

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1570-00-75	WISC 2020087	1
1570-00-76	WISC 2020088	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TURTLE LAKE - CAMERON

ASH STREET TO CTH P

**USH 8
BARRON**

STATE PROJECT NUMBER
1570-00-75

TURTLE LAKE - CAMERON

ASH STREET TO CTH P

**USH 8
BARRON**

STATE PROJECT NUMBER
1570-00-76

ORDER OF SHEETS

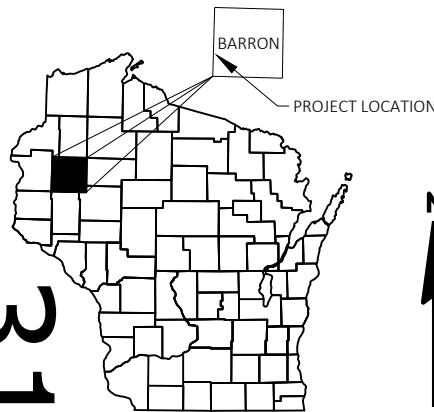
Section No.	Title
1	Title
2	Typical Sections and Details
3	Estimate of Quantities
3	Miscellaneous Quantities
4	Right of Way Plat
5	Plan and Profile
6	Standard Detail Drawings
7	Sign Plates
8	Structure Plans
9	Computer Earthwork Data
10	Gross Sections

TOTAL SHEETS = 110

PROJECT ID: 1570-00-75

31

COUNTY: BARRON



DESIGN DESIGNATION 1570-00-05

	FROM STA.	TO STA.	1263+94	1292+37	1278+58	1564+60
A.A.D.T.	2023	=	9800	6900		
A.A.D.T.	2043	=	10,700	7500		
D.H.V.	2043	=	1124	810		
D.D.		=	60/40	60/40		
T.		=	12.4	13.5		
DESIGN SPEED		=	40 MPH	60 MPH		
ESALS		=		2,600,000		

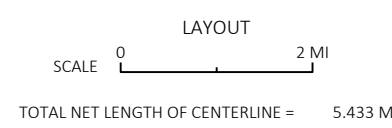
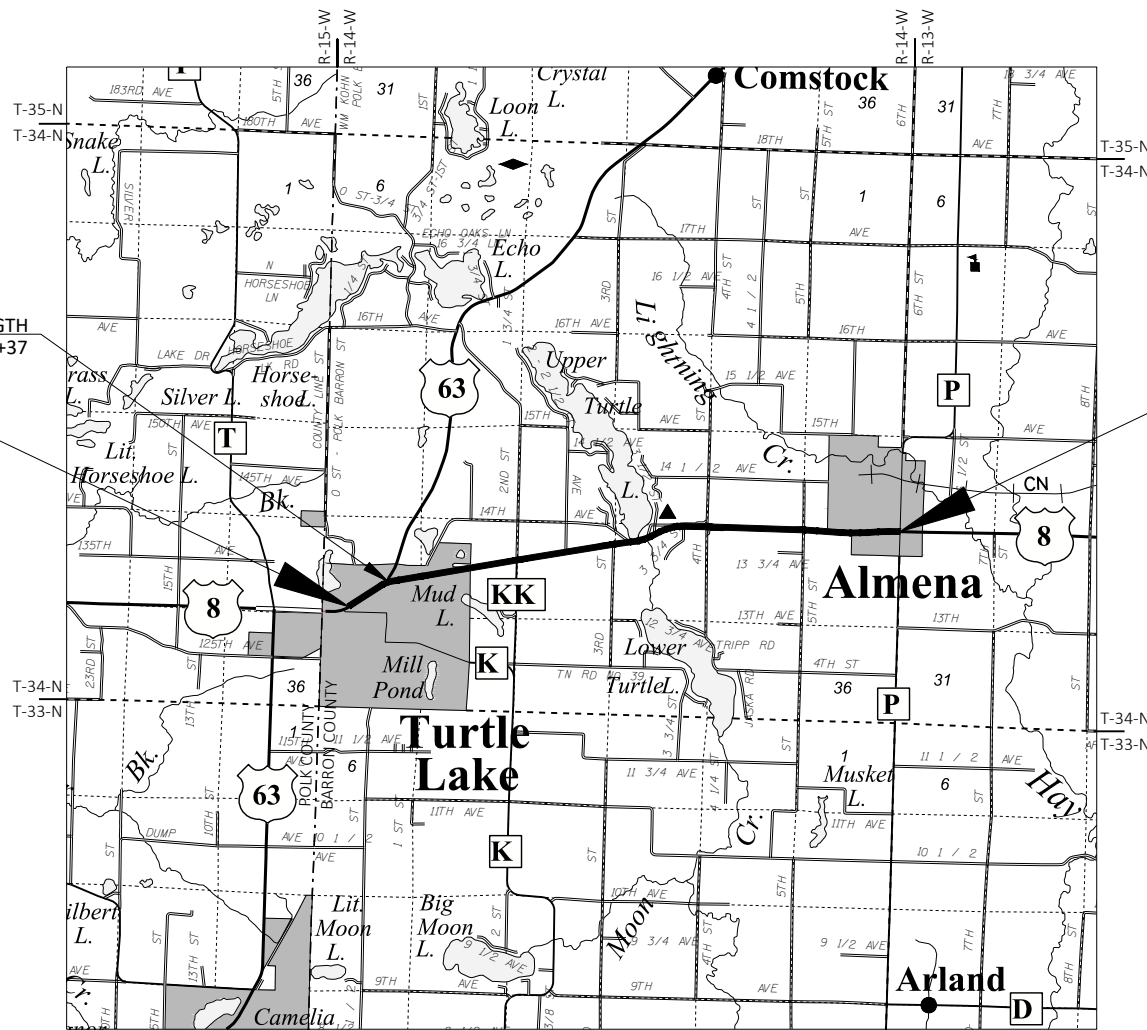
CONVENTIONAL SYMBOLS

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

BEGIN PROJECT 1570-00-75 & 1570-00-76
STA 1263+98.00
X = 228,791.23
Y = 96,224.78

NET EXCEPTION TO CL LENGTH
STA 1278+58 - STA 1292+37

END PROJECT 1570-00-75 & 1570-00-76
STA 1564+60.00
X = 258,054.06
Y = 100,780.98



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), BARRON COUNTY, NAD83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (1991). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 03.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

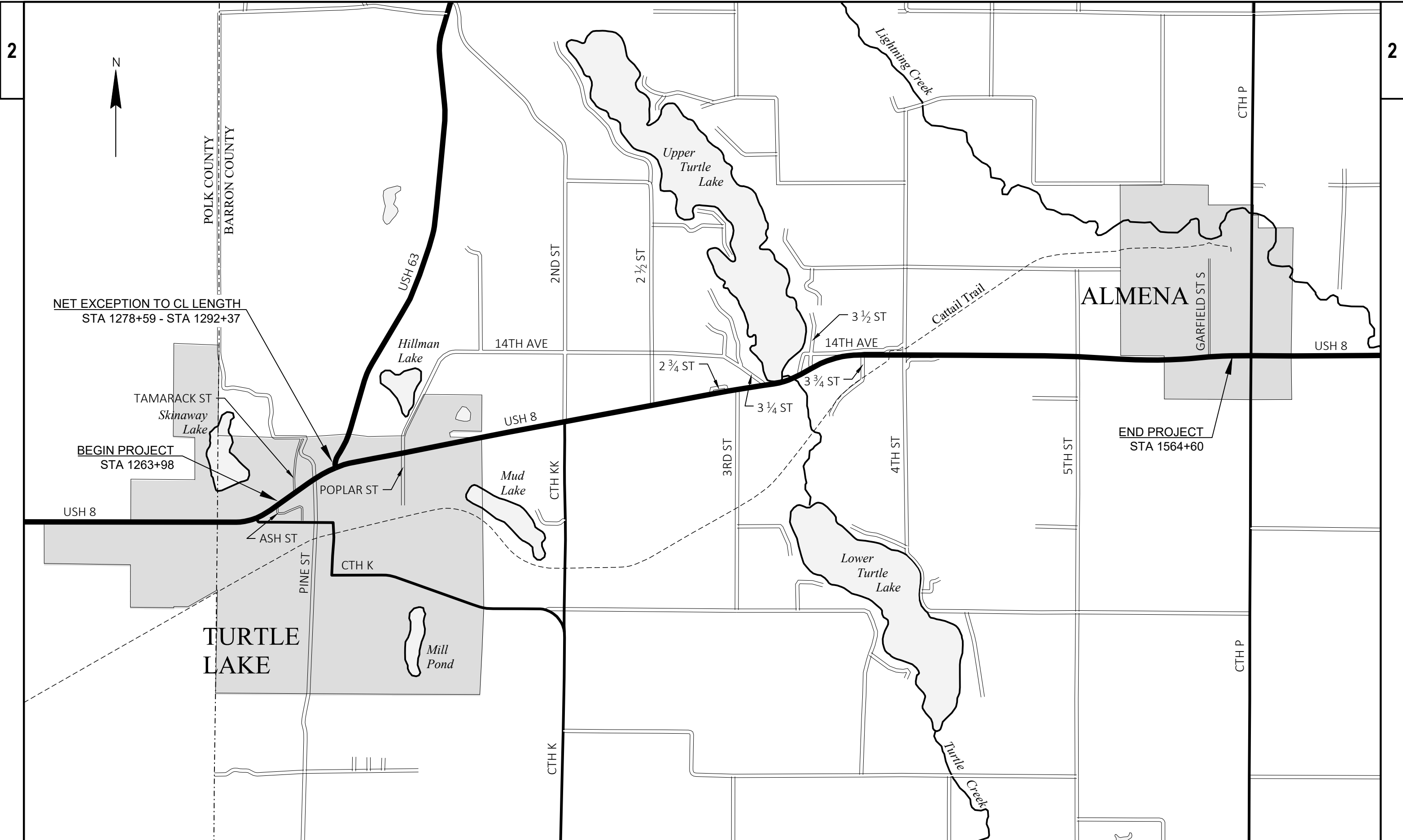
PREPARED BY

Surveyor	WISDOT
Designer	ZACHARY ERICKSON
Project Manager	MATTHEW DICKENSON
Regional Examiner	TOU YANG
Regional Supervisor	JEFFREY OLSON

APPROVED FOR THE DEPARTMENT

DATE: 10/11/2019 *Matthew J. Dickenson* (signature)

E



2

2



NET EXCEPTION TO CL LENGTH
STA 1278+59 - STA 1292+37

BEGIN PROJECT
STA 1263+98

END PROJECT
STA 1564+60

PROJECT NO: 1570-00-75 & 1570-00-76	HWY: USH 8	COUNTY: BARRON	PROJECT OVERVIEW	SHEET	E
-------------------------------------	------------	----------------	------------------	-------	----------

GENERAL NOTES

THE ENGINEER WILL DETERMINE ANY DETAILS OF CONSTRUCTION NOT SHOWN ON THE PLAN.

ALL WASTE MATERIAL RESULTING FROM THE VARIOUS OPERATIONS UNDER THIS CONTRACT SHALL BE COLLECTED TO BE PROPERTY DISPOSED OF PRIOR TO REOPENING LANES TO TRAFFIC.

DISTURBED AREAS WITHIN THE RIGHT OF WAY AS A RESULT OF THIS PROJECT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

WOOD POST SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS ARE APPROXIMATE AND MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

THE CONTRACTOR SHALL PRESERVE PAVEMENT MARKING TRANSITIONS AND ENSURE NEW PAVEMENT MARKING MATCHES THAT WHICH EXISTED PRIOR TO RESURFACING.

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

ACCESS TO ALL RESIDENCES SHALL BE MAINTAINED DURING CONSTRUCTION.

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

THE EXACT LOCATIONS OF EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

CURVE DATA SHOWN IS "ARC DEFINITION".

INSTALL/MAINTAIN ADVANCED WARNING SIGNS BEFORE BEGINNING WORK.

MAINTAIN MINIMUM 11-FT LANES ALONG USH 8 AT ALL TIMES.

HMA PAVEMENT LONGITUDINAL CONSTRUCTIONS JOINTS SHALL NOT BE PLACED IN WHEEL PATHS.

RAMPS SHALL BE PAVED WHEN THE DIFFERENCE BETWEEN EXISTING SURFACE AND MILLED SURFACE IS GREATER THAN 2" AND IS INCIDENTAL TO PAVING.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

HMA PAVEMENT AND ASPHALTIC SURFACE WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

STANDARD ABBREVIATIONS

ABUT.	ABUTMENT	ESALS	EQUIVALENT SINGLE AXLE LOADS	REQ'D	REQUIRED
AGG.	AGGREGATE	E.B.S.	EXCAVATION BELOW SUBGRADE	R/L	REFERENCE LINE
AH.	AHEAD	EL.	EXISTING	RT	RIGHT
AADT	ANNUAL AVERAGE DAILY TRAFFIC	FERT.	FERTILIZE	R.H.F.	RIGHT-HAND FORWARD
APPROX.	APPROXIMATE	FE	FIELD ENTRANCE	R/W	RIGHT-OF-WAY
AEW	APRON END WALL	FIN.	FINISHED	RD	ROAD
ASPH.	ASPHALTIC	FL OR ¶	FLOW LINE	SHLD	SHOULDER
BK.	BACK	HOR.	HORIZONTAL	S.	SOUTH
BEG.	BEGIN	INL.	INLET	SDD	STANDARD DETAIL DRAWINGS
B.M.	BENCH MARK	INTER.	INTERSECTION	SR	SIDE ROAD
C/L OR ¶	CENTER LINE	INV.	INVERT	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
C.E.	COMMERCIAL ENTRANCE	LT	LEFT	STH	STATE TRUNK HIGHWAYS
CONC.	CONCRETE	L.H.F.	LEFT-HAND FORWARD	STA.	STATION
CONSTRUT.	CONSTRUCTION	LF	LINEAR FOOT	STRUCT.	STRUCTURE
CO.	COUNTY	LS	LUMP SUM	TEL	TELEPHONE
CTH	COUNTY TRUNK HIGHWAY	MAX.	MAXIMUM	TEMP.	TEMPORARY
X-SEC.	CROSS SECTION	MISC.	MISCELLANEOUS	T	TOWN
CR.	CRUSHED	N.	NORTH	T.	TRUCKS (PERCENT OF)
CULV.	CULVERT	NE	NORTHEAST	TYP.	TYPICAL
DOT	DEPARTMENT OF TRANSPORTATION	NW	NORTHWEST	UG	UNDERGROUND
D.H.V.	DESIGN HOUR VOLUME	PAVT.	PAVEMENT	VAR.	VARIABLE
DIA.	DIAMETER	PC	POINT OF CURVATURE	V	VELOCITY OR DESIGN SPEED
DISCH.	OR DIS. DISCHARGE	PI	POINT OF INTERSECTION	VC	VERTICAL CURVE
E.	EAST	PT	POINT OF TANGENCY	W.	WEST
EB	EASTBOUND	POT	POINT ON TANGENT	WB	WESTBOUND
EA.	EACH	PE	PRIVATE ENTRANCE	WD	WORKING DAY
ELEC.	ELECTRIC	PROJ.	PROJECT	WZ	WORK ZONE
OR ELEV.	ELEVATION	R	RANGE	X	EAST GRID COORDINATE
				Y	NORTH GRID COORDINATE

COMMUNICATIONS

WISDOT - NW REGION
 ATTN: MATTHEW DICKENSON - DESIGN PROJECT MANAGER
 1701 N. 4TH STREET
 SUPERIOR, WI 54880
 PHONE: (715) 395-3022
 EMAIL: matthew.dickenson@dot.wi.gov

WISDOT - NW REGION
 ATTN: ZACHARY ERICKSON - DESIGN PROJECT LEADER
 1701 N. 4TH STREET
 SUPERIOR, WI 54880
 PHONE: (715) 392-7996
 EMAIL: zachary.erickson@dot.wi.gov

WISDOT - NW REGION
 JENNIFER BERG - TRAFFIC ENGINEER
 718 W. CLAIREMONT AVENUE
 EAU CLAIRE, WI 54701
 (715) 836-2853
 EMAIL: jenniferl.berg@dot.wi.gov

WDNR - NORTHERN REGION HQ
 ATTN: AMY CRONK
 810 W. MAPLE STREET
 SPOONER, WI 54801
 PHONE: (715) 635-4229
 EMAIL: amy.cronk@wisconsin.gov

POLK COUNTY HIGHWAY DEPARTMENT
 EMIL NORBY - HIGHWAY COMMISSIONER
 518 MAIN STREET
 BALSAM LAKE, WI 54810
 PHONE: (715) 485-8700
 FAX: (715) 485-8702

WISCONSIN STATE PATROL SPOONER POST
 W7102 GREEN VALLEY ROAD
 SPOONER, WI 54801
 PHONE: (715) 635-2141
 EMERGENCY: (715) 635-7725
 FAX: (715) 635-6373

POLK COUNTY SHERIFF'S OFFICE
 POLK COUNTY JUSTICE CENTER
 1005 WEST MAIN STREET, SUITE 900
 BALSAM LAKE, WI 54810
 EMERGENCY 911
 DISPATCH (715) 485-8300

UTILITIES

COMMUNICATIONS LINE

CENTURYLINK - COMMUNICATION LINE
 ATTN: MICHAEL VANDEN BOS
 2426 75TH AVENUE
 OSCEOLA, WI 54020
 PHONE: (715) 294-2463
 MOBILE: (715) 292-4278
 EMAIL: mike.vandenbos@centurylink.com

CHARTER COMMUNICATIONS - COMMUNICATIONS LINE
 ATTN: JAMEY OLDEEN
 2304 S MAIN ST
 RICE LAKE, WI 54868
 PHONE: (715) 719-0561
 MOBILE: (715) 651-7488
 EMAIL: jamey.oldeen@charter.com

MOSAIC TELECOM - COMMUNICATIONS LINE
 ATTN: DENNIS RUSSETT
 410 S. 1ST STREET
 CAMERON, WI 54822
 PHONE: (715) 458-5378
 MOBILE: (715) 548-5518
 EMAIL: ctcdennis@mosaictelecom.com

ELECTRICITY - DISTRIBUTION

BARRON ELECTRIC COOPERATIVE - ELECTRICITY
 ATTN: JEFF NELSON
 1434 HWY 25 N 54812
 PHONE: (715) 537-3171
 MOBILE: (715) 418-1167
 EMAIL: jnelson@barronelectric.com

DAIRYLAND POWER COOPERATIVE - ELECTRICITY
 ATTN: ROB MALY
 3200 EAST AVE S.
 P.O. BOX 817
 LA CROSSE, WI 54602-0817
 PHONE: (608) 518-2633
 EMAIL: rob.maly@dairylandpower.com

XCEL ENERGY -ELECTRICITY TRANSMISSION
 ATTN: MITCHELL DIENGER
 414 NICOLLET MALL, 5TH FLOOR
 MINNEAPOLIS, MN 55401
 PHONE: (612) 321-3109
 MOBILE: (608) 386-2233
 EMAIL: mitchell.a.dienger@excelenergy.com

GAS

NORTHERN NATURAL GAS - GAS
 ATTN: JUSTIN PETERSEN
 6579 420TH STREET
 HARRIS, MN 55032
 PHONE: (612) 750-0365
 EMAIL: justin.petersen@nngco.com

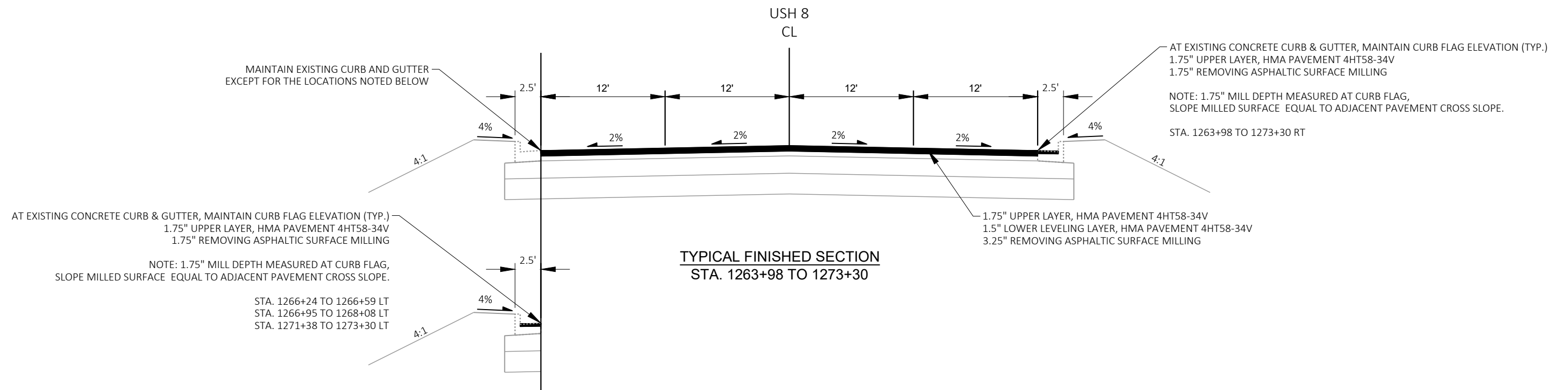
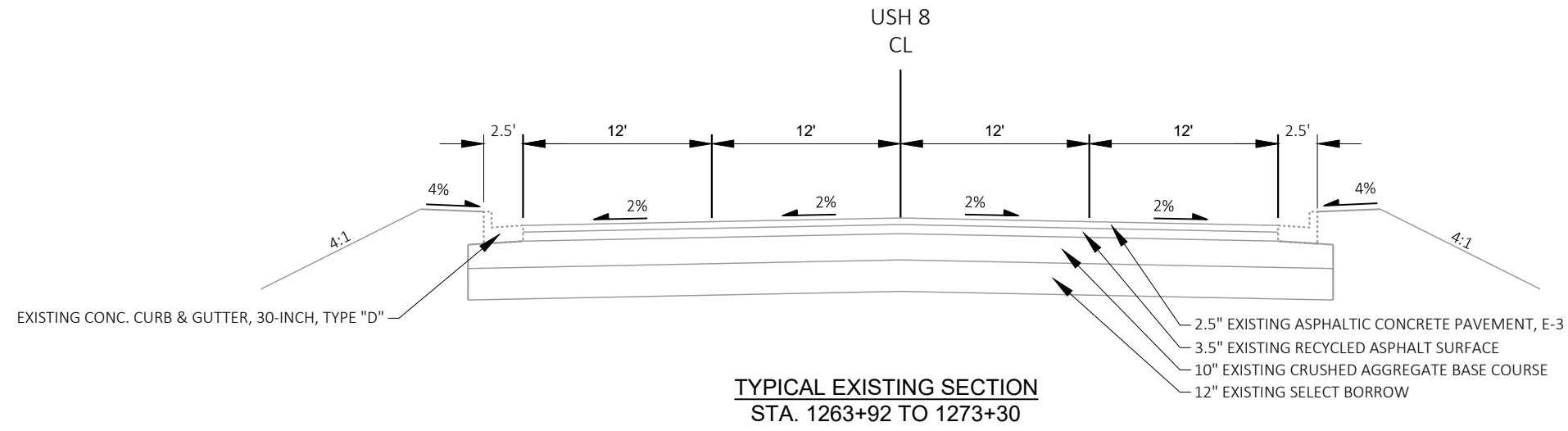
WE ENERGIES - GAS
 ATTN: STEVEN CHAVERS
 104 W. SOUTH STREET
 RICE LAKE, WI 54868
 PHONE: (715) 234-9605
 MOBILE: (715) 213-4327
 EMAIL: steven.chavers@we-energies.com

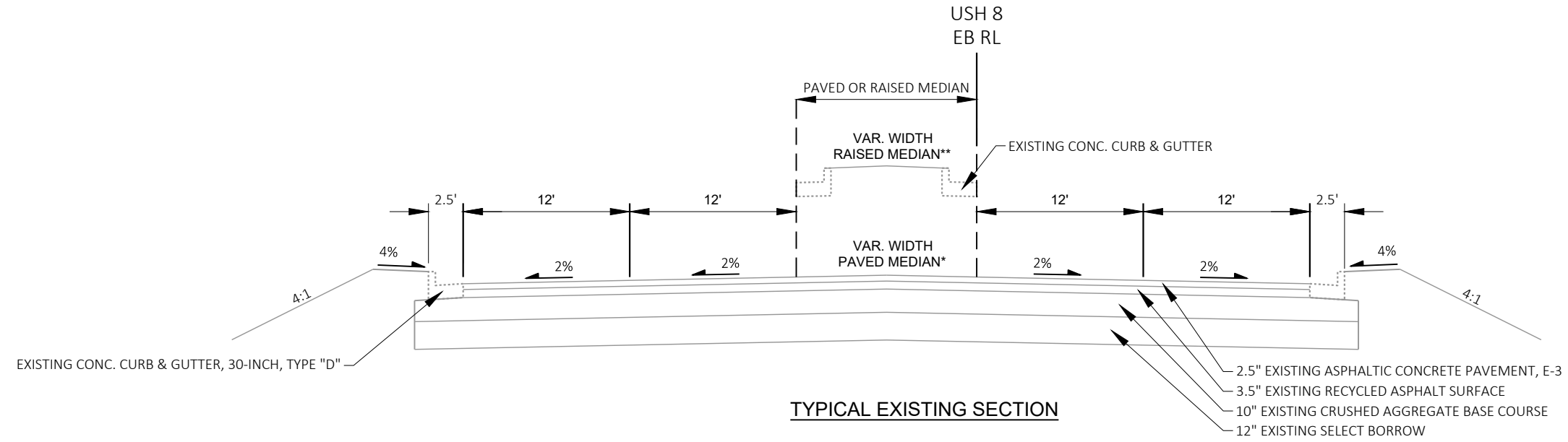
SANITARY AND WATER

VILLAGE OF TURTLE LAKE - SANITARY & WATER MAIN
 ATTN: CORY DAVIS (DIRECTOR OF PUBLIC WORKS)
 520 LOGAN AVENUE E.
 P.O. BOX 11
 TURTLE LAKE, WI 54889
 PHONE: (715) 986-2820
 EMAIL: vtlpw@turtlelake.com

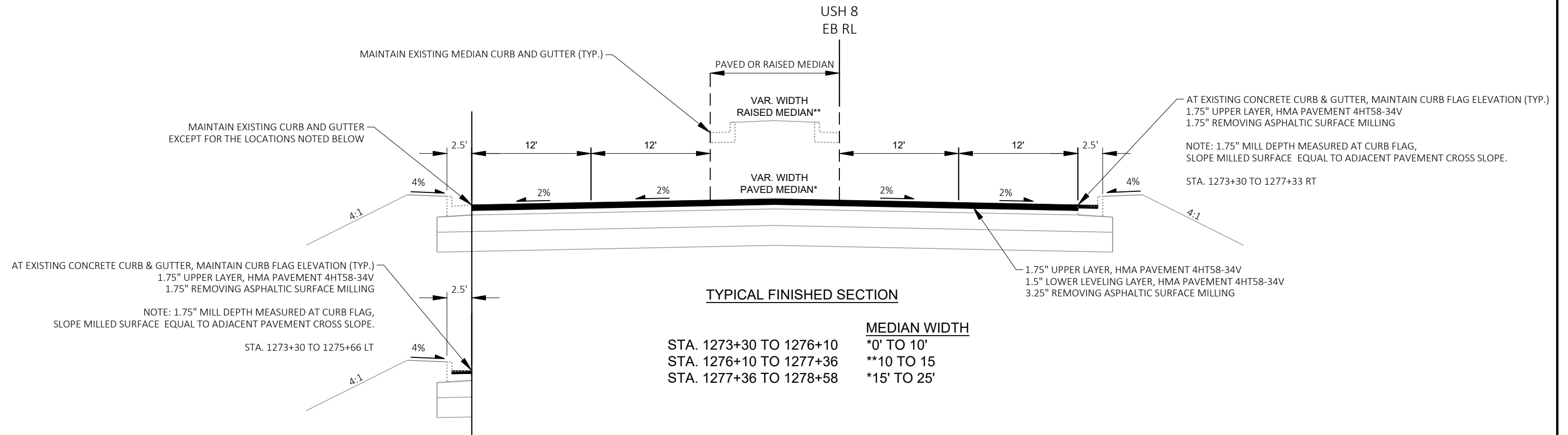
ALMENA MUNICIPAL WATER UTILITY - SANITARY & WATER
 ATTN: WAYNE BECKER
 345 LIGHTNING AVENUE
 ALMENA, WI 54805
 PHONE: (715) 357-3320
 MOBILE: (715) 205-7250
 EMAIL: publicworks@chibardun.net



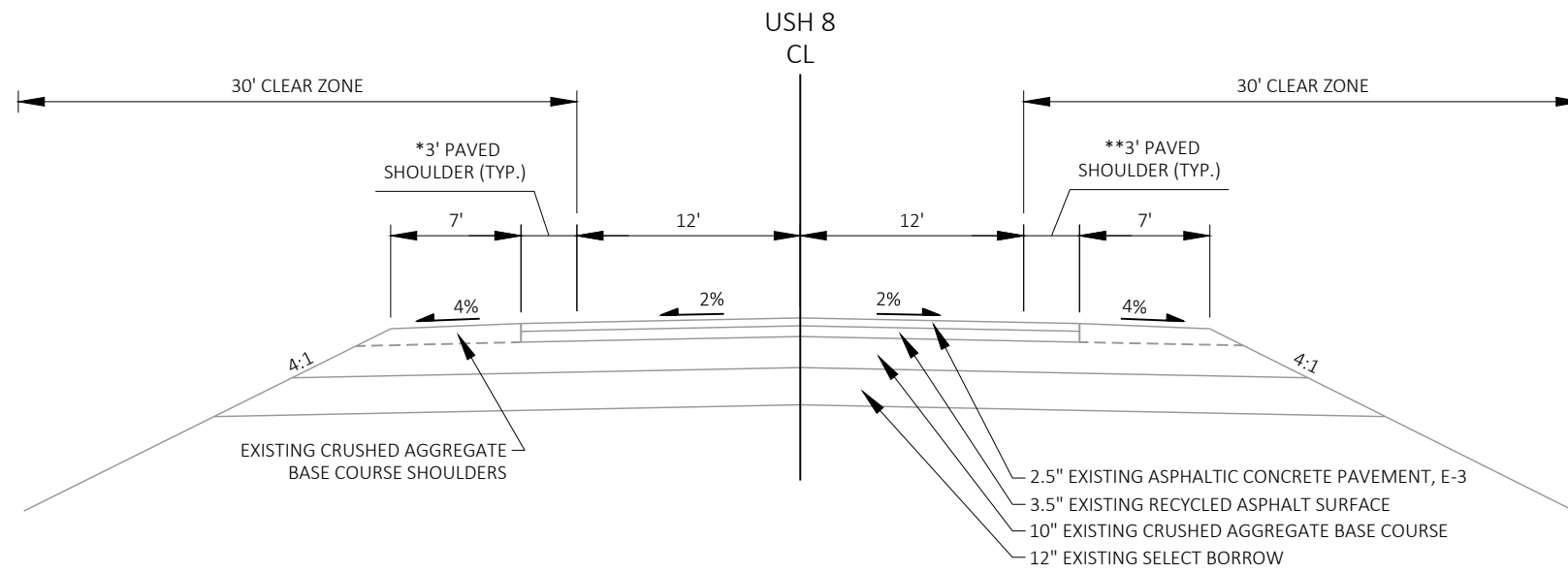




	<u>MEDIAN WIDTH</u>
STA. 1273+30 TO 1276+10	*0' TO 10'
STA. 1276+10 TO 1277+36	**10 TO 15'
STA. 1277+36 TO 1278+58	*15' TO 25'



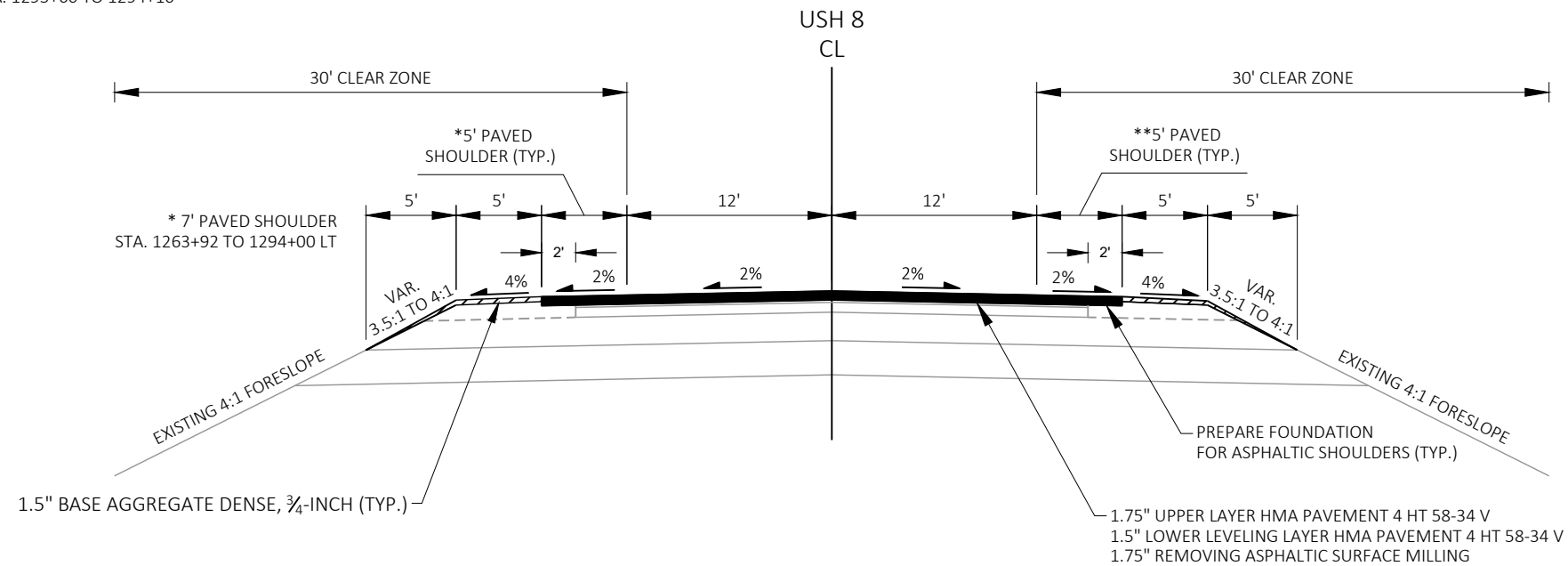
	<u>MEDIAN WIDTH</u>
STA. 1273+30 TO 1276+10	*0' TO 10'
STA. 1276+10 TO 1277+36	**10 TO 15'
STA. 1277+36 TO 1278+58	*15' TO 25'



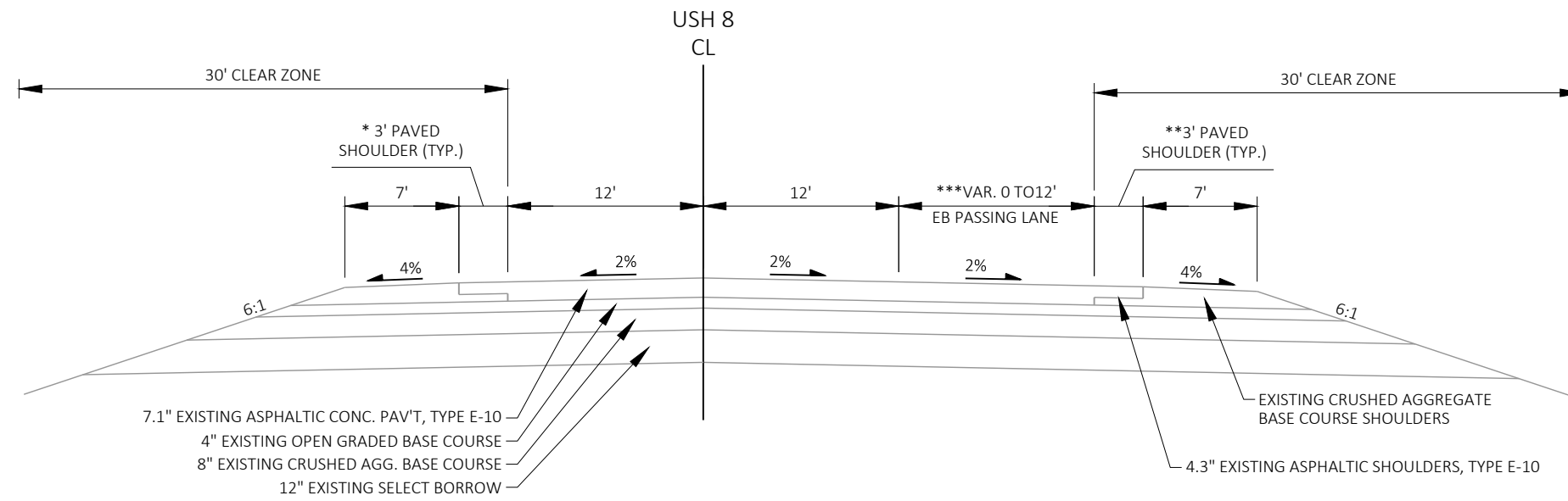
TYPICAL EXISTING SECTION
STA. 1292+37 TO 1304+29

* 8' PAVED SHOULDER STA. 1292+37 TO 1293+60 LT
SHOULDER TAPERS FROM 8' TO TYPICAL
WIDTH FROM STA. 1293+60 TO 1294+10

** EASTBOUND RIGHT TURN LANE TAPER (SEE TURN LANE DETAIL)
STA. 1302+67 TO 1304+29 RT

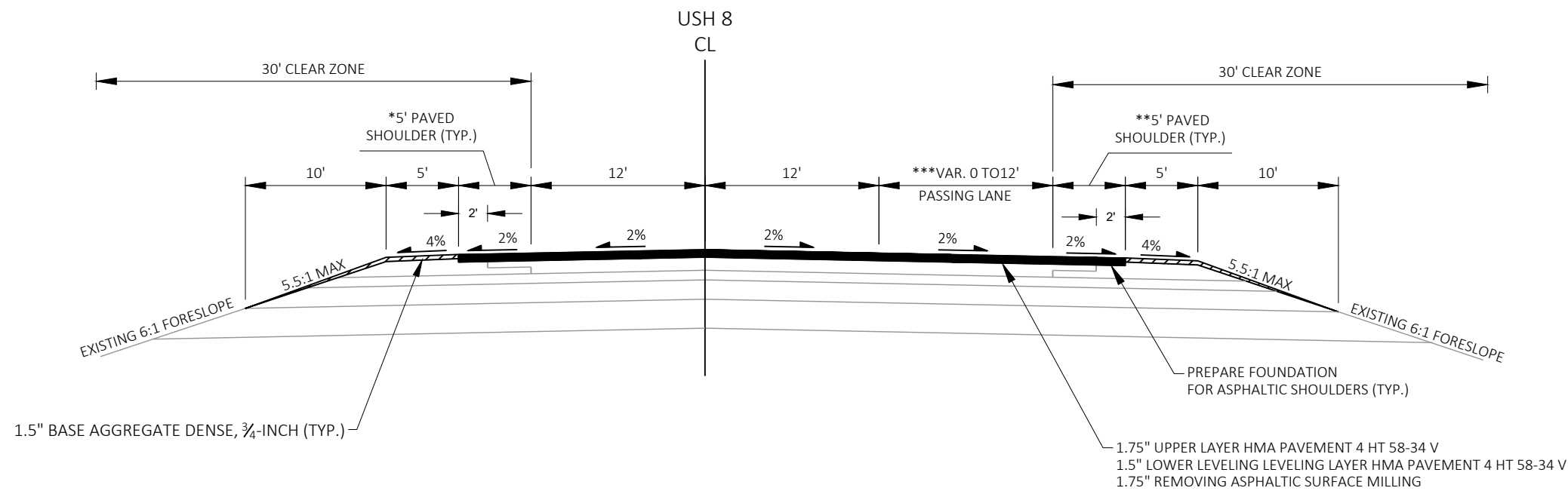


TYPICAL FINISHED SECTION
STA. 1292+37 TO 1304+29

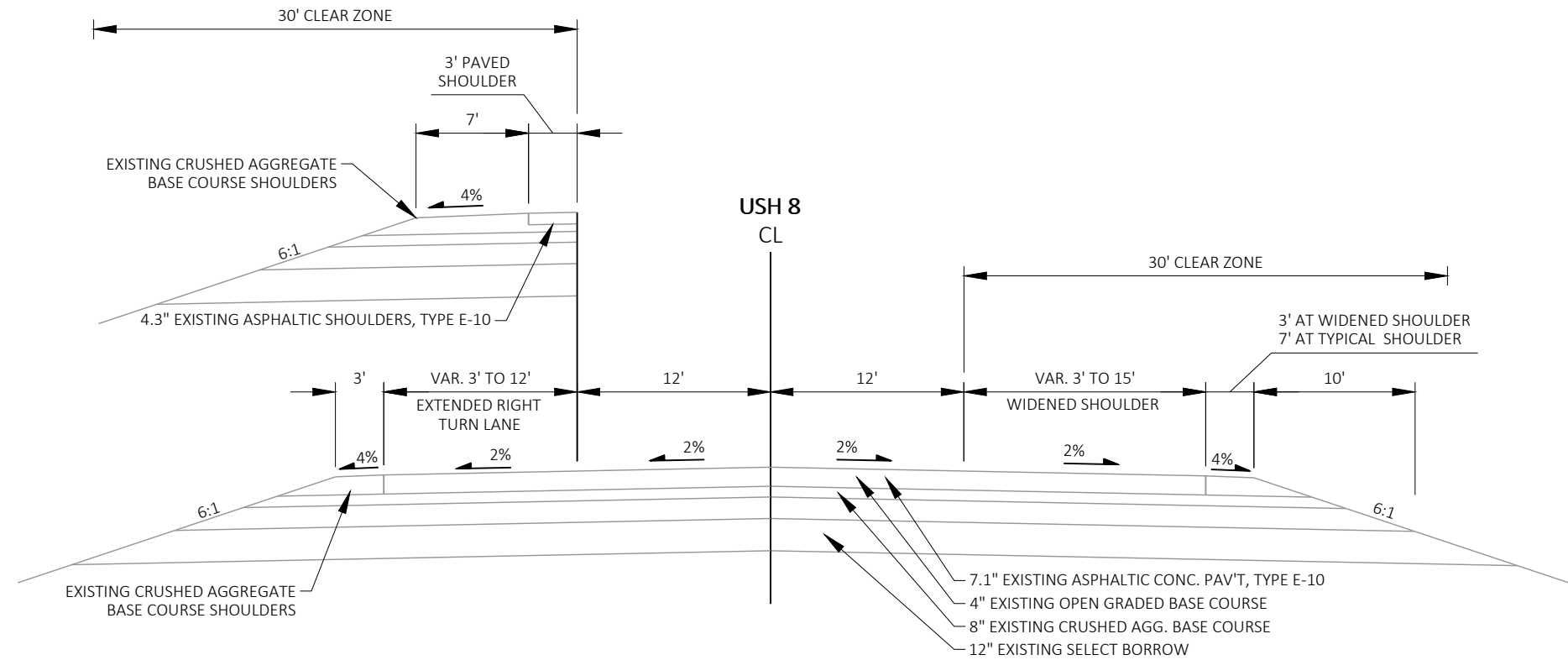


TYPICAL EXISTING SECTION
STA. 1304+29 TO 1415+15

- * WESTBOUND RIGHT TURN LANES (SEE TURN LANE DETAIL)
 STA. 1305+33 TO 1310+40 LT (POPLAR ST)
 STA. 1355+91 TO 1361+07 LT (2ND ST)
 STA. 1383+10 TO 1388+18 LT (2 1/2 ST)
- ** EASTBOUND RIGHT TURN LANES (SEE TURN LANE DETAIL)
 STA. 1304+29 TO 1307+85 RT (POPLAR ST)
 STA. 1352+80 TO 1358+05 RT (CTH KK)
 STA. 1406+87 TO 1412+00 RT (3RD ST)
- *** EASTBOUND PASSING LANE
 STA. 1316+75 TO 1323+80 RT (TAPERS OUT 0' TO 12')
 STA. 1323+80 TO 1395+00 RT (FULL WIDTH 12')
 STA. 1395+00 TO 1402+05 RT (TAPER IN 12' TO 0')



TYPICAL FINISHED SECTION
STA. 1304+29 TO 1415+15

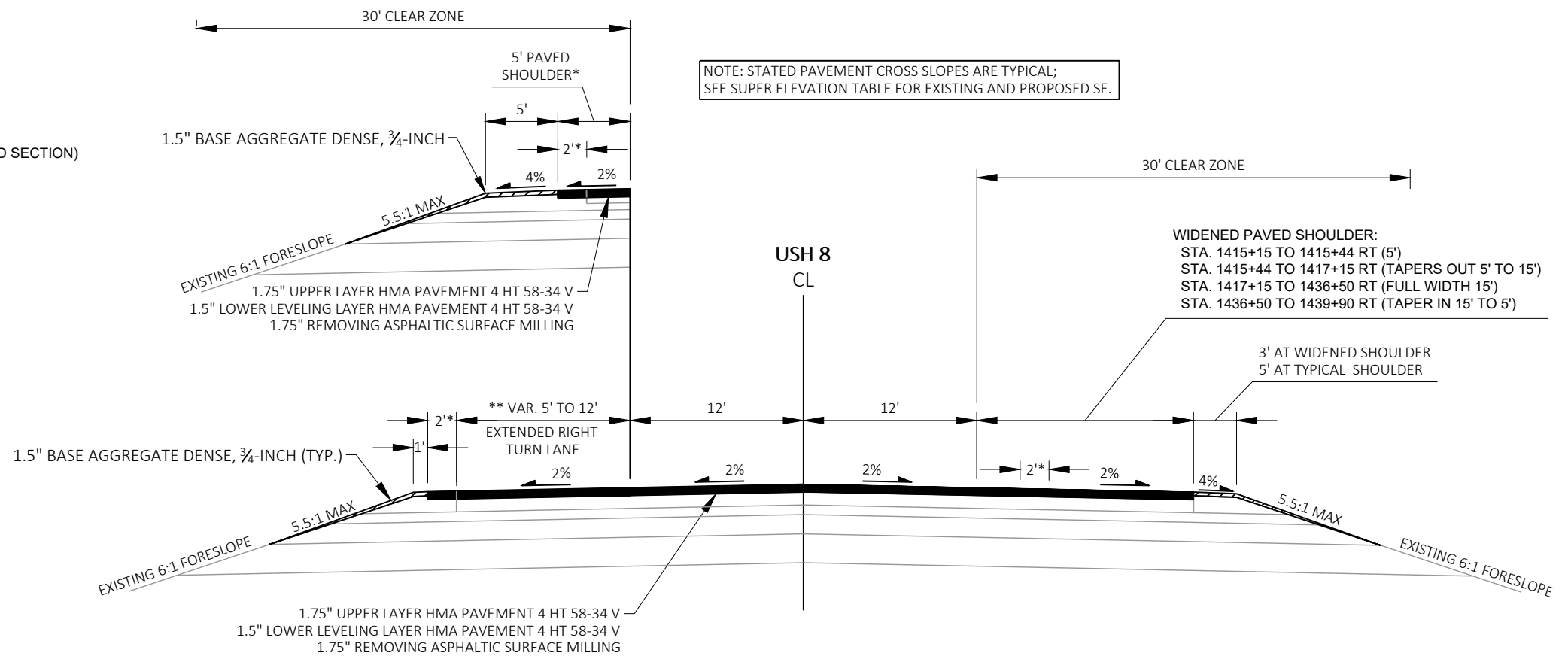


TYPICAL EXISTING SECTION
STA. 1415+15 TO 1441+00

****EXTENDED RT TURN LANE (SEE TURN LANE DETAIL):**

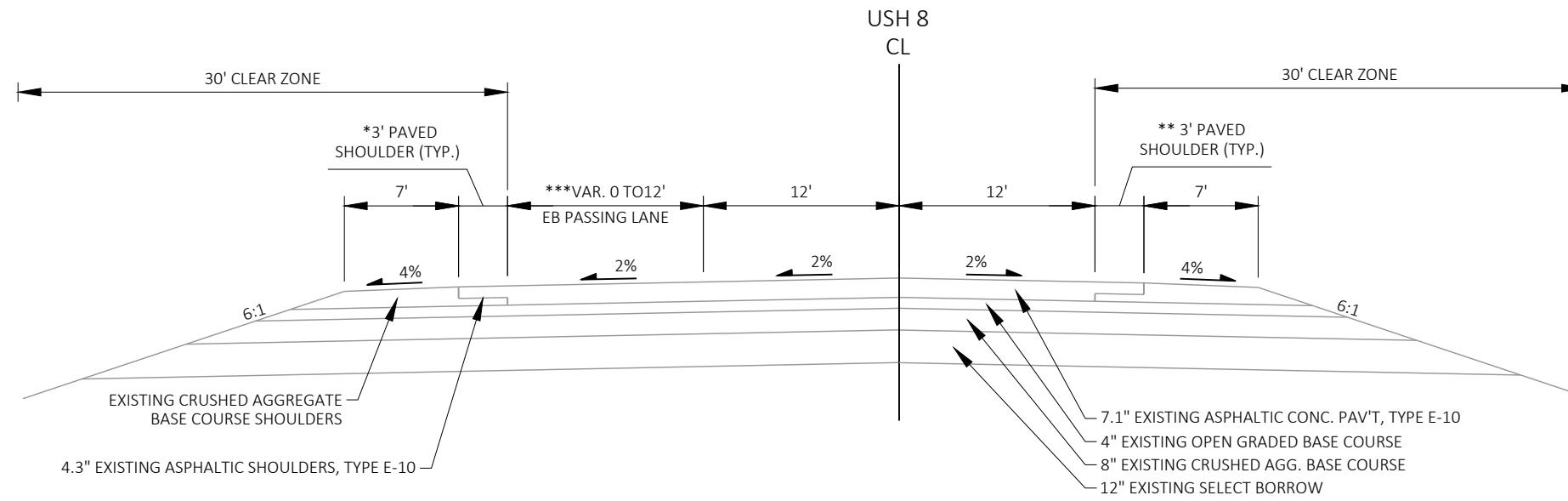
- STA. 1417+54 TO 1418+23 LT (TAPERS OUT 5' TO 12')
- STA. 1418+23 TO 1420+40 LT (12')
- STA. 1420+40 TO 1421+40 (TAPERS IN 12' TO 10' ALONG BEAM GUARD SECTION)
- STA. 1421+40 TO 1426+50 (10' ALONG BEAM GUARD SECTION)
- STA. 1426+50 TO 1427+50 LT (TAPERS OUT TO 10' TO 12')
- STA. 1427+50 TO 1437+60 LT (12')
- STA. 1437+60 TO 1438+73 (TAPERS IN 12' TO 5')

<p>* PAVED SHOULDER WIDENING:</p> <p>PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS REQUIRED IN LOCATIONS WHERE TYPICAL PAVED SHOULDERS ARE BEING WIDENED FROM 3' TO 5'.</p> <p>STA. 1415+15 TO 1417+54 LT STA. 1438+73 TO 1441+00 LT</p> <p>STA. 1415+15 TP 1415+44 RT STA. 1439+90 TO 1441+00 RT</p> <p>PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS REQUIRED IN LOCATIONS WHERE 2' PAVED SHOULDERS ARE BEING ADDED NEXT TO TURN LANES; SEE TURN LANE DETAIL.</p> <p>STA. 1419+67 TO 1420+40 LT STA. 1428+30 TO 1430+22 LT STA. 1431+60 TO 1434+13 LT STA. 1435+49 TO 1438+73 LT</p>



TYPICAL FINISHED SECTION
STA. 1415+15 TO 1441+00

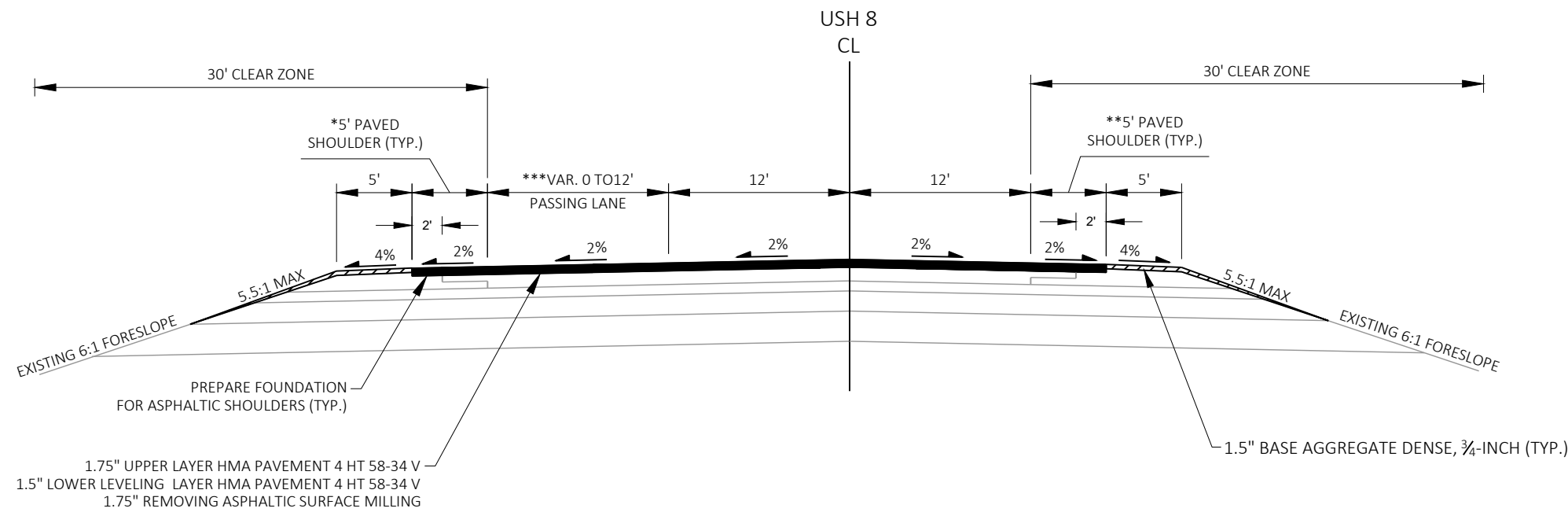
NOTE: STATED PAVEMENT CROSS SLOPES ARE TYPICAL;
SEE SUPER ELEVATION TABLE FOR EXISTING AND PROPOSED SE.



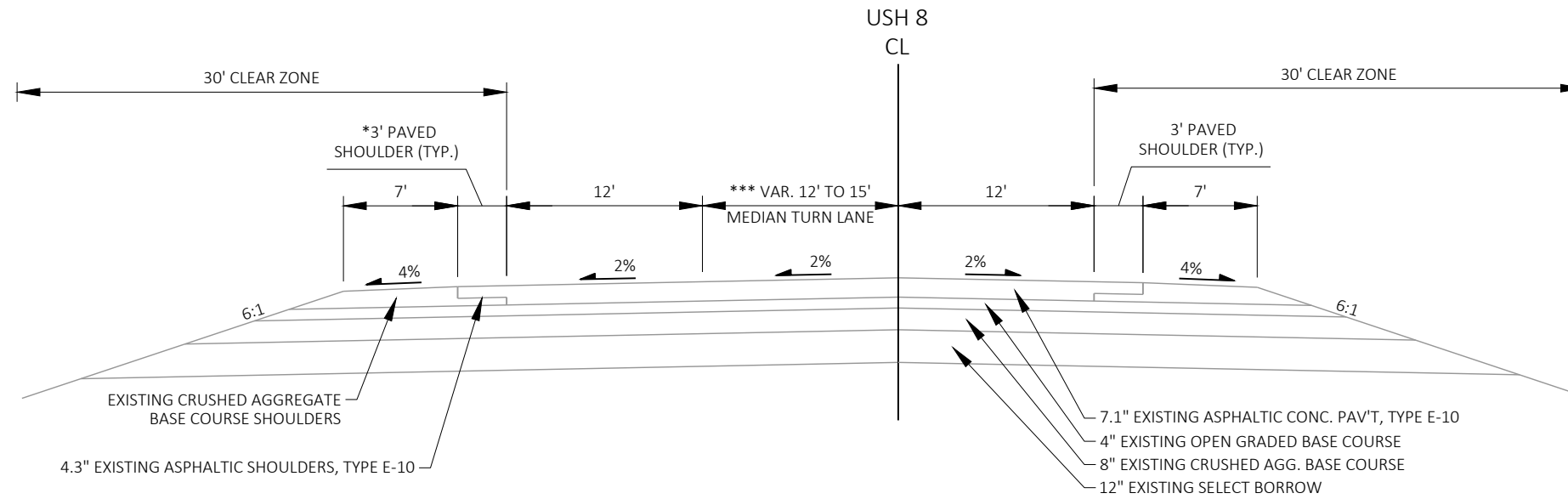
TYPICAL EXISTING SECTION
 STA. 1441+00 TO 1546+50

NOTE: STATED PAVEMENT CROSS SLOPES ARE TYPICAL;
 SEE SUPER ELEVATION TABLE FOR EXISTING AND PROPOSED SE.

- * WESTBOUND RIGHT TURN LANES (SEE TURN LANE DETAIL)
 STA. 1462+64 TO 1467+78 LT (4TH ST)
 STA. 1515+80 TO 1520+80 LT (5TH ST)
- ** EASTBOUND RIGHT TURN LANES (SEE TURN LANE DETAIL)
 STA. 1446+97 TO 1452+24 RT (3 3/4 ST)
 STA. 1460+00 TO 1465+05 RT (4TH ST)
 STA. 1513+12 TO 1518+22 RT (5TH ST)
- *** WESTBOUND PASSING LANE
 STA. 1472+00 TO 1479+05 LT (TAPER OUT 0' TO 12')
 STA. 1479+05 TO 1546+50 (FULL WIDTH 12')

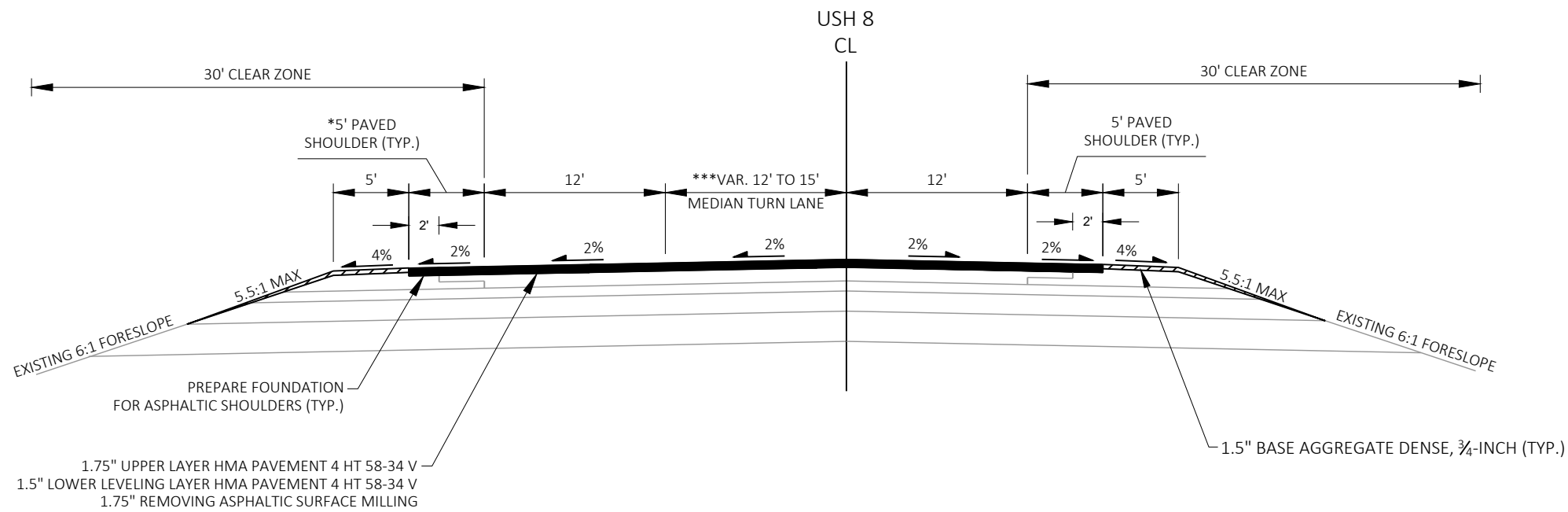


TYPICAL FINISHED SECTION
 STA. 1441+00 TO 1546+50

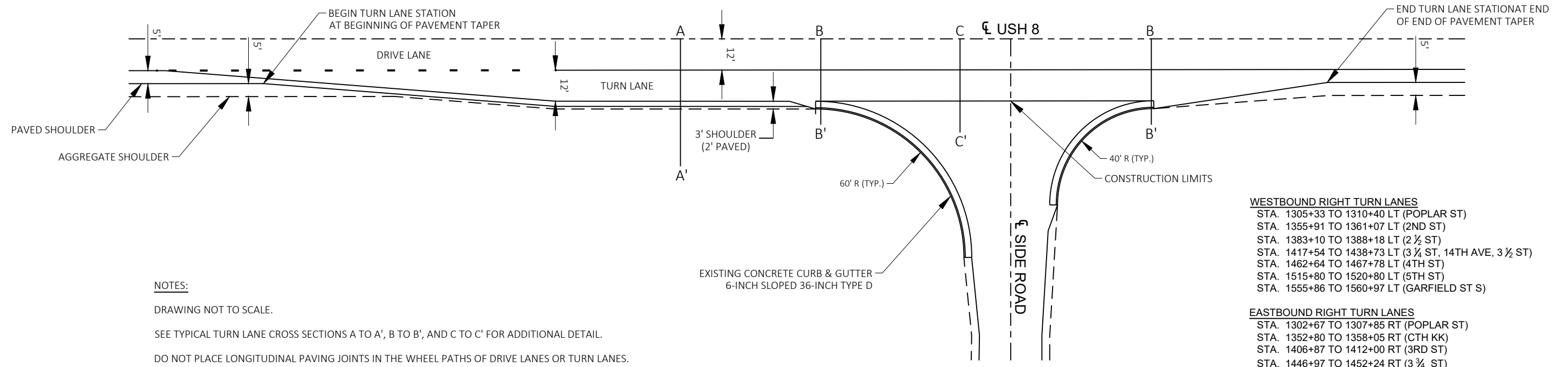


TYPICAL EXISTING SECTION
STA. 1546+50 TO 1564+60

- * WESTBOUND RIGHT TURN LANE (SEE TURN LANE DETAIL)
 STA. 1555+86 TO 1560+97 LT (GARFIELD ST S)
- *** MEDIAN TURN LANE
 STA. 1546+50 TO 1553+73 LT (TAPERS OUT 12' TO 15')
 STA. 1553+73 TO 1564+60 (FULL WIDTH 15')



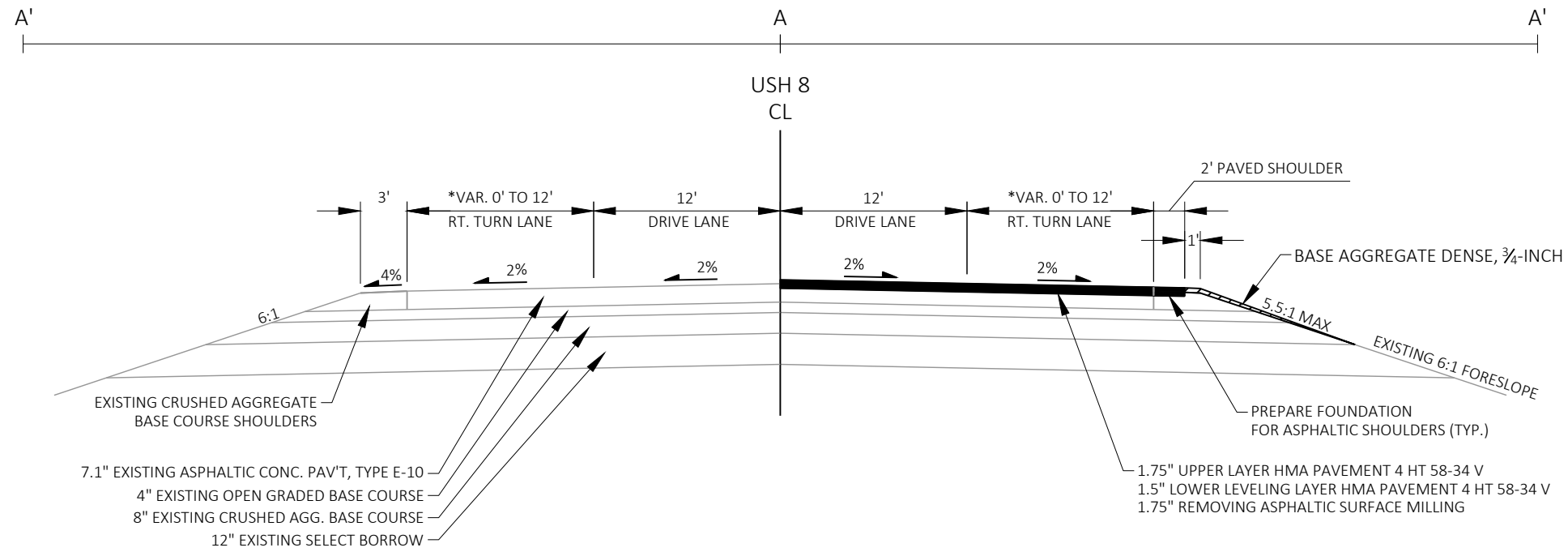
TYPICAL FINISHED SECTION
STA. 1546+50 TO 1564+60



- WESTBOUND RIGHT TURN LANES**
 STA. 1305+33 TO 1310+40 LT (POPLAR ST)
 STA. 1355+91 TO 1361+07 LT (2ND ST)
 STA. 1383+10 TO 1388+18 LT (2 1/2 ST)
 STA. 1417+54 TO 1438+73 LT (3 1/4 ST, 14TH AVE, 3 1/2 ST)
 STA. 1462+64 TO 1467+78 LT (4TH ST)
 STA. 1515+80 TO 1520+80 LT (5TH ST)
 STA. 1555+86 TO 1560+97 LT (GARFIELD ST S)
- EASTBOUND RIGHT TURN LANES**
 STA. 1302+67 TO 1307+85 RT (POPLAR ST)
 STA. 1352+80 TO 1358+05 RT (CTH KK)
 STA. 1406+87 TO 1412+00 RT (3RD ST)
 STA. 1446+97 TO 1452+24 RT (3 3/4 ST)
 STA. 1460+00 TO 1465+05 RT (4TH ST)
 STA. 1513+12 TO 1518+22 RT (5TH ST)

NOTES:
 DRAWING NOT TO SCALE.
 SEE TYPICAL TURN LANE CROSS SECTIONS A TO A', B TO B', AND C TO C' FOR ADDITIONAL DETAIL.
 DO NOT PLACE LONGITUDINAL PAVING JOINTS IN THE WHEEL PATHS OF DRIVE LANES OR TURN LANES.

