

EAU

PROJECT ID: 8911-00-70

COUNTY: CHIPPEWA

NOVEMBER 2022

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.	0	Cross Sections

TOTAL SHEETS = 22



60

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	110
A.A.D.T.	(2042)	=	121
D.H.V.		=	N/A
D.D.		=	50/50
T.		=	8.5%
DESIGN SPEED		=	55 MPH
ESALS		=	15,000

CONVENTIONAL SYMBOLS

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

ROCK
LABEL
96.56
E
FO
G
OH
SAN
SS
T
W
W
W

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STH 40 - TILDEN

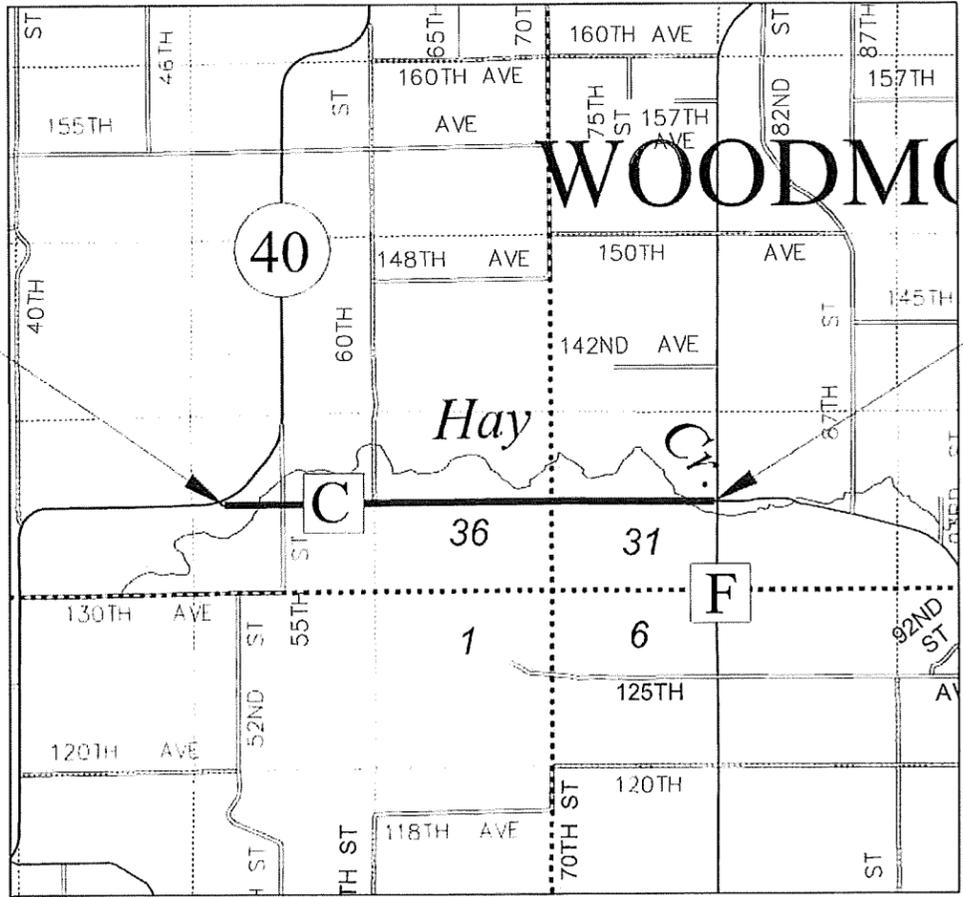
STH 40 TO CTH F

CTH C

CHIPPEWA COUNTY

STATE PROJECT NUMBER
8911-00-70

R-10-W R-9-W



BEGIN PROJECT
STA 10+00
X: 126,652.237
Y: 166,648.095

END PROJECT
STA 156+20

LAYOUT
SCALE 0 1 MI
TOTAL NET LENGTH OF CENTERLINE = 2.769 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), CHIPPEWA 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 18

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8911-00-70	WISC 2023082	1

ACCEPTED FOR CHIPPEWA COUNTY.
DATE: 7-25-22
(Signature)
Highway Commissioner
(Title of Official)

ORIGINAL PLANS PREPARED BY
CORRE
ENGINEERING
MADISON | EAU CLAIRE | APPLETON | WAUKESHA | TOMAH | WITTENBERG

WISCONSIN PROFESSIONAL ENGINEER
KEVIN L. MEYER
E-38309-006
ELK MOUND WI
DATE: 7/25/22
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PREPARED BY
Surveyor: CORRE, INC.
Designer: CORRE, INC.
Project Manager: MATTHEW THORNTSEN, PE
Regional Examiner: TONY YANG, PE
Regional Supervisor: TYLER RONGSTAD, PE

APPROVED FOR THE DEPARTMENT
DATE: 7/26/2022
(Signature)

E

GENERAL NOTES

BEARINGS SHOWN ON THE PLAN ARE REFERENCED TO THE EXISTING ROADWAY CENTERLINE AND ARE ASSUMED. ALIGNMENT DATA IS APPROXIMATE AND INCLUDED FOR INFORMATIONAL USE ONLY.

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OF THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER.

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

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

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/INCH.

SECTION CORNER MONUMENTS WILL BE IMPACTED BY THE PROJECT AND ARE SHOWN WITHIN THE CONSTRUCTION PLANS. THE CHIPPEWA COUNTY SURVEYOR'S OFFICE WILL PERPETUATE AND RE-MONUMENT ANY EFFECTED CORNERS OUTSIDE OF THE PROJECT. CONTACT THE SURVEYOR'S OFFICE PRIOR TO CONSTRUCTION AND AGAIN AT THE COMPLETION OF PAVING OPERATIONS SO THE SURVEYOR'S OFFICE CAN PLAN THEIR RE-MONUMENTATION WORK.

ORDER OF SECTION 2 SHEETS

- GENERAL NOTES
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 22.2 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.0 ACRES

CONSULTANT CONTACT

CORRE, INC.
 KEVIN MEYER, P.E.
 1802 WARDEN ST
 EAU CLAIRE, WI 54703
 PHONE: 715-299-1894
 EMAIL: KMEYER@CORREINC.COM

COUNTY CONTACT

CHIPPEWA COUNTY HIGHWAY DEPARTMENT
 FRED ANDERSON, P.E.
 801 EAST GRAND AVE
 CHIPPEWA FALLS, WI 54729
 PHONE: 715-738-2610
 EMAIL: FANDERSON@CO.CHIPPEWA.WI.US

DNR CONTACT

DNR WEST CENTRAL REGION HQ
 LEAH NICOL
 1300 WEST CLAIREMONT AVE
 EAU CLAIRE, WI 54701
 PHONE: 715-934-9014
 EMAIL: LEAH.NICOL@WISCONSIN.GOV

UTILITY CONTACTS

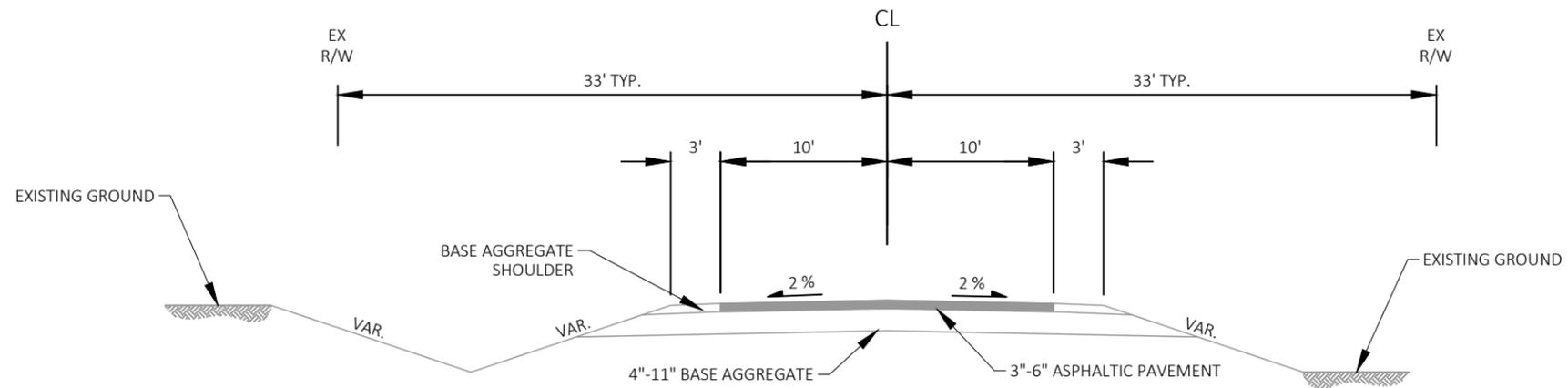
BLOOMER TELEPHONE COMPANY
 TRAVIS MCFARLANE
 1120 15TH AVENUE
 BLOOMER, WI 54724
 PHONE: 715-993-4460
 EMAIL: TRAVIS.MCFARLANE@BLOOMER.NET

CHIPPEWA VALLEY ELECTRIC COOPERATIVE
 NIC ALBERSON
 317 SOUTH 8TH STREET
 PO BOX 575
 CORNELL, WI 54732
 PHONE: 715-239-6800
 EMAIL: NALBERSON@CVE.COOP

XCEL ENERGY
 DAVID MELSNESS
 P.O. BOX 8
 EAU CLAIRE, WI 54702
 PHONE: 715-737-1495
 EMAIL: DAVID.J.MELSNESS@XCELENERGY.COM

