

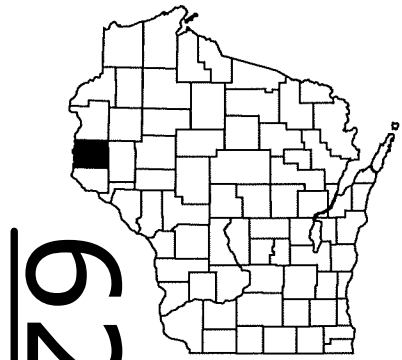
EAU  
PROJECT ID: 8943-00-71  
WITH: -

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 Plans
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Gross Sections

TOTAL SHEETS = 18



62



DESIGN DESIGNATION --

A.A.D.T.	2022	=	522
A.A.D.T.	2042	=	580
D.H.V.		=	52
D.D.		=	60/40
T.		=	6.8%
DESIGN SPEED		=	60
ESALS		=	290,000

CONVENTIONAL SYMBOLS

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

BEGIN PROJECT  
STA 10+00  
X=640142.1470  
Y=363374.1456

END PROJECT  
STA 186+02.02



LAYOUT  
SCALE 0 1 MI  
TOTAL NET LENGTH OF CENTERLINE = 3.334 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), ST. CROIX 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 (1996). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

## USH 63 - STH 128

CTH D - STH 128

CTH DD

ST. CROIX COUNTY

STATE PROJECT NUMBER  
8943-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8943-00-71	WISC 2023059	1
--		

ACCEPTED FOR  
ST. CROIX COUNTY  
Date: 9/21/22 *Robbie Key*  
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY  
ST. CROIX COUNTY HIGHWAY DEPARTMENT  
GREGORY H. HAIG  
E-36403  
HUDSON  
WIS  
PROFESSIONAL ENGINEER  
DATE: 9/21/22 *Greg Haig*  
(Professional Engineer Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
PREPARED BY  
Surveyor: Derek Tuttle  
Designer: Greg Haig  
Project Manager: Paula Groom  
Regional Examiner: Tou Yang  
Regional Supervisor: Tyler Rongstad

APPROVED FOR THE DEPARTMENT  
DATE: 9/21/22 *Paula Groom*  
(Signature)

E

**GENERAL NOTES**

- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 115 LB/SY/IN.
- CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

**STANDARD ABBREVIATIONS**

AC	ACRE	LC.	LONG CHORD
AGG	AGGREGATE	LS	LUMP SUM
<	ANGLE	M.P.	MARKER POST
A.E. AEW	APRON ENDWALL	MGAL	1000 GALLONS
ASPH.	ASPHALTIC	N.C.	NORMAL CROWN
A.D.T.	AVERAGE DAILY TRAFFIC	N	NORTH
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	NB	NORTHBOUND
B.F.	BACK FACE	NOR	NORMAL
BM	BENCHMARK	NO.	NUMBER
BTWN	BETWEEN	PAVT	PAVEMENT
CTR.	CENTER	P.L.E.	PERMANENT LIMITED EASEMENT
C/L	CENTER LINE	P.C.	POINT OF CURVATURE
Δ	CENTRAL ANGLE OR DELTA	P.I.	POINT OF INTERSECTION
C.E.	COMMERCIAL ENTRANCE	P.T.	POINT OF TANGENCY
CONST.	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE	P.E.	PRIVATE ENTRANCE
CMP	CORRUGATED METAL PIPE	PGL	PROFILE GRADE LINE
CO.	COUNTY	P.L.	PROPERTY LINE
CTH	COUNTY TRUNK HIGHWAY	R	RADIUS OR RANGE
CR.	CREEK	R/L	REFERENCE LINE
CABC	CRUSHED AGGREGATE BASE COURSE	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
CY	CUBIC YARD	REQ'D	REQUIRED
CP	CONTROL POINT OR CULVERT PIPE	RT	RIGHT
C&G	CURB AND GUTTER	R.H.F.	RIGHT HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT OF WAY
D.H.V.	DESIGN HOURLY VOLUME	RD.	ROAD
DIA.	DIAMETER	SHLD.	SHOULDER(S)
D.D.	DIRECTIONAL DISTRIBUTION	SHR.	SHRINKAGE
DISCH.	DISCHARGE	S	SOUTH
DMS	DYNAMIC MESSAGE SIGN	SB	SOUTHBOUND
EA	EACH	S.F.	SQUARE FOOT (FEET)
E	EAST	SDD	STANDARD DETAIL DRAWING(S)
EB	EASTBOUND	STH	STATE TRUNK HIGHWAY
ELEC.	ELECTRIC(A.L), ELEC. CABLE	STA.	STATION
EL., ELEV.	ELEVATION	S.E.	SUPERELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	S/L	SURVEY LINE
EXC.	EXCAVATION	SYM	SYMMETRICAL
EXIST	EXISTING	T.	PERCENT TRUCKS
F.F.	FACE TO FACE	TEL.	TELEPHONE
FERT.	FERTILIZER	TEMP.	TEMPORARY
F.E	FIELD ENTRANCE	T.L.E.	TEMPORARY LIMITED EASEMENT
F/L, F.L.	FLOW LINE	T.O.C.	TOP OF CURB
GALV.	GALVANIZE	TYP	TYPICAL
H.S.	HIGH STRENGTH	UNCL.	UNCLASSIFIED
CWT	HUNDRED WEIGHT	U.G.	UNDERGROUND (CABLE)
INL	INLET	VAR	VARIABLE
INTER.	INTERSECTION	V.C.	VERTICAL CURVE
IH	INTERSTATE HIGHWAY	V.P.C.	VERTICAL POINT OF CURVATURE
JT.	JOINT	V.P.I.	VERTICAL POINT OF INTERSECTION
LT	LEFT	V.P.T.	VERTICAL POINT OF TANGENCY
L.H.F.	LEFT HAND FORWARD	Wt.	WEIGHT
L.	LENGTH OF CURVE	W	WEST
L.F.	LINEAR FOOT(FEET)	WB	WESTBOUND

UTILITIES

DNR LIAISON

DESIGN CONTACTS

COMMUNICATIONS

BALDWIN LIGHTSTREAM  
MATT KNEGENDORF  
930 MAPLE STREET  
BALDWIN, WI 54002  
PHONE: 715-760-0968  
PHONE: 651-895-5892  
mknegendorf@lswi.net

AMY LESIK  
WISCONSIN DNR  
1300 W. CLAIREMONT AVE  
EAU CLAIRE, WI 54701  
715-836-6571  
AmyL.Lesik@wisconsin.gov

PROJECT DESIGNER  
GREGORY HAIG, P.E.  
ST. CROIX COUNTY HIGHWAY DEPT.  
300 OAK RIDGE PKWY  
BALDWIN, WI 54002  
715-245-4205  
greg.haig@sccwi.gov

COMMUNICATIONS

CENTURYLINK/LUMEN  
MIKE VANDEN BOS  
2426 75TH AVE  
OSCEOLA, WI 54020  
PHONE: 800-283-4237  
PHONE: 715-292-4278  
mikevandenbos@centurylink.com

OWNER  
ST. CROIX COUNTY HIGHWAY DEPT.  
ATTN: ROBBIE KREJCI  
300 OAK RIDGE PKWY  
BALDWIN, WI 54002  
715-245-4201  
robbie.krejci@sccwi.gov

