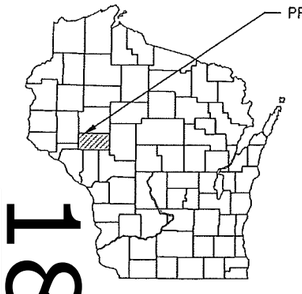
EAU NOVEMBER 2016

PROJECT ID: 7090-01-61
WITH: N/A

COUNTY: EAU CLAIRE

ORDER OF SHEETS

TOTAL SHEETS = 176



18

DESIGN DESIGNATION		EB	WB
A.A.D.T. (2016)	=	32,920	27,290
A.A.D.T. (2036)	=	39,530	36,440
D.H.V.	=	4,072	3,754
D.D.	=	58/42	58/42
T.	=	5.3 %	5.3 %
DESIGN SPEED	=	45 MPH	45 MPH
ESALS	=	N/A	N/A

CONVENTIONAL SYMBOLS

- COUNTY LINE
- CORPORATE LIMITS
- PROPERTY LINE (P.L. 56.1)
- LOT LINE
- LIMITED EASEMENT
- EARTHWORK BALANCE POINT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SURVEY LINE
- SLOPE INTERCEPT
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- MARSH AREA
- WOODED OR SHRUB AREA
- COMBUSTIBLE FLUIDS (CAUTION)
- UNDERGROUND UTILITIES
  - GAS (G)
  - ELECTRIC (E)
  - TELEPHONE OR TELEGRAPH (T)
  - TV/CABLE (TV)
  - SERVICE PEDESTAL
- POWER POLE
- TELEPHONE POLE
- RAILROAD
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- WATER (W)
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- CULVERT (Profile View)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C EAU CLAIRE, CLAIREMONT AVENUE

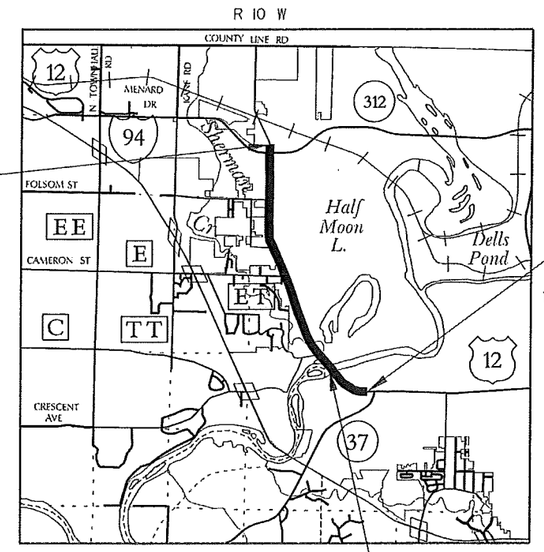
STH 312 TO CRAIG ROAD

USH 12

EAU CLAIRE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7090-01-61	———	—

STATE PROJECT NUMBER
7090-01-61



BEGIN PROJECT
STA 63+67.46'EB'
Y = 288067.861
X = 327682.424

END PROJECT
STA 244+17.00'EB'

EXCEPTION TO NET CENTERLINE LENGTH
STA 216+79.94'EB' TO STA 225+22.48'EB'
STR B-18-0114

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 3.259 MI

Coordinates on this plan are referenced to the Wisconsin County Coordinate System (WCCS), Eau Claire County.

ORIGINAL PLANS PREPARED BY:

SEH
WISCONSIN
TABAL, KRISTA
37975
CHIPPEWA FALLS, WI
4-28-16
PROFESSIONAL ENGINEER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	SEH
Project Manager	DAVID KOEPP
Regional Examiner	CHRISTINE KOSKI
Regional Supervisor	TIMOTHY MASON
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 4/28/2016 D. Kp (Signature)

E

2

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	HYD	HYDRANT
AC	ACRE	ID	INSIDE DIAMETER
AGG	AGGREGATE	INV	INVERT
AECPRC	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE	IP	IRON PIPE ON PIN
		LHF	LEFT-HAND FORWARD
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LF	LINEAR FOOT
ADT	AVERAGE DAILY TRAFFIC	LC	LONG CHORD OF CURVE
BF	BACK FACE	LS	LUMP SUM
BM	BENCH MARK	MH	MANHOLE
BR	BRIDGE	MOR	MID POINT OF RADIUS
CE	COMMERCIAL ENTRANCE	NC	NORMAL CROWN
CL OR C/L OR ℄	CENTER LINE	NO	NUMBER
△	CENTRAL ANGLE OR DELTA	OBLIT	OBLITERATE
CONC	CONCRETE	PAVT	PAVEMENT
CPRC	CULVERT PIPE REINFORCED CONCRETE	PE	PRIVATE ENTRANCE
CPRCHE	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL	PVRC	POINT OF VERTICAL REVERSE CURVE
		QOR	QUARTER POINT OF RADIUS
CR	CREEK	R	RADIUS
CY	CUBIC YARD	REQ'D	REQUIRED
C & G	CURB AND GUTTER	RES	RESIDENCE OR RESIDENTIAL
D	DEGREE OF CURVE	RHF	RIGHT-HAND FORWARD
DHV	DESIGN HOUR VOLUME	R/W	RIGHT-OF-WAY
DISCH	DISCHARGE	R	RIVER
DG	DITCH GRADE	RDWY	ROADWAY
DWY	DRIVEWAY	R/L OR ℞	REFERENCE LINE
X	EAST GRID COORDINATE	SALV	SALVAGED
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	SAN	SANITARY SEWER
		SF	SQUARE FEET
EOR	END POINT OF RADIUS	SY	SQUARE YARD
EL	ELEVATION	SDD	STANDARD DETAIL DRAWINGS
ENT	ENTRANCE	STA	STATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	SS	STORM SEWER
EXC	EXCAVATION	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EBS	EXCAVATION BELOW SUBGRADE	SE	SUPERELEVATION RATE
EXIST	EXISTING	TC	TOP OF CURB
FC	FACE OF CURB	T OR TN	TOWN
FF	FACE TO FACE	T	TRUCKS (PERCENT OF)
FERT	FERTILIZE	TYP	TYPICAL
FE	FIELD ENTRANCE	VAR	VARIABLE
FL	FLOW LINE	VC	VERTICAL CURVE
FO	FIBER OPTIC	Y	NORTH GRID COORDINATE
CWT	HUNDREDWEIGHT	YD	YARD

GENERAL NOTES

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

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

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

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

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH SALVAGED TOPSOILED, FERTILIZED, SEEDED AND MULCHED.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

SILT FENCE SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND IN PLACE PRIOR TO CONSTRUCTION.

MATCH EXISTING SUPERELEVATION RATES. SUPERELEVATION RATES FOR THE EXISTING CURVES WITHIN THE PROJECT ARE UNKNOWN.

NO GRADING CHANGES ARE ANTICIPATED.

DESIGN CONTACT

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QWEST COMMUNICATIONS - COMMUNICATION
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CHARTER COMMUNICATIONS - COMMUNICATION
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ALTOONA, WI 54720
TELEPHONE 715.831.8940 EXT. 619
ATTENTION: SHANE YODER
EMAIL: SHANE.YODER@CHARTERCOM.COM

CHIPPEWA VALLEY INTERNETWORKING
CONSORTIUM (CINC) - COMMUNICATION
105 GARFIELD AVENUE
EAU CLAIRE, WI 54701
TELEPHONE:715.836.5286
ATTENTION: DAREN BAUER
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CITY OF EAU CLAIRE - ELECTRIC
203 SOUTH FARWELL STREET
EAU CLAIRE, WI 54701
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CITY OF EAU CLAIRE - SANITARY, STORM, WATER
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EAU CLAIRE, WI 54703
TELEPHONE: 715.839.1876
ATTENTION: LANE BERG
EMAIL: LANE.BERG@EAUCLAIREWI.GOV

WEST WISCONSIN TELCOM - COMMUNICATION
5808 OLD MILL PLAZA
EAU CLAIRE, WI 54703
TELEPHONE: 715.231.0504 (OFFICE)
TELEPHONE: 715.308.1914 (MOBILE)
ATTENTION: BRAD SCHMIDTKNECHT
EMAIL: BRADS@WWT.NET

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13935 BISHOPS DRIVE
BROOKFIELD, WI 53004
TELEPHONE: 608.512.5587
ATTENTION: DENNIS RUESS
EMAIL: DENNIS.RUESS@WINDSTREAM.COM

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1414 W. HAMILTON AVENUE
PO BOX 8
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TELEPHONE: 715.737.1477
ATTENTION: KIRK HENDRICKSON
EMAIL: KIRK.H.HENDRICKSON@XCELENERGY.COM

XCEL ENERGY - GAS
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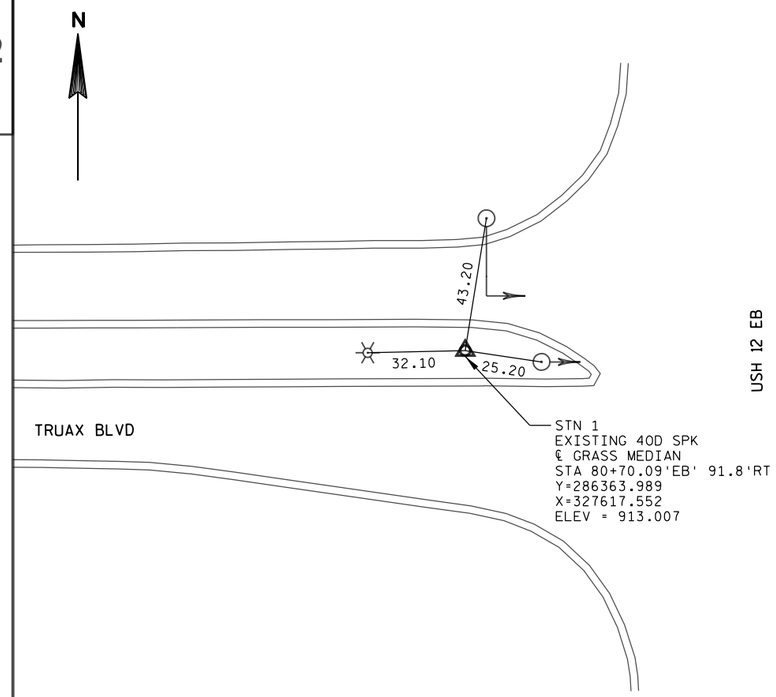
EAU CLAIRE, WI 54702
TELEPHONE: 715.737.2584
ATTENTION: SCOTT SEAHOLM
EMAIL: SCOTT.J.SEAHOLM@XCELENERGY.COM

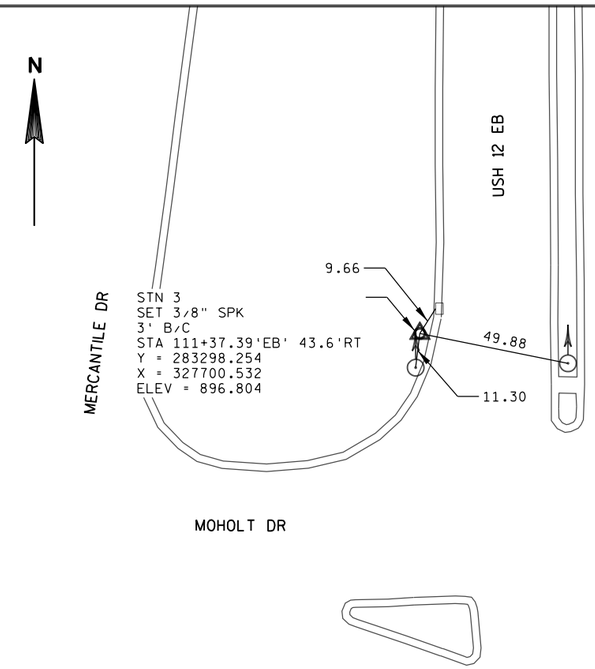
XCEL ENERGY
24-HOUR EMERGENCY (GAS)
1.800.895.2999

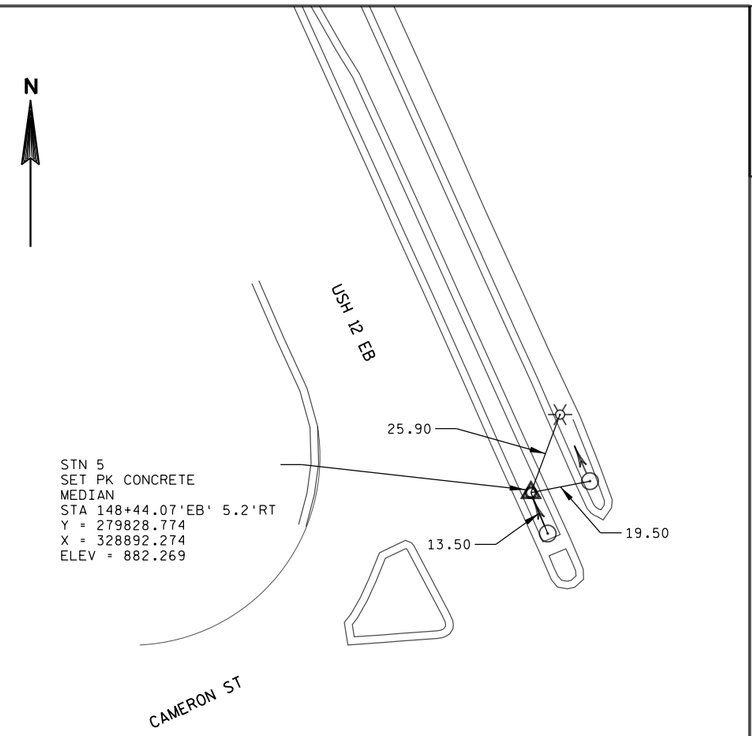
XCEL ENERGY - TRANSMISSION
8701 MONTICELLO LANE
MAPLE GROVE, MN 55369
TELEPHONE: 651.955.1089
ATTENTION: CHARLES DIENGER
EMAIL: CHARLES.G.DIENGER@XCELENERGY.COM

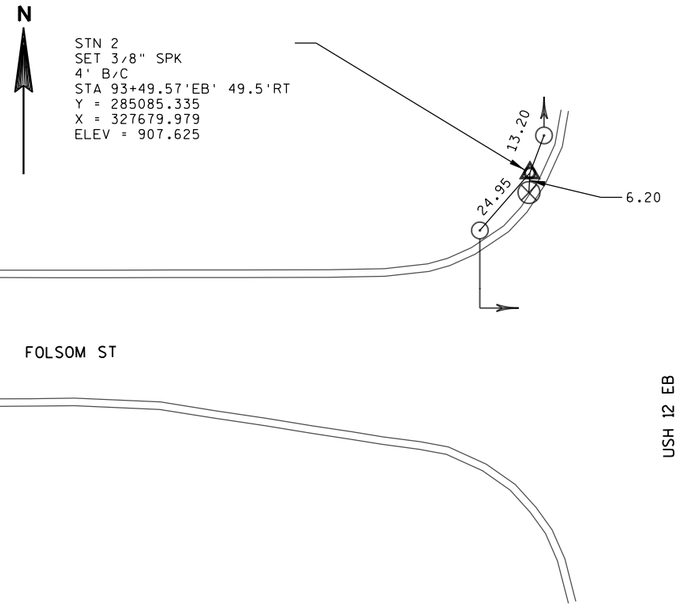
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

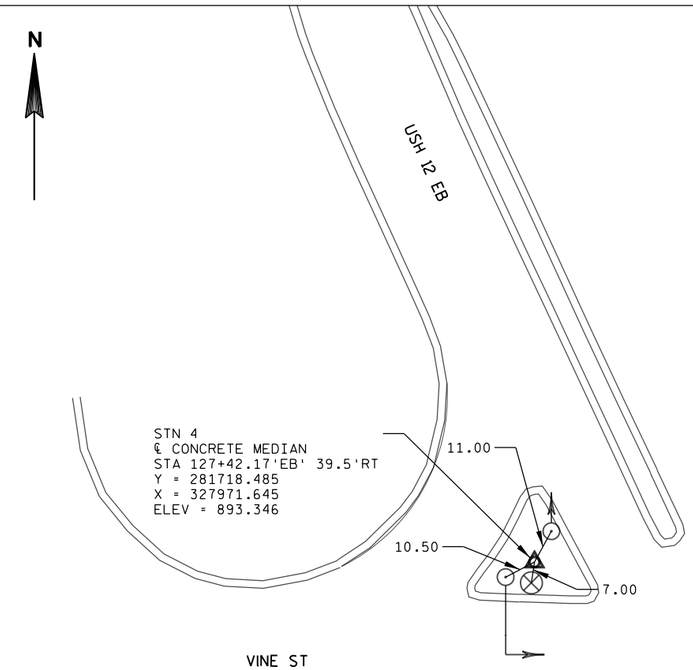
2

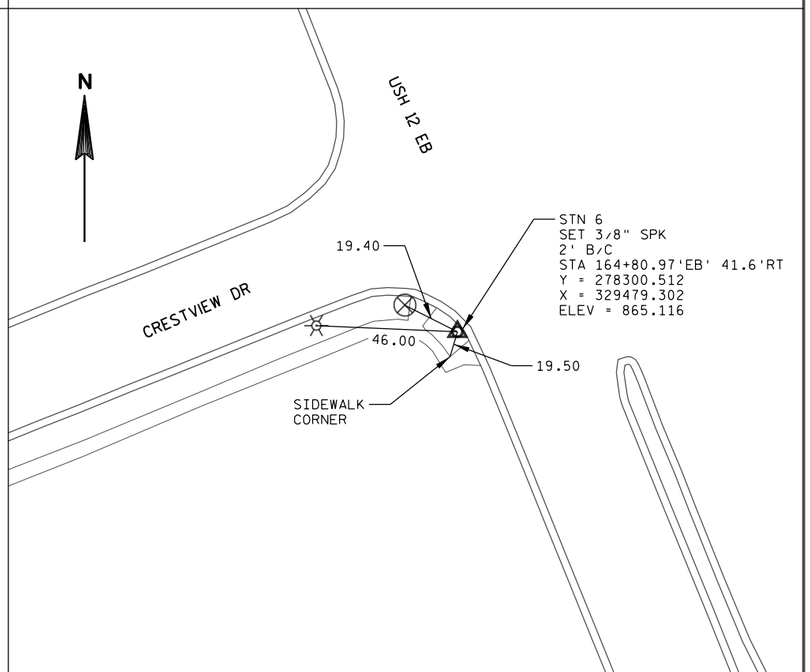






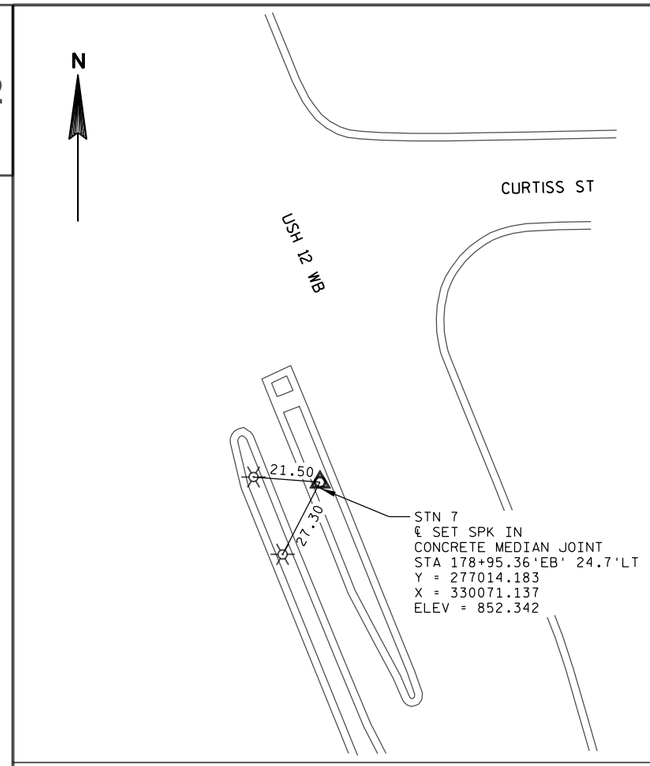




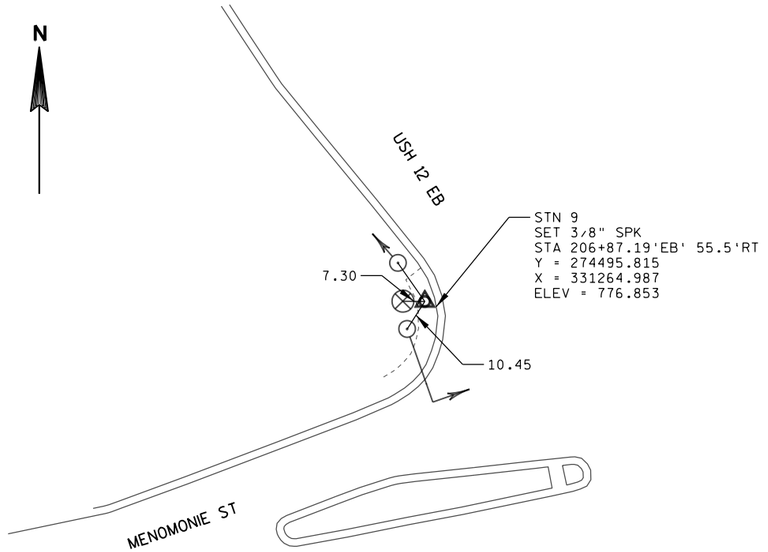


PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	CONTROL TIES	SHEET 3	E

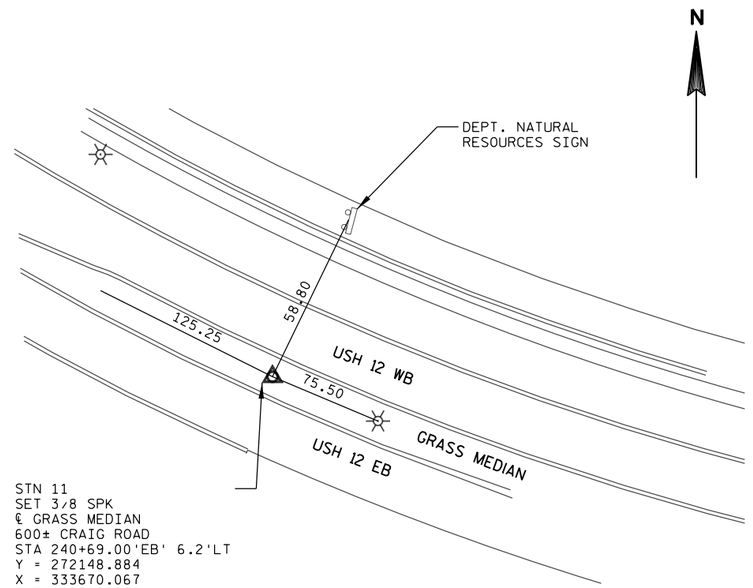
2



STN 7
℄ SET SPK IN
CONCRETE MEDIAN JOINT
STA 178+95.36'EB' 24.7'LT
Y = 277014.183
X = 330071.137
ELEV = 852.342

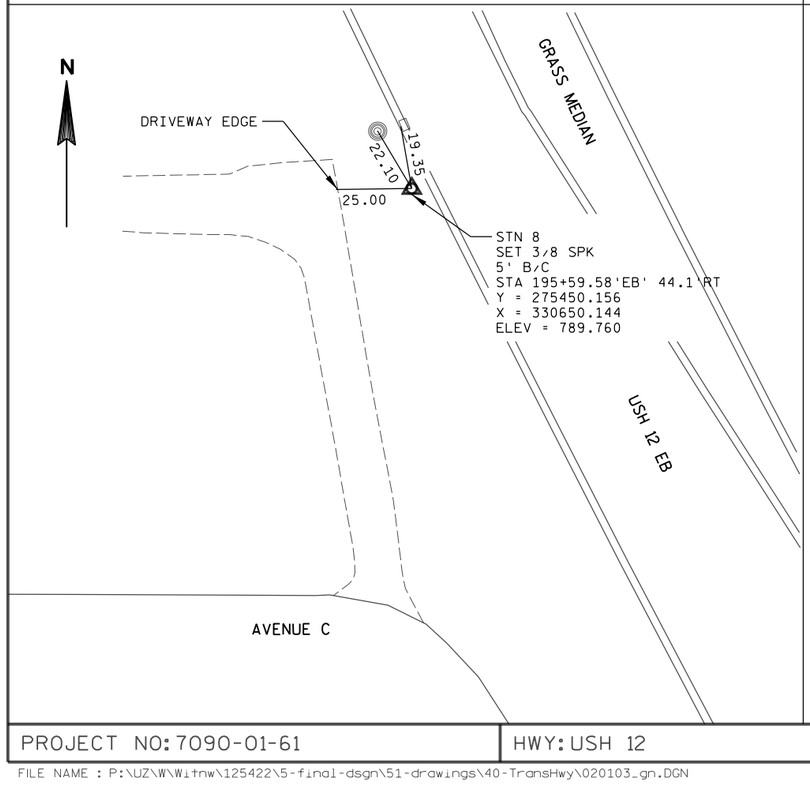


STN 9
SET 3/8" SPK
STA 206+87.19'EB' 55.5'RT
Y = 274495.815
X = 331264.987
ELEV = 776.853

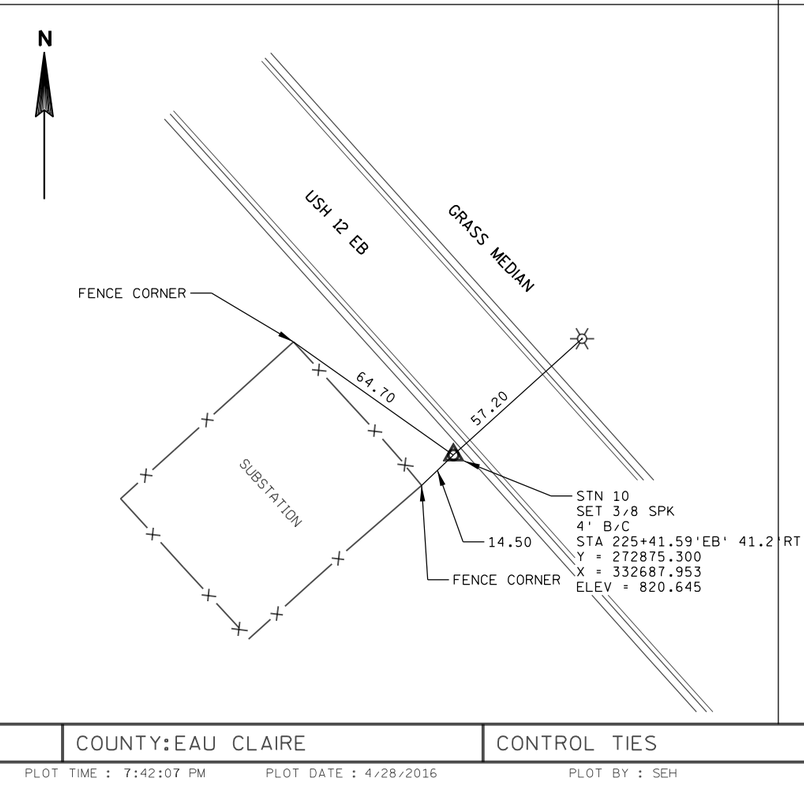


STN 11
SET 3/8 SPK
℄ GRASS MEDIAN
600± CRAIG ROAD
STA 240+69.00'EB' 6.2'LT
Y = 272148.884
X = 333670.067
ELEV = 862.909

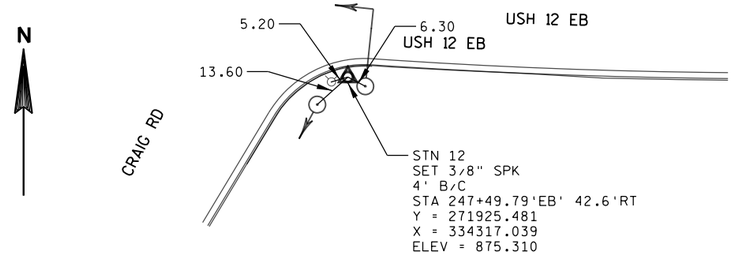
2



STN 8
SET 3/8 SPK
5' B/C
STA 195+59.58'EB' 44.1'RT
Y = 275450.156
X = 330650.144
ELEV = 789.760

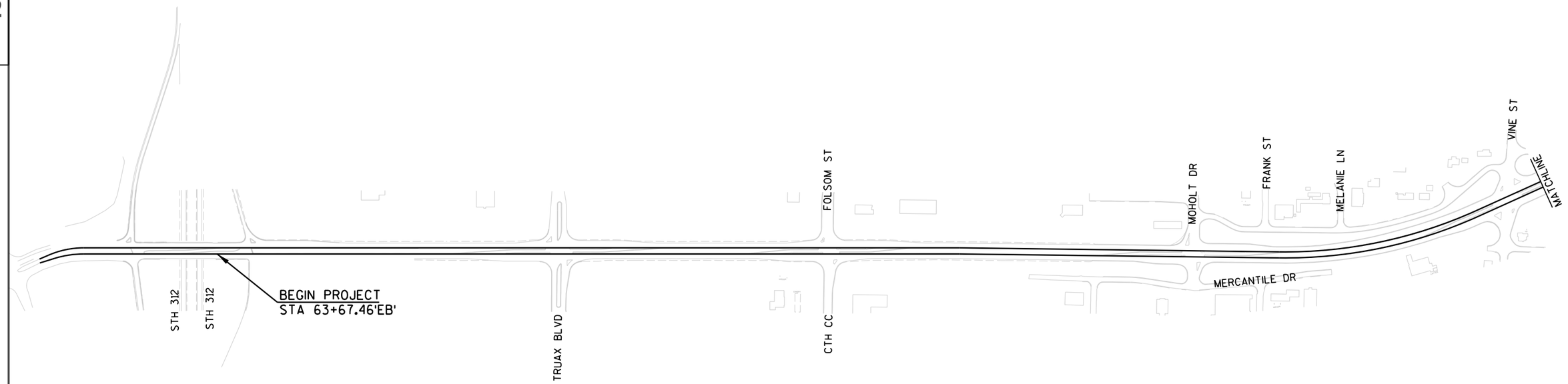


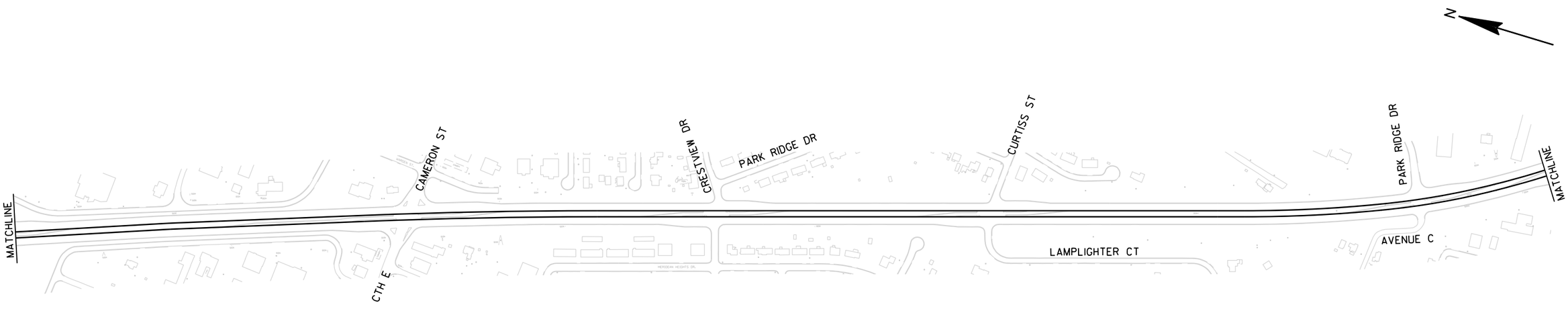
STN 10
SET 3/8 SPK
4' B/C
STA 225+41.59'EB' 41.2'RT
Y = 272875.300
X = 332687.953
ELEV = 820.645



STN 12
SET 3/8" SPK
4' B/C
STA 247+49.79'EB' 42.6'RT
Y = 271925.481
X = 334317.039
ELEV = 875.310

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	CONTROL TIES	SHEET 4	E

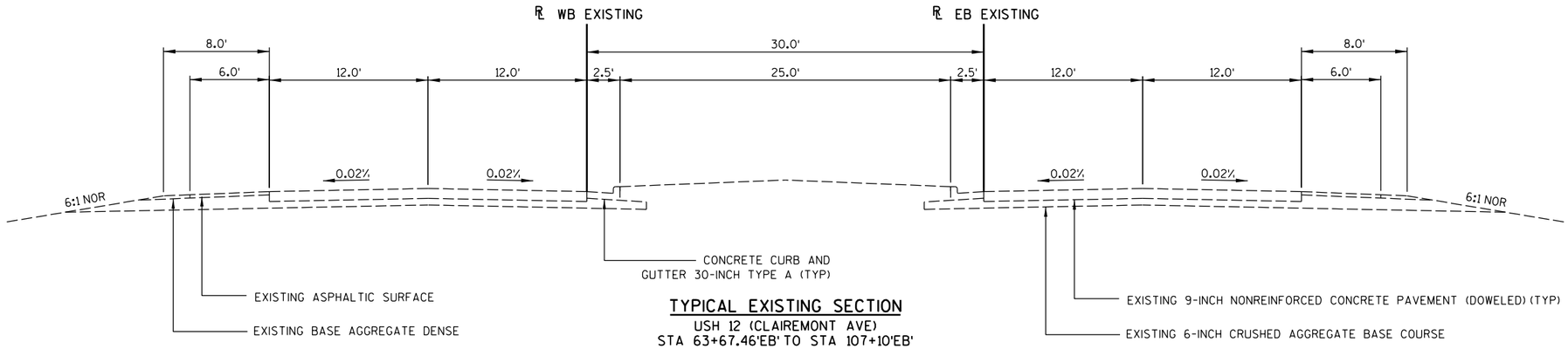

N
STH 312
STH 312
BEGIN PROJECT
STA 63+67.46'EB'
TRUAX BLVD
CTH CC
FOLSOM ST
MOHOLT DR
FRANK ST
MELANIE LN
VINE ST
MATCHLINE
MERCANTILE DR


N
MATCHLINE
CTH E
CAMERON ST
CRESTVIEW DR
PARK RIDGE DR
CURTISS ST
PARK RIDGE DR
MATCHLINE
LAMPLIGHTER CT
AVENUE C

2

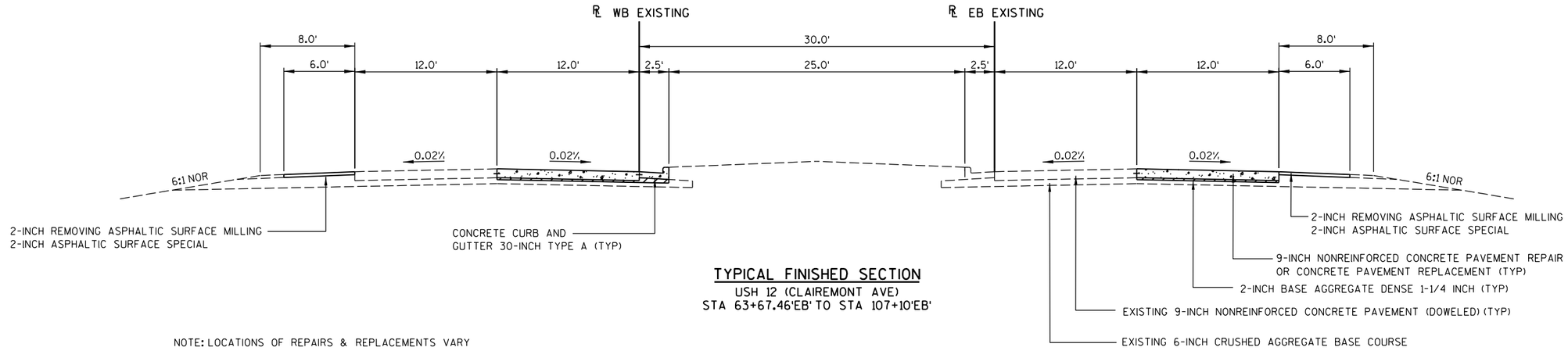
PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PROJECT OVERVIEW	SHEET 6	E

2



TYPICAL EXISTING SECTION

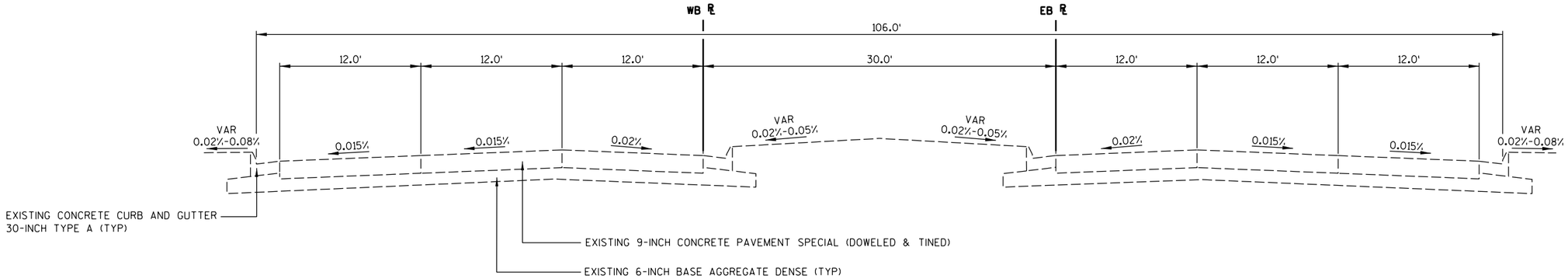
USH 12 (CLAIREMONT AVE)
STA 63+67.46'EB' TO STA 107+10'EB'



TYPICAL FINISHED SECTION

USH 12 (CLAIREMONT AVE)
STA 63+67.46'EB' TO STA 107+10'EB'

NOTE: LOCATIONS OF REPAIRS & REPLACEMENTS VARY

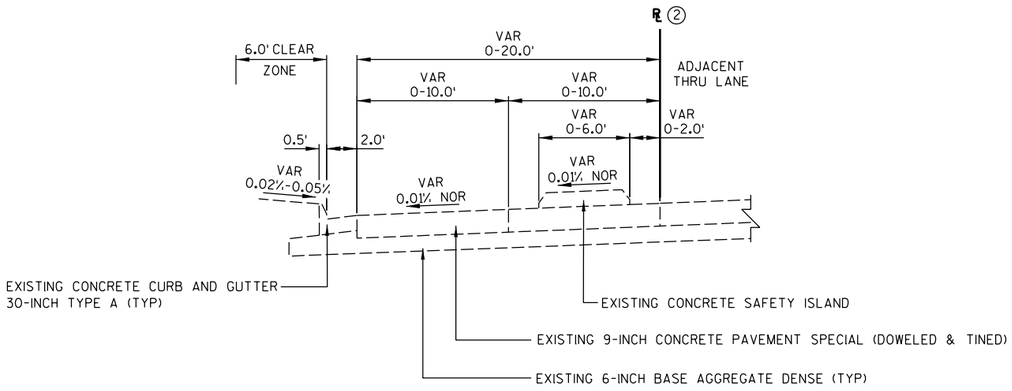


TYPICAL EXISTING SECTION

USH 12 (CLAIREMONT AVENUE)
STA 107+10'EB' TO STA 244+17'EB'

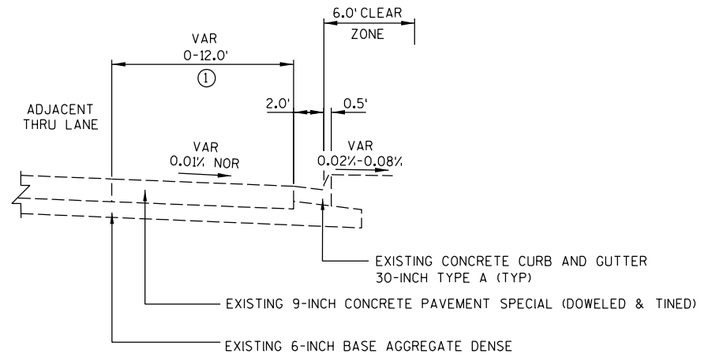
① USH 12 WB KEITH ST INTERSECTION 0-10.0'

② USH 12 EB LOOKING EAST OR WB LOOKING WEST



TYPICAL EXISTING SECTION

LEFT TURN LANE
USH 12 (CLAIREMONT AVENUE)

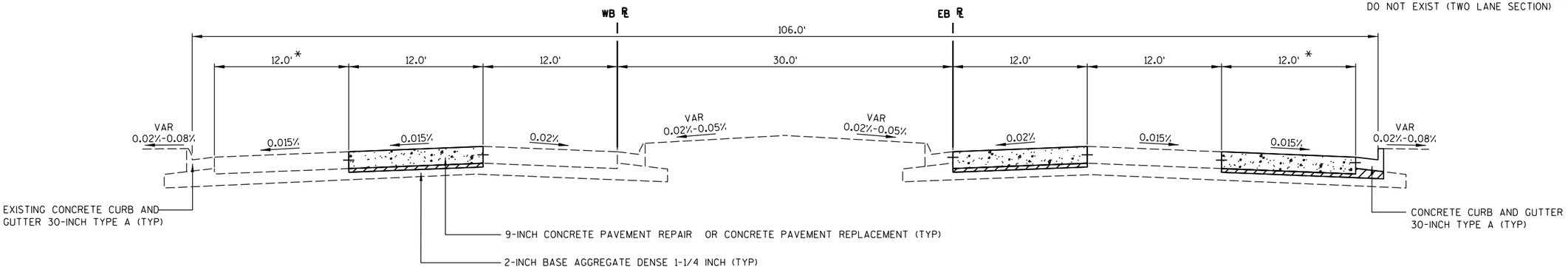


TYPICAL EXISTING SECTION

RIGHT TURN LANE
USH 12 (CLAIREMONT AVENUE)

2

* STA 107+10 'EB' TO STA 118+45 'EB' OUTER LANES DO NOT EXIST (TWO LANE SECTION)

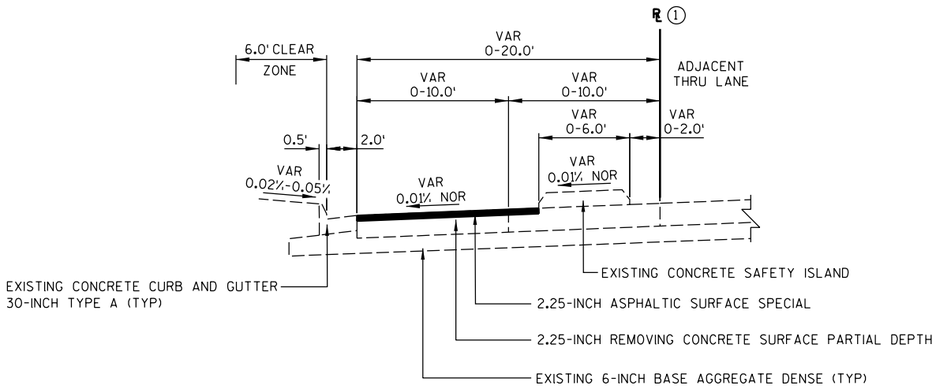


NOTE: LOCATIONS OF REPAIRS & REPLACEMENTS VARY

TYPICAL FINISHED SECTION

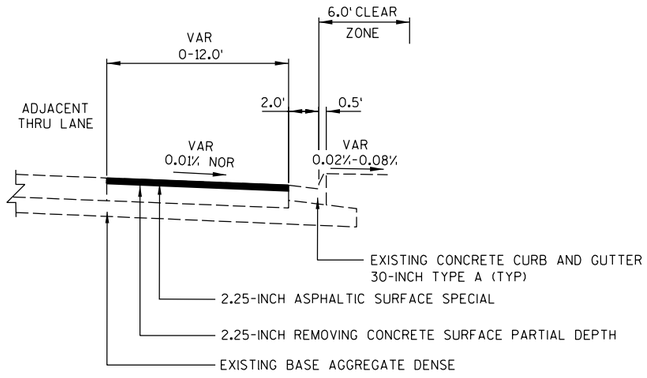
USH 12 (CLAIREMONT AVENUE)
STA 107+10'EB' TO STA 244+17'EB'

① USH 12 EB LOOKING EAST OR WB LOOKING WEST



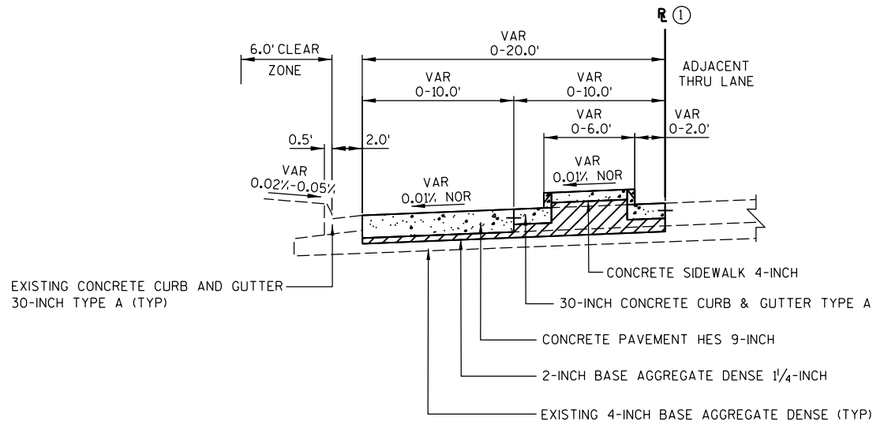
TYPICAL FINISHED SECTION

RIGHT TURN LANE
USH 12 (CLAIREMONT AVENUE)



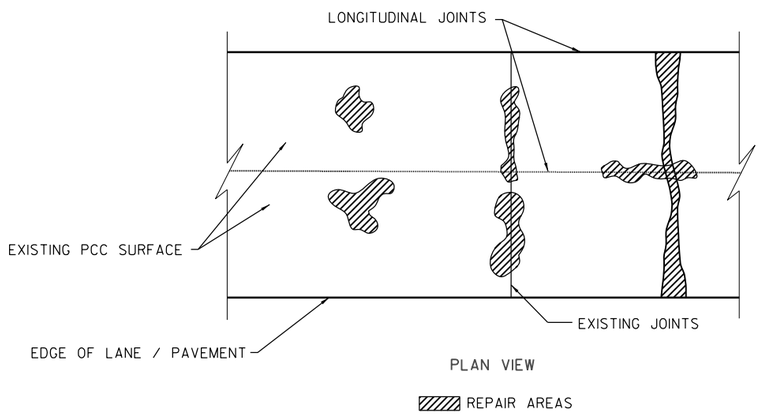
TYPICAL FINISHED SECTION

LEFT TURN LANE
USH 12 (CLAIREMONT AVENUE)



TYPICAL FINISHED SECTION

LEFT TURN LANE
USH 12 (CLAIREMONT AVENUE)

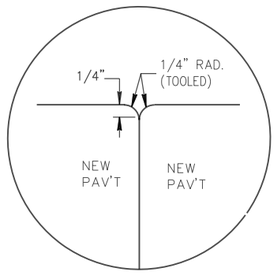


PREPARATION OF FOUNDATION FOR ASPHALT PAVING SPECIAL

CLEANING AND REPAIRING DISTRESSED PCC AREAS

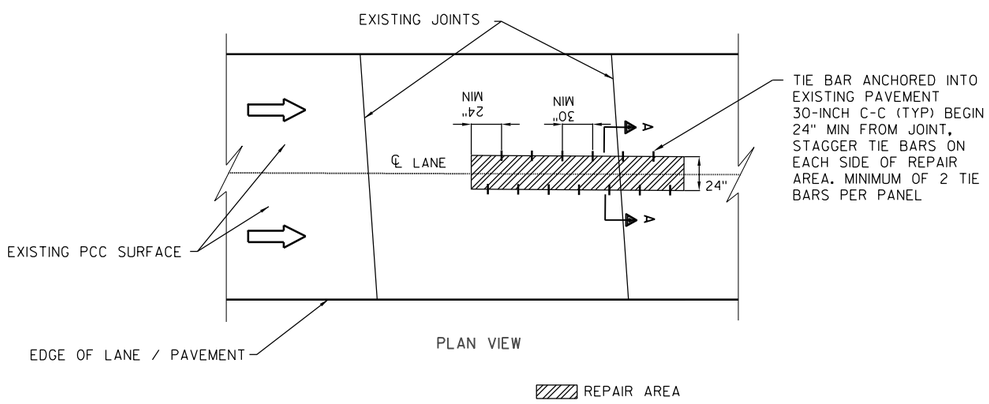
NOTES:

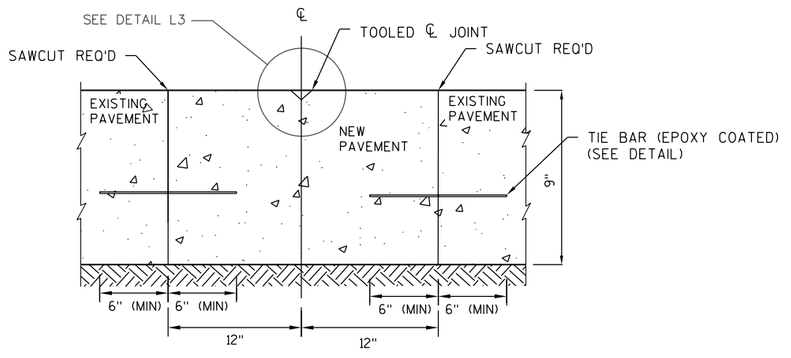
1. AFTER EXISTING PAVEMENT IS GROUND TO DEPTH SPECIFIED ON TYPICAL SECTION REMOVE REMAINDER OF CRACKFILL, PATCHING AND UNSOUND PCC TO A MINIMUM DEPTH OF 4".
2. REPLACE AREAS WITH ASPHALTIC SURFACE PATCHING PAID SEPARATELY FROM THIS ITEM.



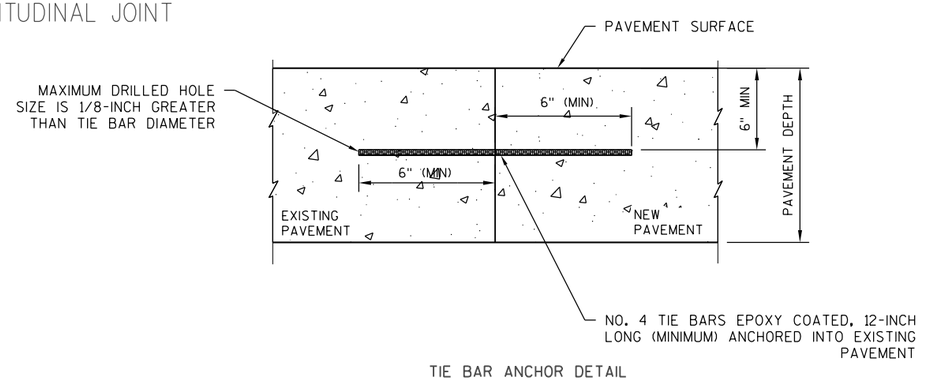
L3

LONGITUDINAL JOINT





SECTION A-A



TIE BAR ANCHOR DETAIL

CONCRETE PAVEMENT CENTERLINE JOINT REPAIR

NOTES:

WITH THE APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6-INCHES AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT. PAID FOR AS CONCRETE PAVEMENT CENTERLINE JOINT REPAIR.

2

2

N

STA 80+62.13'EB' USH 12 =
STA 503+50.83 TRUAX BLVD
CONSTRUCT MODIFIED TYPE C INTERSECTION

CONCRETE PAVEMENT REPLACEMENT OR
CONCRETE PAVEMENT REPLACEMENT SHES
(TYP)

505+00

N 89°05'59" E

75+00'WB' USH 12 76+00'WB' 77+00'WB' 78+00'WB' 79+00'WB' 80+00'WB' 81+00'WB' 82+00'WB' 83+00'WB' 84+00'WB' 85+00'WB' 86+00'WB' 87+00'WB'

S 0°54'17" E

75+00'EB' 76+00'EB' 77+00'EB' 78+00'EB' 79+00'EB' 80+00'EB' 81+00'EB' 82+00'EB' 83+00'EB' 84+00'EB' 85+00'EB' 86+00'EB' 87+00'EB

S 0°54'17" E

PI 503+50.83

PI 503+50.83

USH 12

CONCRETE PAVEMENT REPAIR OR
CONCRETE PAVEMENT REPAIR SHES
(TYP)

STA 80+83.09'EB' USH 12 =
STA 503+50.83 TRUAX BLVD
CONSTRUCT MODIFIED TYPE C INTERSECTION

N 89°48'37" E

TRUAX BLVD

500+00

PI 500+00.00

CONCRETE PAVEMENT HES 9"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 11	E

2

2

N

CONCRETE CURB AND GUTTER
30-INCH TYPE A

STA 93+99.93'EB'USH 12 =
STA 603+22.31 FOLSOM ST
CONSTRUCT MODIFIED TYPE C INTERSECTION

CC1

CC2

605+00

N 89°44'27" E

PI 605+85.50

PI 603+22.31

PI 100'WB'+72.27

PI 100'WB'+52.22

S 0°54'17" E

S 0°54'17" E

89+00'WB' 90+00'WB' USH 12 91+00'WB' 92+00'WB' 93+00'WB' 94+00'WB' 95+00'WB' 96+00'WB' 97+00'WB' 98+00'WB' 99+00'WB' 100'WB'+00 101+0

89+00'EB' 90+00'EB' 91+00'EB' 92+00'EB' 93+00'EB' 94+00'EB' 95+00'EB' 96+00'EB' 97+00'EB' 98+00'EB' 99+00'EB' 100'EB'+00

USH 12

CONCRETE PAVEMENT REPLACEMENT OR
CONCRETE PAVEMENT REPLACEMENT SHES
(TYP)

CONCRETE PAVEMENT REPAIR OR
CONCRETE PAVEMENT REPAIR SHES
(TYP)

STA 94+04.79'EB'USH 12 =
STA 603+22.31 FOLSOM ST
CONSTRUCT MODIFIED TYPE C INTERSECTION

N 89°56'56" E

FOLSOM ST

600+00

PI 600+00.00

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	STA 92+98.45'EB'	128.90'LT	72.0'	Y = 285139.274 X = 327857.584
CC2	STA 94+88.38'EB'	128.27'LT	62.0'	Y = 284949.350 X = 327859.953

CONCRETE PAVEMENT HES 9"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 12	E

FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\021102 id.dgn PLOT TIME : 7:42:12 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	STA 109+49.83'EB'	3.0'LT	3.0'	Y = 283485.965 X = 327746.515
CC2	STA 111+64.63'EB'	5.0'LT	5.0'	Y = 283271.172 X = 327749.213
CC3	STA 112+48.51'EB'	25.0'LT	5.0'	Y = 283187.358 X = 327769.485
CC4	STA 114+66.96'EB'	27.0'LT	3.0'	Y = 282971.913 X = 327772.1850

N

PI 705+33.71

705+00

S 89°02'17" E

CONCRETE MEDIAN SLOPED NOSE REPLACEMENT ONLY

EXISTING JUNCTION BOX TO REMAIN. REMOVAL OF CONCRETE AROUND JUNCTION BOX IS INCIDENTIAL TO REMOVING CONCRETE SURFACE PARTIAL DEPTH (3 BOXES)

CONCRETE PAVEMENT REPLACEMENT OR CONCRETE PAVEMENT REPLACEMENT SHES (TYP)

EXISTING SIGNAL/BASE TO REMAIN

LOOP #1

EXISTING SIGNAL/BASE TO REMAIN

PC 116+53.27

0'WB' 107+00'WB' USH 12 108+00'WB' 109+00'WB' 110+00'WB' 111+00'WB' 112+00'WB' CC3 113+00'WB' 114+00'WB' CC4 115+00'WB' 116+00'WB' 117+00'WB' 118+00'WB'

6+00'EB' USH 12 107+00'EB' 108+00'EB' 109+00'EB' 110+00'EB' 111+00'EB' 112+00'EB' 113+00'EB' 114+00'EB' 115+00'EB' 116+00'EB' 117+00'EB' 118+00'EB'

B C D E F A

PI 701+89.18

CC1 CC2

S 0°11'10" E

S 0°11'10" E

CONCRETE PAVEMENT REPAIR OR CONCRETE PAVEMENT REPAIR SHES (TYP)

LOOP #2

LOOP #3

PC 116+33.03

CONCRETE MEDIAN SLOPED NOSE REPLACEMENT ONLY

N 89°07'51" E

STA 112+05.71'EB' USH 12 =
STA 701+89.18 MOHOLT DR
CONSTRUCT MODIFIED TYPE C INTERSECTION

MOHOLT DR

EXISTING JUNCTION BOX TO REMAIN. REMOVAL OF CONCRETE AROUND JUNCTION BOX IS INCIDENTIAL TO REMOVING CONCRETE SURFACE PARTIAL DEPTH (3 BOXES)

700+00

PI 700+00.00

CURVE POINT TABLE		
POINT	STATION	OFFSET
A	109+91.81'EB'	10.0'LT
B	111+51.62'EB'	10.0'LT
C	111+57.62'EB'	10.0'LT
D	112+55.51'EB'	20.0'LT
E	112+61.51'EB'	20.0'LT
F	114+21.06'EB'	20.0'LT

2.25" REMOVING CONCRETE SURFACE PARTIAL DEPTH ASPHALTIC SURFACE OVERLAY (TYP)

CONCRETE PAVEMENT HES 9"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 13	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	STA 125+42.58'EB'	3.0'LT	3.0'	Y = 281918.026 X = 327927.265
CC2	STA 127+51.31'EB'	5.0'LT	5.0'	Y = 281729.202 X = 328015.824
CC3	STA 128+70.68'EB'	25.0'LT	5.0'	Y = 281629.749 X = 328084.807
CC4	STA 130+89.87'EB'	27.0'LT	3.0'	Y = 281432.333 X = 328180.062

CURVE POINT TABLE		
POINT	STATION	OFFSET
A	125+89.51'EB'	10.0'LT
B	127+38.31'EB'	10.0'LT
C	127+44.31'EB'	10.0'LT
D	128+77.68'EB'	20.0'LT
E	128+83.68'EB'	20.0'LT
F	130+89.64'EB'	20.0'LT

N

EXISTING JUNCTION BOX TO REMAIN.
REMOVAL OF CONCRETE AROUND
JUNCTION BOX IS INCIDENTIAL TO
REMOVING CONCRETE SURFACE
PARTIAL DEPTH (3 BOXES)

EXISTING SIGNAL/BASE TO REMAIN

EXISTING SIGNAL/BASE TO REMAIN

CONCRETE PAVEMENT REPLACEMENT OR
CONCRETE PAVEMENT REPLACEMENT SHES
(TYP)

LOOP #6

CONCRETE CURB AND
GUTTER 30" TYPE A (TYP)

STA 128+05.76'EB' USH 12 =
STA 802+99.71 VINE ST
CONSTRUCT MODIFIED TYPE C INTERSECTION

EXISTING JUNCTION BOX TO REMAIN.
REMOVAL OF CONCRETE AROUND
JUNCTION BOX IS INCIDENTIAL TO
REMOVING CONCRETE SURFACE
PARTIAL DEPTH (3 BOXES)

LOOP #5

CONCRETE PAVEMENT REPAIR OR
CONCRETE PAVEMENT REPAIR SHES
(TYP)

LOOP #4

VINE ST

2.25" REMOVING CONCRETE SURFACE PARTIAL DEPTH
ASPHALTIC SURFACE OVERLAY (TYP)

CONCRETE PAVEMENT HES 9"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 14	E

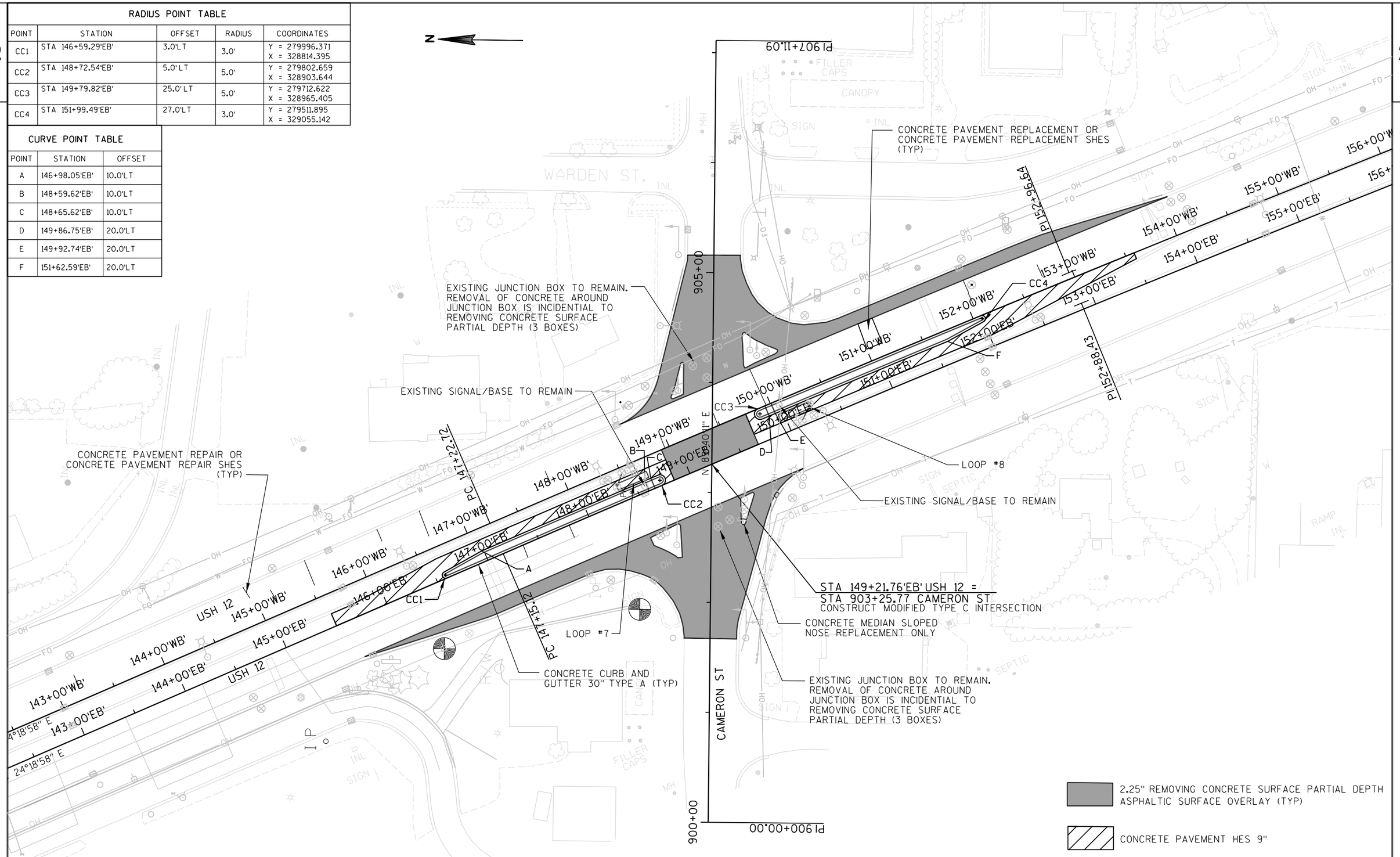
FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\021104 id.dgn PLOT TIME : 7:42:15 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 42

2

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	STA 146+59.29'EB'	3.0'LT	3.0'	Y = 279996.371 X = 328814.395
CC2	STA 148+72.54'EB'	5.0'LT	5.0'	Y = 279802.659 X = 328903.644
CC3	STA 149+79.82'EB'	25.0'LT	5.0'	Y = 279712.622 X = 328965.405
CC4	STA 151+99.49'EB'	27.0'LT	3.0'	Y = 279511.895 X = 329055.142

CURVE POINT TABLE		
POINT	STATION	OFFSET
A	146+98.05'EB'	10.0'LT
B	148+59.62'EB'	10.0'LT
C	148+65.62'EB'	10.0'LT
D	149+86.75'EB'	20.0'LT
E	149+92.74'EB'	20.0'LT
F	151+62.59'EB'	20.0'LT



PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 15	E

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	STA 163+81.87'EB'	3.0'LT	3.0'	Y = 278501.831 X = 329446.040
CC2	STA 163+95.50'EB'	5.0'LT	5.0'	Y = 278397.237 X = 329490.500
CC3	STA 164+98.87'EB'	25.0'LT	5.0'	Y = 278308.906 X = 329547.800
CC4	STA 166+12.57'EB'	27.0'LT	3.0'	Y = 278204.254 X = 329592.283

CURVE POINT TABLE		
POINT	STATION	OFFSET
A	163+22.13'EB'	10.0'LT
B	163+82.50'EB'	10.0'LT
C	163+88.50'EB'	10.0'LT
D	165+05.87'EB'	20.0'LT
E	165+11.87'EB'	20.0'LT
F	165+72.72'EB'	20.0'LT

N

EXISTING JUNCTION BOX TO REMAIN. REMOVAL OF CONCRETE AROUND JUNCTION BOX IS INCIDENTIAL TO REMOVING CONCRETE SURFACE PARTIAL DEPTH (1 BOX)

CONCRETE PAVEMENT REPAIR OR CONCRETE PAVEMENT REPAIR SHES (TYP)

RE-ESTABLISH EXISTING BOX OUT INCIDENTIAL TO CONCRETE PAVEMENT HES 9-INCH

STA 164+40.55'EB' USH 12 =
STA 1002+72.37 CRESTVIEW DR
CONSTRUCT MODIFIED TYPE C INTERSECTION

RE-ESTABLISH EXISTING BOX OUT INCIDENTIAL TO CONCRETE PAVEMENT 9-INCH

CONCRETE CURB AND GUTTER 30" TYPE A (TYP)

LOOP #10

STA 164+55.83'EB' USH 12 =
STA 1002+67.37 CRESTVIEW DR
CONSTRUCT MODIFIED TYPE C INTERSECTION

EXISTING JUNCTION BOX TO REMAIN. REMOVAL OF CONCRETE AROUND JUNCTION BOX IS INCIDENTIAL TO REMOVING CONCRETE SURFACE PARTIAL DEPTH (1 BOX)

LOOP #9

CONCRETE PAVEMENT REPLACEMENT OR CONCRETE PAVEMENT REPLACEMENT SHES (TYP)

2.25" REMOVING CONCRETE SURFACE PARTIAL DEPTH ASPHALTIC SURFACE OVERLAY (TYP)

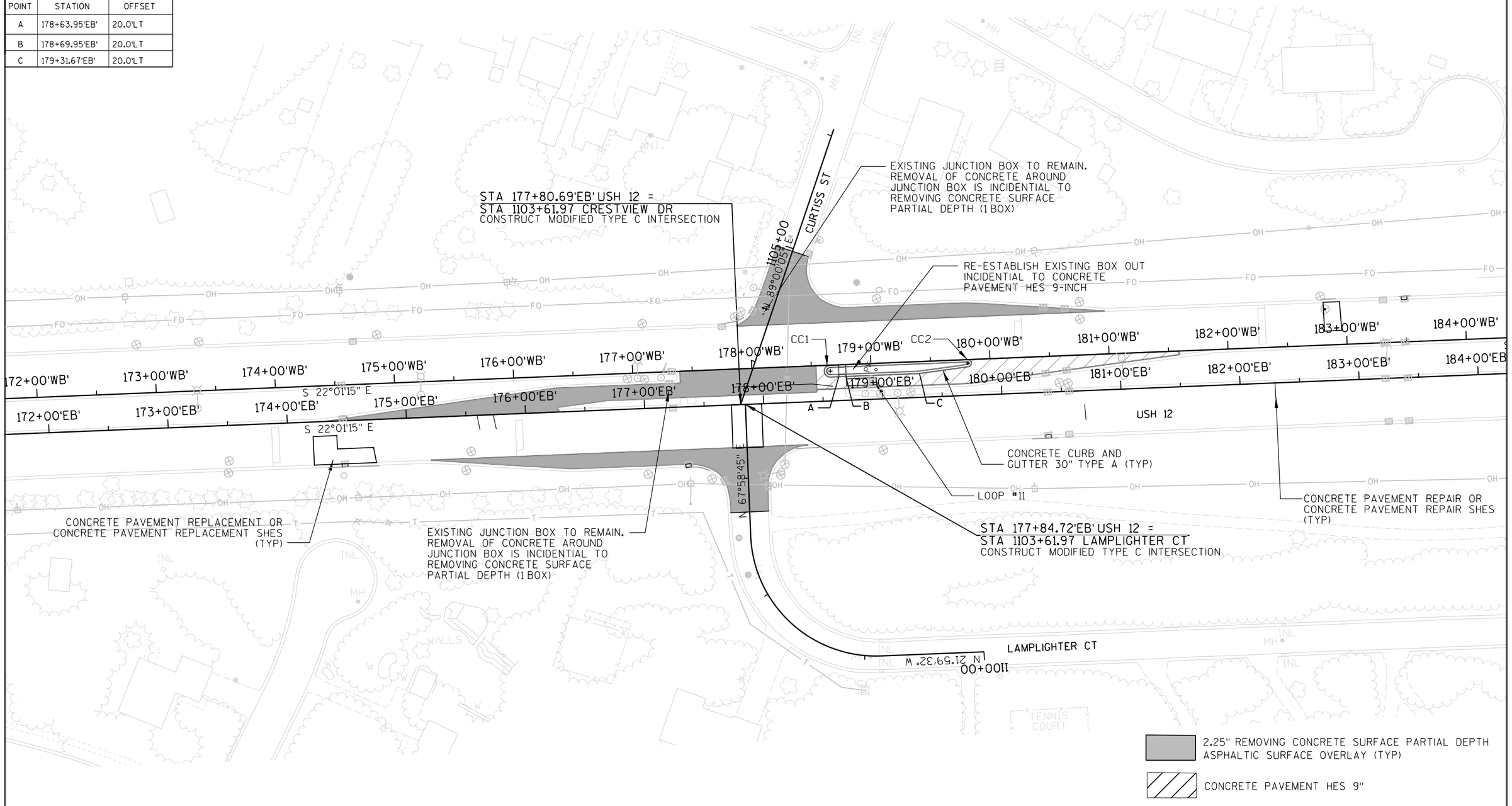
CONCRETE PAVEMENT HES 9"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 16	E

2

RADIUS POINT TABLE				
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	STA 178+56.95'EB'	25.0'LT	5.0'	Y = 277049.901 X = 330057.001
CC2	STA 179+72.57'EB'	27.0'LT	3.0'	Y = 276943.466 X = 330102.205

CURVE POINT TABLE		
POINT	STATION	OFFSET
A	178+63.95'EB'	20.0'LT
B	178+69.95'EB'	20.0'LT
C	179+31.67'EB'	20.0'LT



PROJECT NO:7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 17	E

2

2.25" REMOVING CONCRETE SURFACE PARTIAL DEPTH ASPHALTIC SURFACE OVERLAY (TYP)

N

PARK RIDGE DR

1205+00

N 60°17'46" E

PI 193+89.76

PT 197+23.41

PC 197+23.41

PI 200'WB'+08.74

PC 202+93.01

PT 202+93.01

PI 203+94.53

PT 204+96.02

PI 206+00'WB'.00

194+00'WB' 195+00'WB' 196+00'WB' USH 12 197+00'WB' 198+00'WB' 199+00'WB' 200'WB'+00 201+00'WB' 202+00'WB' 203+00'WB' 204+00'WB' 205+00'WB' 206+00'WB

194+00'EB' 195+00'EB' 196+00'EB' USH 12 197+00'EB' 198+00'EB' 199+00'EB' 200'EB'+00 201+00'EB' 202+00'EB' 203+00'EB' 204+00'EB' 205+00'EB' 206+00'EB

S 38°50'13" E

CONCRETE PAVEMENT REPAIR OR CONCRETE PAVEMENT REPAIR SHES (TYP)

PI 193+82.41

PC 197+17.52

PT 197+17.52

PI 200'WB'+05.09

PC 202+91.59

PT 202+91.59

PI 203+93.83

PT 204+96.02

PI 206+00'WB'.00

1200+00

S 25°07'17" E

AVENUE C

CONCRETE PAVEMENT REPLACEMENT OR CONCRETE PAVEMENT REPLACEMENT SHES (TYP)

STA 199+07.17'EB' USH 12 =
STA 1202+64.73 ARLEN CT
CONSTRUCT MODIFIED TYPE C INTERSECTION

PROJECT NO:7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	INTERSECTION DETAIL	SHEET 18	E

2

SIGNING GENERAL NOTES

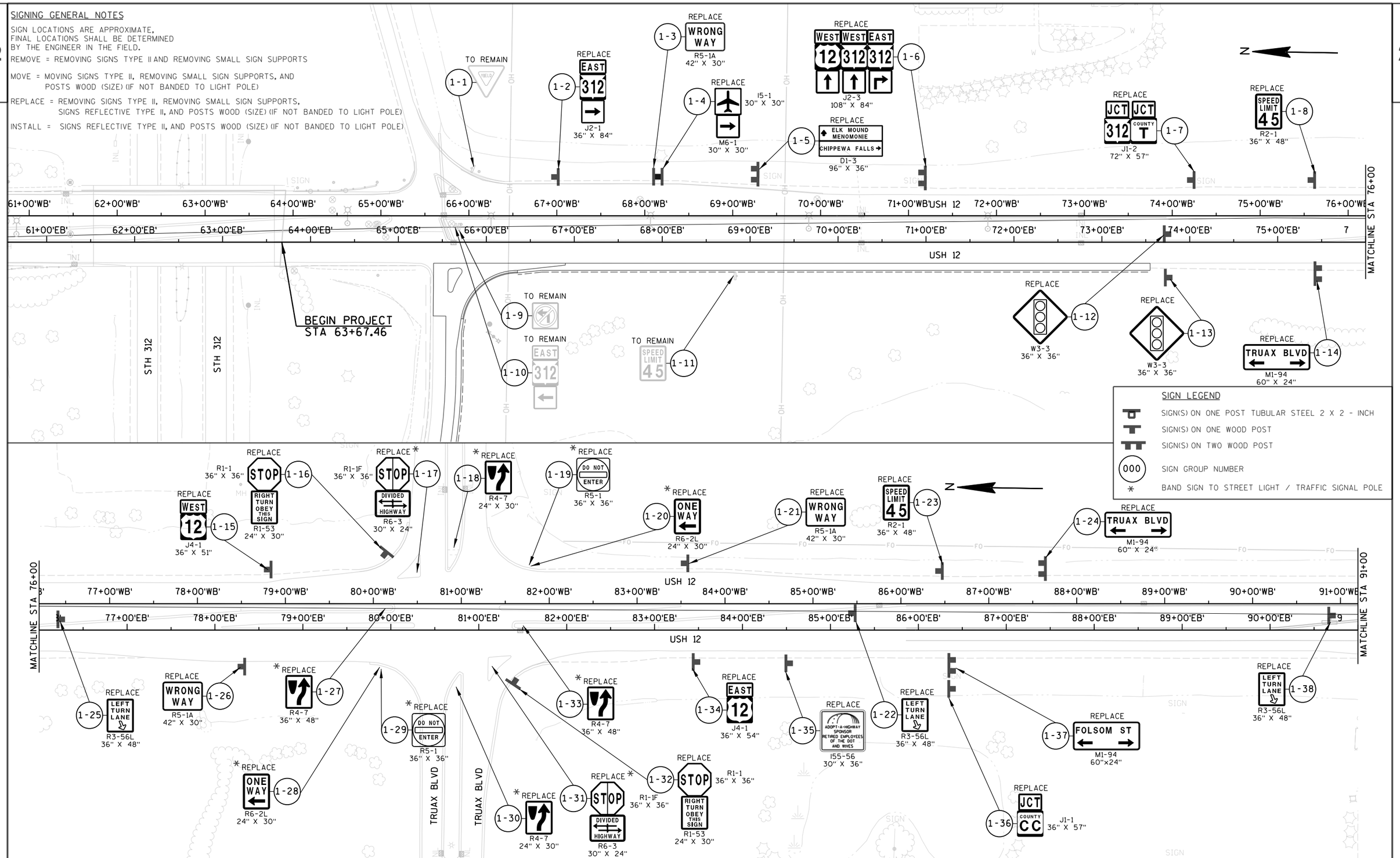
SIGN LOCATIONS ARE APPROXIMATE,
FINAL LOCATIONS SHALL BE DETERMINED
BY THE ENGINEER IN THE FIELD.

REMOVE = REMOVING SIGNS TYPE II AND REMOVING SMALL SIGN SUPPORTS

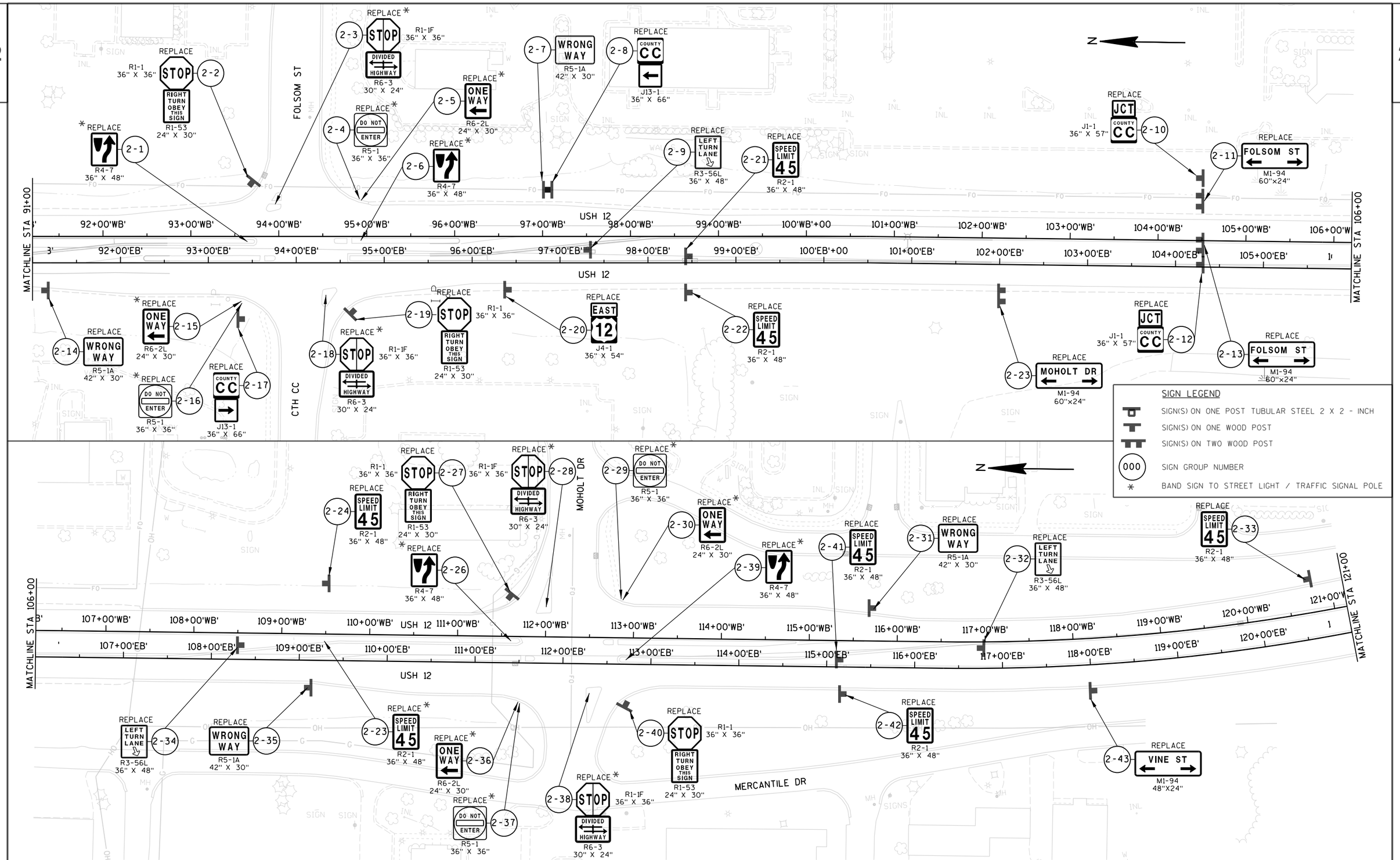
MOVE = MOVING SIGNS TYPE II, REMOVING SMALL SIGN SUPPORTS, AND
POSTS WOOD (SIZE) (IF NOT BANDED TO LIGHT POLE)

REPLACE = REMOVING SIGNS TYPE II, REMOVING SMALL SIGN SUPPORTS,
SIGNS REFLECTIVE TYPE II, AND POSTS WOOD (SIZE) (IF NOT BANDED TO LIGHT POLE)

INSTALL = SIGNS REFLECTIVE TYPE II, AND POSTS WOOD (SIZE) (IF NOT BANDED TO LIGHT POLE)



PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 19	E



PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 20	E

2

MATCHLINE STA 121+00

MATCHLINE STA 136+00

MATCHLINE STA 136+00

MATCHLINE STA 151+00

USH 12

USH 12

USH 12

USH 12

VINE ST

CAMERON ST

CTH E

3-1 REPLACE MOHOLT DR M1-94 60"X24"

3-2 REPLACE MOHOLT DR M1-94 60"X24"

3-3 REPLACE W4-2R 36" X 36"

3-4 REPLACE RIGHT LANE ENDS W9-1R 36" X 36"

3-5 REPLACE * R4-7 36" X 48"

3-6 REPLACE STOP R1-1 36" X 36" RIGHT TURN OBEY THIS SIGN R1-53 24" X 30"

3-7 REPLACE * STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

3-8 REPLACE * ONE WAY R6-2L 24" X 30"

3-9 REPLACE YIELD R1-2 48" X 42"

3-10 REPLACE DO NOT ENTER R5-1 36" X 36"

3-11 REPLACE WRONG WAY R5-1A 42" X 30"

3-12 REPLACE LEFT TURN LANE R3-56L 36" X 48"

3-13 REPLACE THIS LANE ENDS W9-62 48" X 60"

3-14 REPLACE LEFT TURN LANE R3-56L 36" X 48"

3-15 REPLACE WRONG WAY R5-1A 42" X 30"

3-16 REPLACE YIELD R1-2 48" X 42"

3-17 REPLACE * ONE WAY R6-2L 24" X 30"

3-18 REPLACE * STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

3-19 REPLACE STOP R1-1 36" X 36" RIGHT TURN OBEY THIS SIGN R1-53 24" X 30"

3-20 REPLACE * R4-7 36" X 48"

3-21 REPLACE EAST 12 J4-1 36" X 54"

3-22 REPLACE * SPEED LIMIT 45 R2-1 36" X 48"

3-23 REPLACE SPEED LIMIT 45 R2-1 36" X 48"

3-24 REPLACE VINE ST M1-94 48"X24"

3-25 REPLACE VINE ST M1-94 48"X24"

3-26 REPLACE SPEED LIMIT 45 R2-1 36" X 48"

3-27 REPLACE SPEED LIMIT 45 R2-1 36" X 48"

3-28 REPLACE WEST 12 J4-1 36" X 54"

3-29 REPLACE * R4-7 36" X 48"

3-30 REPLACE STOP R1-1 36" X 36" RIGHT TURN OBEY THIS SIGN R1-53 24" X 30"

3-31 REPLACE * STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

3-32 REPLACE ONE WAY R6-2L 24" X 30"

3-33 REPLACE YIELD R1-2 48" X 42"

3-34 REPLACE DO NOT ENTER R5-1 36" X 36"

3-35 REPLACE JCT COUNTY E J1-1 36" X 57"

3-36 REPLACE CAMERON ST M1-94 66"X24"

3-37 REPLACE CAMERON ST M1-94 66"X24"

3-38 REPLACE JCT COUNTY E J1-1 36" X 57"

3-39 REPLACE LEFT TURN LANE R3-56L 36" X 48"

3-40 REPLACE H D9-2 36" X 36" M6-1 30" X 30"

3-41 REPLACE DOWNTOWN M1-94 72"X15"

3-42 REPLACE WRONG WAY R5-1A 42" X 30"

3-43 REPLACE COUNTY E J13-1 36" X 66"

3-44 REPLACE DO NOT ENTER R5-1 36" X 36"

3-45 REPLACE YIELD R1-2 48" X 42"

3-46 REPLACE LEFT TURN SIGNAL R10-10L 24" X 30"

3-47 REPLACE * ONE WAY R6-2L 24" X 30"

3-48 REPLACE * STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

3-49 REPLACE STOP R1-1 36" X 36" RIGHT TURN OBEY THIS SIGN R1-53 24" X 30"

3-50 REPLACE * R4-7 36" X 48"

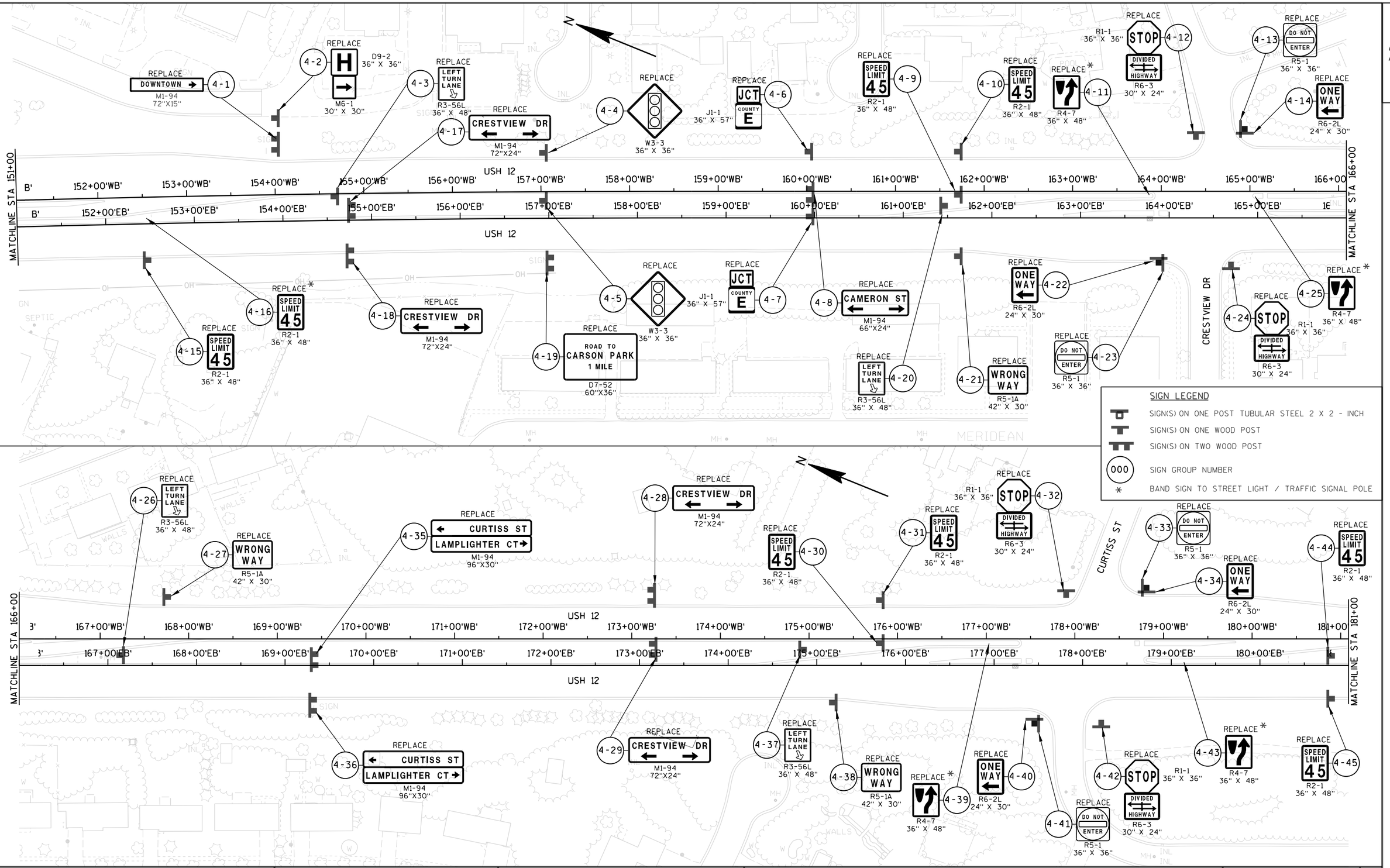
3-51 REPLACE * LEFT TURN SIGNAL R10-10L 24" X 30"

3-52 REPLACE EAST 12 J4-1 36" X 54"

SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- 000 SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT / TRAFFIC SIGNAL POLE

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 21 E



PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 22	E

2

REPLACE 5-1 LEFT TURN LANE R3-56L 36" X 48"

REPLACE 5-2 WRONG WAY R5-1A 42" X 40"

REPLACE 5-4 ← LAMPLIGHTER CT / CURTISS ST → M1-94 96"X30"

REPLACE 5-5 SPEED LIMIT 45 R2-1 36" X 48"

REPLACE 5-6 SPEED LIMIT 45 R2-1 36" X 48"

REPLACE 5-7 LEFT TURN LANE R3-56L 36" X 48"

REPLACE 5-3 ← LAMPLIGHTER CT / CURTISS ST → M1-94 96"X30"

MATCHLINE STA 181+00

MATCHLINE STA 196+00

182+00'WB' 183+00'WB' 184+00'WB' 185+00'WB' 186+00'WB' 187+00'WB' 188+00'WB' 189+00'WB' 190+00'WB' 191+00'WB' 192+00'WB' 193+00'WB' 194+00'WB' 195+00'WB' 196+00

182+00'EB' 183+00'EB' 184+00'EB' 185+00'EB' 186+00'EB' 187+00'EB' 188+00'EB' 189+00'EB' 190+00'EB' 191+00'EB' 192+00'EB' 193+00'EB' 194+00'EB' 195+00'EB'

USH 12

USH 12

SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- (000) SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT / TRAFFIC SIGNAL POLE

REPLACE 5-8 STOP DIVIDED HIGHWAY R1-1 36" X 36" R6-3 30" X 24"

REPLACE 5-9 DO NOT ENTER R5-1 36" X 36"

REPLACE 5-10 ONE WAY R6-2L 24" X 30"

PARK RIDGE DR

REPLACE 5-11 WRONG WAY R5-1A 42" X 30"

REPLACE 5-31 W3-3 36" X 36"

REPLACE 5-12 ADOPT-A-HIGHWAY SPONSOR RETIRED EMPLOYEES OF THE DOT AND WIVES I55-56 30" X 36"

REPLACE* 5-16 DO NOT ENTER R5-1 36" X 36"

REPLACE 5-13 SPEED LIMIT 45 R2-1 36" X 48"

REPLACE* 5-15 WEST 12 J4-1 36" X 54"

REPLACE* 5-17 STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

REPLACE* 5-19 STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

MENOMONIE ST

REPLACE* 5-18

REPLACE* 5-20 ONE WAY R6-2L 36" X 48"

REPLACE* 5-21 DO NOT ENTER R5-1 36" X 36"

REPLACE* 5-44 LEFT TURN SIGNAL R10-10L 24" X 30"

5-22 W12-1D 30" X 30"

MATCHLINE STA 196+00

MATCHLINE STA 211+00

197+00'WB' 198+00'WB' 199+00'WB' 200'WB'+00 201+00'WB' 202+00'WB' 203+00'WB' 204+00'WB' 205+00'WB' 206+00'WB' 207+00'WB' 208+00'WB' 209+00'WB' 210+00'WB'

197+00'EB' 198+00'EB' 199+00'EB' 200'EB'+00 201+00'EB' 202+00'EB' 203+00'EB' 204+00'EB' 205+00'EB' 206+00'EB' 207+00'EB' 208+00'EB' 209+00'EB' 210+00'EB'

USH 12

AVENUE C

REPLACE 5-23 WRONG WAY R5-1A 42" X 30"

REPLACE 5-24 R4-7 36" X 48"

REPLACE 5-25 ONE WAY R6-2L 36" X 48"

REPLACE 5-26 DO NOT ENTER R5-1 36" X 36"

REPLACE 5-27 STOP DIVIDED HIGHWAY R1-1 36" X 36" R6-3 30" X 24"

REPLACE* 5-28 R4-7 36" X 48"

REPLACE 5-29 LEFT TURN LANE R3-56L 36" X 48"

REPLACE 5-30 ← MENOMONIE ST M1-94 90"X15"

REPLACE 5-32 W3-3 36" X 36"

REPLACE CARSON PARK M1-94 60"X24"

5-33

REPLACE* 5-14 SPEED LIMIT 45 R2-1 36" X 48"

REPLACE* 5-35 DO NOT ENTER R5-1 36" X 36"

REPLACE* 5-36 R4-7 36" X 48"

REPLACE WRONG WAY R5-1A 42" X 30" 5-34

REPLACE* 5-37 ONE WAY R6-2L 24" X 30"

5-38 LEFT TURN SIGNAL R10-10L 24" X 30"

REPLACE* 5-39 STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

REPLACE* 5-41 STOP DIVIDED HIGHWAY R1-1F 36" X 36" R6-3 30" X 24"

REPLACE* 5-42 DO NOT ENTER R5-1 36" X 36"

REPLACE* 5-40 R4-7 36" X 48"

REPLACE* 5-43 EAST 12 J4-1 36" X 54"

REPLACE* 5-45 R4-7 36" X 48"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 23	E

FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\023205 ps.dgn PLOT TIME : 7:42:27 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

2

SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- 000 SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT / TRAFFIC SIGNAL POLE

MATCHLINE STA 211+00

MATCHLINE STA 226+00

MATCHLINE STA 241+00

USH 12

NORTH FRONTAGE RD

AMERICAN BLVD

CHIPPEWA RIVER

6-1 REPLACE CARSON PARK M1-94 60"X24"

6-2 REPLACE W3-3 36" X 36"

6-3 REPLACE* W3-3 36" X 36"

6-4 REPLACE LEFT TURN LANE R3-56L 36" X 48"

6-5 REPLACE MENOMONIE ST M1-94 90"X15"

6-6 REPLACE MENOMONIE ST M1-94 90"X15"

6-7 REPLACE* SPEED LIMIT 45 R2-1 36" X 48"

6-8 REPLACE SPEED LIMIT 45 R2-1 36" X 48"

6-9 REPLACE CHIPPEWA RIVER M1-94 84"X15"

6-10 REPLACE CHIPPEWA RIVER M1-94 84"X15"

6-11 REPLACE R4-7 36" X 48"

6-12 REPLACE R1-1 36" X 36" STOP

6-13 REPLACE DO NOT ENTER R5-1 36" X 36"

6-14 REPLACE ONE WAY R6-2L 24" X 30"

6-15 REPLACE WRONG WAY R5-1A 42" X 30"

6-16 REPLACE LEFT TURN LANE R3-56L 36" X 48"

6-17 REPLACE DEPARTMENT OF NATURAL RESOURCES M1-94 114"X24"

6-18 REPLACE DEPARTMENT OF NATURAL RESOURCES M1-94 114"X24"

6-19 REPLACE LEFT TURN LANE R3-56L 36" X 48"

6-20 REPLACE ADOPT-A-HIGHWAY SPONSOR PEACE LUTHERAN CONFORMATION YOUTH GROUPS I55-56 30" X 36"

6-21 REPLACE WRONG WAY R5-1A 42" X 30"

6-22 REPLACE ONE WAY R6-2L 24" X 30"

6-23 REPLACE DO NOT ENTER R5-1 36" X 36"

6-24 REPLACE STOP R1-1 36" X 36" DIVIDED HIGHWAY R6-3 30" X 24"

6-25 REPLACE R4-7 36" X 48"

6-26 REPLACE CRAIG RD M1-94 54"X24"

6-27 REPLACE W3-3 36" X 36"

6-28 REPLACE W3-3 36" X 36"

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 24	E

2

END PROJECT
STA 244+17.00

REPLACE
SPEED LIMIT 45
7-1
R2-1
36" X 48"

MATCHLINE STA 241+00

241+00'WB'
3'
242+00'WB'
242+00'EB'
243+00'WB'
243+00'EB'
244+00'WB'
244+00'EB'
245+00'WB'
245+00'EB'
246+00'WB'
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253+00'WB'
253+00'EB'
254+00'WB'
254+00'EB'
255+00'WB'
255+00'EB'
256+00'EB

REPLACE
LEFT TURN LANE
7-2
R3-56L
36" X 48"

REPLACE
SPEED LIMIT 45
7-3
R2-1
36" X 48"

CRAIG RD

PHONE

NORTH FRONTAGE RD

USH 12

USH 12

CRAIG RD

STH 37

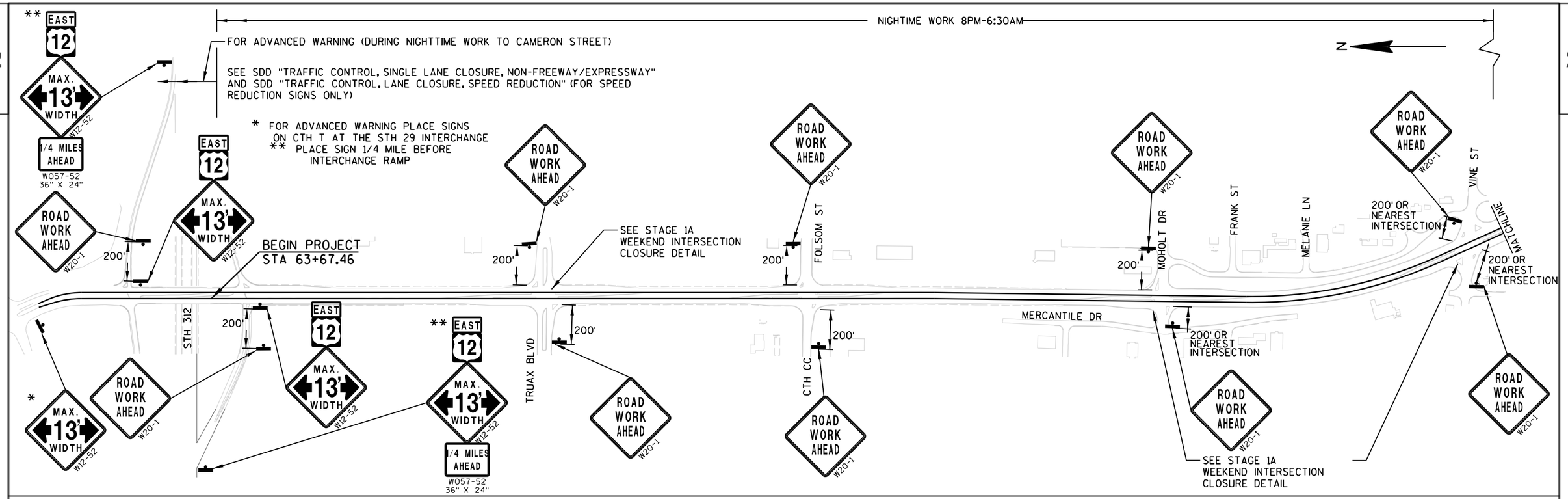
N

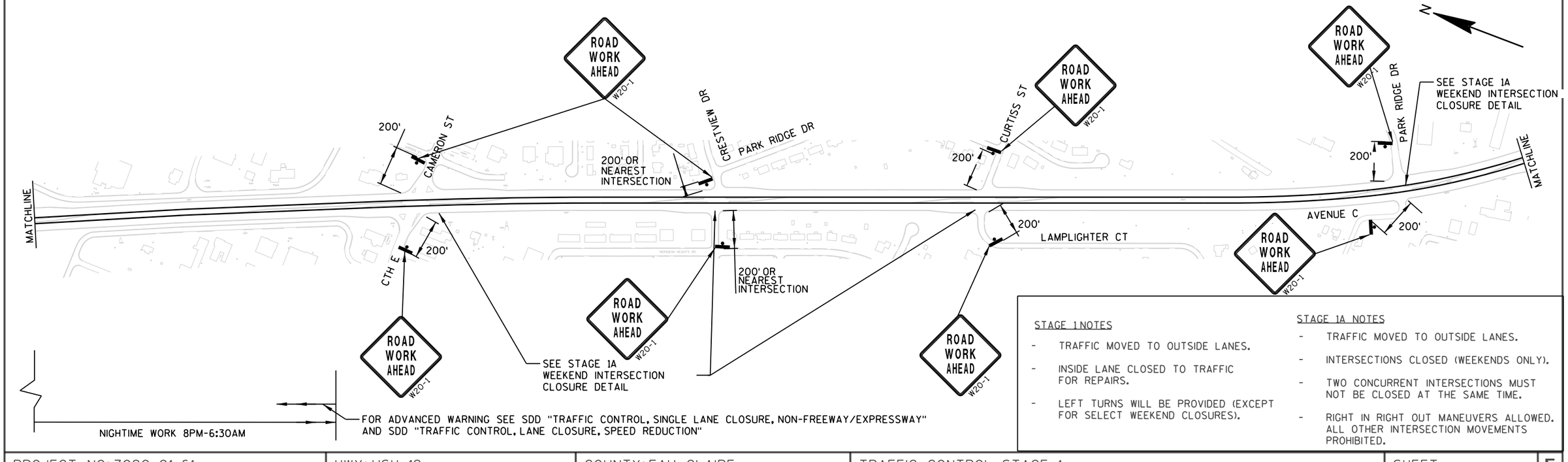
SIGN LEGEND

- SIGN(S) ON ONE POST TUBULAR STEEL 2 X 2 - INCH
- SIGN(S) ON ONE WOOD POST
- SIGN(S) ON TWO WOOD POST
- 000 SIGN GROUP NUMBER
- * BAND SIGN TO STREET LIGHT / TRAFFIC SIGNAL POLE

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 25	E

FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\023207 ps.dgn PLOT TIME : 7:42:29 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A





STAGE 1 NOTES

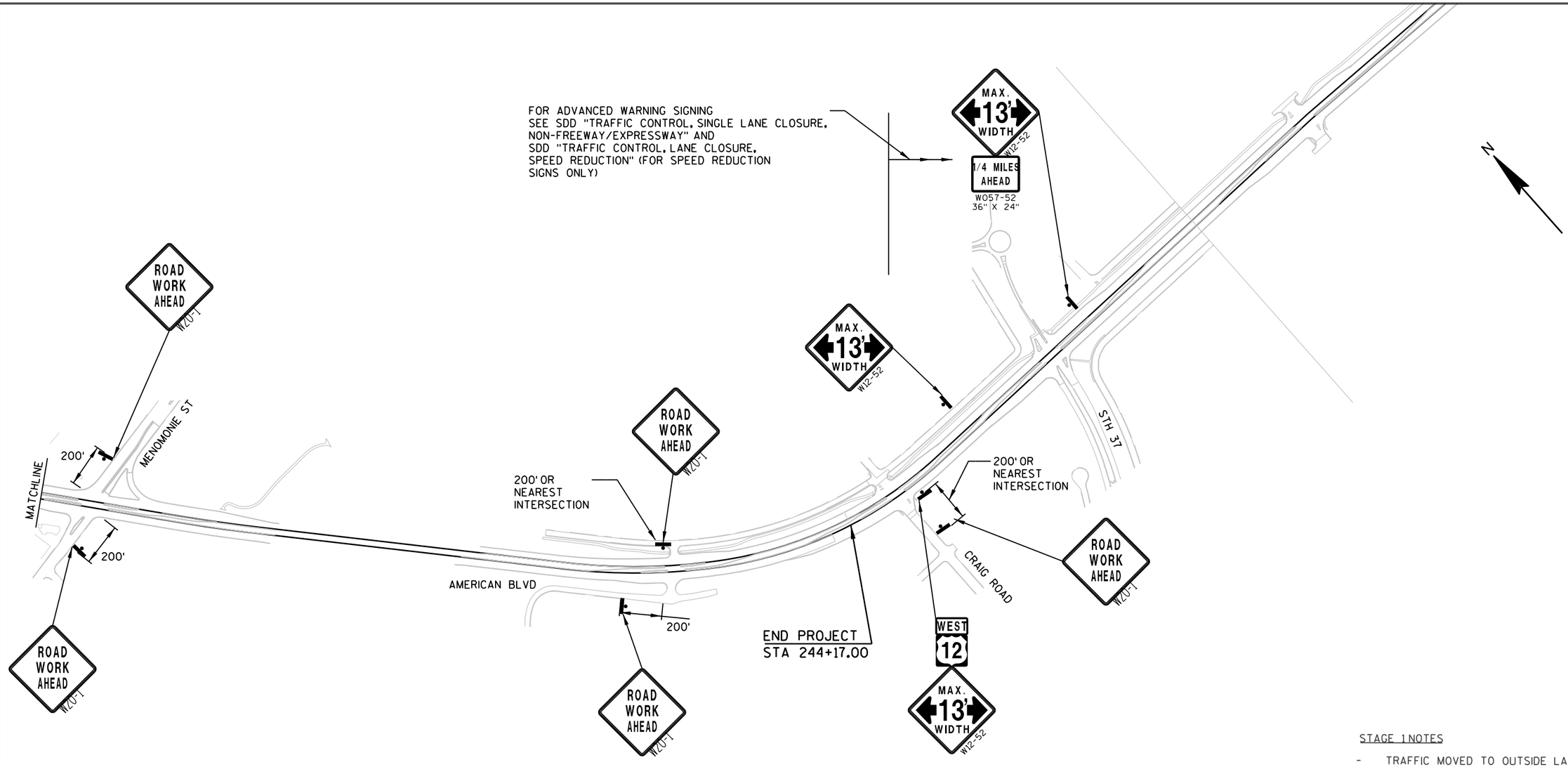
- TRAFFIC MOVED TO OUTSIDE LANES.
- INSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- LEFT TURNS WILL BE PROVIDED (EXCEPT FOR SELECT WEEKEND CLOSURES).

