

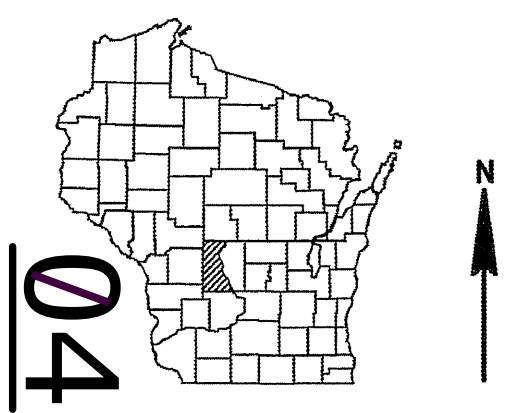
LAX
PROJECT ID: 5809-00-74
WITH: N/A
COUNTY: JUNEAU

MAY 2025

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	Gross Sections

TOTAL SHEETS = 82



DESIGN DESIGNATION 5809-00-04

A.A.D.T.	2025	=	500
A.A.D.T.	2045	=	550
D.H.V.		=	55
D.D.		=	50/50
T.		=	14.0%
DESIGN SPEED		=	55 MPH
ESALS		=	88,000

CONVENTIONAL SYMBOLS

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

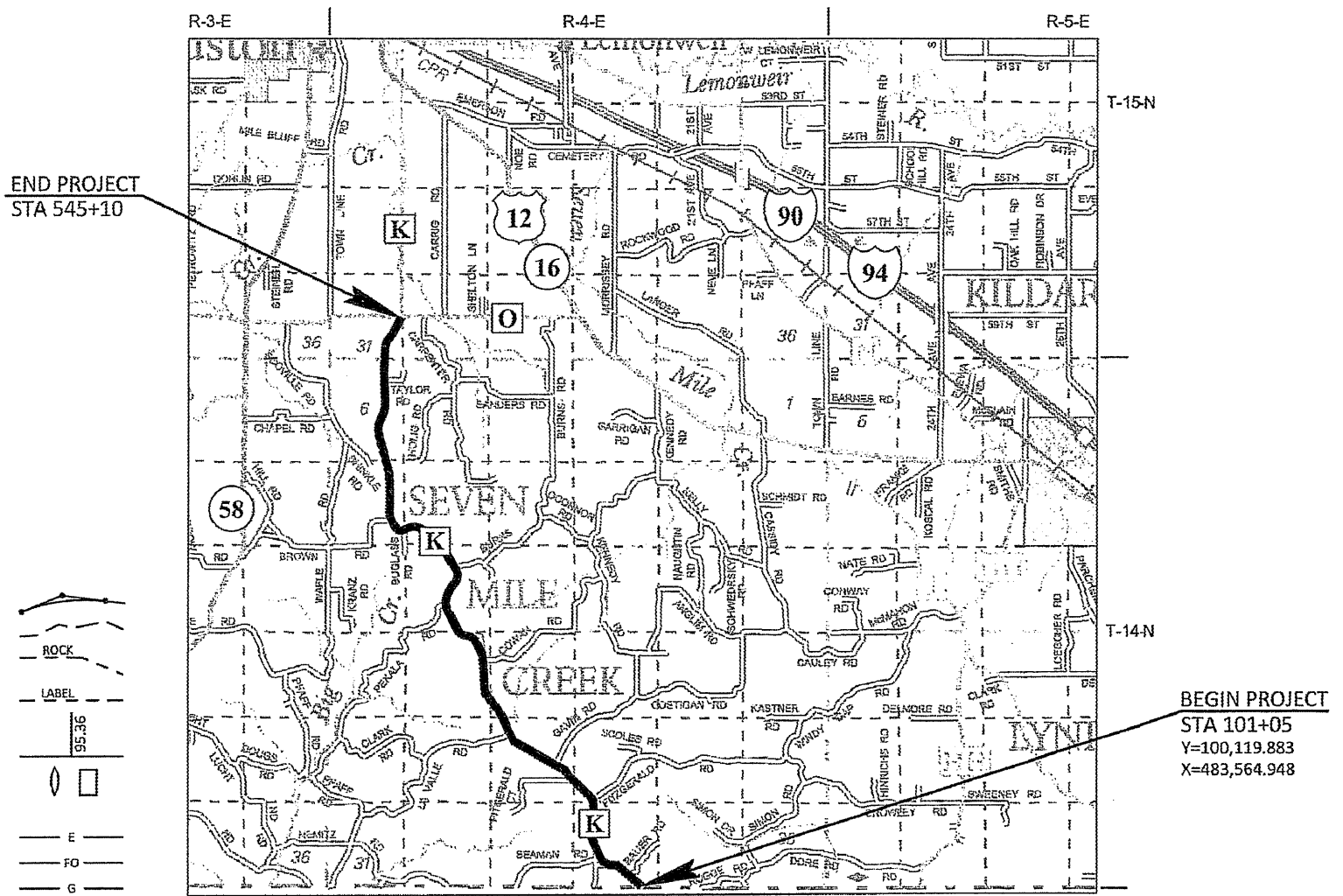
REEDSBURG - MAUSTON (CTH K)

SAUK COUNTY LINE TO CTH O

CTH K

JUNEAU COUNTY

STATE PROJECT NUMBER
5809-00-74



LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 8.410 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), JUNEAU COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5809-00-74	WISC 2025497	1

ACCEPTED FOR
COUNTY of JUNEAU
2-3-25
(Date)
(Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

Short Elliott Hendrickson Inc.
329 Jay Street, Suite 301
La Crosse, WI 54601-4007
Building a Better World for All of Us
608.782.3161 main | 888.908.8166 fax
www.sehinc.com

ALEIGHA J. BURG
45000-6
BROWNSVILLE MN
PROFESSIONAL ENGINEER

1/30/2025
(Date)
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor SEH
Designer SEH
Project Manager DELIA KOENIG
Regional Examiner SW REGION
Regional Supervisor KYLE HEMP

APPROVED FOR THE DEPARTMENT
DATE: 2/4/2025
(Signature)
Digitally signed by Delia Koenig P.E.
Date: 2025.02.04 12:53:49-06'00'

E

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	ID	INSIDE DIAMETER
AC	ACRE	INV	INVERT
AGG	AGGREGATE	IP	IRON PIPE ON PIN
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	LHF	LEFT-HAND FORWARD
AECPCS	APRON ENDWALL FOR CULVERT PIPE CORRUGATED STEEL	L	LENGTH OF CURVE
ASPH	ASPHALTIC	LF	LINEAR FOOT
AVG	AVERAGE	LC	LONG CHORD OF CURVE
ADT	AVERAGE DAILY TRAFFIC	LS	LUMP SUM
BF	BACK FACE	MH	MANHOLE
BM	BENCH MARK	MOR	MID POINT OF RADIUS
BR	BRIDGE	NC	NORMAL CROWN
CE	COMMERCIAL ENTRANCE	NO	NUMBER
C/L	CENTER LINE	OBLIT	OBLITERATE
Δ	CENTRAL ANGLE OR DELTA	PAVT	PAVEMENT
COB	CENTER OF BARRIER	PE	PRIVATE ENTRANCE
CONC	CONCRETE	PVRC	POINT OF VERTICAL REVERSE CURVE
CPRC	CULVERT PIPE REINFORCED CONCRETE	QOR	QUARTER POINT OF RADIUS
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CREEK	R	RADIUS
CR	CREEK	REQ'D	REQUIRED
CY	CUBIC YARD	RES	RESIDENCE OR RESIDENTIAL
C&G	CURB AND GUTTER	RHF	RIGHT-HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT-OF-WAY
DHV	DESIGN HOUR VOLUME	R	RIVER
DISCH	DISCHARGE	RDWY	ROADWAY
DG	DITCH GRADE	R/L	REFERENCE LINE
DWY	DRIVEWAY	SALV	SALVAGED
X	EAST GRID COORDINATE	SAN	SANITARY SEWER
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	SF	SQUARE FEET
EOR	END POINT OF RADIUS	SY	SQUARE YARD
EL	ELEVATION	SDD	STANDARD DETAIL DRAWINGS
ENT	ENTRANCE	STA	STATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	SS	STORM SEWER
EXC	EXCAVATION	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EBS	EXCAVATION BELOW SUBGRADE	SE	SUPERELEVATION RATE
EXIST	EXISTING	TC	TOP OF CURB
FC	FACE OF CURB	T OR TN	TOWN
FF	FACE TO FACE	T	TRUCKS (PERCENT OF)
FERT	FERTILIZE	TYP	TYPICAL
FE	FIELD ENTRANCE	VAR	VARIABLE
FL	FLOW LINE	VC	VERTICAL CURVE
FO	FIBER OPTIC	Y	NORTH GRID COORDINATE
CWT	HUNDREDWEIGHT	YD	YARD
HYD	HYDRANT		

DNR AREA LIAISON:

WI DEPT OF NATURAL RESOURCES
DNR SERVICE CENTER
3550 MORMON COULEE RD
LA CROSSE, WI 54601
TELEPHONE: 608.785.9115
ATTENTION: KAREN KALVELAGE
EMAIL: KAREN.KALVELAGE@WISCONSIN.GOV

WISDOT CONTACT:

WISCONSIN DEPT OF TRANSPORATION
SOUTHWEST REGION
2102 WRIGHT STREET
MADISON, WI 53704
TELEPHONE: 608.246.7963
ATTENTION: DELLA KOENIG
EMAIL: DELLA.KOENIG@DOT.WI.GOV

DESIGN CONTACT:

SEH INC.
329 JAY STREET, SUITE 301
LA CROSSE, WI 54601
TELEPHONE: 608.498.4804
ATTENTION: ALEIGHA BURG
EMAIL: ABURG@SEHINC.COM

UTILITY CONTACT LIST:

FRONTIER - COMMUNICATION
N360 NEBRASKA ST.
BRIGGSVILLE, WI 53920
ATTENTION: JERRY MOORE
TELEPHONE: 608.742.9507
EMAIL: JERALD.R.MOORE@FTR.COM

OAKDALE ELECTRIC COOPERATIVE - ELECTRICITY
P.O. BOX 40
OAKDALE, WI 54649
ATTENTION: TRAVIS CHAMPLIN
TELEPHONE: 608.372.8848
EMAIL: TCHAMPLIN@OAKDALEREC.COOP



Dial 811 or (800)242-8511
www.DiggersHotline.com

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPERANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .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											

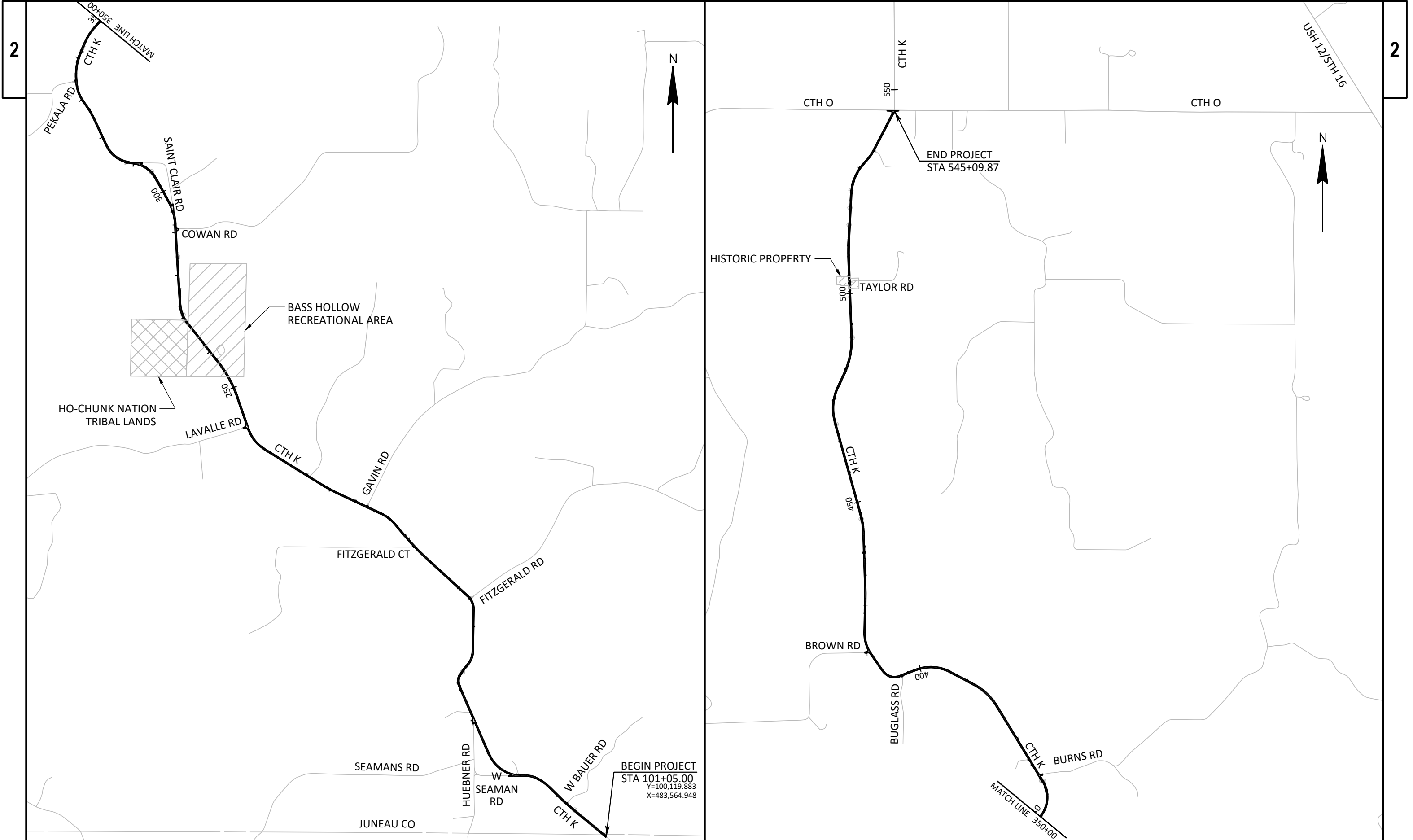
TOTAL PROJECT AREA = 67.3 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 33.8 ACRES

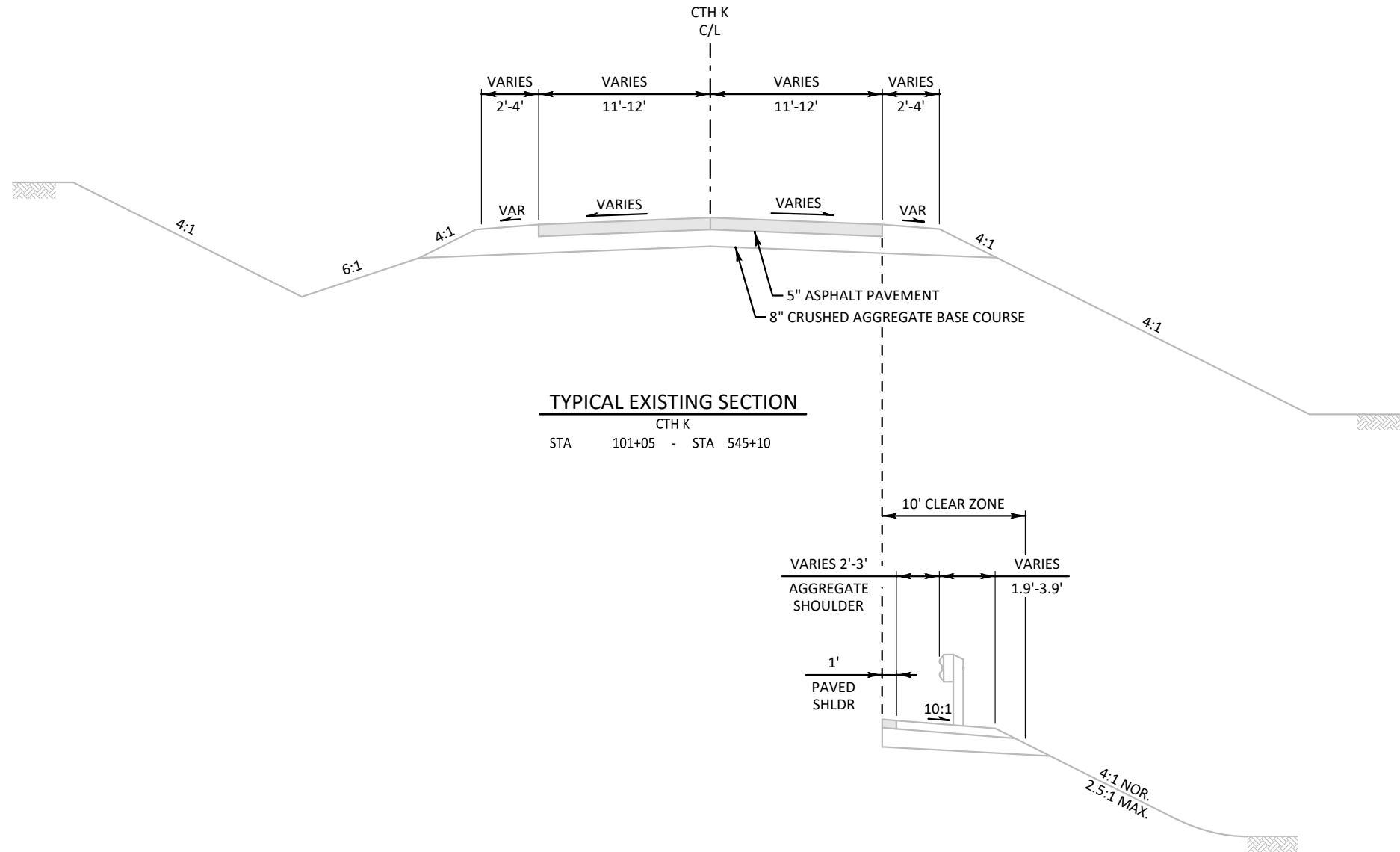
BORING LOG:

BORING NO.	STATION	ASPHALTIC PAVEMENT DEPTH (IN)	BASE DEPTH (IN)	SUBBASE MATERIAL
B-106	263+97	5	5	Clay
B-107	285+84	5	5	Silty Sand
B-108	312+99	5	3	Silty Sand
B-109	336+83	5	4	Sand
B-110	348+68	3.5	4	Silty Sand
B-111	380+19	3	4	Silty Sand
B-112	419+39	4	8	Silty Clay
B-113	448+03	5	6	Silty Clay
B-114	465+16	6	4	Silty Clay
B-115	541+32	7	7	Silty Clay
B-116	495+76	5	10	Silty Sand

GENERAL NOTES:

- NO TREES OR SHRUBS SHALL BE REMOVED WITHOUT 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 ARE NOT SHOWN.
- WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.
- TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- THE EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- ASPHALTIC AND CONCRETE SURFACES SHALL BE SAWCUT AT THE MATCH LINE AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE TOPSOILED, FERTILIZED AND SEEDED.
- FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN AND TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

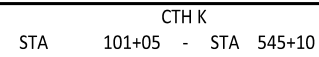




TYPICAL EXISTING GUARDRAIL HALF SECTION

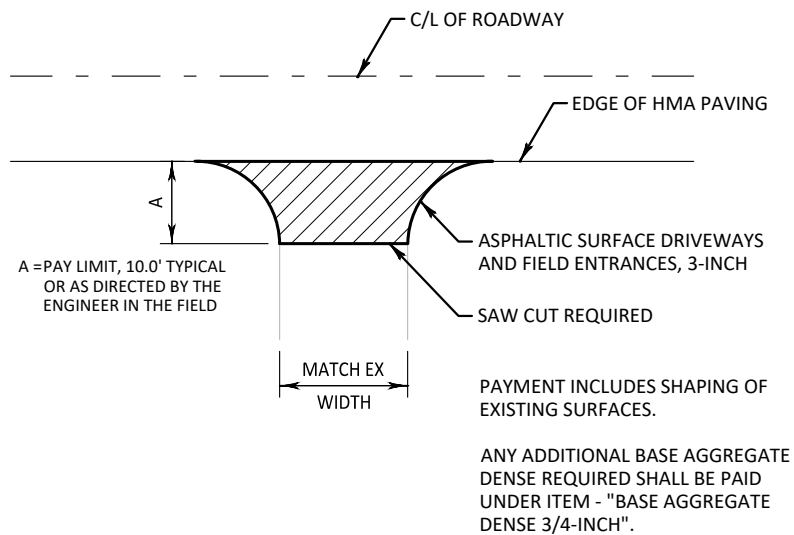
CTH K

LEFT		RIGHT	
STA 152+69	- STA 155+06	STA 106+54	- STA 112+78
STA 338+96	- STA 342+12	STA 152+68	- STA 157+56
STA 355+35	- STA 360+65	STA 267+08	- STA 272+27
STA 423+94	- STA 427+55	STA 281+02	- STA 285+38
STA 442+53	- STA 447+54	STA 301+15	- STA 307+54
STA 511+00	- STA 526+78	STA 355+55	- STA 359+84
		STA 444+23	- STA 447+57
		STA 465+45	- STA 470+08
		STA 477+27	- STA 478+89
		STA 481+03	- STA 482+13
		STA 486+19	- STA 491+27

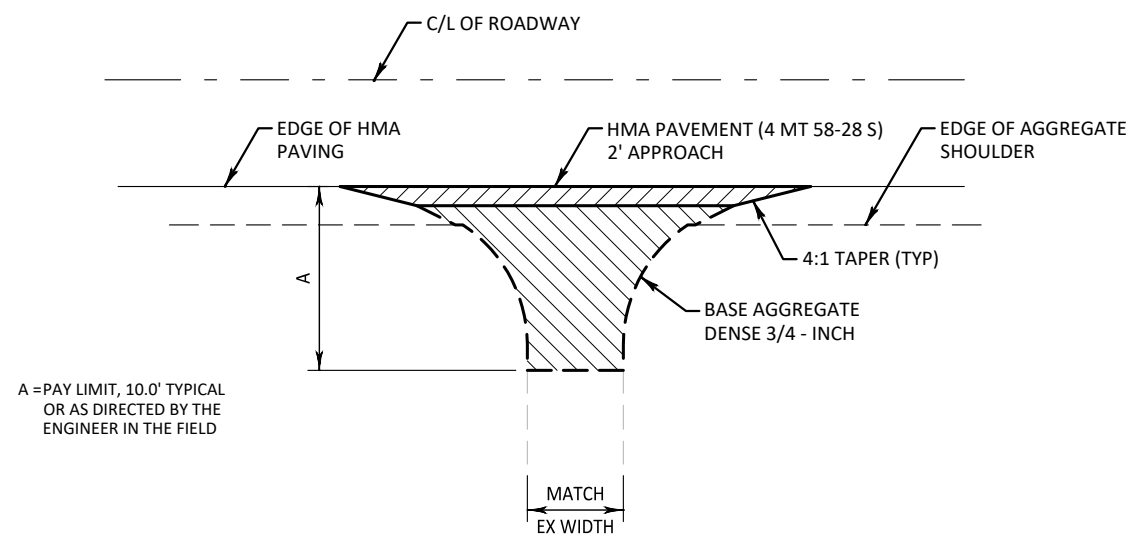


CTH K

LEFT				RIGHT			
STA 152+69	-	STA 155+06		STA 106+54	-	STA 112+78	
STA 338+96	-	STA 342+12		STA 152+68	-	STA 157+56	
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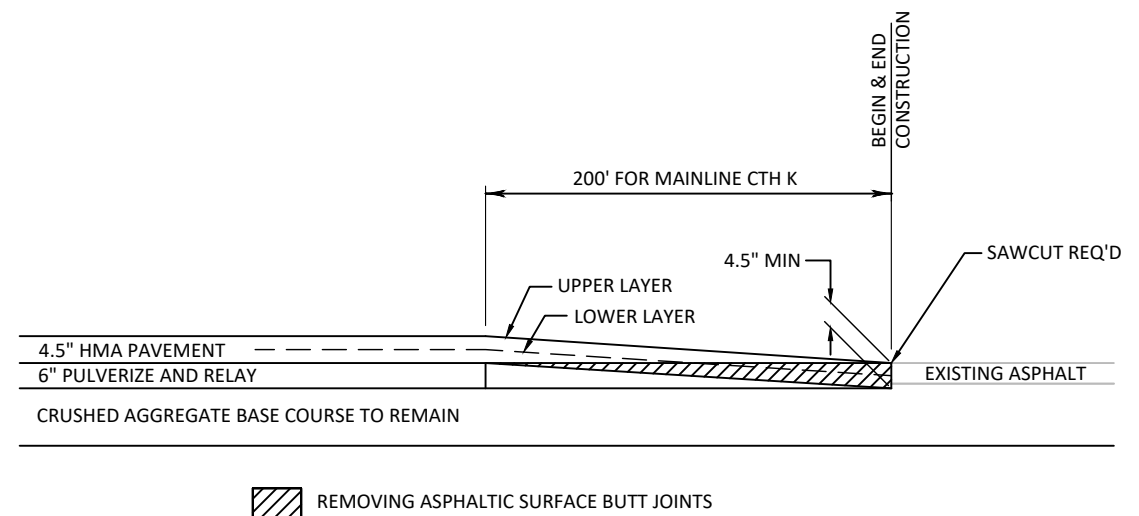


ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
(PE, CE, OR FE)

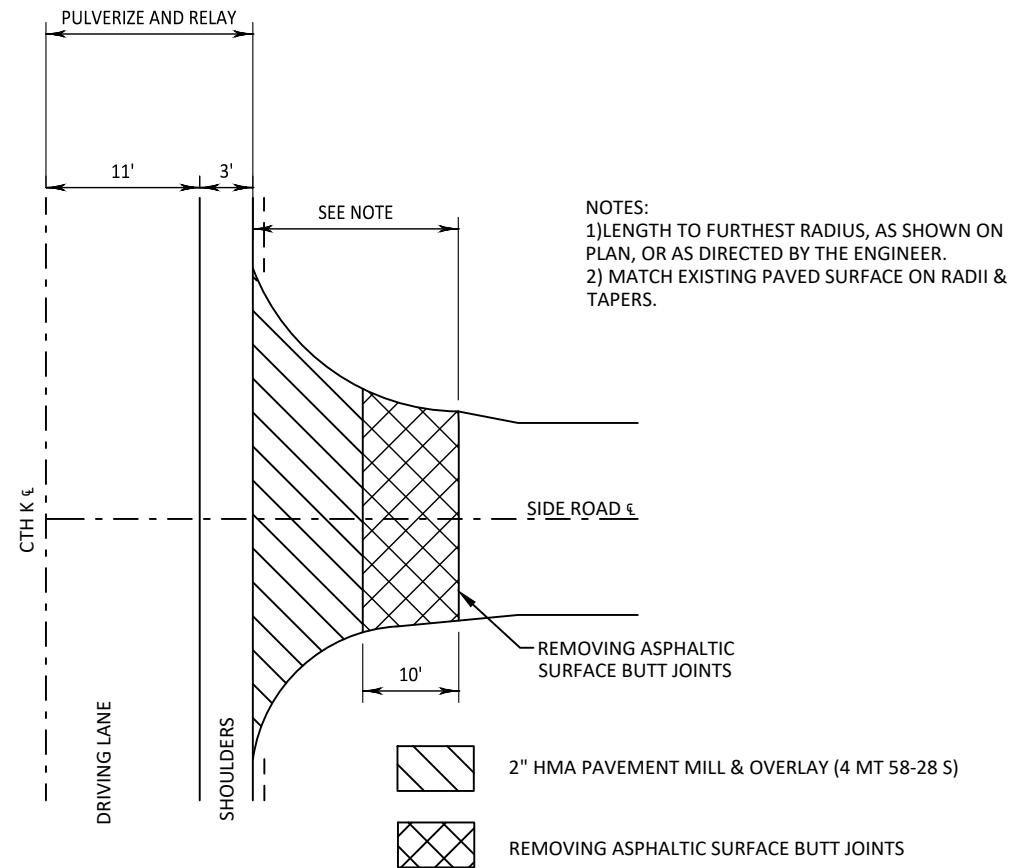


NOTE, 2' HMA APPROACH NOT SHOWN ON PLAN SHEETS

RURAL DRIVEWAY OR FIELD ENTRANCE
AGGREGATE (PE, CE OR FE)

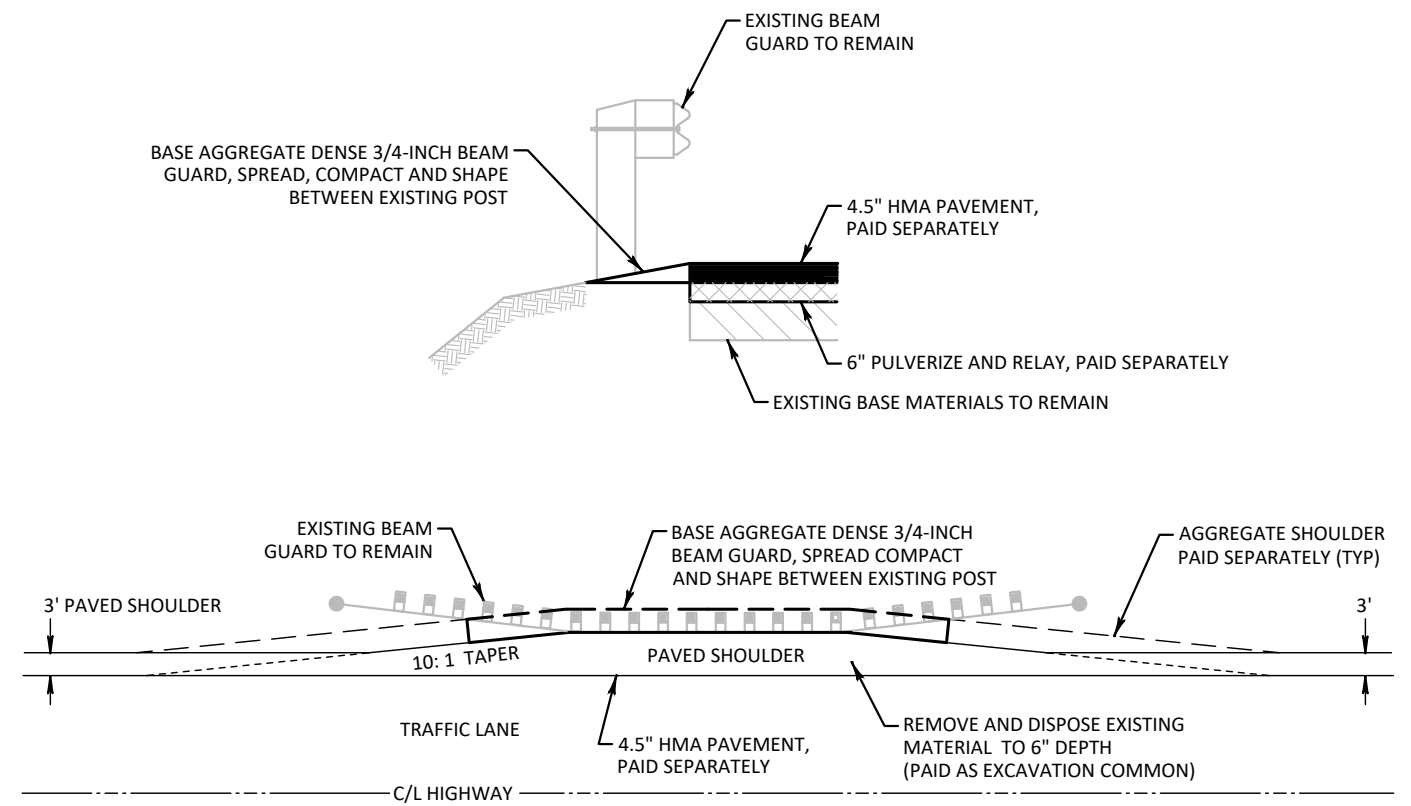


REMOVING ASPHALTIC SURFACE, BUTT JOINT

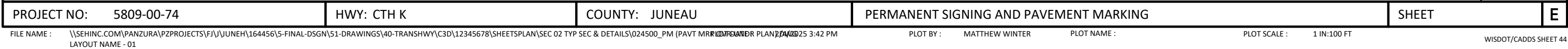
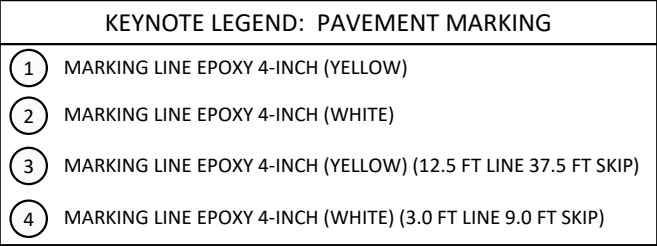


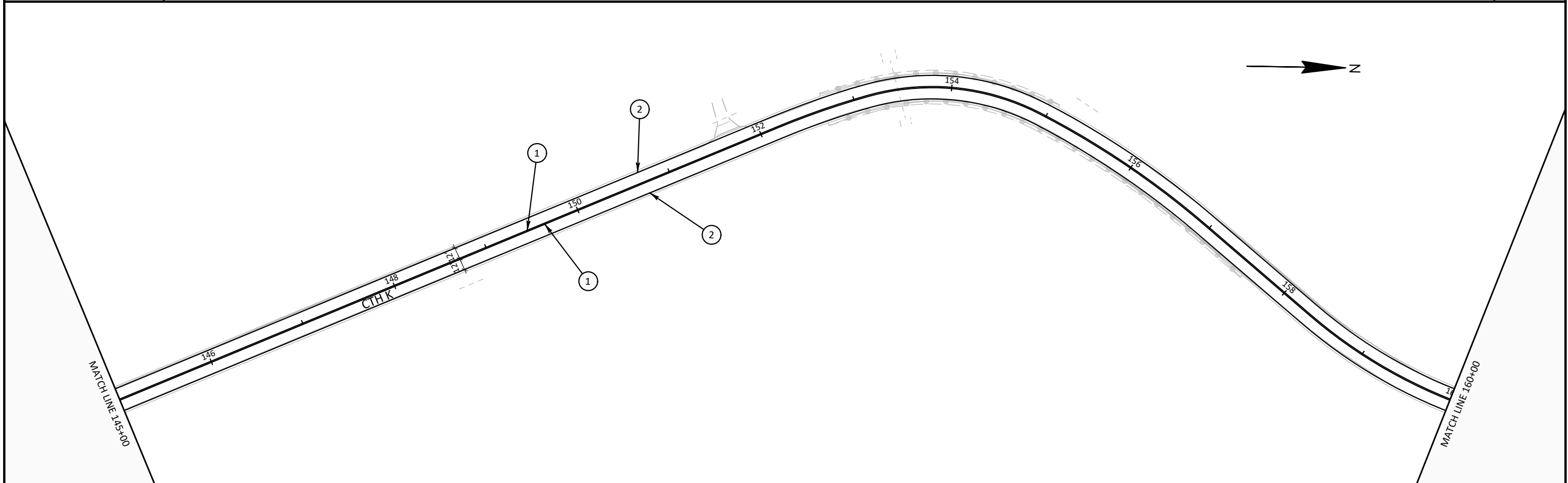
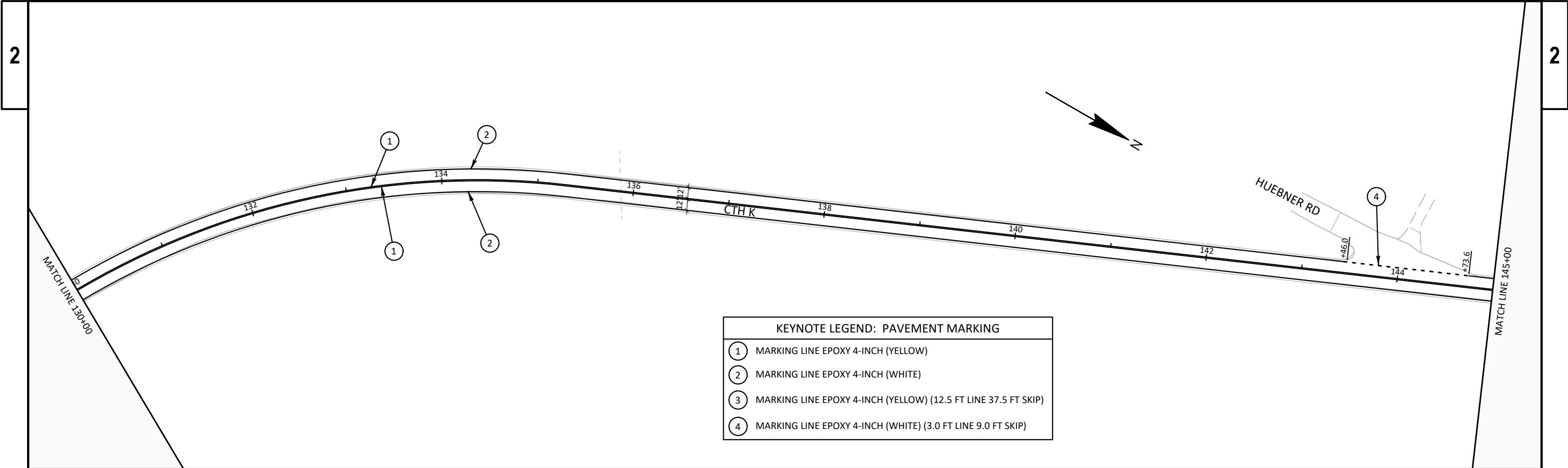
SIDE ROAD PAVING DETAIL

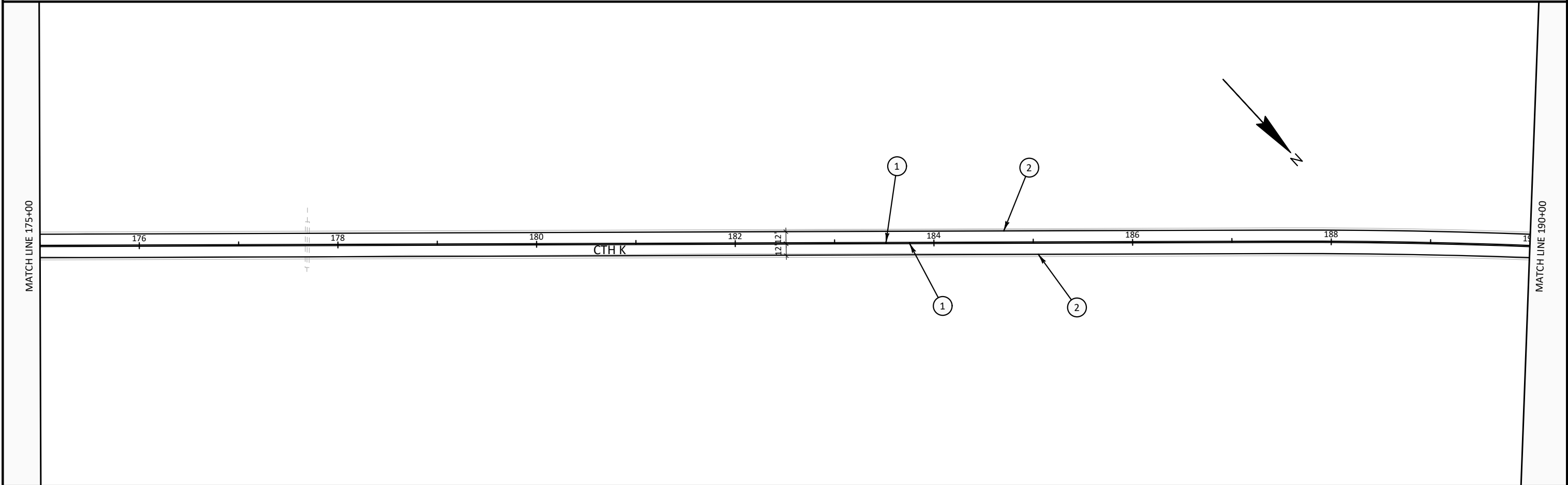
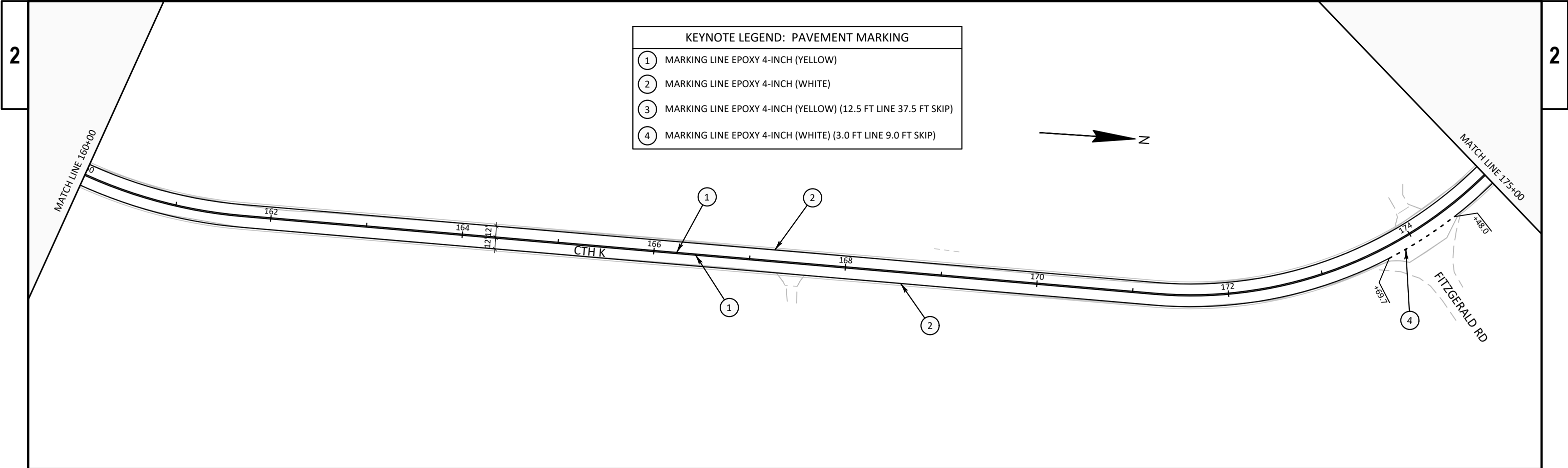
NOTES:
1) LENGTH TO FURTHEST RADIUS, AS SHOWN ON PLAN, OR AS DIRECTED BY THE ENGINEER.
2) MATCH EXISTING PAVED SURFACE ON RADII & TAPERS.