COMMUNICATIONS

NEXTGEN COMMUNICATIONS  
316 3RD AVE  
CLEAR LAKE, WI 54005  
MARK ANDERSON  
PHONE: 715-263-2755  
PHONE: 715-565-7743  
nextgenkolkata@gmail.com

ELECTRIC

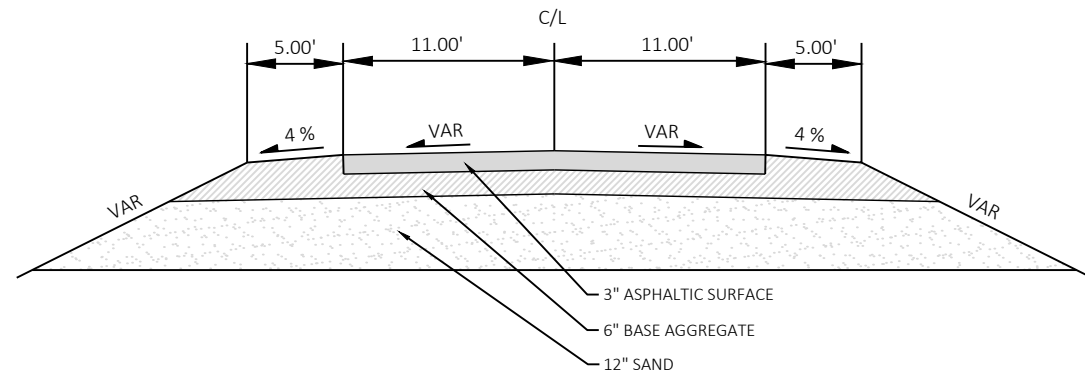
ST CROIX ELECTRIC COOPERATIVE  
1925 RIDGEWAY ST  
HAMMOND, WI 54015  
ROB DOOLEY  
PHONE: 715-760-7000  
PHONE: 715-781-2295  
communications@scecn.net

COMMUNICATIONS

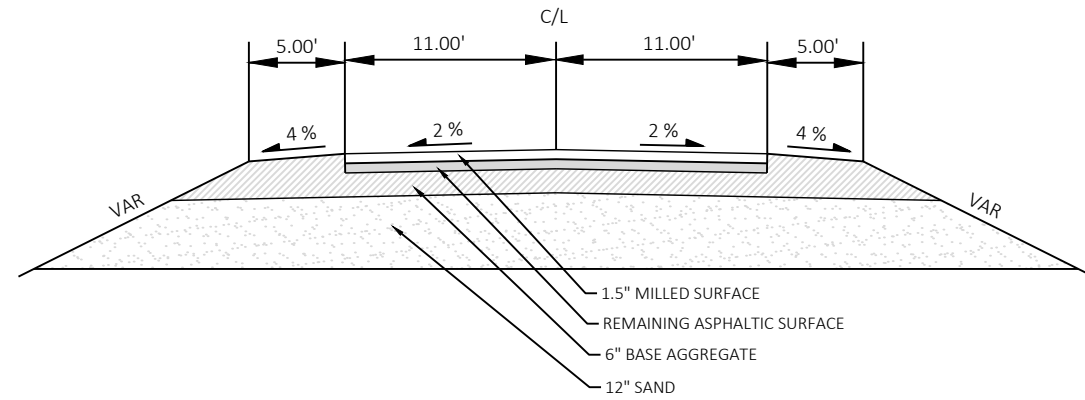
WINDSTREAM  
4001 RODNEY PARHAM RD  
LITTLE ROCK, AR 72212  
PHONE: 800-289-1901  
Locate.desk@windstream.com



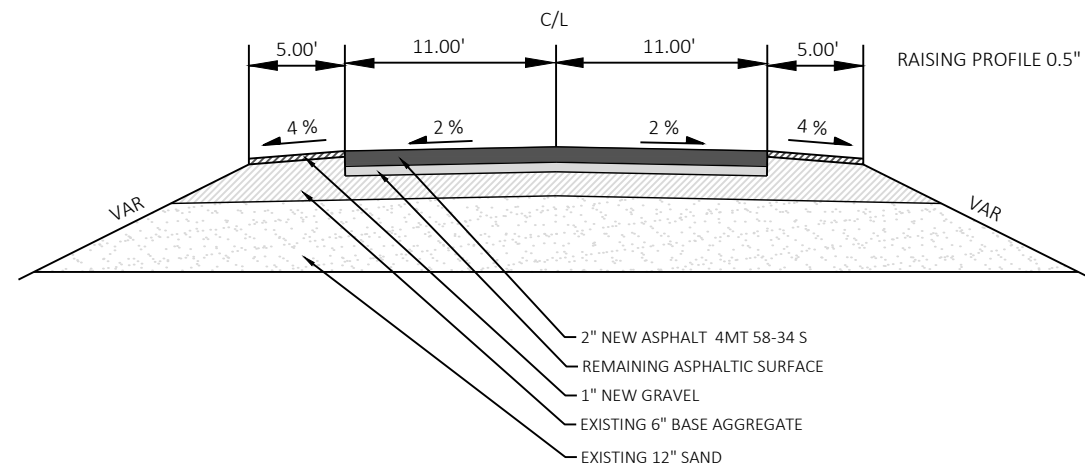
Dial **811** or (800)242-8511  
www.DiggersHotline.com



EXISTING TYPICAL SECTION

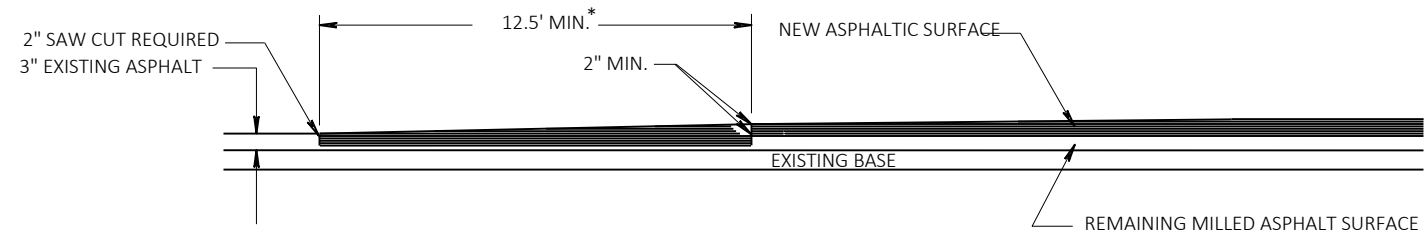


MILLED TYPICAL SECTION



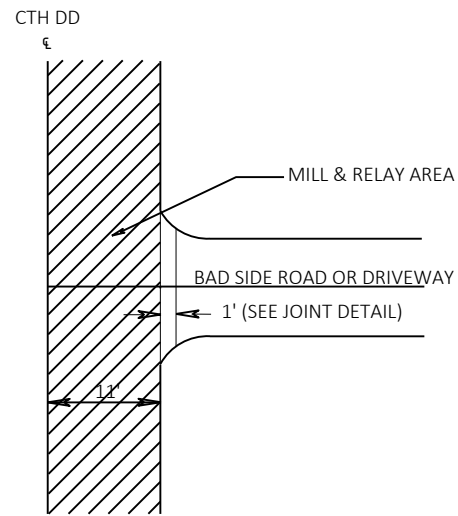
FINISHED TYPICAL SECTION

NOT TO SCALE

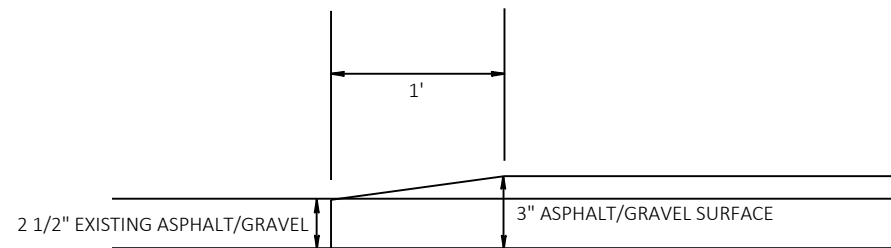


DETAIL OF MAINLINE OVERLAP BUTTED JOINT

\* EXACT DIMENSIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.