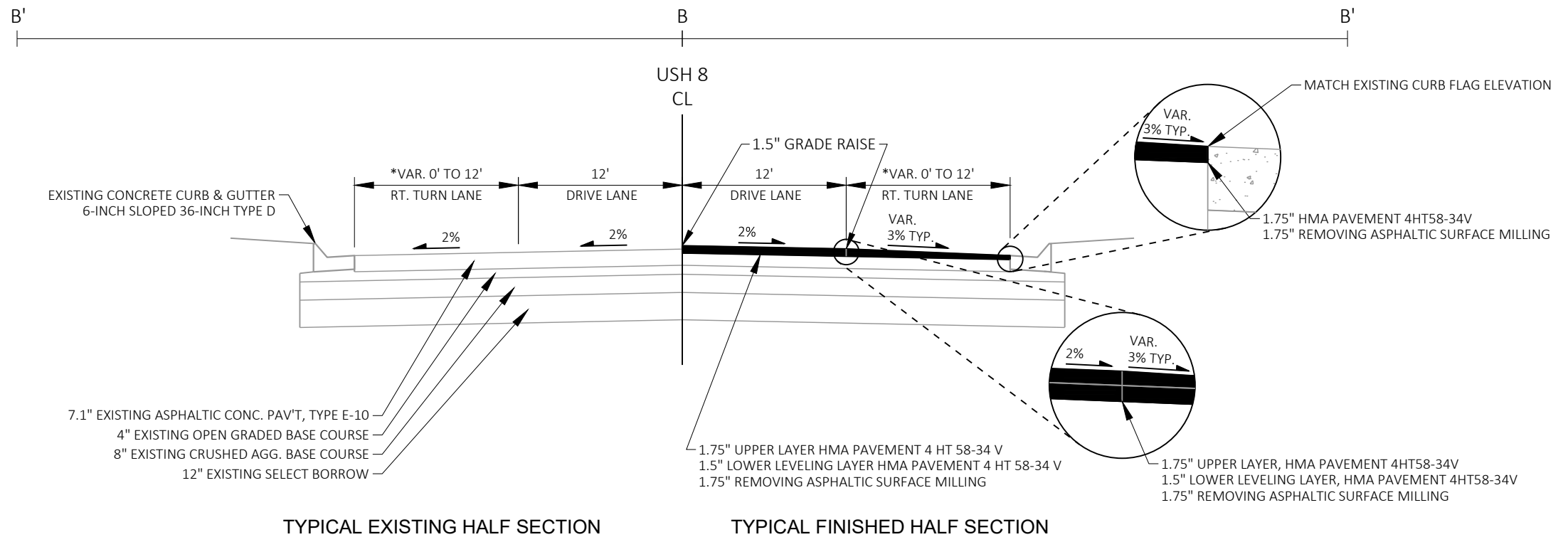
TURN LANE DETAIL (PLAN VIEW)



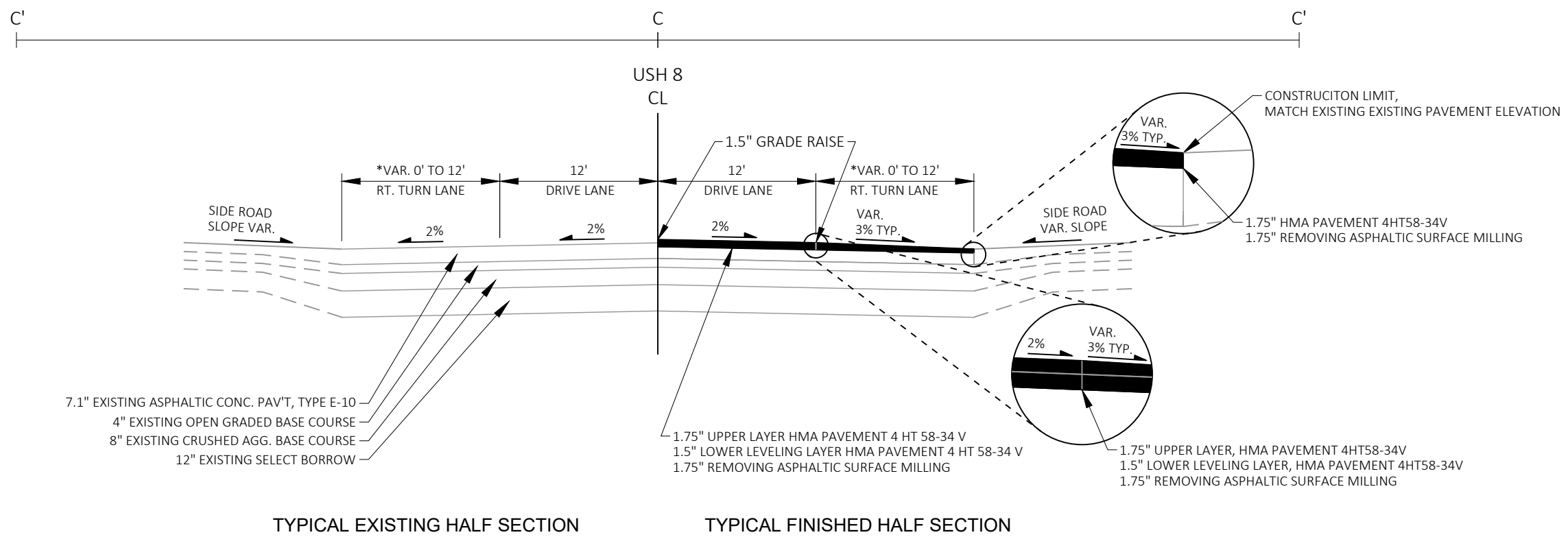
TYPICAL EXISTING HALF SECTION

TYPICAL FINISHED HALF SECTION

TURN LANE DETAIL (A TO A')

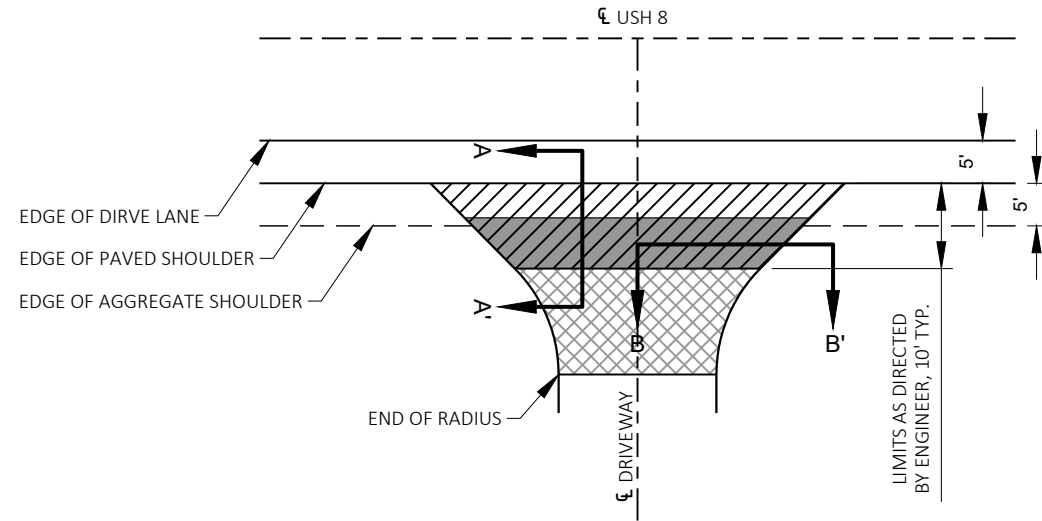


TURN LANE DETAIL (B TO B')



TURN LANE DETAIL (C TO C')




SUPER ELEVATION TABLE - USH 8			
CURVE START STA.	CURVE END. STA.	EXISTING SE	PROPOSED SE
1272+95.93	1278+76.80	RC	RC
1305+89.19	1317+44.51	NC	NC
1323+26.75	1334+85.40	NC	NC
1397+33.74	1412+02.92	NC	NC
1421+58.43	1431+80.94	5.2%	5.2%
1435+99.30	1450+46.05	5.2%	5.2%
1504+22.42	1521+52.30	NC	NC
1529+79.05	1553+73.32	NC	NC
1557+58.74	1566+74.72	NC	NC



RESTORE RURAL PAVED DRIVEWAY AND TYPE C MOD. INTERSECTION DETAIL

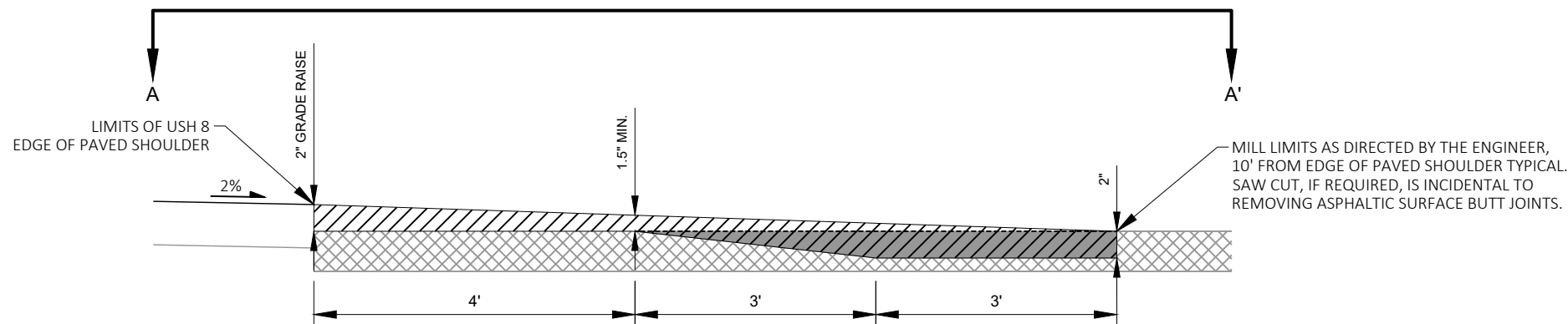
1403+00 LT 1407+55 LT 1419+86 RT 1422+62 RT 1427+90 LT 1430+10 RT 1476+76 LT

LEGEND

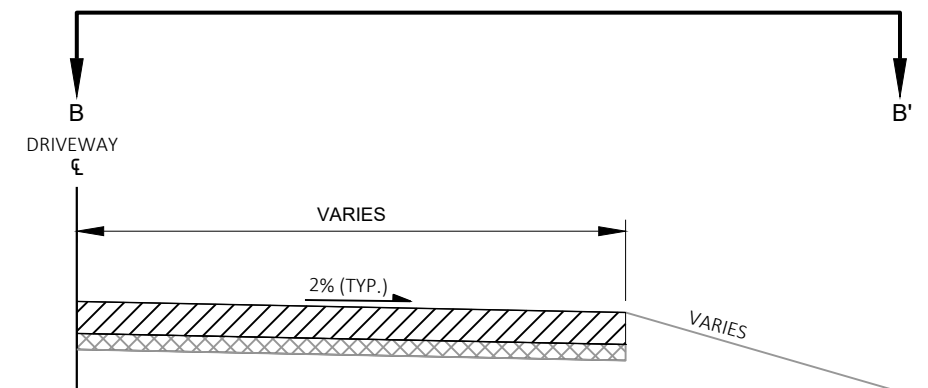
-  = ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (DEPTH VARIES, 2" TYP., 1.5" MIN.)
-  = REMOVING ASPHALTIC SURFACE BUTT JOINTS
-  = EXISTING ASPHALTIC DRIVEWAY

NOTES

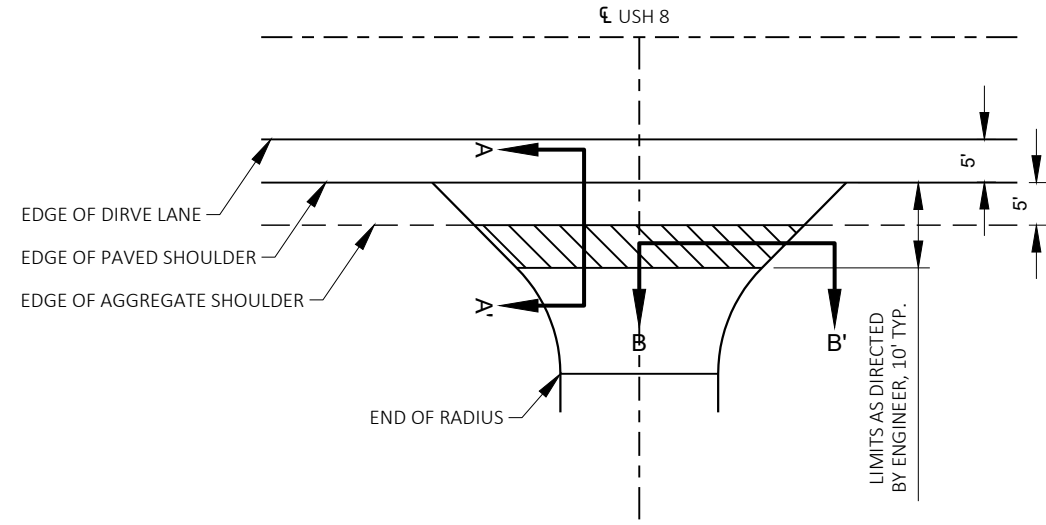
- NOT TO SCALE.
- MATCH EXISTING PAVED SURFACE WIDTH, RADII AND TAPERS.
- ANY ADDITIONAL BASE AGG. DENSE REQUIRED SHALL BE PAID UNDER ITEM 'BASE AGGREGATE DENSE 3/4-INCH'.



DETAIL OF RURAL PAVED DRIVEWAY BUTT JOINT (A-A')



TYPICAL PAVED DRIVEWAY HALF SECTION (B-B')



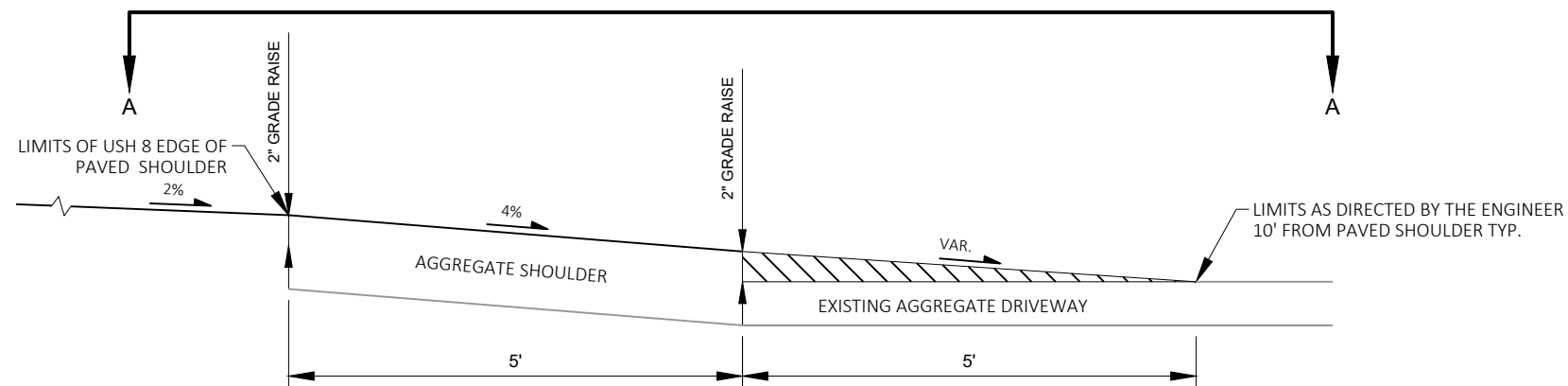
RESTORE AGGREGATE DRIVEWAY DETAIL

1322+40 LT	1351+65 LT	1384+06 RT	1416+96 RT	1490+36 RT
1324+74 RT	1366+44 LT	1398+82 LT	1424+78 RT	1528+00 RT
1335+44 RT	1367+18 RT	1398+88 RT	1426+44 RT	1539+20 LT
1339+64 LT	1371+60 RT	1410+80 LT	1434+40 RT	1539+62 RT
1351+55 RT	1373+78 LT	1416+16 LT	1442+20 RT	1549+67 LT
			1490+26 LT	1562+70 RT

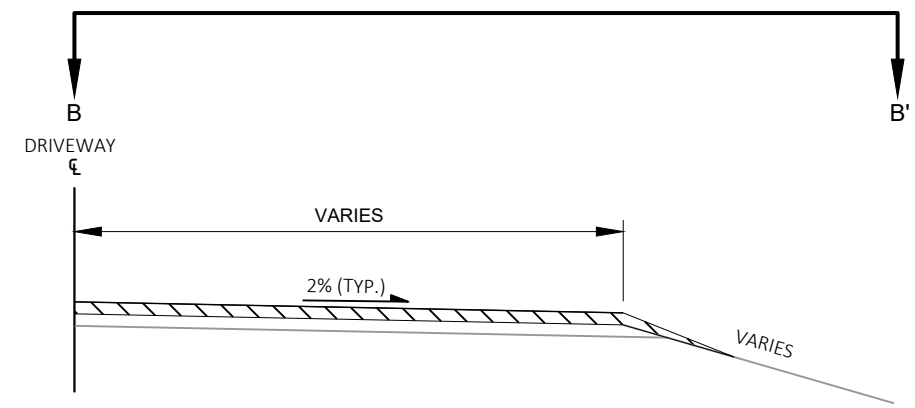
LEGEND



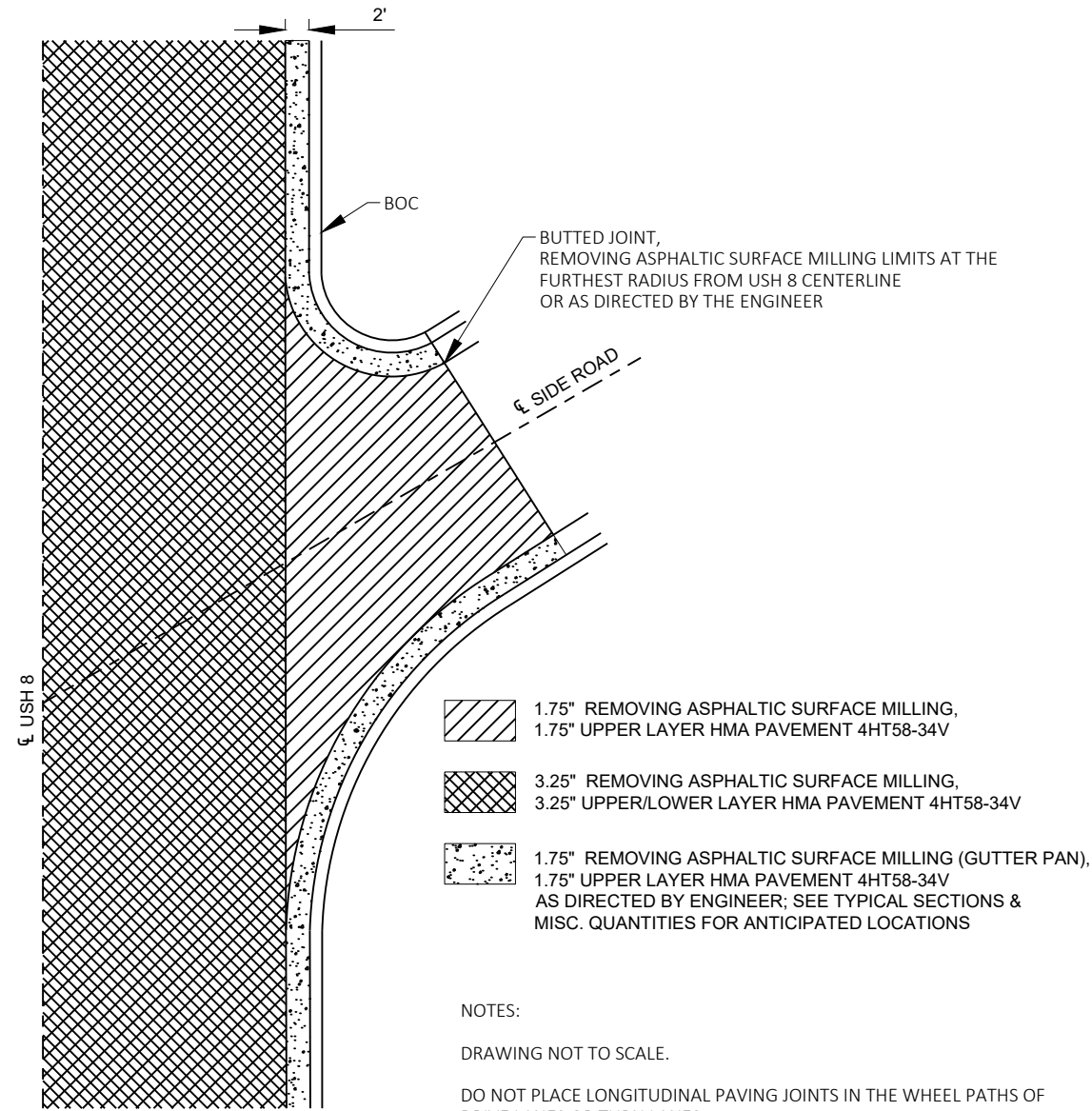
EACH ENTRANCE SHALL RECEIVE ADEQUATE BASE AGGREGATE DENSE 3/4-INCH AFTER MAINLINE PAVING TO BRING ENTRANCE UP TO SHOULDER PAVEMENT GRADE. MATCH EXISTING DRIVEWAY WIDTH AND RADII.



DETAIL OF RURAL AGGREGATE DRIVEWAY (A-A')

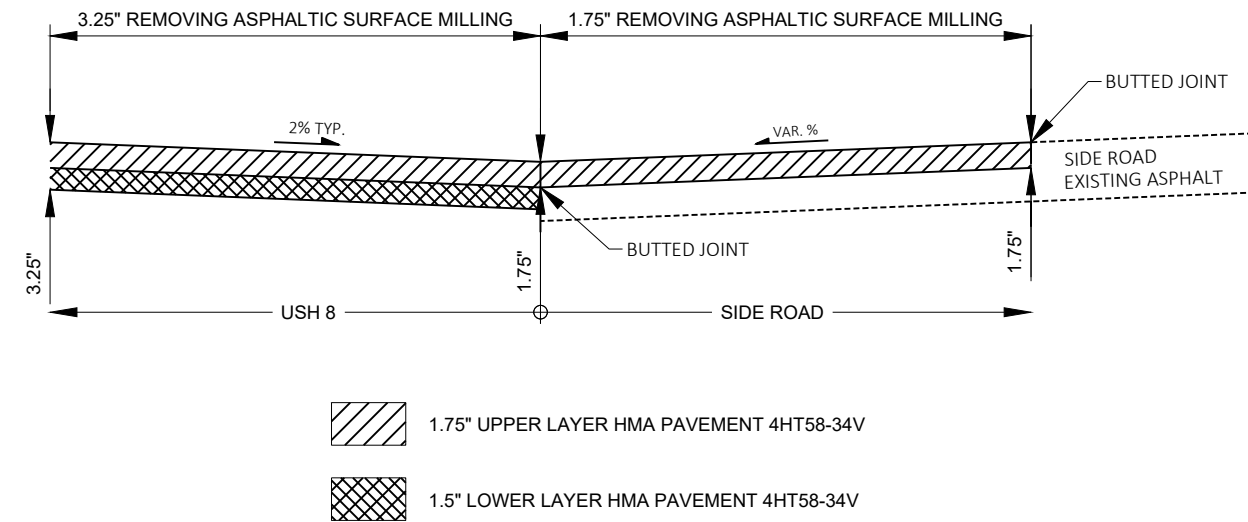


TYPICAL AGGREGATE DRIVEWAY HALF SECTION (B-B')

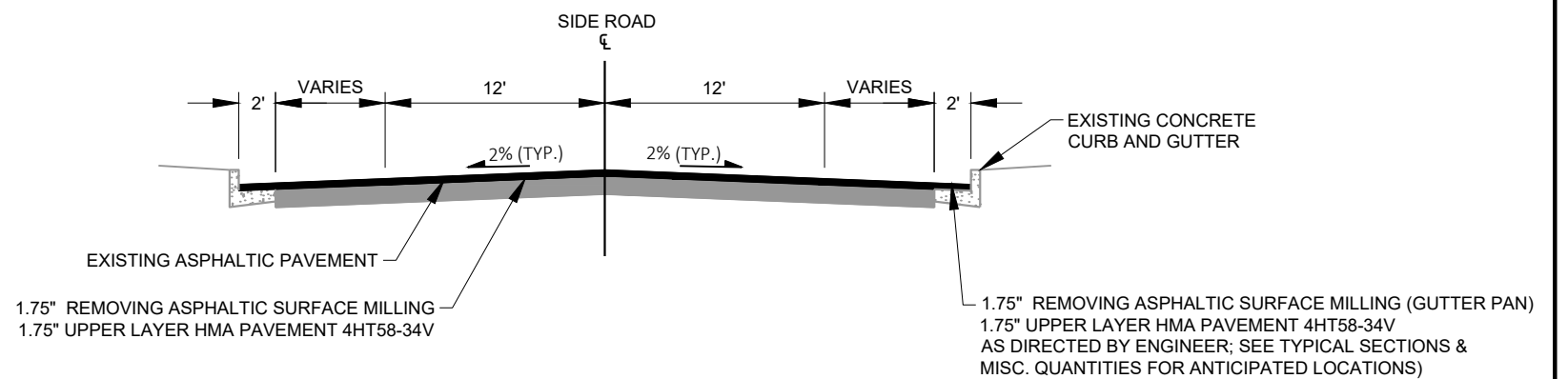


DETAIL OF PAVED SIDE ROAD - URBAN (NO MAINLINE GRADE RAISE)

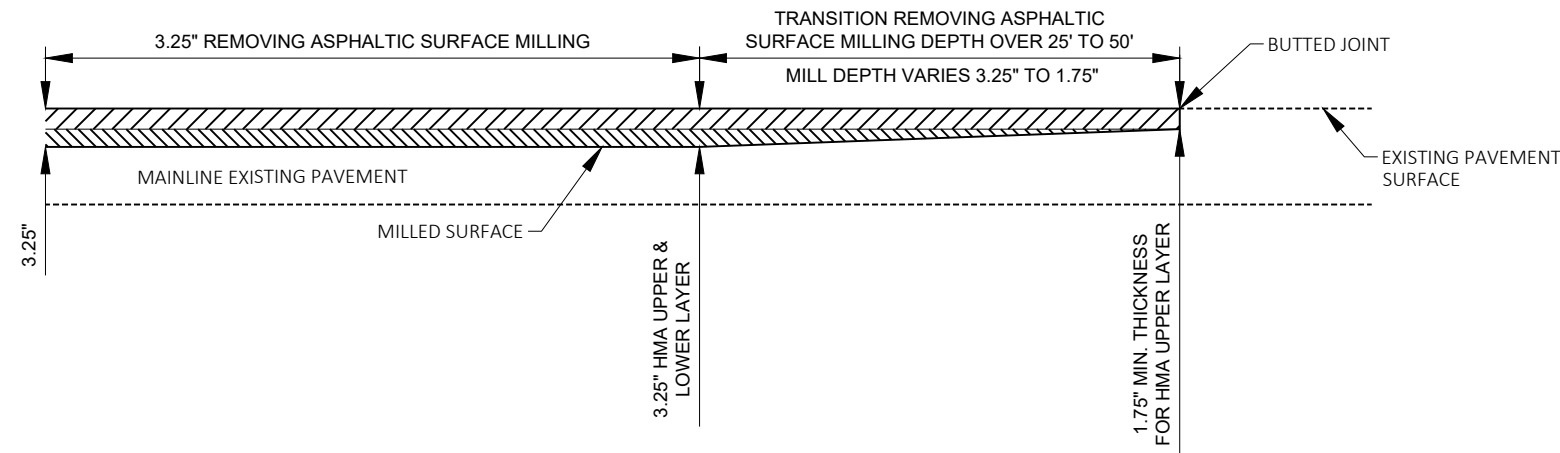
1271+00 LT (TAMARACK ST)
1277+93 LT (PINE ST)
1277+93 RT (PINE ST)



DETAIL OF PAVED SIDE ROAD BUTT JOINT - URBAN (NO GRADE RAISE)



TYPICAL PAVED SIDE ROAD SECTION - URBAN



DETAIL OF MAINLINE BUTT JOINT - END PROJECT (NO GRADE RAISE)

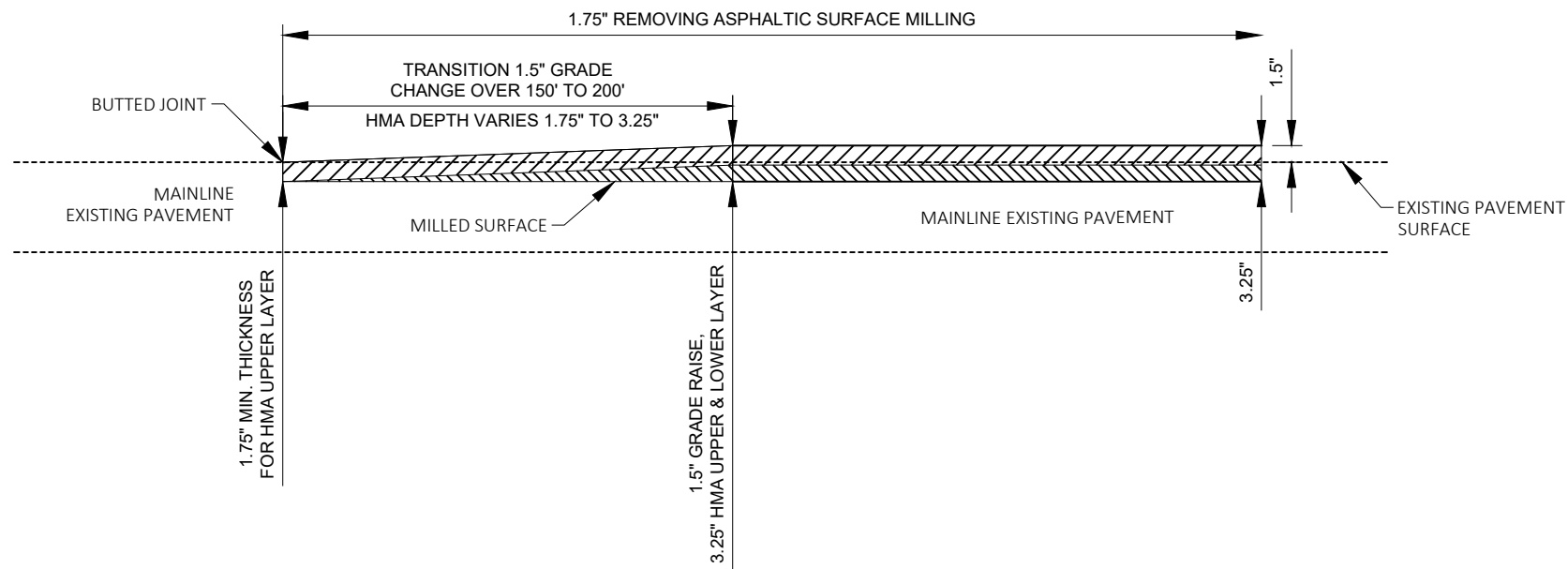
STA. 1263+98 (BEGIN PROJECT)
STA. 1278+58 (END URBAN AT BEGIN NET EXCEPTION)

LEGEND

- = 1.75" UPPER LAYER HMA PAVEMENT 4HT 58-34V
- = VARIABLE DEPTH (1.5" TYP.) LOWER LAYER HMA PAVEMENT 4HT 58-34V

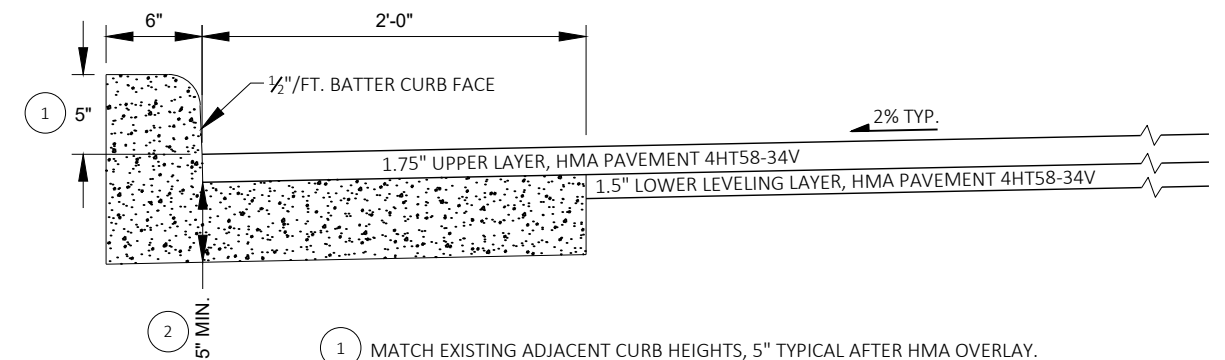
NOTES

- NOT TO SCALE
- LOCATION OF BUTTED JOINT AND TRANSITION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.



DETAIL OF MAINLINE BUTT JOINT - (1.5" GRADE RAISE)

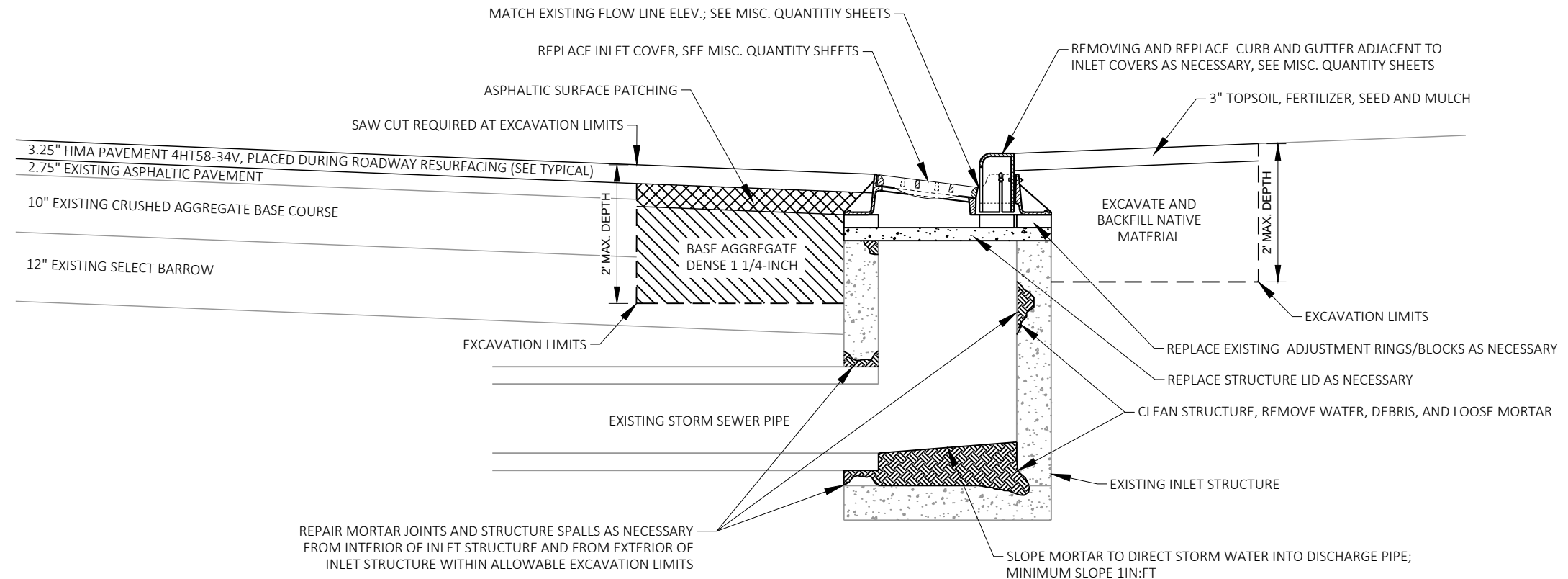
STA. 1292+37 (BEGIN RURAL AT END OF NET EXCEPTION)
STA. 1564+60 (END PROJECT)



- ① MATCH EXISTING ADJACENT CURB HEIGHTS, 5" TYPICAL AFTER HMA OVERLAY.
- ② WHERE NEW CONCRETE CURB AND GUTTER IS BEING PLACED IN LOCATIONS WHERE ADJACENT GUTTER PAN IS BEING OVERLAYED, REDUCE TYPICAL THICKNESS OF TYPE D CONCRETE GUTTER PAN TO ALLOW PLACEMENT OF A 1.75" UPPER LAYER HMA PAVEMENT.

THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE OVERLYING HMA PAVEMENT; MINIMUM CONCRETE THICKNESS = 5".

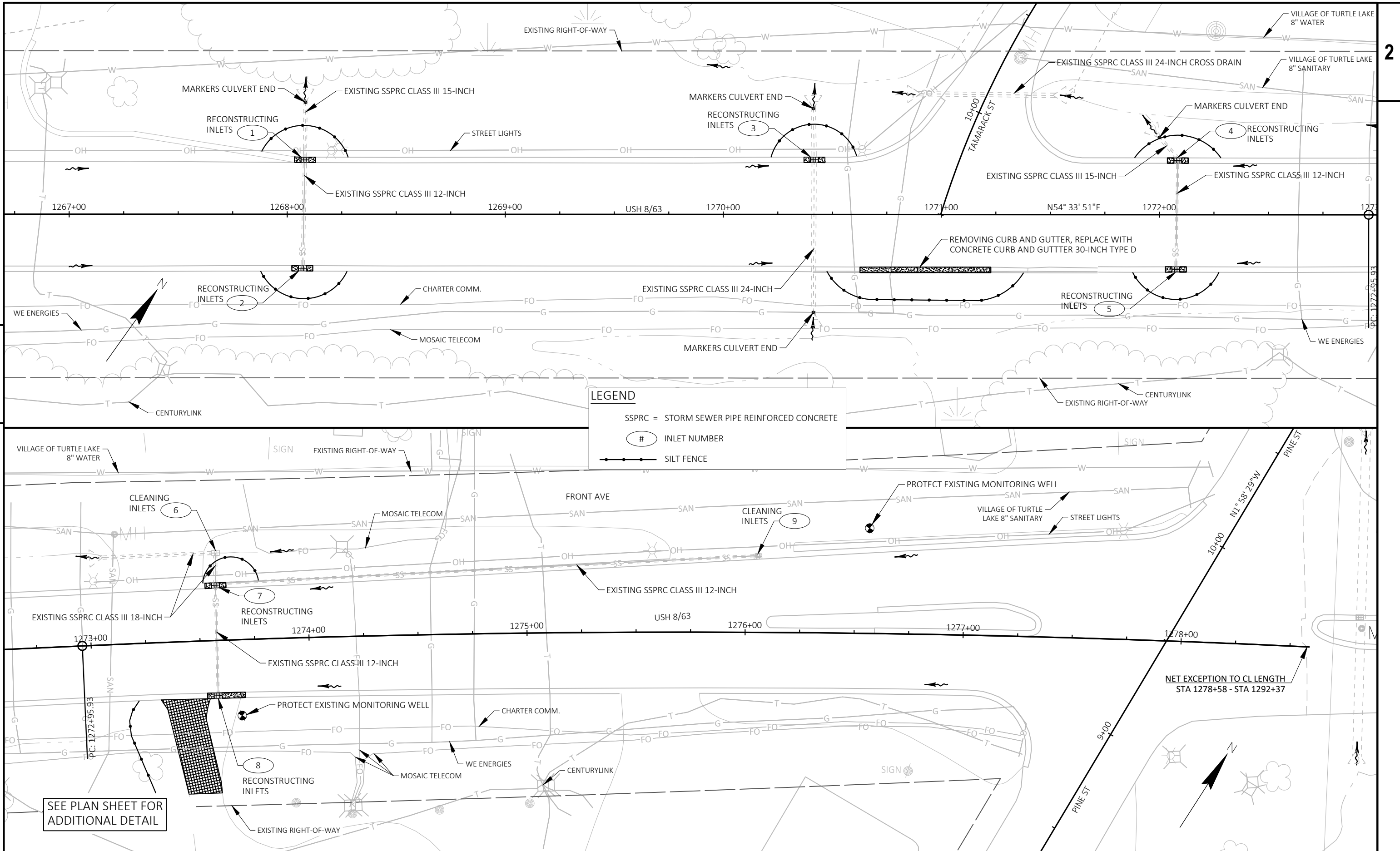
DETAIL OF NEW CONCRETE CURB & GUTTER WITH HMA OVERLAY
(MODIFIED 30" TYPE D SHOWN)



INCIDENTAL WORK, NO SEPARATE MEASUREMENT OR PAYMENT
 EXCAVATION, HANDING AND DISPOSAL OF EXCESS MATERIALS
 CLEAN STRUCTURE
 REMOVE AND REPLACE STRUCTURE LID
 STRUCTURE JOINT AND SPALL MASONRY REPAIR
 ADJUSTMENT RINGS OR BLOCKS
 MATERIAL FOR RESTORATION INCLUDING TOPSOIL, FERTILIZER, SEED AND MULCH

WORK MEASURED AND PAID SEPERATELY
 SAWING CONCRETE
 SAWING ASPHALT
 REMOVING EXISTING AND INSTALLING NEW CURB AND GUTTER
 INLET COVERS
 BASE AGGREGATE DENSE 1 1/4-INCH
 ASPHALTIC SURFACE PATCHING
 HMA PAVEMENT 4HT58-34V

RECONSTRUCTING INLETS DETAIL



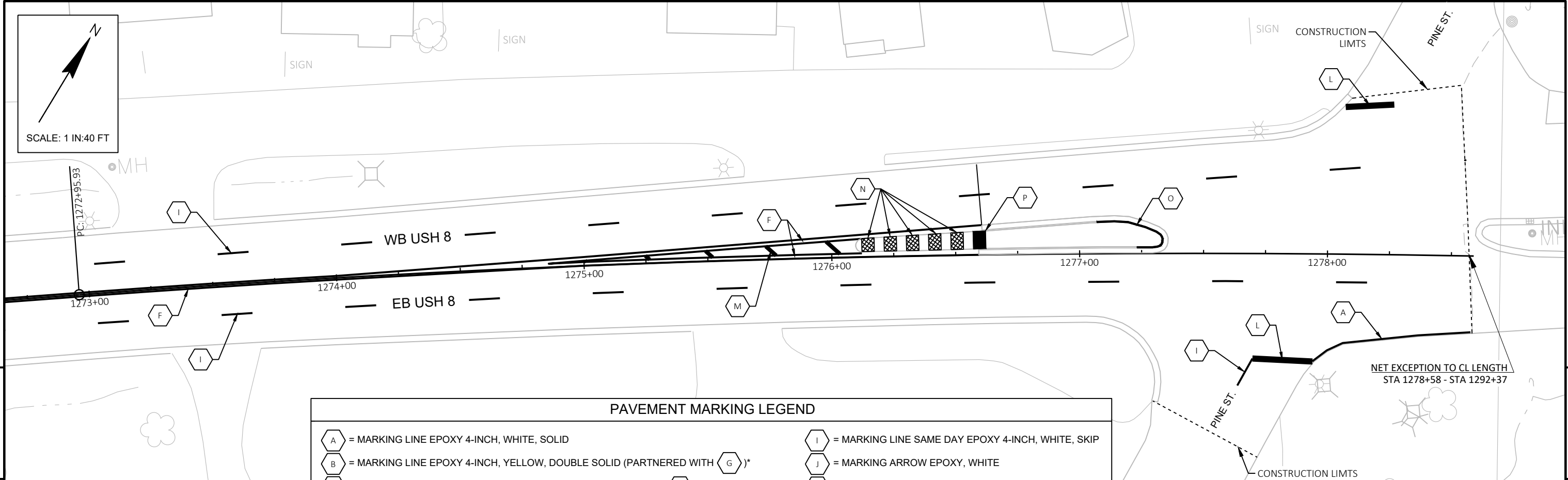
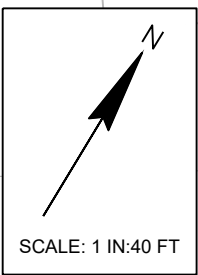
2

2

LEGEND

- SSRPC = STORM SEWER PIPE REINFORCED CONCRETE
- # INLET NUMBER
- SILT FENCE

SEE PLAN SHEET FOR
ADDITIONAL DETAIL

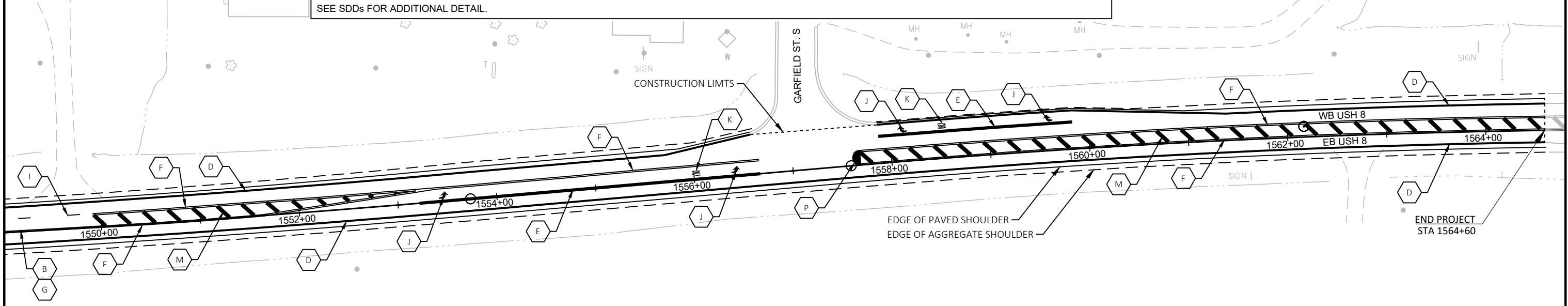
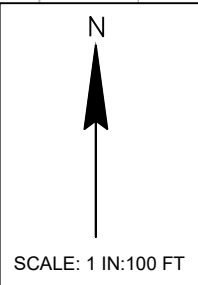


PAVEMENT MARKING LEGEND

<p>A = MARKING LINE EPOXY 4-INCH, WHITE, SOLID</p> <p>B = MARKING LINE EPOXY 4-INCH, YELLOW, DOUBLE SOLID (PARTNERED WITH G)*</p> <p>C = MARKING LINE EPOXY 4-INCH, YELLOW, SKIP (PARTNERED WITH H)*</p> <p>D = MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE, SOLID</p> <p>E = MARKING LINE GROOVED WET REF EPOXY 8-INCH, WHITE, SOLID</p> <p>F = MARKING LINE SAME DAY EPOXY 4-INCH, YELLOW, DOUBLE SOLID</p> <p>G = MARKING LINE SAME DAY EPOXY 4-INCH, YELLOW, DOUBLE SOLID (REDUCED RATE)*</p> <p>H = MARKING LINE SAME DAY EPOXY 4-INCH, YELLOW, SKIP (REDUCED RATE)*</p>	<p>I = MARKING LINE SAME DAY EPOXY 4-INCH, WHITE, SKIP</p> <p>J = MARKING ARROW EPOXY, WHITE</p> <p>K = MARKING WORD EPOXY, WHITE</p> <p>L = MARKING STOP LINE EPOXY 18-INCH, WHITE</p> <p>M = MARKING DIAGONAL EPOXY 12-INCH, YELLOW</p> <p>N = MARKING CORRUGATED MEDIAN EPOXY, YELLOW</p> <p>O = MARKING CURB EPOXY, YELLOW</p> <p>P = MARKING ISLAND NOSE EPOXY, YELLOW</p>
--	---

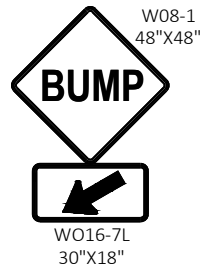
*NOTE: THE 'MARKING LINE SAME DAY EPOXY 4-INCH' IN LOCATIONS WHERE CL RUMBLE STRIPS WILL BE CONSTRUCTED SHALL BE PLACED AT A REDUCED APPLICATION RATE; SEE SPECIAL PROVISIONS.

SEE SDDs FOR ADDITIONAL DETAIL.



LEGEND:

① = PLACE 'BUMP' SIGN AT PROFILE CHANGE EXCEEDING ONE INCH.



[Hatched pattern] = UPPER LAYER HMA

[Diagonal hatched pattern] = LOWER LAYER HMA

[Dotted pattern] = MILLED SURFACE

[Solid grey pattern] = SHOULDER WIDENING

[Arrow] = DIRECTION OF TRAFFIC

[T-shaped symbol] = SIGN ON TEMPORARY SUPPORT

NOTES:

DRAWING NOT TO SCALE.

PLACE 'UNEVEN LANES' AND 'DO NOT PASS' SIGNS WHEN LONGITUDINAL ELEVATION CHANGES OF 1/2-INCH OR GREATER ARE LEFT OVERNIGHT. PLACE ADDITIONAL SIGNS AT 1-MILE INTERVALS OR AS DIRECTED BY THE ENGINEER.

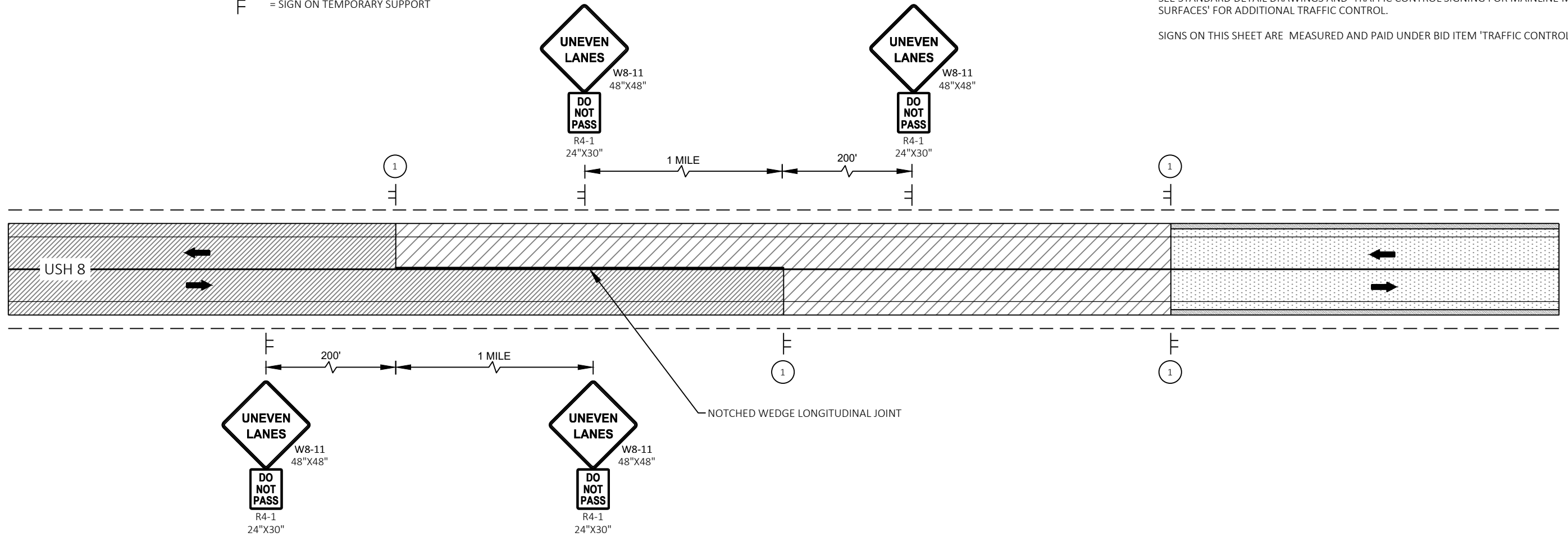
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS, THE SPECIAL PROVISIONS, AND/OR AS DIRECTED BY THE ENGINEER.

SEE STANDARD DETAIL DRAWINGS AND 'TRAFFIC CONTROL SIGNING FOR MAINLINE MILLED SURFACES' FOR ADDITIONAL TRAFFIC CONTROL.

SIGNS ON THIS SHEET ARE MEASURED AND PAID UNDER BID ITEM 'TRAFFIC CONTROL SIGNS'.



TRAFFIC CONTROL SIGNING FOR UNEVEN SURFACES

GENERAL NOTES

SEE SDDs FOR ADDITIONAL TRAFFIC CONTROL REQUIRED.

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

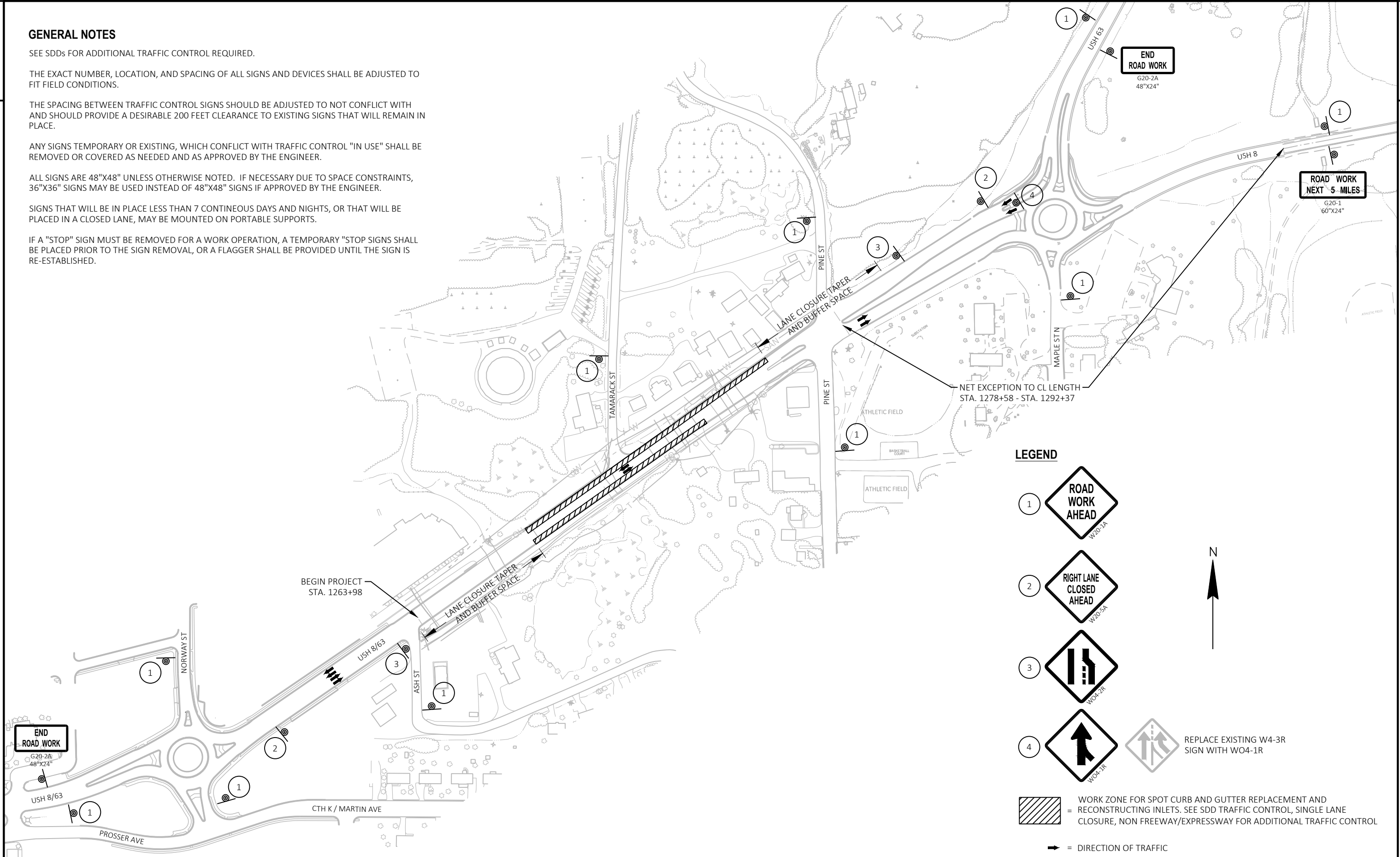
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

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 IF APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINEOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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



LEGEND

- ① ROAD WORK AHEAD
W20-2A
- ② RIGHT LANE CLOSED AHEAD
W20-5A
- ③
W04-2R
- ④
W04-1R
- REPLACE EXISTING W4-3R SIGN WITH W04-1R
- WORK ZONE FOR SPOT CURB AND GUTTER REPLACEMENT AND RECONSTRUCTING INLETS. SEE SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON FREEWAY/EXPRESSWAY FOR ADDITIONAL TRAFFIC CONTROL
- = DIRECTION OF TRAFFIC



Estimate Of Quantities

		1570-00-75	1570-00-76			
Line	Item	Item Description	Unit	Total	Qty	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	224.000	224.000	
0004	204.0120	Removing Asphaltic Surface Milling	SY	133,269.000	133,269.000	
0006	204.0150	Removing Curb & Gutter	LF	124.000	124.000	
0008	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1570-00-75	LS	1.000	1.000	
0010	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	503.000	58.000	445.000
0012	213.0100	Finishing Roadway (project) 01. 1570-00-75	EACH	1.000	1.000	
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	6,369.000	6,369.000	
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	28.000	28.000	
0018	305.0500	Shaping Shoulders	STA	33.000	33.000	
0020	455.0605	Tack Coat	GAL	16,746.000	16,262.000	484.000
0022	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000	
0024	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000	
0026	460.2005	Incentive Density PWL HMA Pavement	DOL	9,040.000	9,040.000	
0028	460.2010	Incentive Air Voids HMA Pavement	DOL	26,000.000	26,000.000	
0030	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	46,723.000	46,723.000	
0032	460.7644	HMA Pavement 4 HT 58-34 V	TON	26,000.000	24,240.000	1,760.000
0034	465.0105	Asphaltic Surface	TON	200.000	200.000	
0036	465.0110	Asphaltic Surface Patching	TON	17.000	17.000	
0038	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	48.000	48.000	
0040	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	43,933.000		43,933.000
0042	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	20,333.000	20,333.000	
0044	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	124.000	124.000	
0046	611.0430	Reconstructing Inlets	EACH	7.000	7.000	
0048	611.0600	Inlet Covers Type A	EACH	5.000	5.000	
0050	611.0639	Inlet Covers Type H-S	EACH	2.000	2.000	
0052	614.0400	Adjusting Steel Plate Beam Guard	LF	610.000	610.000	
0054	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1570-00-75	EACH	1.000	1.000	
0056	619.1000	Mobilization	EACH	1.000	0.900	0.100
0058	624.0100	Water	MGAL	96.500	96.500	
0060	628.1504	Silt Fence	LF	440.000	440.000	
0062	628.1520	Silt Fence Maintenance	LF	440.000	440.000	
0064	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000	
0066	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000	
0068	628.7020	Inlet Protection Type D	EACH	9.000	9.000	
0070	633.5200	Markers Culvert End	EACH	5.000	5.000	
0072	642.5001	Field Office Type B	EACH	1.000	1.000	
0074	643.0300	Traffic Control Drums	DAY	2,380.000	2,380.000	
0076	643.0420	Traffic Control Barricades Type III	DAY	42.000	42.000	

Estimate Of Quantities

1570-00-75 1570-00-76

Line	Item	Item Description	Unit	Total	Qty	Qty
0078	643.0715	Traffic Control Warning Lights Type C	DAY	280.000	280.000	
0080	643.0800	Traffic Control Arrow Boards	DAY	28.000	28.000	
0082	643.0900	Traffic Control Signs	DAY	5,742.000	5,742.000	
0084	643.5000	Traffic Control	EACH	1.000	1.000	
0086	646.1020	Marking Line Epoxy 4-Inch	LF	43,052.000	43,052.000	
0088	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	54,446.000	54,446.000	
0090	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	3,760.000	3,760.000	
0092	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	53,025.000	53,025.000	
0094	646.5020	Marking Arrow Epoxy	EACH	29.000	29.000	
0096	646.5120	Marking Word Epoxy	EACH	12.000	12.000	
0098	646.6120	Marking Stop Line Epoxy 18-Inch	LF	67.000	67.000	
0100	646.7120	Marking Diagonal Epoxy 12-Inch	LF	985.000	985.000	
0102	646.8020	Marking Corrugated Median Epoxy	SF	155.000	155.000	
0104	646.8120	Marking Curb Epoxy	LF	40.000	40.000	
0106	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000	
0108	649.0105	Temporary Marking Line Paint 4-Inch	LF	89,638.000	89,638.000	
0110	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	124.000	124.000	
0112	650.8000	Construction Staking Resurfacing Reference	LF	28,683.000	28,683.000	
0114	650.9910	Construction Staking Supplemental Control (project) 01. 1570-00-75	LS	1.000	1.000	
0116	690.0150	Sawing Asphalt	LF	105.000	105.000	
0118	690.0250	Sawing Concrete	LF	40.000	40.000	
0120	740.0440	Incentive IRI Ride	DOL	28,500.000	28,500.000	
0122	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	2,000.000	2,000.000	
0124	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	630.000	630.000	
0126	SPV.0060	Special 01. Cleaning Inlets	EACH	2.000	2.000	
0128	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	124.000	124.000	
0130	SPV.0105	Special 01. Material Transfer Vehicle (Project 1570-00- 75)	LS	1.000	1.000	
0132	SPV.0105	Special 02. Milling and Removing Temporary Joint (Project 1570-00-75)	LS	1.000	1.000	

MILLING REMOVAL SUMMARY

CATEGORY	STATION TO	STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	SF	SY	MILLING DEPTH (IN)	REMOVING ASPHALTIC SURFACE JOINTS	REMOVING ASPHALTIC SURFACE MILLING	REMARKS	
									204.0115 SY	204.0120 SY		
PROJECT 1570-00-75												
URBAN SEGMENT												
0010	1263+98	-	1278+58	LT & RT	1460	48-82	76198	8466	3.25	-	8466	EXISTING PAVEMENT BETWEEN GUTTER FLAGS
0010	1263+98	-	1278+58	LT & RT	2129	2	4258	473	1.75	-	473	GUTTER PANS, SEE TYPICAL SECTIONS FOR STATION LOCATIONS
0010	1266+24	-	1268+03	LT	-	-	1615	179	1.75	-	179	RT. TURN LANE FOR ST. CROIX CASINO C. E.
0010	1270+57	-	1271+55	LT	-	-	1931	215	1.75	-	215	TAMARACK ST. SIDE ROAD
0010	1277+17	-	1278+39	RT	-	-	2618	291	1.75	-	291	PINE ST. SIDE ROAD
0010	1244+74	-	1278+58	LT	-	-	922	102	1.75	-	102	PINE ST. SIDE ROAD
RURAL SEGMENT												
0010	1292+37	-	1316+75	LT & RT	2438	30	73140	8127	1.75	-	8127	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1316+75	-	1323+80	LT & RT	705	30-42	25380	2820	1.75	-	2820	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE TAPER
0010	1323+80	-	1395+00	LT & RT	7120	42	299040	33227	1.75	-	33227	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE
0010	1395+00	-	1402+05	LT & RT	705	42-30	25380	2820	1.75	-	2820	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE TAPER
0010	1402+05	-	1415+15	LT & RT	1310	30	39300	4367	1.75	-	4367	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1415+15	-	1441+00	LT & RT	2585	30-49	122008	13556	1.75	-	13556	EXISTING PAVEMENT LIMITS
0010	1441+00	-	1472+00	LT & RT	3100	30	93000	10333	1.75	-	10333	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1472+00	-	1479+05	LT & RT	705	30-42	25380	2820	1.75	-	2820	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE TAPER
0010	1479+05	-	1546+50	LT & RT	6745	42	283290	31477	1.75	-	31477	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE
0010	1546+50	-	1564+60	LT & RT	1810	42-45	79017	8780	1.75	-	8780	DRIVE LANES, MEDIUM & EXISTING SHOULDER WIDTH
RURAL RT. TURN LANES & TAPERS BEYOND TYPICAL SHOULDERS												
0010	1305+33	-	1310+40	LT	-	-	3704	412	1.75	-	412	POPLAR ST.
0010	1302+67	-	1307+85	RT	-	-	3834	426	1.75	-	426	POPLAR ST.
0010	1355+91	-	1361+07	LT	-	-	3862	429	1.75	-	430	2ND ST.
0010	1352+80	-	1358+05	RT	-	-	4051	450	1.75	-	451	CTH KK
0010	1383+10	-	1388+18	LT	-	-	4046	450	1.75	-	450	2 1/2 ST.
0010	1406+87	-	1412+00	RT	-	-	3874	430	1.75	-	431	3RD ST.
0010	1446+97	-	1452+24	RT	-	-	4098	455	1.75	-	456	3 3/4 ST.
0010	1462+64	-	1467+78	LT	-	-	3856	428	1.75	-	429	4TH ST.
0010	1460+00	-	1465+05	RT	-	-	3886	432	1.75	-	432	4TH ST.
0010	1515+80	-	1520+80	LT	-	-	3660	407	1.75	-	407	5TH ST.
0010	1513+12	-	1518+22	RT	-	-	4001	445	1.75	-	445	5TH ST.
0010	1555+86	-	1560+97	LT	-	-	4019	447	1.75	-	447	GARFIELD ST.
0010	1403+00	-	-	LT	-	-	409	45	1.75	45	-	RESTORE 2 3/4 ST. (Type C Int.)
0010	1407+55	-	-	LT	-	-	357	40	1.75	40	-	RESTORE 2 3/4 ST. (Type C Int.)
0010	1419+86	-	-	RT	-	-	228	25	1.75	25	-	RESTORE RURAL PAVED DRIVEWAY
0010	1422+62	-	-	RT	-	-	207	23	1.75	23	-	RESTORE RURAL PAVED DRIVEWAY
0010	1427+90	-	-	LT	-	-	339	38	1.75	38	-	RESTORE BOAT LANDING RD. (Type C Int.)
0010	1430+10	-	-	RT	-	-	229	25	1.75	25	-	RESTORE RURAL PAVED DRIVEWAY
0010	1476+76	-	-	LT	-	-	252	28	1.75	28	-	RESTORE RURAL PAVED DRIVEWAY
PROJECT 1570-00-75 CATEGORY 0010 TOTAL									224		133269	
CONTRACT CATEGORY 0010 TOTAL									224		133269	

REMOVING CURB & GUTTER

204.0150						
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
PROJECT 1570-00-75						
0010	126803	-	126813	LT	8	FOR RECONSTRUCTING INLET NO. 1
0010	126802	-	126812	RT	8	FOR RECONSTRUCTING INLET NO. 2
0010	127037	-	127047	LT	8	FOR RECONSTRUCTING INLET NO. 3
0010	127063	-	127123	RT	60	FOR CURB & GUTTER REPLACEMENT
0010	127203	-	127213	LT	8	FOR RECONSTRUCTING INLET NO. 4
0010	127203	-	127213	RT	8	FOR RECONSTRUCTING INLET NO. 5
0010	127353	-	127363	LT	8	FOR RECONSTRUCTING INLET NO. 7
0010	127352	-	127370	RT	16	FOR RECONSTRUCTING INLET NO. 8 & CE WIDTH REDUCTION
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					124	
0100	CONTRACT CATEGORY 0010 TOTAL				124	

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION	TO	STATION	LENGTH (FT)	LOCATION	211.0400 STA	REMARKS
PROJECT 1570-00-75							FOR 2' SHOULDER WIDENING ADJACENT TO RIGHT TURN LANES
0010	1307+32	-	1310+40	308	LT	4	RT. TURN LANE FOR POPLAR ST.
0010	1357+91	-	1361+07	316	LT	4	RT. TURN LANE FOR 2ND ST.
0010	1385+11	-	1388+18	307	LT	4	RT. TURN LANE FOR 2 1/2 ST.
0010	1419+67	-	1420+40	73	LT	1	RT. TURN LANE FOR 14TH AVE.
0010	1428+30	-	1430+22	192	LT	2	RT. TURN LANE FOR BOAT LANDING RD.
0010	1431+60	-	1434+13	253	LT	3	RT. TURN LANE FOR 14TH AVE.
0010	1435+49	-	1438+73	324	LT	4	RT. TURN LANE FOR 3 1/2 ST.
0010	1464+60	-	1467+78	318	LT	4	RT. TURN LANE FOR 4TH ST.
0010	1517+69	-	1520+80	311	LT	4	RT. TURN LANE FOR 5TH ST.
0010	1557+88	-	1560+97	309	LT	4	RT. TURN LANE FOR GARFIELD ST.
0010	1302+67	-	1305+80	313	RT	4	RT. TURN LANE FOR POPLAR ST.
0010	1352+80	-	1355+90	310	RT	4	RT. TURN LANE FOR CTH KK
0010	1406+87	-	1409+92	305	RT	4	RT. TURN LANE FOR 3RD ST.
0010	1446+97	-	1450+26	329	RT	4	RT. TURN LANE FOR 3 3/4 ST.
0010	1460+00	-	1463+12	312	RT	4	RT. TURN LANE FOR 4TH ST.
0010	1513+12	-	1516+27	315	RT	4	RT. TURN LANE FOR 5TH ST.
PROJECT 1570-00-75 CATEGORY 0010 TOTAL						58	
PROJECT 1570-00-76							FOR WIDENING OF TYPICAL SHOULDERS FROM 3' TO 5' PAVED
0010	1292+37	-	1305+33	1296	LT	13	USH 63 ROUND-A-BOUT TO POPLAR ST.
0010	1310+40	-	1355+91	4551	LT	46	POPLAR ST. TO 2ND ST.
0010	1361+07	-	1383+10	2203	LT	23	2ND ST. TO 2 1/2 ST.
0010	1388+18	-	1402+42	1424	LT	15	2 1/2 ST. TO 2 3/4 ST.
0010	1403+58	-	1407+02	344	LT	4	2 3/4 ST TO 2 3/4 ST.
0010	1408+06	-	1417+54	948	LT	10	2 3/4 ST. TO 14TH AVE.
0010	1438+73	-	1462+64	2391	LT	24	3 1/2 ST. TO 4TH ST.
0010	1467+78	-	1515+80	4802	LT	49	4TH ST. TO 5TH ST.
0010	1520+80	-	1555+86	3506	LT	36	5TH ST. TO GARFIELD ST.
0010	1560+97	-	1564+60	363	LT	4	GARFIELD ST. TO CTH P
0010	1292+37	-	1302+67	1030	RT	11	USH 63 ROUND-A-BOUT TO POPLAR ST.
0010	1307+85	-	1352+80	4495	RT	45	POPLAR ST. TO 2ND ST.
0010	1358+05	-	1406+87	4882	RT	49	2ND ST. TO 3RD ST.
0010	1412+00	-	1415+44	344	RT	4	3RD ST. TO EXISTING WIDENED SHOULDER
0010	1439+90	-	1446+97	707	RT	8	EXISTING WIDENED SHOULDER TO 3 3/4 ST.
0010	1452+24	-	1460+00	776	RT	8	3 3/4 ST. TO 4TH ST.
0010	1465+05	-	1513+12	4807	RT	49	4TH ST. TO 5TH ST.
0010	1518+22	-	1564+60	4638	RT	47	5TH ST. TO CTH P
PROJECT 1570-00-76 CATEGORY 0010 TOTAL						445	
CONTRACT CATEGORY 0010 TOTAL						503	

AGGREGATE BASE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	BASE AGGREGATE	BASE AGGREGATE	WATER	REMARKS
					DENSE 3/4-INCH 305.0110 TON	DENSE 1 1/4-INCH 305.0120 TON	624.0100 MGAL	
PROJECT 1570-00-75								
0010	1268+08	-		25' LT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 1
0010	1268+08	-		25' RT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 2
0010	1270+41	-		25' LT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 3
0010	1272+08	-		25' LT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 4
0010	1272+08	-		25' RT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 5
0010	1273+58	-		25' LT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 7
0010	1273+58	-		25' RT	-	4	0.1	FOR RECONSTRUCTING INLET NO. 8
0010	1292+37	-	1304+29	LT & RT	219	-	3.3	SHOULDER AGGREGATE
0010	1304+29	-	1415+15	LT & RT	2710	-	40.7	SHOULDER AGGREGATE
0010	1415+15	-	1441+00	LT & RT	396	-	6.0	SHOULDER AGGREGATE
0010	1441+00	-	1546+50	LT & RT	2579	-	38.7	SHOULDER AGGREGATE
0010	1546+50	-	1564+60	LT & RT	443	-	6.7	SHOULDER AGGREGATE
0010	-	-	-	LT & RT	22	-	0.4	RESTORE 28 AGGREGATE DRIVEWAYS
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					6369	28	96.5	
CONTRACT CATEGORY 0010 TOTAL					6369	28	96.5	

SHAPING SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	305.0500	REMARKS
					STA	
PROJECT 1570-00-75						
0010	1420+40	-	1428+30	LT	8	REMOVING ACCUMULATED SEDIMENT ALONG B.G. IS INCIDENTAL
0010	1415+44	-	1439+90	RT	25	
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					33	
CONTRACT CATEGORY 0010 TOTAL					33	

HMA PAVEMENT AND TACK COAT SUMMARY (1 OF 2)

CATEGORY	STATION	TO	STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	TACK COAT	HMA PAVEMENT	REMARKS
							455.0605 GAL	4 HT 58-34 V 460.7644 TON	
PROJECT 1570-00-75									
URBAN SEGMENT									
0010	1263+98	-	1278+58	LT & RT	1460	48-82	1016	1541	EXISTING PAVEMENT BETWEEN GUTTER FLAGS
0010	1263+98	-	1278+58	LT & RT	2129	2	33	46	GUTTER OVERLAY, SEE TYPICAL SECTIONS FOR STATIONS
0010	1266+24	-	1268+03	LT	-	-	25	18	RT. TURN LANE FOR ST. CROIX CASINO C. E.
0010	1270+57	-	1271+55	LT	-	-	30	21	TAMARACK ST. SIDE ROAD
0010	1277+17	-	1278+39	RT	-	-	41	29	PINE ST. SIDE ROAD
0010	1244+74	-	1278+58	LT	-	-	14	10	PINE ST. SIDE ROAD
RURAL SEGMENT									
0010	1292+37	-	1316+75	LT & RT	2438	30	975	1479	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1316+75	-	1323+80	LT & RT	705	30-42	338	513	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE TAPER
0010	1323+80	-	1395+00	LT & RT	7120	42	3987	6047	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE
0010	1395+00	-	1402+05	LT & RT	705	42-30	338	513	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE TAPER
0010	1402+05	-	1415+15	LT & RT	1310	30	524	795	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1415+15	-	1441+00	LT & RT	2585	30-49	1627	2467	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1441+00	-	1472+00	LT & RT	3100	30	1240	1881	DRIVE LANES, EXISTING SHOULDER WIDTH
0010	1472+00	-	1479+05	LT & RT	705	30-42	338	513	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE TAPER
0010	1479+05	-	1546+50	LT & RT	6745	42	3777	5729	DRIVE LANES, EXISTING SHOULDER WIDTH, PASSING LANE
0010	1546+50	-	1564+60	LT & RT	1810	42-45	1054	1598	DRIVE LANES, MEDIUM & EXISTING SHOULDER WIDTH
RURAL RT. TURN LANES & TAPERS BEYOND TYPICAL SHOULDERS									
0010	1305+33	-	1310+40	LT	507	-	58	82	POPLAR ST.
0010	1302+67	-	1307+85	RT	518	-	59	85	POPLAR ST.
0010	1355+91	-	1361+07	LT	516	-	60	86	2ND ST.
0010	1352+80	-	1358+05	RT	525	-	62	89	CTH KK
0010	1383+10	-	1388+18	LT	508	-	62	89	2 1/2 ST.
0010	1406+87	-	1412+00	RT	513	-	60	86	3RD ST.
0010	1446+97	-	1452+24	RT	527	-	63	91	3 3/4 ST.
0010	1462+64	-	1467+78	LT	514	-	60	86	4TH ST.
0010	1460+00	-	1465+05	RT	505	-	60	86	4TH ST.
0010	1515+80	-	1520+80	LT	500	-	57	82	5TH ST.
0010	1513+12	-	1518+22	RT	510	-	62	89	5TH ST.
0010	1555+86	-	1560+97	LT	511	-	62	89	GARFIELD ST.
UNDISTRIBUTED									
0010	-	-	-	-	-	-	150	-	FOR ASPHALTIC SURFACE
0010	-	-	-	-	-	-	30	-	FOR ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
PROJECT 1570-00-75 CATEGORY 0010 TOTAL							16262	24240	

HMA PAVEMENT AND TACK COAT SUMMARY (2 OF 2)

CATEGORY	STATION	TO	STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	TACK COAT	HMA PAVEMENT	REMARKS
							455.0605 GAL	4 HT 58-34 V 460.7644 TON	
PROJECT 1570-00-76									
FOR WIDENING OF TYPICAL SHOULDERS FROM 3' TO 5' PAVED									
0010	1292+37	-	1305+33	LT	1296	2	14.0	52.0	USH 63 ROUND-A-BOUT TO POPLAR ST.
0010	1310+40	-	1355+91	LT	4551	2	51.0	184.0	POPLAR ST. TO 2ND ST.
0010	1361+07	-	1383+10	LT	2203	2	24.0	89.0	2ND ST. TO 2 1/2 ST.
0010	1388+18	-	1402+42	LT	1424	2	16.0	58.0	2 1/2 ST. TO 2 3/4 ST.
0010	1403+58	-	1407+02	LT	344	2	4.0	14.0	2 3/4 ST TO 2 3/4 ST.
0010	1408+06	-	1417+54	LT	948	2	11.0	38.0	2 3/4 ST. TO 14TH AVE.
0010	1438+73	-	1462+64	LT	2391	2	27.0	97.0	3 1/2 ST. TO 4TH ST.
0010	1467+78	-	1515+80	LT	4802	2	53.0	194.0	4TH ST. TO 5TH ST.
0010	1520+80	-	1555+86	LT	3506	2	39.0	142.0	5TH ST. TO GARFIELD ST.
0010	1560+97	-	1564+60	LT	363	2	4.0	15.0	GARFIELD ST. TO CTH P
0010	1292+37	-	1302+67	RT	1030	2	11.0	42.0	USH 63 ROUND-A-BOUT TO POPLAR ST.
0010	1307+85	-	1352+80	RT	4495	2	50.0	182.0	POPLAR ST. TO 2ND ST.
0010	1358+05	-	1406+87	RT	4882	2	54.0	197.0	2ND ST. TO 3RD ST.
0010	1412+00	-	1415+44	RT	344	2	4.0	14.0	3RD ST. TO EXISTING WIDENED SHOULDER
0010	1439+90	-	1446+97	RT	707	2	8.0	29.0	EXISTING WIDENED SHOULDER TO 3 3/4 ST.
0010	1452+24	-	1460+00	RT	776	2	9.0	31.0	3 3/4 ST. TO 4TH ST.
0010	1465+05	-	1513+12	RT	4807	2	53.0	194.0	4TH ST. TO 5TH ST.
0010	1518+22	-	1564+60	RT	4638	2	52.0	188.0	5TH ST. TO CTH P
PROJECT 1570-00-76 CATEGORY 0010 TOTAL							484	1760	
CONTRACT CATEGORY 0010 TOTAL							16746	26000	

VOIDS & DENSITY SUMMARY

CATEGORY	LOCATION	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS		HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY		REMARKS
		460.0105.S	EACH	460.0110.S	EACH	
PROJECT 1570-00-75						
0010	LEVELING LAYER LAYER 4 HT 58-34V	1		-		SEE PWL MIXTURE USE TABLE
0010	UPPER LAYER 4 HT 58-34V	-		1		SEE PWL MIXTURE USE TABLE
PROJECT 1570-00-75 CATEGORY 0010 TOTAL		1		1		
CONTRACT CATEGORY 0010 TOTAL		1		1		

PWL MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	TYPICAL THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
DRIVE LANES & PASSING LANES	1263+98 TO 1278+58, 1292+37 TO 1564+60	UPPER LAYER	4 HT 58-34V	4 HT 58-34V	9036	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
DRIVE LANES & PASSING LANES	1263+98 TO 1278+58, 1292+37 TO 1564+60	LEVELING LAYER	EXISTING ASPHALTIC CONC. PAVEMENT E-3 OR E-10	4 HT 58-34V	7745	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE BY ORDINARY COMPACTION
MEDIANS, SHOULDERS & TURN LANES	1263+98 TO 1278+58, 1292+37 TO 1564+60	UPPER LAYER	4 HT 58-34V	4 HT 58-34V	4964	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
MEDIANS, SHOULDERS & TURN LANES	1263+98 TO 1278+58, 1292+37 TO 1564+60	LEVELING LAYER	EXISTING ASPHALTIC CONC. PAVEMENT E-3, E-10, OR BASE AGGREGATE	4 HT 58-34V	4255	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE BY ORDINARY COMPACTION
HMA PAVING FOUNDATION	UNDISTRIBUTED	LEVELING AND WEDGING	VARIABLES	ASPHALTIC SURFACE	200	VARIABLES	OMP AS PER STANDARD SPEC. 465	ACCEPTANCE BY ORDINARY COMPACTION
PAVED DRIVEWAYS	VARIOUS	SINGLE LAYER	BASE AGGREGATE	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	48	VARIABLES	OMP AS PER STANDARD SPEC. 465	ACCEPTANCE BY ORDINARY COMPACTION
MINOR REPAIRS	VARIOUS	ASPHALTIC PATCHING	BASE AGGREGATE	ASPHALTIC SURFACE PATCHING	17	VARIABLES	OMP AS PER STANDARD SPEC. 465	ACCEPTANCE BY ORDINARY COMPACTION

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	460. 4110. S LF
PROJECT 1570-00-75					
0010	126398	-	127858	CL	1460
0010	129237	-	156460	CL	27223
0010	131675	-	140205	EB PASSI NG LANE	8530
0010	147250	-	156760	WB PASSI NG LANE	9510
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					46723
CONTRACT CATEGORY 0010 TOTAL					46723

3

3

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	LOCATION	465.0120 TON	REMARKS
PROJECT 1570-00-75				
0010	1403+00	LT	10	RESTORE 2 3/4 ST. (Type C Int.)
0010	1407+55	LT	9	RESTORE 2 3/4 ST. (Type C Int.)
0010	1419+86	RT	5	RESTORE RURAL PAVED DRIVEWAY
0010	1422+62	RT	5	RESTORE RURAL PAVED DRIVEWAY
0010	1427+90	LT	8	RESTORE BOAT LANDING RD. (Type C Int.)
0010	1430+10	RT	5	RESTORE RURAL PAVED DRIVEWAY
0010	1476+76	LT	6	RESTORE RURAL PAVED DRIVEWAY
PROJECT 1570-00-75 CATEGORY 0010 TOTAL			48	
CONTRACT CATEGORY 0010 TOTAL			48	

ASPHALTIC SURFACE

CATEGORY	LOCATION	465.0105 TON	REMARKS
PROJECT 1570-00-75			
0010	UNDISTRIBUTED	200	FOR LEVELING AND WEDGING, PREPARING FOUNDATION FOR ASPHALTIC PAVING
PROJECT 1570-00-75 CATEGORY 0010 TOTAL		200	
CONTRACT CATEGORY 0010 TOTAL		200	

ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION TO	STATION	LOCATION	465.0425 LF	REMARKS
PROJECT 1570-00-76					
0010	1293+25 -	1555+16	LT	20854	OMIT SHOULDER RUMBLES ACCORDING TO SDD
0010	1293+25 -	1559+85	RT	23079	OMIT SHOULDER RUMBLES ACCORDING TO SDD
PROJECT 1570-00-76 CATEGORY 0010 TOTAL				43933	
CONTRACT CATEGORY 0010 TOTAL				43933	

ASPHALTIC SURFACE PATCHING

CATEGORY	LOCATION	465.0110 TON	REMARKS
PROJECT 1570-00-75			
0010	AT RECONSTRUCTING INLETS LOCATIONS	7	7 LOCATIONS, SEE CONSTRUCTION DETAIL
0010	UNDISTRIBUTED	10	FOR MINOR REPAIRS
PROJECT 1570-00-75 CATEGORY 0010 TOTAL		17	
CONTRACT CATEGORY 0010 TOTAL		17	

ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL

CATEGORY	STATION TO	STATION	LOCATION	465.0475 LF	REMARKS
PROJECT 1570-00-75					
0010	129325 -	154767	CL	20333	OMIT CL RUMBLES ACCORDING TO SDD
PROJECT 1570-00-75 CATEGORY 0010 TOTAL				20333	
CONTRACT CATEGORY 0010 TOTAL				20333	

CATEGORY	STATION	TO	STATION	LOCATION	CONCRETE CURB & GUTTER 30-INCH TYPE D 601.0411	SPECIAL(01. CONCRETE CURB AND GUTTER CURE AND SEAL TREATMENT) SPV.0090.01	REMARKS
					LF	LF	
PROJECT 1570-00-75							
0010	1268+03	-	1268+13	LT	8	8	FOR RECONSTRUCTING INLET NO. 1
0010	1268+02	-	1268+12	RT	8	8	FOR RECONSTRUCTING INLET NO. 2
0010	1270+37	-	1270+47	LT	8	8	FOR RECONSTRUCTING INLET NO. 3
0010	1270+63	-	1271+23	RT	60	60	FOR CURB & GUTTER REPLACEMENT
0010	1272+03	-	1272+13	LT	8	8	FOR RECONSTRUCTING INLET NO. 4
0010	1272+03	-	1272+13	RT	8	8	FOR RECONSTRUCTING INLET NO. 5
0010	1273+53	-	1273+63	LT	8	8	FOR RECONSTRUCTING INLET NO. 7
0010	1273+52	-	1273+70	RT	16	16	FOR RECONSTRUCTING INLET NO. 8 & CE WIDTH REDUCTION
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					124	124	
CONTRACT CATEGORY 0010 TOTAL					124	124	

NOTE: SEE CONSTRUCTION DETIAL FOR MODIFICATIONS TO CONCRETE CURB AND GUTTER DIMENSIIONS AT LOCATIONS WHERE THE GUTTER PAN WILL BE OVERLAYED WITH HMA PAVEMENT.