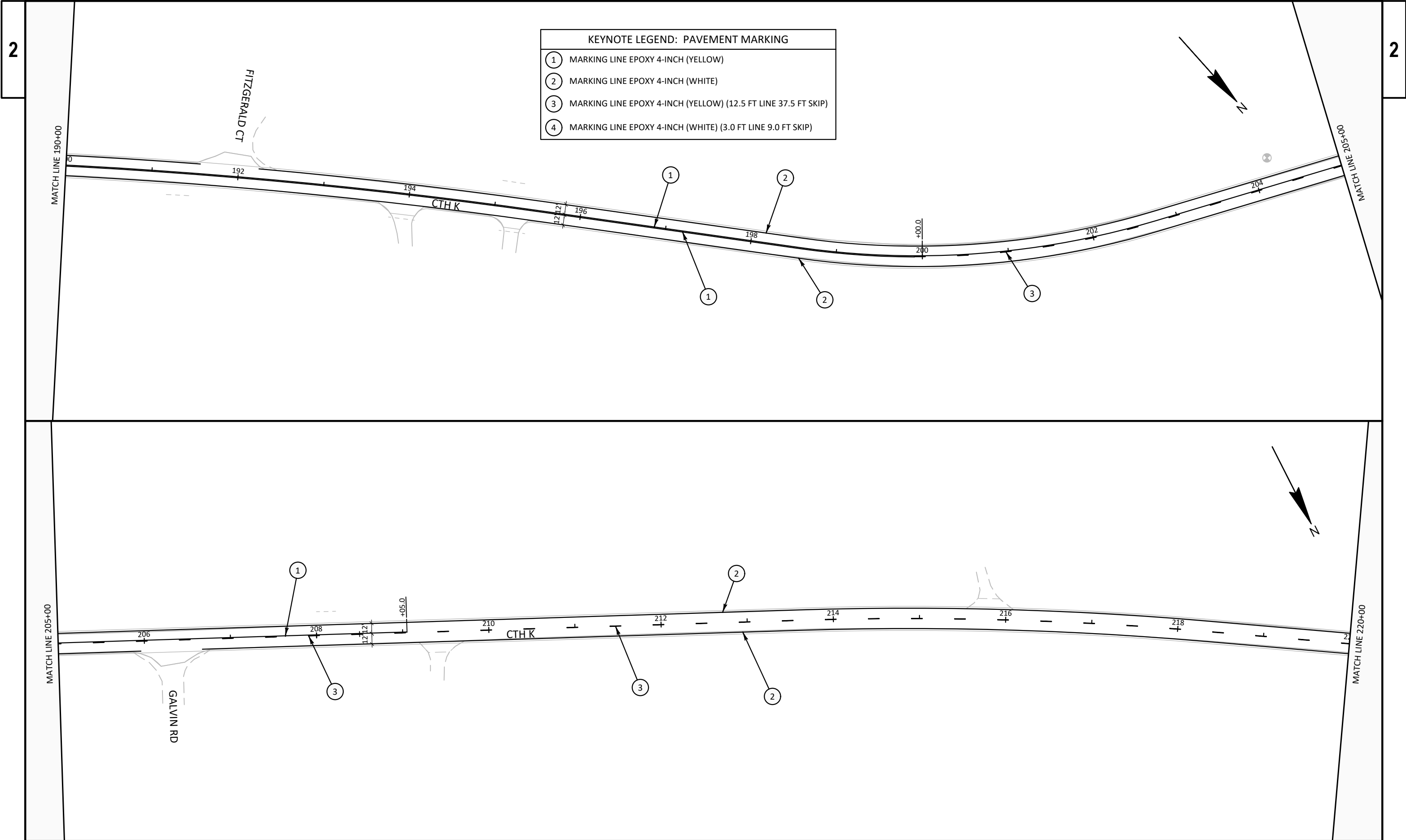


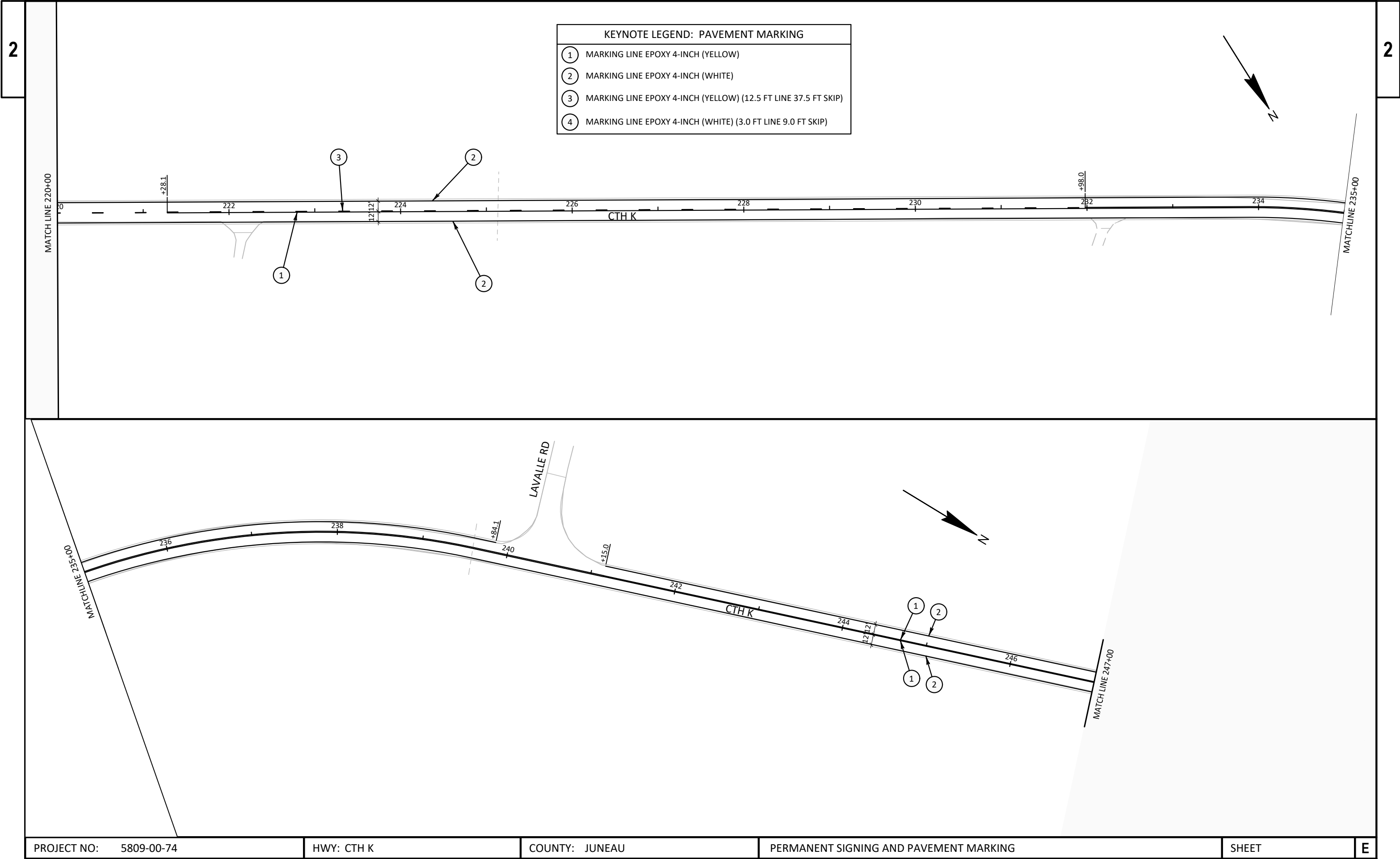
BASE AGGREGATE DENSE 3/4-INCH BEAM GUARD



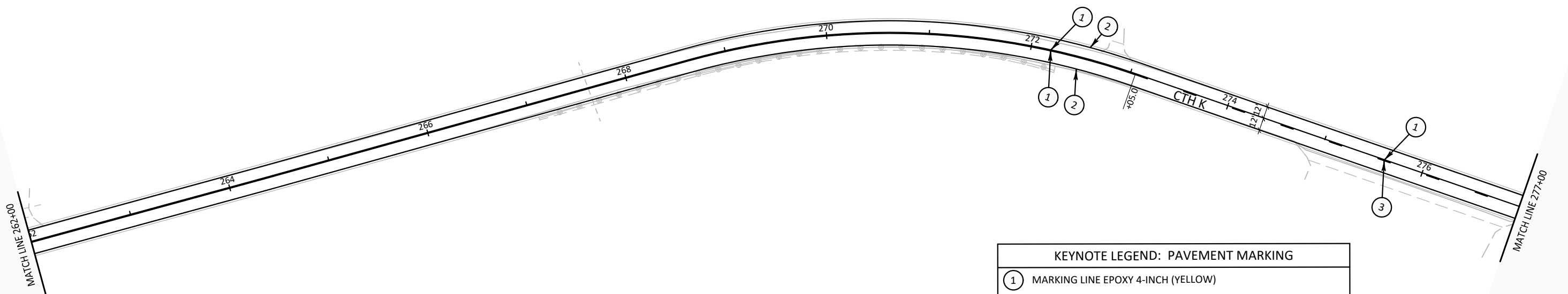
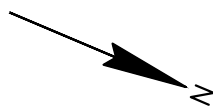
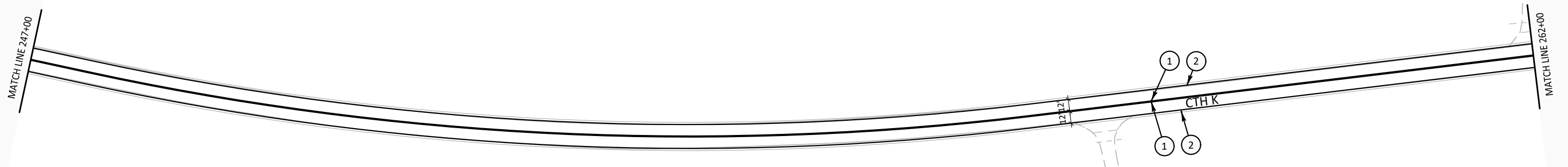




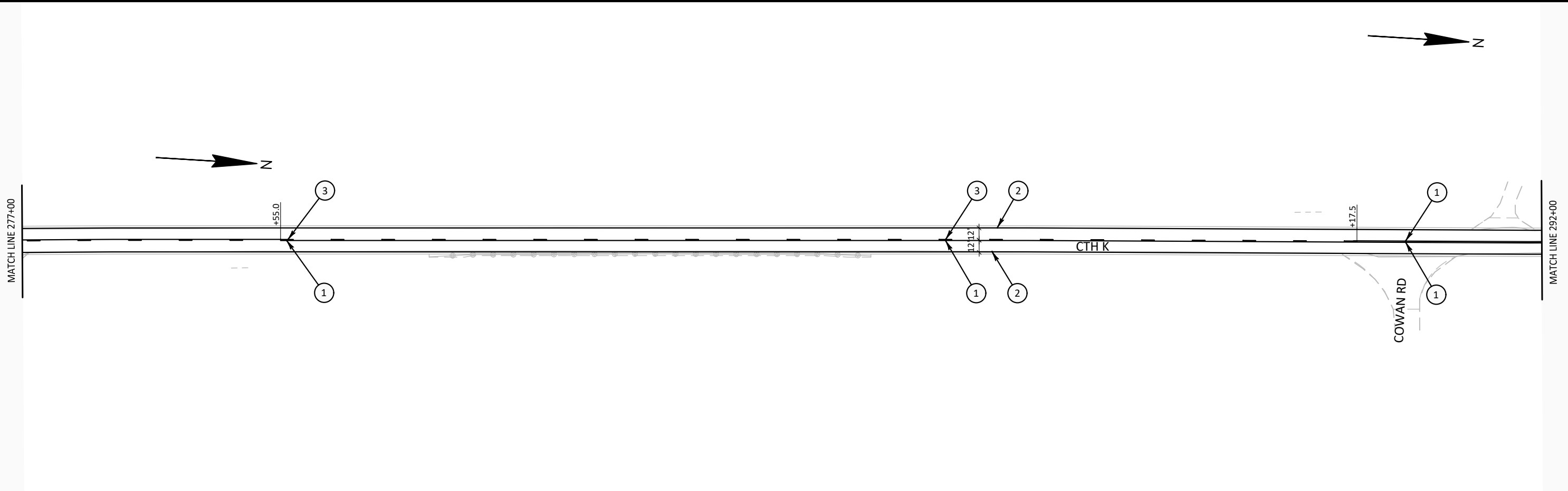




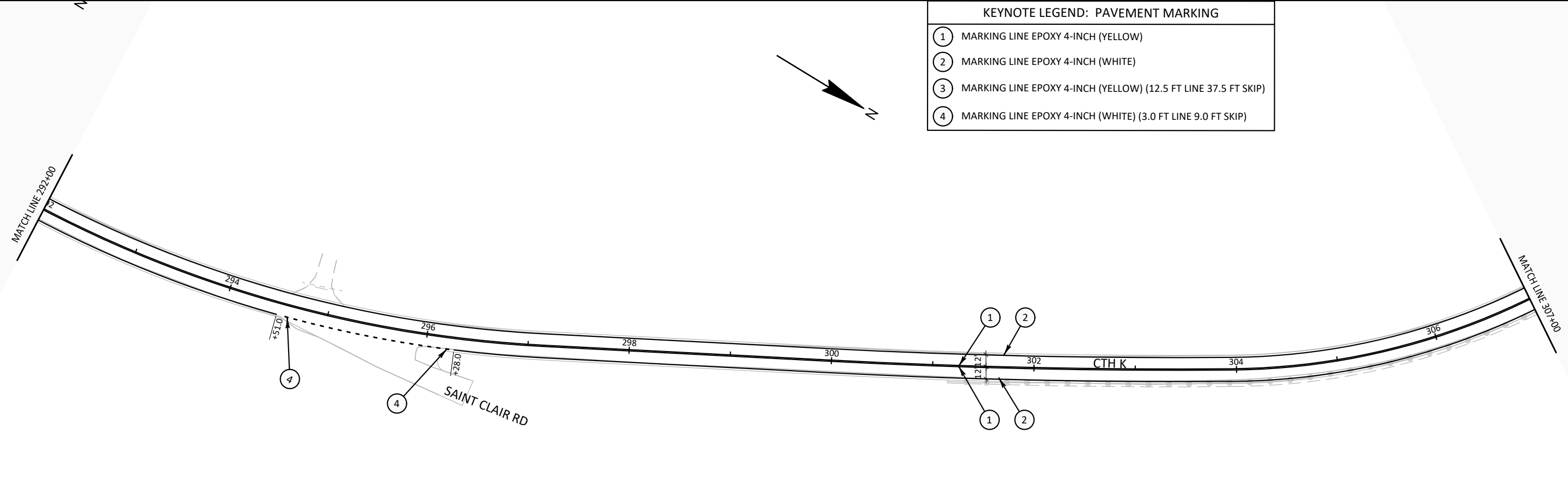
KEYNOTE LEGEND: PAVEMENT MARKING	
1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 FT SKIP)
4	MARKING LINE EPOXY 4-INCH (WHITE) (3.0 FT LINE 9.0 FT SKIP)

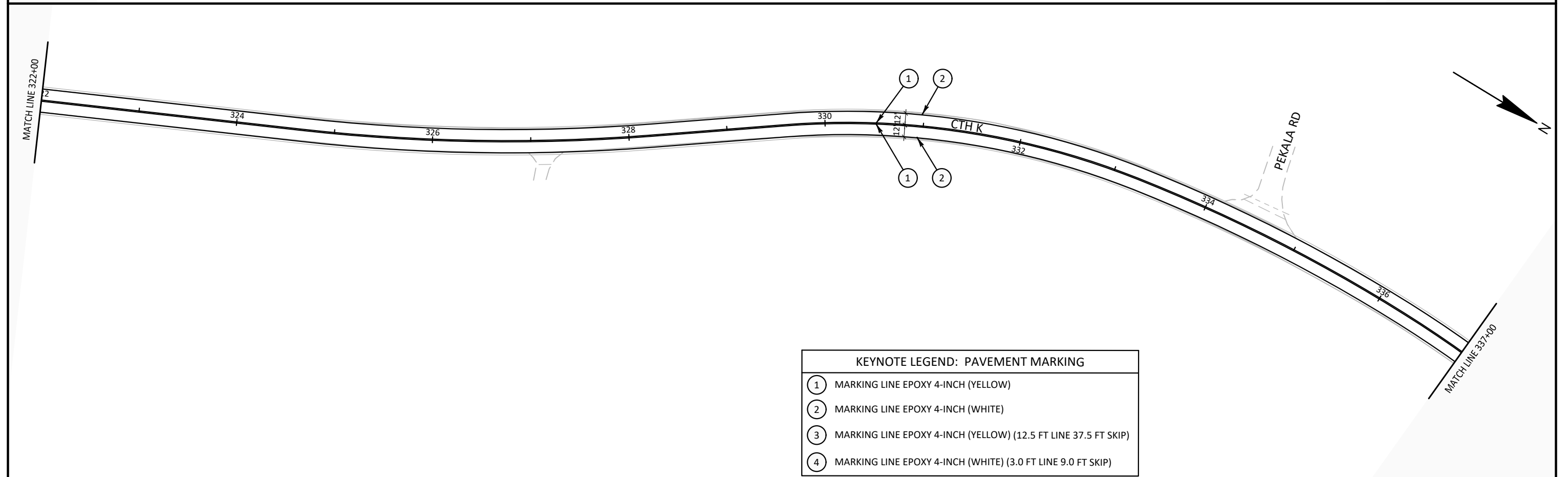
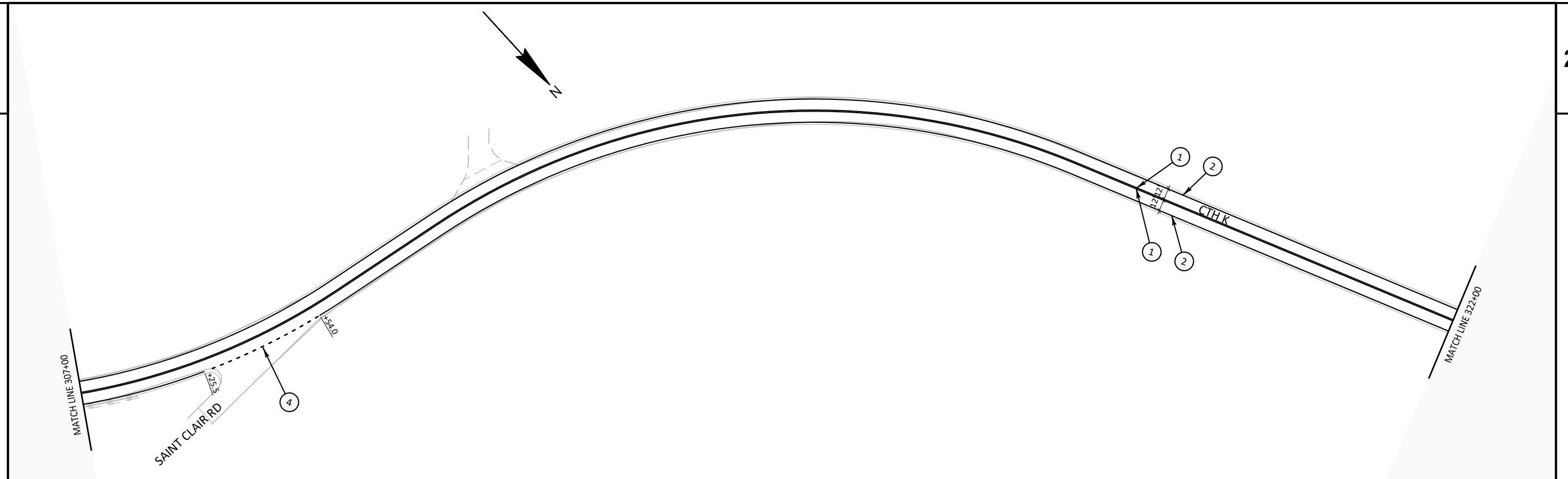


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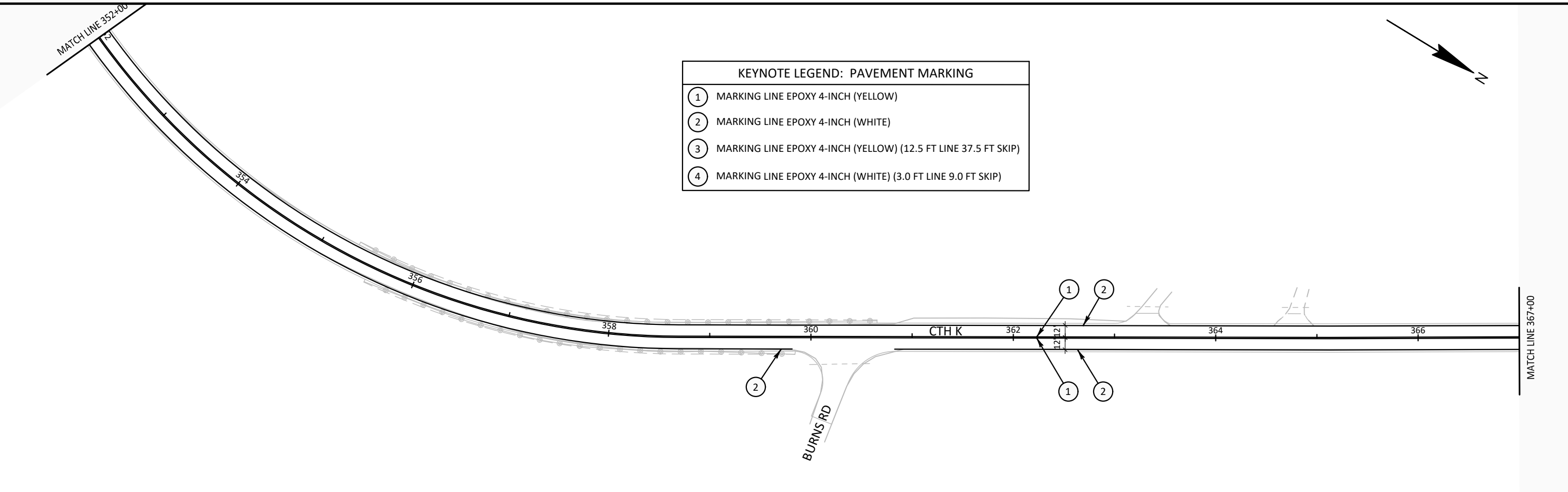
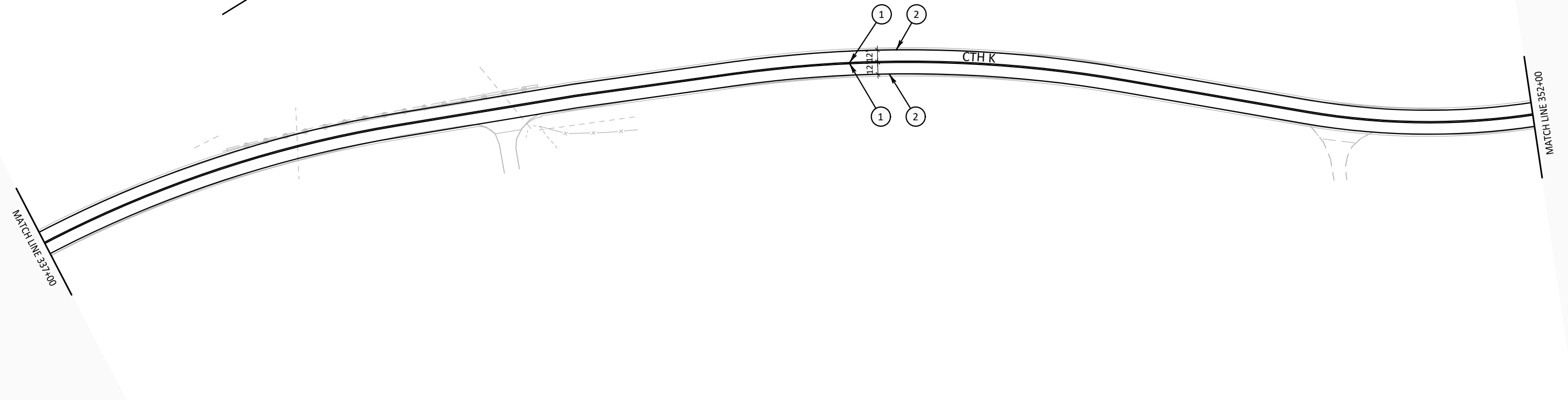


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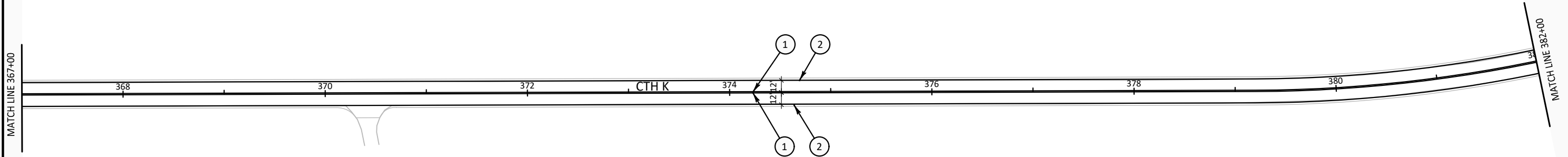




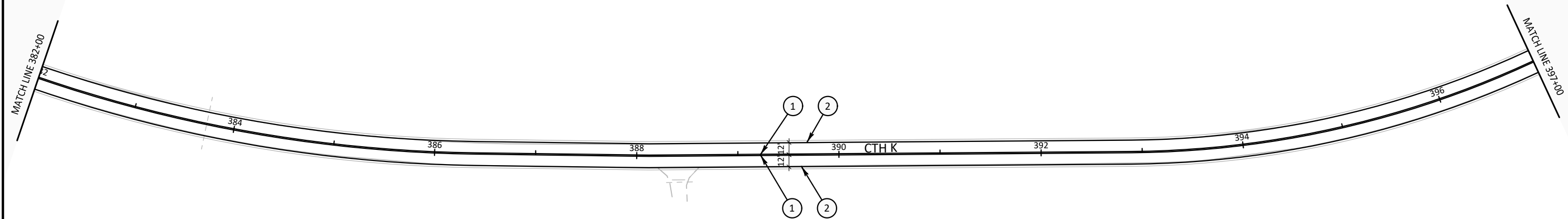
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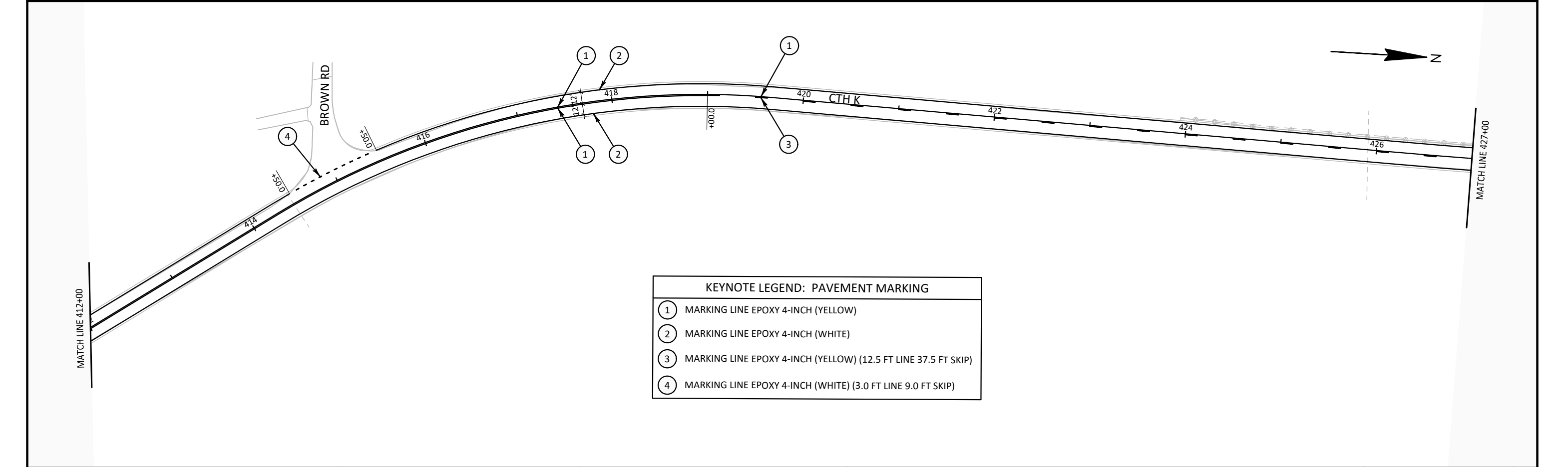
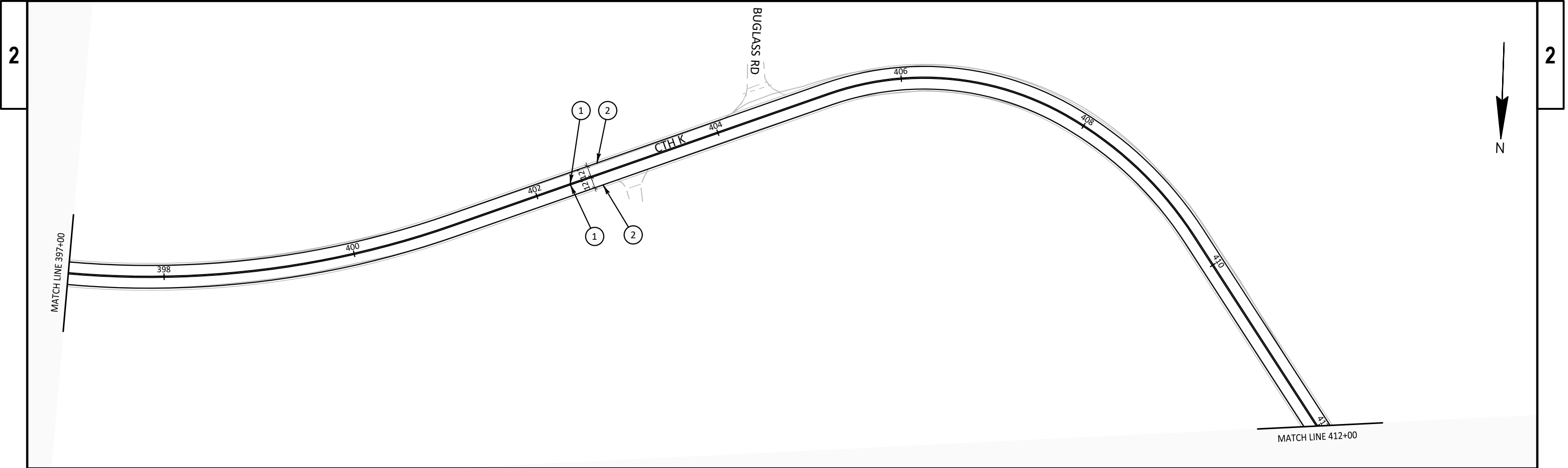


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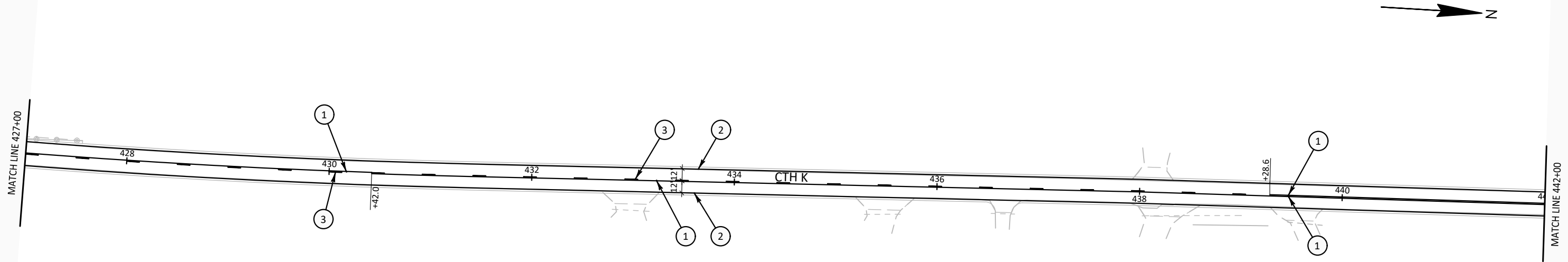


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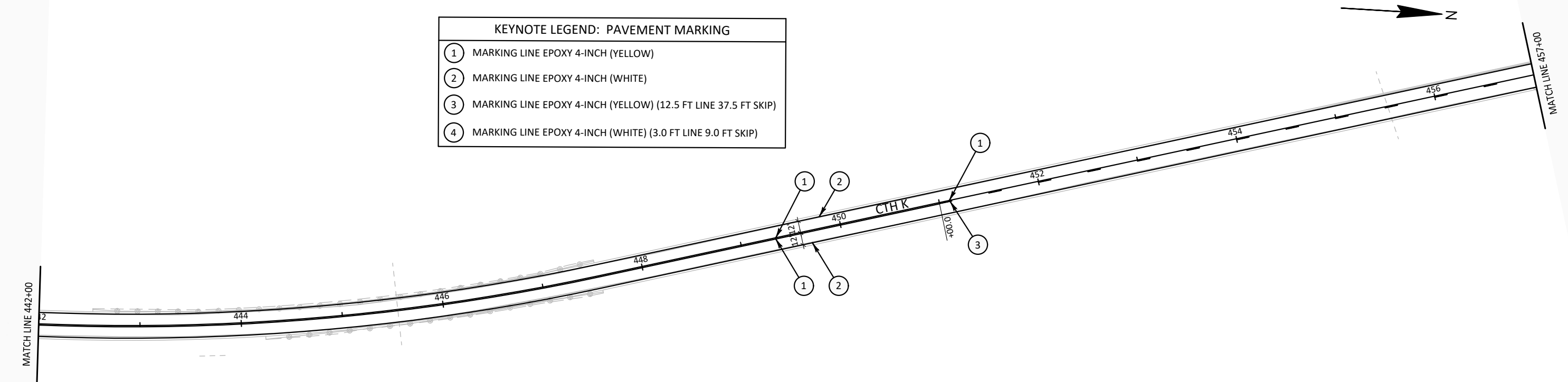


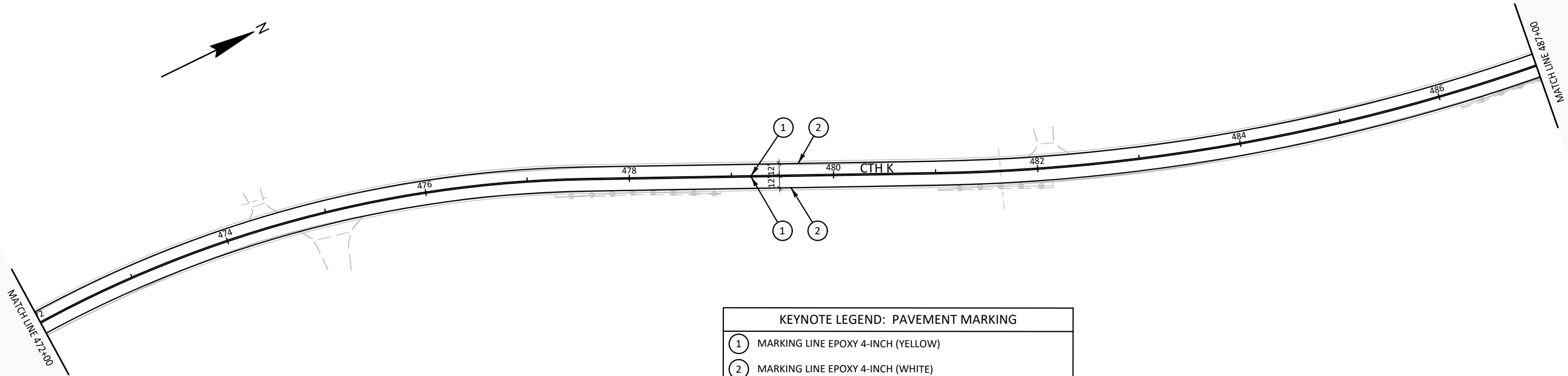
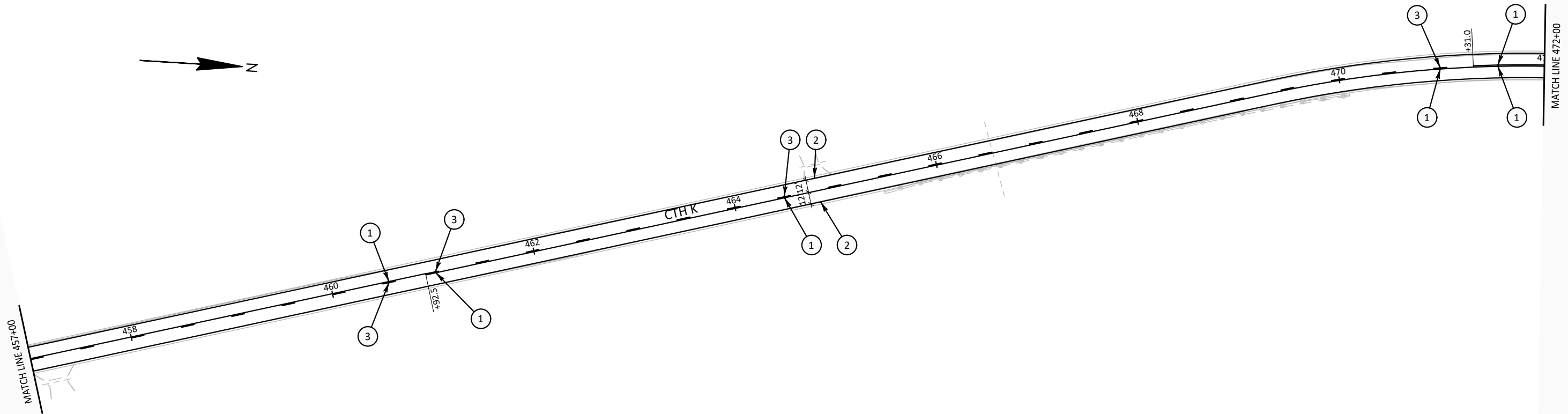


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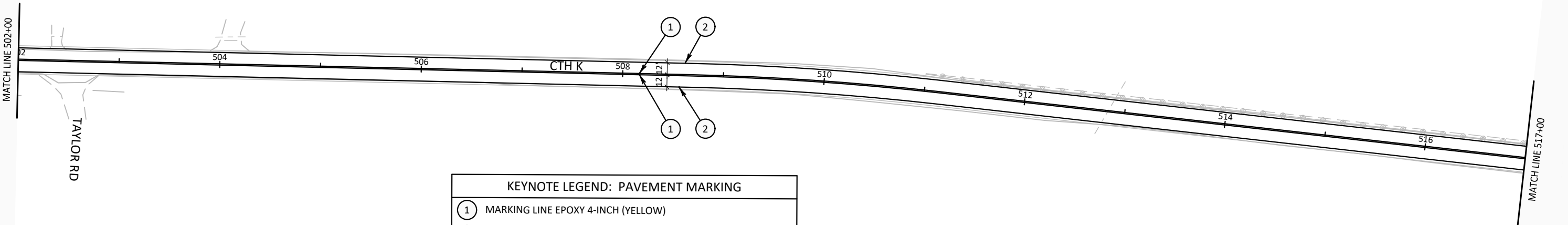
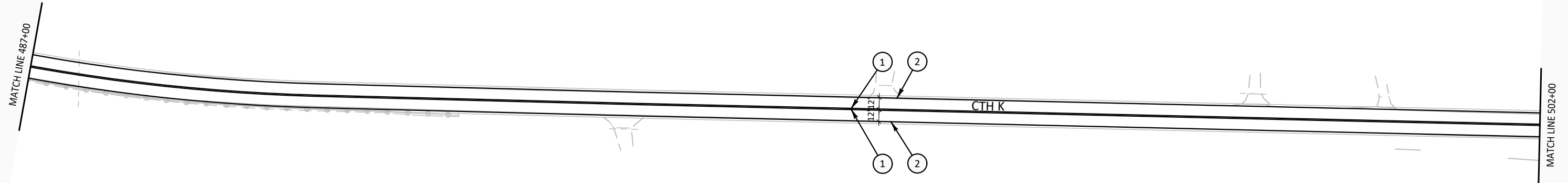


KEYNOTE LEGEND: PAVEMENT MARKING	
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②	MARKING LINE EPOXY 4-INCH (WHITE)
③	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 FT SKIP)
④	MARKING LINE EPOXY 4-INCH (WHITE) (3.0 FT LINE 9.0 FT SKIP)



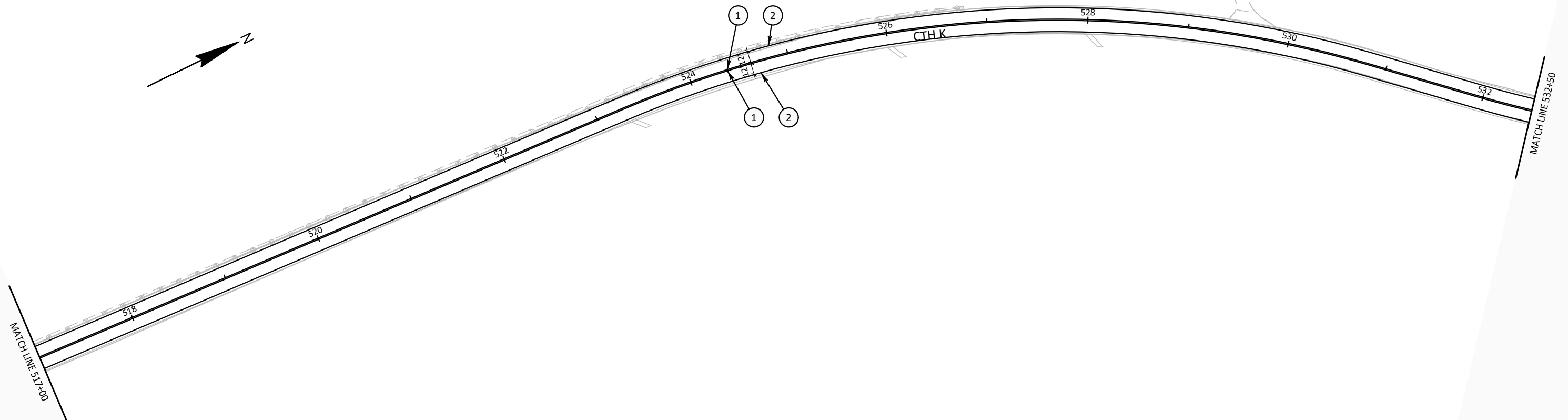


KEYNOTE LEGEND: PAVEMENT MARKING	
①	MARKING LINE EPOXY 4-INCH (YELLOW)
②	MARKING LINE EPOXY 4-INCH (WHITE)
③	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 FT SKIP)
④	MARKING LINE EPOXY 4-INCH (WHITE) (3.0 FT LINE 9.0 FT SKIP)

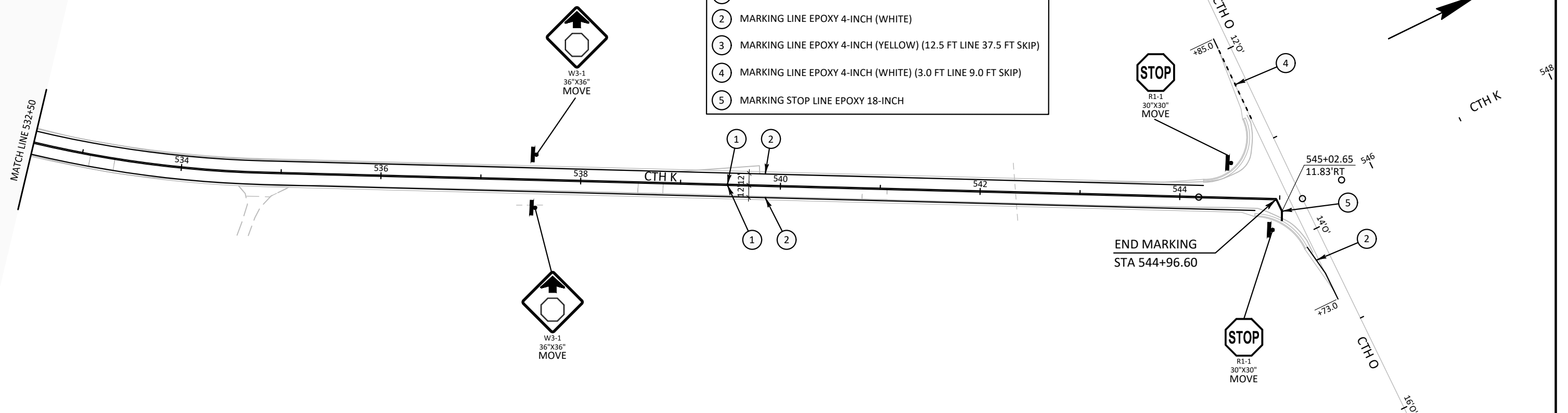


KEYNOTE LEGEND: PAVEMENT MARKING

- | | |
|---|--|
| ① | MARKING LINE EPOXY 4-INCH (YELLOW) |
| ② | MARKING LINE EPOXY 4-INCH (WHITE) |
| ③ | MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 FT SKIP) |
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KEYNOTE LEGEND: PAVEMENT MARKING	
①	MARKING LINE EPOXY 4-INCH (YELLOW)
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③	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5 FT LINE 37.5 FT SKIP)
④	MARKING LINE EPOXY 4-INCH (WHITE) (3.0 FT LINE 9.0 FT SKIP)
⑤	MARKING STOP LINE EPOXY 18-INCH



TRAFFIC CONTROL LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TYPE III BARRICADE

TYPE III BARRICADE WITH SIGN

DIRECTION OF TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGN

WORK SPACE OPEN TO TRAFFIC

FRAME 1

HWY K
ROADWORK

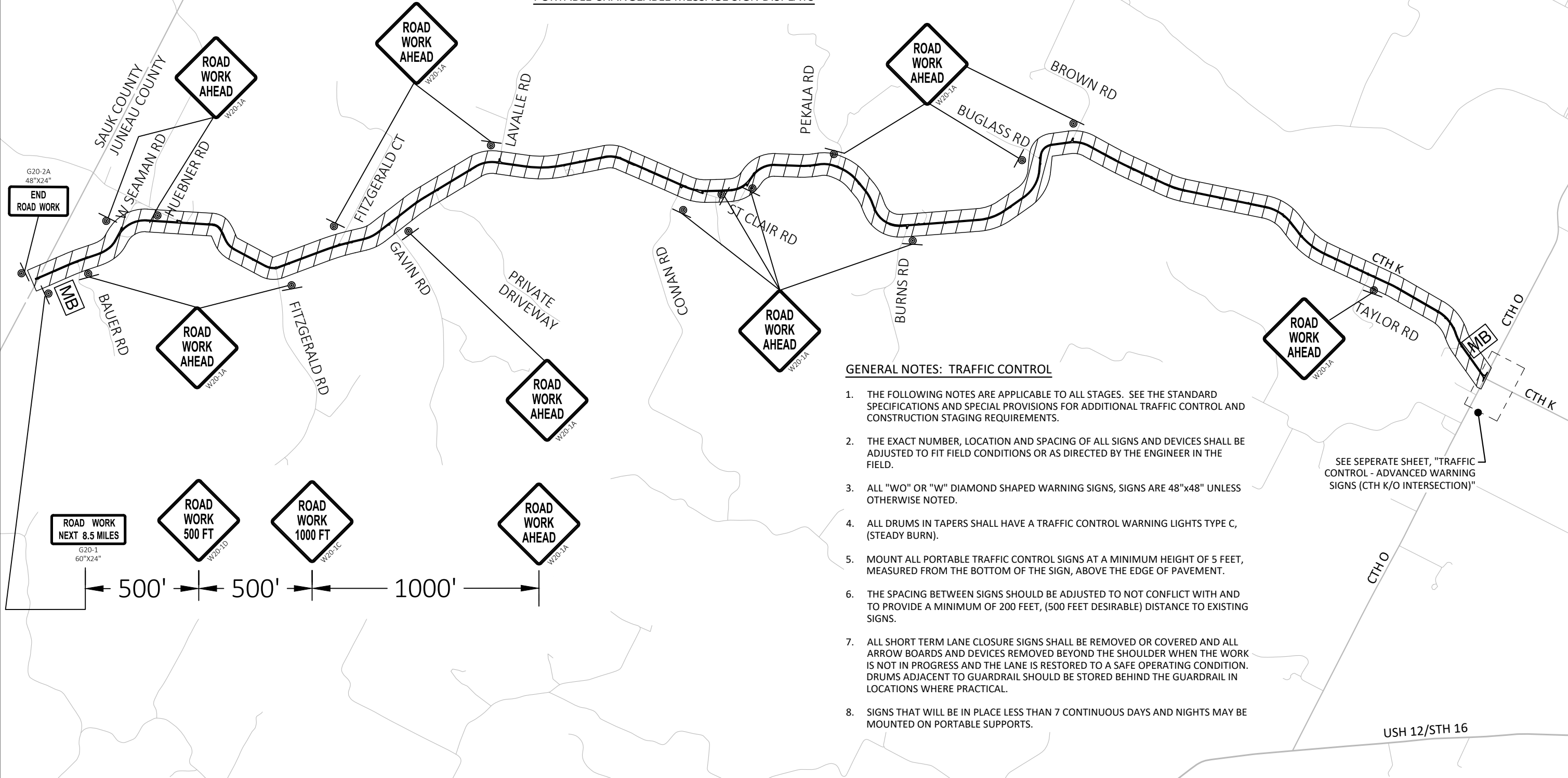
FRAME 2

STARTING
MM/DD/YY

PORTABLE CHANGEABLE MESSAGE SIGN TO ALTERNATE BETWEEN MESSAGES SHOWN IN FRAME 1 AND FRAME 2.

