

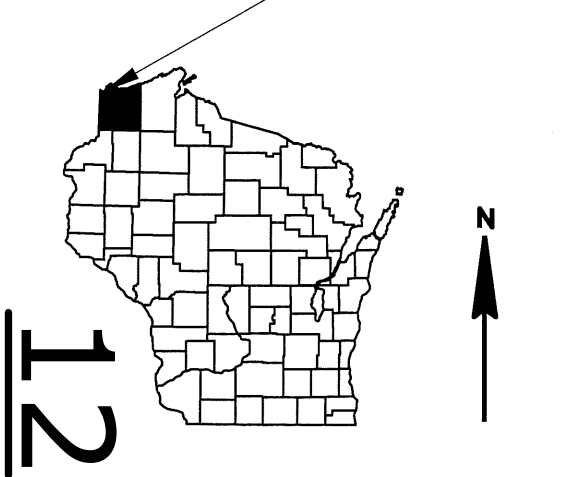
SUP
PROJECT ID: 8010-00-70
WITH:
COUNTY: DOUGLAS

JULY 2020

ORDER OF SHEETS

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

TOTAL SHEETS = 100 PROJECT LOCATION



DESIGN DESIGNATION 8010-00-00

A.A.D.T.	2021	=	6500
A.A.D.T.	2041	=	7200
D.H.V.		=	1,255
D.D.		=	59/41
T.		=	5.9
DESIGN SPEED		=	35
ESALS		=	1,040,104

CONVENTIONAL SYMBOLS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

VILLAGE OF SUPERIOR, TOWER AVENUE

69TH STREET TO 64TH STREET

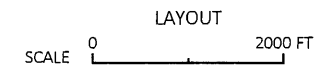
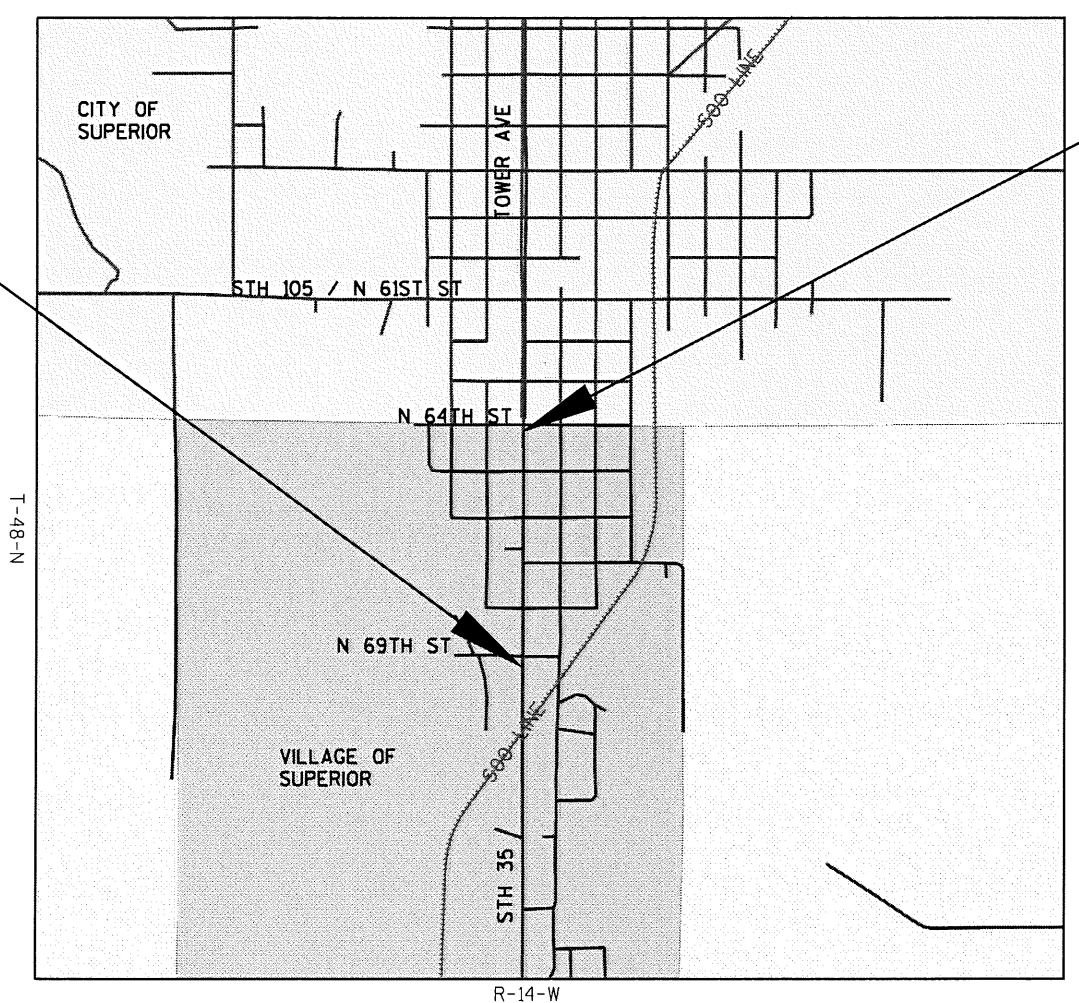
STH 35

DOUGLAS COUNTY

STATE PROJECT NUMBER
8010-00-70

BEGIN PROJECT
STA 448+50.54
X= 146761.9493
Y= 281954.6230

END PROJECT
STA 474+39.04
X= 14686.6024
Y= 284070.1261



TOTAL NET LENGTH OF CENTERLINE = 0.484 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, DOUGLAS COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
80101070	WISC 2020286	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	FLEMING, ANDRE & ASSOCIATES, INC.
Designer	STEPHANIE J. KING, P.E.
Project Manager	STEPHANIE J. KING, P.E.
Regional Examiner	TOU YANG
Regional Supervisor	DAVE KOEPP, PE
APPROVED FOR THE DEPARTMENT	
DATE: 3/3/20	Stephanie J. King (Signature)
E	

ORDER OF SECTION 2 SHEETS

- Project Overview / Alignment
- Typical Sections
- Construction Details
- Intersections
- Pavement Marking
- Traffic Control and Construction Staging

STANDARD ABBREVIATIONS

AGG	AGGREGATE	LC	LONG CHORD OF CURVE
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	MOR	MID POINT OF RADIUS
		NC	NORMAL CROWN
ASPH	ASPHALTIC	N.T.S.	NOT TO SCALE
BM	BENCH MARK	PAVT	PAVEMENT
CE	COMMERCIAL ENTRANCE	PE	PRIVATE ENTRANCE
CL OR C/L OR Δ	CENTER LINE	PVRC	POINT OF VERTICAL REVERSE CURVE
Δ	CENTRAL ANGLE OR DELTA	QOR	QUARTER POINT OF RADIUS
CONC	CONCRETE	R	RADIUS
CPRC	CULVERT PIPE REINFORCED CONCRETE	RES	RESIDENCE OR RESIDENTIAL
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	R/W	RIGHT-OF-WAY
		RDWY	ROADWAY
DISCH	DISCHARGE	R/L OR R	REFERENCE LINE
DWY	DRIVEWAY	SAN	SANITARY SEWER
EOR	END POINT OF RADIUS	SS	STORM SEWER
ENT	ENTRANCE	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
FE	FIELD ENTRANCE	SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
FO	FIBER OPTIC		SUPERELEVATION RATE
CWT	HUNDREDWEIGHT	SE	TYPICAL
HDPE	HIGH DENSITY POLYTHENE PIPE	TYP	VARIABLE
HYD	HYDRANT	VAR	VERTICAL CURVE
INV	INVERT	VC	
IP	IRON PIPE ON PIN		
L	LENGTH OF CURVE		

GENERAL NOTES

- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
- ACCESS TO ALL RESIDENCES AND BUSINESSES SHALL BE MAINTAINED DURING CONSTRUCTION.
- THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- WHEN THE QUANTITY OF BASE AGGREGATE DENSE OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD THE DEPTH OF THE THICKNESS OF THE COURSE SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING PAVEMENTS AT REMOVAL LIMITS. RESTORE SIDE ROAD INTERSECTIONS AND PRIVATE ENTRANCES TO EXISTING CONDITIONS UNLESS OTHERWISE SHOWN. THE EXACT CONSTRUCTION LIMITS OF SIDE ROADS AND PRIVATE ENTRANCES SHALL BE COORDINATED WITH THE ENGINEER IN THE FIELD.
- LIMIT STAGING/STOCKPILING TO PAVED, GRAVEL OR MOVED AREAS. IF STAGING CANNOT BE LIMITED, THEN SURVEYS FOR THREATENED AND ENDANGERED SPECIES ARE REQUIRED.
- CURB RAMP TYPES ARE SHOWN ON THE INTERSECTION DETAIL SHEETS. ALL CURB AND GUTTER RADII, SIDEWALK DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
- THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.
- REMOVAL OF EROSION MAT AFTER VEGETATION HAS BEEN ESTABLISHED, OR AT THE COMPLETION OF PROJECT, WILL BE REQUIRED AND IS INCIDENTAL TO THE COST OF INSTALLATION.
- DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH TOPSOILED, FERTILIZED, SEEDED, AND EROSION MATTED AS SHOWN IN THE PLANS. FINISHED SEEDED SURFACE SHALL BE 1-INCH BELOW THE TOP OF ADJACENT CONCRETE.
- TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE NORMAL GUTTER FLOWLINE.
- ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES
- EMERALD ASH BORER - ASH TREES MAY BE PRESENT. REFER TO DATCP WEBSITE: [HTTP://DATCPSERVICES.WISCONSIN.GOV/EAB/ARTICLE.JSP?TOPICID=20](http://DATCPSERVICES.WISCONSIN.GOV/EAB/ARTICLE.JSP?TOPICID=20)



Dial  or (800)242-8511

www.DiggersHotline.com

DESIGN CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
STEPHANIE J. KING - PROJECT LEADER
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SUPERIOR, WI 54880
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EMAIL: stephanie.king@dot.wi.gov

WDNR CONTACT

STATE OF WISCONSIN
NORTHWEST DISTRICT
HWY 70 WEST
P.O. BOX 309
SPOONER, WI 54801
TELEPHONE: 715.635.4229
ATTENTION: AMY CRONK
AMY.CRONK@WISCONSIN.GOV

AIRPORT FACILITY

RICHARD I. BONG AIRPORT
4804 HAMMOND AVENUE
SUPERIOR, WI 54880
(715) 394-6444
amordeb@ci.superior.wi.us

UTILITIES

COMMUNICATIONS

RUSSEL VANCE CENTURYLINK 135 N. 21ST ST. SUPERIOR, WI 54880 715-392-0045 russel.vance@cenurylink.com	ADAM LAWREY CONSOLIDATED COMMUNICATIONS 4960 MILLER TRUNK HWY SUITE 500 HERMANTOWN, MN 55811 218-730-7906 ADAM.LAWREY@CONSOLIDATED.COM
CHAD LAWRENCE CHARTER COMMUNICATIONS 640 GARFIELD AVENUE DULUTH, MN 55802 218-529-8042 chad.lawrence@charter.com	

ELECTRICITY, WATER, GAS/PETROLEUM

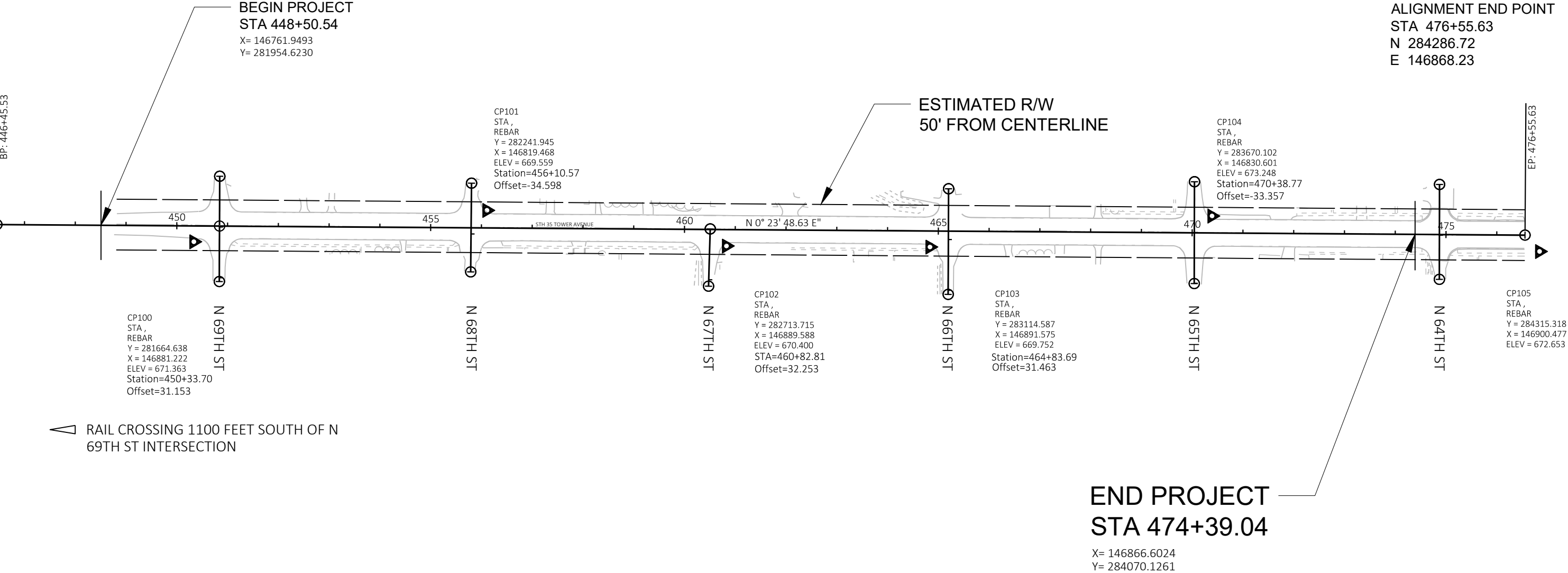
JAMIE MEHLE
SUPERIOR WATER, LIGHT & POWER COMPANY
2915 HILL AVENUE P O BOX 519
SUPERIOR, WI 54880
(715) 395-6288
JMehle@swlp.com

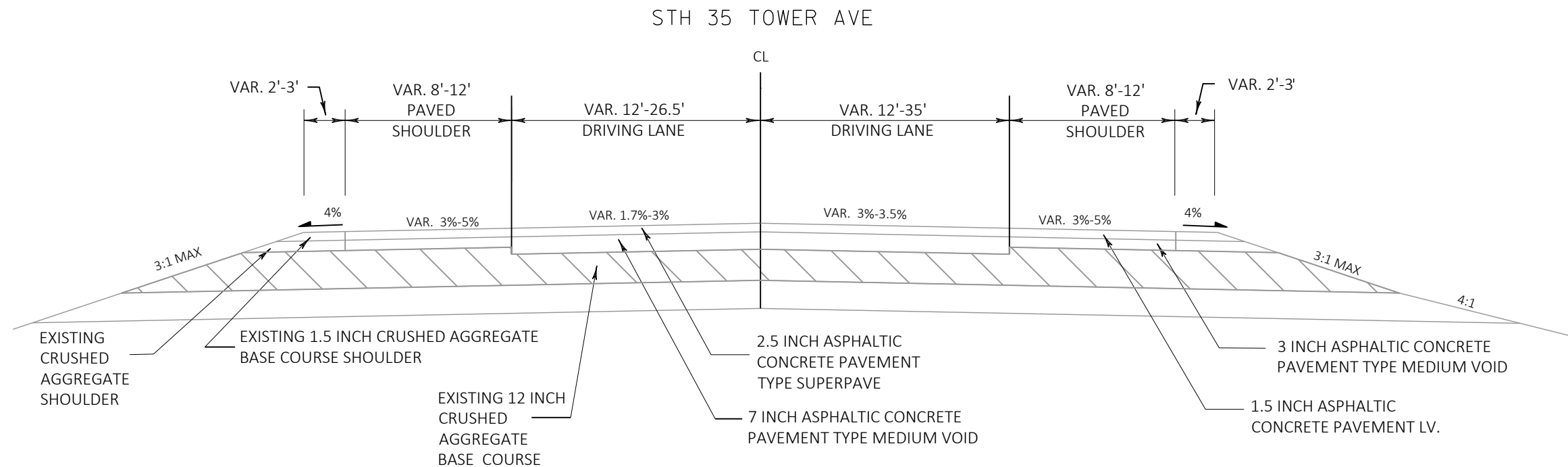
- NOTE:
- ALIGNMENT SHOWN IN PLAN IS PRIMARILY A CONSTRUCTION ALIGNMENT
 - CURB RAMP INTERSECTION DETAILS SHOW CURB ALIGNMENTS AND PROFILES.
 - ALL R/W IS APPROXIMATED

ALIGNMENT BEGIN POINT
STA 446+45.53
N 281276.69
E 146847.38

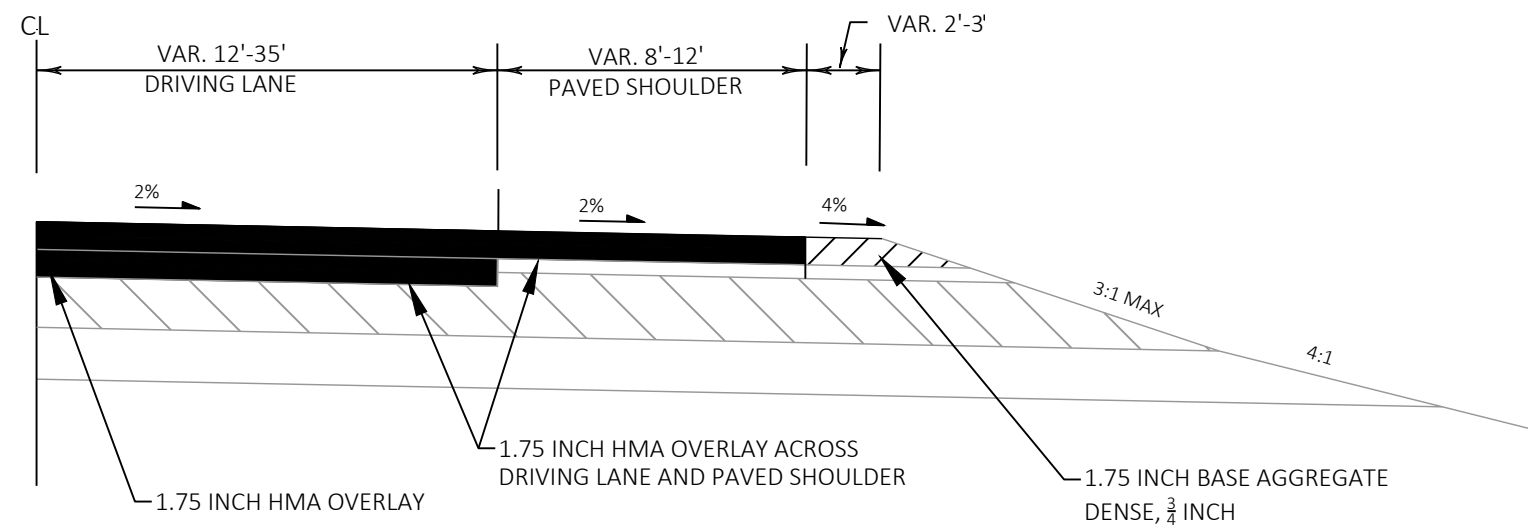
RAIL CROSSING 1080 FEET NORTH OF N 64TH ST INTERSECTION

ALIGNMENT END POINT
STA 476+55.63
N 284286.72
E 146868.23





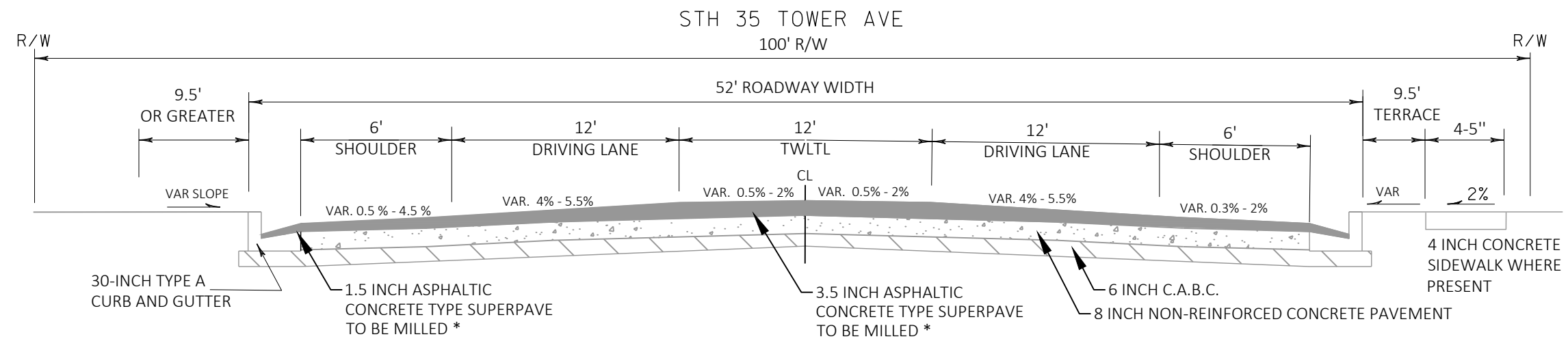
EXISTING TYPICAL SECTION
STA 448+50.54 TO STA 450+41.10



HMA OVERLAY DETAIL
STA 448+50.54 TO STA 450+41.10

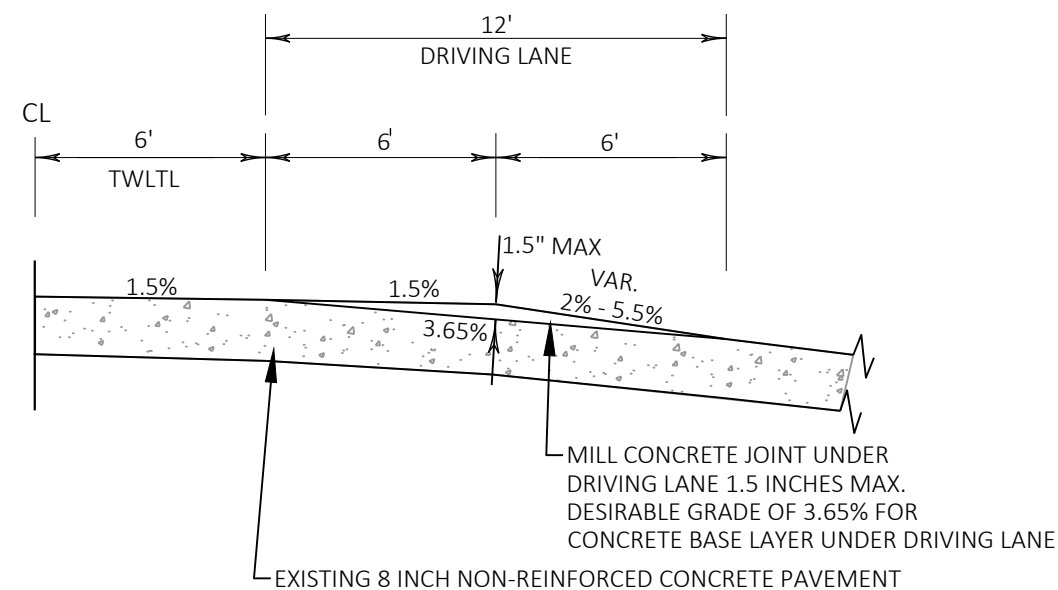
GENERAL NOTES

MILL 3.5 INCHES OF PAVEMENT FROM DRIVING LANE.
MILL 1.75 INCHES OF PAVEMENT FROM SHOULDER.
PLACE A 1.75 INCH LOWER LAYER OF HMA IN DRIVING LANE.
PLACE A 1.75 INCH UPPER LAYER OF HMA IN DRIVING LANE AND SHOULDER.



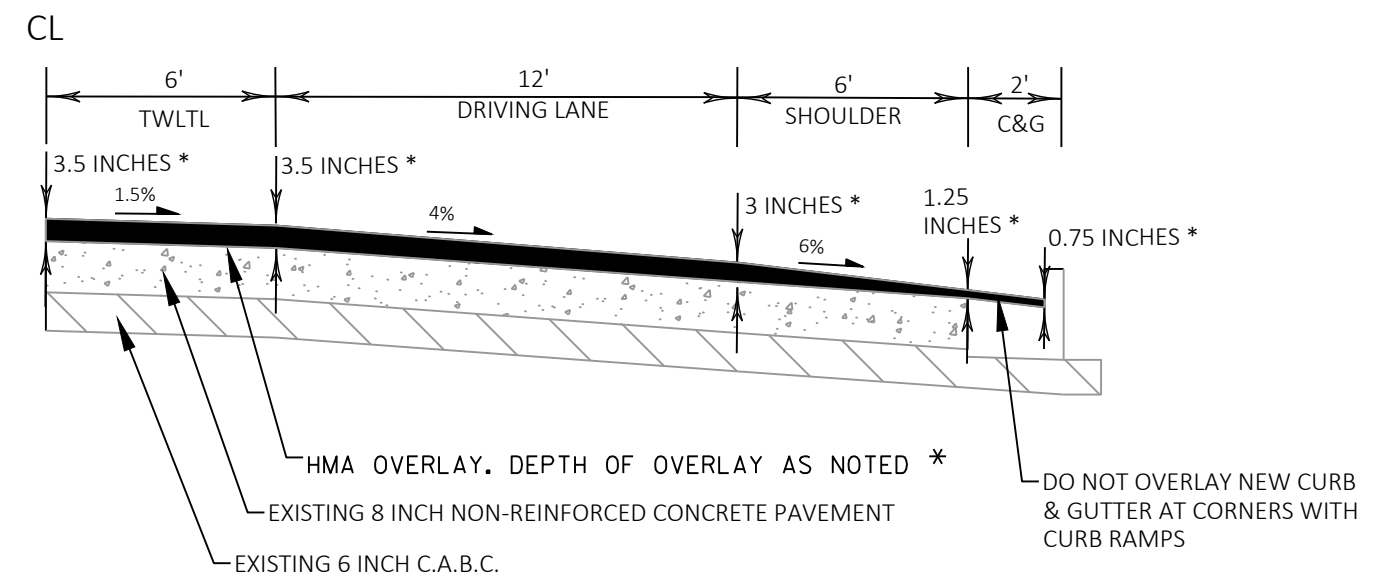
* MILLING SHOULD BE 3.5 INCHES OR UNTIL PCC IS ENCOUNTERED

EXISTING TYPICAL SECTION
STA 450+41.10 TO STA 475+39.00



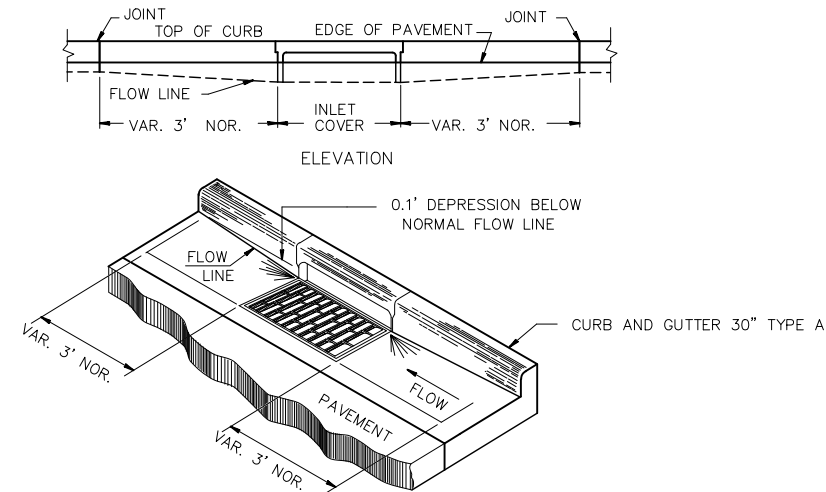
CONCRETE MILLING DETAIL

STA 450+41.10 TO STA 475+39.00



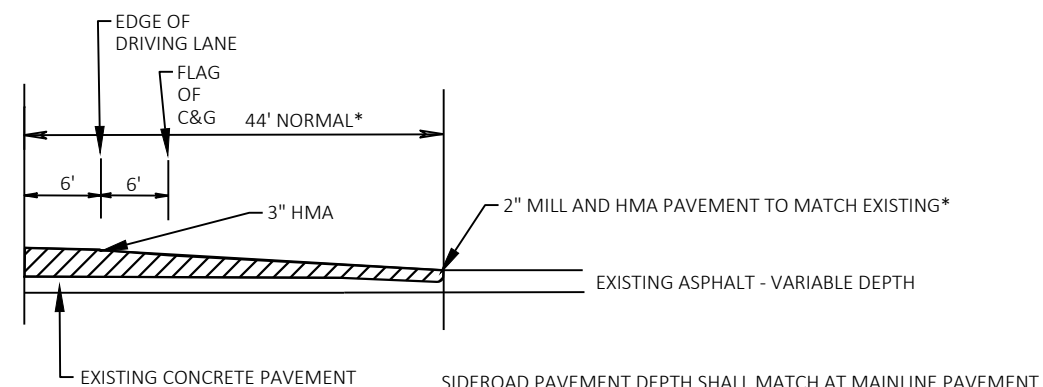
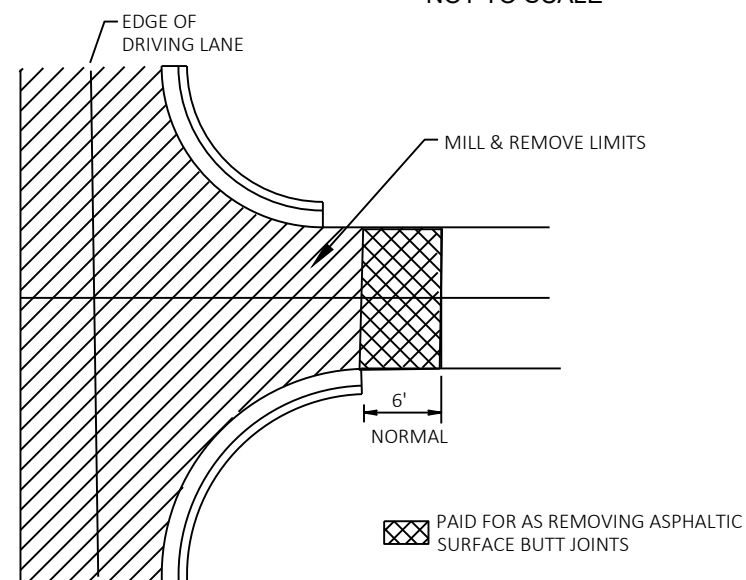
HMA OVERLAY DETAIL
STA 450+41.10 TO STA 475+39.00

HMA OVERLAY THICKNESS					
	TWLTL	INSIDE OF DRIVING LANE	OUTSIDE OF DRIVING LANE	FLAG OF C&G	FLOW LINE OF C&G
LOWER LAYER	1.75"	1.75"	1.25"	0	0
UPPER LAYER	1.75"	1.75"	1.75"	1.25"	0.75"
TOTAL DEPTH	3.50"	3.50"	3.00"	1.25"	0.75"



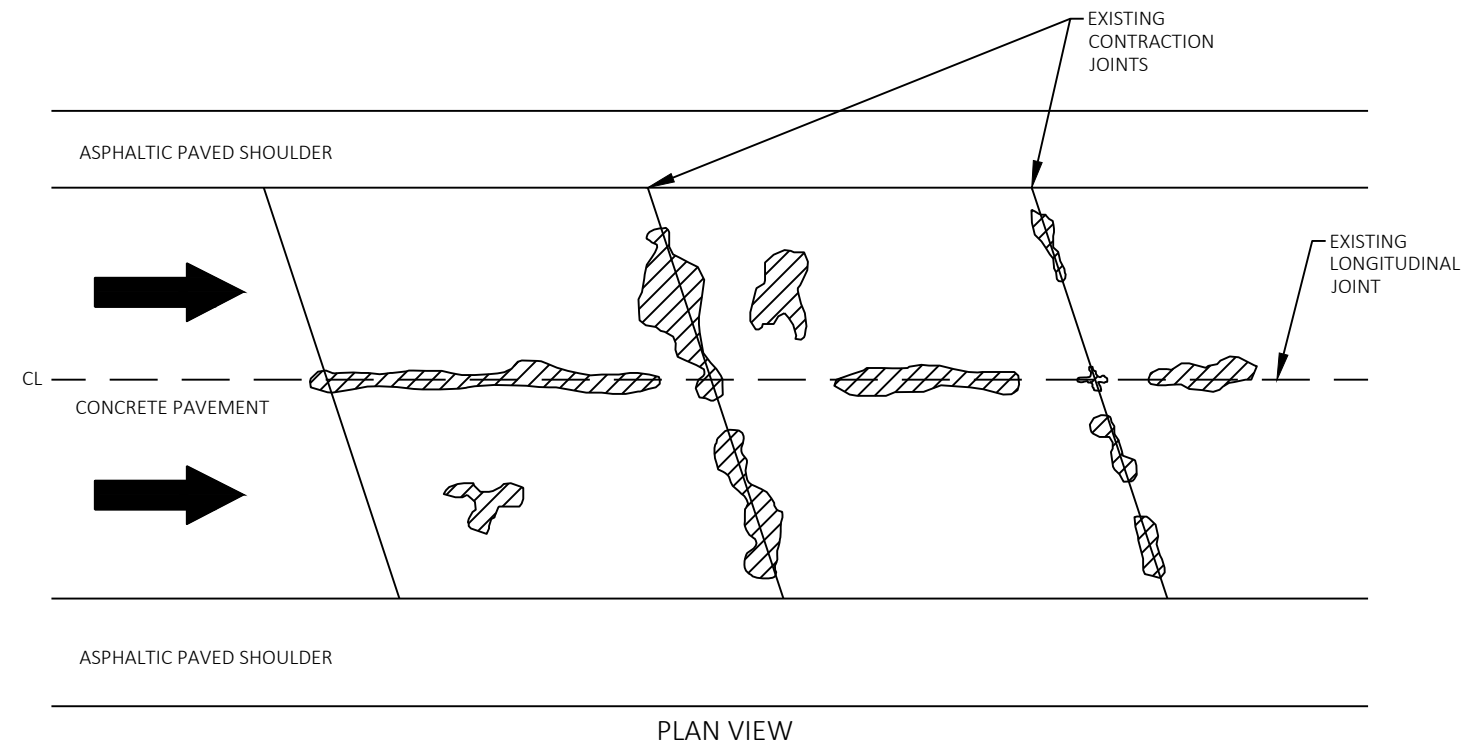
INLETS AT CURB AND GUTTER

SIDEROAD DETAIL - CURB & GUTTER TO REMAIN
NOT TO SCALE

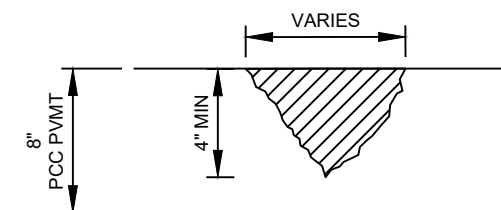


SIDEROAD PAVEMENT DEPTH SHALL MATCH AT MAINLINE PAVEMENT
EDGE AND BE TAPERED TO 3" MINIMUM AT JOINT

*EXACT DIMENSION TO BE DETERMINED BY ENGINEER IN THE FIELD



PLAN VIEW

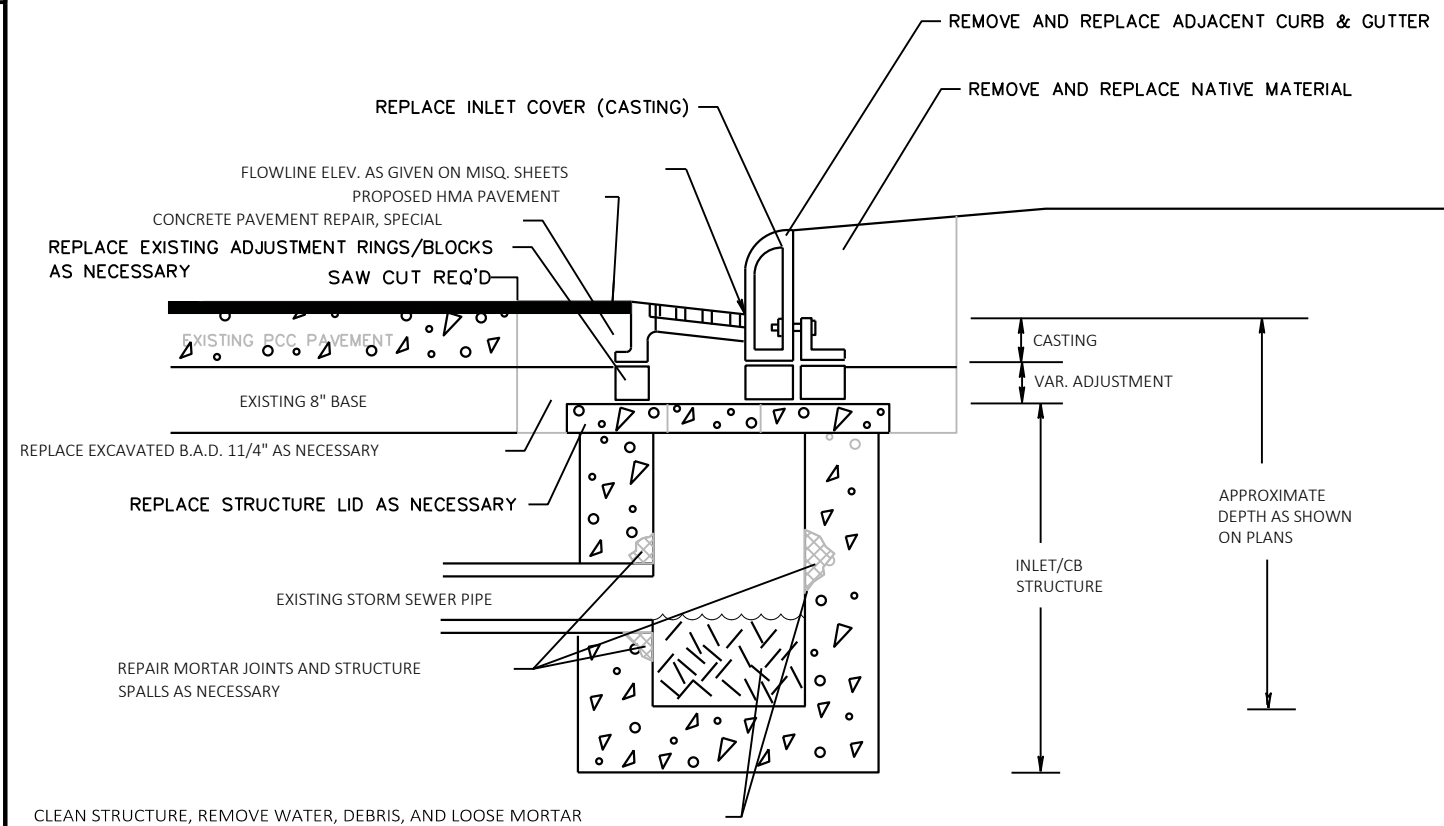


NOTES

1. REMOVE ALL CONCRETE, ASPHALT, AND ANY UNSOUND MATERIAL FROM TRANSVERSE AND LONGITUDINAL AND RANDOM CRACKS. LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. ASPHALTIC SURFACE PATCHING SHALL BE PLACED IN THE JOINT REPAIR AREA. PATCHING SHALL BE COMPACTED IN LIFTS (2 LIFTS MINIMUM) UNTIL FLUSH WITH THE SURFACE OF THE CONCRETE. ASPHALTIC SURFACE PATCHING PAID SEPARATELY FROM THIS ITEM.
3. DEPTH VARIES FROM A MINIMUM DEPTH OF 4 INCHES TO A FULL DEPTH JOINT AS CONDITIONS DICTATE.

PREPARE FOUNDATION FOR ASPHALTIC PAVING

CLEANING AND REPAIRING DISTRESSED PCC AREAS



MANHOLE/INLET/CATCH BASIN DETAIL

SEE PLANS AND QUANTITIES FOR LOCATIONS

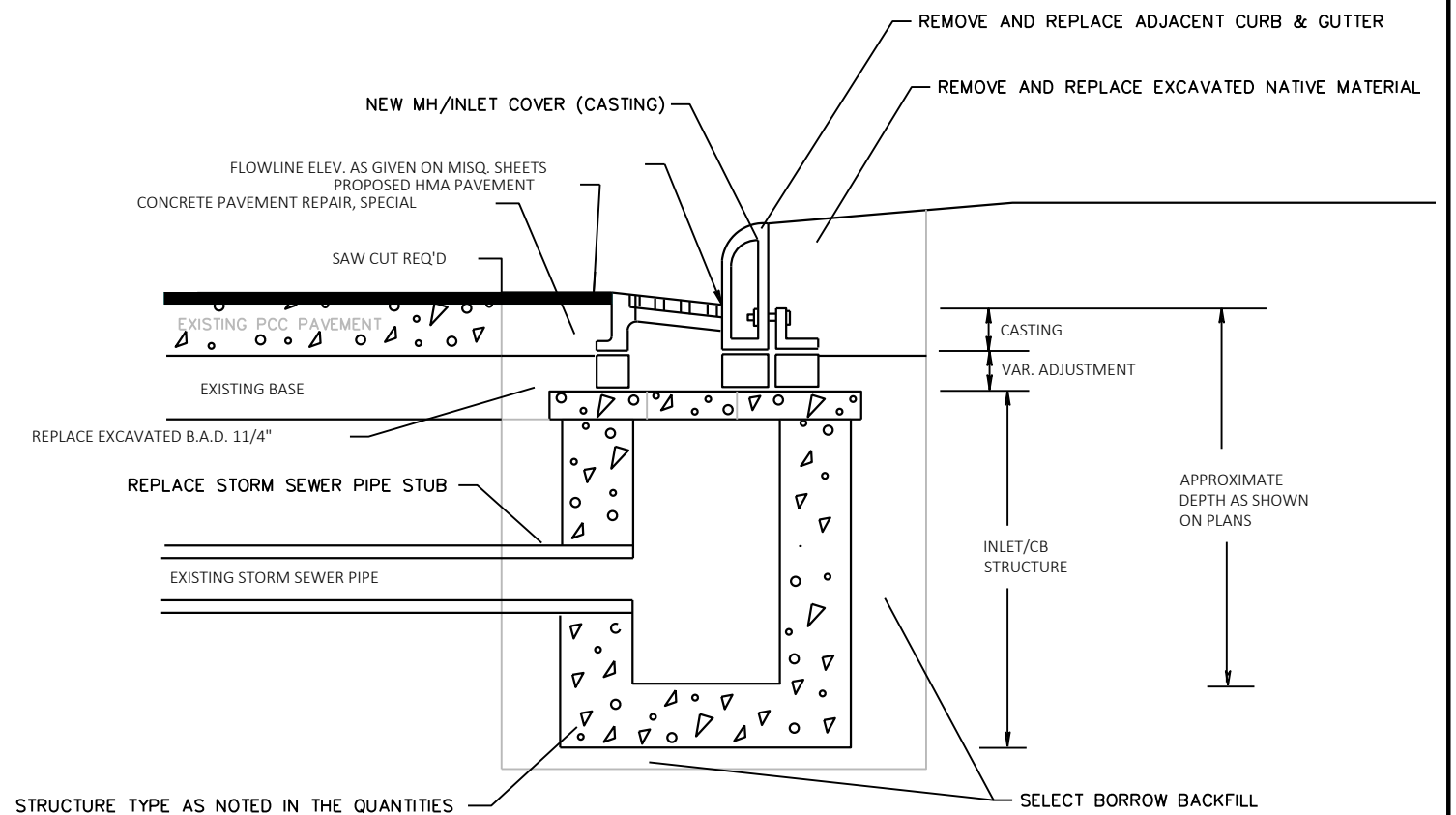
INCIDENTAL WORK, NO SEPARATE MEASUREMENT & PAYMENT

ADJUSTMENT RINGS OR BLOCKS
REMOVE AND REPLACE STRUCTURE LID
STRUCTURE JOINT AND SPALL REPAIR
REMOVE AND REPLACE NATIVE MATERIAL
CLEAN STRUCTURE
CASTING REMOVAL

WORK MEASURED & PAID SEPARATELY

INLET/ MANHOLE COVER (CASTING)
CONCRETE PAV'T REPAIR (REMOVAL INCIDENTAL)
REMOVE AND REPLACE CURB & GUTTER
BASE AGG. DENSE
SAWING PAVEMENT

RECONSTRUCTING CATCH BASIN/MANHOLE



MANHOLE/INLET/CATCH BASIN DETAIL

SEE PLANS AND QUANTITIES FOR LOCATIONS

INCIDENTAL WORK, NO SEPARATE MEASUREMENT & PAYMENT

ADJUSTMENT RINGS OR BLOCKS
STORM SEWER PIPE STUB
SELECT BORROW BACKFILL
REMOVE AND REPLACE NATIVE MATERIAL
CASTING AND OLD STRUCTURE REMOVAL

WORK MEASURED & PAID SEPARATELY

INLET/ MANHOLE COVER (CASTING)
CONCRETE PAV'T REPAIR (REMOVAL INCIDENTAL)
REMOVE AND REPLACE CURB & GUTTER
BASE AGG. DENSE
NEW STRUCTURE
SAWING PAVEMENT

CATCH BASIN/MANHOLE REPLACEMENT

451+00-451+30
69TH ST - NE

GENERAL CONSTRUCTION NOTES:

- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

69TH ST NE

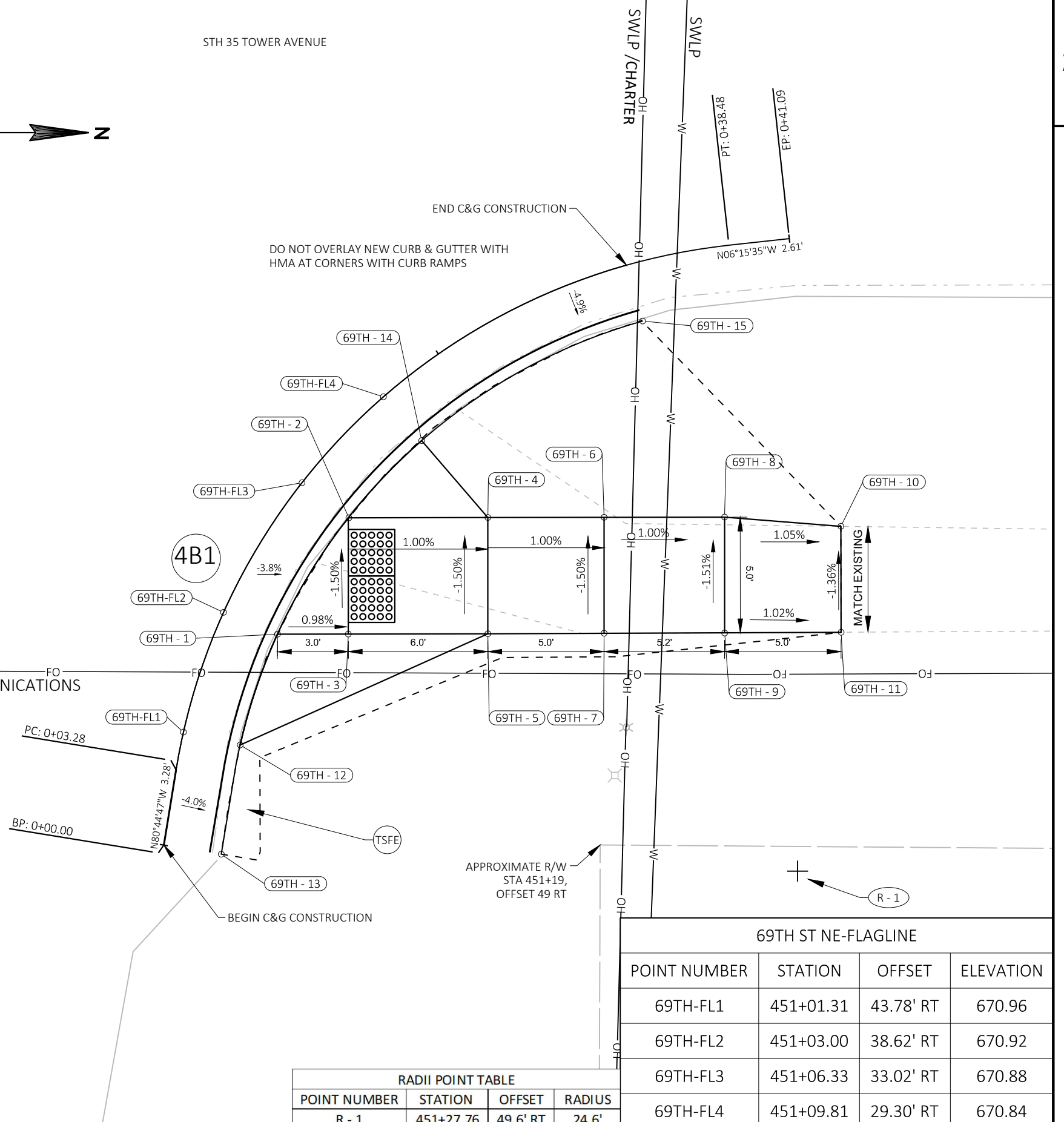
POINT NUMBER	STATION	OFFSET	ELEVATION
69TH - 1	451+05.32	39.54' RT	670.85
69TH - 2	451+08.36	34.51' RT	670.80
69TH - 3	451+08.37	39.51' RT	670.88
69TH - 4	451+14.34	34.46' RT	670.86
69TH - 5	451+14.37	39.46' RT	670.94
69TH - 6	451+19.34	34.42' RT	670.91
69TH - 7	451+19.37	39.40' RT	670.99
69TH - 8	451+24.51	34.37' RT	670.97
69TH - 9	451+24.55	39.35' RT	671.04
69TH - 10	451+29.52	34.73' RT	671.02
69TH - 11	451+29.56	39.29' RT	671.08
69TH - 12	451+03.75	44.32' RT	671.38
69TH - 13	451+02.97	49.02' RT	671.42
69TH - 14	451+11.47	31.17' RT	671.26
69TH - 15	451+20.93	25.96' RT	670.96

LEGEND

---	APPROXIMATE EXISTING RIGHT OF WAY
---	GRADING LINE
RP	REMOVING PAVEMENT
POINT NUMBER	POINT NUMBER
###	CURB RAMP TYPE
TSFE	TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE A
CSW	CONCRETE SIDEWALK 6-INCH
PN# OR C# CALLOUTS REFER TO TEMPORARY LIMITED EASEMENT TABLES	
SAWING ASPHALT	
DETECTABLE WARNING - 2' x 2'	

CONSOLIDATED COMMUNICATIONS

PI STA = 0+23.86
Y = 281735.151
X = 146875.623
DELTA = 74°29'13"
D = 211°36'21"
T = 20.58'
L = 35.20'
R = 27.08'
PC STA = 0+03.28
Y = 281731.841
X = 146895.939
PT STA = 0+38.48
Y = 281755.613
X = 146873.378
BK = N80°44'47.3"W
AH = N06°15'34.7"W



455+98-456+45
68TH ST - NE

STH 35 TOWER AVENUE

PT: 0+48.17

EP: 0+78.50

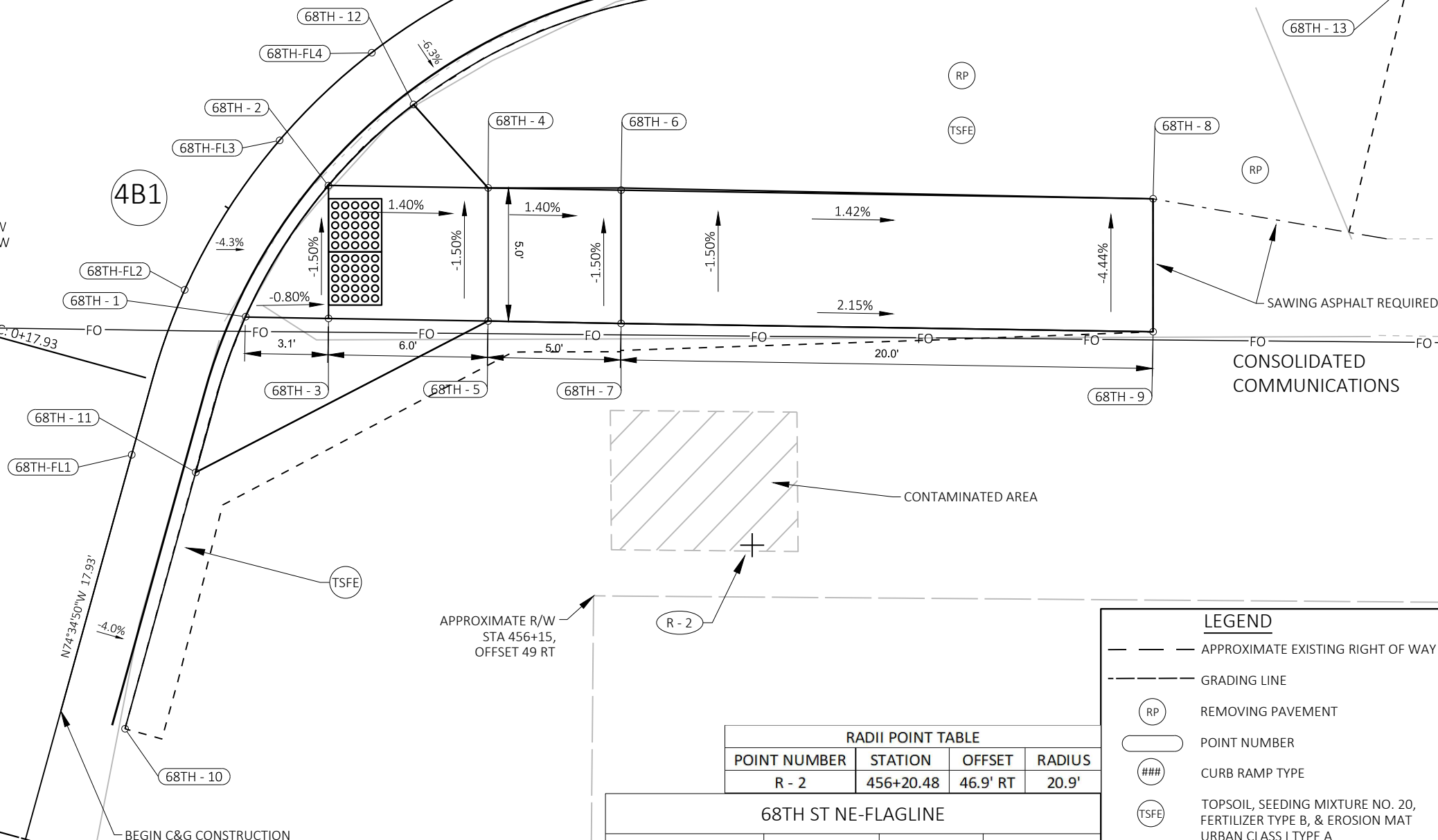
DO NOT OVERLAY NEW CURB & GUTTER WITH
HMA AT CORNERS WITH CURB RAMP

END C&G CONSTRUCTION

N00°29'53"W 30.33'

PI STA = 0+35.58
Y = 282233.432
X = 146877.746
DELTA = 74°04'57"
D = 245°02'53"
T = 17.65'
L = 30.23'
R = 23.38'
PC STA = 0+17.93
Y = 282228.741
X = 146894.756
PT STA = 0+48.17
Y = 282251.077
X = 146877.592
BK = N74°34'50.0"W
AH = N00°29'53.4"W

4B1



GENERAL CONSTRUCTION NOTES:

- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

68TH ST NE

POINT NUMBER	STATION	OFFSET	ELEVATION
68TH - 1	456+01.38	38.39' RT	669.32
68TH - 2	456+04.45	33.44' RT	669.22
68TH - 3	456+04.49	38.44' RT	669.30
68TH - 4	456+10.45	33.49' RT	669.31
68TH - 5	456+10.49	38.49' RT	669.38
68TH - 6	456+15.46	33.54' RT	669.38
68TH - 7	456+15.49	38.55' RT	669.45
68TH - 8	456+35.46	33.72' RT	669.66
68TH - 9	456+35.49	38.73' RT	669.88
68TH - 10	455+96.95	53.92' RT	670.06
68TH - 11	455+99.54	44.26' RT	669.91
68TH - 12	456+07.63	30.37' RT	669.59
68TH - 13	456+44.97	25.57' RT	668.84

LEGEND

- APPROXIMATE EXISTING RIGHT OF WAY
- - - GRADING LINE
- RP REMOVING PAVEMENT
- POINT NUMBER
- ### CURB RAMP TYPE
- TSFE TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE A
- CSW CONCRETE SIDEWALK 6-INCH
- PN# OR C# CALLOUTS REFER TO TEMPORARY LIMITED EASEMENT TABLES
- CONTAMINATED AREA
- SAWING ASPHALT
- DETECTABLE WARNING - 2' x 2'

RADI POINT TABLE

POINT NUMBER	STATION	OFFSET	RADIUS
R - 2	456+20.48	46.9' RT	20.9'

68TH ST NE-FLAGLINE

POINT NUMBER	STATION	OFFSET	ELEVATION
68TH-FL1	455+97.13	43.62' RT	669.49
68TH-FL2	455+99.08	37.40' RT	669.39
68TH-FL3	456+02.60	31.76' RT	669.29
68TH-FL4	456+06.04	28.44' RT	669.22

PROJECT NO: 8010-00-70

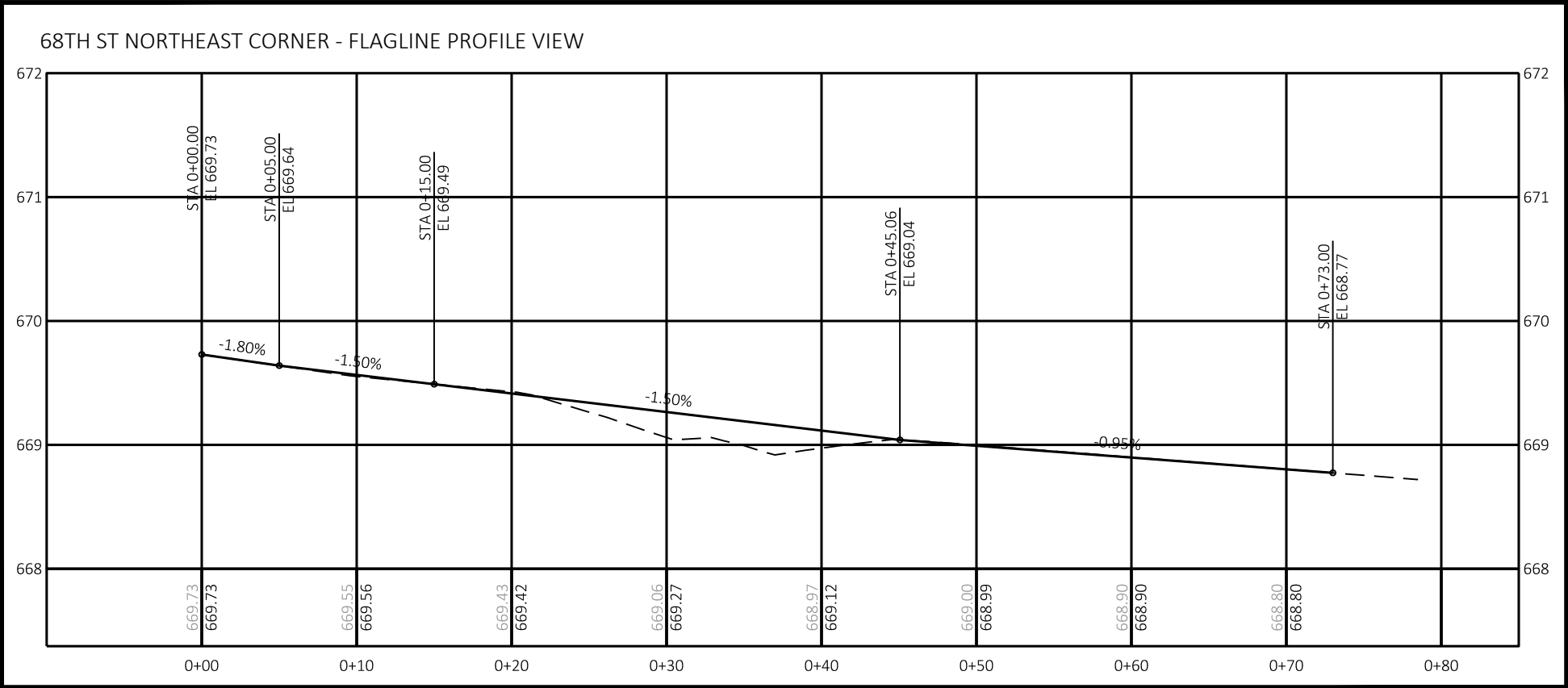
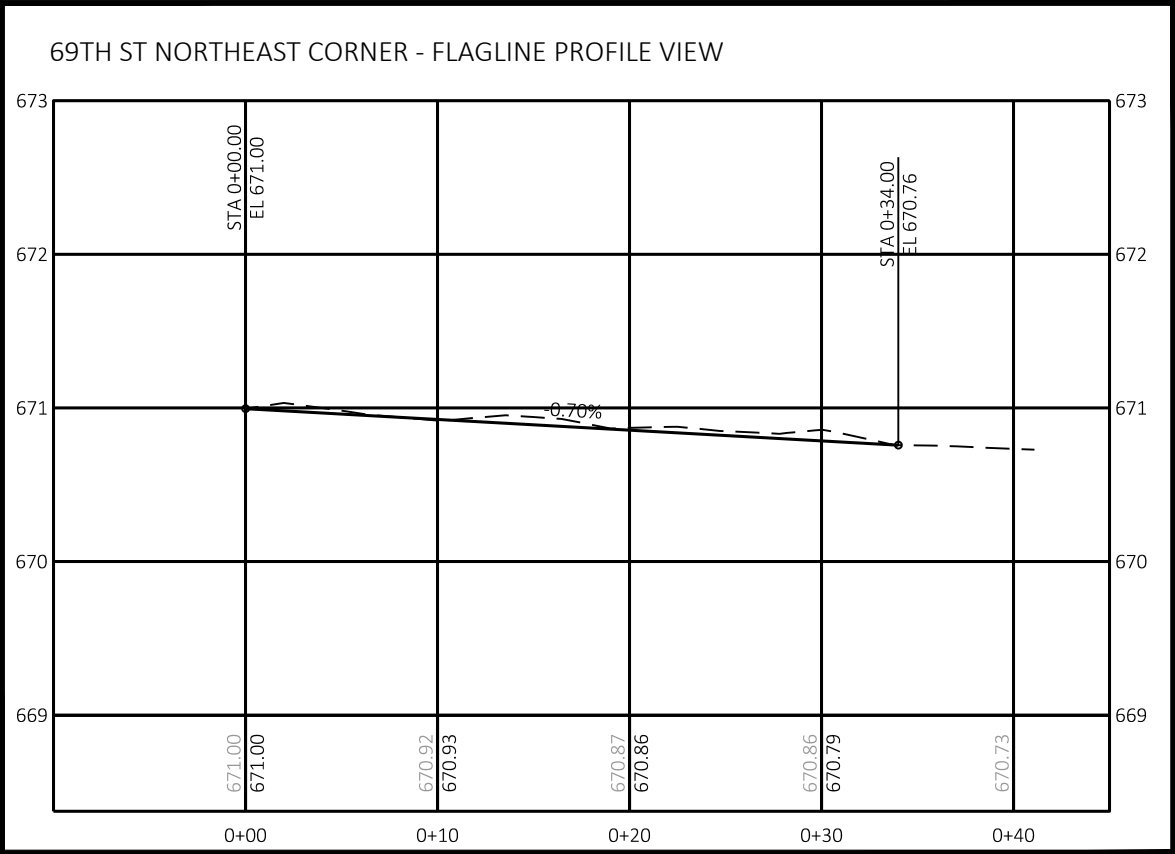
HWY: STH 35

COUNTY: DOUGLAS

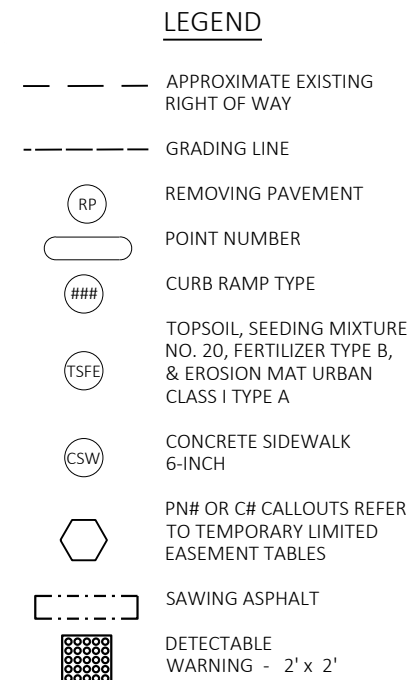
INTERSECTION DETAILS - 68TH ST NE

SHEET

E



- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.



