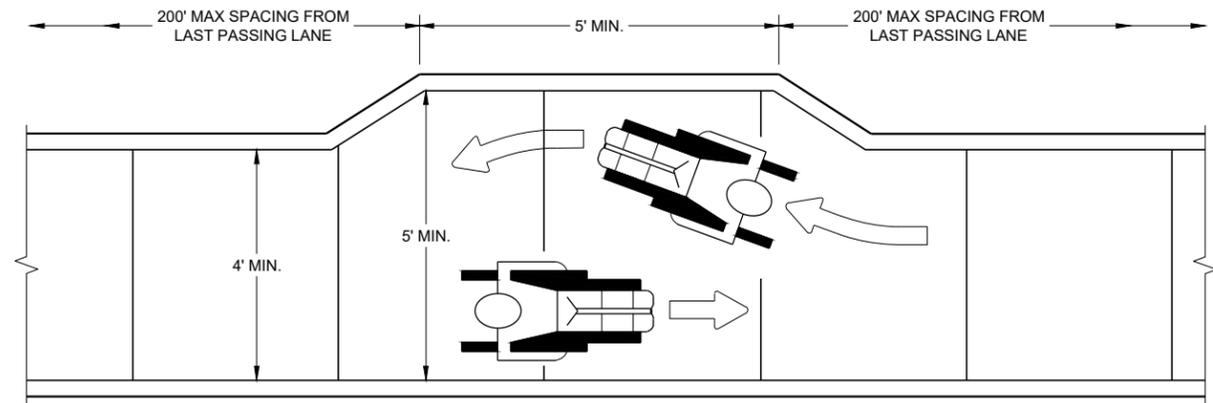
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