ASPHALT/GRAVEL SIDE ROAD AND DRIVEWAY DETAIL



ASPHALT/GRAVEL JOINT

Estimate Of Quantities

8943-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	62.000	62.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	45,027.000	45,027.000
0006	213.0100	Finishing Roadway (project) 01. 8943-01-71	EACH	1.000	1.000
0008	305.0110	Base Aggregate Dense 3/4-Inch	TON	950.000	950.000
0010	305.0500	Shaping Shoulders	STA	176.000	176.000
0012	455.0605	Tack Coat	GAL	3,162.000	3,162.000
0014	460.2000	Incentive Density HMA Pavement	DOL	3,330.000	3,330.000
0016	460.6244	HMA Pavement 4 MT 58-34 S	TON	5,198.000	5,198.000
0018	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8943-00-71	EACH	1.000	1.000
0020	619.1000	Mobilization	EACH	1.000	1.000
0022	624.0100	Water	MGAL	19.000	19.000
0024	642.5001	Field Office Type B	EACH	1.000	1.000
0026	643.0900	Traffic Control Signs	DAY	504.000	504.000
0028	643.5000	Traffic Control	EACH	1.000	1.000
0030	646.1005	Marking Line Paint 4-Inch	LF	57,734.000	57,734.000
0032	648.0100	Locating No-Passing Zones	MI	3.330	3.330
0034	650.8000	Construction Staking Resurfacing Reference	LF	17,602.000	17,602.000
0036	650.9911	Construction Staking Supplemental Control (project) 01. 8943-00-71	EACH	1.000	1.000
0038	690.0150	Sawing Asphalt	LF	44.000	44.000
0040	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0042	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000

REMOVING ASPHALTIC SURFACE MILLING

STATION	TO	STATION	ITEM 204.0120 SY
CTH DD			
10+00.00	-	186+02.02	43,027
UNDISTRIBUTED			2,000
ITEM TOTAL			45,027

ASPHALT BUTT JOINTS

STATION	TO	STATION	REMOVING ASPHALT SURFACE BUTT JOINTS ITEM 204.0115 SY
CTH DD			
10+00.00			31
186+02.02			31
ITEM TOTAL			62

HMA PAVEMENT 4 MT 58-34 S

STATION	TO	STATION	ITEM 460.6244 TON
CTH DD			
10+00.00	-	186+02.02	4,948
UNDISTRIBUTED			250
ITEM TOTAL			5,198

SAWING ASPHALT

STATION	TO	STATION	SAWING ITEM 690.0150 LF
CTH DD			
10+00.00			22
186+02.02			22
ITEM TOTAL			44

BASE AGGREGATE AND SHOULDERS

STATION	TO	STATION	ITEM 305.0110 BASE AGGREGATE DENSE 3/4 INCH TON	ITEM 624.100 WATER MGAL	ITEM 305.0500 SHAPING SHOULDERS STA
CTH DD					
10+00.00	-	186+02.02	950	19	176
ITEM TOTAL			950	19	176

MARKING LINE PAINT 4-INCH

STATION	TO	STATION	ITEM 646.1005 LF
CTH DD			
10+00.00	-	186+02.02	55,234
UNDISTRIBUTED			2,500
ITEM TOTAL			57,734

TACK COAT

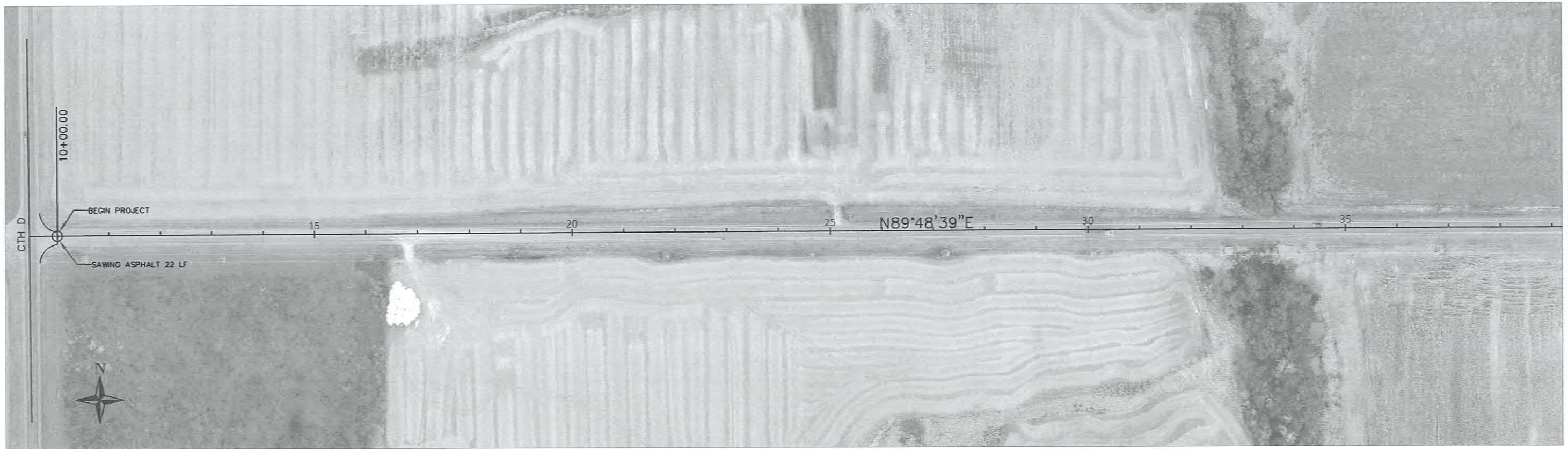
STATION	TO	STATION	ITEM 455.0605 GAL
CTH DD			
10+00.00	-	186+02.02	3,012
UNDISTRIBUTED			150
ITEM TOTAL			3,162

