

RHI

JUL 23 2013

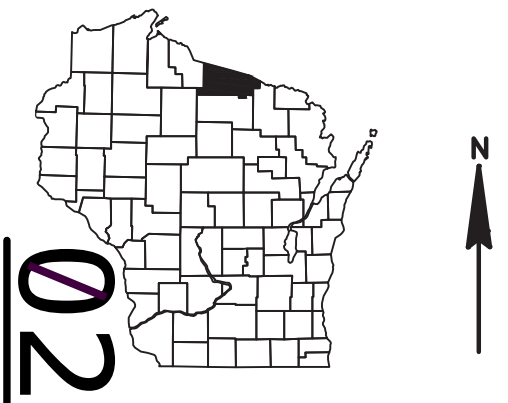
PROJECT ID: 1170-20-70

COUNTY: VILAS

ORDER OF SHEETS

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

TOTAL SHEETS = 32



DESIGN DESIGNATION

A.A.D.T.	2014	=	4090
A.A.D.T.	2034	=	5290
D.H.V.		=	645
D.D.		=	61/39
T.		=	18.3%
DESIGN SPEED		=	60
ESALS		=	1,715,500

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	

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MINOCQUA - MANITOWISH

CTH M TO CTH W

USH 51

VILAS

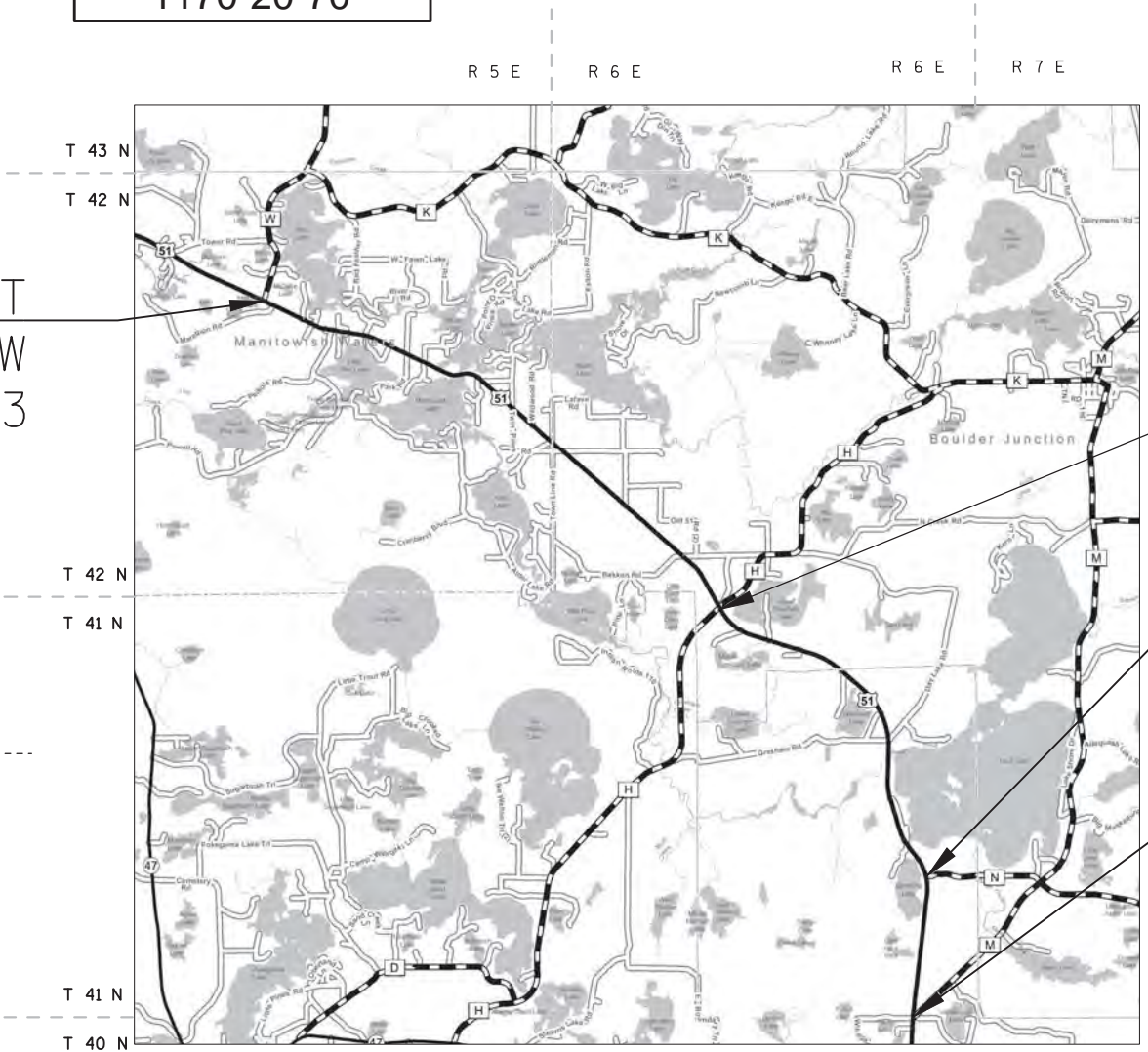
STATE PROJECT NUMBER
1170-20-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1170-20-70		

END PROJECT

CTH W

STA 966+93



LAYOUT

SCALE 0 1.33 MILE

TOTAL NET LENGTH OF CENTERLINE = 5.202 MILES

CTH H

STA 544+65

CTH N

STA 266+00

BEGIN PROJECT

STA 163+00

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JEFF BROCK
Designer	DAN ERVA
Project Manager	DAN ERVA
Regional Examiner	CHERYL SIMON
Regional Supervisor	ANNA WISNER

APPROVED FOR THE DEPARTMENT

DATE: 6/18/13

Anna Wisner
(Signature)

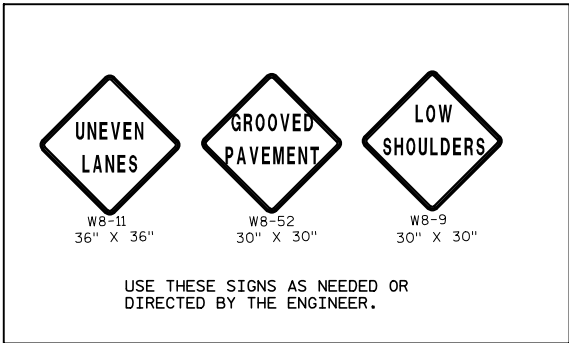
GENERAL NOTES

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

ALL MATERIAL RESULTING FROM THE VARIOUS OPERATIONS UNDER THIS CONTRACT SHALL BE COLLECTED TO BE PROPERLY DISPOSED OF PRIOR TO REOPENING LANES TO TRAFFIC

AN ASPHALTIC PAPER JOINT WILL BE PLACED ANYTIME THERE IS A 1.75" OR GREATER DROP FROM THE MILLING OPERATION

THERE ARE NO KNOWN UTILITY FACILITES WITHIN THE PROJECT AREA AS SHOWN FOR THE PROPOSED WORK

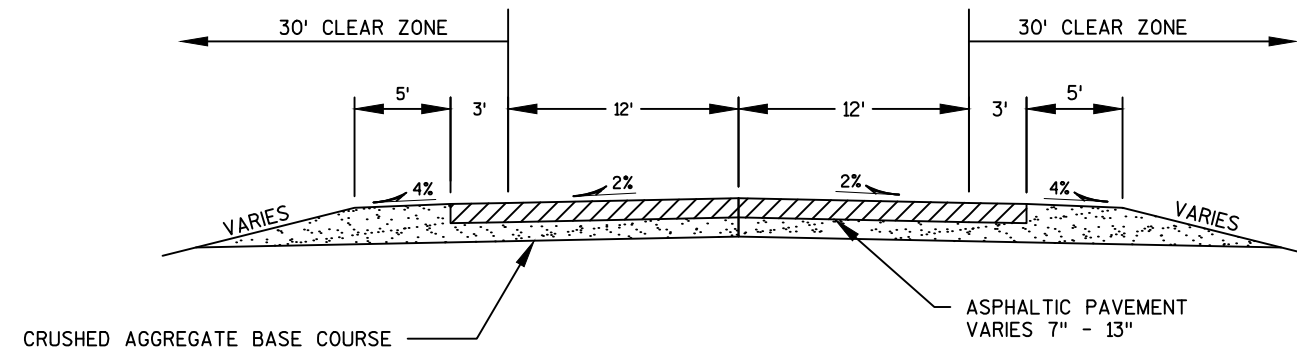


CONTACTS

DEPARTMENT OF NATURAL RESOURCES
NORTH CENTRAL DISTRICT
107 SUTLIFF AVE
RHINELANDER, WI 54501
JON SIMONSEN
715-365-8916

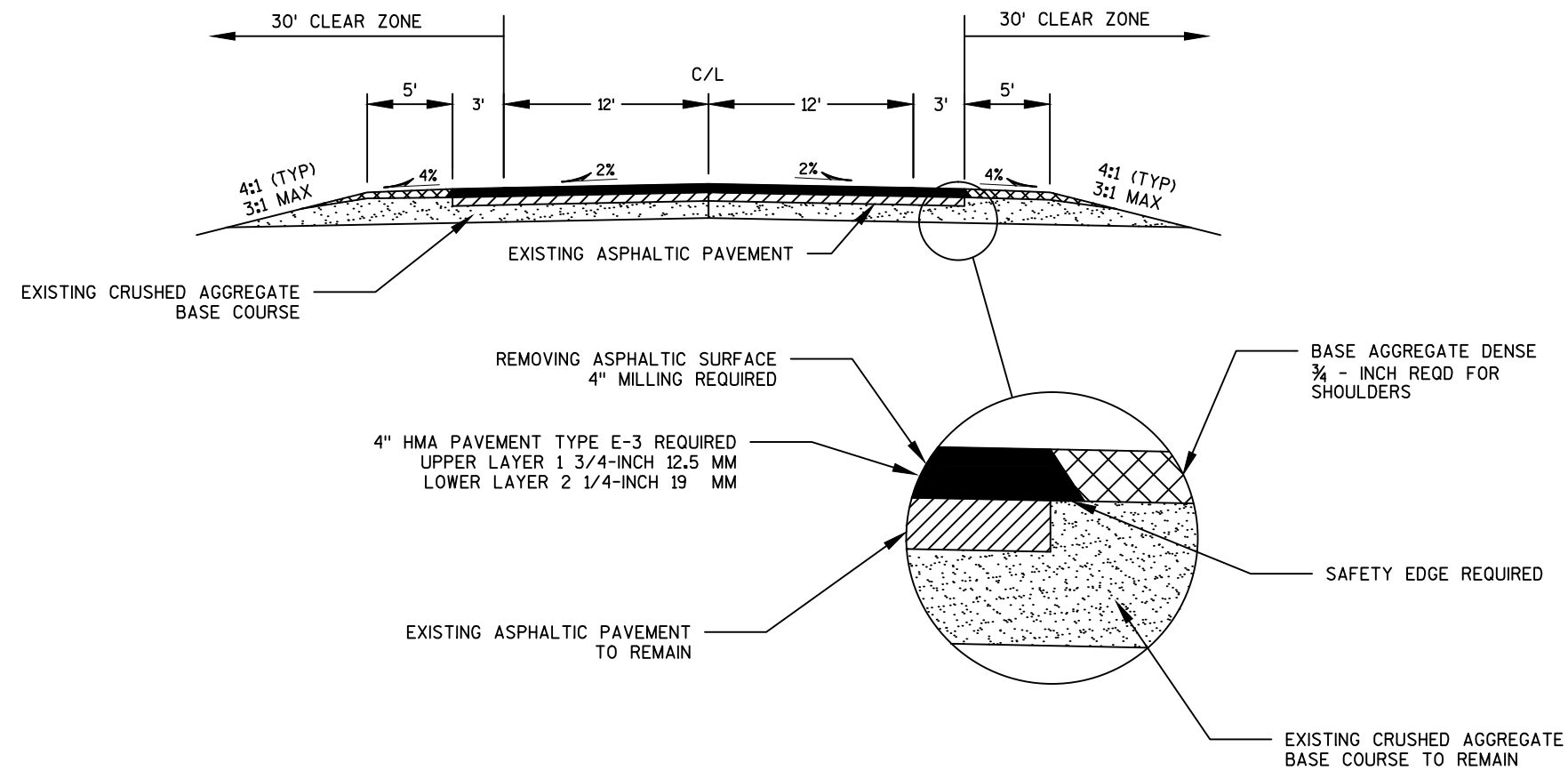


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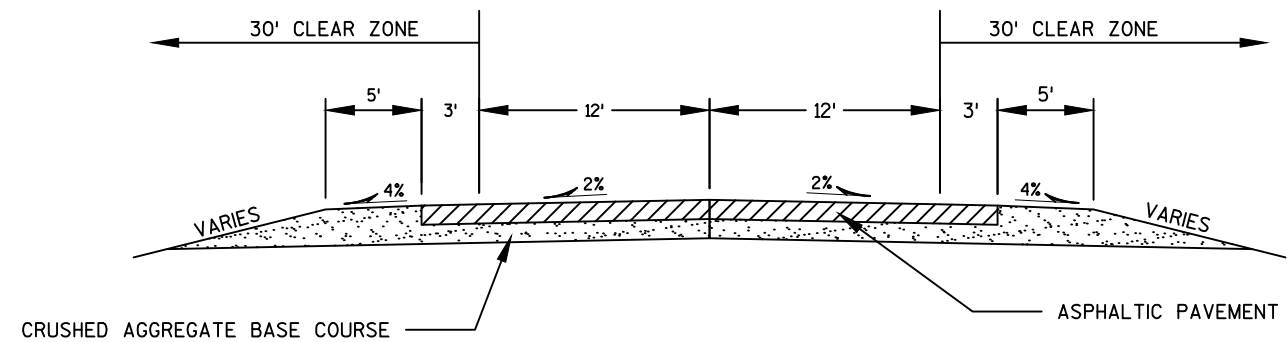
EXISTING TYPICAL SECTION