6

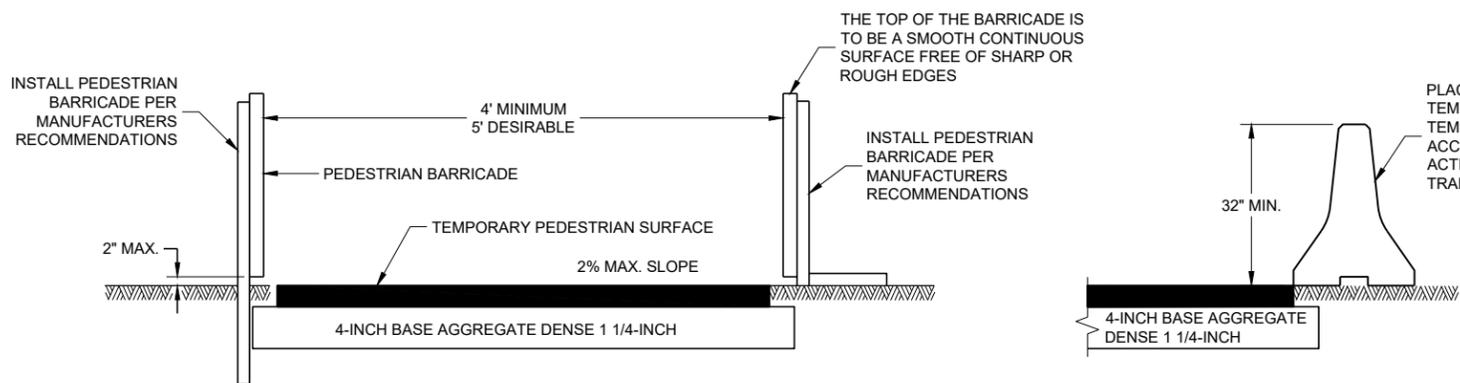
6

SDD 15D30 - 06b

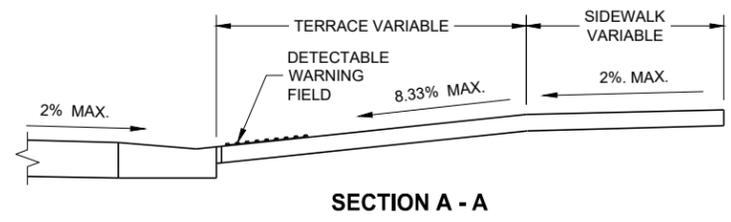
SDD 15D30 - 06b



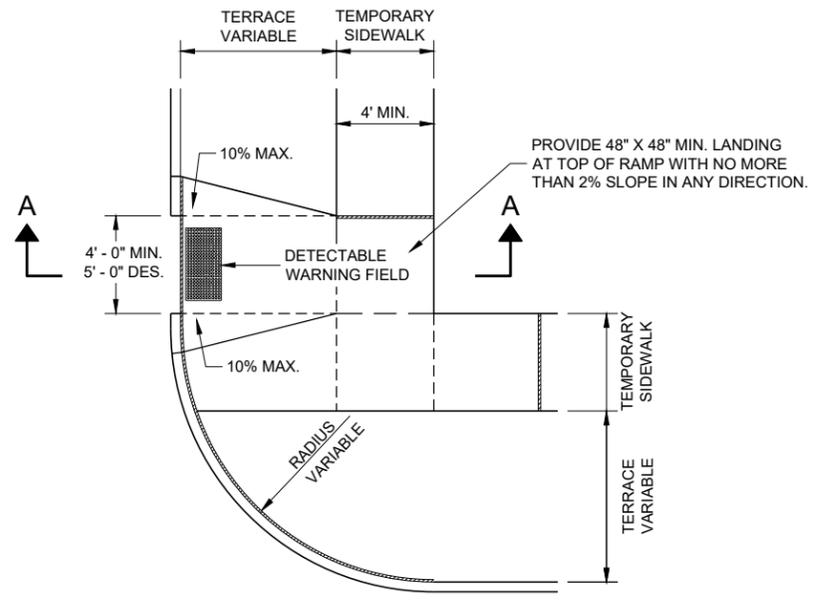
NARROW SIDEWALK PASSING DETAIL



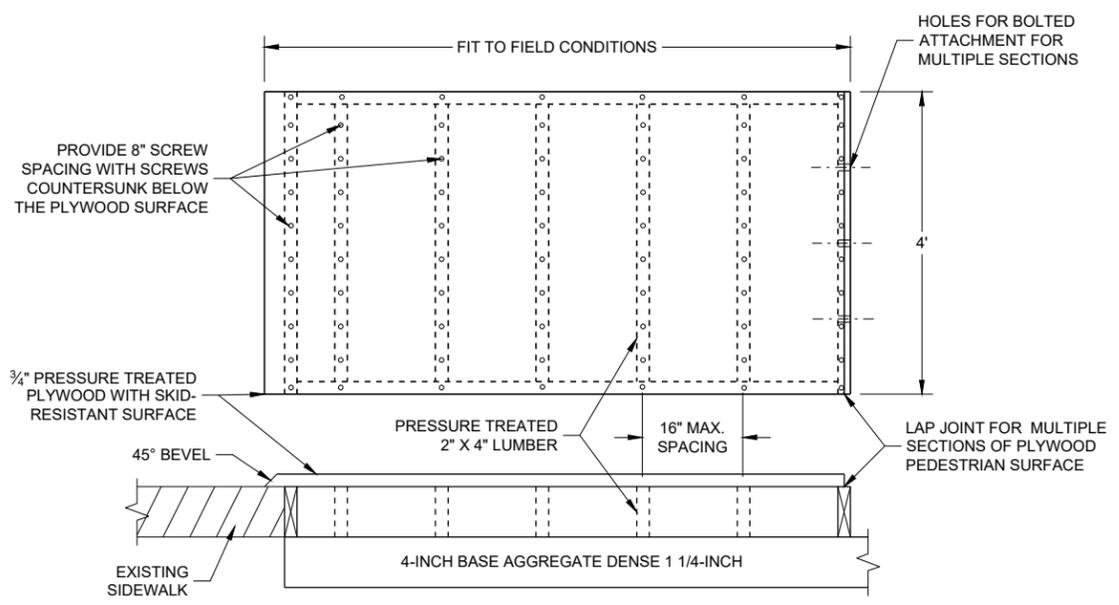
TEMPORARY PEDESTRIAN ACCESS



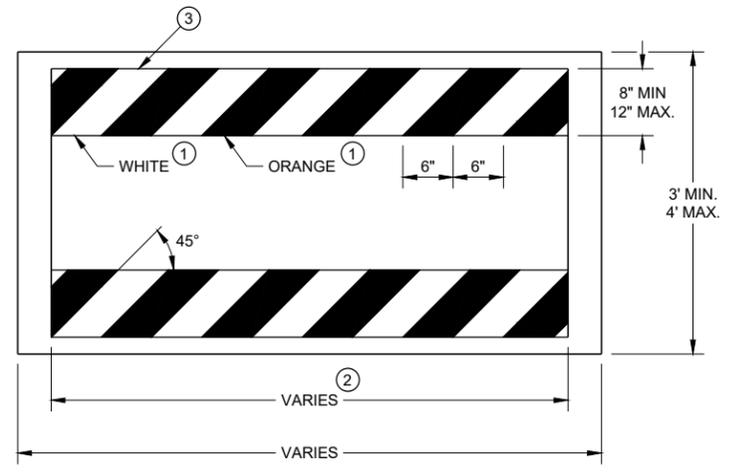
SECTION A - A



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



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

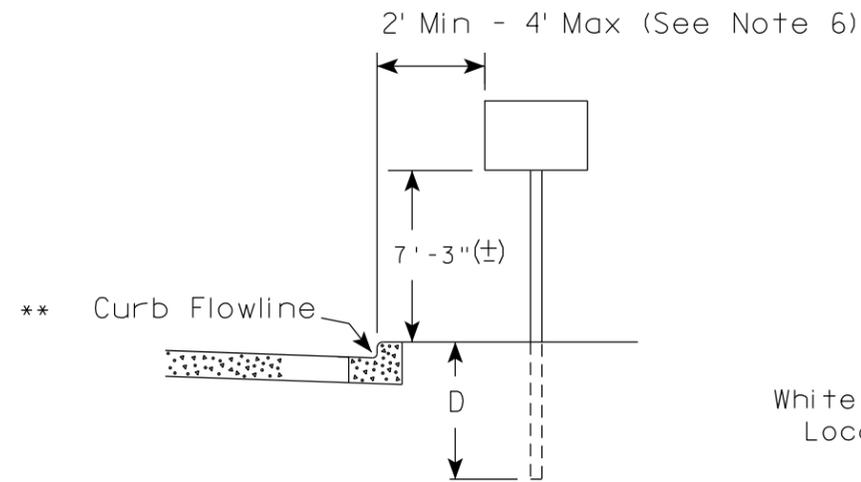
GENERAL NOTES

- 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.

