

PROJECT ID: 3010-01-60
WITH:

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 5	Plan
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans

TOTAL SHEETS = 178

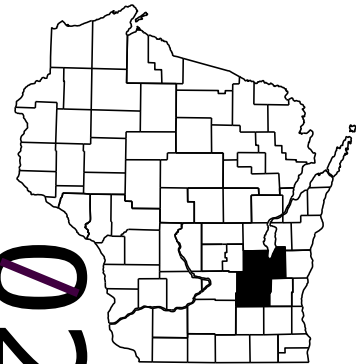
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY REHABILITATION-MAINTENANCE PROJECT

LOMIRA - WAUPUN
USH 41 TO ROCK RIVER BRIDGE
STH 49
DODGE & FOND DU LAC COUNTY

STATE PROJECT NUMBER
3010-01-60

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
3010-01-60		



02

DESIGN DESIGNATION

A.A.D.T. (2009)	=	4,900
A.A.D.T. (2033)	=	6,600
D.H.V.	=	16.1%
D.D.	=	60/40
T.	=	19%
DESIGN SPEED	=	60 MPH
ESALS	=	2,284,900

CONVENTIONAL SYMBOLS

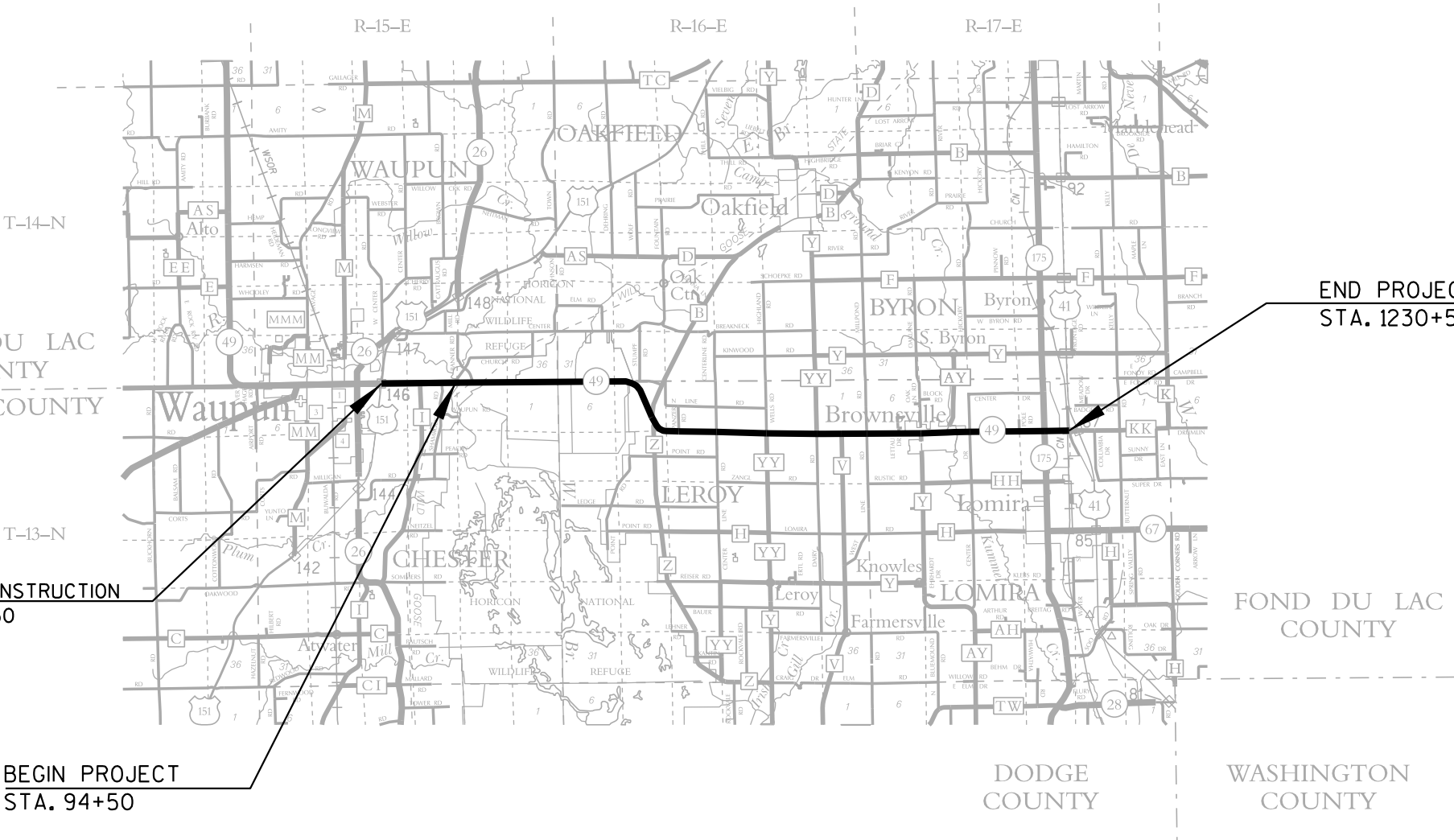
PLAN	
CORPORATE LIMITS	
REFERENCE LINE	
COMBUSTIBLE FLUIDS	
UTILITIES	
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



FOND DU LAC COUNTY
DODGE COUNTY

BEGIN CONSTRUCTION
STA. 16+50

BEGIN PROJECT
STA. 94+50



END PROJECT
STA. 1230+50

LAYOUT
SCALE 0 1.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 12.92 MI.

ORIGINAL PLANS PREPARED BY



PEOPLE WHO CARE.
CREATING QUALITY TRANSPORTATION
TODAY AND TOMORROW

WISDOT SOUTHWEST REGION - MADISON OFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor

Designer

Project Manager

Regional Examiner

Regional Supervisor

C.O. Examiner

BRANDAN HAGER

JEREMY HALL

KURT JOHNSON

APPROVED FOR THE DEPARTMENT

DATE: 10/30/12


(Signature)

GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATION HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS' HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

IF UTILITY CONFLICTS OCCUR DURING CONSTRUCTION FACILITIES ADJUSTMENTS WILL BE COORDINATED WITH CONTRACTOR. IF THERE ARE CONFLICTS WITH NEW BEAM GUARD, SIGNS, OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 110 LB/SY/INCH.

APPLY TACK COAT TO MILLED SURFACES. THE RATE OF APPLICATION IS 0.025 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

PRIOR TO PLACEMENT OF STEEL PLATE BEAM GUARD, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED.

ALL EXISTING SIGNS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION OPERATIONS REQUIRE THEIR REMOVAL OR UNLESS THE ENGINEER APPROVES THEIR REMOVAL.

THE LOCATION OF STOP LINES SHALL BE DETERMINED IN THE FIELD 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, ALL SIGNS RELATING TO THIS OPERATION SHALL BE COVERED OR REMOVED AND FACILITY RESTORED TO NORMAL OPERATION.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES AND FIELD ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PAVING LIMITS AT INTERSECTIONS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND SHALL HAVE BUTT JOINTS.

EXISTING SHOULDER AGGREGATE SHALL BE INCORPORATED INTO THE NEW SHOULDERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN THE FIELD.

CURVE INFORMATION SHOWN ON THE PLANS HAS NOT BEEN VERIFIED BY A FIELD SURVEY. THE ENGINEER SHALL DETERMINE THE APPROPRIATE SUPER-ELEVATION AND RUN-OFF INFORMATION AND PROVIDE TO THE CONTRACTOR PRIOR TO PAVING.

REMOVE AND REPLACE ALL SIGNS AND POSTS WITH NEW SIGNS AND POSTS IN THE SAME GENERAL LOCATION UNLESS OTHERWISE NOTED ON THE PLANS.

HMA PAVEMENT OVERLAY WILL BE PLACED IN ONE LAYER FOR A TOTAL DEPTH OF 2".

SHOULDER WIDENING TO BE PLACED IN 2 LIFTS 1.75" BINDER 2" SURFACE.

THE CONTACTOR'S PAVING OPERATIONS SHALL BE CONSISTANT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

BEAM GUARD WILL BE REPLACED THE SAME DAY IT IS REMOVED.

PIPE LENGTHS SIZE, AND LOCATION ARE TO BE VERIFIED PRIOR TO ORDERING MATERIAL. NO PIPE LENGTH SHALL EXCEED EXISTING LENGTH INCLUDING ENDWALLS UNLESS SPECIFIED.

EROSION CONTROL ITEMS ON THE PLANS ARE SUGGESTED. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. MAINTAIN EROSION CONTROL ITEMS UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY, PROTECT WETLANDS AND OTHER WATERWAYS THAT ARE PRESENT WITHIN THE PROJECT LIMITS.



Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

UTILITY/MUNICIPALITY

VILLAGE OF LOMIRA

CONTACT/ADDRESS

Brian Koll, Director of Public Works
Village of Lomira Department of Public Works Water
423 Water St
Lomira, WI 53048
(920) 269-8155
briankoll@lomiragov.com

UTILITY TYPE

WATER

PACKERLAND BROADBAND

Wayne Cretton, Construction Manager
Packerland Broadband - Communication Line
P.O. Box 885
Iron Mountain, MI 49801
(906) 282-3768
wayne.cretton@plbb.us

COMMUNICATION

WE ENERGIES

Dan Sande
We Energies Electric
333 W Everett St, A299
Milwaukee, WI 53203
(414) 221-4578
dan.sande@we-energies.com

ELECTRIC

For emergencies, call 911, then call,
Electric: 24-hours, (800) 662-4797

DNR CONTACT

Eric Heggelund
3911 Fish Hatchery Road
Fitchburg, Wi 53711
(608) 275-3301
Eric.Heggelund@wisconsin.gov

UTILITY/MUNICIPALITY

AT&T LEGACY - COMMUNICATION LINE

CONTACT/ADDRESS

Carl Donahue, OSPEC Supervisor
AT&T Legacy Communication Line
866 Rock Creek Rd
Plano, IL 60545
(630) 552-9785
cdonahue@att.com

Consultant:
William Koenig
Product Engineer
JMC Engineers
(608) 628-0575
jmc140@myfrontiermail.com

UTILITY TYPE

COMMUNICATIONS

AT&T WISCONSIN - COMMUNICATION LINE

Walter Welk, TCS Engineer
Wisconsin Bell, Inc d/b/a AT&T Wisconsin
Communication Line
70 E Division St
Fond Du Lac, WI 54935
(920) 929-1016
ww5363@att.com

COMMUNICATIONS

ALLIANT ENERGY

Jason Hogan, Senior Permitting and Road Use Coordinator
Alliant Energy Electric & Gas/Petroleum
Suite 1000
4902 N Biltmore Lane
Madison, WI 53718-2148
(608) 458-4871 (work)
(608) 395-7395 (mobile)
jasonhogan@alliantenergy.com

For emergencies, call 911, then call,
Gas: 24-hour, (800) 862-6261

ELECTRIC & GAS/PETROLEUM

AMERICAN TRANSMISSION COMPANY

Mike Olsen, Senior Surveying Specialist
American Transmission Company, LLC - Electric
801 O'Keffe Rd
PO Box 6113
De Pere WI 54115-6113
(920) 338-6582 (office)
(920) 660-2390 (mobile)
molsen@atcllc.com
For emergencies, call 911 Then call,
24-hours, (800) 937-3762

ELECTRIC

VILLAGE OF BROWNSVILLE

Adam Lechner, Superintendent of Public Works
Village of Brownsville Sewer & Water
514 Railroad St
P.O. Box 308
Brownsville, WI 53006
(920) 583-6700
vobclerk@plbb.us

SEWER & WATER

CHARTER COMMUNICATIONS

Bruce Henry, Construction Coordinator
Charter Communications - Communication Line
165 Knights Way
Fond du Lac, WI 54935
(920) 907-7720 x1610
bruce.henry@chartercom.com

COMMUNICATIONS

FRONTIER COMMUNICATIONS

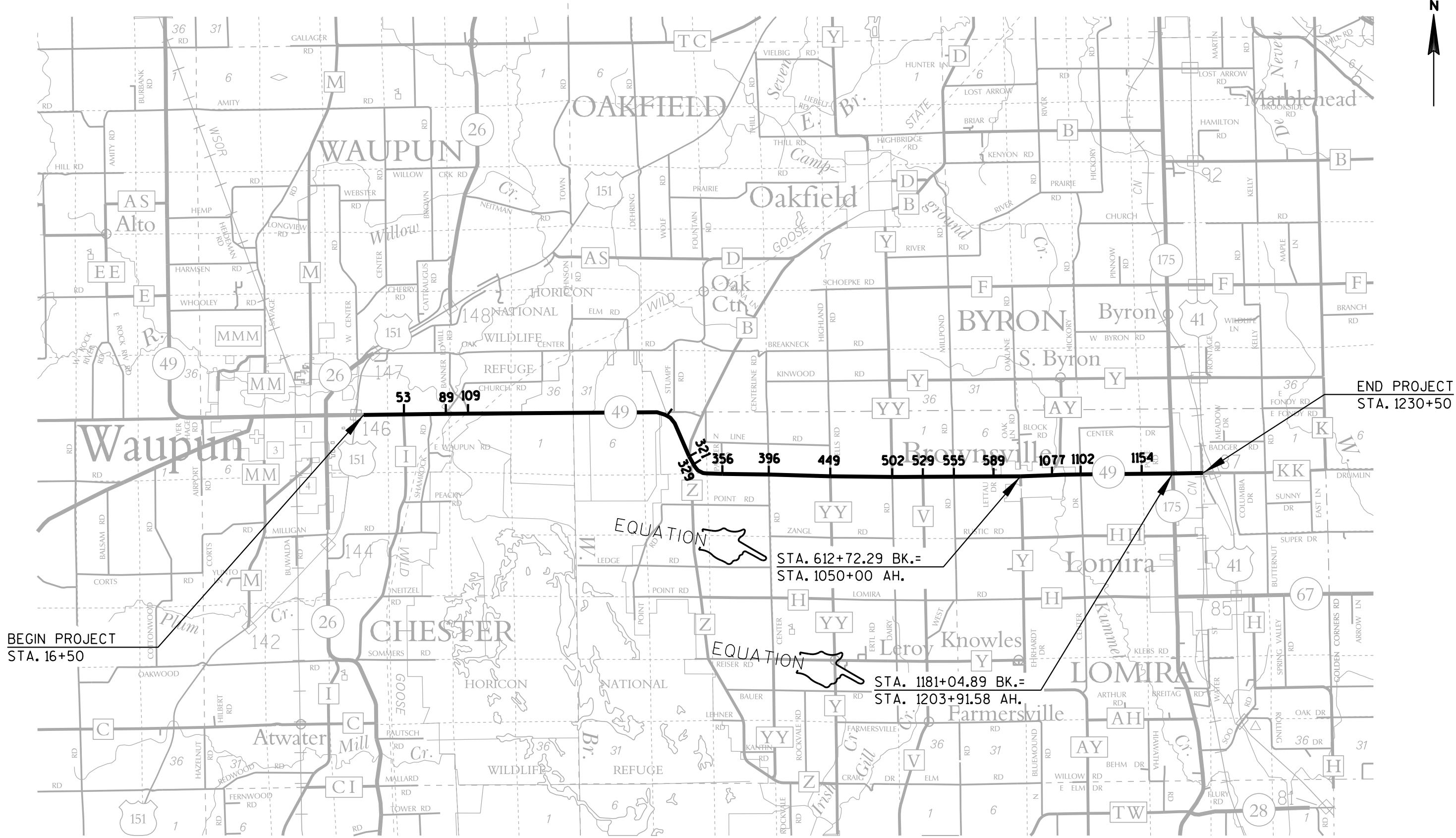
Ryan Osness, Construction Detailer
Frontier Communications - Communication Line
100 Communications Dr
PO Box 49
Sun Prairie, WI 53590
(920) 893-7464
ryan.d.osness@ftr.com

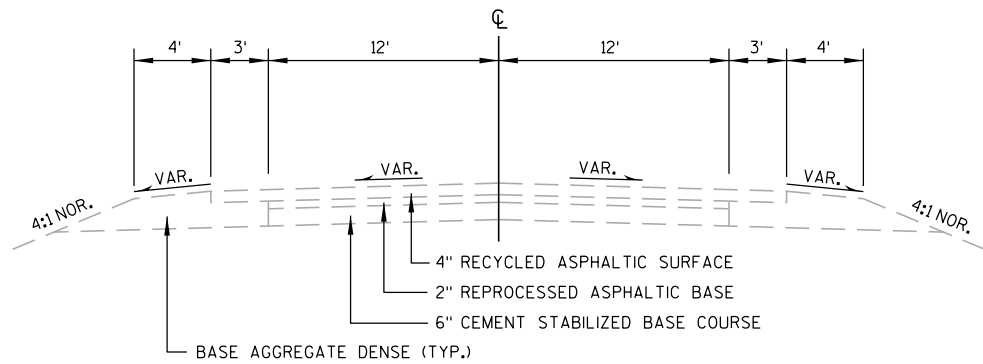
COMMUNICATIONS

KOCH PIPELINE COMPANY L.P.

Julie Maher, Right of Way Agent
Koch Pipeline Company L.P. Gas/Petroleum
P.O. Box 64596
Saint Paul, MN 55164-0596
(651) 438-1563 (office)
(651) 269-7819 (mobile)
julie.maher@kochpipeline.com
For emergencies, call 911 Then call,
24-hours, (651) 437-0700

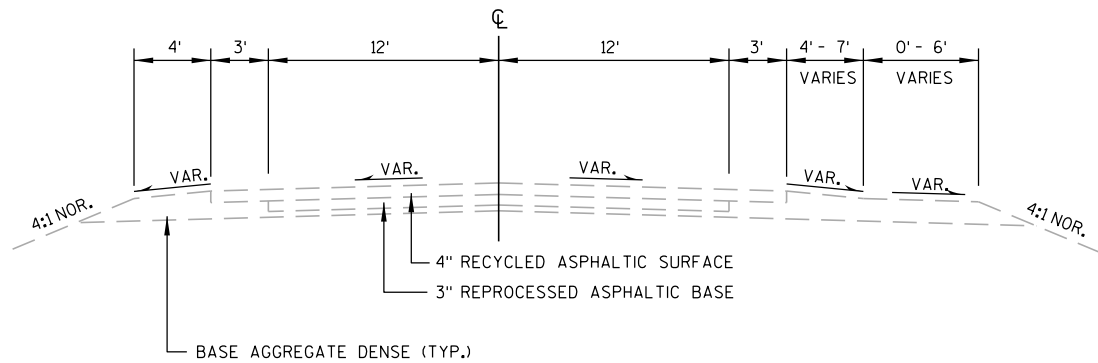
GAS/PETROLEUM





EXISTING TYPICAL SECTION

STH 49
STA. 16+50 - STA. 20+05

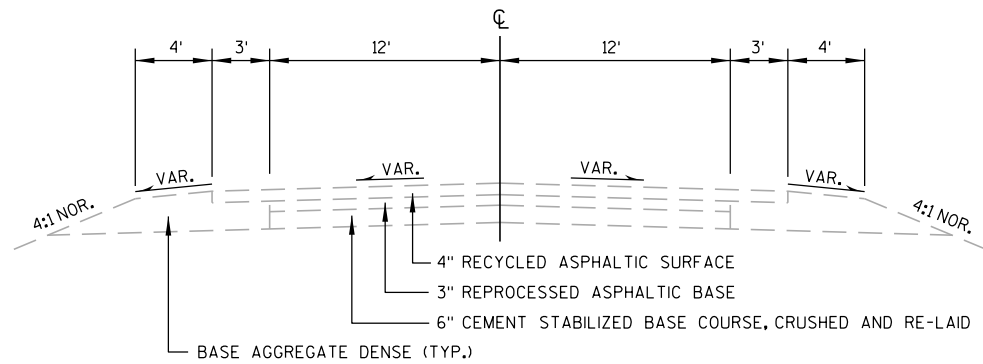


HALF SECTION W/O BEAM GUARD

HALF SECTION WITH BEAM GUARD

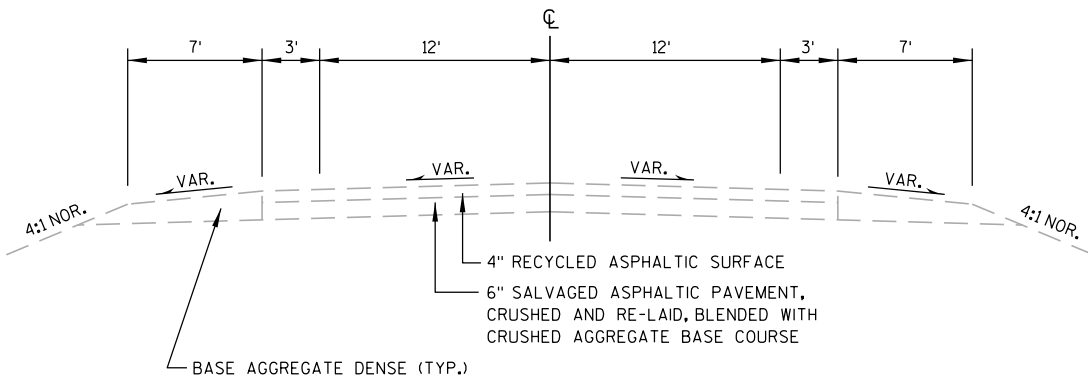
EXISTING TYPICAL SECTION

STH 49
STA. 87+00 - STA. 98+00



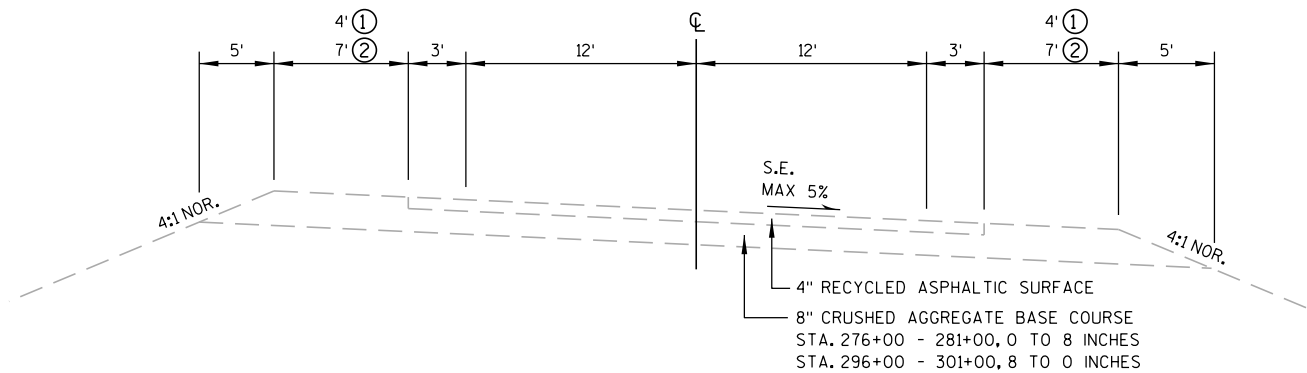
EXISTING TYPICAL SECTION

STH 49
STA. 20+05 - STA. 87+00
STA. 98+00 - STA. 125+00



EXISTING TYPICAL SECTION

STH 49
STA. 125+00 - STA. 276+00

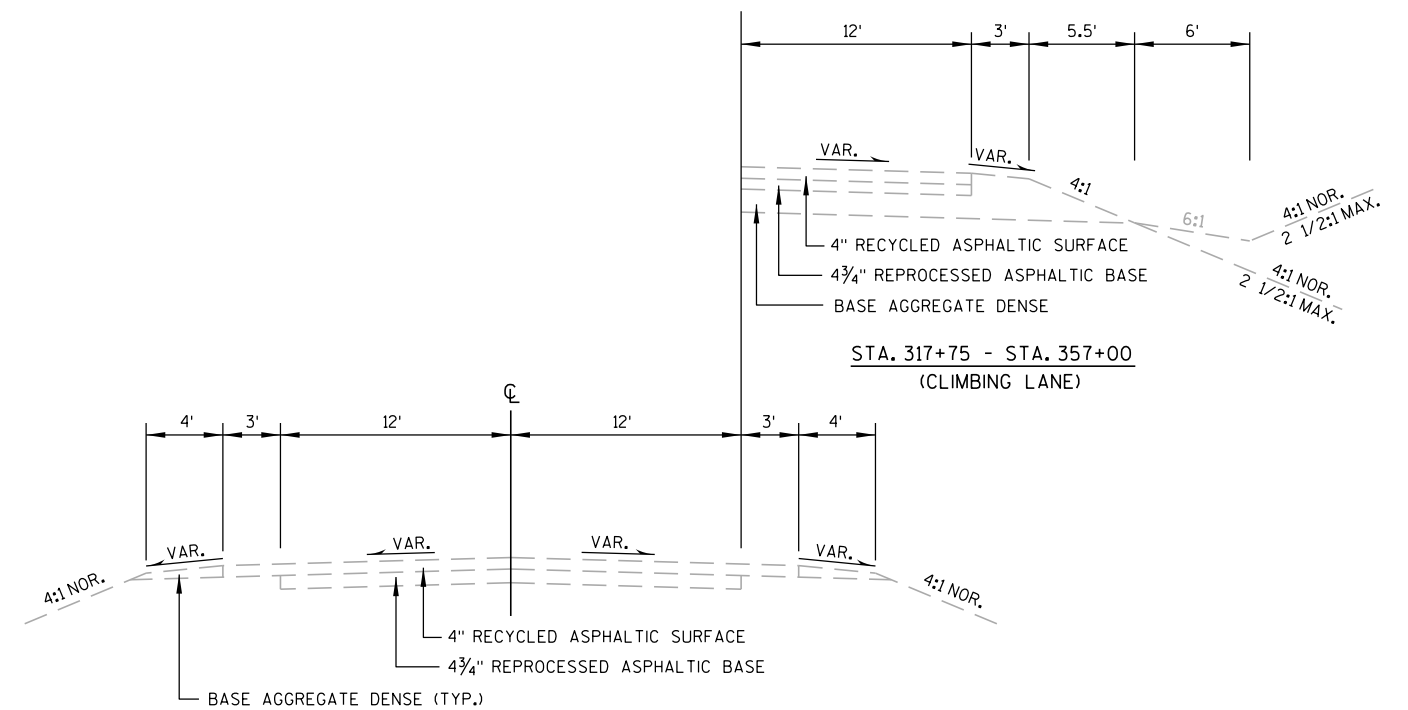


EXISTING TYPICAL SECTION

STH 49

STA. 276+00 - STA. 281+00 ②

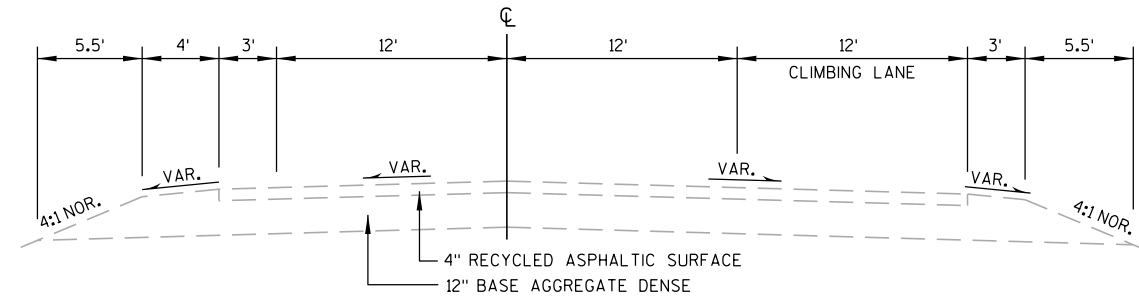
STA. 281+00 - STA. 301+00 ①



EXISTING TYPICAL SECTION

STH 49

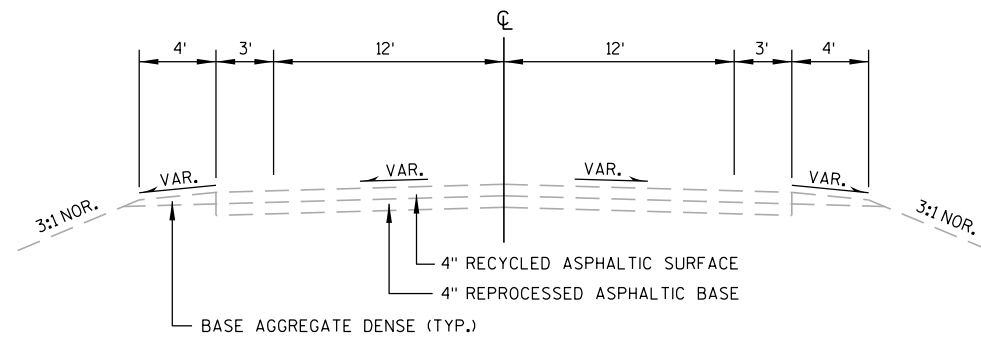
STA. 301+00 - STA. 357+00



EXISTING TYPICAL SECTION

STH 49

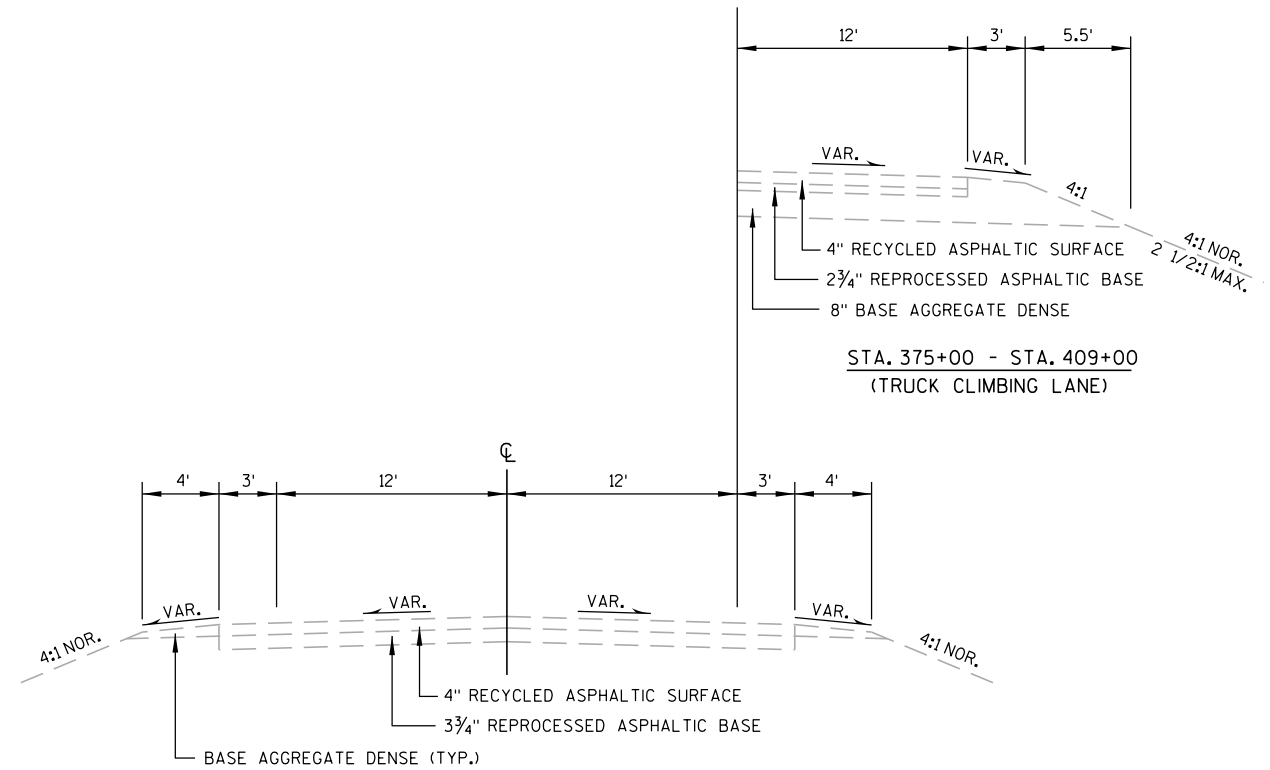
STA. 357+00 - STA. 375+00



EXISTING TYPICAL SECTION

STH 49

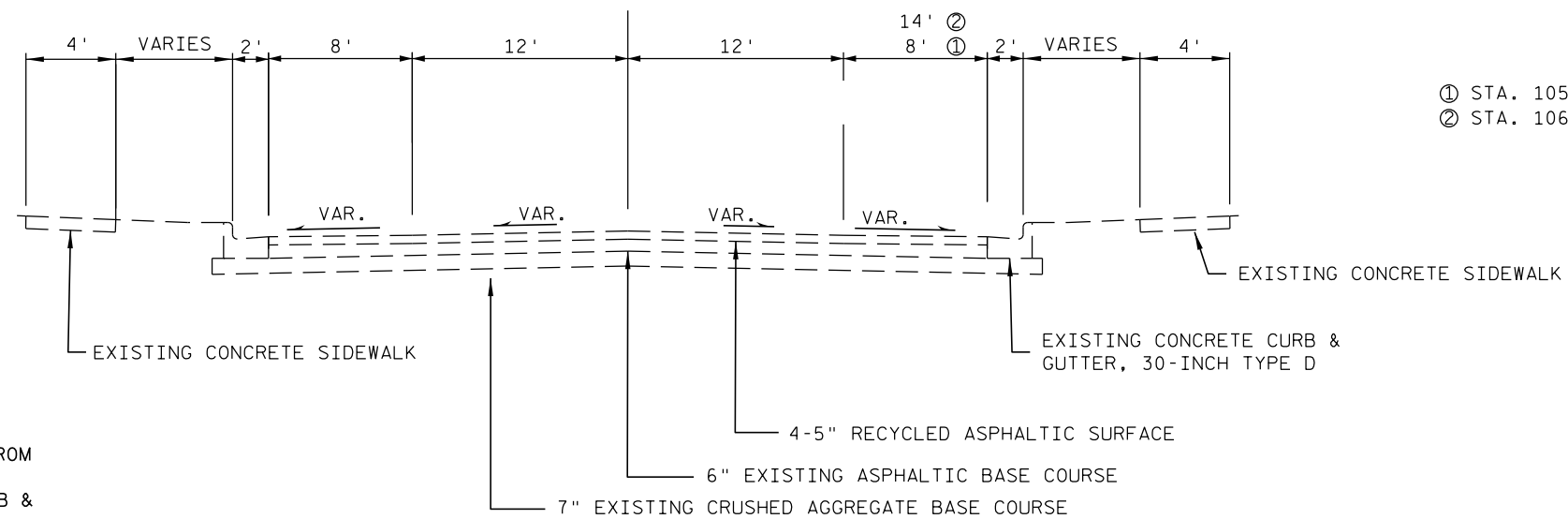
STA. 449+56 - STA. 612+72



EXISTING TYPICAL SECTION

STH 49

STA. 375+00 - STA. 449+56

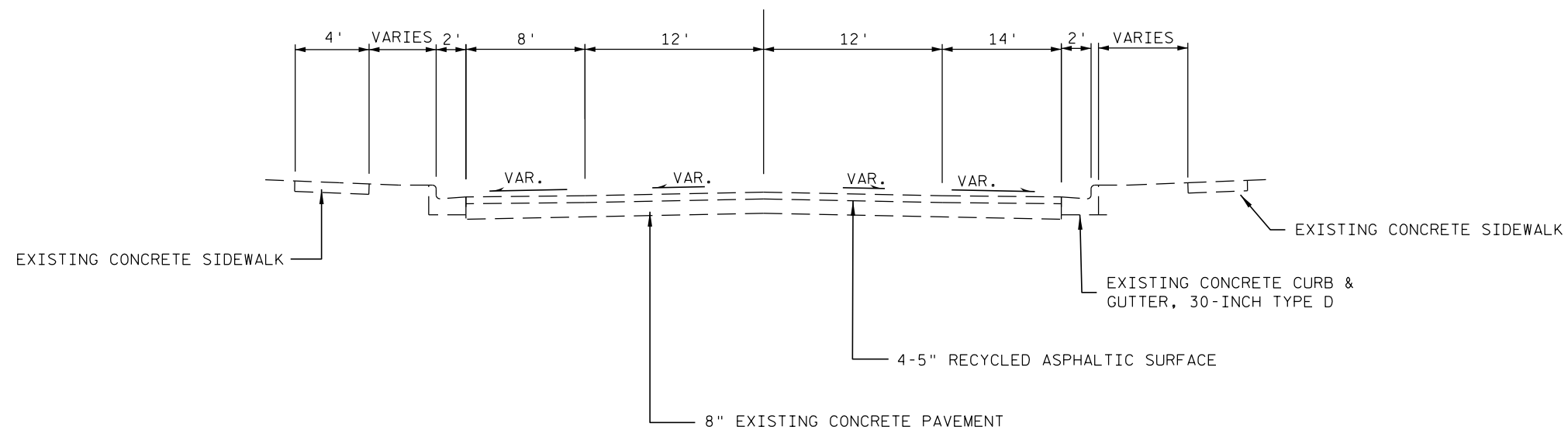


- ① STA. 1050+00 - STA. 1068+00
② STA. 1068+00 - STA. 1070+10

CONSTRUCTION NOTE:
VILLAGE OF BROWNSVILLE WILL REPLACE EXISTING CURB AND GUTTER FROM STA. 1066+00 TO STA. 1088+35. CURB WILL BE RAISED APPROX. 1' TO MATCH 2% SLOPE TO FLAG OF CURB. CONTRACTOR TO MATCH NEW CURB & GUTTER INSTALLED BY VILLAGE OF BROWNSVILLE. COORDINATION WITH VILLAGE OF BROWNSVILLE WILL BE REQUIRED.

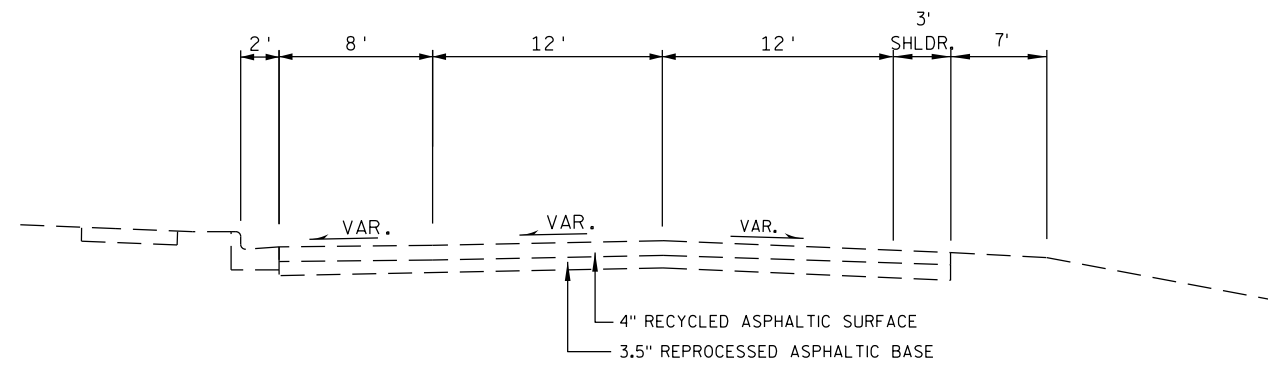
EXISTING TYPICAL SECTION

STA. 1050+00 - STA. 1070+10
VILLAGE OF BROWNSVILLE



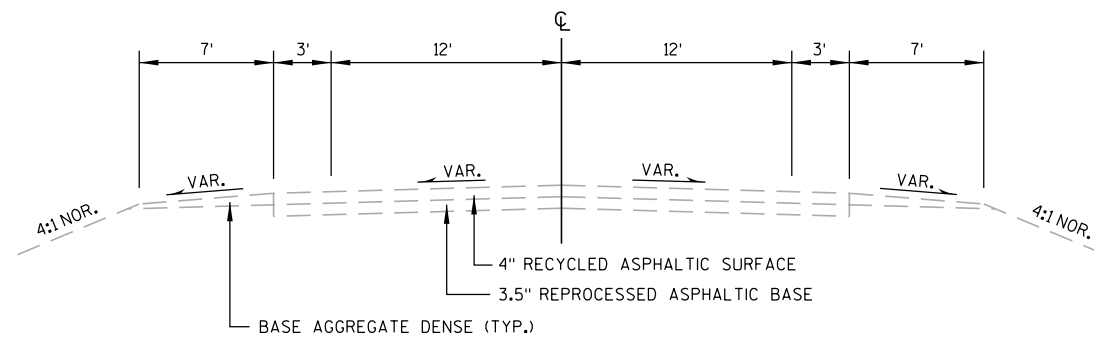
EXISTING TYPICAL SECTION

STA. 1070+10 - STA. 1088+36
VILLAGE OF BROWNSVILLE



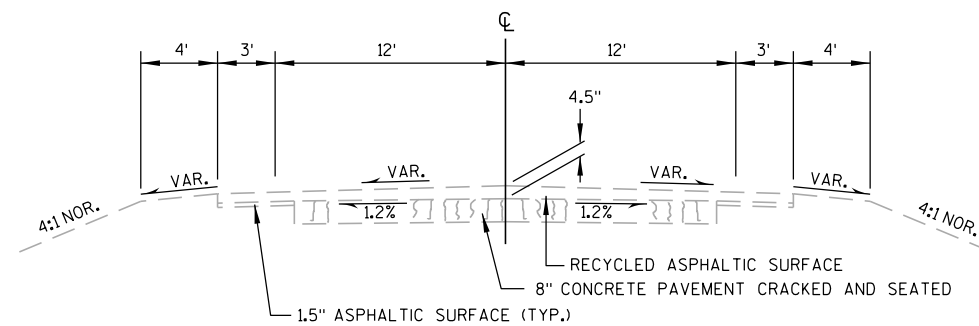
EXISTING TYPICAL SECTION

STH 49
STA. 1088+36 - STA. 1097+55



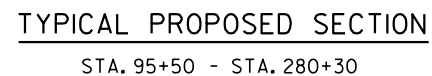
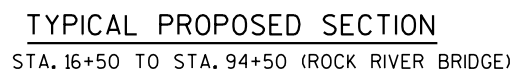
EXISTING TYPICAL SECTION

STH 49
STA. 1097+55 - STA. 1181+04 BK.



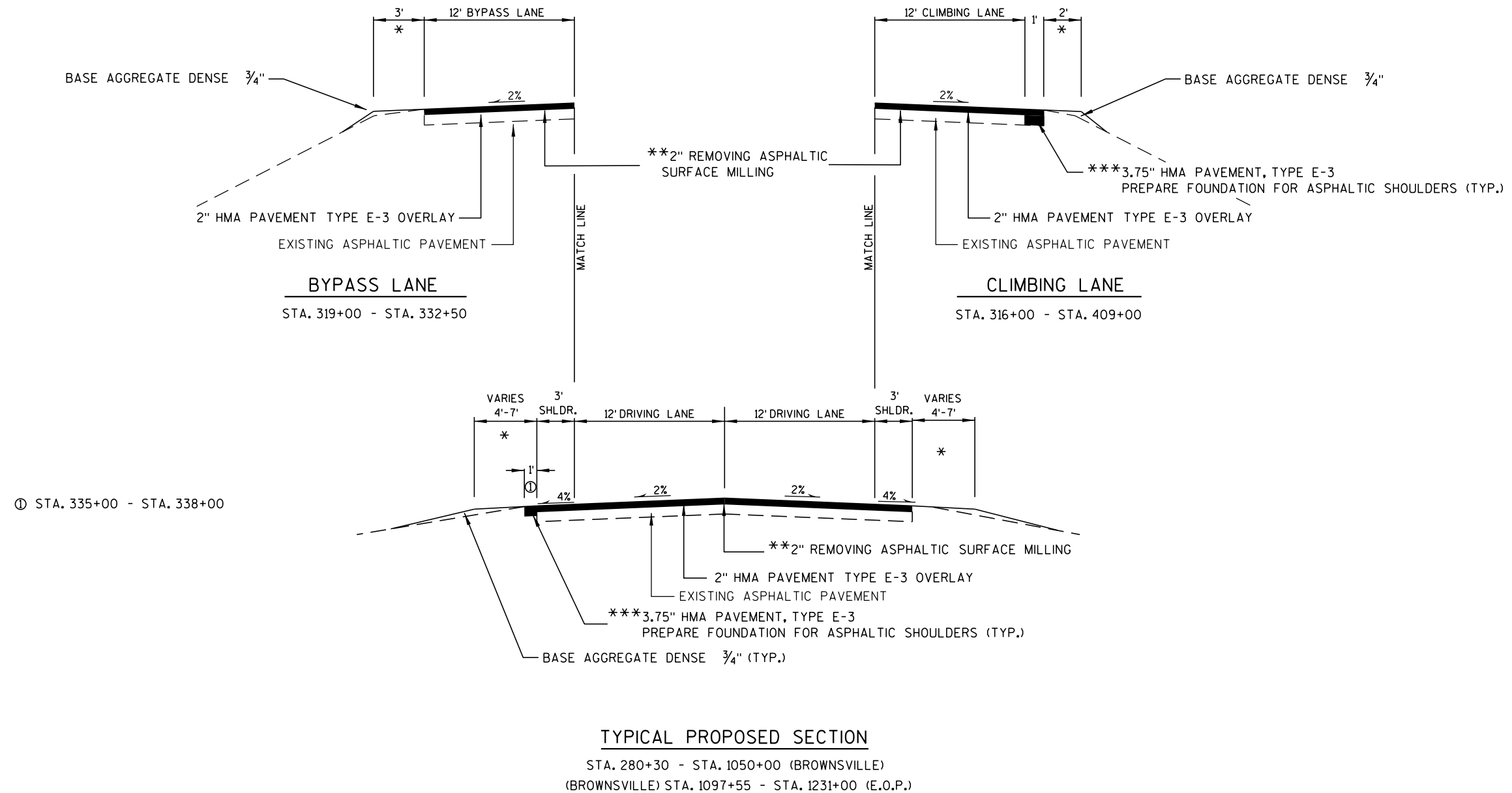
EXISTING TYPICAL SECTION

STH 49
STA. 1203+92 AH. - STA. 1230+50

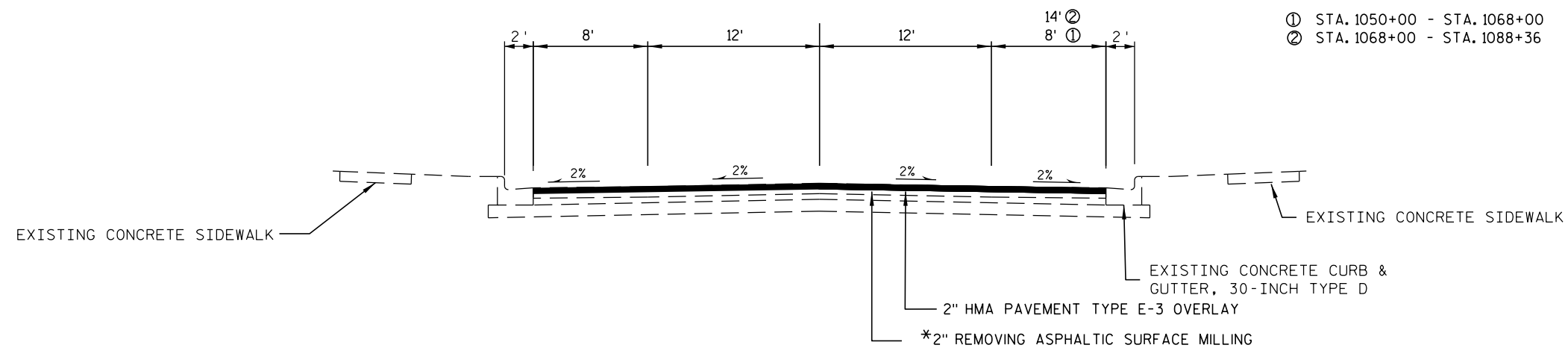


- * SHOULDER REPAIRS AT VARIOUS PLACES THROUGHOUT PROJECT
- ** 2" MILL DEPTH AT SHOULDER AND A 2% CROWNED CROSS-SLOPE WHERE SLOPE CORRECTION IS NEEDED
- *** 3.75" HMA PAVEMENT, TYPE E-3 SHALL BE CONSTRUCTED WITH ONE 1.75" LOWER LAYER AND ONE 2" UPPER LAYER. UPPER LAYER SHALL BE PAVED INTERGRALLY WITH MAINLINE DRIVING LANES.

- * SHOULDER REPAIRS AT VARIOUS PLACES THROUGHOUT PROJECT
- ** 2" MILL DEPTH AT SHOULDER AND A 2% CROWNED CROSS-SLOPE WHERE SLOPE CORRECTION IS NEEDED
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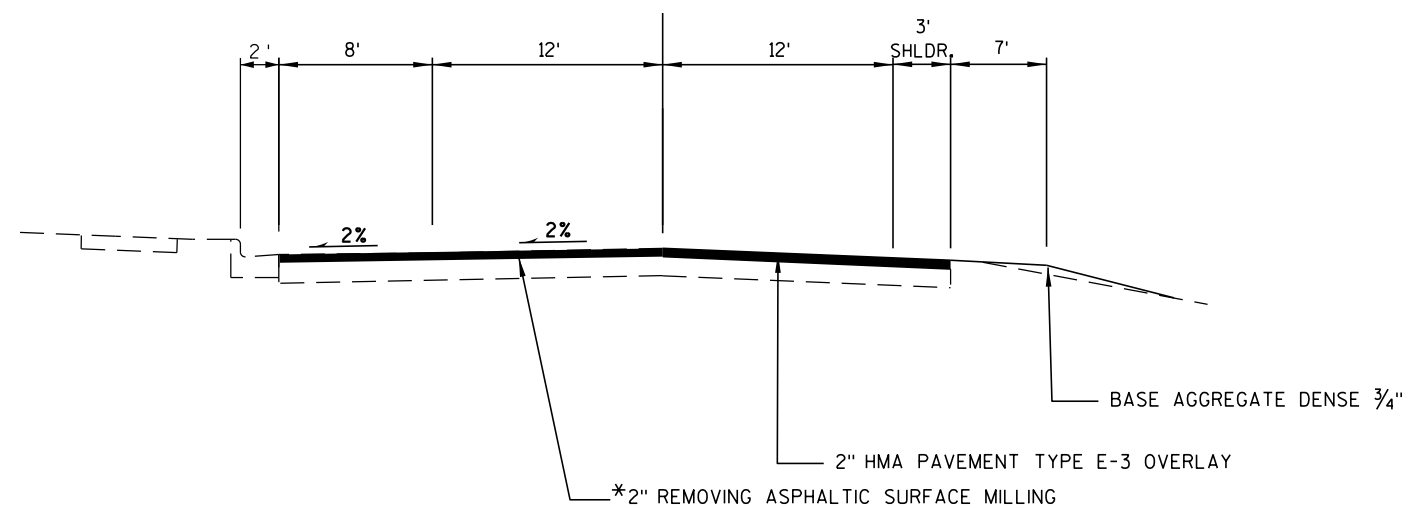


* 2" MILL DEPTH AT CURB & GUTTER AND AT A 2% CROWNED
CROSS-SLOPE WHERE SLOPE CORRECTION IS NEEDED



TYPICAL PROPOSED SECTION

STA. 1050+00 - STA. 1088+36
VILLAGE OF BROWNSVILLE



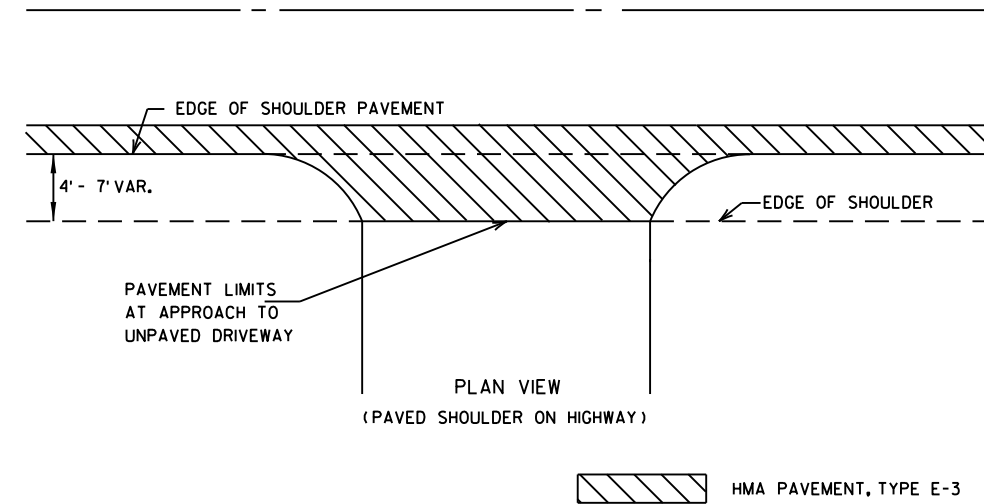
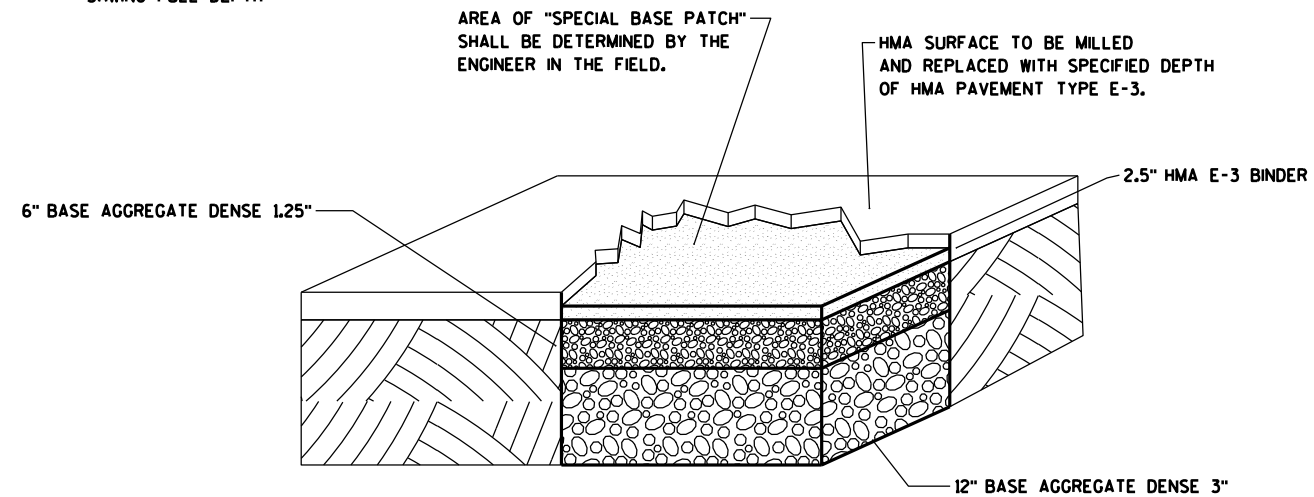
TYPICAL PROPOSED SECTION

STA. 1088+36 - STA. 1097+55
VILLAGE OF BROWNSVILLE

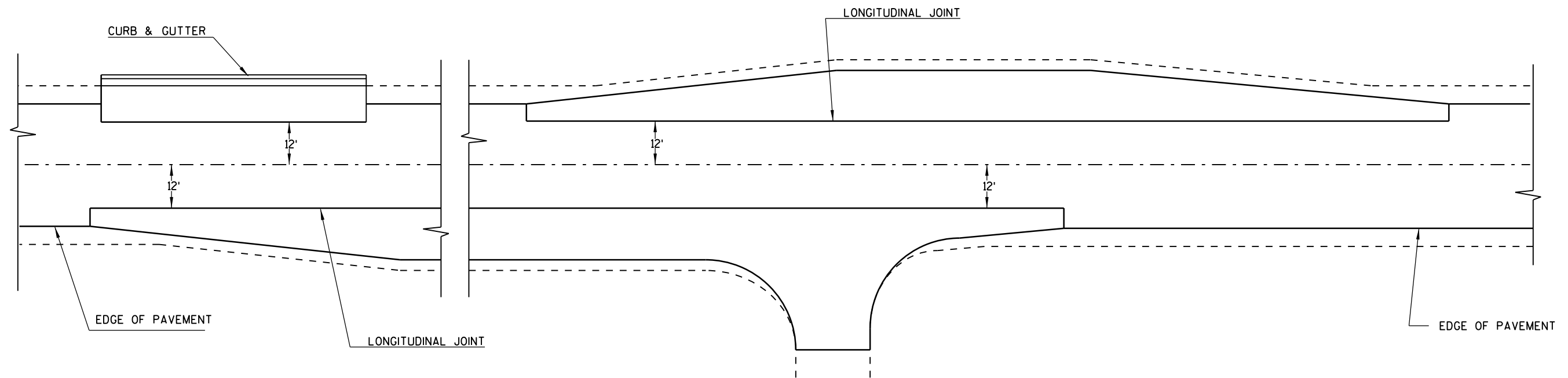
SPECIAL BASE PATCH SECTION

* TO BE INCLUDED IN "SPECIAL BASE PATCH" ITEM:

- * 20.5" OF COMMON EXCAVATION
- * 12" OF BASE AGGREGATE DENSE 3-INCH
- * 6" OF BASE AGGREGATE DENSE 1.25-INCH
- * 2.5" OF HMA BINDER MATERIAL
- * SAWING FULL DEPTH

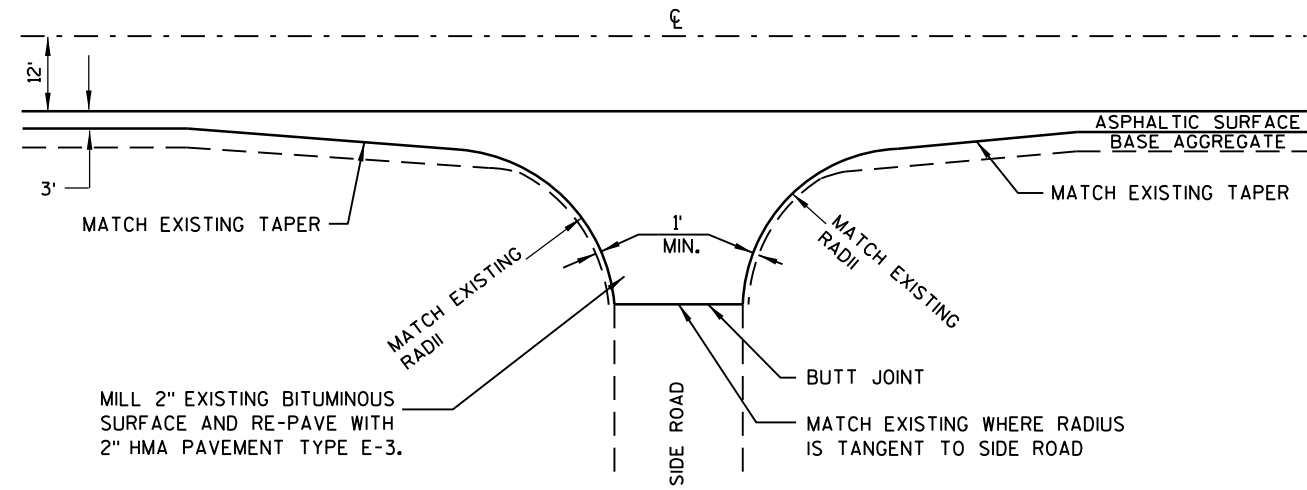


RURAL DRIVEWAY INTERSECTION DETAIL

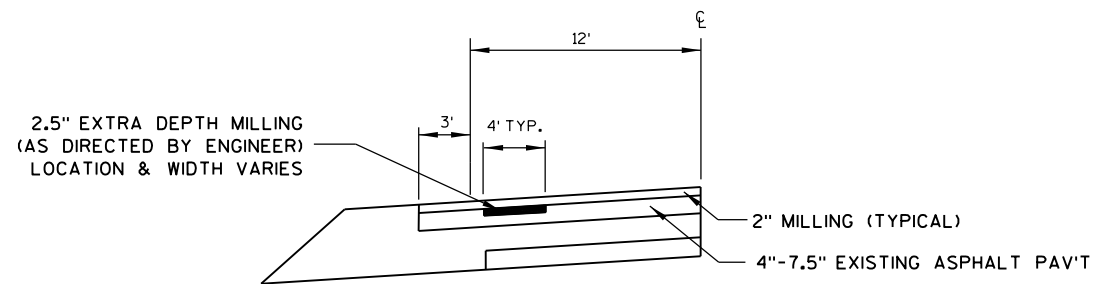


HMA LONGITUDINAL JOINT DETAIL *

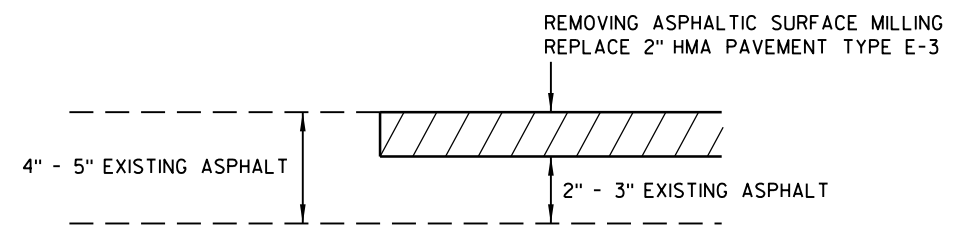
* TO BE USED AT ALL INTERSECTIONS, BYPASS,
PASSING LANE AND RURAL CURB SECTIONS



TYPICAL SIDE ROAD DETAIL



EXTRA DEPTH MILL AND FILL IN SPOT LOCATIONS



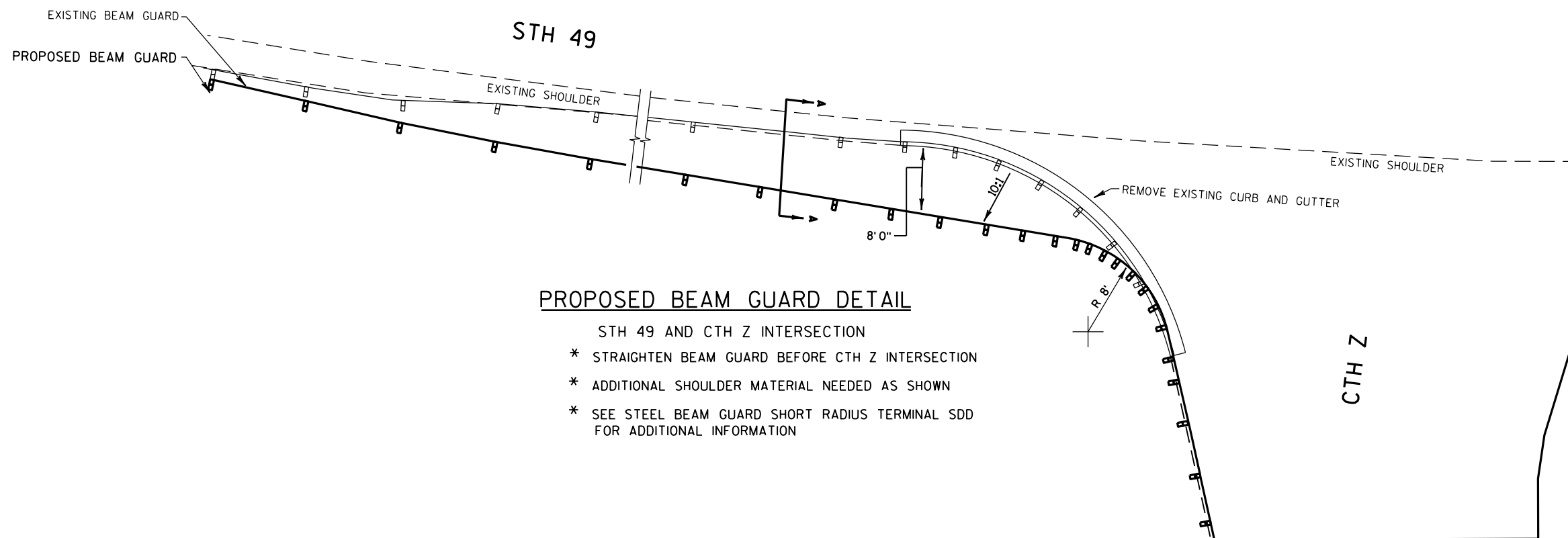
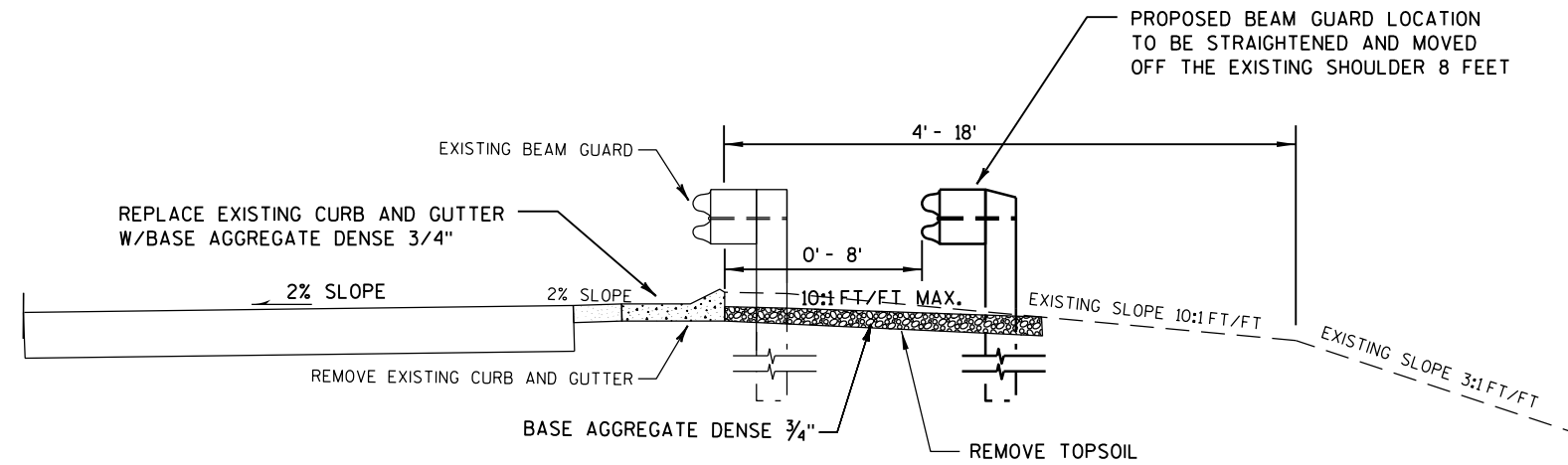
BUTT JOINT DETAIL

SECTION A-A

STH 49 AND CTH Z INTERSECTION

- * ADJUST BEAM GUARD 8' AWAY FROM EDGE OF RADIUS
- * ADDITIONAL SHOULDER MATERIAL NEEDED AS SHOWN

NOTE: EARTHWORK TO RELOCATE BEAM GUARD IS INCIDENTAL TO BARRIER SYSTEM GRADING SHAPING FINISHING.

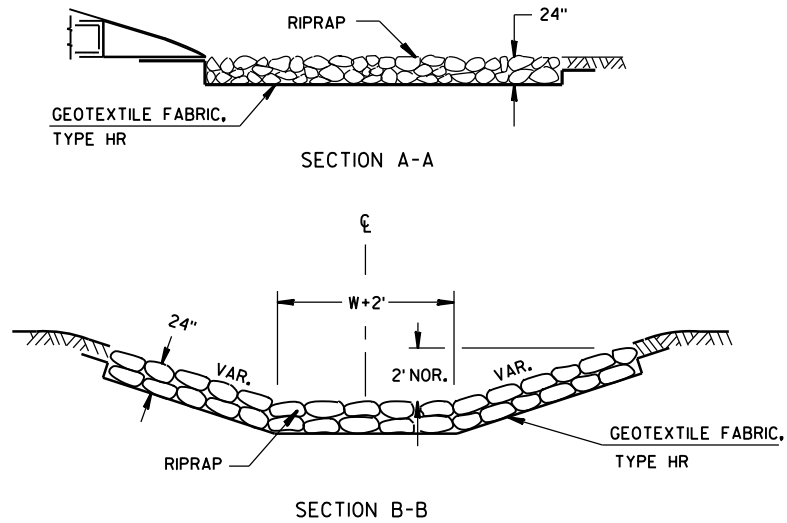
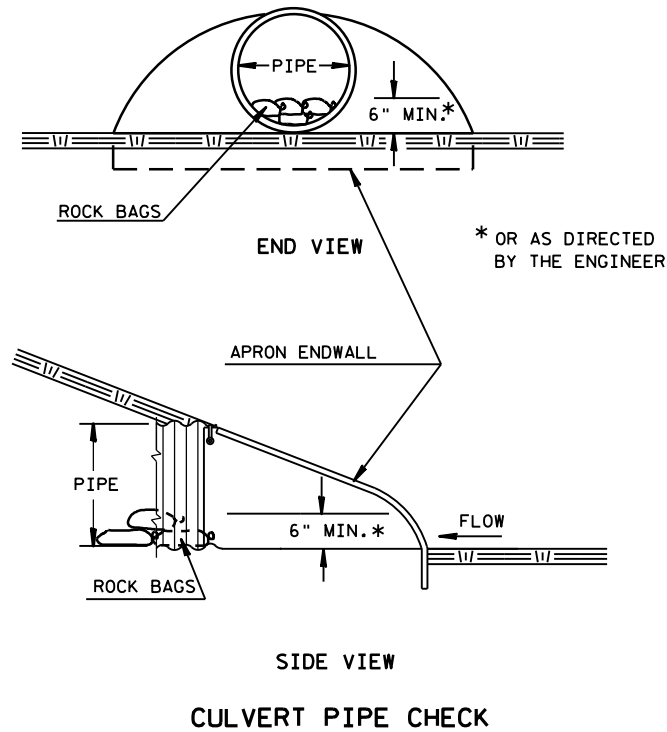


PROPOSED BEAM GUARD DETAIL

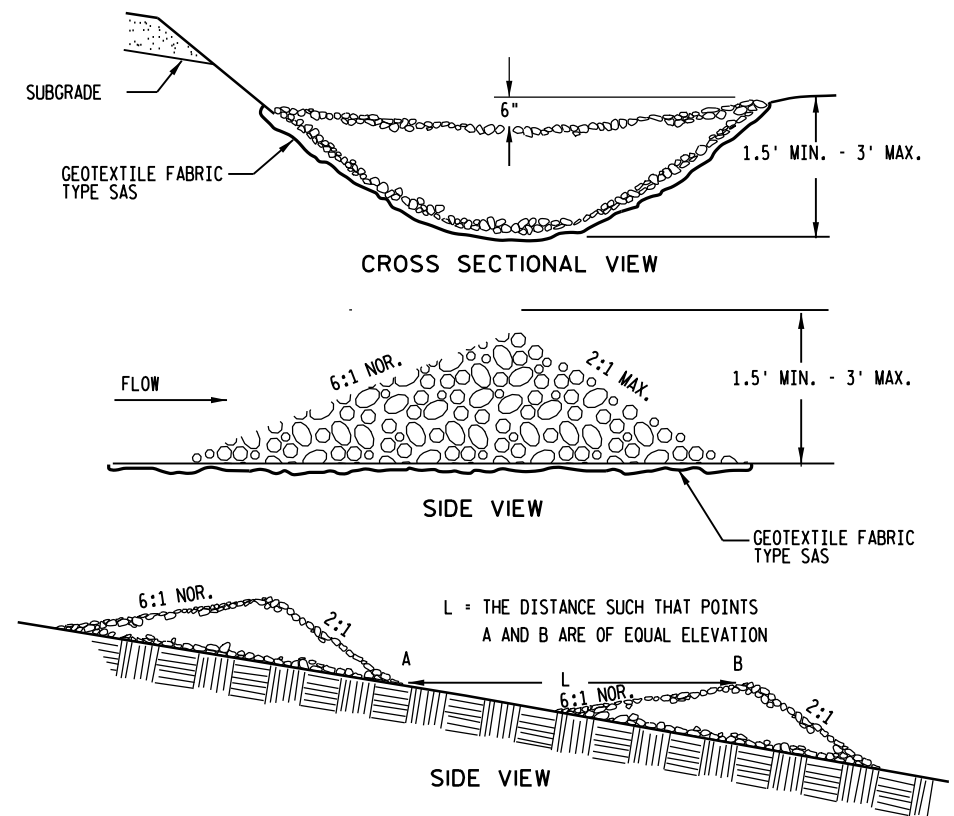
STH 49 AND CTH Z INTERSECTION

- * STRAIGHTEN BEAM GUARD BEFORE CTH Z INTERSECTION
- * ADDITIONAL SHOULDER MATERIAL NEEDED AS SHOWN
- * SEE STEEL BEAM GUARD SHORT RADIUS TERMINAL SDD FOR ADDITIONAL INFORMATION

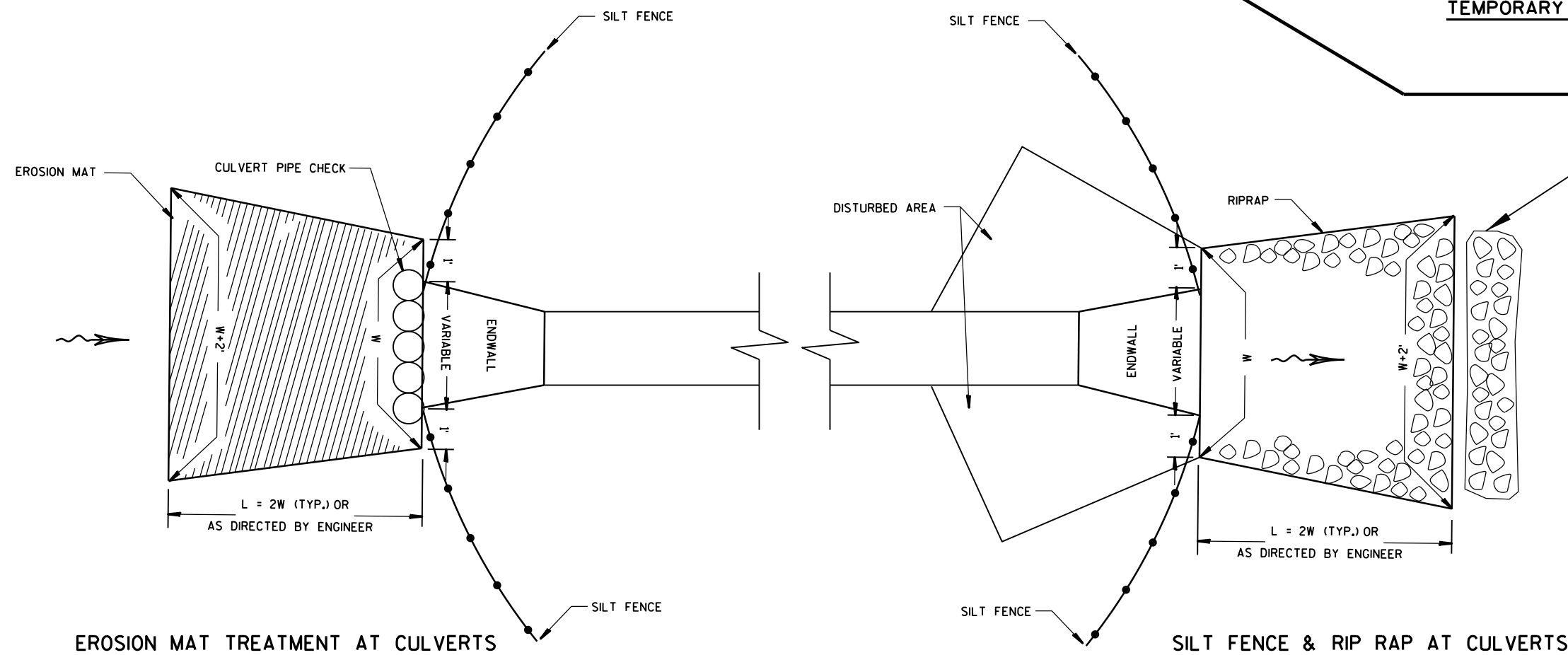
2



**RIPRAP AND GEOTEXTILE FABRIC DETAIL
AT APRON ENDWALLS**



TEMPORARY STONE DITCH CHECK



INSTALL TEMPORARY STONE DITCH CHECKS WHEN WATER IS ACTIVELY FLOWING OR AS DIRECTED BY THE ENGINEER.

EROSION MAT TREATMENT AT CULVERTS

SILT FENCE & RIP RAP AT CULVERTS



PROJECT NO: 3010-01-60

HWY: STH 49

COUNTY: DODGE

INTERSECTION DETAILS - LEDGEVIEW LANE

SHEET

E

FILE NAME : R:\d1_30100130\021100_1.dgn

PLOT DATE : 30-OCT-2012 13:51

PLOT BY : dotc4c

PLOT NAME :

PLOT SCALE : 40:1

16
WISDOT/CAD/CUS SHEET 42



PROJECT NO: 3010-01-60

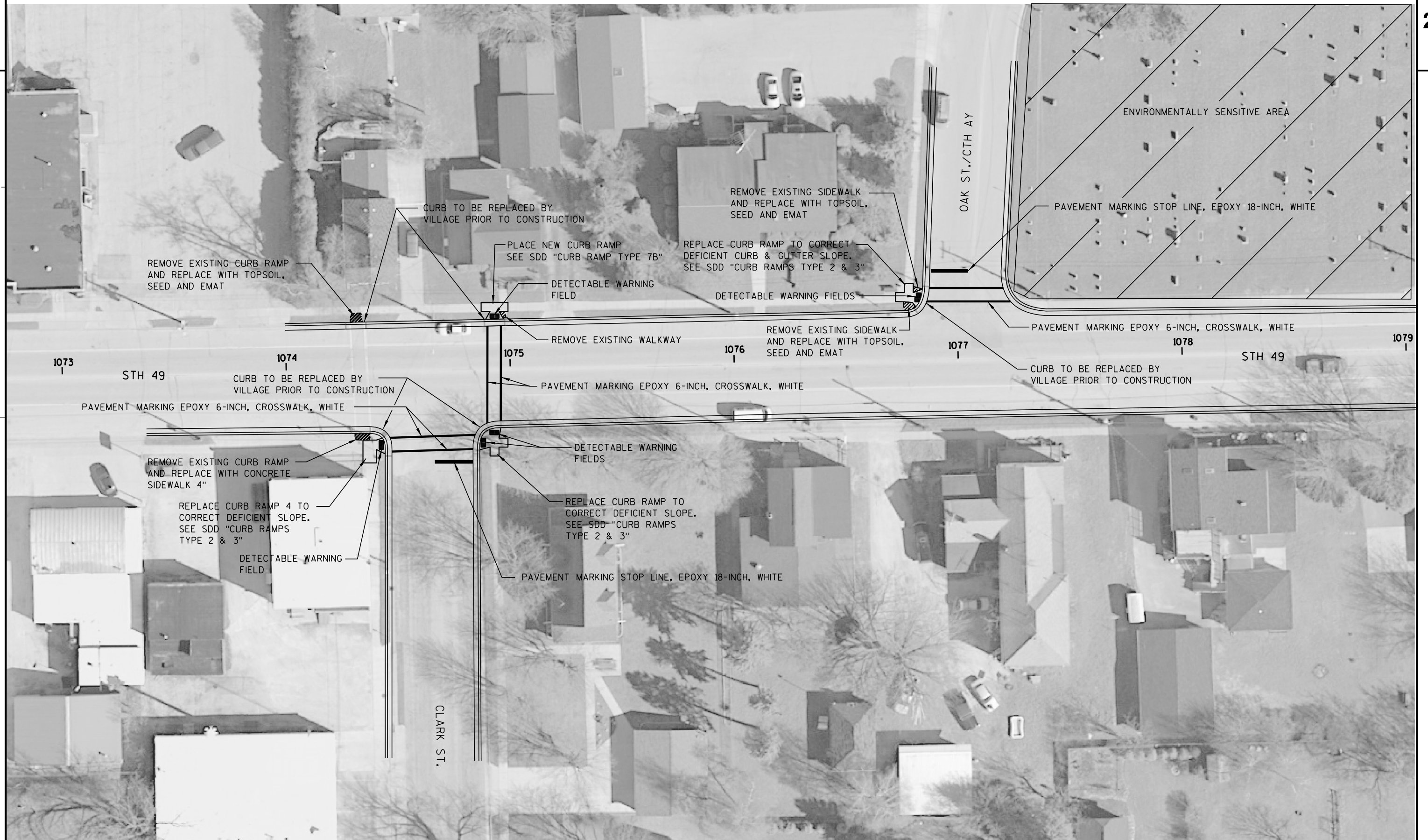
HWY: STH 49

COUNTY: DODGE

INTERSECTION DETAILS - WEST AVE./ RAILROAD ST.

