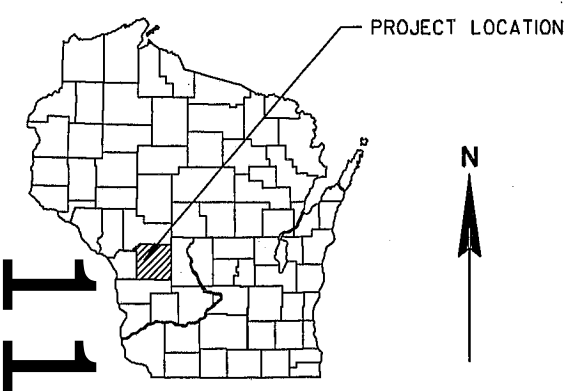


SWL
PROJECT ID: 7100-00-70
WITH: N/A
COUNTY: MONROE

MAR 2016
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 (Includes Erosion Control)
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 38



DESIGN DESIGNATION

A.A.D.T. 2016	=	820
A.A.D.T. 2036	=	910
D.H.V.	=	13.3%
D.D.	=	60/40
T.	=	6.9%
DESIGN SPEED	=	50 MPH
ESALS	=	130,000

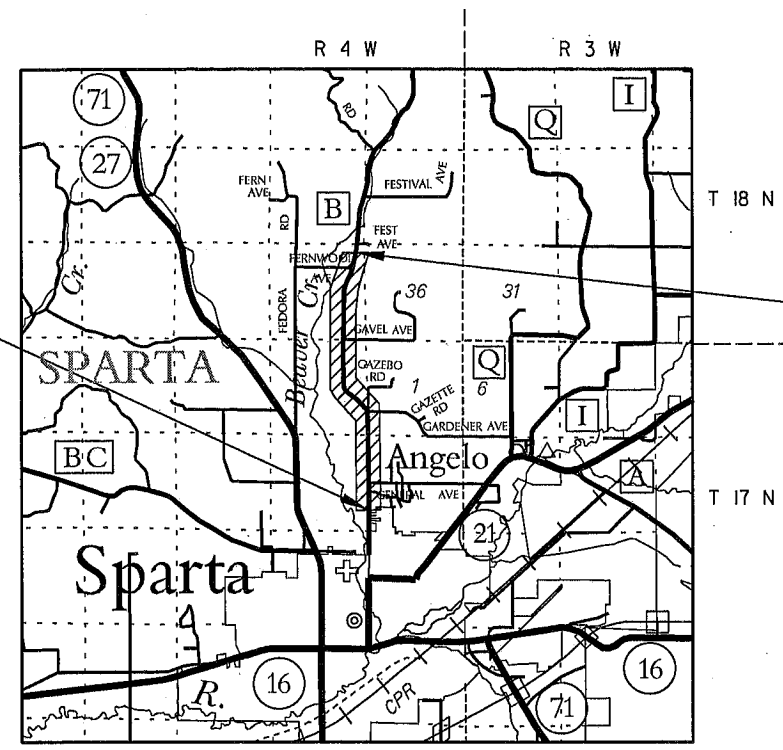
CONVENTIONAL SYMBOLS

COUNTY LINE	COMBUSTIBLE FLUIDS
CORPORATE LIMITS	UNDERGROUND UTILITIES
PROPERTY LINE	GAS
LOT LINE	ELECTRIC
LIMITED EASEMENT	TELEPHONE OR TELEGRAPH
EARTHWORK BALANCE POINT	TV/CABLE
EXISTING RIGHT OF WAY	SERVICE PEDESTAL
PROPOSED OR NEW R/W LINE	POWER POLE
SURVEY LINE	TELEPHONE POLE
SLOPE INTERCEPT	RAILROAD
ORIGINAL GROUND	SANITARY SEWER
MARSH OR ROCK PROFILE	STORM SEWER
(To be noted as such)	WATER
MARSH AREA	EXISTING CULVERT
WOODED OR SHRUB AREA	PROPOSED CULVERT
	(Box or Pipe)
	CULVERT (Profile View)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
PLAN OF PROPOSED IMPROVEMENT
SPARTA - CATARACT
(MEADOWVIEW LANE TO FERNWOOD AVENUE)
CTH B
MONROE COUNTY

STATE PROJECT NUMBER
7100-00-70

BEGIN PROJECT
STA 32+45.00



END PROJECT
STA 181+00.00

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 2.813 MI

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7100-00-70	WISC 2016053	1

ACCEPTED FOR
COUNTY of MONROE
10/14/2015 *Jan. Dittman*
DATE: HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY:

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor: SEH
Designer: SEH

Management Consultant: KJOHNSON ENGINEERS

APPROVED FOR THE DEPARTMENT
DATE: 10/27/15 *[Signature]*
(Management Consultant Signature)

E

STANDARD ABBREVIATIONS

GENERAL NOTES

UTILITY CONTACTS

ABUT	ABUTMENT	HYD	HYDRANT
AC	ACRE	ID	INSIDE DIAMETER
AGG	AGGREGATE	INV	INVERT
AECPRC	APRON ENDWALL FOR CULVERT PIPE	IP	IRON PIPE ON PIN
	REINFORCED CONCRETE	LHF	LEFT-HAND FORWARD
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LF	LINEAR FOOT
ADT	AVERAGE DAILY TRAFFIC	LC	LONG CHORD OF CURVE
BF	BACK FACE	LS	LUMP SUM
BM	BENCH MARK	MH	MANHOLE
BR	BRIDGE	MOR	MID POINT OF RADIUS
CE	COMMERCIAL ENTRANCE	NC	NORMAL CROWN
CL OR C/L OR C	CENTER LINE	NO	NUMBER
Δ	CENTRAL ANGLE OR DELTA	OBLIT	OBLITERATE
CONC	CONCRETE	PAVT	PAVEMENT
CPRC	CULVERT PIPE REINFORCED CONCRETE	PE	PRIVATE ENTRANCE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE	PVRC	POINT OF VERTICAL REVERSE CURVE
	HORIZONTAL ELLIPTICAL	QOR	QUARTER POINT OF RADIUS
CR	CREEK	R	RADIUS
CY	CUBIC YARD	REQ'D	REQUIRED
C & G	CURB AND GUTTER	RES	RESIDENCE OR RESIDENTIAL
D	DEGREE OF CURVE	RHF	RIGHT-HAND FORWARD
DHV	DESIGN HOUR VOLUME	R/W	RIGHT-OF-WAY
DISCH	DISCHARGE	R	RIVER
DG	DITCH GRADE	RDWY	ROADWAY
DWY	DRIVEWAY	R/L OR R	REFERENCE LINE
X	EAST GRID COORDINATE	SALV	SALVAGED
EAT	STEEL PLATE BEAM GUARD	SAN	SANITARY SEWER
	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

ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE APPROXIMATE USGS DATUM.

WHEN THE QUANTITY OF BASE AGGREGATE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE 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. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THOSE UTILITIES.

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

CURVE DATA IS BASED ON THE ARC DEFINITION.

BEARINGS SHOWN ON THE PLANS ARE PROJECT BEARINGS TO THE NEAREST SECOND.

THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS. REMOVAL LIMITS WILL BE DETERMINED BY THE ENGINEER.

4-INCH HMA PAVEMENT TYPE E-1 SHALL BE CONSTRUCTED WITH A 2 IN UPPER LAYER AND A 2 IN LOWER LAYER WITH 12.5-MM NOMINAL AGGREGATE SIZE FOR BOTH LIFTS.

BEARINGS SHOWN ON THE PLAN ARE REFERENCED TO THE EXISTING ROADWAY CENTERLINE AND ARE ASSUMED.

ARCHAEOLOGICAL SITE M0-0151 EXISTS BETWEEN STATIONS 98+00 & 103+00 LT. DO NOT USE THIS AREA FOR BORROW OR WASTE DISPOSAL OR THE STAGING OF PERSONNEL, EQUIPMENT OR SUPPLIES.

CENTURYLINK
P.O. BOX 256
311 SOUTH COURT STREET
SPARTA, WI 54656
TELEPHONE: 608.269.0819
ATTENTION: BRET CLARK
EMAIL: BRET.CLARK@CENTURYLINK.COM

CHARTER COMMUNICATIONS
1228 12TH AVENUE SOUTH
ONALASKA, WI 54650
TELEPHONE: 715.370.7140
ATTENTION: PERRY MCCLELLAN
EMAIL: PERRY.MCCLELLAN@CHARTERCOM.COM

CITY OF SPARTA
201 WEST OAK STREET
SPARTA, WI 54656
TELEPHONE: 608.269.6511 EXT. 228
ATTENTION: LYNN JEROME
EMAIL: DPW@SPARTAWISCONSIN.ORG

COUNTY OF MONROE
803 WASHINGTON STREET
SPARTA, WI 54656
TELEPHONE: 608.269.8739
ATTENTION: JACK DITTMAR
EMAIL: JACK.DITTMAR@CO.MONROE.WI.US

NORTHERN NATURAL GAS
5557 COUNTY ROAD D
PLATVILLE, WI 53818
TELEPHONE: 402.530.2801
ATTENTION: BOB BESECKER
EMAIL: BOB.BESECKER@NNGCO.COM

WE ENERGIES
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
TELEPHONE: 715.421.7259
ATTENTION: TRAVIS KAHL
EMAIL: TRAVIS.KAHL@WE-ENERGIES.COM

XCEL ENERGY - ELECTRIC DISTRIBUTION
1003 SOUTH BLACK RIVER STREET
SPARTA, WI 54656
TELEPHONE: 608.789.3677 EXT. 14
ATTENTION: KAYE CROOK
EMAIL: KAYE.CROOK@XCELENERGY.COM



Dial 811 or (800)242-8511

www.DiggersHotline.com

** NOT A MEMBER OF DIGGERS HOTLINE

MUNICIPALITY CONTACT

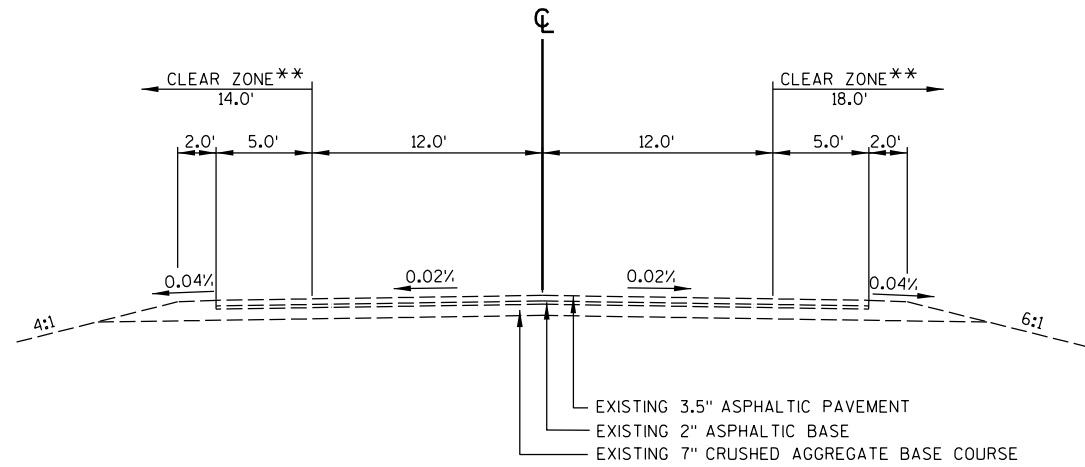
MONROE COUNTY HIGHWAY DEPARTMENT
803 WASHINGTON STREET
SPARTA, WI 54656
TELEPHONE: 608.685.6226
ATTENTION: JACK DITTMAR
EMAIL: JACK.DITTMAR@CO.MONROE.COM

DESIGN CONTACT

SEH
10 NORTH BRIDGE STREET
CHIPPEWA FALLS, WI 54729
TELEPHONE: 715.720.6267
ATTENTION: DAN GUSTAFSON
EMAIL: DGUSTAFSON@SEHINC.COM

WDNR CONTACT

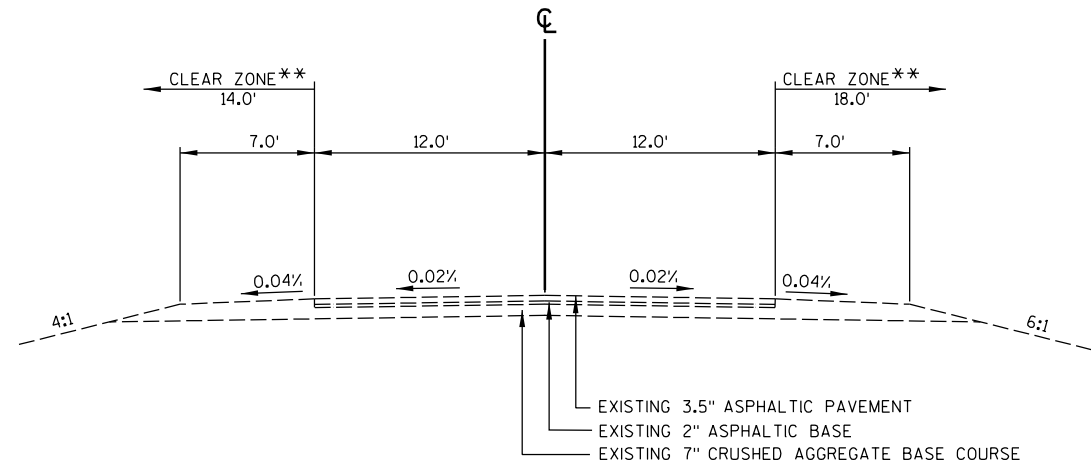
WI DEPT OF NATURAL RESOURCES
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
TELEPHONE: 608.785.9115
ATTENTION: KAREN KALVELAGE
EMAIL: KAREN.KALVELAGE@WISCONSIN.GOV



**14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18' CLEAR ZONE WHERE SIDESLOPES ARE 6:1

EXISTING TYPICAL SECTION

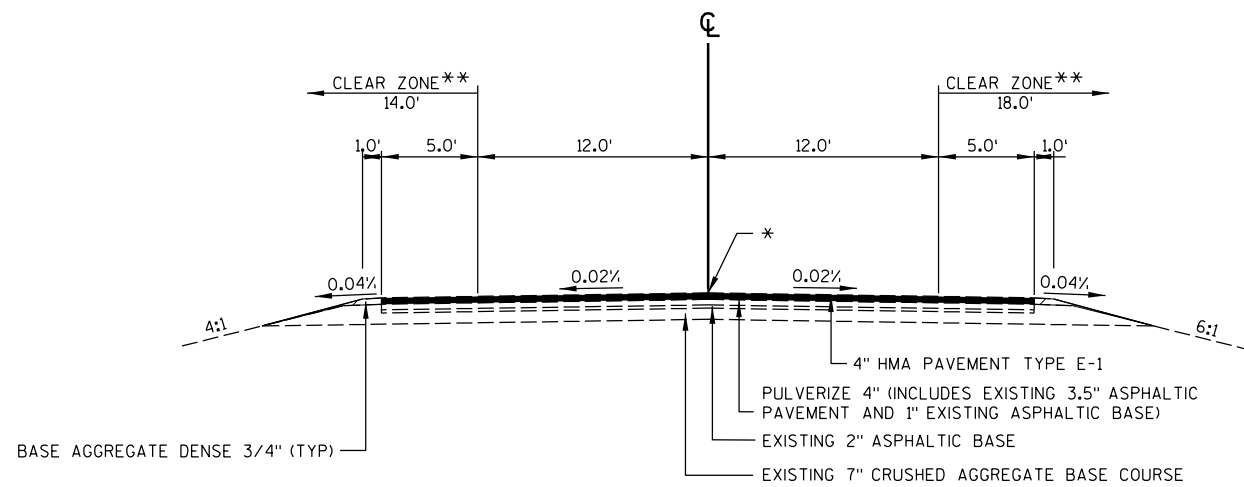
STA 32+45 TO STA 90+00



**14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18' CLEAR ZONE WHERE SIDESLOPES ARE 6:1

EXISTING TYPICAL SECTION

STA 90+00 TO STA 181+00

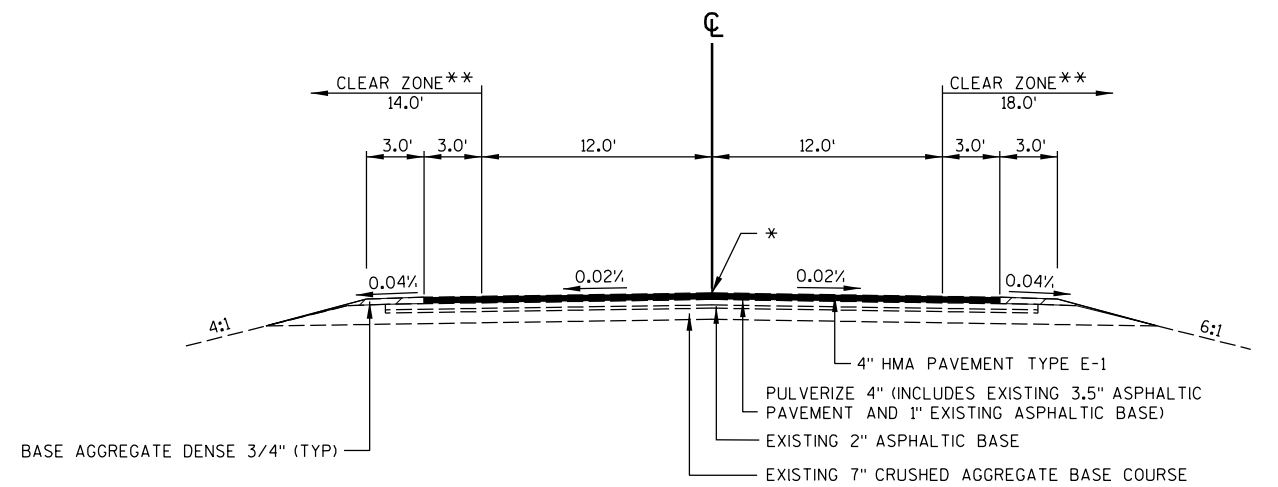


* ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

TYPICAL FINISHED SECTION

STA 32+45 TO STA 90+00

* ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
**14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18'
CLEAR ZONE WHERE SIDESLOPES ARE 6:1

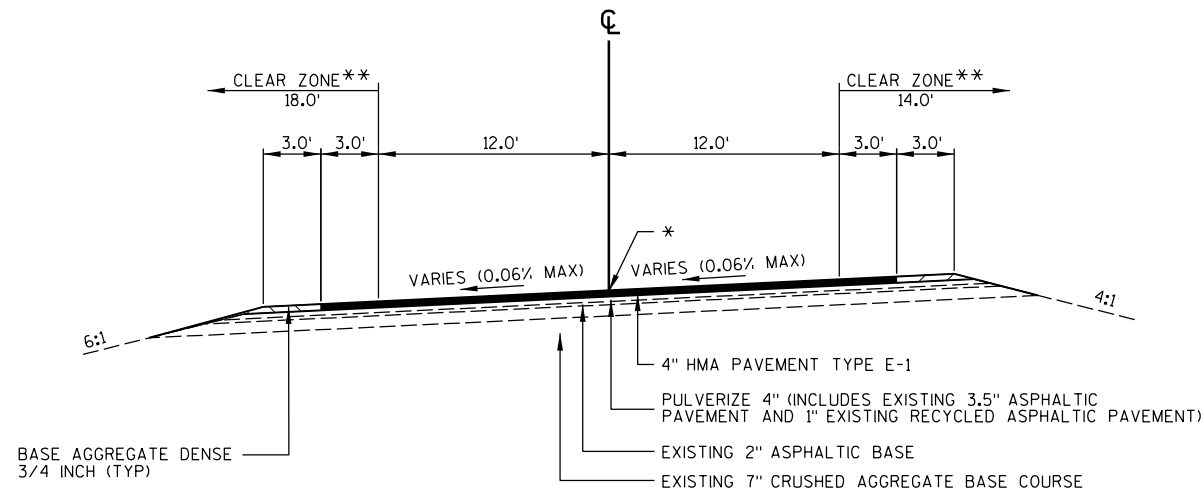


* ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

TYPICAL FINISHED SECTION

STA 90+00 TO STA 181+00

* ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
**14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18'
CLEAR ZONE WHERE SIDESLOPES ARE 6:1

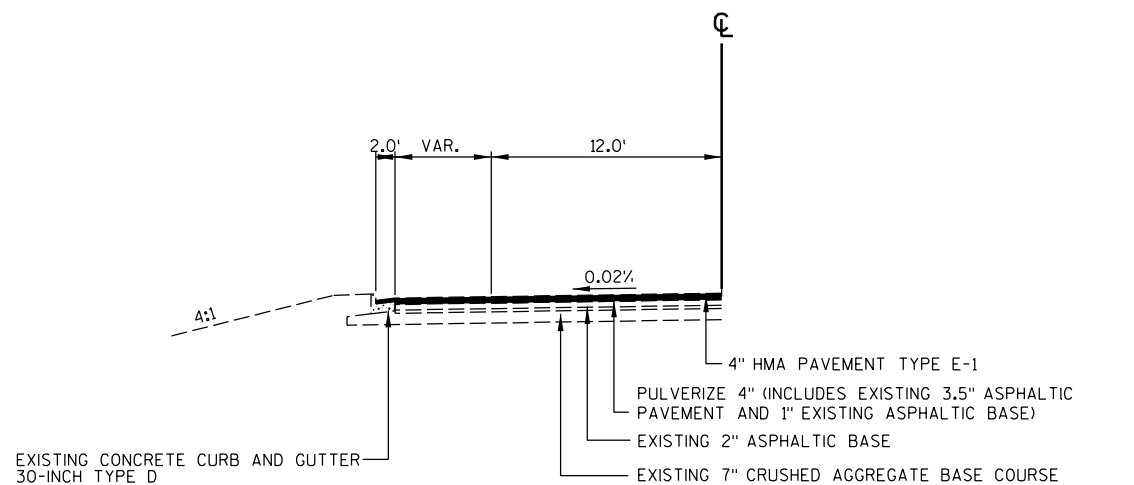


PROPOSED SUPERELEVATED SECTION

*ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
**14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18' CLEAR ZONE WHERE SIDESLOPES ARE 6:1

NOTE: PAVED SHOULDER VARIES, SEE TABLE BELOW

STATION	PAVED SHOULDER	GRAVEL SHOULDER
32+45 – 90+00	5'	1'
90+00 – 91+00	TAPER FROM 5'-3'	TAPER FROM 1'-3'
91+00 – 181+00	3'	3'