ADJUSTING STEEL PLATE BEAM GUARD

STORM SEWER INLET SUMMARY

CATEGORY	STATION	LOCATION	RECONSTRUCTING INLETS 611.0430	INLET COVERS TYPE A 611.0600	INLET COVERS TYPE H-S 611.0639	SPECIAL (01. CLEANING INLETS) SPV.0060.01	REMARKS
			EACH	EACH	EACH	EACH	
PROJECT 1570-00-75							
0010	1268+08	25' LT	1	1	-	-	INLET NO. 1
0010	1268+08	25' RT	1	1	-	-	INLET NO. 2
0010	1270+41	25' LT	1	1	-	-	INLET NO. 3
0010	1272+08	25' LT	1	-	1	-	INLET NO. 4
0010	1272+08	25' RT	1	-	1	-	INLET NO. 5
0010	1273+58	40' LT	-	-	-	1	INLET NO. 6
0010	1273+58	25' LT	1	1	-	-	INLET NO. 7
0010	1273+58	25' RT	1	1	-	-	INLET NO. 8
0010	1276+06	35' LT	-	-	-	1	INLET NO. 9
PROJECT 1570-00-75 CATEGORY 0010 TOTAL			7	5	2	2	

CATEGORY	STATION	TO	STATION	LOCATION	614.0400 LF
PROJECT 1570-00-75					
0010	1420+40	-	1426+50	LT	610
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					610
CONTRACT CATEGORY 0010 TOTAL					610

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
PROJECT 1570-00-75		
0010	PROJECT 1570-00-75	0.90
PROJECT 1570-00-75 CATEGORY 0010 TOTAL		0.90
PROJECT 1570-00-76		
0010	PROJECT 1570-00-76	0.10
PROJECT 1570-00-76 CATEGORY 0010 TOTAL		0.10
CONTRACT CATEGORY 0010 TOTAL		1.00

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SILT FENCE	SILT FENCE	REMARKS
					628. 1504	628. 1520	
					LF	LF	
PROJECT 1570-00-75							
0010	1267+88	-	1268+28	LT	50	50	FOR RECONSTRUCTING INLET NO. 1
0010	1267+88	-	1268+28	RT	50	50	FOR RECONSTRUCTING INLET NO. 2
0010	1270+22	-	1270+61	LT	50	50	FOR RECONSTRUCTING INLET NO. 3
0010	1270+48	-	1271+38	RT	100	100	FOR CURB & GUTTER REPLACEMENT
0010	1271+88	-	1272+28	LT	50	50	FOR RECONSTRUCTING INLET NO. 4
0010	1271+88	-	1272+28	RT	50	50	FOR RECONSTRUCTING INLET NO. 5
0010	1273+52	-	1273+77	LT	40	40	FOR RECONSTRUCTING INLET NO. 7
0010	1273+15	-	1273+30	RT	50	50	FOR RECONSTRUCTING INLET NO. 8 & CE WIDTH REDUCTION
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					440	440	
CONTRACT CATEGORY 0010 TOTAL					440	440	

INLET PROTECTION TYPE D

CATEGORY	STATION	LOCATION	628. 7020	REMARKS
			EACH	
PROJECT 1570-00-75				
0010	1268+08	25' LT	1	INLET NO. 1
0010	1268+08	25' RT	1	INLET NO. 2
0010	1270+41	25' LT	1	INLET NO. 3
0010	1272+08	25' LT	1	INLET NO. 4
0010	1272+08	25' RT	1	INLET NO. 5
0010	1273+58	40' LT	1	INLET NO. 6
0010	1273+58	25' LT	1	INLET NO. 7
0010	1273+58	25' RT	1	INLET NO. 8
0010	1276+06	35' LT	1	INLET NO. 9
PROJECT 1570-00-75 CATEGORY 0010 TOTAL			9	
CONTRACT CATEGORY 0010 TOTAL			9	

EROSION CONTROL MOBILIZATION SUMMARY

CATEGORY	STATION	TO	STATION	MOBILIZATIONS	MOBILIZATIONS	REMARKS
				EROSION CONTROL	EMERGENCY EROSION CONTROL	
				628. 1905	628. 1910	
				EACH	EACH	
PROJECT 1570-00-75						
0010	1263+92	-	1278+59	1	-	INSTALL EROSION CONTROL
0010	1263+92	-	1278+59	1	-	REMOVE EROSION CONTROL
0010	1263+92	-	1278+59	-	1	UNDISTURBED
PROJECT 1570-00-75 CATEGORY 0010 TOTAL				2	1	
CONTRACT CATEGORY 0010 TOTAL				2	1	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633. 5200
			EACH
PROJECT 1570-00-75			
0010	1268+08	LT	1
0010	1270+41	LT & RT	2
0010	1272+00	LT	1
0010	1319+85	RT	1
PROJECT 1570-00-75 CATEGORY 0010 TOTAL			5
CONTRACT CATEGORY 0010 TOTAL			5

TRAFFIC CONTROL SUMMARY

CATEGORY	LOCATION	SIGNS	DAYS	SIGN CODE	DESCRIPTION	TRAFFIC CONTROL	CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL	REMARKS
						DRUMS	BARRICADES	WARNING LIGHTS	ARROW BOARDS	CONTROL SIGNS	CONTROL EACH	
						643.0300	643.0420	643.0715	643.0800	643.0900	643.5000	
						DAY	DAY	DAY	DAY	DAY	EACH	
PROJECT 1570-00-75												
0010	PROJECT 1570-00-75					-	-	-	-	-	1	
0010	BEGIN PROJECT, CTH K RAB	3	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	243	-	SDD 15C-05 ADVANCED WARNING, TC DETAILS
0010		1	81	G20-2A	END ROAD WORK	-	-	-	-	81	-	
0010	ASH ST (RT)	1	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	81	-	SDD 15C-05, SIDE ROAD APPROACH
0010	TAMARACK ST (LT)	1	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	81	-	
0010	PINE ST (LT & RT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	STA. 1275+00 - 1276+25	10	14	-	TRAFFIC CONTROL DRUMS	140	-	-	-	-	-	MEDIAN DELI EATION (IN LIEU OF TEMP. 12' DIAG.)
0010	WB SINGLE LANE CLOSURE	1	14	W04-1R	RIGHT LANE CLOSED AHEAD	-	-	-	-	14	-	SDD 15D-20, 15D-21 & TC DETAILS
0010		1	14	W04-2R	RT LN ENDS	-	-	-	-	14	-	
0010		2	14	R11-2L	LANE CLOSED (ON BARRICADE)	-	28	-	-	28	-	
0010		2	14	R1-1	STOP W/ORANGE FLAGS	-	-	-	-	28	-	
0010		2	14	R3-2OR	BEGIN RT TURN LANE	-	-	-	-	28	-	
0010		1	14	-	FLASHING ARROW BOARD	-	-	-	14	-	-	
0010		60	14	-	TRAFFIC CONTROL DRUMS	840	-	140	-	-	-	
0010	EB SINGLE LANE CLOSURE	1	14	W04-1R	RIGHT LANE CLOSED AHEAD	-	-	-	-	14	-	SDD 15D-20, 15D-21 & TC DETAILS
0010		1	14	W04-2R	RT LN ENDS	-	-	-	-	14	-	
0010		1	14	R11-2L	LANE CLOSED (ON BARRICADE)	-	14	-	-	14	-	
0010		1	14	-	FLASHING ARROW BOARD	-	-	-	14	-	-	
0010		40	14	-	TRAFFIC CONTROL DRUMS	560	-	140	-	-	-	
0010	USH 63/MAPLE ST. RAB	3	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	243	-	SDD 15C-05 ADVANCED WARNING, TC DETAILS
0010		1	81	G20-2A	END ROAD WORK	-	-	-	-	81	-	
0010		1	14	W04-1R	MERGE ARROW	-	-	-	-	14	-	PLACE OVER EXISTING 36"X36" W4-3R, SEE TC DETA
0010		1	81	G20-1	ROAD WORK NEXT 5 MILES	-	-	-	-	81	-	
0010	POPLAR ST (LT & RT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	SDD 15C-04, SIDE ROAD APPROACH
0010	CTH KK	1	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	81	-	SDD 15C-04 ADVANCED WARNING
0010		1	81	W20-1C	ROAD WORK 1000 FT	-	-	-	-	81	-	
0010		1	81	W20-1D	ROAD WORK 500 FT	-	-	-	-	81	-	
0010		1	81	G20-2A	END ROAD WORK	-	-	-	-	81	-	
0010		1	81	G20-1C	ROAD WORK NEXT 4 MILES	-	-	-	-	81	-	EB
0010		1	81	G20-1C	ROAD WORK NEXT 2 MILES	-	-	-	-	81	-	WB
0010	2ND ST (LT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	SDD 15C-04, SIDE ROAD APPROACH
0010	2 1/2 ST (LT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	3RD ST (RT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	3 1/4 ST (LT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	14TH AVE (LT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	3 1/2 ST (LT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	3 3/4 ST (RT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	4TH ST (LT & RT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	5TH ST (LT & RT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	GARFIELD ST S (LT)	2	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	162	-	
0010	STA. 1549+90 - 1553+10	20	14	-	TRAFFIC CONTROL DRUMS	280	-	-	-	-	-	MEDIAN DELI EATION (IN LIEU OF TEMP. 12' DIAG.)
0010	STA. 1557+37 - 1564+60	40	14	-	TRAFFIC CONTROL DRUMS	560	-	-	-	-	-	
0010	END PROJECT/CTH P	3	81	W20-1A	ROAD WORK AHEAD	-	-	-	-	243	-	SDD 15C-04 ADVANCED WARNING
0010		3	81	W20-1C	ROAD WORK 1000 FT	-	-	-	-	243	-	
0010		3	81	W20-1D	ROAD WORK 500 FT	-	-	-	-	243	-	
0010		3	81	G20-2A	END ROAD WORK	-	-	-	-	243	-	
0010		1	81	G20-1C	ROAD WORK NEXT 6 MILES	-	-	-	-	81	-	
0010	UNDI STRIBUTED	-	-	W08-1	BUMP	-	-	-	-	200	-	SDD 15D44, SIGNING ON MILLED SURFACES AND
0010		-	-	W016-7L	DIAGONAL DOWN ARROW	-	-	-	-	200	-	TRAFFIC CONTROL SIGNING FOR UNEVEN SURFACES
0010		-	-	W8-11	UNEVEN LANES	-	-	-	-	200	-	
0010		-	-	R4-1	DO NOT PASS	-	-	-	-	200	-	
0010		-	-	W08-52	GROOVED PAVEMENT	-	-	-	-	200	-	
0010		-	-	W013-1	45 M. P. H.	-	-	-	-	200	-	
PROJECT 1570-00-75 CATEGORY 0010 TOTAL						2380	42	280	28	5742	1	
CONTRACT CATEGORY 0010 TOTAL						2380	42	280	28	5742	1	

PROJECT NO: 1570-00-75 / 1570-00-76

HWY: USH 8

COUNTY: BARRON

MISCELLANEOUS QUANTITIES

SHEET:

E

PAVEMENT MARKING SUMMARY

CATEGORY	STATION TO	STATION	LOCATION	MARKING	MARKING LINE	MARKING LINE	MARKING LINE	MARKING	MARKING	MARKING STOP	MARKING	MARKING	MARKING	MARKING	REMARKS
				LINE EPOXY	GROOVED WET REF	GROOVED WET REF	SAME DAY	ARROW	WORD	LINE EPOXY	DIAGONAL	CORRUGATED	CURB	ISLAND NOSE	
				4-1NCH	EPOXY 4-1NCH	EPOXY 8-1NCH	EPOXY 4-1NCH	EPOXY	EPOXY	18-1NCH	EPOXY 12-1NCH	MEDI AN EPOXY	EPOXY	EPOXY	
				646. 1020	646. 1040	646. 3040	646. 4520	646. 5020	646. 5120	646. 6120	646. 7120	646. 8020	646. 8120	646. 8220	
				LF	LF	LF	LF	EACH	EACH	LF	LF	SF	LF	EACH	
PROJECT 1570-00-75															
URBAN SEGMENT															
0010	1263+98	-	1276+60	CL	-	-	2524	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW
0010	1263+98	-	1278+58	EB & WB LANE LINES	-	-	730	-	-	-	-	-	-	-	SKIP, WHITE
0010	1277+95	-	1278+58	EB EDGE LINE	66	-	-	-	-	-	-	-	-	-	SKIP, WHITE
0010	1274+30	-	1277+36	MEDI AN	-	-	370	-	-	-	35	155	40	1	SOLID, YELLOW
0010	1270+91	-	1271+13	SIDE ROAD LT	-	-	22	-	-	22	-	-	-	-	WHITE STOP LINE (TAMARACK ST)
0010	1277+70	-	1277+95	SIDE ROAD RT	-	-	25	-	-	25	-	-	-	-	WHITE STOP LINE (PINE ST)
0010	1278+06	-	1278+26	SIDE ROAD LT	-	-	20	-	-	20	-	-	-	-	WHITE STOP LINE (PINE ST)
RURAL SEGMENT															
0010	1292+37	-	1564+60	EDGE LINES	-	54446	-	-	-	-	-	-	-	-	SOLID, WHITE
0010	1292+37	-	1295+85	CL	696	-	696	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW*
0010	1295+85	-	1328+45	CL	4075	-	4075	-	-	-	-	-	-	-	SOLID-SKIP, YELLOW*
0010	1328+45	-	1338+85	CL	2080	-	2080	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW*
0010	1338+85	-	1402+80	CL	7994	-	7994	-	-	-	-	-	-	-	SOLID-SKIP, YELLOW*
0010	1402+80	-	1464+45	CL	12330	-	12330	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW*
0010	1464+45	-	1479+80	CL	1919	-	1919	-	-	-	-	-	-	-	SOLID-SKIP, YELLOW*
0010	1479+80	-	1496+22	CL	3284	-	3284	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW*
0010	1496+22	-	1507+25	CL	1379	-	1379	-	-	-	-	-	-	-	SOLID-SKIP, YELLOW*
0010	1507+25	-	1514+58	CL	1466	-	1466	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW*
0010	1514+58	-	1544+47	CL	3737	-	3737	-	-	-	-	-	-	-	SOLID-SKIP, YELLOW*
0010	1544+47	-	1564+60	CL	4026	-	4026	-	-	-	-	-	-	-	DOUBLE SOLID, YELLOW*
RURAL PASSING LANES, MEDI ANS, AND TURN LANES															
0010	1316+75	-	1392+35	EB PASS. LANE LINE	-	-	1890	-	-	-	-	-	-	-	SKIP, WHITE
0010	1481+20	-	1549+90	WB PASS. LANE LINE	-	-	1718	-	-	-	-	-	-	-	SKIP, WHITE
0010	1549+90	-	1556+67	MEDI AN	-	-	1354	-	-	-	205	-	-	-	SOLID, YELLOW
0010	1557+67	-	1564+60	MEDI AN	-	-	1386	-	-	-	745	-	-	1	SOLID, YELLOW
0010	1302+34	-	1308+06	EB RT TURN LANE	-	235	-	2	1	-	-	-	-	-	POPLAR ST.
0010	1305+06	-	1310+66	WB RT TURN LANE	-	240	-	2	1	-	-	-	-	-	POPLAR ST.
0010	1352+59	-	1358+08	EB RT TURN LANE	-	230	-	2	1	-	-	-	-	-	CTH KK
0010	1355+75	-	1361+46	WB RT TURN LANE	-	255	-	2	1	-	-	-	-	-	2ND ST.
0010	1382+93	-	1388+55	WB RT TURN LANE	-	230	-	2	1	-	-	-	-	-	2 1/2 ST.
0010	1406+35	-	1412+12	EB RT TURN LANE	-	230	-	2	1	-	-	-	-	-	3RD ST.
0010	1417+45	-	1422+16	WB RT TURN LANE	-	140	-	2	-	-	-	-	-	-	3 1/4 ST.
0010	1428+30	-	1430+22	WB RT TURN LANE	-	60	-	1	-	-	-	-	-	-	BOAT LANDING RD.
0010	1431+58	-	1434+13	WB RT TURN LANE	-	135	-	2	-	-	-	-	-	-	14TH AVE.
0010	1435+46	-	1439+22	WB RT TURN LANE	-	230	-	2	1	-	-	-	-	-	3 1/2 ST.
0010	1446+80	-	1542+38	EB RT TURN LANE	-	240	-	2	1	-	-	-	-	-	3 3/4 ST.
0010	1459+66	-	1465+25	EB RT TURN LANE	-	240	-	-	-	-	-	-	-	-	4TH ST. (OMIT ARROWS AND ONLYS)
0010	1462+48	-	1468+00	WB RT TURN LANE	-	240	-	-	-	-	-	-	-	-	4TH ST. (OMIT ARROWS AND ONLYS)
0010	1512+70	-	1518+35	EB RT TURN LANE	-	235	-	2	1	-	-	-	-	-	5TH ST.
0010	1515+66	-	1521+00	WB RT TURN LANE	-	235	-	2	1	-	-	-	-	-	5TH ST.
0010	1551+60	-	1556+67	EB LT TURN LANE	-	345	-	2	1	-	-	-	-	-	GARFIELD ST.
0010	1555+68	-	1561+48	WB RT TURN LANE	-	240	-	2	1	-	-	-	-	-	GARFIELD ST.
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					43052	54446	3760	53025	29	12	67	985	155	40	2
CONTRACT CATEGORY 0010 TOTAL					43052	54446	3760	53025	29	12	67	985	155	40	2

*NOTE: THE 'MARKING LINE SAME DAY EPOXY 4-1NCH' IN LOCATIONS WHERE CL RUMBLE STRIPS WILL BE CONSTRUCTED SHALL BE PLACED AT A REDUCED APPLI CATION RATE; SEE SPECIAL PROVI SI ONS.

TEMPORARY MARKING LINE PAINT 4-INCH

CATEGORY	STATION	TO	STATION	LENGTH (FT)	APPLICATIONS*	MULTIPLIER	LOCATION	649.0105 LF	REMARKS
PROJECT 1570-00-75									
URBAN SEGMENT									
0010	1263+98	-	1277+34	1336	2	2.00	CL	5344	DOUBLE SOLID, YELLOW
0010	1263+98	-	1278+58	1460	2	0.08	EB LANE LINE	234	SKIP, WHITE
0010	1263+98	-	1278+58	1460	2	0.08	WB LANE LINE	234	SKIP, WHITE
0010	1274+30	-	1276+15	185	2	2.00	MEDIAN	740	SOLID, YELLOW (2ND LINE EACH SIDE)
RURAL SEGMENT									
0010	1292+37	-	1295+85	348	2	2.00	CL	1392	DOUBLE SOLID, YELLOW
0010	1295+85	-	1328+45	3260	2	1.08	CL	7042	SOLID-SKIP, YELLOW
0010	1328+45	-	1338+85	1040	2	2.00	CL	4160	DOUBLE SOLID, YELLOW
0010	1338+85	-	1402+80	6395	2	1.08	CL	13814	SOLID-SKIP, YELLOW
0010	1402+80	-	1464+45	6165	2	2.00	CL	24660	DOUBLE SOLID, YELLOW
0010	1464+45	-	1479+80	1535	2	1.08	CL	3316	SOLID-SKIP, YELLOW
0010	1479+80	-	1496+22	1642	2	2.00	CL	6568	DOUBLE SOLID, YELLOW
0010	1496+22	-	1507+25	1103	2	1.08	CL	2383	SOLID-SKIP, YELLOW
0010	1507+25	-	1514+58	733	2	2.00	CL	2932	DOUBLE SOLID, YELLOW
0010	1514+58	-	1544+47	2989	2	1.08	CL	6457	SOLID-SKIP, YELLOW
0010	1544+47	-	1564+60	2013	2	2.00	CL	8052	DOUBLE SOLID, YELLOW
PASSING LANES									
0010	1316+75	-	1392+35	7560	2	0.08	EB PASSING LANE LINE	1210	SKIP, WHITE
0010	1481+20	-	1549+90	6870	2	0.08	WB PASSING LANE LINE	1100	SKIP, WHITE
PROJECT 1570-00-75 CATEGORY 0010 TOTAL								89638	
CONTRACT CATEGORY 0010 TOTAL								89638	

NOTES: *QUANTITIES ASSUME ONE APPLICATION ON MILLED SURFACE AND SECOND APPLICATION ON HMA LOWER LAYER.

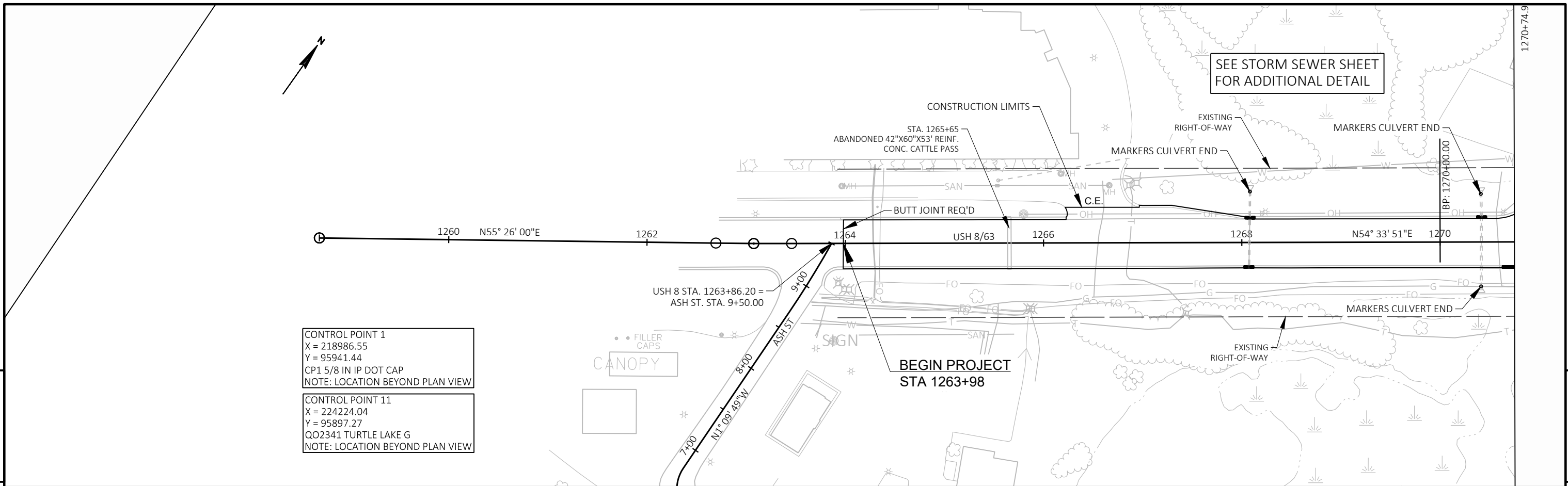
ALSO SEE PAVEMENT MARKING SUMMARY TABLE FOR LOCATIONS WHERE 'MARKING LINE SAME DAY EPOXY 4-INCH' WILL BE MARKED AT A REDUCED APPLICATION RATE PRIOR TO CENTERLINE RUMBLE STRIP INSTALLATION; SEE SPECIAL PROVISIONS.

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CONSTRUCTION	CONSTRUCTION	REMARKS
					STAKING CURB GUTTER AND CURB & GUTTER 650.5500 LF	STAKING RESURFACING REFERENCE 650.8000 LF	
PROJECT 1570-00-75							
0010	1263+98	-	1278+58	CL	-	1460	
0010	1292+37	-	1564+60	CL	-	27223	
0010	1268+03	-	1268+13	LT	8	-	FOR RECONSTRUCTING INLET NO. 1
0010	1268+02	-	1268+12	RT	8	-	FOR RECONSTRUCTING INLET NO. 2
0010	1270+37	-	1270+47	LT	8	-	FOR RECONSTRUCTING INLET NO. 3
0010	1270+63	-	1271+23	RT	60	-	FOR CURB & GUTTER REPLACEMENT
0010	1272+03	-	1272+13	LT	8	-	FOR RECONSTRUCTING INLET NO. 4
0010	1272+03	-	1272+13	RT	8	-	FOR RECONSTRUCTING INLET NO. 5
0010	1273+53	-	1273+63	LT	8	-	FOR RECONSTRUCTING INLET NO. 7
0010	1273+52	-	1273+70	RT	16	-	FOR RECONSTRUCTING INLET NO. 8 & CE WIDTH REDUCTION
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					124	28683	
CONTRACT CATEGORY 0010 TOTAL					124	28683	

SAWING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SAWING	SAWING	REMARKS
					ASPHALT 690.0150 LF	CONCRETE 690.0250 LF	
PROJECT 1570-00-75							
0010	1268+03	-	1268+13	LT	15	5	FOR RECONSTRUCTING INLET NO. 1
0010	1268+02	-	1268+12	RT	15	5	FOR RECONSTRUCTING INLET NO. 2
0010	1270+37	-	1270+47	LT	15	5	FOR RECONSTRUCTING INLET NO. 3
0010	1270+63	-	1271+23	RT	-	5	FOR CURB & GUTTER REPLACEMENT
0010	1272+03	-	1272+13	LT	15	5	FOR RECONSTRUCTING INLET NO. 4
0010	1272+03	-	1272+13	RT	15	5	FOR RECONSTRUCTING INLET NO. 5
0010	1273+53	-	1273+63	LT	15	5	FOR RECONSTRUCTING INLET NO. 7
0010	1273+52	-	1273+70	RT	15	5	FOR RECONSTRUCTING INLET NO. 8 & CE WIDTH REDUCTION
PROJECT 1570-00-75 CATEGORY 0010 TOTAL					105	40	
CONTRACT CATEGORY 0010 TOTAL					105	40	

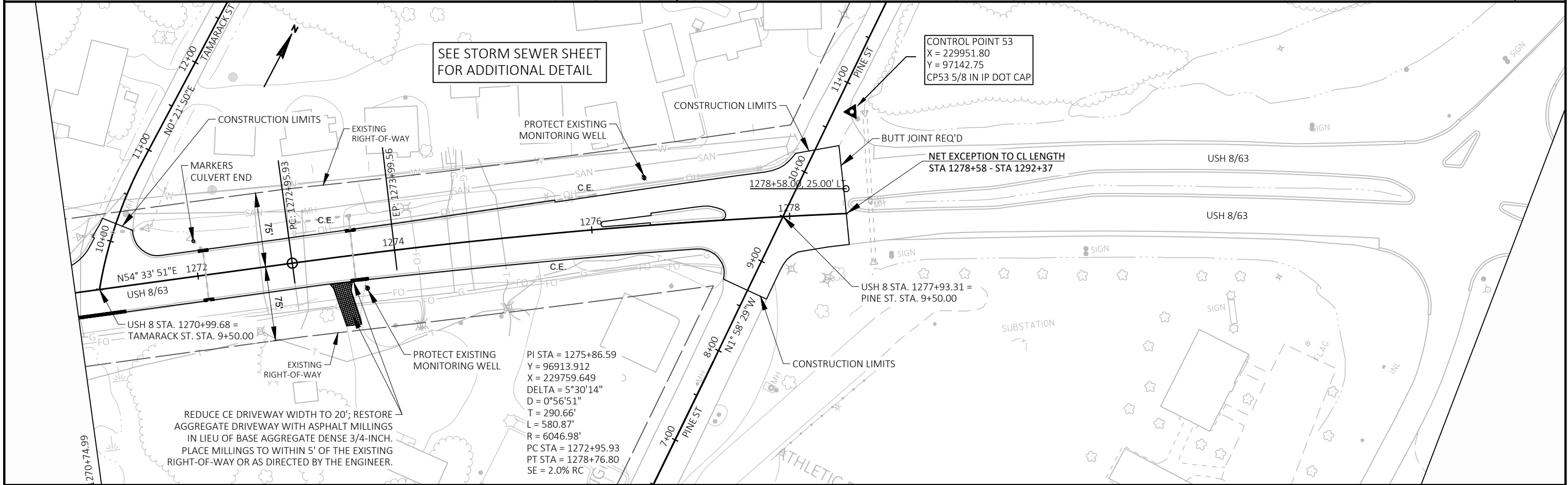


CONTROL POINT 1
 X = 218986.55
 Y = 95941.44
 CP1 5/8 IN IP DOT CAP
 NOTE: LOCATION BEYOND PLAN VIEW

CONTROL POINT 11
 X = 224224.04
 Y = 95897.27
 QO2341 TURTLE LAKE G
 NOTE: LOCATION BEYOND PLAN VIEW

5

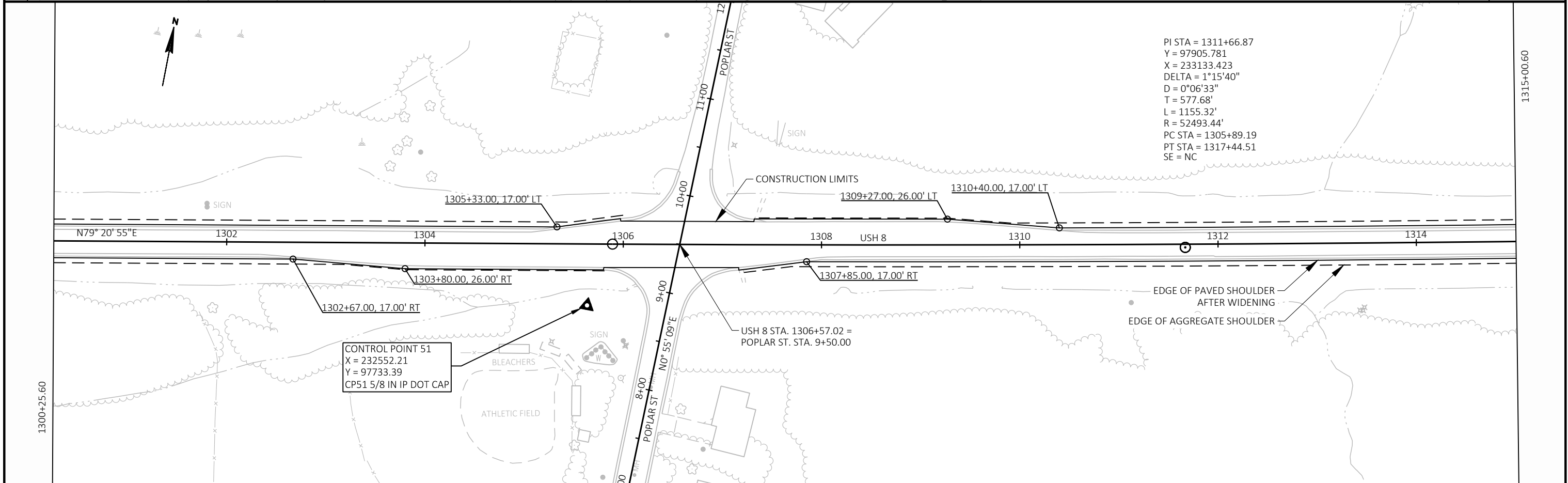
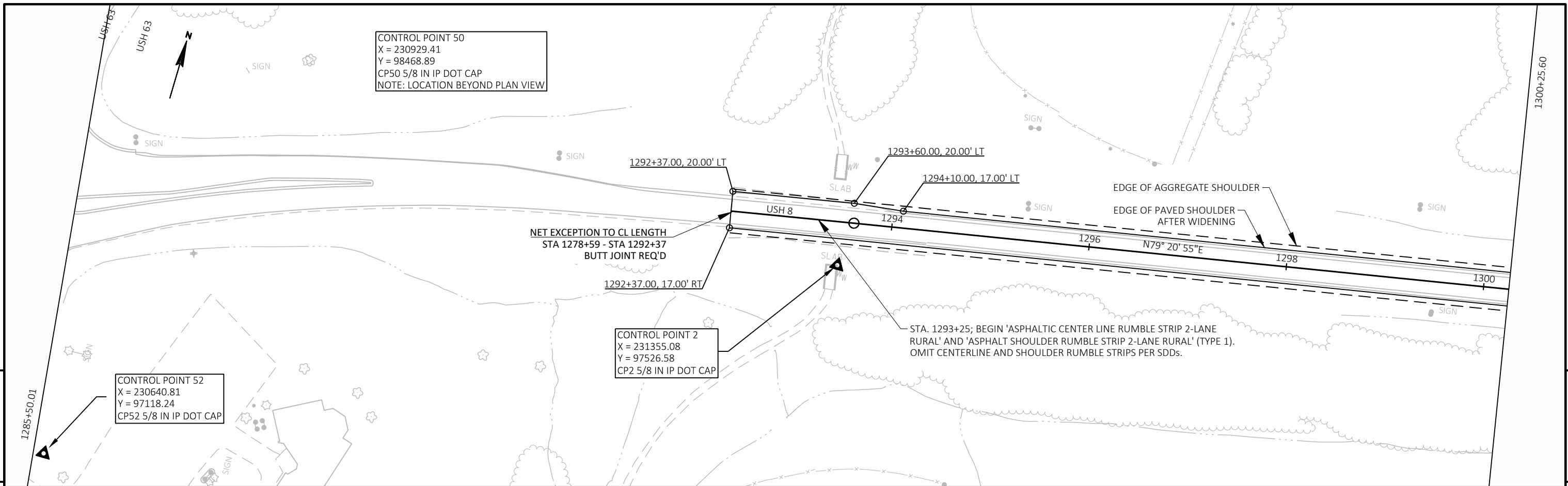
5



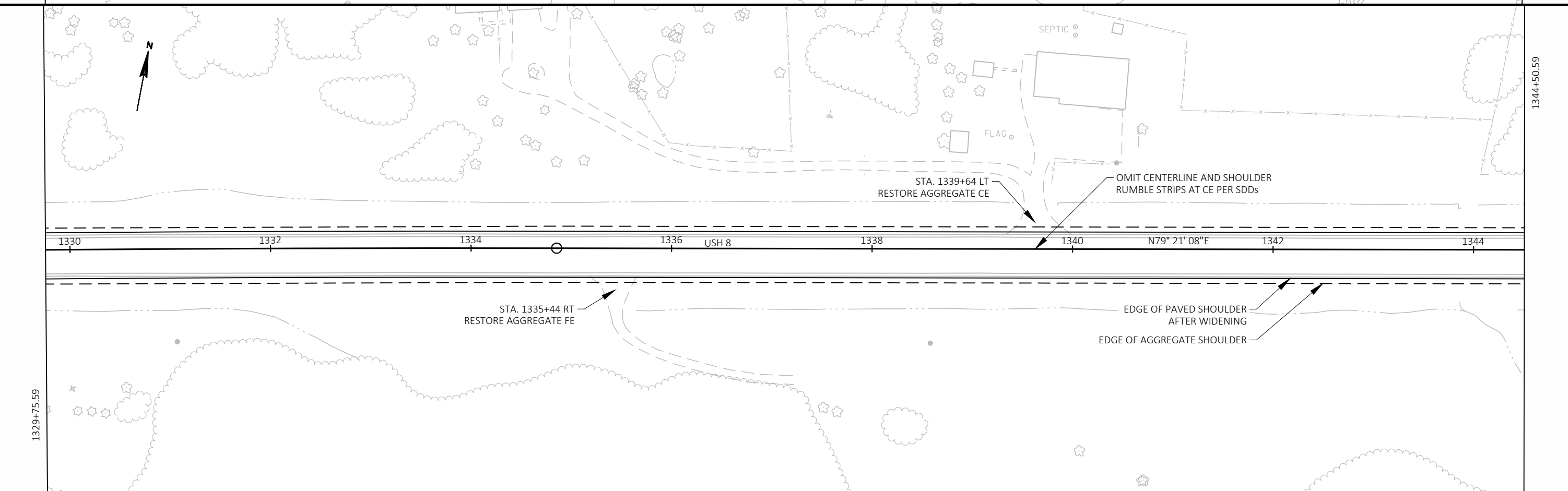
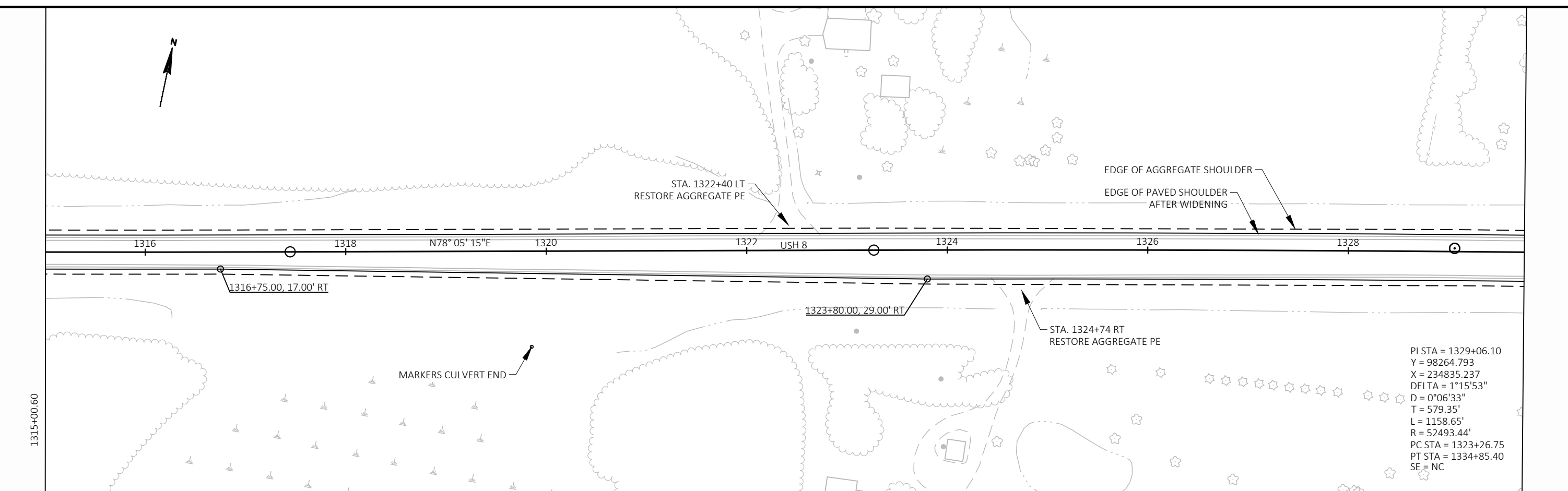
SEE STORM SEWER SHEET FOR ADDITIONAL DETAIL

CONTROL POINT 53
 X = 229951.80
 Y = 97142.75
 CP53 5/8 IN IP DOT CAP

PI STA = 1275+86.59
 Y = 96913.912
 X = 229759.649
 DELTA = 5°30'14"
 D = 0°56'51"
 T = 290.66'
 L = 580.87'
 R = 6046.98'
 PC STA = 1272+95.93
 PT STA = 1278+76.80
 SE = 2.0% RC



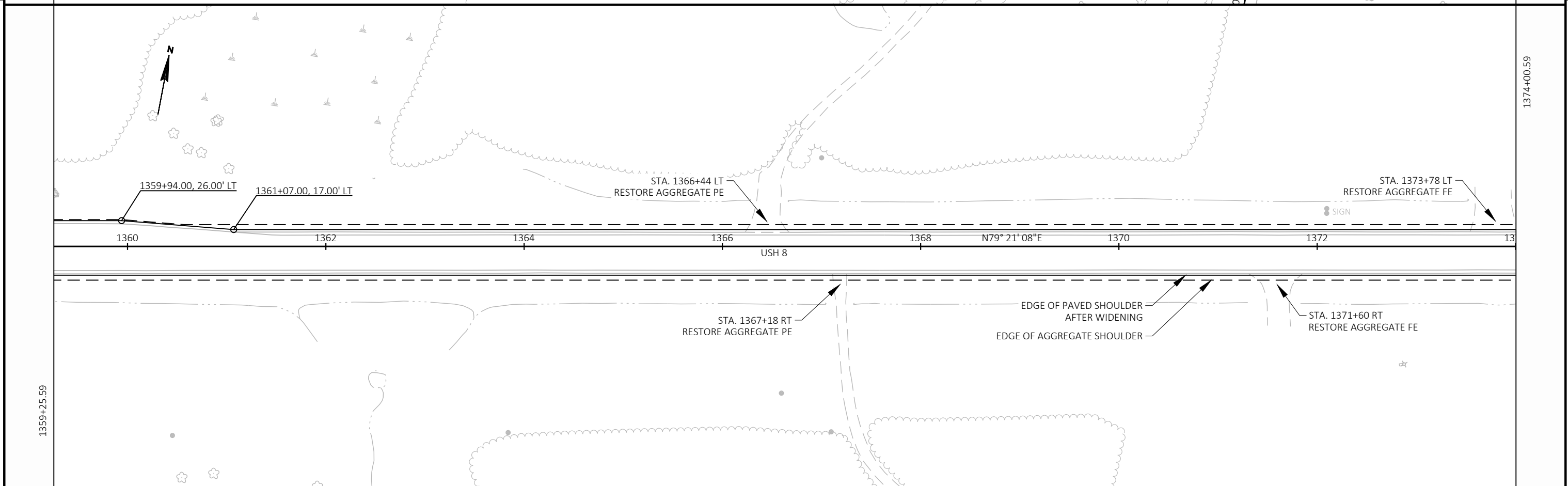
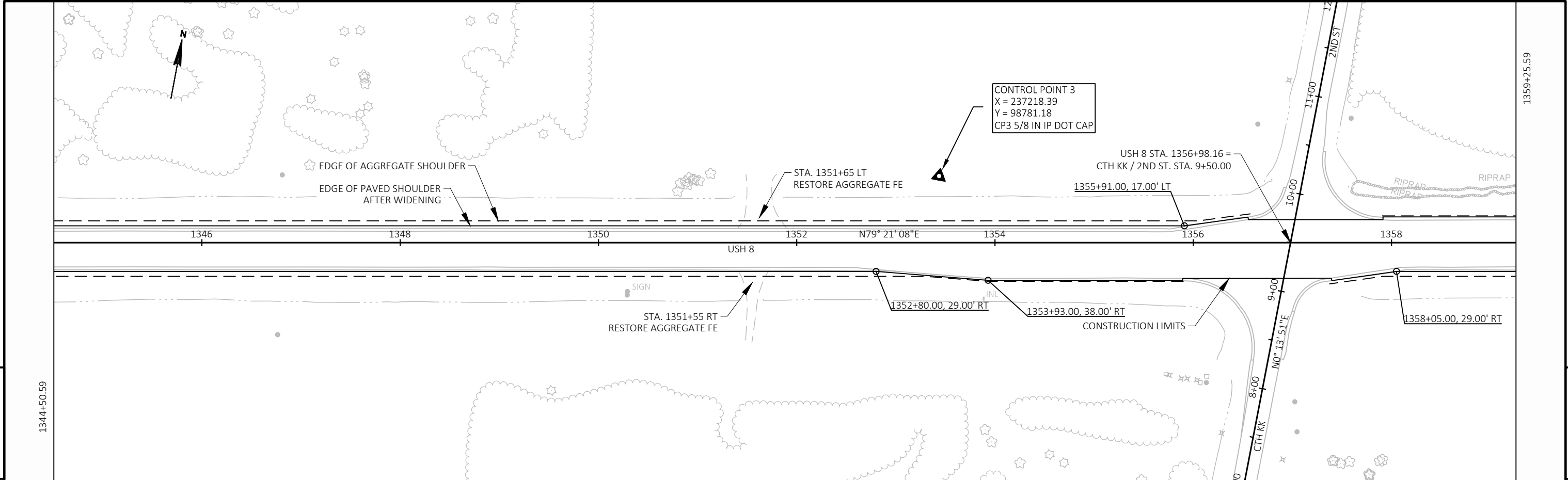
PROJECT NO: 1570-00-75 & 1570-00-76	HWY: USH 8	COUNTY: BARRON	PLAN	SHEET	E
-------------------------------------	------------	----------------	------	-------	---



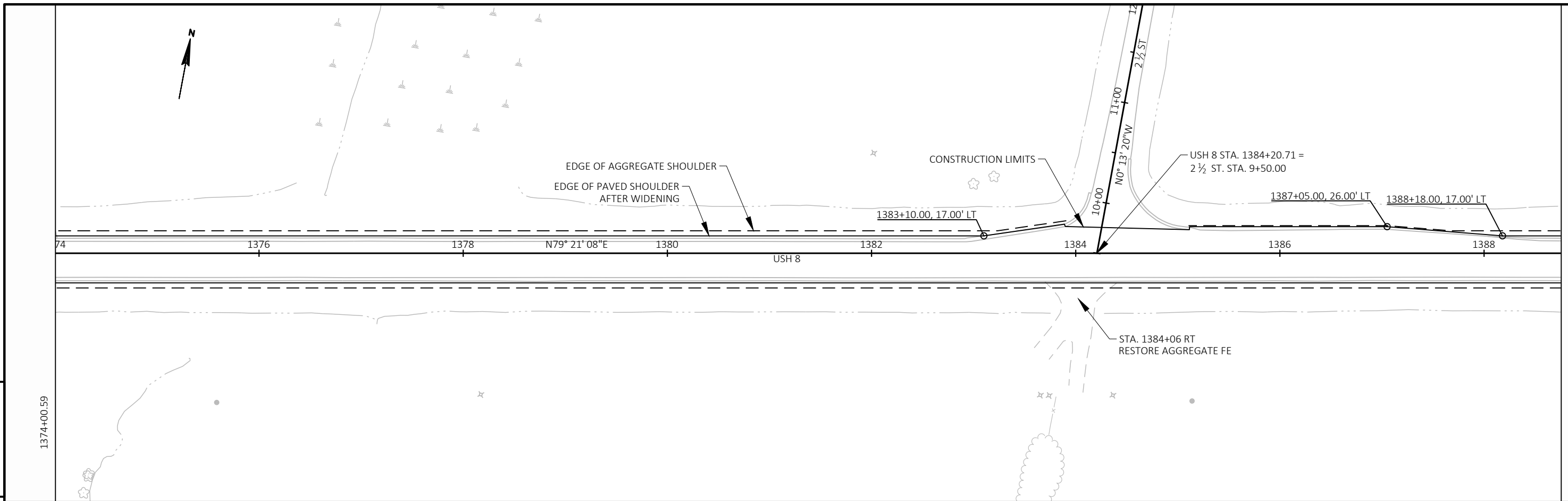
PROJECT NO: 1570-00-75 & 1570-00-76 HWY: USH 8 COUNTY: BARRON PLAN SHEET E

FILE NAME: N:\PDS\C3D\15700005\SHEETSPLAN\15700005_PP.DWG PLOT DATE: 10/8/2019 11:35 AM PLOT BY: ERICKSON, ZACHARY A PLOT NAME: PLOT SCALE: ##### WISDOT/CADD SHEET 44

LAYOUT NAME - PN-03

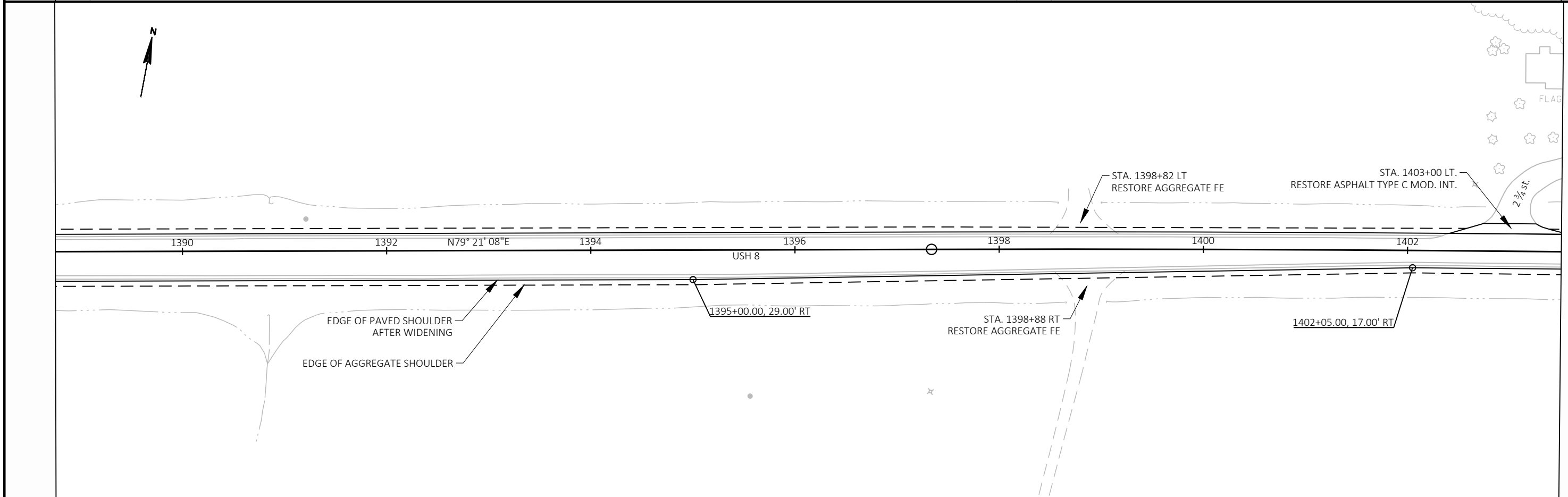


PROJECT NO: 1570-00-75 & 1570-00-76	HWY: USH 8	COUNTY: BARRON	PLAN	SHEET	E
-------------------------------------	------------	----------------	------	-------	----------



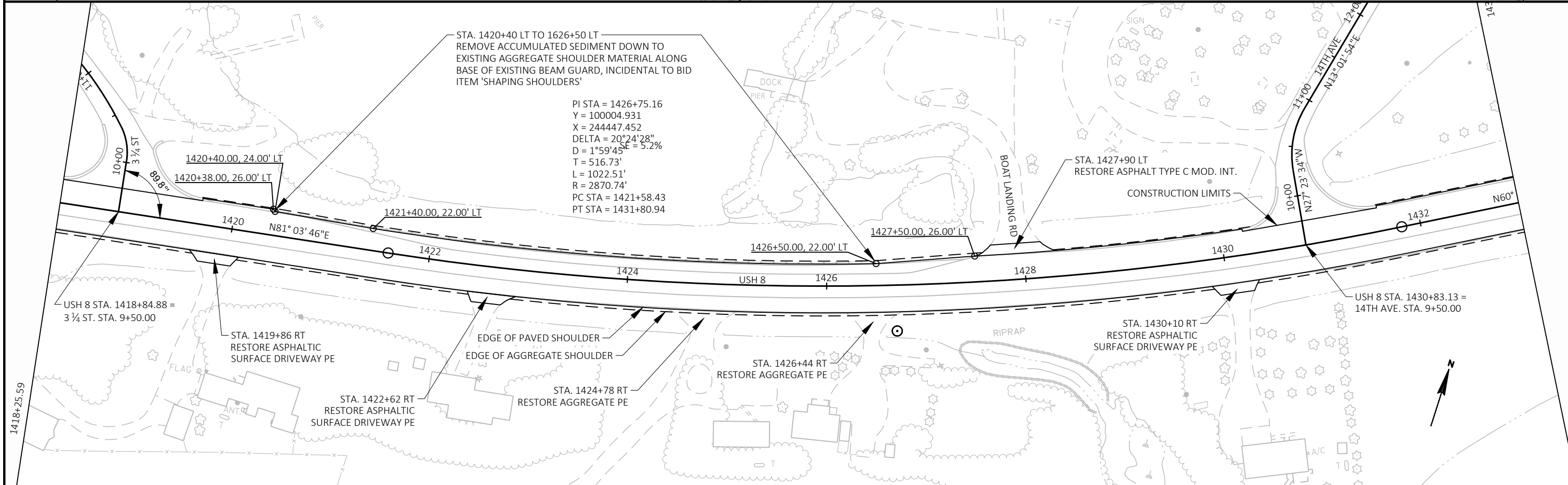
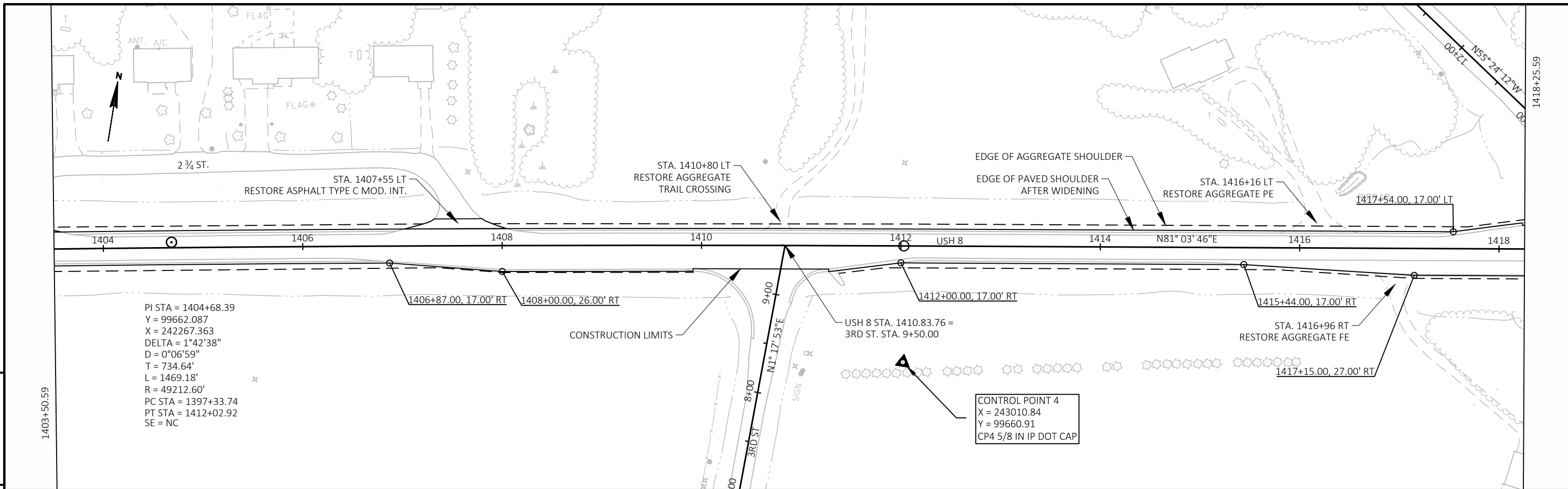
5

5

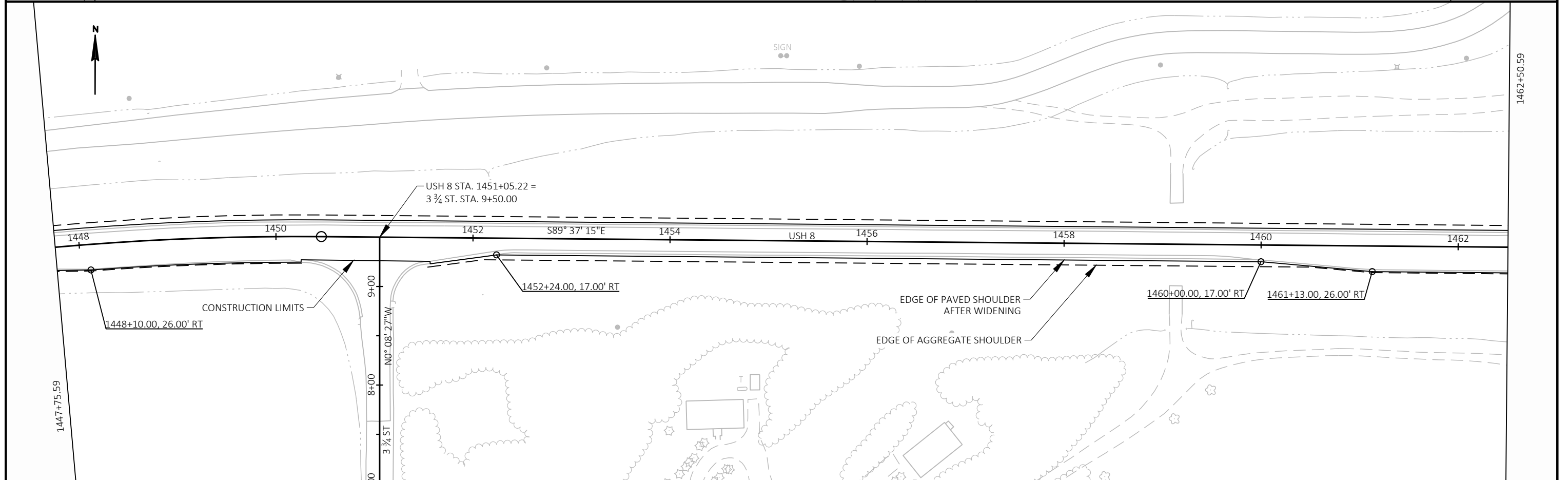
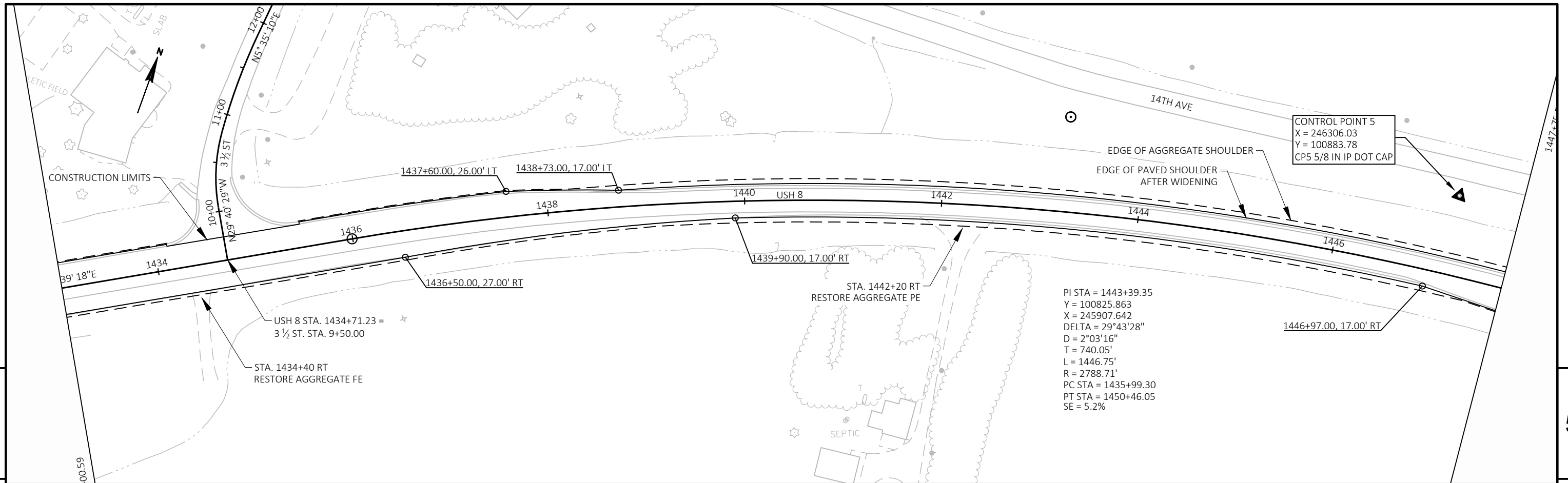


1403+50.59

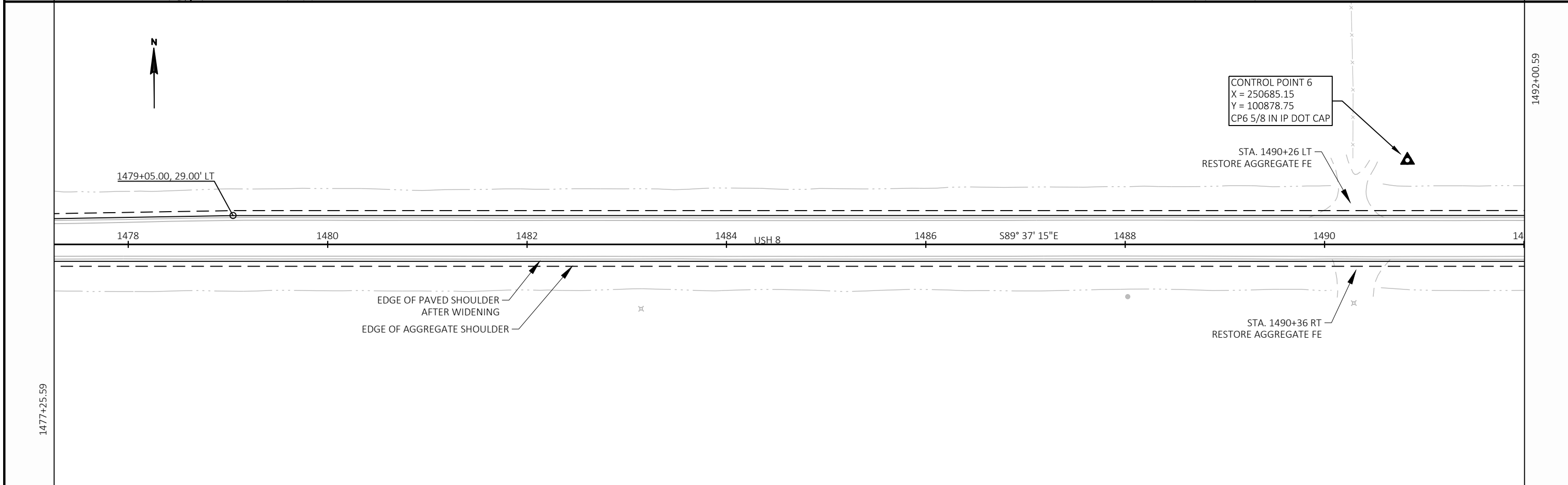
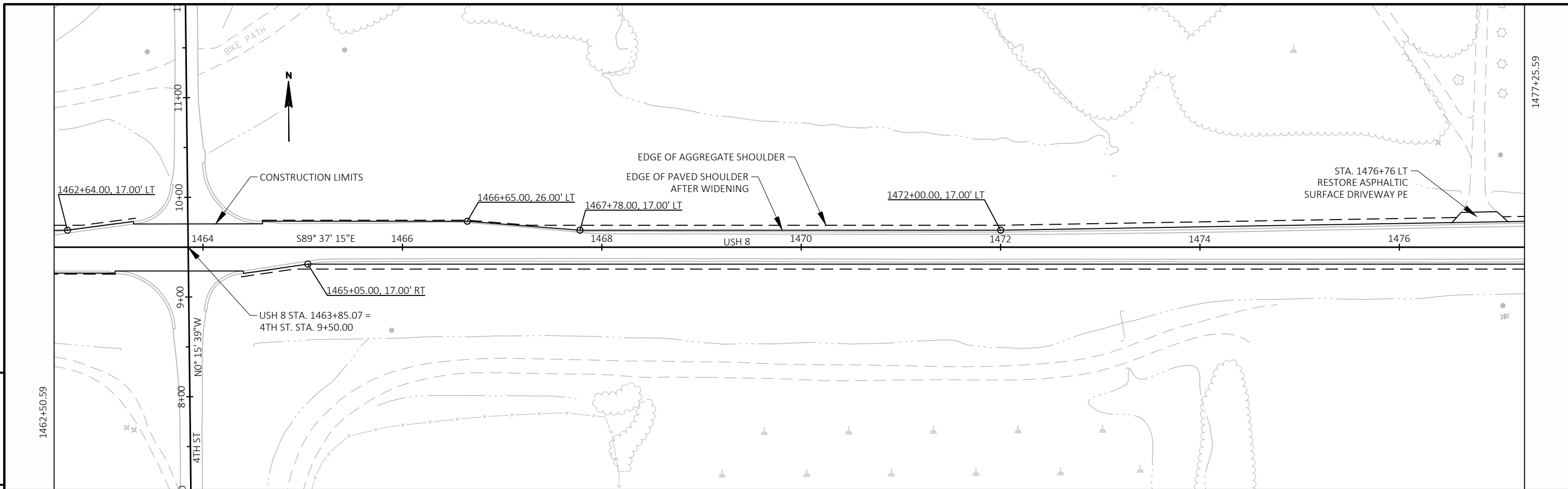
PROJECT NO: 1570-00-75 & 1570-00-76	HWY: USH 8	COUNTY: BARRON	PLAN	SHEET	E
-------------------------------------	------------	----------------	------	-------	----------