STAGE 1A NOTES

- TRAFFIC MOVED TO OUTSIDE LANES.
- INTERSECTIONS CLOSED (WEEKENDS ONLY).
- TWO CONCURRENT INTERSECTIONS MUST NOT BE CLOSED AT THE SAME TIME.
- RIGHT IN RIGHT OUT MANEUVERS ALLOWED. ALL OTHER INTERSECTION MOVEMENTS PROHIBITED.

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 1	SHEET 26	E

2



STAGE 1 NOTES

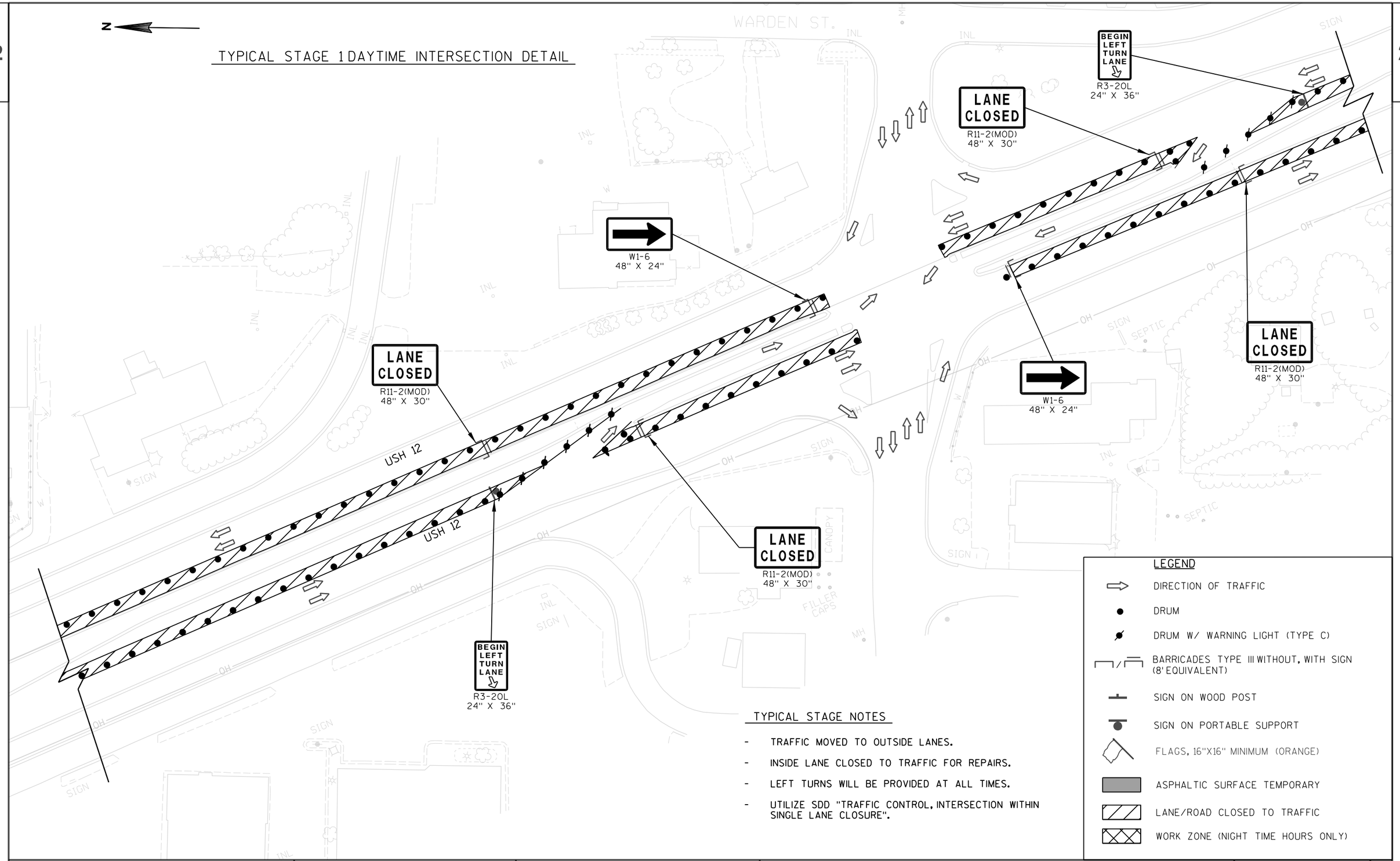
- TRAFFIC MOVED TO OUTSIDE LANES.
- INSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- LEFT TURNS WILL BE PROVIDED (EXCEPT FOR SELECT WEEKEND CLOSURES).

STAGE 1A NOTES

- TRAFFIC MOVED TO OUTSIDE LANES.
- INTERSECTIONS CLOSED (WEEKENDS ONLY).
- TWO CONCURRENT INTERSECTIONS MUST NOT BE CLOSED AT THE SAME TIME.
- RIGHT IN RIGHT OUT MANEUVERS ALLOWED. ALL OTHER INTERSECTION MOVEMENTS PROHIBITED.

2

TYPICAL STAGE 1 DAYTIME INTERSECTION DETAIL



LEGEND

- DIRECTION OF TRAFFIC
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- BARRICADES TYPE III WITHOUT, WITH SIGN (8' EQUIVALENT)
- SIGN ON WOOD POST
- SIGN ON PORTABLE SUPPORT
- FLAGS, 16"X16" MINIMUM (ORANGE)
- ASPHALTIC SURFACE TEMPORARY
- LANE/ROAD CLOSED TO TRAFFIC
- WORK ZONE (NIGHT TIME HOURS ONLY)

TYPICAL STAGE NOTES

- TRAFFIC MOVED TO OUTSIDE LANES.
- INSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- LEFT TURNS WILL BE PROVIDED AT ALL TIMES.
- UTILIZE SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE".

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 1	SHEET 28	E

2

N

TYPICAL STAGE 1 NIGHTTIME INTERSECTION DETAIL

WARDEN ST.

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

LANE CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

LANE CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

USH 12

USH 12

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

TYPICAL STAGE NOTES

- TRAFFIC MOVED TO OUTSIDE LANES.
- INSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- LEFT TURNS WILL BE CONTROLLED THROUGH FLAGGING DURING NIGHT TIME HOURS.
- UTILIZE SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE".

LEGEND

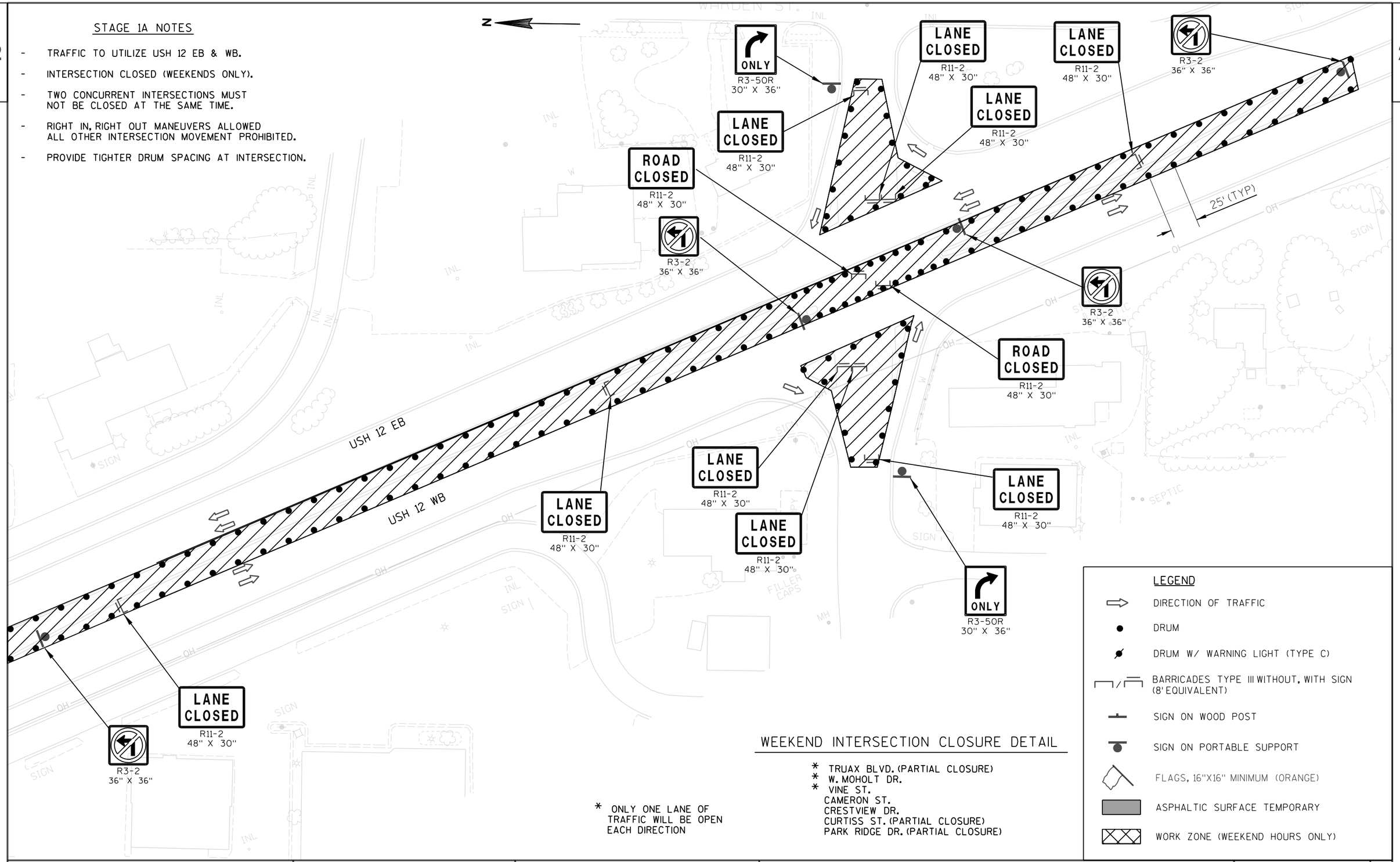
- DIRECTION OF TRAFFIC
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- BARRICADES TYPE III WITHOUT, WITH SIGN (8' EQUIVALENT)
- SIGN ON WOOD POST
- SIGN ON PORTABLE SUPPORT
- FLAGS, 16"X16" MINIMUM (ORANGE)
- ASPHALTIC SURFACE TEMPORARY
- LANE/ROAD CLOSED TO TRAFFIC
- WORK ZONE (NIGHT TIME HOURS ONLY)

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 1	SHEET 29	E

2

STAGE 1A NOTES

- TRAFFIC TO UTILIZE USH 12 EB & WB.
- INTERSECTION CLOSED (WEEKENDS ONLY).
- TWO CONCURRENT INTERSECTIONS MUST NOT BE CLOSED AT THE SAME TIME.
- RIGHT IN, RIGHT OUT MANEUVERS ALLOWED ALL OTHER INTERSECTION MOVEMENT PROHIBITED.
- PROVIDE TIGHTER DRUM SPACING AT INTERSECTION.



* ONLY ONE LANE OF TRAFFIC WILL BE OPEN EACH DIRECTION

WEEKEND INTERSECTION CLOSURE DETAIL

* TRUAX BLVD. (PARTIAL CLOSURE)
* W. MOHOLT DR.
* VINE ST.
CAMERON ST.
CRESTVIEW DR.
CURTISS ST. (PARTIAL CLOSURE)
PARK RIDGE DR. (PARTIAL CLOSURE)

LEGEND

- DIRECTION OF TRAFFIC
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- BARRICADES TYPE III WITHOUT, WITH SIGN (8' EQUIVALENT)
- SIGN ON WOOD POST
- SIGN ON PORTABLE SUPPORT
- FLAGS, 16"X16" MINIMUM (ORANGE)
- ASPHALTIC SURFACE TEMPORARY
- WORK ZONE (WEEKEND HOURS ONLY)

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - WEEKEND INTERSECTION CLOSURE STAGE 1 A	SHEET 30	E

NIGHTIME WORK 8PM-6:30AM

FOR ADVANCED WARNING (DURING NIGHTTIME WORK TO CAMERON STREET)

SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" (FOR SPEED REDUCTION SIGNS ONLY)

* FOR ADVANCED WARNING PLACE SIGNS ON CTH T AT THE STH 29 INTERCHANGE
** PLACE SIGN 1/4 MILE BEFORE INTERCHANGE RAMP

N

** EAST 12 — MAX. 13' WIDTH W12-52
1/4 MILES AHEAD W057-52 36" X 24"
ROAD WORK AHEAD W20-1
200'
EAST 12 — MAX. 13' WIDTH W12-52
BEGIN PROJECT STA 63+67.46
ROAD WORK AHEAD W20-1 — 200' — SEE STAGE 2 NIGHTIME INTERSECTION DETAIL
ROAD WORK AHEAD W20-1 — 200' — FOLSOM ST — SEE STAGE 2A NIGHTIME INTERSECTION DETAIL
ROAD WORK AHEAD W20-1 — 200' — MOHOLT DR
FRANK ST
MELANIE LN
ROAD WORK AHEAD W20-1 — 200' OR NEAREST INTERSECTION — VINE ST
MATCHLINE
200' OR NEAREST INTERSECTION
* MAX. 13' WIDTH W12-52
ROAD WORK AHEAD W20-1
STH 312
200'
EAST 12 — MAX. 13' WIDTH W12-52
** EAST 12 — MAX. 13' WIDTH W12-52
1/4 MILES AHEAD W057-52 36" X 24"
TRUAX BLVD — 200' — ROAD WORK AHEAD W20-1
CTH CC — 200' — ROAD WORK AHEAD W20-1
MERCANTILE DR
200' OR NEAREST INTERSECTION
ROAD WORK AHEAD W20-1
SEE STAGE 2 NIGHTIME INTERSECTION DETAIL

ROAD WORK AHEAD W20-1 — 200' — CAMERON ST
CRESTVIEW DR
PARK RIDGE DR
200' OR NEAREST INTERSECTION
MATCHLINE
CTH E — 200' — ROAD WORK AHEAD W20-1
ROAD WORK AHEAD W20-1
200' OR NEAREST INTERSECTION
SEE STAGE 2 NIGHTIME INTERSECTION DETAIL
ROAD WORK AHEAD W20-1 — 200' — CURTISS ST
LAMPLIGHTER CT
ROAD WORK AHEAD W20-1 — 200' — PARK RIDGE DR.
AVENUE C
ROAD WORK AHEAD W20-1 — 200'
MATCHLINE

NIGHTIME WORK 8PM-6:30AM

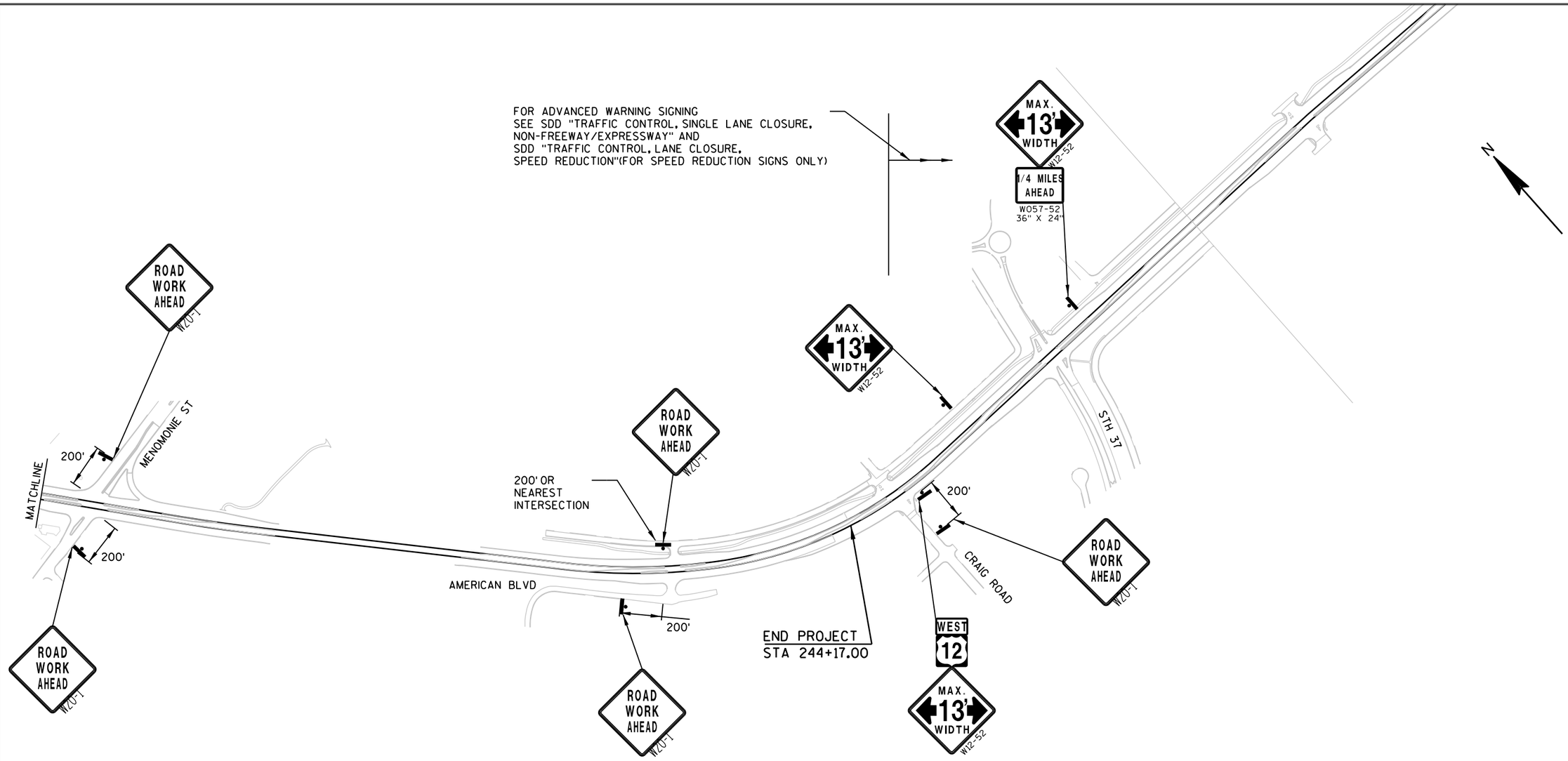
FOR ADVANCED WARNING SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION"

STAGE 2 NOTES

- TRAFFIC MOVED TO INSIDE LANE.
- OUTSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- RIGHT & LEFT TURNS WILL BE ALLOWED DURING CONSTRUCTION WITH FLAGGING BEING UTILIZED DURING NIGHT TIME HOURS.

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 2	SHEET 31	E

2



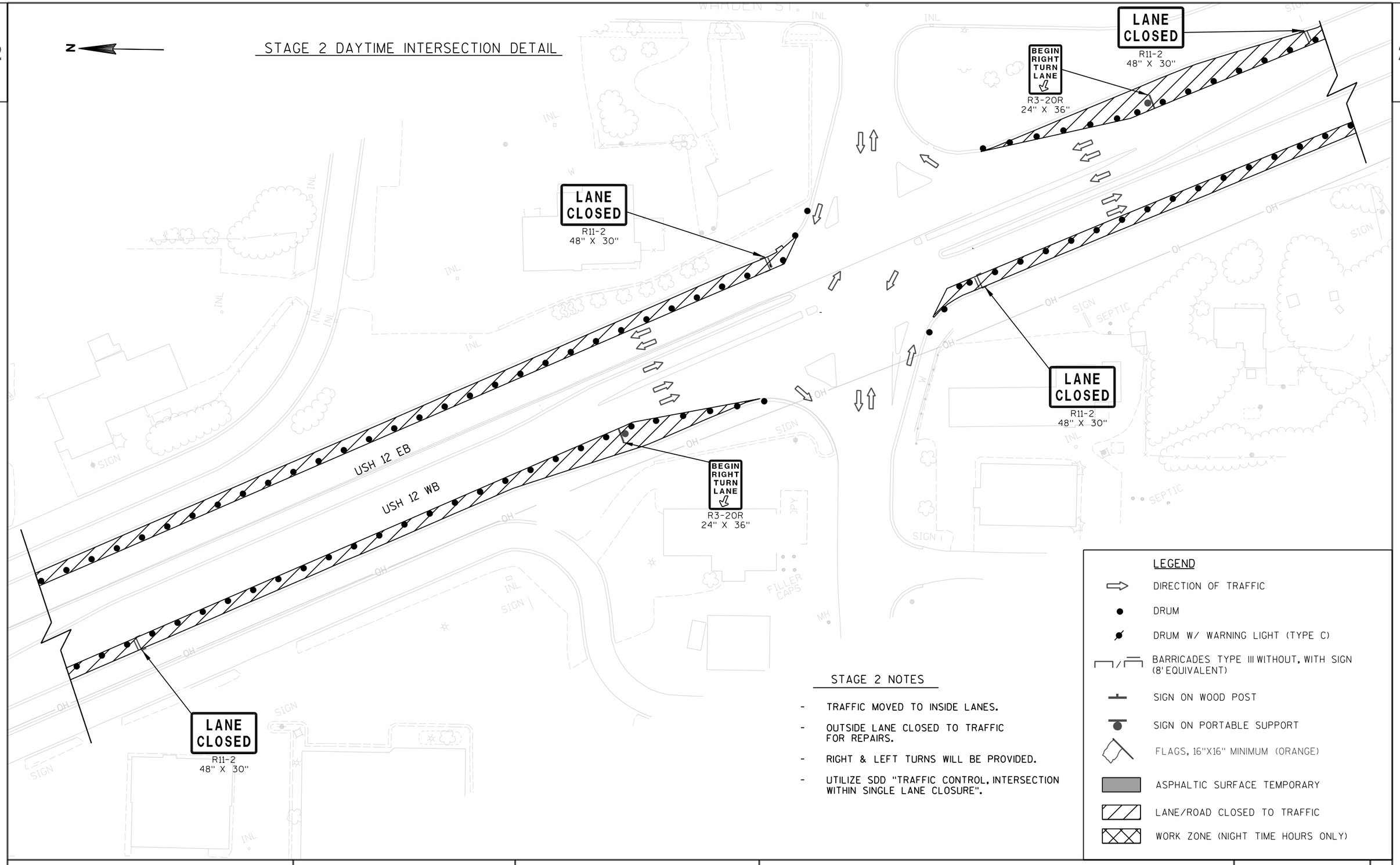
STAGE 2 NOTES

- TRAFFIC MOVED TO INSIDE LANE.
- OUTSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- RIGHT & LEFT TURNS WILL BE ALLOWED DURING CONSTRUCTION WITH FLAGGING BEING UTILIZED DURING NIGHT TIME HOURS.

2

N

STAGE 2 DAYTIME INTERSECTION DETAIL



STAGE 2 NOTES

- TRAFFIC MOVED TO INSIDE LANES.
- OUTSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- RIGHT & LEFT TURNS WILL BE PROVIDED.
- UTILIZE SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE".

LEGEND

- DIRECTION OF TRAFFIC
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- BARRICADES TYPE III WITHOUT, WITH SIGN (8' EQUIVALENT)
- SIGN ON WOOD POST
- SIGN ON PORTABLE SUPPORT
- FLAGS, 16"X16" MINIMUM (ORANGE)
- ASPHALTIC SURFACE TEMPORARY
- LANE/ROAD CLOSED TO TRAFFIC
- WORK ZONE (NIGHT TIME HOURS ONLY)

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 2	SHEET 33	E

2

N

STAGE 2 NIGHTIME INTERSECTION DETAIL

LANE CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2
48" X 30"

USH 12 EB

USH 12 WB

WARDEN ST.

STAGE 2 NOTES

- TRAFFIC MOVED TO INSIDE LANES.
- OUTSIDE LANE CLOSED TO TRAFFIC FOR REPAIRS.
- RIGHT & LEFT TURNS WILL BE PROVIDED CONTROLLED THOUGH FLAGGING DURING NIGHTTIME HOURS.
- RIGHT TURN LANES AND INTERSECTION THROUGH LANES WILL BE CONSTRUCTED DURING NIGHT TIME HOURS.
- UTILIZE SDD "TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE".

LEGEND

- DIRECTION OF TRAFFIC
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- BARRICADES TYPE III WITHOUT, WITH SIGN (8' EQUIVALENT)
- SIGN ON WOOD POST
- SIGN ON PORTABLE SUPPORT
- FLAGS, 16"X16" MINIMUM (ORANGE)
- ASPHALTIC SURFACE TEMPORARY
- LANE/ROAD CLOSED TO TRAFFIC
- WORK ZONE (NIGHT TIME HOURS ONLY)

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 2	SHEET 34	E

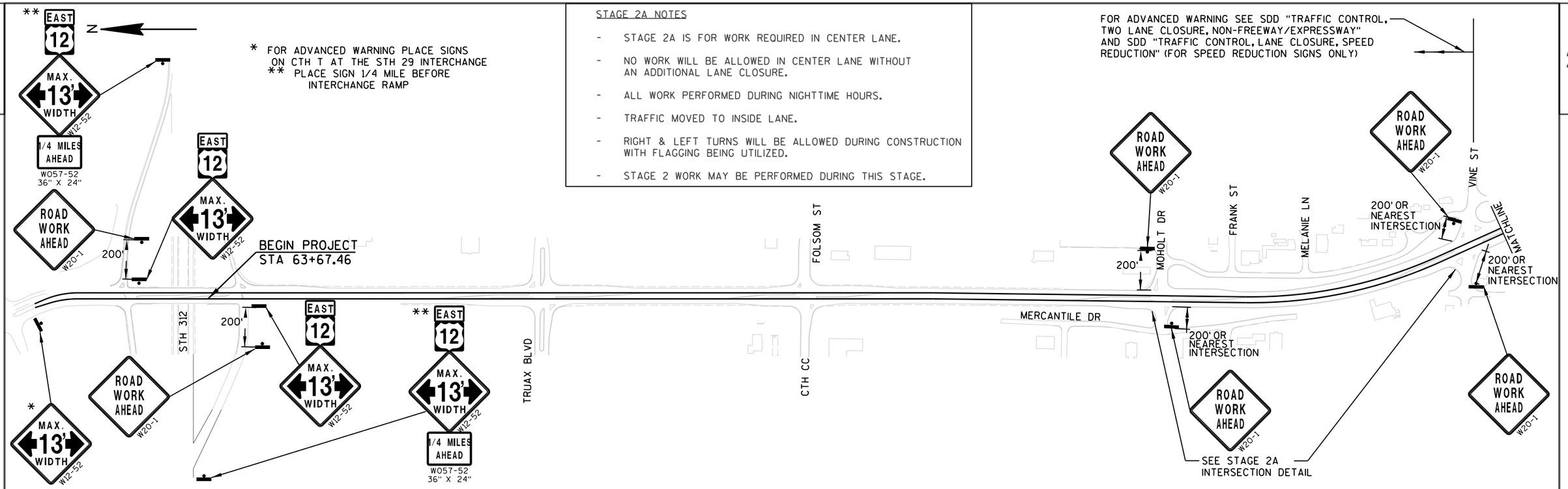
2

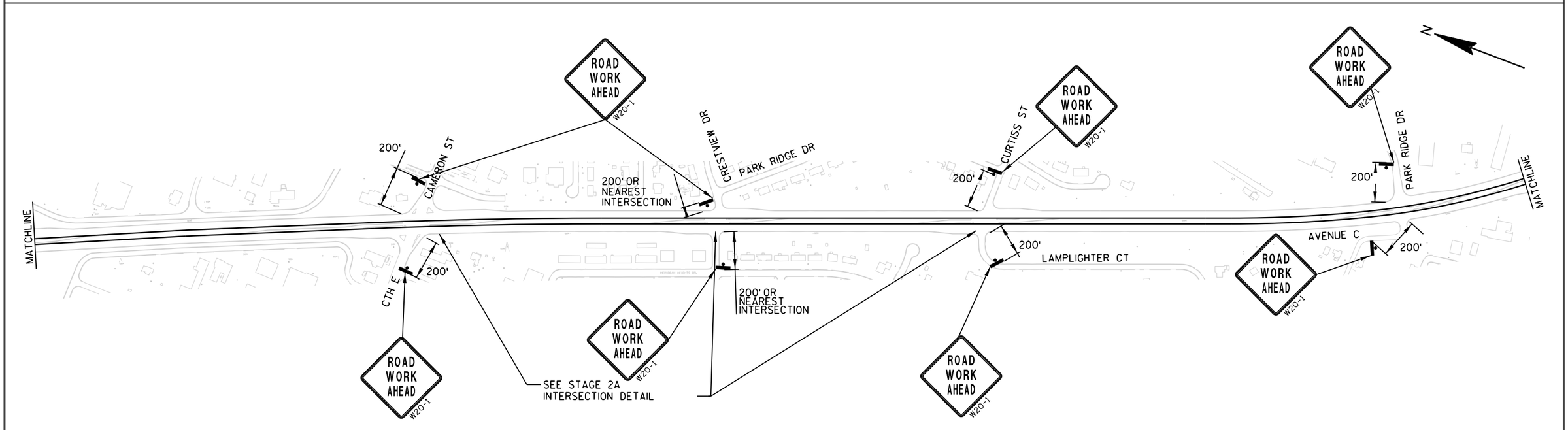
STAGE 2A NOTES

- STAGE 2A IS FOR WORK REQUIRED IN CENTER LANE.
- NO WORK WILL BE ALLOWED IN CENTER LANE WITHOUT AN ADDITIONAL LANE CLOSURE.
- ALL WORK PERFORMED DURING NIGHTTIME HOURS.
- TRAFFIC MOVED TO INSIDE LANE.
- RIGHT & LEFT TURNS WILL BE ALLOWED DURING CONSTRUCTION WITH FLAGGING BEING UTILIZED.
- STAGE 2 WORK MAY BE PERFORMED DURING THIS STAGE.

* FOR ADVANCED WARNING PLACE SIGNS ON CTH T AT THE STH 29 INTERCHANGE
** PLACE SIGN 1/4 MILE BEFORE INTERCHANGE RAMP

FOR ADVANCED WARNING SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" (FOR SPEED REDUCTION SIGNS ONLY)

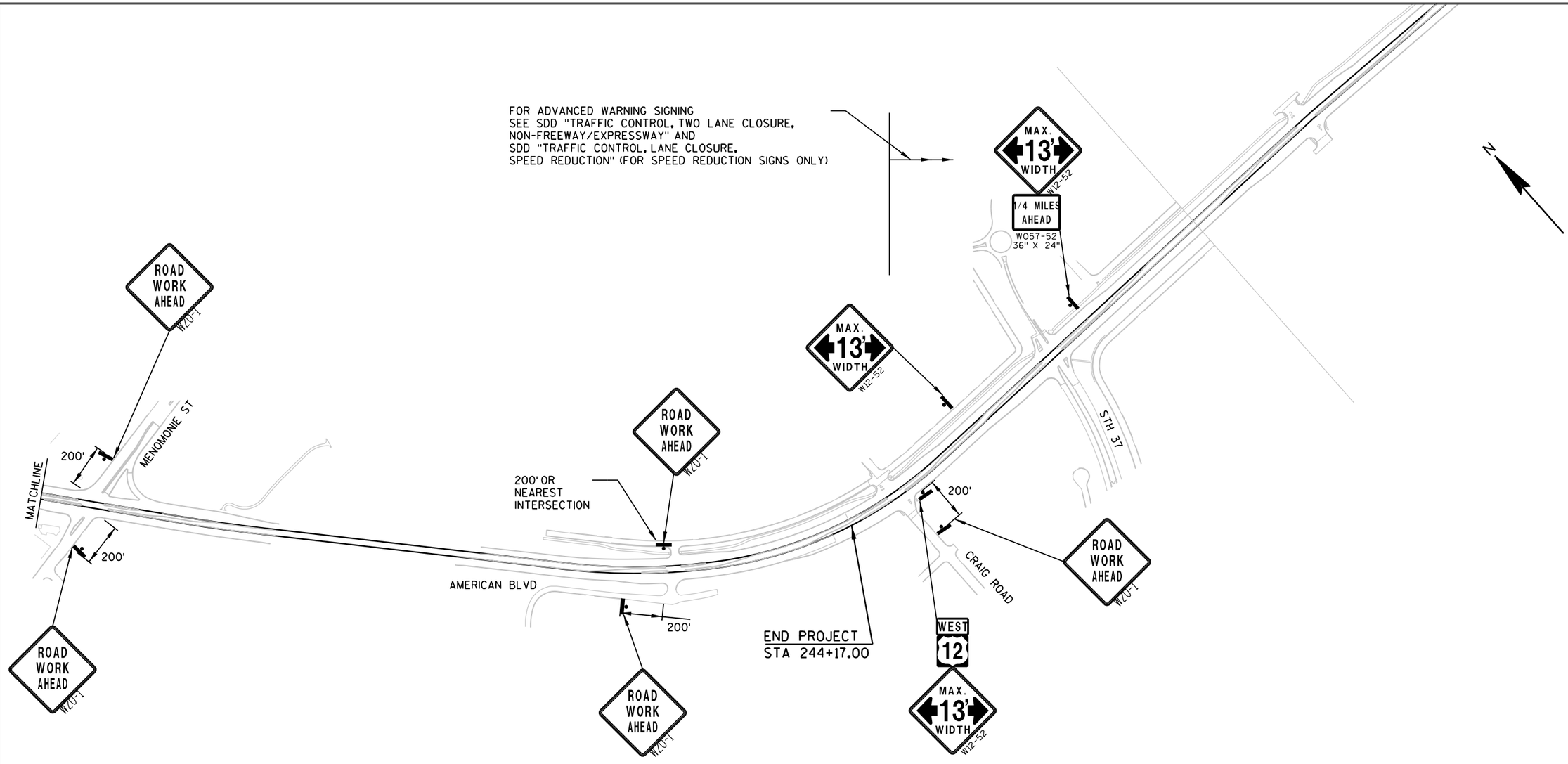




PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 2A	SHEET 35	E

2

FOR ADVANCED WARNING SIGNING
SEE SDD "TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND
SDD "TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION" (FOR SPEED REDUCTION SIGNS ONLY)



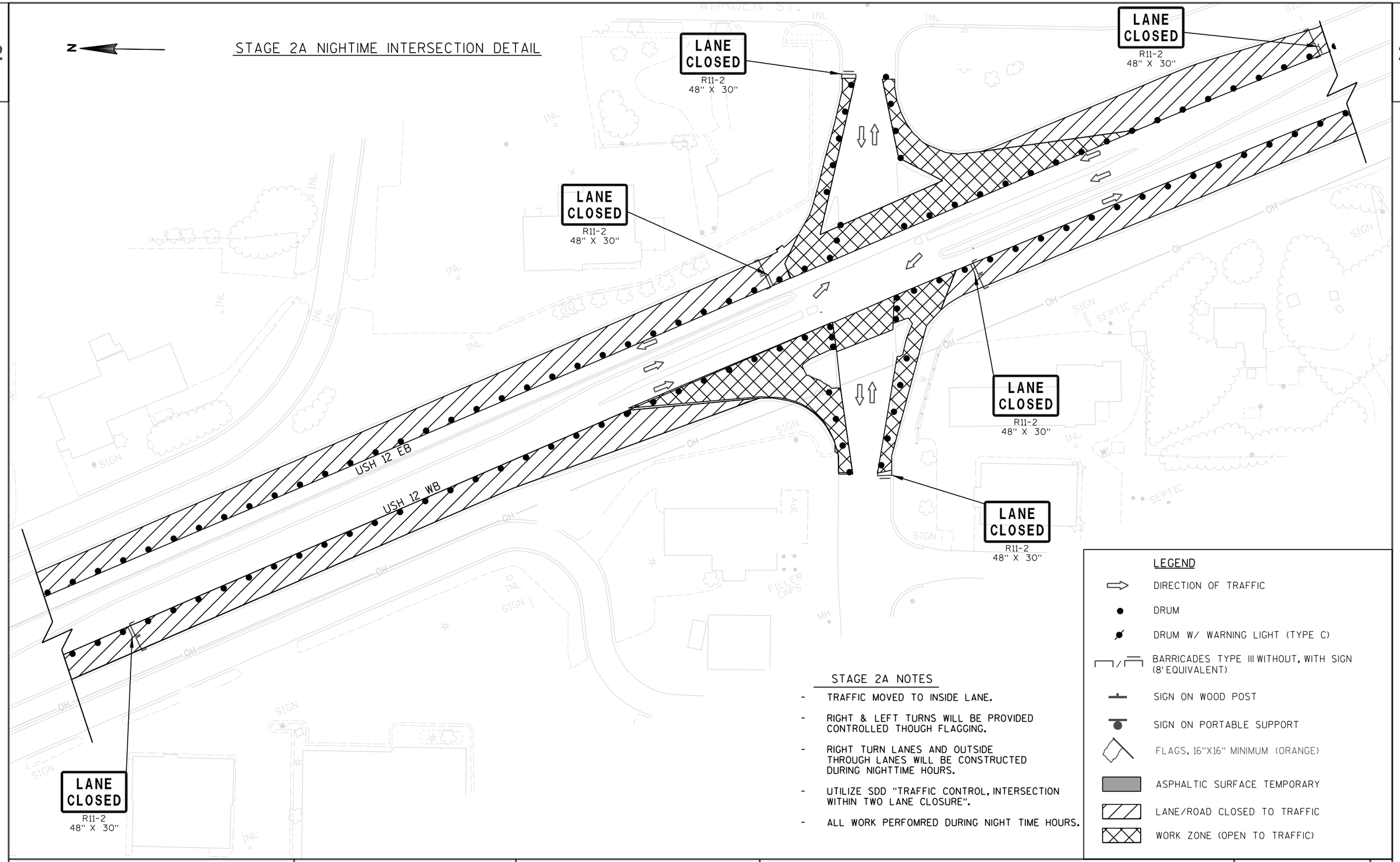
STAGE 2A NOTES

- STAGE 2A IS FOR WORK REQUIRED IN CENTER LANE.
- NO WORK WILL BE ALLOWED IN CENTER LANE WITHOUT AN ADDITIONAL LANE CLOSURE.
- ALL WORK PERFORMED DURING NIGHTTIME HOURS.
- TRAFFIC MOVED TO INSIDE LANE.
- RIGHT & LEFT TURNS WILL BE ALLOWED DURING CONSTRUCTION WITH FLAGGING BEING UTILIZED.
- STAGE 2 WORK MAY BE PERFORMED DURING THIS STAGE.

2

N

STAGE 2A NIGHTTIME INTERSECTION DETAIL



STAGE 2A NOTES

- TRAFFIC MOVED TO INSIDE LANE.
- RIGHT & LEFT TURNS WILL BE PROVIDED CONTROLLED THOUGH FLAGGING.
- RIGHT TURN LANES AND OUTSIDE THROUGH LANES WILL BE CONSTRUCTED DURING NIGHTTIME HOURS.
- UTILIZE SDD "TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE".
- ALL WORK PERFOMRED DURING NIGHT TIME HOURS.

LEGEND

- DIRECTION OF TRAFFIC
- DRUM
- DRUM W/ WARNING LIGHT (TYPE C)
- BARRICADES TYPE III WITHOUT, WITH SIGN (8' EQUIVALENT)
- SIGN ON WOOD POST
- SIGN ON PORTABLE SUPPORT
- FLAGS, 16"X16" MINIMUM (ORANGE)
- ASPHALTIC SURFACE TEMPORARY
- LANE/ROAD CLOSED TO TRAFFIC
- WORK ZONE (OPEN TO TRAFFIC)

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 2A	SHEET 37	E

DATE 10AUG16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7090-01-61 QUANTITY
0010	204.0100	Removing Pavement	SY	5,820.000	5,820.000
0020	204.0109.S	Removing Concrete Surface Partial Depth	SF	107,365.000	107,365.000
0030	204.0120	Removing Asphaltic Surface Milling	SY	5,000.000	5,000.000
0040	204.0150	Removing Curb & Gutter	LF	4,674.000	4,674.000
0050	204.0165	Removing Guardrail	LF	860.000	860.000
0060	204.9165.S	Removing (item description) 01. Safety Island	SF	8,450.000	8,450.000
0070	211.0200	Prepare Foundation for Concrete Pavement (project) 01. 7090-01-61	LS	1.000	1.000
0080	213.0100	Finishing Roadway (project) 01. 7090-01-61	EACH	1.000	1.000
0090	305.0110	Base Aggregate Dense 3/4-Inch	TON	220.000	220.000
0100	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,300.000	2,300.000
0110	415.1090	Concrete Pavement HES 9-Inch	SY	4,000.000	4,000.000
0120	416.0610	Drilled Tie Bars	EACH	5,803.000	5,803.000
0130	416.0620	Drilled Dowel Bars	EACH	10,592.000	10,592.000
0140	416.1710	Concrete Pavement Repair	SY	506.000	506.000
0150	416.1715	Concrete Pavement Repair SHES	SY	3,200.000	3,200.000
0160	416.1720	Concrete Pavement Replacement	SY	410.000	410.000
0170	416.1725	Concrete Pavement Replacement SHES	SY	1,500.000	1,500.000
0180	465.0110	Asphaltic Surface Patching	TON	75.000	75.000
0190	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	8,219.000	8,219.000
0200	602.0405	Concrete Sidewalk 4-Inch	SF	7,535.000	7,535.000
0210	611.0624	Inlet Covers Type H	EACH	24.000	24.000
0220	614.0010	Barrier System Grading Shaping Finishing	EACH	3.000	3.000
0230	614.0200	Steel Thrie Beam Structure Approach	LF	57.600	57.600
0240	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
0250	614.0230	Steel Thrie Beam	LF	221.800	221.800
0260	614.2300	MGS Guardrail 3	LF	262.500	262.500
0270	614.2500	MGS Thrie Beam Transition	LF	157.600	157.600
0280	614.2610	MGS Guardrail Terminal EAT	EACH	3.000	3.000
0290	614.2620	MGS Guardrail Terminal Type 2	EACH	3.000	3.000
0300	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7090-01-61	EACH	1.000	1.000
0310	619.1000	Mobilization	EACH	1.000	1.000
0320	620.0300	Concrete Median Sloped Nose	SF	60.000	60.000
0330	624.0100	Water	MGAL	25.400	25.400
0340	625.0500	Salvaged Topsoil	SY	994.000	994.000
0350	627.0200	Mulching	SY	994.000	994.000
0360	628.1504	Silt Fence	LF	1,000.000	1,000.000
0370	628.1520	Silt Fence Maintenance	LF	1,000.000	1,000.000
0380	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0390	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0400	628.2008	Erosion Mat Urban Class I Type B	SY	185.000	185.000
0410	628.7015	Inlet Protection Type C	EACH	24.000	24.000
0420	629.0210	Fertilizer Type B	CWT	63.000	63.000
0430	630.0120	Seeding Mixture No. 20	LB	27.000	27.000
0440	630.0140	Seeding Mixture No. 40	LB	18.000	18.000
0450	630.0200	Seeding Temporary	LB	27.000	27.000
0460	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	68.000	68.000
0470	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	101.000	101.000
0480	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	30.000	30.000
0490	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	2.000	2.000
0500	634.0805	Posts Tubular Steel 2x2-Inch X 5-FT	EACH	1.000	1.000

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DATE 10AUG16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7090-01-61 QUANTITY
0510	637.2210	Signs Type II Reflective H	SF	2,520.660	2,520.660
0520	637.2215	Signs Type II Reflective H Folding	SF	104.440	104.440
0530	637.2230	Signs Type II Reflective F	SF	134.250	134.250
0540	638.2602	Removing Signs Type II	EACH	220.000	220.000
0550	638.3000	Removing Small Sign Supports	EACH	193.000	193.000
0560	642.5201	Field Office Type C	EACH	1.000	1.000
0570	643.0100	Traffic Control (project) 01. 7090-01-61	EACH	1.000	1.000
0580	643.0300	Traffic Control Drums	DAY	137,700.000	137,700.000
0590	643.0420	Traffic Control Barricades Type III	DAY	12,630.000	12,630.000
0600	643.0705	Traffic Control Warning Lights Type A	DAY	25,260.000	25,260.000
0610	643.0715	Traffic Control Warning Lights Type C	DAY	26,775.000	26,775.000
0620	643.0800	Traffic Control Arrow Boards	DAY	306.000	306.000
0630	643.0900	Traffic Control Signs	DAY	33,513.000	33,513.000
0640	643.1050	Traffic Control Signs PCMS	DAY	320.000	320.000
0650	646.0106	Pavement Marking Epoxy 4-Inch	LF	43,670.000	43,670.000
0660	646.0126	Pavement Marking Epoxy 8-Inch	LF	9,799.000	9,799.000
0670	647.0156	Pavement Marking Arrows Epoxy Type 1	EACH	8.000	8.000
0680	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	59.000	59.000
0690	647.0356	Pavement Marking Words Epoxy	EACH	37.000	37.000
0700	647.0456	Pavement Marking Curb Epoxy	LF	395.000	395.000
0710	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	1,171.000	1,171.000
0720	647.0606	Pavement Marking Island Nose Epoxy	EACH	23.000	23.000
0730	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	2,200.000	2,200.000
0740	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,659.000	1,659.000
0750	650.9910	Construction Staking Supplemental Control (project) 01. 7090-01-61	LS	1.000	1.000
0760	652.0800	Conduit Loop Detector	LF	900.000	900.000
0770	653.0208	Junction Boxes 8x8x8-Inch	EACH	11.000	11.000
0780	653.0905	Removing Pull Boxes	EACH	11.000	11.000
0790	655.0800	Loop Detector Wire	LF	955.000	955.000
0800	690.0250	Sawing Concrete	LF	9,785.000	9,785.000
0810	715.0415	Incentive Strength Concrete Pavement	DOL	730.000	730.000
0820	SPV.0045	Special 01. Portable Changeable Message Sign (PCMS) Cellular Communications	DAY	320.000	320.000
0830	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	8,219.000	8,219.000
0840	SPV.0105	Special 01. Construction Staking Concrete Pavement Joint Layout	LS	1.000	1.000
0850	SPV.0105	Special 02. Preparation of Foundation for Asphaltic Paving Special	LS	1.000	1.000
0860	SPV.0165	Special 01. Concrete Sidewalk Cure and Seal Treatment	SF	7,535.000	7,535.000
0870	SPV.0165	Special 02. Concrete Median Sloped Nose Cure and Seal Treatment	SF	60.000	60.000
0880	SPV.0180	Special 01. Concrete Pavement Centerline Joint Repair	SY	450.000	450.000
0890	SPV.0195	Special 01. Asphaltic Surface Special	TON	2,120.000	2,120.000

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REMOVALS

STATION	LOCATION	204.0100 REMOVING PAVEMENT SY	204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH SF	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0150 REMOVING CURB & GUTTER LF	204.0165 REMOVING GUARDRAIL LF	204.9165.S REMOVING SAFETY ISLAND SF	REMARKS
USH 12'EB'								
63+67 - 244+17	EB & WB	-	-	-	3184	-	-	ESTIMATE AS OF 2015 INSPECTION, SEE C&G TABLE FOR LOCATIONS
63+82 - 64+76	WB LT	-	-	-	-	94	-	
66+00 - 107+10	EB RT, WB LT	-	-	5000	-	-	-	MILLING SHOULDERS
108+00 - 111+75	EB LT	720	-	-	-	-	1100	FOR TURN LANE AND ISLAND REPLACEMENT
112+35 - 115+80	EB LT	685	-	-	-	-	1160	FOR TURN LANE AND ISLAND REPLACEMENT
125+40 - 127+65	EB LT	335	-	-	-	-	1145	FOR TURN LANE AND ISLAND REPLACEMENT
127+52 - 128+55	EB LT	-	2975	-	-	-	-	
128+55 - 131+95	EB LT	680	-	-	-	-	1125	FOR TURN LANE AND ISLAND REPLACEMENT
145+50 - 148+85	EB LT	690	-	-	-	-	1145	FOR TURN LANE AND ISLAND REPLACEMENT
148+85 - 149+65	EB LT	-	2500	-	-	-	-	
149+65 - 153+50	EB LT	735	-	-	-	-	1110	FOR TURN LANE AND ISLAND REPLACEMENT
158+90 - 161+30	EB RT	-	-	-	240	-	-	
161+00 - 164+10	EB LT	500	-	-	-	-	585	FOR TURN LANE AND ISLAND REPLACEMENT
164+10 - 164+85	EB LT	-	2385	-	-	-	-	
164+85 - 168+00	EB LT	500	-	-	-	-	550	FOR TURN LANE AND ISLAND REPLACEMENT
174+50 - 178+45	EB LT	-	5785	-	-	-	-	
178+45 - 181+50	EB LT	515	-	-	-	-	530	FOR TURN LANE AND ISLAND REPLACEMENT
192+45.5 - 193+60.5	EB LT	-	-	-	115	-	-	REMOVE CURB AND GUTTER PRIOR TO EAT
193+65 - 194+30	EB LT	-	-	-	-	66	-	
195+54 - 198+66	EB LT	-	3815	-	-	-	-	
199+67 - 202+87	EB LT	-	3660	-	-	-	-	
214+85.2 - 216+15.2	WB RT	-	-	-	130	-	-	REMOVE CURB AND GUTTER PRIOR TO BULLNOSE
214+86.8 - 216+16.8	EB LT	-	-	-	130	-	-	REMOVE CURB AND GUTTER PRIOR TO BULLNOSE
215+95 - 216+77	EB LT	-	-	-	-	146	-	
216+08 - 216+93	WB RT	-	-	-	-	85	-	
225+21 - 226+92	EB LT	-	-	-	-	171	-	
225+44 - 226+98	EB LT	-	-	-	-	229	-	
226+30 - 226+99	EB RT	-	-	-	-	69	-	
226+78.8 - 228+08.8	EB LT	-	-	-	130	-	-	REMOVE CURB AND GUTTER PRIOR TO BULLNOSE
226+78.8 - 228+08.8	EB LT	-	-	-	130	-	-	REMOVE CURB AND GUTTER PRIOR TO BULLNOSE
227+06.3 - 228+21.3	EB LT	-	-	-	115	-	-	REMOVE CURB AND GUTTER PRIOR TO EAT
TRUAX BLVD								
503+15 - 503+28	LT & RT	270	-	-	-	-	-	
FOLSOM ST								
603+88 - 604+52	RT	142	-	-	-	-	-	INCLUDES 92 FEET OF CONCRETE CURB & GUTTER
603+98 - 604+52	LT	48	-	-	-	-	-	INCLUDES 58 FEET OF CONCRETE CURB & GUTTER
MOHOLT DR								
701+00 - 701+67	LT & RT	-	7625	-	-	-	-	
702+41 - 703+08	LT & RT	-	8955	-	-	-	-	
VINE ST								
801+42 - 802+73	LT & RT	-	13760	-	-	-	-	
803+32 - 804+92	LT & RT	-	12995	-	-	-	-	
CAMERON ST								
901+67 - 903+23	LT & RT	-	12350	-	-	-	-	
903+60 - 905+16	LT & RT	-	13250	-	-	-	-	
CRESTVIEW DR								
1001+96 - 1002+36	LT & RT	-	4095	-	-	-	-	
1003+38 - 1003+78	LT & RT	-	3925	-	-	-	-	
LAMPLIGHTER CT								
1102+72 - 1103+26	LT & RT	-	4495	-	-	-	-	
CURTISS CT								
1104+23 - 1104+98	LT & RT	-	4795	-	-	-	-	
UNDISTRIBUTED		-	-	-	500	-	-	
ITEM TOTALS		5820	107365	5000	4674	860	8450	

* CONCRETE PAVEMENT ADJACENT TO CURB & GUTTER INCLUDES CURB & GUTTER REMOVAL

PREPARE FOUNDATION FOR CONCRETE PAVEMENT (7090-01-61)

STATION	211.0200 LS
USH 12	1
ITEM TOTAL	1

FINISHING ROADWAY (7090-01-61)

STATION	213.0100 EACH
USH 12	1
ITEM TOTAL	1

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BASE AGGREGATE DENSE

STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
USH 12'EB'					
66+00 - 107+10	EB RT, WB LT	220	-	2.2	FOR SHOULDER REPAIR IF NEEDED
66+00 - 107+10	EB RT, WB LT	-	400	4	FOR CONCRETE REPAIR
66+00 - 107+10	EB RT, WB LT	-	215	2.2	FOR CONCRETE PAVEMENT REPLACEMENT
66+00 - 107+10	EB RT, WB LT	-	265	2.7	FOR CURB & GUTTER REPLACEMENT
108+00 - 111+75	EB RT	-	180	1.8	FOR TURN LANE AND ISLAND REPAIR
112+35 - 115+80	EB RT	-	180	1.8	FOR TURN LANE AND ISLAND REPAIR
125+40 - 127+65	EB RT	-	135	1.4	FOR TURN LANE AND ISLAND REPAIR
128+55 - 131+95	EB RT	-	180	1.8	FOR TURN LANE AND ISLAND REPAIR
145+50 - 148+85	EB RT	-	175	1.8	FOR TURN LANE AND ISLAND REPAIR
149+65 - 153+50	EB RT	-	180	1.8	FOR TURN LANE AND ISLAND REPAIR
161+00 - 164+10	EB RT	-	110	1.1	FOR TURN LANE AND ISLAND REPAIR
164+85 - 168+00	EB RT	-	110	1.1	FOR TURN LANE AND ISLAND REPAIR
178+45 - 181+50	EB RT	-	110	1.1	FOR TURN LANE AND ISLAND REPAIR
TRUAX BLVD					
503+15 - 503+28	LT & RT	-	30	0.3	FOR CONCRETE PAVEMENT REPLACEMENT
FOLSOM ST					
603+88 - 604+52	RT	-	20	0.2	
603+98 - 604+52	LT	-	10	0.1	
ITEM TOTALS		220	2300	25.4	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

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CONCRETE PAVEMENT HES 9-INCH

STATION	LOCATION	415.1090 CONCRETE PAVEMENT HES 9-INCH SY	*416.0610 DRILLED TIE BARS EACH	*416.0620 DRILLED DOWEL BARS EACH	REMARKS
USH 12'EB'					
108+00 - 111+75	EB LT	485	191	19	FOR TURN LANE AND ISLAND REPAIR
112+35 - 115+80	EB LT	450	167	19	FOR TURN LANE AND ISLAND REPAIR
125+40 - 127+65	EB LT	110	33	23	FOR TURN LANE AND ISLAND REPAIR
128+55 - 131+95	EB LT	445	158	19	FOR TURN LANE AND ISLAND REPAIR
145+50 - 148+85	EB LT	455	153	24	FOR TURN LANE AND ISLAND REPAIR
149+65 - 153+50	EB LT	495	194	19	FOR TURN LANE AND ISLAND REPAIR
161+00 - 164+10	EB LT	380	177	15	FOR TURN LANE AND ISLAND REPAIR
164+85 - 168+00	EB LT	375	180	15	FOR TURN LANE AND ISLAND REPAIR
178+45 - 181+50	EB LT	385	175	15	FOR TURN LANE AND ISLAND REPAIR
TRUAX BLVD					
503+15 - 503+28	LT & RT	270	75	18	FOR INTERSECTION REPAIR
FOLSOM ST					
603+88 - 604+52	RT	117	47	-	
603+98 - 604+52	LT	33	24	-	
ITEM TOTALS		4000	1574	186	

* QUANTITY SHOWN ELSEWHERE IN PLANS

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

CONCRETE PAVEMENT REPLACEMENT

STATION	LOCATION	*416.0610 DRILLED TIE BARS EACH	*416.0620 DRILLED DOWEL BARS EACH	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	REMARKS
USH 12'EB'						
65+20	EB LT	29	26	-	80	TURN LANE
66+55	EB RT	17	36	-	64	BOTH LANES
69+25	EB RT	22	16	-	40	LEFT LANE
69+70	WB LT	11	22	-	49	RIGTH LANE
69+70	EB RT	5	16	-	20	RIGHT LANE
70+10	WB LT	11	16	-	20	LEFT LANE
70+20	WB LT	5	16	-	20	RIGHT LANE
70+75	WB LT	17	36	-	64	BOTH LANES
72+60	EB RT	6	36	-	43	BOTH LANES
77+45	WB LT	16	36	-	76	BOTH LANES
85+40	WB LT	11	16	-	20	LEFT LANE
88+95	WB LT	9	16	-	32	RIGHT LANE
90+85	EB RT	26	36	-	91	BOTH LANES
96+35	EB RT	21	36	-	81	BOTH LANES
98+08	WB LT	18	16	-	34	RIGHT LANE
117+55	EB RT	15	16	-	28	LEFT LANE
120+75	EB RT	17	16	-	31	LEFT LANE
121+80	EB RT	11	36	-	40	BOTH LANES
123+55	EB RT	22	6	-	20	FOR LOOP REPLACEMENT
123+65	EB RT	11	16	-	20	RIGHT LANE
124+35	WB LT	22	16	-	40	RIGHT LANE
126+85	WB LT	12	36	-	43	LEFT & CENTER LANES
128+20	WB LT	12	16	-	23	RIGHT LANE
128+90	EB RT	20	16	-	98	ALL THREE LANES
129+20	WB LT	13	36	-	48	RIGHT & CENTER LANES
131+55	WB LT	20	16	-	36	RIGHT LANE
136+00	EB RT	13	36	-	48	RIGHT & CENTER LANES
151+00	WB LT	11	36	20	20	RIGHT & CENTER LANES
158+55	EB RT	17	36	32	32	RIGHT & CENTER LANES
174+40	EB RT	39	36	71	27	RIGHT & CENTER LANES
177+85	EB RT	19	54	69	35	ALL THREE LANES
182+80	WB LT	11	36	20	20	RIGHT & CENTER LANES
195+65	EB RT	35	16	64	-	RIGHT LANE
197+35	WB LT	11	36	20	20	RIGHT & CENTER LANES
204+70	EB RT	11	36	20	20	LEFT & CENTER LANES
235+25	EB RT	11	54	40	20	ALL THREE LANES
MENOMONIE ST						
207+20	EB	15	36	54	-	BOTH INCOMING LANES
UNDSTRIBUTED		49	46	-	97	
ITEM TOTALS		640	1060	410	1500	

* QUANTITY SHOWN ELSEWHERE IN PLANS

ASPHALTIC PAVEMENT ITEMS

STATION	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	SPV.0195.01 ASPHALTIC SURFACE SPECIAL TON
USH 12'EB'			
66+00 - 107+10	EB RT & WB LT		630
127+52 - 128+55	EB LT	2	42
148+85 - 149+65	EB LT	2	35
164+10 - 164+85	EB LT	2	34
174+50 - 178+45	EB LT	4	81
195+54 - 198+66	EB LT	3	53
199+67 - 202+87	EB LT	3	51
MOHOLT DR			
701+00 - 701+67	LT & RT	5	107
702+41 - 703+08	LT & RT	6	125
VINE ST			
801+42 - 802+73	LT & RT	10	193
803+32 - 804+92	LT & RT	9	182
CAMERON ST			
901+67 - 903+23	LT & RT	9	173
903+87 - 905+16	LT & RT	9	172
CRESTVIEW DR			
1001+96 - 1002+36	LT & RT	3	57
1003+38 - 1003+78	LT & RT	3	55
LAMPLIGHTER CT			
1102+72 - 1103+26	LT & RT	3	63
CURTISS CT			
1104+23 - 1104+98	LT & RT	3	67
ITEM TOTAL		75	2120

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CONCRETE PAVEMENT REPAIR

STATION	LOCATION	*416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	417.1715 CONCRETE PAVEMENT REPAIR SHES SY
USH 12'EB'				
64+19	WB LT	40	-	16
65+11	WB LT	40	-	16
65+33	EB RT	20	-	8
65+48	EB RT	25	-	10
65+55	EB RT	20	-	8
65+80	WB LT	40	-	16
66+43	WB LT	60	-	24
66+91	WB LT	60	-	24
67+74	WB LT	40	-	16
68+30	WB LT	20	-	8
69+03	WB LT	20	-	8
69+08	WB LT	20	-	8
69+28	WB LT	20	-	8
69+32	WB LT	20	-	8
69+74	WB LT	20	-	8
70+35	WB LT	40	-	16
72+35	WB LT	40	-	16
72+60	WB LT	20	-	8
73+57	WB LT	20	-	8
75+59	EB RT	23	-	9
76+49	EB RT	25	-	10
76+57	EB LT	15	-	6
76+61	EB RT	25	-	10
76+97	EB RT	25	-	10
77+57	EB LT	25	-	10
77+63	EB RT	38	-	15
77+79	EB LT & RT	68	-	27
77+83	EB RT	20	-	8
78+03	EB LT & RT	90	-	36
78+26	EB RT	60	-	24
78+29	EB LT	25	-	10
78+46	EB RT	20	-	8
78+50	WB LT	20	-	8
78+86	EB RT	20	-	8
78+86	WB LT	20	-	8
78+94	WB LT	50	-	20
78+99	EB LT	20	-	8
79+23	EB LT & RT	60	-	24
79+40	WB LT	28	-	11
79+41	EB LT & RT	60	-	24
79+70	EB LT & RT	60	-	24
80+06	WB LT	20	-	8
80+22	EB LT	52	-	21
80+30	WB LT	40	-	16
81+32	EB LT	40	-	16
81+35	EB RT	40	-	16
81+37	WB LT	16	-	6
81+45	WB LT	20	-	8
82+11	WB LT	20	-	8
82+74	WB LT	20	-	8
83+44	WB LT	20	-	8
83+52	WB LT	20	-	8
83+57	EB RT	20	-	8
84+47	WB LT	14	-	6
85+15	WB LT	4	-	2
85+23	WB LT	20	-	8
89+20	EB RT	40	-	16
89+22	WB LT	20	-	8
90+02	WB LT	20	-	8
90+25	WB LT	20	-	8
91+32	WB LT	40	-	16
91+41	EB RT	50	-	20
91+58	EB RT	20	-	8
92+05	EB RT	20	-	8
92+92	EB RT	20	-	8
93+63	EB LT & RT	45	-	18
93+67	EB LT	35	-	14
93+85	EB RT	38	-	15
94+35	EB LT	30	-	12
94+63	EB LT	40	-	16
94+82	EB RT	40	-	16
94+82	WB LT	20	-	8
ITEM SUBTOTALS		2246	0	898

CONCRETE PAVEMENT REPAIR CONT.

STATION	LOCATION	*416.0620 DRILLED DOWEL BARS EACH	415.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY
USH 12'EB'				
95+06	EB RT	20	-	8
95+58	WB LT	20	-	8
96+19	WB LT	25	-	10
96+59	EB RT	20	-	8
97+41	WB RT	15	-	6
98+02	WB LT	15	-	6
98+06	WB LT	15	-	6
98+70	EB RT	40	-	16
99+42	EB RT	40	-	16
99+96	EB RT	40	-	16
100+33	EB RT	40	-	16
100+90	EB RT	40	-	16
101+82	EB RT	40	-	16
102+67	WB LT	20	-	8
102+72	WB LT	20	-	8
103+00	EB RT	20	-	8
103+19	EB RT	20	-	8
104+38	EB RT	40	-	16
104+62	WB LT	20	-	8
104+66	WB LT	20	-	8
105+65	EB RT	40	-	16
106+37	EB RT	20	-	8
106+95	EB RT	20	-	8
107+86	EB RT	20	-	8
108+03	EB RT	40	-	16
108+59	EB LT	40	-	16
109+15	EB RT	40	-	16
109+72	EB RT	40	-	16
111+32	EB RT	20	-	8
111+62	EB LT	20	-	8
112+15	EB RT	50	-	20
112+51	EB RT	20	-	8
113+14	EB RT	40	-	16
113+38	WB RT	60	-	24
113+47	EB RT	40	-	16
113+56	EB RT	20	-	8
113+59	WB LT	60	-	24
114+98	EB RT	40	-	16
115+45	WB LT	20	-	8
116+12	EB RT	40	-	16
116+99	EB RT	20	-	8
117+75	EB RT	20	-	8
118+49	EB RT	20	-	8
121+45	EB RT	20	-	8
122+25	WB LT	20	-	8
122+39	WB LT	20	-	8
122+55	WB LT	20	-	8
123+72	EB RT	20	-	8
124+02	EB RT	20	-	8
124+95	EB LT & RT	65	-	26
125+10	WB LT	20	-	8
125+49	WB RT	60	-	24
126+13	WB RT	40	-	16
126+14	EB LT	40	-	16
126+72	EB LT	40	-	16
127+50	WB LT	20	-	8
129+76	WB LT	40	-	16
129+93	WB LT	20	-	8
130+73	EB RT	20	-	8
131+49	WB LT	10	-	4
131+52	WB LT	20	-	8
132+06	EB RT	20	-	8
134+16	WB LT	20	-	8
134+35	WB LT	20	-	8
134+41	WB LT	20	-	8
134+77	EB RT	20	-	8
135+29	WB LT	40	-	16
135+37	EB RT	20	-	8
135+52	EB RT	20	-	8
135+66	WB LT	20	-	8
137+50	WB LT	20	-	8
138+23	WB LT	20	-	8
ITEM SUBTOTALS		2035	0	814

CONCRETE PAVEMENT REPAIR CONT.

STATION	LOCATION	*416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	417.1715 CONCRETE PAVEMENT REPAIR SHES SY
USH 12'EB'				
139+04	WB LT	20	-	8
139+16	WB LT	40	-	16
139+30	WB LT	20	-	8
139+69	WB LT	20	-	8
140+09	WB LT	20	-	8
140+61	WB LT	20	-	8
140+81	EB RT	20	-	8
140+86	EB RT	20	-	8
141+51	WB LT	20	-	8
141+99	WB LT	20	-	8
143+13	WB LT	20	-	8
144+86	WB LT	20	-	8
145+09	WB LT	20	-	8
145+46	WB LT	40	-	16
146+18	WB LT	20	-	8
146+60	WB LT	40	-	16
147+34	EB RT	20	-	8
147+80	WB LT	20	-	8
147+81	EB RT	20	-	8
148+88	WB LT	20	-	8
148+93	EB RT	30	-	12
149+41	WB LT	20	-	8
149+88	WB LT	60	-	24
151+97	WB LT	40	8	8
152+64	WB LT	20	-	8
164+42	EB LT	50	-	20
164+58	EB LT	50	-	20
164+73	EB LT	50	-	20
164+85	EB LT	20	-	8
168+34	WB LT	20	8	-
169+46	WB LT	20	-	8
175+60	EB RT	20	8	-
175+75	EB RT	20	8	-
180+69	EB RT	20	-	8
182+30	EB RT	20	8	-
191+82	WB LT	60	16	8
193+16	WB LT	60	16	8
194+09	WB LT	60	16	8
198+19	EB RT	20	8	-
198+55	EB RT	20	8	-
198+75	EB LT	40	-	16
198+80	EB RT	40	8	8
198+94	EB RT	50	-	20
198+97	WB LT & RT	40	8	8
199+26	WB RT	35	-	14
199+57	EB LT	40	-	16
199+59	WB LT	5	-	2
199+78	WB LT	40	8	8
201+52	WB LT	20	-	8
202+12	WB LT	40	16	-
202+82	EB RT	40	16	-
202+85	WB LT	20	8	-
202+95	WB LT	40	8	8
203+05	WB LT	20	8	-
203+45	WB LT	40	16	-
203+67	EB RT	40	8	8
204+57	EB RT	20	8	-
205+56	EB RT	15	6	-
205+78	EB RT	20	8	-
206+37	EB RT	20	8	-
206+38	EB RT	20	8	-
206+59	EB RT	20	8	-
206+80	EB RT	20	8	-
207+29	EB LT & RT	40	8	16
207+60	WB LT & RT	40	-	16
207+81	EB LT	20	-	8
208+09	WB RT	35	-	14
208+53	EB RT	40	8	8
208+80	EB LT	60	16	8
209+08	WB LT	40	8	8
209+72	WB LT	20	-	8
209+79	EB RT	20	-	8
210+69	WB LT	40	8	8
ITEM SUBTOTALS		2180	310	570

CONCRETE PAVEMENT REPAIR CONT.

STATION	LOCATION	*416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	417.1715 CONCRETE PAVEMENT REPAIR SHES SY
USH 12 'EB'				
211+18	EB LT	35	-	14
211+48	EB LT	20	-	8
212+00	EB LT	35	-	14
212+27	EB LT	20	-	8
212+68	WB RT	60	16	8
213+19	EB LT	20	8	-
213+21	WB RT	20	-	8
213+75	EB LT	60	16	8
214+28	WB RT	20	8	-
214+78	WB RT	20	8	-
215+16	EB LT	20	8	-
215+18	WB RT	20	8	-
215+37	EB LT	60	16	8
226+72	EB LT	60	16	8
229+40	EB LT	20	8	-
232+69	EB RT	20	-	8
234+33	EB LT & RT	40	8	8
234+69	EB RTT	20	-	8
235+28	EB LT	35	-	14
235+28	EB LT	20	8	-
235+51	EB LT	20	-	8
235+52	EB LT & RT	40	-	16
235+90	WB RT	20	8	-
236+01	EB LT	15	-	6
236+02	WB RT	20	8	-
236+32	WB RT	20	8	-
236+52	WB RT	20	8	-
236+62	WB RT	20	8	-
236+72	WB RT	20	8	-
236+93	WB RT	20	8	-
242+15	EB LT & RT	50	12	8
ITEM SUBTOTALS		890	196	160

CONCRETE PAVEMENT REPAIR CONT.

STATION	LOCATION	*416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	417.1715 CONCRETE PAVEMENT REPAIR SHES SY
TRUAX BLVD				
503+62	EB	80	-	32
503+72	WB	50	-	20
504+18	WB	20	-	8
504+42	WB	70	-	28
504+42	EB	50	-	20
504+72	WB	30	-	12
FOLSOM ST				
602+34	EB	20	-	8
602+59	WB	35	-	14
602+64	EB	25	-	10
602+65	EB	25	-	10
603+44	EB	25	-	10
603+46	WB	35	-	14
604+10	EB & WB	75	-	30
604+11	WB	25	-	10
MOHOLT DR				
701+10	EB & WB	90	-	36
701+20	EB	60	-	24
701+20	WB	60	-	24
701+42	EB & WB	140	-	56
CAMERON ST				
904+25	EB & WB	80	-	32
CRESTVIEW DR				
1002+87	EB & WB	100	-	40
CURTISS ST				
1103+86	EB & WB	120	-	48
PARK RIDGE DR				
1202+74	WB	50	-	20
MENOMONIE ST				
1303+30	WB	70	-	28
1304+69	WB	25	-	10
1304+77	WB	35	-	14
UNDISTRIBUTED		600	-	200
ITEM SUBTOTALS		1995	0	758
ITEM TOTALS		9346	506	3200

* QUANTITY SHOWN ELSEWHERE IN PLANS

ALL ITEMS ARE CATEGORY 0010
UNLESS NOTED OTHERWISE.

CONCRETE CURB & GUTTER

STATION	LOCATION	*416.0610 DRILLED TIE BARS EACH	601.0409 30-INCH TYPE A LF	SPV.0090.01 CURE AND SEAL TREATMENT LF	REMARKS
USH 12'EB'					
65+57	EB LT	2	9	9	SPOT CURB & GUTTER REPAIR
65+80	WB LT	0	7	7	SPOT CURB & GUTTER REPAIR
66+42	WB LT	0	7	7	SPOT CURB & GUTTER REPAIR
66+64	WB LT	0	7	7	SPOT CURB & GUTTER REPAIR
66+92	WB LT	0	6	6	SPOT CURB & GUTTER REPAIR
67+13	WB LT	0	6	6	SPOT CURB & GUTTER REPAIR
67+39	EB LT	1	11	11	SPOT CURB & GUTTER REPAIR
70+73	EB LT	0	23	23	SPOT CURB & GUTTER REPAIR
72+71	EB LT	6	31	31	SPOT CURB & GUTTER REPAIR
75+55	EB LT	6	25	25	SPOT CURB & GUTTER REPAIR
79+95	WB LT	4	12	12	SPOT CURB & GUTTER REPAIR
83+60	EB LT	3	15	15	SPOT CURB & GUTTER REPAIR
85+54	WB LT	11	35	35	SPOT CURB & GUTTER REPAIR
90+22	EB LT	9	27	27	SPOT CURB & GUTTER REPAIR
94+61	EB LT	20	67	67	SPOT CURB & GUTTER REPAIR
98+31	WB LT	5	16	16	SPOT CURB & GUTTER REPAIR
100+40	WB LT	5	16	16	SPOT CURB & GUTTER REPAIR
102+57	WB LT	2	8	8	SPOT CURB & GUTTER REPAIR
103+46	WB LT	3	10	10	SPOT CURB & GUTTER REPAIR
105+38	WB LT	3	11	11	SPOT CURB & GUTTER REPAIR
109+47 - 111+69	EB LT	71	445	445	FOR TURN LANE AND ISLAND REPAIR
111+77	EB RT	13	47	47	SPOT CURB & GUTTER REPAIR
112+45 - 114+63	WB LT	71	445	445	FOR TURN LANE AND ISLAND REPAIR
113+13	EB LT	8	24	24	SPOT CURB & GUTTER REPAIR
117+44	WB LT	3	10	10	SPOT CURB & GUTTER REPAIR
119+73	WB LT	4	14	14	SPOT CURB & GUTTER REPAIR
120+75	EB LT	0	22	22	SPOT CURB & GUTTER REPAIR
121+78	EB RT	0	12	12	SPOT CURB & GUTTER REPAIR
125+26	WB LT	4	12	12	SPOT CURB & GUTTER REPAIR
125+40 - 127+56	EB LT	113	430	430	FOR TURN LANE AND ISLAND REPAIR
125+95	WB LT	5	17	17	SPOT CURB & GUTTER REPAIR
126+06	EB RT	6	20	20	SPOT CURB & GUTTER REPAIR
126+18	WB LT	3	9	9	SPOT CURB & GUTTER REPAIR
128+33	EB RT	49	207	207	SPOT CURB & GUTTER REPAIR
128+59 - 130+93	WB LT	73	455	455	FOR TURN LANE AND ISLAND REPAIR
132+98	WB LT	5	15	15	SPOT CURB & GUTTER REPAIR
134+26	EB RT	8	25	25	SPOT CURB & GUTTER REPAIR
142+56	EB RT	22	66	66	SPOT CURB & GUTTER REPAIR
146+58 - 148+78	EB LT	71	440	440	FOR TURN LANE AND ISLAND REPAIR
149+55	WB LT	13	40	40	SPOT CURB & GUTTER REPAIR
149+64	EB RT	8	25	25	SPOT CURB & GUTTER REPAIR
149+75 - 152+02	WB LT	73	455	455	FOR TURN LANE AND ISLAND REPAIR
150+22	EB RT	17	51	51	SPOT CURB & GUTTER REPAIR
153+87	WB LT	4	13	13	SPOT CURB & GUTTER REPAIR
ITEM SUBTOTALS		724	3648	3648	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

CONCRETE CURB & GUTTER CONT.

STATION	LOCATION	*416.0610 DRILLED TIE BARS EACH	601.0409 30-INCH TYPE A LF	SPV.0090.01 CURE AND SEAL TREATMENT LF	REMARKS
USH 12'EB'					
158+53	EB RT	0	16	16	SPOT CURB & GUTTER REPAIR
158+90 - 161+30	EB RT	69	240	240	SPOT CURB & GUTTER REPAIR
162+79 - 164+10	EB LT	38	240	240	FOR TURN LANE AND ISLAND REPAIR
164+06	WB LT	5	16	16	SPOT CURB & GUTTER REPAIR
164+85 - 166+15	WB LT	38	240	240	FOR TURN LANE AND ISLAND REPAIR
174+54	EB RT	0	43	43	SPOT CURB & GUTTER REPAIR
177+46	EB RT	5	17	17	SPOT CURB & GUTTER REPAIR
177+79	WB LT	5	16	16	SPOT CURB & GUTTER REPAIR
178+36	EB RT	7	21	21	SPOT CURB & GUTTER REPAIR
178+45 - 179+75	WB LT	38	245	245	FOR TURN LANE AND ISLAND REPAIR
180+35	EB RT	7	21	21	SPOT CURB & GUTTER REPAIR
182+77	WB LT	0	12	12	SPOT CURB & GUTTER REPAIR
183+41	WB LT	3	10	10	SPOT CURB & GUTTER REPAIR
186+43	WB LT	3	9	9	SPOT CURB & GUTTER REPAIR
192+45.5 - 193+60.5	EB RT	38	115	115	NO HEAD ON CURB PRIOR TO EAT
198+29	WB LT	3	9	9	SPOT CURB & GUTTER REPAIR
199+56	WB LT	7	29	29	SPOT CURB & GUTTER REPAIR
200+84	EB LT	7	21	21	SPOT CURB & GUTTER REPAIR
201+61	WB LT	12	36	36	SPOT CURB & GUTTER REPAIR
202+14	EB LT	2	12	12	SPOT CURB & GUTTER REPAIR
202+92	WB LT	2	20	20	SPOT CURB & GUTTER REPAIR
202+92	WB LT	1	11	11	SPOT CURB & GUTTER REPAIR
204+67	EB RT	5	20	20	SPOT CURB & GUTTER REPAIR
207+04	WB LT	12	37	37	SPOT CURB & GUTTER REPAIR
208+15	EB RT	0	8	8	SPOT CURB & GUTTER REPAIR
214+85.2 - 216+15.2	EB RT	44	130	130	NO HEAD ON CURB PRIOR TO BULLNOSE
214+86.8 - 216+16.8	EB LT	44	130	130	NO HEAD ON CURB PRIOR TO BULLNOSE
225+95	EB LT	29	89	89	SPOT CURB & GUTTER REPAIR
226+78.8 - 228+08.8	EB LT	44	130	130	NO HEAD ON CURB PRIOR TO BULLNOSE
226+78.8 - 228+08.8	WB RT	44	130	130	NO HEAD ON CURB PRIOR TO BULLNOSE
227+06.3 - 228+21.3	WB LT	38	115	115	NO HEAD ON CURB PRIOR TO EAT
230+23	WB LT	11	33	33	SPOT CURB & GUTTER REPAIR
230+96	WB LT	6	18	18	SPOT CURB & GUTTER REPAIR
231+58	WB LT	4	12	12	SPOT CURB & GUTTER REPAIR
233+19	WB LT	4	12	12	SPOT CURB & GUTTER REPAIR
233+27	EB LT	112	356	356	SPOT CURB & GUTTER REPAIR
233+94	EB RT	82	250	250	SPOT CURB & GUTTER REPAIR
235+83	EB RT	12	41	41	SPOT CURB & GUTTER REPAIR
237+15	EB LT	72	218	218	SPOT CURB & GUTTER REPAIR
239+97	WB LT	256	793	793	SPOT CURB & GUTTER REPAIR
FOLSOM ST					
603+88 - 604+52	RT	0	92	92	
603+98 - 604+52	LT	0	58	58	
UNDISTRIBUTED		150	500	500	
ITEM SUBTOTALS		1259	4571	4571	
ITEM TOTALS		1983	8219	8219	

* QUANTITY SHOWN ELSEWHERE IN PLANS.

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3

MAINTENANCE AND REPAIR OF HAUL ROADS (7090-01-61)

STATION	618.0100 EACH
USH 12	1
ITEM TOTAL	1

MOBILIZATION

STATION	619.1000 EACH
USH 12	1
ITEM TOTAL	1

EROSION CONTROL ITEMS

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY
USH 12'EB'				
63+80 - 64+75	WB LT	200	200	-
192+23 - 194+23	EB RT	200	200	-
214+91 - 214+91	EB RT	200	200	-
225+00 - 227+05	EB RT	200	200	185
226+30 - 227+20	WB LT	200	200	-
ITEM TOTALS		1000	1000	185

SALVAGED TOPSOIL, MULCHING AND SEEDING

STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 TEMPORARY SEEDING LB
USH 12'EB'							
72+71	EB LT	10	10	0.7	0.3	0.2	0.3
75+55	EB LT	8	8	0.5	0.2	0.1	0.2
85+54	WB LT	12	12	0.7	0.3	0.2	0.3
90+22	EB LT	9	9	0.6	0.2	0.1	0.2
98+31	WB LT	5	5	0.3	0.1	0.1	0.1
100+40	WB LT	5	5	0.3	0.1	0.1	0.1
102+57	WB LT	3	3	0.2	0.1	0.1	0.1
103+46	WB LT	3	3	0.2	0.1	0.1	0.1
105+38	WB LT	4	4	0.2	0.1	0.1	0.1
111+77	EB RT	16	16	1.0	0.4	0.3	0.4
117+44	WB LT	3	3	0.2	0.1	0.1	0.1
119+73	WB LT	5	5	0.3	0.1	0.1	0.1
120+75	EB LT	7	7	0.5	0.2	0.1	0.2
121+78	EB RT	4	4	0.3	0.1	0.1	0.1
125+26	WB LT	4	4	0.3	0.1	0.1	0.1
125+95	WB LT	6	6	0.4	0.2	0.1	0.2
126+06	EB RT	7	7	0.4	0.2	0.1	0.2
126+18	WB LT	3	3	0.2	0.1	0.1	0.1
128+33	EB RT	69	69	4.3	1.9	1.3	1.9
132+98	WB LT	5	5	0.3	0.1	0.1	0.1
134+26	EB RT	8	8	0.5	0.2	0.1	0.2
142+56	EB RT	22	22	1.4	0.6	0.4	0.6
149+55	WB LT	13	13	0.8	0.4	0.3	0.4
149+64	EB RT	8	8	0.5	0.2	0.1	0.2
150+22	EB RT	17	17	1.1	0.5	0.3	0.5
153+87	WB LT	4	4	0.3	0.1	0.1	0.1
158+53	EB RT	5	5	0.3	0.1	0.1	0.1
158+90 - 160+71	EB RT	70	70	4.4	1.9	1.3	1.9
164+06	WB LT	5	5	0.3	0.1	0.1	0.1
174+54	EB RT	14	14	0.9	0.4	0.3	0.4
177+46	EB RT	6	6	0.4	0.2	0.1	0.2
177+79	WB LT	5	5	0.3	0.1	0.1	0.1
178+36	EB RT	7	7	0.4	0.2	0.1	0.2
180+35	EB RT	7	7	0.4	0.2	0.1	0.2
182+77	WB LT	4	4	0.3	0.1	0.1	0.1
183+41	WB LT	3	3	0.2	0.1	0.1	0.1
186+43	WB LT	3	3	0.2	0.1	0.1	0.1
198+29	WB LT	3	3	0.2	0.1	0.1	0.1
199+56	WB LT	10	10	0.6	0.3	0.2	0.3
201+61	WB LT	12	12	0.8	0.3	0.2	0.3
202+14	EB LT	4	4	0.3	0.1	0.1	0.1
202+92	WB LT	7	7	0.4	0.2	0.1	0.2
202+92	WB LT	4	4	0.2	0.1	0.1	0.1
204+67	EB RT	7	7	0.4	0.2	0.1	0.2
207+04	WB LT	12	12	0.8	0.3	0.2	0.3
225+95	EB LT	30	30	1.9	0.8	0.5	0.8
230+23	WB LT	11	11	0.7	0.3	0.2	0.3
230+96	WB LT	6	6	0.4	0.2	0.1	0.2
231+58	WB LT	4	4	0.3	0.1	0.1	0.1
233+27	EB LT	65	65	4.1	1.8	1.2	1.8
233+94	EB RT	83	83	5.3	2.3	1.5	2.3
235+83	EB RT	14	14	0.9	0.4	0.3	0.4
237+60	EB LT	21	21	1.3	0.6	0.4	0.6
239+97	WB LT	264	264	16.7	7.1	4.7	7.1
FOLSOM ST							
603+88 - 604+52	RT	29	29	1.8	0.8	0.5	0.8
603+98 - 604+52	LT	19	19	1.2	0.5	0.3	0.5
ITEM TOTALS		994	994	63	27	18	27

MOBILIZATIONS EROSION CONTROL

STATION	628.1905 EROSION CONTROL EACH	628.1910 EMERGENCY EROSION CONTROL EACH
USH 12	2	2
ITEM TOTALS	2	2

FIELD OFFICE TYPE C

STATION	642.5201 EACH
USH 12	1
ITEM TOTAL	1

TRAFFIC CONTROL

STATION	643.0100 (7090-01-61) EACH	643.0300 DRUMS DAY	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C DAY	643.0800 ARROW BOARDS DAY	643.0900 SIGNS DAY	643.1050 SIGNS PCMS DAY	SPV.0045.01 (PCMS) CELLULAR COMMUNICATION DAY	REMARKS
USH 12	1									
63+67 - 244+17		86400	8640	17280	16800	192	23424	206	206	STAGE 1
63+67 - 244+17		51300	3990	7980	9975	114	10089	114	114	STAGE 2
ITEM TOTALS	1	137700	12630	25260	26775	306	33513	320	320	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

3

SIGNING ITEMS

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0805 POSTS TUBULAR STEEL 2X2-INCH X 5-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-1	R1-2	YIELD	- X -	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
1-2	J2-1	EAST	36 X 84	21.00	-	-	-	-	1	-	-	-	-	
		STH 312	- X -	-	-	-	-	-	-	-	-	-	-	
		RIGHT ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
1-3	R5-1A	WRONG WAY	42 X 30	8.75	-	-	-	-	1	-	-	1	1	
1-4	I5-1	AIRPORT	30 X 30	6.25	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 1-3
	M6-1	RIGHT ARROW	30 X 30	6.25	-	-	-	-	-	-	-	1	-	
1-5	D1-3	AHEAD ARROW ELK MOUND	96 X 36	24.00	-	-	-	2	-	-	-	1	2	
		MENOMONIE	- X -	-	-	-	-	-	-	-	-	-	-	
		CHIPPEWA FALLS RIGHT ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
1-6	J2-3	WEST	108 X 84	63.00	-	-	-	-	-	2	-	1	2	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
		AHEAD ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
		WEST	- X -	-	-	-	-	-	-	-	-	-	-	
		STH 312	- X -	-	-	-	-	-	-	-	-	-	-	
		AHEAD ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
		EAST	- X -	-	-	-	-	-	-	-	-	-	-	
		STH 312	- X -	-	-	-	-	-	-	-	-	-	-	
		ADVANCE ARROW RIGHT TURN	- X -	-	-	-	-	-	-	-	-	-	-	
1-7	J1-2	JCT	72 X 57	28.50	-	-	-	-	2	-	-	1	1	
		STH 312	- X -	-	-	-	-	-	-	-	-	-	-	
		JCT	- X -	-	-	-	-	-	-	-	-	-	-	
		CTH T	- X -	-	-	-	-	-	-	-	-	-	-	
1-8	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
1-9	R3-2	NO LEFT TURN	- X -	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
1-10	J2-1	EAST	- X -	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
		STH 312	- X -	-	-	-	-	-	-	-	-	-	-	
		LEFT ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
1-11	R2-1	SPEED LIMIT 45	- X -	-	-	-	-	-	-	-	-	-	-	EXISTING TO REMAIN
1-12	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
1-13	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
1-14	M1-94	TRUAX BLVD	60 X 24	10.00	-	-	2	-	-	-	-	1	2	
1-15	J4-1	WEST	36 X 51	12.75	-	-	-	1	-	-	-	1	1	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
1-16	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
1-17	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
1-18	R4-7	KEEP RIGHT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
1-19	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
1-20	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 1-19
1-21	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
1-22	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
1-23	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
1-24	M1-94	TRUAX BLVD	60 X 24	10.00	-	-	2	-	-	-	-	1	2	
1-25	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
1-26	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
1-27	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
1-28	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
1-29	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 1-28
1-30	R4-7	KEEP RIGHT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
1-31	R1-1F	FOLDING STOP	36 X 36		7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
1-32	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
1-33	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
1-34	J4-1	EAST	36 X 54	13.50	-	-	-	1	-	-	-	1	1	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
1-35	I55-56	ADOPT-A-HWY	30 X 36	7.50	-	-	-	1	-	-	-	1	1	
		RETIRED EMPLOYEES OF DOT AND WIVES	- X -	-	-	-	-	-	-	-	-	-	-	
1-36	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	2	
		CTH CC	- X -	-	-	-	-	-	-	-	-	-	-	
1-37	M1-94	FOLSOM ST	60 X 24	10.00	-	-	2	-	-	-	-	-	-	REMOVAL PAID UNDER 1-36
1-38	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
SHEET SUBTOTALS				410.17	14.92	18.00	8	13	6	2	0	30	26	

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SIGNING ITEMS CONT.

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0805 POSTS TUBULAR STEEL 2X2-INCH X 5-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
2-1	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-2	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
2-3	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
2-4	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-5	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 2-4
2-6	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-7	R5-1A	WRONG WAY	42 X 30	8.75	-	-	-	-	1	-	-	1	1	
2-8	J13-1	CTH CC	36 X 66	16.50	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 2-7
		LEFT ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
2-9	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-10	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	2	
		CTH CC	- X -	-	-	-	-	-	-	-	-	-	-	
2-11	M1-94	FOLSOM ST	60 X 24	10.00	-	-	2	-	-	-	-	-	-	REMOVAL PAID UNDER 2-10
2-12	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	2	
		CTH CC	- X -	-	-	-	-	-	-	-	-	-	-	
2-13	M1-94	FOLSOM ST	60 X 24	10.00	-	-	2	-	-	-	-	-	-	REMOVAL PAID UNDER 2-11
2-14	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
2-15	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-16	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 2-15
2-17	J13-1	CTH CC	36 X 66	16.50	-	-	-	-	-	-	-	1	-	
		RIGHT ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
2-18	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
2-19	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
2-20	J4-1	EAST	36 X 54	13.50		-	-	1	-	-	-	1	1	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
2-21	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-22	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-23	M1-94	MOHOLT DR	60 X 24	10.00	-	-	2	-	-	-	-	1	2	
2-24	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-25	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-26	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-27	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
2-28	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
2-29	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-30	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 2-29
2-31	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1		-	-	-	1	1	
2-32	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-33	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-34	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-35	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1		-	-	-	1	1	
2-36	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-37	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 2-36
2-38	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
2-39	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
2-40	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
2-41	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-42	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
2-43	M1-94	VINE ST	48 X 24	8.00	-	-	1	-	-	-	-	1	1	
3-1	M1-94	MOHOLT DR	60 X 24	10.00	-	-	2	-	-	-	-	1	2	
3-2	M1-94	MOHOLT DR	60 X 24	10.00	-	-	2	-	-	-	-	1	2	
3-3	W4-2R	RIGHT LANE DROP	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
3-4	W9-1R	RIGHT LANE ENDS	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
3-5	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1		BAND TO POLE
3-6	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
3-7	R1-1F	FOLDING STOP	36 X 36		7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
3-8	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-9	R1-2	YIELD	48 X 42	7.00	-	-	-	1	.		-	1	1	
3-10	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	1	-	-	-	1	1	
3-11	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
3-12	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
3-13	W9-62	THIS LANE ENDS	48 X 60		-	20.00	-	-	-	-	-	1	-	OVERHEAD SUPPORT
3-14	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
3-15	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
3-16	R1-2	YIELD	48 X 42	7.00	-	-	-	1	.		-	1	1	
3-17	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-18	R1-1F	FOLDING STOP	36 X 36		7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
SHEET SUBTOTALS				570.80	44.76	38.00	16	19	6	0	0	54	39	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

SIGNING ITEMS CONT.

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0805 POSTS TUBULAR STEEL 2X2-INCH X 5-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
3-19	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
3-20	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-21	J4-1	EAST	36 X 54	13.50	-	-	-	1	-	-	-	1	1	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
3-22	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-23	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
3-24	M1-94	VINE ST	48 X 24	8.00	-	-	1	-	-	-	-	1	1	
3-25	M1-94	VINE ST	48 X 24	8.00	-	-	1	-	-	-	-	1	1	
3-26	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
3-27	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
3-28	J4-1	WEST	36 X 54	13.50	-	-	-	1	-	-	-	1	1	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
3-29	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-30	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
3-31	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DMDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
3-32	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-33	R1-2	YIELD	48 X 42	7.00	-	-	-	1	-	-	-	1	1	
3-34	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	1	-	-	-	1	1	
3-35	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	2	
		CTH E	- X -	-	-	-	-	-	-	-	-	-	-	
3-36	M1-94	CAMERON ST	66 X 24	11.00	-	-	2	-	-	-	-	-	-	REMOVAL PAID UNDER 3-35
3-37	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	2	
		CTH E	- X -	-	-	-	-	-	-	-	-	-	-	
3-38	M1-94	CAMERON ST	66 X 24	11.00	-	-	2	-	-	-	-	-	-	REMOVAL PAID UNDER 3-37
3-39	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
3-40	D9-2	HOSPITAL	36 X 36	9.00	-	-	-	-	1	-	-	1	1	
	M6-1	LEFT ARROW	30 X 30	6.25	-	-	-	-	-	-	-	-	-	
3-41	M1-94	LEFT ARROW DOWNTOWN	72 X 15	7.50	-	-	2	-	-	-	-	1	2	
3-42	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
3-43	J13-1	CTH E	36 X 66	16.50	-	-	-	-	1	-	-	1	1	
		RIGHT ARROW	- X -	-	-	-	-	-	-	-	-	-	-	
3-44	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 3-43
3-45	R1-2	YIELD	48 X 42	7.00	-	-	-	1	-	-	-	1	1	
3-46	R10-10L	LEFT TURN SIGNAL	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-47	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-48	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	-	-	BAND TO POLE
	R6-3	DMDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
3-49	R1-1	STOP	36 X 36	7.46	-	-	-	-	1	-	-	1	1	
	R1-53	RIGHT TURN OBEY THIS SIGN	24 X 30	5.00	-	-	-	-	-	-	-	-	-	
3-50	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-51	R10-10L	LEFT TURN SIGNAL	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
3-52	J4-1	EAST	36 X 54	13.50	-	-	-	1	-	-	-	1	1	
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
4-1	M1-94	DOWNTOWN RIGHT ARROW	72 X 15	7.50	-	-	2	-	-	-	-	1	2	
4-2	D9-2	HOSPITAL	36 X 36	9.00	-	-	-	-	1	-	-	1	1	
	M6-1	LEFT ARROW	30 X 30	6.25	-	-	-	-	-	-	-	-	-	
4-3	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-4	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
4-5	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
4-6	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	1	
		CTH E	- X -	-	-	-	-	-	-	-	-	-	-	
4-7	J1-1	JCT	36 X 57	14.25	-	-	-	1	-	-	-	1	2	
		CTH E	- X -	-	-	-	-	-	-	-	-	-	-	
4-8	M1-94	CAMERON ST	66 X 24	11.00	-	-	2	-	-	-	-	-	-	REMOVAL PAID UNDER 4-7
4-9	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-10	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-11	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
4-12	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DMDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
4-13	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	1	-	-	1	1	
4-14	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 4-13
4-15	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-16	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
4-17	M1-94	CRESTVIEW DR	72 X 24	12.00	-	-	2	-	-	-	-	1	2	
4-18	M1-94	CRESTVIEW DR	72 X 24	12.00	-	-	2	-	-	-	-	1	2	
4-19	D7-52	ROAD TO	60 X 36	15.00	-	-	-	2	-	-	-	1	2	
		CARSON PARK	- X -	-	-	-	-	-	-	-	-	-	-	
		1 MILE	- X -	-	-	-	-	-	-	-	-	-	-	
4-20	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-21	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
SHEET SUBTOTALS				570.84	14.92	18.00	18	24	7	0	0	49	46	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

SIGNING ITEMS CONT.

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0805 POSTS TUBULAR STEEL 2X2-INCH X 5-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
4-22	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	1	-	-	1	1	
4-23	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 4-22
4-24	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
4-25	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
4-26	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-27	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
4-28	M1-94	CRESTVIEW DR	72 X 24	12.00	-	-	2	-	-	-	-	1	2	
4-29	M1-94	CRESTVIEW DR	72 X 24	12.00	-	-	2	-	-	-	-	1	2	
4-30	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-31	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-32	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
4-33	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	1	-	-	1	1	
4-34	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 4-33
4-35	M1-94	LT ARROW CURTISS/ LAMPLIGHTER RT ARROW	96 X 30	20.00	-	-	-	2	-	-	-	1	2	
4-36	M1-94	LT ARROW CURTISS/ LAMPLIGHTER RT ARROW	96 X 30	20.00	-	-	-	2	-	-	-	1	2	
4-37	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-38	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
4-39	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
4-40	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	1	-	-	1	1	
4-41	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 4-40
4-42	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
4-43	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
4-44	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
4-45	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-1	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-2	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
5-3	M1-94	LT ARROW LAMPLIGHTER/CURTISS RT ARROW	96 X 30	20.00	-	-	-	2	-	-	-	1	2	
5-4	M1-94	LT ARROW LAMPLIGHTER/CURTISS RT ARROW	96 X 30	20.00	-	-	-	2	-	-	-	1	2	
5-5	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-6	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-7	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-8	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
5-9	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	1	-	-	1	1	
5-10	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 5-9
5-11	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
5-12	I55-56	ADOPT-A-HWY	30 X 36	7.50	-	-	-	1	-	-	-	1	1	
		RETIRED EMPLOYEES OF DOT AND WIVES	- X -	-	-	-	-	-	-	-	-	-	-	
5-13	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-14	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-15	J4-1	WEST	36 X 54	13.50	-	-	-	-	-	-	-	1	-	BAND TO POLE
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
5-16	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-17	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 5-16
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 5-16
5-18	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-19	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	-	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
5-20	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-21	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-22	W12-1D	DOUBLE DIAGONAL ARROW	30 X 30	-	-	6.25	-	-	-	-	1	-	-	
5-23	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
5-24	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-25	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	1	-	-	1	1	
5-26	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	
5-27	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
5-28	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-29	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
5-30	M1-94	MENOMONIE ST	90 X 15	9.38	-	-	2	-	-	-	-	1	2	
5-31	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
5-32	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
5-33	M1-94	LEFT ARROW CARSON PARK	60 X 24	10.00	-	-	-	2	-	-	-	1	2	
5-34	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
5-35	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-36	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-37	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-38	R10-10L	LEFT TURN SIGNAL	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-39	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
SHEET SUBTOTALS				626.18	22.38	24.25	12	31	5	0	1	55	48	

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SIGNING ITEMS CONT.