STATION 163+00 - STA 544+65



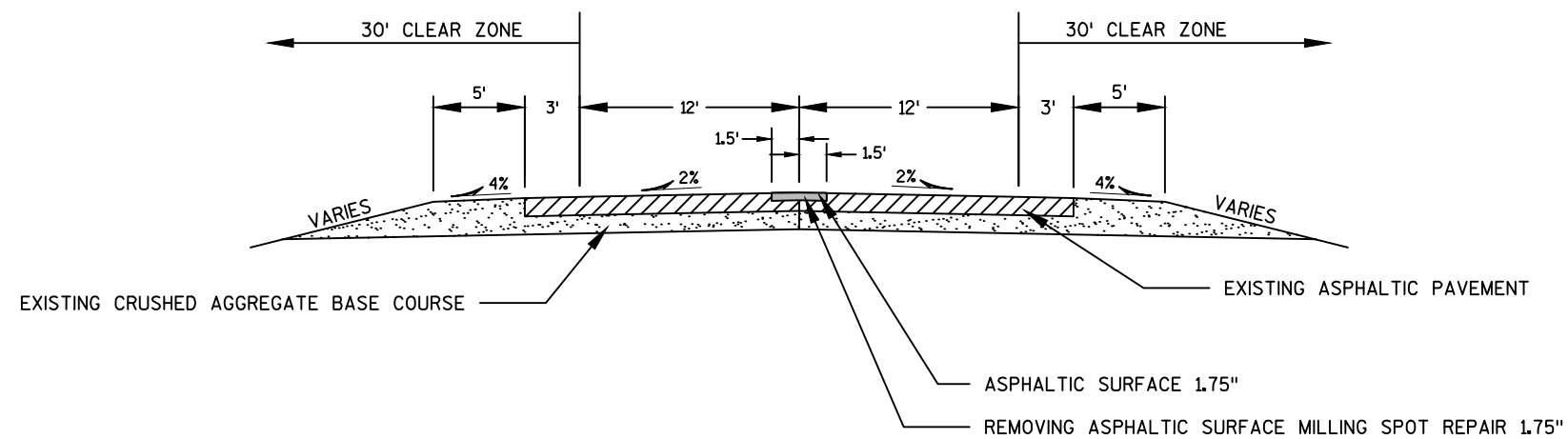
PROPOSED TYPICAL SECTION

STATION 268+00 - STA 542+65



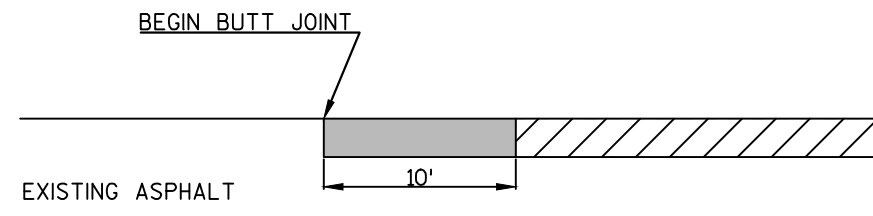
EXISTING TYPICAL SECTION

CTH H - CTH W



PROPOSED TYPICAL SECTION

SPOT LOCATIONS
CTH H - CTH W

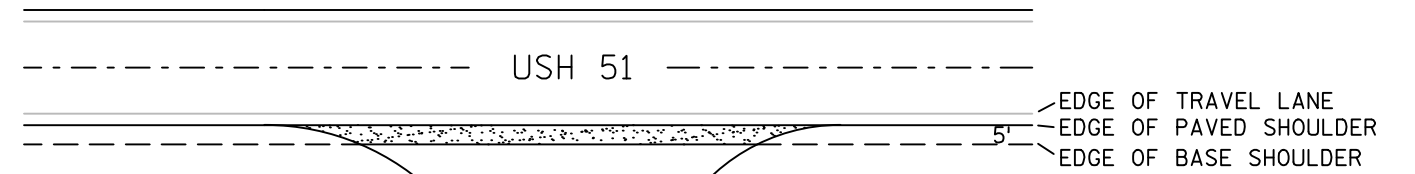


■ BUTT JOINT

▨ REMOVING ASPHALTIC SURFACE MILLING

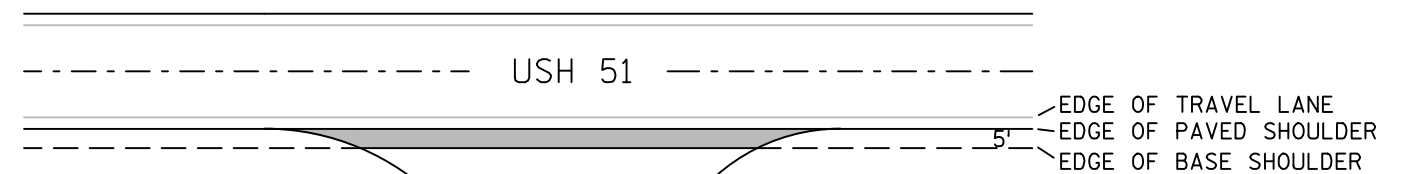
BUTT JOINT DETAIL

STA 268+00
STA 542+65



■ VARIABLE DEPTH BASE AGGREGATE DENSE 3/4-INCH

MATCH LIMITS AT UNPAVED INTERSECTIONS AND DRIVEWAYS



■ 1.75-INCH MILL
1.75-INCH HMA PAVEMENT TYPE E-3 OVERLAY

MILL AND OVERLAY AT ASPHALT INTERSECTIONS AND PAVED DRIVEWAYS

DATE 20JUN13		E S T I M A T E O F Q U A N T I T I E S			
LINE					1170-20-70
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	66.000	66.000
0020	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	91,550.000	91,550.000
0030	213.0100	FINISHING ROADWAY (PROJECT) 01. 1170-20-70	EACH	1.000	1.000
0040	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	2,119.000	2,119.000
0050	305.0500	SHAPING SHOULDERS	STA	550.000	550.000
0060	440.4410.S	INCENTIVE IRI RIDE	DOL	10,400.000	10,400.000
0070	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,128.000	1,128.000
0080	455.0605	TACK COAT	GAL	4,703.000	4,703.000
0090	460.1103	HMA PAVEMENT TYPE E-3	TON	20,507.000	20,507.000
0100	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	13,130.000	13,130.000
0110	460.4110.S	REHEATING HMA LONGITUDINAL JOINTS	LF	54,930.000	54,930.000
0120	465.0105	ASPHALTIC SURFACE	TON	490.000	490.000
0130	465.0110	ASPHALTIC SURFACE PATCHING	TON	50.000	50.000
0140	465.0475.S	ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL	LF	27,465.000	27,465.000
0150	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1170-20-70	EACH	1.000	1.000
0160	619.1000	MOBILIZATION	EACH	1.000	1.000
0170	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1170-20-70	EACH	1.000	1.000
0180	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,365.000	2,365.000
0190	646.0103	PAVEMENT MARKING PAINT 4-INCH	LF	30,000.000	30,000.000
0200	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	82,676.000	82,676.000
0210	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	27,746.000	27,746.000
0220	648.0100	LOCATING NO-PASSING ZONES	MI	5.200	5.200
0230	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	55,492.000	55,492.000
0240	690.0150	SAWING ASPHALT	LF	60.000	60.000
0250	SPV.0180	SPECIAL 01. REMOVING ASPHALTIC SURFACE MILLING SPOT REPAIR	SY	5,000.000	5,000.000

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REMOVING ASPHALTIC SURFACE BUTT JOINT

		204.0115
STATION	LOCATION	SY
268+00	USH 51	33
542+65	USH 51	33
TOTAL		66

REMOVING ASPHALTIC SURFACE MILLING

		204.0120
STATION - STATION	LOCATION	SY
STA 268+00 - STA 542+65	USH 51	91550
TOTAL		91550

BASE AGGREGATE DENSE

		305.0110
		3/4-INCH
STATION - STATION	LOCATION	TON
STA 268+00 - STA 542+65	USH 51	2119
TOTALS		2119

SHAPING SHOULDERS

		305.0500
STATION - STATION	LOCATION	STATION
268+00 - 542+65	USH 51	550
TOTAL		550

TACK COAT

		455.0605	REMARKS
STATION - STATION	LOCATION	GAL	
STA 268+00 - STA 542+65	USH 51	4578	SPOT REPAIRS
	CTH H - CTH W	125	
TOTAL		4703	

HMA PAVEMENT TYPE & ASPHALTIC MATERIAL

		455.0105	460.4110.S	
		460.1103	ASPHALTIC	
		HMA	REHEATING	
		PAVEMENT	HMA PAVEMENT	
		PG58-28	LONGITUDINAL	
		TYPE E-3	JOINT	
STATION - STATION	LOCATION	TON	TON	LF
STA 268+00 - STA 542+65	USH 51	20507	1128	54930
TOTALS		20507	1128	54930

ASPHALTIC SURFACE

		465.0105
STATION - STATION	LOCATION	TON
	CTH H - CTH W	490
TOTAL		490

ASPHALTIC SURFACE PATCHING

		465.0110
STATION - STATION	LOCATION	TON
163+00 - 266+00	USH 51	10
268+00 - 542+65	USH 51	40
TOTAL		50

CENTER LINE RUMBLE STRIP

		465.0475.S
		ASPHALT
		2-LANE
		RURAL
STATION - STATION	LOCATION	LF
STA 268+00 - STA 542+65	CL	27465
TOTAL		27465

TRAFFIC CONTROL

	643.0900
	SIGNS
	DAYS
ADVANCED WARNING SIGNS	450
SIDE ROADS	1755
UNDISTRIBUTED: UNEVEN LANES / GROOVED PAVEMENT / LOW SHOULDERS	160
TOTALS	2365

LOCATING NO-PASSING ZONES

	648.0100
STATION - STATION	MILES
268+00 - 542+65	5.2
TOTAL	5.2

PAVEMENT MARKING

		646.0103	646.0106	646.0406	
				SAME DAY	
				EPOXY	
		PAINT	EPOXY	4-INCH	
		4-INCH	4-INCH	EPOXY	
STATION - STATION	LOCATION	LF	LF	LF	REMARKS
STA 268+00 - STA 542+65	CL		27746	27746	YELLOW
STA 268+00 - STA 542+65	EDGELINE		54930	0	WHITE
	CTH H - CTH W CL	30000			YELLOW FOR SPOT REPAIRS
	TOTAL	30000	82676	27746	

SAWING ASPHALT

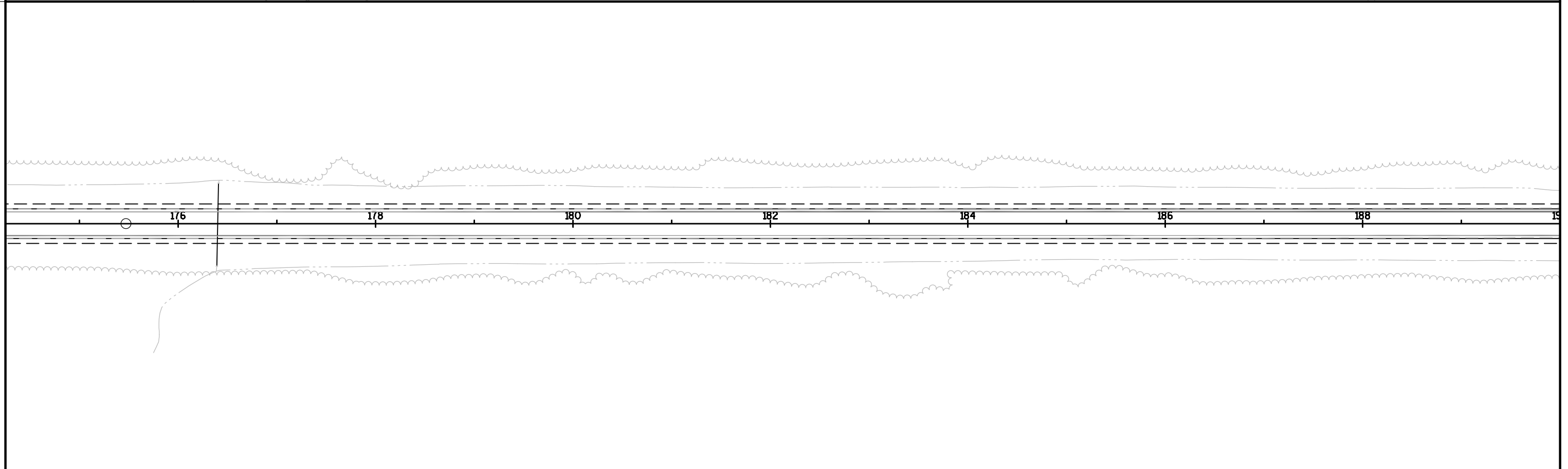
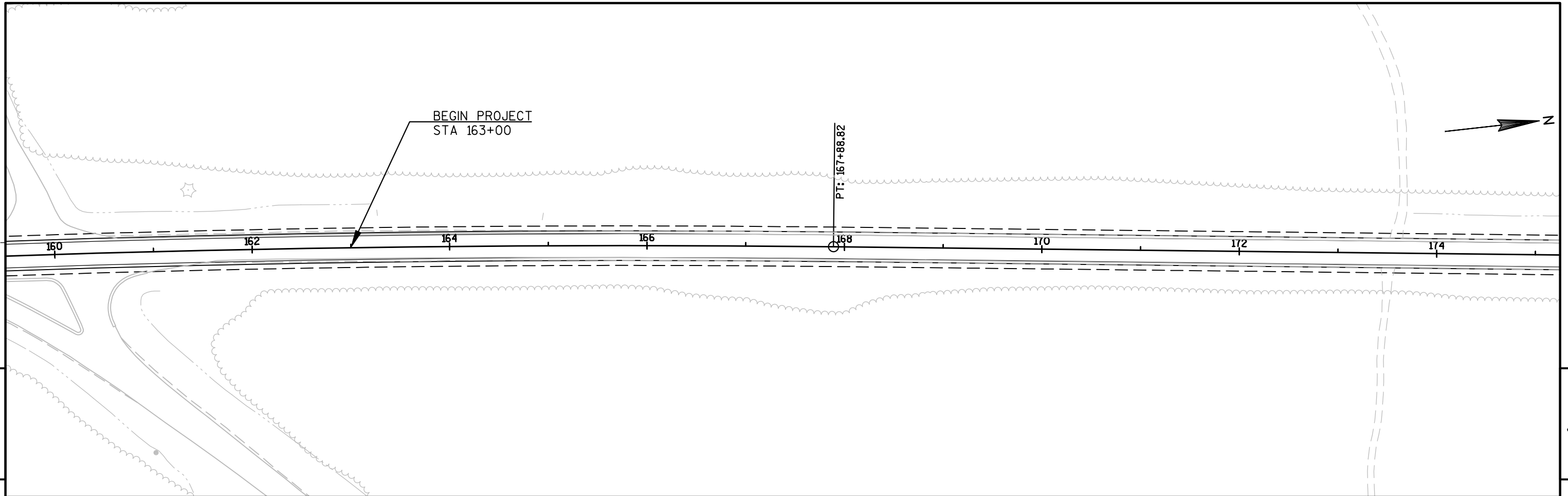
		690.0105
STATION	LOCATION	LF
268+00	USH 51	30
542+65	USH 51	30
	TOTAL	60

TEMPORARY PAVEMENT MARKING

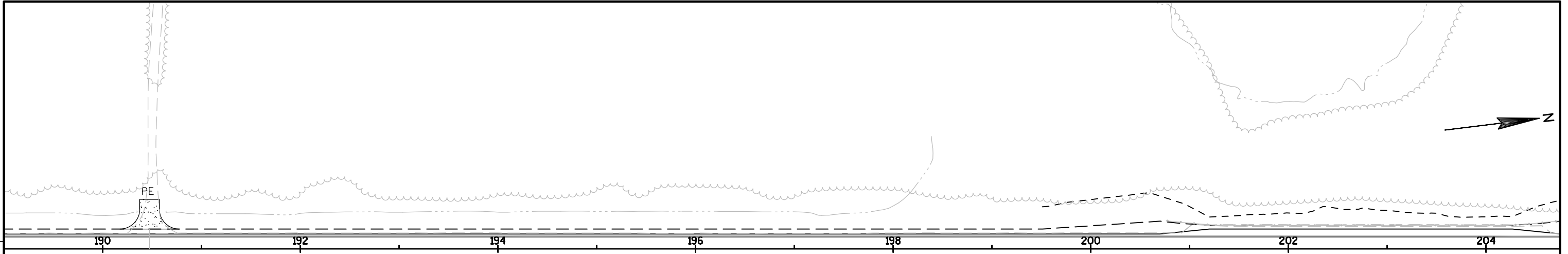
		649.0100	
		TEMPORARY	
		PAVEMENT	
		MARKING	
		4-INCH	
STATION - STATION	LOCATION	LF	REMARKS
268+00 - 542+65	CL	55492	YELLOW
		55492	