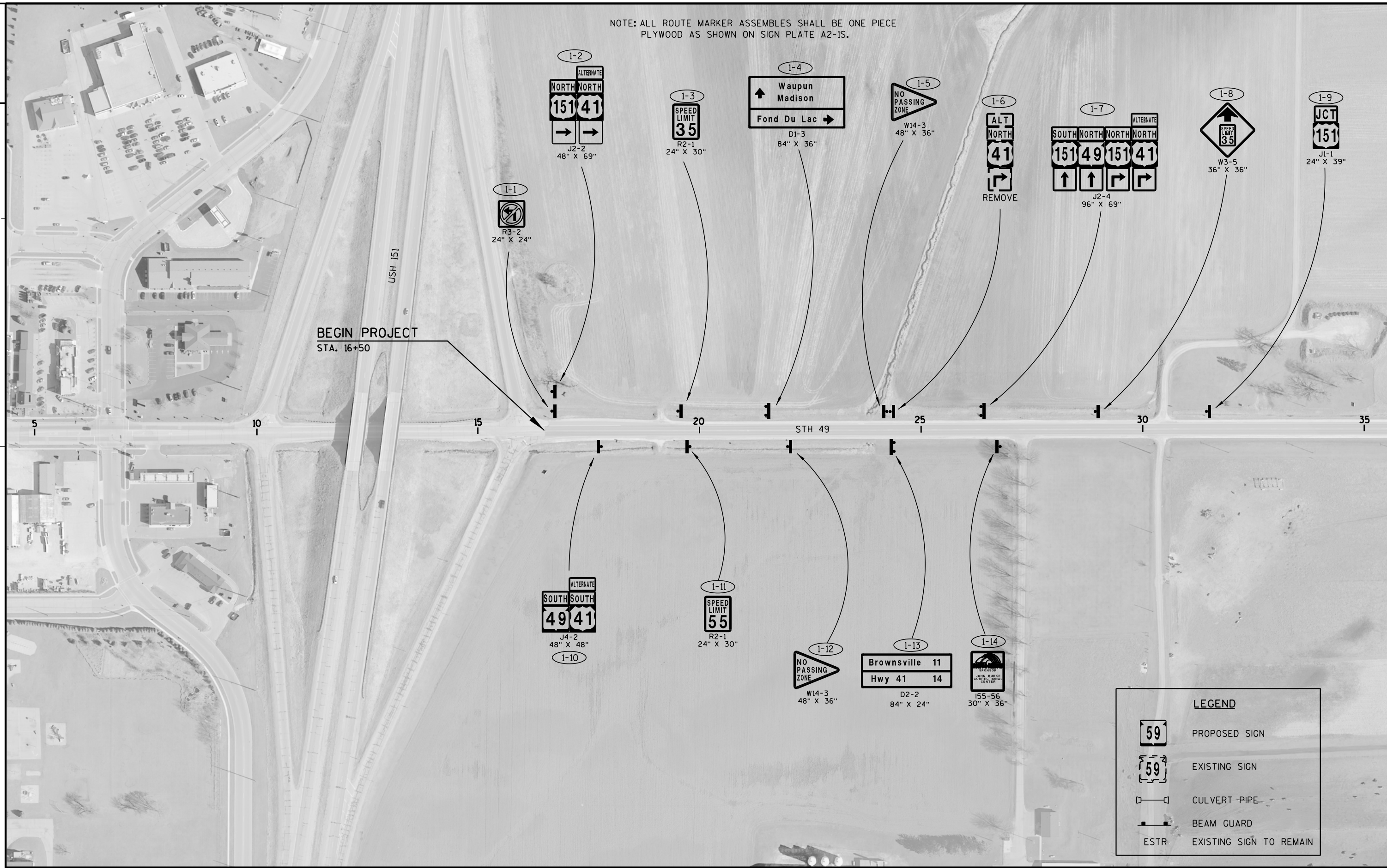
SHEET

E





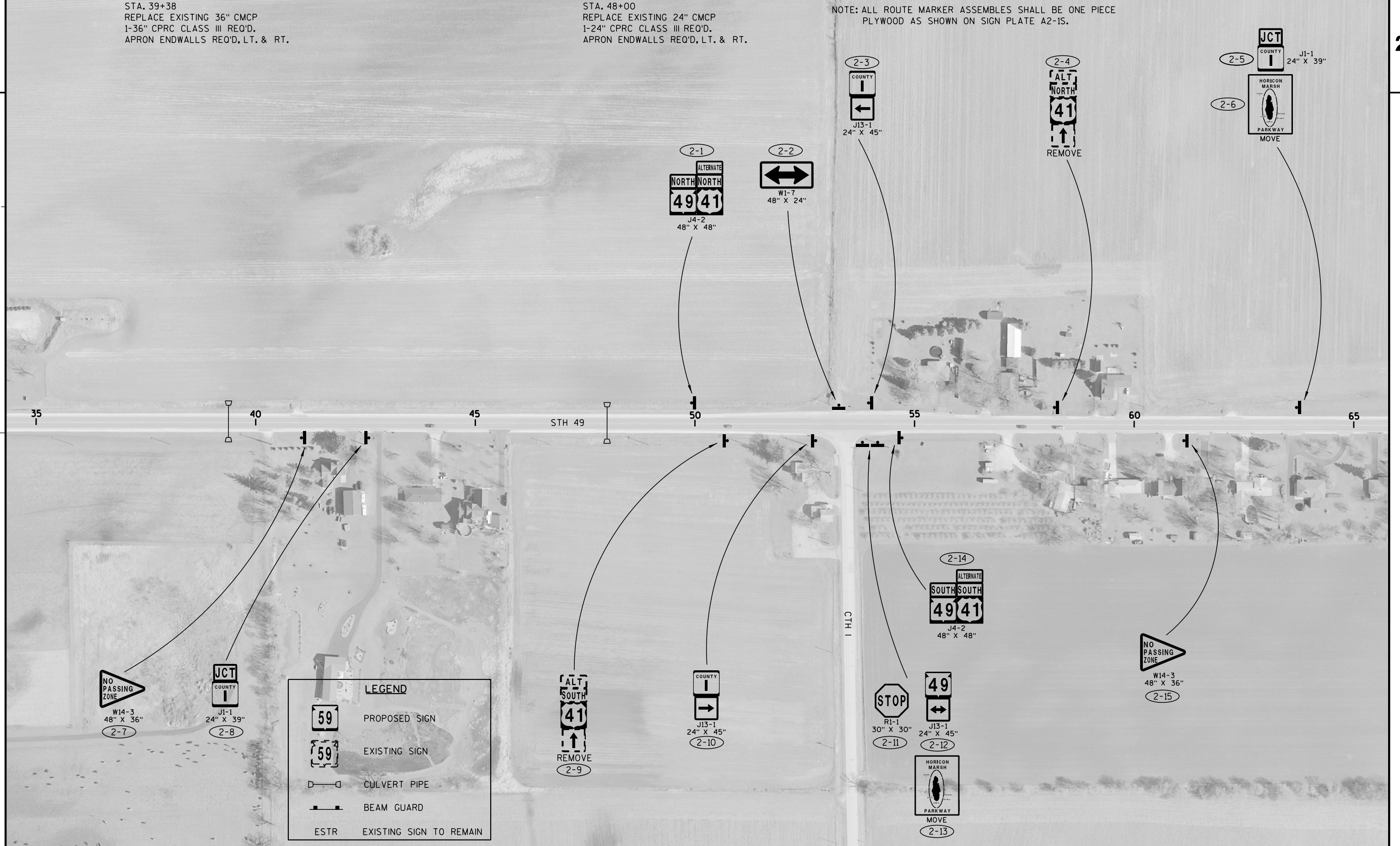
NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



STA. 39+38
REPLACE EXISTING 36" CMCP
1-36" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

STA. 48+00
REPLACE EXISTING 24" CMCP
1-24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-IS.



NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

STA. 86+00
REPLACE EXISTING 24" CMCP
1-24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.
TO BE LENGTHENED APPROX. 4'
ON EACH SIDE

3-1
STOP
R1-1
30" X 30"

65 70 75 80 85 90 95
STH 49

SHAMROCK

STA. 93+14 - STA. 94+44
REPLACE STEEL PLATE
BEAM GUARD

LEGEND	
	PROPOSED SIGN
	EXISTING SIGN
	CULVERT PIPE
	BEAM GUARD
ESTR	EXISTING SIGN TO REMAIN

STOP
R1-1
30" X 30"
3-2

ROUGH
ROAD
REMOVE
3-3

NO
PASSING
ZONE
W14-3
48" X 36"
3-4

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

STA. 116+56
REPLACE EXISTING 24" CMCP
1-24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.
TO BE LENGTHENED APPROX. 4'
ON EACH SIDE

4-1
ROUGH
ROAD
REMOVE

4-2
NO
PASSING
ZONE
W14-3
48" X 36"

4-3
STOP
R1-1
30" X 30"

4-4
SPONSOR
JOHN BURKE
CORRECTIONAL
CENTER
155-56
30" X 36"

4-5
TRAIL
CROSSING
W11-15A
36" X 36"

STA. 95+64 - STA. 96+82
REPLACE STEEL PLATE
BEAM GUARD

STA. 101+10
REPLACE EXISTING 24" CMCP
1- 24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.
BORROW REQUIRED TO BACKFILL
AEW INCIDENTAL TO AEW

STA. 104+80
REPLACE EXISTING 24" CMCP
1-24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

PAVEMENT MARKING EPOXY 6-INCH,
CROSSWALK, WHITE

LEGEND



PROPOSED SIGN



EXISTING SIGN



CULVERT PIPE



BEAM GUARD



EXISTING SIGN TO REMAIN



MARSH AREA

PROJECT NO: 3010-01-60

HWY: STH 49

COUNTY: DODGE

PLAN DETAILS

SHEET

E

FILE NAME : R:\d1_30100130\021204_pd.dgn

PLOT DATE : 12-NOV-2012 08:29

PLOT BY : dotc4c

PLOT NAME :

PLOT SCALE : 200:1

WISDOT/CALCS SHEET 42

STA. 129+40
REPLACE EXISTING 24" CMCP
1- 24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

STA. 135+90
REPLACE EXISTING 24" CMCP
1- 24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.
TURBIDITY BARRIER REQ'D.
SEE TURBIDITY BARRIER SDD

NOTE: ALL ROUTE MARKER ASSEMBLIES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-IS.

STA. 152+90
REPLACE EXISTING 24" CMCP
1- 24" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.
TURBIDITY BARRIER REQ'D.
SEE TURBIDITY BARRIER SDD



125

130

135

STH 49

140

145

150

155



LEGEND	
	PROPOSED SIGN
	EXISTING SIGN
	CULVERT PIPE
	BEAM GUARD
ESTR	EXISTING SIGN TO REMAIN
	MARSH AREA

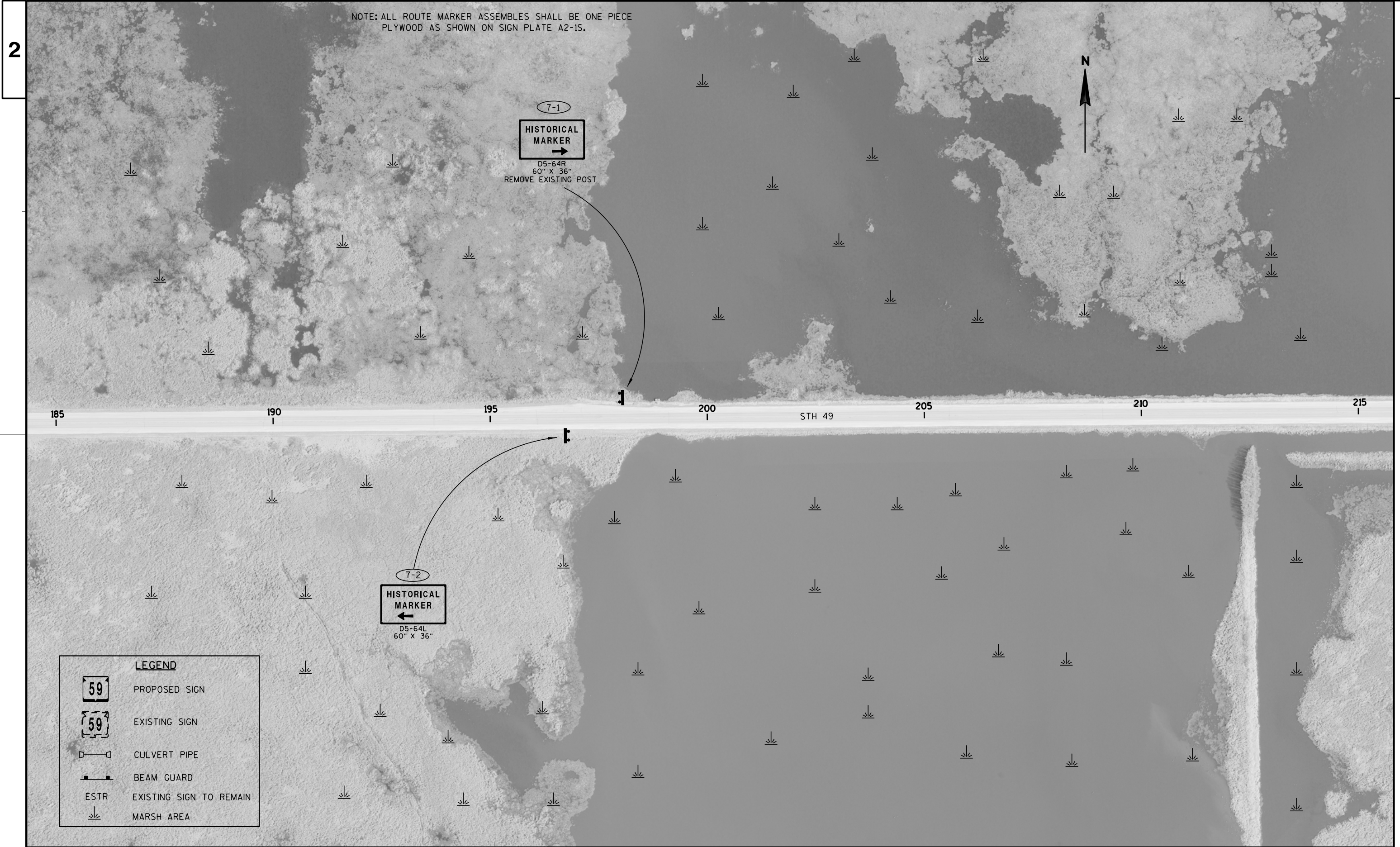
NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-IS.



155 160 165 170 175 180 185

6-1
HISTORICAL
MARKER
1/2 MILE
D5-63
60" X 36"

LEGEND	
	PROPOSED SIGN
	EXISTING SIGN
	CULVERT PIPE
	BEAM GUARD
	EXISTING SIGN TO REMAIN
	MARSH AREA



NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

8-1
**HISTORICAL
MARKER**
1/2 MILE
D5-63
60" X 36"
REMOVE EXISTING POSTS



215

220

225

STH 49

230

235

240

245

LEGEND



PROPOSED SIGN



EXISTING SIGN



CULVERT PIPE



BEAM GUARD

ESTR

EXISTING SIGN TO REMAIN



MARSH AREA

PROJECT NO: 3010-01-60

HWY: STH 49

COUNTY: DODGE

PLAN DETAILS

SHEET

E

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

9-1
NO
PASSING
ZONE
W14-3
48" X 36"

9-2
Fond du Lac Co
12-2
84" X 15"
9-3
HORIZON
MARSH
PARKWAY
MOVE

9-4
Dodge Co
12-2
54" X 15"
HORIZON
MARSH
PARKWAY
MOVE
9-5

59

PROPOSED SIGN

59

EXISTING SIGN

CULVERT PIPE

BEAM GUARD

ESTR

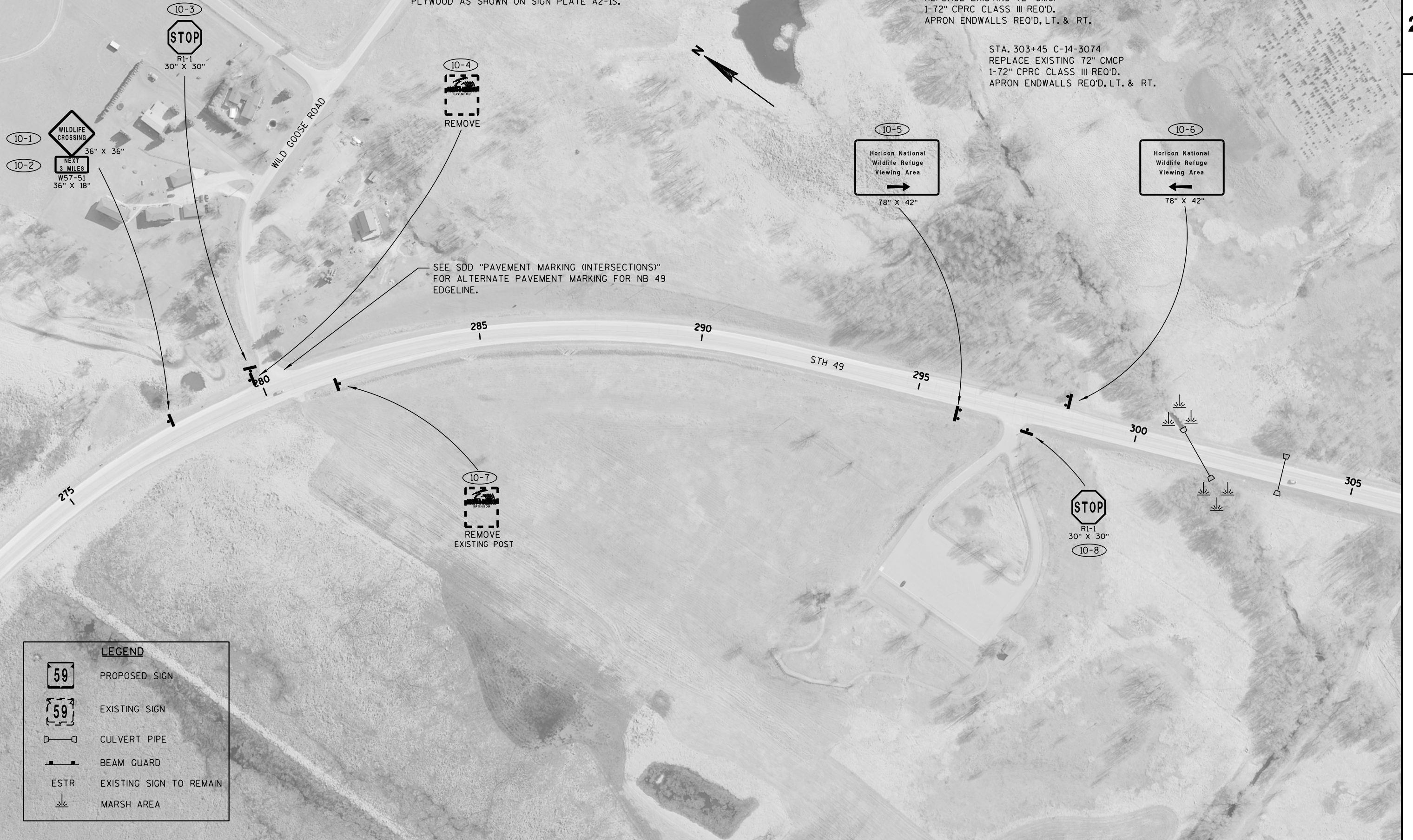
EXISTING SIGN TO REMAIN

MARSH AREA

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

STA. 301+15 C-14-3075
REPLACE EXISTING 72" CMCP
1-72" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

STA. 303+45 C-14-3074
REPLACE EXISTING 72" CMCP
1-72" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

**LEGEND**

PROPOSED SIGN



EXISTING SIGN



CULVERT PIPE



BEAM GUARD

ESTR

EXISTING SIGN TO REMAIN



MARSH AREA

PROJECT NO: 3010-01-60

HWY: STH 49

COUNTY: DODGE

PLAN DETAILS

SHEET

E

FILE NAME : R:\d1_30100130\021210_pd.dgn

PLOT DATE : 30-OCT-2012 13:59

PLOT BY : dotc4c

PLOT NAME :

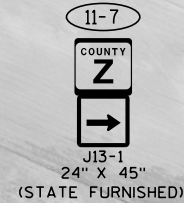
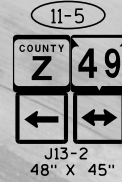
PLOT SCALE : 200:1

29
WISDOT/CALCS SHEET 42

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

STA. 319+98
REPLACE EXISTING 24" CMCP
1-24" CPRC CLASS III REQ'D.
2-APRON ENDWALLS REQ'D. LT. & RT.

STA. 327+60 C-14-3037
LINE EXISTING 72" CMCP
2-APRON ENDWALLS REQ'D. LT. & RT.
BORROW REQUIRED TO BACKFILL AEW
INCIDENTAL TO AEW ITEM



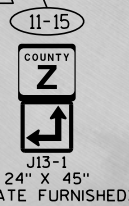
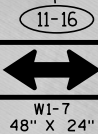
REMOVE EXISTING CURB AND GUTTER



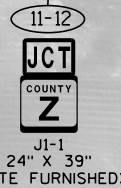
STA. 325+20 - STA. 329+64
REPLACE STEEL PLATE
BEAM GUARD

SEE SDD "SIGNING & MARKING"
FOR COMBINATION RIGHT TURN
LANE & BYPASS LANE
FOR NB 49.

SEE SDD "PAVEMENT MARKING
(INTERSECTIONS)" FOR ALTERNATE
PAVEMENT MARKING FOR SB 49
EDGE LINE.



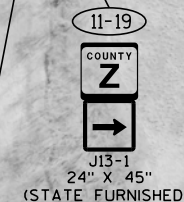
SEE SDD "PAVEMENT MARKING
& SIGNING" (CLIMBING LANE &
PASSING LANE) FOR SB 49.

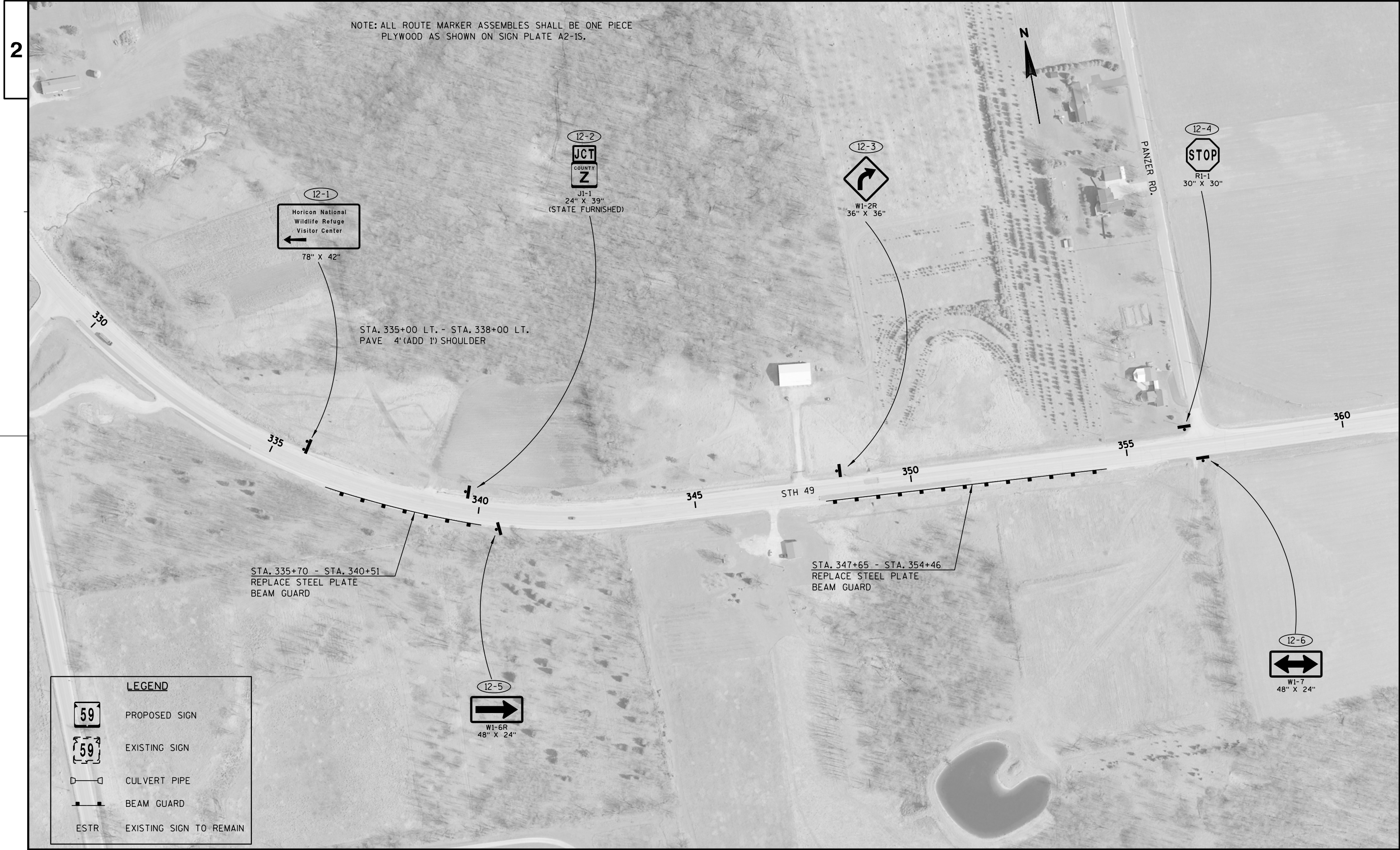


LEGEND

	PROPOSED SIGN
	EXISTING SIGN
	CULVERT PIPE
	BEAM GUARD
	EXISTING SIGN TO REMAIN
	MARSH AREA

STA. 323+56 - STA. 330+00
REPLACE & RELOCATE STEEL PLATE
BEAM GUARD (SEE CONSTRUCTION DETAIL)





NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



13-2

DO
NOT
PASS

R4-1
24" X 30"

PLACE ACROSS FROM
NO PASSING ZONE SIGN

360

365

370

STH 49

375

380

385

390

STA. 361+52 - STA. 366+33
REPLACE STEEL PLATE
BEAM GUARD

13-1

NO
PASSING
ZONE

W14-3
48" X 36"

LEGEND



PROPOSED SIGN



EXISTING SIGN



CULVERT PIPE

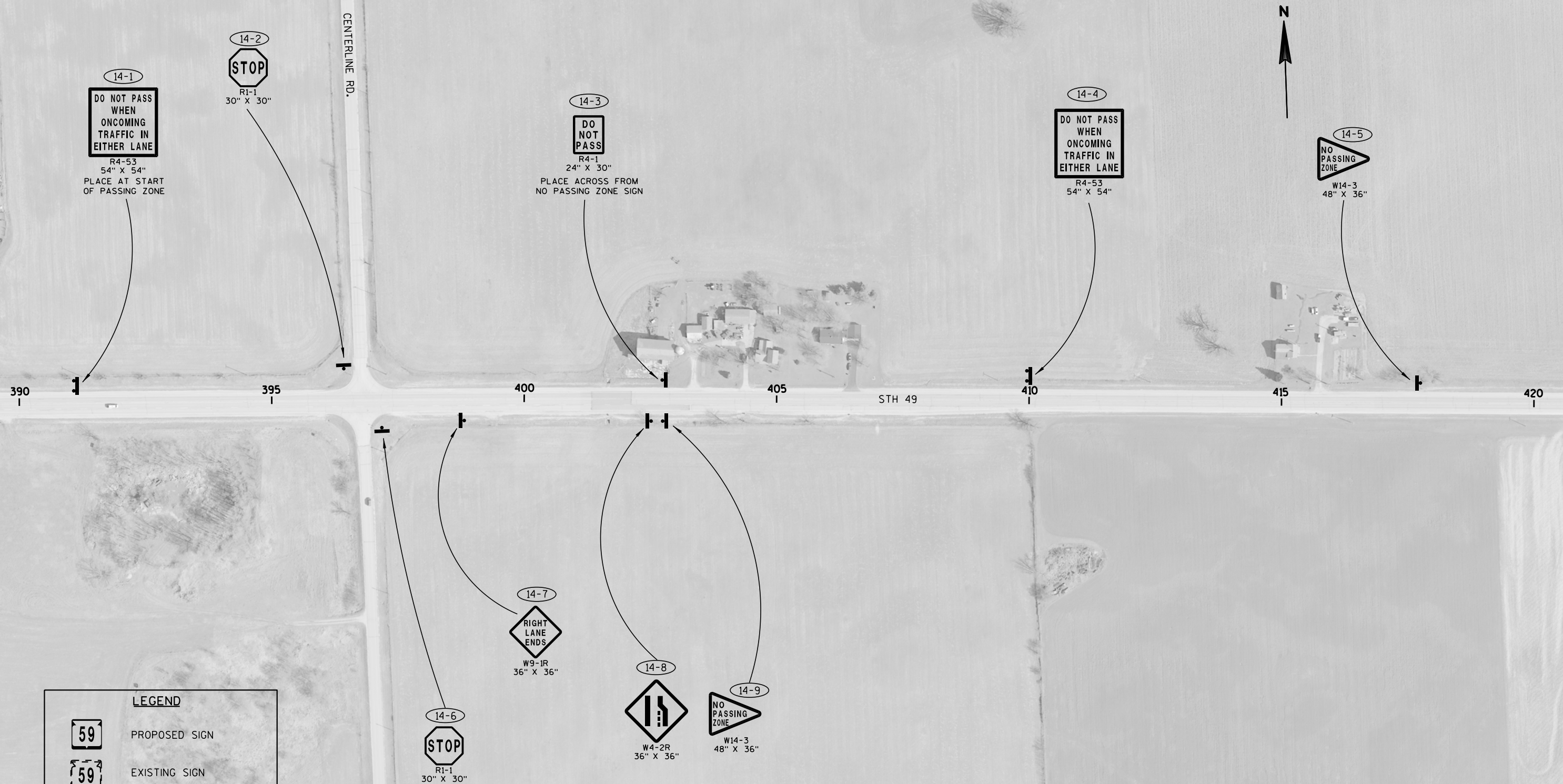


BEAM GUARD

ESTR

EXISTING SIGN TO REMAIN

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

STA. 449+16
REPLACE EXISTING 36" CMCP
1-36" CPRC CLASS III REQ'D.
2-APRON ENDWALLS REQ'D. LT. & RT.

420 425 430 435 440 445 450
| | | | | | |
STH 49

WELLS RD.

CTH YY

LEGEND



PROPOSED SIGN



EXISTING SIGN



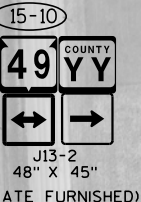
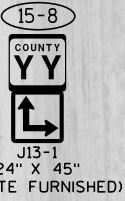
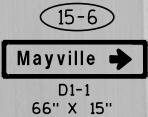
CULVERT PIPE



BEAM GUARD

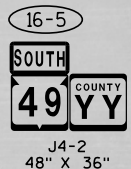
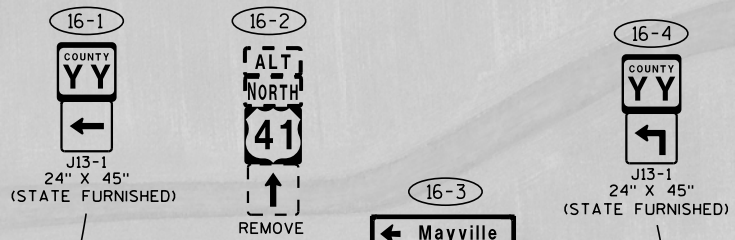
ESTR

EXISTING SIGN TO REMAIN



STA. 450+23 C-142005
REPLACE EXISTING TWIN 65"x40" CMCP
2-HE 68"x43" CPRC CLASS III REQ'D.
4-APRON ENDWALLS REQ'D. LT. & RT.

NOTE: ALL ROUTE MARKER ASSEMBLIES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



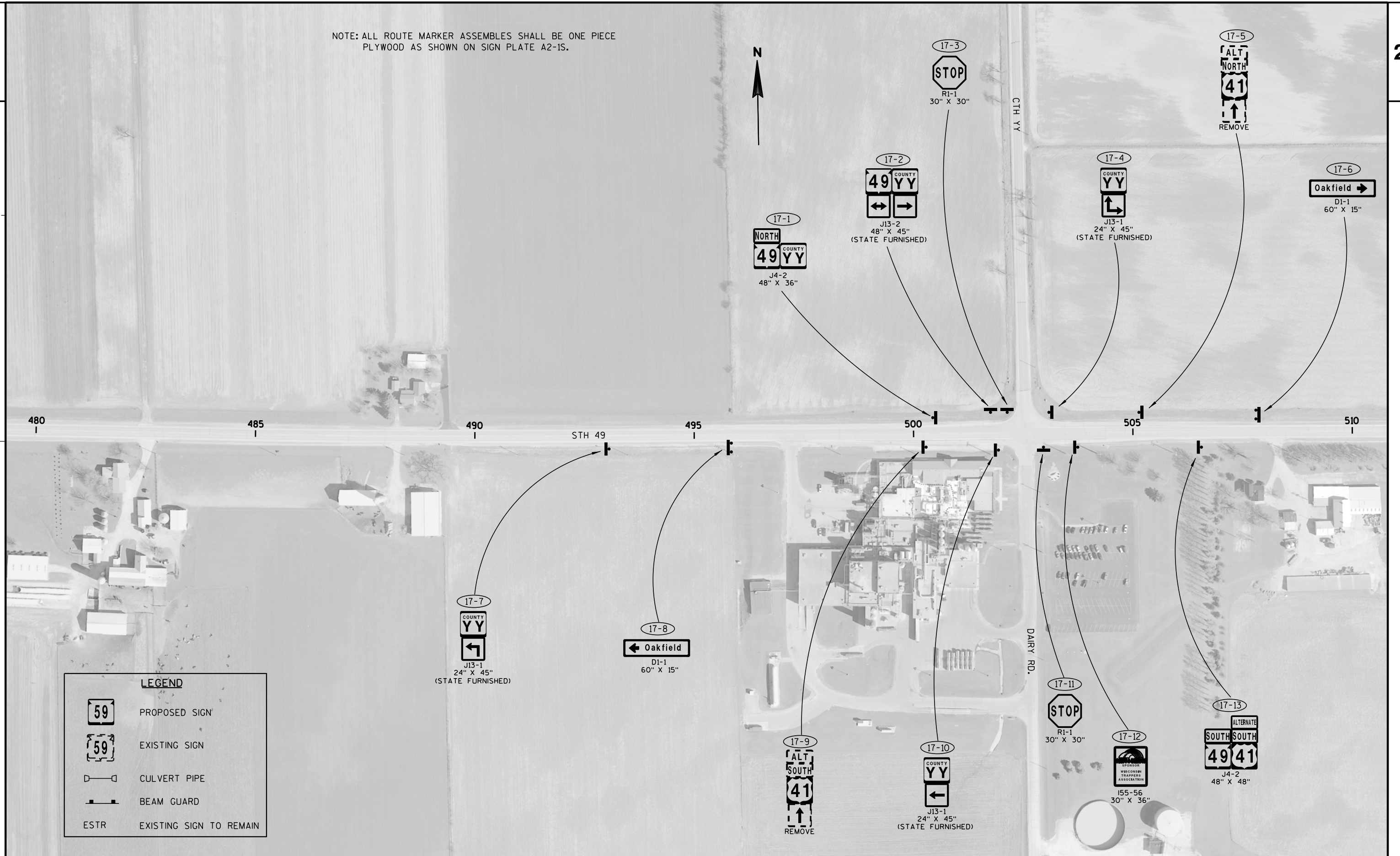
LEGEND

	PROPOSED SIGN
	EXISTING SIGN
	CULVERT PIPE
	BEAM GUARD
	EXISTING SIGN TO REMAIN



APPROXIMATE CROSSING
KOCH PIPELINE 10" DIA.
WAUPUN TO MILWAUKEE

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



PROJECT NO: 3010-01-60

HWY: STH 49

COUNTY: DODGE

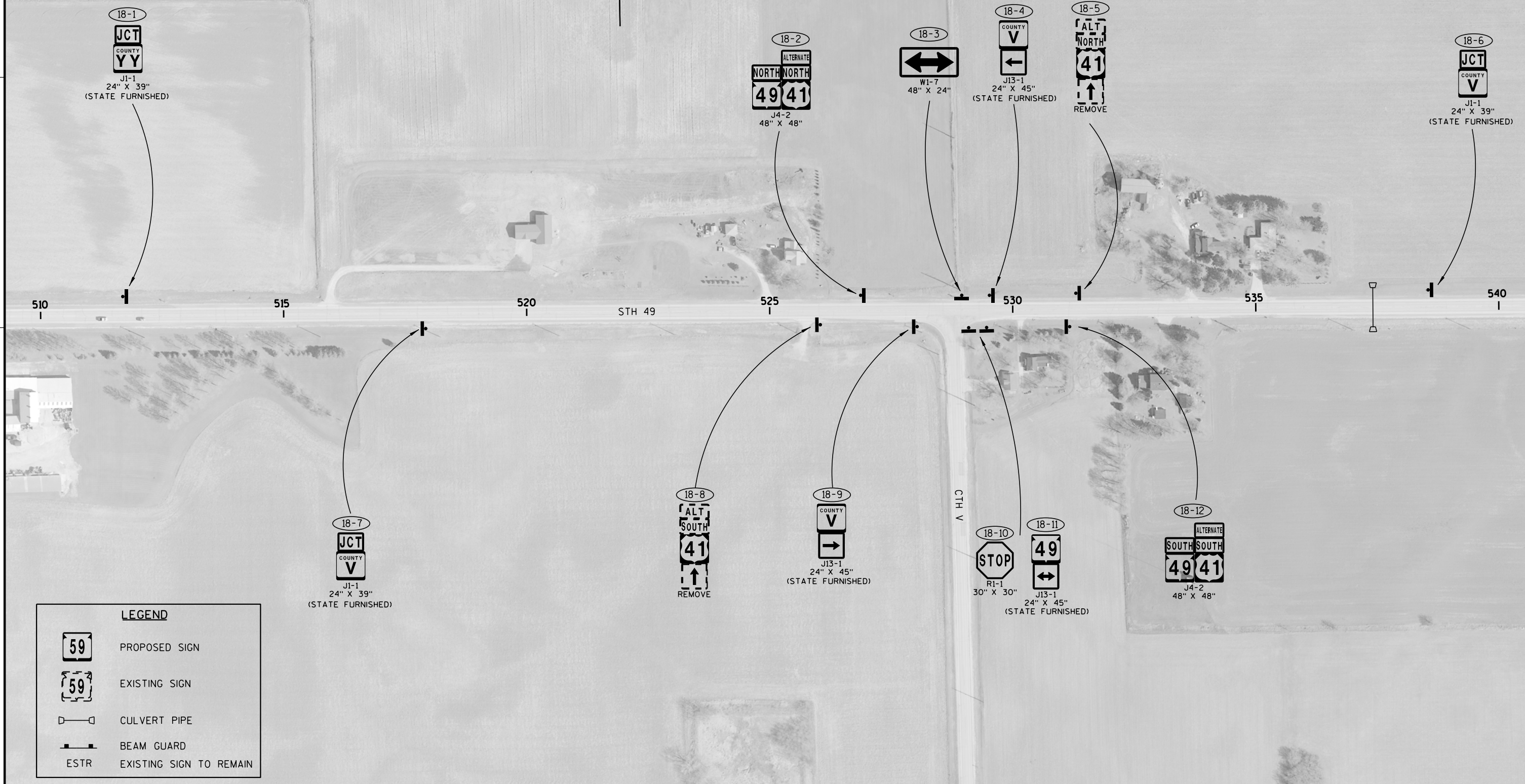
PLAN DETAILS

SHEET

E

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

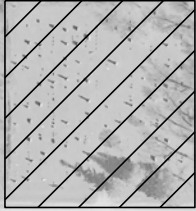
STA. 537+41
REPLACE EXISTING 30" CMCP
1-30" CMCP CLASS III REQ'D.
2-APRON ENDWALLS RE'OD. LT. & RT.



NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



ENVIRONMENTALLY SENSITIVE AREA



540

545

550

STH 49

555

560

565

570

WEST LINE RD.

WEST LINE RD.



LEGEND



PROPOSED SIGN



EXISTING SIGN



CULVERT PIPE



BEAM GUARD

ESTR

EXISTING SIGN TO REMAIN

NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

STA. 573+04
REPLACE EXISTING 30" CMCP
1-30" CPRC CLASS III REQ'D.
2-APRON ENDWALLS REQ'D, LT. & RT.

20-1
STOP
R1-1
30" X 30"

NO
PASSING
ZONE
W14-3
ESTR

20-5
Waupun 12
D2-1
66" X 15"

SPEED
LIMIT
155
R2-1
ESTR

20-2
STOP
R1-1
30" X 30"

EVERGREEN DR.

570

575

580

STH 49

585

590

595

600

SPEED
LIMIT
45
W3-5
ESTR

20-3
Brownsville
POPULATION 580
MOVE

SNOW
EMERGENCY
NO PARKING
MOVE
20-4

SPEED
LIMIT
45
R2-1
ESTR

STA. 586+24
REPLACE EXISTING 30" CMCP
1-30" CPRC CLASS III REQ'D.
APRON ENDWALLS REQ'D, LT. & RT.

STA. 592+55 C-14-3033
LINE EXISTING 72" CMCP
2-APRON ENDWALLS REQ'D, LT. & RT.
BORROW REQUIRED TO BACKFILL AEW
INCIDENTAL TO AEW ITEM

LEGEND

59

PROPOSED SIGN

59

EXISTING SIGN



CULVERT PIPE



BEAM GUARD

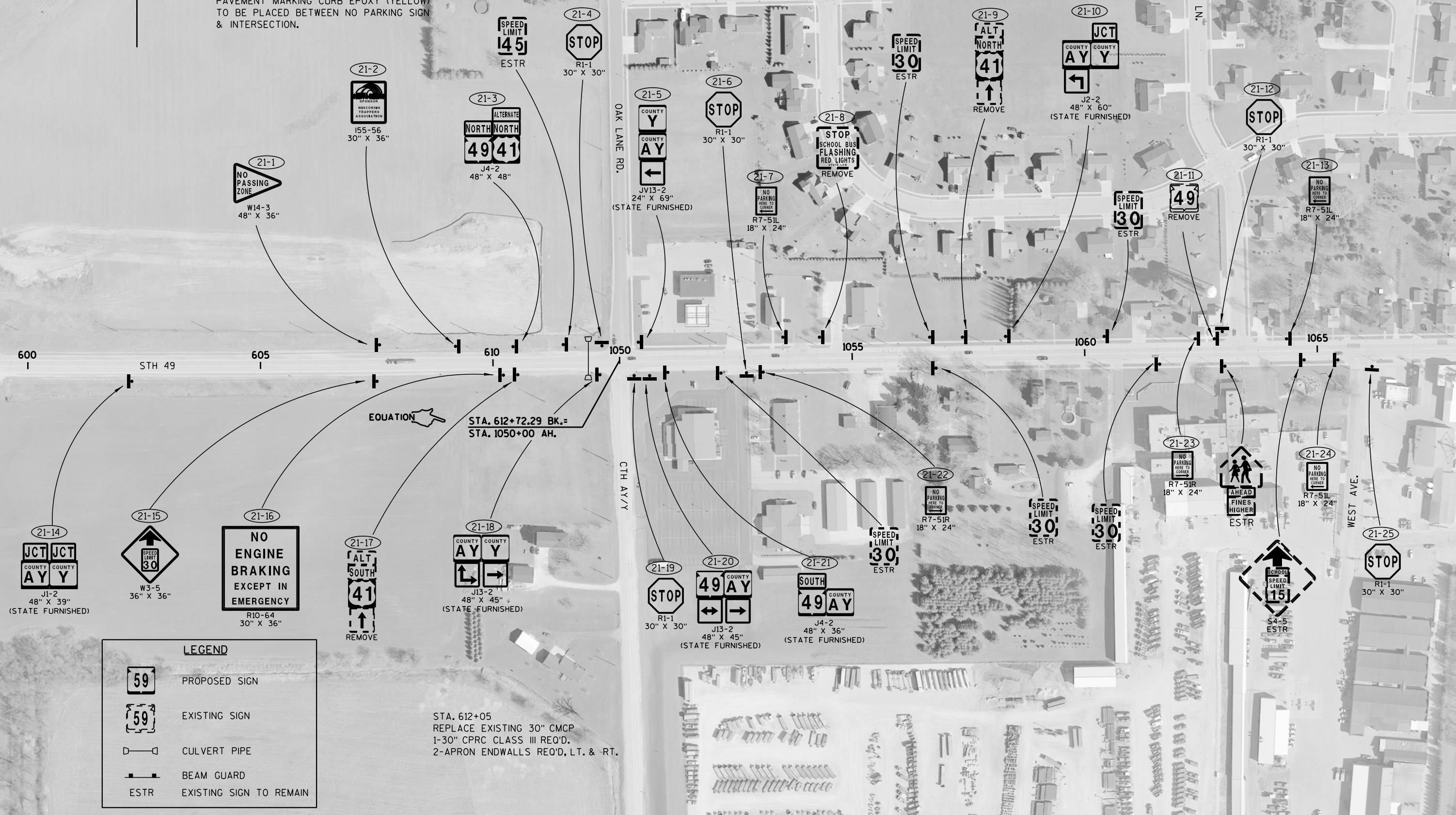
ESTR

EXISTING SIGN TO REMAIN

NOTE: ALL ROUTE MARKER ASSEMBLIES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

ALL NO PARKING SIGNS TO BE PLACED 75'
FROM $\square$ OF INTERSECTING ROADWAY.

PAVEMENT MARKING CURB EPOXY (YELLOW)
TO BE PLACED BETWEEN NO PARKING SIGN
& INTERSECTION.



NOTE: ALL ROUTE MARKER ASSEMBLIES SHALL BE ONE PIECE PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.

ALL NO PARKING SIGNS TO BE PLACED 75' FROM CL OF INTERSECTING ROADWAY.

PAVEMENT MARKING CURB EPOXY (YELLOW) TO BE PLACED BETWEEN NO PARKING SIGN & INTERSECTION.





NOTE: ALL ROUTE MARKER ASSEMBLES SHALL BE ONE PIECE
PLYWOOD AS SHOWN ON SIGN PLATE A2-1S.



1125

1130

1135

STH 49

1140

1145

1150

1155

POLE RD.

LEGEND



PROPOSED SIGN



EXISTING SIGN

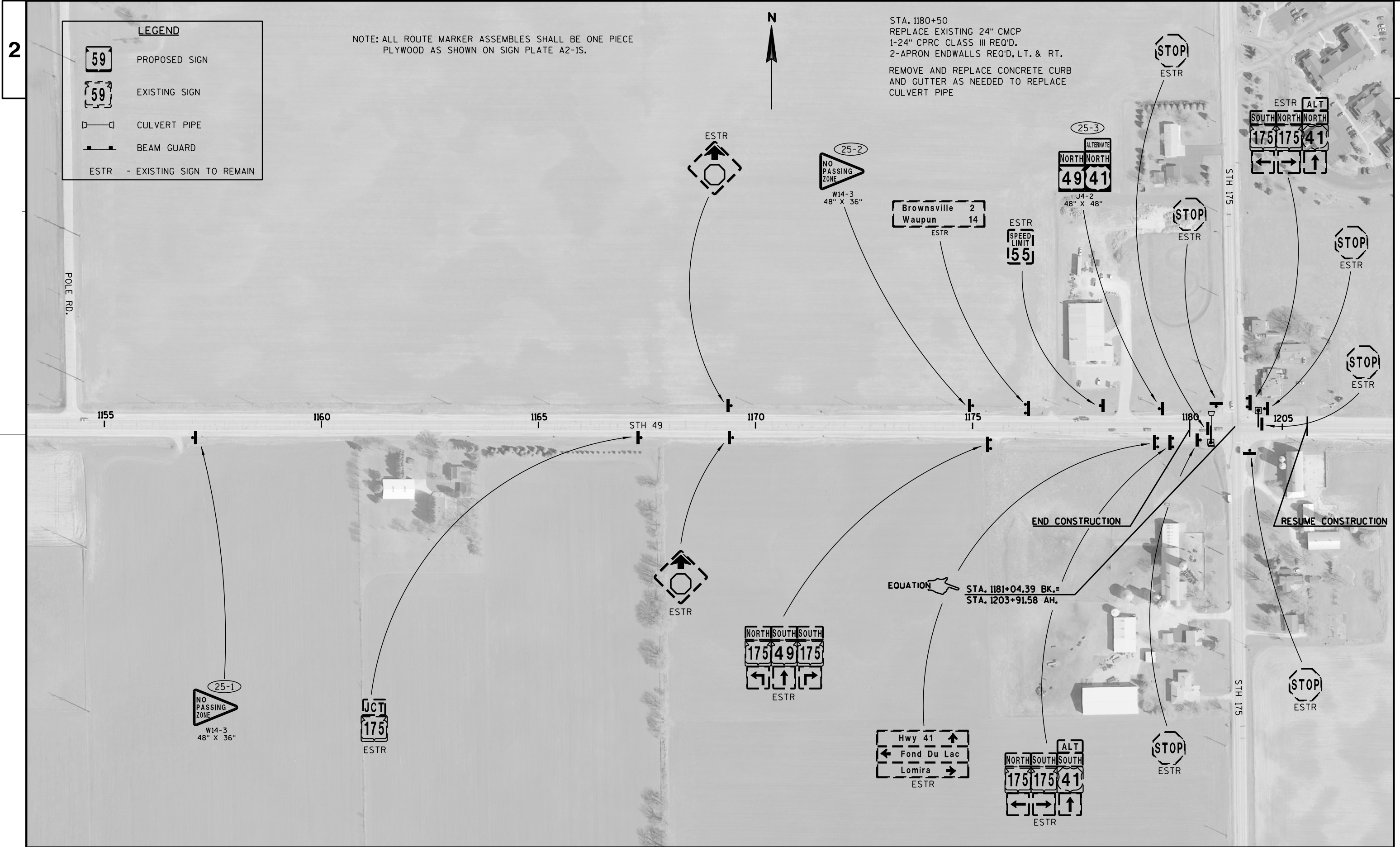


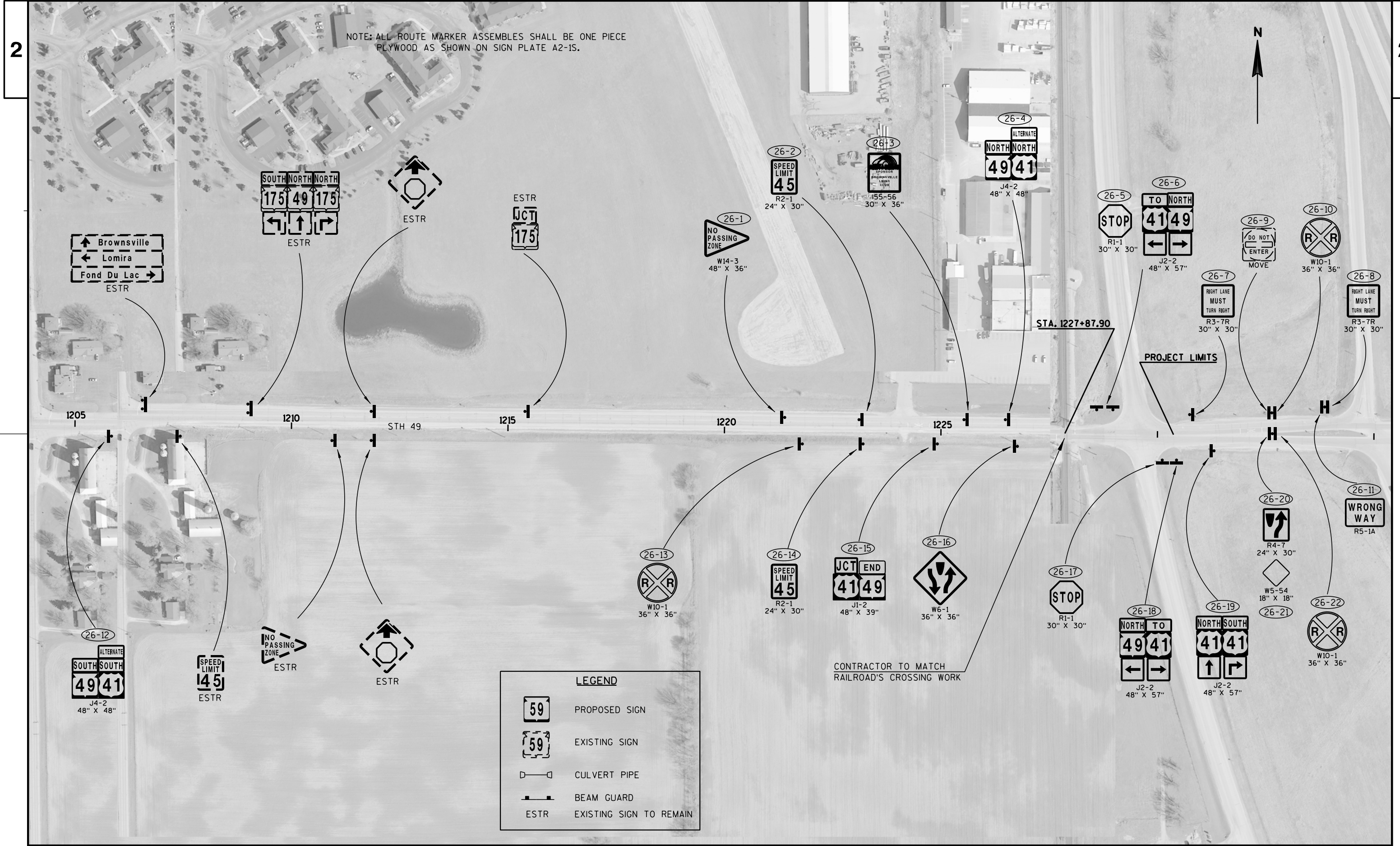
CULVERT PIPE



BEAM GUARD

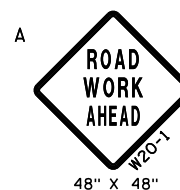
ESTR - EXISTING SIGN TO REMAIN





2

TRAFFIC CONTROL:
FOR MOVING OPERATION STA. 16+50 TO STA. 1230+50
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL FOR
LANE CLOSURE (SUITABLE FOR MOVING OPERATION)".



B **END**
ROAD WORK
G20-2A
48" X 24"

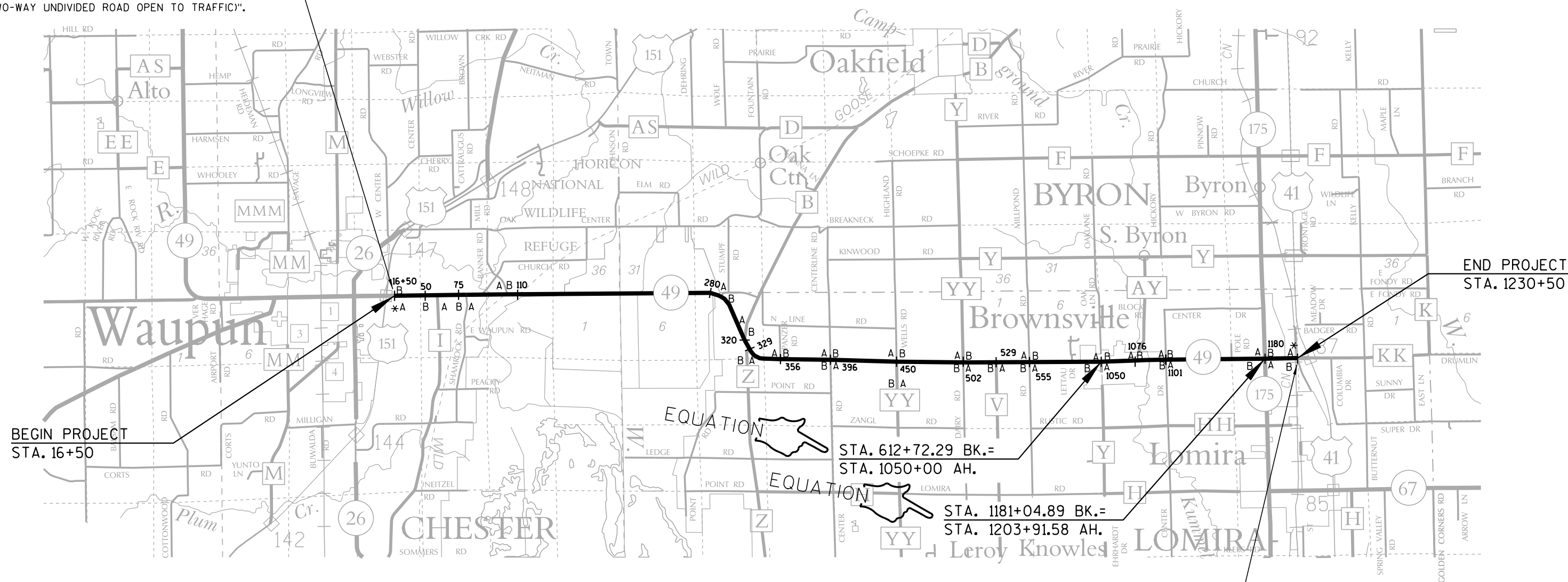
* **HWY 49**
UNDER CONSTRUCTION
JUNE XX-AUG. XX

G20-57
48" X 102"

* PLACE FIXED MESSAGE SIGN AT THE LIMITS OF THE PROJECT FOR 10 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.



SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL
ADVANCE WARNING SIGNS 45 MPH OR GREATER
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC").



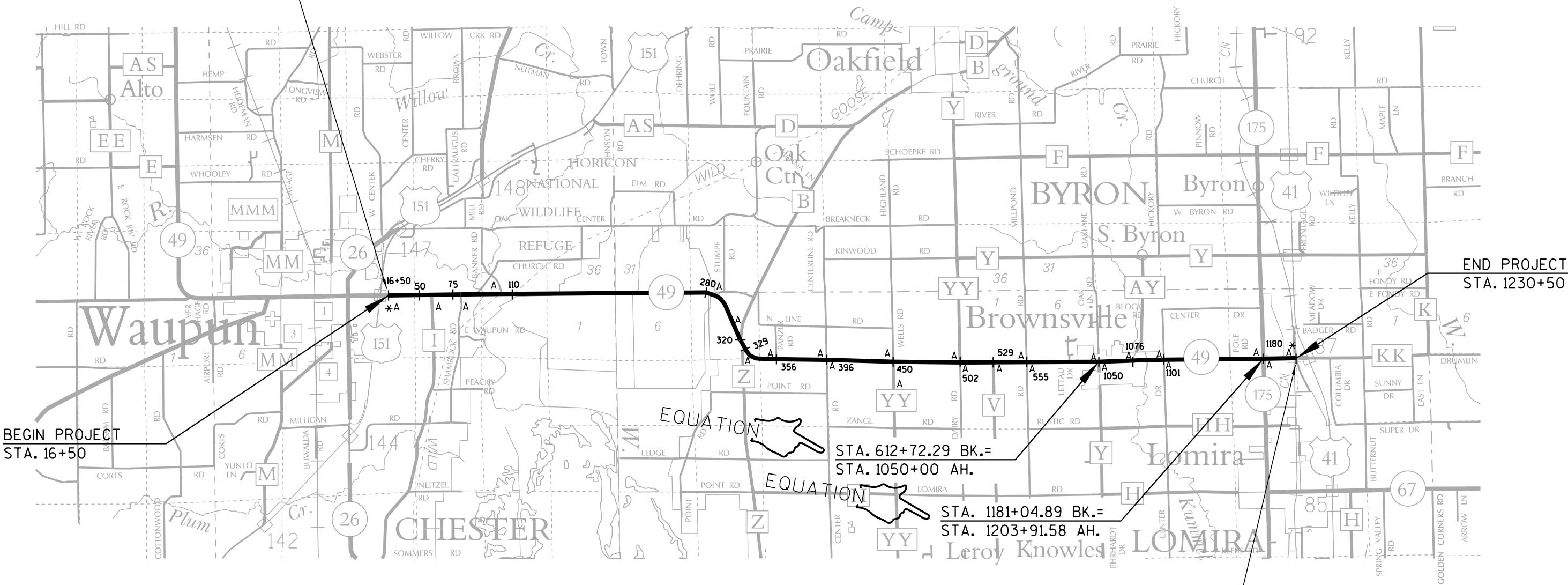
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL
ADVANCE WARNING SIGNS 45 MPH OR GREATER
TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC)".

TRAFFIC CONTROL:
FOR ROAD CLOSURE OPERATION STA. 16+50 TO STA. 1230+50
SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR
MAINLINE CLOSURES".

A.) SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR SIDE ROAD CLOSURES".
"DETAIL #3" (PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS).



SEE STANDARD DETAIL DRAWING BARRICADES
AND SIGNS FOR MAINLINE CLOSURES.



BEGIN PROJECT
STA. 16+50

END PROJECT
STA. 1230+50

STA. 612+72.29 BK.=
STA. 1050+00 AH.

STA. 1181+04.89 BK.=
STA. 1203+91.58 AH.

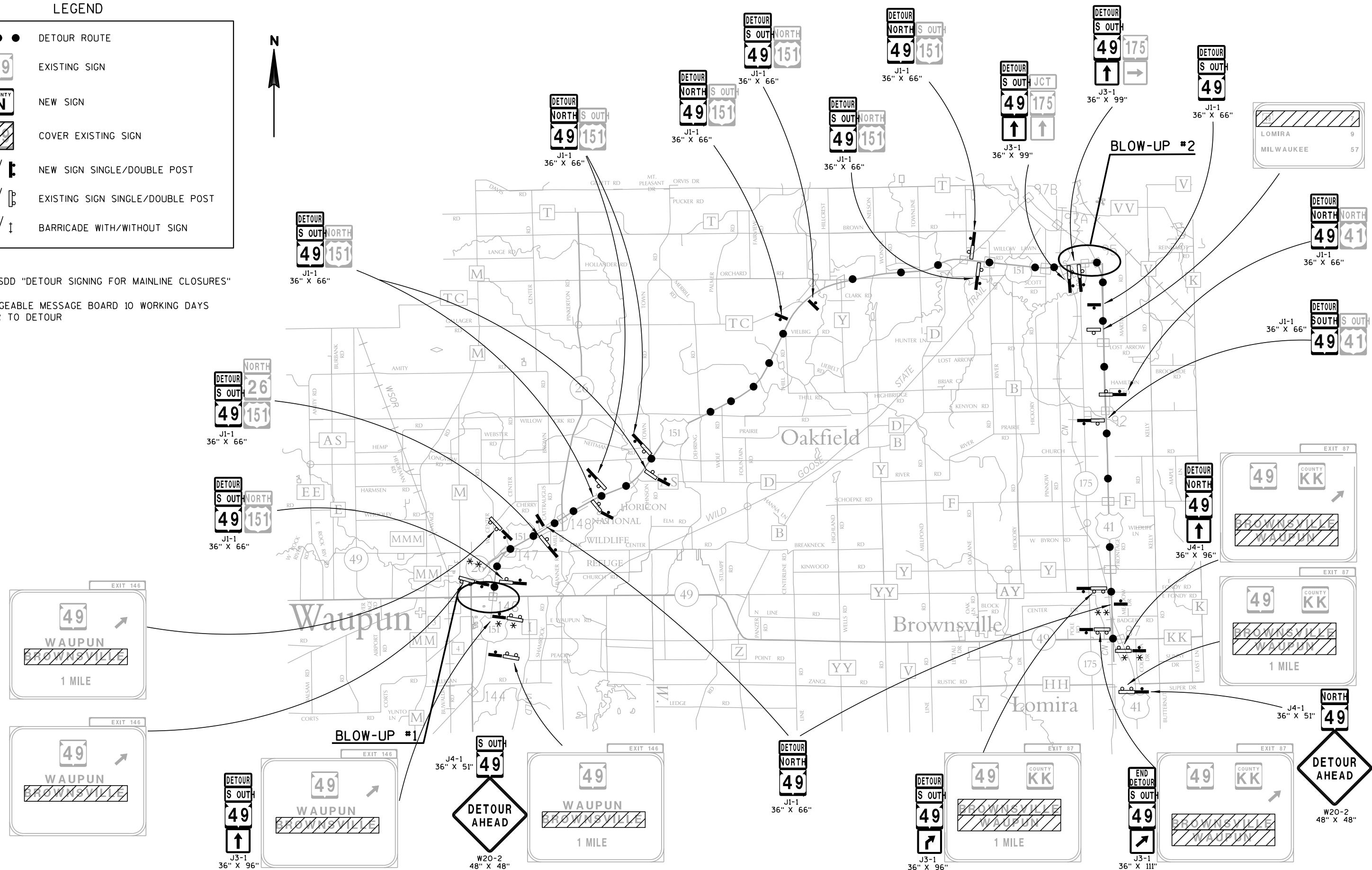
SEE STANDARD DETAIL DRAWING BARRICADES
AND SIGNS FOR MAINLINE CLOSURES.
PROVIDE FULL CLOSURE ON BOTH SIDES OF
RAILROAD CROSSING.

LEGEND

- | | |
|---|----------------------------------|
| ● ● ● | DETOUR ROUTE |
|  | EXISTING SIGN |
|  | NEW SIGN |
|  | COVER EXISTING SIGN |
|  | NEW SIGN SINGLE/DOUBLE POST |
|  | EXISTING SIGN SINGLE/DOUBLE POST |
|  | BARRICADE WITH/WITHOUT SIGN |

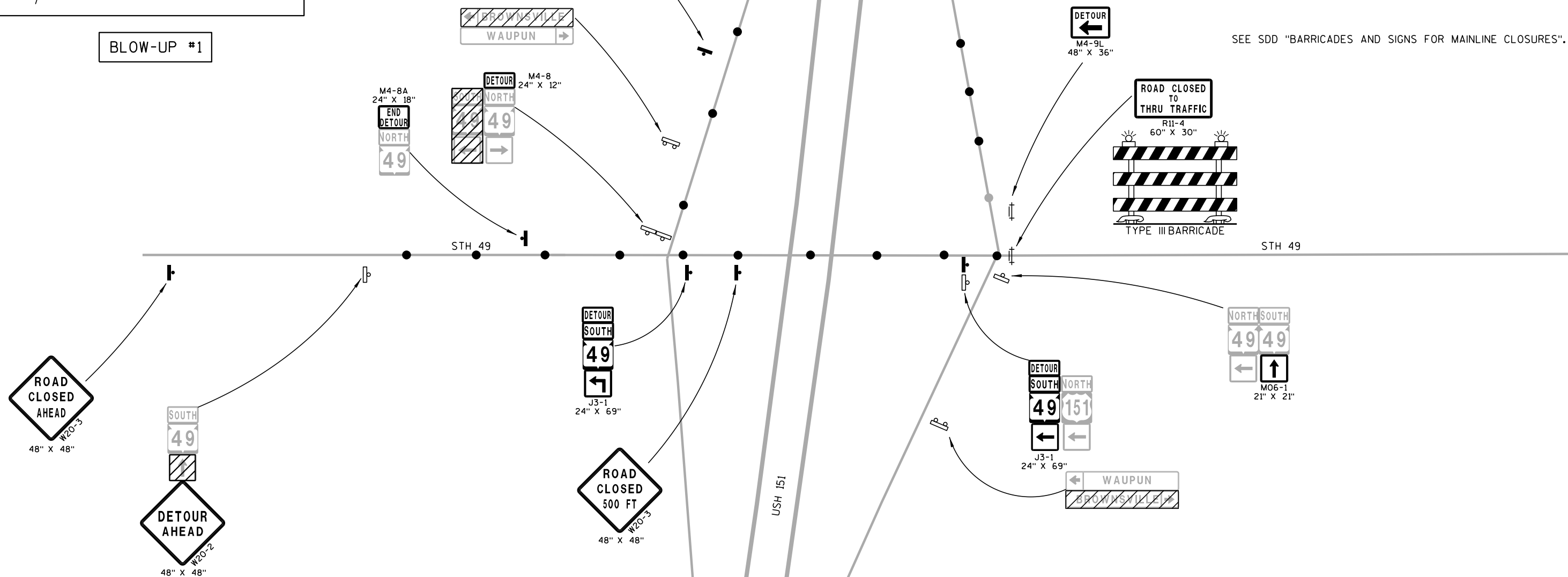
* SEE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES"

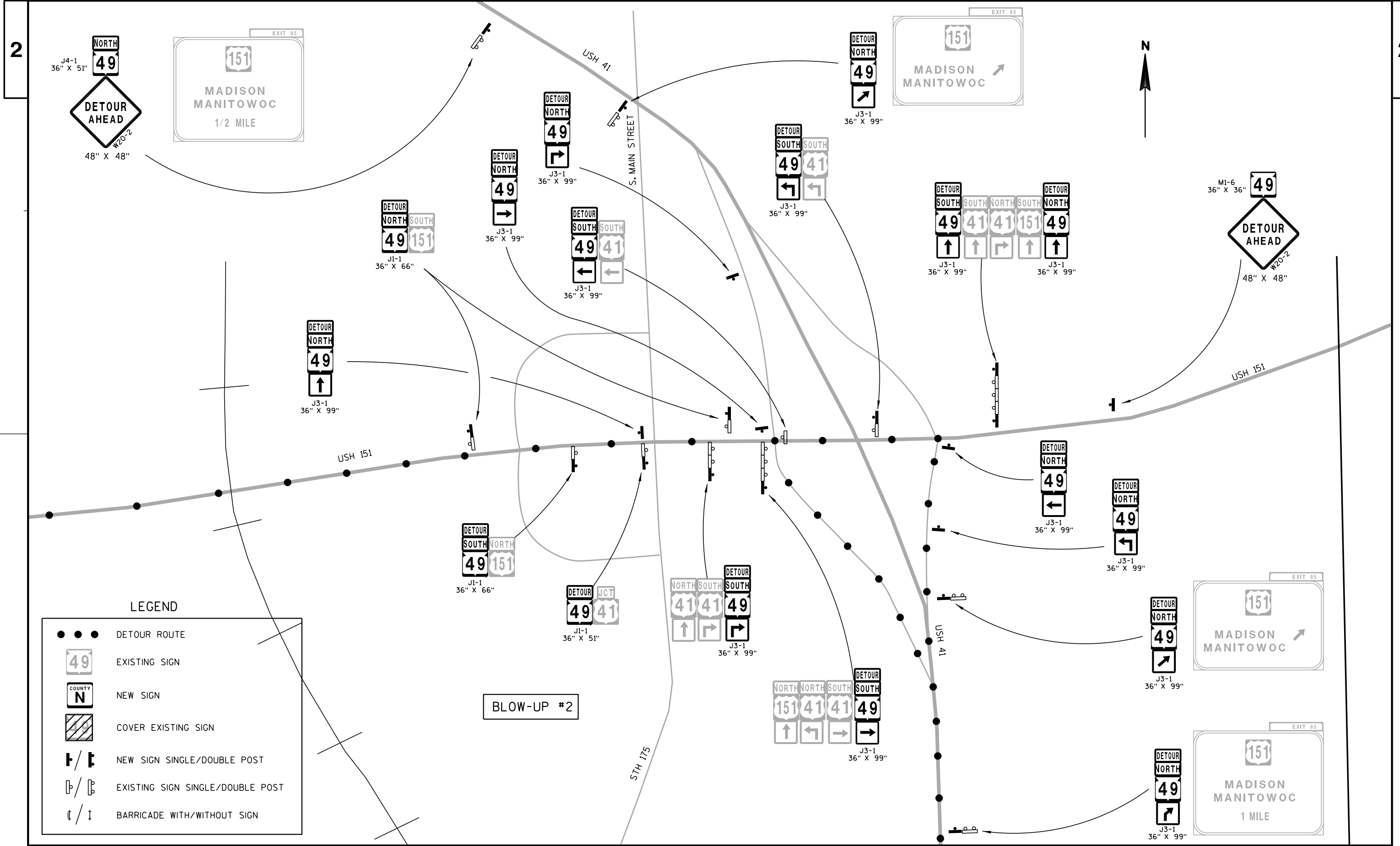
** CHANGEABLE MESSAGE BOARD 10 WORKING DAYS
PRIOR TO DETOUR



BLOW-UP #1

- | | |
|---|----------------------------------|
|  | DETOUR ROUTE |
|  | EXISTING SIGN |
|  | NEW SIGN |
|  | COVER EXISTING SIGN |
|  | NEW SIGN SINGLE/DOUBLE POST |
|  | EXISTING SIGN SINGLE/DOUBLE POST |
|  | BARRICADE WITH/WITHOUT SIGN |





3

DATE 31JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE					3010-01-60
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	16.000	16.000
0020	203.0200	REMOVING OLD STRUCTURE (STATION) 01. 301+15	LS	1.000	1.000
0030	203.0200	REMOVING OLD STRUCTURE (STATION) 02. 303+45	LS	1.000	1.000
0040	203.0200	REMOVING OLD STRUCTURE (STATION) 03. 450+23	LS	1.000	1.000
0050	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	229,000.000	229,000.000
0060	204.0150	REMOVING CURB & GUTTER	LF	364.000	364.000
0070	204.0155	REMOVING CONCRETE SIDEWALK	SY	156.000	156.000
0080	204.0165	REMOVING GUARDRAIL	LF	3,141.000	3,141.000
0090	211.0400	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	STA	623.000	623.000
0100	213.0100	FINISHING ROADWAY (PROJECT) 01. 3010-01-60	EACH	1.000	1.000
0110	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	9,680.000	9,680.000
0120	305.0500	SHAPING SHOULDERS	STA	798.000	798.000
0130	440.4410.S	INCENTIVE IRI RIDE	DOL	51,680.000	51,680.000
0140	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,860.000	1,860.000
0150	455.0605	TACK COAT	GAL	6,910.000	6,910.000
0160	460.1103	HMA PAVEMENT TYPE E-3	TON	33,520.000	33,520.000
0170	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	21,520.000	21,520.000
0180	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	300.000	300.000
0190	490.0205	SALVAGED ASPHALTIC PAVEMENT MILLING	TON	4,000.000	4,000.000
0200	520.0700.S	CULVERT PIPE LINERS (INCH) 02. 72-INCH	LF	219.000	219.000
0210	521.1024	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH	EACH	2.000	2.000
0220	521.1072	APRON ENDWALLS FOR CULVERT PIPE STEEL 72-INCH	EACH	4.000	4.000
0230	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	760.000	760.000
0240	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	384.000	384.000
0250	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	184.000	184.000
0260	522.0172	CULVERT PIPE REINFORCED CONCRETE CLASS III 72-INCH	LF	221.000	221.000
0270	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	20.000	20.000
0280	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	8.000	8.000
0290	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	4.000	4.000
0300	522.1072	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 72-INCH	EACH	4.000	4.000
0310	523.0143	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 43X68-INCH	LF	172.000	172.000
0320	523.0543	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43X68-INCH	EACH	4.000	4.000
0330	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	124.000	124.000
0340	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	90.000	90.000
0350	602.0405	CONCRETE SIDEWALK 4-INCH	SF	1,437.000	1,437.000

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DATE 31JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE					3010-01-60
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0360	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	176.000	176.000
0370	606.0200	RIPRAP MEDIUM	CY	100.000	100.000
0380	611.8110	ADJUSTING MANHOLE COVERS	EACH	17.000	17.000
0390	614.0010	BARRIER SYSTEM GRADING SHAPING FINISHING	EACH	9.000	9.000
0400	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	712.500	712.500
0410	614.0345	STEEL PLATE BEAM GUARD SHORT RADIUS	LF	25.000	25.000
0420	614.0370	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	EACH	2.000	2.000
0430	614.2300	MGS GUARDRAIL 3	LF	1,787.500	1,787.500
0440	614.2500	MGS THRIE BEAM TRANSITION	LF	157.600	157.600
0450	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	12.000	12.000
0460	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 3010-01-60	EACH	1.000	1.000
0470	619.1000	MOBILIZATION	EACH	1.000	1.000
0480	625.0100	TOPSOIL	SY	190.000	190.000
0490	625.0500	SALVAGED TOPSOIL	SY	1,500.000	1,500.000
0500	628.1504	SILT FENCE	LF	5,130.000	5,130.000
0510	628.1520	SILT FENCE MAINTENANCE	LF	2,570.000	2,570.000
0520	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	2.000	2.000
0530	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	1.000	1.000
0540	628.2002	EROSION MAT CLASS I TYPE A	SY	1,500.000	1,500.000
0550	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	190.000	190.000
0560	628.6005	TURBIDITY BARRIERS	SY	70.000	70.000
0570	628.7555	CULVERT PIPE CHECKS	EACH	90.000	90.000
0580	629.0210	FERTILIZER TYPE B	CWT	1.200	1.200
0590	630.0130	SEEDING MIXTURE NO. 30	LB	28.000	28.000
0600	630.0140	SEEDING MIXTURE NO. 40	LB	4.000	4.000
0610	633.5200	MARKERS CULVERT END	EACH	38.000	38.000
0620	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	34.000	34.000
0630	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	156.000	156.000
0640	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	42.000	42.000
0650	634.0620	POSTS WOOD 4X6-INCH X 20-FT	EACH	5.000	5.000
0660	637.0202	SIGNS REFLECTIVE TYPE II	SF	1,497.240	1,497.240
0670	638.2102	MOVING SIGNS TYPE II	EACH	12.000	12.000
0680	638.2602	REMOVING SIGNS TYPE II	EACH	204.000	204.000
0690	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	201.000	201.000
0700	638.3620	ERECTING STATE OWNED SIGNS TYPE II	EACH	32.000	32.000
0710	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
0720	643.0100	TRAFFIC CONTROL (PROJECT) 01. 3010-01-60	EACH	1.000	1.000
0730	643.0300	TRAFFIC CONTROL DRUMS	DAY	600.000	600.000
0740	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	320.000	320.000
0750	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	640.000	640.000
0760	643.0900	TRAFFIC CONTROL SIGNS	DAY	6,900.000	6,900.000
0770	643.0910	TRAFFIC CONTROL COVERING SIGNS TYPE I	EACH	10.000	10.000
0780	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	5.000	5.000
0790	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	68.000	68.000
0800	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	40.000	40.000
0810	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 3010-01-60	EACH	1.000	1.000
0820	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	190.000	190.000
0830	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	370.000	370.000
0840	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	160,800.000	160,800.000
0850	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	1,730.000	1,730.000

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DATE 31JAN13		E S T I M A T E O F Q U A N T I T I E S			
LINE					3010-01-60
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0860	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	57,800.000	57,800.000
0870	647.0110	PAVEMENT MARKING RAILROAD CROSSINGS	EACH	2.000	2.000
		EPOXY			
0880	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	4.000	4.000
0890	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	4.000	4.000
0900	647.0456	PAVEMENT MARKING CURB EPOXY	LF	2,500.000	2,500.000
0910	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	840.000	840.000
0920	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	1,000.000	1,000.000
0930	648.0100	LOCATING NO-PASSING ZONES	MI	12.800	12.800
0940	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE	LF	135,750.000	135,750.000
		PAINT 4-INCH			
0950	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	19.000	19.000
0960	650.8000	CONSTRUCTION STAKING RESURFACING	LF	75,390.000	75,390.000
		REFERENCE			
0970	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL	LS	1.000	1.000
		CONTROL (PROJECT) 01. 3010-01-60			
0980	690.0150	SAWING ASPHALT	LF	170.000	170.000
0990	690.0250	SAWING CONCRETE	LF	340.000	340.000
1000	SPV.0035	SPECIAL 01. TEMPORARY STONE DITCH CHECKS	CY	64.000	64.000
1010	SPV.0180	SPECIAL 01. SPECIAL BASE PATCHING	SY	13,910.000	13,910.000

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CULVERTS

			203.0100	203.0200	* 522.0124	* 522.0130	* 522.0136	* 522.0172	522.1024	522.1030	522.1036	522.1072	*	523.0543	** 633.5200	** 650.6000	** SPV.0180.01	SPV.0035.01	REMARKS
GROUP	STA	LOCATION	REMOVING SMALL PIPE CULVERTS EACH	REMOVING OLD STRUCTURE LS	CLASS III 24-INCH LF	CLASS III 30-INCH LF	CLASS III 36-INCH LF	CLASS III 72-INCH LF	FOR CPRC 24-INCH EACH	FOR CPRC 30-INCH EACH	FOR CPRC 36-INCH EACH	FOR CPRC 72-INCH EACH	523.0143 CPRC-HE CLASS HE-III 43 x 68-INCH LF	523.0543 AEW FOR CPRC-HE 43 x 68-INCH EACH	633.5200 MARKERS CULVERT END EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	SPV.0180.01 SPECIAL BASE PATCHING SY	SPV.0035.01 TEMPORARY STONE DITCH CHECKS CY	
0010	39+38	MAINLINE	1	-	-	-	77	-	-	-	2	-	-	-	2	1	30	3	
0010	48+00	MAINLINE	1	-	71	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	86+00	MAINLINE	1	-	74	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	101+10	MAINLINE	1	-	102	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	104+80	MAINLINE	1	-	90	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	116+56	MAINLINE	1	-	85	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	129+40	MAINLINE	1	-	86	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	135+90	MAINLINE	1	-	91	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	152+90	MAINLINE	1	-	-	79	-	-	2	-	-	-	-	-	2	1	30	-	
0010	301+15	MAINLINE	-	1	-	-	-	124	-	-	-	2	-	-	2	1	40	5	C-14-3075
0010	303+45	MAINLINE	-	1	-	-	-	97	-	-	-	2	-	-	2	1	40	5	C-14-3074
0010	319+98	MAINLINE	1	-	81	-	-	-	2	-	-	-	-	-	2	1	30	2	
0010	449+16	MAINLINE	1	-	-	-	107	-	-	-	2	-	-	-	2	1	30	3	
0010	450+23	MAINLINE	-	1	-	-	-	-	-	-	-	-	172	4	2	1	50	8	C-14-2010
0010	537+41	MAINLINE	1	-	-	72	-	-	-	2	-	-	-	-	2	1	30	3	
0010	573+04	MAINLINE	1	-	-	57	-	-	-	2	-	-	-	-	2	1	30	3	
0010	586+24	MAINLINE	1	-	-	73	-	-	-	2	-	-	-	-	2	1	30	3	
0010	612+05	MAINLINE	1	-	-	103	-	-	-	2	-	-	-	-	2	1	30	3	
0010	1180+50	MAINLINE	1	-	80	-	-	-	2	-	-	-	-	-	2	1	30	2	
TOTAL:			16		760	384	184	221	20	8	4	4	172	4	38	19	610	64	
					*	*	*	*					*		**		**		