CONSTRUCTION STAKING RESURFACING REFERENCE

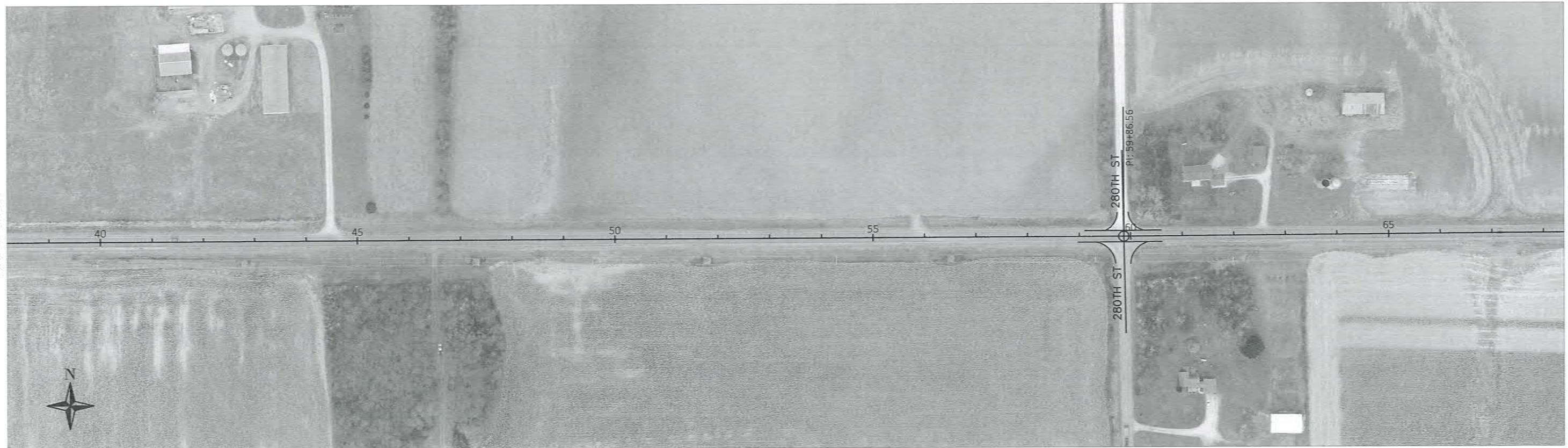
STATION	TO	STATION	ITEM 650.8000 LF
CTH DD			
10+00.00	-	186+02.02	17,602
ITEM TOTAL			17,602

Traffic Control

SIGN	NO. OF DAYS	TRAFFIC CONTROL SIGNS ITEM 643.0900	
		SIGNS EACH	SIGNS (DAY)
TRAFFIC CONTROL SIGNS	14	32	448
UNDISTRIBUTED	14	4	56
ITEM TOTAL		36	504



MATCH LINE A



MATCH LINE A

MATCH LINE B

PROJECT NO: 8943-00-71	HWY: CTH DD	COUNTY: ST. CROIX	PLAN	SHEET
------------------------	-------------	-------------------	------	-------

FILE NAME : S:\HIGHWAY\CADD\WG\COCONST\2023 CTH DD\CTH DD.DWG PLOT DATE : PLOT BY : PLOT NAME : PLOT SCALE : 1"=200'  
 LAYOUT NAME - Layout1



MATCH LINE B

MATCH LINE C



MATCH LINE C

MATCH LINE D

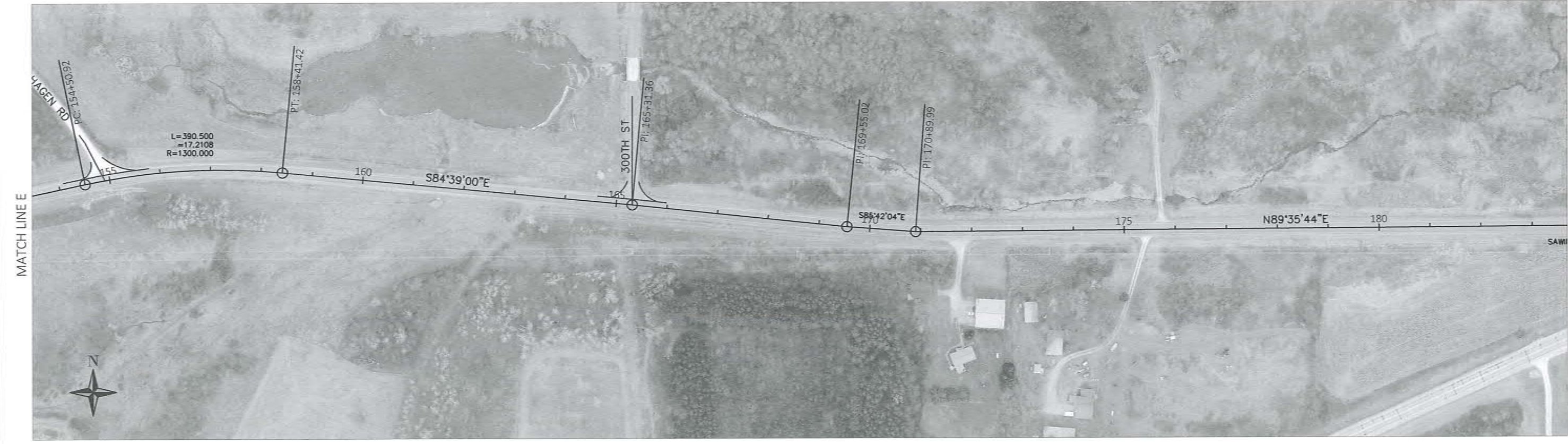
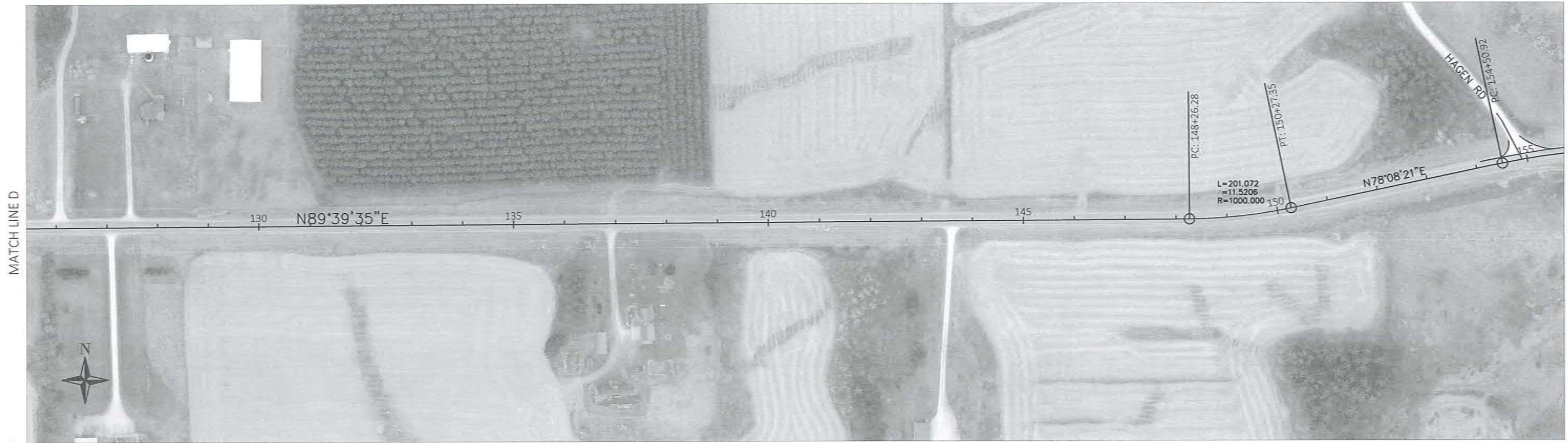