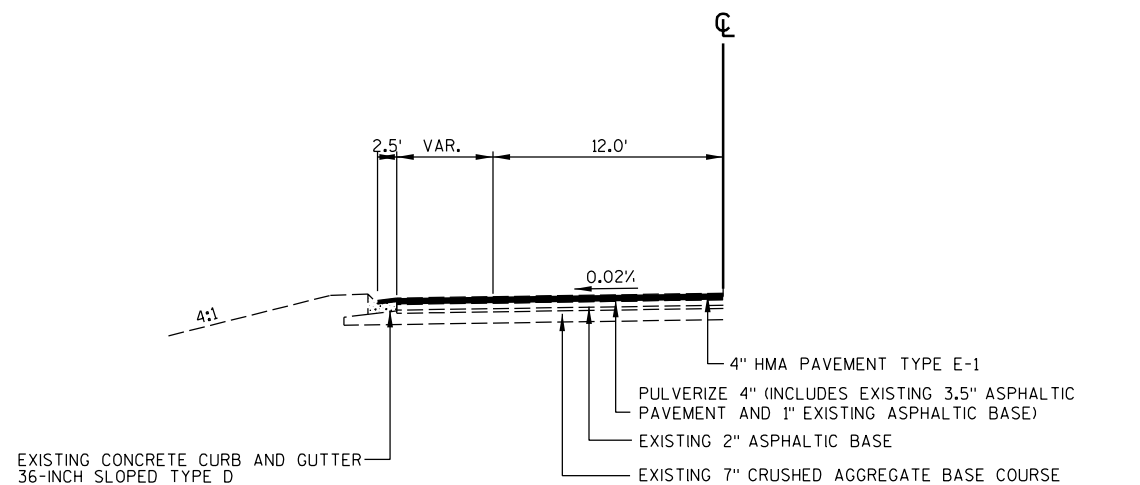


TYPICAL FINISHED HALF SECTION

STA 37+50 TO STA 40+00 LT
STA 103+00 TO STA 107+60 RT

SUPERELEVATION TABLE

STATION	TYPE	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
82+89.68	SH END NC	-0.04	-0.02	-0.02	-0.04
83+27.93	END NC	-0.04	-0.02	-0.02	-0.02
83+66.18	ZERO SUPER	-0.04	-0.02	0.00	0.00
84+04.43	REV. CROWN	-0.04	-0.02	0.02	0.02
84+42.68	SH. TRANS.	-0.04	-0.04	0.04	0.04
84+80.93	BEGIN FS	-0.06	-0.06	0.06	0.06
92+61.25	END FS	-0.06	-0.06	0.06	0.06
92+99.50	SH. TRANS.	-0.04	-0.04	0.04	0.04
93+37.75	REV. CROWN	-0.04	-0.02	0.02	0.02
93+76.00	ZERO SUPER	-0.04	-0.02	0.00	0.00
94+14.25	BEGIN NC	-0.04	-0.02	-0.02	-0.02
94+52.50	SH BEGIN NC	-0.04	-0.02	-0.02	-0.04
100+92.54	SH END NC	-0.04	-0.02	-0.02	-0.04
101+30.79	END NC	-0.02	-0.02	-0.02	-0.04
101+69.04	ZERO SUPER	0.00	0.00	-0.02	-0.04
102+07.29	REV. CROWN	0.02	0.02	-0.02	-0.04
102+45.54	SH. TRANS.	0.04	0.04	-0.04	-0.04
102+83.79	BEGIN FS	0.06	0.06	-0.06	-0.06
109+73.46	END FS	0.06	0.06	-0.06	-0.06
110+11.71	SH. TRANS.	0.04	0.04	-0.04	-0.04
110+49.96	REV. CROWN	0.02	0.02	-0.02	-0.04
110+88.21	ZERO SUPER	0.00	0.00	-0.02	-0.04
111+26.46	BEGIN NC	-0.02	-0.02	-0.02	-0.04
111+64.71	SH BEGIN NC	-0.04	-0.02	-0.02	-0.04
156+92.05	SH END NC	-0.04	-0.02	-0.02	-0.04
157+30.30	END NC	-0.02	-0.02	-0.02	-0.04
157+68.55	ZERO SUPER	0.00	0.00	-0.02	-0.04
158+06.80	REV. CROWN	0.02	0.02	-0.02	-0.04
158+45.05	SH. TRANS.	0.04	0.04	-0.04	-0.04
158+83.30	BEGIN FS	0.06	0.06	-0.06	-0.06
161+51.14	END FS	0.06	0.06	-0.06	-0.06
161+89.39	SH. TRANS.	0.04	0.04	-0.04	-0.04
162+27.64	REV. CROWN	0.02	0.02	-0.02	-0.04
162+65.89	ZERO SUPER	0.00	0.00	-0.02	-0.04
163+04.14	BEGIN NC	-0.02	-0.02	-0.02	-0.04
163+42.39	SH BEGIN NC	-0.04	-0.02	-0.02	-0.04
170+96.46	SH END NC	-0.04	-0.02	-0.02	-0.04
171+34.23	END NC	-0.04	-0.02	-0.02	-0.02
171+72.00	ZERO SUPER	-0.04	-0.02	0.00	0.00
172+09.77	REV. CROWN	-0.04	-0.02	0.02	0.02
172+47.54	SH. TRANS.	-0.04	-0.04	0.04	0.04
172+78.64	BEGIN FS	-0.06	-0.06	0.06	0.06
174+86.72	END FS	-0.06	-0.06	0.06	0.06
175+17.82	SH. TRANS.	-0.04	-0.04	0.04	0.04
175+55.59	REV. CROWN	-0.04	-0.02	0.02	0.02
175+93.36	ZERO SUPER	-0.04	-0.02	0.00	0.00
176+31.13	BEGIN NC	-0.04	-0.02	-0.02	-0.02
176+68.90	SH BEGIN NC	-0.04	-0.02	-0.02	-0.04

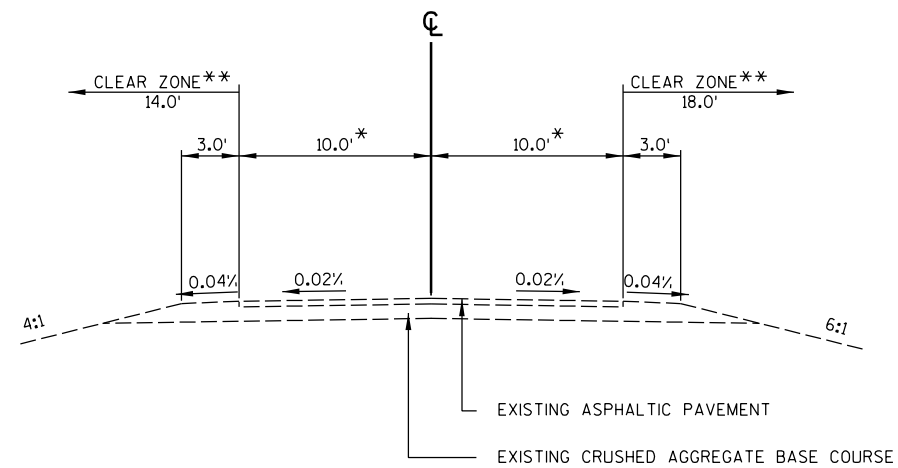


TYPICAL FINISHED HALF SECTION

STA 140+50 TO STA 143+50 LT
STA 142+00 TO STA 144+00 RT

2

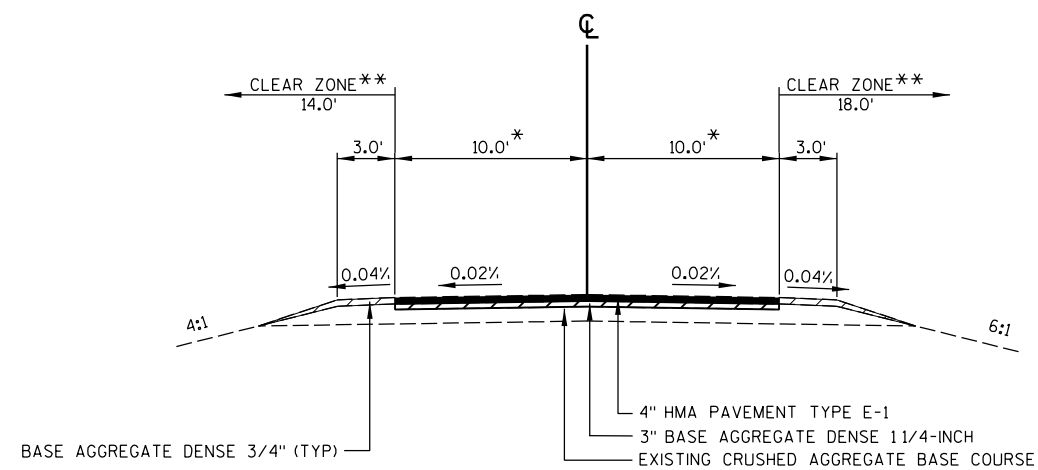
2



*FIELD VERIFY. PROPOSED TO MATCH EXISTING
 **14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18' CLEAR ZONE WHERE SIDESLOPES ARE 6:1

EXISTING SIDEROAD TYPICAL SECTION

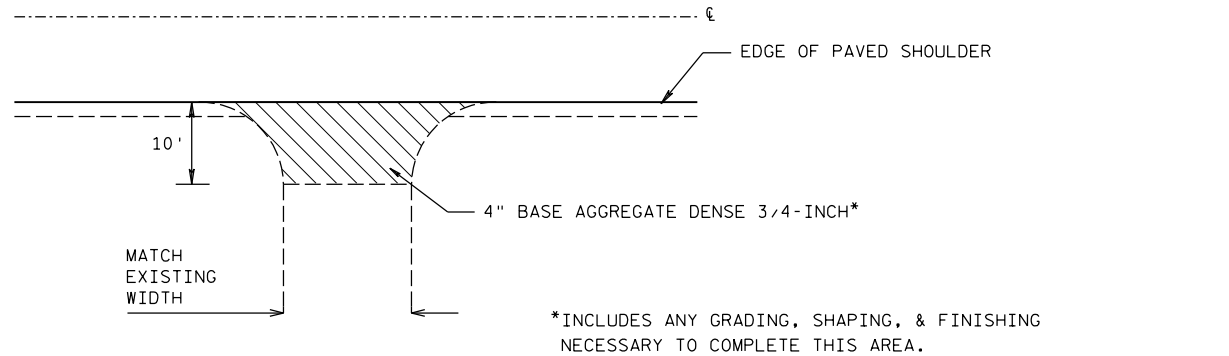
GEMWOOD AVENUE
GENERAL AVENUE
GARDENER AVENUE
GAVEL AVENUE
FERNWOOD AVENUE



*FIELD VERIFY, PROPOSED TO MATCH EXISTING
**14' CLEAR ZONE WHERE SIDESLOPES ARE 4:1. 18' CLEAR ZONE WHERE SIDESLOPES ARE 6:1

PROPOSED SIDEROAD TYPICAL SECTION

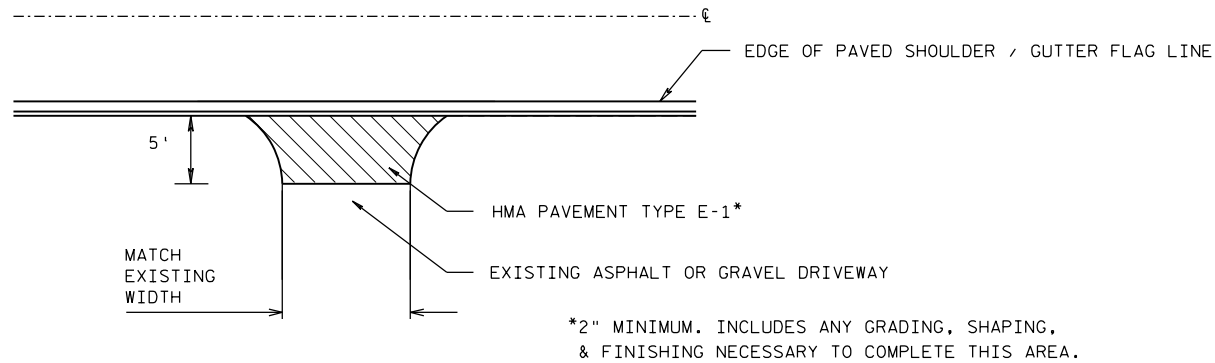
GEMWOOD AVENUE
GENERAL AVENUE
GARDENER AVENUE
GAVEL AVENUE
FERNWOOD AVENUE



RURAL DRIVEWAY DETAIL - GRAVEL

STA 62+89, RT
STA 65+37, LT
STA 75+63, LT
STA 75+86, RT
STA 96+00, LT
STA 120+50, RT
STA 145+02, LT
STA 145+02, RT
STA 177+00, LT

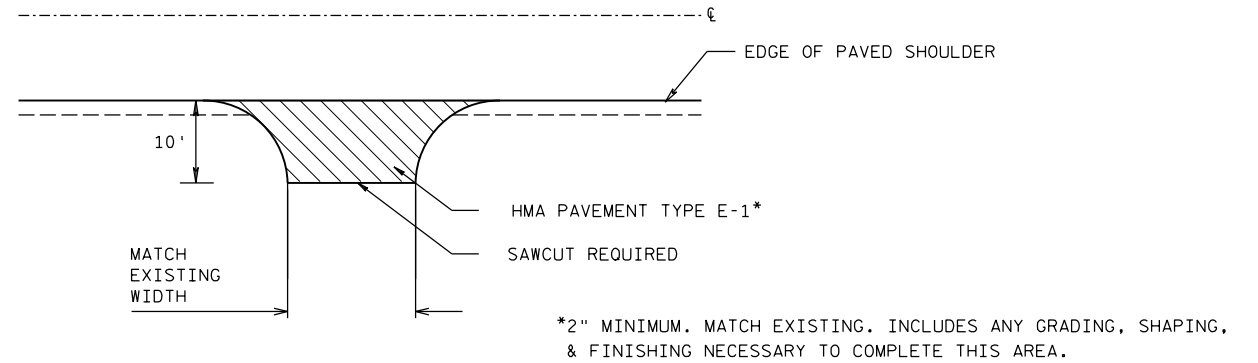
DRIVEWAYS ARE NOT SHOWN ON PLAN SHEETS



RURAL DRIVEWAY DETAIL - CURB & GUTTER LOCATIONS

STA 38+21, LT
STA 39+29, LT
STA 103+45, RT
STA 106+00, RT
STA 142+40, LT

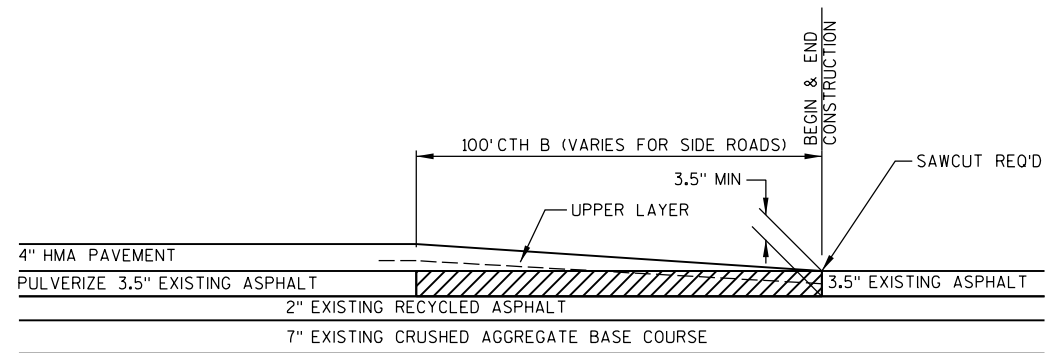
DRIVEWAYS ARE NOT SHOWN ON PLAN SHEETS




RURAL DRIVEWAY DETAIL - ASPHALT

STA 34+36, RT
STA 35+50, RT
STA 39+18, RT
STA 47+55, RT
STA 58+77, LT
STA 61+37, LT
STA 91+85, RT
STA 93+08, RT
STA 99+86, RT
STA 100+79, RT
STA 102+80, LT
STA 106+00, LT
STA 111+20, LT
STA 112+09, LT
STA 112+65, RT
STA 113+02, LT
STA 115+20, RT
STA 116+25, RT
STA 118+12, RT
STA 118+22, LT
STA 119+05, LT
STA 132+70, LT
STA 145+75, RT
STA 147+00, RT
STA 149+25, LT
STA 153+96, RT
STA 159+85, LT
STA 161+12, LT
STA 163+31, RT
STA 168+35, RT
STA 169+60, RT
STA 170+70, RT
STA 172+25, RT

DRIVEWAYS ARE NOT SHOWN ON PLAN SHEETS



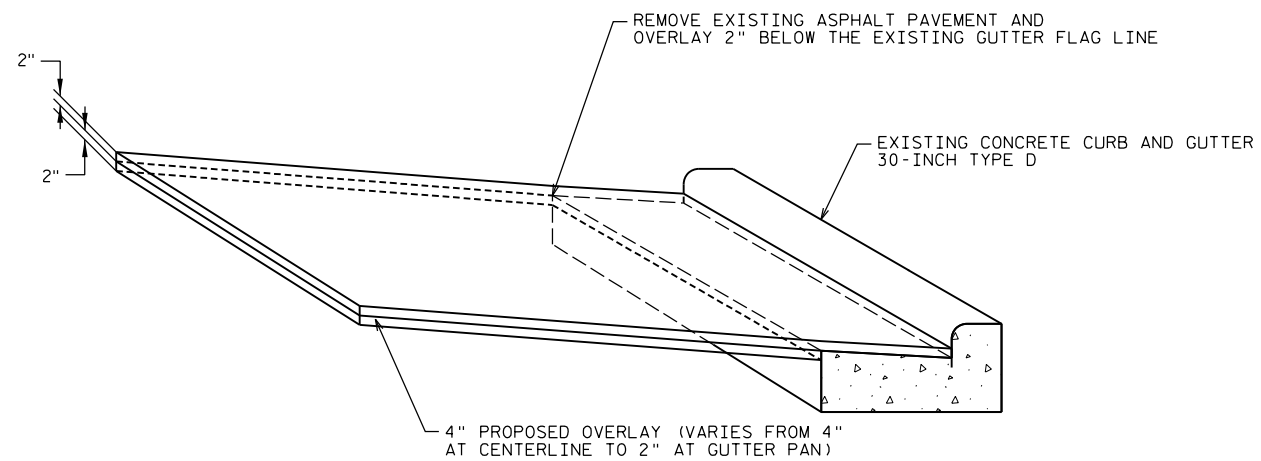
 REMOVING ASPHALTIC SURFACE

DETAIL OF BUTTED JOINT

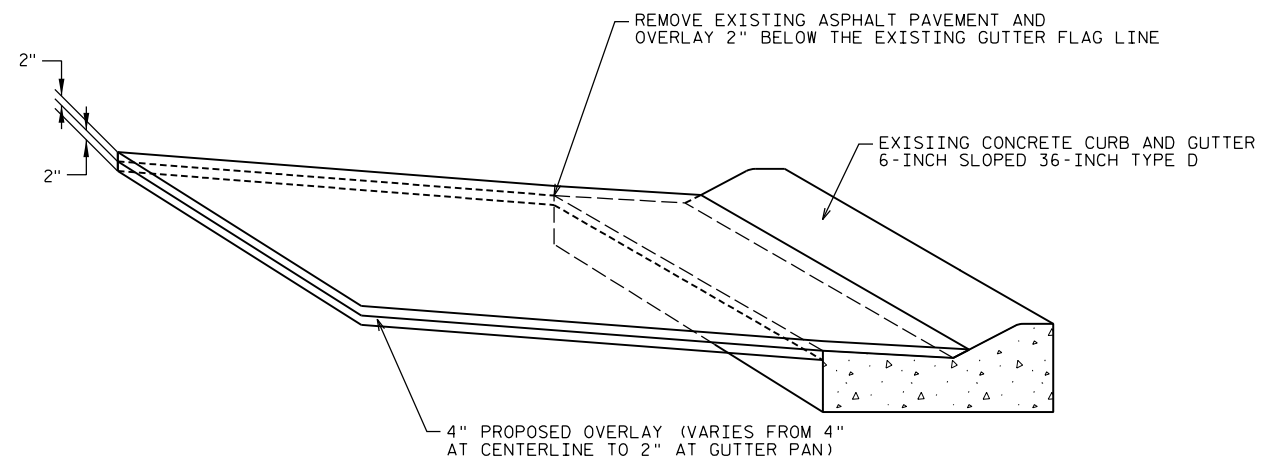
STA 32+45*
STA 181+00*

GEMWOOD AVENUE
GENERAL AVENUE
GARDENER AVENUE
GAVEL AVENUE
FERNWOOD AVENUE

*ADJUST AS NEEDED TO FIT EXISTING FIELD LOCATIONS



CURB & GUTTER TERMINI
4\" HMA PAVEMENT OVERLAY AT
CONCRETE CURB & GUTTER 30-INCH TYPE D
STA 37+50 TO STA 40+00, LT
STA 103+00 TO STA 107+60, RT

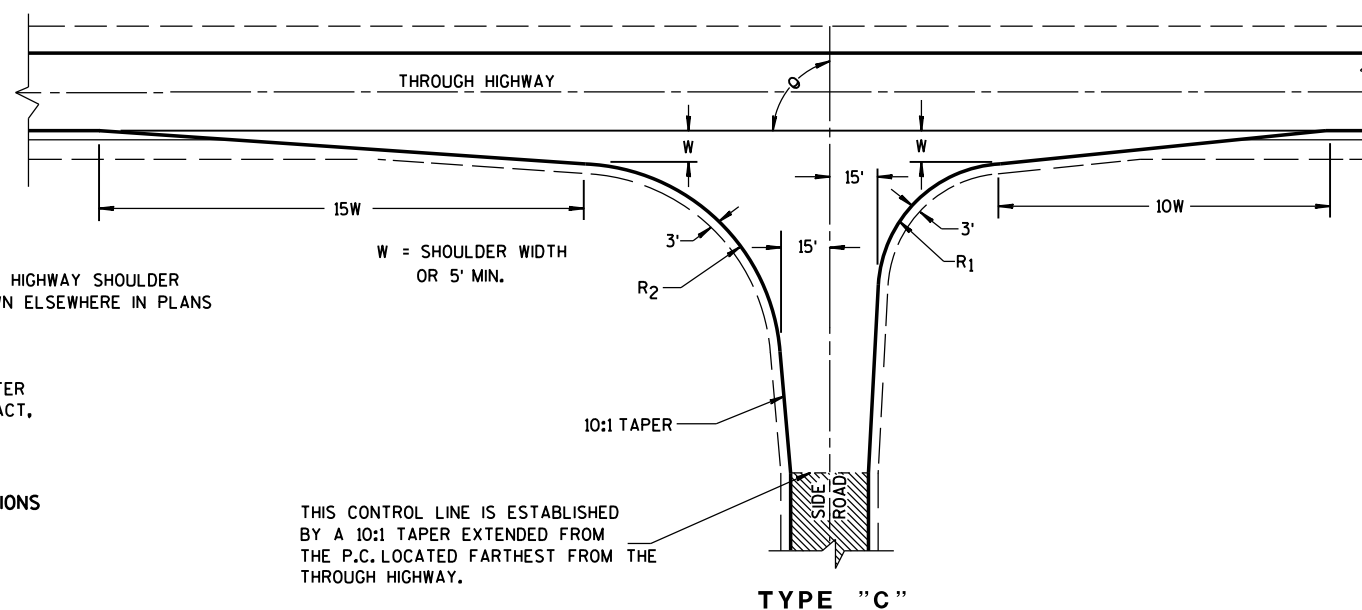


CURB & GUTTER TERMINI
4\" HMA PAVEMENT OVERLAY AT
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
STA 140+50 TO STA 143+50, LT
STA 142+00 TO STA 144+00, RT

DATE 21DEC15		E S T I M A T E O F Q U A N T I T I E S			
LINE					7100-00-70
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0110	Removing Asphalt ic Surface	SY	425.000	425.000
0020	204.0115	Removing Asphalt ic Surface Butt Joints	SY	1,400.000	1,400.000
0030	211.0100	Prepare Foundation for Asphalt ic Paving (project) 01. 7100-00-70	LS	1.000	1.000
0040	213.0100	Finishing Roadway (project) 01. 7100-00-70	EACH	1.000	1.000
0050	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,340.000	2,340.000
0060	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	285.000	285.000
0070	325.0100	Pulverize and Relay	SY	45,365.000	45,365.000
0080	440.4410	Incentive IRI Ride	DOL	11,260.000	11,260.000
0090	455.0105	Asphalt ic Material PG58-28	TON	670.000	670.000
0100	455.0605	Tack Coat	GAL	3,250.000	3,250.000
0110	460.1101	HMA Pavement Type E-1	TON	12,130.000	12,130.000
0120	460.2000	Incentive Density HMA Pavement	DOL	7,770.000	7,770.000
0130	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	13,425.000	13,425.000
0140	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0150	619.1000	Mobilization	EACH	1.000	1.000
0160	624.0100	Water	MGAL	250.000	250.000
0170	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	10.000	10.000
0180	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	8.000	8.000
0190	637.2210	Signs Type II Reflective H	SF	40.900	40.900
0200	637.2230	Signs Type II Reflective F	SF	84.750	84.750
0210	638.2602	Removing Signs Type II	EACH	17.000	17.000
0220	638.3000	Removing Small Sign Supports	EACH	17.000	17.000
0230	642.5001	Field Office Type B	EACH	1.000	1.000
0240	643.0100	Traffic Control (project) 01. 7100-00-70	EACH	1.000	1.000
0250	646.0106	Pavement Marking Epoxy 4-Inch	LF	49,710.000	49,710.000
0260	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	100.000	100.000
0270	648.0100	Locating No-Passing Zones	MI	2.813	2.813
0280	649.0403	Temporary Pavement Marking Epoxy 4-Inch	LF	29,710.000	29,710.000
0290	650.8000	Construction Staking Resurfacing Reference	LF	14,855.000	14,855.000
0300	650.9910	Construction Staking Supplemental Control (project) 01. 7100-00-70	LS	1.000	1.000
0310	690.0150	Sawing Asphalt	LF	784.000	784.000
0320	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	600.000	600.000
0330	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000

