

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 Plan
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plans
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Grass Details

TOTAL SHEETS = 18



56

DESIGN DESIGNATION 8802-00-00

A.A.D.T.	2022	=	539
A.A.D.T.	2042	=	550
D.H.V.		=	N/A
D.D.		=	50/50
T.		=	8.8%
DESIGN SPEED		=	55 MPH
ESALS		=	140,000

CONVENTIONAL SYMBOLS

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

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STH 35 - SPOONER

CHRISTNER ROAD TO CTH E

CTH A

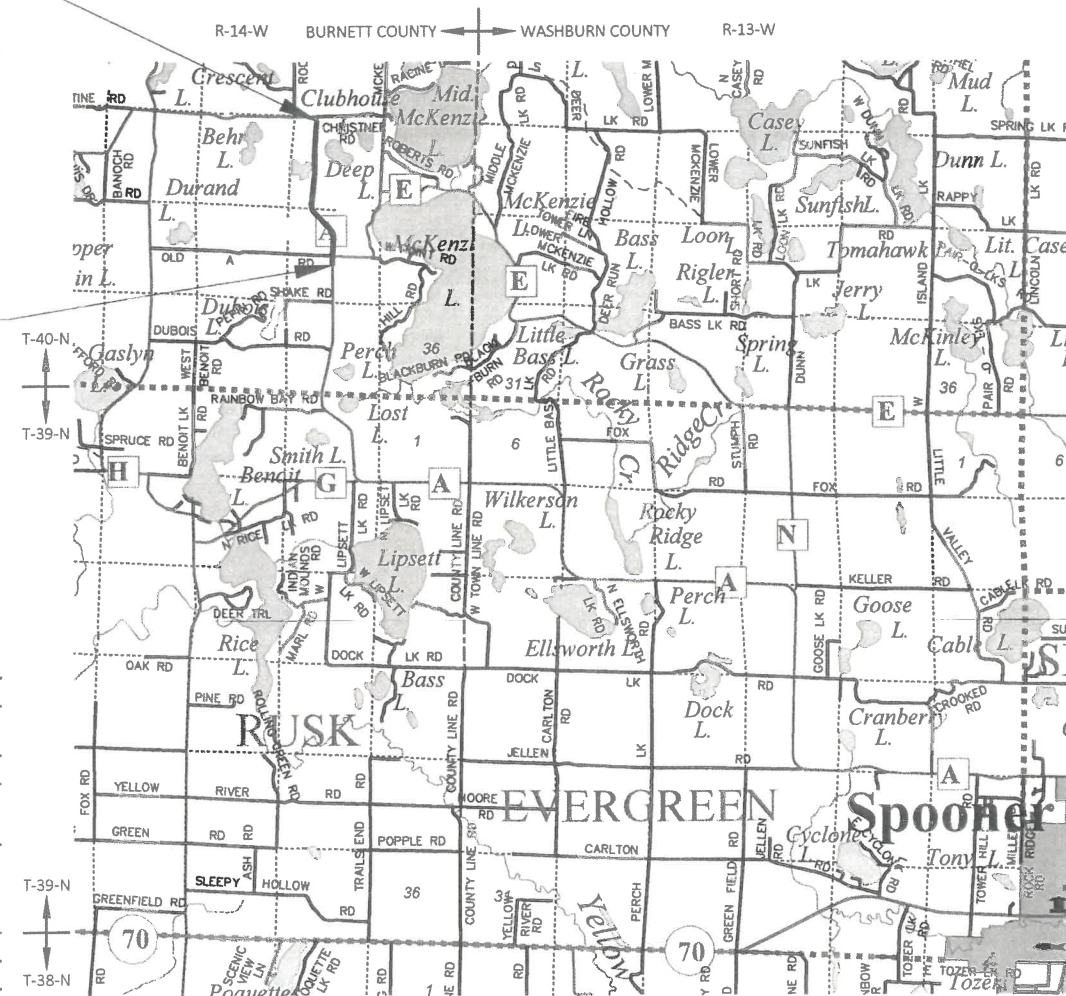
BURNETT COUNTY

STATE PROJECT NUMBER

8802-00-70

BEGIN PROJECT
STA 110+00
Y = 211,341.09
X = 309,025.77

END PROJECT
STA 196+76
Y = 203,160.46
X = 310,161.89



LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 1.643 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), BURNETT COUNTY, NAD83 (1991), 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 (1991). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12B.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8802-00-70	WISC 2023080	1

ACCEPTED FOR

BURNETT COUNTY

Date: 7/25/22
Mark H. Hahn
Highway Commissioner
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY



DATE: 7/25/2022
Jacob A. Friberg
Professional Engineer Signature

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	COOPER ENGINEERING
Designer	COOPER ENGINEERING
Project Manager	PAULA GROOM, P.E.
Regional Examiner	TOU YANG, P.E.
Regional Supervisor	TYLER RONGSTAD, P.E.

APPROVED FOR THE DEPARTMENT
DATE: 07/25/22
Paula Groom
(Signature)

E

LIST OF STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LT.	LEFT
AC	ACRES	LS	LUMP SUM
AGG	AGGREGATE	MH	MANHOLE
AH	AHEAD	N	NORTH
ADT	AVERAGE DAILY TRAFFIC	NC	NORMAL CROWN
AVG.	AVERAGE	PAVT	PAVEMENT
ASPH	ASPHALTIC	PC	POINT OF CURVATURE
BK.	BACK	PE	PRIVATE ENTRANCE
BM	BENCHMARK	PI	POINT OF INTERSECTION
Δ	CENTRAL ANGLE OR DELTA	PL	PROPERTY LINE
℄, C/L	CENTERLINE	PP	POWER POLE
C & G	CURB AND GUTTER	PT	POINT OF TANGENCY
CABC	CRUSHED AGGREGATE BASE COURSE	R	RANGE, RADIUS
CONC.	CONCRETE	RCCP	REINFORCED CONCRETE CULVERT PIPE
COR	CORNER	RD	ROAD
CORR	CORRUGATED	REBAR	REINFORCEMENT BAR
CSCP	CORRUGATED STEEL CULVERT PIPE	REQD	REQUIRED
CSPA	CORRUGATED STEEL PIPE ARCH	RDWY	ROADWAY
CTH	COUNTY TRUNK HIGHWAY	RHF	RIGHT HAND FORWARD
CP.	CULVERT PIPE	RL, R/L	REFERENCE LINE
CY	CUBIC YARD	RR	RAILROAD
CWT.	HUNDREDWEIGHT	RT.	RIGHT
DIA	DIAMETER	R/W	RIGHT-OF-WAY
D	DEGREE OF CURVE	S	SOUTH
DHV	DESIGN HOURLY VOLUME	SAN S	SANITARY SEWER
DWY	DRIVEWAY	SDD	STANDARD DETAIL DRAWING
EBS	EXC. BELOW SUB GRADE	SE	SUPER ELEVATION
ELEV., EL	ELEVATION	SF.	SQUARE FEET
ELEC.	ELECTRIC	SHLDR	SHOULDER
EXC	EXCAVATION	SPECS	SPECIFICATIONS
EXIST	EXISTING	SQ.	SQUARE
E	EAST	SS.	STORM SEWER
FE	FIELD ENTRANCE	SY.	SQUARE YARD
FF.	FACE TO FACE	STH	STATE TRUNK HIGHWAY
FL, F/L	FLOW LINE	ST.	STREET
FS	FULL SUPERELEVATION	STA.	STATION
G	GARAGE	SW	SIDEWALK
GN	GRID NORTH	T	TANGENT
H	HOUSE	TC	TOP OF CURB
		℄, T/L	TRANSIT LINE
		TEL	TELEPHONE
		TEMP	TEMPORARY
		TLE	TEMPORARY LIMITED EASEMENT
		TYP	TYPICAL
HYD	HYDRANT	USH	UNITED STATES HIGHWAY
I	INTERSECTION ANGLE	UG	UNDERGROUND
INTERS	INTERSECTION	V	DESIGN SPEED
INV.	INVERT	VAR.	VARIABLE
IP	IRON PIN OR PIPE	VERT	VERTICAL
LC	LONG CHORD OF CURVE	YD	YARD
LF	LINEAR FOOT		
LHF	LEFT HAND FORWARD		
L	LENGTH OF CURVE		

UTILITY CONTACTS

COMMUNICATIONS

LUMEN (CENTURYLINK)
CHARLES BROWN
100 S. CINCINNATI AVE., STE. 1200
TULSA, OK 74103
PHONE: (918) 547-6549
EMAIL: charles.brown@lumen.com

COMMUNICATIONS

SIREN TELEPHONE
KENT BASS
7723 W MAIN STREET
SIREN, WI 54872
PHONE: (715) 349-2224
EMAIL: kentbass@sirentel.net

ELECTRIC

POLK-BURNETT ELECTRIC COOP
JASON EVENSON
1001 STATE ROAD 35
CENTURIA, WI 54824
PHONE: (715) 646-2191 EXT 401
EMAIL: jevenson@polkburnett.com

ALL UTILITIES LISTED ARE MEMBERS OF DIGGERS HOTLINE



OTHER CONTACTS

DESIGN CONSULTANT

COOPER ENGINEERING
JACOB FRIBERG
2600 COLLEGE DRIVE
RICE LAKE, WI 54868
PHONE: (715) 234-7008
EMAIL: jfriberg@cooperengineering.net

BURNETT COUNTY

HIGHWAY COMMISSIONER
MIKE HOEFS
8150 STATE ROAD 70
SIREN, WI 54872
PHONE: (715) 349-2285 EXT. 1453
EMAIL: mhoefs@burnettcounty.org

WDNR REGIONAL CONTACT

WDNR/WISDOT LIAISON
AMY CRONK
810 W. MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4229
EMAIL: amy.cronk@wisconsin.gov