SET MESSAGE BOARDS ONE WEEK BEFORE CLOSURE.

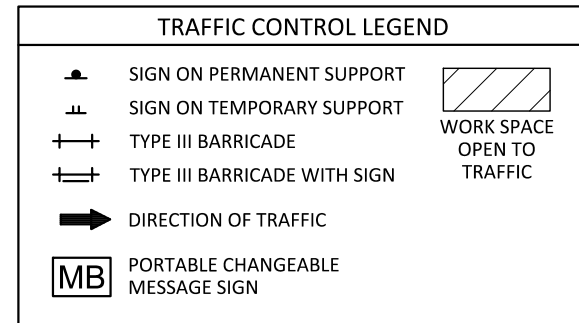
PORTABLE CHANGEABLE MESSAGE SIGN DISPLAYS



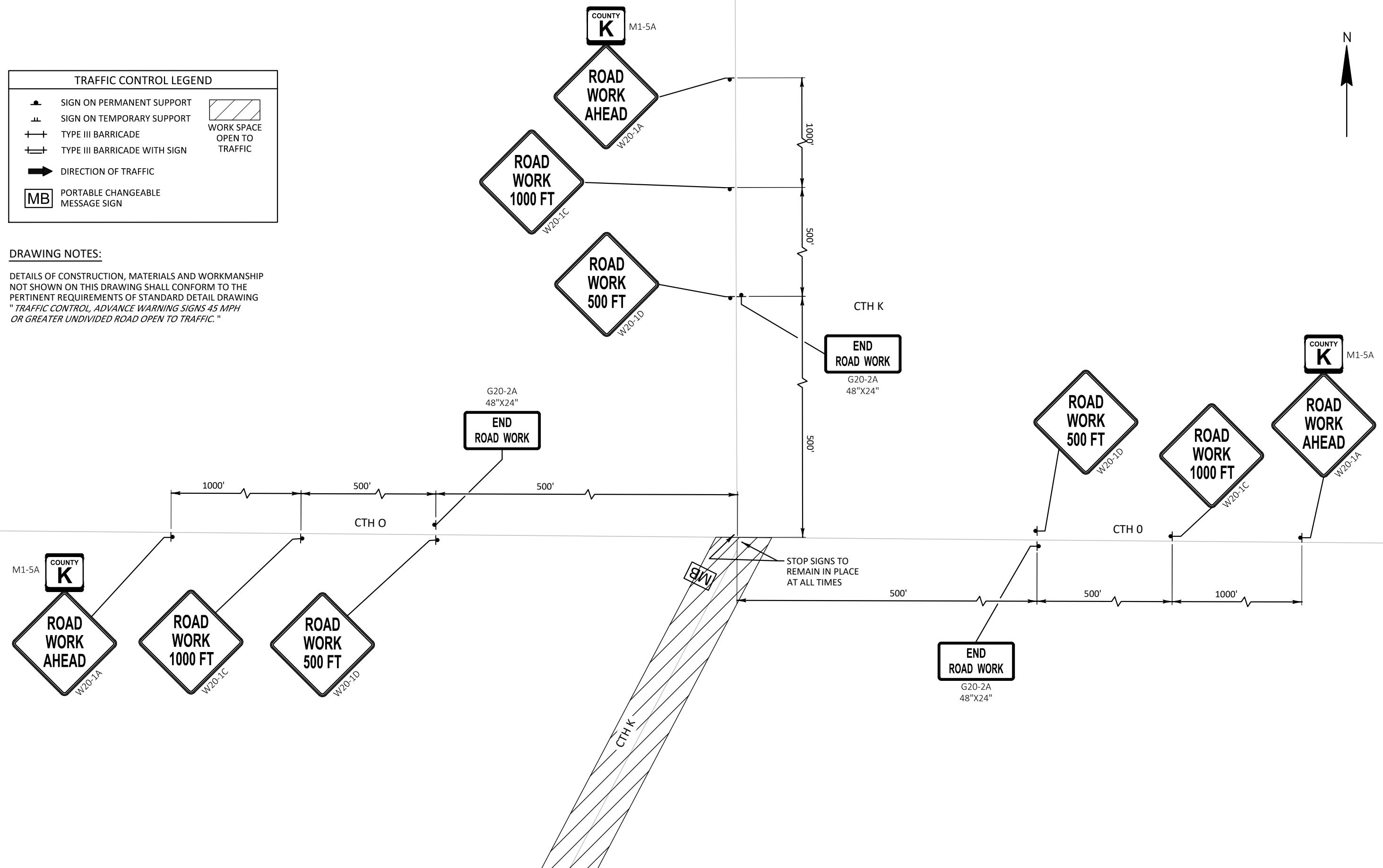
GENERAL NOTES: TRAFFIC CONTROL

1. THE FOLLOWING NOTES ARE APPLICABLE TO ALL STAGES. SEE THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL AND CONSTRUCTION STAGING REQUIREMENTS.
2. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
3. ALL "WO" OR "W" DIAMOND SHAPED WARNING SIGNS, SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.
4. ALL DRUMS IN TAPERS SHALL HAVE A TRAFFIC CONTROL WARNING LIGHTS TYPE C, (STEADY BURN).
5. MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.
6. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.
7. ALL SHORT TERM LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL ARROW BOARDS AND DEVICES REMOVED BEYOND THE SHOULDER WHEN THE WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION. DRUMS ADJACENT TO GUARDRAIL SHOULD BE STORED BEHIND THE GUARDRAIL IN LOCATIONS WHERE PRACTICAL.
8. SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

SEE SEPERATE SHEET, "TRAFFIC CONTROL - ADVANCED WARNING SIGNS (CTH K/O INTERSECTION)"

**DRAWING NOTES:**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF STANDARD DETAIL DRAWING "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER UNDIVIDED ROAD OPEN TO TRAFFIC."



PROJECT NO: 5809-00-74

HWY: CTH K

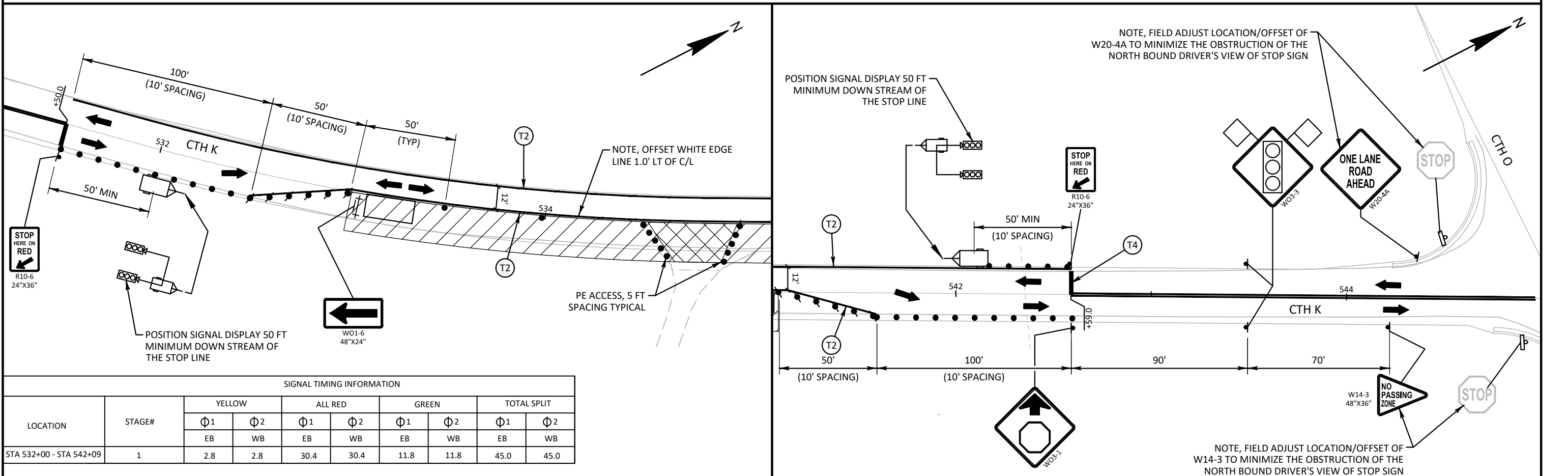
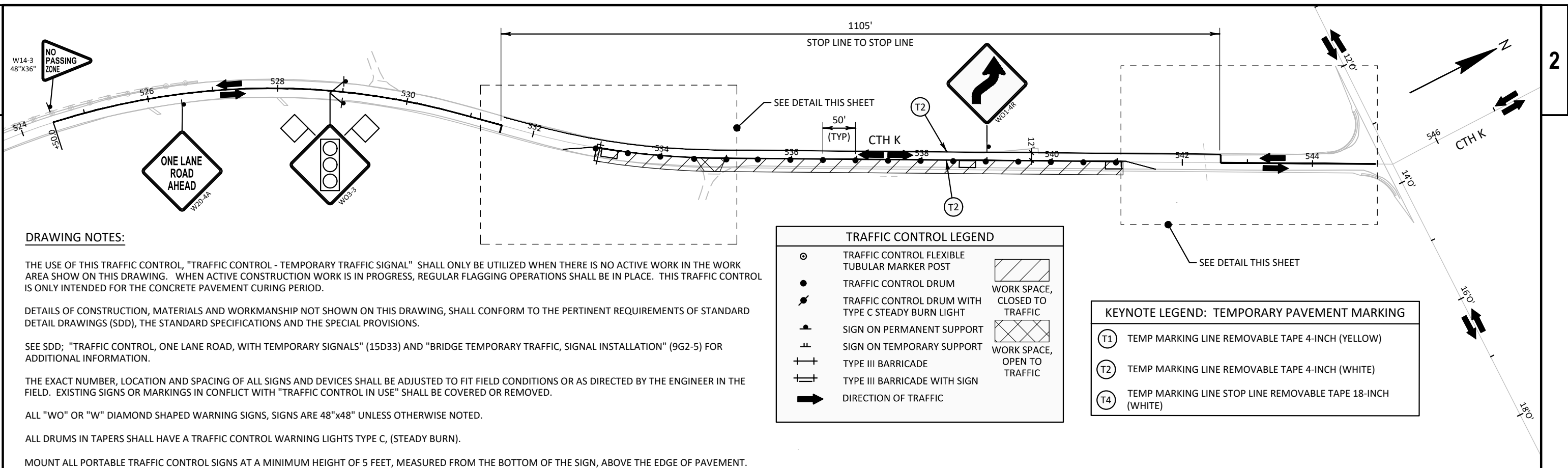
COUNTY: JUNEAU

TRAFFIC CONTROL - ADVANCED WARNING SIGNS (CTH K/O INTERSECTION)

SHEET

E

2



PROJECT NO: 5809-00-74

HWY: CTH K

COUNTY: JUNEAU

TRAFFIC CONTROL - TEMPORARY TRAFFIC SIGNAL

SHEET

E

Estimate Of Quantities

5809-00-74

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	93.000	93.000
0004	204.0110	Removing Asphaltic Surface	SY	480.000	480.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,751.000	1,751.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	1,990.000	1,990.000
0010	205.0100	Excavation Common	CY	5,925.000	5,925.000
0012	211.0201	Prepare Foundation for Concrete Pavement (project) 01. 5809-00-74	EACH	1.000	1.000
0014	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	888.000	888.000
0016	213.0100	Finishing Roadway (project) 01. 5809-00-74	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,101.000	1,101.000
0020	325.0100	Pulverize and Relay	SY	150,070.000	150,070.000
0022	374.1020.S	QMP Pulverize and Relay Compaction	SY	150,070.000	150,070.000
0024	415.0090	Concrete Pavement 9-Inch	SY	93.000	93.000
0026	455.0605	Tack Coat	GAL	10,550.000	10,550.000
0028	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0030	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0032	460.2005	Incentive Density PWL HMA Pavement	DOL	27,350.000	27,350.000
0034	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	17,770.000	17,770.000
0036	460.2010	Incentive Air Voids HMA Pavement	DOL	38,660.000	38,660.000
0038	460.6223	HMA Pavement 3 MT 58-28 S	TON	21,680.000	21,680.000
0040	460.6224	HMA Pavement 4 MT 58-28 S	TON	16,978.000	16,978.000
0042	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	40.000	40.000
0046	465.0315	Asphaltic Flumes	SY	23.000	23.000
0048	465.0560	Asphaltic Rumble Strips, Centerline	LF	38,605.000	38,605.000
0050	602.3280	Concrete Rumble Strips, Transverse	SY	100.000	100.000
0052	614.0400	Adjusting Steel Plate Beam Guard	LF	820.000	820.000
0054	618.0100	Maintenance and Repair of Haul Roads (project) 01. 5809-00-74	EACH	1.000	1.000
0056	619.1000	Mobilization	EACH	1.000	1.000
0058	624.0100	Water	MGAL	918.000	918.000
0060	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000	2.000
0062	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0064	638.2102	Moving Signs Type II	EACH	4.000	4.000
0066	642.5001	Field Office Type B	EACH	1.000	1.000
0068	643.0300	Traffic Control Drums	DAY	325.000	325.000
0070	643.0420	Traffic Control Barricades Type III	DAY	5.000	5.000
0072	643.0715	Traffic Control Warning Lights Type C	DAY	60.000	60.000
0074	643.0900	Traffic Control Signs	DAY	3,135.000	3,135.000
0076	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0078	643.3105	Temporary Marking Line Paint 4-Inch	LF	161,725.000	161,725.000
0080	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	3,896.000	3,896.000
0082	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	24.000	24.000
0084	643.5000	Traffic Control	EACH	1.000	1.000
0086	646.1020	Marking Line Epoxy 4-Inch	LF	165,910.000	165,910.000
0088	646.6120	Marking Stop Line Epoxy 18-Inch	LF	23.000	23.000
0090	648.0100	Locating No-Passing Zones	MI	8.400	8.400
0092	650.8000	Construction Staking Resurfacing Reference	LF	44,405.000	44,405.000
0094	650.9911	Construction Staking Supplemental Control (project) 01. 5809-00-74	EACH	1.000	1.000
0096	690.0150	Sawing Asphalt	LF	459.000	459.000
0098	740.0440	Incentive IRI Ride	DOL	31,595.000	31,595.000

Estimate Of Quantities

5809-00-74

Line	Item	Item Description	Unit	Total	Qty
0100	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,400.000	2,400.000
0102	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	2,160.000	2,160.000
0104	SPV.0035	Special 01. Base Repair for Pulverized Asphalt Base Layer	CY	500.000	500.000
0106	SPV.0060	Special 01. Temporary Traffic Signals	EACH	1.000	1.000
0108	SPV.0195	Special 01. Base Aggregate Dense 3/4-Inch Beam Guard	TON	281.000	281.000

3

REMOVING PAVEMENT							
CATEGORY	STATION	LOCATION	204.0100	204.0110	204.0115	204.0120	REMARKS
			REMOVING CONCRETE PAVEMENT SY	REMOVING ASPHALTIC SURFACE SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMOVING ASPHALTIC SURFACE MILLING SY	
0010	101+05	CL	-	-	523	-	CTH K
0010	115+87	LT	-	19	-	-	DRIVEWAY
0010	128+58	LT	-	-	56	243	W SEAMAN RD
0010	143+60	LT	-	-	92	278	HUEBNER RD
0010	147+07	RT	-	78	-	-	FITZGERALD RD
0010	191+98	LT	-	72	-	-	FITZGERALD CT
0010	193+95	RT	-	40	-	-	DRIVEWAY
0010	195+23	RT	-	30	-	-	DRIVEWAY
0010	206+32	RT	-	76	-	-	GAVIN RD
0010	222+16	RT	-	33	-	-	DRIVEWAY
0010	240+36	LT	-	-	64	311	LAVALLE RD
0010	296+45	RT	-	-	70	390	ST CLAIR RD
0010	308+11	RT	-	-	60	290	ST CLAIR RD
0010	341+76	RT	-	41	-	-	DRIVEWAY
0010	360+10	RT	-	-	58	188	BURNS RD
0010	363+32	LT	-	34	-	-	DRIVEWAY
0010	370+42	RT	-	34	-	-	DRIVEWAY
0010	415+20	LT	-	-	60	290	BROWN RD
0010	436+66	RT	-	23	-	-	DRIVEWAY
0010	533+20	RT	32	-	-	-	RUMBLE STRIPS
0010	538+70	RT	31	-	-	-	RUMBLE STRIPS
0010	540+94	RT	30	-	-	-	RUMBLE STRIPS
0010	545+10	CL	-	-	768	-	CTH K
PROJECT TOTAL			93	480	1,751	1,990	

EXCAVATION COMMON			
CATEGORY	STATION	LOCATION	205.0100 CY
0010	101+05 - 126+50	LT & RT	343
0010	126+50 - 171+00	LT & RT	582
0010	171+00 - 214+15	LT & RT	921
0010	241+15 - 308+25	LT & RT	899
0010	308+25 - 359+81	LT & RT	696
0010	359+81 - 415+50	LT & RT	738
0010	415+50 - 545+10	LT & RT	1,746
PROJECT TOTAL			5,925

PREPARE FOUNDATION FOR CONCRETE PAVING (5809-00-74)		
CATEGORY	PROJECT	211.0201 EACH
0010	5809-00-74	1
PROJECT TOTAL		1

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS							
				211.0400			
CATEGORY	STATION			LOCATION	STA		
0010	101+05 - 545+10		LT&RT		888		
PROJECT TOTAL					888		
BASE AGGREGATE ITEMS							
				305.0110	SPV.0195.01	624.0100*	
				BASE AGGREGATE	BASE AGGREGATE		
				DENSE 3/4-INCH	DENSE 3/4-INCH		
CATEGORY	STATION	TO	STATION	LOCATION	TON	BEAM GUARD	WATER
						TON	MGAL
0010	101+05	-	126+50	LT/RT	41	37	1
0010	126+50	-	171+00	LT/RT	66	42	2
0010	171+00	-	214+15	LT/RT	99	-	1
0010				DRIVEWAYS	194	-	2
0010	241+15	-	308+25	LT/RT	106	47	2
0010	308+25	-	359+81	LT/RT	82	37	2
0010	359+81	-	415+50	LT/RT	87	-	1
0010	415+50	-	545+10	LT/RT	206	118	4
				DRIVEWAYS	220	-	3
PROJECT TOTAL					1,101	281	18
* SHOWN ELSEWHERE IN THE PLAN							

PULVERIZE AND RELAY				
CATEGORY	STATION	LOCATION	325.0100 SY	624.0100* WATER MGAL
0010	101+05 - 126+50	LT & RT	8,360	50
0010	126+50 - 171+00	LT & RT	15,380	92
0010	171+00 - 214+15	LT & RT	23,700	142
0010	241+15 - 308+25	LT & RT	22,680	136
0010	308+25 - 359+81	LT & RT	17,520	105
0010	359+81 - 415+50	LT & RT	19,140	115
0010	415+50 - 545+10	LT & RT	43,290	260
PROJECT TOTAL			150,070	900
* SHOWN ELSEWHERE IN THE PLAN				

CONCRETE PAVEMENT					RUMBLE STRIPS				
415.0090 CONCRETE PAVEMENT 9-INCH					465.0560 ASPHALTIC RUMBLE STRIPS CENTERLINE LF				
CATEGORY	STATION	OFFSET	SY	REMARKS	CATEGORY	STATION	LOCATION	LF	602.3280 CONCRETE RUMBLE STRIPS, TRANSVERSE SY
0010	535+55	RT	31	PAVEMENT UNDER RUMBLE STRIPS	0010	101+05 - 126+50	CL	2,495	-
0010	538+55	RT	31	PAVEMENT UNDER RUMBLE STRIPS	0010	126+50 - 171+00	CL	3,700	-
0010	540+80	RT	31	PAVEMENT UNDER RUMBLE STRIPS	0010	171+00 - 214+15	CL	3,115	-
PROJECT TOTAL			93		0010	214+15 - 308+25	CL	7,685	-
					0010	308+25 - 359+81	CL	4,330	-
					0010	359+81 - 415+50	CL	4,670	-
					0010	415+50 - 545+10	CL	12,610	-
					0010	535+55	RT	-	33.3
					0010	538+55	RT	-	33.3
					0010	540+80	RT	-	33.3
PROJECT TOTAL					PROJECT TOTAL			38,605	100.0

ASPHALTIC PAVEMENT													
					455.0605	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	SPV.0035.01 BASE REPAIR FOR PULVERIZED ASPHALT BASE LAYER CY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0315 ASPHALTIC FLUMES SY	
CATEGORY	STATION	TO	STATION	LOCATION	TACK COAT GAL								
0010	101+05	-	126+50	DRIVEWAYS	590	-	-	1,209	946	30	-	-	
0010	126+50	-	171+00		1,090	-	-	2,238	1,754	50	-	-	
0010	171+00	-	214+15		1,670	-	-	3,427	2,685	80	-	-	
					-	-	-	-	-	-	40	-	
0010	241+15	-	308+25		1,600	-	-	3,285	2,573	80	-	-	
0010	308+25	-	359+81		1,230	-	-	2,526	1,978	60	-	-	
0010	359+81	-	415+50		1,340	-	-	2,760	2,162	60	-	-	
0010	415+50	-	545+10		3,030	-	-	6,235	4,880	140	-	23	
					-	-	-	-	-	-	-	-	
					PROJECT	-	2	2	-	-	-	-	-
PROJECT TOTAL					10,550	2	2	21,680	16,978	500	40	23	
NOTE: TACK COAT REQUIRED PRIOR TO PAVING OVER MILLED SURFACE. CALCULATIONS BASED ON APPLICATION RATE OF 0.07 GAL/SY. HMA PAVEMENT WEIGHT CALCULATIONS BASED ON UNIT WEIGHT OF 112 LB/SY/INCH.													

3

3

PWL MIXTURE USE TABLE

DESCRIPTION	STATION - STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
22-FOOT DRIVING LANE	101+05 - 545+10	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	12,157	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT460.2005
22-FOOT DRIVING LANE	101+05 - 545+10	LOWER LAYER	PULVERIZE AND RELAY	3 MT 58-28 S	15,197	2.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT460.2005
3-FOOT PAVED SHOULDERS	101+05 - 545+10	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	3,315	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2) *NOT ELGIBLE FOR INCENTIVE
3-FOOT PAVED SHOULDERS	101+05 - 545+10	LOWER LAYER	PULVERIZE AND RELAY	3 MT 58-28 S	4,145	2.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2) *NOT ELGIBLE FOR INCENTIVE
INTERSECTIONS	101+05 - 545+10	LOWER LAYER	MILLED EXISTING HMA SURFACE	3 MT 58-28 S	2,338	2.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2) *NOT ELGIBLE FOR INCENTIVE
INTERSECTIONS	101+05 - 545+10	UPPER LAYER	3 MT 58-28 S	4 MT 58-28 S	1,506	2.0"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	DEPARTMENT ACCEPTANCE (SS 460.3.3.2) *NOT ELGIBLE FOR INCENTIVE

GUARDRAIL ITEMS

614.0400 ADJUSTING STEEL PLATE BEAM GUARD				
CATEGORY	STATION TO STATION	LOCATION	LF	REMARKS
0010	UNDISTRIBUTED	LT&RT	820	-
PROJECT TOTAL			820	

MOVING SIGNS - TYPE II

						634.0614 POSIS WOOD 4X6- INCH X 14- EACH	634.0616 POSIS WOOD 4X6- INCH X 16- EACH	638.2102 MOVING SIGNS TYPE II EACH
CATEGORY	SIGN NUMBER	SIGN CODE	SIZE (INCH)	SIZE (INCH)	MESSAGE			
0010	01-01M	W3-1	36	36	STOP AHEAD	-	1	1
0010	01-02M	W3-1	36	36	STOP AHEAD	-	1	1
0010	01-03M	R1-1	30	30	STOP	1	-	1
0010	01-04M	R1-1	30	30	STOP	1	-	1
PROJECT TOTAL						2	2	4

PAVEMENT MARKING													
					643.3105						646.1020	646.6120	648.0100
					TEMPORARY MARKING LINE						MARKING LINE	MARKING	LOCATING
					PAINT 4-INCH						EPOXY 4-INCH	STOP LINE	NO-PASSING
					(YELLOW, SOLID)	(YELLOW, 12.5-FT SKIPS)	(WHITE, SOLID)	(WHITE, 3-FT SKIPS)	(YELLOW, SOLID)	(YELLOW, 12.5-FT SKIPS)	EPOXY 18-INCH	ZONES	
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF	MI	
0010	101+05	-	126+50	LT&RT	10,184	-	5,048	-	5,092	-	-	-	
0010	126+50	-	171+00	LT&RT	17,800	-	8,590	78	8,900	-	-	-	
0010	171+00	-	214+15	LT&RT	19,202	1604	10,938	21	9,601	802	-	-	
0010	241+15	-	308+25	LT&RT	23,434	855	13,247	42	11,717	427.5	-	-	
0010	308+25	-	359+81	LT&RT	20,640	-	10,188	30	10,320	-	-	-	
0010	359+81	-	415+50	LT&RT	22,280	-	10,938	21	11,140	-	-	-	
0010	415+50	-	545+10	LT&RT	43,696	2,030	25,818	-	21,848	1,015	23	-	
0010	11+85	-	14+75	CTH O	-	-	70	18	-	-	-	-	
0010				PROJECT	-	-	-	-	-	-	-	8.4	
TOTAL					157,236	4,489	84,837	210	78,618	2,245			
PROJECT TOTAL					161,725				165,910		23	8.4	

CONSTRUCTION STAKING

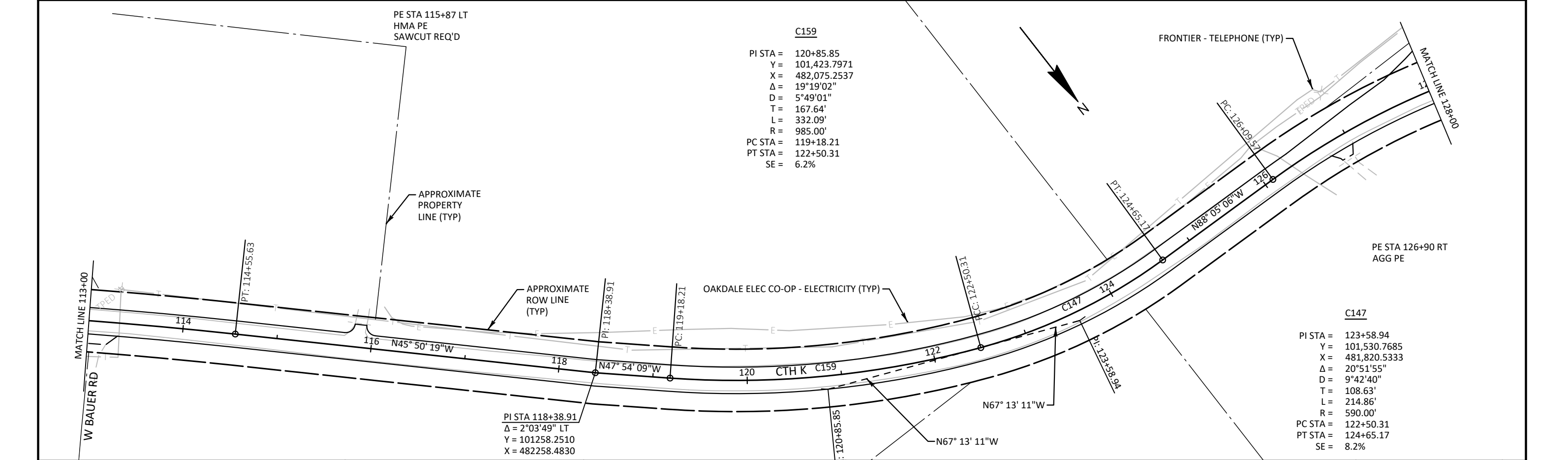
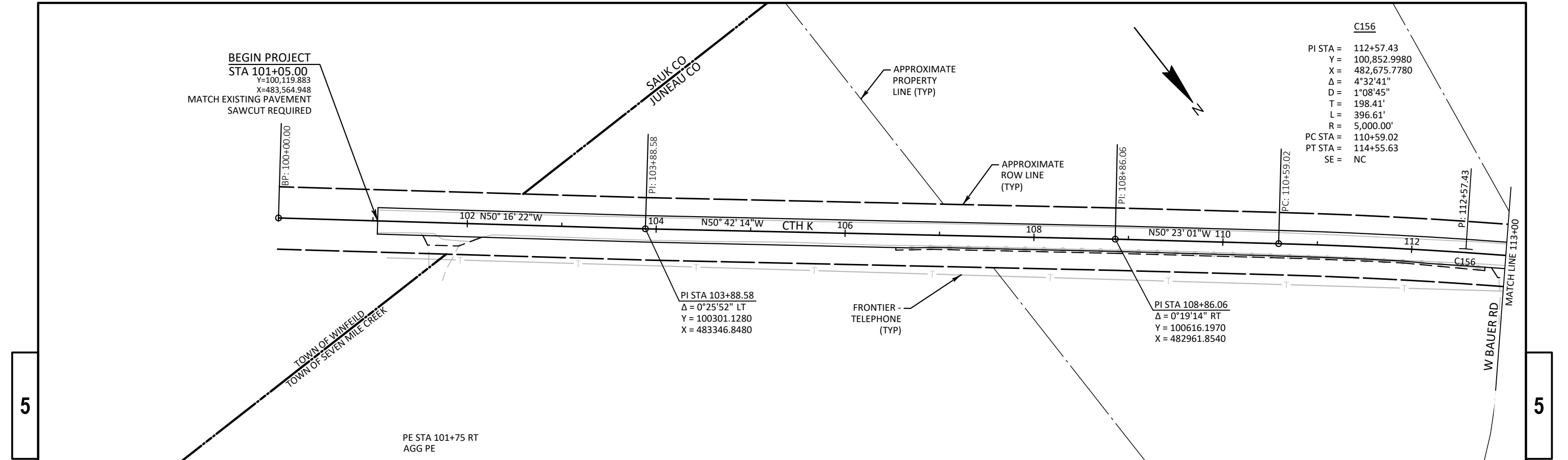
		650.8000	650.9911
		RESURFACING	SUPPLEMENTAL
		REFERENCE	CONTROL
		LF	(5809-00-74)
CATEGORY	LOCATION		EACH
0010	PROJECT	44,405	1
PROJECT TOTAL		44,405	1

TEMPORARY TRAFFIC SIGNALS

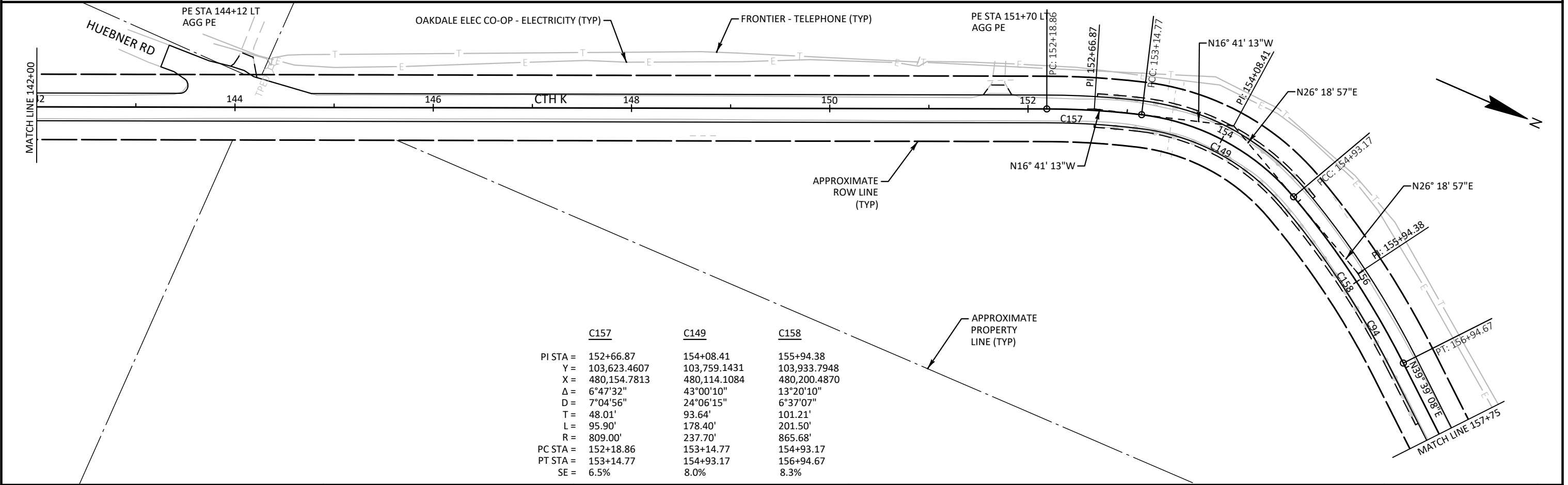
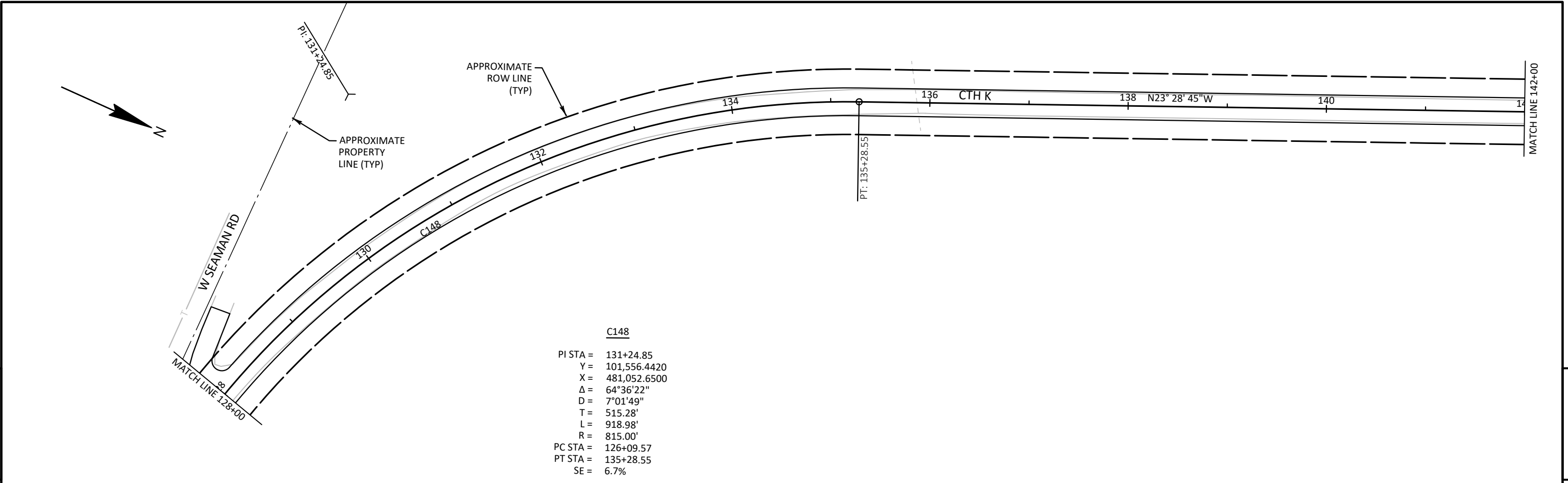
				SPV.0060.01
				SPECIAL (01. TEMPORARY
				TRAFFIC SIGNALS)
				EACH
CATEGORY	STATION TO	STATION	LOCATION	
0010	531+58	- 542+57	LT&RT	1
PROJECT TOTAL				1