PROJECT NO: 1570-00-75 & 1570-00-76 HWY: USH 8 COUNTY: BARRON PLAN SHEET E



PROJECT NO: 1570-00-75 & 1570-00-76 HWY: USH 8 COUNTY: BARRON PLAN SHEET E



PROJECT NO: 1570-00-75 & 1570-00-76	HWY: USH 8	COUNTY: BARRON	PLAN
SHEET			E



EDGE OF AGGREGATE SHOULDER
EDGE OF PAVED SHOULDER
AFTER WIDENING

1492 1494 1496 1498 USH 8 1500 S89° 37' 15"E 1502 1504 1506

1492+00.59

5

1506+75.59

5



CONTROL POINT 7
X = 252920.51
Y = 100850.91
CP7 5/8 IN IP DOT CAP

1515+80.00, 29.00' LT

1519+67.00, 38.00' LT

1520+80.00, 29.00' LT

1508 1510 1512 USH 8 1514 1516 1518 1520

1513+12.00, 17.00' RT

1514+13.00, 26.00' RT

1518+22.00, 17.00' RT

EDGE OF PAVED SHOULDER
AFTER WIDENING
EDGE OF AGGREGATE SHOULDER

CONSTRUCTION LIMITS

USH 8 STA. 1516+98.57 =
5TH ST. STA. 9+50.00

PI STA = 1512+87.56
Y = 100779.652
X = 252889.050
DELTA = 3°01'16"
D = 0°10'29"
T = 865.14'
L = 1729.87'
R = 32808.40'
PC STA = 1504+22.42
PT STA = 1521+52.30
SE = NC

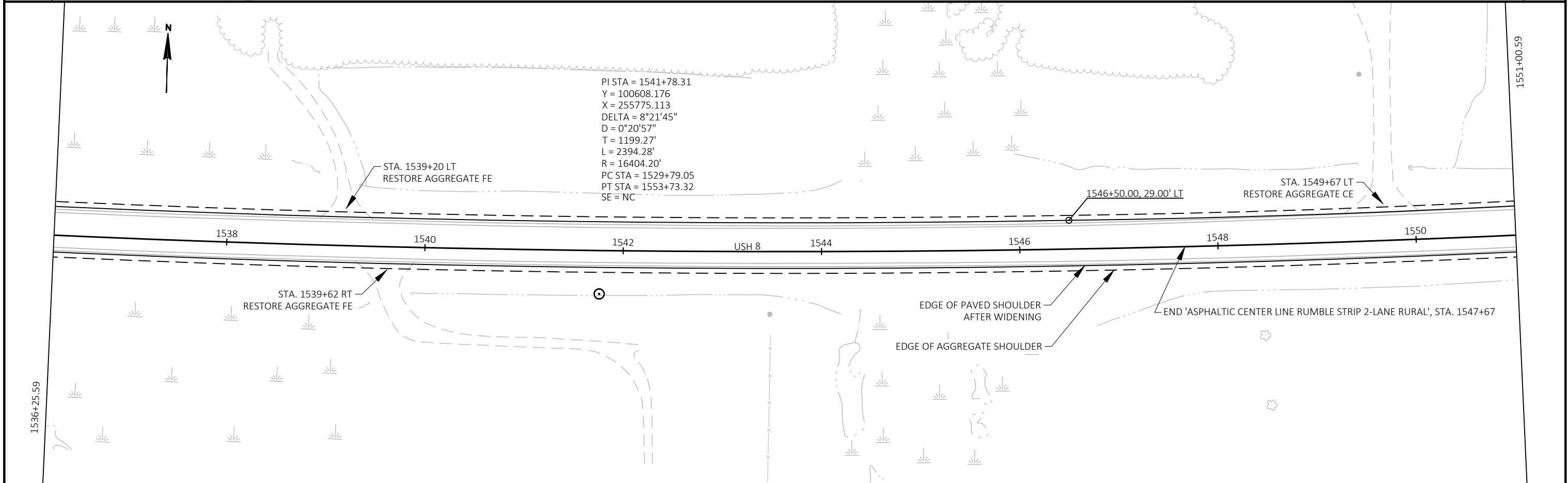
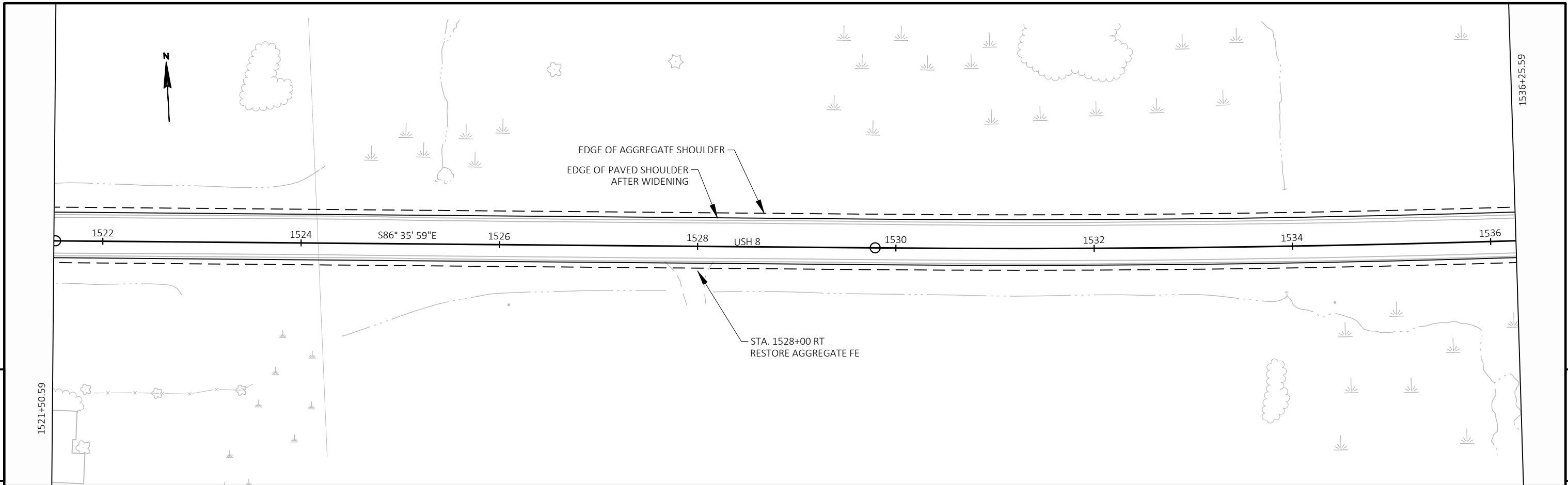
11+00 5TH ST
10+00
9+00
8+00
5TH ST
N0°12'49"W

1506+75.59

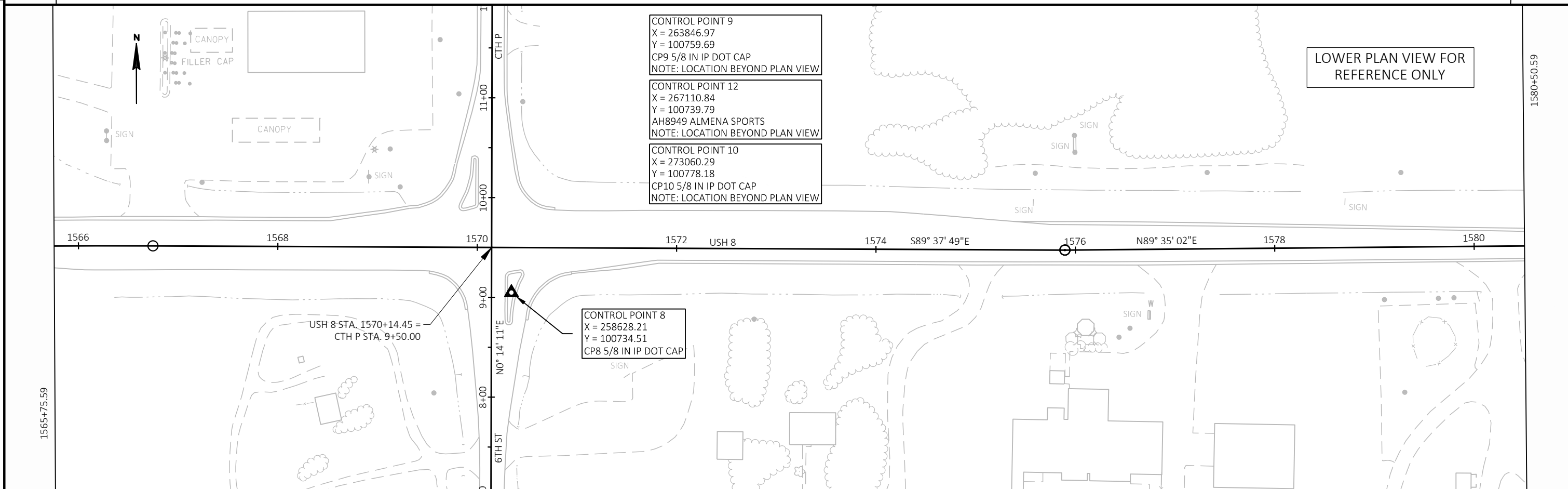
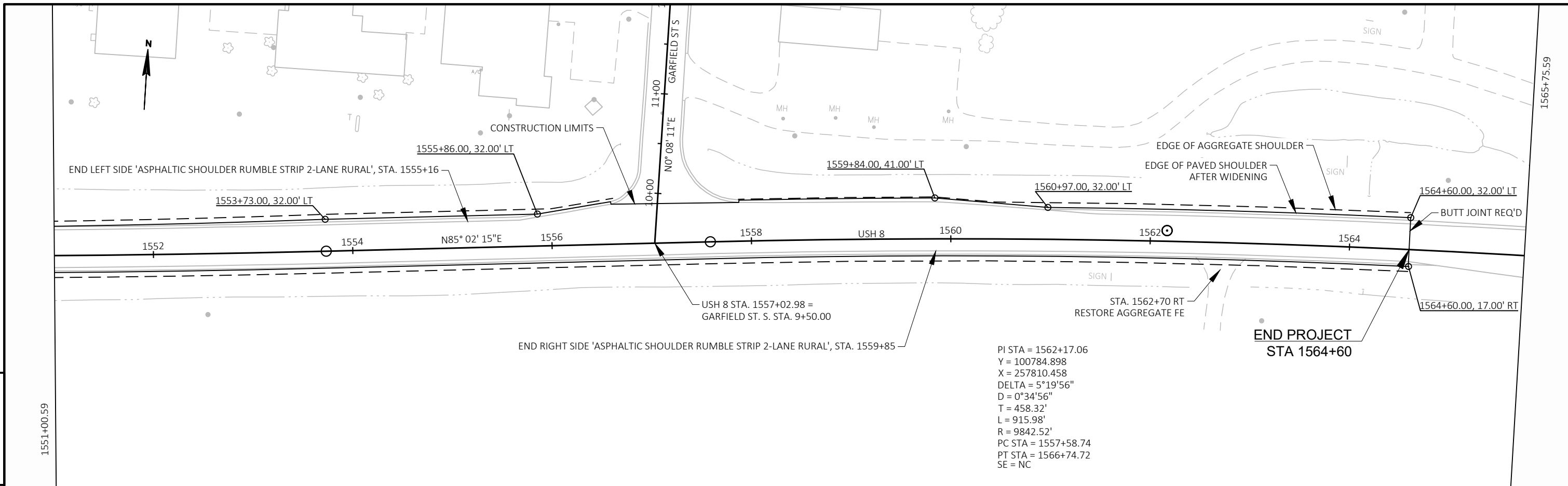
1521+50.59

PROJECT NO: 1570-00-75 & 1570-00-76 HWY: USH 8 COUNTY: BARRON PLAN SHEET E

FILE NAME: N:\PDS\C3D\15700005\SHEETSP\15700005_PP.DWG PLOT DATE: 10/8/2019 11:37 AM PLOT BY: ERICKSON, ZACHARY A PLOT NAME: PLOT SCALE: ##### WISDOT/CADD SHEET 44



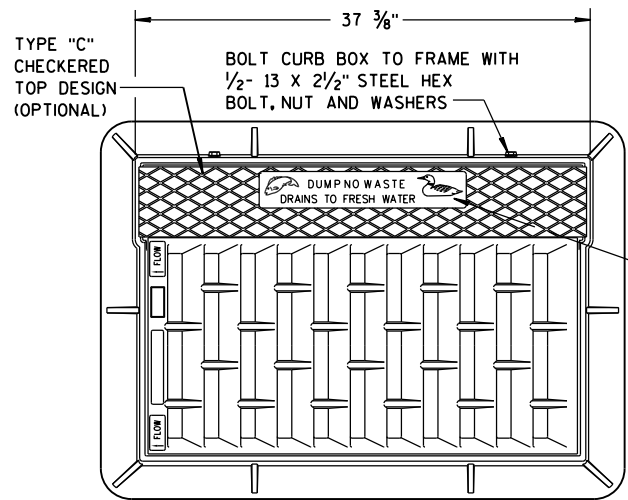
PROJECT NO: 1570-00-75 & 1570-00-76	HWY: USH 8	COUNTY: BARRON	PLAN
SHEET			E



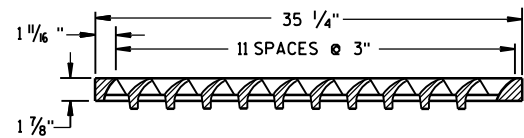
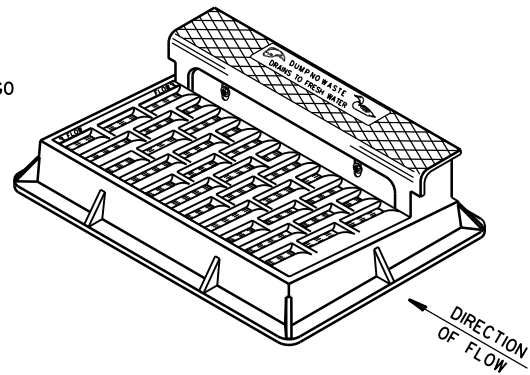
PROJECT NO: 1570-00-75 & 1570-00-76 HWY: USH 8 COUNTY: BARRON PLAN SHEET E

Standard Detail Drawing List

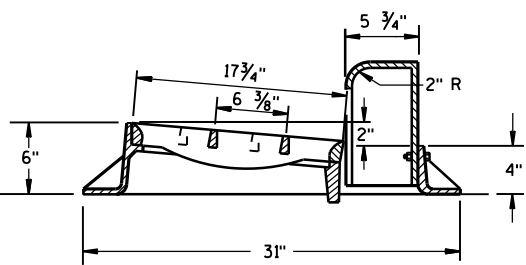
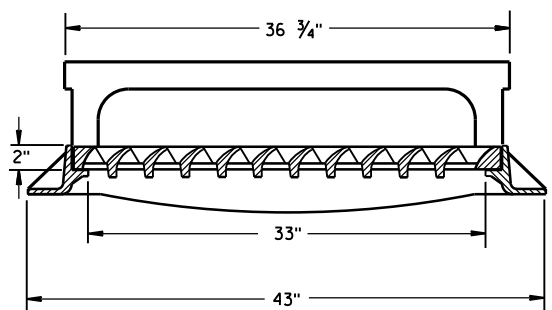
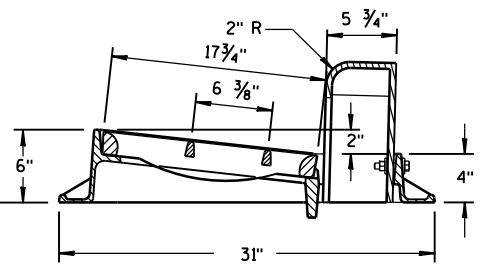
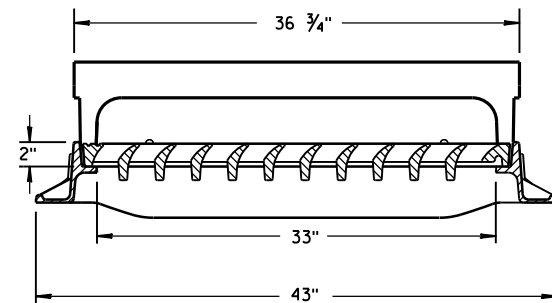
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-01	HMA LONGITUDINAL JOINTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19C	PAVEMENT MARKING (TURN LANES)
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-05B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-03	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-03A	PAVEMENT MARKING (INTERSECTIONS)
15C35-03B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-03C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-06	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-01	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES



**NOTE:
GRATE IS REVERSIBLE.**

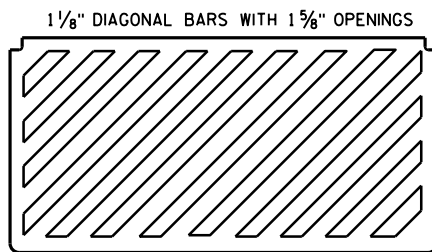


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



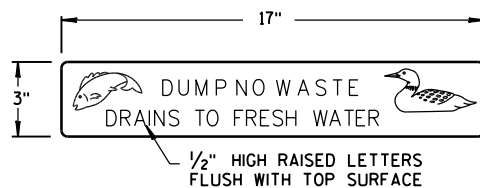
TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

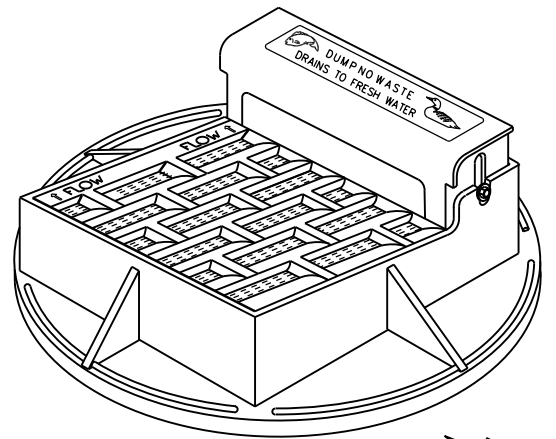


**SPECIAL GRATE FOR
TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)

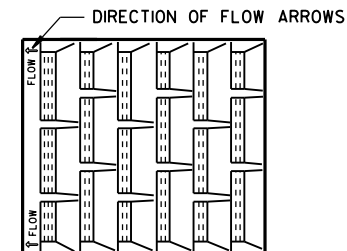


LOGO DETAIL

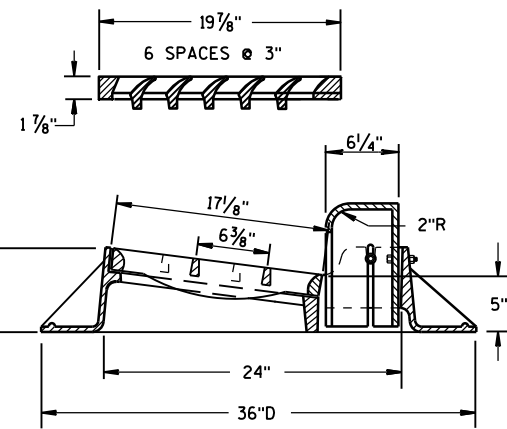
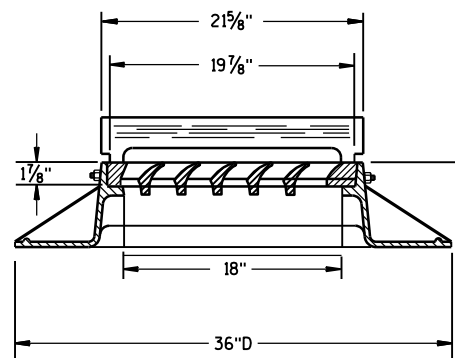


NOTE: CURB BOX ADJUSTABLE 4" TO 9"

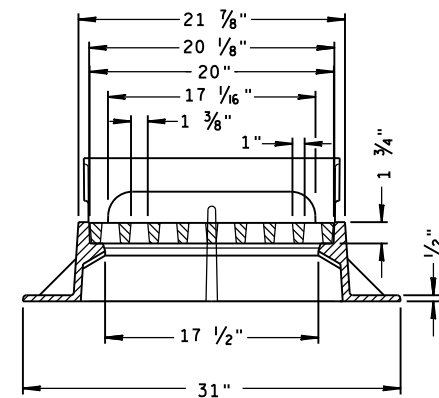
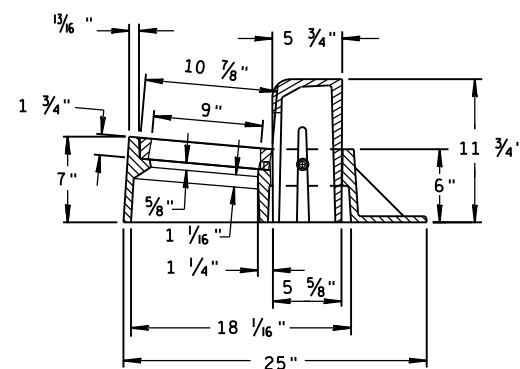
**NOTE:
GRATE IS REVERSIBLE.**



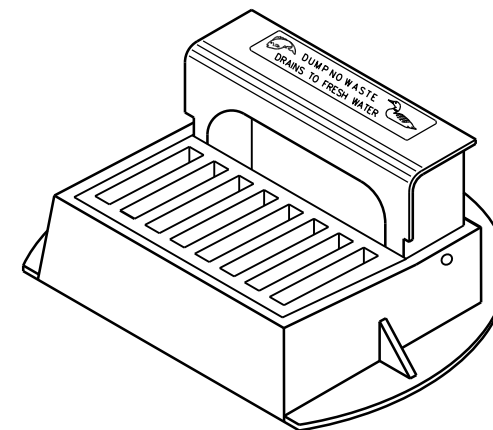
**SPECIAL GRATE FOR
TYPE "A" COVER**
(MEASURES 19 3/4" X 17" X 1 1/8")
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"



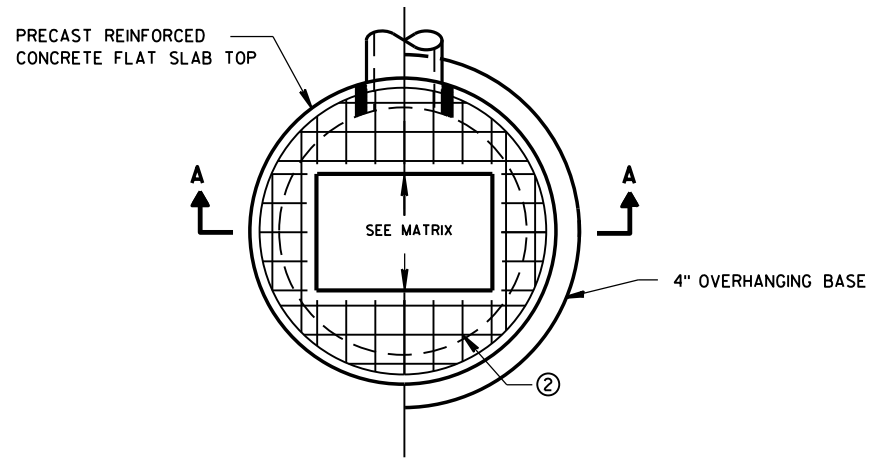
TYPE "Z"



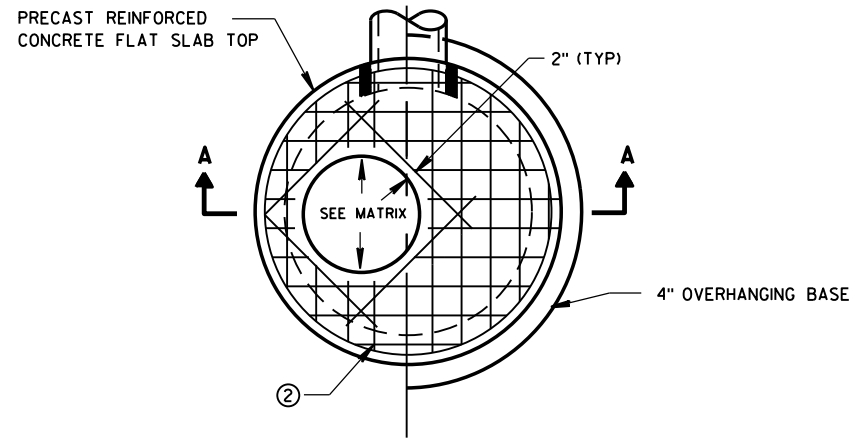
**INLET COVERS
TYPE A, H, A-S, H-S & Z**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 11-27-13 /S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

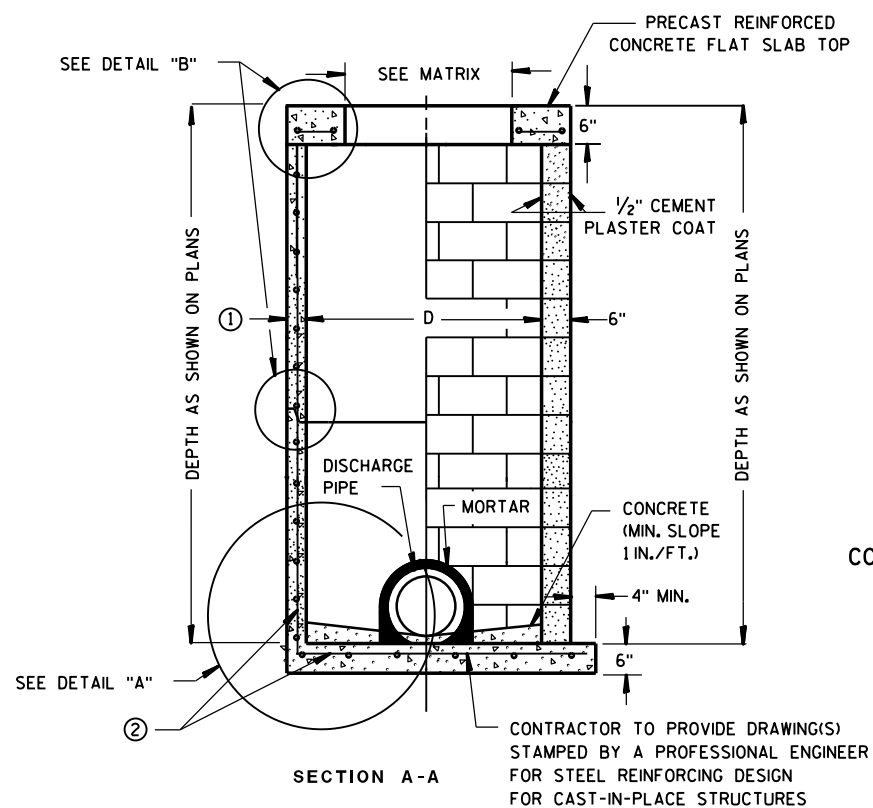
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

- ① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

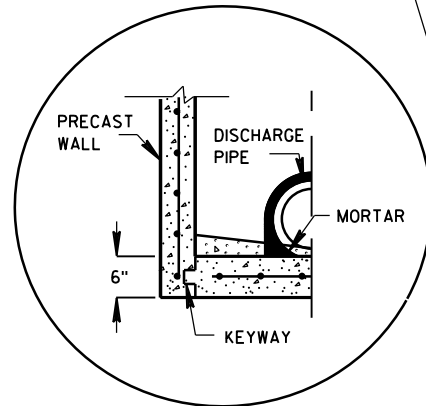
	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X	X	
	2X2.5			X								
	2X3						X					
	2.5X3					X						



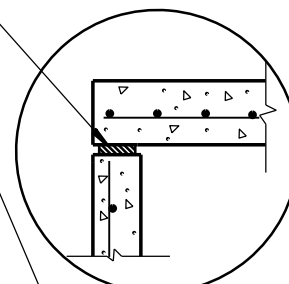
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE OR CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

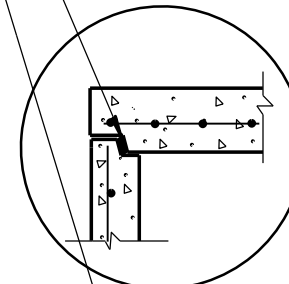
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)



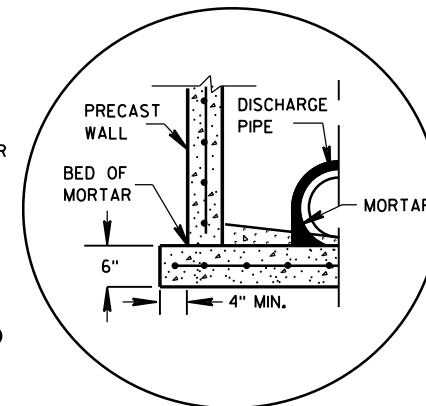
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



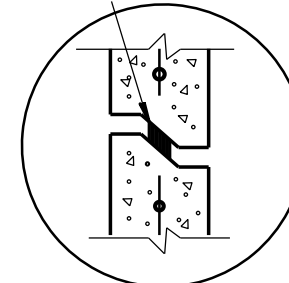
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

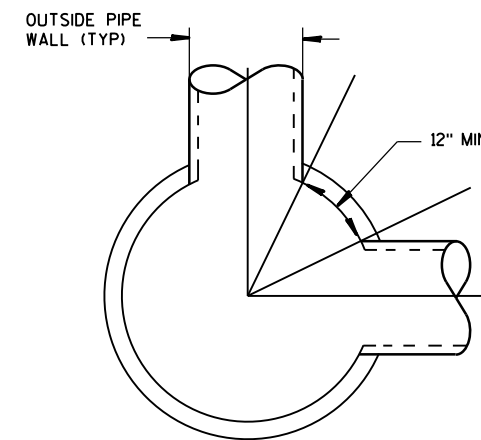


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER



DETAIL "C"

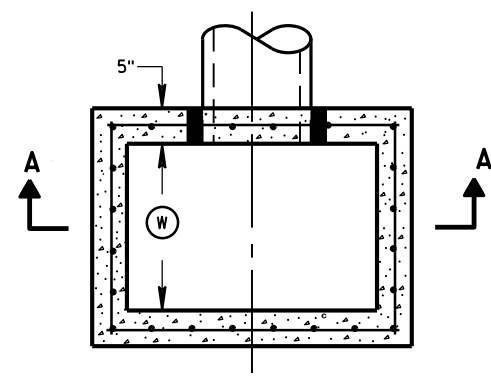
PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

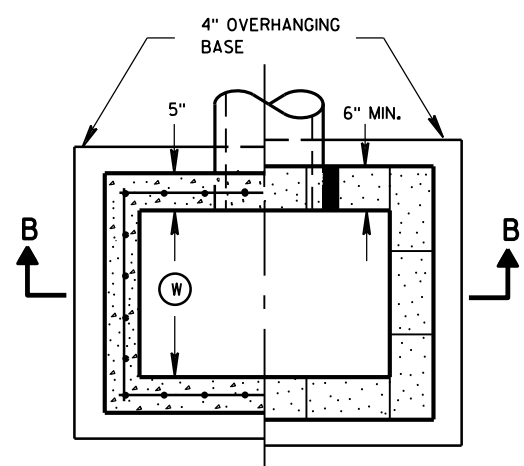
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

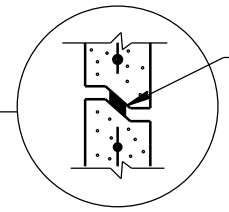
APPROVED
 Sept., 2016 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
 FHWA



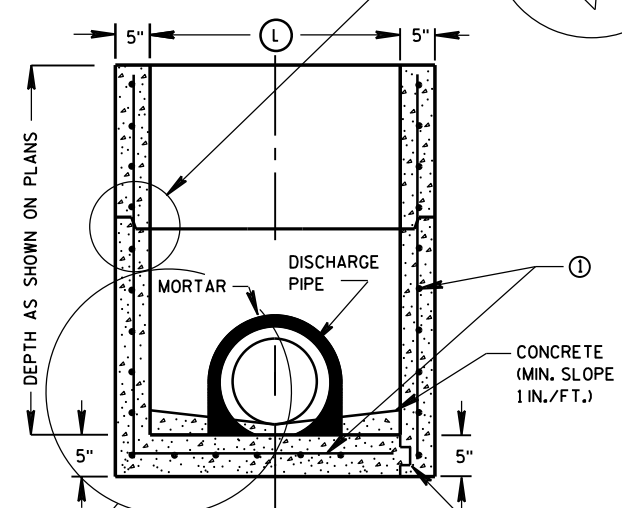
PLAN VIEW



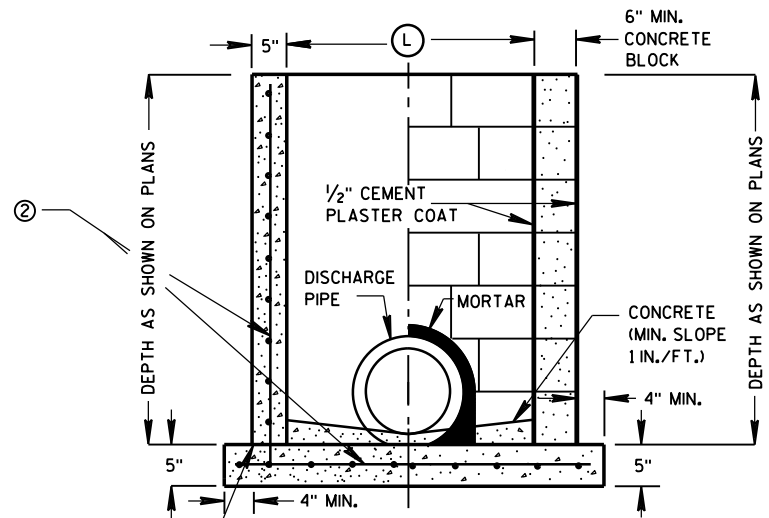
PLAN VIEW



RISER JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



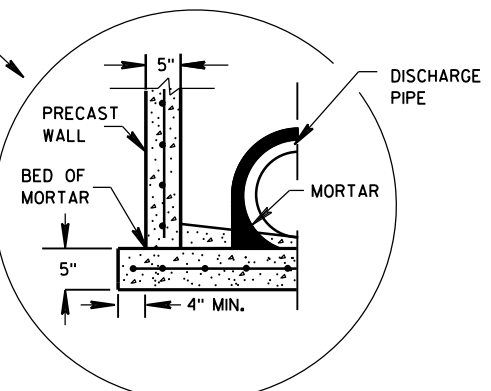
SECTION A-A



SECTION B-B

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE
 PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE
 KEYWAY

CONSTRUCTION JOINT
 CAST-IN-PLACE REINFORCED CONCRETE
 CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ①



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

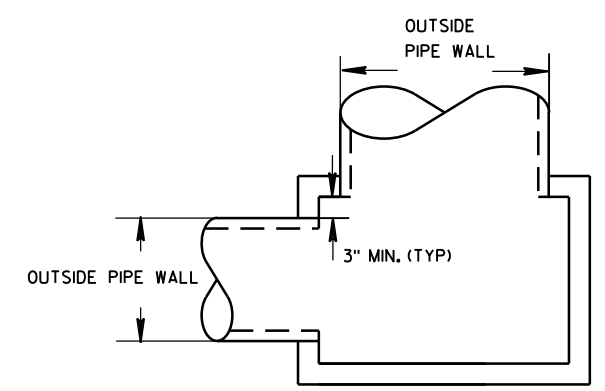
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE	INLET COVER TYPE		ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



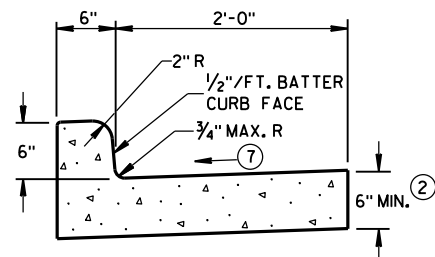
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

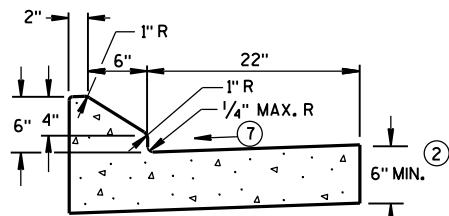
**INLETS 2X2-FT, 2X2.5-FT,
2X3-FT AND 2.5X3-FT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

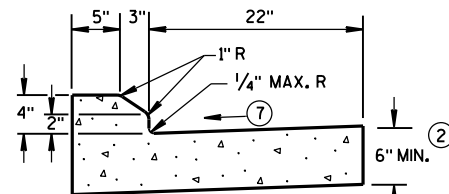
APPROVED
 Sep 1, 2016 /S/ Rodney Taylor
 DATE ROADWAY STANDARDS DEVELOPMENT
 FHWA UNIT SUPERVISOR



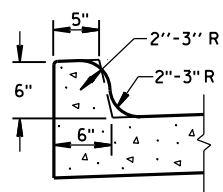
TYPES A^① & D



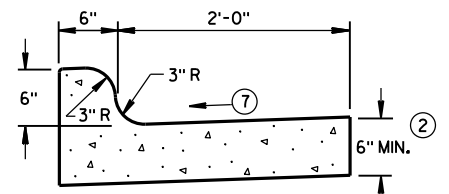
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

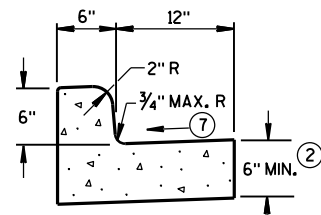


TYPES K^① & L
(OPTIONAL CURB SHAPE)



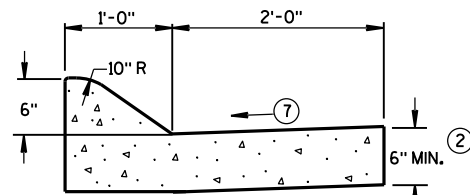
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

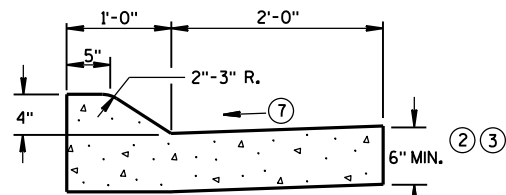


TYPES A^① & D

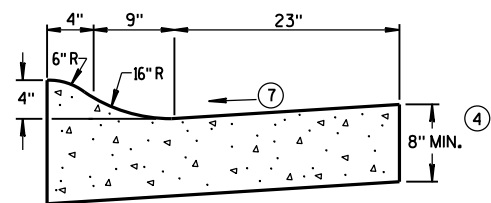
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

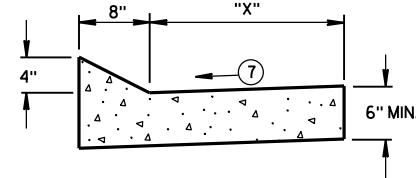


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

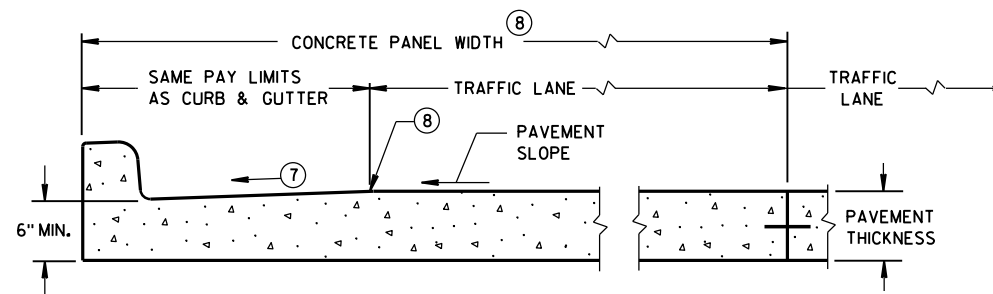
CONCRETE CURB & GUTTER 36"



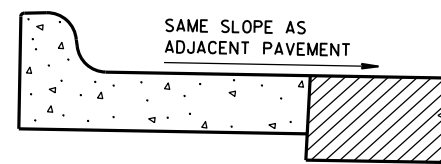
TYPES TBT & TBTT^①

CONCRETE CURB & GUTTER

TBT & TBTT	"X"
30"	22"
36"	28"



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

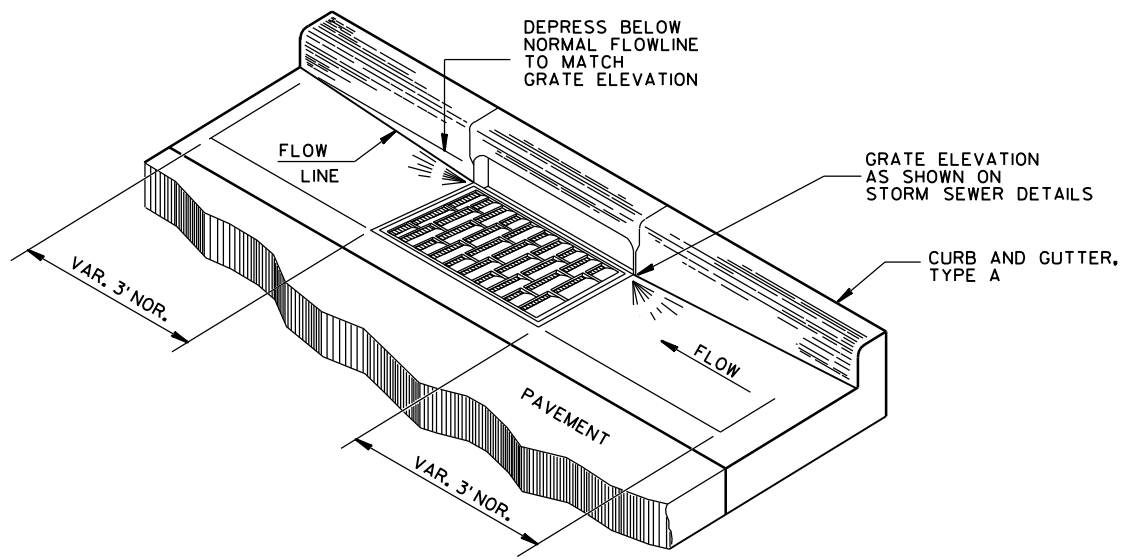
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'

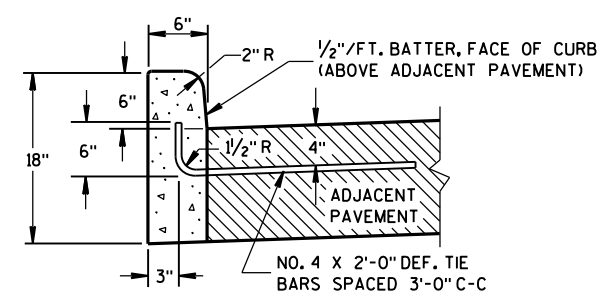
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

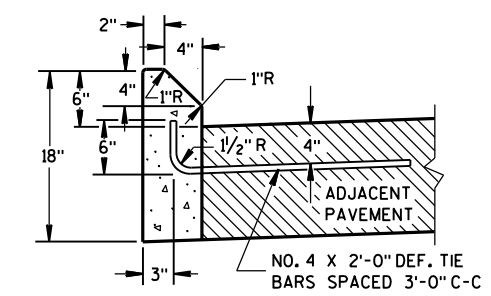
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL OF CURB AND GUTTER AT INLETS
(TYPE H INLET COVER SHOWN)



TYPES A^① & D

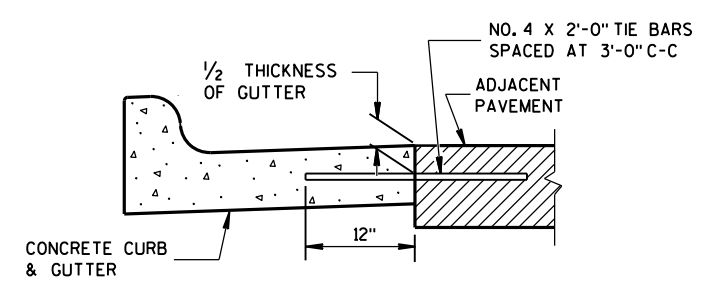


TYPES G^① & J

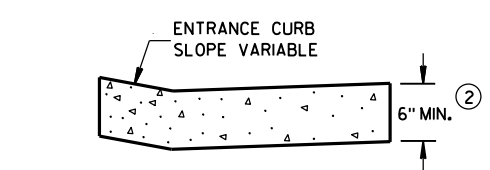
GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.
- PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.
- UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.
 - ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
 - ③ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

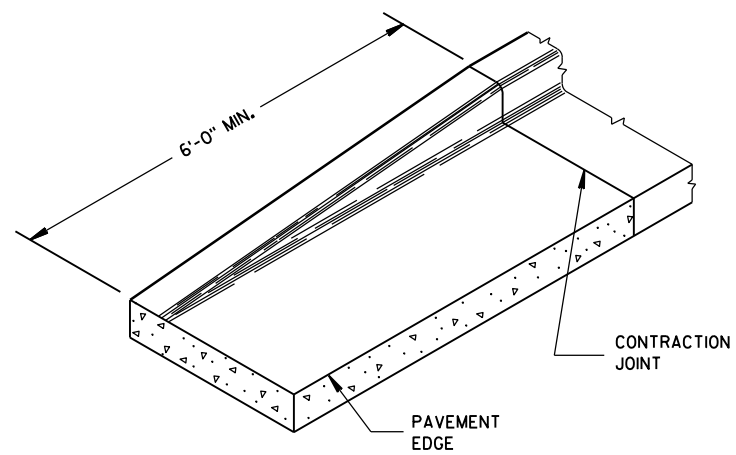
CONCRETE CURB



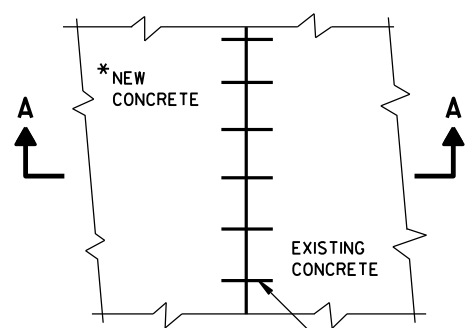
TYPICAL TIE BAR LOCATION^①



DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)



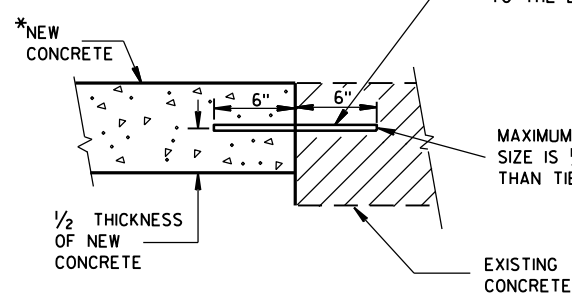
END SECTION CURB & GUTTER



PLAN VIEW

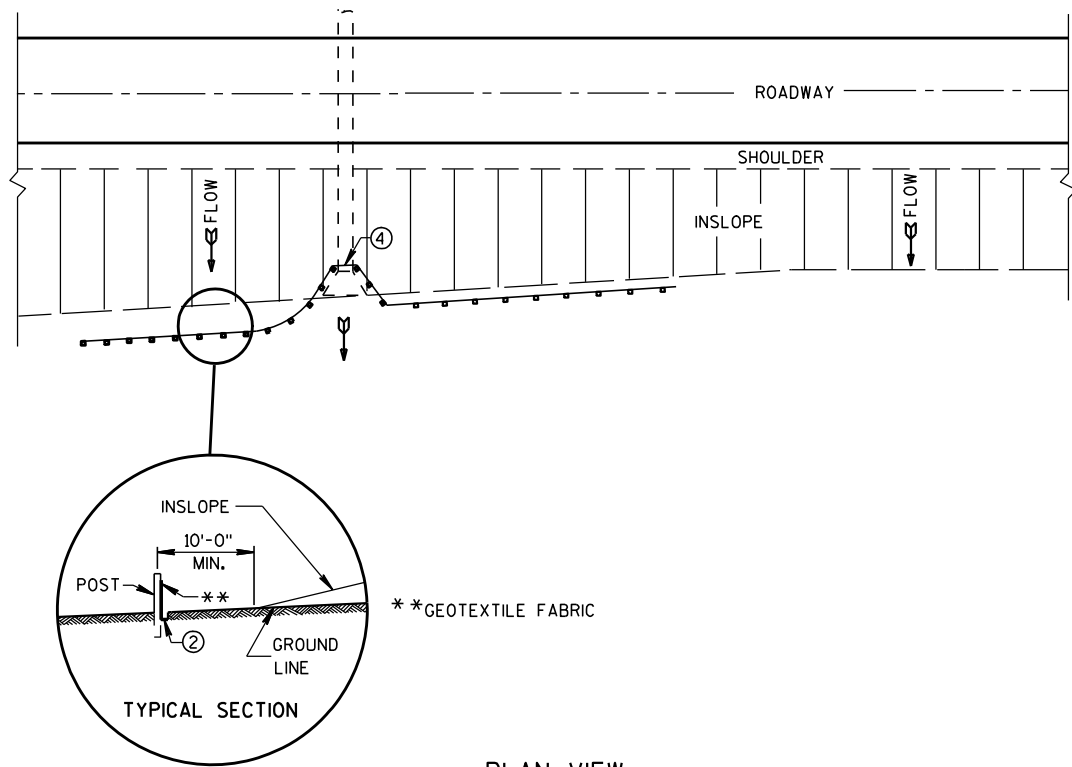
* NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.

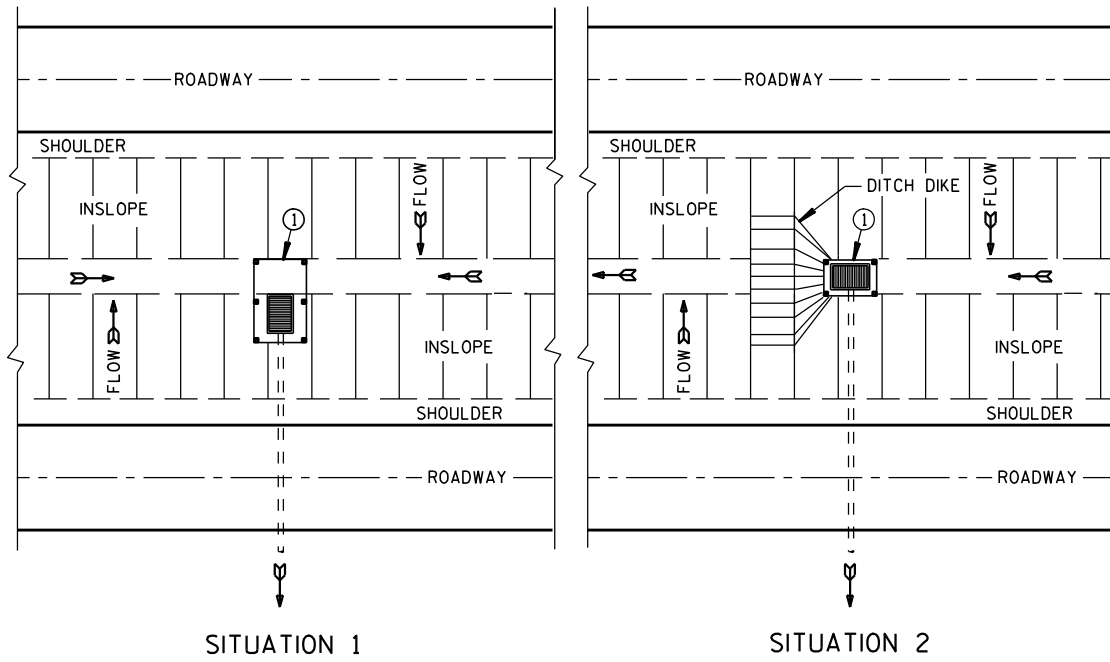


SECTION A-A
TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2017 DATE	/s/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

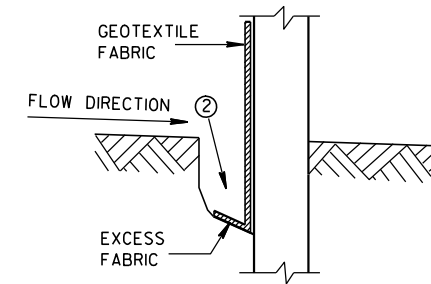


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

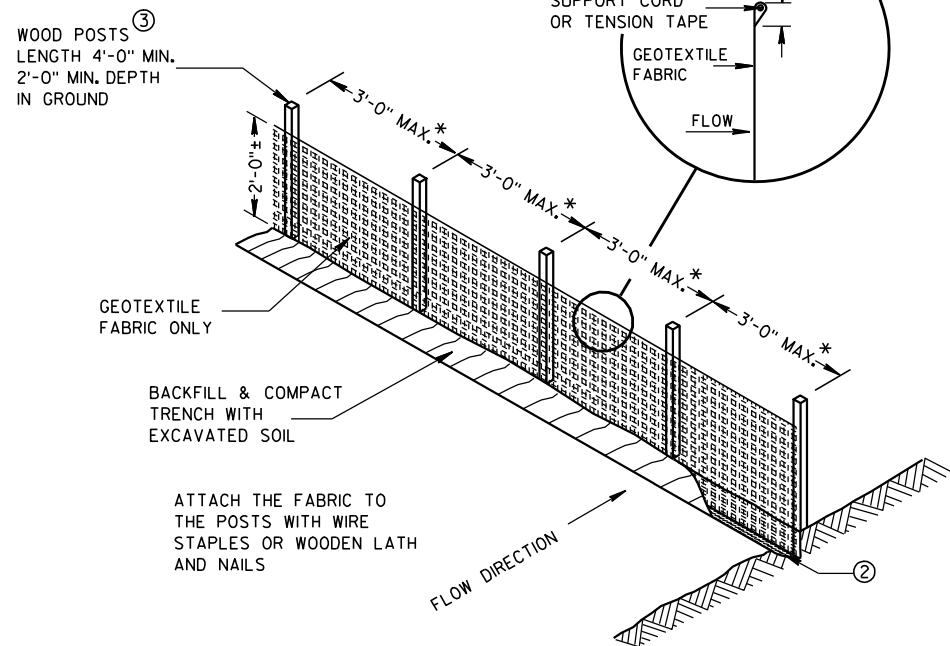
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



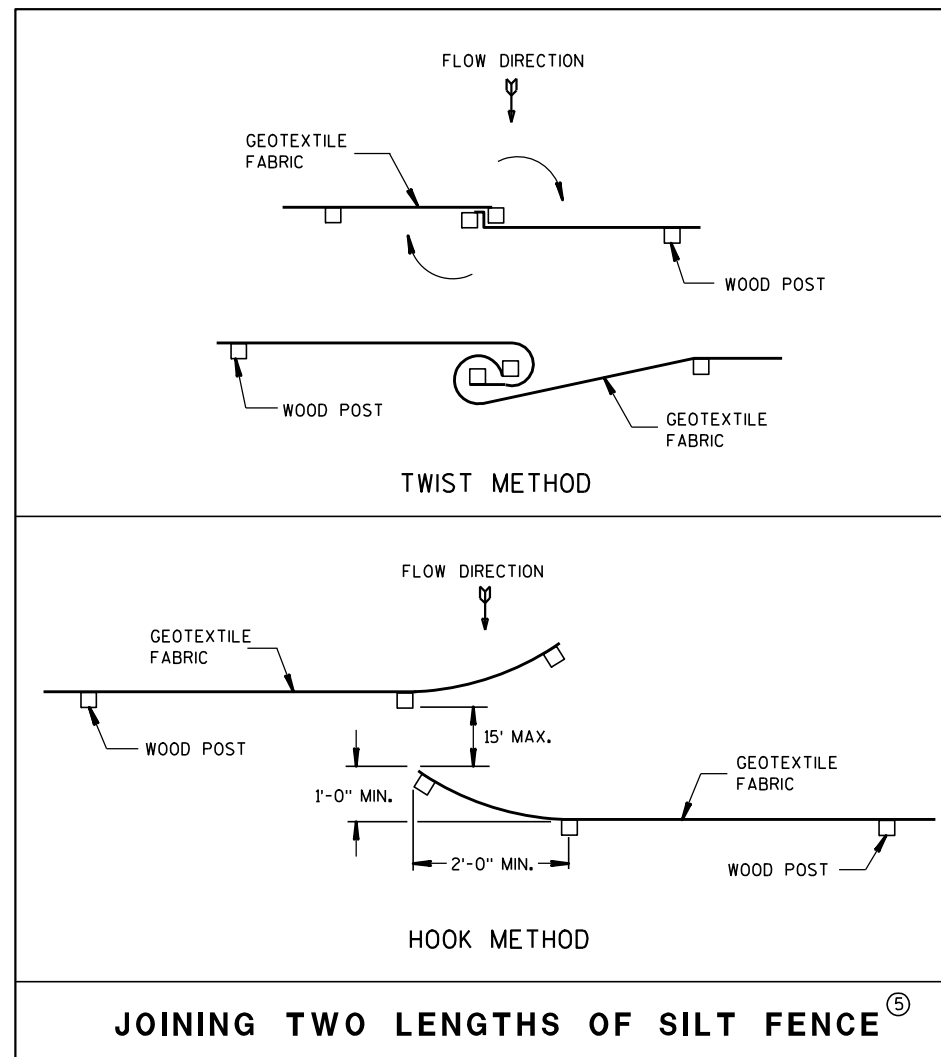
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

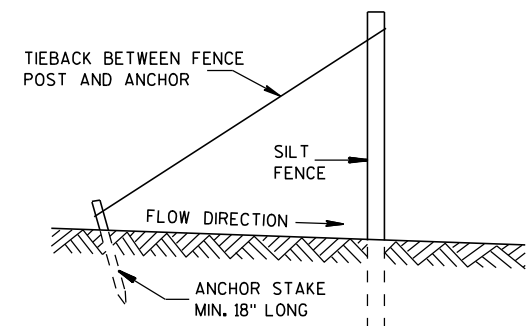


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤

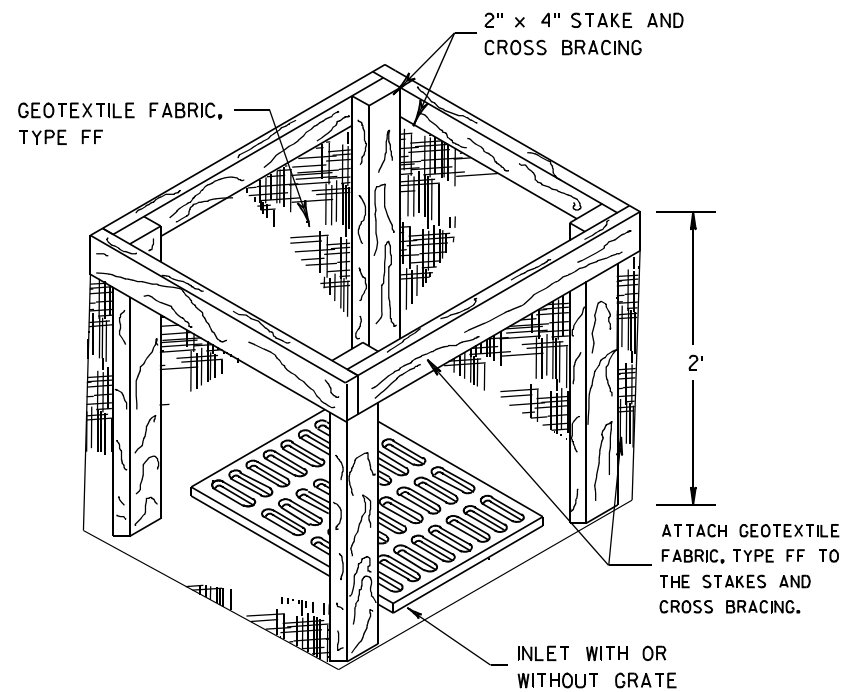
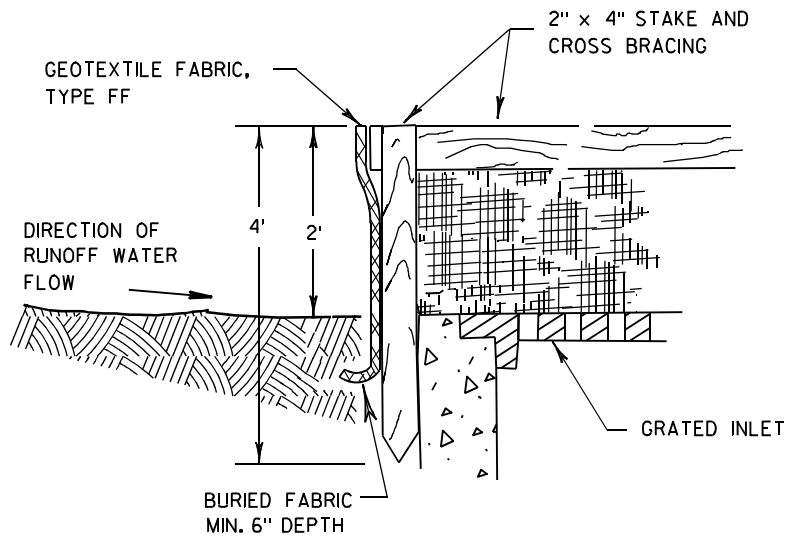


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Canestra
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



INLET PROTECTION, TYPE A

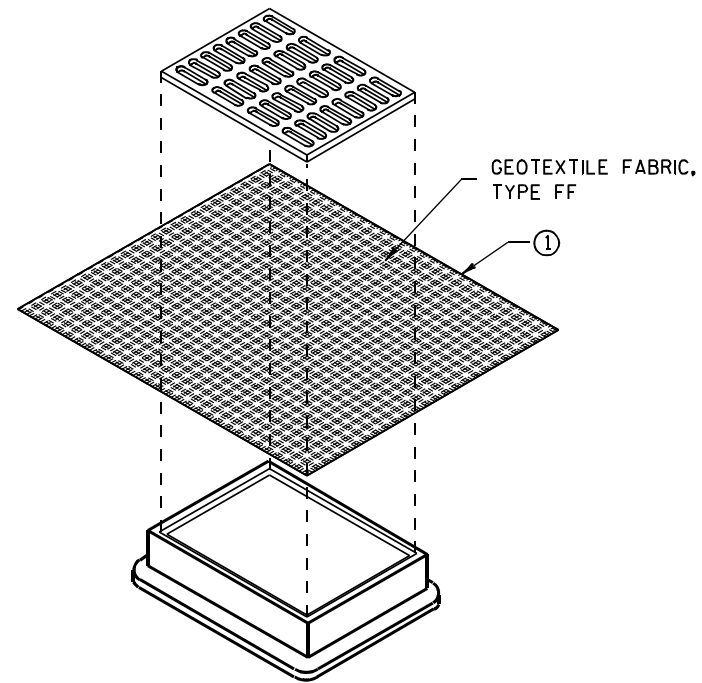
GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

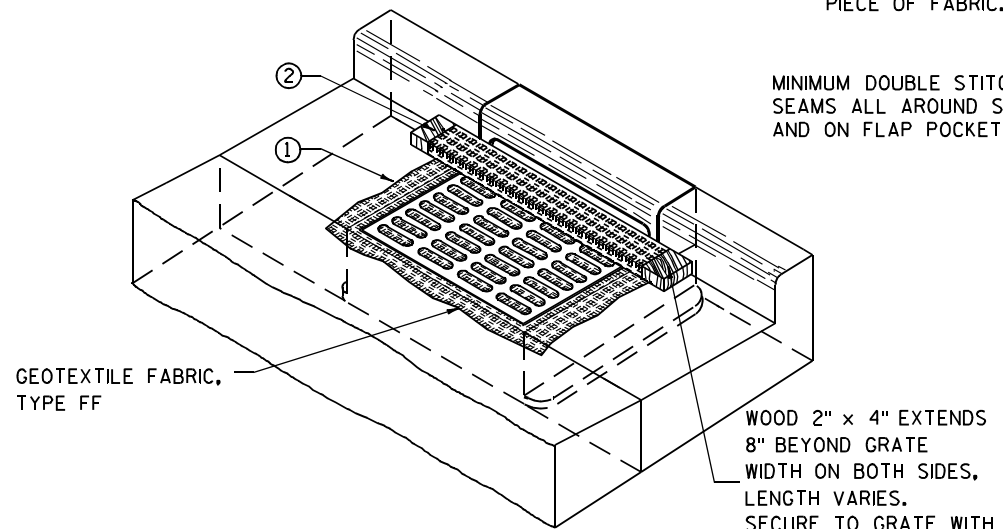
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

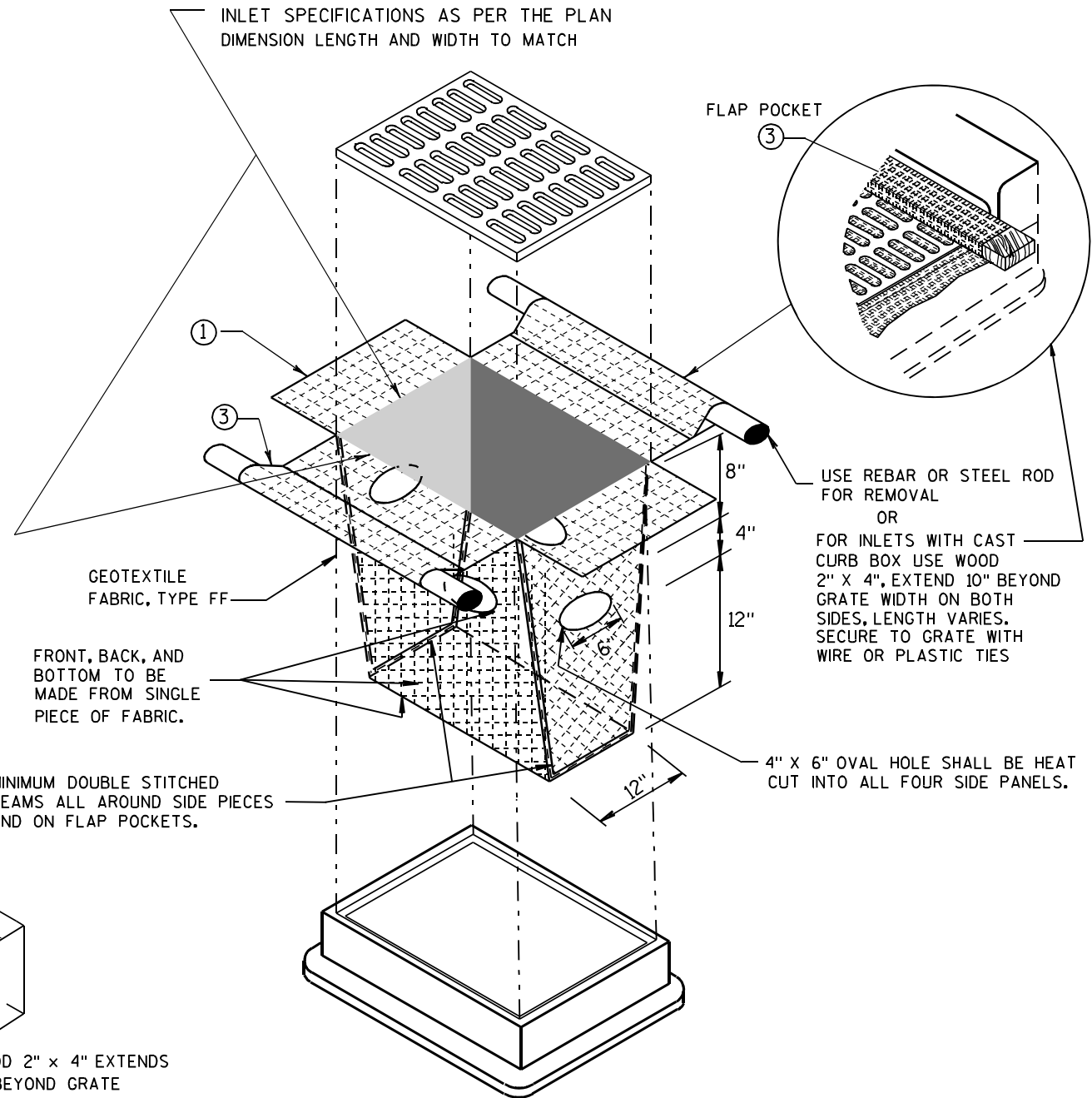
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

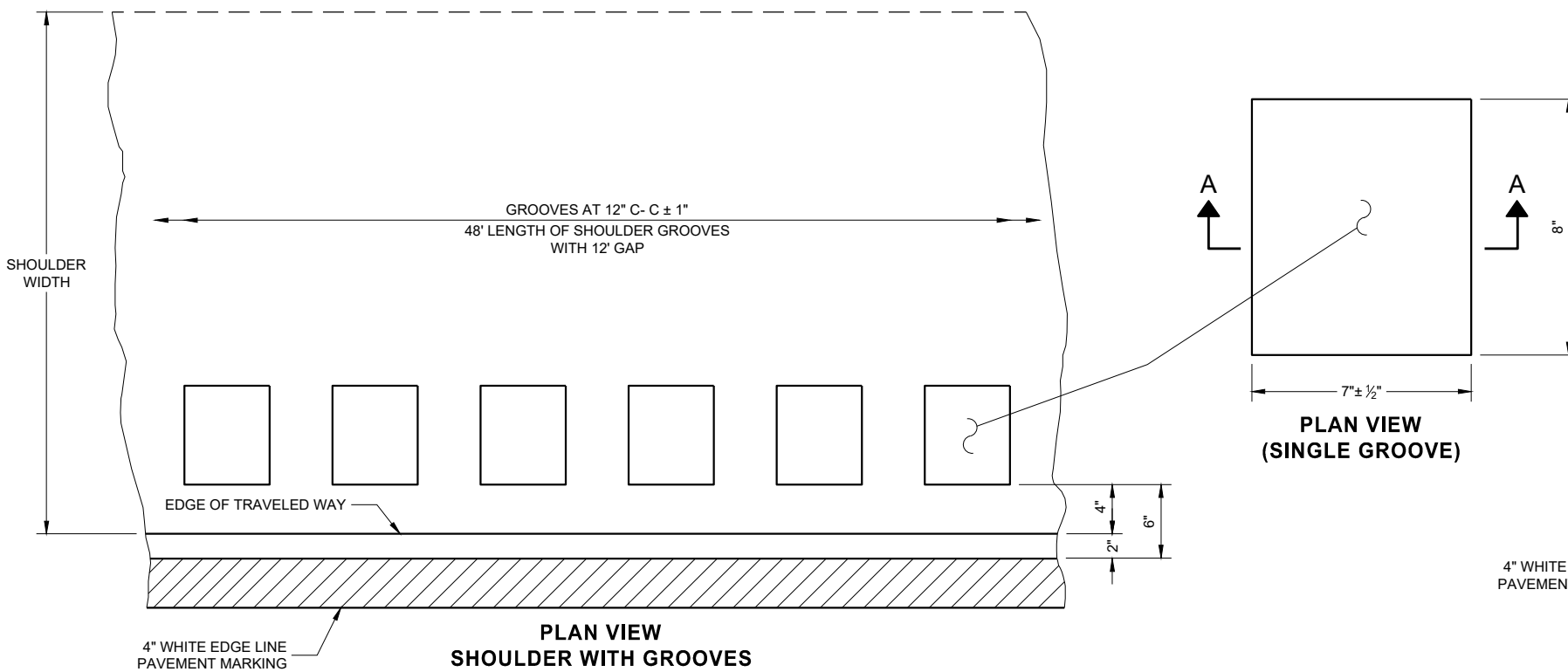
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