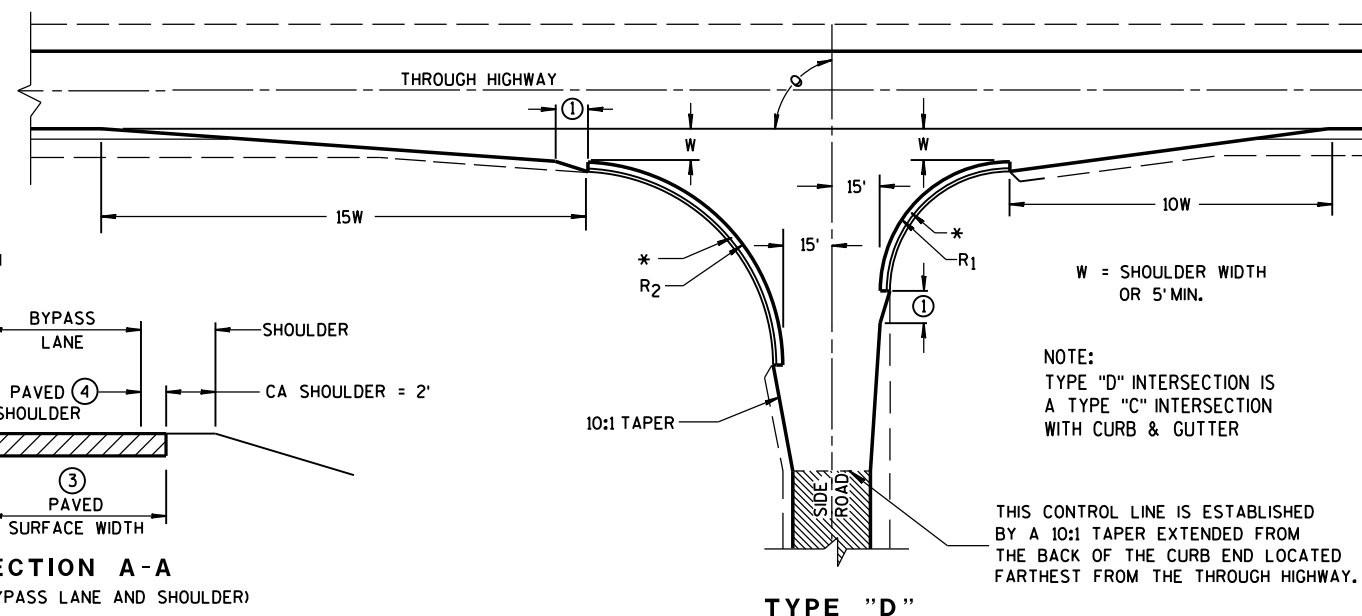
Standard Detail Drawing List

09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



**RADI DIMENSIONS FOR TYPES
"B1", "B2", "C" AND "D" INTERSECTIONS**

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45





DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

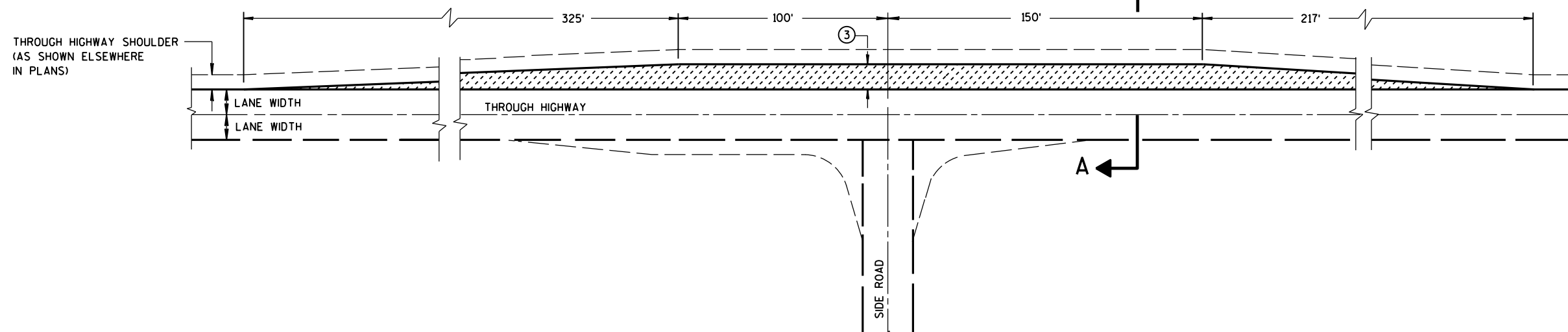
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

-  EXISTING PAVED SURFACE
-  BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.

SECTION A-A
 NG BYPASS LANE AND SHOULDER



TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

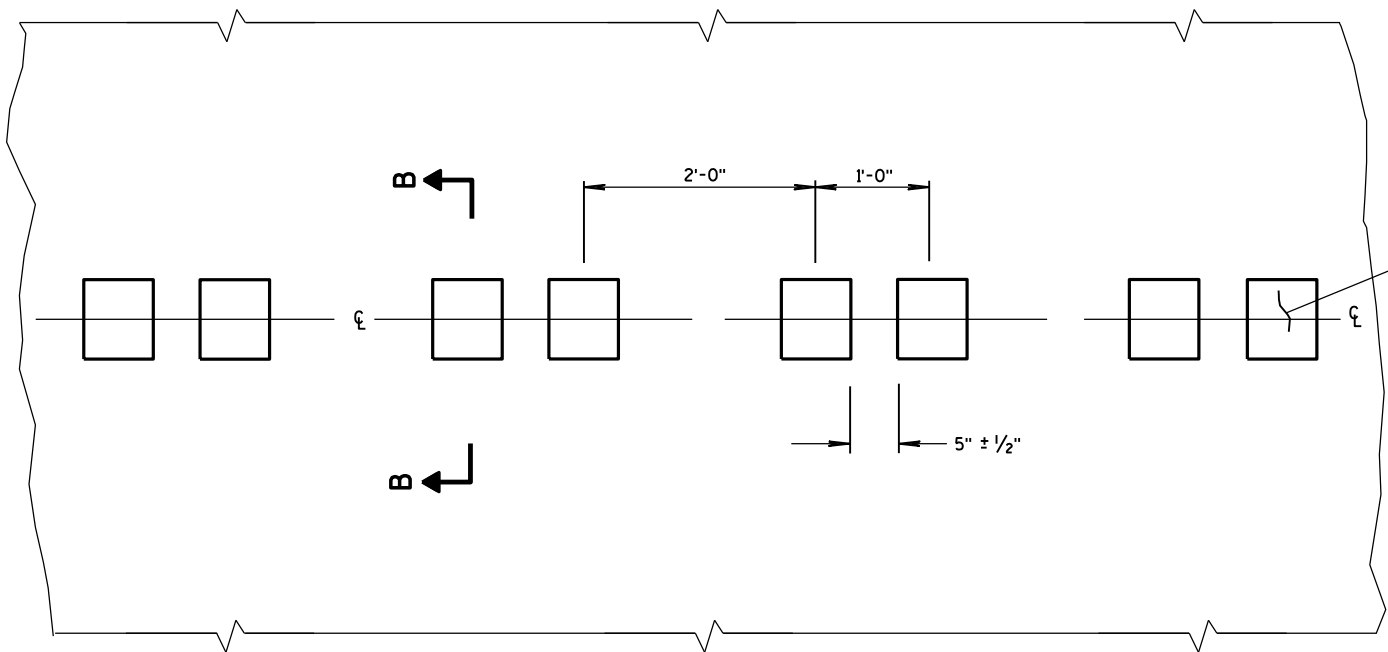
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

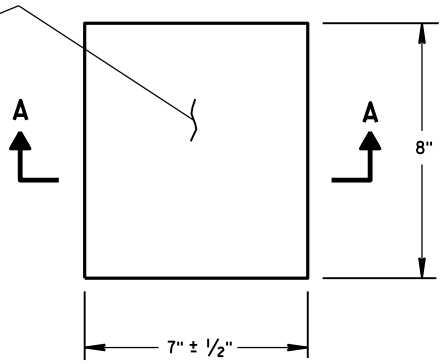
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

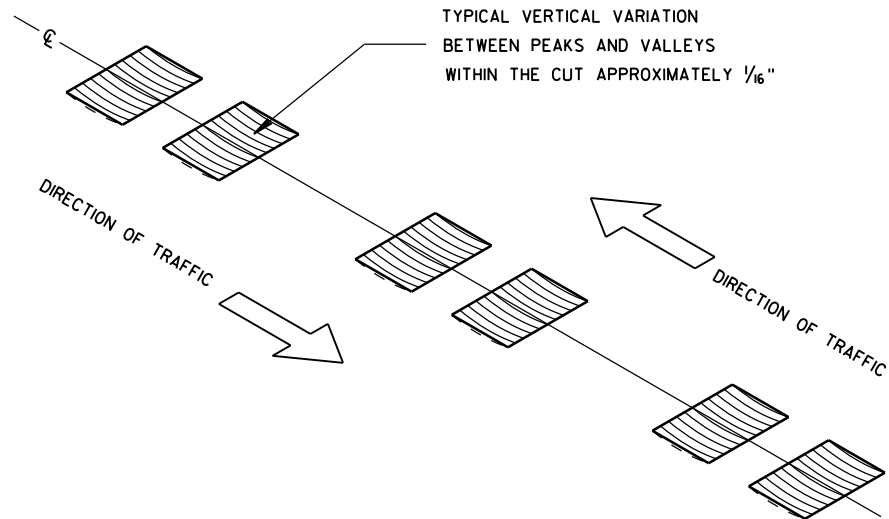
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



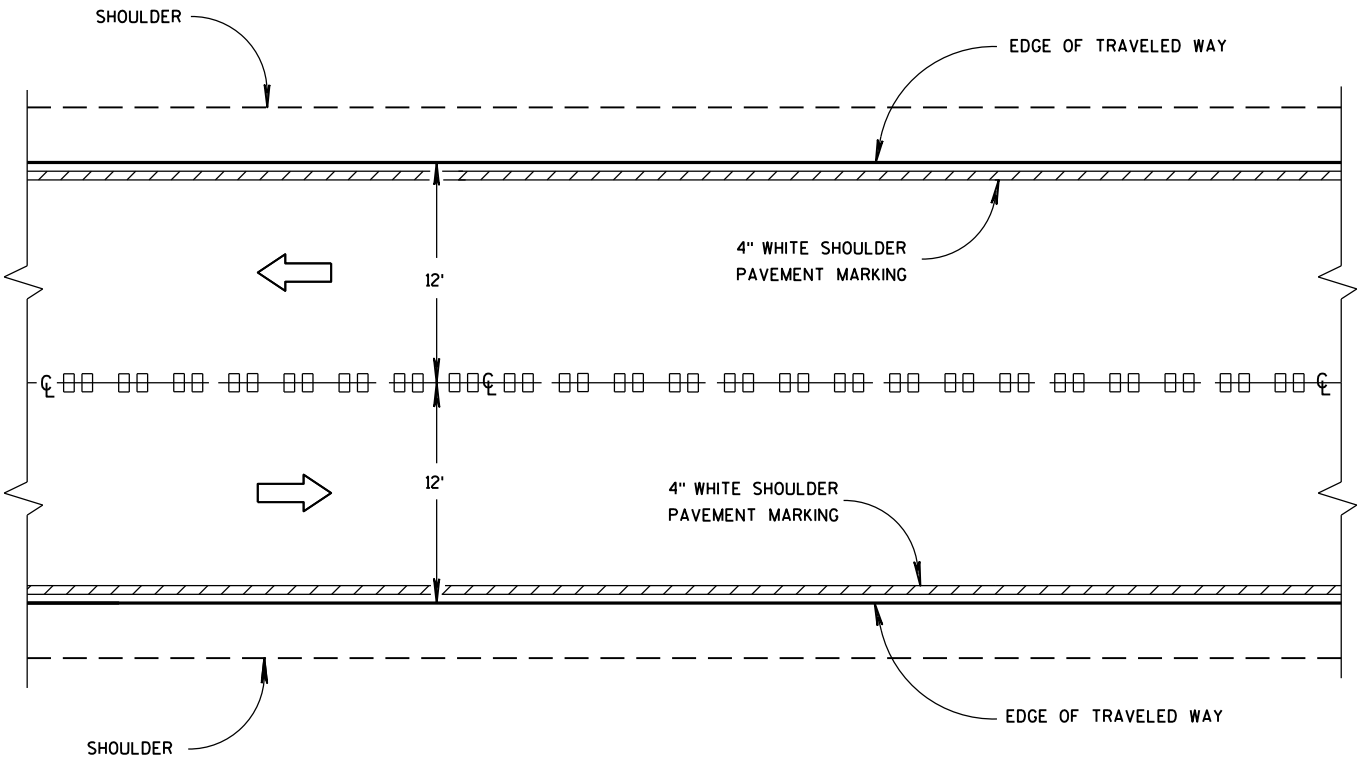
PLAN VIEW
CENTER LINE WITH GROOVES



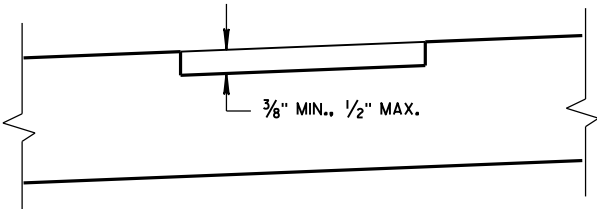
PLAN VIEW
(SINGLE GROOVE)



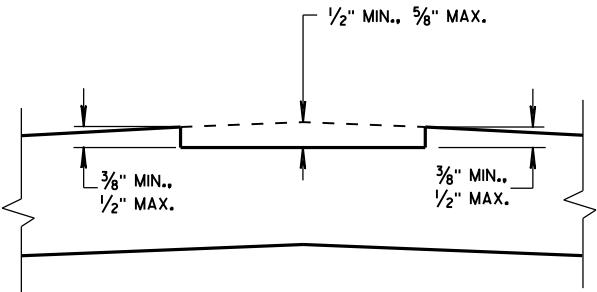
ISOMETRIC



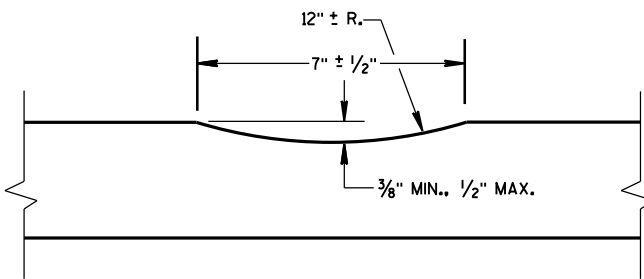
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



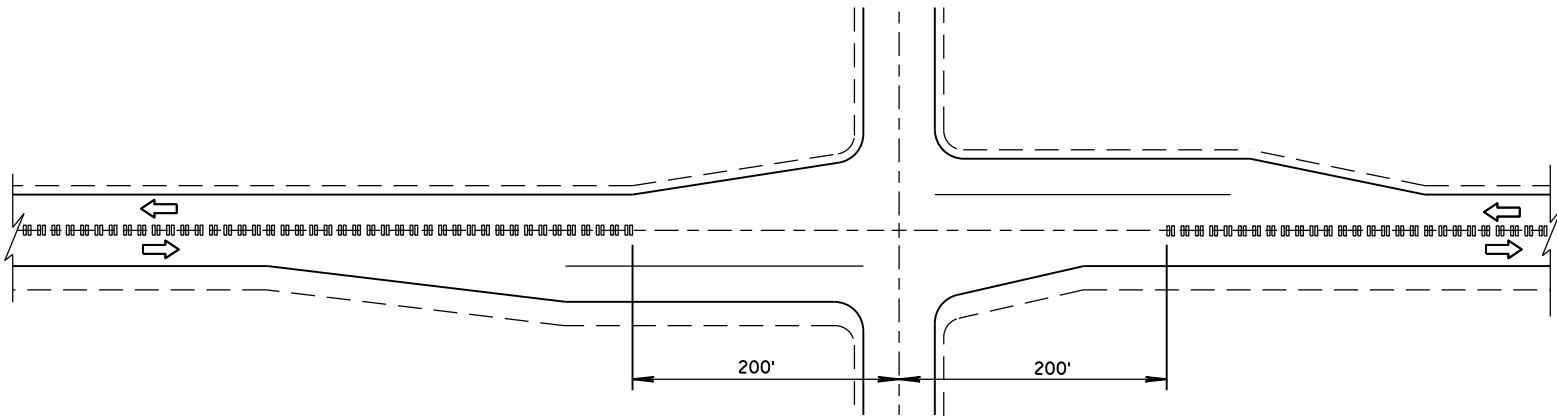
SECTION B-B
CROWNED ROADWAY



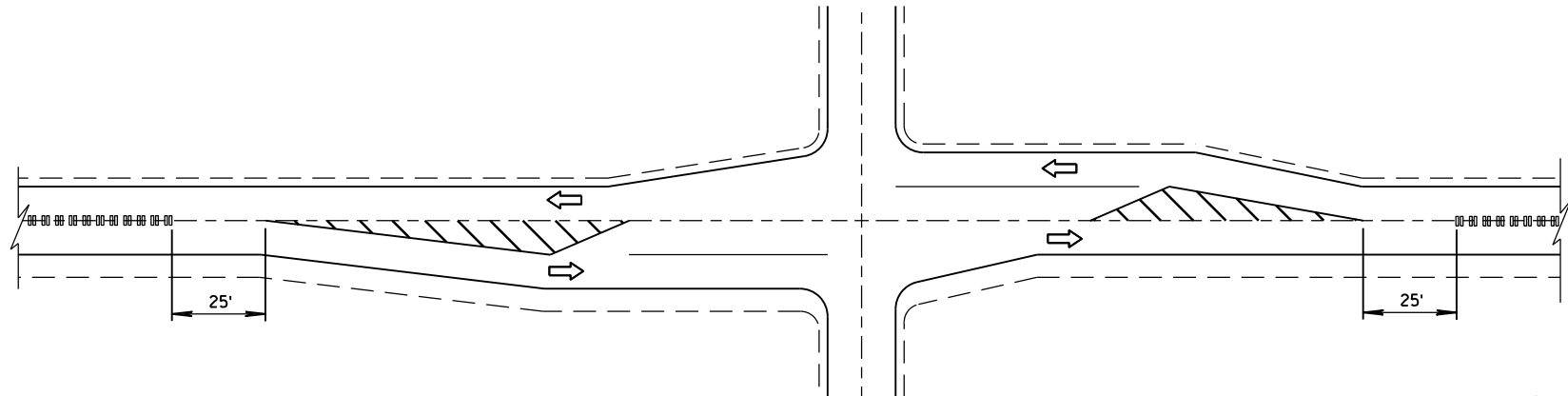
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

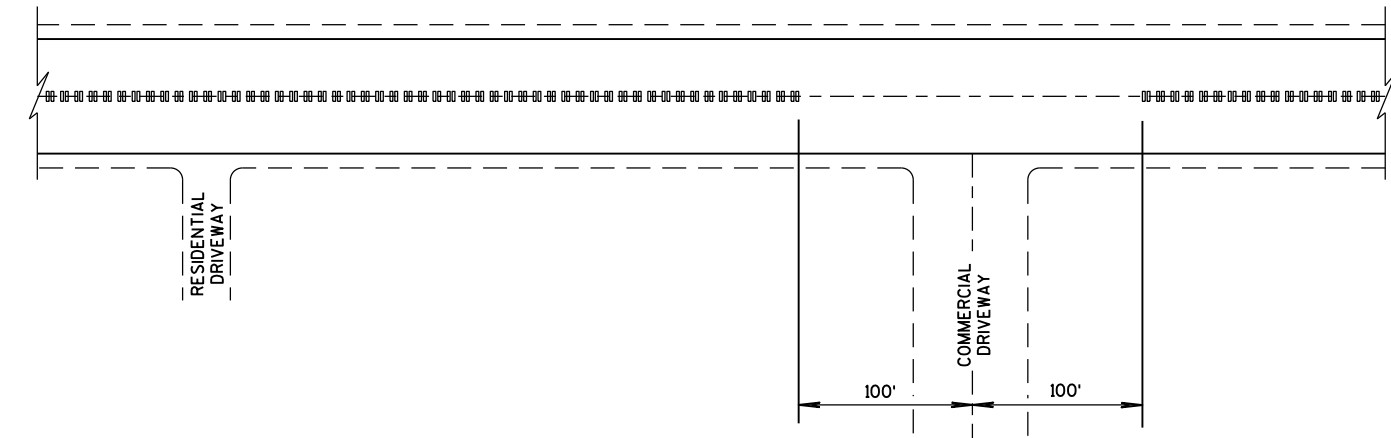
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

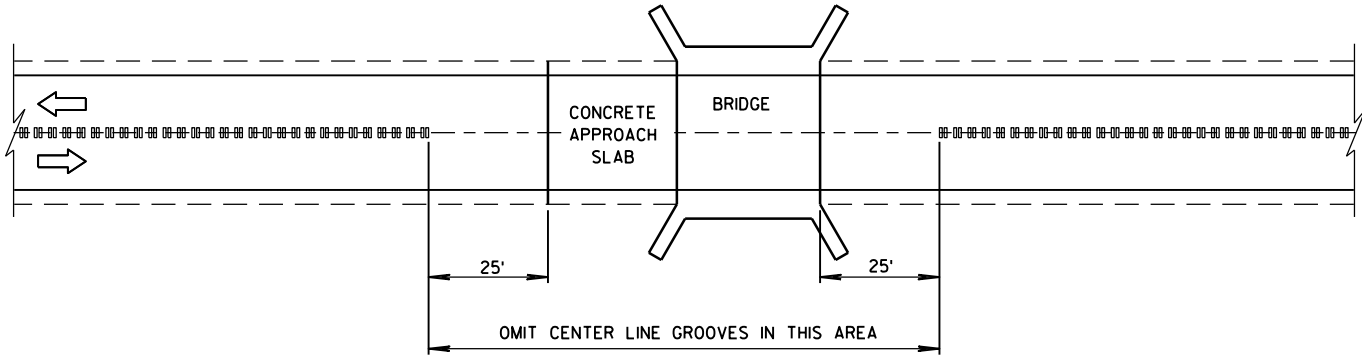


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

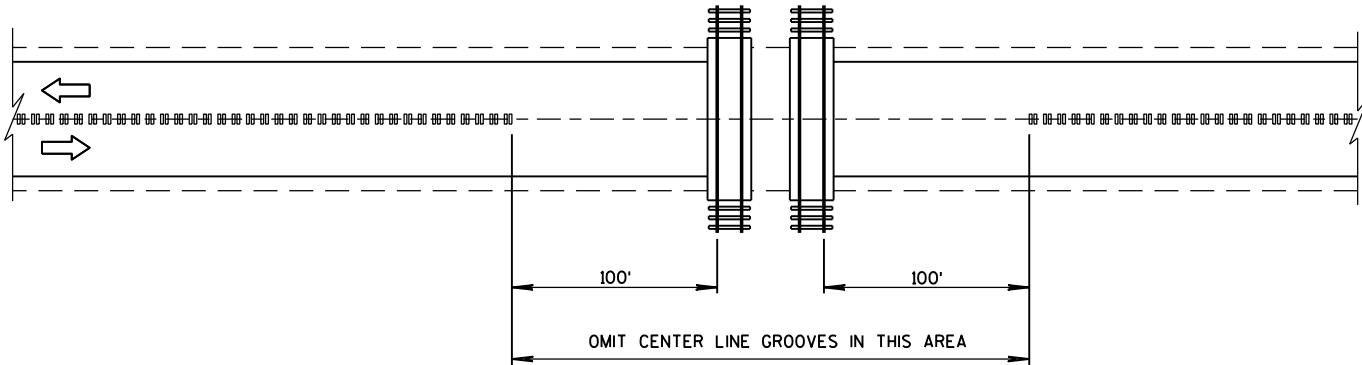


CENTER LINE GROOVES AT DRIVEWAYS^①

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

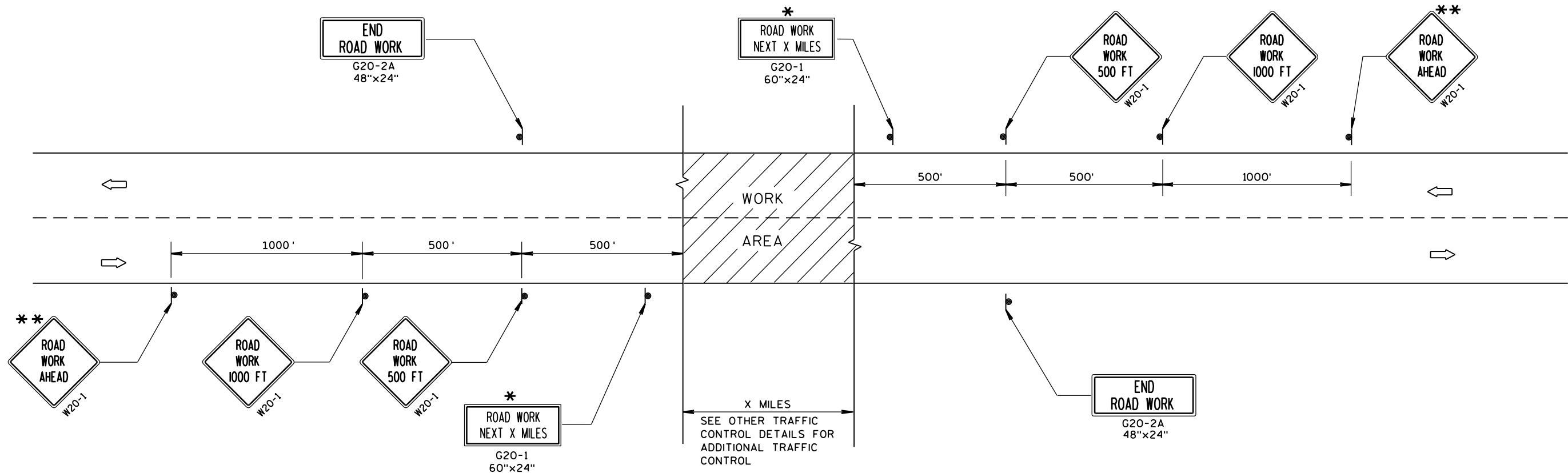


CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

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



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

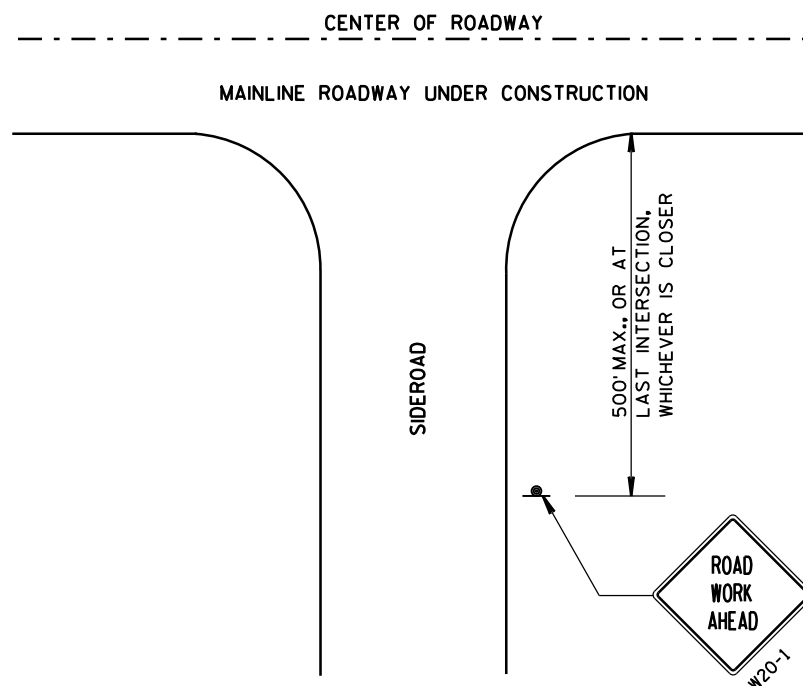
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