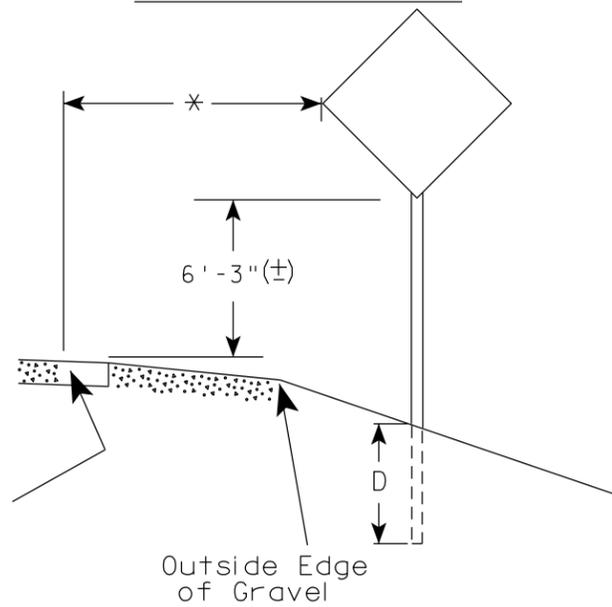
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

URBAN AREA

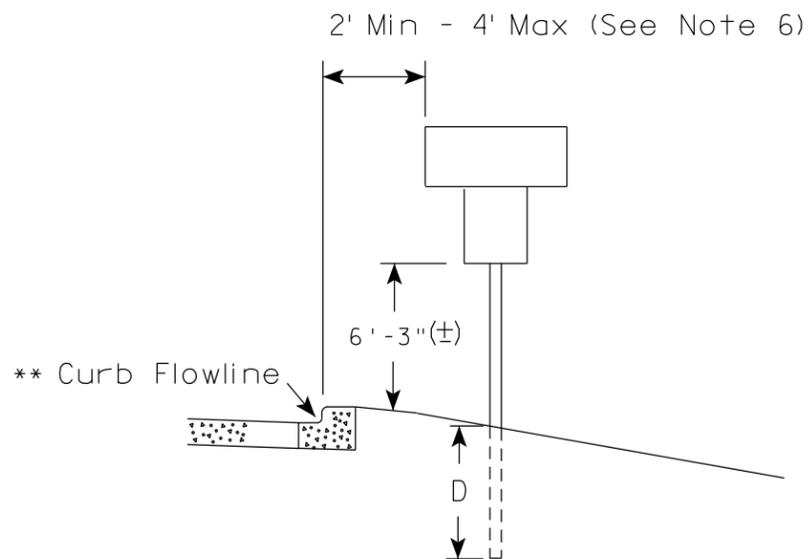
RURAL AREA (See Note 2)



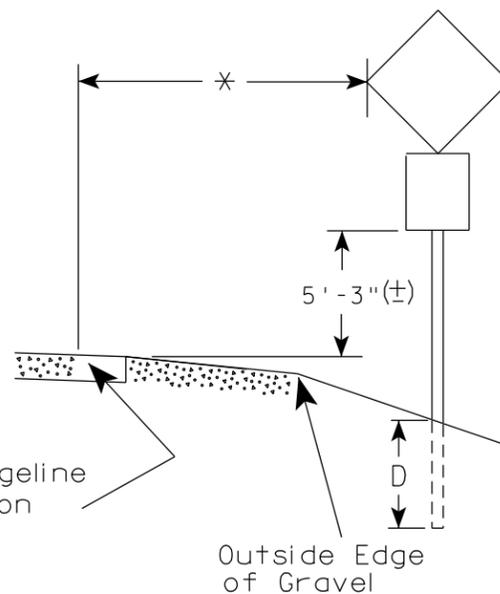
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

POST EMBEDMENT DEPTH

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

GENERAL NOTES

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

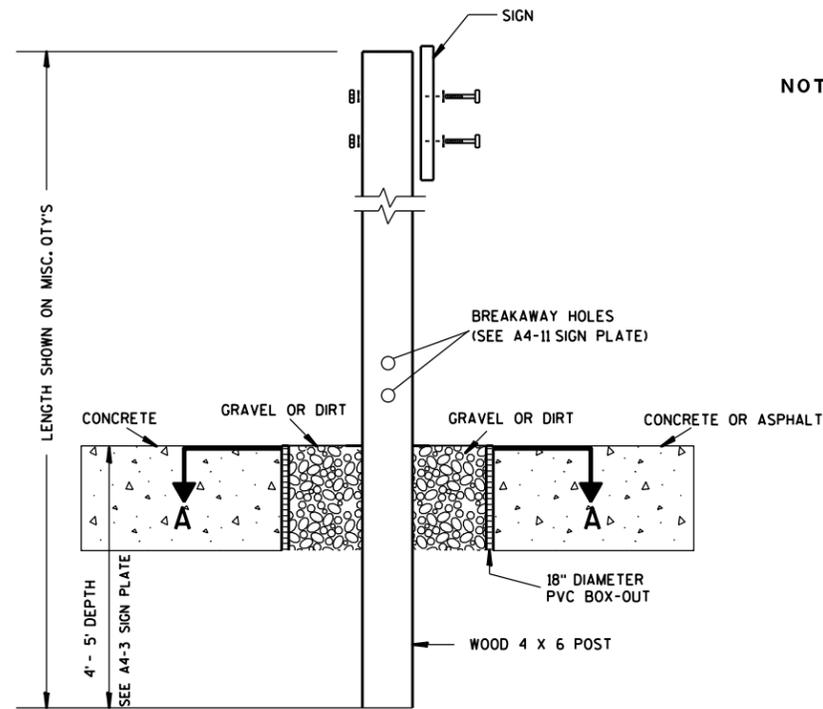
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