REMOVING ASPHALTIC SURFACE MILLING SPOT REPAIR

		SPV.0180.01
STATION - STATION	LOCATION	SY
	CTH H - CTH W	5000
	TOTAL	5000

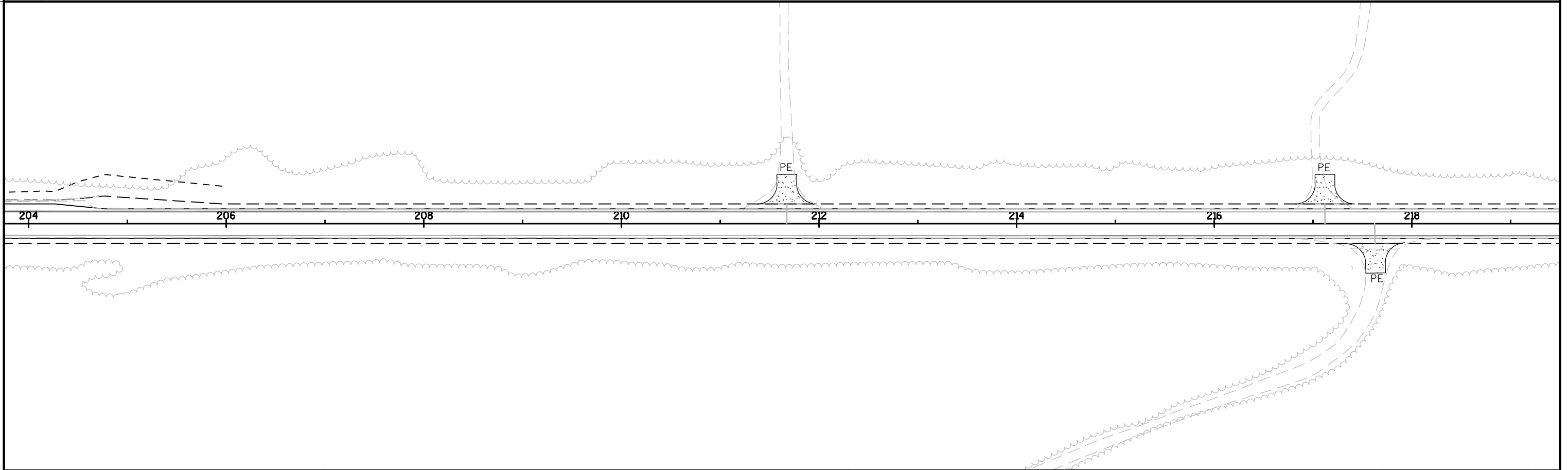


PROJECT NO:1170-20-70	HWY: USH 51	COUNTY: VILAS	PLAN AND PROFILE: USH 51 CTH M TO CTH W	SHEET	E
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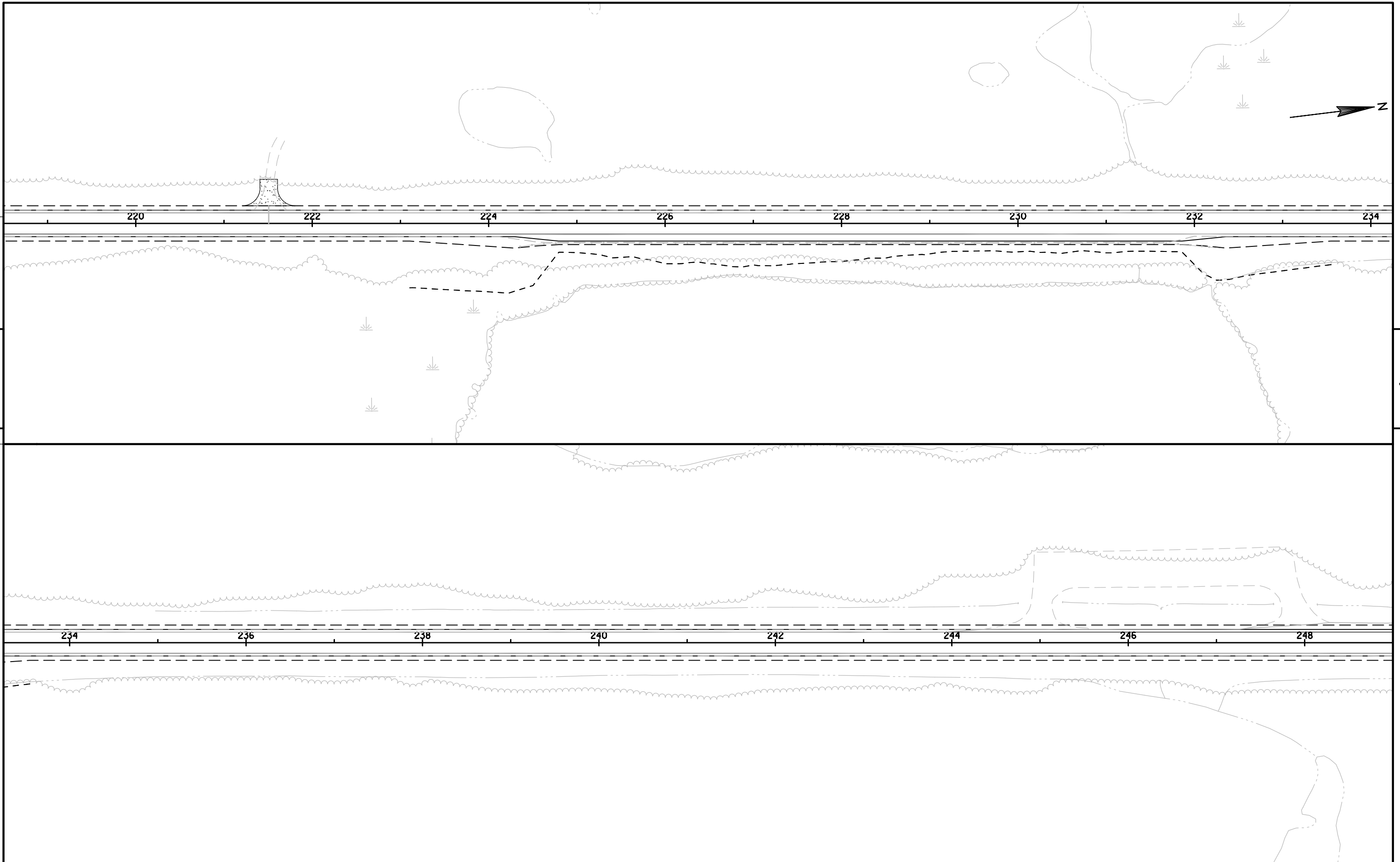


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PROJECT NO:1170-20-70	HWY: USH 51	COUNTY: VILAS	PLAN AND PROFILE: USH 51 CTH M TO CTH W	SHEET	E
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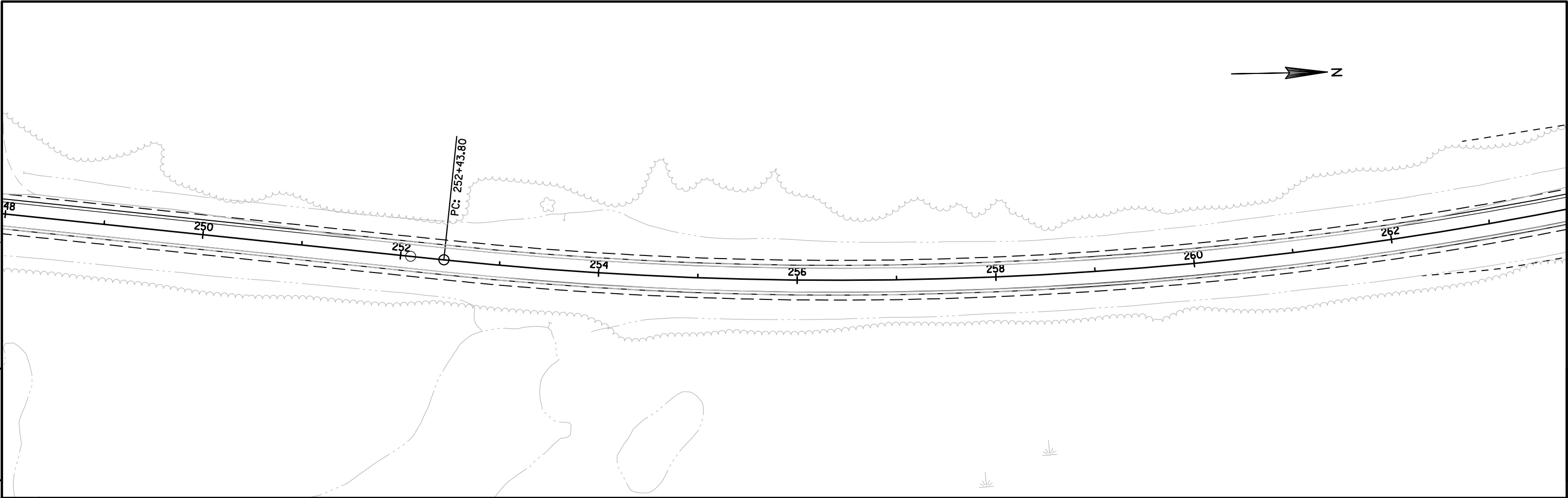


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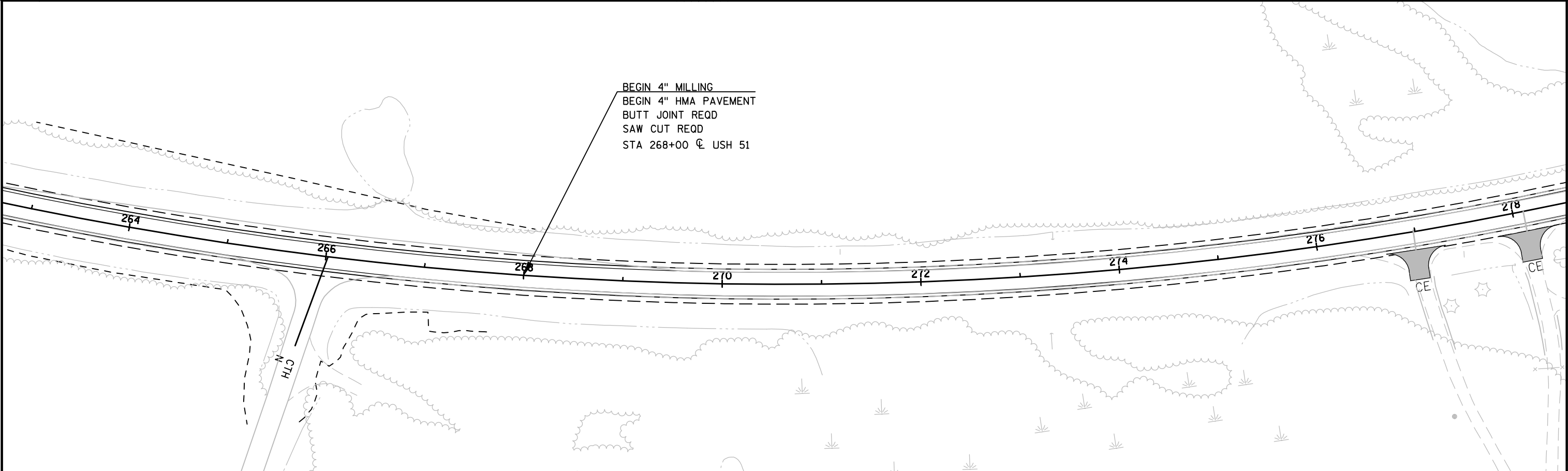
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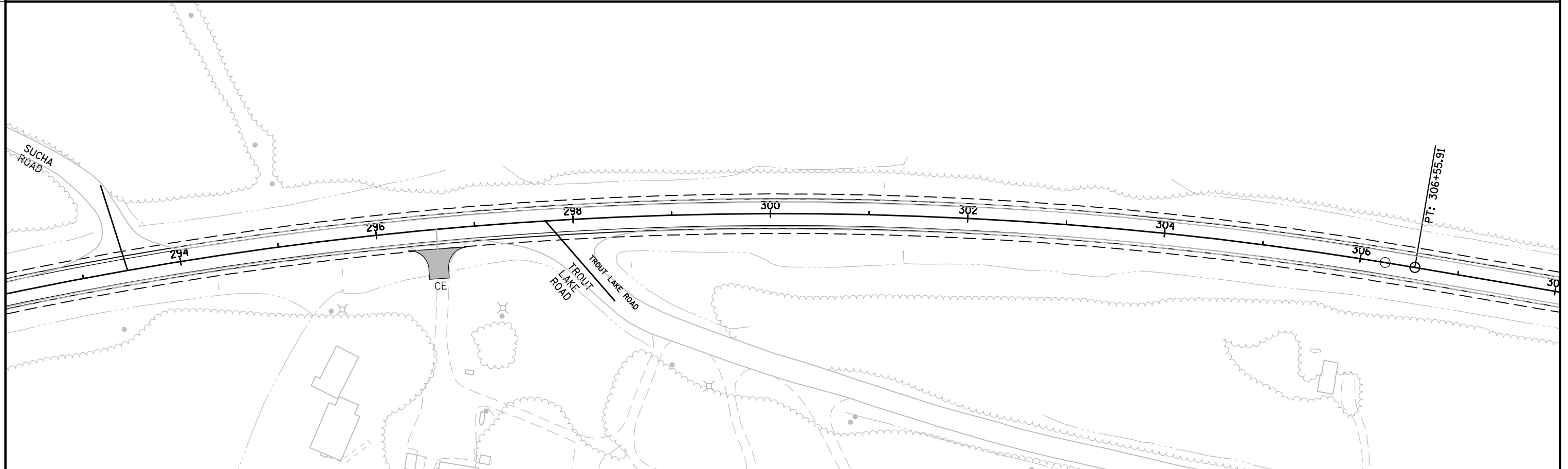
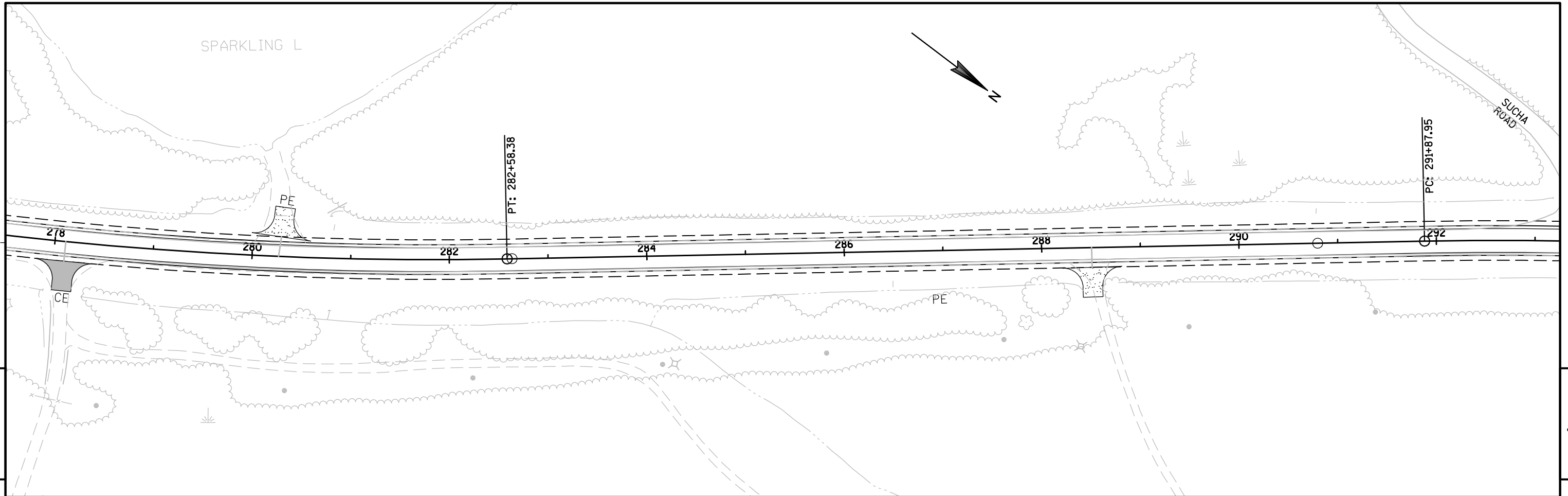
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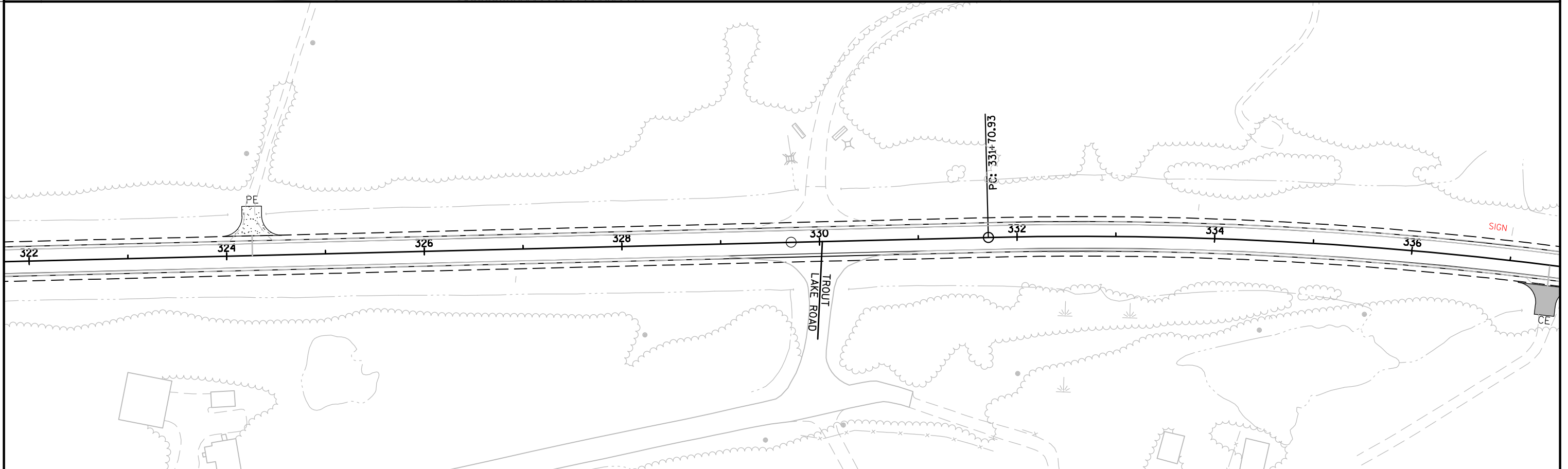
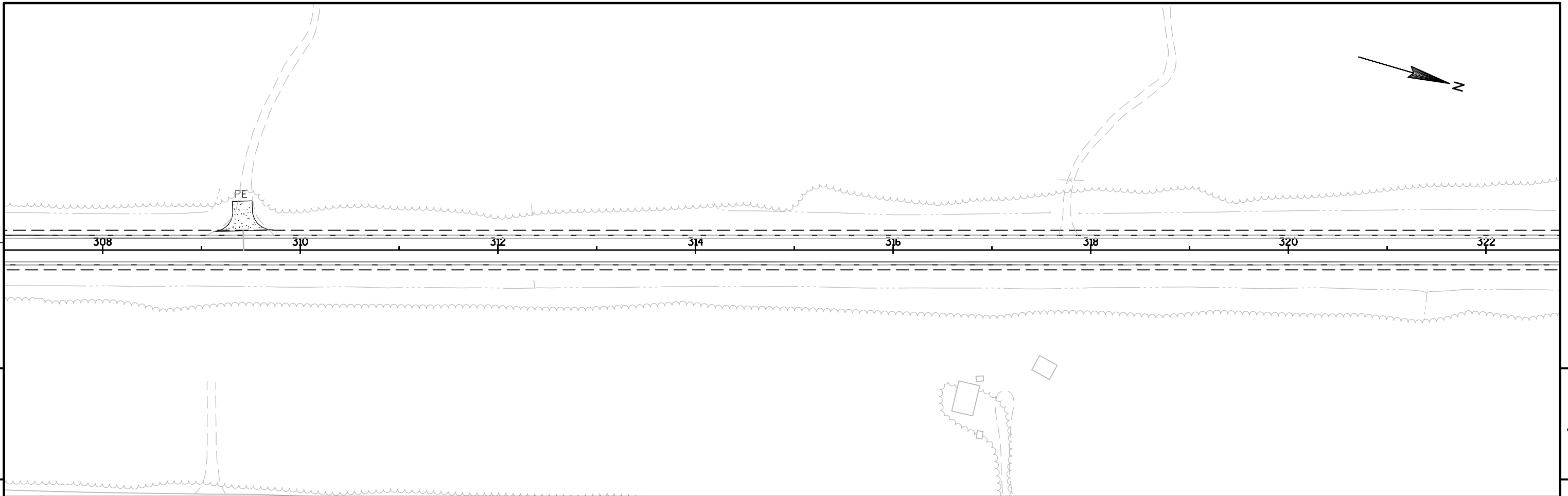
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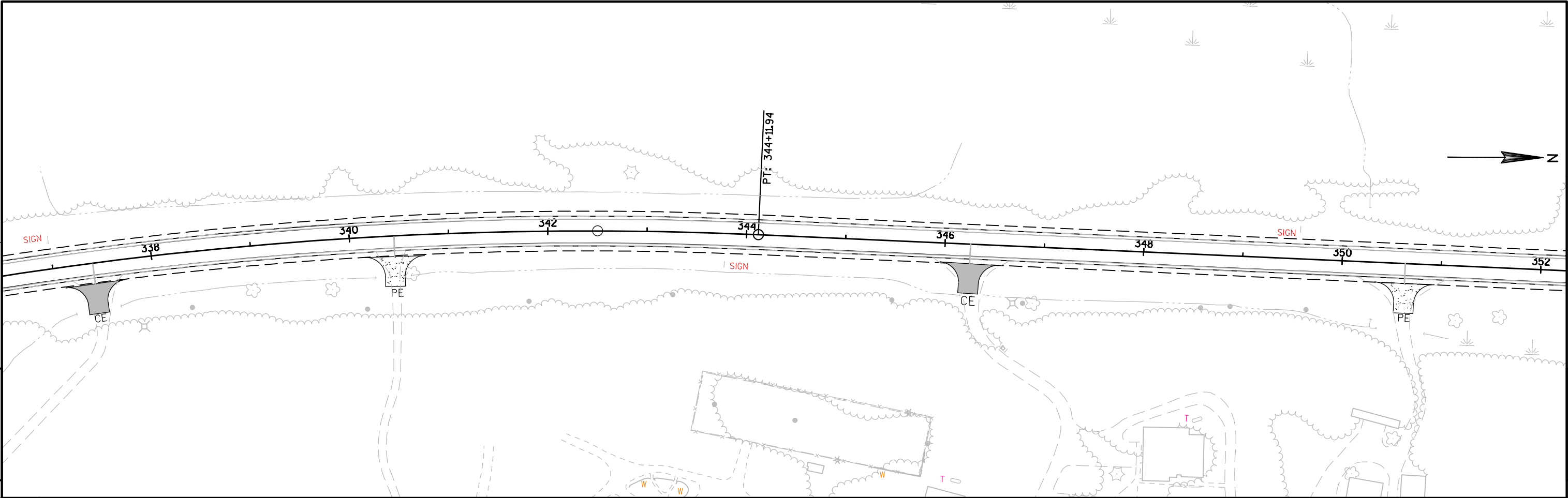