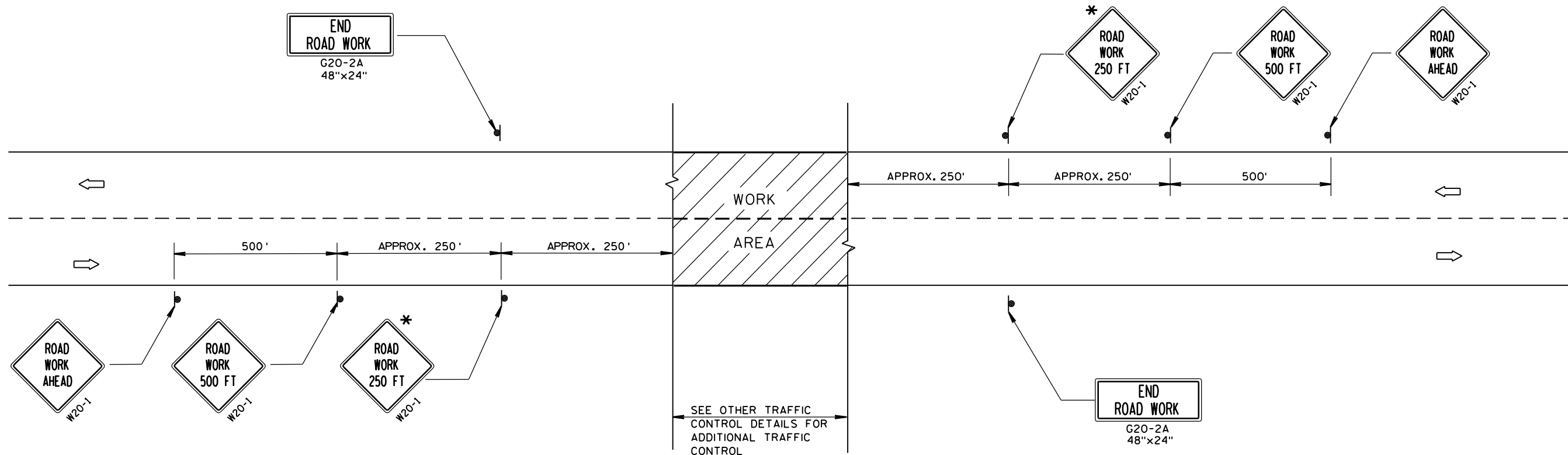
** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

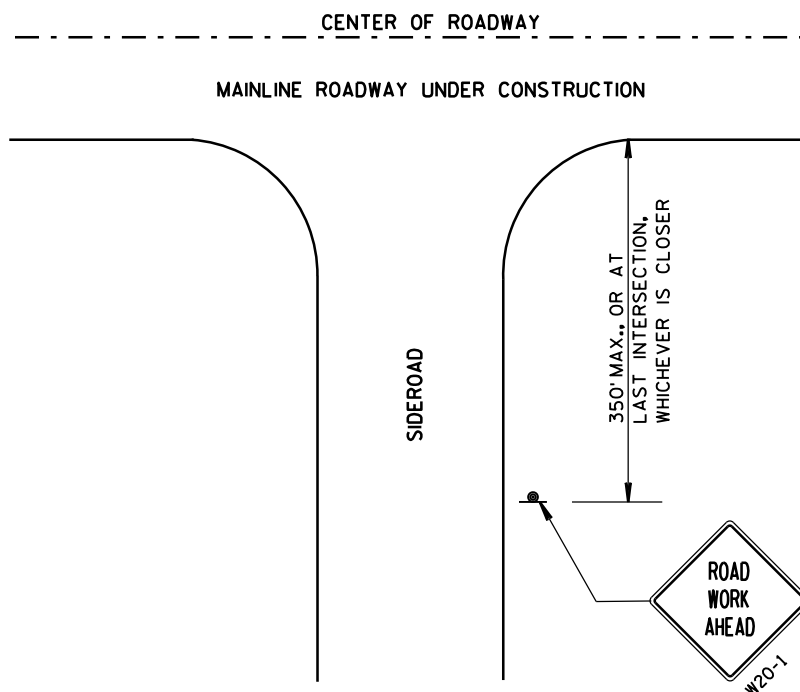
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

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

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

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



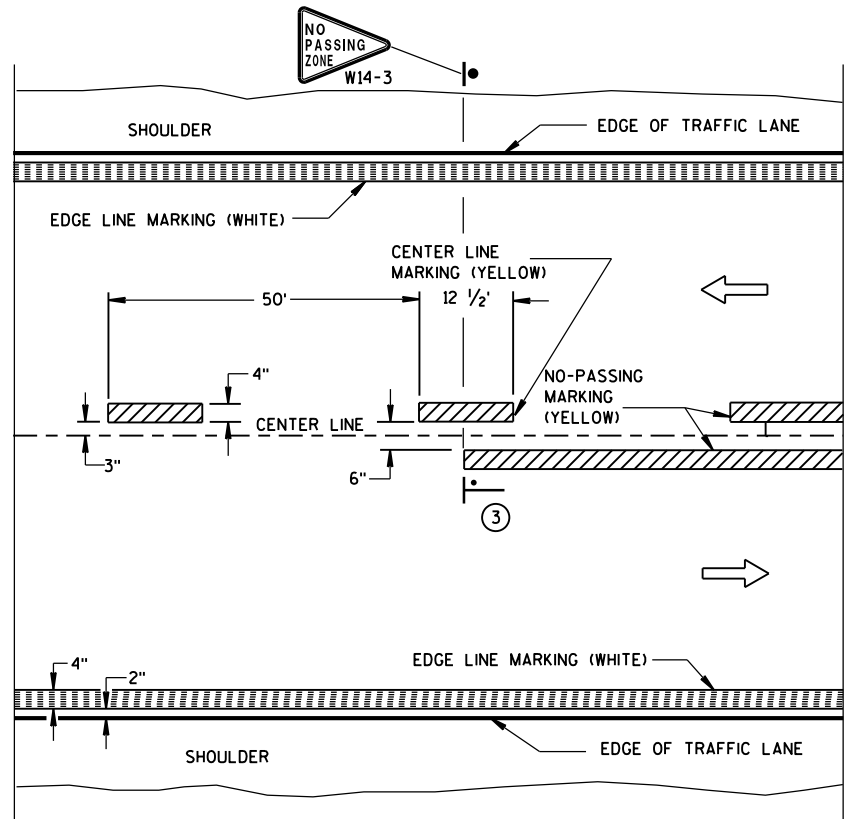
LEGEND

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

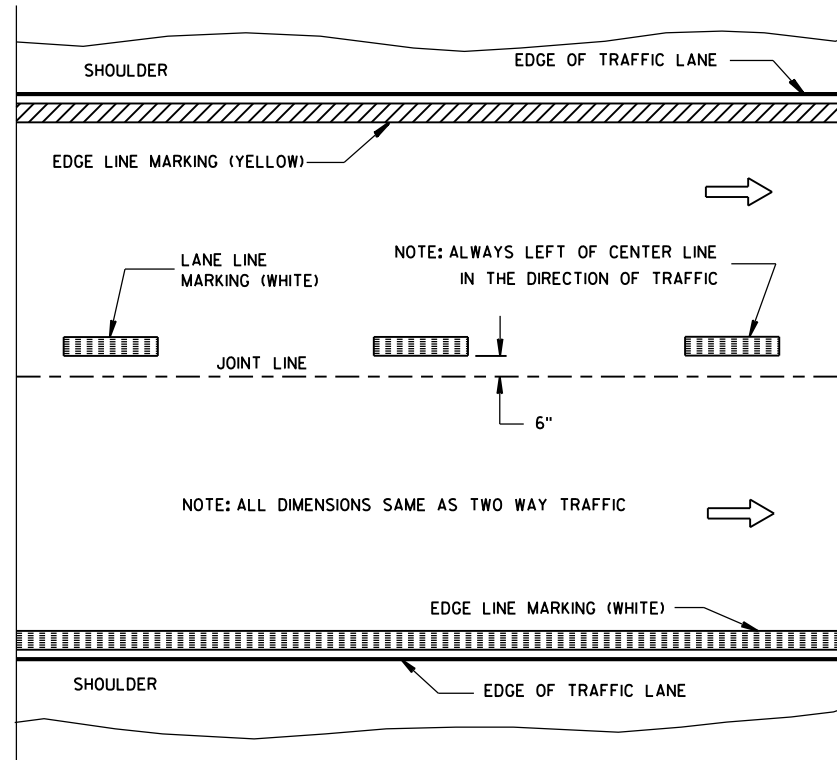
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 40 M.P.H.
OR LESS TWO-WAY UNDIVIDED
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA

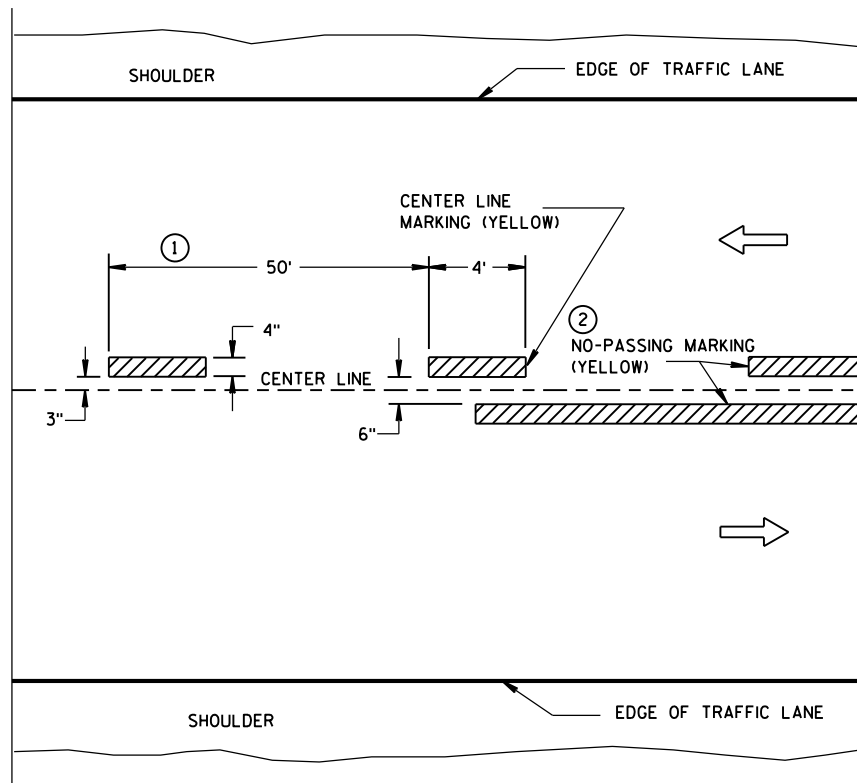


TWO WAY TRAFFIC

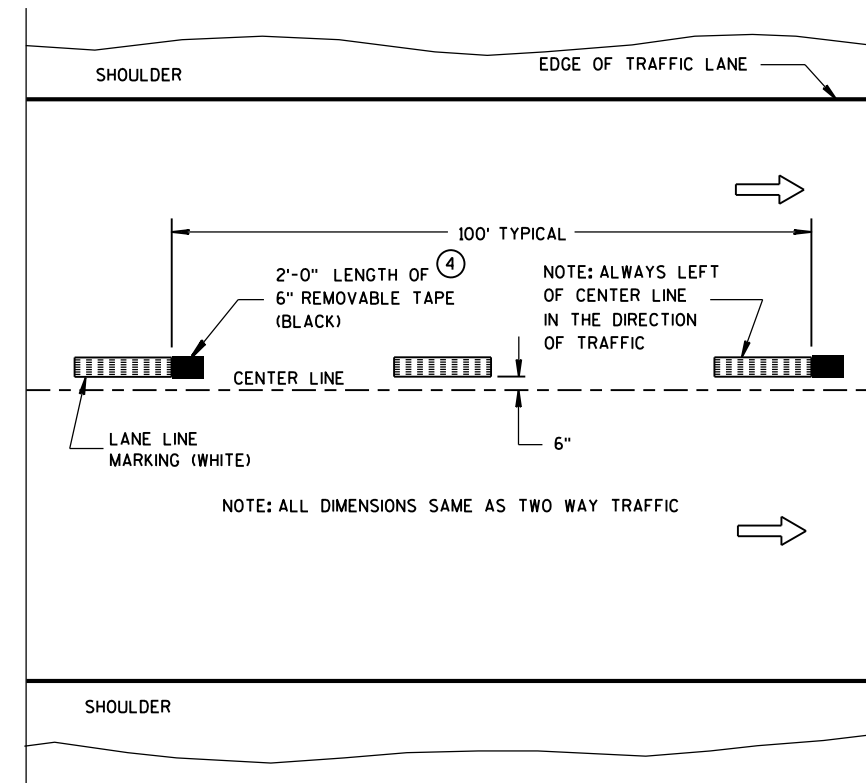


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

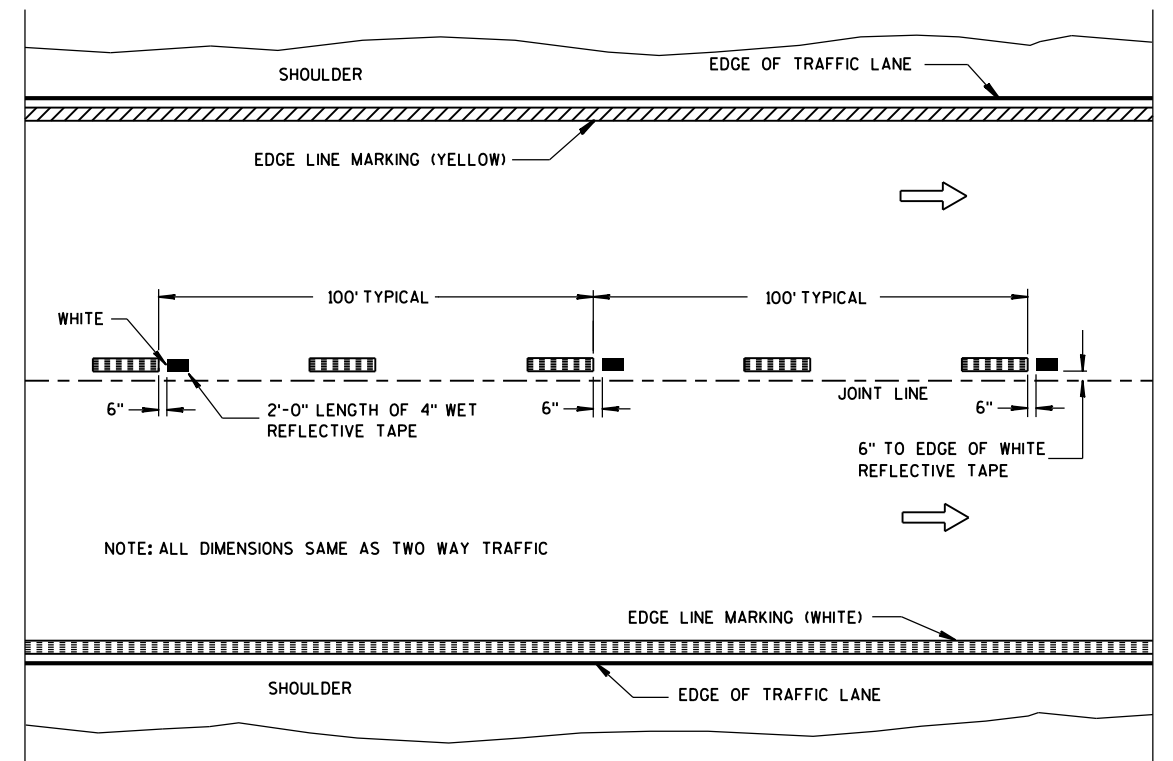
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

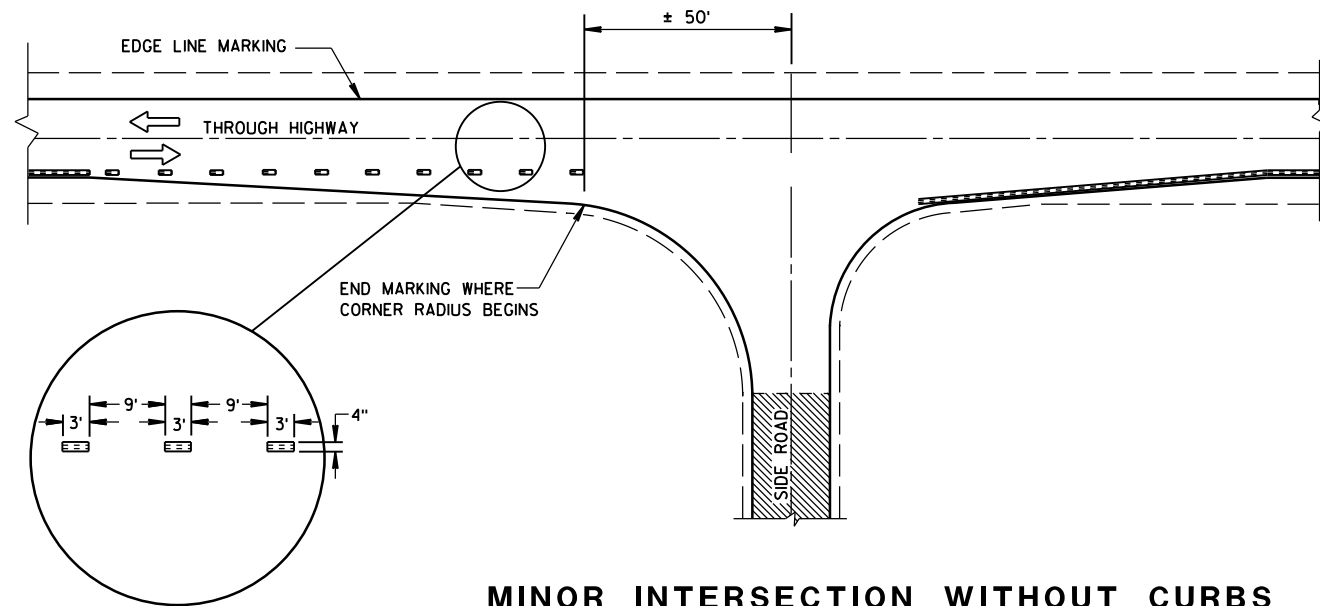
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

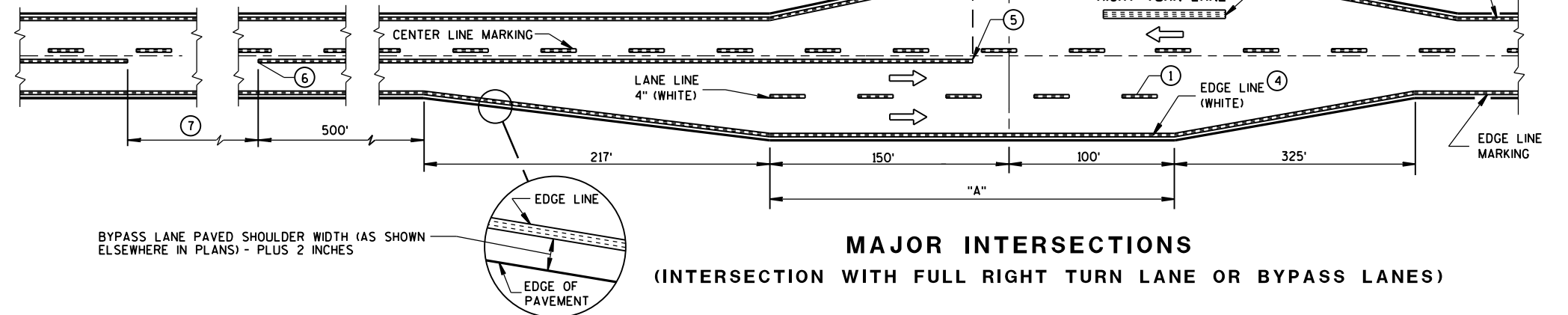
APPROVED
5-13-2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER
FHWA