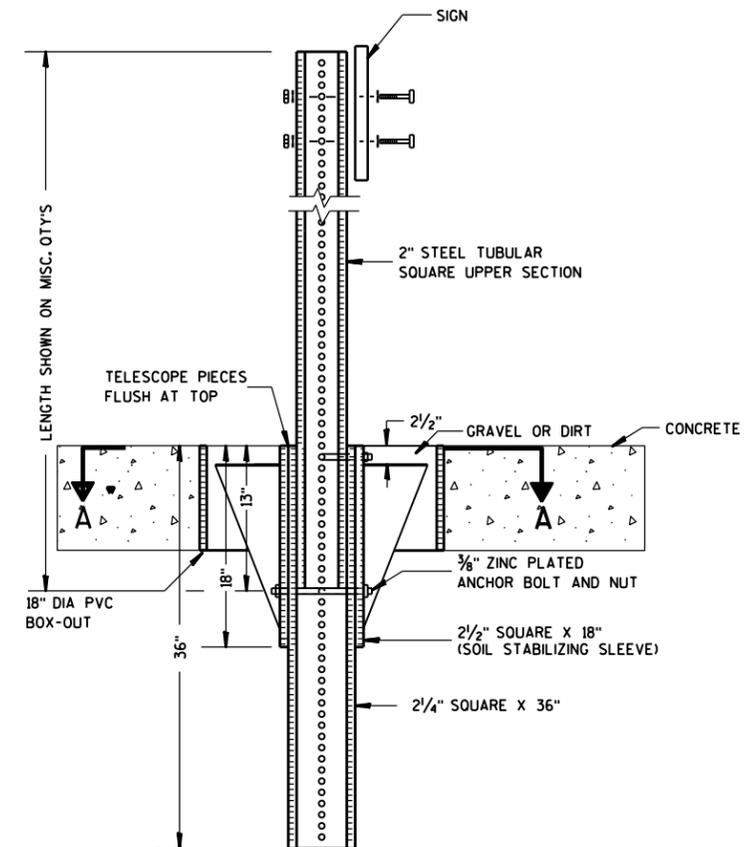
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

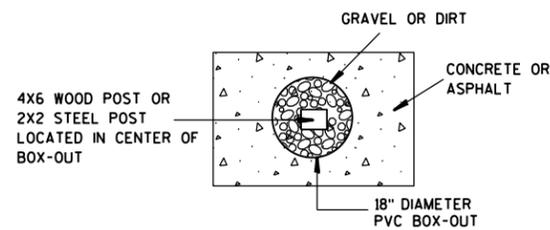
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

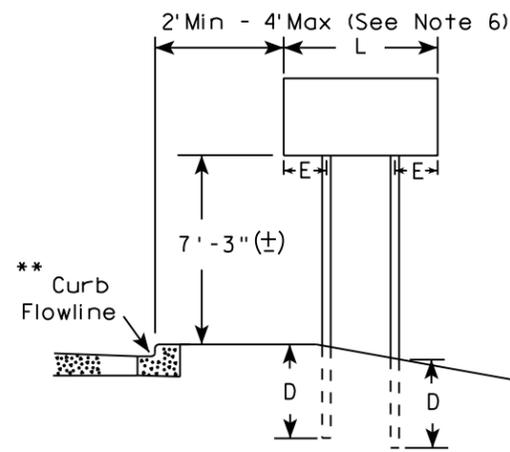
FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
APPROVED <i>Matthew R. Rauch</i> <small>for State Traffic Engineer</small>	
<small>DATE 1/27/14</small>	<small>PLATE NO. A4-3B.1</small>

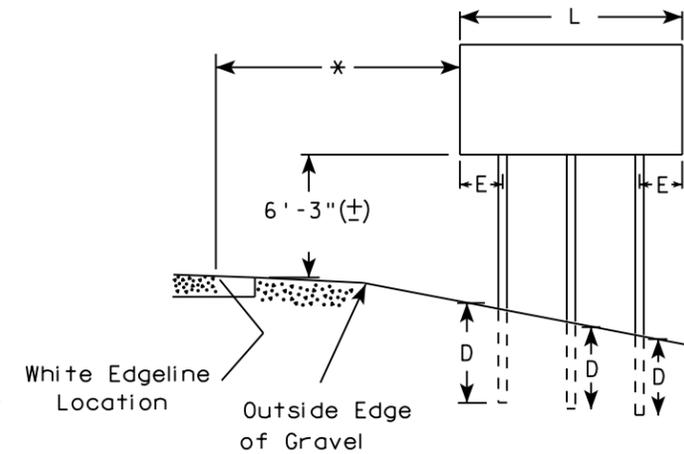
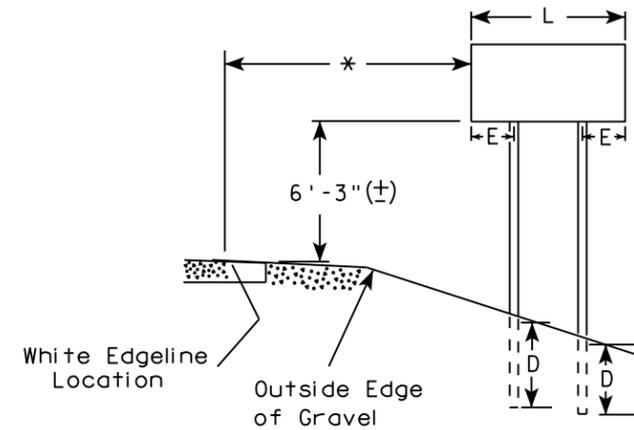
GENERAL NOTES