67 TH ST SE			
POINT NUMBER	STATION	OFFSET	ELEVATION
67TH - 1	460+28.89	39.15' RT	668.91
67TH - 2	460+25.68	34.14' RT	668.82
67TH - 3	460+25.69	39.16' RT	668.89
67TH - 4	460+19.66	34.18' RT	668.93
67TH - 5	460+19.69	39.18' RT	669.00
67TH - 6	460+14.68	34.20' RT	669.02
67TH - 7	460+14.69	39.18' RT	669.09
67TH - 8	460+08.05	34.15' RT	669.14
67TH - 9	460+08.06	39.15' RT	669.17
67TH - 10	460+03.04	35.13' RT	669.25
67TH - 11	460+03.01	39.11' RT	669.23
67TH - 12	460+20.23	29.29' RT	669.20
67TH - 13	460+22.46	30.94' RT	669.25
67TH - 14	460+30.70	44.27' RT	669.48
67TH - 15	460+31.41	48.39' RT	669.31

460+66-460+96
67TH ST - NE

GENERAL CONSTRUCTION NOTES:

- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

67 TH ST NE

POINT NUMBER	STATION	OFFSET	ELEVATION
67TH - 16	460+71.15	39.02' RT	669.42
67TH - 17	460+74.30	34.02' RT	669.38
67TH - 18	460+74.33	39.02' RT	669.45
67TH - 19	460+81.28	33.97' RT	669.63
67TH - 20	460+81.33	39.00' RT	669.70
67TH - 21	460+86.28	33.98' RT	669.81
67TH - 22	460+86.33	38.98' RT	669.88
67TH - 23	460+96.28	33.95' RT	670.18
67TH - 24	460+96.33	38.95' RT	670.32
67TH - 25	460+69.10	47.14' RT	669.78
67TH - 26	460+69.47	44.22' RT	669.95
67TH - 27	460+77.65	30.71' RT	669.84
67TH - 28	460+81.30	28.34' RT	669.76

LEGEND

- APPROXIMATE EXISTING RIGHT OF WAY
- - - GRADING LINE
- RP REMOVING PAVEMENT
- POINT NUMBER
- ### CURB RAMP TYPE
- TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE A
- TSFE CONCRETE SIDEWALK 6-INCH
- CSW PN# OR C# CALLOUTS REFER TO TEMPORARY LIMITED EASEMENT TABLES
- SAWING ASPHALT
- DETECTABLE WARNING - 2' x 2'

STH 35 TOWER AVENUE

UN-LOCATED SWLP WATER

PI STA = 0+22.91
Y = 282698.942
X = 146882.354
DELTA = 81°43'51"
D = 226°55'01"
T = 21.85'
L = 36.02'
R = 25.25'
PC STA = 0+01.06
Y = 282697.411
X = 146904.145
PT STA = 0+37.08
Y = 282720.727
X = 146880.735
BK = N85°58'47.8"W
AH = N04°14'56.8"W

DO NOT OVERLAY NEW CURB & GUTTER WITH HMA AT CORNERS WITH CURB RAMPS



BEGIN C&G CONSTRUCTION

END C&G CONSTRUCTION

PC: 0+01.06
BP: 0+00.00

4B1

APPROXIMATE R/W
STA 460+85,
OFFSET 49 RT

CONSOLIDATED COMMUNICATIONS

RADII POINT TABLE

POINT NUMBER	STATION	OFFSET	RADIUS
R - 4	460+91.81	48.5' RT	22.8'

67TH ST NE-FLAGLINE

POINT NUMBER	STATION	OFFSET	ELEVATION
67TH-FL5	460+68.85	38.00' RT	669.49
67TH-FL6	460+72.39	32.38' RT	669.45
67TH-FL7	460+66.98	43.87' RT	669.40
67TH-FL8	460+76.01	28.82' RT	669.40

PROJECT NO: 8010-00-70

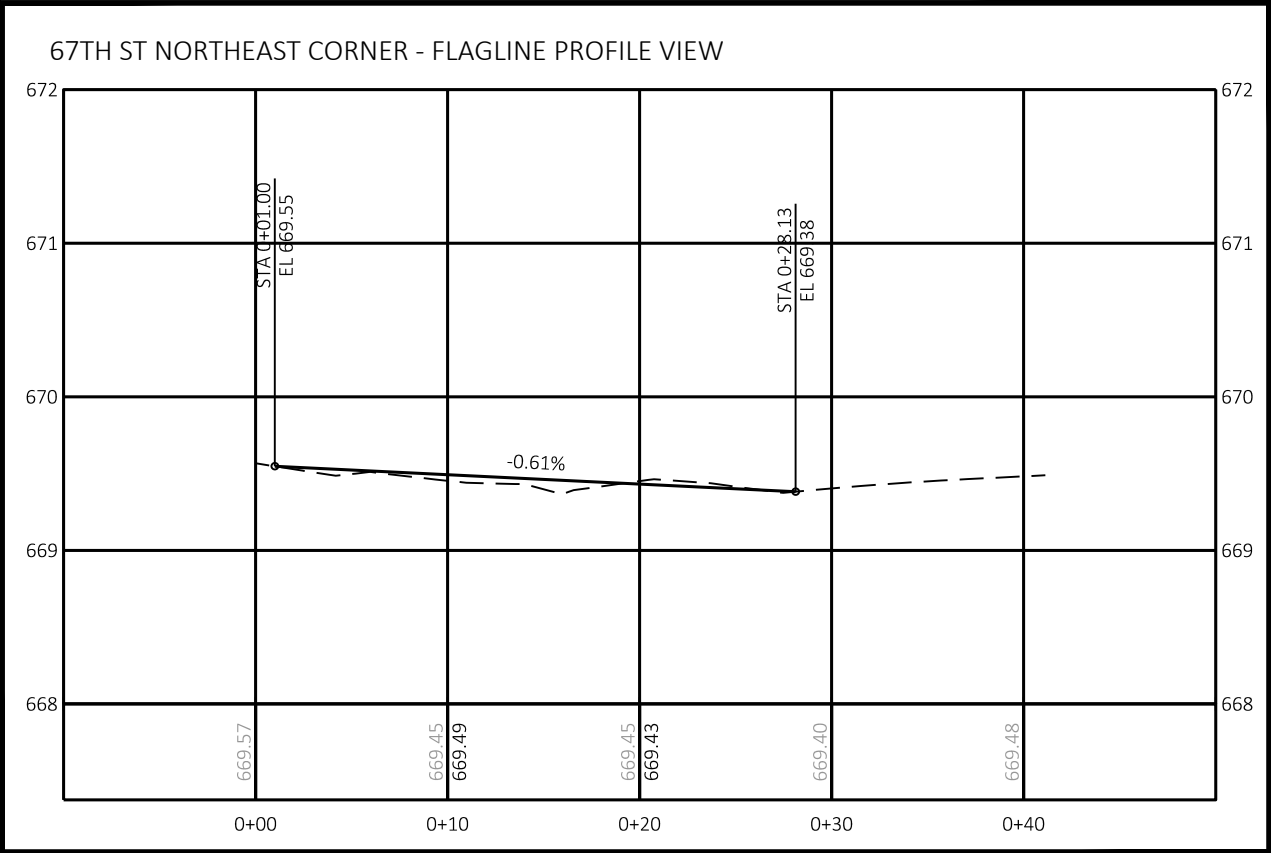
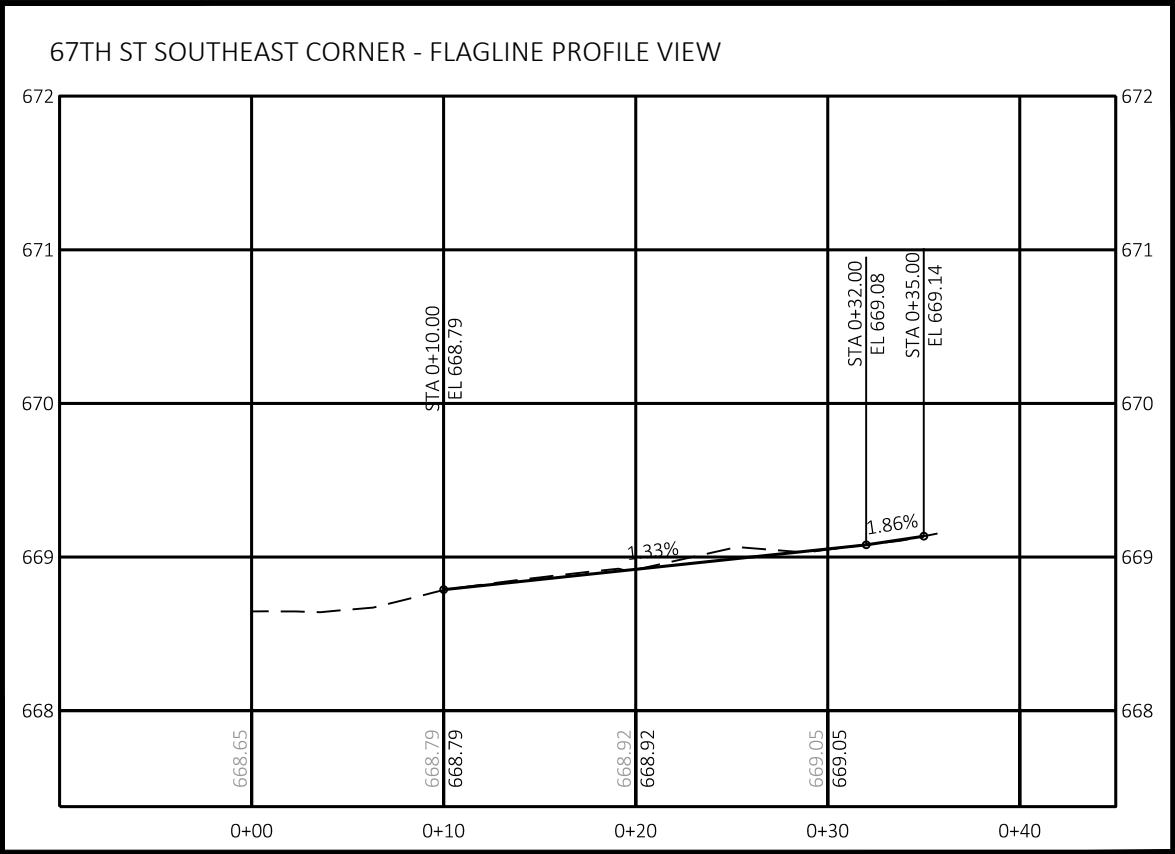
HWY: STH 35

COUNTY: DOUGLAS

INTERSECTION DETAILS - 67TH ST NE

SHEET

E



464+76-465+04
66TH ST - SW

RADIOI POINT TABLE			
POINT NUMBER	STATION	OFFSET	RADIUS
R - 5	464+77.52	51.8' LT	24.1'

LEGEND

- APPROXIMATE EXISTING RIGHT OF WAY
- GRADING LINE
- RP

REMOVING PAVEMENT
- POINT NUMBER

POINT NUMBER
- ###

CURB RAMP TYPE
- TSFE

TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE A
- CSW

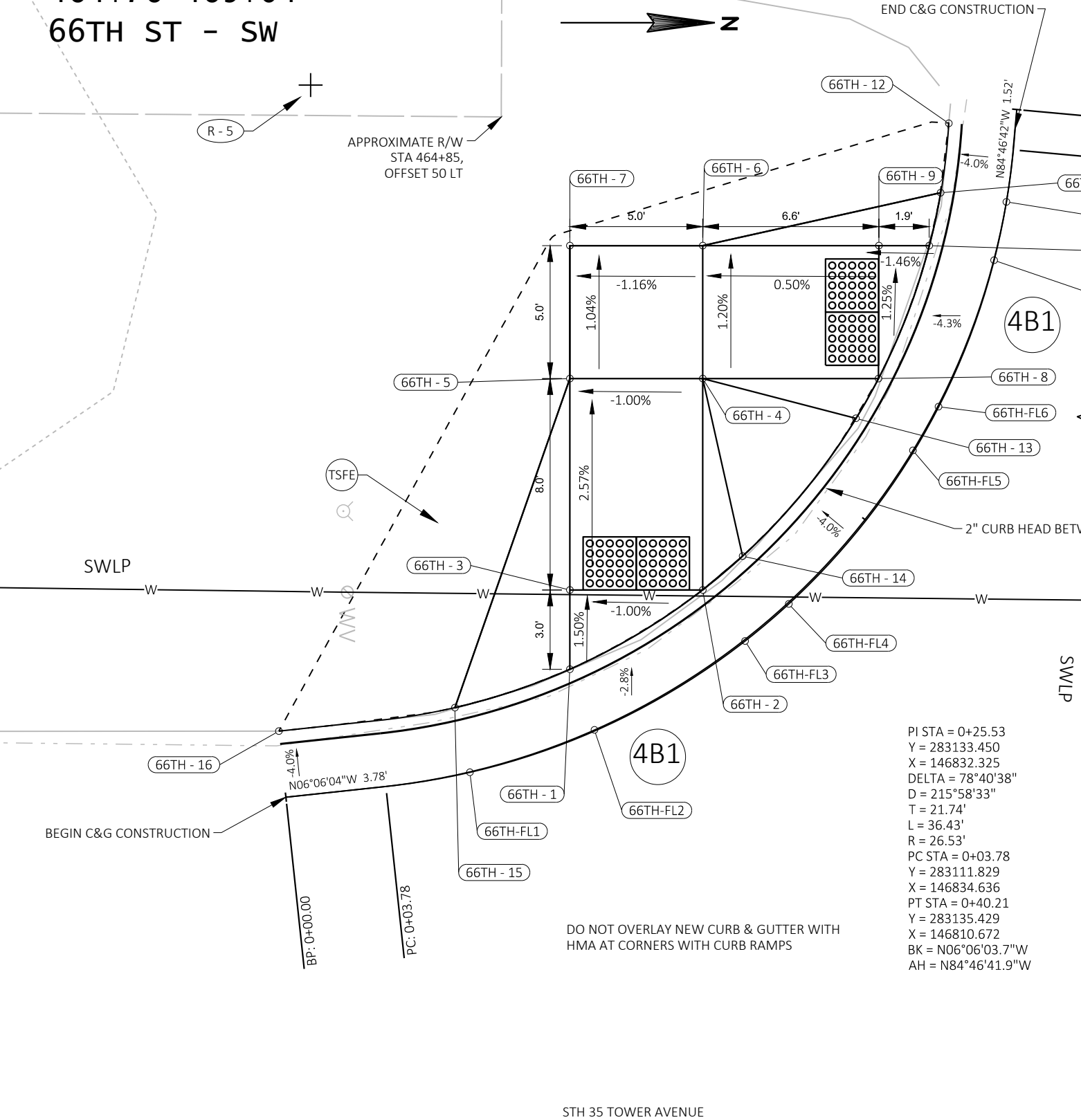
CONCRETE SIDEWALK 6-INCH
- PN# OR C# CALLOUTS REFER TO TEMPORARY LIMITED EASEMENT TABLES
- SAWING ASPHALT
- DETECTABLE WARNING - 2' x 2'

66TH ST SW

POINT NUMBER	STATION	OFFSET	ELEVATION
66TH - 1	464+87.43	29.92' LT	669.13
66TH - 2	464+92.41	32.93' LT	669.23
66TH - 3	464+87.41	32.90' LT	669.18
66TH - 4	464+92.35	40.89' LT	669.43
66TH - 5	464+87.35	40.86' LT	669.38
66TH - 6	464+92.32	45.89' LT	669.49
66TH - 7	464+87.32	45.86' LT	669.43
66TH - 8	464+98.96	40.94' LT	669.40
66TH - 9	464+98.94	45.94' LT	669.46
66TH - 10	465+00.84	45.95' LT	669.49
66TH - 11	465+01.25	47.95' LT	669.68
66TH - 12	465+01.54	50.56' LT	669.82
66TH - 13	464+98.12	39.43' LT	669.53
66TH - 14	464+93.90	34.22' LT	669.42
66TH - 15	464+83.11	28.44' LT	669.55
66TH - 16	464+76.49	27.51' LT	669.44

GENERAL CONSTRUCTION NOTES:

- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.



PI STA = 0+25.53
Y = 283133.450
X = 146832.325
DELTA = 78°40'38"
D = 215°58'33"
T = 21.74'
L = 36.43'
R = 26.53'
PC STA = 0+03.78
Y = 283111.829
X = 146834.636
PT STA = 0+40.21
Y = 283135.429
X = 146810.672
BK = N06°06'03.7"W
AH = N84°46'41.9"W

66TH ST SW-FLAGLINE











POINT NUMBER	STATION	OFFSET	ELEVATION
66TH-FL1	464+83.69	26.01' LT	669.13
66TH-FL2	464+88.37	27.64' LT	669.20
66TH-FL3	464+94.01	31.02' LT	669.30
66TH-FL4	464+95.65	32.43' LT	669.33
66TH-FL5	465+00.28	38.24' LT	669.44
66TH-FL6	465+01.23	39.89' LT	669.47
66TH-FL7	465+03.28	45.42' LT	669.40
66TH-FL8	465+03.73	47.62' LT	669.59

STH 35 TOWER AVENUE



66TH ST SE-FLAGLINE			
POINT NUMBER	STATION	OFFSET	ELEVATION
66TH-FL9	464+89.04	26.22' RT	669.56
66TH-FL10	464+94.55	29.87' RT	669.56
66TH-FL11	464+97.90	33.33' RT	669.32
66TH-FL12	464+84.26	24.41' RT	669.10

LEGEND

- | | |
|---|---|
|  | APPROXIMATE EXISTING
RIGHT OF WAY |
|  | GRADING LINE |
|  | REMOVING PAVEMENT |
|  | POINT NUMBER |
|  | CURB RAMP TYPE |
|  | TOPSOIL, SEEDING MIXTURE
NO. 20, FERTILIZER TYPE B,
& EROSION MAT URBAN
CLASS I TYPE A |
|  | CONCRETE SIDEWALK
6-INCH |
|  | PN# OR C# CALLOUTS REFER
TO TEMPORARY LIMITED
EASEMENT TABLES |
|  | SAWING ASPHALT |
|  | DETECTABLE
WARNING - 2' x 2' |

PI STA = 0+21.61
Y = 283130.067
X = 146885.252
DELTA = 73°57'09"
D = 216°46'14"
T = 19.90'
L = 34.12'
R = 26.43'
PC STA = 0+01.71
Y = 283110.232
X = 146883.639
PT STA = 0+35.83
Y = 283134.000
X = 146904.760
BK = N04°38'56.1"E
AH = N78°36'05.6"E

66TH ST SE

POINT NUMBER	STATION	OFFSET	ELEVATION
66TH - 17	464+87.83	28.42' RT	669.09
66TH - 18	464+92.85	31.71' RT	669.18
66TH - 19	464+87.85	31.77' RT	669.12
66TH - 20	464+92.87	34.89' RT	669.39
66TH - 21	464+87.88	34.93' RT	669.34
66TH - 22	464+92.91	39.89' RT	669.44
66TH - 23	464+87.91	39.93' RT	669.39
66TH - 24	464+83.08	38.92' RT	669.56
66TH - 25	464+77.92	38.91' RT	669.68
66TH - 26	464+77.90	34.91' RT	669.57
66TH - 27	464+79.35	26.07' RT	669.42
66TH - 28	464+83.55	26.81' RT	669.52
66TH - 29	464+95.93	34.87' RT	669.74
66TH - 30	464+99.79	41.69' RT	669.81

GENERAL CONSTRUCTION NOTES:

- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

MH

DO NOT OVERLAY NEW CURB & GUTTER WITH
HMA AT CORNERS WITH CURB RAMPS

(4B1

CONSOLIDATED COMMUNICATIONS

©
MH

LP

CAUTION

G

RADII POINT TABLE			
POINT NUMBER	STATION	OFFSET	RADIUS
R - 6	464+77.32	49.9' RT	23.9"

PROJECT NO:	8010-00-70
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HWY: STH 35

COUNTY: DOUGLAS

INTERSECTION DETAILS - 66TH ST SE

SHEET








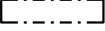

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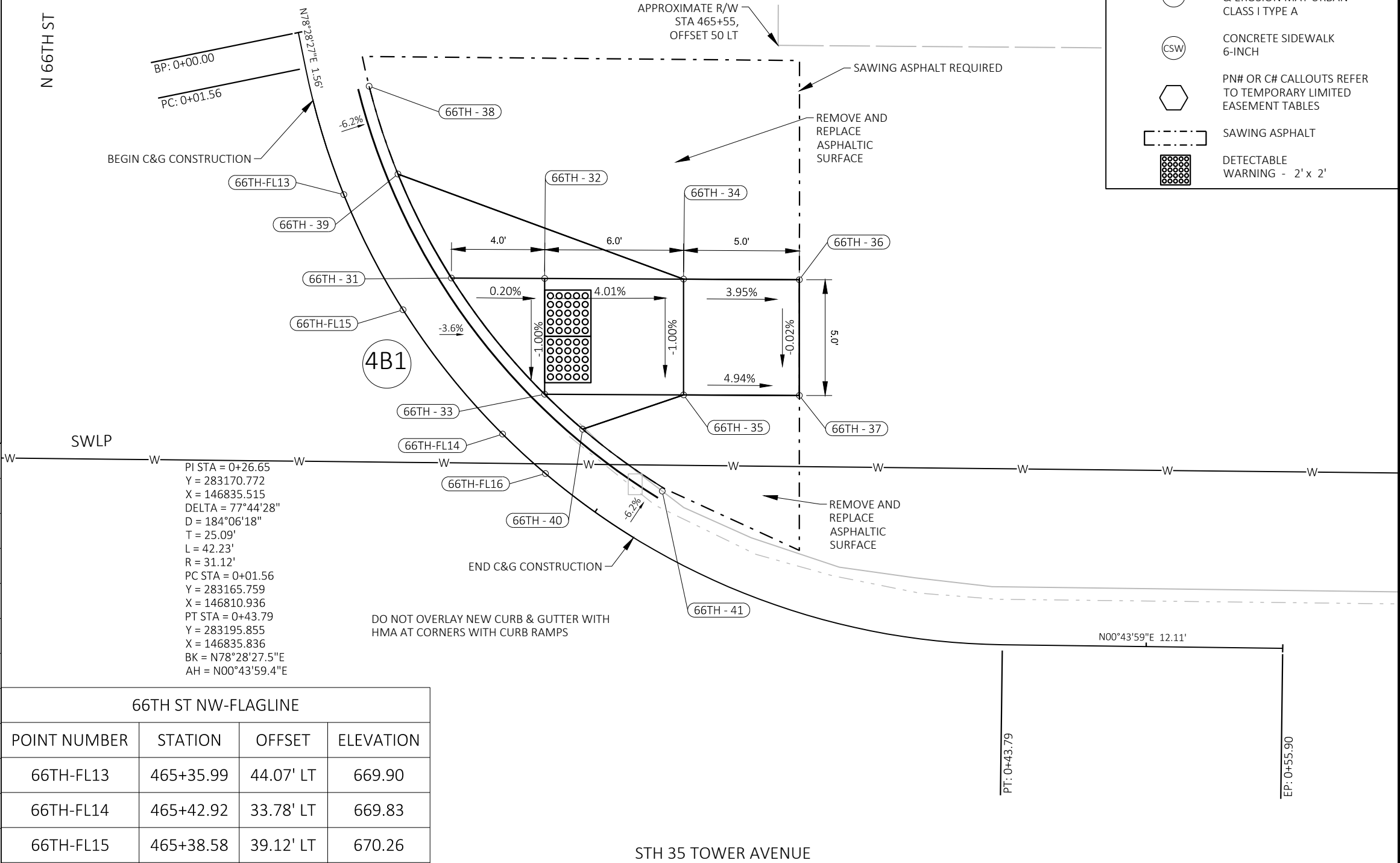
465+35-465+56
66TH ST - NW

SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.

- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

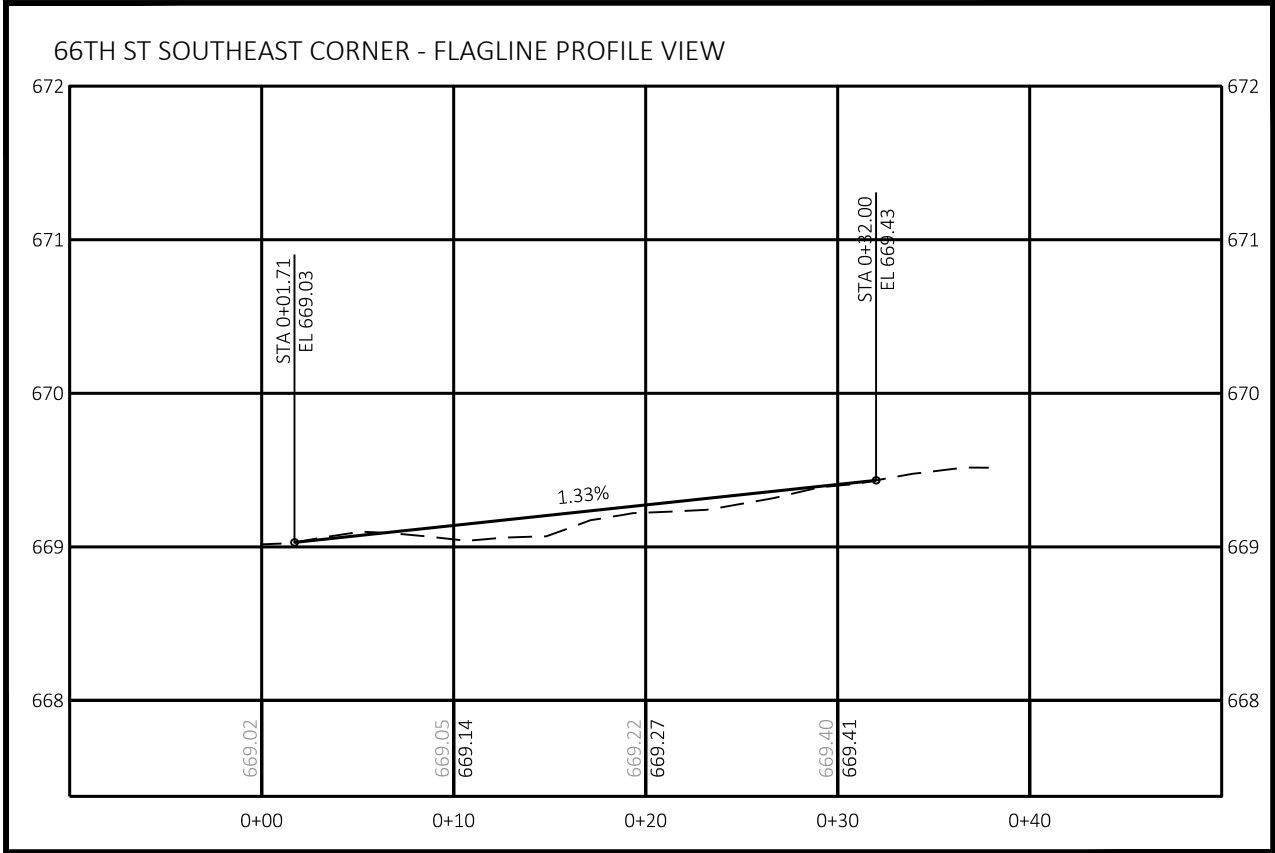
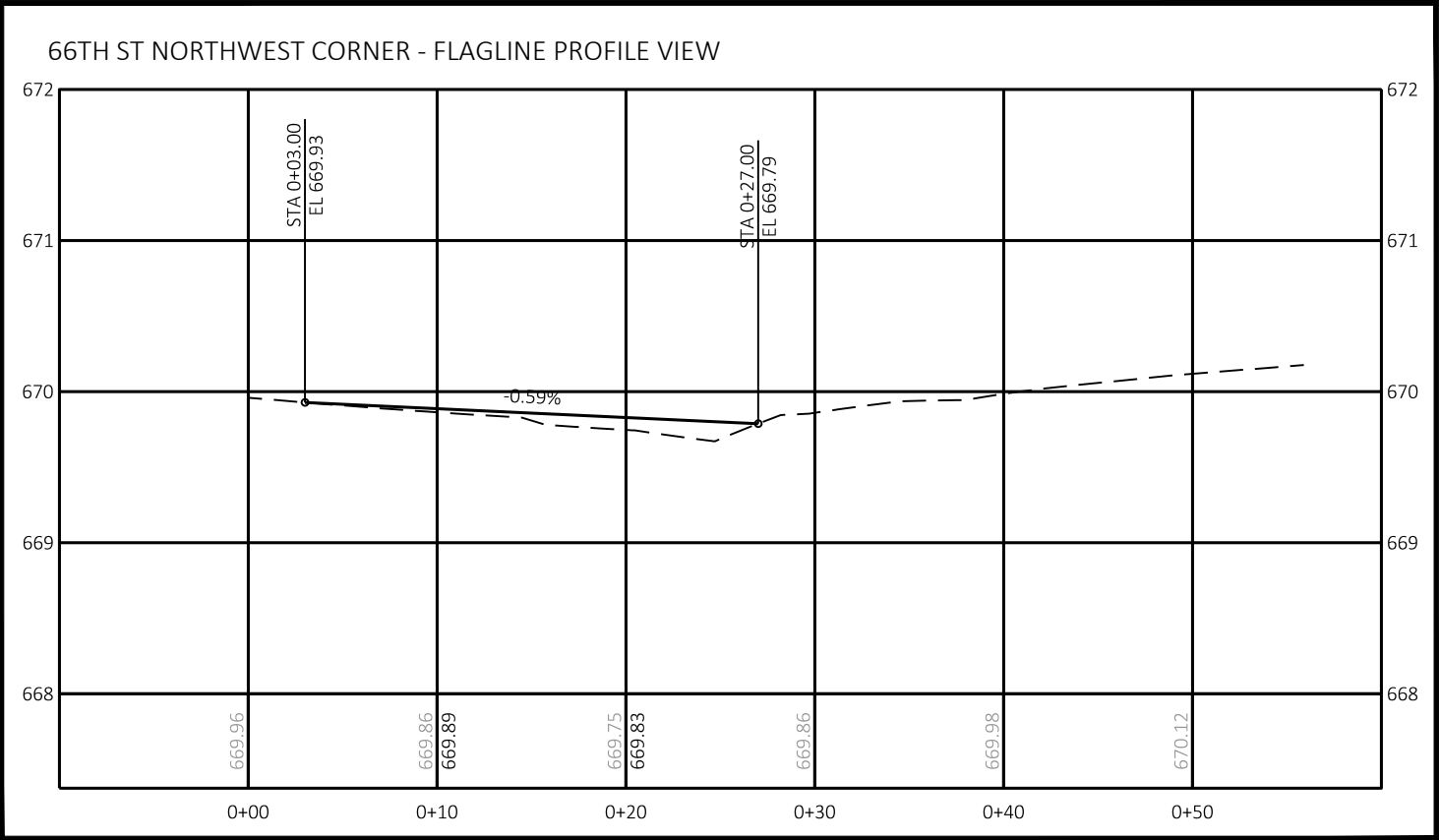
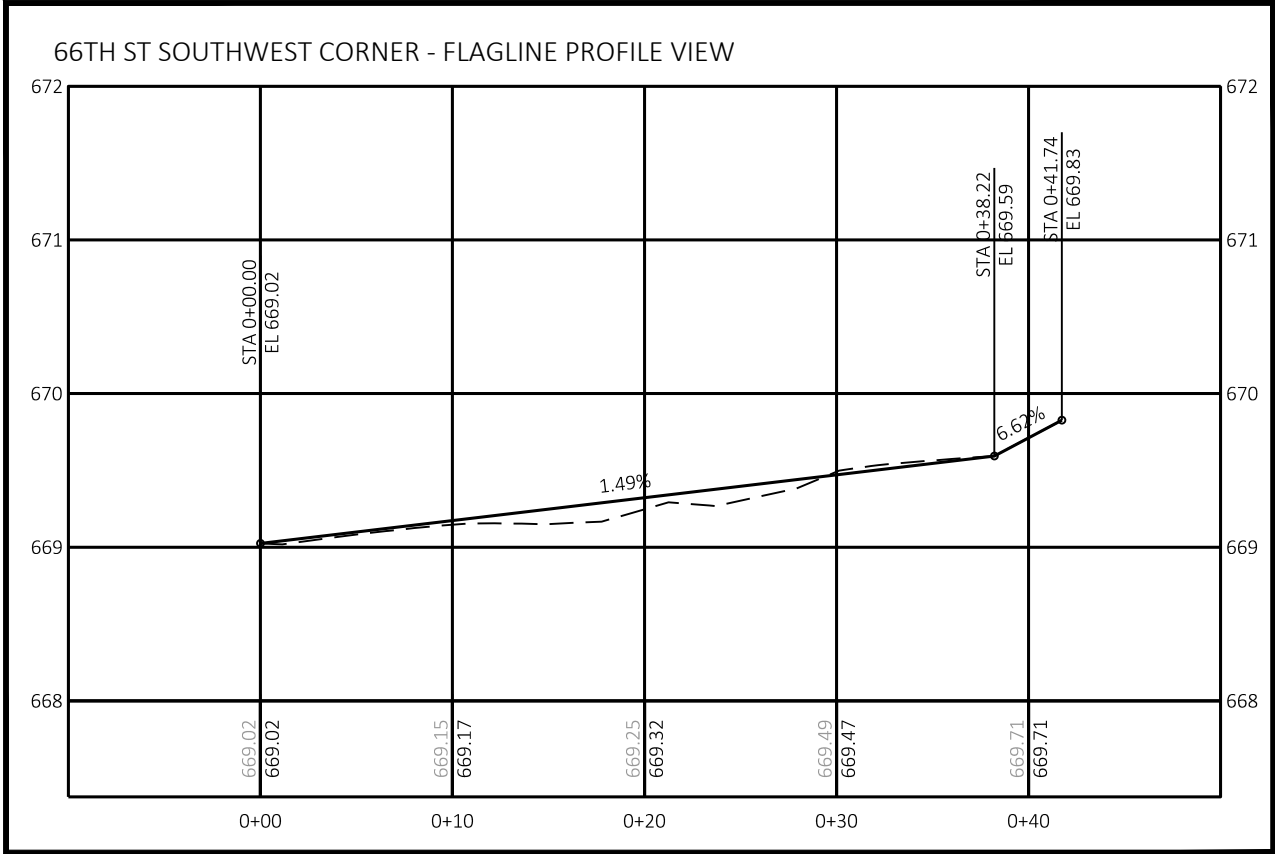
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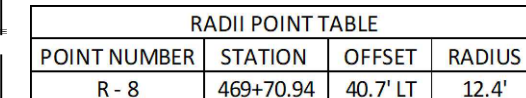
	APPROXIMATE EXISTING RIGHT OF WAY
	GRADING LINE
	REMOVING PAVEMENT POINT NUMBER
	CURB RAMP TYPE
	TOPSOIL, SEEDING MIXTURE NO. 20, FERTILIZER TYPE B, & EROSION MAT URBAN CLASS I TYPE A
	CONCRETE SIDEWALK 6-INCH
	PN# OR C# CALLOUTS REFER TO TEMPORARY LIMITED EASEMENT TABLES
	SAWING ASPHALT
	DETECTABLE WARNING - 2' x 2'



SHEET

E





65TH ST SW-FLAGLINE			
POINT NUMBER	STATION	OFFSET	ELEVATION
65TH-FL1	469+80.47	29.27' LT	672.39
65TH-FL2	469+84.67	34.93' LT	672.48
65TH-FL3	469+86.18	40.33' LT	672.56
65TH-FL4	469+87.44	45.55' LT	672.63

- ## GENERAL CONSTRUCTION NOTES:
- SLOPE ARROWS do NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
 - DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
 - CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
 - ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

65TH ST SW			
POINT NUMBER	STATION	OFFSET	ELEVATION
65TH - 1	469+83.75	40.91' LT	672.49
65TH - 2	469+82.37	35.91' LT	672.41
65TH - 3	469+82.31	40.91' LT	672.49
65TH - 4	469+74.37	35.84' LT	672.81
65TH - 5	469+74.31	40.84' LT	672.88
65TH - 6	469+68.57	35.79' LT	673.04
65TH - 7	469+68.49	40.79' LT	673.09
65TH - 8	469+63.45	35.75' LT	673.10
65TH - 9	469+63.49	40.75' LT	673.13
65TH - 10	469+53.45	36.02' LT	673.48
65TH - 11	469+53.49	40.82' LT	673.48
65TH - 12	469+63.33	50.75' LT	673.46
65TH - 13	469+67.18	50.78' LT	673.46
65TH - 14	469+85.72	49.05' LT	673.06
65TH - 15	469+85.01	46.14' LT	673.05
65TH - 16	469+78.98	31.28' LT	672.81
65TH - 17	469+76.14	29.46' LT	672.72

470+20-470+48
65TH ST - NW

GENERAL CONSTRUCTION NOTES:

- SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.
- DETECTABLE WARNINGS ARE 4 FT WIDE AND 2 FT LONG.
- CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- ALL STATIONS AND OFFSET INFORMATION REFERENCE STH 35 / TOWER AVENUE.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE BACK OF CURB.

65 TH ST NW

POINT NUMBER	STATION	OFFSET	ELEVATION
65TH - 18	470+25.19	41.98' LT	672.67
65TH - 19	470+28.12	41.96' LT	672.67
65TH - 20	470+28.10	36.96' LT	672.57
65TH - 21	470+34.12	41.84' LT	672.88
65TH - 22	470+34.10	36.84' LT	672.78
65TH - 23	470+39.12	41.75' LT	673.06
65TH - 24	470+39.10	36.74' LT	672.96
65TH - 25	470+57.27	41.40' LT	673.80
65TH - 26	470+57.18	36.40' LT	673.77
65TH - 27	470+22.73	52.41' LT	673.33
65TH - 28	470+23.63	46.97' LT	673.21
65TH - 29	470+31.15	33.58' LT	672.95
65TH - 30	470+42.87	27.48' LT	672.70

PI STA = 0+24.41
Y = 283655.472
X = 146835.946
DELTA = 71°40'45"
D = 208°39'12"
T = 19.83'
L = 34.35'
R = 27.46'
PC STA = 0+04.58
Y = 283652.429
X = 146816.347
PT STA = 0+38.93
Y = 283675.033
X = 146839.219
BK = N81°10'36.7"E
AH = N09°29'51.9"E

RADII POINT TABLE

POINT NUMBER	STATION	OFFSET	RADIUS
R - 9	470+48.11	51.9' LT	25.0'

65TH ST NW-FLAGLINE

POINT NUMBER	STATION	OFFSET	ELEVATION
65TH-FL5	470+21.18	46.48' LT	672.84
65TH-FL6	470+22.91	40.95' LT	672.74
65TH-FL7	470+26.15	35.38' LT	673.14
65TH-FL8	470+29.48	31.71' LT	672.57

BEGIN C&G CONSTRUCTION

BP: 0+00.00

PC: 0+04.58

65TH-FL5

65TH - 18

65TH-FL6

4B1

65TH - 20

65TH-FL7

65TH - 29

65TH-FL8

65TH - 27

65TH - 28

65TH - 21

65TH - 23

65TH - 25

65TH - 26

65TH - 30

END C&G CONSTRUCTION

DO NOT OVERLAY NEW CURB & GUTTER WITH
HMA AT CORNERS WITH CURB RAMP

STH 35 TOWER AVENUE

N

APPROXIMATE R/W
STA 470+54,
OFFSET 50 LT

LEGEND

- APPROXIMATE EXISTING RIGHT OF WAY
- GRADING LINE
- RP REMOVING PAVEMENT
- POINT NUMBER
- ### CURB RAMP TYPE
- TSFE TOPSOIL, SEEDING MIXTURE NO. 20,
FERTILIZER TYPE B, & EROSION MAT
URBAN CLASS I TYPE A
- CSW CONCRETE SIDEWALK 6-INCH
- PN# OR C# CALLOUTS REFER TO
TEMPORARY LIMITED EASEMENT TABLES
- CONTAMINATED AREA
- SAWING ASPHALT
- DETECTABLE WARNING - 2' x 2'

PROJECT NO: 8010-00-70

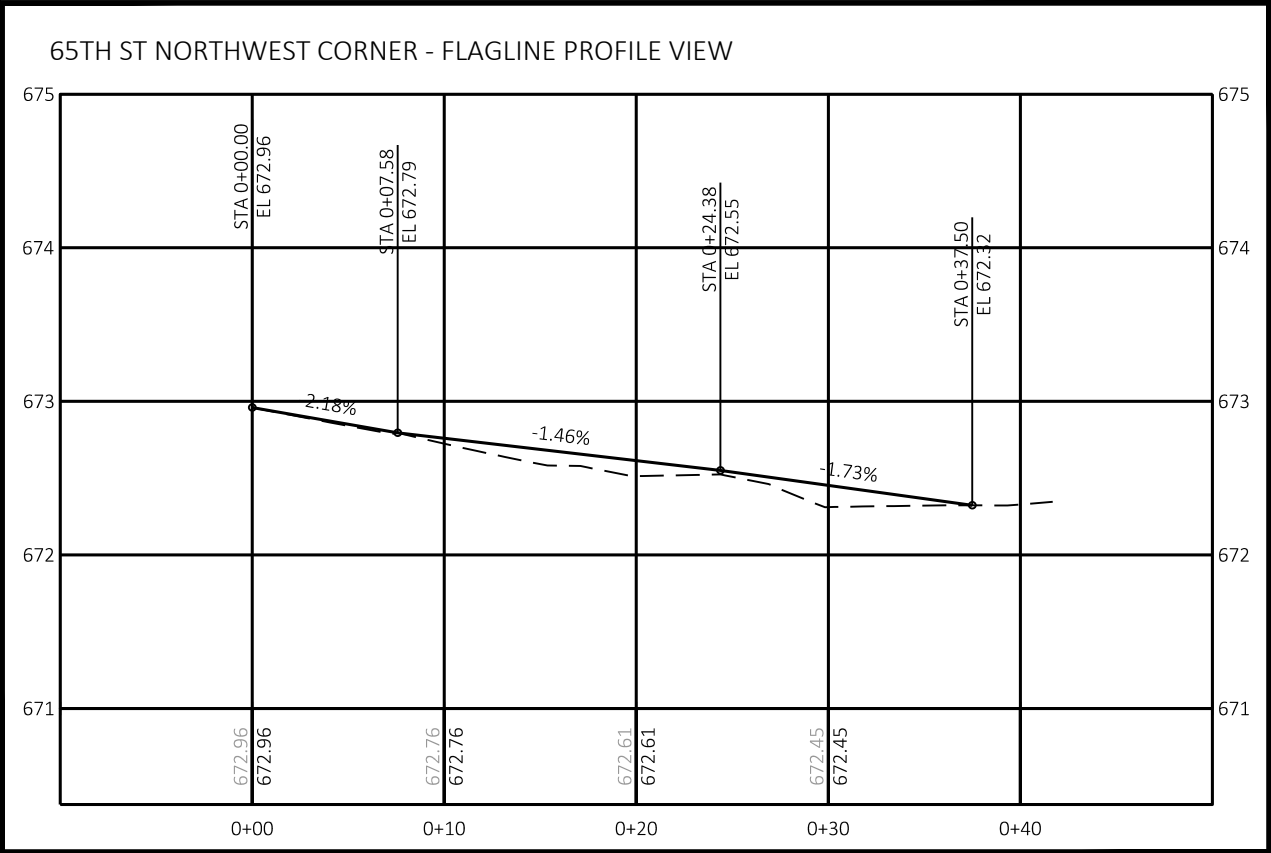
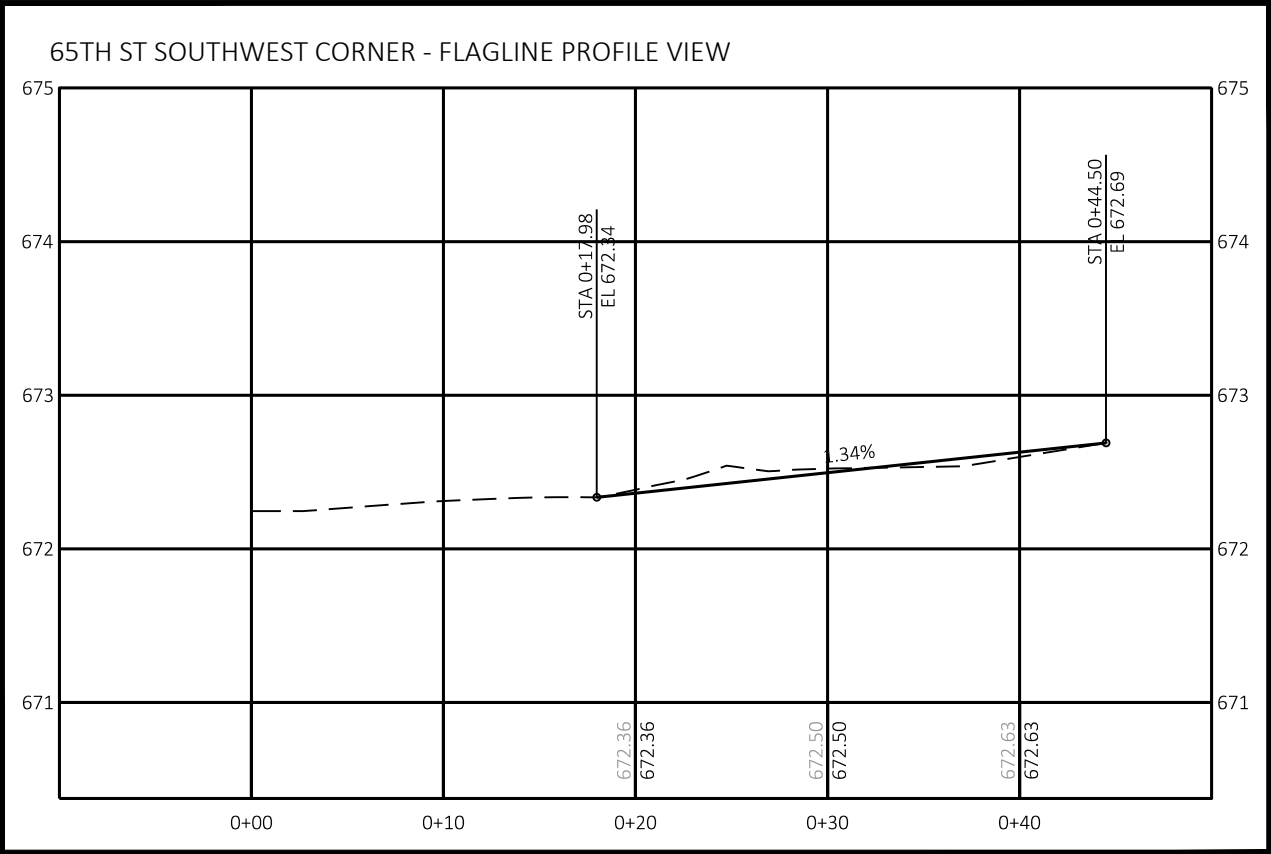
HWY: STH 35

COUNTY: DOUGLAS

INTERSECTION DETAILS - 65TH ST NW

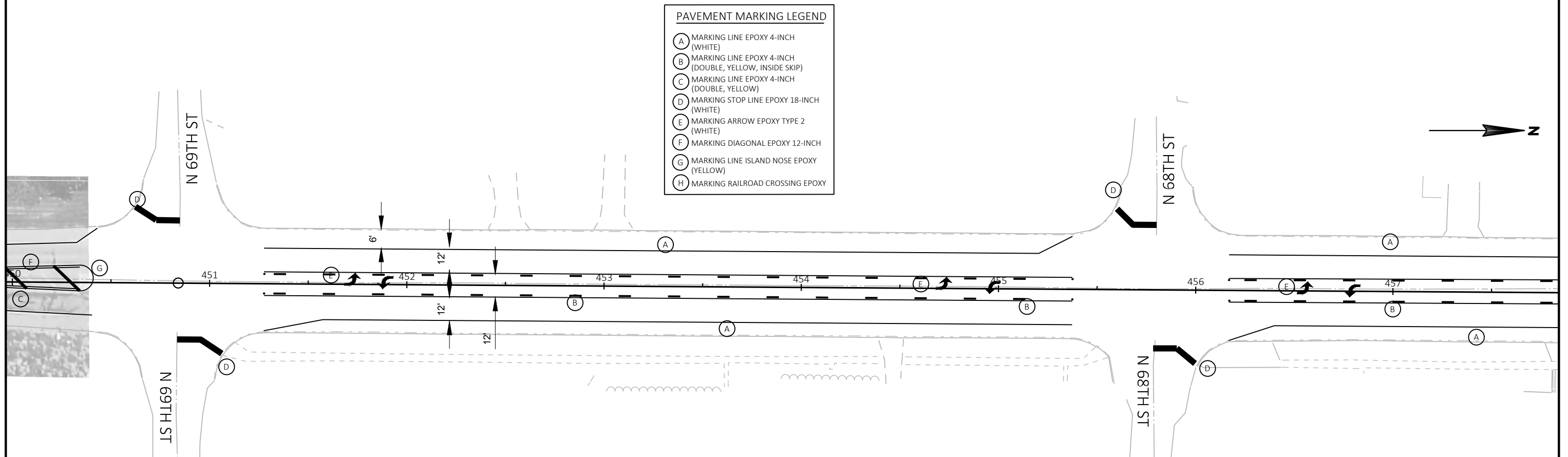
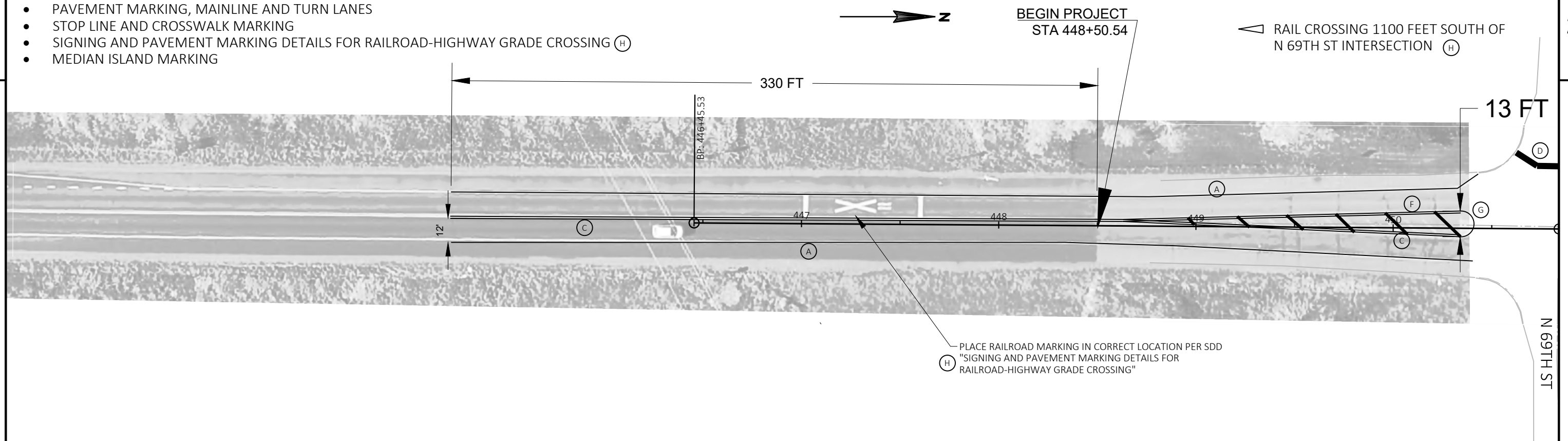
SHEET

E



UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL PAVEMENT MARKING DETAILS, SEE:

- PAVEMENT MARKING, MAINLINE AND TURN LANES
- STOP LINE AND CROSSWALK MARKING
- SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSING (H)
- MEDIAN ISLAND MARKING



PROJECT NO: 8010-00-70

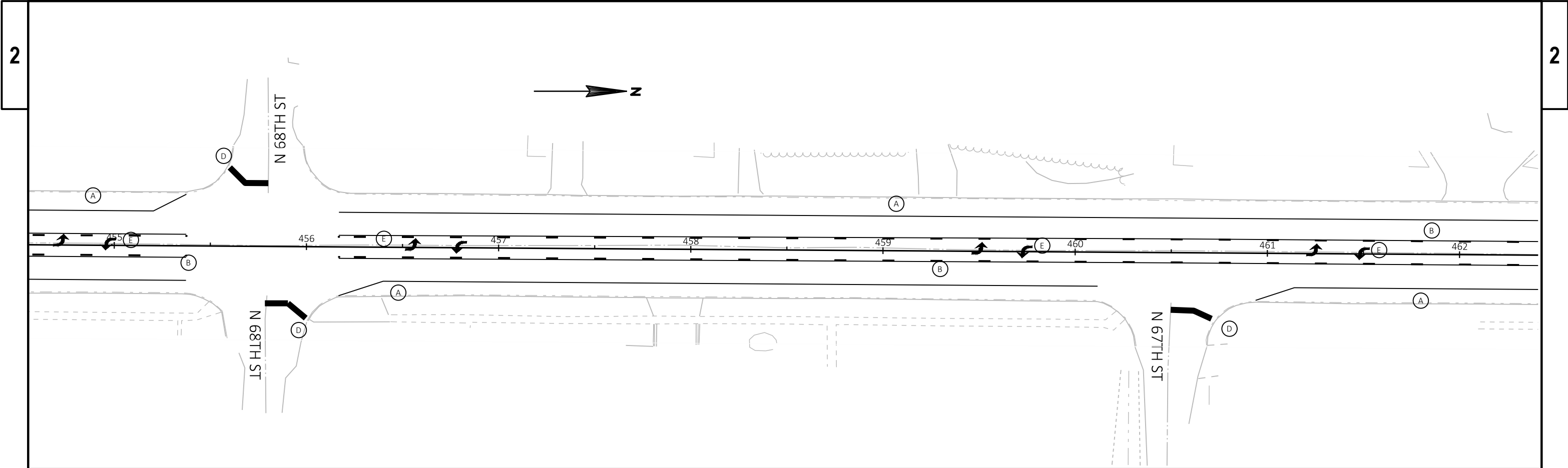
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COUNTY: DOUGLAS

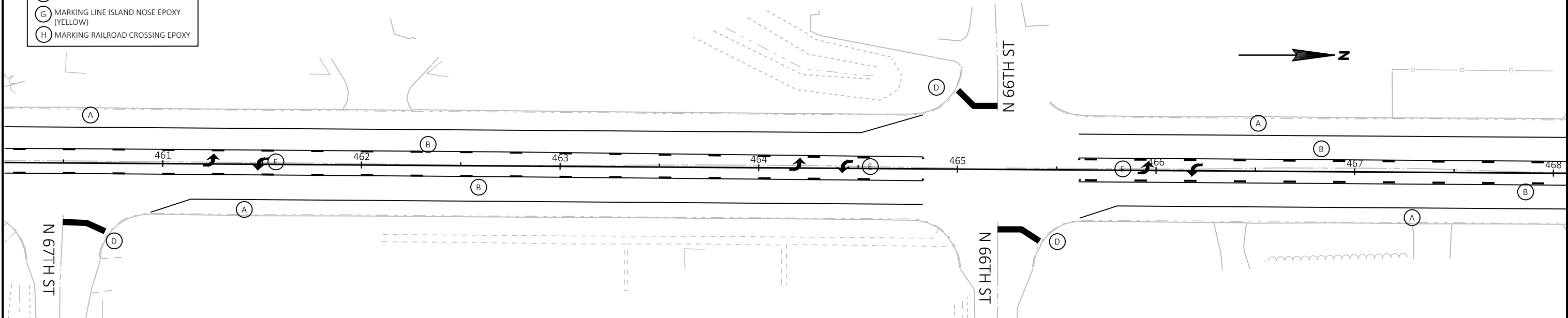
PAVEMENT MARKING

SHEET

E

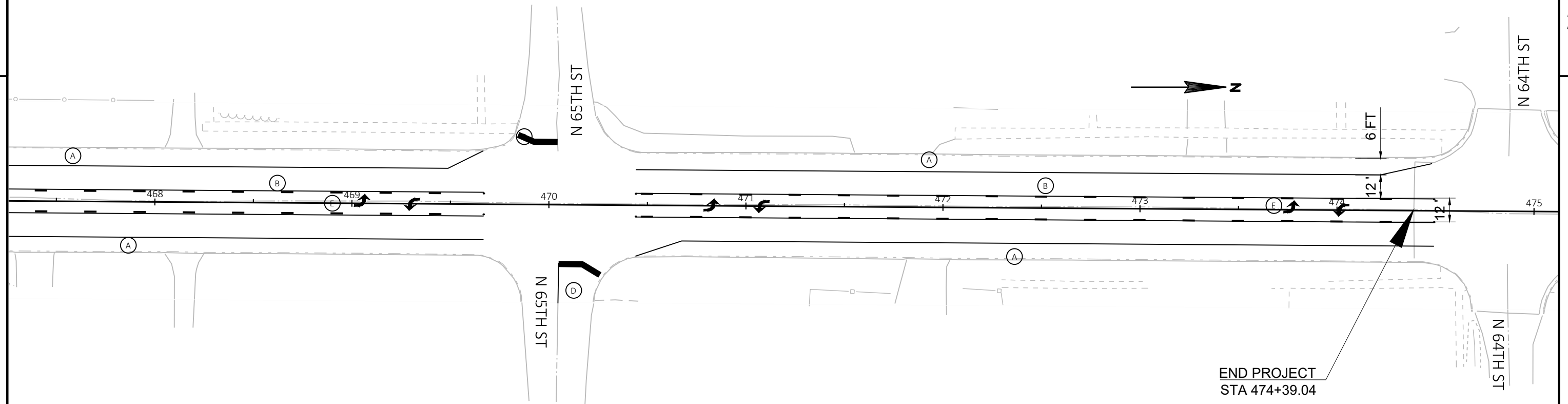


PAVEMENT MARKING LEGEND	
(A)	MARKING LINE EPOXY 4-INCH (WHITE)
(B)	MARKING LINE EPOXY 4-INCH (DOUBLE, YELLOW, INSIDE SKIP)
(C)	MARKING LINE EPOXY 4-INCH (DOUBLE, YELLOW)
(D)	MARKING STOP LINE EPOXY 18-INCH (WHITE)
(E)	MARKING ARROW EPOXY TYPE 2 (WHITE)
(F)	MARKING DIAGONAL EPOXY 12-INCH
(G)	MARKING LINE ISLAND NOSE EPOXY (YELLOW)
(H)	MARKING RAILROAD CROSSING EPOXY



PROJECT NO: 8010-00-70	HWY: STH 35	COUNTY: DOUGLAS	PAVEMENT MARKING	SHEET	E
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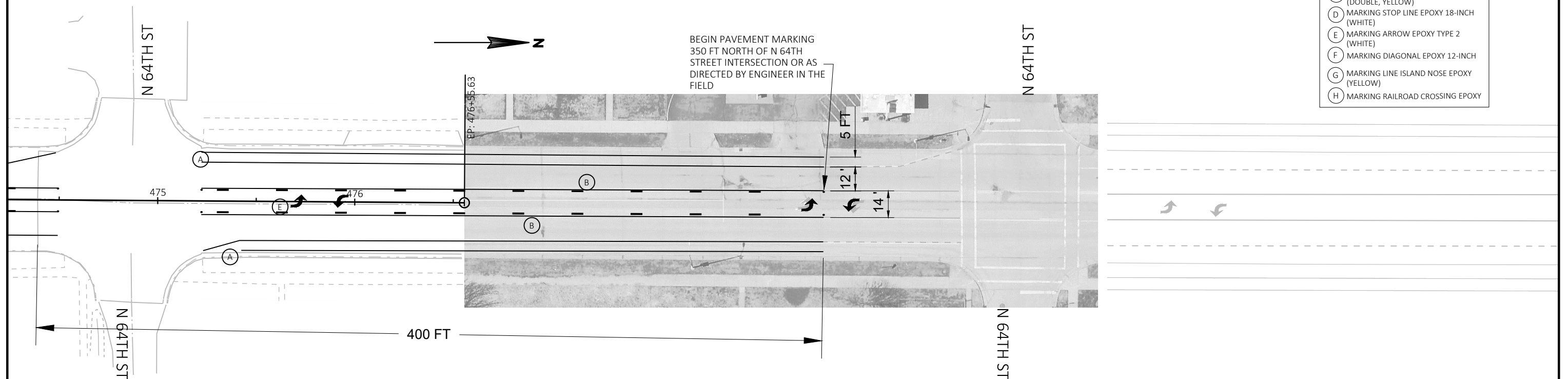
2



END PROJECT
STA 474+39.04

PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE, YELLOW, INSIDE SKIP)
- (C) MARKING LINE EPOXY 4-INCH (DOUBLE, YELLOW)
- (D) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (E) MARKING ARROW EPOXY TYPE 2 (WHITE)
- (F) MARKING DIAGONAL EPOXY 12-INCH
- (G) MARKING LINE ISLAND NOSE EPOXY (YELLOW)
- (H) MARKING RAILROAD CROSSING EPOXY



PROJECT NO:	8010-00-70
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HWY: STH 35

COUNTY: DOUGLAS

PAVEMENT MARKING

SHEET

3

FILE NAME : N:\PDS\C3D\80100000\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 64TH-65TH

PLOT DATE : 3/3/2020 10:24 AM

PLOT BY : KING, STEPHANIE J

PLOT NAME :

PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

PLACE W12-52 500 FEET BEFORE THE W20-1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.