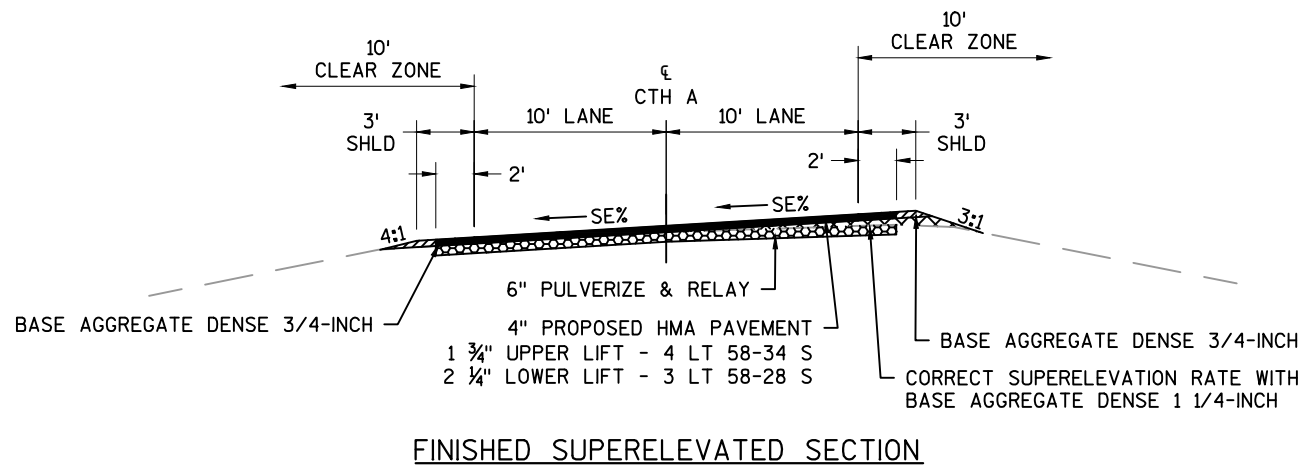
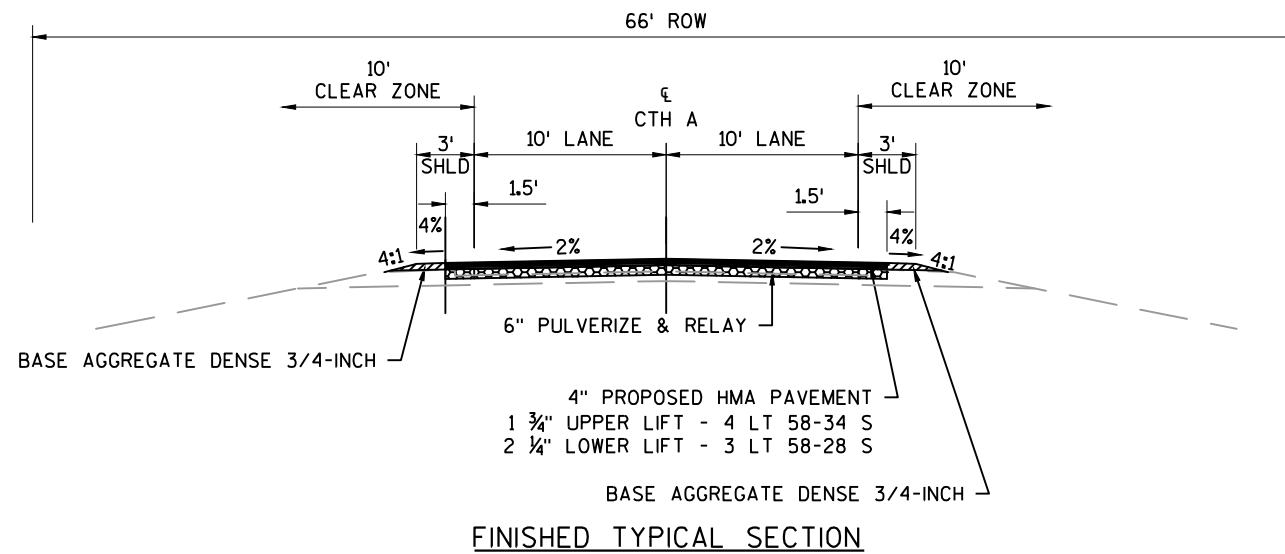
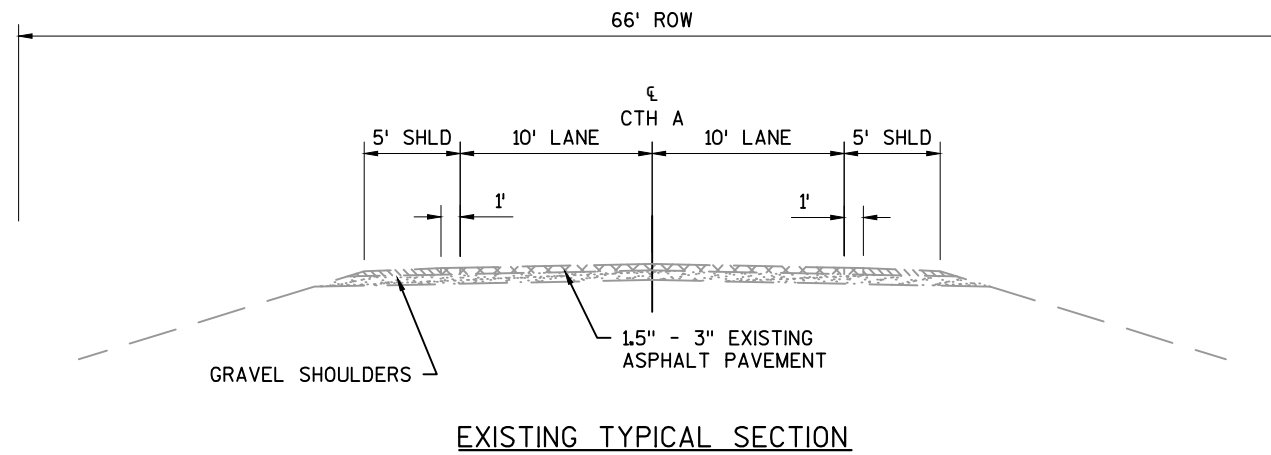
GENERAL NOTES:

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- ACCESS TO ALL RESIDENCES & SIDE ROADS SHALL BE MAINTAINED DURING CONSTRUCTION.
- THE LOCATION OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.
- PAVEMENT MARKING SHALL MEET MUTCD STANDARDS.
- CTH A WILL BE CLOSED DURING CONSTRUCTION AND NO DETOUR ROUTE WILL BE MARKED.

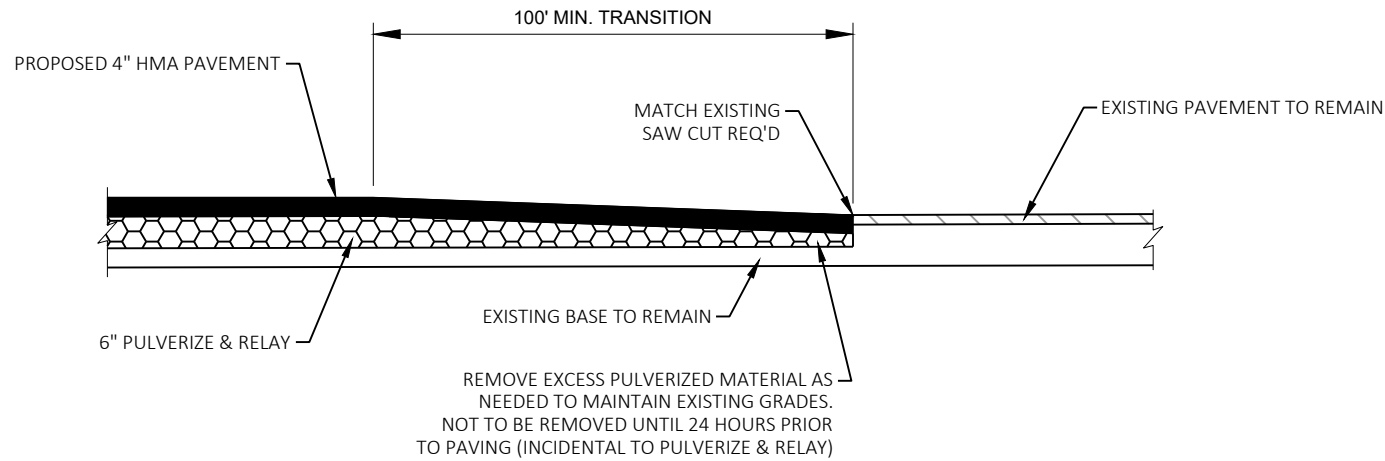
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP								
	A			B			C		
	SLOPE RANGE (%)			SLOPE RANGE (%)			SLOPE RANGE (%)		
LAND USE:	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
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36
PAVEMENT:									
ASPHALT	.70 - .95								
CONCRETE	.80 - .95								
BRICK	.70 - .80								
DRIVES, WALKS	.75 - .85								
ROOFS	.75 - .95								
GRAVEL ROADS, SHOULDERS	.40 - .60								

TOTAL PROJECT AREA = 13.15 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 6.57 ACRES



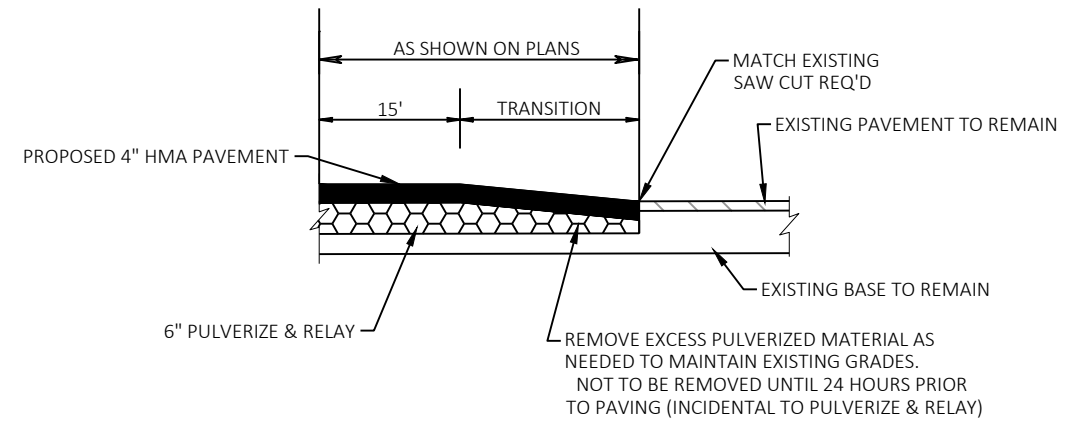
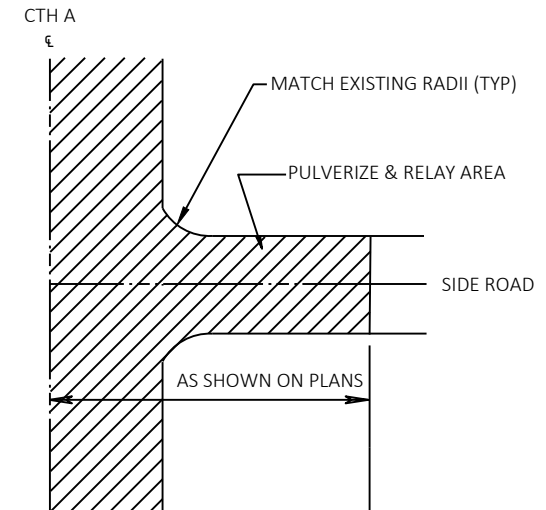
CURVE NUMBER	PI STA	RADIUS (FT)	END NORMAL CROWN	LEVEL CROWN	REVERSE CROWN	BEGIN FULL SUPER	END FULL SUPER	REVERSE CROWN	LEVEL CROWN	BEGIN NORMAL CROWN	SE (%)
1	128+95.71	3,600	125+98.48	126+51.98	127+05.48	127+58.98	130+32.18	130+85.68	131+39.18	131+92.68	4.0
2	138+87.38	2,750	135+74.60	136+28.08	136+81.56	137+51.08	140+23.20	140+92.72	141+46.20	141+99.68	4.6
3	160+49.25	600	156+15.58	156+68.91	157+22.25	158+28.91	162+35.77	163+42.43	163+95.77	164+49.10	6.0
4	178+64.62	650	174+25.83	174+79.16	175+32.50	176+39.16	180+59.22	181+65.89	182+19.22	182+72.55	6.0
5	193+10.12	5,000	-	-	-	-	-	-	-	-	NC