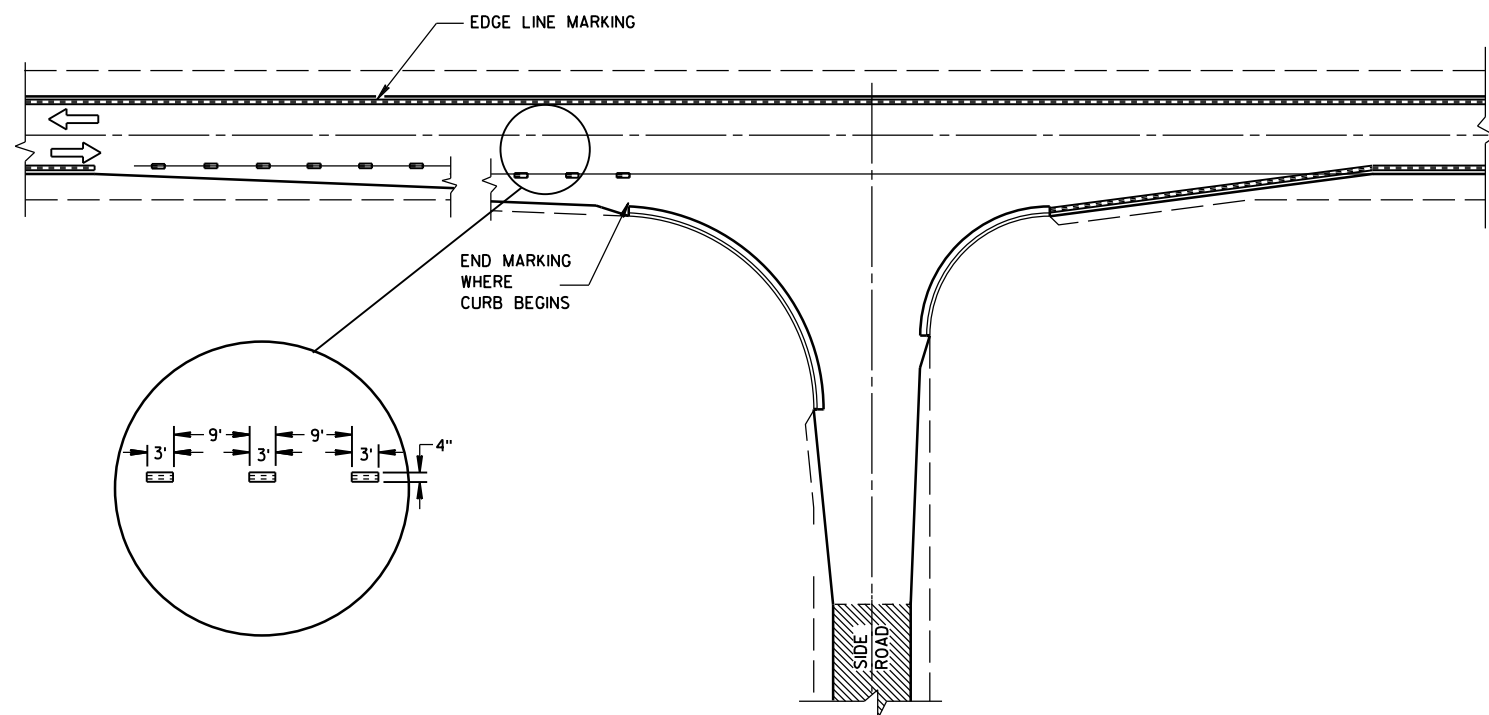
MINOR INTERSECTION WITHOUT CURBS

⑦

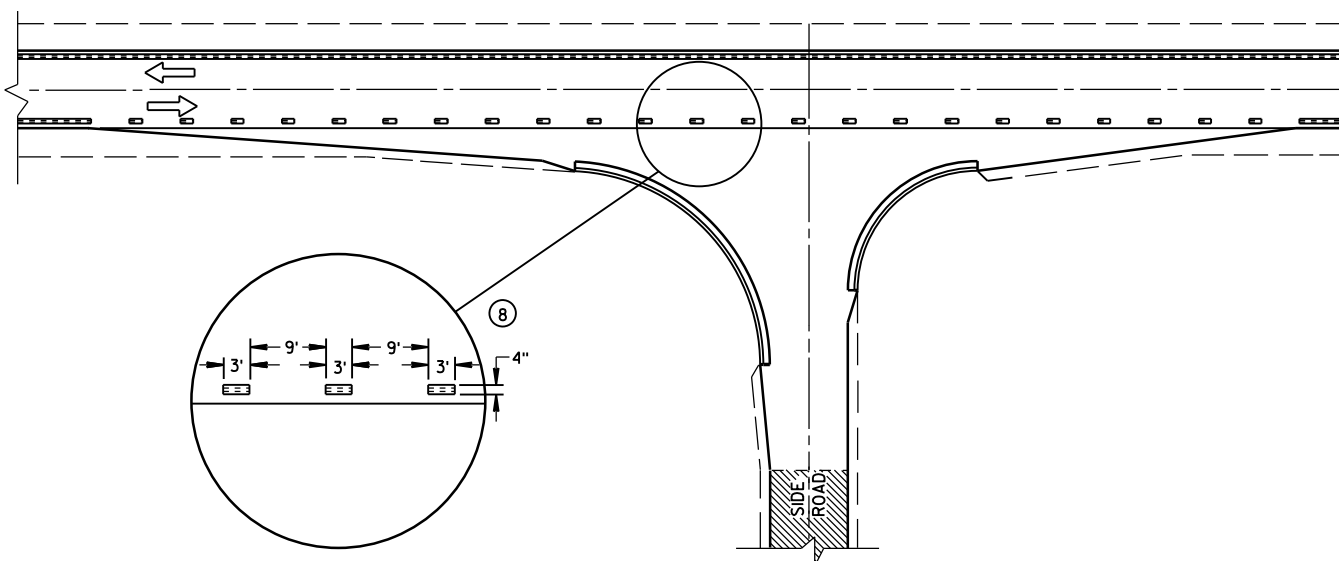
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



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



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED 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 ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

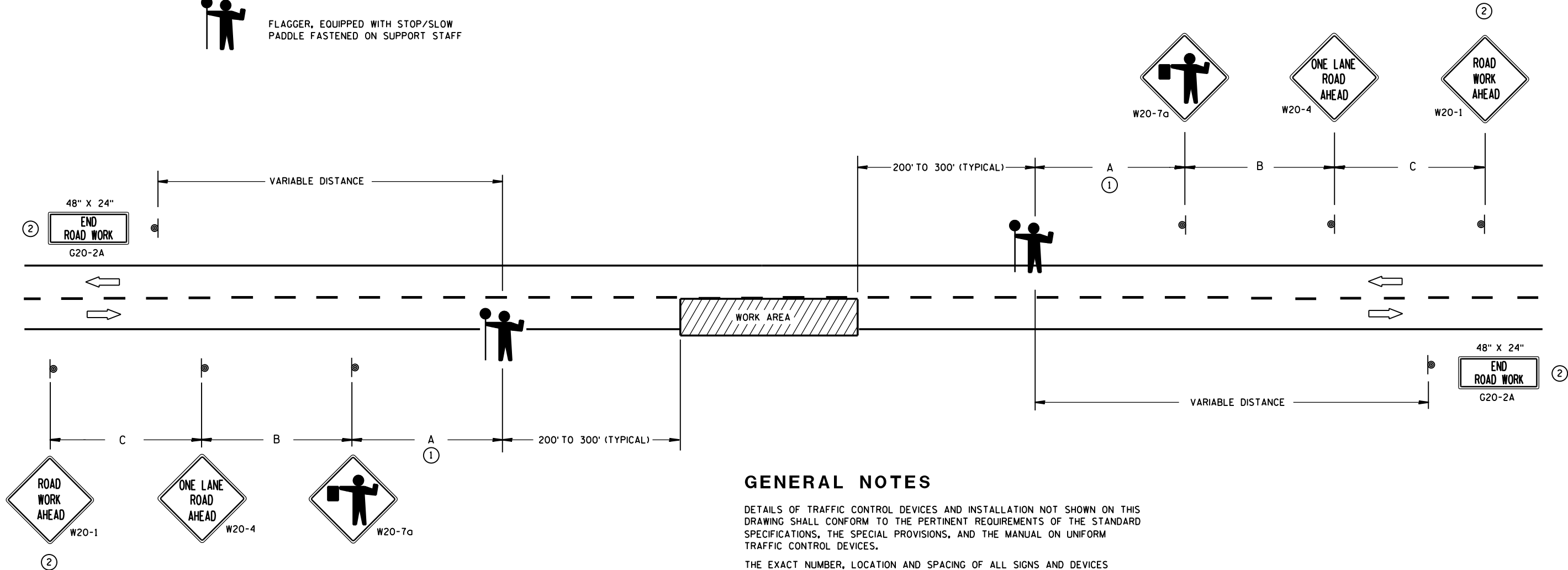
-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



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



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

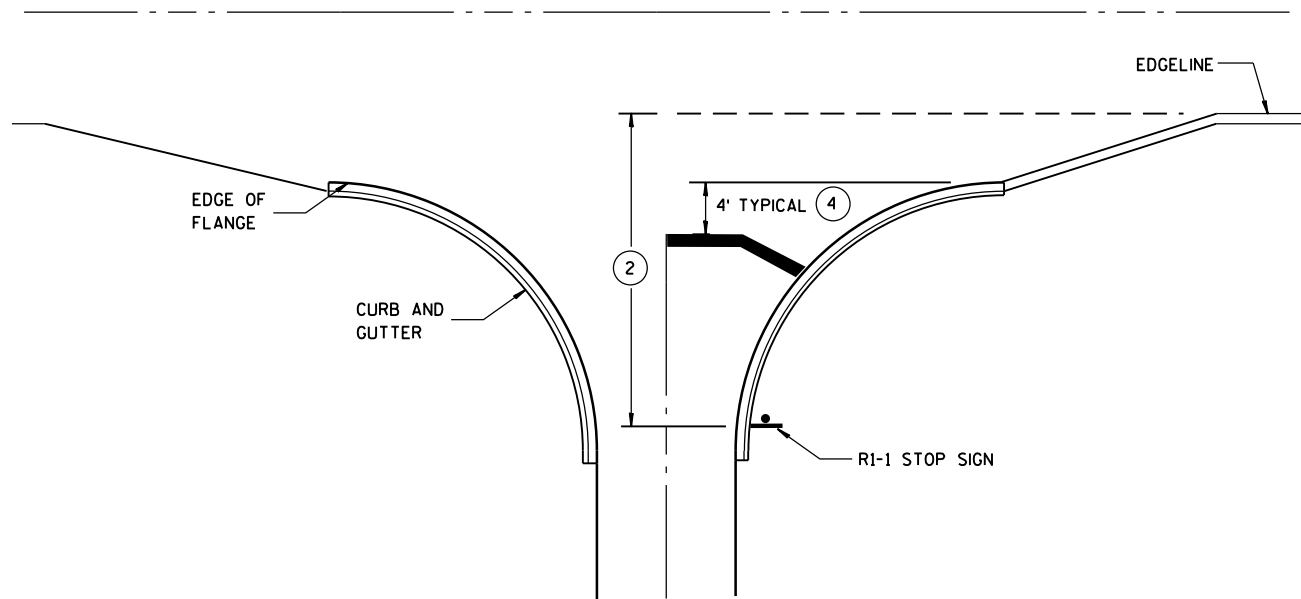
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

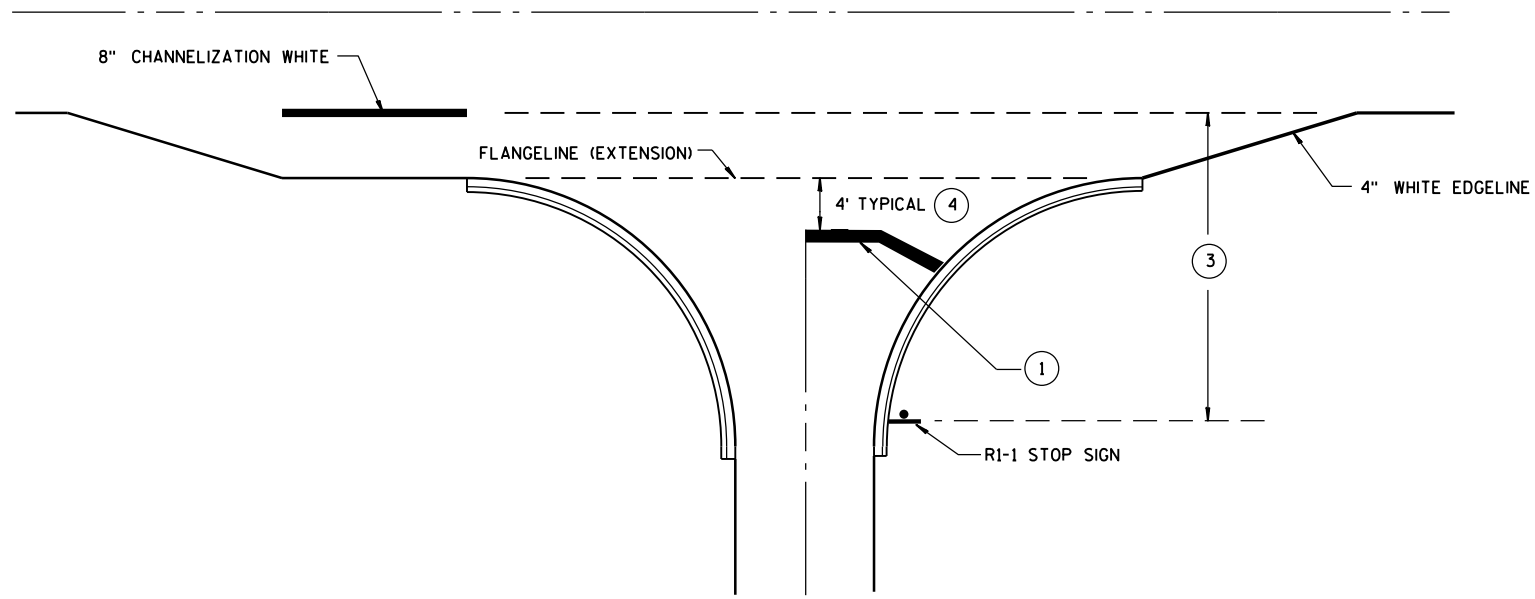
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

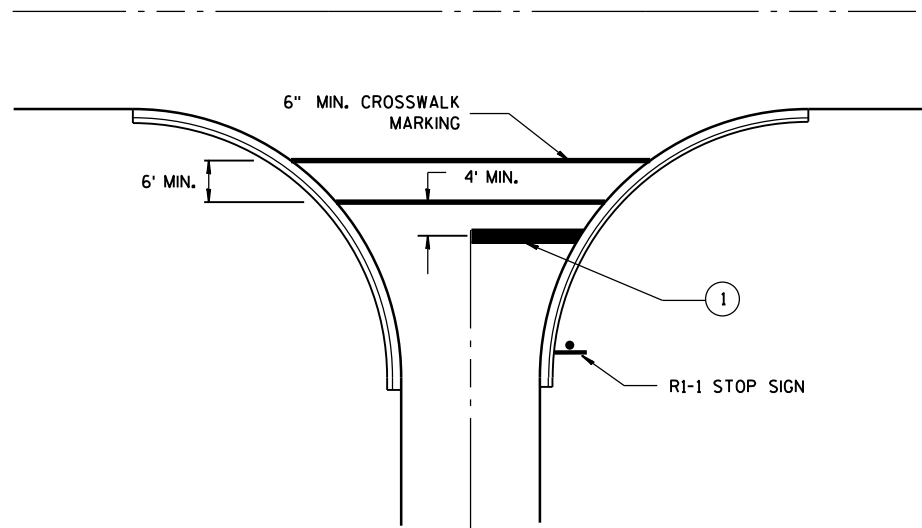
APPROVED
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINEER OF DESIGN
FHWA



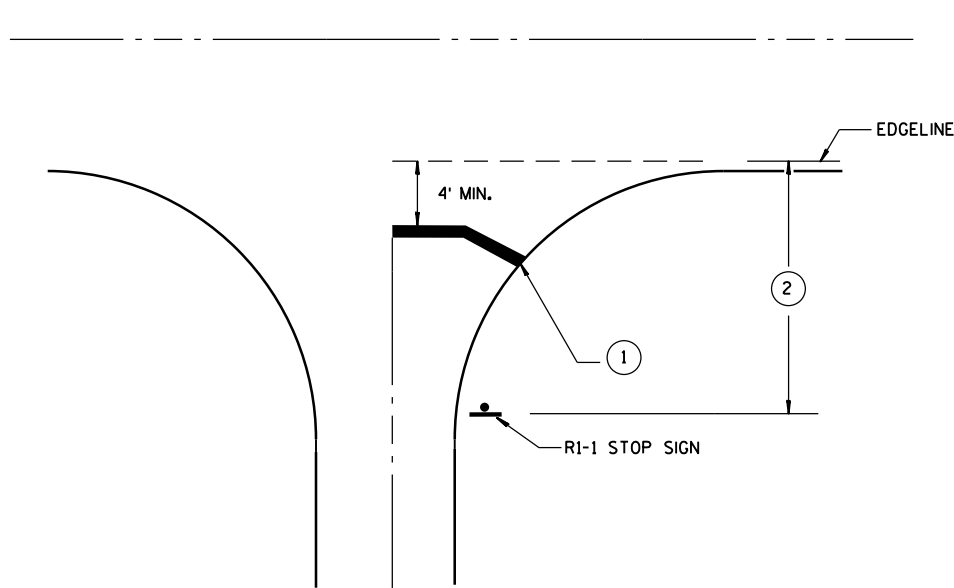
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/30/2013 DATE /S/ Travis Feltz
STATE TRAFFIC ENGINEER
FHWA

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.

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

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

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

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.

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.

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

TABLE A

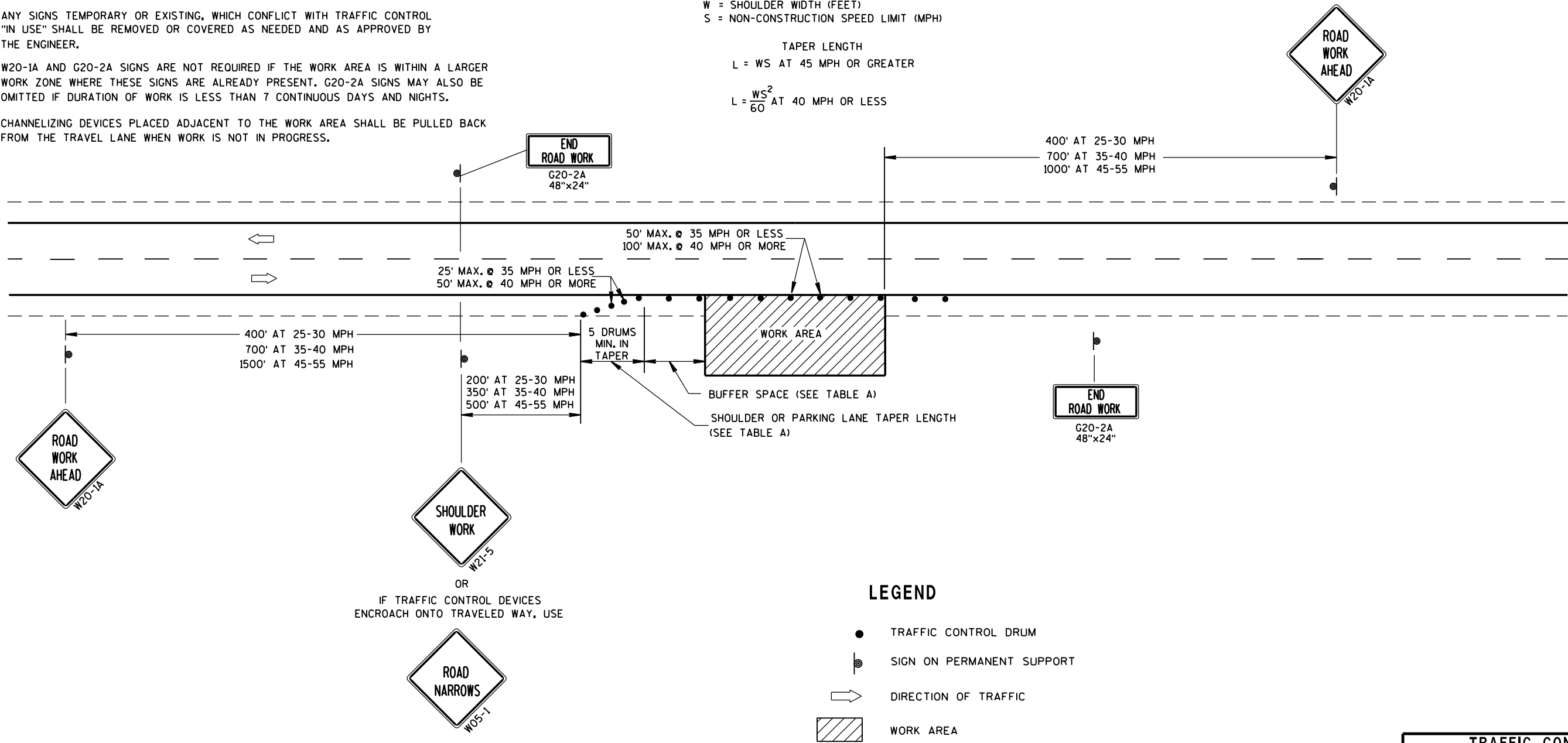
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = $\frac{1}{3}L$



LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

3

REMOVING ASPHALTIC SURFACE				
STATION	LOCATION	204.0110	204.0115	
		SY	BUTT JOINTS SY	
CTH B				
32+45	LT & RT		380	
181+00	LT & RT		270	
DRIVEWAYS	LT & RT	425		
SIDE-ROADS				
GEMWOOD AVE	LT & RT		65	
GENERAL AVE	LT & RT		65	
GARDENER AVE	LT & RT		90	
GAVEL AVE	LT & RT		260	
FERNWOOD AVE	LT & RT		270	
ITEM TOTAL		425	1400	

PREPARE FOUNDATION FOR ASPHALTIC PAVING (7100-00-70)			
STATION - STATION	LOCATION	211.0100	
		LS	
CTH B			
32+45 - 181+00	LT & RT	1	
ITEM TOTAL		1	

FINISHING ROADWAY (7100-00-70)			
STATION - STATION	213.0100		
	EACH		
CTH B			
32+45 - 181+00	1		
ITEM TOTAL	1		

BASE AGGREGATE DENSE					
STATION - STATION	LOCATION	305.0110	305.0120	*624.0100	REMARKS
		3/4-INCH TON	1 1/4-INCH TON	WATER MGAL	
CTH B					
32+45 - 181+00	LT & RT	2315		22	FINISHED SHOULDER - INCLUDES SIDEROADS
UNDISTRIBUTED		25	285	3	DRIVEWAY & SIDEROADS
ITEM TOTALS		2340	285	25	
*ITEM LOCATED ELSEWHERE IN PLANS					

PULVERIZE AND RELAY				
STATION - STATION	LOCATION	325.0100	*624.0100	
		SY	WATER MGAL	
CTH B				
32+45 - 180+00	LT & RT	45365	225	
ITEM TOTAL		45365	225	
*ITEM LOCATED ELSEWHERE IN PLANS				

ASPHALTIC PAVEMENT ITEMS						
STATION - STATION	LOCATION	455.0105	455.0605	460.1101	465.0475	REMARKS
		ASPHALTIC MATERIAL PG58-28 TON	TACK COAT GAL	HMA PAVEMENT TYPE E-1 TON	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	
CTH B						
32+45 - 181+00	LT & RT	670	3250	12130		INCLUDES DRIVEWAYS
46+75 - 181+00	~				13425	
ITEM TOTALS		670	3250	12130	13425	

ADJUSTING MANHOLE COVERS				
STATION - STATION	LOCATION	611.8110*		REMARKS
		EACH		
CTH B				
35+22	15' LT	1		SANITARY MANHOLE
38+68	15' LT	1		SANITARY MANHOLE
41+68	16' LT	1		SANITARY MANHOLE
44+18	15' LT	1		SANITARY MANHOLE
46+68	14' LT	1		SANITARY MANHOLE
49+38	14' LT	1		SANITARY MANHOLE
ITEM TOTAL		6		
*CATEGORY 0020				