SIGNS TO BE 48" x 48" UNLESS OTHERWISE NOTED.

WHERE PAVEMENT MARKINGS CONFLICT WITH THE TEMPORARY TRAVEL PATH, THE CHANNELIZING DEVICES SEPARATING OPPOSING TRAFFIC SHOULD HAVE A MAXIMUM SPACING IN FEET OF $\frac{1}{2}$ THE SPEED LIMIT IN MPH.

ALL TYPE III BARRICADES THAT ARE USED DURING THE NIGHTTIME ARE REQUIRED TO HAVE WARNING LIGHTS TYPE A.

ENSURE THAT SIGNS DO NOT CAUSE ANY VISION ISSUES WITH RAILROAD SIGNALS OR SIGNS.

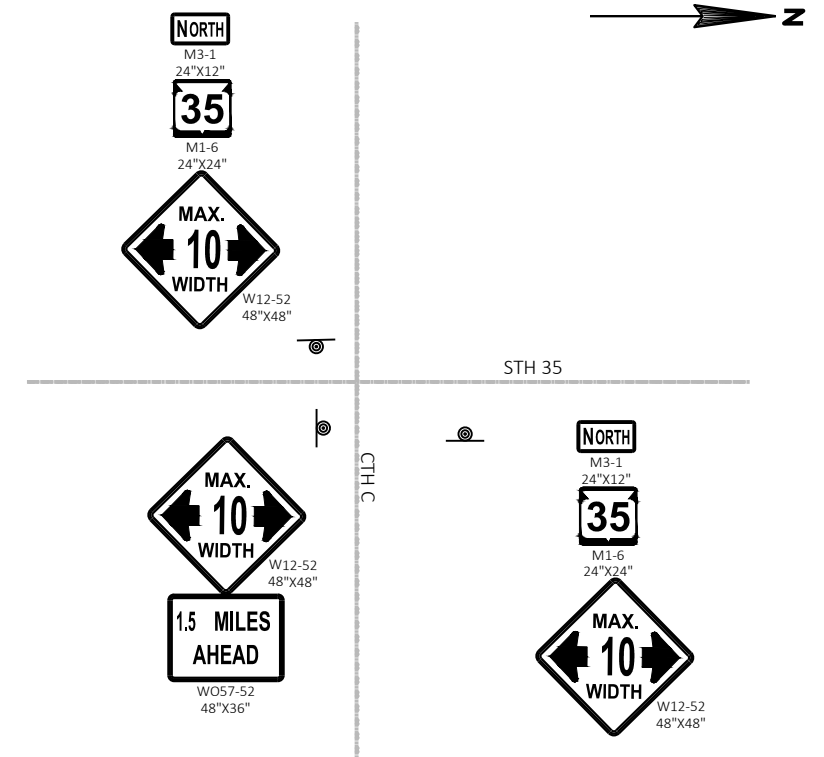
UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL TRAFFIC CONTROL DETAILS, SEE:

- "ADVANCED WIDTH RESTRICTION SIGNING"
- "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- "TRAFFIC CONTROL, DROP-OFF SIGNING"

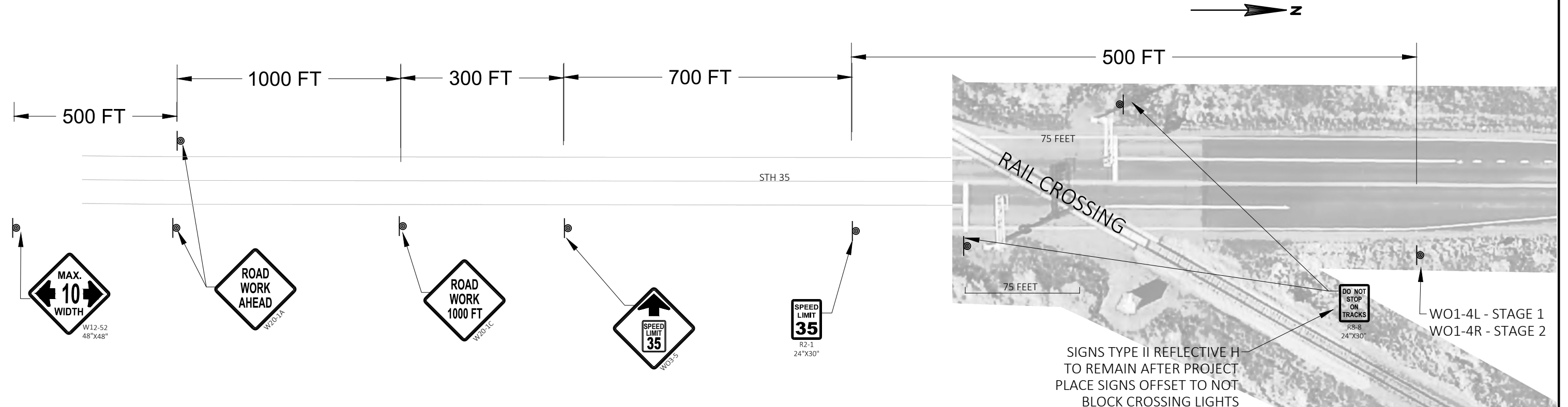
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

SIGNS TO BE PLACED AT COUNTY ROAD C INTERSECTION APPROXIMATELY 1.5 MILES SOUTH OF PROJECT



ADVANCE WARNING DETAIL STAGE 1 & 2 SOUTH END OF PROJECT



PROJECT NO: 8010-00-70

HWY: STH 35

COUNTY: DOUGLAS

TRAFFIC CONTROL - STAGE 1

SHEET

E

PLACE W12-52 500 FEET BEFORE THE W20-1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

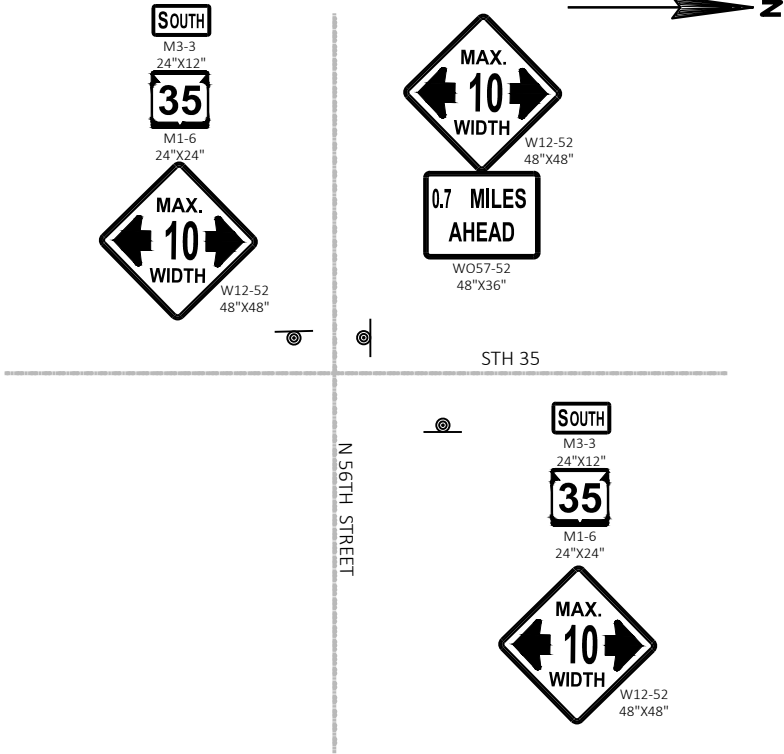


SIGNS TO BE 48" x 48" UNLESS OTHERWISE NOTED.

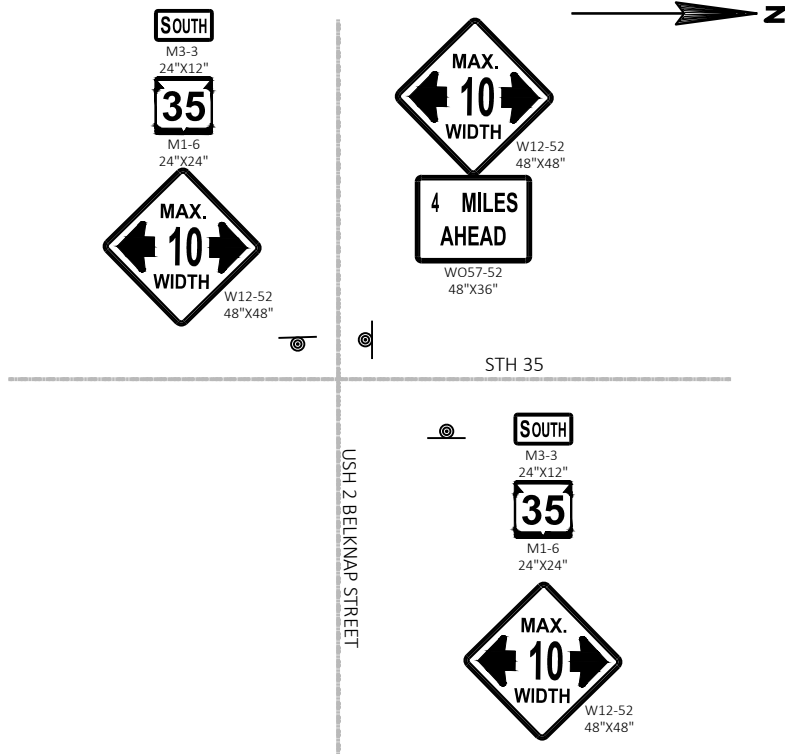
UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL TRAFFIC CONTROL DETAILS, SEE:

- "ADVANCED WIDTH RESTRICTION SIGNING"
- "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- "TRAFFIC CONTROL, DROP-OFF SIGNING"

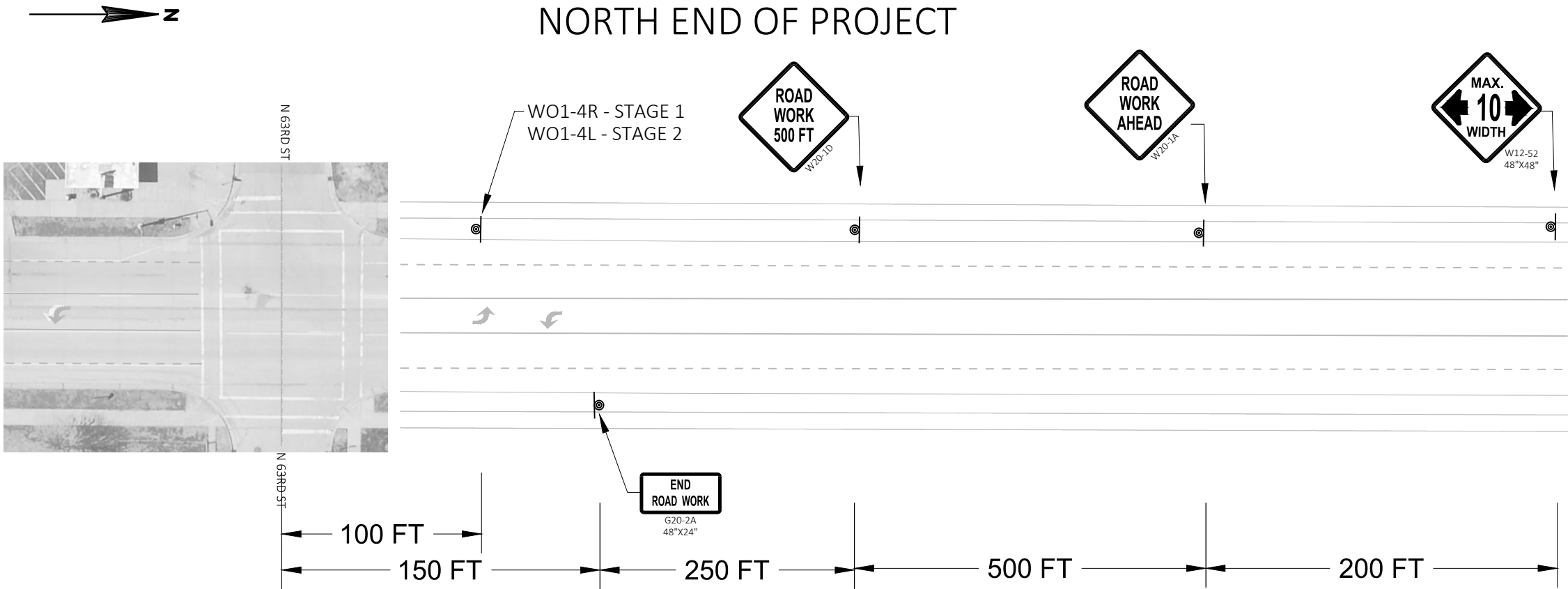
SIGNS TO BE PLACED AT N 56TH STREET INTERSECTION
APPROXIMATELY 0.7 MILES NORTH OF PROJECT



SIGNS TO BE PLACED AT USH 2, BELKNAP STREET INTERSECTION
APPROXIMATELY 4 MILES NORTH OF PROJECT



ADVANCE WARNING DETAIL STAGE 1 & 2
NORTH END OF PROJECT



SIGNS TO BE 48" x 48" UNLESS OTHERWISE NOTED.

- 
- WORK AREA

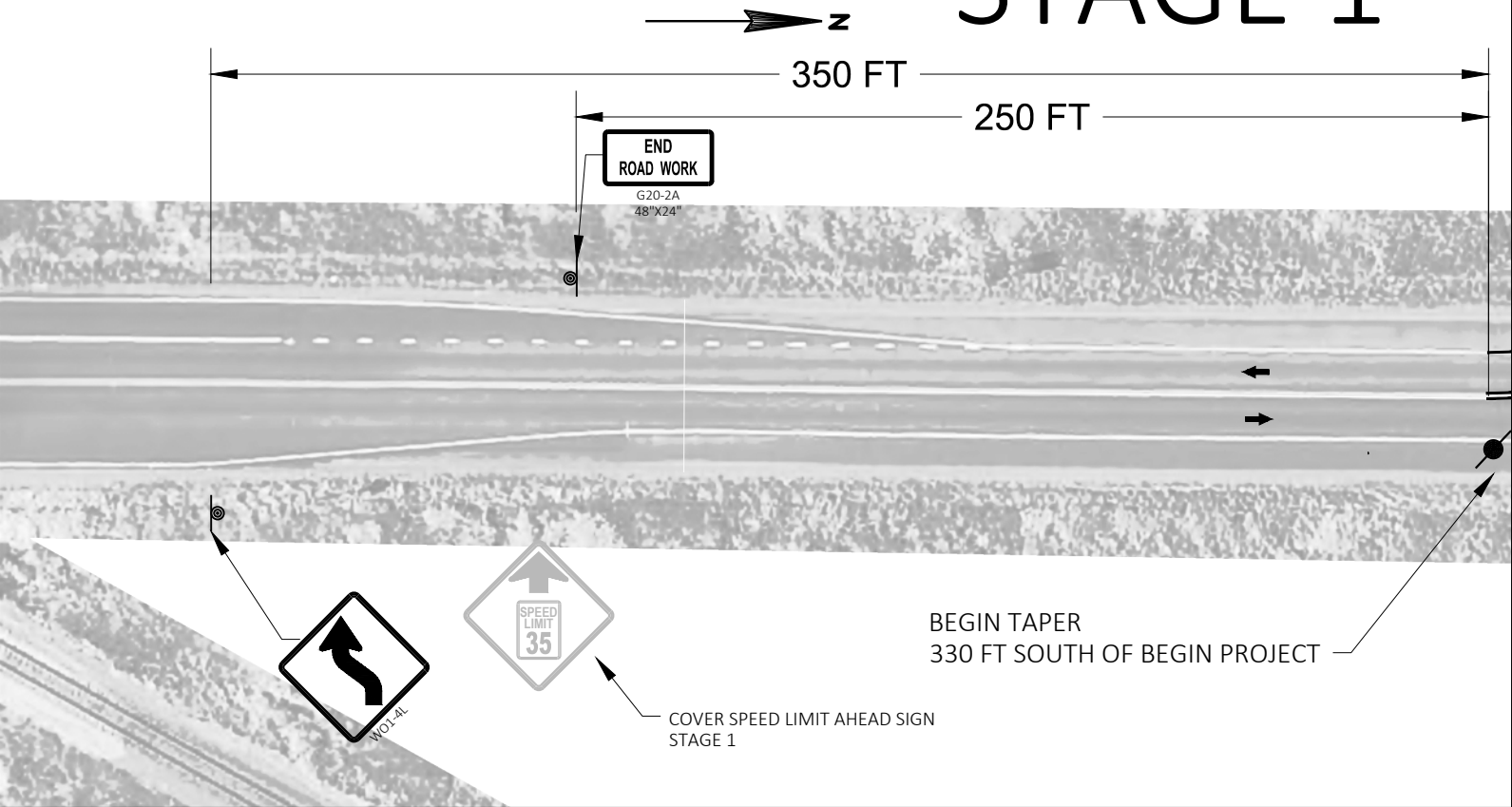
➡ DIRECTION OF TRAFFIC

ALL TYPE III BARRICADES THAT ARE USED DURING THE NIGHTTIME ARE REQUIRED TO HAVE WARNING LIGHTS TYPE A.

UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL TRAFFIC CONTROL
DETAILS, SEE:

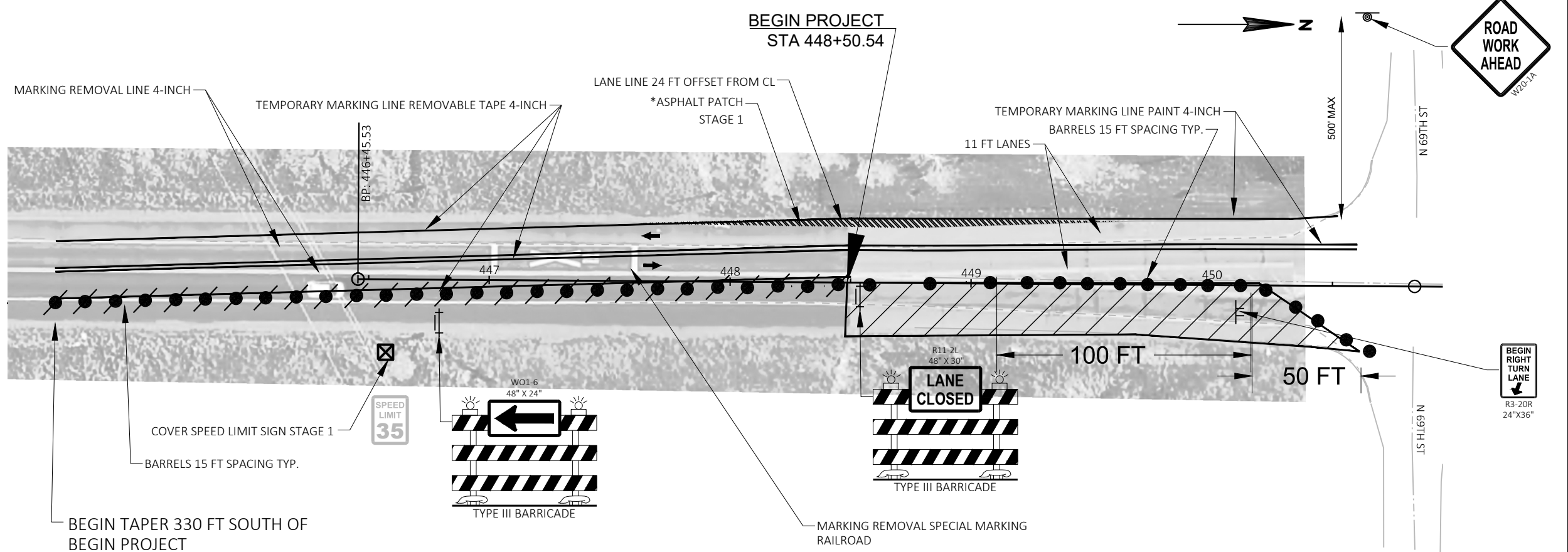
- "ADVANCED WIDTH RESTRICTION SIGNING"
- "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
- "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"
- "TRAFFIC CONTROL, DROP-OFF SIGNING"

STAGE 1

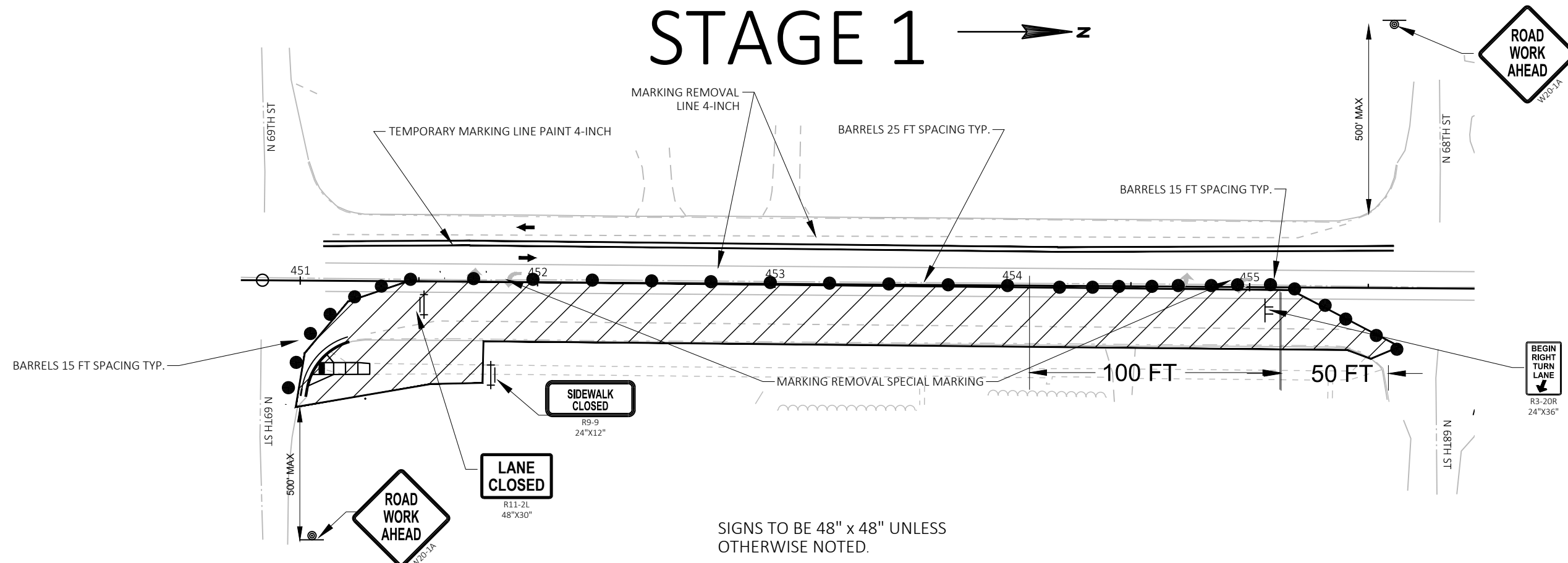


*ASPHALT SURFACE PATCH TO MAINTAIN 24' OFFSET FROM CL TO PAVEMENT EDGE, FROM BEGIN PROJECT TO N 69TH STREET. FROM BEGIN PROJECT SOUTH, ASPHALT PATCH IS TO TAPER WITH TRAFFIC CONTROL DEVICES

WHERE PAVEMENT MARKINGS
CONFLICT WITH THE TEMPORARY
TRAVEL PATH, THE CHANNELIZING
DEVICES SEPARATING OPPOSING
TRAFFIC SHOULD HAVE A MAXIMUM
SPACING IN FEET OF $\frac{1}{2}$ THE SPEED
LIMIT IN MPH.

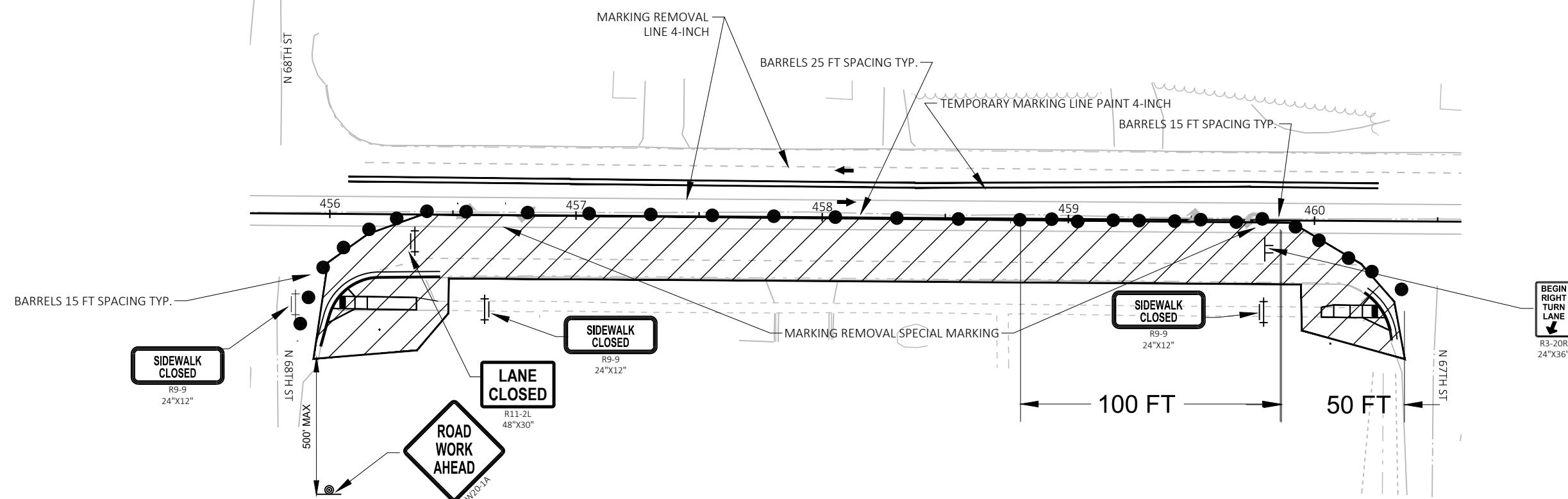


STAGE 1

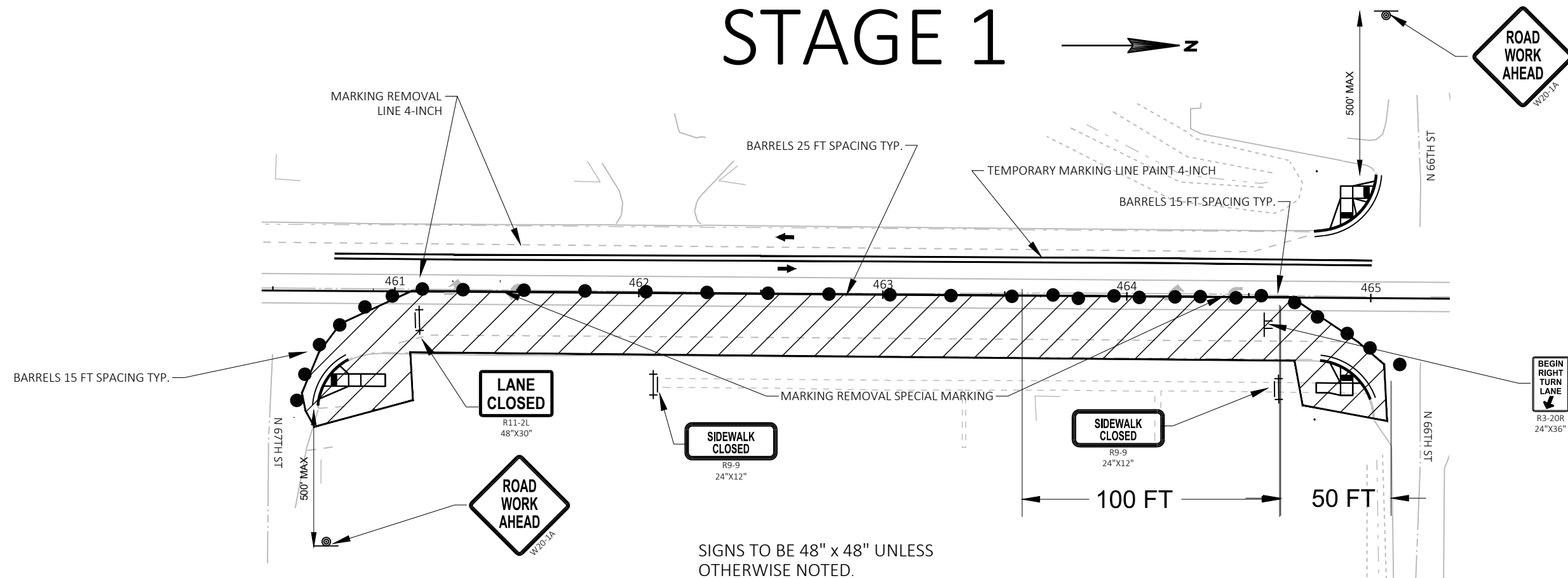


SIGNS TO BE 48" x 48" UNLESS
OTHERWISE NOTED.

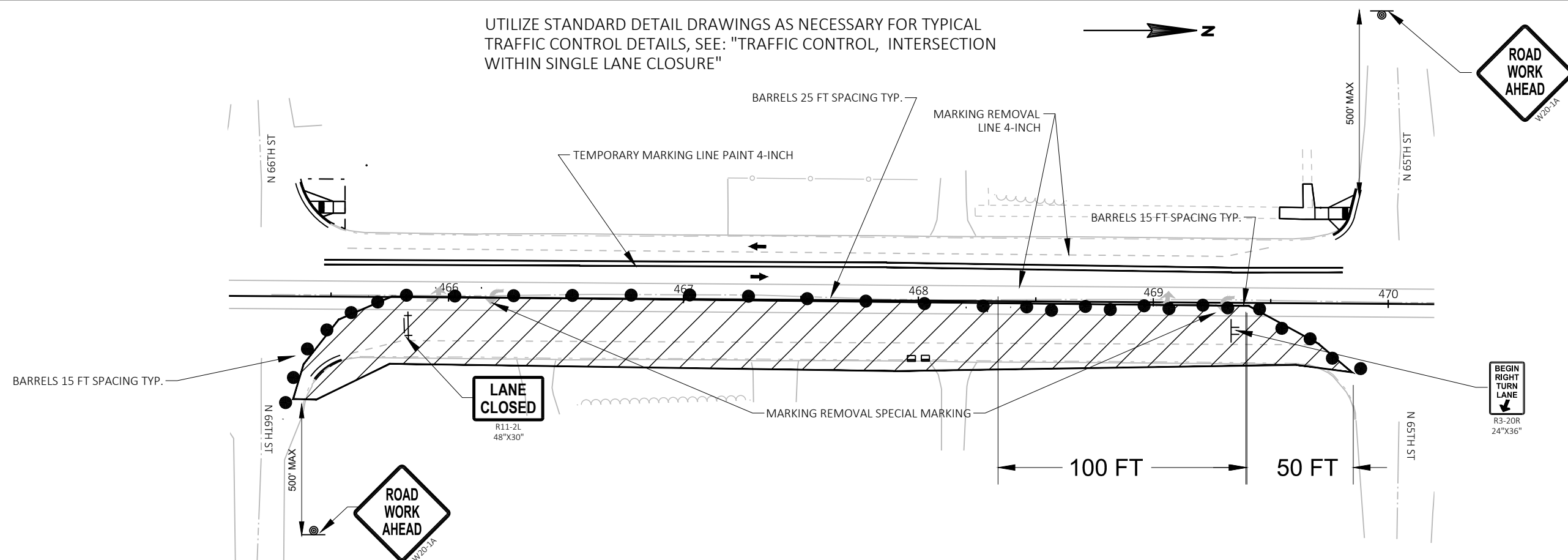
UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL
TRAFFIC CONTROL DETAILS, SEE: "TRAFFIC CONTROL, INTERSECTION
WITHIN SINGLE LANE CLOSURE"



STAGE 1



UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL TRAFFIC CONTROL DETAILS, SEE: "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"



PROJECT NO: 8010-00-70

HWY: STH 35

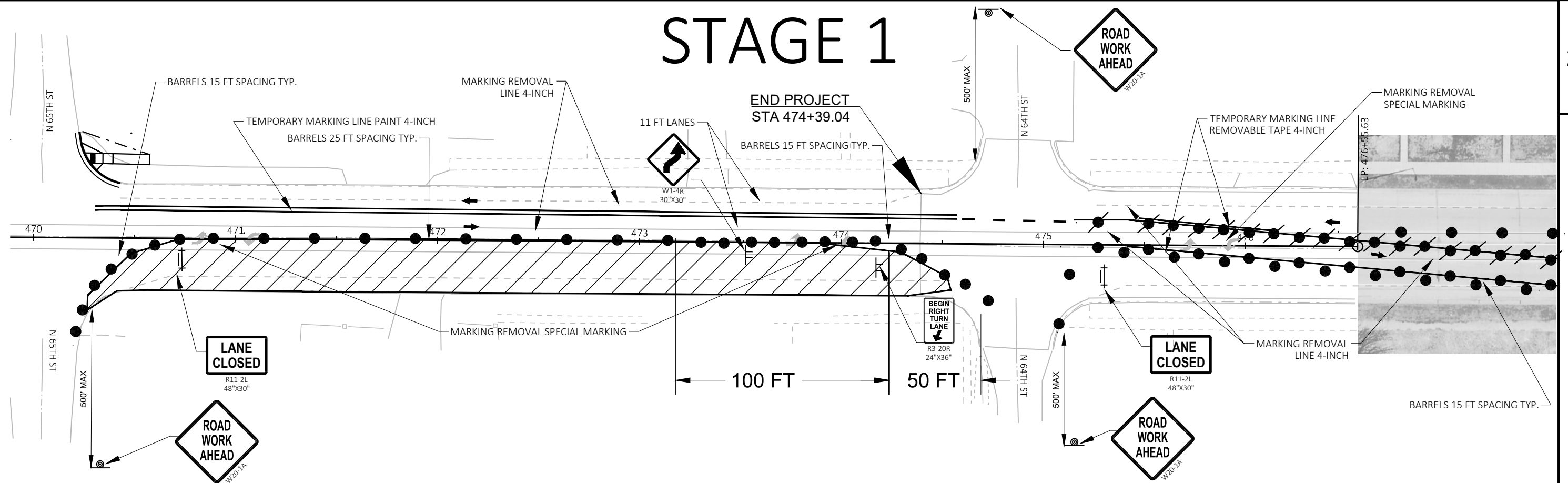
COUNTY: DOUGLAS

TRAFFIC CONTROL - STAGE 1

SHEET

E

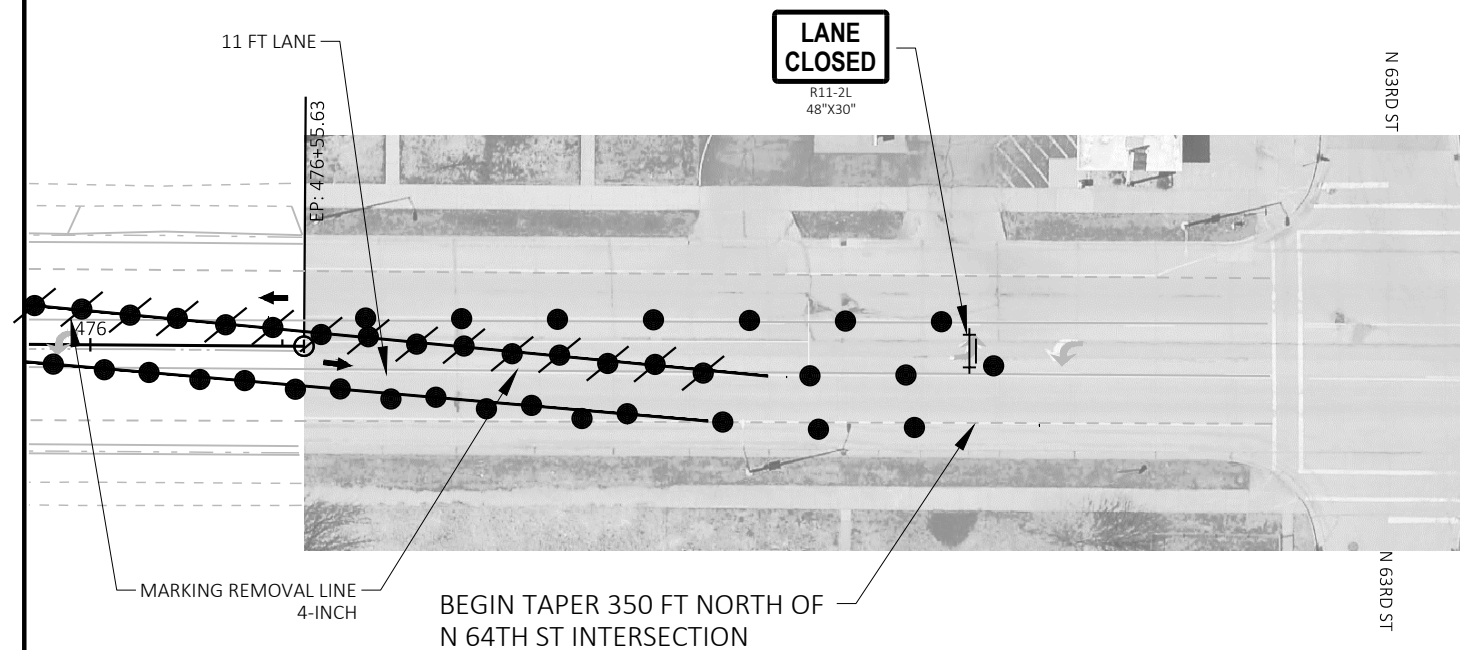
STAGE 1



UTILIZE STANDARD DETAIL DRAWINGS AS NECESSARY FOR TYPICAL TRAFFIC CONTROL DETAILS, SEE: "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE"

WHERE PAVEMENT MARKINGS CONFLICT WITH THE TEMPORARY TRAVEL PATH, THE CHANNELIZING DEVICES SEPARATING OPPOSING TRAFFIC SHOULD HAVE A MAXIMUM SPACING IN FEET OF $\frac{1}{2}$ THE SPEED LIMIT IN MPH.

SIGNS TO BE 48" x 48" UNLESS OTHERWISE NOTED.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT



DIRECTION OF TRAFFIC

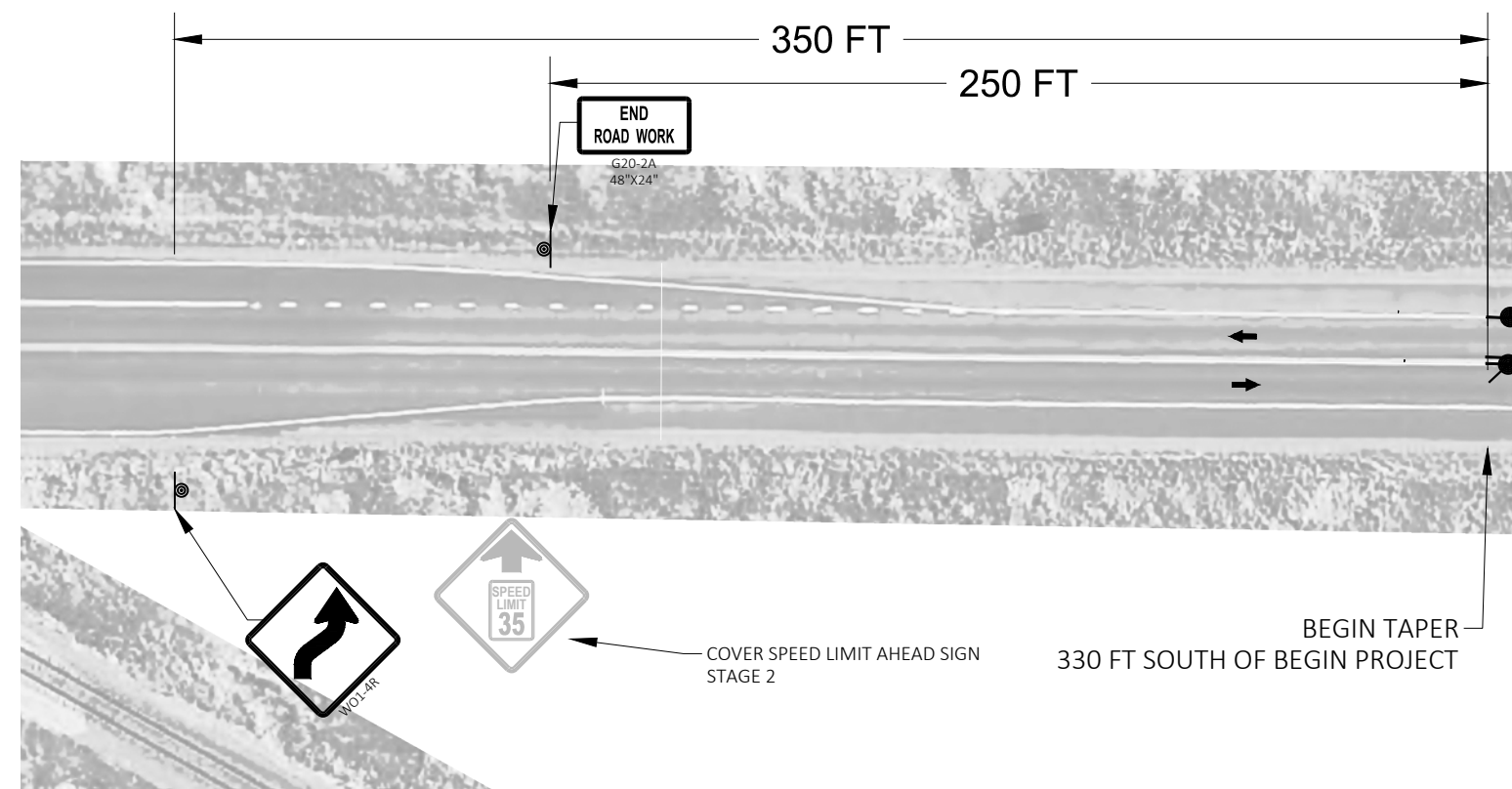
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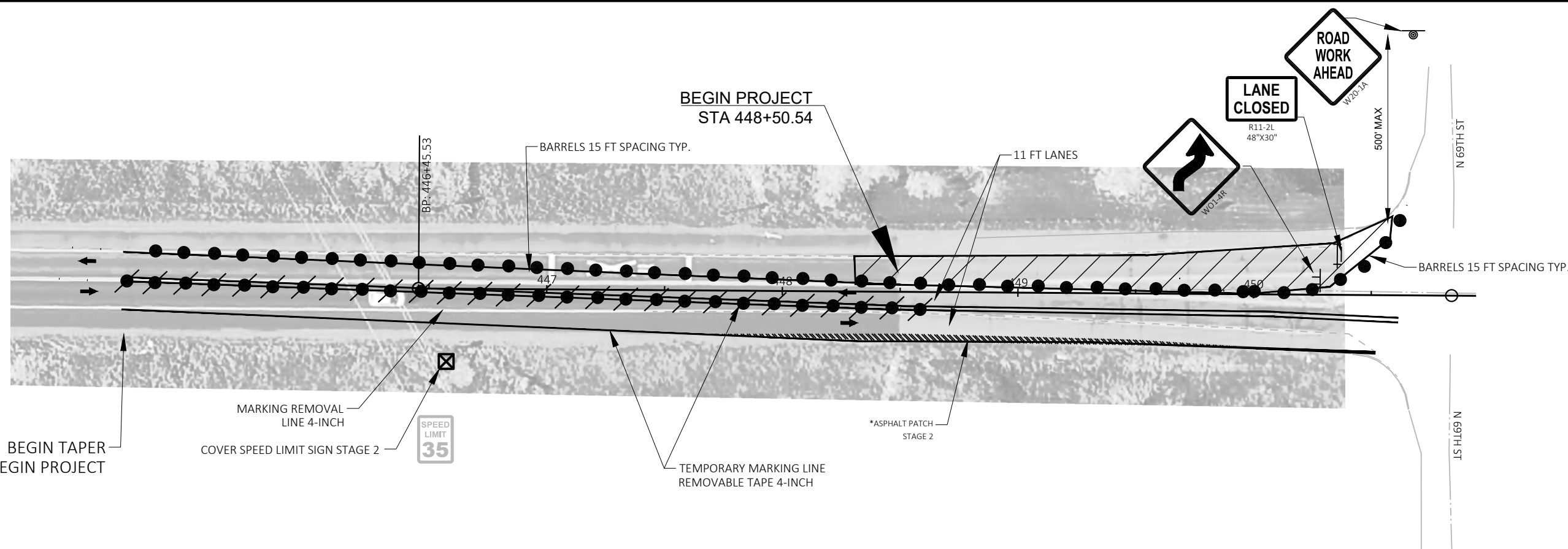
SIGNS TO BE 48" x 48" UNLESS OTHERWISE NOTED.

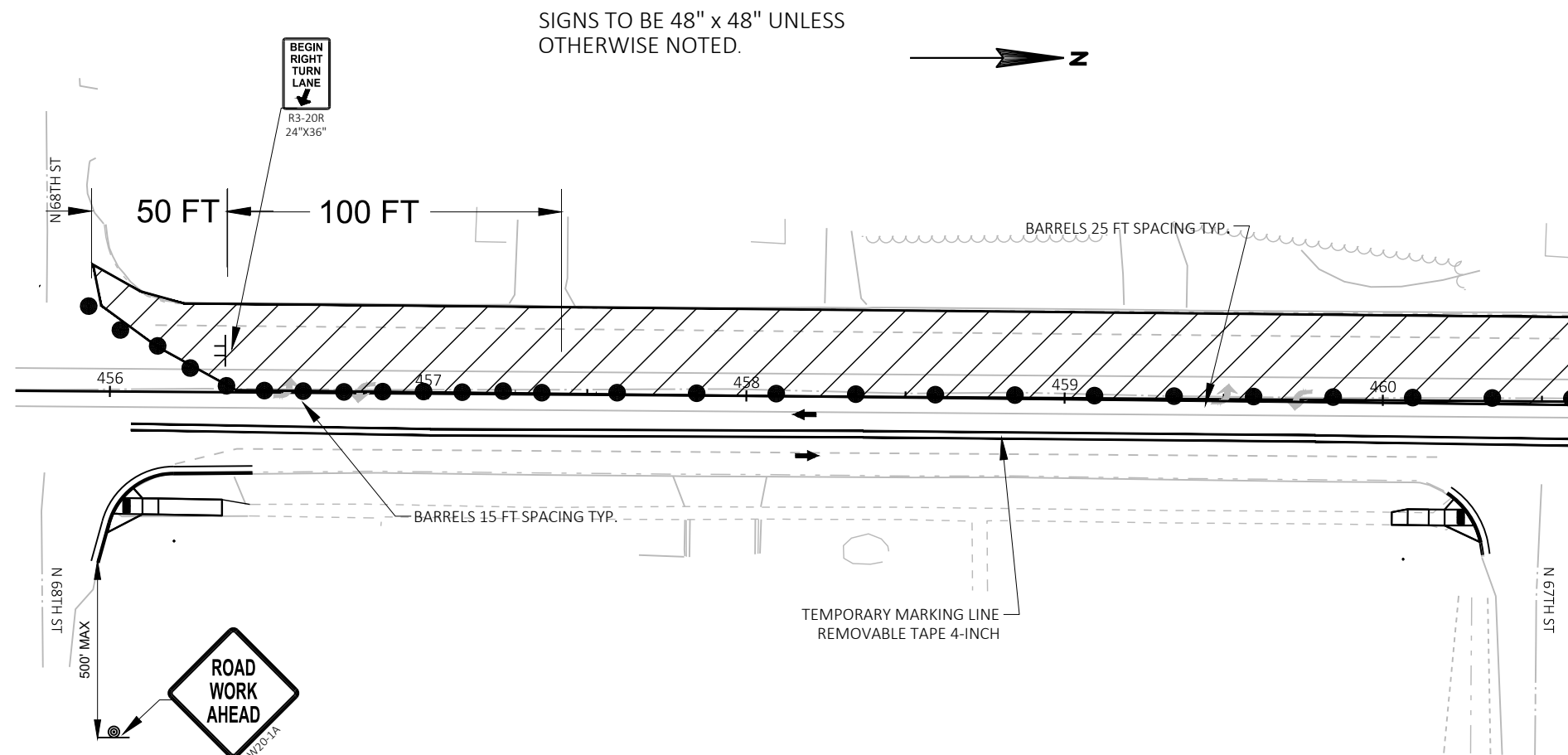
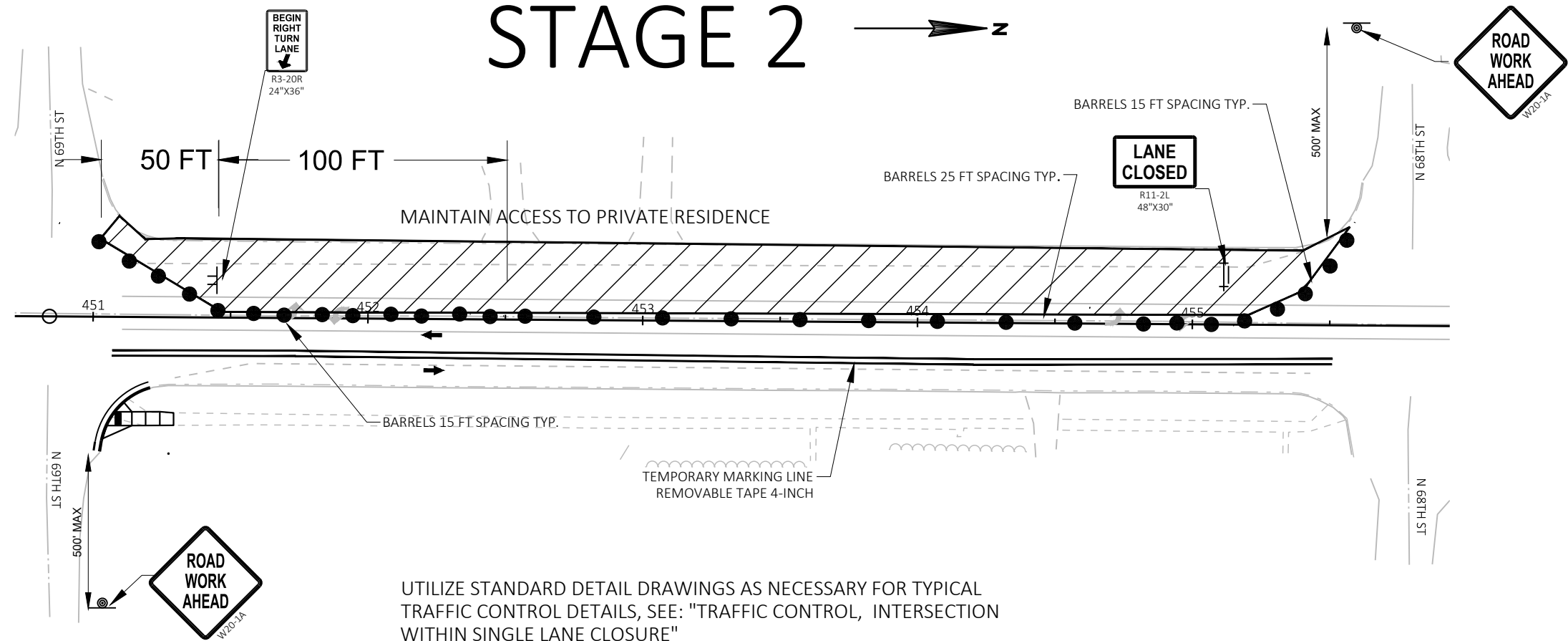
STAGE 2



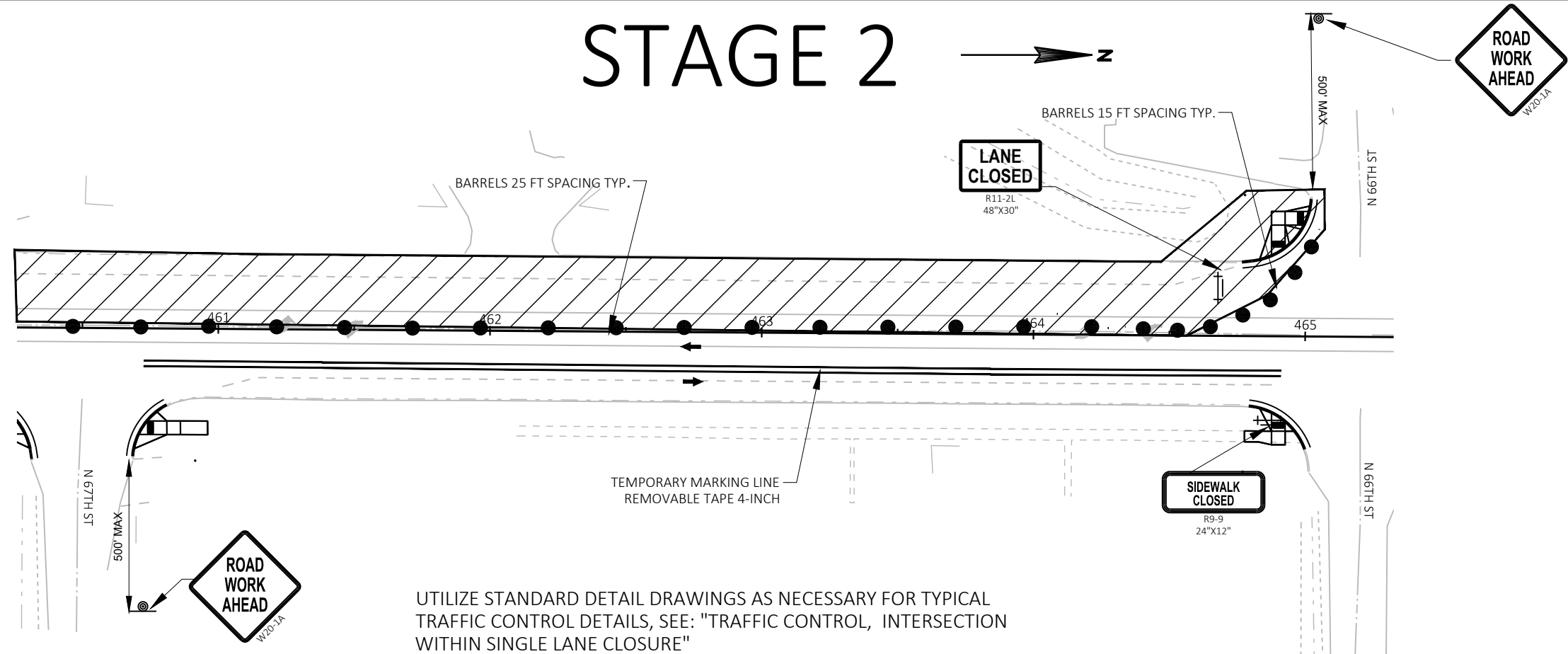
*ASPHALT PATCH TO MAINTAIN 24' OFFSET FROM CL TO PAVEMENT EDGE, FROM BEGIN PROJECT TO N 69TH STREET. FROM BEGIN PROJECT SOUTH, ASPHALT PATCH IS TO TAPER WITH TRAFFIC CONTROL DEVICES

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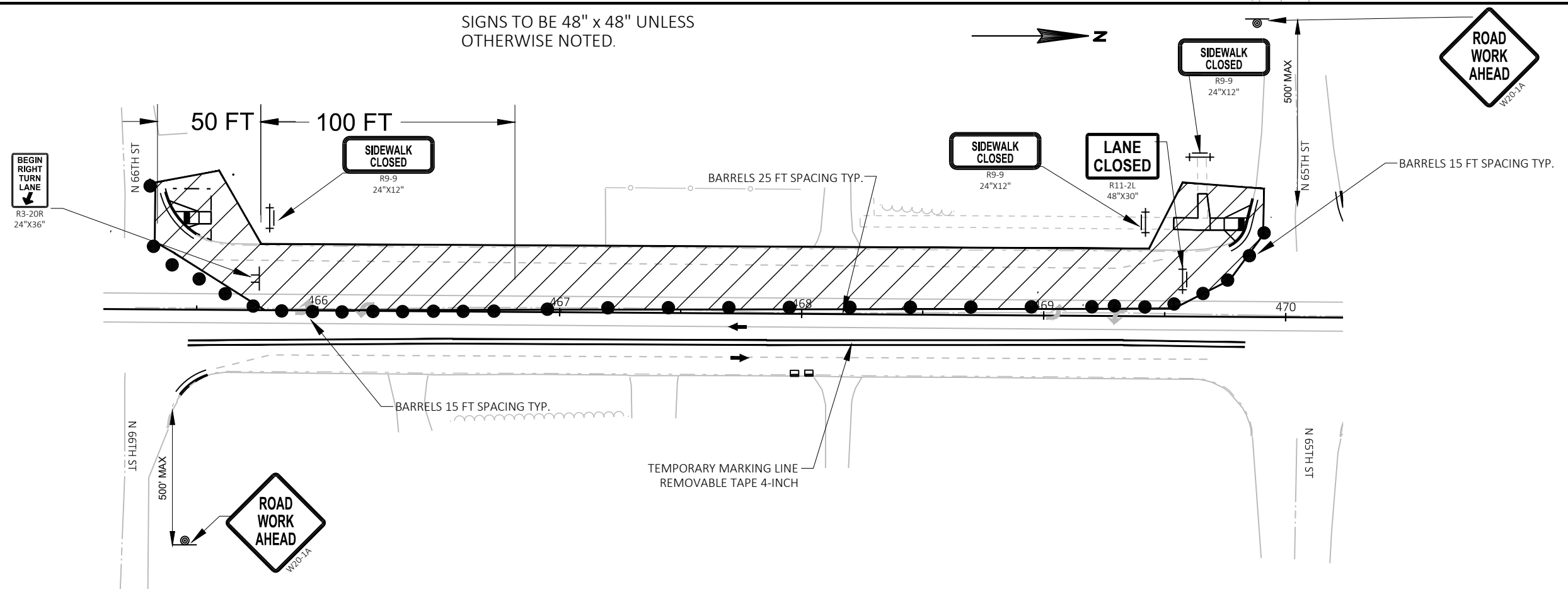




STAGE 2



SIGNS TO BE 48" x 48" UNLESS OTHERWISE NOTED.



PROJECT NO: 8010-00-70

HWY: STH 35

COUNTY: DOUGLAS

TRAFFIC CONTROL - STAGE 2

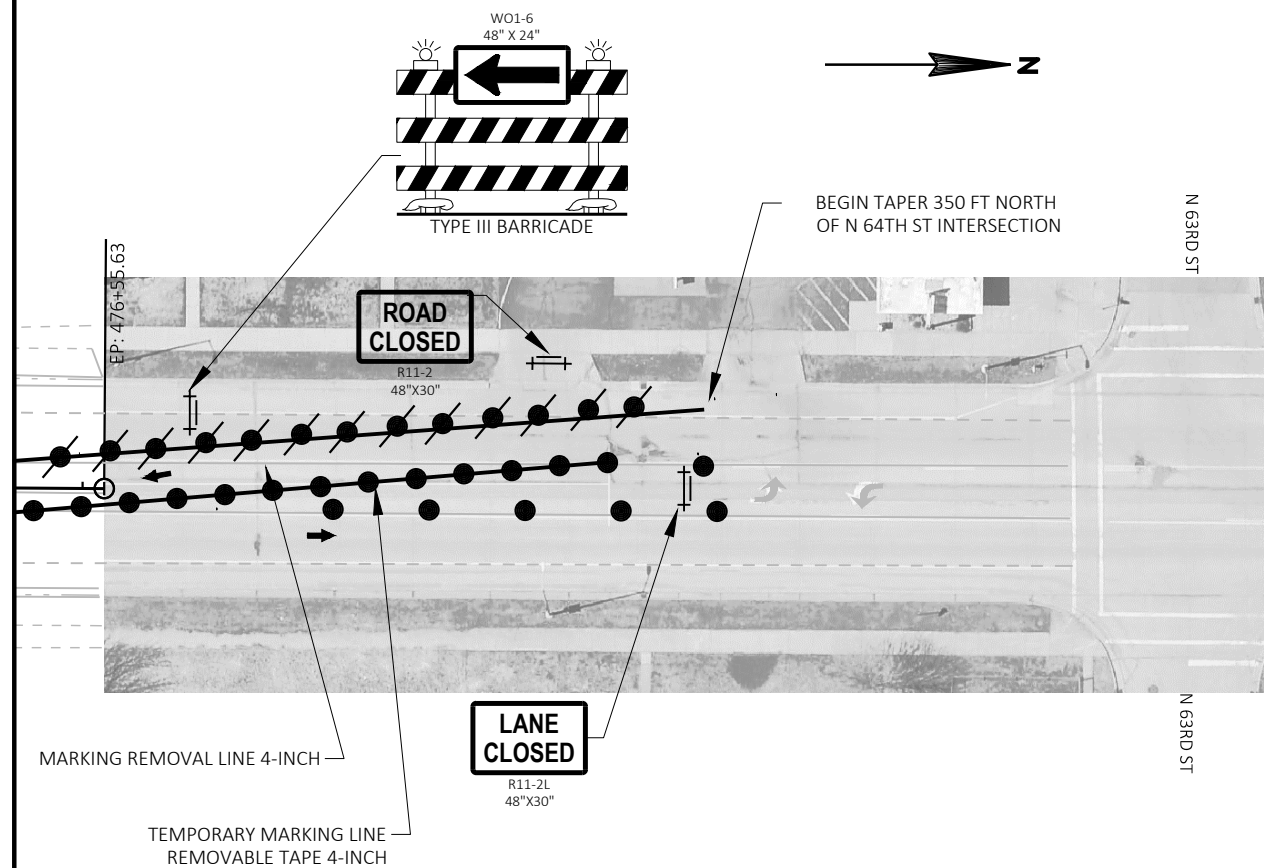
SHEET

E

STAGE 2

Plan view of Stage 2 of the project. The diagram shows a road layout with various lane closures and temporary markings. Key features include:

- STAGE 2** (Large text at the top center)
- 50 FT** and **100 FT** dimensions indicating lane widths or offsets.
- SIDEWALK CLOSED** (Sign: R9-9 24"X12")
- LANE CLOSED** (Sign: R11-2L 48"X30")
- ROAD WORK AHEAD** (Sign: W20-1A)
- BARRELS 15 FT SPACING TYP.** (Typical spacing for barrels)
- BARRELS 25 FT SPACING TYP.** (Typical spacing for barrels)
- TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH**
- 11 FT LANES**
- END PROJECT STA 474+39.04**
- MARKING REMOVAL LINE 4-INCH**
- TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH**
- STREET NAMES:** N 65TH ST, N 64TH ST, N 63RD ST, N 62ND ST, N 61ST ST, N 60TH ST, N 59TH ST, N 58TH ST, N 57TH ST, N 56TH ST, N 55TH ST, N 54TH ST, N 53RD ST, N 52ND ST, N 51ST ST, N 50TH ST, N 49TH ST, N 48TH ST, N 47TH ST, N 46TH ST, N 45TH ST, N 44TH ST, N 43RD ST, N 42ND ST, N 41ST ST, N 40TH ST, N 39TH ST, N 38TH ST, N 37TH ST, N 36TH ST, N 35TH ST, N 34TH ST, N 33RD ST, N 32ND ST, N 31ST ST, N 30TH ST, N 29TH ST, N 28TH ST, N 27TH ST, N 26TH ST, N 25TH ST, N 24TH ST, N 23RD ST, N 22ND ST, N 21ST ST, N 20TH ST, N 19TH ST, N 18TH ST, N 17TH ST, N 16TH ST, N 15TH ST, N 14TH ST, N 13RD ST, N 12ND ST, N 11ST ST, N 10TH ST, N 9TH ST, N 8TH ST, N 7TH ST, N 6TH ST, N 5TH ST, N 4TH ST, N 3RD ST, N 2ND ST, N 1ST ST, N 0TH ST, N -1ST ST, N -2ND ST, N -3RD ST, N -4TH ST, N -5TH ST, N -6TH ST, N -7TH ST, N -8TH ST, N -9TH ST, N -10TH ST, N -11TH ST, N -12TH ST, N -13TH ST, N -14TH ST, N -15TH ST, N -16TH ST, N -17TH ST, N -18TH ST, N -19TH ST, N -20TH ST, N -21ST ST, N -22ND ST, N -23RD ST, 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ST, N -415TH ST, N -416TH ST, N -417TH ST, N -418TH ST, N -419TH ST, N -420



WHERE PAVEMENT MARKINGS CONFLICT WITH THE TEMPORARY TRAVEL PATH, THE CHANNELIZING DEVICES SEPERATING OPPOSIG TRAFFIC SHOULD HAVE A MAXIMUM SPACING IN FEET OF $\frac{1}{2}$ THE SPEED LIMIT IN MPH.