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

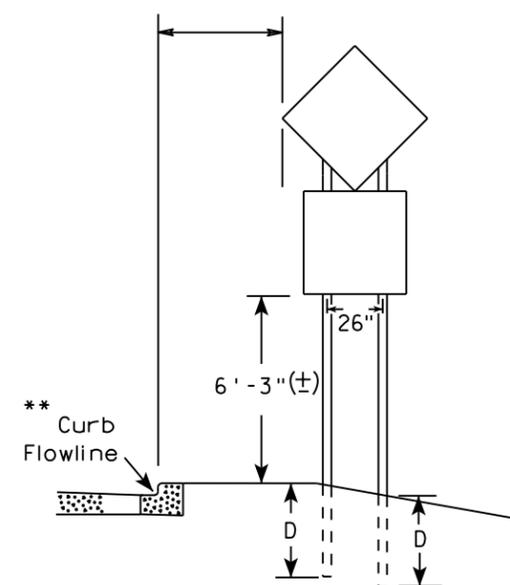
URBAN AREA



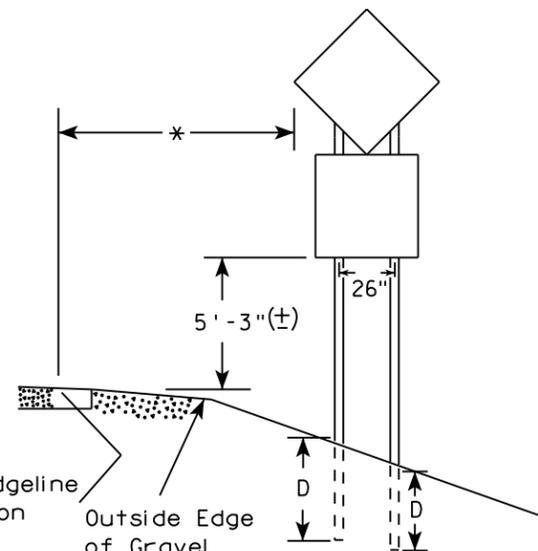
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

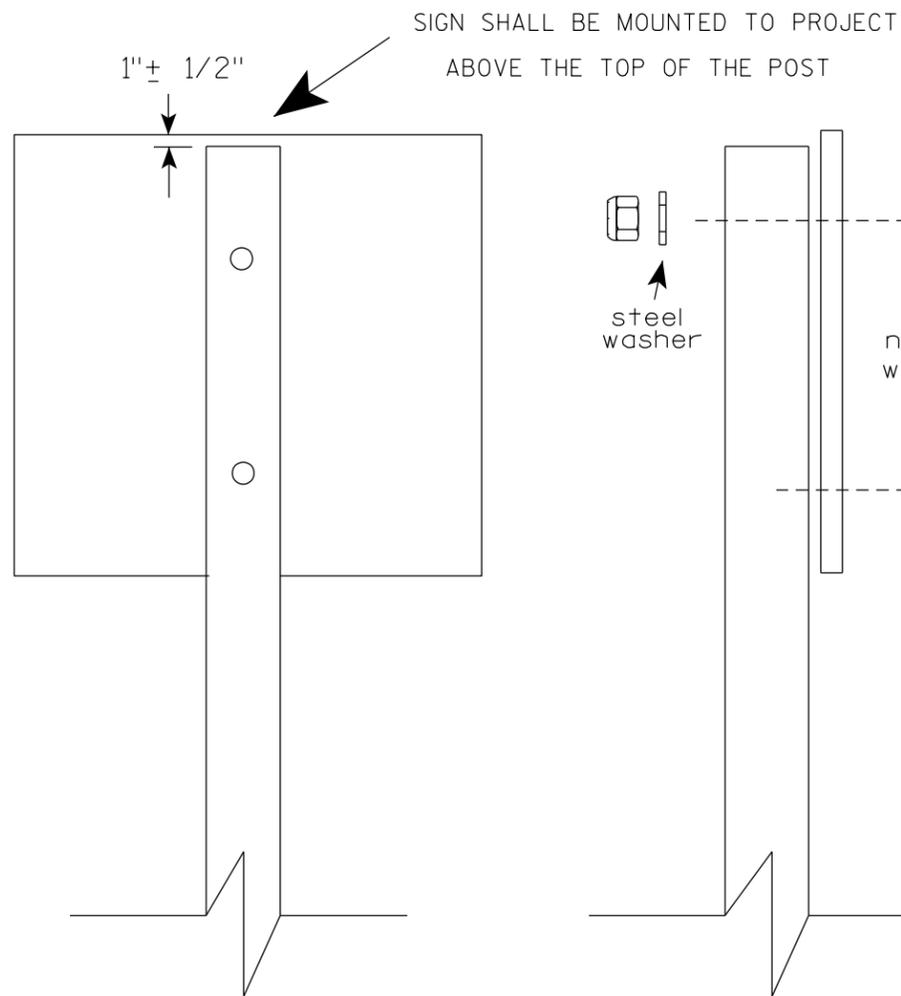
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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 8/21/17 PLATE NO. A4-4.15