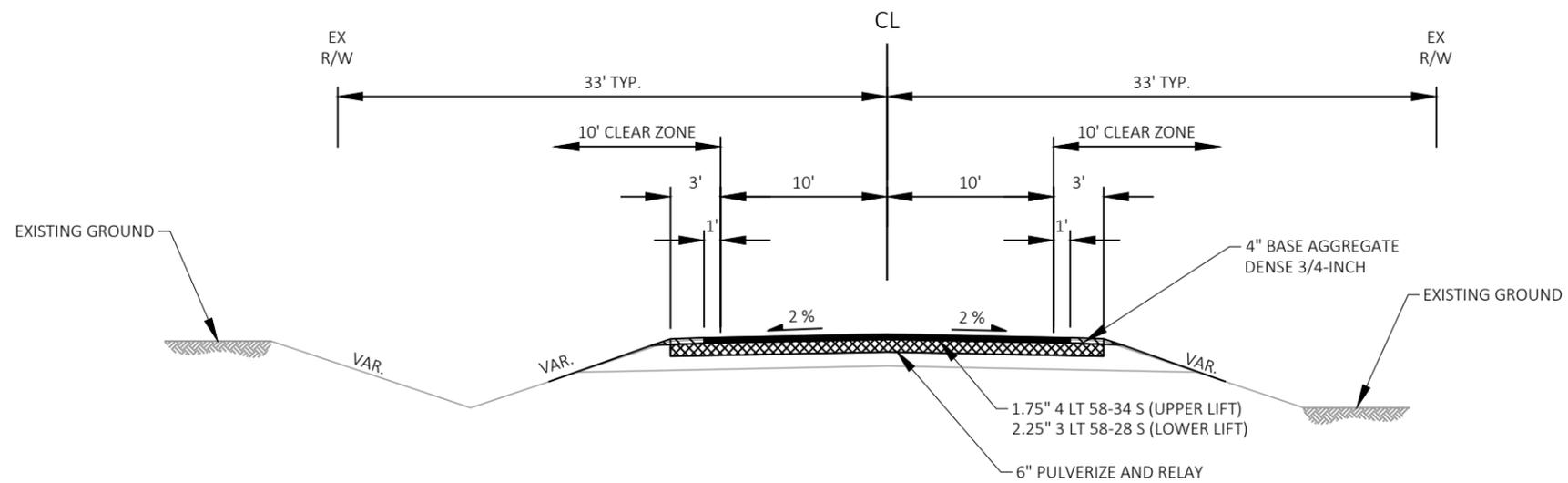
CTH C BORING LOG			
BORING NO	STATION	LANE	ASPHALTIC PAVEMENT DEPTH (IN)
B-01	18+33	EB	5.50
B-02	18+33	CL	5.50
B-03	78+33	WB	6.00
B-04	78+33	CL	4.00
B-05	138+33	EB	6.25
B-06	138+33	CL	5.75

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



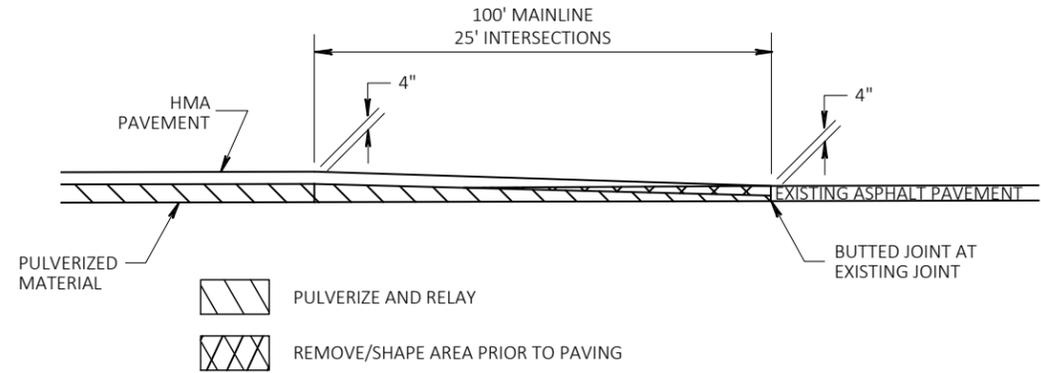
EXISTING TYPICAL SECTION

STA 10+00 - 147+62
STA 148+22 - 156+20

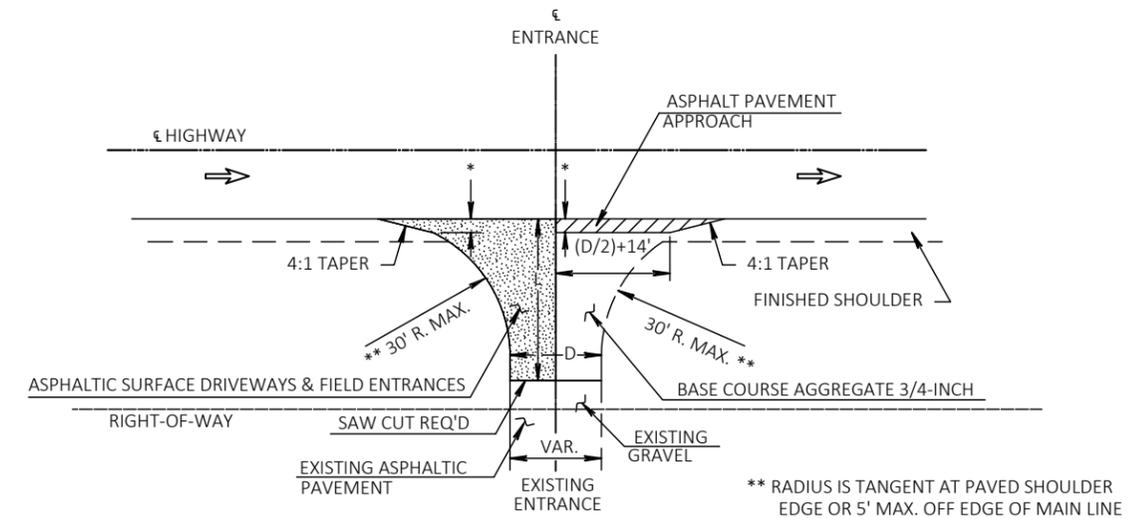


FINISHED TYPICAL SECTION

STA 10+00 - 147+62
STA 148+22 - 156+20



DETAIL OF ASPHALTIC SURFACE BUTT JOINT

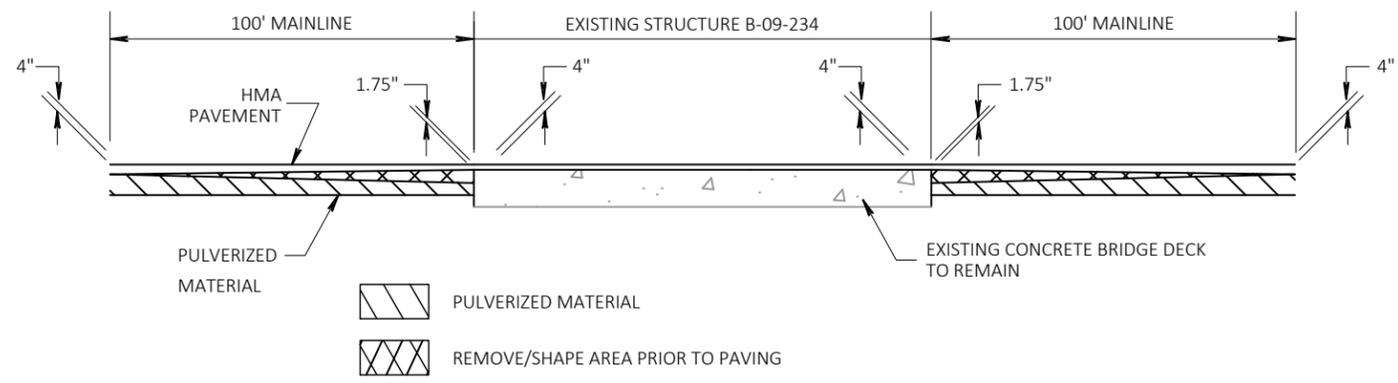


L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

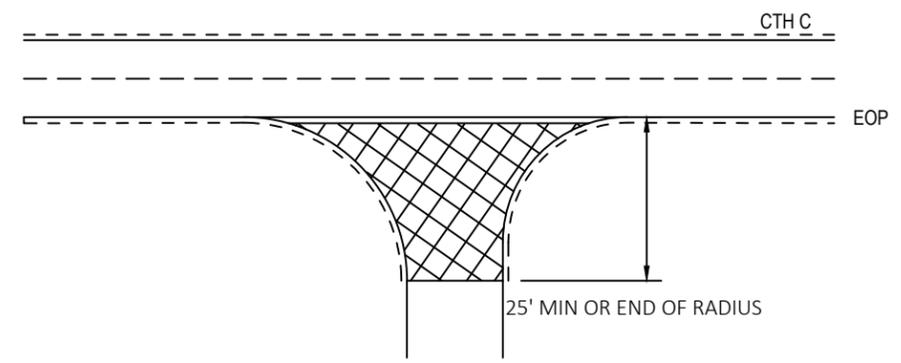
D=MATCH EXISTING DRIVEWAY WIDTH

PLAN VIEW

RURAL DRIVEWAY INTERSECTION (PE, FE & CE)



STRUCTURE OVERLAY DETAIL
STA 147+62 - STA 148+22



REMOVING ASPHALTIC SURFACE BUTT JOINTS SEE BUTT JOINT DETAIL

SIDE ROADS
WITHOUT CURB AND GUTTER

Estimate Of Quantities

8911-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	223.000	223.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,450.000	1,450.000
0006	213.0100	Finishing Roadway (project) 01. 8911-00-70	EACH	1.000	1.000
0008	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,090.000	2,090.000
0010	325.0100	Pulverize and Relay	SY	42,500.000	42,500.000
0012	374.1020.S	QMP Pulverize and Relay Compaction	SY	42,500.000	42,500.000
0014	455.0605	Tack Coat	GAL	2,570.000	2,570.000
0016	460.2000	Incentive Density HMA Pavement	DOL	5,250.000	5,250.000
0018	460.5223	HMA Pavement 3 LT 58-28 S	TON	4,610.000	4,610.000
0020	460.5244	HMA Pavement 4 LT 58-34 S	TON	3,590.000	3,590.000
0022	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	27.000	27.000
0024	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8911-00-70	EACH	1.000	1.000
0026	619.1000	Mobilization	EACH	1.000	1.000
0028	624.0100	Water	MGAL	264.000	264.000
0030	642.5001	Field Office Type B	EACH	1.000	1.000
0032	643.0900	Traffic Control Signs	DAY	866.000	866.000
0034	643.1000	Traffic Control Signs Fixed Message	SF	64.000	64.000
0036	643.3105	Temporary Marking Line Paint 4-Inch	LF	13,500.000	13,500.000
0038	643.5000	Traffic Control	EACH	1.000	1.000
0040	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	29,240.000	29,240.000
0042	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	15,450.000	15,450.000
0044	648.0100	Locating No-Passing Zones	MI	2.770	2.770
0046	650.8000	Construction Staking Resurfacing Reference	LF	14,620.000	14,620.000
0048	650.9911	Construction Staking Supplemental Control (project) 01. 8911-00-70	EACH	1.000	1.000
0050	690.0150	Sawing Asphalt	LF	123.000	123.000
0052	740.0440	Incentive IRI Ride	DOL	10,000.000	10,000.000
0054	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0056	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000