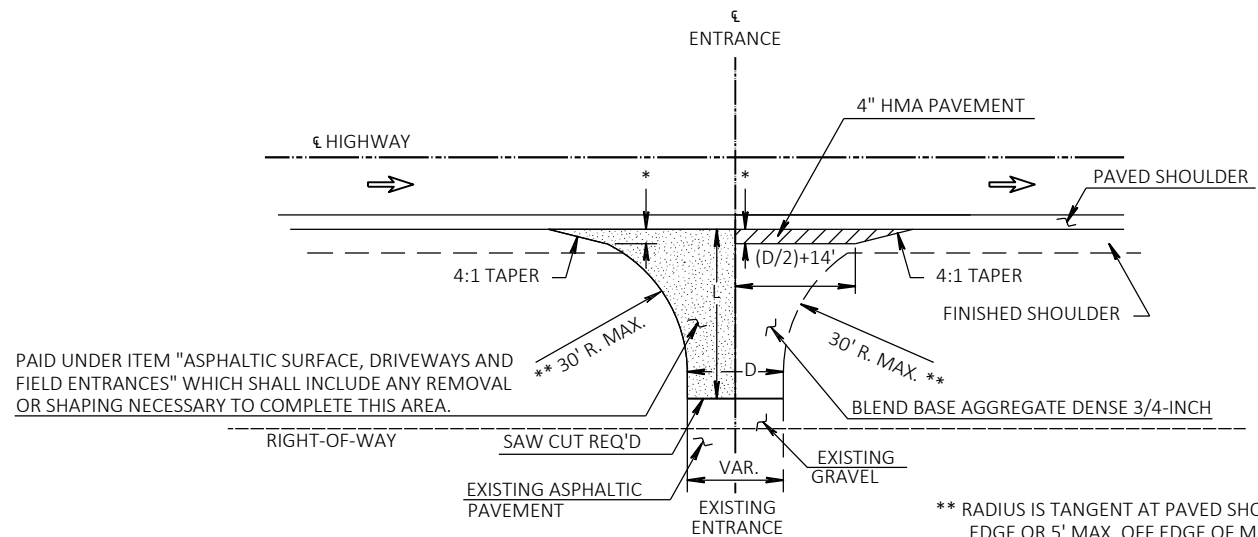
REMOVE EXCESS PULVERIZED MATERIAL AS NEEDED TO MAINTAIN EXISTING GRADES. NOT TO BE REMOVED UNTIL 24 HOURS PRIOR TO PAVING (INCIDENTAL TO PULVERIZE & RELAY)

TRANSITION DETAIL

STA 110+00 - STA 111+00
STA 195+76 - STA 196+76



SIDE ROAD DETAIL



PAID UNDER ITEM "ASPHALTIC SURFACE, DRIVEWAYS AND FIELD ENTRANCES" WHICH SHALL INCLUDE ANY REMOVAL OR SHAPING NECESSARY TO COMPLETE THIS AREA.

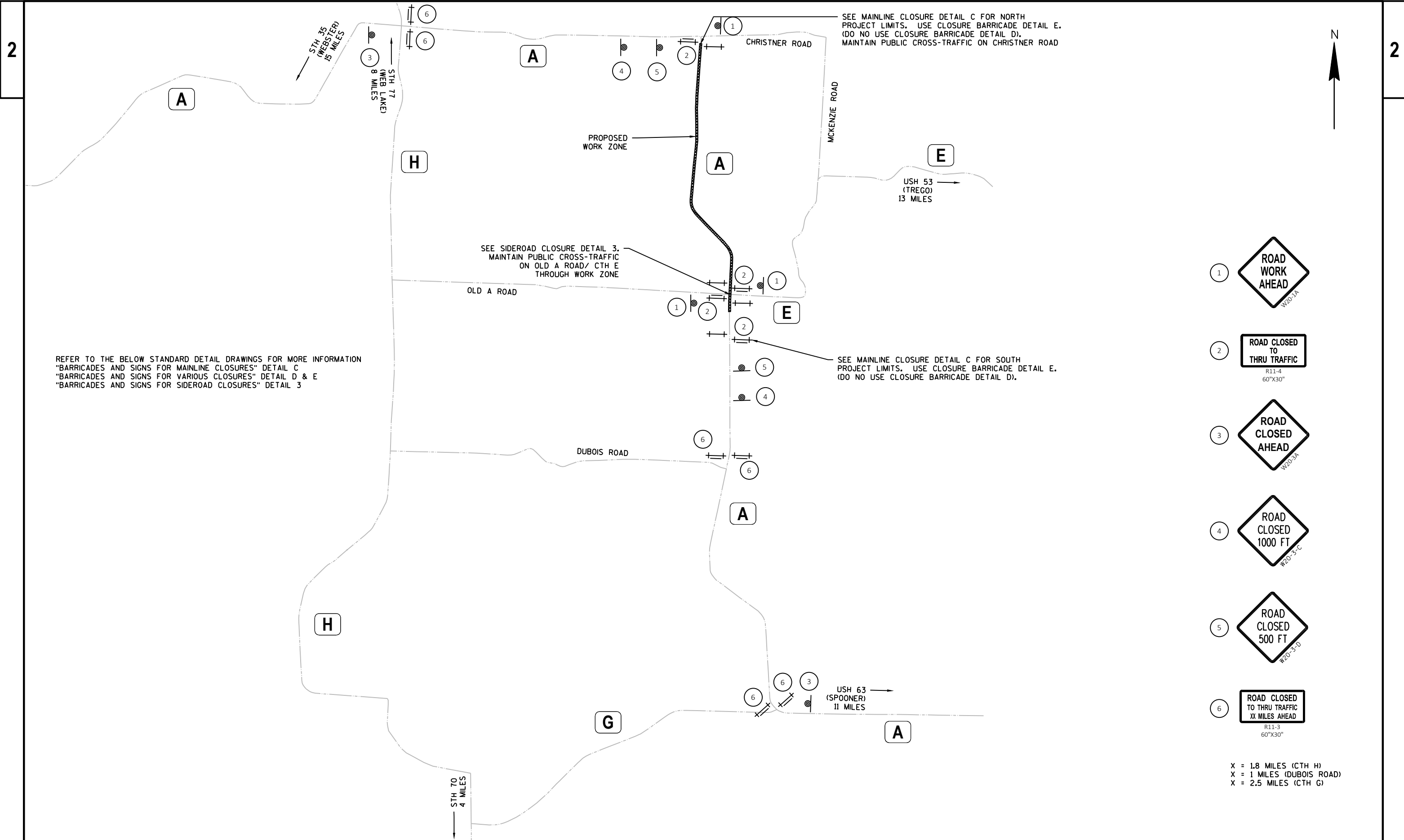
** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MAX. OR TO FINISHED SHOULDER WHICH EVER IS LESS.

L=5' TYPICAL, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

D=DRIVEWAY WIDTH (MATCH EXISTING SURFACE MATERIAL DEPTH AND WIDTH)

RURAL DRIVEWAY DETAIL



- 1 ROAD WORK AHEAD
- 2 ROAD CLOSED TO THRU TRAFFIC
- 3 ROAD CLOSED AHEAD
- 4 ROAD CLOSED 1000 FT
- 5 ROAD CLOSED 500 FT
- 6 ROAD CLOSED TO THRU TRAFFIC XX MILES AHEAD

X = 1.8 MILES (CTH H)
 X = 1 MILES (DUBOIS ROAD)
 X = 2.5 MILES (CTH G)

Estimate Of Quantities

8802-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 8802-00-70	EACH	1.000	1.000
0004	213.0100	Finishing Roadway (project) 01. 8802-00-70	EACH	1.000	1.000
0006	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,750.000	1,750.000
0008	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,100.000	1,100.000
0010	325.0100	Pulverize and Relay	SY	23,000.000	23,000.000
0012	374.1020.S	QMP Pulverize and Relay Compaction	SY	23,000.000	23,000.000
0014	450.4000	HMA Cold Weather Paving	TON	1,290.000	1,290.000
0016	455.0605	Tack Coat	GAL	1,615.000	1,615.000
0018	460.2000	Incentive Density HMA Pavement	DOL	5,160.000	5,160.000
0020	460.5223	HMA Pavement 3 LT 58-28 S	TON	2,900.000	2,900.000
0022	460.5244	HMA Pavement 4 LT 58-34 S	TON	2,260.000	2,260.000
0024	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	170.000	170.000
0026	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8802-00-70	EACH	1.000	1.000
0028	619.1000	Mobilization	EACH	1.000	1.000
0030	624.0100	Water	MGAL	90.000	90.000
0032	642.5001	Field Office Type B	EACH	1.000	1.000
0034	643.0420	Traffic Control Barricades Type III	DAY	560.000	560.000
0036	643.0705	Traffic Control Warning Lights Type A	DAY	1,120.000	1,120.000
0038	643.0900	Traffic Control Signs	DAY	760.000	760.000
0040	643.5000	Traffic Control	EACH	1.000	1.000
0042	646.1005	Marking Line Paint 4-Inch	LF	34,491.000	34,491.000
0044	648.0100	Locating No-Passing Zones	MI	1.640	1.640
0046	650.5000	Construction Staking Base	LF	2,900.000	2,900.000
0048	650.8000	Construction Staking Resurfacing Reference	LF	8,676.000	8,676.000
0050	650.9911	Construction Staking Supplemental Control (project) 01. 8802-00-70	EACH	1.000	1.000
0052	690.0150	Sawing Asphalt	LF	290.000	290.000
0054	740.0440	Incentive IRI Ride	DOL	3,280.000	3,280.000
0056	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0058	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000