INLET PROTECTION TYPE A, B, C, AND D	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/s/ Beth Connestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



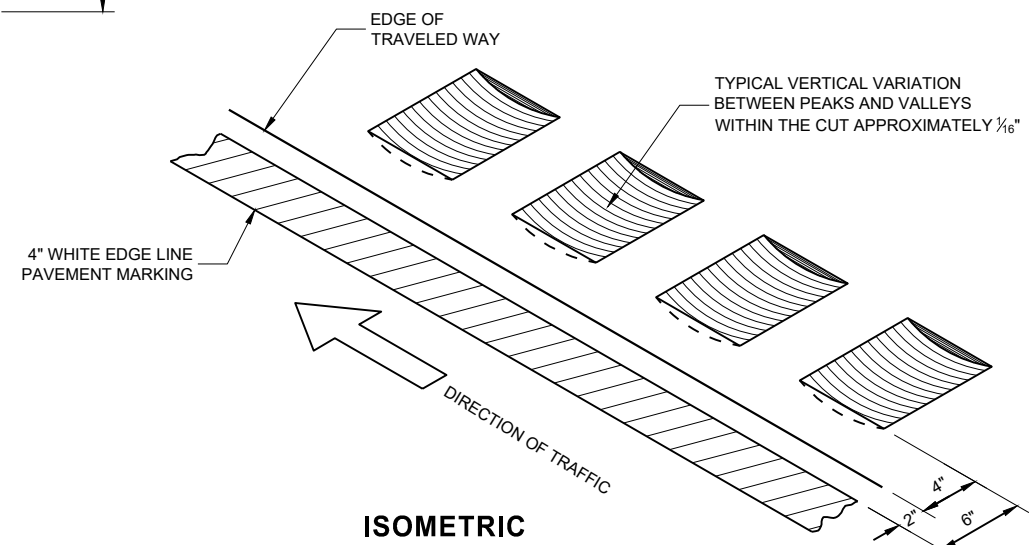
PLAN VIEW SHOULDER WITH GROOVES
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

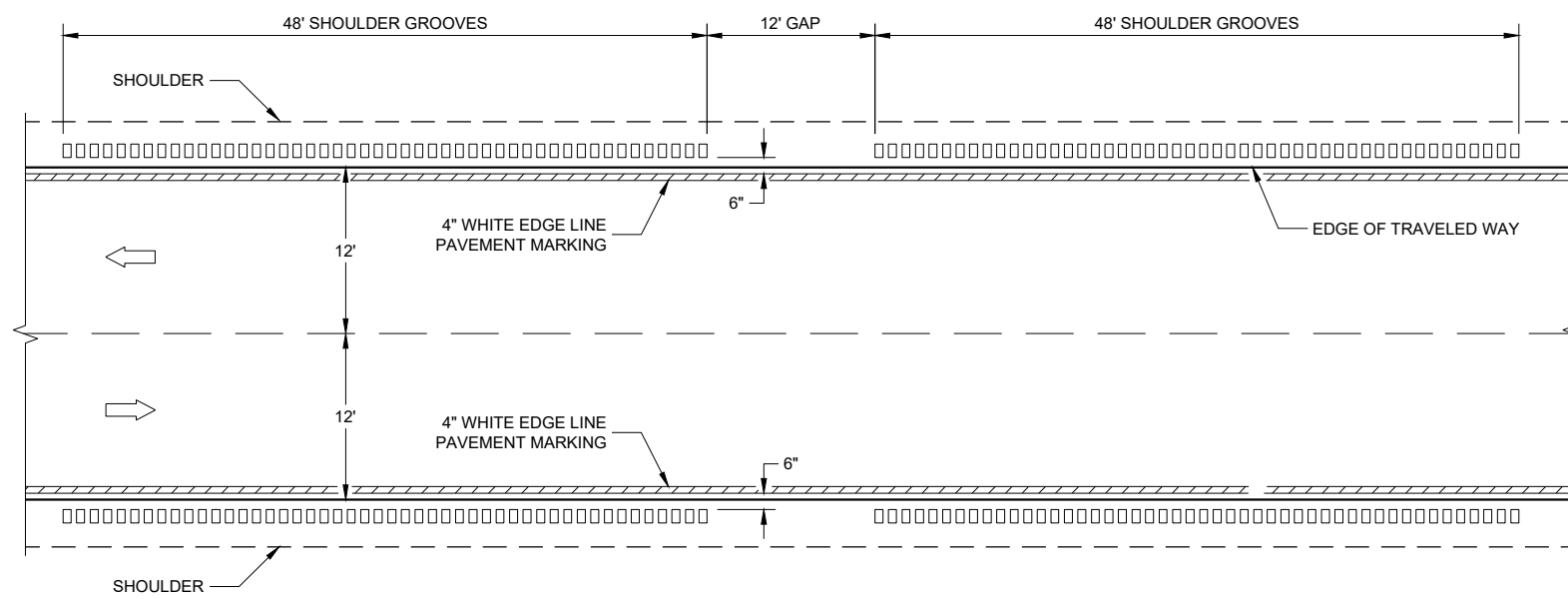
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

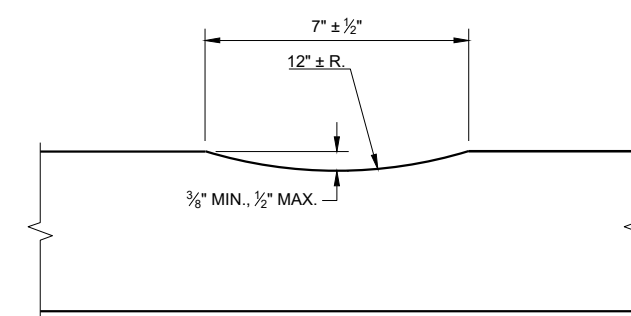
- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



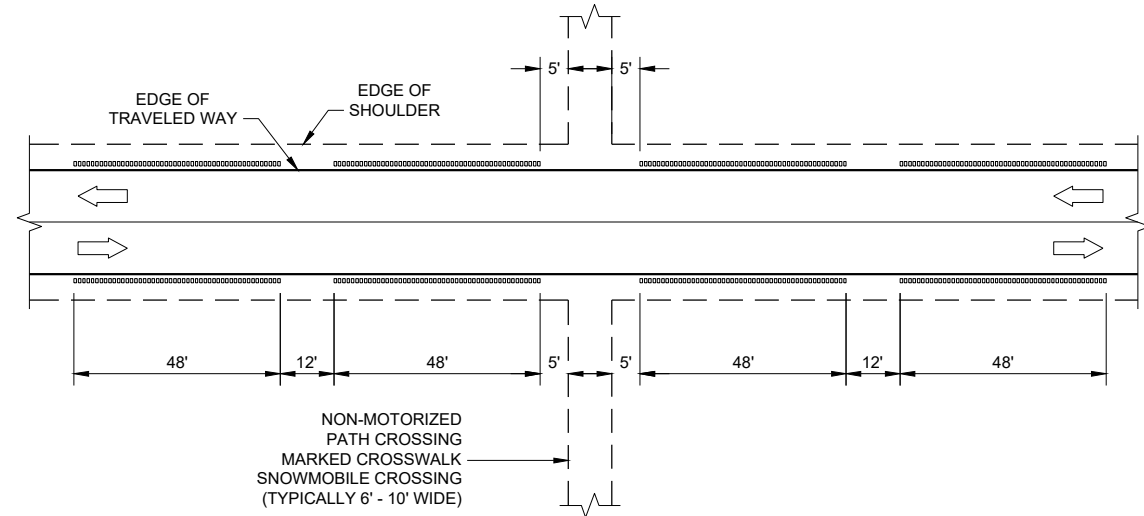
TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



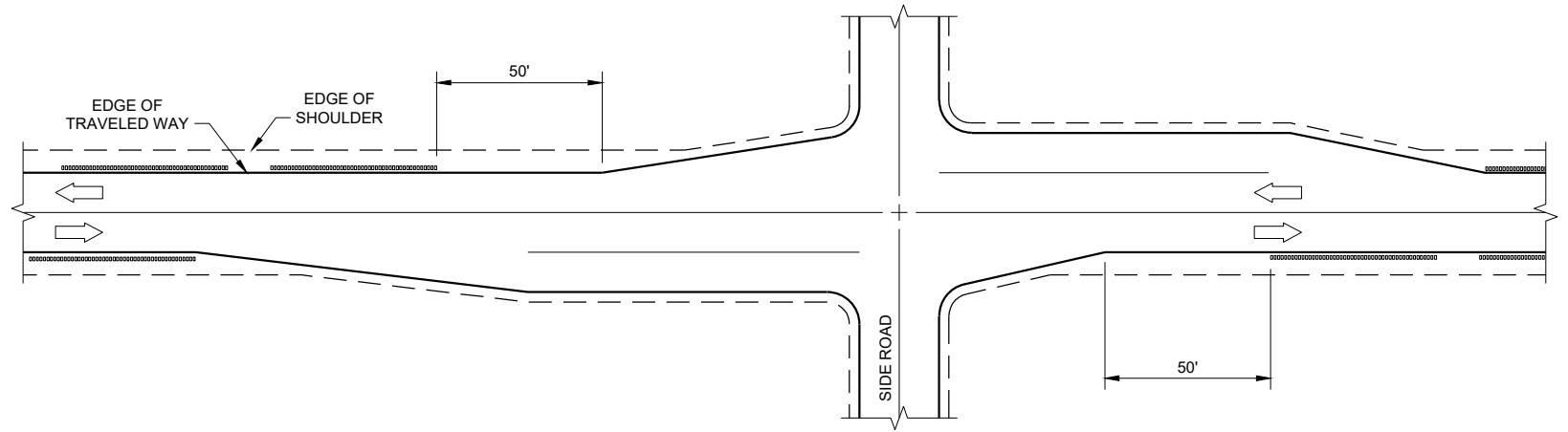
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

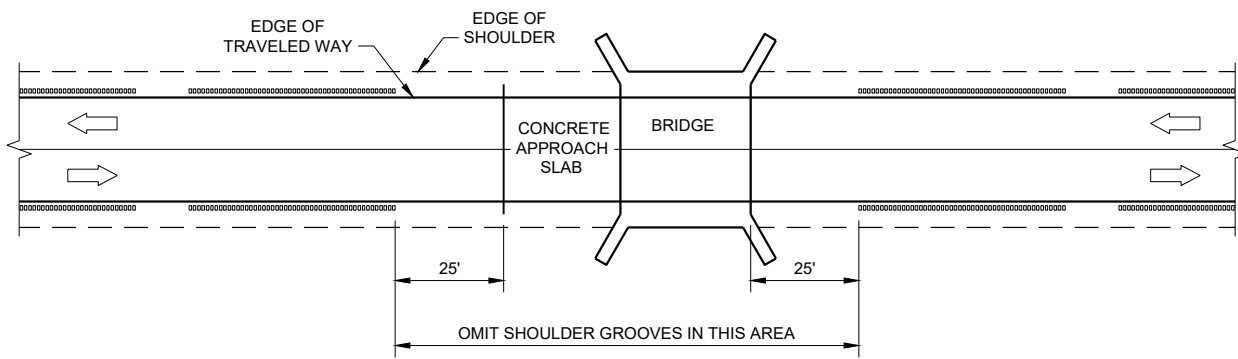
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



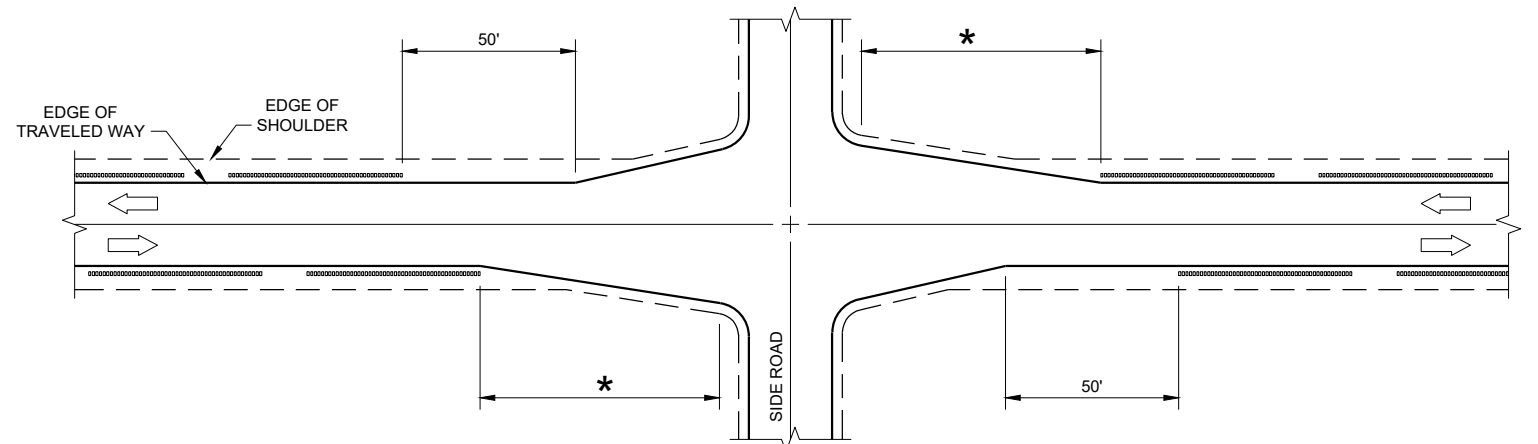
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

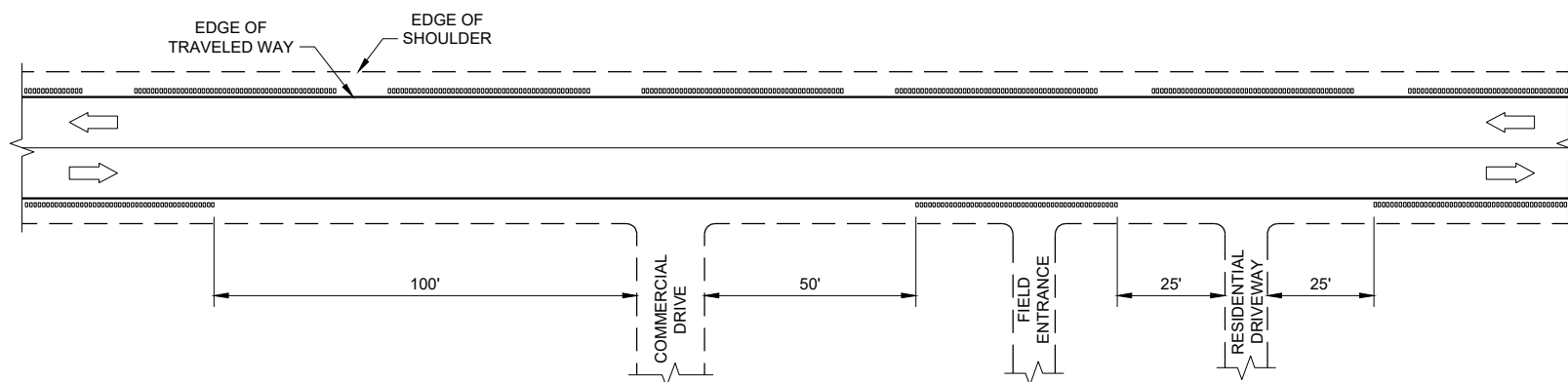


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



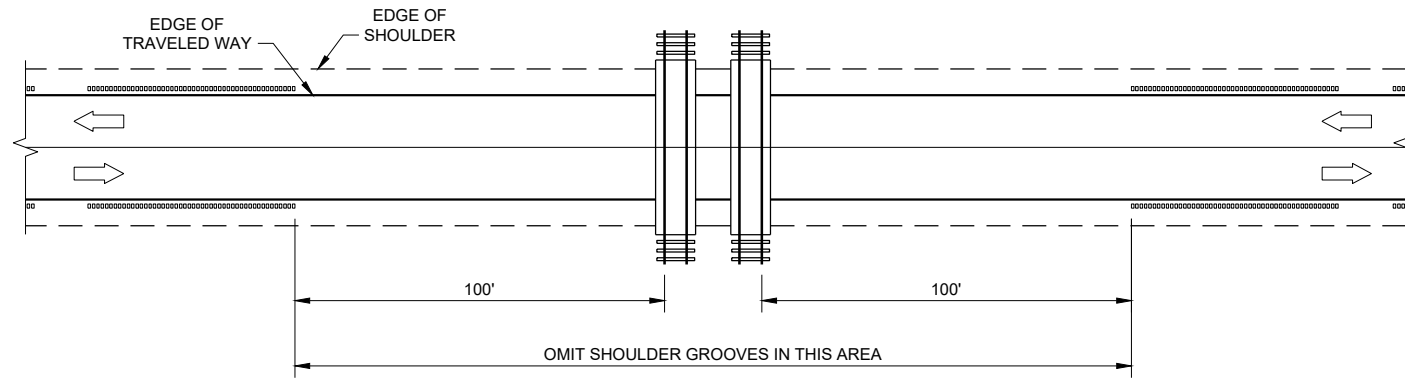
SHOULDER GROOVES AT DRIVEWAYS^①

GENERAL NOTES

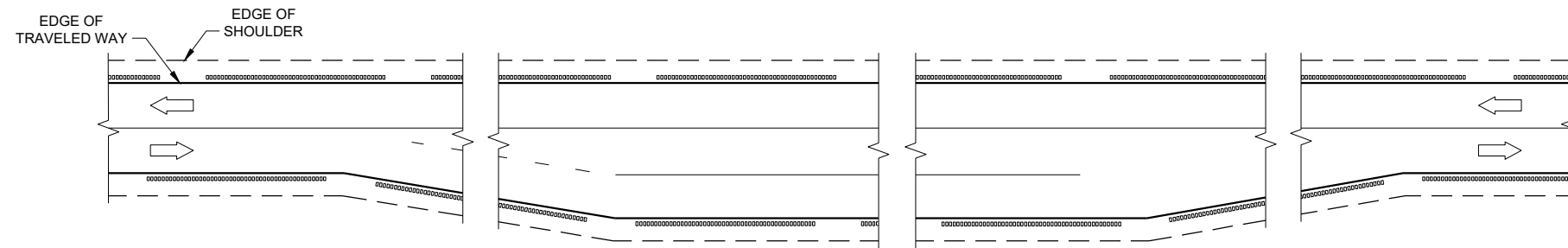
- ① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

**2-LANE RURAL SHOULDER
RUMBLE STRIP, MILLING**

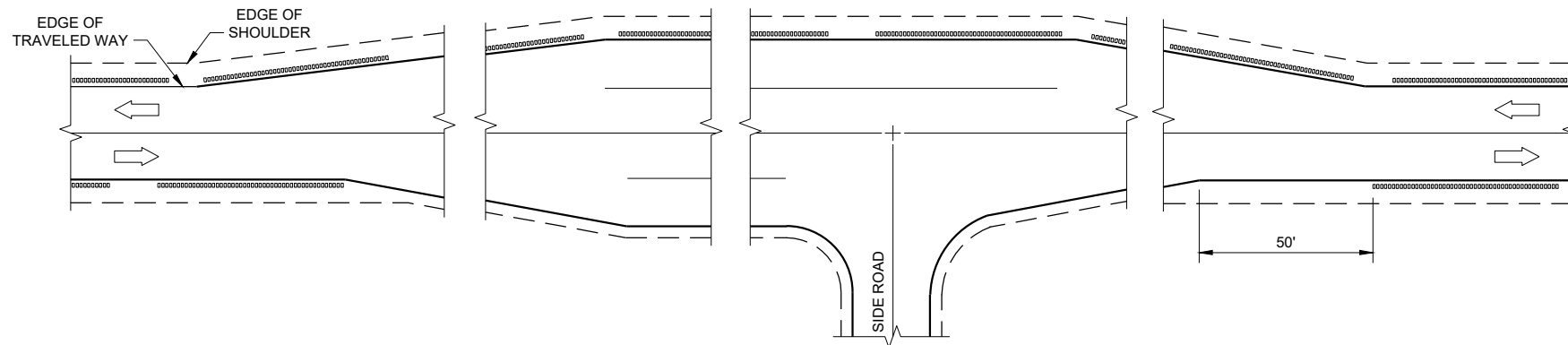
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

**2-LANE RURAL SHOULDER
RUMBLE STRIP, MILLING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

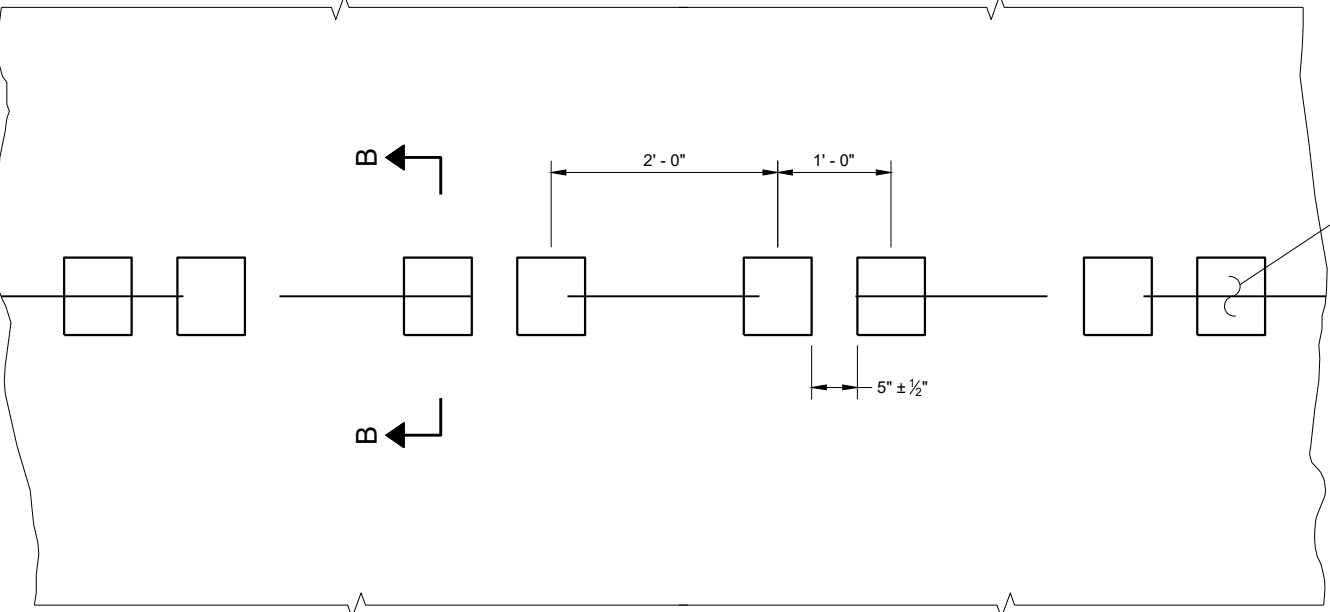
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

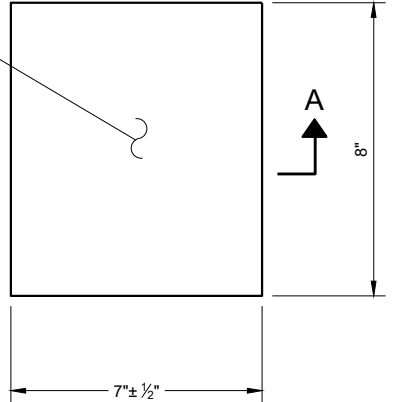
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

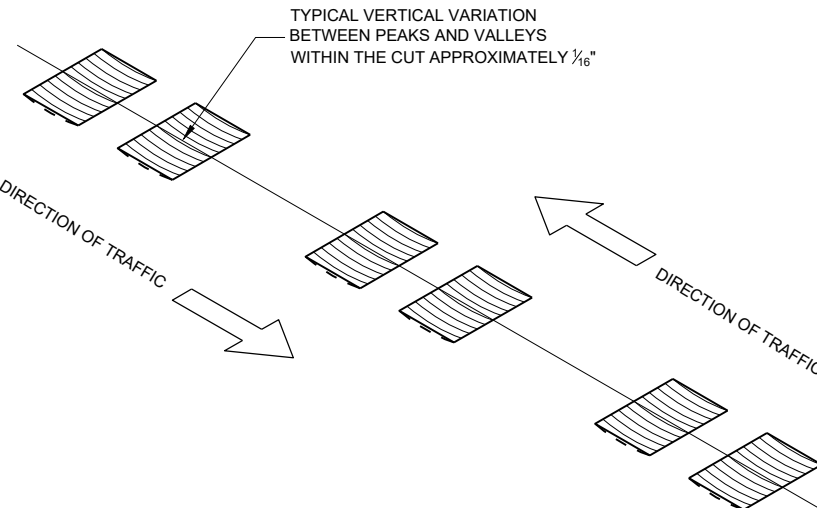
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



**PLAN VIEW
SHOULDER WITH GROOVES**

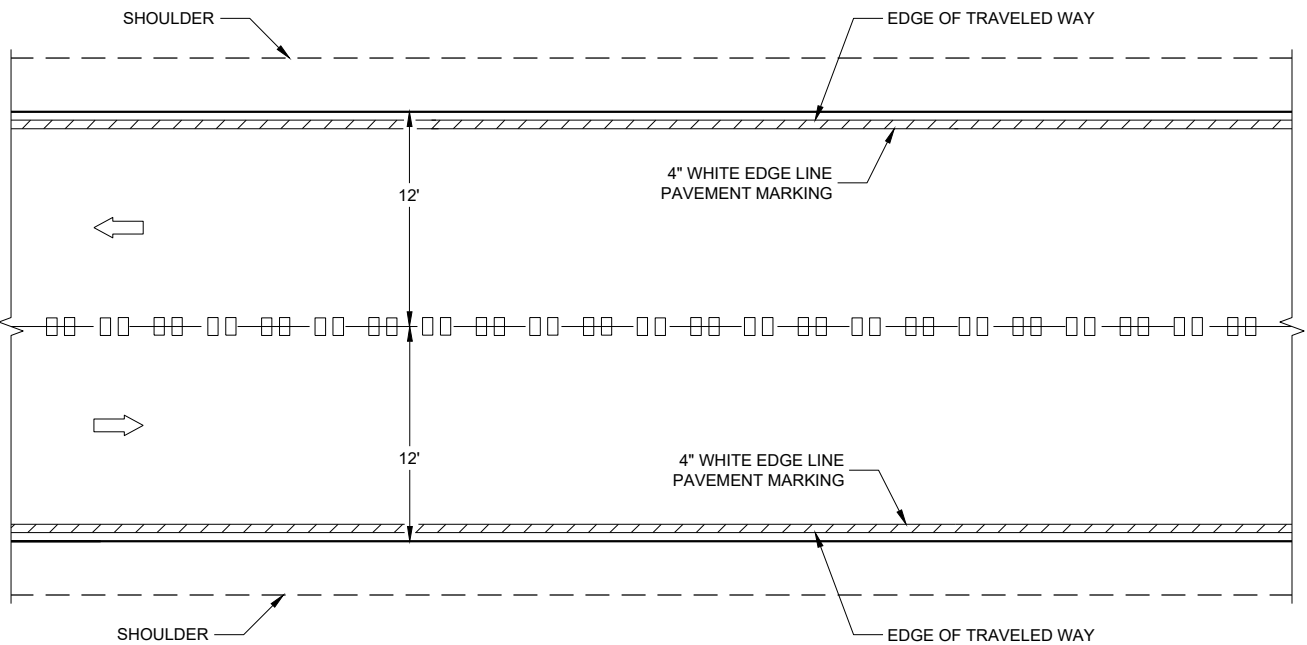


**PLAN VIEW
(SINGLE GROOVE)**

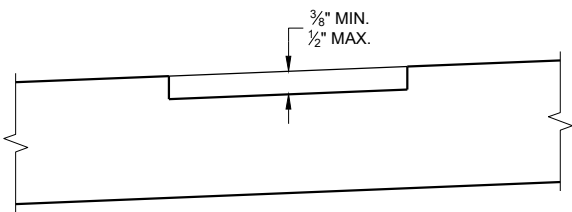


ISOMETRIC

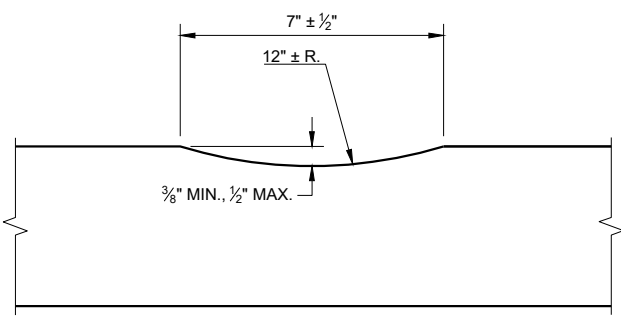
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



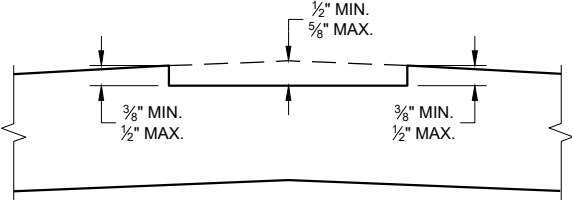
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



**SECTION B - B
SUPERELEVATED ROADWAY**



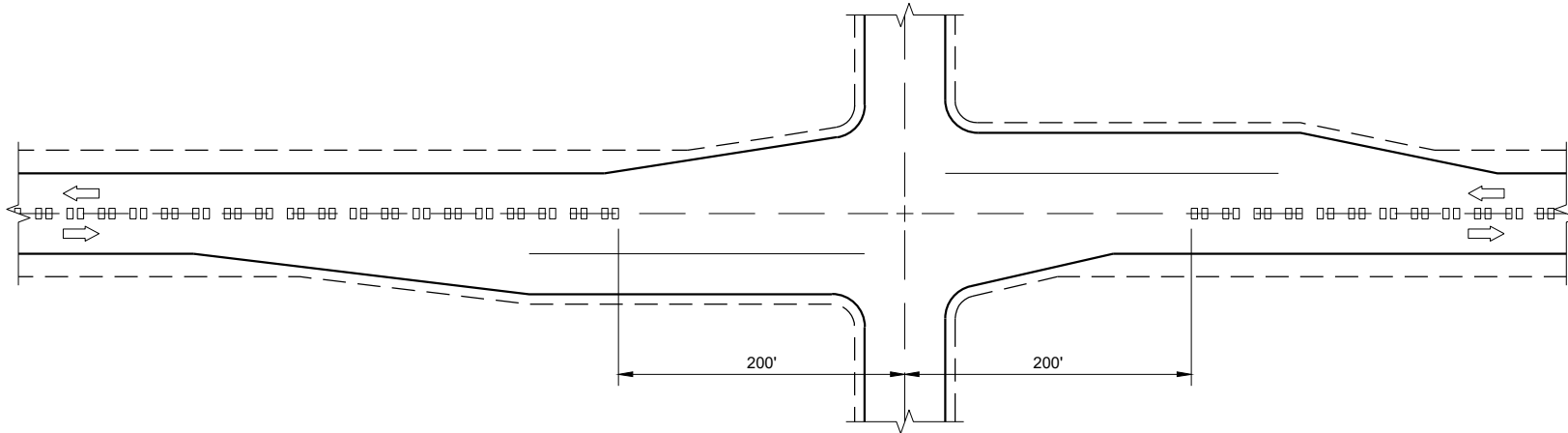
SECTION A - A



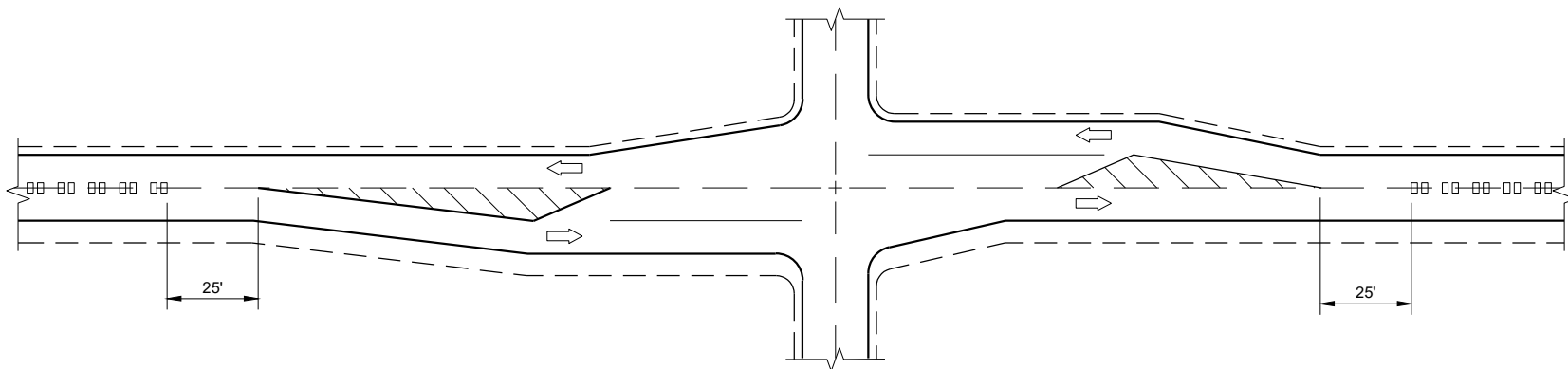
**SECTION B - B
CROWNED ROADWAY**

**2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING**

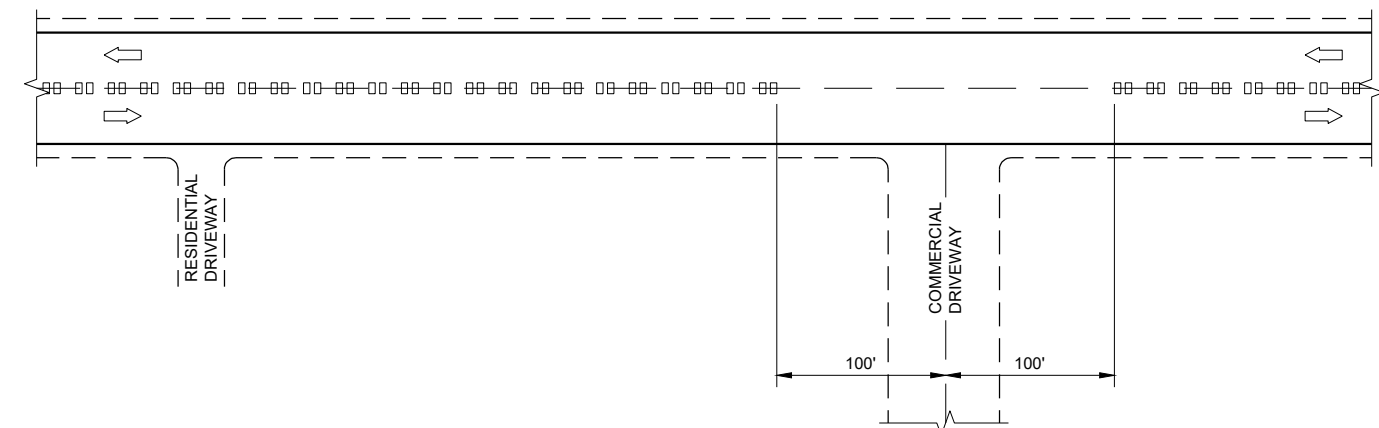
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



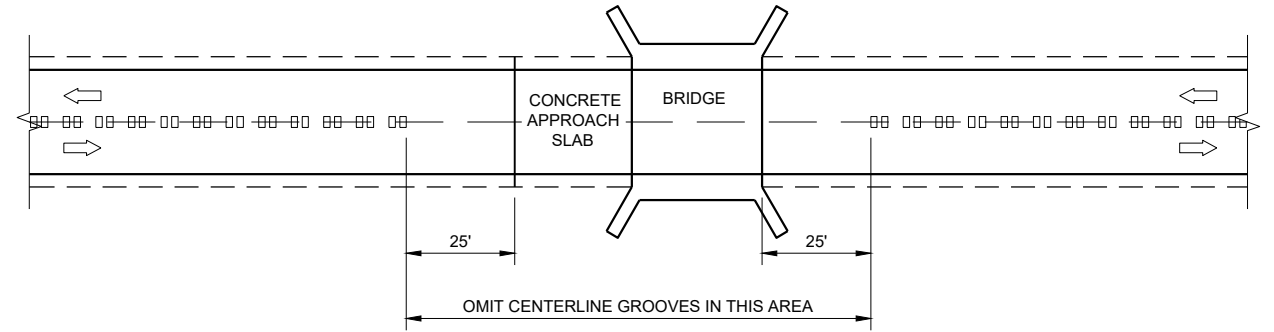
**CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)**



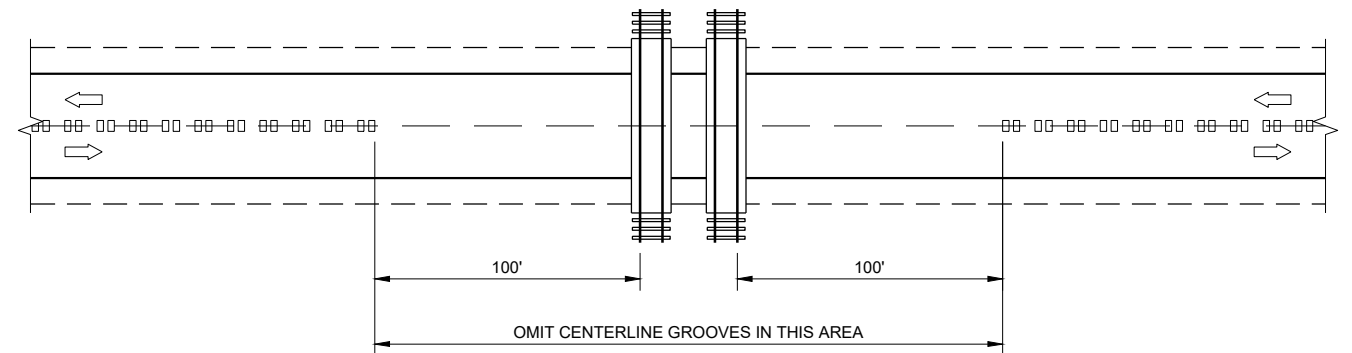
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

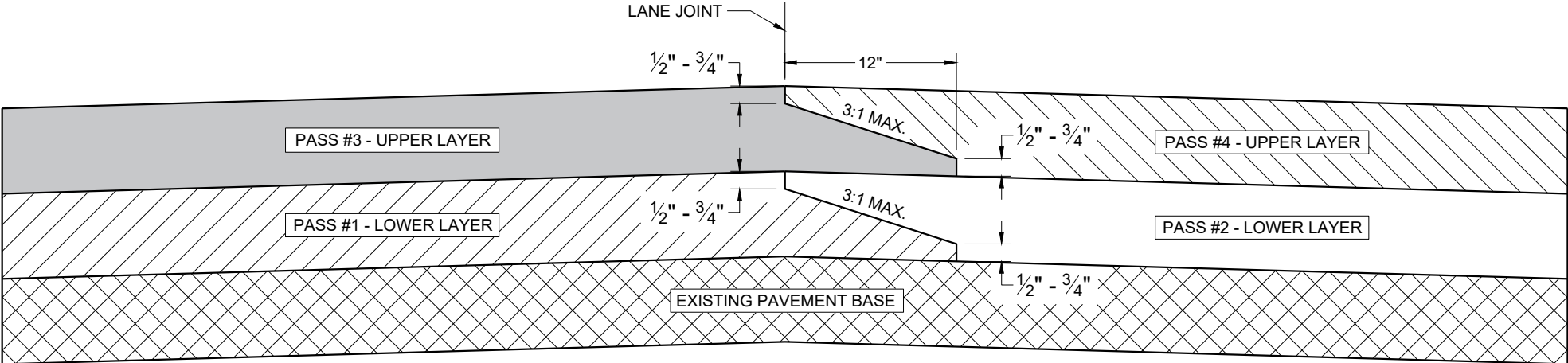
6

6

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 7/2018	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

GENERAL NOTES

CONFORM TO STANDARD SPECIFICATION 450.3.2.8



**TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINTS**

6

6

SDD 13C19 - 01

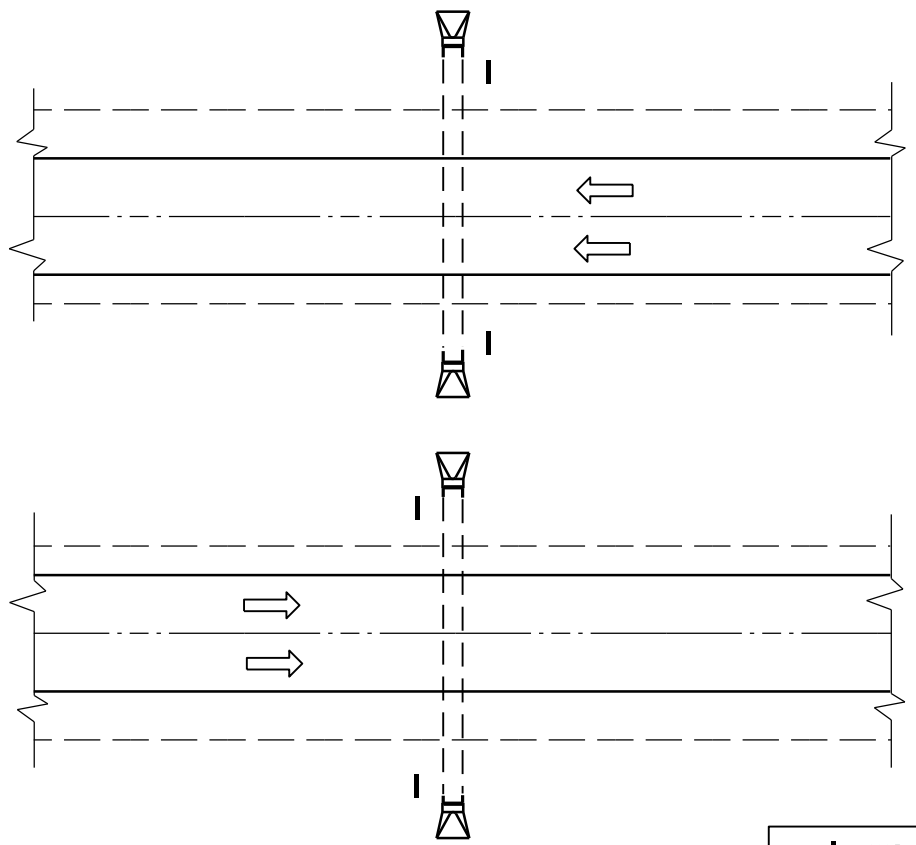
SDD 13C19 - 01

HMA LONGITUDINAL JOINTS

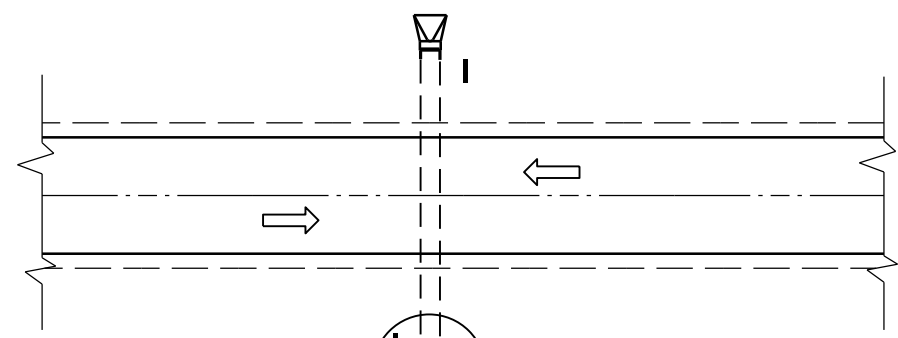
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER

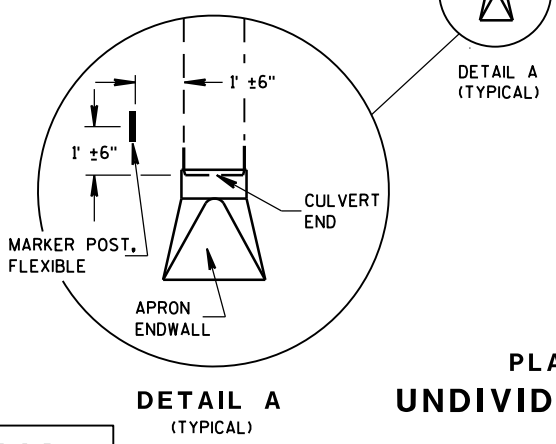
FHWA



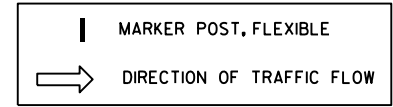
PLAN VIEW
DIVIDED HIGHWAY



PLAN VIEW
UNDIVIDED HIGHWAY

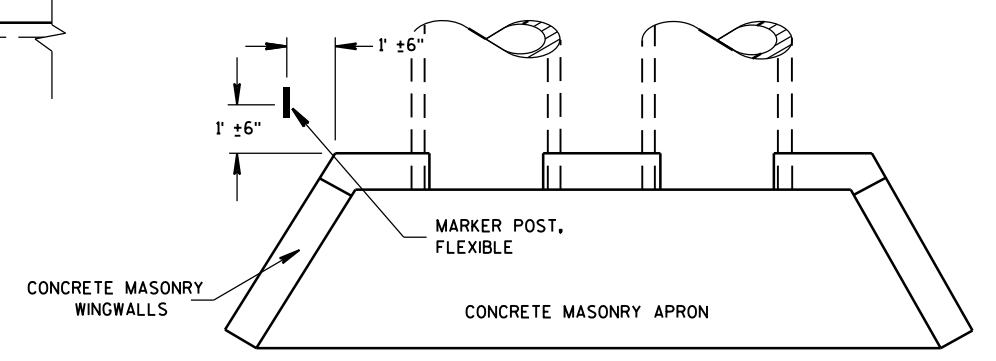


DETAIL A
(TYPICAL)



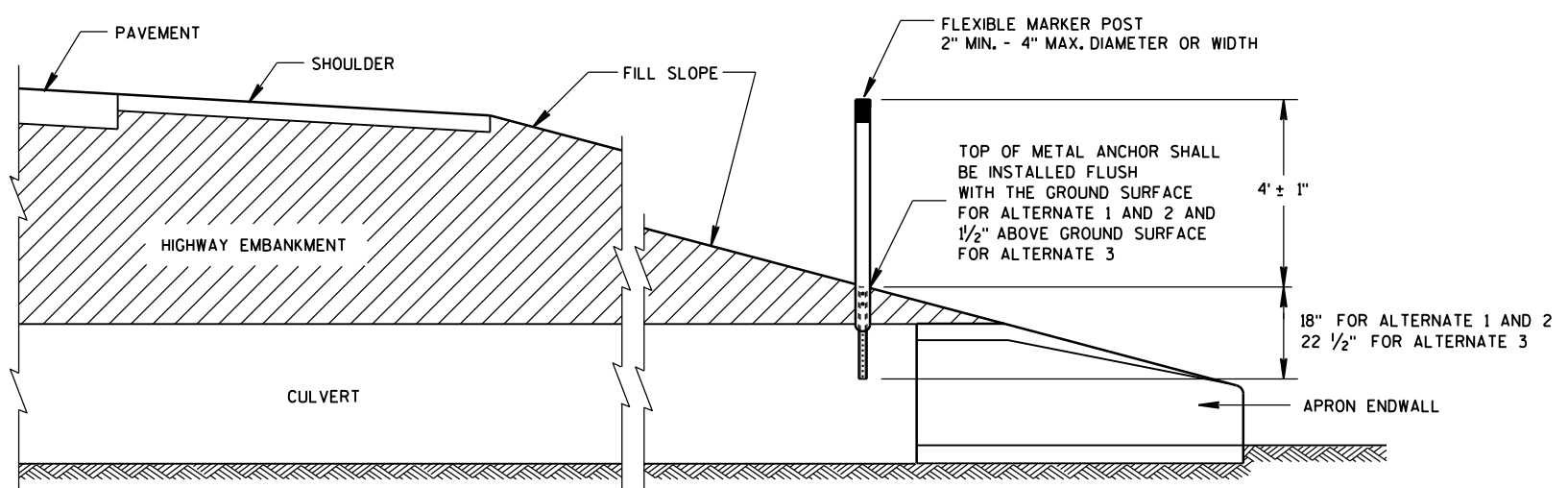
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION
FLEXIBLE MARKER POST

**FLEXIBLE MARKER POST
FOR CULVERT END**

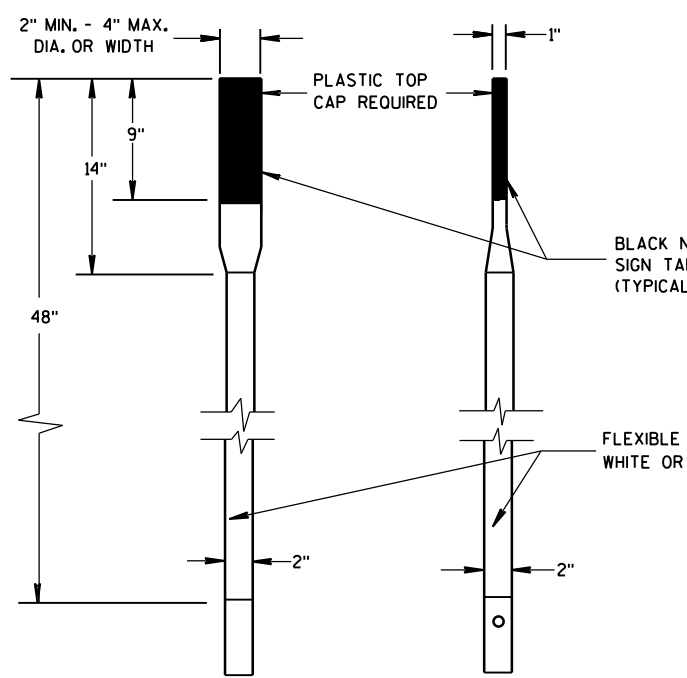
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

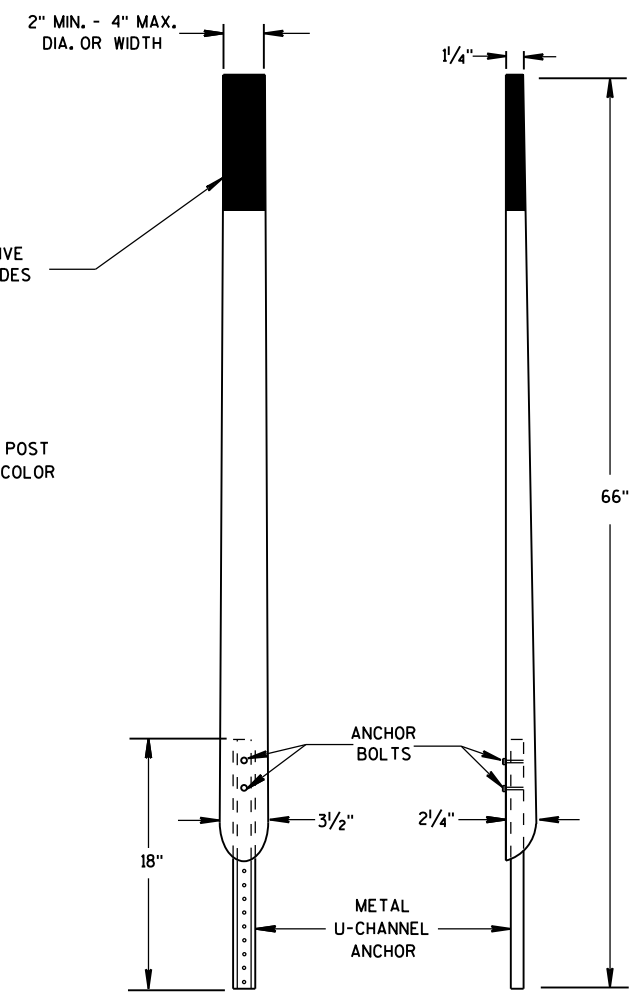
6

S.D.D. 15 A 3-2a

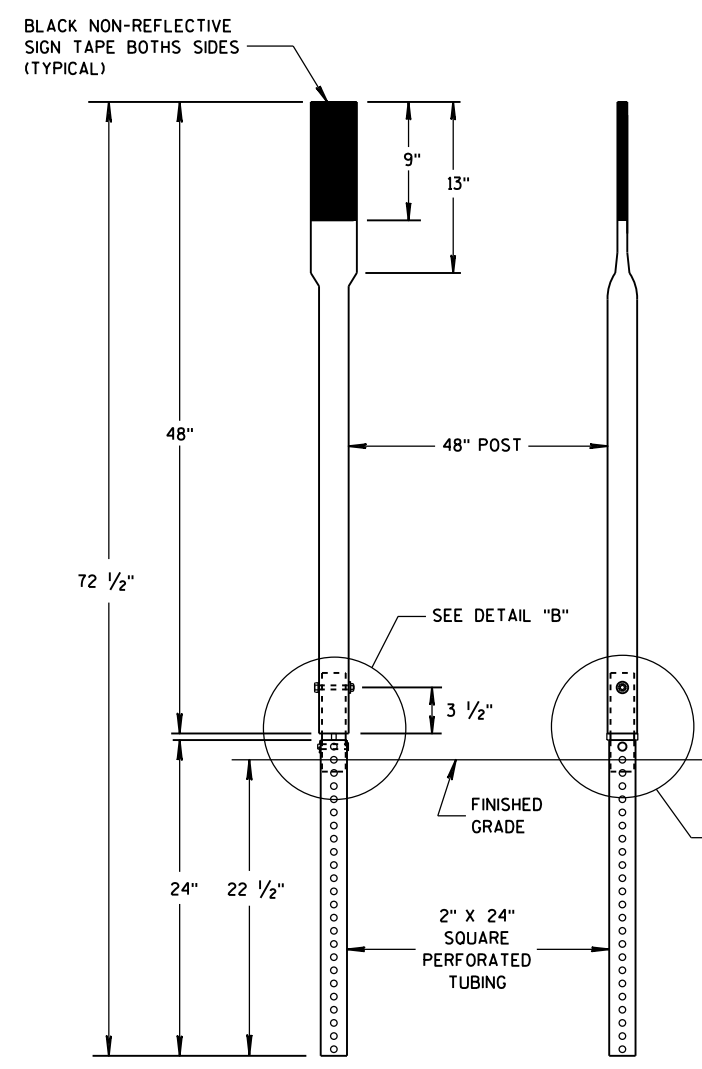
S.D.D. 15 A 3-2a



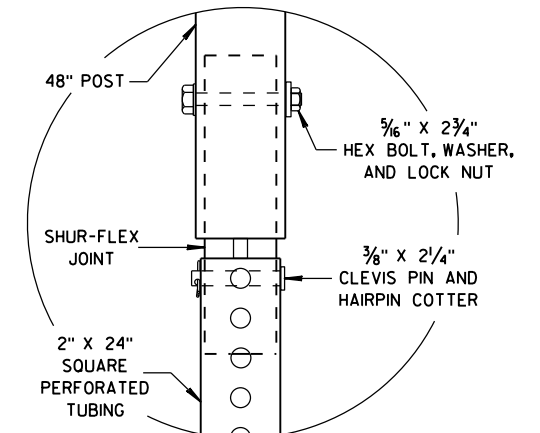
FRONT VIEW SIDE VIEW
ALTERNATE 1



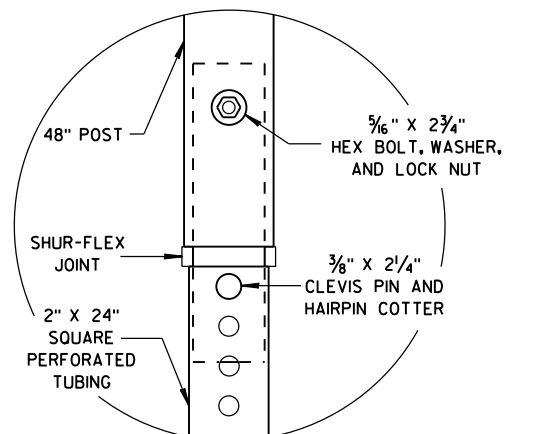
FRONT VIEW SIDE VIEW
ALTERNATE 2



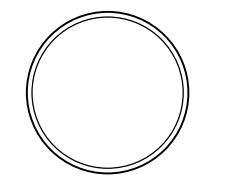
FRONT VIEW SIDE VIEW
ALTERNATE 3



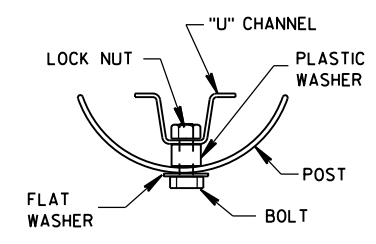
DETAIL B



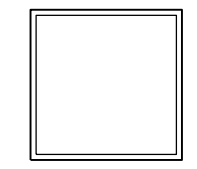
DETAIL C



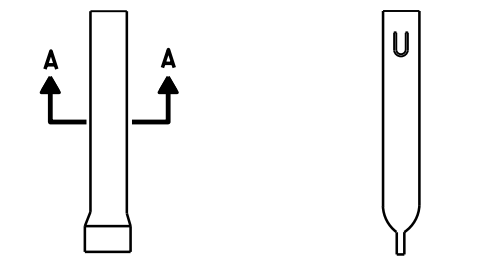
SECTION A-A



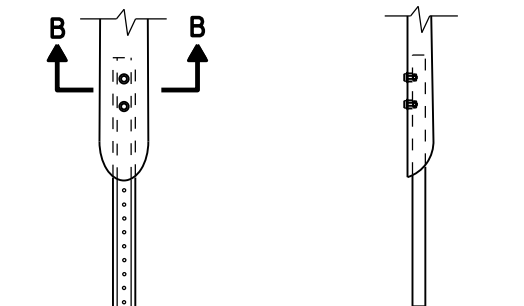
SECTION B-B



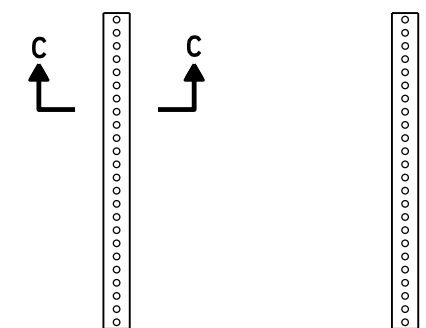
SECTION C-C



FRONT VIEW SIDE VIEW
ALTERNATE 1



FRONT VIEW SIDE VIEW
ALTERNATE 2



FRONT VIEW SIDE VIEW
ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

GENERAL NOTES

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

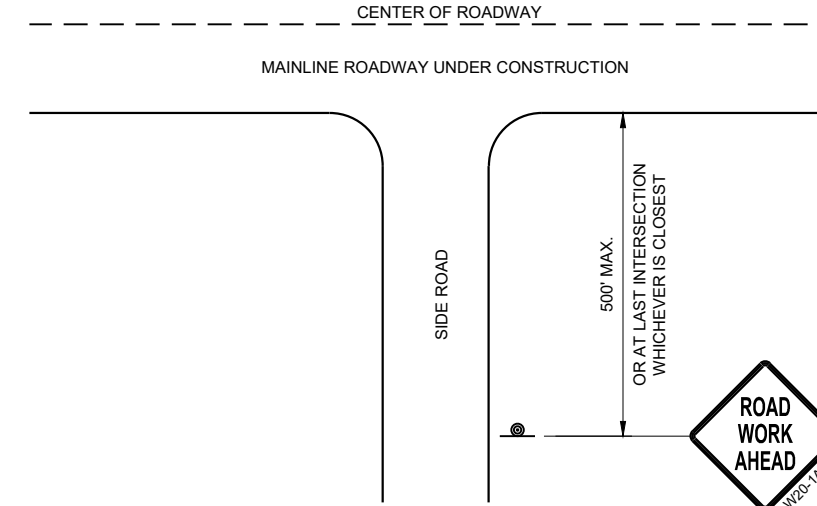
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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.

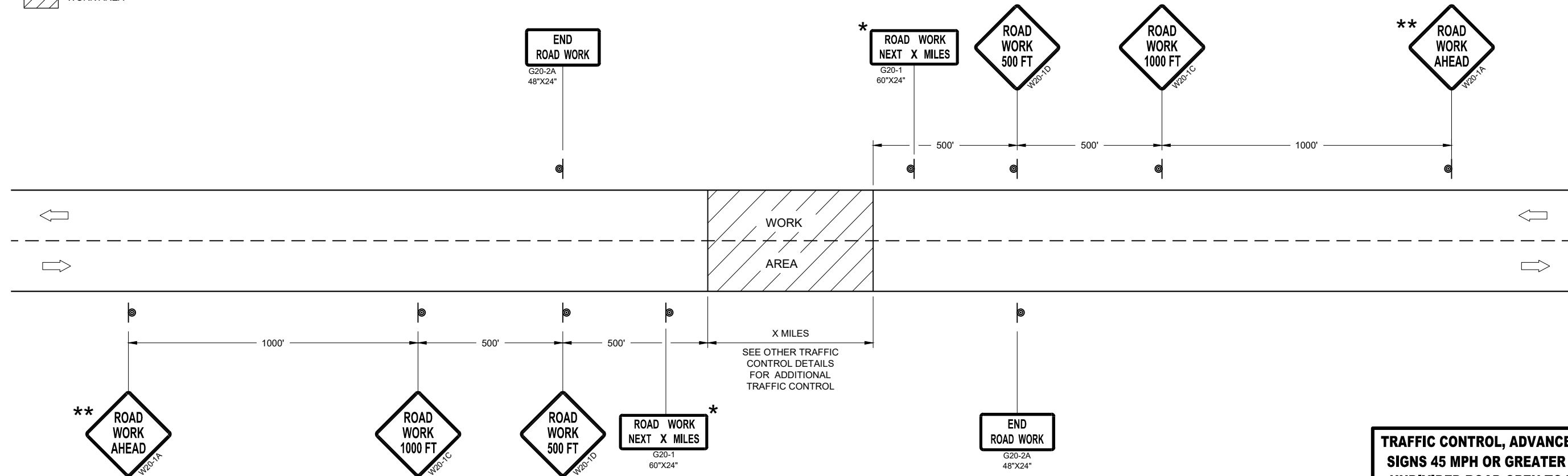
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

GENERAL NOTES

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

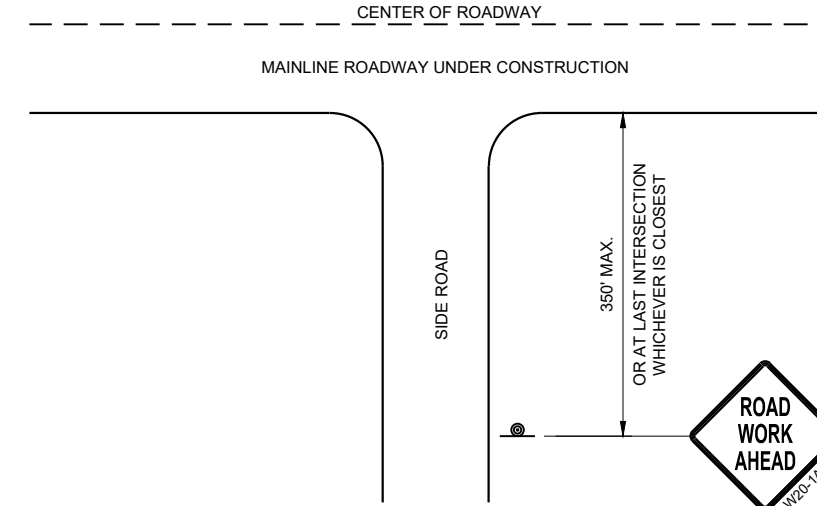
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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.