Estimate Of Quantities

8010-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	204.0109.S	Removing Concrete Surface Partial Depth	SF	57,580.000	57,580.000
0004	204.0110	Removing Asphaltic Surface	SY	100.000	100.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	340.000	340.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	16,110.000	16,110.000
0010	204.0150	Removing Curb & Gutter	LF	346.000	346.000
0012	204.0155	Removing Concrete Sidewalk	SY	100.000	100.000
0014	205.0100	Excavation Common	CY	27.000	27.000
0016	209.2100	Backfill Granular Grade 2	CY	63.000	63.000
0018	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 8010-00-70	LS	1.000	1.000
0020	213.0100	Finishing Roadway (project) 01. 8010-00-70	EACH	1.000	1.000
0022	305.0110	Base Aggregate Dense 3/4-Inch	TON	74.000	74.000
0024	450.4000	HMA Cold Weather Paving	TON	1,596.000	1,596.000
0026	455.0605	Tack Coat	GAL	1,145.000	1,145.000
0028	460.2000	Incentive Density HMA Pavement	DOL	2,040.000	2,040.000
0030	460.6444	HMA Pavement 4 MT 58-34 H	TON	3,192.000	3,192.000
0032	465.0105	Asphaltic Surface	TON	124.000	124.000
0034	465.0110	Asphaltic Surface Patching	TON	60.000	60.000
0036	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	346.000	346.000
0038	602.0415	Concrete Sidewalk 6-Inch	SF	1,503.000	1,503.000
0040	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	80.000	80.000
0042	611.0430	Reconstructing Inlets	EACH	1.000	1.000
0044	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8010-00-70	EACH	1.000	1.000
0046	619.1000	Mobilization	EACH	1.000	1.000
0048	624.0100	Water	MGAL	0.100	0.100
0050	625.0100	Topsoil	SY	248.000	248.000
0052	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0054	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0056	628.2006	Erosion Mat Urban Class I Type A	SY	248.000	248.000
0058	628.7015	Inlet Protection Type C	EACH	14.000	14.000
0060	629.0210	Fertilizer Type B	CWT	1.000	1.000
0062	630.0130	Seeding Mixture No. 30	LB	7.300	7.300
0064	630.0500	Seed Water	MGAL	14.000	14.000
0066	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0068	637.2210	Signs Type II Reflective H	SF	10.000	10.000
0070	642.5001	Field Office Type B	EACH	1.000	1.000
0072	643.0300	Traffic Control Drums	DAY	13,672.000	13,672.000
0074	643.0420	Traffic Control Barricades Type III	DAY	955.000	955.000
0076	643.0705	Traffic Control Warning Lights Type A	DAY	1,188.000	1,188.000

Estimate Of Quantities

8010-00-70

Line	Item	Item Description	Unit	Total	Qty
0078	643.0715	Traffic Control Warning Lights Type C	DAY	3,121.000	3,121.000
0080	643.0900	Traffic Control Signs	DAY	4,515.000	4,515.000
0082	643.0920	Traffic Control Covering Signs Type II	EACH	2.000	2.000
0084	643.5000	Traffic Control	EACH	1.000	1.000
0086	646.1020	Marking Line Epoxy 4-Inch	LF	13,338.000	13,338.000
0088	646.5020	Marking Arrow Epoxy	EACH	24.000	24.000
0090	646.5320	Marking Railroad Crossings Epoxy	EACH	1.000	1.000
0092	646.6120	Marking Stop Line Epoxy 18-Inch	LF	234.000	234.000
0094	646.7120	Marking Diagonal Epoxy 12-Inch	LF	72.000	72.000
0096	646.8220	Marking Island Nose Epoxy	EACH	1.000	1.000
0098	646.9000	Marking Removal Line 4-Inch	LF	8,370.000	8,370.000
0100	646.9300	Marking Removal Special Marking	EACH	23.000	23.000
0102	649.0105	Temporary Marking Line Paint 4-Inch	LF	4,740.000	4,740.000
0104	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	9,860.000	9,860.000
0106	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	346.000	346.000
0108	650.8000	Construction Staking Resurfacing Reference	LF	2,889.000	2,889.000
0110	650.9000	Construction Staking Curb Ramps	EACH	10.000	10.000
0112	650.9910	Construction Staking Supplemental Control (project) 01. 8010-00-70	LS	1.000	1.000
0114	690.0150	Sawing Asphalt	LF	570.000	570.000
0116	740.0440	Incentive IRI Ride	DOL	3,922.000	3,922.000
0118	SPV.0090	Special 01. Cure and Seal Treatment Concrete Curb and Gutter	LF	346.000	346.000
0120	SPV.0165	Special 01. Cure and Seal Treatment Concrete Sidewalk	SF	1,503.000	1,503.000

REMOVING PAVEMENT				❖ QUANTITY FOUND ON ❖ MULTIPLE TABLES			
				204.0109.S	204.0115	204.0120	690.0150
				REMOVING CONCRETE SURFACE PARTIAL DEPTH	REMOVING ASPHALTIC SURFACE BUTT JOINTS	REMOVING ASPHALTIC SURFACE MILLING	SAWING ASPHALT
STATION	TO	STATION	LOCATION	SF	SY	SY	LF
448+50	-	448+56	Begin Project		30		50
450+41	-	450+84	Begin Project to N 69th	1,040			
448+50	-	450+84	Begin Project to N 69th			1,260	
450+84	-	455+80	N 69th to N 68th	11,910		2,880	
450+45	-	451+24	LT - N 69th		30	130	40
450+45	-	451+24	RT - N 69th		30	130	40
455+80	-	460+51	N 68th to N 67th	11,310		2,750	
455+38	-	456+22	LT - N 68th		30	130	40
455+40	-	456+17	RT - N 68th		30	130	40
460+12	-	460+93	RT - N 67th		30	130	40
460+51	-	465+20	N 67th - N 66th	11,260		2,730	
464+77	-	465+64	LT - N 66th		30	120	40
464+78	-	465+61	RT - N 66th		30	130	40
465+20	-	470+04	N 66th - N 65th	11,620		2,810	
469+62	-	470+47	LT - N 65th		30	130	40
469+65	-	470+44	RT - N 65th		30	130	40
470+04	-	474+39	N 65th - End Project	10,440		2,520	
474+38	-	474+42	End Project		40		50
TOTAL 0010				57,580	340	16,110	460
				*1 PASS OF 12' MILL IN DRIVING LANE ONLY, NORTHBOUND AND SOUTHBOUND			

PROJECT ITEMS									
STATION	TO	STATION	LOCATION	211.0100.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 8010-00-70) LS	213.0100.01 FINISHING ROADWAY (PROJECT) (01. 8010-00-70) EACH	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) (01. 8010-00-70) EACH	619.1000 MOBILIZATION EACH	642.5001 FIELD OFFICE TYPE B EACH	643.5000 TRAFFIC CONTROL EACH
445+50	-	474+39	Begin Project - End Project	1	1	1	1	1	1
TOTAL 0010				1	1	1	1	1	1

REMOVING CONCRETE SIDEWALK

❖ QUANTITY FOUND
ON MULTIPLE TABLES

				204.0110 REMOVING ASPHALTIC SURFACE SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	205.0100 EXCAVATION COMMON CY	611.0430 RECONSTRUCTING INLETS EACH	628.7015 INLET PROTECTION TYPE C EACH	690.0150 SAWING ASPHALT LF	REMARKS
451+00	-	451+30	69th - NE		30	20	3				
453+50			24.5' RT						1		
455+62			49' RT						1		
455+98	-	456+45	68th - NE	50	70		4			20	
458+50			27.5' LT						1		
458+50			24.5' RT						1		
460+03	-	460+33	67th - SE		30	20	3				
460+66	-	460+96	67th - NE		30	20	3				
463+51			25' RT						1		
463+51			27' LT						1		
464+79	-	465+02	66th - SE		30	10	2				
464+76	-	465+04	66th - SW		40		3				
465+35	-	465+56	66th NW	30	30		2			50	
465+42	-	465+54	25.5' RT 66th-NE		8			1	1		
465+48			29' LT						1		
468+29			27' LT						1		
467+95	-	468+05	23.5' RT		8				1		
469+63	-	469+88	65th - SW		30	30	4				
470+20	-	470+47	65th - NW	20	40		3			40	
470+48			25' RT						1		
470+48			26.5' LT						1		
473+50			25.5' RT						1		
473+75			26.5' LT						1		
TOTAL 0010				100	346	100	27	1	14	110	

HMA				❖ QUANTITY FOUND ON MULTIPLE TABLES						
				305.0110	455.0605	460.6444	❖ 465.0105	465.0110	624.0100	
				BASE						
				AGGREGATE		HMA PAVEMENT 4	ASPHALTIC	ASPHALTIC SURFACE		
				DENSE 3/4-	TACK COAT	MT 58-34 H	SURFACE	PATCHING	WATER	
STATION	TO	STATION	LOCATION	INCH TON	GAL	TON	TON	TON	MGAL	REMARKS
447+80	-	450+25	69th S - LT	32			10			Shoulder patch for staging - West side
447+80	-	450+25	69th S - RT	32			10			Shoulder patch for staging - East side
448+50	-	450+41	Begin Project to N 69th	10	18	50			0.1	Final shoulders
448+50	-	450+84	Begin Project to N 69th		88	245		10		
450+84	-	455+80	N 69th to N 68th		201	563		10		
450+45	-	451+24	LT - N 69th		9	24				
450+45	-	451+24	RT - N 69th		9	24				
455+80	-	460+51	N 68th to N 67th		192	537		10		
455+38	-	456+22	LT - N 68th		9	25				
455+40	-	456+17	RT - N 68th		9	24				
460+12	-	460+93	RT - N 67th		9	24				
460+51	-	465+20	N 67th - N 66th		191	535		10		
464+77	-	465+64	LT - N 66th		9	23				
464+78	-	465+61	RT - N 66th		9	25				
465+20	-	470+04	N 66th - N 65th		197	550		10		
469+62	-	470+47	LT - N 65th		9	25				
469+65	-	470+44	RT - N 65th		9	24				
470+04	-	474+39	N 65th - End Project		177	494		10		
448+51	-	474+39	various locations				100			wedging
-										
TOTAL 0010				74	1,145	3,192	120	60	0.1	

CONCRETE SIDEWALK				209.2100	465.0105	601.0409	602.0415	602.0515	650.5500	650.9000	SPV.0090.01	SPV.0165.01
				BACKFILL	ASPHALTIC	CONCRETE	CONCRETE	CURB RAMP	CONSTRUCTION	CONSTRUCTION	SPECIAL (01. CURE	SPECIAL (01. CURE
				GRANULAR	SURFACE	CURB &	SIDEWALK 6-	DETECTABLE	STAKING CURB	STAKING CURB	AND SEAL	AND SEAL
				GRADE 2	TON	GUTTER 30-	INCH	WARNING	GUTTER AND CURB	RAMPS	TREATMENT	TREATMENT
				CY		INCH TYPE A	SF	FIELD NATURAL	& GUTTER	EACH	CONCRETE CURB	CONCRETE
						LF		PATINA			AND GUTTER)	SIDEWALK)
STATION	TO	STATION	LOCATION									
451+00	-	451+30	69th - NE	7		30	150	8	30	1	30	150
455+98	-	456+45	68th - NE	9		70	210	8	70	1	70	210
460+03	-	460+33	67th - SE	7		30	160	8	30	1	30	160
460+66	-	460+96	67th - NE	7		30	160	8	30	1	30	160
464+79	-	465+02	66th - SE	5		30	120	8	30	1	30	120
464+76	-	465+04	66th - SW	7		40	180	16	40	2	40	180
465+35	-	465+56	66th NW	5	4	30	93	8	30	1	30	93
465+42	-	465+54	25.5' RT 66th-NE	0		8			8		8	0
467+95	-	468+05	23.5' RT	0		8			8		8	0
469+63	-	469+88	65th - SW	9		30	240	8	30	1	30	240
470+20	-	470+47	65th - NW	7		40	190	8	40	1	40	190
TOTAL 0010				63	4	346	1,503	80	346	10	346	1,503

❖ QUANTITY FOUND ON MULTIPLE TABLES

FINISHING								
				625.0100	628.2006	629.0210	630.0130	630.0500
				TOPSOIL	EROSION MAT URBAN	FERTILIZER	SEEDING MIXTURE	SEED WATER
				SY	CLASS I TYPE A	TYPE B	NO. 30	MGAL
STATION	TO	STATION	LOCATION	SY	SY	CWT	LB	
								14
451+00	-	451+30	69th - NE	20	20	0.1	0.6	
455+98	-	456+45	68th - NE	50	50	0.1	1.4	
460+03	-	460+33	67th - SE	10	10	0.1	0.3	
460+66	-	460+96	67th - NE	20	20	0.1	0.6	
464+79	-	465+02	66th - SE	20	20	0.1	0.6	
464+76	-	465+04	66th - SW	20	20	0.1	0.6	
465+42	-	465+54	25.5' RT 66th-NE	4	4	0.1	0.2	
467+95	-	468+05	23.5' RT	4	4	0.1	0.2	
469+63	-	469+88	65th - SW	50	50	0.1	1.4	
470+20	-	470+47	65th - NW	50	50	0.1	1.4	
TOTAL 0010				248	248	1.0	7.3	14

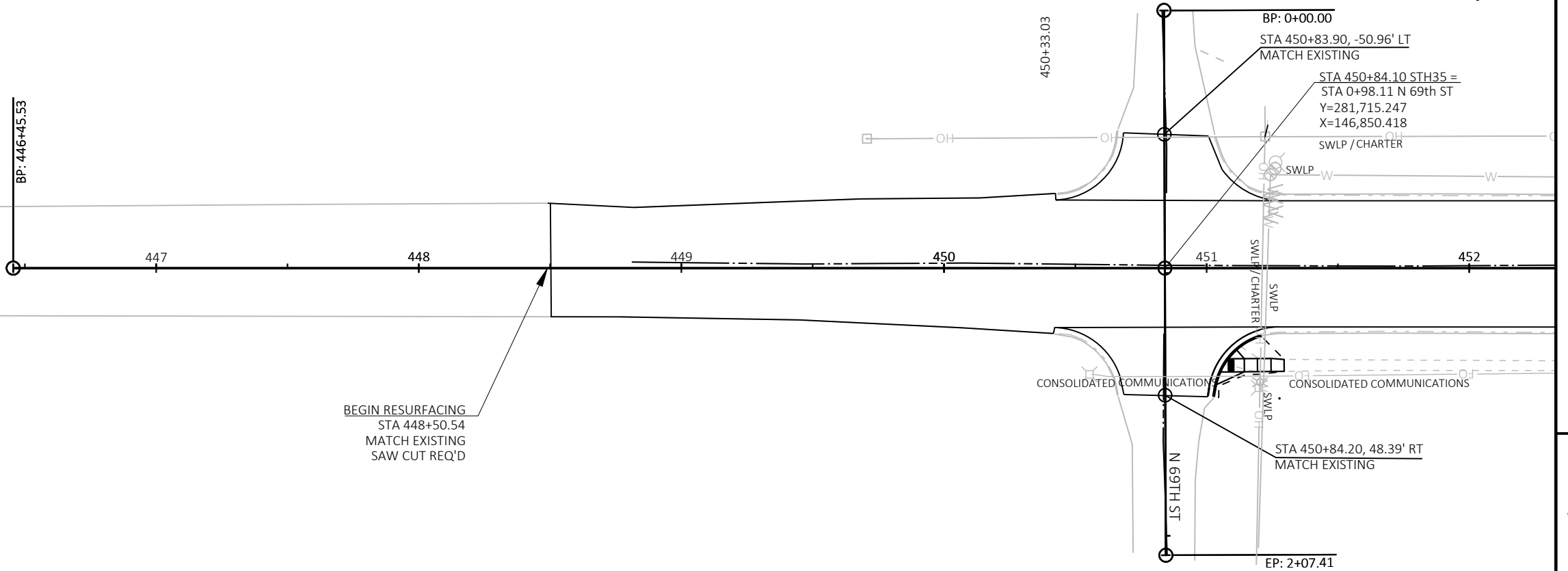
MOB EROSION CONTROL					
				628.1905	628.1910
				MOBILIZATIONS	MOBILIZATIONS EMERGENCY
				EROSION	EROSION
				CONTROL	CONTROL
				EACH	EACH
STATION	TO	STATION	LOCATION		
448+51	-	474+39	Project	1	1
TOTAL 0010				1	1

TRAFFIC CONTROL																
		634.0616	637.2210	643.0300	643.0420	643.0705	643.0715	643.0900			643.0920					
		POSTS WOOD	SIGNS TYPE II	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC			TRAFFIC					
		4X6-INCH X	REFLECTIVE H	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			CONTROL					
		16-FT	SF	DRUMS	BARRICADES	LIGHTS	LIGHTS TYPE	SIGNS	NUMBER	COVER/	COVERING					
		EACH		DAY	TYPE III	TYPE A	C	DAY	OF SIGNS	UNCOVER	SIGNS TYPE					
STATION	TO	STATION	STAGE							CYCLES	II	LOCATION / REMARKS				
			1 & 2						1	1	1	WO3-5, Advance warning, South of Project				
			1 & 2						1	1	1	R2-1, Advance warning, South of Project				
			1	2	10							R8-8 Do Not Stop On Tracks				
			1					496	16			Advance warning, South of Project, prior to TC taper				
445+21	-	448+50	1		680	31	62	680	31	1		From beginning of TC Taper to Begin Project				
448+50	-	450+52	1		375	31	62		93	3		From Begin Project to 69th Street				
451+10	-	455+61	1		725	62	62		155	5		69th - 68th Street				
456+07	-	460+25	1		684	124	62		186	6		68th - 67th Street				
460+75	-	465+00	1		693	93	62		186	6		67th - 66th Street				
465+47	-	470+00	1		728	31	62		124	4		66th- 65th Street				
470+30	-	474+55	1		693	31	62		155	5		65th - 64th Street				
474+55	-	478+35	1		1,571	62	124	786	93	3		From End Project to end of TC Taper				
			1						651	21		Advance warning, North of Project, prior to TC taper				
			2						560	16		Advance warning, South of Project, prior to TC taper				
445+21	-	448+50	2		1,536	0	0	768	0	0		From beginning of TC Taper to Begin Project				
448+50	-	450+52	2		330	35	70		105	3		From Begin Project to 69th Street				
451+10	-	455+61	2		819	35	70		140	4		69th - 68th Street				
456+07	-	460+25	2		772	0	0		70	2		68th - 67th Street				
460+75	-	465+00	2		782	70	70		140	4		67th - 66th Street				
465+47	-	470+00	2		728	140	70		245	7		66th- 65th Street				
470+30	-	474+55	2		782	70	70		175	5		65th - 64th Street				
474+55	-	478+35	2		1,774	140	280	887	175	5		From End Project to end of TC Taper				
			2						735	21		Advance warning, North of Project, prior to TC taper				
												Project				
		TOTAL 0010		2	10	13,672	955	1,188	3,121	4,515	2					
PROJECT NO: 8010-00-70				HWY: STH 35			COUNTY: DOUGLAS			MISCELLANEOUS QUANTITIES				SHEET:		E

PERMANENT MARKING										
				646.1020	646.5020	646.5320	646.6120	646.7120	646.8220	
				MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	
				LINE EPOXY	ARROW	RAILROAD	STOP LINE	DIAGONAL	ISLAND	
				4-INCH	EPOXY	CROSSINGS EPOXY	EPOXY 18-	EPOXY 12-	NOSE EPOXY	
STATION	TO	STATION	LOCATION	LF	EACH	EACH	LF	LF	EACH	REMARKS
445+20	-	448+50	PRIOR TO BEGIN PROJECT	1,320	0	1	0	0	0	REPLACE REMOVED MARKING DUE TO TC
448+50	-	450+84	BEGIN PROJECT TO N 69TH STREET	1,128	0	0	26	72	1	
450+84	-	455+80	N 69TH STREET to N 68TH STREET	1,760	4	0	52	0	0	
455+80	-	460+50	N 68TH STREET to N 67TH STREET	1,850	4	0	26	0	0	
460+50	-	465+20	N 67TH STREET to N 66TH STREET	1,840	4	0	52	0	0	
465+20	-	470+00	N 66TH STREET to N 65TH STREET	1,730	4	0	52	0	0	
470+00	-	474+88	N 65TH STREET to N 64TH STREET	1,730	4	0	26	0	0	
474+88	-	478+38	N 64TH STREET to PAST END PROJECT	1,980	4	0	0	0	0	REPLACE REMOVED MARKING DUE TO TC
TOTAL 0010				13,338	24	1	234	72	1	

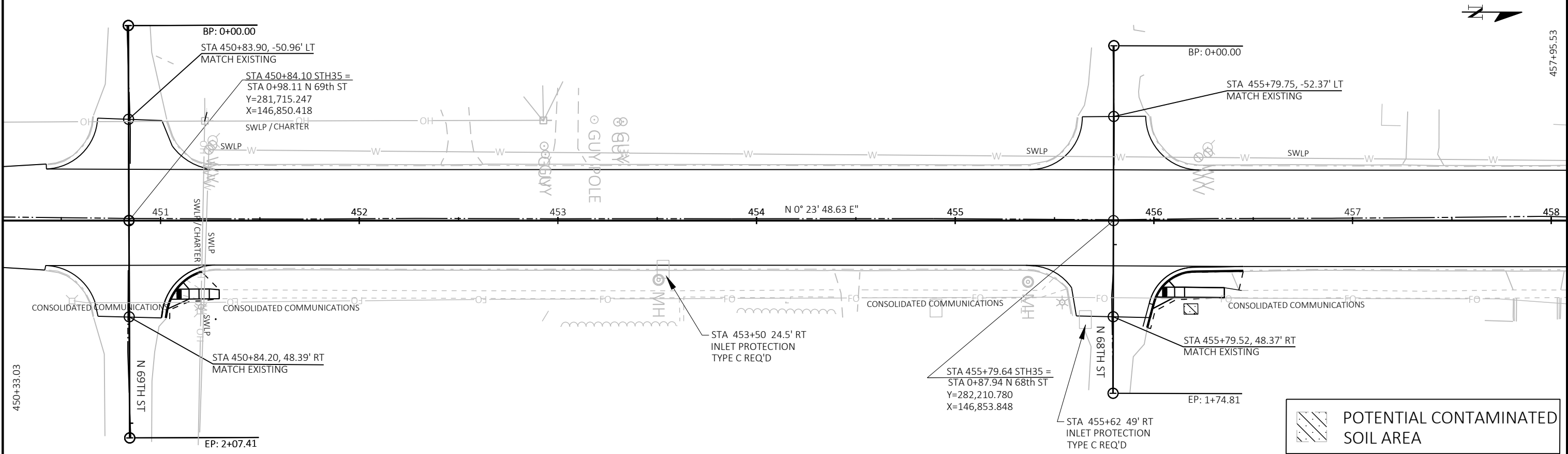
TEMPORARY MARKING									
		646.9000	646.9300	649.0105	649.0150				
		MARKING	REMOVAL	TEMPORARY	TEMPORARY				
		REMOVAL	SPECIAL	MARKING LINE	MARKING LINE				
		LINE 4-INCH	MARKING	PAINT 4-INCH	TAPE 4-INCH				
STATION	TO STATION	LOCATION	STAGE	LF	EACH	LF	LF	REMARKS	
445+21	- 448+50	SB LANE LINE	1	330			660	From beginning of TC Taper to Begin Project, edge of lanes	
445+21	- 448+50	CENTERLINE	1	660			1,320	Double Center Line within taper to Begin Project	
447+04	- 447+63	SB LANE	1		1			RR CROSSING	
448+50	- 450+52	SB LANE LINE	1	210			210	From Begin Project to 69th Street, edge of lanes	
448+50	- 450+52	CENTERLINE	1	410		410		CenterLine to 69th	
451+10	- 455+61	69th - 68th St	1	980	4	910		Remove Edge Line and TWLTL, place Center Line from 69th to 68th Street	
456+07	- 460+25	68th - 67th St	1	970	4	840		Remove Edge Line and TWLTL, place Center Line from 68th to 67th Street	
460+75	- 465+00	67th - 66th St	1	990	4	850		Remove Edge Line and TWLTL, place Center Line from 67th to 66th Street	
465+47	- 470+00	66th- 65th St	1	1,040	4	910		Remove Edge Line and TWLTL, place Center Line from 66th to 65th Street	
470+30	- 474+39	65th - 64th St	1	930	4	820		Remove Edge Line and TWLTL, place Center Line from 65th to 64th Street	
474+39	- 476+25	64th - LANE TAPER	1	410	2		380	Remove Edge Line and TWLTL, place Center Line from 64th to lane taper	
476+25	- 477+77	NB LANE LINE	1	340			310	From End Project to end of TC Taper, edge of lanes	
445+21	- 448+50	NB LANE LINE	2	330			660	From beginning of TC Taper to Begin Project, edge of lanes	
445+21	- 448+50	CENTERLINE	2				660	Double Center Line within taper to Begin Project	
448+50	- 450+52	NB LANE LINE	2				210	From Begin Project to 69th Street, edge of lanes	
448+50	- 450+52	CENTERLINE	2				410	CenterLine to 69th	
451+10	- 455+61	69th - 68th St	2				910	Remove Edge Line and TWLTL, place Center Line from 69th to 68th Street	
456+07	- 460+25	68th - 67th St	2				840	Remove Edge Line and TWLTL, place Center Line from 68th to 67th Street	
460+75	- 465+00	67th - 66th St	2				850	Remove Edge Line and TWLTL, place Center Line from 67th to 66th Street	
465+47	- 470+00	66th- 65th St	2				910	Remove Edge Line and TWLTL, place Center Line from 66th to 65th Street	
470+30	- 474+39	65th - 64th St	2				820	Remove Edge Line and TWLTL, place Center Line from 65th to 64th Street	
474+39	- 476+25	64th - LANE TAPER	2	410			380	Remove Edge Line and TWLTL, place Center Line from 64th to lane taper	
476+25	- 477+87	SB LANE LINE	2	360			330	From End Project to end of TC Taper, edge of lanes	
TOTAL 0010				8,370	23	4,740	9,860		

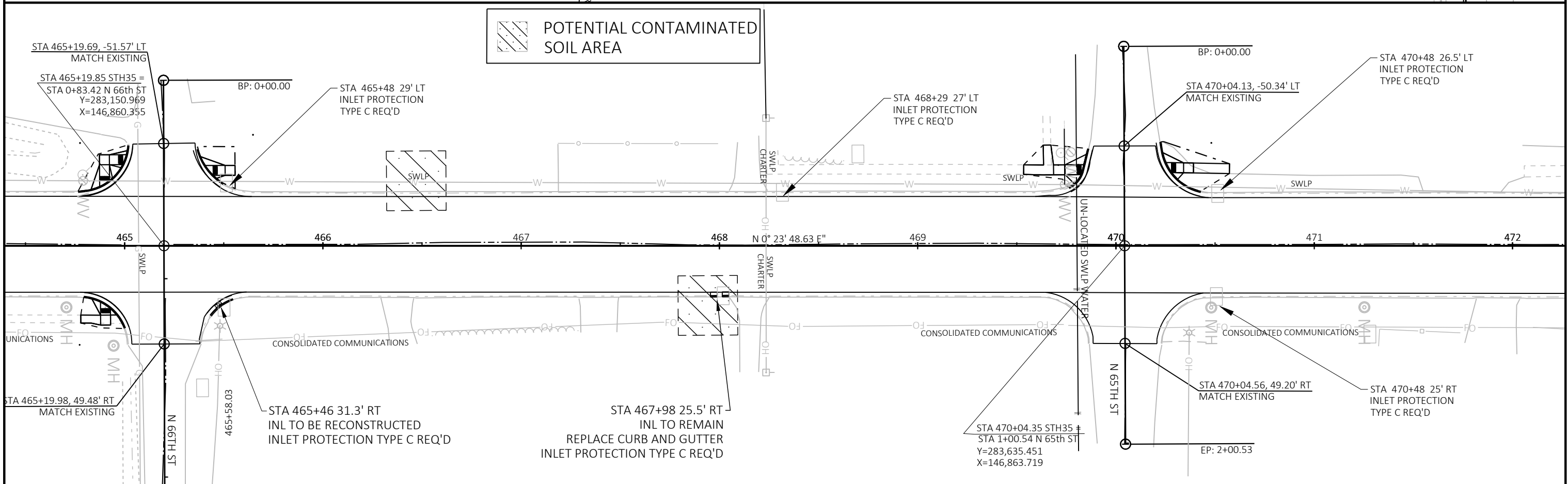
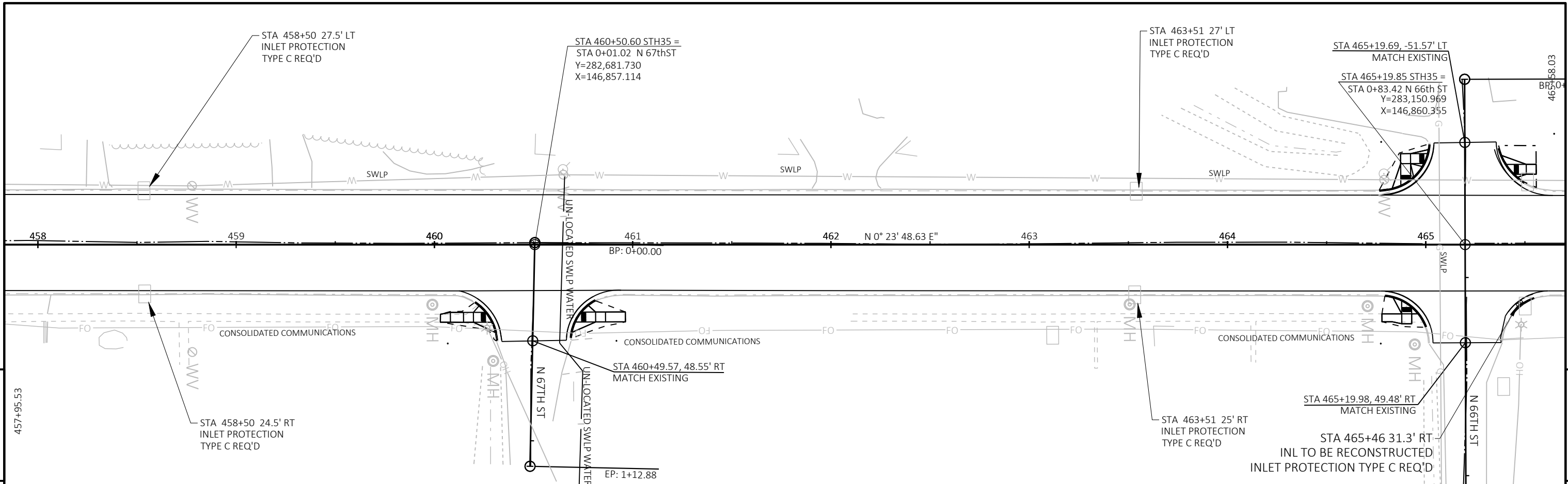
NOTE: ALL INLETS SHALL RECEIVE INLET
PROTECTION TYPE C



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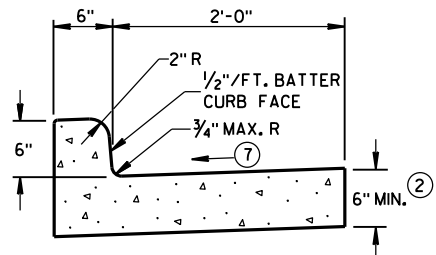




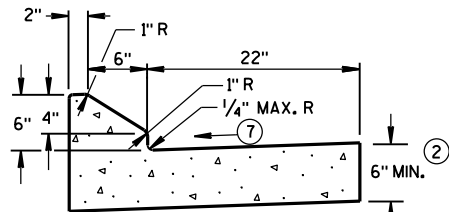
PROJECT NO: 8010-00-70	HWY: STH 35	COUNTY: DOUGLAS	PLANVIEW TOWER AVENUE -2	SHEET 5
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Standard Detail Drawing List

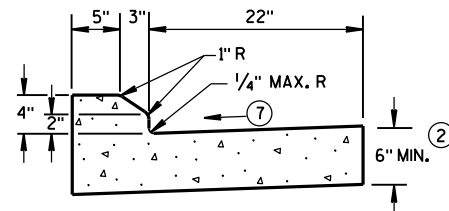
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C02-07F	ADVANCED WIDTH RESTRICTION SIGNING
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
15C07-15C	PAVEMENT MARKING ARROWS
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C08-19B	PAVEMENT MARKING (TURN LANES)
15C09-11A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
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
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D12-07B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D21-06A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-06B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING



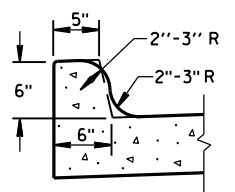
TYPES A^① & D



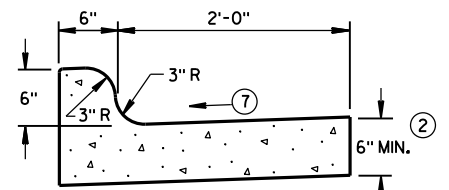
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

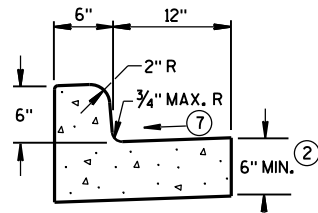


TYPES K^① & L
(OPTIONAL CURB SHAPE)



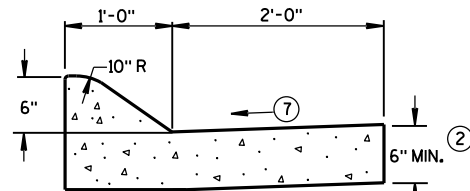
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

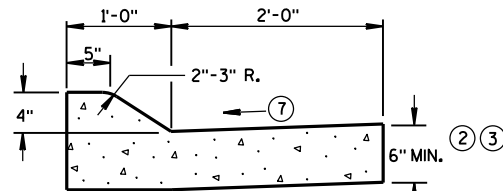


TYPES A^① & D

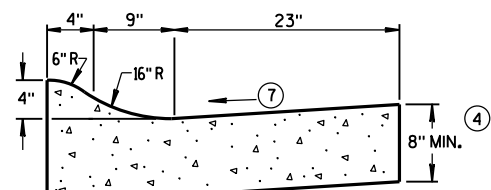
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

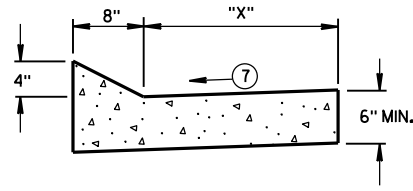


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

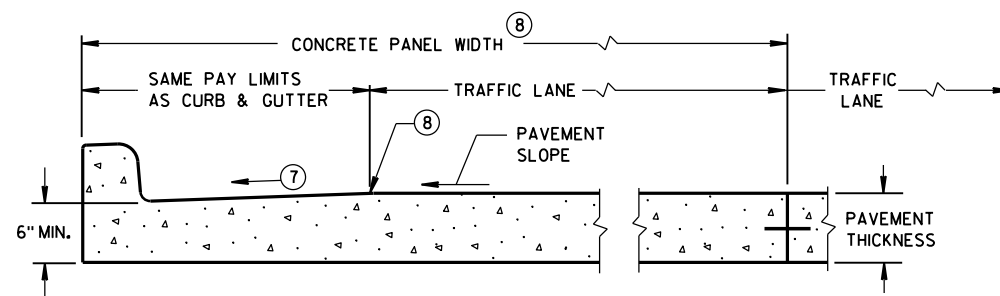
CONCRETE CURB & GUTTER 36"



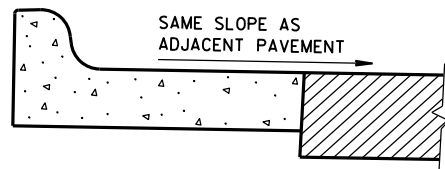
TYPES TBT & TBTT^①

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.

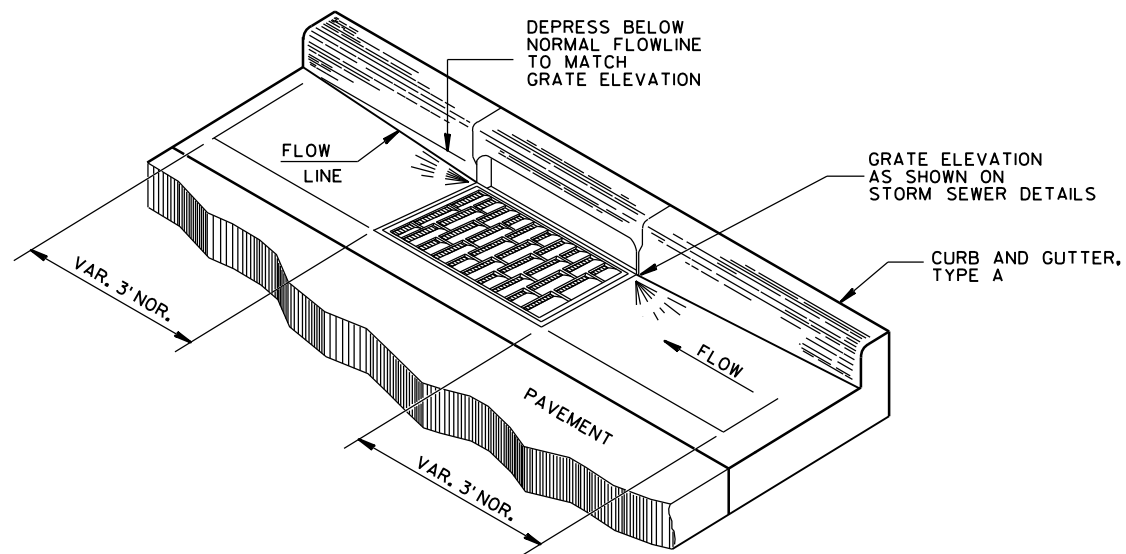
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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

* BIKE LANE IS NOT SHOWN.

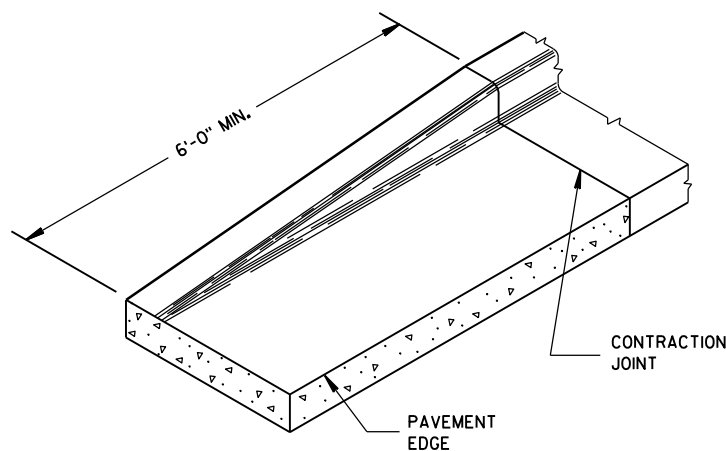
CONCRETE CURB & GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

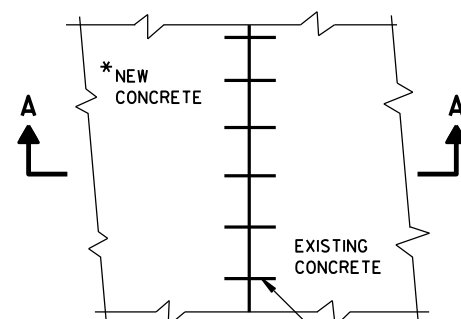


DETAIL OF CURB AND GUTTER AT INLETS

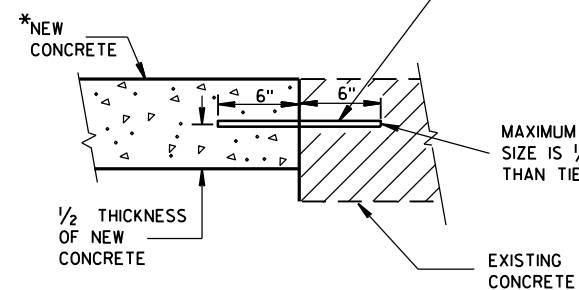
(TYPE H INLET COVER SHOWN)



END SECTION CURB & GUTTER



PLAN VIEW



**SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT**

*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.

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

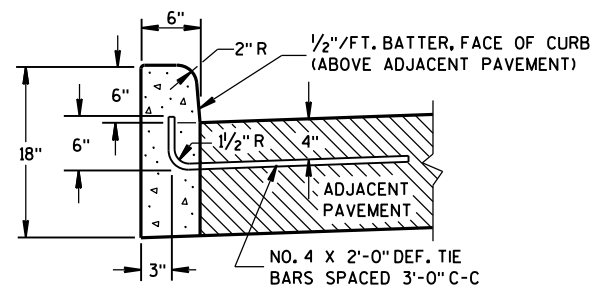
GENERAL NOTES

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

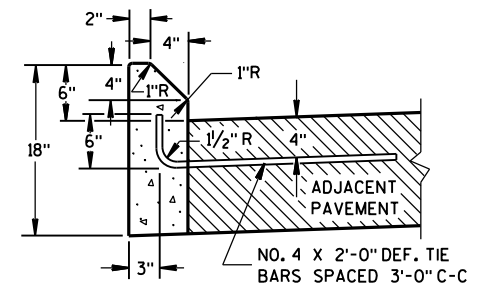
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.
- ⑨ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

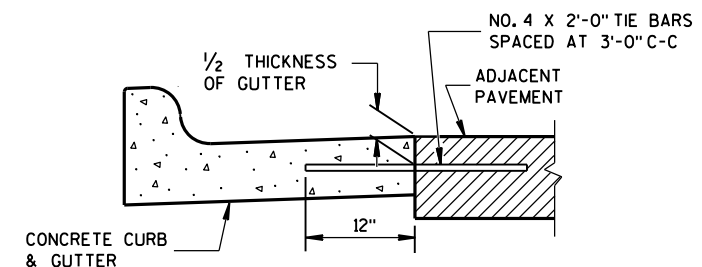


TYPES A^① & D

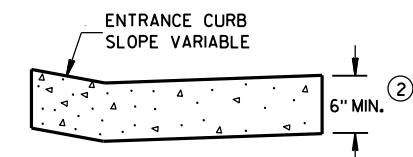


TYPES G^① & J

CONCRETE CURB



TYPICAL TIE BAR LOCATION^①



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

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2017

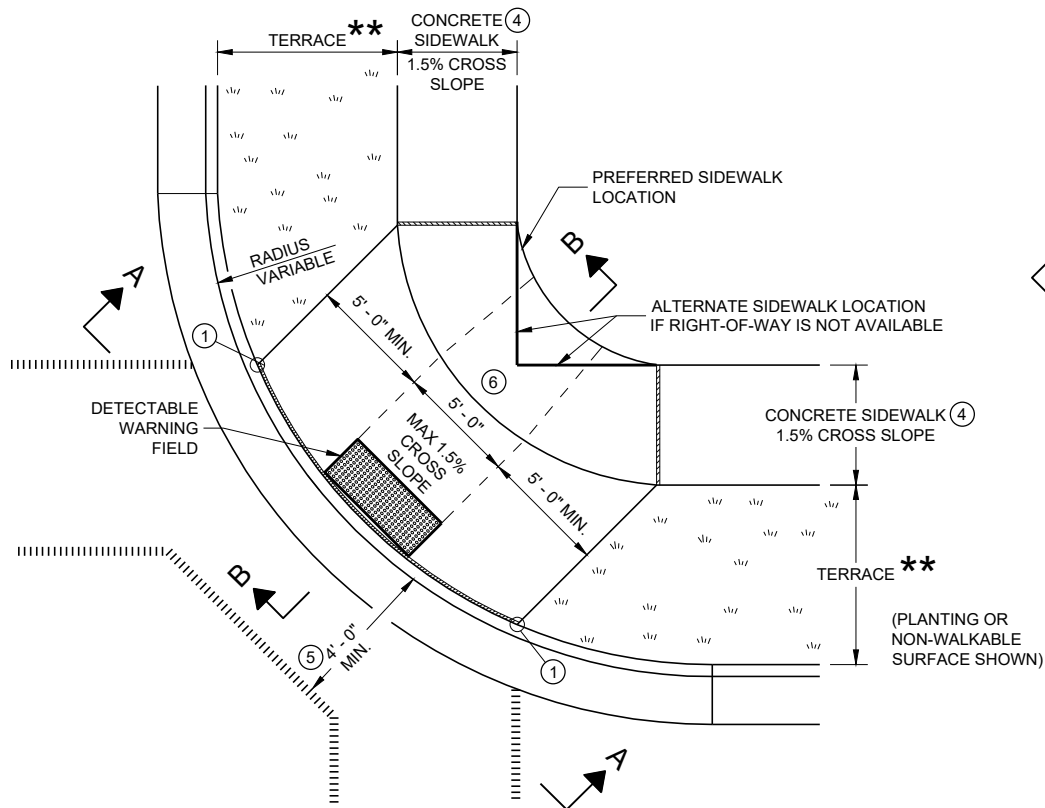
DATE

FHWA

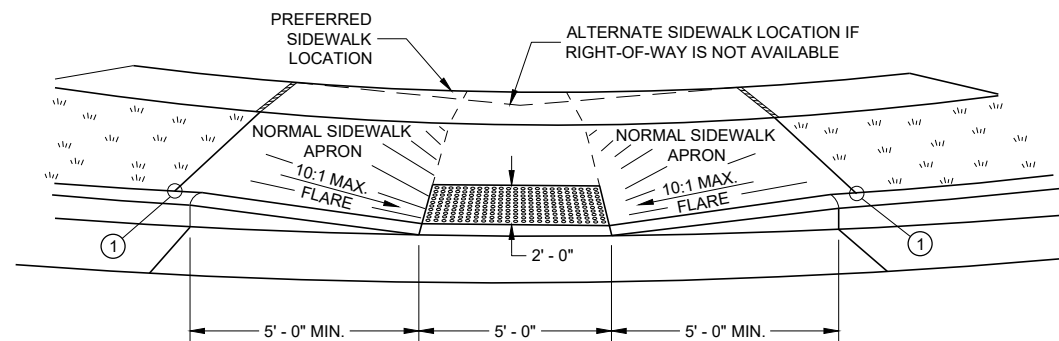
/S/ Rodney Taylor

ROADWAY STANDARDS DEVELOPMENT

UNIT SUPERVISOR

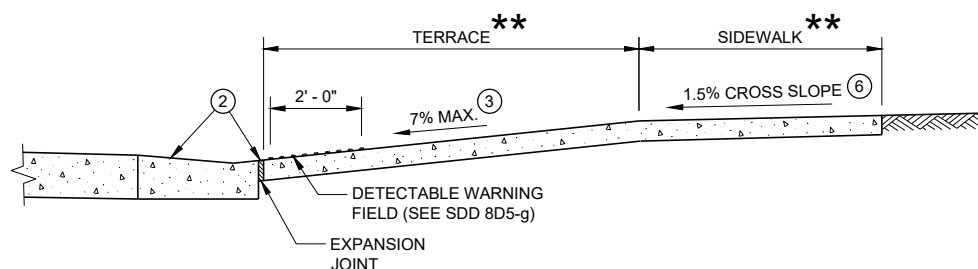


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

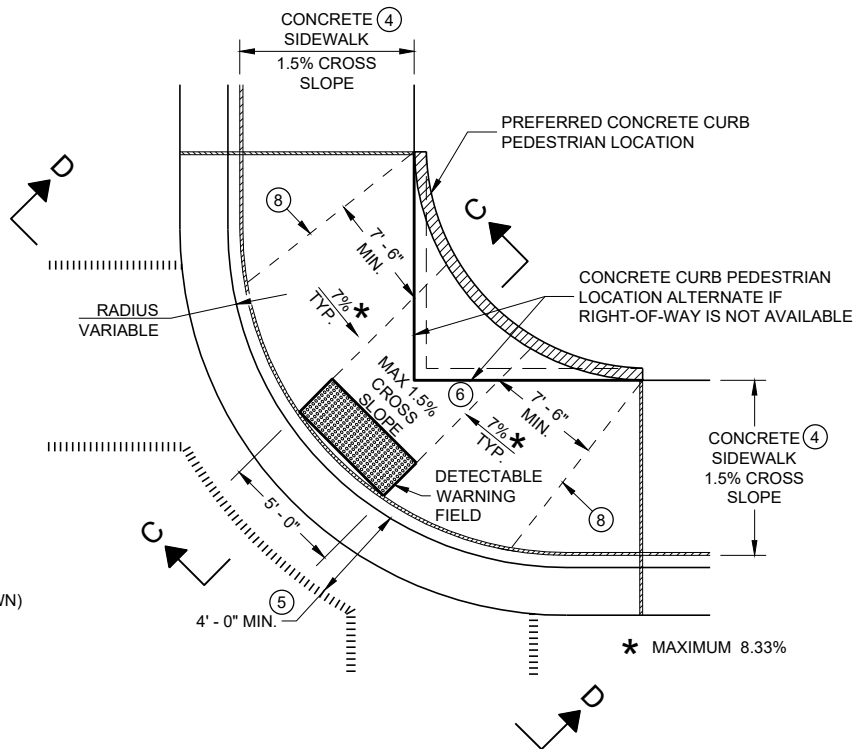


VIEW A - A FOR TYPE 1

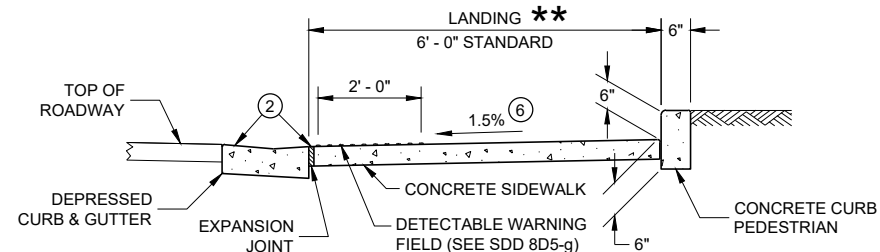
**** WIDTH SHOWN ELSEWHERE
IN THE PLANS**



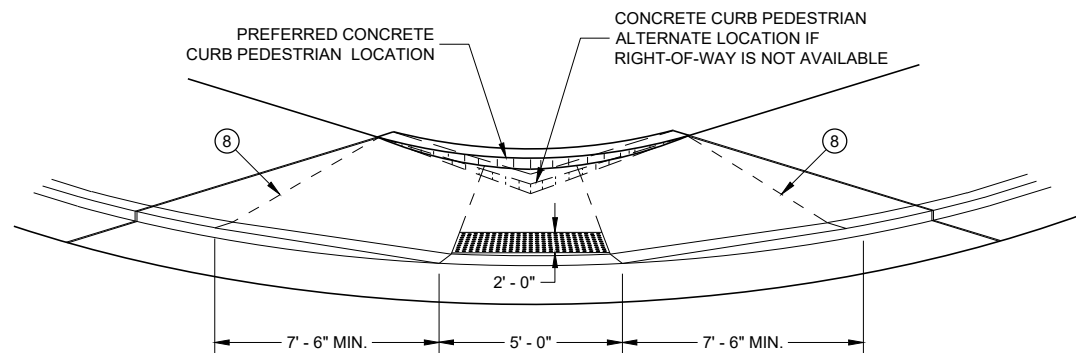
SECTION B - B FOR TYPE 1



PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

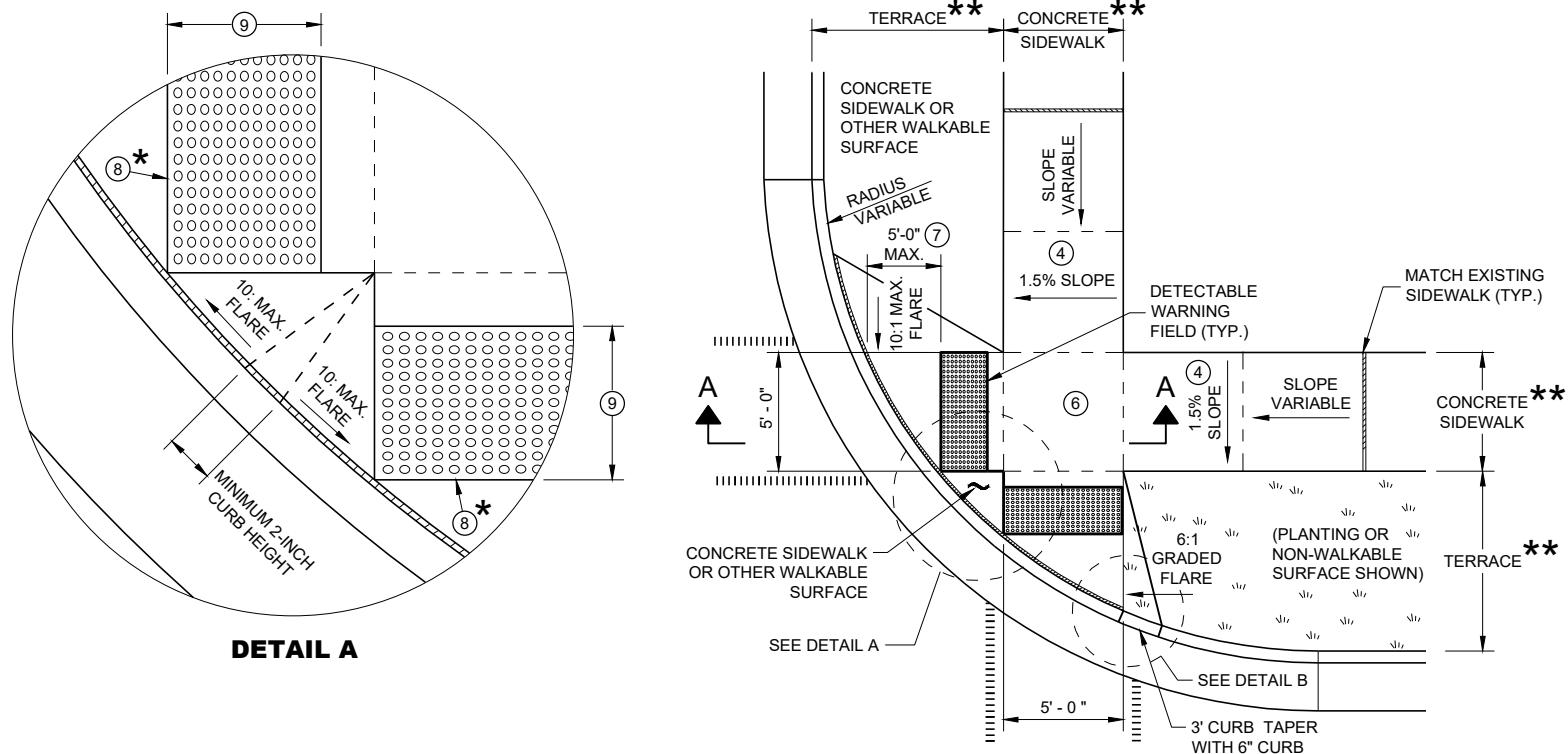
- 1 THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 5 PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

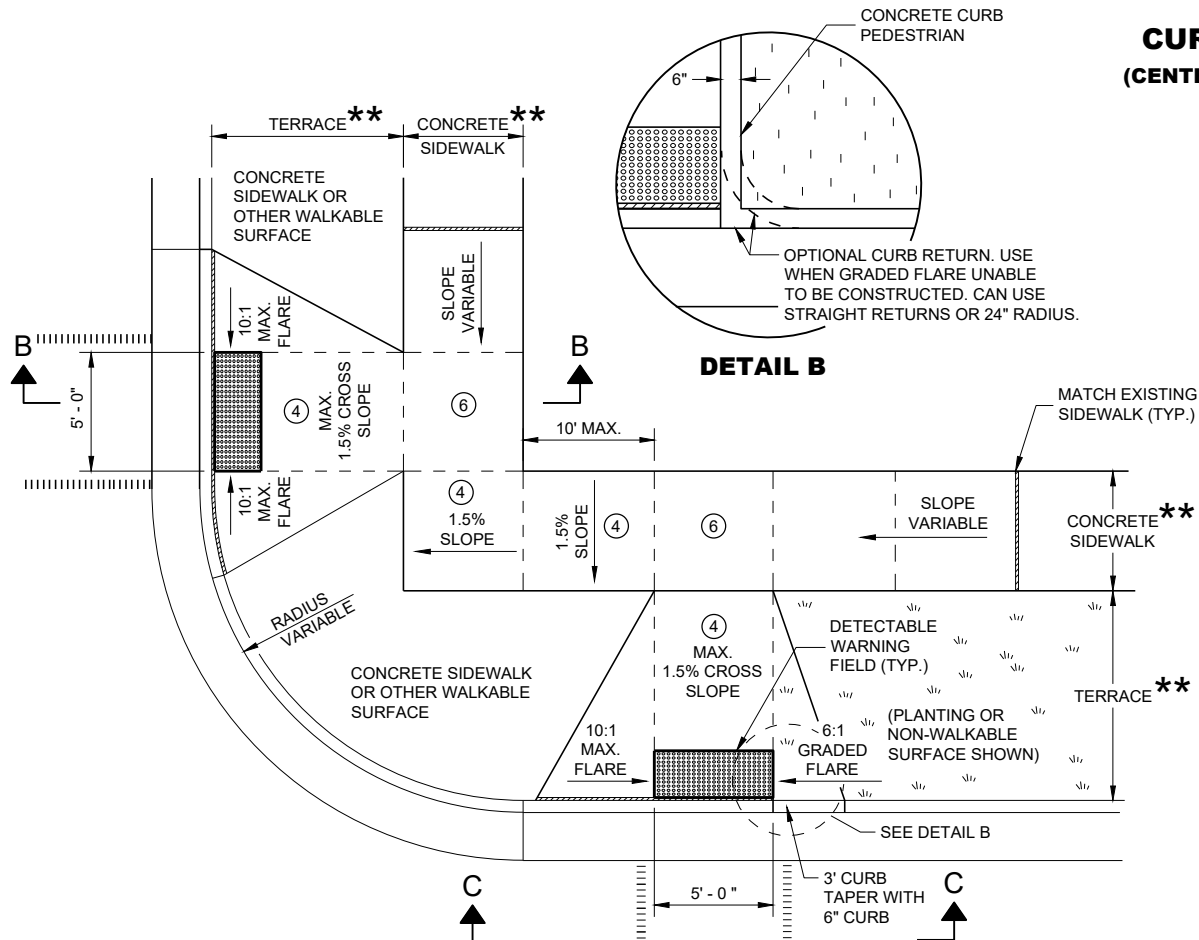
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



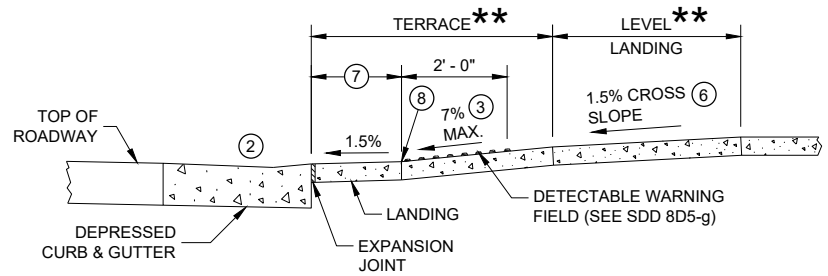
PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)



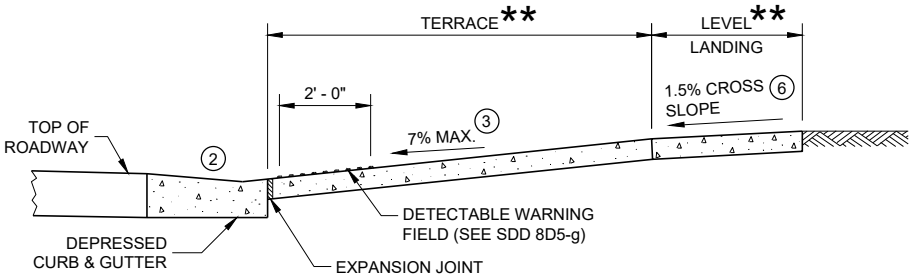
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