PROJECT NO: 8943-00-71	HWY: CTH DD	COUNTY: ST. CROIX	PLAN	SHEET
------------------------	-------------	-------------------	------	-------

FILE NAME: S:\HIGHWAY\CADDWG\COCONST\2023 CTH DD\CTH DD.DWG PLOT DATE: PLOT BY: PLOT NAME: PLOT SCALE: 1"=200'

LAYOUT NAME - Layout2





PROJECT NO: 8943-00-71	HWY: CTH DD	COUNTY: ST. CROIX	PLAN	SHEET
------------------------	-------------	-------------------	------	-------

FILE NAME: S:\HIGHWAY\CADDWG\COCONST\2023 CTH DD\CTH DD.DWG PLOT DATE: PLOT BY: PLOT NAME: PLOT SCALE: 1"=200'

LAYOUT NAME: Layout3

MATCH LINE F



PROJECT NO: 8943-00-71

HWY: CTH DD

COUNTY: ST. CROIX

PLAN

SHEET

FILE NAME : S:\HIGHWAY\CADD\WG\COCONST\2023 CTH DD\CTH DD.DWG  
LAYOUT NAME - Layout4

PLOT DATE :

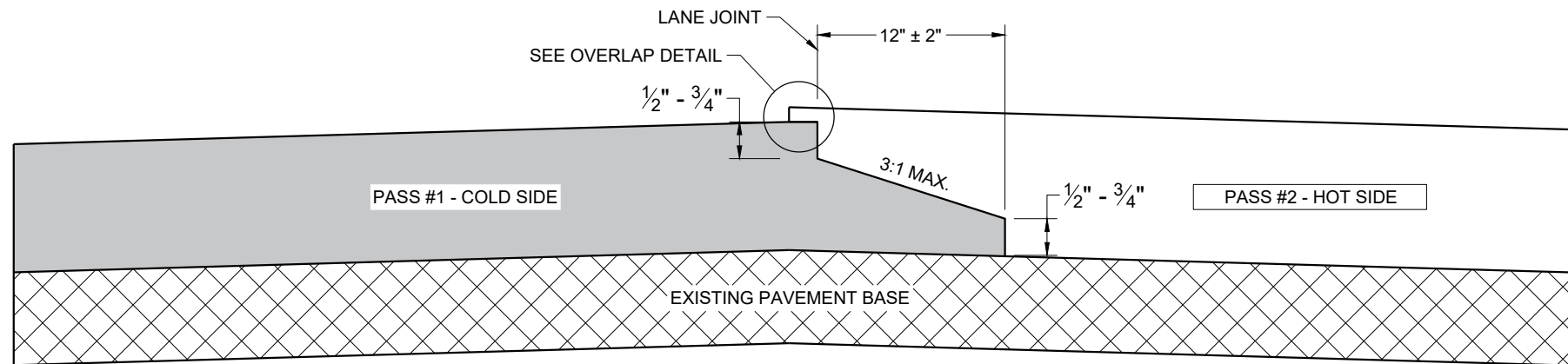
PLOT BY :

PLOT NAME :

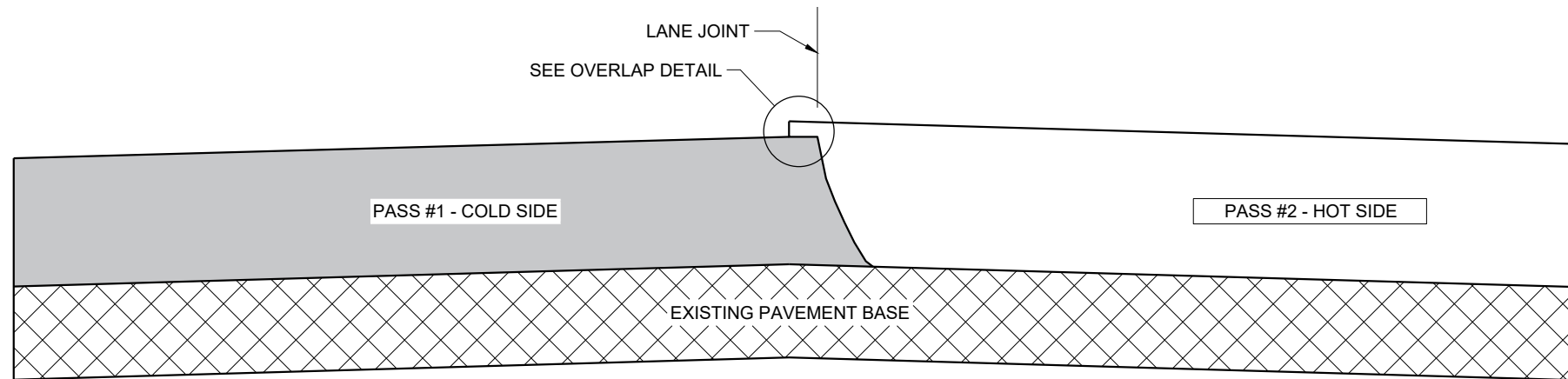
PLOT SCALE : 1"=200'

## Standard Detail Drawing List

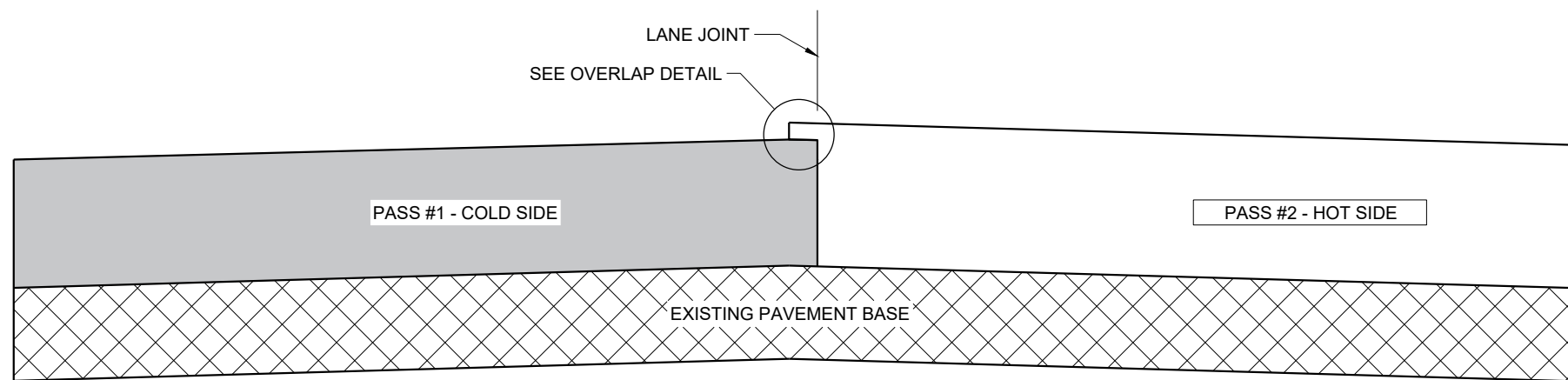
13C19-03	HMA LONGITUDINAL JOINTS
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES



**TYPICAL PAVEMENT CROSS SECTION NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION VERTICAL JOINT**



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

**GENERAL NOTES**

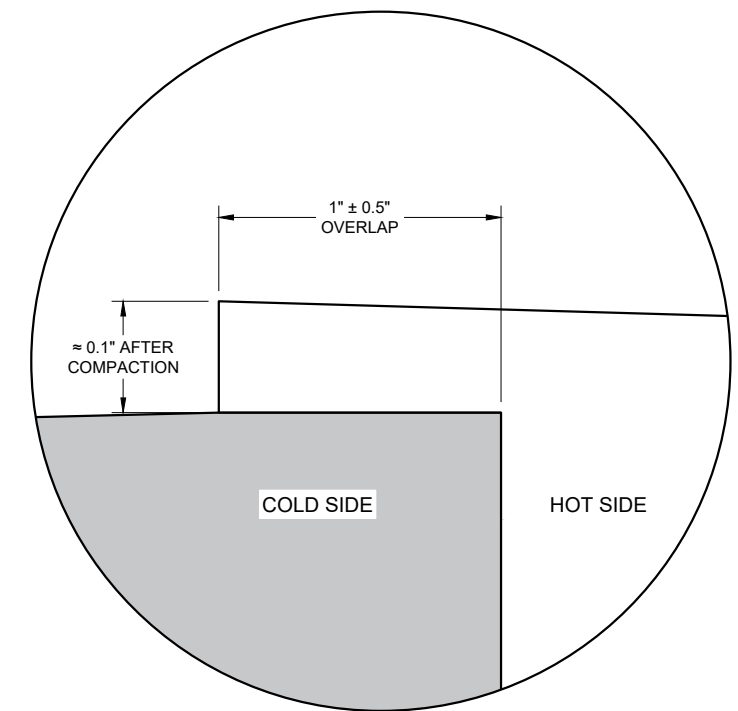
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY  $1" \pm 0.5"$  AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY  $0.1"$  AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO  $2"$  FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



**OVERLAP DETAIL (TYPICAL)**

6

6

SDD 13C19 - 03

SDD 13C19 - 03

**HMA LONGITUDINAL JOINTS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

**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.

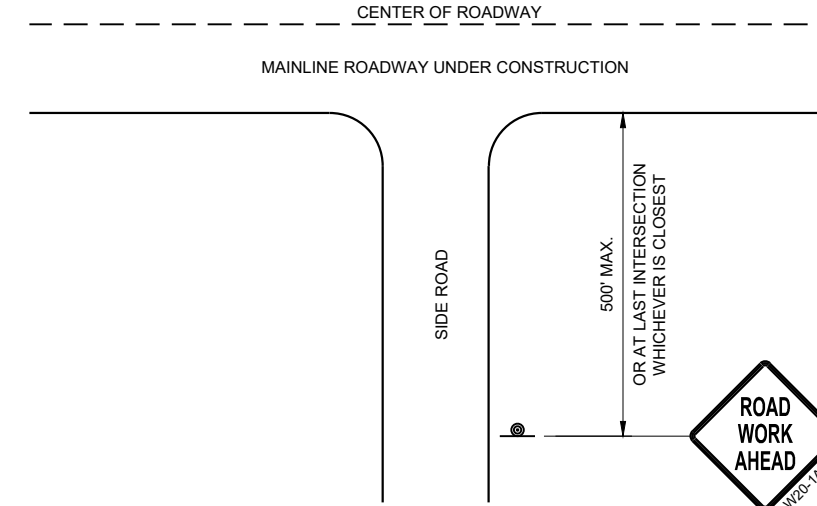
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

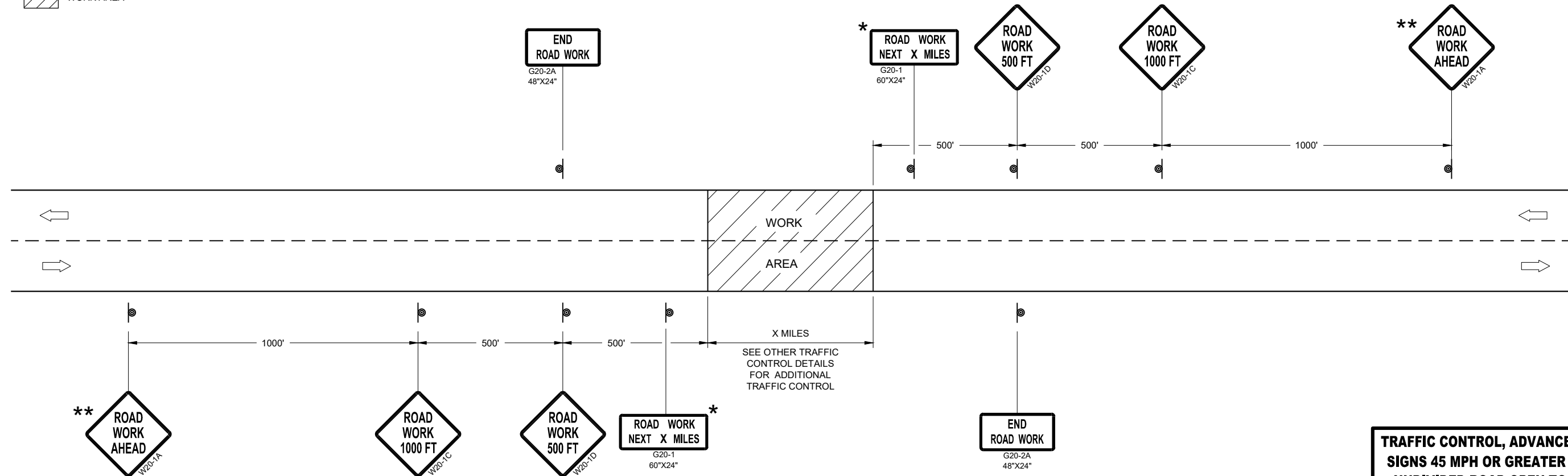
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