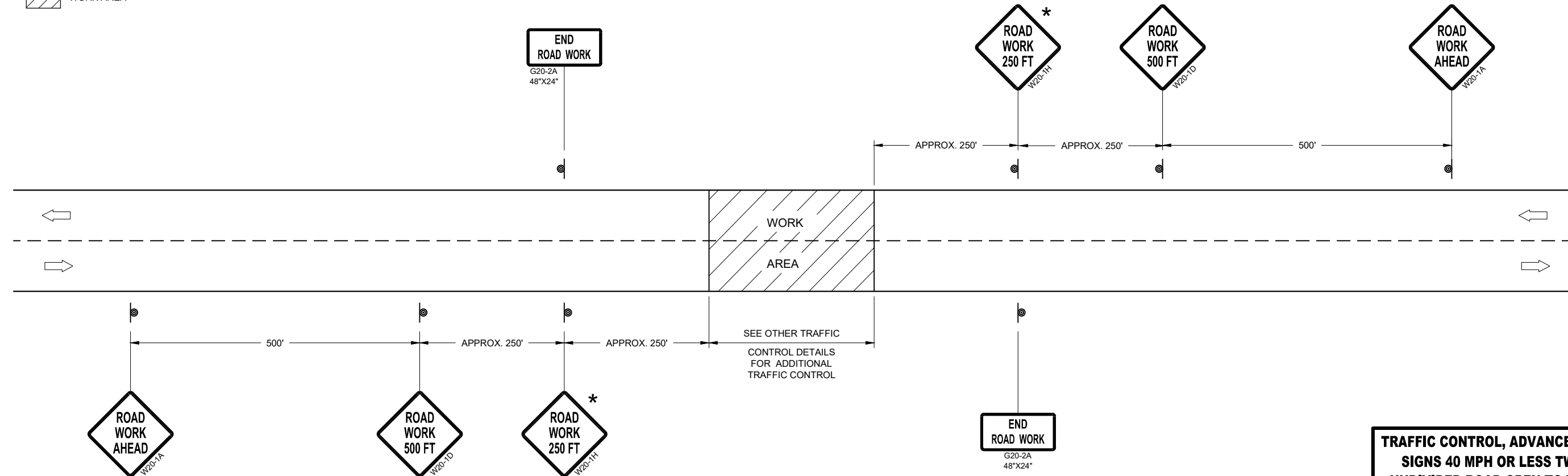
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



**TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL**

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

**TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFICE**

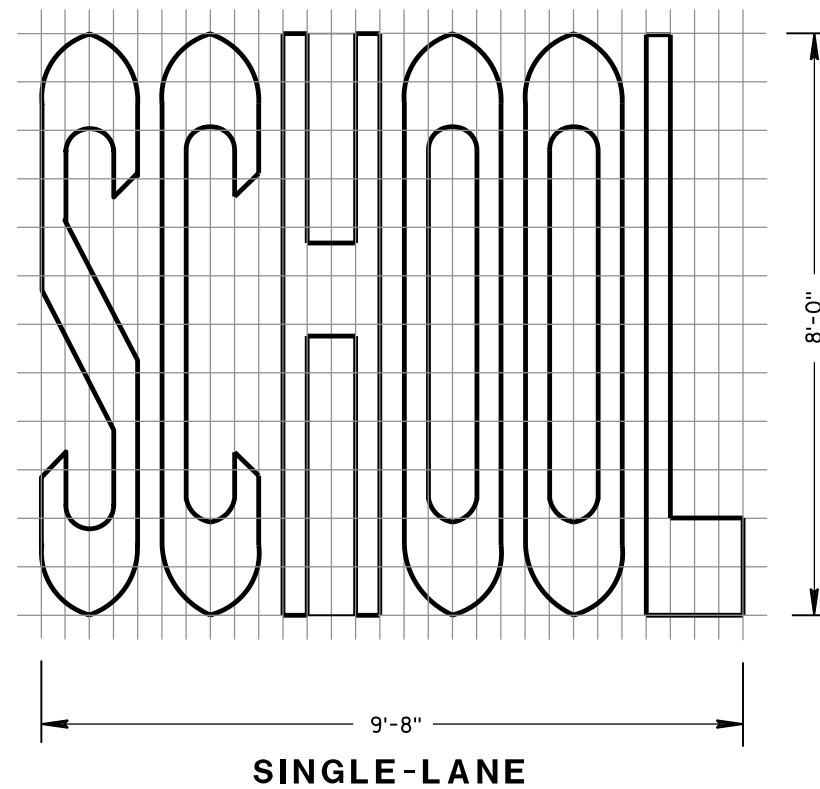
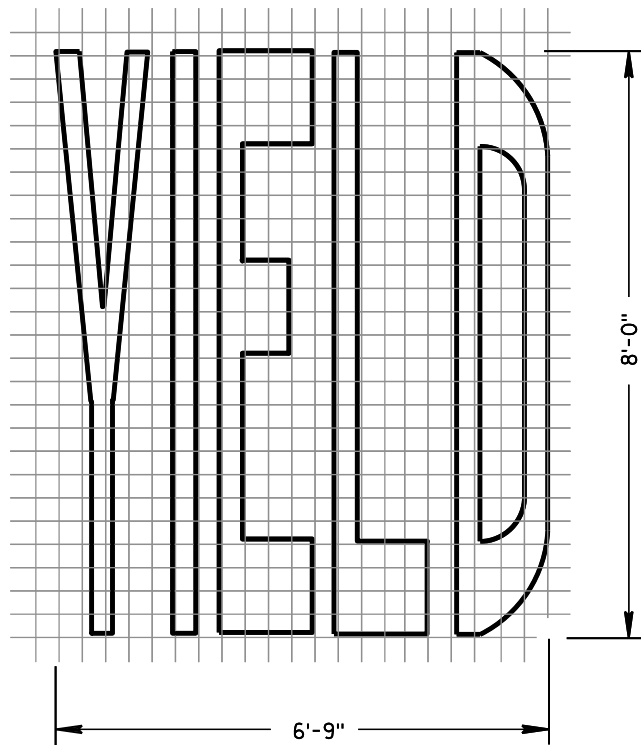
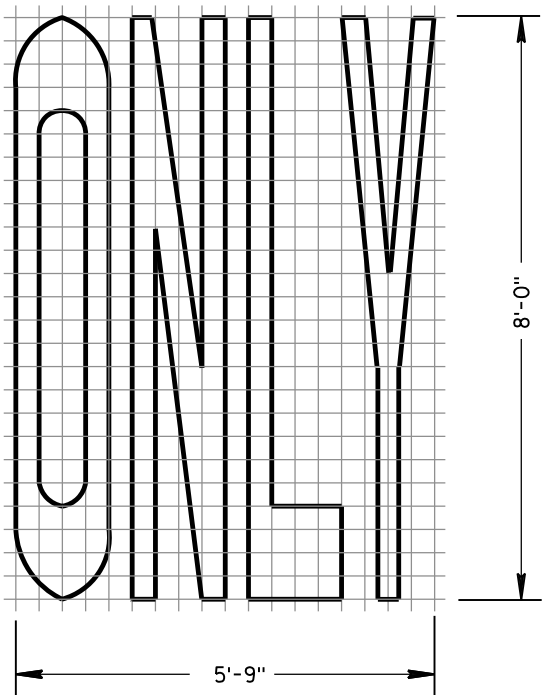
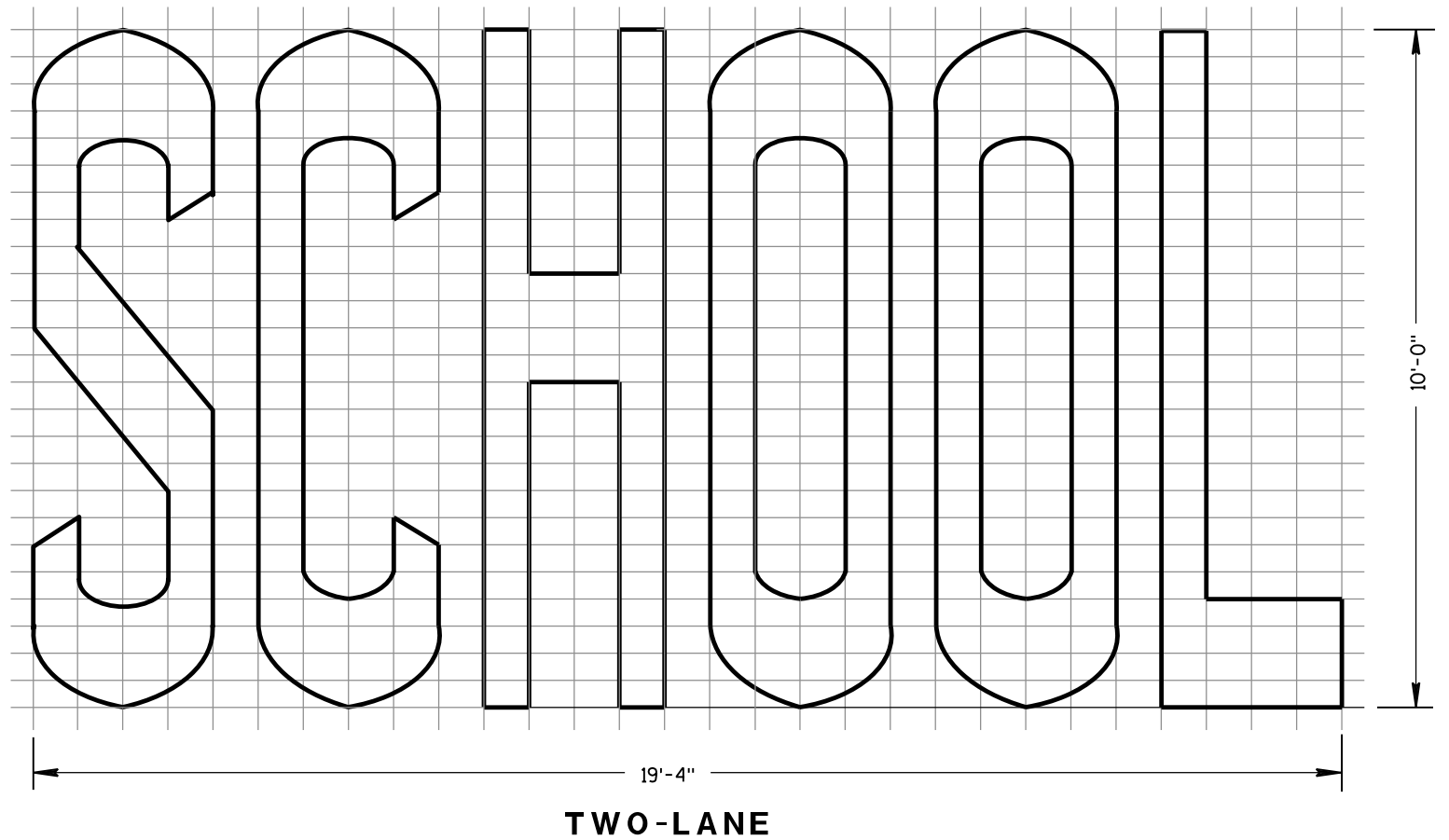
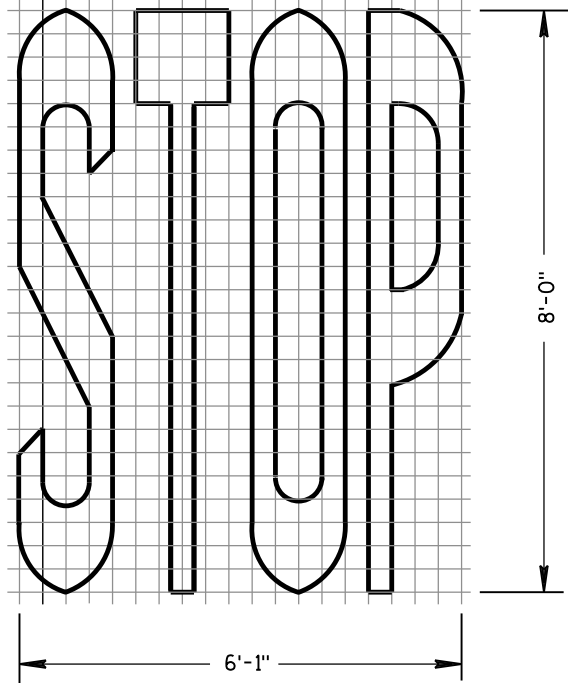
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

GENERAL NOTES

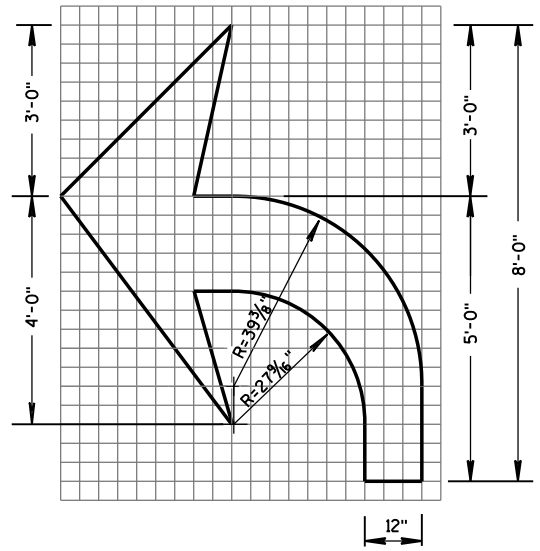
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



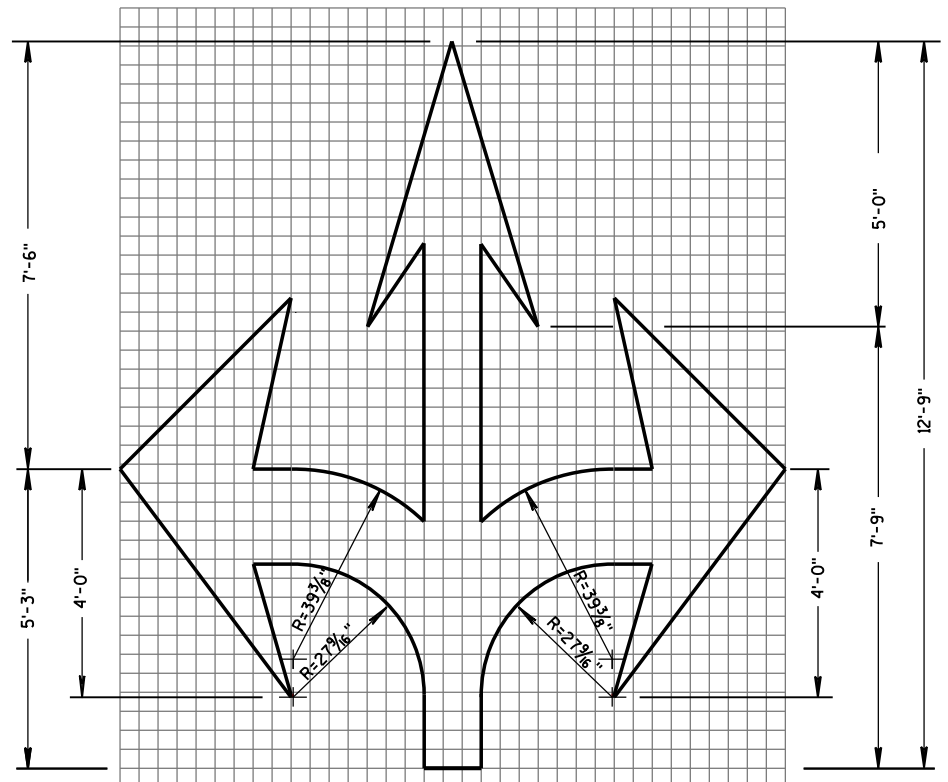
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

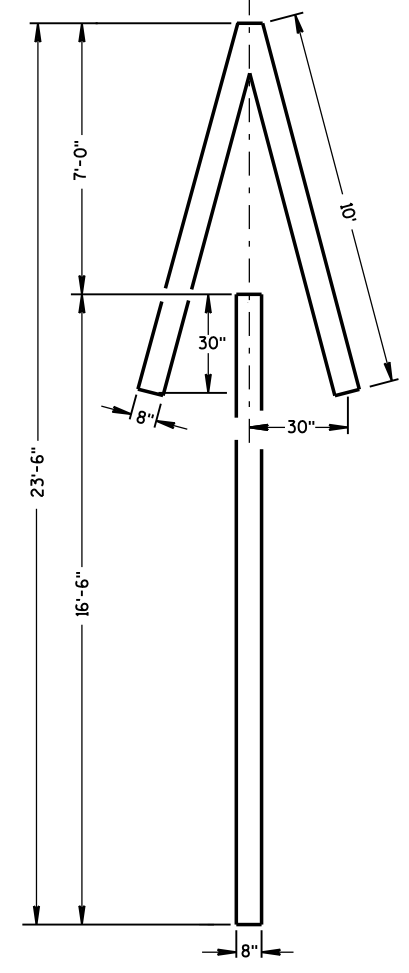
APPROVED
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA



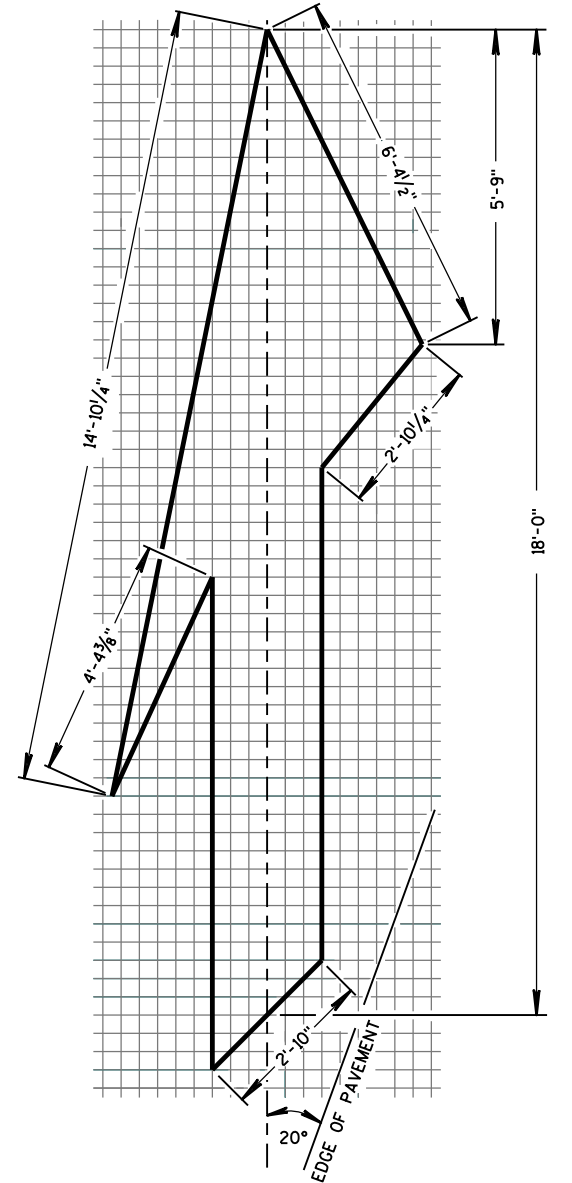
TYPE 2



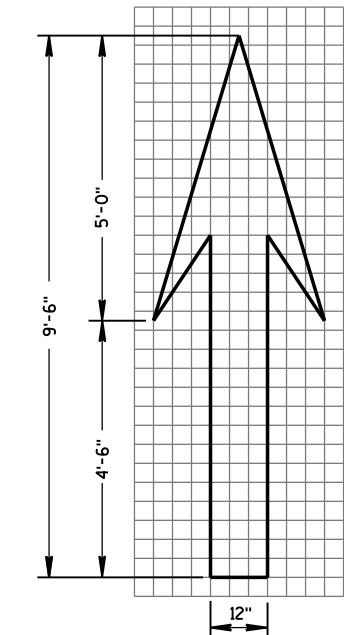
TYPE 6



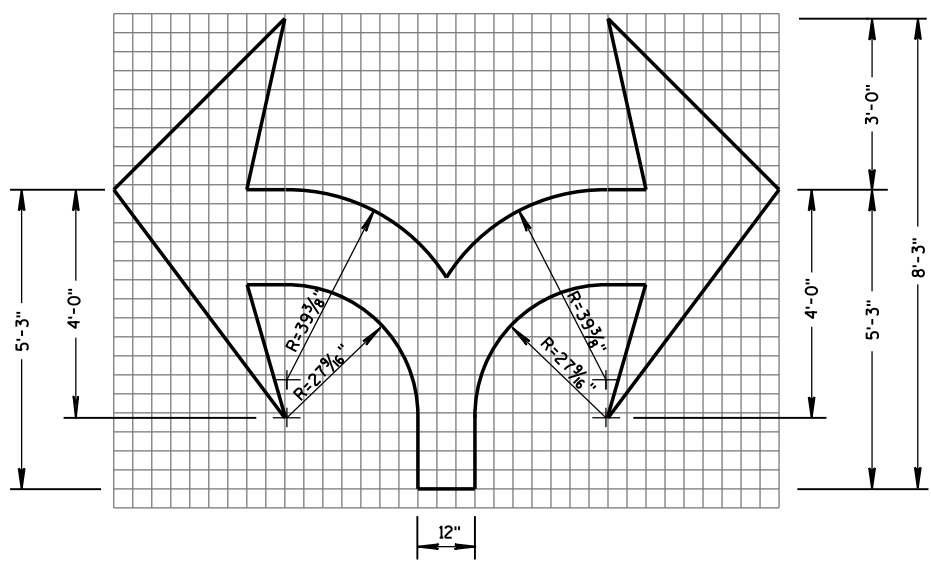
TYPE 4



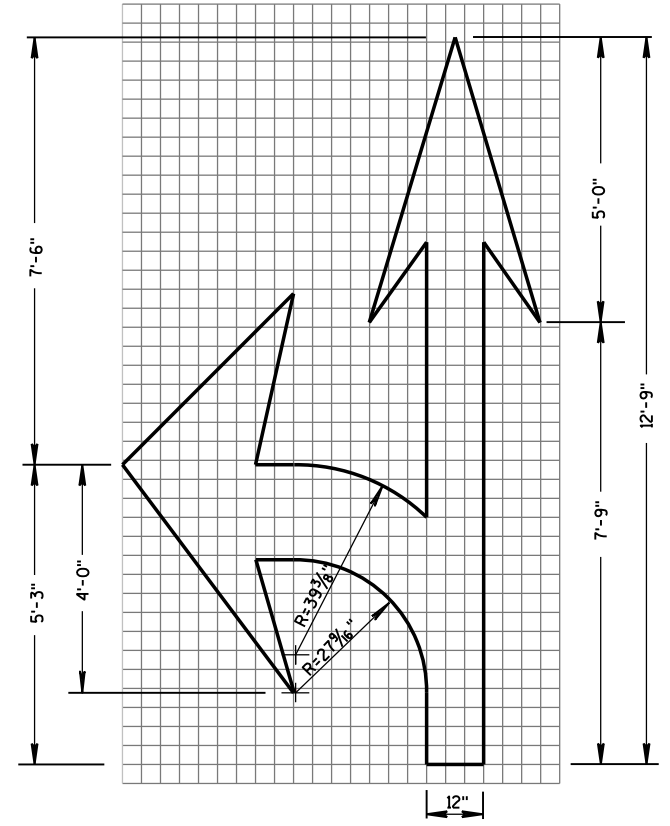
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7

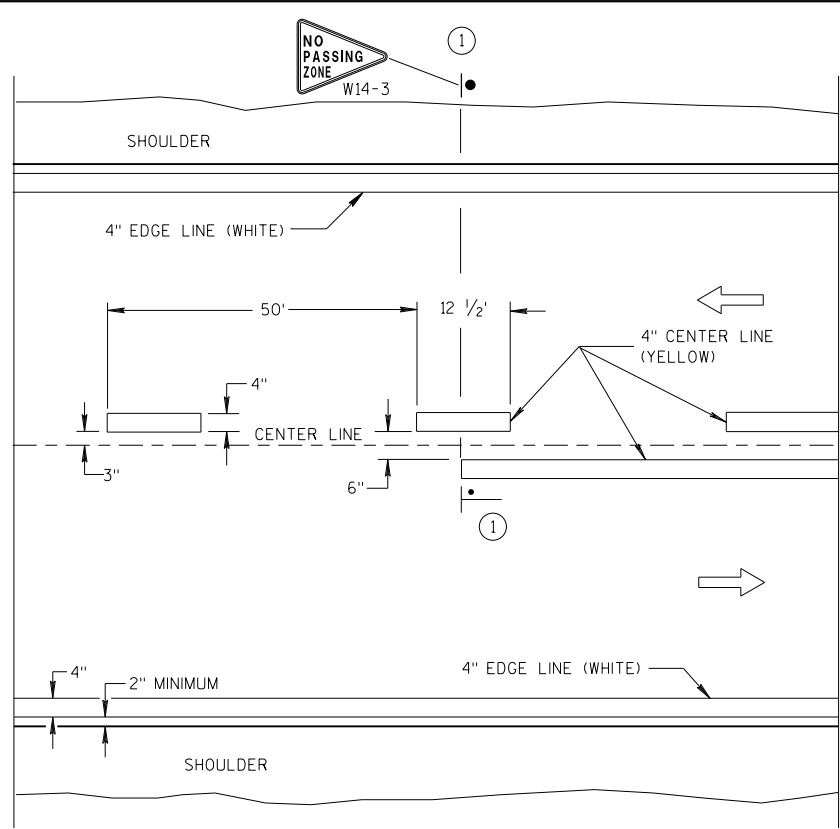


TYPE 3

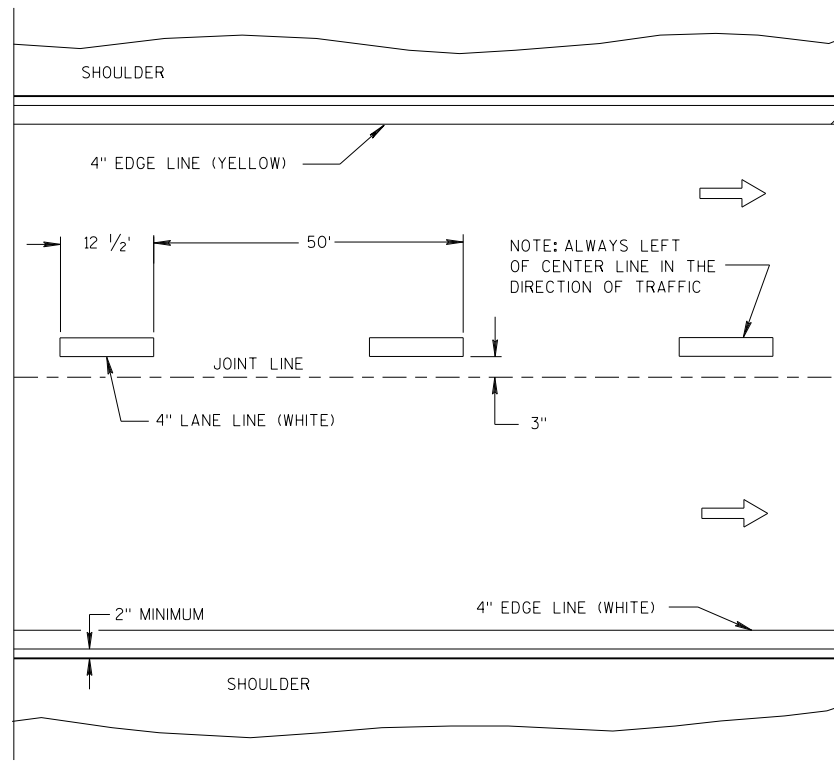
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING ARROWS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

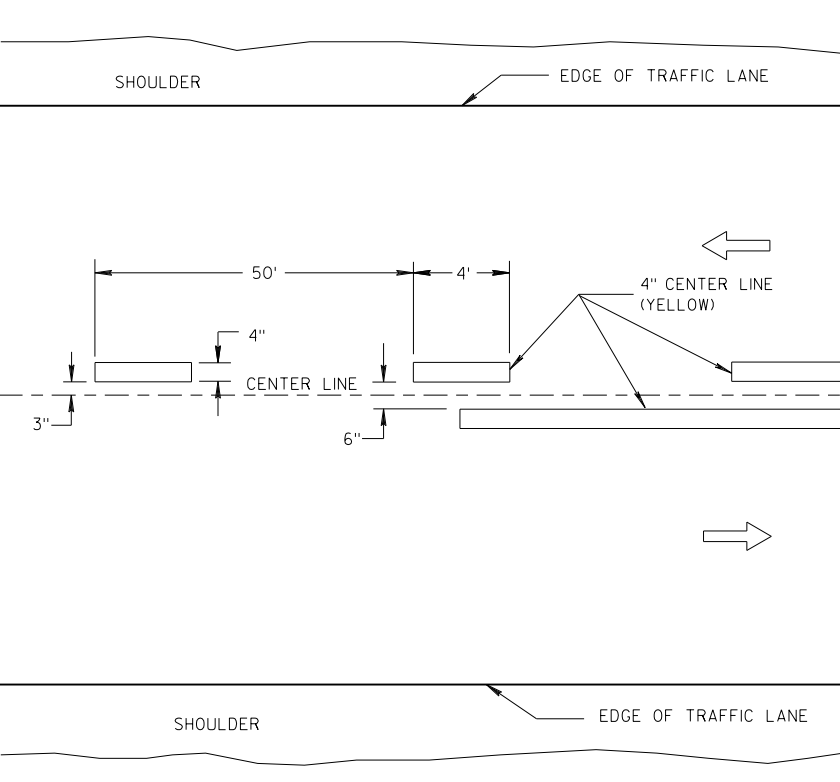


TWO WAY TRAFFIC

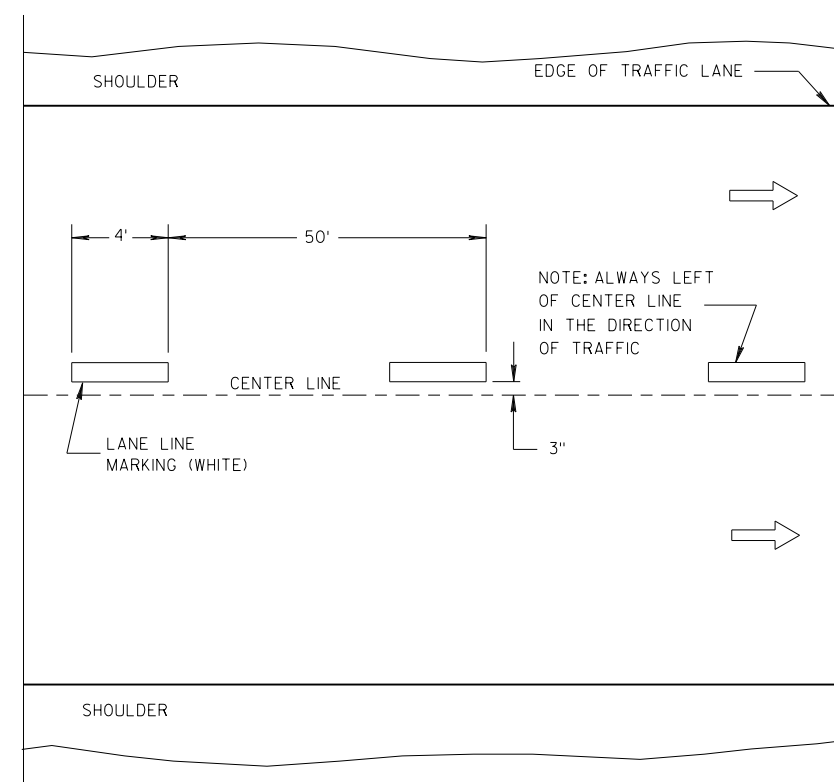


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

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.

NOTE

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

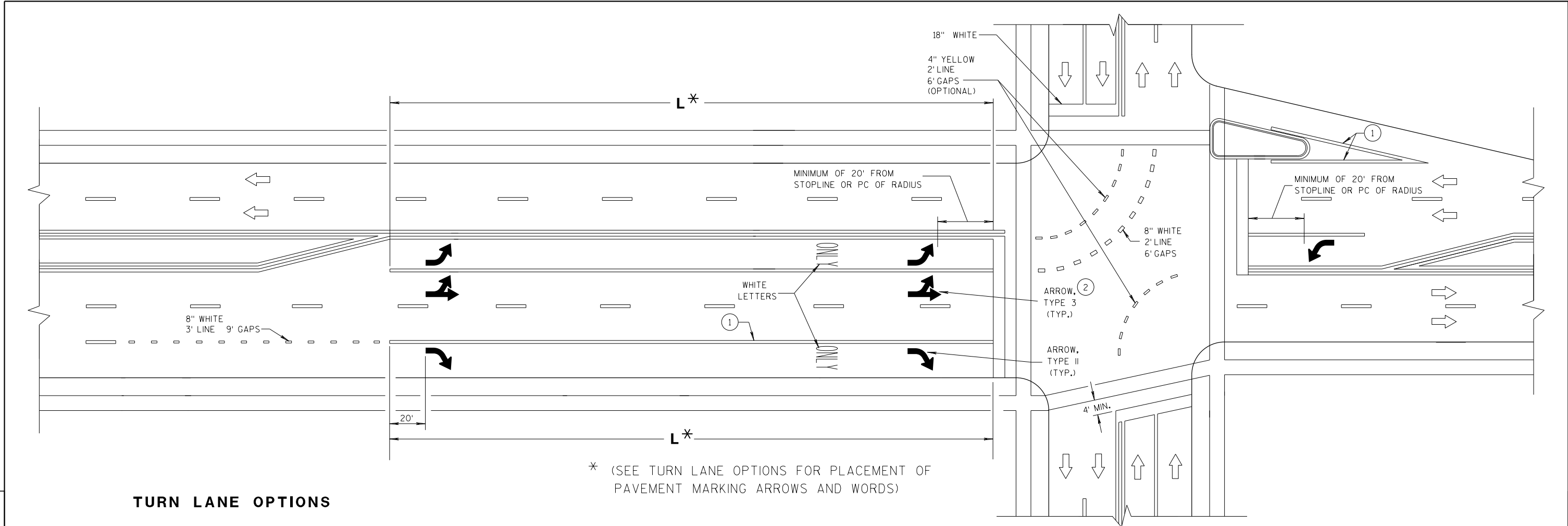
6

6

S.D.D. 15 C 8-19a

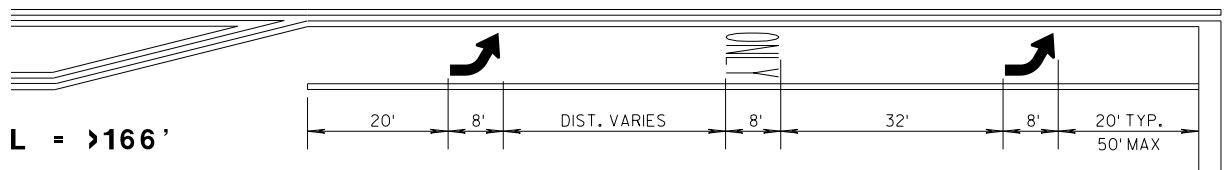
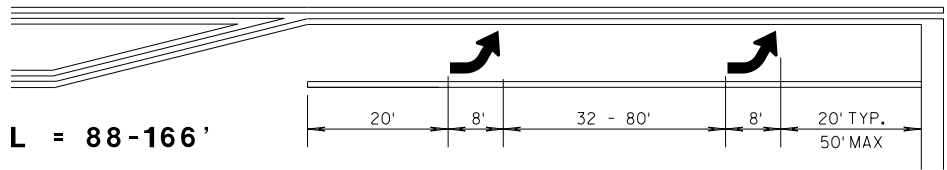
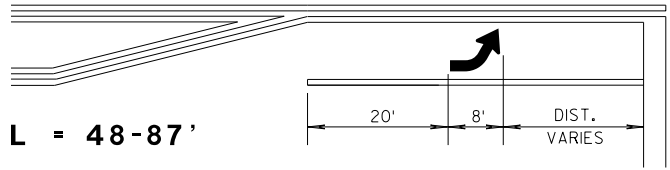
S.D.D. 15 C 8-19a

LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/2018	/S/ Matthew R. Rauch DATE STATE SIGNING AND MARKING ENGINEER
FHWA	



TURN LANE OPTIONS

LENGTH OF TURN BAY (L) OF 0-47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

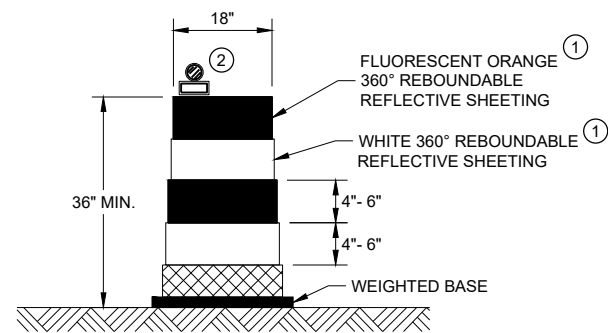
GENERAL NOTES

- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROW ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION, THE ARROWS AND ONLY MARKING ARE ELIMINATED.

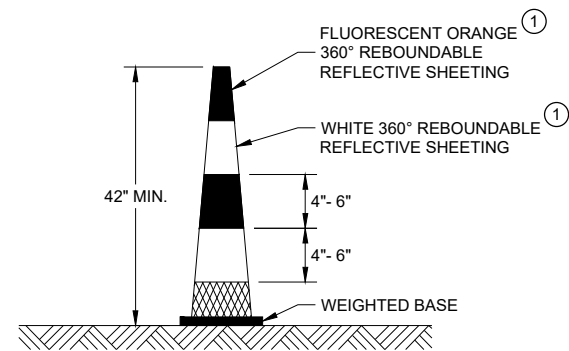
➔ DIRECTION OF TRAFFIC
L = LENGTH OF TURN BAY

**PAVEMENT MARKING
(TURN LANES)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

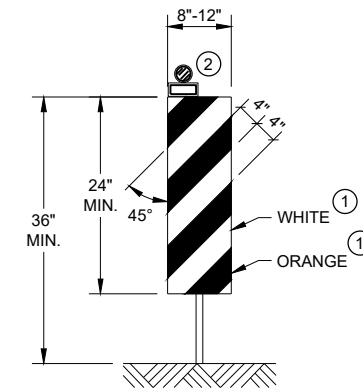


DRUM



42" CONE

DO NOT USE IN TAPERS
 1/2 SPACING OF DRUMS

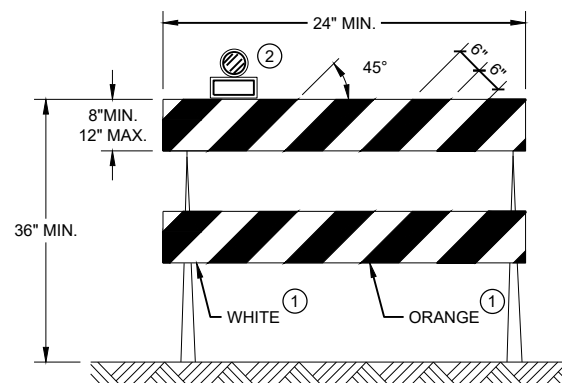


VERTICAL PANEL

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

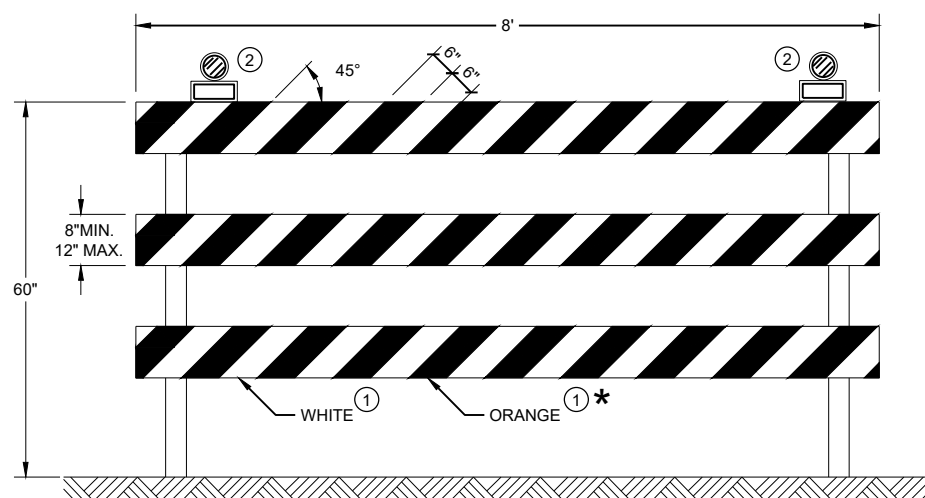
GENERAL NOTES

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



TYPE II BARRICADE

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








TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	

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.

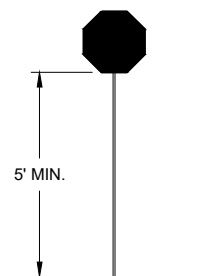
WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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 SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR 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.



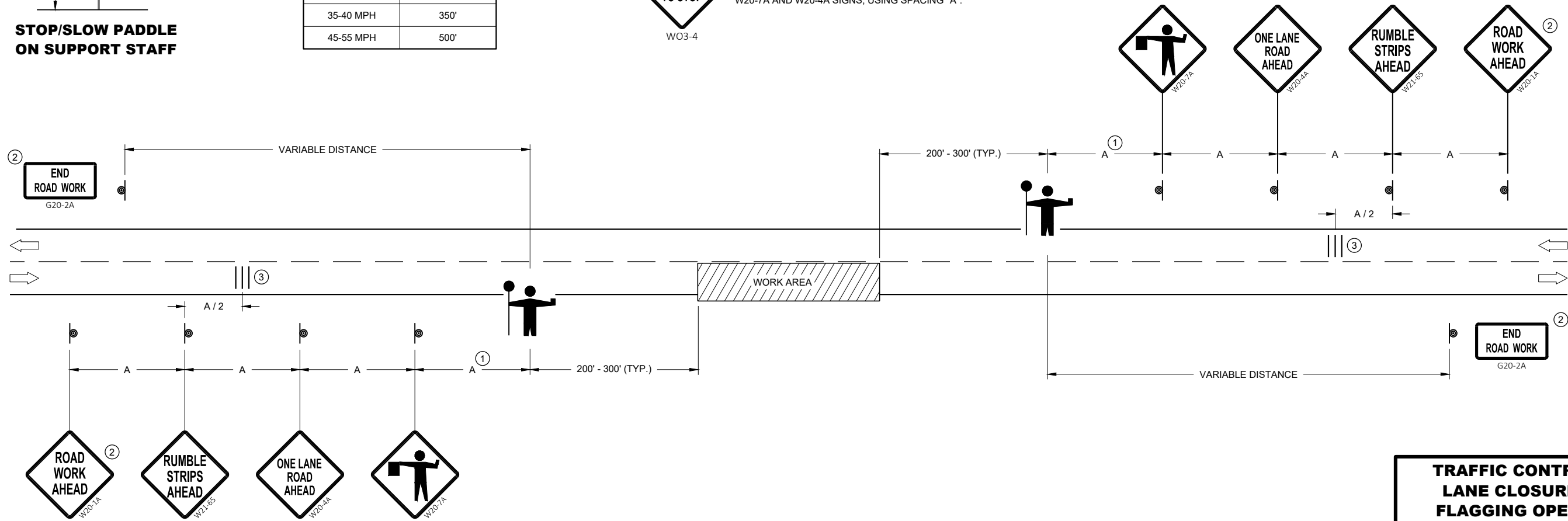
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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".



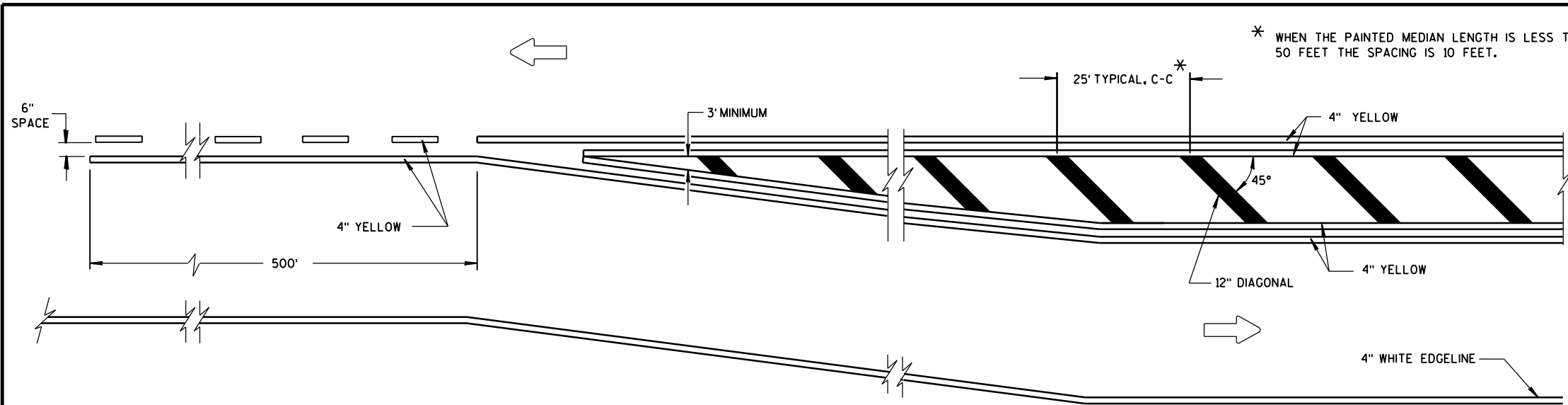
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE May 2019 /S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

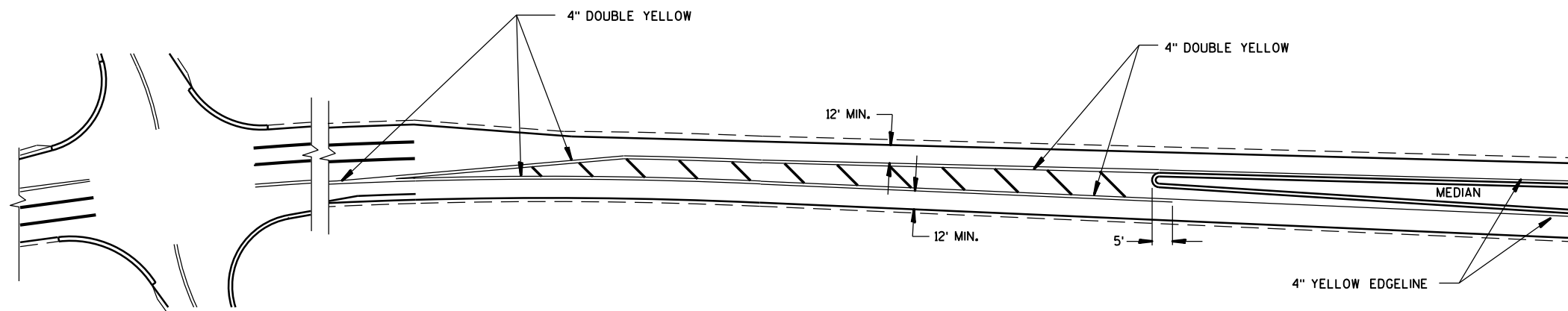


MEDIAN ISLAND DETAIL

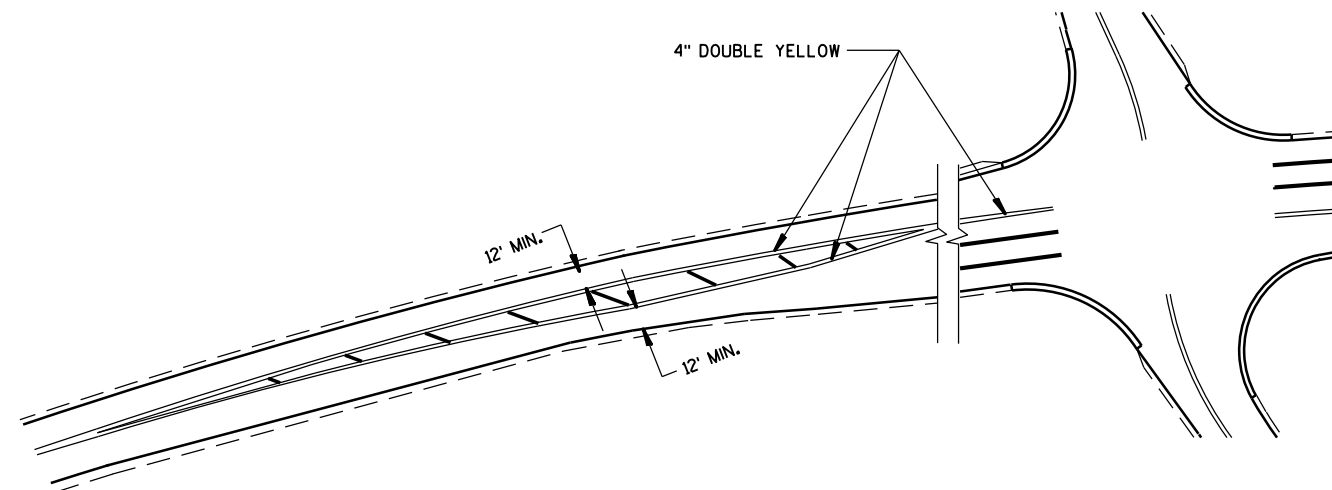
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

➔ DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

6

6

S.D.D. 15 C 18-4

S.D.D. 15 C 18-4

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew Rauch STATE SIGNING AND MARKING ENGINEER FHWA

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.

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.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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 OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

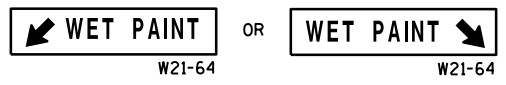
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

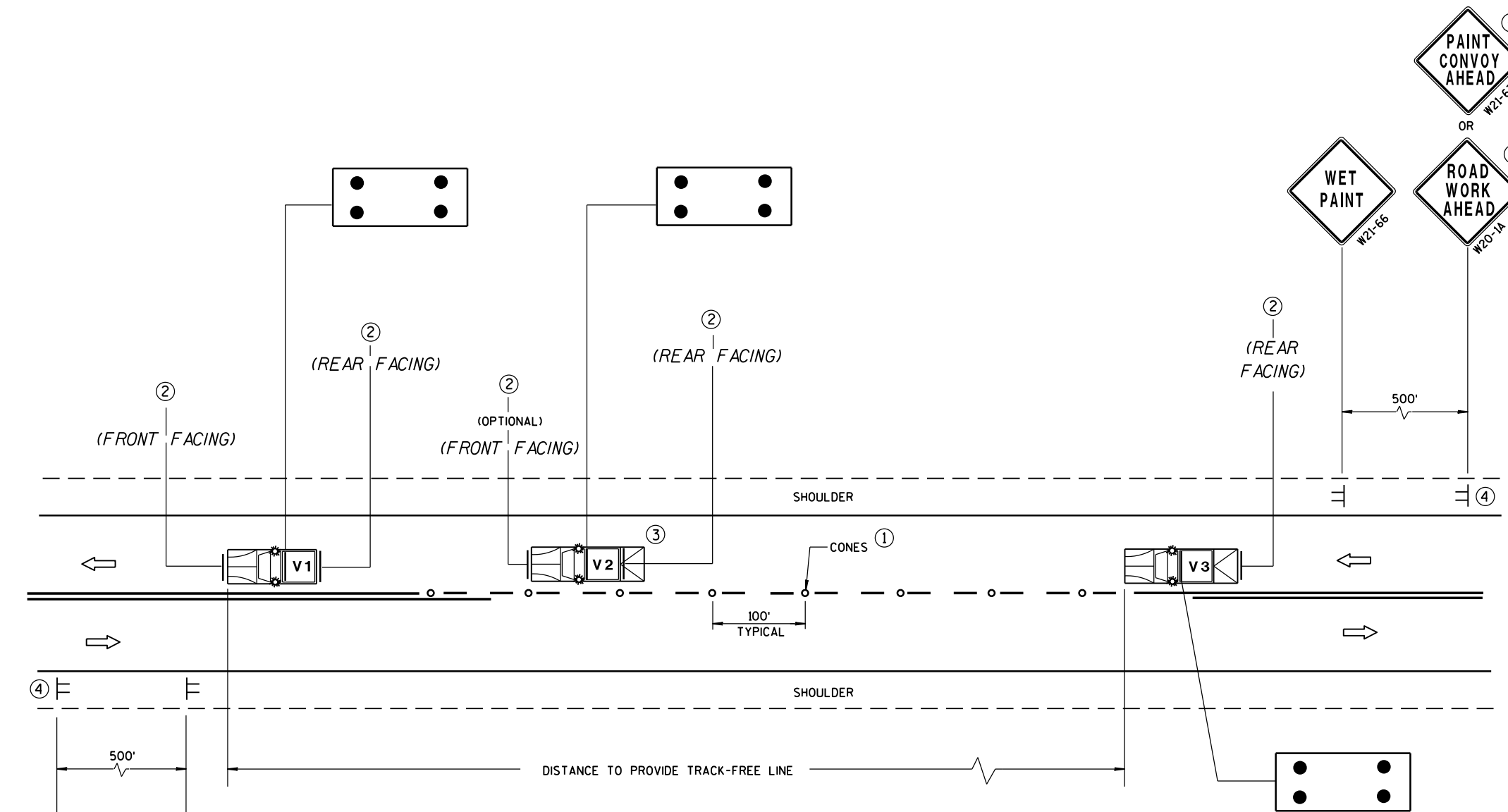
TMA TRUCK-MOUNTED ATTENUATOR

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

CONES

FLASHING ARROW PANEL (CAUTION)



MOVING PAVEMENT MARKING OPERATIONS TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: Sept., 2017 /S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

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. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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 OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REAR MOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

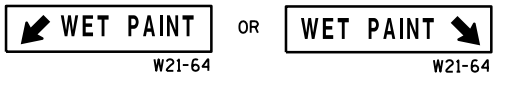
FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REAR MOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE OR LANELINE MARKING FOR MULTILANE UNDIVIDED ROADWAYS.

① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

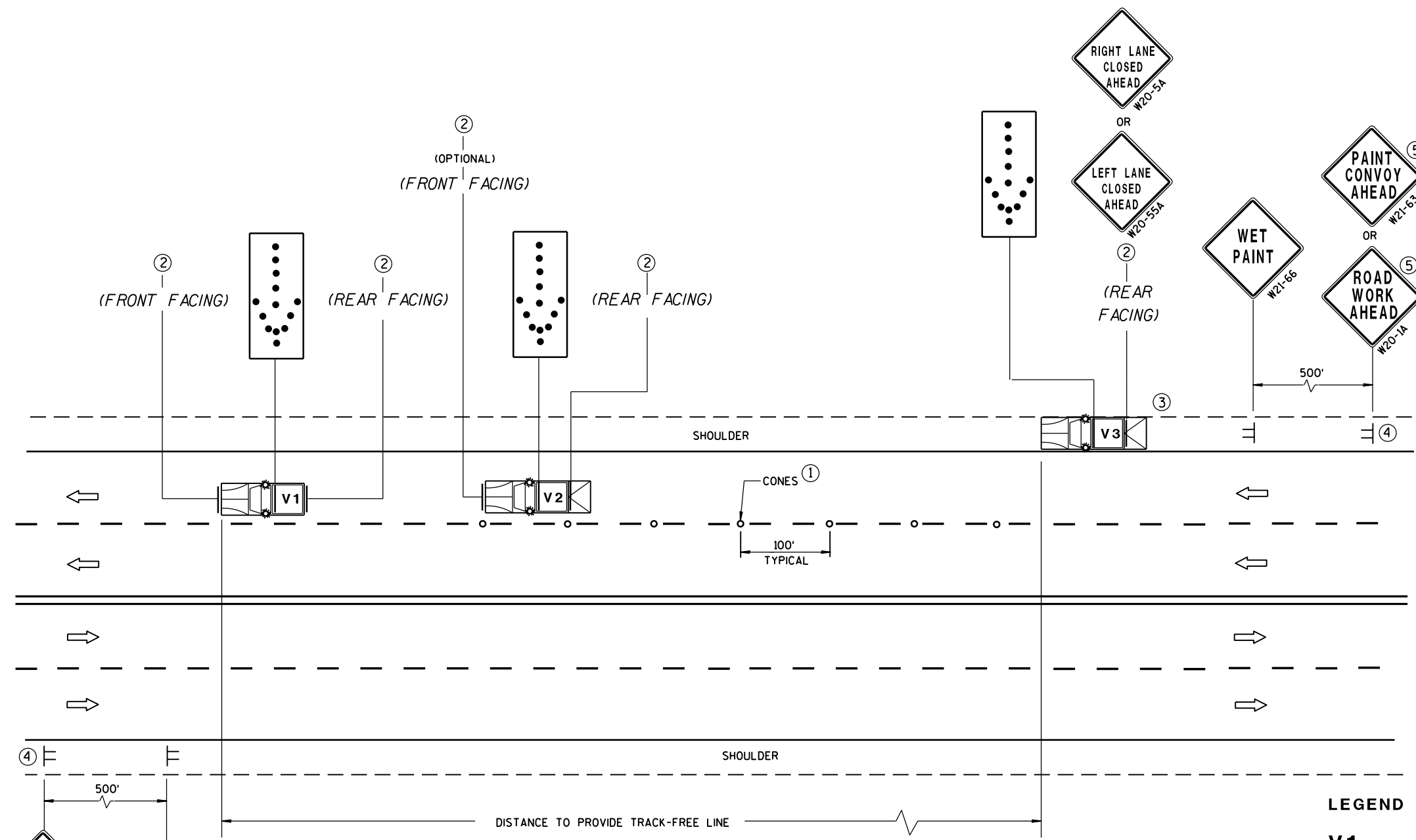
② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS MULTI-LANE UNDIVIDED ROADWAY

LEGEND

V1 LEAD VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE WITH TMA

TMA TRUCK-MOUNTED ATTENUATOR

Sign on temporary support

Direction of traffic

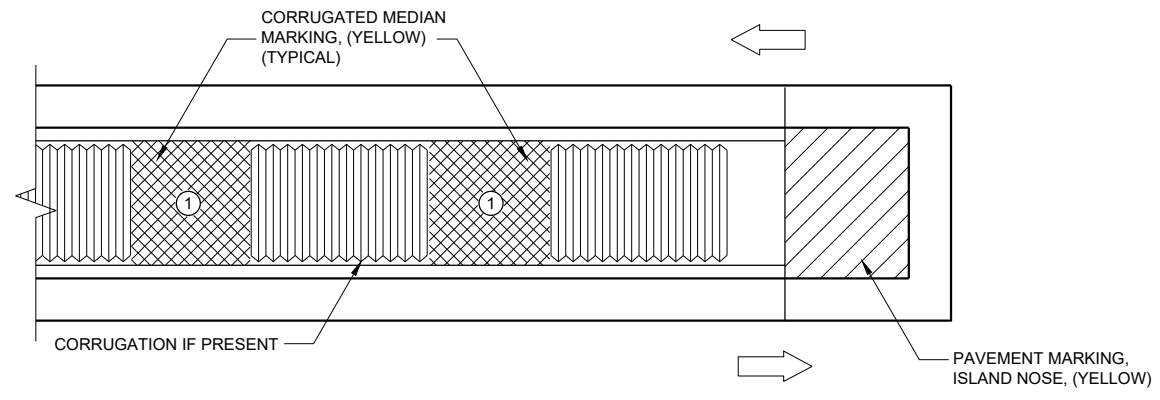
Cones

Flashing arrow panel (merge)

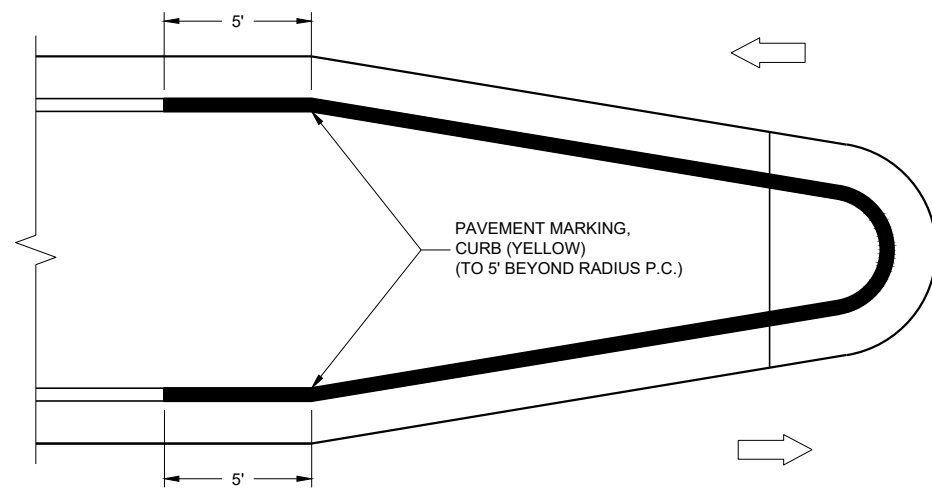
MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

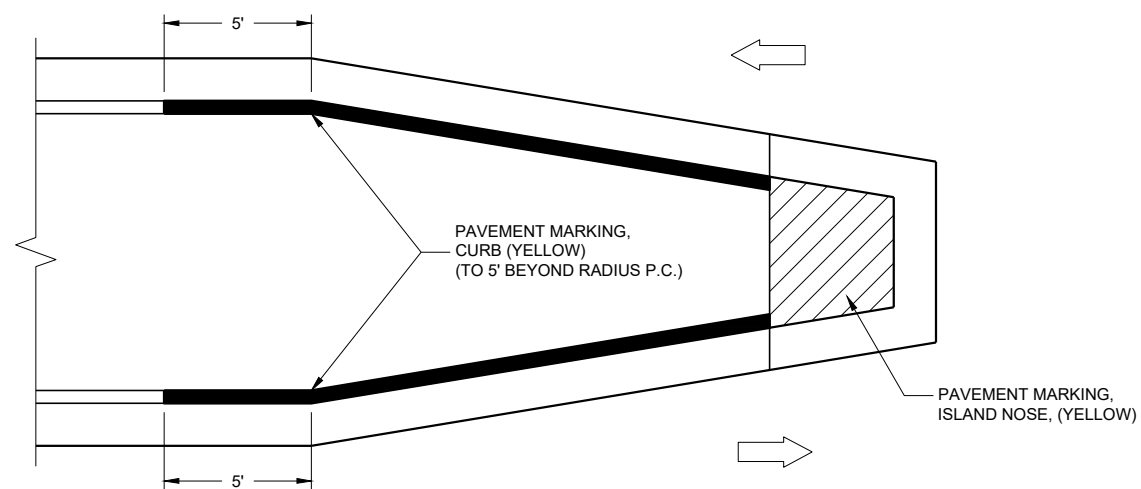
APPROVED
Sept., 2017 /s/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE







MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

-  ISLAND NOSE MARKING
-  CURB MARKING
-  CORRUGATED MEDIAN MARKING
-  DIRECTION OF TRAVEL

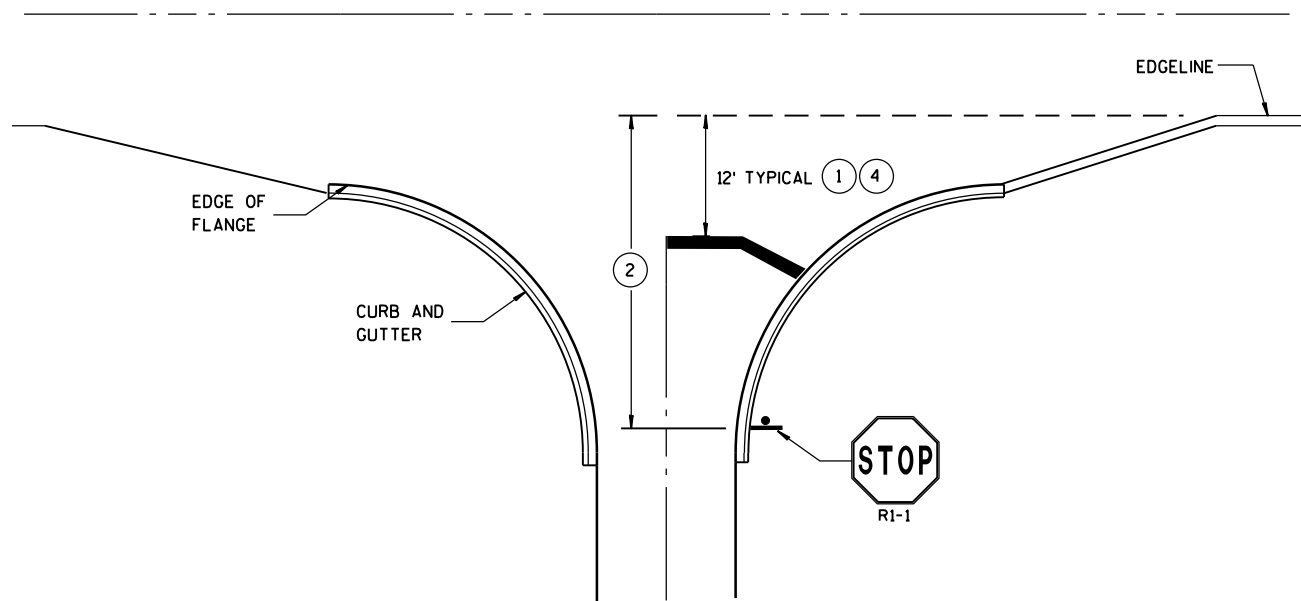
6

6

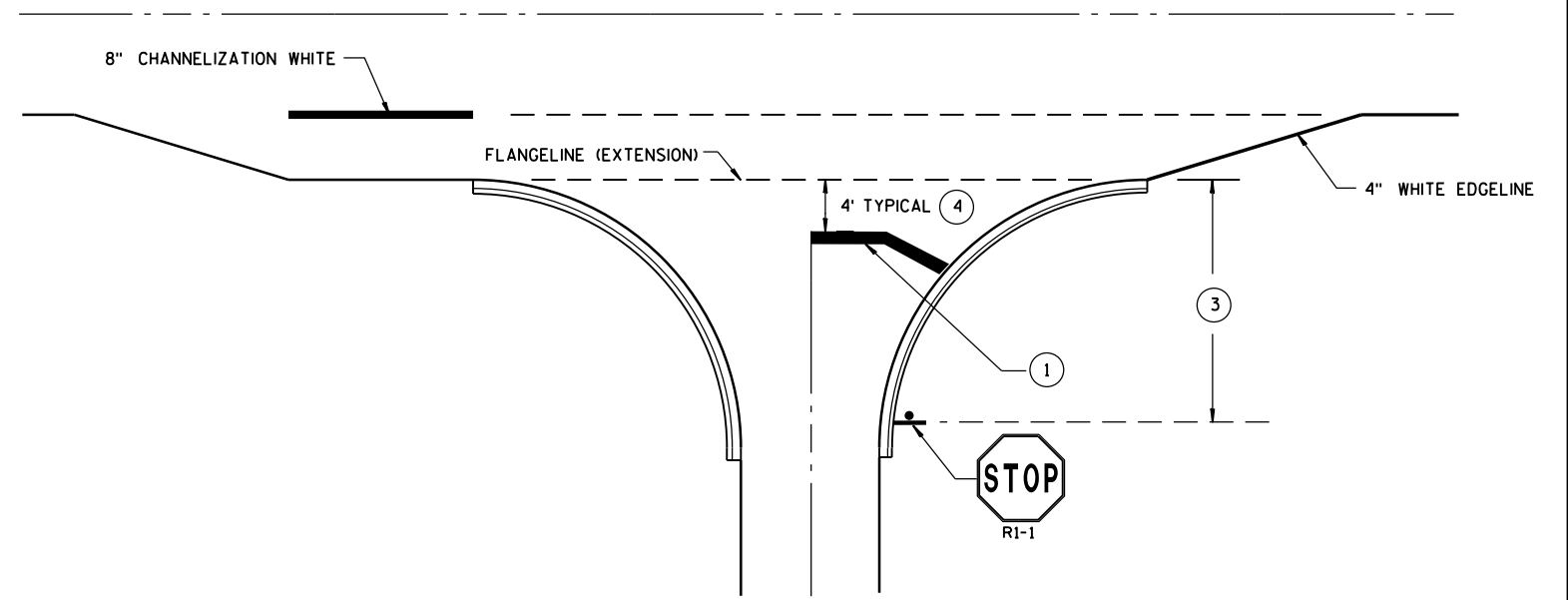
SDD 15C27 - 03b

SDD 15C27 - 03b

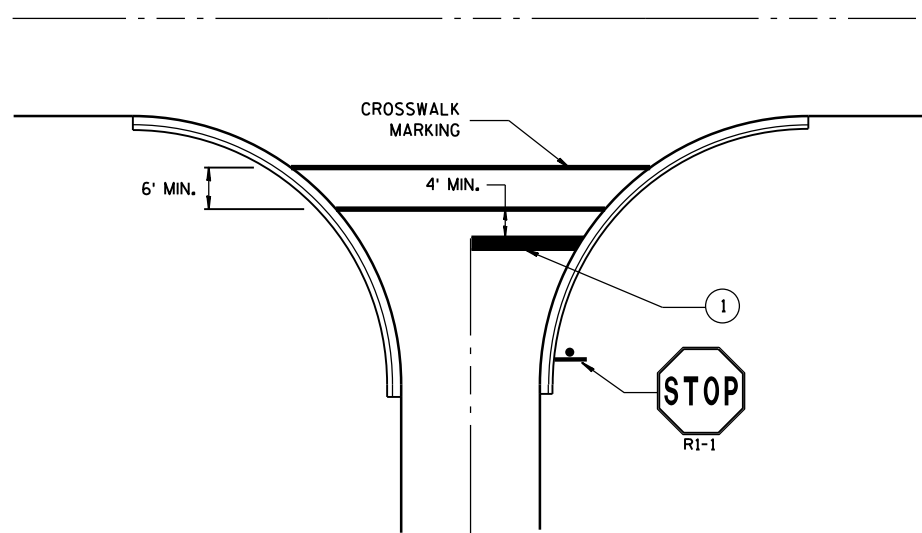
PAVEMENT MARKINGS (ISLANDS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 7/2018	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	



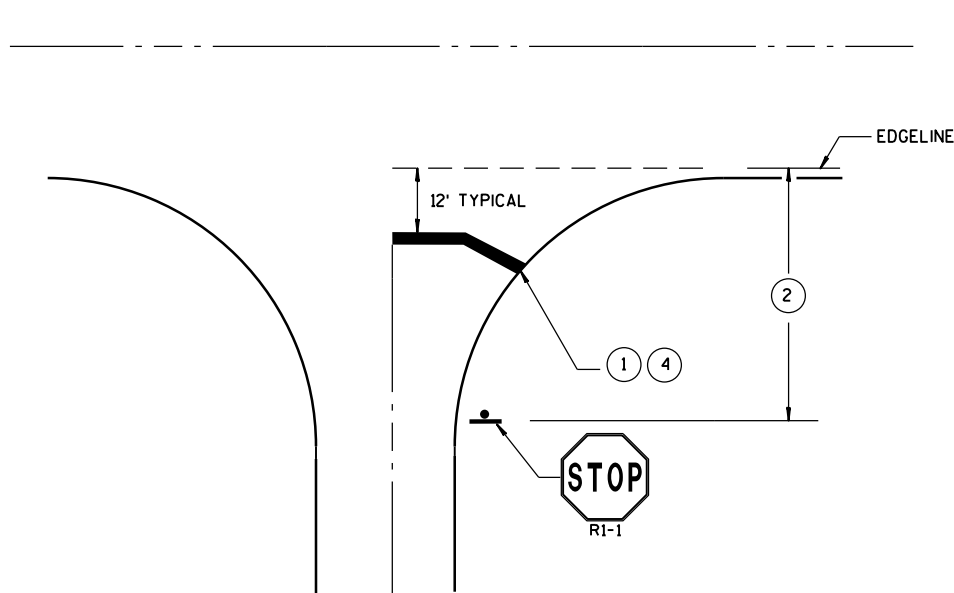
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

- 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 EDGELINE 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. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

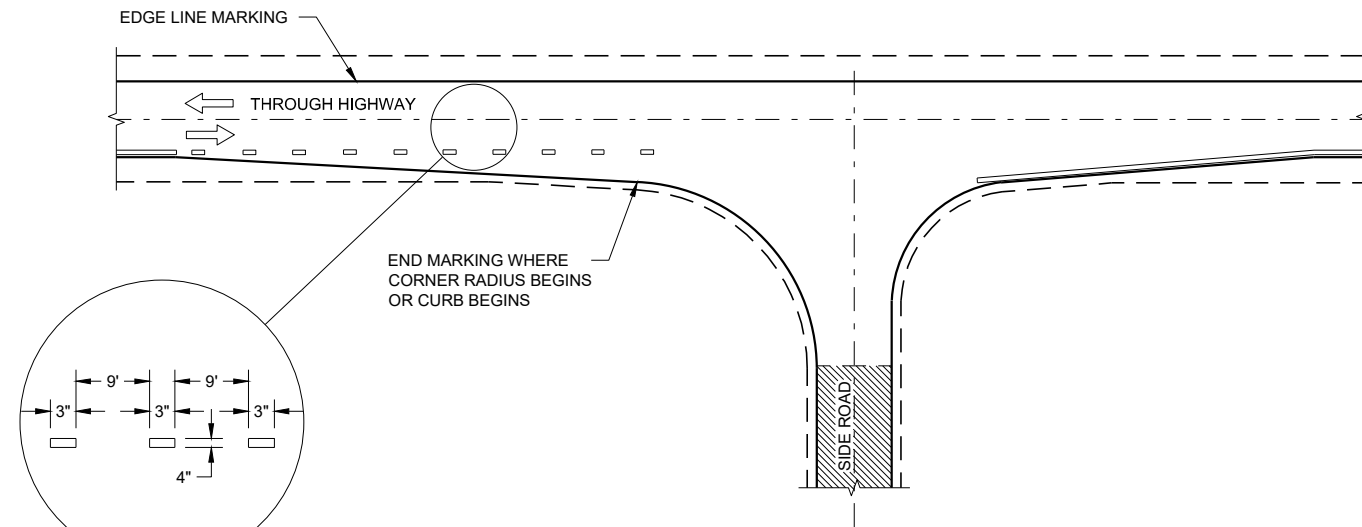
APPROVED
DATE: Sept., 2017 /S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER
FHWA

GENERAL NOTES

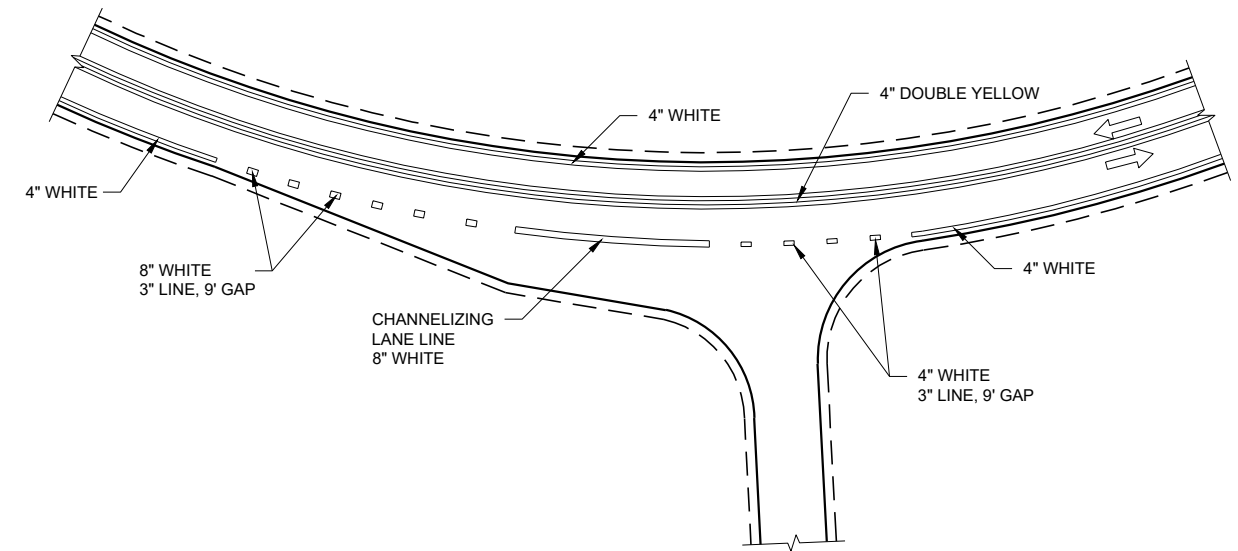
OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

- 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

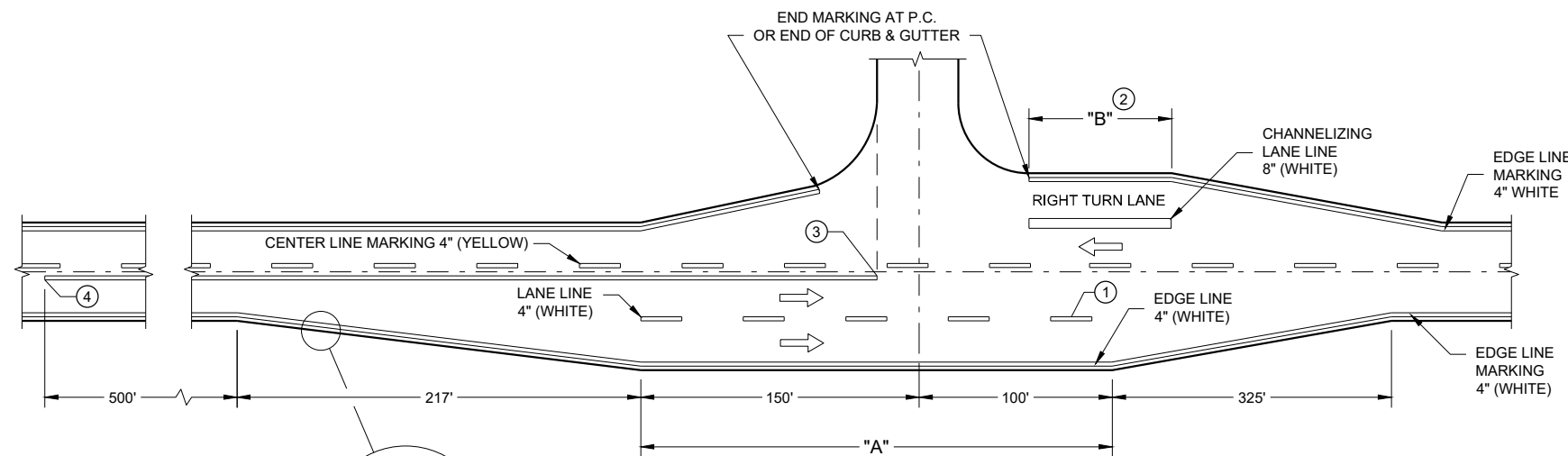
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