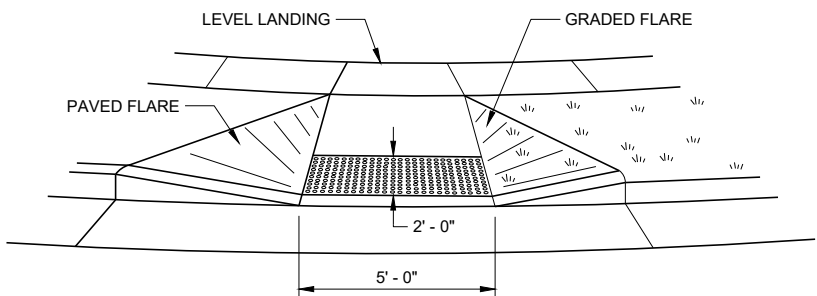
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/2 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
 - ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
 - ⑦ WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - ⑨ WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

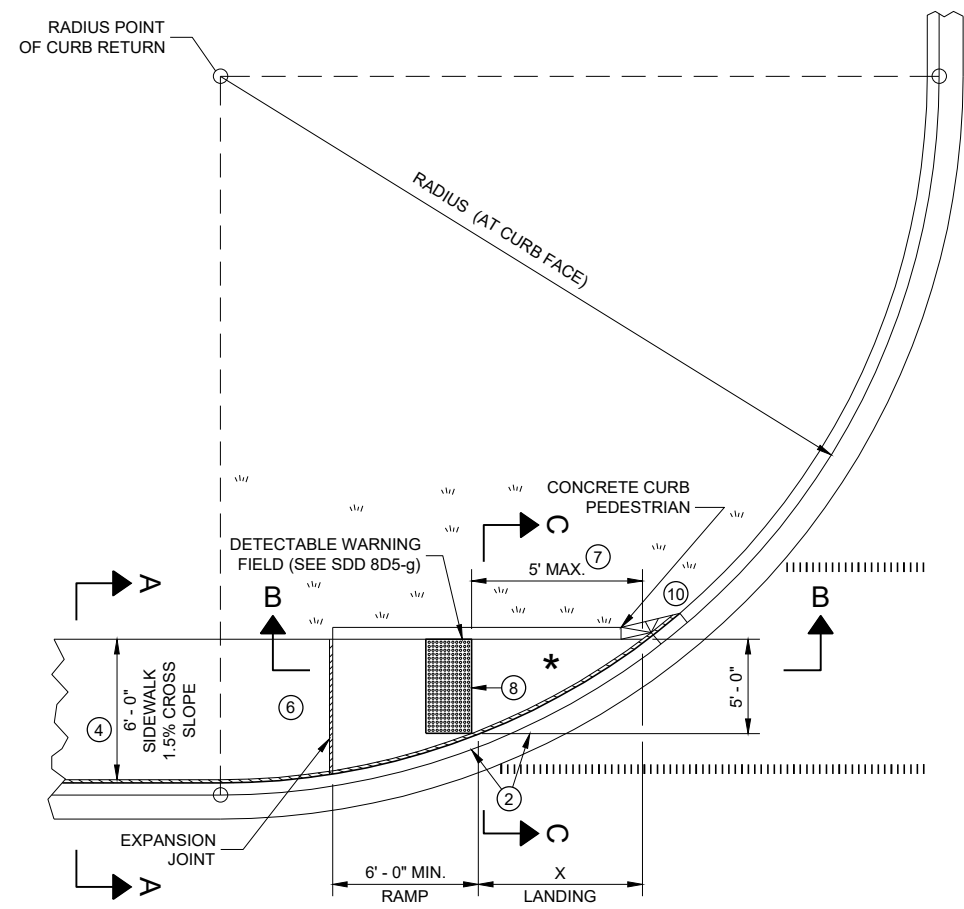
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

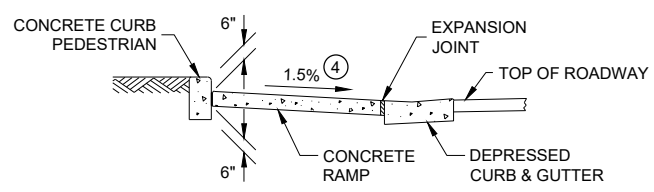
** WIDTH SHOWN ELSEWHERE IN THE PLANS

CURB RAMPS
TYPE 2 AND 3

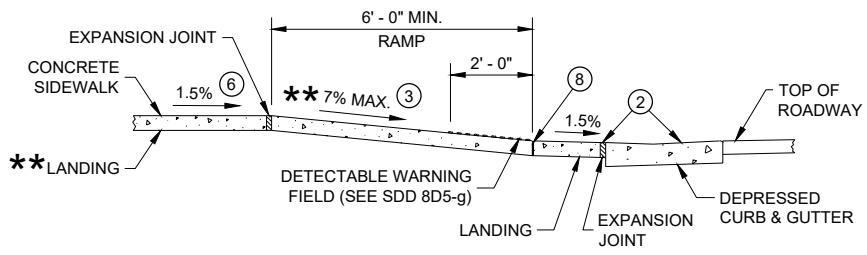
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A



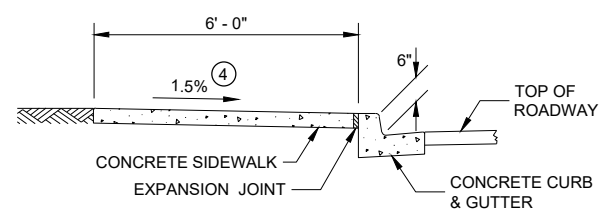
SECTION B - B FOR
TYPE 4A AND TYPE 4A1

** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

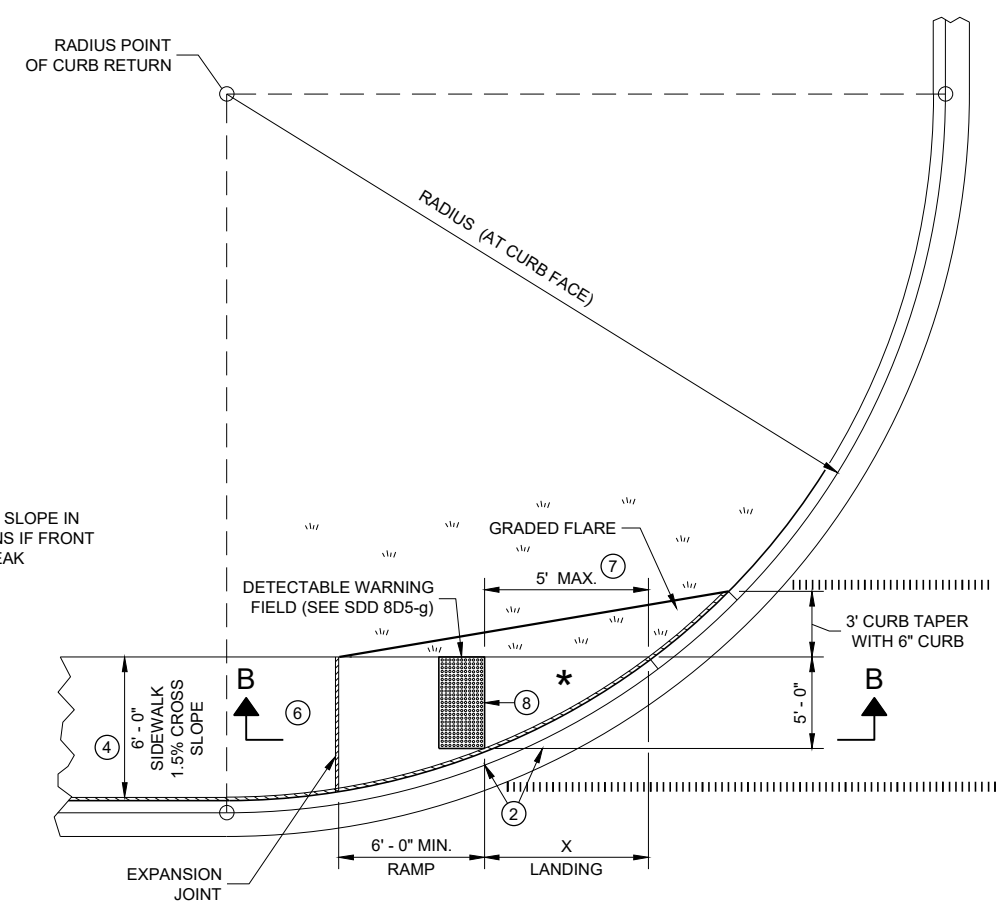
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



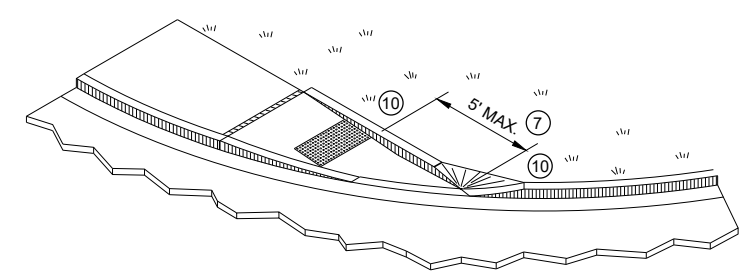
PLAN VIEW
CURB RAMP TYPE 4A1

GENERAL NOTES

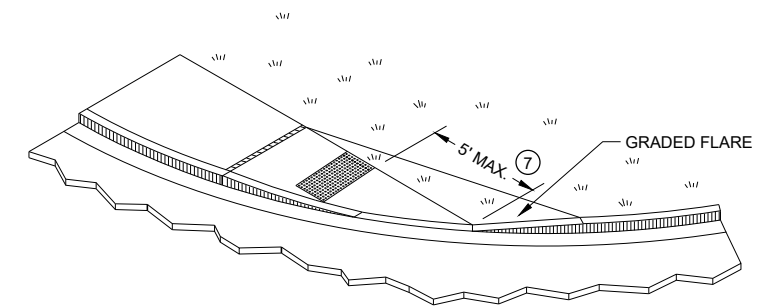
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



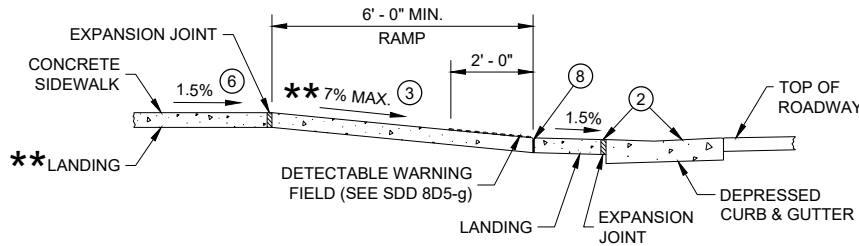
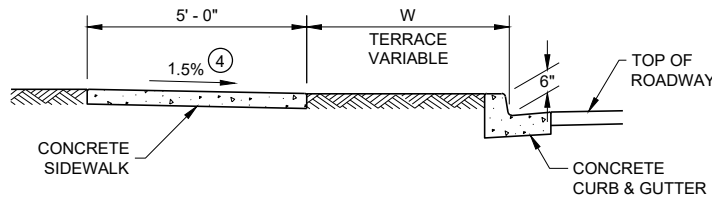
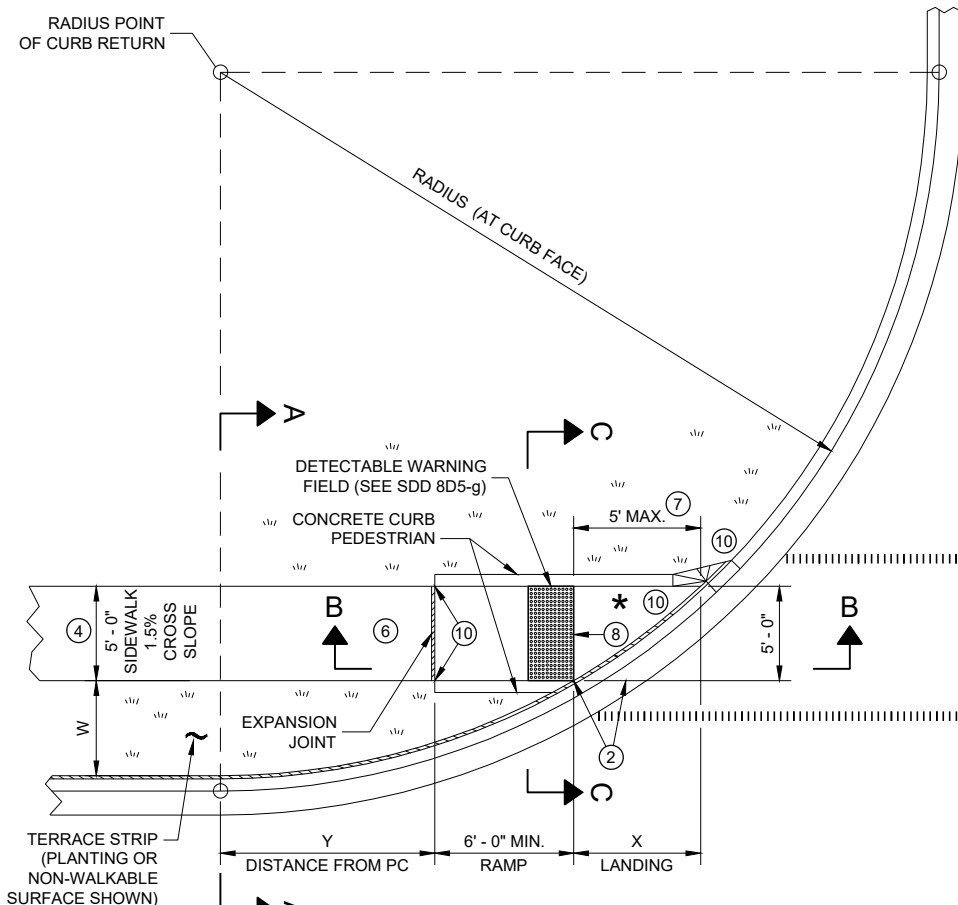
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

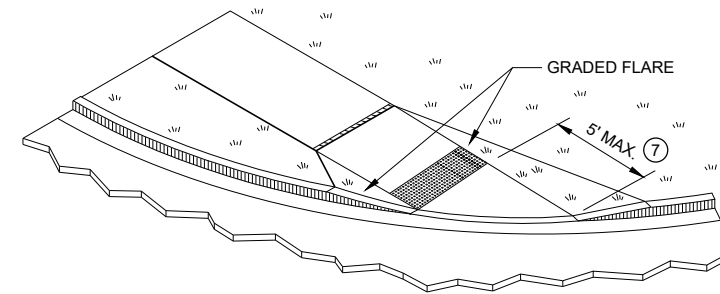
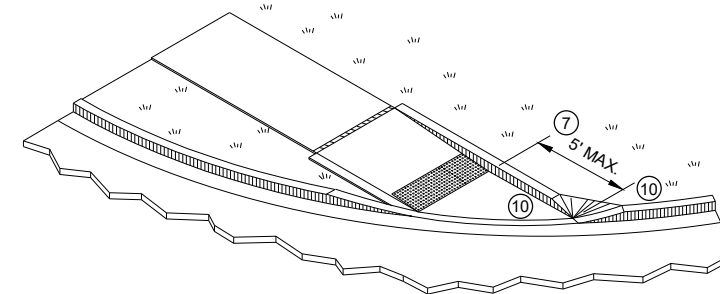
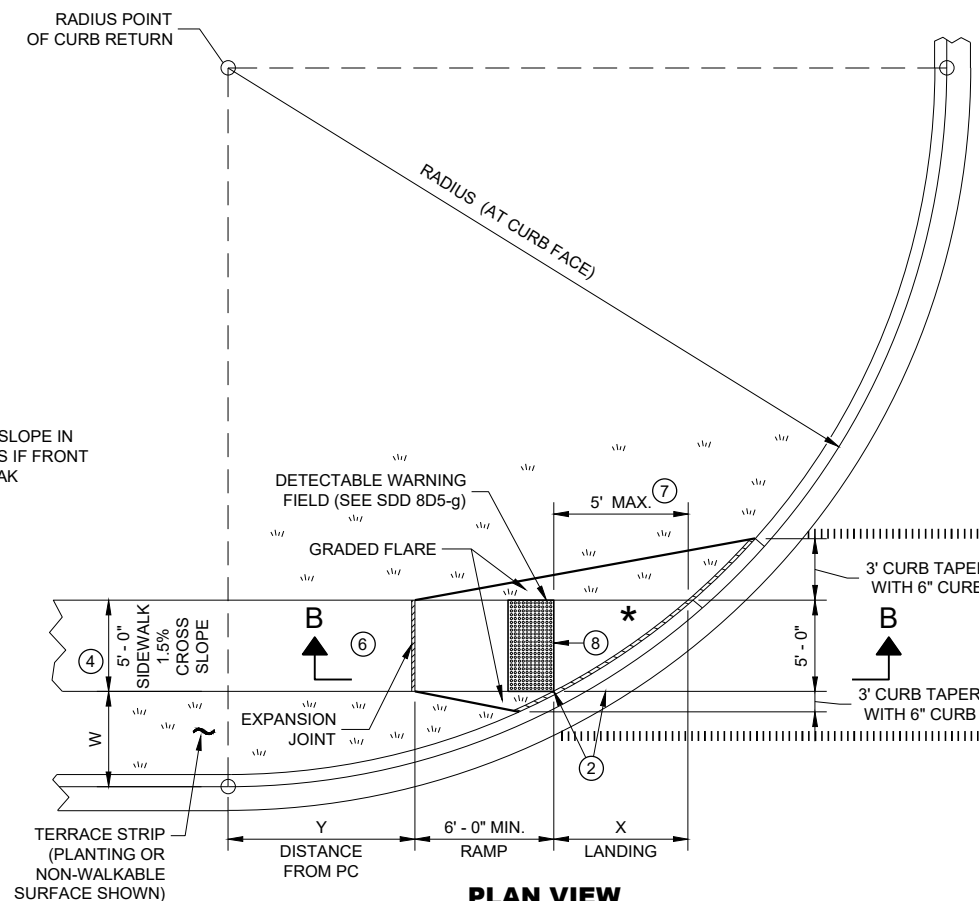
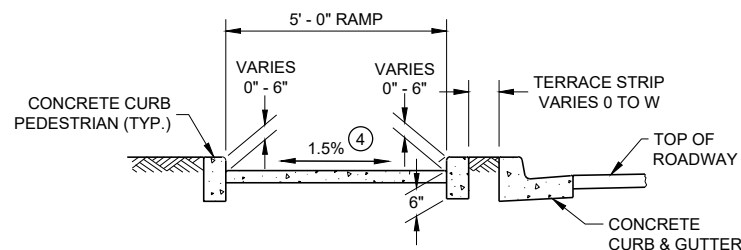


** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 3/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET	5' - 9 3/4"	3' - 6 1/2"	4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET			6' - 9 1/4"	7' - 11 1/4"	6' - 0 1/4"	9' - 8"	5' - 5"	11' - 1 3/4"	4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET									6' - 1 3/4"	15' - 8 1/2"	5' - 8"	17' - 2"	5' - 3"	18' - 5 3/4"	4' - 10 3/4"	19' - 8 1/4"
50 FEET															5' - 10 1/4"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

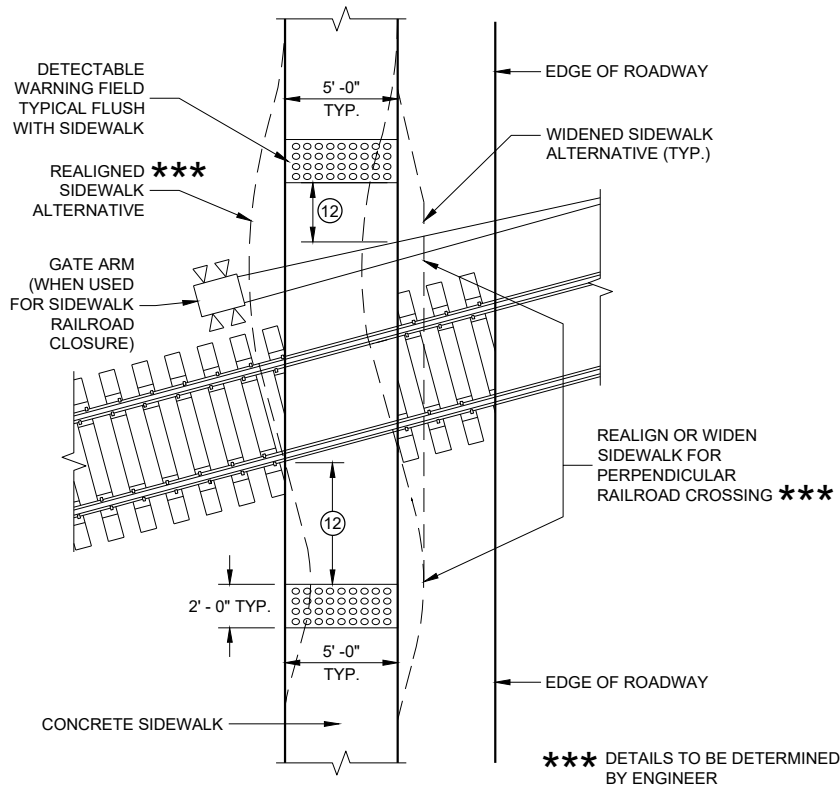
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

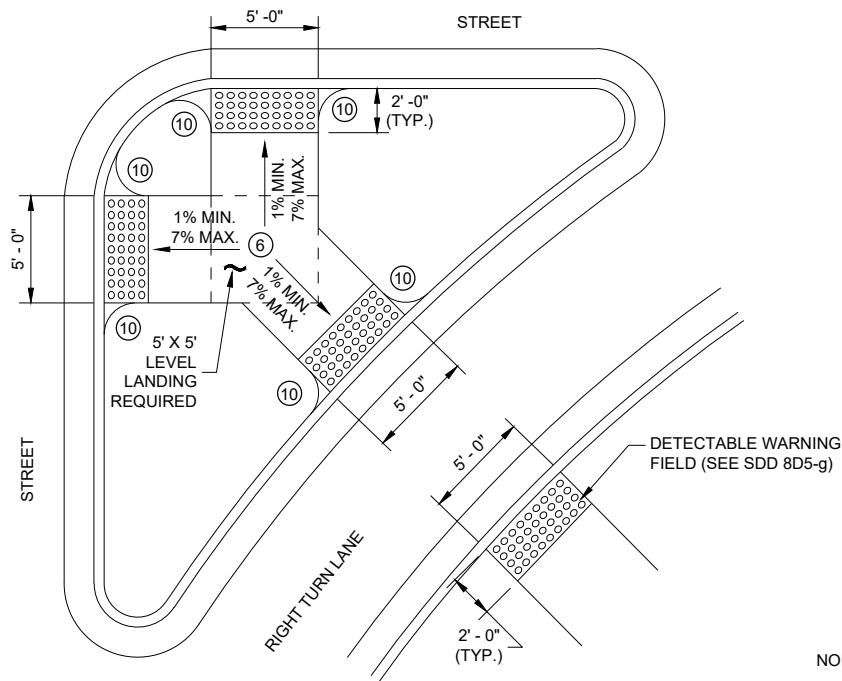
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

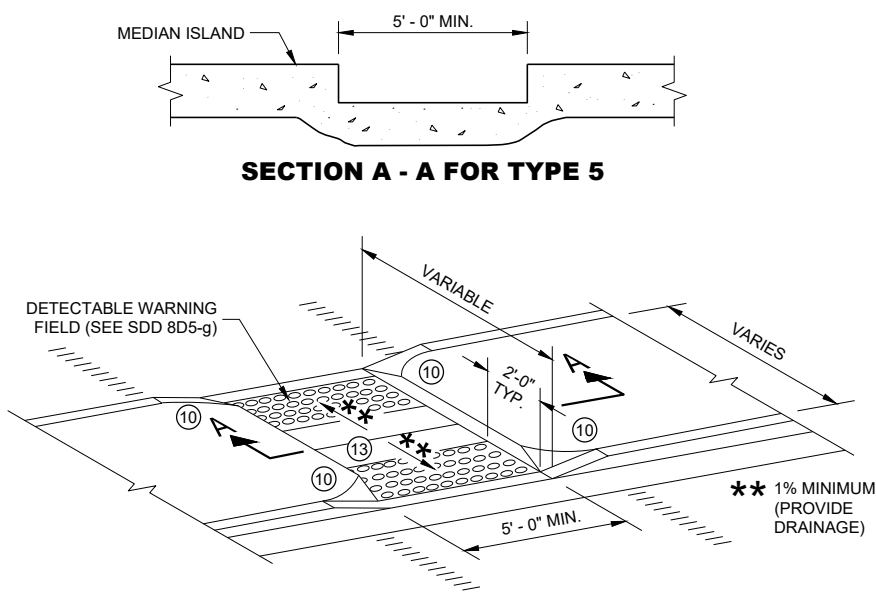
**DETECTABLE WARNINGS
AT RAILROAD CROSSING**



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

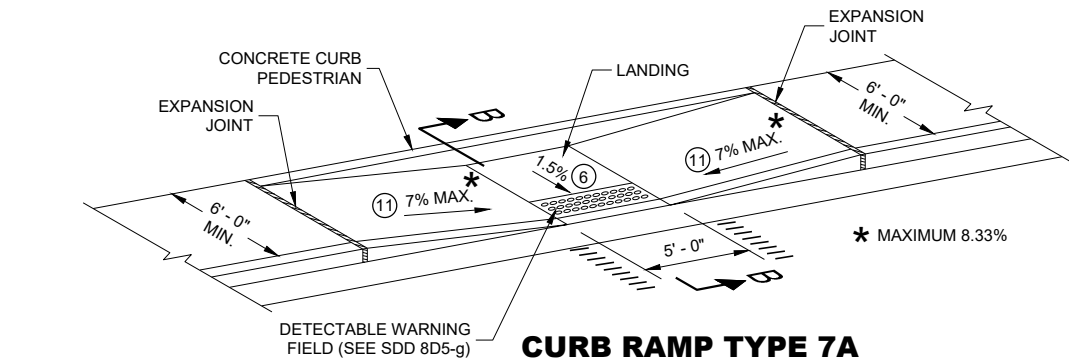
REFER TO GENERAL NOTES (2) AND (3)
FOR ALL ISLAND CURB RAMPS



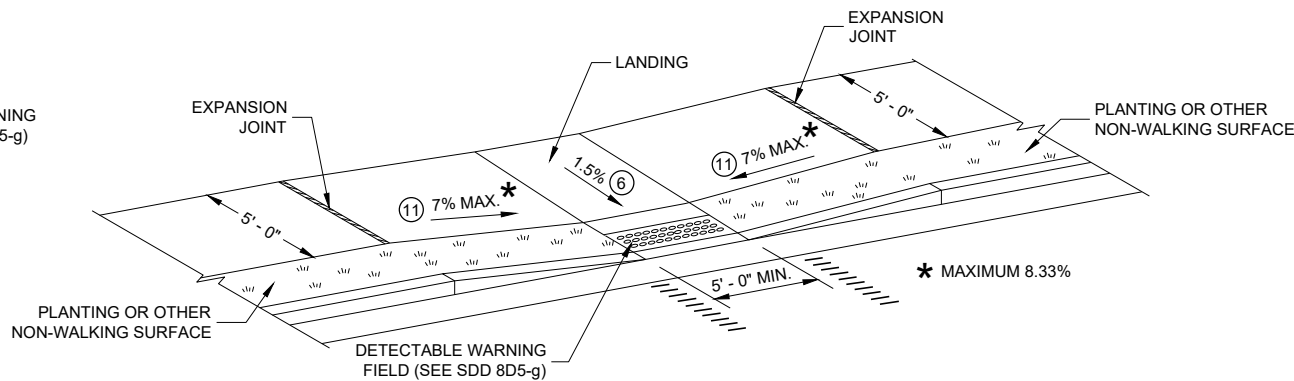
SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



**CURB RAMP TYPE 7A
MID BLOCK CROSSING**



**CURB RAMP TYPE 7B
MID BLOCK CROSSING**

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS
MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

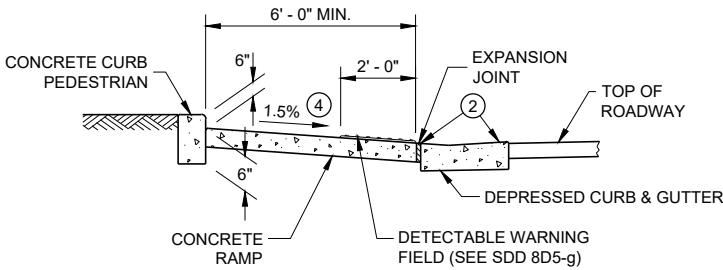
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



SECTION B - B FOR TYPE 7A

**CURB RAMPS
TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

Diagram illustrating the radial detectable warning field placement when the 5-foot grade break distance per SDD 8D5-c is exceeded.

Key components and dimensions shown:

- EXPANSION JOINT**: Located at the start of the detectable warning field.
- DETECTABLE WARNING FIELD RADIAL**: The main area of the detectable warning field.
- GRADED FLARE**: The transition area between the ramp and the landing.
- SEE DETAIL A**: Reference to a detail view of the flare.
- MIN. 2'-0" DWF COVERAGE**: Minimum detectable warning field coverage required.
- LANDING 'XR'**: The landing area following the ramp.
- RAMP**: The sloped section of the ramp.
- 6'-0" MIN.**: Minimum length of the ramp section.
- 6'-0" SIDEWALK 1.5% CROSS SLOPE**: Dimensions for the sidewalk area.
- 3' CURB TAPER WITH 6" CURB**: Dimensions for the curb area.
- 5'-0"**: Dimension for the landing area.
- * MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK**: Slope requirement for the landing area.

Callouts (4), (8), (14), (15), (16), and (17) indicate specific details or components.

PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

The diagram illustrates the plan view of Curb Ramp Type 4A1. It shows a ramp with a 7% typical grade (*** 7% TYP.) and a 1.5% slope (1.5% (6)). The ramp is flanked by a concrete sidewalk (CONCRETE SIDEWALK) and a depressed curb and gutter (DEPRESSED CURB & GUTTER). A radial detectable warning field (RADIAL DETECTABLE WARNING FIELD (SEE SDD 8D5-g)) is shown on the ramp. The ramp is separated from the roadway by an expansion joint (EXPANSION JOINT). The distance from the ramp to the expansion joint is labeled as 6'-0" MIN. (6'-0" MIN.). The distance from the ramp to the next expansion joint is labeled as LANDING "XR" (14) (GRADE BREAK DIST.). The distance from the ramp to the next expansion joint is also labeled as * 1.5% (8). The diagram includes callouts for CONCRETE SIDEWALK, EXPANSION JOINT, TOP OF ROADWAY, and DEPRESSED CURB & GUTTER. The diagram also includes a note: **** LANDING (****). The diagram includes a note: *** MAXIMUM 8.33% (*** MAXIMUM 8.33%).

SECTION A - A FOR TYPE 4A1

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

Diagram illustrating the Plan View of Curb Ramp Type 4B1, showing dimensions and components:

- Dimensions:**
 - 5'-0" SIDEWALK 1.5% CROSS SLOPE
 - 2'-0" (Ramp width)
 - 6'-0" MIN. RAMP
 - LANDING 'XR'
 - 3' CURB TAPER WITH 6" CURB
 - 5'-0" (Landing width)
- Components and Labels:**
 - EXPANSION JOINT
 - GRADED FLARE
 - TERRACE STRIP (PLANTING OR NON-WALKABLE SURFACE SHOWN)
 - DETECTABLE WARNING FIELD RADIAL
 - SEE DETAIL B
 - MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- Callouts:**
 - ④
 - ⑥
 - ⑧ ⑭
 - ⑮
 - ⑮
 - ⑮

PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

NON-WALKABLE
SURFACE SHOWN)

PLAN VIEW CURB RAMP TYPE 4B1 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)

EXPANSION JOINT

CONCRETE SIDEWALK

1.5% (6)

6' - 0" MIN. RAMP

*** 7% TYP. (7)

LANDING 'XR' (14)

(GRADE BREAK DIST.)

EXPANSION JOINT

TOP OF ROADWAY

1.5% (8)

*** LANDING

RADIAL DETECTABLE WARNING FIELD (SEE SDD 8D5-g)

DEPRESSED CURB & GUTTER




1.5% (12)

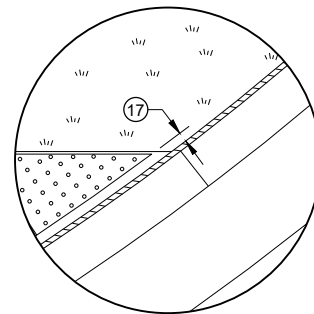
*** IF RAMP SLOPE IS LESS

*** MAXIMUM 8.33% (9)

SECTION B - B FOR TYPE 4B1

LEGEND

	1/2" EXPANSION JOINT SIDEWALK
	CONTRACTION JOINT SIDEWALK
	PAVEMENT MARKING CROSSWALK (WHITE)



DETAIL A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$ " - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN $\frac{1}{8}$ " DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

NOTE: SECOND TYPE 2 RAMP NOT SHOWN

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

SECTION C - C FOR TYPE 2

DETAIL C

*** MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK**

**** WIDTH SHOWN ELSEWHERE IN THE PLANS**

***** MAXIMUM 8.33%**

SECTION C - C FOR TYPE 2

10:1 MAX FLARE

8 14

2'-0"

GRADED FLARE

15

LANDING**

TERRACE**

DETECTABLE WARNING FIELD RADIAL

SEE DETAIL C

5'-0"

3' CURB TAPER WITH 6" CURB

TERRACE STRIP (PLANTING OR NON-WALKABLE SURFACE SHOWN)

17

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%

DETAIL C

SURFACE

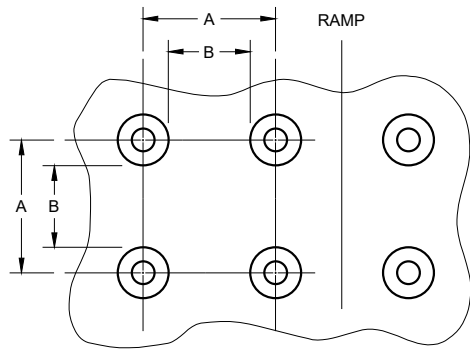
PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

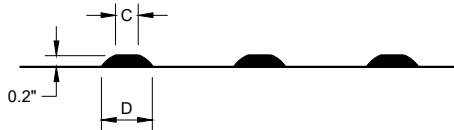
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

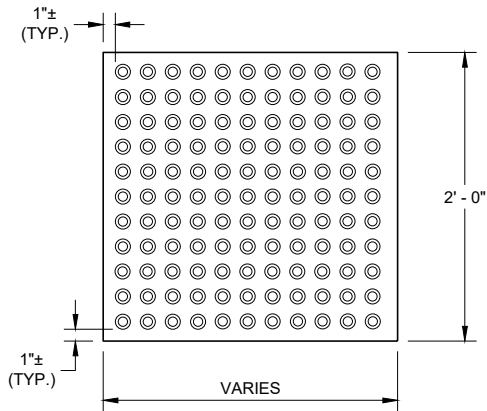


PLAN VIEW

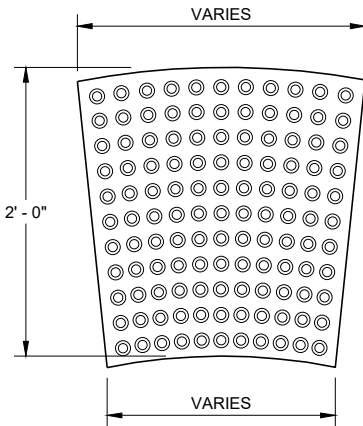


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

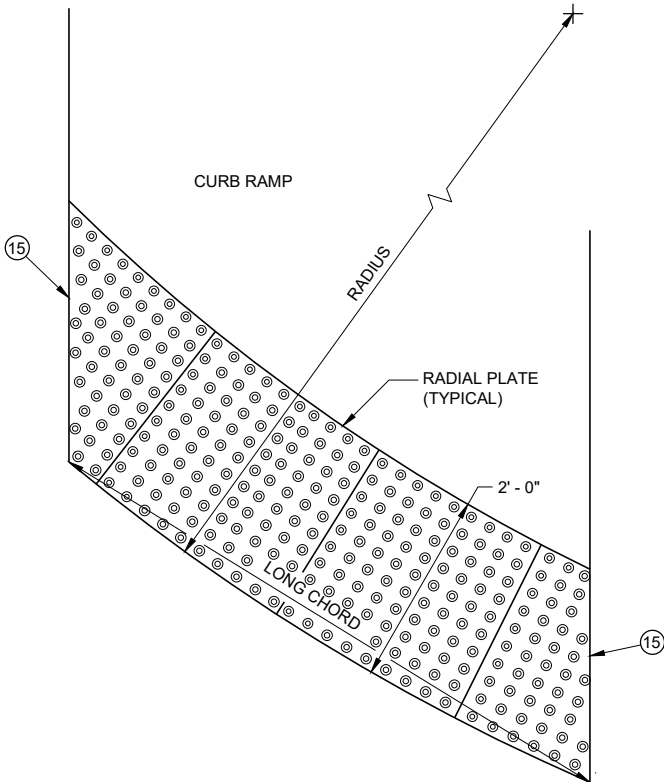


RECTANGULAR
PLATES



RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

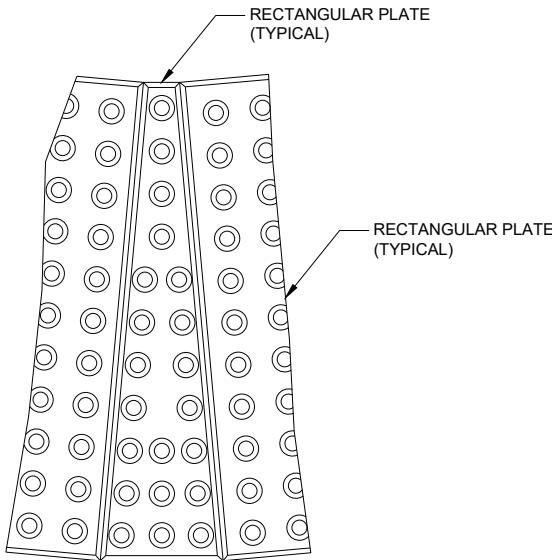
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8\"/>



PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



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.



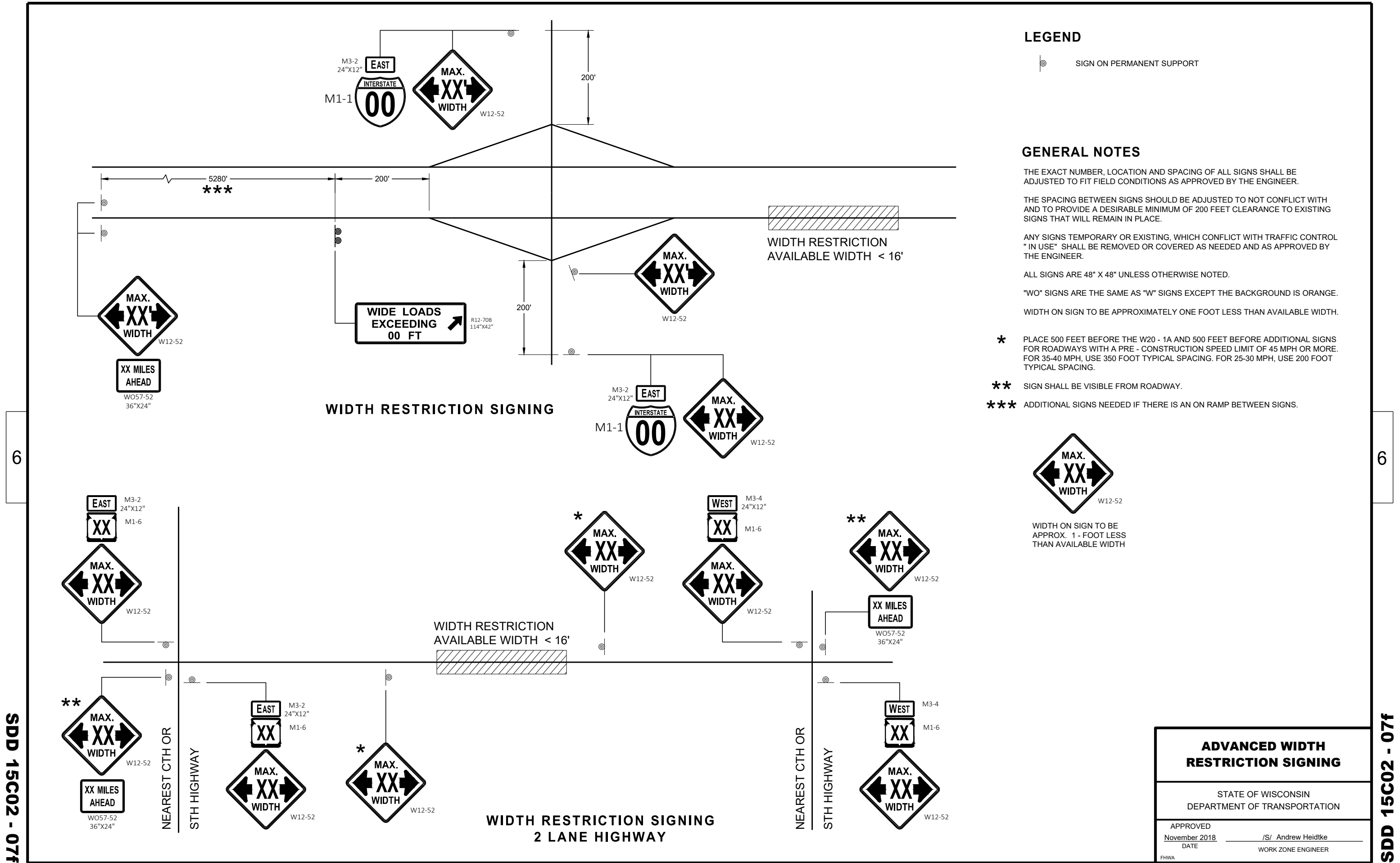
INLET PROTECTION, TYPE D

(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 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



GENERAL NOTES

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

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




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

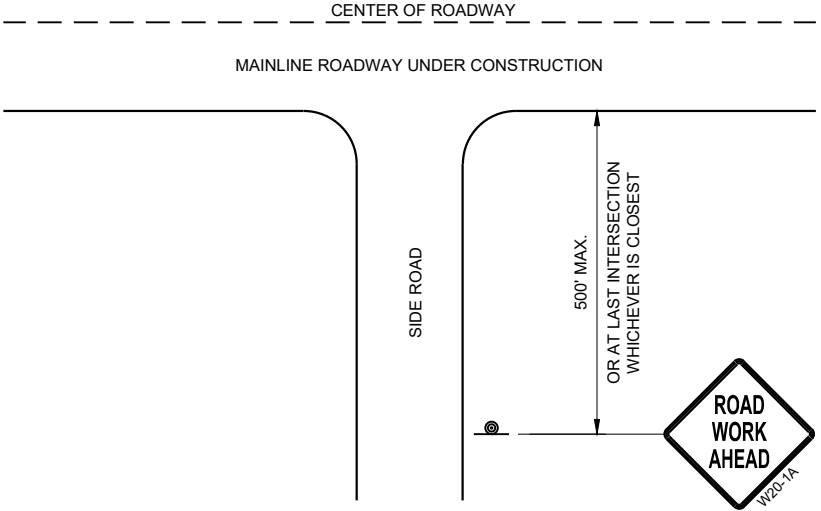
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

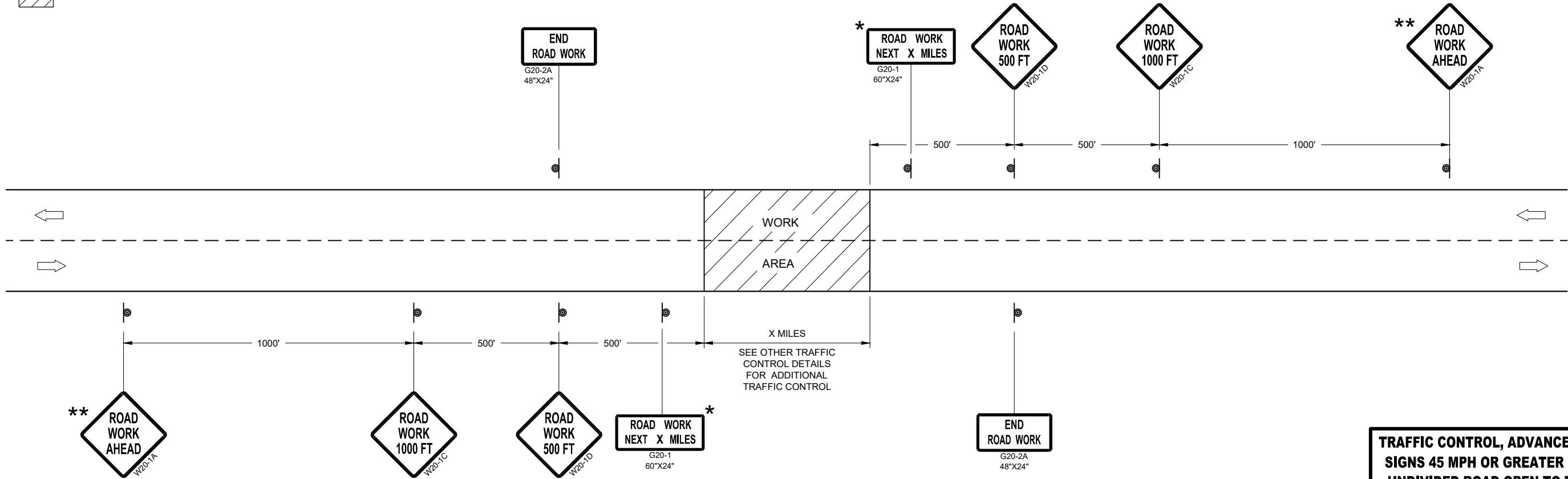
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE 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.

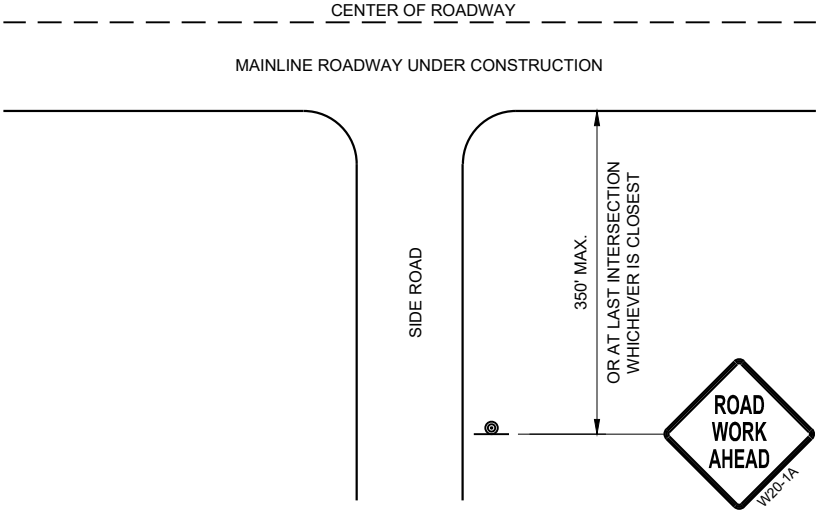
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

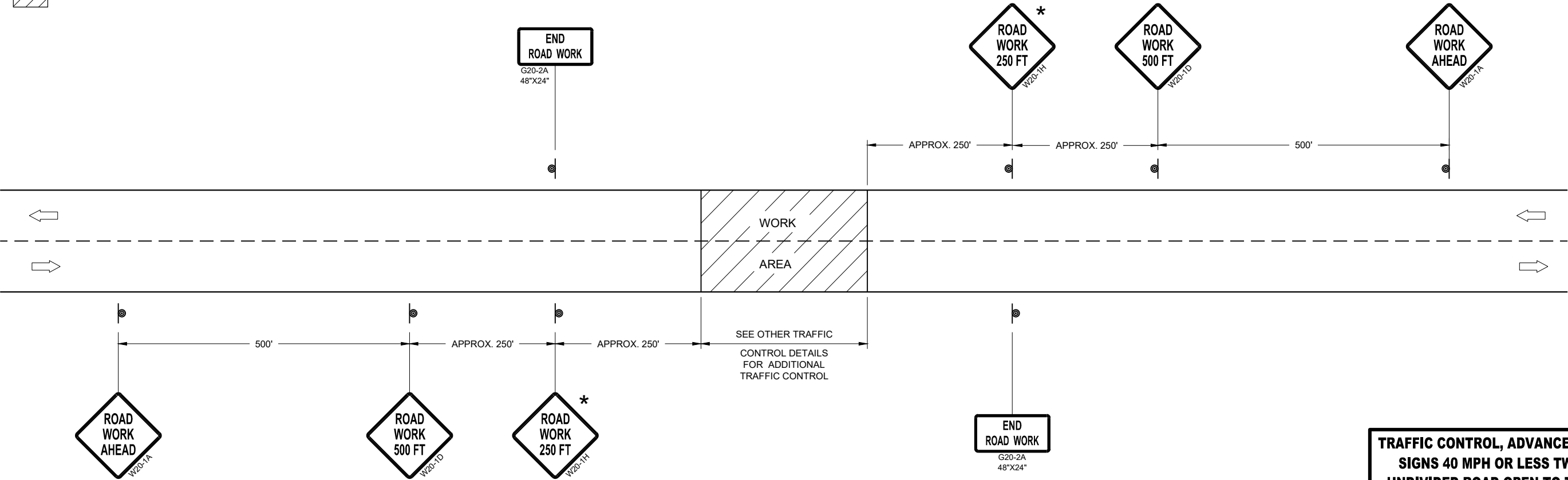
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

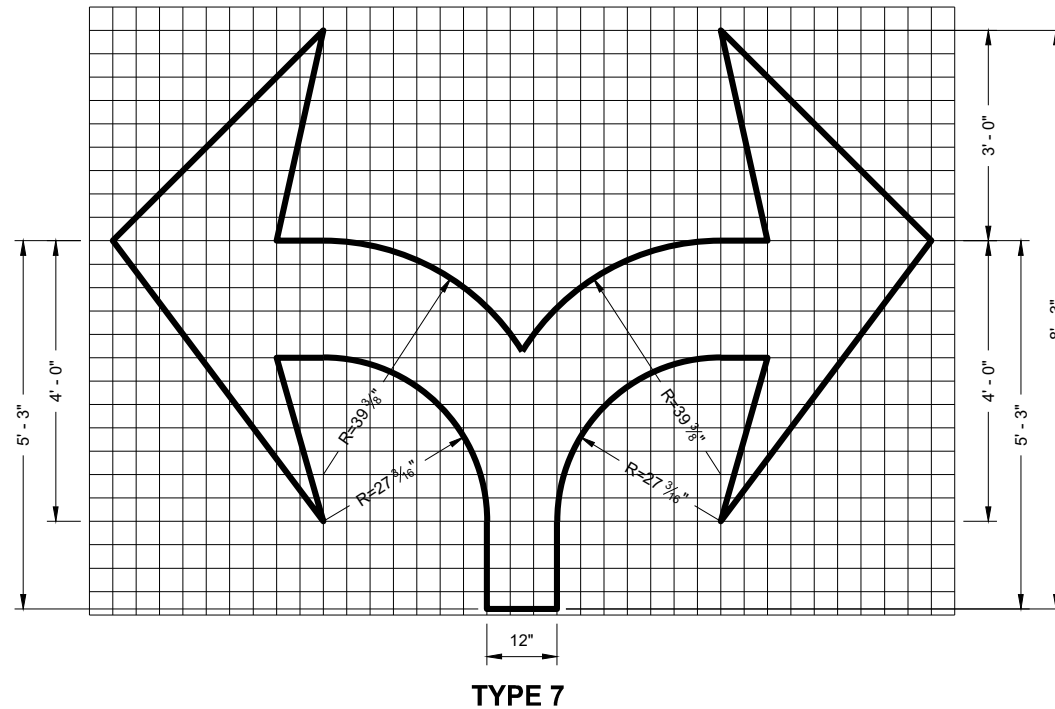
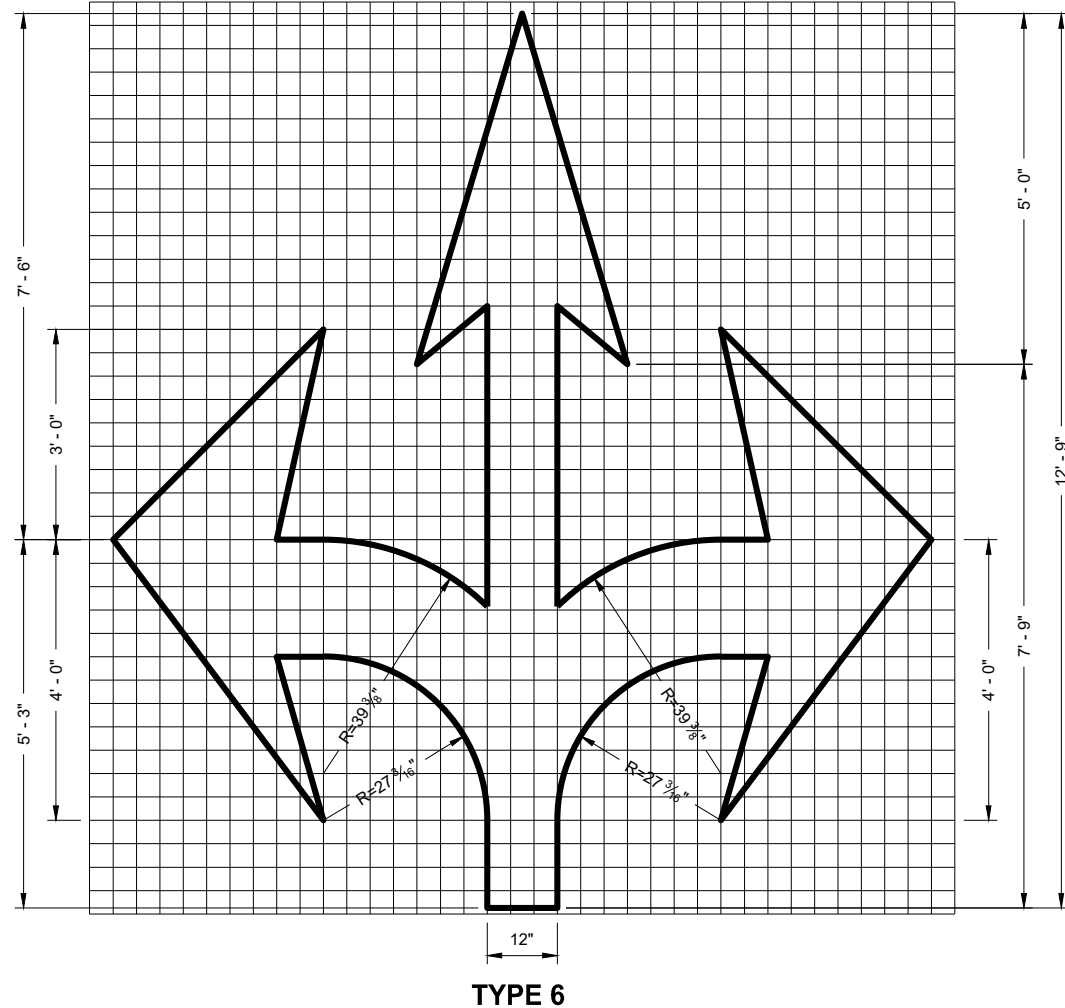
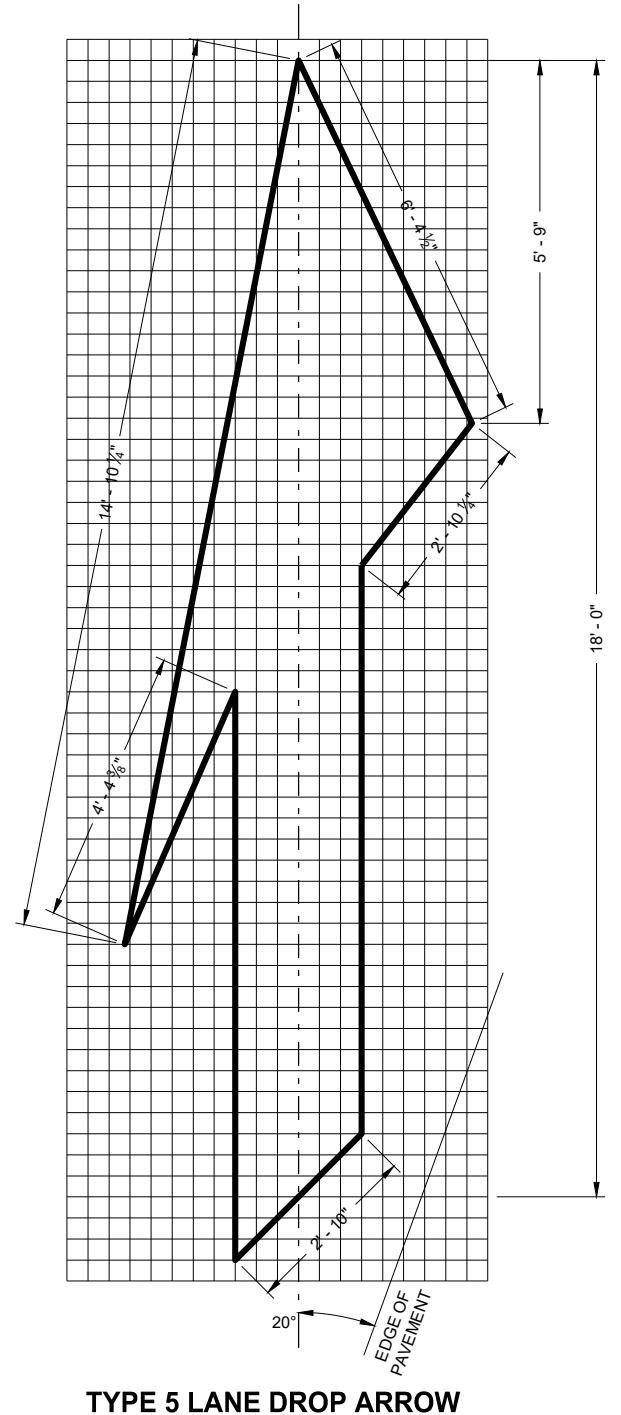
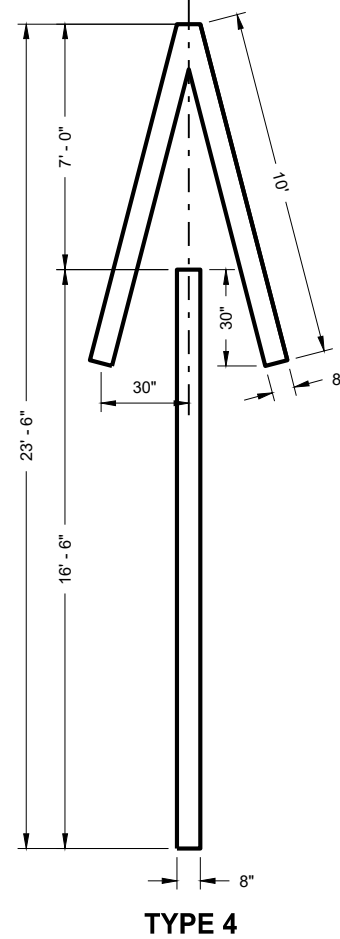
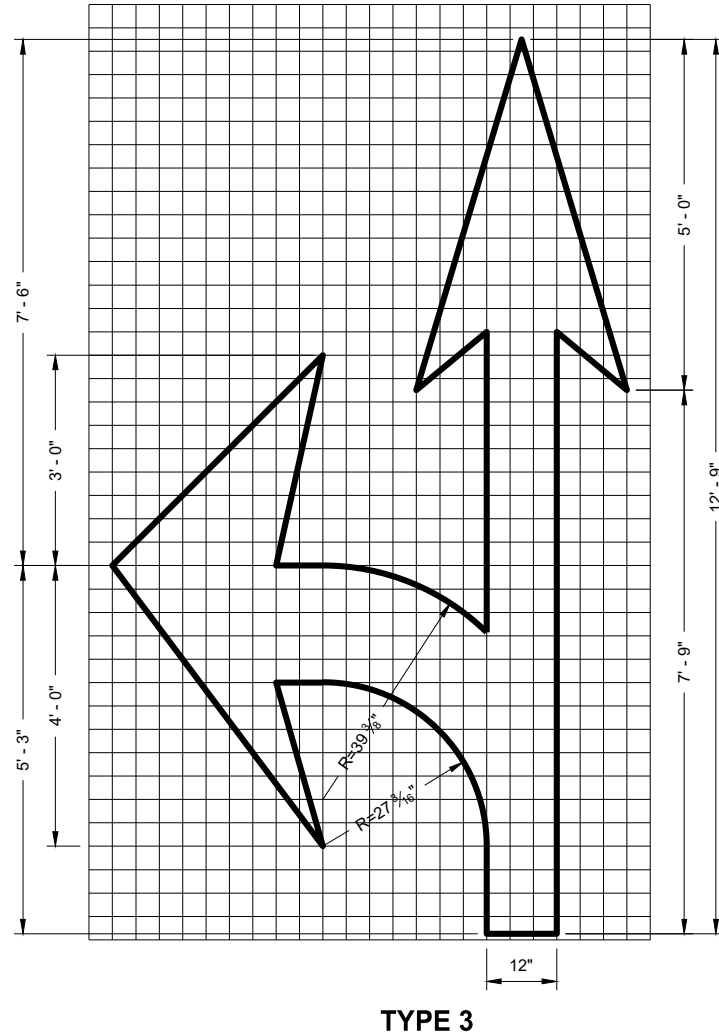
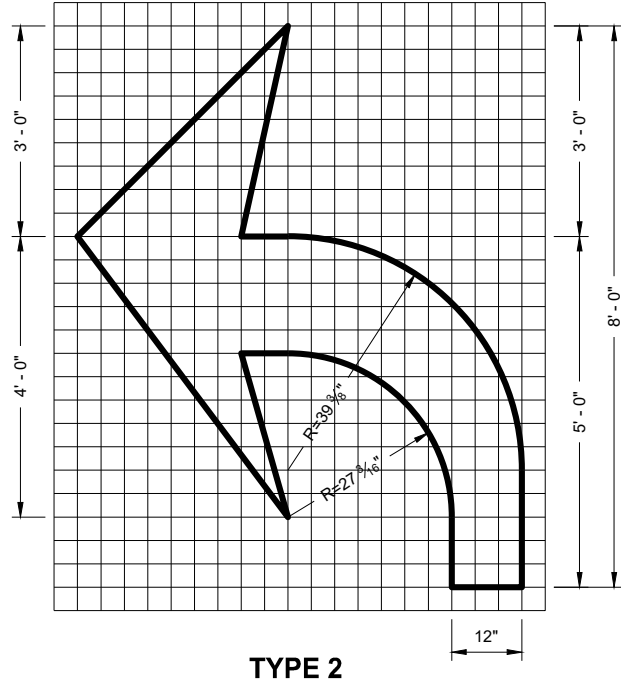
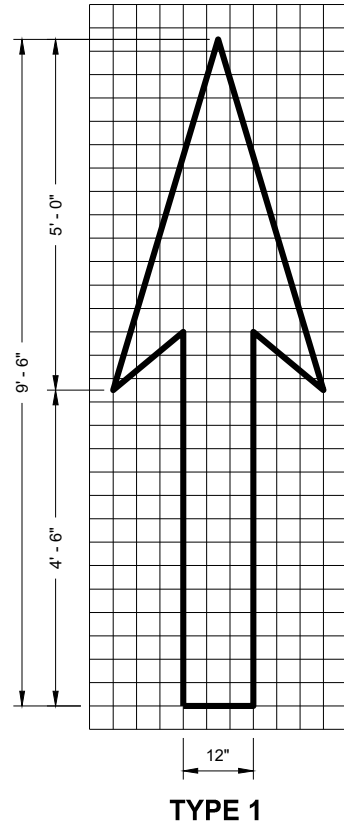


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



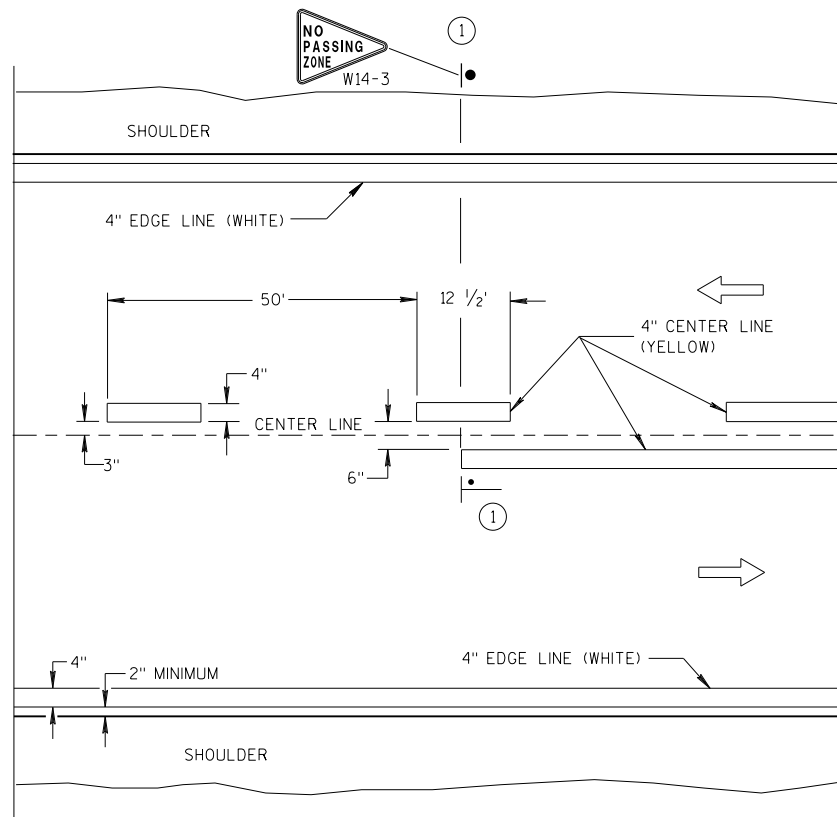
GENERAL NOTES

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.