**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

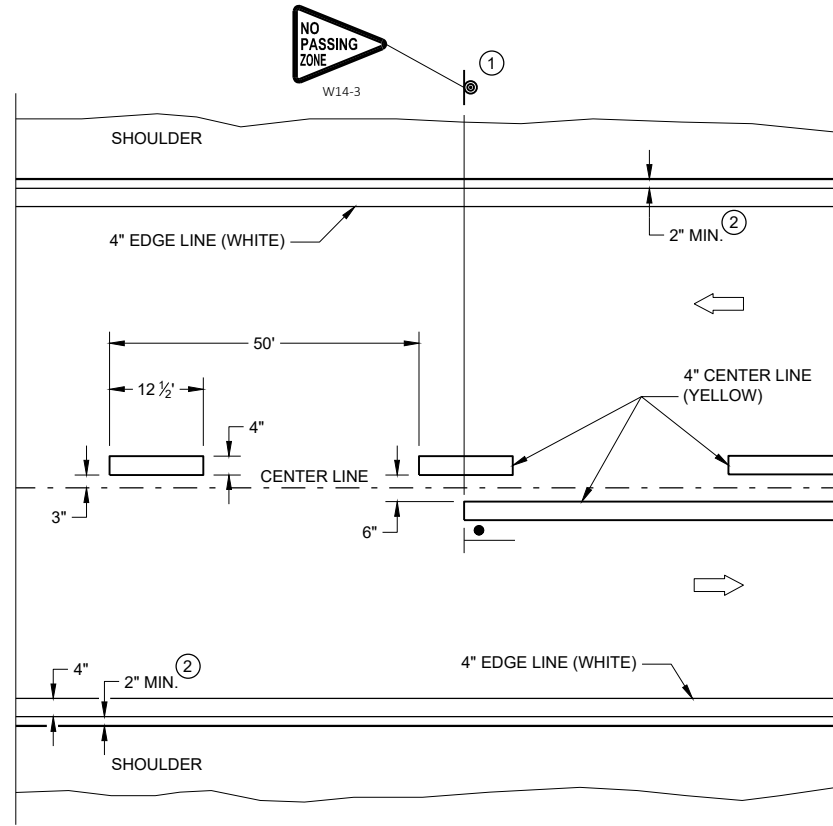
**GENERAL NOTES**

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

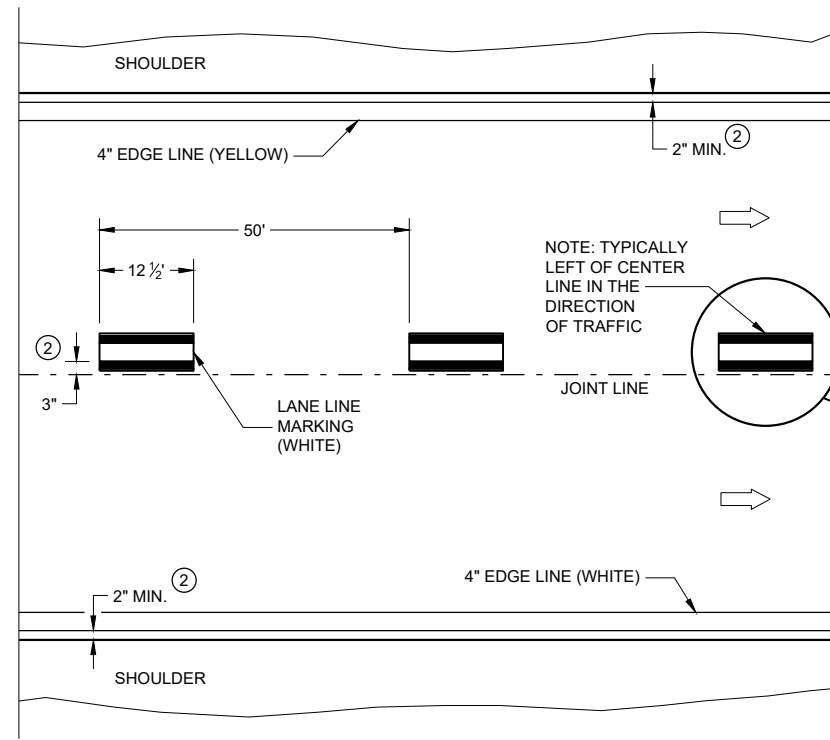
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

**LEGEND**

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

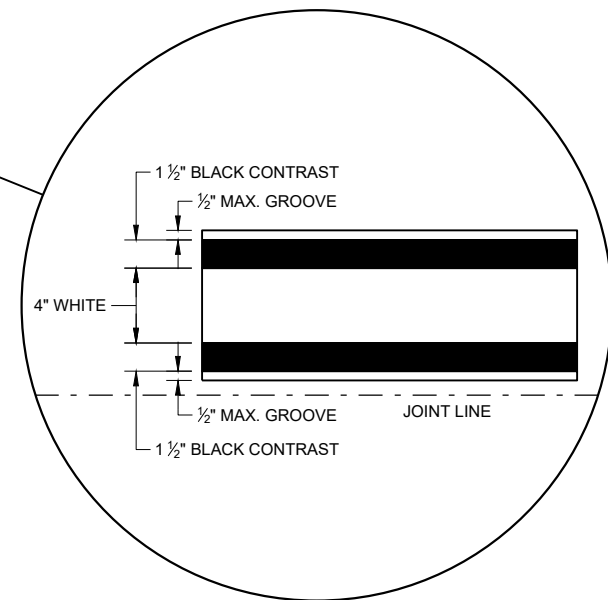


**TWO WAY TRAFFIC**



**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.

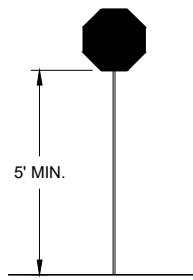
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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**

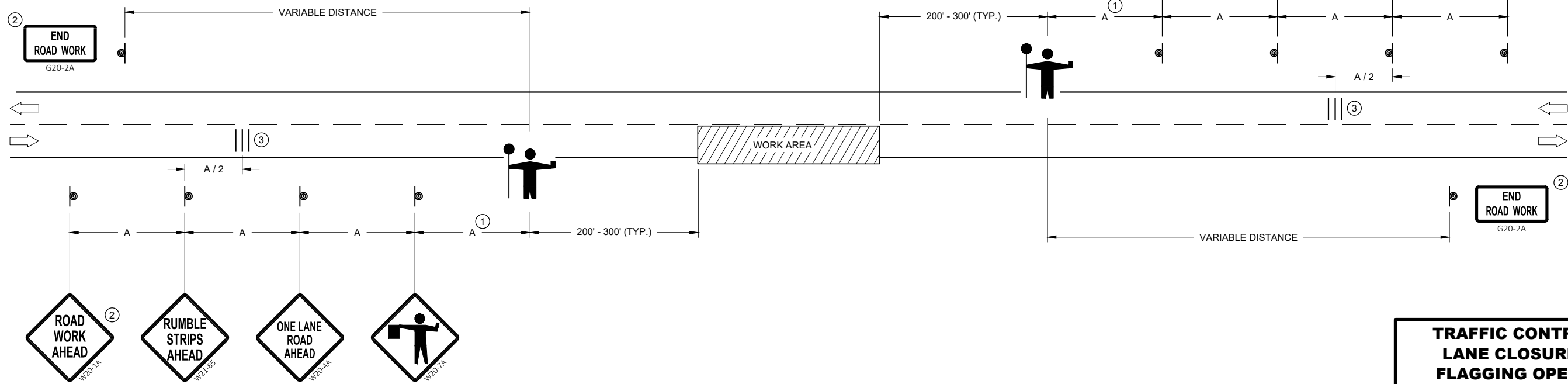
**SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE**

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".