CATEGORY	STATION	TO	STATION	SIDE	ASPHALT THICKNESS (IN)	LAYERS	BASE AGGREGATE		QMP PULVERIZE AND RELAY	TACK COAT	HMA PAVEMENT		ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES		REMARKS	
							DENSE	DENSE			3 LT 58-28 S	4 LT 58-34 S	TON	MGAL		
							3/4-INCH	1 1/4-INCH			325.0100	374.1020.5	455.0605	460.5223		460.5244
0010	110+00	-	125+98	LI/R1	4	2	300	-	4085	4085	285	515	400	-	16	
0010	125+98	-	131+93	LI/R1	4	2	110	300	1585	1585	110	200	155	-	6	SE CURVE; 2' PAVED SHLD
0010	131+93	-	135+75	LT/RT	4	2	70	-	975	975	70	125	95	-	4	
0010	135+75	-	142+00	LT/RT	4	2	120	300	1665	1665	115	210	165	-	6	SE CURVE; 2' PAVED SHLD
0010	142+00	-	156+16	LT/RT	4	2	270	-	3615	3615	255	455	355	-	14	
0010	156+16	-	164+49	LT/RT	4	2	160	280	2220	2220	155	280	220	-	9	SE CURVE; 2' PAVED SHLD
0010	164+49	-	174+26	LT/RT	4	2	180	-	2495	2495	175	315	245	-	10	
0010	174+26	-	182+73	LT/RT	4	2	160	220	2260	2260	160	285	220	-	9	SE CURVE; 2' PAVED SHLD
0010	182+73	-	191+04	LT/RT	4	2	160	-	2125	2125	150	270	210	-	8	
0010	191+04	-	192+03	LT/RT	4	2	20	-	765	765	55	95	75	-	3	CTH E INTERSECTION
0010	192+03	-	196+76	LT/RT	4	2	90	-	1210	1210	85	150	120	-	5	
0010	DRIVEWAYS							110	-	-	-	-	-	170	-	
TOTAL 0010							1,750	1,100	23,000	23,000	1,615	2,900	2,260	170	90	

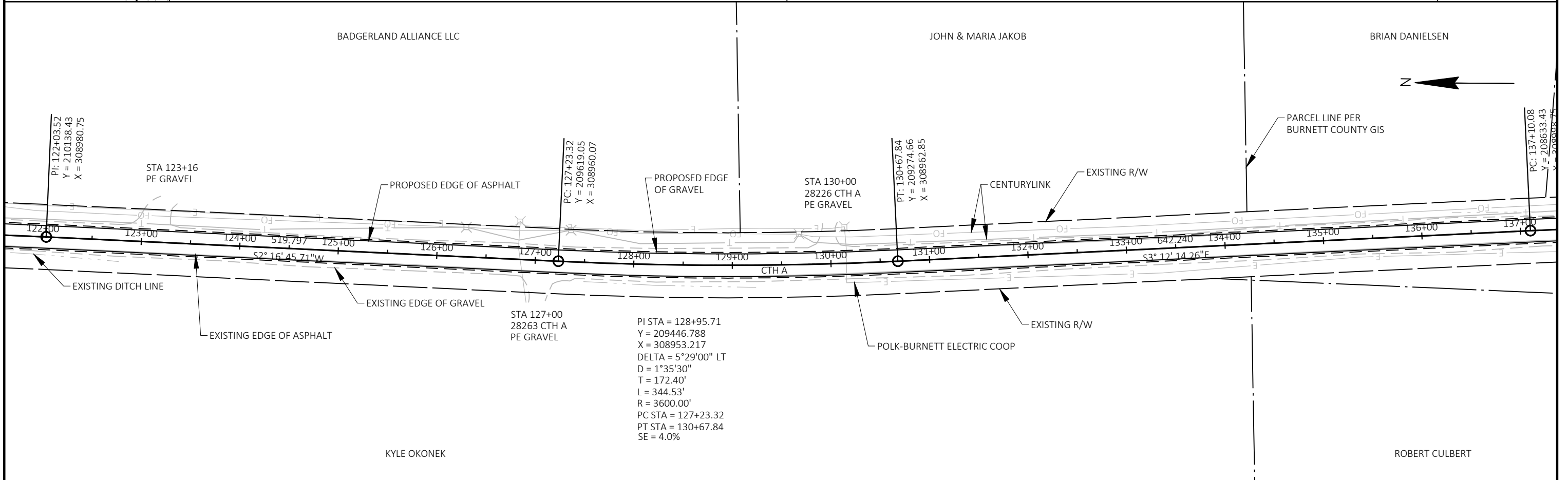
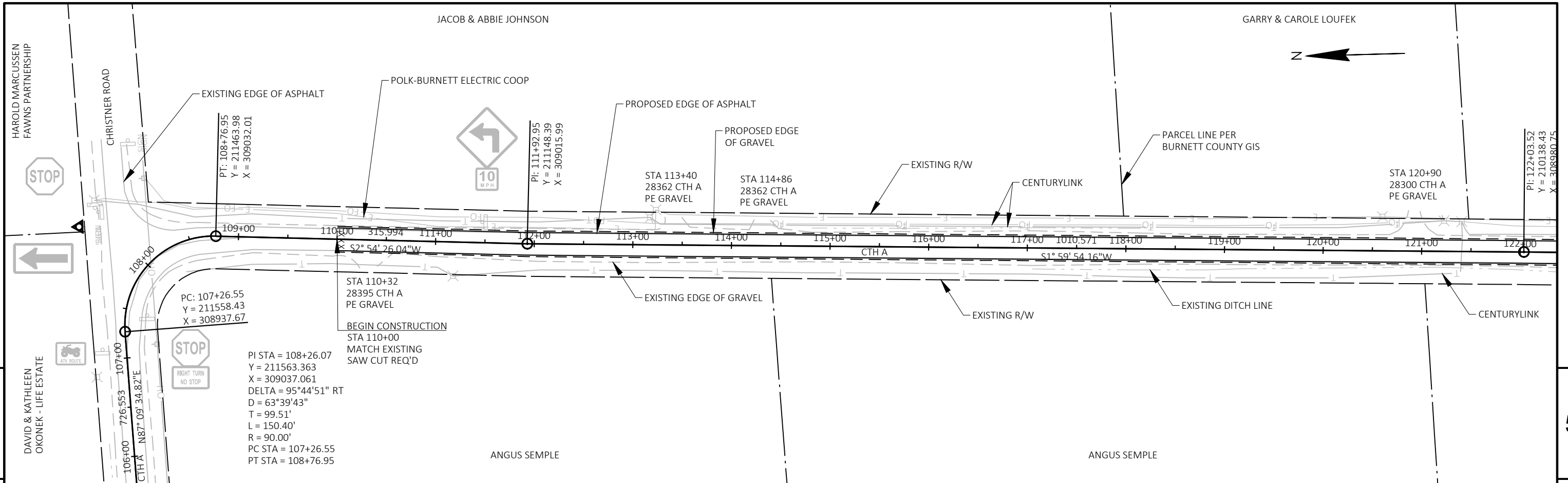
CATEGORY	DAYS	TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		REMARKS
		#	DAYS	#	DAYS	#	DAYS	
		643.0420		643.0705		643.0900		
0010	40	4	160	8	320	7	280	ADVANCE ROAD CLOSED DETAIL C NORTH SIDE
0010	40	4	160	8	320	4	160	SIDEROAD CLOSURE DETAIL 3 AT CTH E
0010	40	6	240	12	480	8	320	ADVANCED ROAD CLOSED DETAIL C SOUTH SIDE
TOTAL 0010		560		1,120		760		

CATEGORY	STATION	TO	STATION	SIDE	MARKING LINE PAINT 4-INCH	MARKING LINE PAINT 4-INCH, YELLOW	MARKING LINE PAINT 4-INCH, WHITE	LOCATING NO-PASSING ZONES	REMARKS
					646.1005	*	*	648.0100	
					LF	LF	LF	MI	
0010	110+00	-	196+76	CL	17352	17352	-	1.64	DOUBLE YELLOW CENTERLINE
0010	110+00	-	190+81	LT	8081	-	8081	-	LT WHITE EDGELINE
0010	110+00	-	191+04	RT	8104	-	8104	-	RT WHITE EDGELINE
0010	191+95	-	196+76	RT	481	-	481	-	RT WHITE EDGELINE
0010	192+03	-	196+76	LT	473	-	473	-	RT WHITE EDGELINE
TOTAL 0010					34491	17352	17139	1.64	