MINOR INTERSECTION

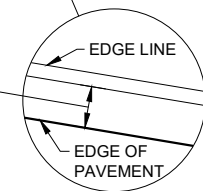


INTERSECTION ON OUTSIDE OF CURVE



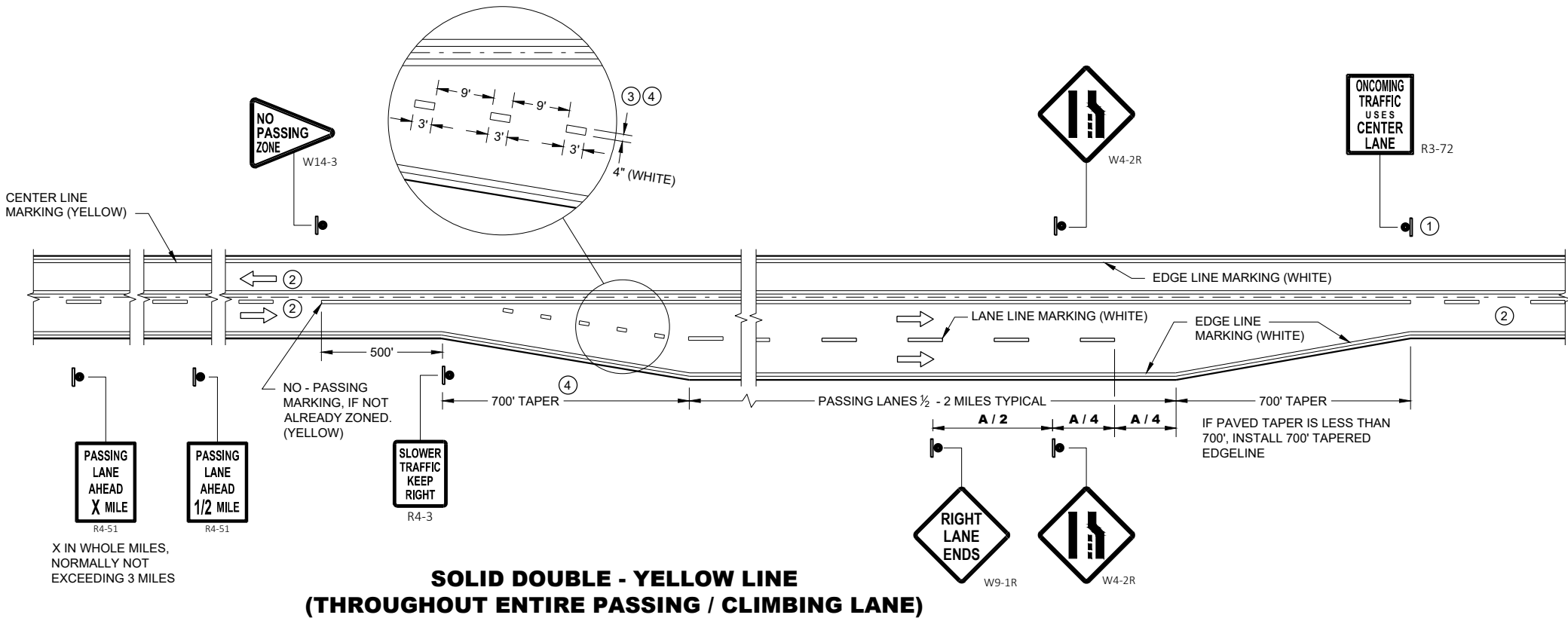
MAJOR INTERSECTIONS (INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

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



PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



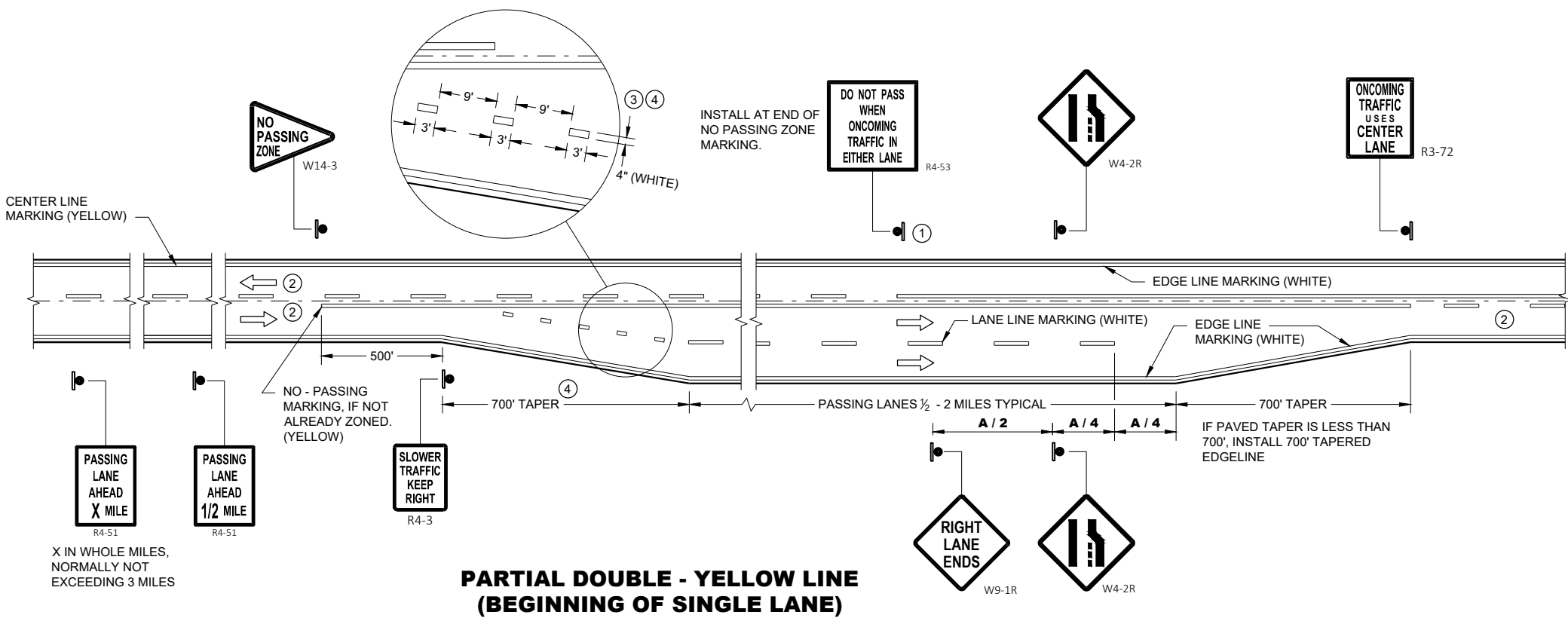
GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950



6

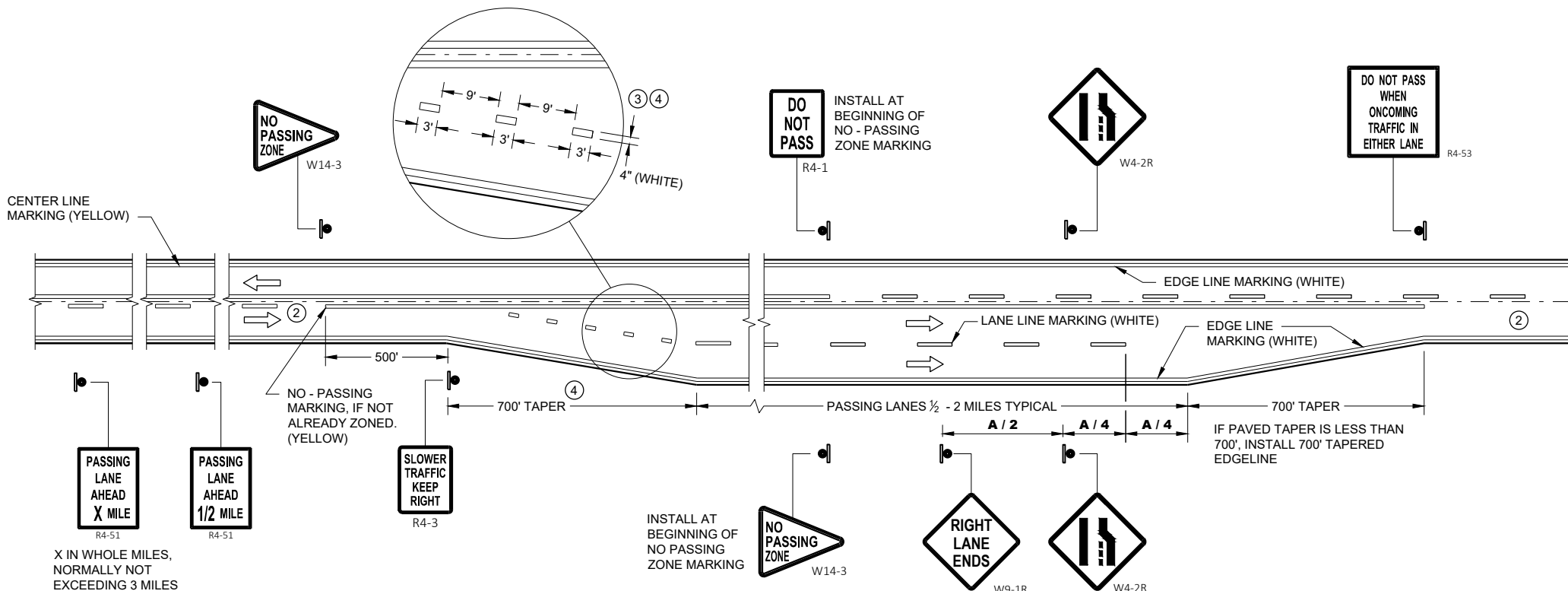
6

SDD 15C35 - 03b

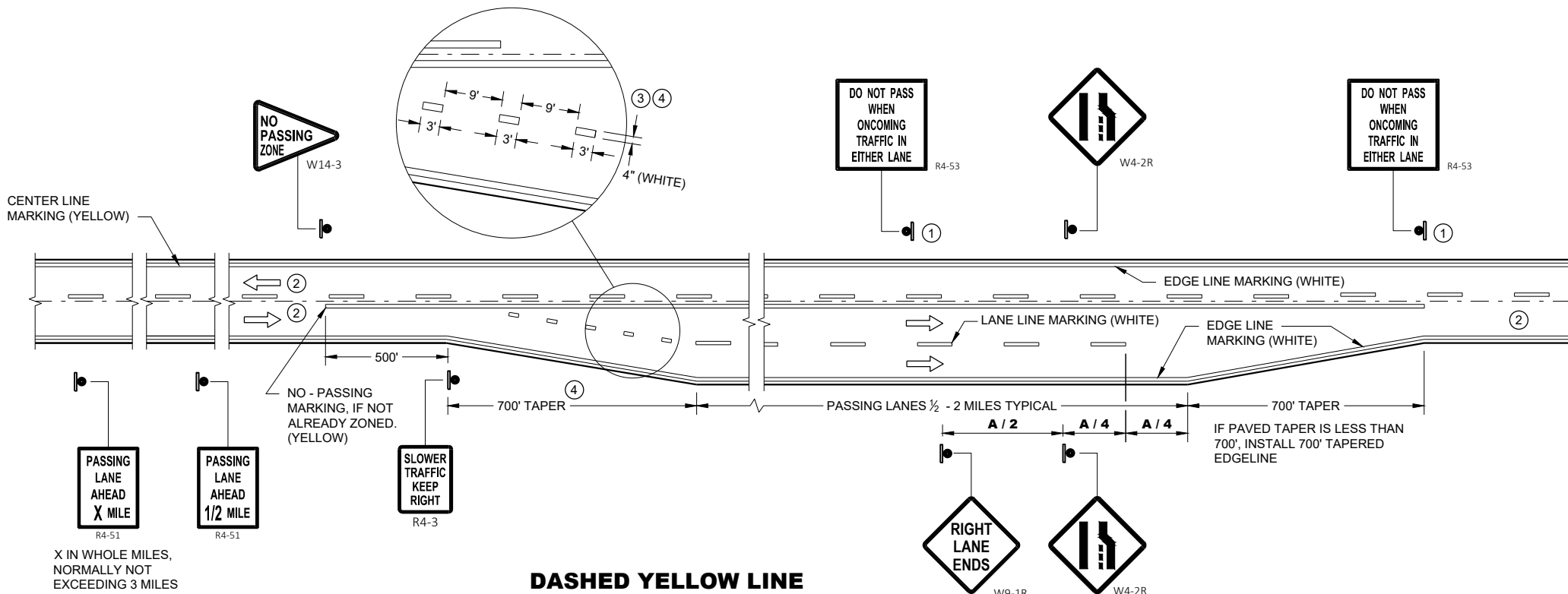
SDD 15C35 - 03b

**PAVEMENT MARKING & SIGNING
(CLIMBLING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)**



**DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)**

GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBLING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

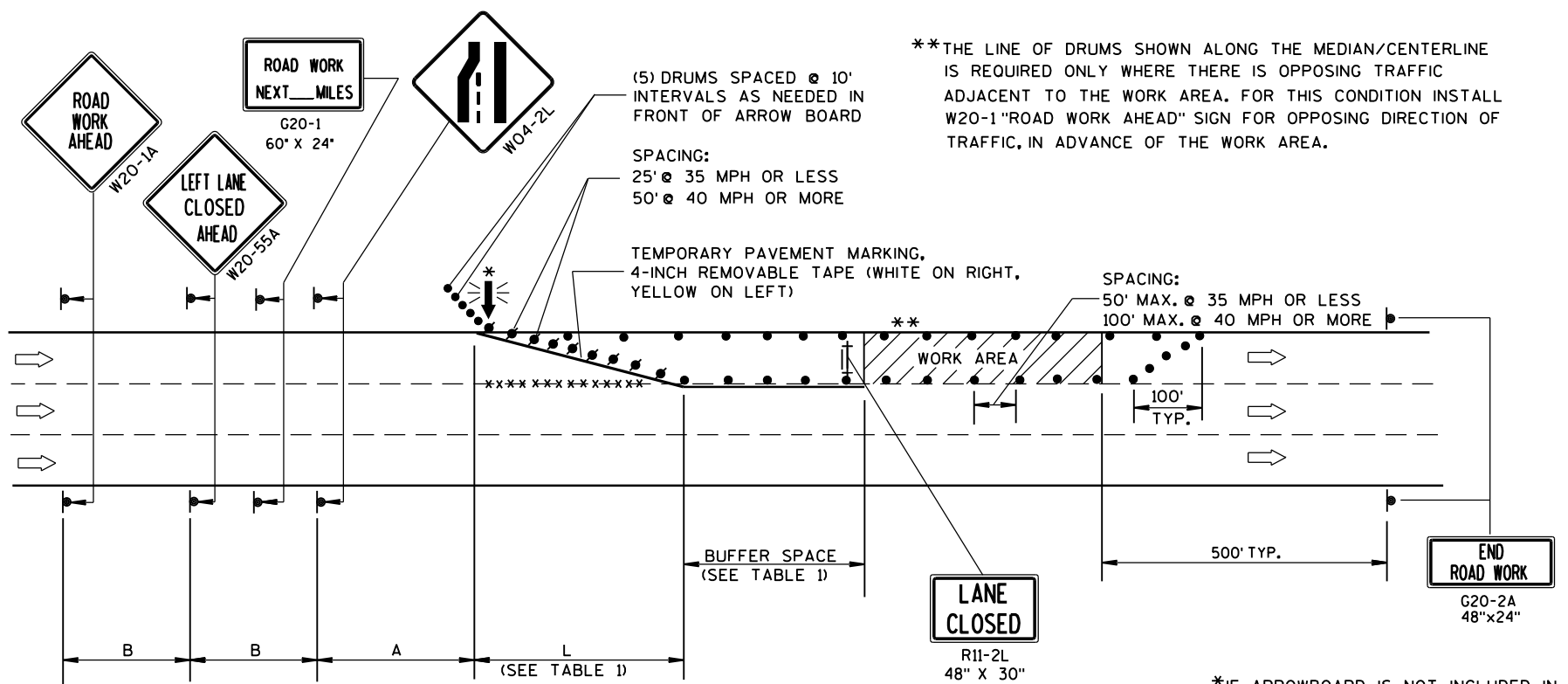
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	850
55	950

**PAVEMNET MARKING & SIGNING
(CLIMBLING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 DATE /S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA



B=400' AT 25-30 MPH
 700' AT 35-40 MPH
 1000' AT 45-55 MPH

A=200' AT 25-30 MPH
 350' AT 35-40 MPH
 500' AT 45-55 MPH

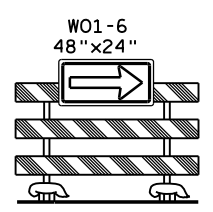
TABLE 1
 TAPER AND BUFFER SPACE
 FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':
 L = WS AT 45 MPH OR GREATER
 $L = \frac{WS^2}{60}$ AT 40 MPH OR LESS
 L = TAPER LENGTH IN FEET
 S = NON-CONSTRUCTION SPEED LIMIT (MPH)
 W = WIDTH OF LANE CLOSURE

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.



LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND 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 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, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

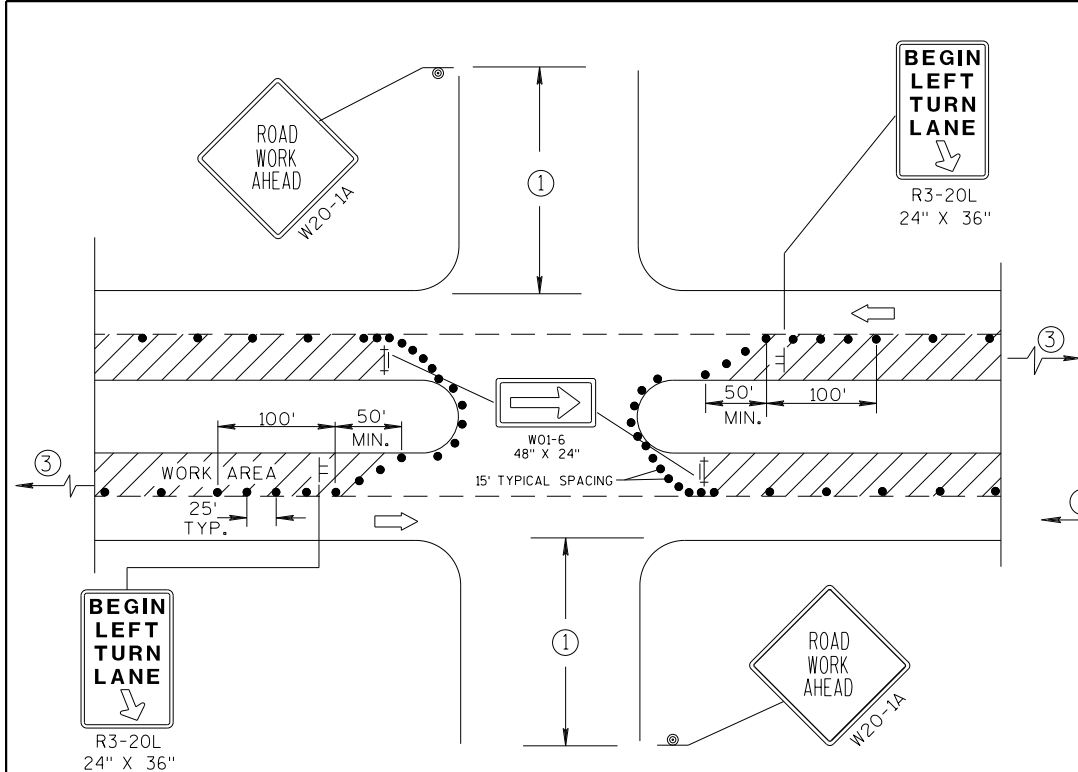
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

**TRAFFIC CONTROL,
 SINGLE LANE CLOSURE,
 NON-FREEWAY/EXPRESSWAY**

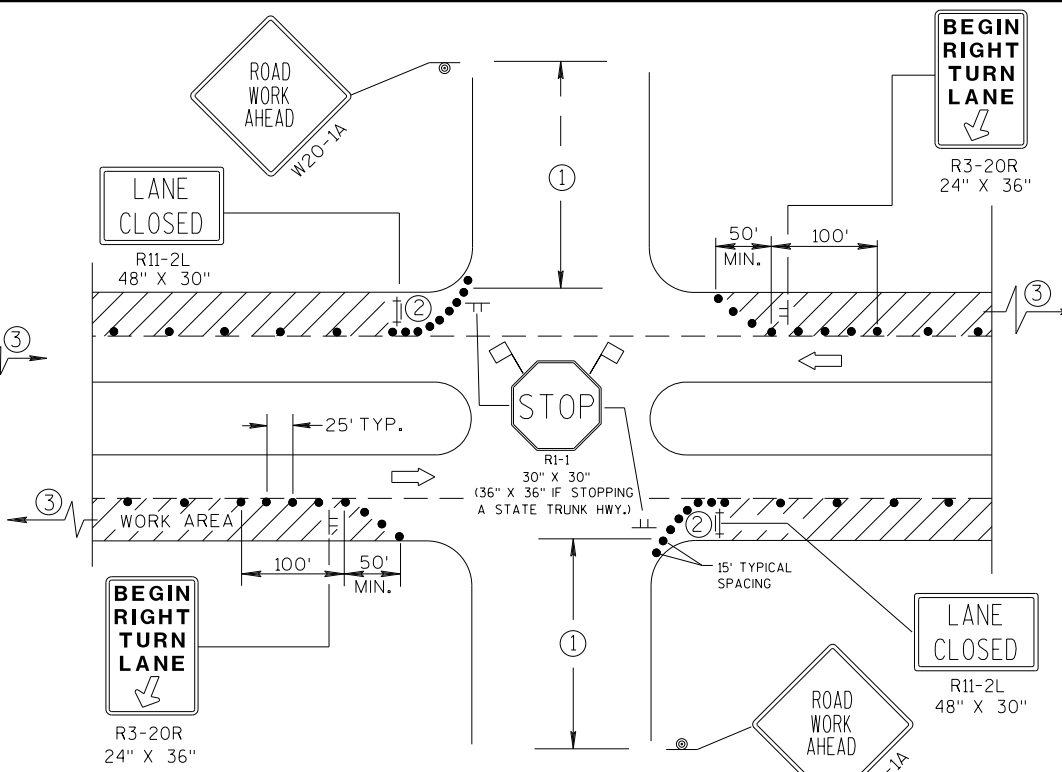
STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED
 June 2016 /s/ Peter Amakobe Atepe
 DATE STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
 FHWA



DETAIL A
FOR LEFT LANE CLOSURE AT
INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

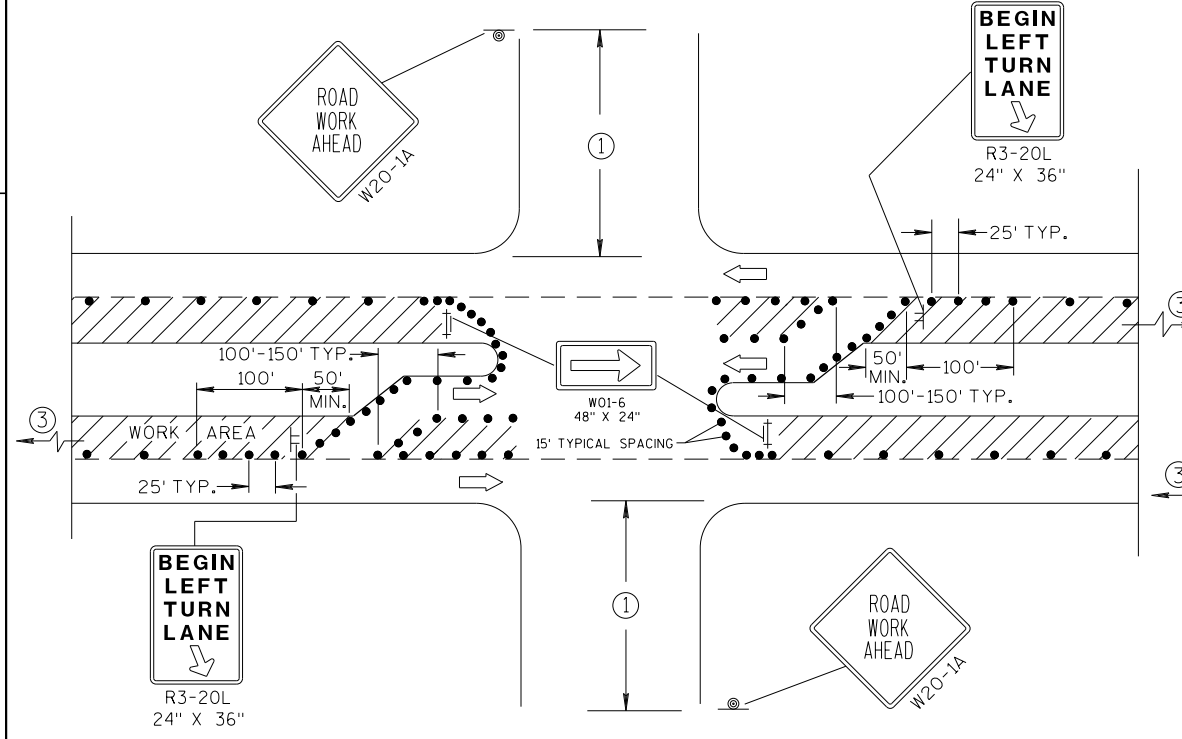


DETAIL B
FOR RIGHT LANE CLOSURE
AT INTERSECTION

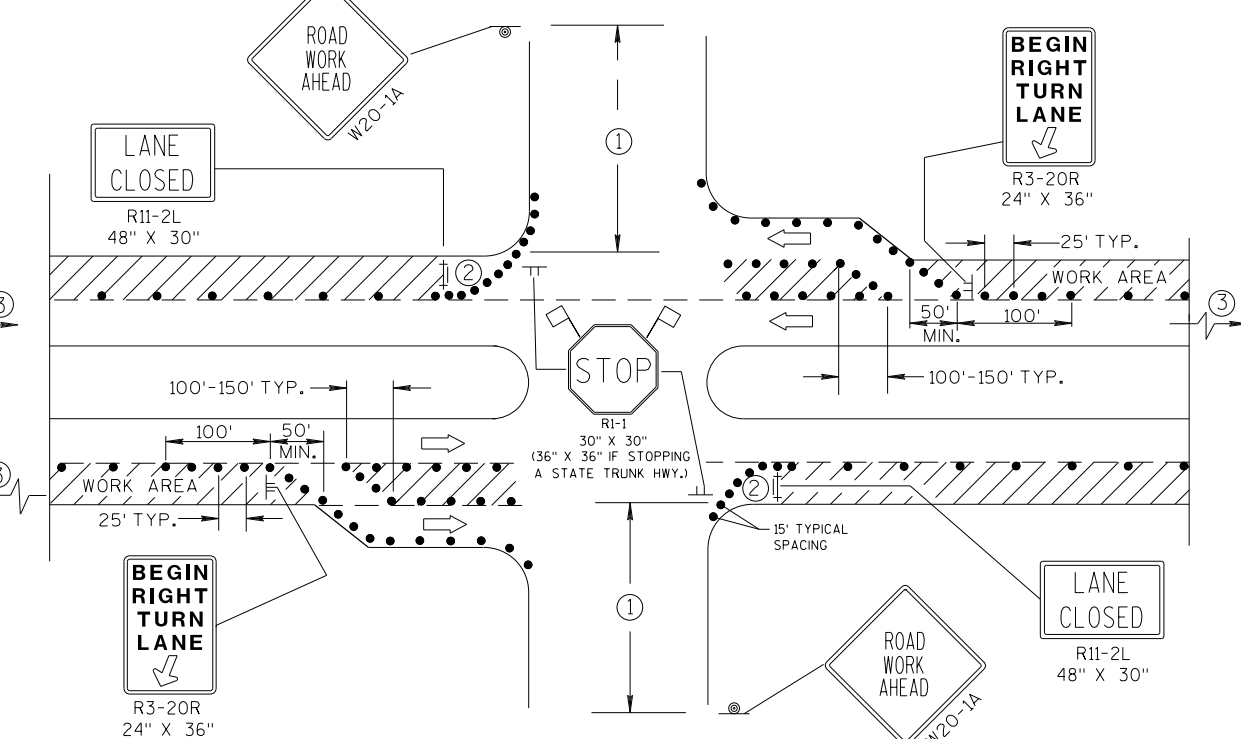
GENERAL NOTES

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN 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 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.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, 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.
- CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.
- BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER. 350' IF 35-40 MPH. 200' IF 25-30 MPH.
- ② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C
FOR LEFT LANE CLOSURE AT INTERSECTION OR
MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D
FOR RIGHT LANE CLOSURE AT INTERSECTION
(WITH RIGHT TURN BAY OPEN)

LEGEND

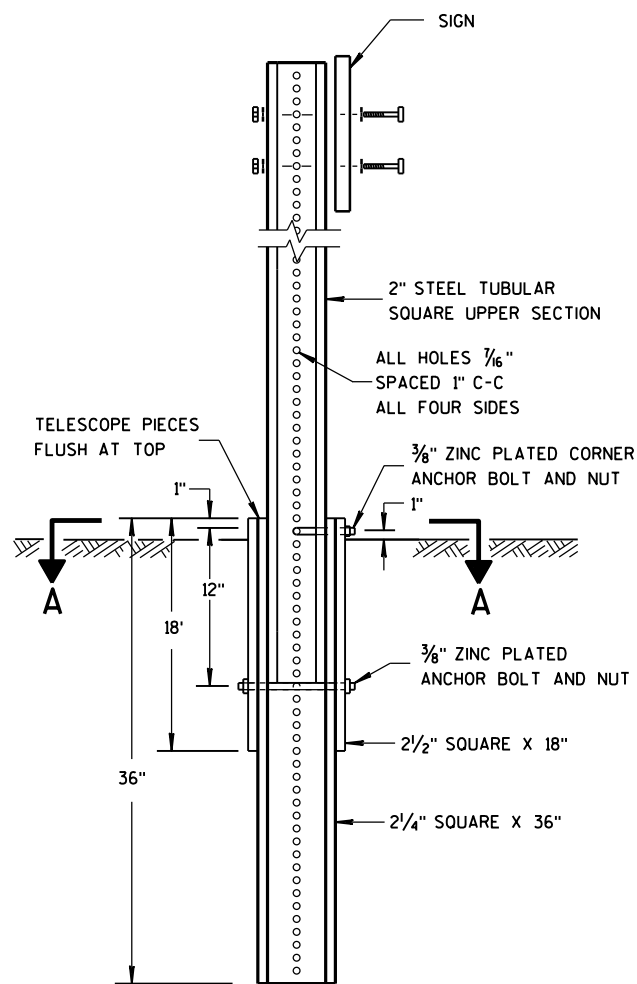
- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ⊞ SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- ⊞ TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- ➔ DIRECTION OF TRAFFIC
- 🚩 FLAGS, 16" X 16" MIN., (ORANGE)
- ▨ WORK AREA

**TRAFFIC CONTROL,
INTERSECTION WITHIN
SINGLE LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 7/2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



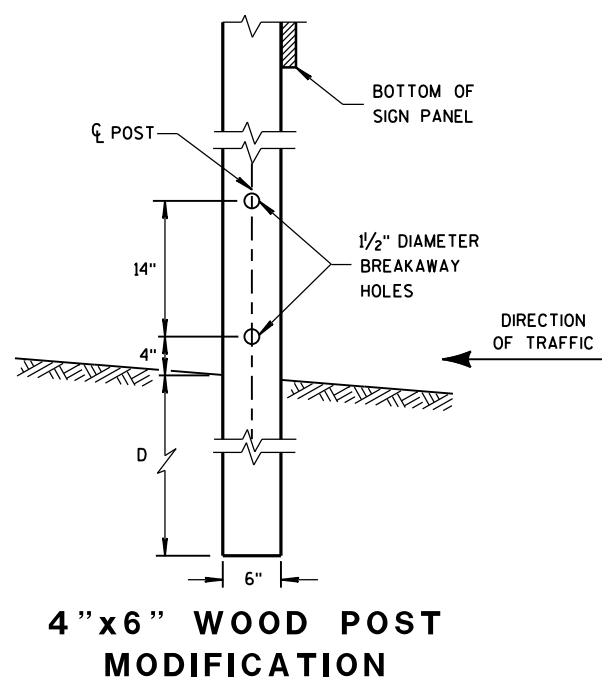
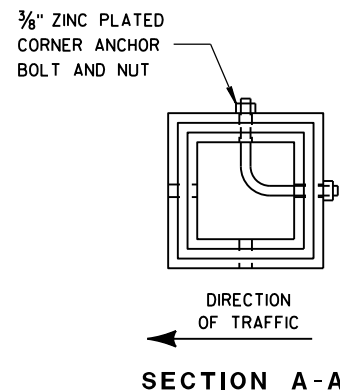
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

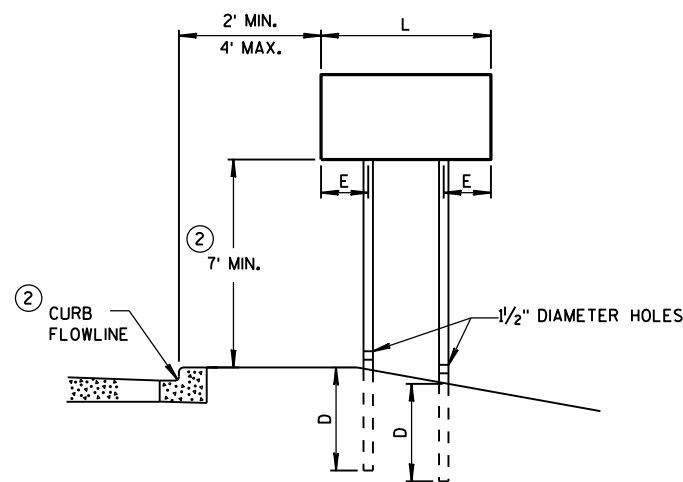
SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.



GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② 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. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

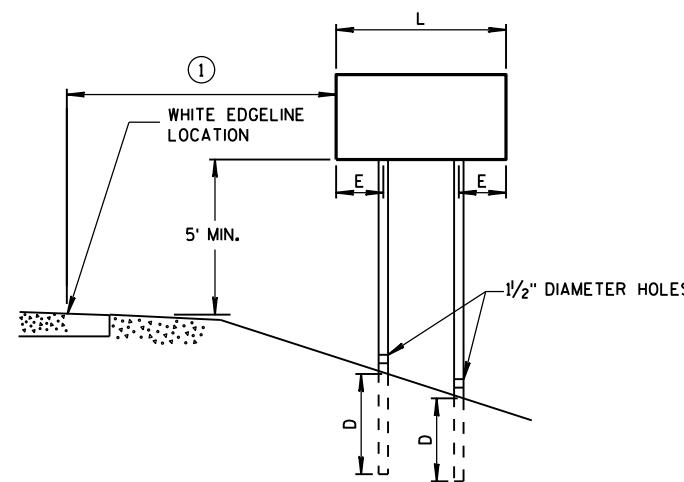


URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



RURAL AREA

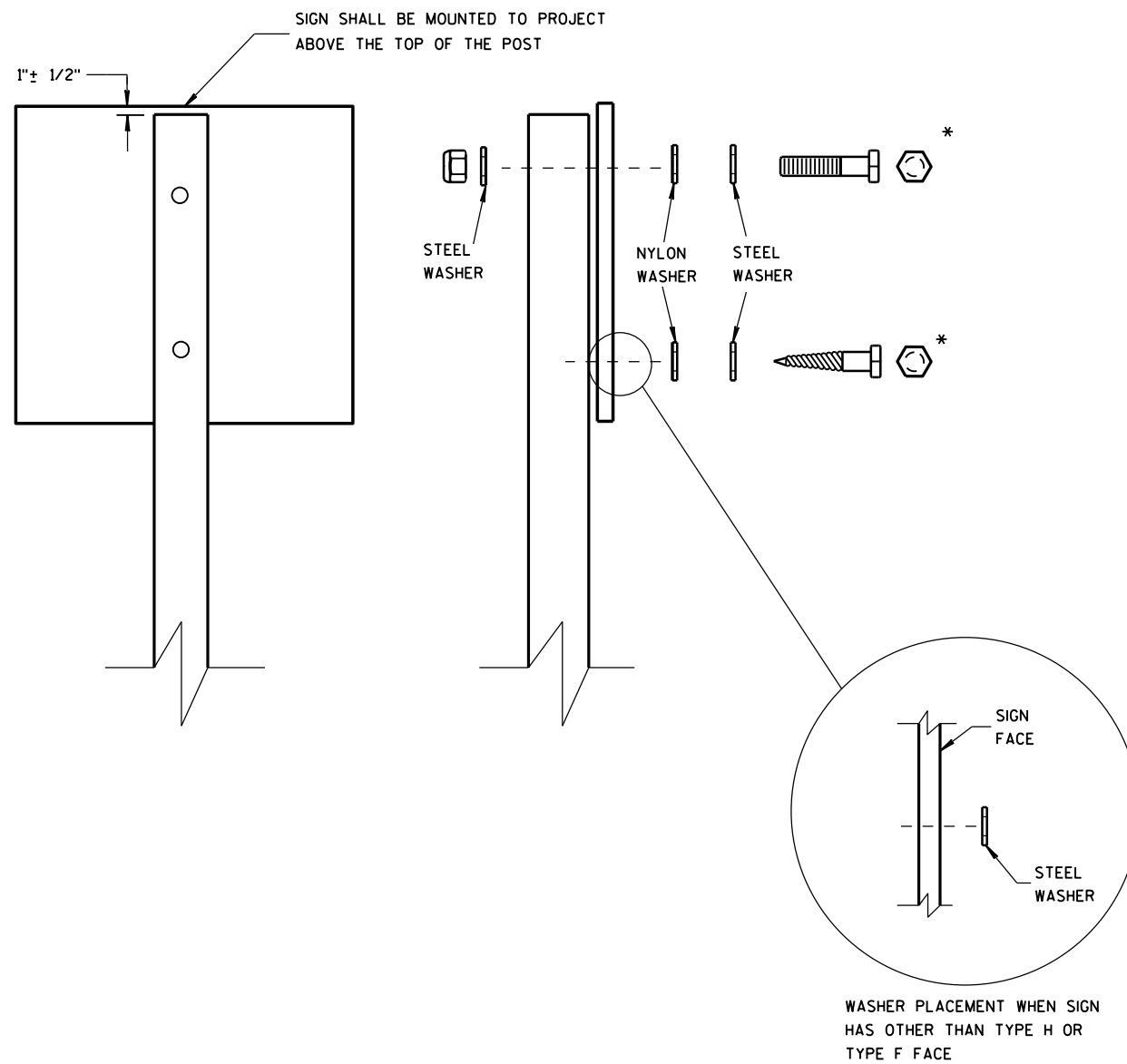
4\"/>

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48\"/>	-	1
LESS THAN 60\"/>	12\"/>	2
60\"/>	L/5	2
GREATER THAN 120\"/>	12\"/>	3
168\"/>	12\"/>	4

SEE NOTE ③

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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 - 5/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

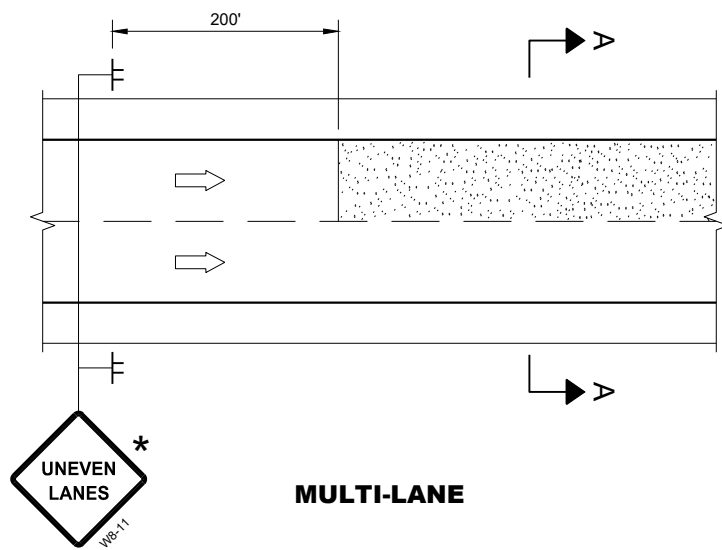
WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

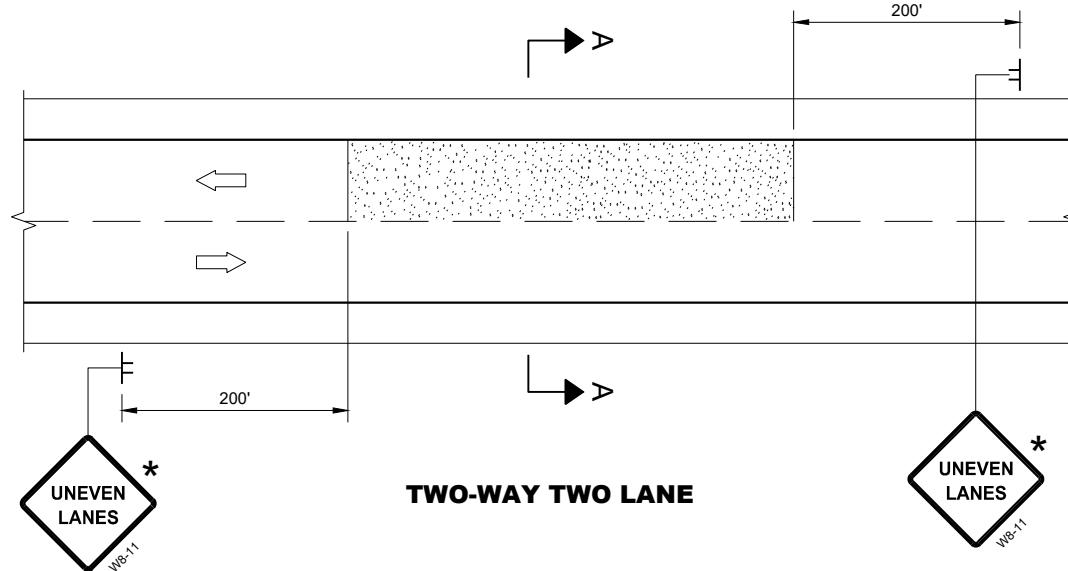
1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

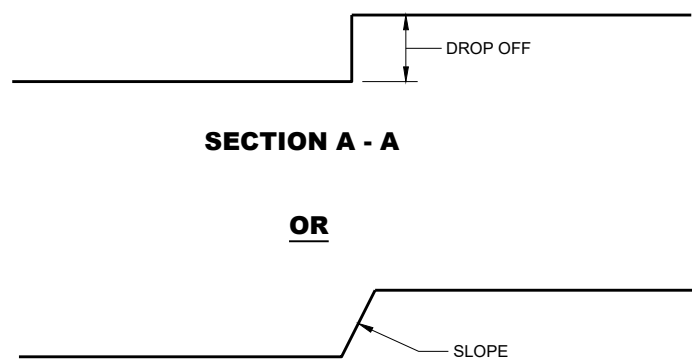
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/s/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



MULTI-LANE



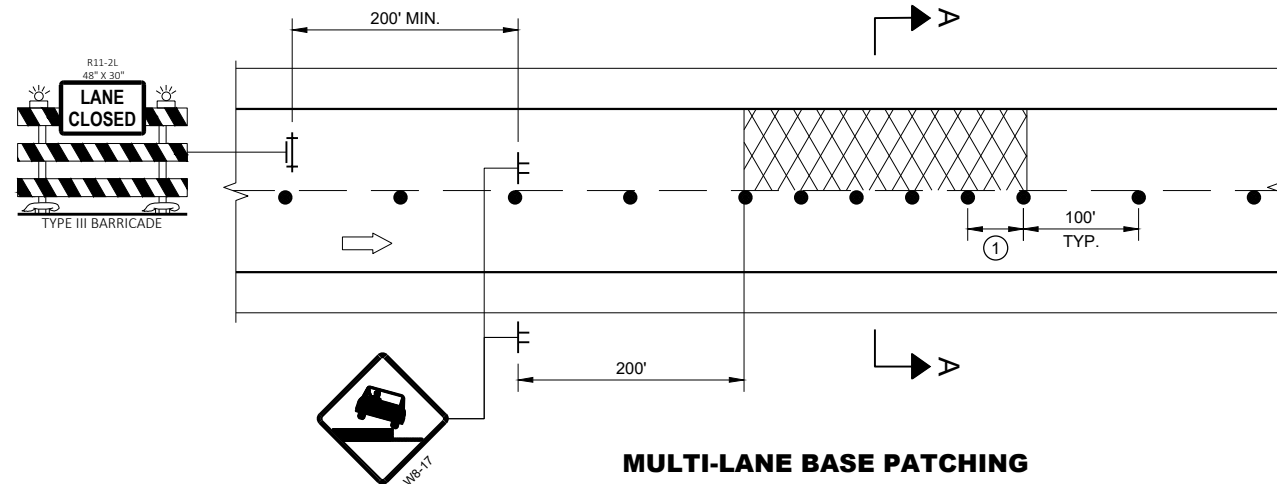
TWO-WAY TWO LANE



SECTION A - A

OR

SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

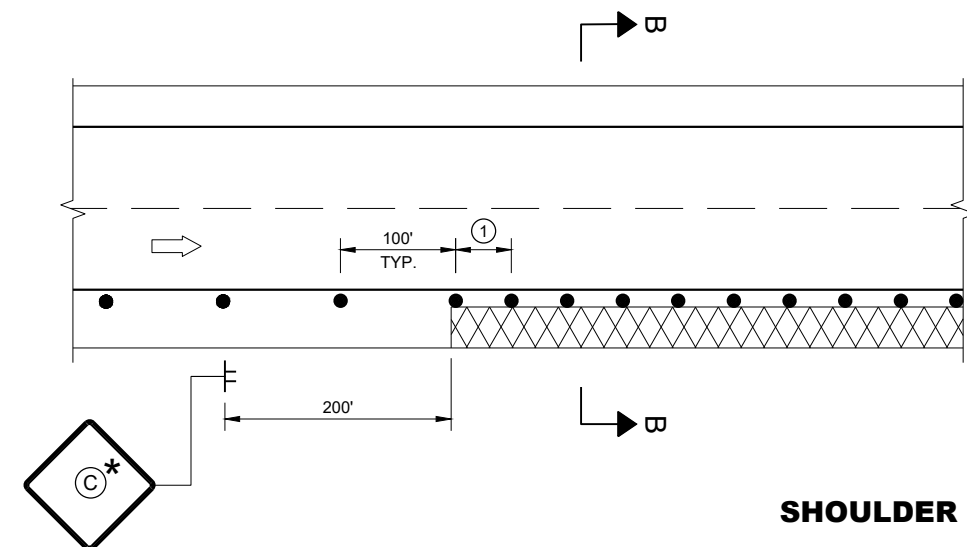
- FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- * IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.
- ① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

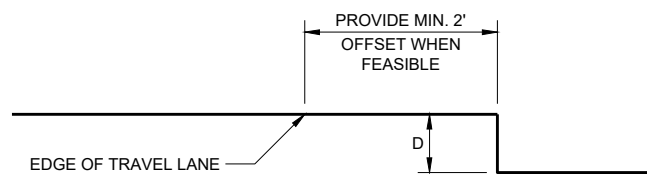
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

6

6



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	 W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	 W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

SDD 15D39 - 02

SDD 15D39 - 02

**TRAFFIC CONTROL,
DROP-OFF SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE DATE 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.

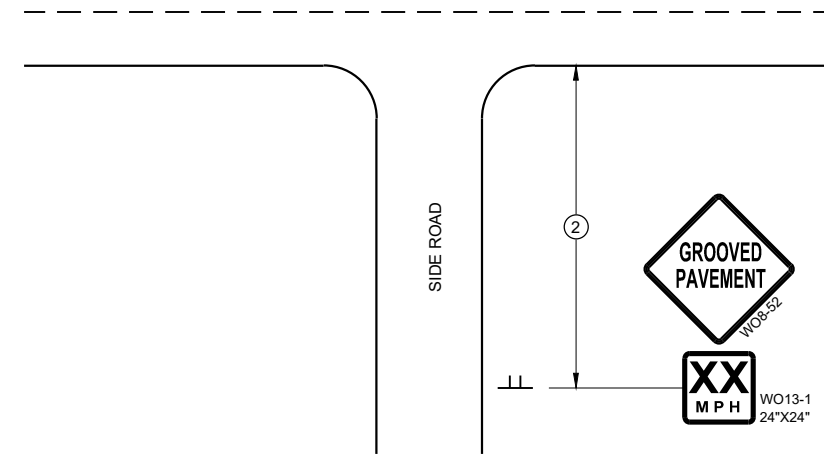
SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

- 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.

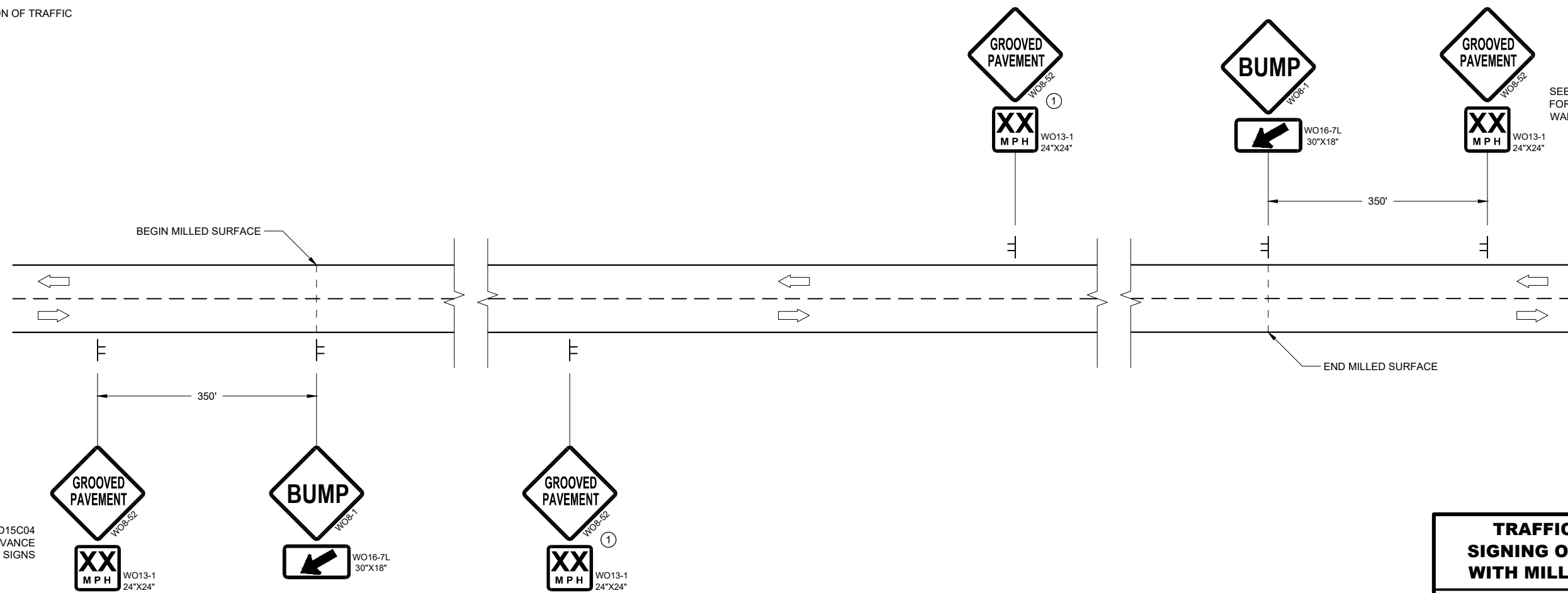
LEGEND

⊥ 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

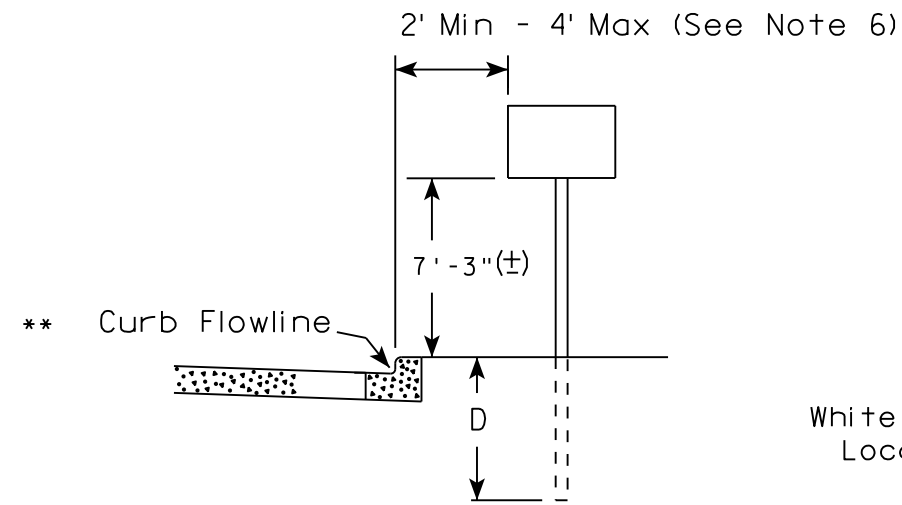
TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

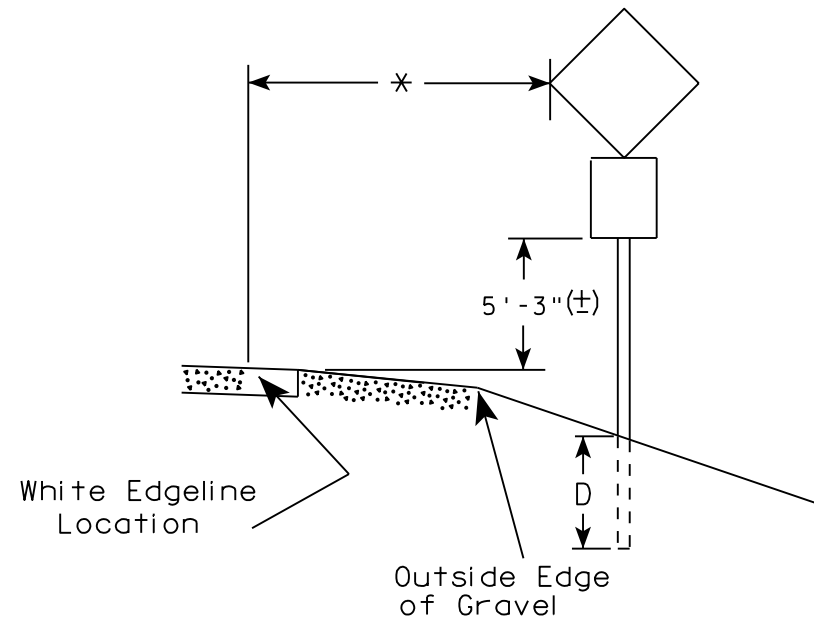
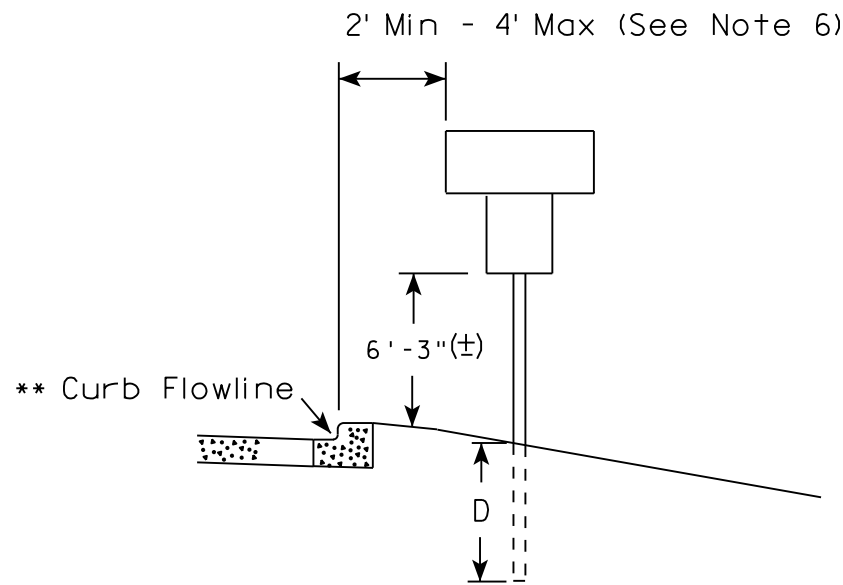
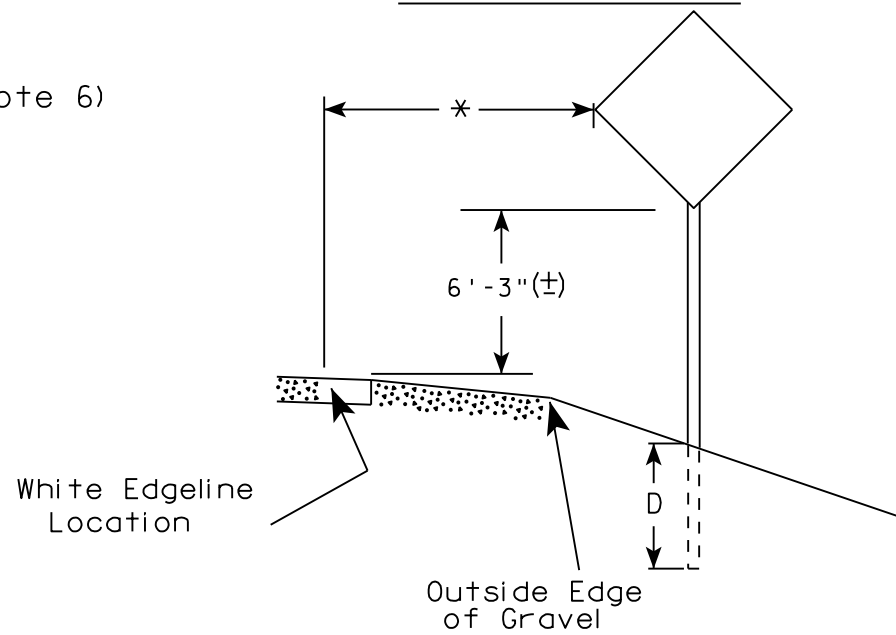
APPROVED
August 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 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. J-Assemblies are considered to be one sign for mounting height.
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" (±).

* * 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.

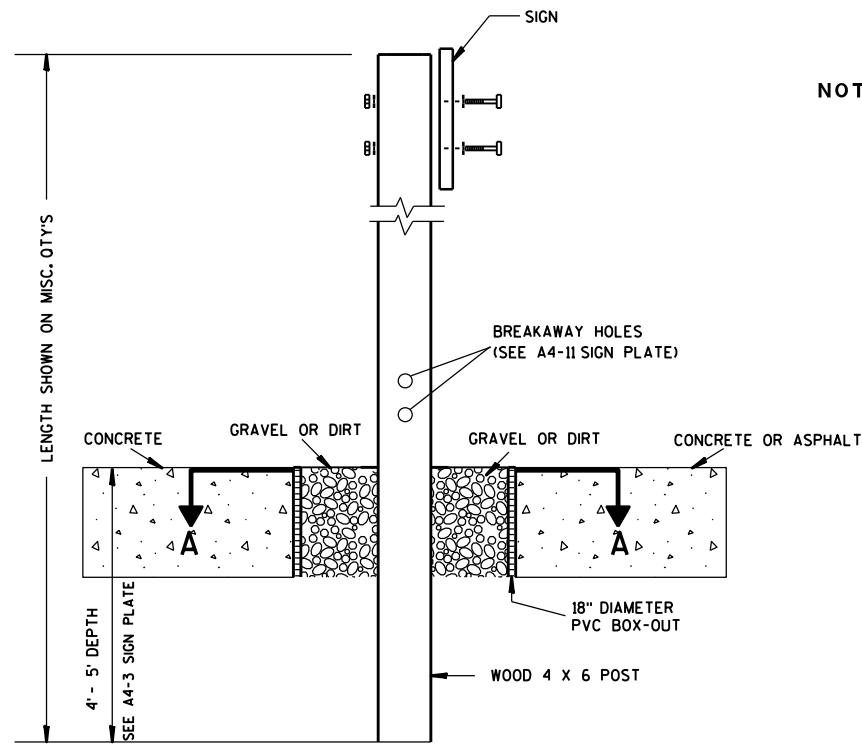
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

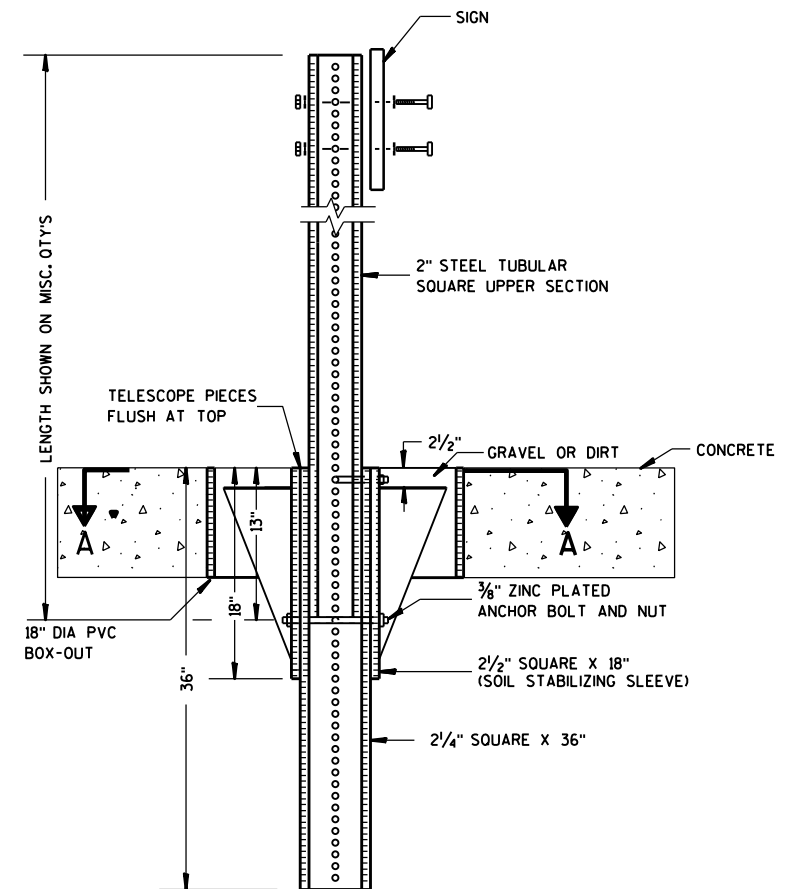
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

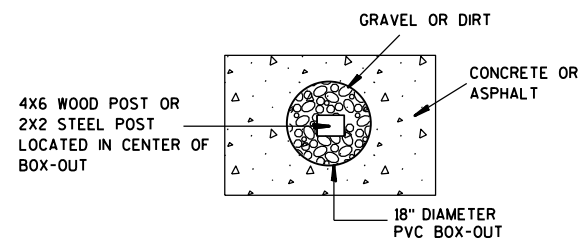
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

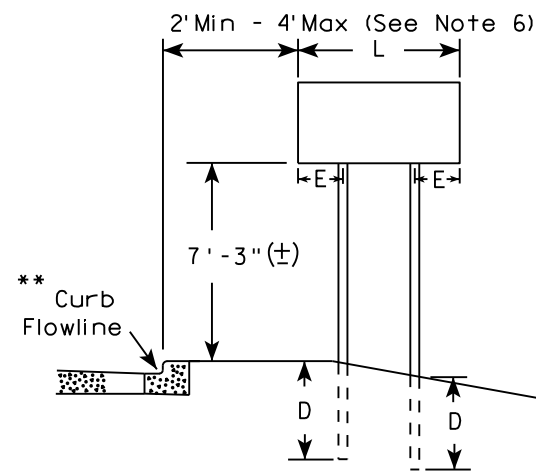
7

7

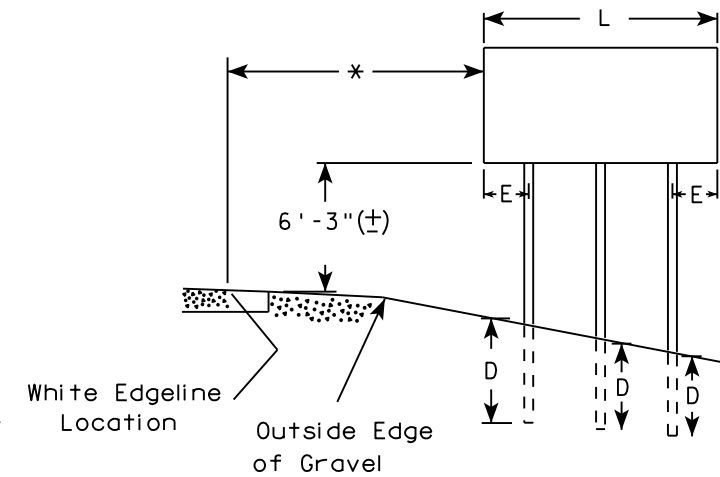
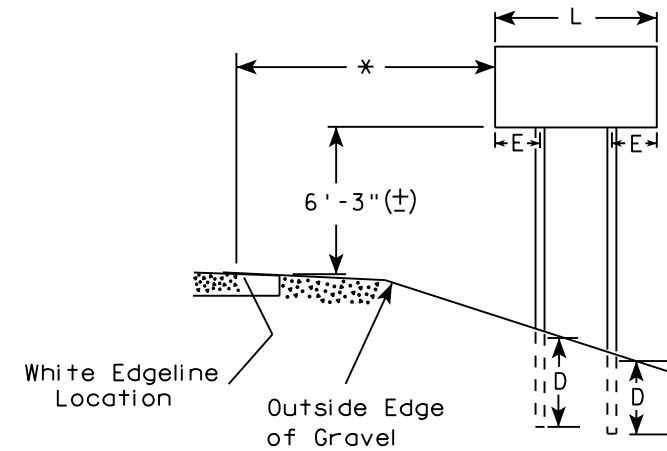
GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. 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), 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" (±).

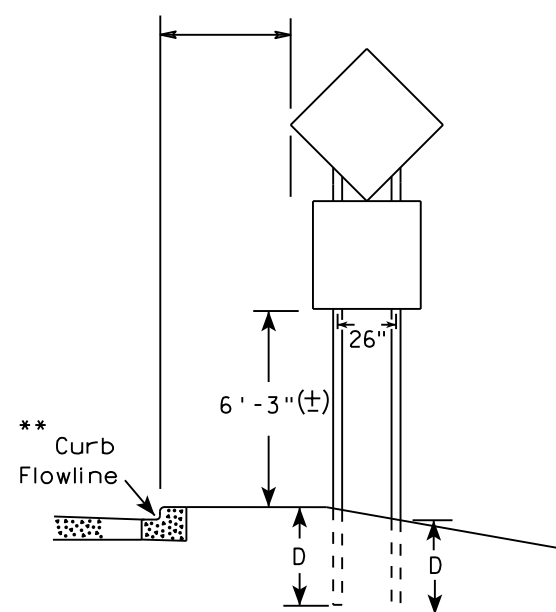
URBAN AREA



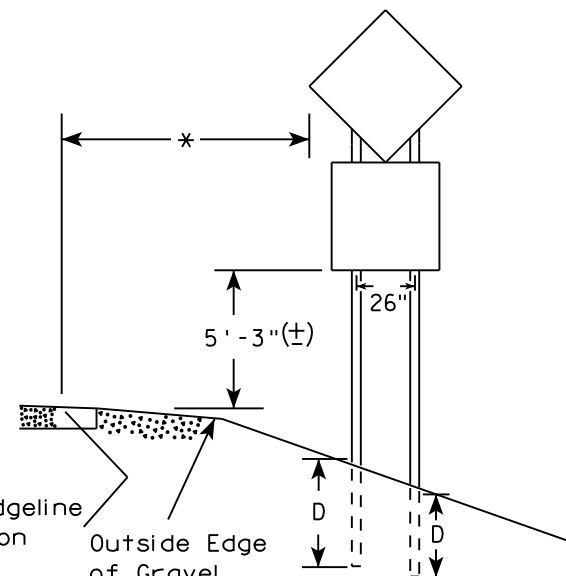
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

* 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.