SIGN GROUP NUMBER	SIGN CODE	SIGN MESSAGE	SIGN SIZE W X H (INCHES)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II FOLDING REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	634.0620 POSTS WOOD 4X6-INCH X 20-FT EACH	634.0805 POSTS TUBULAR STEEL 2X2-INCH X 5-FT EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
5-40	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 5-39
5-41	R1-1F	FOLDING STOP	36 X 36	-	7.46	-	-	-	-	-	-	1	-	BAND TO POLE
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	BAND TO POLE
5-42	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	BAND TO POLE, REMOVAL PAID UNDER 5-41
5-43	J4-1	EAST	36 X 54	13.50	-	-	-	-	-	-	-	1	-	BAND TO POLE
		USH 12	- X -	-	-	-	-	-	-	-	-	-	-	
5-44	R10-10L	LEFT TURN SIGNAL	24 X 30	5.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
5-45	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
6-1	M1-94	CARSON PARK RIGHT ARROW	60 X 24	10.00	-	-	2	-	-	-	-	1	2	
6-2	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
6-3	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	-	-	-	-	1	-	BAND TO POLE
6-4	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
6-5	M1-94	MENOMONIE ST	90 X 15	9.38	-	-	2	-	-	-	-	1	2	
6-6	M1-94	MENOMONIE ST	90 X 15	9.38	-	-	2	-	-	-	-	1	2	
6-7	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	-	-	-	-	1	-	BAND TO POLE
6-8	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
6-9	M1-94	CHIPPEWA RIVER	84 X 15	8.75	-	-	2	-	-	-	-	1	2	
6-10	M1-94	CHIPPEWA RIVER	84 X 15	8.75	-	-	2	-	-	-	-	1	2	
6-11	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
6-12	R1-1	STOP	36 X 36	7.46	-	-	1	-	-	-	-	1	1	
6-13	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	1	-	-	1	1	
6-14	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 6-13
6-15	R5-1A	WRONG WAY	42 X 30	8.75	-	-	1	-	-	-	-	1	1	
6-16	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
6-17		DEPARTMENT OF RIGHT ARROW	114 X 24	19.00	-	-	-	-	2	-	-	1	2	
		NATURAL RESOURCES	- X -	-	-	-	-	-	-	-	-	-	-	
6-18		LEFT ARROW DEPARTMENT OF	114 X 24	19.00	-	-	-	-	2	-	-	1	2	
		NATURAL RESOURCES	- X -	-	-	-	-	-	-	-	-	-	-	
6-19	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
6-20	I55-56	ADOPT-A-HWY	30 X 36	7.50	-	-	-	1	-	-	-	1	1	
		PEACE LUTHERAN CONFIRMATION	- X -	-	-	-	-	-	-	-	-	-	-	
		YOUTH GROUPS	- X -	-	-	-	-	-	-	-	-	-	-	
6-21	R5-1A	WRONG WAY	42 X 30	8.75	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 6-20
6-22	R6-2L	ONE WAY LEFT	24 X 30	5.00	-	-	-	-	1	-	-	1	1	
6-23	R5-1	DO NOT ENTER	36 X 36	9.00	-	-	-	-	-	-	-	-	-	REMOVAL PAID UNDER 6-22
6-24	R1-1	STOP	36 X 36	7.46	-	-	-	1	-	-	-	1	1	
	R6-3	DIVIDED HWY	30 X 24	5.00	-	-	-	-	-	-	-	-	-	
6-25	R4-7	KEEP RIGHT	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
6-26	M1-94	CRAIG RD	54 X 24	9.00	-	-	2	-	-	-	-	1	2	
6-27	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
6-28	W3-3	STOP LIGHT AHEAD	36 X 36	-	-	9.00	-	1	-	-	-	1	1	
7-1	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
7-2	R3-56L	LEFT TURN LANE	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
7-3	R2-1	SPEED LIMIT 45	36 X 48	12.00	-	-	-	1	-	-	-	1	1	
SHEET SUBTOTALS				342.67	7.46	36.00	14	14	6	0	0	32	34	
ITEM TOTALS				2520.66	104.44	134.25	68	101	30	2	1	220	193	

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PAVEMENT MARKING

STATION	LOCATION	646.0106 EPOXY 4-INCH LF	646.0126 EPOXY 8-INCH LF	647.0156 ARROWS EPOXY TYPE 1 EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY EACH	647.0456 CURB EPOXY LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY EACH	647.0766 CROSSWALK EPOXY 6-INCH LF	REMARKS
USH 12'EB'											
63+67 - 244+17	EB LANE LINE	7400	-	-	-	-	-	-	-	-	WHITE SKIP
63+70 - 244+17	WB LANE LINE	7500	-	-	-	-	-	-	-	-	WHITE SKIP
63+67 - 107+00	EB LANE EDGE RT	3150	-	-	-	-	-	-	-	-	WHITE
63+70 - 107+00	WB LANE EDGE LT	3000	-	-	-	-	-	-	-	-	WHITE
75+00 - 80+00	EB LANE EDGE	500	-	-	-	-	-	-	-	-	YELLOW
78+25 - 79+75	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
78+00 - 80+00	EB CHANNELIZING	-	200	-	-	-	-	-	-	-	WHITE
78+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
79+00	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
80+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
80+00	WB	-	-	-	-	-	10	-	1	-	YELLOW
80+00	EB	-	-	-	-	-	-	50	-	-	WHITE
81+50	EB	-	-	-	-	-	10	-	1	-	YELLOW
81+50	WB	-	-	-	-	-	-	50	-	-	WHITE
81+50 - 83+75	WB CHANNELIZING	-	225	-	-	-	-	-	-	-	WHITE
81+50 - 86+00	WB	450	-	-	-	-	-	-	-	-	YELLOW
82+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
83+00	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
83+25 - 84+00	WB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
84+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
90+00 - 93+50	EB LANE EDGE LT	350	-	-	-	-	-	-	-	-	YELLOW
91+50 - 92+25	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
92+00 - 93+50	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
92+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
92+50	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
93+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
93+50	WB	-	-	-	-	-	10	-	1	-	YELLOW
93+50	EB	-	-	-	-	-	-	50	-	-	WHITE
93+75	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
94+50	EB	-	-	-	-	-	10	-	1	-	YELLOW
94+75	WB	-	-	-	-	-	-	50	-	-	WHITE
94+75 - 97+00	WB CHANNELIZING	-	225	-	-	-	-	-	-	-	WHITE
94+75 - 98+25	WB	350	-	-	-	-	-	-	-	-	YELLOW
95+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
96+00	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
96+00 - 96+75	WB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
97+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
107+00 - 111+50	EB LANE EDGE RT	450	-	-	-	-	-	-	-	-	WHITE
107+50 - 111+50	EB LANE EDGE LT	400	-	-	-	-	-	-	-	-	YELLOW
108+50 - 109+50	EB CHANNELIZING	-	200	-	-	-	-	-	-	-	WHITE
110+00 - 111+50	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
110+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
110+50	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
111+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
111+50	WB	-	-	-	-	-	10	-	1	-	YELLOW
111+50	EB	-	-	-	-	-	-	50	-	-	WHITE
111+50	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
112+50	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
112+75	WB	-	-	-	-	-	-	50	-	-	WHITE
112+75	EB	-	-	-	-	-	10	-	1	-	YELLOW
113+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
112+75 - 115+00	WB CHANNELIZING	-	225	-	-	-	-	-	-	-	WHITE
112+75 - 116+00	WB LANE EDGE RT	325	-	-	-	-	-	-	-	-	WHITE
112+75 - 117+00	WB LANE EDGE LT	425	-	-	-	-	-	-	-	-	YELLOW
113+50	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
114+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
114+50	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
114+75 - 115+50	WB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
115+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
123+50 - 127+25	EB LANE EDGE LT	375	-	-	-	-	-	-	-	-	YELLOW
124+25 - 126+50	EB LANE EDGE RT	225	-	-	-	-	-	-	-	-	WHITE
124+50 - 125+50	EB CHANNELIZING	-	200	-	-	-	-	-	-	-	WHITE
126+00 - 127+50	EB CHANNELIZING	-	200	-	-	-	-	-	-	-	WHITE
126+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
126+50	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
127+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
127+50	WB	-	-	-	-	-	10	-	1	-	YELLOW
127+50	EB	-	-	-	-	-	-	50	-	-	WHITE
127+50	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
ITEM SUBTOTALS		24900	2525	0	15	8	70	350	7	800	

PAVEMENT MARKING CONT.

STATION	LOCATION	646.0106 EPOXY 4-INCH LF	646.0126 EPOXY 8-INCH LF	647.0156 ARROWS EPOXY TYPE 1 EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY EACH	647.0456 CURB EPOXY LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY EACH	647.0766 CROSSWALK EPOXY 6-INCH LF	REMARKS
USH 12'EB'											
129+00	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
129+00	WB	-	-	-	-	-	-	50	-	-	WHITE
129+00	EB	-	-	-	-	-	30	-	1	-	YELLOW
129+00 - 131+00	WB CHANNELIZING	-	250	-	-	-	-	-	-	-	WHITE
129+00 - 133+00	WB LANE EDGE RT	400	-	-	-	-	-	-	-	-	YELLOW
129+75 - 132+00	WB LANE EDGE LT	225	-	-	-	-	-	-	-	-	WHITE
129+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
130+25	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
130+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
131+00 - 131+75	EB CHANNELIZING	-	175	-	-	-	-	-	-	-	WHITE
140+25 - 148+50	EB LANE EDGE LT	825	-	-	-	-	-	-	-	-	YELLOW
141+75 - 146+50	EB CHANNELIZING	-	575	-	-	-	-	-	-	-	WHITE
145+50 - 148+00	EB LANE EDGE RT	250	-	-	-	-	-	-	-	-	WHITE
146+75 - 148+50	EB CHANNELIZING	-	225	-	-	-	-	-	-	-	WHITE
146+75	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
147+25	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
147+75	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
148+50	WB	-	-	-	-	-	10	-	1	-	YELLOW
148+50	EB	-	-	-	-	-	-	50	-	-	WHITE
148+50	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
150+00	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
150+00	WB	-	-	-	-	-	-	50	-	-	WHITE
150+00	EB	-	-	-	-	-	25	-	1	-	YELLOW
150+00 - 152+75	WB CHANNELIZING	-	325	-	-	-	-	-	-	-	WHITE
150+00 - 154+25	WB LANE EDGE RT	425	-	-	-	-	-	-	-	-	YELLOW
150+75 - 154+00	WB LANE EDGE LT	325	-	-	-	-	-	-	-	-	WHITE
150+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
151+25	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
151+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
152+25	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
152+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
152+00 - 153+00	EB CHANNELIZING	-	200	-	-	-	-	-	-	-	WHITE
160+75 - 163+75	EB LANE EDGE LT	300	-	-	-	-	-	-	-	-	YELLOW
162+00 - 162+75	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
161+50 - 163+75	EB LANE EDGE RT	225	-	-	-	-	-	-	-	-	WHITE
162+75 - 163+75	EB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
162+75	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
163+25	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
163+75	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
163+75	WB	-	-	-	-	-	10	-	1	-	YELLOW
165+00	EB	-	-	-	-	-	25	-	1	-	YELLOW
165+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
165+00 - 166+25	WB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
165+00 - 167+50	WB LANE EDGE LT	250	-	-	-	-	-	-	-	-	WHITE
165+25 - 168+25	WB LANE EDGE RT	300	-	-	-	-	-	-	-	-	YELLOW
165+50	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
166+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
166+25 - 167+00	WB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
174+25 - 177+25	EB LANE EDGE LT	300	-	-	-	-	-	-	-	-	YELLOW
175+25 - 177+25	EB LANE EDGE RT	200	-	-	-	-	-	-	-	-	WHITE
175+50 - 176+25	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
176+25 - 177+25	EB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
176+25	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
176+75	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
177+25	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
177+25	WB	-	-	-	-	-	10	-	1	-	YELLOW
178+75	EB	-	-	-	-	-	25	-	1	-	YELLOW
178+75 - 180+00	WB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
178+75 - 182+00	WB LANE EDGE RT	325	-	-	-	-	-	-	-	-	YELLOW
178+75 - 181+00	WB LANE EDGE LT	225	-	-	-	-	-	-	-	-	WHITE
178+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
179+25	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
179+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
179+75 - 180+50	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
195+50 - 198+75	EB LANE EDGE LT	325	-	-	-	-	-	-	-	-	YELLOW
197+50 - 198+25	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
198+75	WB	-	-	-	-	-	10	-	1	-	YELLOW
199+75	EB	-	-	-	-	-	10	-	1	-	YELLOW
199+75 - 201+00	WB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
ITEM SUBTOTALS		4900	3125	0	15	8	155	150	9	600	

PAVEMENT MARKING CONT.

STATION	LOCATION	646.0106 EPOXY 4-INCH LF	646.0126 EPOXY 8-INCH LF	647.0156 ARROWS EPOXY TYPE 1 EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY EACH	647.0456 CURB EPOXY LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY EACH	647.0766 CROSSWALK EPOXY 6-INCH LF	REMARKS
USH 12'EB'											
199+75 - 203+00	WB LANE EDGE RT	325	-	-	-	-	-	-	-	-	YELLOW
199+75 - 202+00	WB LANE EDGE LT	225	-	-	-	-	-	-	-	-	WHITE
199+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
200+25	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
200+75	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
200+25 - 201+00	WB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
201+00 - 207+25	EB LANE EDGE LT	625	-	-	-	-	-	-	-	-	YELLOW
202+00 - 205+75	EB CHANNELIZING	-	400	-	-	-	-	-	-	-	WHITE
204+75 - 206+75	EB LANE EDGE RT	200	-	-	-	-	-	-	-	-	WHITE
205+75 - 207+00	EB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
206+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
206+50	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
207+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
207+00	EB	-	-	-	-	-	-	50	-	-	WHITE
207+25	WB	-	-	-	-	-	25	-	1	-	YELLOW
207+25	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
208+50	EB & WB	-	-	-	-	-	-	-	-	200	WHITE
208+50 - 235+00	EB LANE EDGE RT	2650	-	-	-	-	-	-	-	-	WHITE
208+75 - 235+00	EB LANE EDGE LT	2625	-	-	-	-	-	-	-	-	YELLOW
208+75	WB	-	-	-	-	-	-	50	-	-	WHITE
208+75	EB	-	-	-	-	-	20	-	1	-	YELLOW
208+75 - 235+00	WB LANE EDGE RT	2625	-	-	-	-	-	-	-	-	YELLOW
209+00 - 213+75	WB CHANNELIZING	-	625	-	-	-	-	-	-	-	WHITE
210+00 - 212+75	EB CHANNELIZING	-	300	-	-	-	-	-	-	-	WHITE
211+00 - 235+00	WB LANE EDGE LT	2400	-	-	-	-	-	-	-	-	WHITE
211+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
211+50	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
212+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
213+00	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
213+50	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
233+25 - 234+00	EB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
234+00 - 235+25	EB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
234+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
234+50	EB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
235+00	EB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
235+00	WB	-	-	-	-	-	10	-	1	-	YELLOW
236+00	EB	-	-	-	-	-	20	-	1	-	YELLOW
236+00 - 237+25	WB CHANNELIZING	-	125	-	-	-	-	-	-	-	WHITE
236+00 - 239+50	WB LANE EDGE RT	350	-	-	-	-	-	-	-	-	YELLOW
236+00 - 238+25	WB LANE EDGE LT	225	-	-	-	-	-	-	-	-	WHITE
236+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
236+50	WB	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
237+00	WB	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
237+00 - 237+75	WB CHANNELIZING	-	150	-	-	-	-	-	-	-	WHITE
ITEM SUBTOTALS		12250	2150	0	11	6	75	100	4	400	

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

PAVEMENT MARKING CONT.

STATION	LOCATION	646.0106 EPOXY 4-INCH LF	646.0126 EPOXY 8-INCH LF	647.0156 ARROWS EPOXY TYPE 1 EACH	647.0166 ARROWS EPOXY TYPE 2 EACH	647.0356 WORDS EPOXY EACH	647.0456 CURB EPOXY LF	647.0566 STOP LINE EPOXY 18-INCH LF	647.0606 ISLAND NOSE EPOXY EACH	647.0766 CROSSWALK EPOXY 6-INCH LF	REMARKS
TRUAX BLVD											
		-	500	-	4	4	75	72	1	-	
FOLSOM ST											
602+30 - 602+90	LT	120	-	-	-	-	-	-	-	-	DOUBLE YELLOW
602+30 - 602+90	RT	-	60	-	-	-	-	-	-	-	WHITE
602+30	RT	-	-	-	1	-	-	-	-	-	WHITE (RIGHT)
602+60 - 602+75	RT	-	30	-	-	-	-	-	-	-	WHITE
602+80	RT	-	-	-	-	1	-	-	-	-	WHITE (ONLY)
602+90	RT	-	-	-	-	-	-	45	-	-	WHITE
603+90	LT	-	-	-	-	-	-	45	-	-	WHITE
603+90 - 604+55	LT	-	160	-	-	-	-	-	-	-	WHITE
603+90 - 604+55	RT	130	-	-	-	-	-	-	-	-	DOUBLE YELLOW
604+05	LT	-	-	-	2	-	-	-	-	-	WHITE (LEFT/RIGHT)
604+55	LT	-	-	-	-	2	-	-	-	-	WHITE (ONLY)
MOHOLT DR											
701+00 - 701+60	LT	120	-	-	-	-	-	-	-	-	DOUBLE YELLOW
701+00 - 701+60	RT	-	44	-	-	-	-	-	-	-	WHITE
701+30	RT	-	-	1	1	-	-	-	-	-	WHITE (LEFT)
701+60	RT	-	-	-	-	-	-	18	-	-	WHITE
702+50 - 703+10	LT	-	100	-	-	-	-	-	-	-	WHITE
702+50 - 703+10	RT	120	-	-	-	-	-	-	-	-	DOUBLE YELLOW
702+50	LT	-	-	-	-	-	-	50	-	-	WHITE
702+80	LT	-	-	1	1	-	-	-	-	-	WHITE (LEFT)
VINE ST											
801+40 - 802+70	LT	260	-	-	-	-	-	-	-	-	DOUBLE YELLOW
801+60 - 802+70	RT	-	110	-	-	-	-	-	-	-	WHITE
802+00	RT	-	-	-	-	2	-	-	-	-	WHITE Only)
802+50	RT	-	-	1	1	-	-	-	-	-	WHITE (LEFT)
802+70	RT	-	-	-	-	-	-	40	-	-	WHITE
803+75 - 804+95	RT	240	-	-	-	-	-	-	-	-	DOUBLE YELLOW
803+75 - 804+95	LT	-	260	-	-	-	-	-	-	-	WHITE
803+75	LT	-	-	-	-	-	-	40	-	-	WHITE
804+00	LT	-	-	1	1	-	-	-	-	-	WHITE (LEFT)
804+50	LT	-	-	-	-	2	-	-	-	-	WHITE (ONLY)
CAMERON ST											
901+70 - 902+80	LT	220	-	-	-	-	-	-	-	-	DOUBLE YELLOW
901+90 - 902+80	RT	-	190	-	-	-	-	-	-	-	WHITE
902+10	RT	-	-	-	-	2	-	-	-	-	WHITE (ONLY)
902+60	RT	-	-	1	1	-	-	-	-	-	WHITE (LEFT)
902+80	RT	-	-	-	-	-	-	40	-	-	WHITE
903+95 - 905+15	LT	-	250	-	-	-	-	-	-	-	WHITE
903+95 - 905+15	RT	240	-	-	-	-	-	-	-	-	DOUBLE YELLOW
903+95	LT	-	-	-	-	-	-	45	-	-	WHITE
904+50	LT	-	-	1	1	-	-	-	-	-	WHITE (LEFT)
905+00	LT	-	-	-	-	2	-	-	-	-	WHITE (ONLY)
CRESTVIEW DR											
1002+15	RT	-	-	-	-	-	-	20	-	-	WHITE
1003+50	LT	-	-	-	-	-	-	20	-	-	WHITE
CURTISS CT											
1102+75 - 1103+1	LT	70	-	-	-	-	-	-	-	-	DOUBLE YELLOW
1103+10	RT	-	-	-	-	-	-	20	-	-	WHITE
1104+45	LT	-	-	-	-	-	-	20	-	-	WHITE
1104+45 - 1104+9	RT	100	-	-	-	-	-	-	-	-	DOUBLE YELLOW
MENOMONIE ST											
1303+00 - 1303+5	RT	-	100	-	-	-	-	-	-	-	WHITE
1303+20	RT	-	-	1	2	-	-	-	-	-	WHITE (LEFT/RIGHT)
1303+50	LT & RT	-	-	-	-	-	-	36	-	200	WHITE
1303+50	LT	-	-	-	-	-	10	-	1	-	YELLOW
1305+00	LT & RT	-	-	-	-	-	-	60	-	200	WHITE
1305+10	RT	-	-	-	-	-	10	-	1	-	YELLOW
1305+10 - 1305+7	LT	-	195	-	-	-	-	-	-	-	WHITE
1305+50	LT	-	-	1	3	-	-	-	-	-	WHITE (LEFT/RIGHT)
ITEM SUBTOTALS		1620	1999	8	18	15	95	571	3	400	
ITEM TOTALS		43670	9799	8	59	37	395	1171	23	2200	

3

CONSTRUCTION STAKING

STATION	LOCATION	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.9910 SUPPLEMENTAL CONTROL (7090-01-61) LS
USH 12'EB'			1
109+47 - 111+69	EB LT	216	-
112+45 - 114+63	WB RT	215	-
126+29 - 127+56	EB LT	79	-
128+59 - 130+93	WB RT	219	-
146+58 - 148+78	EB LT	215	-
149+75 - 152+02	WB RT	220	-
162+79 - 164+10	EB LT	113	-
164+85 - 166+15	WB RT	114	-
178+45 - 179+75	WB RT	118	-
FOLSOM ST			
603+88 - 604+52	RT	92	-
603+98 - 604+52	LT	58	-
ITEM TOTALS		1659	1

SAWING

STATION	LOCATION	690.0250 CONCRETE LF	REMARKS
USH 12			
63+67 - 244+17	EB & WB	2850	FOR CURB & GUTTER REPLACEMENT
63+67 - 244+17	EB & WB	6300	FOR TURN LANE AND ISLAND REPAIR
TRUAX BLVD			
503+15 - 503+28	LT&RT	420	FOR INTERSECTION REPAIR
FOLSOM ST			
603+88 - 604+52	RT	140	
603+98 - 604+52	LT	75	
ITEM TOTAL		9785	

3

LOOP DETECTOR ITEMS

STATION	LOCATION	LOOP #	SIZE (FT)X(FT)	NO. OF TURNS	652.0800 CONDUIT LOOP DETECTOR LF	653.0208 JUNCTION BOXES 8x8x8-INCH EACH	653.0905 REMOVING PULL BOXES EACH	655.0800 LOOP DETECTOR WIRE LF
USH 12'EB'								
108+07	MOHOLT INTERSECTION	1	6 x 18	4	60	1	1	65
111+40	MOHOLT INTERSECTION	2	6 x 30	4	90	1	1	95
112+80	MOHOLT INTERSECTION	3	6 x 30	4	90	1	1	95
123+55	VINE INTERSECTION	4	6 x 18	4	60	1	1	65
127+23	VINE INTERSECTION	5	6 x 30	4	90	1	1	95
129+00	VINE INTERSECTION	6	6 x 30	4	90	1	1	95
148+50	CAMERON INTERSECTION	7	6 x 30	4	90	1	1	95
150+10	CAMERON INTERSECTION	8	6 x 30	4	90	1	1	95
163+67	CRESTVIEW INTERSECTION	9	6 x 25	4	80	1	1	85
165+25	CRESTVIEW INTERSECTION	10	6 x 25	4	80	1	1	85
178+83	CURTISS INTERSECTION	11	6 x 25	4	80	1	1	85
ITEM TOTALS					900	11	11	955

CONSTRUCTION STAKING CONCRETE PAVEMENT JOINT LAYOUT

STATION	SPV.0105.01 LS
USH 12	1
ITEM TOTAL	1

PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL

STATION	SPV.0105.02 LS
USH 12	1
ITEM TOTAL	1

CONCRETE PAVEMENT CENTERLINE JOINT REPAIR

STATION	LOCATION	*416.0610 DRILLED TIE BARS EACH	SPV.0180.01 SY
USH 12	EB & WB	1600	450
ITEM TOTALS		1600	450

* QUANTITY SHOWN ELSEWHERE IN PLANS

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

3

CONCRETE SIDEWALK / MEDIAN

STATION	LOCATION	*416.0610 DRILLED TIE BARS EACH	602.0405 CONCRETE SIDEWALK 4-INCH SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	SPV.0165.01 CONCRETE SIDEWALK CURE AND SEAL TREATMENT SF	SPV.0165.02 CONCRETE MEDIAN SLOPED NOSE CURE AND SEAL TREATMENT SF	REMARKS
USH 12'EB'							
109+48 - 111+67	EB LT	-	1000	-	1000	-	FOR TURN LANE AND ISLAND REPAIR
112+46 - 114+61	EB LT	-	1000	-	1000	-	FOR TURN LANE AND ISLAND REPAIR
125+40 - 127+54	EB LT	-	965	-	965	-	FOR TURN LANE AND ISLAND REPAIR
128+60 - 130+91	EB LT	-	1025	-	1025	-	FOR TURN LANE AND ISLAND REPAIR
146+60 - 148+76	EB LT	-	1000	-	1000	-	FOR TURN LANE AND ISLAND REPAIR
149+77 - 152+00	EB LT	-	1035	-	1035	-	FOR TURN LANE AND ISLAND REPAIR
162+81 - 164+10	EB LT	-	500	-	500	-	FOR TURN LANE AND ISLAND REPAIR
164+85 - 166+15	EB LT	-	500	-	500	-	FOR TURN LANE AND ISLAND REPAIR
178+45 - 179+75	EB LT	-	510	-	510	-	FOR TURN LANE AND ISLAND REPAIR
MOHOLT DR							
701+24	RT	2	-	20	-	20	NOSE REPLACEMENT
702+83	LT	2	-	20	-	20	NOSE REPLACEMENT
CAMERON ST							
902+71	RT	2	-	20	-	20	NOSE REPLACEMENT
ITEM TOTALS		6	7535	60	7535	60	

* QUANTITY SHOWN ELSEWHERE IN PLANS

BARRIER SYSTEM GRADING SHAPING FINISHING

STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	*EXCAVATION COMMON CY	*BORROW CY	*SALVAGED TOPSOIL SY	*FERTILIZER TYPE A CWT	*SEEDING MIXTURE NO. 20 LB	*MULCHING SY
USH 12'EB'								
64+19.4 - 64+72.5	WB LT	1	5	5	200	200	0.2	8
193+45.5 - 193+98.2	EB RT	1	5	5	200	200	0.2	8
226+69.4 - 227+22.5	WB LT	1	5	5	200	200	0.2	8
ITEM TOTALS		3	15	15	600	600	0.6	24

* ITEMS & QUANTITIES LISTED FOR BID INFORMATION ONLY. MINIMAL GRADING EXPECTED.

3

STORM SEWER STRUCTURE ITEMS

STATION	LOCATION	611.0624 INLET COVERS TYPE H EACH	628.7015 INLET PROTECTION TYPE C EACH
USH 12'EB'			
65+63	EB LT	1	1
72+76	EB LT	1	1
79+81	WB LT	1	1
85+56	WB LT	1	1
102+62	WB LT	1	1
119+75	WB LT	1	1
125+91	WB LT	1	1
134+30	EB RT	1	1
149+65	EB RT	1	1
164+06	WB LT	1	1
174+47	EB RT	1	1
177+35	EB RT	1	1
180+38	EB RT	1	1
183+41	WB LT	1	1
186+43	WB LT	1	1
198+30	WB LT	1	1
201+68	WB LT	1	1
230+12	WB LT	1	1
231+53	EB LT	1	1
231+58	EB LT	1	1
233+41	EB RT	1	1
235+97	WB LT	1	1
236+02	EB RT	1	1
236+08	EB LT	1	1
ITEM TOTALS		24	24

GUARDRAIL

STATION	LOCATION	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH
USH 12'EB'								
63+80 - 64+19.4	WB LT	-	-	-	-	39.4	-	-
64+19.4 - 64+72.5	WB LT	-	-	-	-	-	1	-
193+45.5 - 193+98.2	EB RT	-	-	-	-	-	1	-
193+98.2 - 194+23.1	EB RT	-	-	-	25	-	-	1
215+86.8 - 216+40.5	EB LT	-	1	-	-	-	-	-
216+03.5 - 216+53.4	WB LT	-	-	-	50	-	-	1
216+40.5 - 216+53.0	EB LT	-	-	12.5	-	-	-	-
216+40.5 - 216+62.4	WB RT	-	-	21.8	-	-	-	-
216+53.0 - 216+67.4	EB LT	14.4	-	-	-	-	-	-
216+53.4 - 216+92.8	WB LT	-	-	-	-	39.4	-	-
216+62.4 - 216+76.8	WB RT	14.4	-	-	-	-	-	-
225+19.5 - 225+58.9	EB RT	-	-	-	-	39.4	-	-
225+41.1 - 225+55.5	WB RT	14.4	-	-	-	-	-	-
225+53.2 - 225+67.6	EB LT	14.4	-	-	-	-	-	-
225+55.5 - 226+55.5	EB LT	-	-	100	-	-	-	-
225+58.9 - 226+96.4	EB RT	-	-	-	137.5	-	-	1
225+67.6 - 226+55.1	WB RT	-	-	87.5	-	-	-	-
225+93.8 - 226+33.2	WB LT	-	-	-	-	39.4	-	-
226+33.2 - 226+83.2	WB LT	-	-	-	50	-	-	-
226+55.1 - 227+08.9	EB LT	-	1	-	-	-	-	-
226+83.2 - 227+36.3	WB LT	-	-	-	-	-	1	-
ITEM TOTALS		57.6	2	221.8	262.5	157.6	3	3

ALL ITEMS ARE CATEGORY 0010 UNLESS NOTED OTHERWISE.

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED

MGS THRIE BEAM TRANSITION REQ'D
STA 63+80'EB' TO STA 64+19.4'EB'LT

MGS GUARDRAIL TERMINAL EAT REQ'D
STA 64+19.4'EB' TO STA 64+72.5'EB'LT

N

61+00'WB' 62+00'WB' 63+00'WB' 64+00'WB' 65+00'WB' 66+00'WB' 67+00'WB' 68+00'WB' 69+00'WB' 70+00'WB' 71+00'WB' USH 12 72+00'WB' 73+00'WB' 74+00'WB' 75+00'WB' 76+00'WB

61+00'EB' 62+00'EB' 63+00'EB' 64+00'EB' 65+00'EB' 66+00'EB' 67+00'EB' 68+00'EB' 69+00'EB' 70+00'EB' 71+00'EB' 72+00'EB' 73+00'EB' 74+00'EB' 75+00'EB' 7

MATCHLINE STA 76+00

S 0°54'17" E

S 0°54'17" E

USH 12

BM 1

BEGIN PROJECT
STA 63+67.46
Y = 288067.861
X = 327682.424
MATCH EXISTING

STH 312

STH 312

XCEL ENERGY

XCEL ENERGY

R/W

R/W

5

5

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
BM1	63+69.50 27.85'RT	WISDOT 5054	927.780
BM2	71+70.02 15.25'LT	CONCRETE BASE	922.080
BM3	87+43.78 15.45'LT	CONCRETE BASE	912.054

N

505+00 N 89°05'

XCEL ENERGY

CINC

STA 80+62.13'EB' USH 12 =
STA 503+20.83 TRUAX BLVD.

AT&T WI

CITY OF
EAU CLAIRE

CINC

MATCHLINE STA 76+00

77+00'WB' 78+00'WB' 79+00'WB' 80+00'WB' 81+00'WB' 82+00'WB' 83+00'WB' USH 12 84+00'WB' 85+00'WB' 86+00'WB' 87+00'WB' 88+00'WB' 89+00'WB' 90+00'WB' 91+00'WB

77+00'EB' 78+00'EB' 79+00'EB' 80+00'EB' 81+00'EB' 82+00'EB' 83+00'EB' 84+00'EB' 85+00'EB' 86+00'EB' 87+00'EB' 88+00'EB' 89+00'EB' 90+00'EB' 9

MATCHLINE STA 91+00

S 0°54'17" E

S 0°54'17" E

Pl 503+50.83

Pl 503+50.83

USH 12

CITY OF
EAU CLAIRE

WEST
WISCONSIN
TELCOM

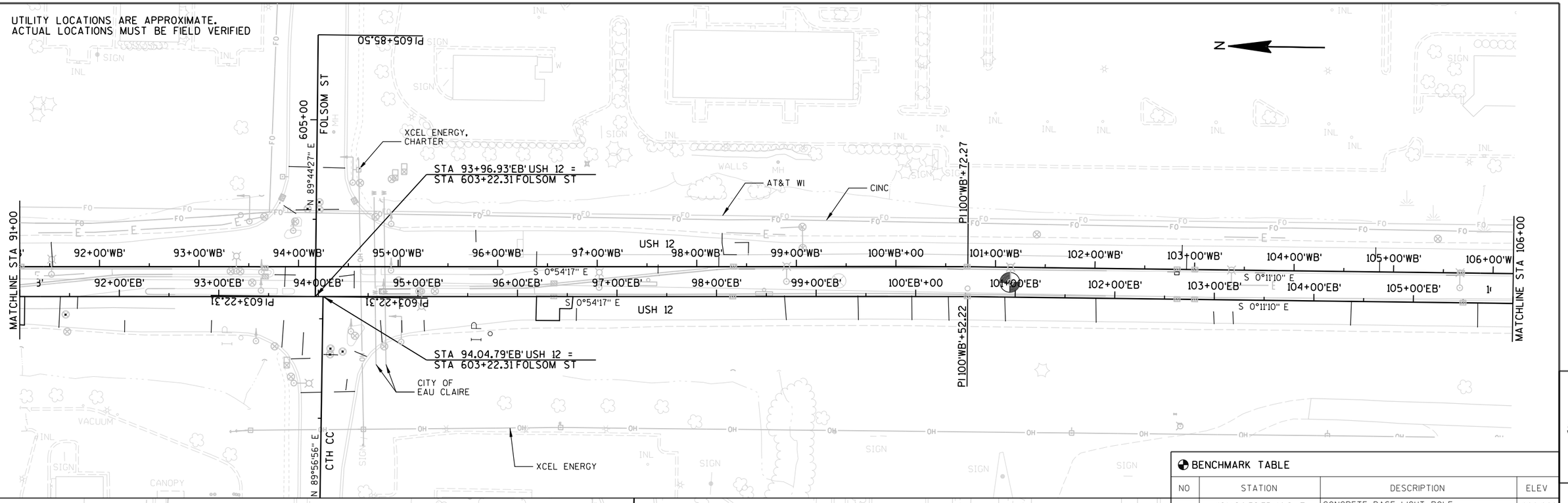
STA 80+83.09'EB' USH 12 =
STA 503+20.83 TRUAX BLVD.

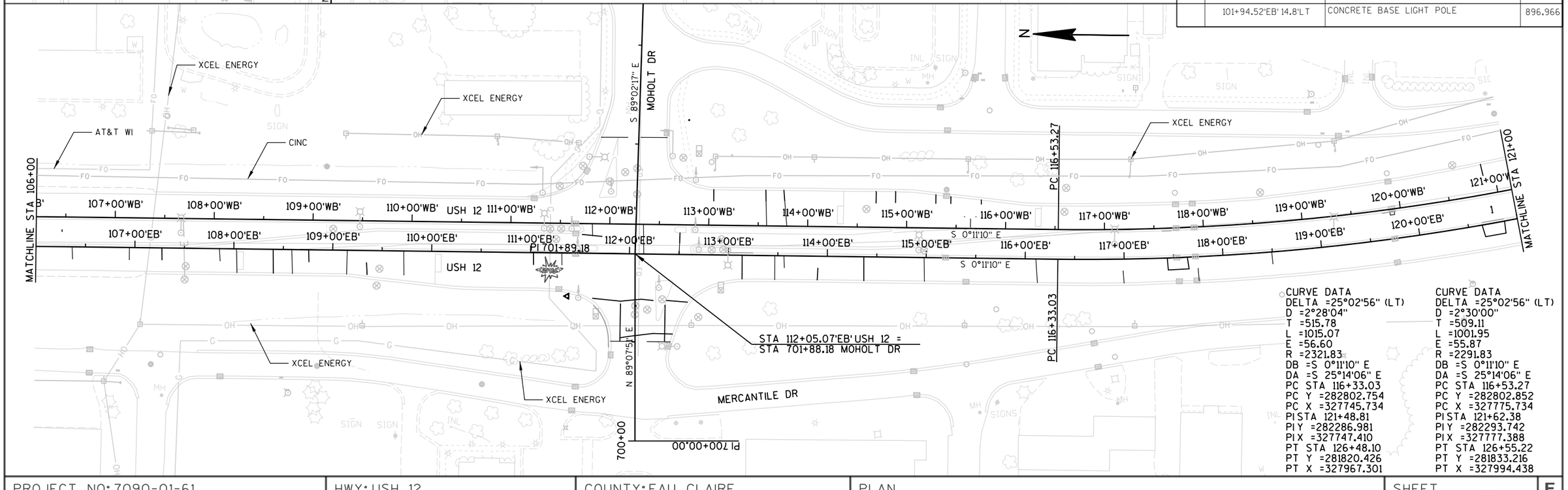
N 89°48'37" E

TRUAX BLVD

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 54	E

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED



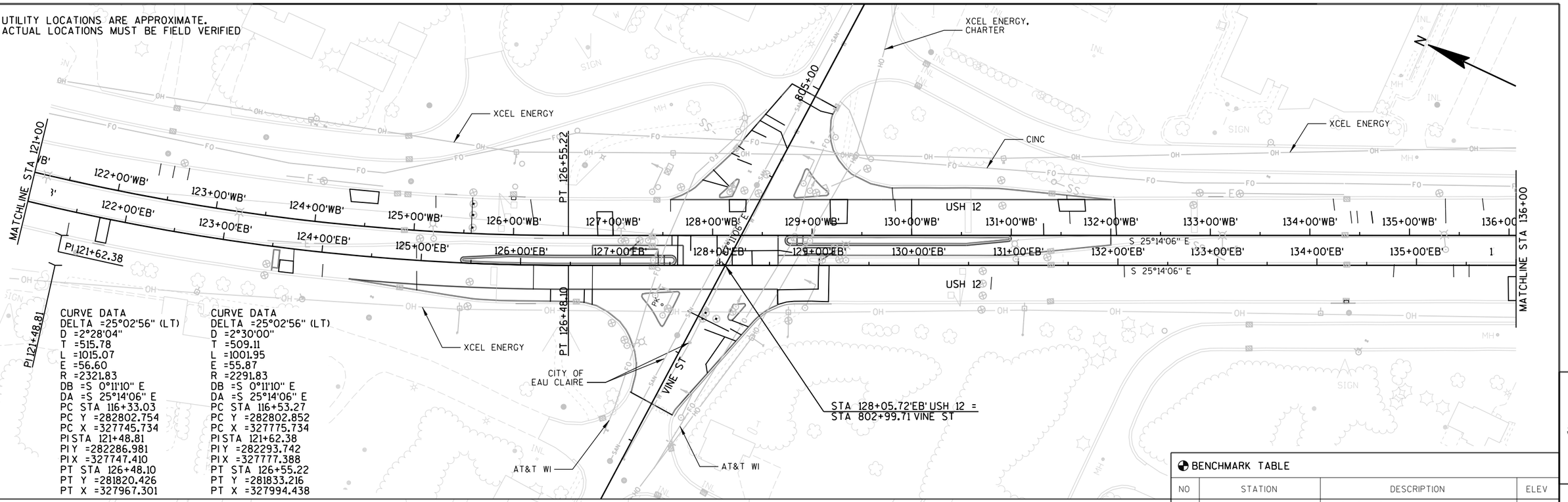


BENCHMARK TABLE			
NO	STATION	DESCRIPTION	ELEV
	101+94.52'EB' 14.8'LT	CONCRETE BASE LIGHT POLE	896.966

CURVE DATA	CURVE DATA
DELTA =25°02'56" (LT)	DELTA =25°02'56" (LT)
D =2°28'04"	D =2°30'00"
T =515.78	T =509.11
L =1015.07	L =1001.95
E =56.60	E =55.87
R =2321.83	R =2291.83
DB =S 0°11'10" E	DB =S 0°11'10" E
DA =S 25°14'06" E	DA =S 25°14'06" E
PC STA 116+33.03	PC STA 116+53.27
PC Y =282802.754	PC Y =282802.852
PC X =327745.734	PC X =327775.734
PI STA 121+48.81	PI STA 121+62.38
PI Y =282286.981	PI Y =282293.742
PI X =327747.410	PI X =327777.388
PT STA 126+48.10	PT STA 126+55.22
PT Y =281820.426	PT Y =281833.216
PT X =327967.301	PT X =327994.438

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 55	E

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED

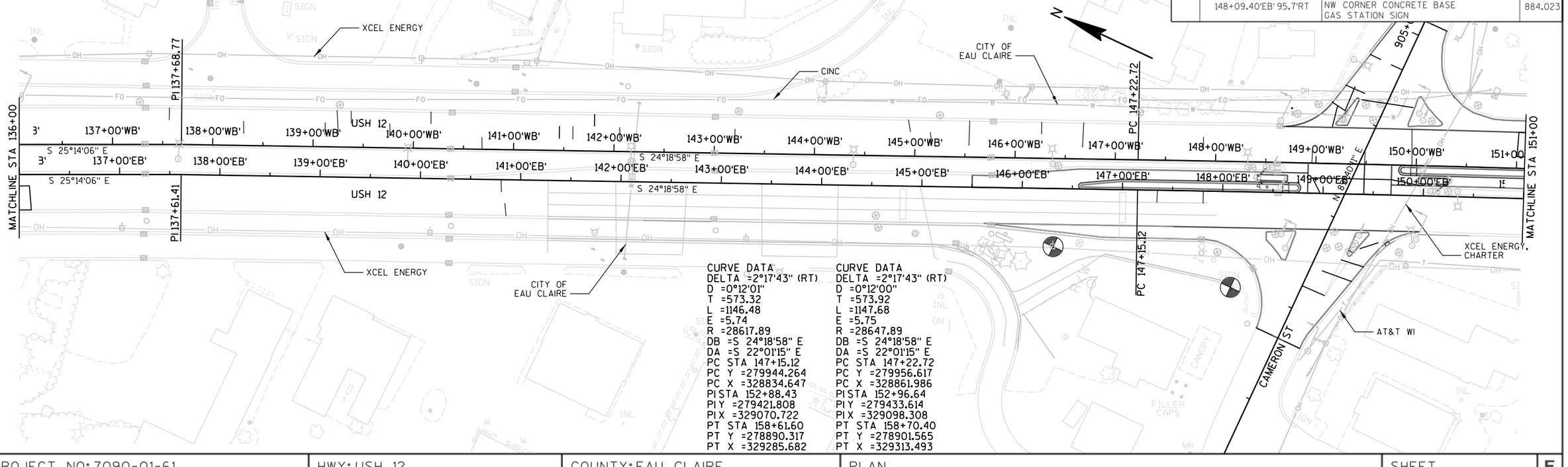


CURVE DATA
DELTA =25°02'56" (LT)
D =2°28'04"
T =515.78
L =1015.07
E =56.60
R =2321.83
DB =S 0°11'10" E
DA =S 25°14'06" E
PC STA 116+33.03
PC Y =282802.754
PC X =327745.734
PI STA 121+48.81
PI Y =282286.981
PI X =327747.410
PT STA 126+48.10
PT Y =281820.426
PT X =327967.301

CURVE DATA
DELTA =25°02'56" (LT)
D =2°30'00"
T =509.11
L =1001.95
E =55.87
R =2291.83
DB =S 0°11'10" E
DA =S 25°14'06" E
PC STA 116+53.27
PC Y =282802.852
PC X =327775.734
PI STA 121+62.38
PI Y =282293.742
PI X =327777.388
PT STA 126+55.22
PT Y =281833.216
PT X =327994.438

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
	146+31.70'EB' 58.1'RT	BOLT STL PP	884.852
	148+09.40'EB' 95.7'RT	NW CORNER CONCRETE BASE GAS STATION SIGN	884.023

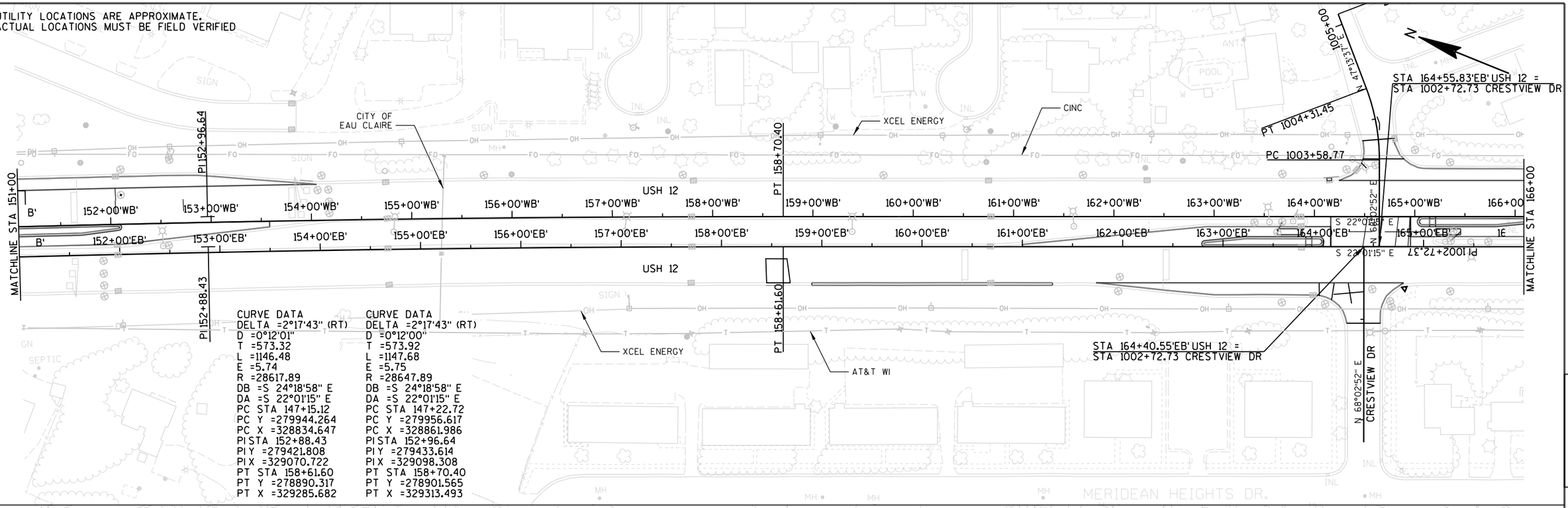


CURVE DATA
DELTA =2°17'43" (RT)
D =0°12'01"
T =573.32
L =1146.48
E =5.74
R =28617.89
DB =S 24°18'58" E
DA =S 22°01'15" E
PC STA 147+15.12
PC Y =279944.264
PC X =328834.647
PI STA 152+88.43
PI Y =279421.808
PI X =329070.722
PT STA 158+61.60
PT Y =278890.317
PT X =329285.682

CURVE DATA
DELTA =2°17'43" (RT)
D =0°12'00"
T =573.92
L =1147.68
E =5.75
R =28647.89
DB =S 24°18'58" E
DA =S 22°01'15" E
PC STA 147+22.72
PC Y =279956.617
PC X =328861.986
PI STA 152+96.64
PI Y =279433.614
PI X =329098.308
PT STA 158+70.40
PT Y =278901.565
PT X =329313.493

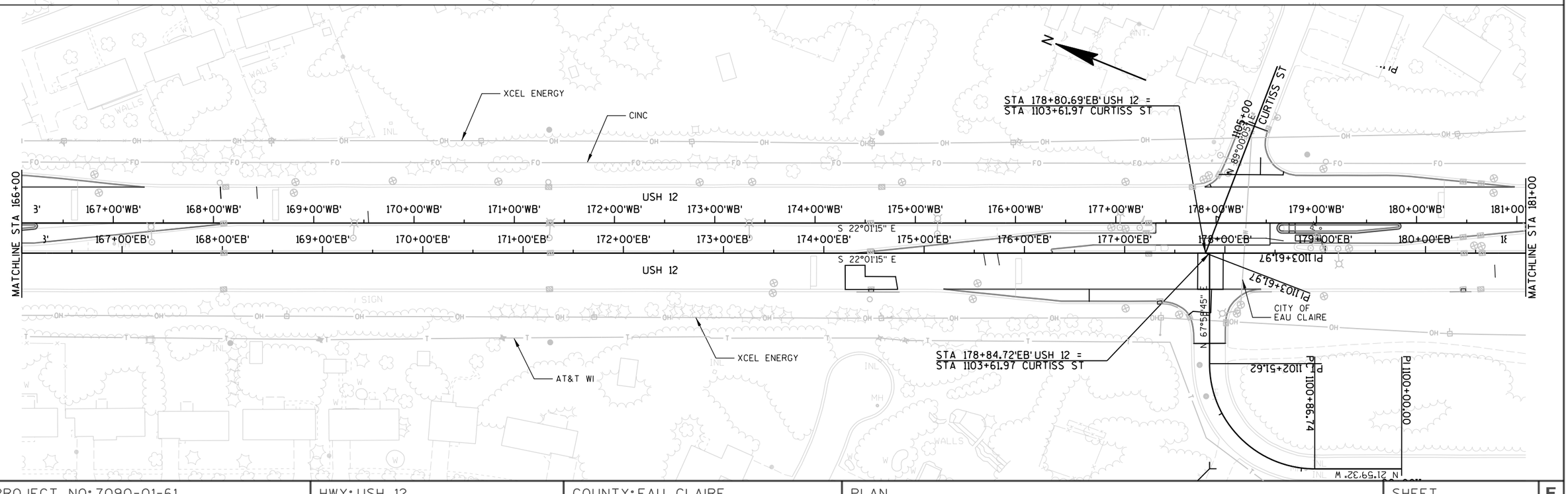
PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 56	E

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED



CURVE DATA
DELTA =2°17'43" (RT)
D =0°12'01"
T =573.32
L =1146.48
E =5.74
R =28617.89
DB =S 24°18'58" E
DA =S 22°01'15" E
PC STA 147+15.12
PC Y =279944.264
PC X =328834.647
PI STA 152+88.43
PI Y =279421.808
PI X =329070.722
PT STA 158+61.60
PT Y =278890.317
PT X =329285.682

CURVE DATA
DELTA =2°17'43" (RT)
D =0°12'00"
T =573.92
L =1147.68
E =5.75
R =28647.89
DB =S 24°18'58" E
DA =S 22°01'15" E
PC STA 147+22.72
PC Y =279956.617
PC X =328861.986
PI STA 152+96.64
PI Y =279433.614
PI X =329098.308
PT STA 158+70.40
PT Y =278901.565
PT X =329313.493



PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 57	E

FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\050204 pn.dgn PLOT TIME : 7:45:15 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 44

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED

5

5

XCEL ENERGY

CINC

MATCHLINE STA 181+00

182+00'WB' 183+00'WB' 184+00'WB' 185+00'WB' 186+00'WB' 187+00'WB' 188+00'WB' 189+00'WB' 190+00'WB' 191+00'WB' 192+00'WB' 193+00'WB' 194+00'WB' 195+00'WB' 196+00

182+00'EB' 183+00'EB' 184+00'EB' 185+00'EB' 186+00'EB' 187+00'EB' 188+00'EB' 189+00'EB' 190+00'EB' 191+00'EB' 192+00'EB' 193+00'EB' 194+00'EB' 195+00'EB'

S 22°01'15" E

USH 12

PC 190+55.58

PC 190+46.77

PI 193+89.76

PI 193+82.41

AT&T WI

MATCHLINE STA 196+00

CONCRETE CURB & GUTTER
30-INCH TYPE A (NO HEAD)

CITY OF
EAU CLAIRE

CURVE DATA
DELTA =5°33'55" (LT)
D =0°49'47"
T =335.64
L =670.75
E =8.15
R =6905.49
DB =S 22°01'15" E
DA =S 27°35'10" E
PC STA 190+46.77
PC Y =275937.505
PC X =330479.939
PI STA 193+82.41
PI Y =275626.353
PI X =330605.784
PT STA 197+17.52
PT Y =275328.872
PT X =330761.210

CURVE DATA
DELTA =5°33'55" (LT)
D =0°50'00"
T =334.18
L =667.83
E =8.12
R =6875.49
DB =S 22°01'15" E
DA =S 27°35'10" E
PC STA 190+55.58
PC Y =275948.753
PC X =330507.750
PI STA 193+89.76
PI Y =275638.953
PI X =330633.048
PT STA 197+23.41
PT Y =275342.764
PT X =330787.800

MGS GUARDRAIL TERMINAL EAT REQ'D
STA 193+45.5'EB' TO STA 193+98.2'EB' RT

MGS GUARDRAIL 3 REQ'D
STA 193+98.2'EB' TO STA 194+23.1'EB' RT

MGS GUARDRAIL TERMINAL TYPE 2 REQ'D
STA 194+23.1'EB' RT

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
	202+78.30'EB' 52.8'RT	DISC	779.828

XCEL ENERGY

PARK RIDGE DR

STA 199+07.17'EB' USH 12 =
STA 1202+64.97 ARLEN CT

PT 197+23.41
PC 197+23.41

PC 197+17.52
PT 197+17.52

MATCHLINE STA 196+00

197+00'WB' 198+00'WB' 199+00'WB' 200'WB+00 201+00'WB' 202+00'WB' 203+00'WB' 204+00'WB' 205+00'WB' 206+00'WB' 207+00'WB' 208+00'WB' 209+00'WB' 210+00'WB'

197+00'EB' 198+00'EB' 199+00'EB' 200'EB+00 201+00'EB' 202+00'EB' 203+00'EB' 204+00'EB' 205+00'EB' 206+00'EB' 207+00'EB' 208+00'EB' 209+00'EB' 210+00'EB'

S 38°50'13" E

USH 12

AVENUE C

1200+00

PI 200'WB+08.74

PC 201+15.25

PT 1201+98.26

PI 200'WB+05.09

PC 202+91.59
PT 202+91.59

PT 202+93.01
PC 202+93.01

PI 203+94.53

PI 203+93.83

PT 204+96.02

PI 206+00'WB.00

PI 1305+00

MENOMONIE ST

N 78°45'04" E

STA 207+85.31'EB' USH 12 =
STA 1304+19.44 MENOMONIE ST

XCEL ENERGY, CHARTER

AT&T WI

CITY OF
EAU CLAIRE

STA 205+94.16'EB' USH 12 =
STA 1304+19.44 MENOMONIE ST

N 78°37'44" E

CINC

CURVE DATA
DELTA =8°32'38" (LT)
D =1°29'18"
T =287.57
L =574.07
E =10.73
R =3849.72
DB =S 27°35'10" E
DA =S 36°07'48" E
PC STA 197+17.52
PC Y =275328.872
PC X =330761.210
PI STA 200+05.09
PI Y =275073.995
PI X =330894.378
PT STA 202+91.59
PT Y =274841.731
PT X =331063.934

CURVE DATA
DELTA =8°32'38" (LT)
D =1°30'00"
T =285.33
L =569.60
E =10.64
R =3819.72
DB =S 27°35'10" E
DA =S 36°07'48" E
PC STA 197+23.41
PC Y =275342.764
PC X =330787.800
PI STA 200+08.74
PI Y =275089.873
PI X =330919.930
PT STA 202+93.01
PT Y =274859.419
PT X =331088.164

CURVE DATA
DELTA =2°42'25" (LT)
D =1°19'27"
T =102.24
L =204.43
E =1.21
R =4327.18
DB =S 36°07'48" E
DA =S 38°50'13" E
PC STA 202+91.59
PC Y =274841.731
PC X =331063.934
PI STA 203+93.83
PI Y =274759.157
PI X =331124.214
PT STA 204+96.02
PT Y =274679.523
PT X =331188.326

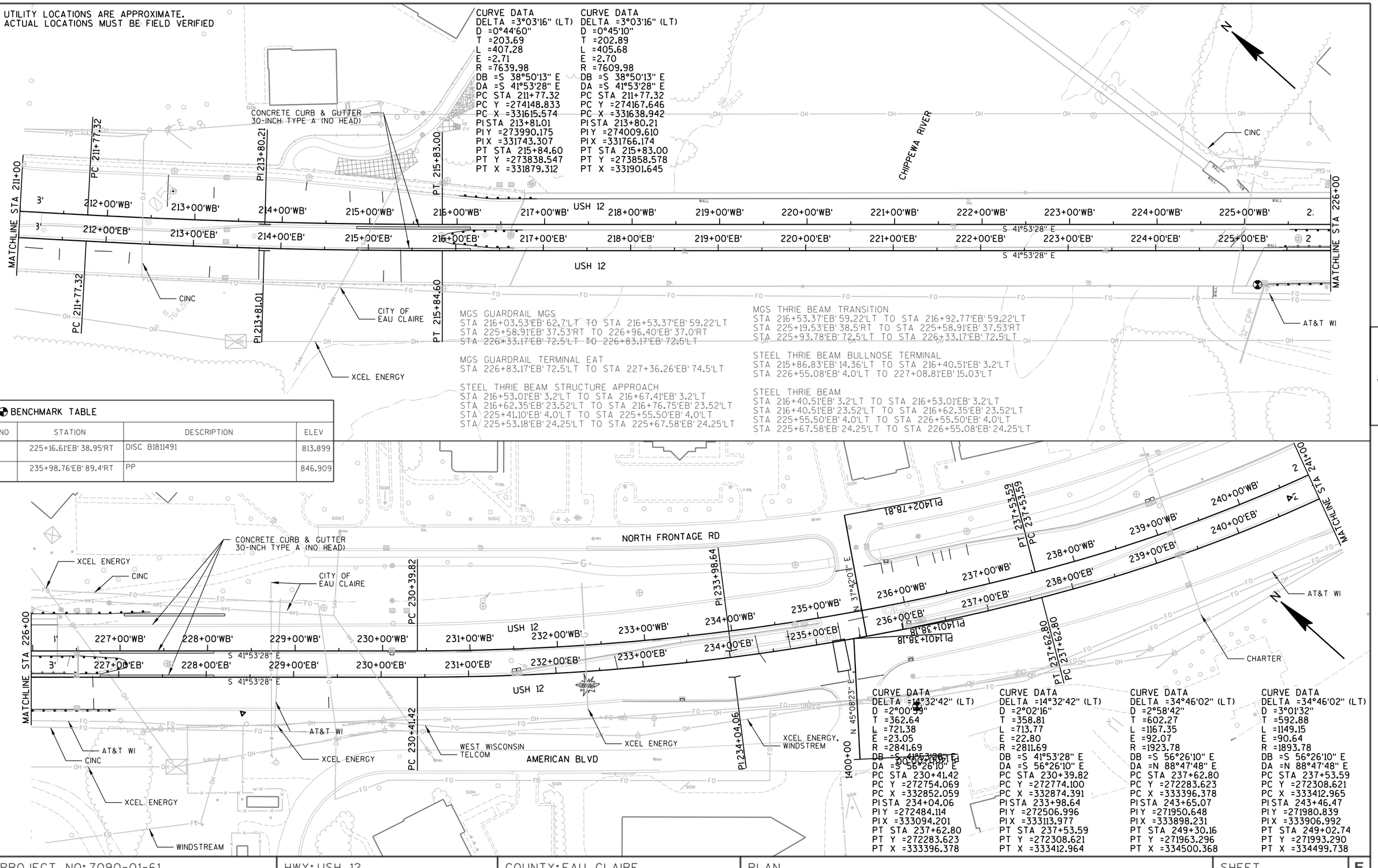
CURVE DATA
DELTA =2°42'25" (LT)
D =1°19'60"
T =101.53
L =203.02
E =1.20
R =4297.18
DB =S 36°07'48" E
DA =S 38°50'13" E
PC STA 202+93.01
PC Y =274859.419
PC X =331088.164
PI STA 203+94.53
PI Y =274777.418
PI X =331148.026
PT STA 204+96.02
PT Y =274698.336
PT X =331211.694

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 58	E

FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\050205 pn.dgn PLOT TIME : 7:45:17 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 44

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED



CURVE DATA
DELTA =3°03'16" (LT)
D =0°44'60"
T =203.69
L =407.28
E =2.71
R =7639.98
DB =S 38°50'13" E
DA =S 41°53'28" E
PC STA 211+77.32
PC Y =274148.833
PC X =331615.574
PI STA 213+81.01
PI Y =273990.175
PI X =331743.307
PT STA 215+84.60
PT Y =273838.547
PT X =331879.312

CURVE DATA
DELTA =3°03'16" (LT)
D =0°45'10"
T =202.89
L =405.68
E =2.70
R =7609.98
DB =S 38°50'13" E
DA =S 41°53'28" E
PC STA 211+77.32
PC Y =274167.646
PC X =331638.942
PI STA 213+80.21
PI Y =274009.610
PI X =331766.174
PT STA 215+83.00
PT Y =273858.578
PT X =331901.645

MGS GUARDRAIL MGS
STA 216+03.53'EB' 62.7'LT TO STA 216+53.37'EB' 59.22'LT
STA 225+58.91'EB' 37.53'RT TO STA 226+96.40'EB' 37.0'RT
STA 226+33.17'EB' 72.5'LT TO 226+83.17'EB' 72.5'LT

MGS GUARDRAIL TERMINAL EAT
STA 226+83.17'EB' 72.5'LT TO STA 227+36.26'EB' 74.5'LT

STEEL THRIE BEAM STRUCTURE APPROACH
STA 216+53.01'EB' 3.2'LT TO STA 216+67.41'EB' 3.2'LT
STA 216+62.35'EB' 23.52'LT TO STA 216+76.75'EB' 23.52'LT
STA 225+41.10'EB' 4.0'LT TO STA 225+55.50'EB' 4.0'LT
STA 225+53.18'EB' 24.25'LT TO STA 225+67.58'EB' 24.25'LT

MGS THRIE BEAM TRANSITION
STA 216+53.37'EB' 59.22'LT TO STA 216+92.77'EB' 59.22'LT
STA 225+19.53'EB' 38.5'RT TO STA 225+58.91'EB' 37.53'RT
STA 225+93.78'EB' 72.5'LT TO STA 226+33.17'EB' 72.5'LT

STEEL THRIE BEAM BULLNOSE TERMINAL
STA 215+86.83'EB' 14.36'LT TO STA 216+40.51'EB' 3.2'LT
STA 226+55.08'EB' 4.0'LT TO 227+08.81'EB' 15.03'LT

STEEL THRIE BEAM
STA 216+40.51'EB' 3.2'LT TO STA 216+53.01'EB' 3.2'LT
STA 216+40.51'EB' 23.52'LT TO STA 216+62.35'EB' 23.52'LT
STA 225+55.50'EB' 4.0'LT TO STA 226+55.50'EB' 4.0'LT
STA 225+67.58'EB' 24.25'LT TO STA 226+55.08'EB' 24.25'LT

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV
	225+16.61'EB' 38.95'RT	DISC B1811491	813.899
	235+98.76'EB' 89.4'RT	PP	846.909

CURVE DATA
DELTA =14°32'42" (LT)
D =2°00'00"
T =362.64
L =721.38
E =23.05
R =2841.69
DB =S 50°26'10" E
DA =S 56°26'10" E
PC STA 230+41.42
PC Y =272754.069
PC X =332852.059
PI STA 234+04.06
PI Y =272484.114
PI X =333094.201
PT STA 237+62.80
PT Y =272283.623
PT X =333396.378

CURVE DATA
DELTA =14°32'42" (LT)
D =2°02'16"
T =358.81
L =713.77
E =22.80
R =2811.69
DB =S 41°53'28" E
DA =S 56°26'10" E
PC STA 230+39.82
PC Y =272774.100
PC X =332874.391
PI STA 233+98.64
PI Y =272506.996
PI X =333113.977
PT STA 237+53.59
PT Y =272308.621
PT X =333412.964

CURVE DATA
DELTA =34°46'02" (LT)
D =2°58'42"
T =602.27
L =1167.35
E =92.07
R =1923.78
DB =S 56°26'10" E
DA =N 88°47'48" E
PC STA 237+62.80
PC Y =272283.623
PC X =333396.378
PI STA 243+65.07
PI Y =271950.648
PI X =333898.231
PT STA 249+30.16
PT Y =271963.296
PT X =334500.368

CURVE DATA
DELTA =34°46'02" (LT)
D =3°01'32"
T =592.88
L =1149.15
E =90.64
R =1893.78
DB =S 56°26'10" E
DA =N 88°47'48" E
PC STA 237+53.59
PC Y =272308.621
PC X =333412.965
PI STA 243+46.47
PI Y =271980.839
PI X =333906.992
PT STA 249+02.74
PT Y =271993.290
PT X =334499.738

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 59	E

UTILITY LOCATIONS ARE APPROXIMATE.
ACTUAL LOCATIONS MUST BE FIELD VERIFIED

CURVE DATA
DELTA =14°32'42" (LT)
D =2°00'59"
T =362.64
L =721.38
E =23.05
R =2841.69
DB =S 41°53'28" E
DA =S 56°26'10" E
PC STA 230+41.42
PC Y =272754.069
PC X =332852.059
PI STA 234+04.06
PI Y =272484.114
PI X =333094.201
PT STA 237+62.80
PT Y =272283.623
PT X =333396.378

CURVE DATA
DELTA =14°32'42" (LT)
D =2°02'16"
T =358.81
L =713.77
E =22.80
R =2811.69
DB =S 41°53'28" E
DA =S 56°26'10" E
PC STA 230+39.82
PC Y =272774.100
PC X =332874.391
PI STA 233+98.64
PI Y =272506.996
PI X =333113.977
PT STA 237+53.59
PT Y =272308.621
PT X =333412.964

CURVE DATA
DELTA =34°46'02" (LT)
D =2°58'42"
T =602.27
L =1167.35
E =92.07
R =1923.78
DB =S 56°26'10" E
DA =N 88°47'48" E
PC STA 237+62.80
PC Y =272283.623
PC X =333396.378
PI STA 243+65.07
PI Y =271950.648
PI X =333898.231
PT STA 249+30.16
PT Y =271963.296
PT X =334500.368

CURVE DATA
DELTA =34°46'02" (LT)
D =3°01'32"
T =592.88
L =1149.15
E =90.64
R =1893.78
DB =S 56°26'10" E
DA =N 88°47'48" E
PC STA 237+53.59
PC Y =272308.621
PC X =333412.965
PI STA 243+46.47
PI Y =271980.839
PI X =333906.992
PT STA 249+02.74
PT Y =271993.290
PT X =334499.738

MATCHLINE STA 241+00

241+00'WB'
242+00'WB'
242+00'EB'
243+00'WB'
243+00'EB'
244+00'WB'
244+00'EB'
245+00'WB'
245+00'EB'
246+00'WB'
246+00'EB'
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252+00'WB'
252+00'EB'
253+00'WB'
253+00'EB'
254+00'WB'
254+00'EB'
255+00'WB'
255+00'EB'
256+00'EB

CRAIG RD
N 0°05'15" W
N 0°03'42" W
1500+00
PI 1500+00.00
PI 1502+47.76
PI 1504+77.95
PT 249+02.74
PT 249+30.16
PI 243+46.47
PI 243+65.07

AT&T WI
XCEL ENERGY, CHARTER
XCEL ENERGY
XCEL ENERGY, WINDSTREAM
WEST WISCONSIN TELCOM
CINC
CITY OF EAU CLAIRE

NORTH FRONTAGE RD
USH 12
N 88°47'48" E
STH 37

END PROJECT
STA 244+17
Y = 272020.669
X = 333991.951
MATCH EXISTING

BENCHMARK TABLE

NO	STATION	DESCRIPTION	ELEV

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN	SHEET 60	E

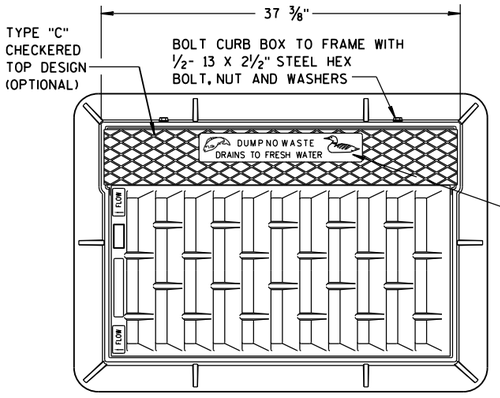
FILE NAME : P:\UZ\W\Witnw\125422\5-final-dsgn\51-drawings\40-TransHwy\050207 pn.dgn PLOT TIME : 7:45:20 PM PLOT DATE : 4/28/2016 PLOT BY : SEH PLOT NAME : PLOT SCALE : N/A

WISDOT/CADDS SHEET 44

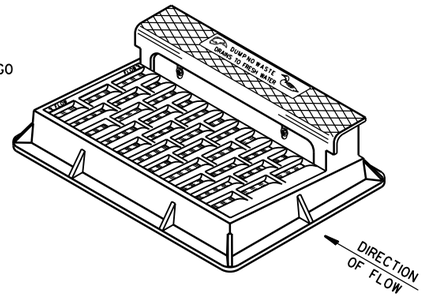
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09F09-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
11B02-02	CONCRETE MEDIAN NOSE
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-13A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-11B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS
14B20-11C	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS
14B20-11D	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS
14B20-11E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B20-11F	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"
14B20-11G	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL
14B20-11H	STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT
14B26-03A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-03E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-02A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-02C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-03C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-05A	TRAFFIC CONTROL, LANE CLOSURE
15D12-05B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D20-03	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-02	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-03	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

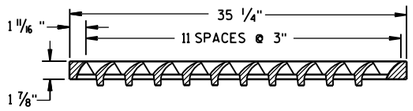
6

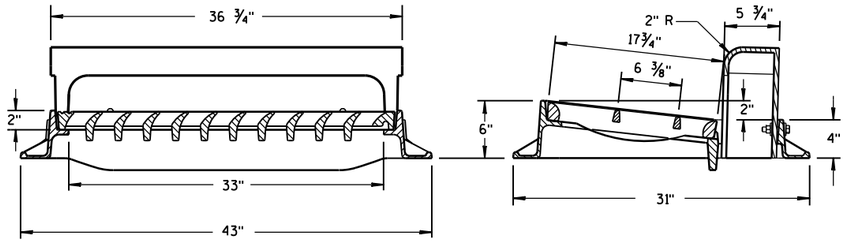


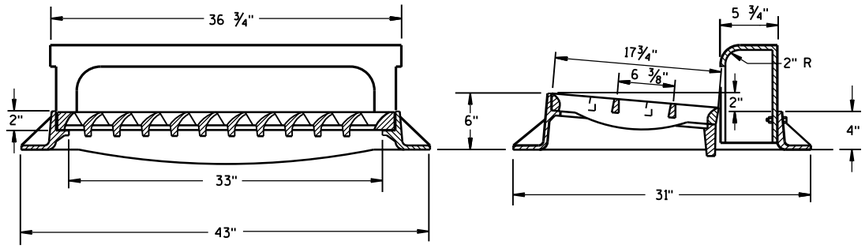
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

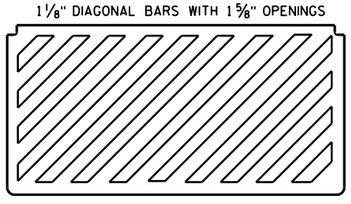






TYPE "H"

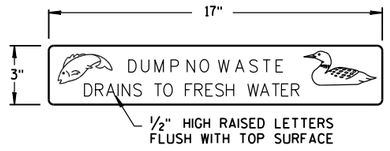
NOTE: EITHER CASTING IS ACCEPTABLE



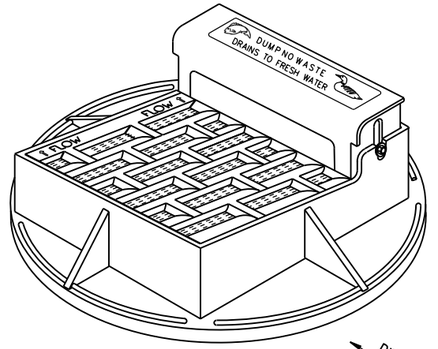
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

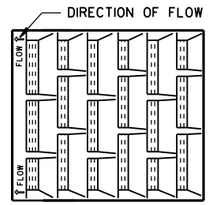
NOTE:
GRATE IS REVERSIBLE.

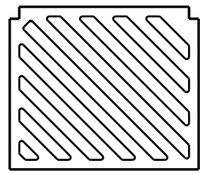
GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

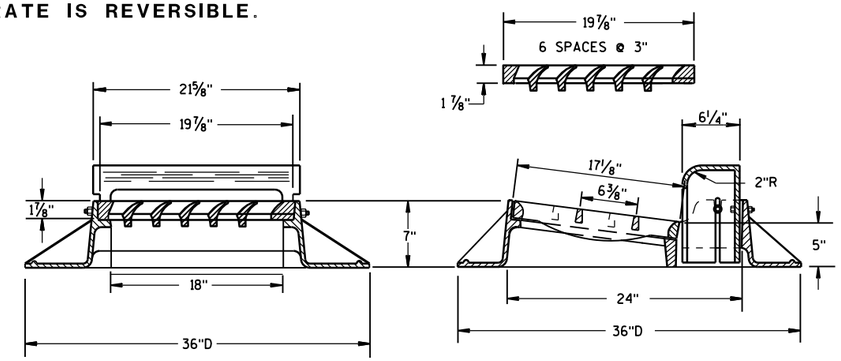




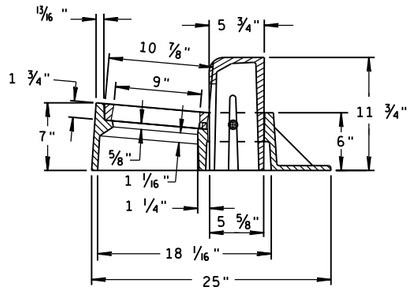
SPECIAL GRATE FOR TYPE "A" COVER

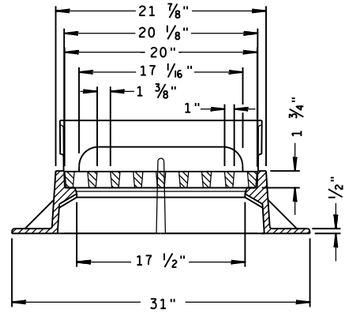
(MEASURES 19 3/4" X 17" X 1 7/8")

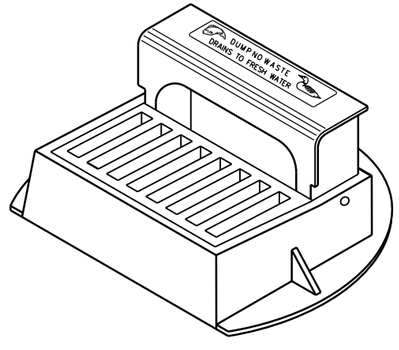
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

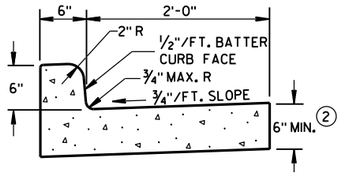
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

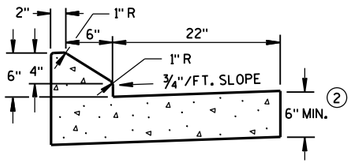
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

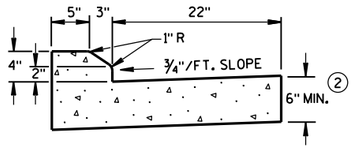
S.D.D. 8 A 5-19a



TYPES A & D ①

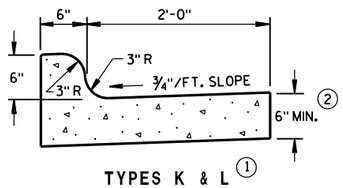


6" SLOPED CURB TYPES G & J ①

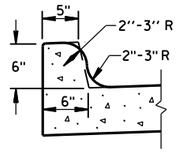


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

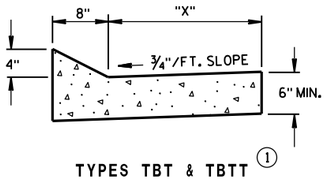


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

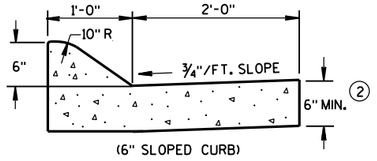
CONCRETE CURB & GUTTER 30"



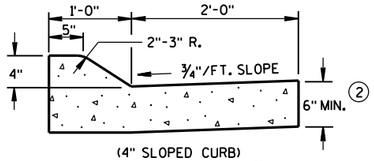
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

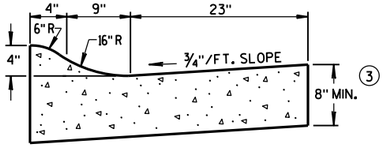


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

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. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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.

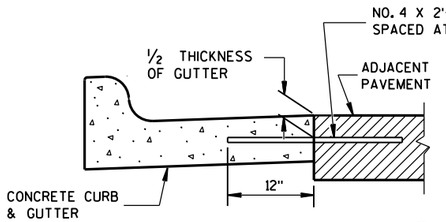
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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.

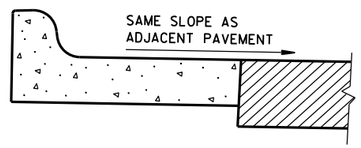
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

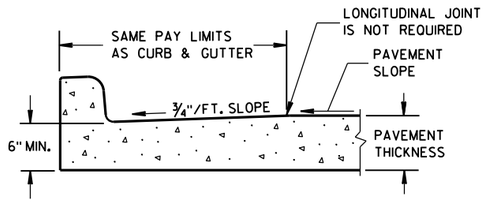
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



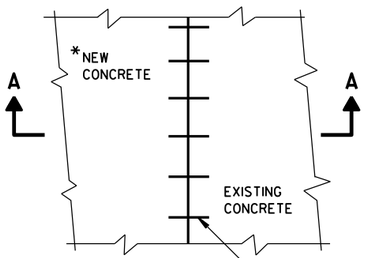
TYPICAL TIE BAR LOCATION ①



REVERSE SLOPE GUTTER ⑤
(TYPICAL FOR ALL CURB & GUTTER TYPES)

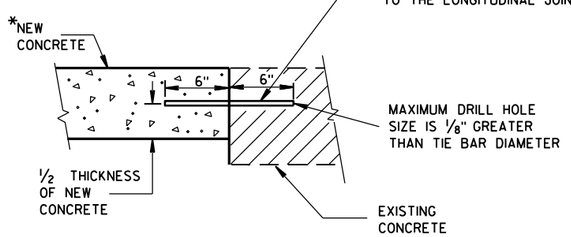


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



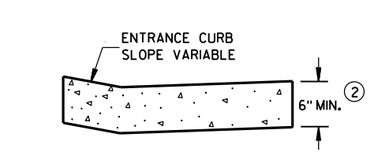
PLAN VIEW

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

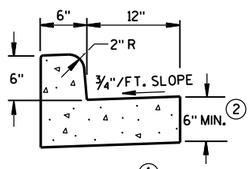


SECTION A-A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

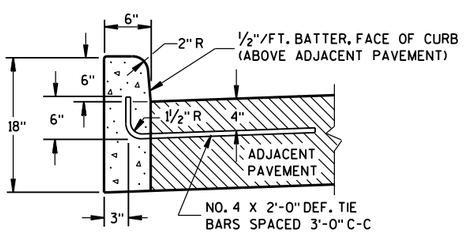


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

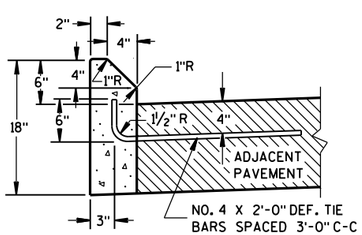


① TYPES A & D

CONCRETE CURB & GUTTER 18"

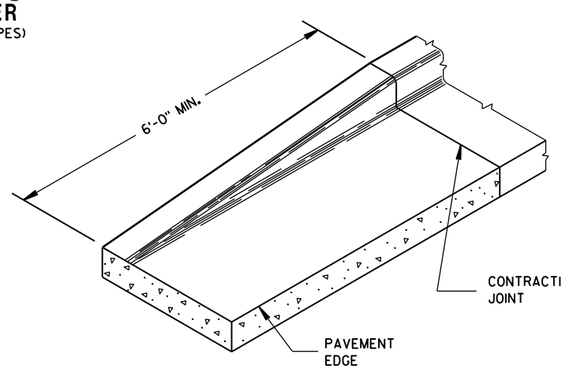


① TYPES A & D



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

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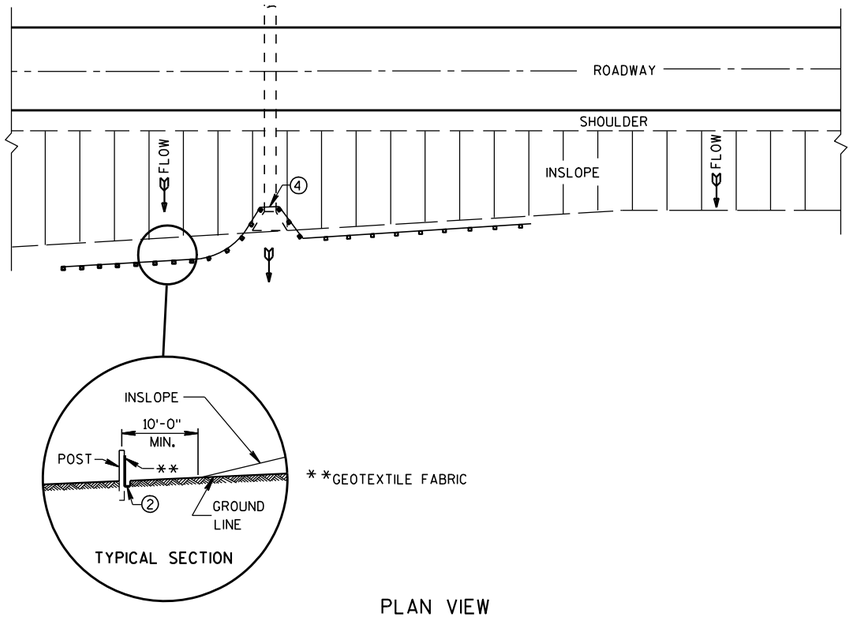
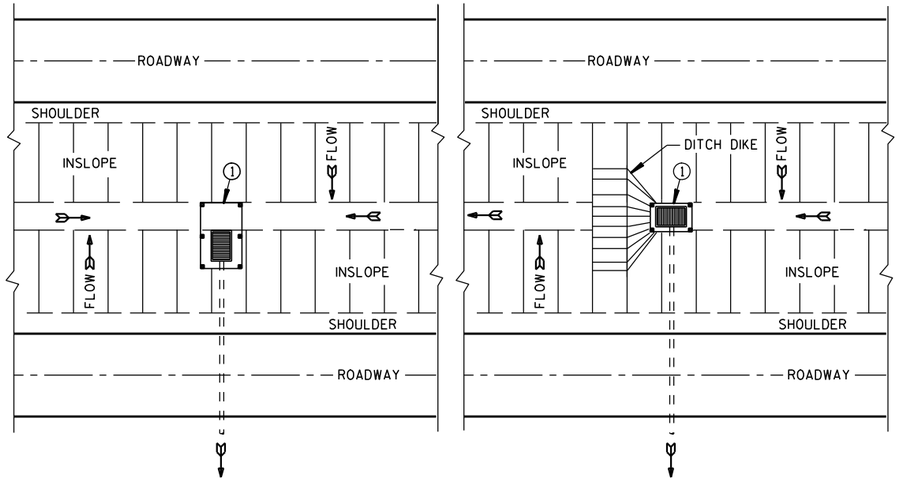
S.D.D. 8 D 1-18



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



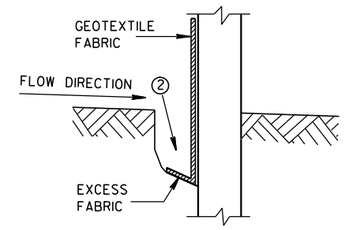
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

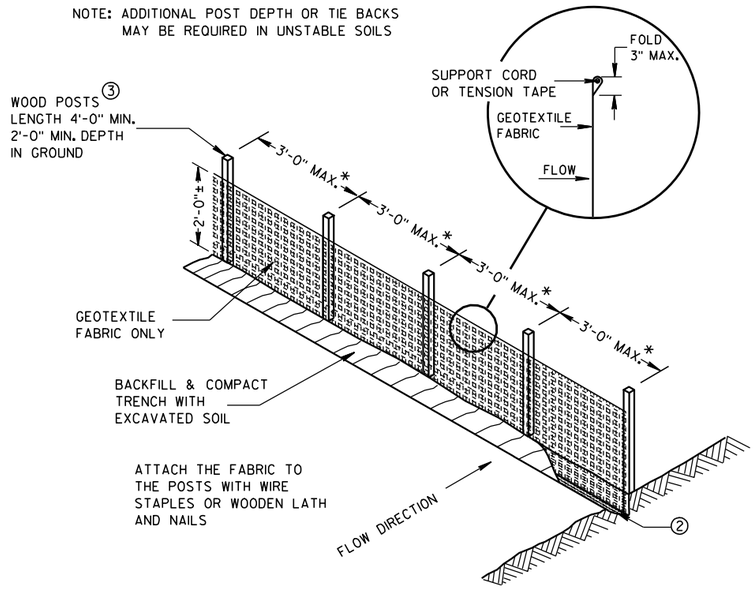
GENERAL NOTES

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

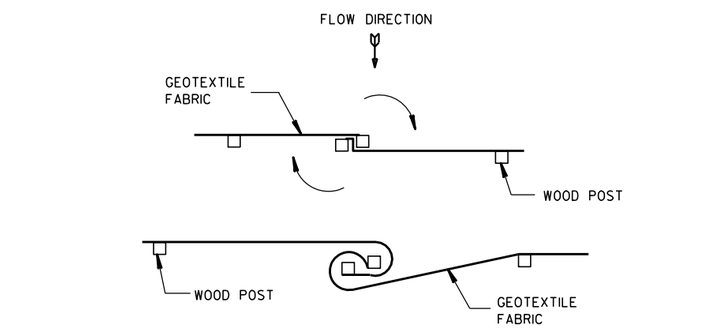
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



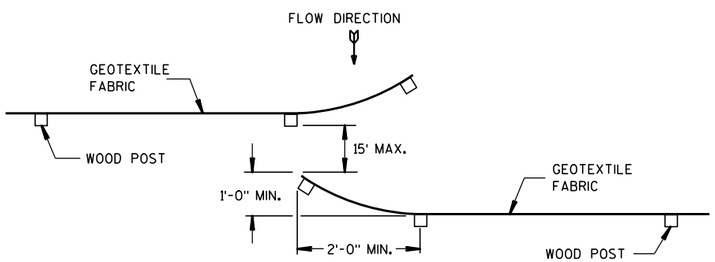
TRENCH DETAIL



SILT FENCE

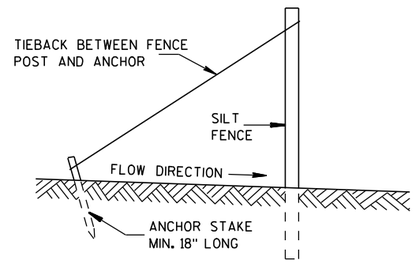


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

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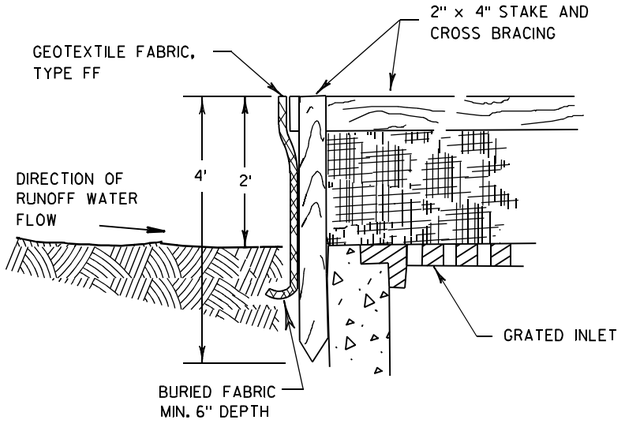
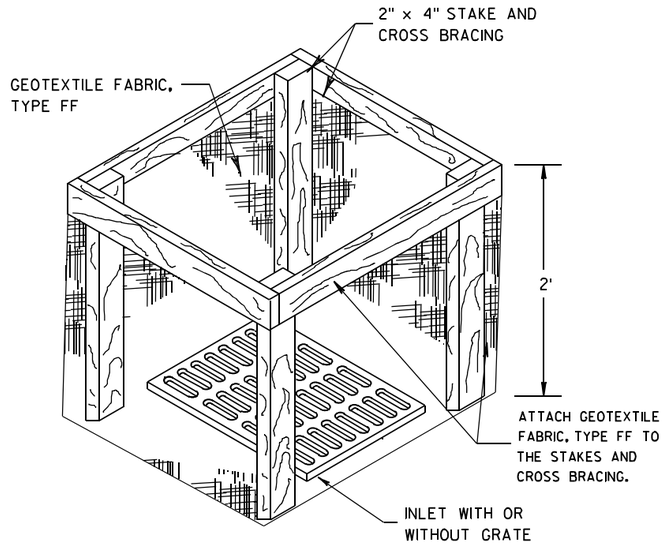
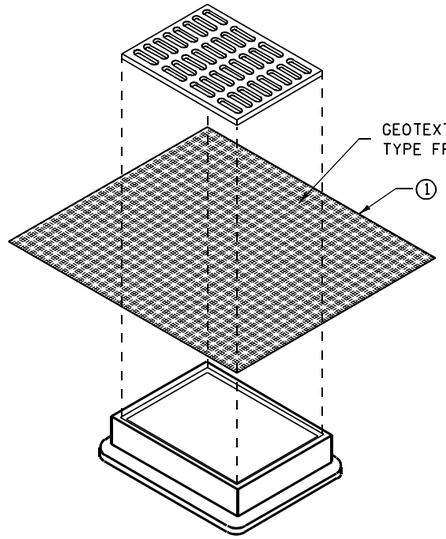
S.D.D. 8 E 9-6



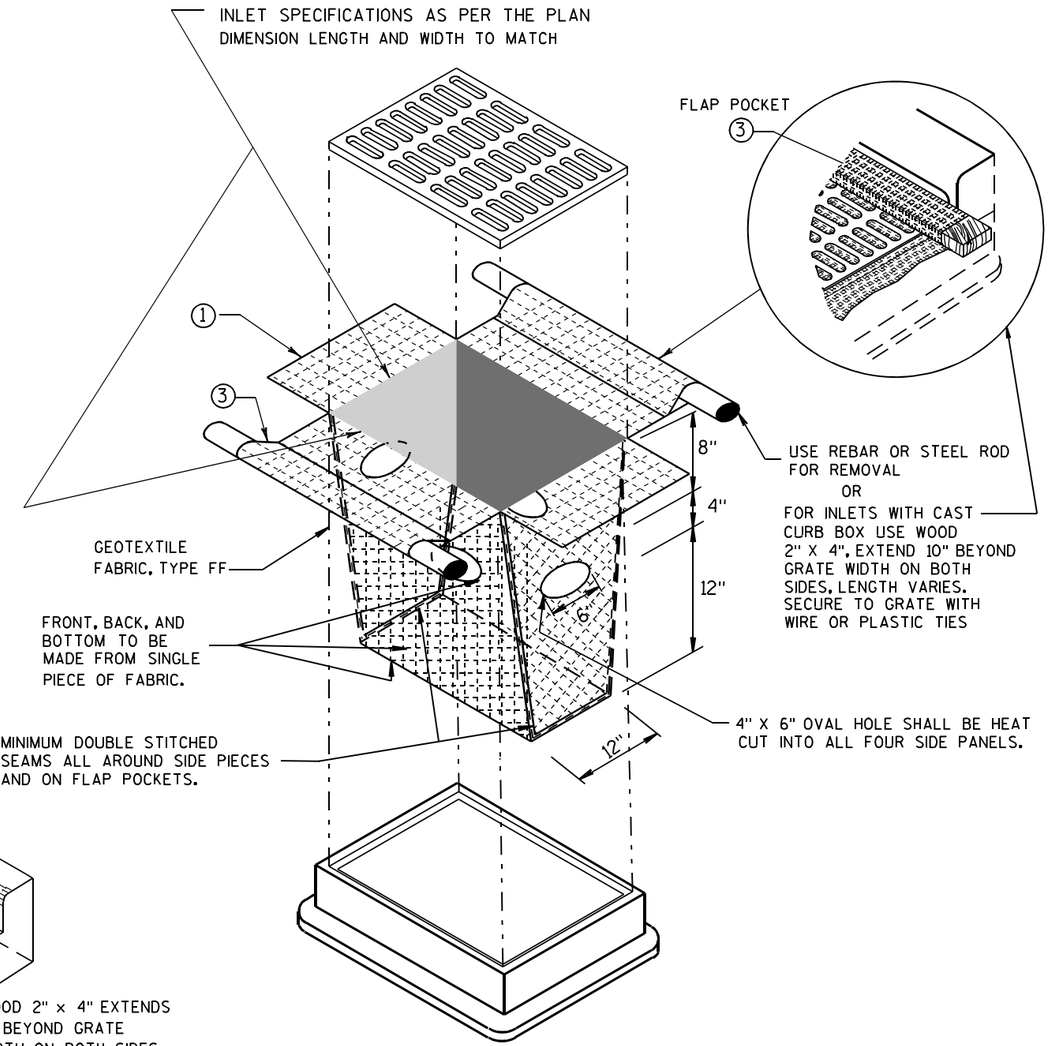


INLET PROTECTION, TYPE A



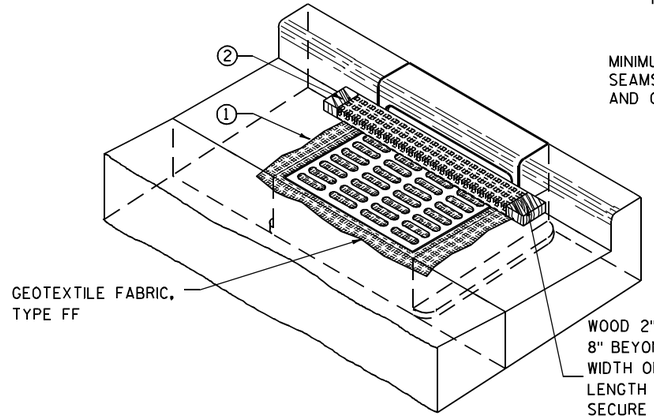
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

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.

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 A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

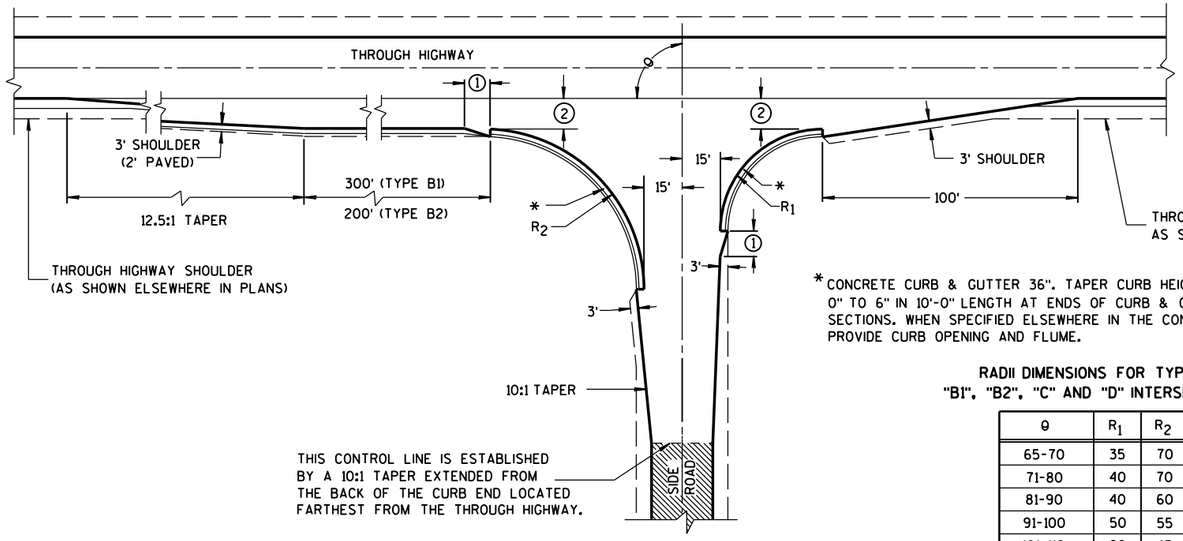
APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

6
S.D.D. 8 E 10-2

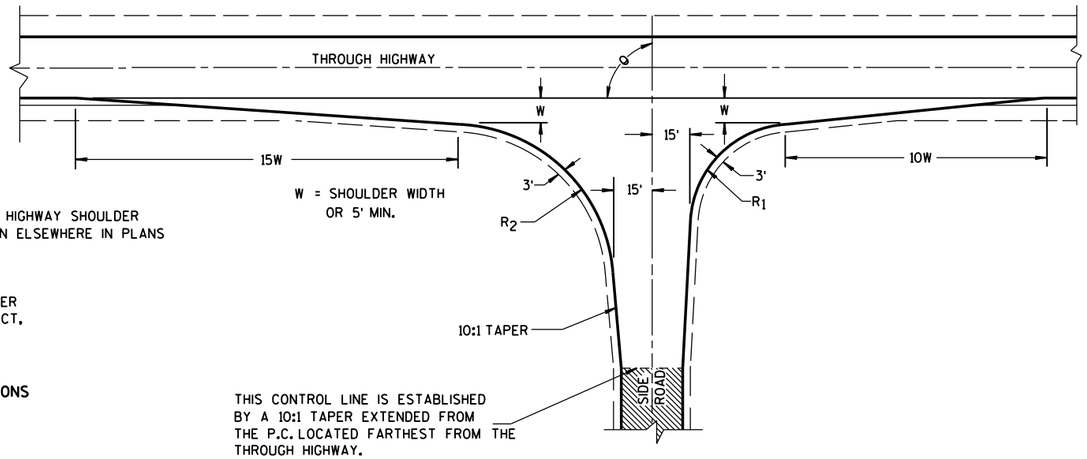


TYPE "B1" AND "B2"

*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

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



TYPE "C"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

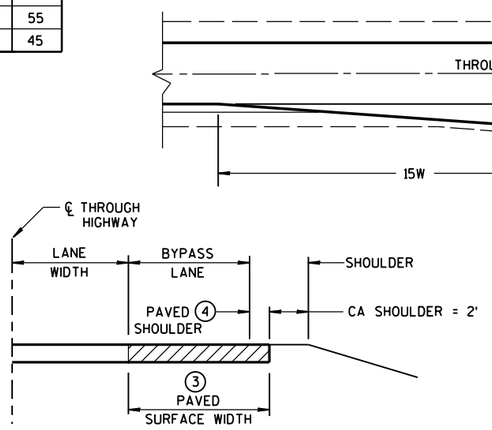
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

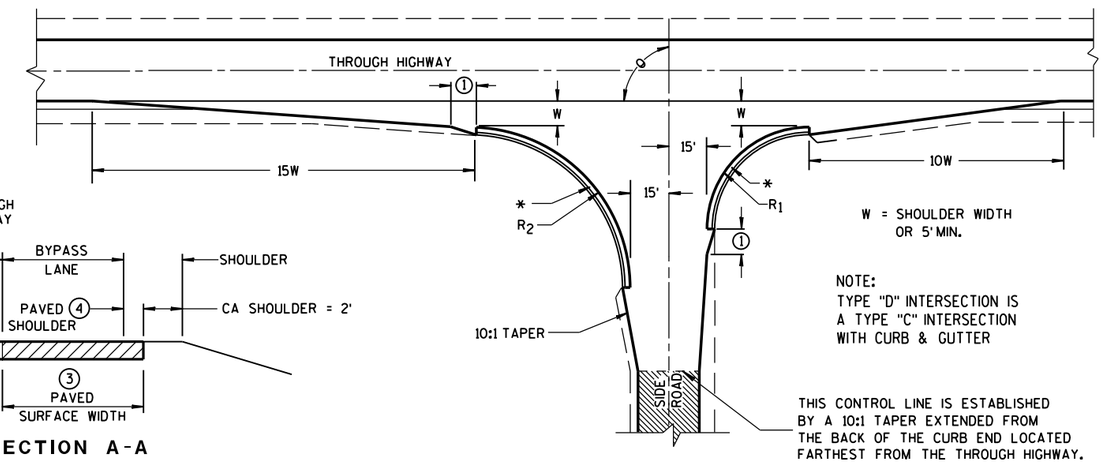
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

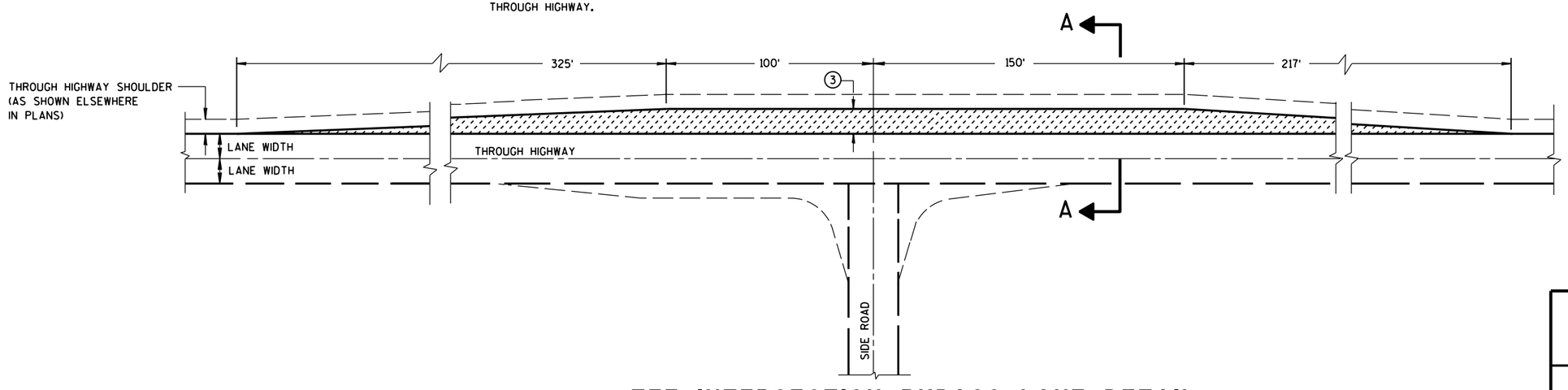
(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TYPE "D"



TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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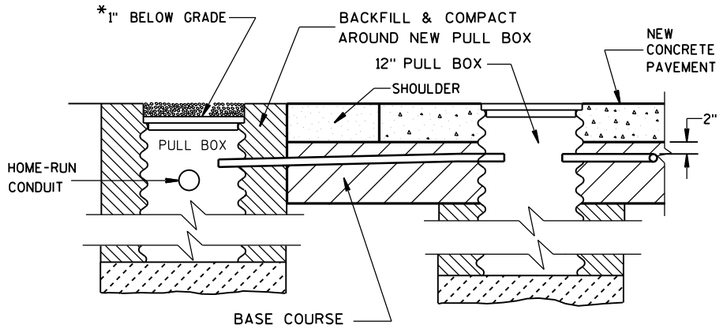


SECTION A-A

NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

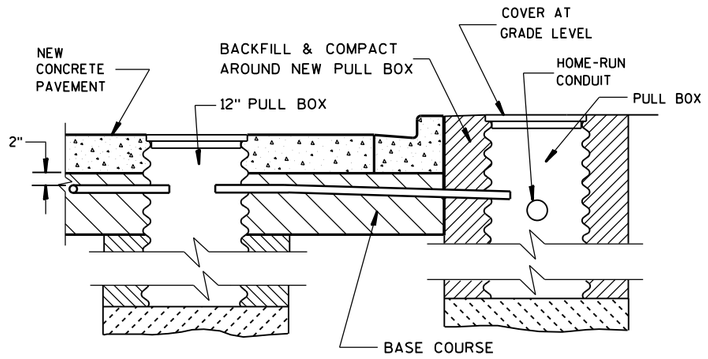
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT, CONDULET AND PULL BOX SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE NEW CONCRETE PAVEMENT IS PLACED.