* PIPE LENGTHS TO BE FIELD VERIFIED PRIOR TO ORDERING
** ADDITIONAL QUANTITY LISTED ELSEWHERE IN THE PLANS

HMA PAVEMENT

						204.0120	490.0205	455.0105	455.0605	460.1103	465.0120		
						REMOVING ASPHALTIC SURFACE MILLING	SALVAGED ASPHALTIC PAVEMENT MILLING	ASPHALTIC MATERIAL PG58-28	TACK COAT	HMA PAVEMENT TYPE E-3	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES		
GROUP	CODE	STATION	TO	STATION	LOCATION	SY	TON	TON	GAL	TON	TON	REMARKS	
0010	16+50	-	1230+50		MAINLINE	202,000	4,000	1,690	6,280	30,600	-	TRAVEL LANES AND SHOULDERS	
0010	16+50	-	1230+50		INTERSECTIONS & DRIVEWAYS	17,400	-	100	380	1,650	300		
0020	1050+00	-	1097+55		BROWNSVILLE	4,500	-	30	120	540	-	6' VILLAGE PARKING LANES	
UNDISTRIBUTED EXTRA MILL & FILL SPOT LOCATIONS						5,100	-	40	130	710	-		
SUBTOTAL CATEGORY 0010						224,500	4,000	1,830	6,790	32,960	300		
SUBTOTAL CATEGORY 0020						4,500	-	30	120	540	-	BROWNSVILLE	
PROJECT TOTAL:						229,000	4,000	1,860	6,910	33,500	300		

CURB RAMP REPLACEMENT

					204.0150	204.0155	602.0405	602.0505	601.0411	601.0557		
					REMOVING CURB & GUTTER	REMOVING CONCRETE SIDEWALK	CONCRETE SIDEWALK 4-INCH	CURB RAMP DETECTABLE WARNING FIELD YELLOW	CONCRETE CURB & GUTTER 30-INCH TYPE D	CONCRETE CURB & GUTTER 36-INCH TYPE D		
GROUP	CODE	STATION	-	STATION	LF	SY	SF	SF	LF	LF		
0010	328+00	-	329+00	CTH Z	150	-	-	-	-	-		
0010	449+16	-	450+23	CTH YY	60					60		
0010	1063+00	-	1063+75	LEDGEVIEW LN	21	18	120	16	21			
0010	1065+50	-	1066+50	WEST AVE	21	22	174	16	21			
0010	1069+75	-	1070+75	RAILROAD ST	40	25	237	32	40			
0010	1074+25	-	1075+00	CLARK ST	-	28	269	32	-			
0010	1076+75	-	1077+00	CTH AY / OAK ST	-	10	70	8	-			
0010	1081+00	-	1081+75	CHURCH ST	-	17	169	24	-			
0010	1085+50	-	1086+50	PROSPECT ST	42	36	398	48	42			
0010	1180+25	-	1180+50	STH 175	30					30		
TOTAL:					364	156	1,437	176	124	90		

BEAM GUARD REPLACEMENT

			204.0165	614.0010	614.0305	614.0345	614.0370	614.2300	614.2500	614.2610	REMARKS
			REMOVING GUARDRAIL LF	BARRIER SYSTEM GRADING SHAPING FINISHING EACH	STEEL PLATE BEAM GUARD CLASS A LF	STEEL PLATE BEAM GUARD SHORT RADIUS L.F.	STEEL PLATE BEAM GUARD EAT EACH	MGS GUARDRAIL 3 LF	MGS THRIE BEAM TRANSITION LF	MGS GUARDRAIL TERMINAL EAT EACH	
STA	-	STA									
93+14	-	94+44	LT	152	1	-	-	37.5	39.4	1	
93+14	-	94+44	RT	152	1	-	-	37.5	39.4	1	
95+64	-	96+82	LT	115	1	-	-	25.0	39.4	1	
95+64	-	96+82	RT	115	1	-	-	25.0	39.4	1	
323+56	-	330+00	RT	716	1	712.5	25.0	2	-	-	8' Radius
325+20	-	329+64	LT	454	1	-	-	337.5	-	2	
335+70	-	340+51	RT	367	1	-	-	375.0	-	2	
347+65	-	354+46	RT	666	1	-	-	575.0	-	2	
361+52	-	366+33	RT	404	1	-	-	375.0	-	2	
TOTAL			3141	9		712.5	25.0	2	1787.5	157.6	12

* LENGTH TO BE FIELD VERIFIED

BASE ITEMS

*									
211.0400 305.0110 305.0500 SPV.0180.01									
PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS BASE AGGREGATE DENSE, 3/4" SHAPING SHOULDERS SPECIAL BASE PATCHING									
GROUP	STATION	TO	STATION	LOCATION	STA	TON	STA	SY	REMARKS
0010	16+50	-	612+72	SHOULDERS	623	7,750	571	-	
0010	1050+00	-	1097+55	SHOULDERS	-	90	9	-	
0010	1097+55	-	1230+50	SHOULDERS	-	940	218	-	
0010	95+50	-	1230+50	PAVEMENT REPAIR AREAS	-	-	-	13,300	
UNDISTRIBUTED					-	900	-	-	
SUBTOTAL CATEGORY 0010					623	9,680	798	13,000	
SUBTOTAL CATEGORY 0020					-	-	-	300	BROWNSVILLE
PROJECT TOTAL:					623	9,680	798	13,300	
*									

* ADDITIONAL QUANTITY LISTED ELSEWHERE IN THE PLANS

LINING CULVERTS

* **									
520.0700.S 521.1072 633.5200									
CULVERT PIPE EXISTING CAPACITY CULVERT PIPE LINERS PIPE STEEL CULVERT MARKERS CULVERT END									
GROUP	STATION	LOCATION	TYPE	SLOPE	CFS	72-INCH	72-INCH	EACH	REMARKS
0010	327+60	MAINLINE	CMP	1.88%	315	136	2	2	C-14-3037
	592+55	MAINLINE	CMP	0.54%	169	83	2	2	C-14-3033
TOTAL:					219	4	4		
* **									

* BORROW REQUIRED TO BACKFILL AEW INCIDENTAL TO AEW ITEMS

** ADDITIONAL QUANTITY LISTED ELSEWHERE IN THE PLANS

ADJUSTING MANHOLES

611.8110 ADJUSTING MANHOLE COVERS					
GROUP	STATION	-	STATION	LOCATION	EACH
0020	1050+00	-	1097+55	Brownsville	17
SUBTOTAL CATEGORY 0010					0
SUBTOTAL CATEGORY 0020					17
TOTAL:					17

BARRIER SYSTEM GRADING SHAPING FINISHING, ITEM 614.0010

LOCATION			* BORROW EXCAVATION	* SALVAGED TOPSOIL	* FERTILIZER TYPE B	* SEEDING MIXTURE No. 30	* MULCHING
STA	-	STA	CY	SY	CWT	LB	SY
93+14	-	94+44	100	150	0.07	3	150
93+14	-	94+44	100	150	0.07	3	150
95+64	-	96+82	100	150	0.07	3	150
95+64	-	96+82	100	150	0.07	3	150
323+56	-	330+00	500	600	0.41	12	600
325+20	-	329+64	340	400	0.3	8	400
335+70	-	340+51	375	400	0.3	8	400
347+65	-	354+46	535	600	0.41	12	600
361+52	-	366+33	350	400	0.3	8	400
PROJECT			2,500	3,000	2.0	60	3,000

EROSION CONTROL

606.0200 625.0100 625.0500 628.1504 628.1520 628.1905 628.1910 MOBILIZATION EROSION CONTROL 628.2002 EMAT CLASS I URBAN TYPE A 628.2006 EMAT CLASS I URBAN TYPE A 628.6005 TURBIDITY BARRIERS 628.7555 CULVERT PIPE CHECKS 629.0210 FERTILIZER TYPE B 630.0130 SEEDING MIXTURE NO. 30 630.0140 SEEDING MIXTURE NO. 40 645.0120 GEOTEXTILE FABRIC TYPE HR																
GROUP	LOCATION	RIPRAP MEDIUM	TOPSOIL	SALVAGED TOPSOIL	SILT FENCE	SILT FENCE MAINTENANCE	EROSION CONTROL	EROSION CONTROL	EMAT CLASS I TYPE A	EMAT CLASS I TYPE A	TURBIDITY BARRIERS	CULVERT PIPE CHECKS	FERTILIZER TYPE B	SEEDING MIXTURE NO. 30	SEEDING MIXTURE NO. 40	GEOTEXTILE FABRIC TYPE HR
0010	CULVERT AREAS	80	-	1,200	1,100	550	-	-	1,200	-	50	70	0.8	22	-	290
0010	BROWNSVILLE SIDEWALK AREAS	-	150	-	-	-	-	-	-	150	-	-	0.1	-	3	-
0010	BEAM GUARD AREAS	-	-	-	3,000	1,500	-	-	-	-	-	-	-	-	-	-
UNDISTRIBUTED		20	40	300	1,030	520	2	1	300	40	20	20	0.3	6	1	80
TOTAL:		100	190	1,500	5,130	2,570	2	1	1,500	190	70	90	1.2	28	4	370

PERMANENT SIGNING														
GROUP CODE	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W x H	MESSAGE	634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620
						POSTS	POSTS	POSTS	POSTS	SIGNS	MOVING	REMOVING	REMOVING	ERECTING
						WOOD	WOOD	WOOD	WOOD	REFLECTIVE	SIGNS	SIGNS	SMALL	STATE
						4X6 INCH	4X6 INCH	4X6 INCH	4X6 INCH	TYPE II	TYPE II	TYPE II	SUPPORTS	OWNED SIGNS
						14 FT	16 FT	18 FT	20 FT	SF	EACH	EACH	EACH	TYPE II
						EACH	EACH	EACH	EACH					REMARKS
0010	1-1	16+60 LT	R3-2	24 x 24	NO LEFT TURN	1	-	-	-	4.00	-	1	1	-
0010	1-2	16+60 LT	J33-2	48 x 69	ROUTE MARKER ASSEMBLY	-	-	-	1	23.00	-	2	1	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 151	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	1-3	19+50 LT	R2-1	24 x 30	SPEED LIMIT 35	-	1	-	-	5.00	-	1	1	-
0010	1-4	21+40 LT	D1-3	84 x 36	WAUPUN, MADISON, FOND DU LAC	-	-	2	-	21.00	-	1	2	-
0010	1-5	24+20 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	1-6	58+20 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	-	-
0010	1-7	26+30 LT	J32-4	96 x 69	ROUTE MARKER ASSEMBLY	-	-	-	2	46.00	-	1	2	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 151	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	AHEAD ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	AHEAD ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 151	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M5-1R	21 x 21	ADVANCED RIGHT ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M5-1R	21 x 21	ADVANCED RIGHT ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	1-8	28+90 LT	W3-5	36 x 36	SPEED LIMIT 35 AHEAD	-	-	1	-	9.00	-	1	1	-
0010	1-9	31+40 LT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	6.50	-	1	1	-
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 151	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	1-10	18+00 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	1-11	19+50 RT	R2-1	24 x 30	SPEED LIMIT 55	-	1	-	-	5.00	-	1	1	-
0010	1-12	22+00 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	1-13	24+20 RT	D2-2	84 x 24	BROWNSVILLE 11, HWY 4114	-	1	1	-	14.00	-	1	2	-
0010	1-14	26+50 RT	I55-56	30 x 36	ADOPT A HIGHWAY (JOHN BURKE CORRECTIONAL CENTER)	-	1	-	-	7.50	-	1	1	-
0010	2-1	50+00 LT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-2	53+30 LT	W1-7	48 x 24	TWO-DIRECTION ARROW	-	1	-	-	8.00	-	-	-	-
0010	2-3	53+70 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	7.50	-	1	1	-
			M1-5A	24 x 24	CTH I	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	LEFT ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-4	58+20 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	1	-
0010	2-5	63+50 LT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	6.50	-	1	1	-
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-5A	24 x 24	CTH I	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-6	63+56 LT	-	-	HORICON MARSH PARKWAY WITH ARROW	-	-	-	-	-	1	-	-	MOVE, POSTED WITH 2-5
0010	2-7	41+10 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	2-8	42+50 RT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	6.50	-	1	1	-
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-5A	24 x 24	CTH I	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-9	50+80 RT	J32-1	-	ALT SOUTH 41	-	-	-	-	-	-	1	1	-
0010	2-10	52+50 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	7.50	-	1	1	-
			M1-5A	24 x 24	CTH I	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-11	53+60 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
CATEGORY 0010 PAGE 1 TOTAL						1	14	6	3	232.18	1	23	23	0
CATEGORY 0020 PAGE 1 TOTAL						0	0	0	0	0	0	0	0	0
						BROWNSVILLE								

PERMANENT SIGNING															
					634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620		
					POSTS	POSTS	POSTS	POSTS				REMOVING	ERECTING		
					WOOD	WOOD	WOOD	WOOD	SIGNS	MOVING	REMOVING	SMALL	STATE		
					4X6 INCH	4X6 INCH	4X6 INCH	4X6 INCH	REFLECTIVE	SIGNS	SIGNS	SIGN	OWNED SIGNS		
					14 FT	16 FT	18 FT	20 FT	TYPE II	TYPE II	TYPE II	SUPPORTS	TYPE II		
GROUP	SIGN		SIGN	SIGN	MESSAGE	EACH	EACH	EACH	EACH	SF	EACH	EACH	EACH	EACH	REMARKS
CODE	NUMBER	LOCATION	CODE	W x H											
0010	2-12	53+60 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	7.50	-	1	1	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-4	21 x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-13	53+60 RT	-	-	HORICON MARSH PARKWAY	-	-	-	-	-	1	-	-	-	MOVE, POSTED WITH 2-12
0010	2-14	52+70 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-	J-ASSEMBLY
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	2-15	61+30 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-	
0010	3-1	88+50 LT	R 1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	3-2	76+70 RT	R 1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	3-3	85+00 RT	-	-	ROUGH ROAD	-	-	-	-	-	-	1	-	-	
0010	3-4	85+00 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-	
0010	4-1	100+70 LT	-	-	ROUGH ROAD	-	-	-	-	-	-	1	1	-	
0010	4-2	100+70 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	-	-	
0010	4-3	108+70 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	4-4	120+30 LT	I55-56	30 x 36	ADOPT A HIGHWAY (JOHN BURKE CORRECTIONAL CENTER)	-	1	-	-	7.50	-	1	1	-	
0010	4-5	124+80 LT	W11-15A	36 x 36	TRAIL CROSSING	-	-	1	-	9.00	-	1	1	-	
0010	4-6	116+20 RT	W11-15A	36 x 36	TRAIL CROSSING	-	-	1	-	9.00	-	1	1	-	
0010	4-7	119+00 RT	-	-	ADOPT A HIGHWAY	-	-	-	-	-	-	1	1	-	
0010	4-8	121+80 RT	-	36 x 36	WILDLIFE CROSSING	-	-	1	-	9.00	-	1	1	-	
0010	4-9	121+80 RT	W57-51	36 x 18	NEXT 3 MILES	-	-	-	-	4.50	-	1	-	-	POSTED WITH 4-8
0010	5-1	128+40 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	5-2	136+10 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-	
0010	6-1	159+20 RT	D5-63	60 x 36	HISTORICAL MARKER 1/2 MILE	-	2	-	-	15.00	-	1	2	-	
0010	7-1	198+00 LT	D5-64R	60 x 36	HISTORICAL MARKER RIGHT ARROW	-	2	-	-	15.00	-	-	1	-	
0010	7-2	196+60 RT	D5-64L	60 x 36	HISTORICAL MARKER LEFT ARROW	-	2	-	-	15.00	-	1	2	-	
0010	8-1	223+80 LT	D5-63	60 x 36	HISTORICAL MARKER 1/2 MILE	-	2	-	-	15.00	-	-	1	-	
0010	9-1	261+00 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-	
0010	9-2	271+00 LT	I2-2	84 x 15	FOND DU LAC CO	1	1	-	-	8.75	-	1	2	-	
0010	9-3	271+00 LT	-	-	HORICON MARSH PARKWAY	-	-	-	-	-	1	-	-	-	MOVE, POSTED WITH 9-2
0010	9-4	271+00 RT	I2-2	54 x 15	DODGE COUNTY	1	1	-	-	5.63	-	1	1	-	
0010	9-5	271+00 RT	-	-	HORICON MARSH PARKWAY	-	-	-	-	-	1	-	-	-	MOVE, POSTED WITH 9-4
0010	10-1	278+00 LT	-	36 x 36	WILDLIFE CROSSING	-	-	1	-	9.00	-	1	1	-	
0010	10-2	278+00 LT	W57-51	36 x 18	NEXT 3 MILES	-	-	-	-	4.50	-	1	-	-	POSTED WITH 10-1
0010	10-3	280+00 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	10-4	280+00 LT	-	-	ADOPT A HIGHWAY	-	-	-	-	-	-	1	1	-	
0010	10-5	296+00 RT	-	78 x 42	HORICON NAT. WILDLIFE REFUGE VIEWING AREA	-	-	1	1	22.75	-	1	2	-	
0010	10-6	298+50 LT	-	78 x 42	HORICON NAT. WILDLIFE REFUGE VIEWING AREA	-	-	1	1	22.75	-	1	-	-	
0010	10-7	281+50 RT	-	-	ADOPT A HIGHWAY	-	-	-	-	-	-	-	1	-	
0010	10-8	297+50 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	11-1	308+60 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-	
0010	11-2	308+60 LT	-	-	ROUGH ROAD	-	-	-	-	-	-	1	-	-	
0010	11-3	319+20 LT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	11-4	320+60 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	11-5	320+60 LT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	15.00	-	1	1	-	J-ASSEMBLY
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-4	21 x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	11-6	321+50 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	11-7	321+90 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1	J-ASSEMBLY
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	11-8	329+00 LT	W1-7	48 x 24	TWO-DIRECTION ARROW	-	1	-	-	8.00	-	-	-	-	
0010	11-9	329+50 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1	J-ASSEMBLY
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-6	21 x 21	AHEAD & LEFT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
CATEGORY 0010 PAGE 2 TOTAL						2	30	8	2	312.32	3	38	39	2	
CATEGORY 0020 PAGE 2 TOTAL						0	0	0	0	0	0	0	0	0	BROWNSVILLE

PERMANENT SIGNING														
GROUP CODE	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W x H	MESSAGE	634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620
						POSTS WOOD 4X6 INCH 14 FT EACH	POSTS WOOD 4X6 INCH 16 FT EACH	POSTS WOOD 4X6 INCH 18 FT EACH	POSTS WOOD 4X6 INCH 20 FT EACH	SIGNS REFLECTIVE TYPE II SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	ERECTING STATE OWNED SIGNS TYPE II EACH
0010	11-10	332+10 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	1	-
0010	11-11	306+00 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	11-12	311+40 RT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-
0010	11-13	315+50 RT	R4-3	24 x 30	SLOWER TRAFFIC KEEP RIGHT	-	1	-	-	5.00	-	1	1	-
0010	11-14	318+50 RT	J32-1	-	ALT SOUTH 41	-	-	-	-	-	-	1	1	-
0010	11-15	320+50 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-
			M6-6	21 x 21	AHEAD & LEFT ARROW	-	-	-	-	-	-	-	-	-
0010	11-16	321+10 RT	W1-7	48 x 24	TWO-DIRECTION ARROW	-	1	-	-	8.00	-	-	-	-
0010	11-17	326+20 RT	-	78 x 42	HORICON NAT. WILDLIFE REFUGE VISITOR CENTER	-	-	2	-	22.75	-	1	2	-
0010	11-18	326+20 RT	-	-	HORICON MARSH PARKWAY	-	-	-	-	-	1	-	-	-
0010	11-19	328+10 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	11-20	328+50 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	11-21	329+40 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	11-22	329+40 RT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	15.00	-	1	1	-
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-
			M6-1	21 x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M6-4	21 x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-
0010	11-23	329+40 LT	-	-	HORICON MARSH PARKWAY	-	-	-	-	-	1	-	-	-
0010	11-24	330+40 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	11-25	322+90 LT	R3-7R	30 x 30	RIGHT LANE MUST TURN RIGHT	-	1	-	-	6.25	-	-	-	-
0010	11-26	327+80 LT	R3-7R	30 x 30	RIGHT LANE MUST TURN RIGHT	-	1	-	-	6.25	-	-	-	-
0010	12-1	335+70 LT	-	78 x 42	HORICON NAT. WILDLIFE REFUGE VISITOR CENTER	-	-	2	-	22.75	-	1	2	-
0010	12-2	339+70 LT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH Z	-	-	-	-	-	-	-	-	-
0010	12-3	348+50 LT	W1-2R	36 x 36	ROAD CURVES RIGHT	-	-	1	-	9.00	-	1	1	-
0010	12-4	356+40 LT	R 1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	12-5	340+30 RT	W1-6R	48 x 24	ONE-DIRECTION ARROW	-	1	-	-	8.00	-	-	-	-
0010	12-6	356+50 RT	W1-7	48 x 24	TWO-DIRECTION ARROW	-	1	-	-	8.00	-	1	1	-
0010	13-1	368+70 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	13-2	368+70 LT	R4-1	24 x 30	DO NOT PASS	-	1	-	-	5.00	-	-	-	-
0010	14-1	391+00 LT	R4-53	54 x 54	DO NOT PASS WHEN ONCOMING TRAFFIC IN EITHER LANE	-	-	2	-	20.25	-	-	-	-
0010	14-2	396+50 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	14-3	402+70 LT	R4-1	24 x 30	DO NOT PASS	-	1	-	-	5.00	-	-	-	-
0010	14-4	410+00 LT	R4-53	54 x 54	DO NOT PASS WHEN ONCOMING TRAFFIC IN EITHER LANE	-	-	2	-	20.25	-	1	-	-
0010	14-5	417+70 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	14-6	397+00 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	14-7	398+70 RT	W9-1R	36 x 36	RIGHT LANE ENDS	-	-	1	-	9.00	-	1	1	-
0010	14-8	402+50 RT	W4-2R	36 x 36	RIGHT LANE ENDS, MERGE	-	-	1	-	9.00	-	1	1	-
0010	14-9	402+70 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	-	-
0010	15-1	448+50 LT	-	-	ROUGH ROAD	-	-	-	-	-	-	1	1	-
0010	15-2	448+50 LT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	15-3	449+20 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	15-4	436+80 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	15-5	438+20 RT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
0010	15-6	444+50 RT	D1-1	66 x 15	MAYVILLE RIGHT ARROW	1	1	-	-	6.88	-	1	2	-
0010	15-7	447+00 RT	J32-1	-	ALT SOUTH 41	-	-	-	-	-	-	1	1	-
CATEGORY 0010 PAGE 3 TOTAL						1	26	13	0	279.46	2	32	32	5
CATEGORY 0020 PAGE 3 TOTAL						0	0	0	0	0	0	0	0	0
						BROWNSVILLE								

PERMANENT SIGNING														
GROUP CODE	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W x H	MESSAGE	634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620
						POSTS WOOD 4X6 INCH 14 FT EACH	POSTS WOOD 4X6 INCH 16 FT EACH	POSTS WOOD 4X6 INCH 18 FT EACH	POSTS WOOD 4X6 INCH 20 FT EACH	SIGNS REFLECTIVE TYPE II SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	ERECTING STATE OWNED SIGNS TYPE II EACH
0010	15-8	449+00 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M6-6	21x 21	AHEAD & RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	15-9	450+00 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	15-10	450+10 RT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M6-4	21x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	16-1	450+00 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-
0010	16-2	452+20 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	1	-
0010	16-3	455+00 LT	D1-1	66 x 15	MAYVILLE LEFT ARROW	1	1	-	-	6.88	-	1	2	-
0010	16-4	457+80 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M5-1L	21x 21	ADVANCED LEFT ARROW	-	-	-	-	-	-	-	-	-
0010	16-5	451+00 RT	J4-2	48 x 36	REASSURANCE MARKER	-	1	-	-	12.00	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
0010	17-1	500+50 LT	J4-2	48 x 36	REASSURANCE MARKER	-	1	-	-	12.00	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
0010	17-2	502+00 LT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M6-4	21x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	17-3	502+10 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	17-4	503+10 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M6-6	21x 21	AHEAD & RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	17-5	505+10 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	1	-
0010	17-6	507+80 LT	D1-1	60 x 15	OAKFIELD RIGHT ARROW	1	1	-	-	6.25	-	1	2	-
0010	17-7	492+90 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M5-1L	21x 21	ADVANCED LEFT ARROW	-	-	-	-	-	-	-	-	-
0010	17-8	495+70 RT	D1-1	60 x 15	OAKFIELD LEFT ARROW	1	1	-	-	6.25	-	1	2	-
0010	17-9	500+30 RT	J32-1	-	ALT SOUTH 41	-	-	-	-	-	-	1	1	-
0010	17-10	501+80 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-
0010	17-11	502+90 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	17-12	503+70 RT	I55-56	30 x 36	ADOPT A HIGHWAY (WISCONSIN TRAPPERS ASSOCIATION)	-	1	-	-	7.50	-	1	1	-
0010	17-13	506+50 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	18-1	511+70 LT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH YY	-	-	-	-	-	-	-	-	-
0010	18-2	526+90 LT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	18-3	529+00 LT	W1-7	48 x 24	TWO-DIRECTION ARROW	-	1	-	-	8.00	-	1	1	-
0010	18-4	529+70 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH V	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-
CATEGORY 0010 PAGE 4 TOTAL						3	20	2	0	106.42	0	23	26	10
CATEGORY 0020 PAGE 4 TOTAL						0	0	0	0	0	0	0	0	0
						BROWNSVILLE								

PERMANENT SIGNING														
GROUP CODE	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W x H	MESSAGE	634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620
						POSTS WOOD 4X6 INCH 14 FT EACH	POSTS WOOD 4X6 INCH 16 FT EACH	POSTS WOOD 4X6 INCH 18 FT EACH	POSTS WOOD 4X6 INCH 20 FT EACH	SIGNS REFLECTIVE TYPE II SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	ERECTING STATE OWNED SIGNS TYPE II EACH
0010	18-5	531+30 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	1	-
0010	18-6	538+60 LT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH V	-	-	-	-	-	-	-	-	-
0010	18-7	517+80 RT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH V	-	-	-	-	-	-	-	-	-
0010	18-8	525+90 RT	J32-1	-	ALT SOUTH 41	-	-	-	-	-	-	1	1	-
0010	18-9	528+00 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH V	-	-	-	-	-	-	-	-	-
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	18-10	529+10 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	18-11	529+20 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M6-4	21 x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-
0010	18-12	531+10 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	19-1	554+90 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	19-2	555+50 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	20-1	588+70 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	20-2	599+00 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	20-3	594+50 RT	I2-3	-	BROWNSVILLE POPULATION 580	-	1	1	-	-	1	-	2	-
0010	20-4	594+50 RT	-	-	SNOW EMERGENCY NO PARKING, DIAL 911	-	-	-	-	-	1	1	-	-
0010	20-5	594+50 LT	D2-1	66 x 15	WAUPUN 12	1	1	-	-	6.88	-	-	-	-
0010	21-1	607+50 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	21-2	609+30 LT	I55-56	30 x 36	ADOPT A HIGHWAY (WISCONSIN TRAPPERS ASSOCIATION)	-	1	-	-	7.50	-	1	1	-
0010	21-3	610+50 LT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	21-4	612+40 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	21-5	1050+50 LT	JV13-2	24 x 69	ROUTE MARKER ASSEMBLY	-	-	1	-	-	-	1	1	1
			M1-5A	24 x 24	CTH Y	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH AY	-	-	-	-	-	-	-	-	-
			M6-1	21 x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-
0010	21-6	1052+70 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0020	21-7	1053+60 LT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	1	1	-
0010	21-8	1054+50 LT	-	-	STOP SCHOOL BUS FLASHING RED LIGHTS	-	-	-	-	-	-	1	-	-
0010	21-9	1057+40 LT	J32-1	-	ALT NORTH 41	-	-	-	-	-	-	1	1	-
0010	21-10	1058+40 LT	J2-2	48 x 60	ROUTE MARKER ASSEMBLY	-	-	1	-	-	-	1	1	1
			M1-5A	24 x 24	CTH AY	-	-	-	-	-	-	-	-	-
			M5-1L	21 x 21	ADVANCED LEFT ARROW	-	-	-	-	-	-	-	-	-
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH Y	-	-	-	-	-	-	-	-	-
0010	21-11	1062+80 LT	M1-6	-	STH 49	-	-	-	-	-	-	1	-	-
0010	21-12	1063+00 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0020	21-13	1064+50 LT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-
0010	21-14	602+10 RT	J1-2	48 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH AY	-	-	-	-	-	-	-	-	-
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH Y	-	-	-	-	-	-	-	-	-
0010	21-15	607+50 RT	W3-5	36 x 36	SPEED LIMIT 30 AHEAD	-	-	1	-	9.00	-	1	1	-
0010	21-16	610+00 RT	R10-64	30 x 36	NO ENGINE BRAKING EXCEPT IN EMERGENCY	-	1	-	-	7.50	-	1	1	-
0010	21-17	610+30 RT	J32-1	-	ALT SOUTH 41	-	-	-	-	-	-	1	1	-
0010	21-18	612+30 RT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1
			M1-5A	24 x 24	CTH AY	-	-	-	-	-	-	-	-	-
			M6-6	21 x 21	AHEAD & RIGHT ARROW	-	-	-	-	-	-	-	-	-
			M1-5A	24 x 24	CTH Y	-	-	-	-	-	-	-	-	-
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-
CATEGORY 0010 PAGE 5 TOTAL						1	19	6	0	110.32	2	28	27	8
CATEGORY 0020 PAGE 5 TOTAL						2	0	0	0	6.00	0	1	1	0
						BROWNSVILLE								

PERMANENT SIGNING															
GROUP CODE	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W x H	MESSAGE	634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620	REMARKS
						POSTS	POSTS	POSTS	POSTS	SIGNS	MOVING	REMOVING	REMOVING	ERECTING	
						4X6 INCH 14 FT EACH	WOOD 16 FT EACH	WOOD 18 FT EACH	WOOD 20 FT EACH	REFLECTIVE TYPE II SF	SIGNS TYPE II EACH	SIGNS TYPE II EACH	SIGN SUPPORTS EACH	STATE OWNED SIGNS TYPE II EACH	
0010	21-19	1050+20 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	21-20	1050+30 RT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-4	21 x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	21-21	1050+90 RT	J4-2	48 x 36	REASSURANCE MARKER	-	1	-	-	-	-	-	-	1	J-ASSEMBLY
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0020	21-22	1053+00 RT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0020	21-23	1062+40 LT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0020	21-24	1065+30 RT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	21-25	1066+00 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0020	22-1	1069+50 RT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	22-2	1074+20 LT	J4-1	24 x 36	REASSURANCE MARKER	-	1	-	-	6.00	-	-	-	-	J-ASSEMBLY
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	22-3	1075+00 LT	S1-1	36 x 36	SCHOOL ZONE	-	1	-	-	6.75	-	1	-	-	
0010	22-4	1075+00 LT	WF16-7L	30 x 18	DIAGONAL ARROW	-	-	-	-	3.75	-	-	-	-	POSTED WITH 22-3
0010	22-5	1076+20 LT	W11-8	30 x 30	FIRE TRUCK CROSSING	-	1	-	-	6.25	-	1	-	-	
0020	22-6	1076+30 LT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	1	1	-	
0010	22-7	1076+80 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	22-8	1077+40 LT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	-	1	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-6	21 x 21	AHEAD & RIGHT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0020	22-9	1078+00 LT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	1	1	-	
0010	22-10	1084+30 LT	J1-1	24 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	-	1	J-ASSEMBLY
			M2-1	21 x 15	JCT	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0020	22-11	1085+30 LT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	22-12	1085+70 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	22-13	1086+40 LT	S1-1	36 x 36	SCHOOL ZONE	-	1	-	-	-	1	-	1	-	
0010	22-14	1086+40 LT	WF16-7L	30 x 18	DIAGONAL ARROW	-	-	-	-	-	1	-	-	-	POSTED WITH 22-13
0020	22-15	1086+70 LT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0020	22-16	1087+90 LT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	22-17	1088+40 LT	W5-52L	12 x 36	BRIDGE WARNING HATCH	1	-	-	-	3.00	-	1	1	-	
0010	22-18	1088+90 LT	W5-52R	12 x 36	BRIDGE WARNING HATCH	1	-	-	-	3.00	-	1	1	-	
0010	22-19	1089+00 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0020	22-20	1089+70 LT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0020	22-21	1067+20 RT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	22-22	1070+40 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0020	22-23	1071+00 RT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	22-24	1072+50 RT	W11-8	30 x 30	FIRE TRUCK CROSSING	-	-	-	-	6.25	-	1	-	-	MOSTED ON POWER POLE
0010	22-25	1073+60 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M5-1L	21 x 21	ADVANCED LEFT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0020	22-26	1074+10 RT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-	
0010	22-27	1074+50 RT	S1-1	36 x 36	SCHOOL ZONE	-	-	-	-	6.75	-	1	-	-	MOSTED ON POWER POLE
0010	22-28	1074+50 RT	WF16-7L	30 x 18	DIAGONAL ARROW	-	-	-	-	3.75	-	-	-	-	POSTED WITH 22-27
0010	22-29	1074+90 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0020	22-30	1075+50 RT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	1	1	-	
0010	22-31	1076+50 RT	J13-1	24 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	1	1	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
0010	22-32	1076+80 RT	J13-2	48 x 45	ROUTE MARKER ASSEMBLY	-	1	-	-	-	-	1	-	1	J-ASSEMBLY
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-4	21 x 21	TWO-DIRECTION ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M1-5A	24 x 24	CTHAY	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
			M6-1	21 x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-	J-ASSEMBLY
CATEGORY 0010 PAGE 6 TOTAL						2	18	0	0	81.76	2	19	13	7	
CATEGORY 0020 PAGE 6 TOTAL						14	0	0	0	42.00	0	3	3	0	BROWNSVILLE

PERMANENT SIGNING														
GROUP	SIGN		SIGN	SIGN		634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620
CODE	NUMBER	LOCATION	CODE	W x H	MESSAGE	POSTS WOOD 4X6 INCH 14 FT EACH	POSTS WOOD 4X6 INCH 16 FT EACH	POSTS WOOD 4X6 INCH 18 FT EACH	POSTS WOOD 4X6 INCH 20 FT EACH	SIGNS REFLECTIVE TYPE II SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	ERECTING STATE OWNED SIGNS TYPE II EACH
0010	22-33	1078+20 RT	J4-1	24 x 36	REASSURANCE MARKER	-	1	-	-	6.00	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
0020	22-34	1080+60 RT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	1	1	-
0010	22-35	1081+60 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0020	22-36	1082+10 RT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-
0020	22-37	1085+20 RT	R7-51L	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-
0010	22-38	1086+30 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0020	22-39	1088+00 RT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-
0010	22-40	1088+30 RT	W5-52R	12 x 36	BRIDGE WARNING HATCH	1	-	-	-	3.00	-	1	1	-
0010	22-41	1089+10 RT	W5-52L	12 x 36	BRIDGE WARNING HATCH	1	-	-	-	3.00	-	1	1	-
0010	23-1	1097+00 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	23-2	1101+60 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	23-3	1106+00 LT	W3-5	36 x 36	SPEED LIMIT 30 AHEAD	-	1	-	-	9.00	-	1	1	-
0010	23-4	1108+40 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	23-5	1110+50 LT	R10-64	30 x 36	NO ENGINE BRAKING EXCEPT IN EMERGENCY	-	1	-	-	7.50	-	1	1	-
0010	23-6	1095+40 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0020	23-7	1096+40 LT	R7-51R	18 x 24	NO PARKING HERE TO CORNER	1	-	-	-	3.00	-	-	-	-
0010	23-8	1097+50 RT	I55-56	30 x 36	ADOPT A HIGHWAY (BROWNSVILLE LIONS CLUB)	-	1	-	-	7.50	-	1	1	-
0010	23-9	1102+20 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	23-10	1103+60 RT	D2-1	66 x 15	HWY 412	1	1	-	-	6.88	-	-	-	-
0010	24-1	1126+40 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	24-2	1138+50 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	24-3	1154+00 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	25-1	1157+10 RT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	25-2	1175+00 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	-	-	-
0010	25-3	1179+40 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	26-1	1221+30 LT	W14-3	48 x 36	NO PASSING ZONE	-	1	-	-	6.00	-	1	1	-
0010	26-2	1223+20 LT	R2-1	24 x 30	SPEED LIMIT 45	-	1	-	-	5.00	-	1	1	-
0010	26-3	1225+50 LT	I55-56	30 x 36	ADOPT A HIGHWAY (BROWNSVILLE LIONS CLUB)	-	1	-	-	7.50	-	1	1	-
0010	26-4	1226+60 LT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
0010	26-5	1229+10 LT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-
0010	26-6	1229+10 LT	J2-2	48 x 57	ROUTE MARKER ASSEMBLY	-	-	1	-	19.00	-	2	2	-
			M4-5	24 x 12	TO	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M6-1	21x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-
0010	26-7	1230+90 LT	R3-7R	30 x 30	RIGHT LANE MUST TURN RIGHT	-	1	-	-	6.25	-	1	1	-
0010	26-8	1234+00 LT	R3-7R	30 x 30	RIGHT LANE MUST TURN RIGHT	-	1	-	-	6.25	-	1	1	-
0010	26-9	1232+50 LT	R5-1	-	DO NOT ENTER	-	-	-	-	-	1	-	-	-
0010	26-10	1232+50 LT	W10-1	36 x 36	RAILROAD CROSSING	-	1	-	-	7.07	-	1	1	-
0010	26-11	1234+00 LT	R5-1A	-	WRONG WAY	-	-	-	-	-	1	-	-	-
0010	26-12	1205+70 RT	J4-2	48 x 48	REASSURANCE MARKER	-	-	1	-	16.00	-	1	1	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-
			M4-1	24 x 12	ALTERNATE	-	-	-	-	-	-	-	-	-
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-
CATEGORY 0010 PAGE 7 TOTAL						3	24	4	0	220.21	2	28	28	0
CATEGORY 0020 PAGE 7 TOTAL						5	0	0	0	15.00	0	1	1	0
						BROWNSVILLE								

PERMANENT SIGNING															
GROUP CODE	SIGN NUMBER	LOCATION	SIGN CODE	SIGN W x H	MESSAGE	634.0614	634.0616	634.0618	634.0620	637.0202	638.2102	638.2602	638.3000	638.3620	REMARKS
						POSTS WOOD 4X6 INCH	POSTS WOOD 4X6 INCH	POSTS WOOD 4X6 INCH	POSTS WOOD 4X6 INCH	SIGNS REFLECTIVE TYPE II	MOVING SIGNS TYPE II	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS	ERECTING STATE OWNED SIGNS TYPE II	
						14 FT EACH	16 FT EACH	18 FT EACH	20 FT EACH	SF	EACH	EACH	EACH	EACH	
0010	26-13	1221+70 RT	W10-1	36 x 36	RAILROAD CROSSING	-	1	-	-	7.07	-	1	1	-	
0010	26-14	1223+20 RT	R2-1	24 x 30	SPEED LIMIT 45	-	1	-	-	5.00	-	1	1	-	
0010	26-15	1224+80 RT	J1-2	48 x 39	ROUTE MARKER ASSEMBLY	-	1	-	-	13.00	-	1	1	-	
			M2-1	21x 15	JCT	-	-	-	-	-	-	-	-	-	
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-	
			M4-6	24 x 12	END	-	-	-	-	-	-	-	-	-	
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	
0010	26-16	1226+70 RT	W6-1	36 x 36	DIVIDED HIGHWAY	-	-	1	-	9.00	-	1	1	-	
0010	26-17	1230+20 RT	R1-1	30 x 30	STOP	-	1	-	-	5.18	-	1	1	-	
0010	26-18	1230+20 RT	J2-2	48 x 57	ROUTE MARKER ASSEMBLY	-	-	1	-	19.00	-	1	1	-	
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-	
			M1-6	24 x 24	STH 49	-	-	-	-	-	-	-	-	-	
			M6-1	21x 21	LEFT ARROW	-	-	-	-	-	-	-	-	-	
			M4-5	24 x 12	TO	-	-	-	-	-	-	-	-	-	
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-	
			M6-1	21x 21	RIGHT ARROW	-	-	-	-	-	-	-	-	-	
0010	26-19	1231+10 RT	J2-2	48 x 57	ROUTE MARKER ASSEMBLY	-	-	1	-	19.00	-	1	1	-	
			M3-1	24 x 12	NORTH	-	-	-	-	-	-	-	-	-	
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-	
			M6-1	21x 21	AHEAD ARROW	-	-	-	-	-	-	-	-	-	
			M3-3	24 x 12	SOUTH	-	-	-	-	-	-	-	-	-	
			M1-4	24 x 24	USH 41	-	-	-	-	-	-	-	-	-	
			M5-1R	21x 21	ADVANCED RIGHT ARROW	-	-	-	-	-	-	-	-	-	
0010	26-20	1232+50 RT	R4-7	24 x 30	KEEP RIGHT	-	1	-	-	5.00	-	1	1	-	
0010	26-21	1232+50 RT	W5-54	18 x 18	REFLECTOR	-	-	-	-	2.25	-	-	-	-	POSTED WITH 26-20
0010	26-22	1232+50 RT	W10-1	36 x 36	RAILROAD CROSSING	-	-	-	-	7.07	-	-	-	-	POSTED WITH 26-20
CATEGORY 0010 PAGE 8 TOTAL						0	5	3	0	91.57	0	8	8	0	
CATEGORY 0020 PAGE 8 TOTAL						0	0	0	0	0.00	0	0	0	0	BROWNSVILLE
CATEGORY 0010 PAGE 1 TOTAL						1	14	6	3	232.18	1	23	23	0	
CATEGORY 0010 PAGE 2 TOTAL						2	30	8	2	312.32	3	38	39	2	
CATEGORY 0010 PAGE 3 TOTAL						1	26	13	0	279.46	2	32	32	5	
CATEGORY 0010 PAGE 4 TOTAL						3	20	2	0	106.42	0	23	26	10	
CATEGORY 0010 PAGE 5 TOTAL						1	19	6	0	110.32	2	28	27	8	
CATEGORY 0010 PAGE 6 TOTAL						2	18	0	0	81.76	2	19	13	7	
CATEGORY 0010 PAGE 7 TOTAL						3	24	4	0	220.21	2	28	28	0	
CATEGORY 0010 PAGE 8 TOTAL						0	5	3	0	91.57	0	8	8	0	
CETEGORY 0010 TOTAL						13	156	42	5	1434.24	12	199	196	32	
CATEGORY 0020 PAGE 1 TOTAL						0	0	0	0	0.00	0	0	0	0	BROWNSVILLE
CATEGORY 0020 PAGE 2 TOTAL						0	0	0	0	0.00	0	0	0	0	BROWNSVILLE
CATEGORY 0020 PAGE 3 TOTAL						0	0	0	0	0.00	0	0	0	0	BROWNSVILLE
CATEGORY 0020 PAGE 4 TOTAL						0	0	0	0	0.00	0	0	0	0	BROWNSVILLE
CATEGORY 0020 PAGE 5 TOTAL						2	0	0	0	6.00	0	1	1	0	BROWNSVILLE
CATEGORY 0020 PAGE 6 TOTAL						14	0	0	0	42.00	0	3	3	0	BROWNSVILLE
CATEGORY 0020 PAGE 7 TOTAL						5	0	0	0	15.00	0	1	1	0	BROWNSVILLE
CATEGORY 0020 PAGE 8 TOTAL						0	0	0	0	0.00	0	0	0	0	BROWNSVILLE
CETEGORY 0020 TOTAL						21	0	0	0	63.00	0	5	5	0	BROWNSVILLE
PROJECT TOTAL						34	156	42	5	1497.24	12	204	201	32	

TRAFFIC CONTROL

			643.0100	643.0300	643.0420	643.0705	643.0900	643.0910	643.0920	643.1000	643.1050	643.2000	643.3000
			TRAFFIC		BARRICADES	WARNING		COVERING	COVERING	SIGNS		TRAFFIC	
			CONTROL	DRUMS	TYPE III	LIGHTS		SIGNS	SIGNS	FIXED	SIGNS	CONTROL	DETOUR
			PROJECT			TYPE A		TYPE I	TYPE II	MESSAGE	PCMS	PROJECT	SIGNS
GROUP			DAYS	DAYS	DAYS	DAYS	DAYS	EACH	EACH	SF	DAYS	EACH	DAYS
CODE	LOCATION												
0010	MOVING PAVING OPERATION		60	-	-	-	6,000	-	-	68	-	-	-
0010	STH 49 DETOUR		3	-	290	580	270	9	4	-	40	1	170
0010	UNDISTRIBUTED		-	600	30	60	630	1	1	-	-	-	20
TOTAL:			1	600	320	640	6,900	10	5	68	40	1	190

* FOR INFORMATION ONLY

PAVEMENT MARKING ITEMS

				**											
				646.0106	649.0200	646.0406	646.0126	647.0110	647.0166	647.0356	647.0456	647.0566	647.0766	648.0100	
				PAVEMENT	TEMPORARY	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	PAVEMENT	LOCATING	
				MARKING	PAVEMENT	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	NO	
				EPOXY	REFLECTIVE PAINT	SAME DAY	EPOXY	RAILROAD	ARROWS	WORDS	CURB	STOP LINE	CROSSWALK	PASSING	
				4-INCH	4-INCH	EPOXY 4-INCH	8-INCH	CROSSING	EPOXY	EPOXY	EPOXY	EPOXY 18-INCH	EPOXY 6-INCH	ZONES	
GROUP				WHITE	YELLOW	YELLOW	WHITE	EPOXY	TYPE 2	"ONLY"	EPOXY	WHITE	WHITE	MI	
CODE	STATION	-	STATION	LF	LF	LF	LF	EACH	EACH	EACH	LF	LF	LF		
0010	16+50	-	95+50	16,100	6,400	-	-	-	-	-	-	-	-	-	-
0010	95+50	-	1235+00	138,300	-	135,750	57,800	-	2	-	-	-	100	12.8	-
	1050+00	-	1097+00	-	-	-	-	-	-	-	2,500	240	900	-	-
0010			USH 151 TURN LANE	-	-	-	-	300	-	-	-	-	-	-	-
0010			CTHI	-	-	-	-	-	-	-	-	20	-	-	-
0010			SHAMROCK RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			CHURCH RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			BANNER RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			WILDLIFE REFUGE	-	-	-	-	-	-	-	-	20	-	-	-
0010			WILD GOOSE RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			WILDLIFE REFUGE	-	-	-	-	-	-	-	-	20	-	-	-
0010			CTH Z NORTH	-	-	-	-	230	2	2	-	20	-	-	-
0010			CTH Z SOUTH	-	-	-	-	-	-	-	-	20	-	-	-
0010			PANZER RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			CENTERLINE RD	-	-	-	-	-	-	-	-	40	-	-	-
0010			WELLS RD / CTH YY	-	-	-	-	-	-	-	-	40	-	-	-
0010			CTH YY / DAIRY RD	-	-	-	300	-	-	-	-	40	-	-	-
0010			CTH V	-	-	-	-	-	-	-	-	20	-	-	-
0010			WEST LINE RD	-	-	-	-	-	-	-	-	40	-	-	-
0010			LETTAU RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			EVERGREEN DR	-	-	-	-	100	-	-	-	20	-	-	-
0010			CENTER RD	-	-	-	-	-	-	-	-	40	-	-	-
0010			POLE RD	-	-	-	-	-	-	-	-	20	-	-	-
0010			STH 175	-	-	-	400	-	-	-	-	60	-	-	-
0010			INDUSTRIAL DR	-	-	-	400	-	2	2	-	60	-	-	-
SUBTOTAL				154,400	6,400										
CATEGORY 0010 TOTAL				160,800		135,750	57,800	1,730	2	4	4	840	1,000	12.8	
CATEGORY 0020 TOTAL				0		0	0	0	0	0	2,500	0	0	0	

** TEMPORARY PAVEMENT MARKING USED TO PLACE DOUBLE YELLOW ON EXISTING PAVEMENT ADJACENT TO NEW PAVEMENT AS DIRECTED BY ENGINEER.

CONSTRUCTION STAKING

		650.8000	650.9910
		RESURFACING	SUPPLEMENTAL
		REFERENCE	CONTROL (PROJECT)
GROUP			
CODE	LOCATION	LF	LS
0010	PROJECT	75,390	1

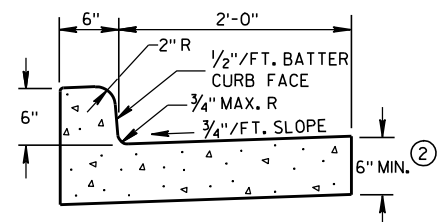
SAWING

		690.0150	690.0250
		SAWING	SAWING
		ASPHALT	CONCRETE
GROUP			
CODE	LOCATION	LF	LF
0010	BROWNSVILLE	60	270
0010	RR CROSSING	70	-
0010	UNDISTRIBUTED	40	70
TOTAL:		170	340

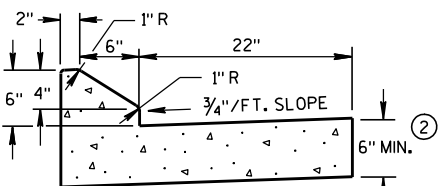
SAWING FOR CULVERTS IS INCIDENTAL TO SPECIAL BASE PATCHING

Standard Detail Drawing List

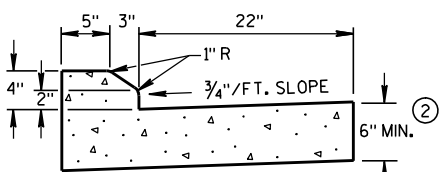
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-12B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
14B15-07A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B24-07A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-01	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-01A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C28-02	SIGNING AND MARKING FOR COMBINATION RIGHT TURN AND BYPASS LANE
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY



TYPES A & D ①



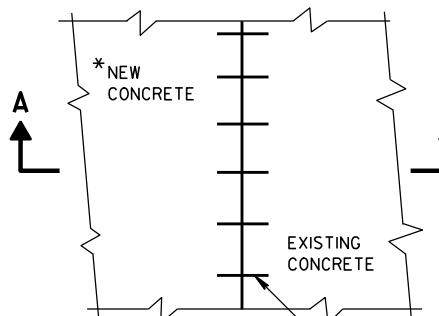
6" SLOPED CURB TYPES G & J ①



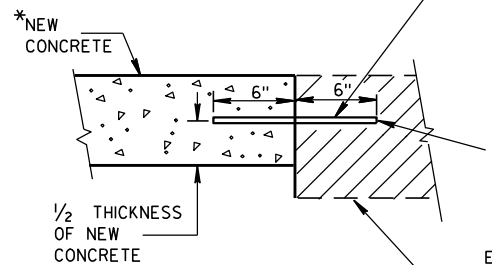
4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

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



PLAN VIEW

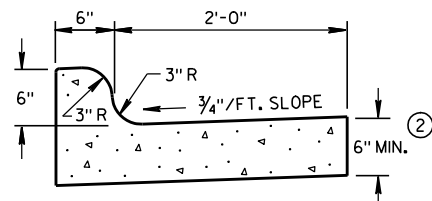


SECTION A-A
TIE BARS DRILLED
INTO EXISTING PAVEMENT

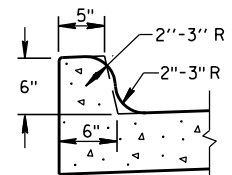
NO. 6 TIE BARS SPACED 2'-6" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT.

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

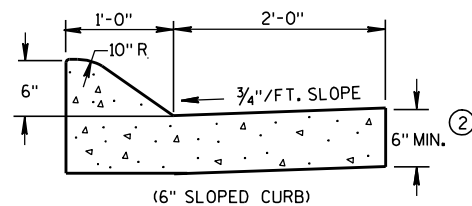
EXISTING
CONCRETE



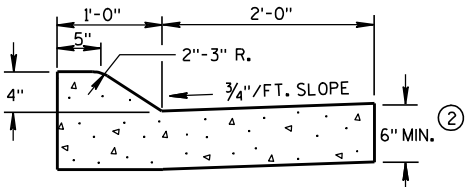
TYPES K & L ①



OPTIONAL CURB SHAPE
FOR TYPES K & L ①

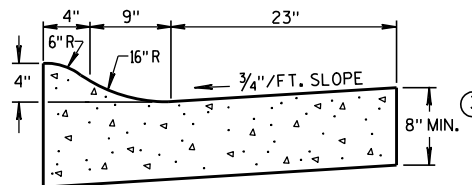


(6" SLOPED CURB)

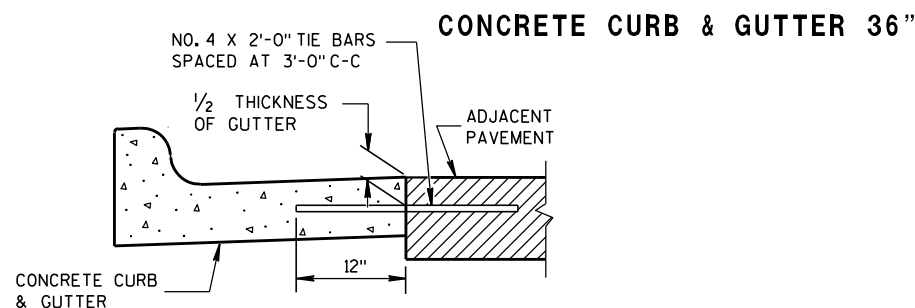


(4" SLOPED CURB)

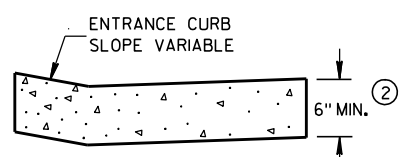
TYPES A & D ①



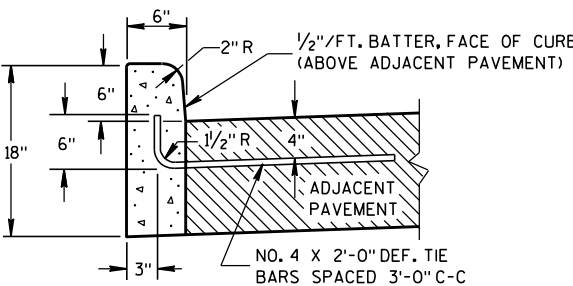
4" SLOPED CURB TYPES R & T ① ④



TYPICAL TIE BAR LOCATION ①

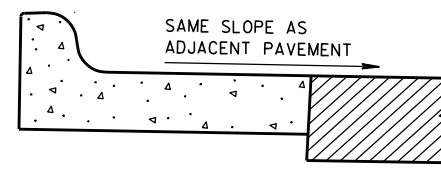


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

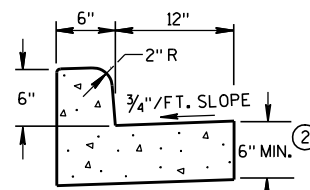


TYPES A & D ①

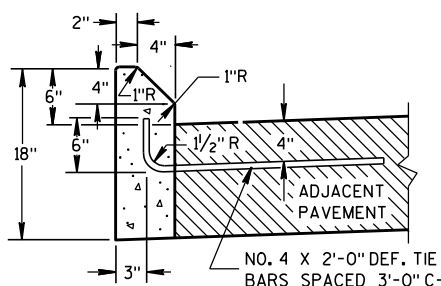
CONCRETE CURB



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



TYPES A & D
CONCRETE CURB & GUTTER 18"



TYPES G & J ①

GENERAL NOTES

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

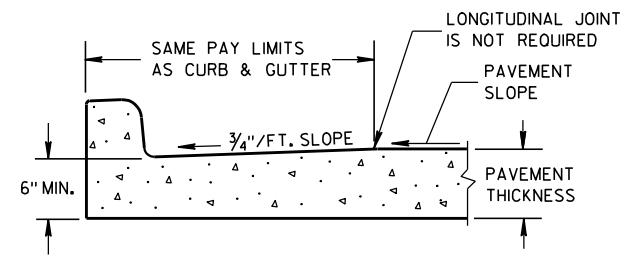
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.

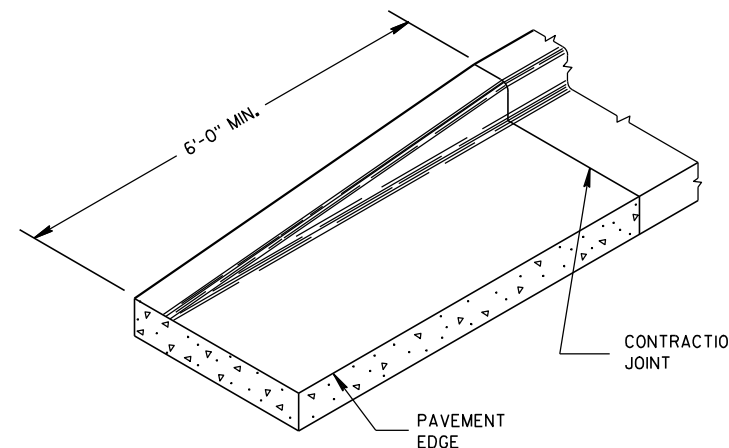
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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 AND R.
- 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.



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER

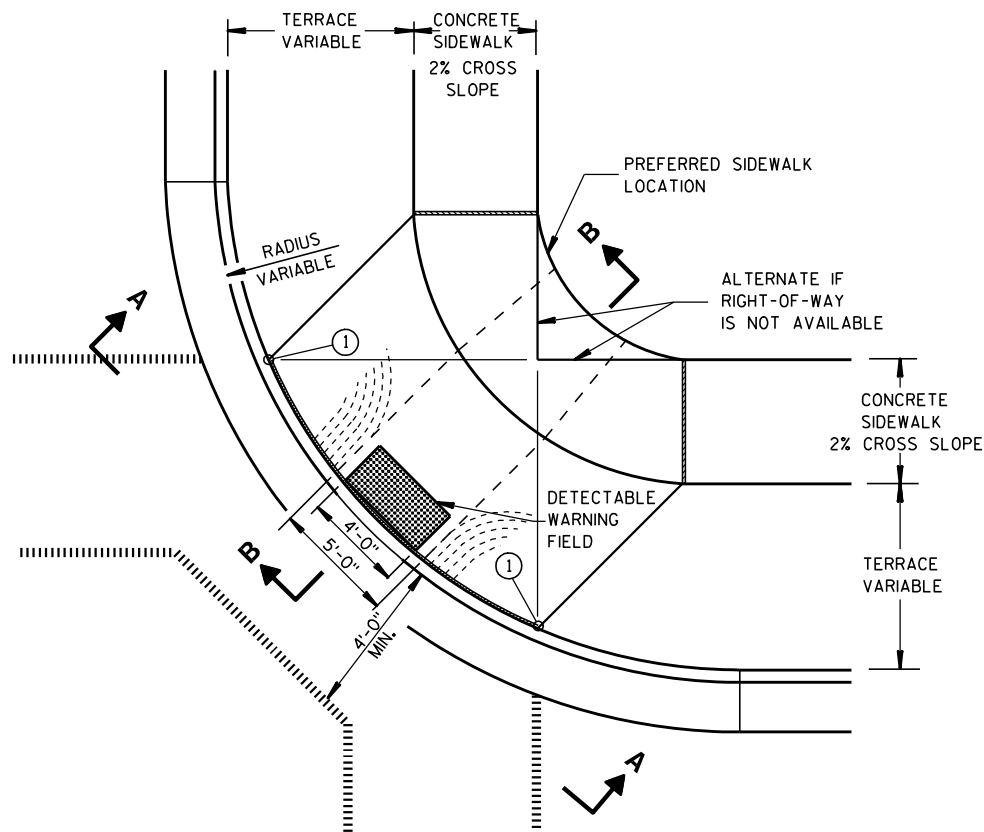


END SECTION CURB & GUTTER

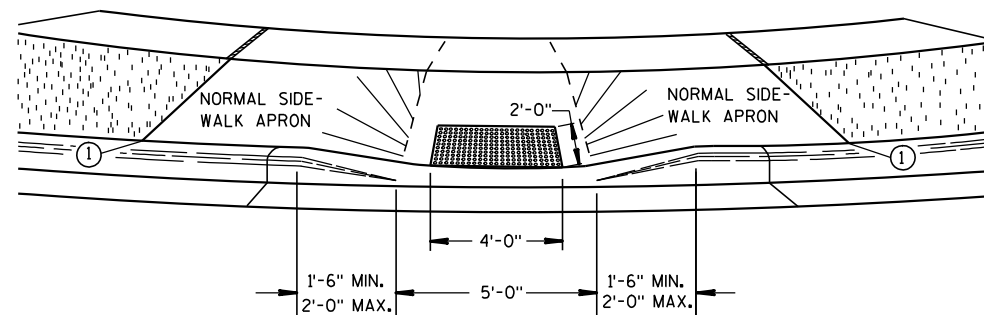
CONCRETE CURB, CONCRETE
CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

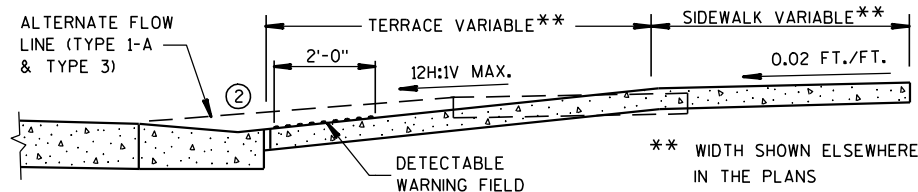
APPROVED
9/4/08 /S/ Jerry H. 7-
DATE ROADWAY STANDARDS 66 ENT
FHWA ENGINEER



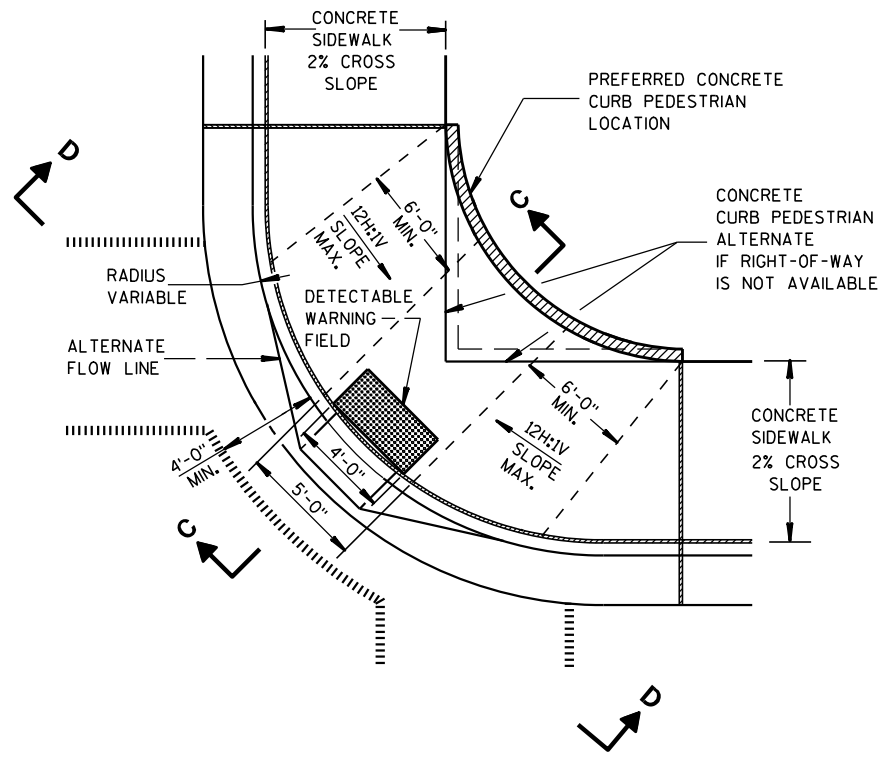
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



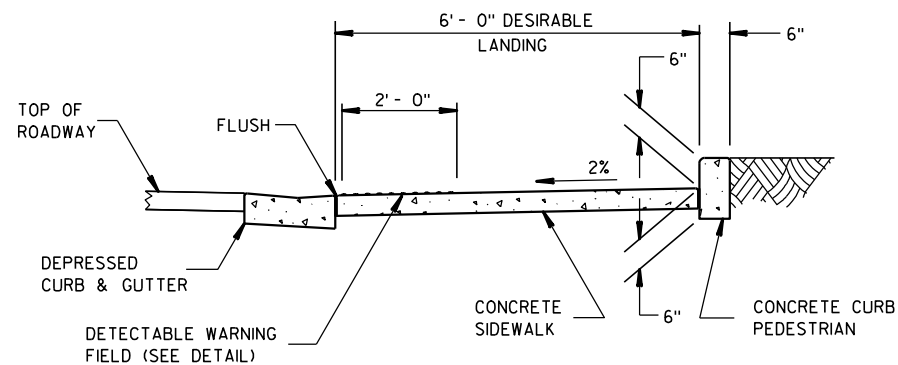
VIEW A-A



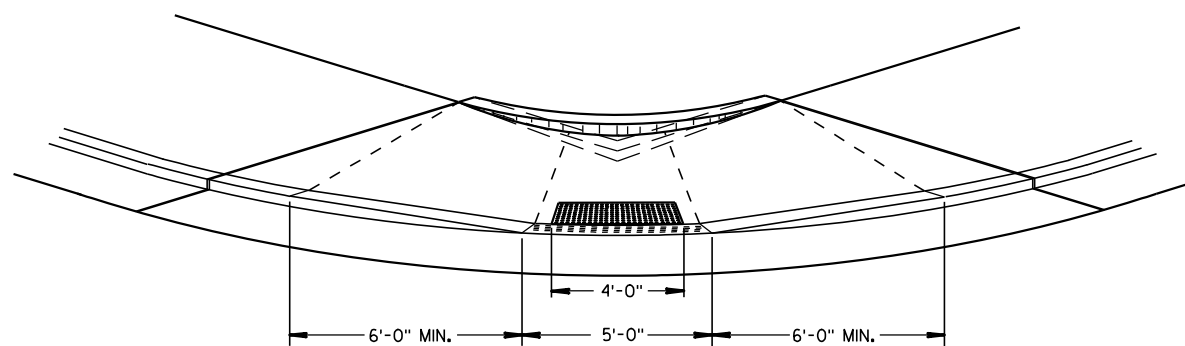
SECTION B-B



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)



SECTION C-C



VIEW D-D

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.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

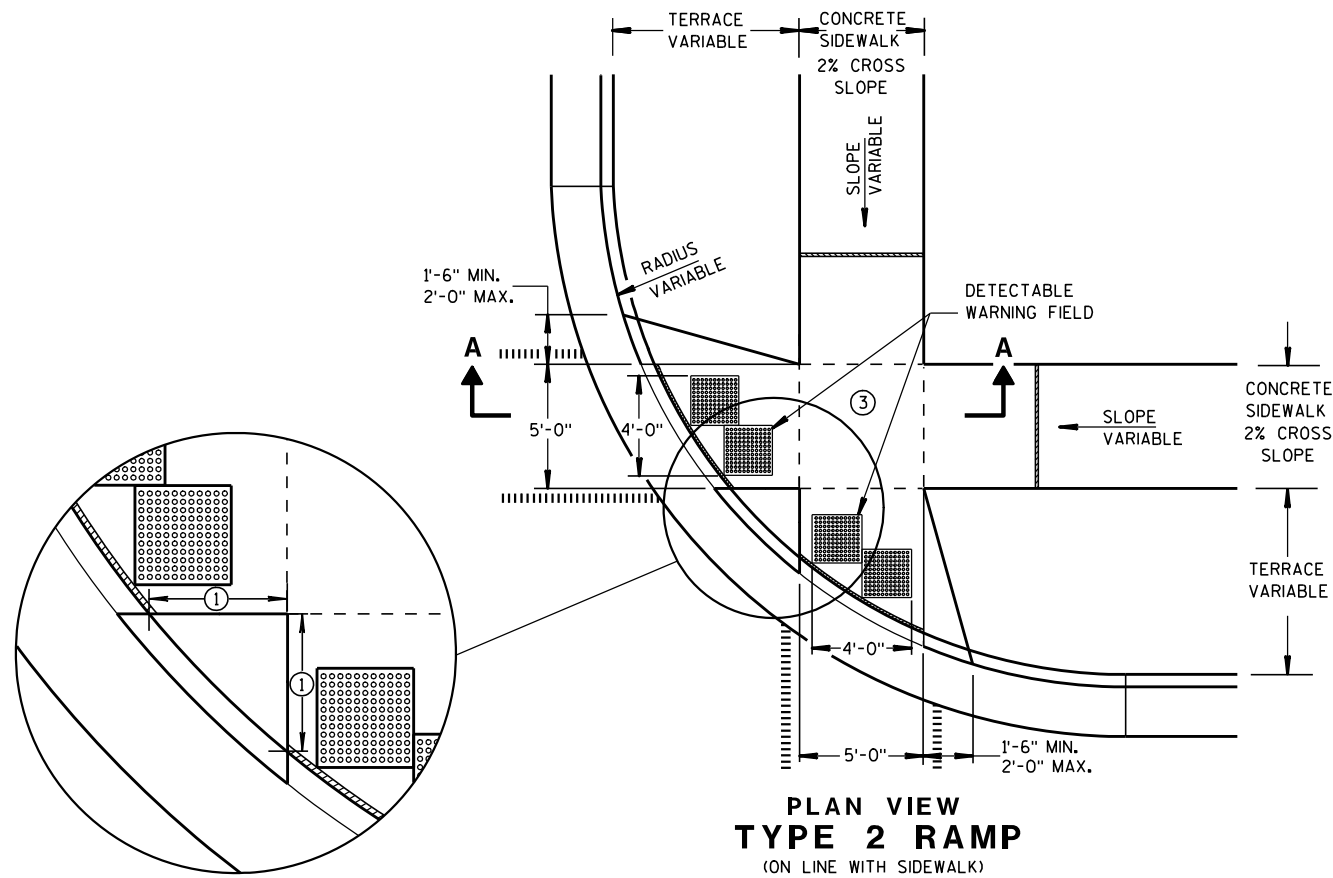
- THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

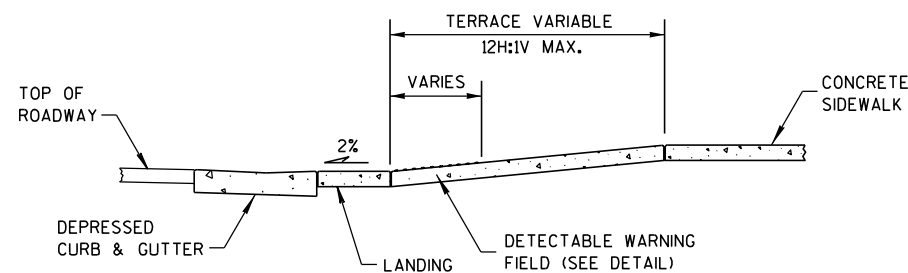
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

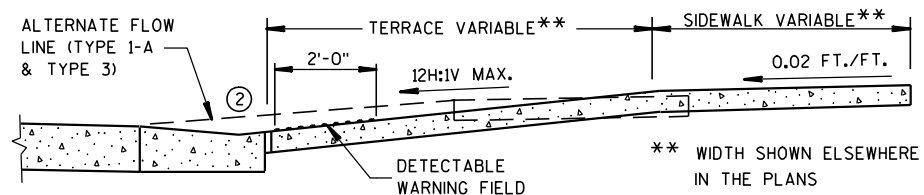
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW
TYPE 2 RAMP**
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

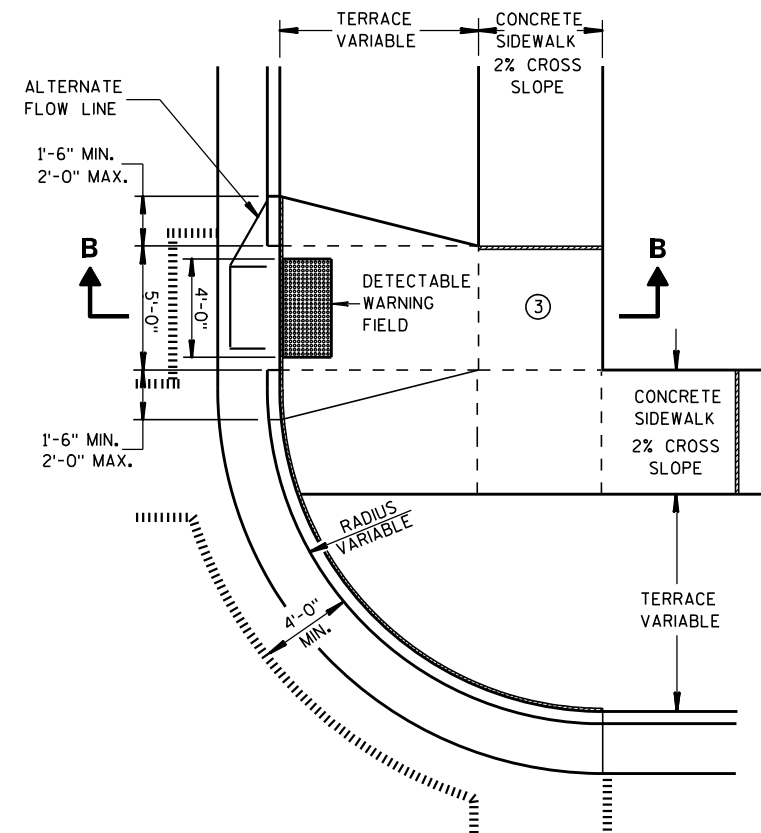
GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③ PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

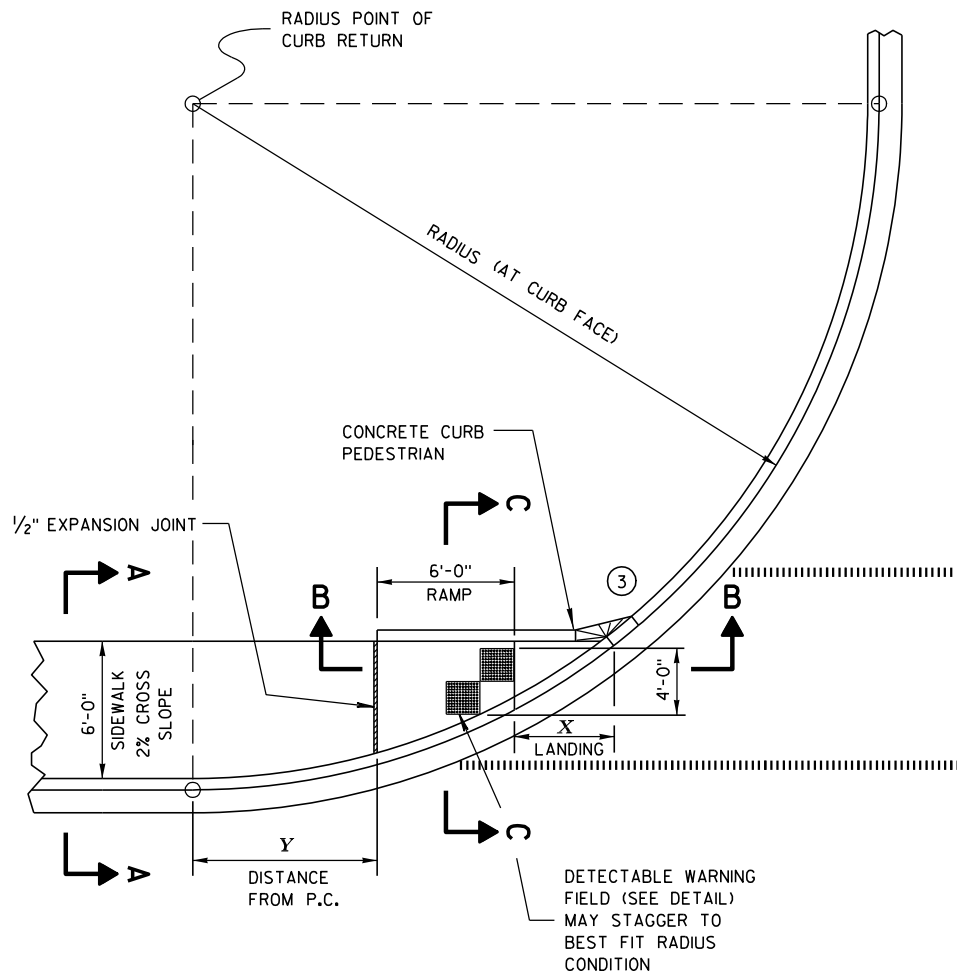
- ===== 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



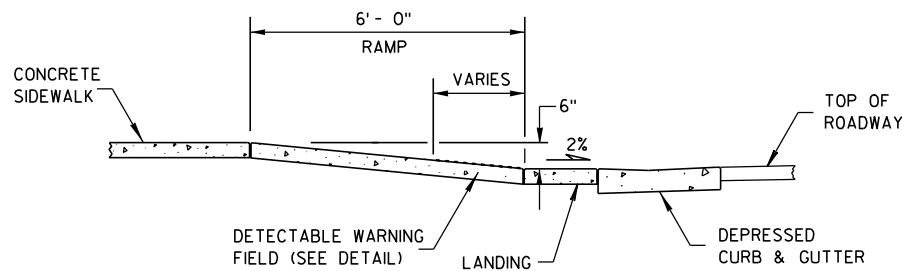
**PLAN VIEW
TYPE 3 RAMP**
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS
TYPES 2 AND 3**

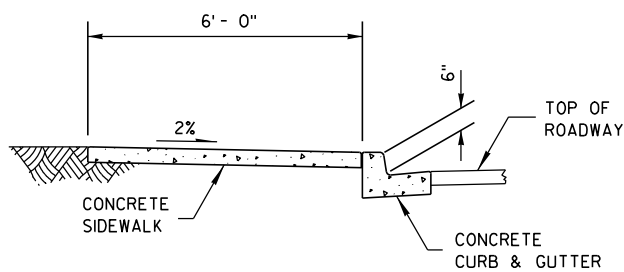
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



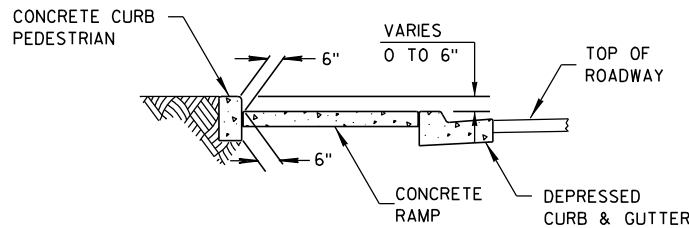
CURB RAMP TYPE 4A
PLAN VIEW



SECTION B-B



SECTION A-A



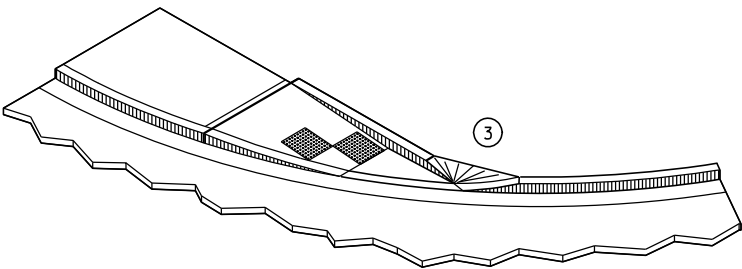
SECTION C-C

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
30 FEET	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
40 FEET	9'-5 $\frac{1}{4}$ "	6'-5"
50 FEET	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
60 FEET	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

INTERMEDIATE RADII CAN BE INTERPOLATED

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)
DO NOT MARK TRANSITION NOSE.