MOBILIZATION		
STATION - STATION	619.1000	
	EACH	
CTH B		
32+45 - 181+00	1	
ITEM TOTAL	1	

3

PERMANENT SIGNING										
SIGN GROUP CODE	SIGN CODE	MESSAGE	TYPE II SIZE	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-1	S1-1	SCHOOL CROSSING SIGN	36" X 36"		6.75	1		1	1	REPLACE
1-2	R2-1	SPEED LIMIT 35	24" X 30"	5.00		1		1	1	REPLACE
1-3	R2-1	SPEED LIMIT 35	24" X 30"	5.00		1		1	1	REPLACE
1-4	R1-1	STOP	30" X 30"	5.18		1		1	1	REPLACE
1-5	R2-1	SPEED LIMIT 35	24" X 30"	5.00		1		1	1	REPLACE
1-6	R1-1	STOP	30" X 30"	5.18		1		1	1	REPLACE
1-7	W3-5	REDUCE SPEED AHEAD 35	36" X 36"		9.00	1		1	1	REPLACE
1-8		END SPEED ZONE								REMAINS
2-1	W1-2L	LEFT CURVE	30" X 30"		6.25		1	1	1	REPLACE
	W13-1	ADVISORY SPEED 45	18" X 18"		2.25					INSTALL
2-2	R1-1	STOP	30" X 30"	5.18		1		1	1	REPLACE
2-3		ADOPT-A-HIGHWAY								REMAINS
3-1	W1-2R	RIGHT CURVE	30" X 30"		6.25		1	1	1	REPLACE
	W13-1	ADVISORY SPEED 45	18" X 18"		2.25					INSTALL
3-2	W1-2R	RIGHT CURVE	30" X 30"		6.25		1	1	1	REPLACE
	W13-1	ADVISORY SPEED 45	18" X 18"		2.25					INSTALL
3-3	S3-1	SCHOOL BUS STOP	36" X 36"		9.00		1	1	1	REPLACE
3-4	S3-1	SCHOOL BUS STOP	36" X 36"		9.00		1	1	1	REPLACE
3-5	W1-2L	LEFT CURVE	30" X 30"		6.25		1	1	1	REPLACE
	W13-1	ADVISORY SPEED 45	18" X 18"		2.25					INSTALL
4-1	R1-1	STOP	30" X 30"	5.18		1		1	1	REPLACE
5-1	W1-2R	RIGHT CURVE	30" X 30"		6.25		1	1	1	REPLACE
	W13-1	ADVISORY SPEED 45	18" X 18"		2.25					REPLACE
5-2	W1-2L	LEFT CURVE	30" X 30"		6.25		1			INSTALL
	W13-1	ADVISORY SPEED 45	18" X 18"		2.25					INSTALL
5-3	R1-1	STOP	30" X 30"	5.18		1		1	1	REPLACE
5-4		ADOPT-A-HIGHWAY								REMAINS
ITEM TOTALS				40.90	84.75	10	8	17	17	

PAVEMENT MARKING					
STATION	LOCATION	646.0106 EPOXY 4-INCH LF	647.0566 STOP LINE EPOXY 18-INCH LF	649.0403 TEMPORARY PAVEMENT MARKING PAINT 4-INCH LF	REMARKS
CTH B					
32+45 - 181+00	LT & RT	29460			WHITE EDGELINE
32+45 - 181+00	~	13750		29710	DOUBLE YELLOW
32+45 - 181+00	~	5600			SOLID YELLOW W/ SKIPS
32+45 - 181+00	~	900			YELLOW SKIPS
SIDE-ROADS					
GEMWOOD AVE	RT		20		
GENERAL AVE	RT		20		
GARDENER AVE	RT		20		
GAVEL AVE	RT		20		
FERNWOOD AVE	RT		20		
ITEM TOTALS		49710	100	29710	

LOCATING NO-PASSING ZONES

STATION	LOCATION	648.0100 MI
CTH B		
32+45 - 181+00	LT & RT	2.813
ITEM TOTAL		2.813

FIELD OFFICE TYPE B

STATION - STATION	642.5001 EACH
CTH B	
32+45 - 181+00	1
ITEM TOTAL	1

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL (7100-00-70) LS
CTH B			
32+45 - 181+00	LT & RT	14855	1
ITEM TOTALS		14855	1

TRAFFIC CONTROL

STATION - STATION	643.0100 EACH
CTH B	
32+45 - 181+00	1
ITEM TOTAL	1

SAWING ASPHALT

STATION - STATION	LOCATION	690.0150 LF
CTH B		
32+45	LT & RT	34
181+00	LT & RT	24
DRIVEWAYS	LT & RT	600
SIDE-ROADS		
GEMWOOD AVE	LT & RT	25
GENERAL AVE	LT & RT	25
GARDENER AVE	LT & RT	25
GAVEL AVE	LT & RT	21
FERNWOOD AVE	LT & RT	30
ITEM TOTAL		784

PROJECT NO: 7100-00-70

HWY: CTH B

COUNTY: MONROE

MISCELLANEOUS QUANTITIES

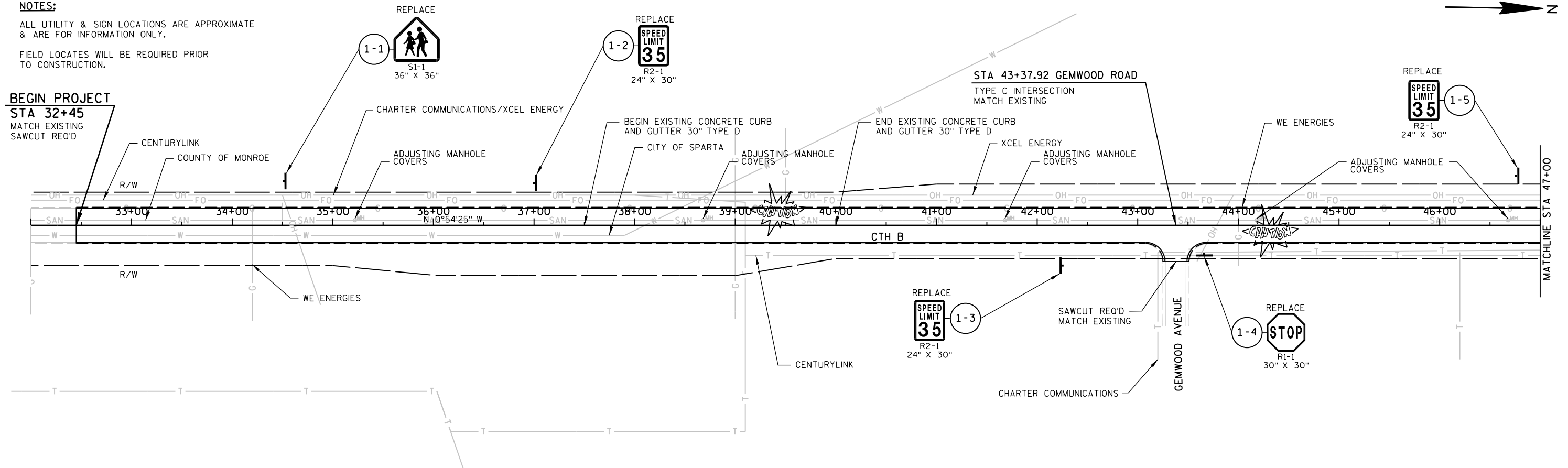
SHEET

E

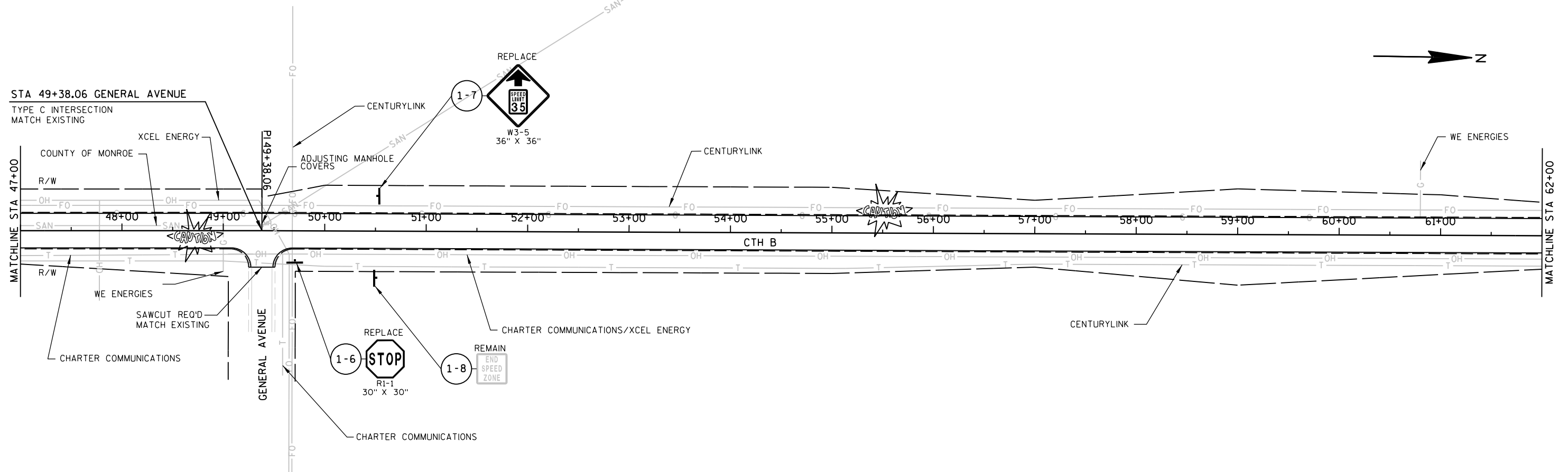
NOTES:

ALL UTILITY & SIGN LOCATIONS ARE APPROXIMATE
& ARE FOR INFORMATION ONLY.
FIELD LOCATES WILL BE REQUIRED PRIOR
TO CONSTRUCTION.

BEGIN PROJECT
STA 32+45
MATCH EXISTING
SAWCUT REQ'D



STA 49+38.06 GENERAL AVENUE
TYPE C INTERSECTION
MATCH EXISTING



PROJECT NO: 7100-00-70

HWY: CTH B

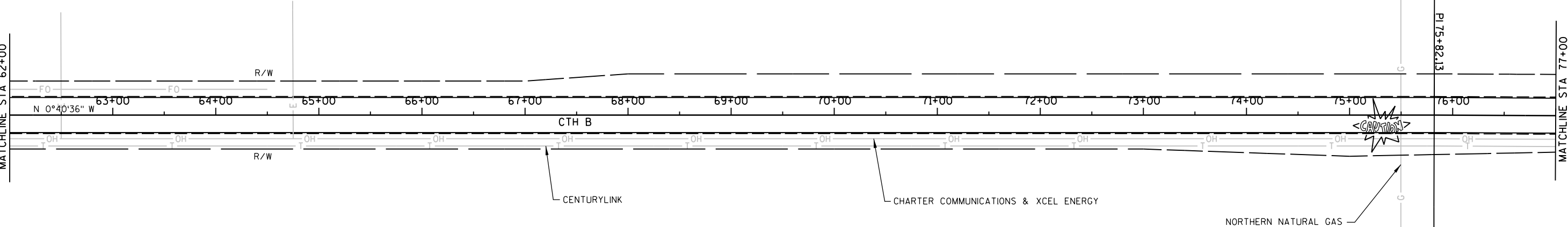
COUNTY: MONROE

PLAN

SHEET

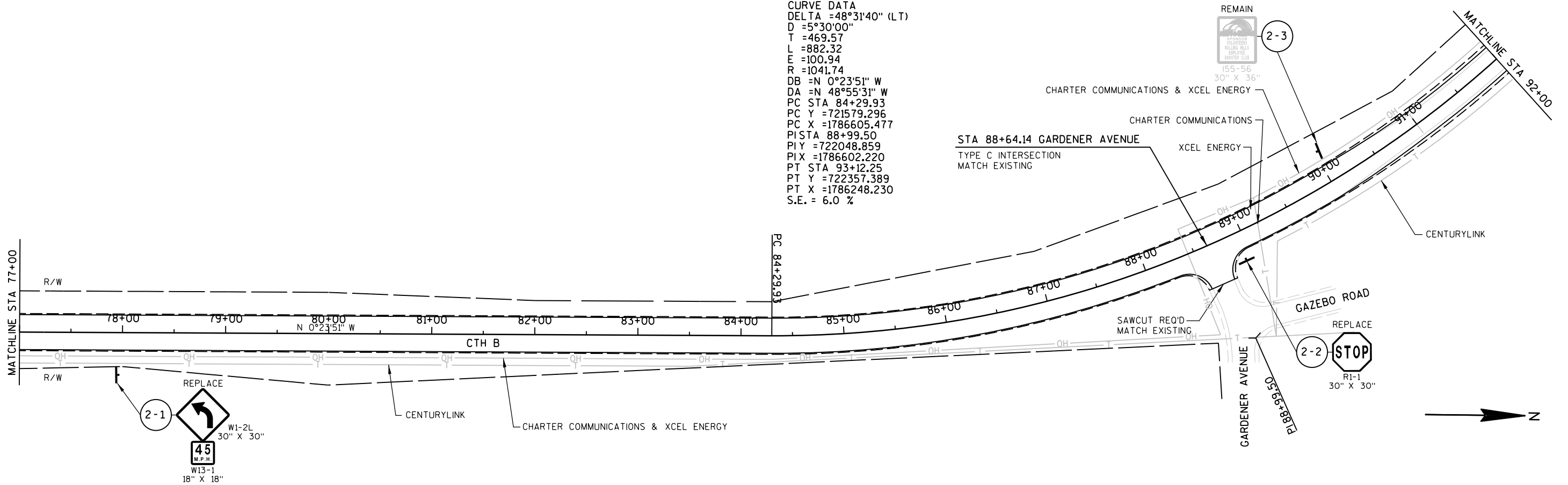
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NOTES:
ALL UTILITY & SIGN LOCATIONS ARE APPROXIMATE
& ARE FOR INFORMATION ONLY.
FIELD LOCATES WILL BE REQUIRED PRIOR
TO CONSTRUCTION.



5

5

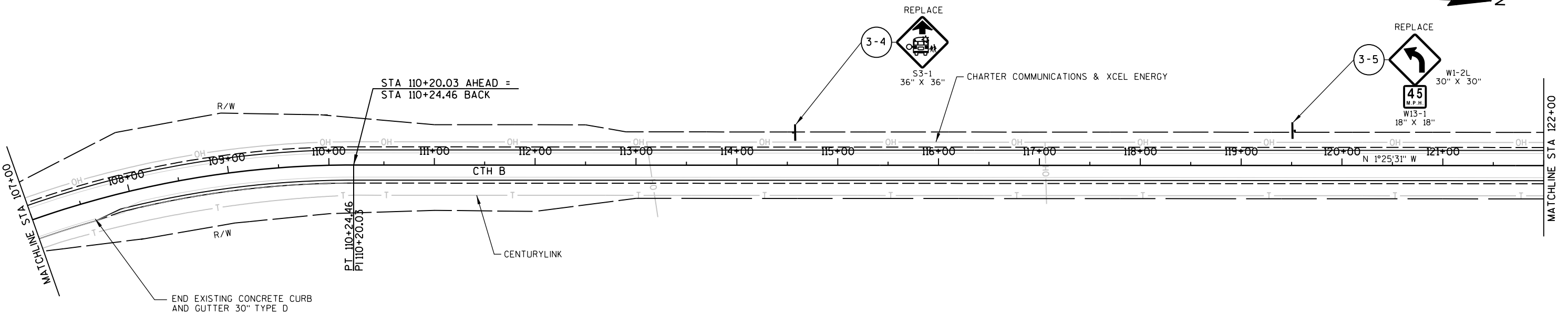
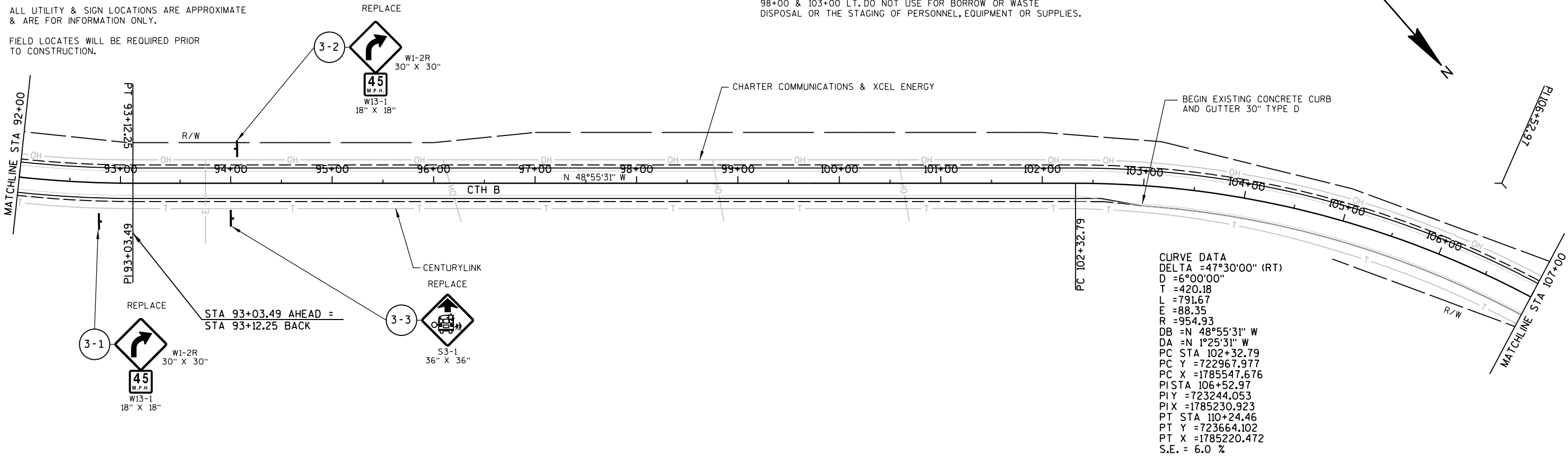


NOTES:

ALL UTILITY & SIGN LOCATIONS ARE APPROXIMATE
& ARE FOR INFORMATION ONLY.

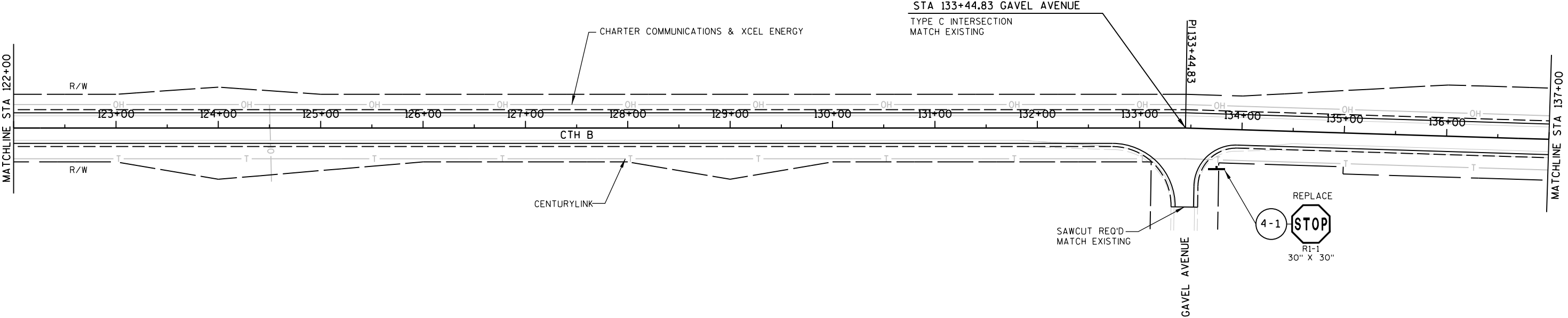
FIELD LOCATES WILL BE REQUIRED PRIOR
TO CONSTRUCTION.

NOTE: ARCHAEOLOGICAL SITE MO-0151 EXISTS BETWEEN STATIONS
98+00 & 103+00 LT. DO NOT USE FOR BORROW OR WASTE
DISPOSAL OR THE STAGING OF PERSONNEL, EQUIPMENT OR SUPPLIES.



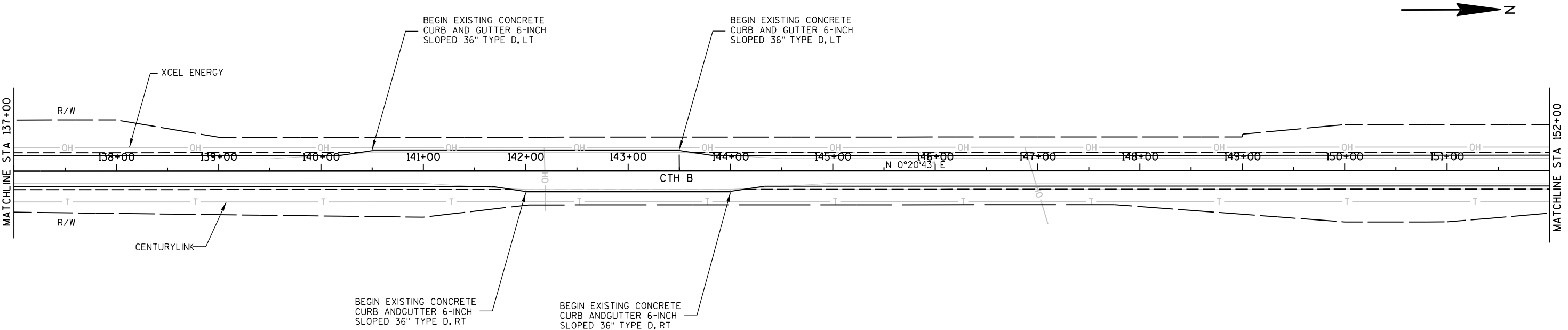
NOTES:
ALL UTILITY & SIGN LOCATIONS ARE APPROXIMATE
& ARE FOR INFORMATION ONLY.

FIELD LOCATES WILL BE REQUIRED PRIOR
TO CONSTRUCTION.

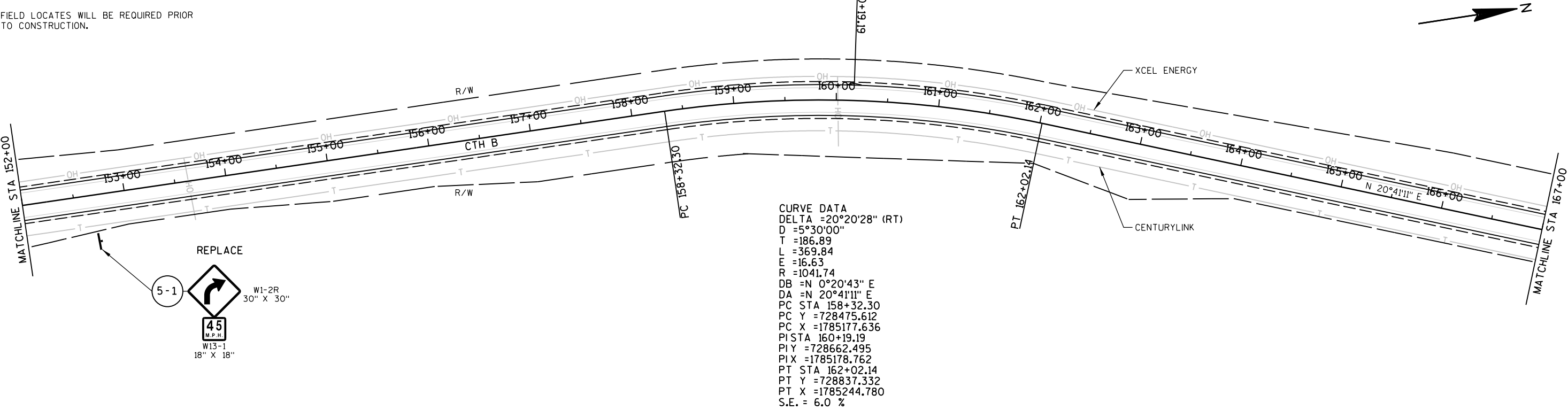


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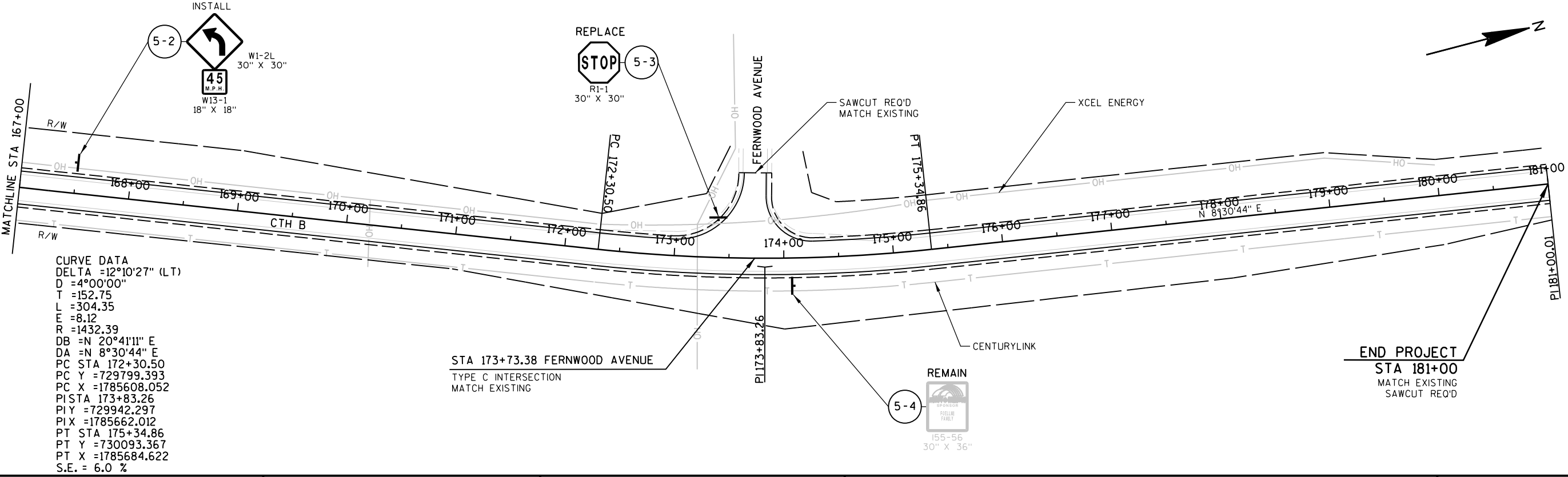
5



NOTES:
ALL UTILITY & SIGN LOCATIONS ARE APPROXIMATE
& ARE FOR INFORMATION ONLY.
FIELD LOCATES WILL BE REQUIRED PRIOR
TO CONSTRUCTION.