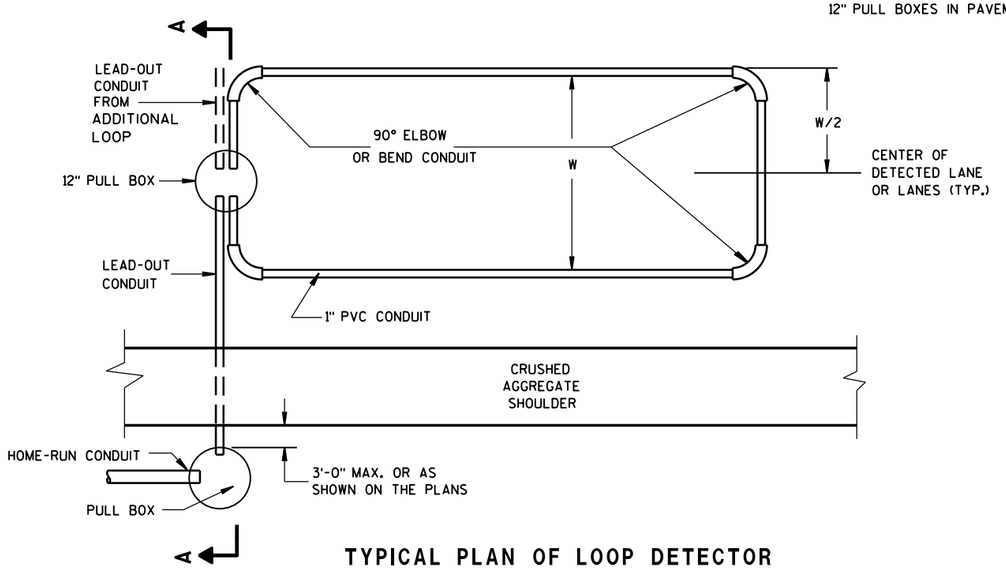
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



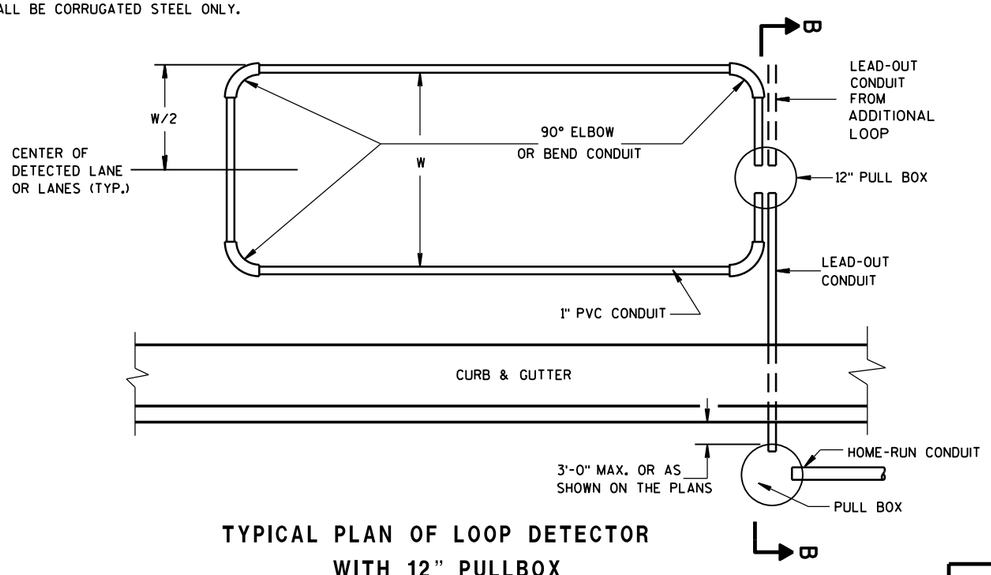
SECTION B-B

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

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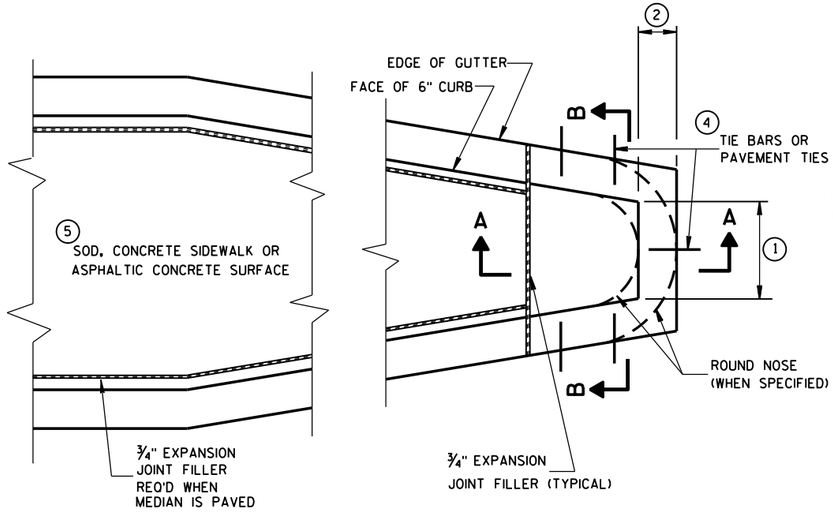
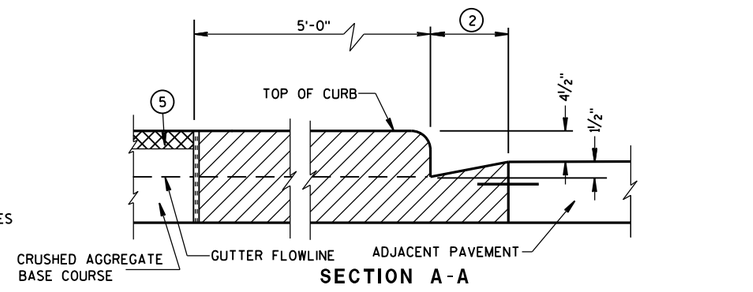




CONCRETE MEDIAN BLUNT NOSE DETAIL

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.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

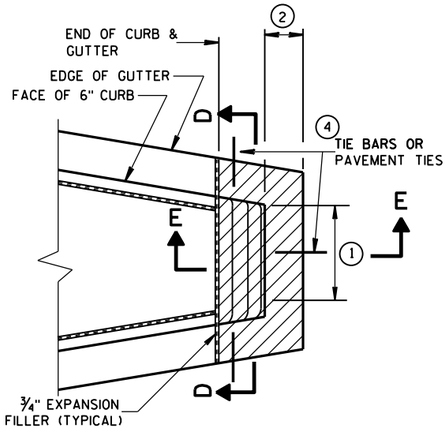
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

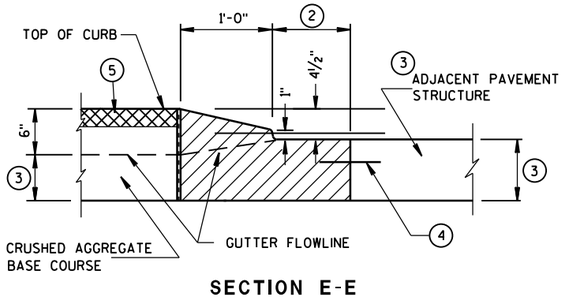
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

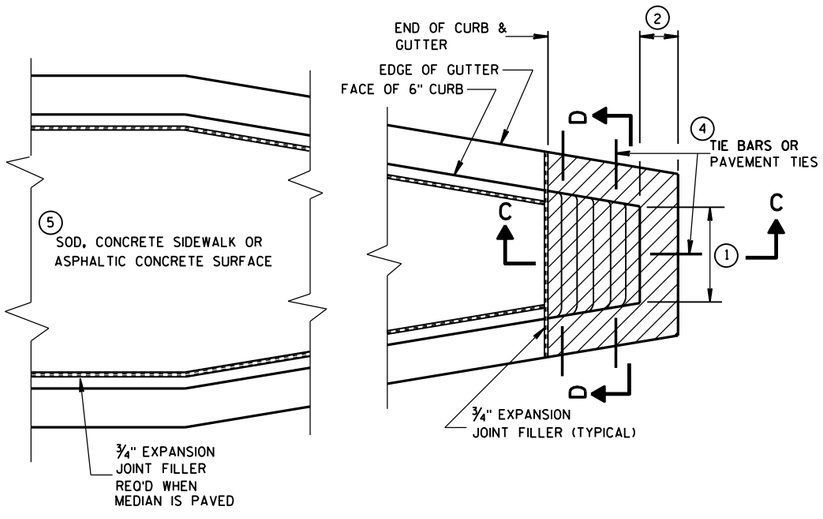
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

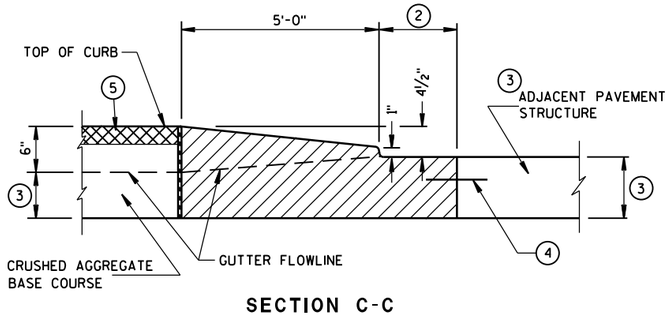
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



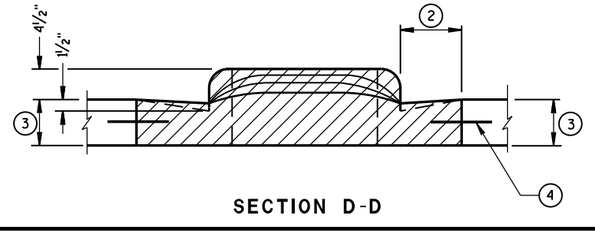


CONCRETE MEDIAN SLOPED NOSE TYPE 2





CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/8/2006 DATE FHWA	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

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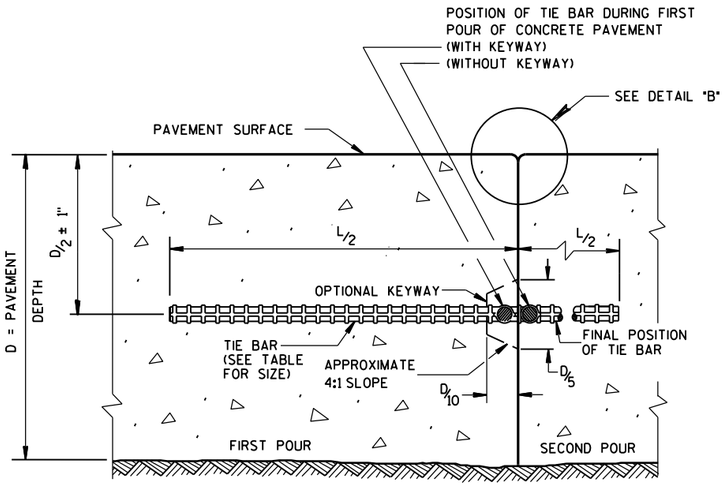
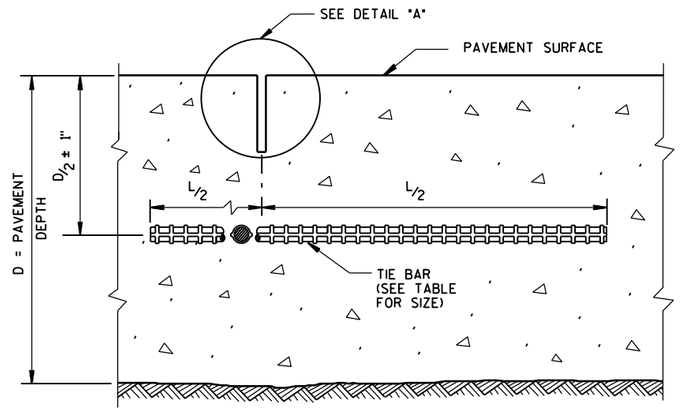


CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

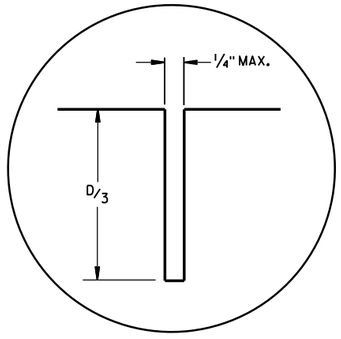
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

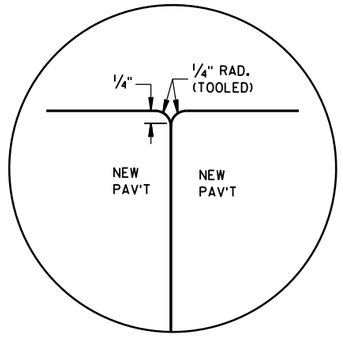
PLAN VIEW

SECTION A-A

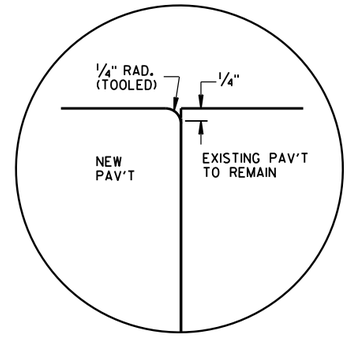
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



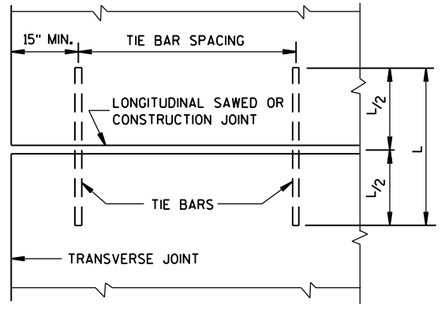
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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S.D.D. 13 C 1-18

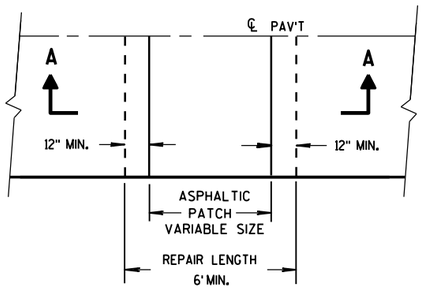
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

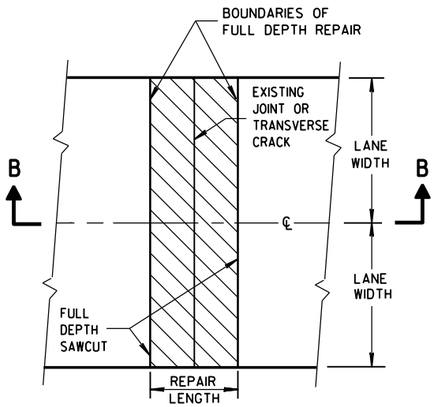
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

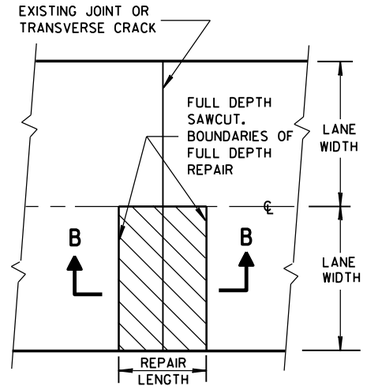
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

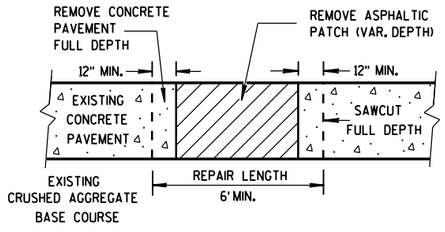


PLAN VIEW
(DOUBLE LANE REPAIR)



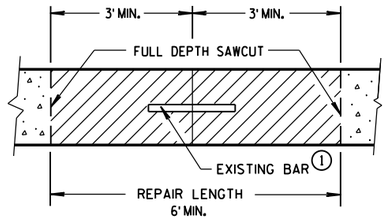
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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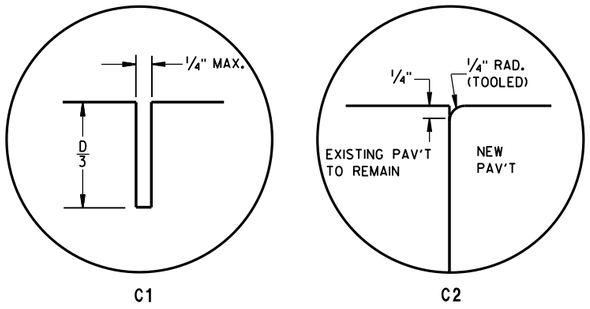


C1 C2

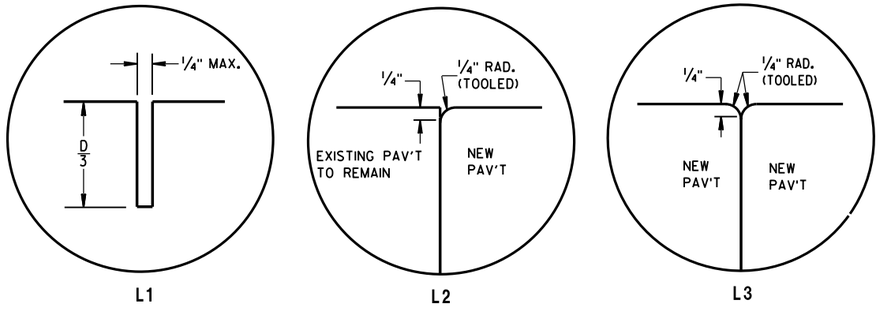
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

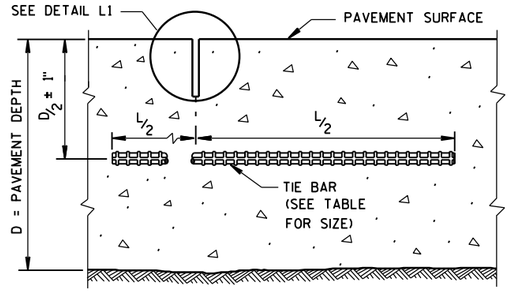
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

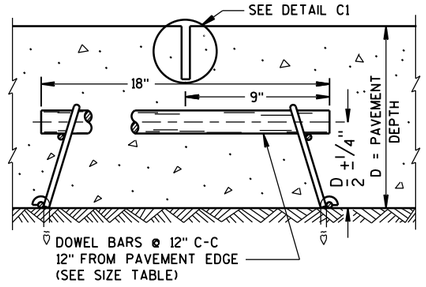
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

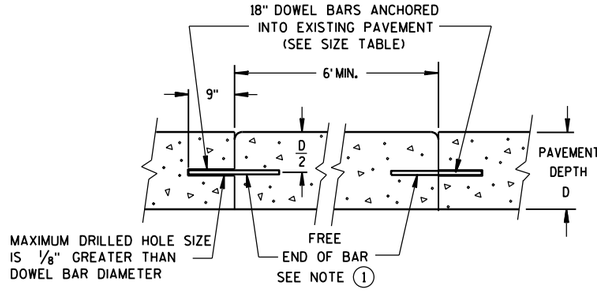
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

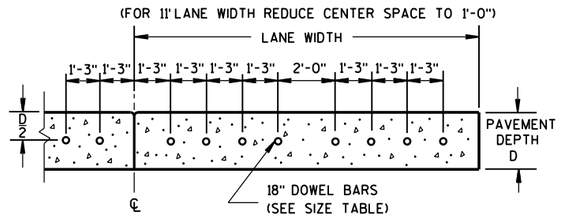


SECTION F-F

CONTRACTION JOINT



SECTION D-D

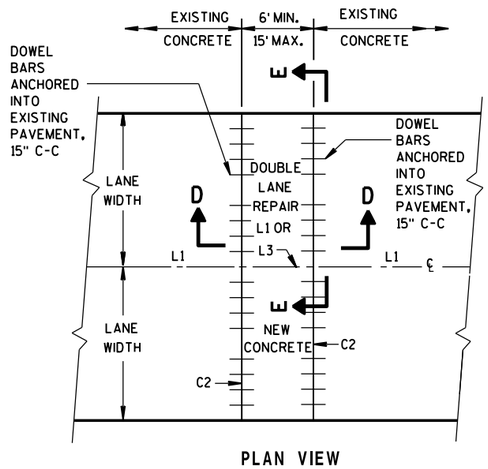


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

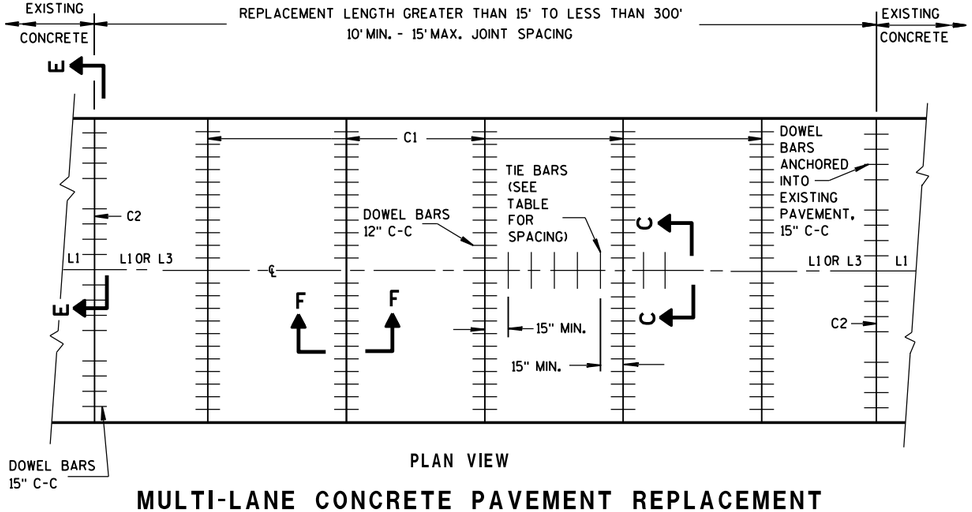
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6",6 ½"	NONE	12'
7",7 ½"	1"	14'
8",8 ½"	1 ¼"	15'
9",9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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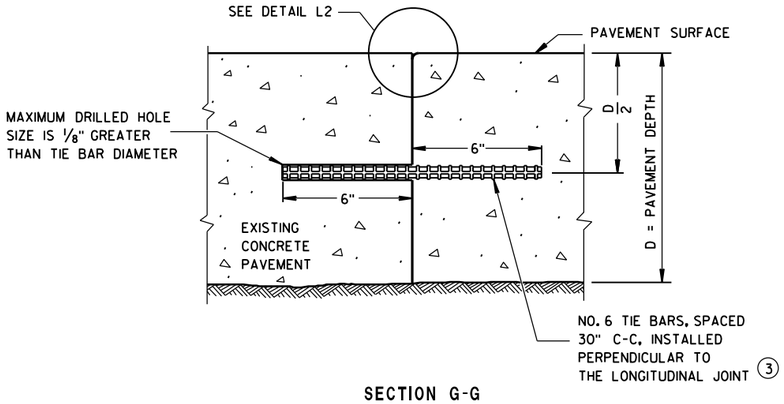
S.D.D. 13 C 9-13b



SECTION G-G

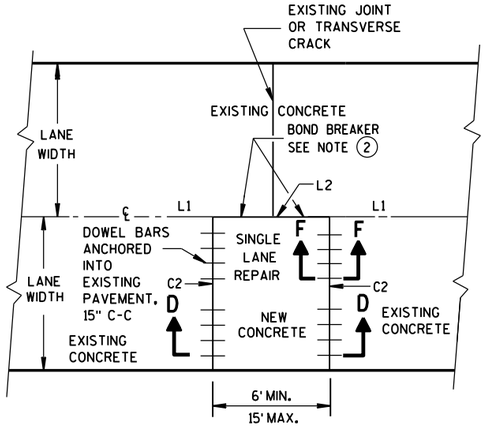
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

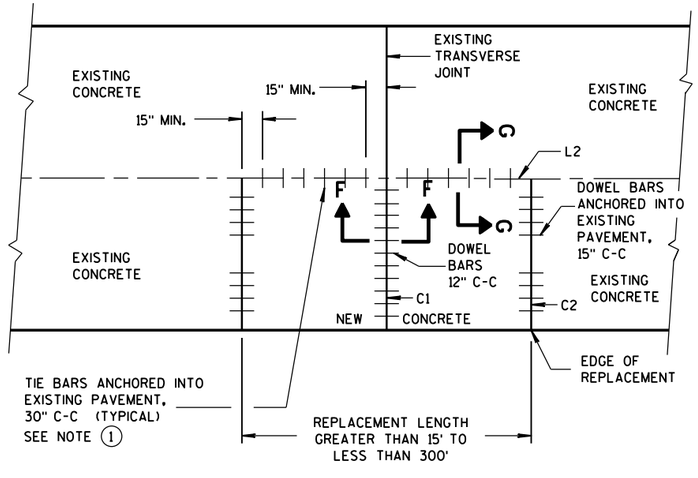
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

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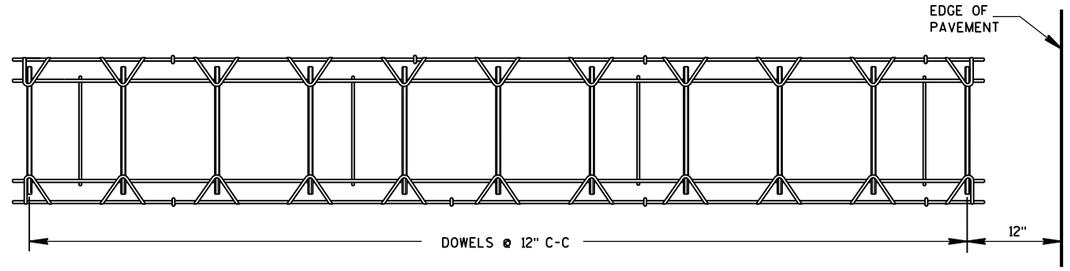
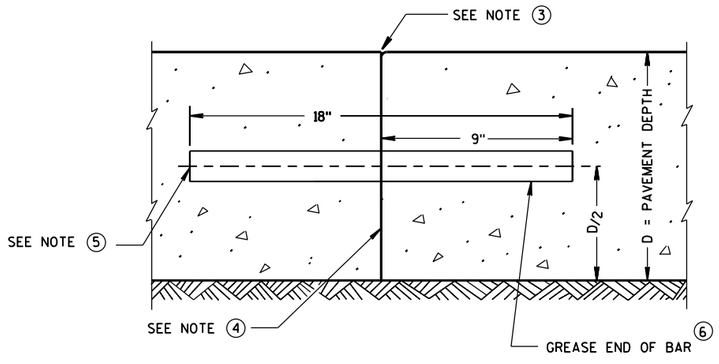
S.D.D. 13 C 9-13c



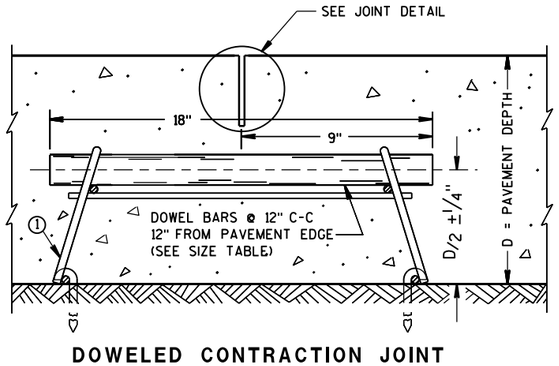
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



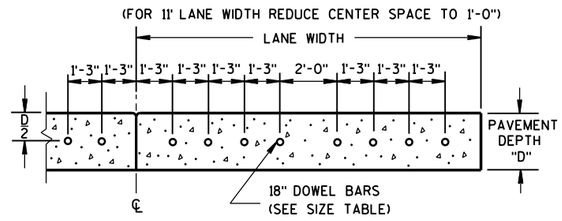
TRANSVERSE CONSTRUCTION JOINT



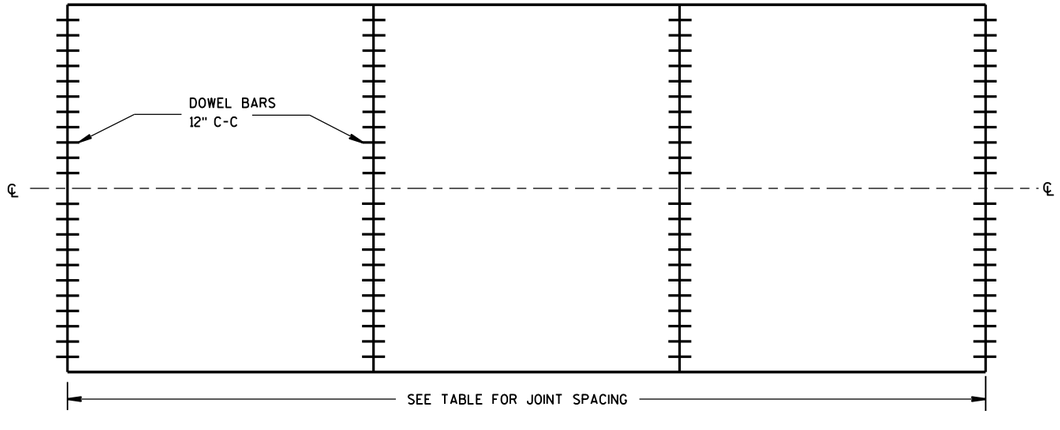
DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① **OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.**

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

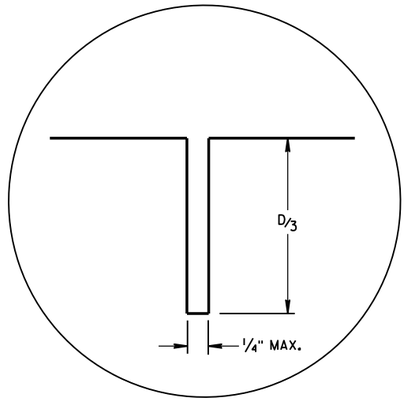
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

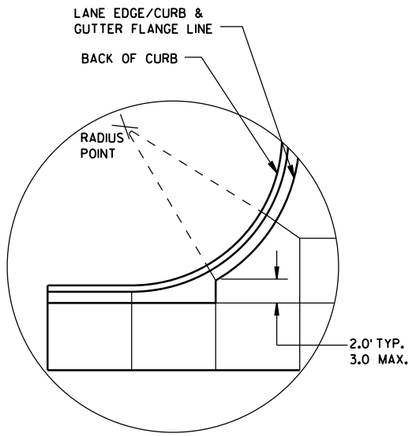
URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

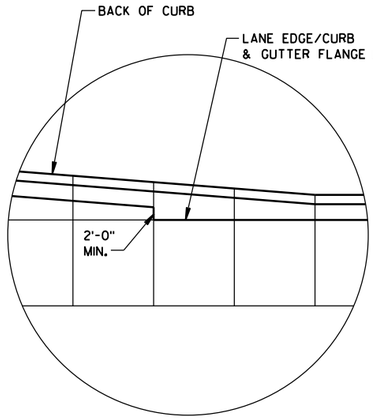
APPROVED
5/3/2013 DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER
FHWA

6

S.D.D. 13 C 13-8



DETAIL "A"



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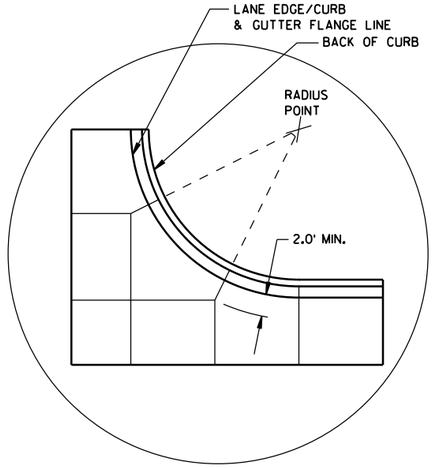

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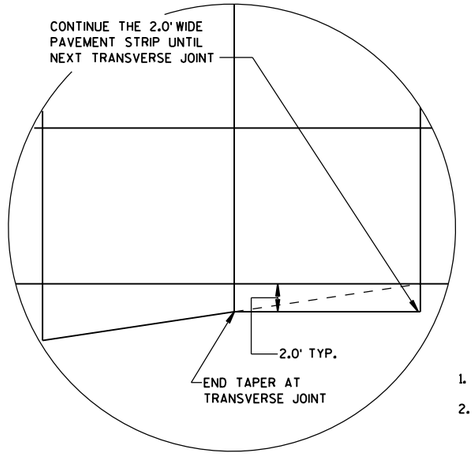


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

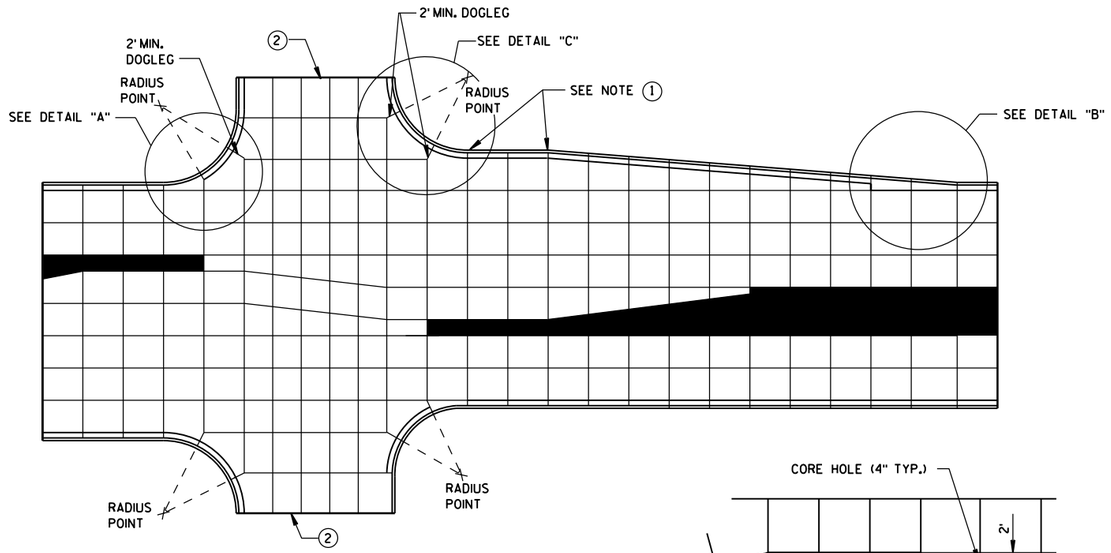
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

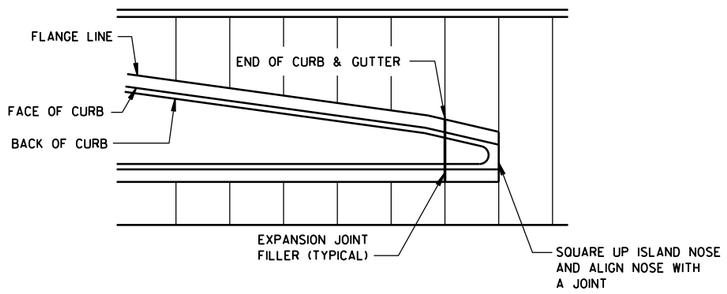
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



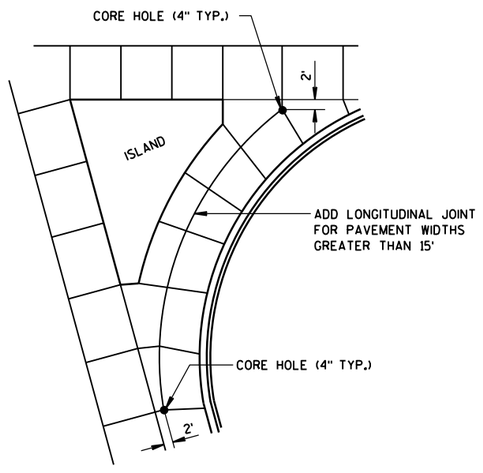
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

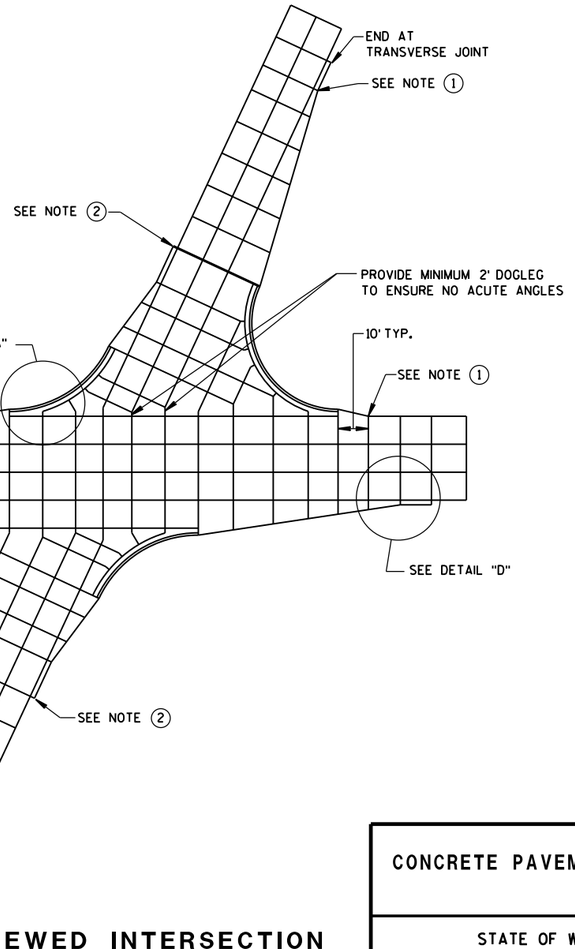
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

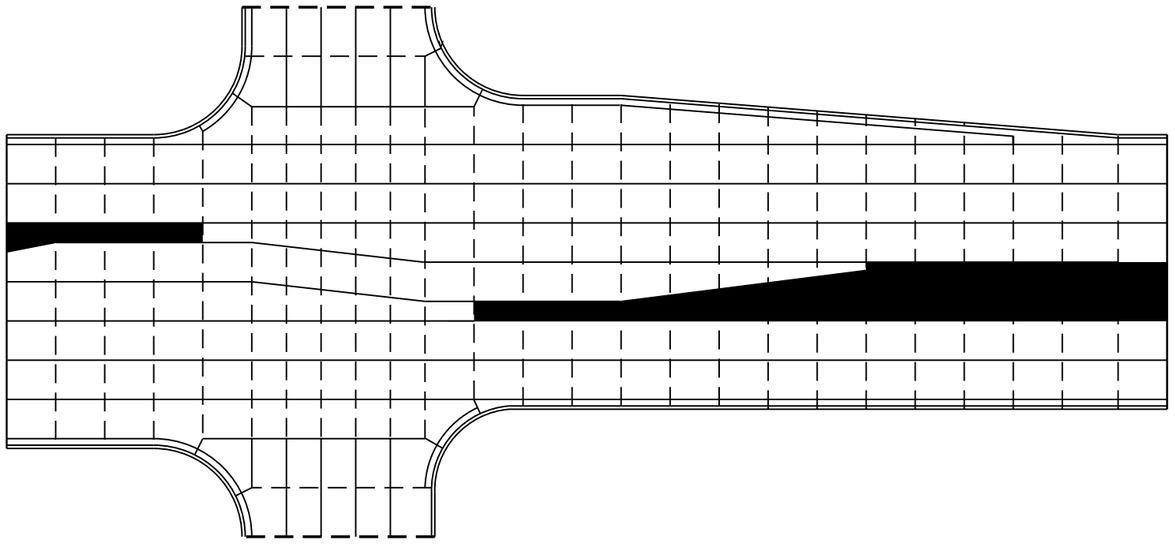
6
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

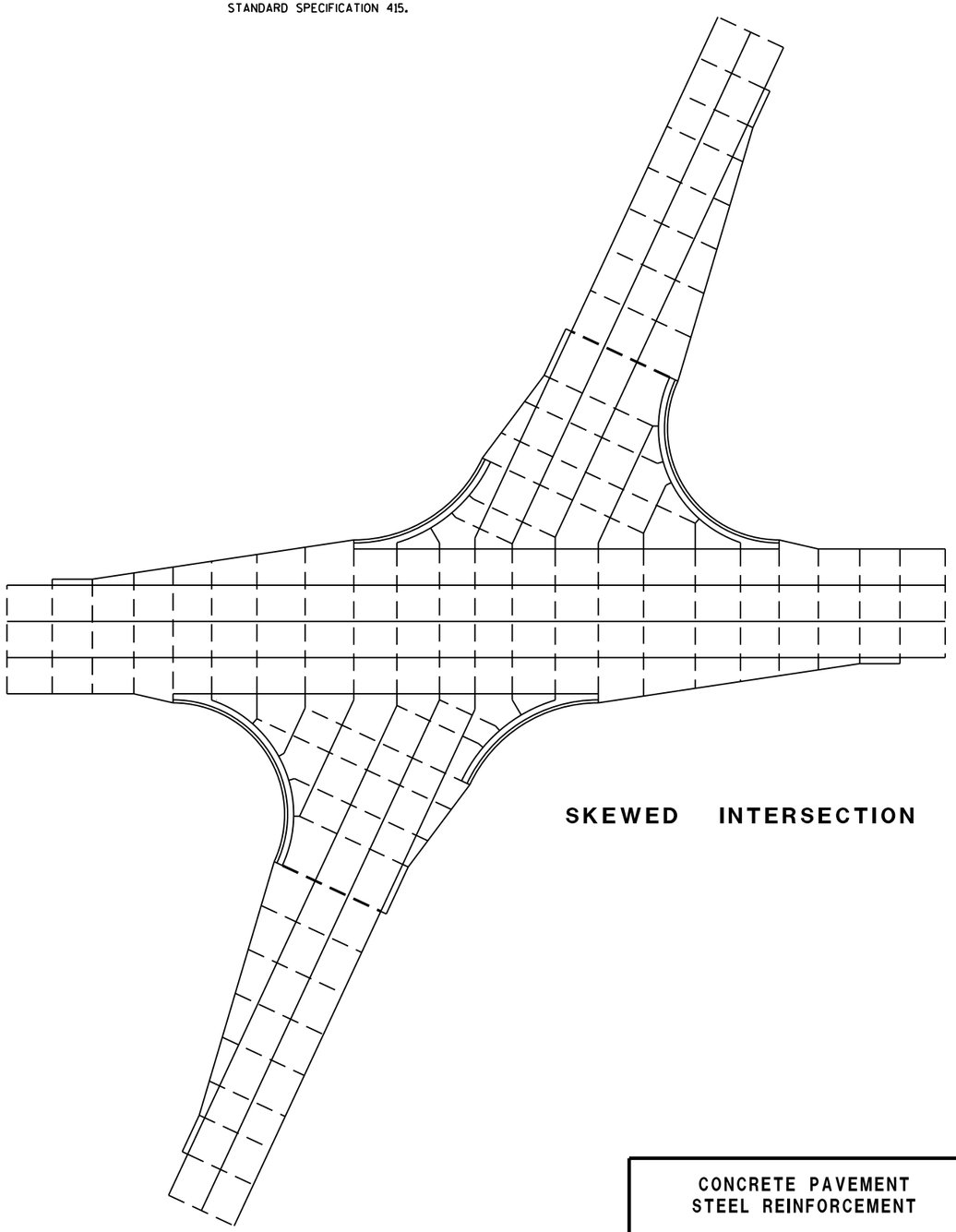
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

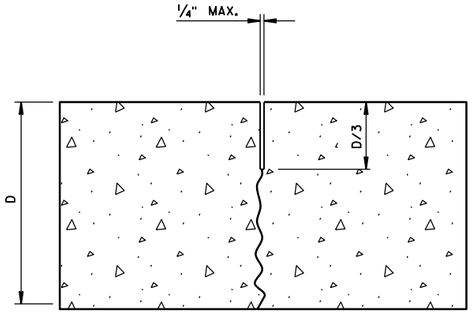
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

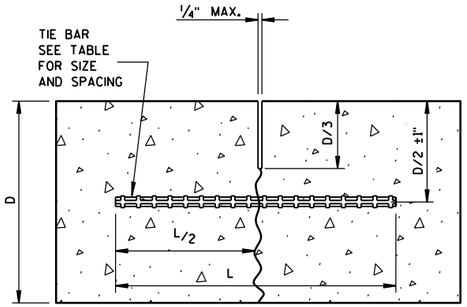
S.D.D. 13 C 18-3b

6

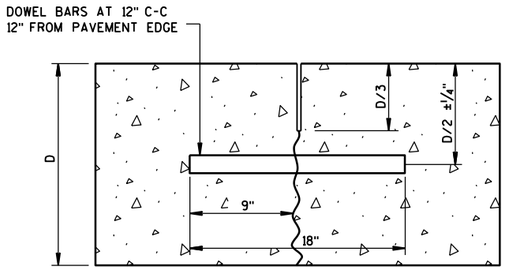
S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



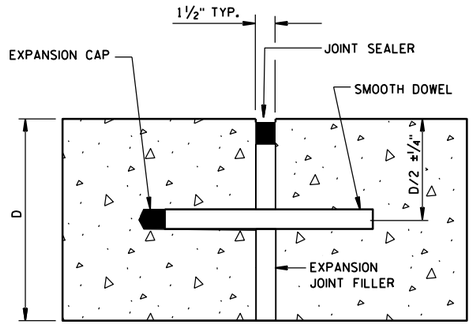
TIED LONGITUDINAL



DOWELED-TRANSVERSE

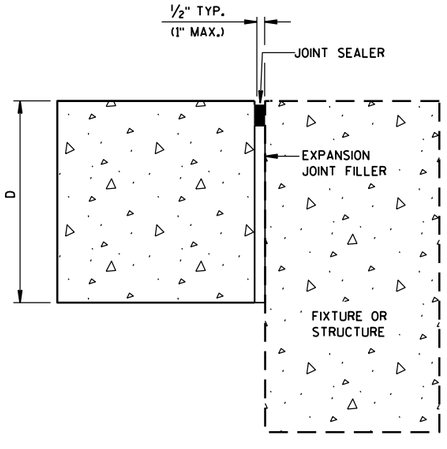
CONTRACTION JOINTS

SEE NOTE (2)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

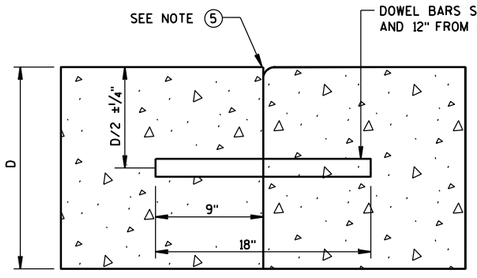
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

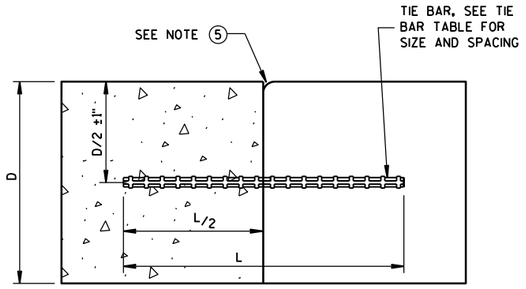
** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

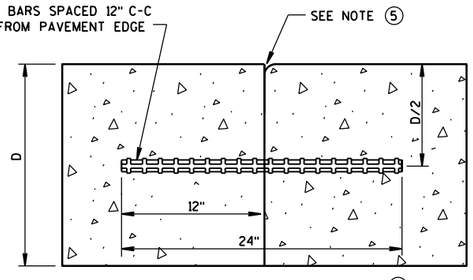
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



DOWELED TRANSVERSE (3)

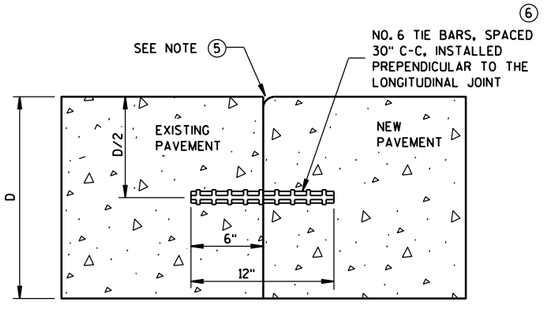


TIED LONGITUDINAL



TIED TRANSVERSE (3)

(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

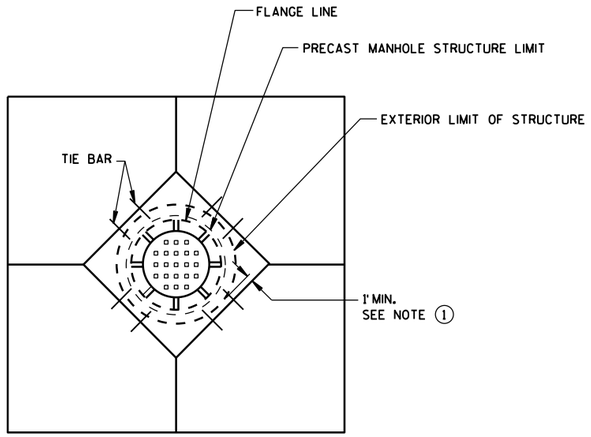
SEE NOTE (4)

CONCRETE PAVEMENT
JOINT TYPES

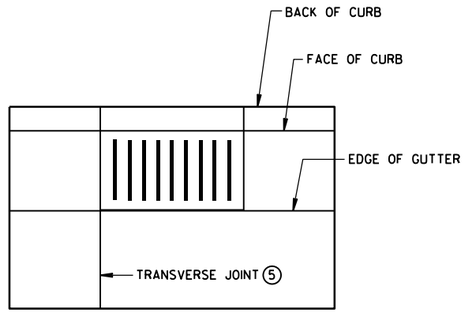
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

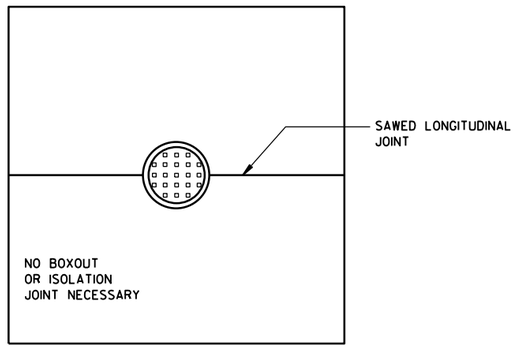
S.D.D. 13 C 18-3c



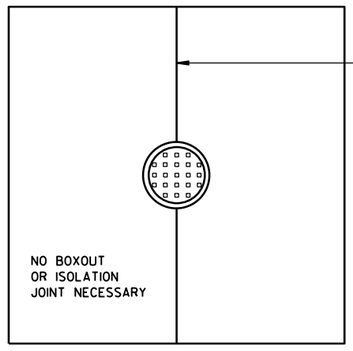
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



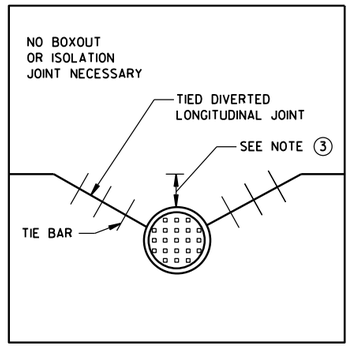
INLET WITH TRANSVERSE JOINT



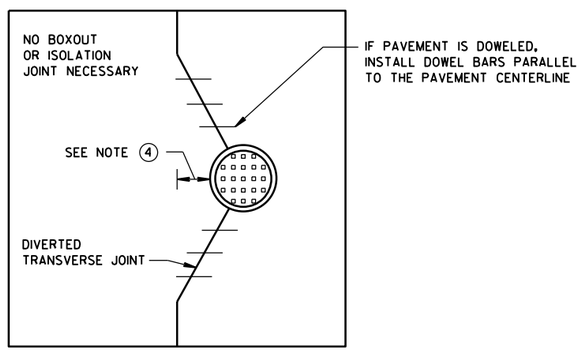
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

(1) USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.

(2) ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.

(3) IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDIAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(4) IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.

(5) ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

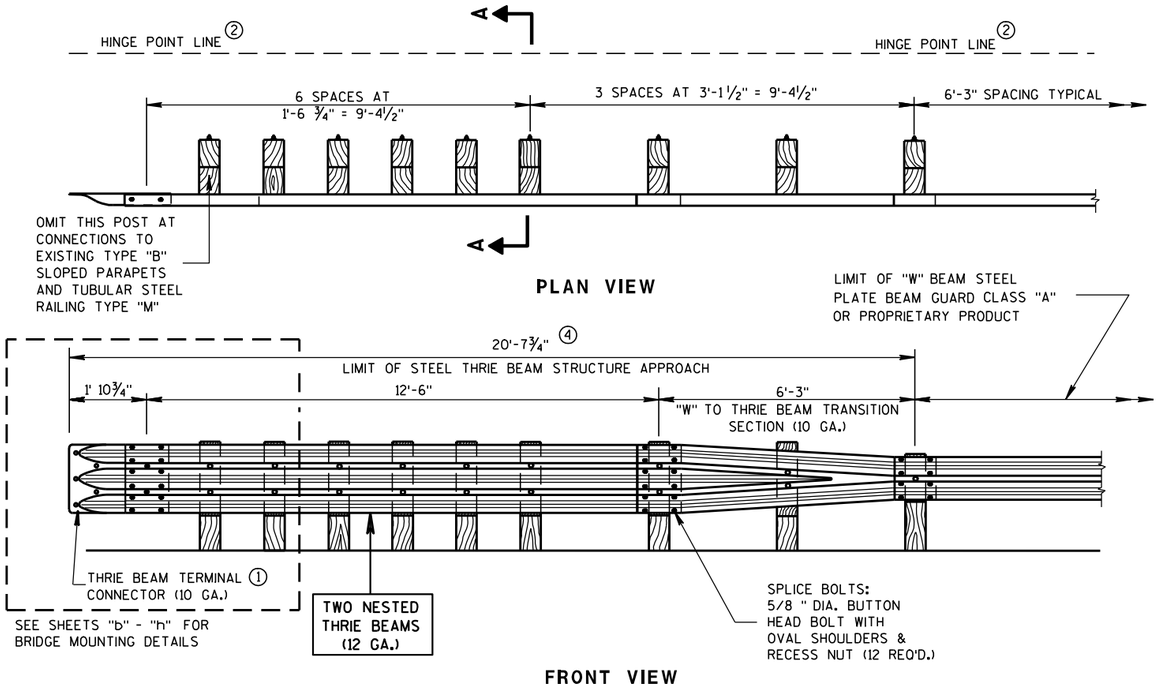
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPER
FHWA

6

S.D.D. 13 C 18-3d



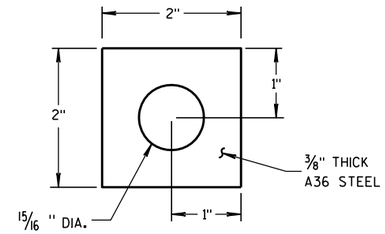


PLATE WASHER DETAIL

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

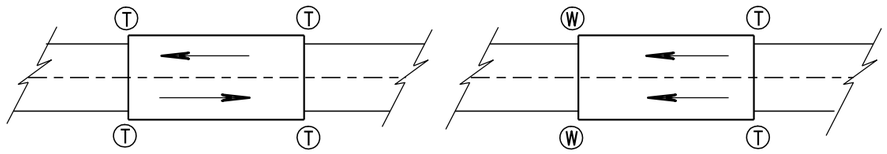
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



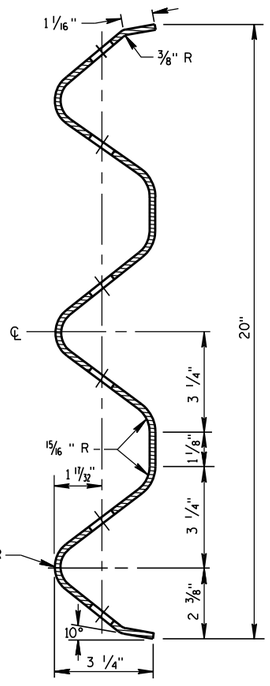
TWO WAY TRAFFIC

ONE WAY TRAFFIC

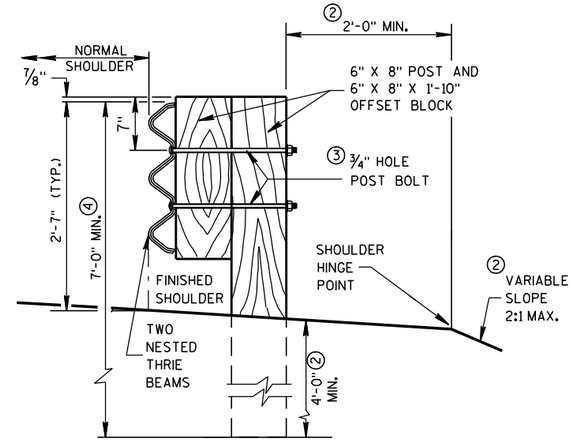
(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

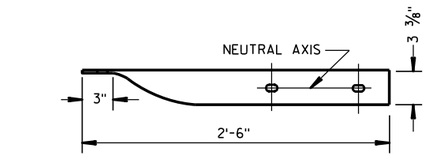
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

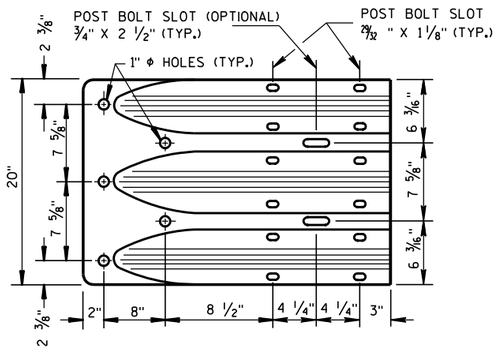


SECTION THRU THRIE BEAM RAIL ELEMENT

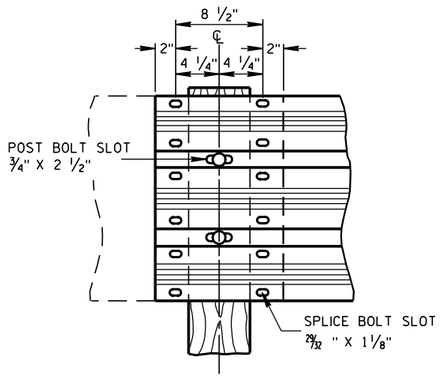


SECTION A-A





THRIE BEAM TERMINAL CONNECTOR



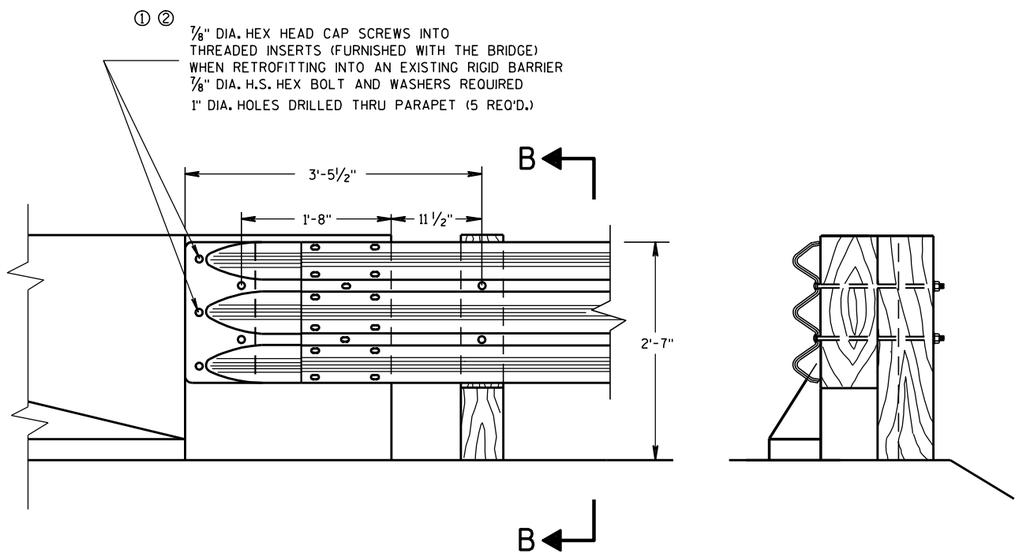
THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

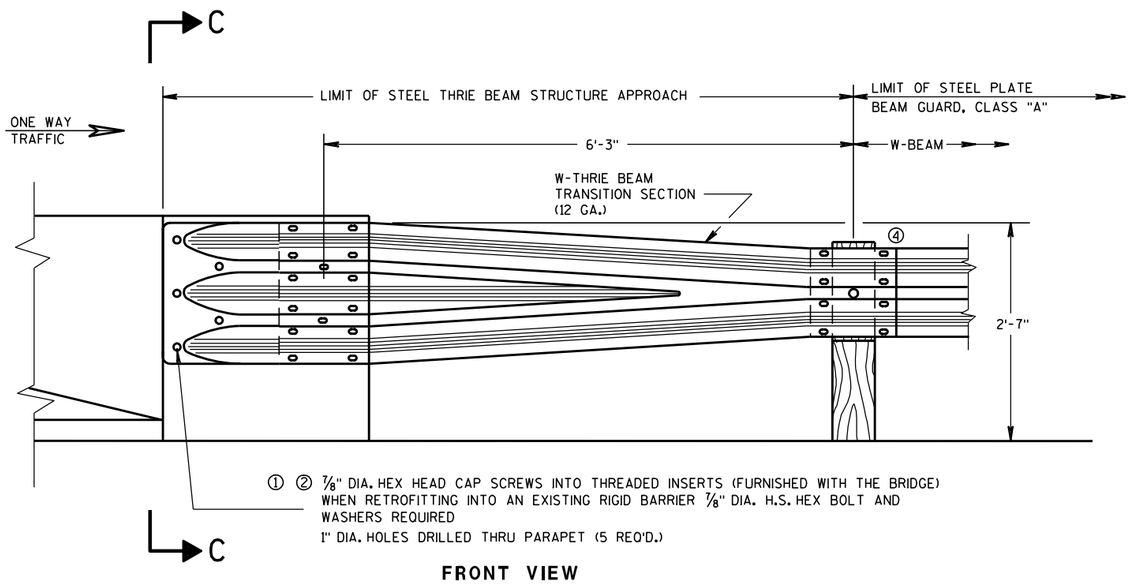
FHWA



FRONT VIEW

SECTION B-B

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



① ② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER ⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED
1" DIA. HOLES DRILLED THRU PARAPET (5 REQ'D.)

FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

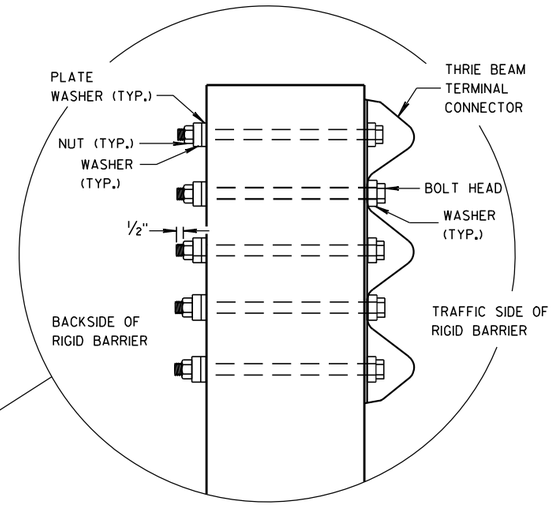
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

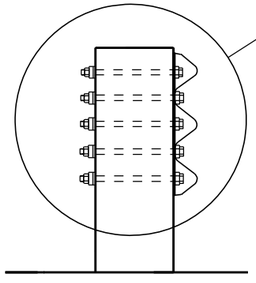
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





SECTION C-C

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS 179
ENGINEER
FHWA

6

S.D.D. 14 B 20-11b

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S.D.D. 14 B 20-11b

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

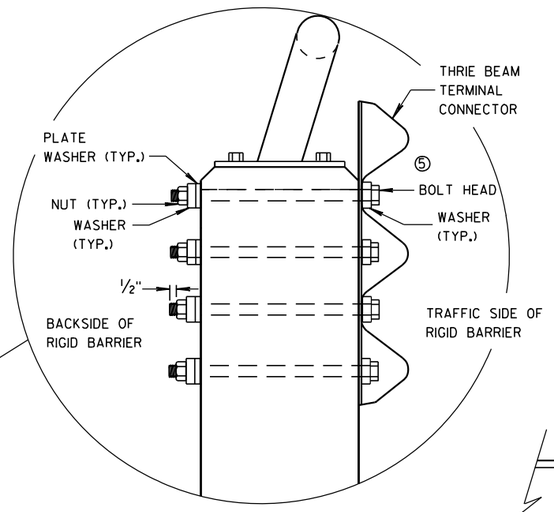
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

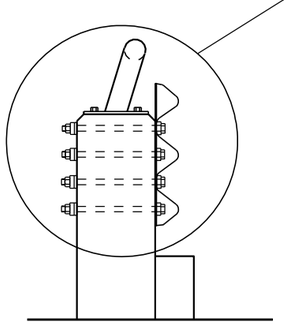
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

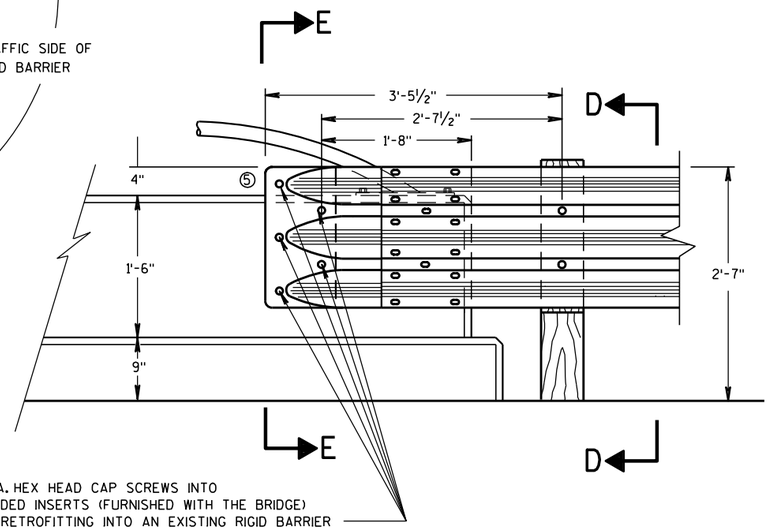
⑤ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





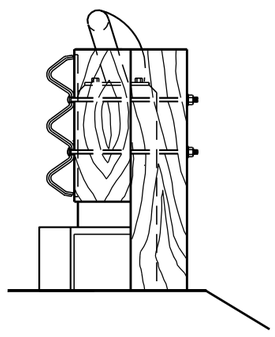
SECTION E-E



①② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER
⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED

1" DIA. HOLES DRILLED THRU PARAPET (4 REQ'D.)

FRONT VIEW

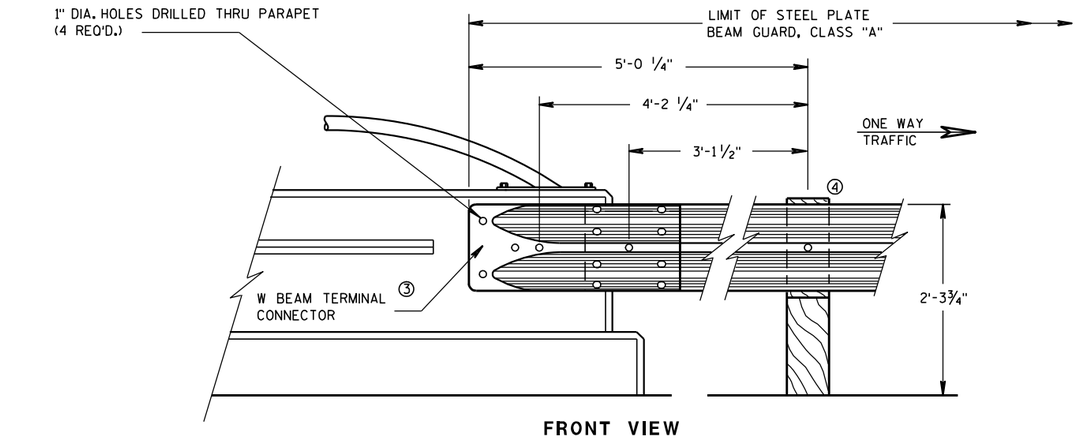


SECTION D-D

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

①② ⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER
⅞" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER
⅞" DIA. H.S. HEX BOLT AND WASHERS REQUIRED

1" DIA. HOLES DRILLED THRU PARAPET (4 REQ'D.)



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
8/31/2012 DATE	/S/ Jerry H. Zaa ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

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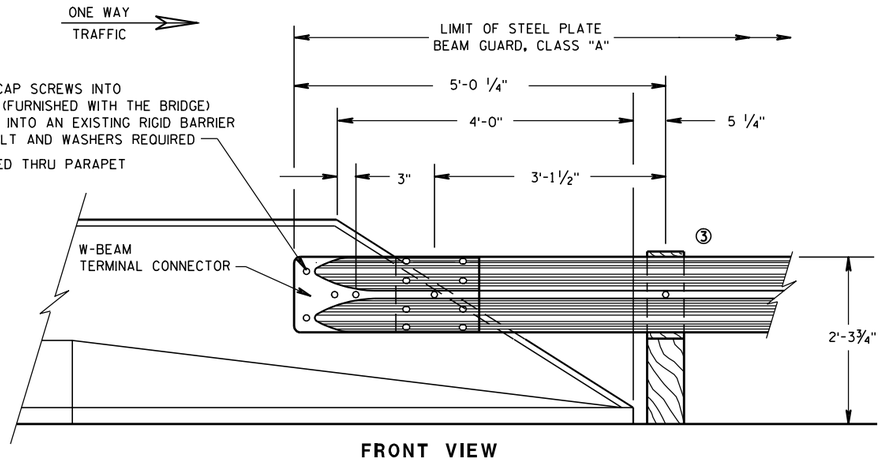


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

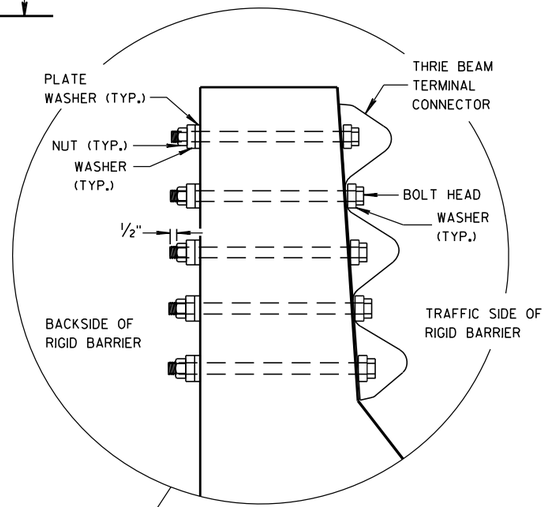
BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

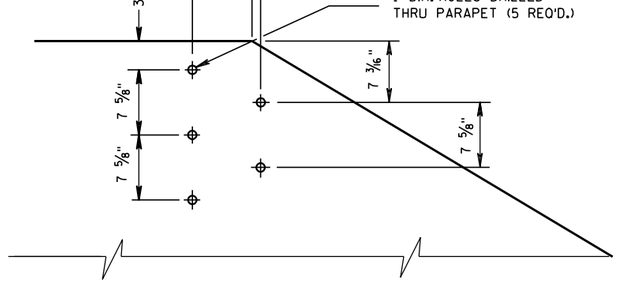
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

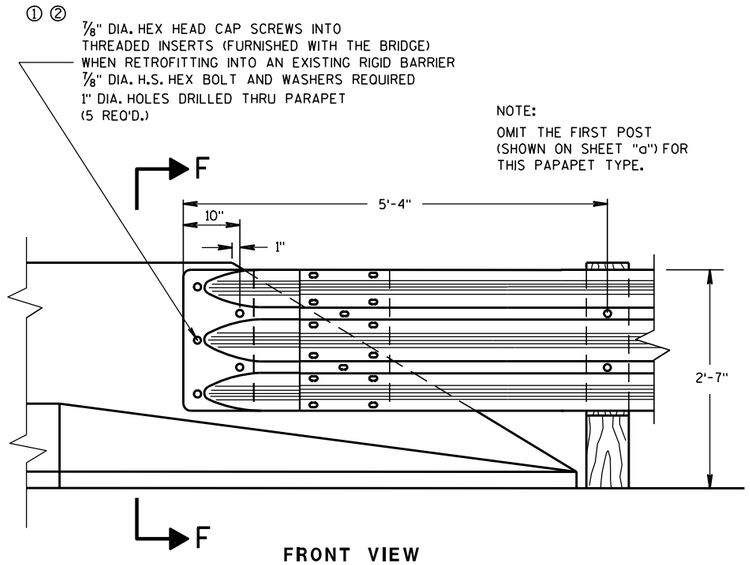
③ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

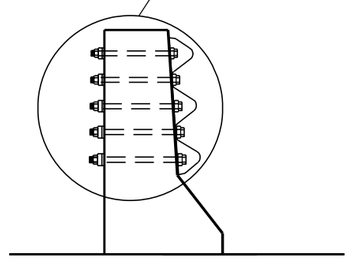




DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION F-F

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 — DATE
/S/ Jerry H. Zaas — ROADWAY STANDARDS ENGINEER
FHWA

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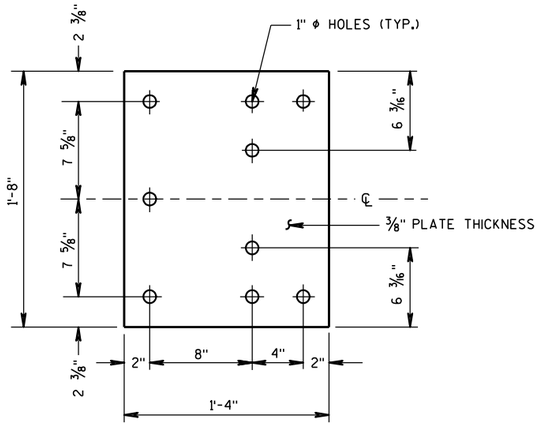
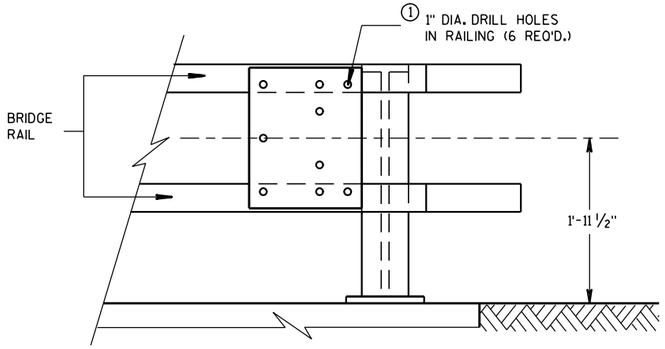
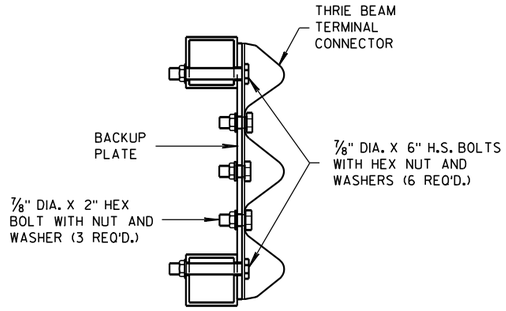
S.D.D. 14 B 20-11d



BACK-UP PLATE DETAIL



BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



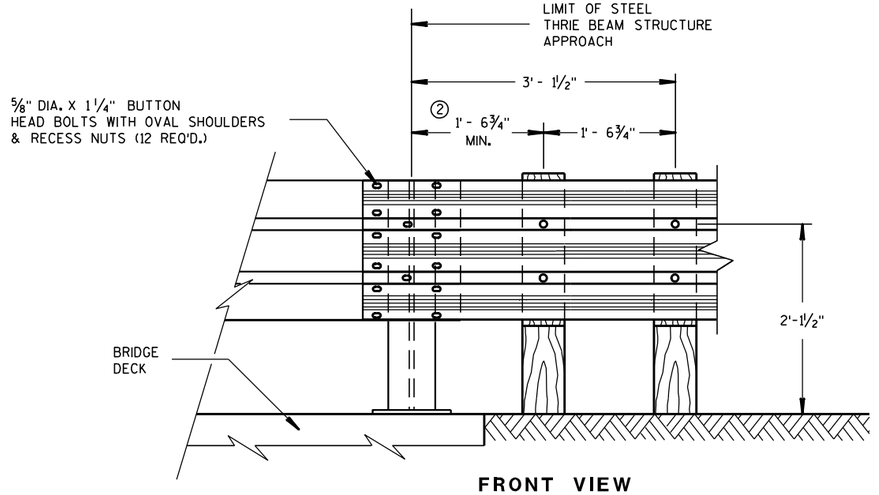
SECTION G-G

GENERAL NOTES

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

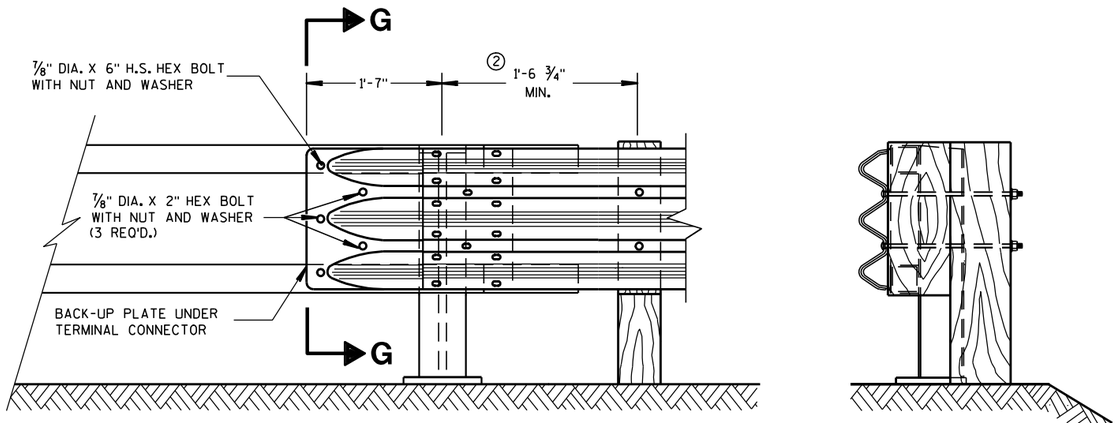
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

② VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL AS CLOSE AS FEASIBLE TO THE STEEL END POST.



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW

END VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 DATE
/S/ Jerry H ... ROADWAY STANDARDS ENGINEER
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S.D.D. 14 B 20-11e

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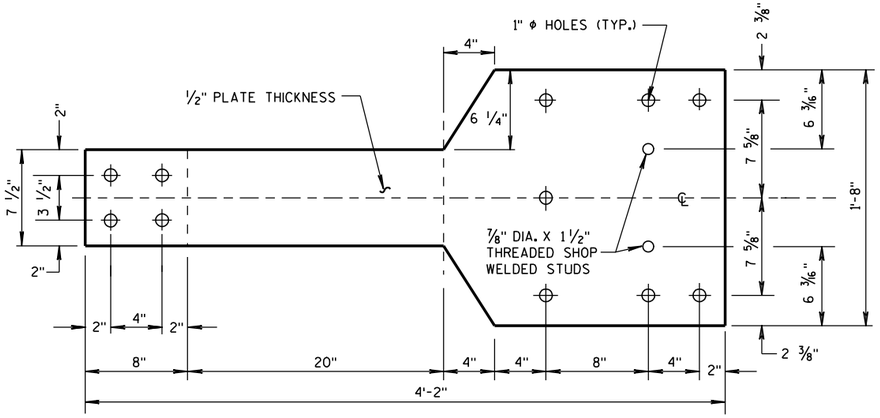
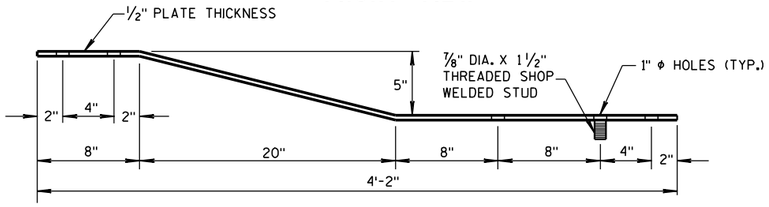
S.D.D. 14 B 20-11e

GENERAL NOTES

① VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL BE AS CLOSE AS FEASIBLE TO THE STEEL END POST.

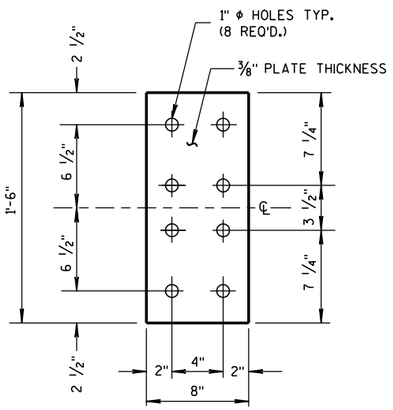


FRONT VIEW



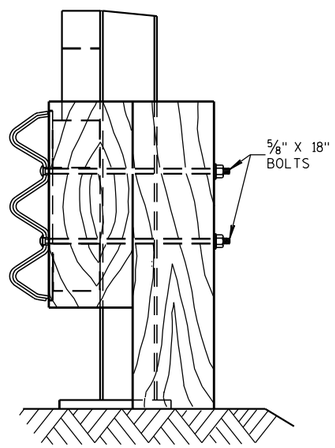
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

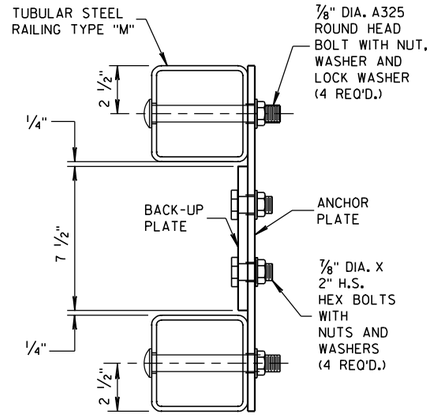


FRONT VIEW

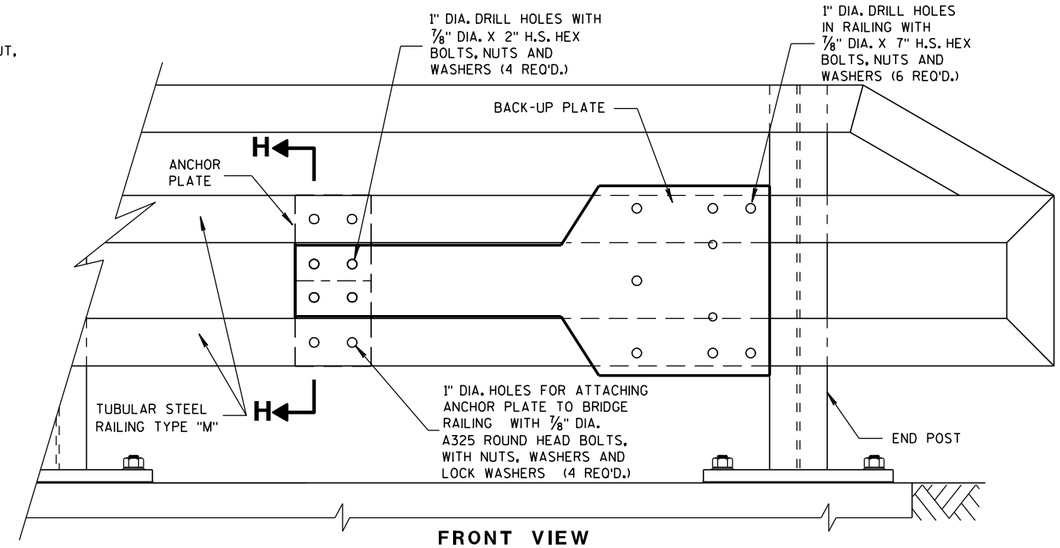
ANCHOR PLATE DETAIL, TYPE "M"



SECTION I-I

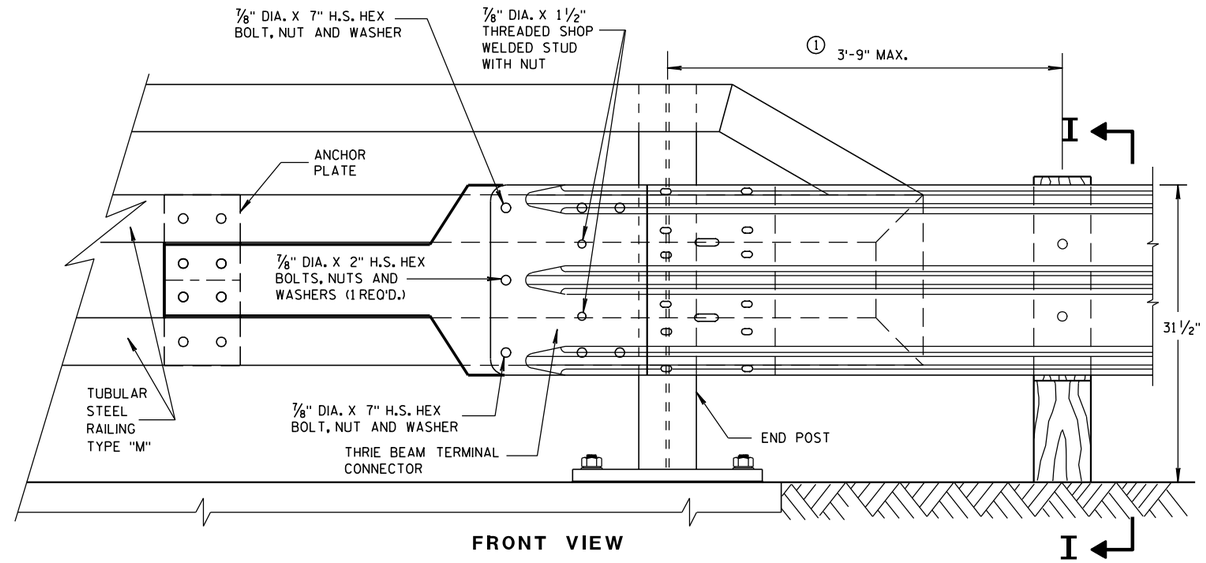


SECTION H-H

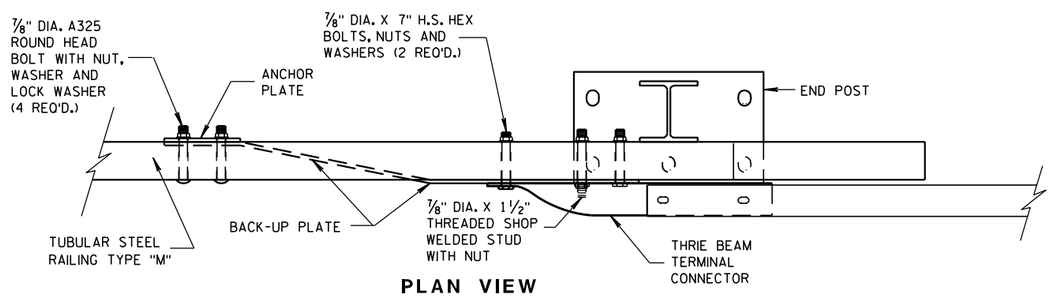


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
FHWA

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

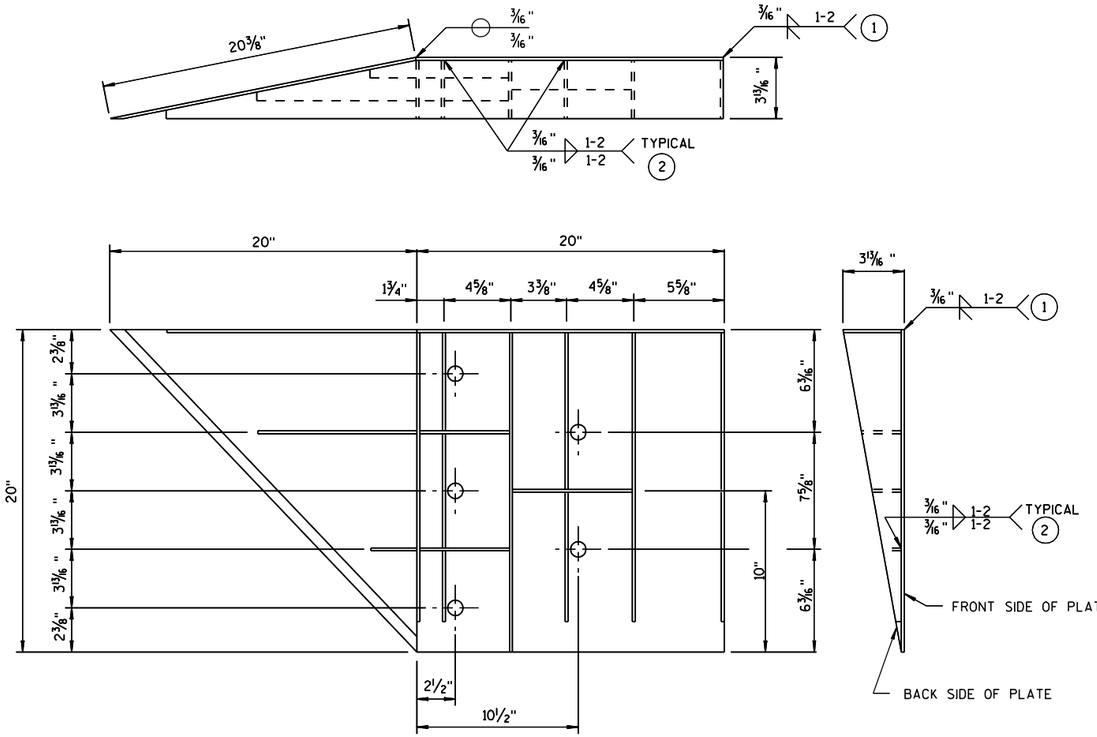
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

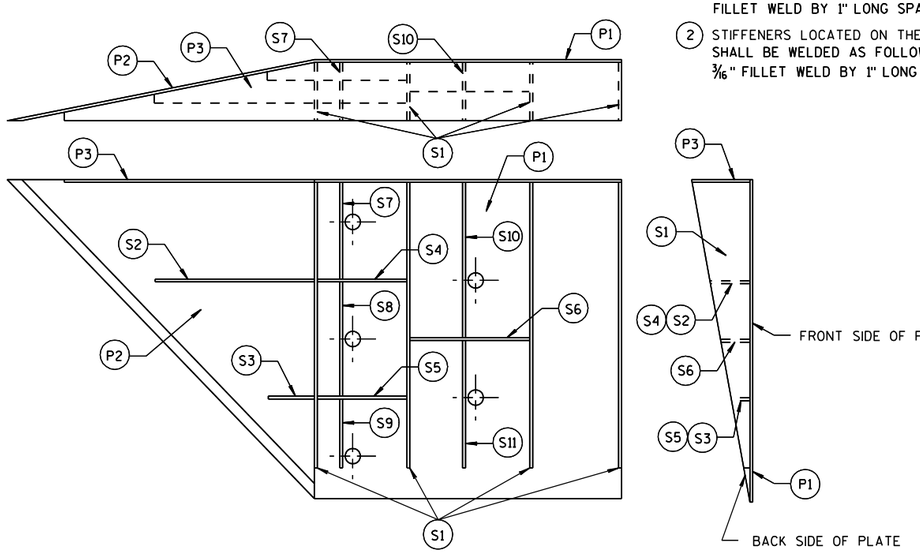


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

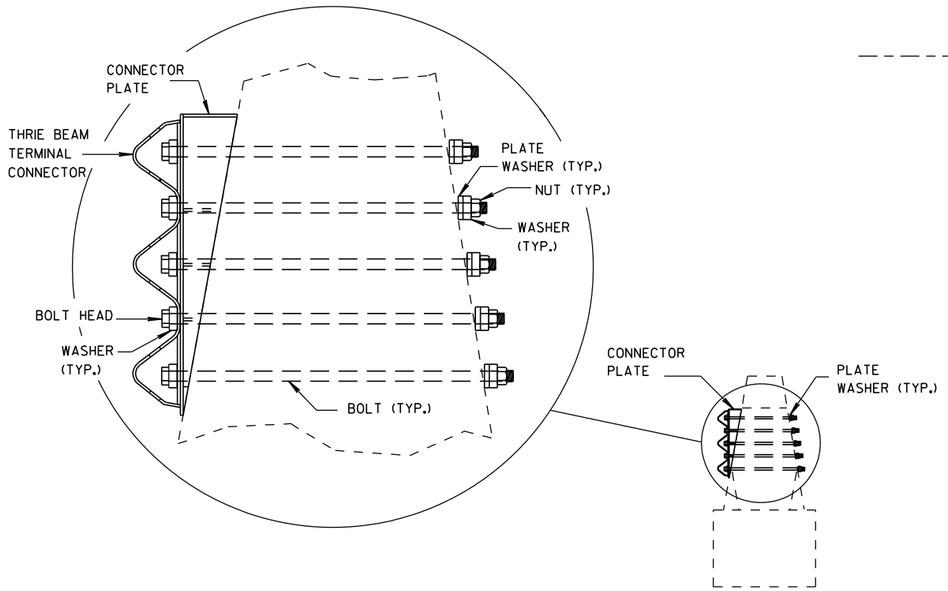
PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

STEEL THRIE BEAM STRUCTURE APPROACH

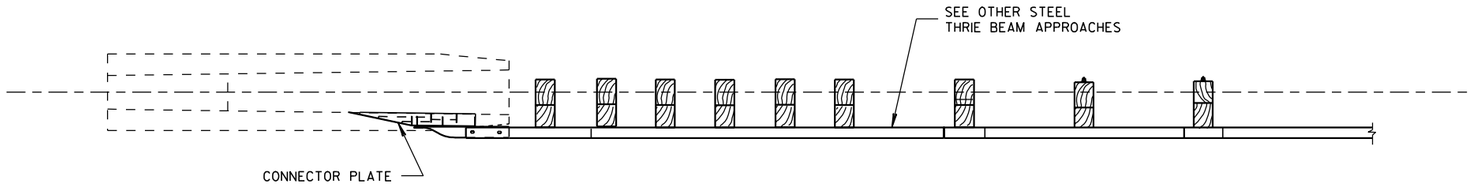
STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

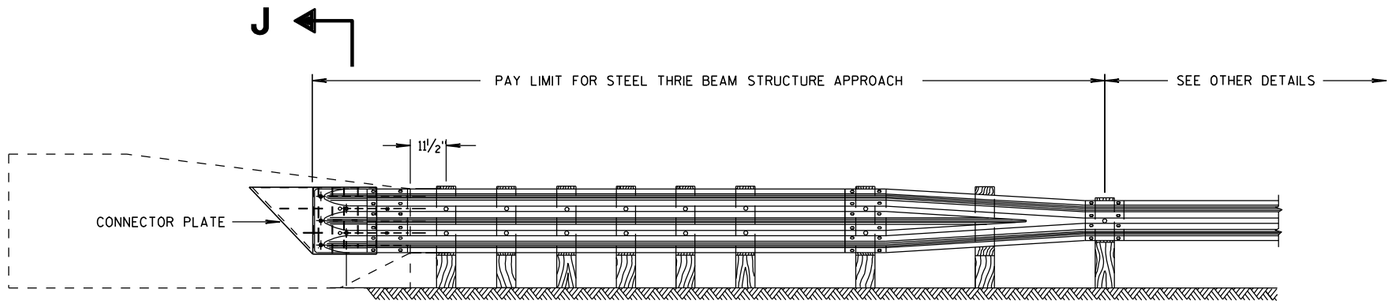
APPROVED
8/31/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
84 — CONTENT
FHWA



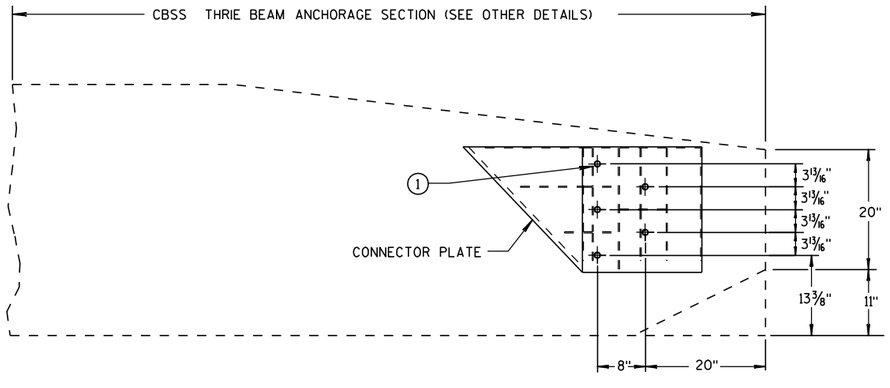
SECTION J-J



PLAN VIEW



FRONT VIEW



CONNECTOR PLATE LOCATION

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 614.