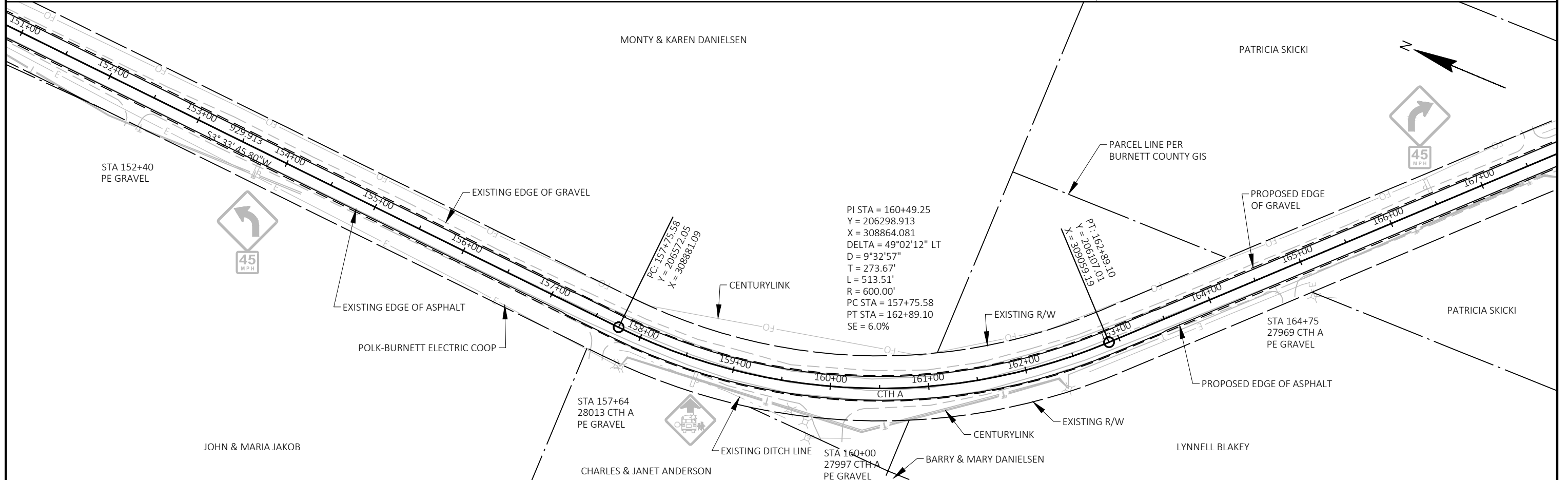
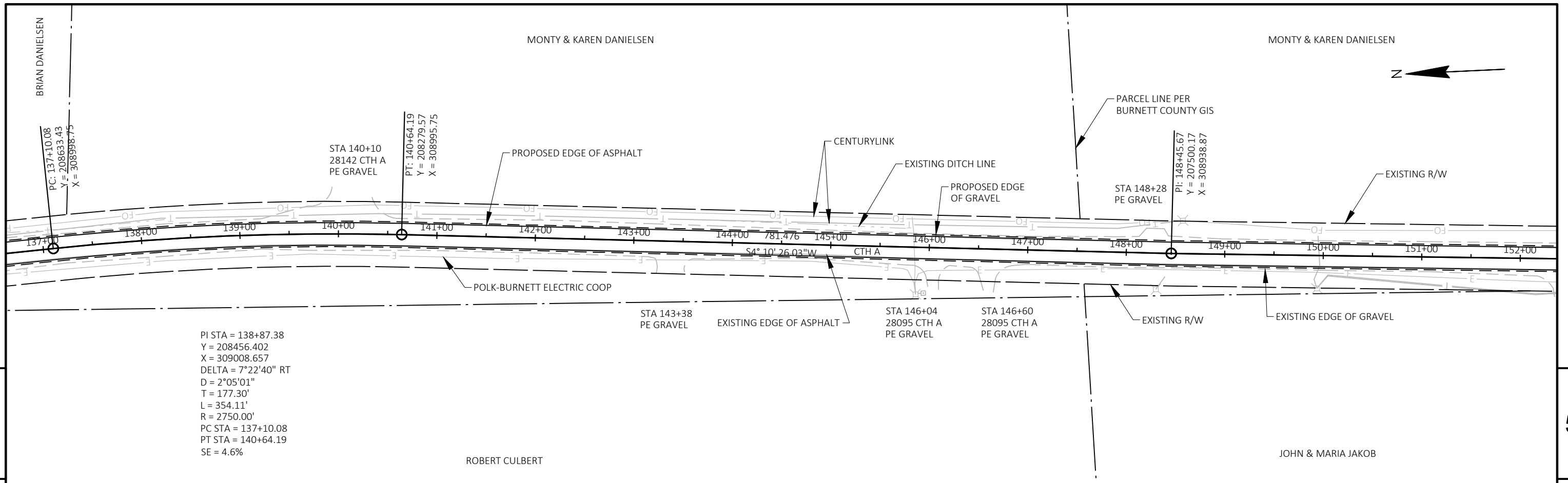
*FOR INFORMATION ONLY

CATEGORY	STATION	TO	STATION	REMARKS	CONSTRUCTION STAKING	
					CONSTRUCTION STAKING BASE	RESURFACING REFERENCE
					650.5000	650.8000
0010	110+00	-	125+98		-	1,598
0010	125+98	-	131+93	SE CURVE	594	594
0010	131+93	-	135+75			382
0010	135+75	-	142+00	SE CURVE	625	625
0010	142+00	-	156+16			1,416
0010	156+16	-	164+49	SE CURVE	834	834
0010	164+49	-	174+26			977
0010	174+26	-	182+73	SE CURVE	847	847
0010	182+73	-	196+76			1,403
TOTAL 0010					2,900	8,676

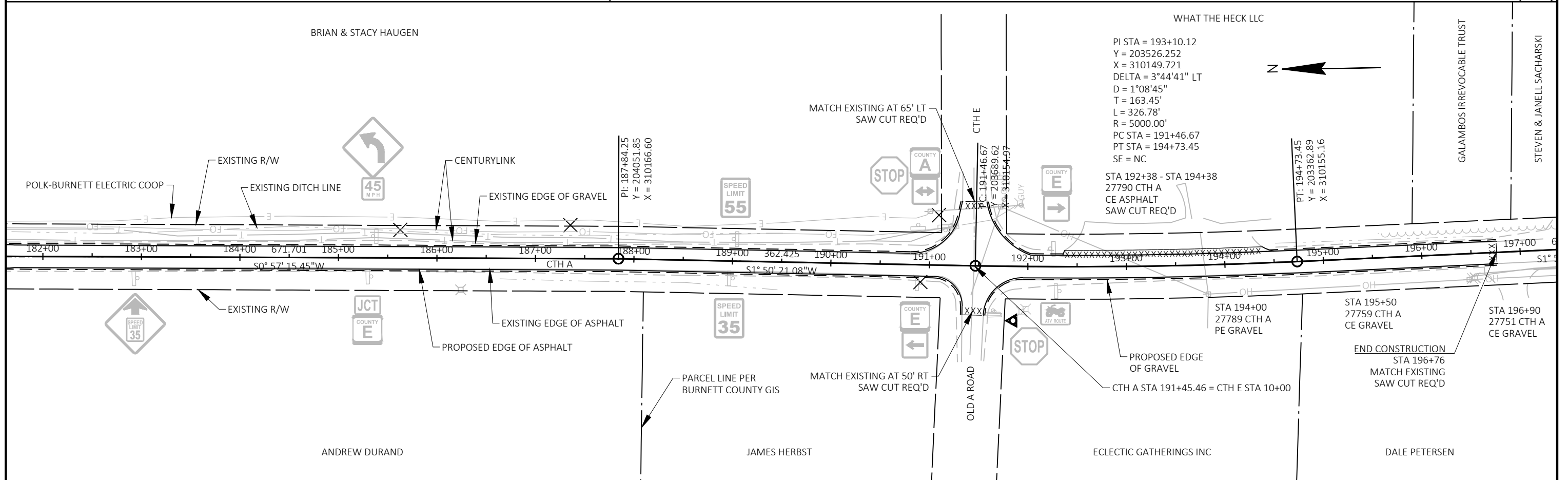
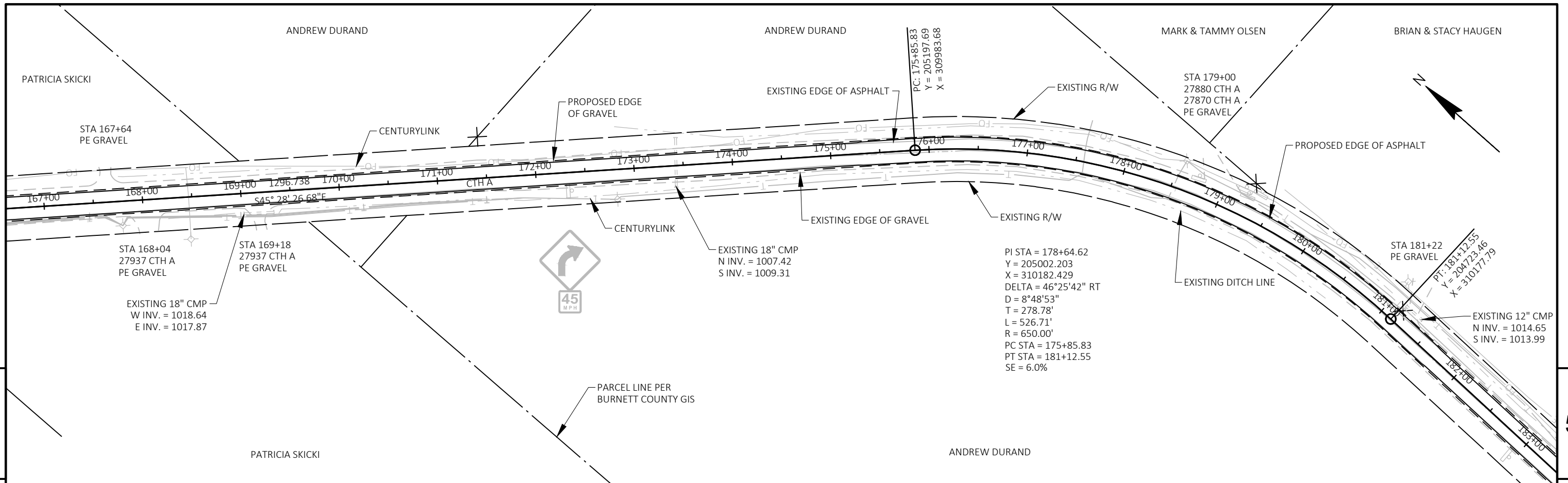
CATEGORY	STATION	TO	STATION	SIDE	SAWING ASPHALT	REMARKS
					690.0150	
LF	LF					
0010	110+00			LT/RT	22	BEGIN PROJECT
0010	191+45			LT	24	CTH E
0010	191+45			RT	22	OLD A RD
0010	192+38	-	194+38	LT	200	DRIVEWAY
0010	196+76			LT/RT	22	END PROJECT
					290	