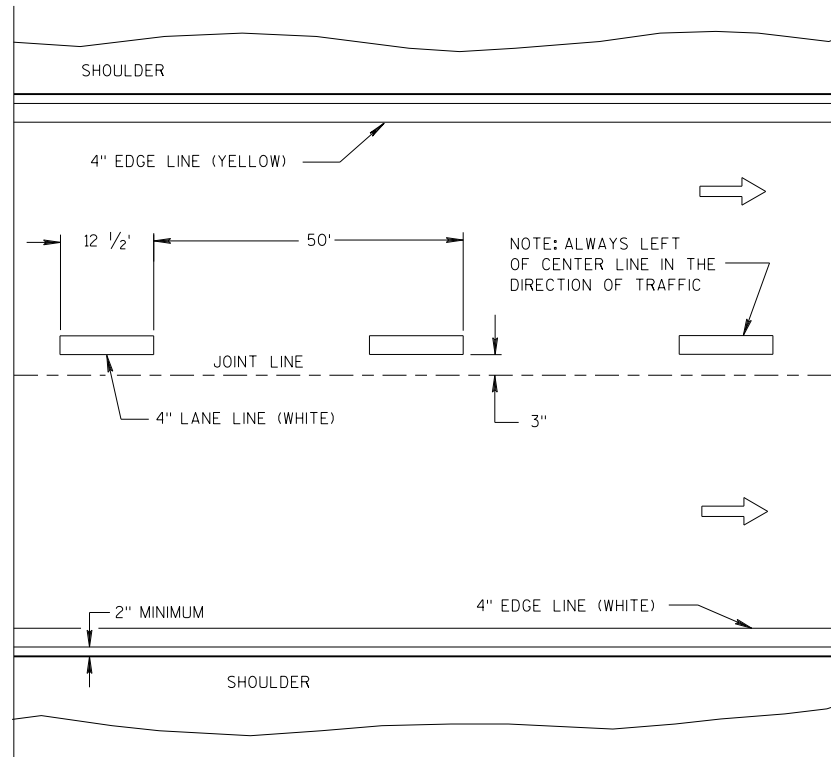
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA

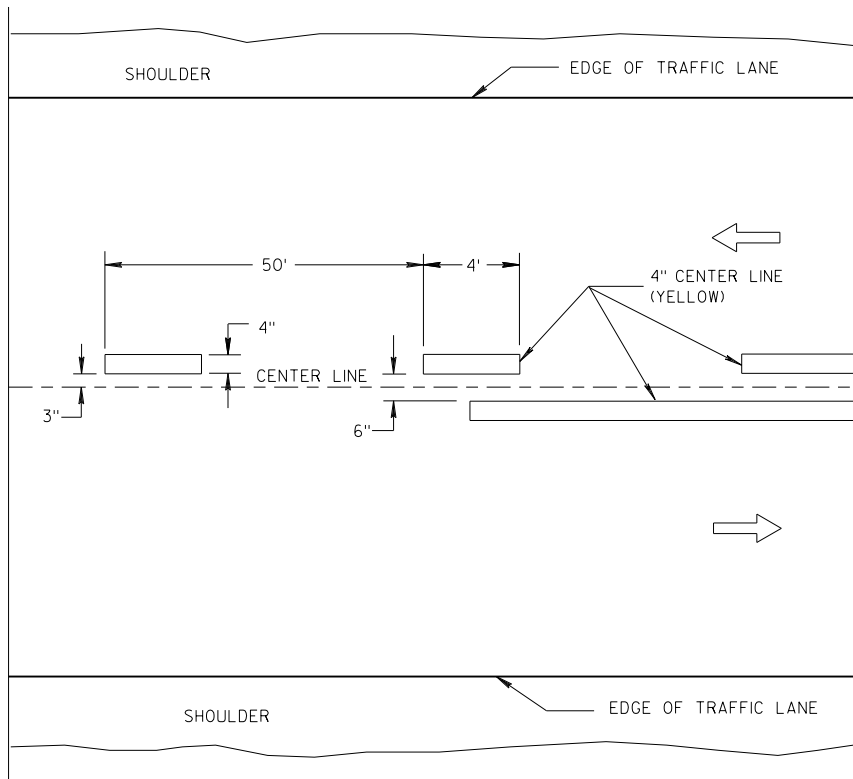


TWO WAY TRAFFIC

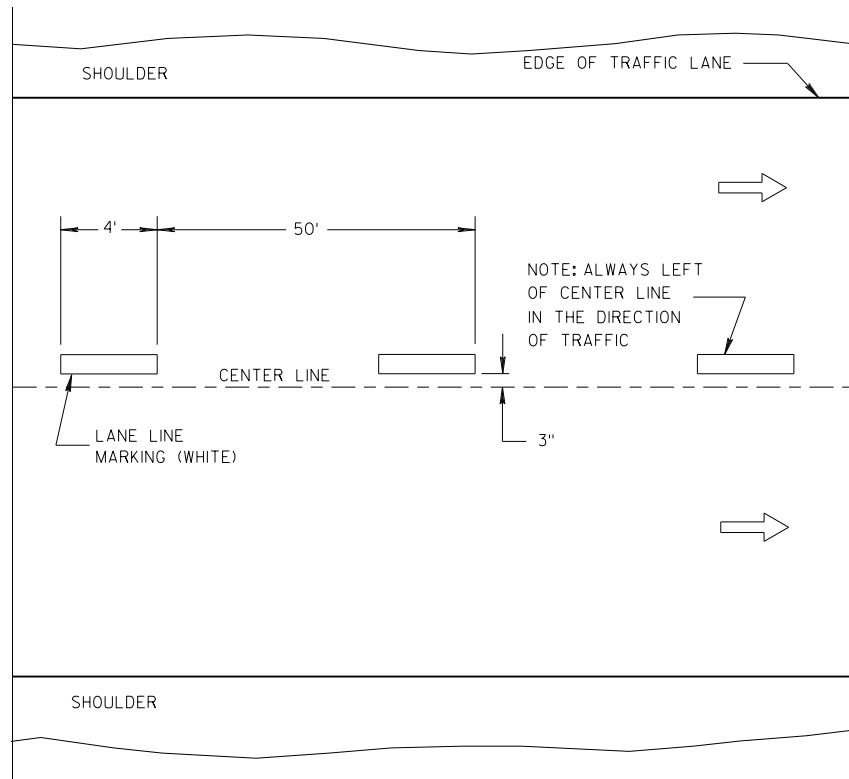


ONE WAY TRAFFIC

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

LONGITUDINAL MARKING
(MAINLINE)

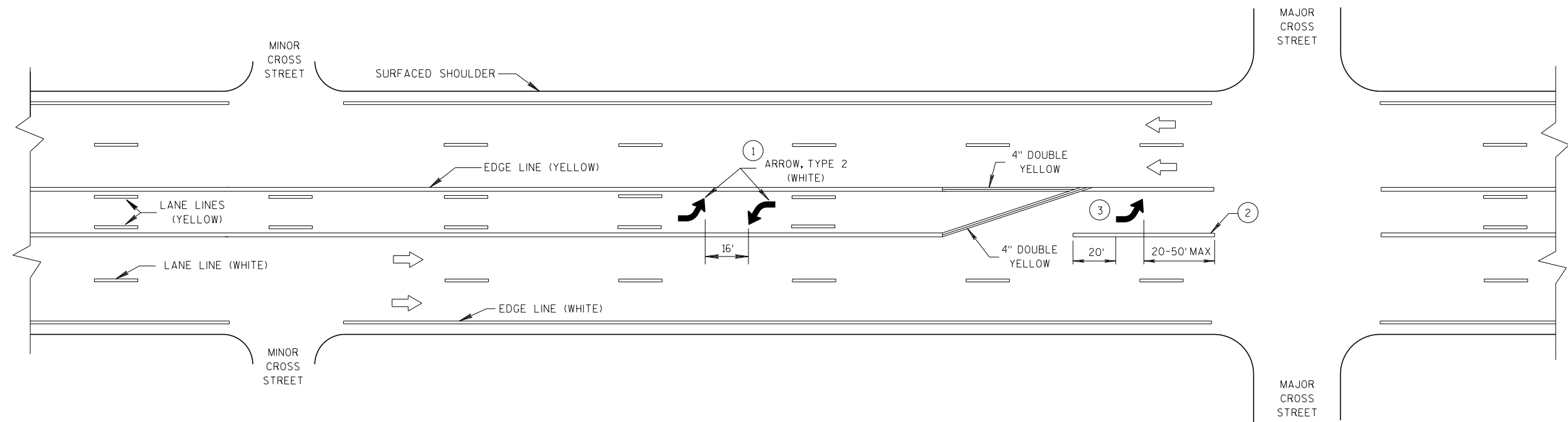
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

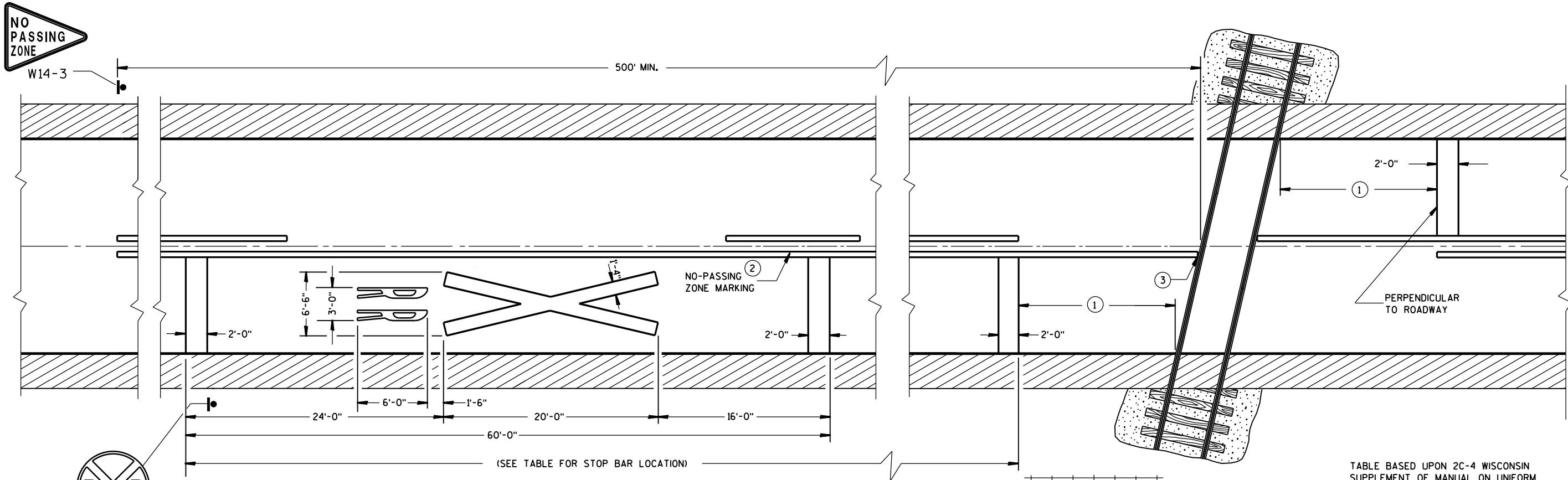
GENERAL NOTES

- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 8" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT

➔ DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE



PAVEMENT MARKING

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.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

RETRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

- ① MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- ② 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- ③ FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

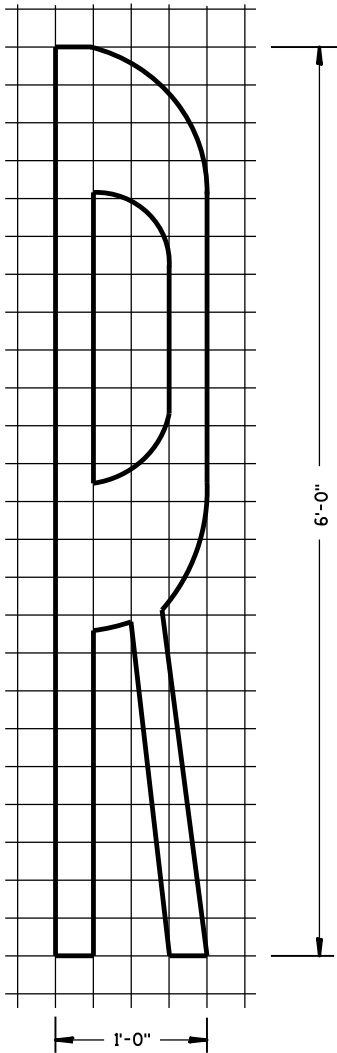


TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

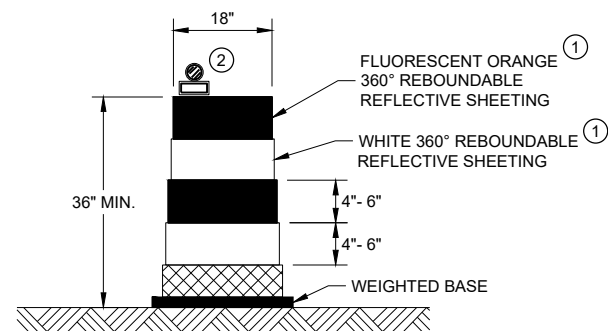
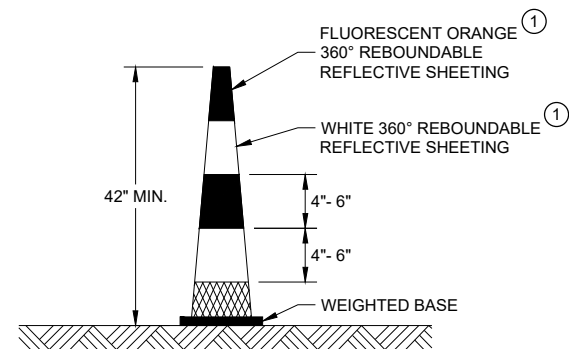
Posted Speed (M.P.H.)	Dimension Range (Feet)
25	150*- 250
30	200*- 300
35	250*- 450
40	300*- 500
45	400*- 650
50	550*- 800
55	750*- 1000
60	1000*- 1250
65	1000*- 1250

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSE PROXIMITY OF DRIVEWAYS, BRIDGES, SIDEROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

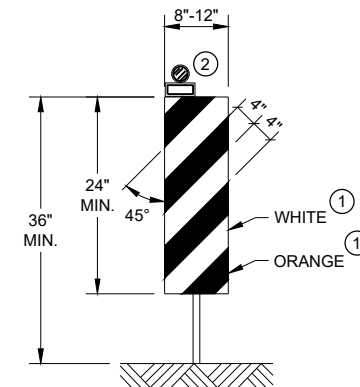
SIGNING AND PAVEMENT MARKING
DETAILS FOR RAILROAD-HIGHWAY
GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

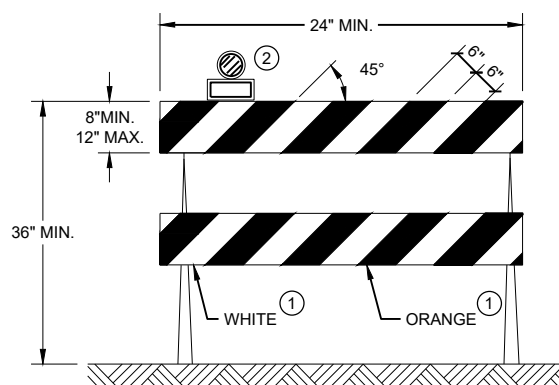
APPROVED
Sept., 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

**DRUM****42" CONE**

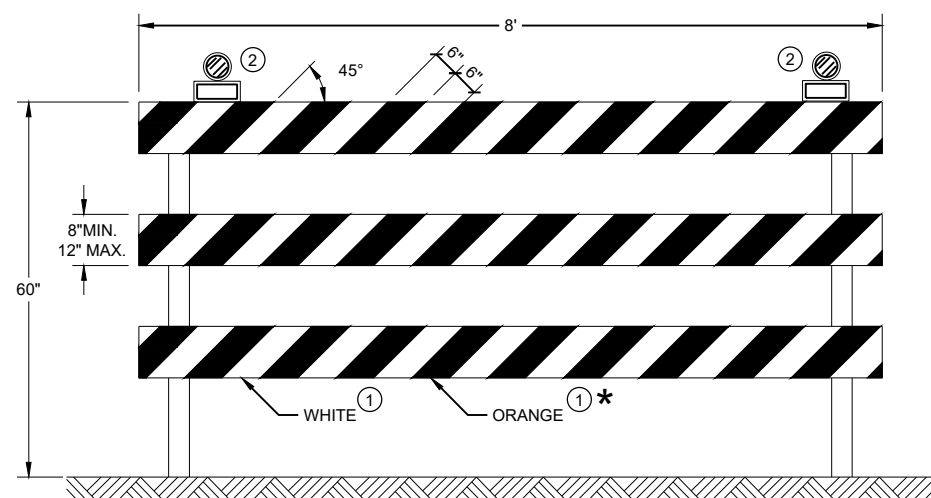
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

**VERTICAL PANEL**

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

**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.

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.






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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

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.

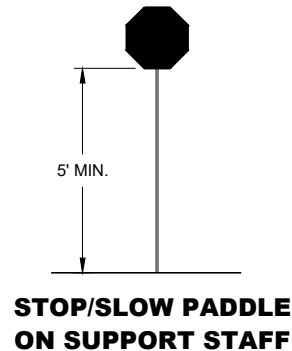
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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.
- 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.
 - 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.
- 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.

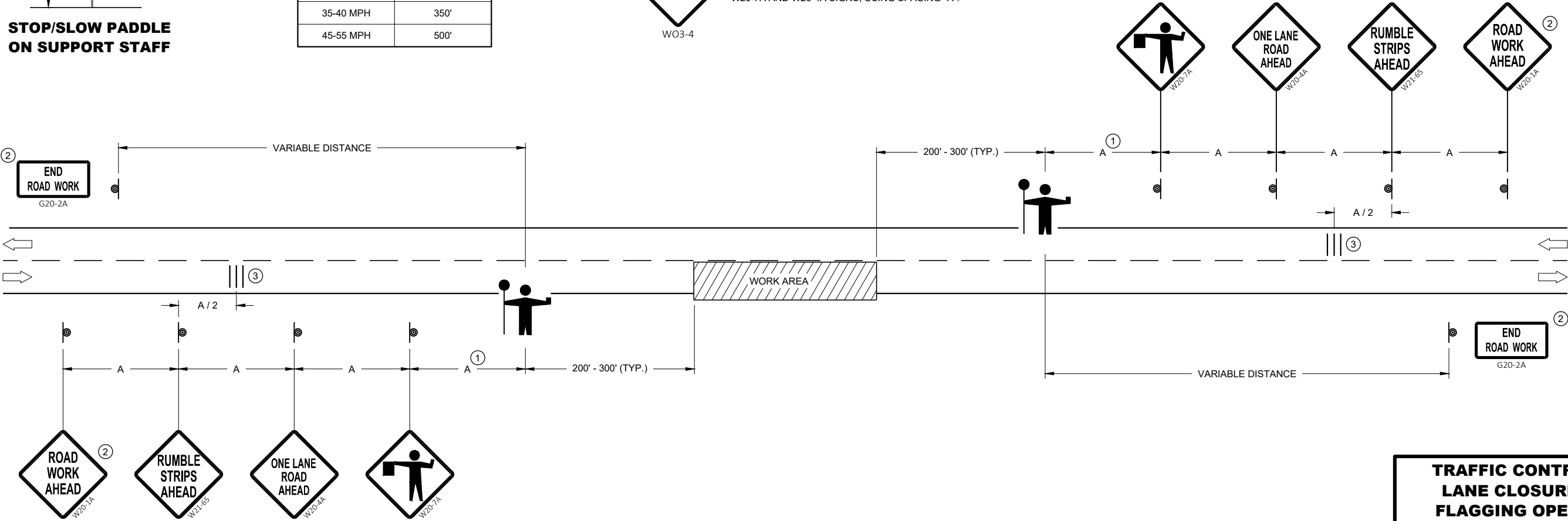


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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".



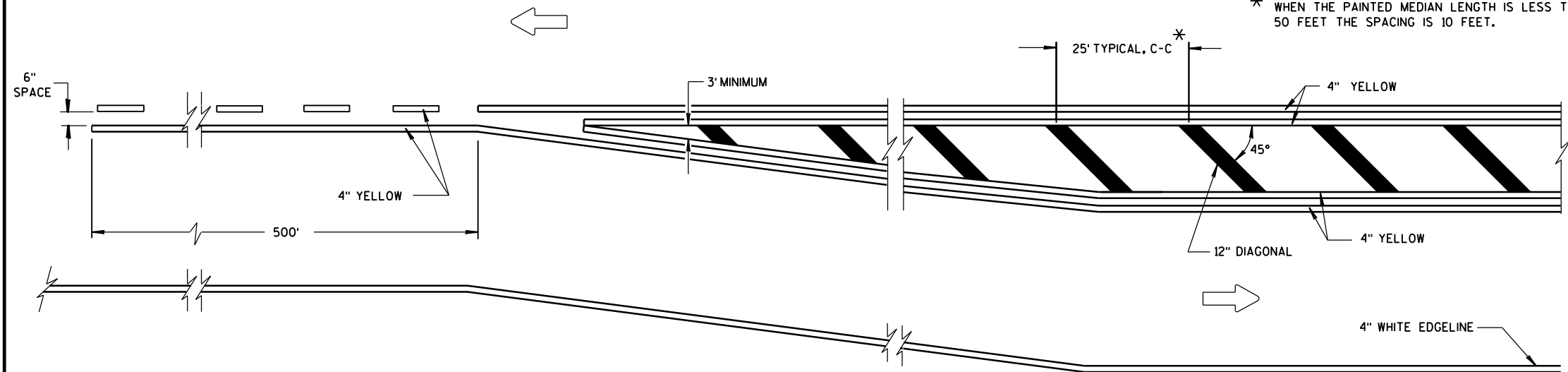
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

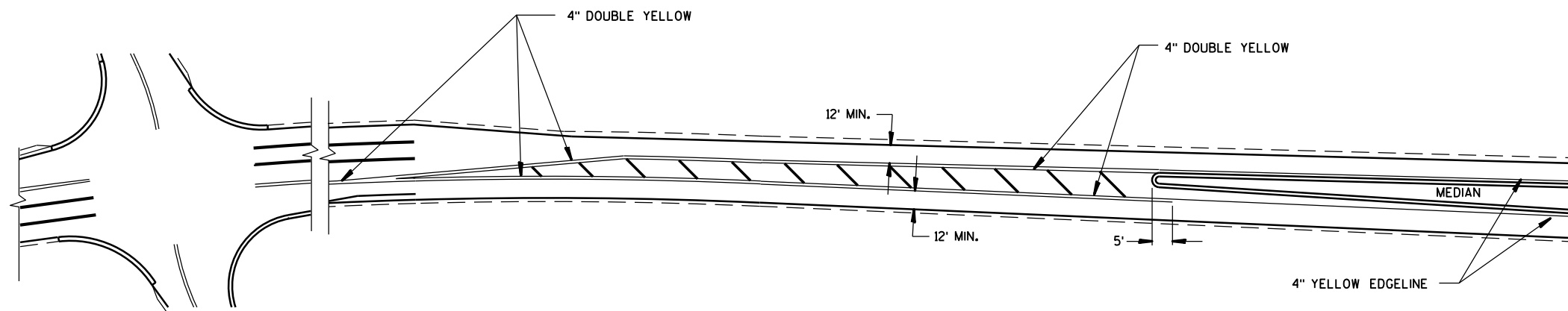


MEDIAN ISLAND DETAIL

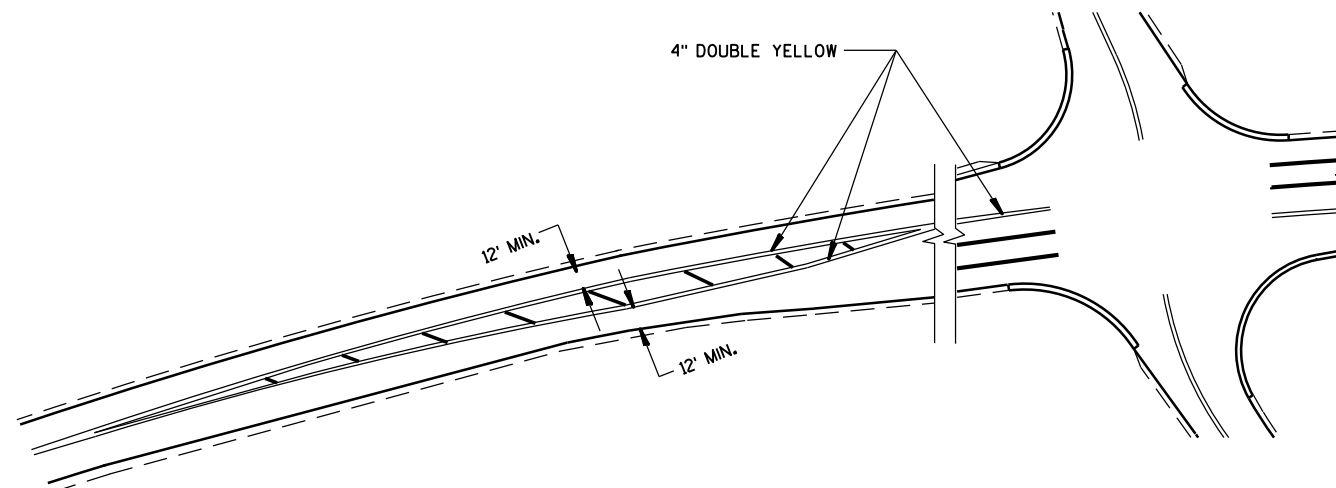
GENERAL NOTE

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

MEDIAN ISLAND MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

LEGEND

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

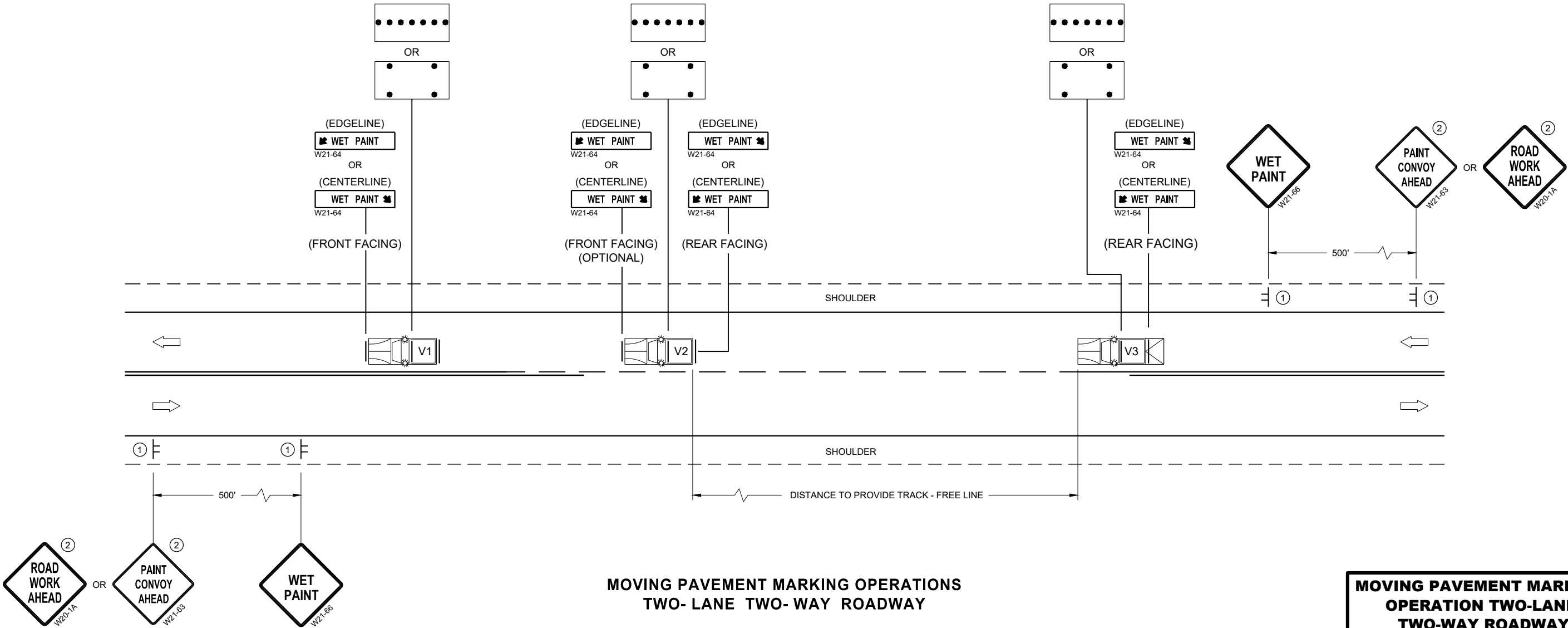
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

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

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

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

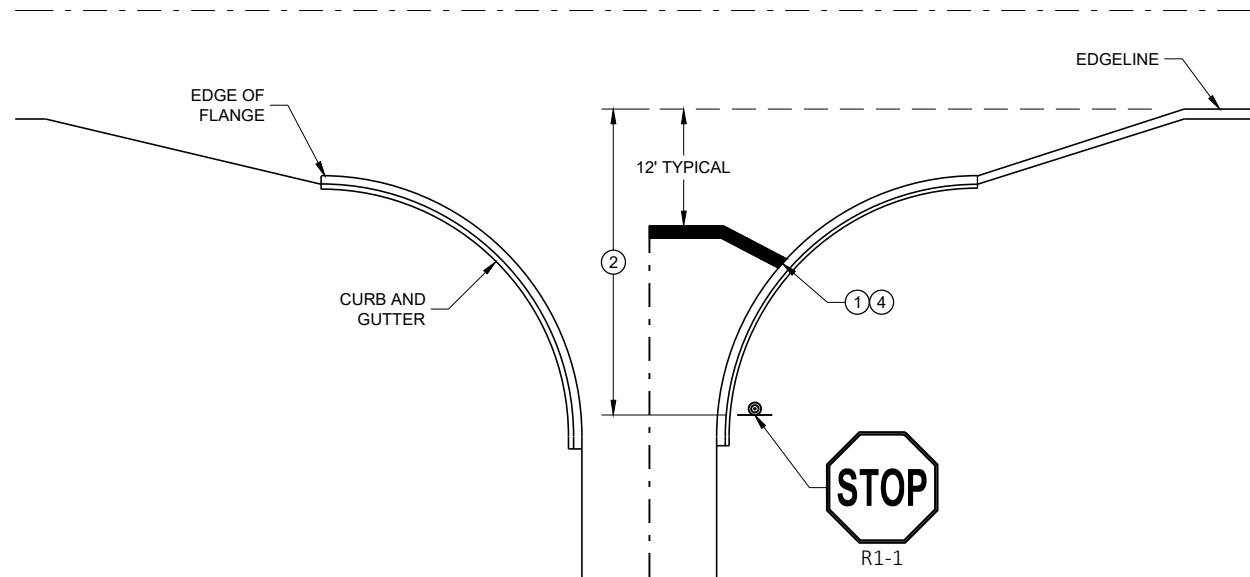
- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



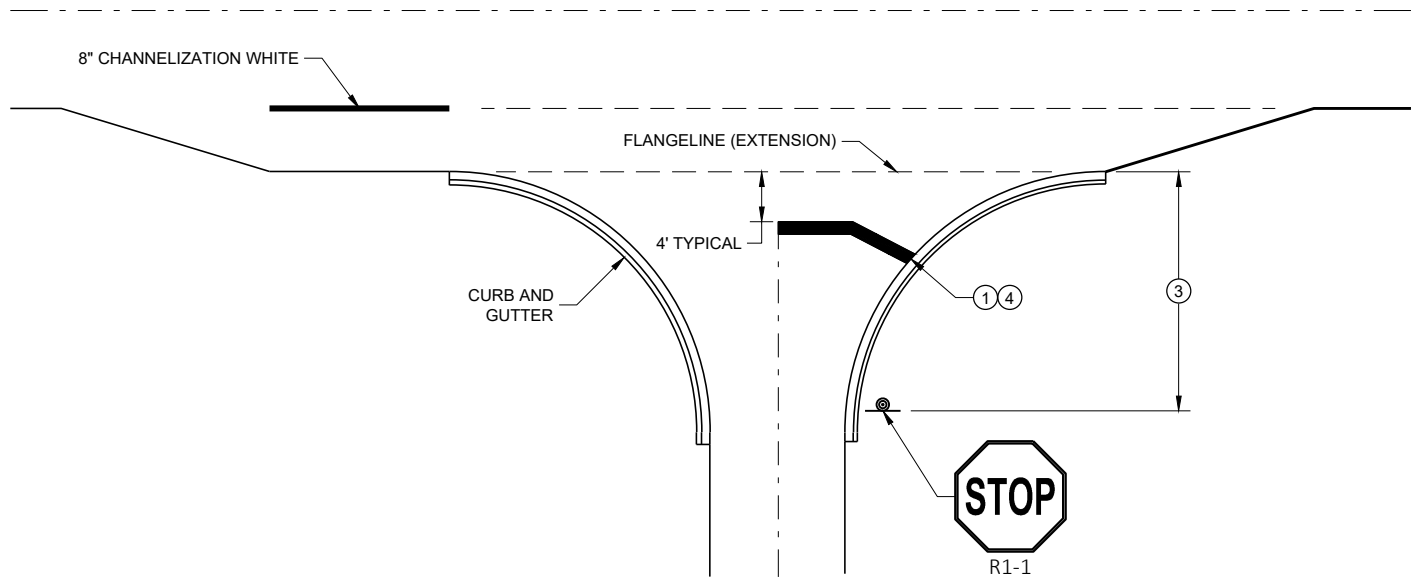
MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

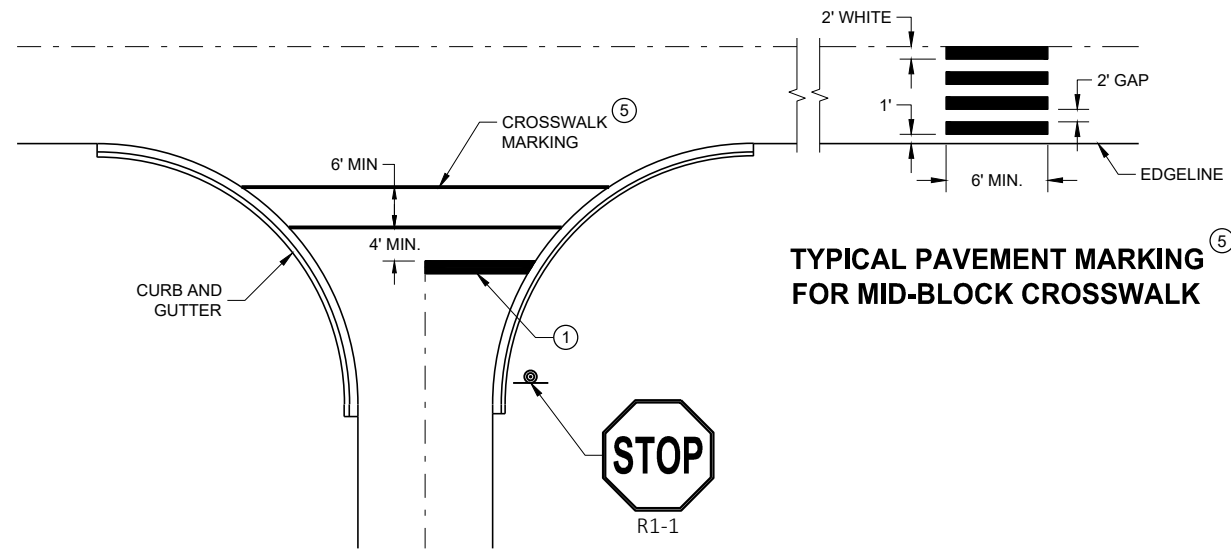
APPROVED
November 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



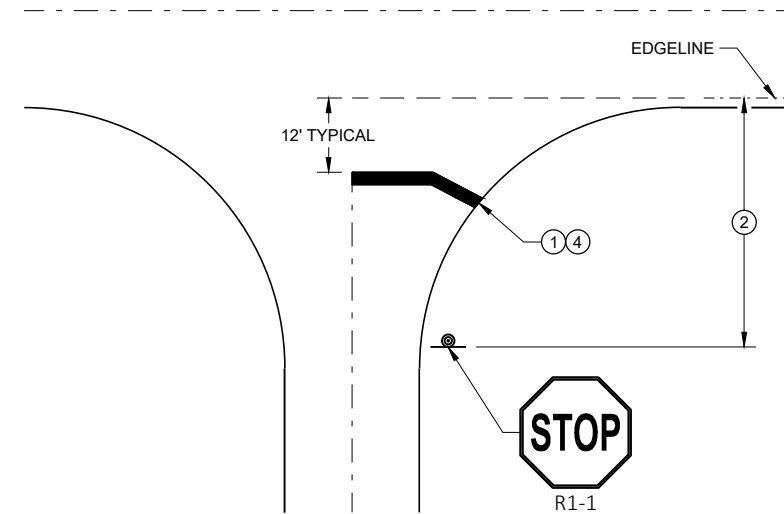
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



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

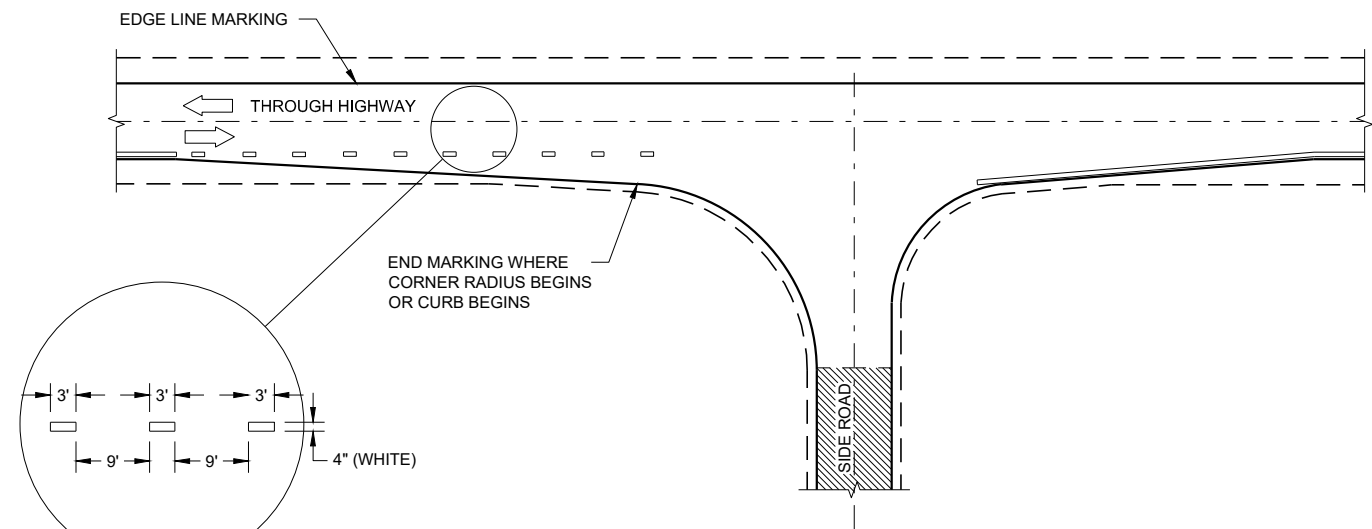
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 1 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- 2 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE.
- 3 NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
- 4 MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- 5 LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.

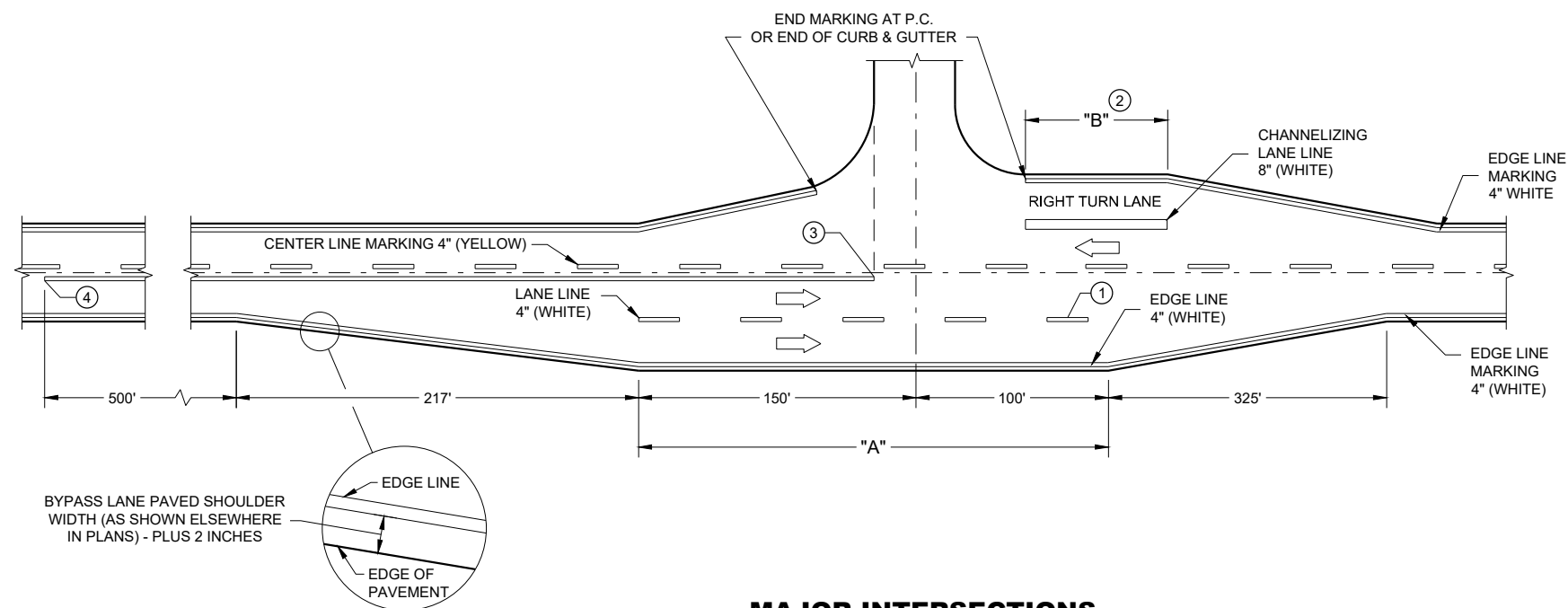
STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA



MINOR INTERSECTION



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

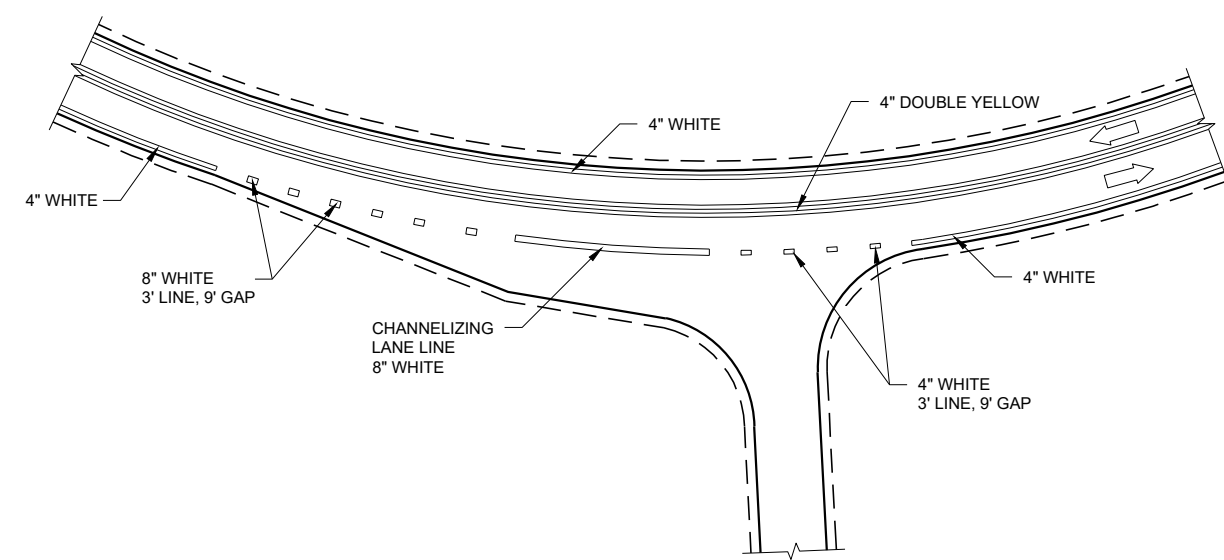
GENERAL NOTES

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.

LEGEND

➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

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 TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

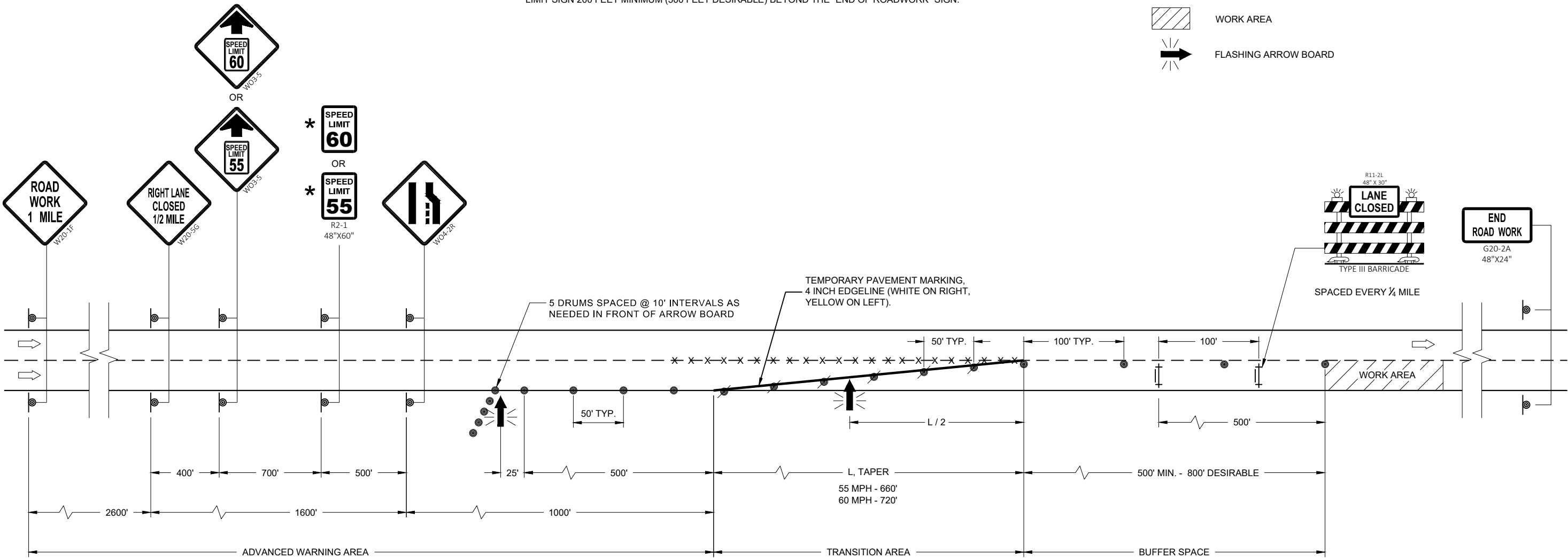
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

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

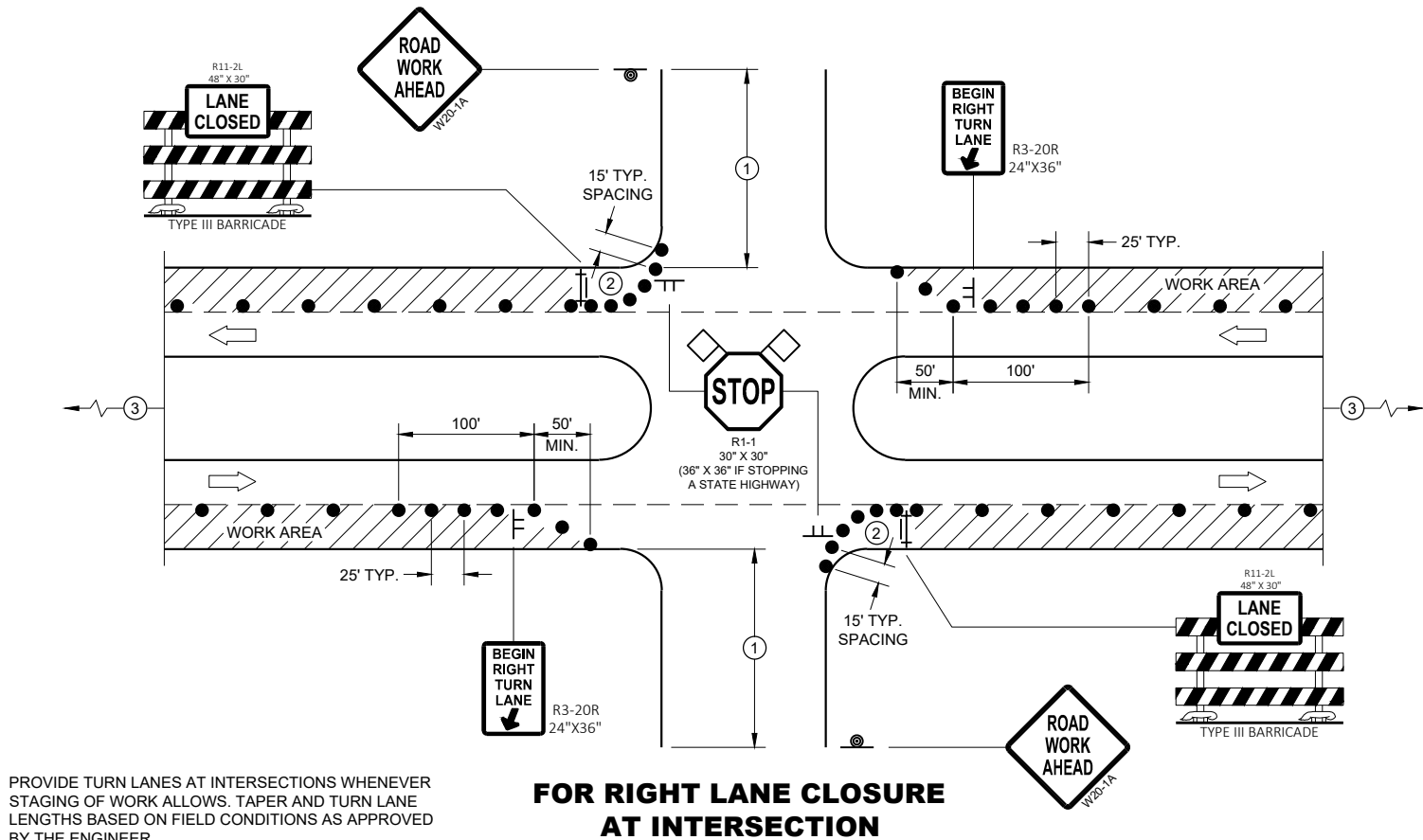


TRAFFIC CONTROL,
LANE CLOSURE,
SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

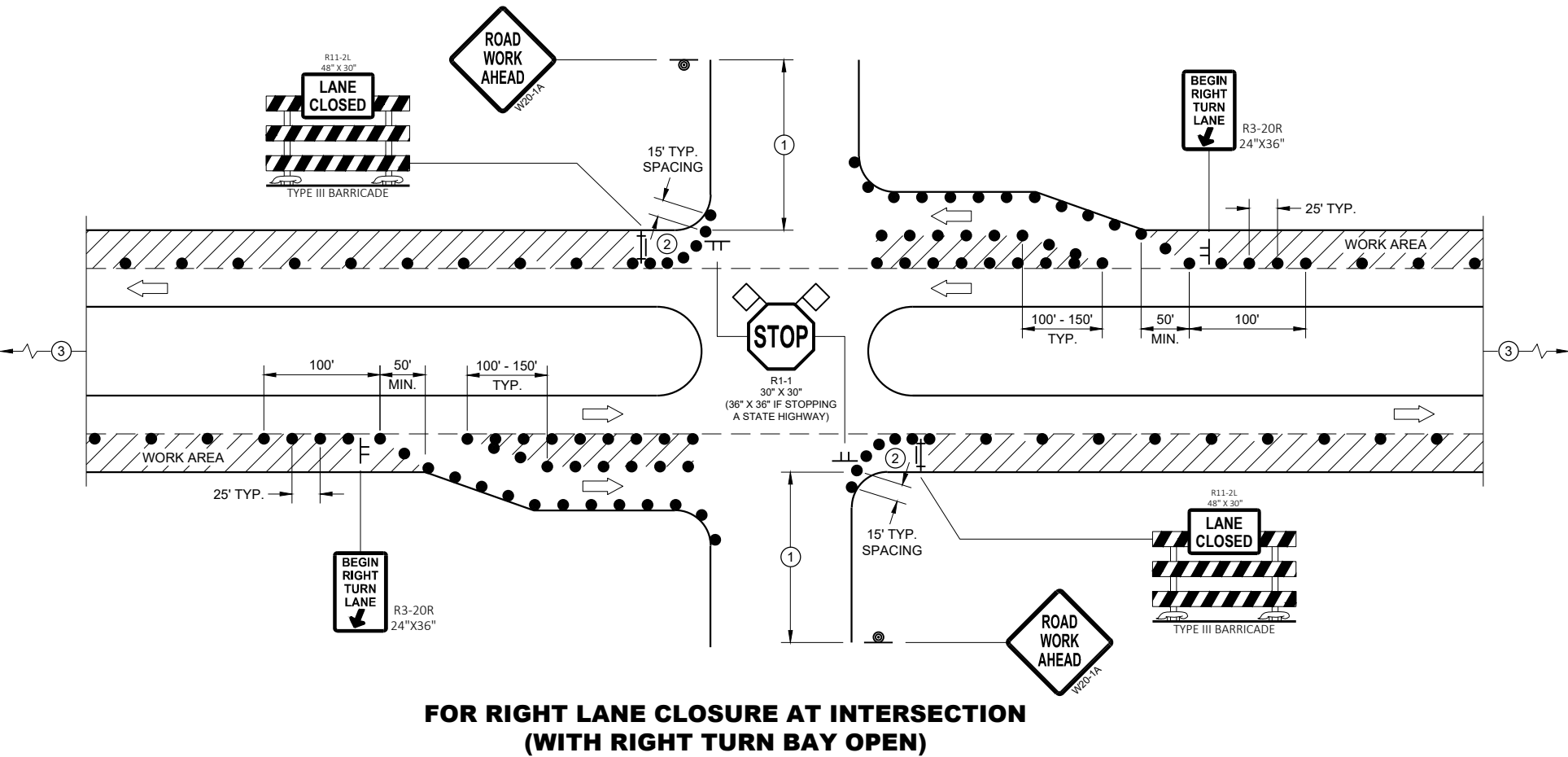
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

- 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.

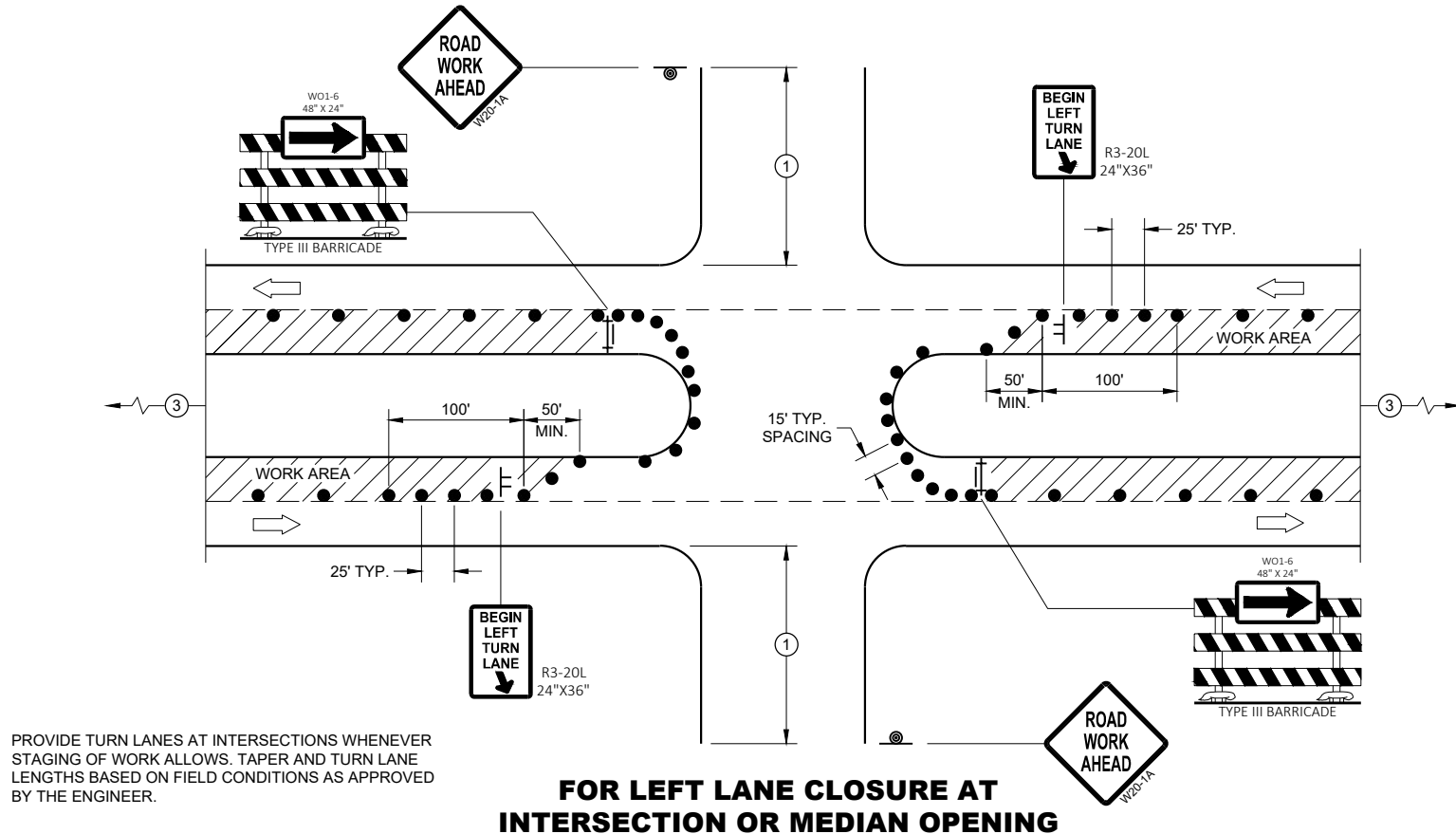
LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

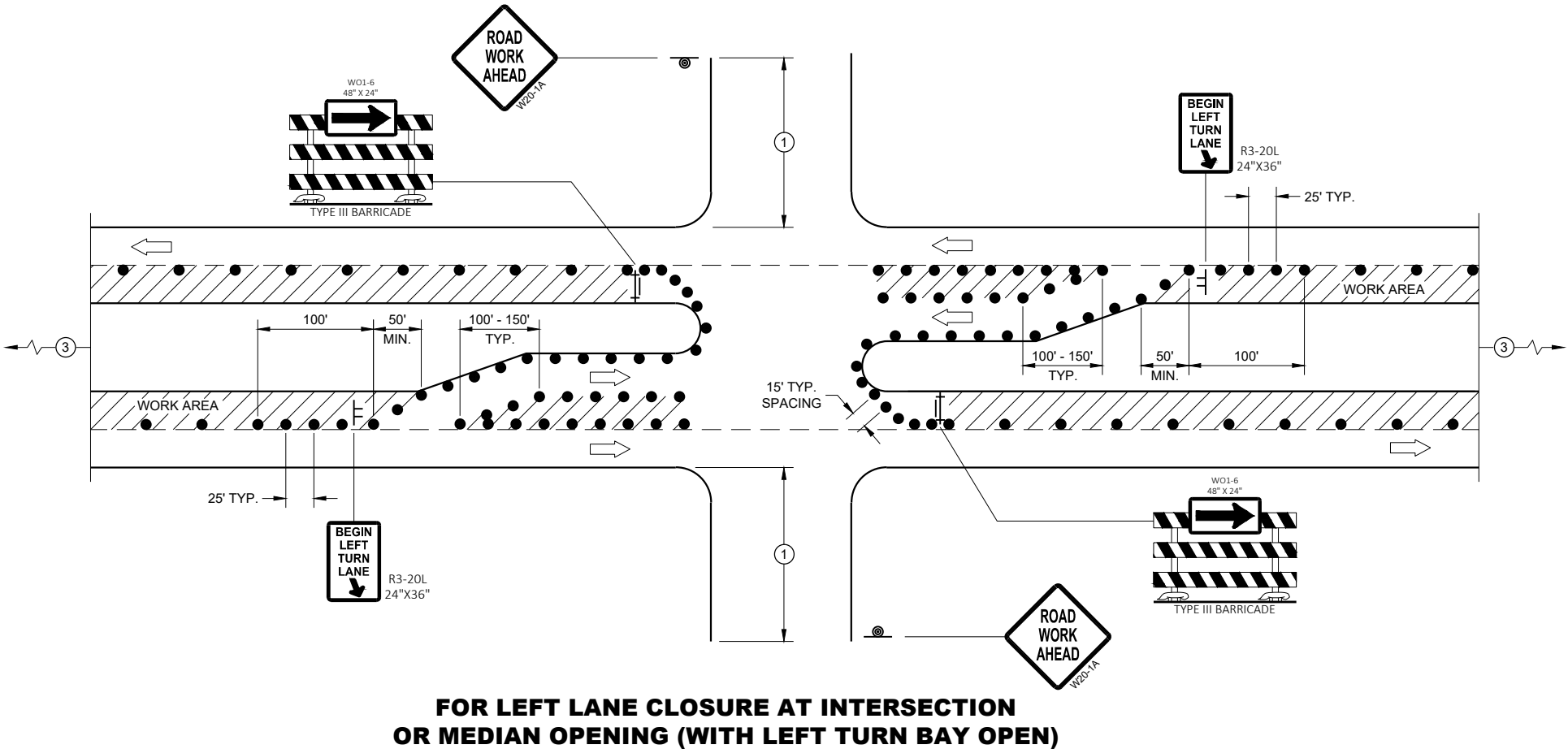
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

- 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.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- ◇ FLAGS, 16" X 16" MIN., ORANGE
- ▨ WORK AREA



TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

LEGEND





-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

TABLE A

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

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

TAPER LENGTH

L= WS AT 45 MPH OR GREATER
L = WS² / 60 AT 40 MPH OR LESS

SHOULDER TAPER LENGTH = 1/3L

GENERAL NOTES

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 THE REGIONAL TRAFFIC UNIT.