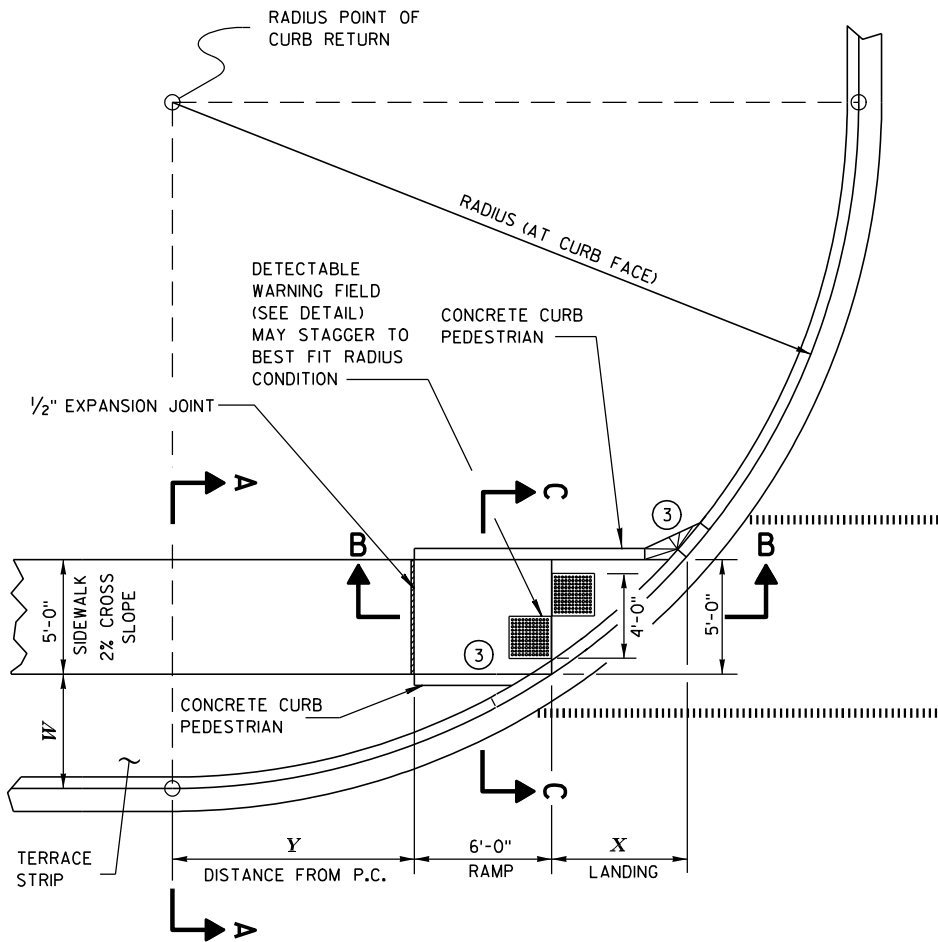


ISOMETRIC VIEW

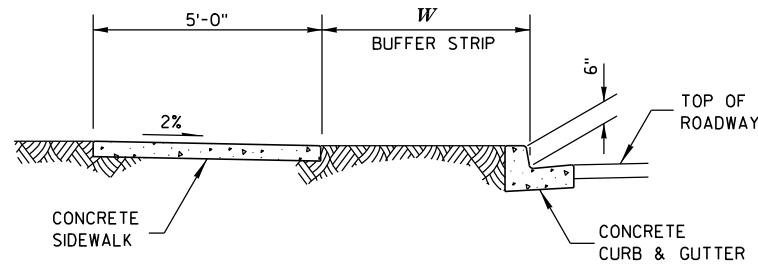
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
 - CONTRACTION JOINT FIELD LOCATED
 - PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4A

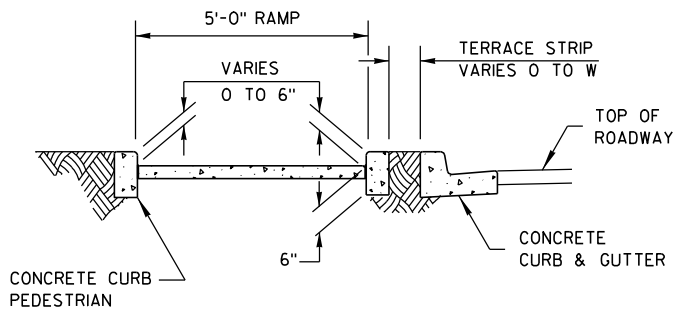
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



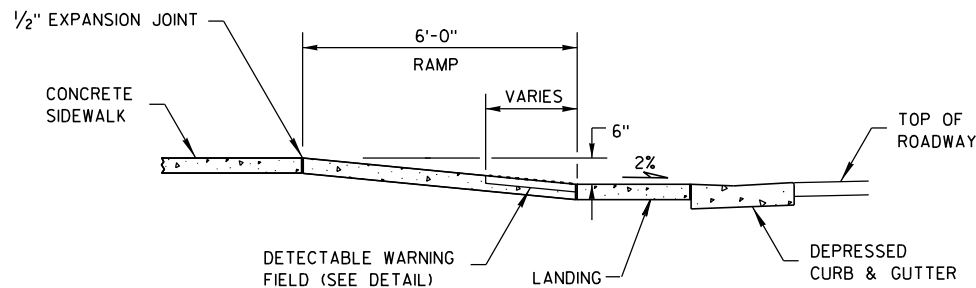
CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A



SECTION C-C



SECTION B-B

GENERAL NOTES

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

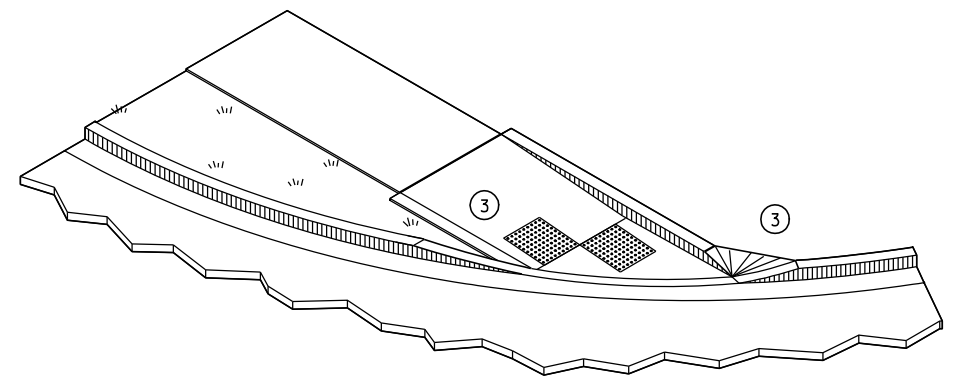
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3 1/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3 1/4"	11'-3 1/4"	9'-1 1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3 1/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"
70 FEET	12'-2 3/4"	14'-3 1/4"	11'-1 1/4"	17'-4"	10'-1"	19'-11 3/4"	9'-3 3/4"	22'-4 1/4"	8'-8 1/4"	24'-6 1/4"
80 FEET	13'-2"	15'-8 1/2"	11'-10 1/2"	18'-11 3/4"	10'-10 3/4"	21'-10"	10'-1"	24'-4 3/4"	9'-5"	26'-8 3/4"
90 FEET	14'-1 1/2"	17'-1 1/2"	12'-8 1/4"	20'-6 1/2"	11'-7 3/4"	23'-7"	10'-9 3/4"	26'-3 3/4"	10'-1 1/4"	28'-9 1/2"
100 FEET	14'-10 1/2"	18'-3 3/4"	13'-5 1/2"	22'-0"	12'-4 1/4"	25'-2 3/4"	11'-5 3/4"	28'-1 1/2"	10'-9"	30'-9"

INTERMEDIATE RADII CAN BE INTERPOLATED



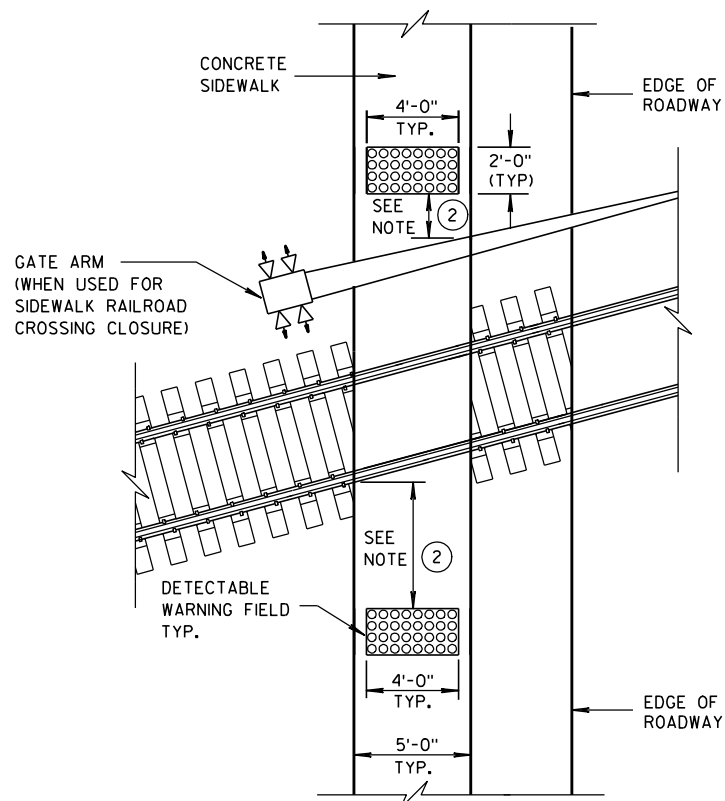
ISOMETRIC VIEW

LEGEND

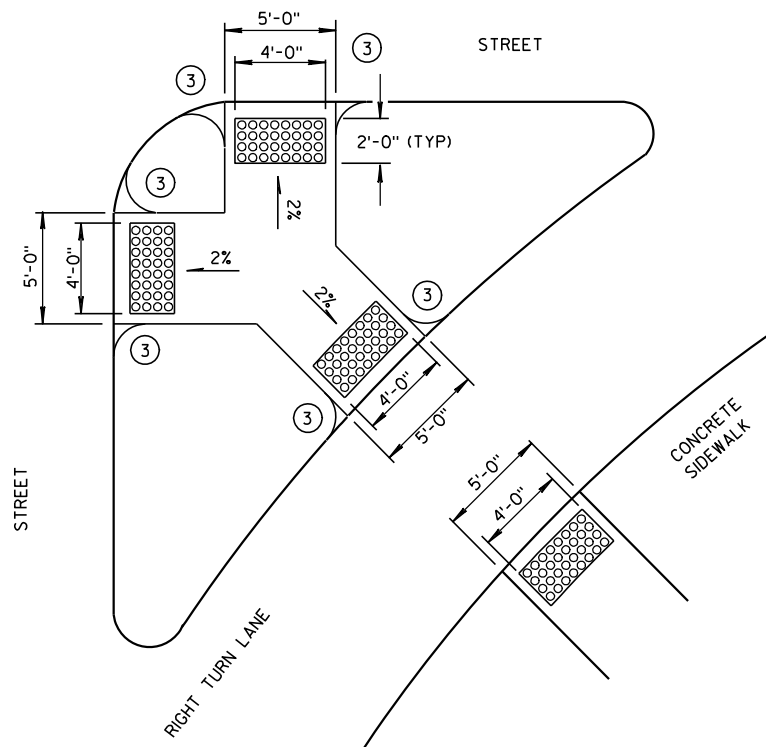
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 4B

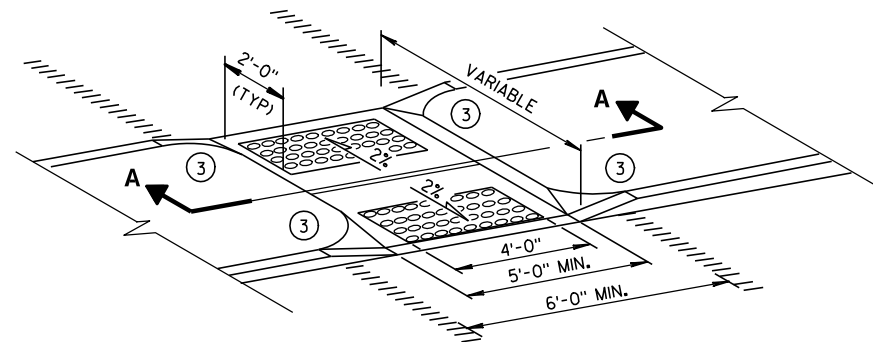
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



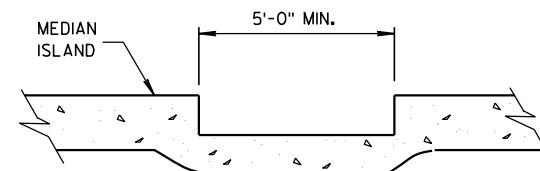
TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING



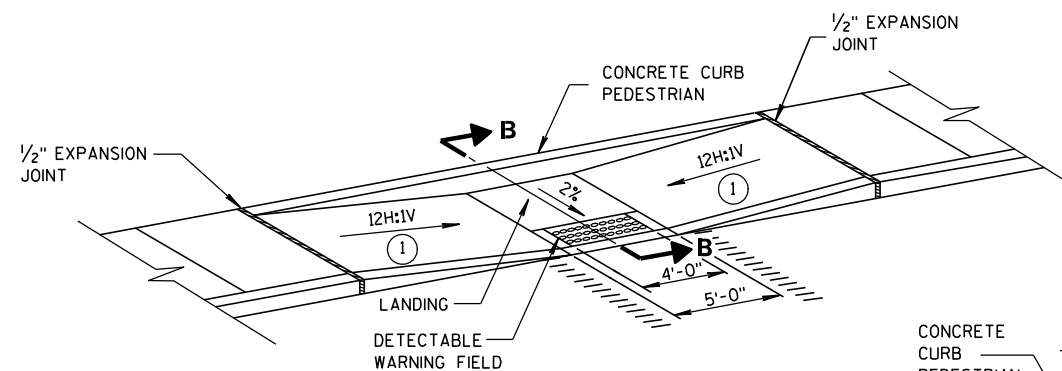
TYPE 6
DETECTABLE WARNING AT ISLANDS



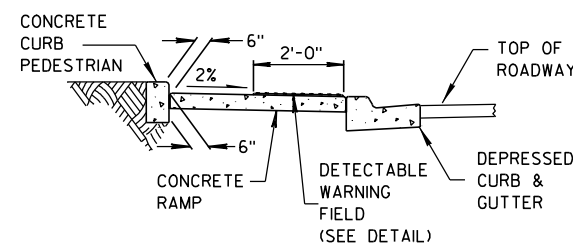
MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



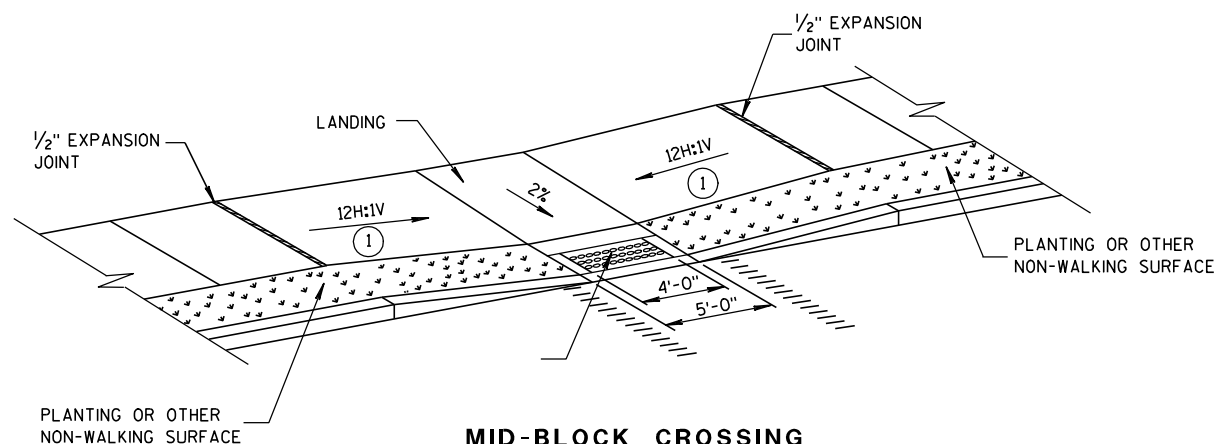
SECTION A-A



MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



MID-BLOCK CROSSING
TYPE 7B

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

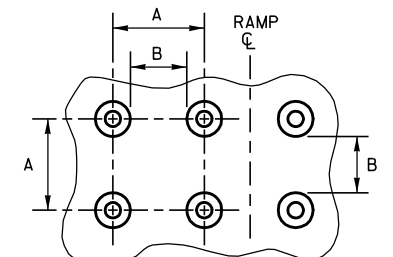
GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

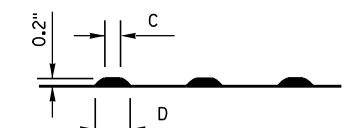
- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET $\pm$ 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

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



PLAN VIEW

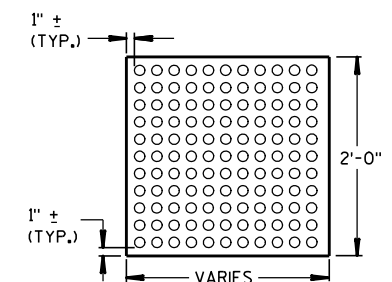


ELEVATION VIEW

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

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

TRUNCATED DOMES
DETECTABLE WARNING
PATTERN DETAIL



PLAN VIEW
DETECTABLE WARNING
FIELD (TYPICAL)

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 2-9-10
/S/ Jerry H. Zogg
ROADWAY STANDARDS 71
ENGINEER
FHWA



- 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 1½" X 1½" 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.

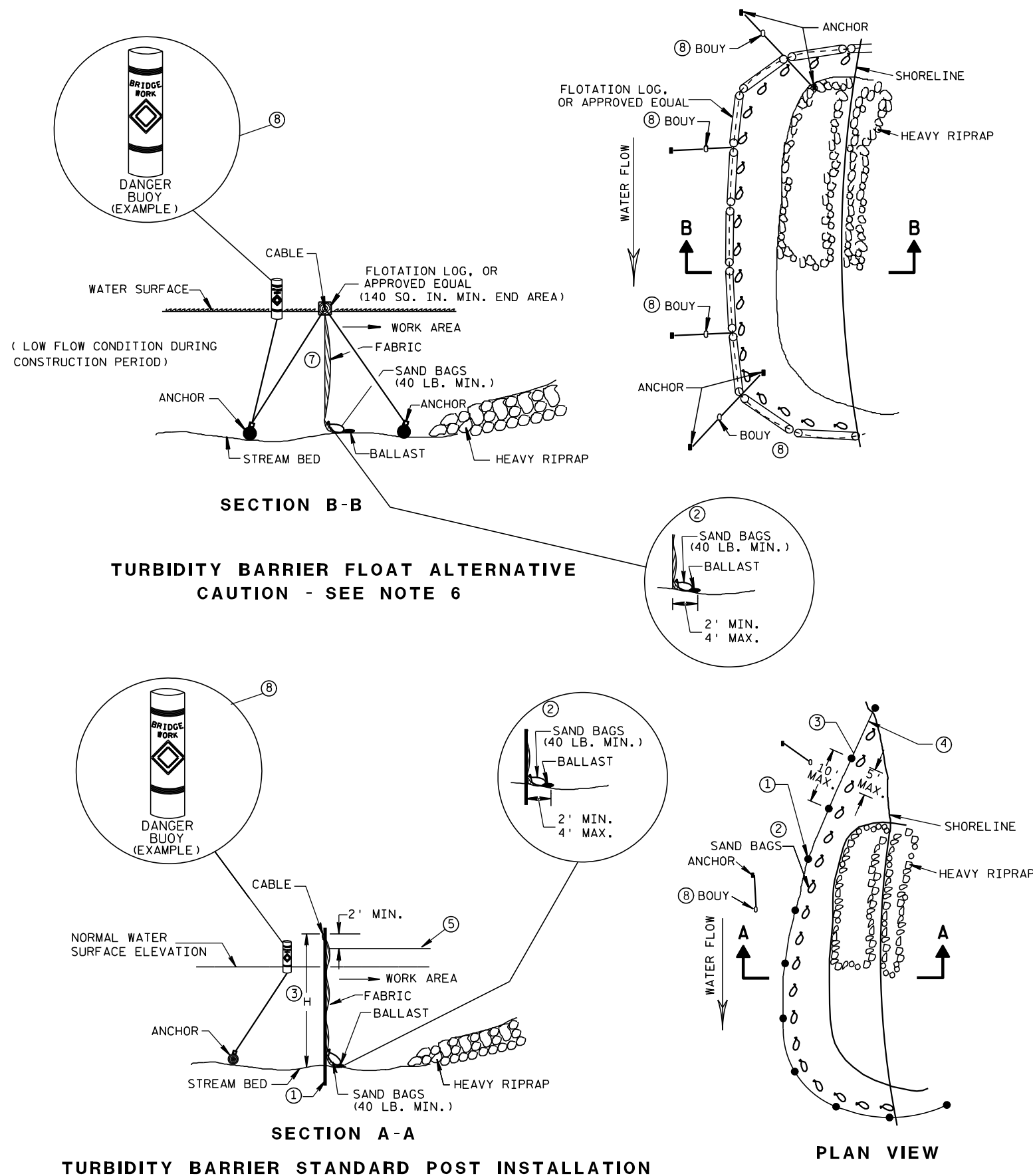


SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

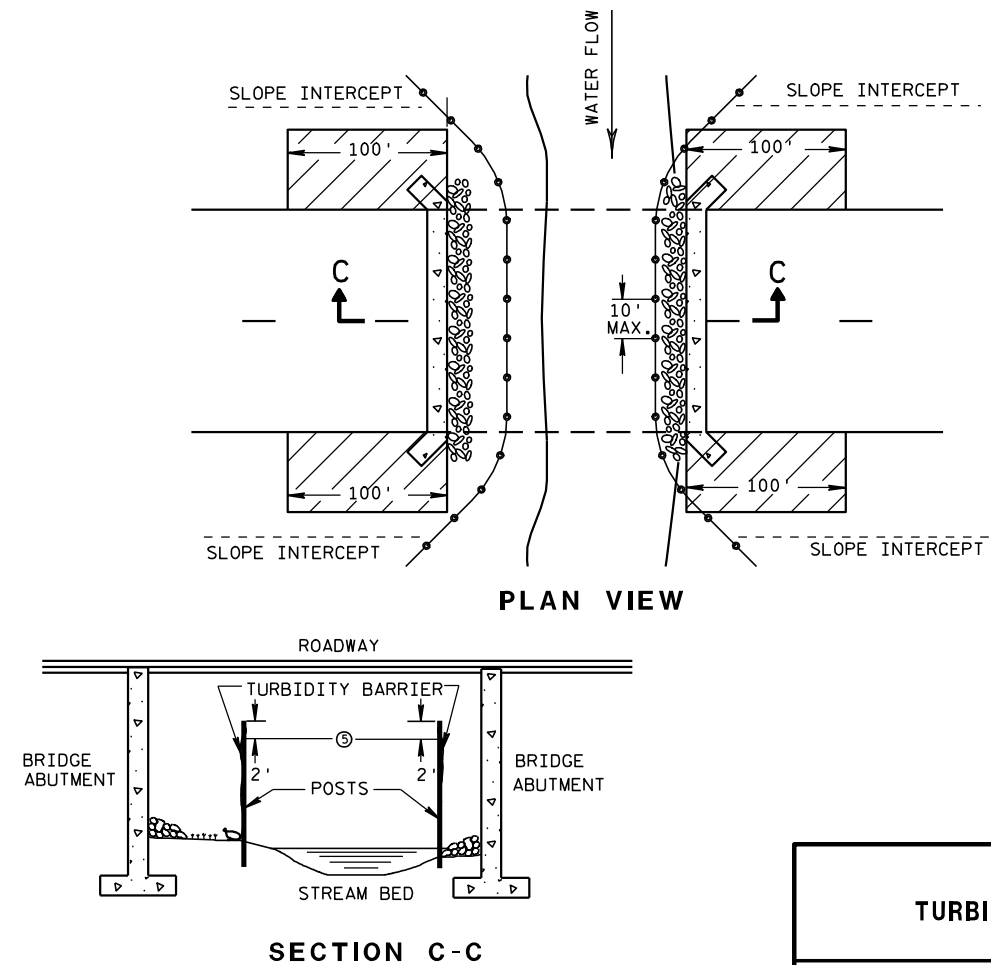


GENERAL NOTES

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.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02

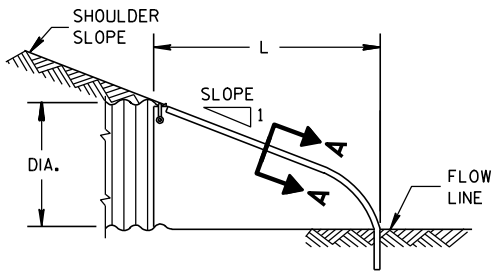
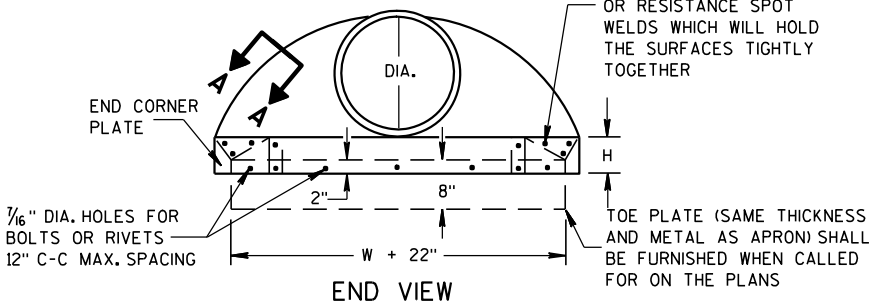
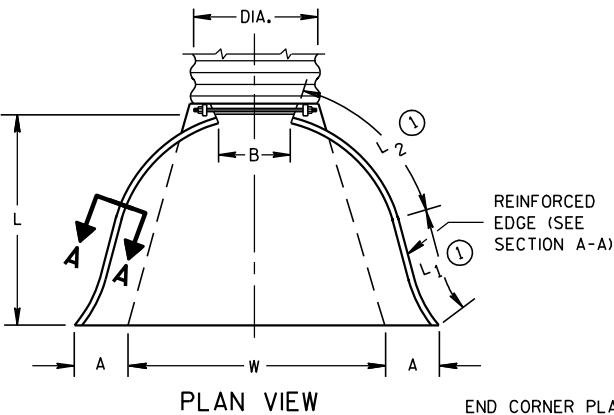
DATE

/S/ Beth Conn
CHIEF ROADWAY DEVELOPER

FWHA

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

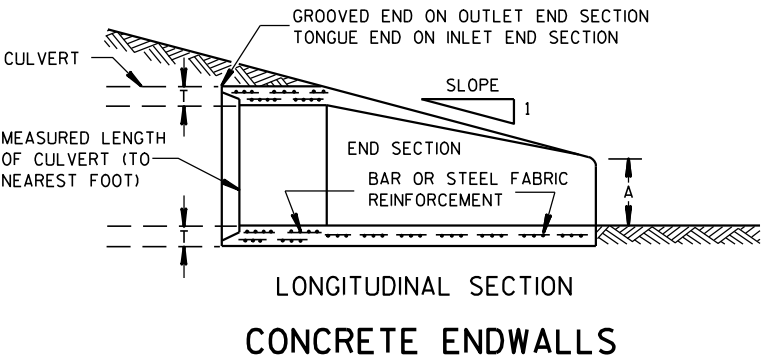
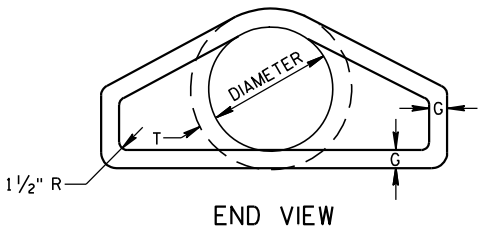
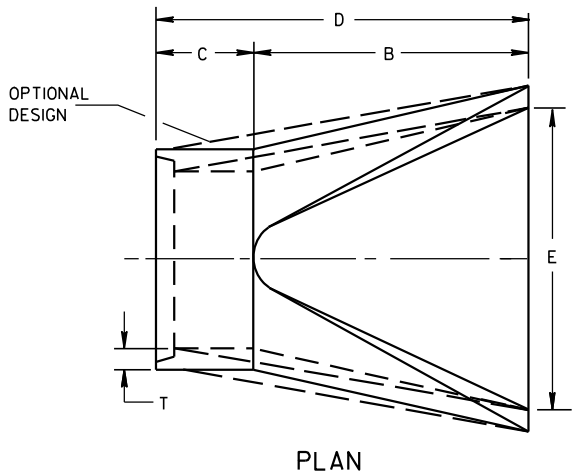
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



SIDE ELEVATION
METAL ENDWALLS

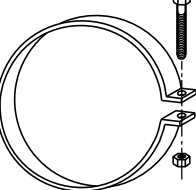
REINFORCED CONCRETE APRON ENDWALLS											
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE			
	T	A	B	C	D	E	G				
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1			
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1			
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1			
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1			
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1			
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1			
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1			
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1			
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1			
48	5	24	72	26	98	84	5	3 to 1			
54	5 1/2	27	65	33 1/4	98 1/4	90	5 1/2	2 2/5 to 1			
60	6	30-35	60	39	99	96	5	2 to 1			
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1			
72	7	24-36	78	21	99	108	6	2 to 1			
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1			
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1			
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1			

* MINIMUM
** MAXIMUM

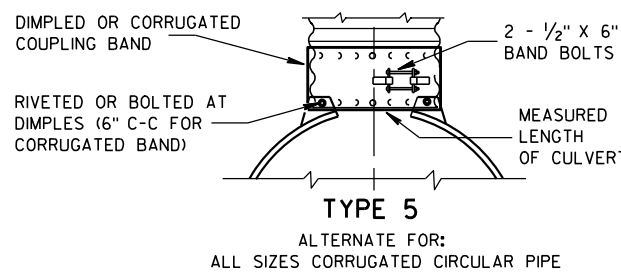
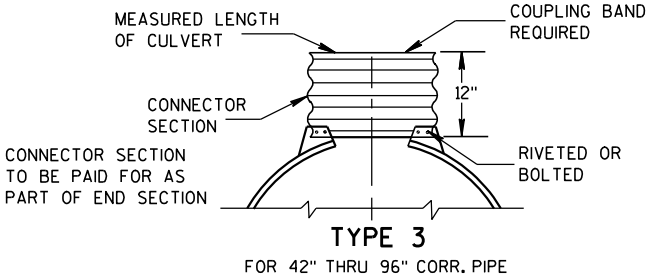
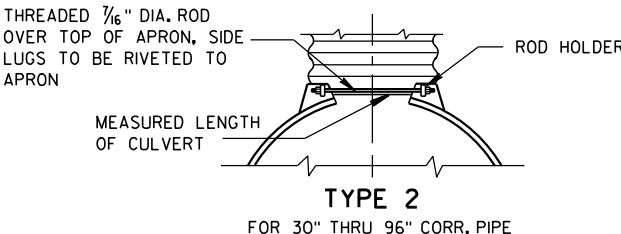
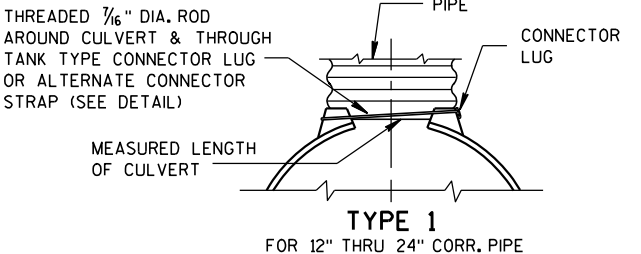


LONGITUDINAL SECTION
CONCRETE ENDWALLS

1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



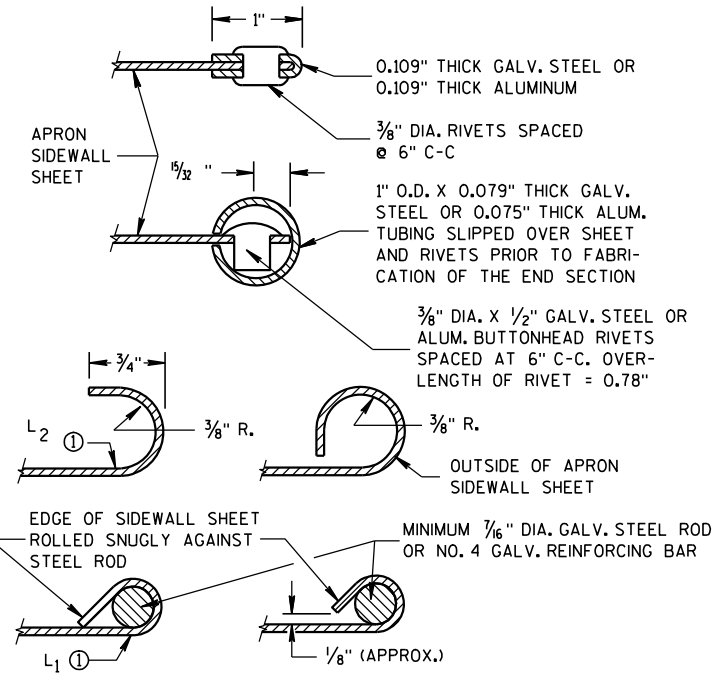
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

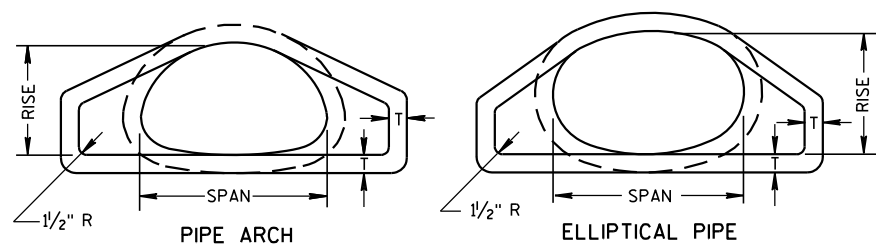
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

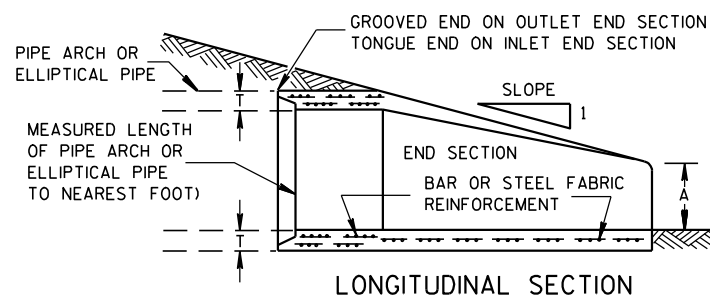
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinehart CHIEF ROADWAY DEVELOP 74 NEER
FHWA	

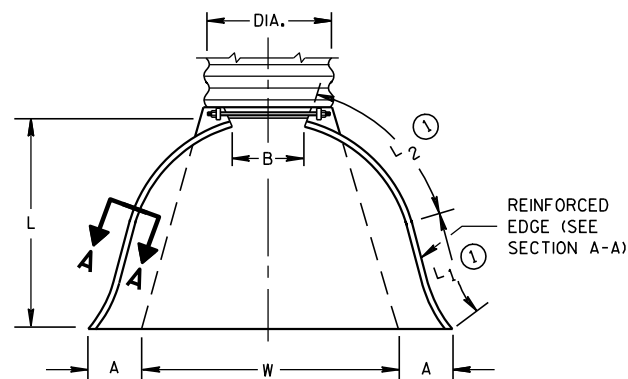


END VIEW



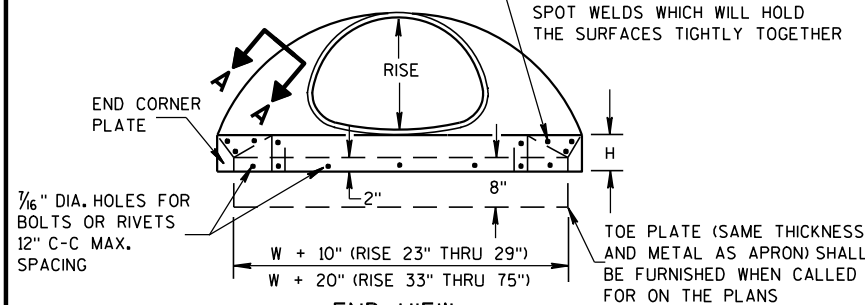
LONGITUDINAL SECTION

CONCRETE ENDWALLS

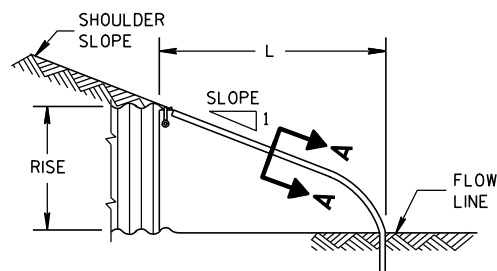
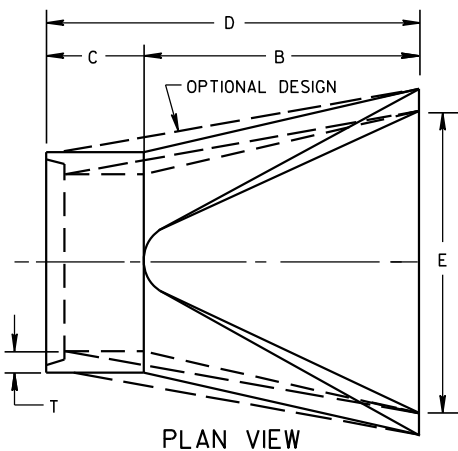


PLAN VIEW

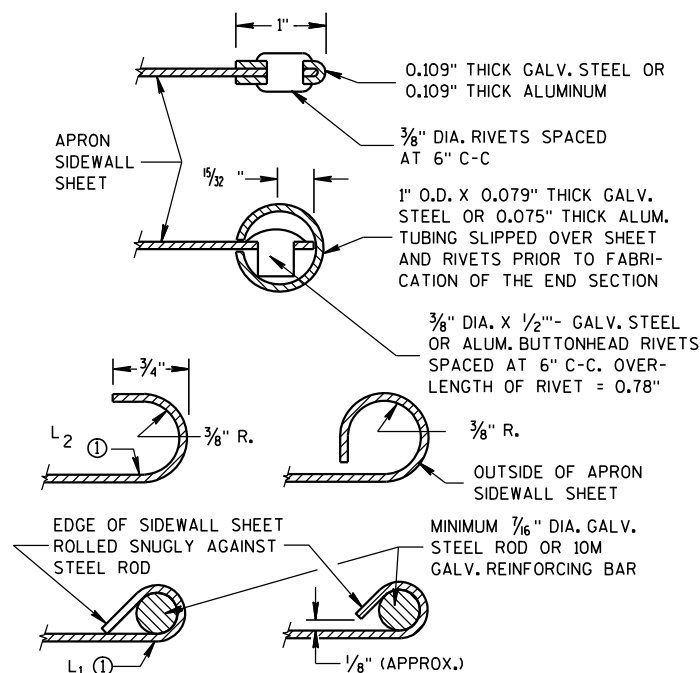
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW



SECTION A-A

2- 2 2/3" X 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

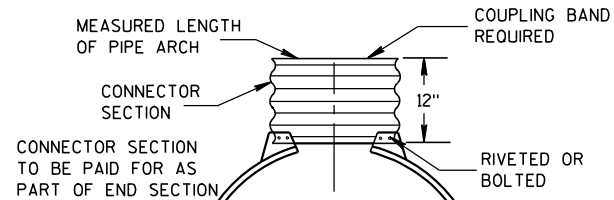
3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

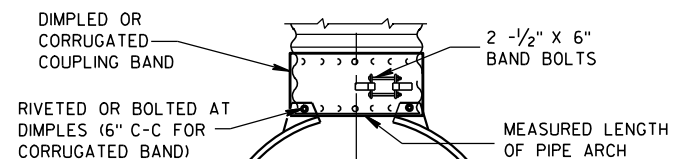
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHESNOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

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.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPESTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94

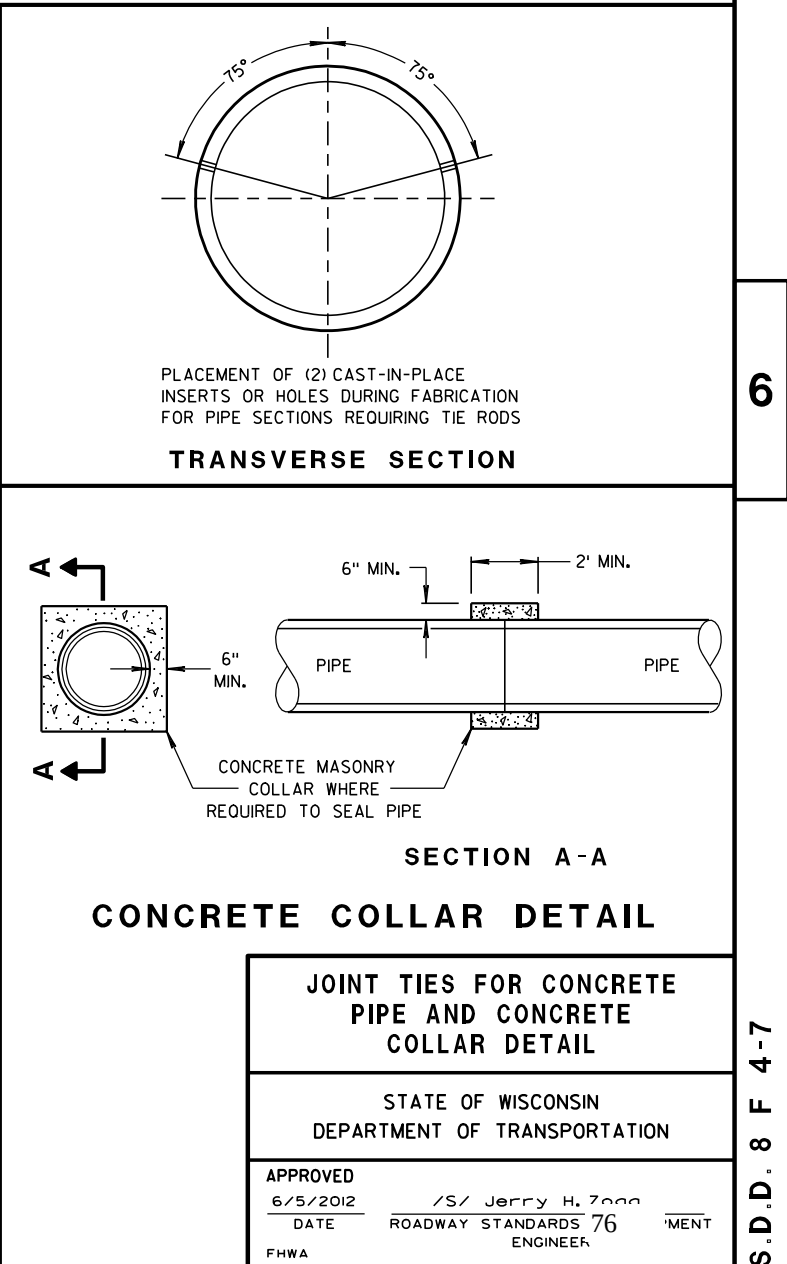
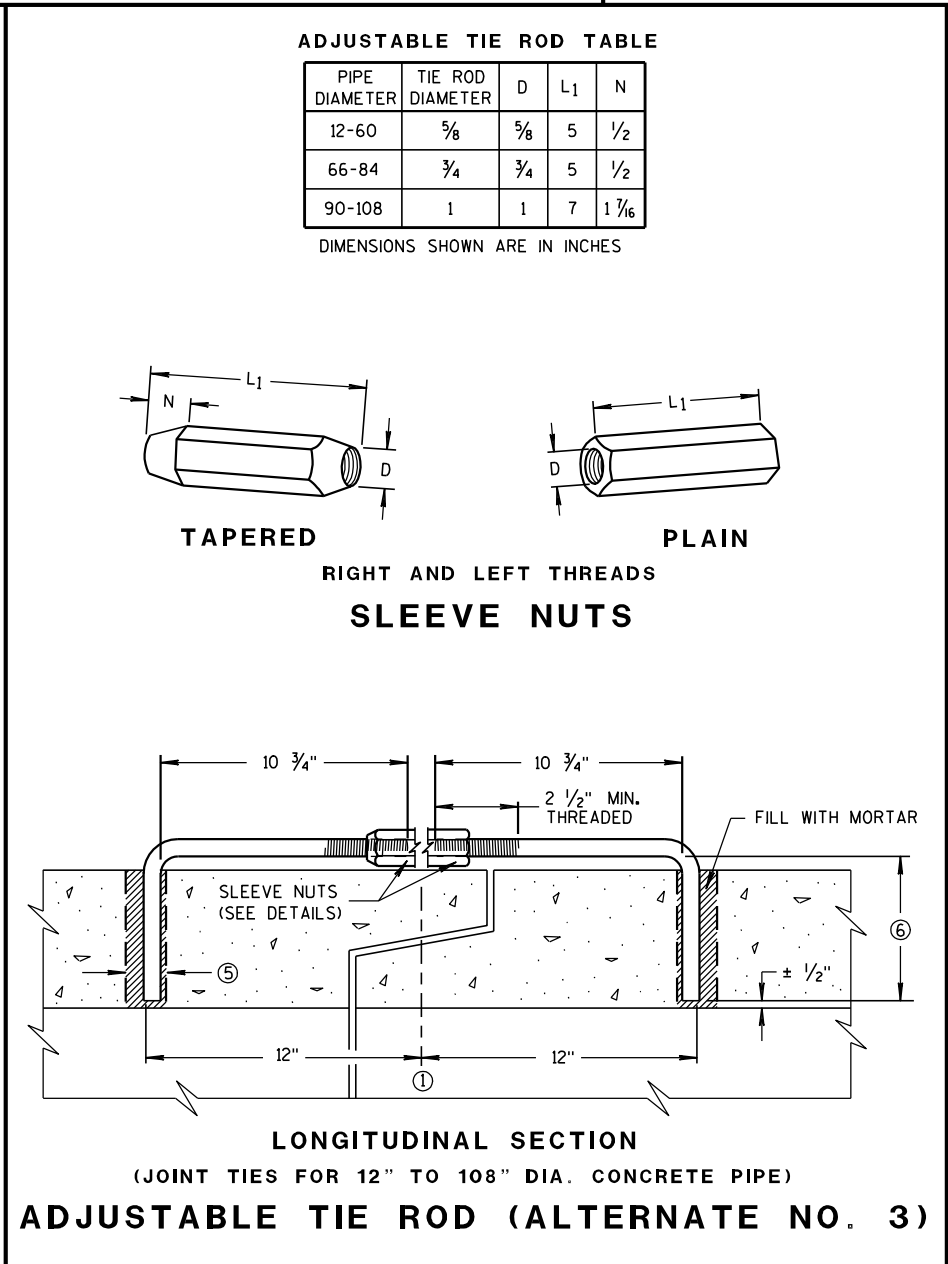
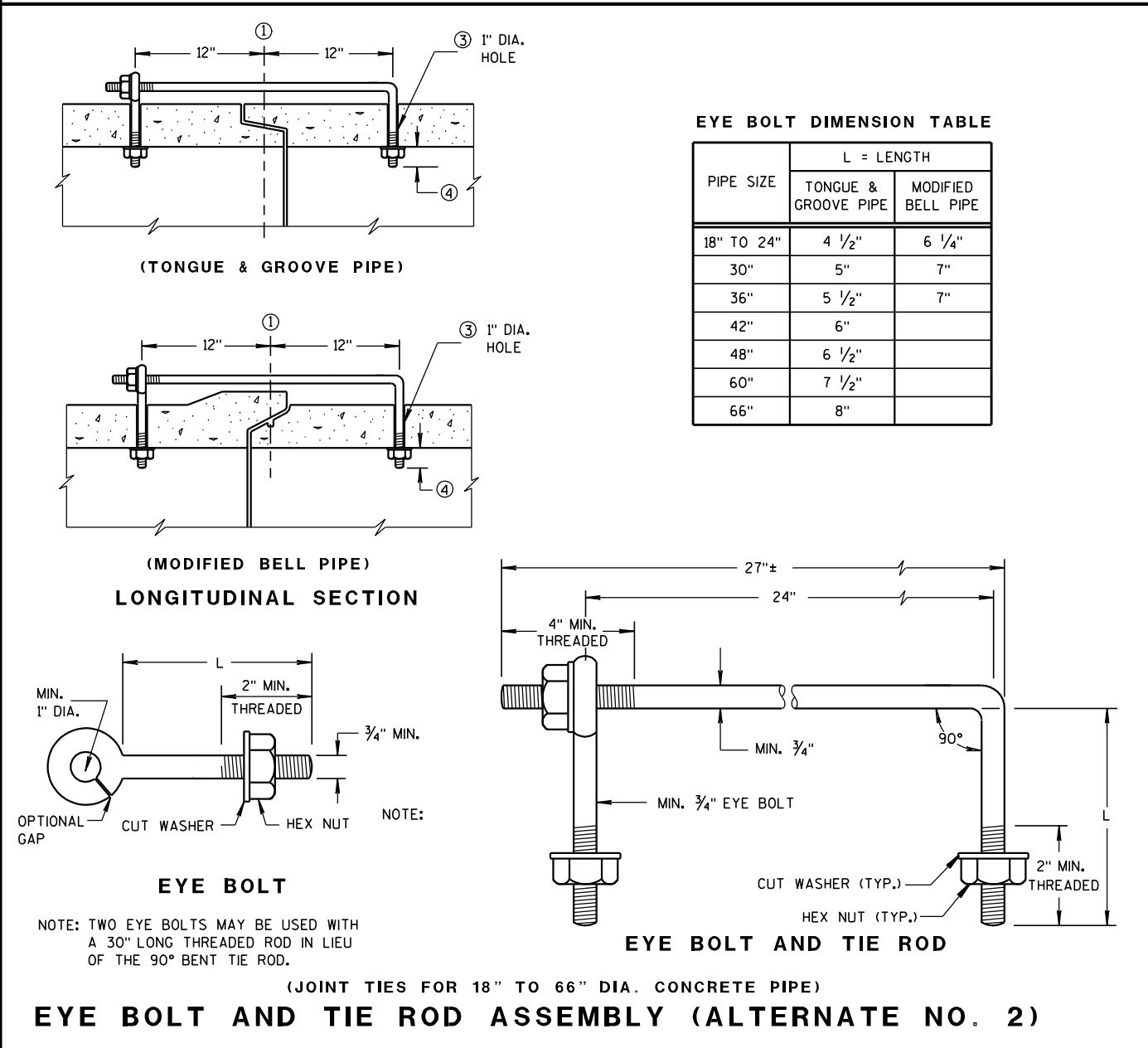
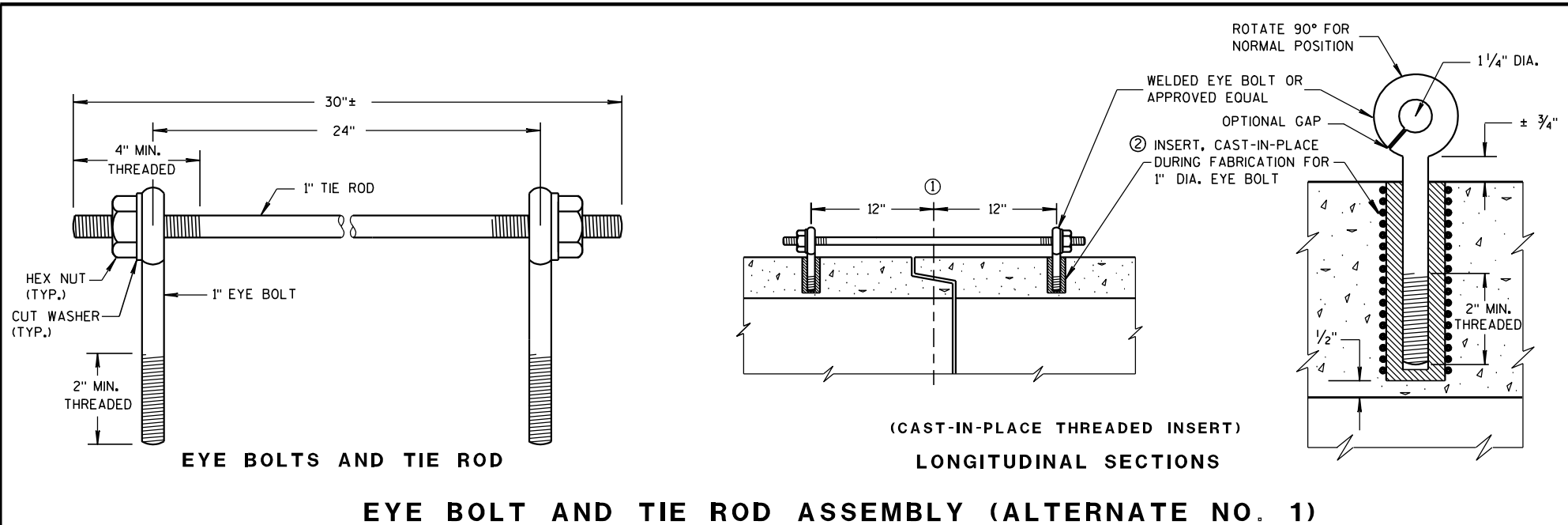
DATE

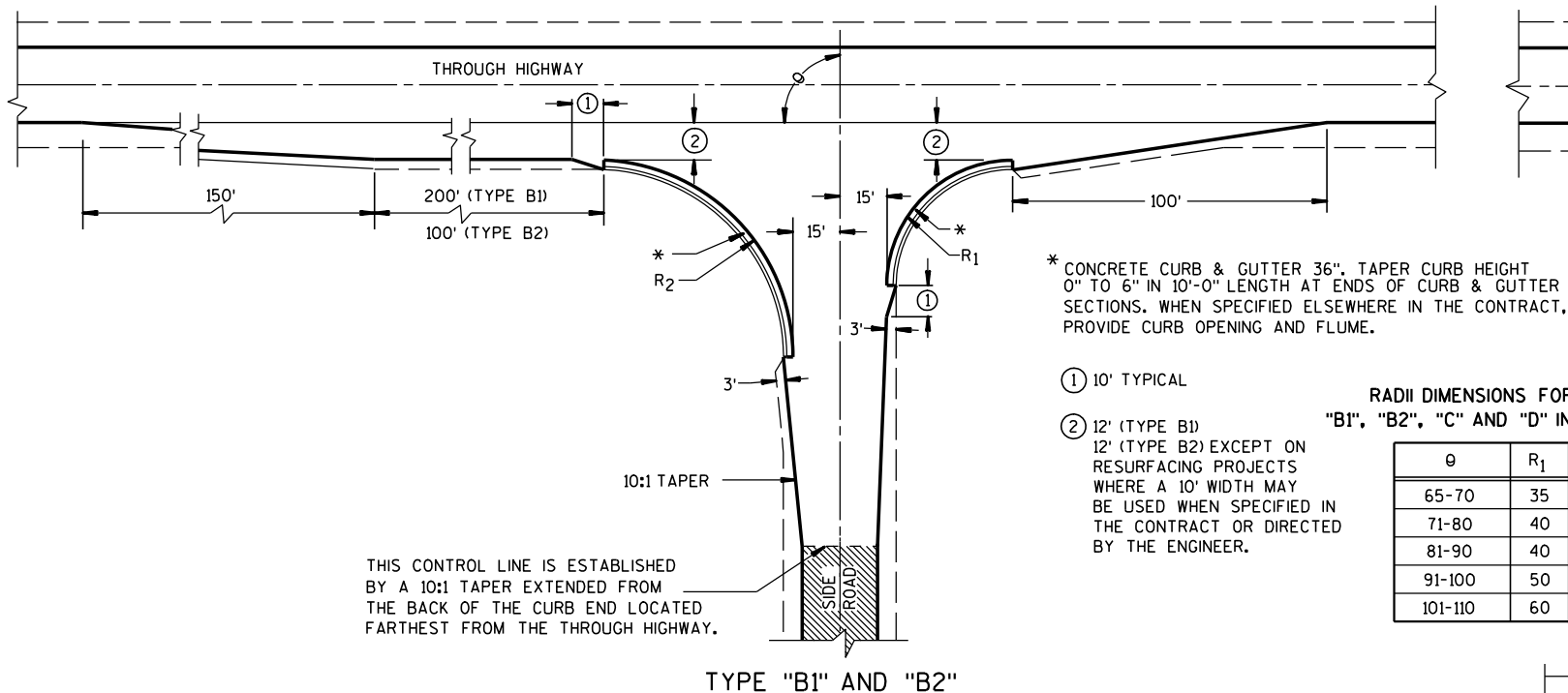
/S/ Rory L. Rhinehart

CHIEF ROADWAY DEVELOPER

FHWA

ENGINEER





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.

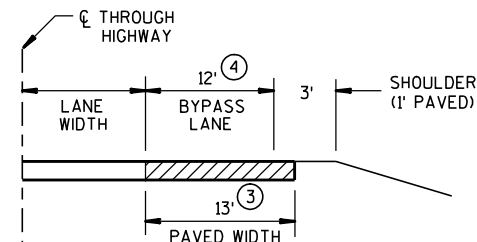
SIDE ROAD SURFACING NOTE

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.

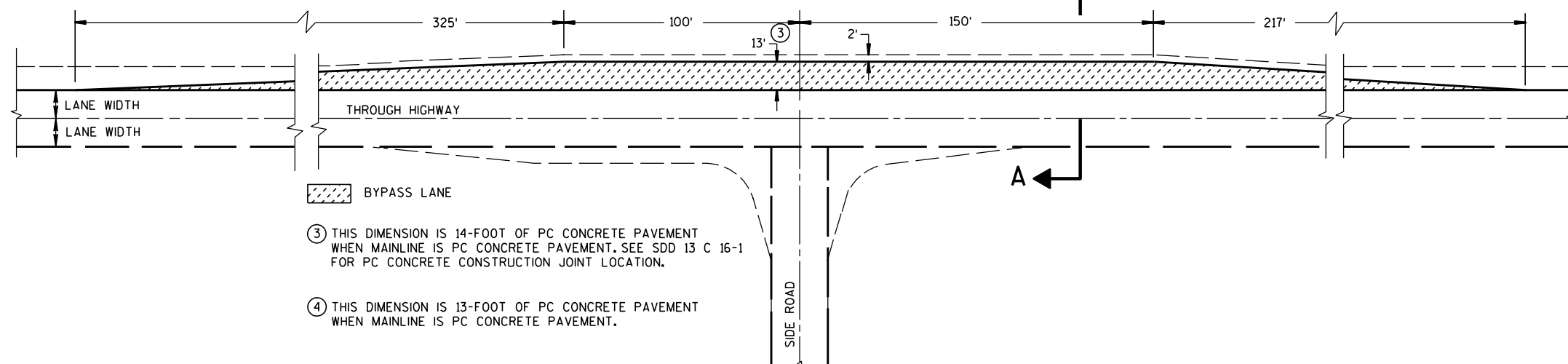
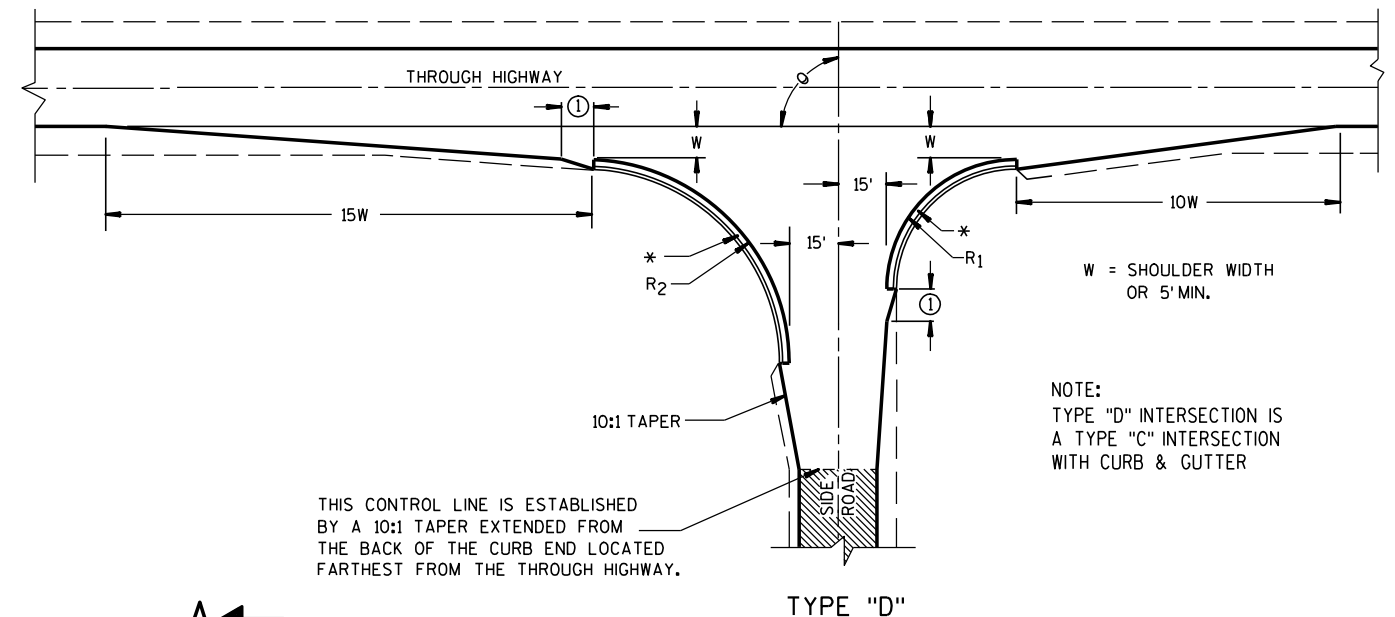
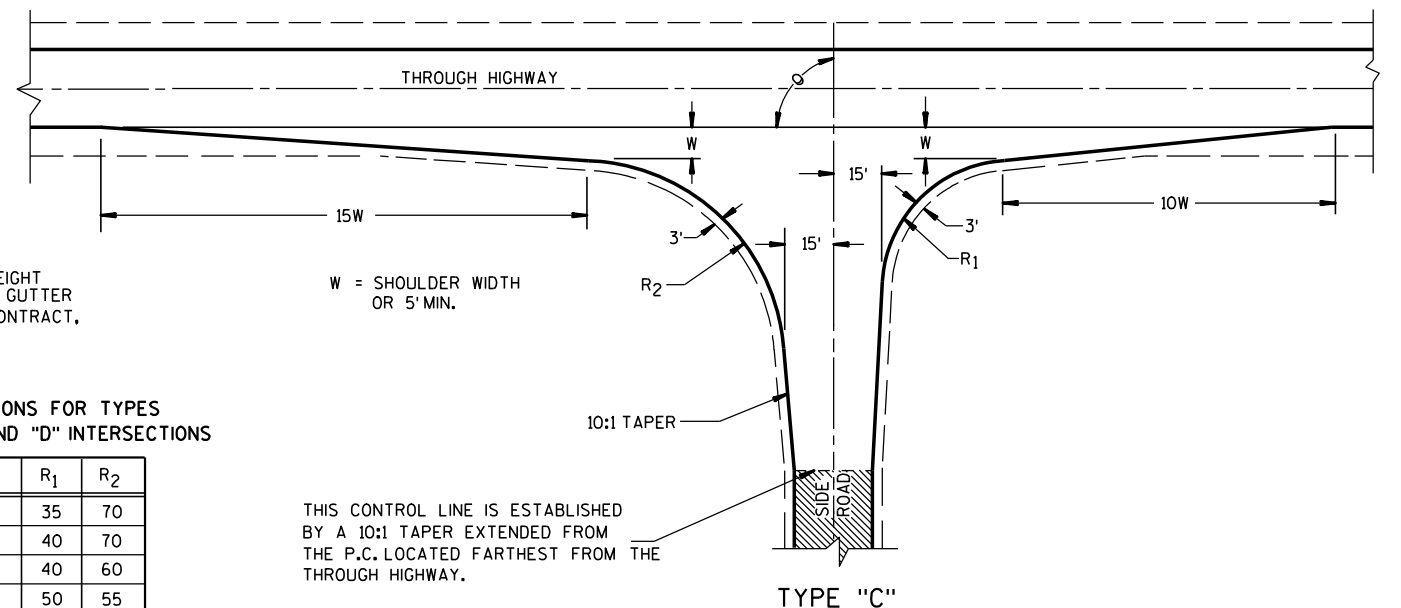
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

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

EXISTING SURFACE



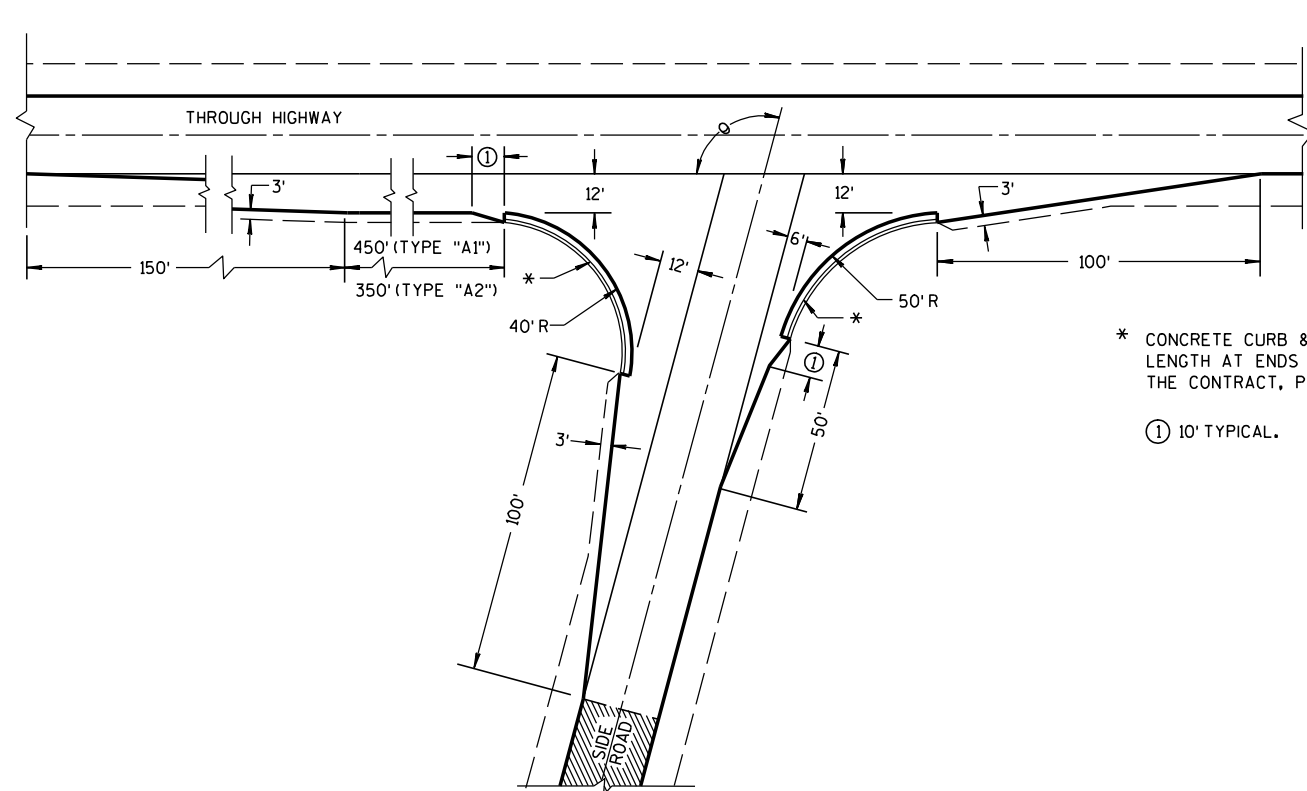
SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



TEE INTERSECTION BYPASS LANE DETAIL

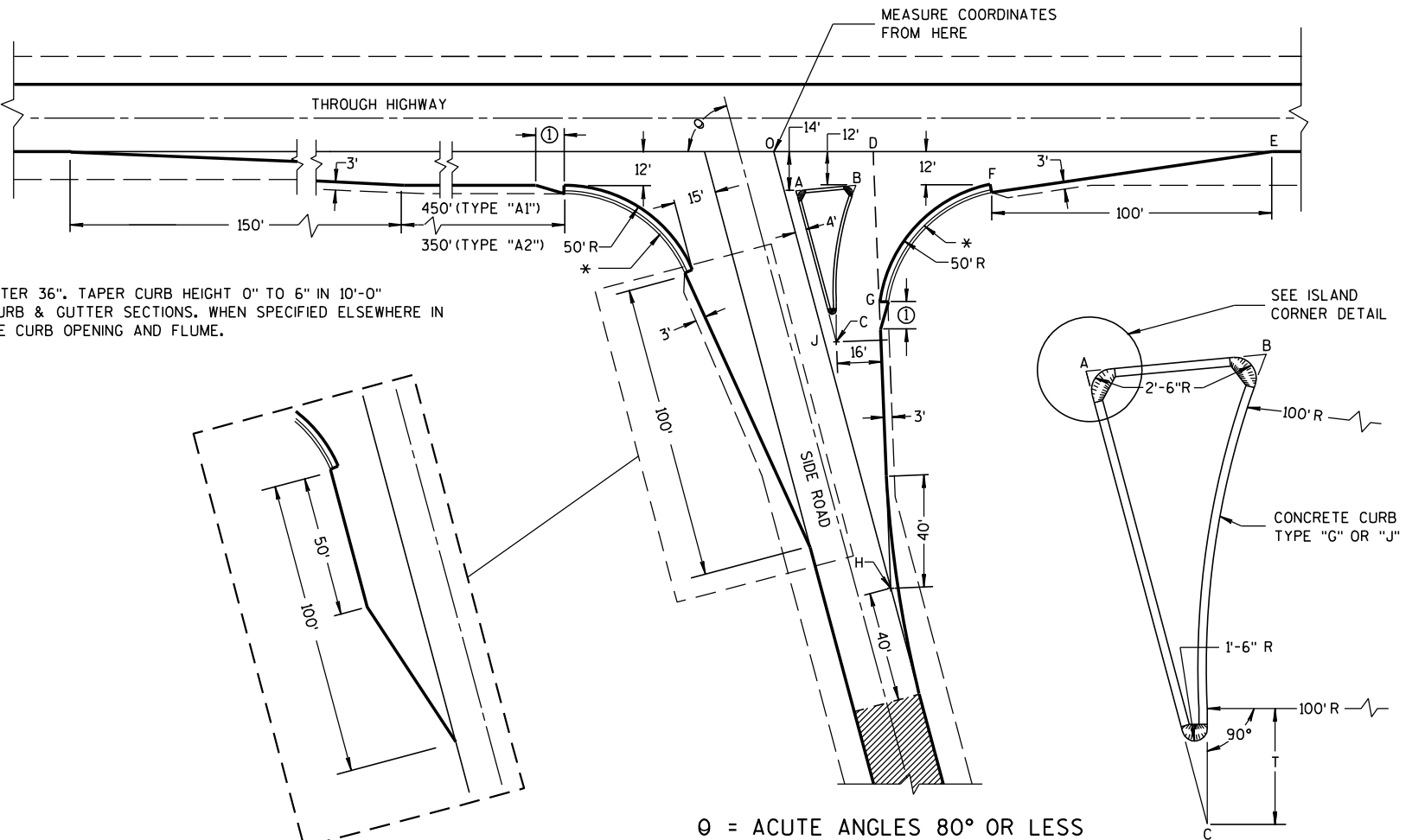
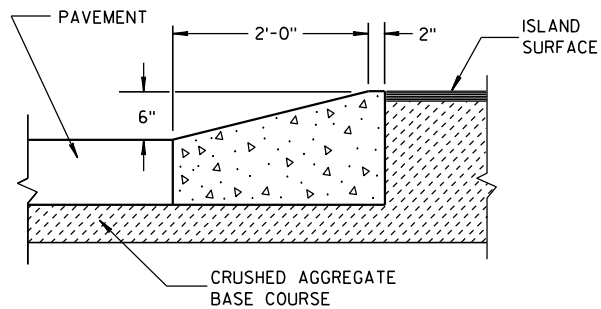
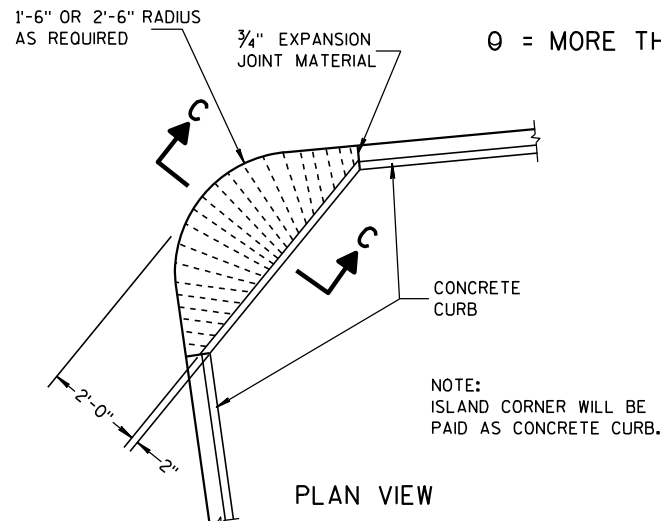
AT-GRADE SIDE ROAD
INTERSECTION, TYPES "B1", "B2",
"C" AND "D" AND TEE
INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



* 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.

① 10' TYPICAL.



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC

θ = ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

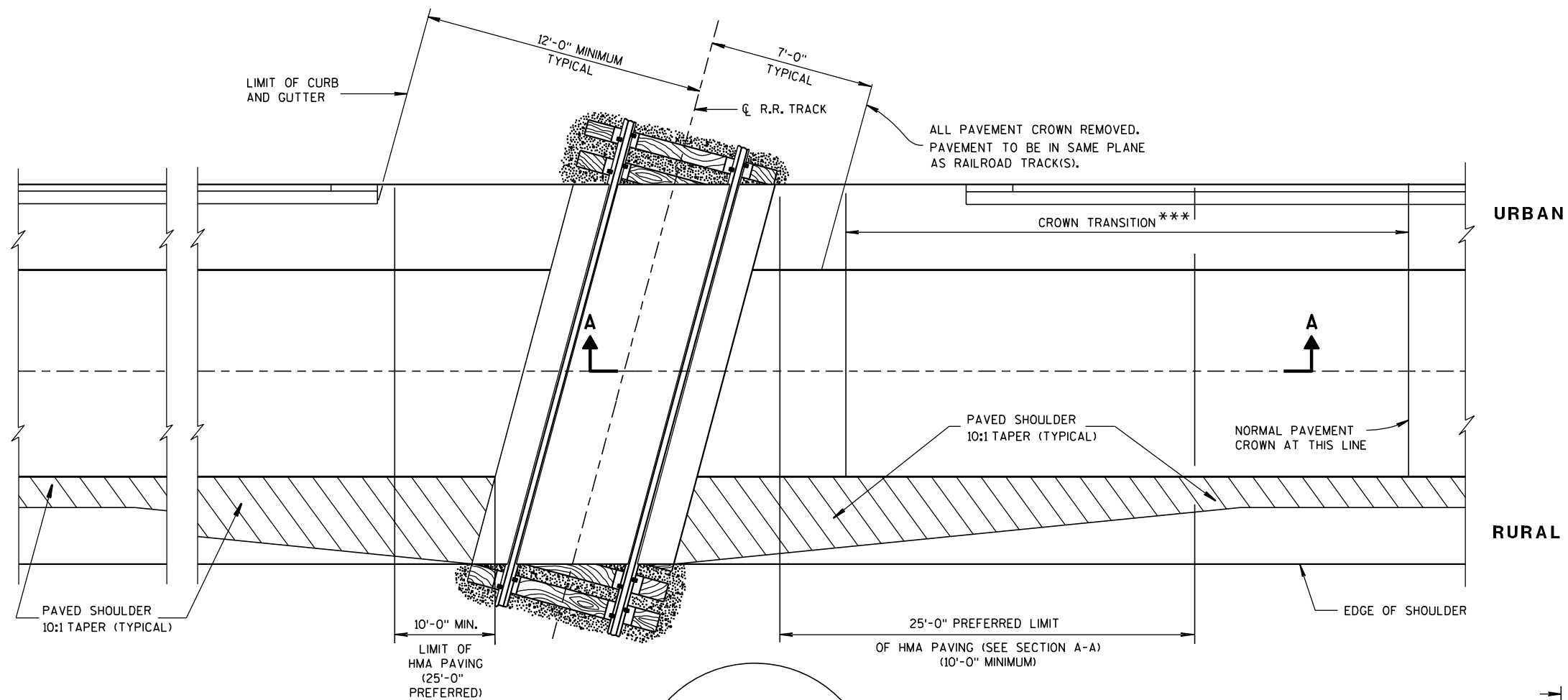
ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
	-14.0	-12.0	-72.4	0.0	0.0	-12.0	-75.5	-147.1					
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
	-14.0	-12.0	-71.6	0.0	0.0	-12.0	-71.5	-151.3					
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
	-14.0	-12.0	-70.1	0.0	0.0	-12.0	-67.5	-154.2					
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
	-14.0	-12.0	-67.9	0.0	0.0	-12.0	-63.4	-155.9					
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9
	-14.0	-12.0	-65.2	0.0	0.0	-12.0	-59.3	-156.5					

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/02 DATE /S/ Beth Conn-----
CHIEF ROADWAY DEVELOPER
FHWA



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.

TIMBER, CONCRETE OR RUBBER CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, GEOTEXTILE FABRIC AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS OTHERWISE PROVIDED.

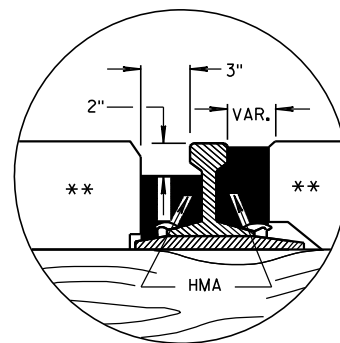
HMA PAVEMENT APPROACHES AND HMA PAVEMENT CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

HMA FLANGWAY AND FIELD FILLERS TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR WHEN NOT PROVIDED BY OTHERS. SEE DETAIL B. HMA FILLERS NOT REQUIRED WHEN RUBBER FILLERS ARE PROVIDED.

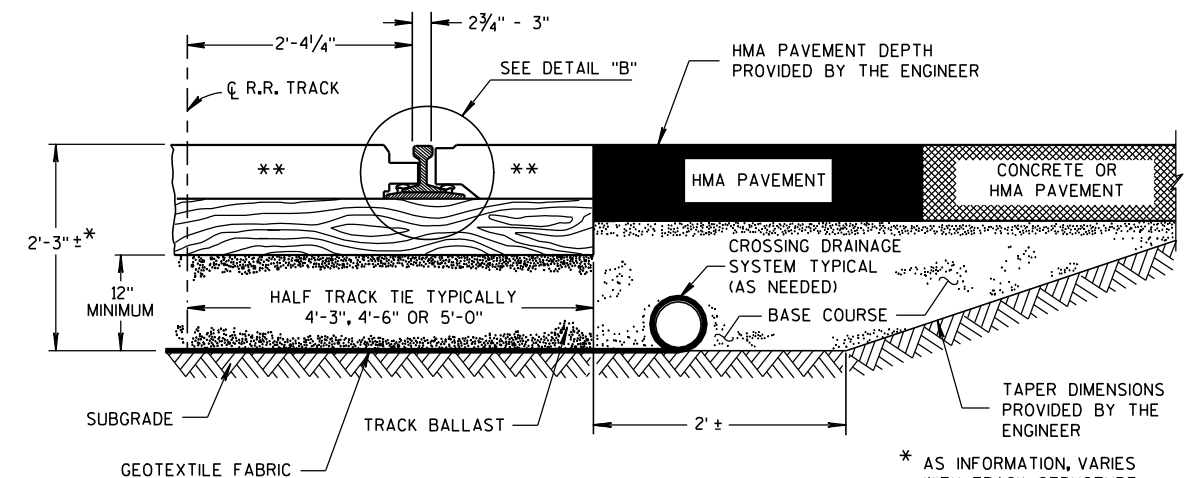
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

** CROSSING SURFACE MAY BE TIMBER, RUBBER, CONCRETE, HMA PAVEMENT OR A COMBINATION OF SUCH MATERIALS.

*** CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.

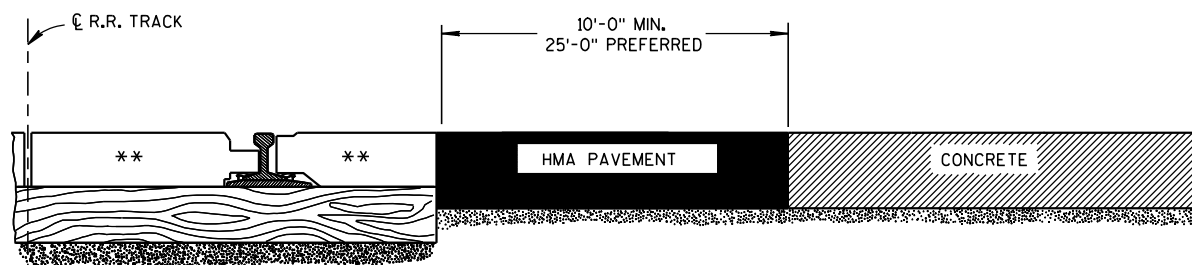


DETAIL B
HMA FLANGWAY
AND FIELD FILLERS

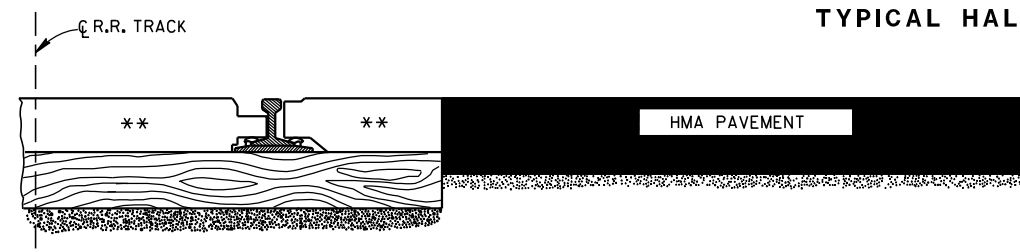


TYPICAL HALF SECTION

* AS INFORMATION, VARIES WITH TRACK STRUCTURE AND SOIL CONDITIONS



SECTION A-A
CONCRETE PAVEMENT APPROACH



SECTION A-A
HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-28-09

DATE

FHWA

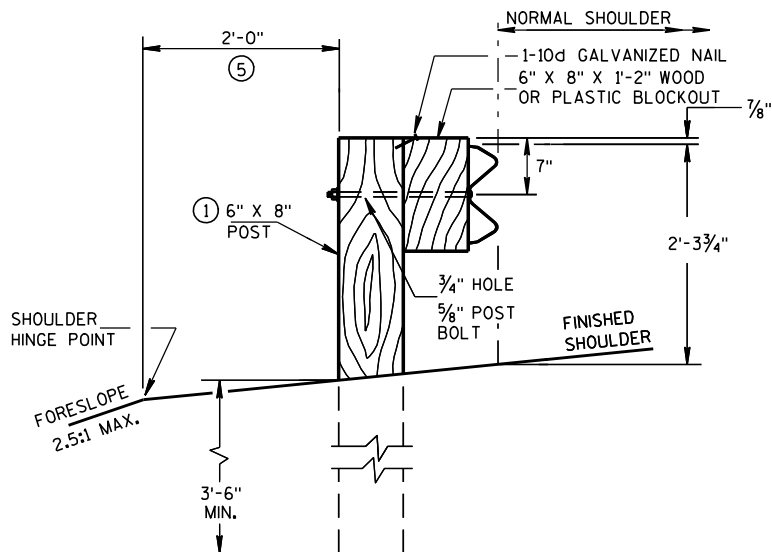
/S/ Ronald E. Adams
CHIEF, RAILROADS & HIGHWAYS DIVISION

GENERAL NOTES

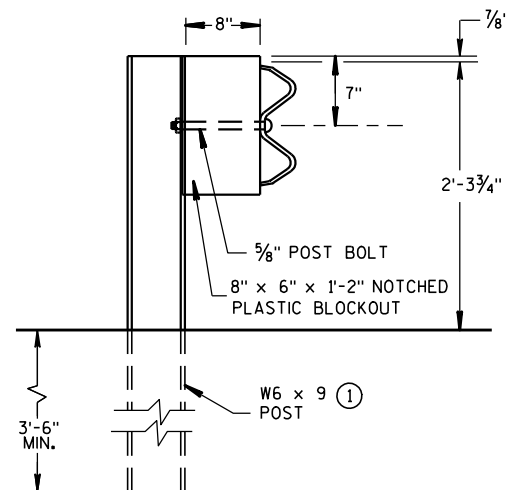
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

- ① W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.
DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- ② USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111 EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPALTER COATING ON GALVANIZED POSTS.
- ③ INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ④ USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- ⑤ IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
- ⑥ IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.