CONNECTOR PLATE, DRILLING HOLES THROUGH PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

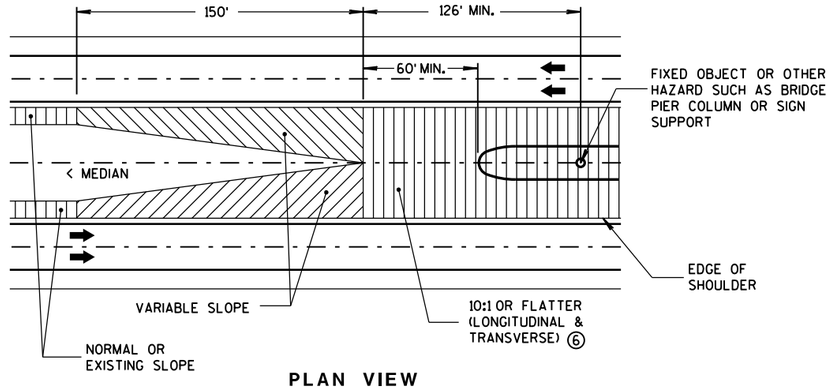
STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

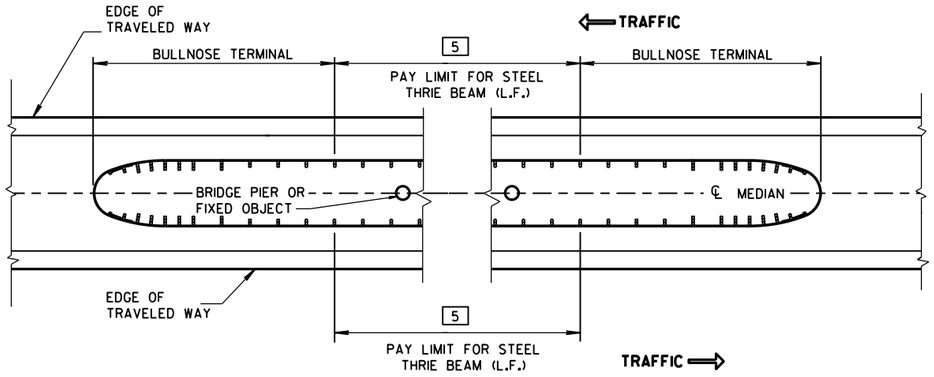
APPROVED
8/31/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 20-11h

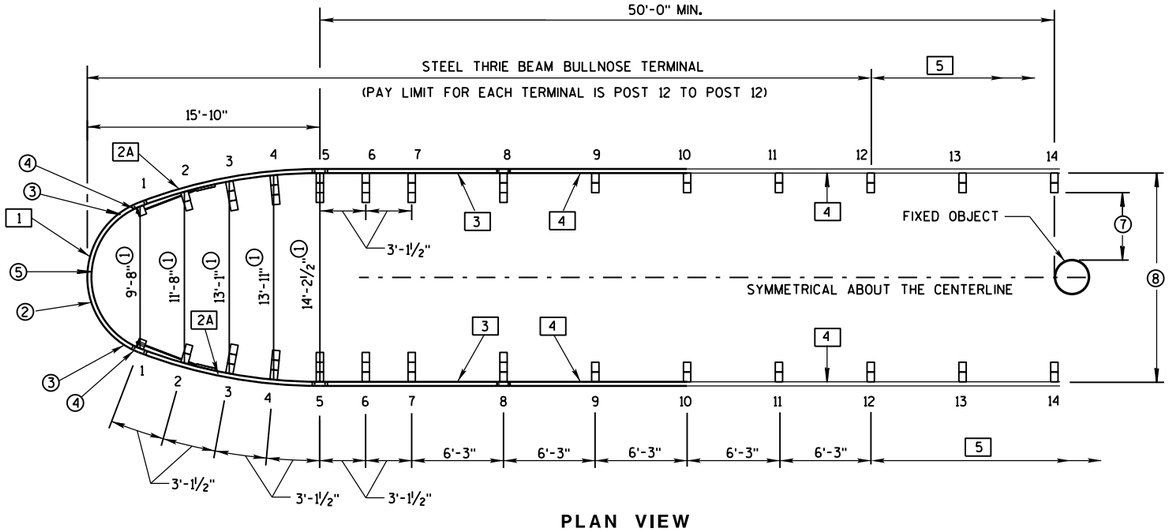


PLAN VIEW

GRADING AT BULLNOSE
(ALL INSTALLATIONS)

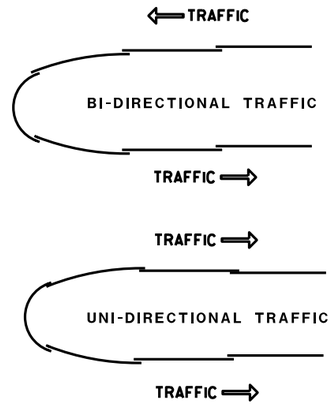


MEDIAN HAZARD PROTECTION PAY LIMITS



PLAN VIEW

TYPICAL BULLNOSE LAYOUT



LAPPING DETAIL
(ALL INSTALLATIONS)

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½" AND 12" DIAMETER AROUND POST. SEE SDD 14B15 OR SDD 14B42 FOR MORE INFORMATION.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

[4] UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

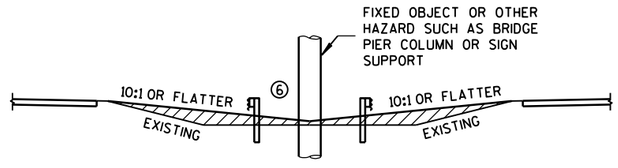
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

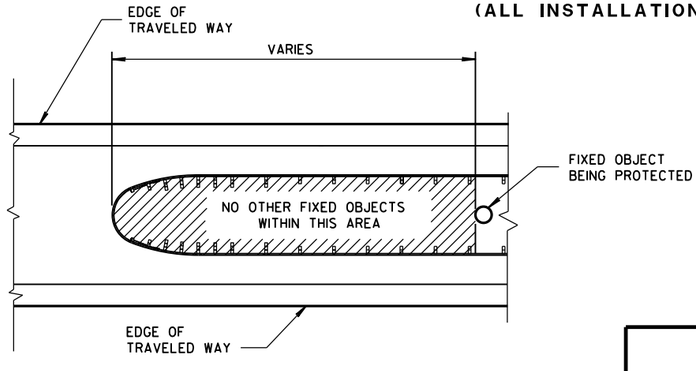
⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



MEDIAN GRADING SECTION
(ALL INSTALLATIONS)

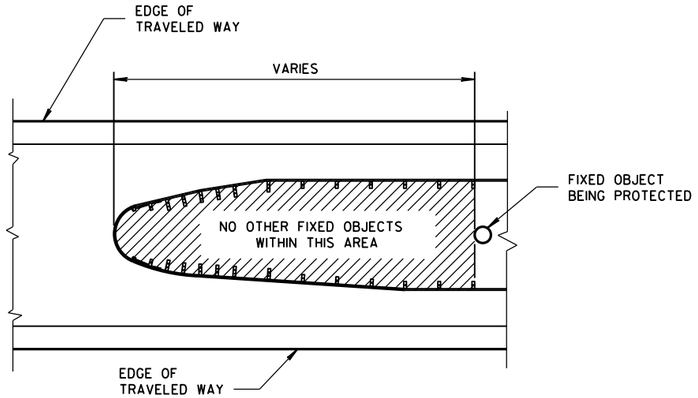


HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 26-3a



HAZARD FREE
AREA INSIDE BULLNOSE

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A, (POST 1 TO POST 5)

[2B] SLOTTED THRIE BEAM RAIL NO. 2B, (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

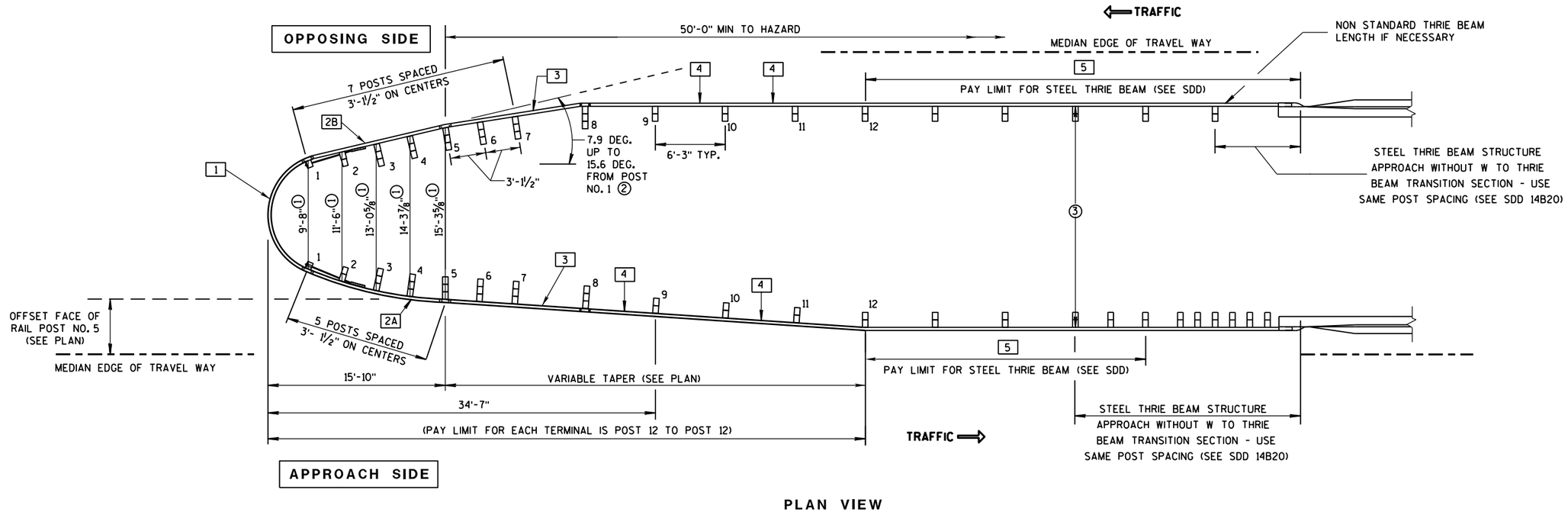
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



PLAN VIEW

WIDENED BULLNOSE DESIGN

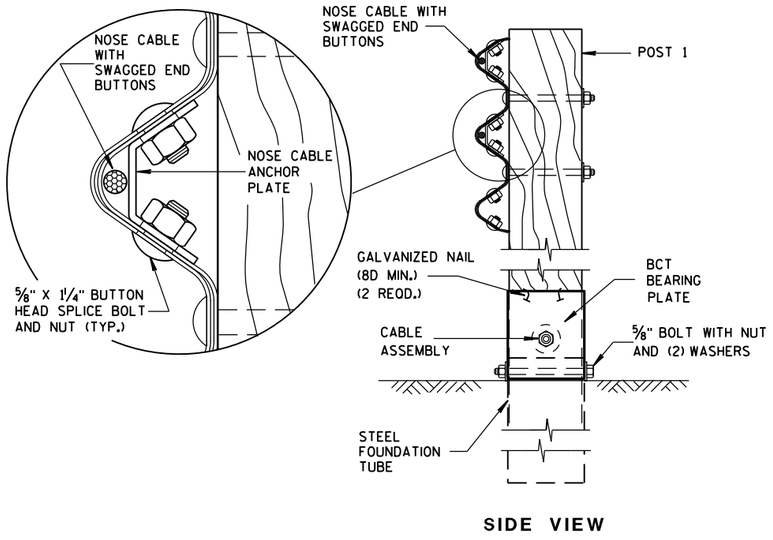
(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

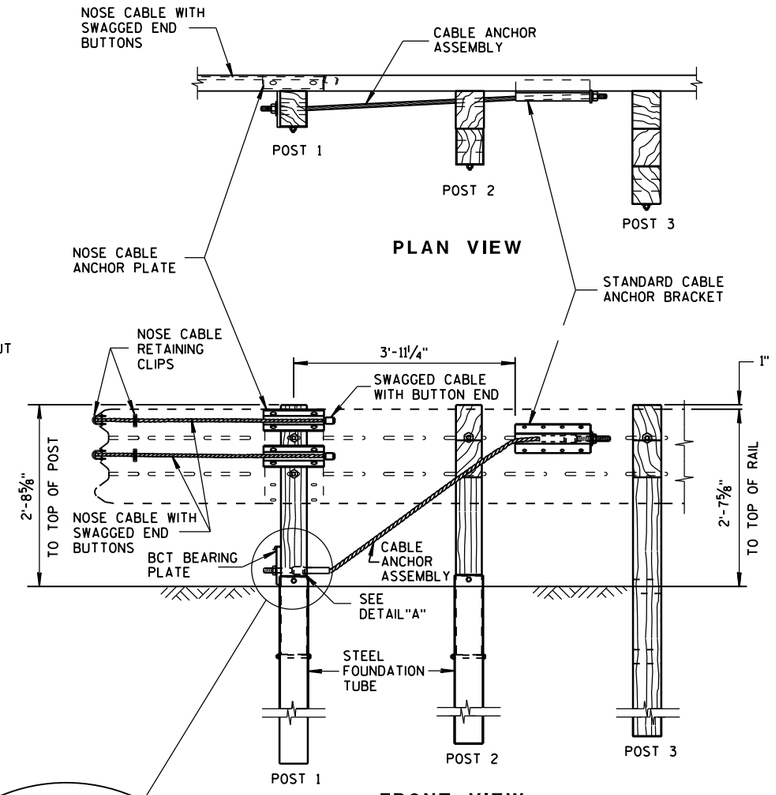
6

S.D.D. 14 B 26-3b



SIDE VIEW

NOSE CABLE ASSEMBLY AT POST NO. 1



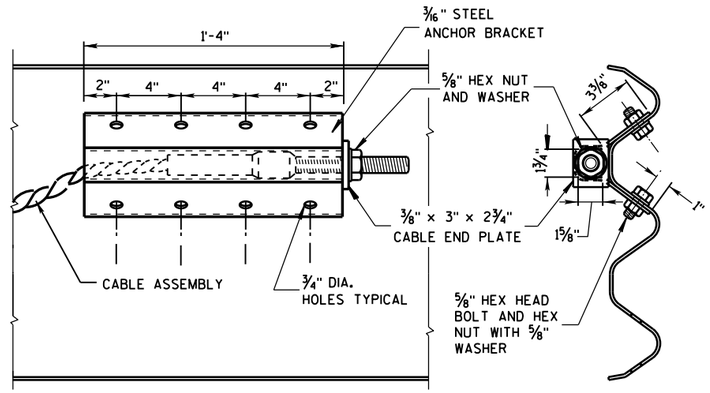
PLAN VIEW

FRONT VIEW

NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY

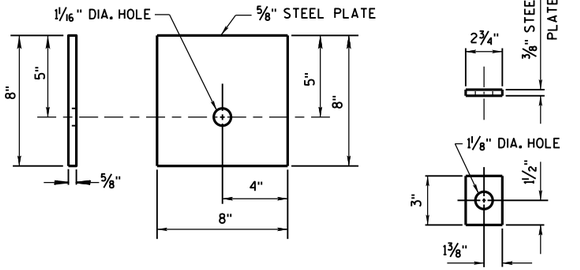
GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



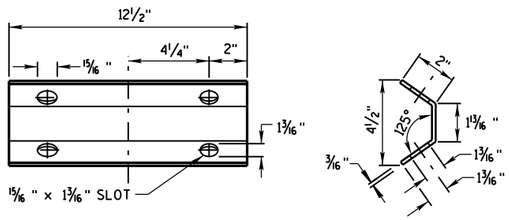
FRONT VIEW END VIEW

DETAILS OF CABLE ANCHOR BRACKET



BCT BEARING PLATE

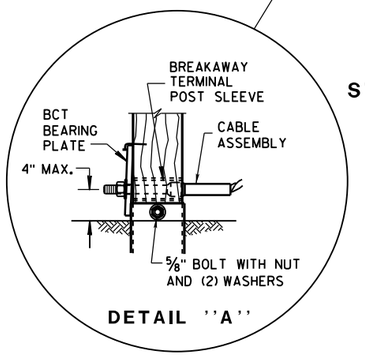
CABLE END PLATE



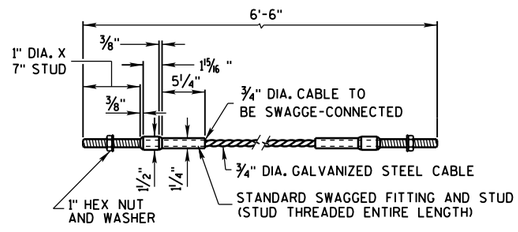
ELEVATION VIEW END VIEW

NOSE CABLE ANCHOR PLATE

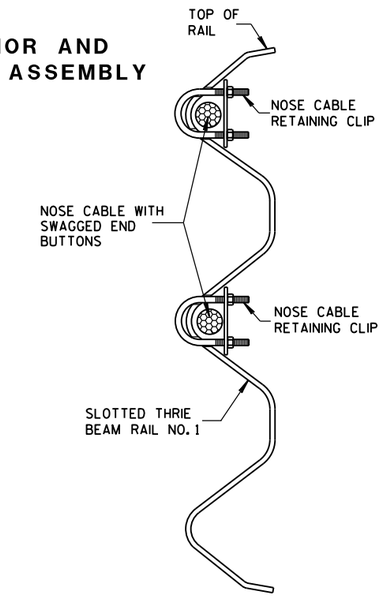
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)



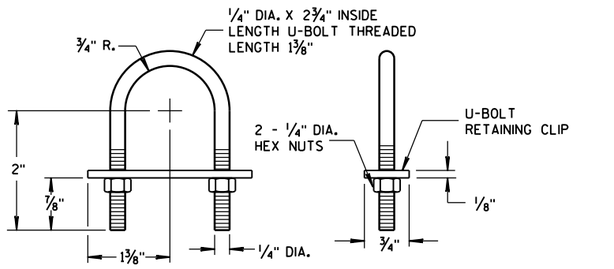
DETAIL ''A''



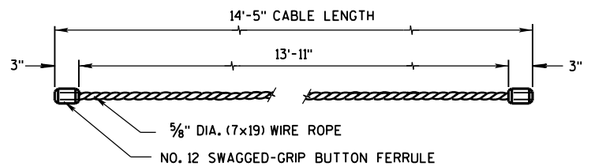
DETAILS OF CABLE ANCHOR ASSEMBLY



PLACEMENT OF NOSE CABLE RETAINING CLIP



NOSE CABLE RETAINING CLIP



NOSE CABLE WITH SWAGGED END BUTTONS

TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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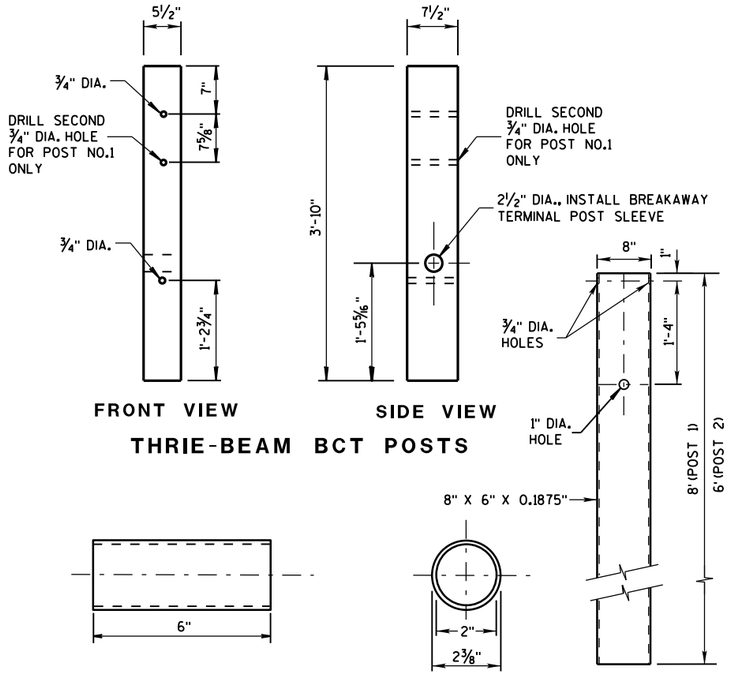
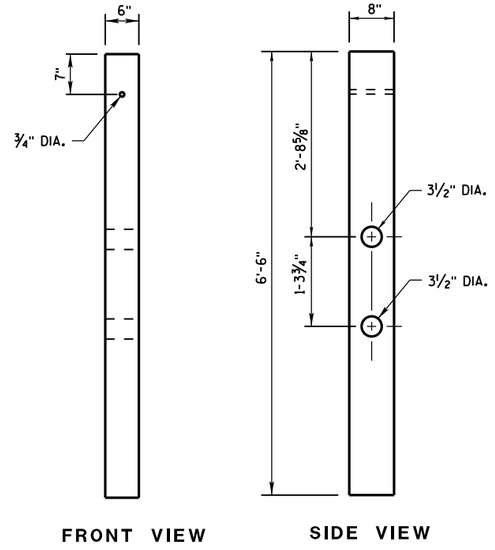
S.D.D. 14 B 26-3c



THRIE-BEAM BCT POSTS

BREAKAWAY TERMINAL POST SLEEVE

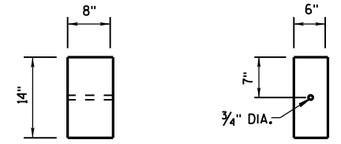
STEEL FOUNDATION TUBE



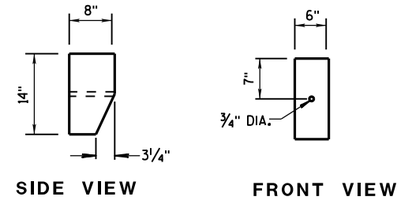
THRIE-BEAM CRT WOOD POSTS

GENERAL NOTES

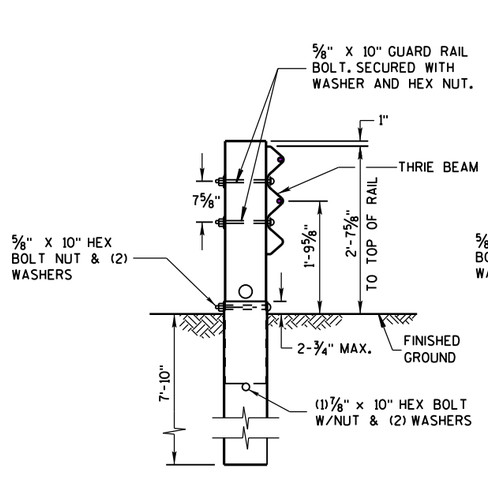
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



STANDARD WOOD BLOCK

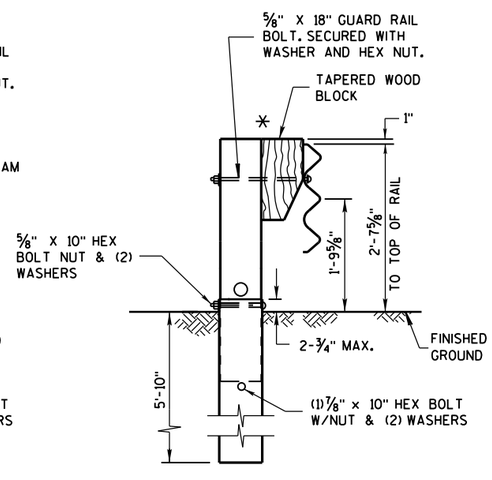


TAPERED WOOD BLOCK



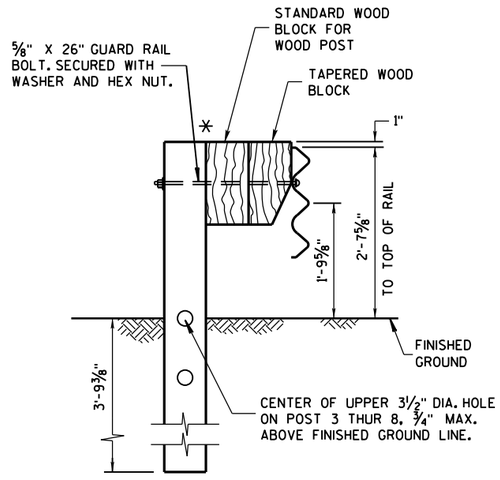
THRIE-BEAM BCT POST
(WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



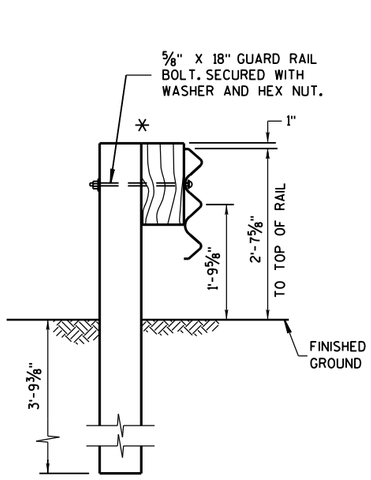
THRIE-BEAM BCT POST
(WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2



THRIE-BEAM CRT POST
(6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8



THRIE-BEAM POST
(6'-6" LONG POST WITH 1'-2" BLOCK)

POST NO. 9,10,11,& 12

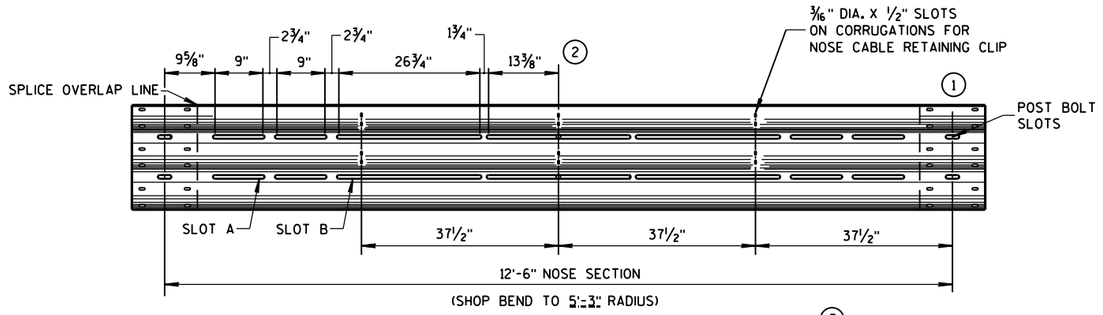
(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

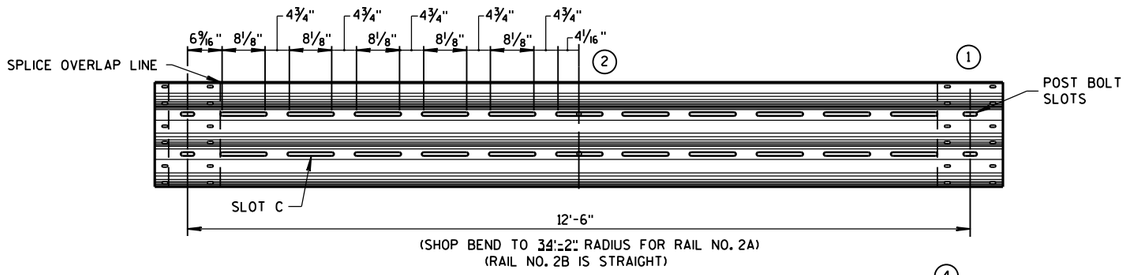
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

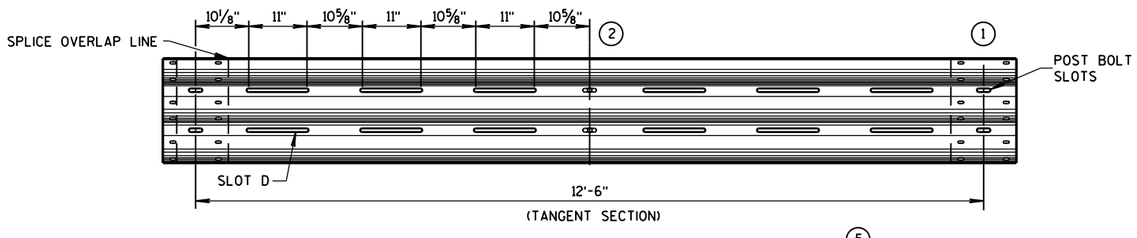
6
S.D.D. 14 B 26-3d



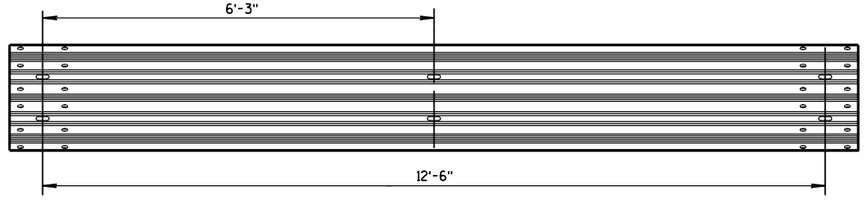
SLOTTED THRIE BEAM RAIL NO. 1 (3)



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)



SLOTTED THRIE BEAM RAIL NO. 3 (5)



UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

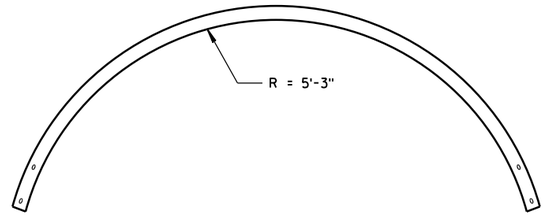
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

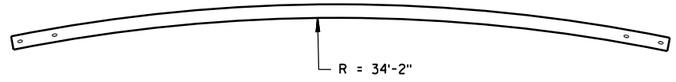
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



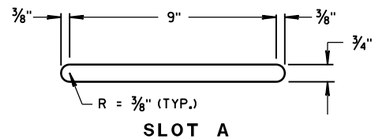
PLAN VIEW

SLOTTED THRIE BEAM RAIL NO. 1

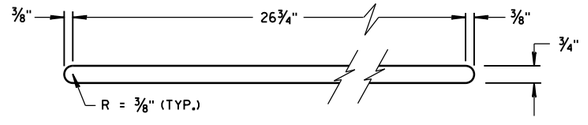


PLAN VIEW

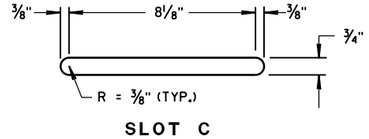
SLOTTED THRIE BEAM RAIL NO. 2A



SLOT A



SLOT B



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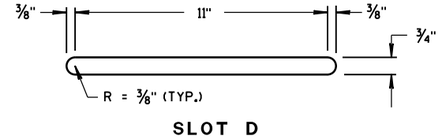

SLOT D

SLOT DETAILS

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2014 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

NT

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S.D.D. 14 B 26-3e

6

S.D.D. 14 B 26-3e

GENERAL NOTES

1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

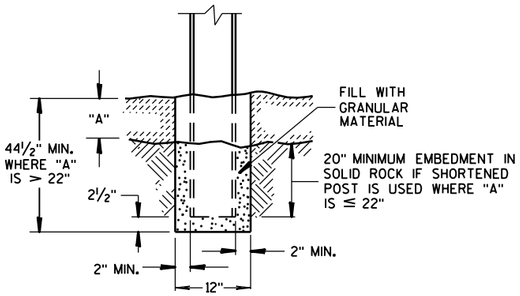
2. USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

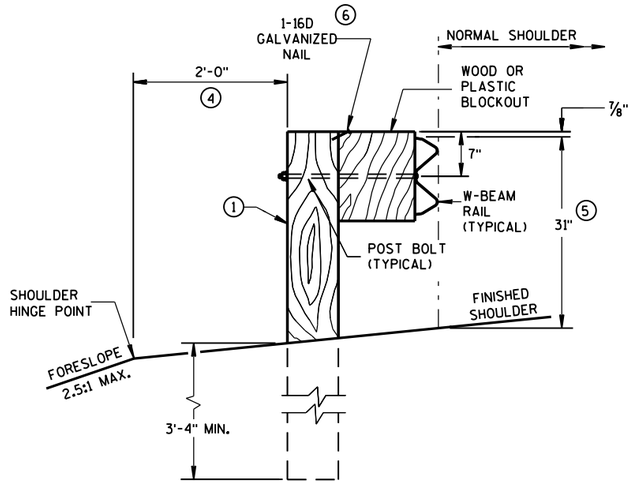
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

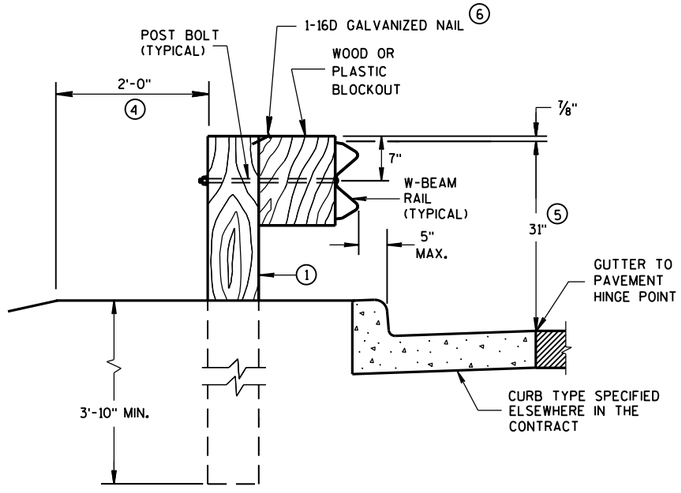
6. WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



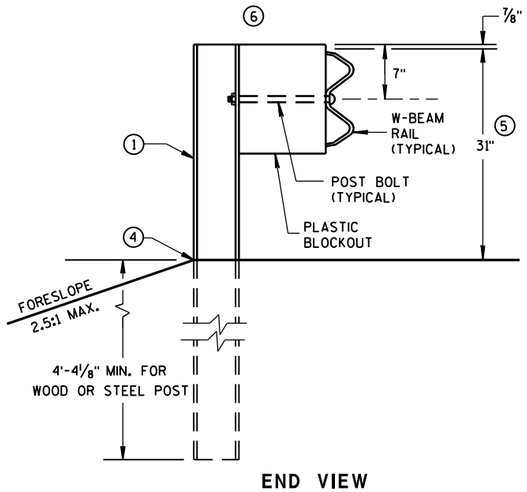
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



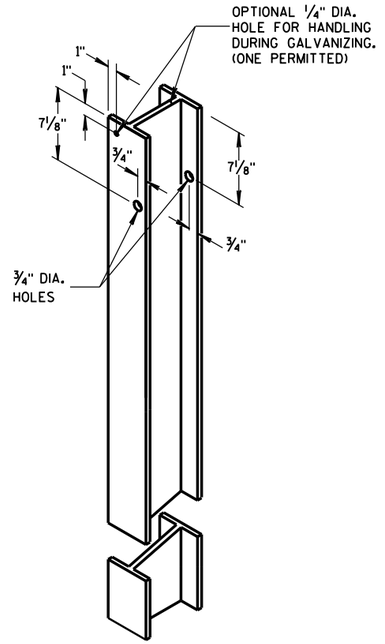
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



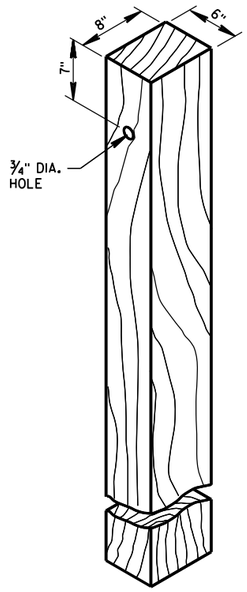
END VIEW
LOCATED ALONG A CURBED ROADWAY



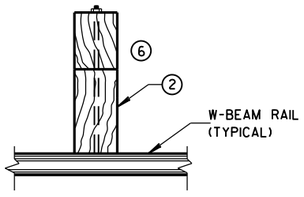
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



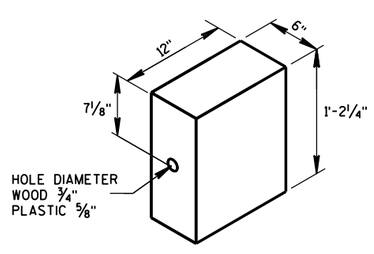
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



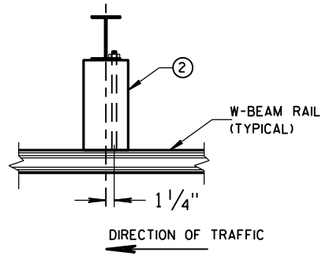
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

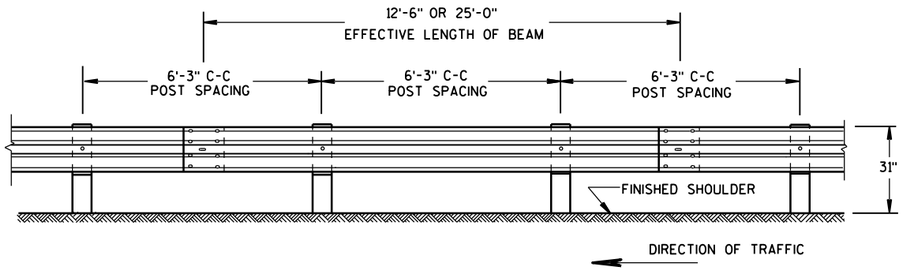


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

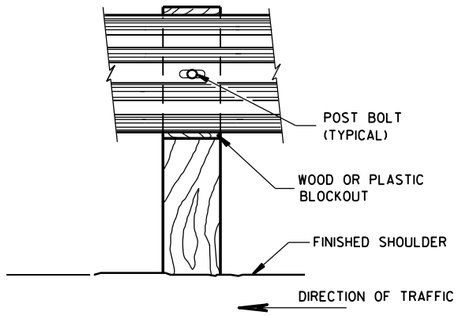
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 42-3a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



FRONT VIEW AT WOOD POST

GENERAL NOTES

(7) PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.

(8) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.

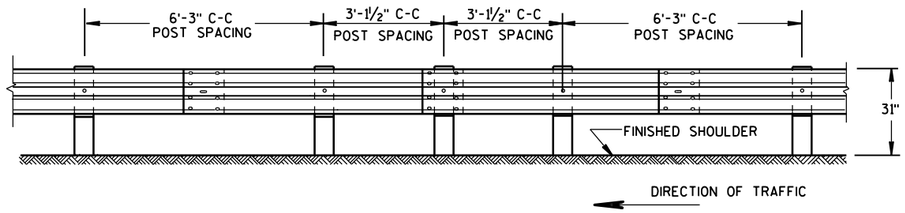
(9) REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.

(10) PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.

(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

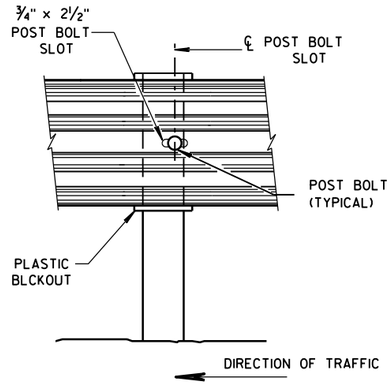
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

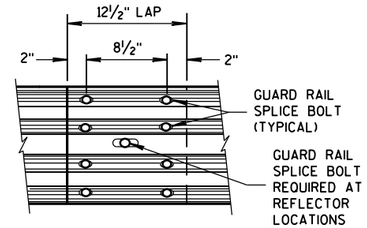


FRONT VIEW

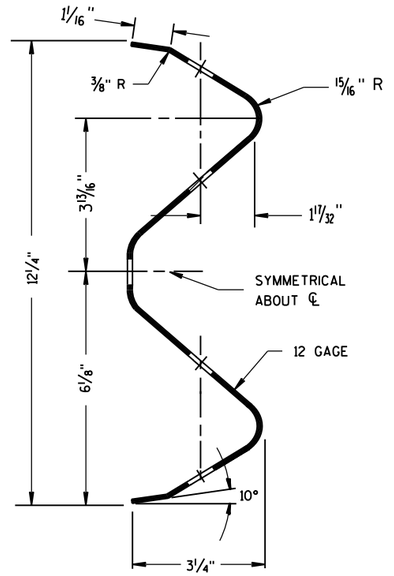
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



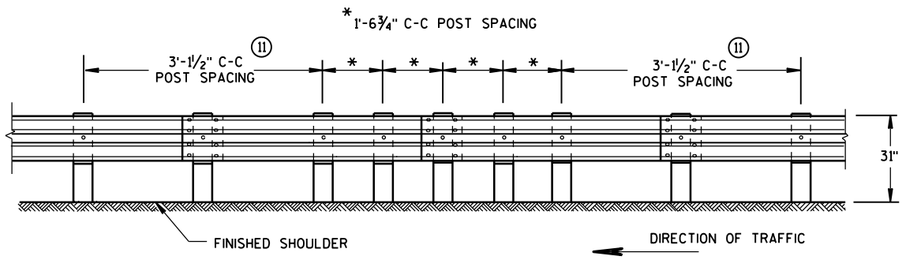
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE

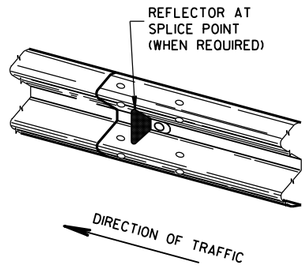


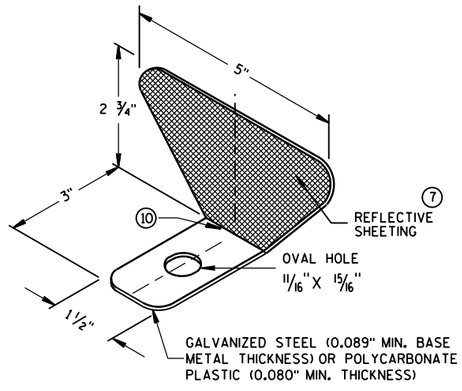
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (7)

REFLECTOR SPACING (8)

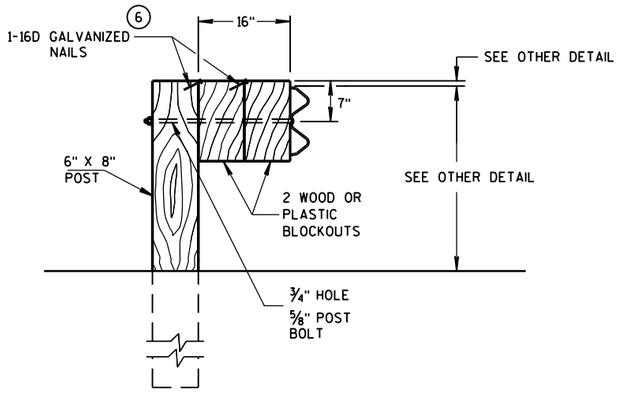
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (9)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (10)	

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

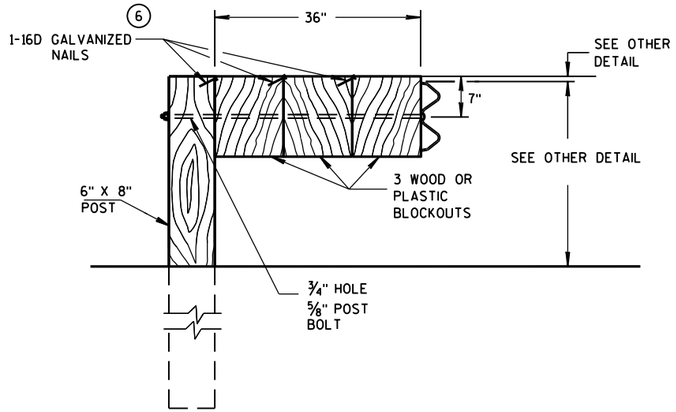
6

S.D.D. 14 B 42-3b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

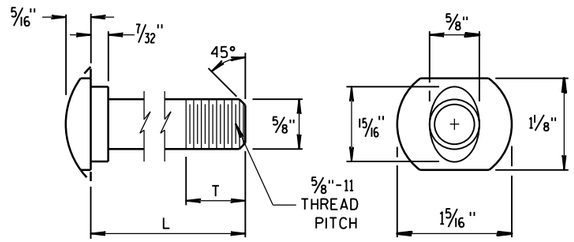


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

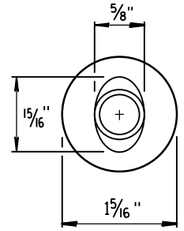
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

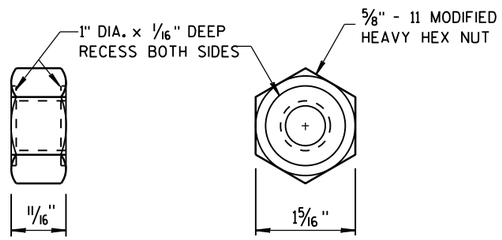


POST BOLT TABLE

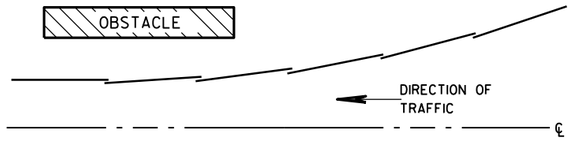
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

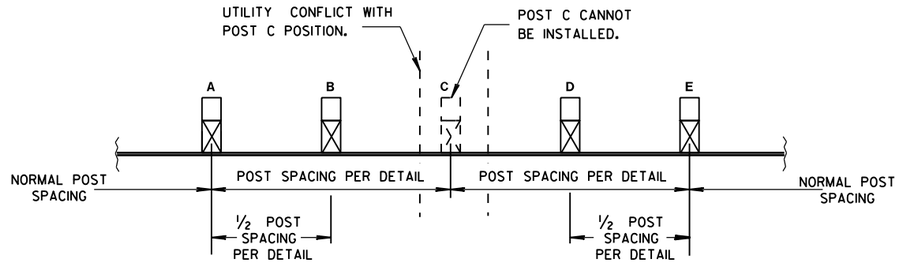


POST BOLT AND RECESS NUT

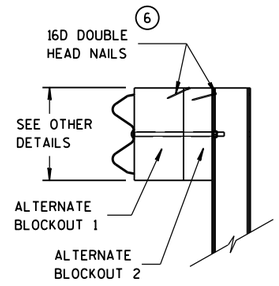


PLAN VIEW

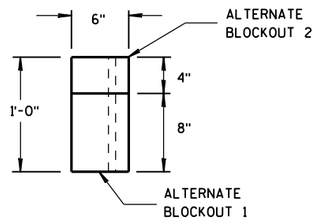
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

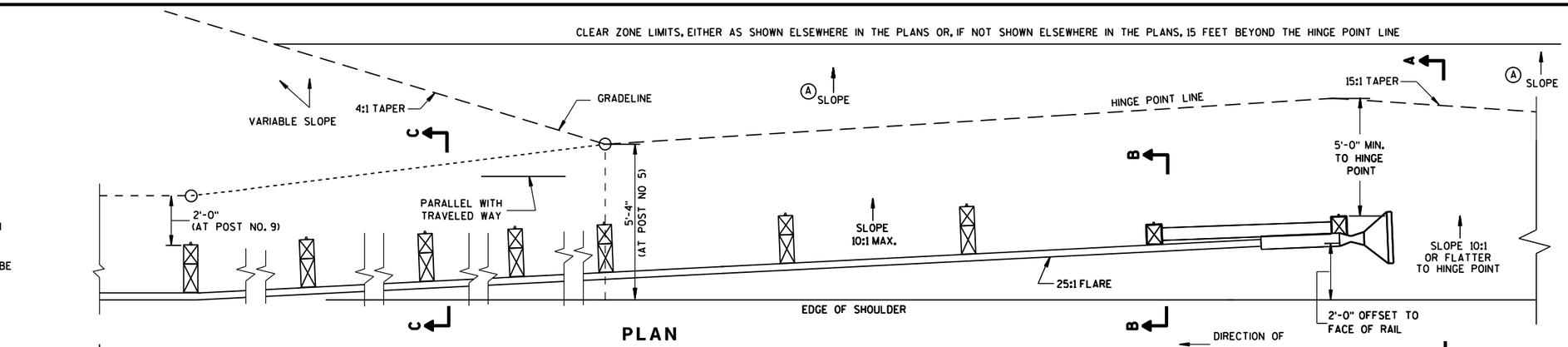
SEE SDD 14B42 FOR MORE INFORMATION.

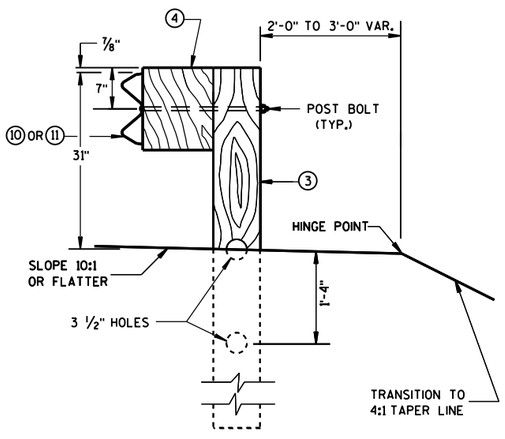
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

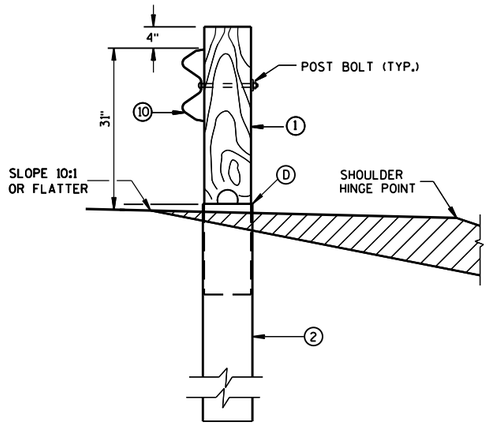
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

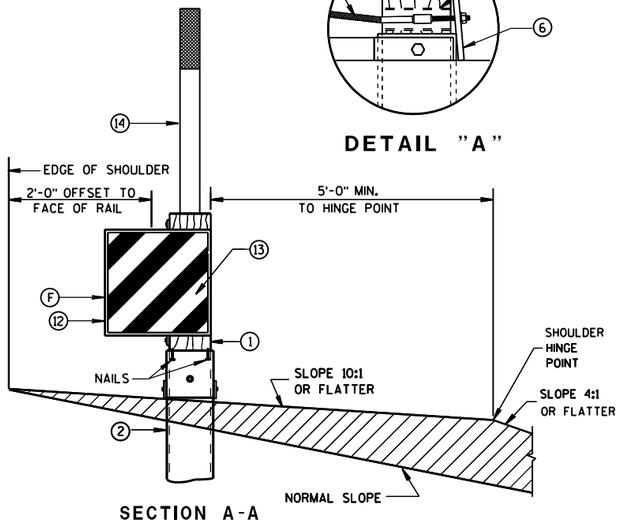




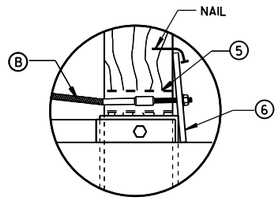
SECTION C-C
TYPICAL AT POST NOS. 3-9



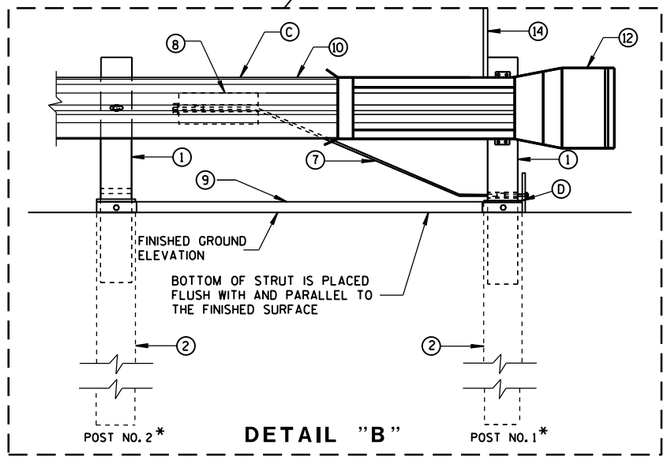
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



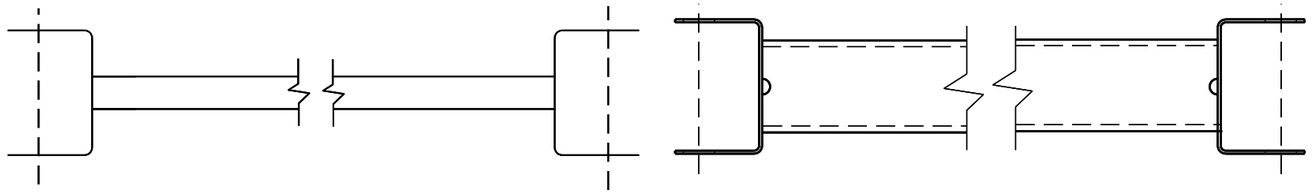
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

S.D.D. 14 B 44-2a

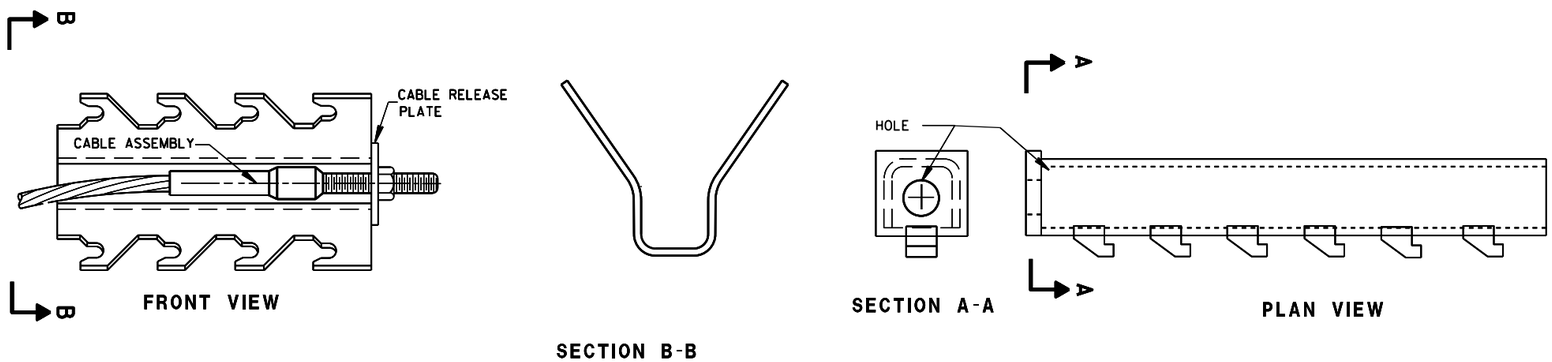
S.D.D. 14 B 44-2a



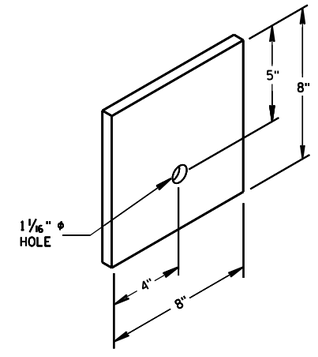
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



GENERIC ANCHOR CABLE BOX (8) (H)

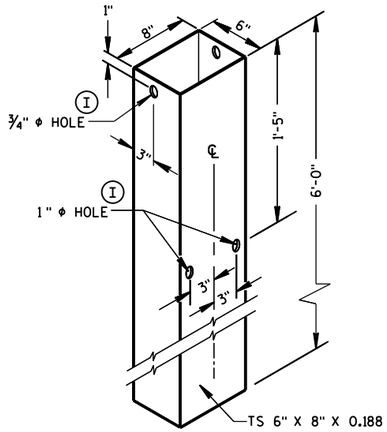


BEARING PLATE (6)

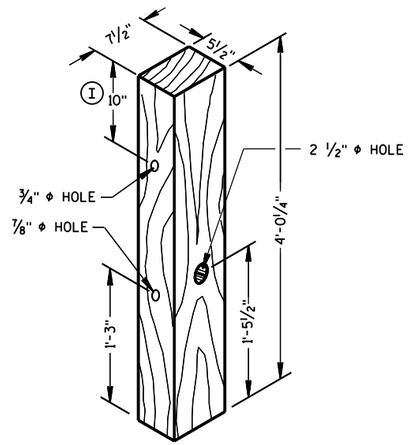
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 44-2b

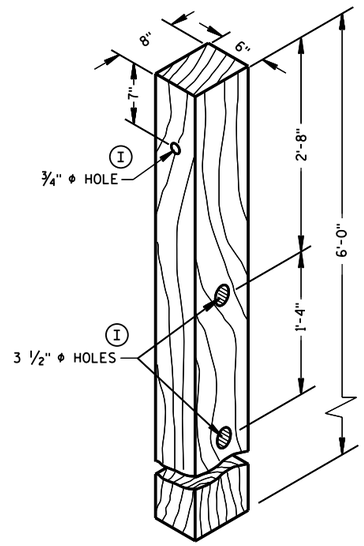


FOUNDATION TUBE (2)



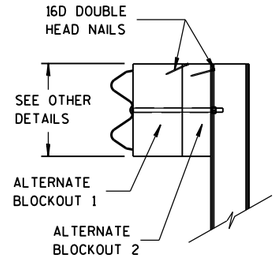
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

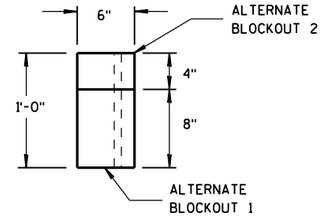


POSTS NUMBER 3-9

WOOD CRT POST (3)

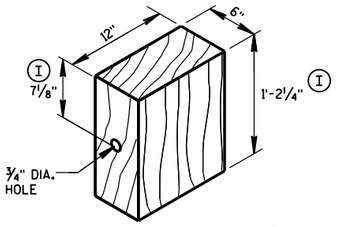


SIDE VIEW



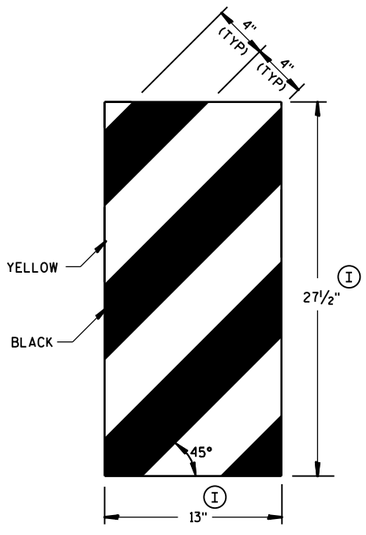
TOP VIEW

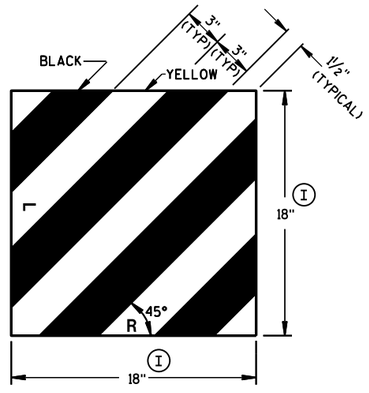
ALTERNATE WOOD BLOCKOUT DETAIL



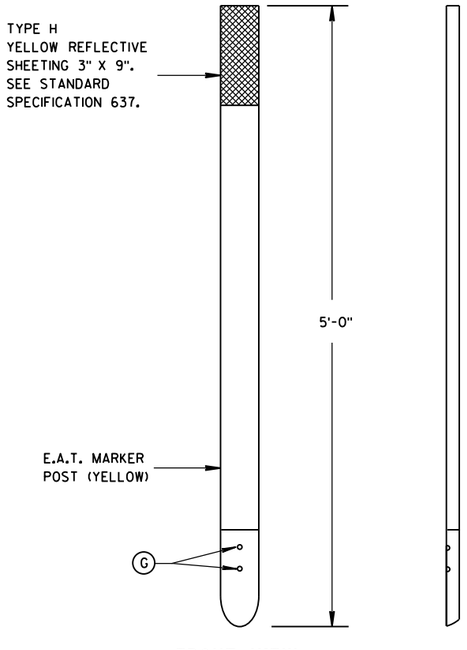
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





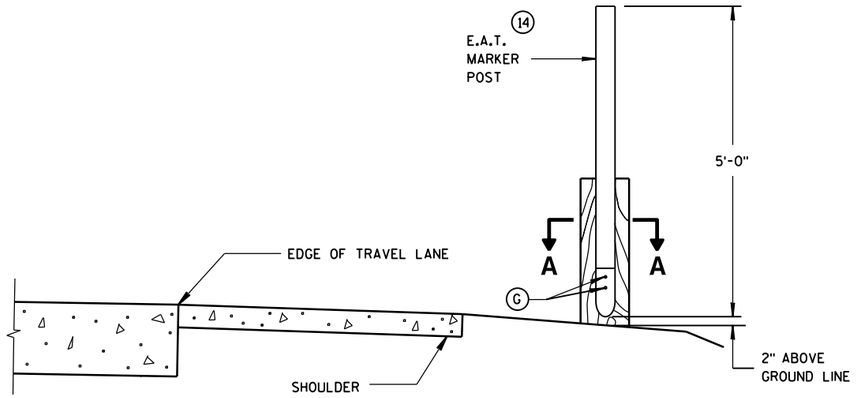
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

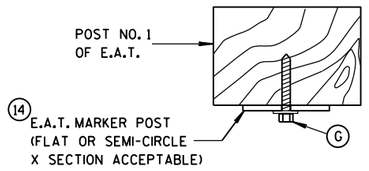
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

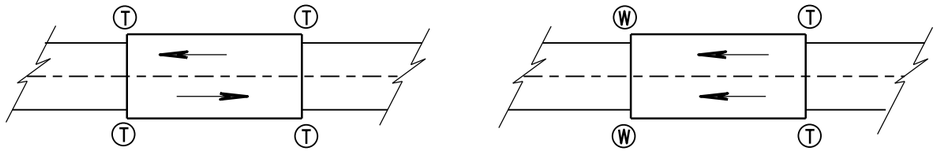
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

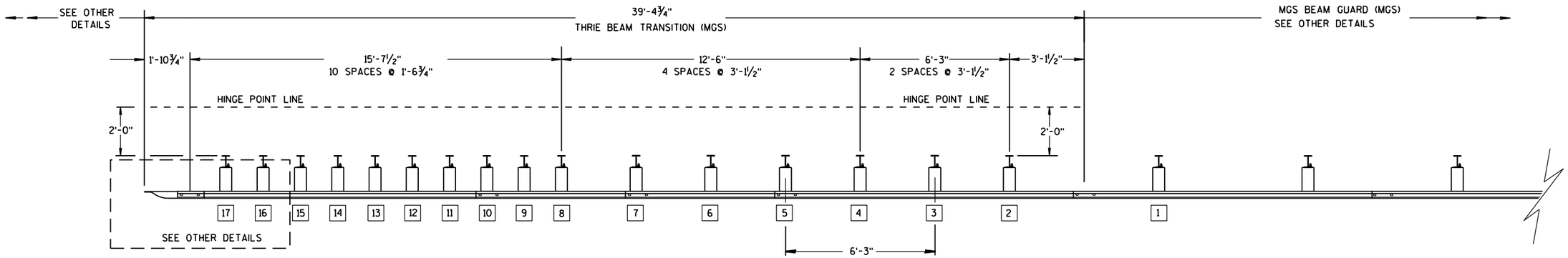
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

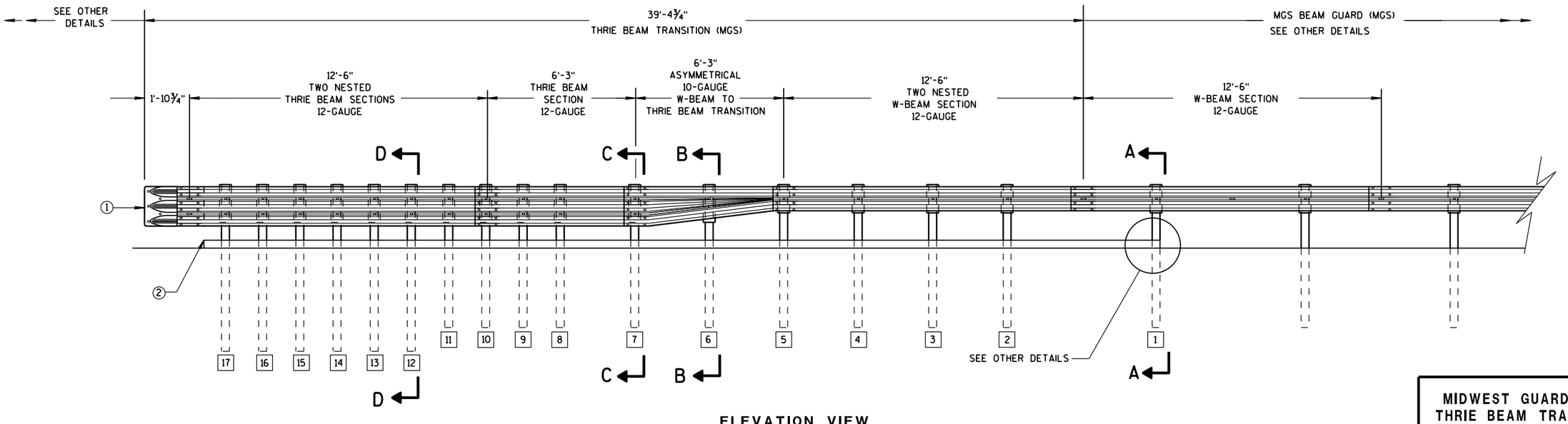
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI 97

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S.D.D. 14 B 45-4a

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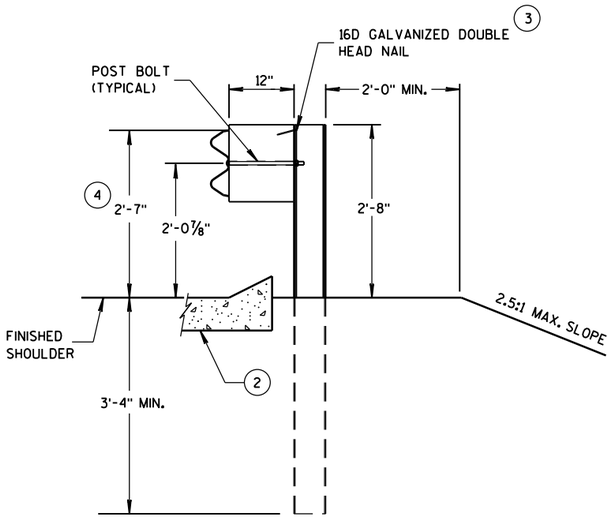
S.D.D. 14 B 45-4a

GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE_FEATURE SEE PLAN FOR INFORMATION.

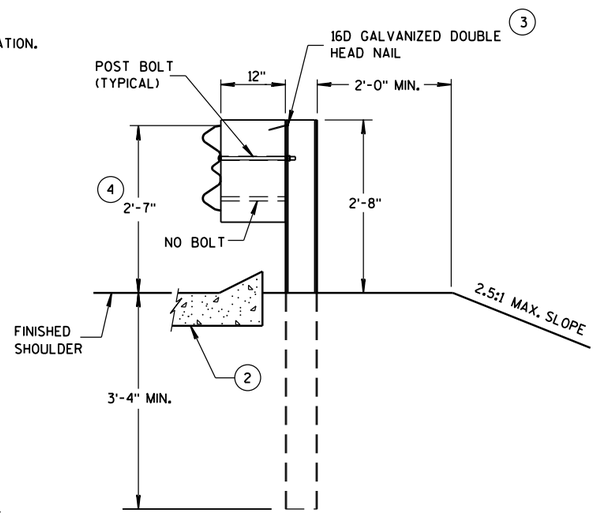
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



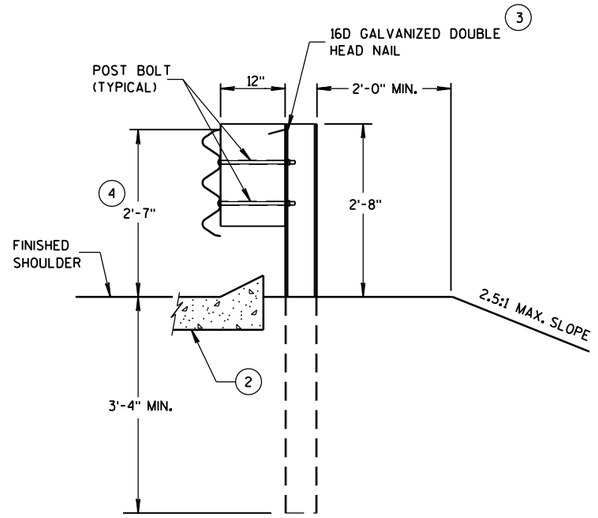
SECTION A-A

POSTS 1-5



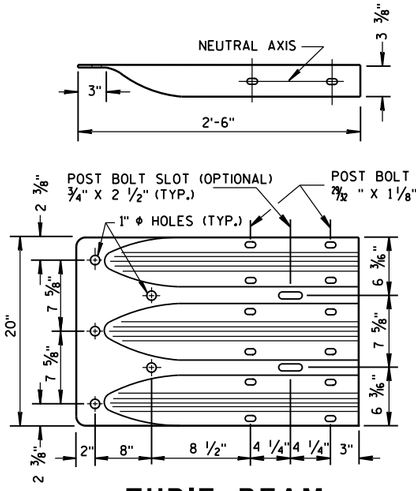
SECTION B-B

POST 6

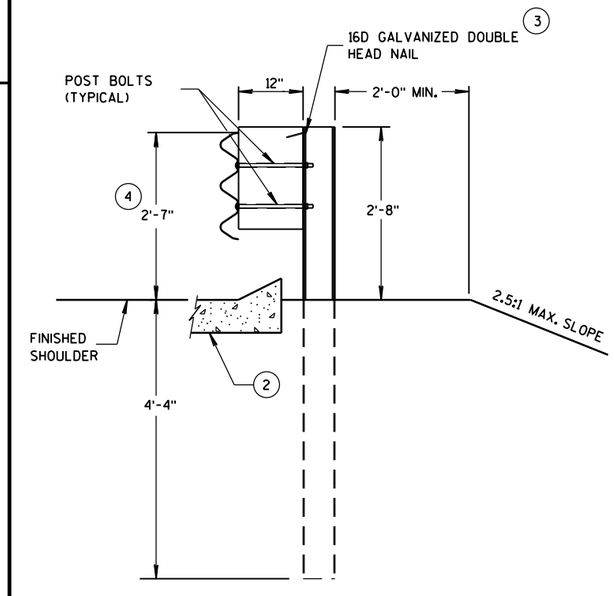


SECTION C-C

POSTS 7-11

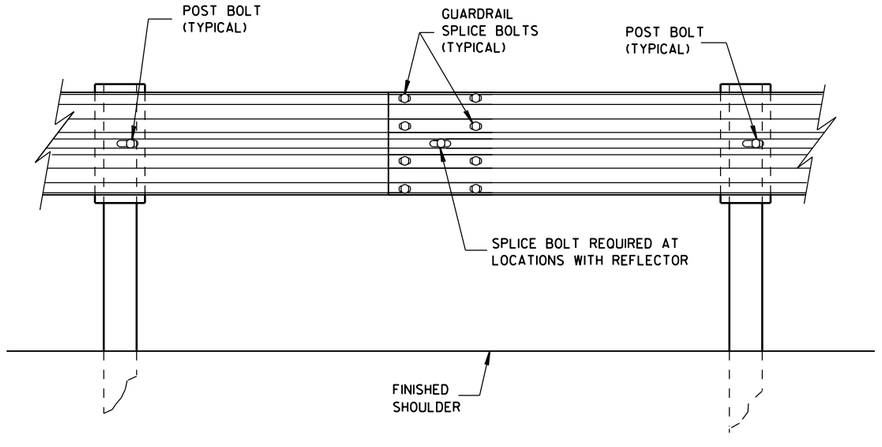


THRIE BEAM TERMINAL CONNECTOR



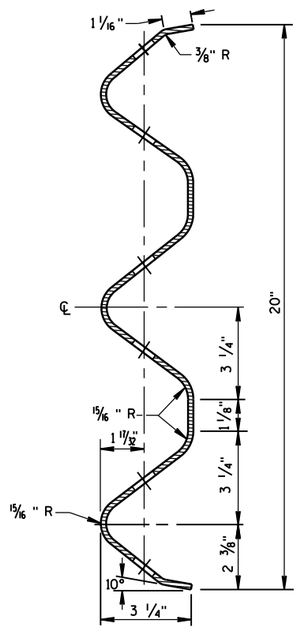
SECTION D-D

POSTS 12-17



SPLICE DETAIL

PLATE WASHER DETAIL



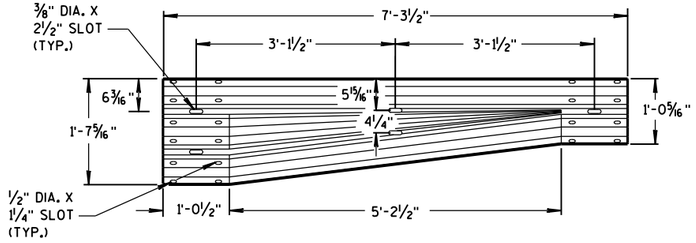
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

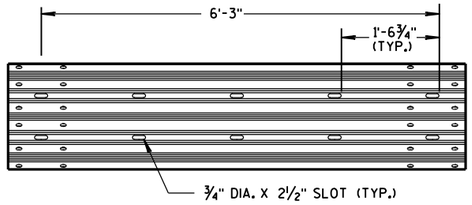
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

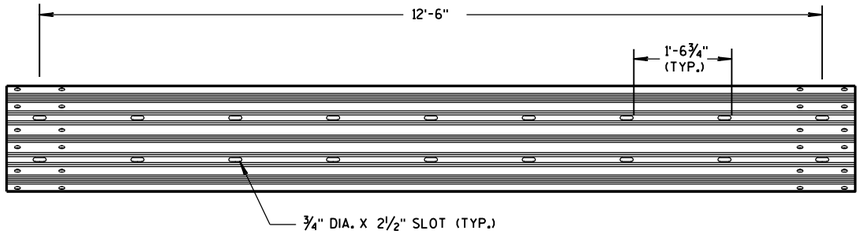
S.D.D. 14 B 45-4b



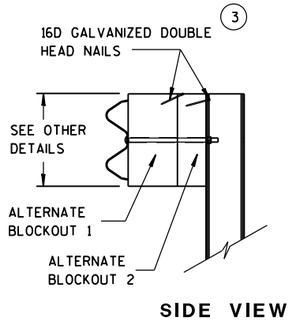
W-BEAM TO THRIE BEAM TRANSITION SECTION



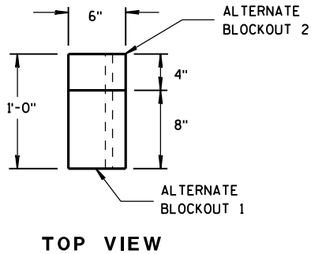
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

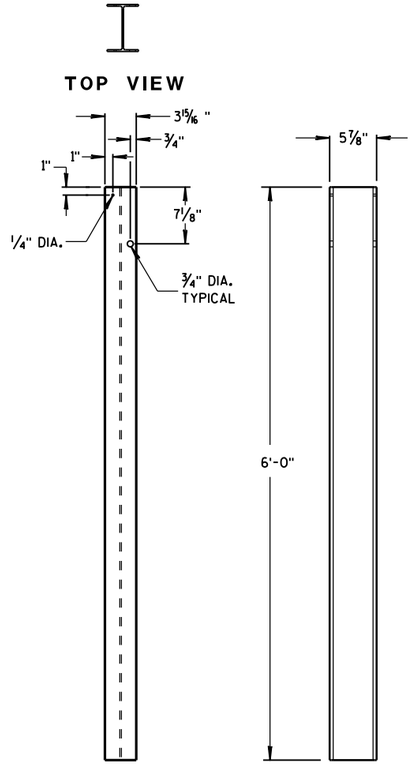


SIDE VIEW



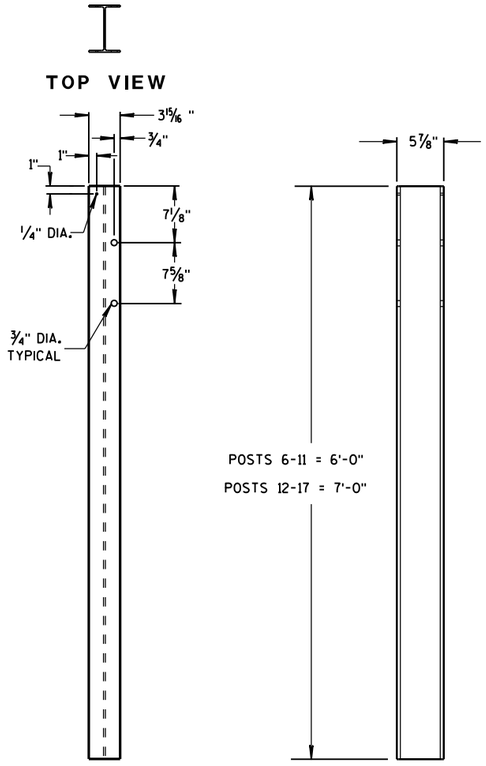
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



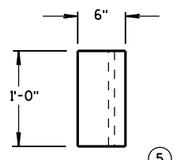
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5

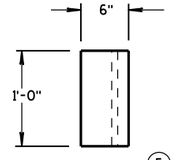


FRONT VIEW SIDE VIEW

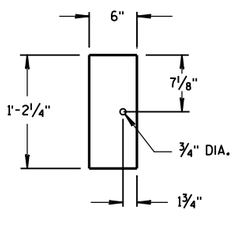
STEEL POSTS 6-17



TOP VIEW (5)

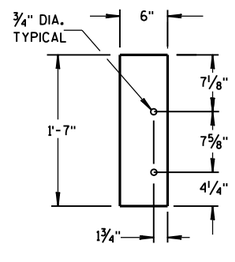


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

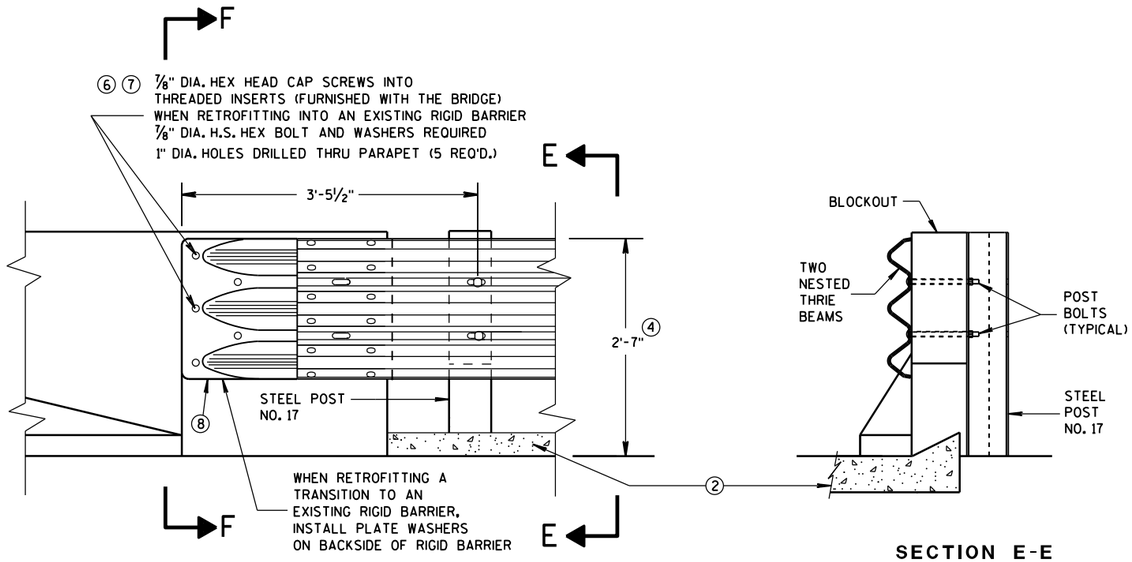
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-4c
S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

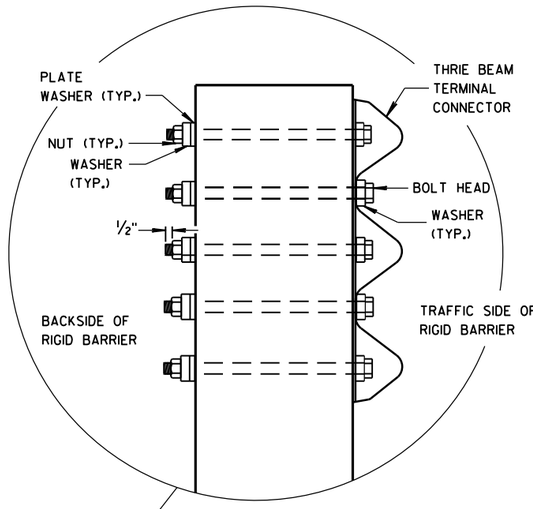
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

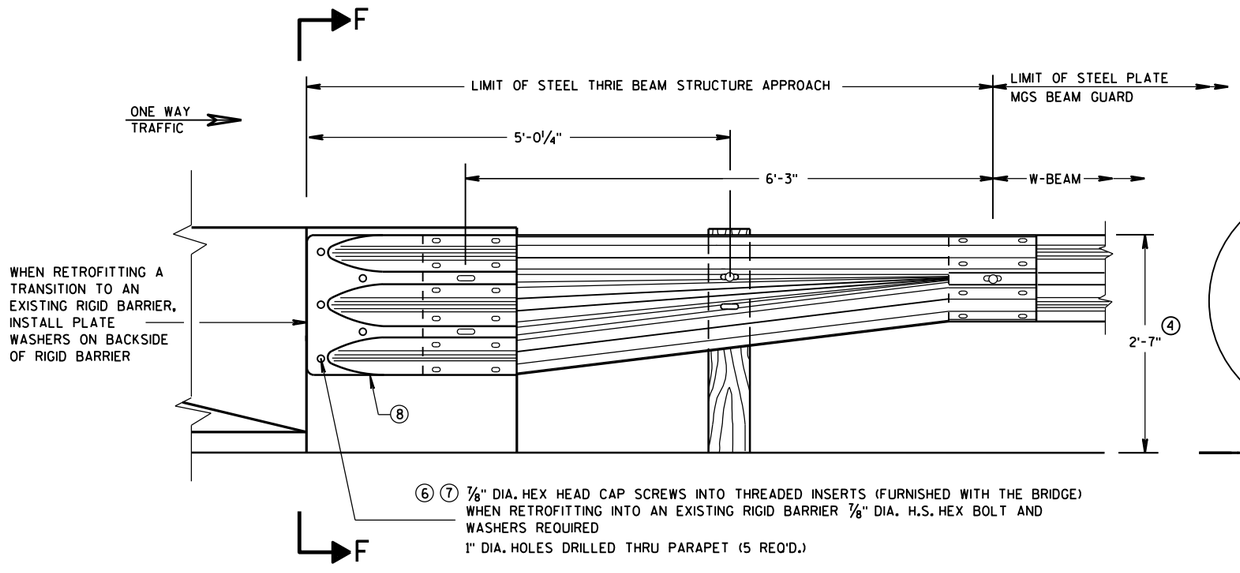
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

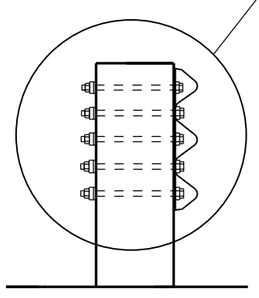
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

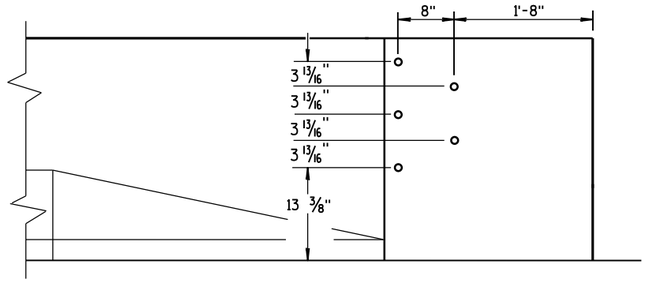




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 45-4d

6

S.D.D. 14 B 45-4d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

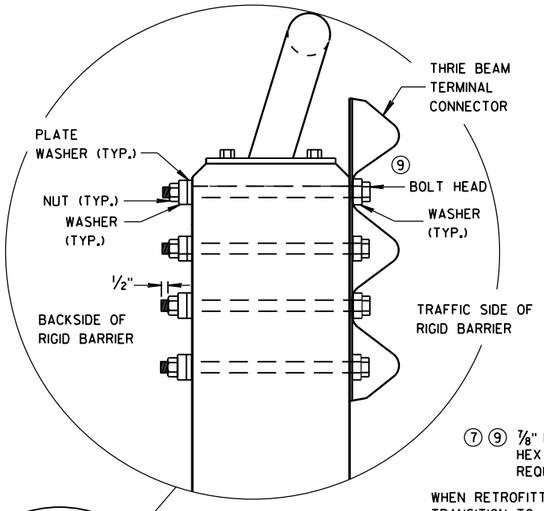
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

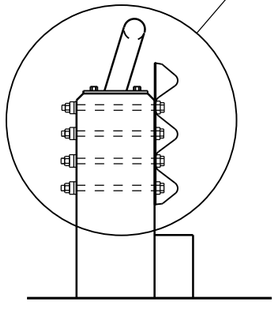
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

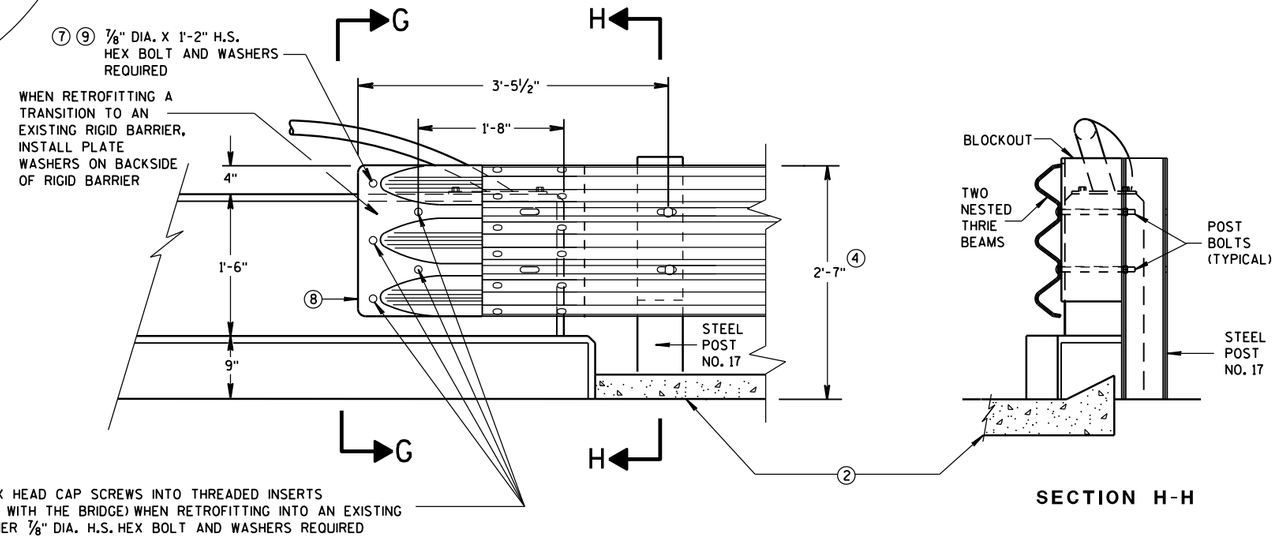
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





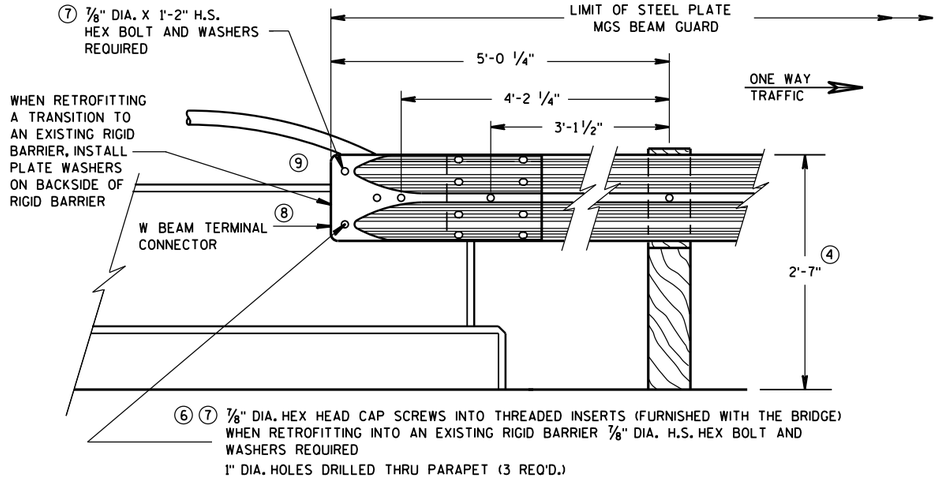
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
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S.D.D. 14 B 45-4e

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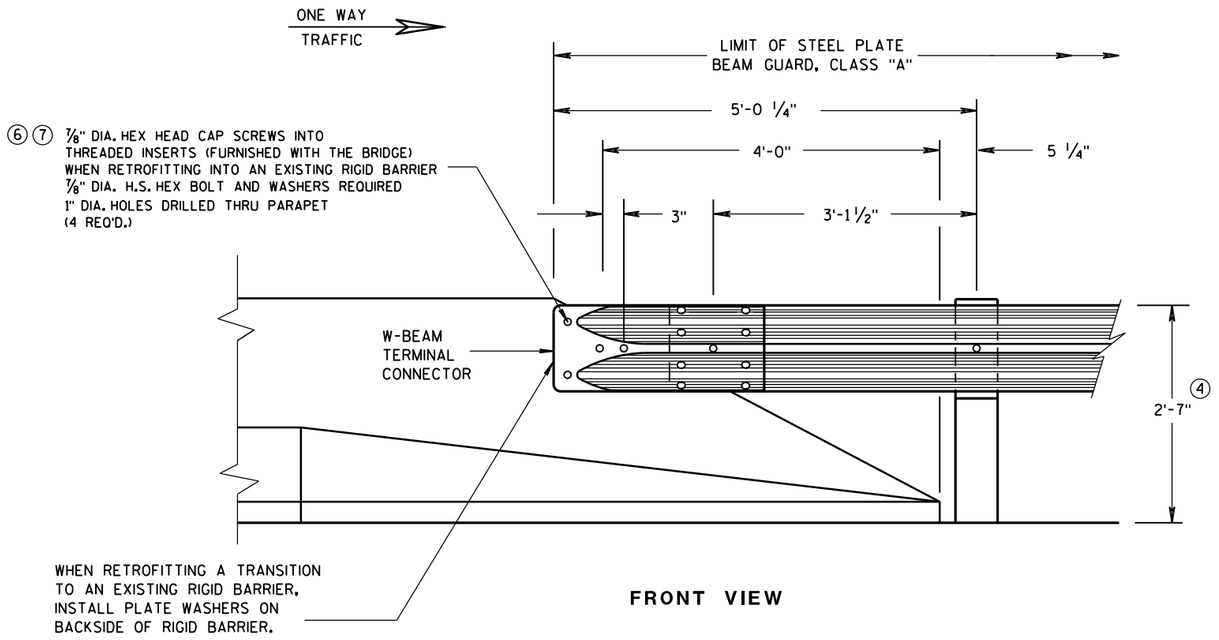


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

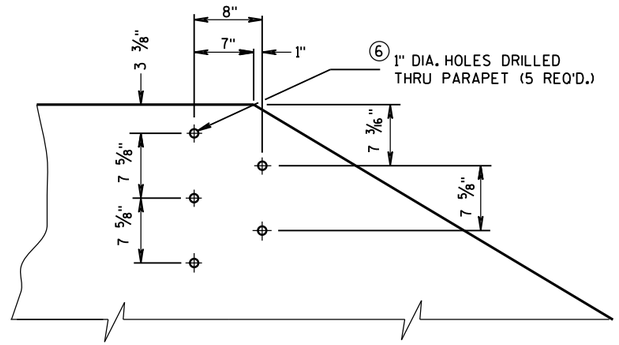
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

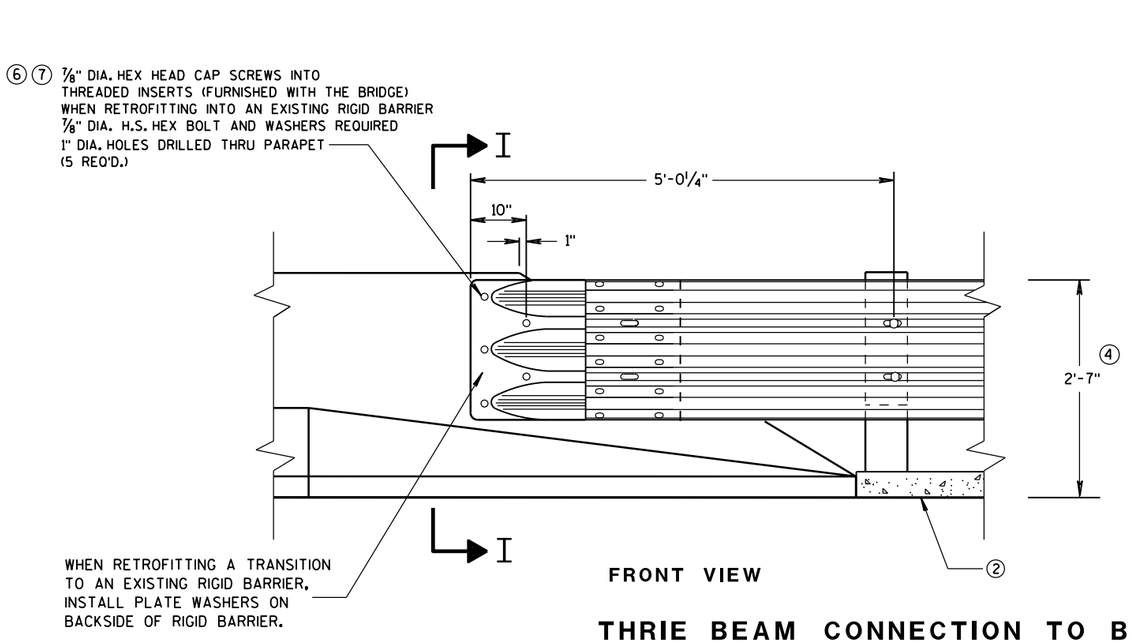
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

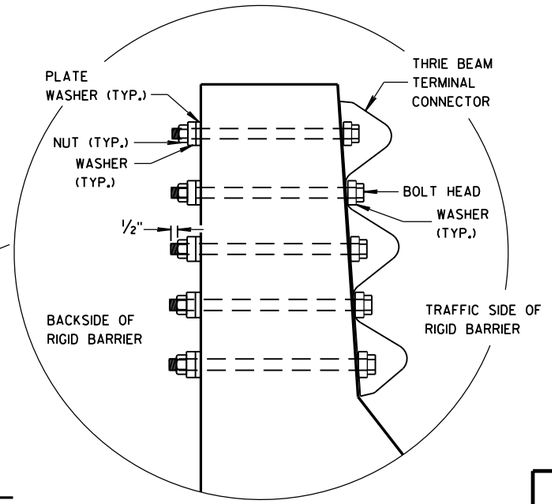


DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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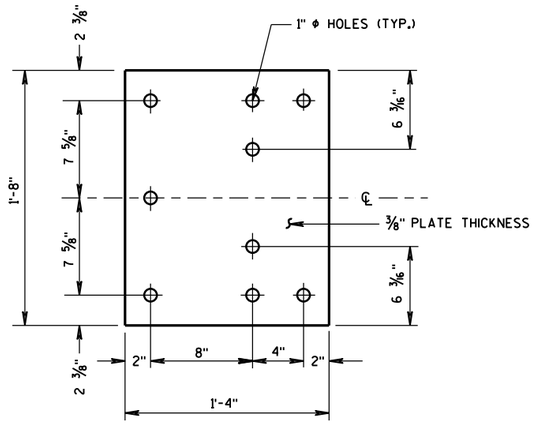
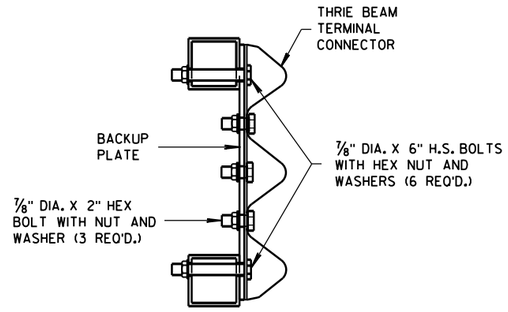
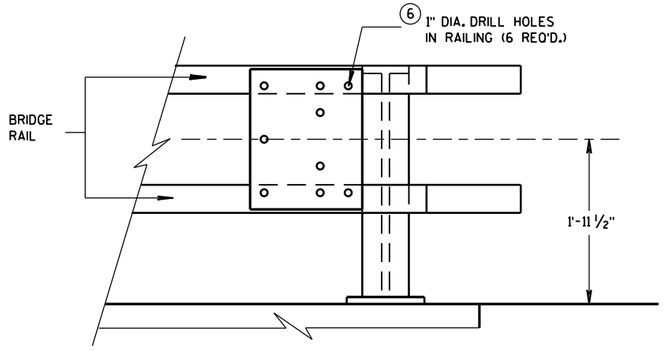


BACK-UP PLATE DETAIL



SECTION J-J

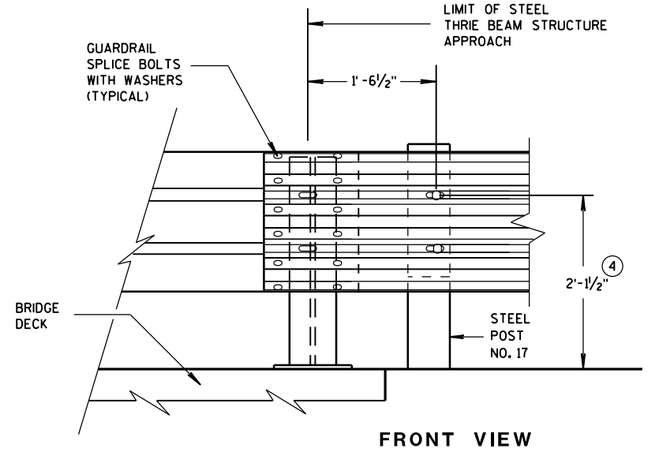


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

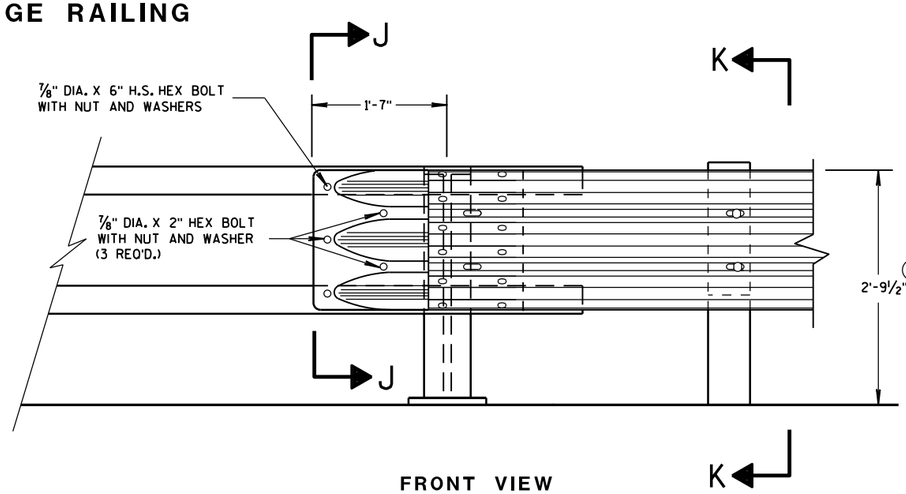
4 TOLERANCE FOR TOP OF BEAM IS ± 1".