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

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

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

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

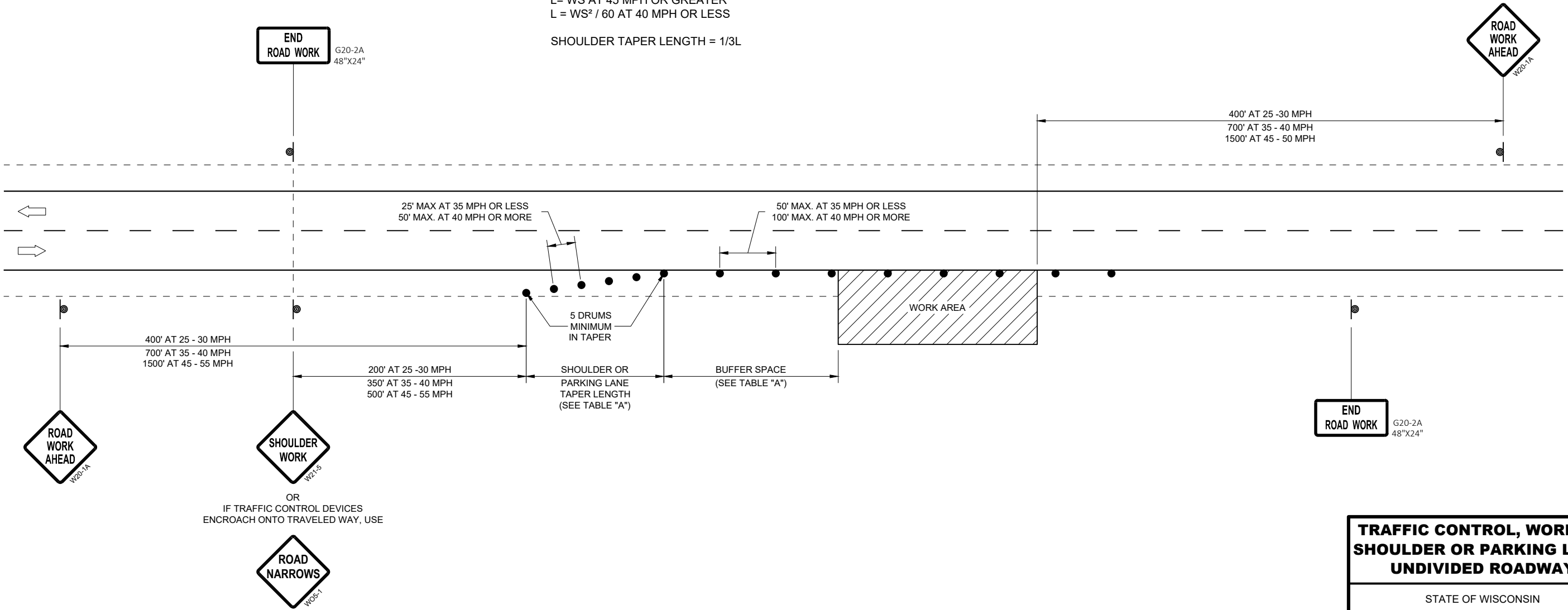
W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY RESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6

SDD 15D28 - 03

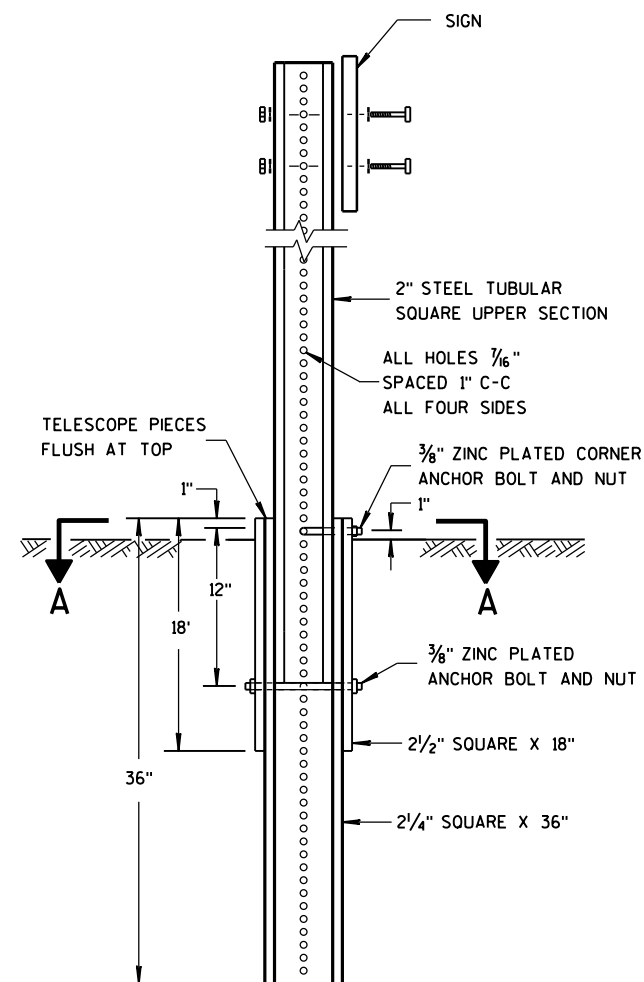
SDD 15D28 - 03



TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE /S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER
FHWA

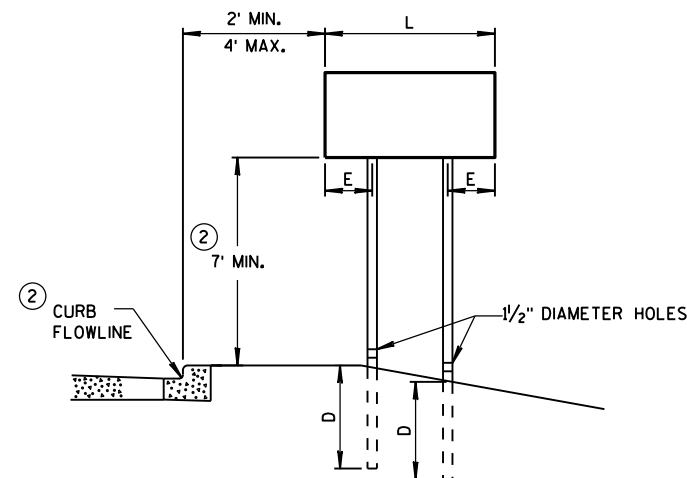
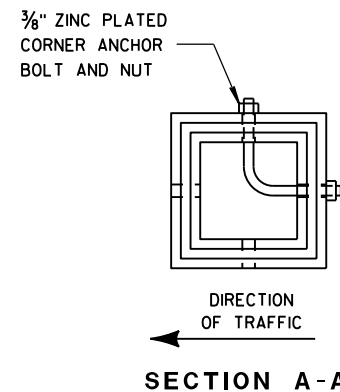


DETAIL OF TUBULAR STEEL SIGN POST

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.

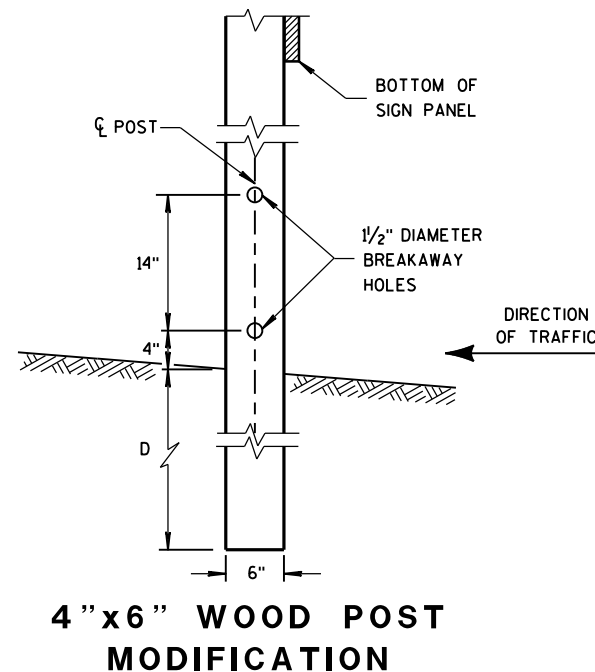


URBAN AREA

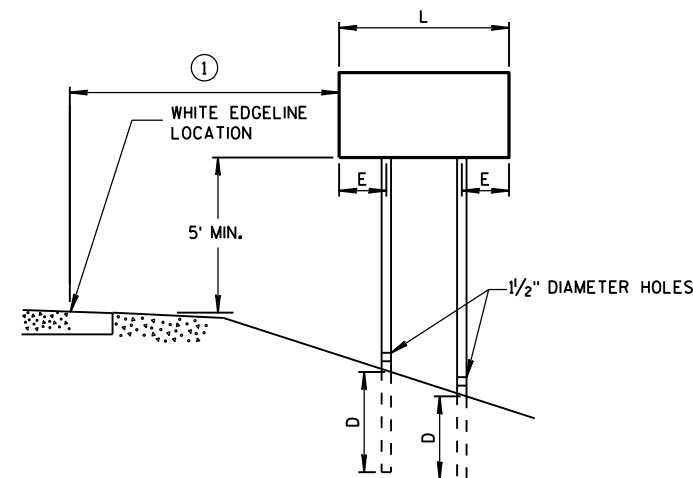
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST EMBEDMENT DEPTH

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



4"x6" WOOD POST MODIFICATION



RURAL AREA

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

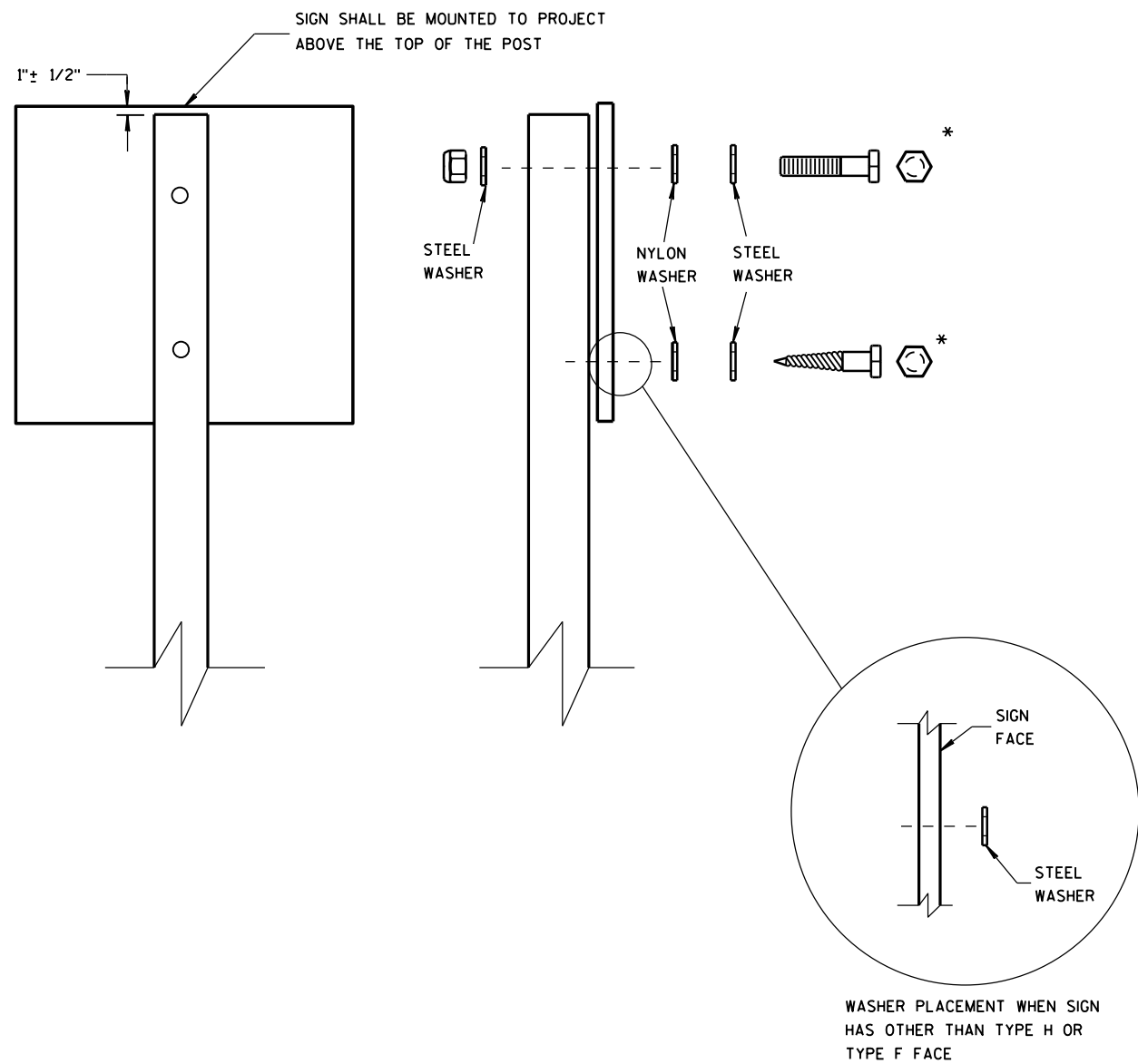
SEE NOTE ③

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.

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.

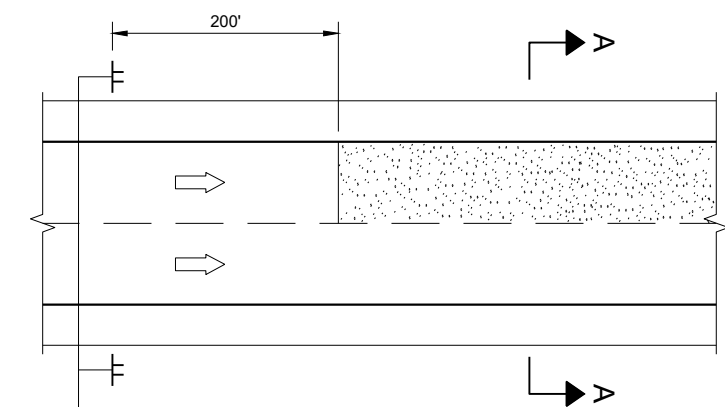
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

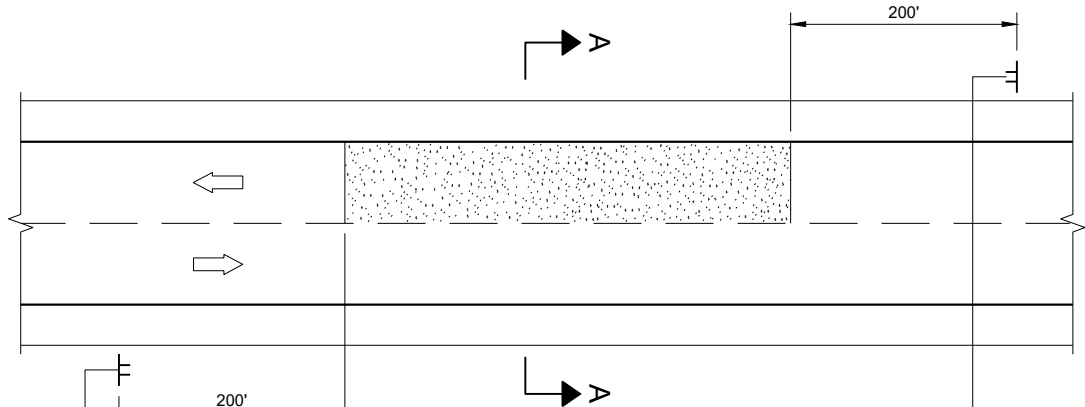
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
 - 1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

* 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.

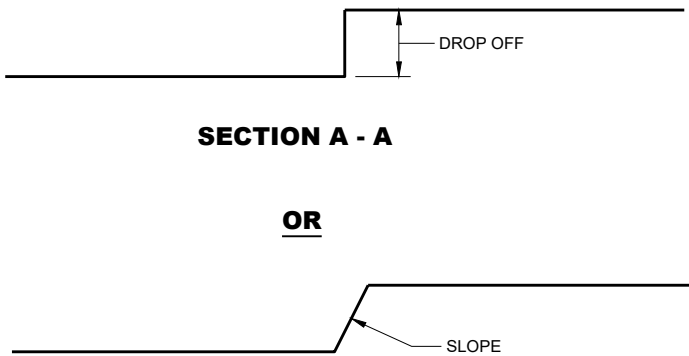
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



MULTI-LANE



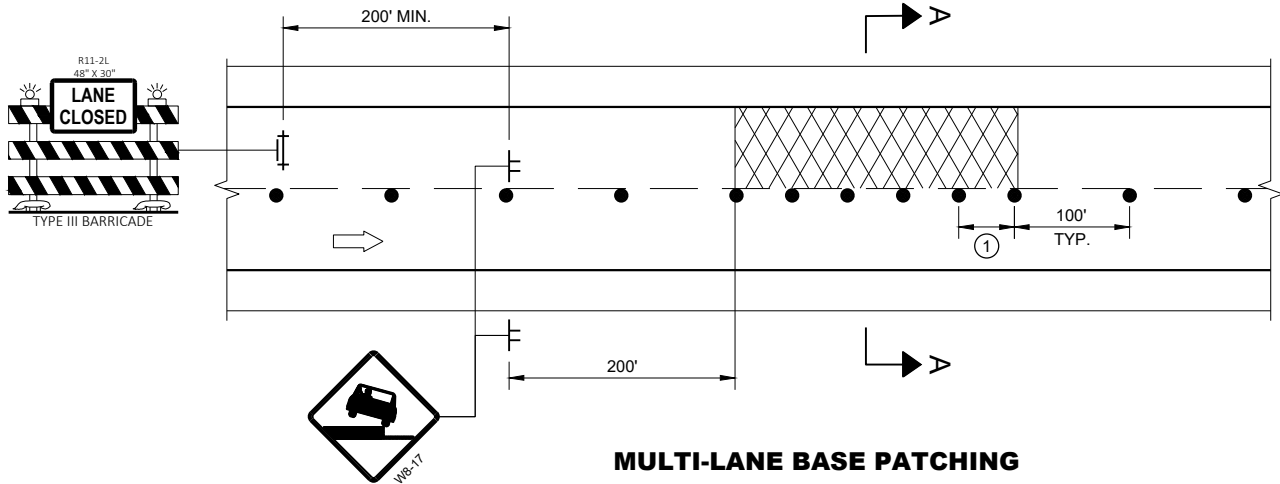
TWO-WAY TWO LANE



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.

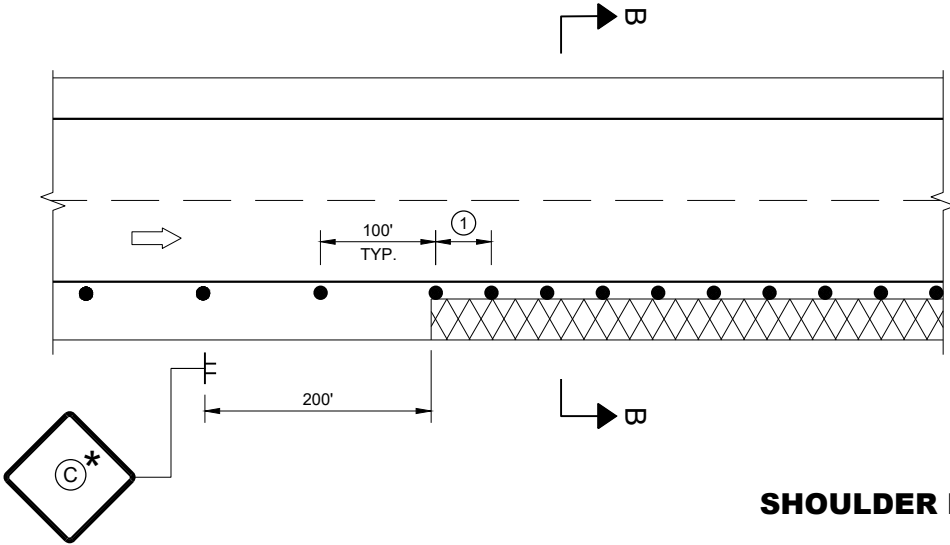
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

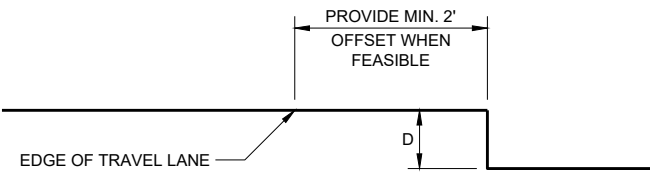
① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	 WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	 W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL,
DROP-OFF SIGNING

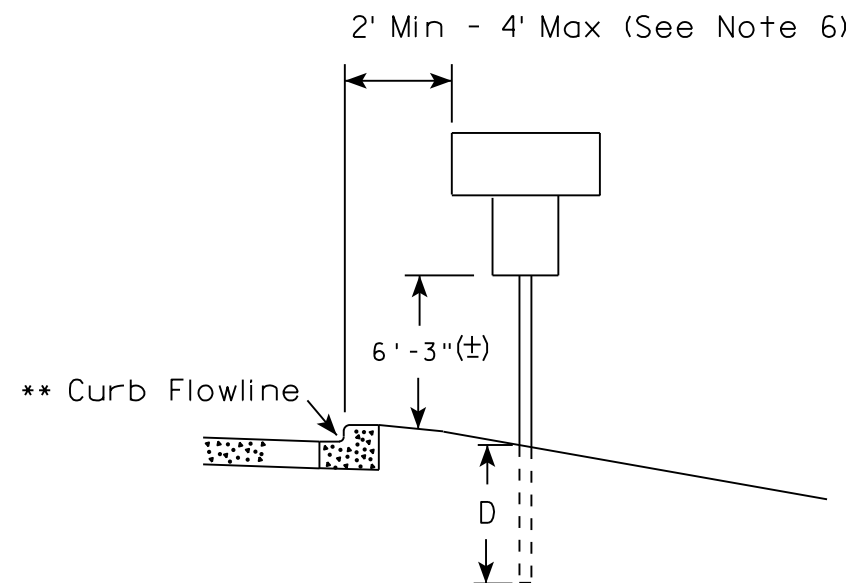
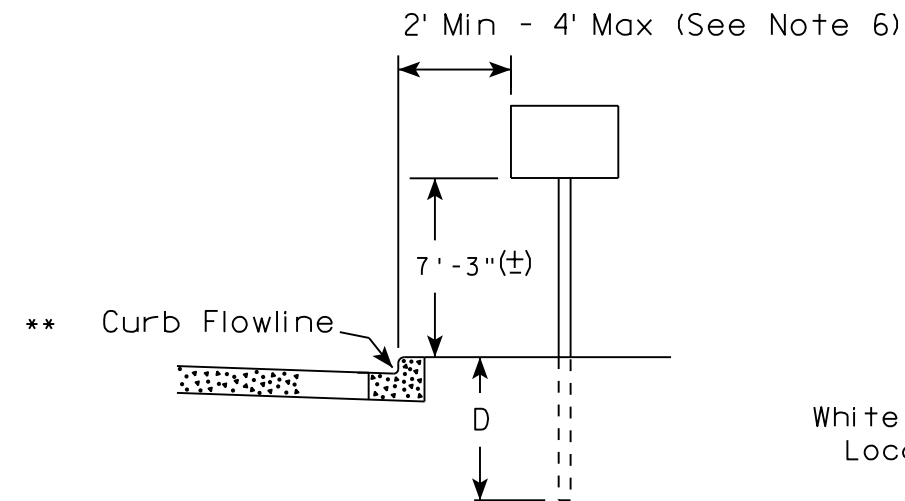
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

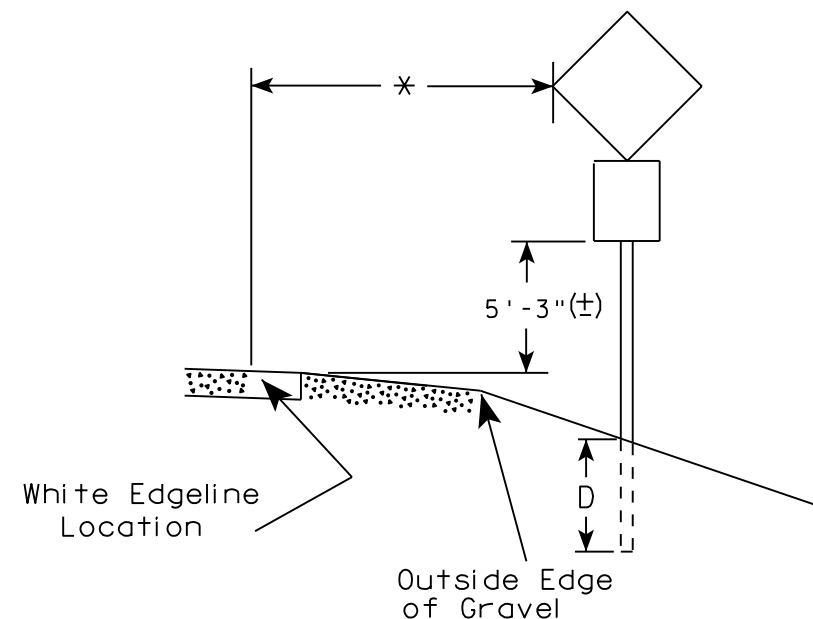
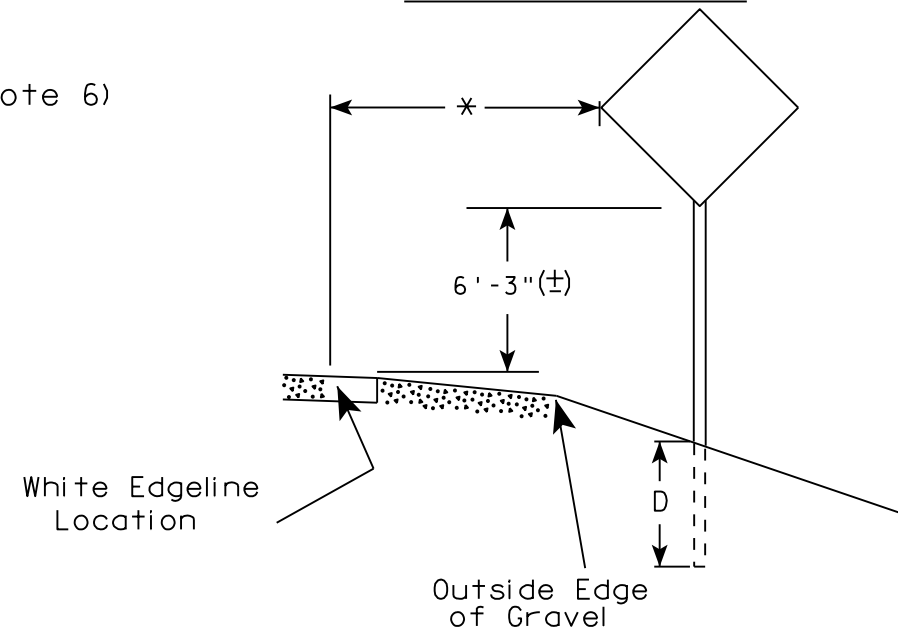
FHWA

URBAN AREA



✱✱ 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.

RURAL AREA (See Note 2)



* 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.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

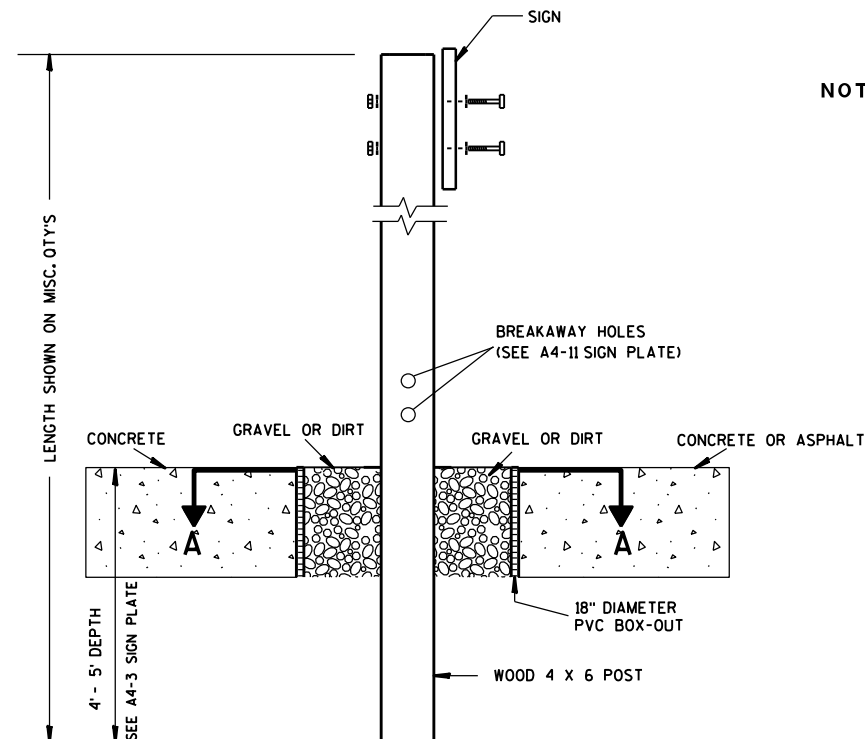
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies 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" (±).

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

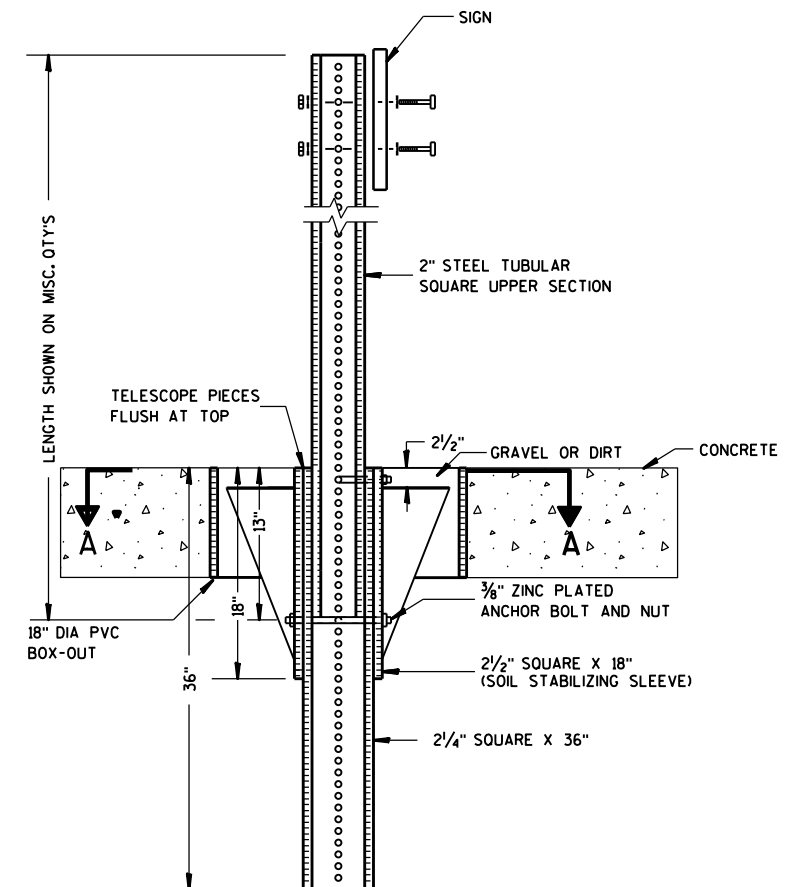
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

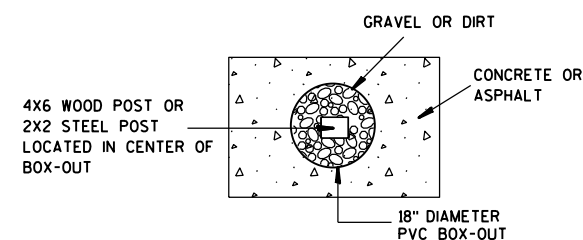
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

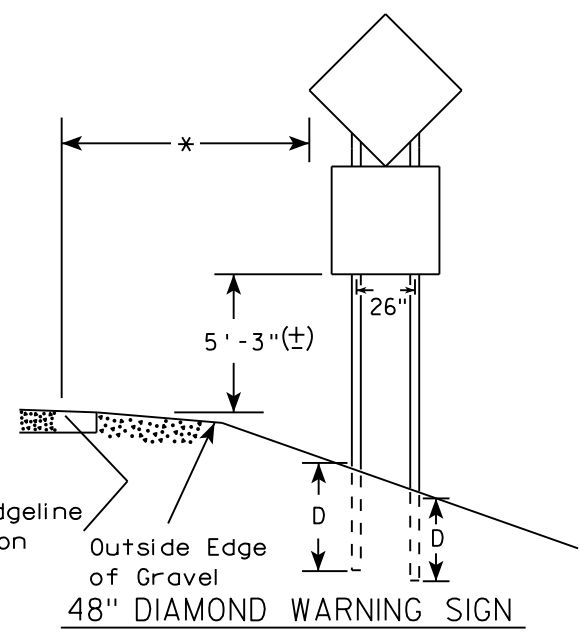
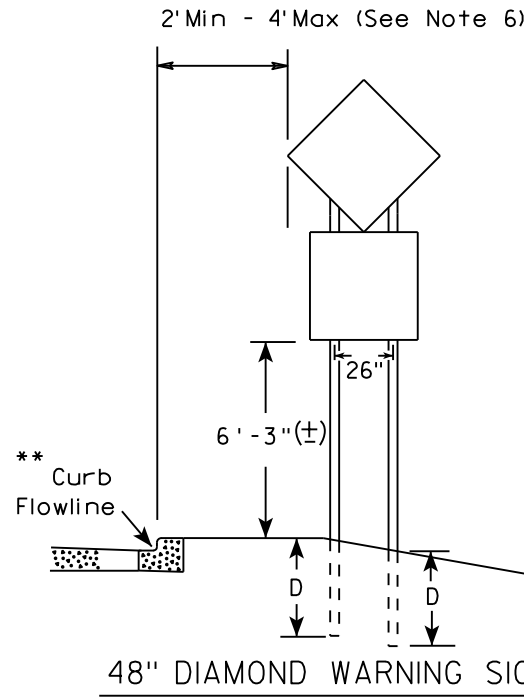
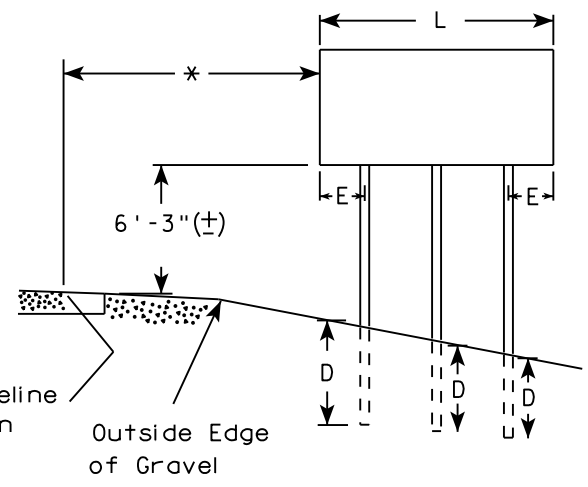
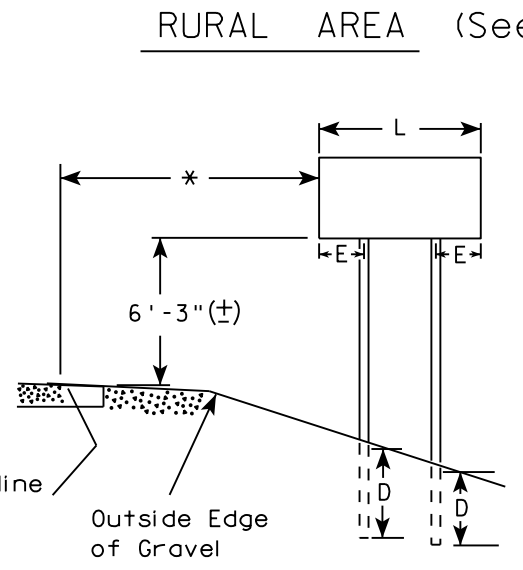
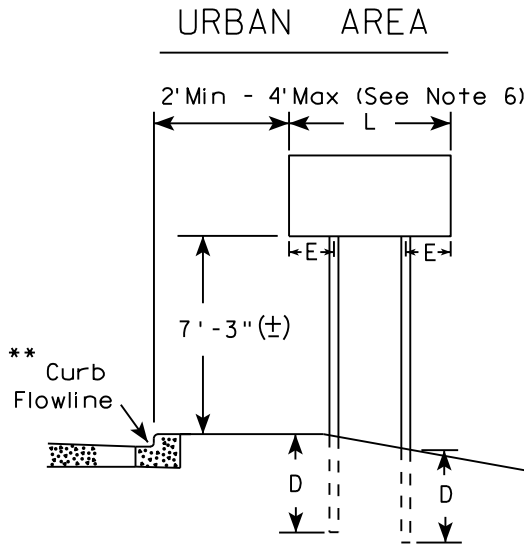
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- 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" (±).

* 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

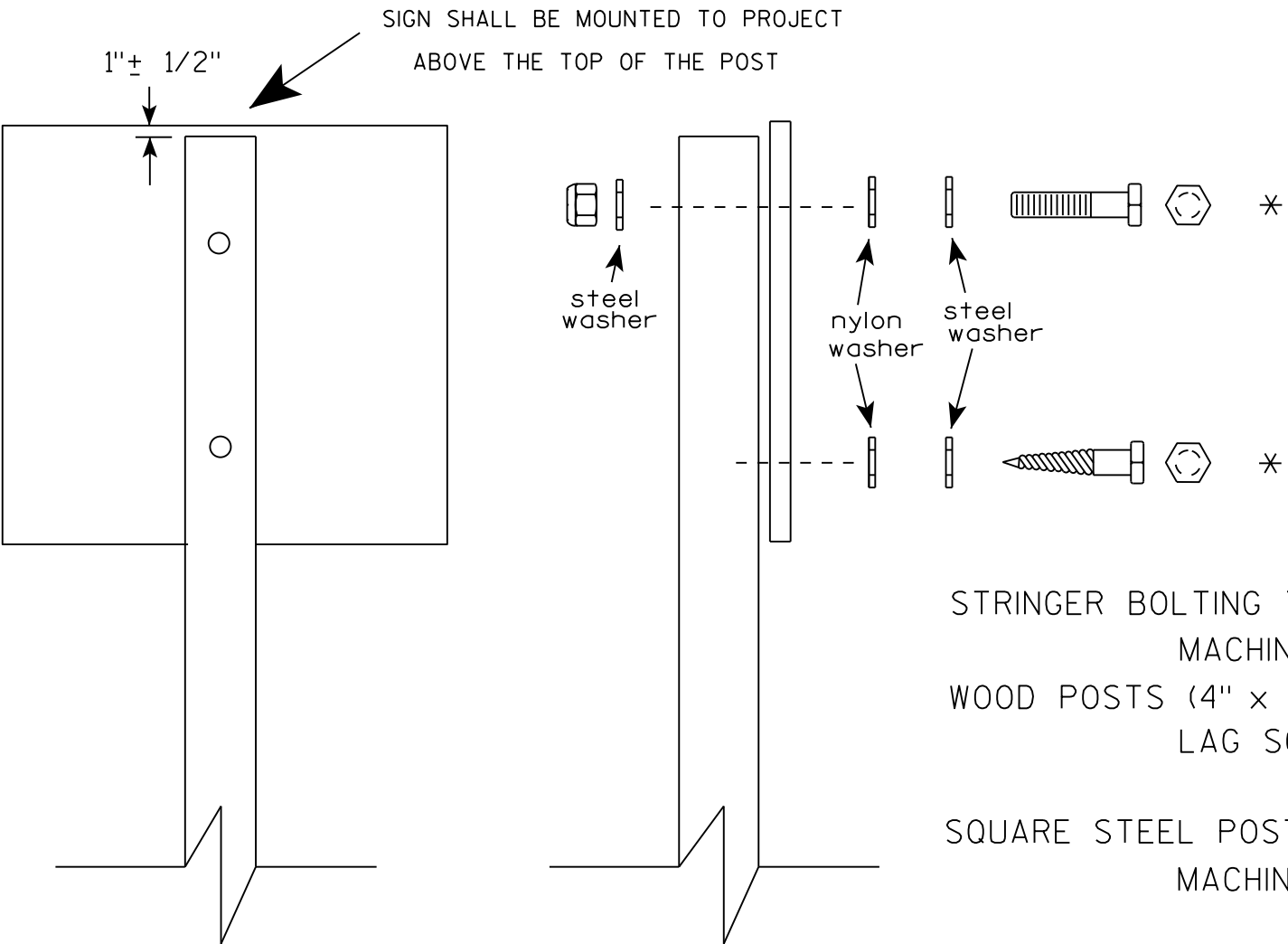
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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



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.

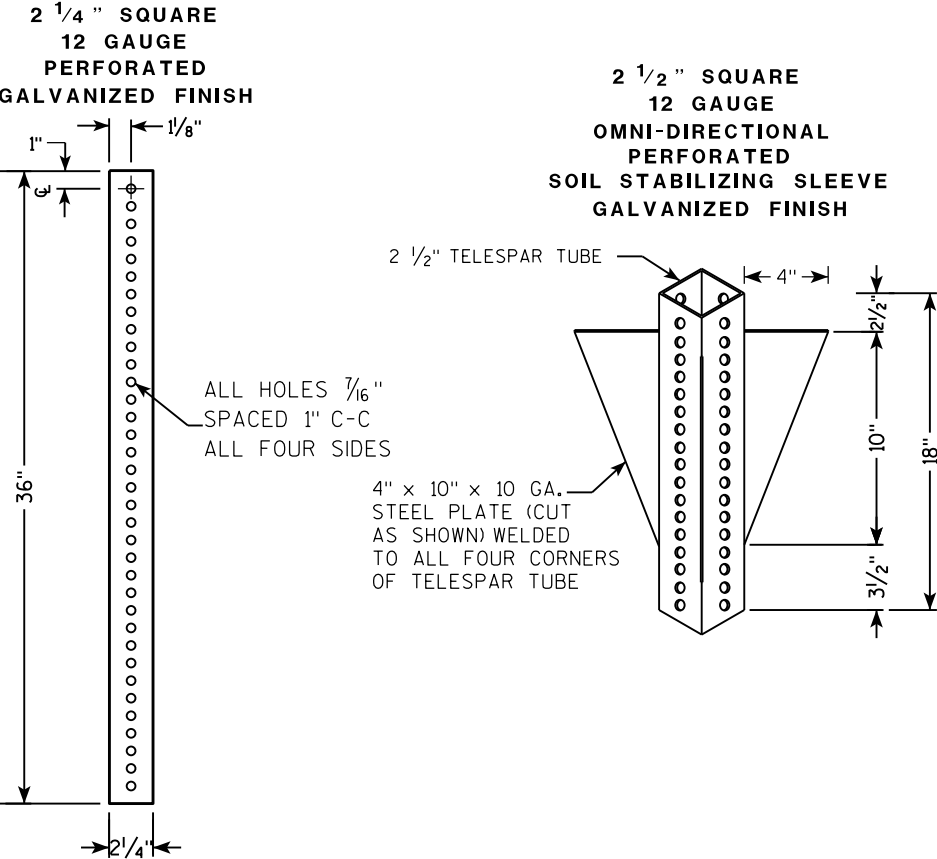
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

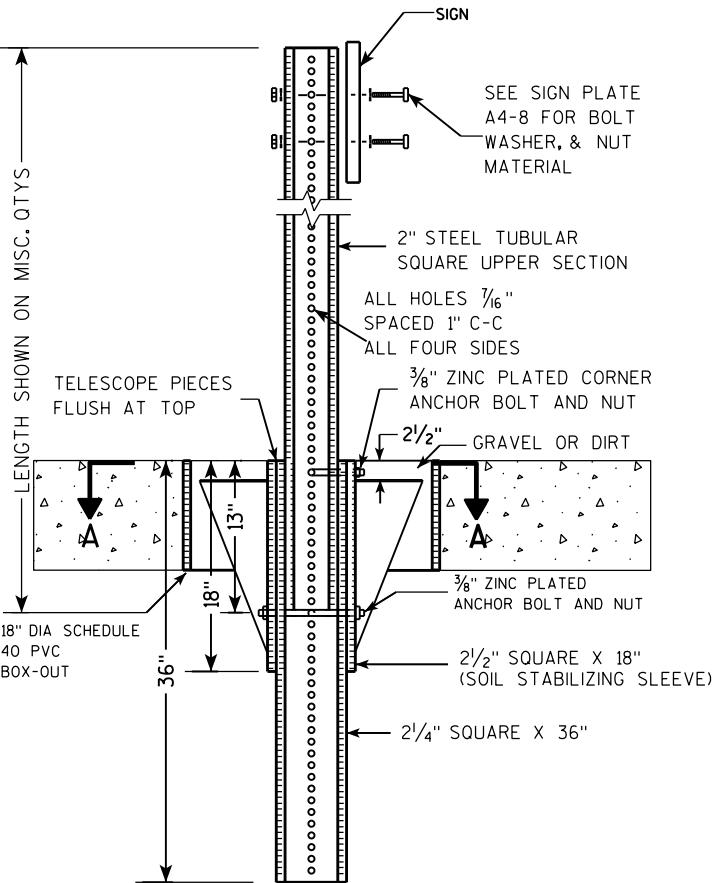
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

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

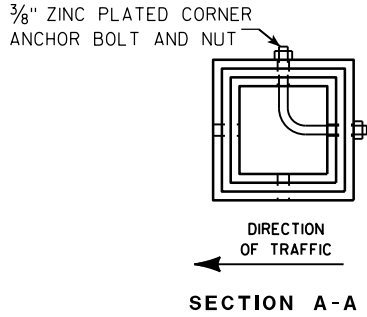
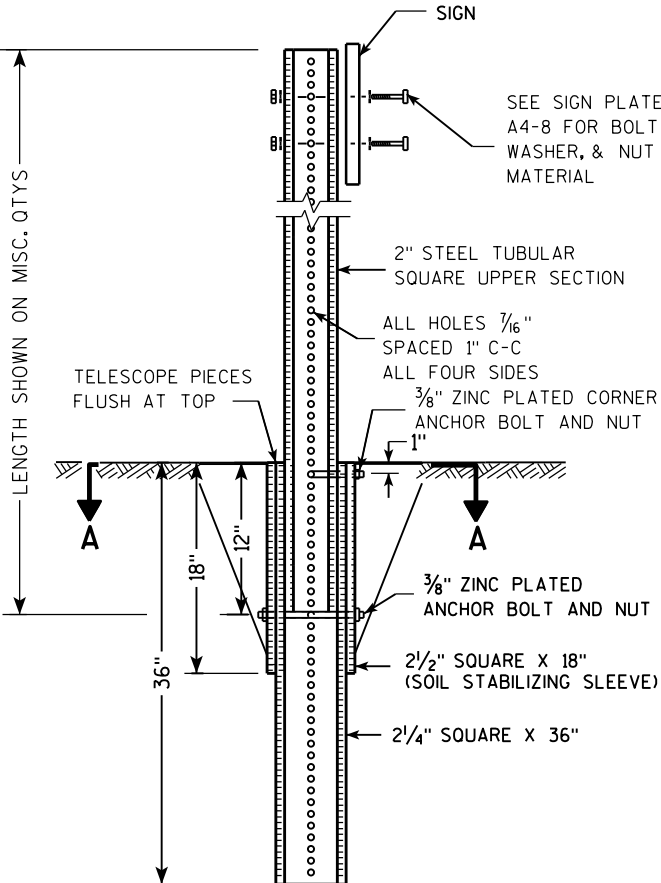
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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).

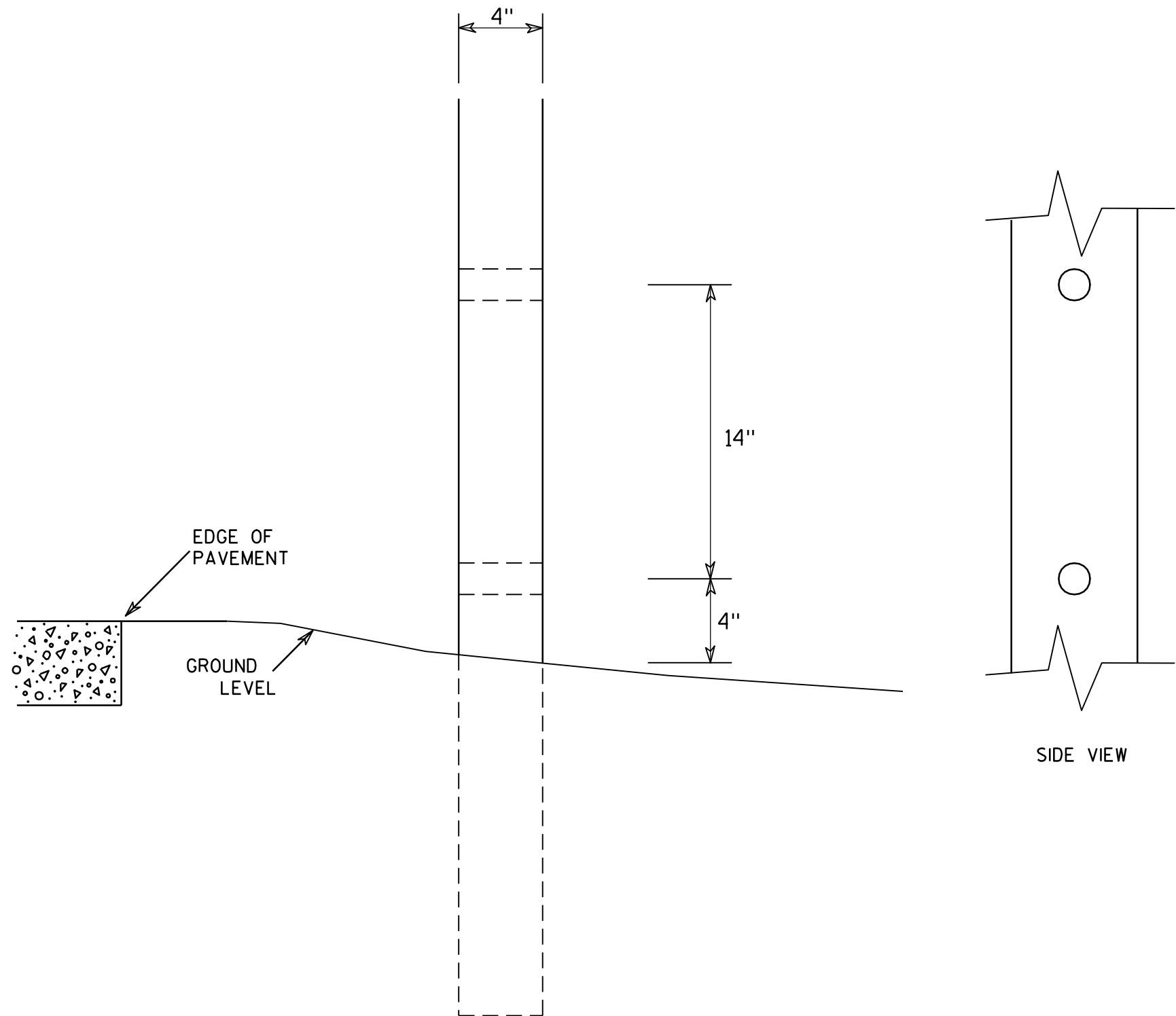
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

7



GENERAL NOTES

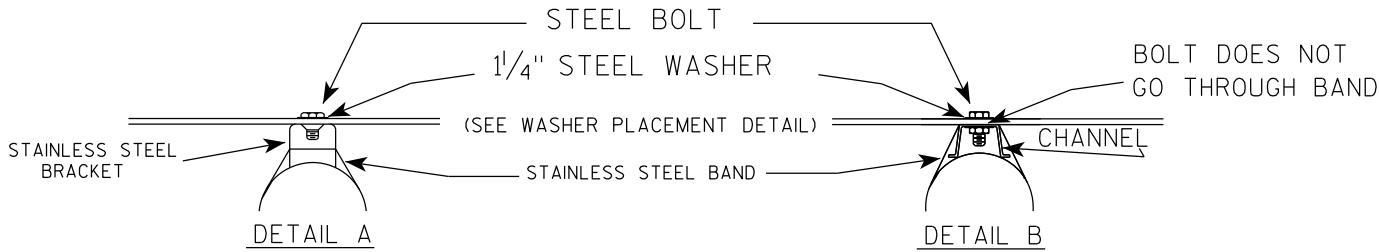
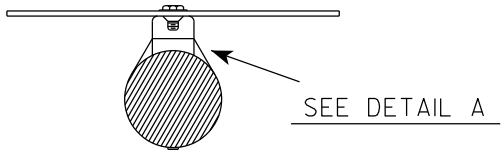
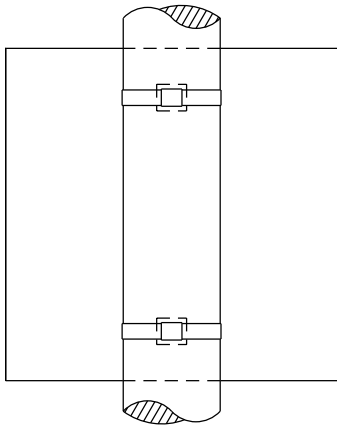
1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

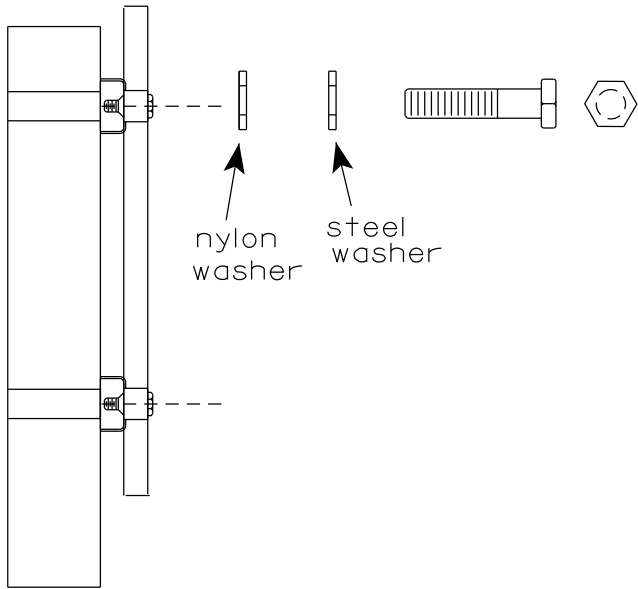
4 X 6 WOOD POST MODIFICATIONS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chester J. Spang</i> for State Traffic Engineer
DATE 3/27/97	PLATE NO. A4-11.2

BANDING

SINGLE SIGN



WASHER PLACEMENT

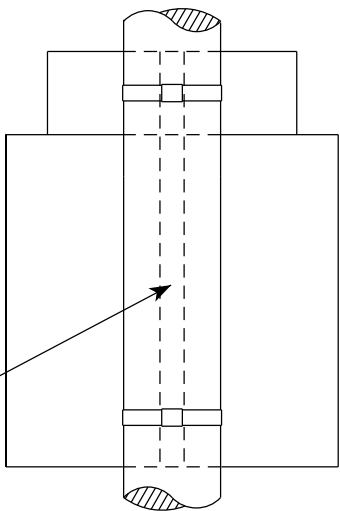


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

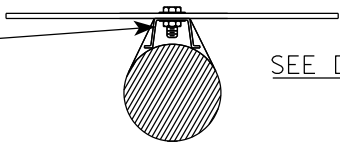
GENERAL NOTES

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

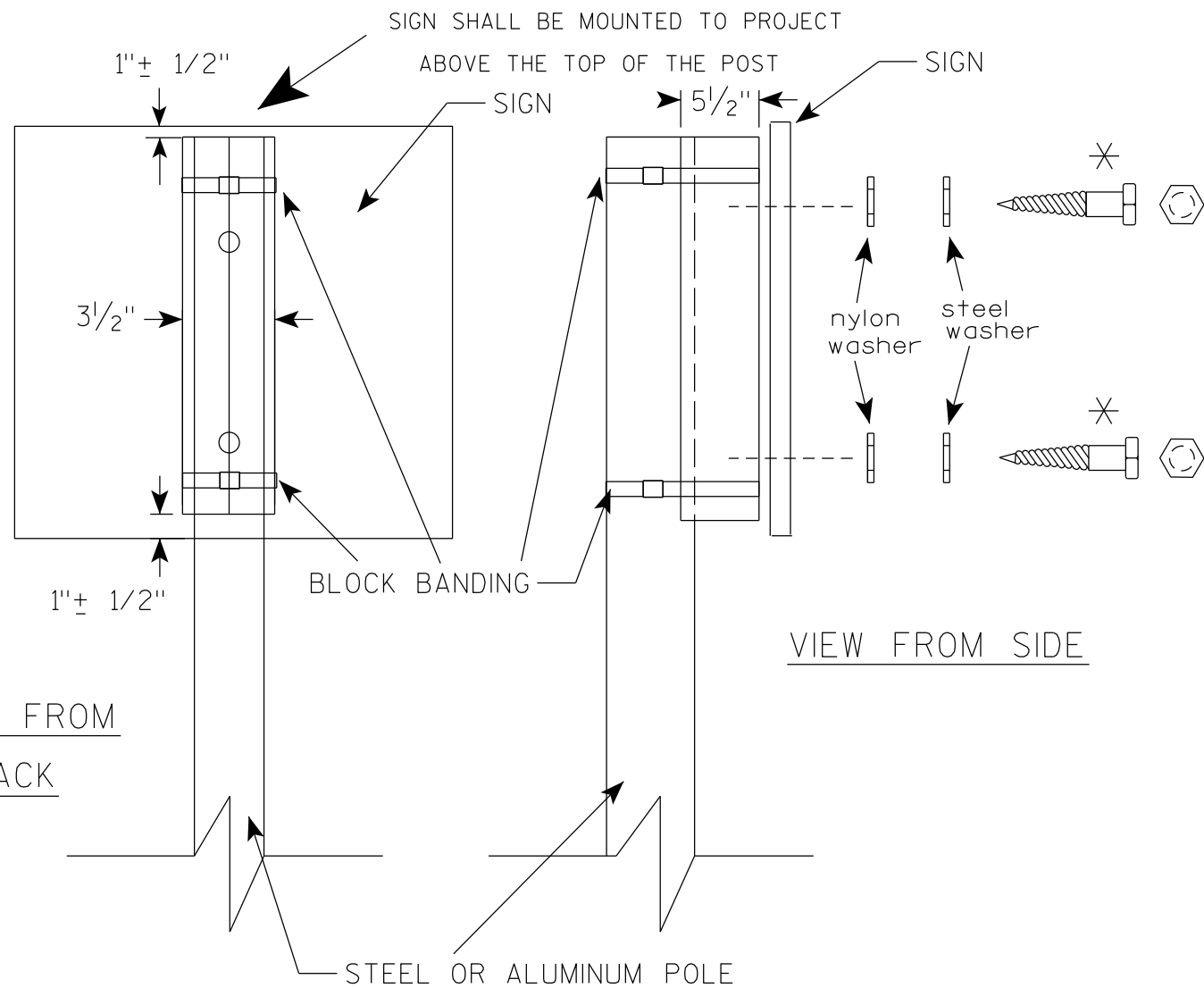


STANDARD SIGN
SIGN BANDING DETAILS

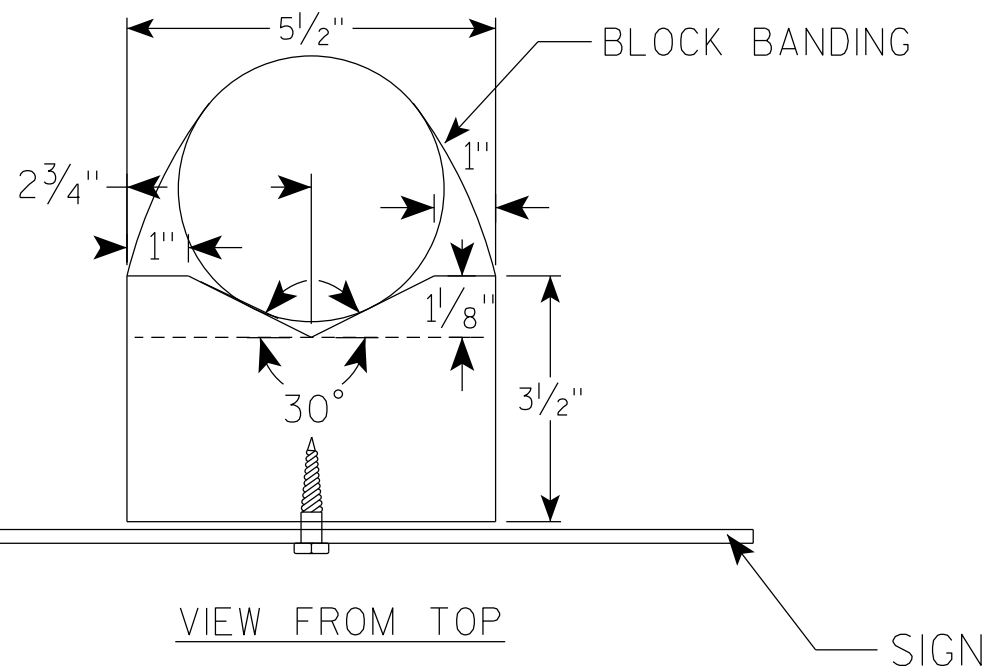
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM
BACK



VIEW FROM SIDE



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, $\frac{3}{4}$ " 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 $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

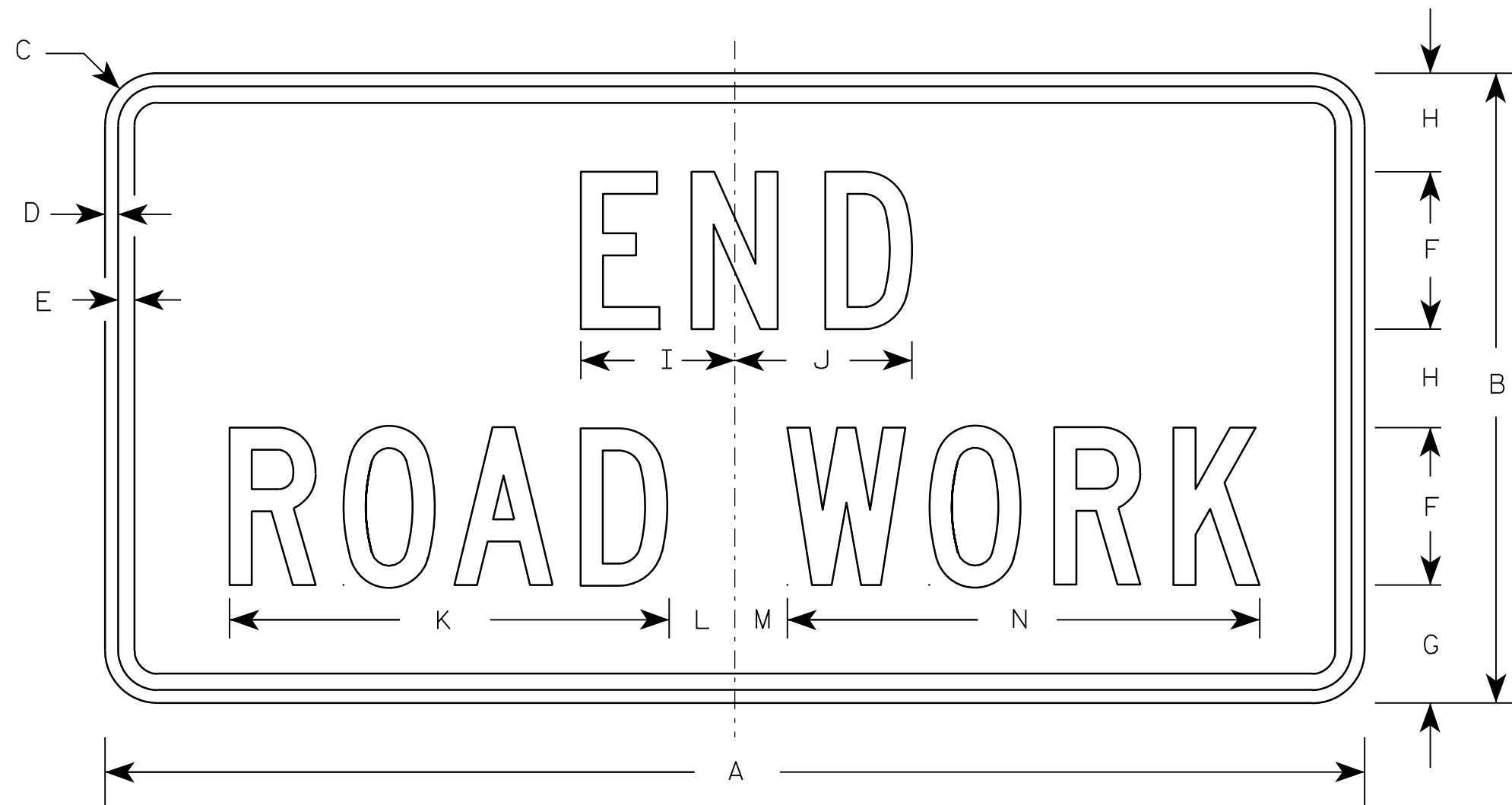
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO:

E

7



G20-2A

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.