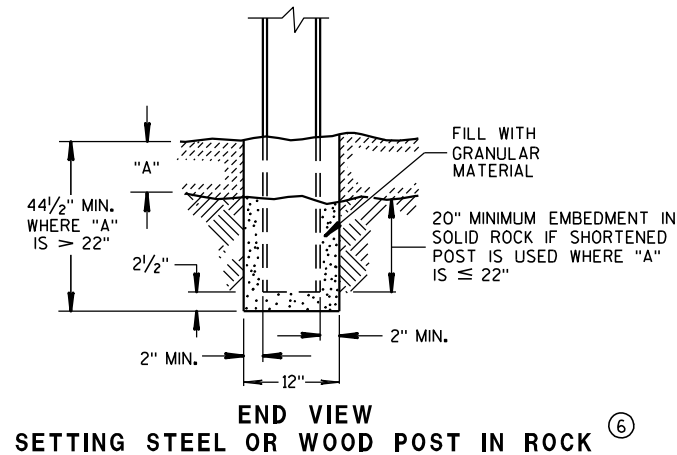
INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



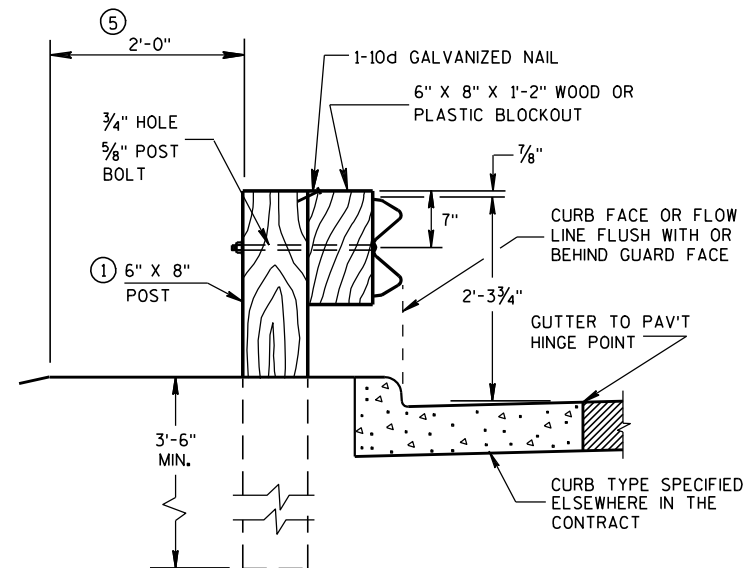
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



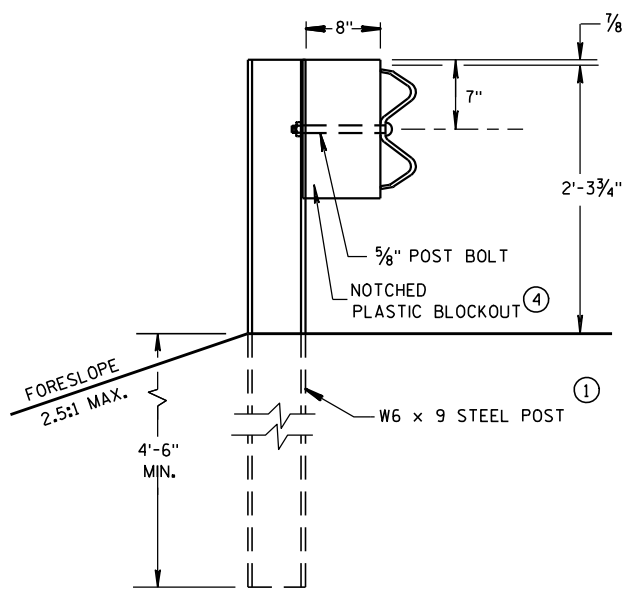
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



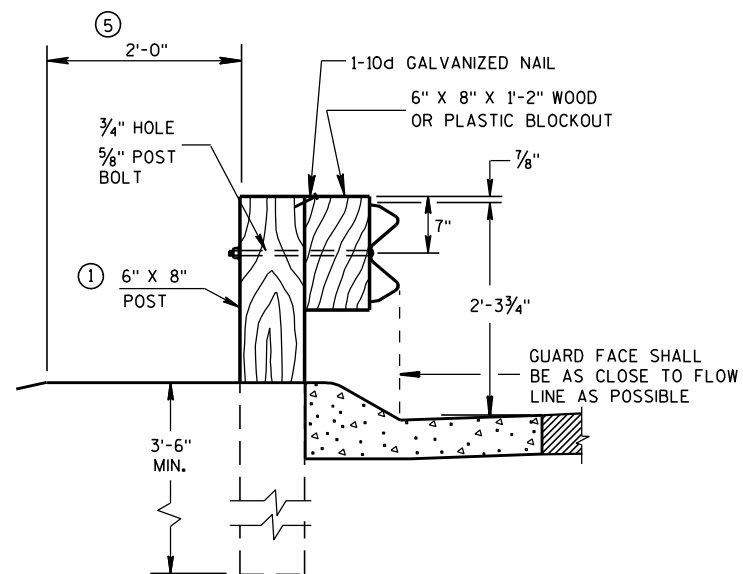
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥



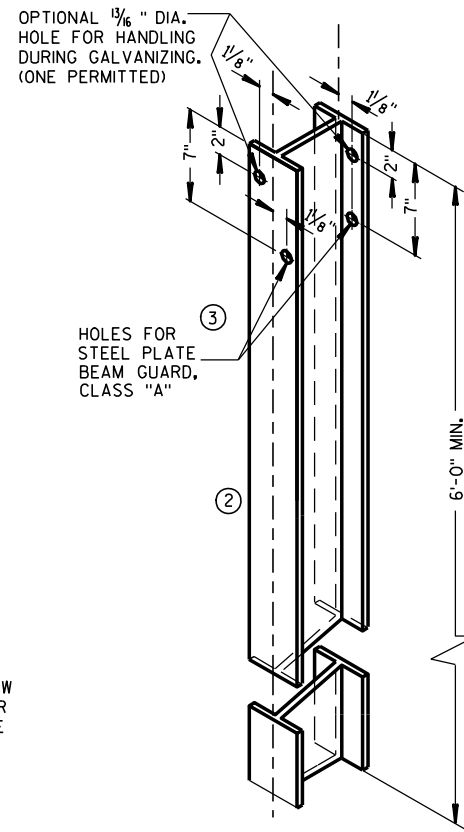
END VIEW
LOCATED ALONG A CURBED ROADWAY



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)

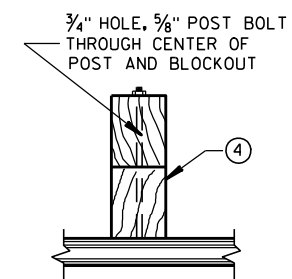


END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

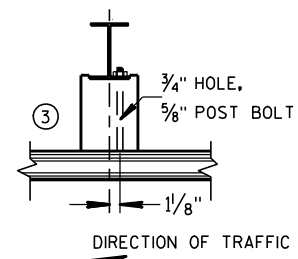


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①

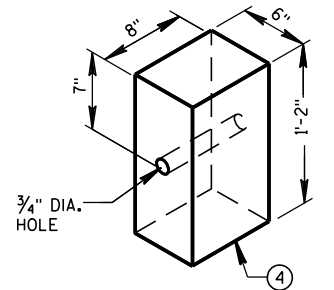
ALL HOLES 1 3/8" DIAMETER EXCEPT AS NOTED



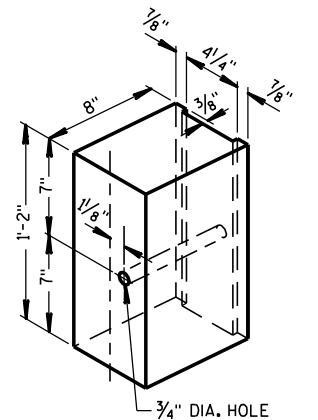
PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS

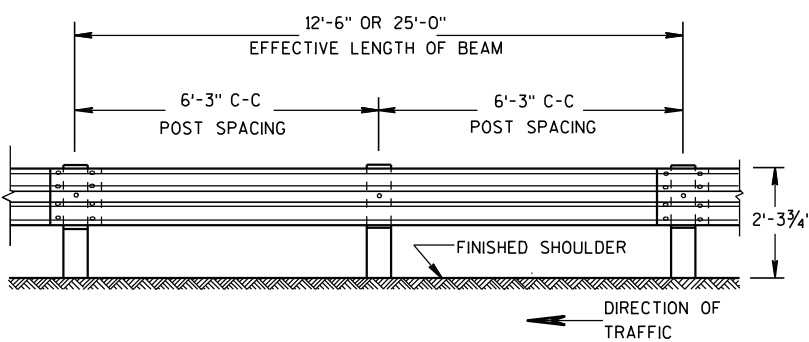


TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS ①

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

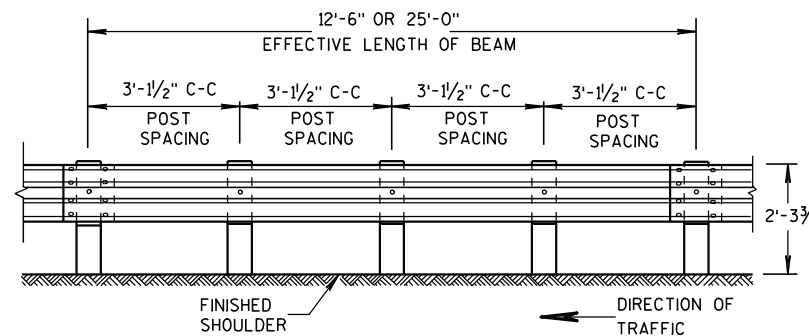
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

80



FRONT VIEW

POST SPACING STANDARD INSTALLATION



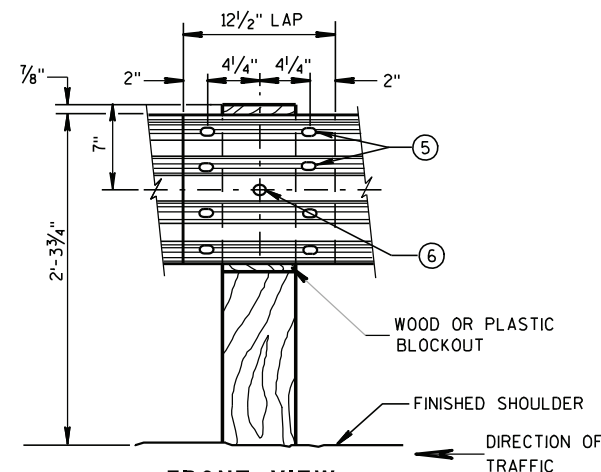
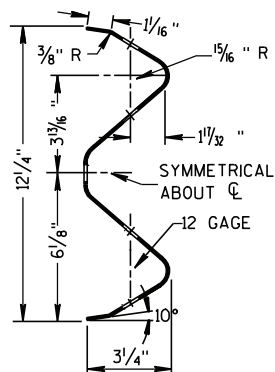
FRONT VIEW

POST SPACING FOR LONGER POST
AT HALF POST SPACING W BEAM (LHW)

REFLECTOR SPACING^②

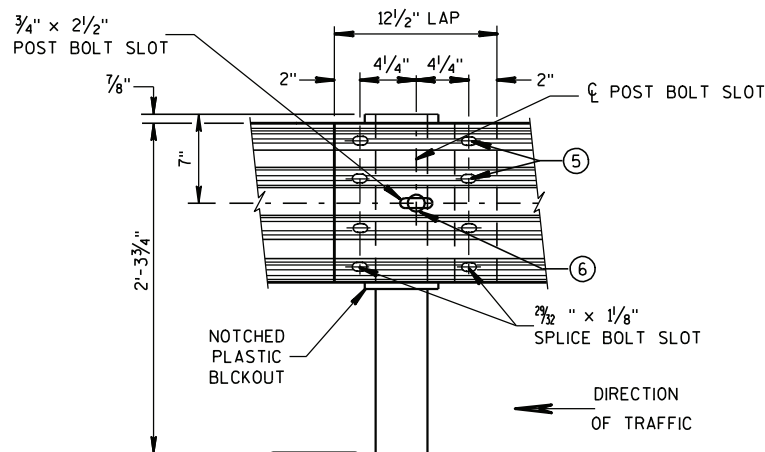
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 ③ 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 ④ 2	3

SECTION THRU W BEAM



FRONT VIEW

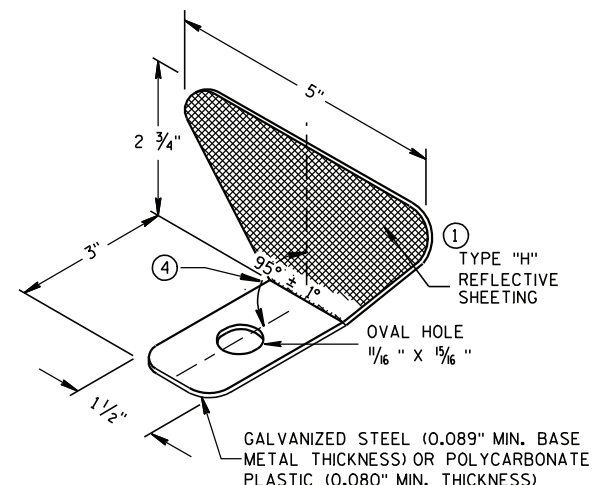
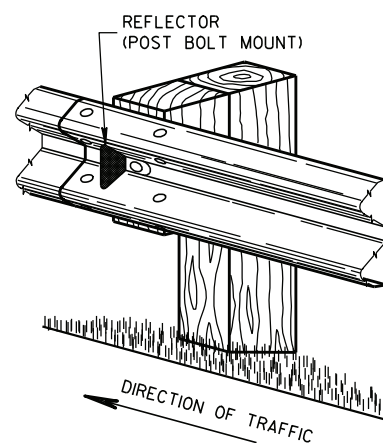
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL



FRONT VIEW

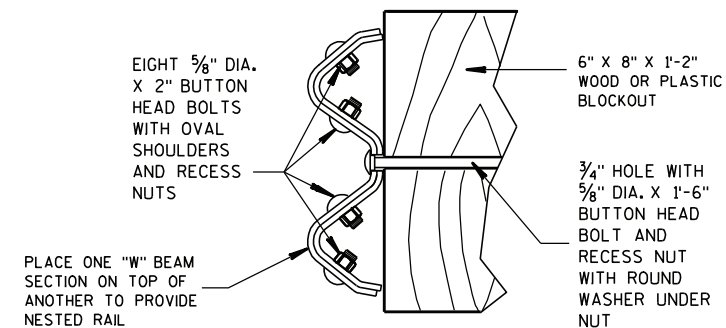
BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS
OF STEEL PLATE BEAM GUARD



GENERAL NOTES

- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
- ⑤ 8 - 5/8" ϕ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑥ 5/8" ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



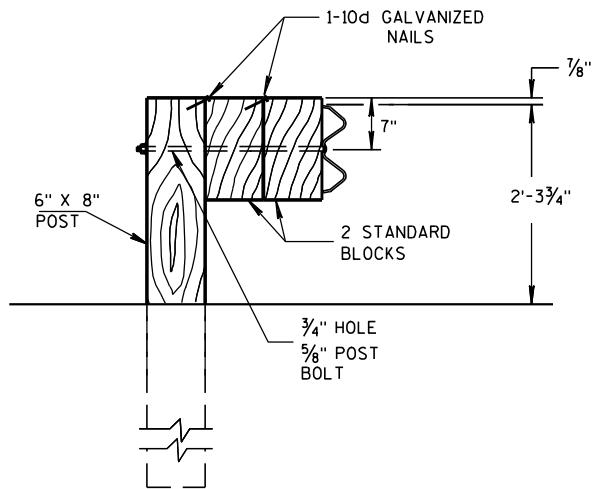
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

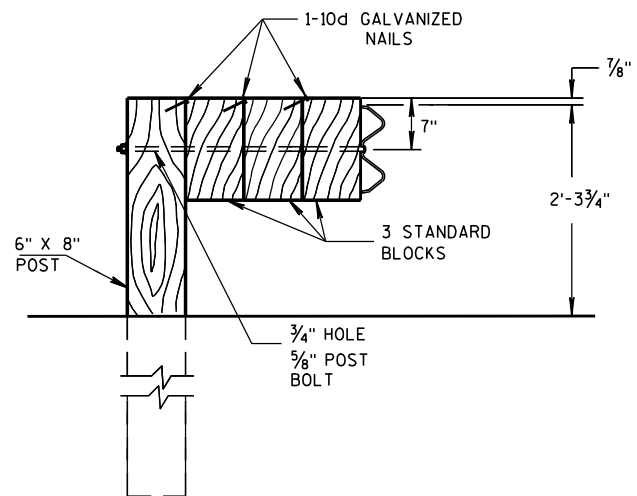
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

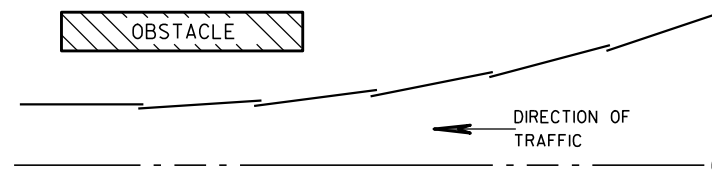


DETAIL FOR TRIPLE BLOCKS

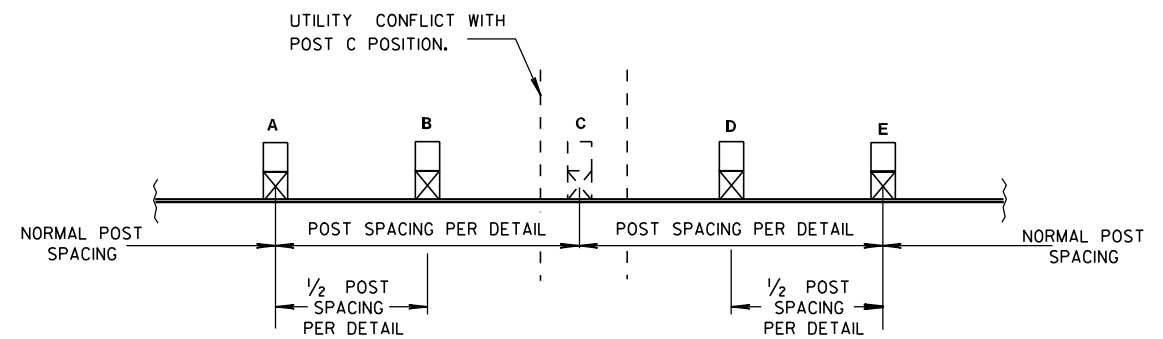
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.



PLAN VIEW BEAM LAPPING DETAIL

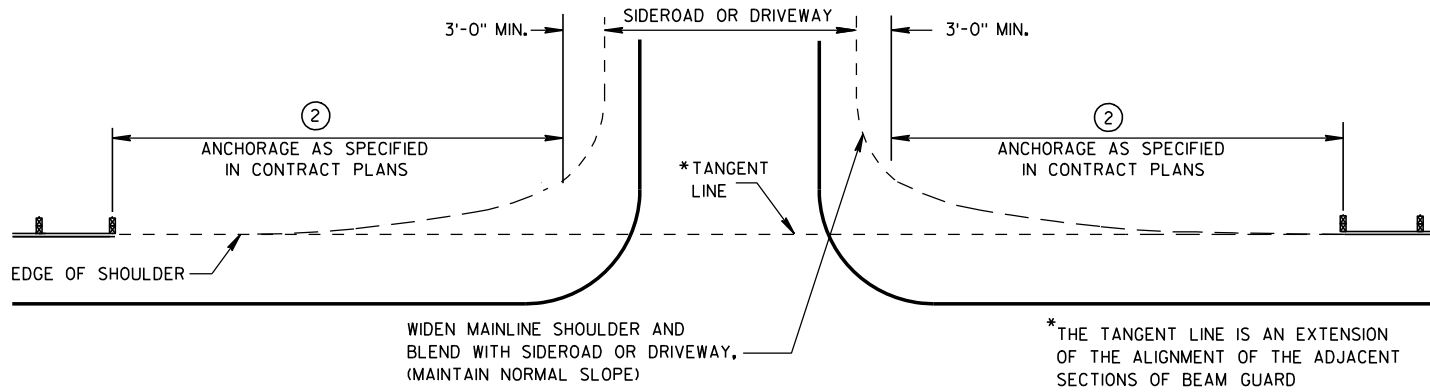


POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

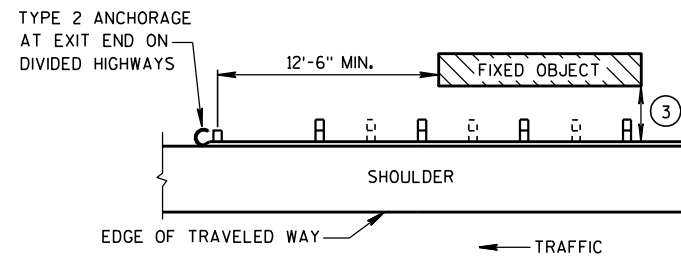
STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

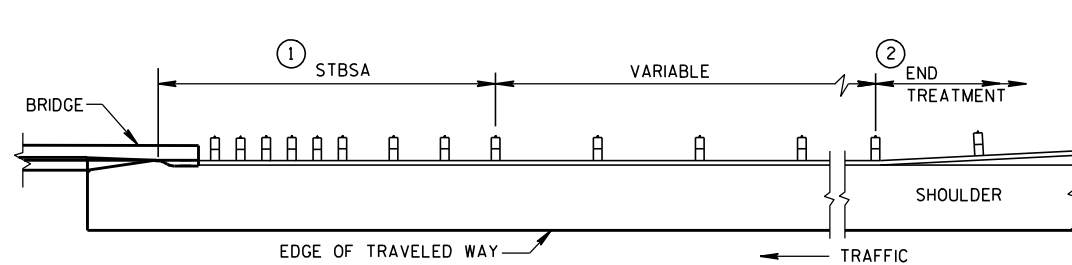
APPROVED
5/23/11
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS 82 ENT
ENGINEER
FHWA



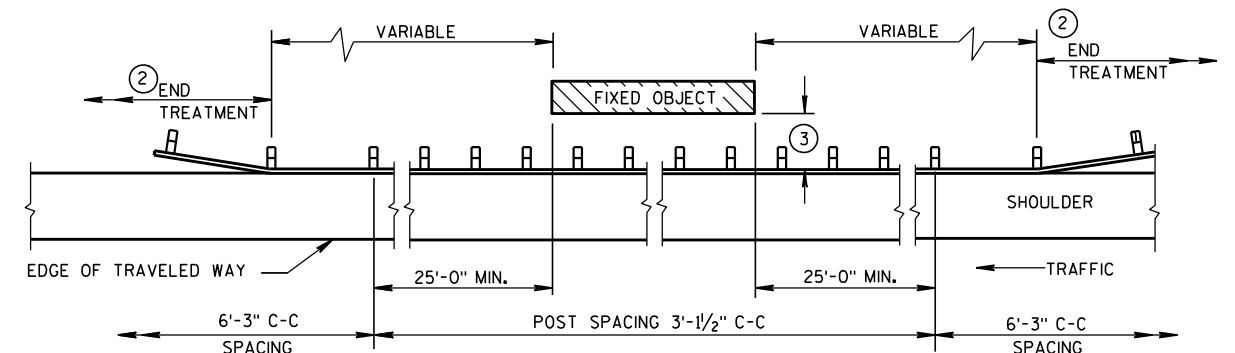
BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC



BEAM GUARD AT FULL WIDTH BRIDGES

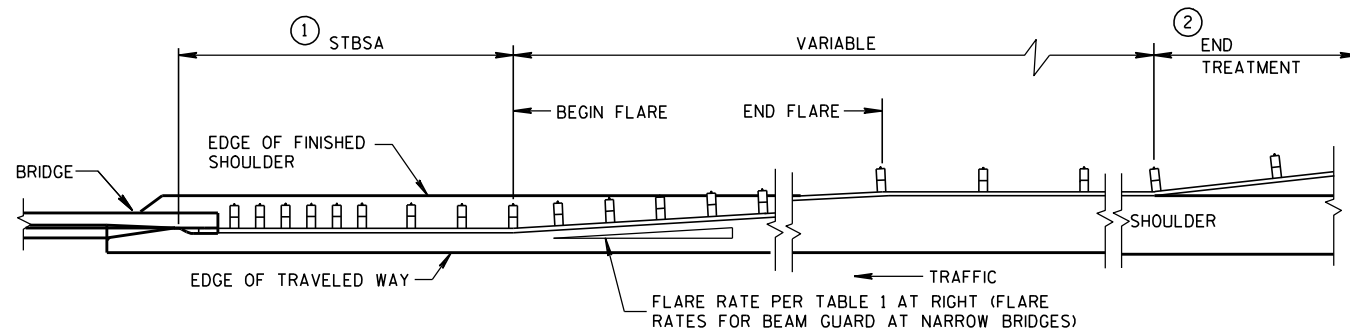


BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")

TABLE 1
FLARE RATES FOR BEAM
GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1



BEAM GUARD AT NARROW BRIDGES (FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

- STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.
- USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1 1/2"
4'-6"	6' - 3"

STEEL PLATE BEAM GUARD
CLASS "A"
AT BRIDGES, OBSTACLES
AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8-21-07 DATE /S/ Jerry H. Zoon
ROADWAY STANDARDS (83) ENGINEER
FHWA

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	**	STEEL TUBE: OPTION 1 - QUANTITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANTITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
③	2	SOIL PLATE: 2'-0" X 1'-6" X 1/4" **
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA, 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA, 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	REFLECTIVE SHEETING TYPE H: 18" X 18"
⑮	1	E.A.T. MARKER POST

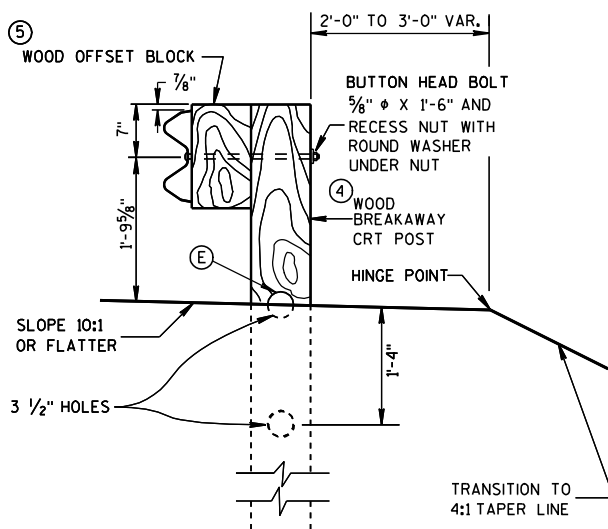
GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL 5/8" Ø X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

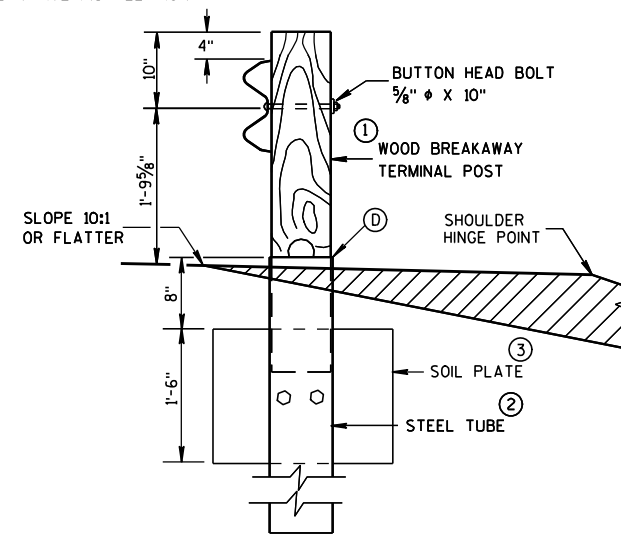
- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.
- (D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.
- (F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER OF E.A.T. STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.
- DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

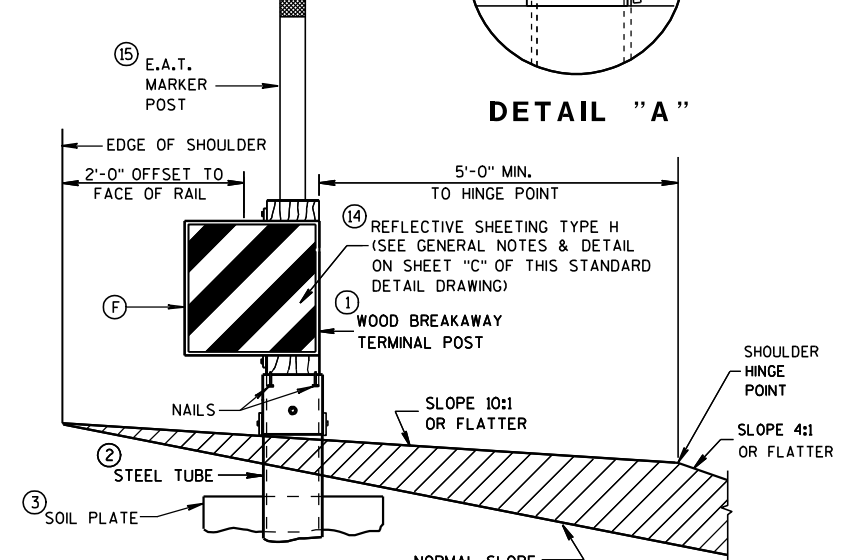
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



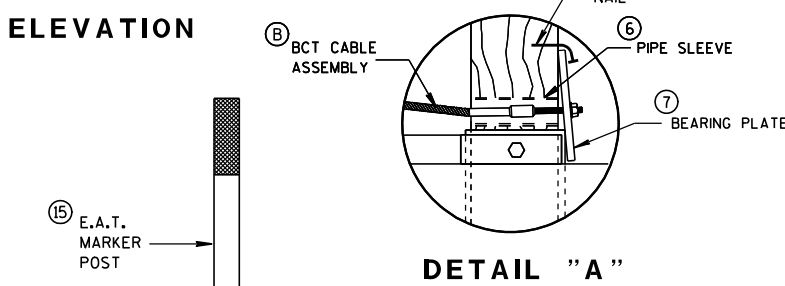
SECTION C-C
TYPICAL AT POST NOS. 6, 8



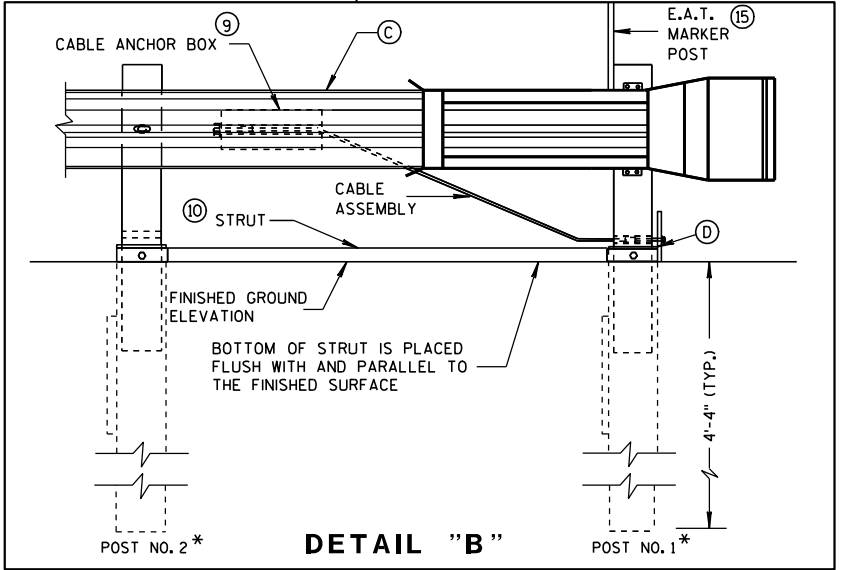
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



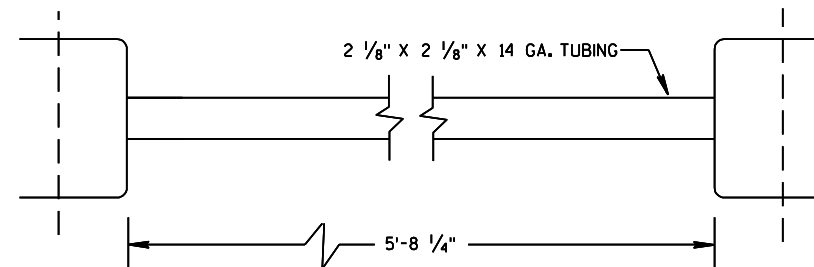
DETAIL "A"



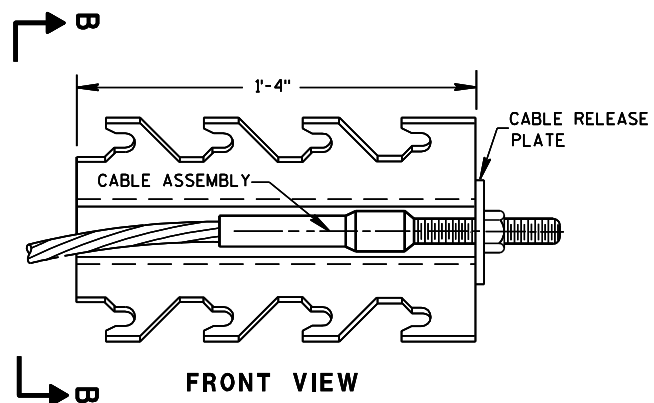
DETAIL "B"

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



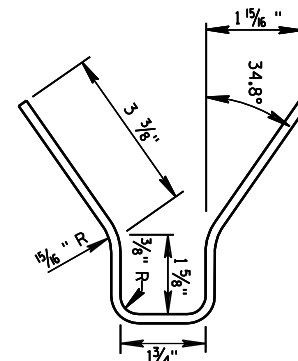
⑩ STRUT DETAIL (SKT-350)



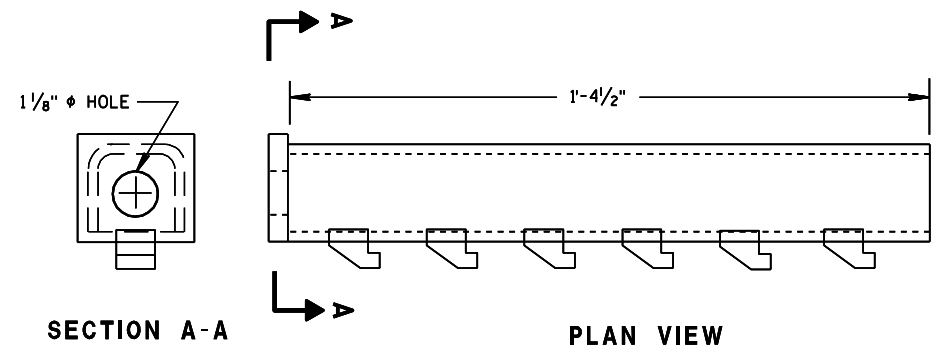
FRONT VIEW

⑨ CABLE ANCHOR BOX (SKT-350)

(SKT-350)



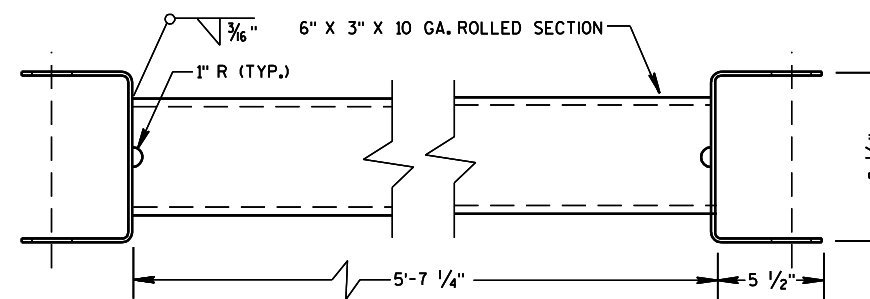
SECTION B-B



SECTION A-A

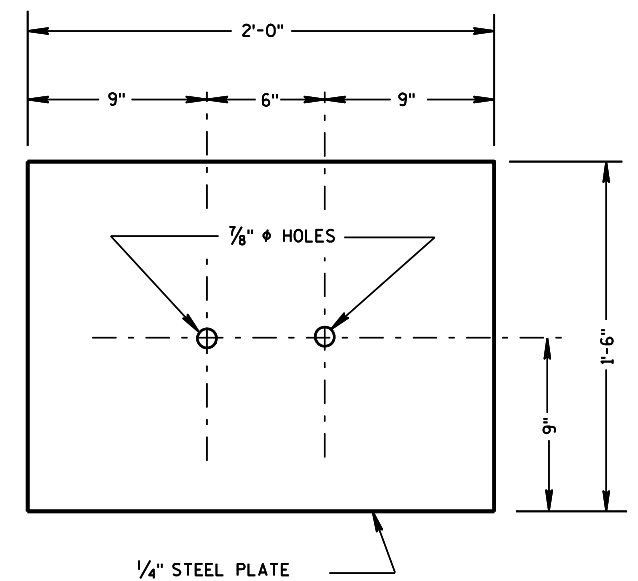
PLAN VIEW

⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



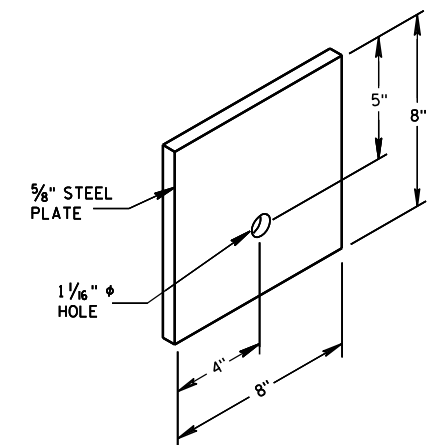
⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)

(ET-2000/ET-2000 PLUS)



③ SOIL PLATE

(SKT-350, ET-2000/ET-2000 PLUS)



⑦ STEEL BEARING PLATE

(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



⑤ **WOOD OFFSET BLOCK**
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



(G) 1/2" DIA. X 3" LAG BOLT WITH WASHER.



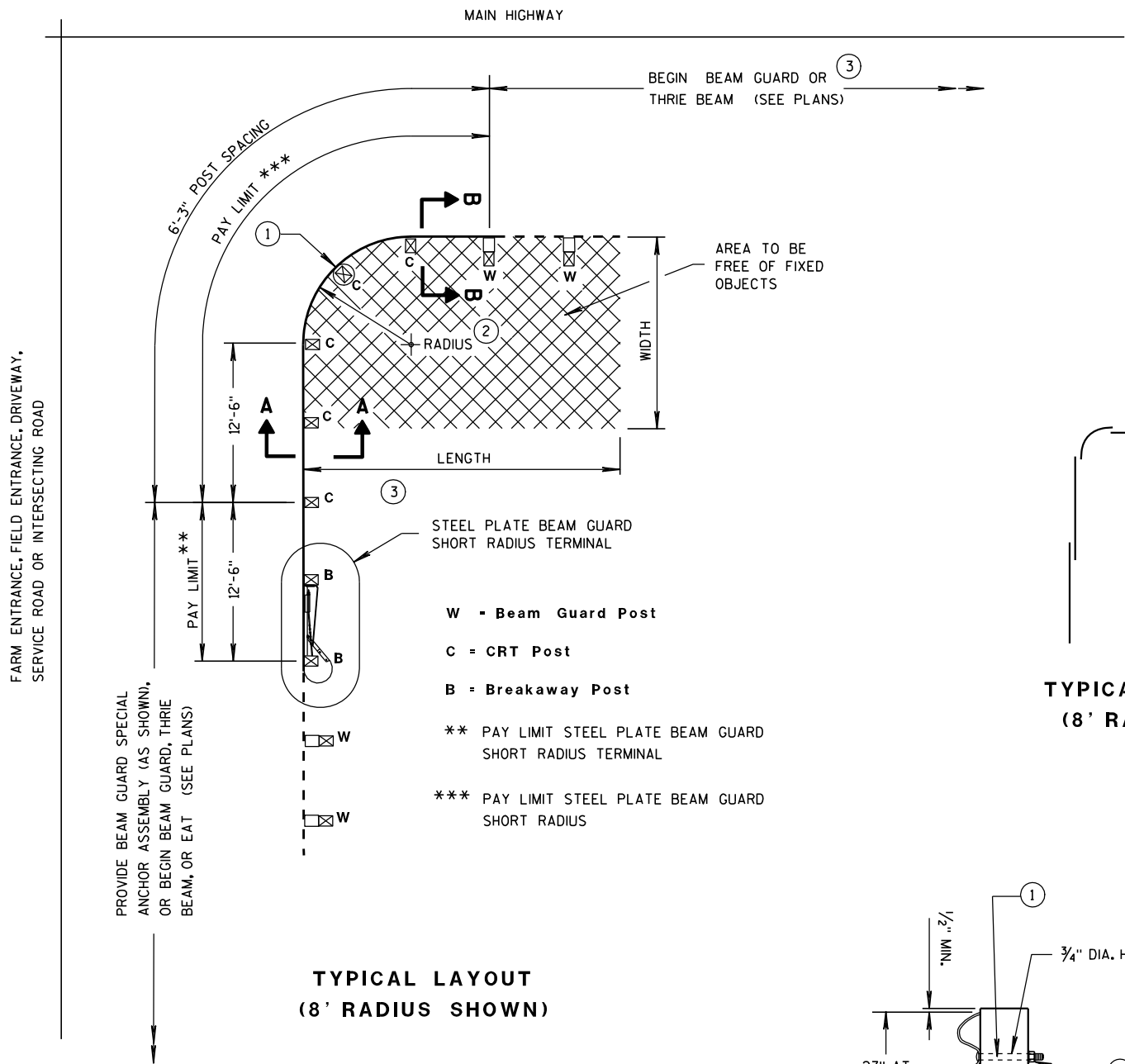
14 REFLECTIVE SHEETING DETAILS

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

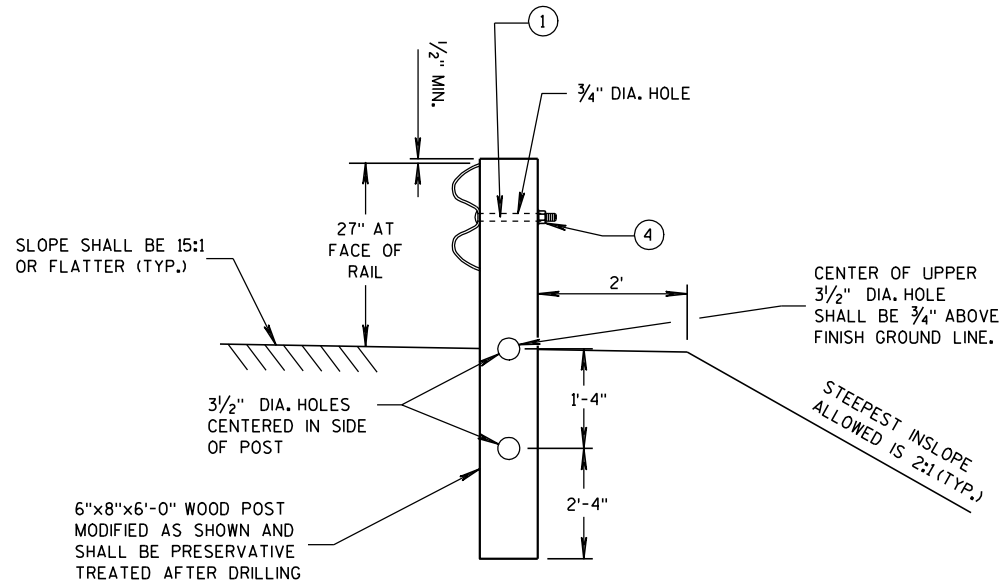
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-12-10 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 86 INT
FHWA ENGINEER



TYPICAL LAYOUT
(8' RADIUS SHOWN)



SECTION A-A
(CRT POST)

TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2, UNLESS NOTED OTHERWISE.

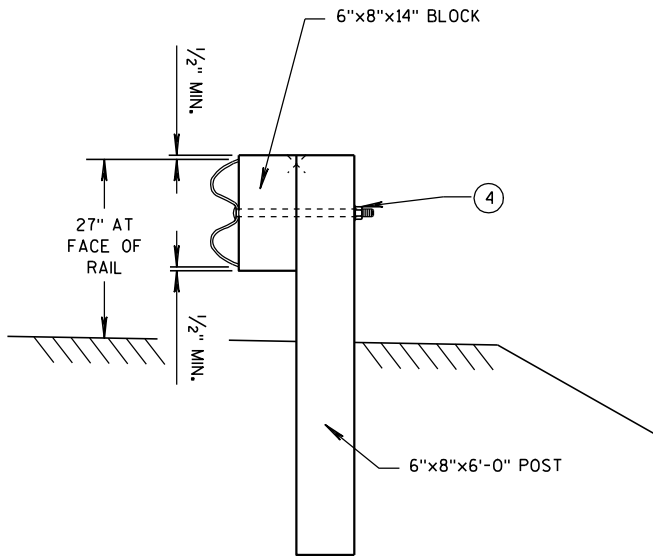
SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

- ① ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.
- ② RADIUS FROM 8' - 36'. SEE PLAN.
- ③ HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.
- ④ 5/8" Ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

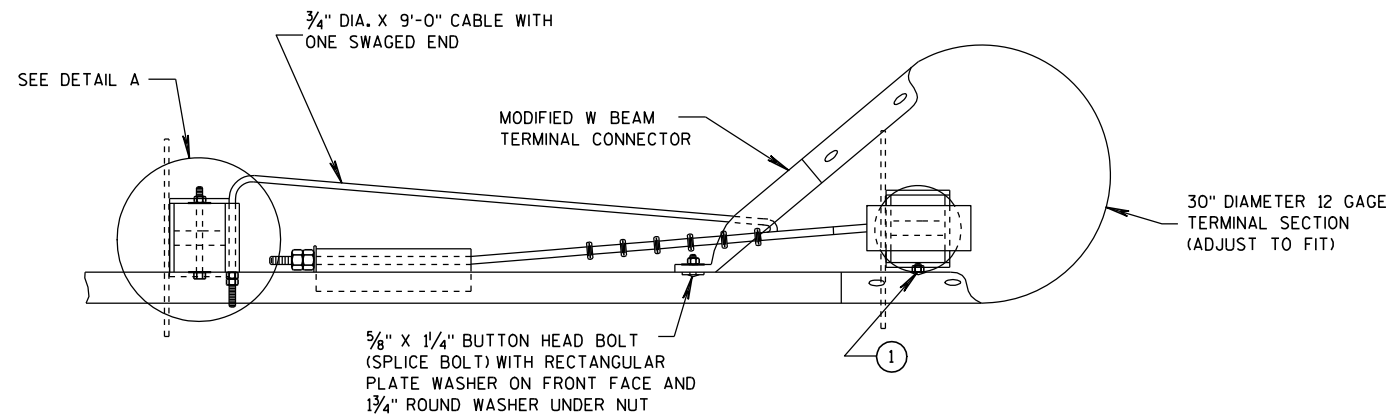
* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



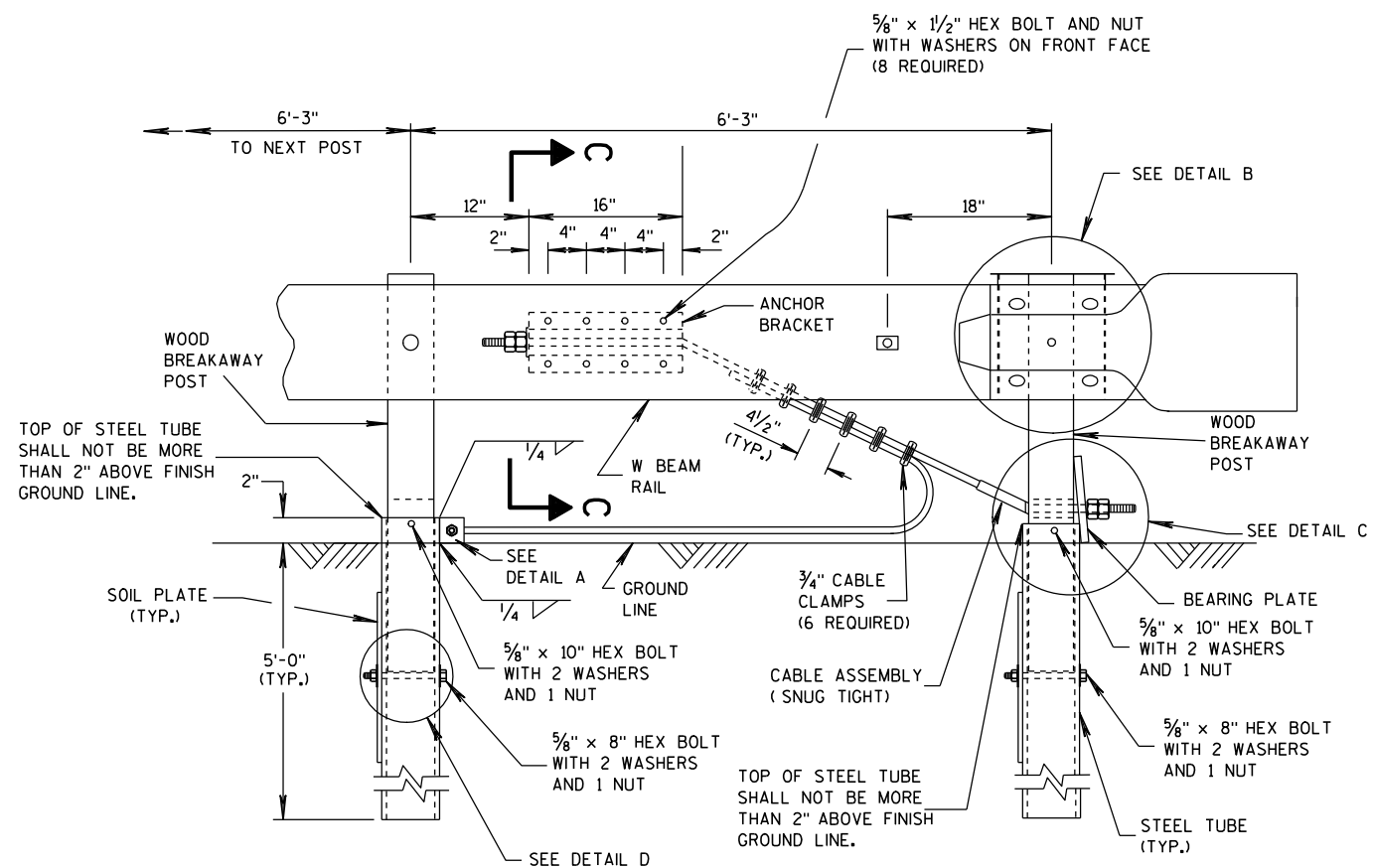
SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW

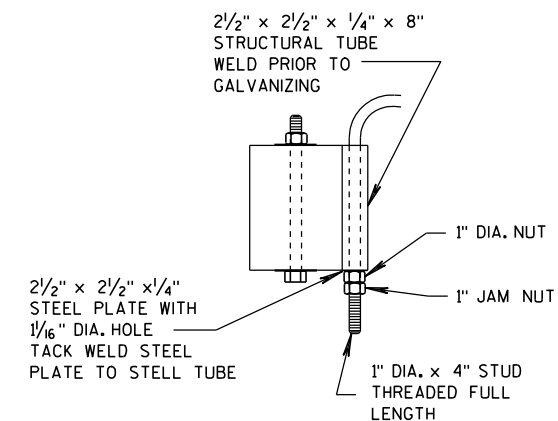


ELEVATION VIEW

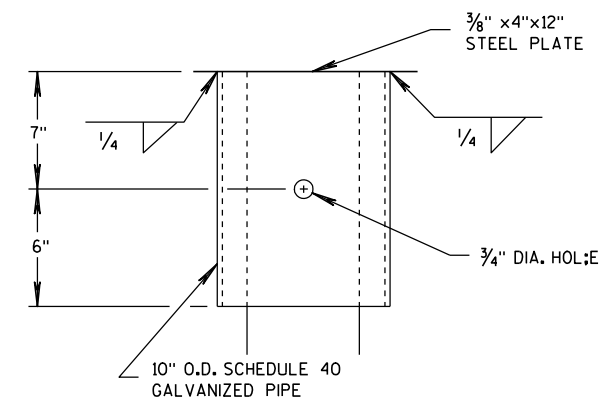
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

GENERAL NOTES

- ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A 5/8" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.
- INSTALL GALVANIZED 3/4" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED FLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A

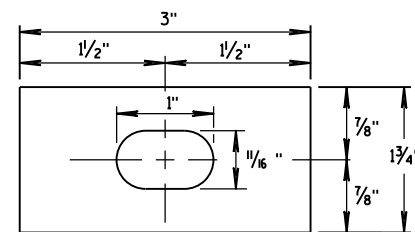


DETAIL B

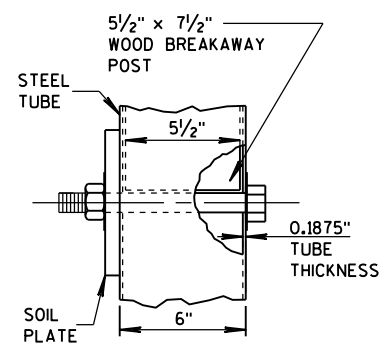
(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

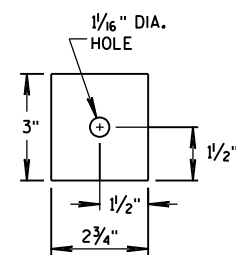
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



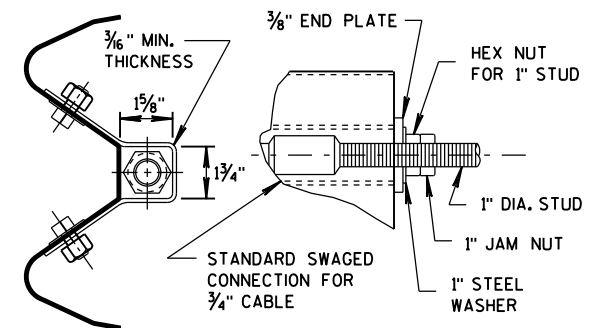
**RECTANGULAR
PLATE WASHER**



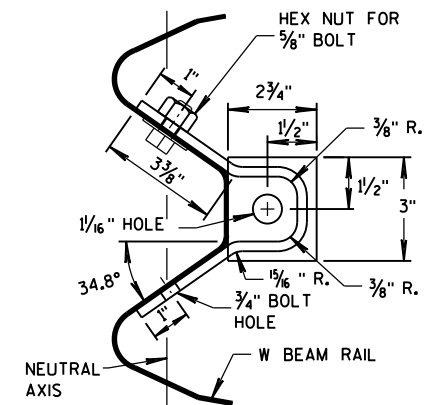
DETAIL D



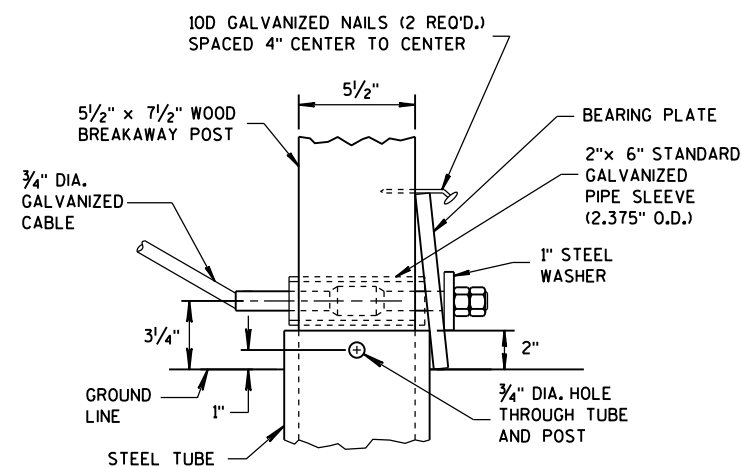
END PLATE



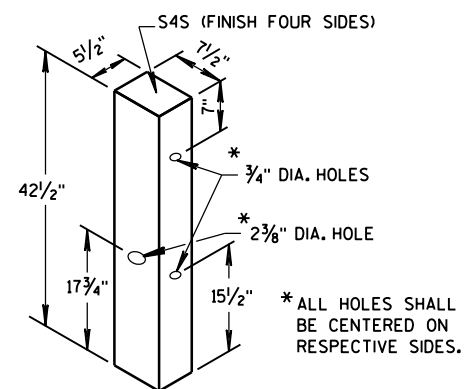
SECTION C-C
(END PLATE REMOVED)



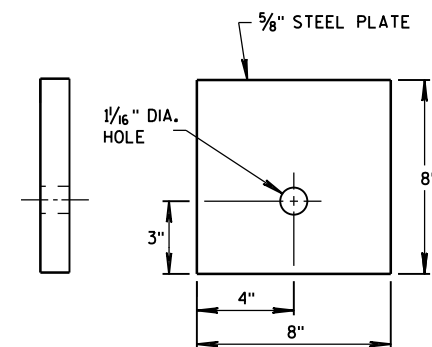
ANCHOR BRACKET



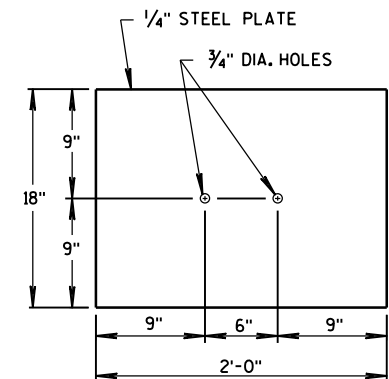
DETAIL C



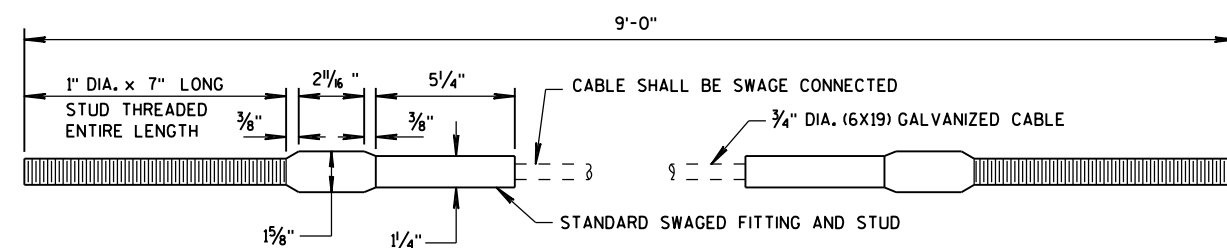
WOOD BREAKAWAY POST



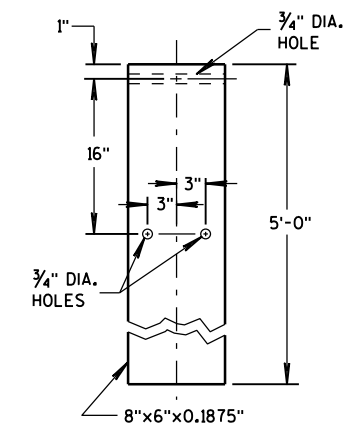
BEARING PLATE



SOIL PLATE



CABLE ASSEMBLY

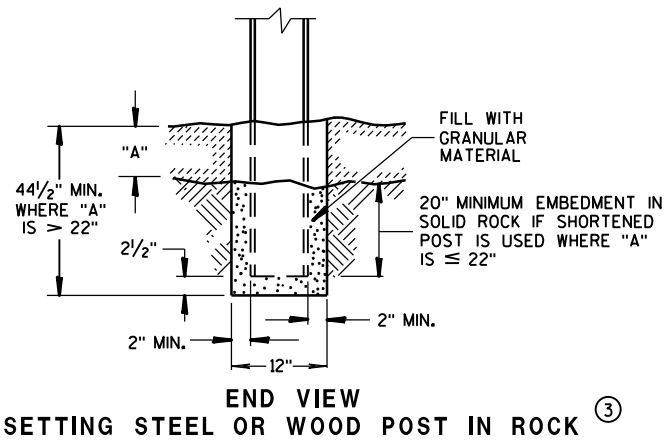


STEEL TUBE

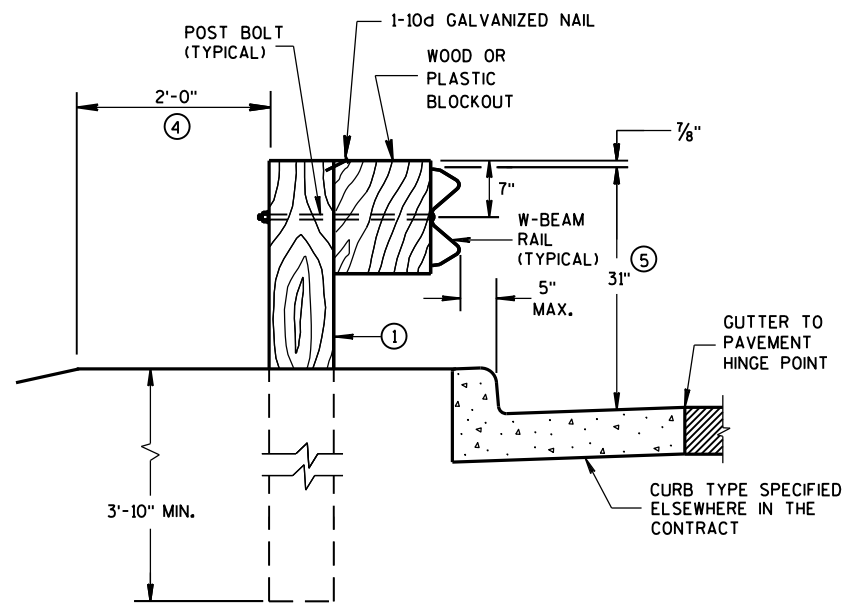
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/18/08 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER 89 INT
FHWA	

GENERAL NOTES

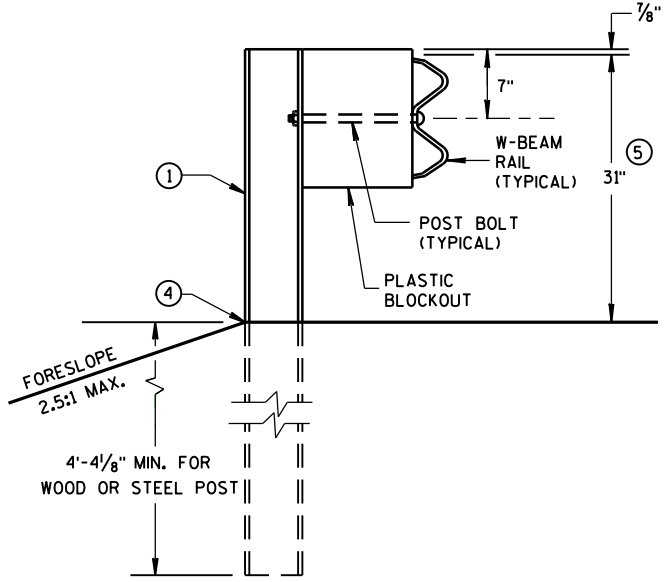
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. 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 2 1/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND 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 27 3/4" TO 32".



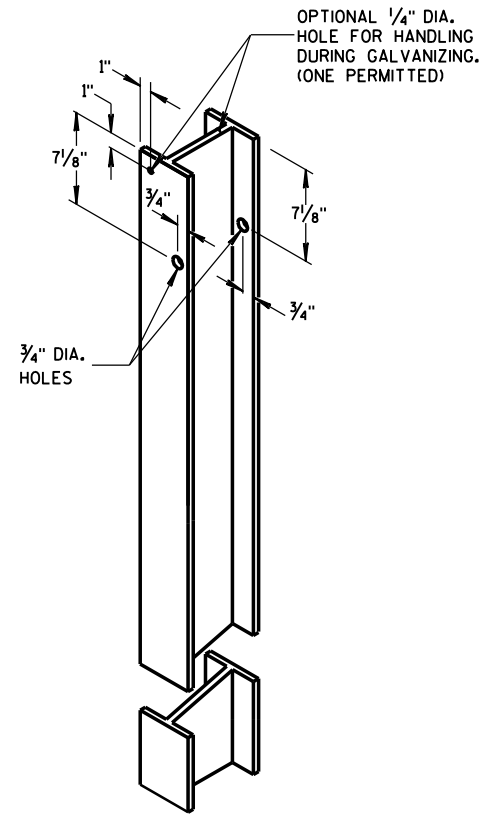
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



END VIEW
LOCATED ALONG A CURBED ROADWAY



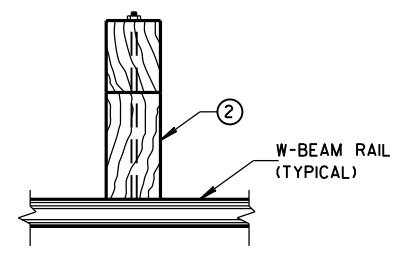
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



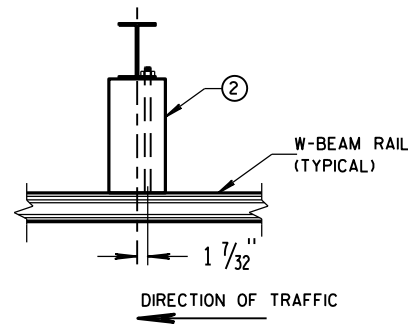
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



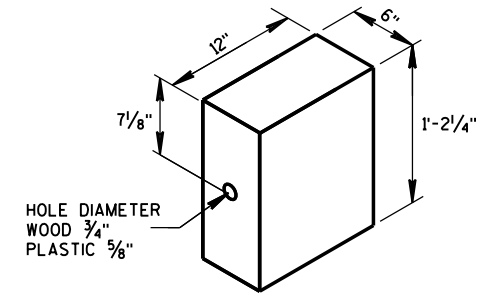
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



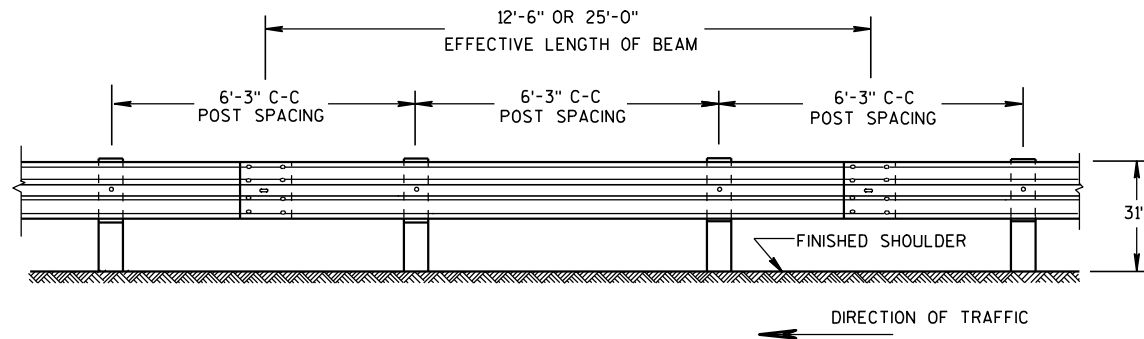
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

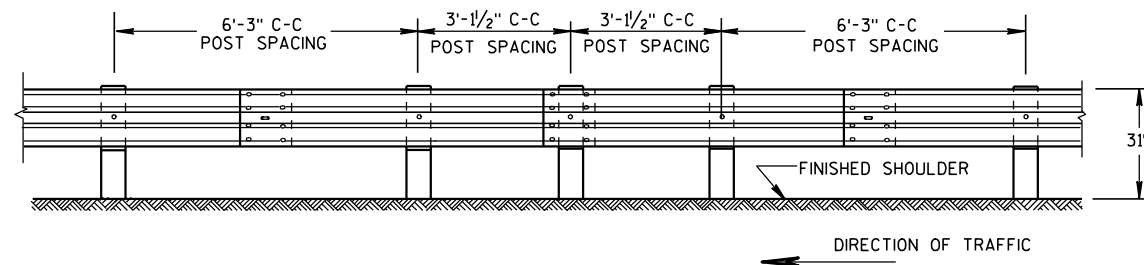
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



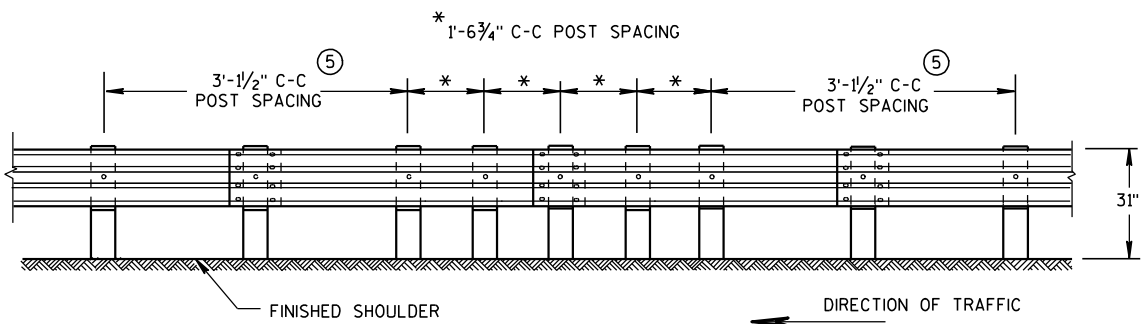
FRONT VIEW

POST SPACING STANDARD INSTALLATION



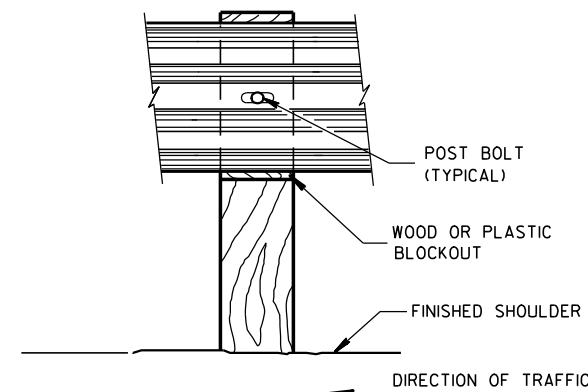
FRONT VIEW

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

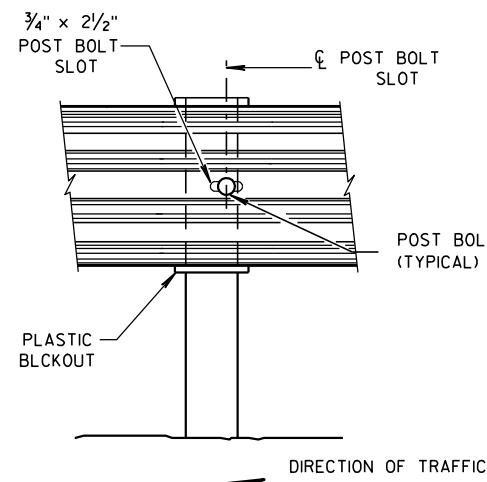


FRONT VIEW

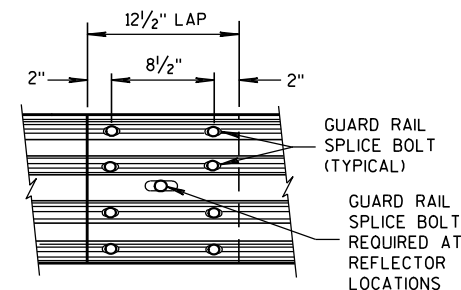
QUARTER POST SPACING (QS)



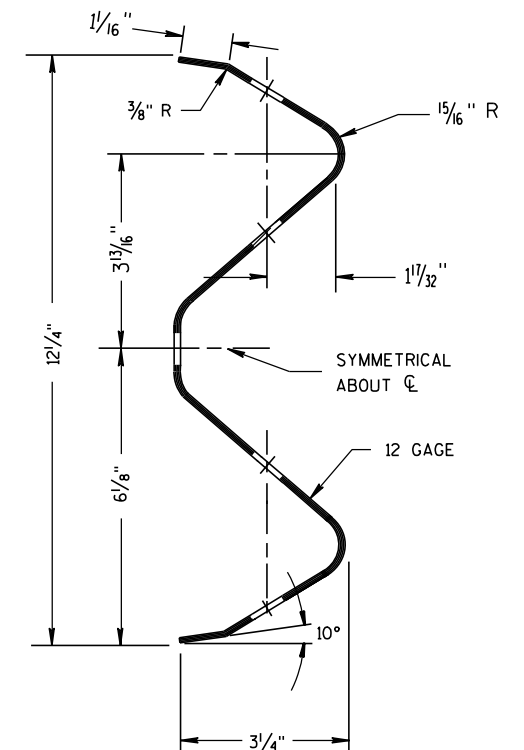
FRONT VIEW AT WOOD POST



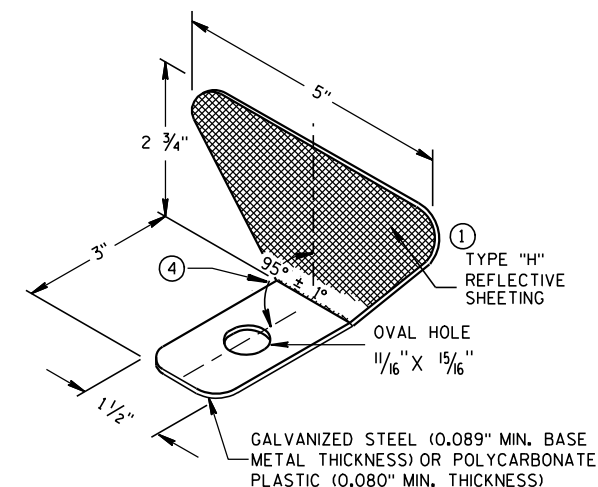
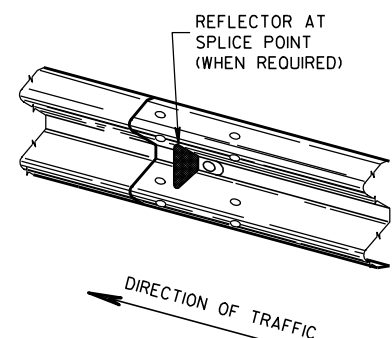
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

- ① PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
- ② 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.
- ③ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
- ④ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
- ⑤ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

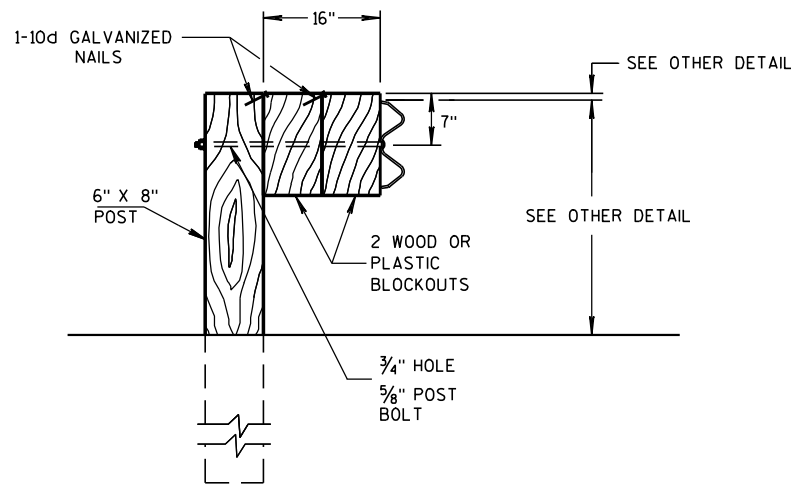
GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING

	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 ③	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ④	3
	> 200'	100' C-C	2	

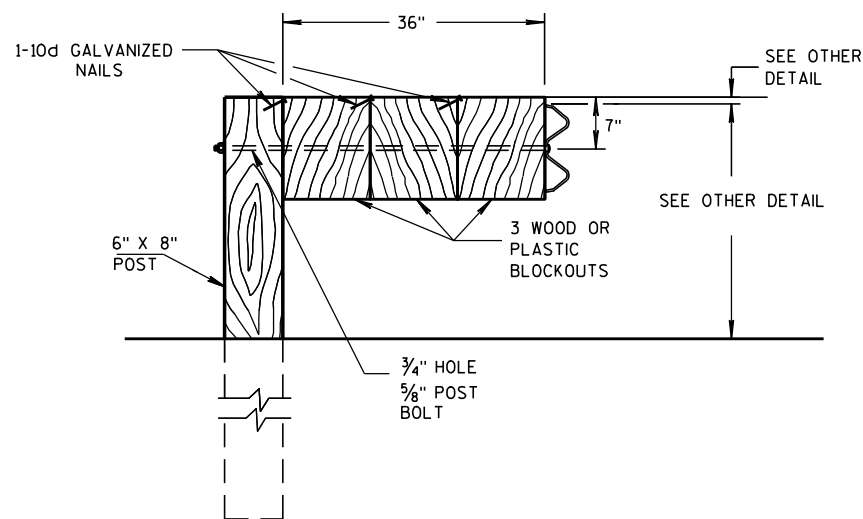
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR 16" BLOCKOUT DEPTH

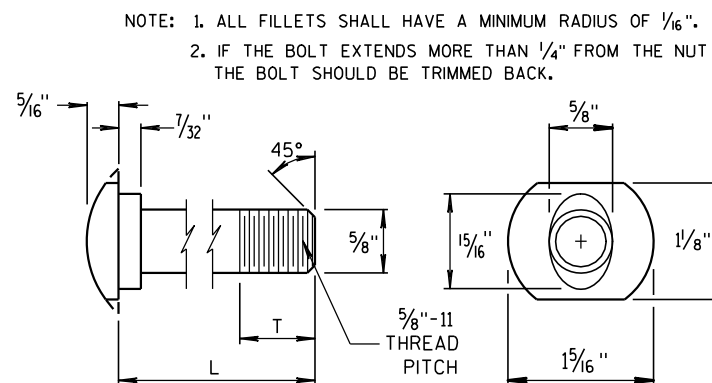
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



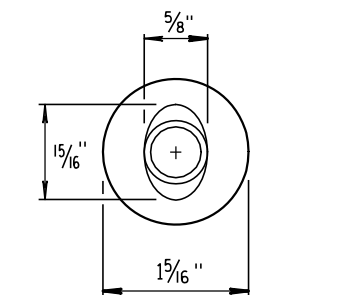
DETAIL FOR 36" BLOCKOUT DEPTH

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.