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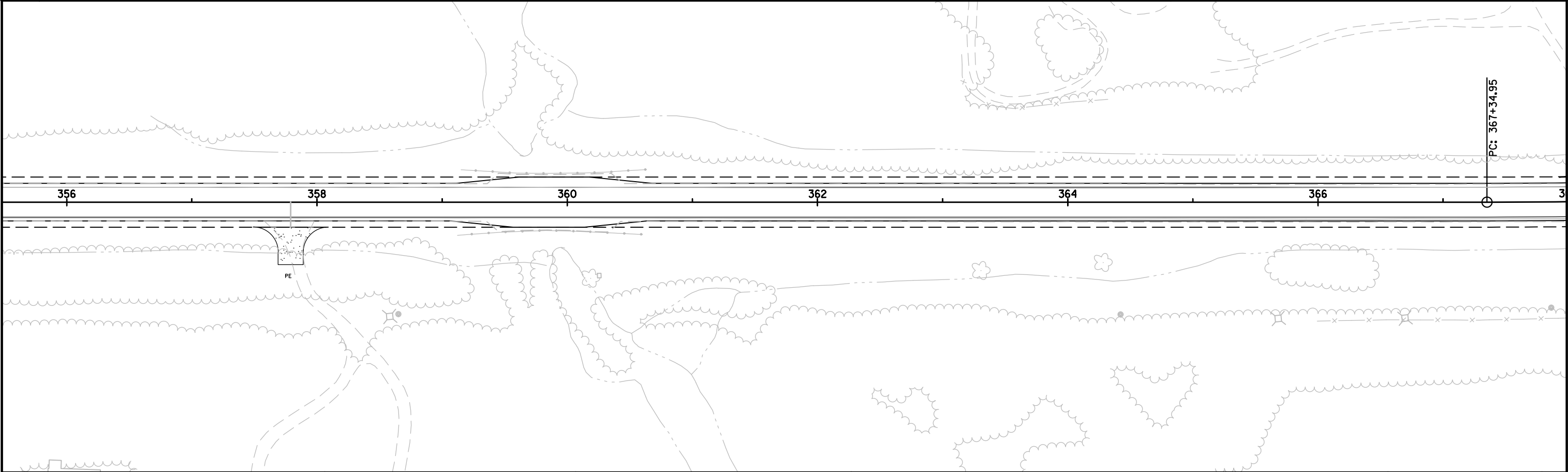


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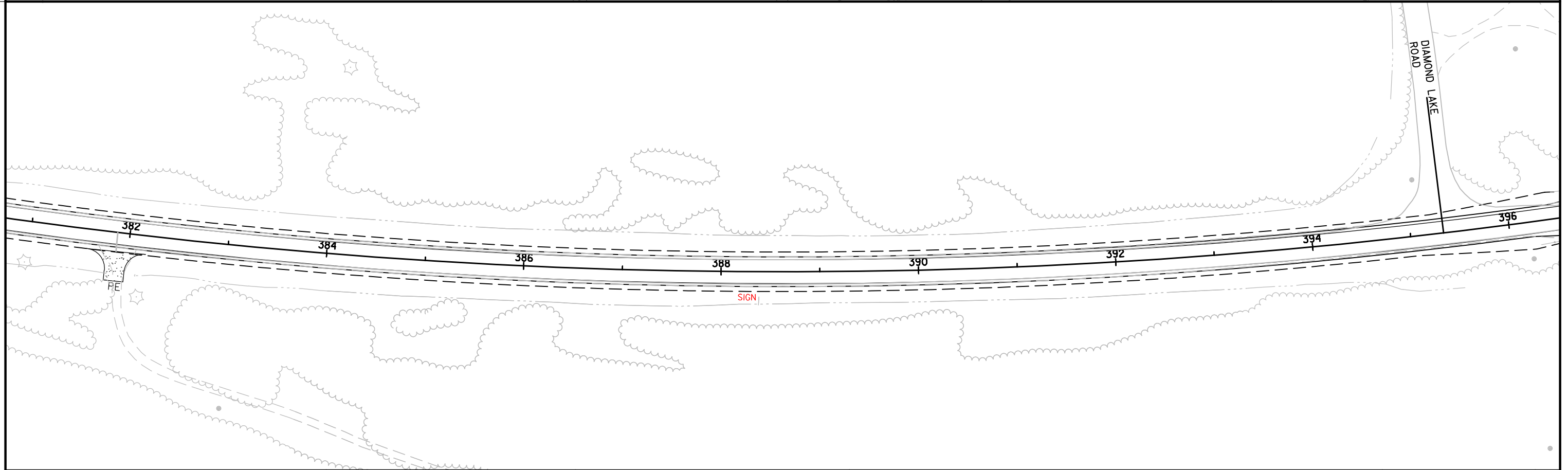
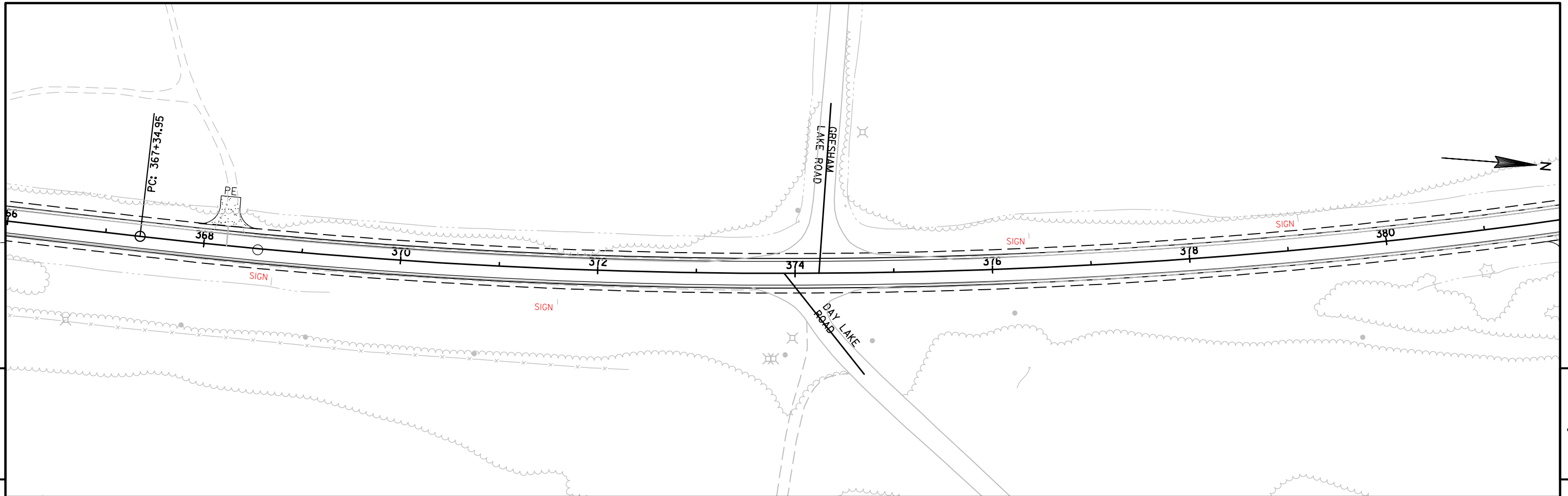
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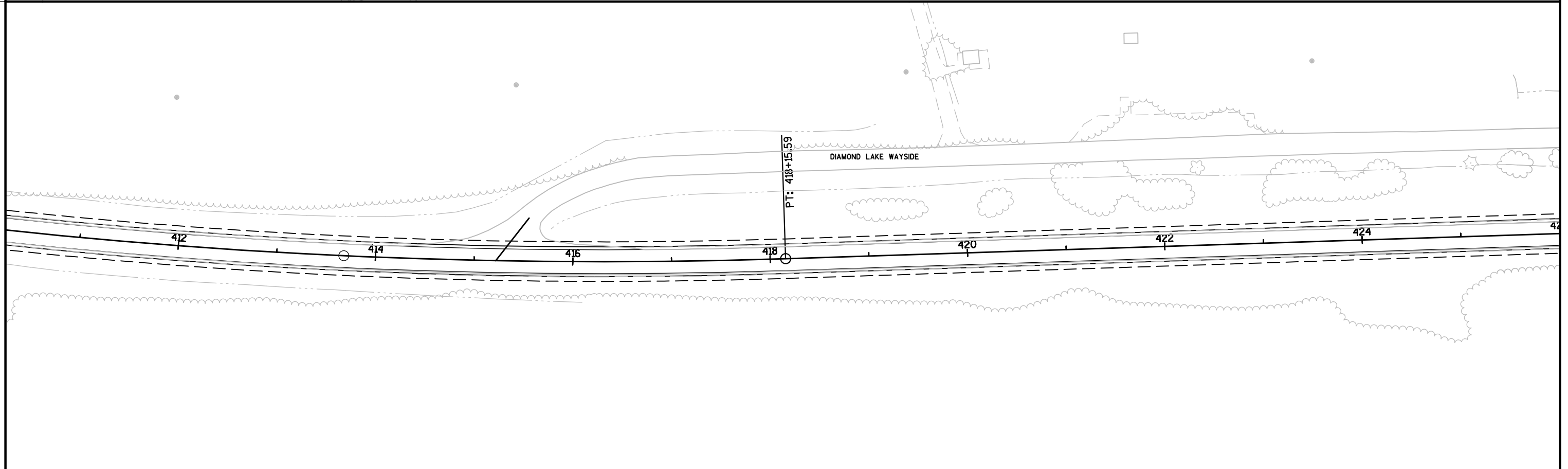
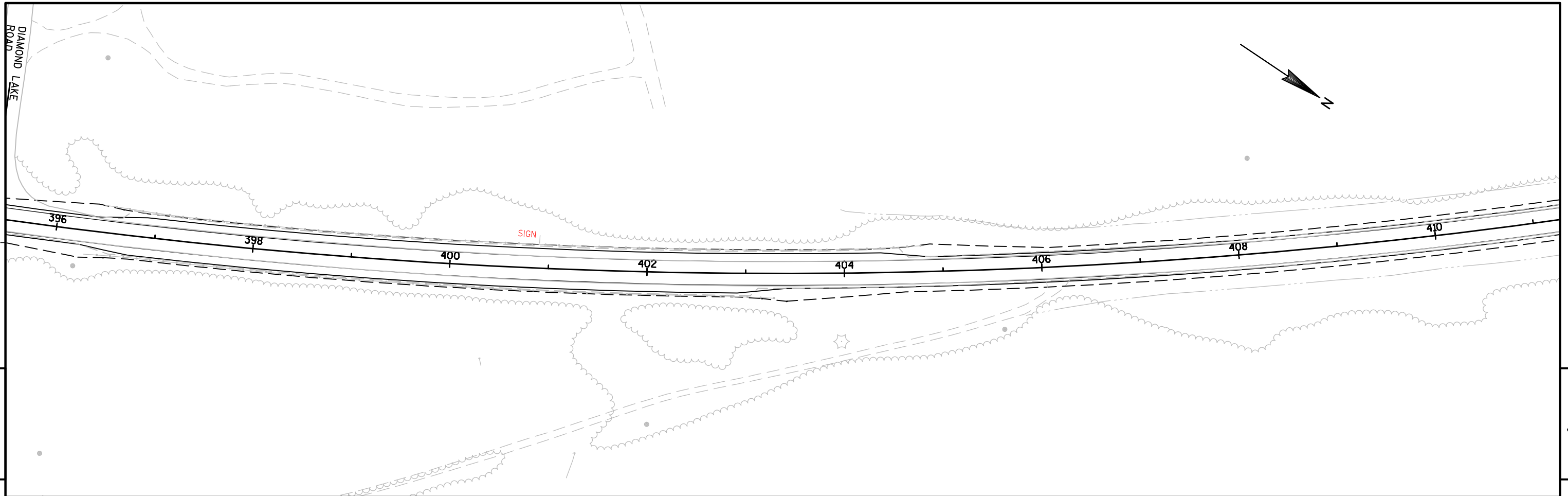
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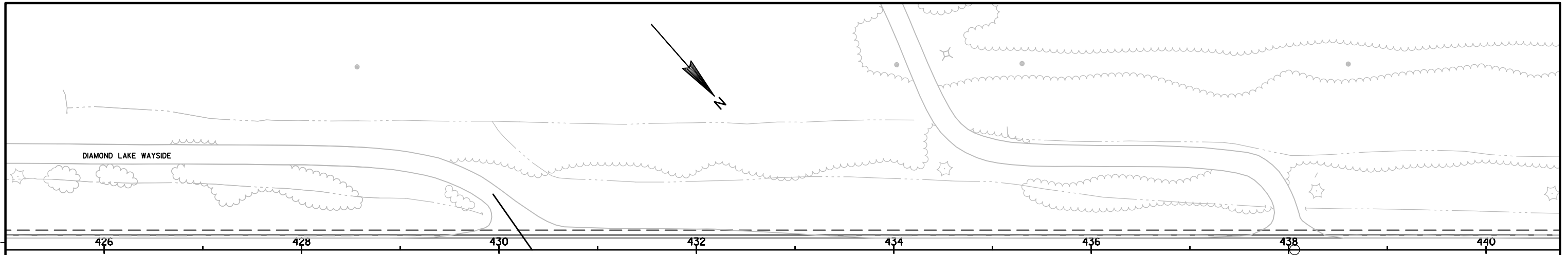
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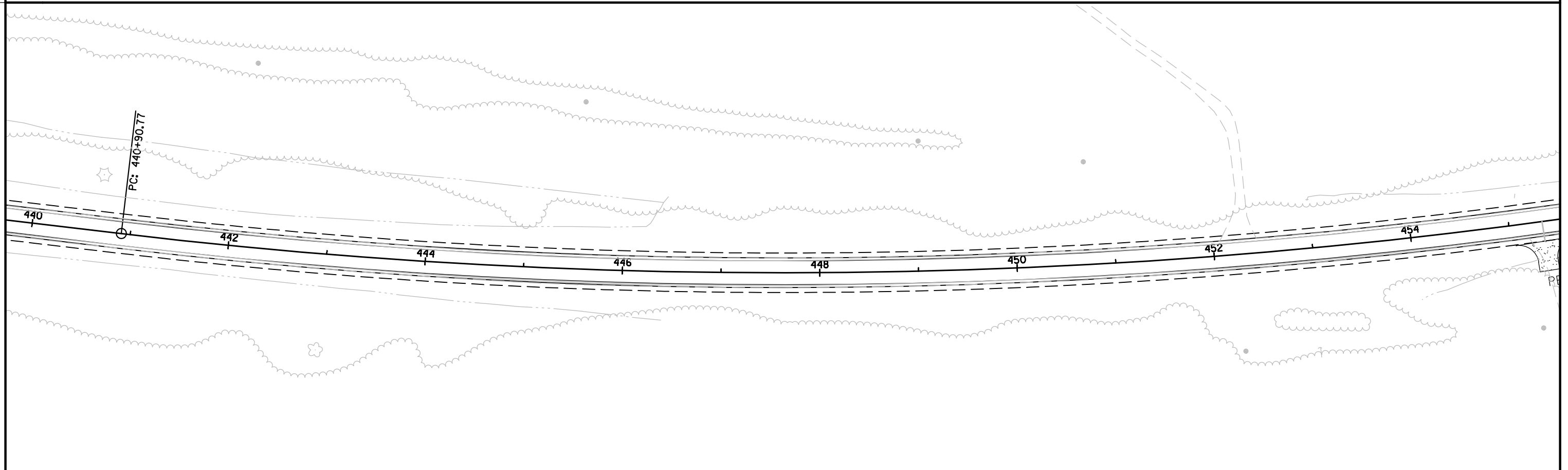