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

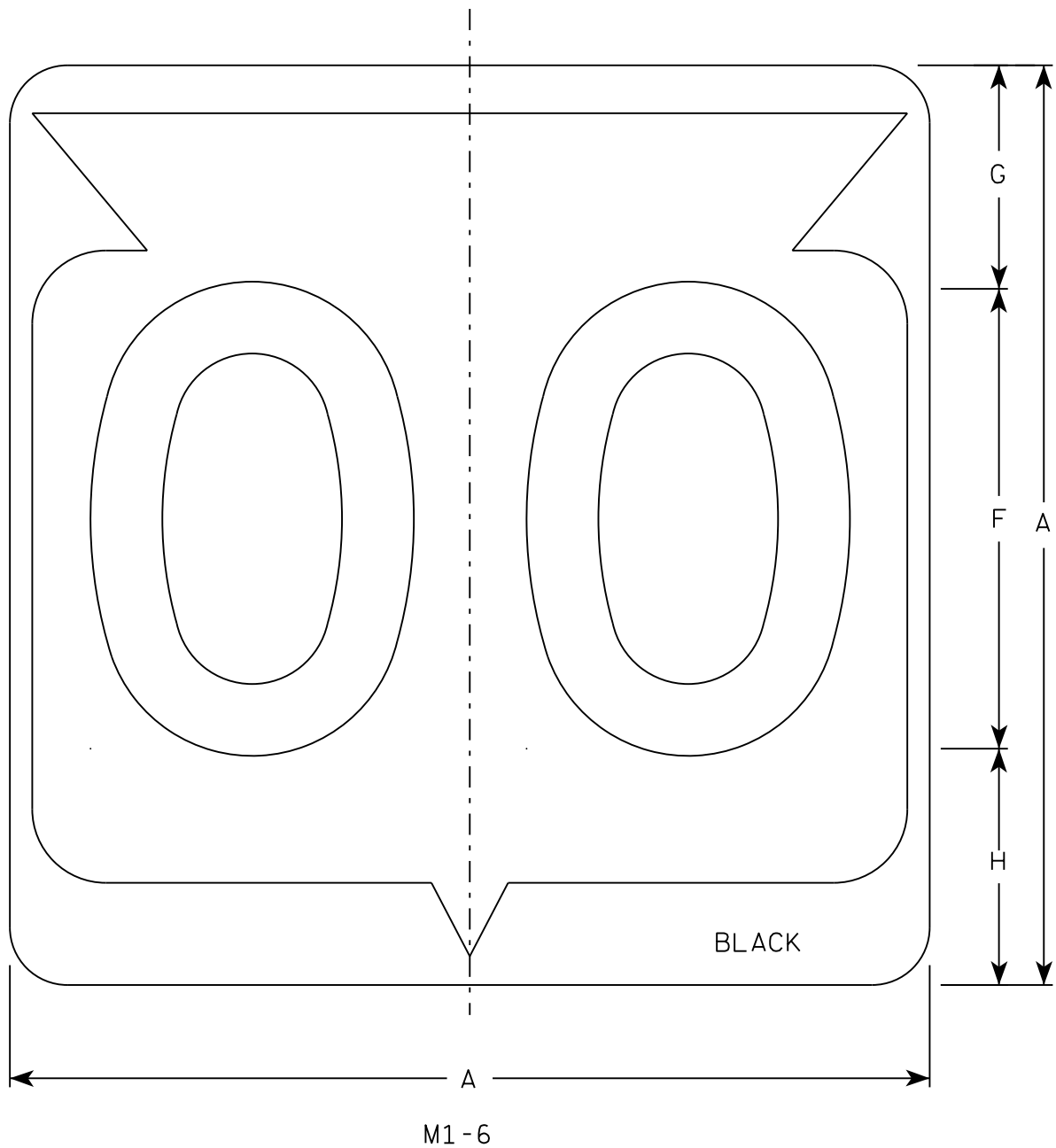
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

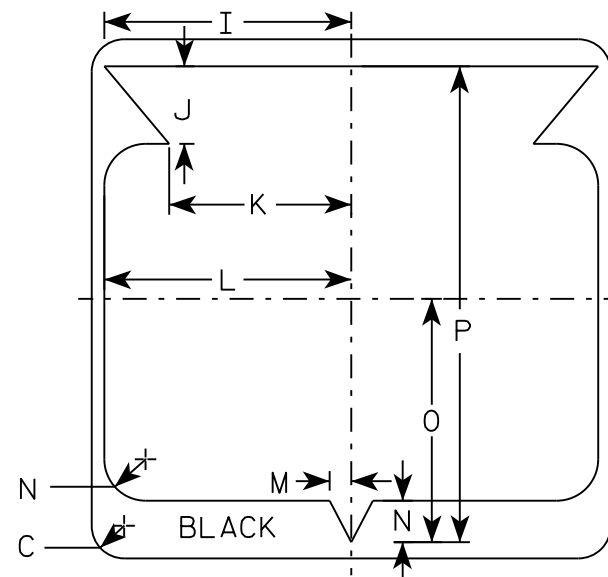
DATE 9/30/09 PLATE NO. G20-2A.8

7



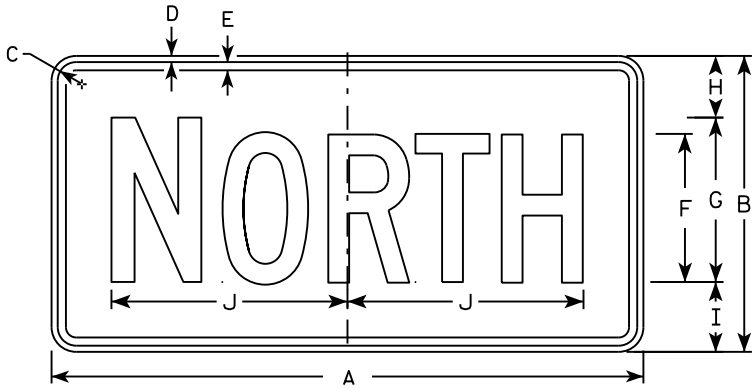
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D except 3 number signs 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.

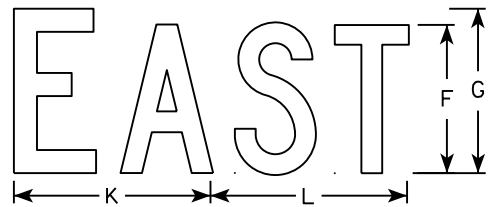


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

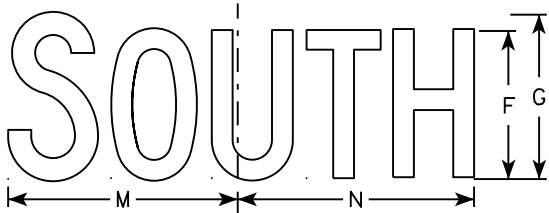
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/16/18	PLATE NO. M1-6.10



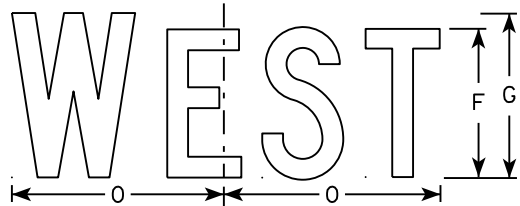
M3-1
MM3-1
MP3-1



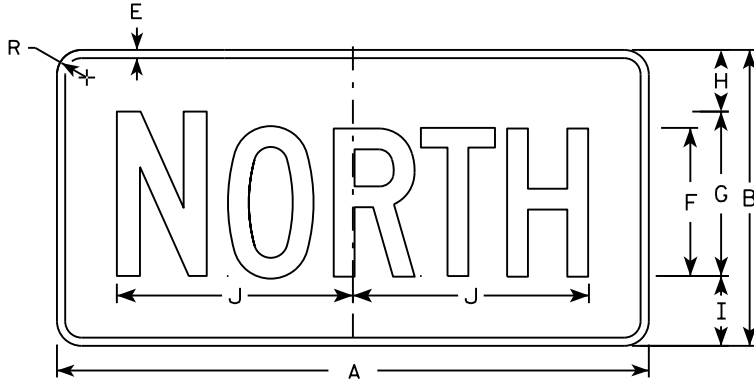
M3-2
MM3-2
MP3-2



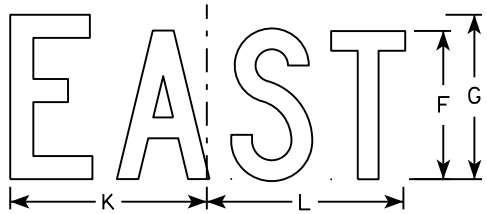
M3-3
MM3-3
MP3-3



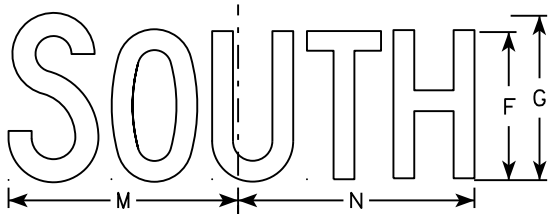
M3-4
MM3-4
MP3-4



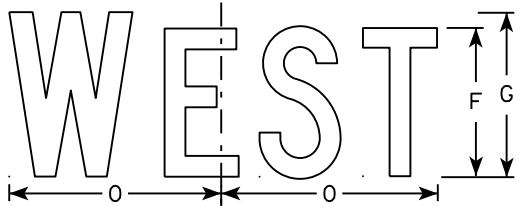
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
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. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

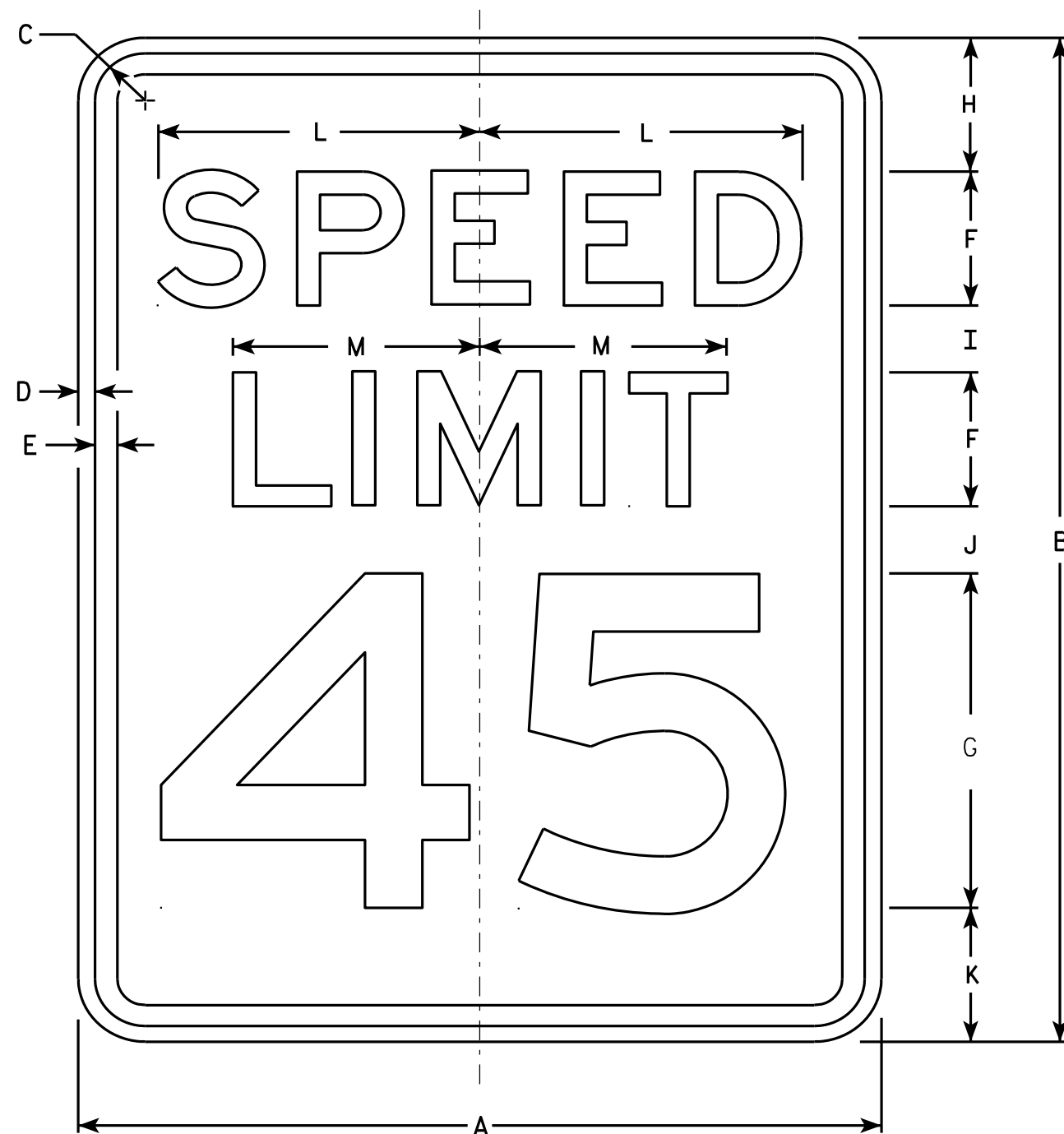
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M3-1.14



R2-1

NOTES

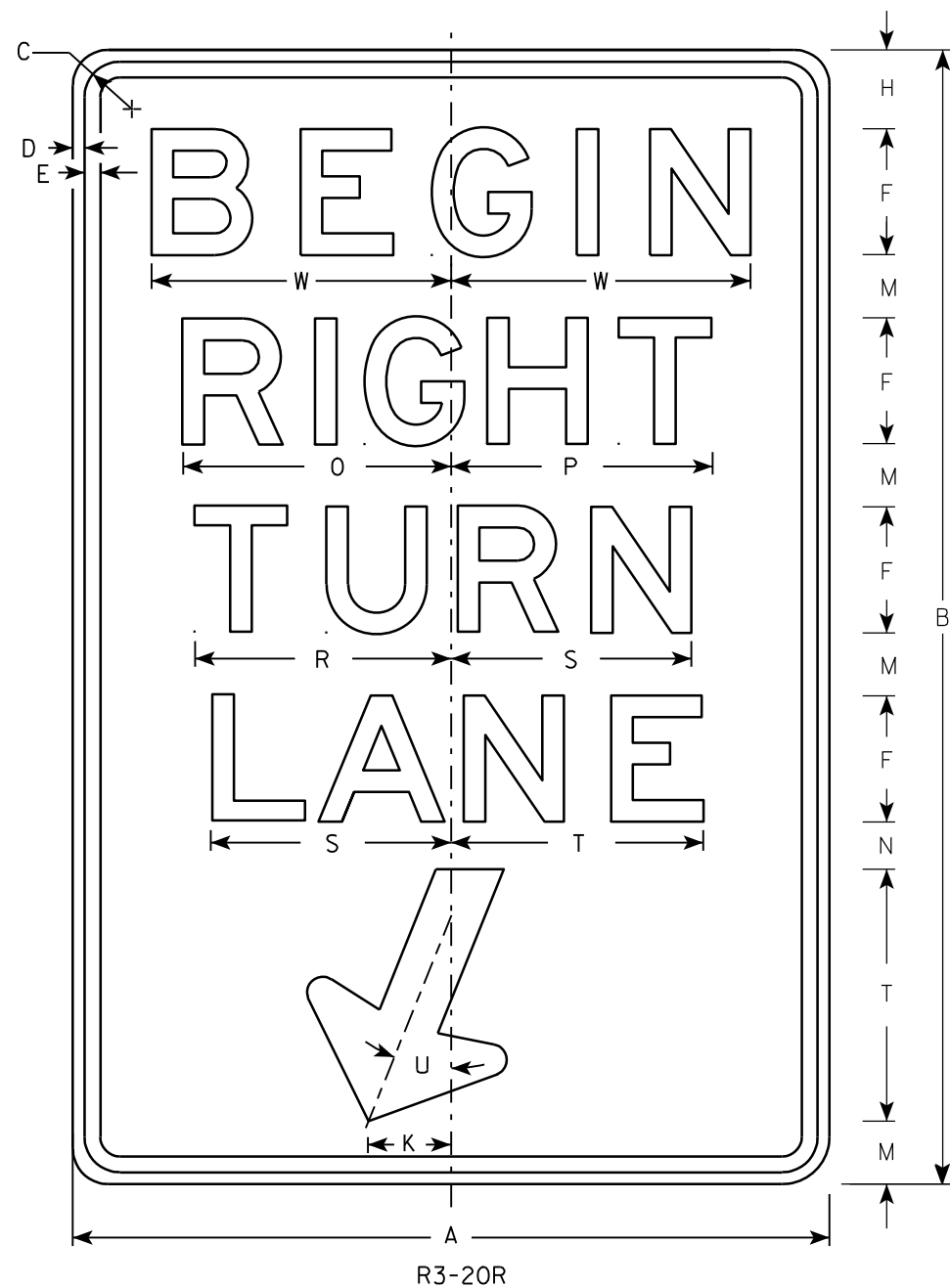
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

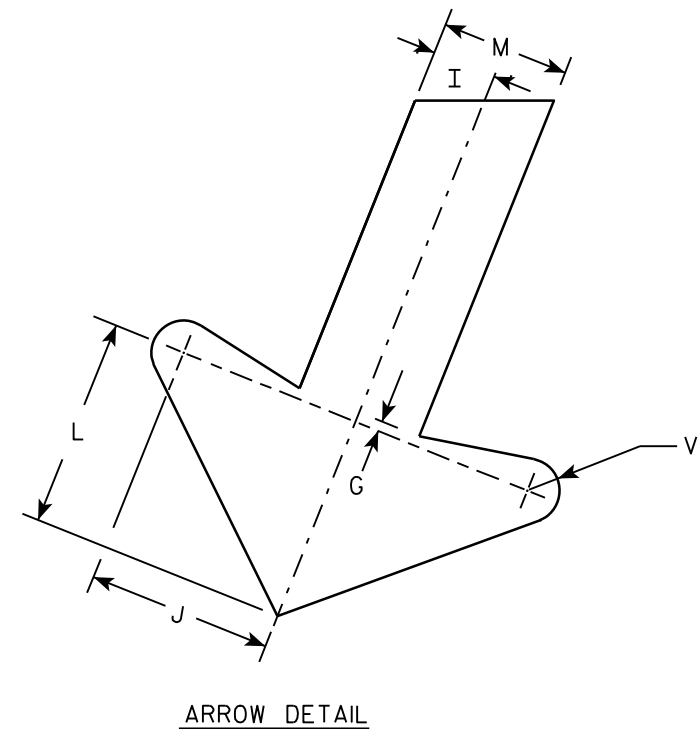
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E



- NOTES
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - White
Message - Black
 3. Message Series - E
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6



R8-8

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.

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	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 1/4	9 5/8	6 5/8	3 5/8	10														5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 1/4	9 5/8	6 5/8	3 5/8	10														5.0
3	36	48	1 3/8	1/2	5/8	6	6	4	13 7/8	14 3/8	9 7/8	5 3/8	15														12.0
4	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	18 1/2	19 1/4	13 1/4	7 1/4	20														20.0
5																											

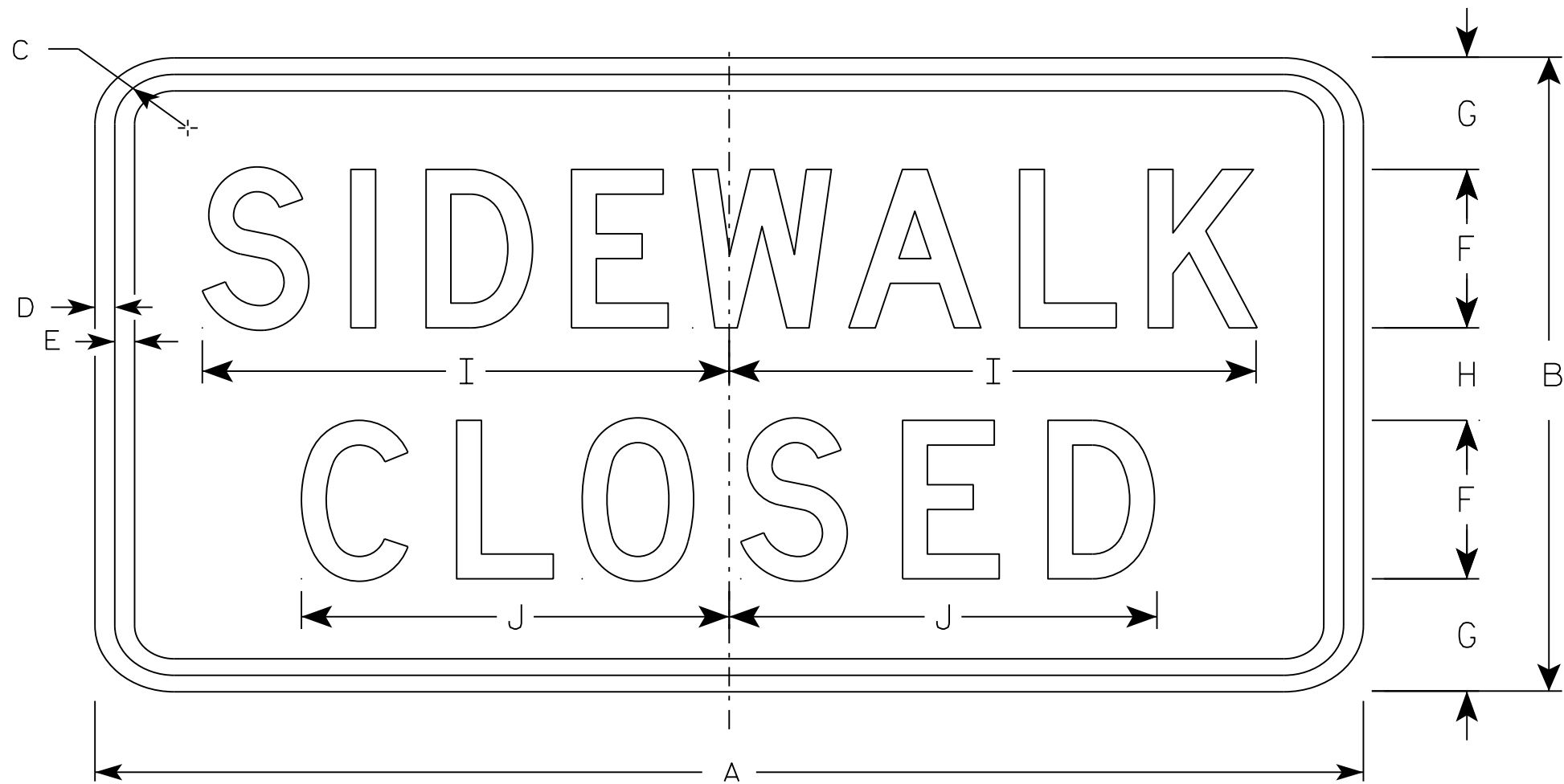
STANDARD SIGN
R8-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R8-8.4

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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R9-9

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 - 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

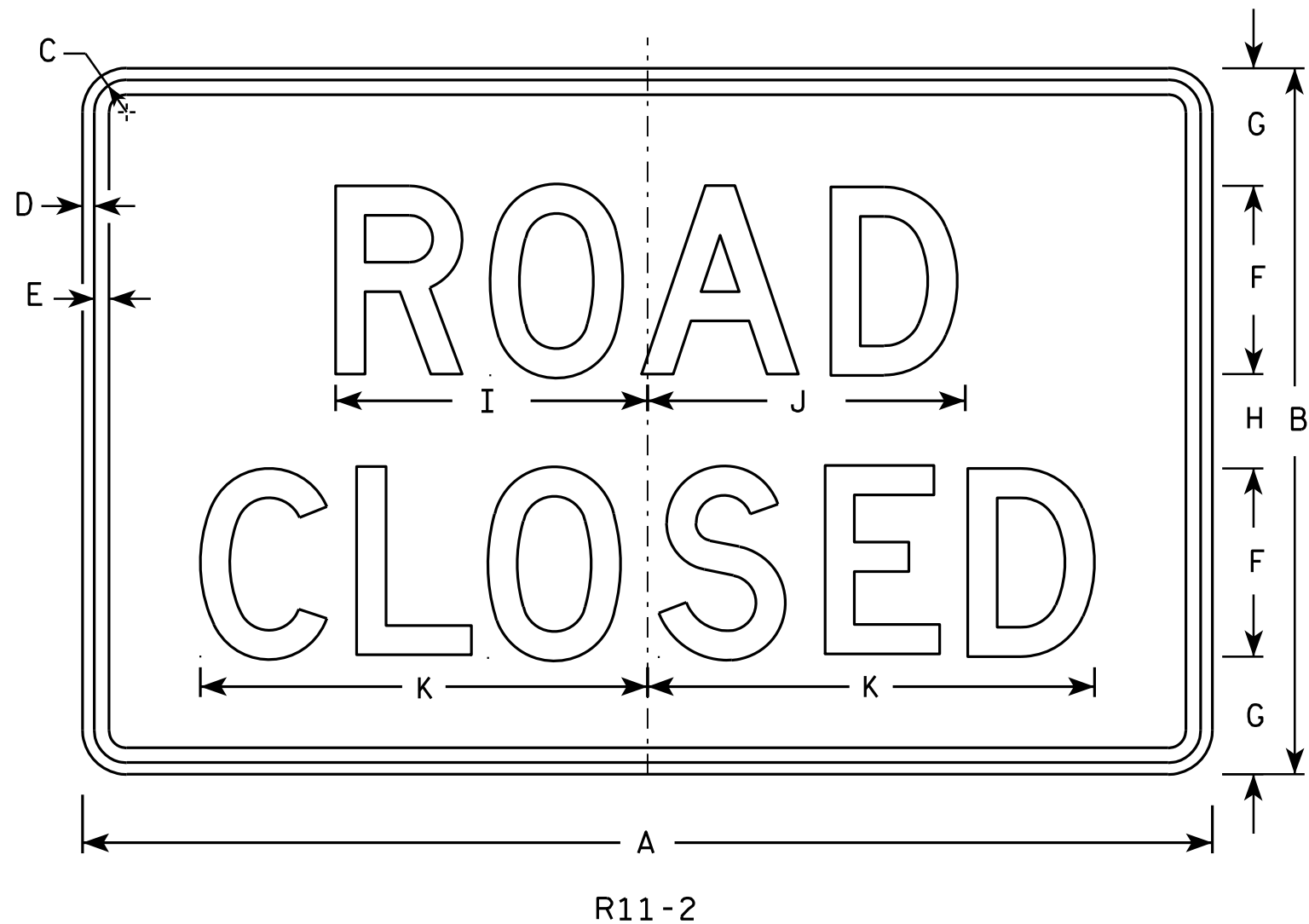
E

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

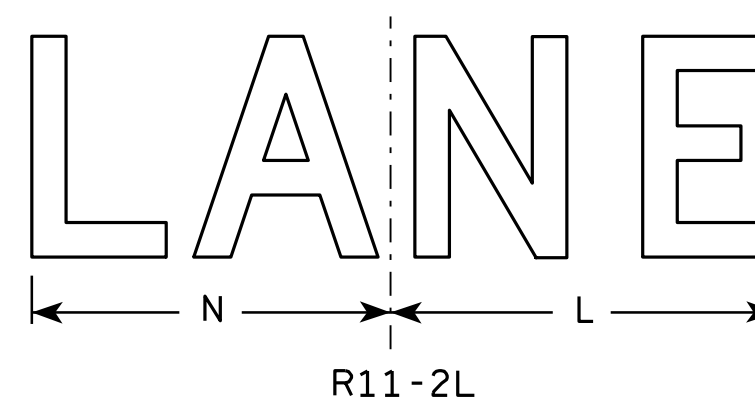
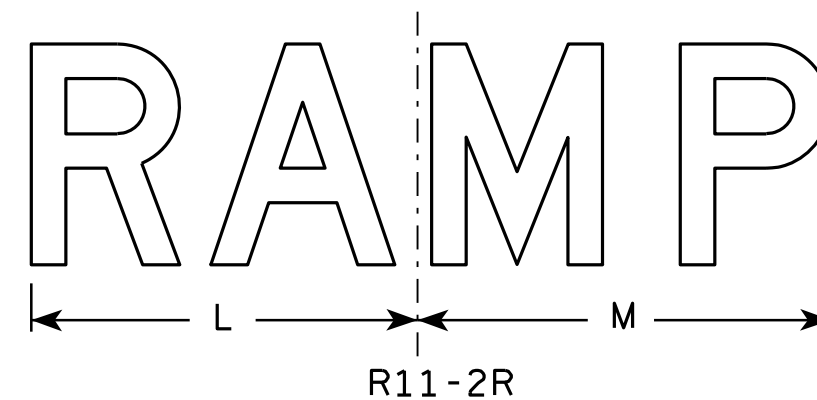
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/11/16 PLATE NO. R9-9.6



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.
5. Modify the message as required.

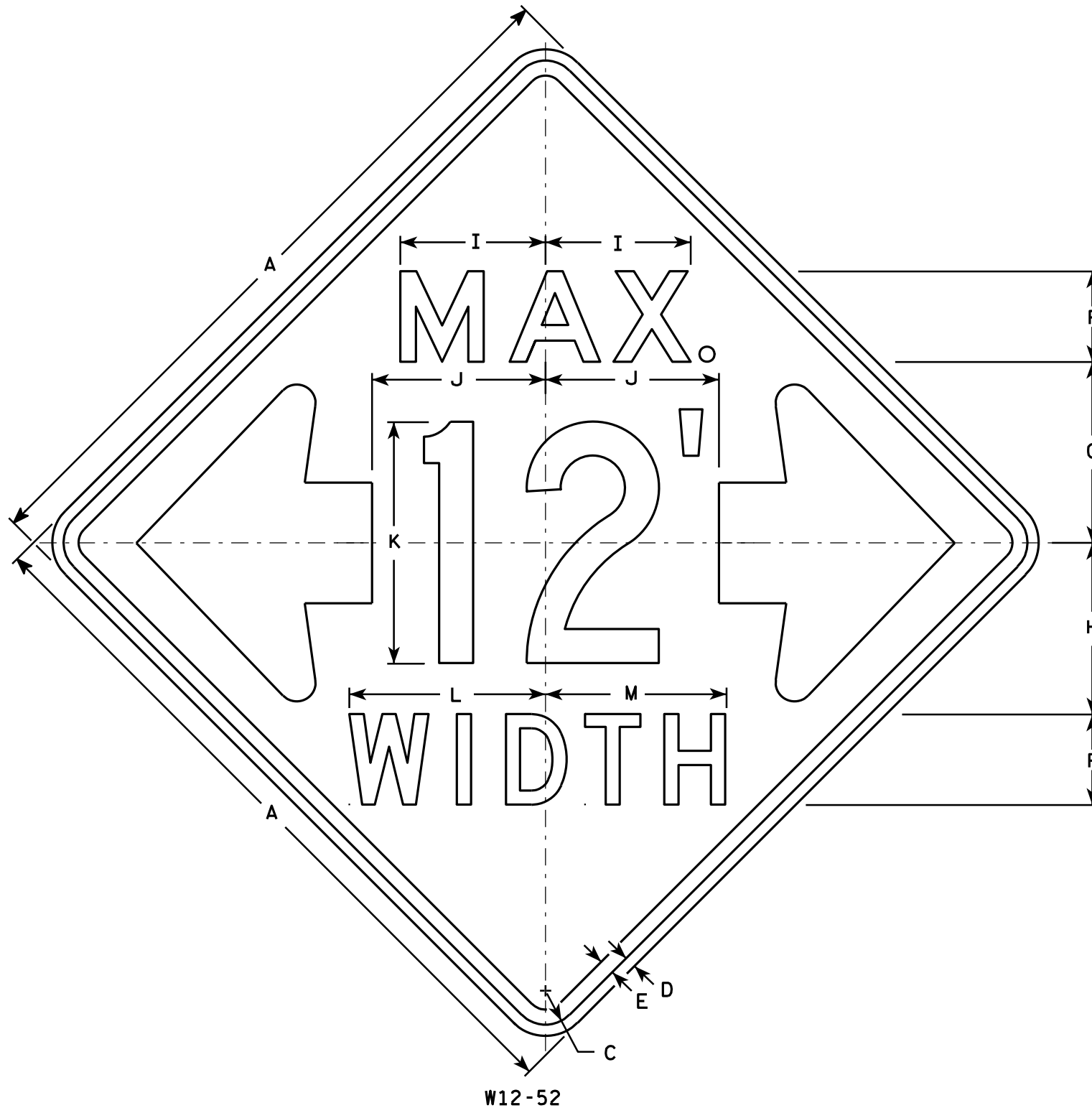


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

STANDARD SIGN R11-2

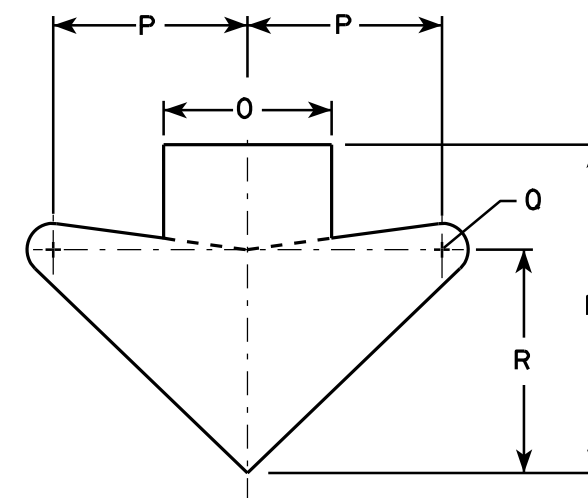
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - See note 5
- 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.
- The top line is series E, the numerals are series C, and the bottom line is series D.
- Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

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

STANDARD SIGN W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
For State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

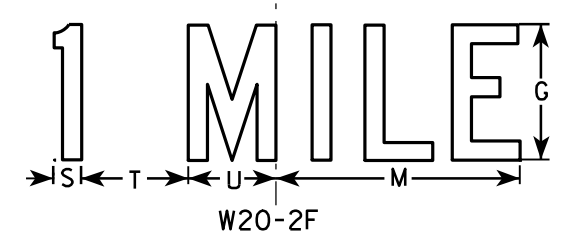
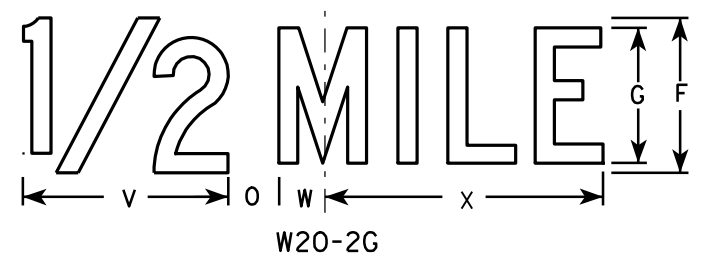
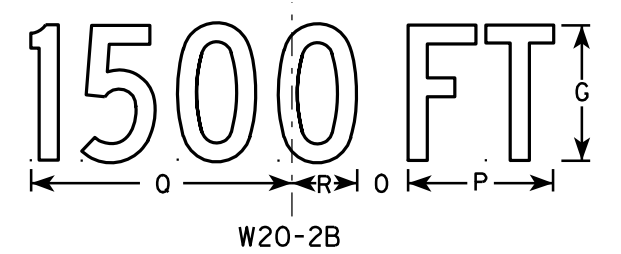
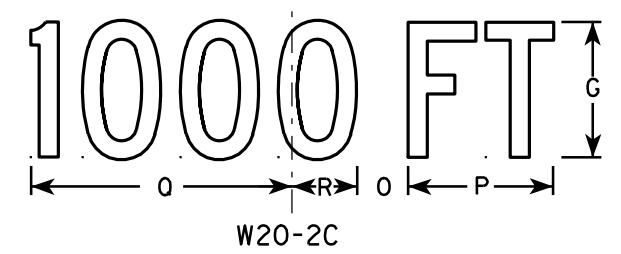
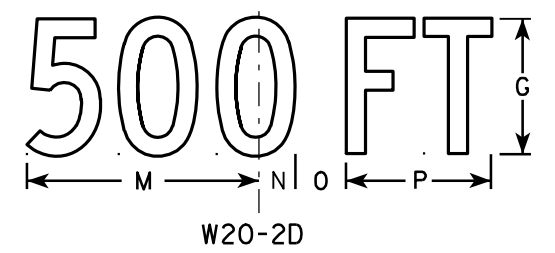
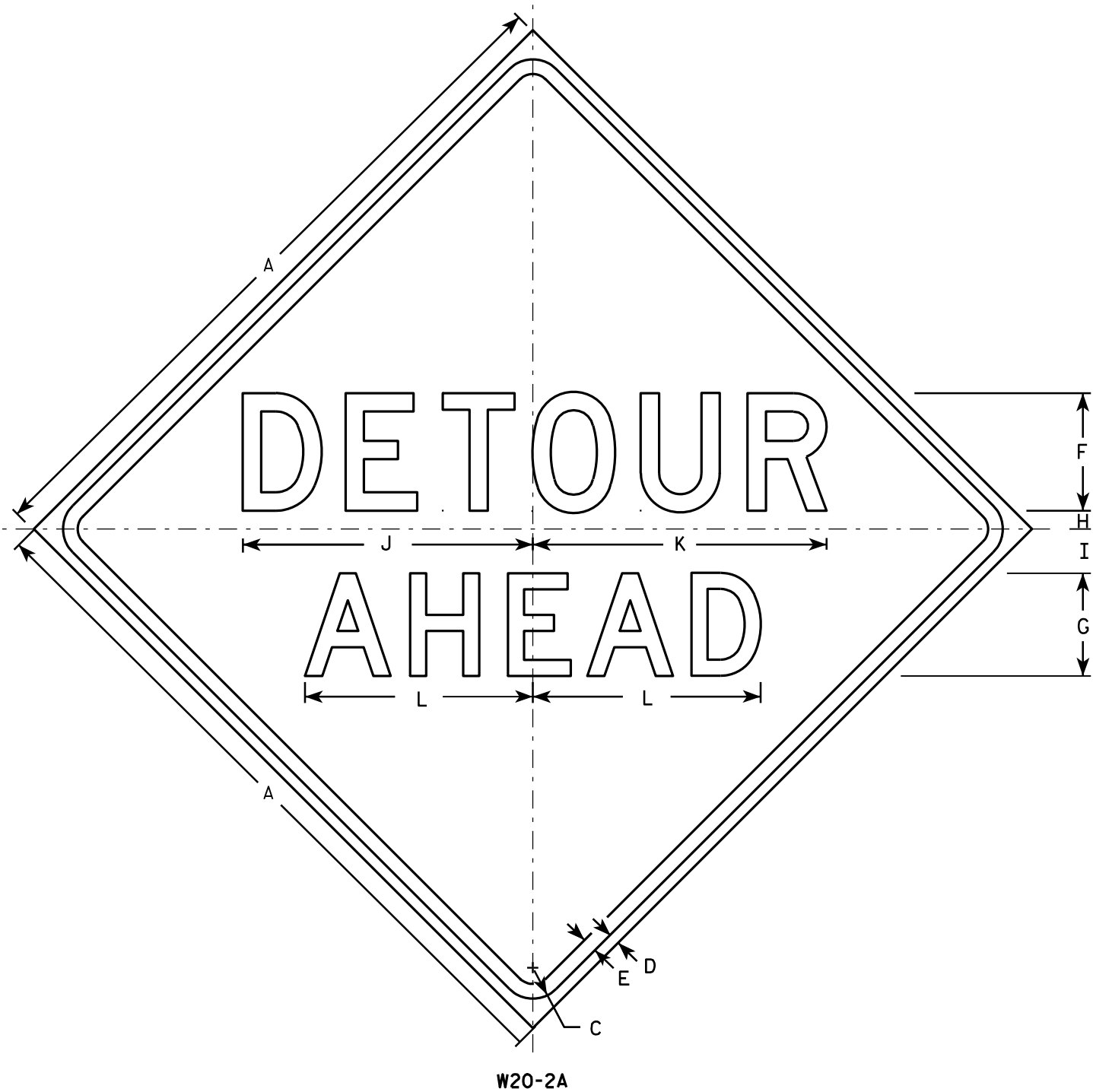
PROJECT NO:

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 - 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. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

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	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

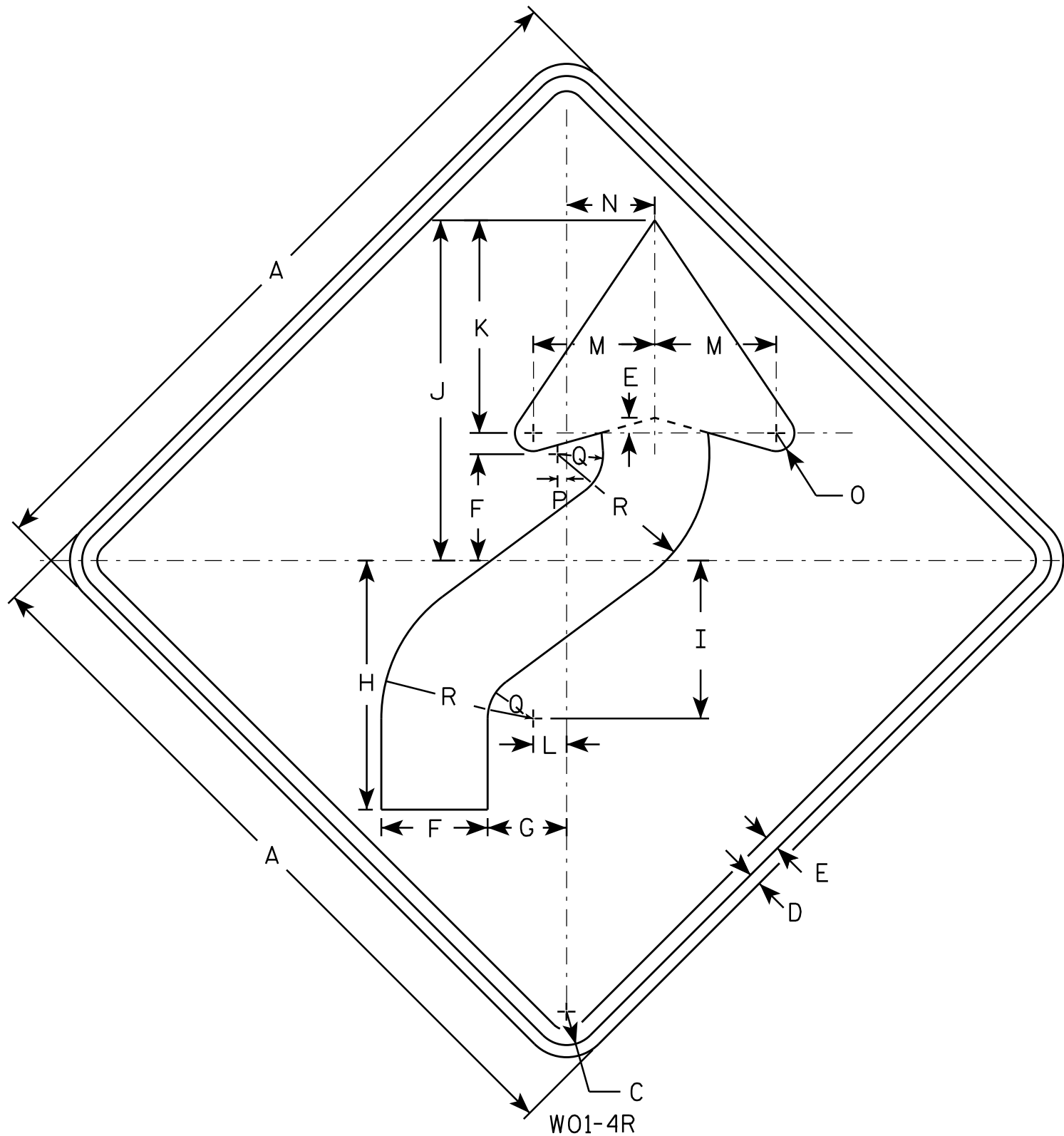
PROJECT NO:

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. 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. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

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	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4.1

PROJECT NO:

HWY:

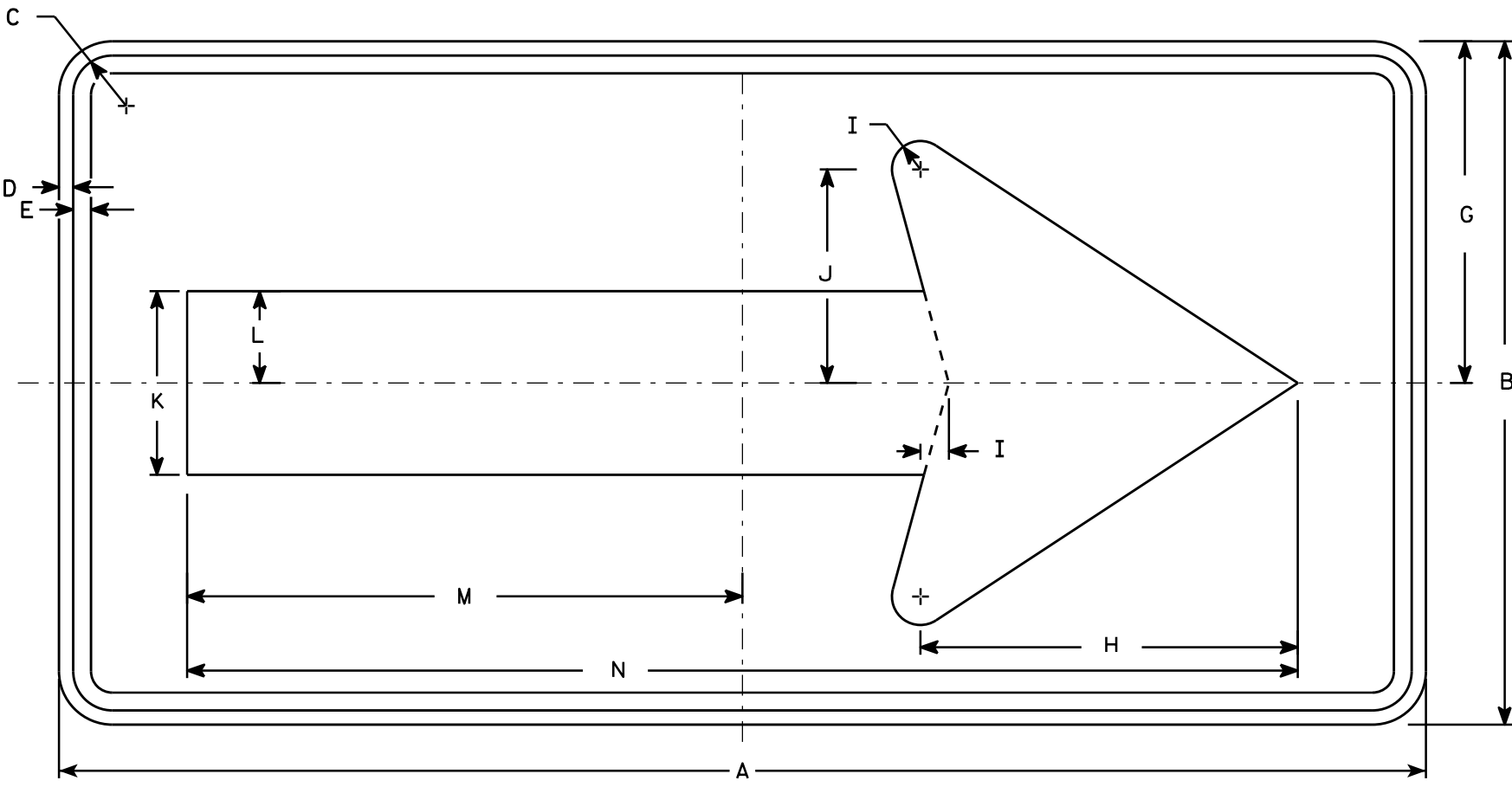
COUNTY:

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. 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.



W01-6

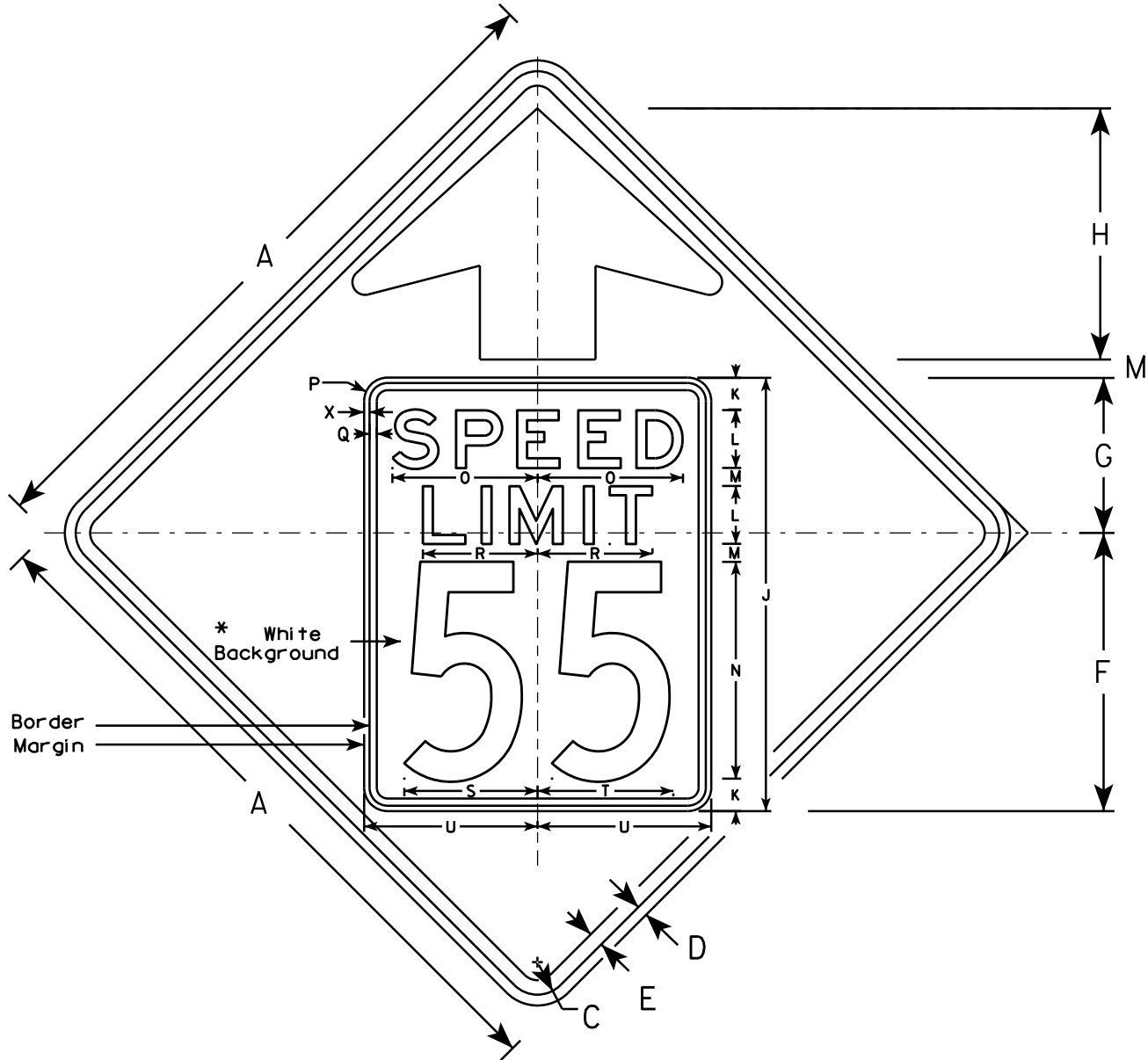
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

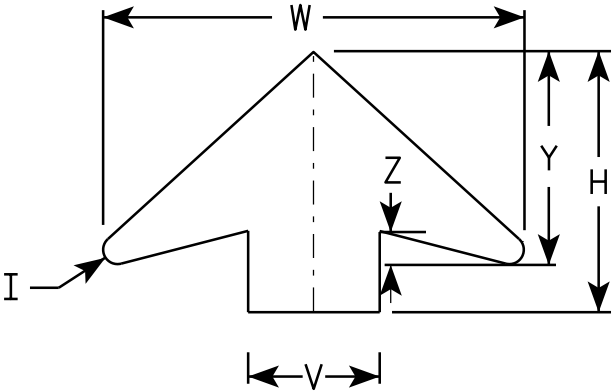


W03-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

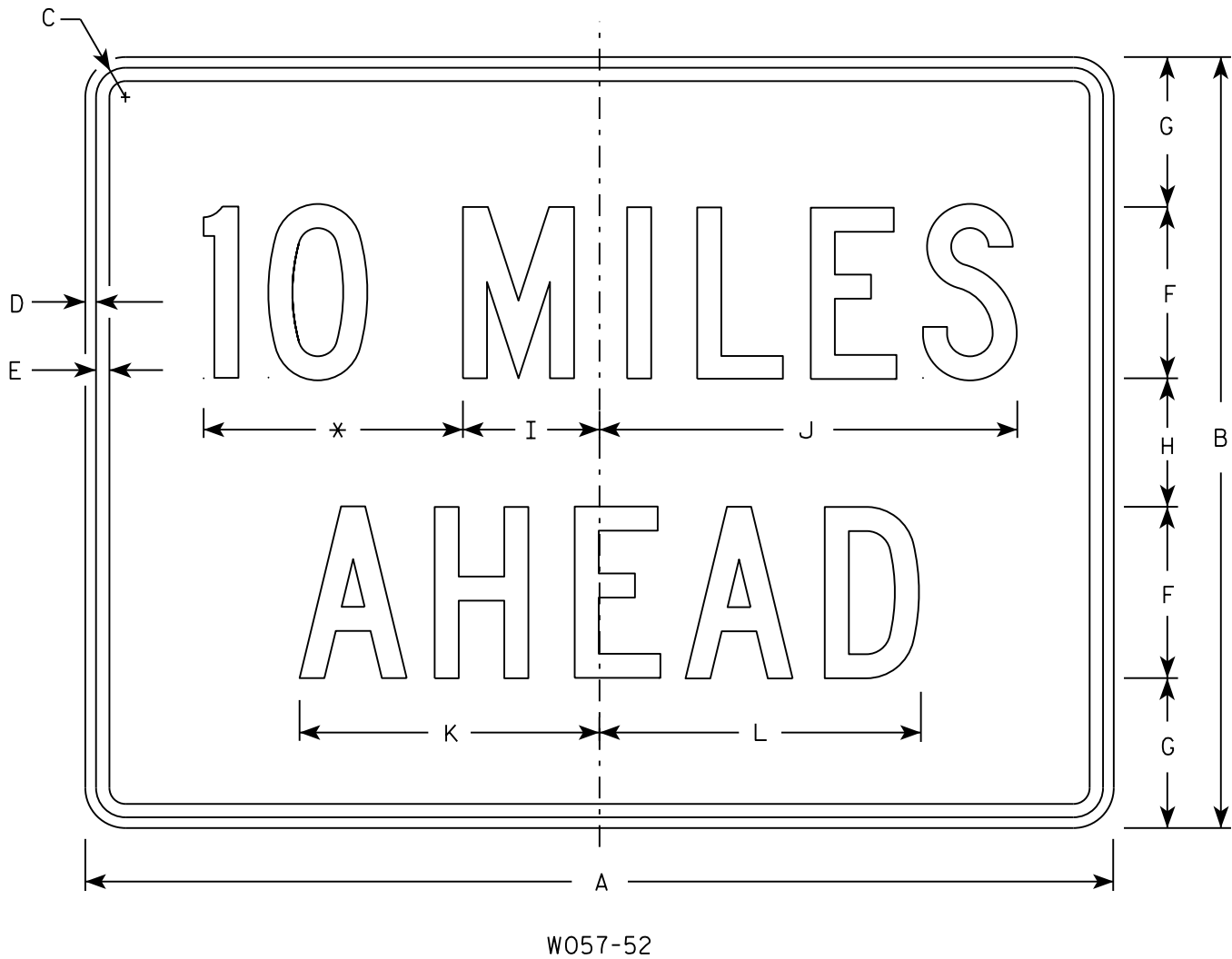
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W03-5.1

PROJECT NO:

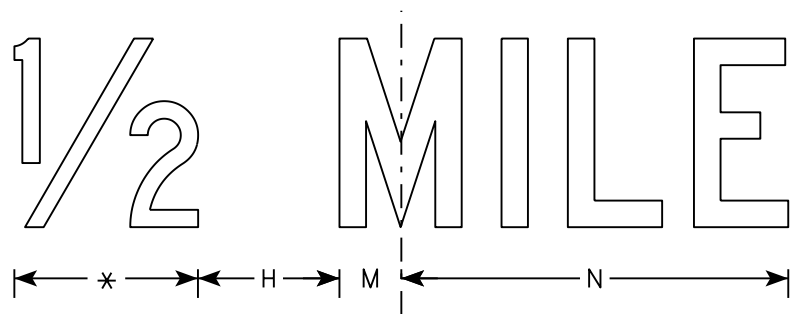
SHEET NO:

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.
- 5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.



* See note 5

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	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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