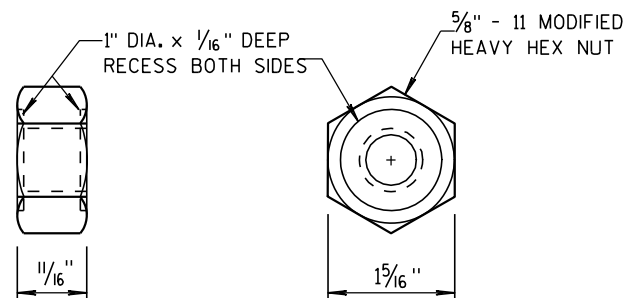
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



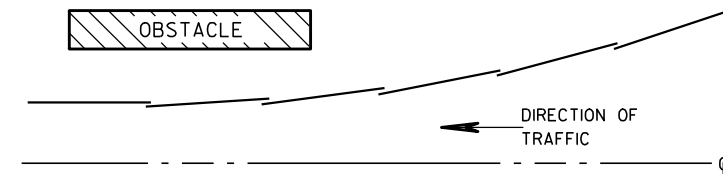
POST BOLT TABLE



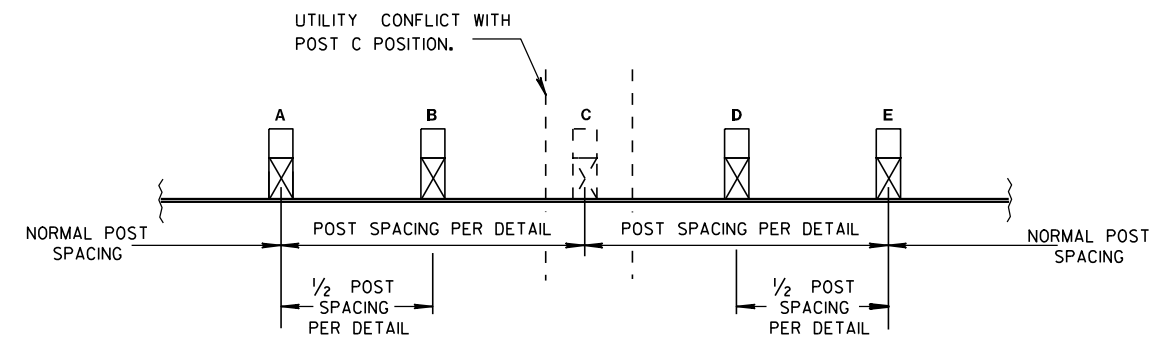
ALTERNATE BOLT HEAD



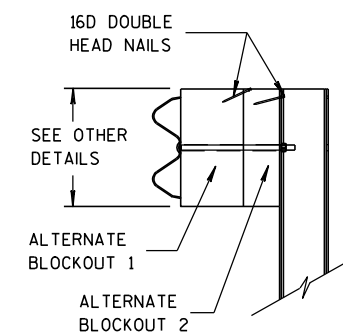
POST BOLT AND RECESS NUT



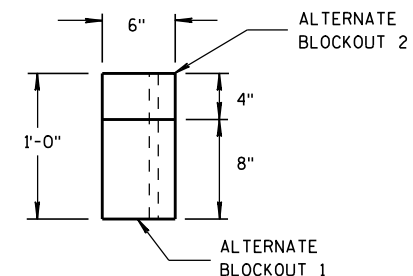
PLAN VIEW
BEAM LAPPING DETAIL



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

11/15/2011

DATE

FHWA

/S/ Jerry H. Zapp

ROADWAY STANDARDS 92

ENGINEER

ENT

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), 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.
- (E) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.
- (F) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (G) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (H) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

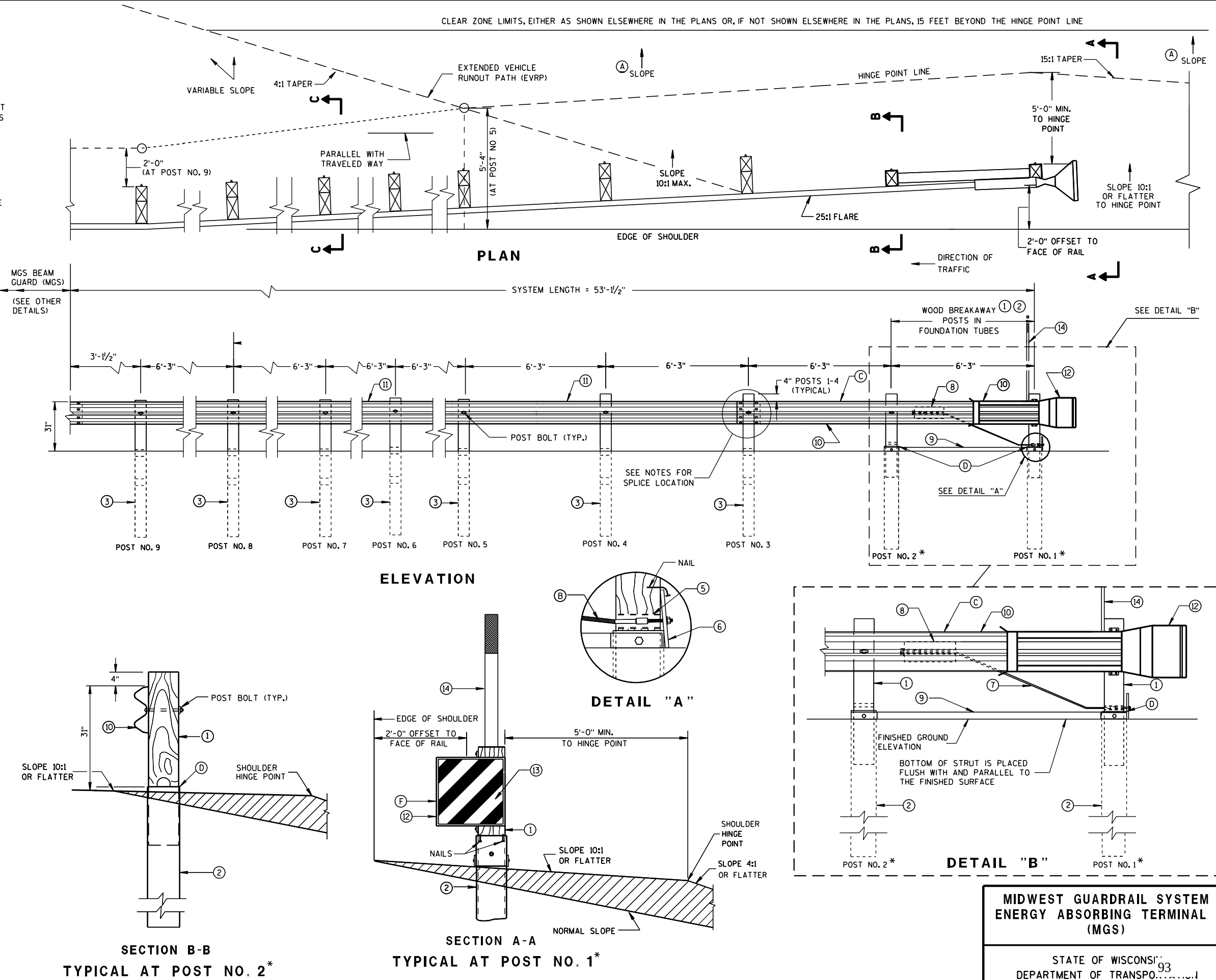
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

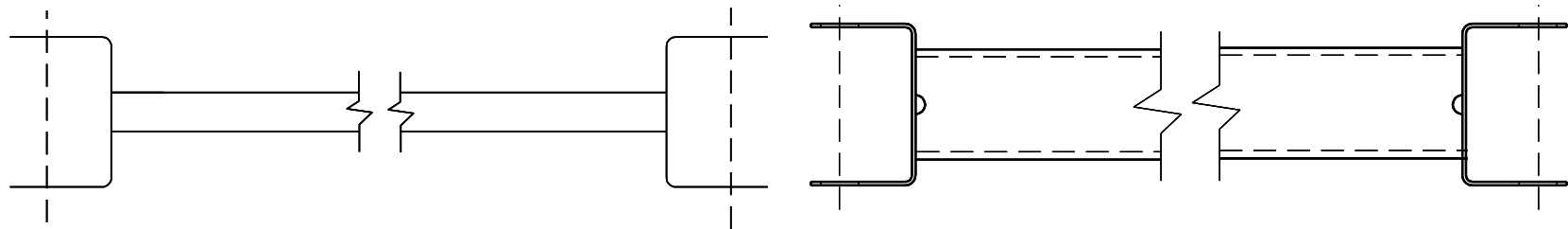
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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.

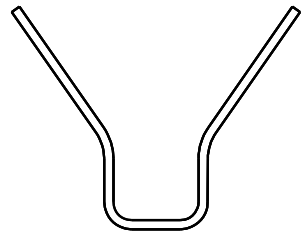
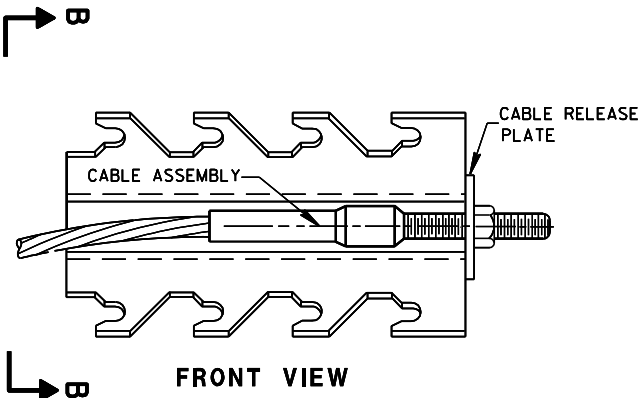
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE ($\pm \frac{3}{4}$ ")

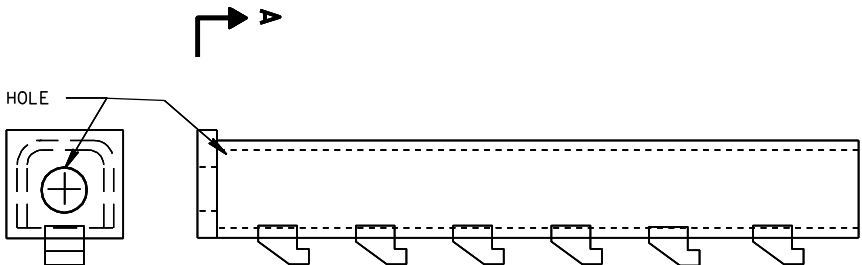




9 H
GENERIC GROUND STRUT



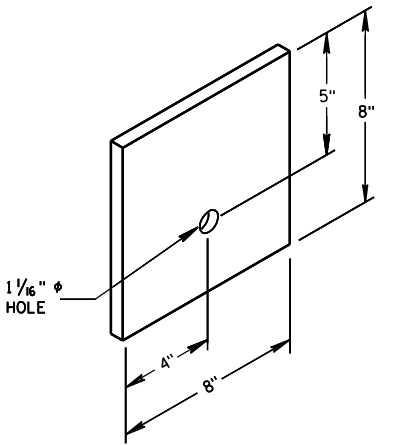
SECTION B-B
8 H
GENERIC ANCHOR CABLE BOX



SECTION A-A
PLAN VIEW

BILL OF MATERIALS

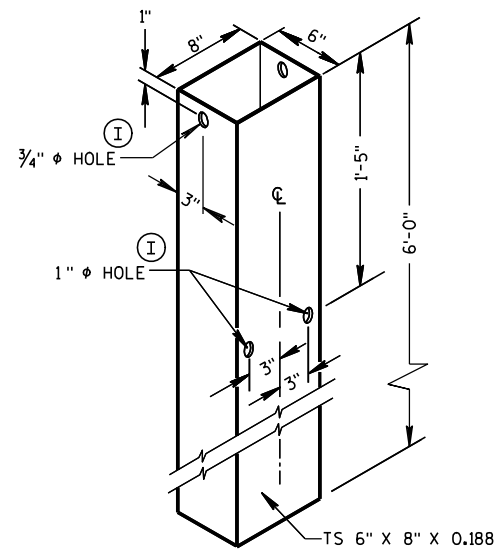
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND 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 H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



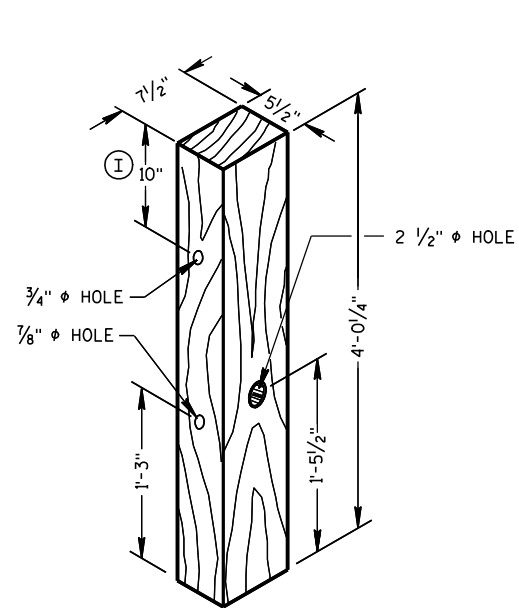
6
BEARING PLATE

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

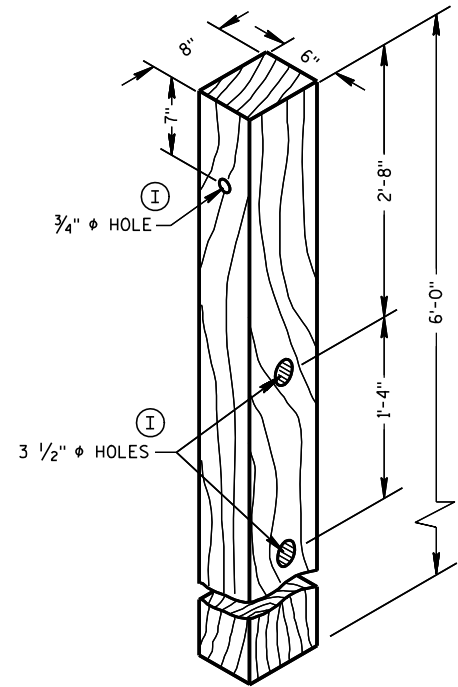
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



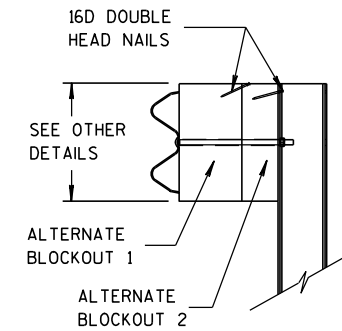
FOUNDATION TUBE ②



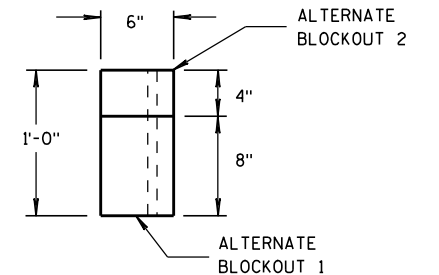
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

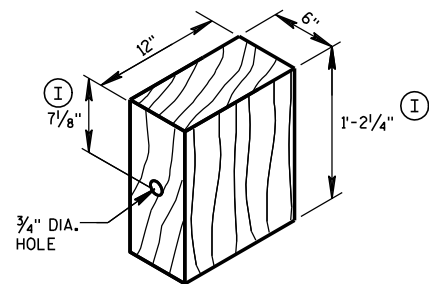


SIDE VIEW



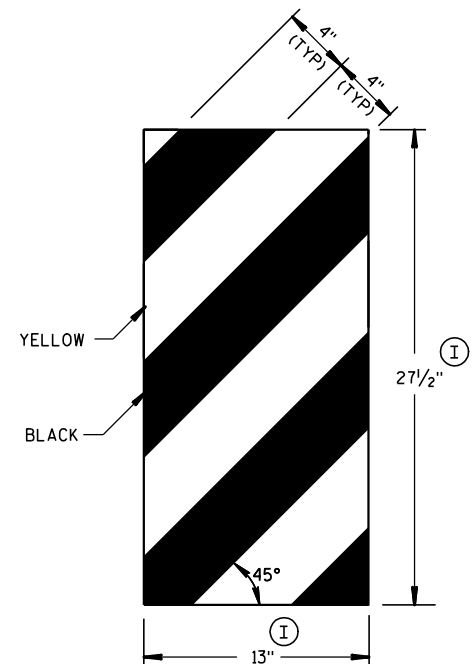
TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

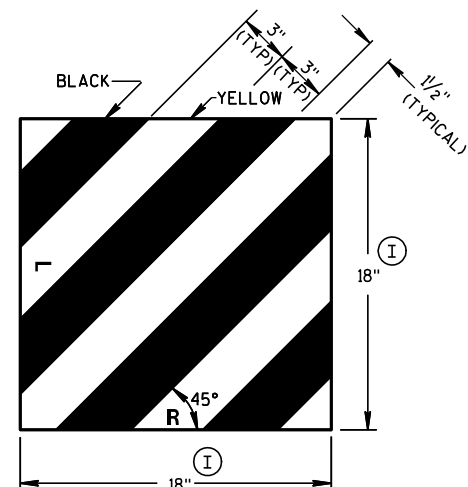


WOOD BLOCKOUT ④

YELLOW REFLECTIVE TAPE
3" X 9" TYPE H
REFLECTIVE SHEETING



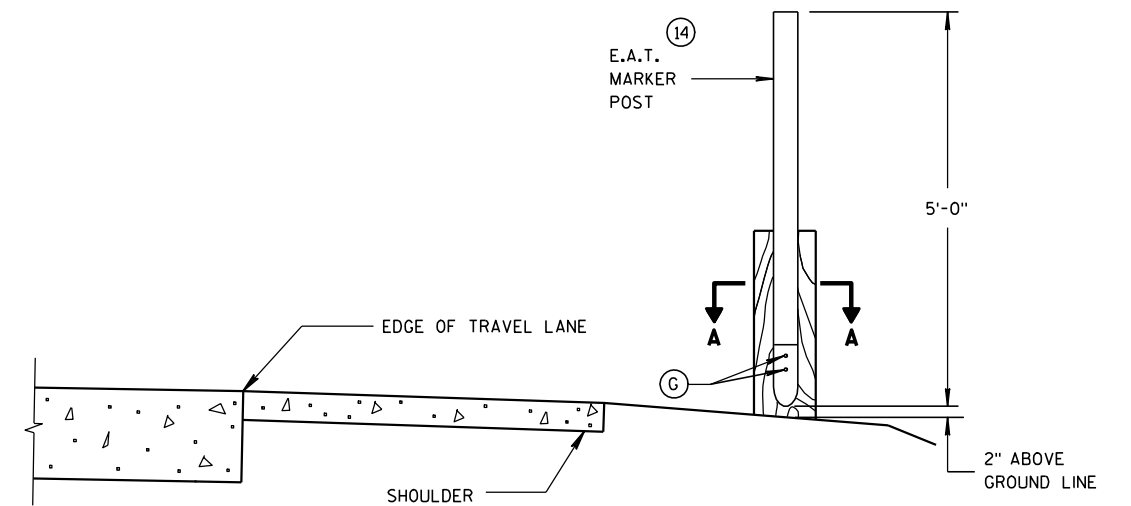
GENERIC REFLECTIVE SHEETING ⑬ ④



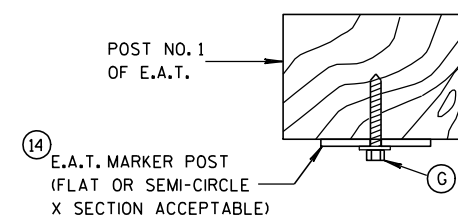
FRONT VIEW

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)

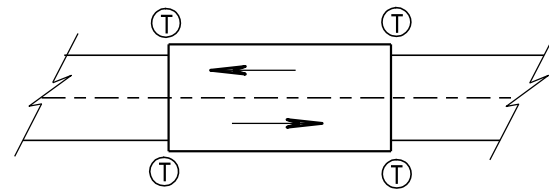


SECTION A-A

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

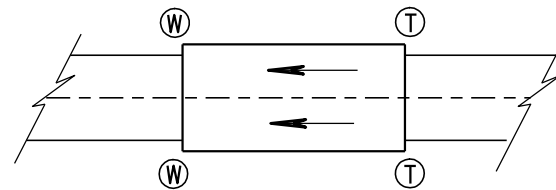
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011 DATE /S/ Jerry H. 3000
DATE ROADWAY STANDARDS 95 CENT
FHWA ENGINEER



TWO WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION



ONE WAY TRAFFIC

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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".

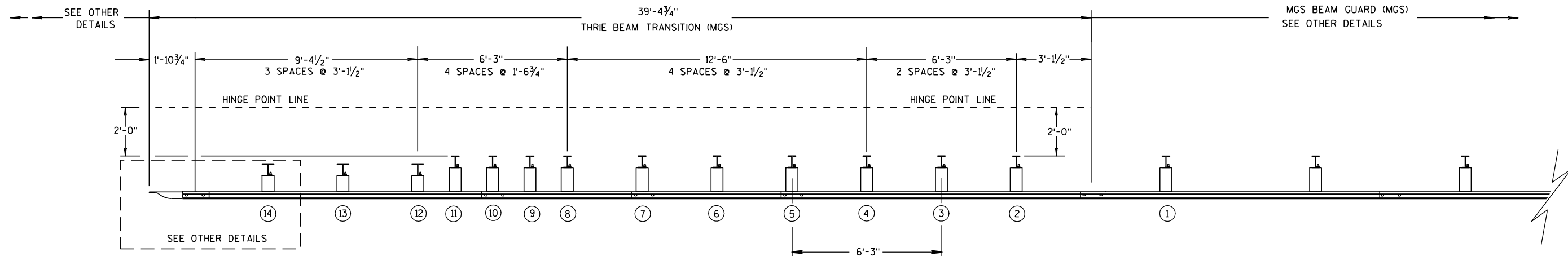
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

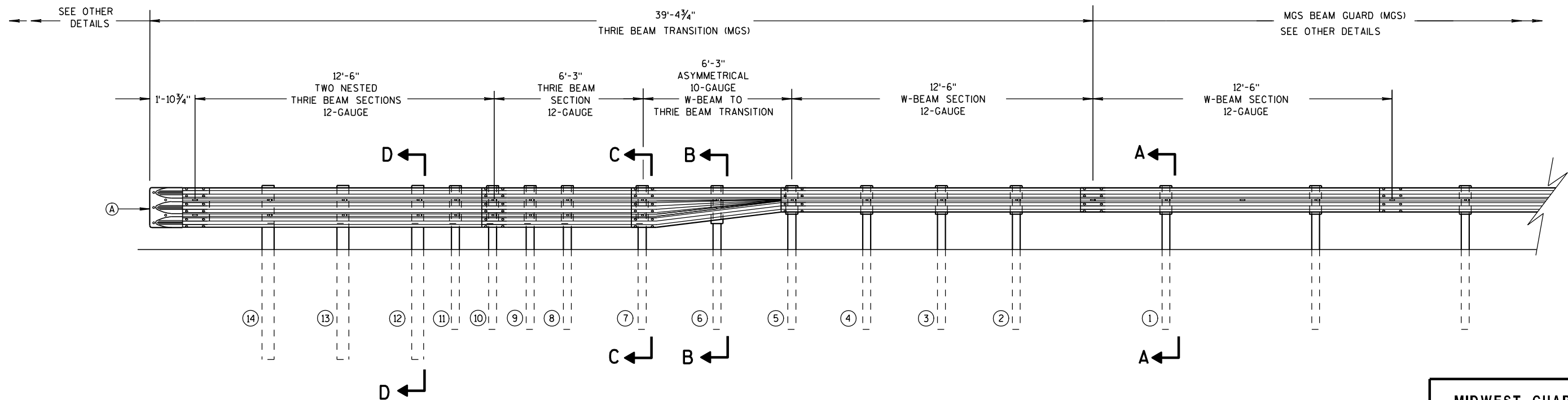
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

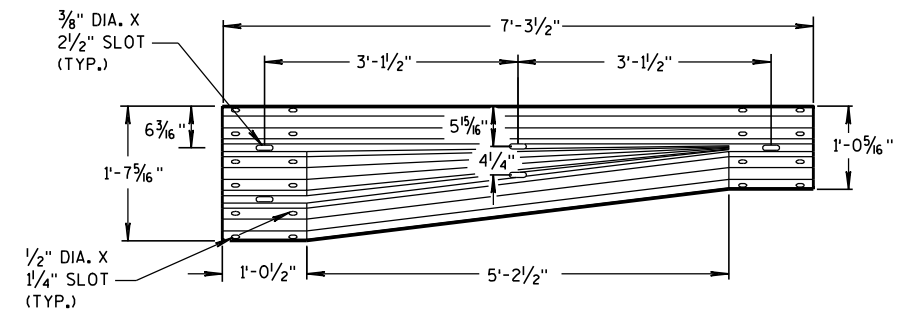
S.D.D. 14 B 45-3b



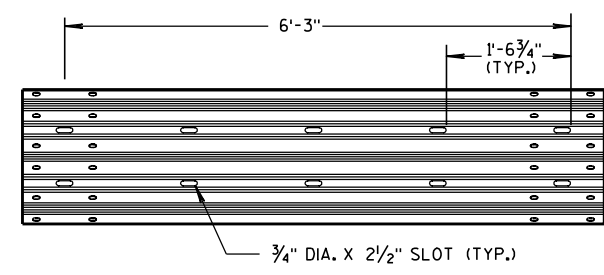
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

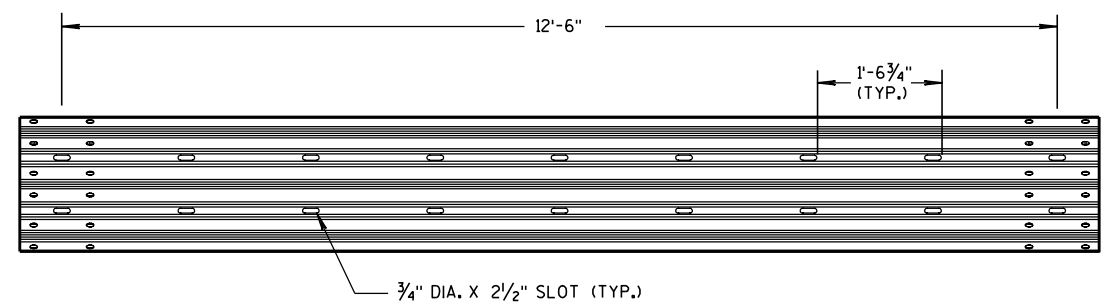
S.D.D. 14 B 45-3b



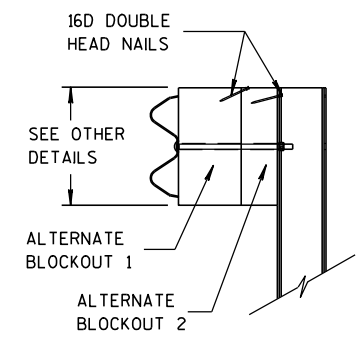
W-BEAM TO THRIE BEAM TRANSITION SECTION



6'-3" THRIE BEAM SECTION

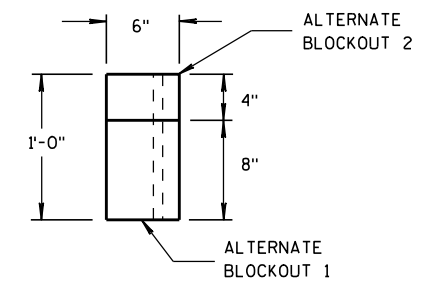


12'-6" THRIE BEAM SECTION

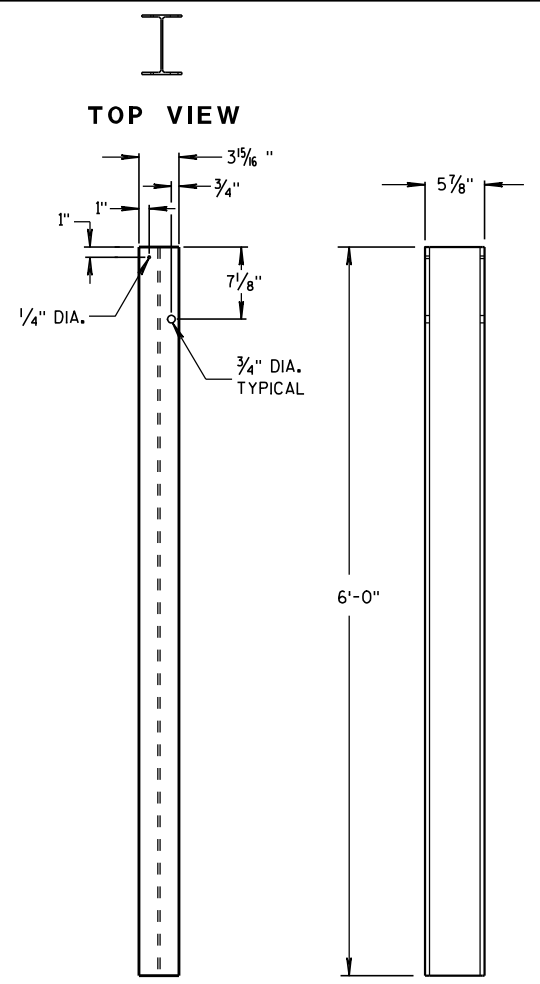


SIDE VIEW

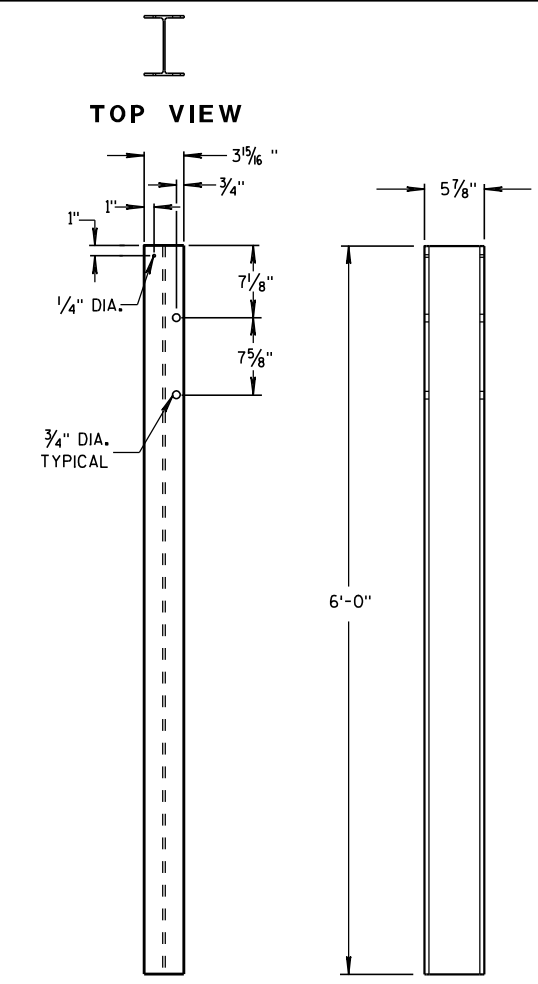
ALTERNATE WOOD BLOCKOUT DETAIL



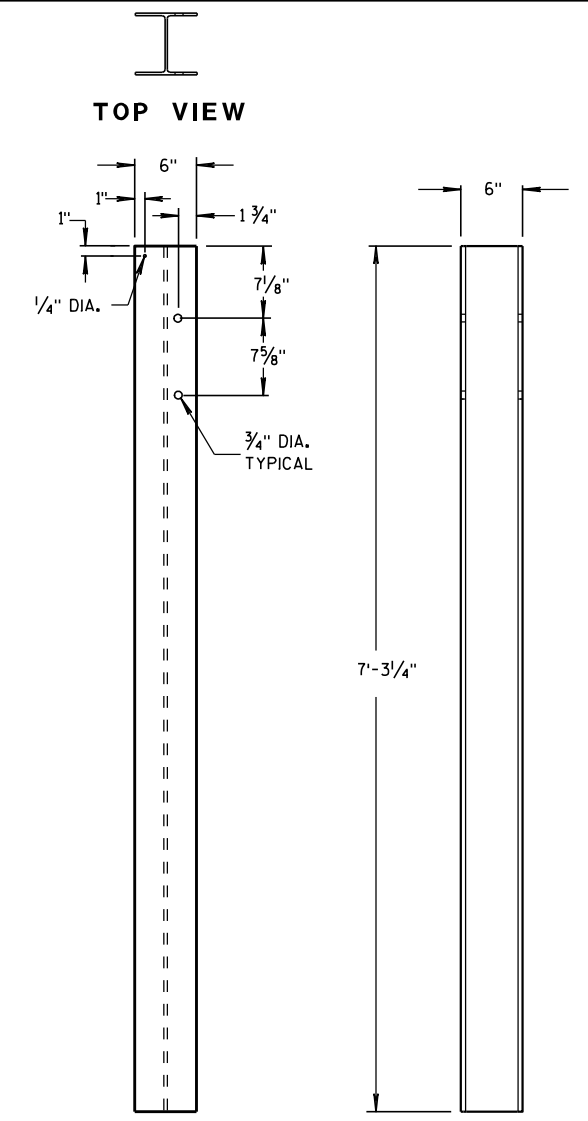
TOP VIEW



STEEL POSTS 1-5

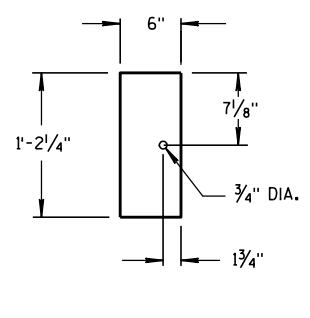
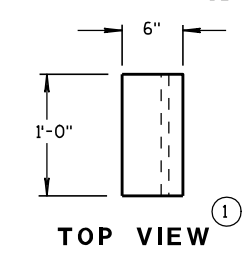


STEEL POSTS 6-11

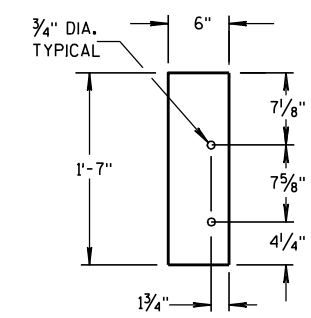
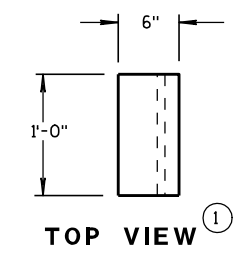


STEEL POSTS 12-14

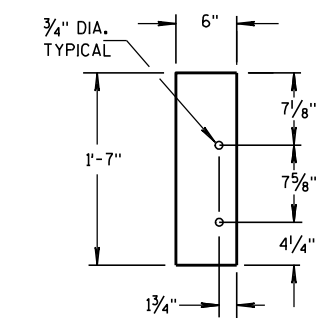
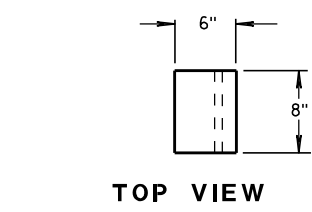
① WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



BLOCKOUT POSTS 1-5



BLOCKOUT POSTS 6-11



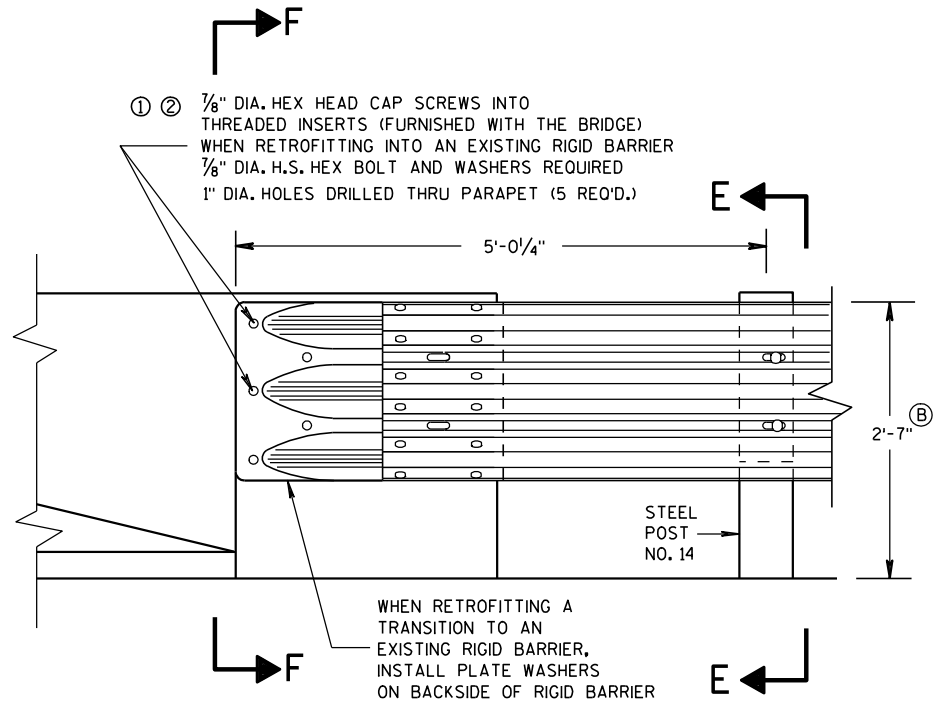
BLOCKOUT POSTS 12-14

STEEL POST SIZES

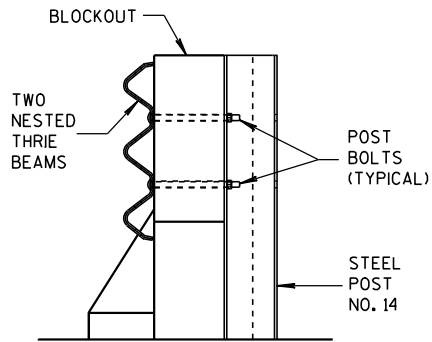
POST NUMBER	SECTION TYPE	LENGTH
①	W6x9	72"
②	W6x9	72"
③	W6x9	72"
④	W6x9	72"
⑤	W6x9	72"
⑥	W6x9	72"
⑦	W6x9	72"
⑧	W6x9	72"
⑨	W6x9	72"
⑩	W6x9	72"
⑪	W6x9	72"
⑫	W6x15	87 1/8"
⑬	W6x15	87 1/8"
⑭	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



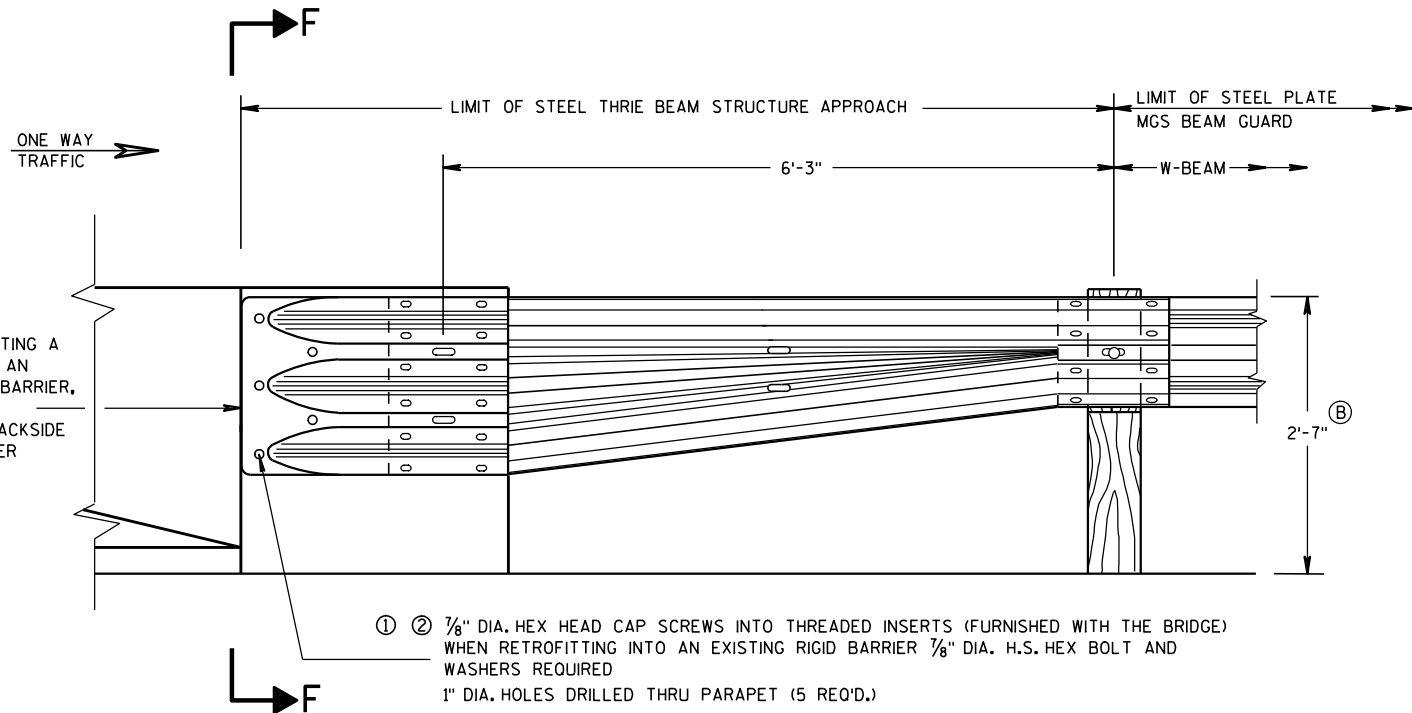
FRONT VIEW
THRIE BEAM CONNECTION TO BRIDGE
PARAPET WITH SQUARE ENDS



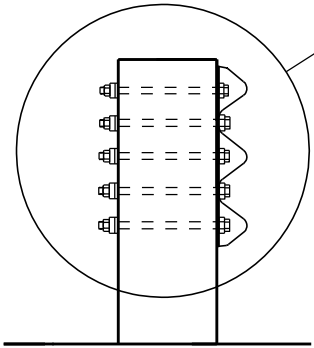
SECTION E-E

GENERAL NOTES

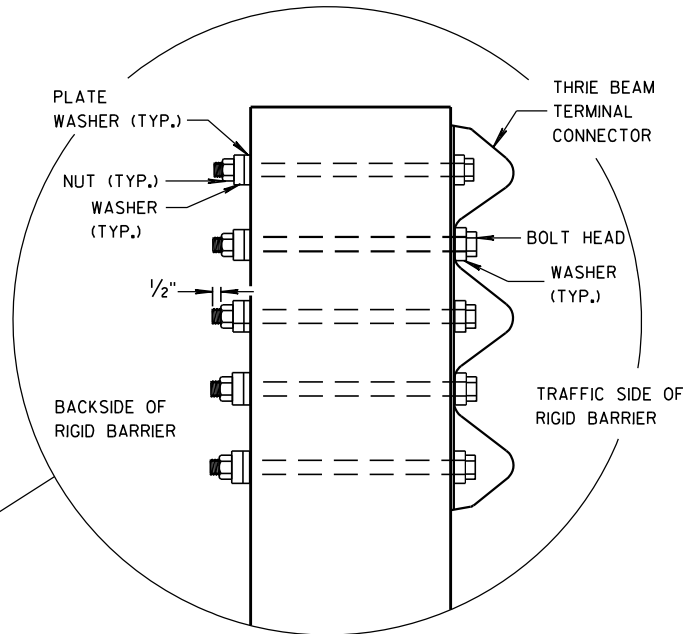
- THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSITION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.
- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
 - ② BOLTS MAY BE A325 BOLTS OR 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 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.
 - 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 1/2".
 - ④ TOLERANCE FOR TOP OF BEAM IS ± 1".



FRONT VIEW
W BEAM TRANSITION AND CONNECTION TO
BRIDGE PARAPETS WITH SQUARE ENDS
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION F-F

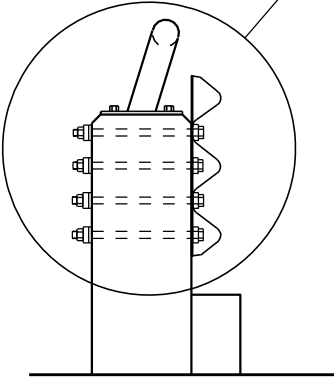
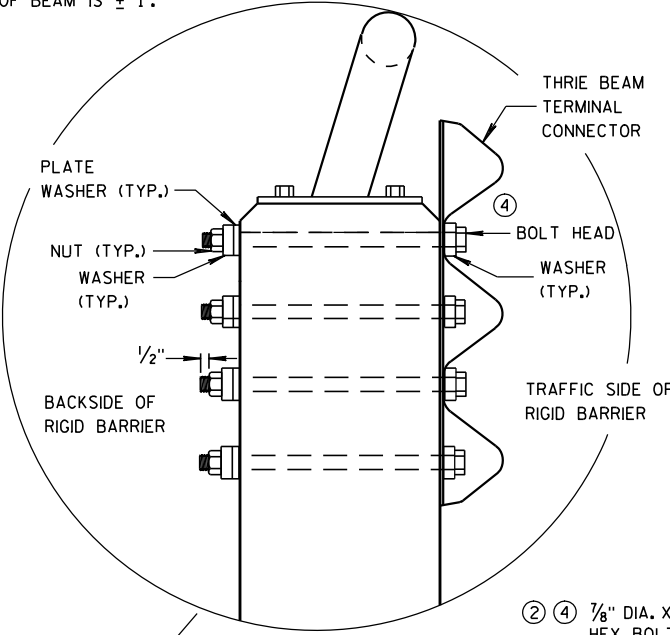


MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED 8/31/2012 DATE	/S/ Jerry H. Zapp ROADWAY STANDARDS ENGINEER	ENT
FHWA		

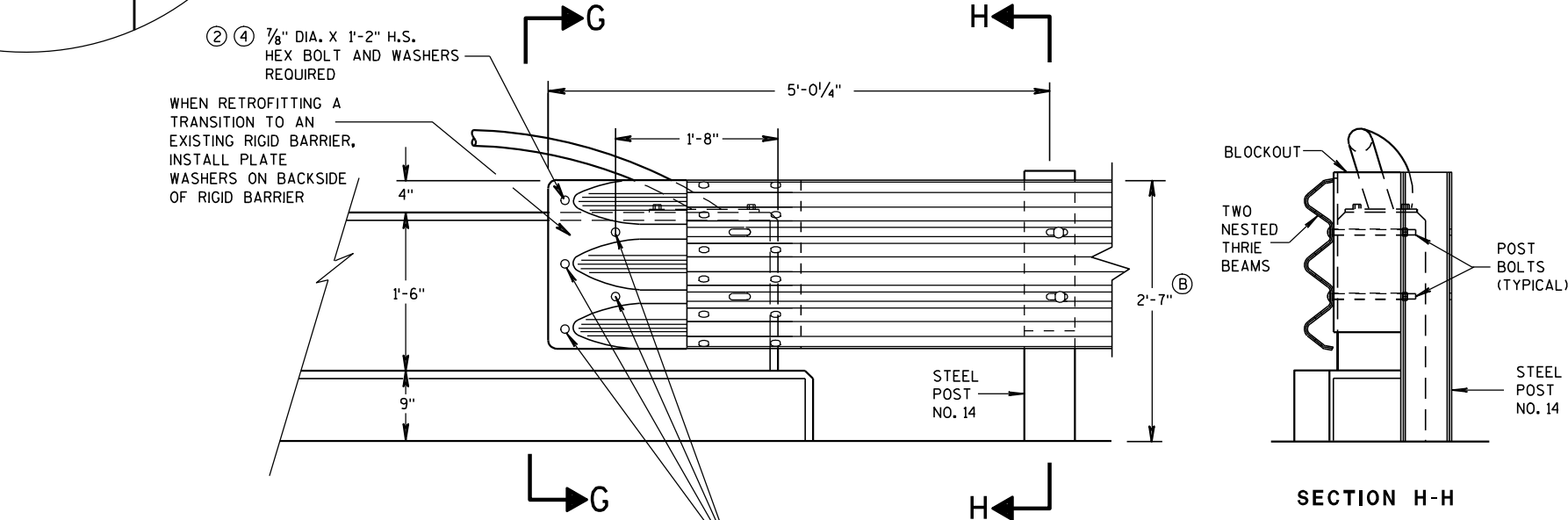
GENERAL NOTES

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

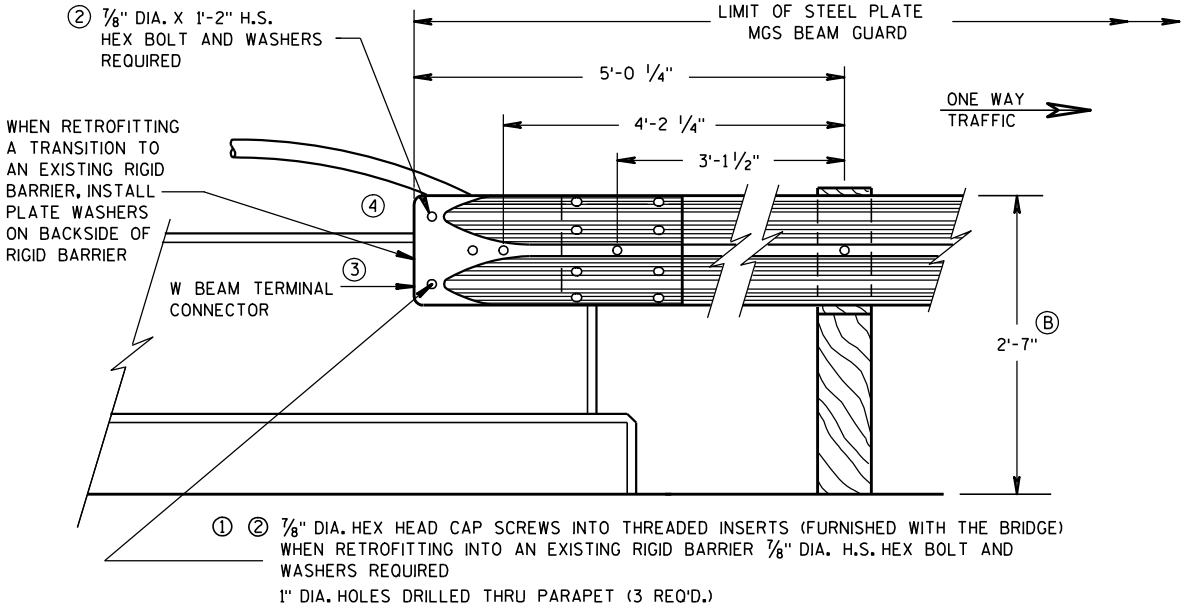
- ① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM 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 $\frac{5}{8}$ " 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 $\frac{1}{2}$ ". BLOCK IS INCIDENTAL TO THE CONTRACT.
- ④ 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.
- ⑤ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.



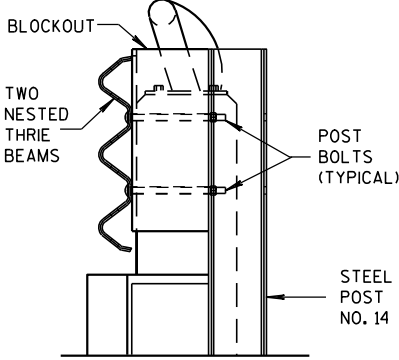
SECTION G-G



- ① ② $\frac{7}{8}$ " DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER $\frac{7}{8}$ " 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)

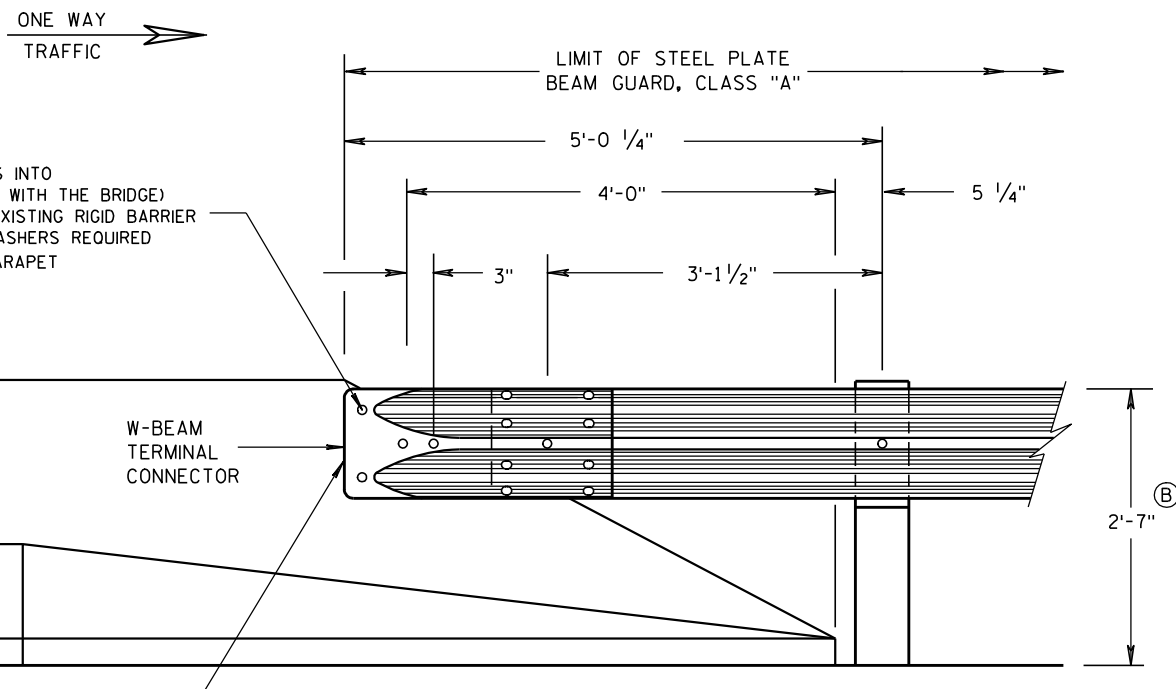


SECTION H-H

FRONT VIEW

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8-31-2012 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	



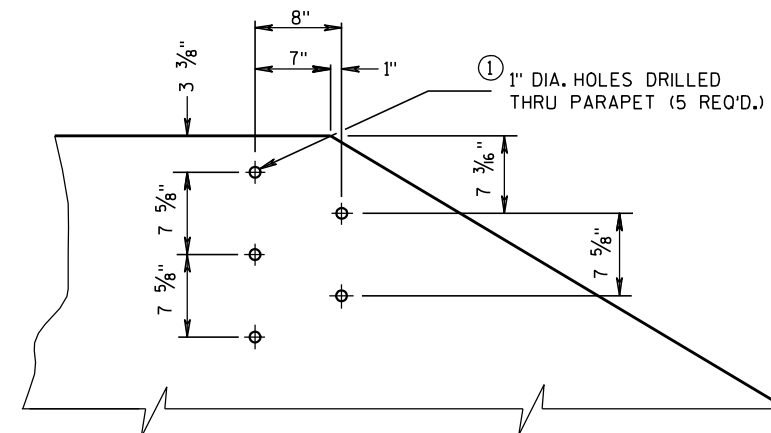
FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

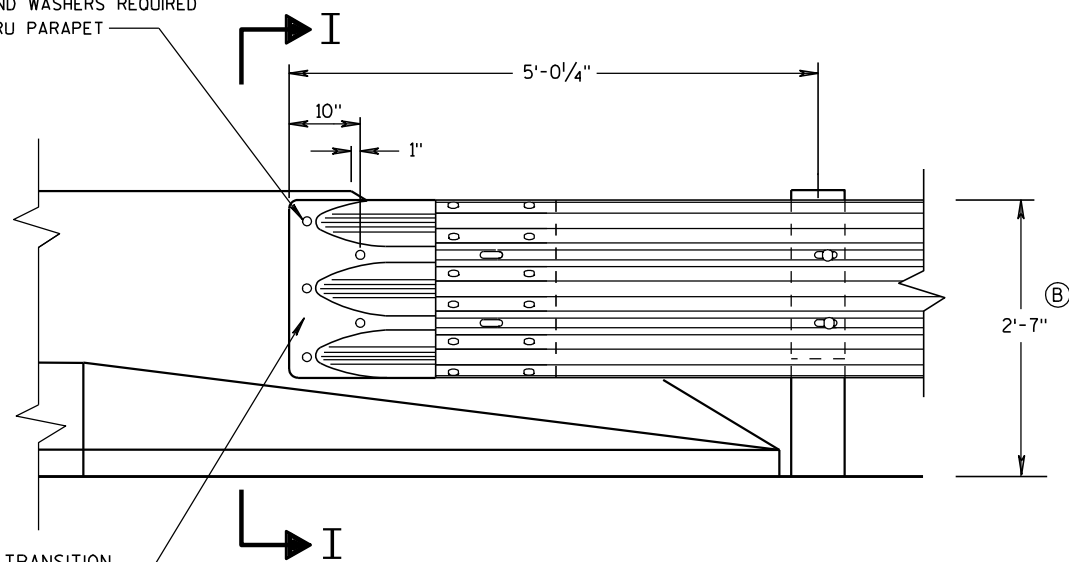
GENERAL NOTES

- 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 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.
- ③ TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.



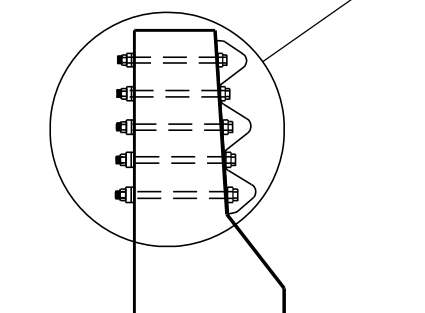
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION

- ① ② 1/8" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER. 7/8" DIA. H.S. HEX BOLT AND WASHERS REQUIRED. 1" DIA. HOLES DRILLED THRU PARAPET (5 REQ'D.).

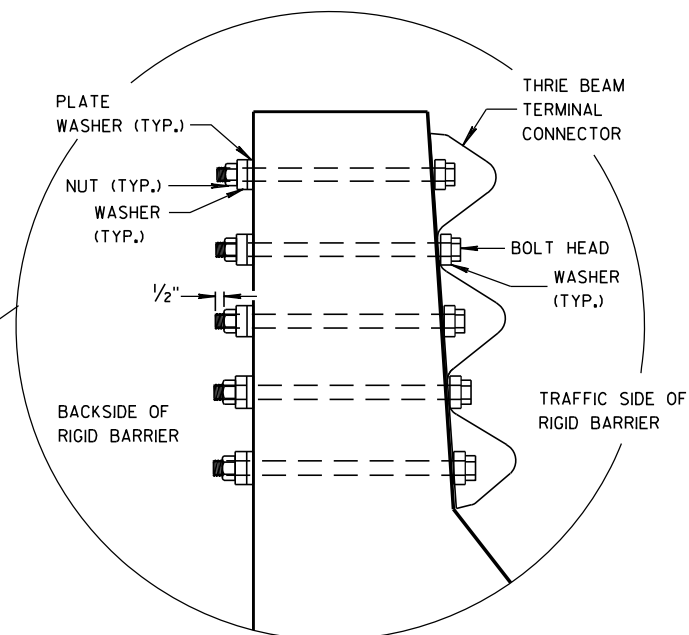


FRONT VIEW

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS



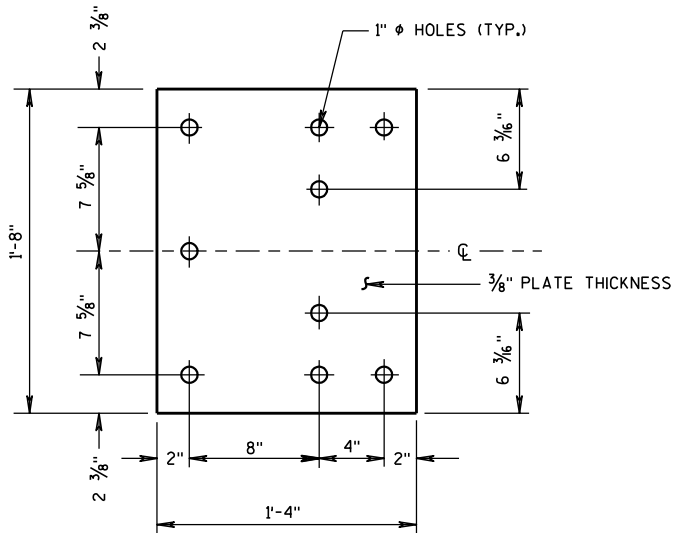
SECTION I-I



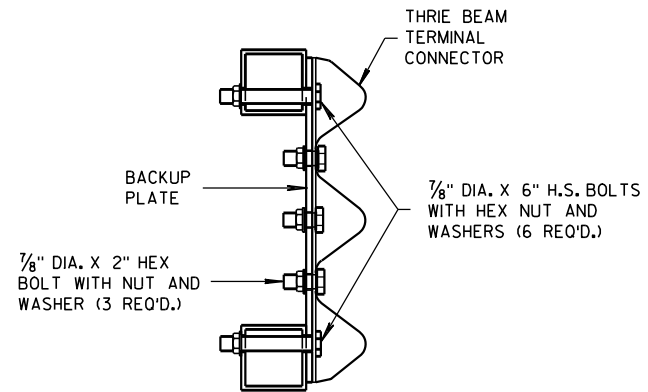
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

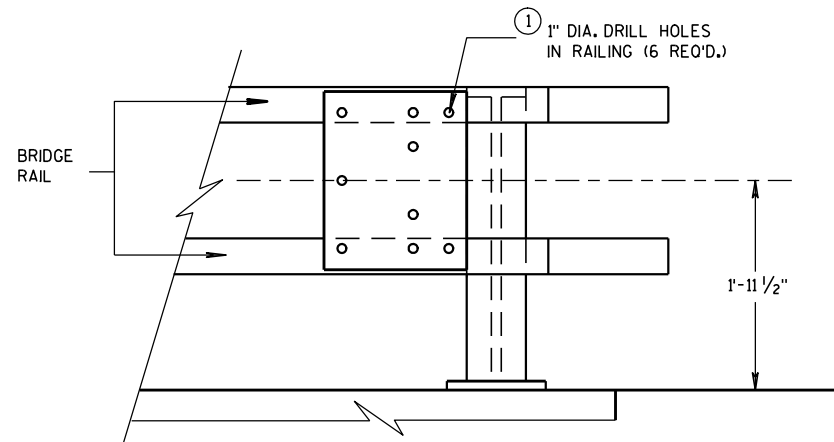
APPROVED
8/31/2012
DATE
/S/ Jerry H. Zopp
ROADWAY STANDARDS 101
ENGINEER
FHWA



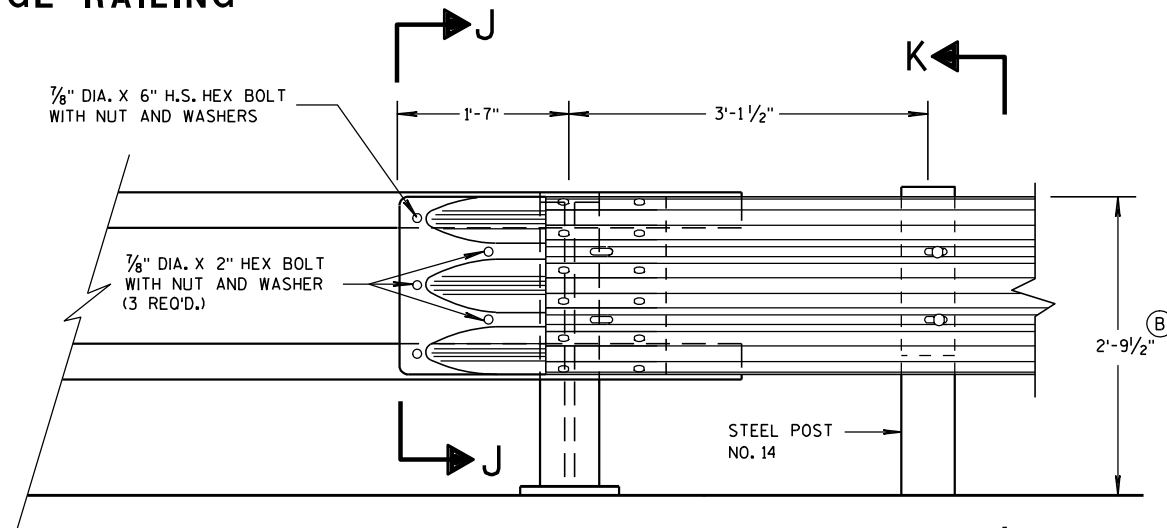
BACK-UP PLATE DETAIL



SECTION J-J

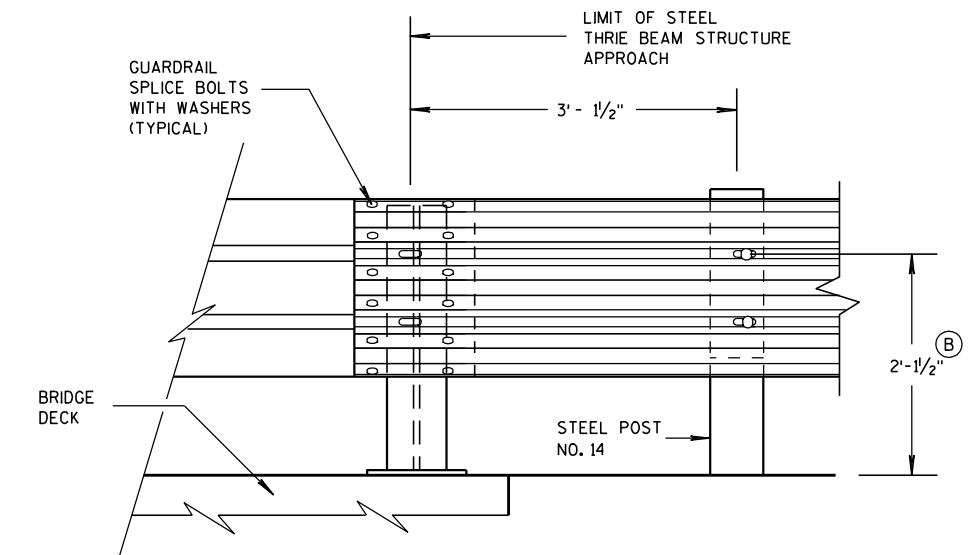


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

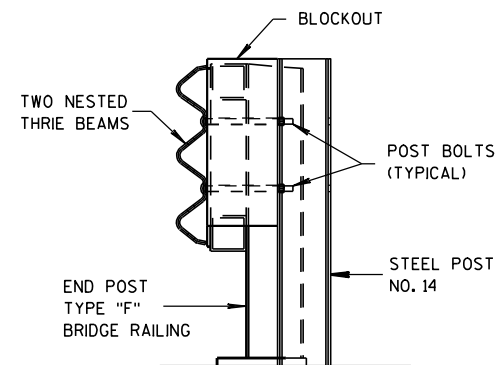


FRONT VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"



**FRONT VIEW
THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"**



SECTION K-K

GENERAL NOTES

- ① DRILLING HOLES THROUGH THE PAPER, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.
- ② TOLERANCE FOR TOP OF BEAM IS $\pm 1"$.

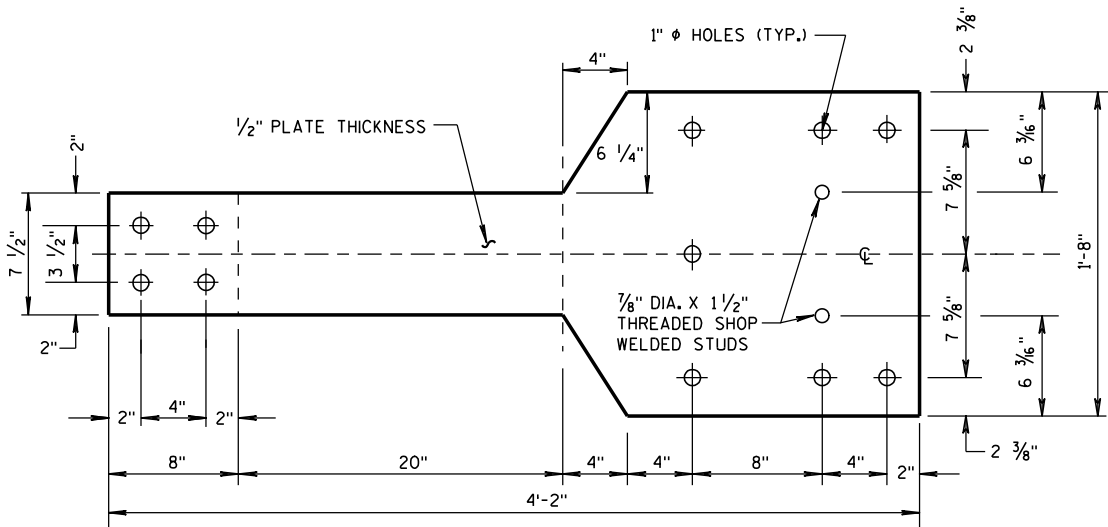
**MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

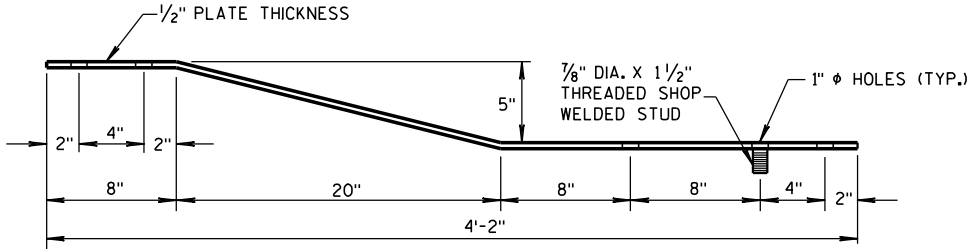
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8/31/2012 DATE /S/ Jerry H. Zopp
ROADWAY STANDARDS 102 ENGINEER
FHWA

GENERAL NOTES

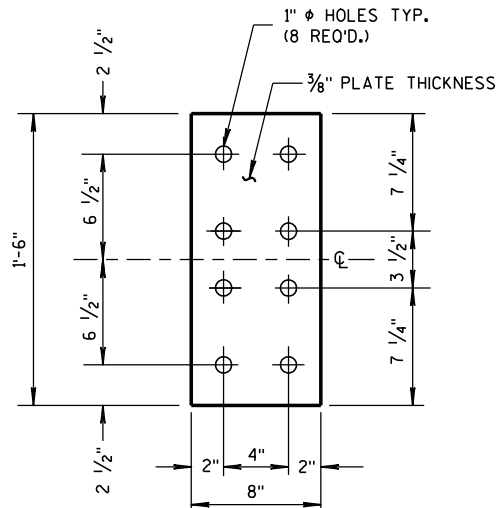
(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS $\pm 1"$.



FRONT VIEW

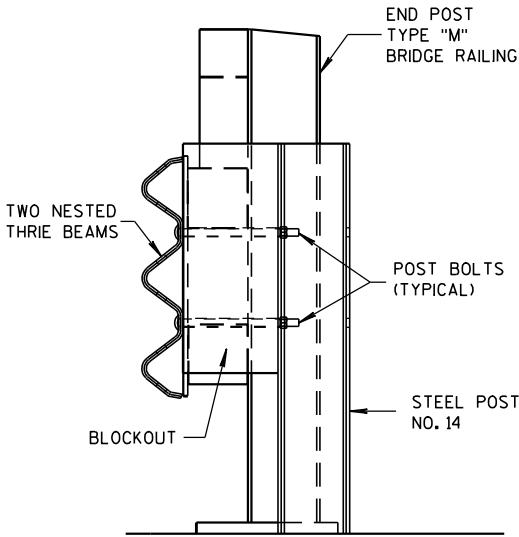


PLAN VIEW
BACK-UP PLATE DETAIL, TYPE "M"

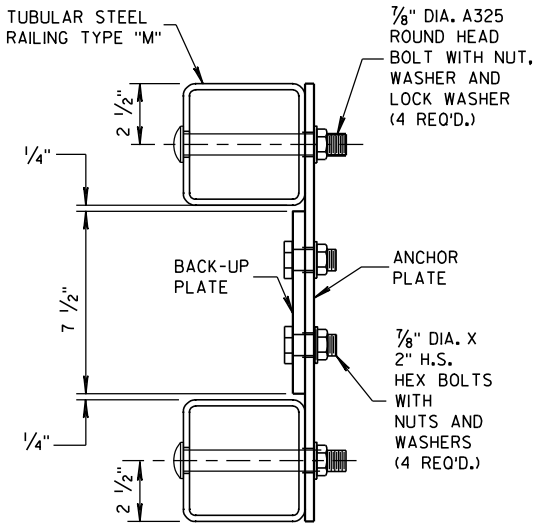


FRONT VIEW

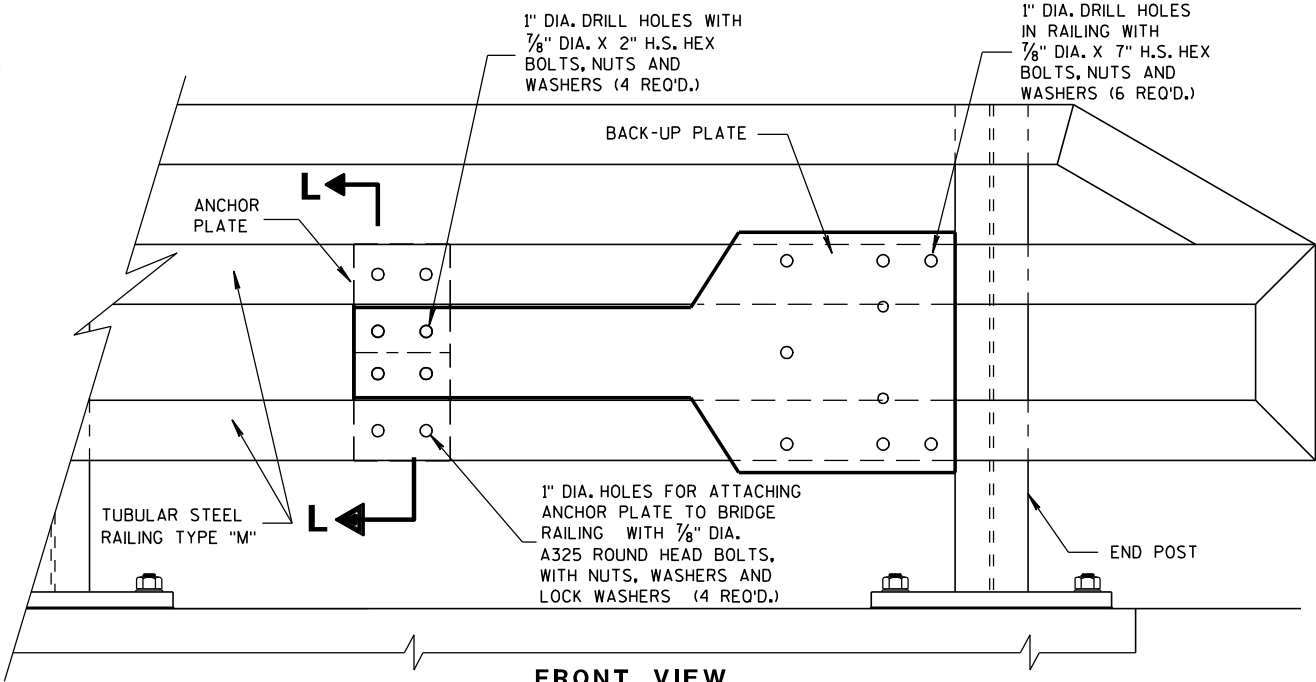
ANCHOR
PLATE DETAIL,
TYPE "M"



SECTION M-M

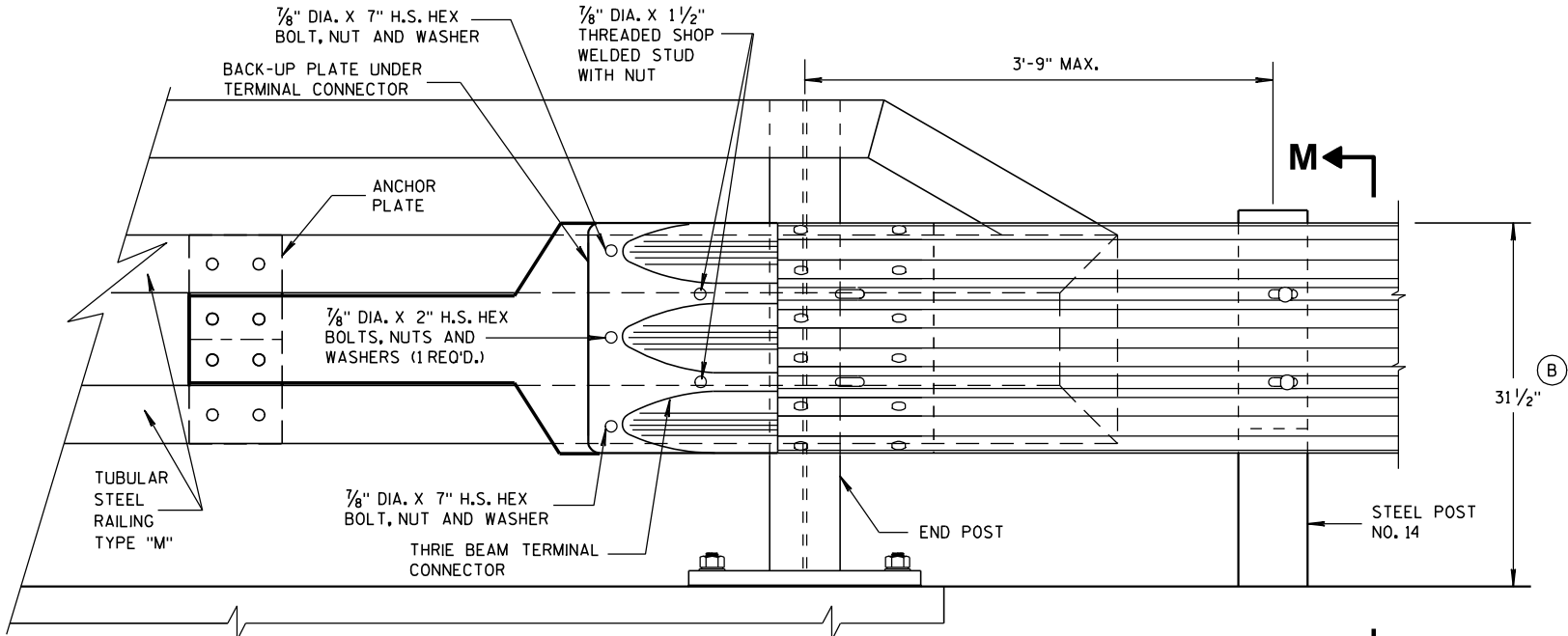


SECTION L-L

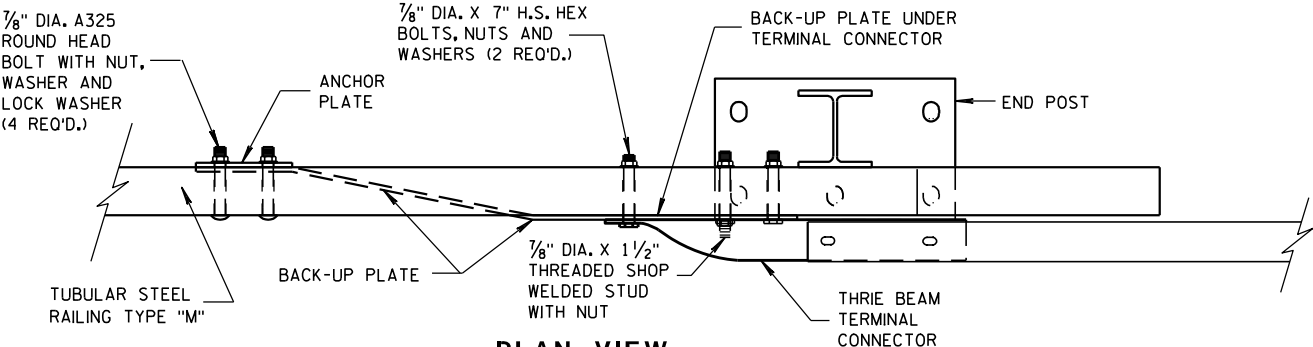


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

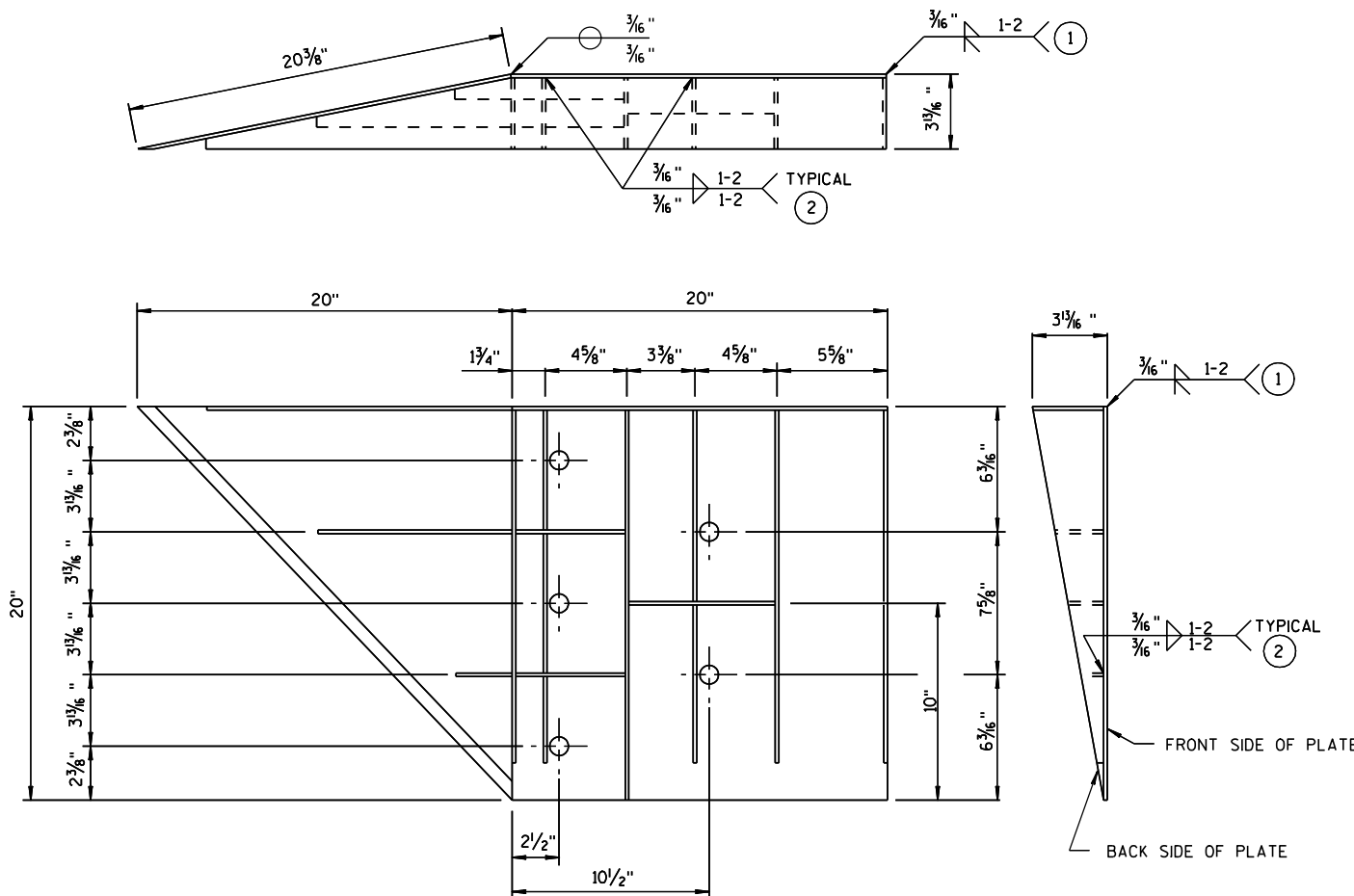
APPROVED

8-31-2012

DATE

FHWA

/S/ Jerry H. Zoon
ROADWAY STANDARDS 103
ENGINEER

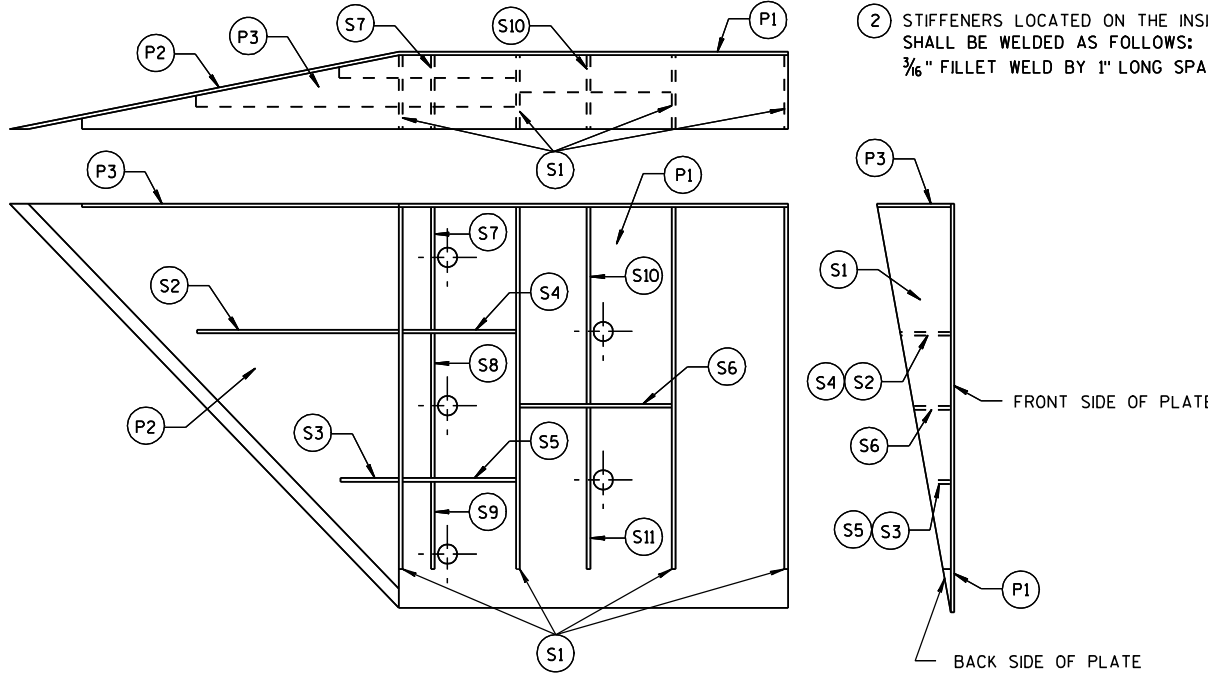


WELDING INSTRUCTION
(VIEWED FROM BACK SIDE OF PLATE)

SINGLE SLOPE CONNECTION 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 3/16"	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 1/16"	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 9/32" 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 1/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 1/16"	1/4"

PLATE AND STIFFENER IDENTIFICATION
(VIEWED FROM BACK SIDE OF PLATE)



GENERAL NOTES

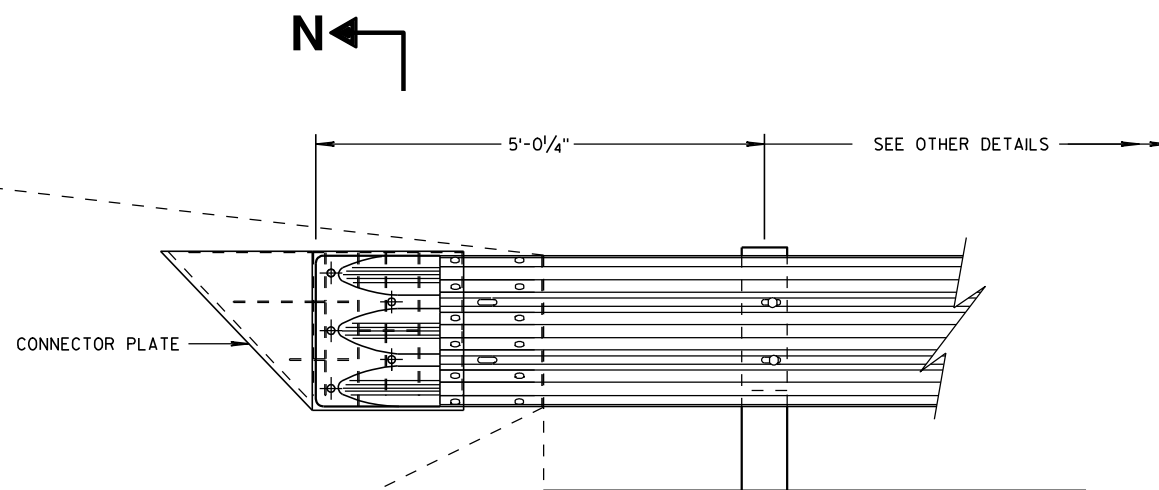
- COVER PLATE PANELS ARE 3/16" THICK.
- ALL STIFFENERS ARE 1/4" THICK.
- CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.
- FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.
- ALL HOLE DIAMETERS SHALL BE 1".
- FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

- 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".