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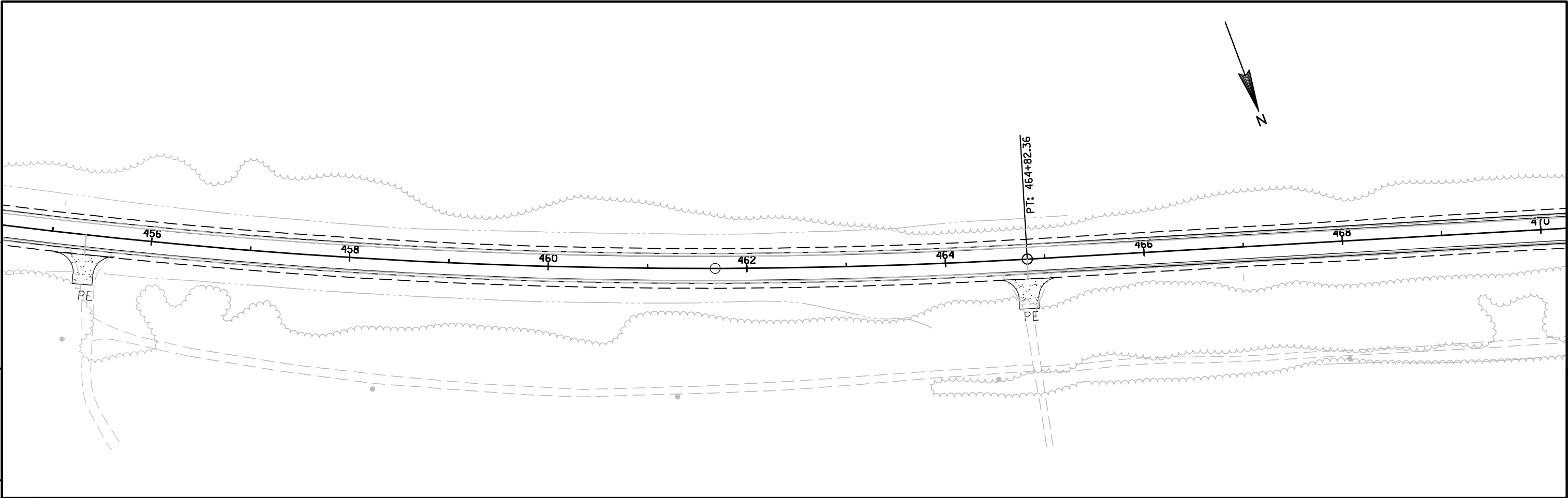
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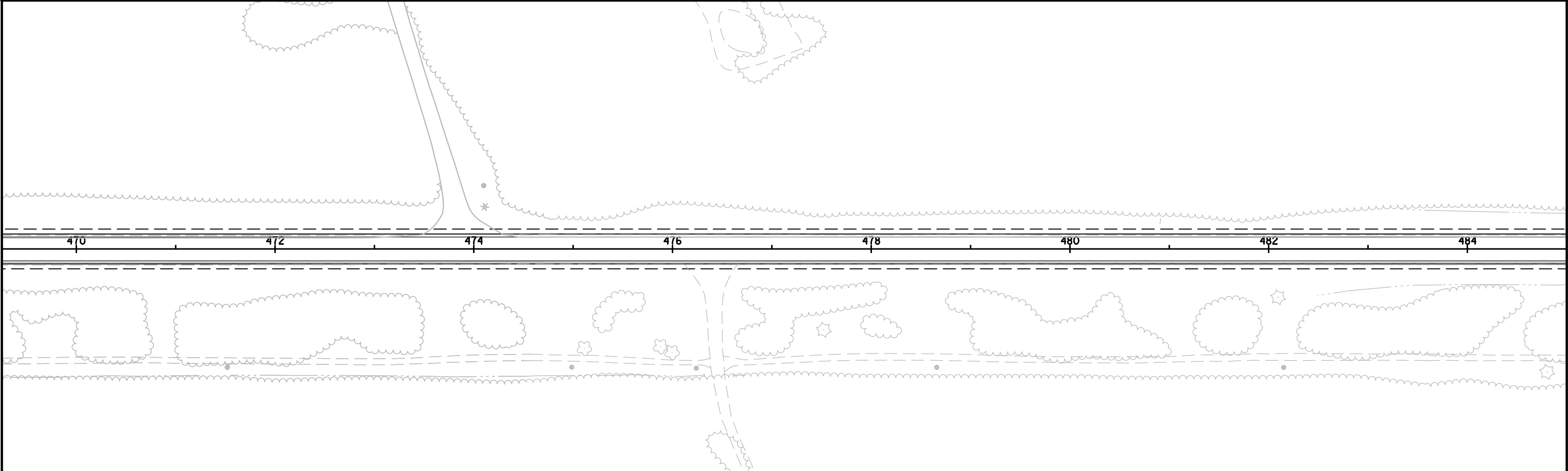


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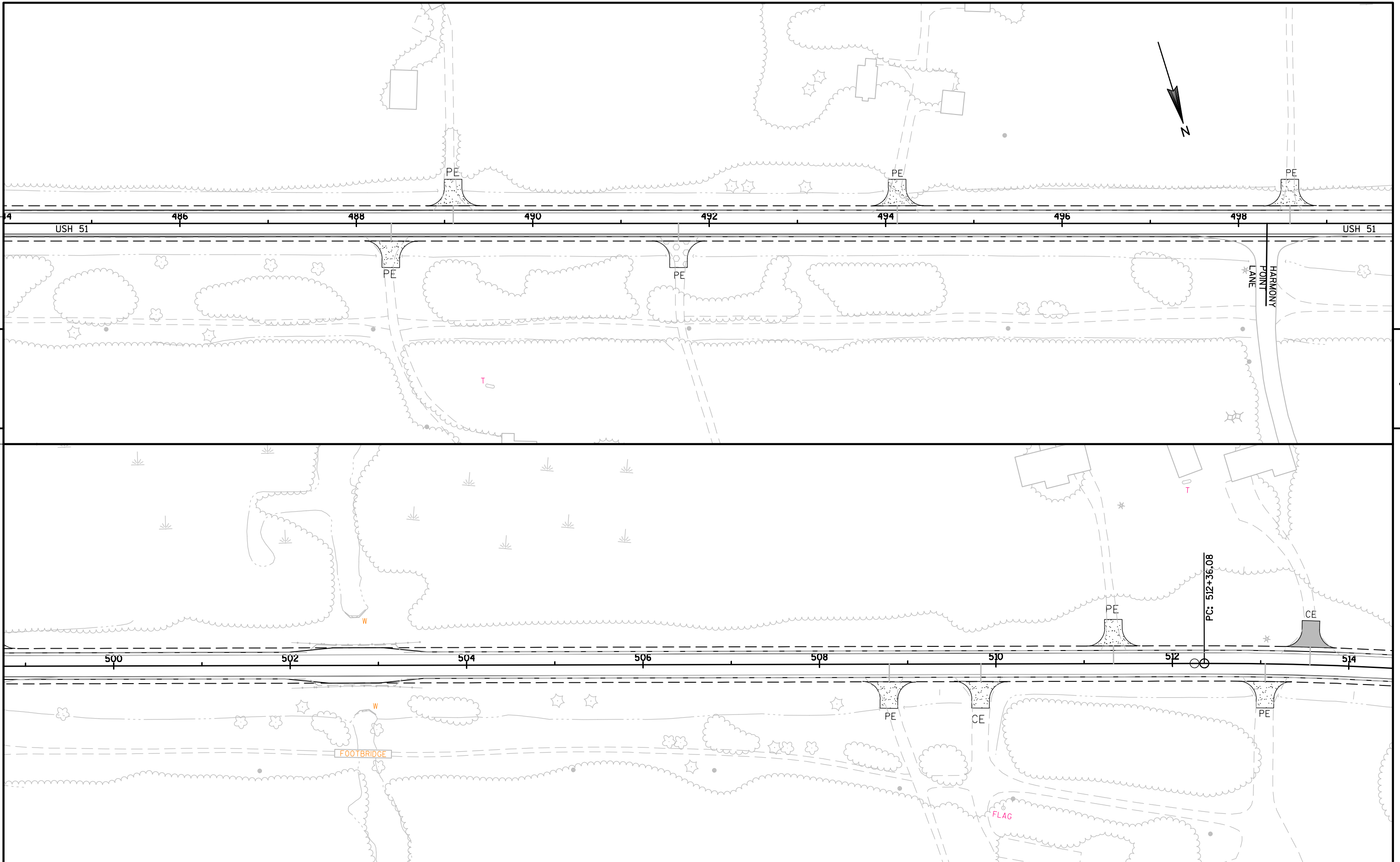
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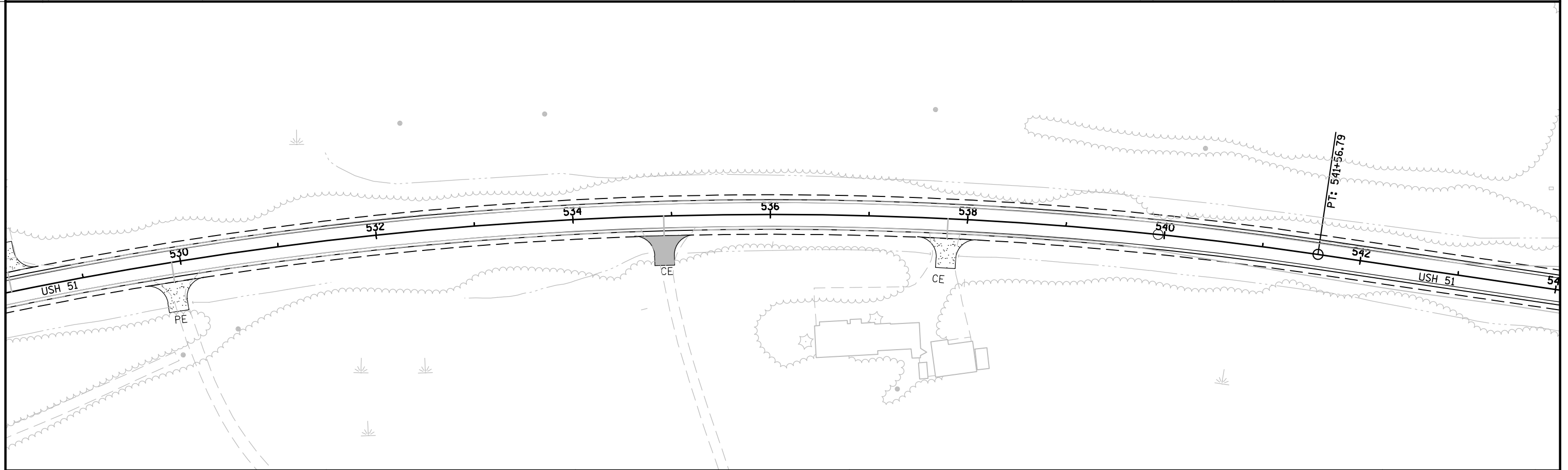
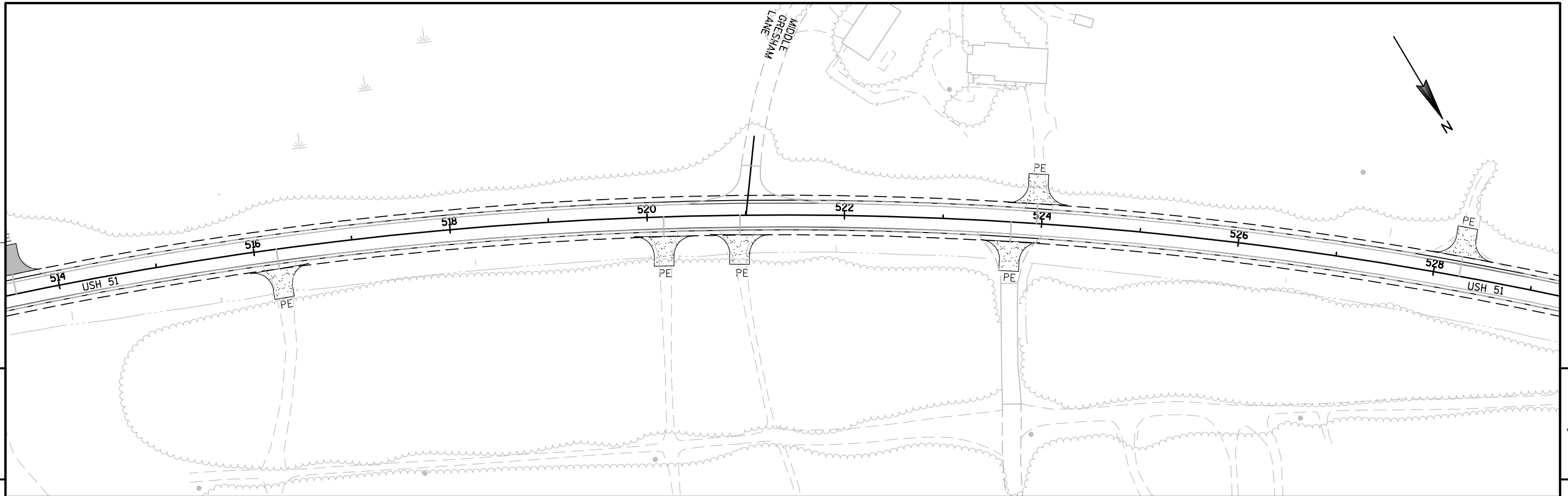
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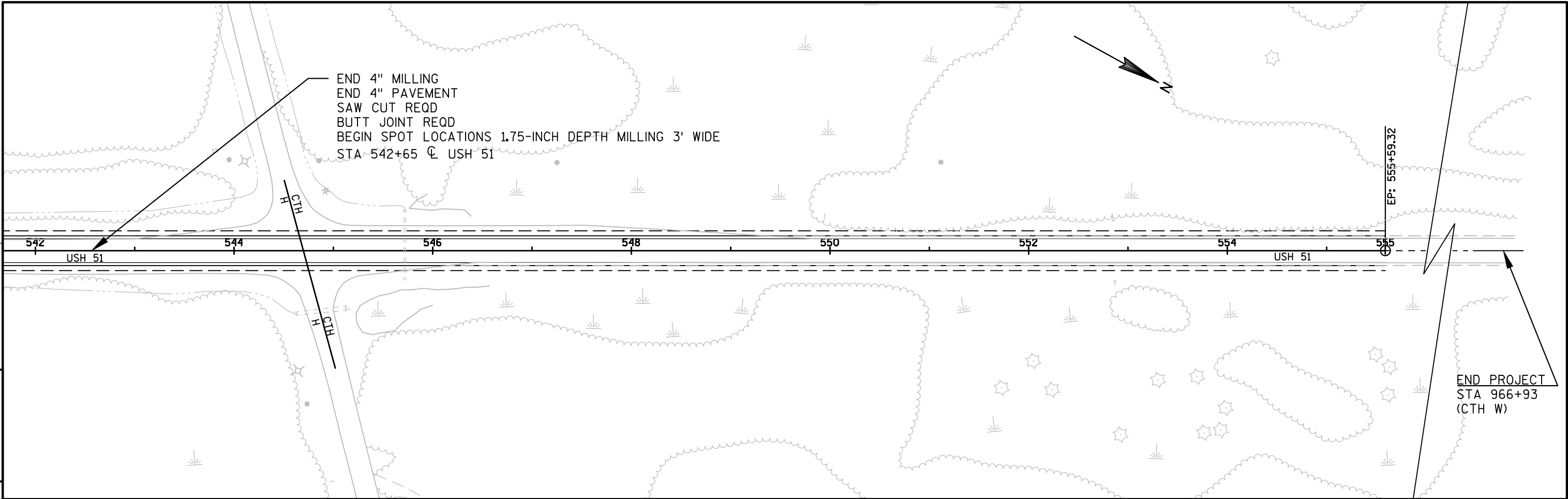
FILE NAME : N:\PDS\C3D\1170-USH 51 EMERGENCY PROJECT\SHEETS\PLAN\050201_PN.DWG