PROJECT NO: 8802-00-70	HWY: CTH A	COUNTY: BURNETT	PLAN : CTH A	SHEET	E
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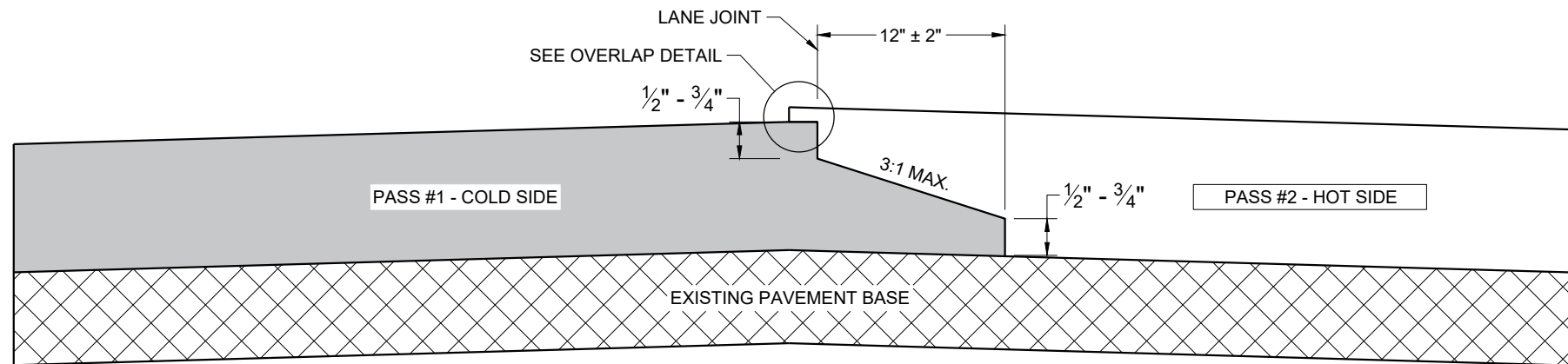
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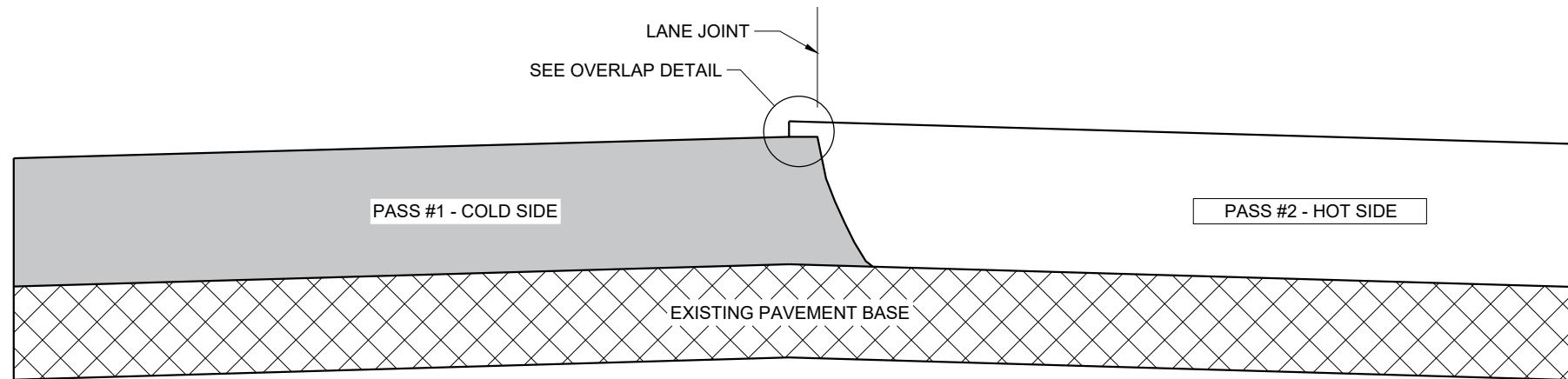
PROJECT NO: 8802-00-70	HWY: CTH A	COUNTY: BURNETT	PLAN : CTH A	SHEET	E
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Standard Detail Drawing List

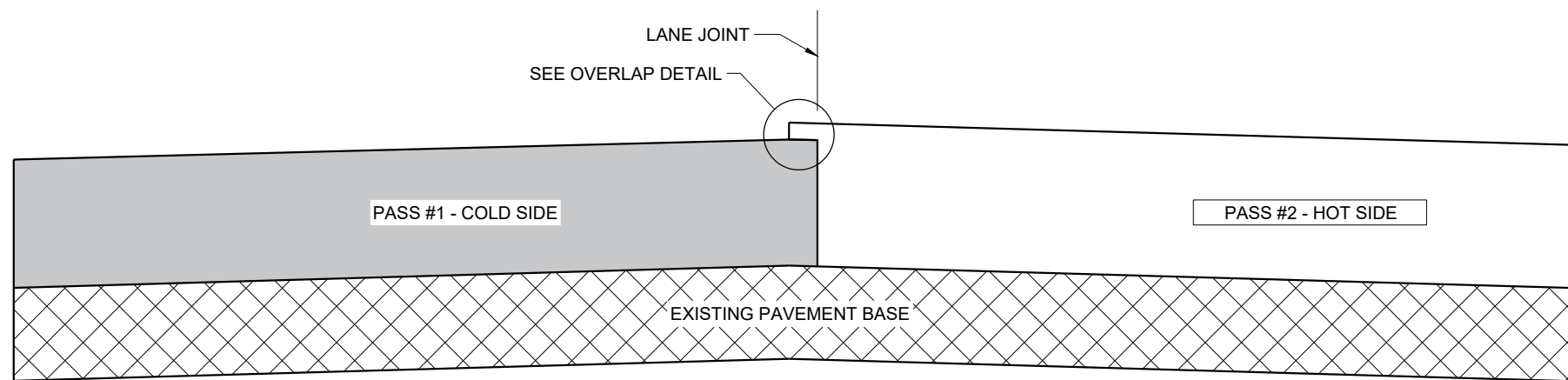
13C19-03	HMA LONGITUDINAL JOINTS
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



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

GENERAL NOTES

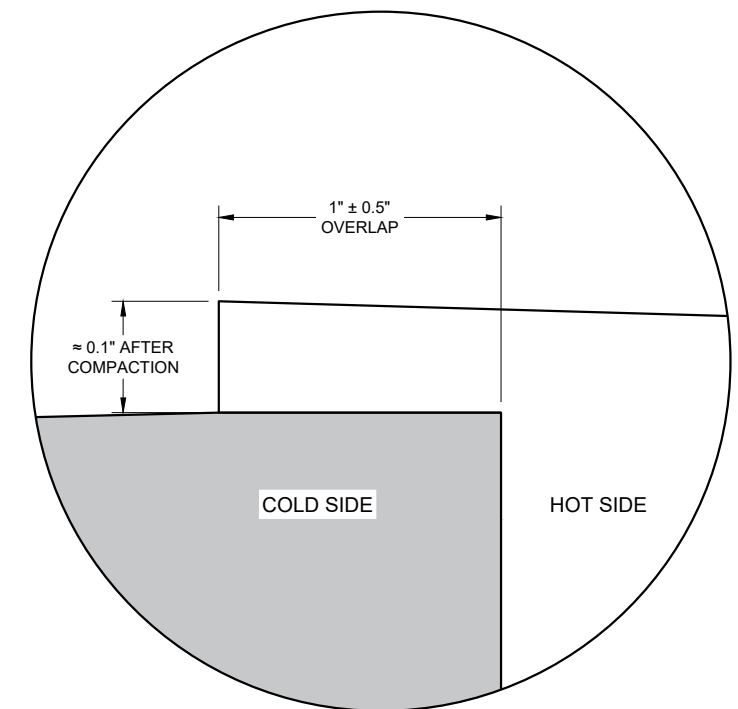
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

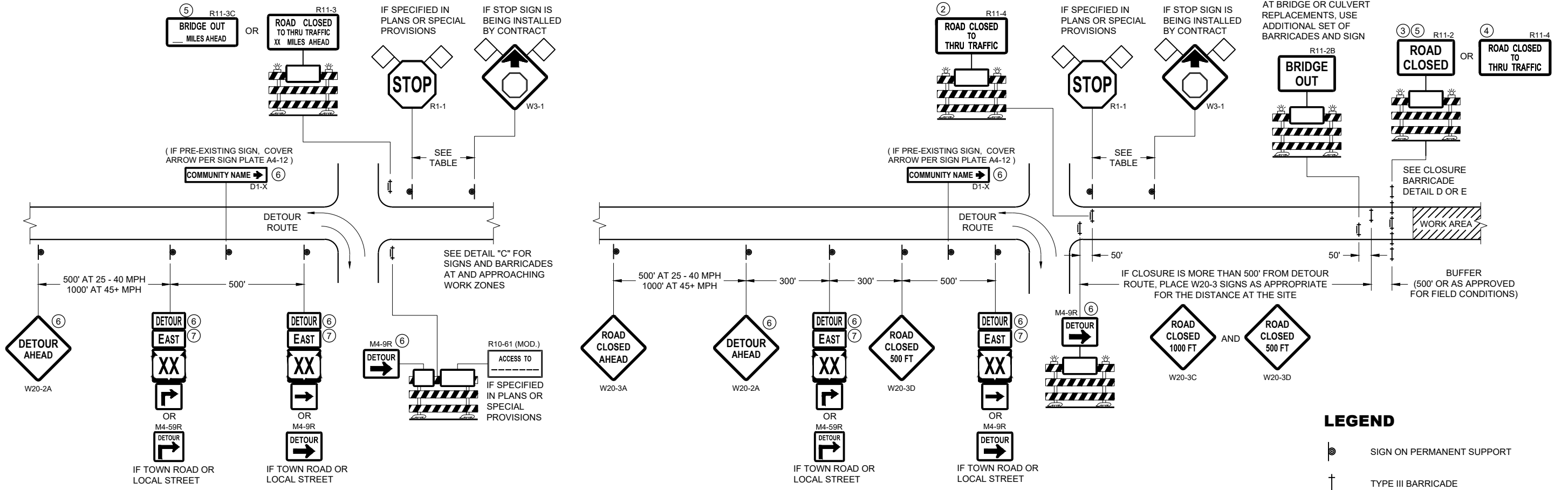
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6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
FHWA	



**DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

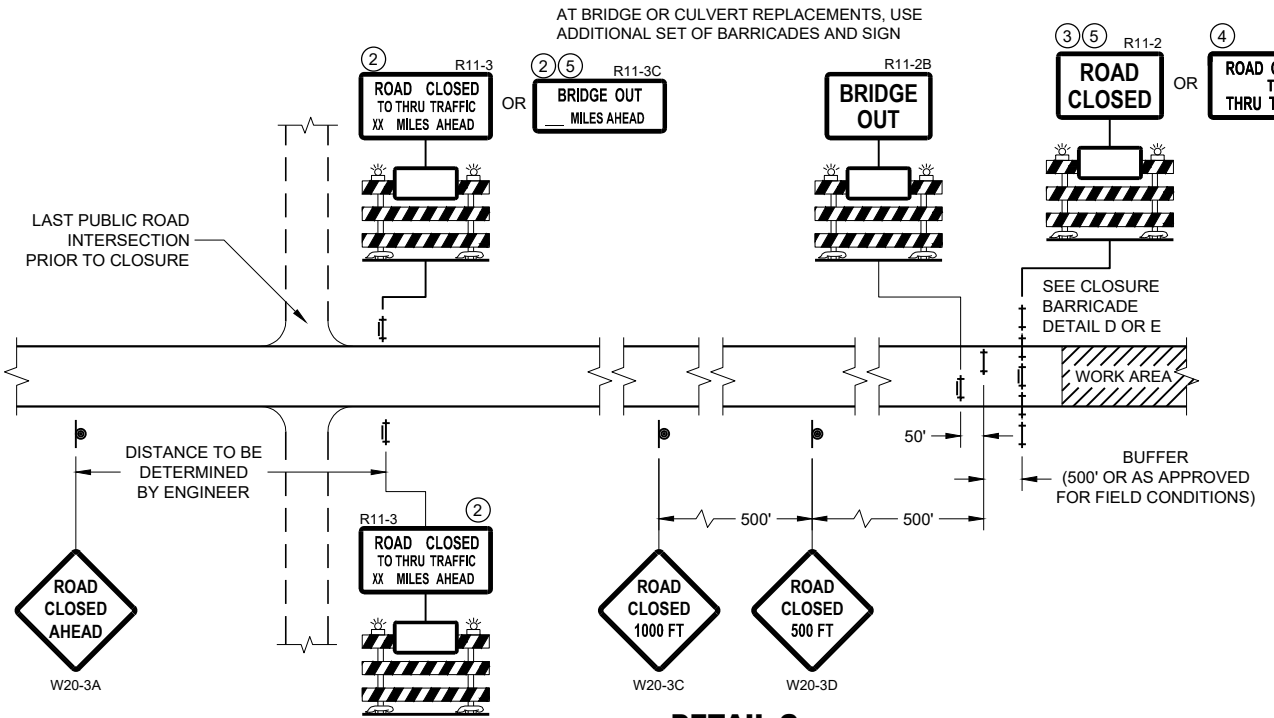
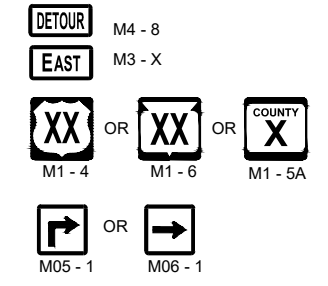
**DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE LESS THAN 1/2 MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