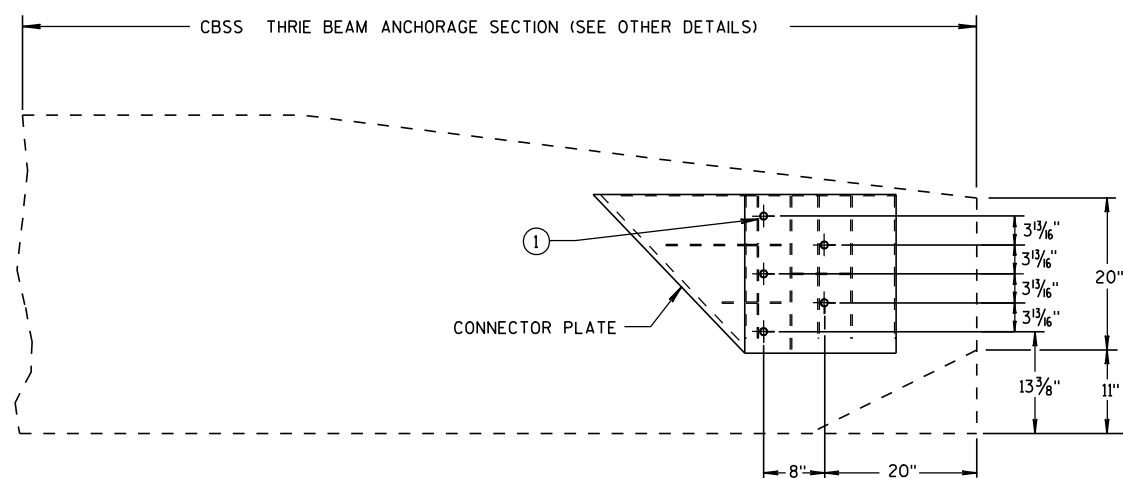
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/31/2012 DATE /S/ Jerry H. JENT
ROADWAY STANDARDS 104 ENGINEER
FHWA



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

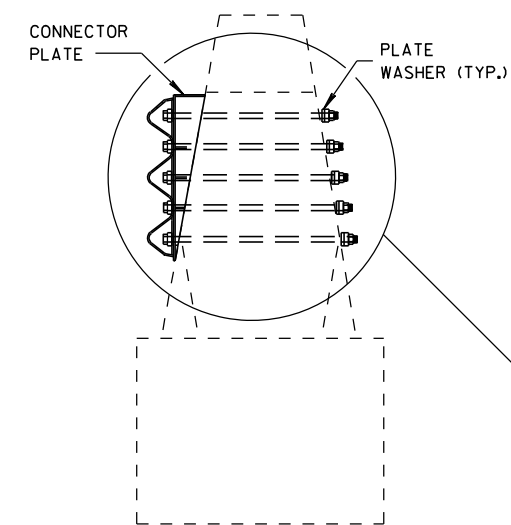


SINGLE SLOPE CONNECTION PLATE PLACEMENT

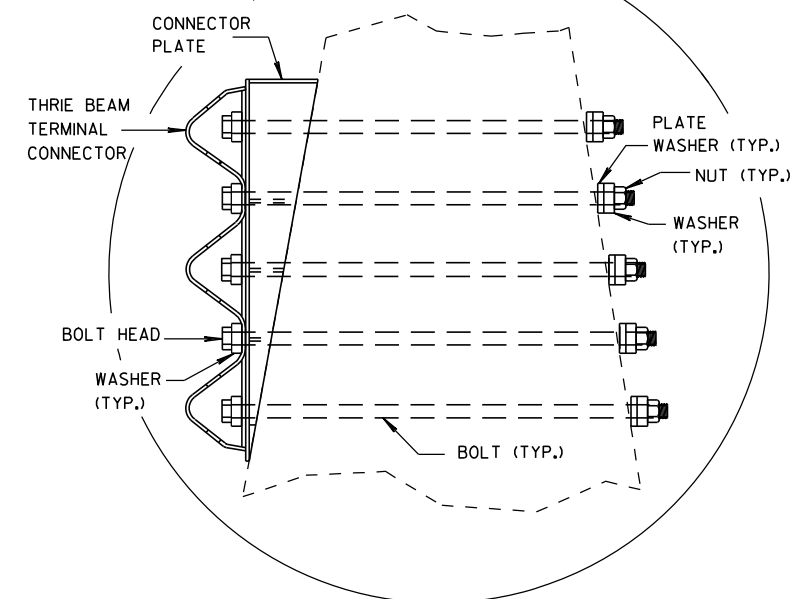
GENERAL NOTES

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

- 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 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

APPROVED

8/31/2012

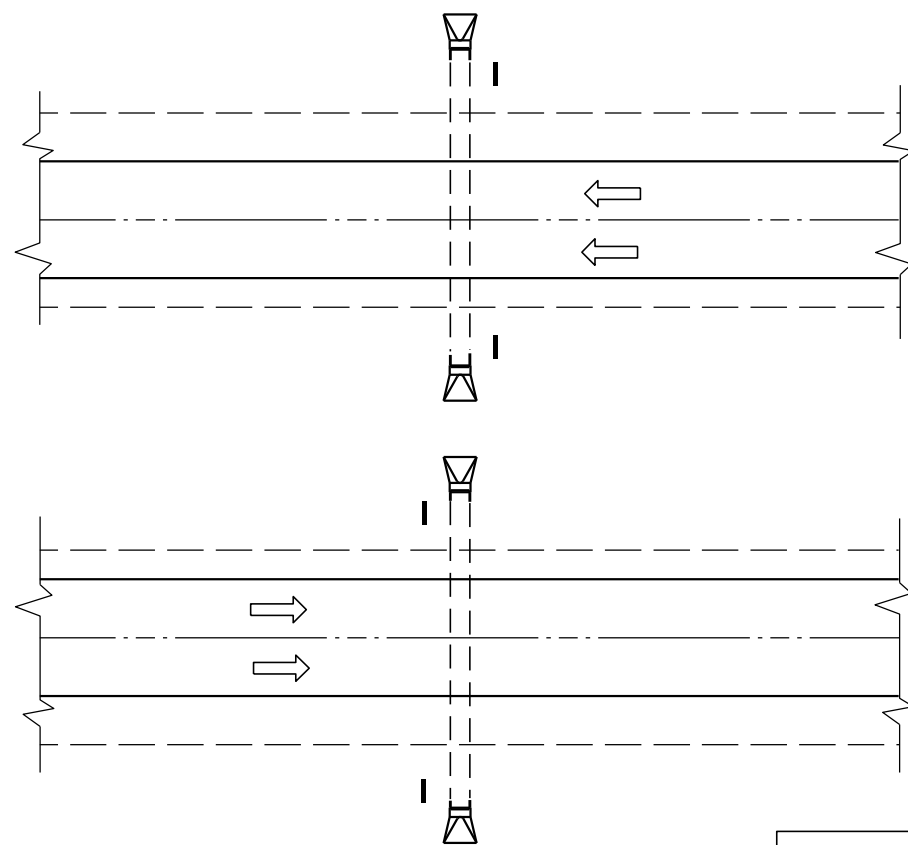
DATE

FHWA

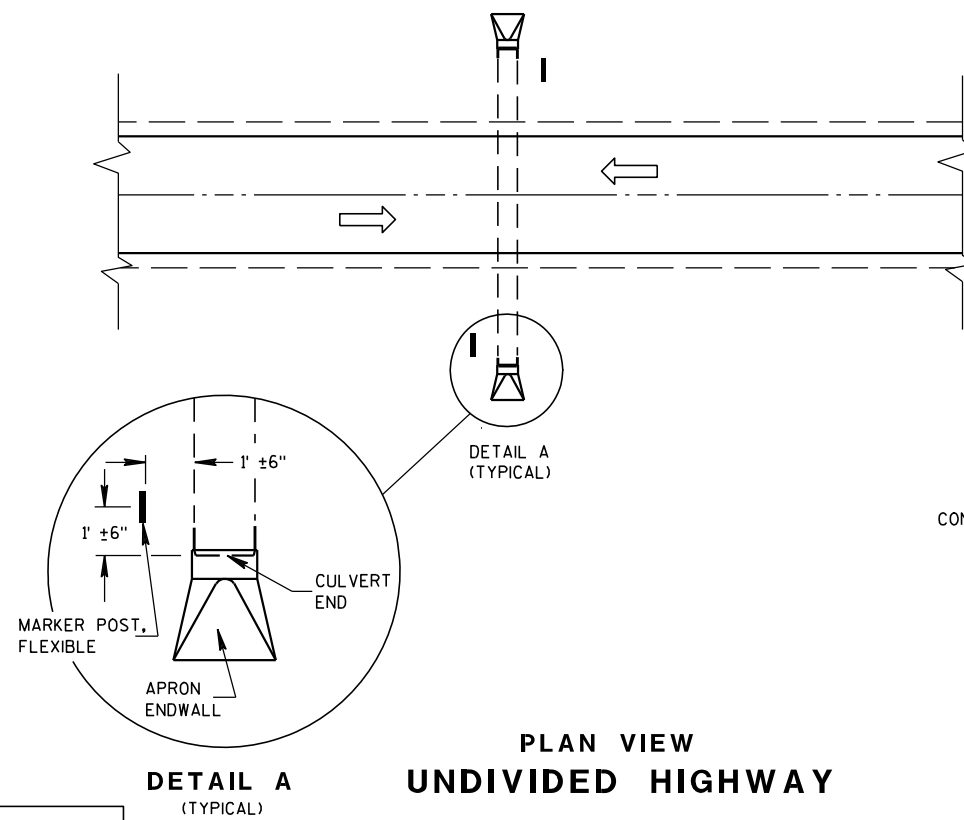
/S/ Jerry H. 7000

ROADWAY STANDARDS 105 ENT

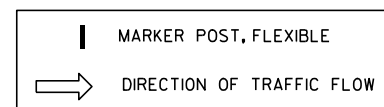
ENGINEER



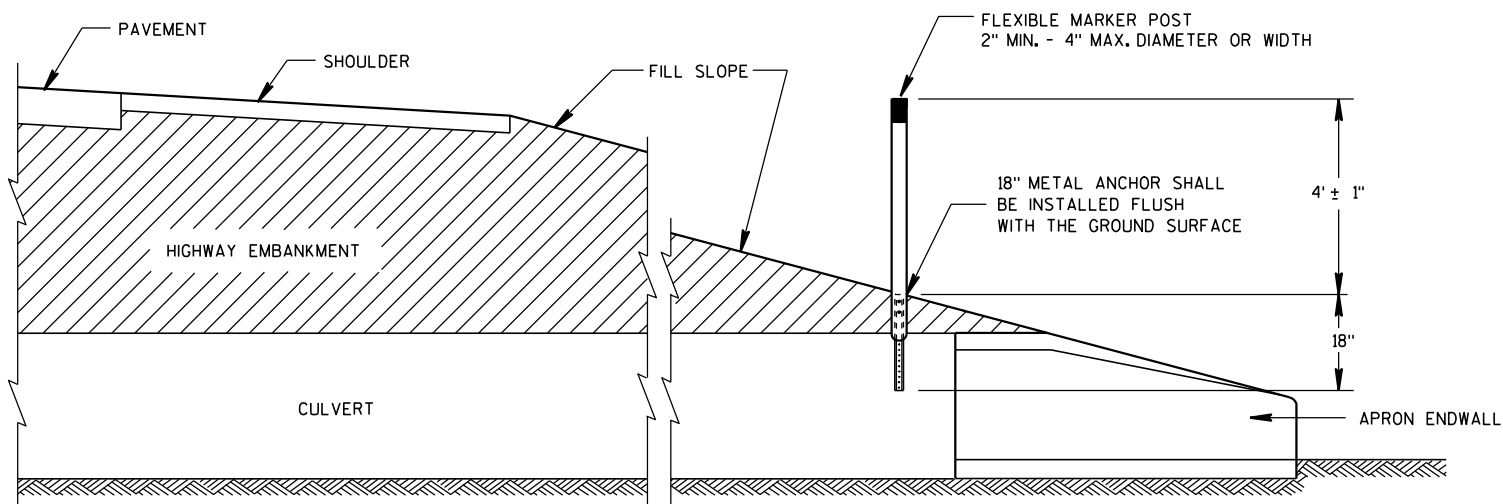
PLAN VIEW
DIVIDED HIGHWAY



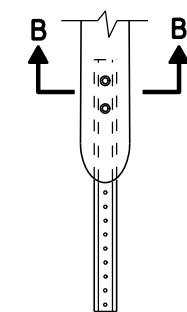
PLAN VIEW
UNDIVIDED HIGHWAY



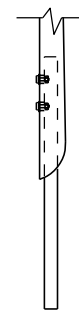
FLEXIBLE MARKER POST LOCATION



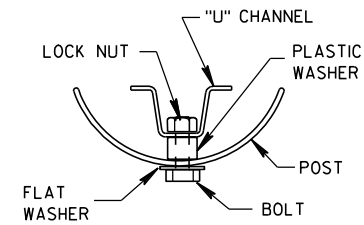
CROSS SECTION
FLEXIBLE MARKER POST



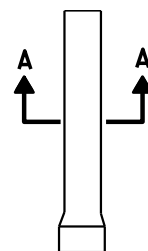
FRONT VIEW
CURVED MARKER



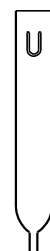
SIDE VIEW
CURVED MARKER



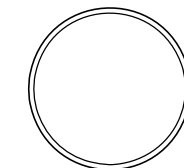
SECTION B-B



FRONT VIEW
ROUND MARKER



SIDE VIEW
ROUND MARKER

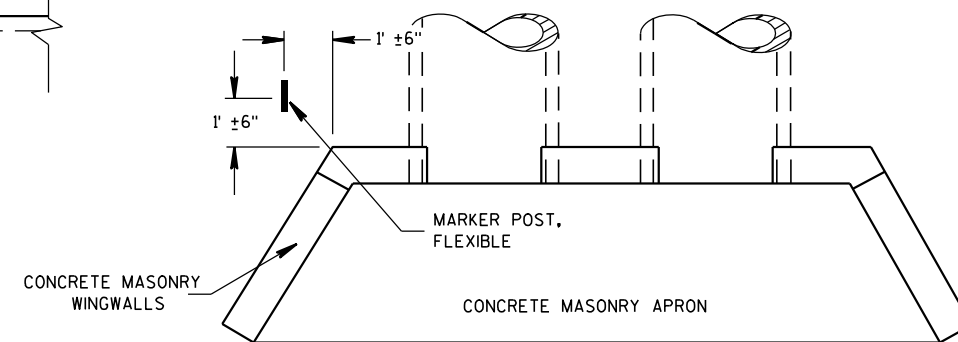


SECTION A-A

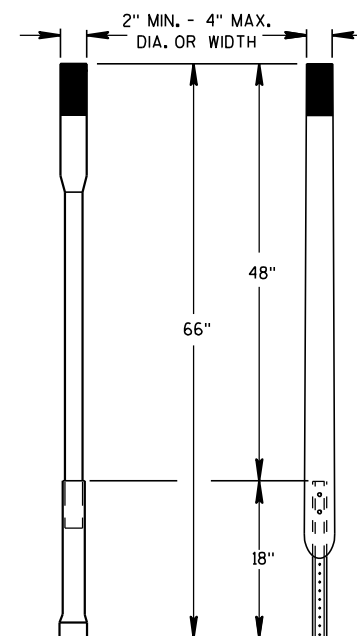
FLEXIBLE MARKER POST ANCHORS

GENERAL NOTES

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



PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



ALTERNATE 1 ALTERNATE 2
FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE,
FOR CULVERT END

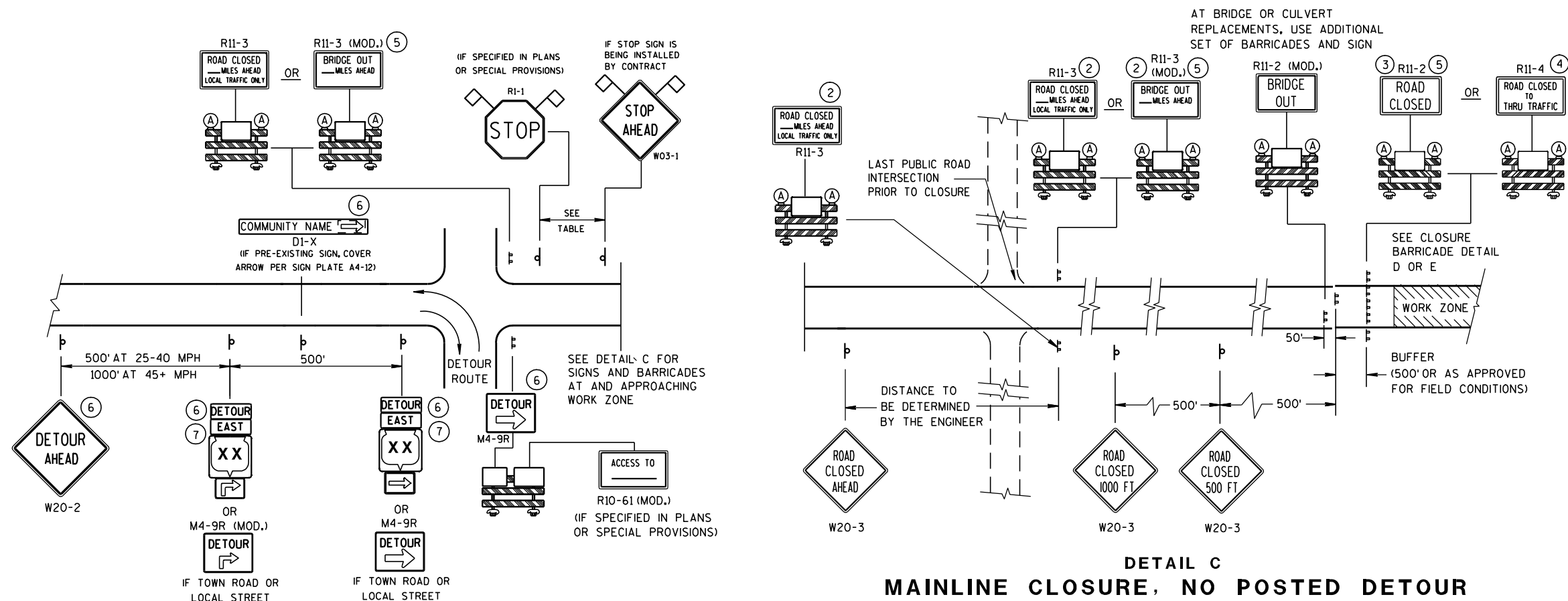
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/98
DATE

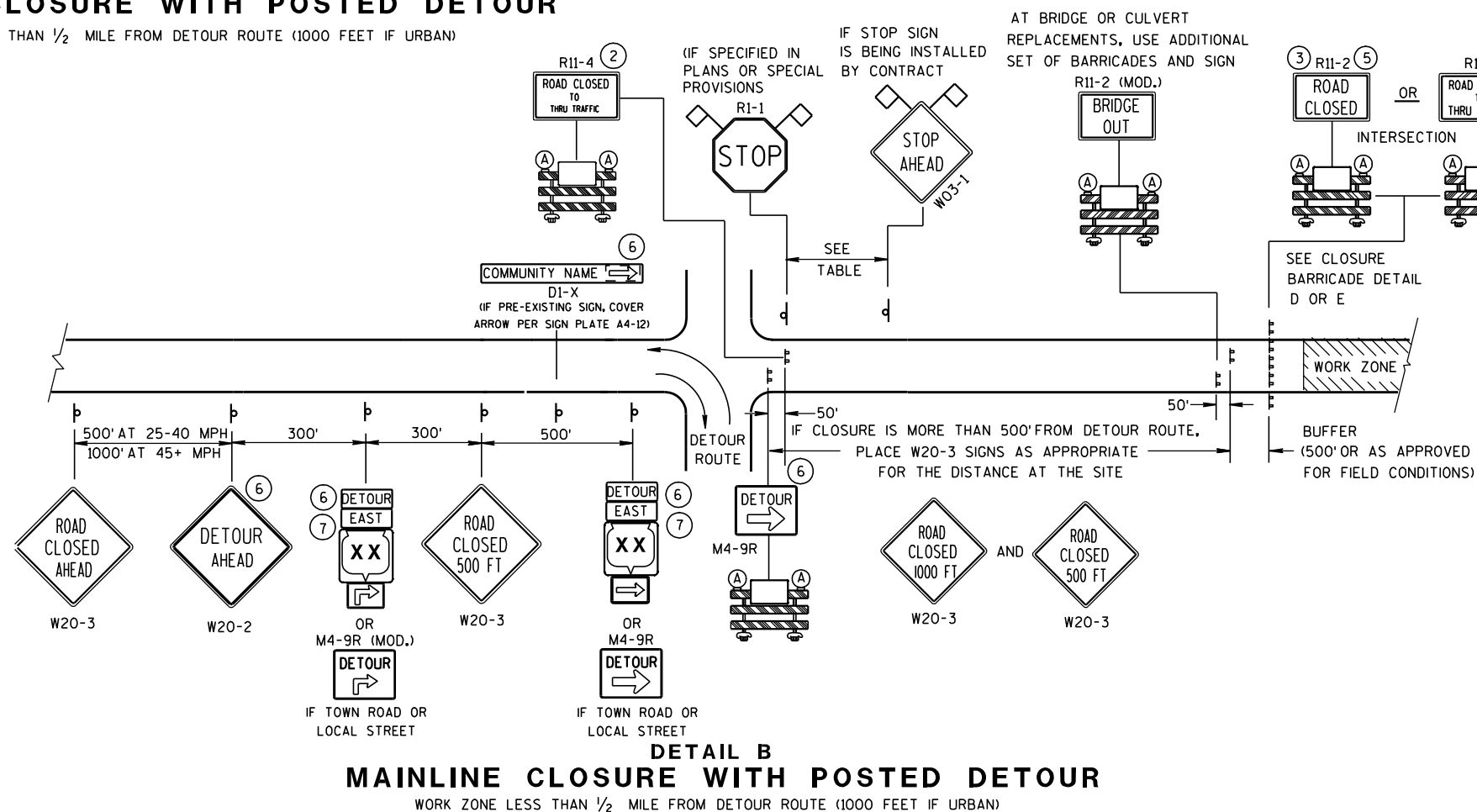
FHWA

/S/ Rory L. Rhin...
CHIEF ROADWAY DEVELOP 106 ENGINEER



SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCING WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

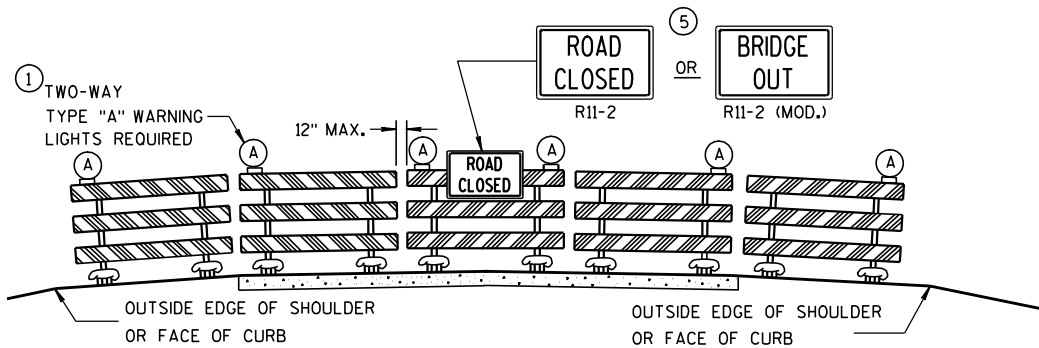


LEGEND

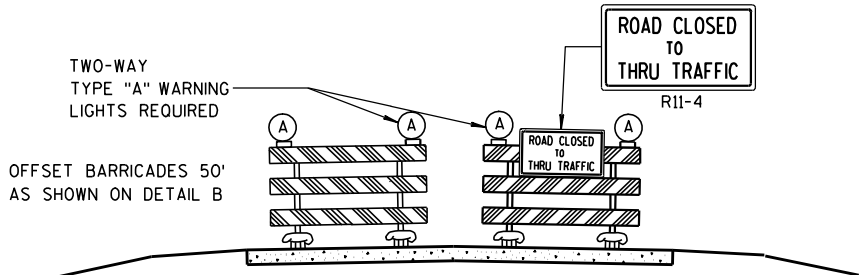
-  POST MOUNTED SIGN
 TYPE III BARRICADES
 (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
 WORK ZONE
 M4-8
 M3-X
 OR  OR 
 M1-4 MI-5A M1-6
 OR 
 M05-1 M06-1
 FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

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

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.

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.

BARRICADES 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.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

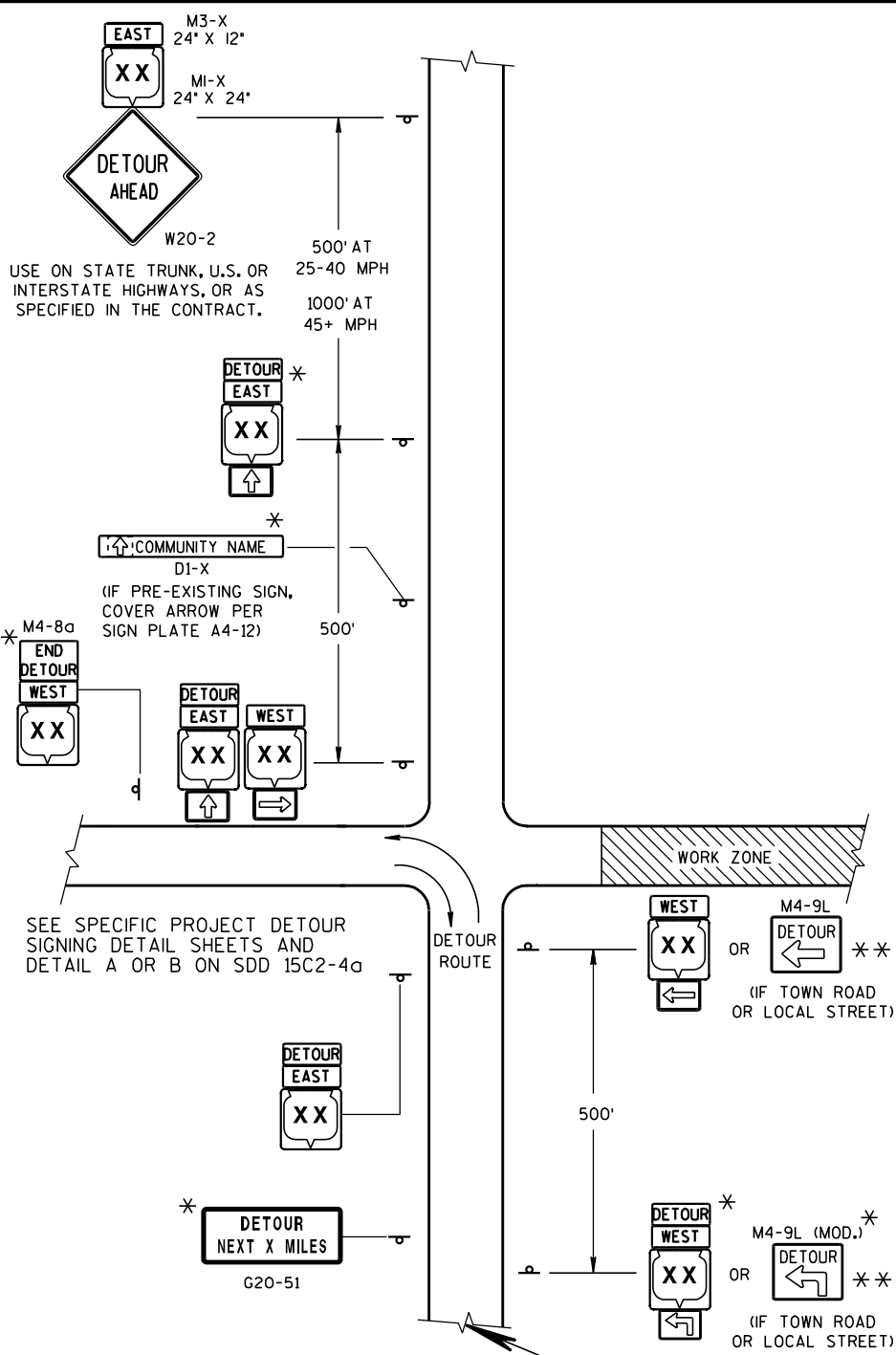
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED		
9/16/03 DATE	/S/ Thomas N. N CHIEF SIGNS AND MAR	108 INEER
FHWA		



LEGEND

POST MOUNTED SIGN

WORK ZONE

DETOUR EAST M4-8 M3-X

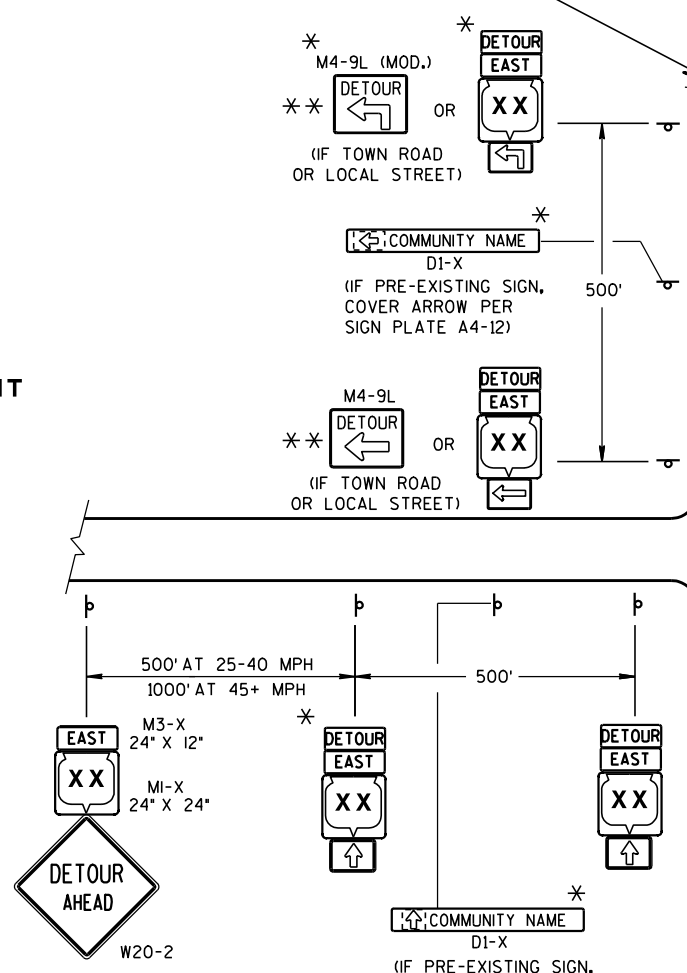
M1-4 OR COUNTY M1-5A OR M1-6

M05-1 OR M06-1 OR M06-1

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT

DETAIL F
DETOUR SIGNING



USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT.

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-9 SHALL BE 30" X 24".

M4-8a SHALL BE 24" X 18".

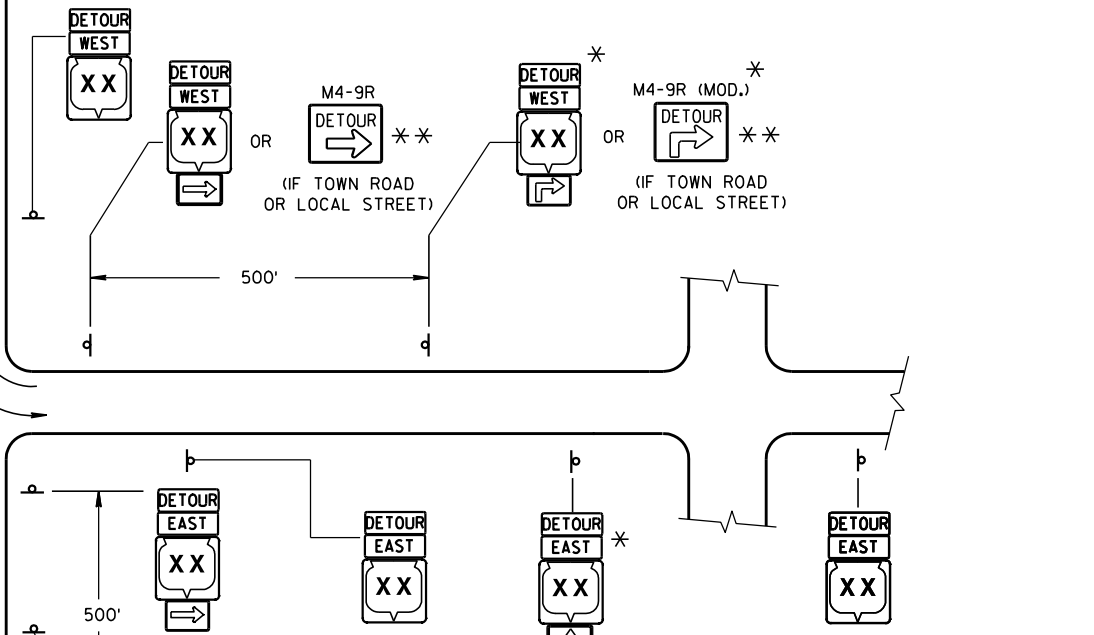
G20-51 SHALL BE 60" X 24".

W20-2 SHALL BE 48" X 48".

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA.)

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

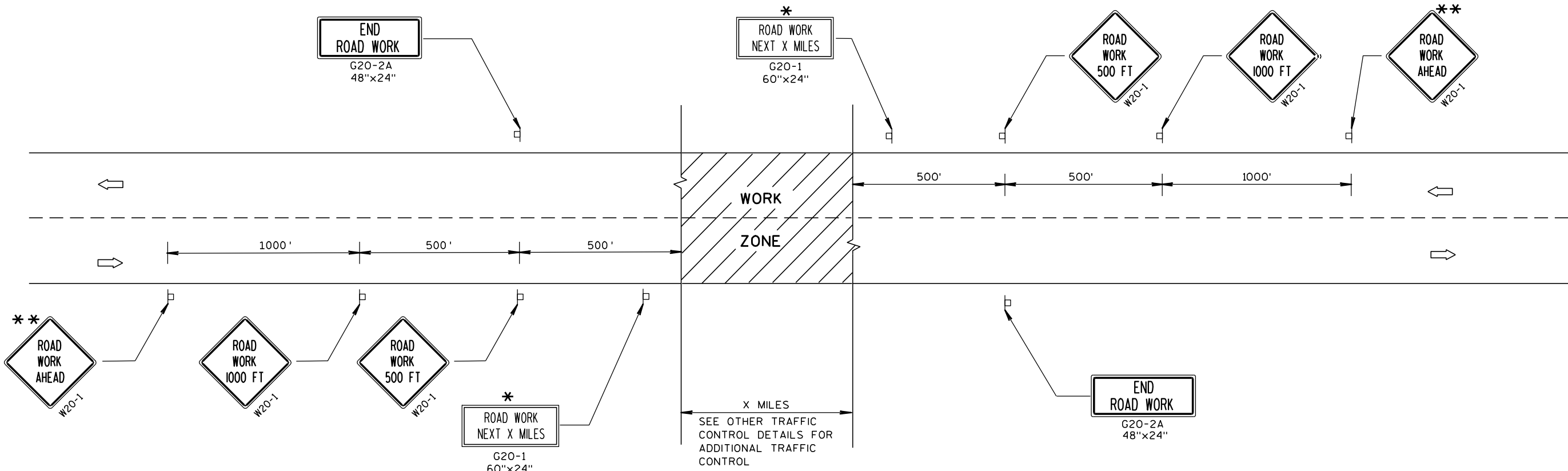
APPROVED
9-16-03 DATE /S/ Thomas N. N... CHIEF SIGNS AND MAR 109 INEER
FHWA



R11-4 AND R11-3 SHALL BE 60" X 30".

-  POST MOUNTED WARNING SIGN
-  TYPE III BARRICADES
-  TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
-  WORK AREA

9-16-03 /S/ Thomas N. N¹¹⁰
DATE CHIEF SIGNS AND MAR 110 INEER



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

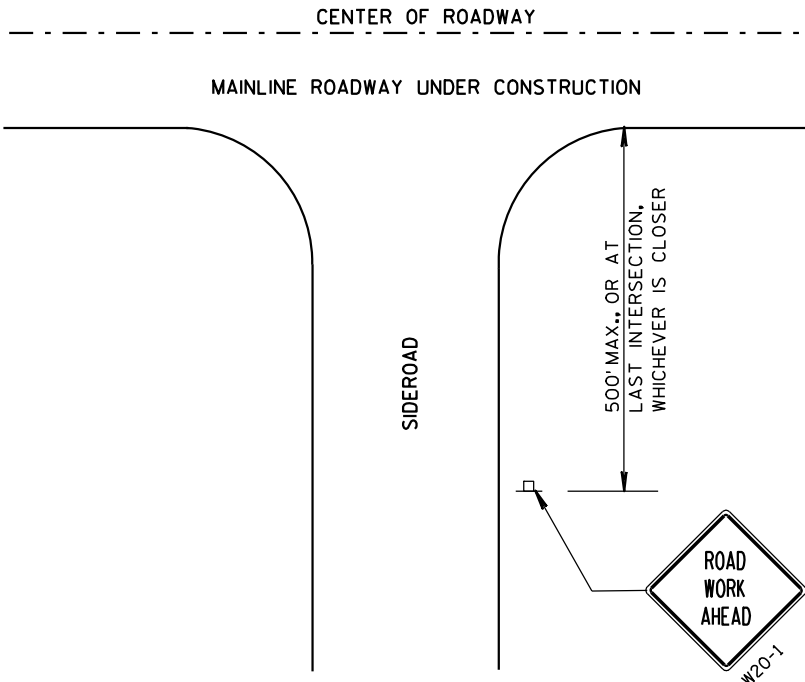
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

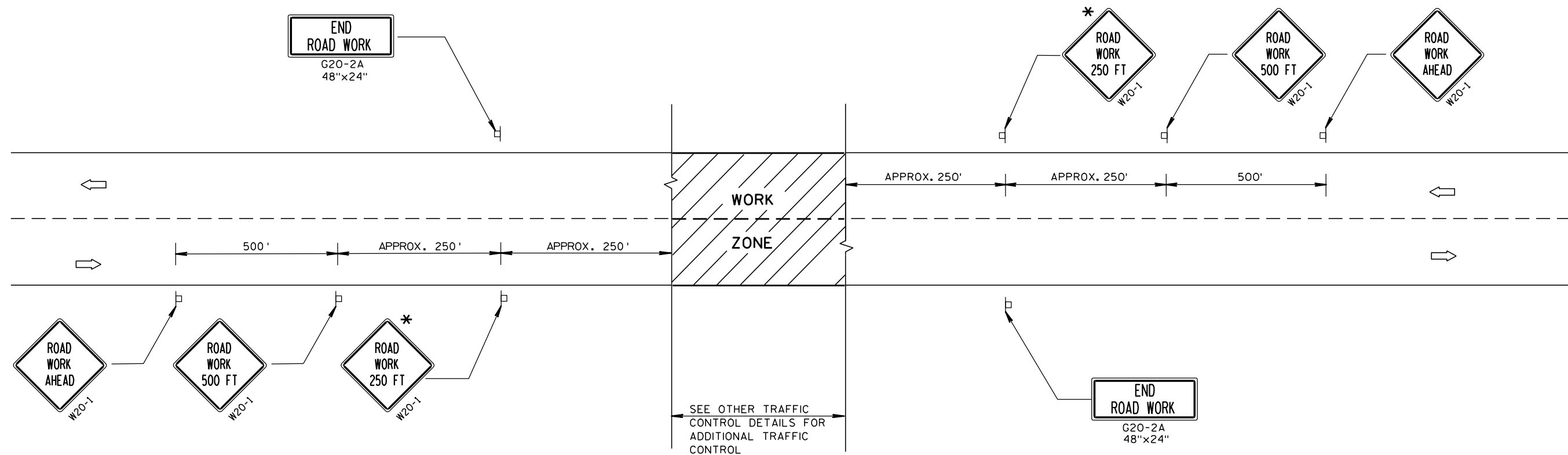
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.



LEGEND

- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED	5/23/00	/S/ Chester J. Neer	
DATE		CHIEF SIGNS AND MARKING	111
FHWA			



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

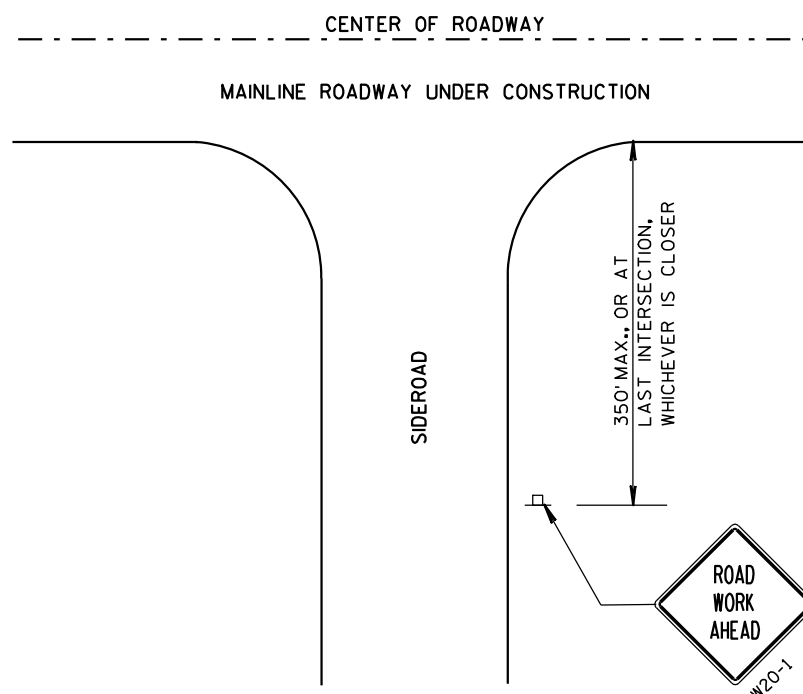
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



LEGEND

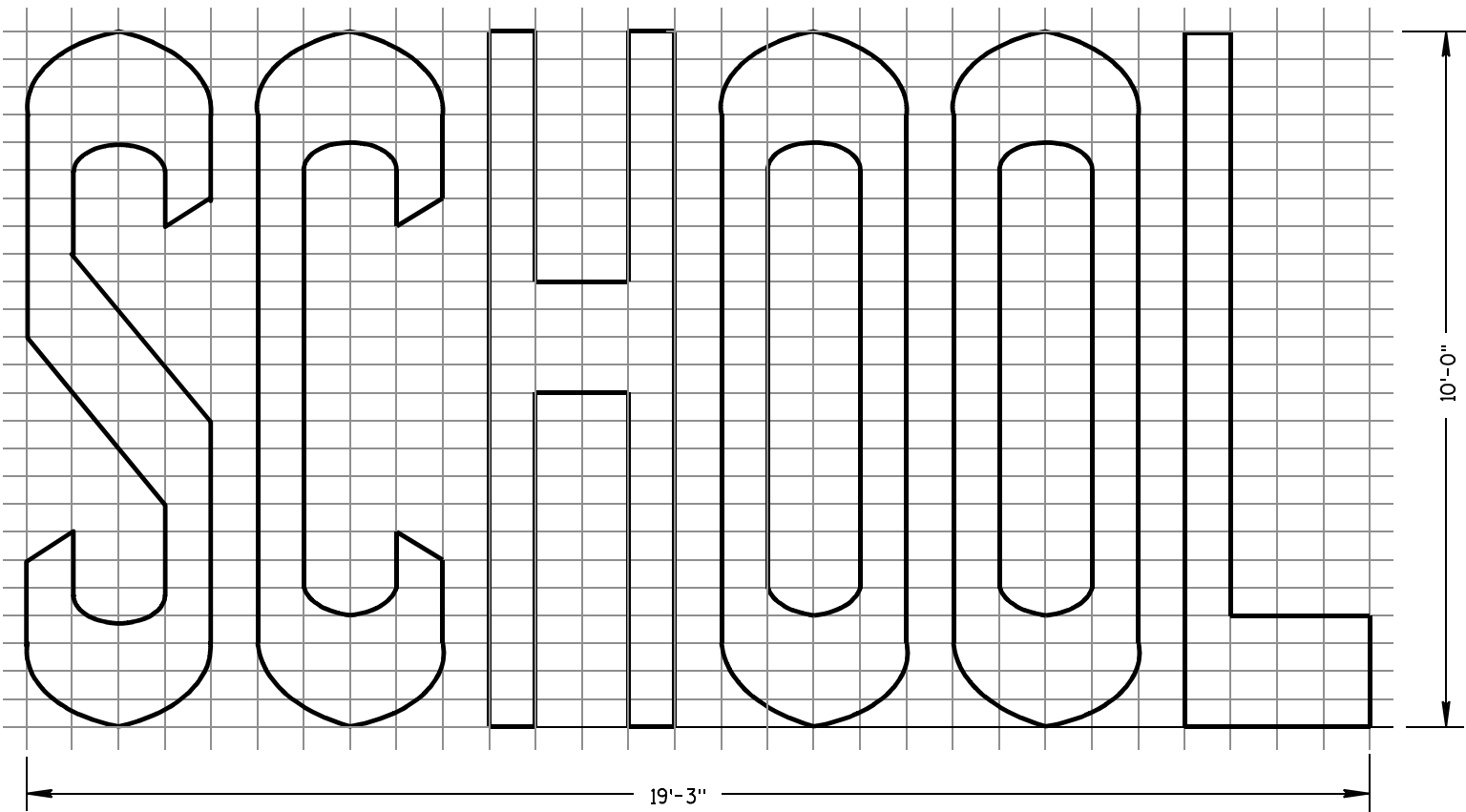
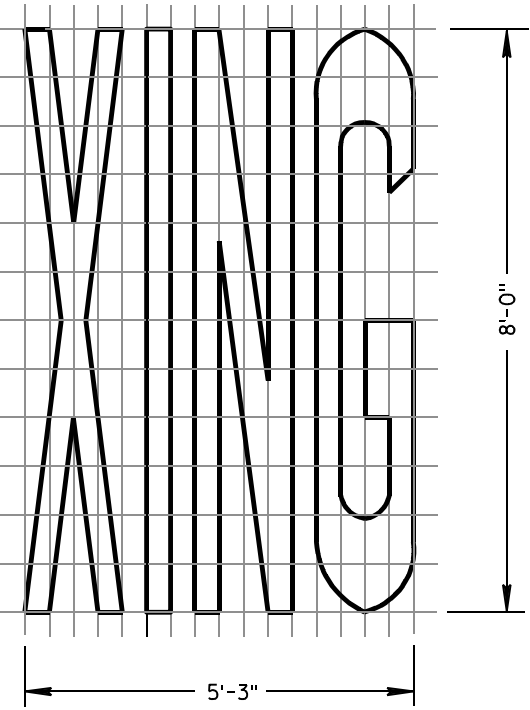
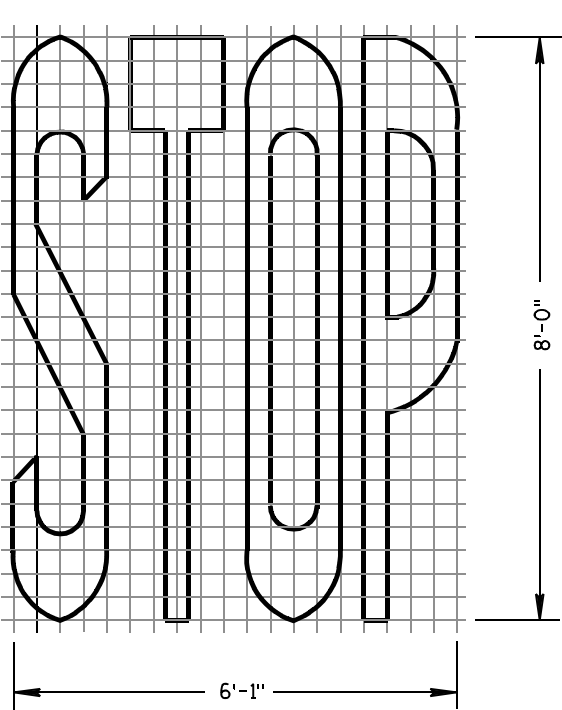
- POST MOUNTED SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/23/00 DATE	/S/ Chester J. 112 CHIEF SIGNS AND MARKING ENGINEER
FHWA	

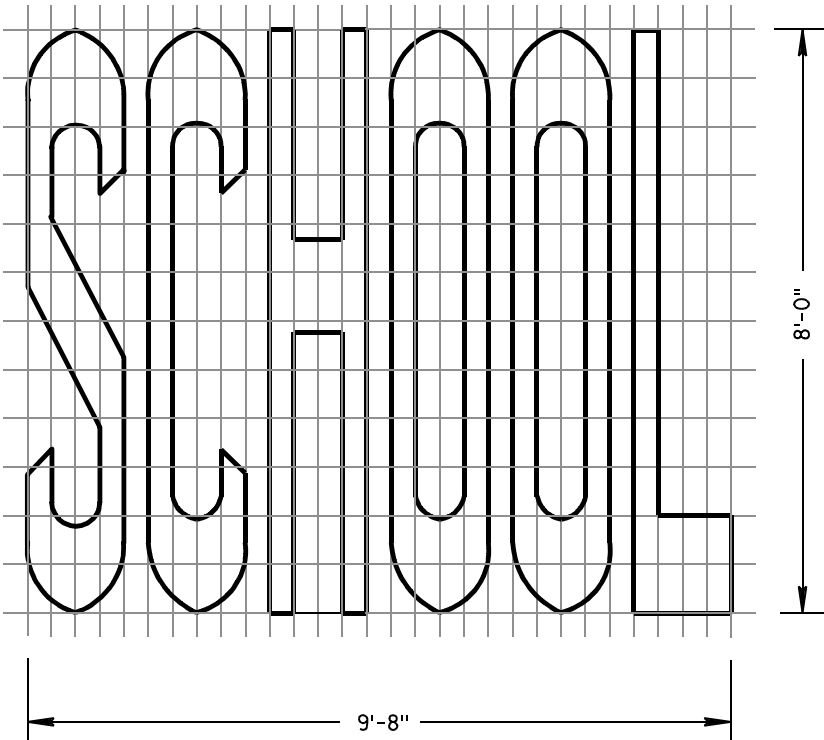
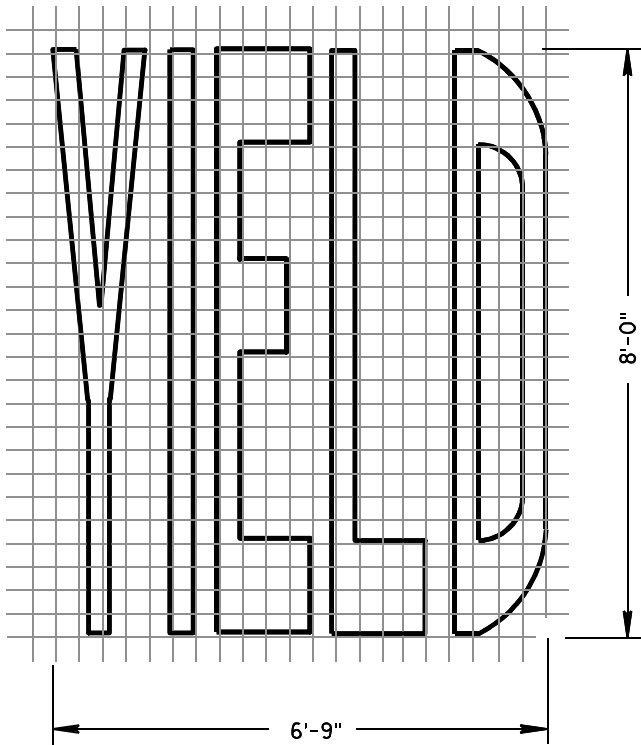
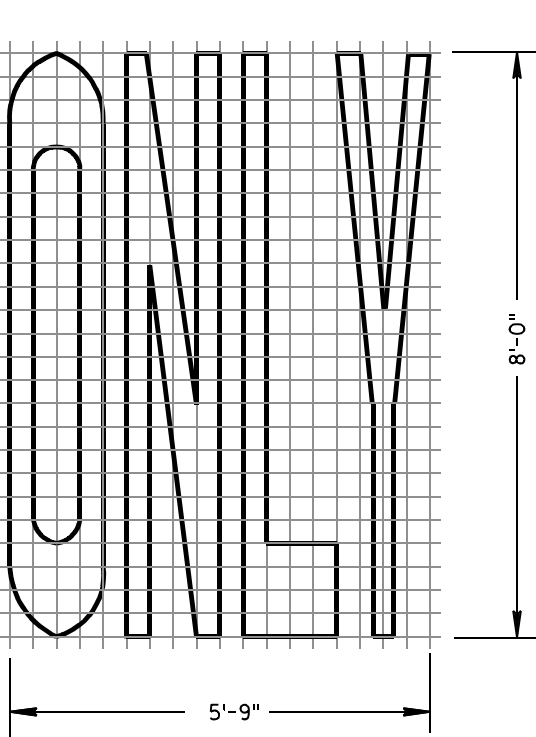
GENERAL NOTES

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

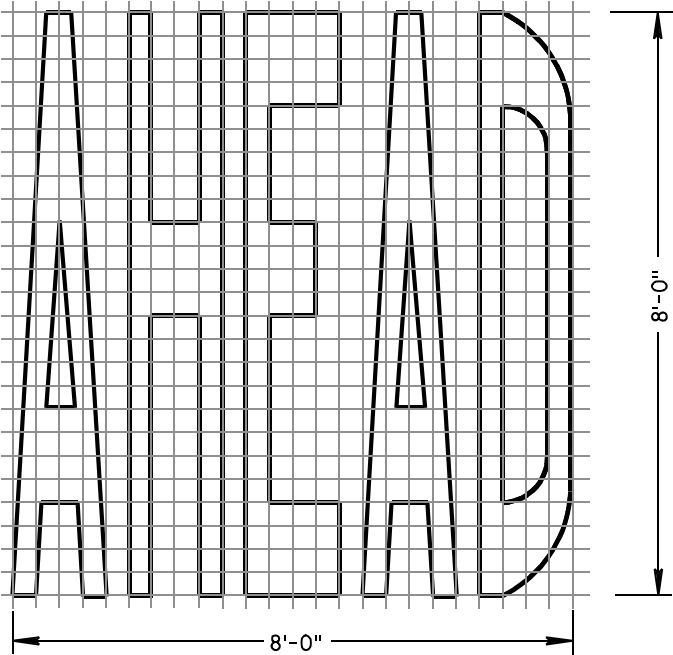
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TWO-LANE



SINGLE-LANE



PAVEMENT MARKING WORDS

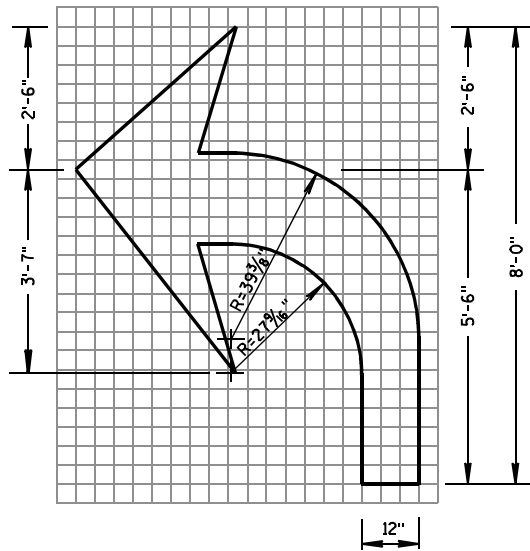
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

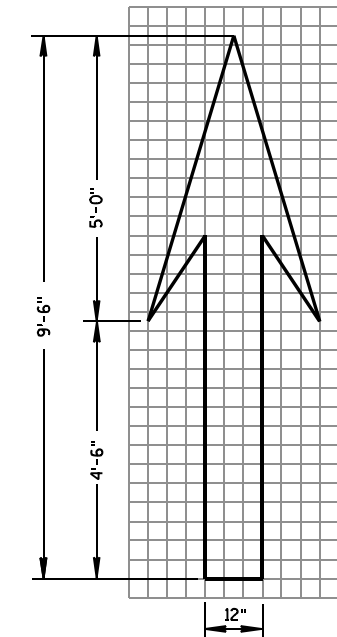
7-1-11
DATE

/S/ Thomas N. Nothnag
STATE TRAFFIC ENGINEER 113 IGN

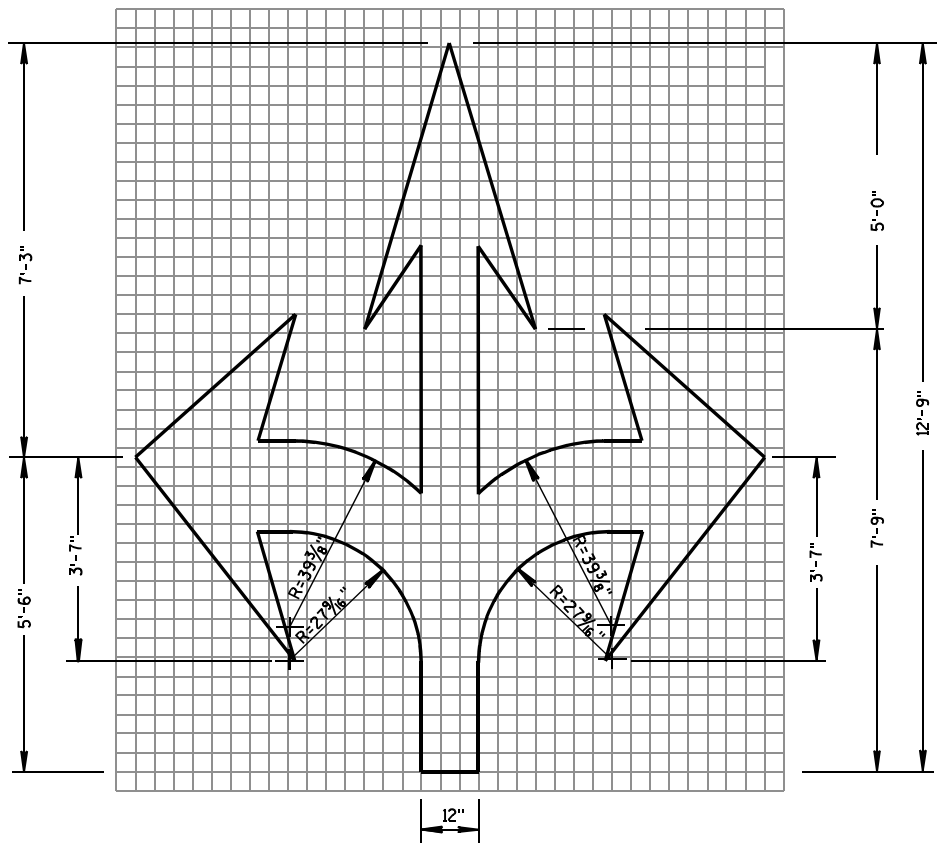
FHWA



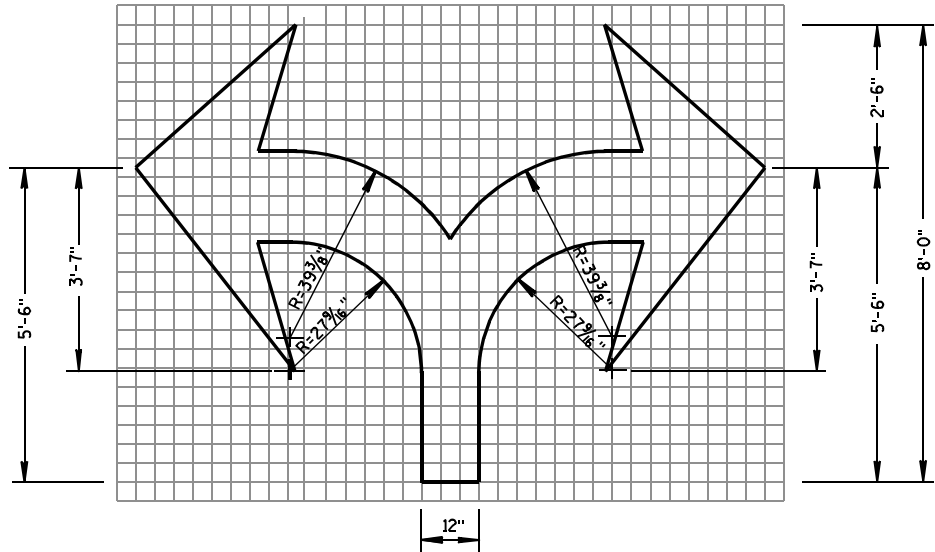
TYPE 2



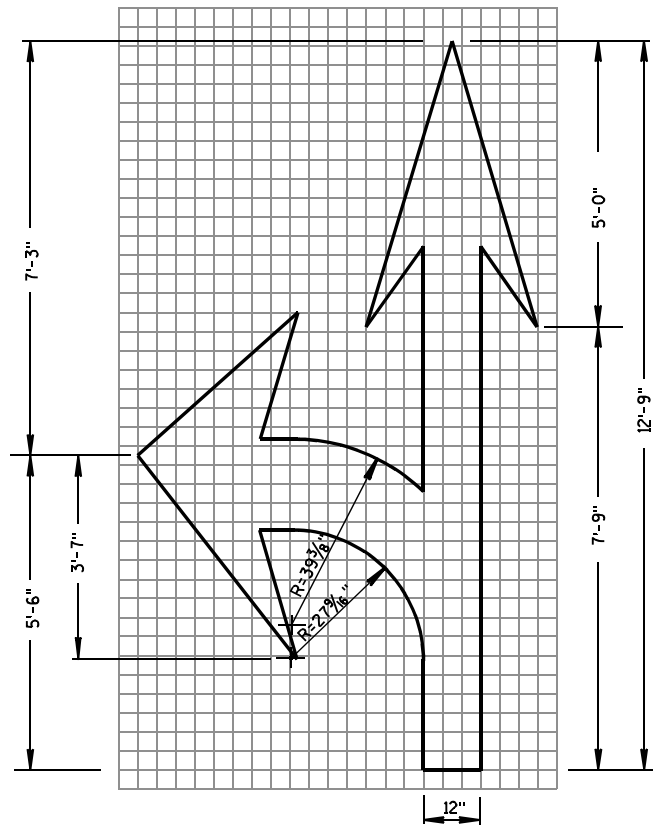
TYPE 1



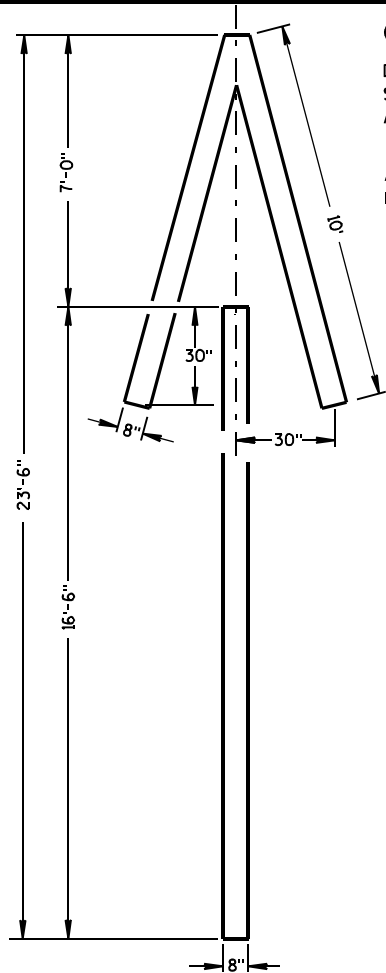
TYPE 6



TYPE 7



TYPE 3

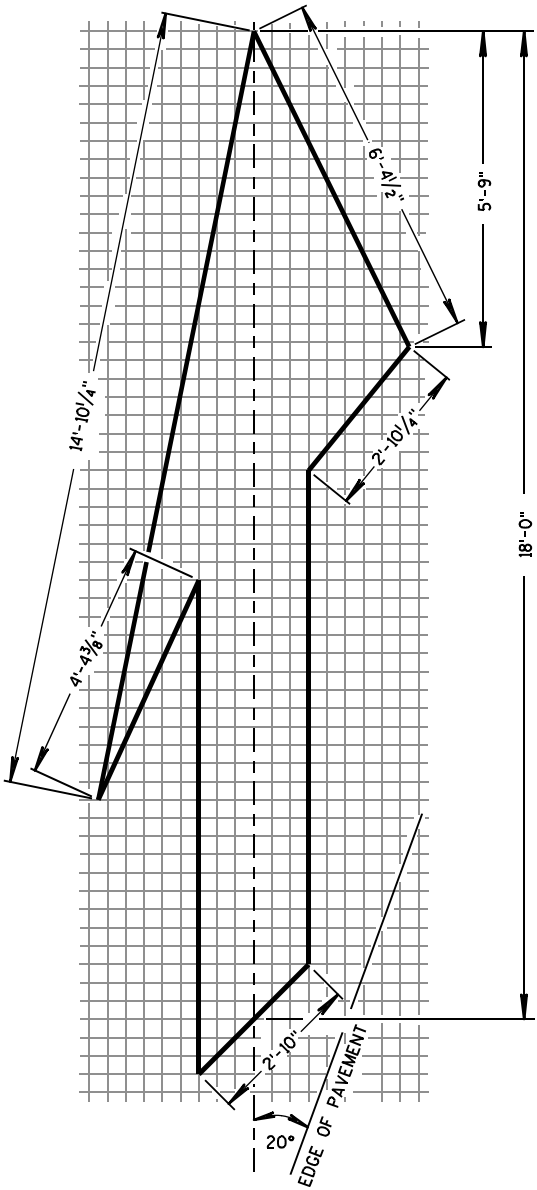


TYPE 4

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.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

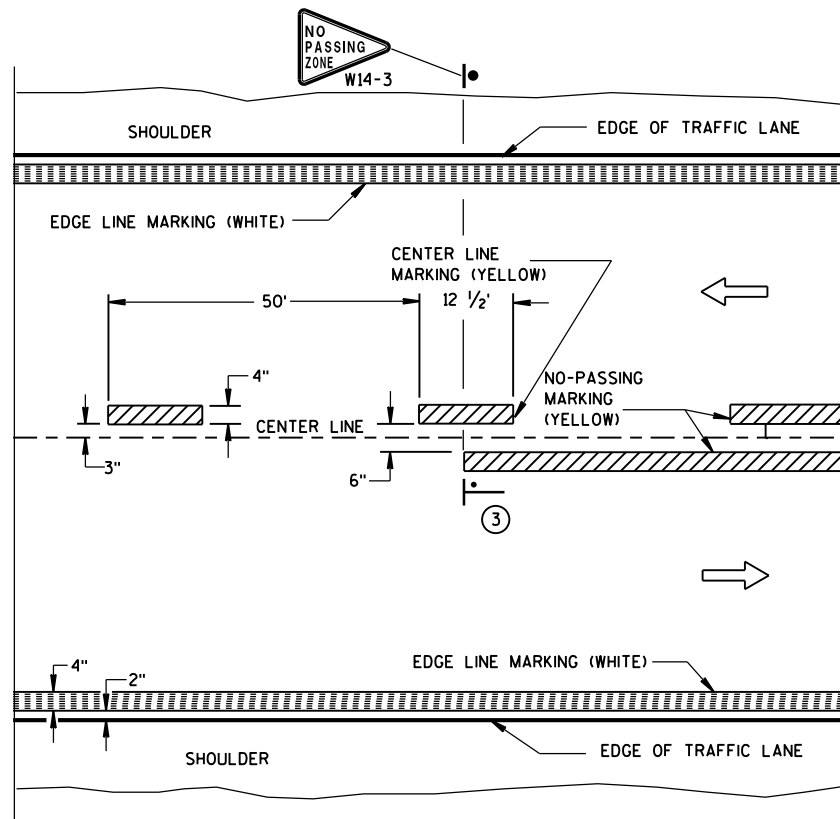


TYPE 5 LANE DROP ARROW

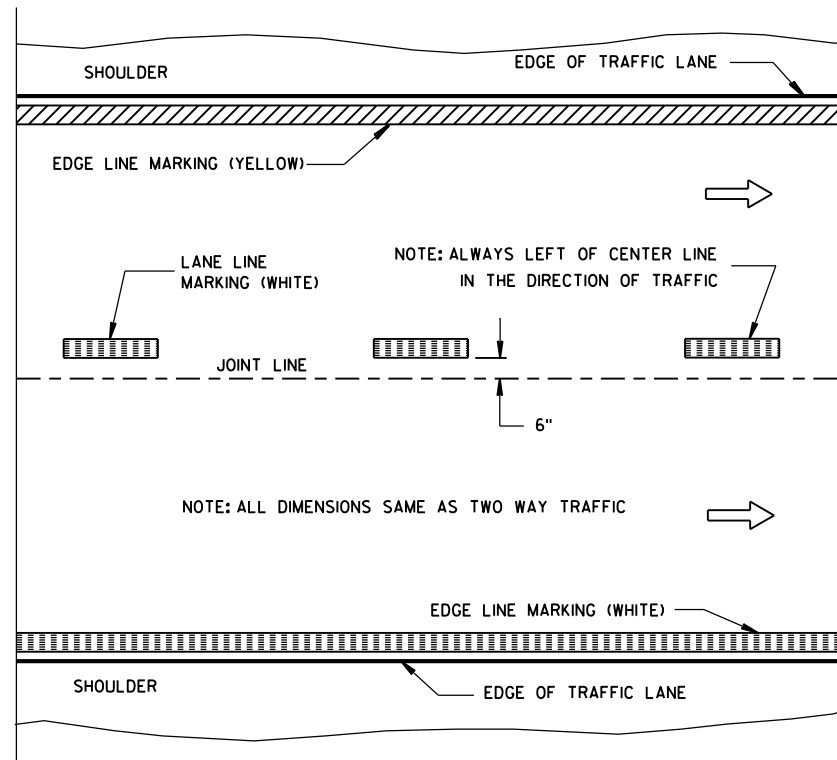
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/1/11 DATE /S/ Thomas N. Nathahn
STATE TRAFFIC ENGINE 114 SIGN
FHWA

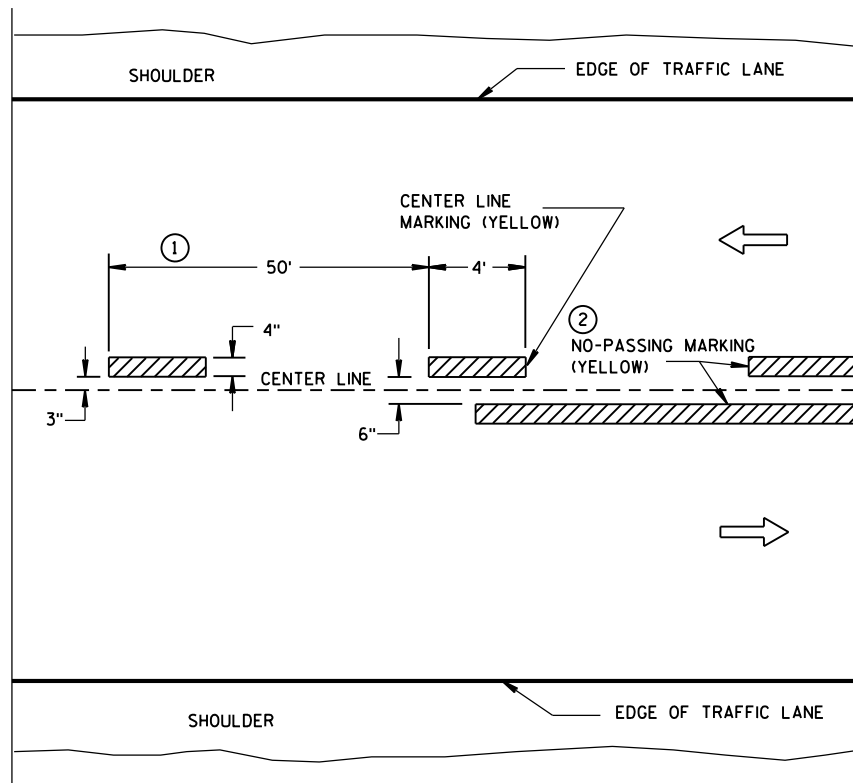


TWO WAY TRAFFIC

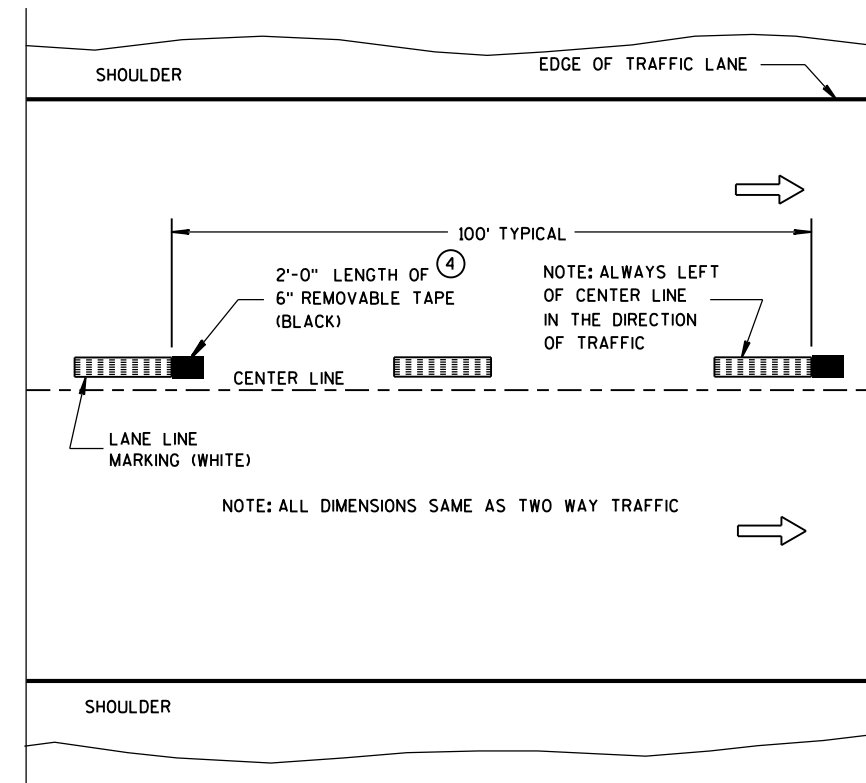


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

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

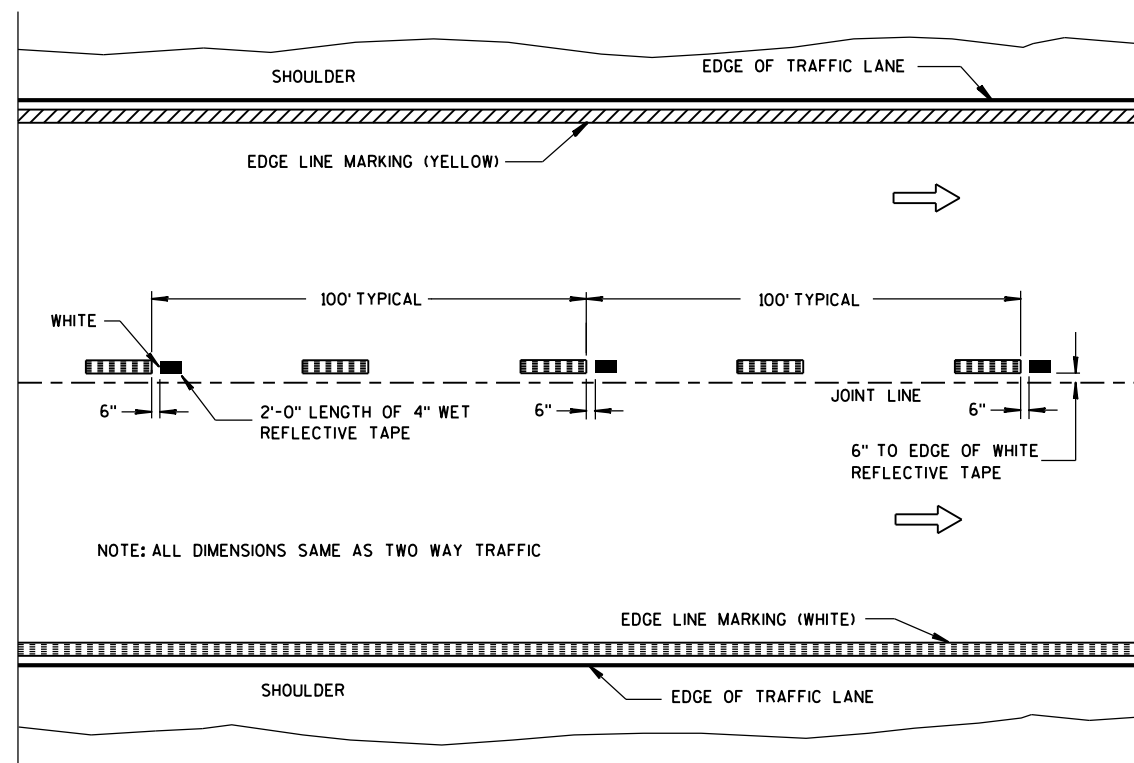
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