CURVE DATA
DELTA =20°20'28" (RT)
D =5°30'00"
T =186.89
L =369.84
E =16.63
R =1041.74
DB =N 0°20'43" E
DA =N 20°41'11" E
PC STA 158+32.30
PC Y =728475.612
PC X =1785177.636
PISTA 160+19.19
PIY =728662.495
PIX =1785178.762
PT STA 162+02.14
PT Y =728837.332
PT X =1785244.780
S.E. = 6.0 %

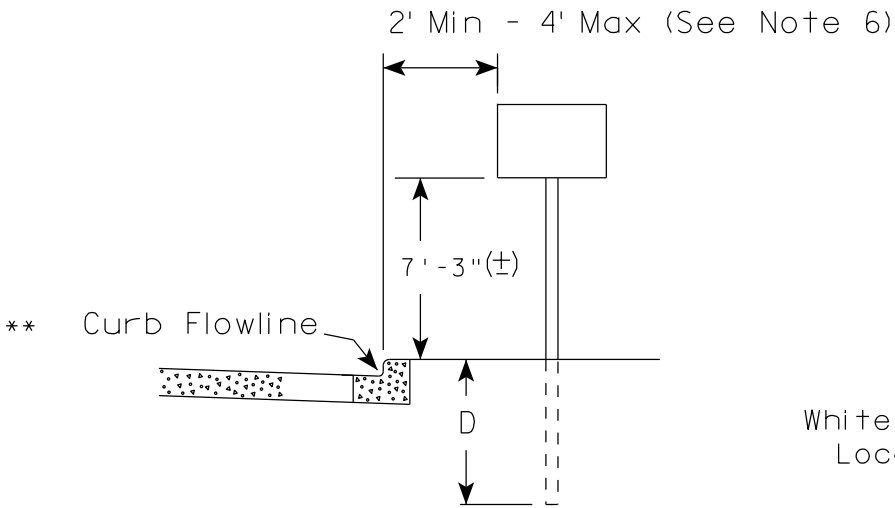


CURVE DATA
DELTA =12°10'27" (LT)
D =4°00'00"
T =152.75
L =304.35
E =8.12
R =1432.39
DB =N 20°41'11" E
DA =N 8°30'44" E
PC STA 172+30.50
PC Y =729799.393
PC X =1785608.052
PISTA 173+83.26
PIY =729942.297
PIX =1785662.012
PT STA 175+34.86
PT Y =730093.367
PT X =1785684.622
S.E. = 6.0 %

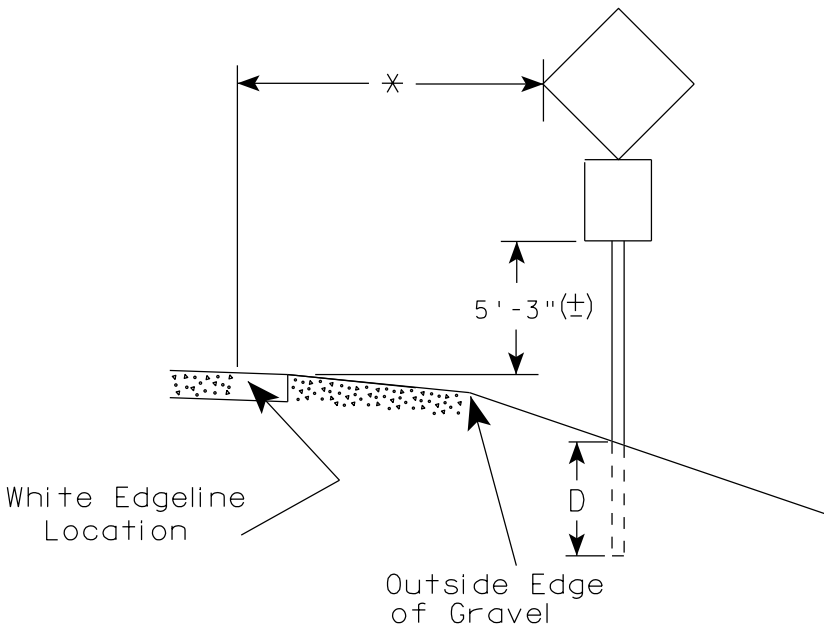
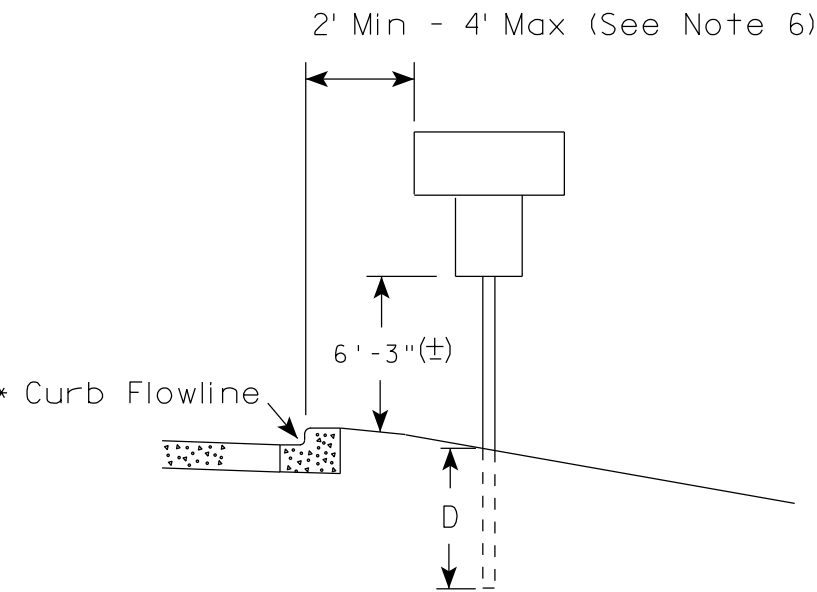
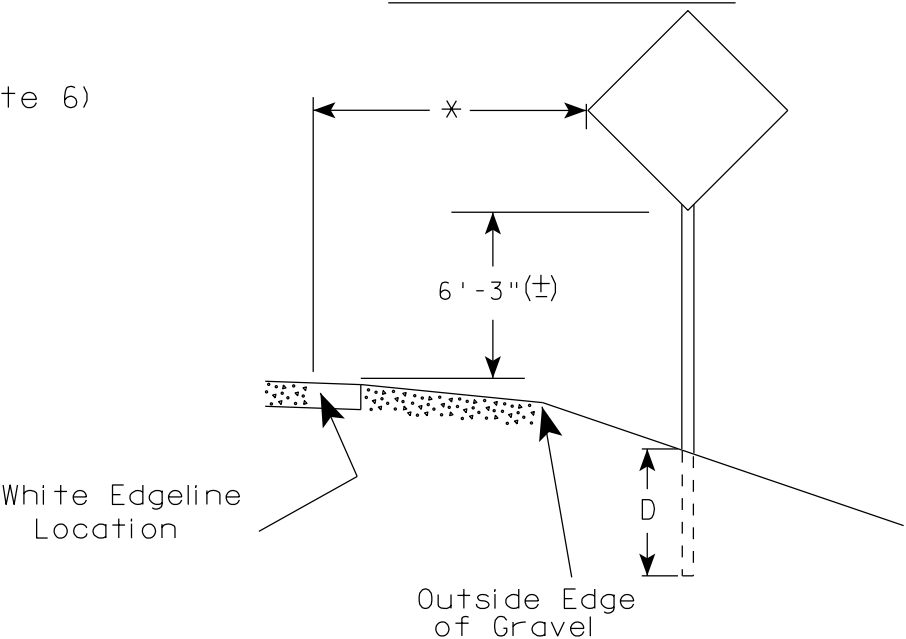
STA 173+73.38 FERNWOOD AVENUE
TYPE C INTERSECTION
MATCH EXISTING

END PROJECT
STA 181+00
MATCH EXISTING
SAWCUT REQ'D

URBAN AREA



RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet, 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-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" (±).

POST EMBEDMENT DEPTH

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

* * 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.

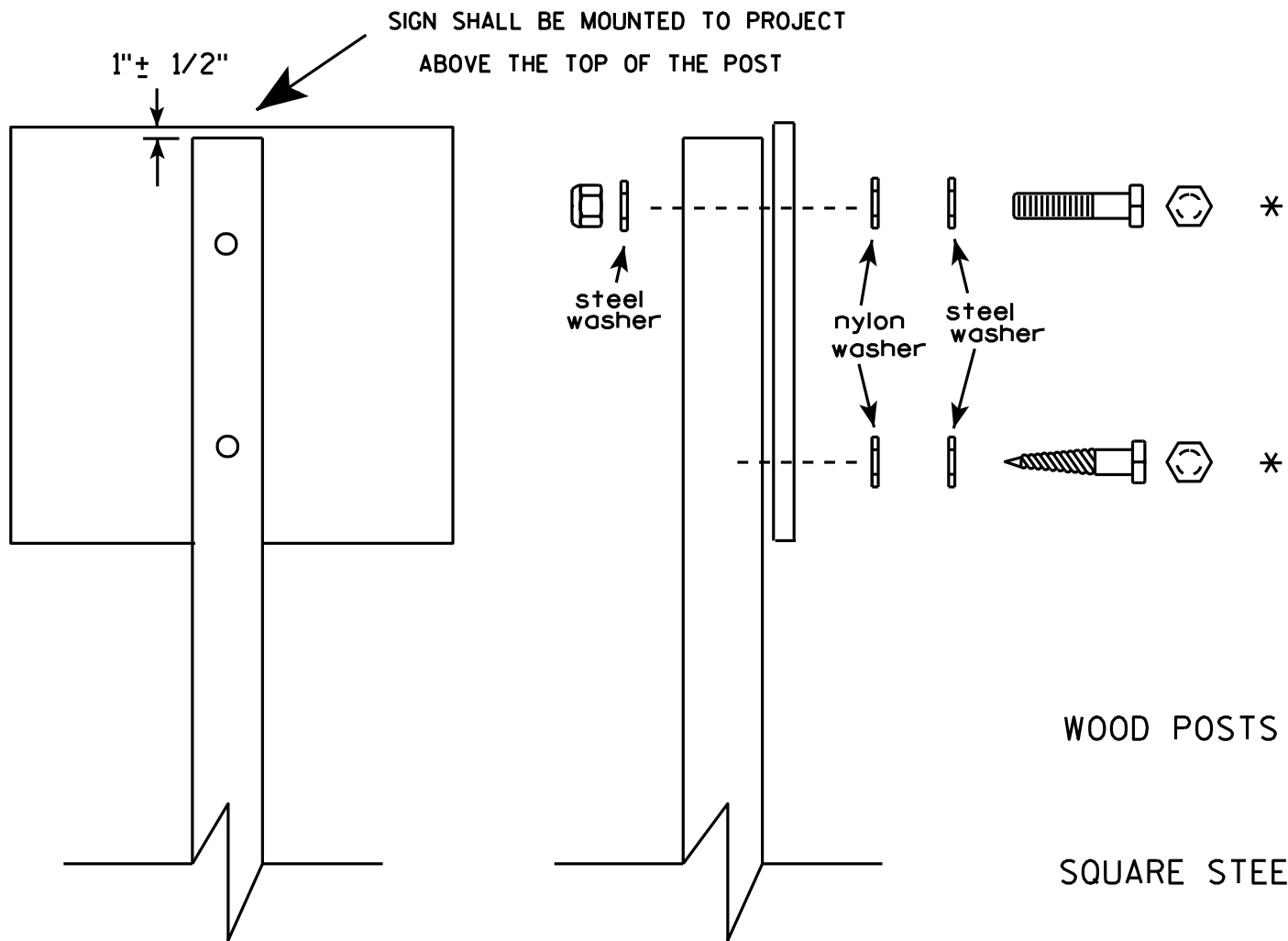
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/12/14 PLATE NO. A4-3.19

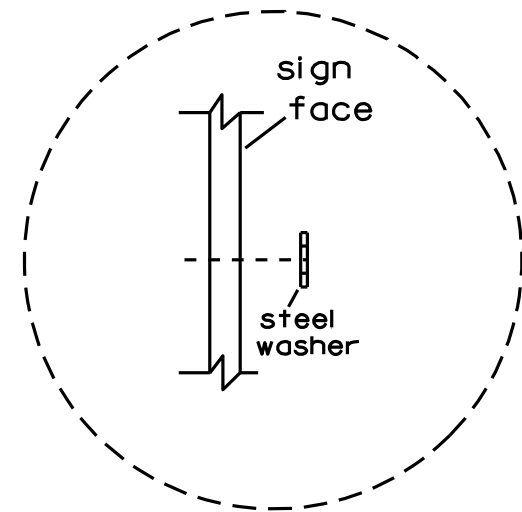


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- 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.

- WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 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 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.

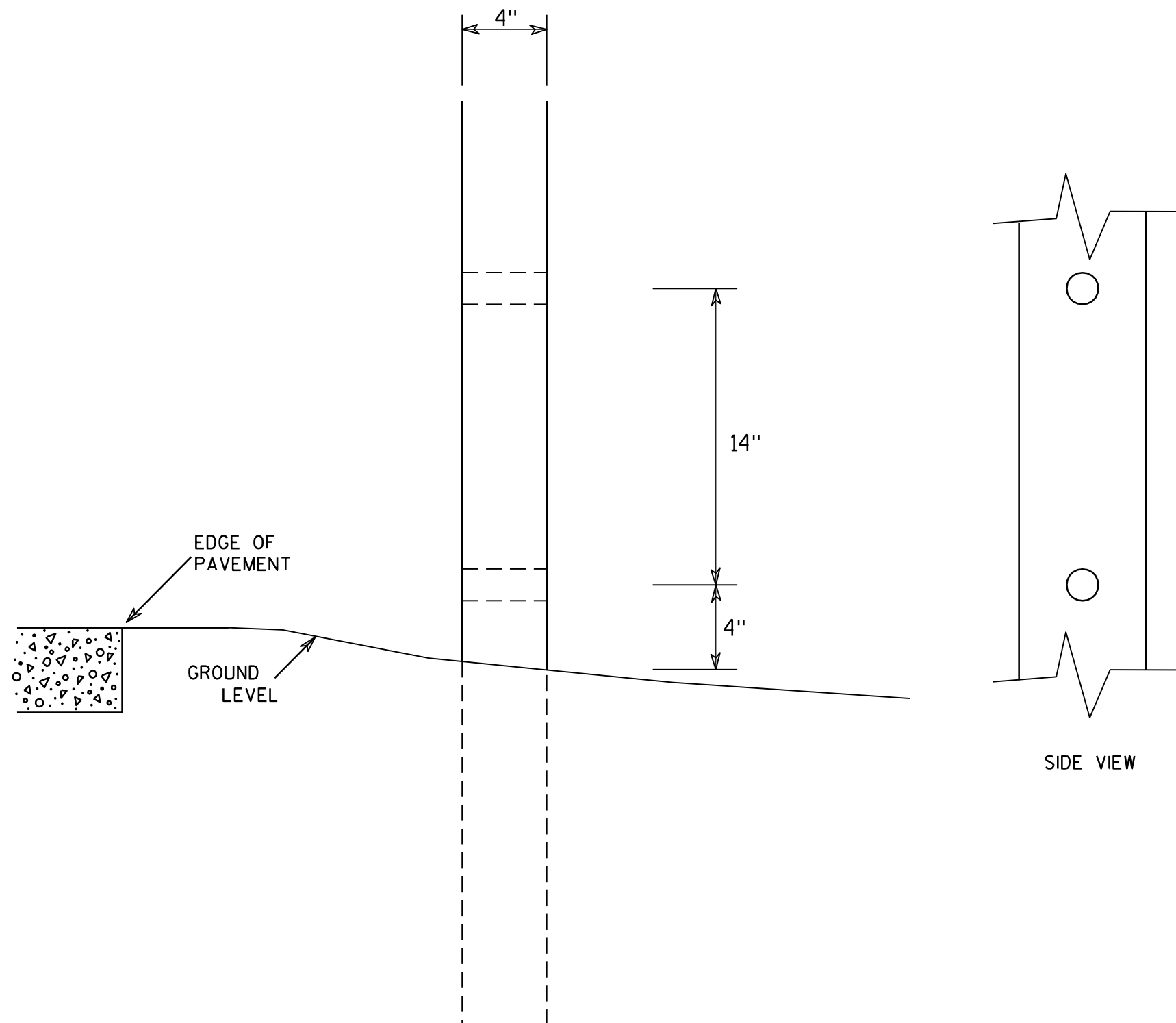


Washer Placement when Sign Has Other Than Type H or Type F Face

* 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 3/23/10	PLATE NO. A4-8.7

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

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

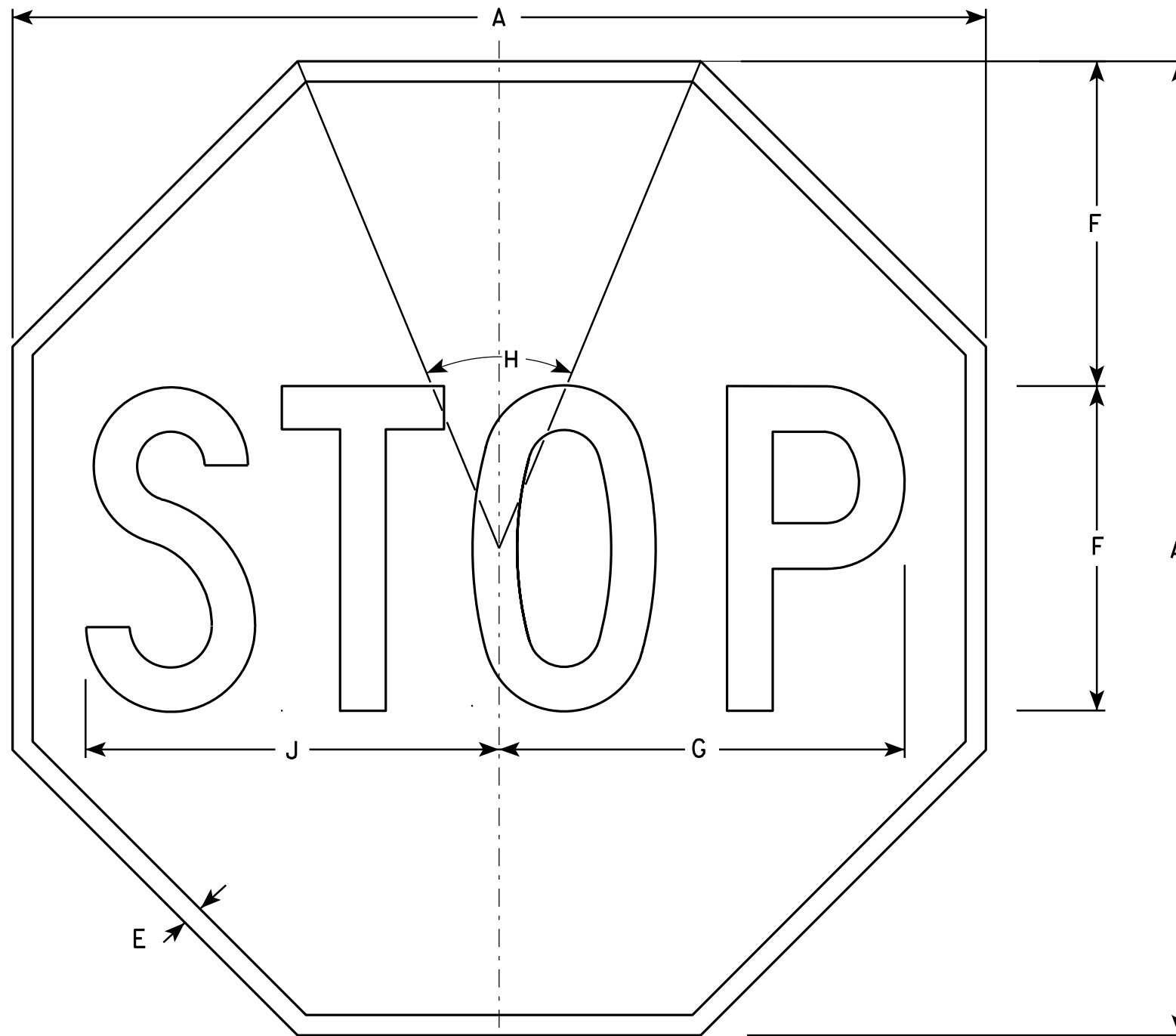
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Red
Message - White
3. Message Series - C

R1-1

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	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

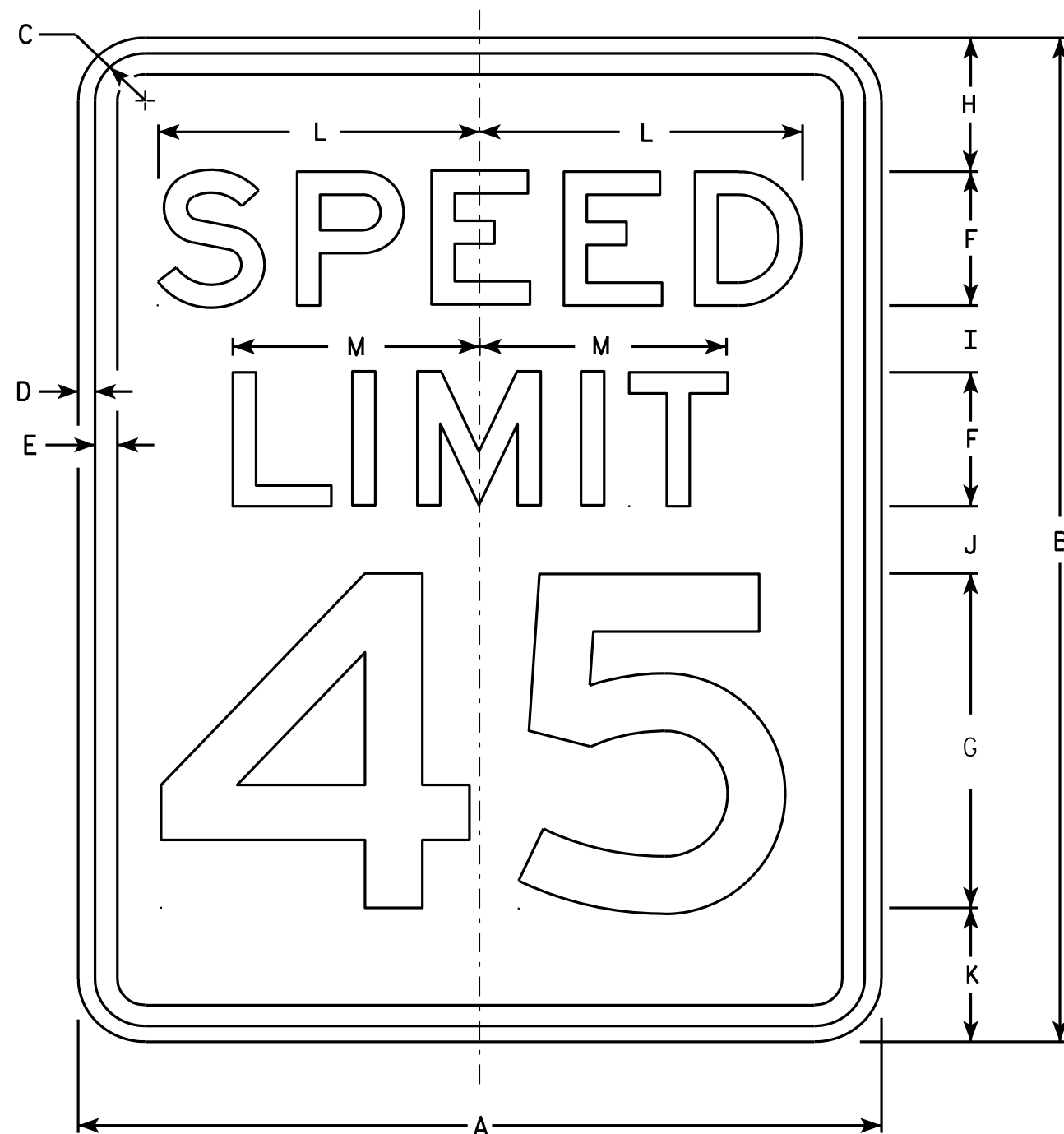
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
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. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