6 DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

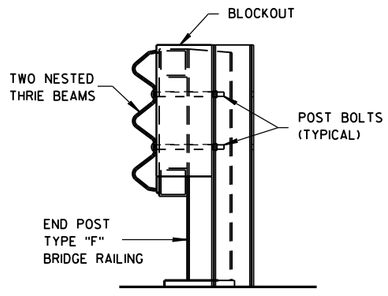


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
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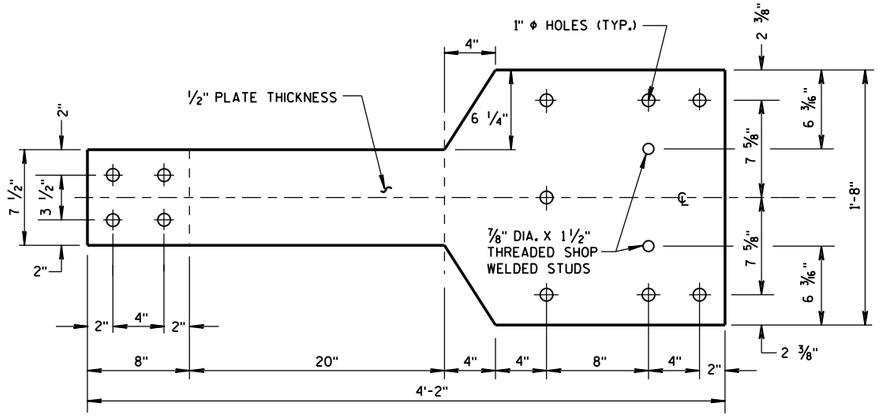
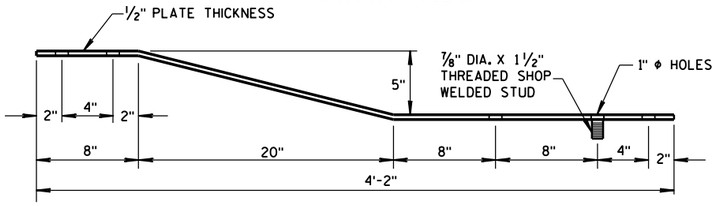
GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

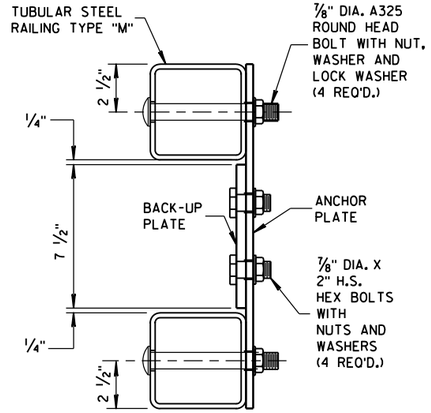


FRONT VIEW

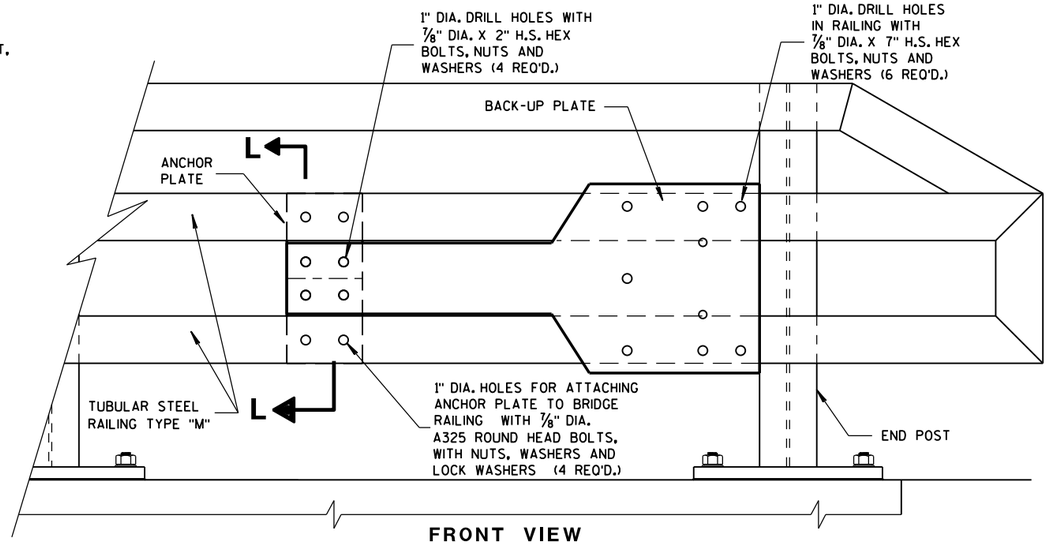


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

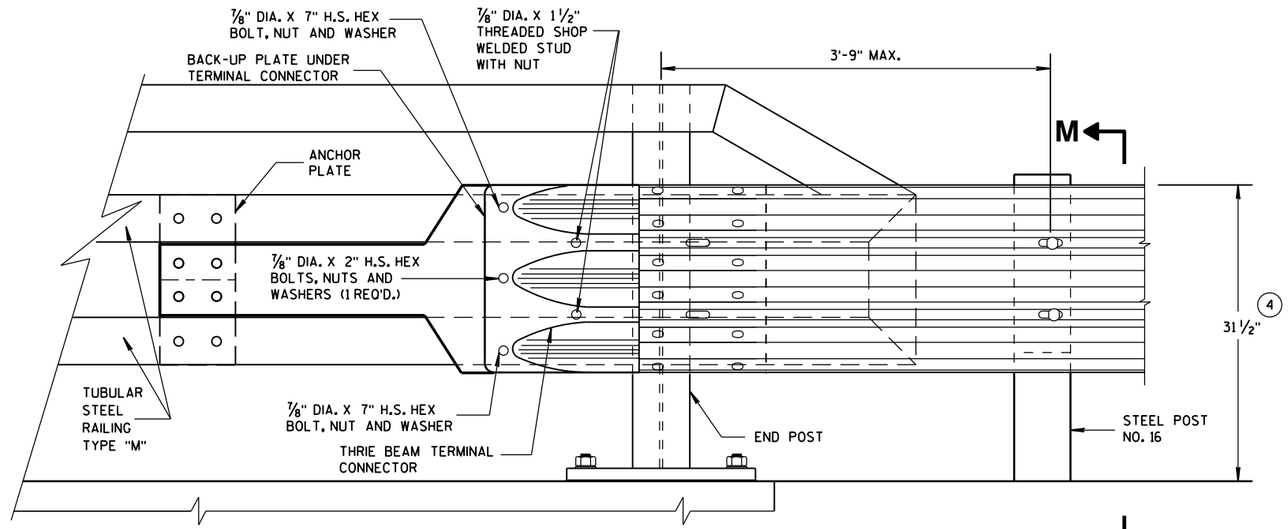


SECTION L-L

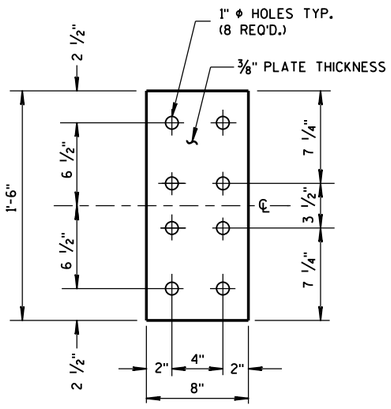


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

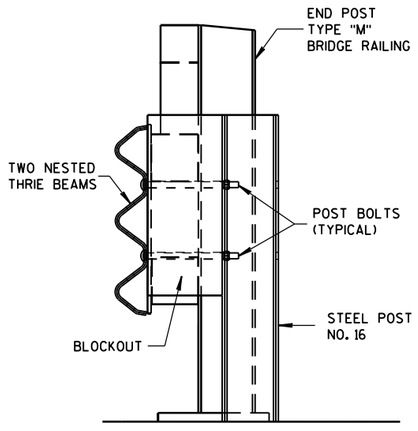


FRONT VIEW

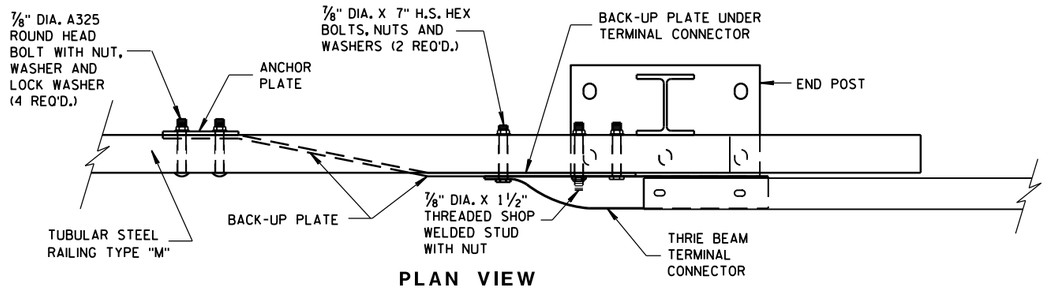


FRONT VIEW

ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
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June, 2015	/S/ Jerry H. Zogg
DATE	ROADWAY STANDARDS DEVELOPMENT ENGINEER
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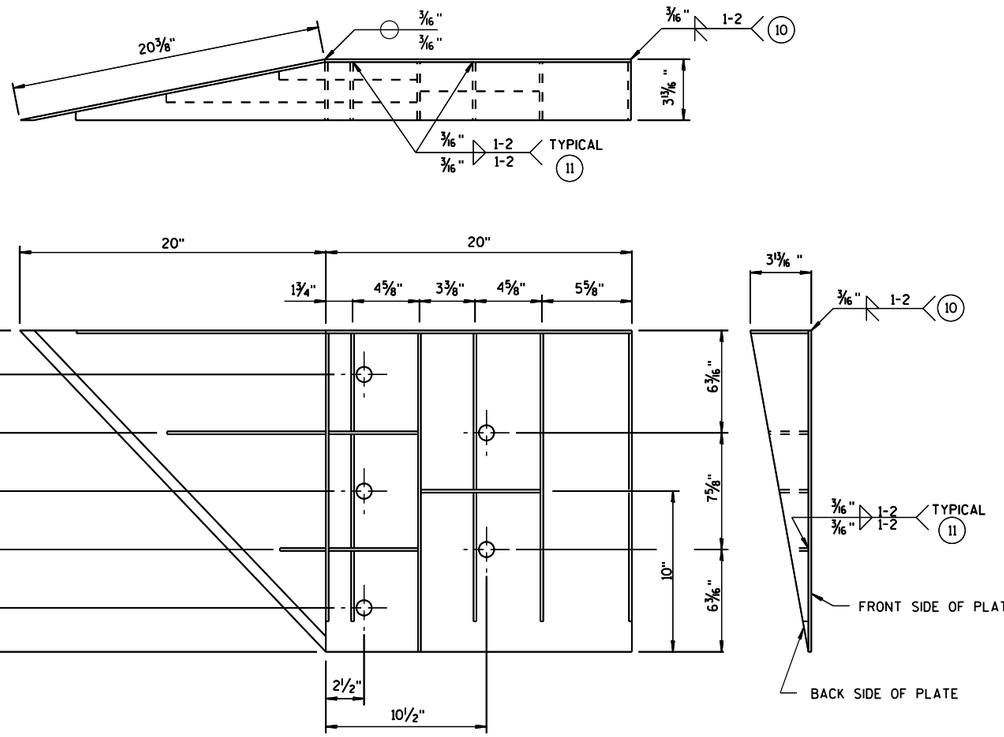

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

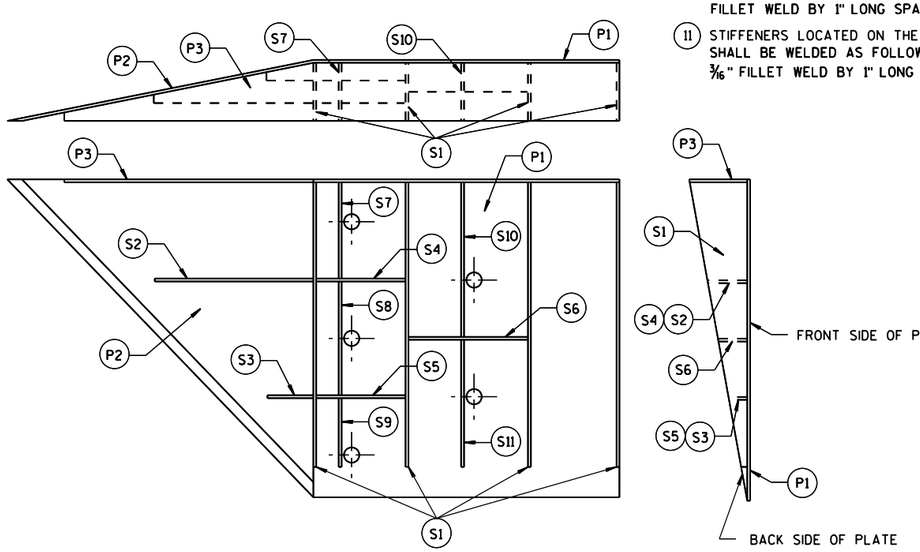

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 3/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 1/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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S.D.D. 14 B 45-4i

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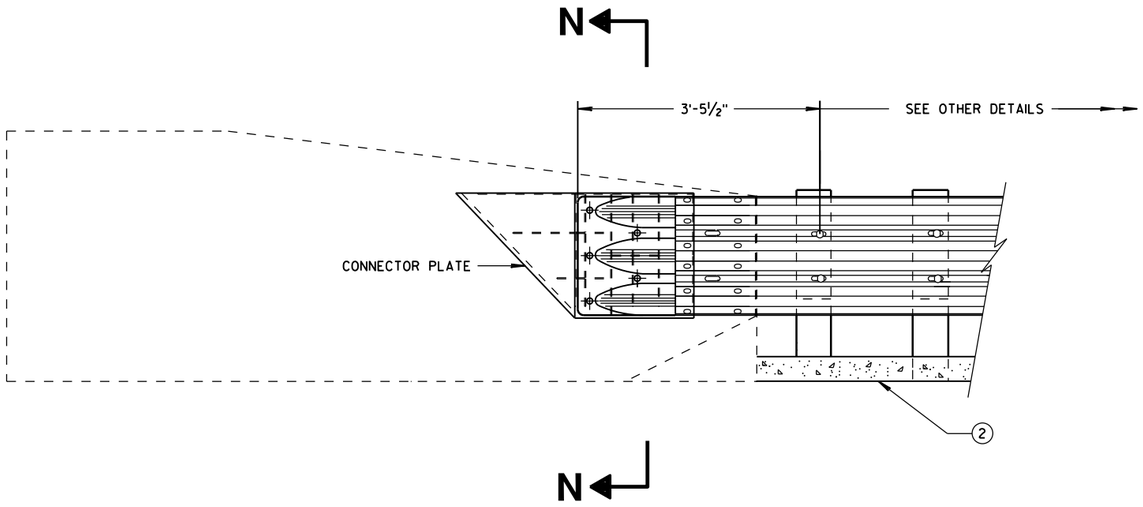
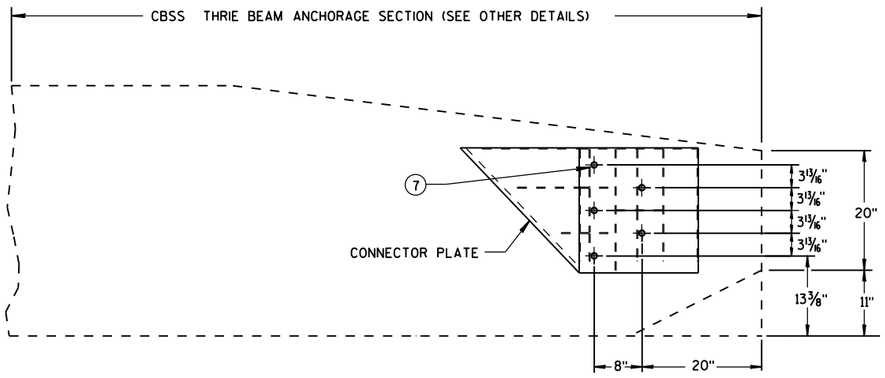
S.D.D. 14 B 45-4i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



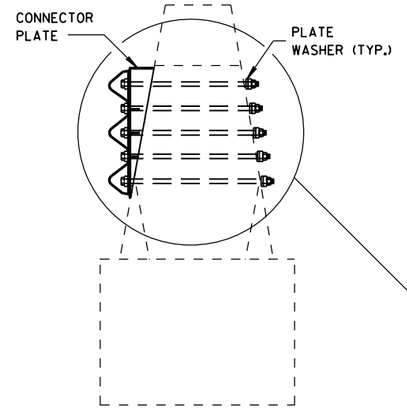
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

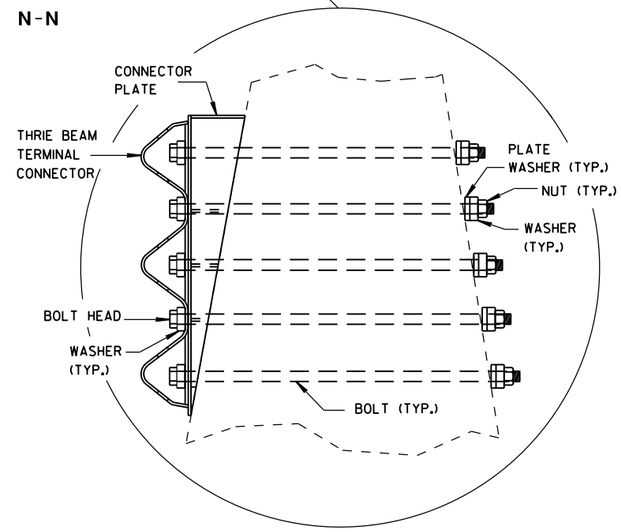
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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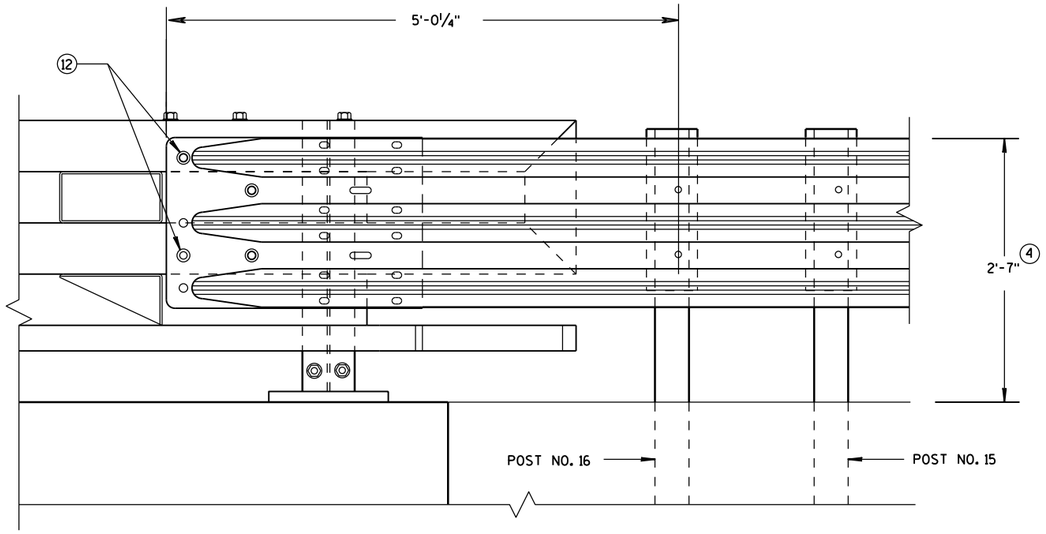
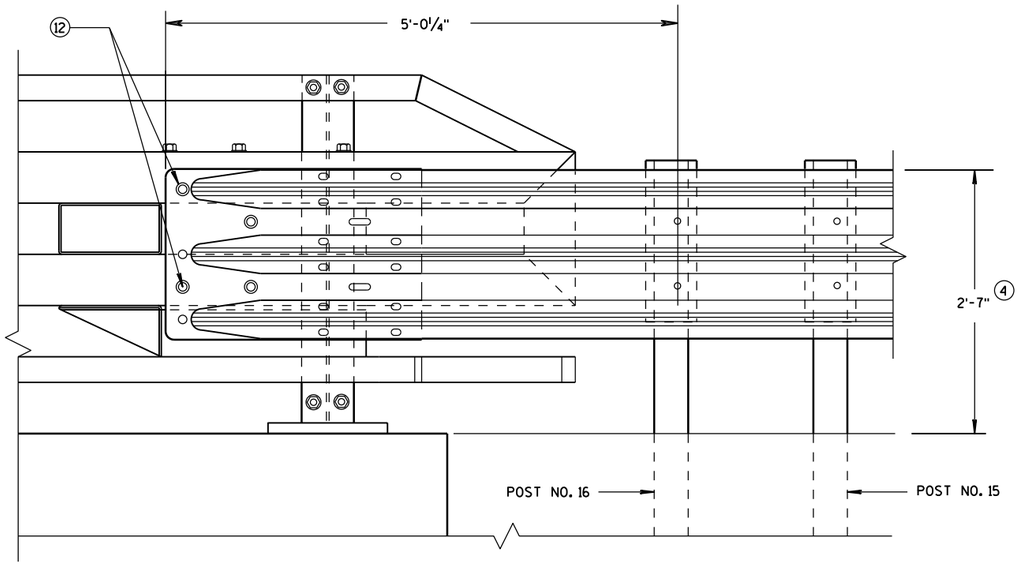


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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June, 2015
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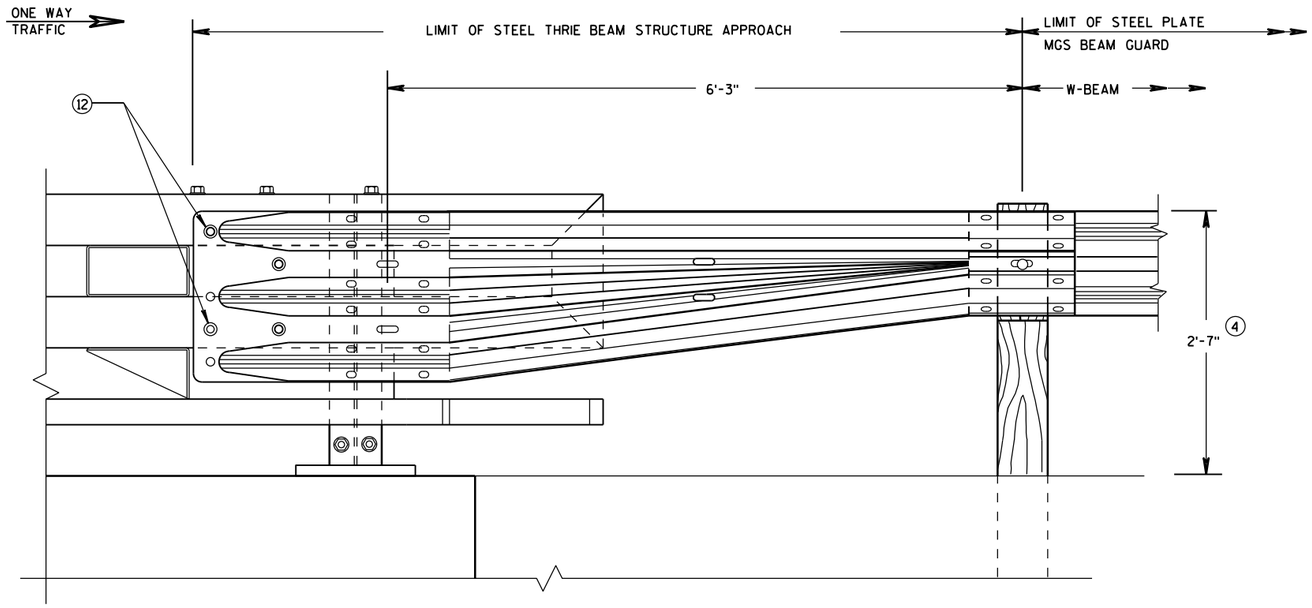
S.D.D. 14 B 45-4k



FRONT VIEW

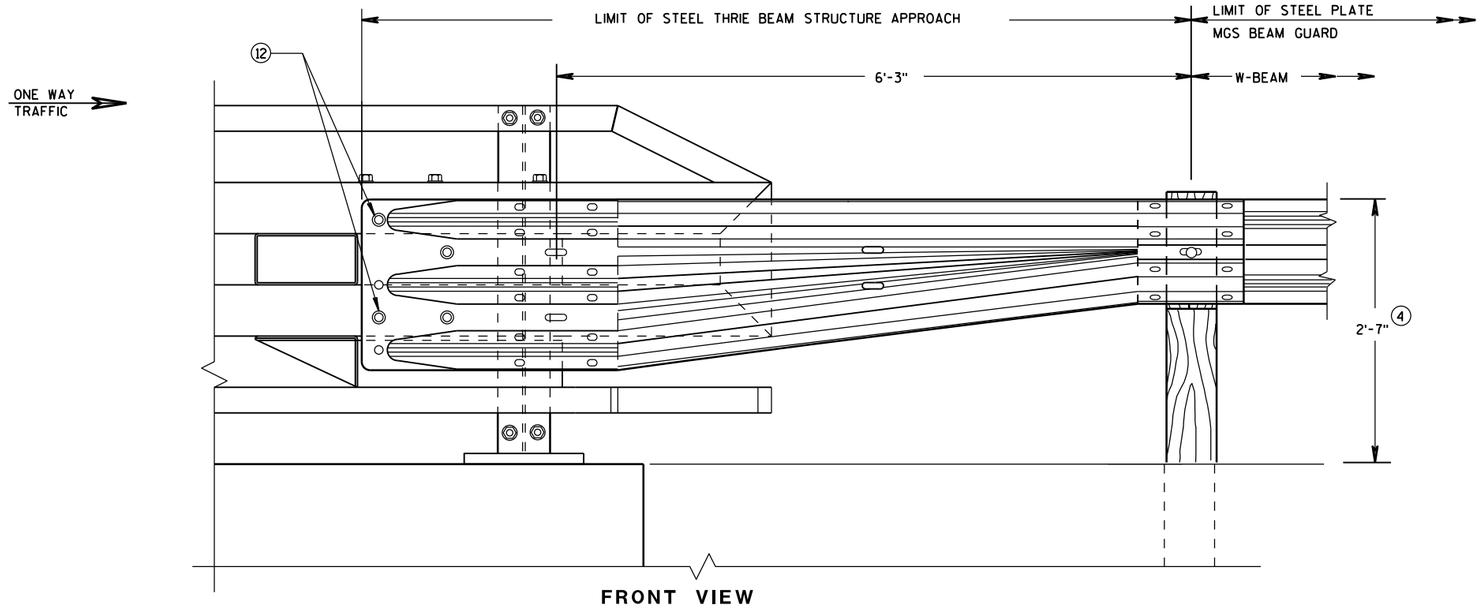
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND ½-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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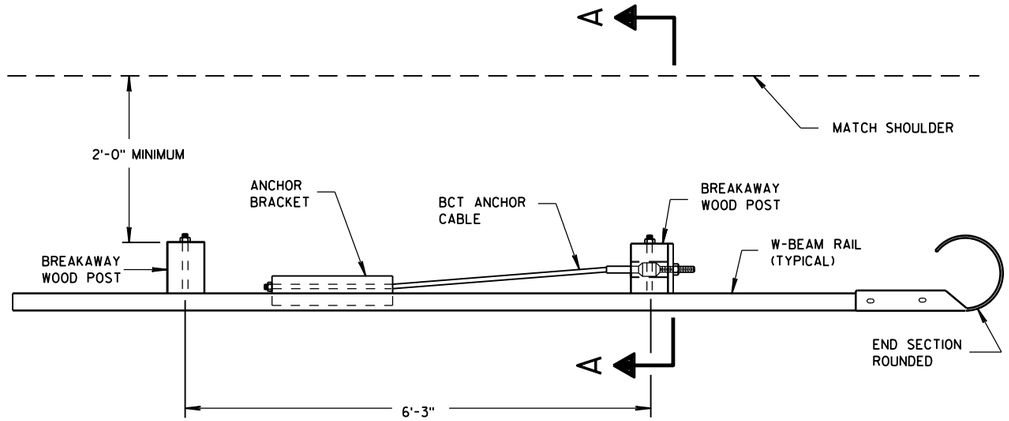
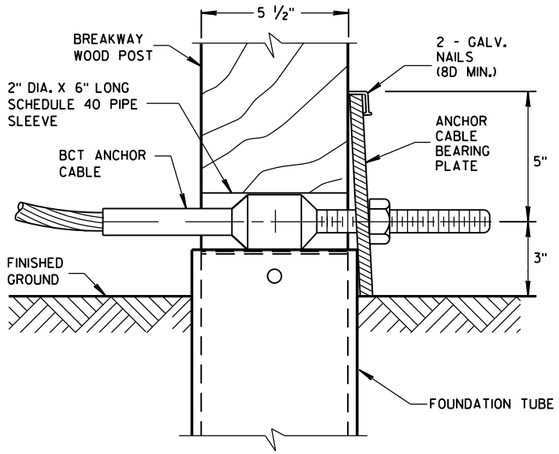


PLAN VIEW



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

END SECTION BOLTS AND NUTS HAVE THE SAME MATERIAL REQUIREMENTS AS SPLICE BOLTS.

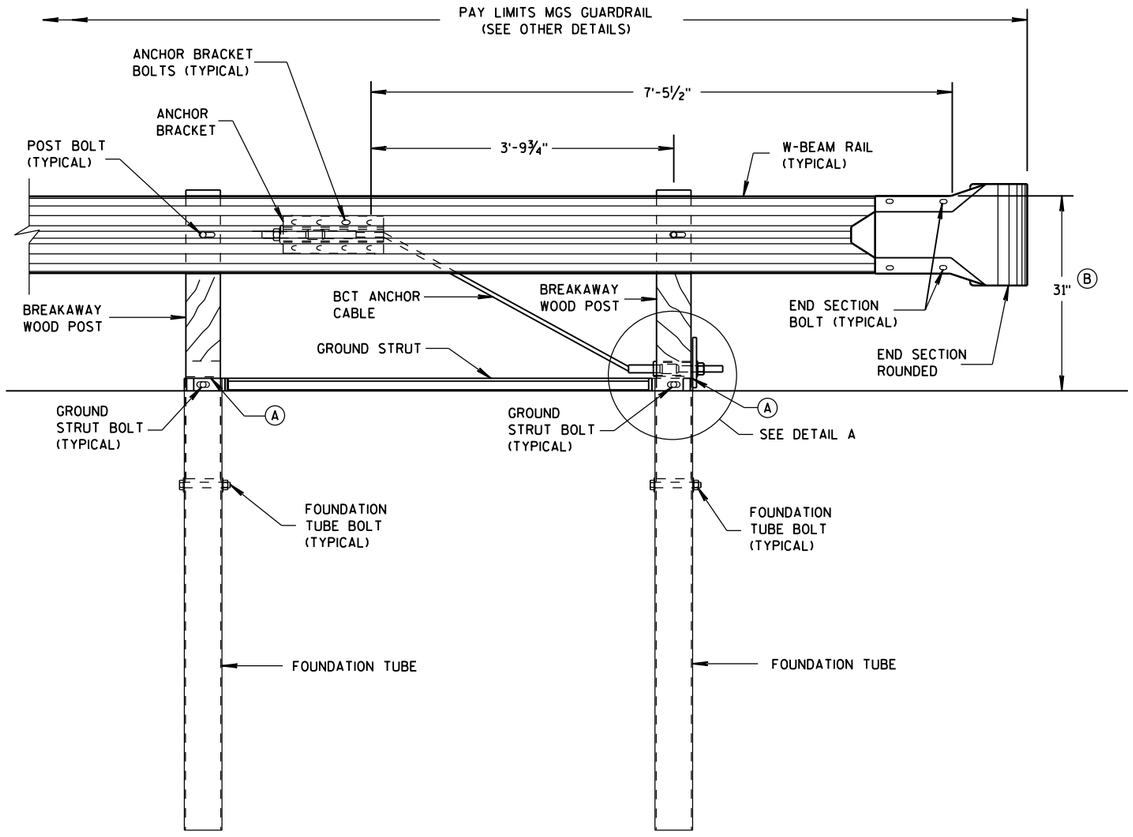
FOUNDATION TUBE BOLTS ARE ⅞" DIAMETER ASTM A307 HEX HEAD BOLT. FOUNDATION TUBE BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅞" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

ANCHOR BRACKET AND GROUND STRUT BOLTS ARE A ⅝" DIAMETER ASTM A307 HEX HEAD BOLT. ANCHOR BRACKET BOLTS REQUIRE ASTM A563 A NUT AND TWO ASTM F844 ⅝" DIAMETER FLAT WASHERS. INSTALL ONE WASHER UNDER BOLT HEAD AND ONE WASHER UNDER NUT.

W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

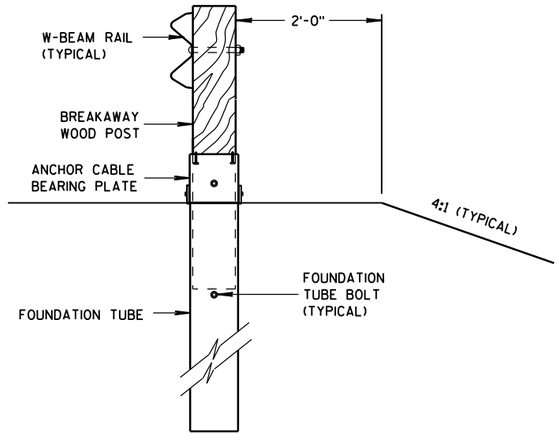
(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".

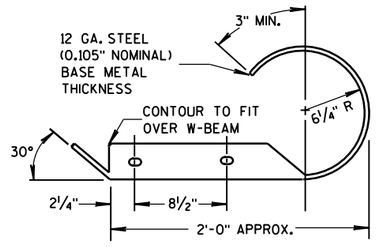


FRONT VIEW

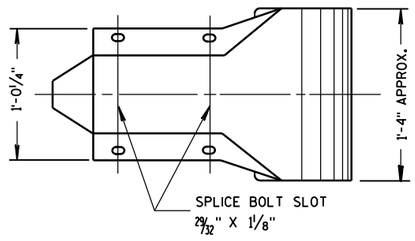
END RAIL DETAIL



SECTION A-A



PLAN VIEW



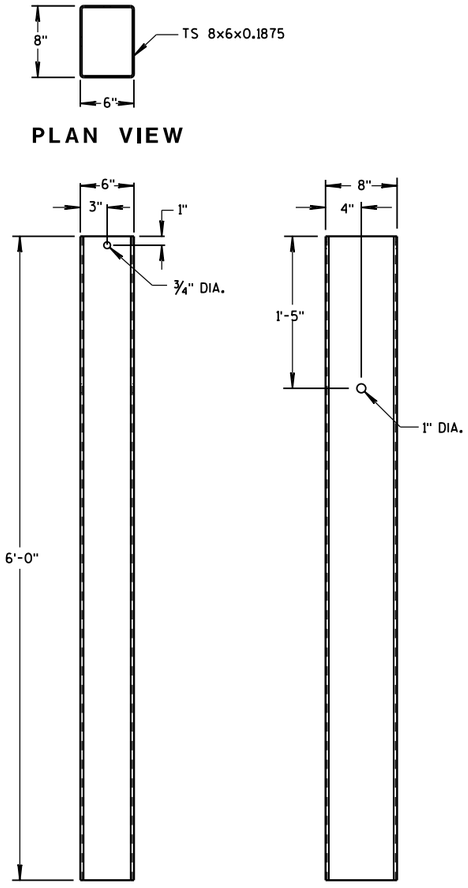
FRONT VIEW

W BEAM END SECTION ROUNDED

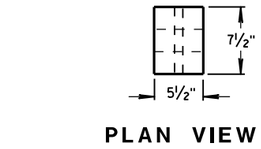
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

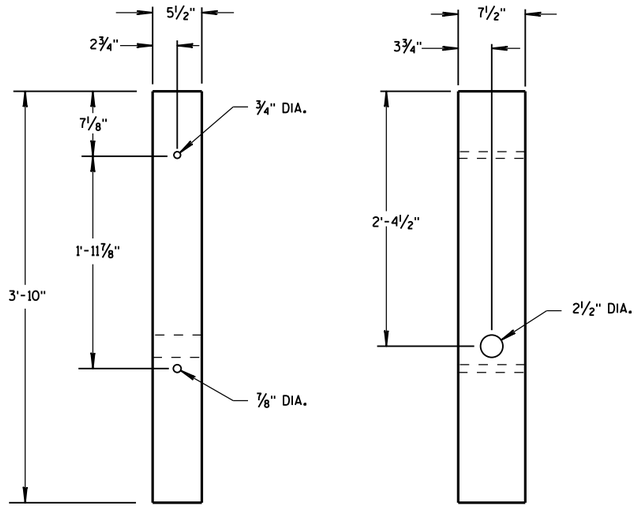
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 47-2a



FOUNDATION TUBE



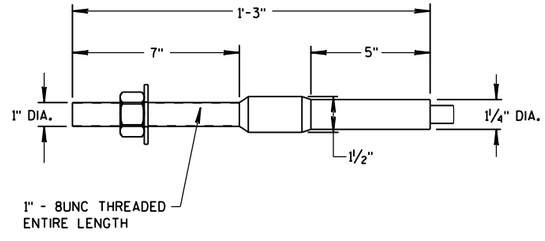


BREAKAWAY WOOD POST

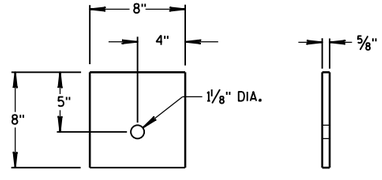
GENERAL NOTES

BCT ANCHOR CABLE IS A ¾" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. TREADED STUD SHALL CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. WIRE ROPE IS TO BE TAUT.

BCT ANCHOR CABLE



DETAIL B



ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 47-2b

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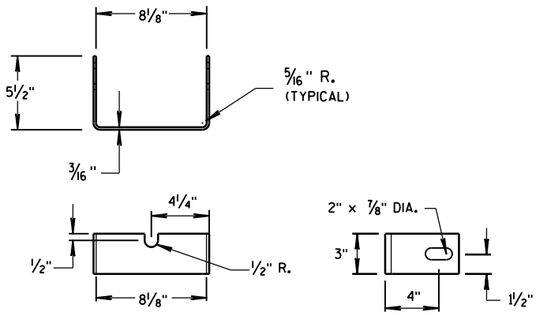
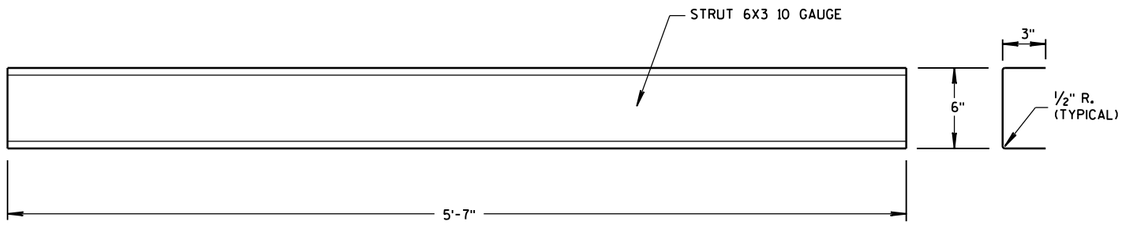
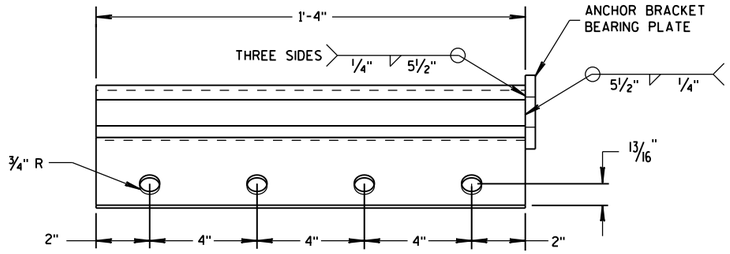
S.D.D. 14 B 47-2b

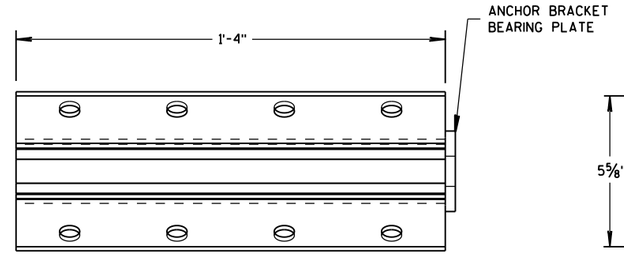


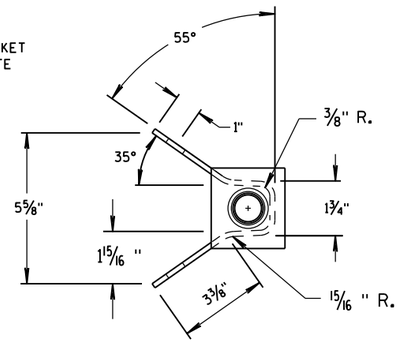
YOKE DETAIL



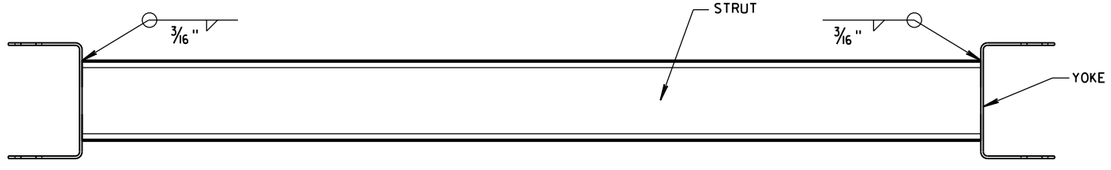
STRUT DETAIL



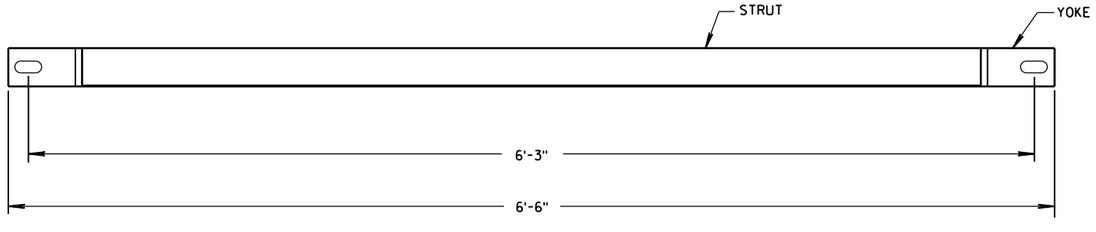




ANCHOR BRACKET

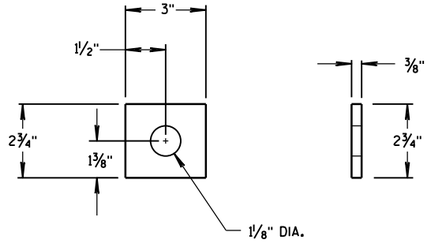


PLAN VIEW



FRONT VIEW

GROUND STRUT DETAIL



ANCHOR BRACKET BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

6

S.D.D. 14 B 47-2c

6

S.D.D. 14 B 47-2c

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.

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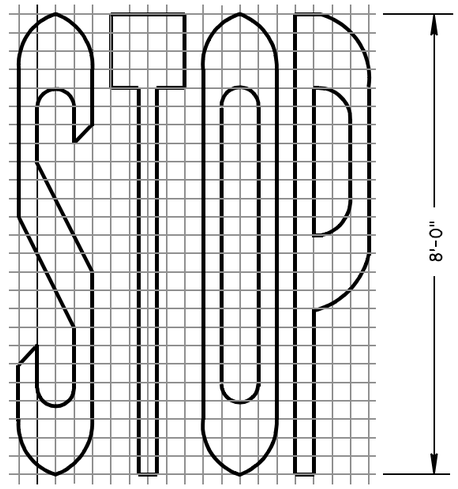
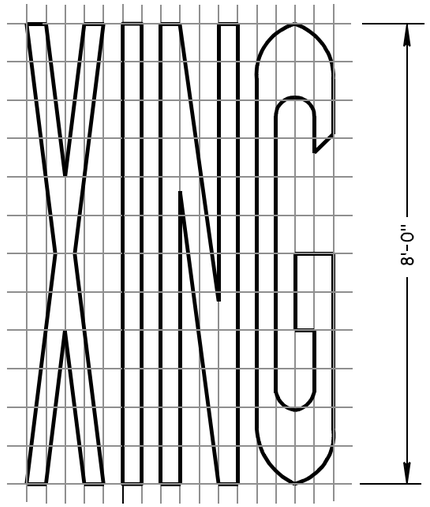
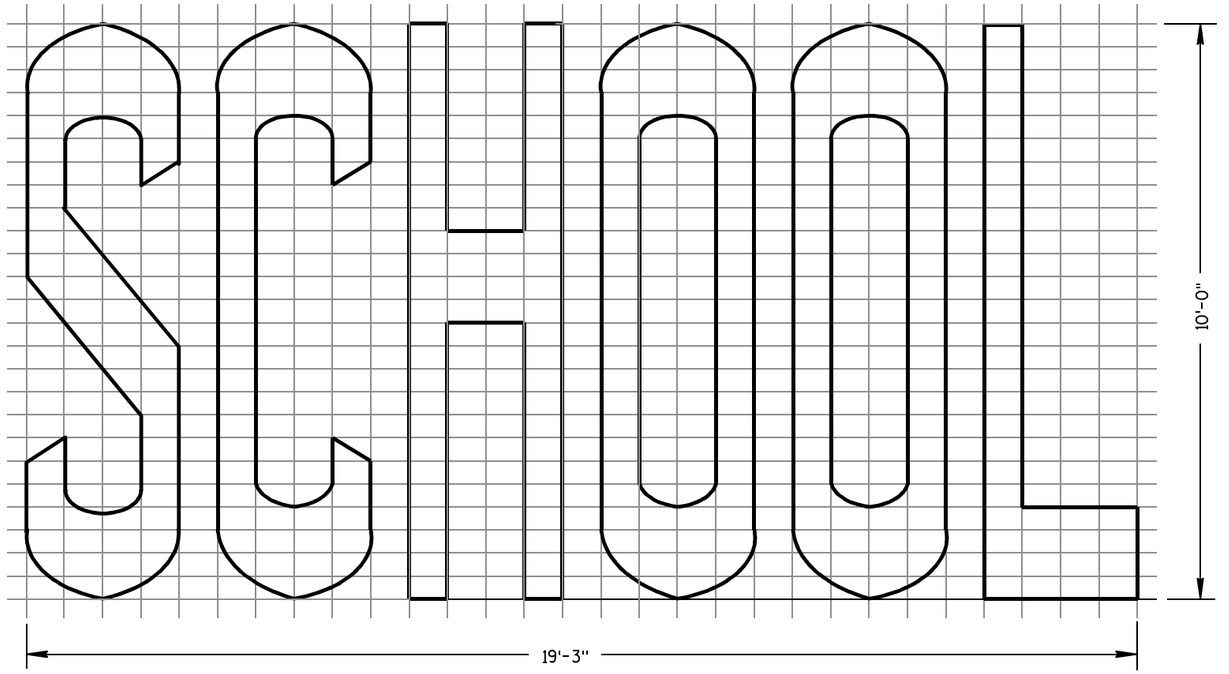
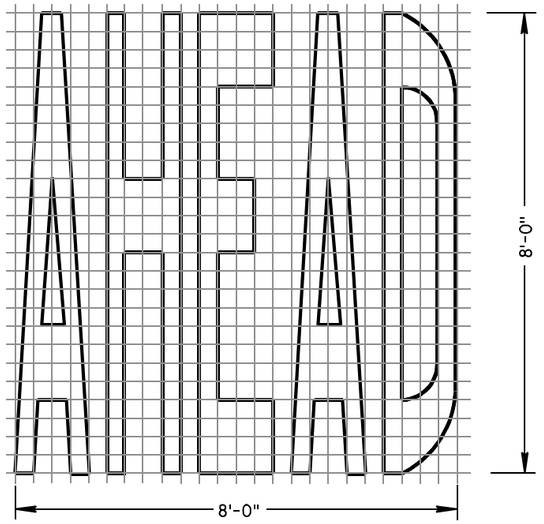
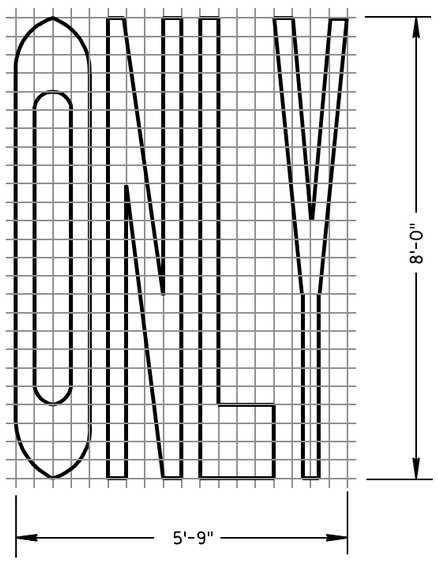


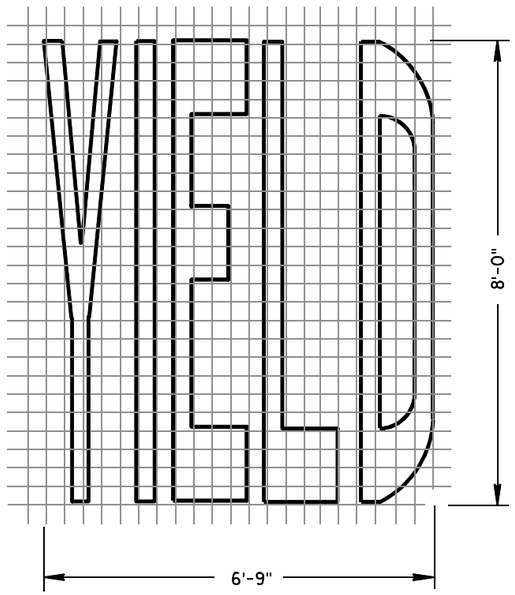


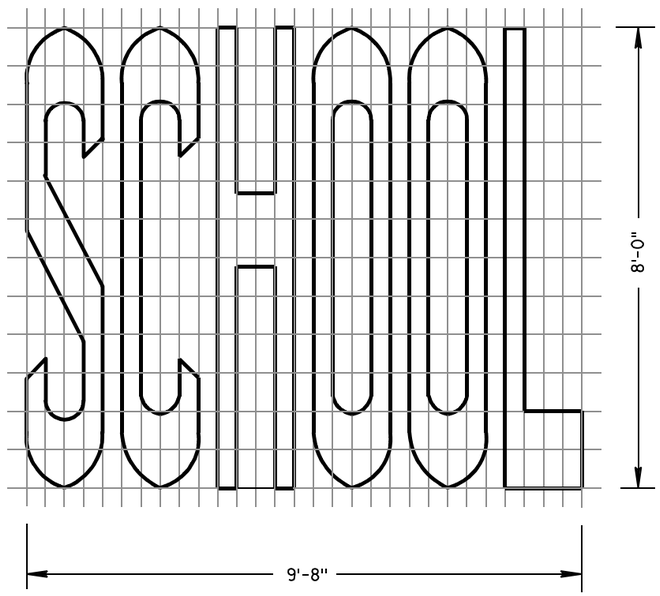


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER — IGN

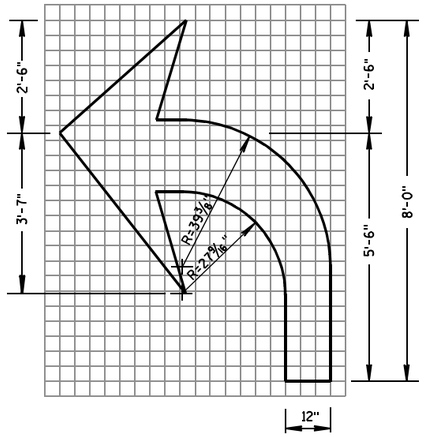
FHWA

6

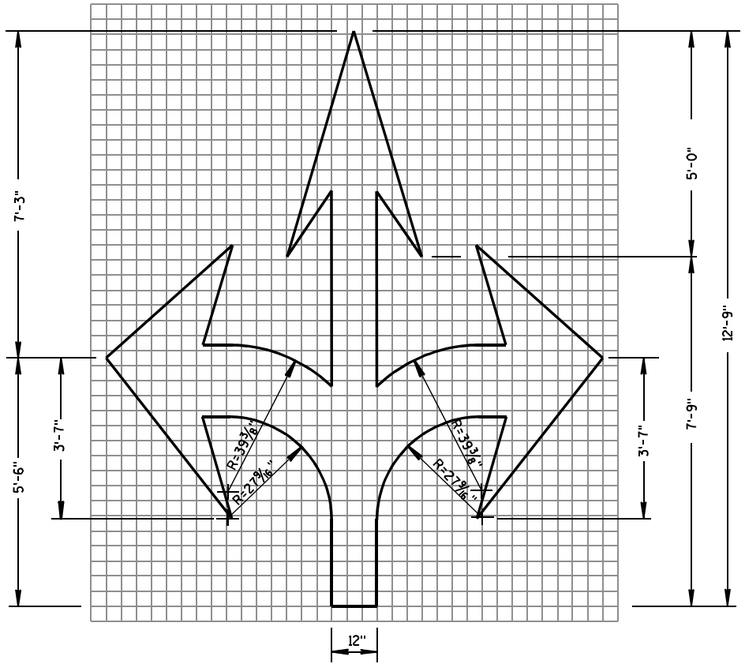
S.D.D. 15 C 7-12b

6

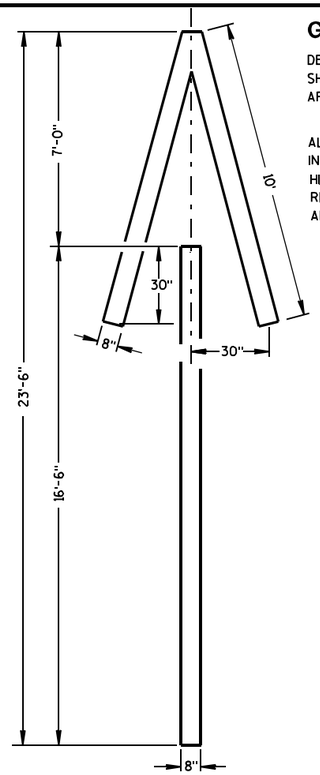
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6



TYPE 4

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.

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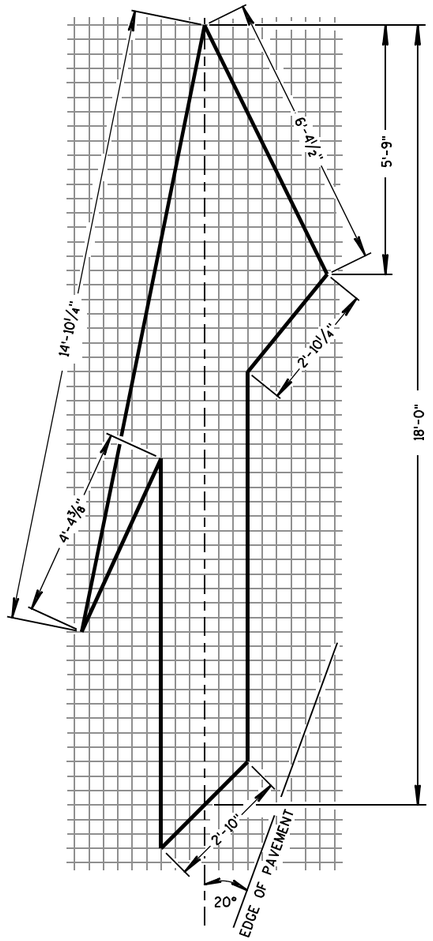
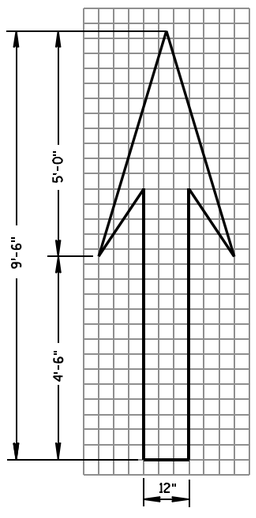
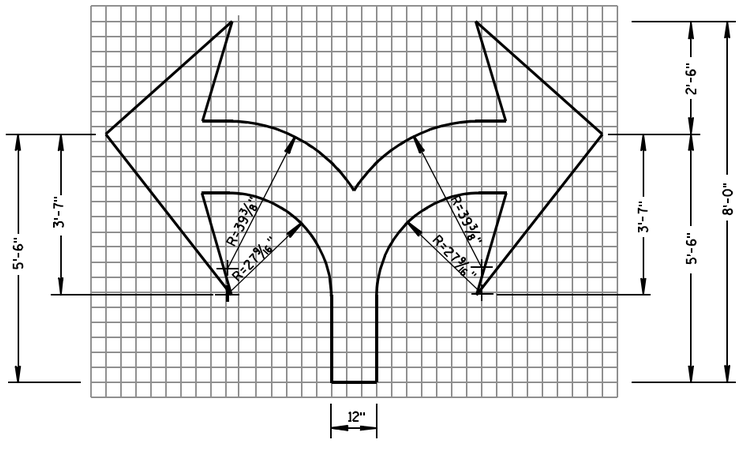


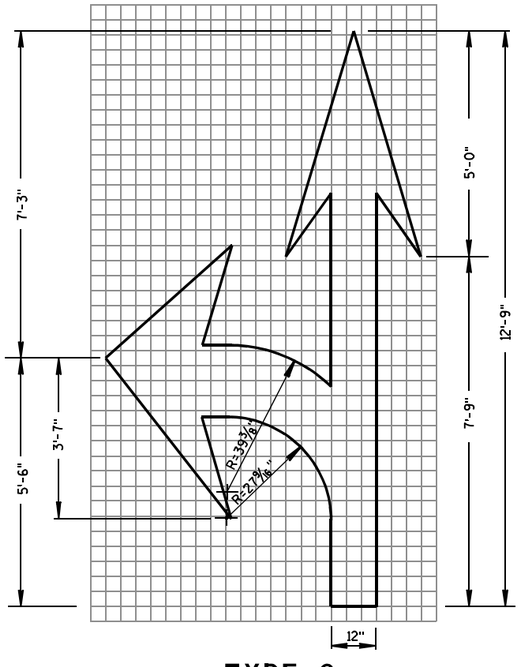
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12c

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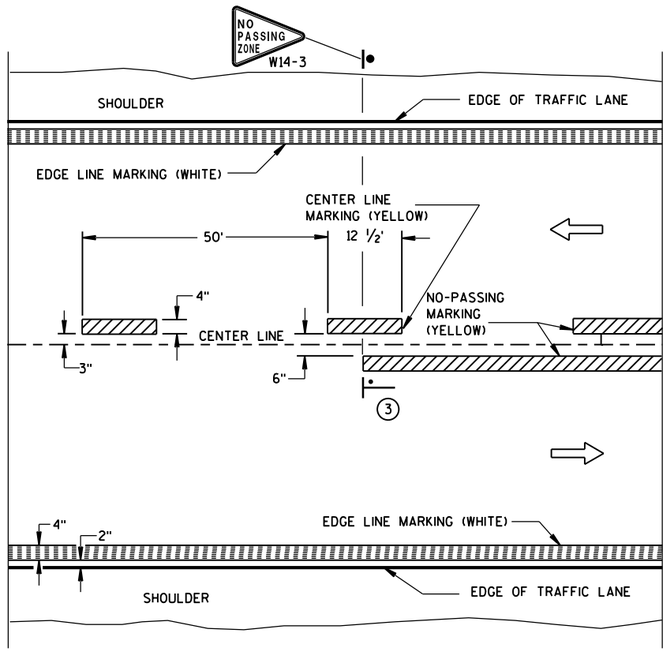
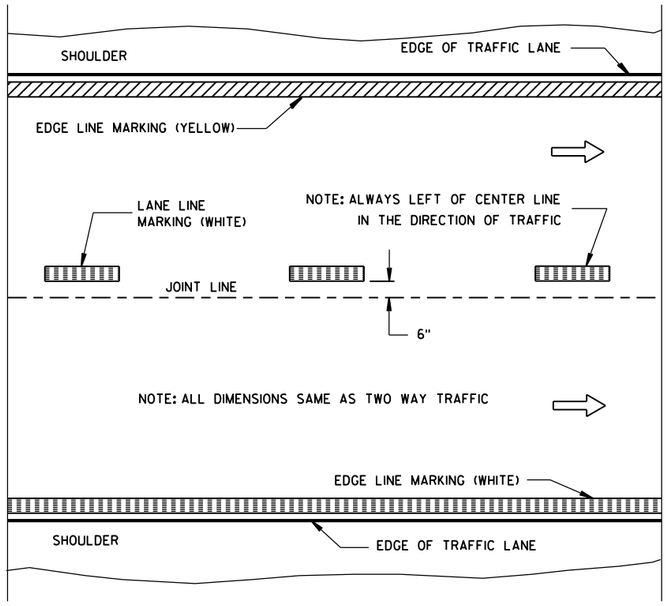
S.D.D. 15 C 7-12c

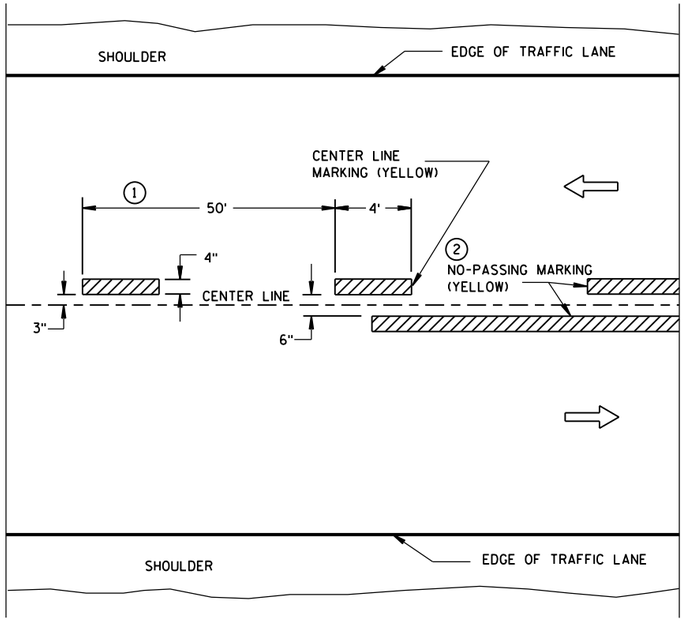


TWO WAY TRAFFIC

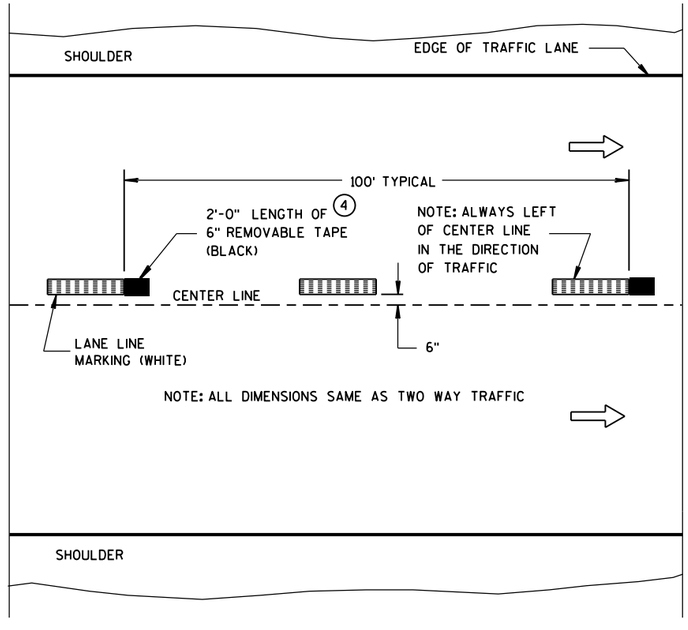


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

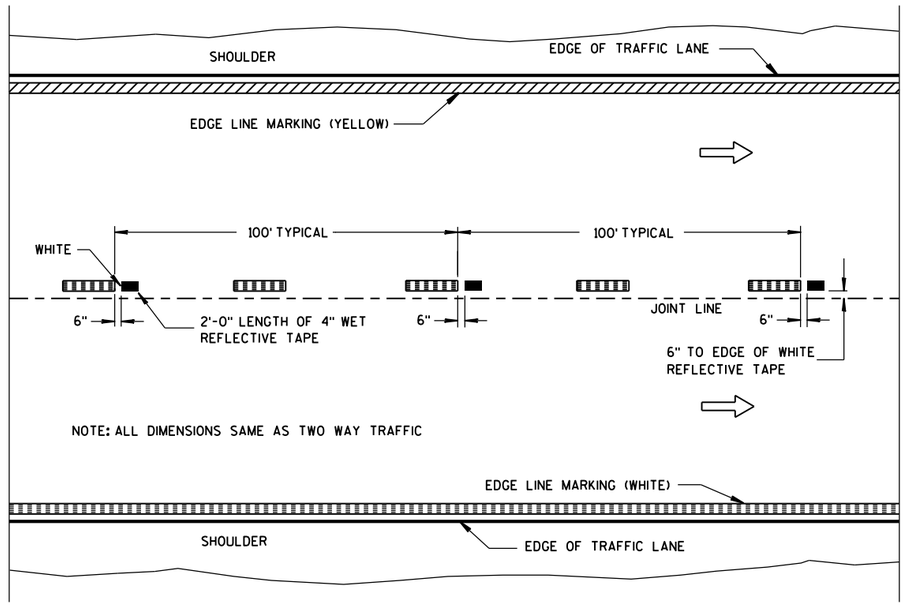
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

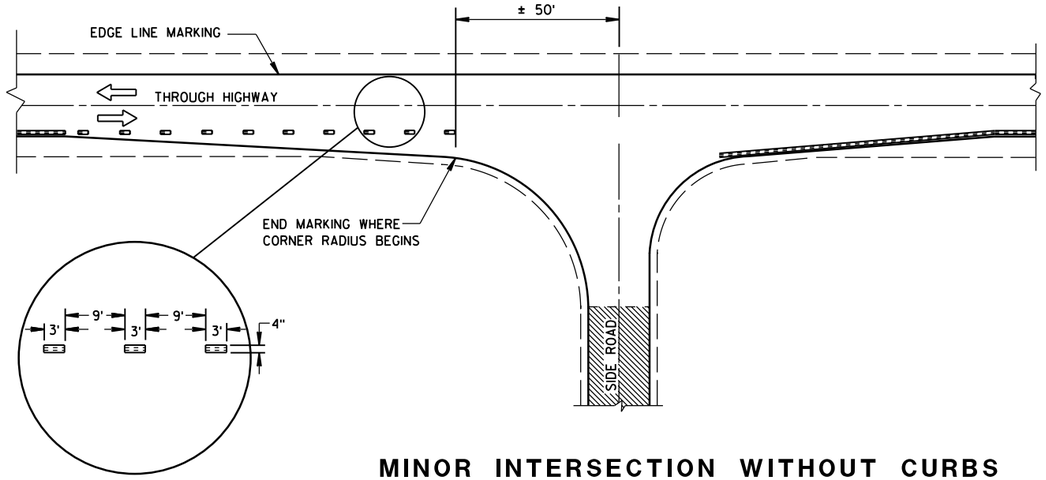
APPROVED
5-13-2013 DATE
/S/ Travis Feltes STATE TRAFFIC E
FHWA

6

S.D.D. 15 C 8-16a

6

S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

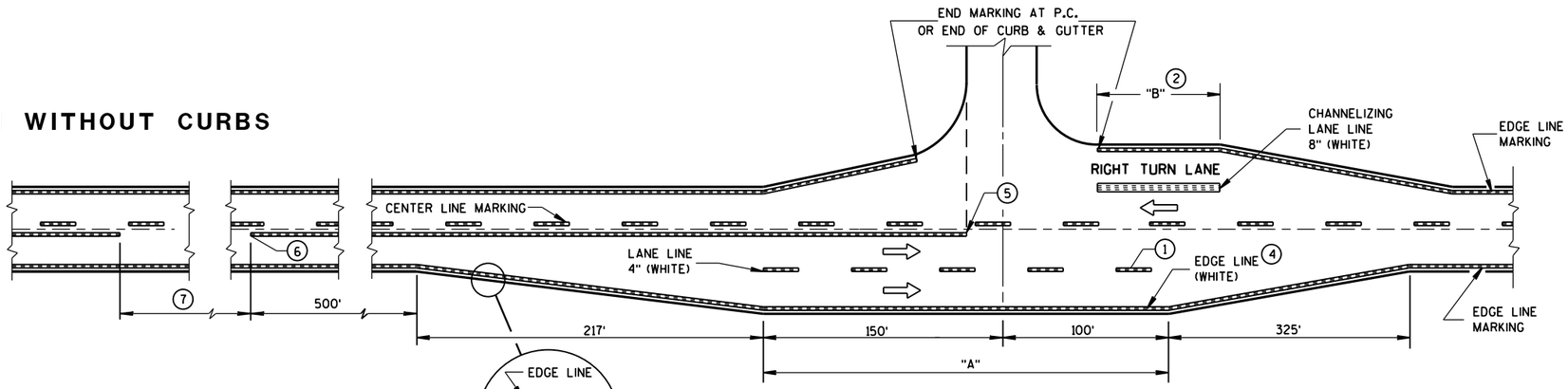
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

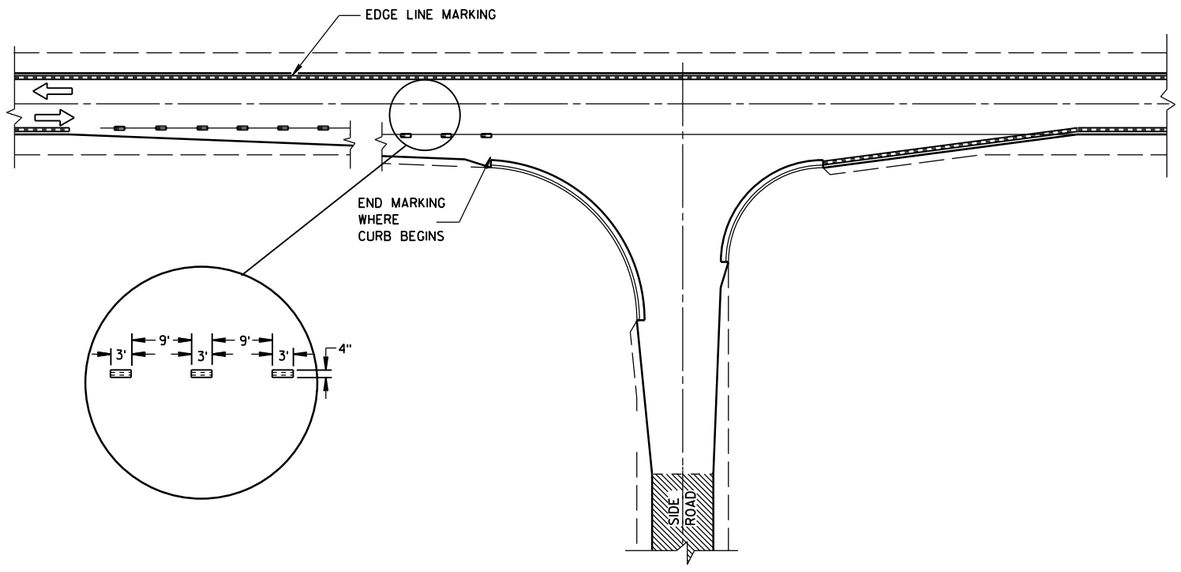
(7)

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



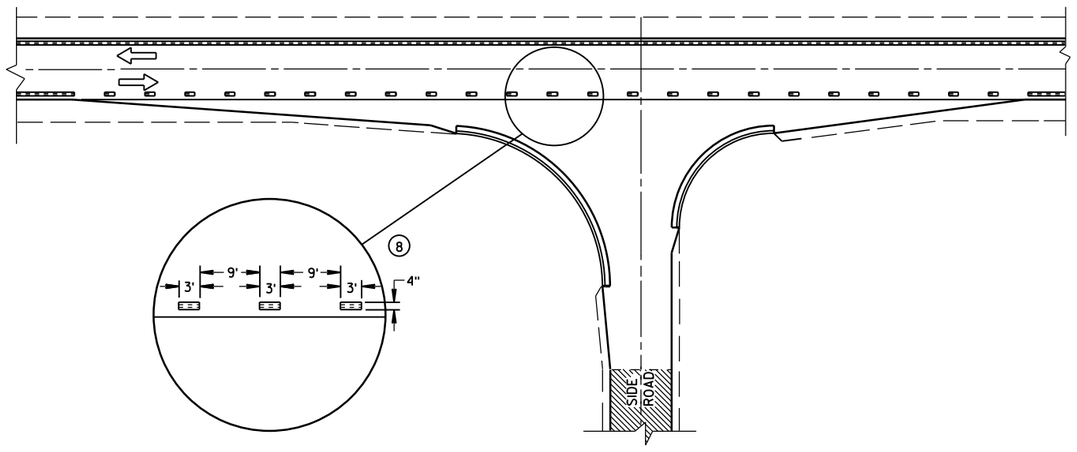
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

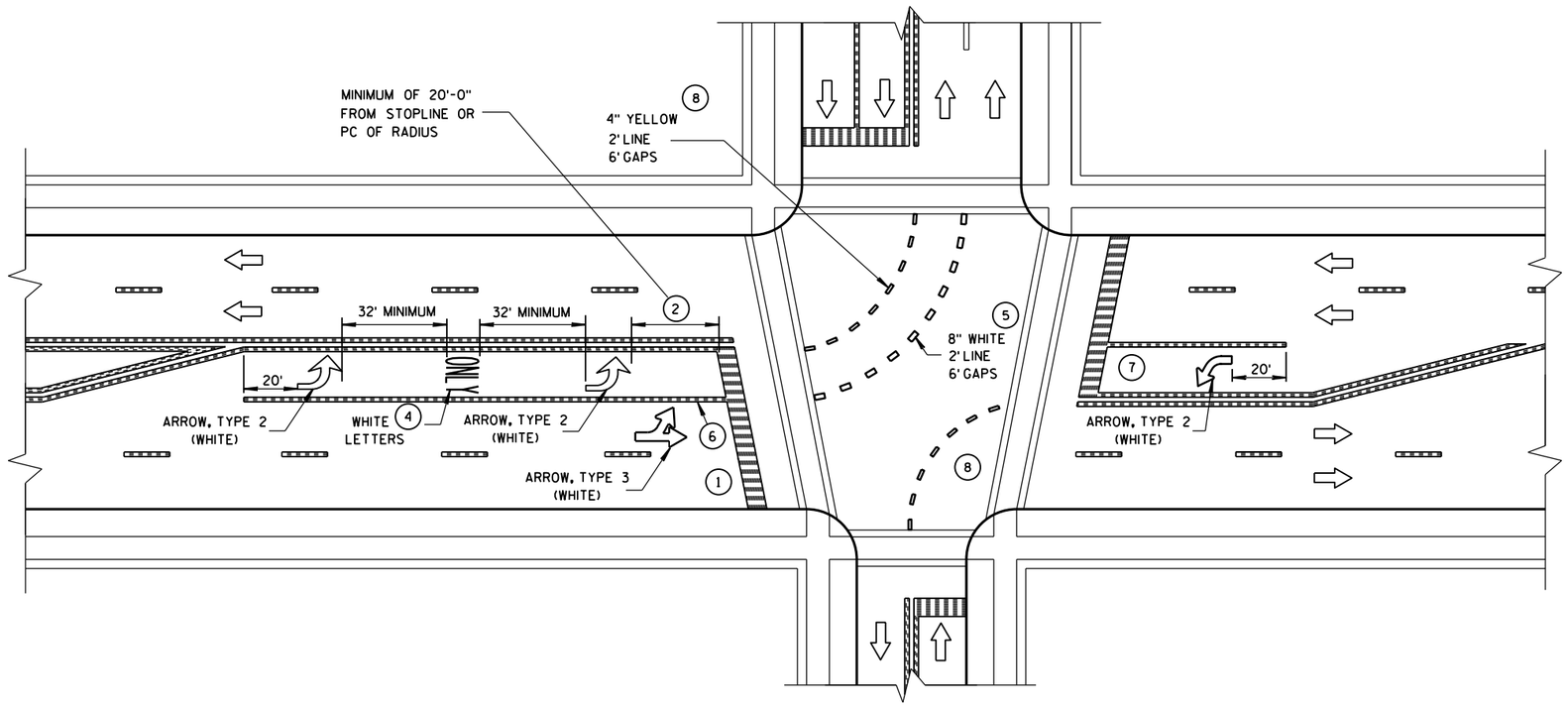
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 C 8-16b

6

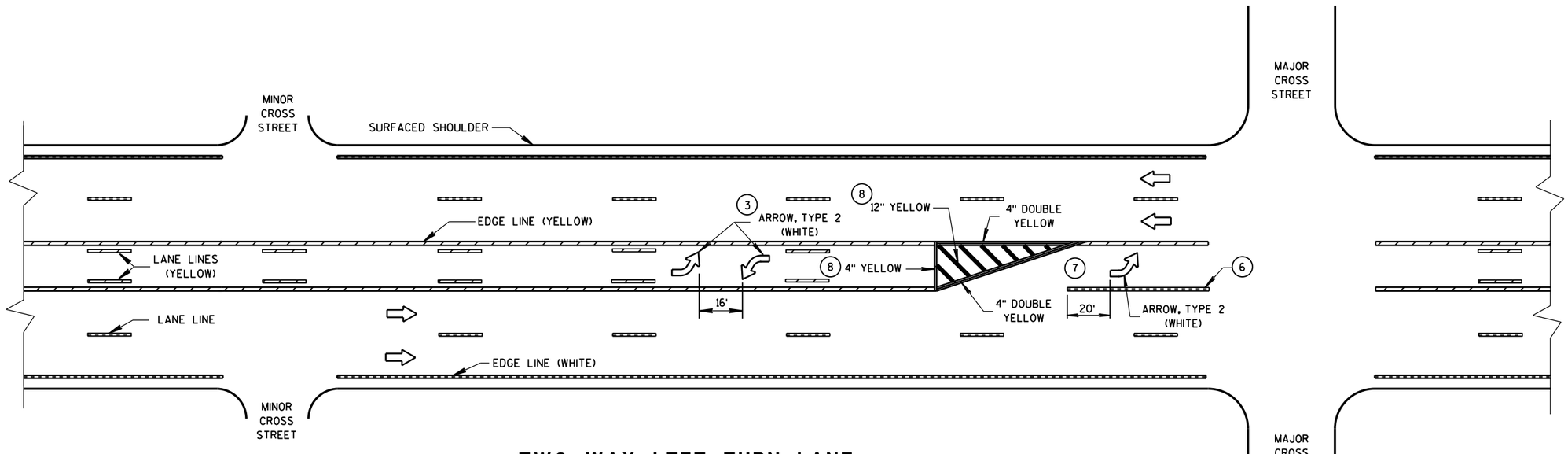
S.D.D. 15 C 8-16b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA SETS OF ONE ARROW AND ONE ONLY PER 160 FEET OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108 FEET.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

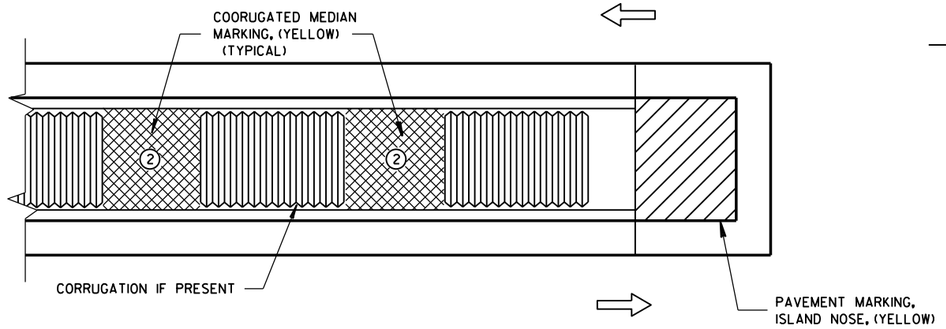
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

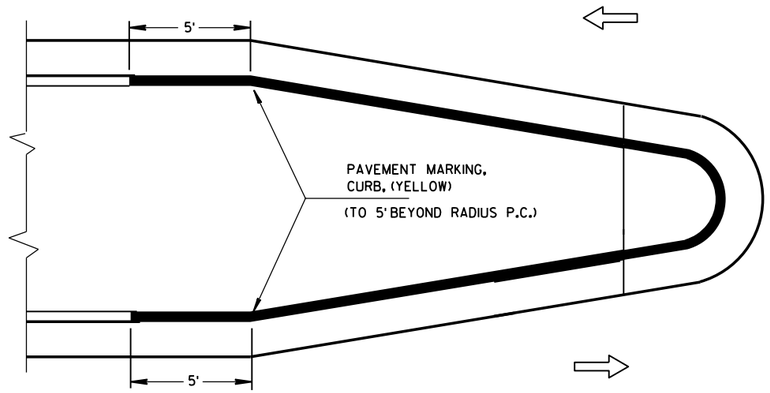
S.D.D. 15 C 8-16e

6

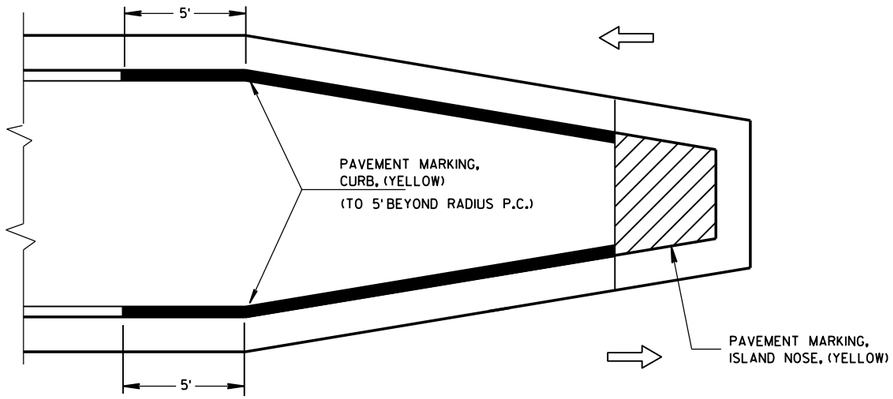
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

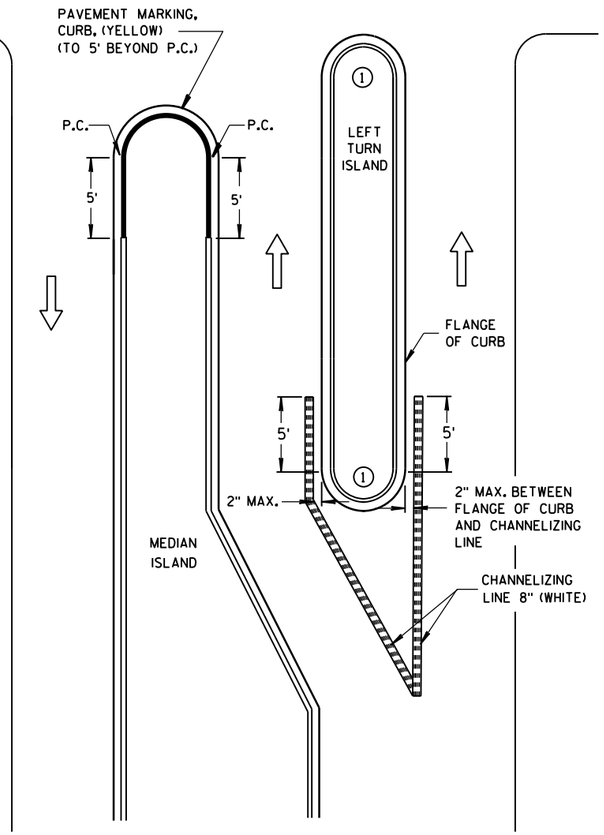


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

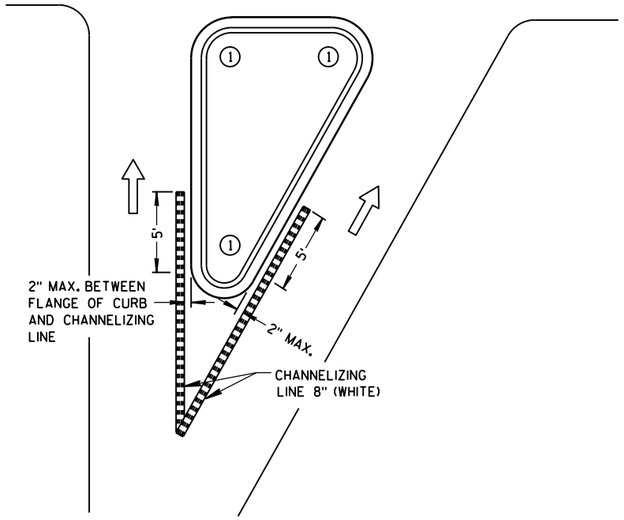


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.

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



RIGHT TURN ISLAND

LEGEND

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

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 8-16f

6

S.D.D. 15 C 8-16f

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

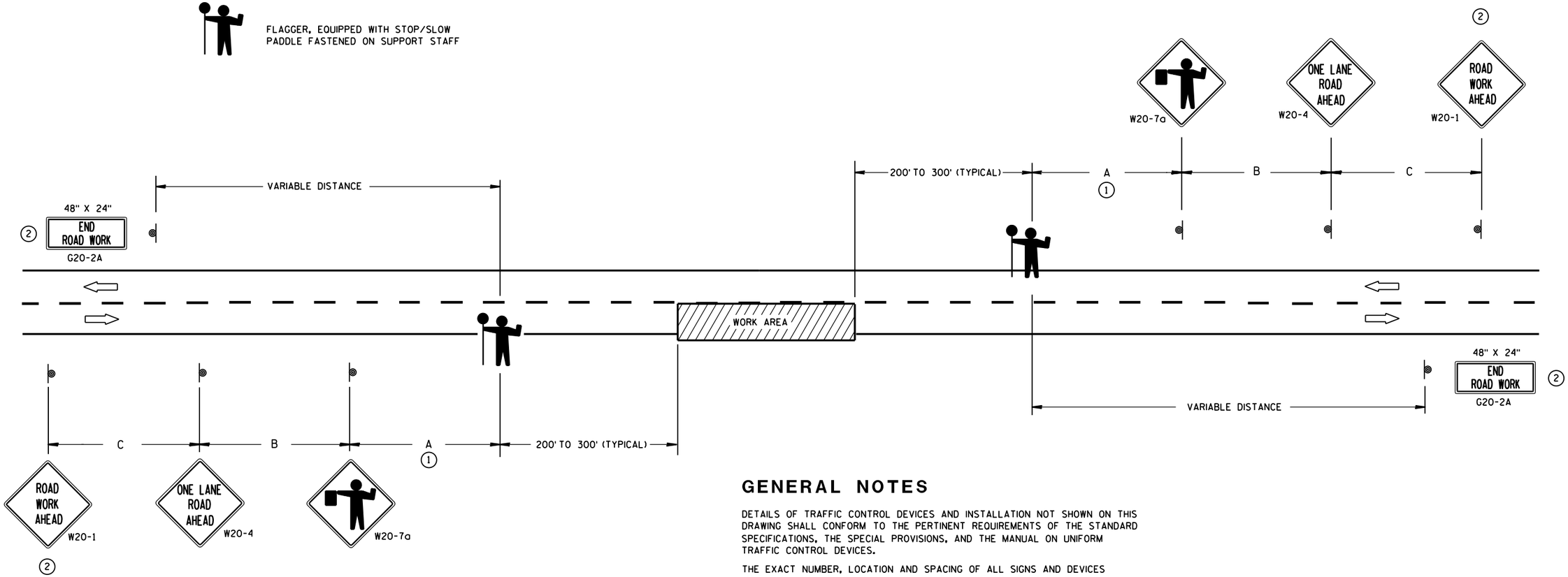
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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

BE PREPARED TO STOP
W3-4

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



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

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

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

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

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

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

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

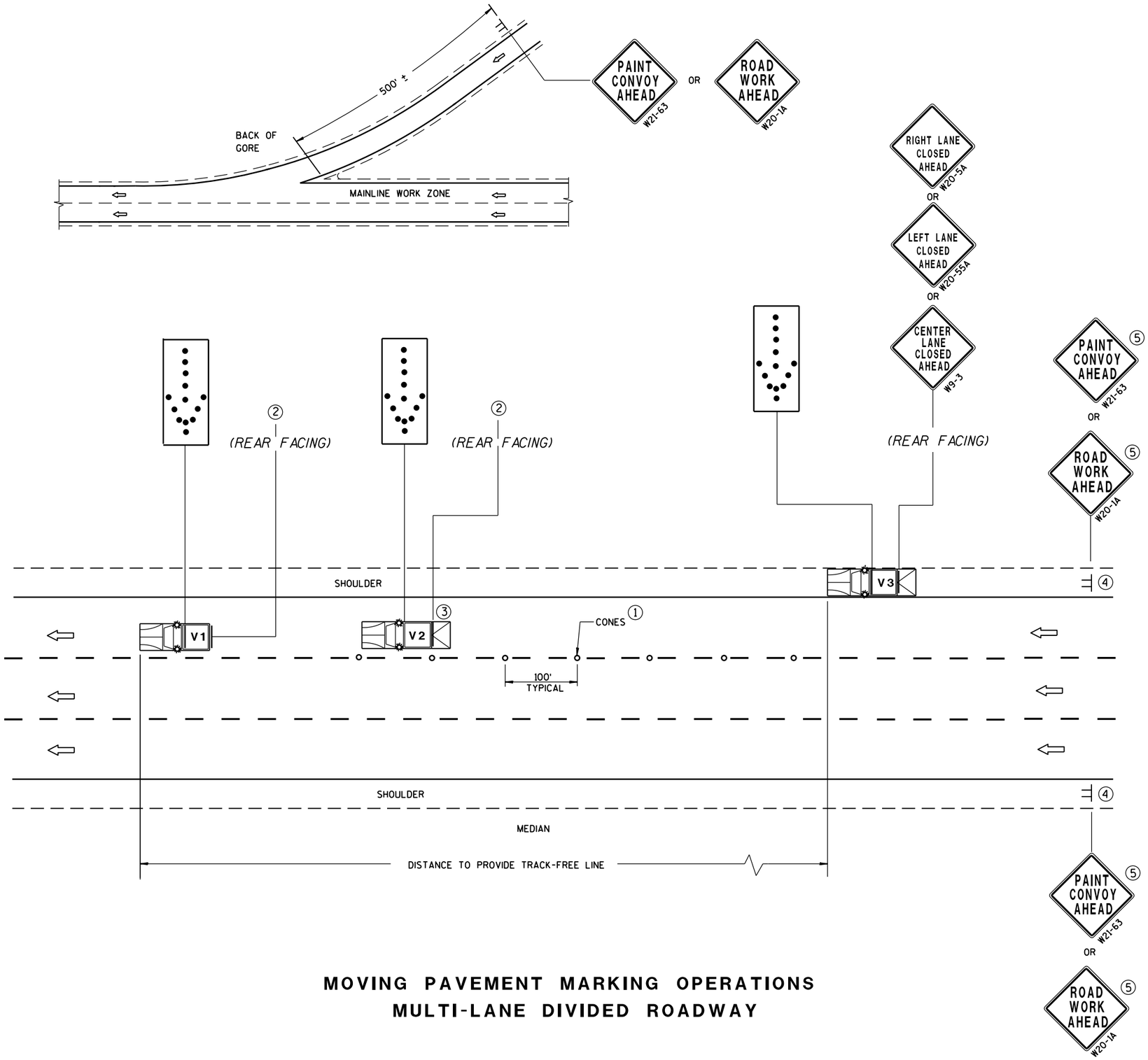
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

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

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

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

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

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

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

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

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

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

FOR EDGELINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

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

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

② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

④ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.

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

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON TEMPORARY SUPPORT
	DIRECTION OF TRAFFIC
	CONES
	FLASHING ARROW PANEL (MERGE)

MOVING PAVEMENT MARKING OPERATION
MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe — STATEWIDE WORK ZON SAFETY ENGINI
FHWA

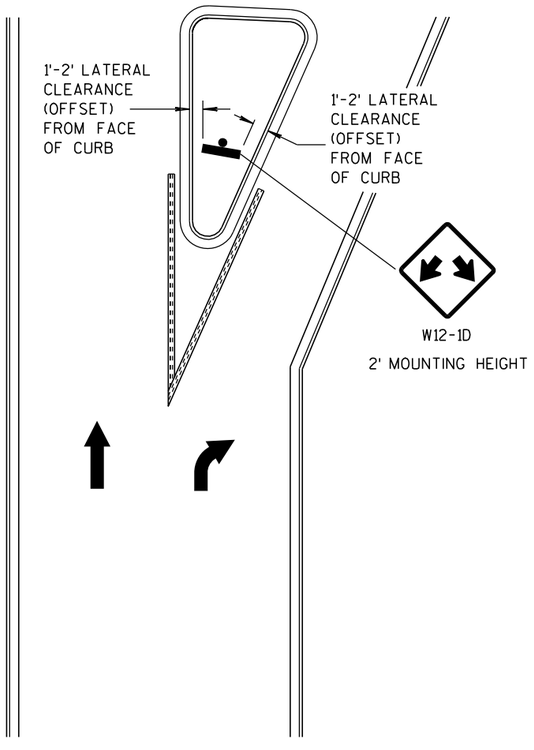
6 S.D.D. 15 C 19-3c

6 S.D.D. 15 C 19-3c

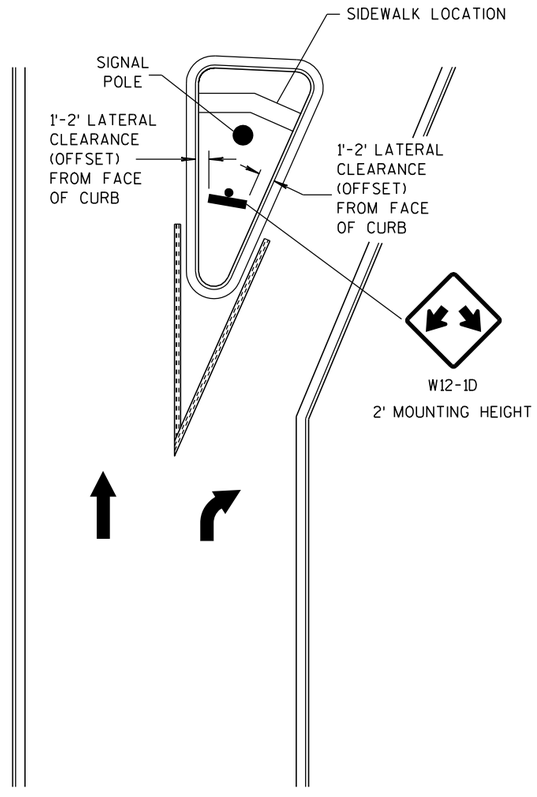
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

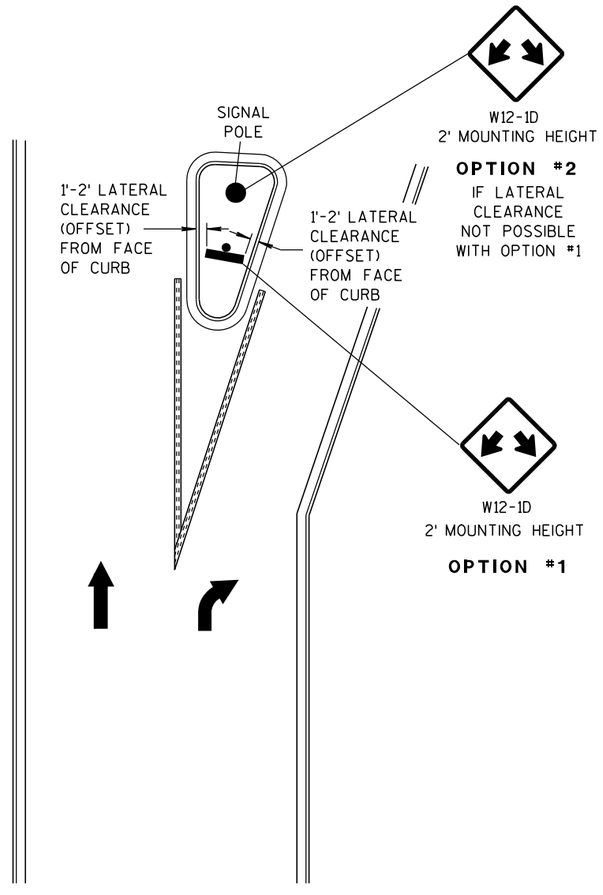
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

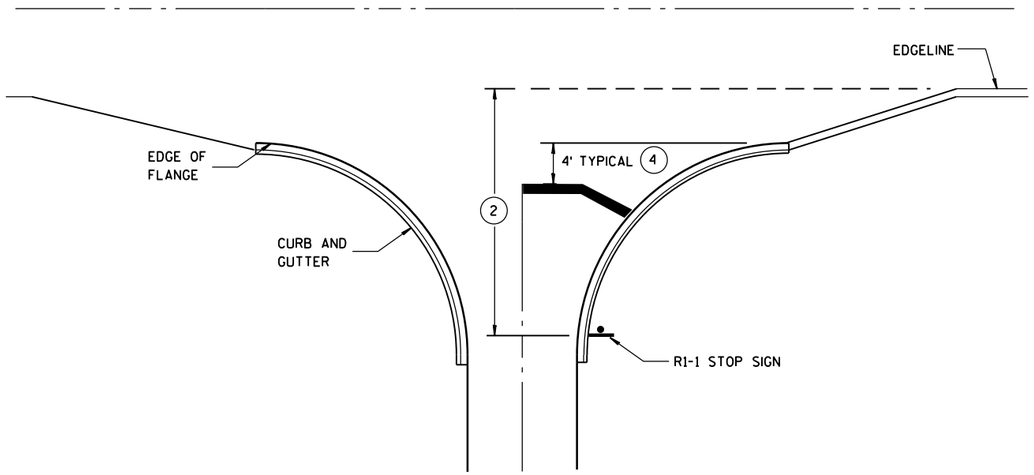
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA	

6

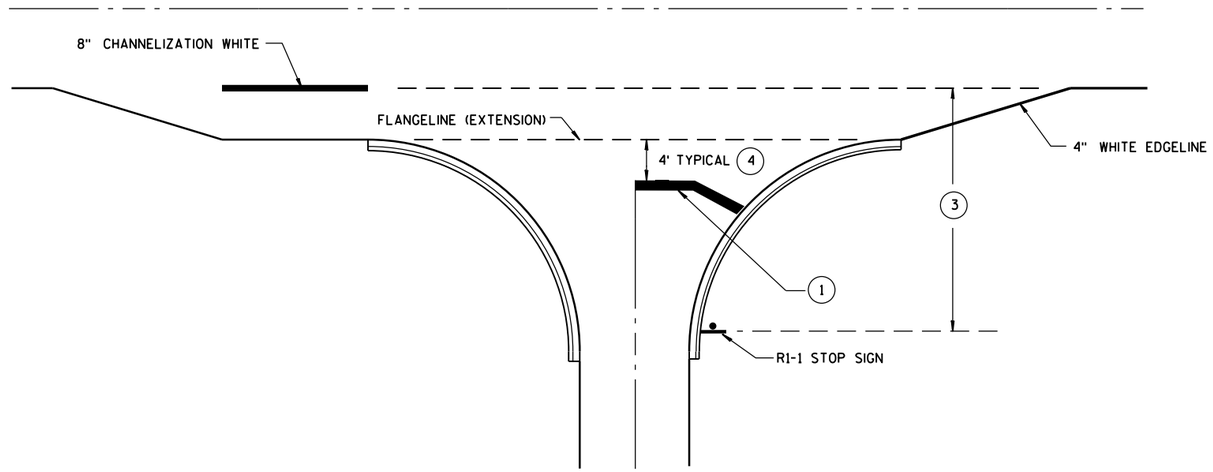
S.D.D. 15 C 27-1

6

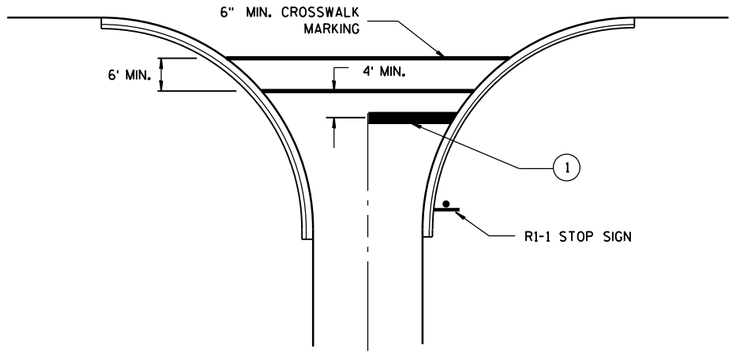
S.D.D. 15 C 27-1



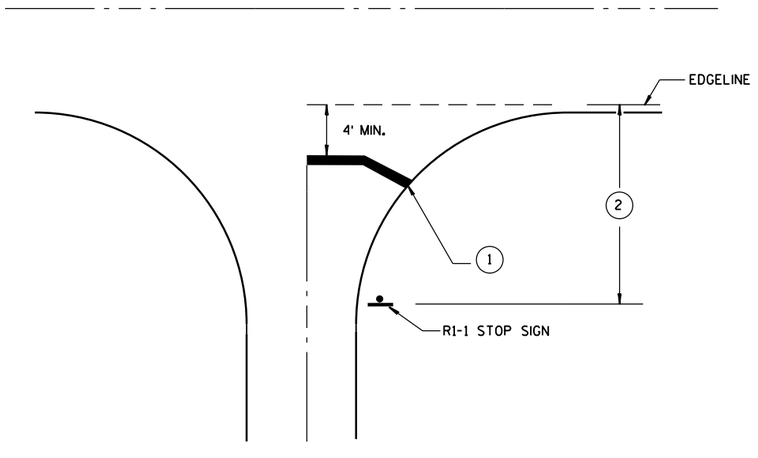
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

LEGEND

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

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF 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.