3

204.0110
REMOVING
ASPHALTIC
SURFACE

CATEGORY	STATION	LOCATION	SY	REMARKS
0010	41+39	RT	34	PE
0010	61+86	LT	33	PE
0010	68+17	LT	31	PE
0010	77+52	RT	25	PE
0010	94+64	RT	26	PE
0010	103+13	LT	40	PE
0010	155+00	RT	34	PE
TOTAL 0010			223	

204.0115
REMOVING
ASPHALTIC
SURFACE BUTT
JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	10+00	-	11+00	ML	245	CTH C
0010	27+70	-	-	LT	200	55TH ST
0010	27+70	-	-	RT	110	55TH ST
0010	54+15	-	-	LT	150	60TH ST
0010	146+70	-	147+70	ML	250	B-09-234
0010	148+25	-	149+25	ML	250	B-09-234
0010	155+20	-	156+20	ML	245	CTH C
TOTAL 0010					1,450	

3

305.0110
BASE AGGREGATE
DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
0010	10+00	-	156+20	LT	960	SHOULDERS
0010	10+00	-	156+20	RT	960	SHOULDERS
0010	10+00	-	156+20	LT & RT	170	DRIVEWAYS
TOTAL 0010					2,090	

325.0100
PULVERIZE AND
RELAY
SY

374.1020.S
QMP PULVERIZE
AND RELAY
COMPACTION
SY

CATEGORY	STATION	TO	STATION	LOCATION	SY	SY	REMARKS
0010	10+00	-	147+70	ML	40,000	40,000	BOP TO B-09-234
0010	148+25	-	156+20	ML	2,500	2,500	B-09-234 TO EOP
TOTAL 0010					42,500	42,500	

455.0605
TACK COAT
GAL

460.5223
HMA PAVEMENT 3
LT 58-28 S
TON

460.5244
HMA PAVEMENT 4
LT 58-34 S
TON

CATEGORY	STATION	TO	STATION	LOCATION	GAL	TON	TON	REMARKS
0010	10+00	-	156+20	ML	2,510	4,520	3,520	BOP TO EOP
0010	27+70	-	-	LT	25	40	30	55TH ST
0010	27+70	-	-	RT	15	20	15	55TH ST
0010	54+15	-	-	LT	20	30	25	60TH ST
TOTAL 0010					2,570	4,610	3,590	

465.0120
ASPHALTIC
SURFACE
DRIVEWAYS
AND FIELD
ENTRANCES
TON

CATEGORY	STATION	LOCATION	TON	REMARKS
0010	41+39	RT	4	PE
0010	61+86	LT	4	PE
0010	68+17	LT	4	PE
0010	77+52	RT	3	PE
0010	94+64	RT	3	PE
0010	103+13	LT	5	PE
0010	155+00	RT	4	PE
TOTAL 0010			27	

3

CATEGORY	STATION	TO	STATION	LOCATION	624.0100 WATER MGAL	REMARKS
0010	10+00	-	156+20	ML	9	SHOULDERS
0010	10+00	-	156+20	ML	255	PULVERIZE & RELAY
TOTAL 0010					264	

CATEGORY	LOCATION	DAYS	DEVICES	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1000 TRAFFIC CONTROL SIGNS FIXED MESSAGE SF	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	PROJECT	38	18	684	-	1	ADVANCED WARNING
0010	PROJECT	14	13	182	-	-	PULVERIZE
0010	PROJECT	-	-	-	64	-	G20-57 PRE-WARNING
TOTAL 0010				866	64	1	

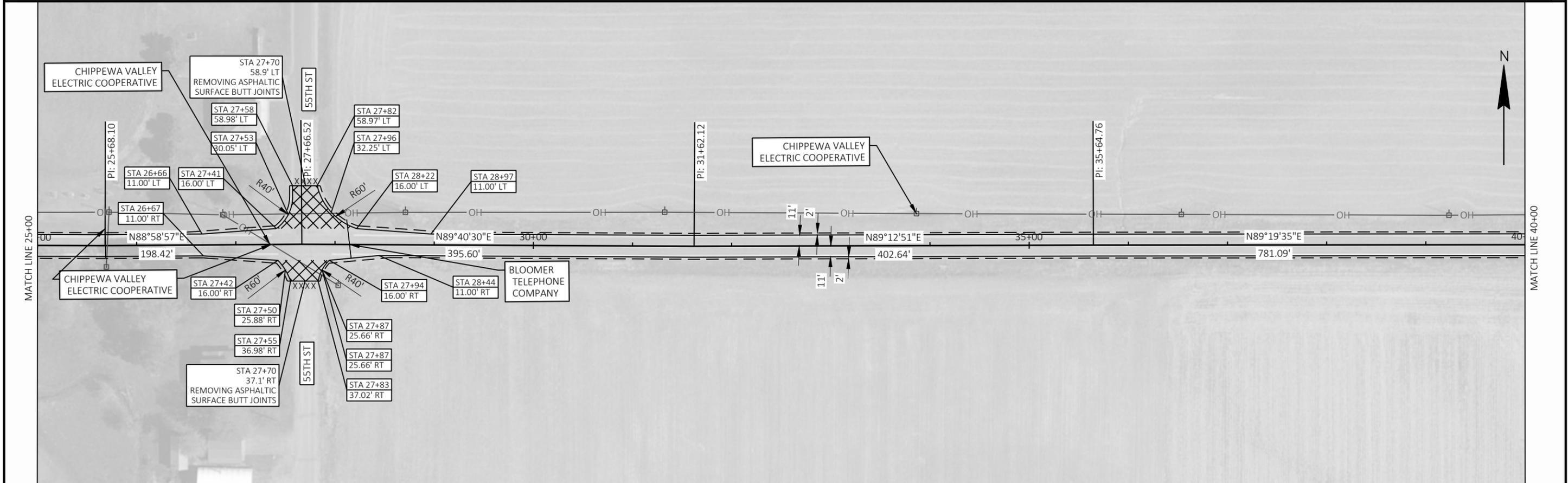
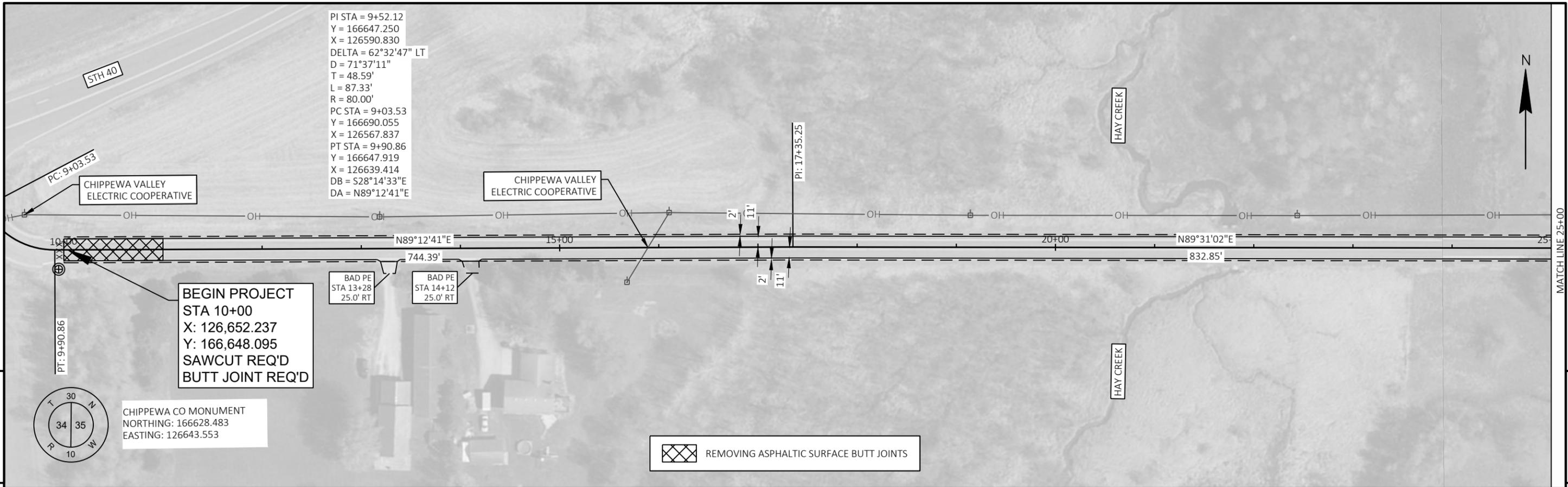
3

CATEGORY	STATION	TO	STATION	LOCATION	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4- INCH LF	646.4520 MARKING LINE SAME DAY EPOXY 4-INCH LF	REMARKS
0010	10+00	-	156+20	CL	13,500	-	-	LOWER LIFT YELLOW CL
0010	10+00	-	156+20	CL	-	-	15,450	UPPER LIFT YELLOW CL
0010	10+00	-	156+20	LT	-	14,620	-	WHITE EDGE LINE
0010	10+00	-	156+20	RT	-	14,620	-	WHITE EDGE LINE
TOTAL 0010					13,500	29,240	15,450	