R2-1

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:

HWY:

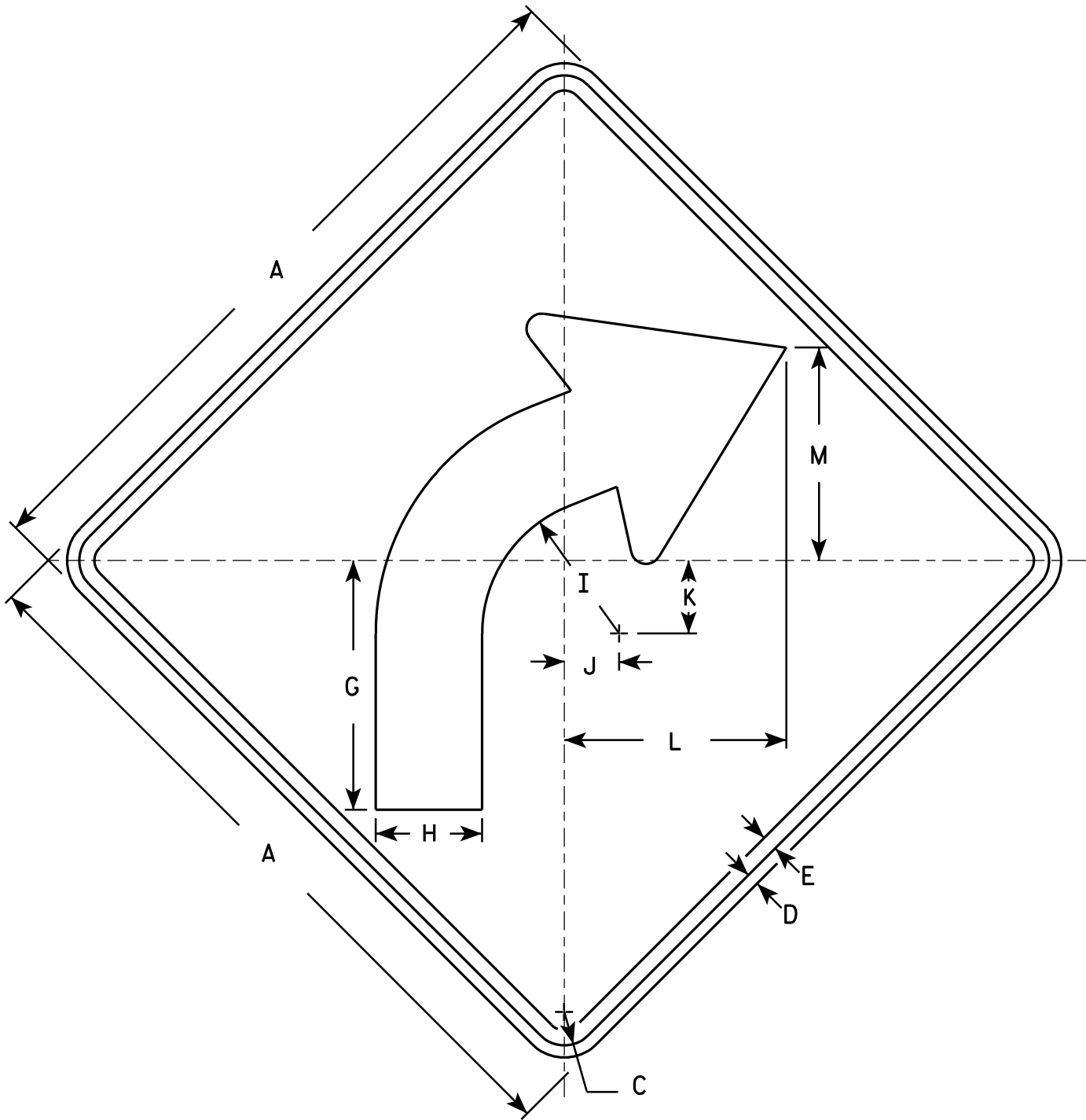
COUNTY:

SHEET NO:

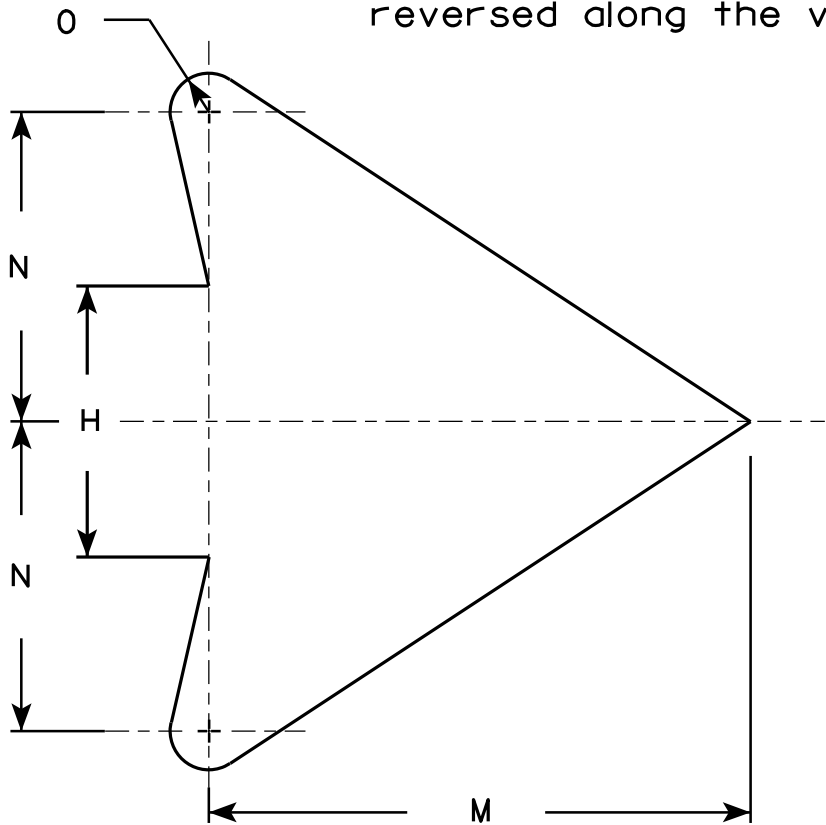
E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. 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.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

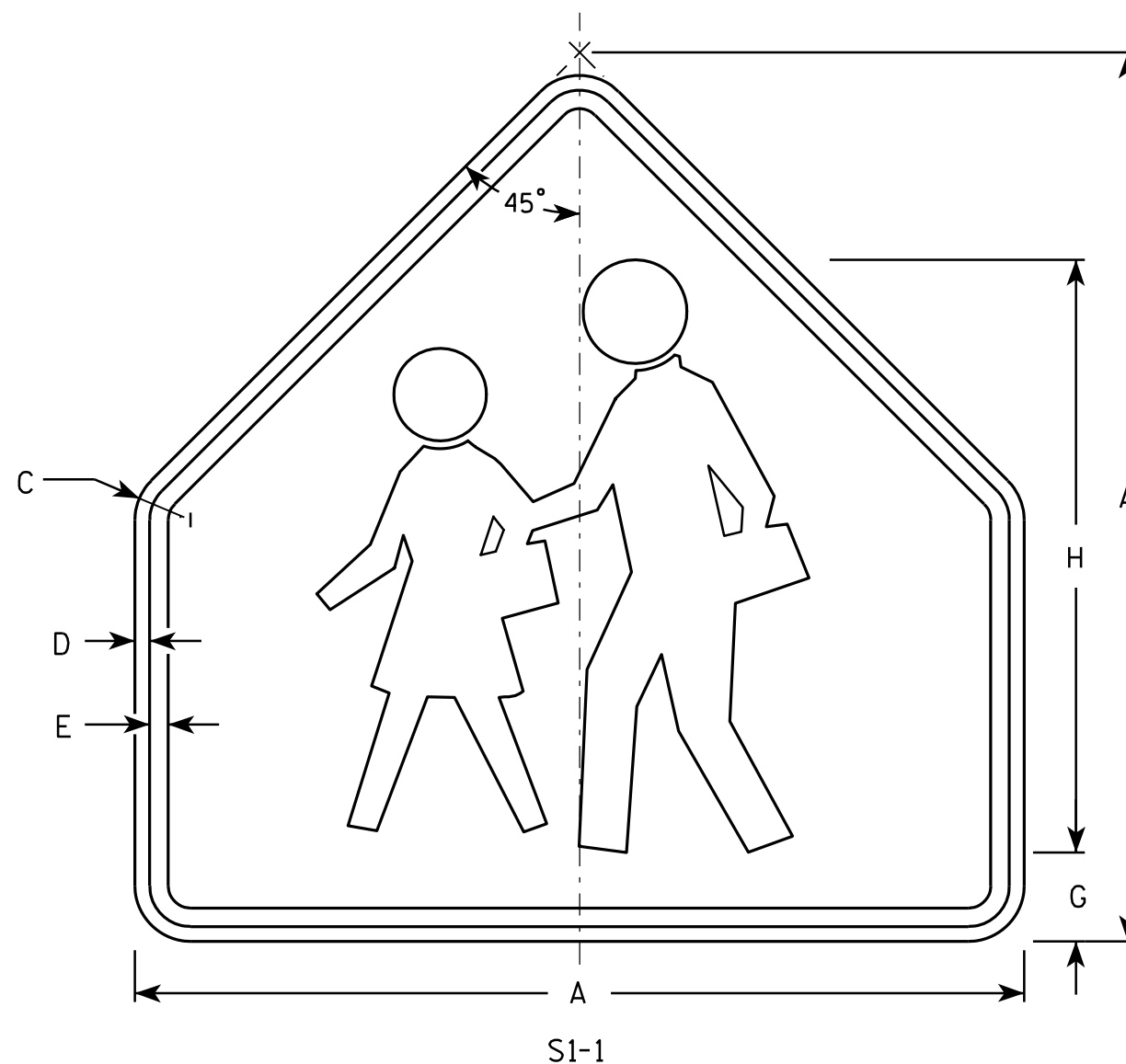
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow-Green
Message - Black
3. 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.

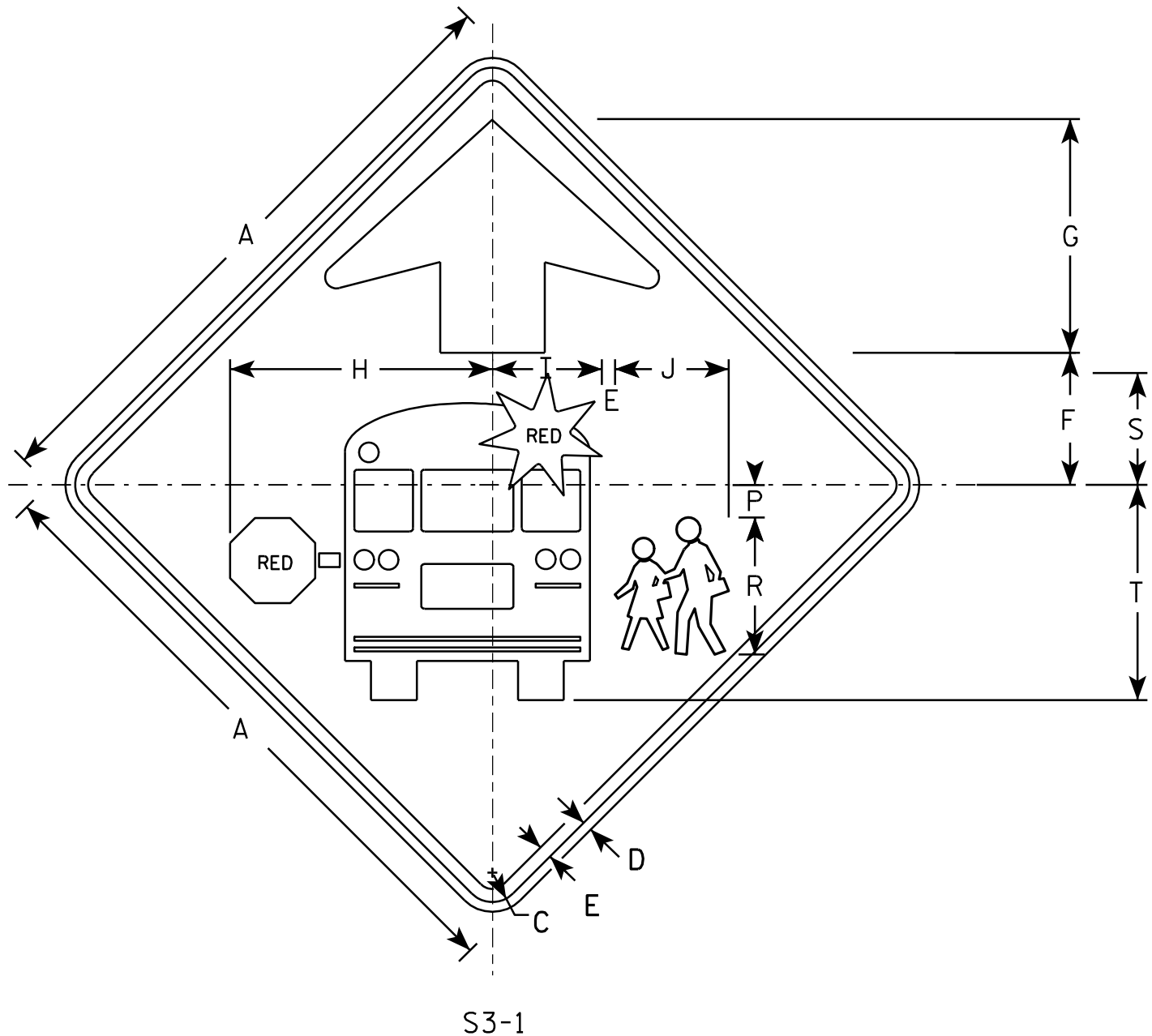
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN S1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

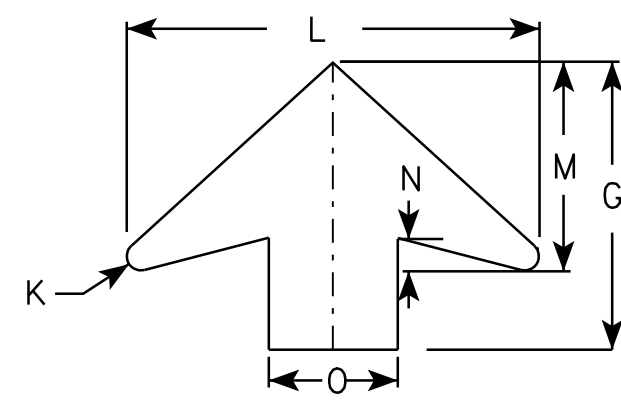
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**



S3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW-GREEN
Message - BLACK except as noted
Circles except PEDS- RED BACKGROUND
3. 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.



ARROW DETAIL

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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

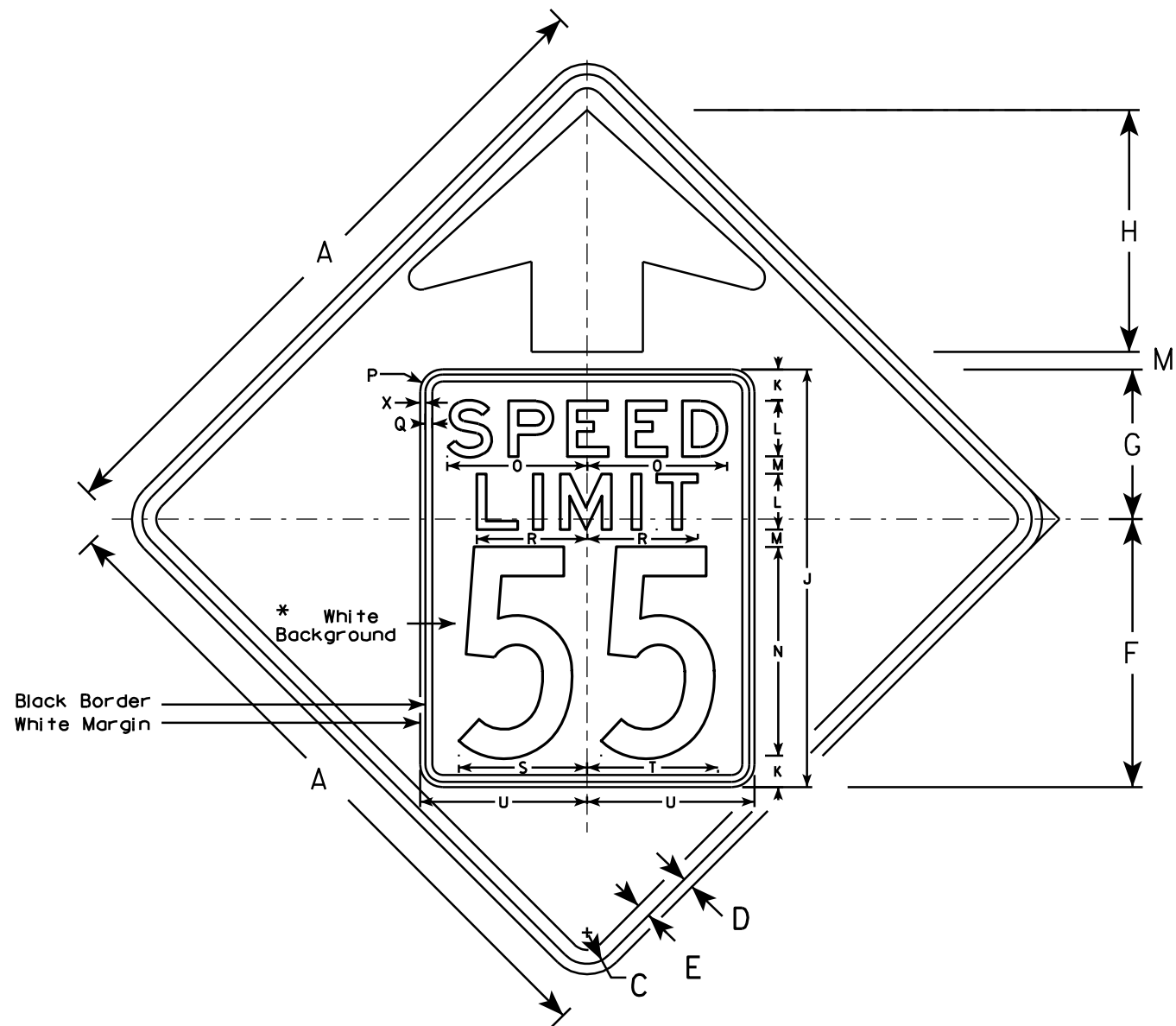
PROJECT NO:					SHEET NO:	E
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STANDARD SIGN
S3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

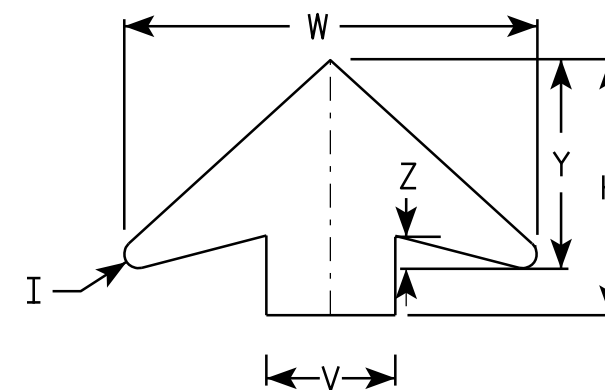


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
Background - YELLOW*
Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

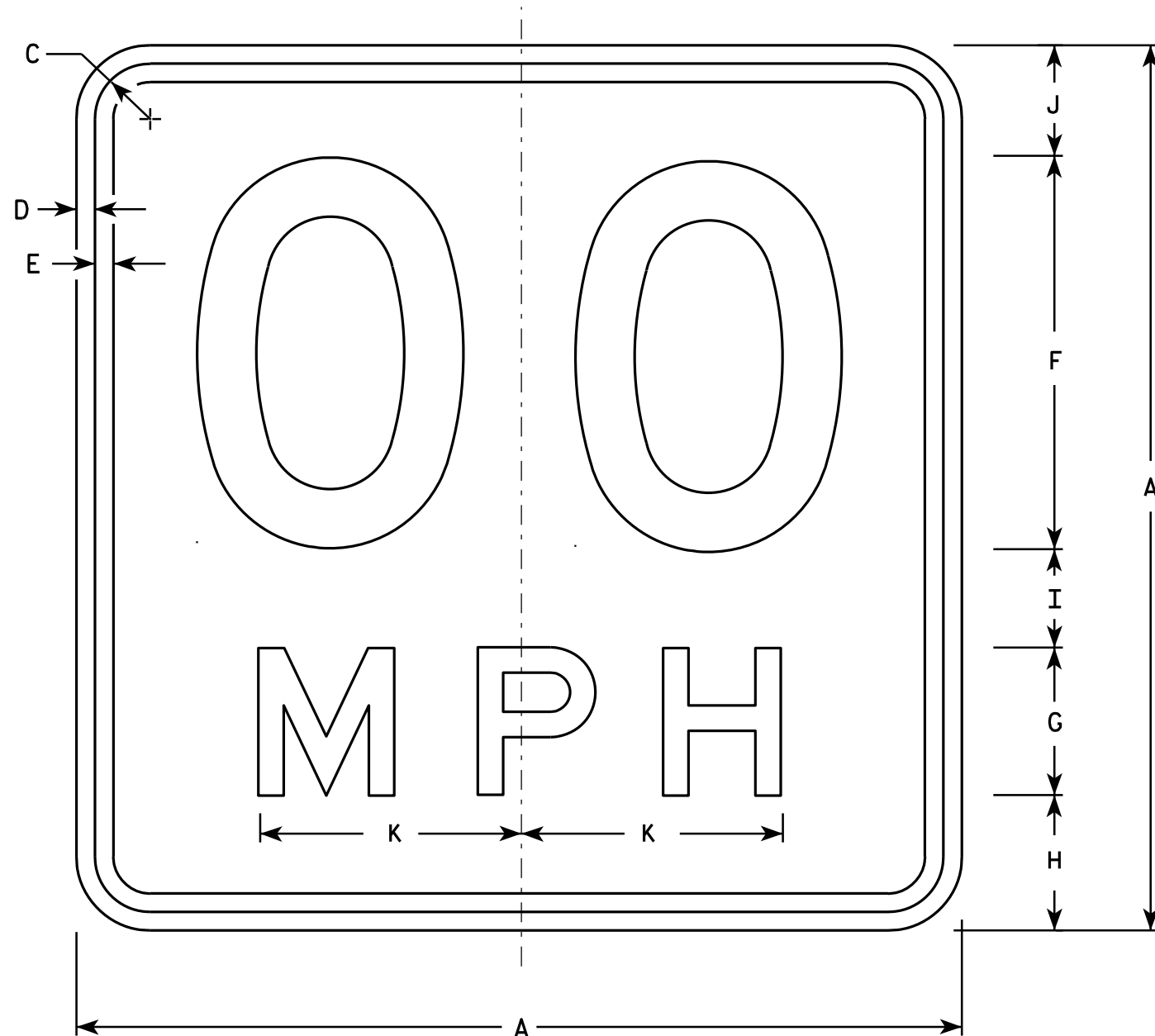
DATE 5/29/12

PLATE NO. W3-5.5

PROJECT NO:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
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. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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