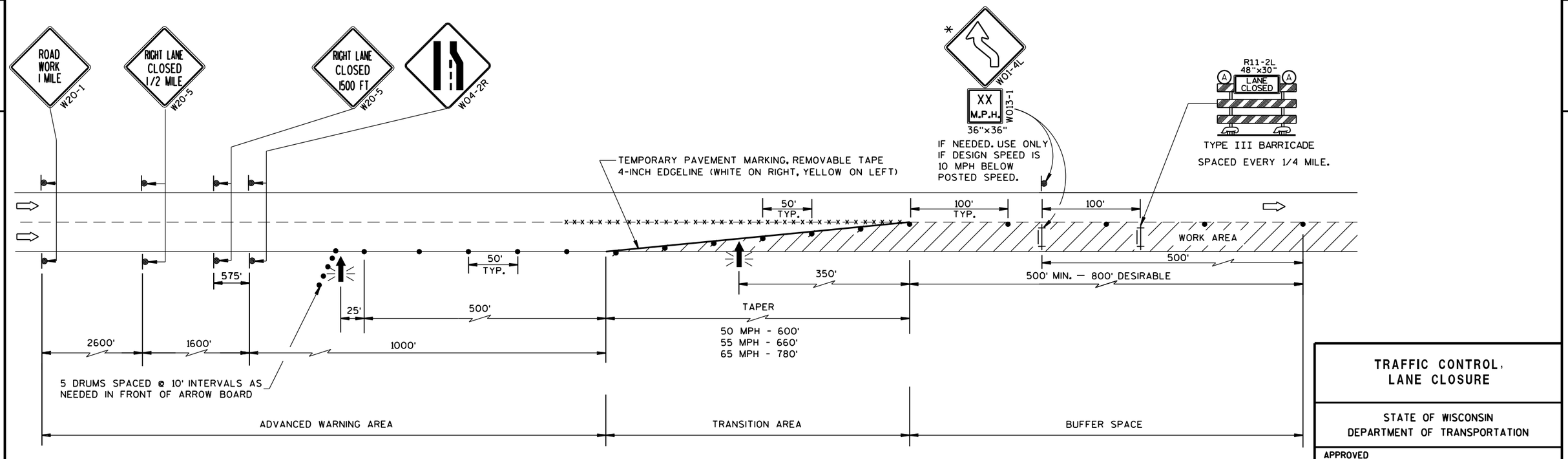
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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. THE LANE CLOSURE MUST 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 1/2 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.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 12-5a

LEGEND

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

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48"×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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF 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 FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

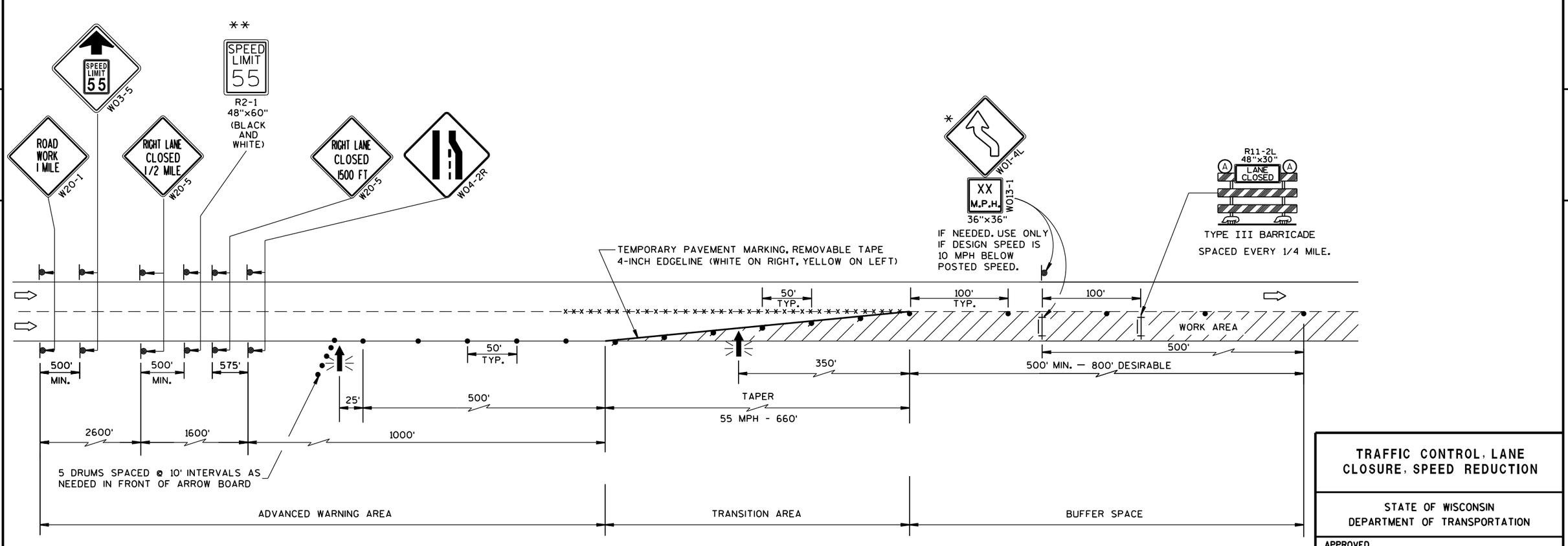
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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. THE LANE CLOSURE MUST 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 1/2 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.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



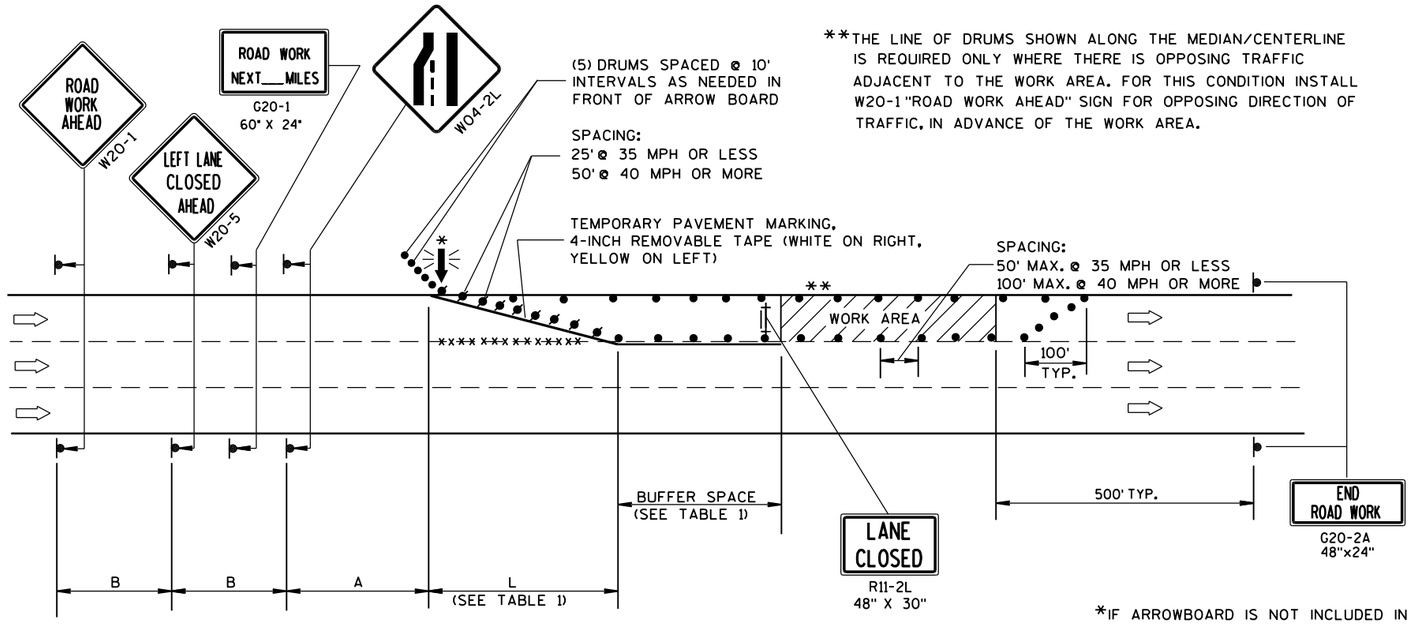
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

S.D.D. 15 D 12-5b

S.D.D. 15 D 12-5b



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

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

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

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

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

W01-6
48"x24"

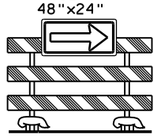


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

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

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

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

GENERAL NOTES

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

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

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

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

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

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

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

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

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

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

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

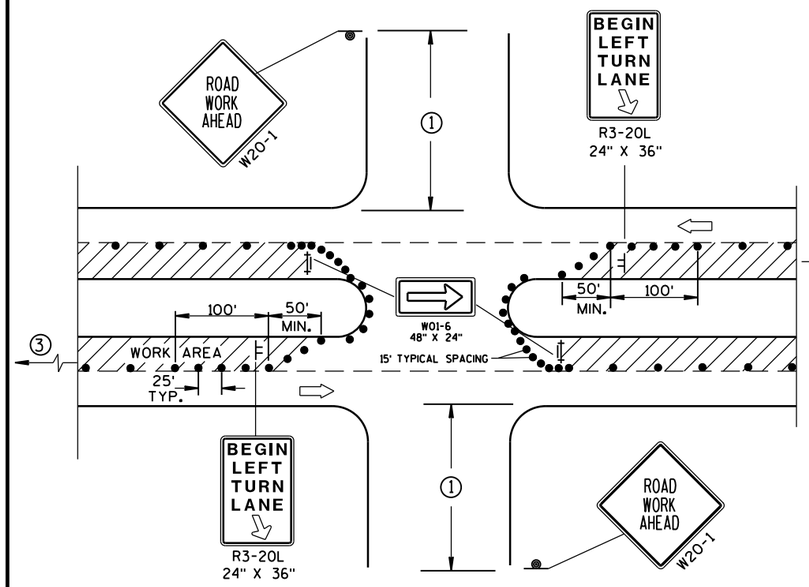
TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

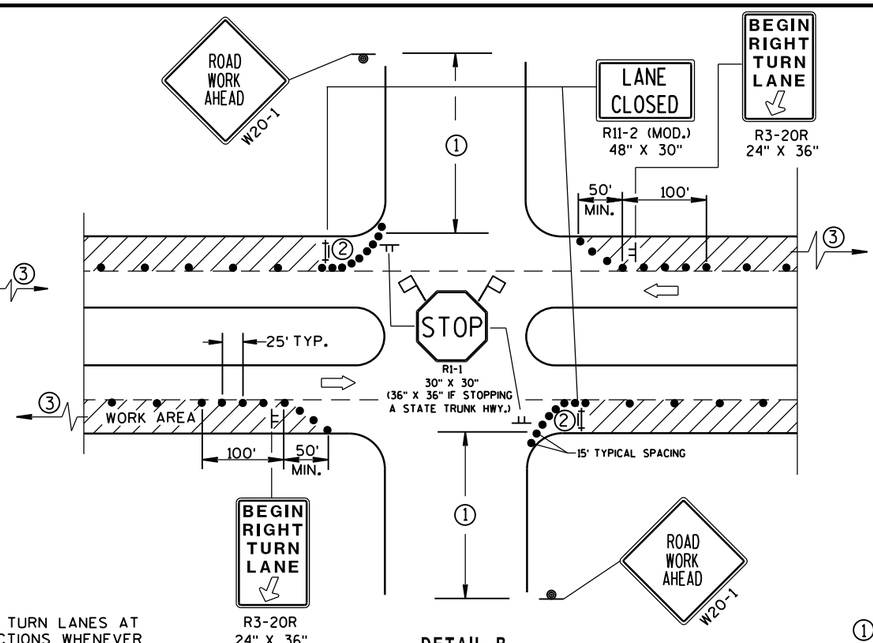
S.D.D. 15 D 20-3



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

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



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

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

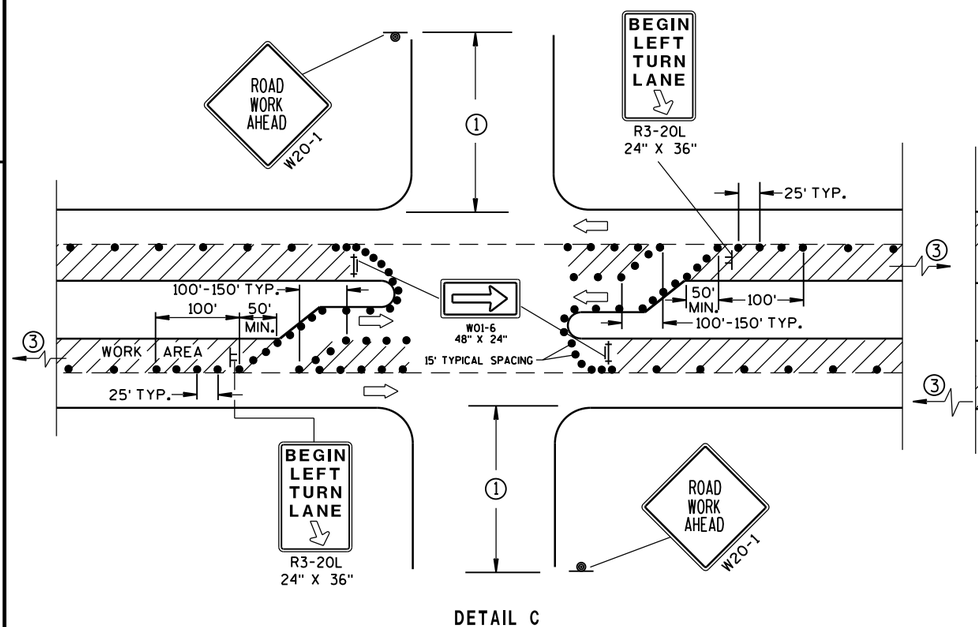
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

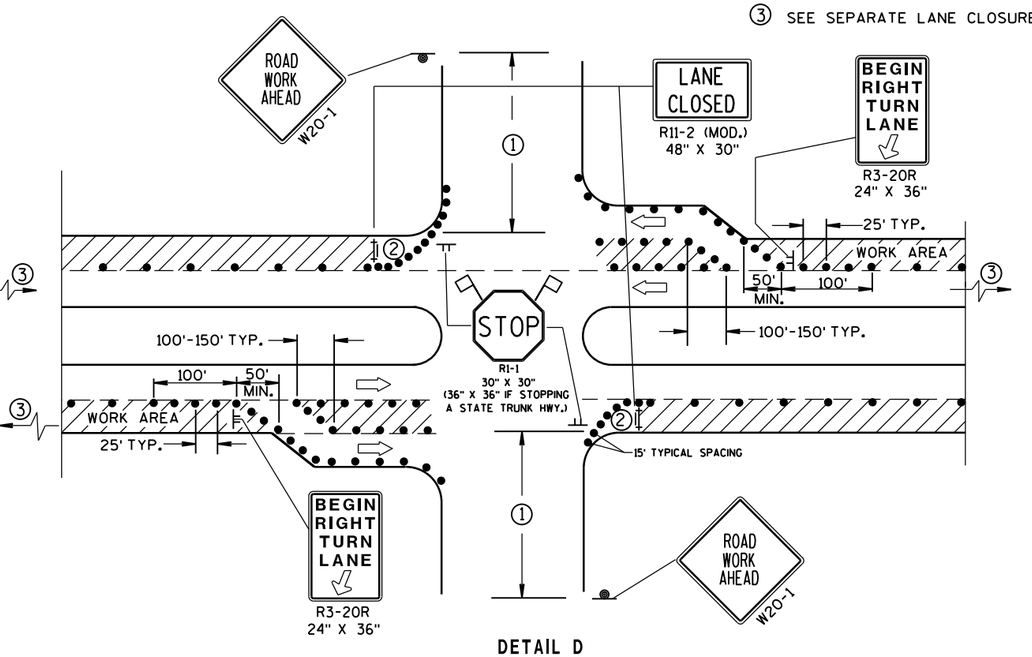
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

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



DETAIL D

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

LEGEND

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

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 21-3

TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

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

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TRAFFIC CONTROL DRUM

FLASHING ARROW BOARD

DIRECTION OF TRAFFIC

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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

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

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

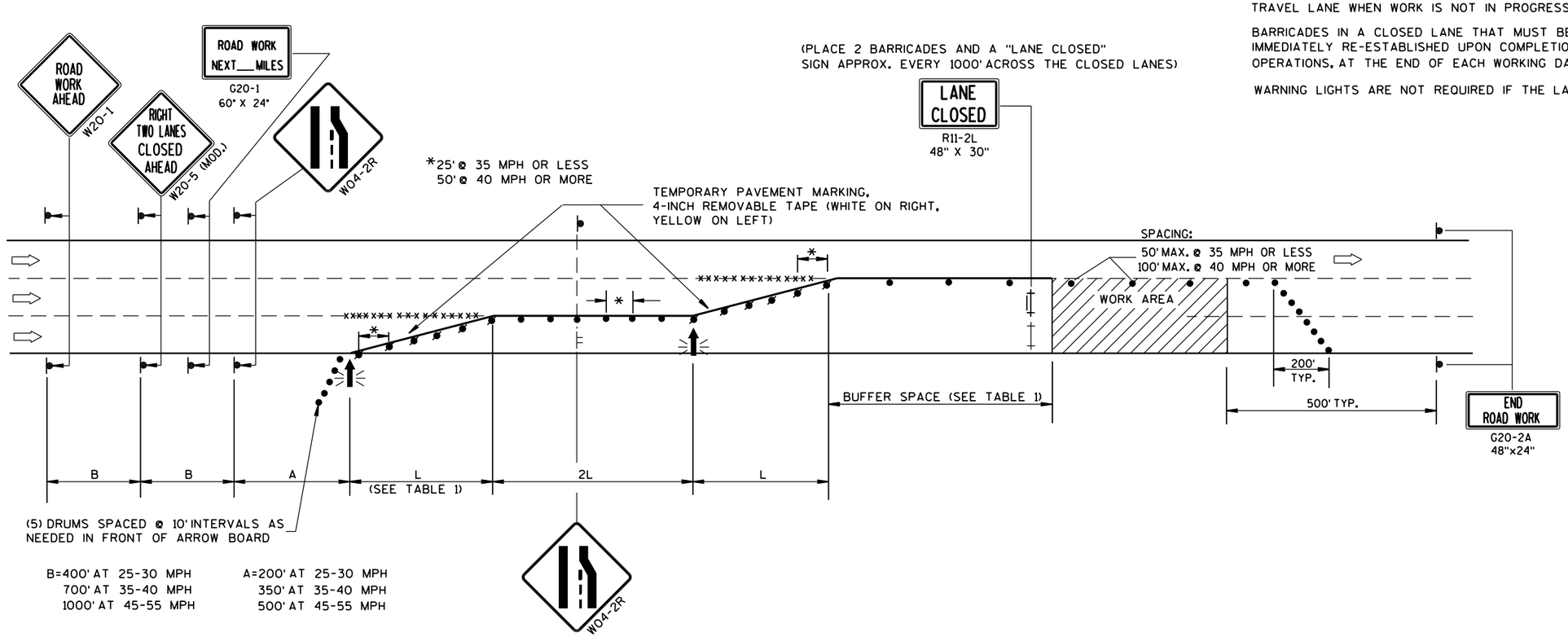
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

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

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

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



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

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

TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

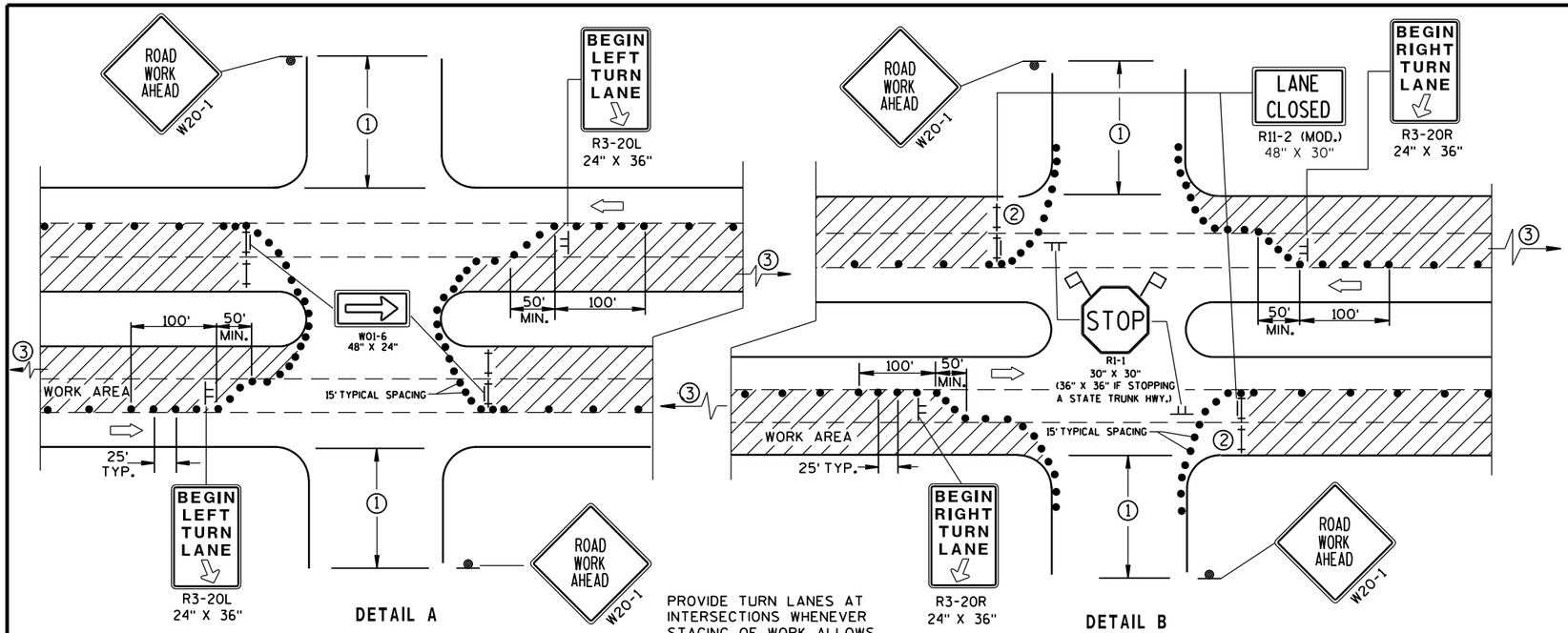
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

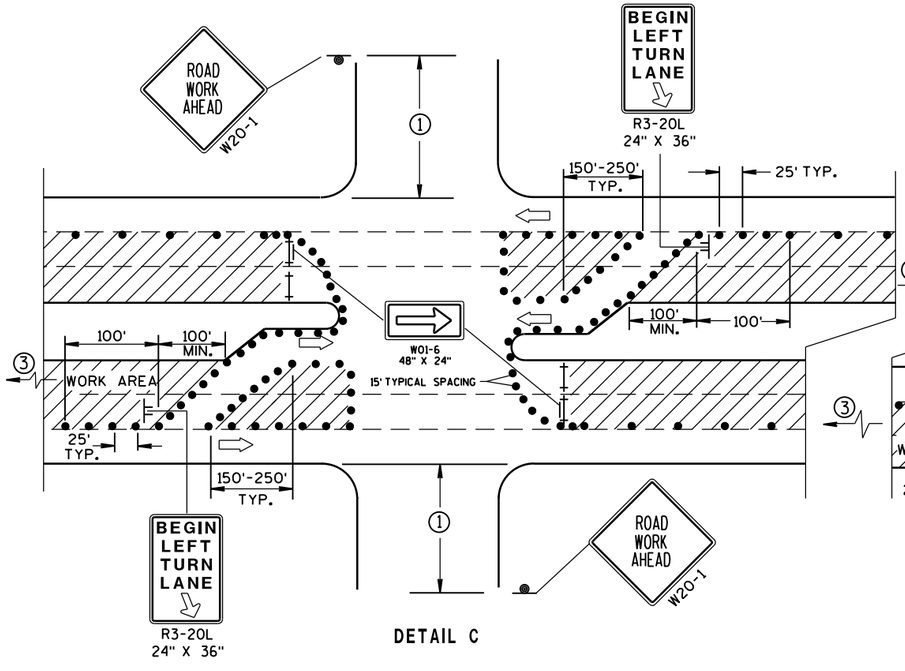
S.D.D. 15 D 22-2

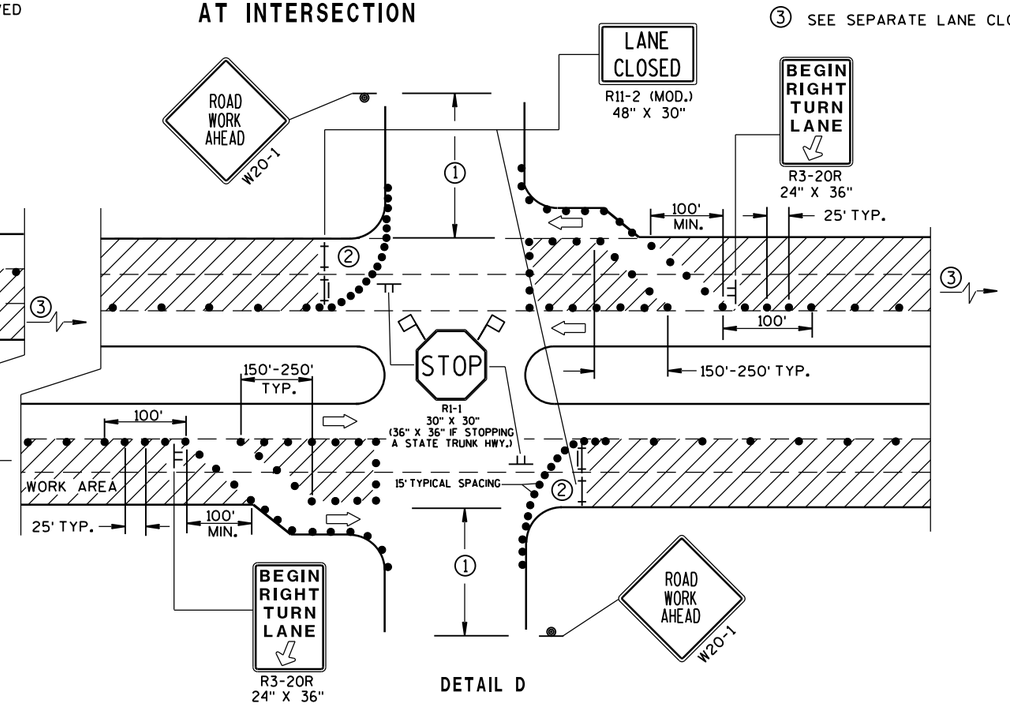


FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

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





FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

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

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

① 500 FEET TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350 FEET IF 35-40 MPH.
200 FEET IF 25-30 MPH.

② ALSO USE BARRICADES AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

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

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 23-3

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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

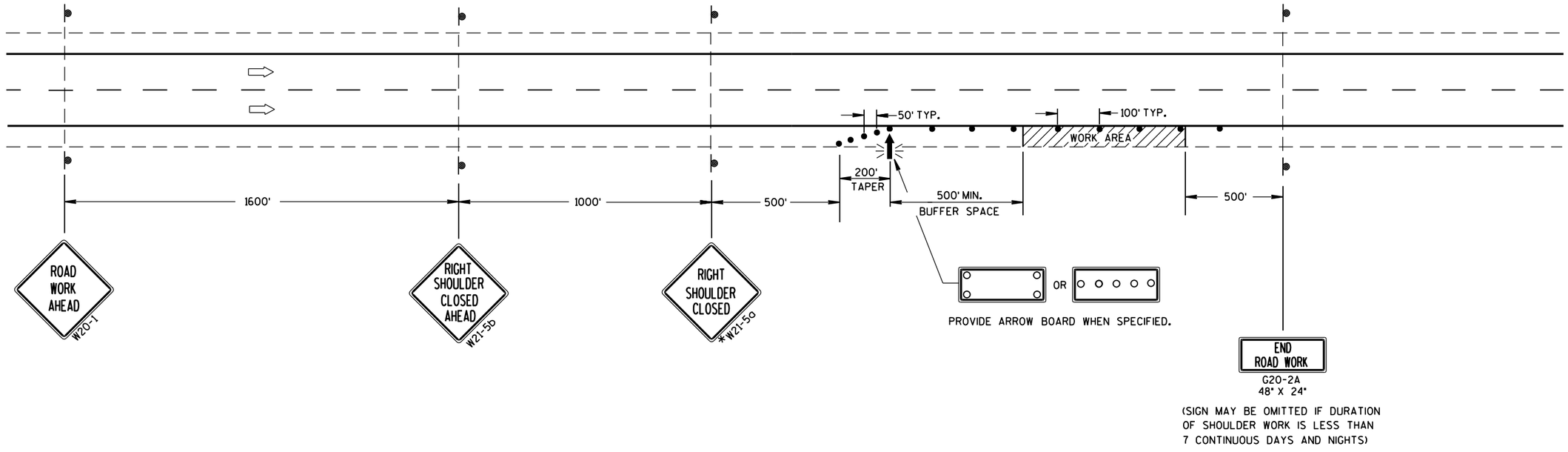
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

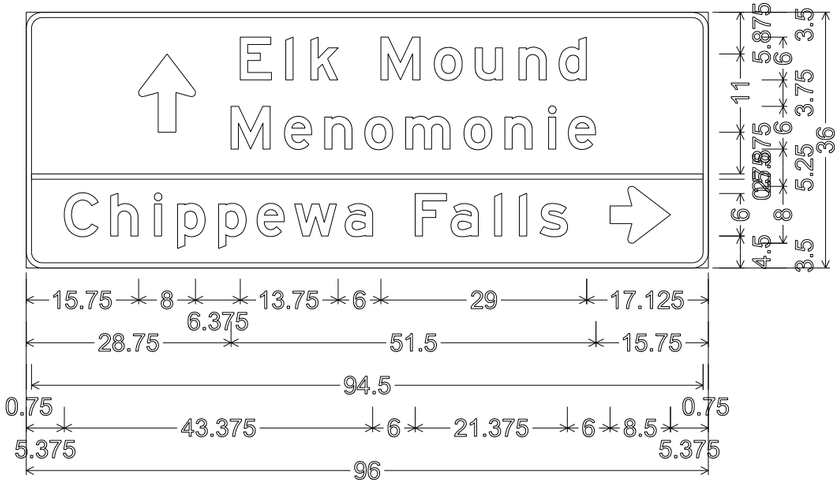
8/2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC ENGINEER

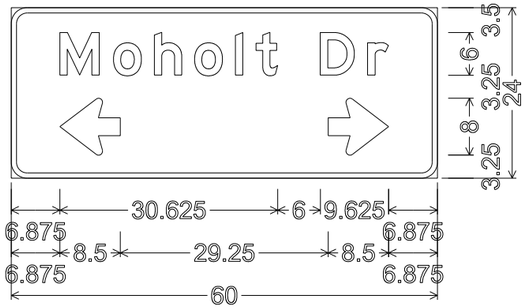
FHWA

6

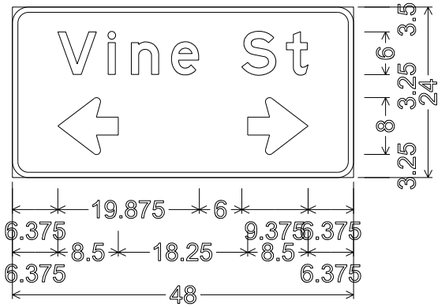
S.D.D. 15 D 27-2



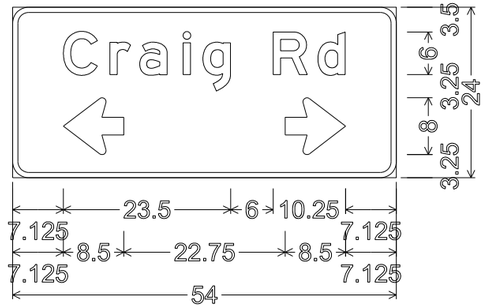
2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 11.000" X 8.000" 90°; "Elk" E;
"Mound" E; "Menomonie" E; "Chippewa" E; "Falls" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



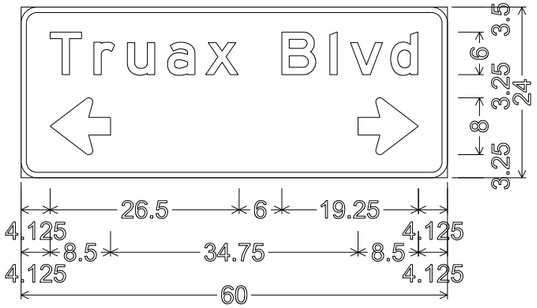
2.250" Radius, 0.750" Border, White on Green;
"Moholt" E; "Dr" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



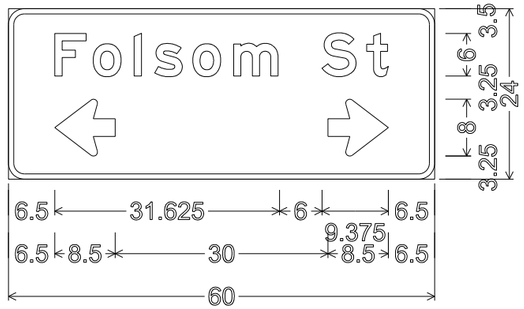
2.250" Radius, 0.750" Border, White on Green;
"Vine" E; "St" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



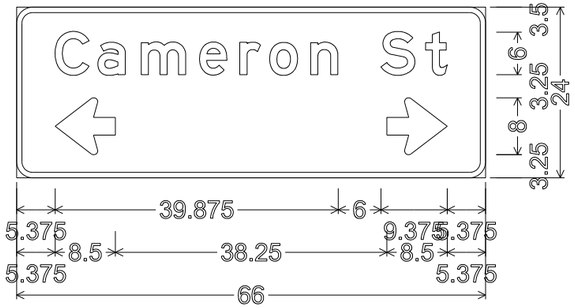
2.250" Radius, 0.750" Border, White on Green;
"Craig" E; "Rd" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
"Truax" E; "Blvd" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
"Folsom" E; "St" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
"Cameron" E; "St" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;

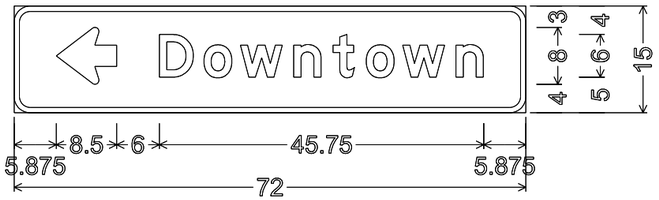
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E

7

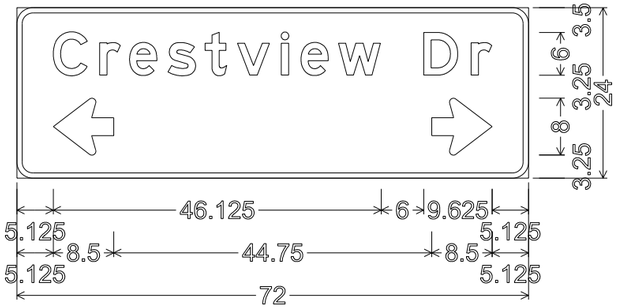
7

PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 129	E

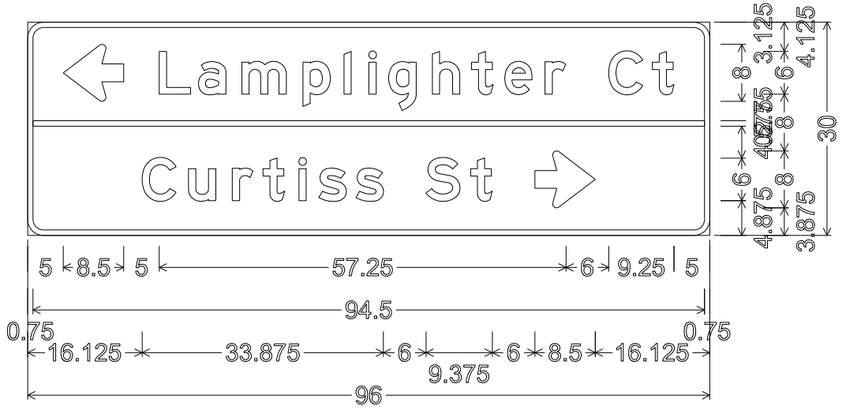


2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Downtown" E;

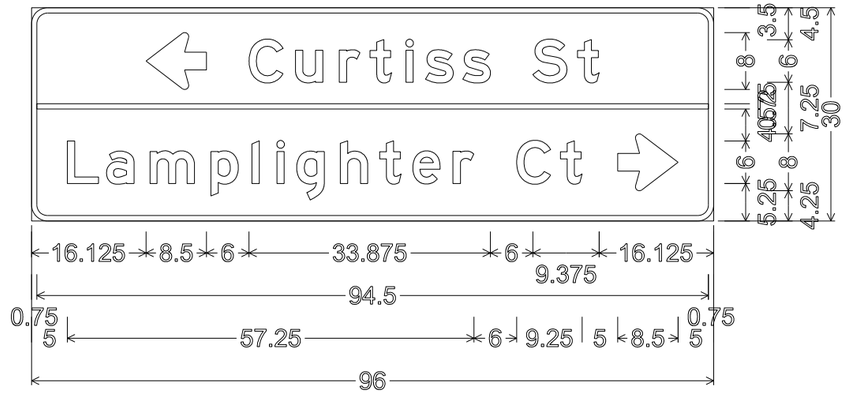
2.250" Radius, 0.750" Border, White on Green;
"Downtown" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
"Crestview" E; "Dr" E;
Standard Arrow Custom 8.500" X 8.000" 180°;
Standard Arrow Custom 8.500" X 8.000" 0°;

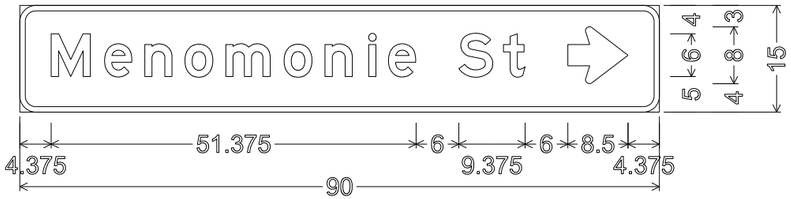


2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Lamplighter" E; "Ct" E; "Curtiss" E; "St" E;
Standard Arrow Custom 8.500" X 8.000" 0°;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Curtiss" E;
"St" E; "Lamplighter" E; "Ct" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°;
"Menomonie" E; "St" E;



2.250" Radius, 0.750" Border, White on Green;
"Menomonie" E; "St" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

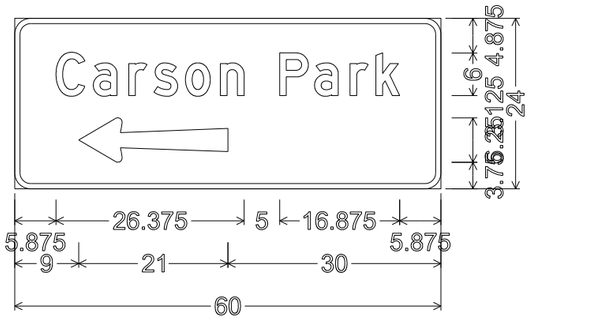
NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E

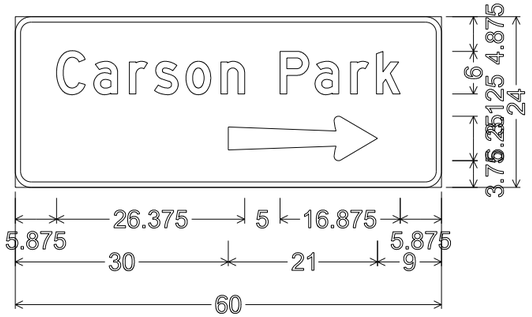
7

7

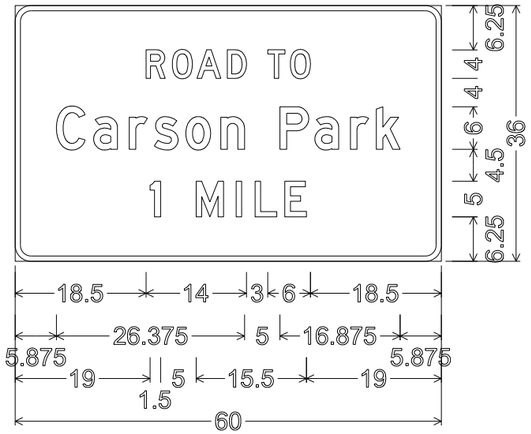
PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 130	E



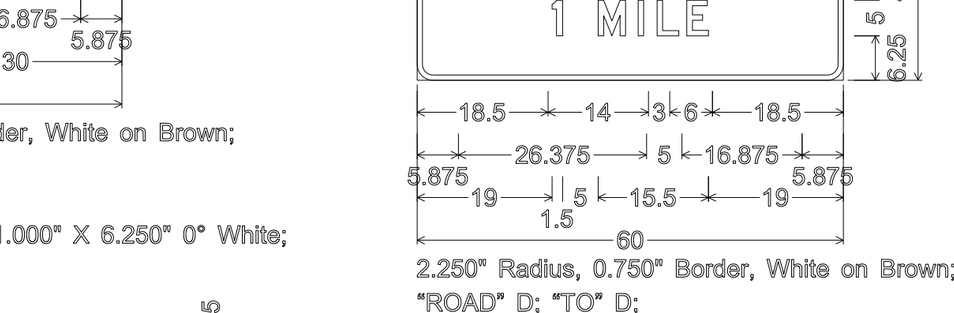
2.250" Radius, 0.750" Border, White on Brown;
"Carson" D 88% spacing;
"Park" D 88% spacing;
Standard Arrow Custom 21.000" X 6.250" 0° White;



2.250" Radius, 0.750" Border, White on Brown;
"Carson" D 88% spacing;
"Park" D 88% spacing;
Standard Arrow Custom 21.000" X 6.250" 0° White;



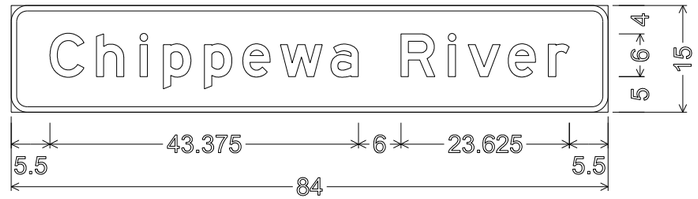
2.250" Radius, 0.750" Border, White on Brown;
"ROAD" D; "TO" D;
"Carson" D 88% spacing;
"Park" D 88% spacing; "1" E;
"MILE" D;



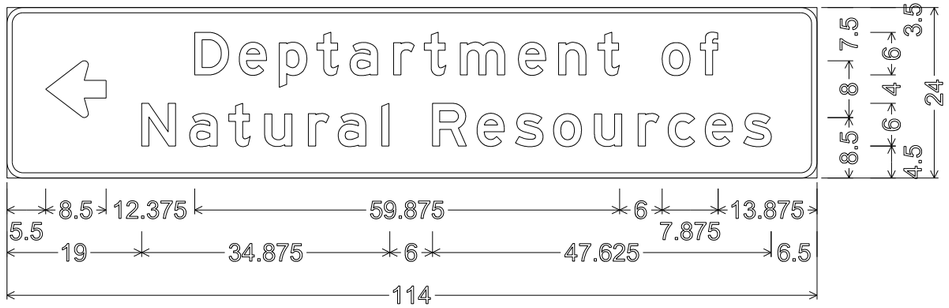
2.250" Radius, 0.750" Border, White on Green;
"Deptartment" E; "of" E; "Natural" E; "Resources" E;
Standard Arrow Custom 8.500" X 8.000" 0°;

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - GREEN except Park signs are Brown
   Message - WHITE
3. Message Series - E



2.250" Radius, 0.750" Border, White on Green;
"Chippewa" E; "River" E;



2.250" Radius, 0.750" Border, White on Green;
Standard Arrow Custom 8.500" X 8.000" 180°; "Deptartment" E;
"of" E; "Natural" E; "Resources" E;

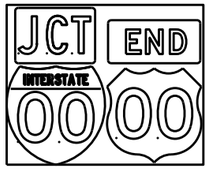
7

7

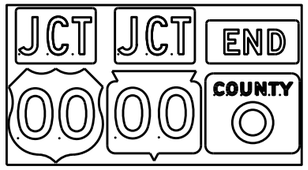
PROJECT NO: 7090-01-61	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 131	E

TYPICAL ASSEMBLIES

J1-1

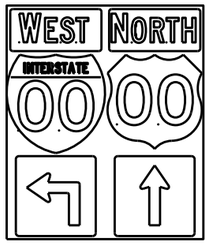


J1-2

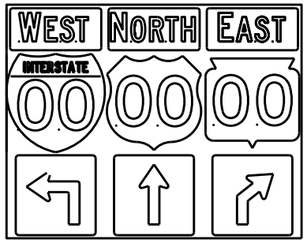


J1-3

J2-1



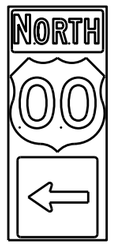
J2-2



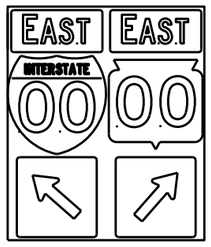
J2-3

JV

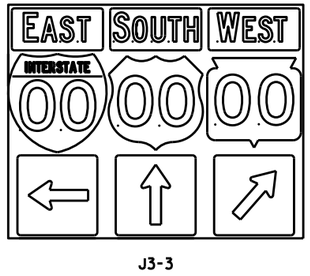
(Typical Vertical J-Assembly
See Note 10 and 11)



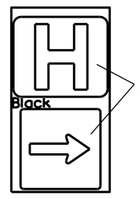
J3-1



J3-2



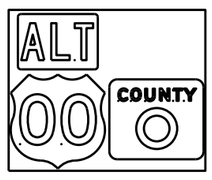
J3-3



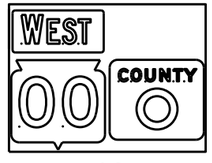
Blue Background

JH-1

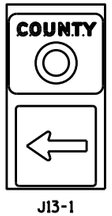
J4-1



J4-2



J4-2



J13-1

J12-1

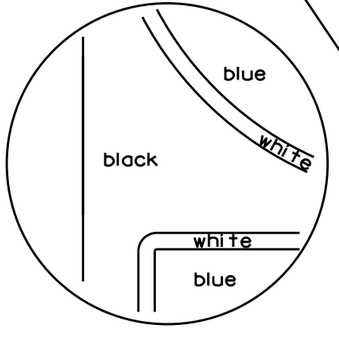
J32-1

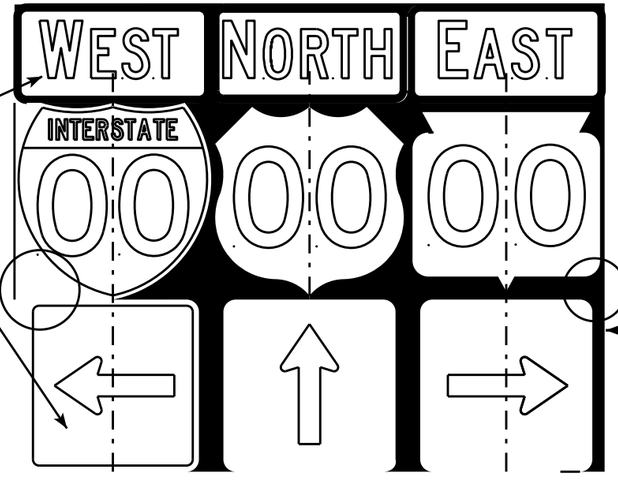
J33-1

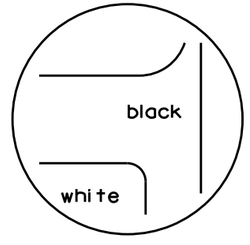
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

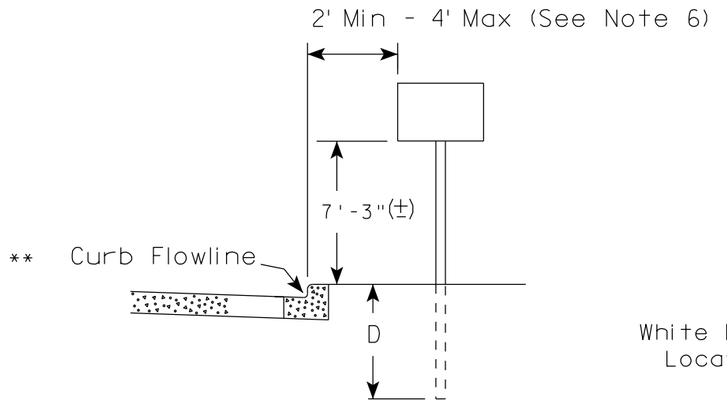
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/06/14 PL A2-1S.8

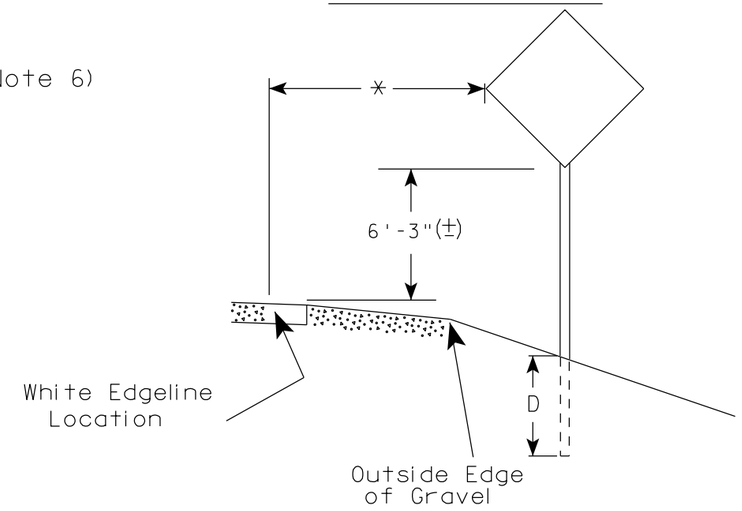
PROJECT NO: SHEET NO: E

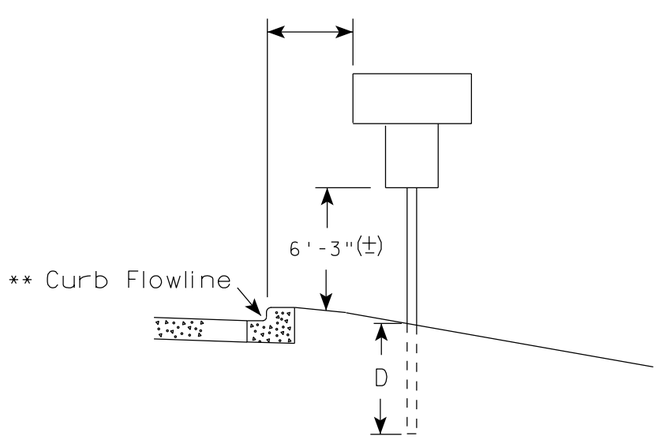
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

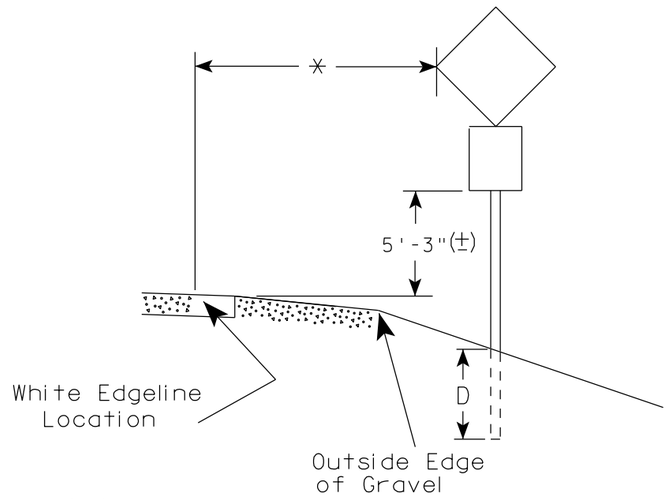
URBAN AREA



RURAL AREA (See Note 2)







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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

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

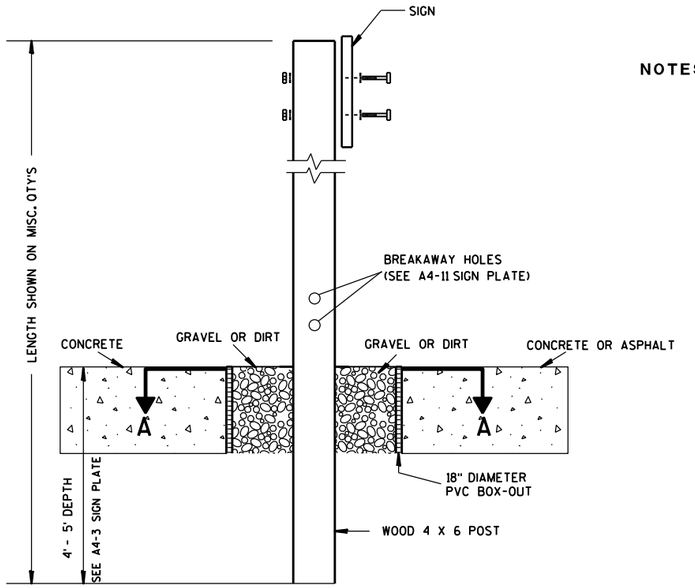
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

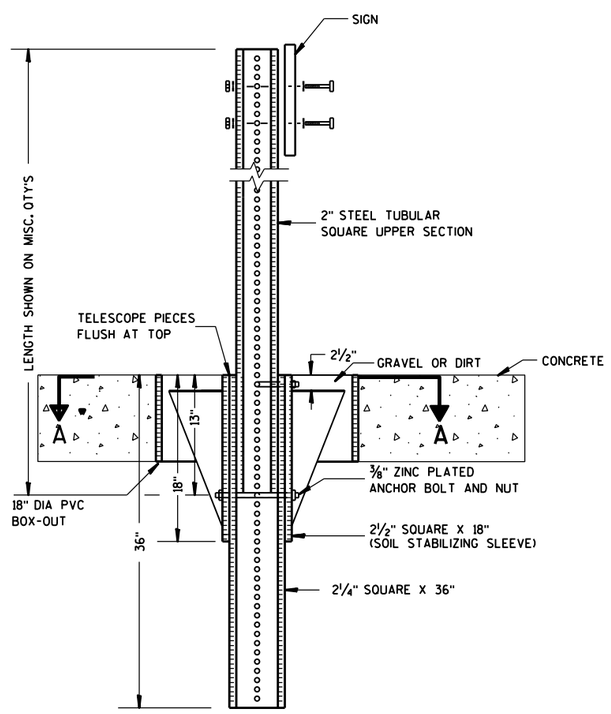
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

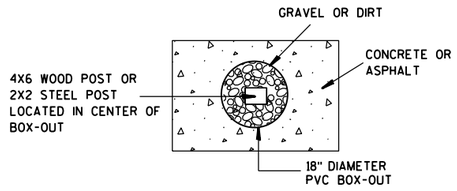
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

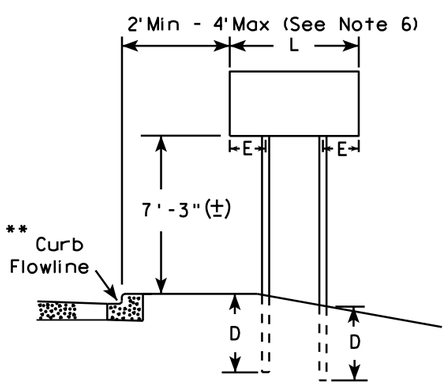
APPROVED Matthew R Rauch
for State Traffic Engineer

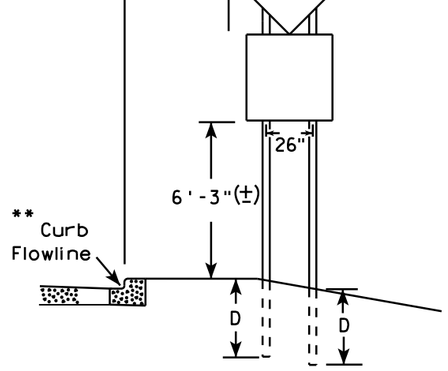
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

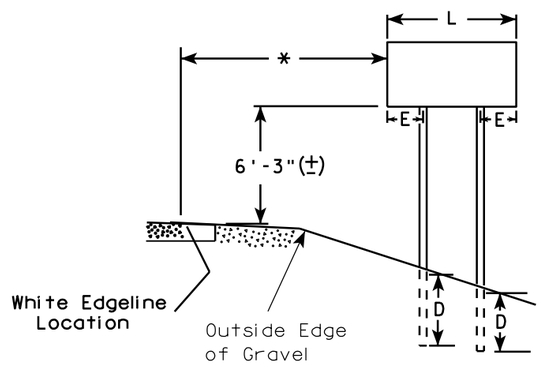
URBAN AREA

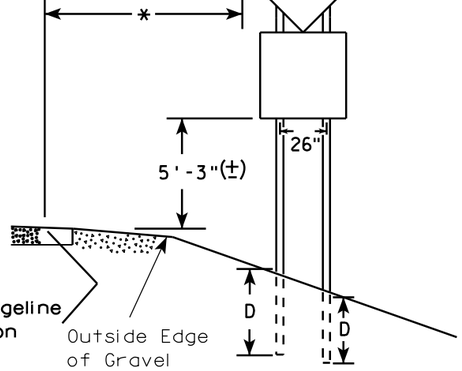




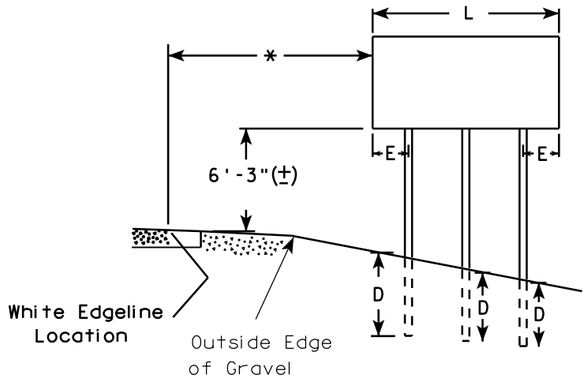
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
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 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

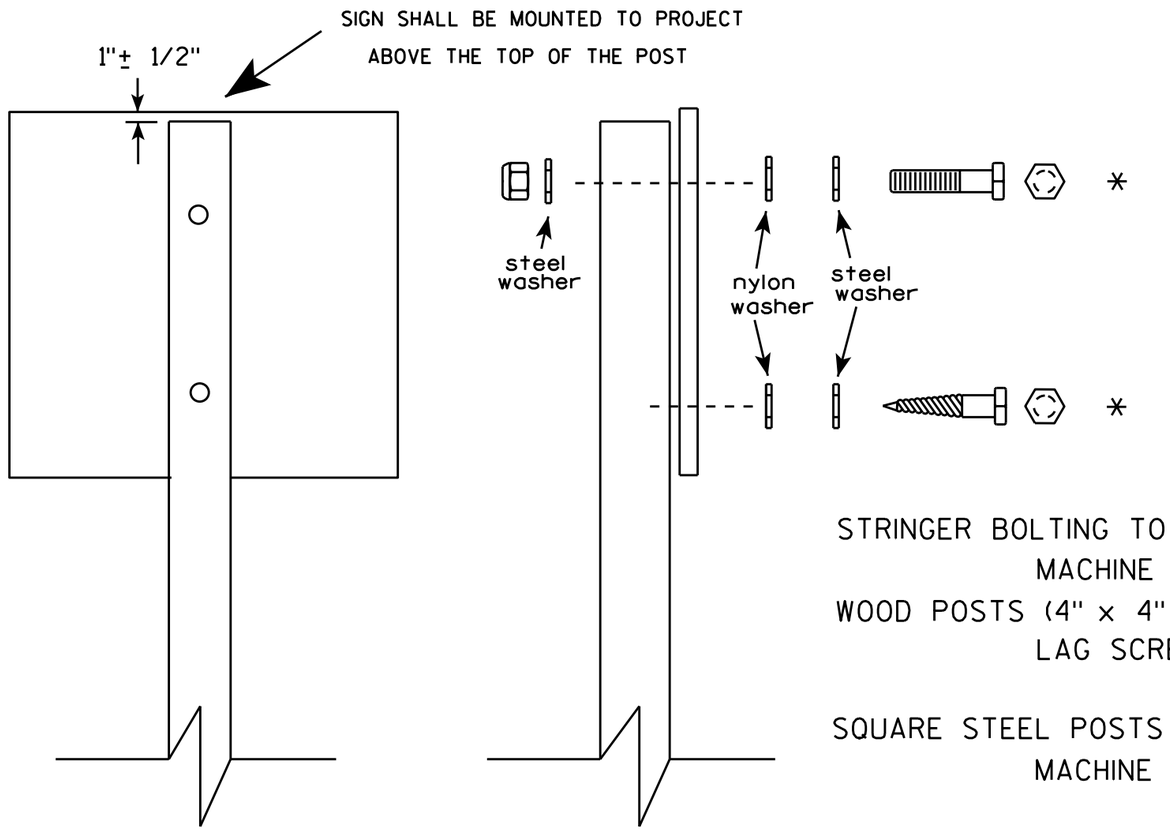
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14
135

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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/ 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 Matthew R Rauch
for State Traffic Engineer

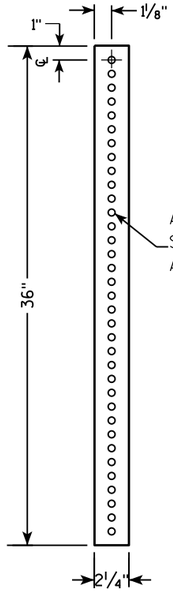
DATE 4/27/16 PLATE NO. A4-8.8

PROJECT NO: | SHEET NO: E

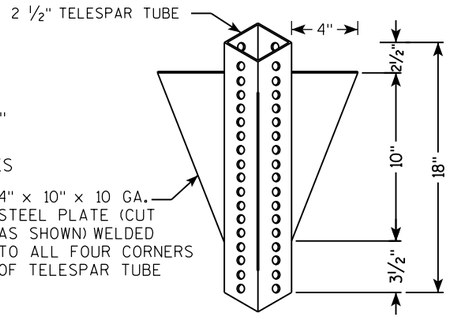
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 27-APR-2016 09:07 PLOT BY : mscj9h
WISDOT/CADDS SHEET 42

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

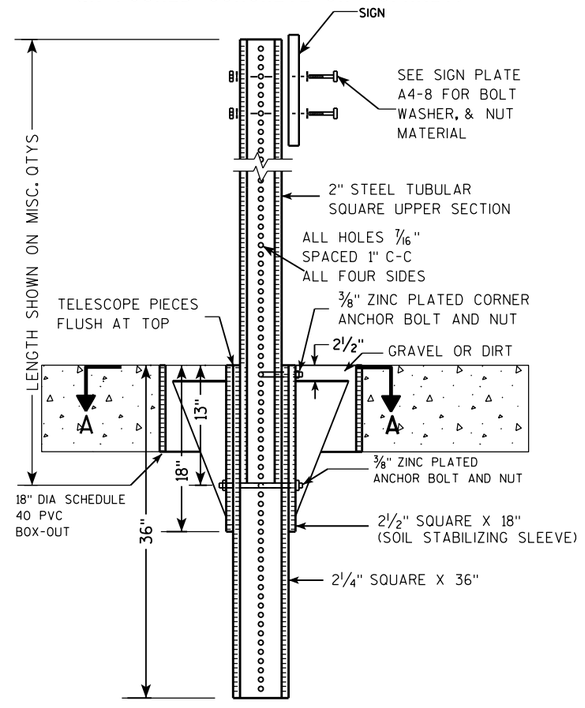
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



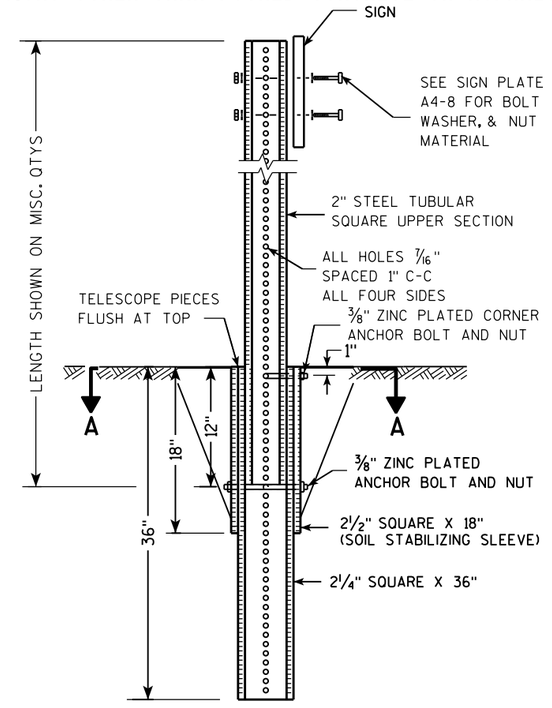
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

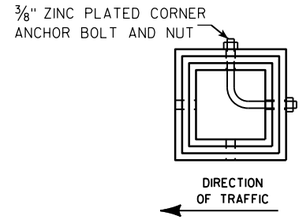


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

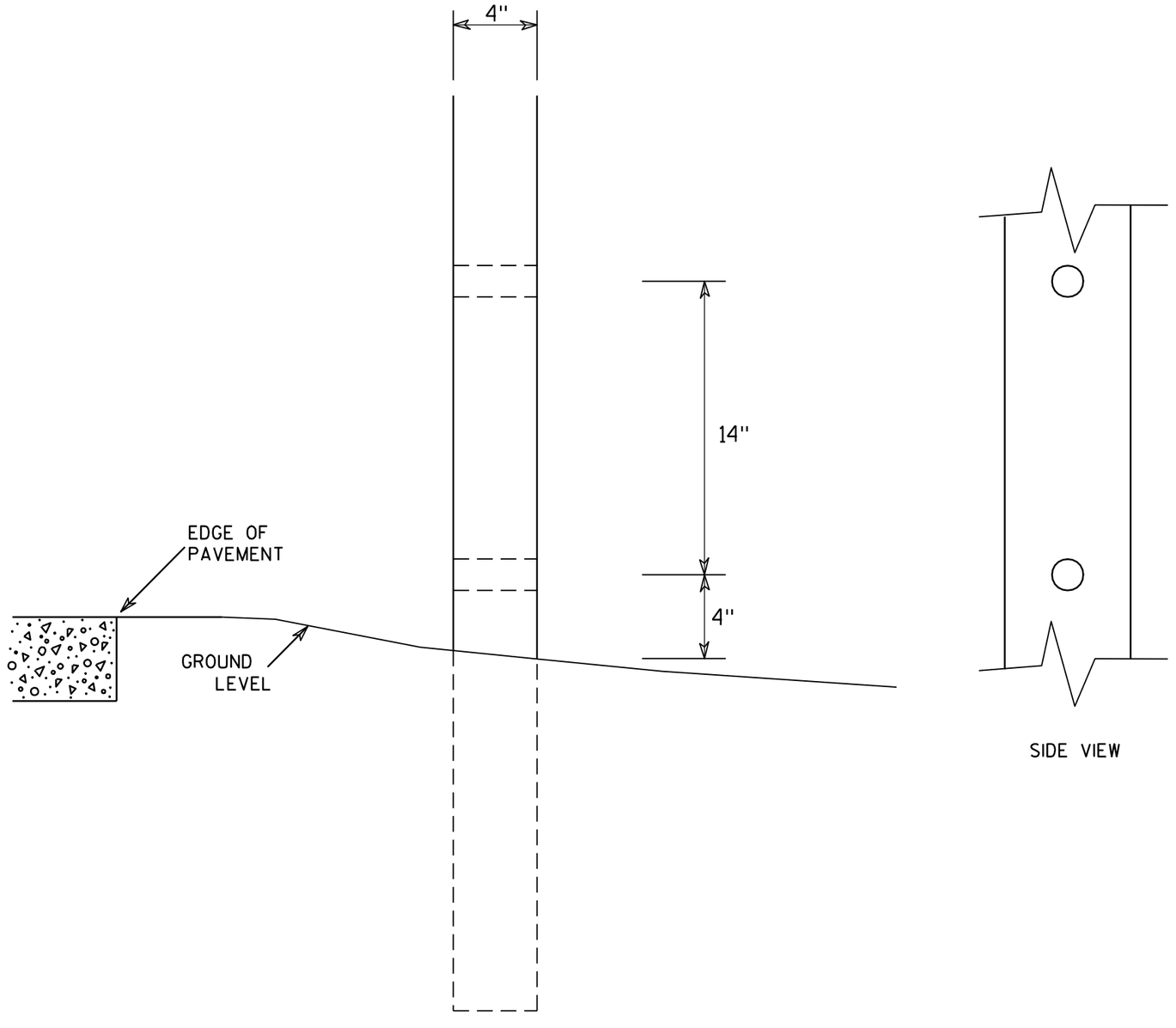
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

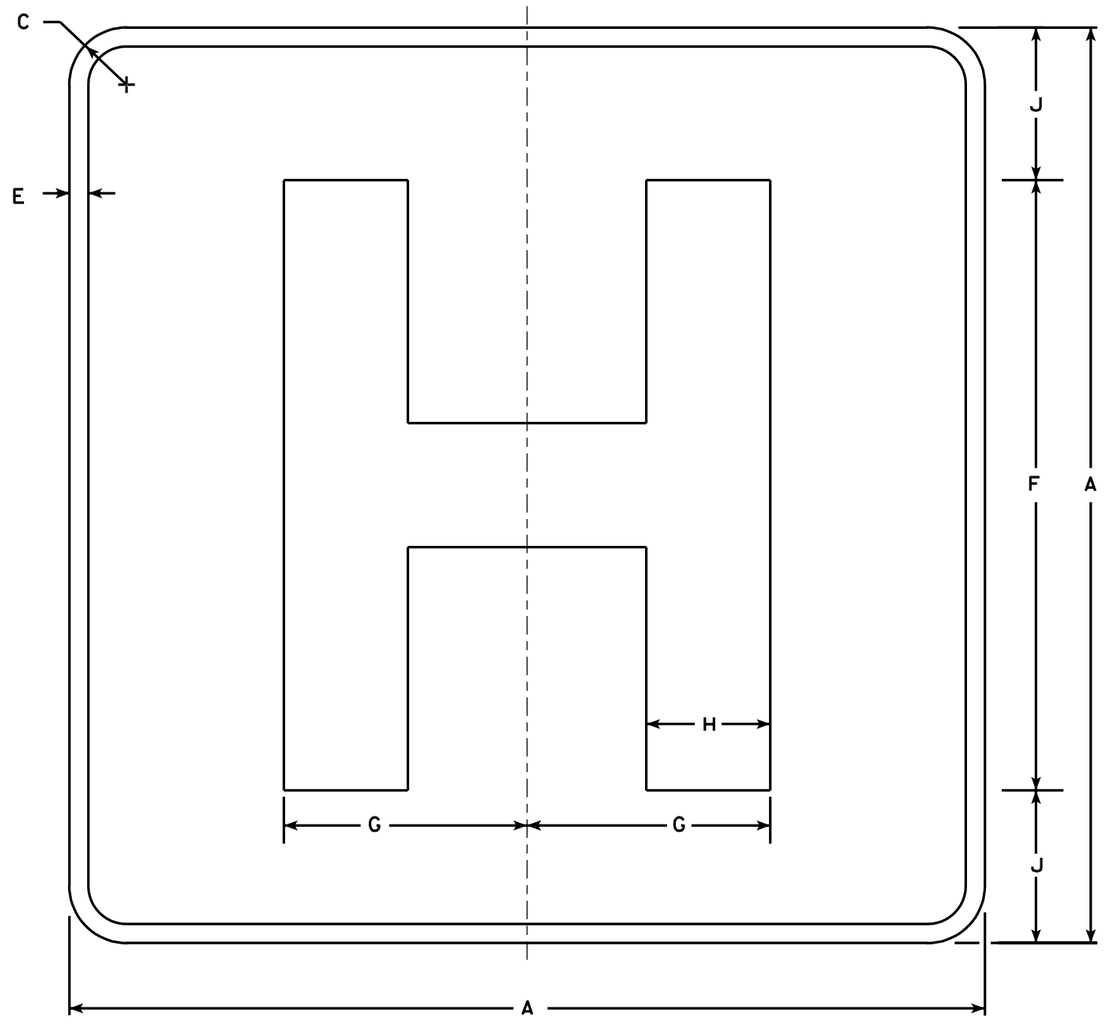
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 138	E



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
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	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

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

STANDARD SIGN
D9-2

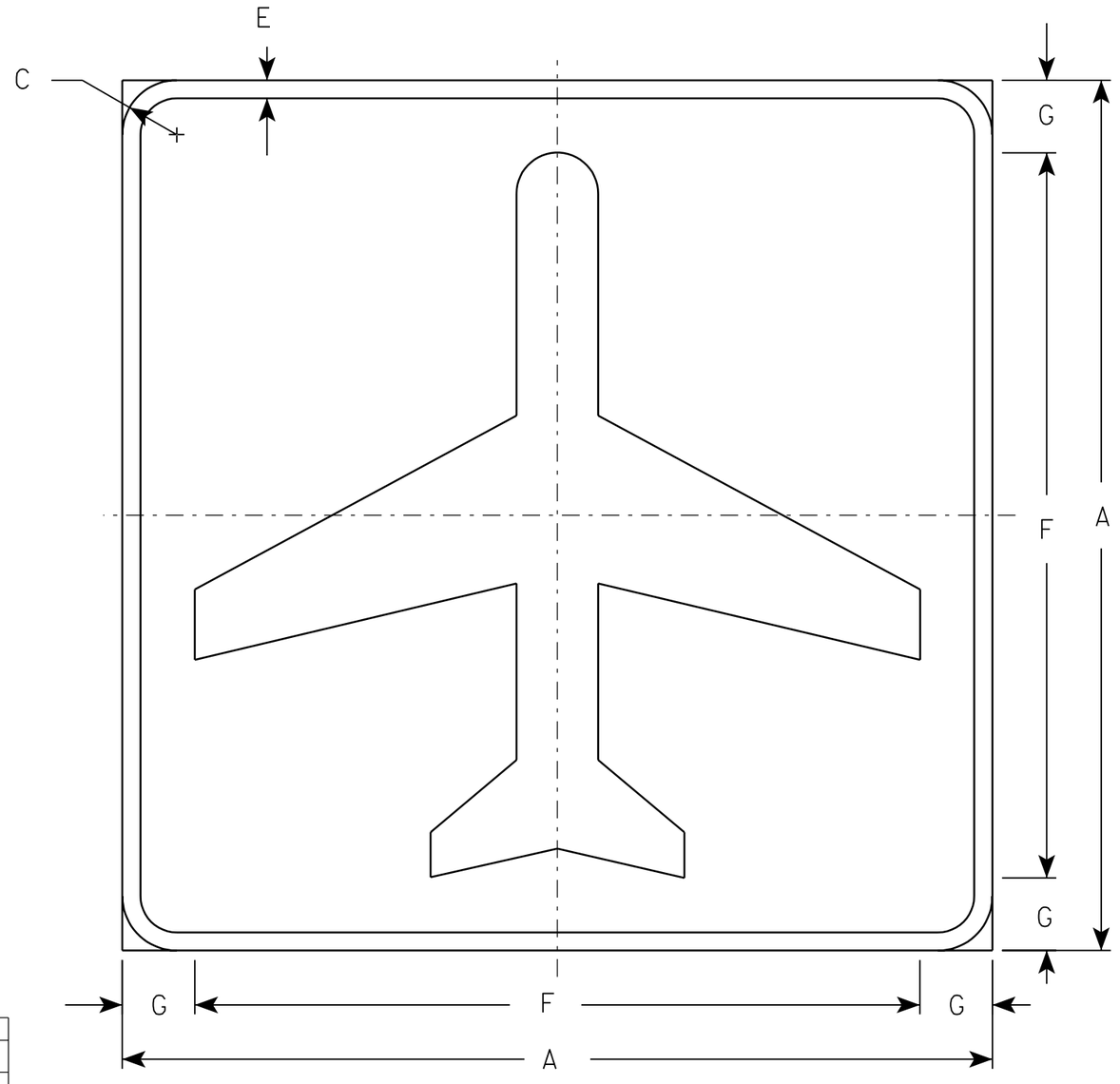
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-2.4

PROJECT NO:

SHEET NO: 139 E



I5 - 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 - Green
   Message - White - Type H Reflective
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.

Metric equivalent for this sign is:

SIZE	
1	450 mm X 450 mm
2	600 mm X 600 mm
3	750 mm X 750 mm
4	
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.	Area m2
1	18		1 1/8		3/8	15	1 1/2																				2.25	0.20
2	24		1 1/2		1/2	20	2																				4.0	0.37
3	30		2 1/4		3/4	25	2 1/2																				6.25	0.58
4																												
5																												

STANDARD SIGN
I5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 1/25/02 PLATE NO. I5-1.3

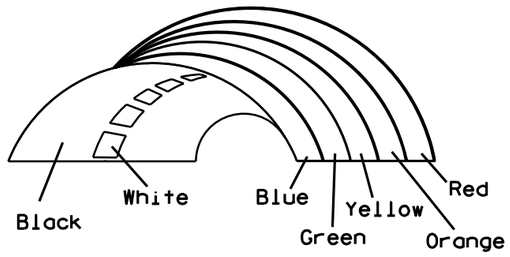
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 140	E

FILE NAME : C:\Users\Projects\tr_stdplate\I51.DGN PLOT DATE : 13-OCT-2005 11:47 PLOT BY : DITJPH PLOT NAME : PLOT SCALE : 3.973889:1.000000

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 - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

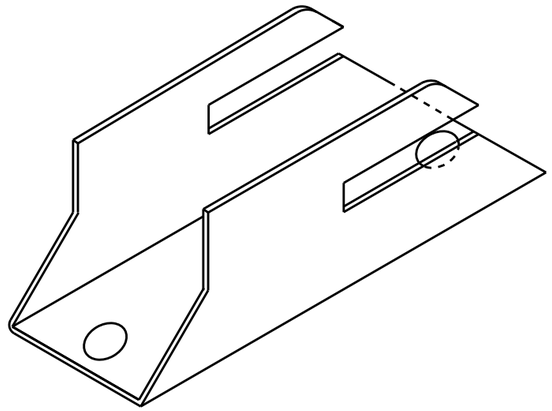
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

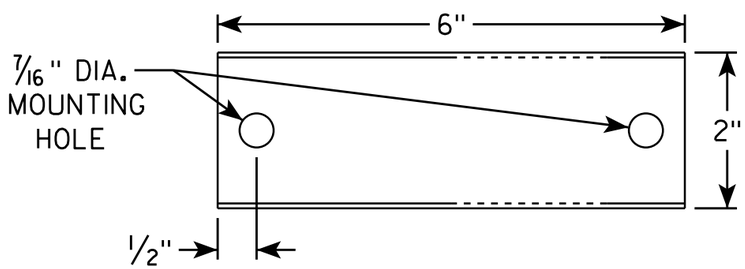
DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 141

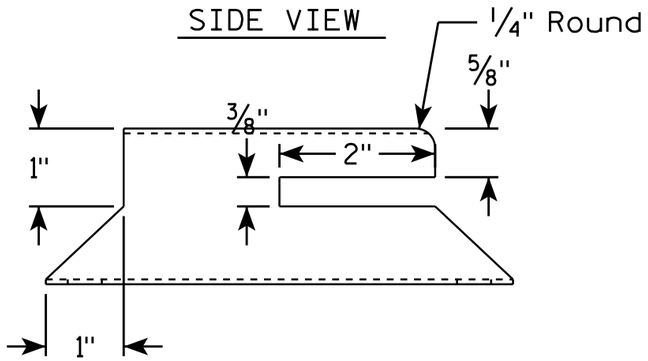
ISOMETRIC VIEW



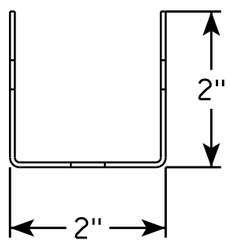
TOP VIEW



SIDE VIEW



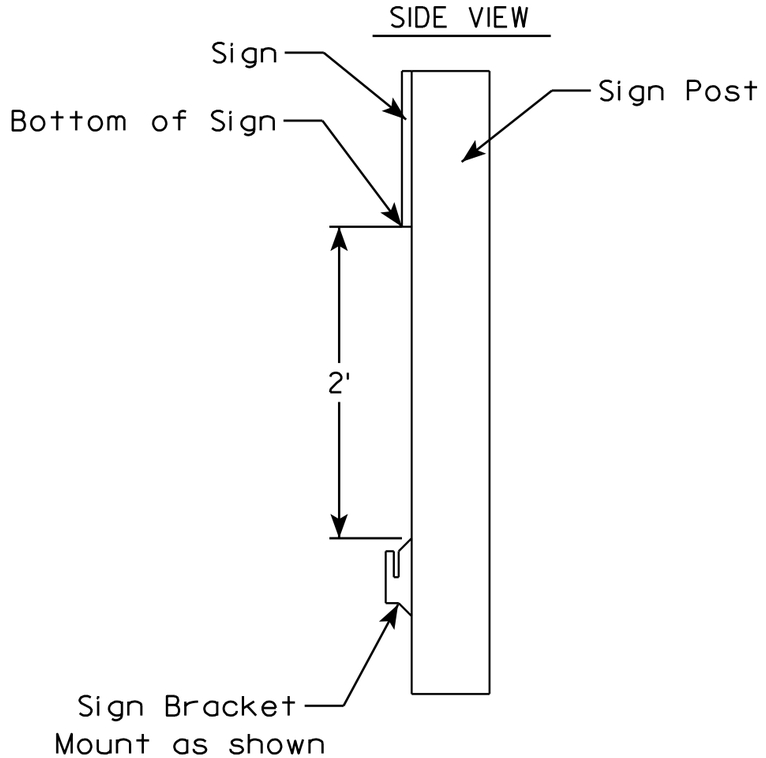
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

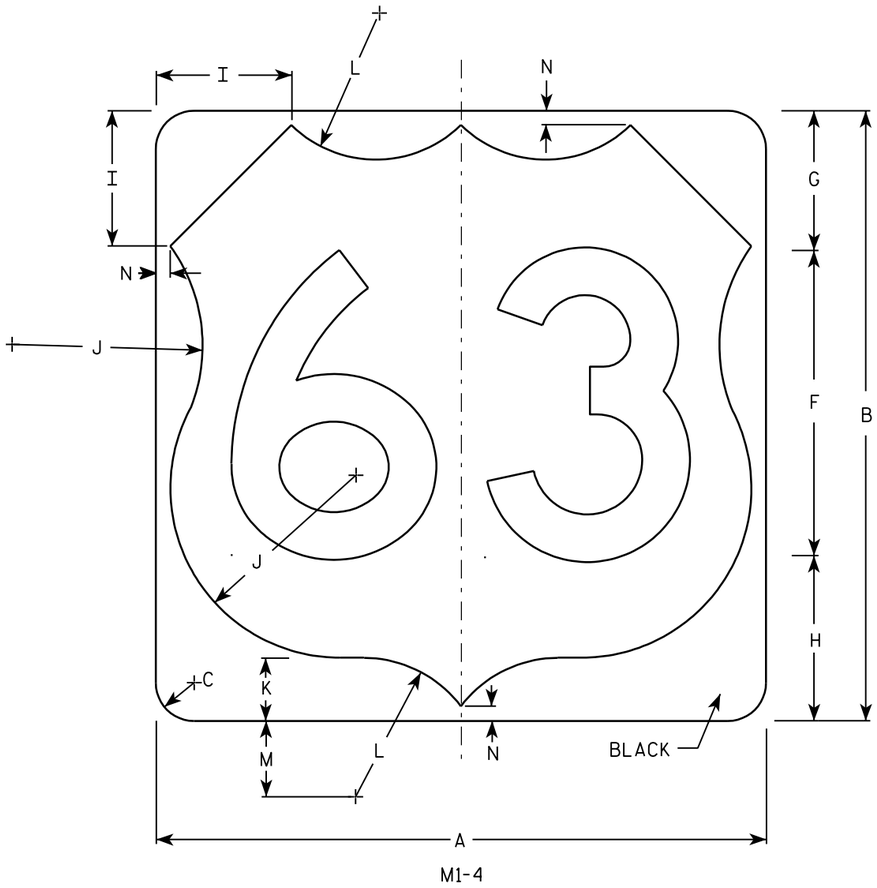
DATE 4/26/16 PLATE I55-56B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

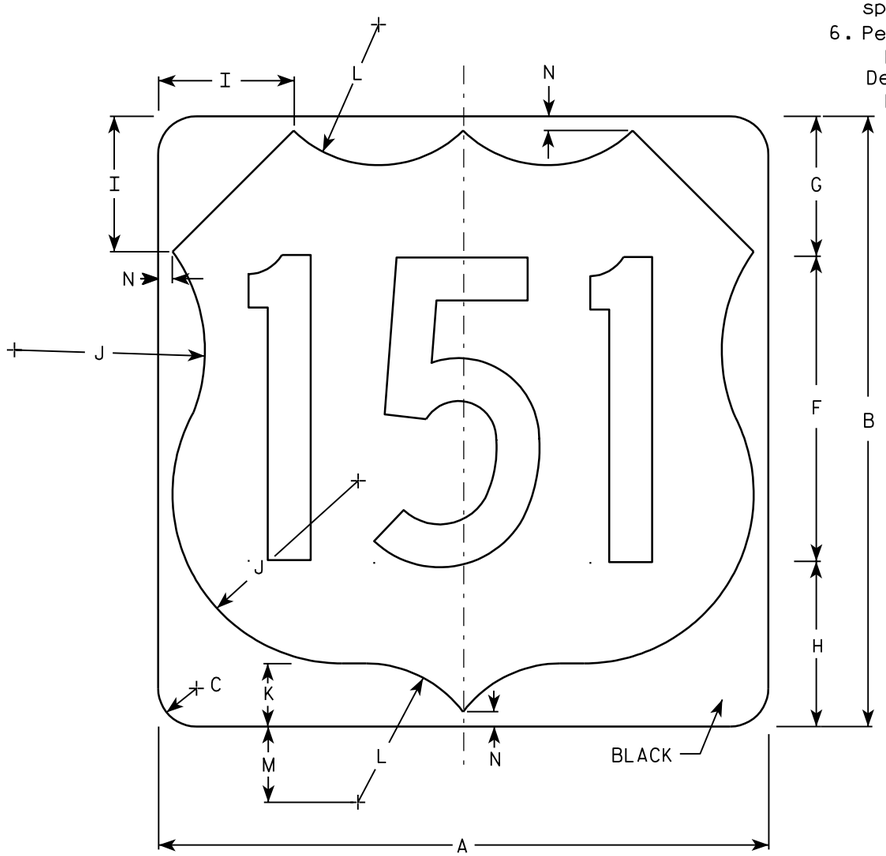
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\I5556B.DGN PLOT DATE : 26-APR-2016 17:29 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 1.945842:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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 m2
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

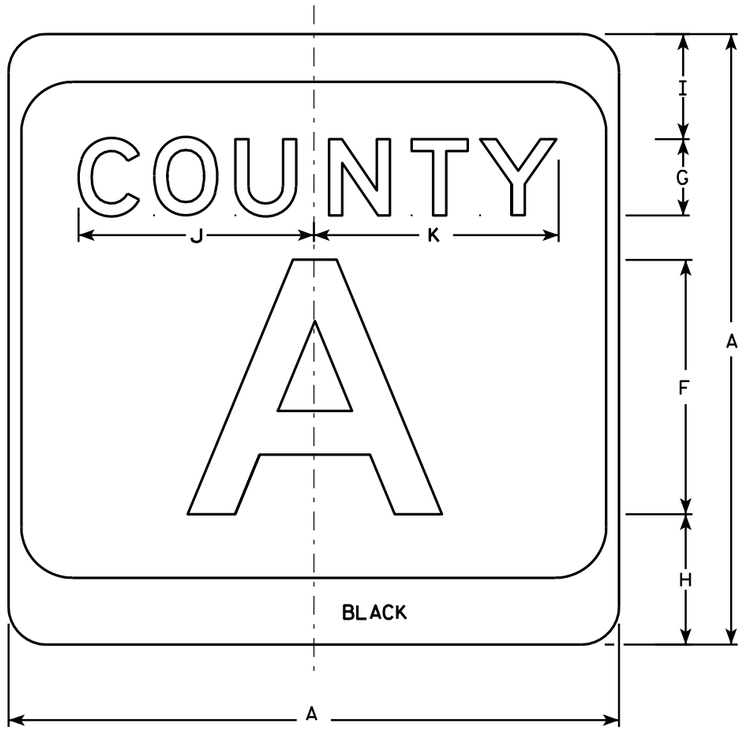
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

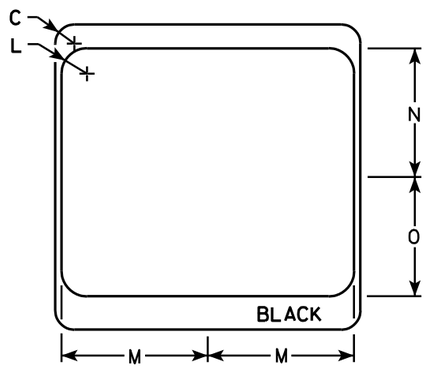
APPROVED Matthew R Rauch
for State Traffic Engineer

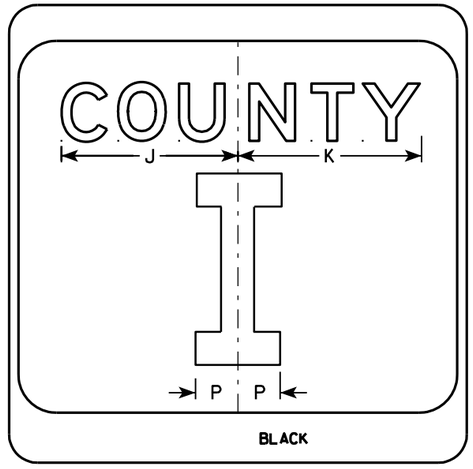
DATE 08/25/05 PLATE NO. M1-4.9

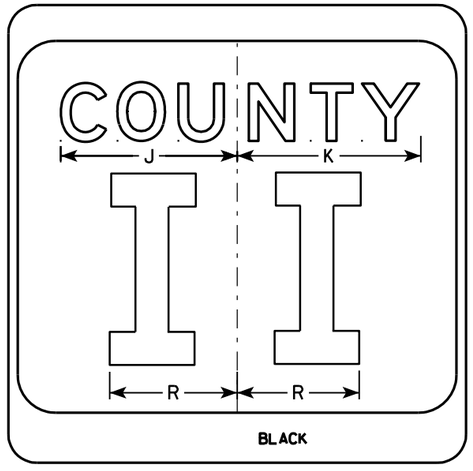
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 143 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

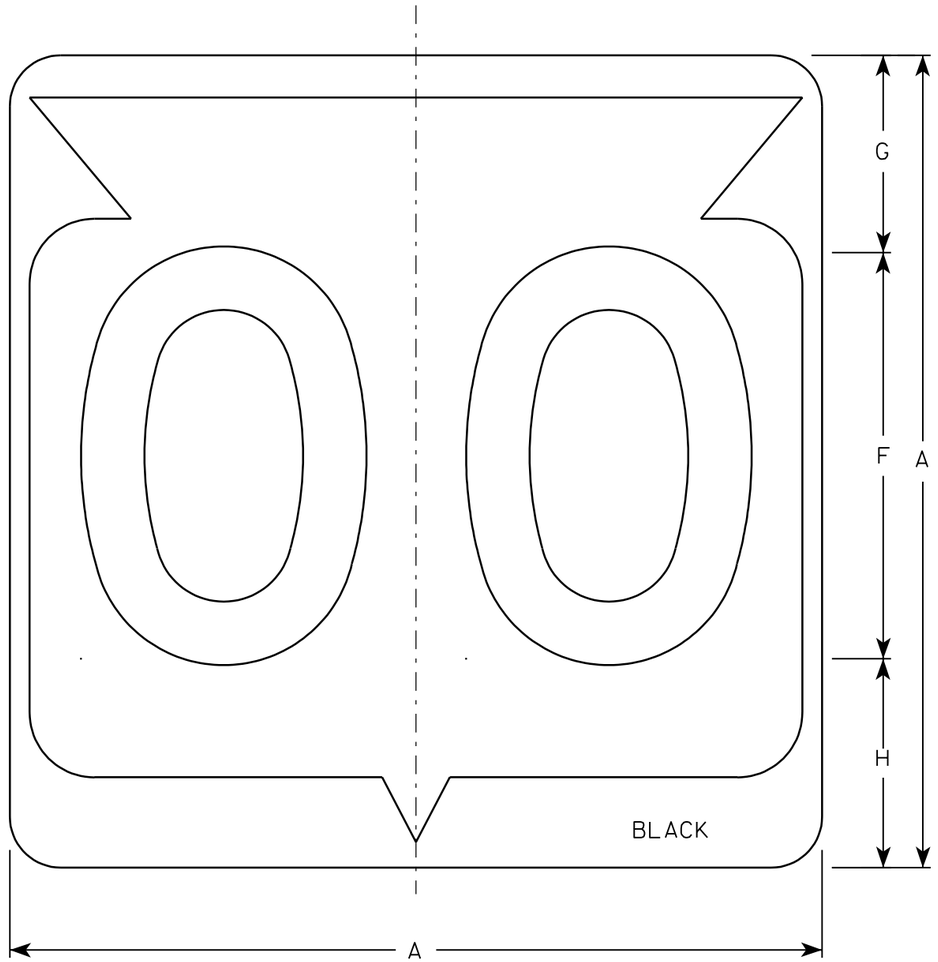
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

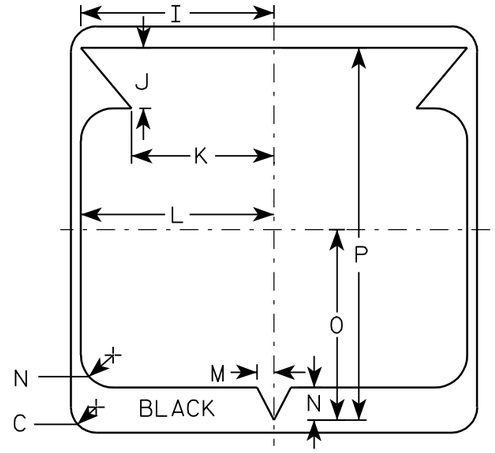
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 144	E



M1-6

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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 m2
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	.36
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	.81
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	.81
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	.81

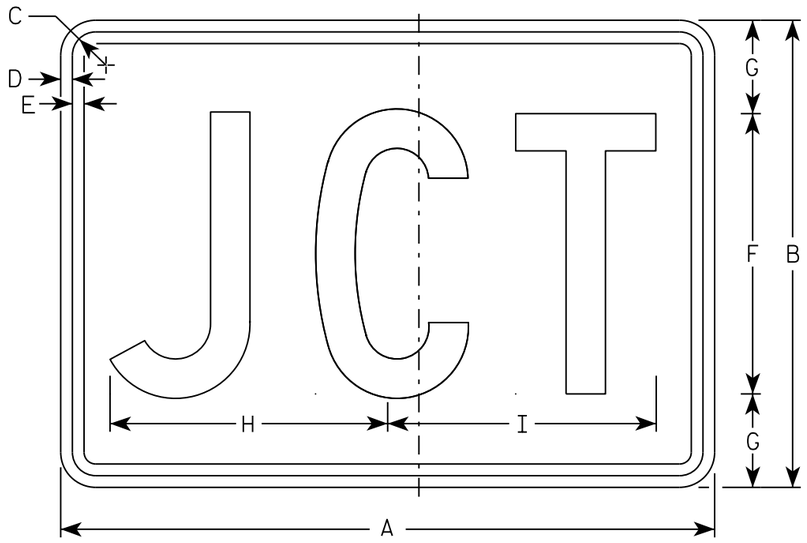
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

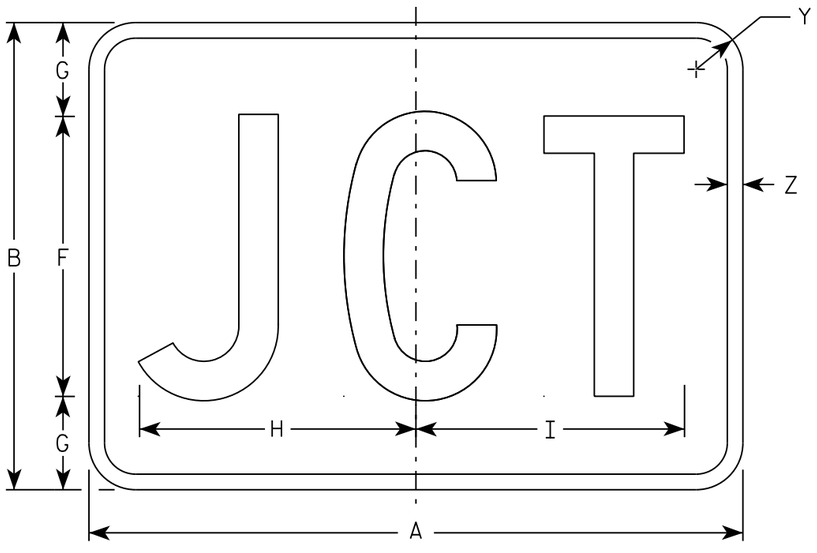
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 145	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is 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. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

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	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

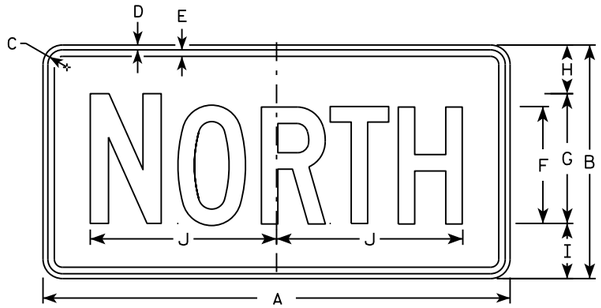
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

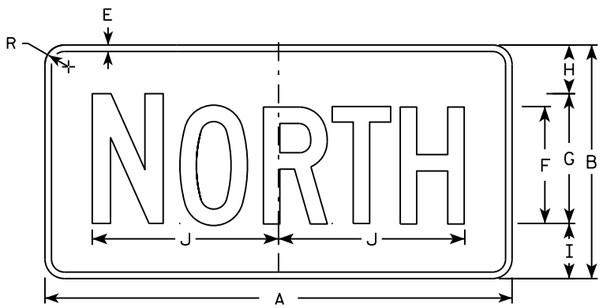
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 146 M2-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



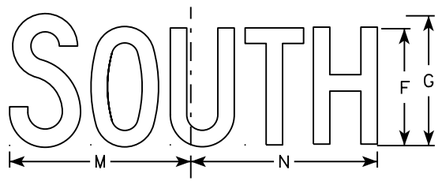
M3-1
MM3-1
MP3-1



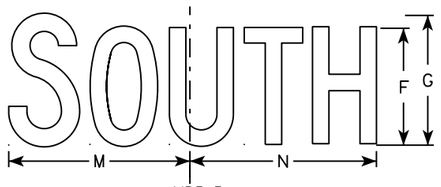
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

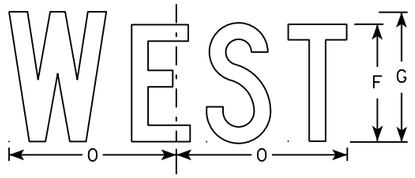
MB3-2
MK3-2
MN3-2



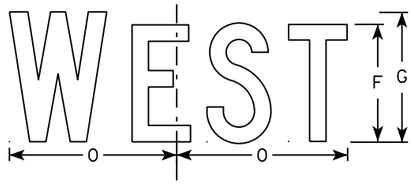
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



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 thur M3-4
SERIES

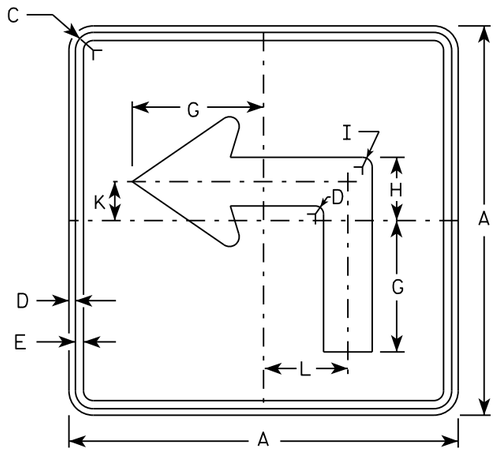
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

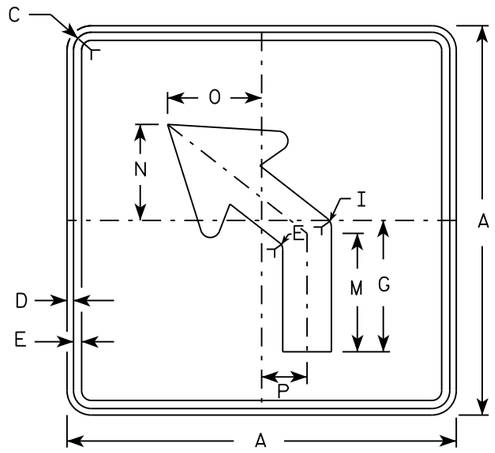
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

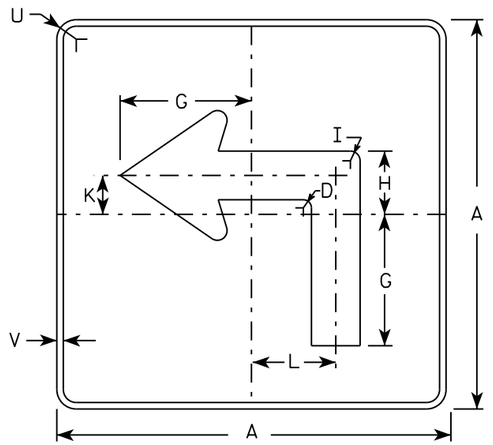
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



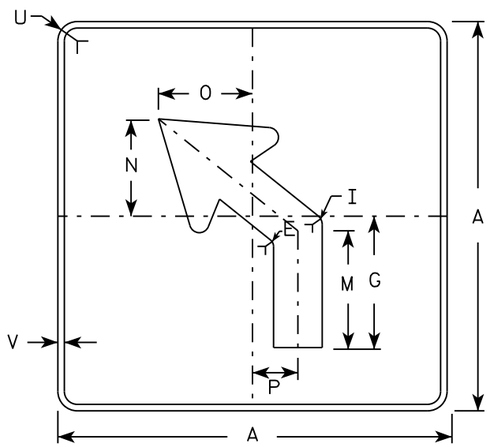
M5-1L
MM5-1L
MO5-1L
MP5-1L



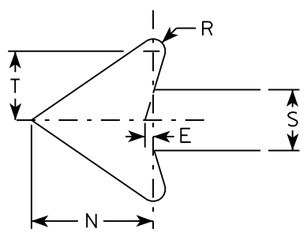
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
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. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

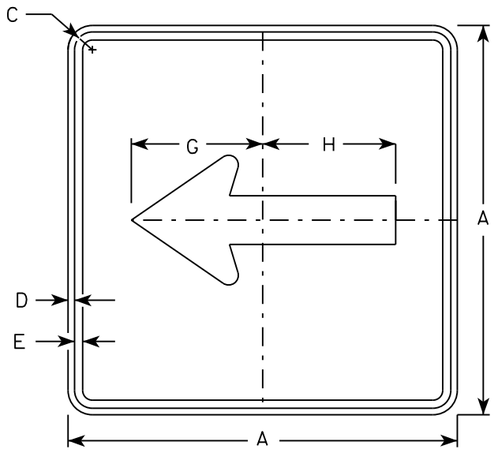
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

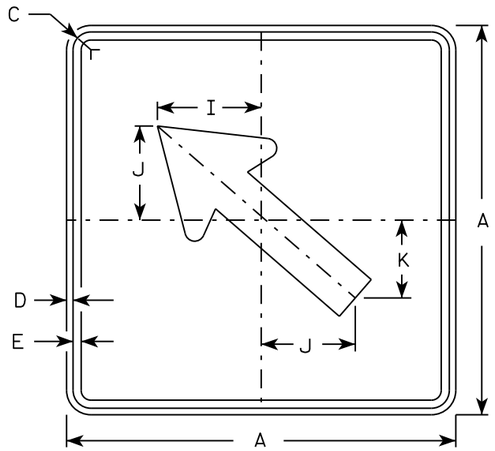
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



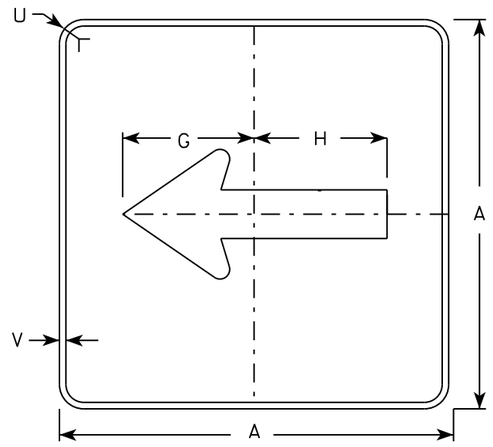
M6-1
MM6-1
MO6-1
MP6-1



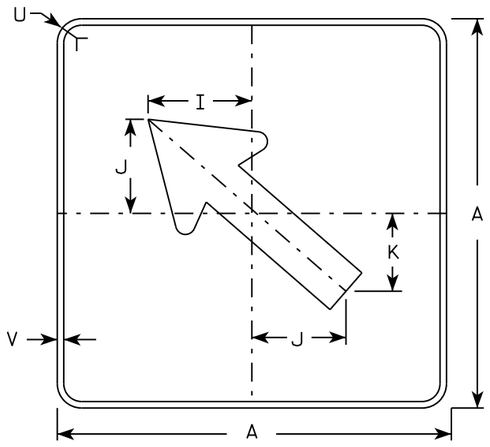
M6-2
MM6-2
MO6-2
MP6-2

NOTES

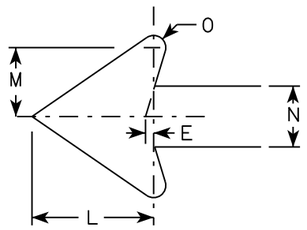
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