PLOT DATE : 6/14/2013 9:33 AM

PLOT BY : LAVIN, MITCHELL L PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 44



Standard Detail Drawing List

13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-01A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

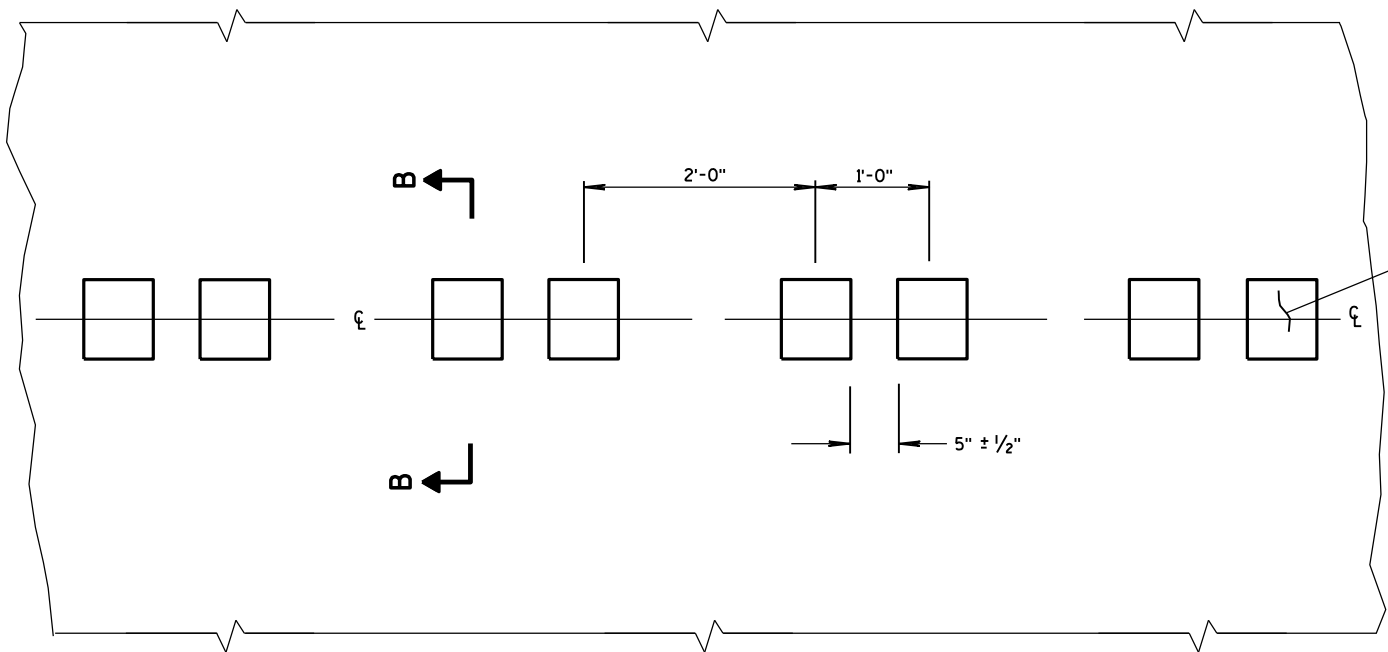
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

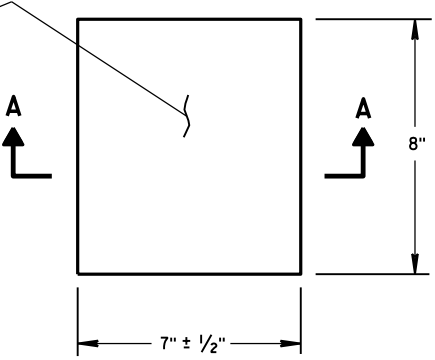
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

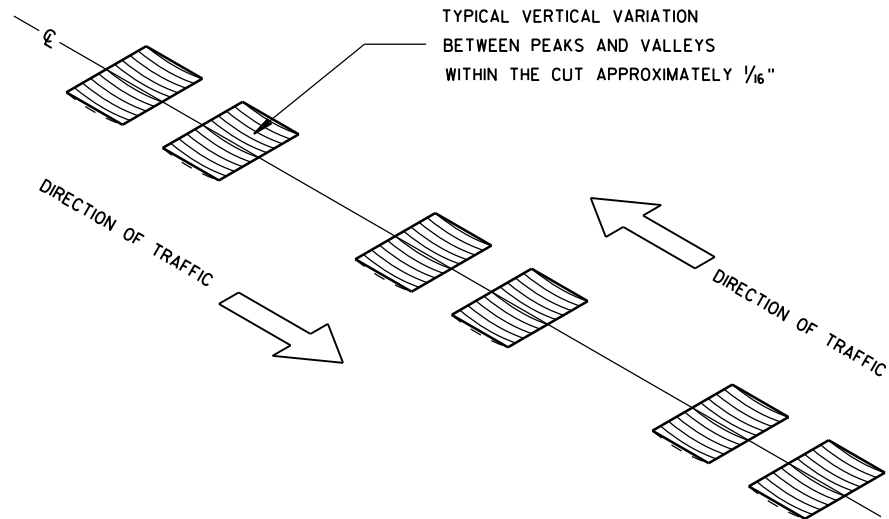
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



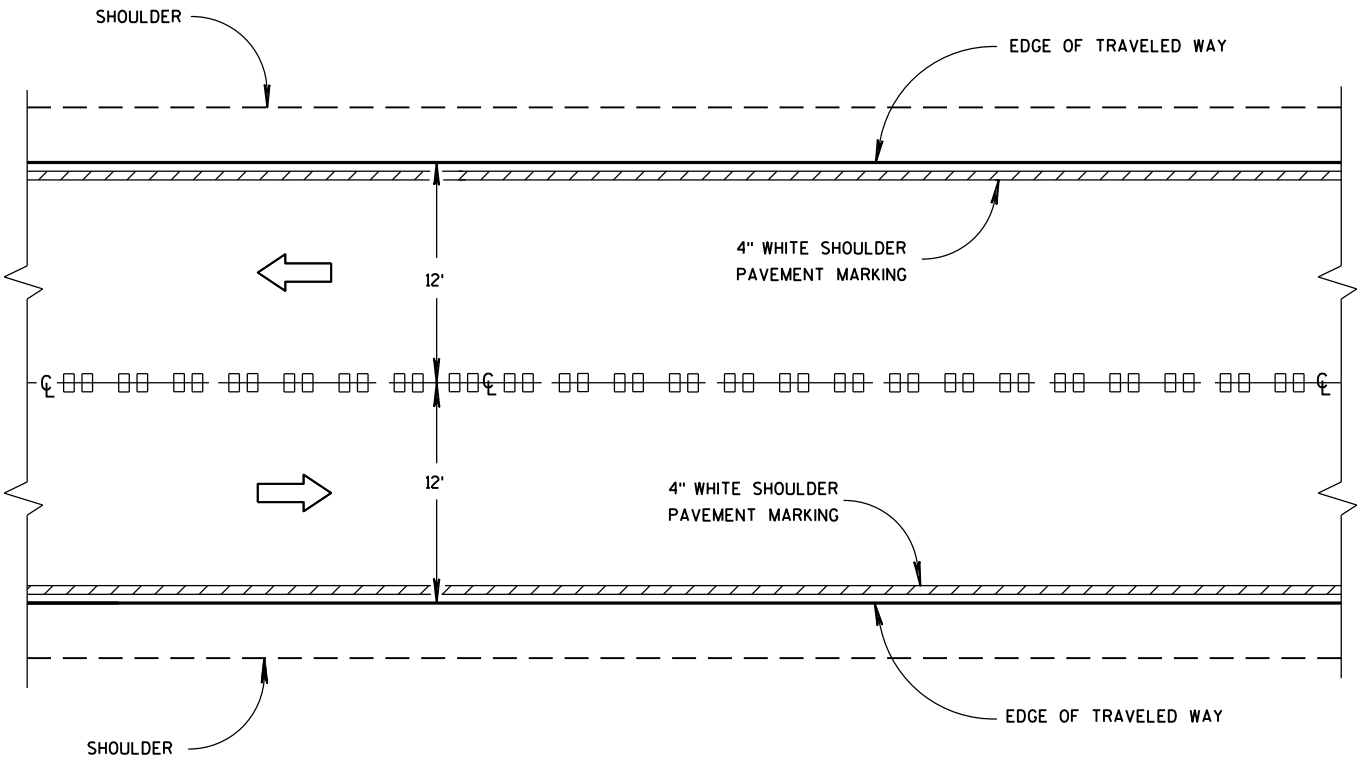
PLAN VIEW
CENTER LINE WITH GROOVES



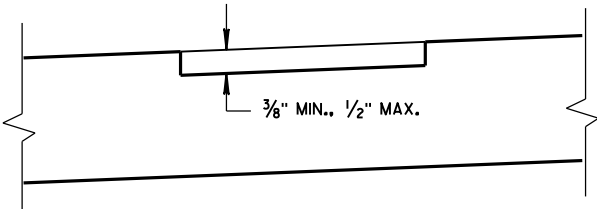
PLAN VIEW
(SINGLE GROOVE)



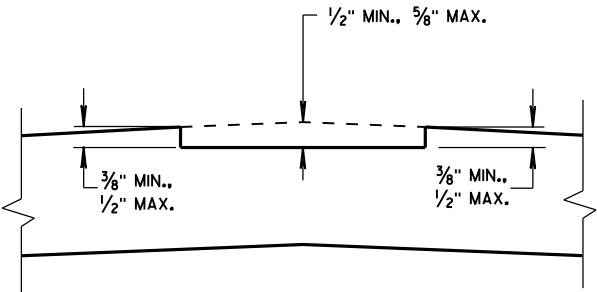
ISOMETRIC



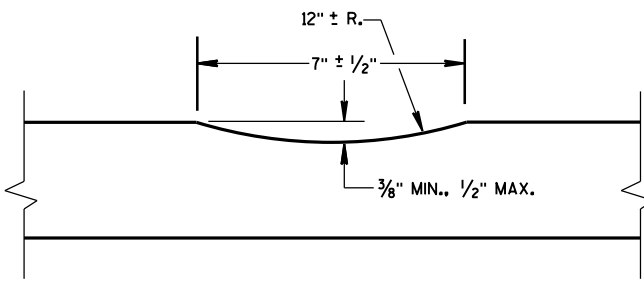
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



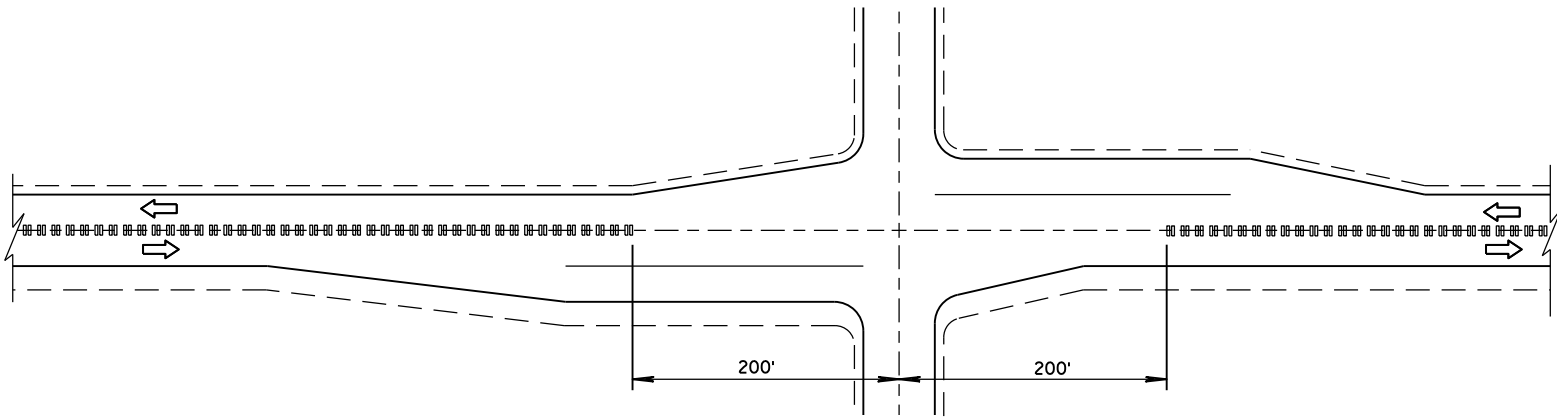
SECTION B-B
CROWNED ROADWAY



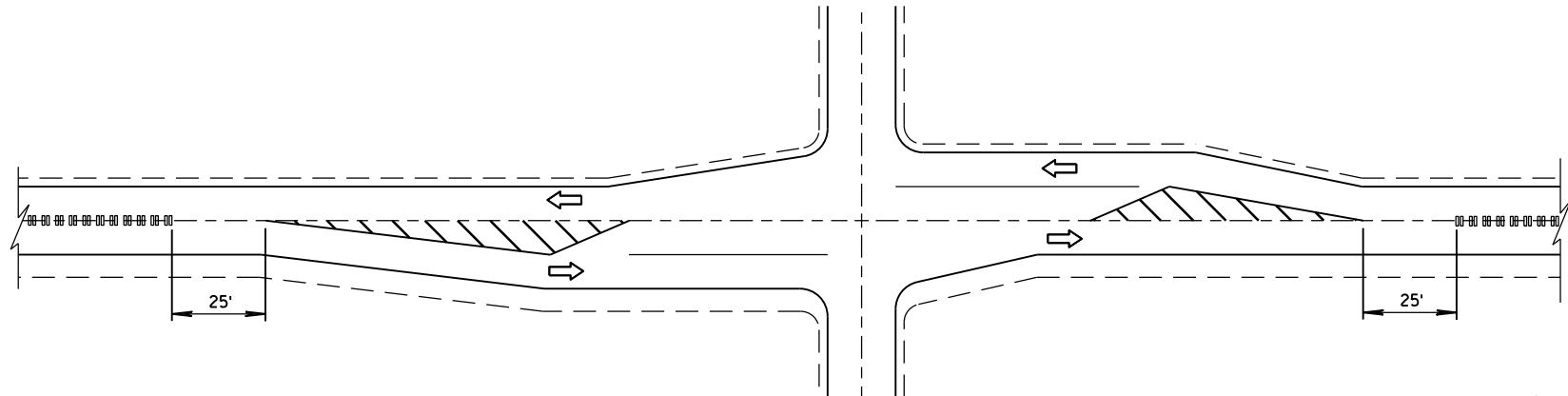
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