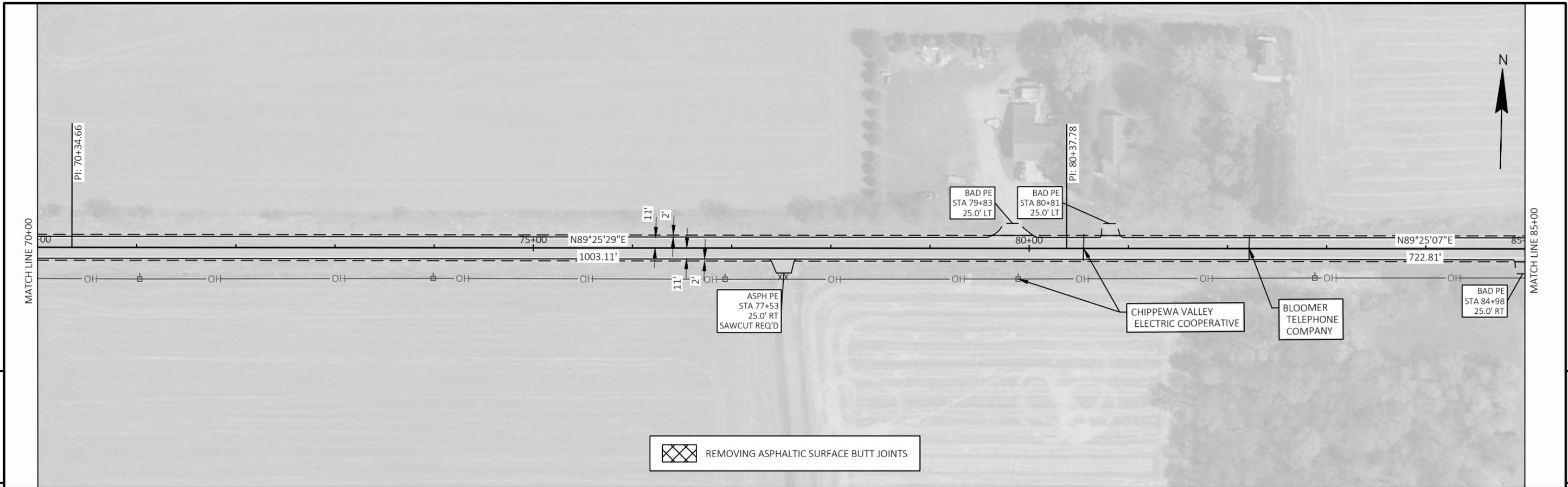
CATEGORY	STATION	TO	STATION	LOCATION	648.0100 LOCATING NO- PASSING ZONES MI
0010	10+00	-	156+20	PROJECT	2.77
TOTAL 0010					2.77

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 8911-00-70) EACH
0010	10+00	-	156+20	PROJECT	14,620	1
TOTAL 0010					14,620	1

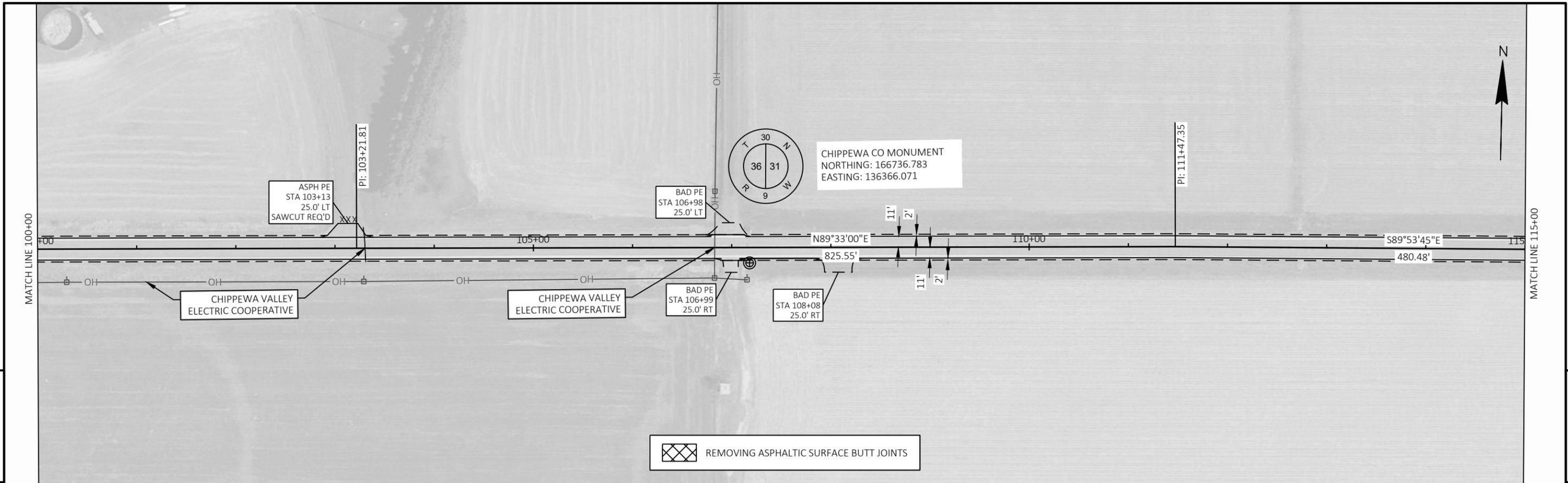
CATEGORY	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	41+39	RT	24	PE
0010	61+86	LT	15	PE
0010	68+17	LT	14	PE
0010	77+52	RT	14	PE
0010	94+64	RT	14	PE
0010	103+13	LT	20	PE
0010	155+00	RT	22	PE
TOTAL 0010			123	



PROJECT NO: 8911-00-70	HWY: CTH C	COUNTY: CHIPPEWA	PLAN SHEETS	SHEET	E
------------------------	------------	------------------	-------------	-------	---



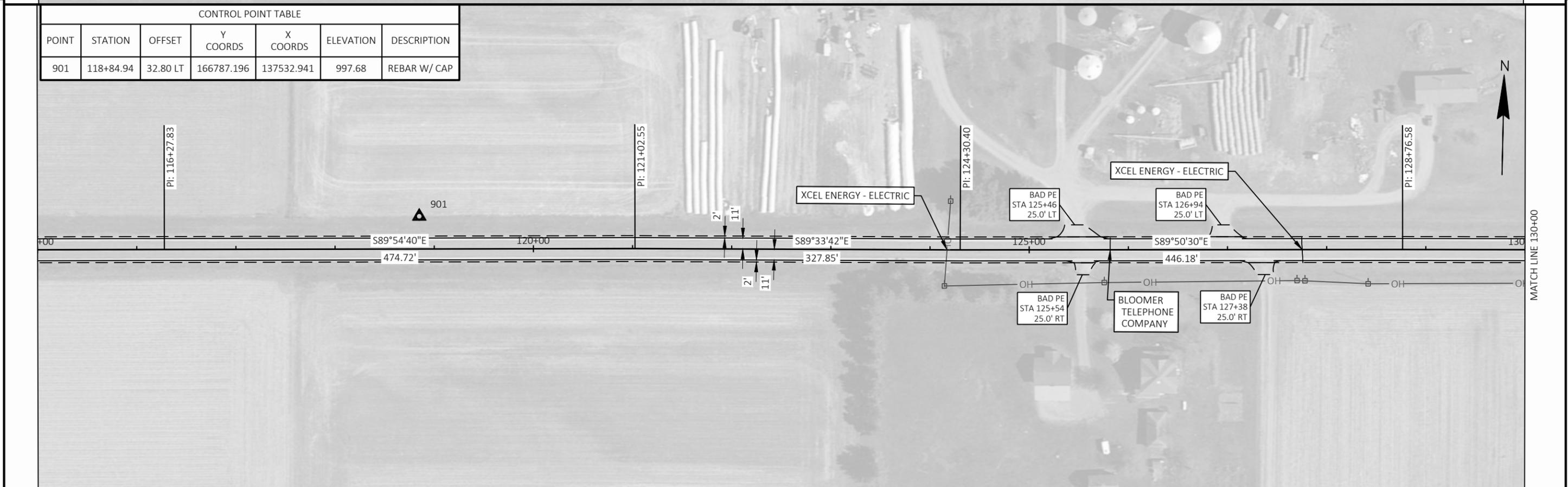
PROJECT NO: 8911-00-70	HWY: CTH C	COUNTY: CHIPPEWA	PLAN SHEETS	SHEET	E
------------------------	------------	------------------	-------------	-------	----------