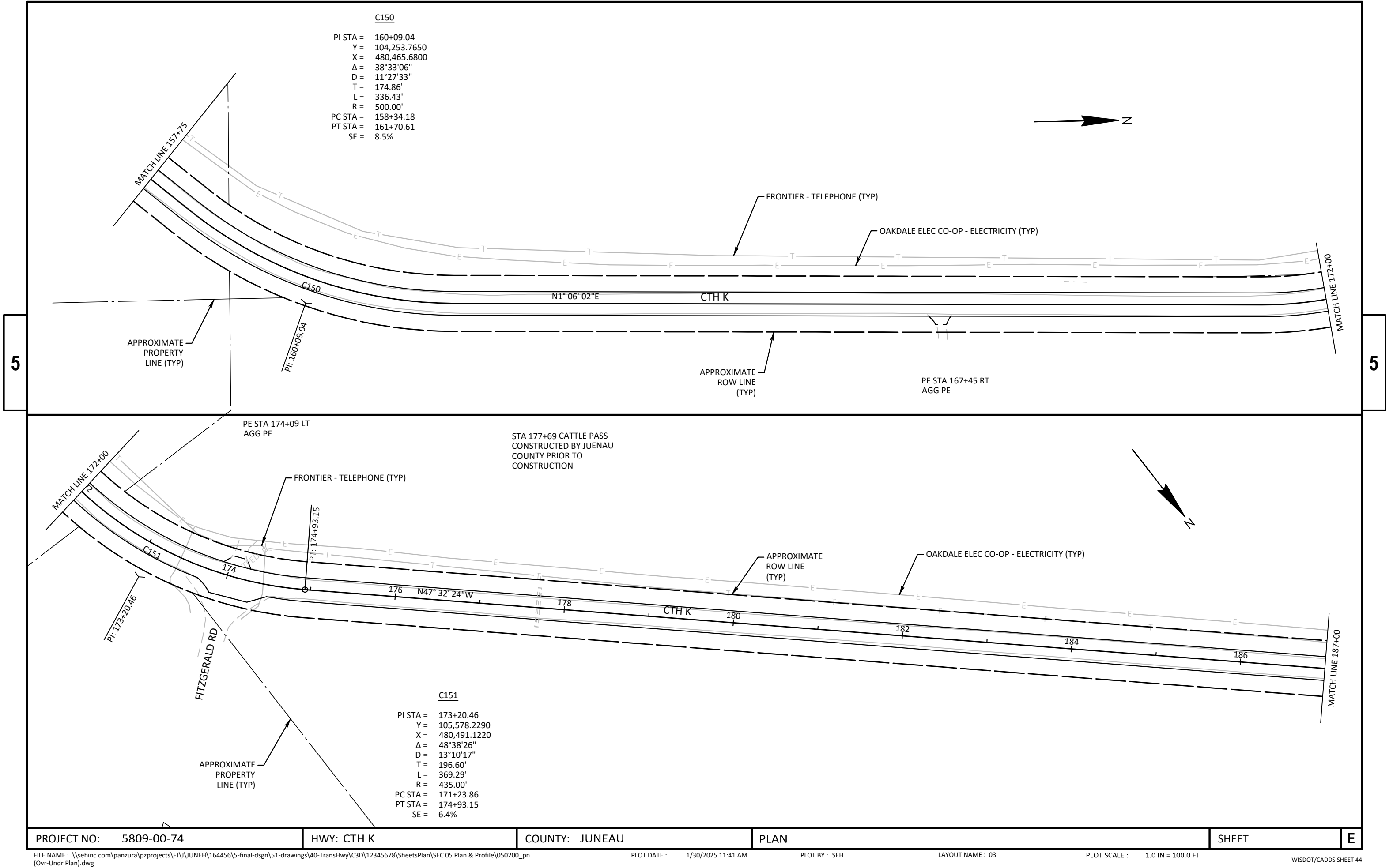
SAWING ASPHALT

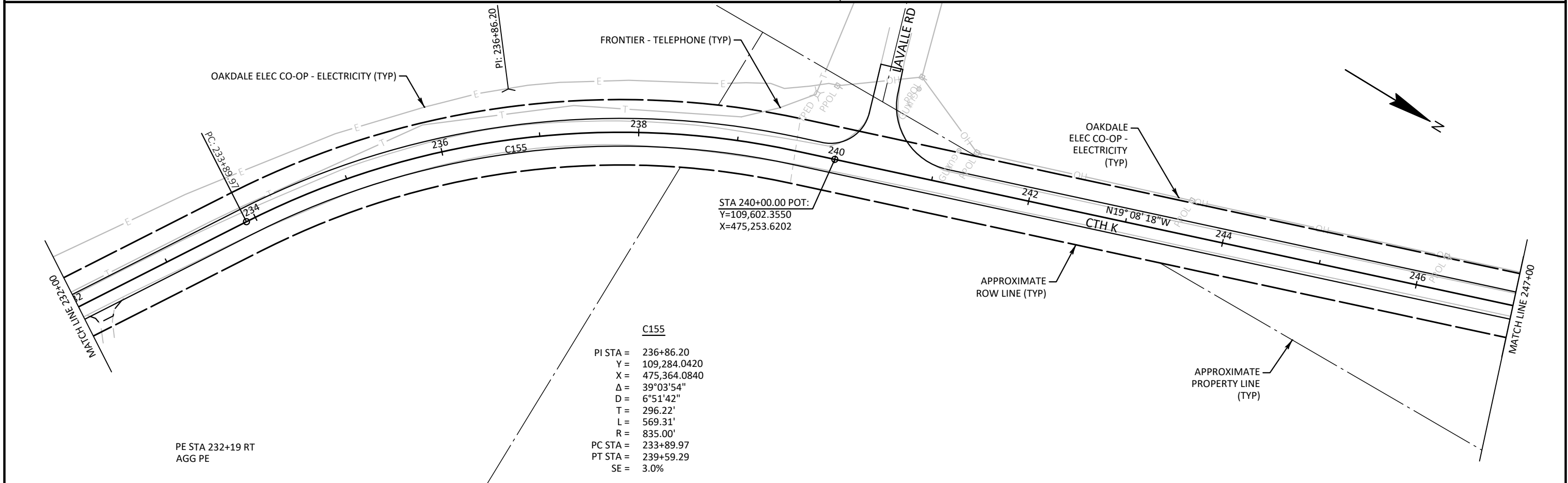
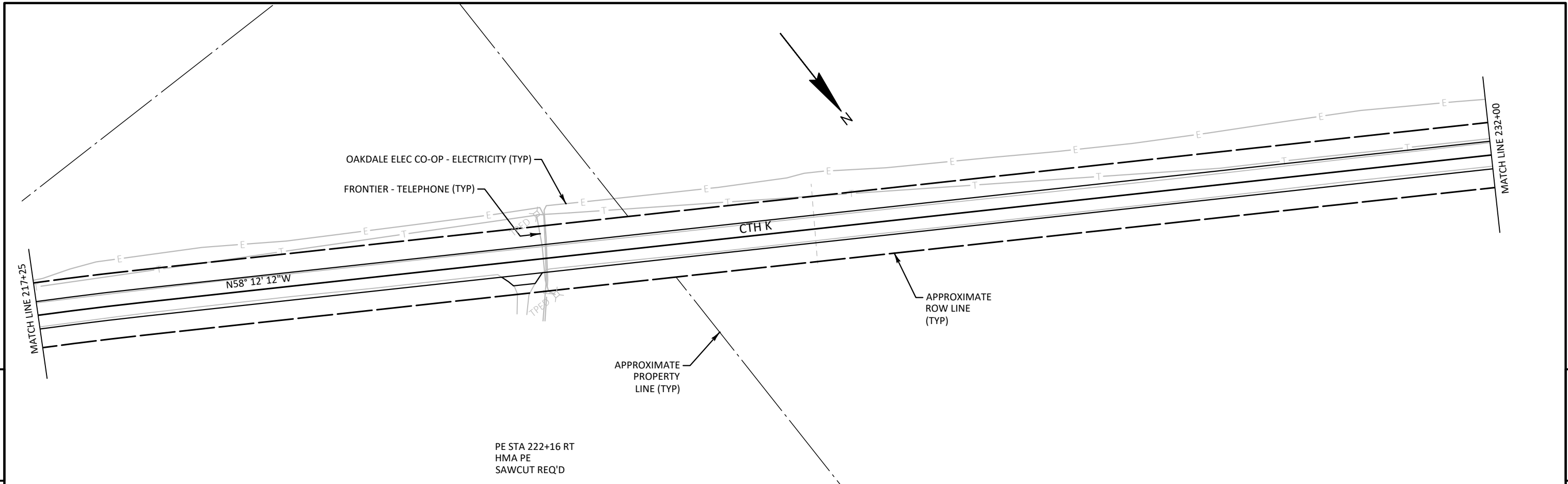
			690.0150	
			ASPHALT	
CATEGORY	STATION	LOCATION	LF	REMARKS
0010	101+05	CL	24	CTH K
0010	115+87	LT	12	DRIVEWAY
0010	128+58	LT	20	W SEAMAN RD
0010	143+60	LT	23	HUEBNER RD
0010	193+95	RT	18	DRIVEWAY
0010	195+23	RT	17	DRIVEWAY
0010	222+16	RT	12	DRIVEWAY
0010	240+36	LT	23	LAVALLE RD
0010	296+45	RT	26	ST CLAIR RD
0010	308+11	RT	21	ST CLAIR RD
0010	341+76	RT	15	DRIVEWAY
0010	360+10	RT	20	BURNS RD
0010	363+32	LT	13	DRIVEWAY
0010	370+42	RT	14	DRIVEWAY
0010	415+03	LT	14	DRIVEWAY
0010	415+20	LT	21	BROWN RD
0010	436+66	RT	14	DRIVEWAY
0010	545+10	CL	152	CTH O INTERSECTION
PROJECT TOTAL			459	



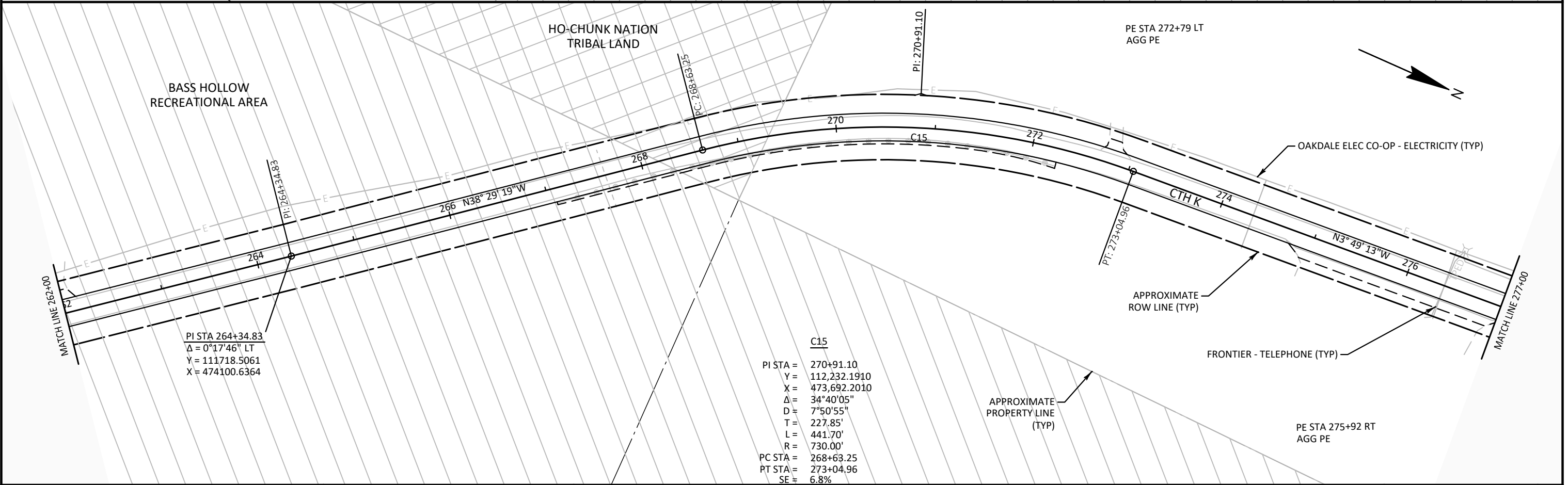
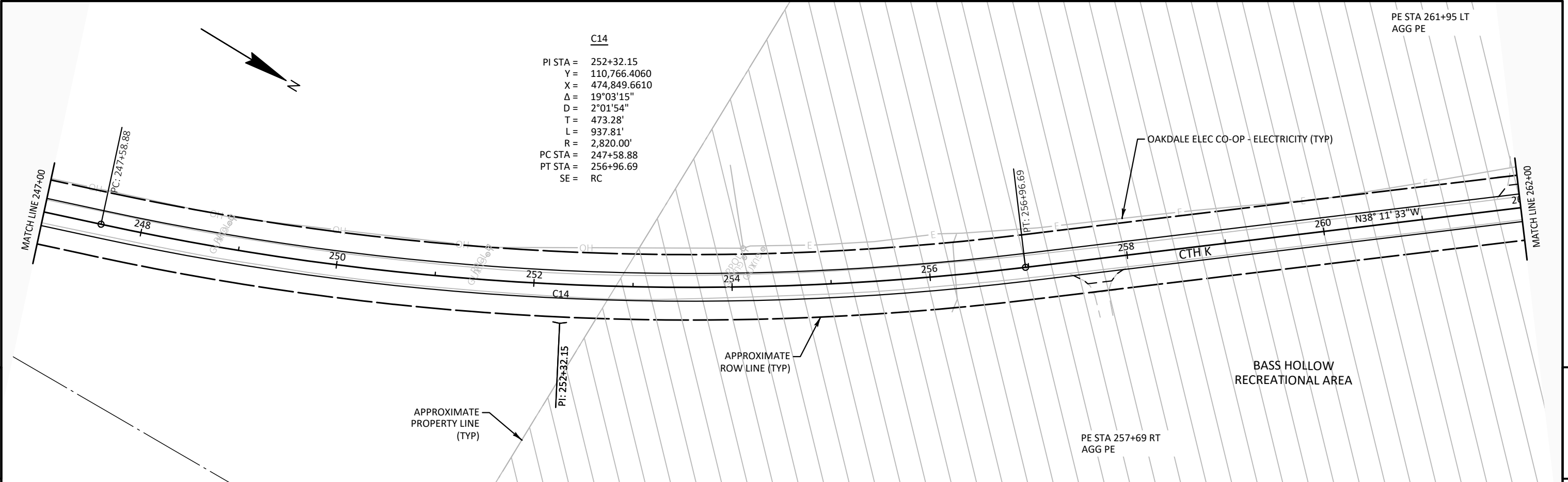
PROJECT NO: 5809-00-74	HWY: CTH K	COUNTY: JUNEAU	PLAN	SHEET	E
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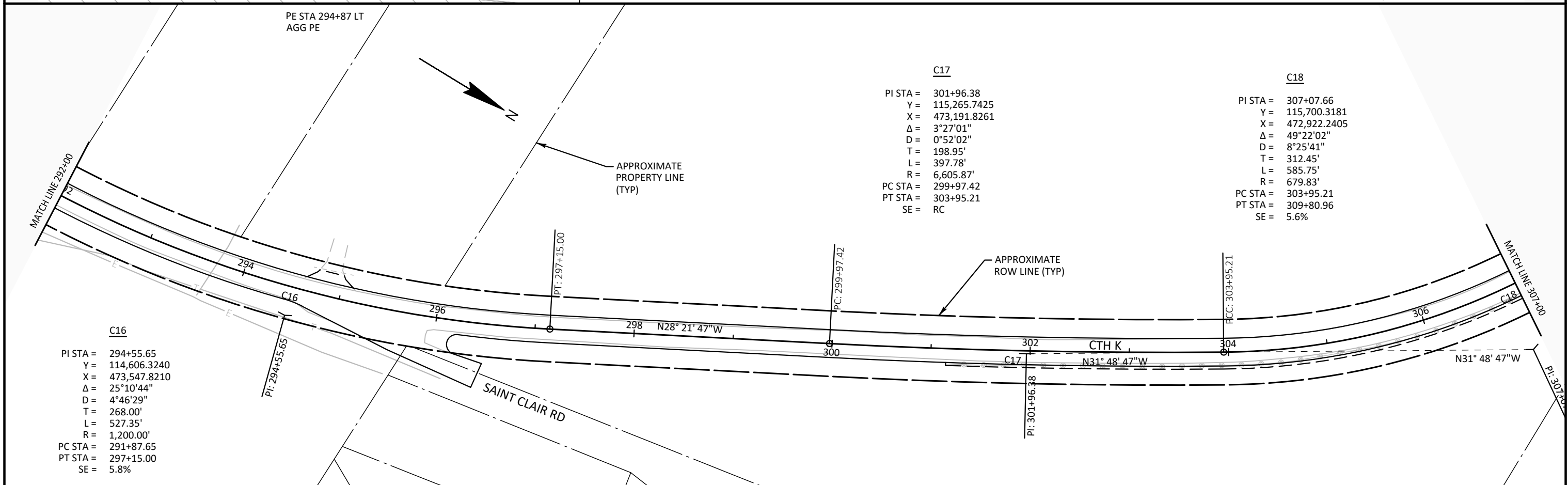
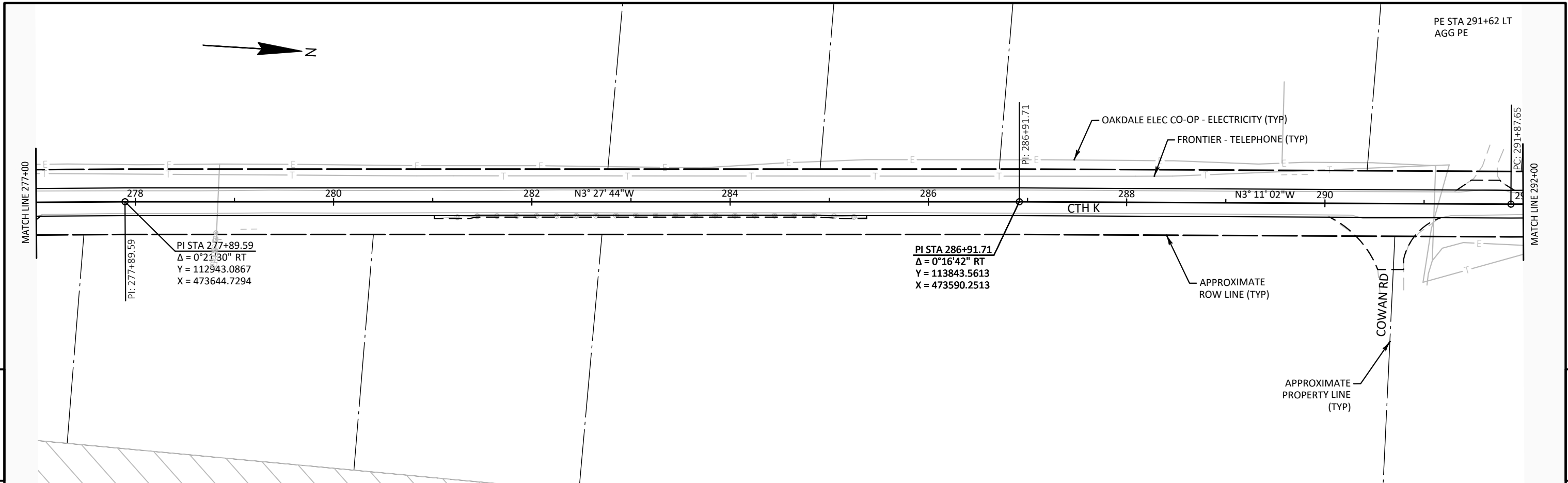




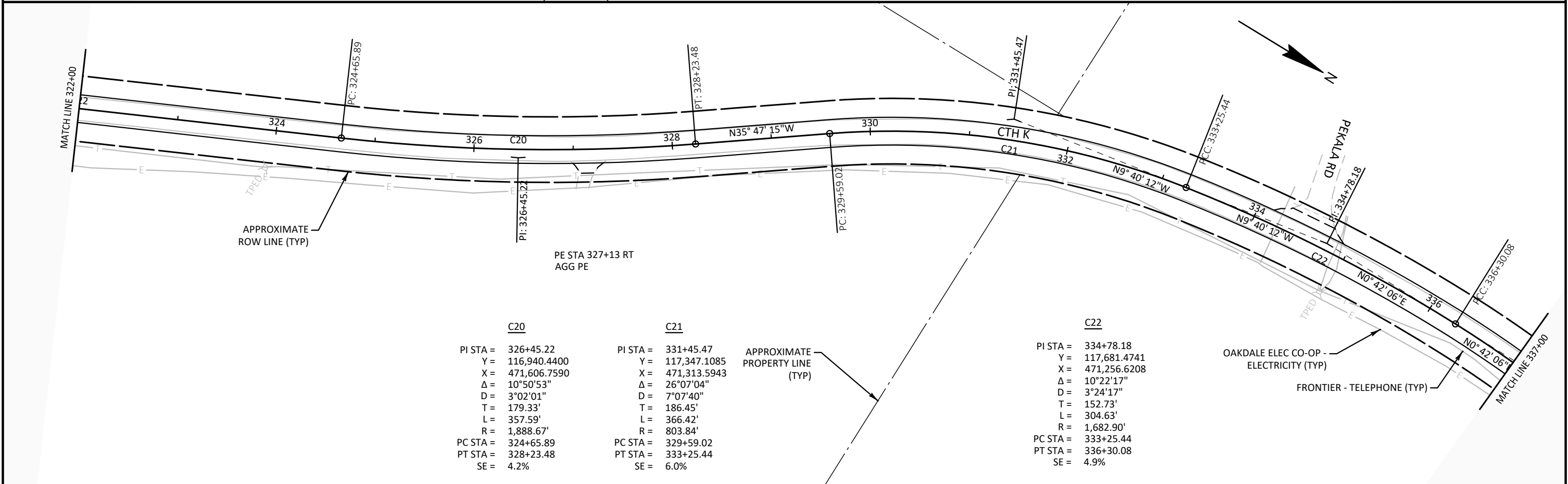
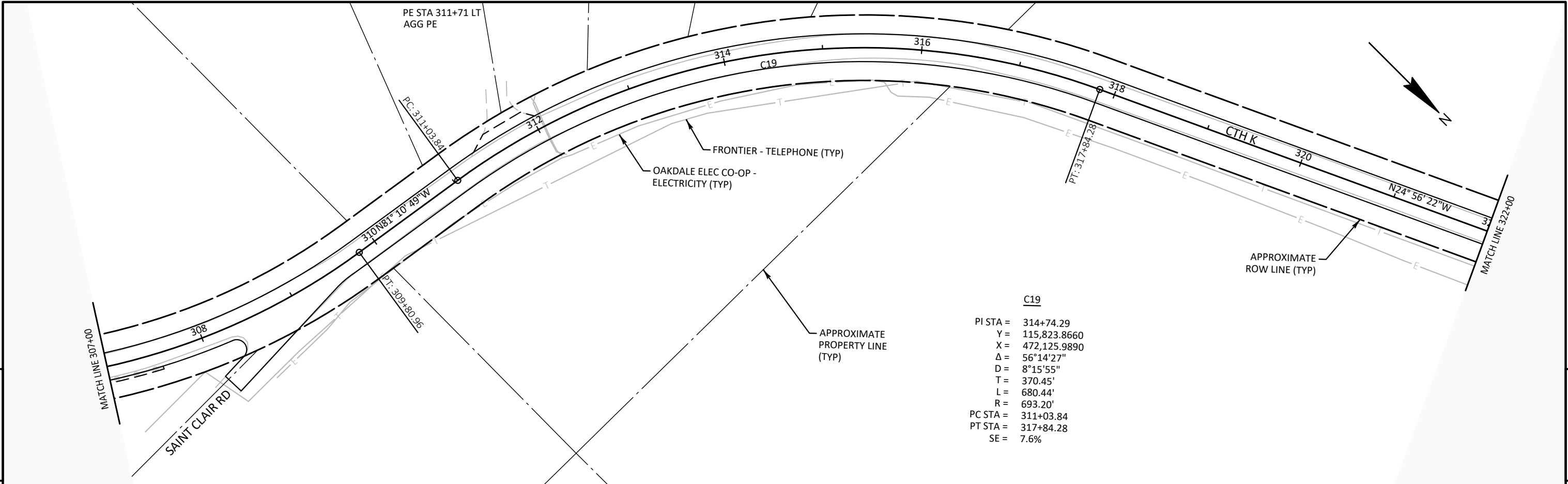


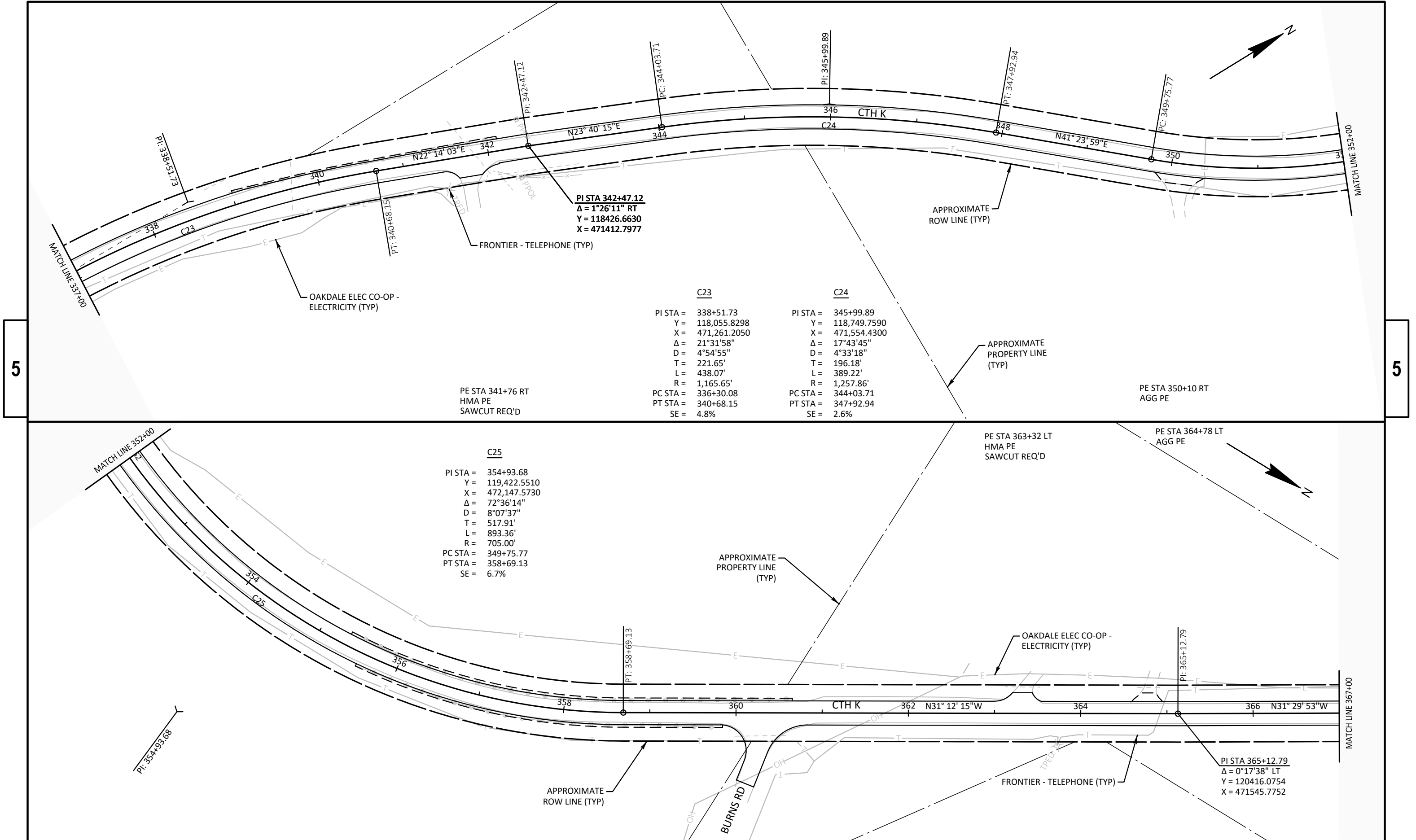
PROJECT NO: 5809-00-74	HWY: CTH K	COUNTY: JUNEAU	PLAN	SHEET	E
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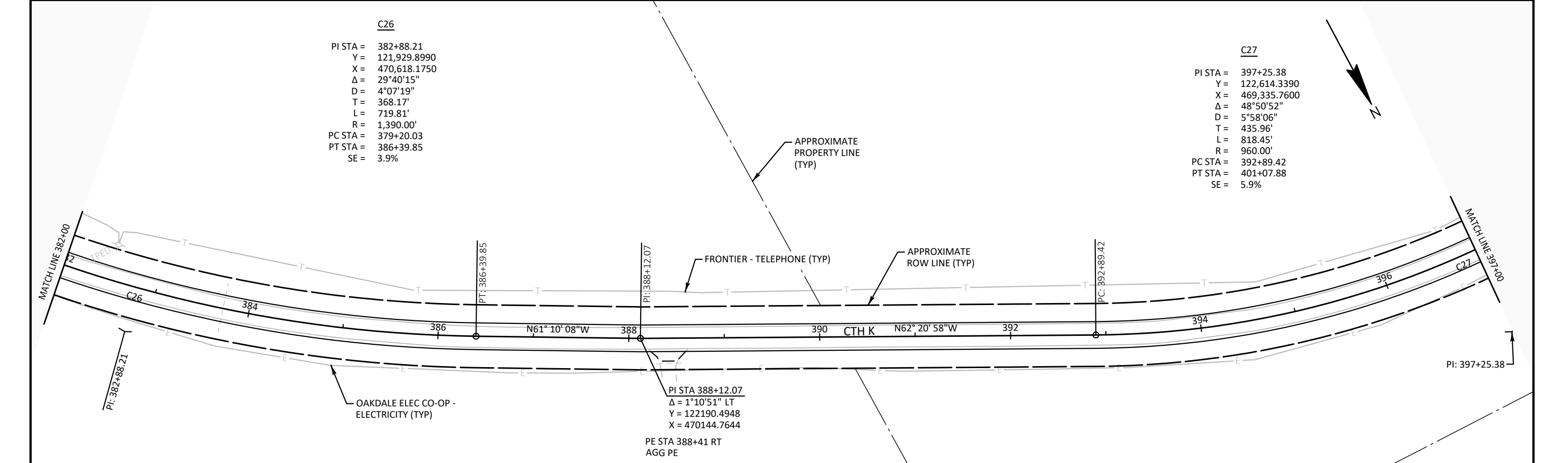
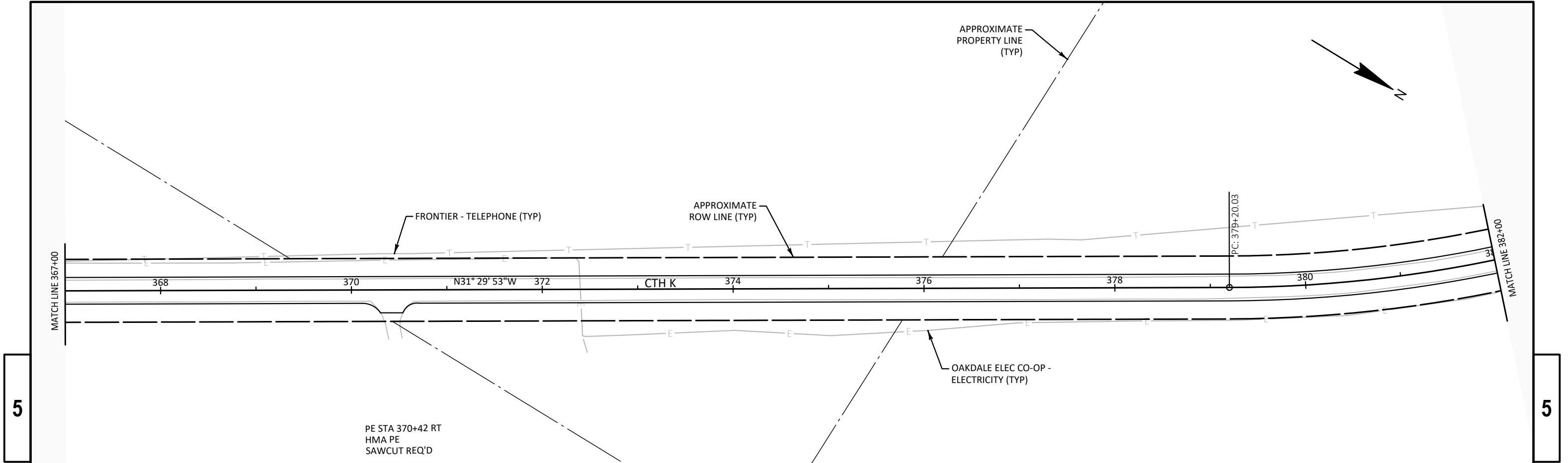


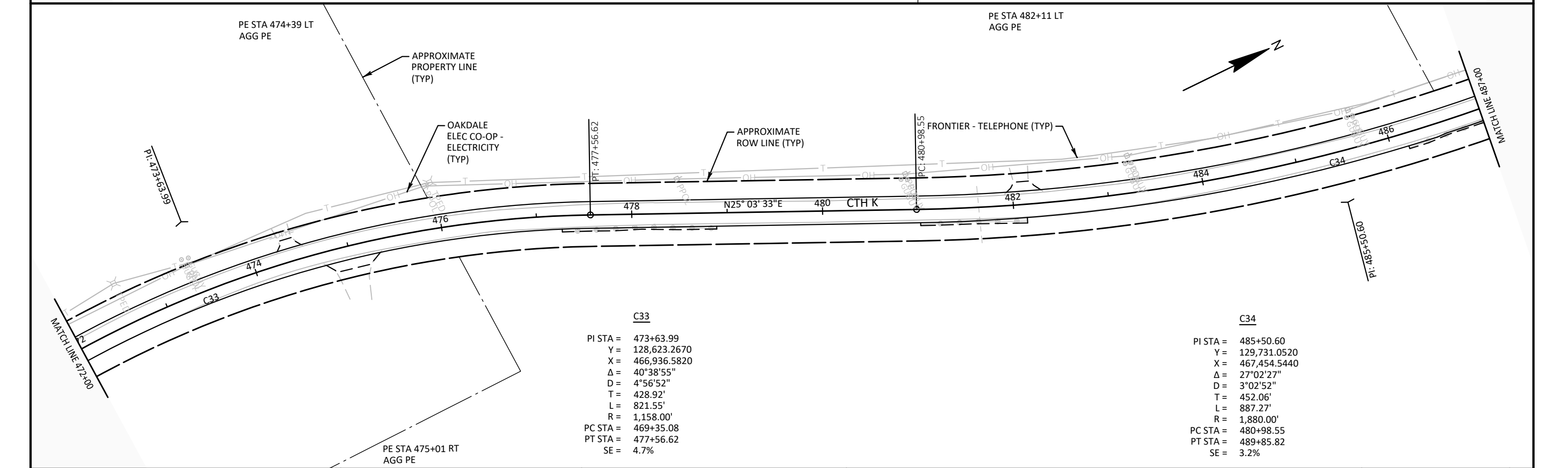
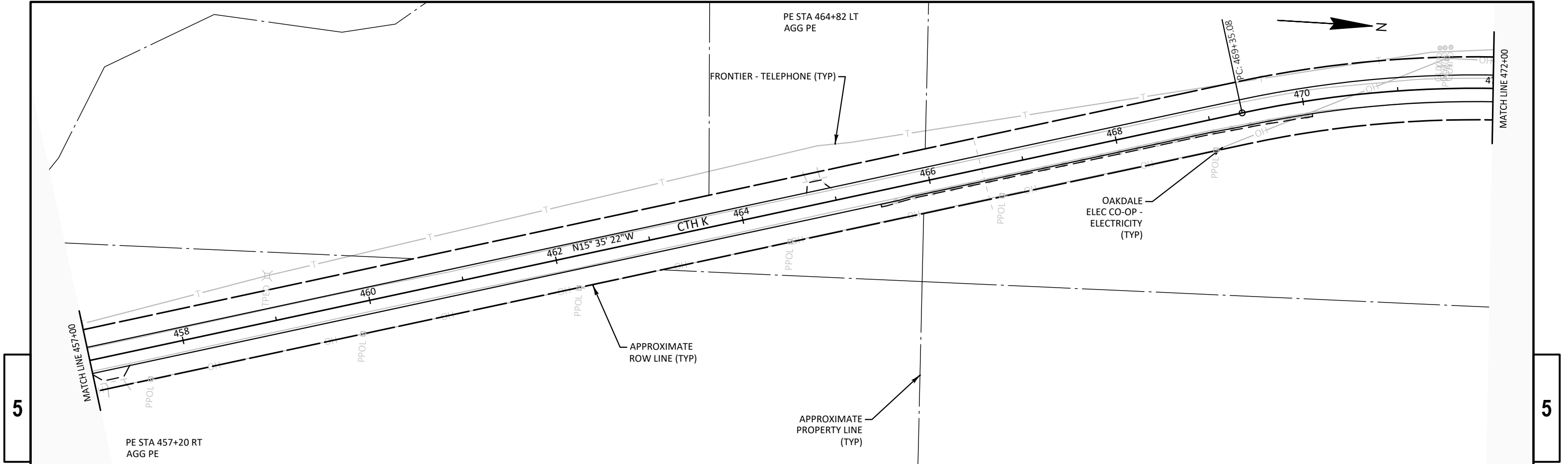


PROJECT NO: 5809-00-74	HWY: CTH K	COUNTY: JUNEAU	PLAN	SHEET	E
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PROJECT NO: 5809-00-74

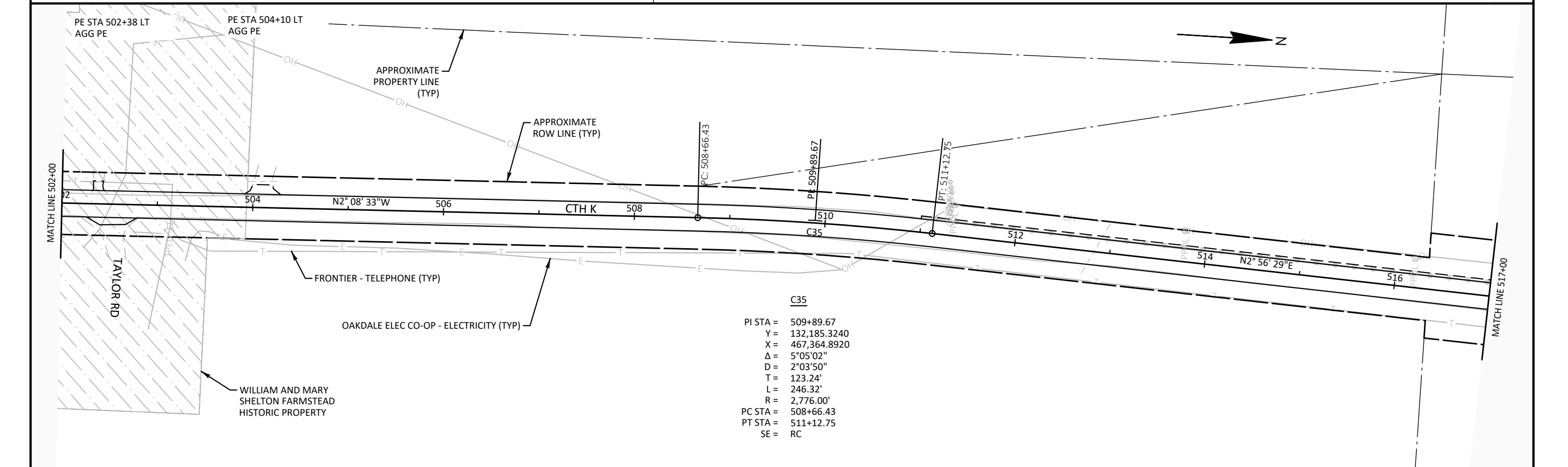
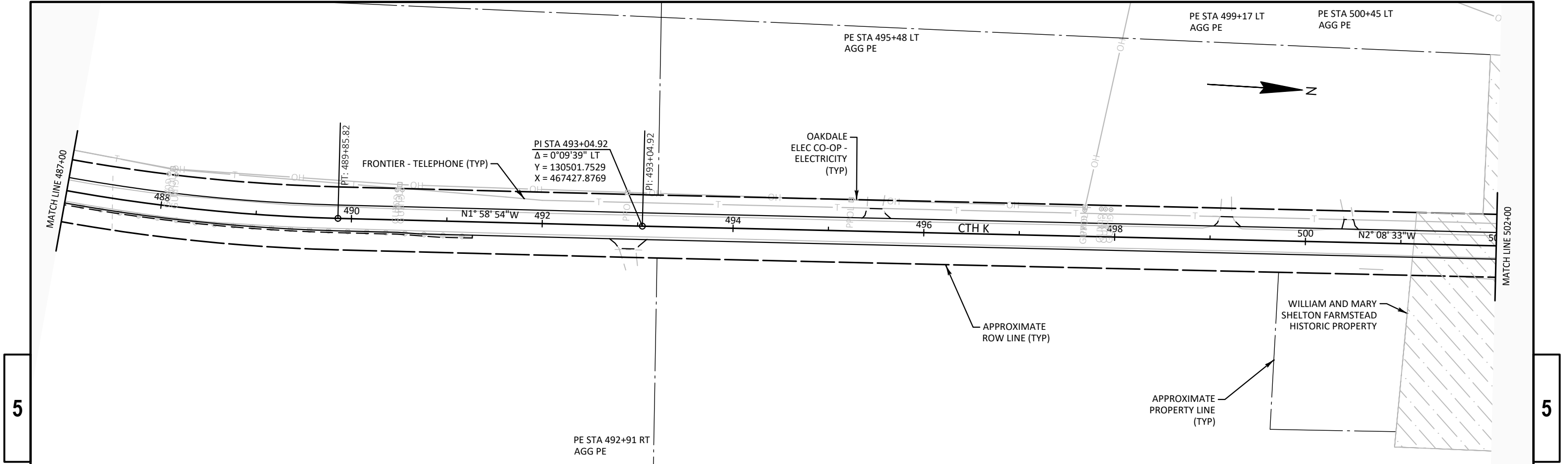
HWY: CTH K

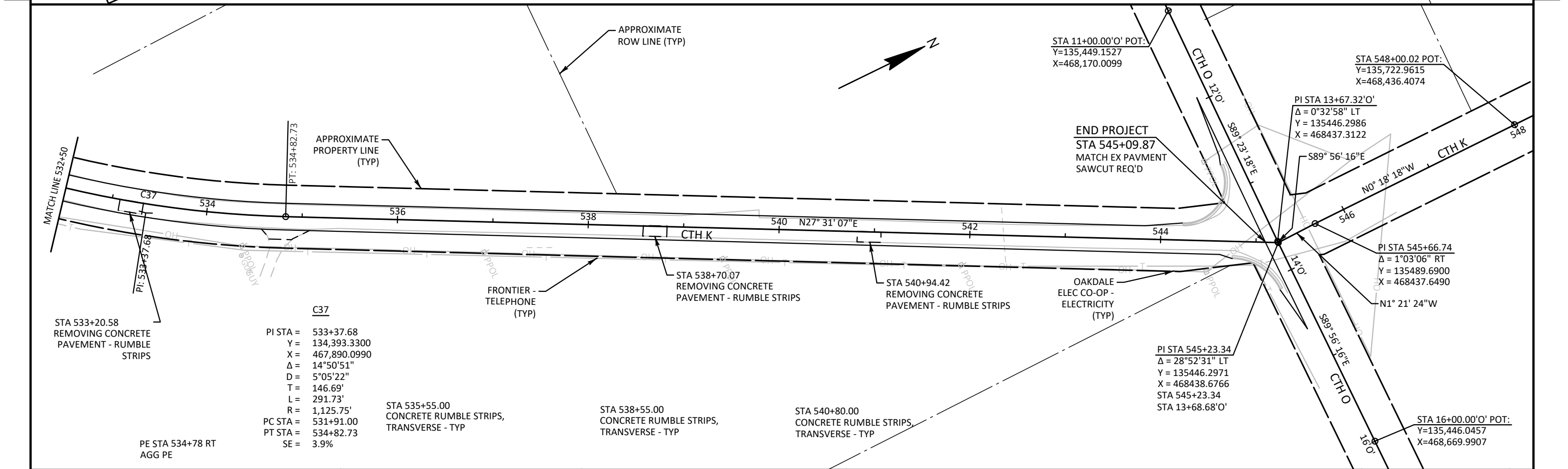
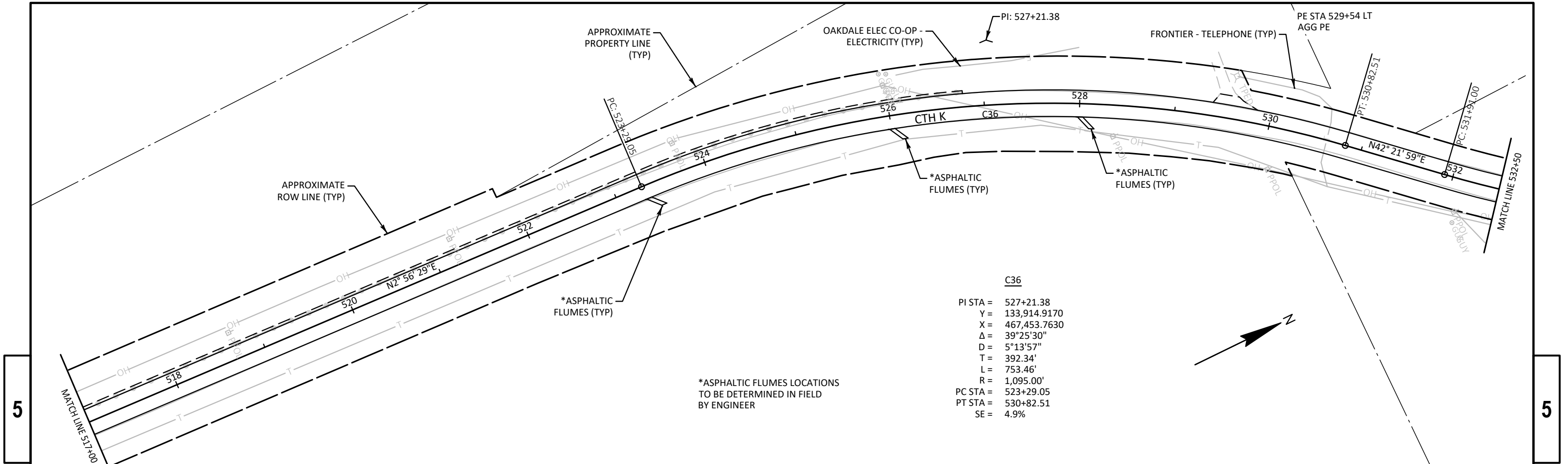
COUNTY: JUNEAU