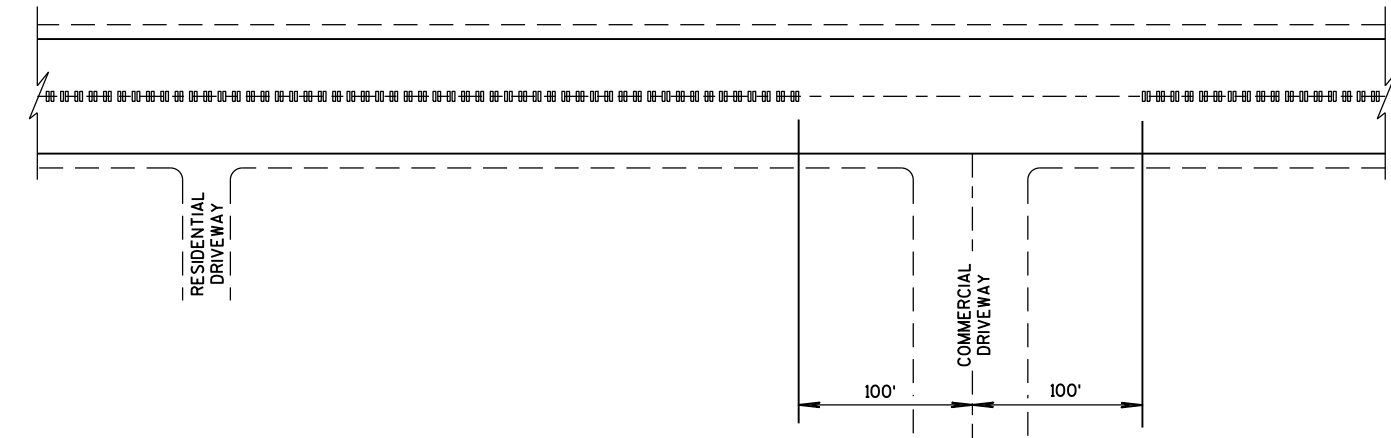
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

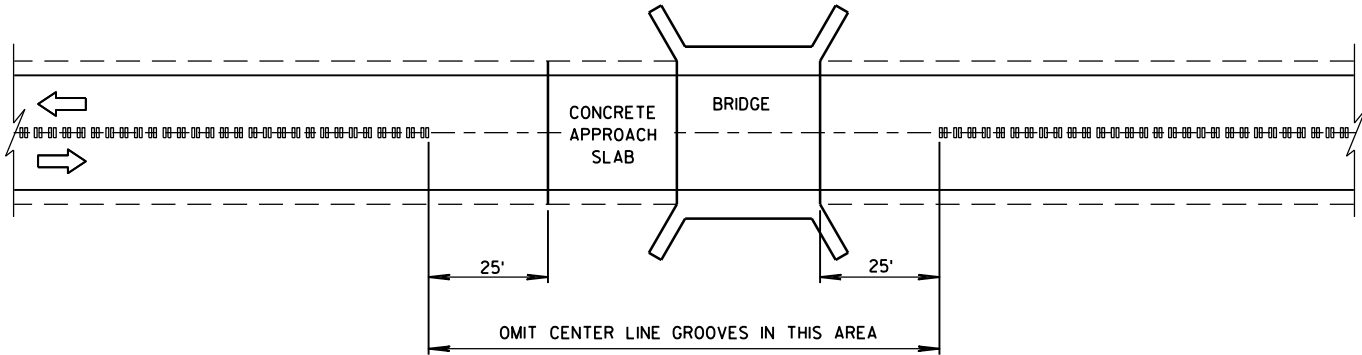


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

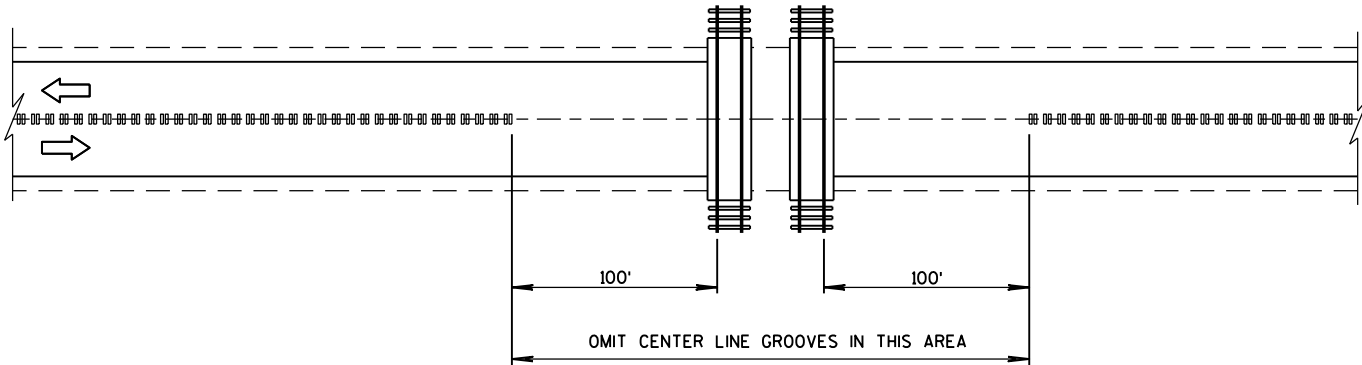


CENTER LINE GROOVES AT DRIVEWAYS^①

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

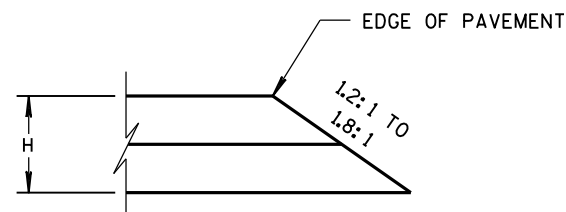


CENTER LINE GROOVES AT BRIDGES

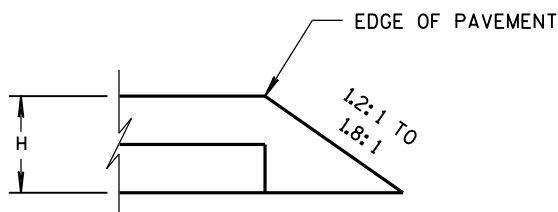


CENTER LINE GROOVES AT RAILROADS

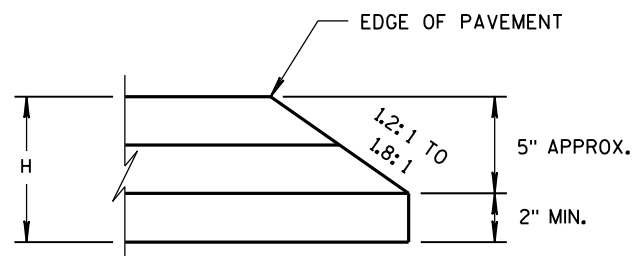
2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



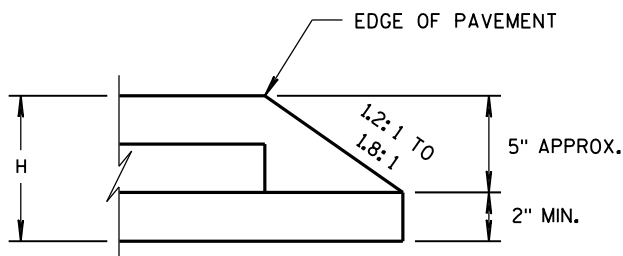
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

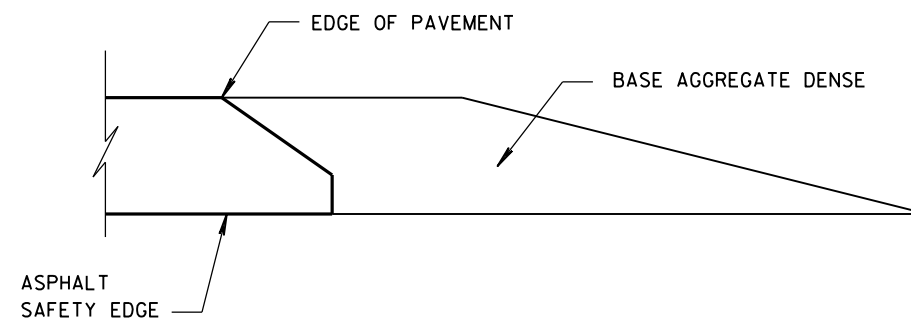


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



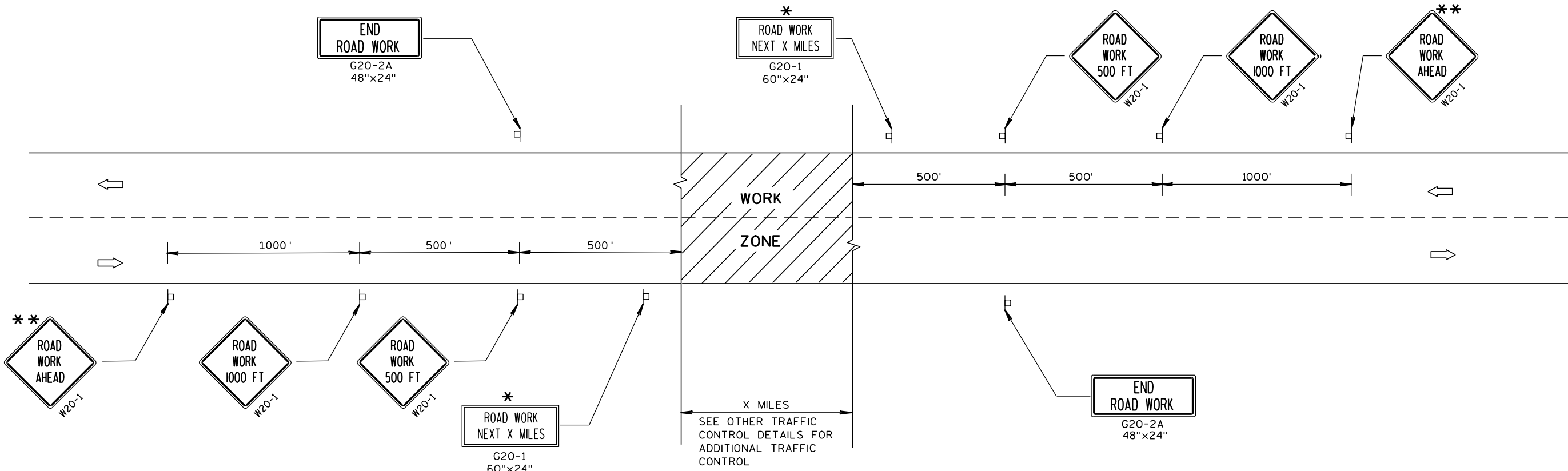
FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

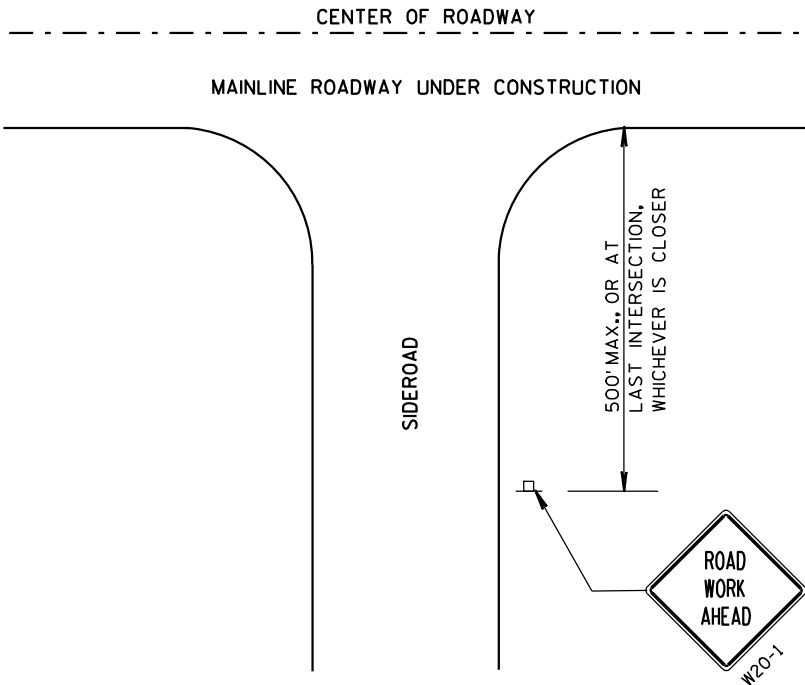
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

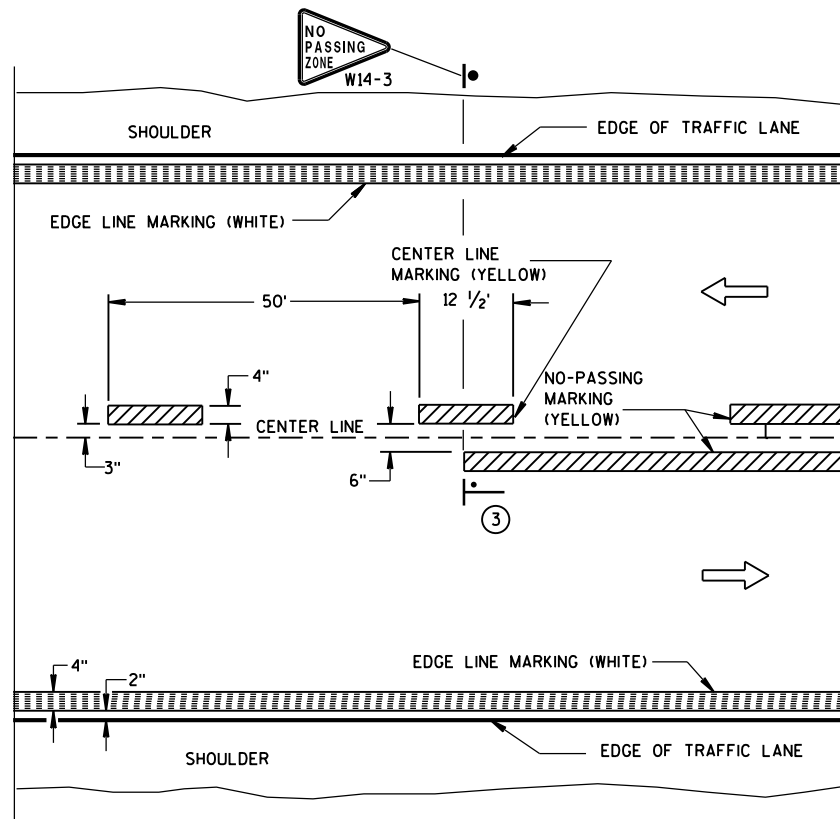
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.