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS
TO POSTS

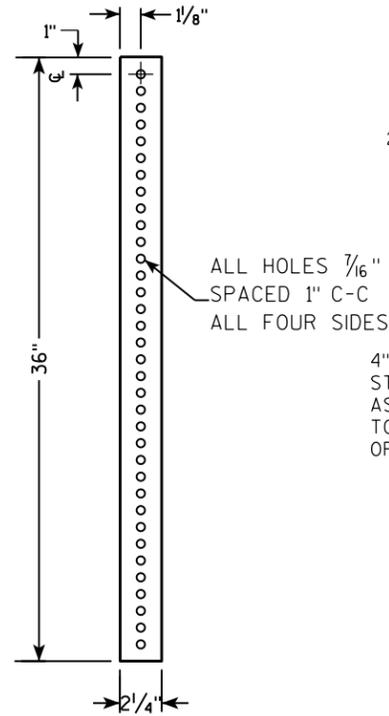
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

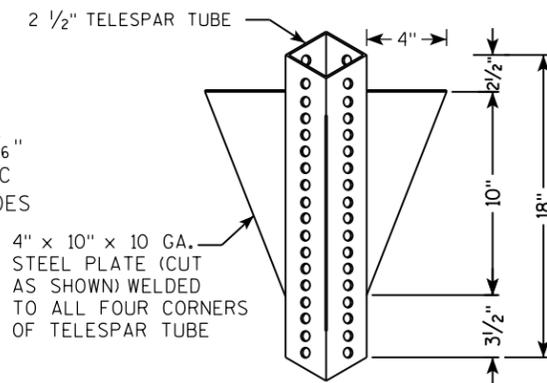
DATE 4/1/2020 PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

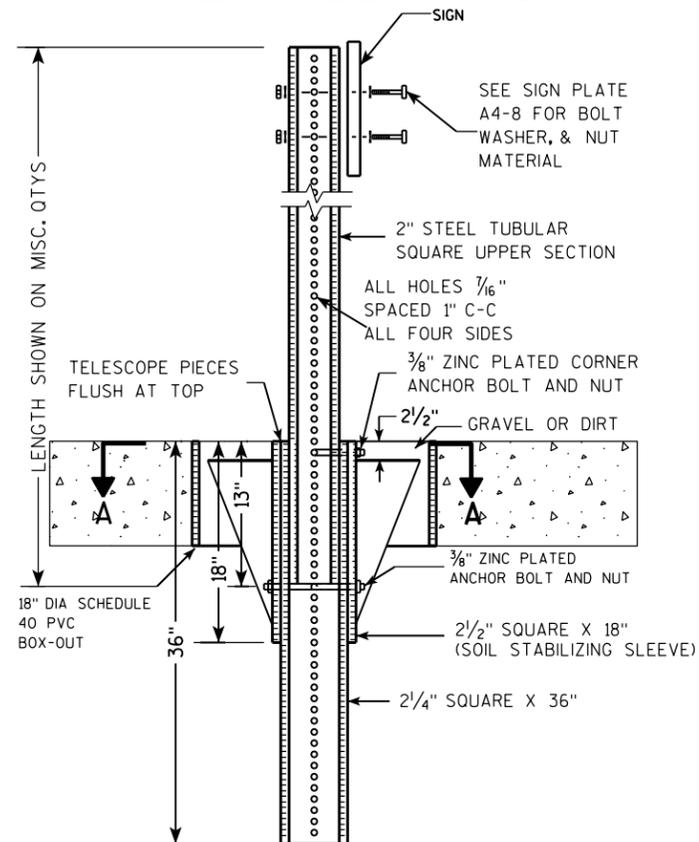
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



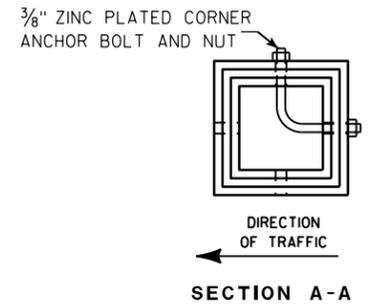
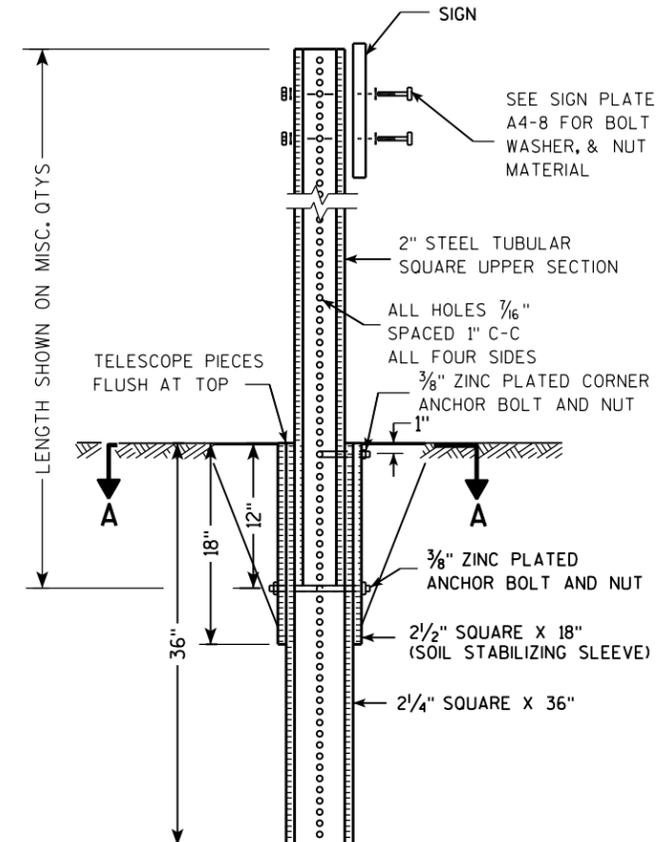
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