PLAN

SHEET

E





PROJECT NO: 5809-00-74

HWY: CTH K

COUNTY: JUNEAU

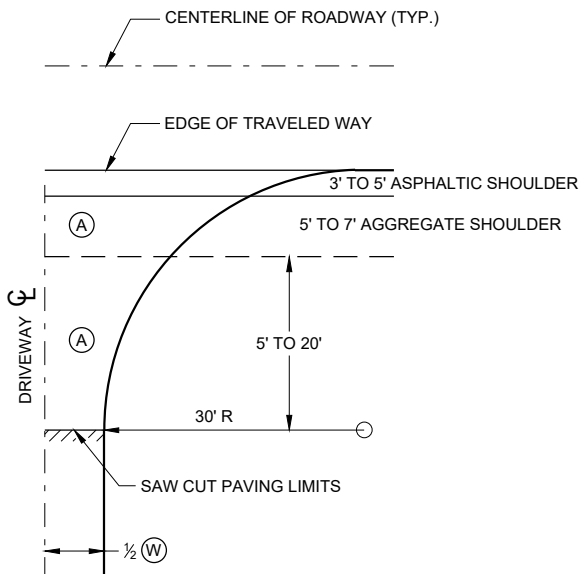
PLAN

SHEET

E

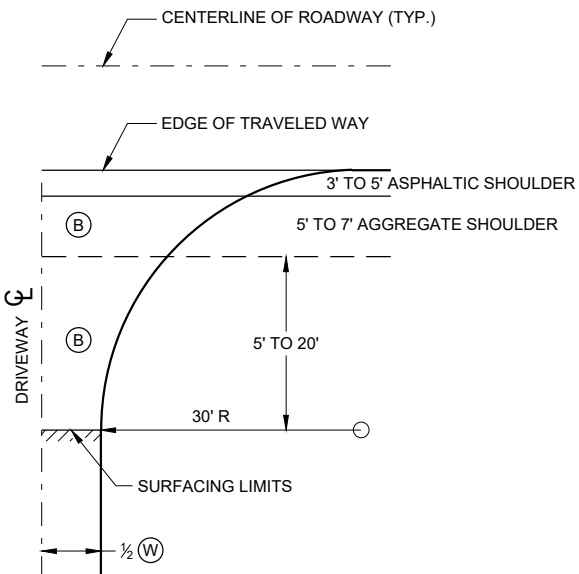
Standard Detail Drawing List

08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
13A09-02	TRANSVERSE RUMBLE STRIPS, CONCRETE
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-09	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

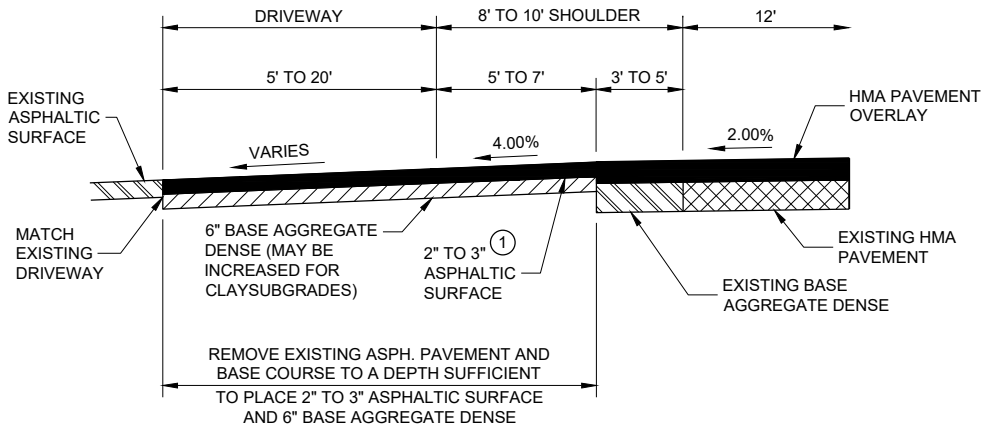


**PLAN VIEW
HALF SECTION**

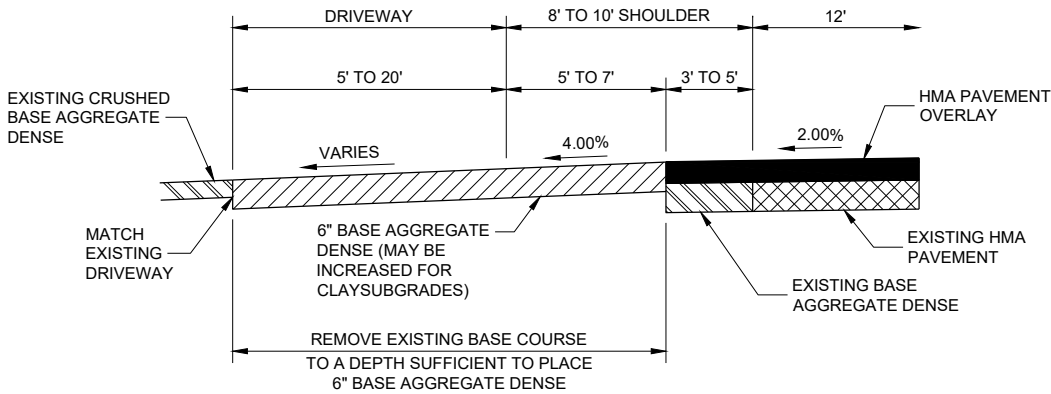
- (A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES. (TON)
- (B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)
- (W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



**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**

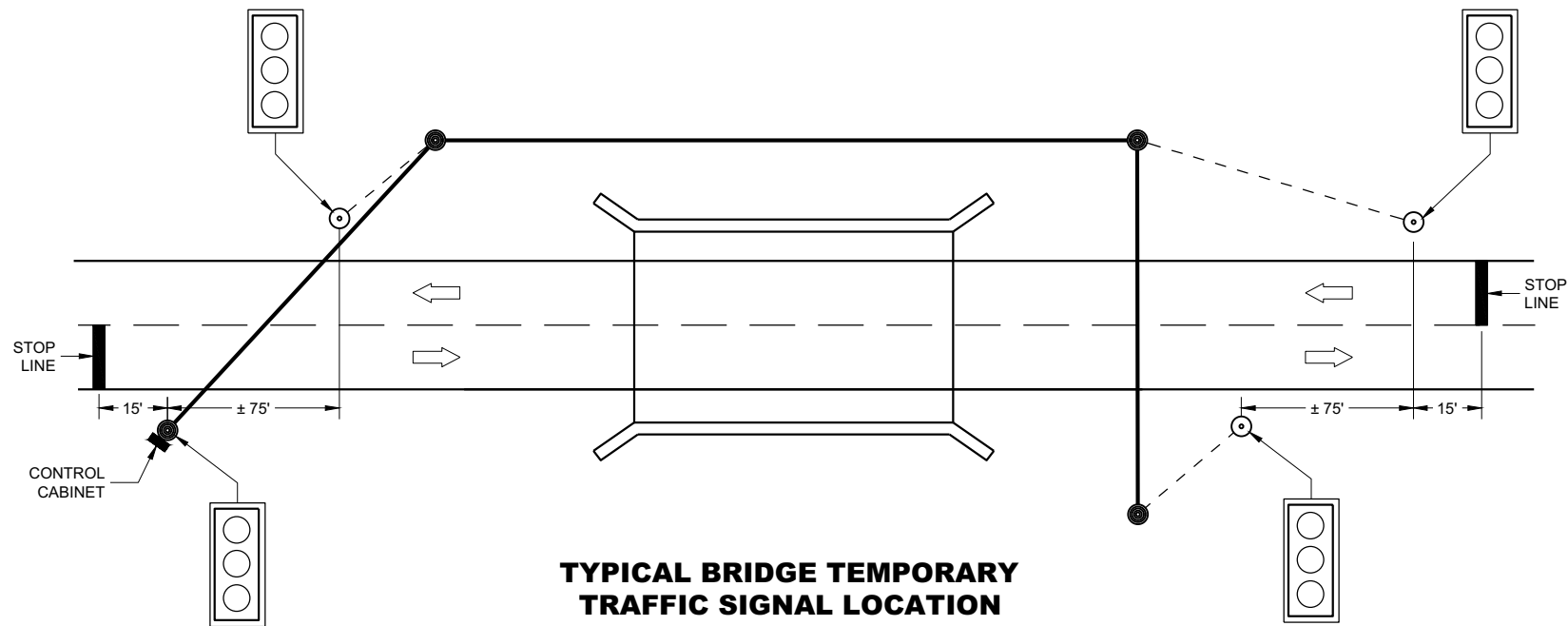
GENERAL NOTES

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

**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



TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREAKAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

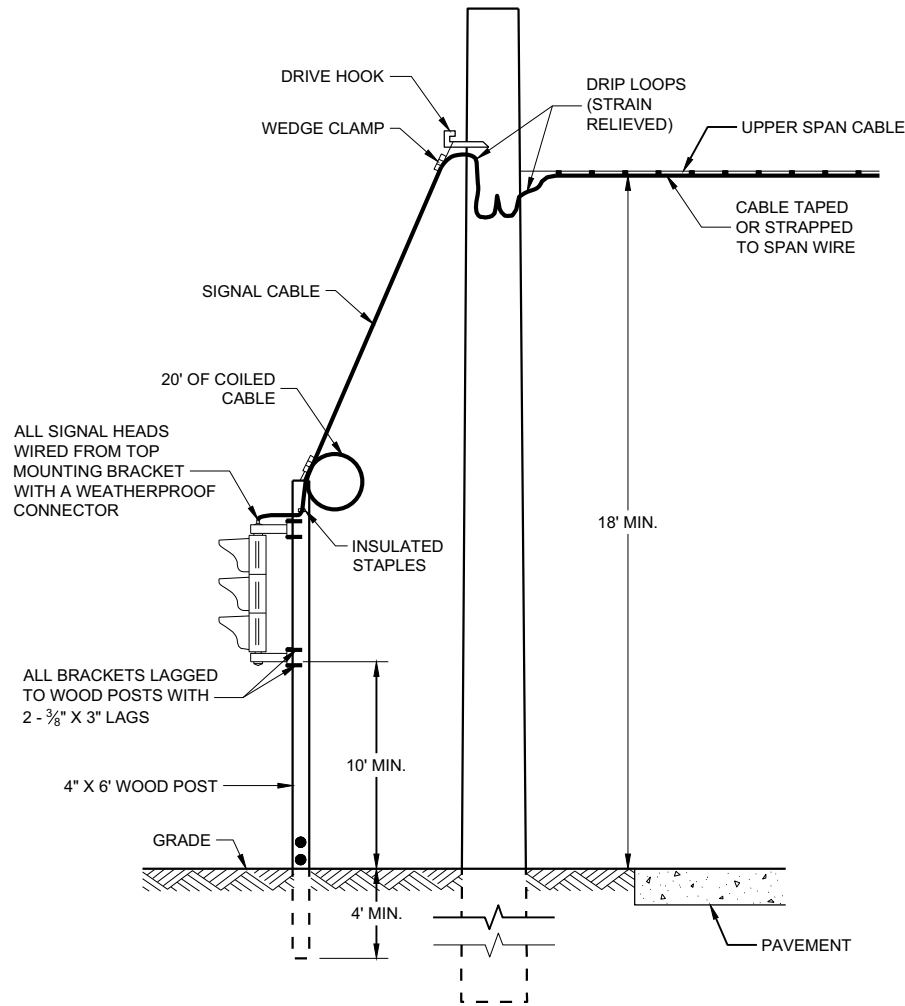
WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

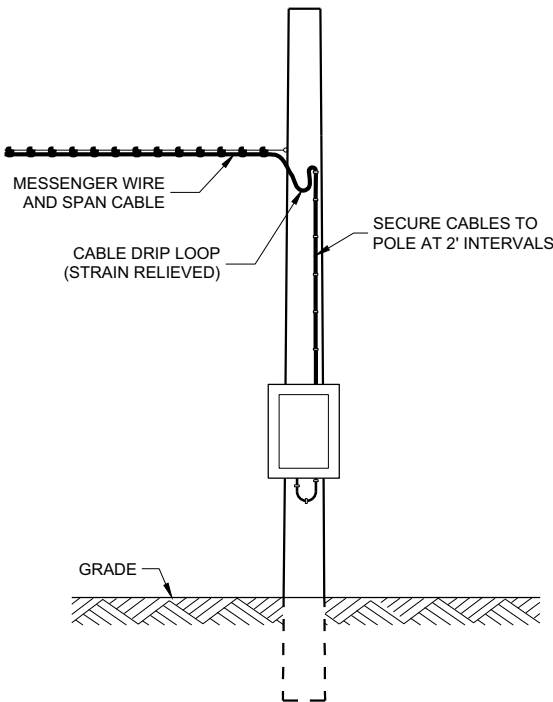
TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

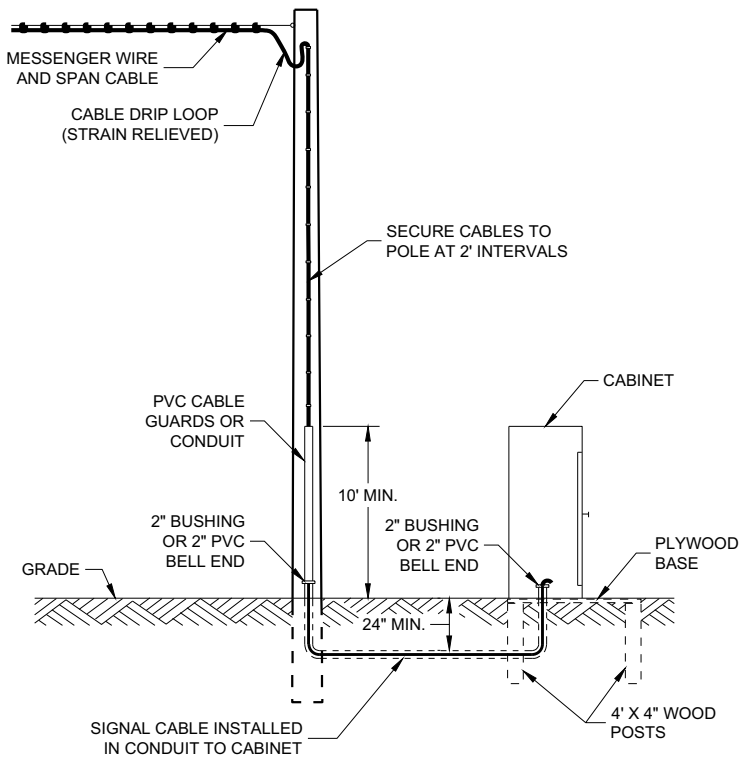
SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

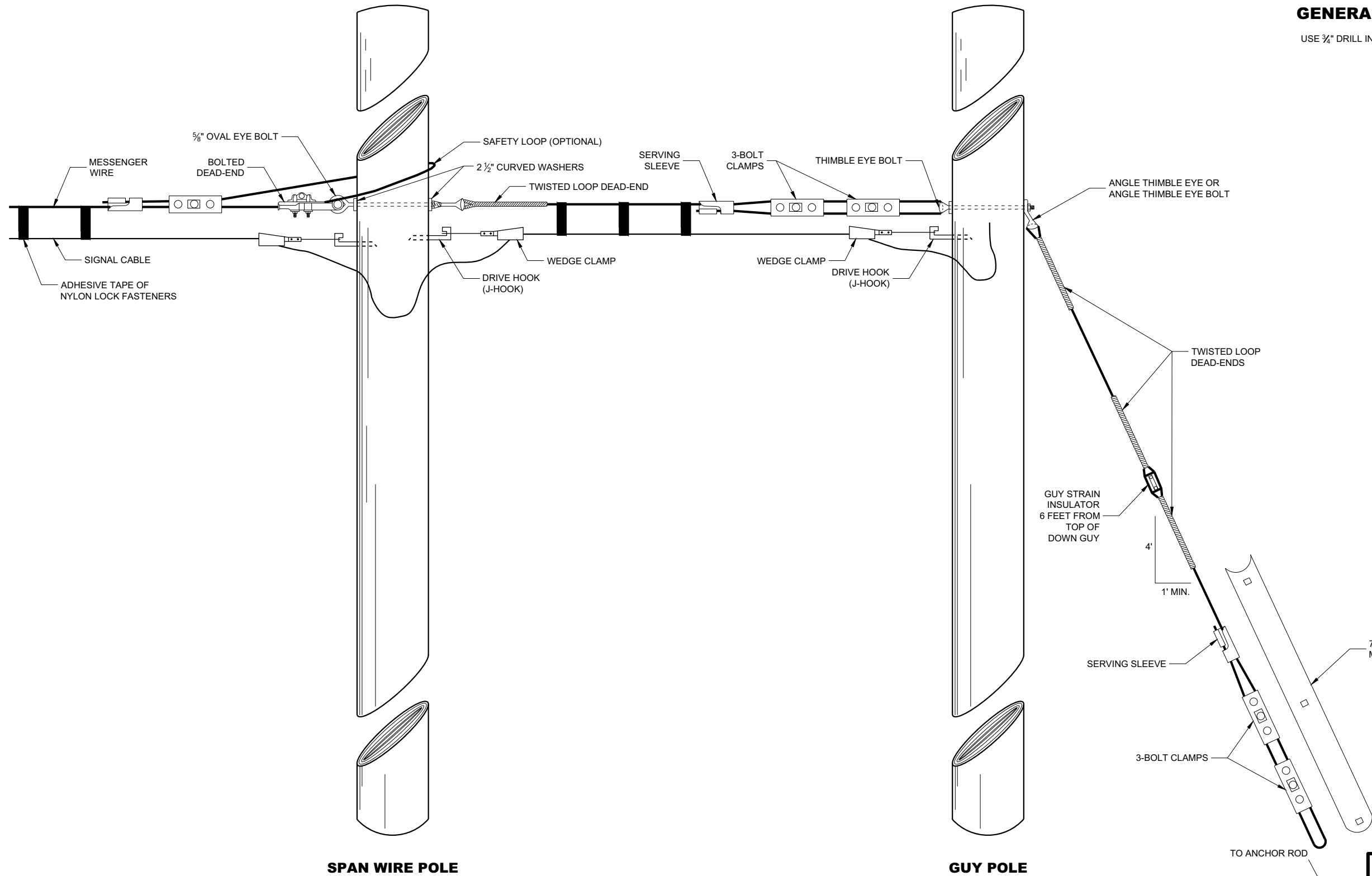
OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE*
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/CURBS	2 FT

* NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Ahmet Demirbilek
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA ENGINEER



GENERAL NOTES

USE 3/4\"/>

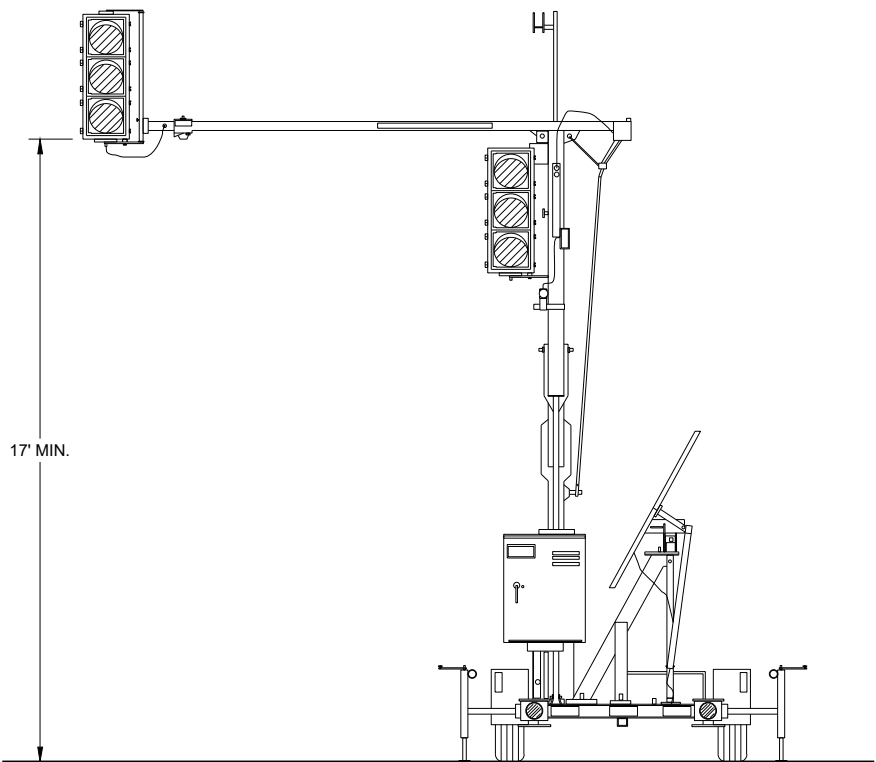
TYPICAL DEAD-ENDINGS OR GUYING

**BRIDGE TEMPORARY TRAFFIC
SIGNAL INSTALLATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 DATE /S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

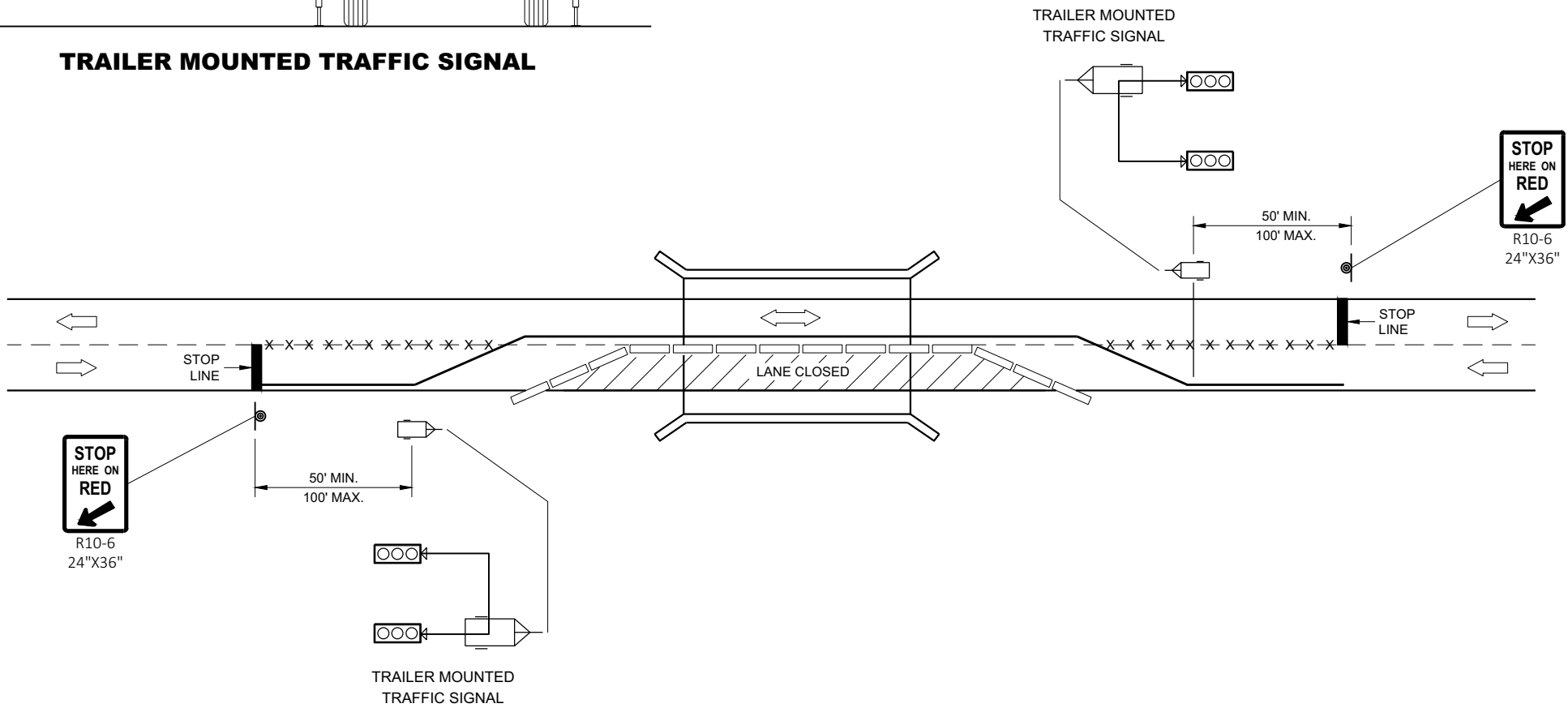


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

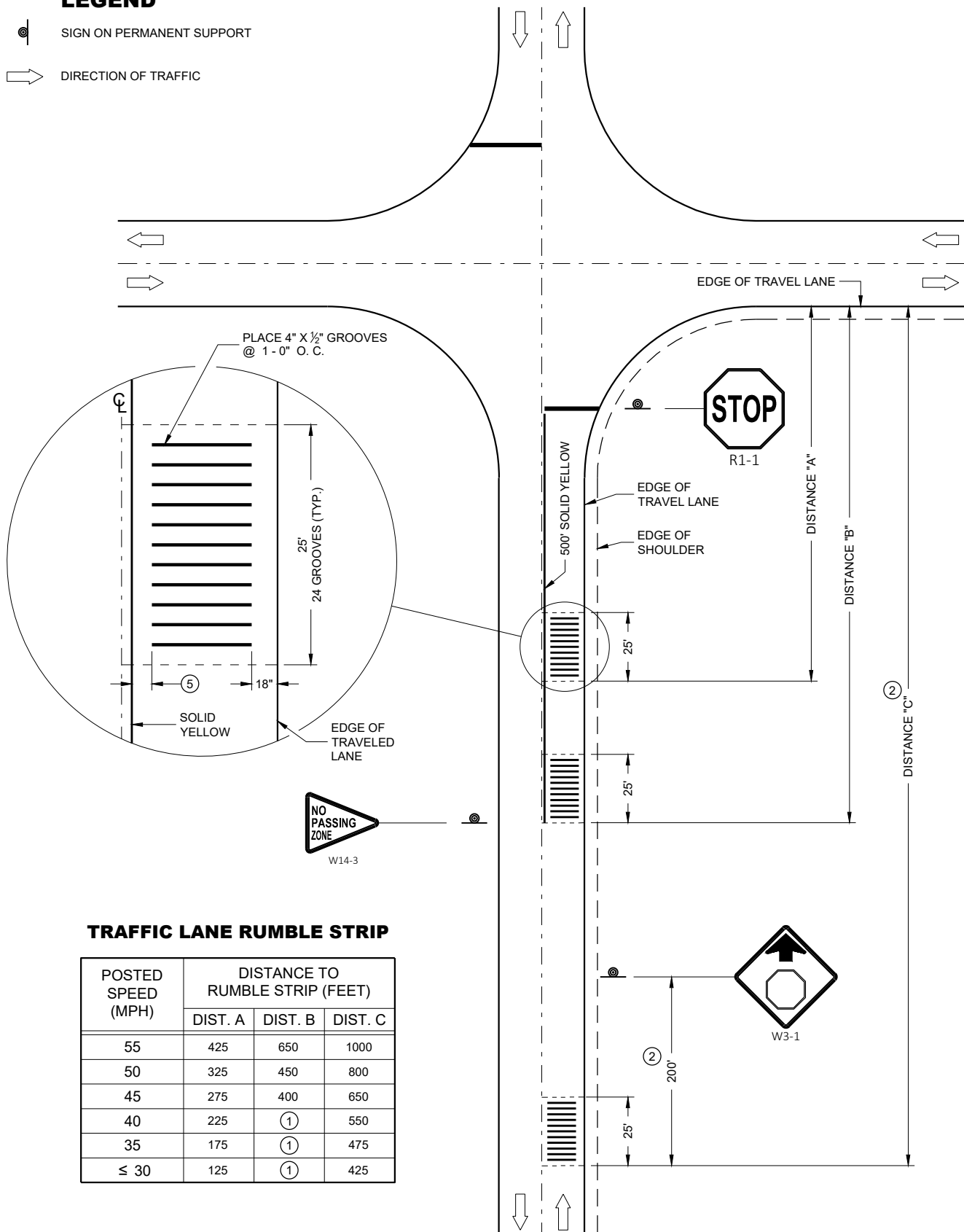
BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE /S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

LEGEND
 SIGN ON PERMANENT SUPPORT

 DIRECTION OF TRAFFIC
**TRAFFIC LANE RUMBLE STRIP**

POSTED SPEED (MPH)	DISTANCE TO RUMBLE STRIP (FEET)		
	DIST. A	DIST. B	DIST. C
55	425	650	1000
50	325	450	800
45	275	400	650
40	225	①	550
35	175	①	475
≤ 30	125	①	425

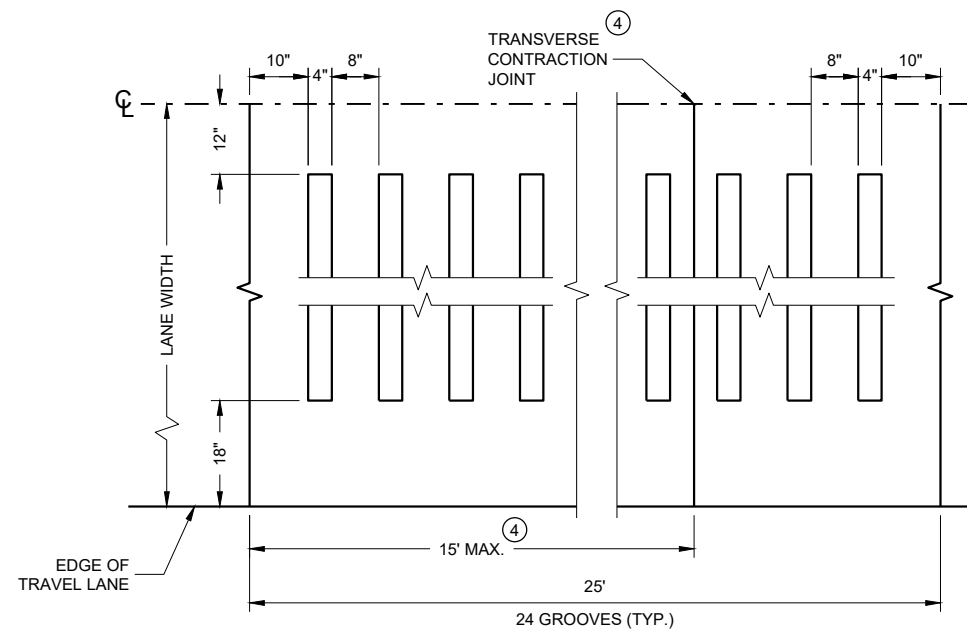
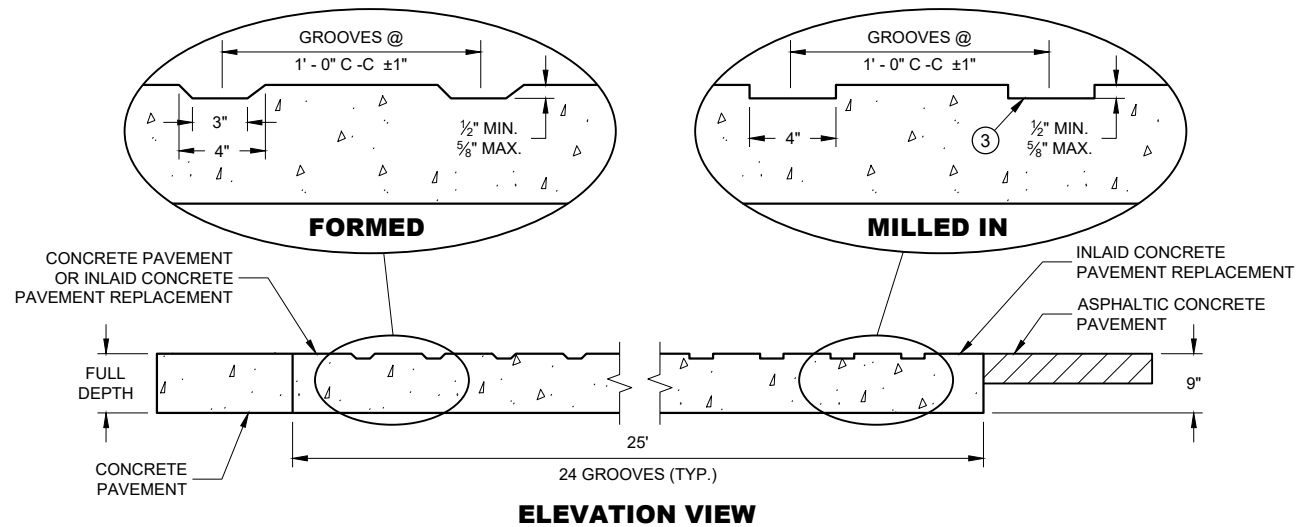
RUMBLE STRIP LOCATION**GENERAL NOTES**

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

EXTEND CONCRETE FROM \mathcal{C} TO THE EDGE OF TRAVELED WAY.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDE ELSEWHERE IN THE CONTRACT.

- ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.
- LOCATE RUMBLE STRIP 200 FEET IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE "C".
- TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY $\frac{1}{16}$ ".
- 15 FOOT MAXIMUM SPACING FOR TRANSVERSE CONTRACTION JOINT.
- 12 INCH CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.

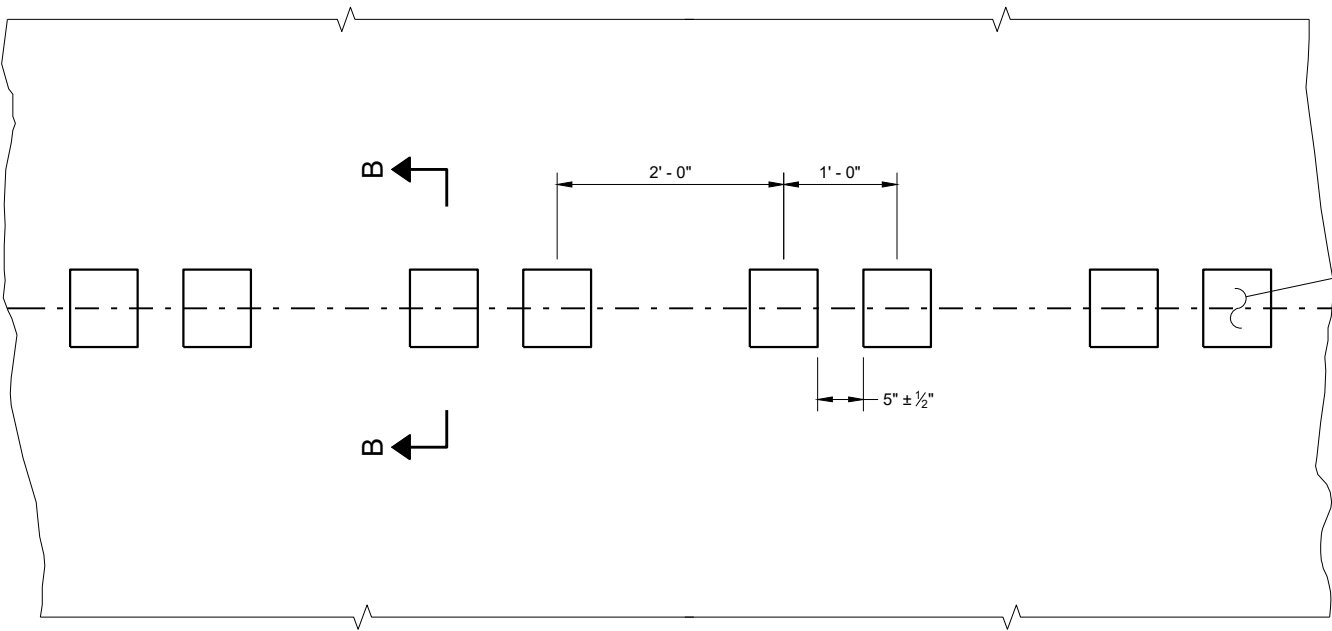
**CONCRETE PAVEMENT MILLED IN OR TOOLED IN****TRANSVERSE RUMBLE STRIPS, CONCRETE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

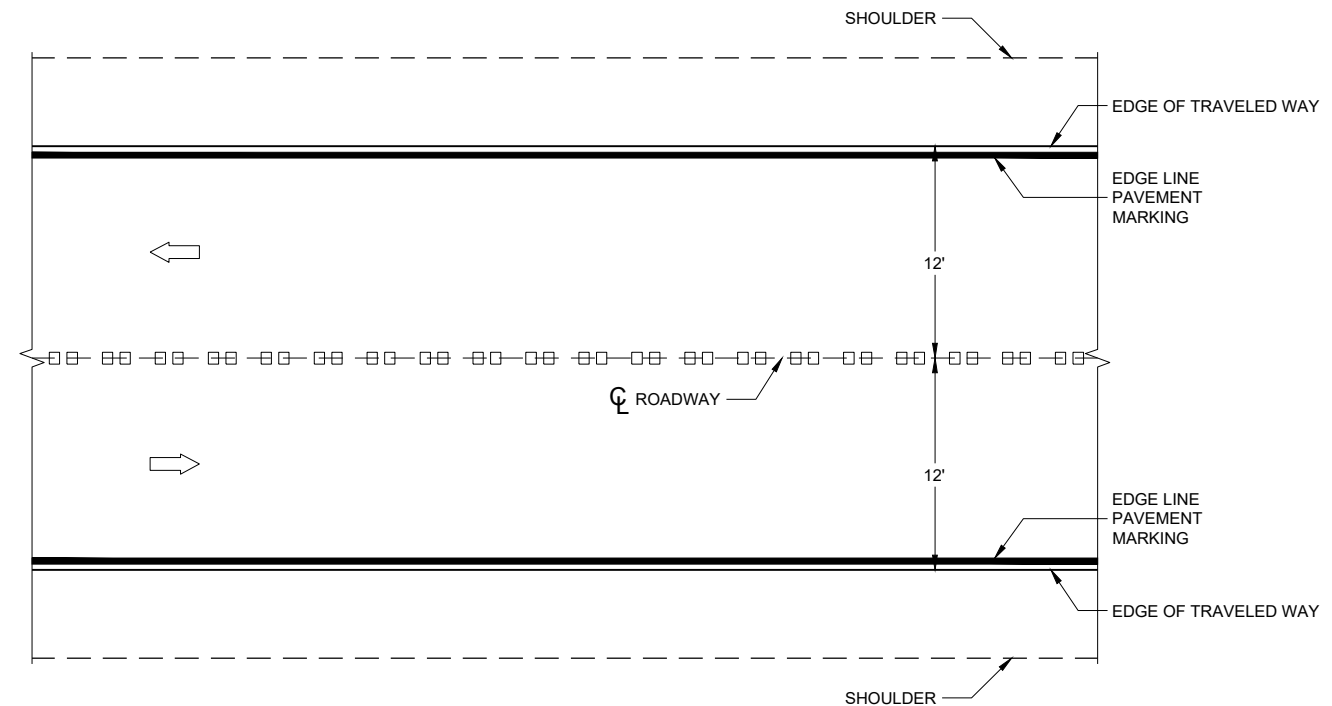
APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY DESIGN STANDARDS
UNIT SUPERVISOR

FHWA

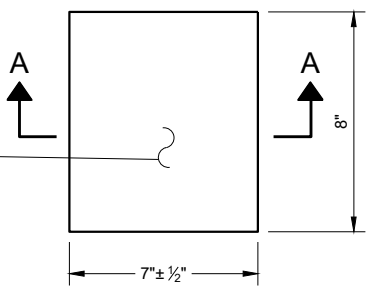


PLAN DETAIL VIEW

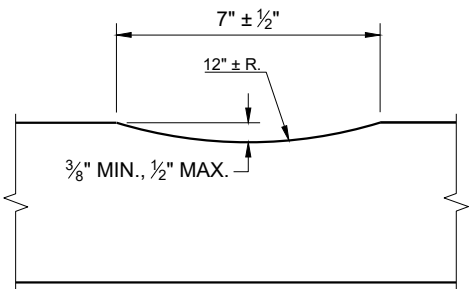


PLAN VIEW

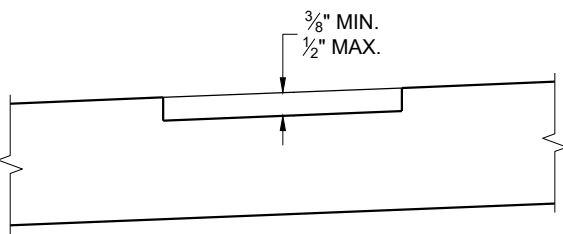
CENTERLINE RUMBLE STRIPS - ASPHALT



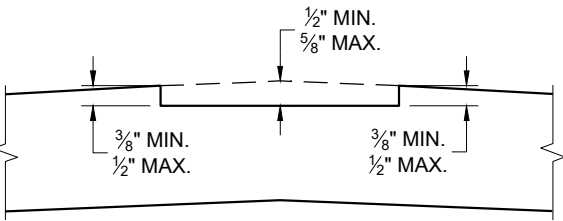
PLAN VIEW
(SINGLE GROOVE)



SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY

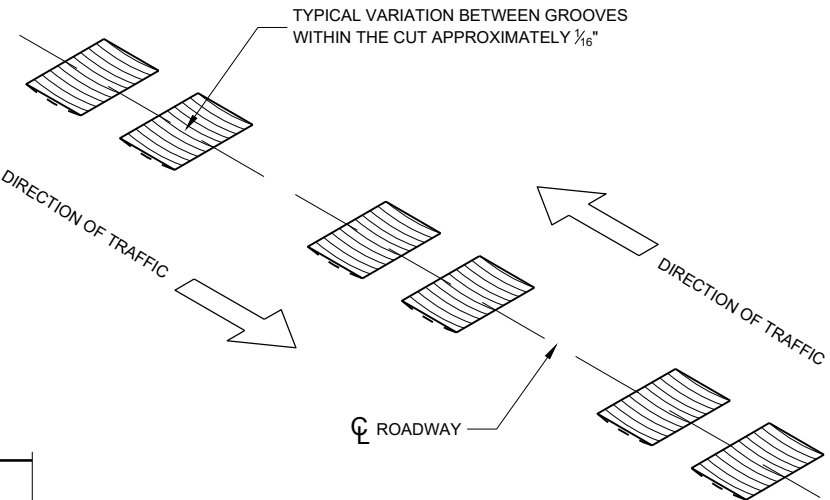


SECTION B - B
CROWNED ROADWAY

GENERAL NOTES

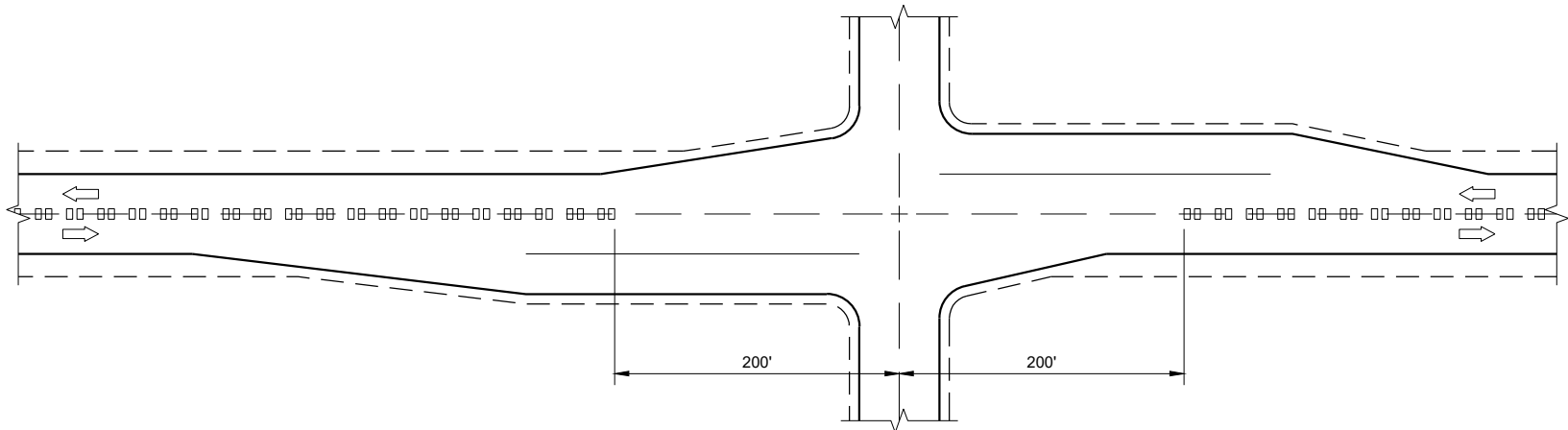
DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

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

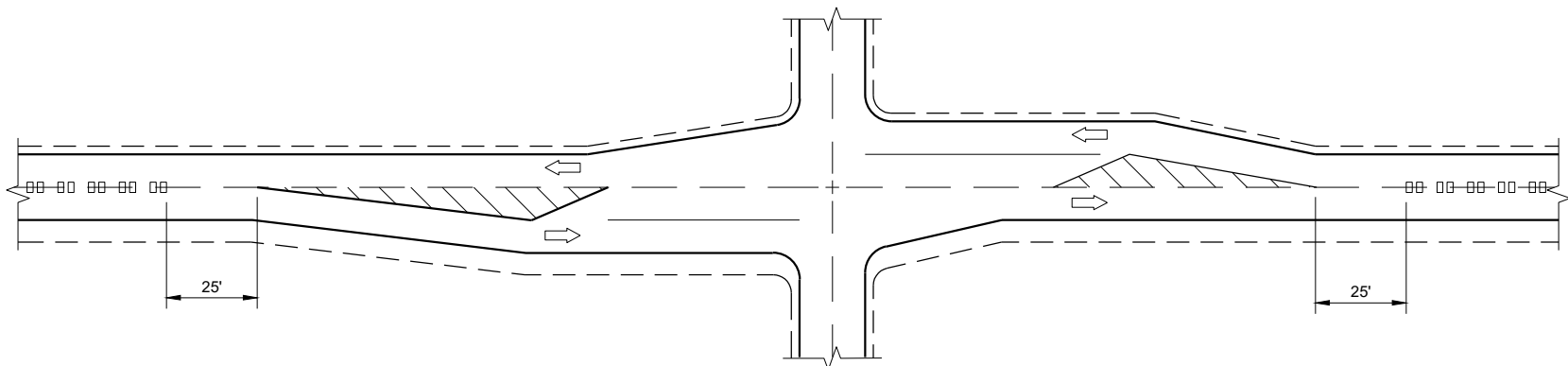


CENTERLINE RUMBLE
STRIPS - ASPHALT

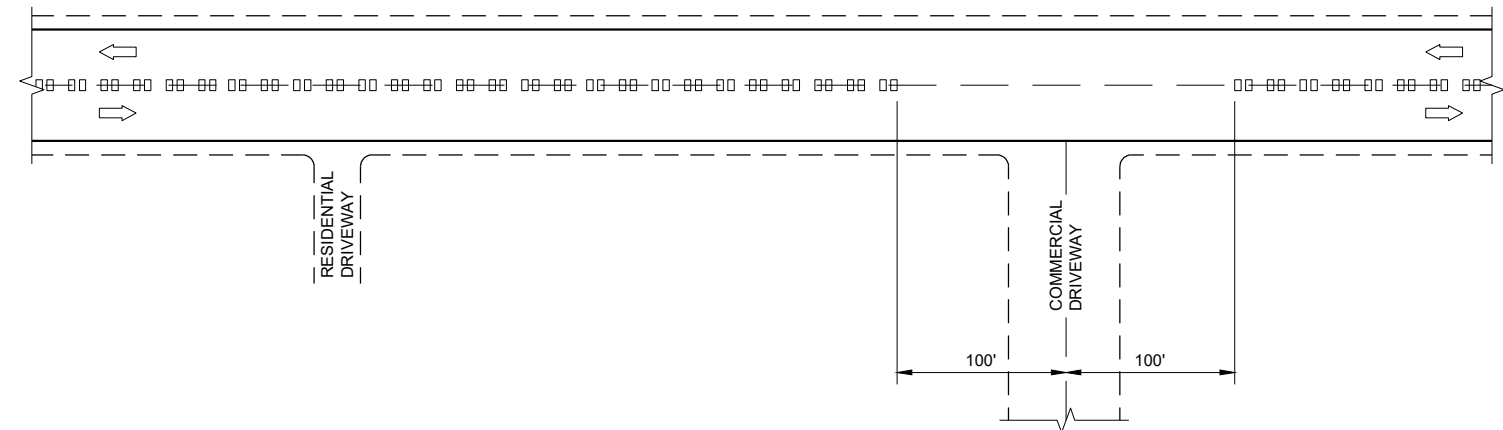
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



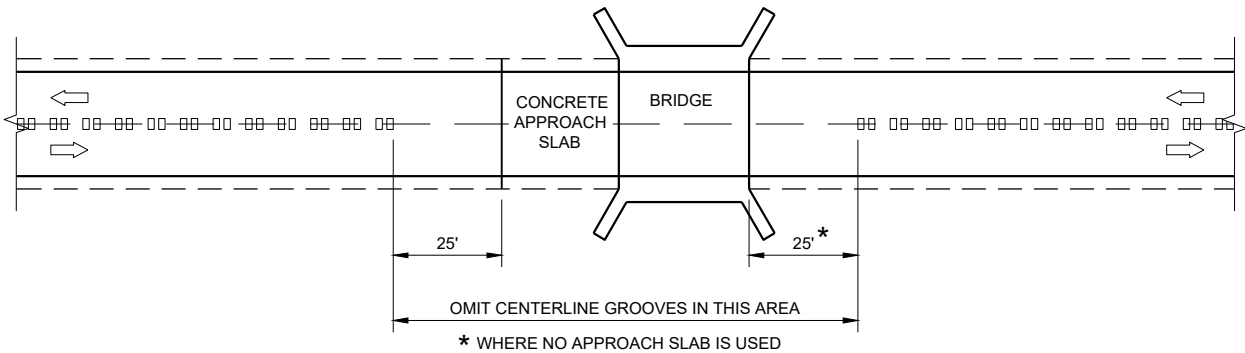
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



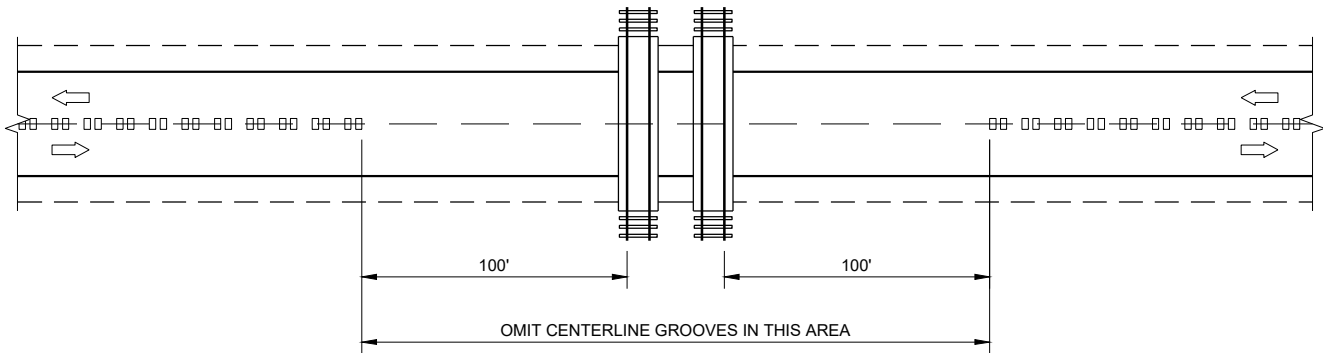
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES

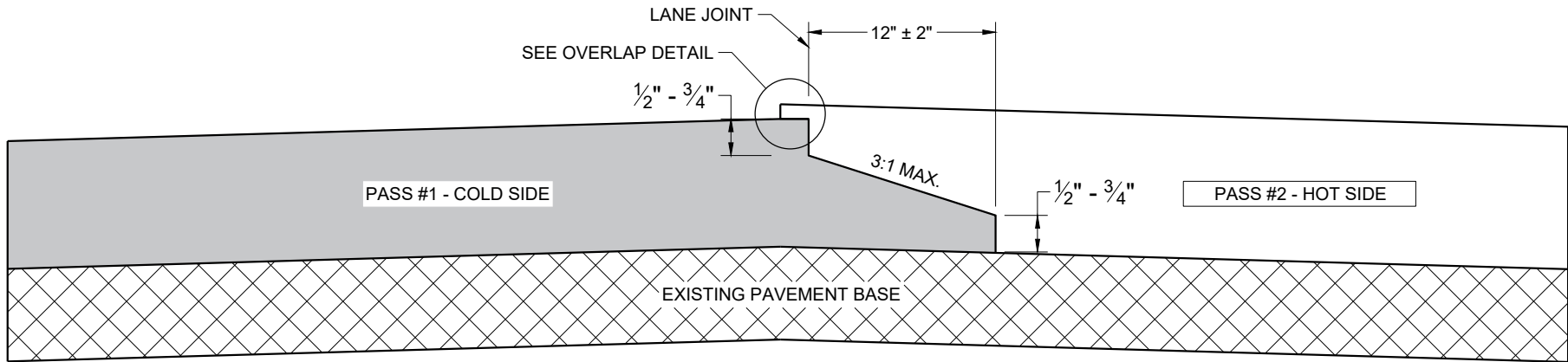


CENTERLINE GROOVES AT RAILROADS

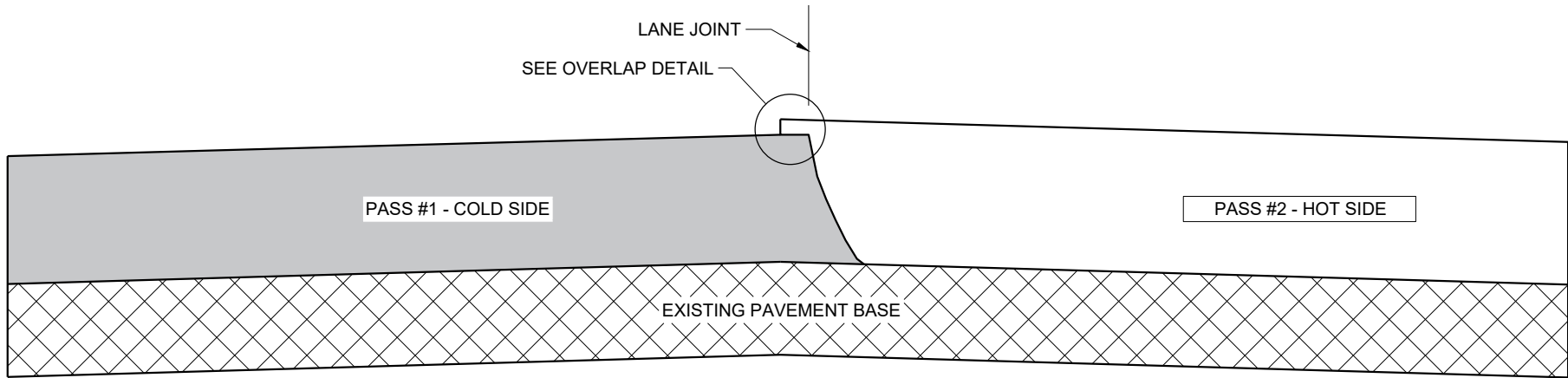
CENTER LINE
RUMBLE STRIPS -
INTERSECTIONS, DRIVEWAYS,
BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

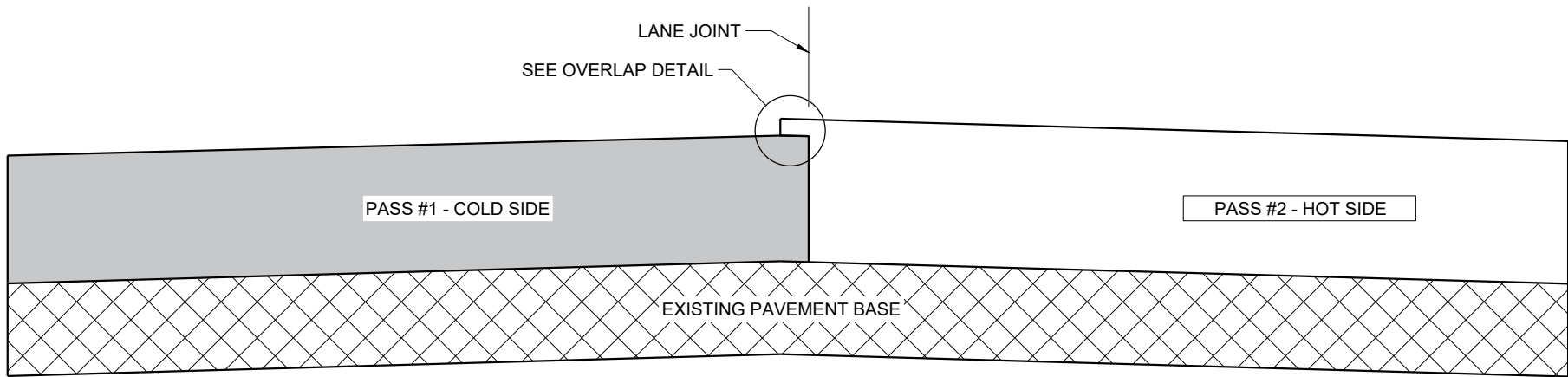
APPROVED
May 2023
DATE
/S/ John Jenkins
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

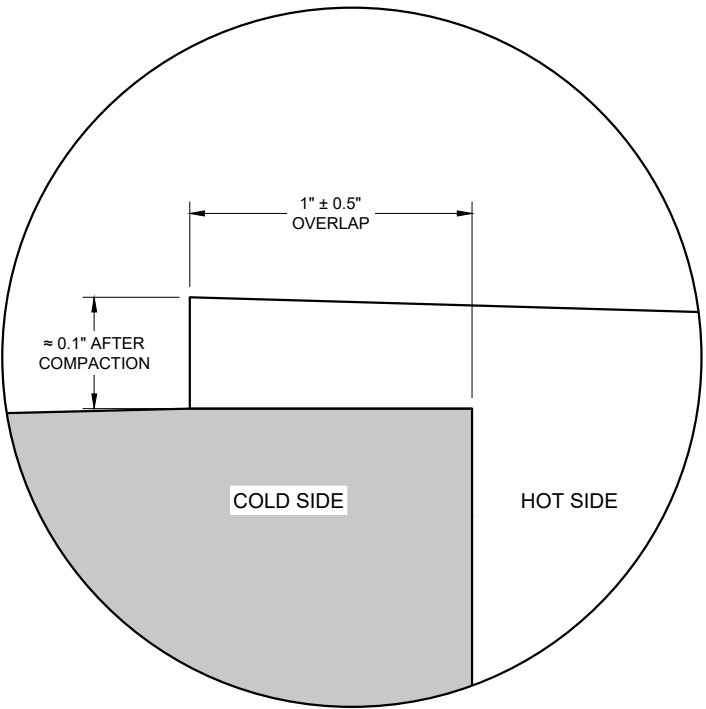
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

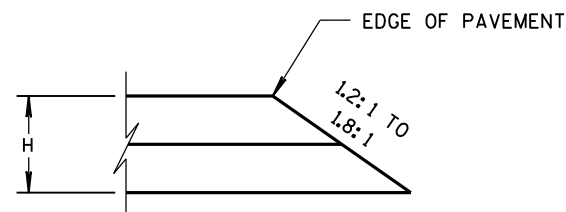


OVERLAP DETAIL (TYPICAL)

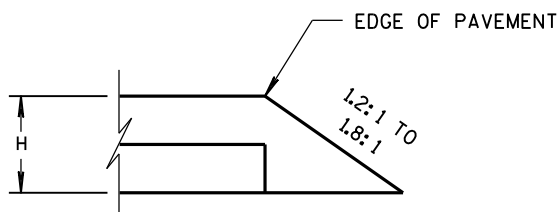
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

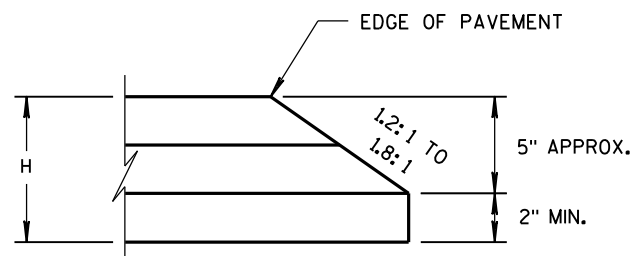
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



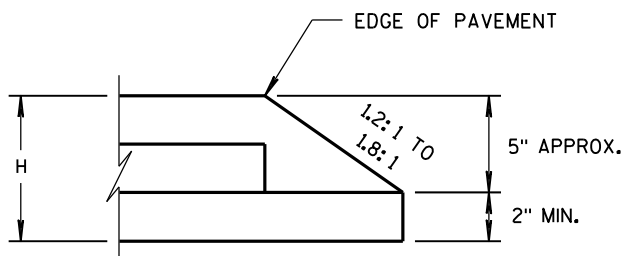
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

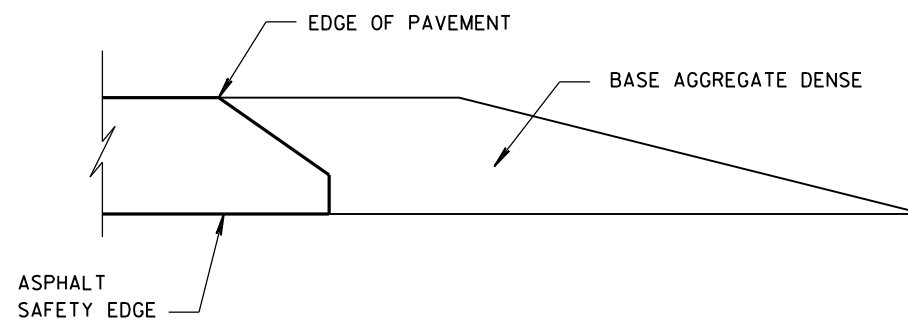


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

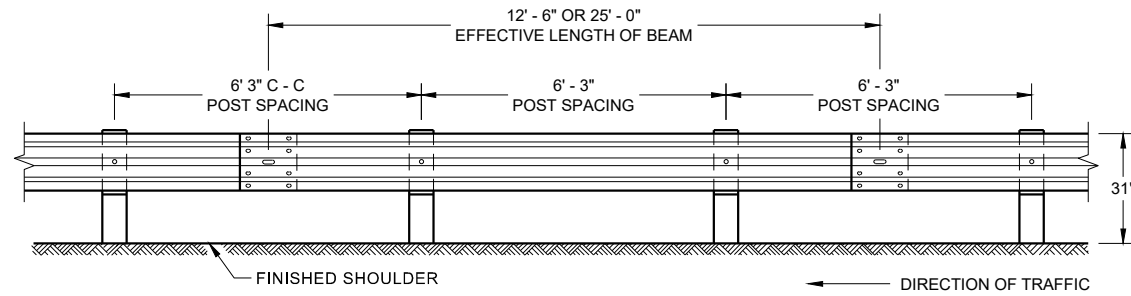
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
FHWA

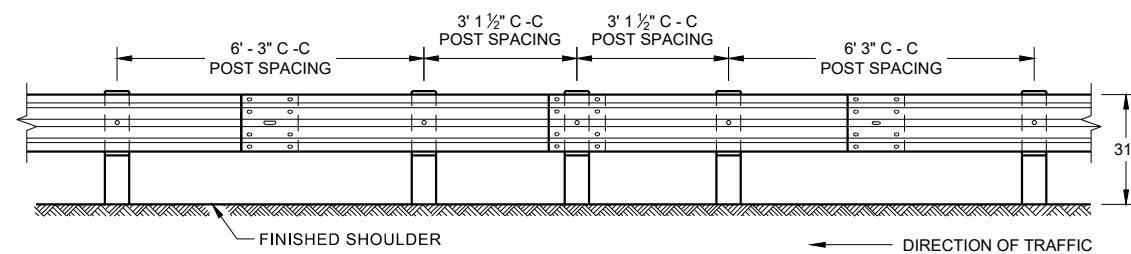
/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

- SDD 14B42 - 07a**

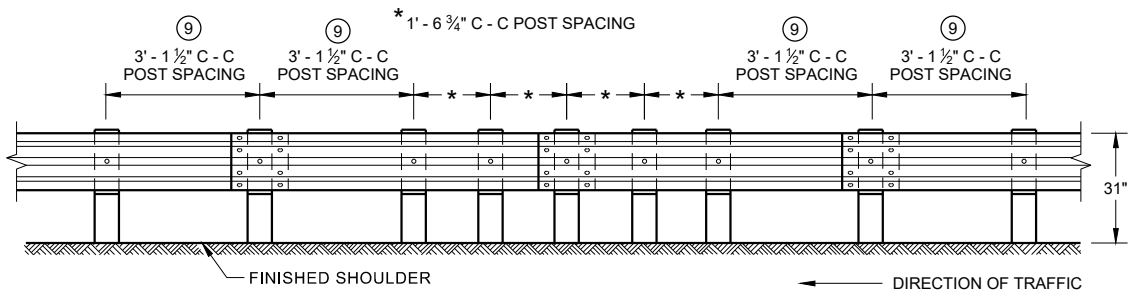




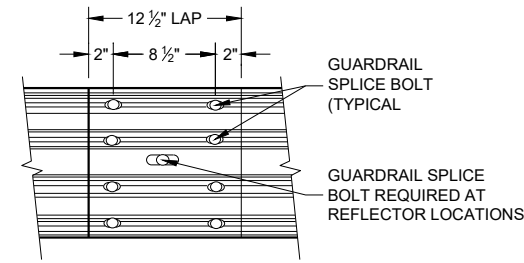
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



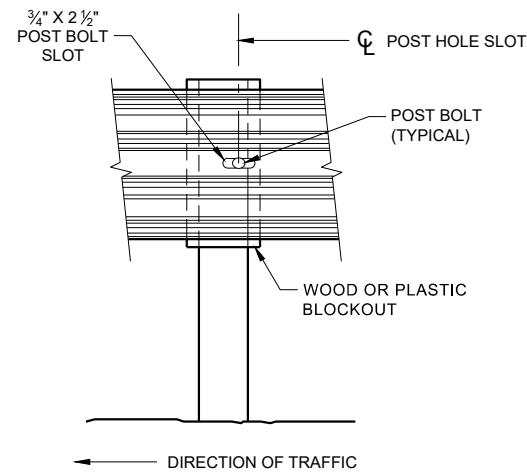
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



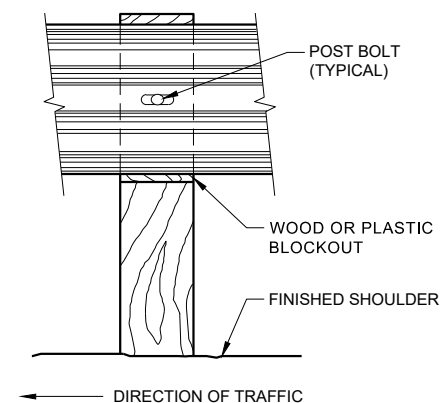
**FRONT VIEW
QUARTER POST SPACING (QS)**



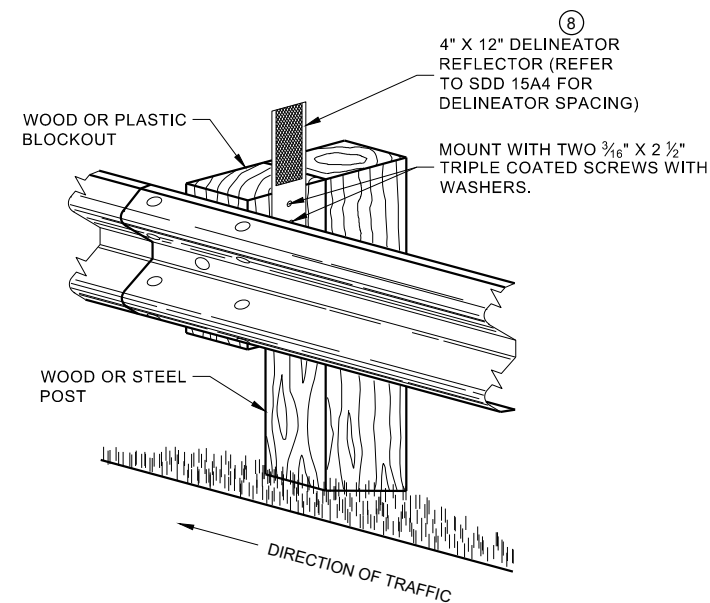
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



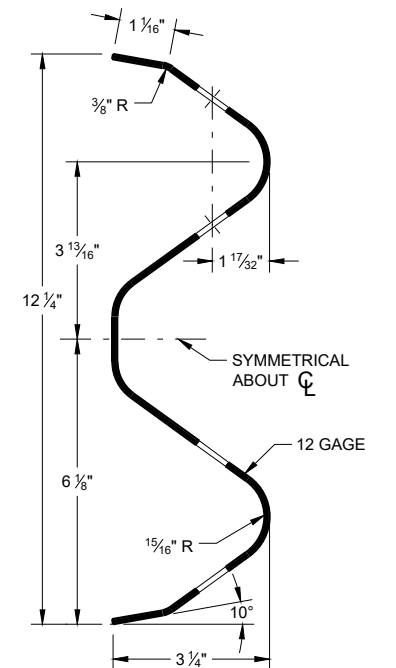
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

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

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

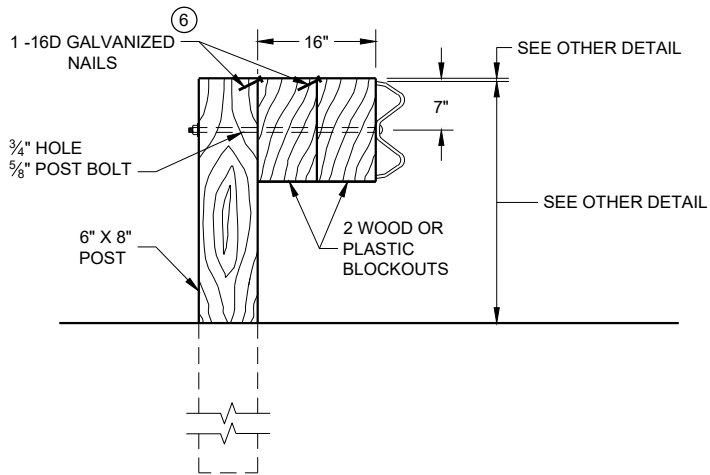
GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

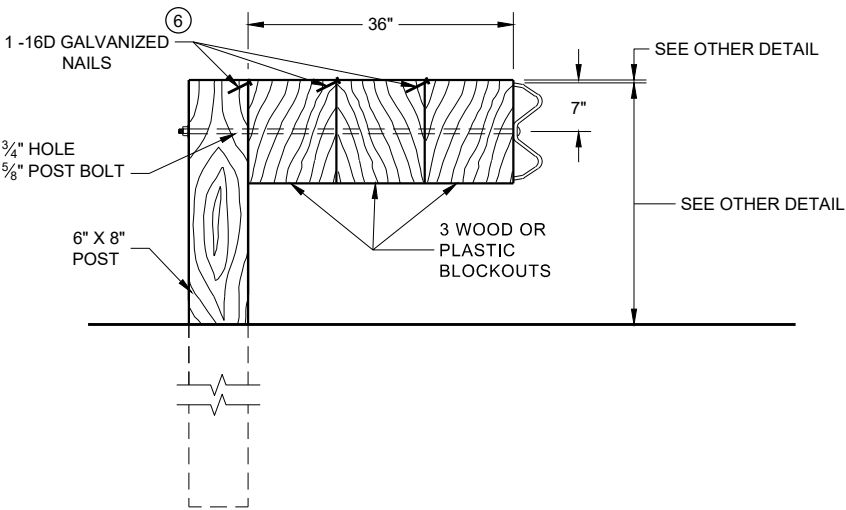
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

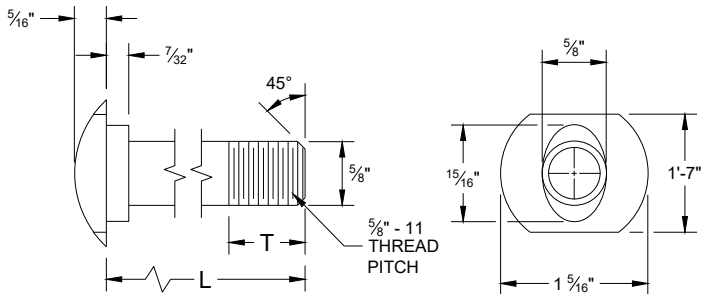
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



DETAIL FOR 36" BLOCKOUT DEPTH

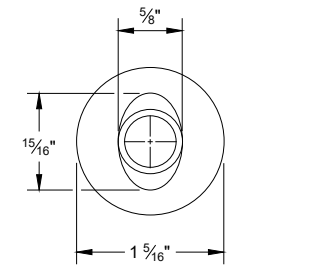
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

- NOTE:
- 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
 - 2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

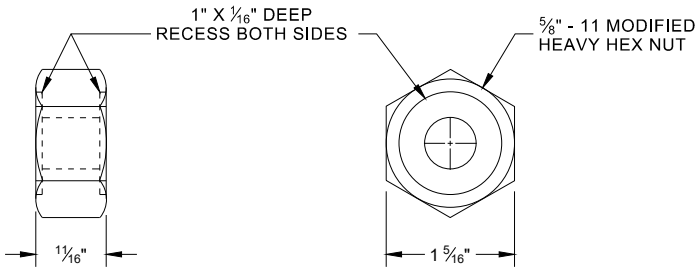


POST BOLT TABLE

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

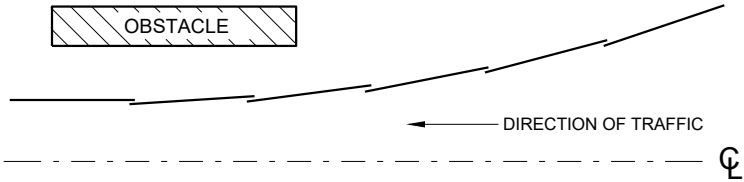


ALTERNATE BOLT HEAD

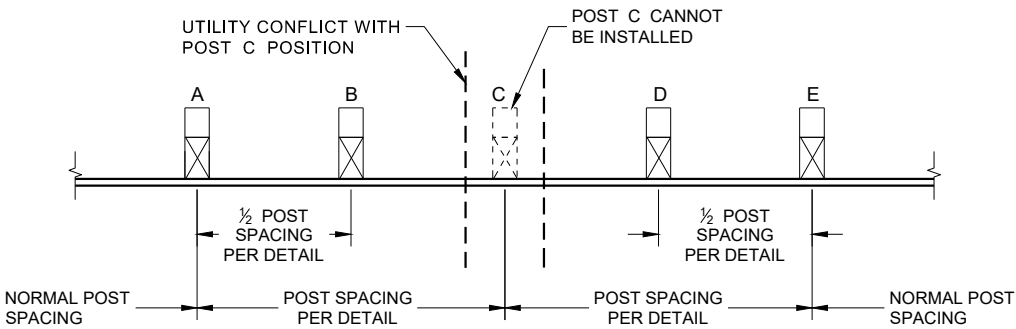


POST BOLT, SPLICE BOLT
AND RECESS NUT

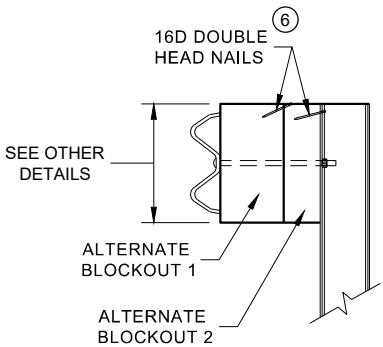
- 6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



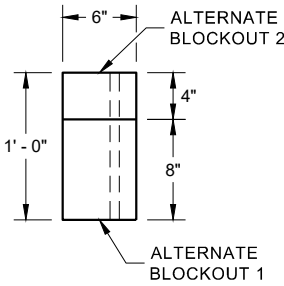
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW

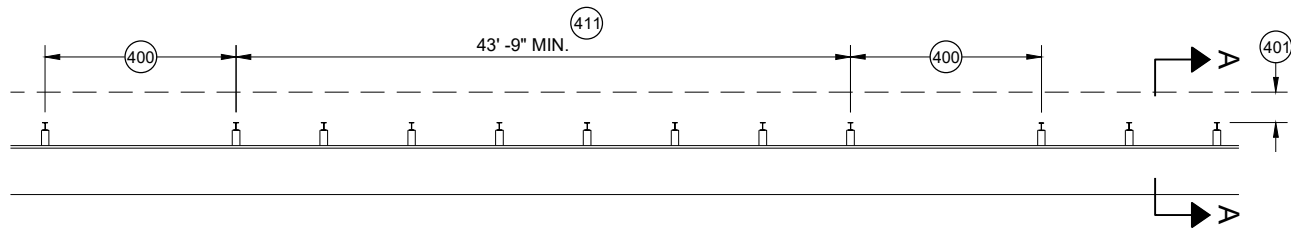


PLAN VIEW

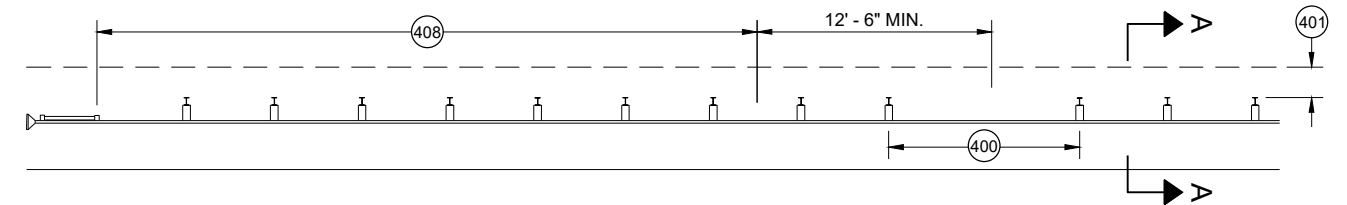
ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

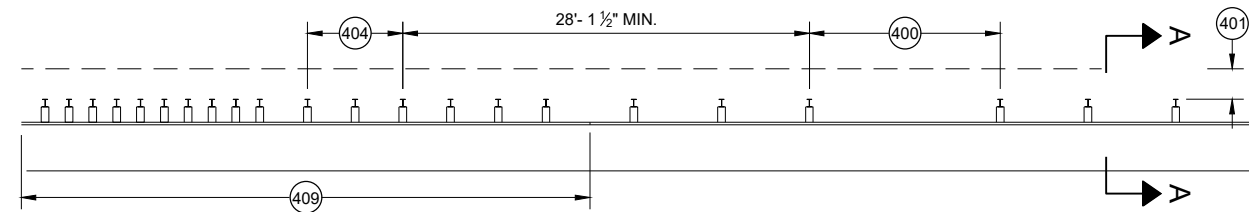
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



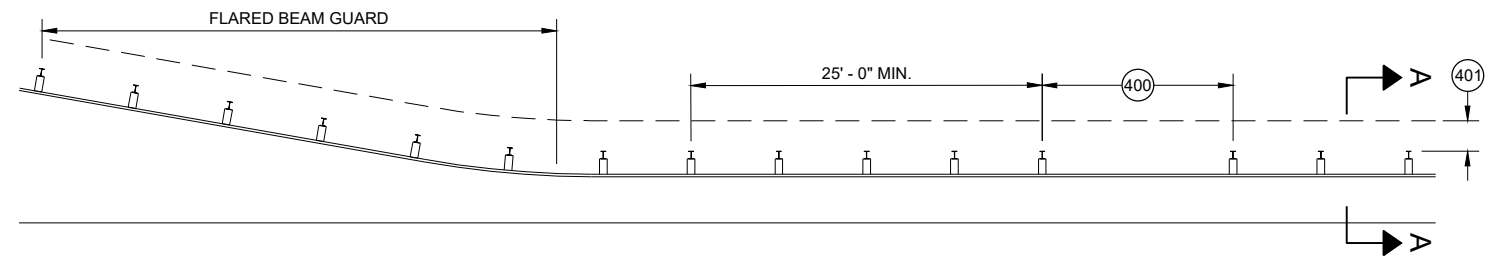
MISSING POST IN MGS GUARDRAIL



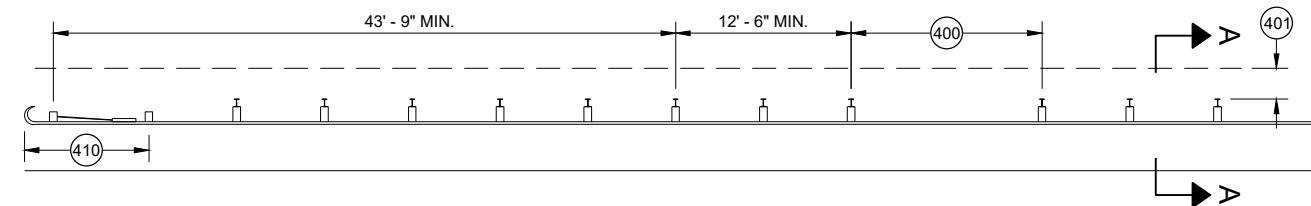
MISSING POST IN MGS GUARDRAIL NEAR EAT



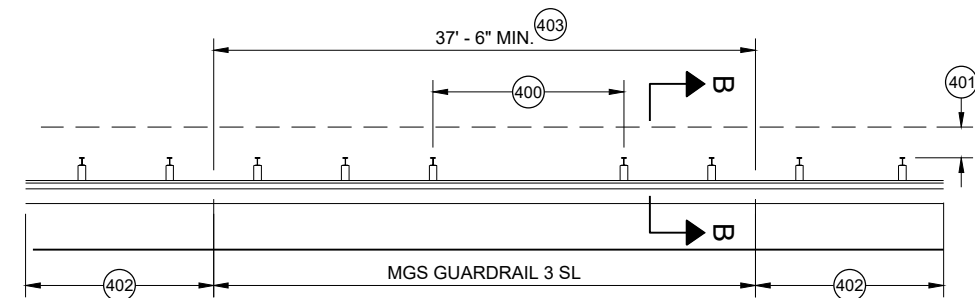
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

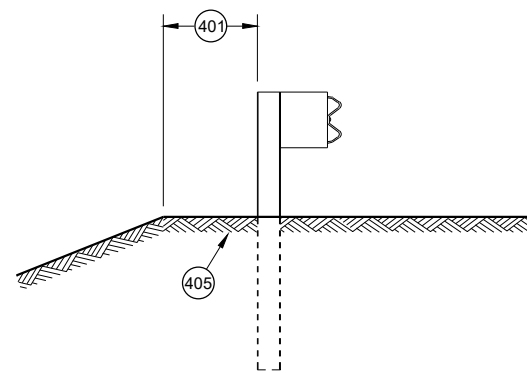


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

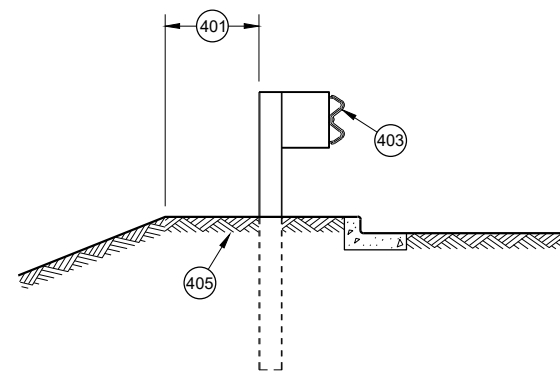


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)

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



SECTION A - A



SECTION B - B

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	

GENERAL NOTES

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

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




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

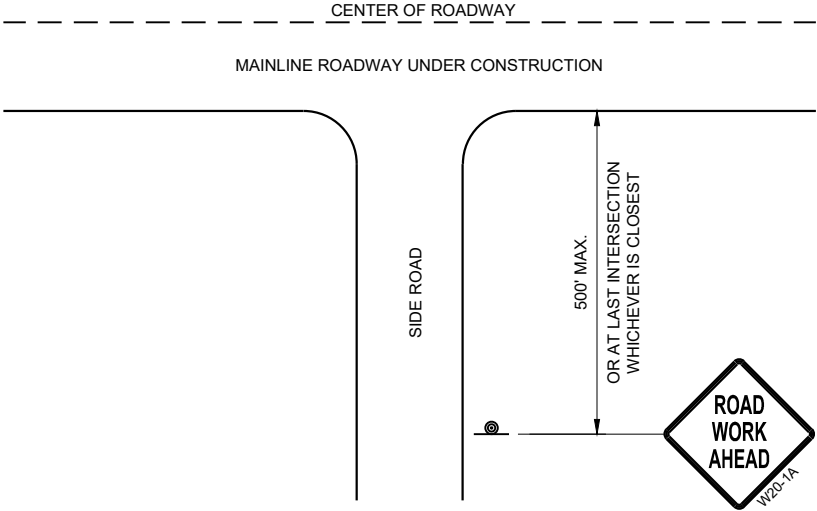
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