5

5

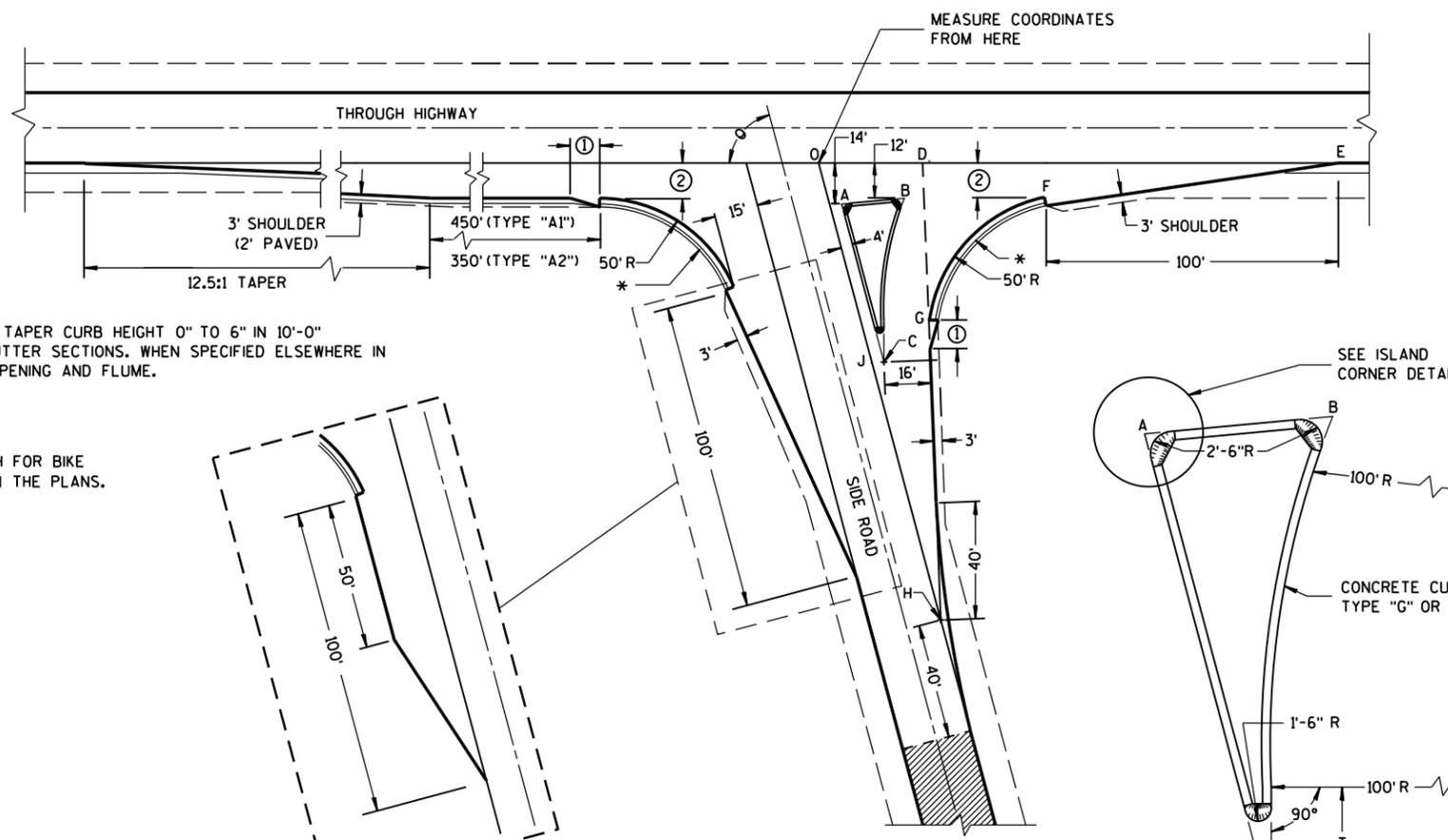
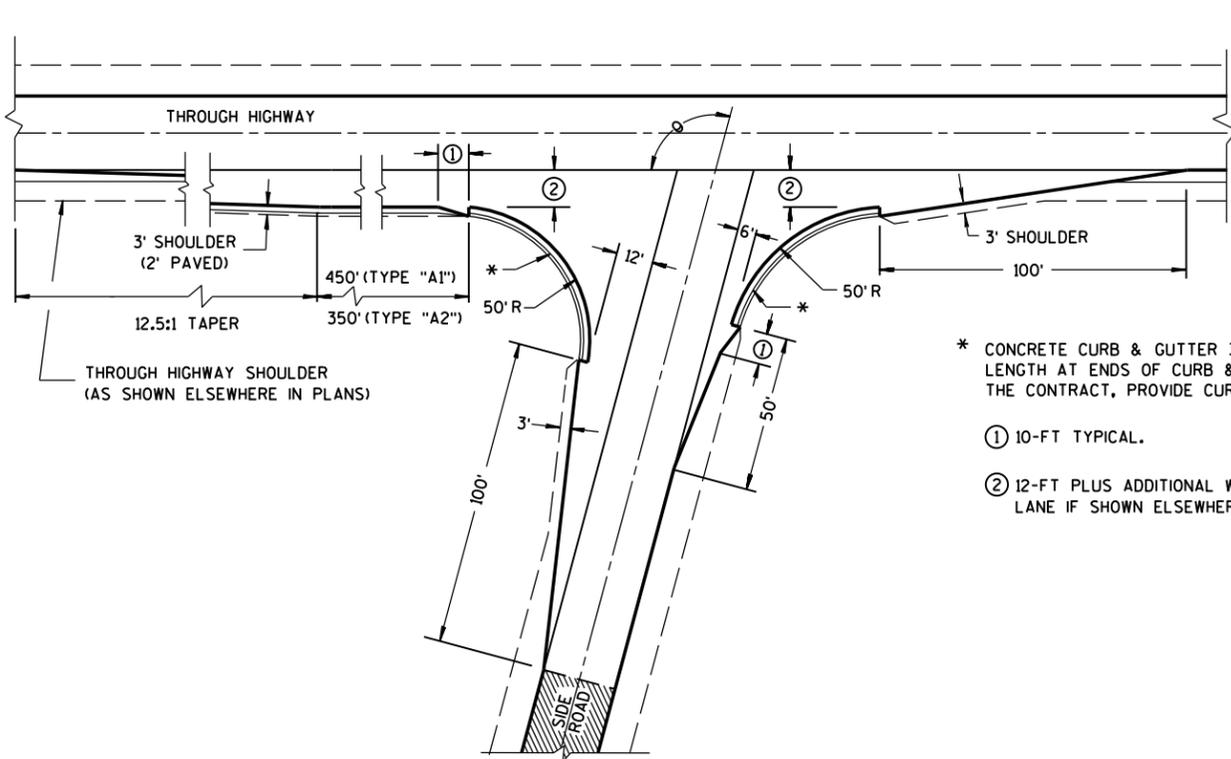
CONTROL POINT TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
901	118+84.94	32.80 LT	166787.196	137532.941	997.68	REBAR W/ CAP



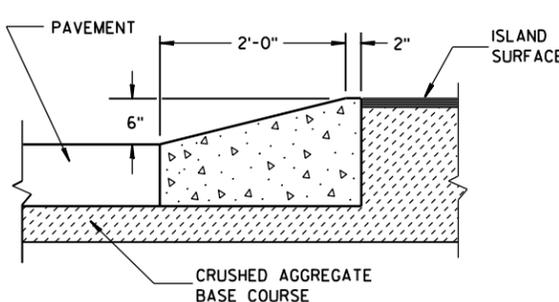
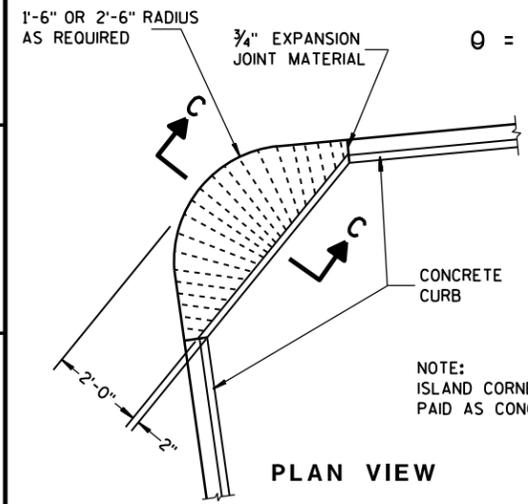
PROJECT NO: 8911-00-70 HWY: CTH C COUNTY: CHIPPEWA PLAN SHEETS SHEET E

Standard Detail Drawing List

09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-10	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-07A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL



- * CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.
- ① 10-FT TYPICAL.
- ② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
 $\theta =$ ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES
 (INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED 12/18/12 /S/ Jerry H. Zogg
 DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER
 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.

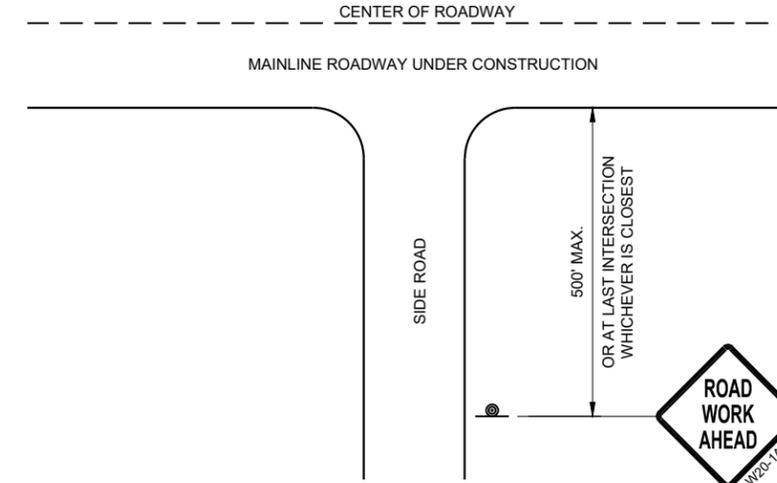
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

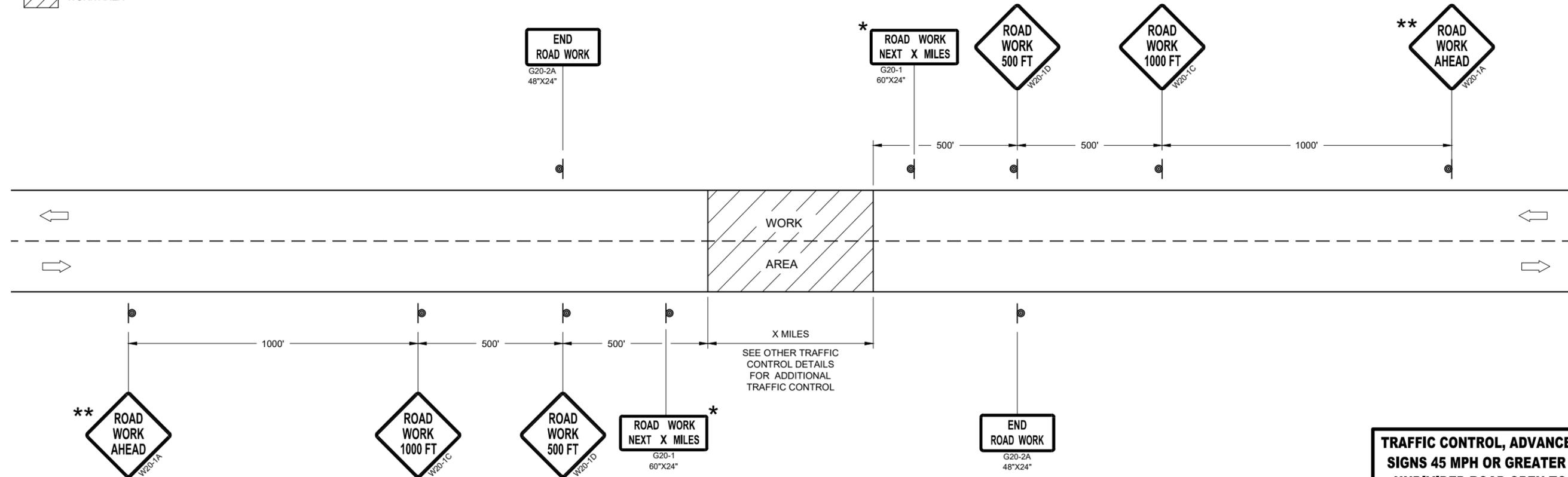
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



**TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL**



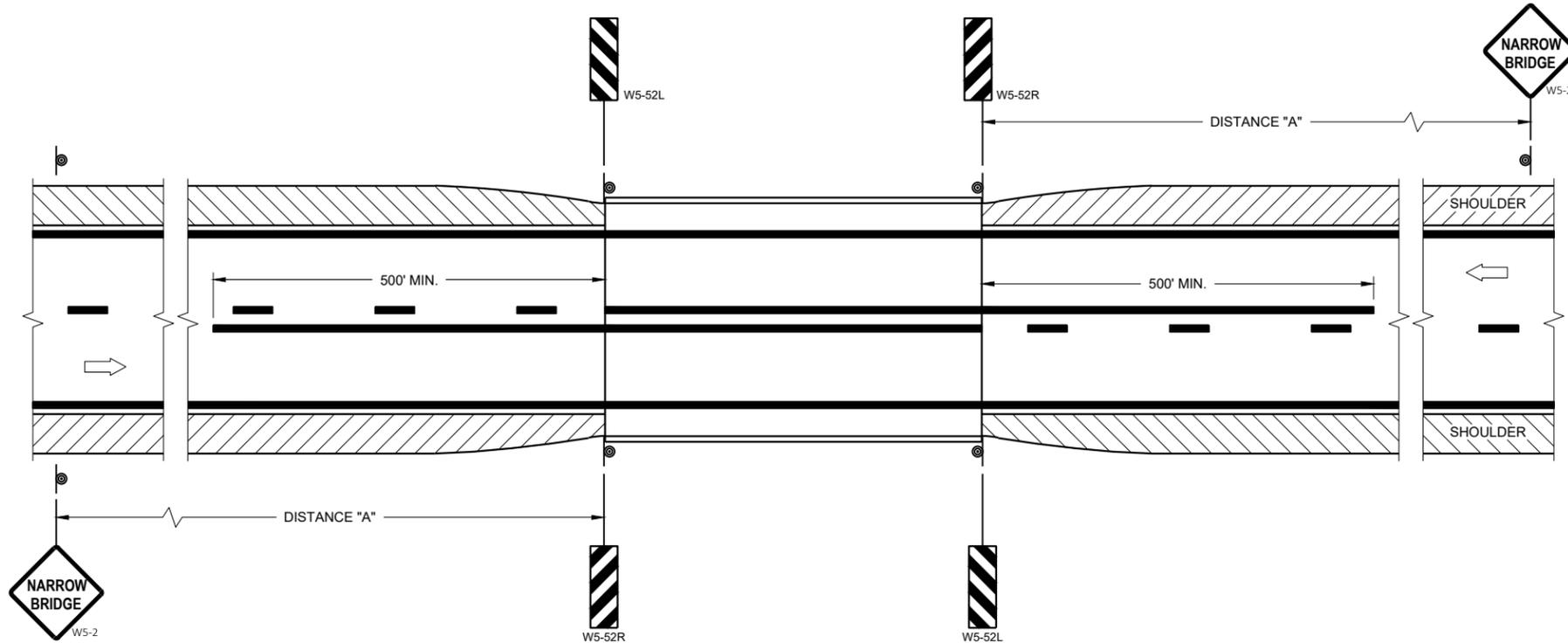
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

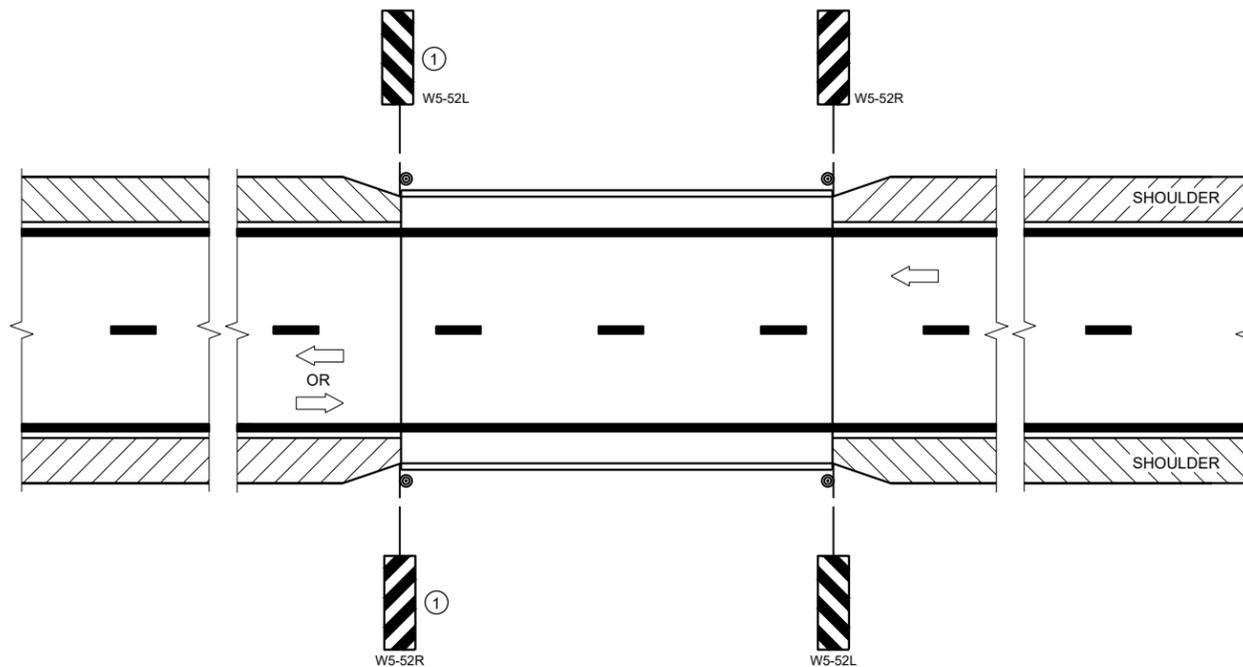
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



SITUATION 1
 WARRANTING CRITERIA:
 BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2
 WARRANTING CRITERIA:
 1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
 2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

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

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

① OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

➡ DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

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

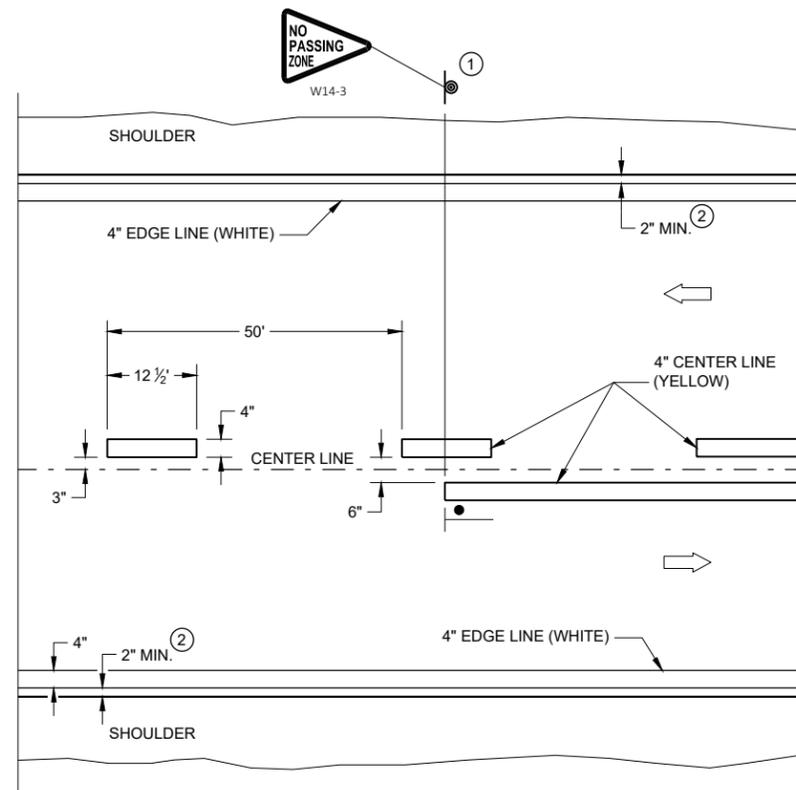
GENERAL NOTES

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

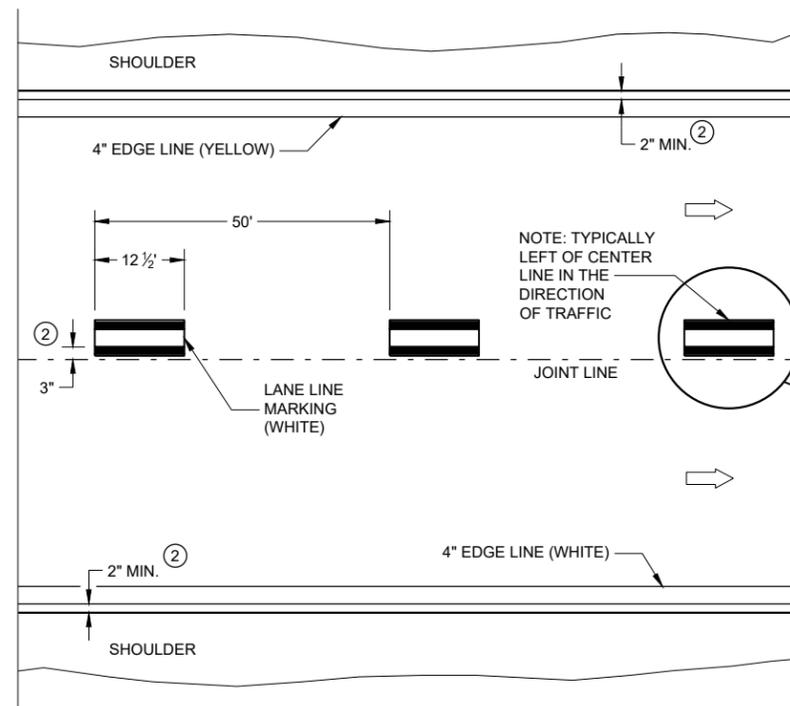
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