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



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



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

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

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

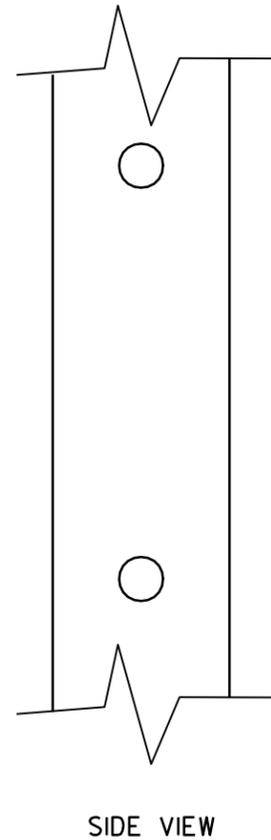
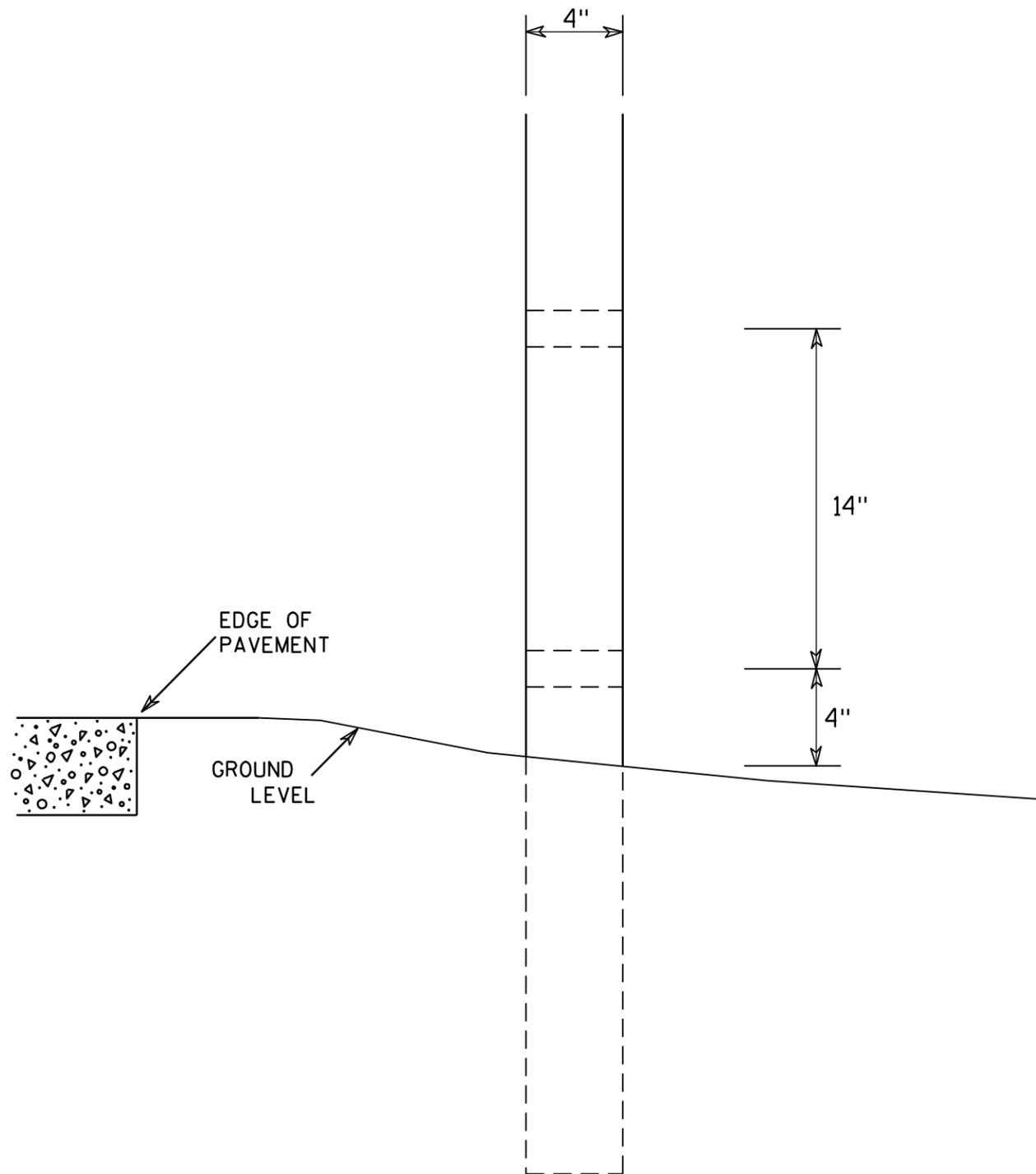
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