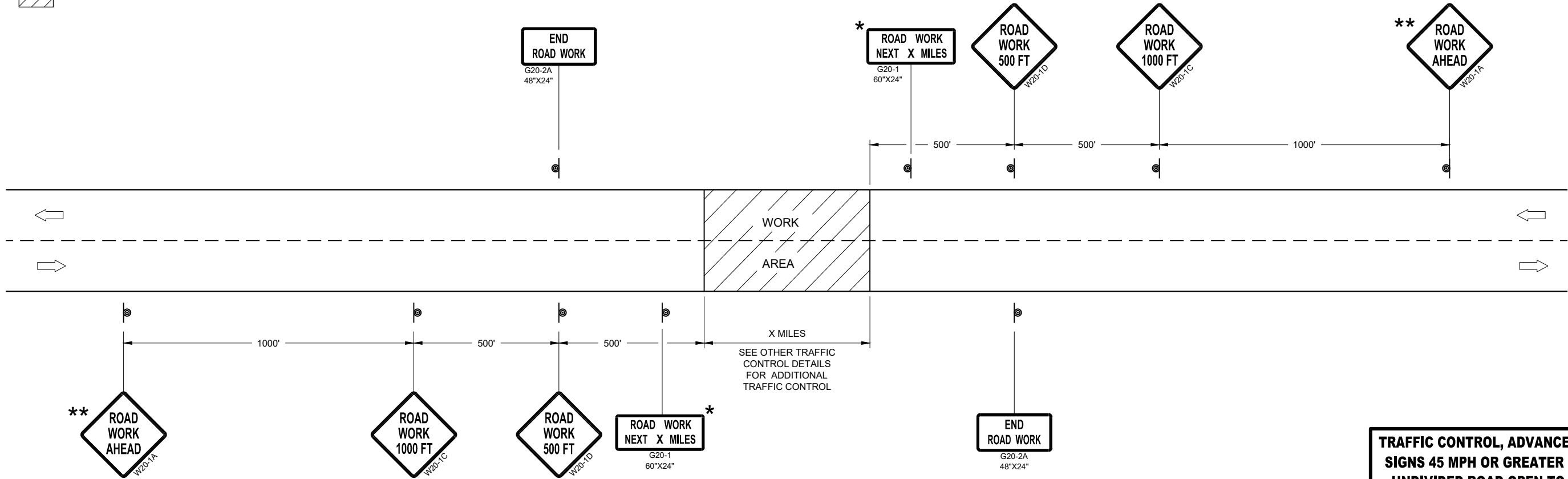
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

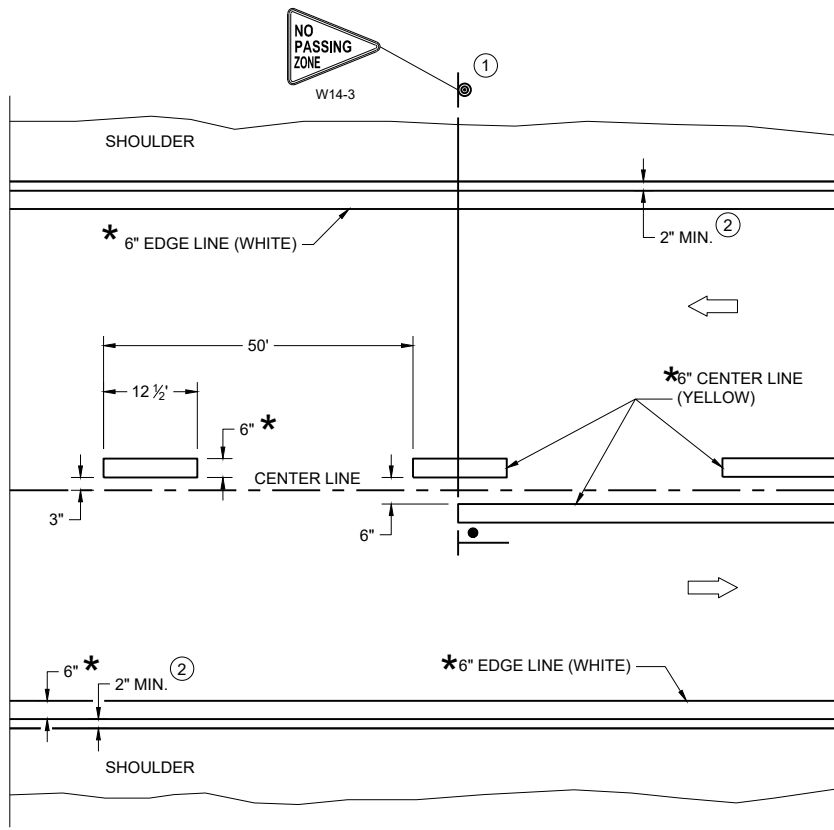


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

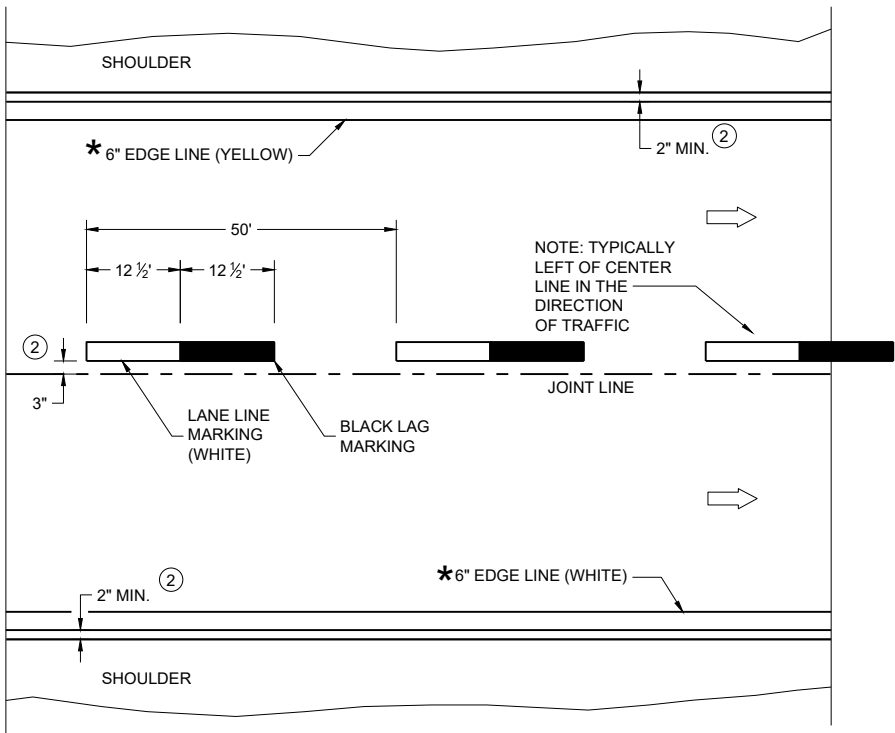
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

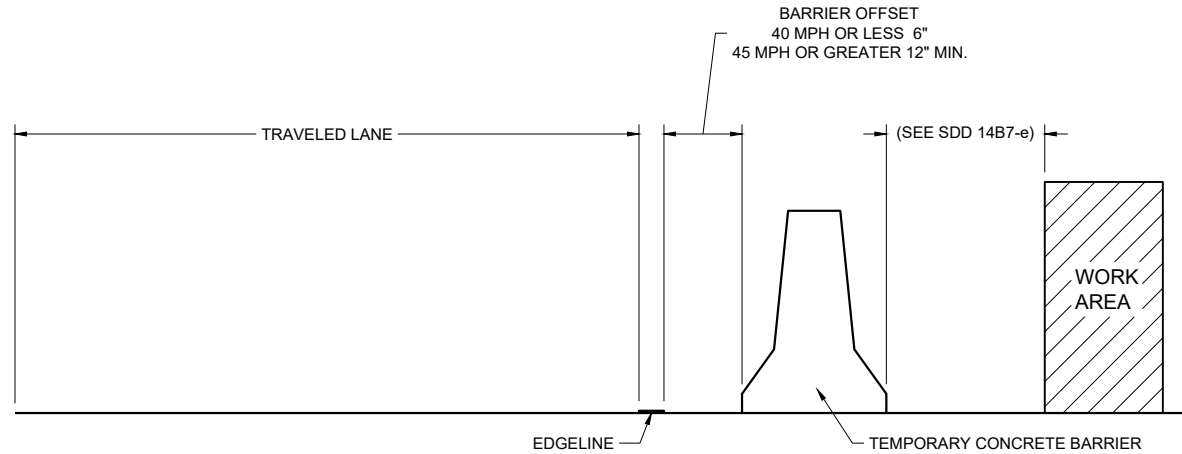
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

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

LEGEND

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

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



TEMPORARY BARRIER OFFSET FROM EDGE LINE

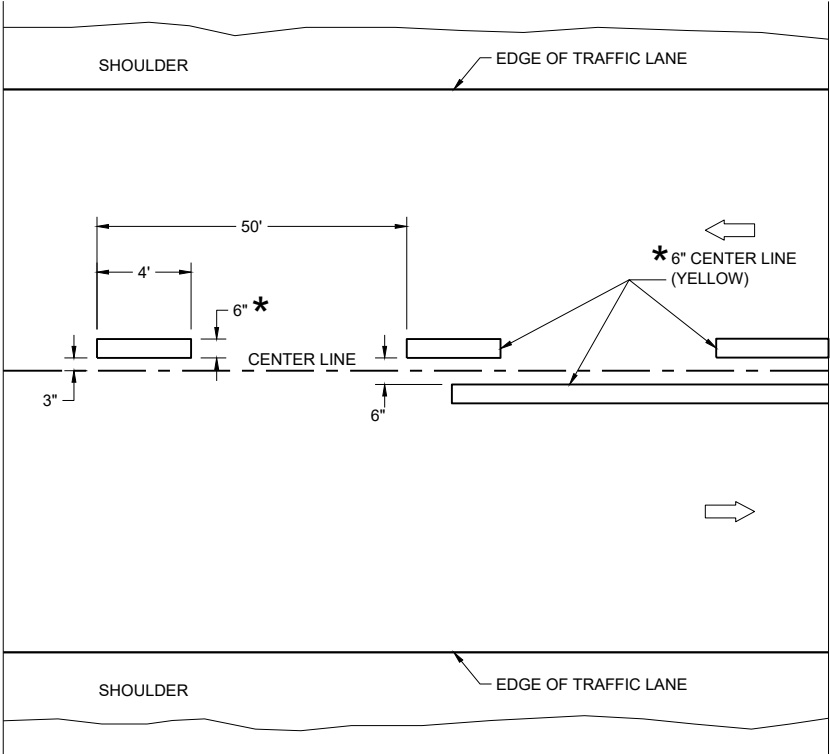
GENERAL NOTES

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

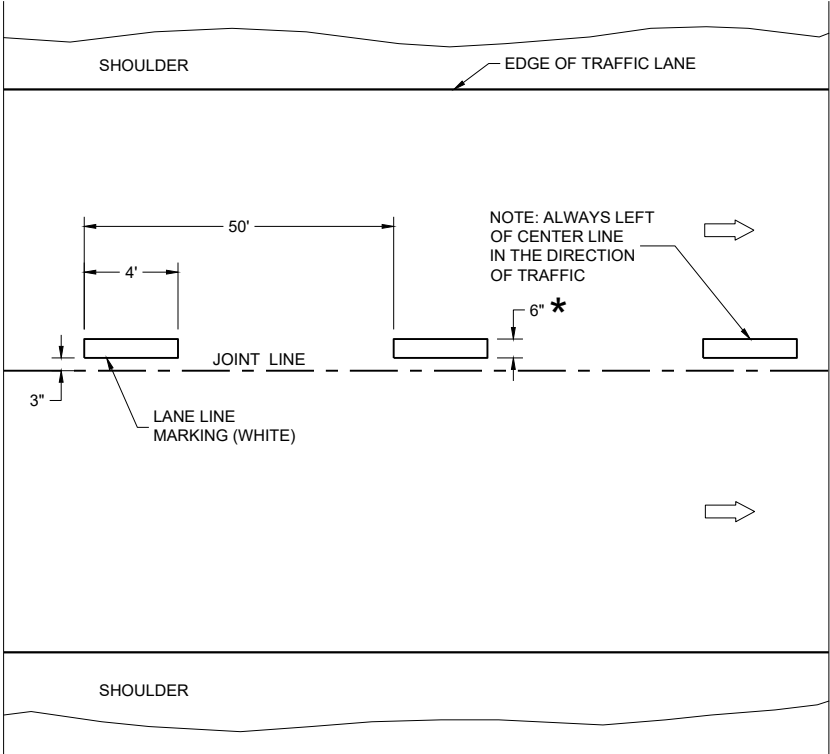
LEGEND

DIRECTION OF TRAFFIC

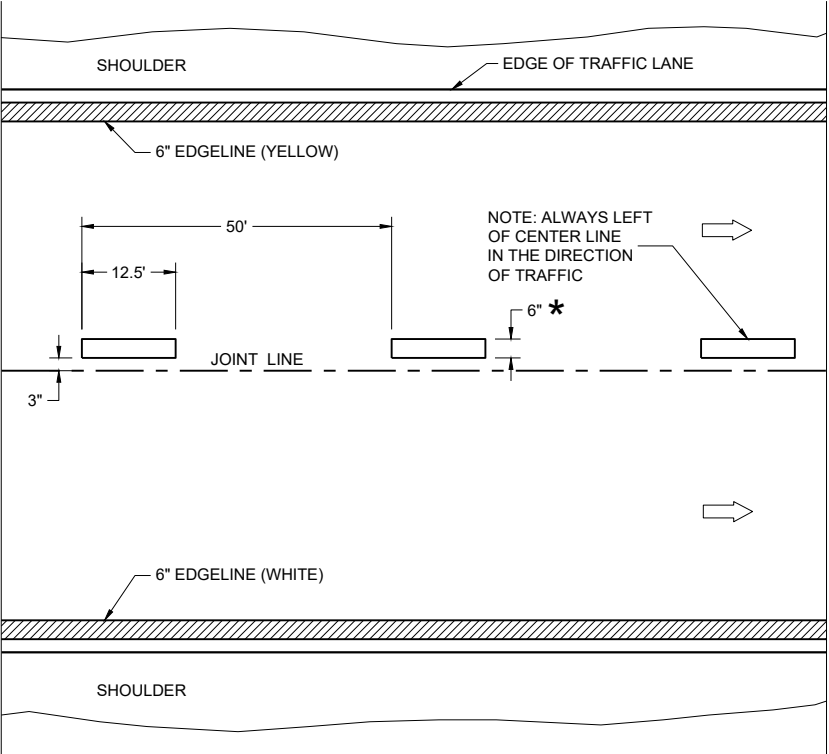
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC








FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

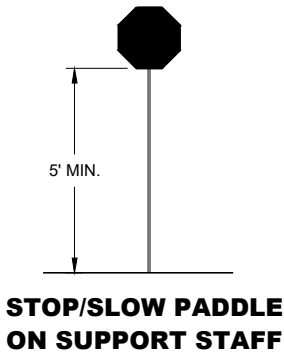
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

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

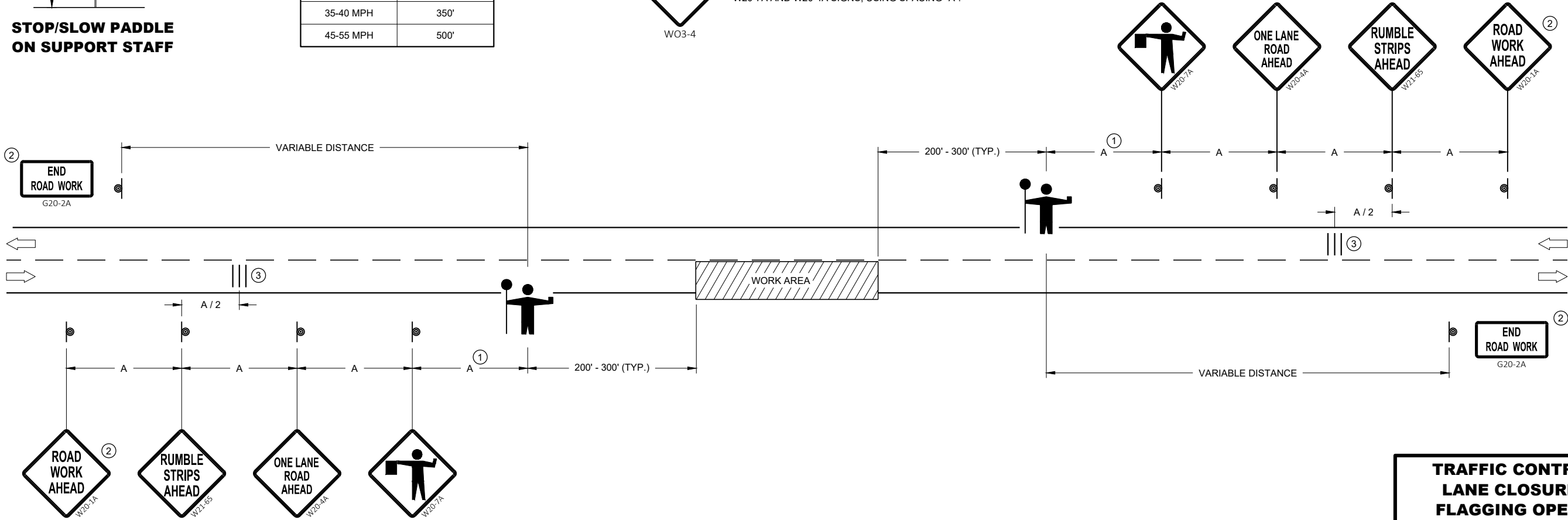


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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




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


LEGEND


- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

SIGN ON TEMPORARY SUPPORT
- 

DIRECTION OF TRAFFIC

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.

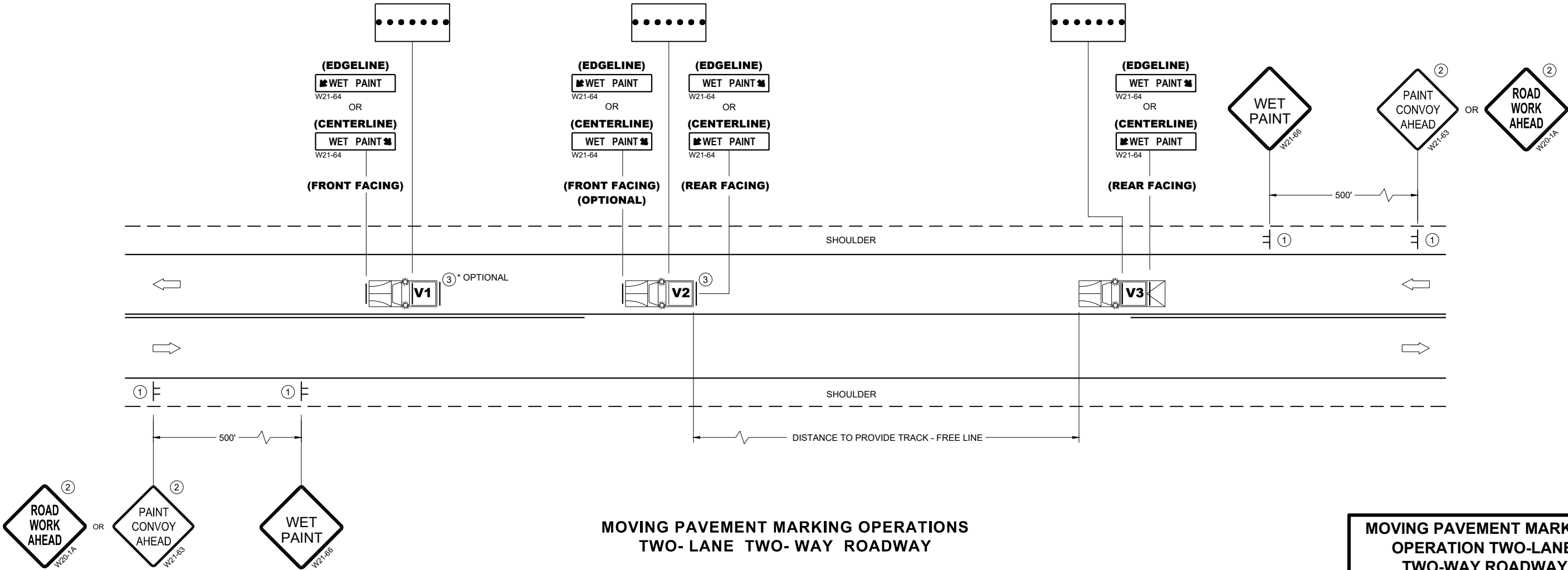
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

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.

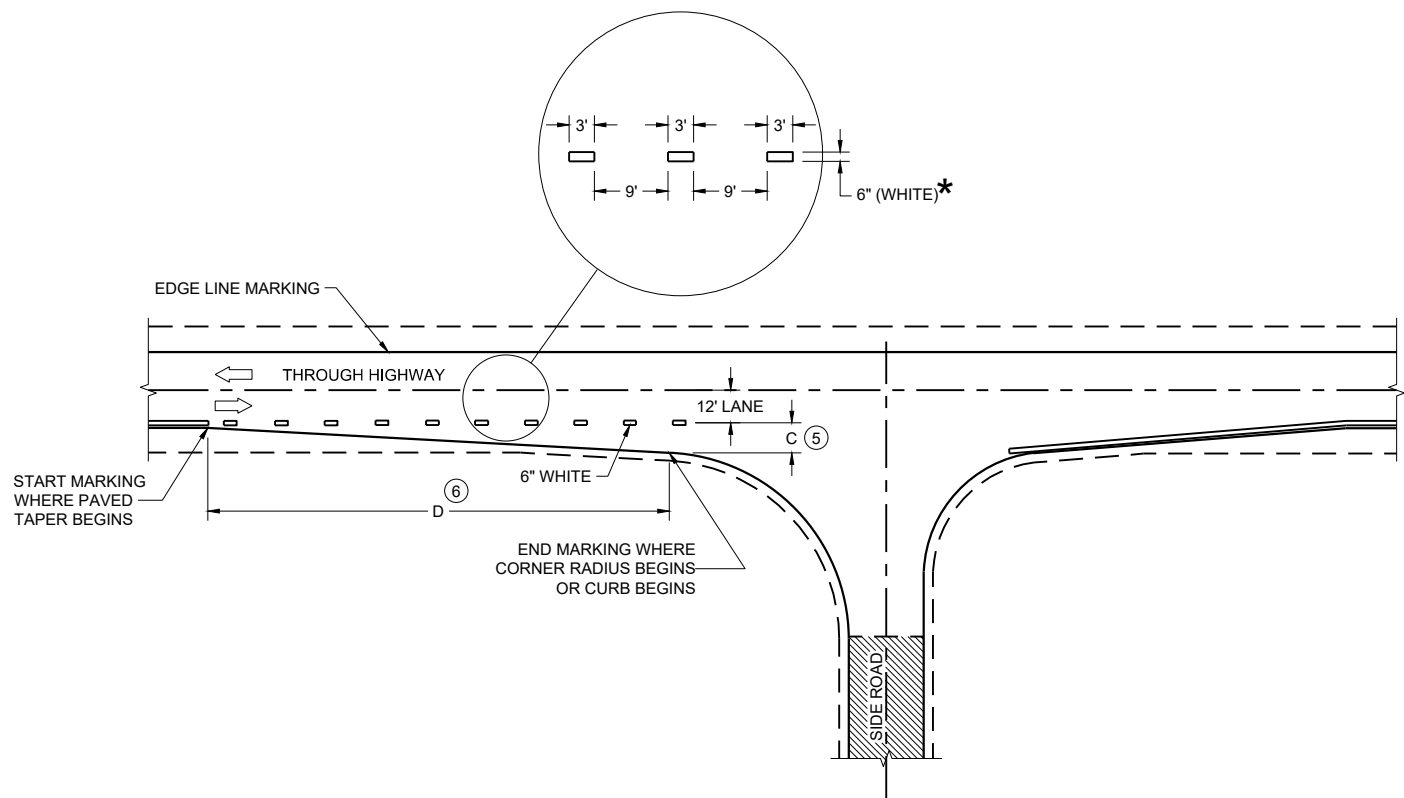
CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

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

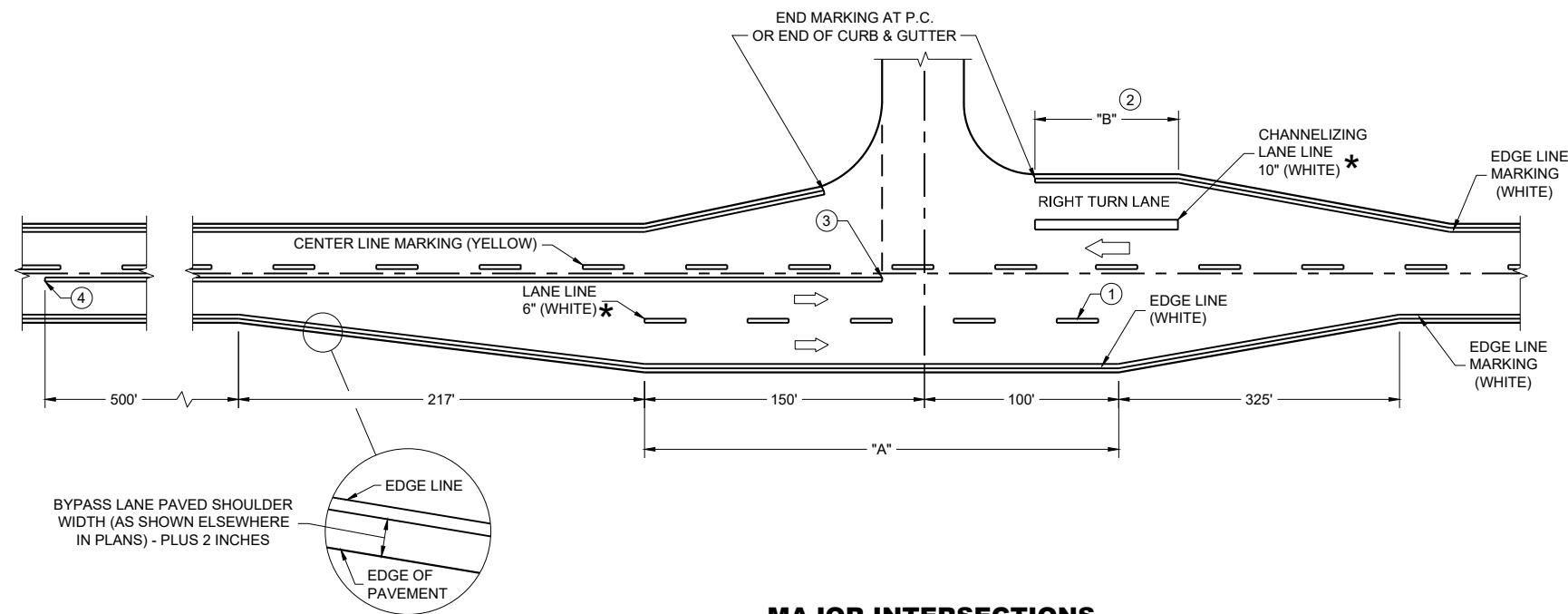


MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2024 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



MINOR INTERSECTION



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

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

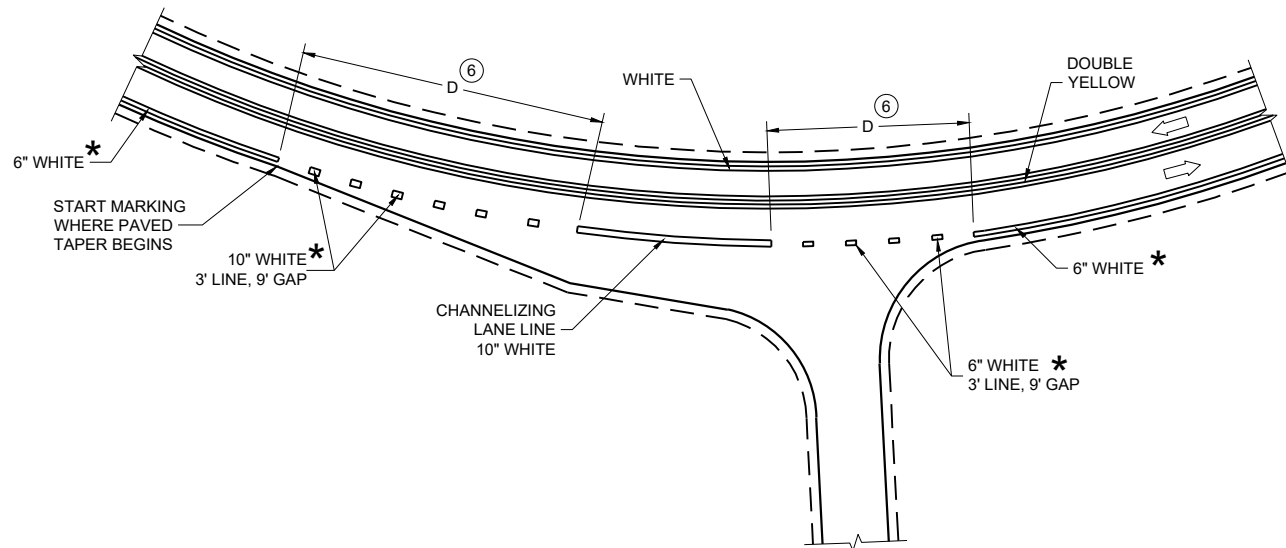
GENERAL NOTES

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.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

➡ DIRECTION OF TRAVEL







INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

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

GENERAL NOTES

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

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

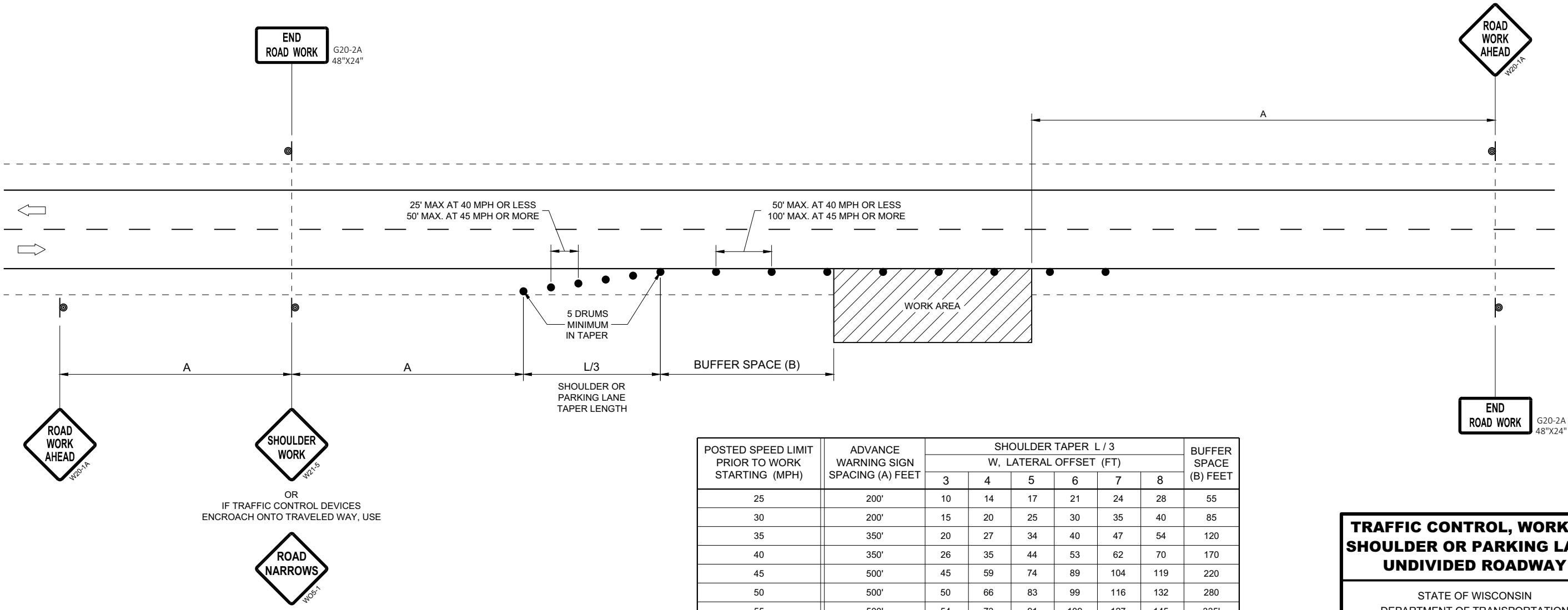
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

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

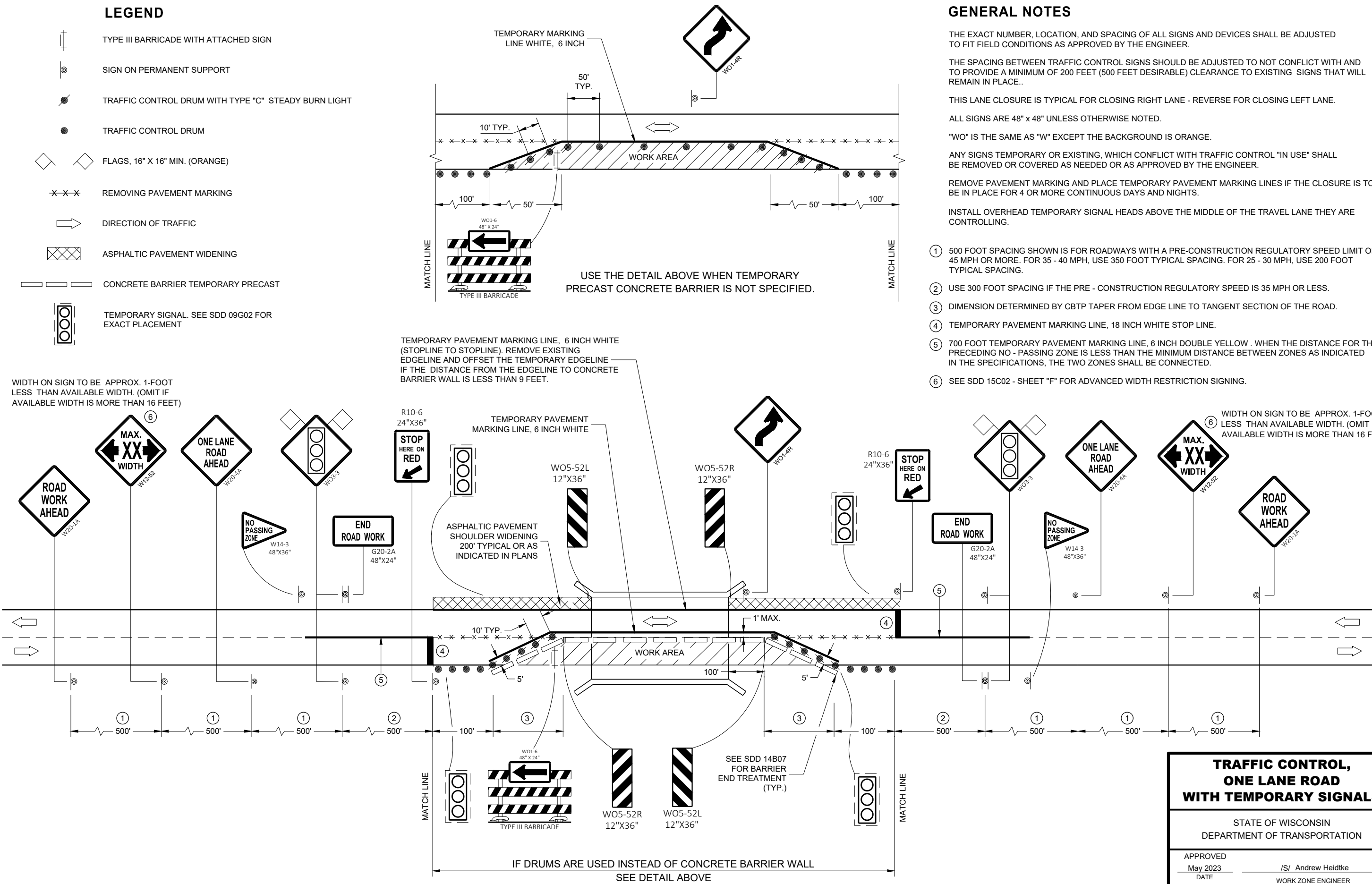
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLAGS, 16" X 16" MIN. (ORANGE)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- ASPHALTIC PAVEMENT WIDENING
- CONCRETE BARRIER TEMPORARY PRECAST
- TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT

WIDTH ON SIGN TO BE APPROX. 1-FOOT LESS THAN AVAILABLE WIDTH. (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET)



GENERAL NOTES

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE..
- THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.
- ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.
- "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.
- REMOVE PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING LINES IF THE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
- INSTALL OVERHEAD TEMPORARY SIGNAL HEADS ABOVE THE MIDDLE OF THE TRAVEL LANE THEY ARE CONTROLLING.
- 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
 - USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
 - DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
 - TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.
 - 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 6 INCH DOUBLE YELLOW . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
 - SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.

**TRAFFIC CONTROL,
ONE LANE ROAD
WITH TEMPORARY SIGNALS**

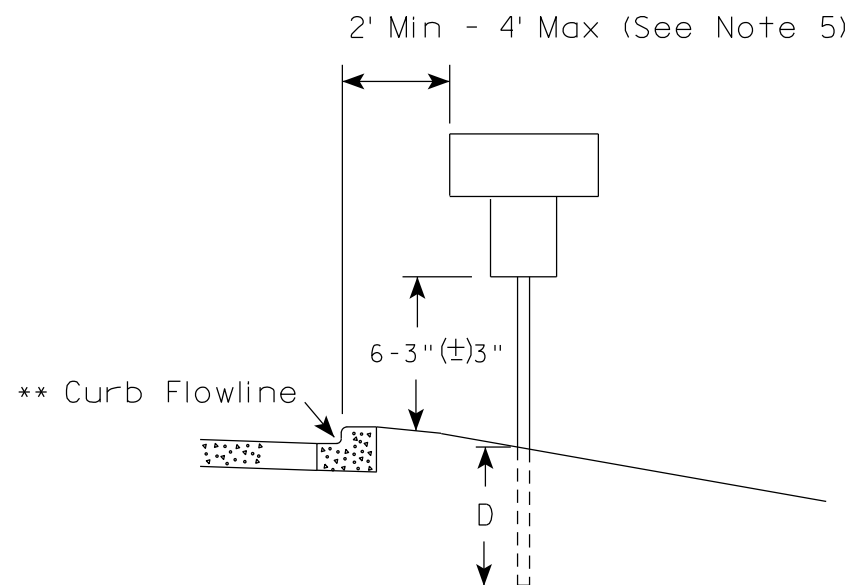
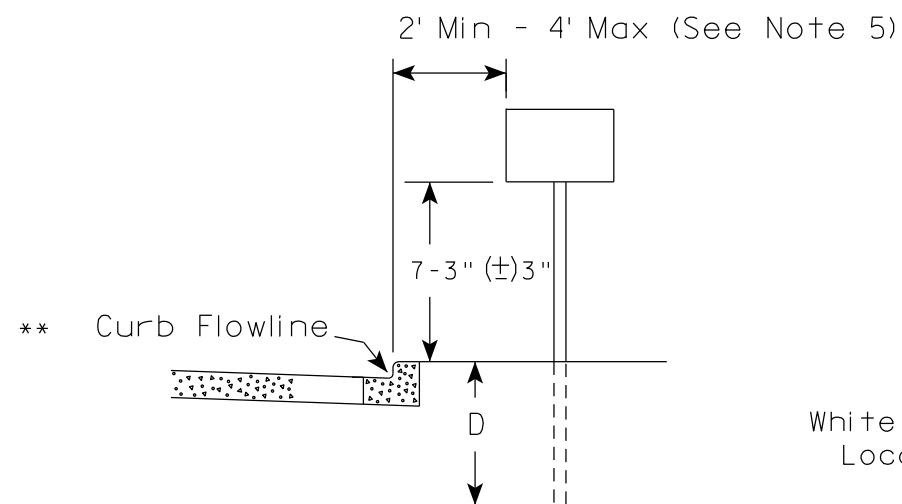
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

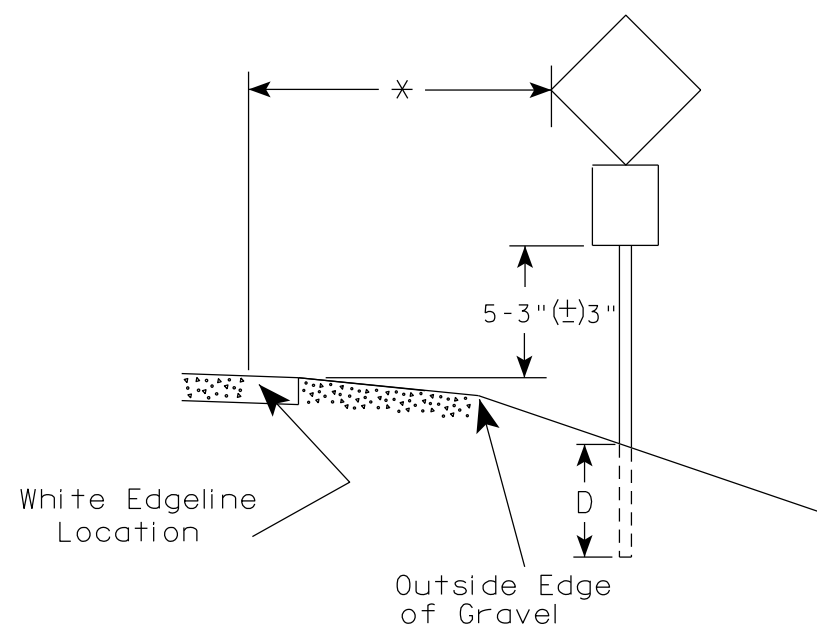
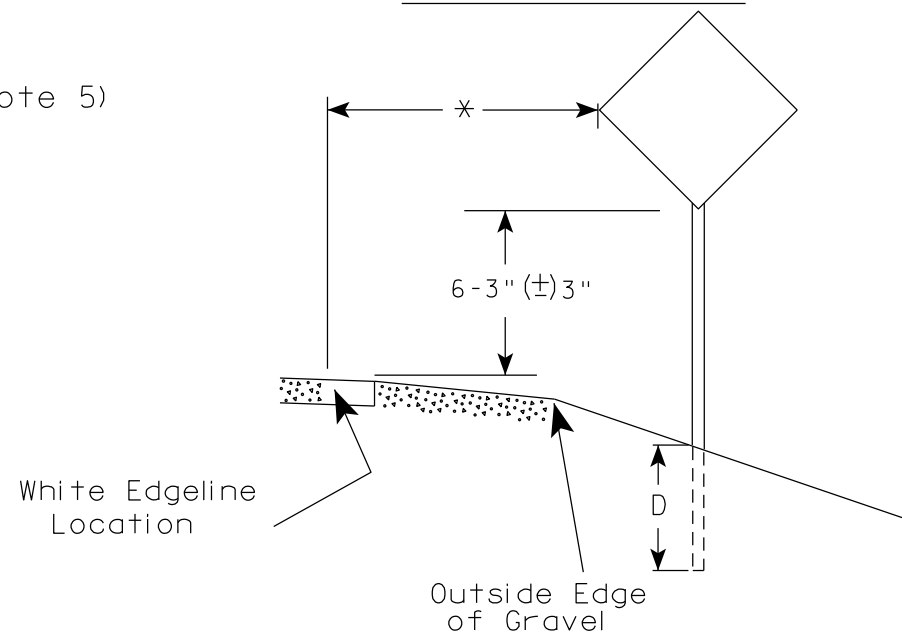
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

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

* * 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.