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

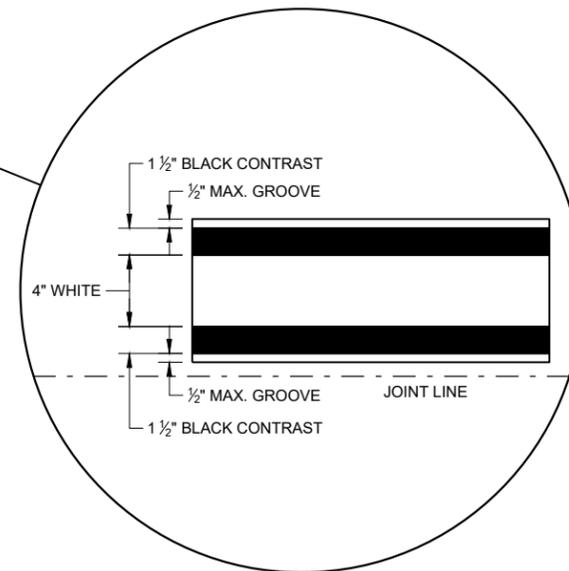


TWO WAY TRAFFIC



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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

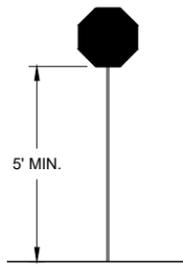
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



STOP/SLOW PADDLE ON SUPPORT STAFF

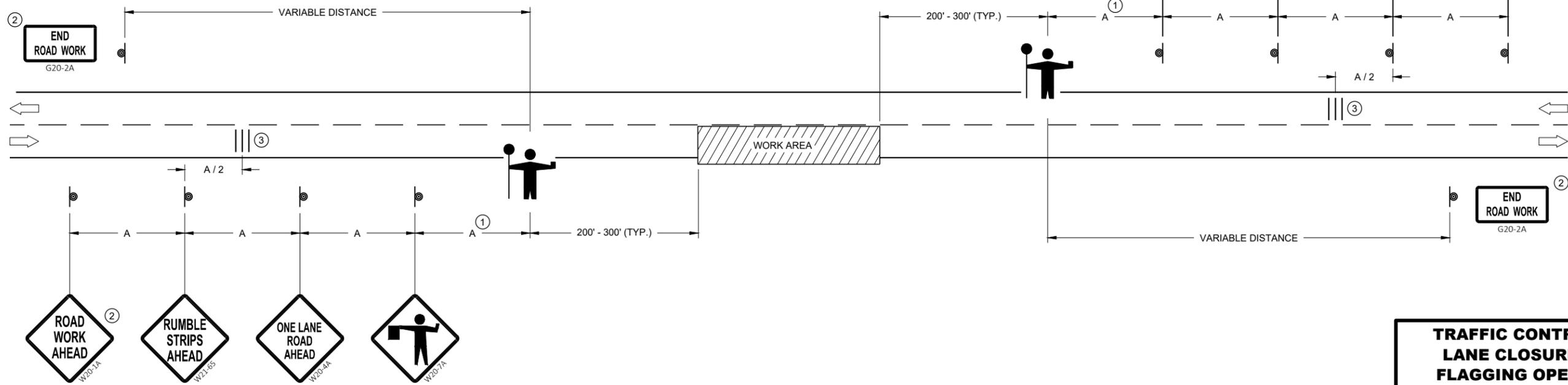
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



W03-4

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".



6

6

SDD 15C12 - 09a

SDD 15C12 - 09a

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: May 2022 /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
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

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

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

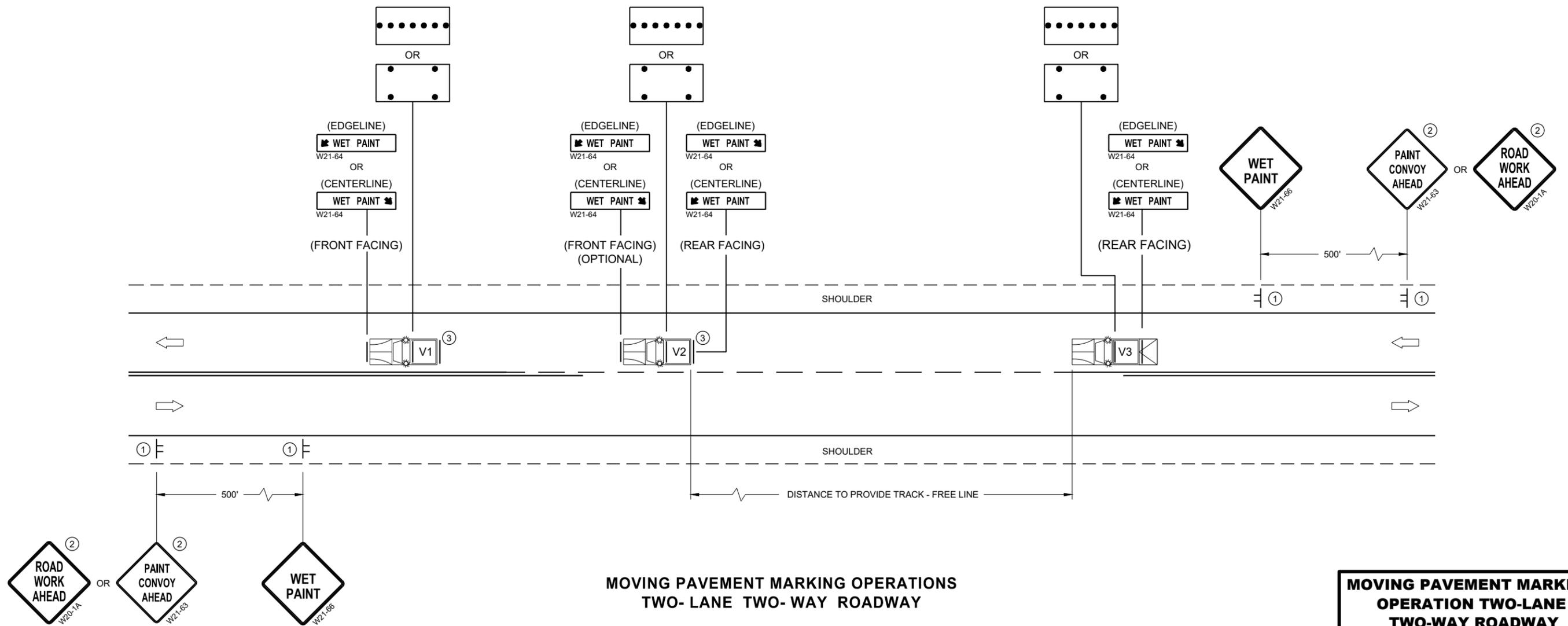
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