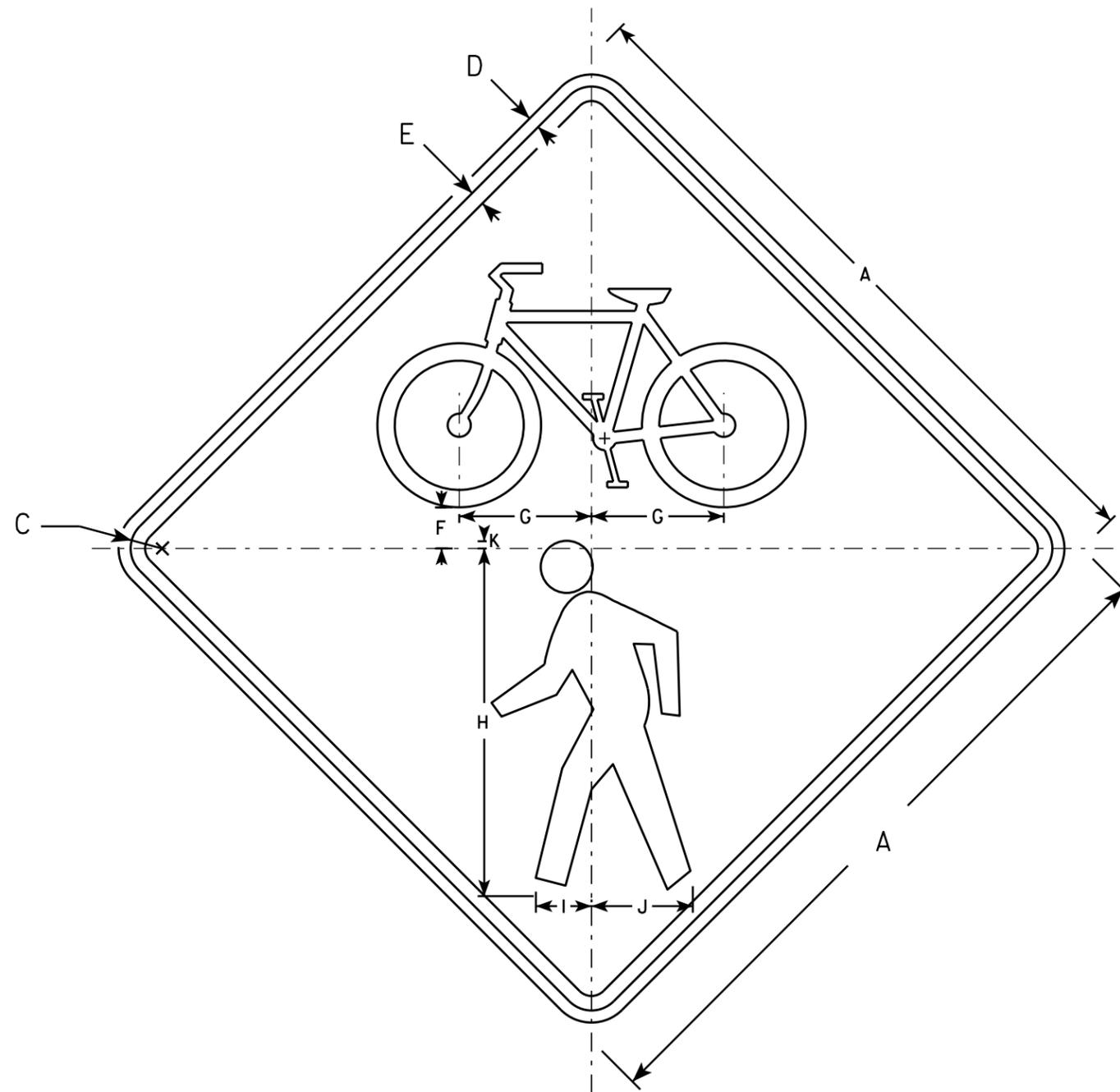
GENERAL NOTES

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

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4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	<i>Chester J Spang</i> for State Traffic Engineer
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>



W11-15

NOTES

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

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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 1/8	3/8	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN
W11-15

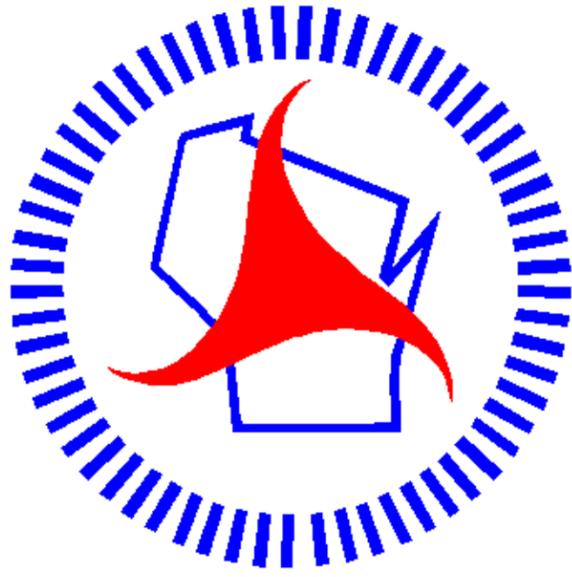
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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