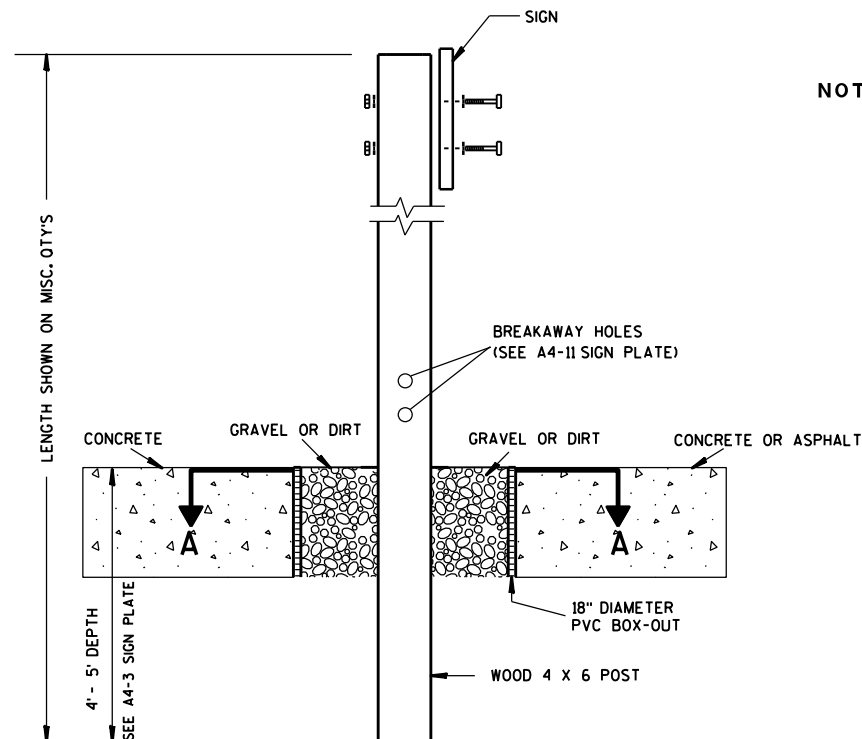
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

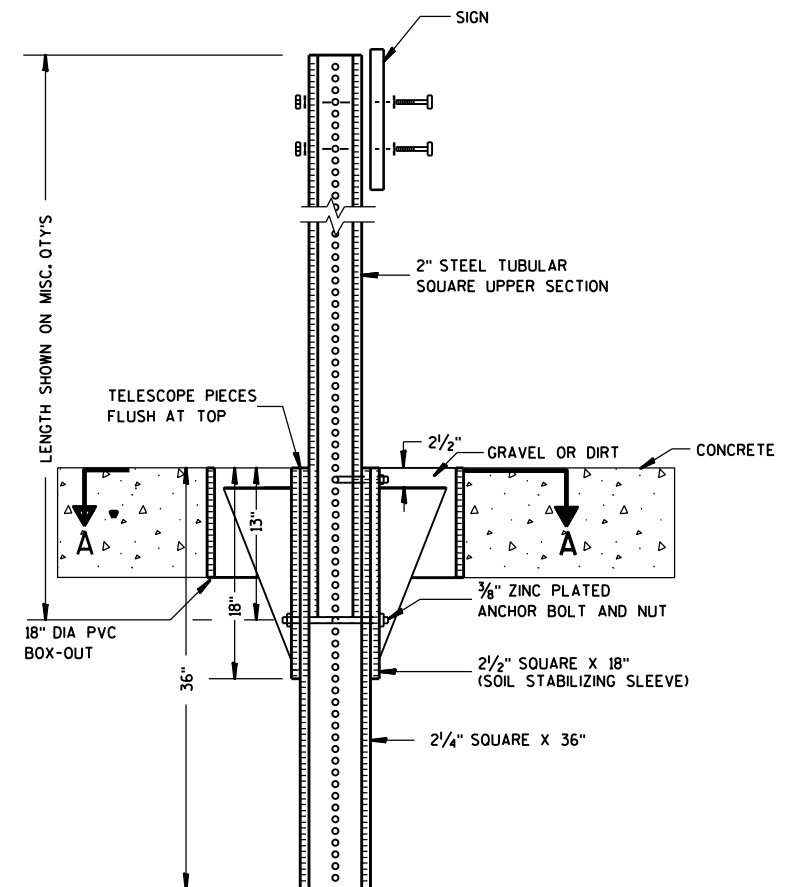
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

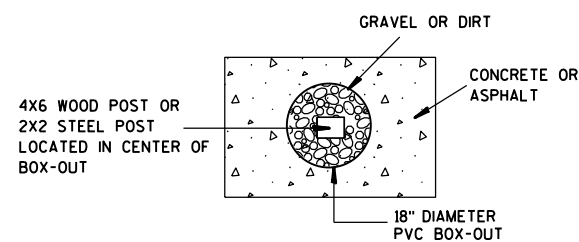
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:

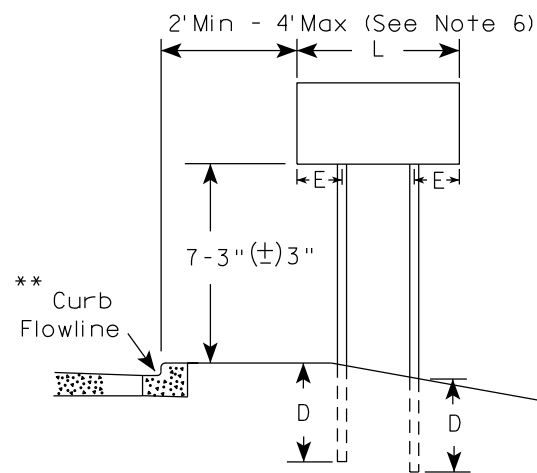
HWY:

COUNTY:

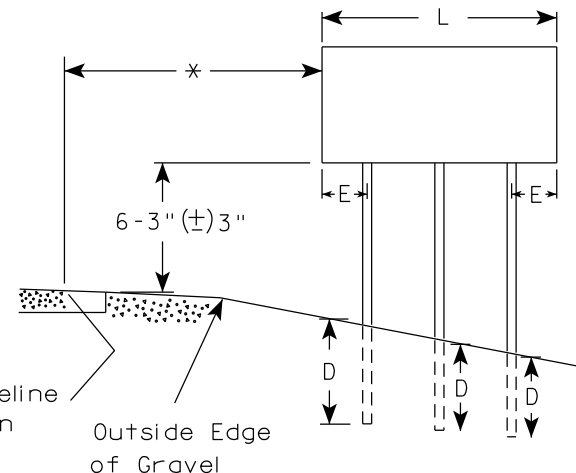
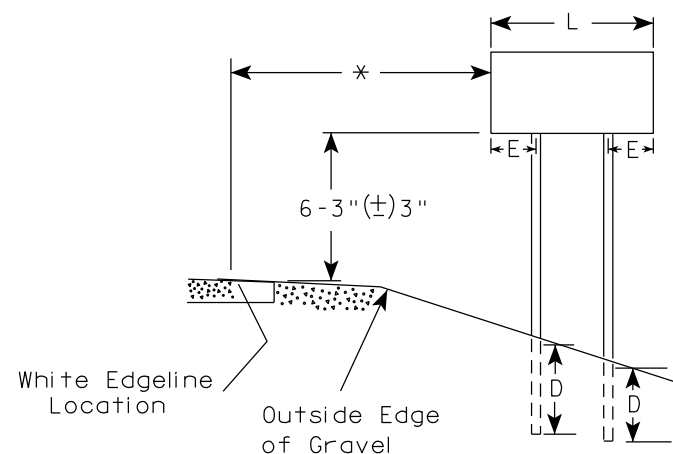
SHEET NO:

E

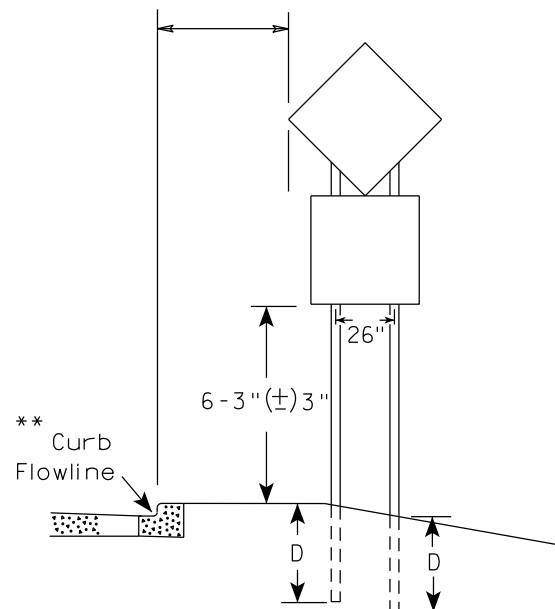
URBAN AREA



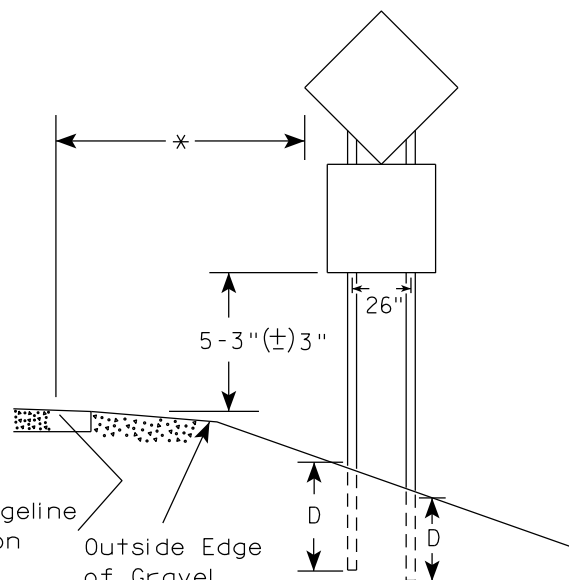
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

POST EMBEDMENT DEPTH

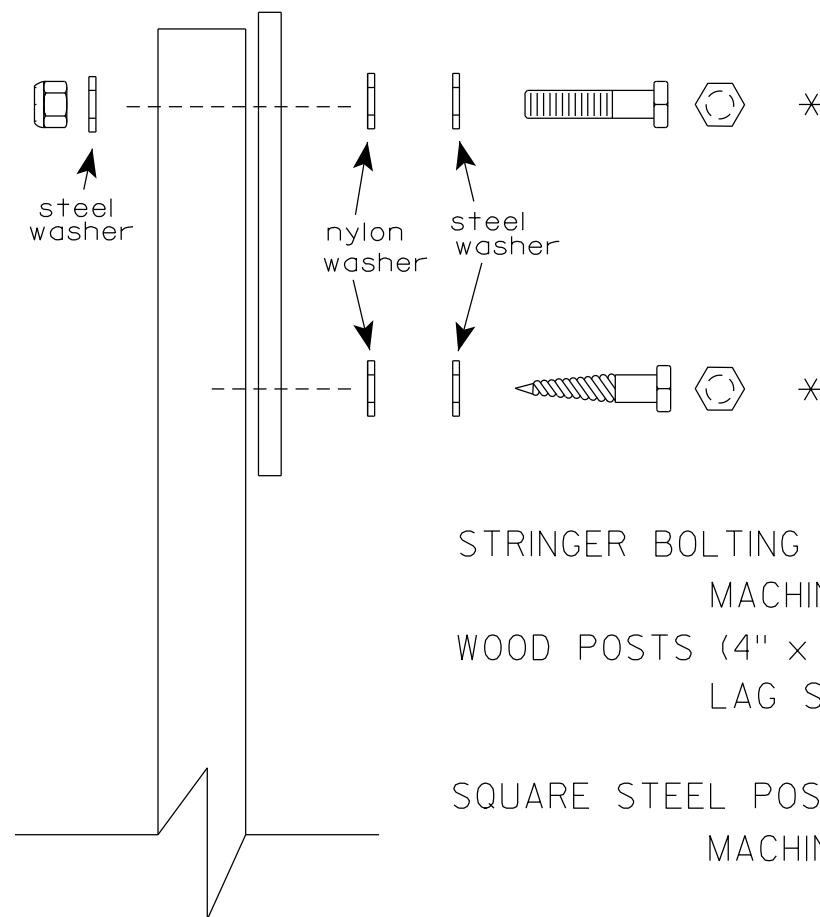
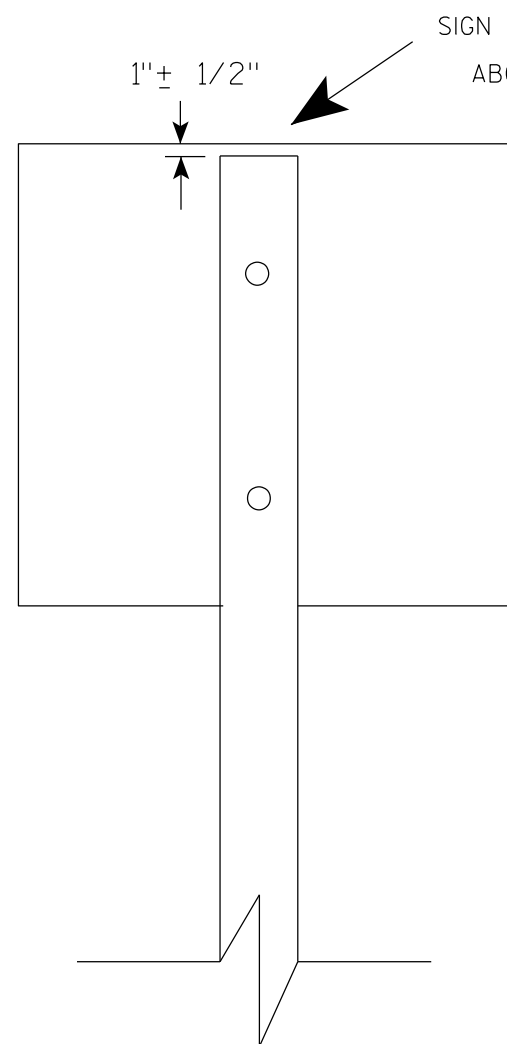
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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

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

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

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

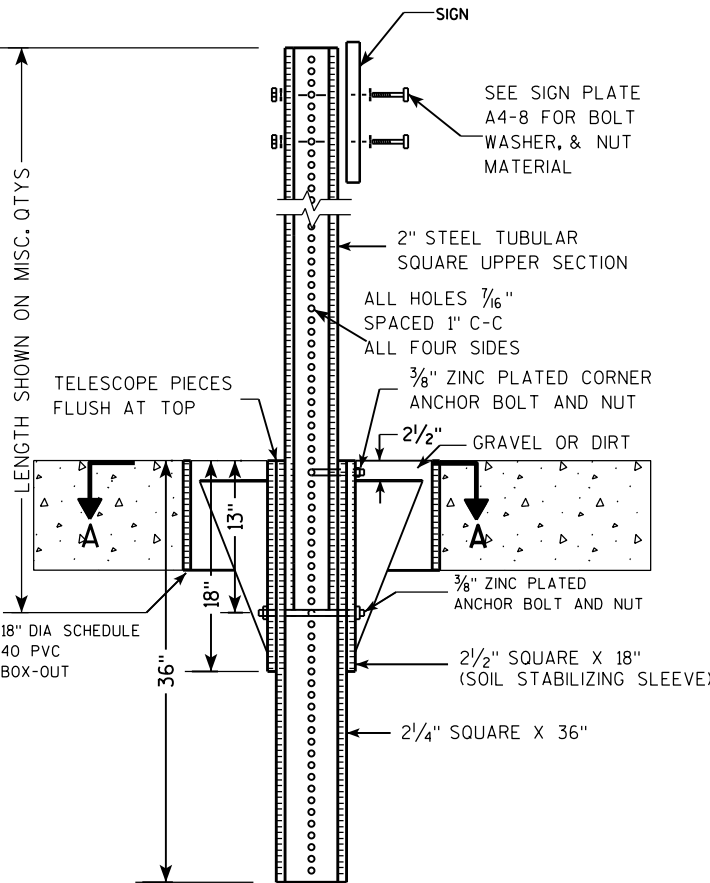
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

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

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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



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



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

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

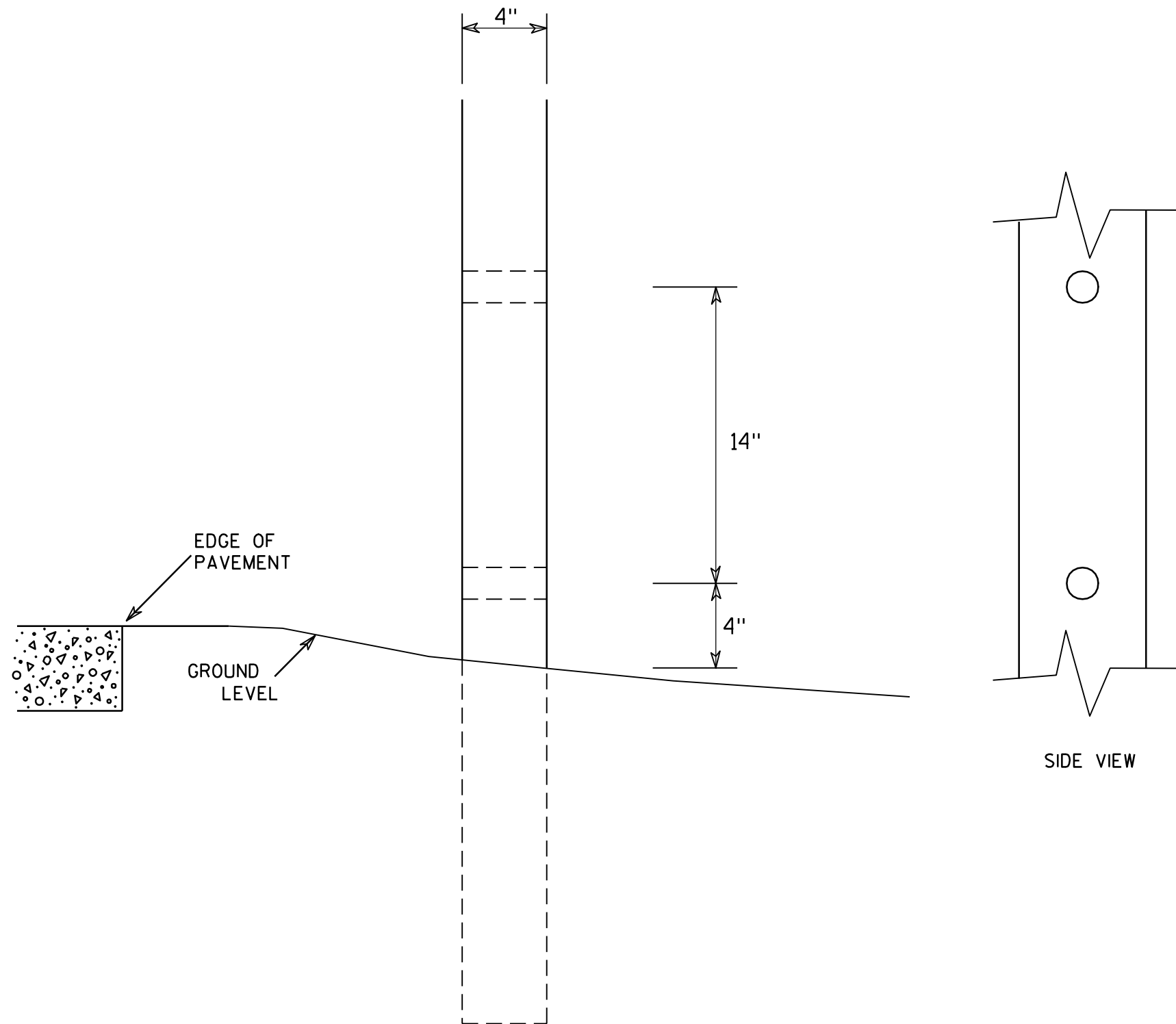
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7



GENERAL NOTES

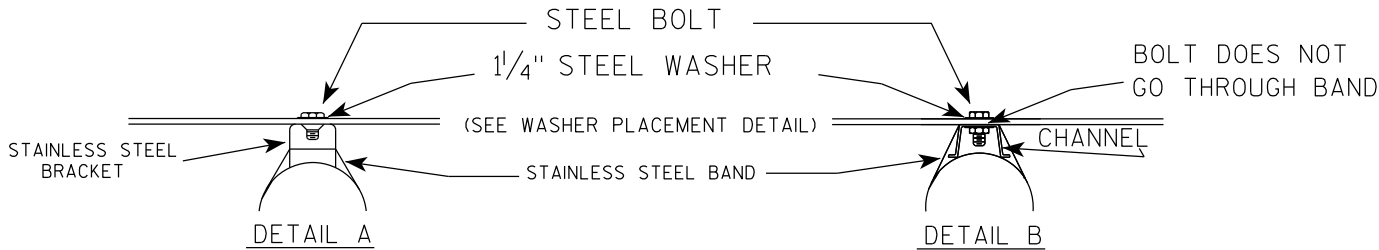
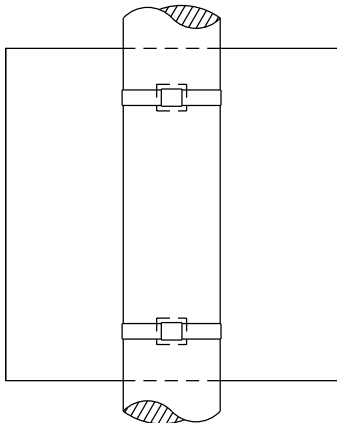
1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

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

BANDING

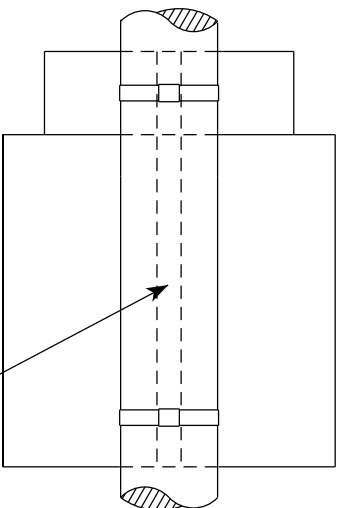
SINGLE SIGN



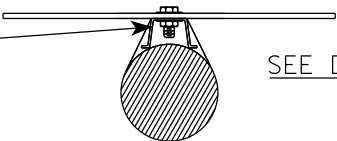
GENERAL NOTES

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

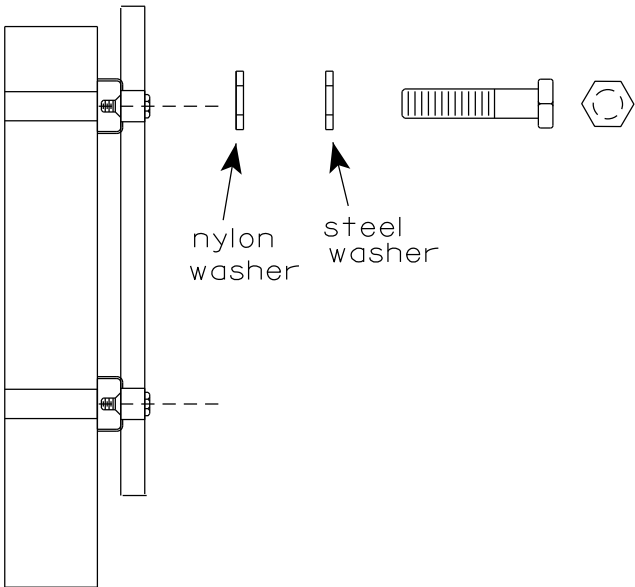
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



WASHER PLACEMENT

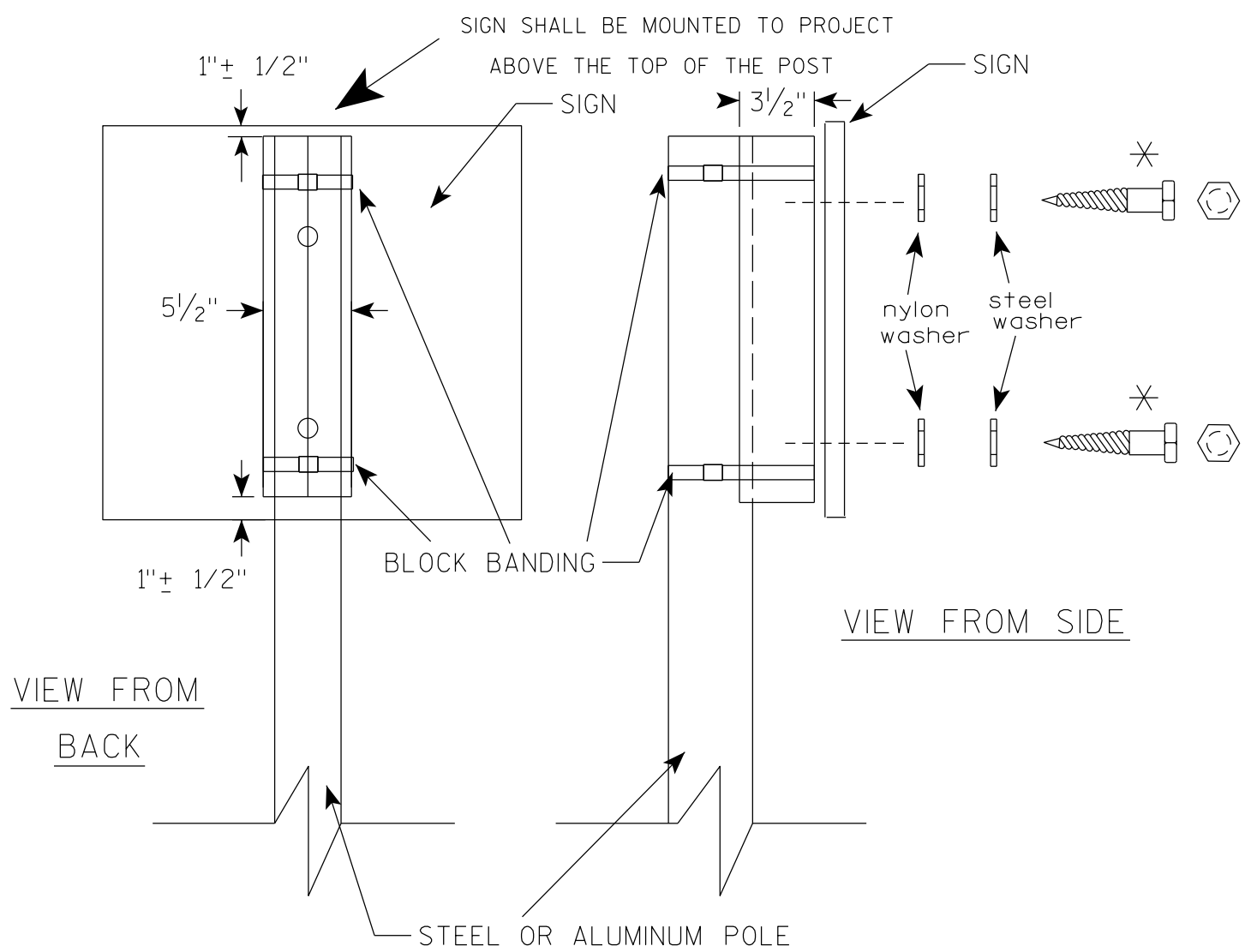


WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

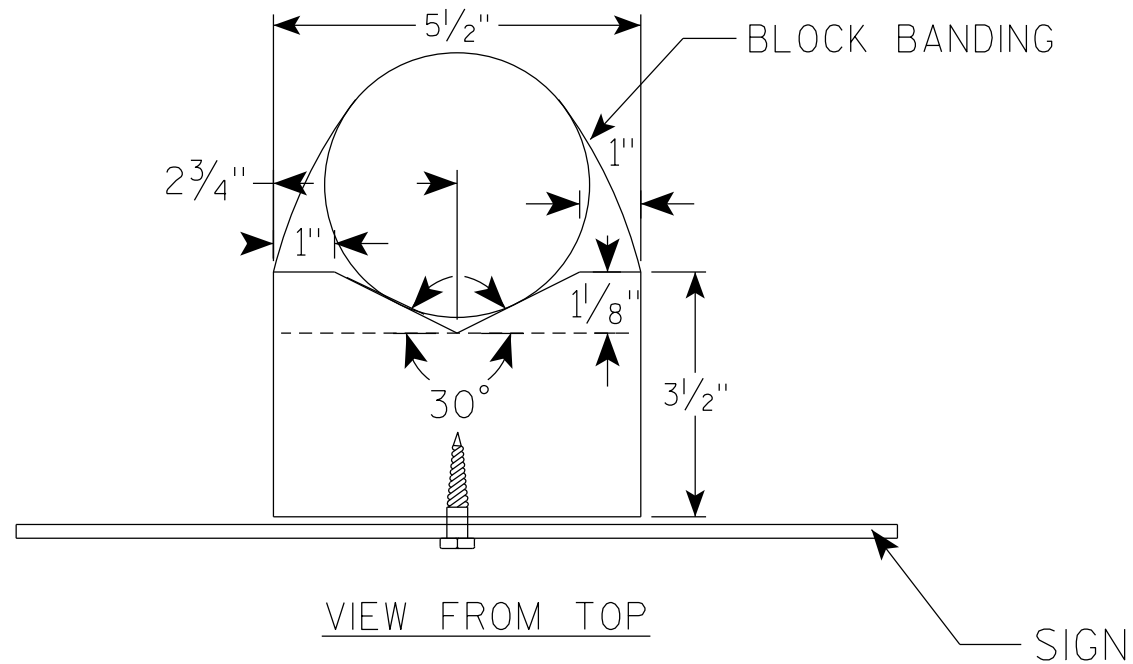
WISCONSIN DEPT OF TRANSPORTATION

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



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

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

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

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

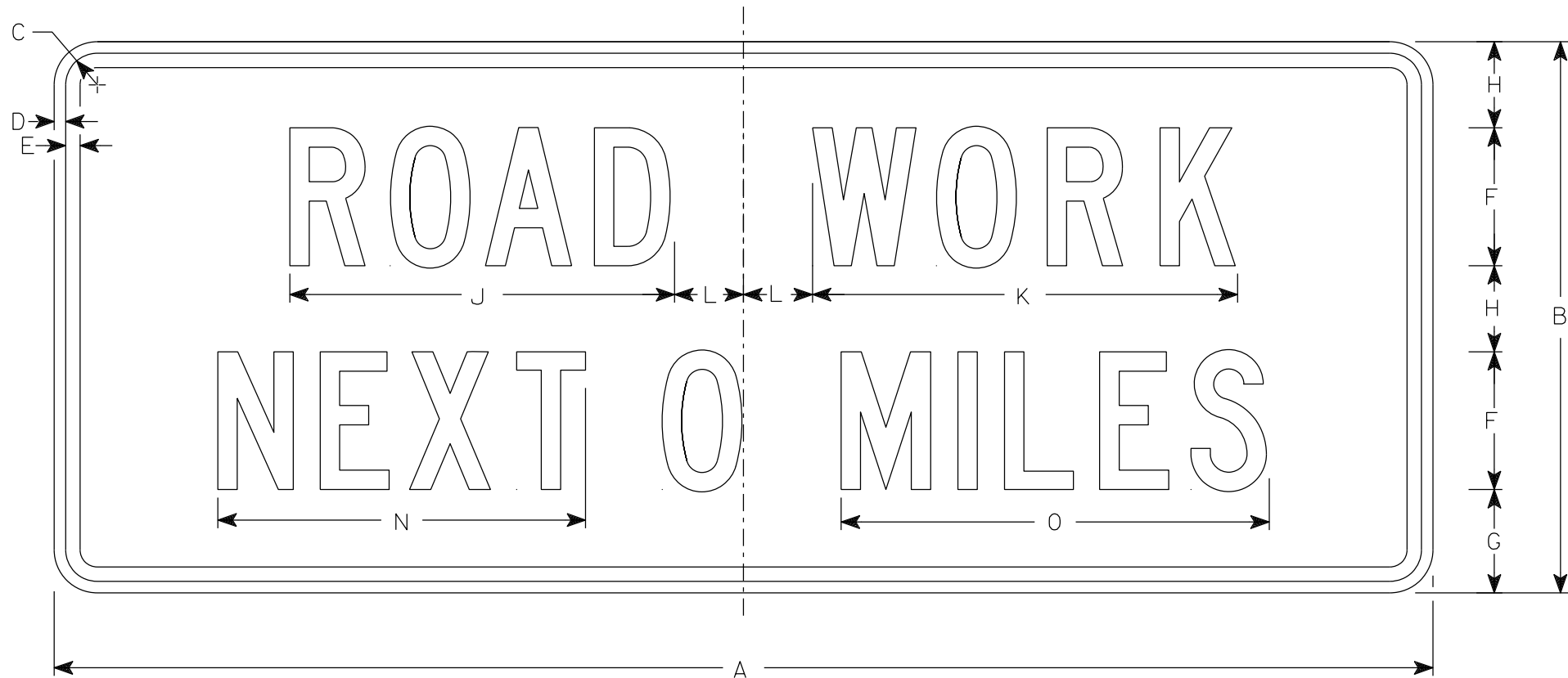
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO:

E

7



G20-1

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10.0
2M	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10.0
3	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10.0
4	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10.0
5	60	24	1 7⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10.0

STANDARD SIGN

G20-1

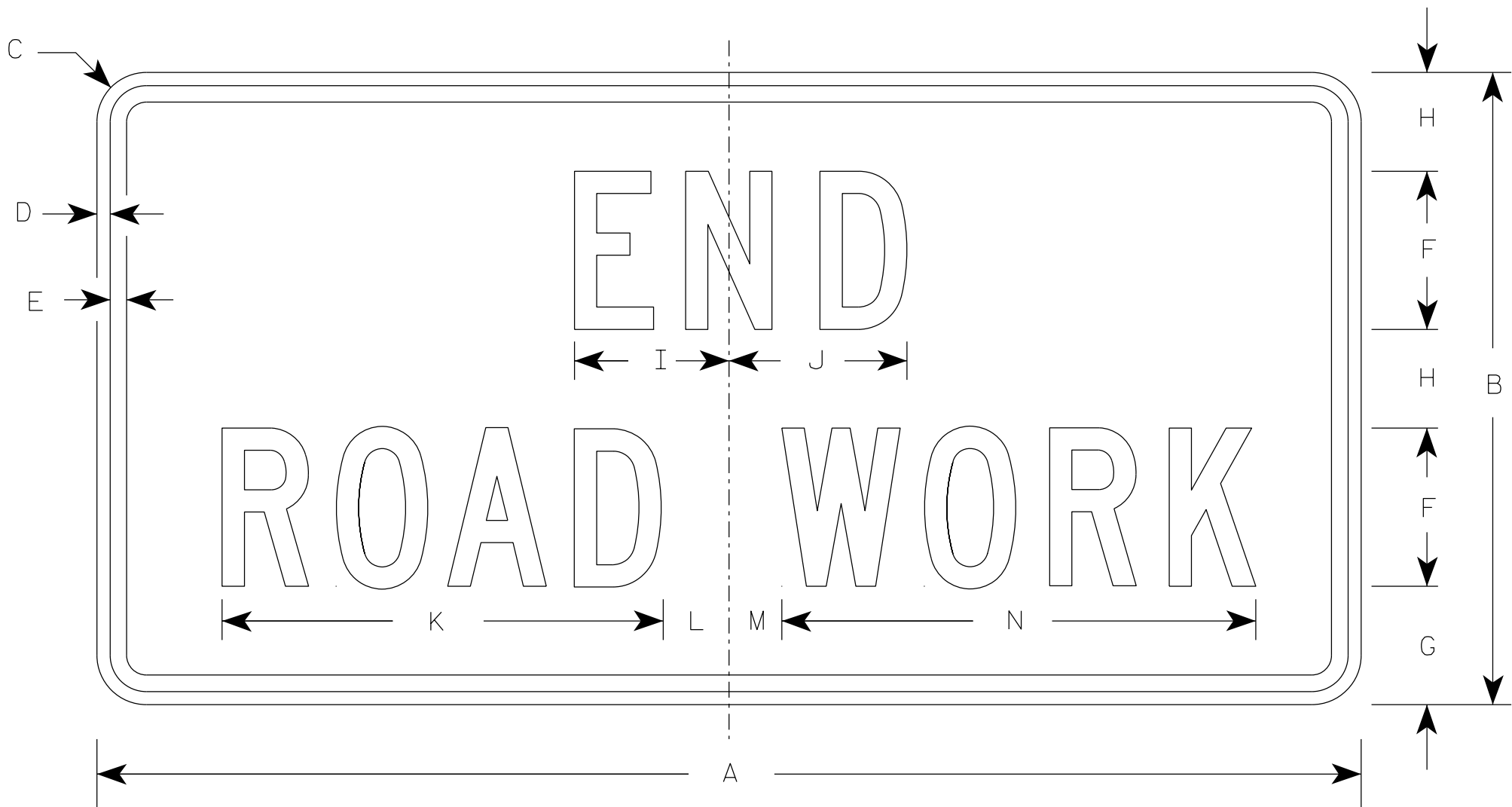
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-1.9

NOTES

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



G20-2A

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

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

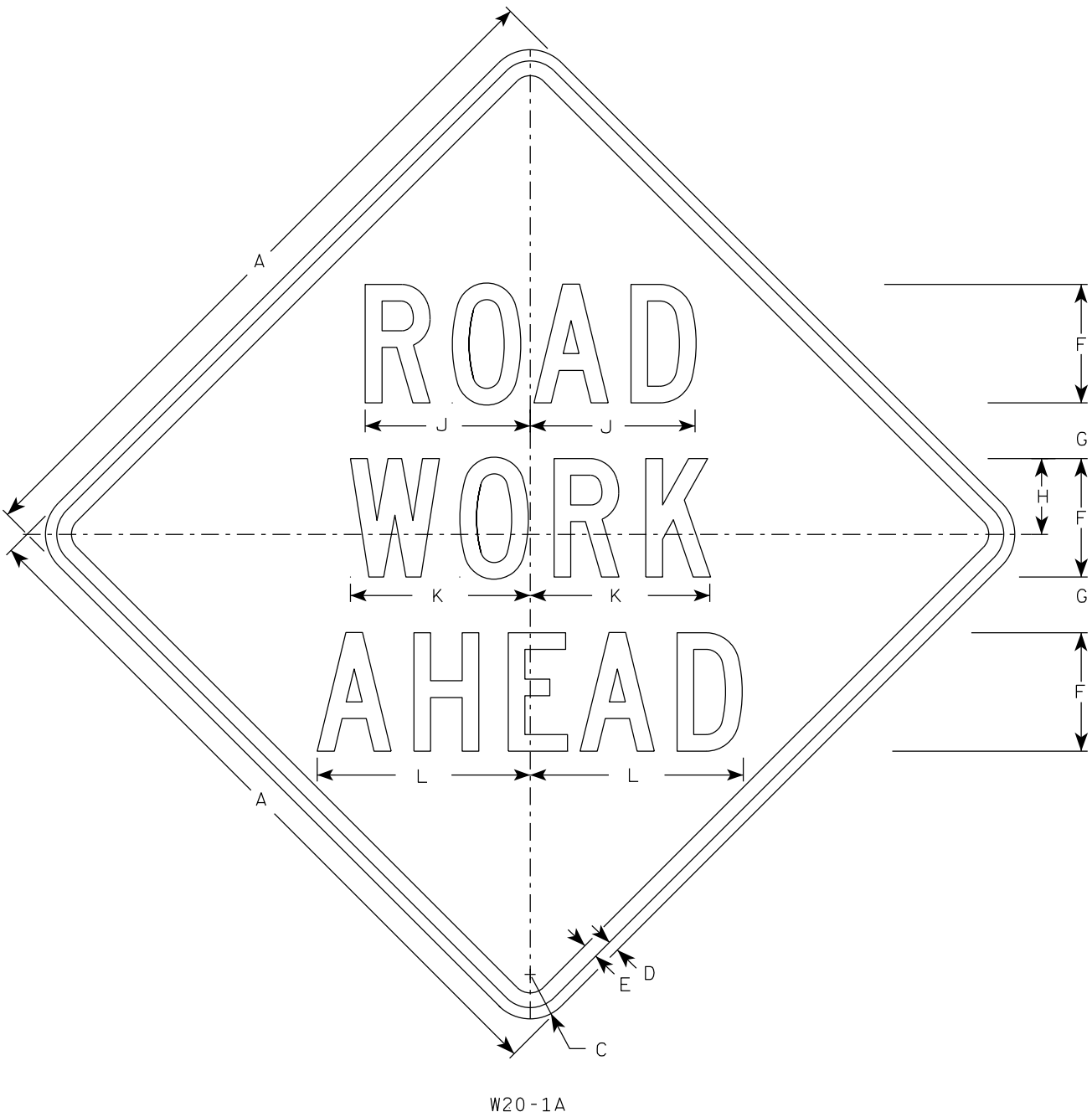
PROJECT NO:

HWY:

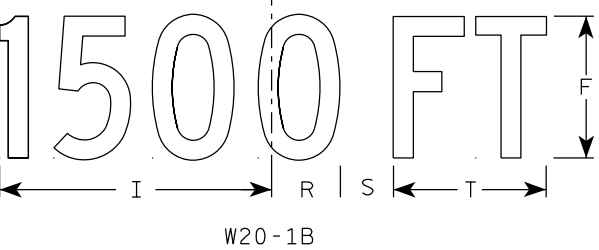
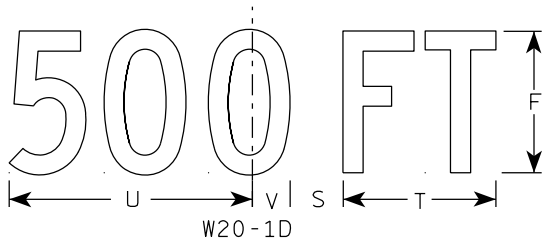
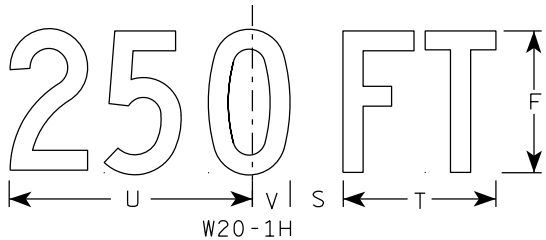
COUNTY:

SHEET NO:

E

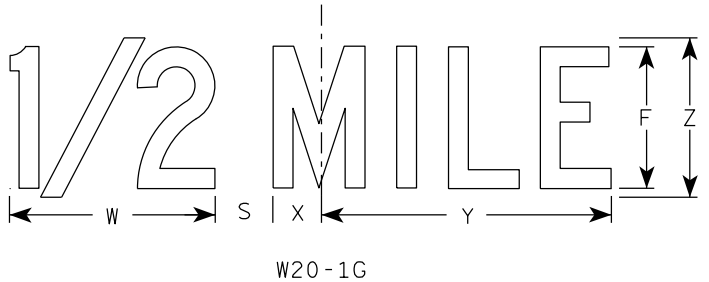


W20-1A

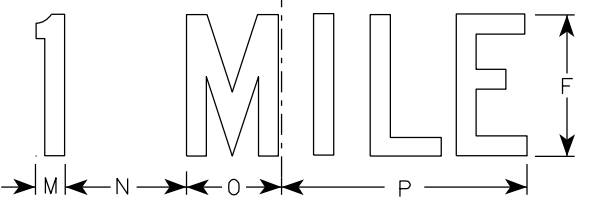


W20-1B

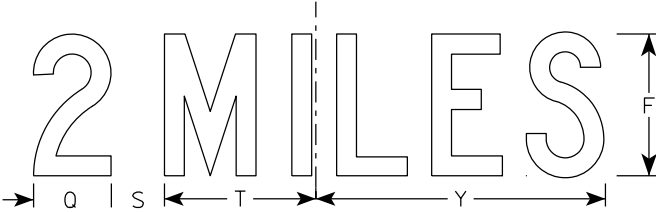
- NOTES
1. Sign is Type II - Type F Reflective
 2. Color:
Background - Orange
Message - Black
 3. Message Series - C
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



W20-1F



W20-1E

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

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>