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

6

6



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

SDD 15C19 - 07a

SDD 15C19 - 07a

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

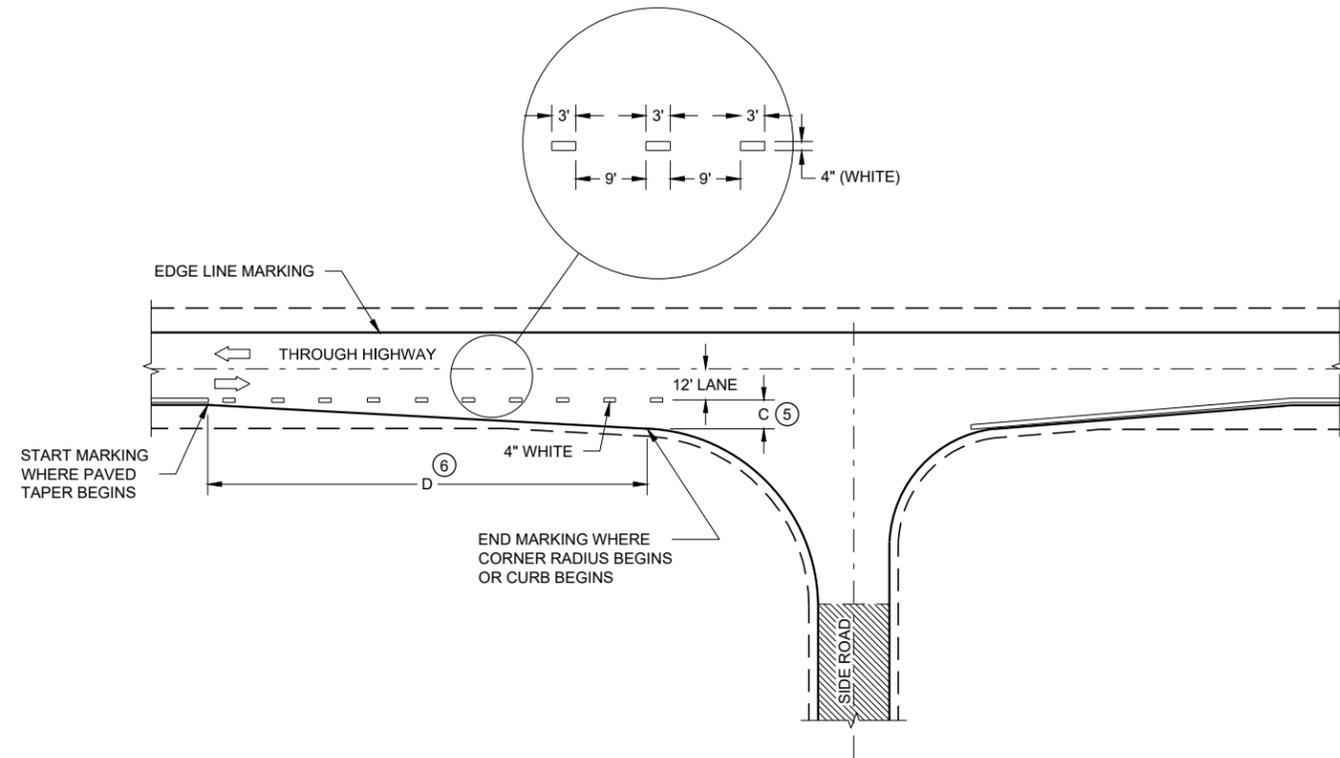
GENERAL NOTES

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

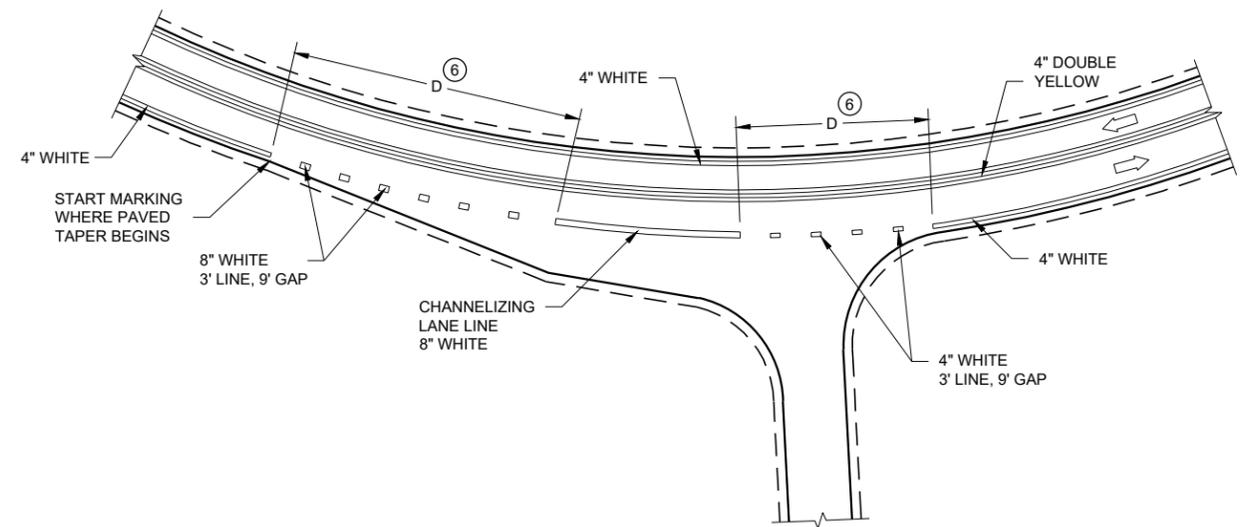
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
- ⑥ WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

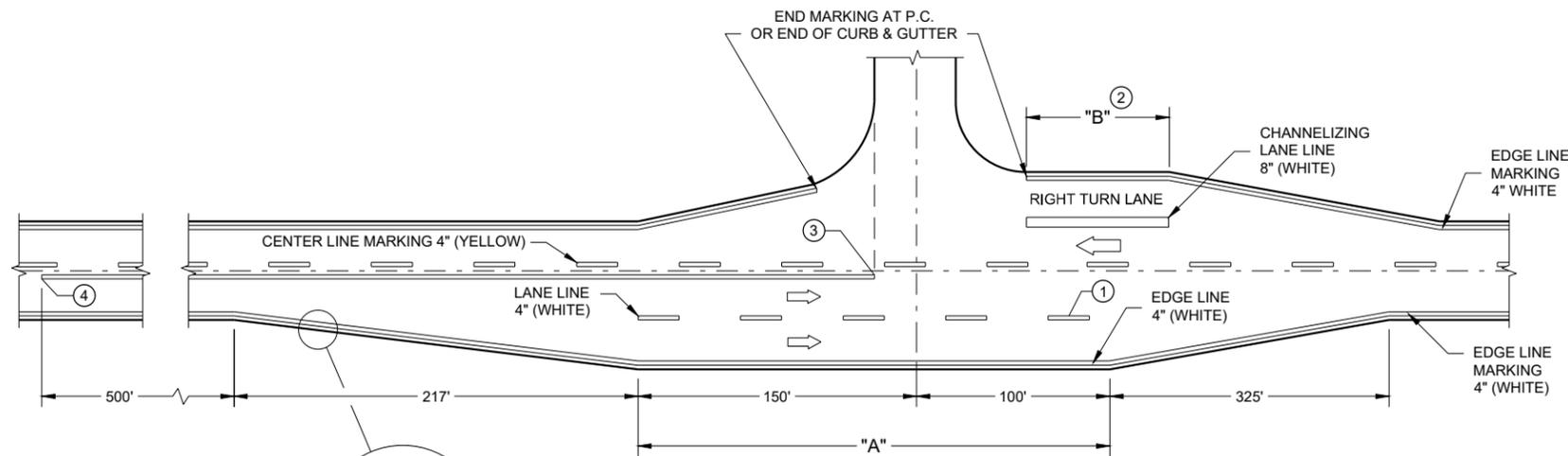
➡ DIRECTION OF TRAVEL



MINOR INTERSECTION

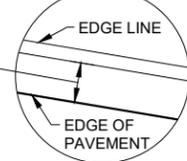


INTERSECTION ON OUTSIDE OF CURVE



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

BYPASS LANE PAVED SHOULDER WIDTH (AS SHOWN ELSEWHERE IN PLANS) - PLUS 2 INCHES



**PAVEMENT MARKING
(INTERSECTIONS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

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

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

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

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

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

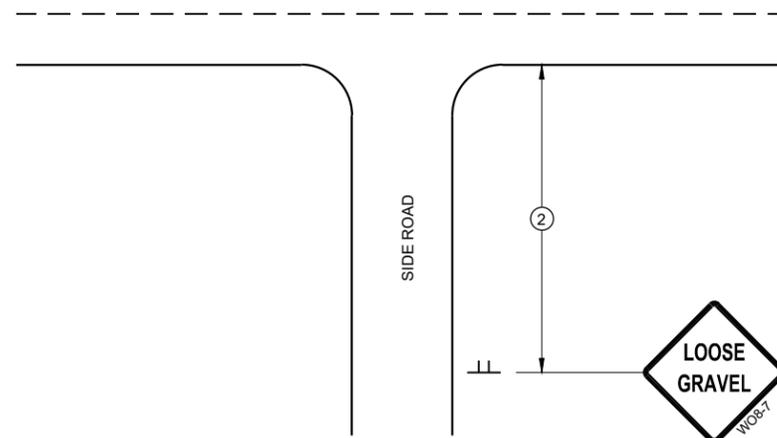
SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

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

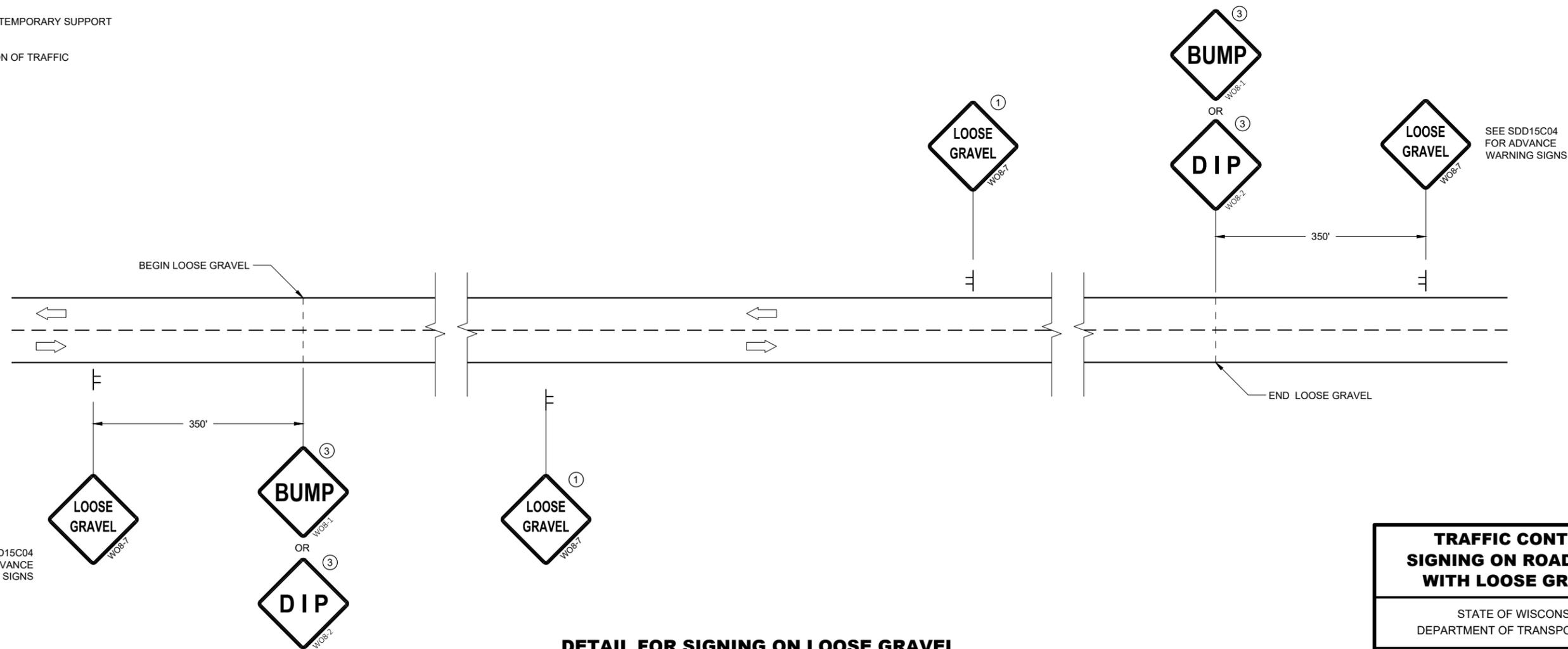
LEGEND

⊥ SIGN ON TEMPORARY SUPPORT

➡ DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

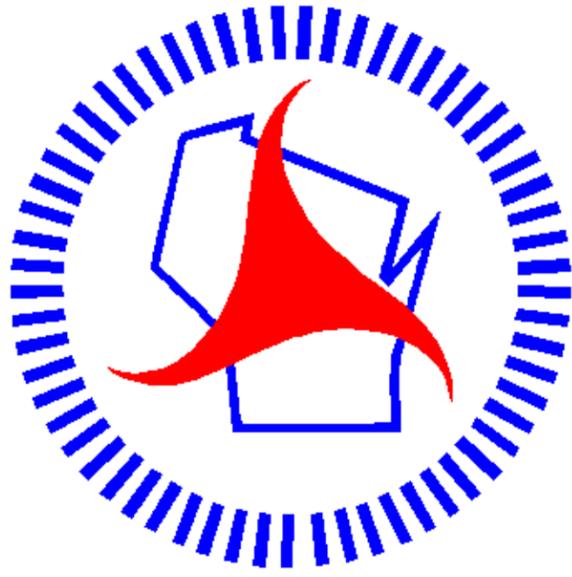
SEE SDD15C04 FOR ADVANCE WARNING SIGNS

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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