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

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



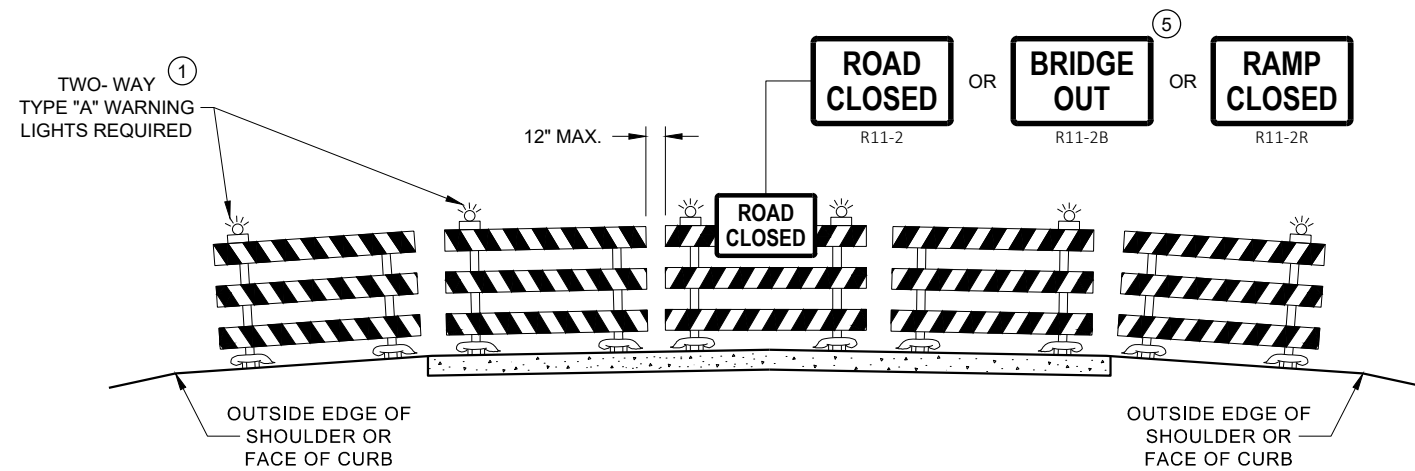
**DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR**

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

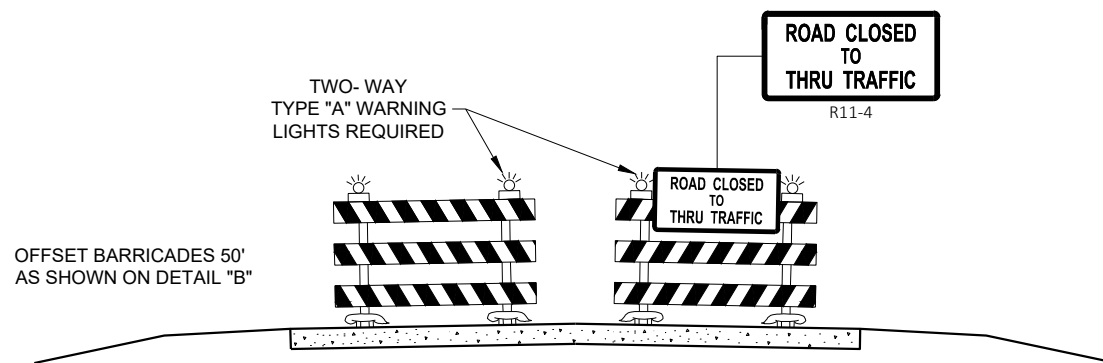
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



**DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW**



**DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

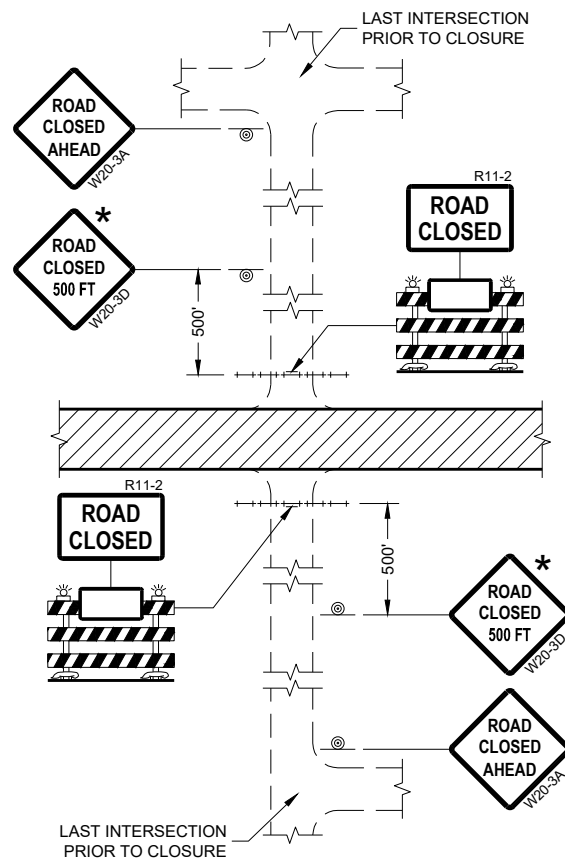
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24"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

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

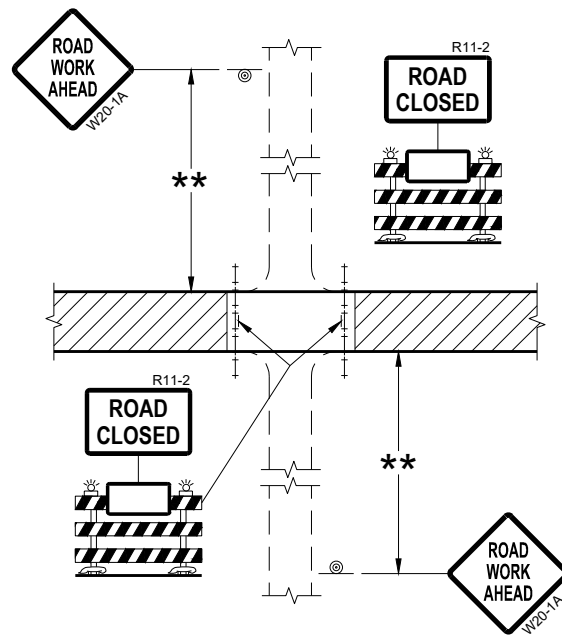
**BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

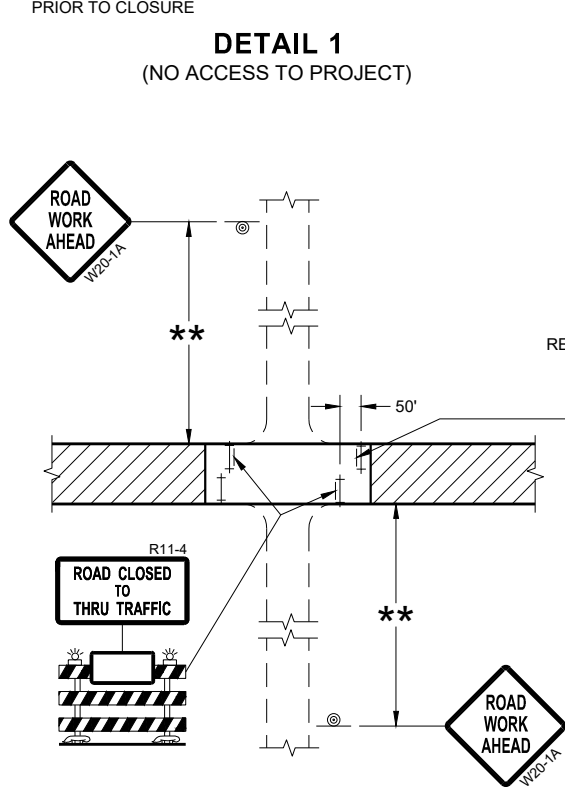
APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



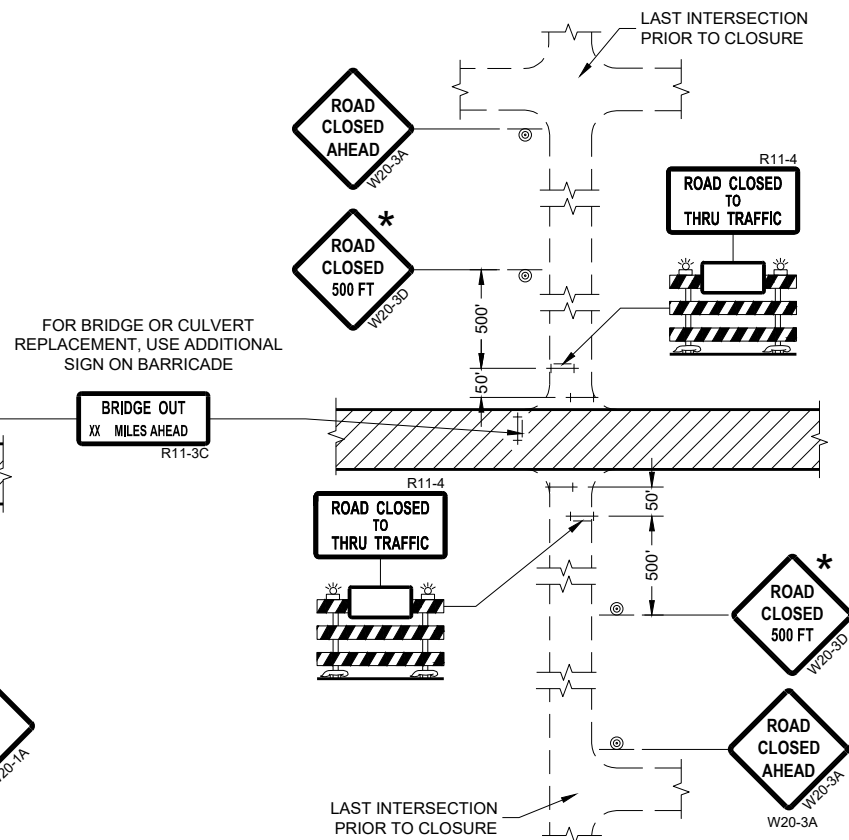
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