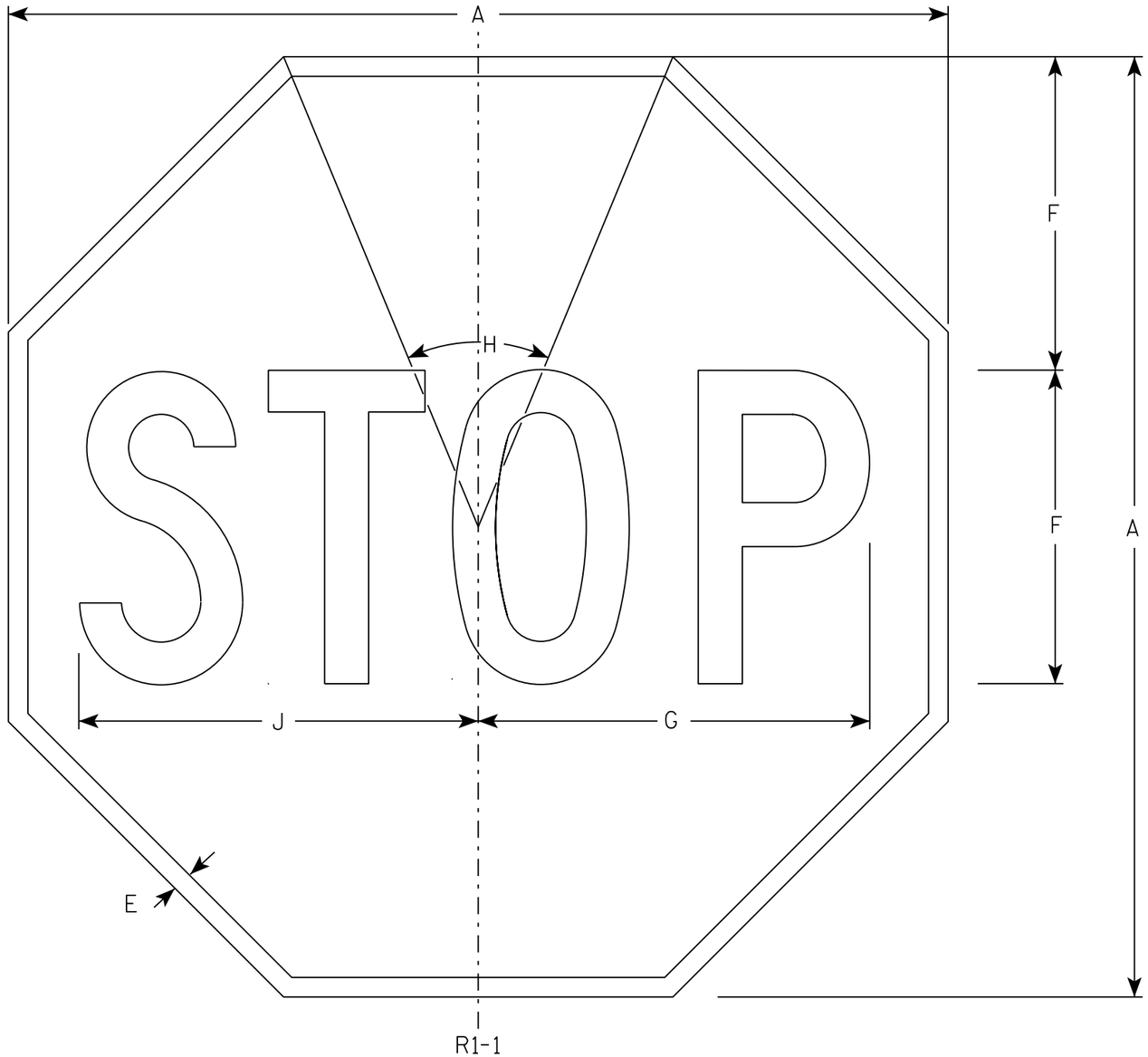
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 149 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R1-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1-1

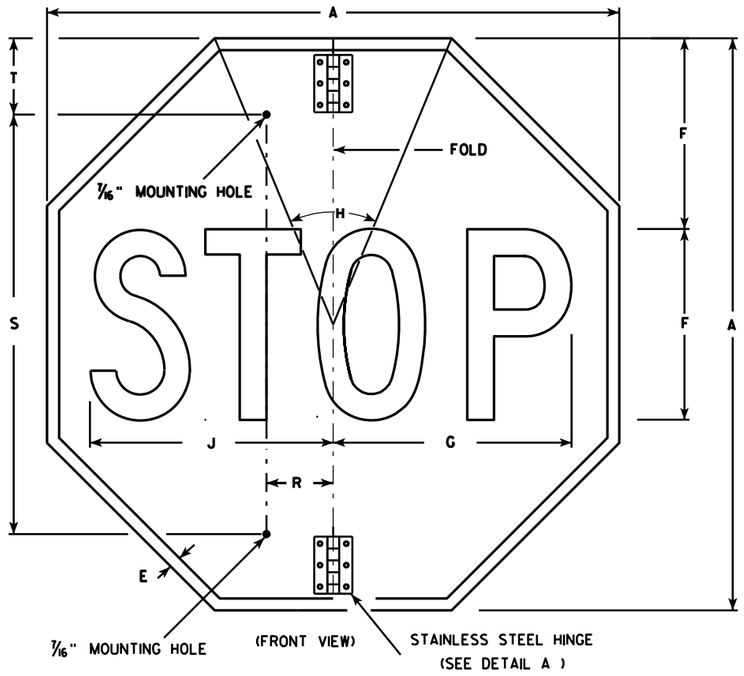
WISCONSIN DEPT OF TRANSPORTATION

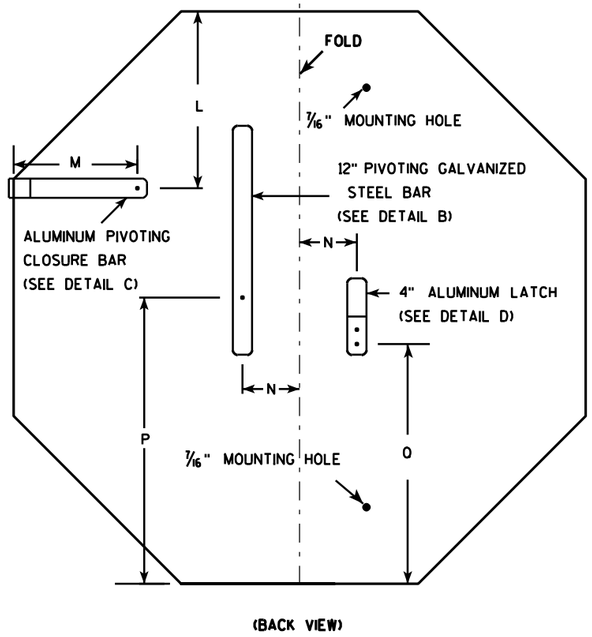
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 150 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

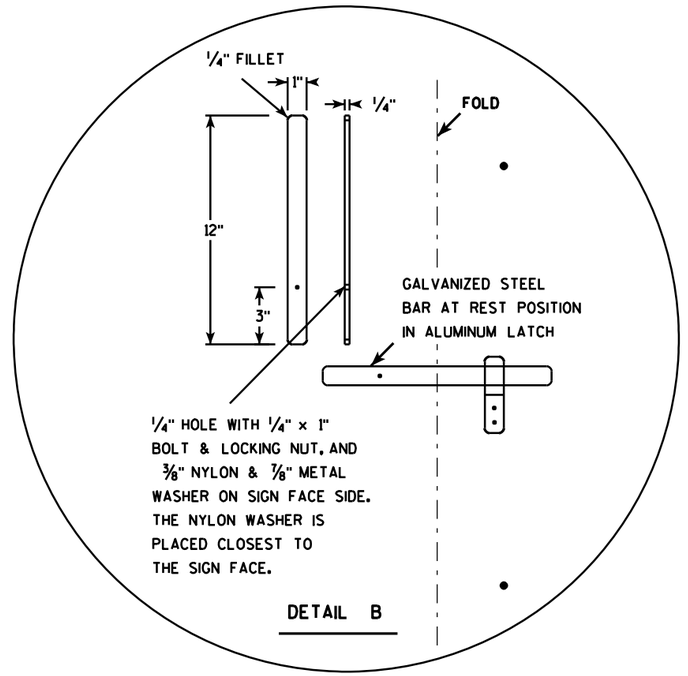
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



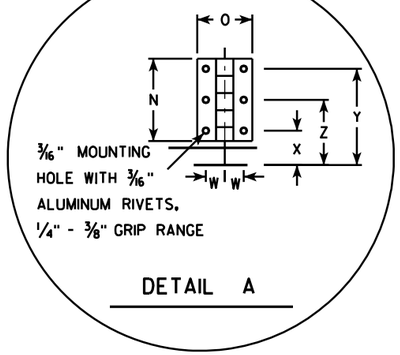


NOTES

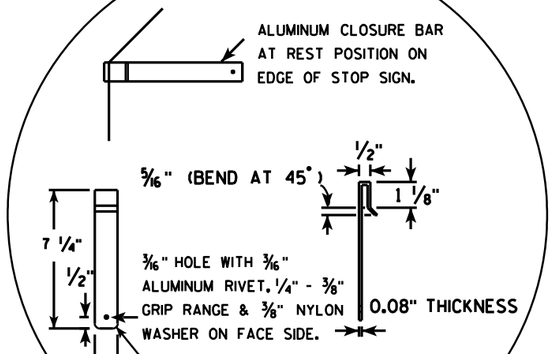
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



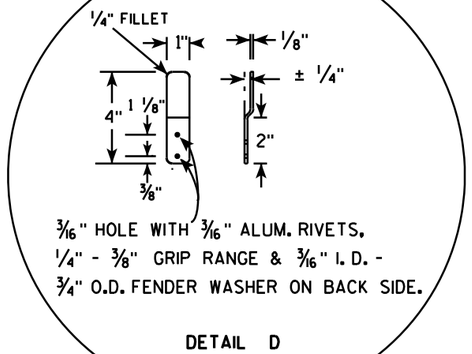
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

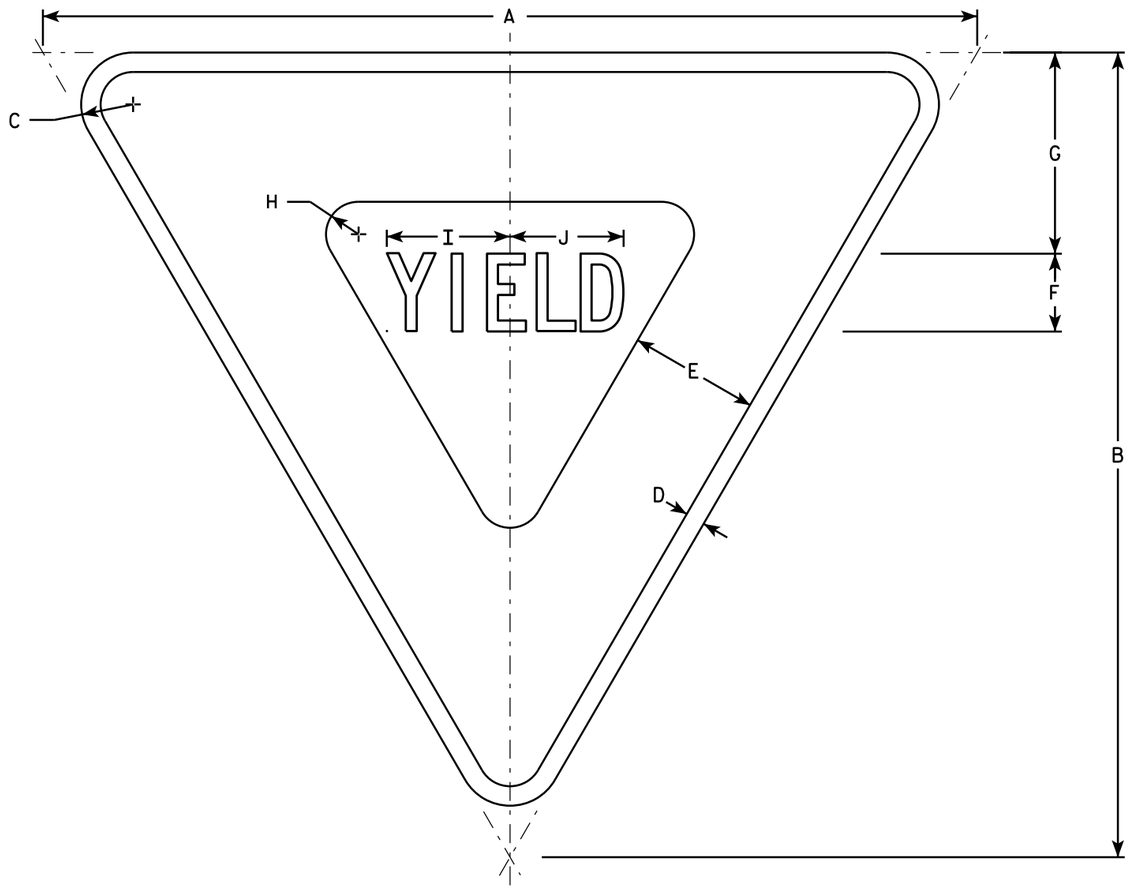
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 151	E



R1-2

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 - 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. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

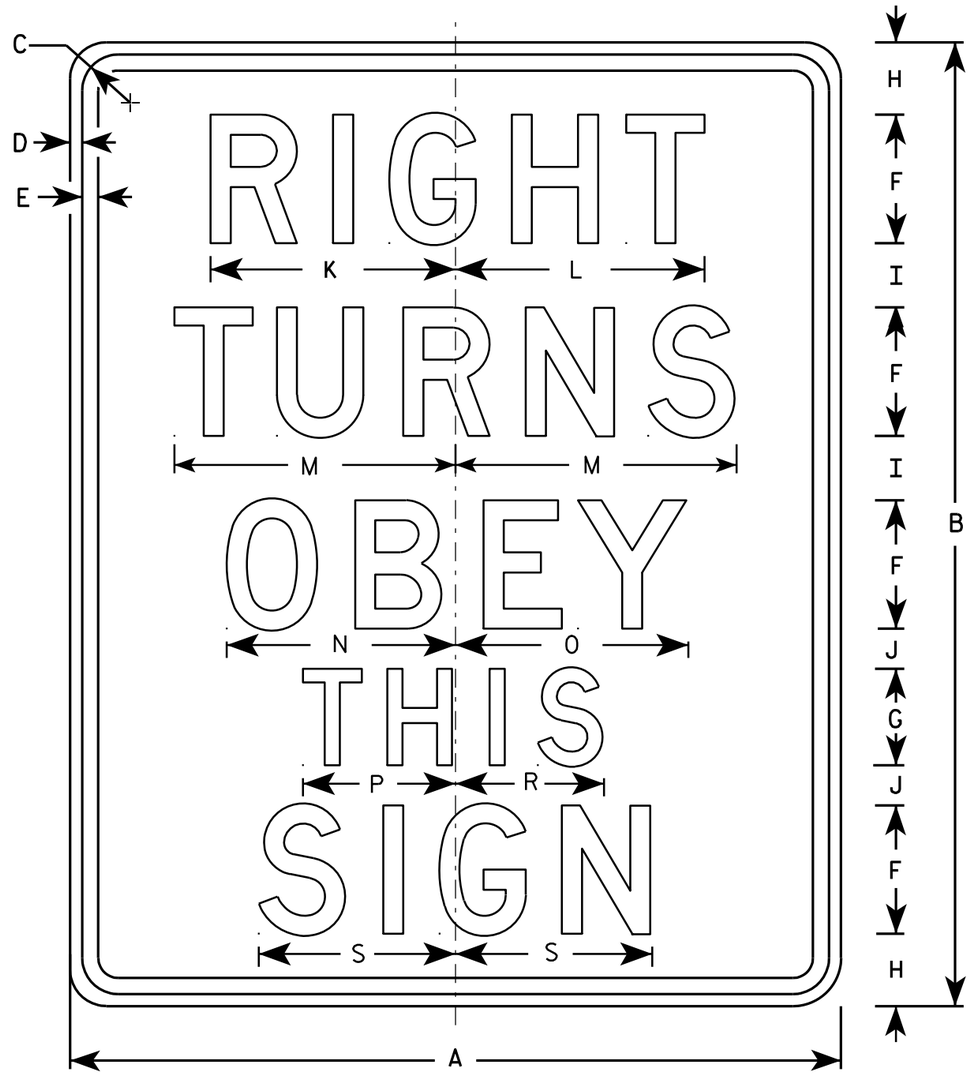
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R1-53

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	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
2M	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
3																											
4																											
5																											

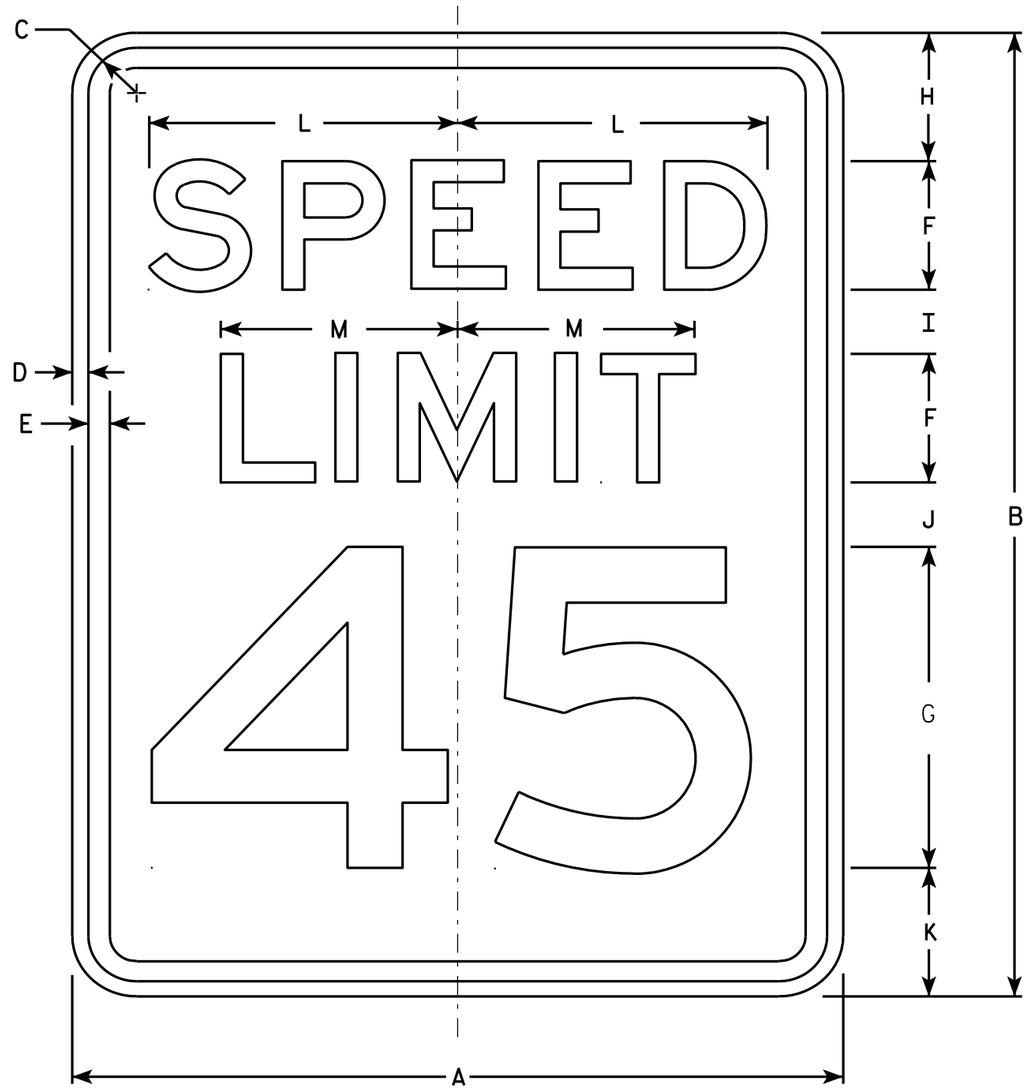
STANDARD SIGN
R1-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-53.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 153 | E



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

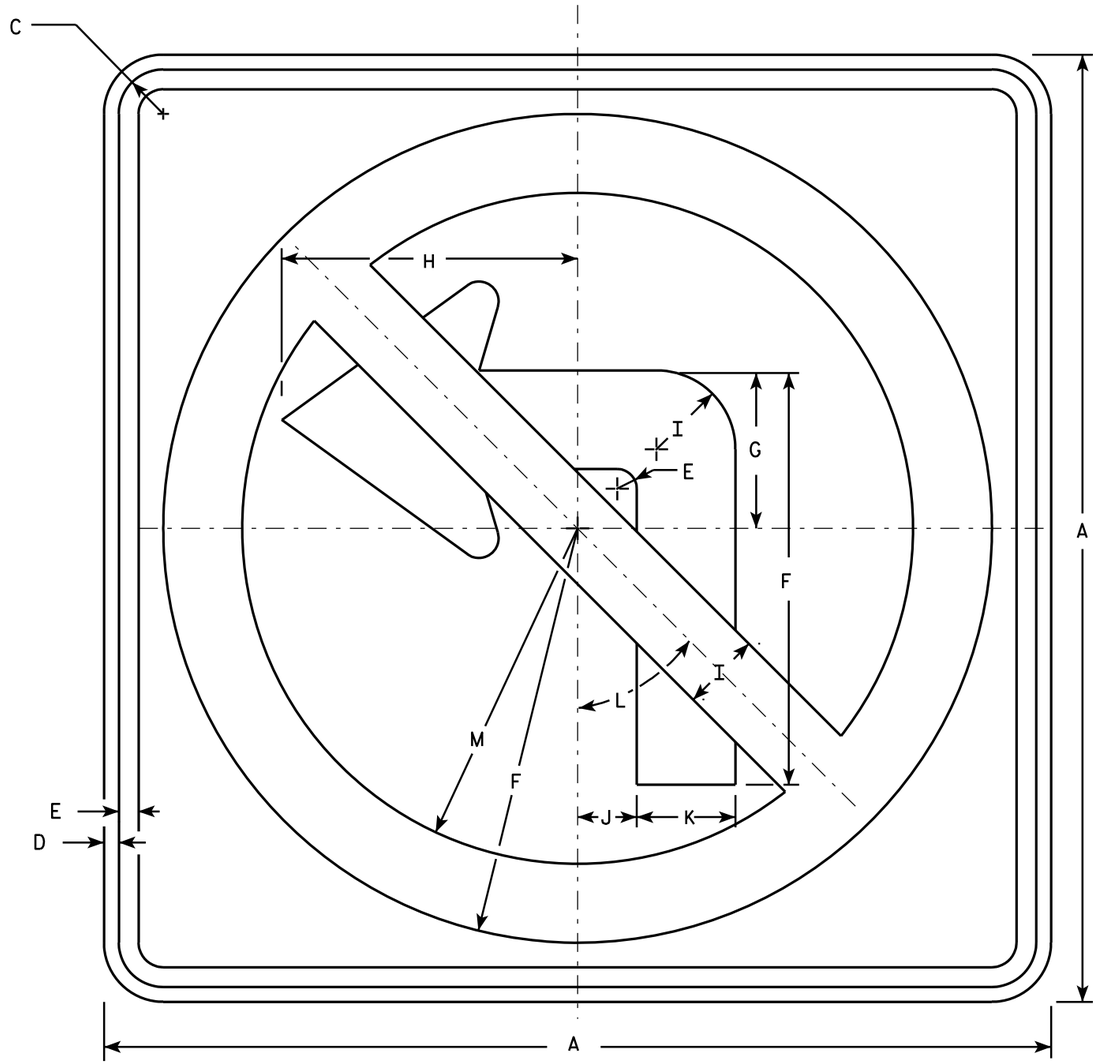
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

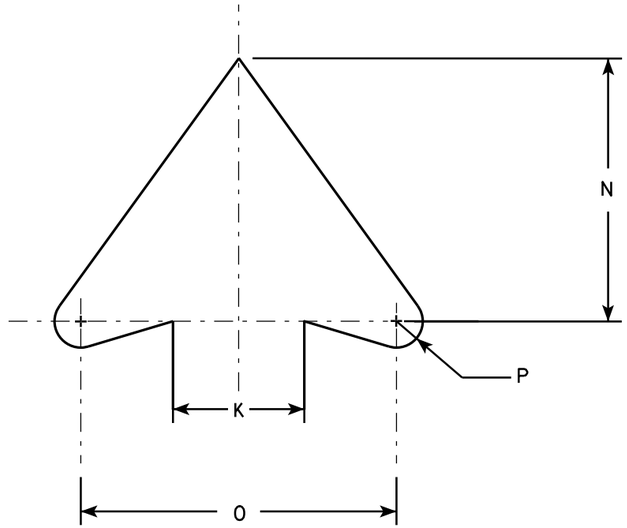
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 154	E



R3-2

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 - See note 4
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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

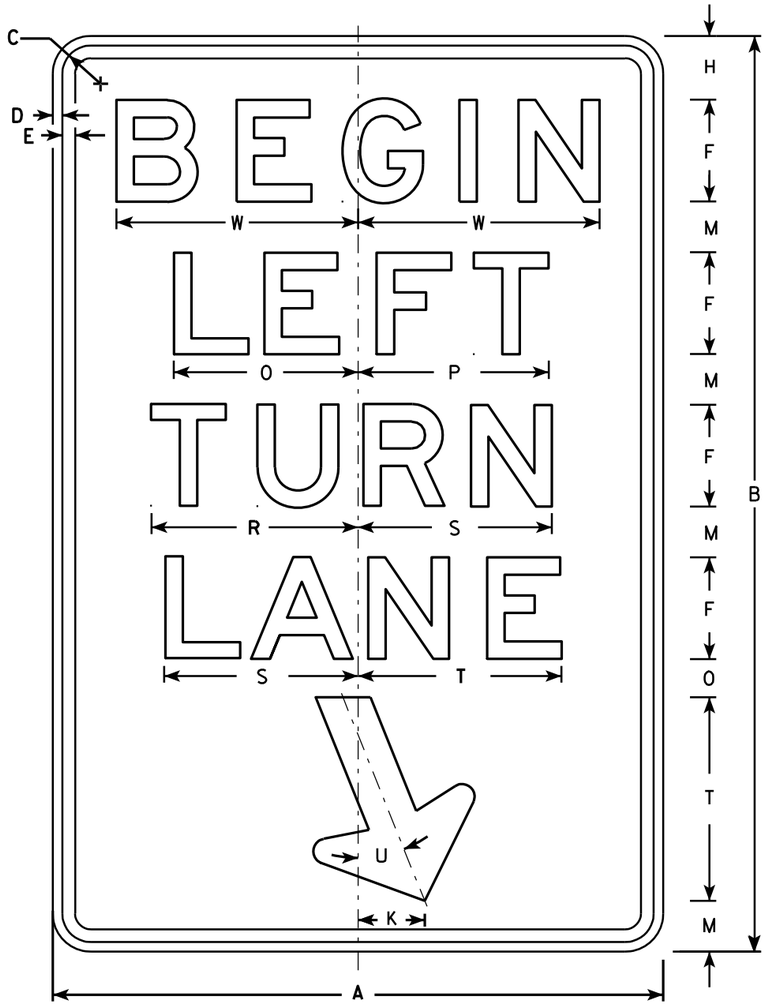
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

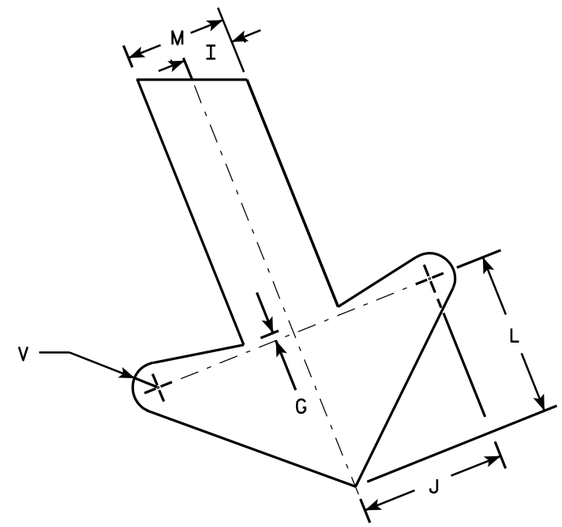
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 155	E



R3-20L

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.



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	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	7 1/4	7 1/2		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	7 1/4	7 1/2		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	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

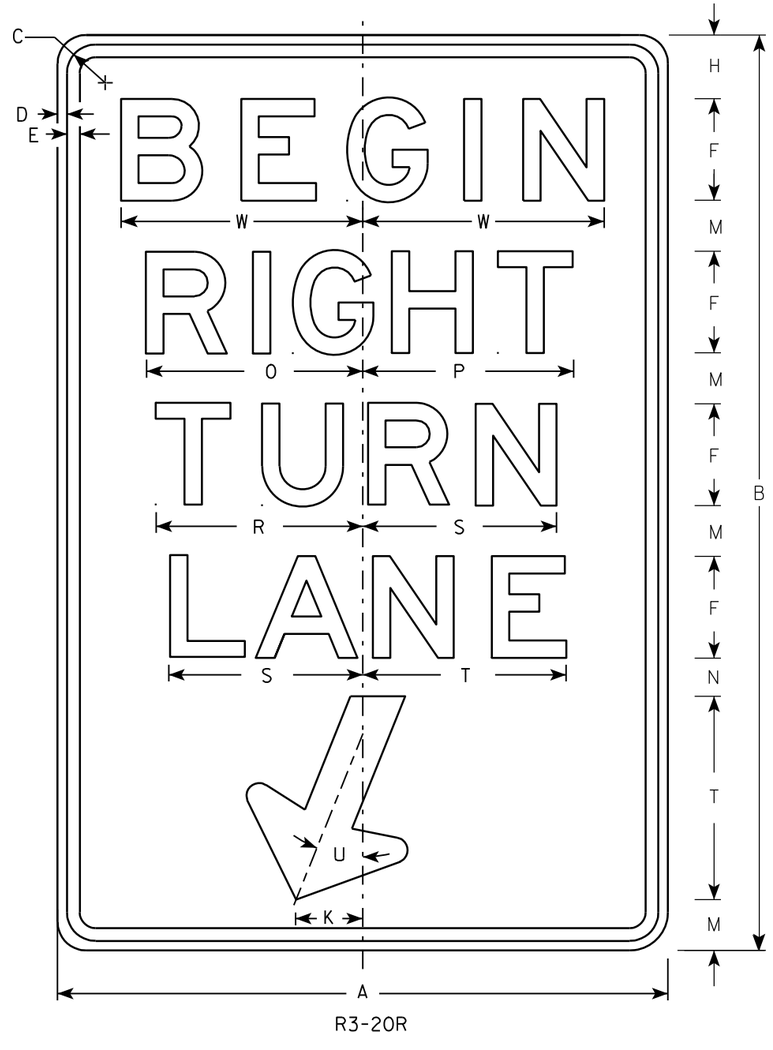
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

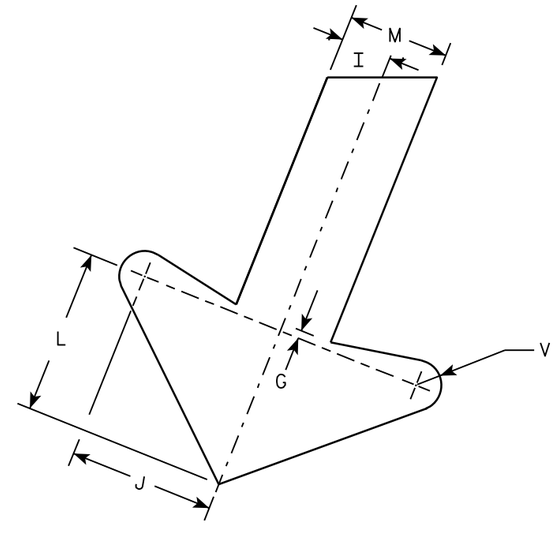
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 156 | E



R3-20R

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.



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	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																											

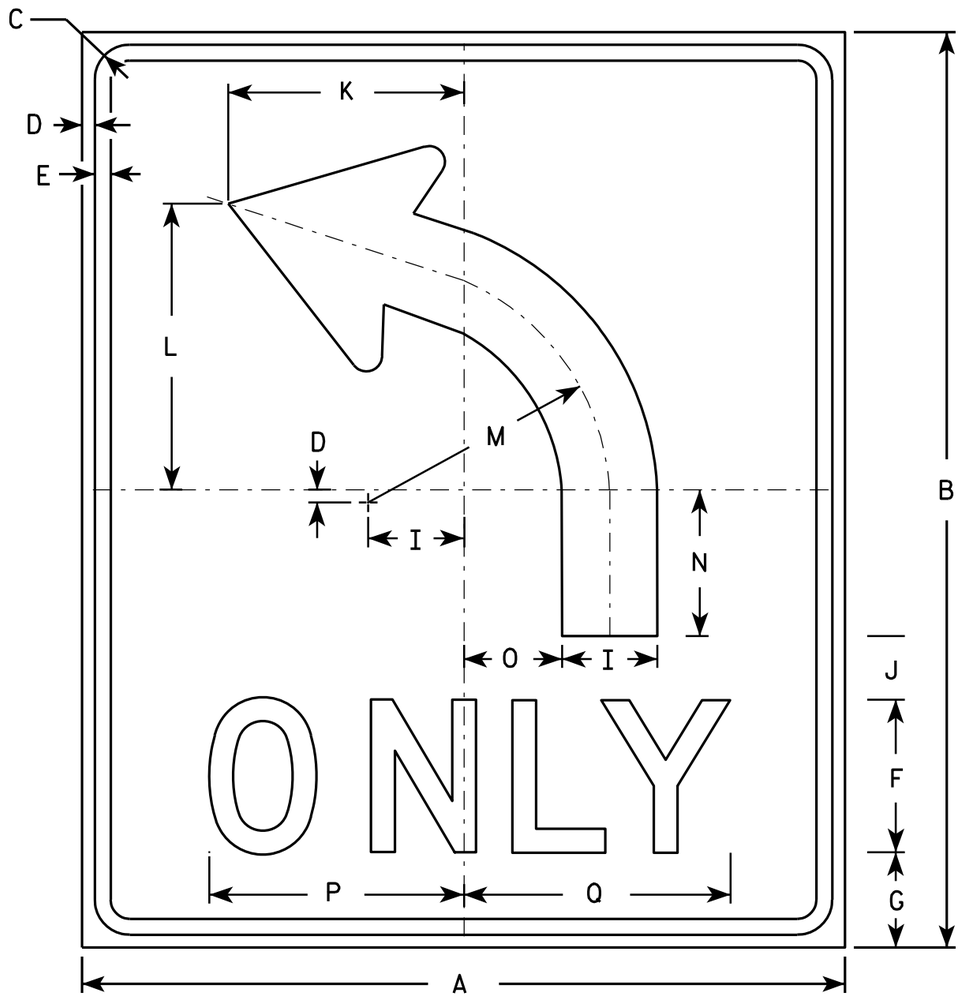
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

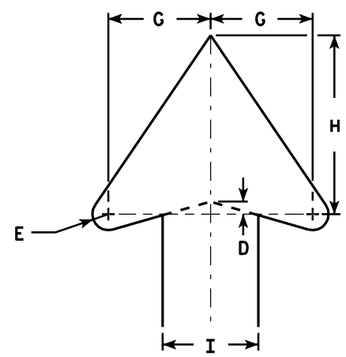
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 157 | E



R3-50L

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. R3-50R is the same as R3-50L except curved portion of arrow points right.



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	30	36	1 3/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
2M	30	36	1 3/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
3																											
4																											
5																											

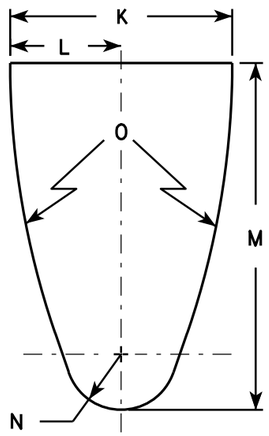
STANDARD SIGN
R3-50

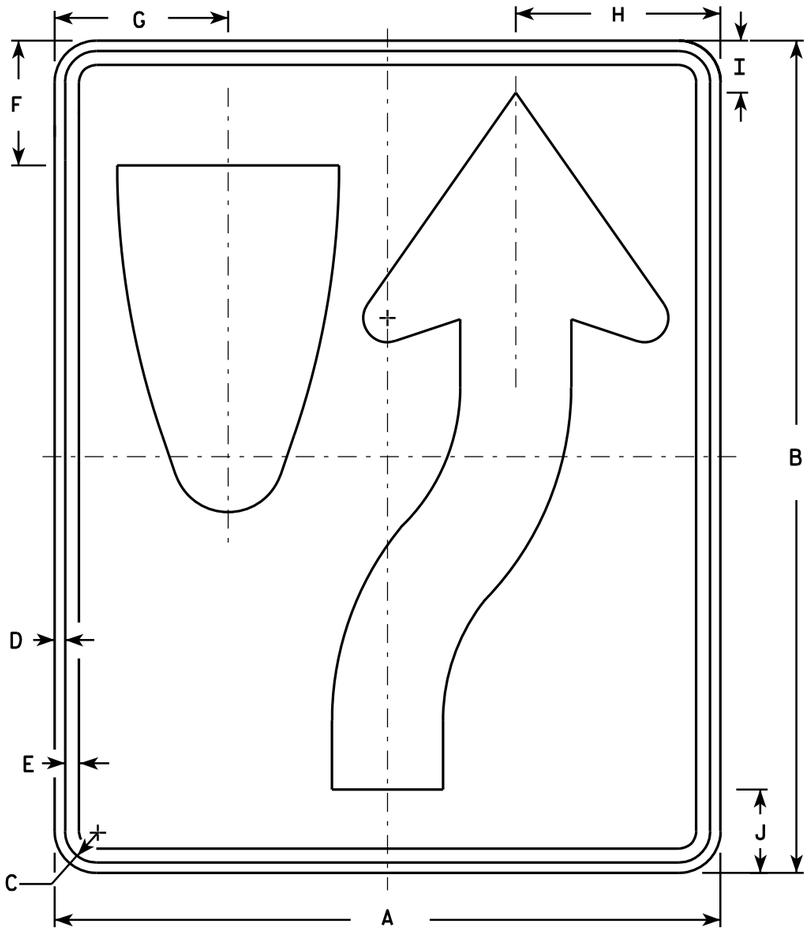
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-50.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 158 | E

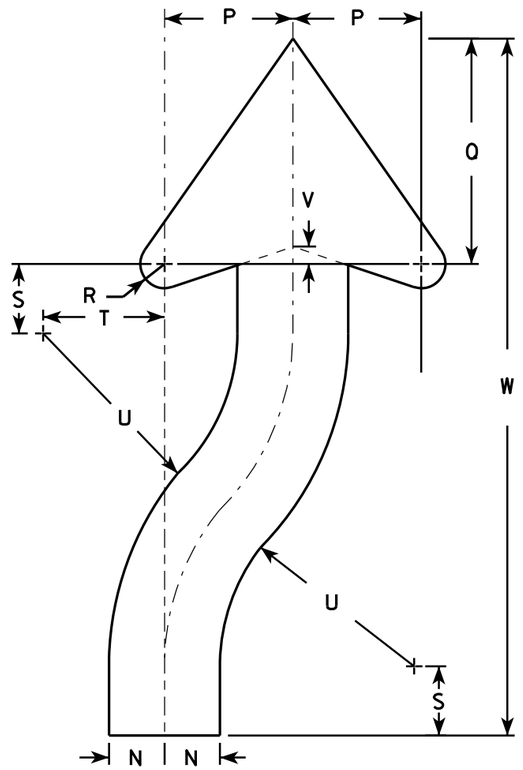




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

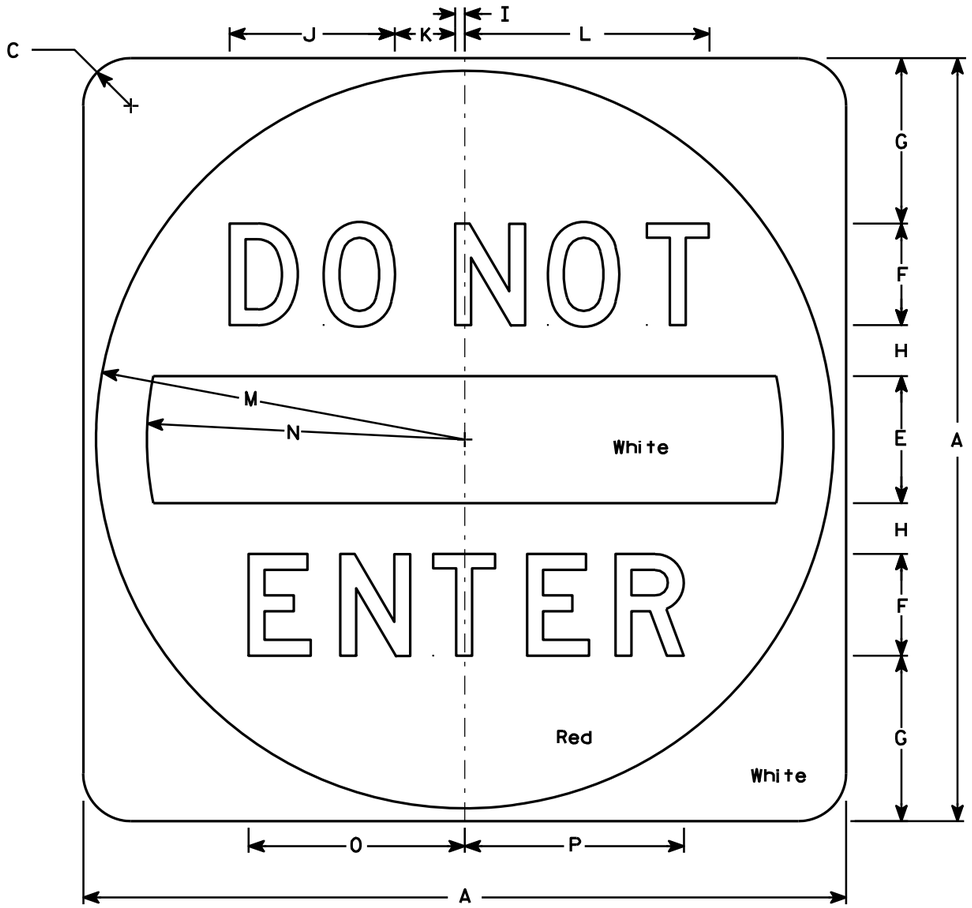
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors 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	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

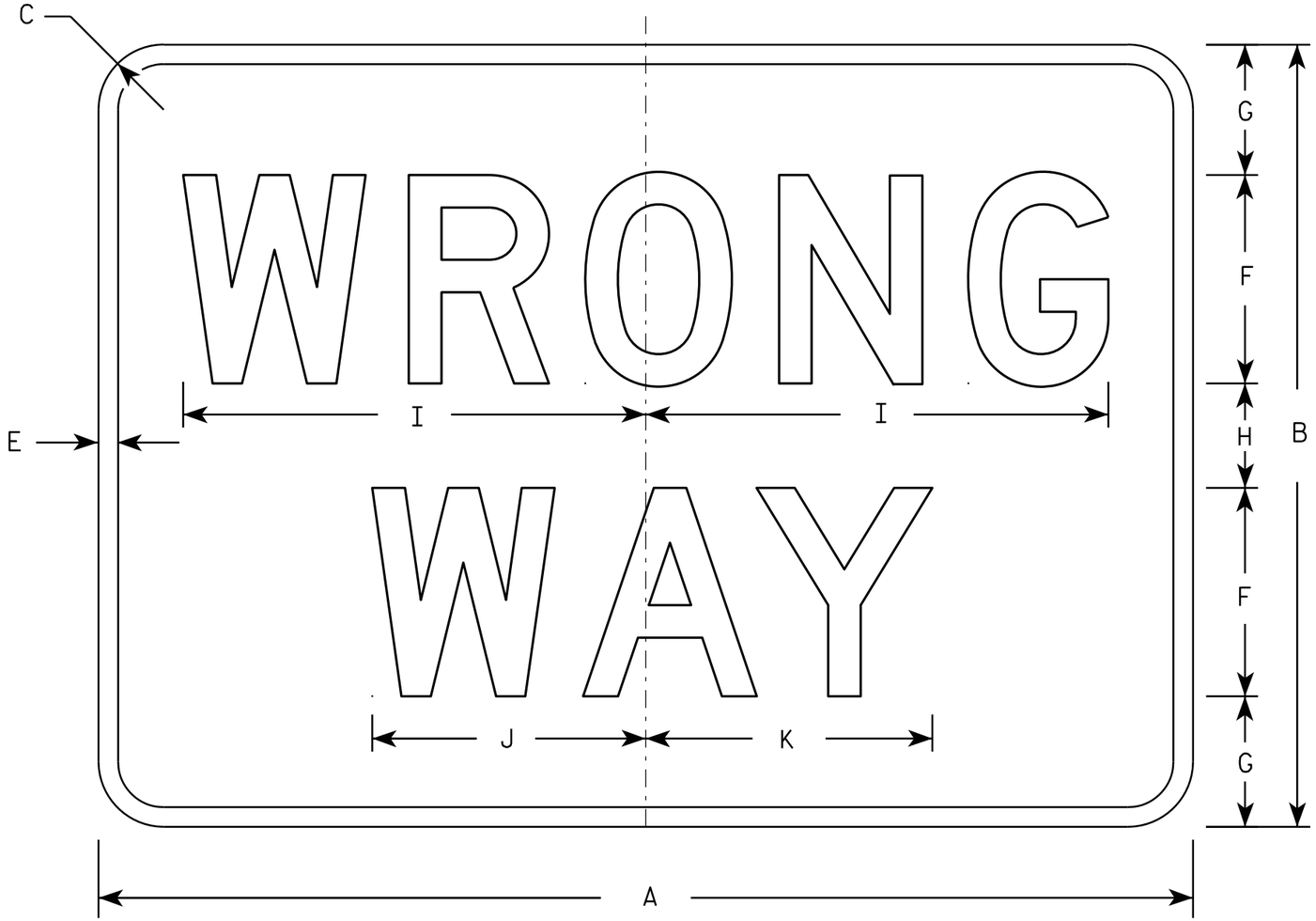
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 160 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - 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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

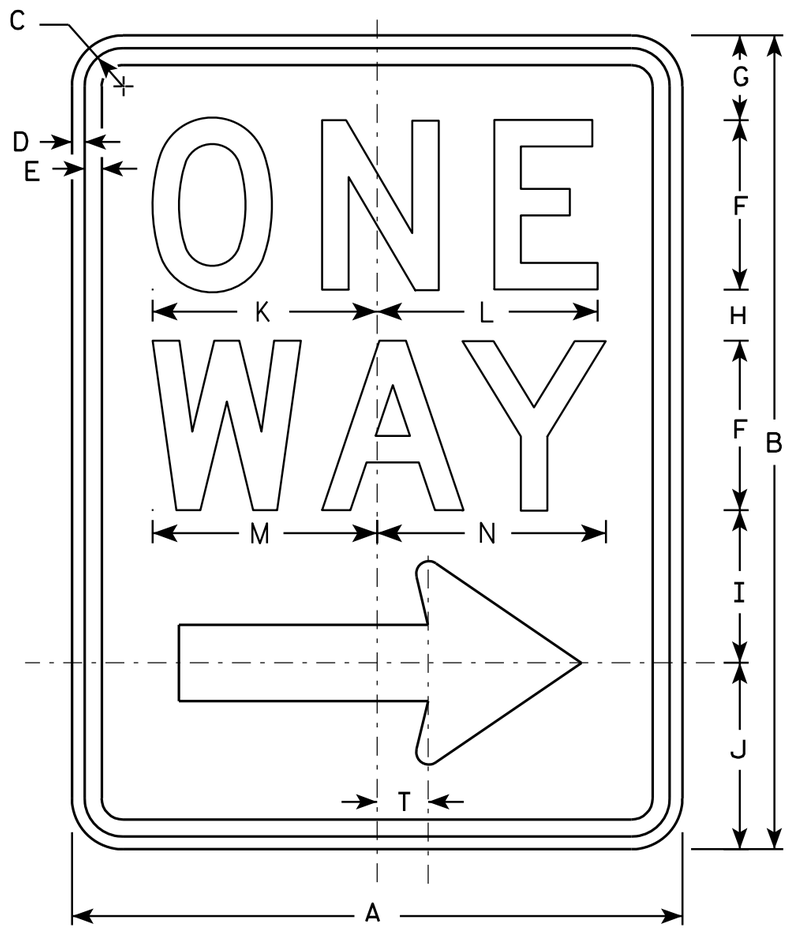
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

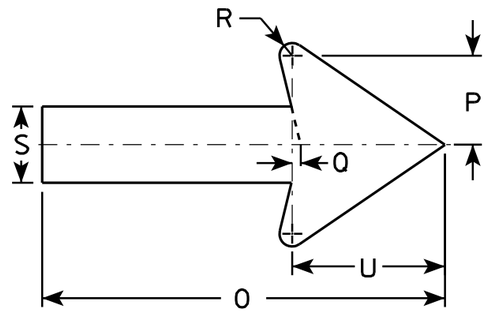
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 161 | E



R6-2R

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. R6-2L same as R6-2R except arrow points to the left.



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
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

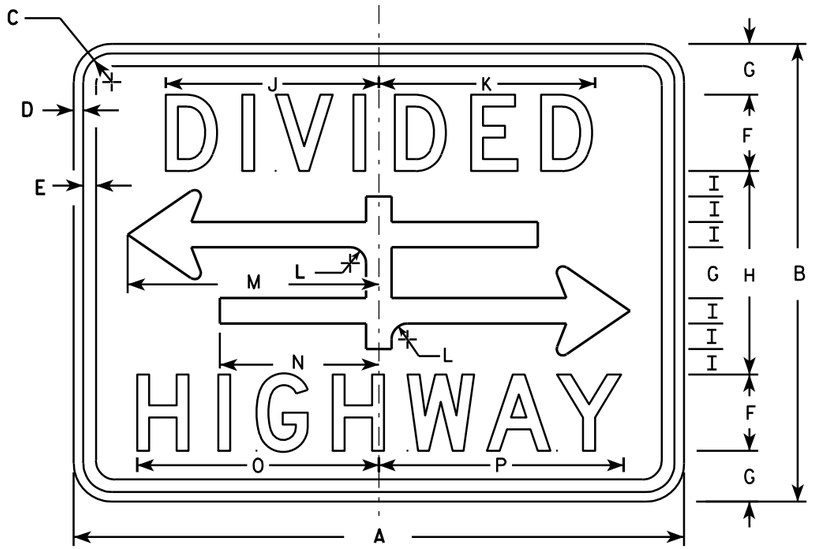
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

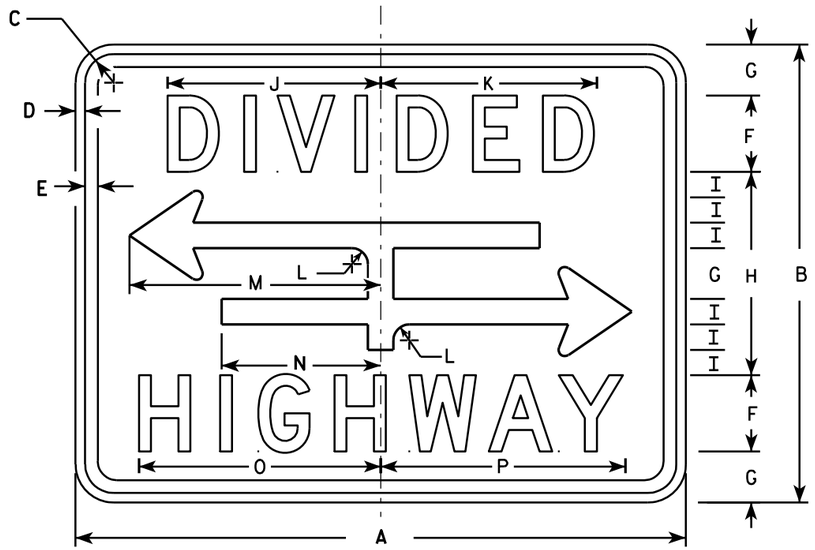
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E



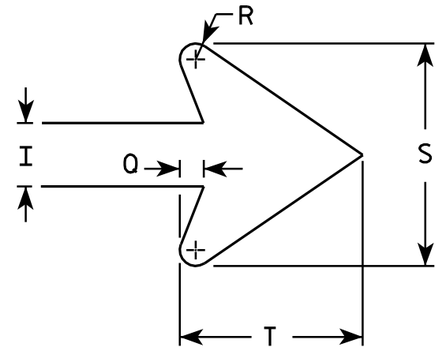
R6-3

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.



R6-3A



ARROW DETAIL

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

STANDARD SIGN
R6-3 & R6-3A

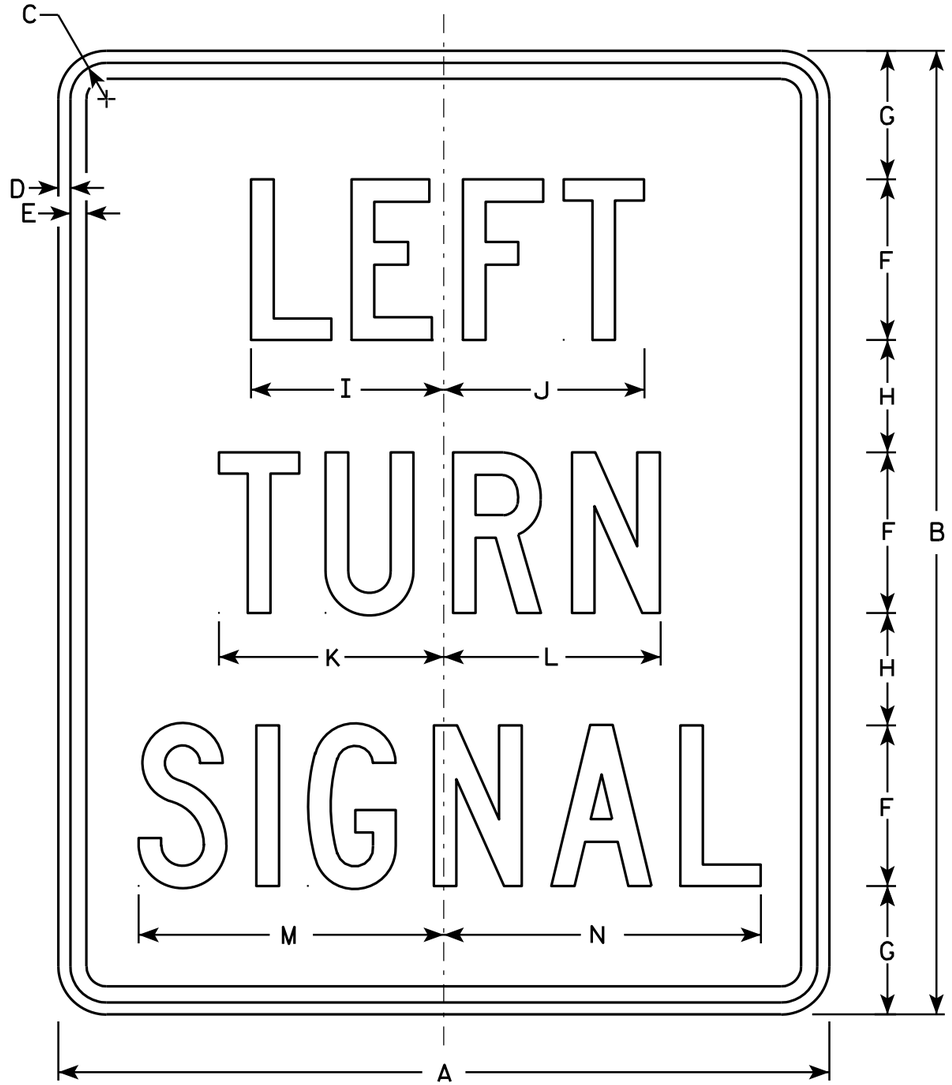
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

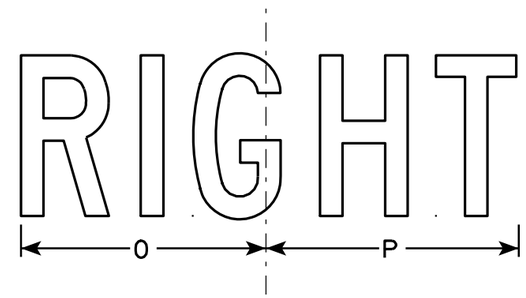
SHEET NO: 163 E



R10-10L

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. R10-10R is identical to R10-10L except RIGHT replaces LEFT.



R10-10R

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	5	4	3 1/2	6	6 1/4	7	6 3/4	9 1/2	9 7/8	7 5/8	7 7/8											5.0
2M	24	30	1 1/8	3/8	1/2	5	4	3 1/2	6	6 1/4	7	6 3/4	9 1/2	9 7/8	7 5/8	7 7/8											5.0
3																											
4																											
5																											

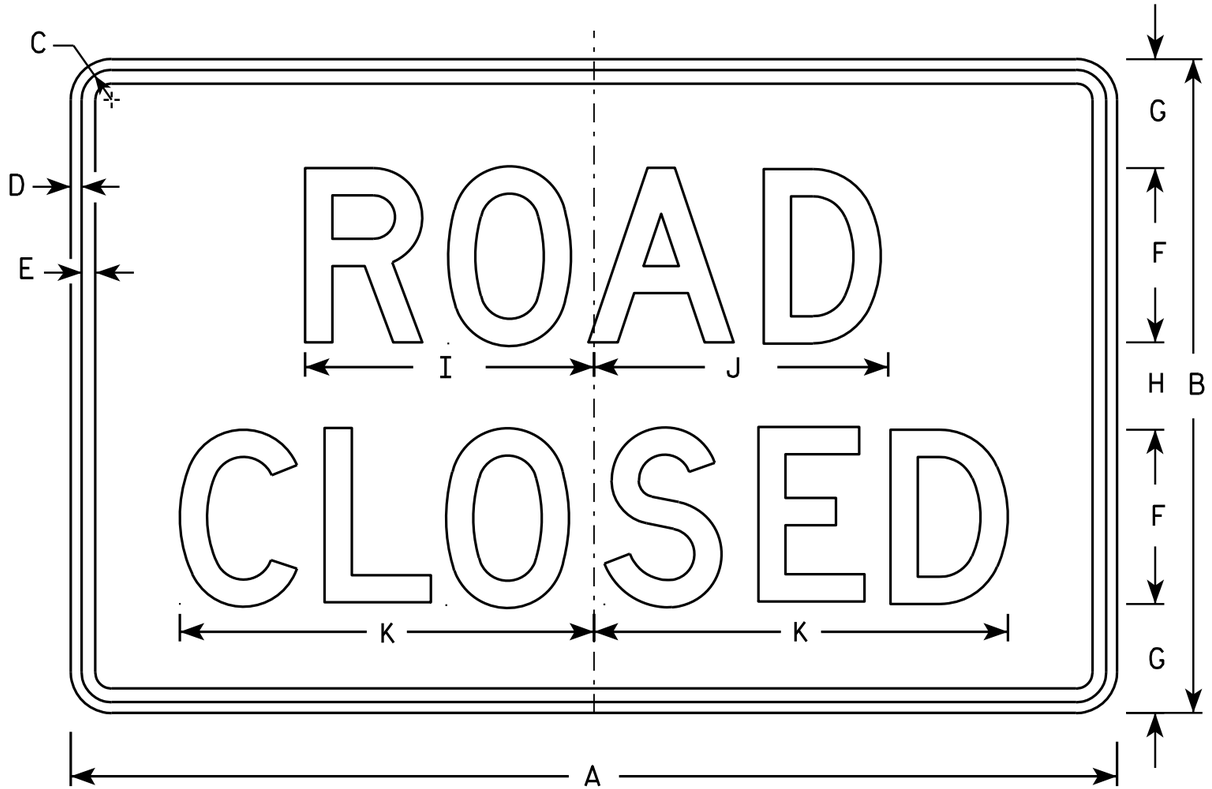
STANDARD SIGN
R10-10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-10.6

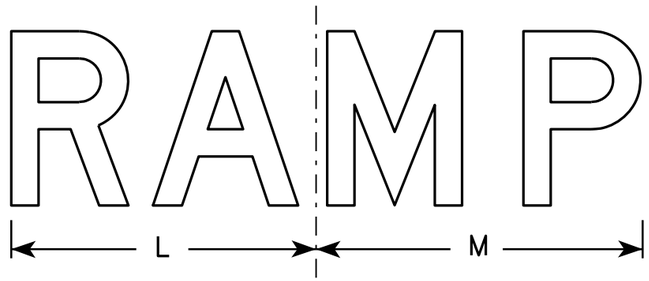
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 164	E



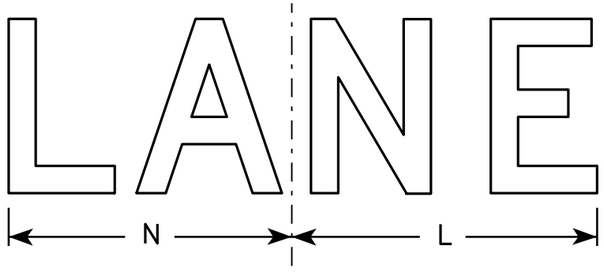
R11-2

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.



R11-2R



R11-2L

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

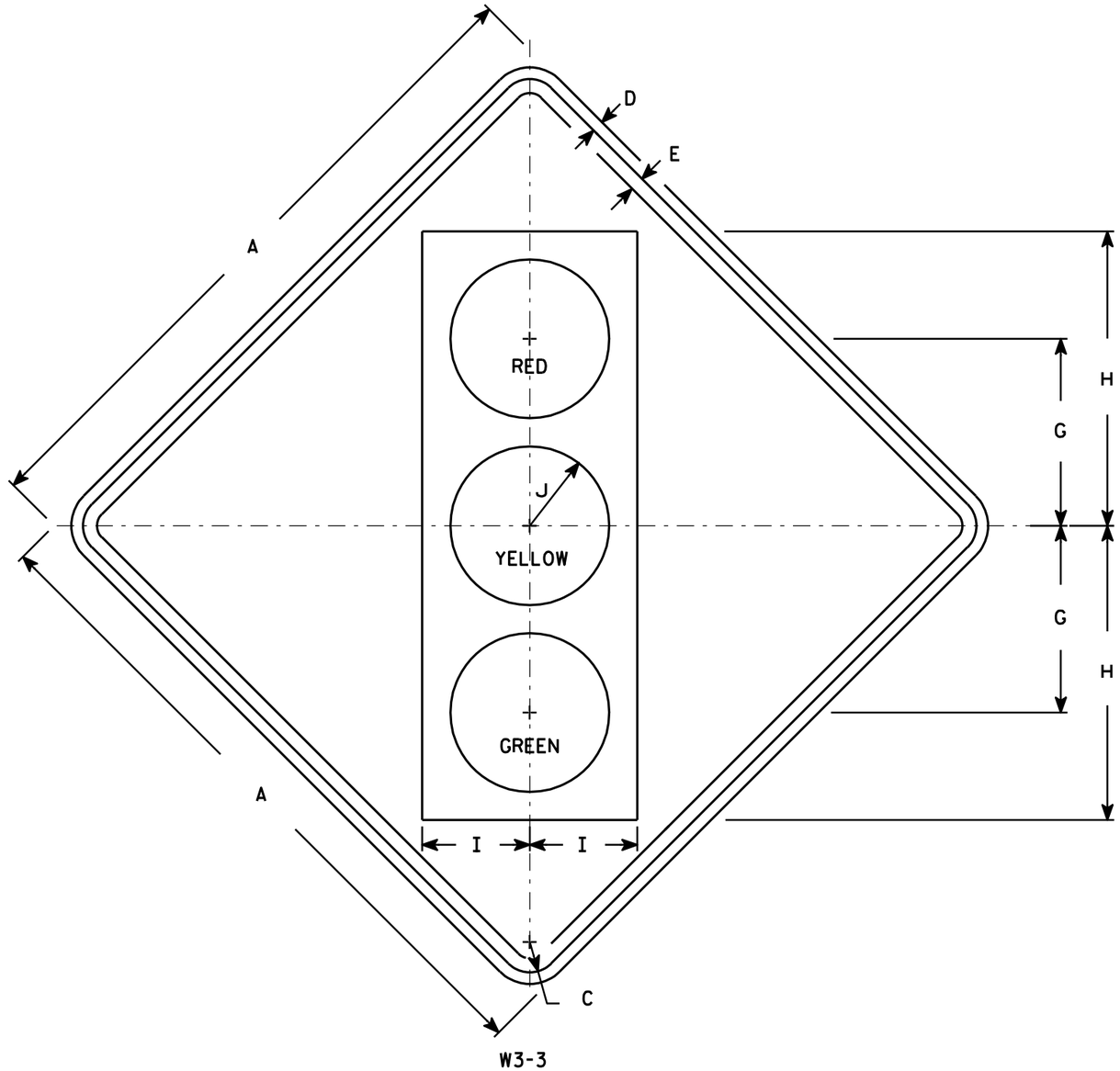
STANDARD SIGN
R11-2

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: 165 | E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
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. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

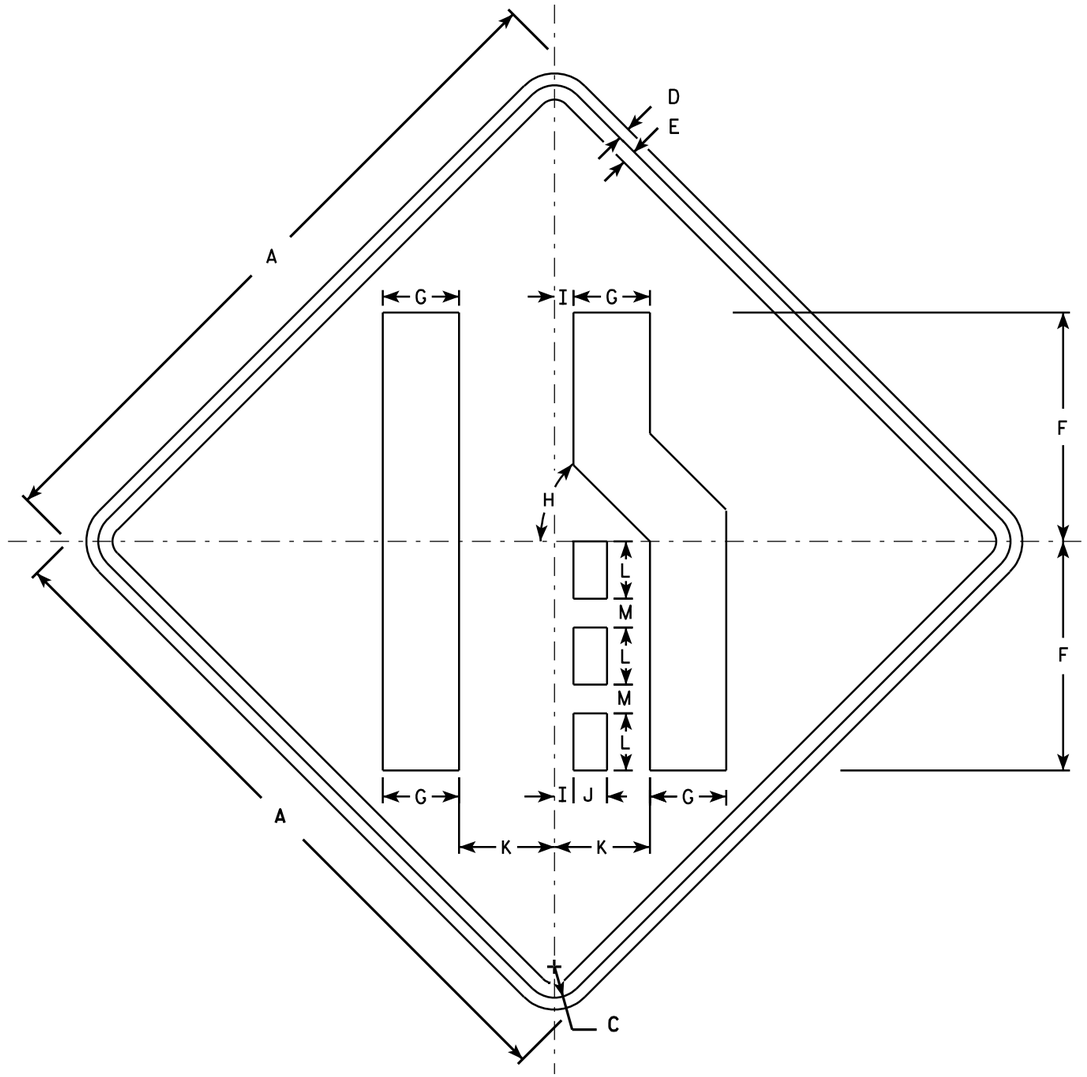
STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 166 | E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol 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	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

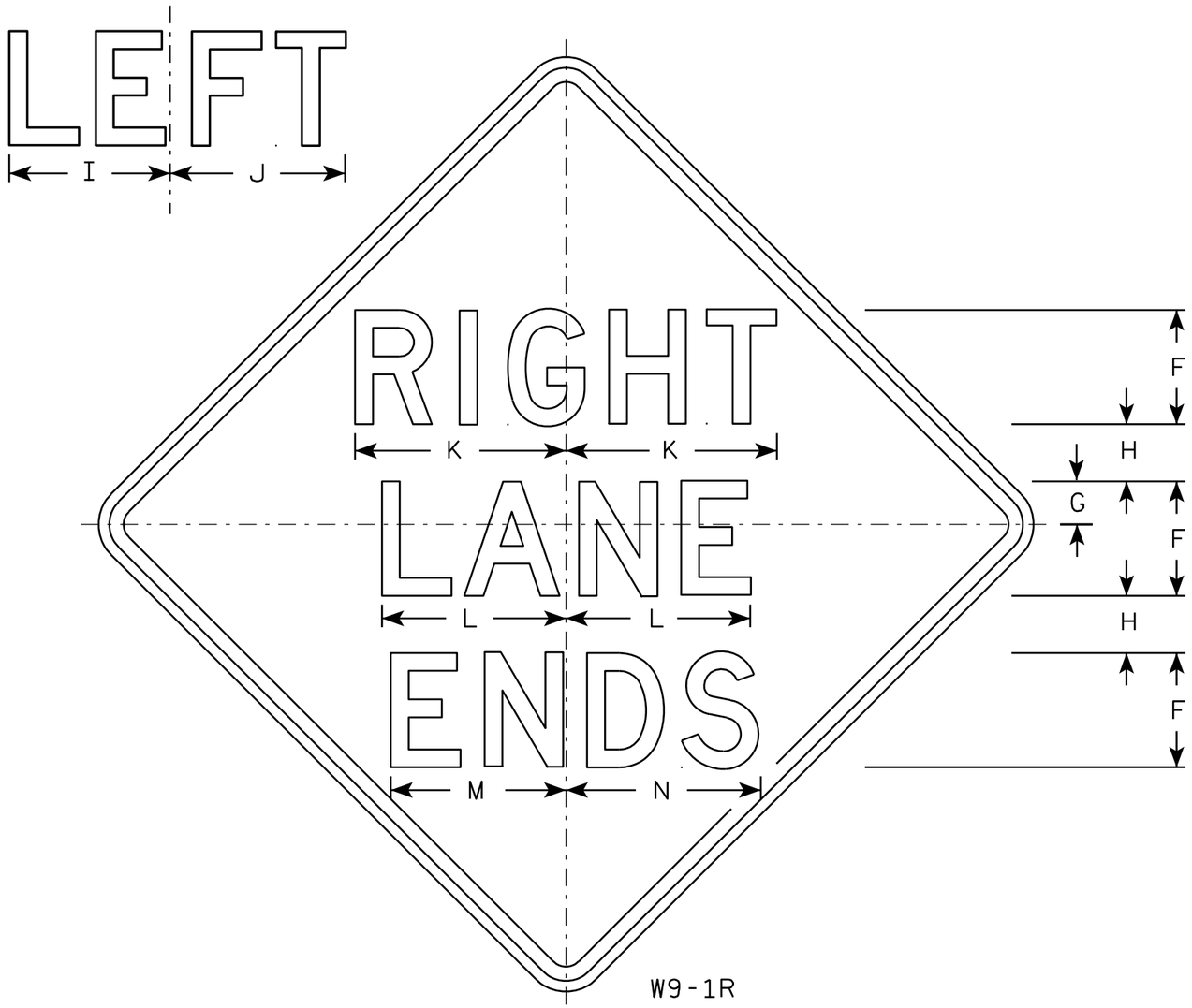
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 167 E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W9-1L same as W9-1R except the word Left replaces Right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	1 1/2	2 1/2	7 1/8	7 5/8	9 1/4	8 1/8	7 5/8	8 5/8													6.25
2S	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
2M	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
3	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
4	36		1 5/8	5/8	3/4	6	2	3	8 1/2	9 1/8	11	9 3/4	9	10 3/8													9.0
5	48		2 1/4	3/4	1	8	3	4	11 1/4	12 1/4	14 3/4	12 7/8	12 1/4	13 5/8													16.0

STANDARD SIGN
W9-1

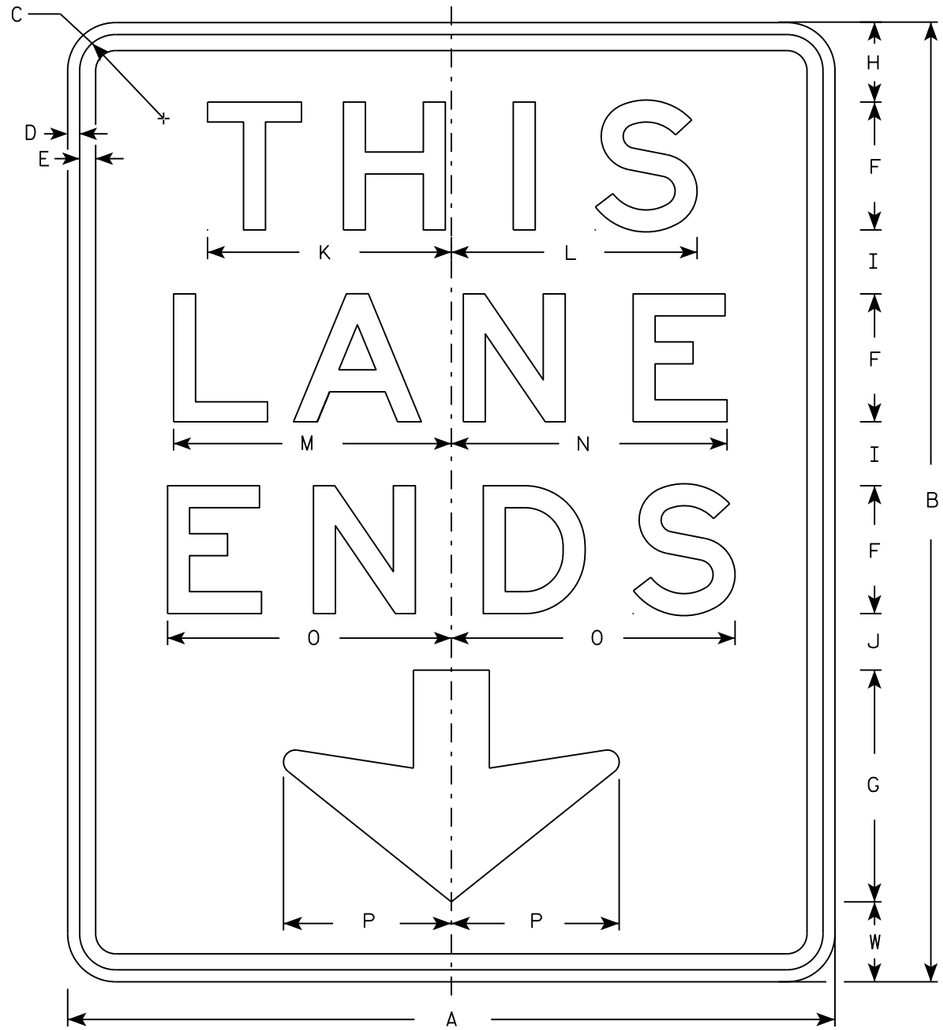
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

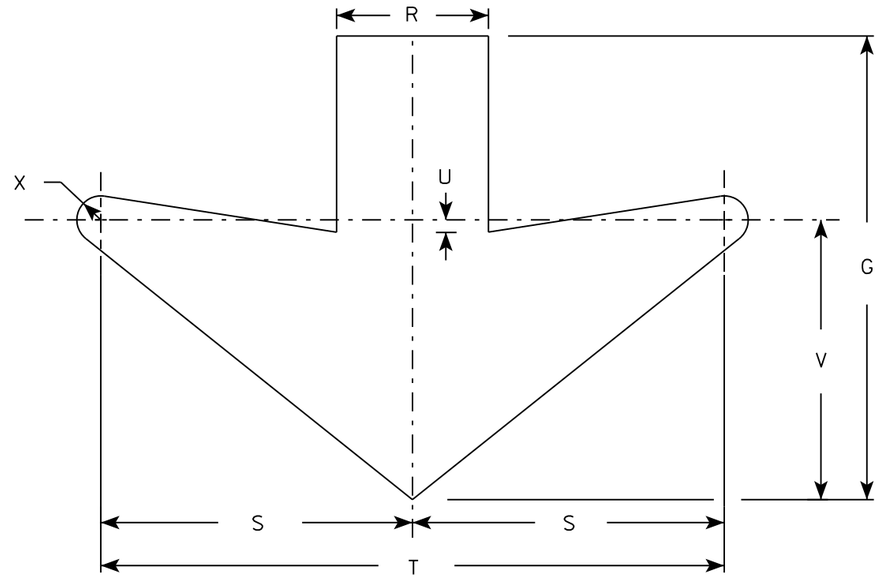
SHEET NO: 168 E



W9-62

NOTES

1. Sign is Type II - Type F Reflective except see Note 5
2. Color:
   Background - Yellow
   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. Size 4 and 5 shall be Type I sign.



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	48	60	2 1/4	3/4	1	8	14 1/2	5	4	3 1/2	15 1/4	15 3/8	17 3/8	17 1/4	17 3/4	10 1/2		4 3/4	9 3/4	19 1/2	3/4	8 3/4	5	3/4			20.0
2S	48	60	2 1/4	3/4	1	8	14 1/2	5	4	3 1/2	15 1/4	15 3/8	17 3/8	17 1/4	17 3/4	10 1/2		4 3/4	9 3/4	19 1/2	3/4	8 3/4	5	3/4			20.0
2M	48	60	2 1/4	3/4	1	8	14 1/2	5	4	3 1/2	15 1/4	15 3/8	17 3/8	17 1/4	17 3/4	10 1/2		4 3/4	9 3/4	19 1/2	3/4	8 3/4	5	3/4			20.0
3																											
4	72	90	6	1	1 1/2	12	22	8	6	5	23	23	26 1/8	26 1/8	26 5/8	16		6 1/2	15	30	2	15	7	1			45.0
5	72	90	6	1	1 1/2	12	22	8	6	5	23	23	26 1/8	26 1/8	26 5/8	16		6 1/2	15	30	2	15	7	1			45.0

STANDARD SIGN
W9-62

WISCONSIN DEPT OF TRANSPORTATION

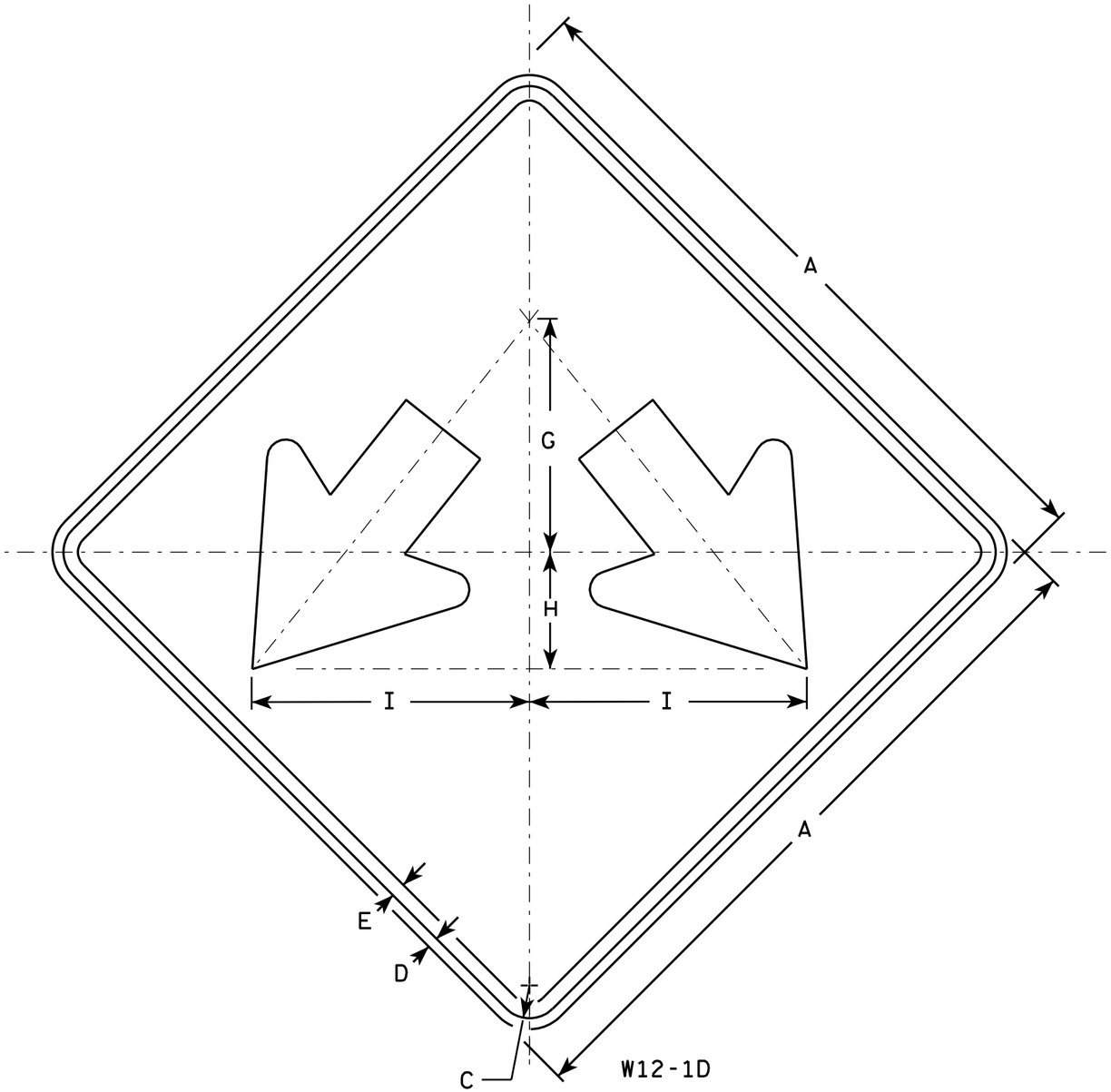
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 10/15/15 PLATE W9-62.10

PROJECT NO:

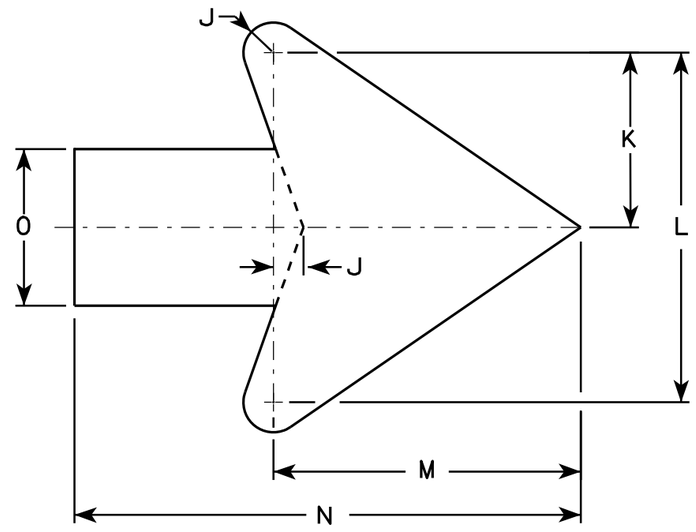
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W962.DGN PLOT DATE : 01-DEC-2015 18:11 PLOT BY : $$ plotuser $$



NOTES

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



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	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

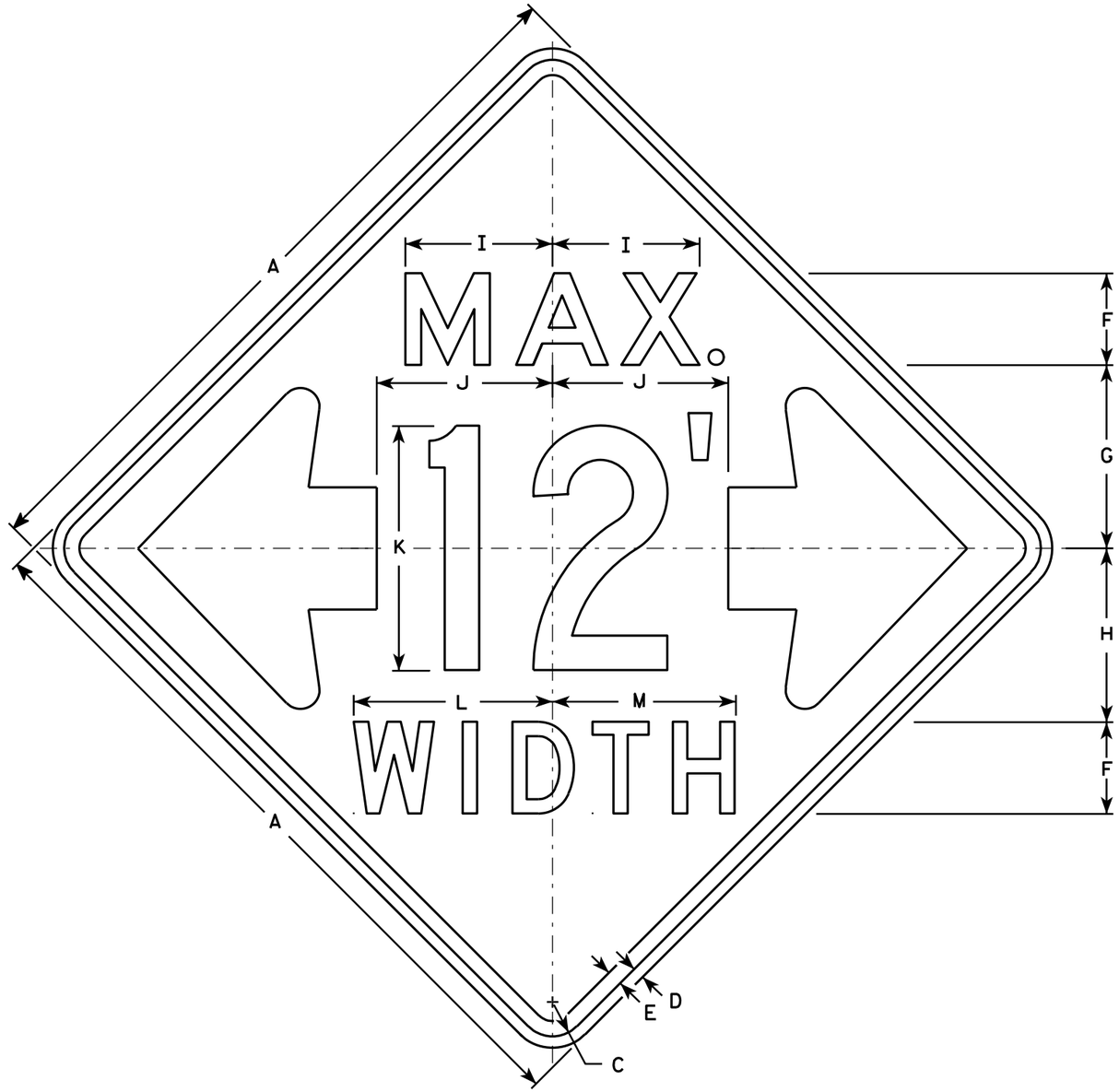
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

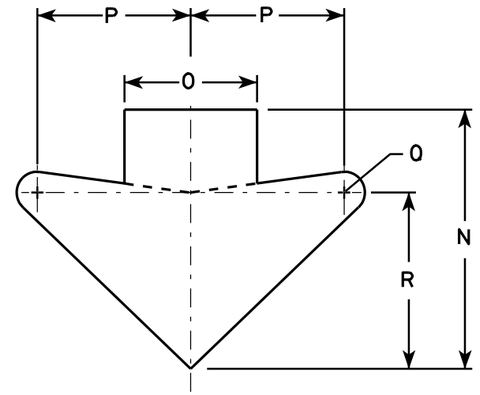
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 170	E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. 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

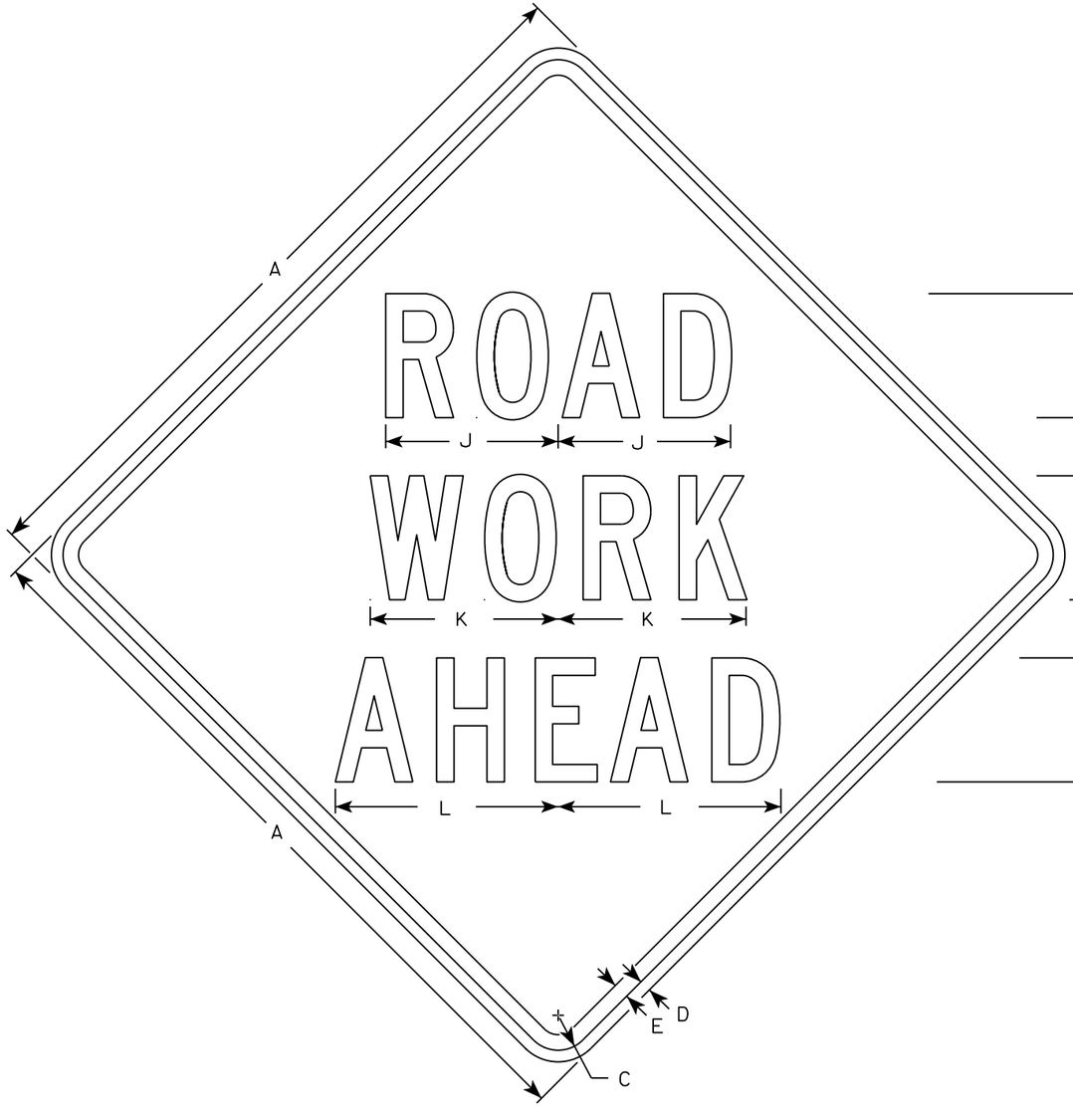
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

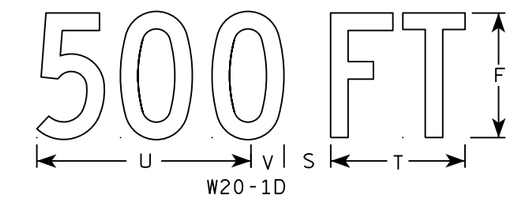
DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 171 | E

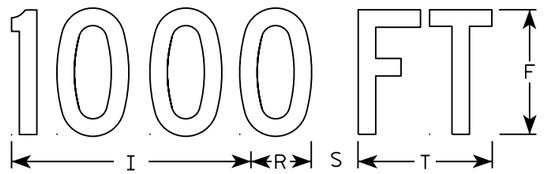
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000
WISDOT/CADDS SHEET 42



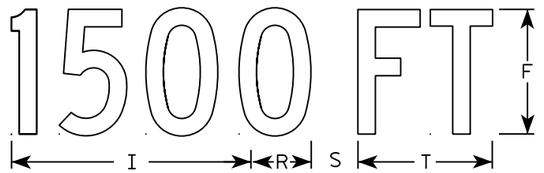
W20-1A



W20-1D

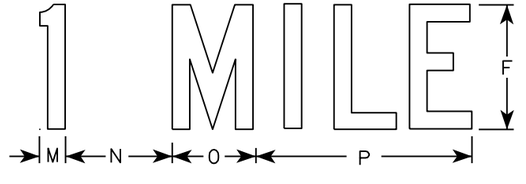


W20-1C

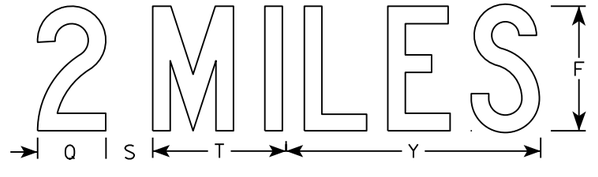


W20-1B

W20-1G



W20-1F



W20-1E

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.

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

STANDARD SIGN
W20-1A, B, C, D, F & G

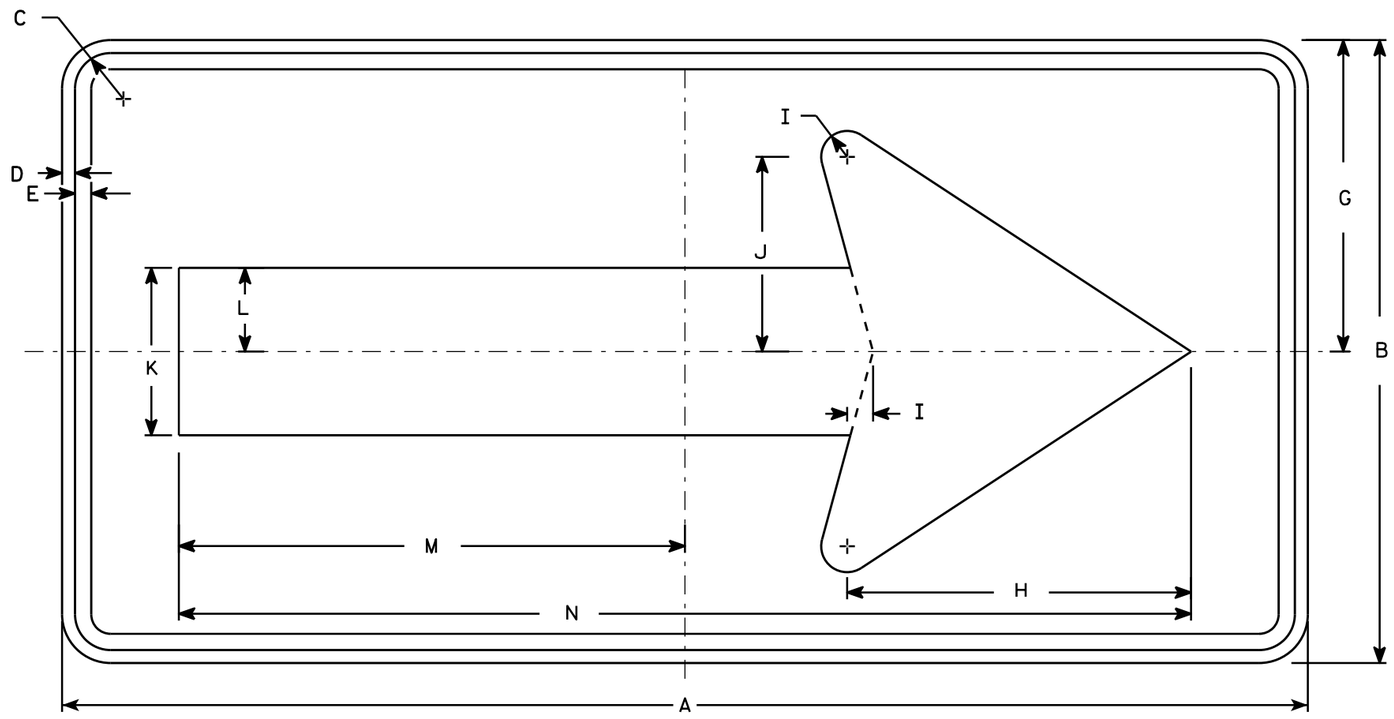
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

PROJECT NO:

SHEET NO: E



W01-6

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.

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

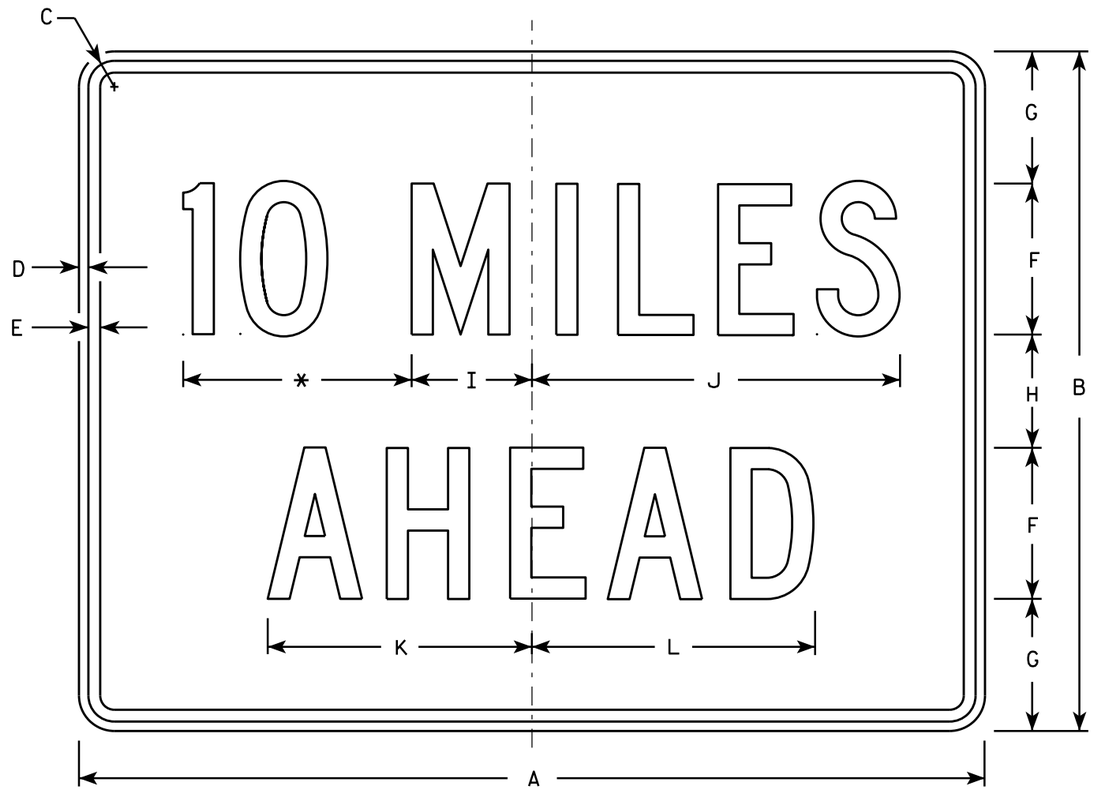
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

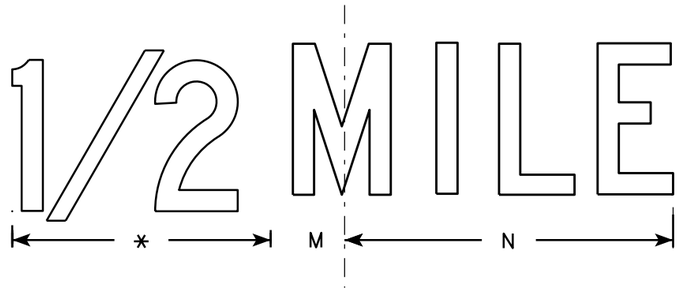
DATE 11/18/13 PLATE W01-6.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W057-52



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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 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	13													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	17 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	17 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	17 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	17 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	17 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W057-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W05752.DGN PLOT DATE : 28-FEB-2014 11:42 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 8.026599:1.000000 WISDOT/CADDS SHEET 42

Notes

Wisconsin Department of Transportation

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through innovation and exceptional service.

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