**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.

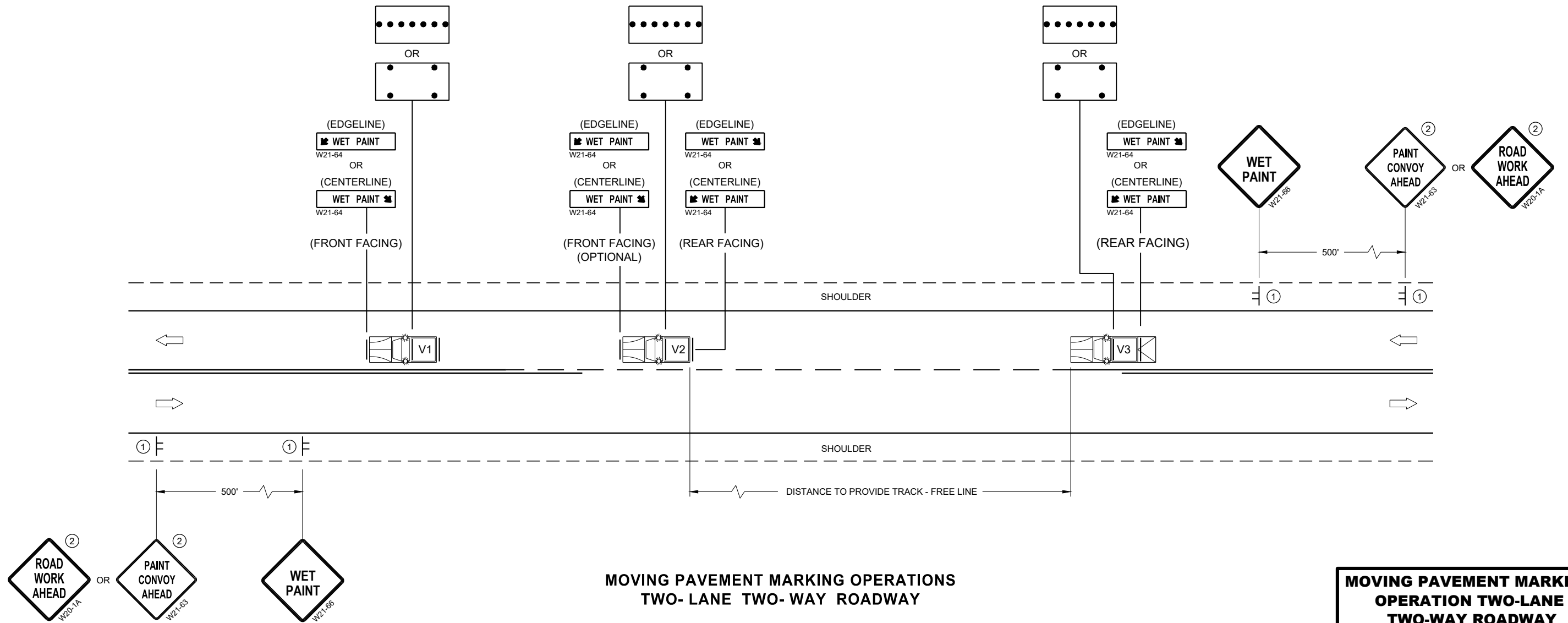
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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.

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

**SDD 15C19 - 06a**

**SDD 15C19 - 06a**

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



**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.

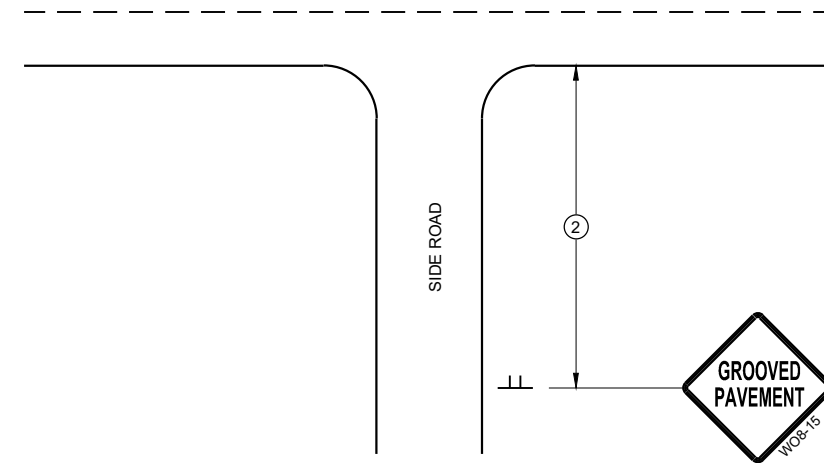
SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

- ① PLACE SIGNS 350' IN ADVANCE OF MILLED 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.

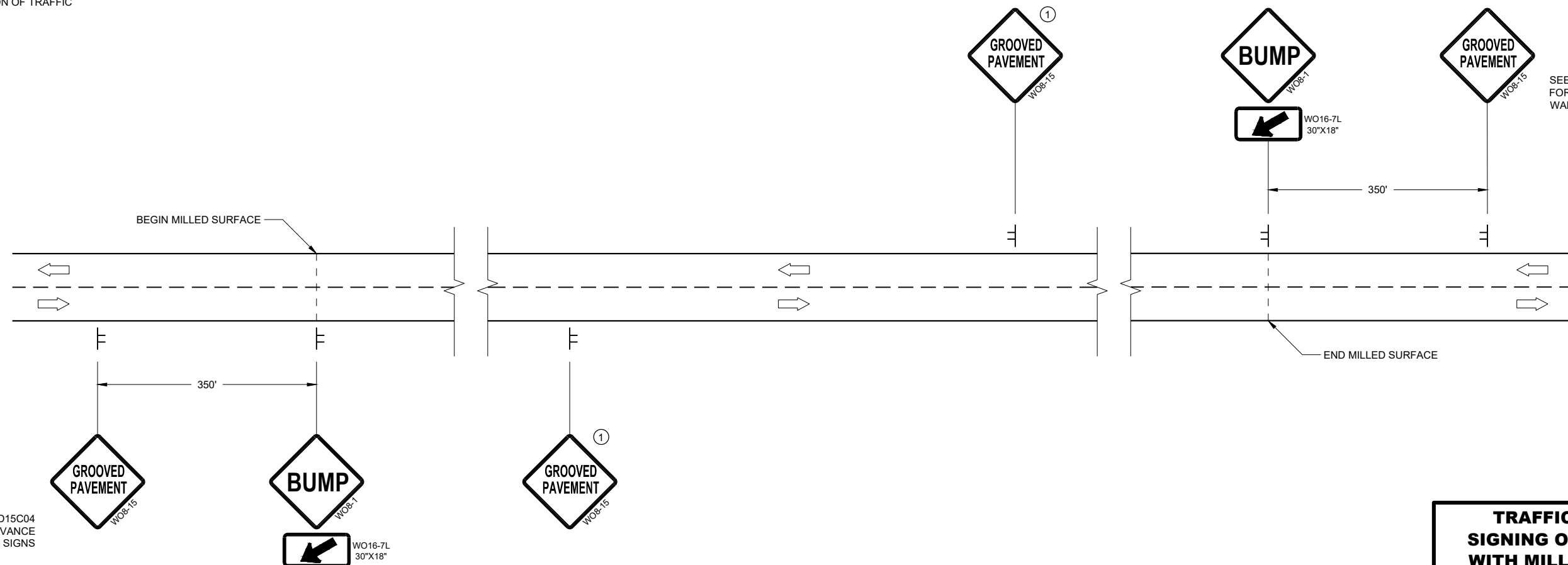
**LEGEND**

⊥ SIGN ON TEMPORARY SUPPORT

⇨ DIRECTION OF TRAFFIC



**TYPICAL SIDE ROAD APPROACH SIGN DETAIL**



SEE SDD15C04 FOR ADVANCE WARNING SIGNS

SEE SDD15C04 FOR ADVANCE WARNING SIGNS

**DETAIL FOR SIGNING ON MILLED SURFACES**

**TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

FHWA



## *Wisconsin Department of Transportation*

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