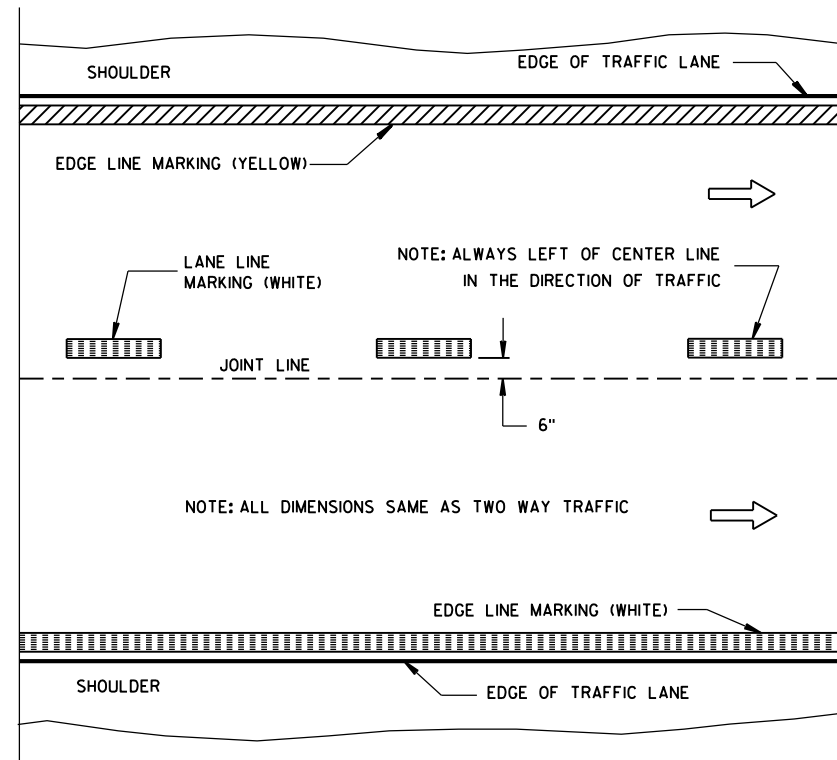
LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. Spang CHIEF SIGNS AND MARKING ENGINEER
FHWA	

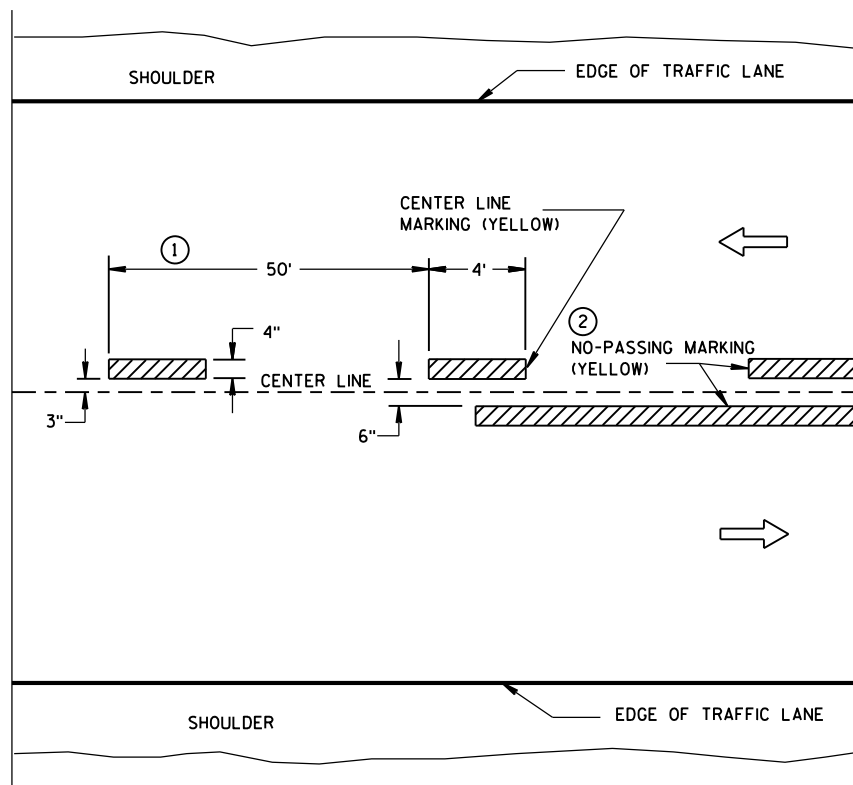


TWO WAY TRAFFIC

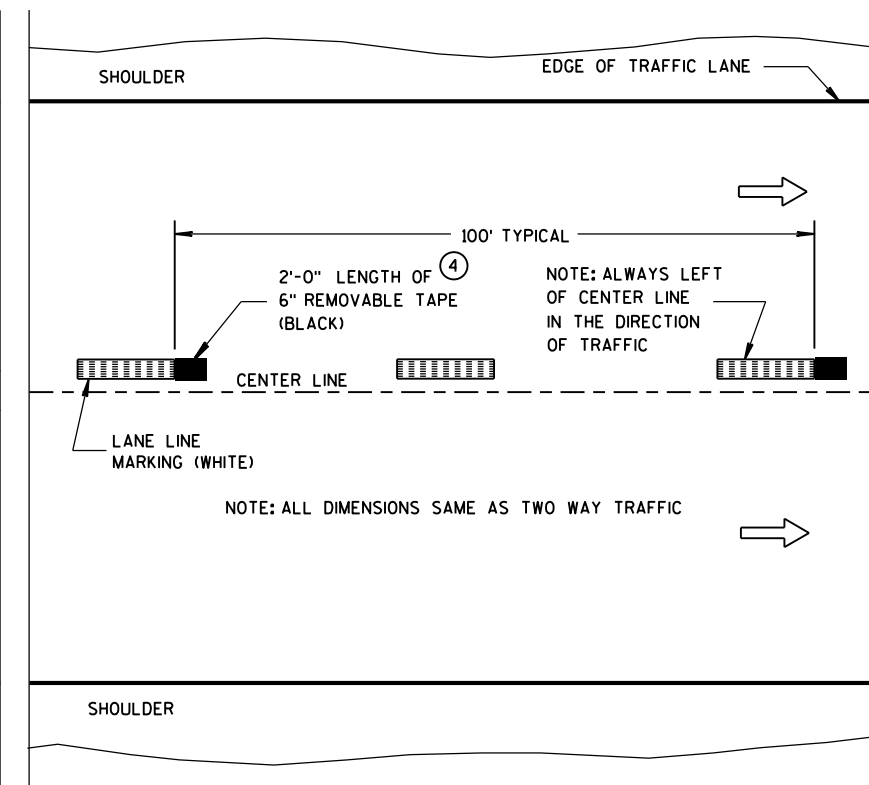


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

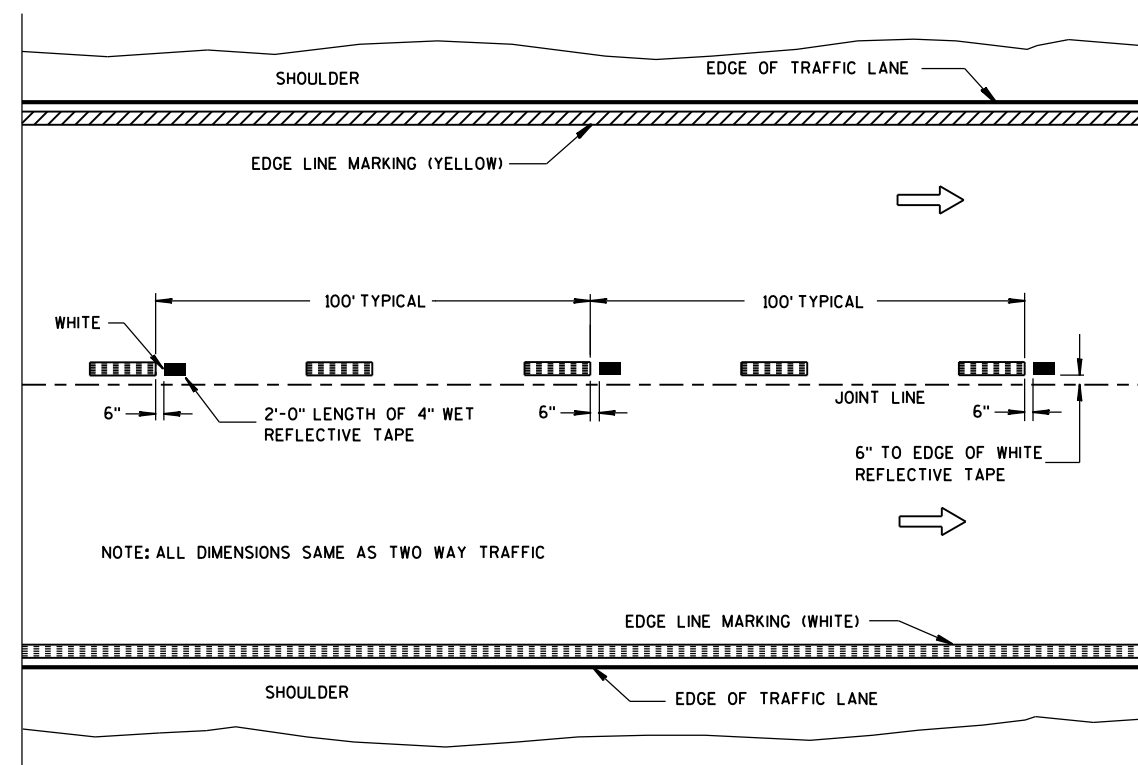
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

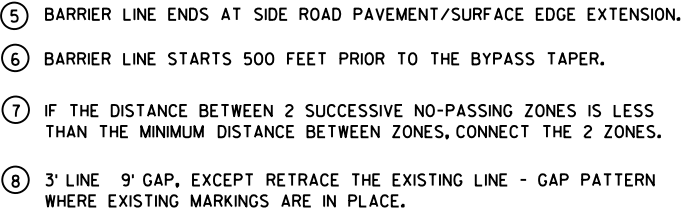
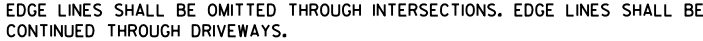
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA




PAVEMENT MARKING (INTERSECTIONS)


STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TWO-LANE ROADWAY


SYMBOLS



WORK AREA



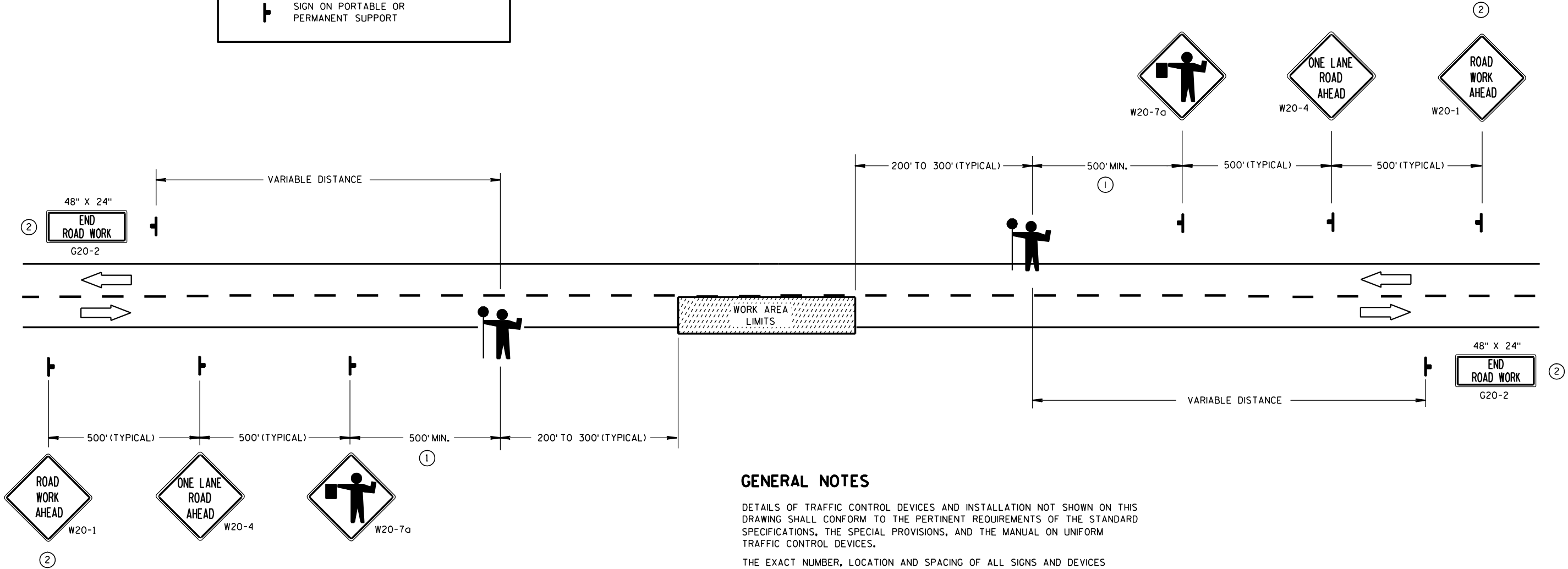
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



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.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

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, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT 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.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

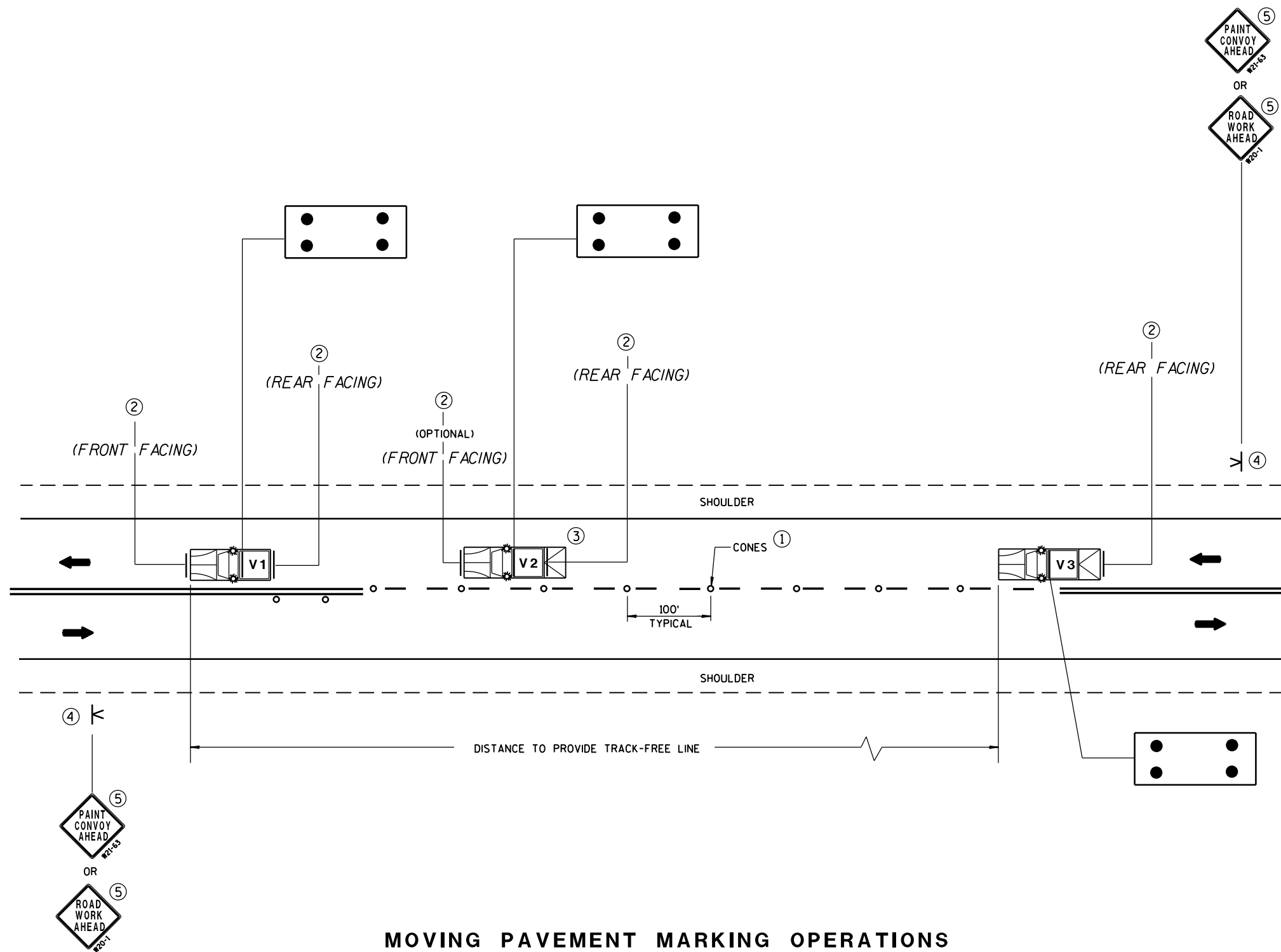
9/5/06

DATE

/S/ Thomas N. Notbohm

STATE TRAFFIC ENGINEER OF DESIGN

FHWA



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

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.

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.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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 OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

K SIGN ON PORTABLE SUPPORT

→ DIRECTION OF TRAVEL

○ CONES

⋮ FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/6/2011
DATE

FHWA

/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER OF DESIGN



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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