** 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.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

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

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

POST EMBEDMENT DEPTH

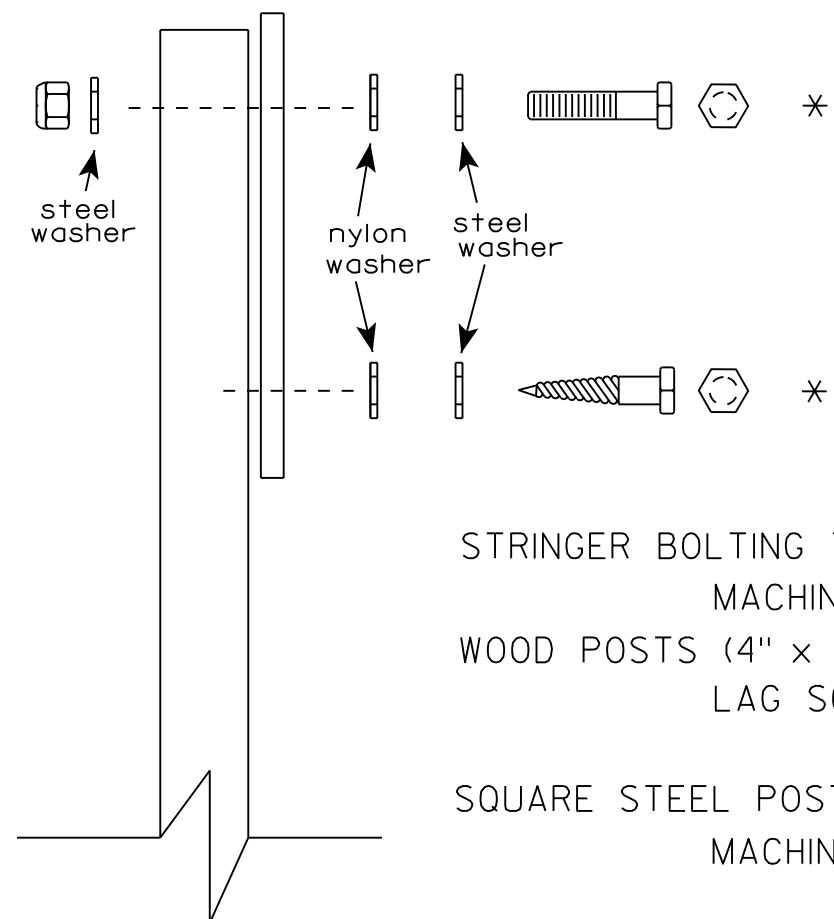
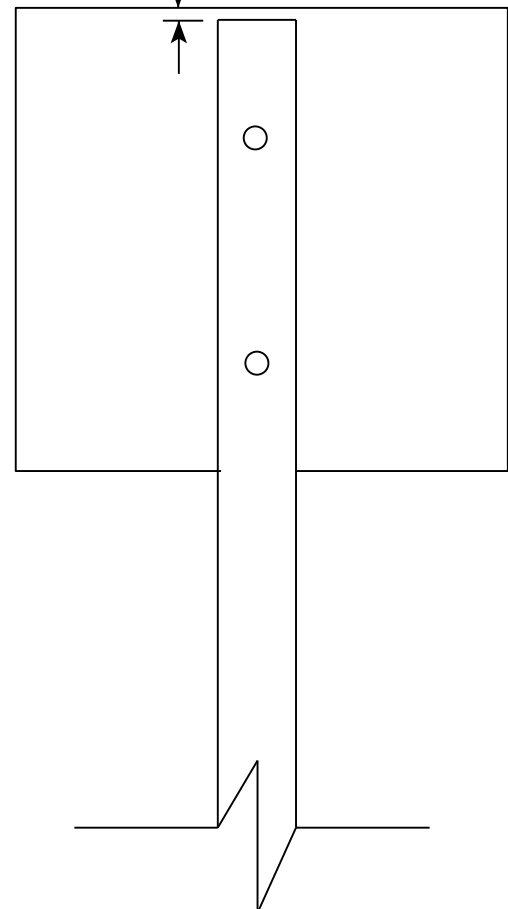
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 8/21/17 PLATE NO. A4-4.15

1"± 1/2"

SIGN SHALL BE MOUNTED TO PROJECT ABOVE THE TOP OF THE POST



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

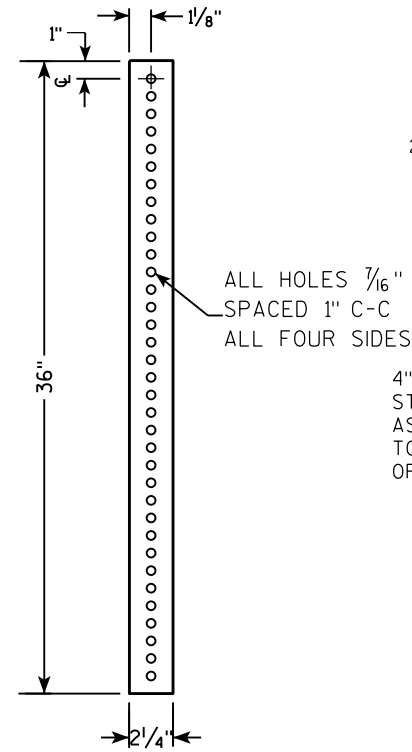
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

7

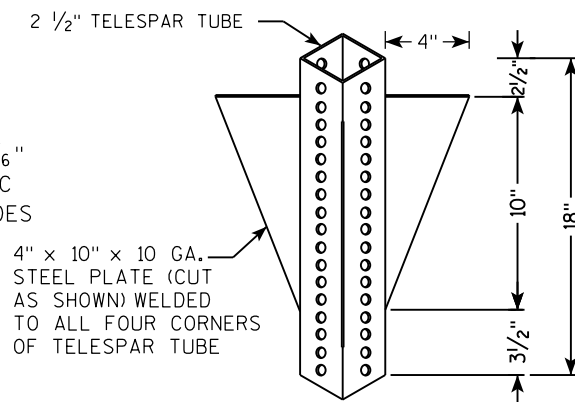
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

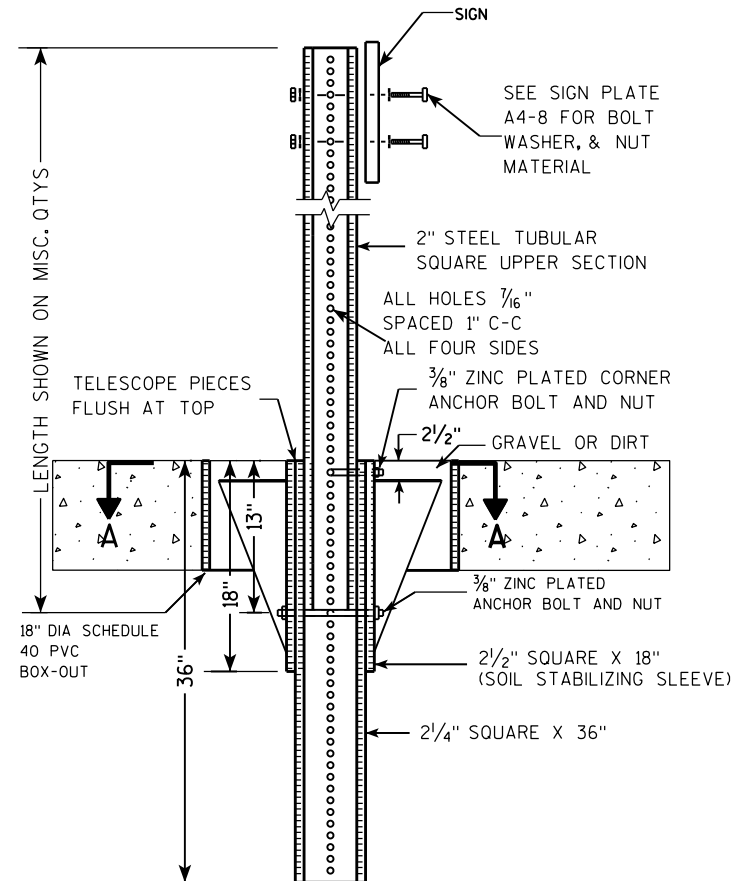
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



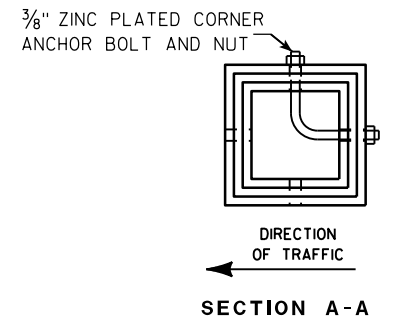
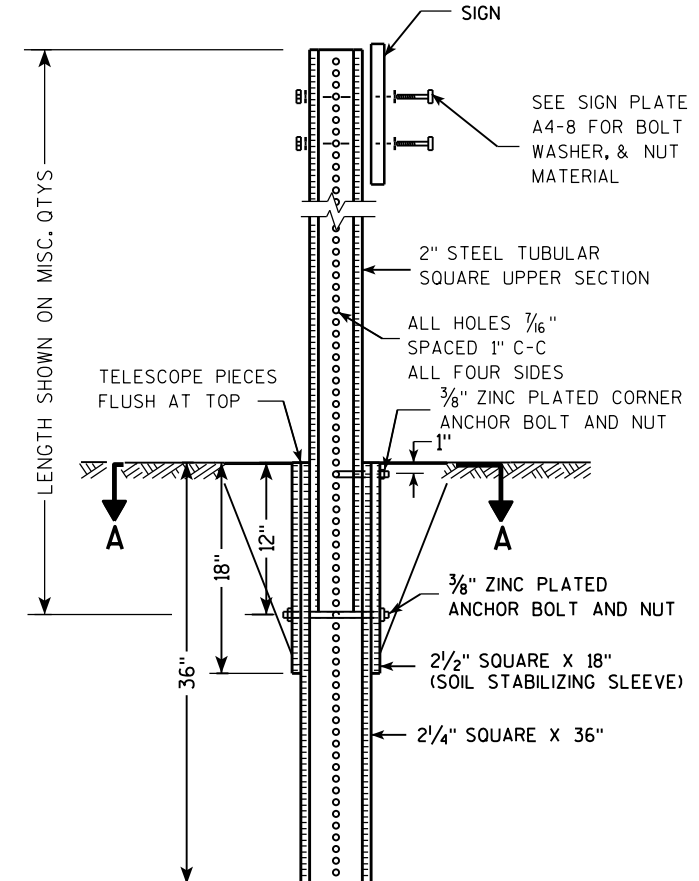
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



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



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

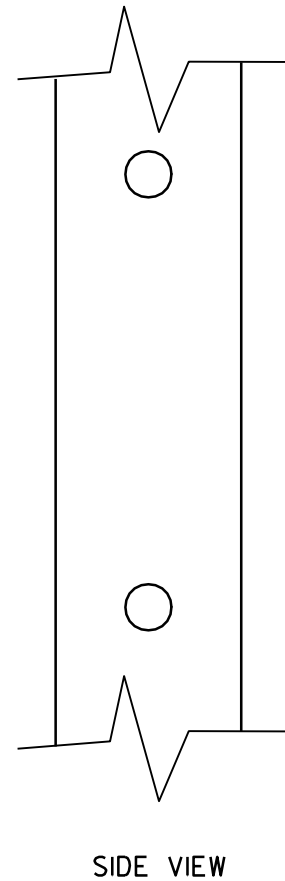
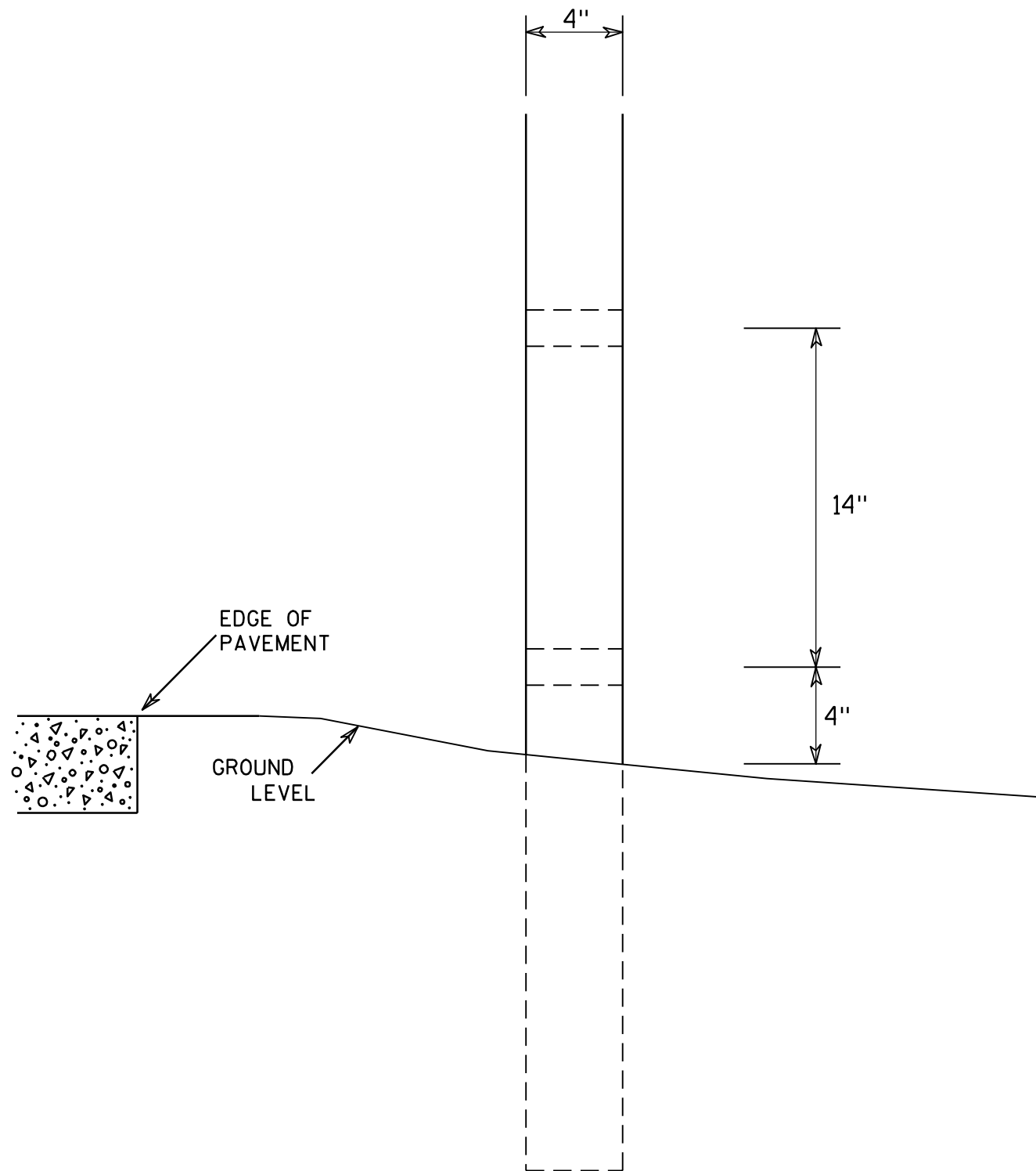


Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

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

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 2/05/15 PLATE NO. A4-9.9



GENERAL NOTES

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

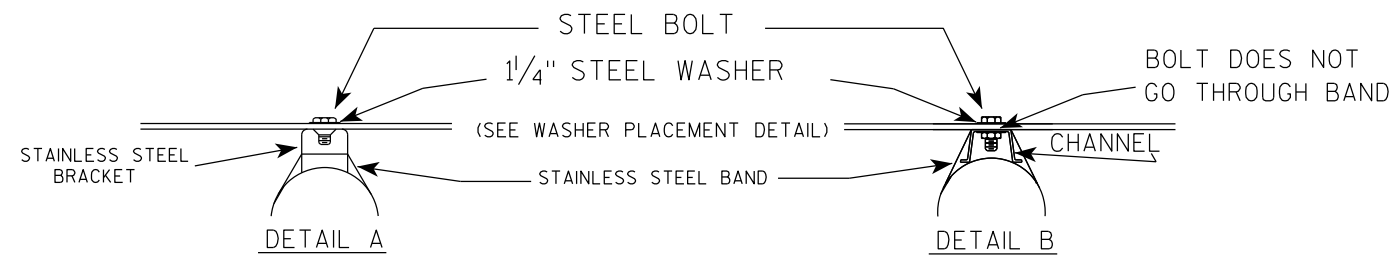
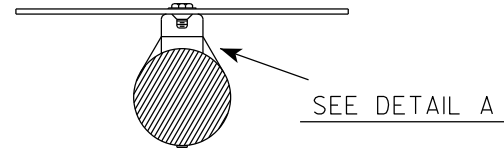
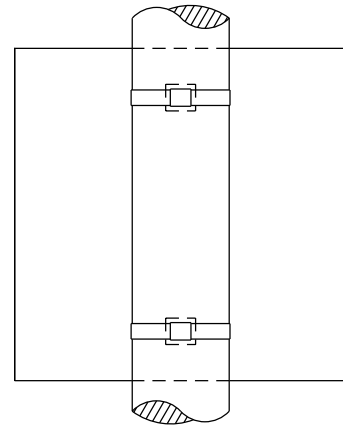
7

7

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

BANDING

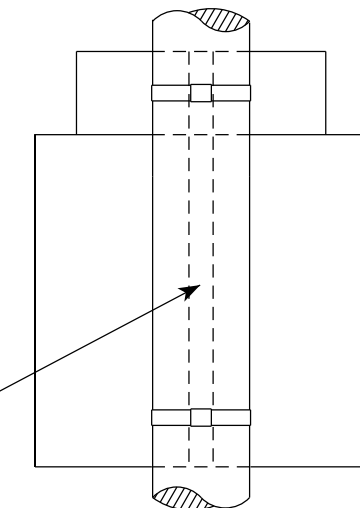
SINGLE SIGN



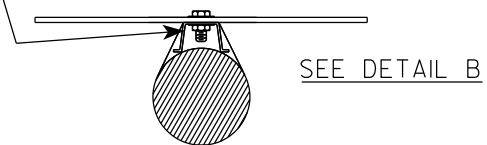
GENERAL NOTES

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

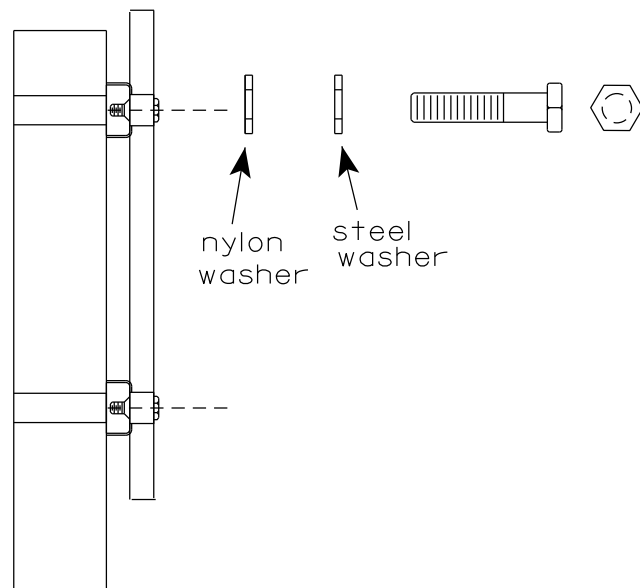
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



WASHER PLACEMENT



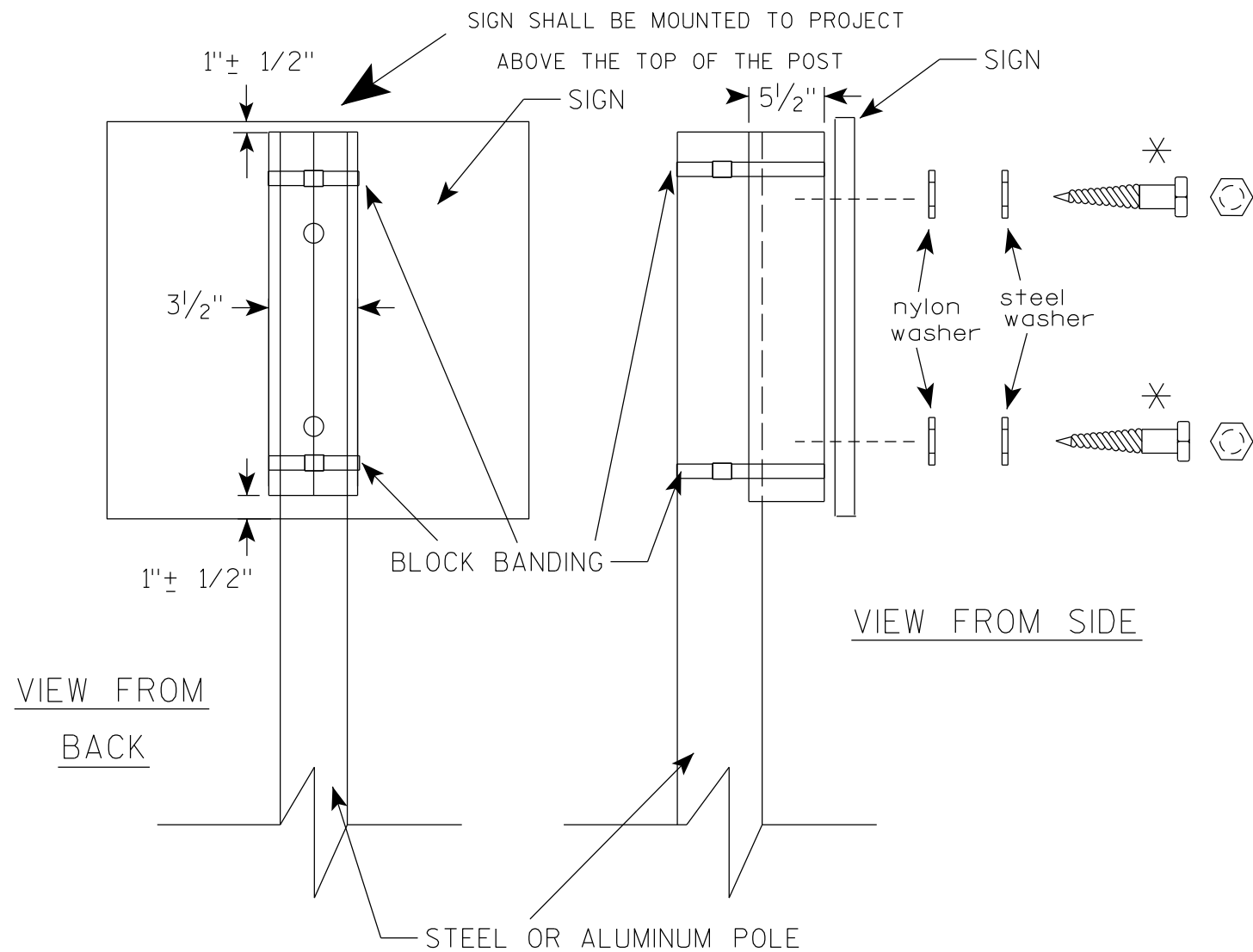
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

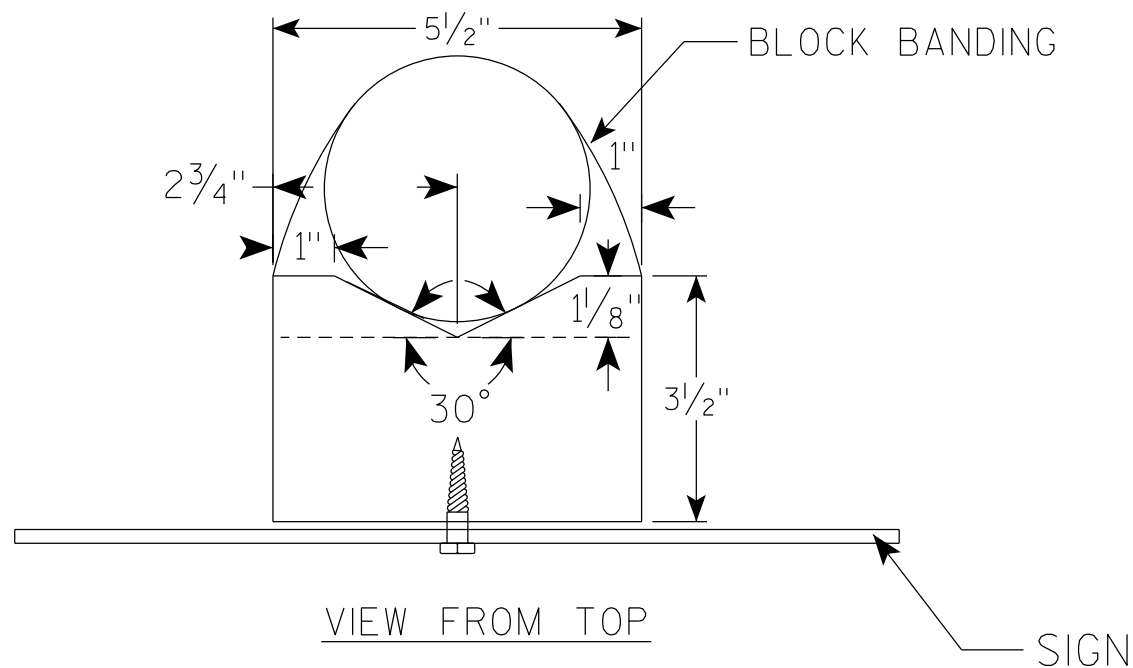
DATE 6/10/19 PLATE NO. A5-9.4



GENERAL NOTES

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

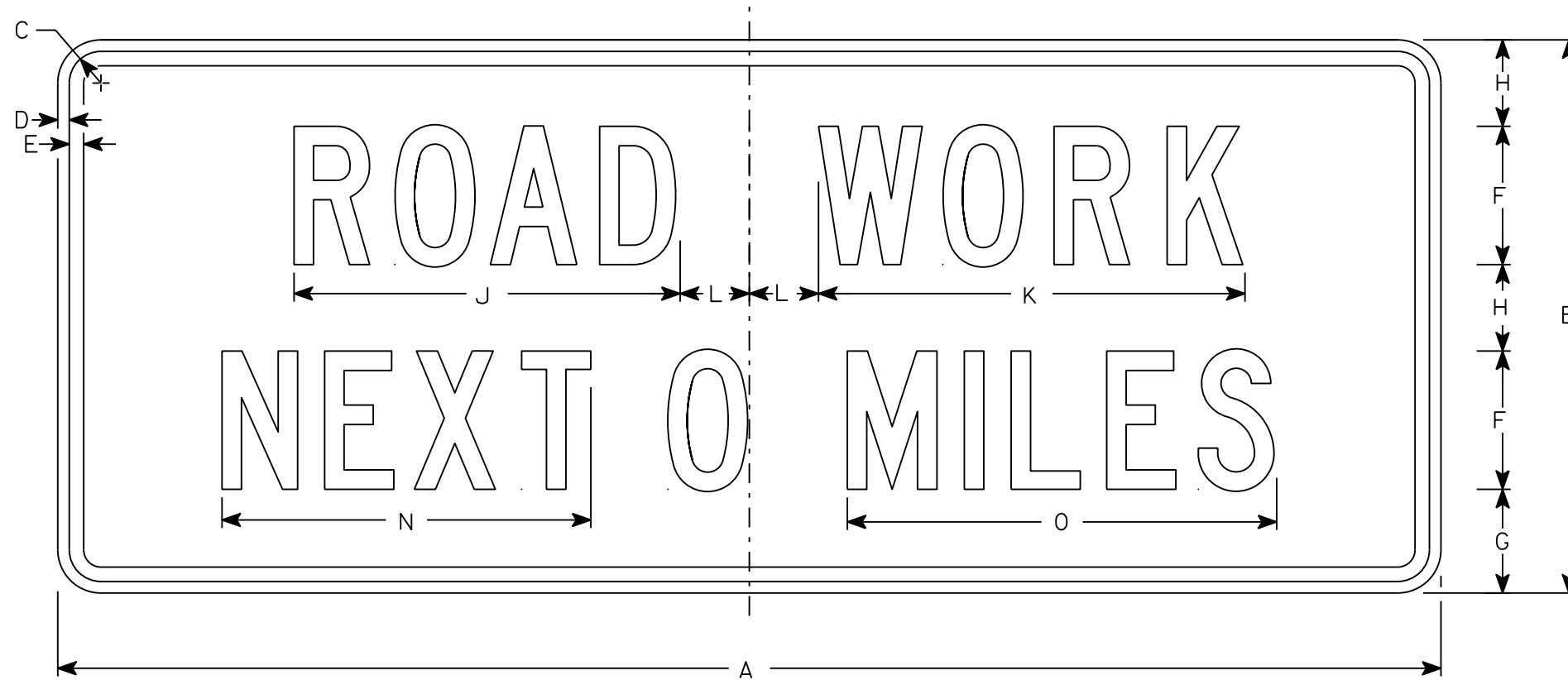
✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"



BLOCK BANDING DETAIL (V-BLOCK OPTION)	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> for State Traffic Engineer
DATE <u>6/10/19</u>	PLATE NO. <u>A5-10.2</u>

NOTES

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



G20-1

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	
1																												
2	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8													10
3																												
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8													10
5																												

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

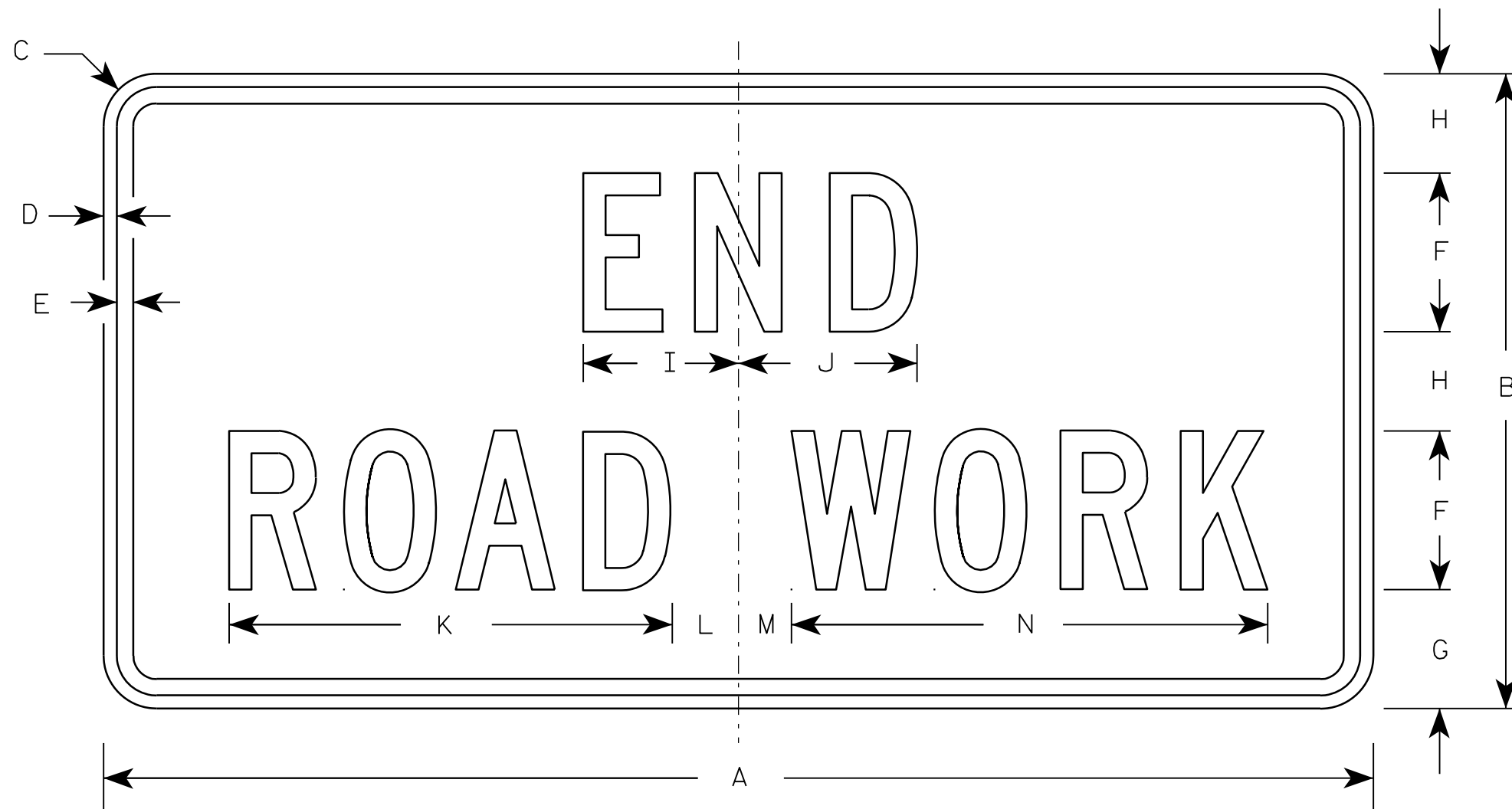
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

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 - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



G20-2A

7

7

Metric equivalent for this sign is:

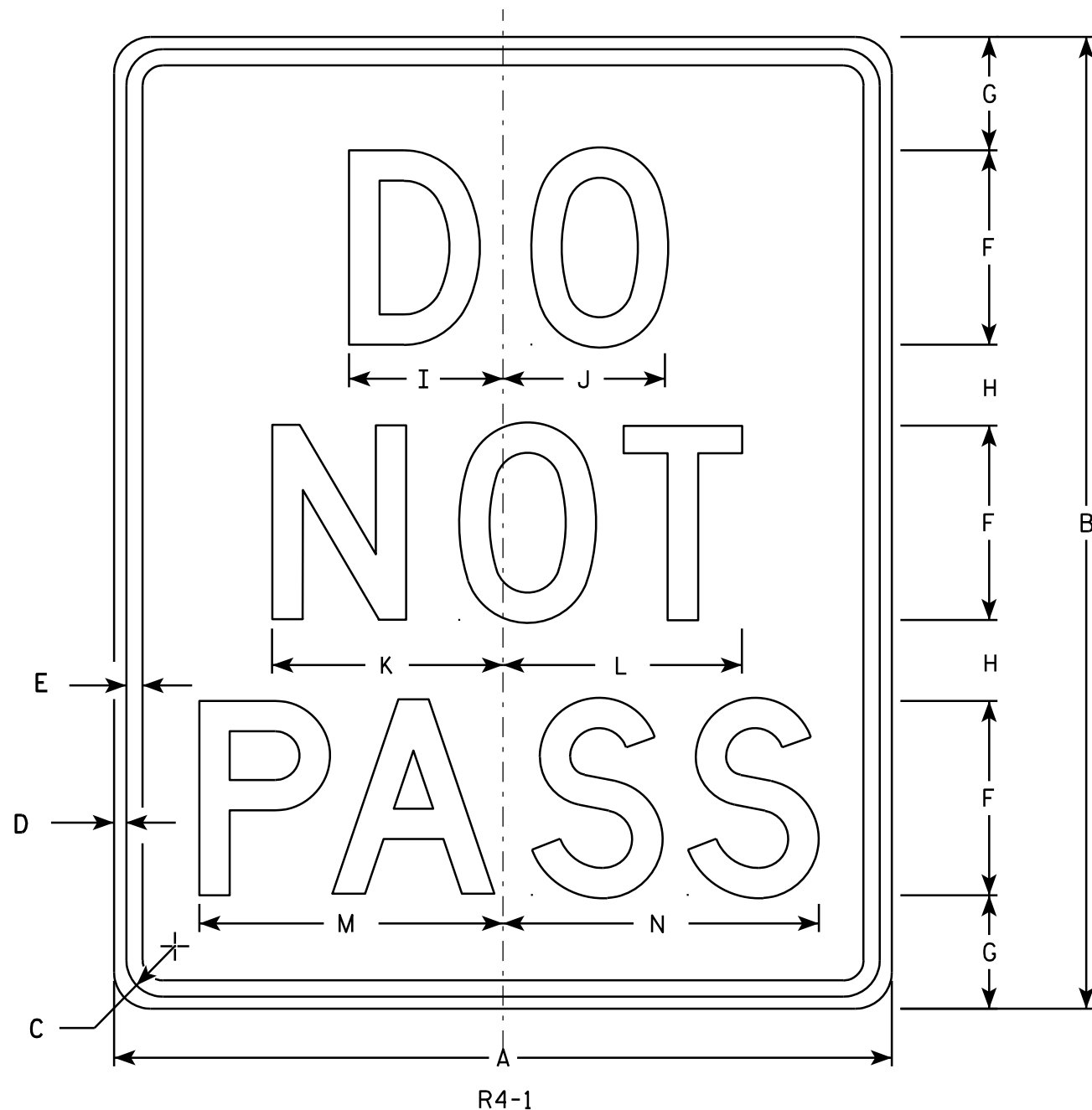
SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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.	Area sq. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN G20-2A	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/30/09	PLATE NO. G20-2A.8

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 - D
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.



R4-1

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	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 1/8	12 1/4	15 5/8	16 1/4													20.0

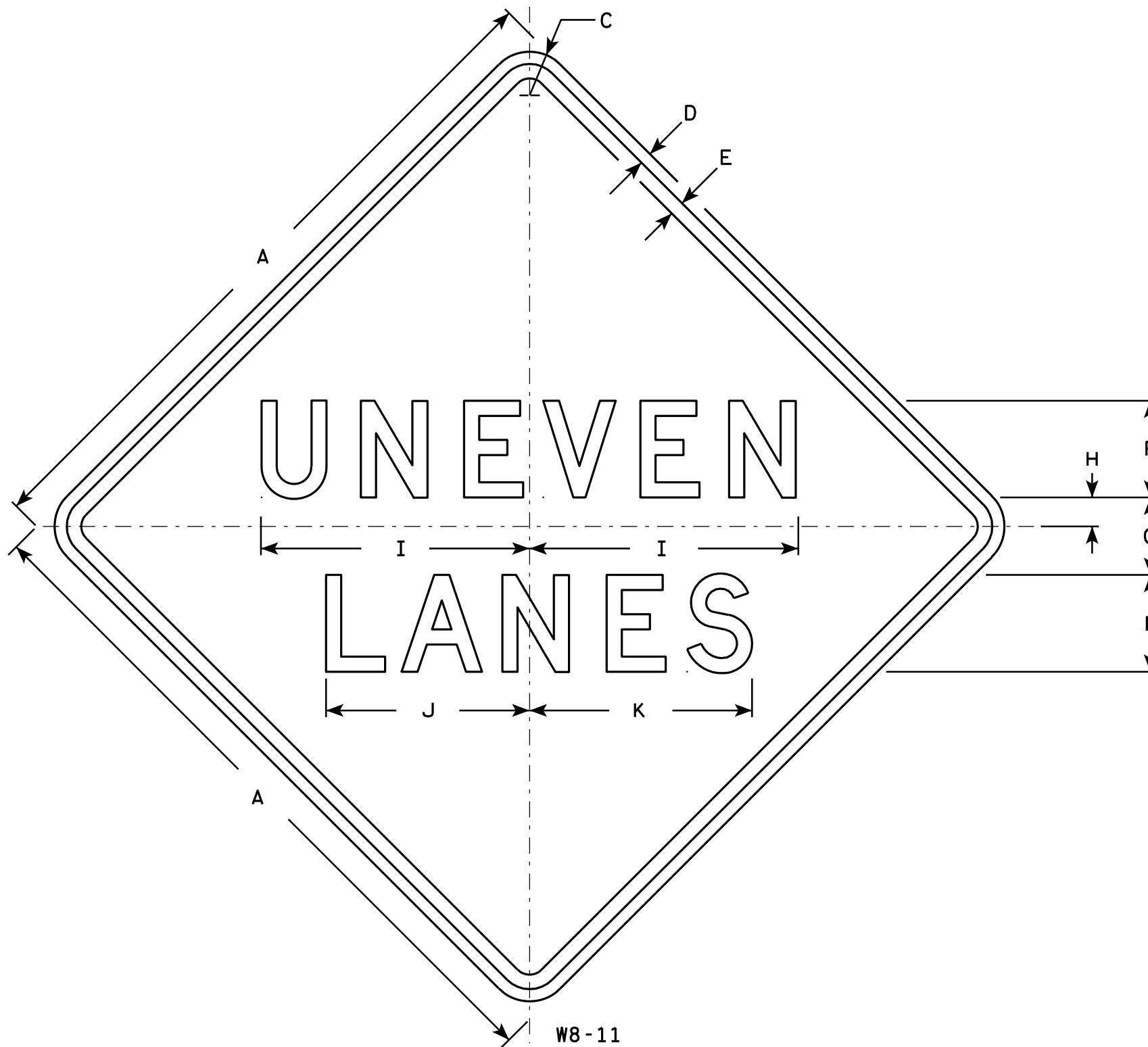
STANDARD SIGN
R4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

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 - Orange
Message - Black
3. Message Series - D
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.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	5	4	1 1/2	13 7/8	10 1/2	11 1/2																9.0
2M	36		1 5/8	5/8	3/4	5	4	1 1/2	13 7/8	10 1/2	11 1/2																9.0
3																											
4	36		1 5/8	5/8	3/4	5	4	1 1/2	13 7/8	10 1/2	11 1/2																9.0
5	48		2 1/4	3/4	1	7	5	2	18 1/2	14	15 3/8																16.0

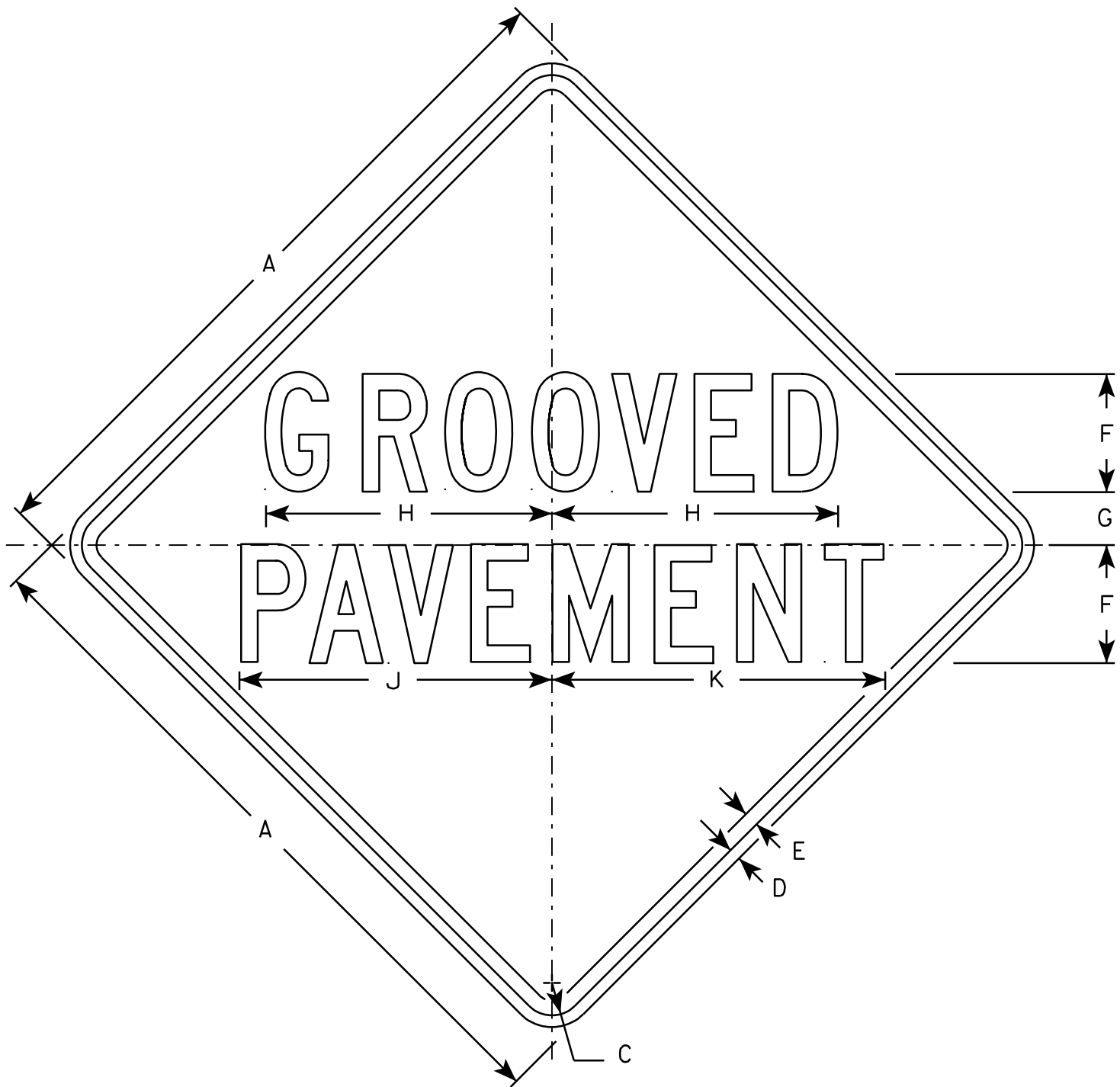
STANDARD SIGN
W8-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W8-11.4

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



W8-52

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
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.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 3/8	1/2	5/8	5	2 1/4	12 1/8		13 1/4	14 1/8																6.25
2M	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
3	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
4	36		1 5/8	5/8	3/4	6	2 5/8	14 1/2		15 7/8	17																9.0
5	48		2 1/4	3/4	1	8	3 1/2	19 3/8		21 1/4	22 5/8																16.0

STANDARD SIGN
W8-52

WISCONSIN DEPT OF TRANSPORTATION

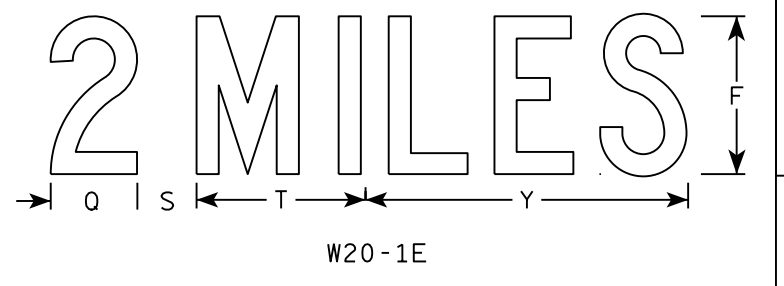
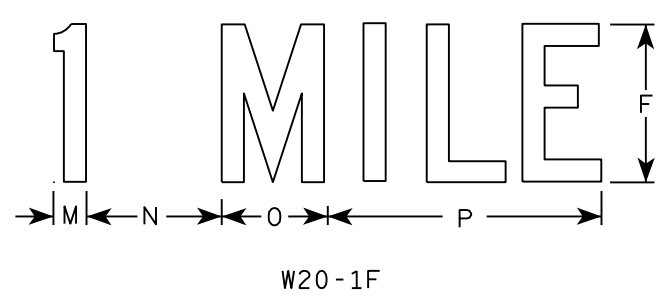
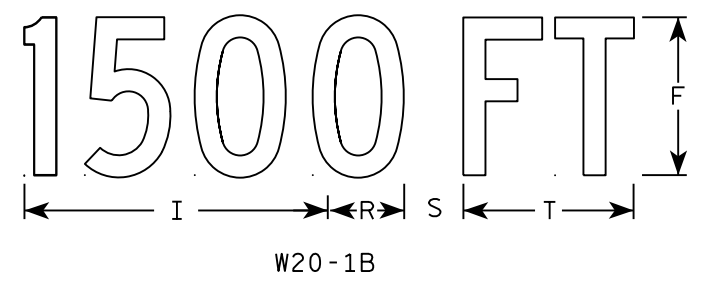
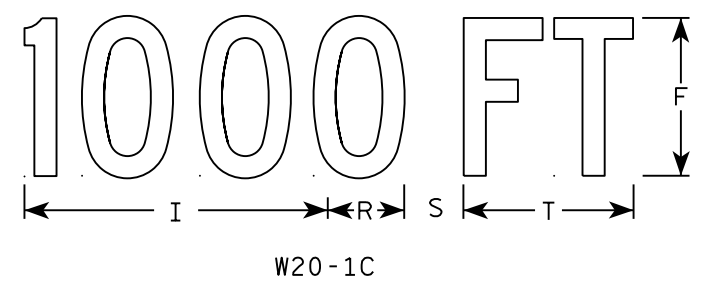
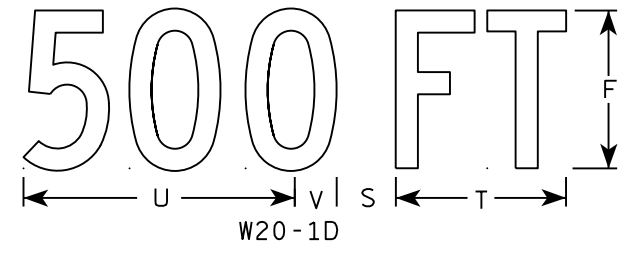
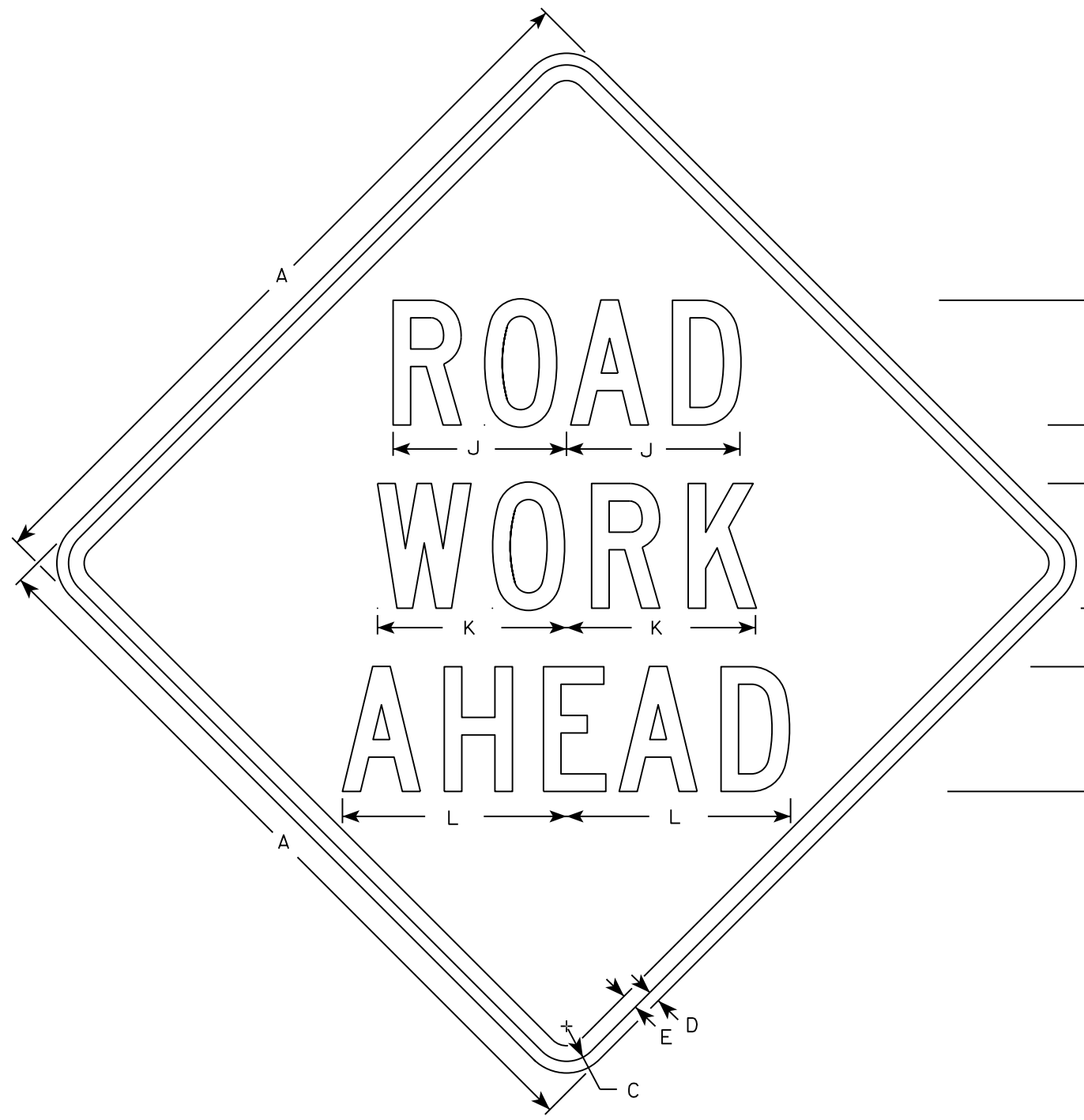
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 03/14/13 PLATE NO. W8-52.8

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

NOTES

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



7

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

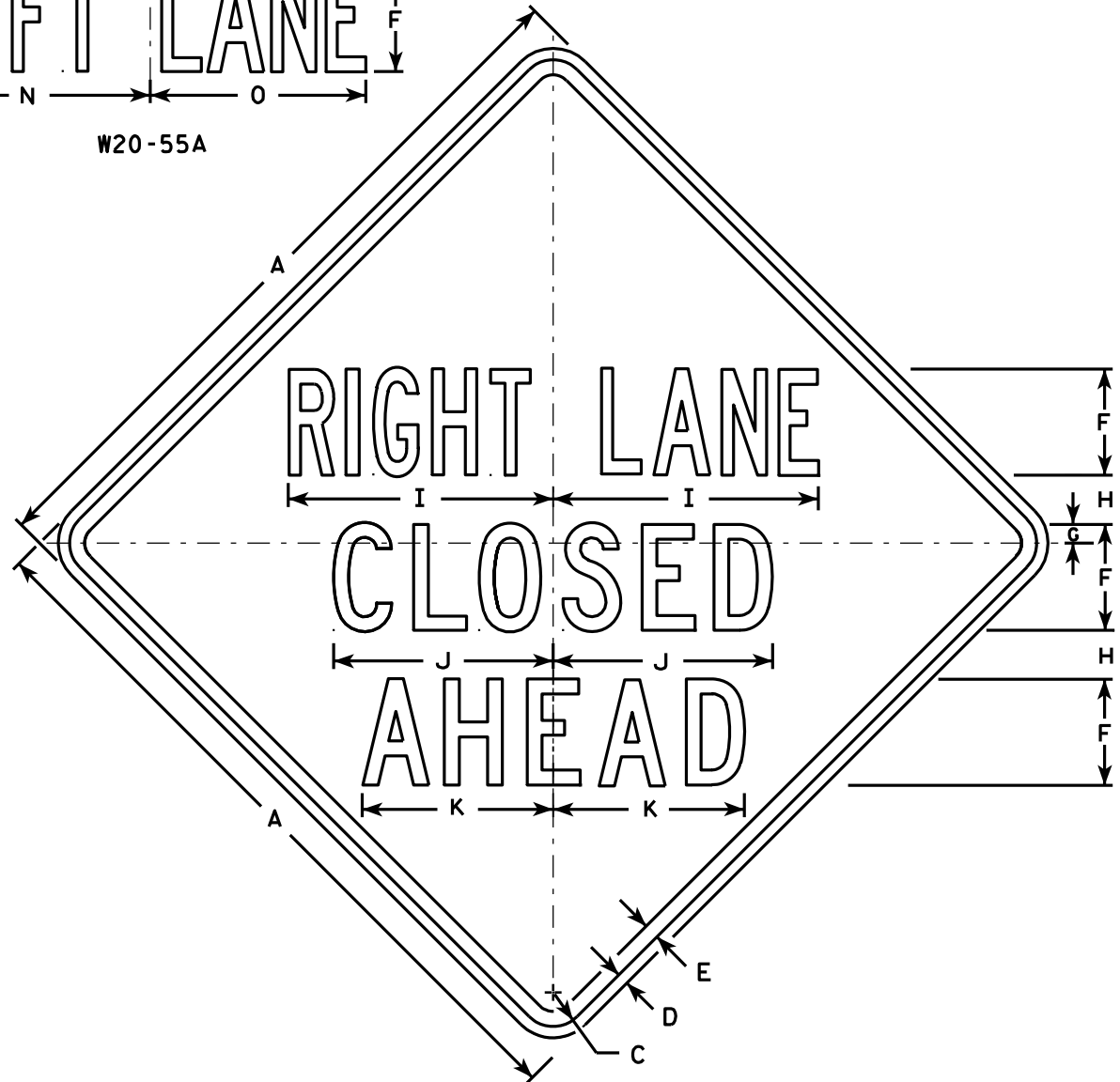
STANDARD SIGN
W20-1A, B, C, D, F & G
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/07/15 PLATE NO. W20-1.10

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 5
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. "-----LANE" is Series B.
All other copy is Series C.

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

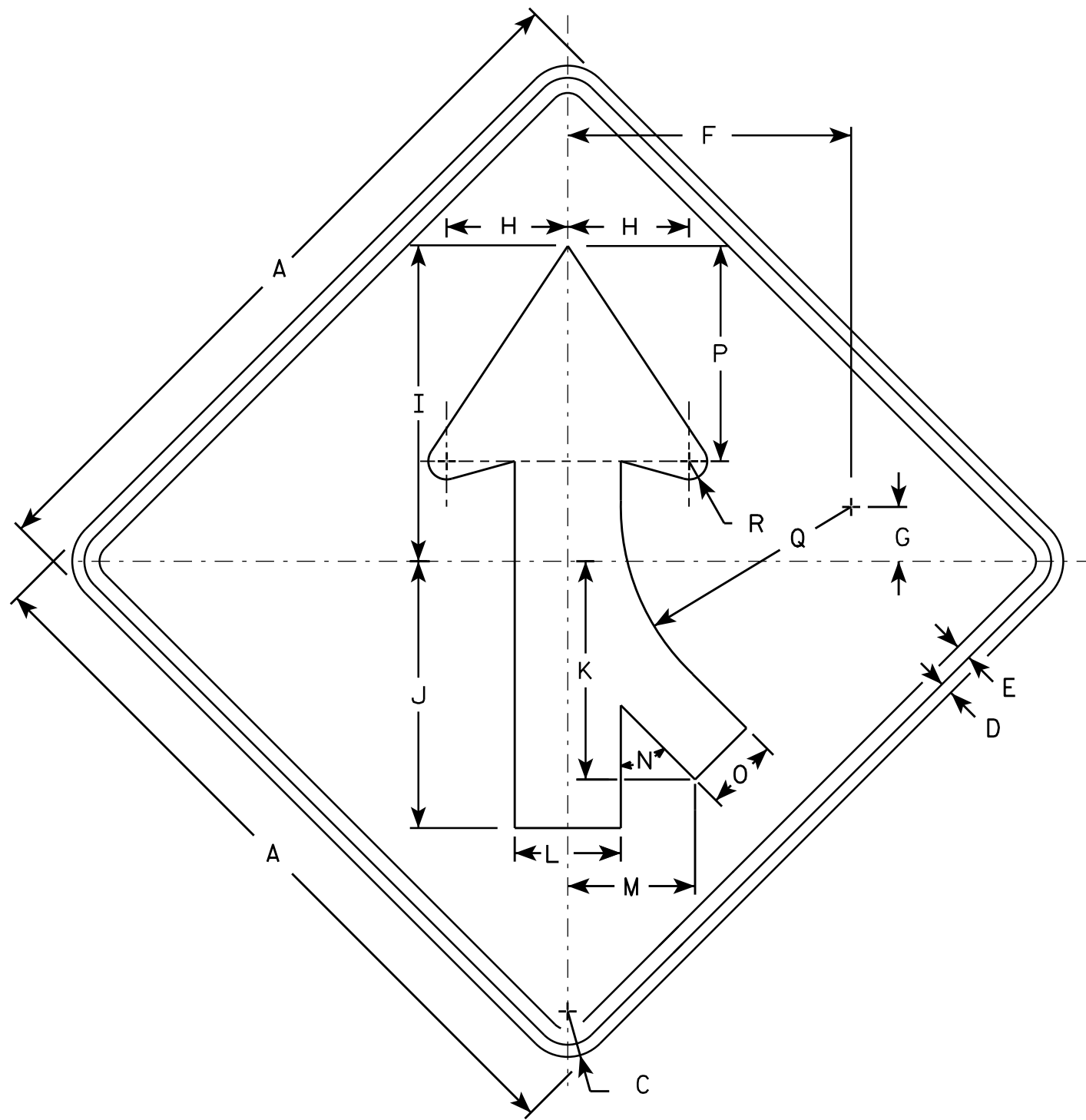
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

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



W04-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
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. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

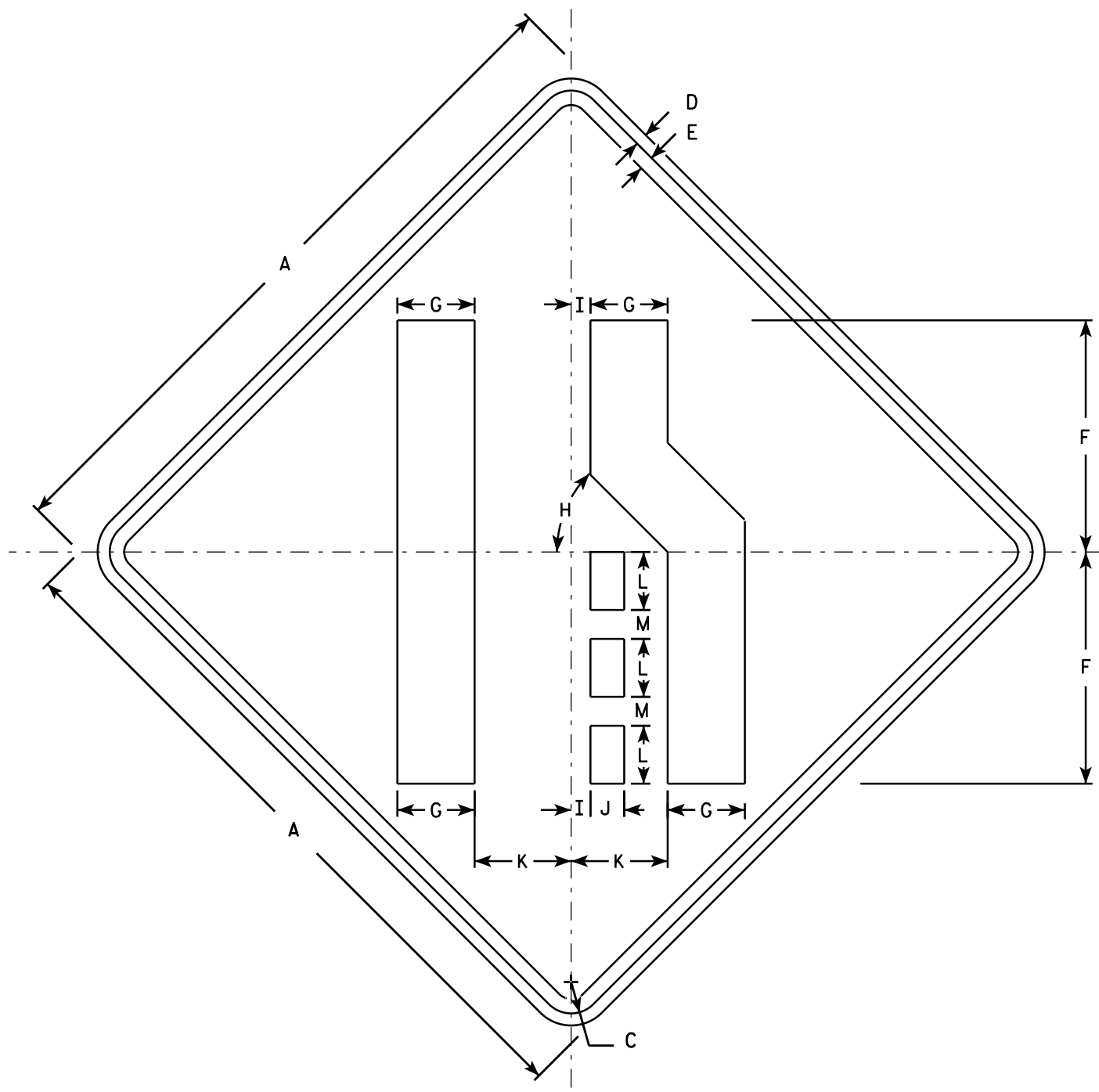
STANDARD SIGN
W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1

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



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
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. W04-2L is the same as W04-2R except the symbols is reversed along the vertical centerline.

7

7

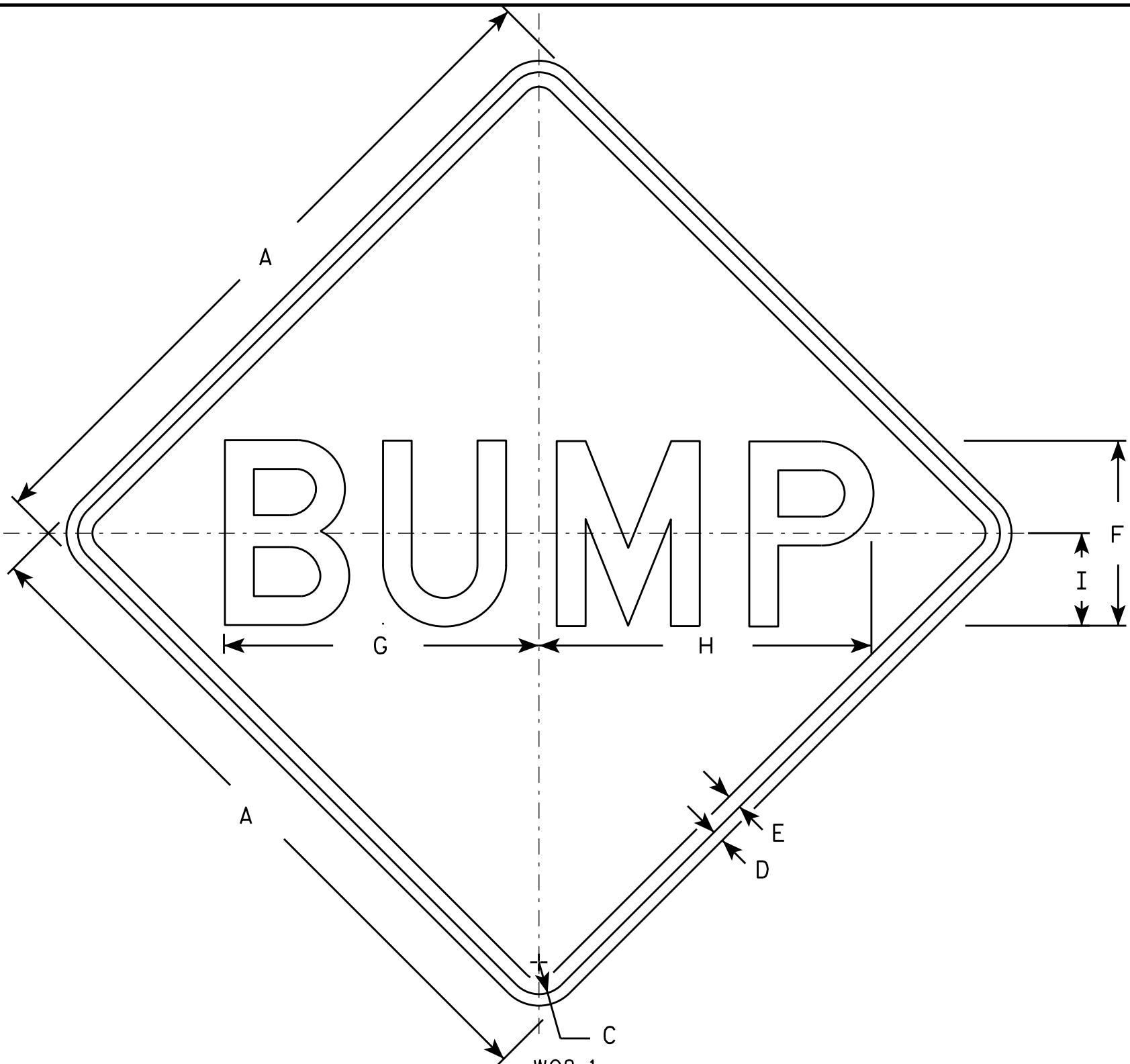
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-2.1



NOTES

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

7

7

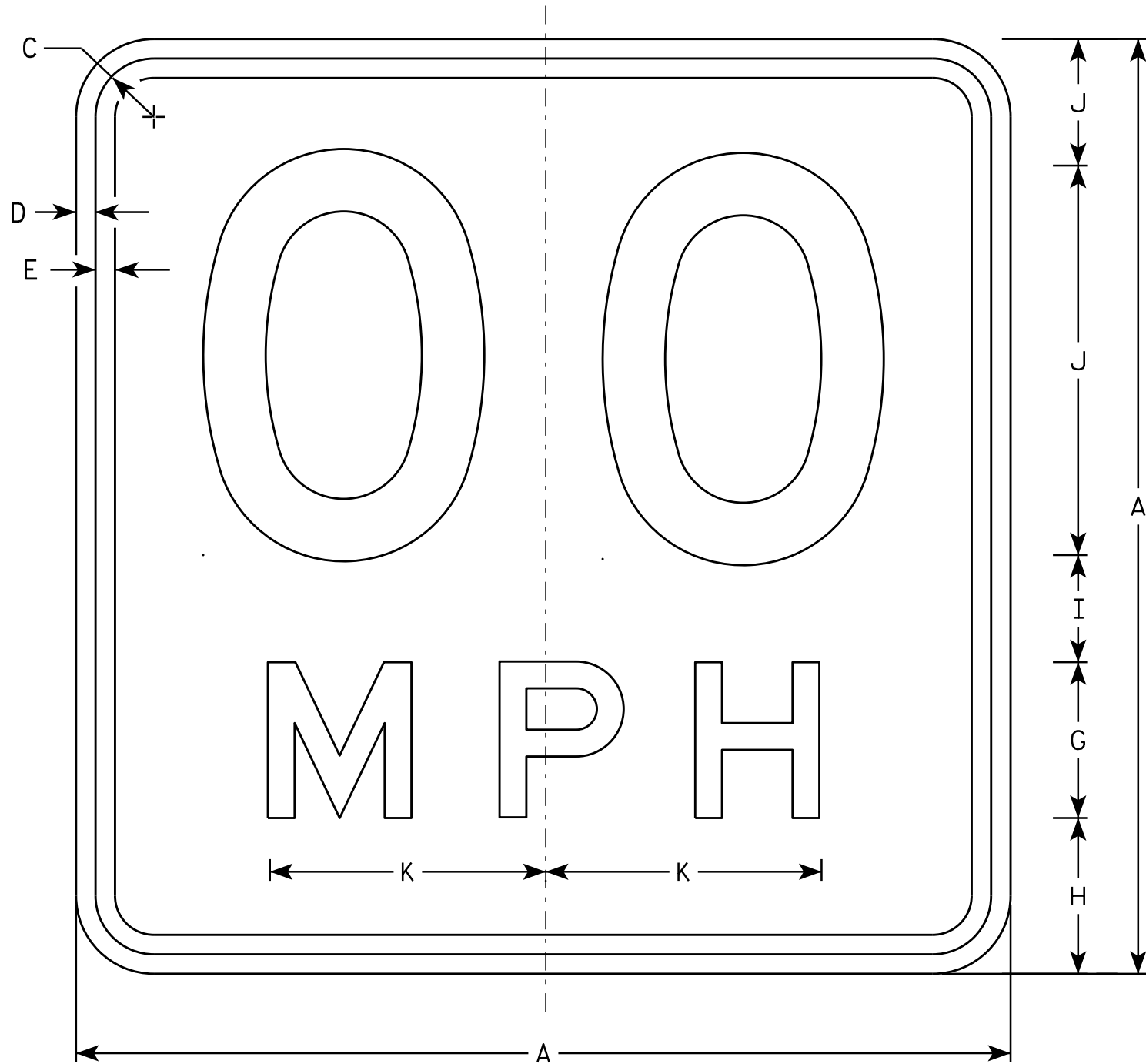
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	10	16 7/8	17 7/8	5																		9.0
2S	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
2M	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
3	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
4	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0
5	48		2 1/4	3/4	1	12	20 3/8	21 5/8	6																		16.0

STANDARD SIGN
W08-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 11/20/13 PLATE NO. W08-1.1



W013-1

NOTES

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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
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
W013-1

WISCONSIN DEPT OF TRANSPORTATION

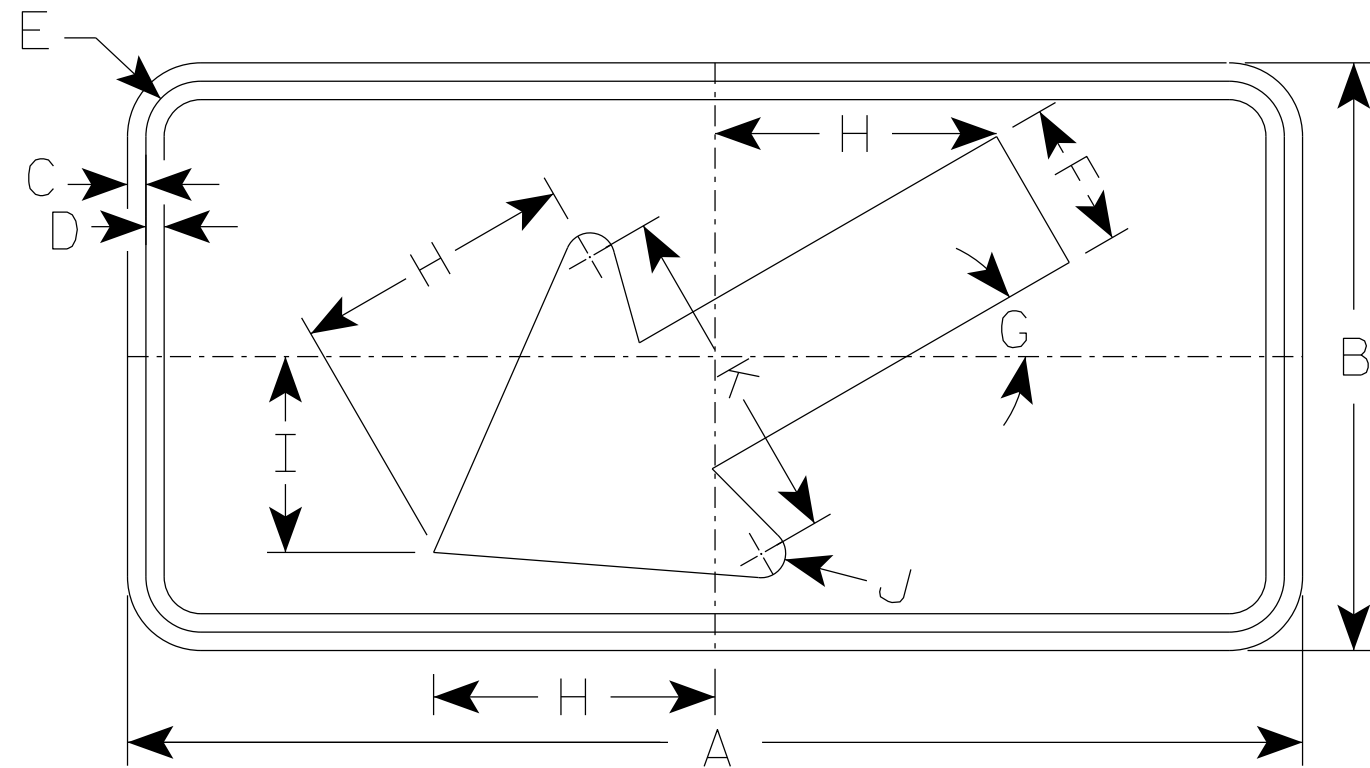
APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 11/21/13 PLATE NO. W013-1.1

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

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.



W016-7L

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/11/18 PLATE NO. W016-7.1

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>