LEGEND

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

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




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

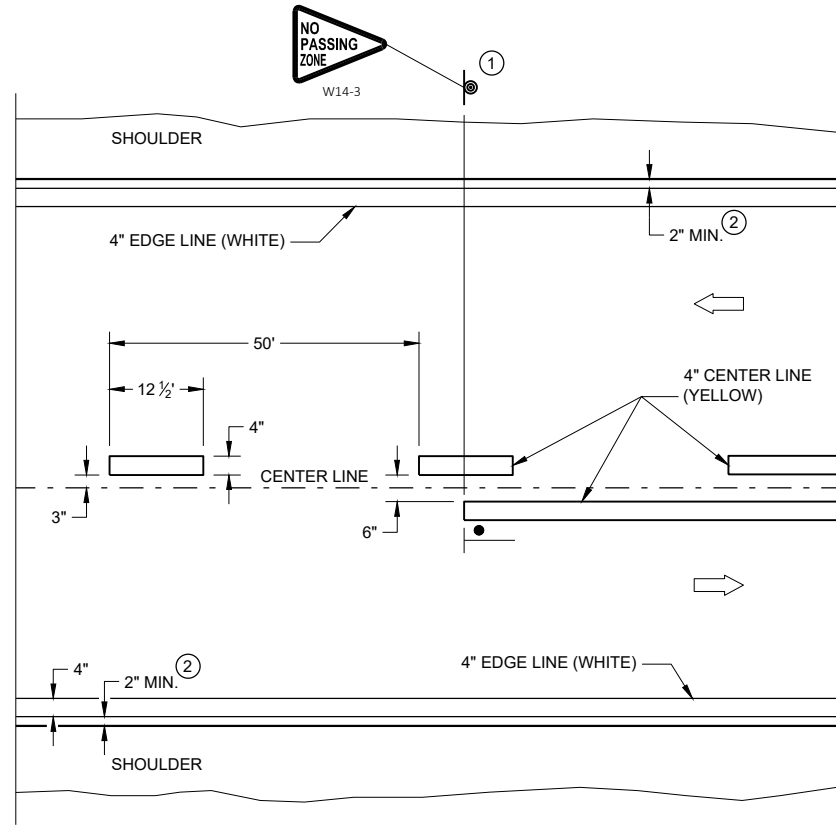
GENERAL NOTES

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

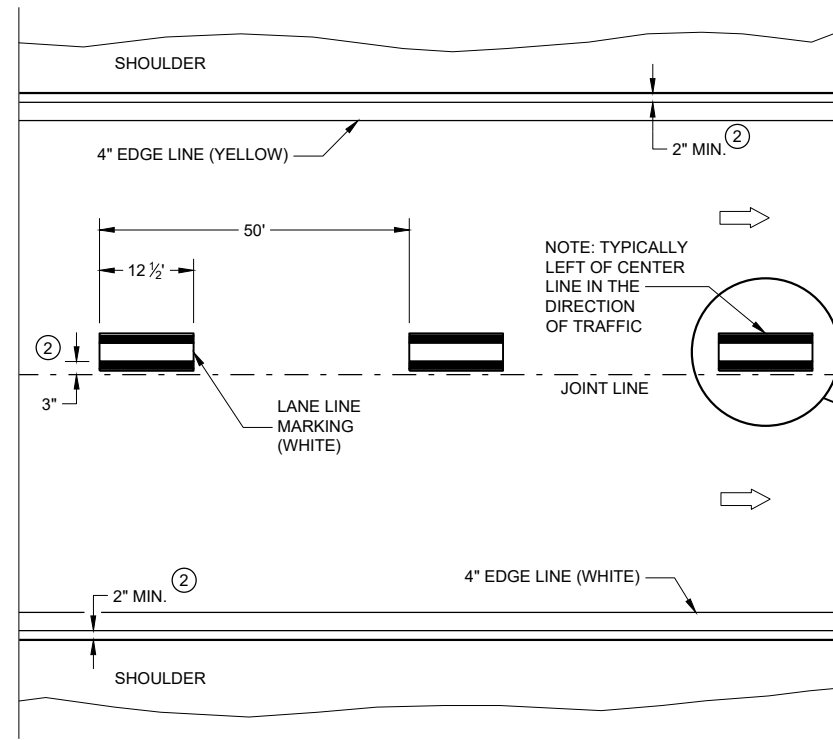
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

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

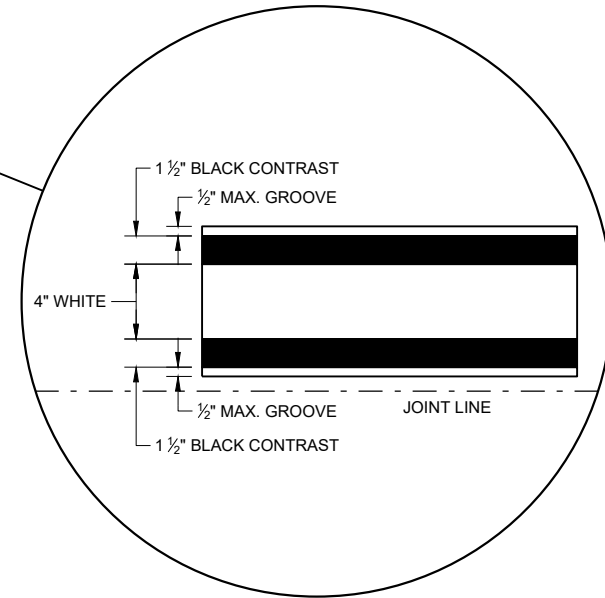


TWO WAY TRAFFIC



ONE WAY TRAFFIC

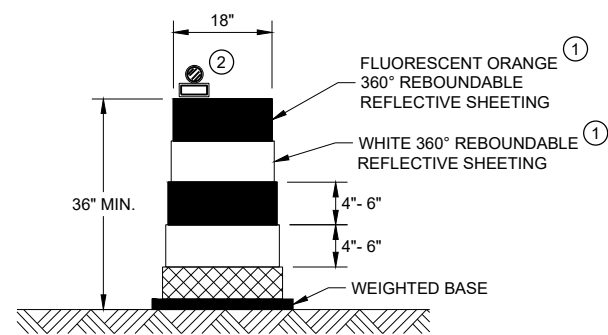
PERMANENT PAVEMENT MARKING



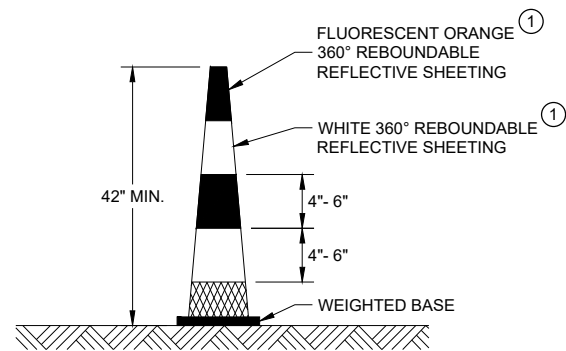
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: May 2022 /S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING ENGINEER

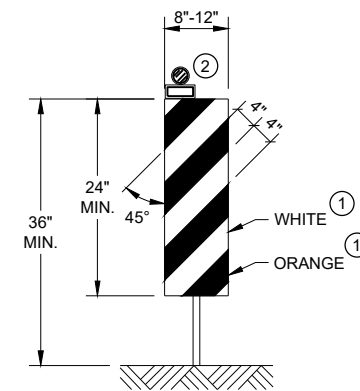


DRUM



42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS

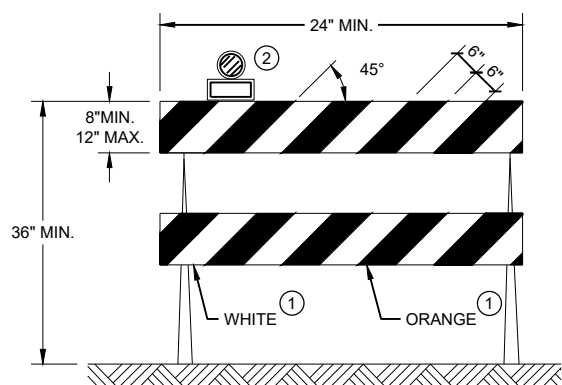


VERTICAL PANEL

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

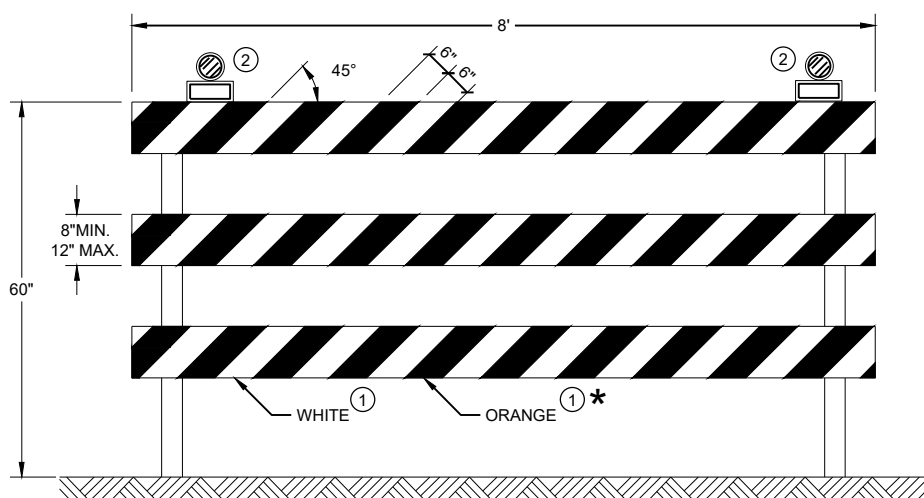
GENERAL NOTES

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



TYPE II BARRICADE

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



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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