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

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

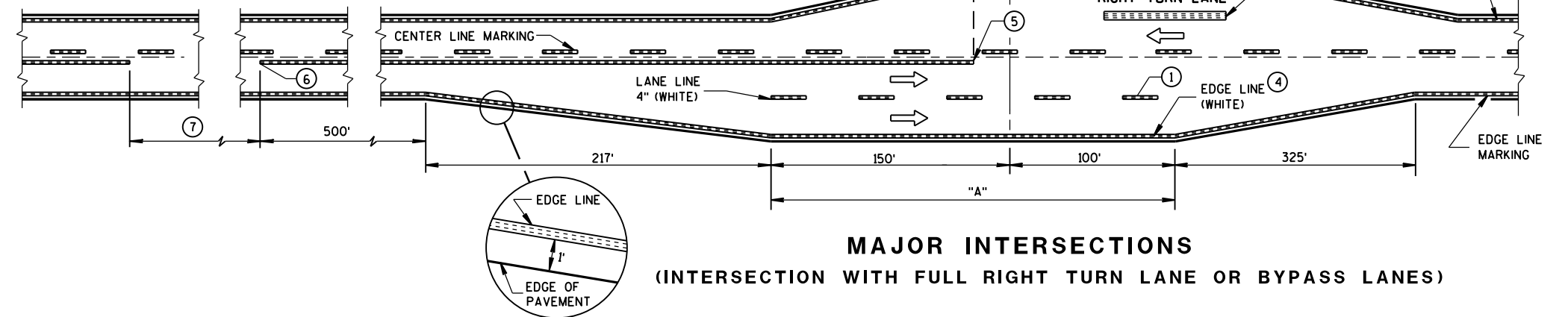
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-1-2012 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 115 :SIGN
FHWA



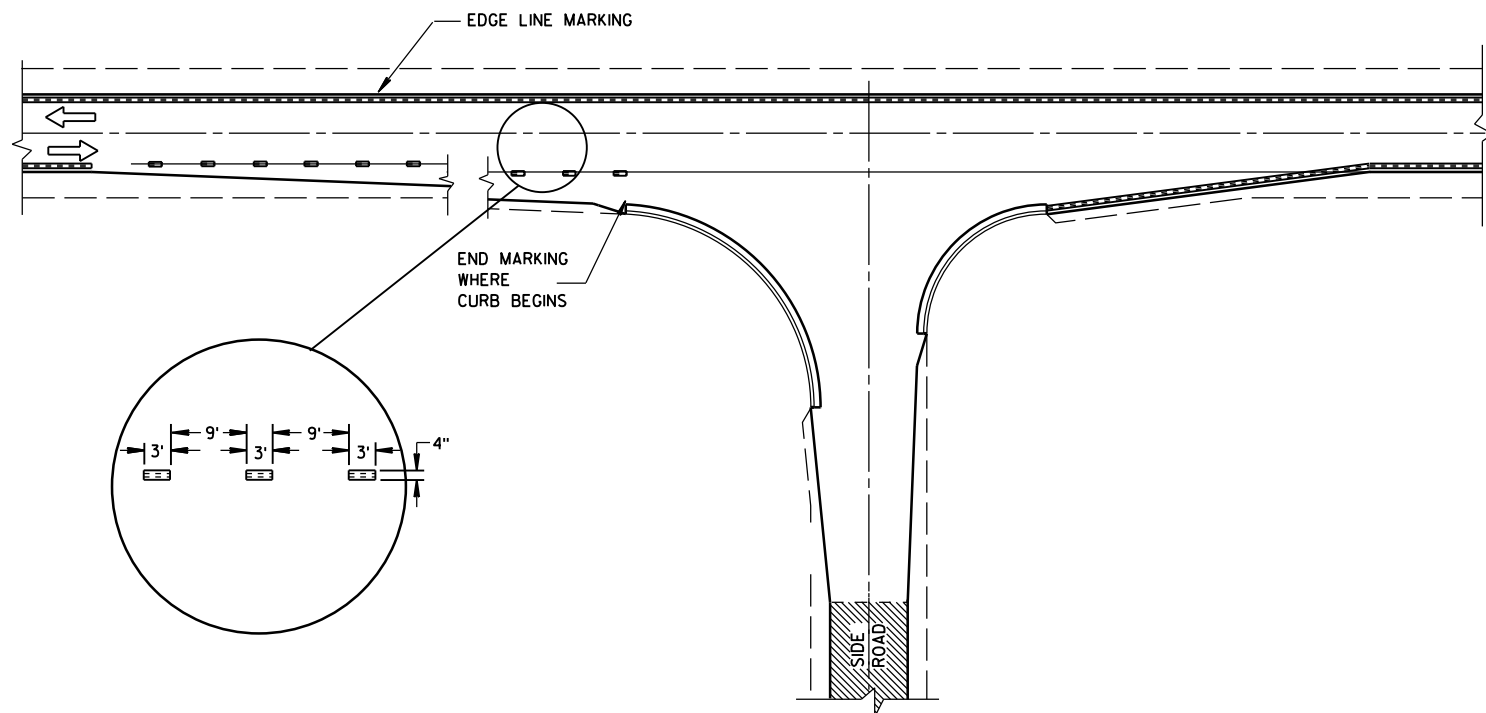
(7)

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

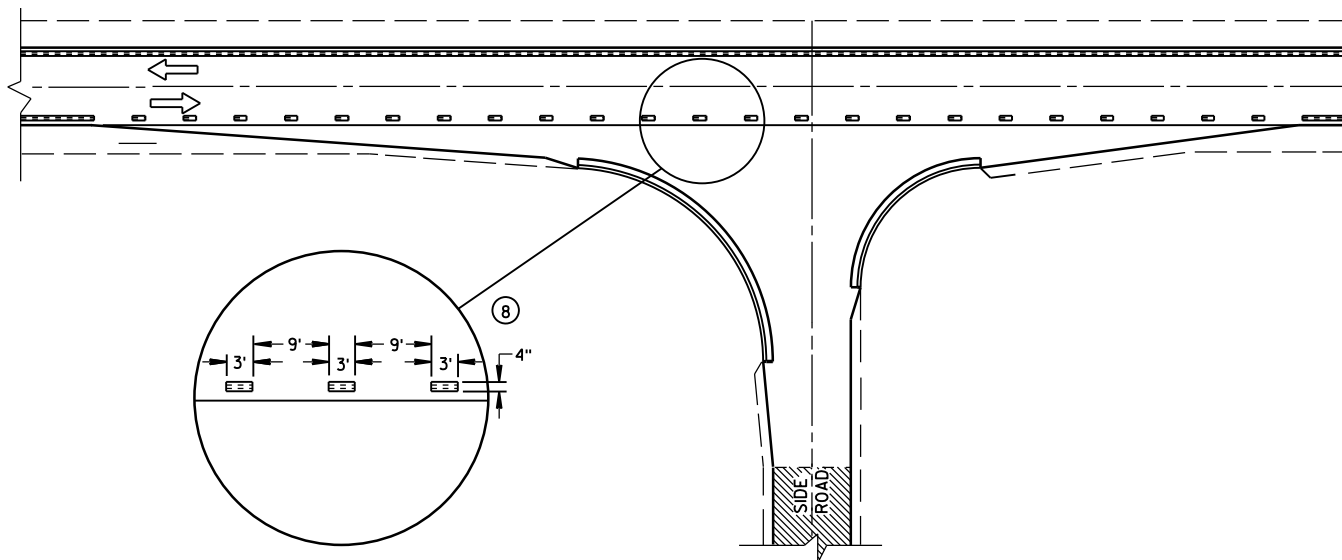


MAJOR INTERSECTIONS

(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 TRANSPORTATION 116

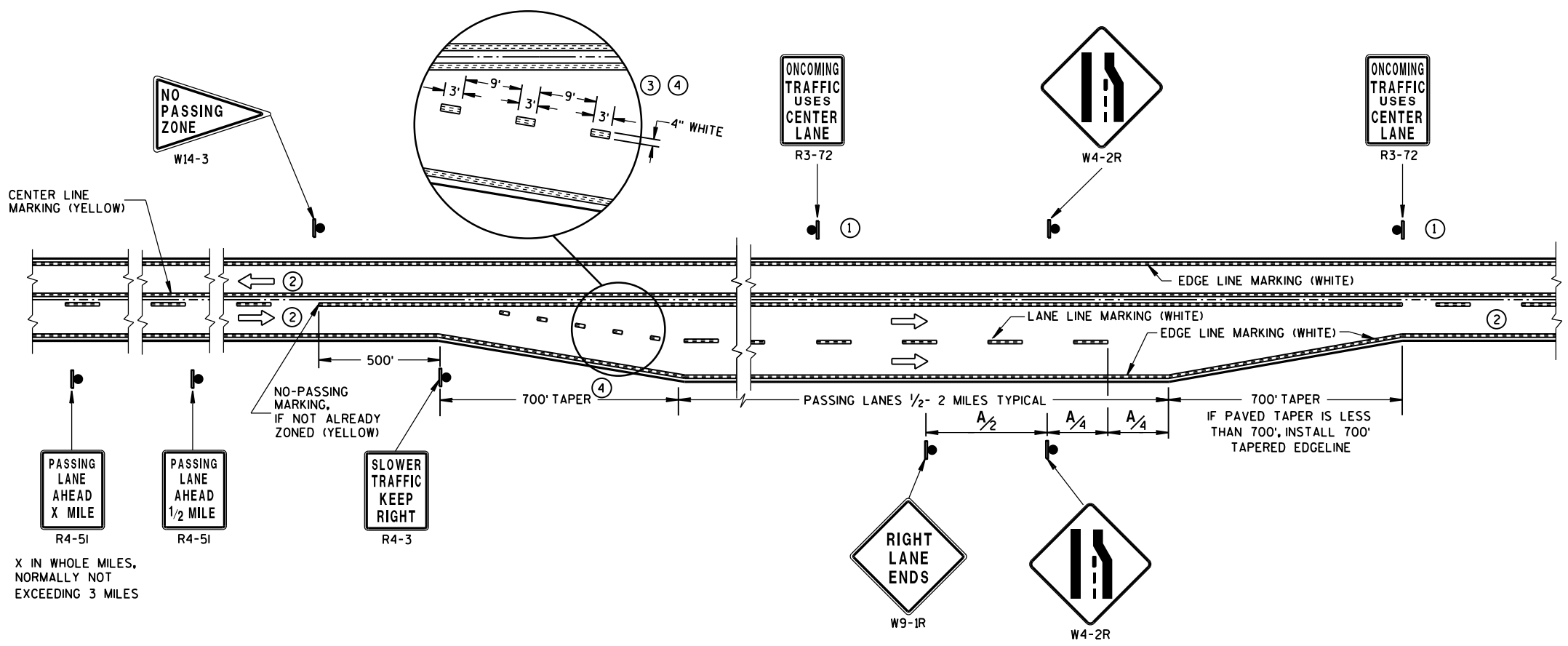
GENERAL NOTES

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



**SOLID DOUBLE-YELLOW LINE
(THROUGHOUT ENTIRE PASSING/CLIMBING LANE)**

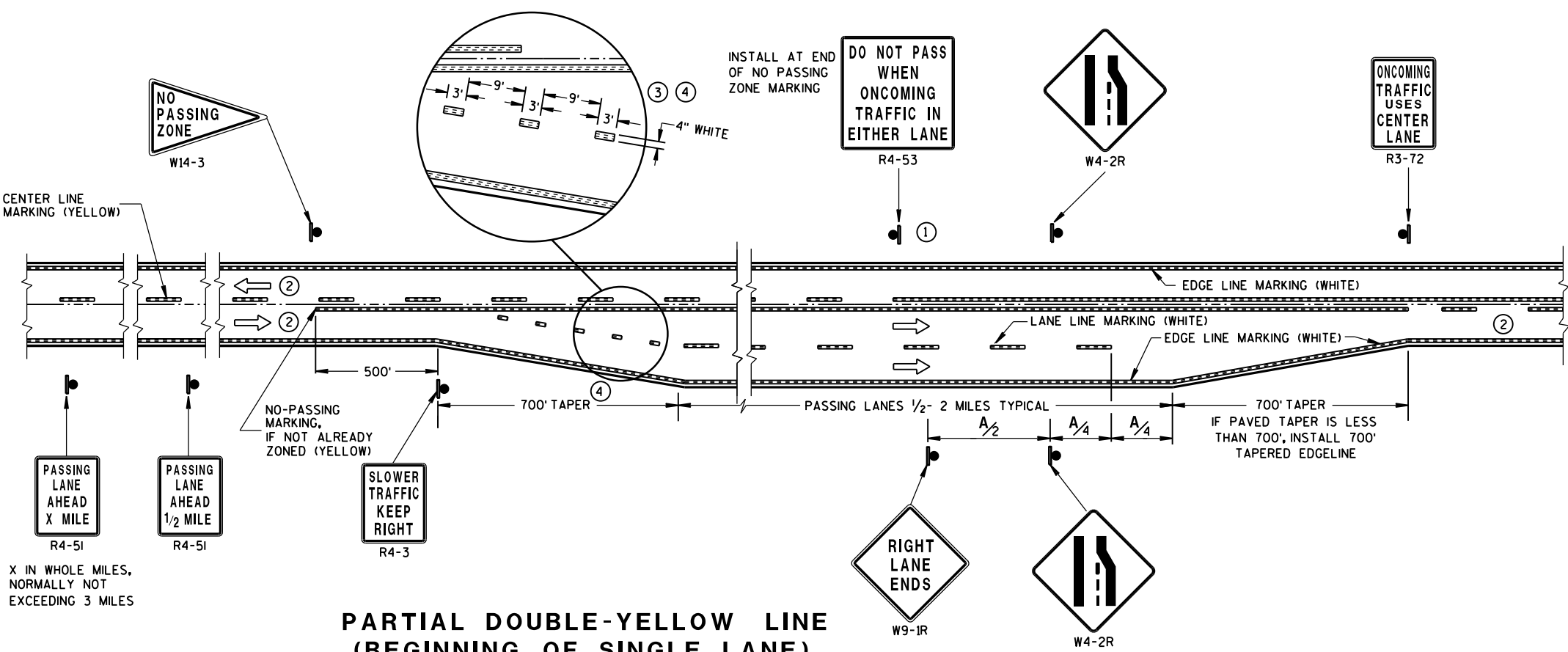
GENERAL NOTES

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

ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

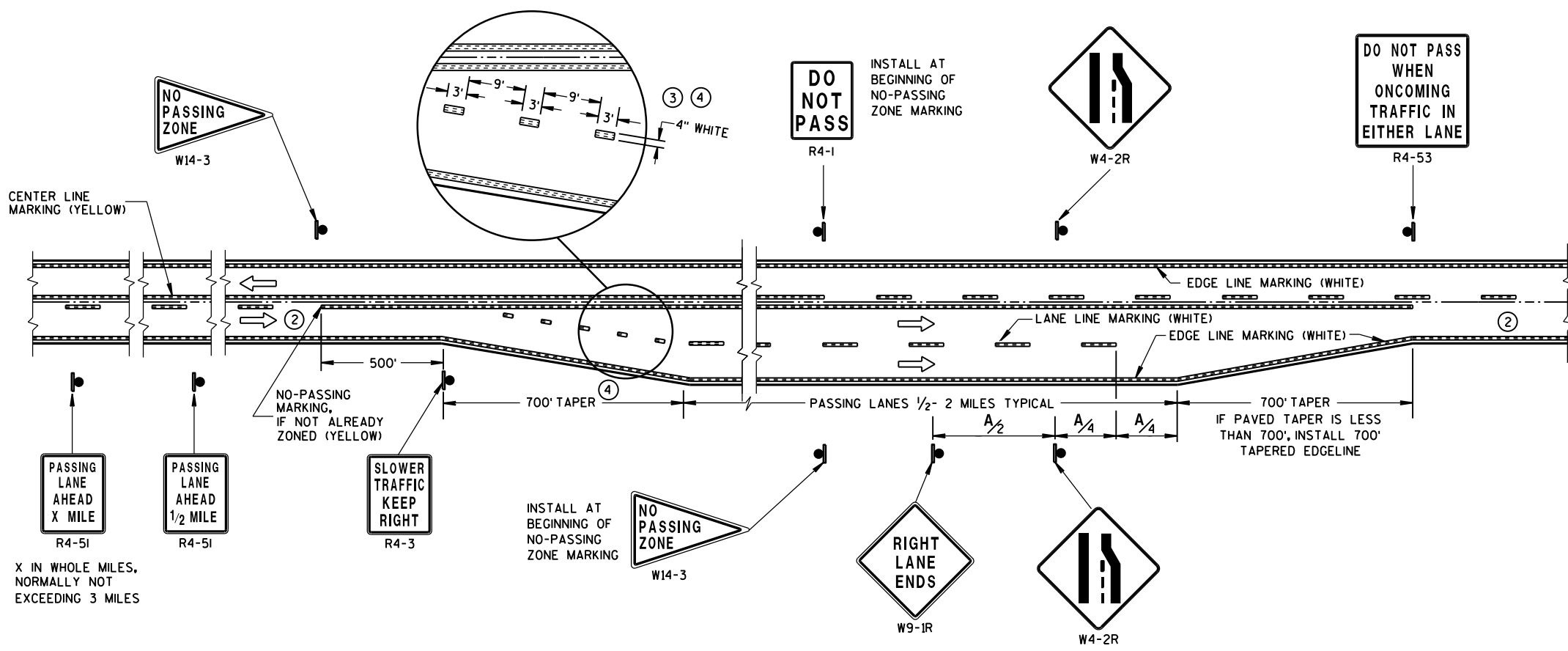
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



**PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)**

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 117



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

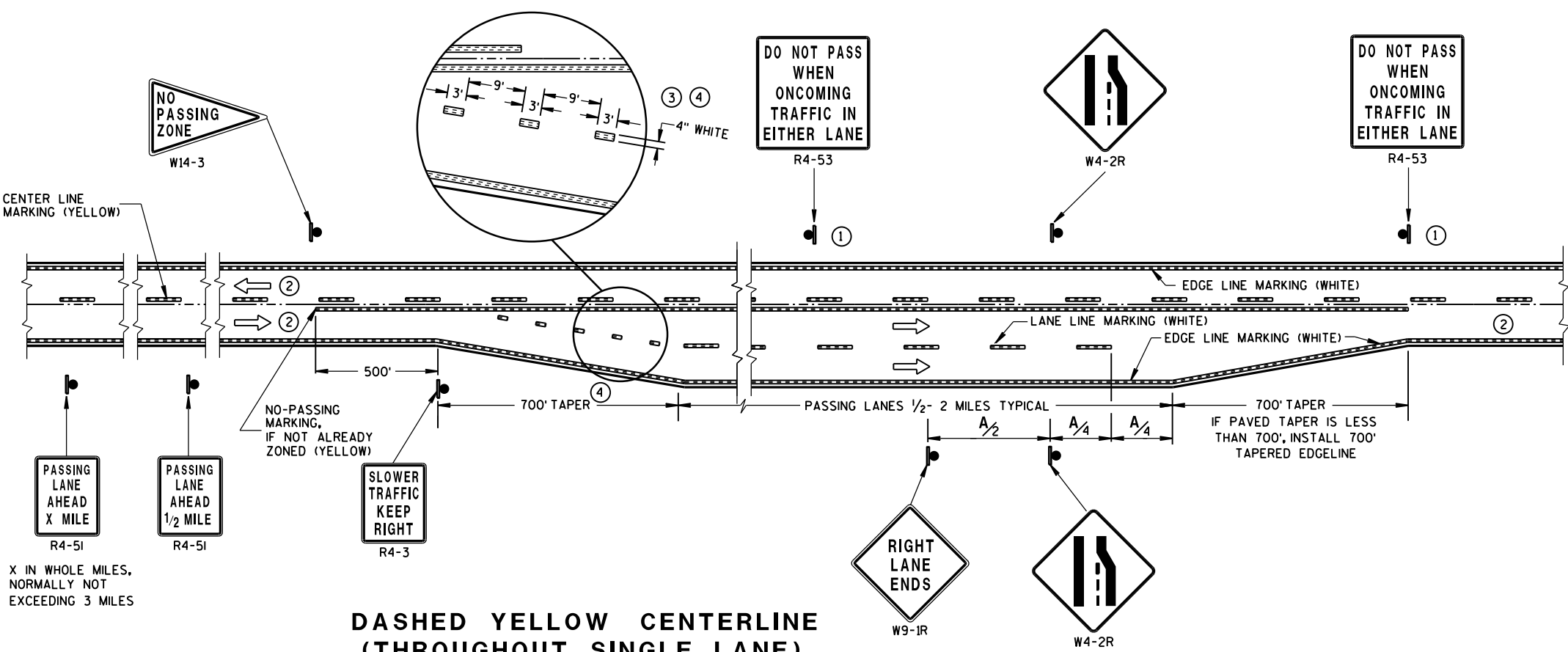
GENERAL NOTES

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

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

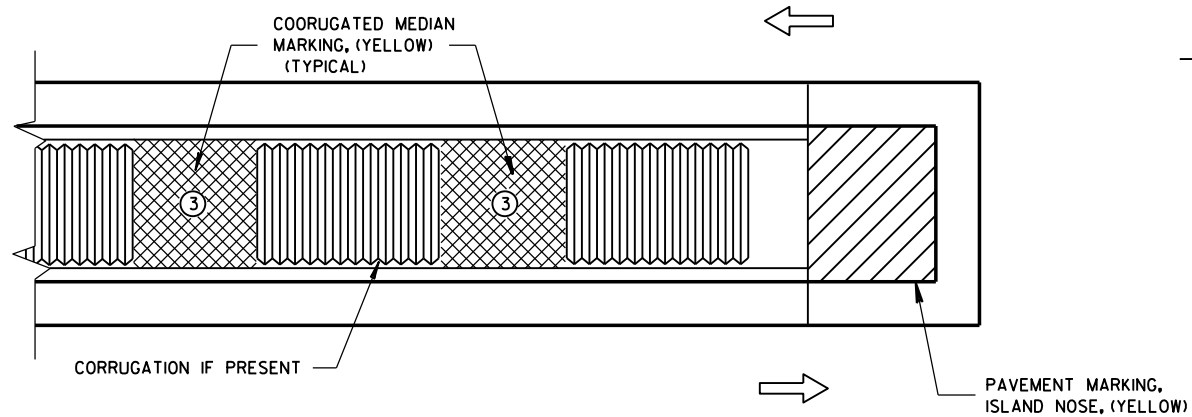
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950



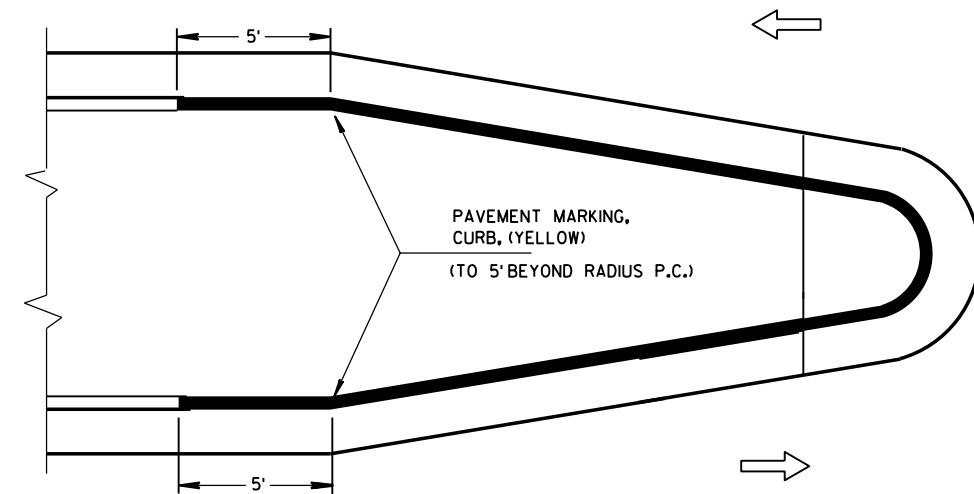
**DASHED YELLOW CENTERLINE
(THROUGHOUT SINGLE LANE)**

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

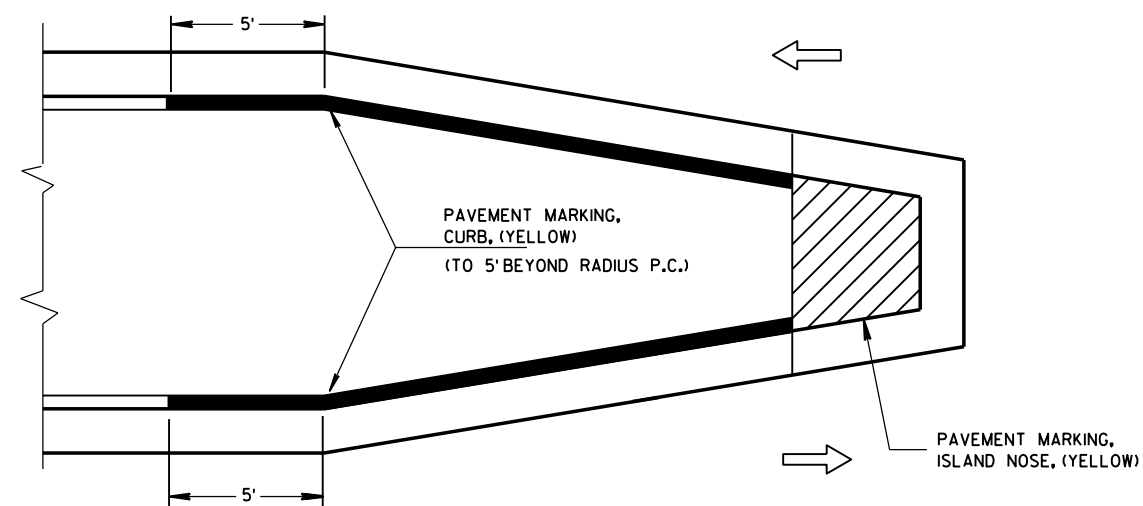
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 118



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

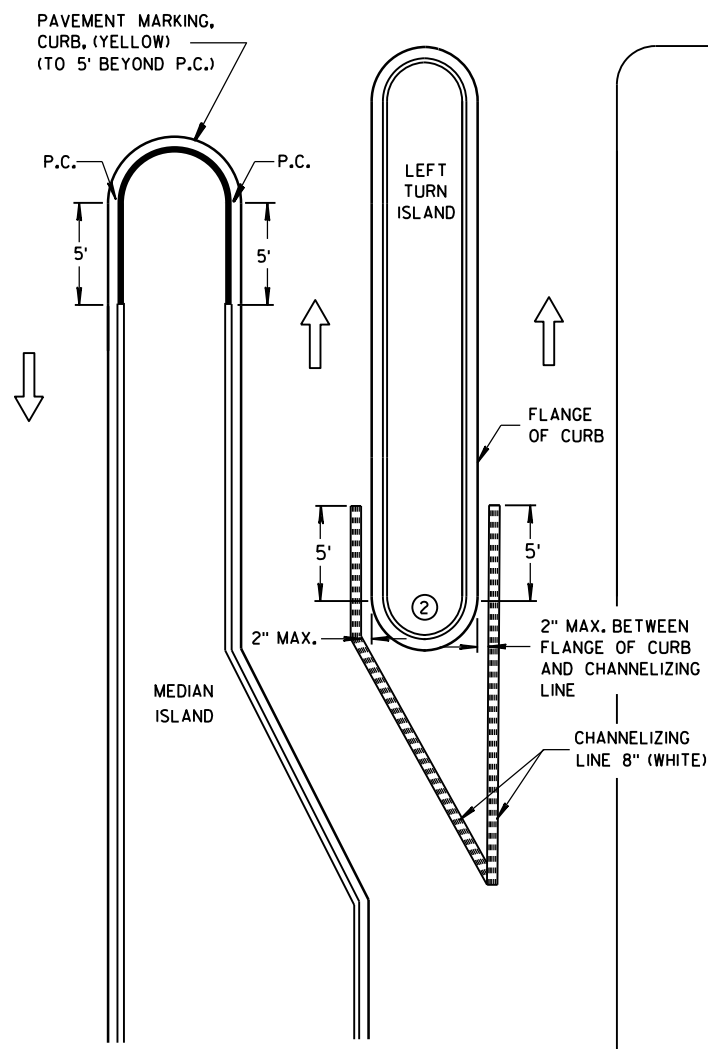


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

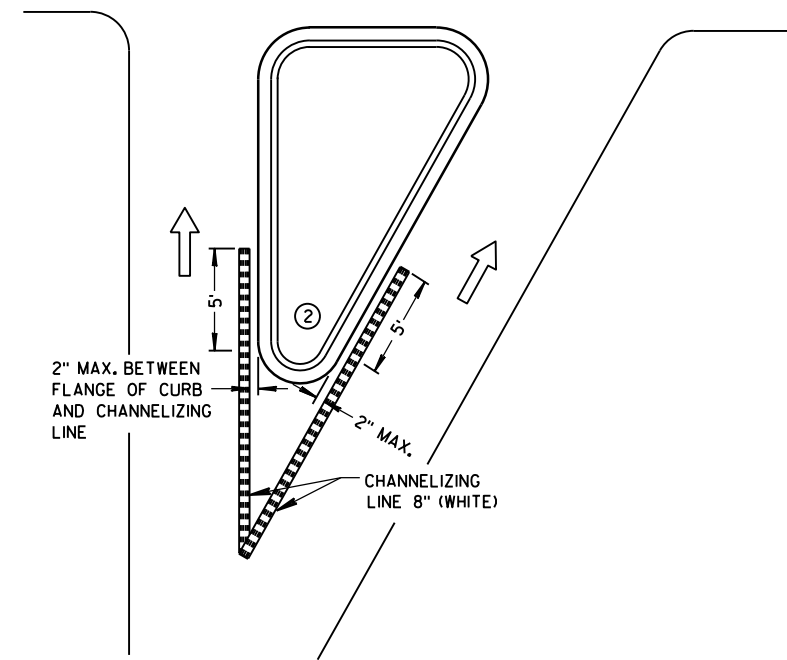
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

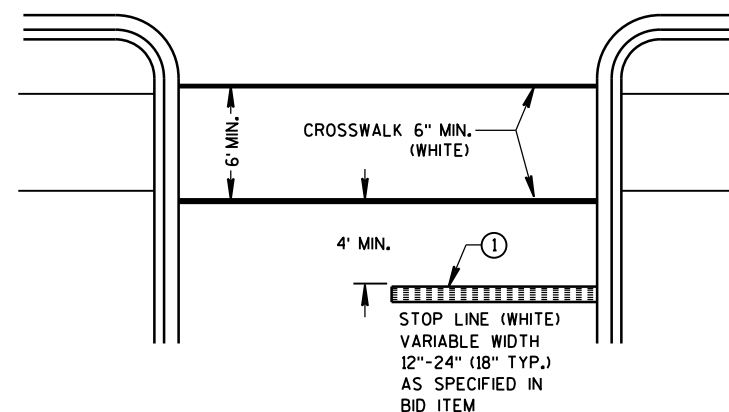
- ① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
- ③ WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND

LEGEND

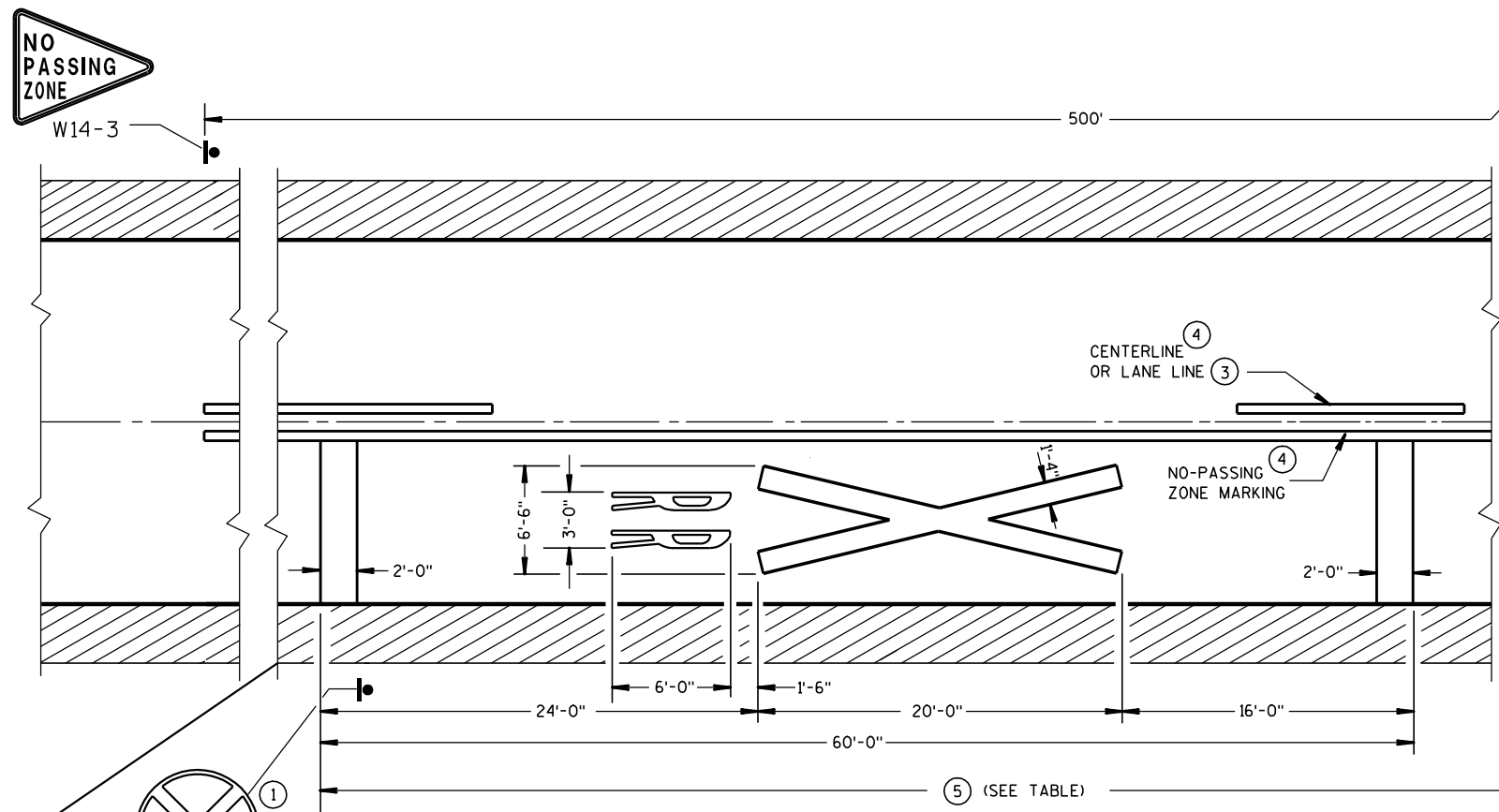
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL



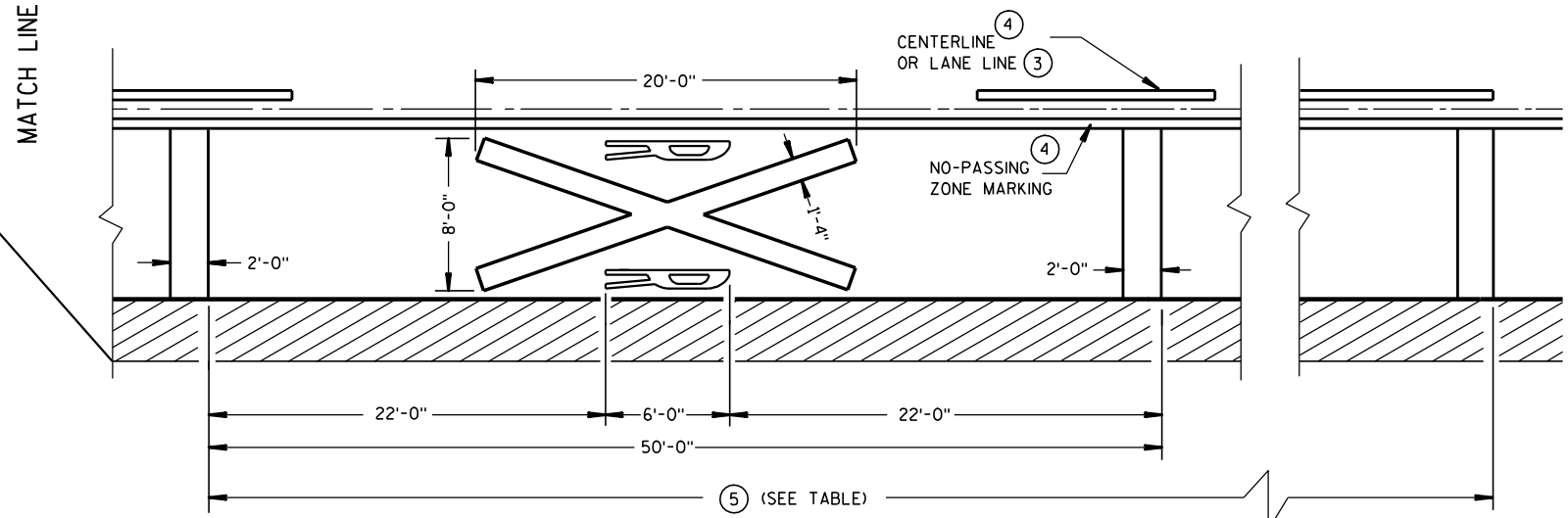
STOP LINE AND CROSSWALK

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 119



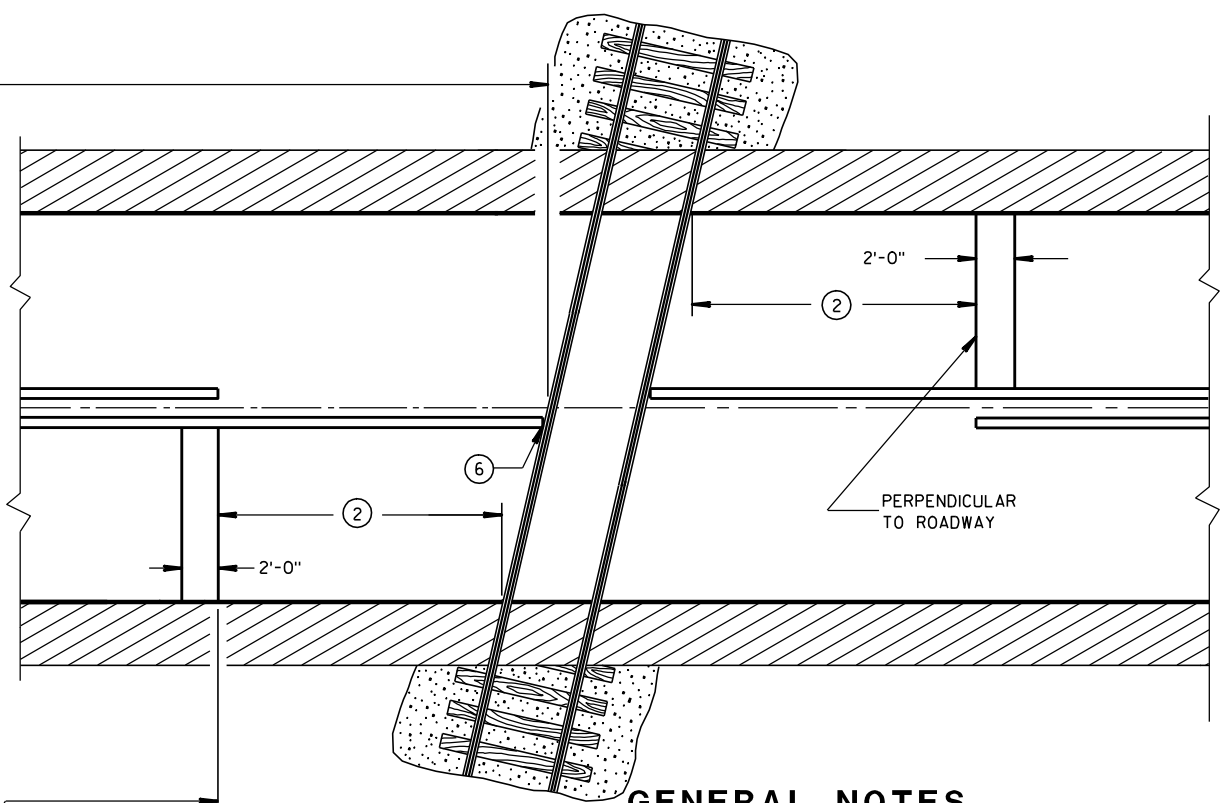
PREFERRED PAVEMENT MARKING



ALTERNATE PAVEMENT MARKING

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

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



GENERAL NOTES

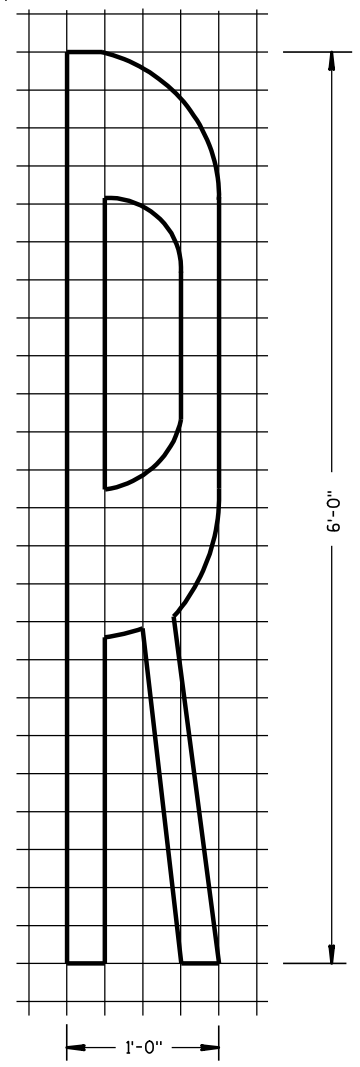
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A THREE-LANE ROADWAY SHOULD BE MARKED WITH A CENTERLINE FOR TWO-LANE APPROACH OPERATION ON THE APPROACH TO A CROSSING.

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE. ALL LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" (ADOPTED BY THE FEDERAL HIGHWAY ADMINISTRATION).

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

- (1) A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
- (2) MINIMUM 8' FROM ANY RAILROAD WARNING DEVICES (SIGNALS, GATES, ETC.) OR 25' FROM THE NEAREST RAIL, WHICHEVER DISTANCE IS GREATER.
- (3) REFLECTIVE WHITE.
- (4) REFLECTIVE YELLOW 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.
- (5) TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (6) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.



SIGNING AND PAVEMENT MARKING
DETAILS FOR RAILROAD-HIGHWAY
GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1-9-2012 /S/ Thomas N. [Signature]
DATE STATE TRAFFIC ENGINEER 120 DESIGN
FHWA

TWO-LANE ROADWAY

SYMBOLS



WORK AREA



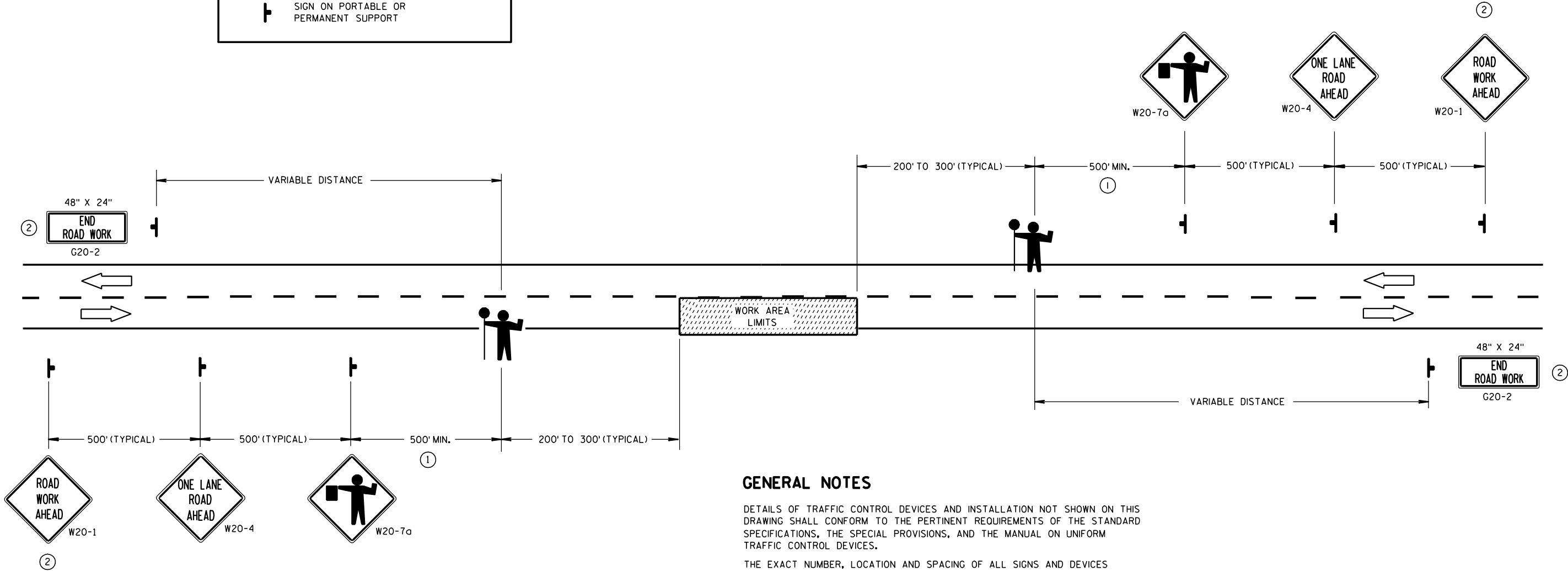
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



SIGN ON PORTABLE OR PERMANENT SUPPORT



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



GENERAL NOTES

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

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

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

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

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

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

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

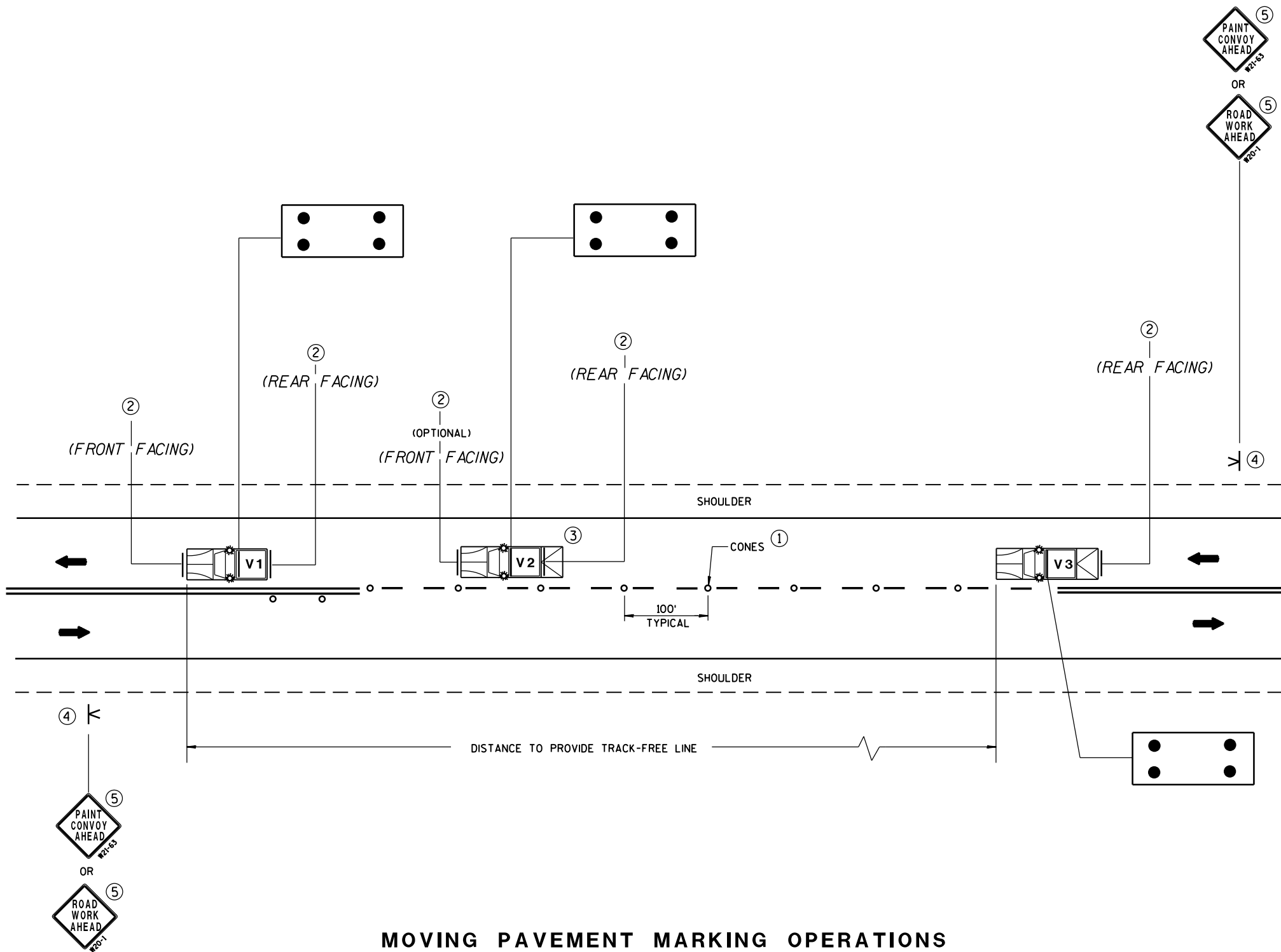
TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/5/06 /S/ Thomas N. Nothohm
DATE STATE TRAFFIC ENGINE 121 DESIGN

FHWA



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY 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.

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
 OR 
W21-64 W21-64
- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.
- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

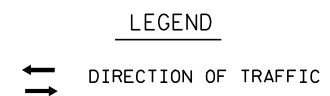
- V1 LEAD VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE WITH TMA
- TMA TRUCK-MOUNTED ATTENUATOR
- K SIGN ON PORTABLE SUPPORT
- ➡ DIRECTION OF TRAVEL
- CONES
- ⋮ FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING
OPERATION
TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/6/2011 /S/ Thomas N. Notbohm
DATE STATE TRAFFIC ENGINEER 122 SIGN
FHWA

- ① BARRIER LINE STARTS AT 500 FEET PRIOR TO THE BYPASS TAPER.
- ② PLACE R3-7R SIGNS AT BEGINNING OF WHITE DROP LANE LINE DASHED AND WHITE CHANNEL LINE.
- ③ IF THE DISTANCE BETWEEN TWO SUCCESSIVE NO PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE TWO ZONES.
- ④ REQUIRED ONLY WHEN SPECIFIED IN THE PLANS.
- ⑤ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.



APPROVED

5-13-10 /S/ Thomas N. Nettleton

DATE STATE TRAFFIC ENGINEER 123 SIGN

FHWA

GENERAL NOTES

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

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

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

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

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

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

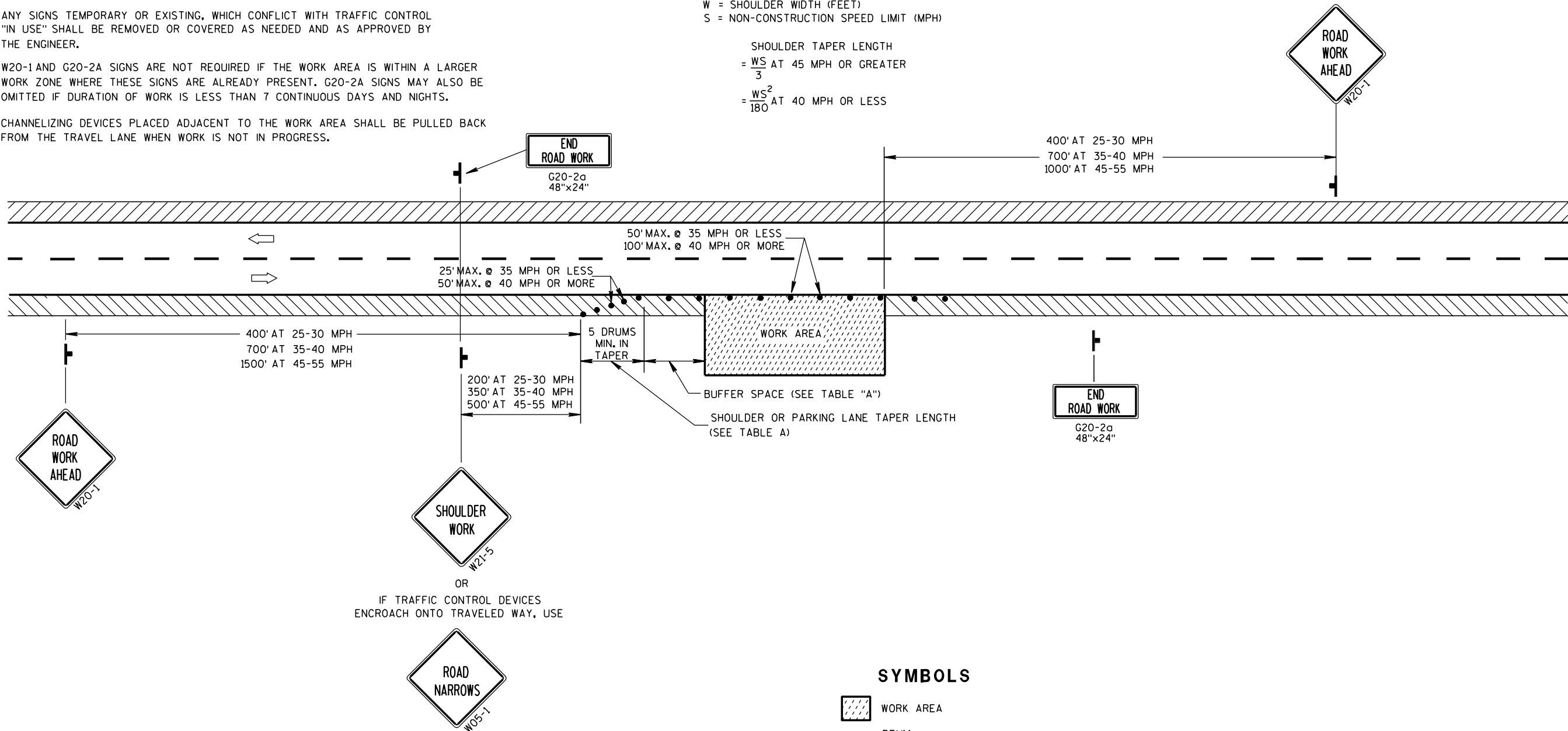
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

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

SHOULDER TAPER LENGTH
= $\frac{WS}{3}$ AT 45 MPH OR GREATER
= $\frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

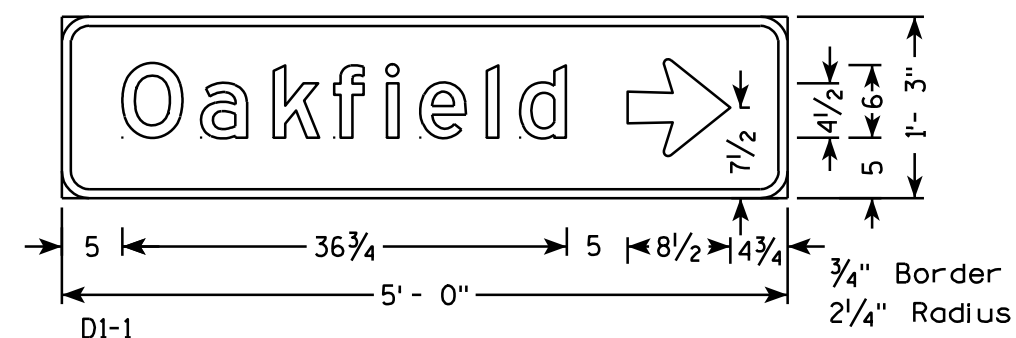
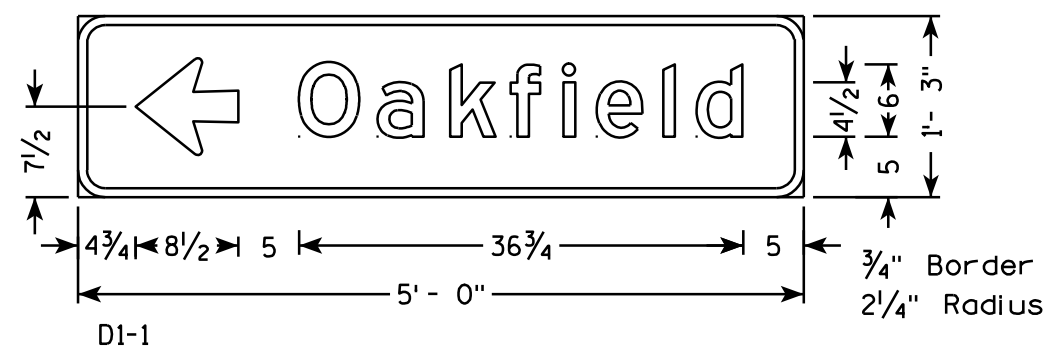
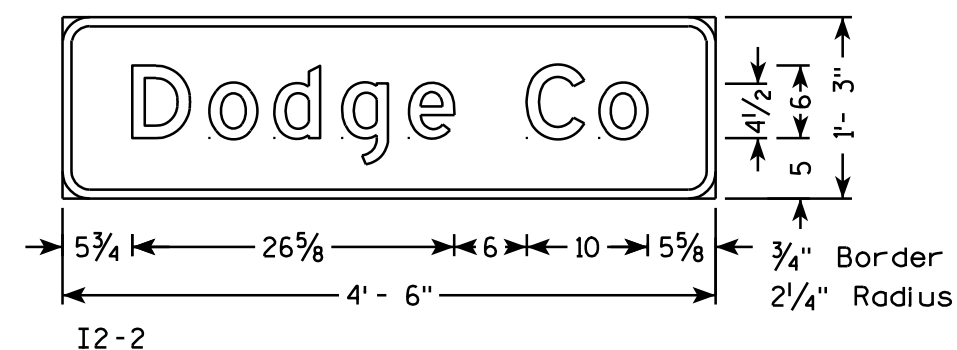
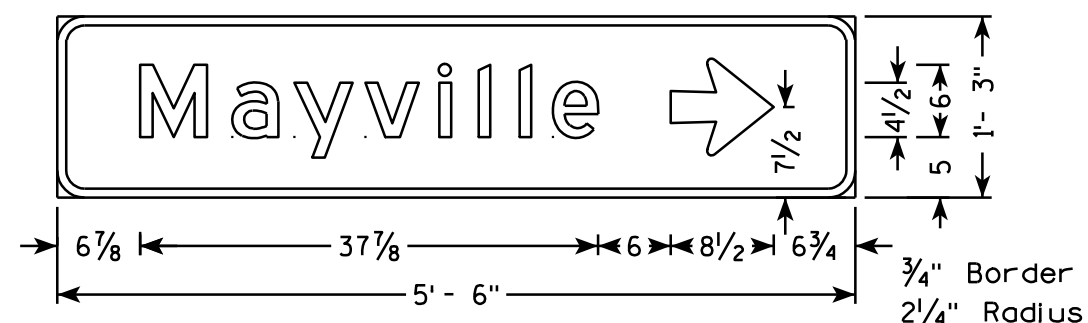
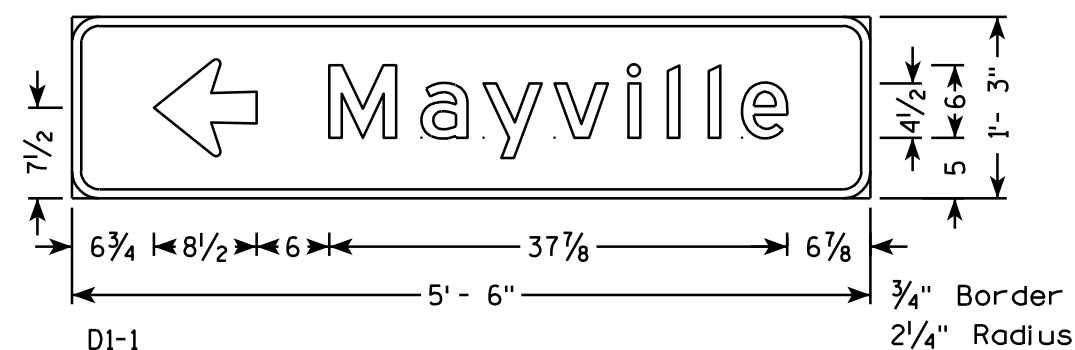
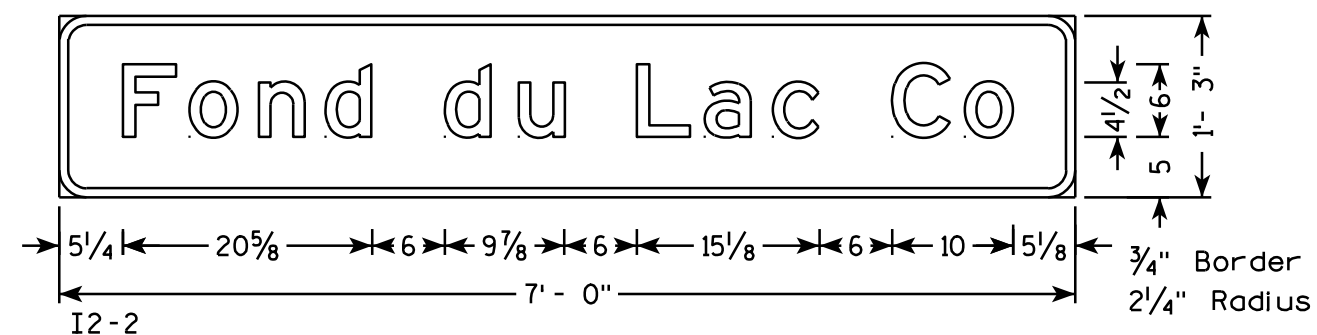
TRAFFIC CONTROL,
WORK ON SHOULDER OR
PARKING LANE,
UNDIVIDED ROADWAY

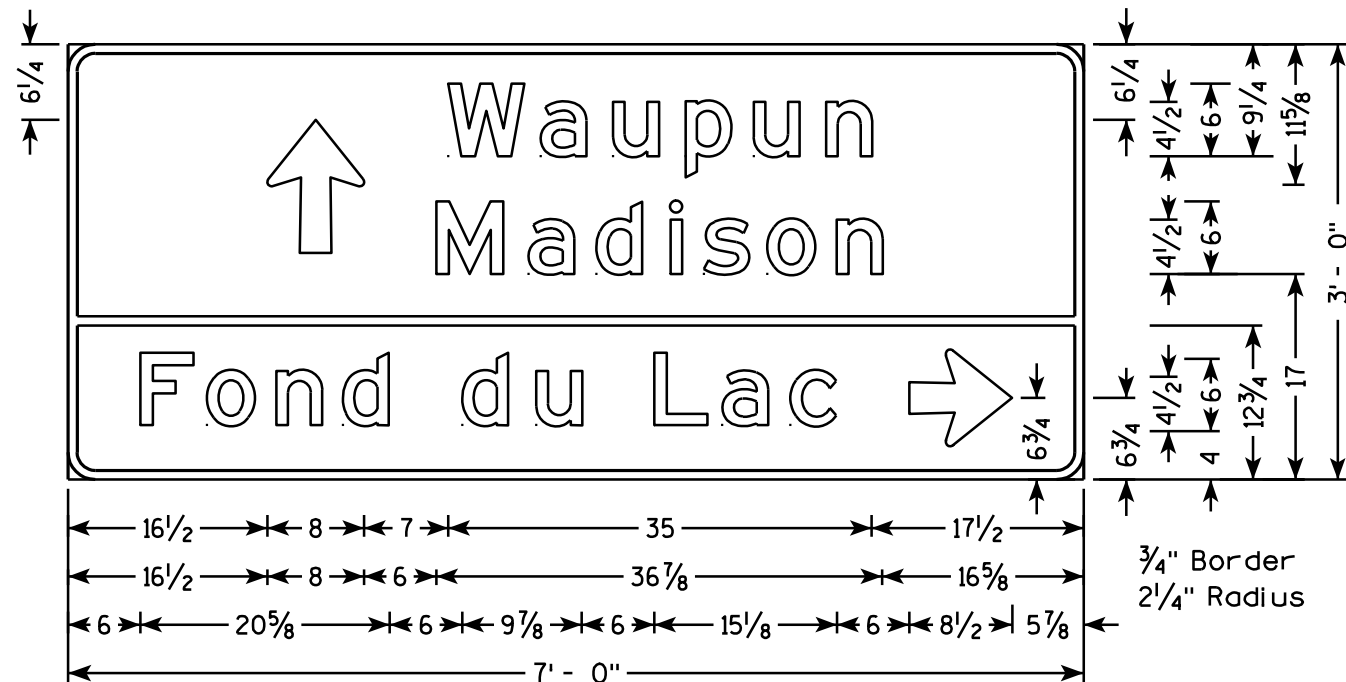
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 /S/ Chester J. [Signature]
DATE CHIEF SIGNS AND MARK 124 NNEER
FHWA

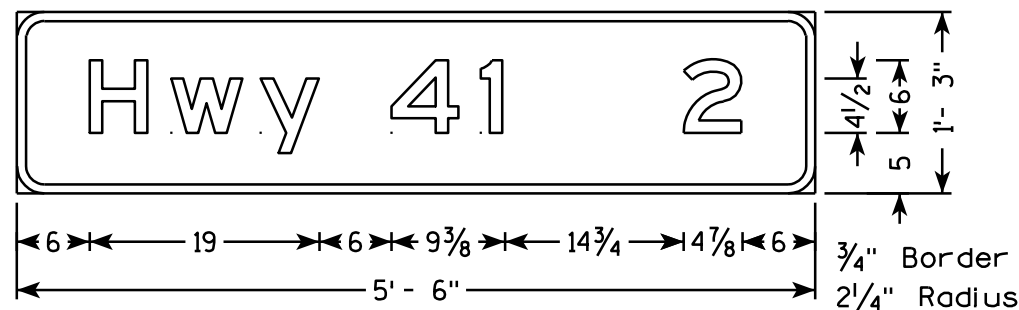
NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E

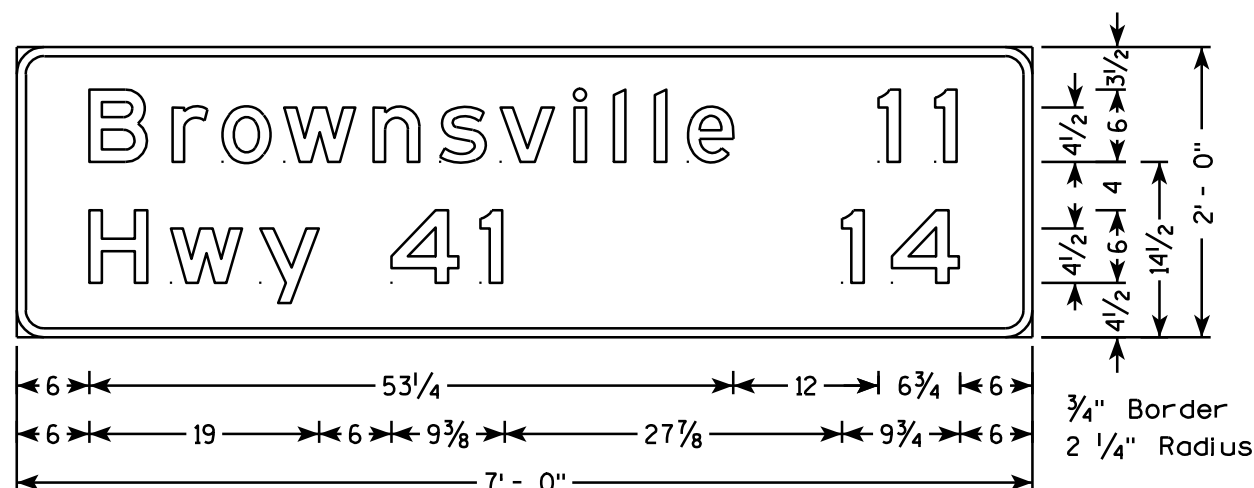




D1-3



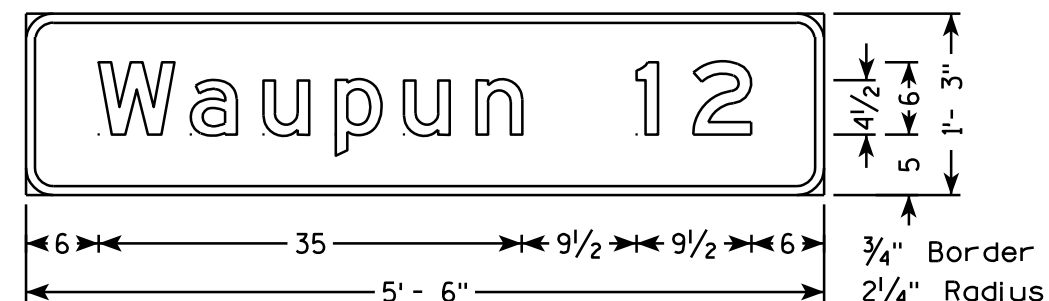
D2-1



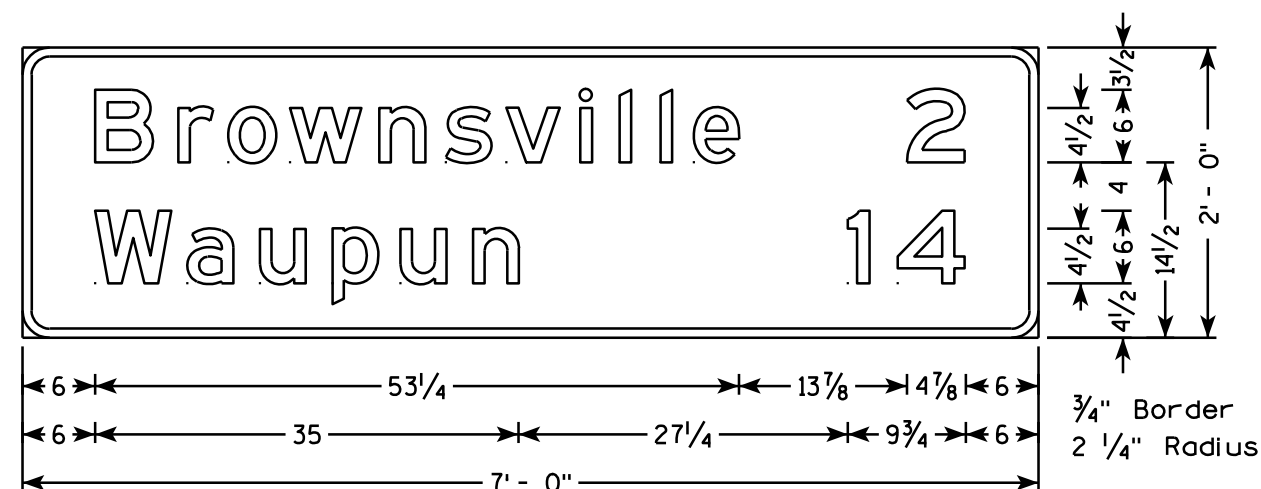
D2-2

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E



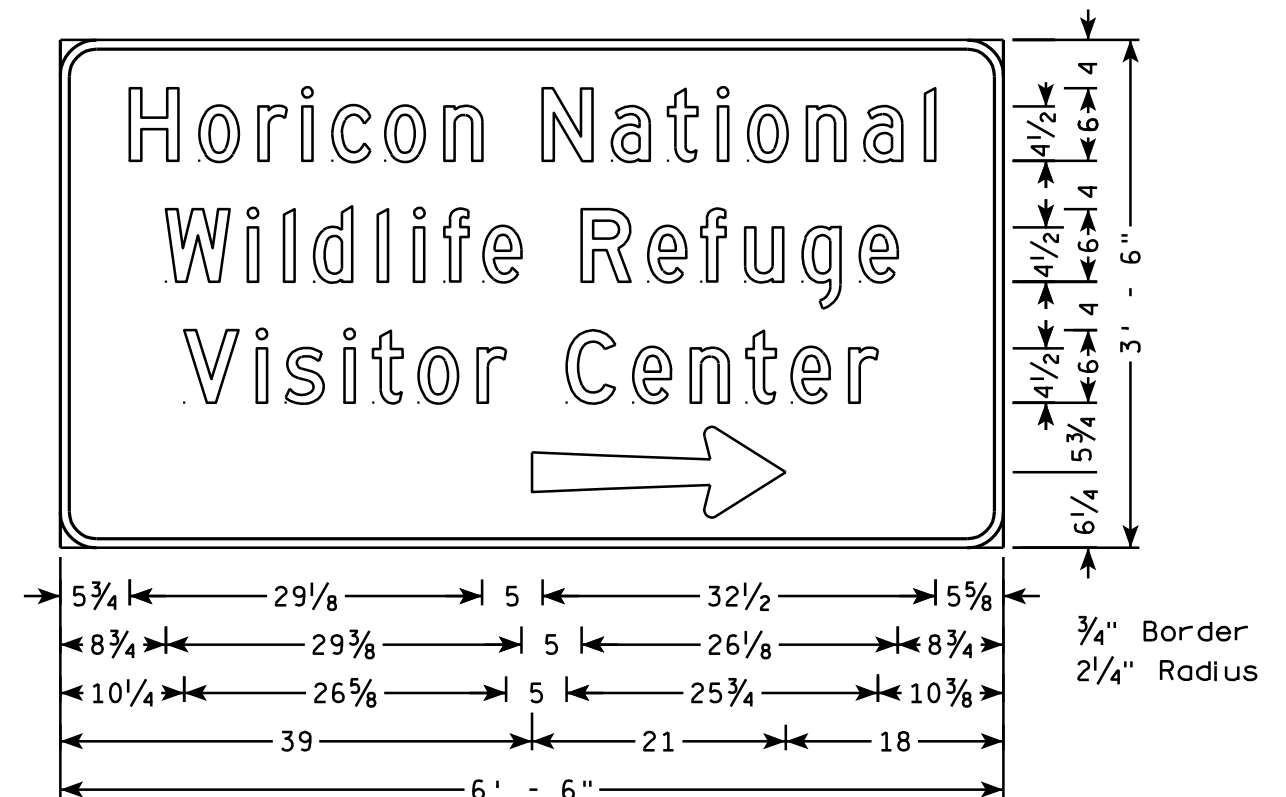
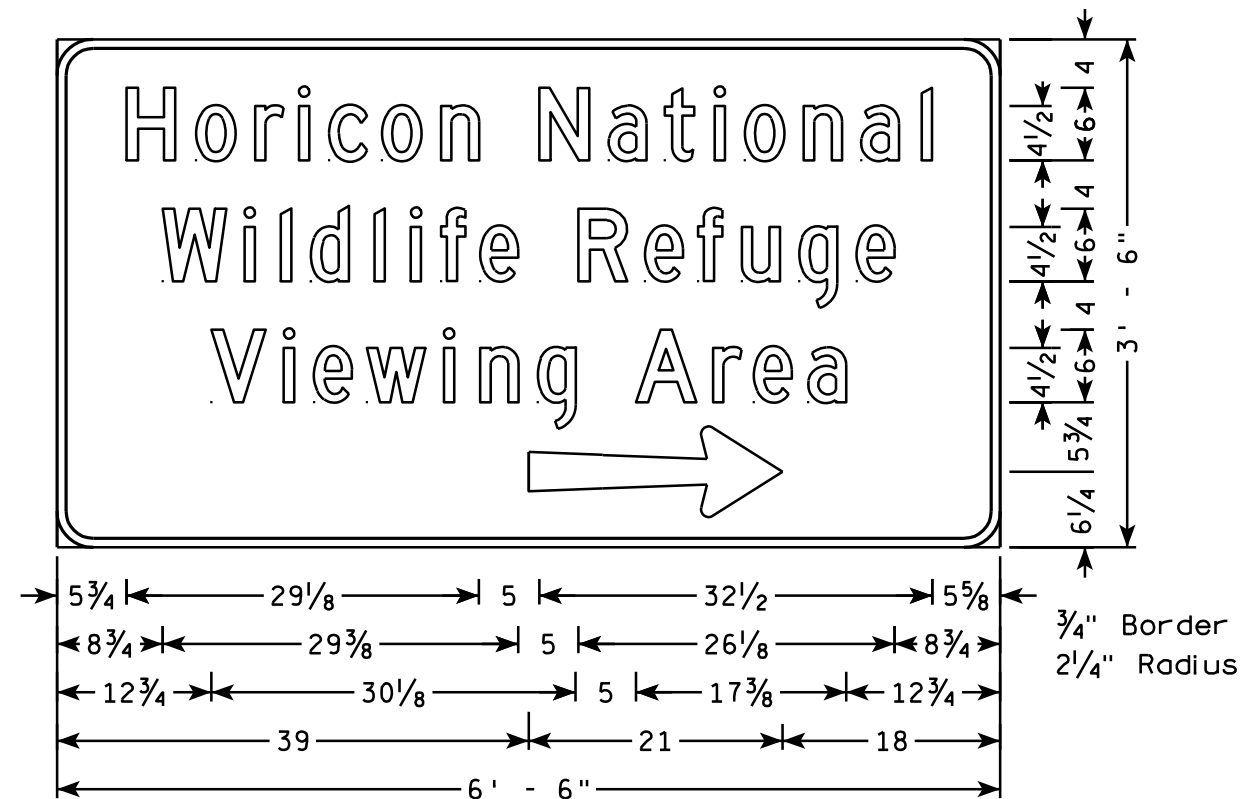
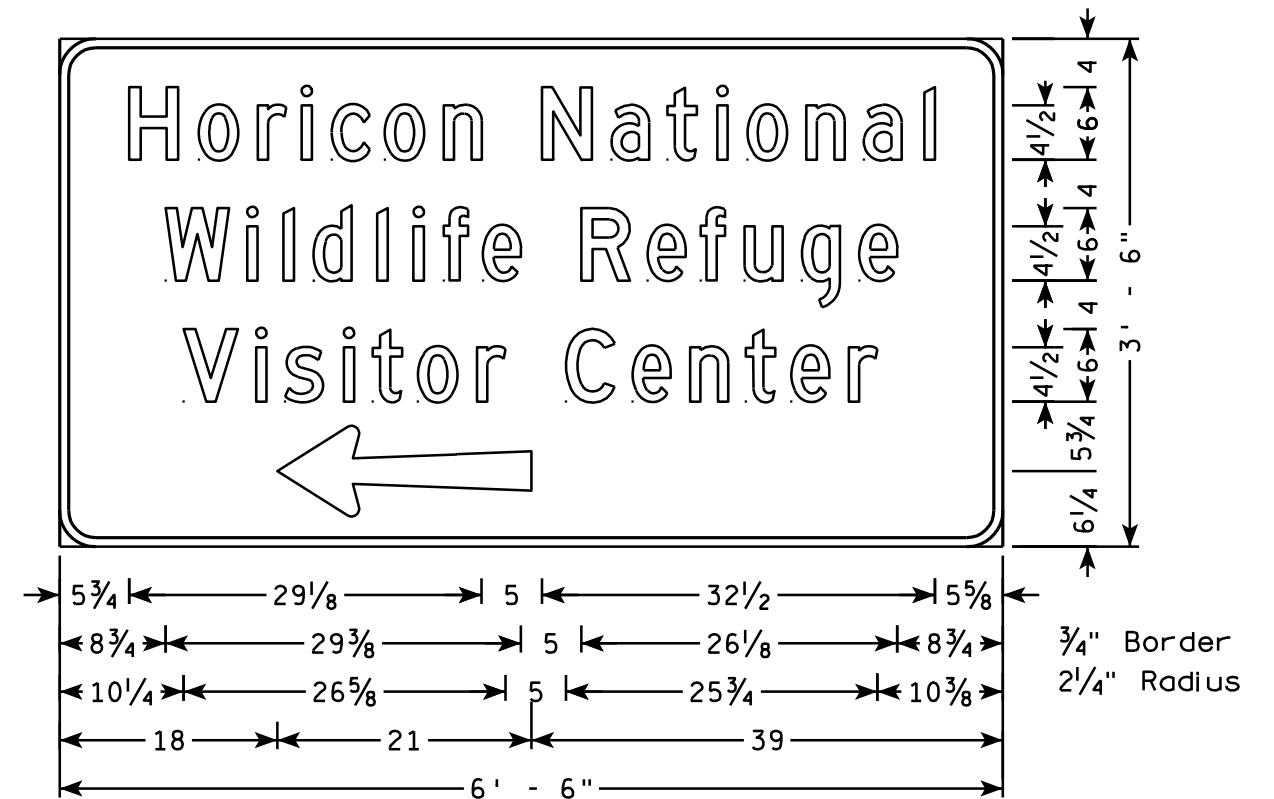
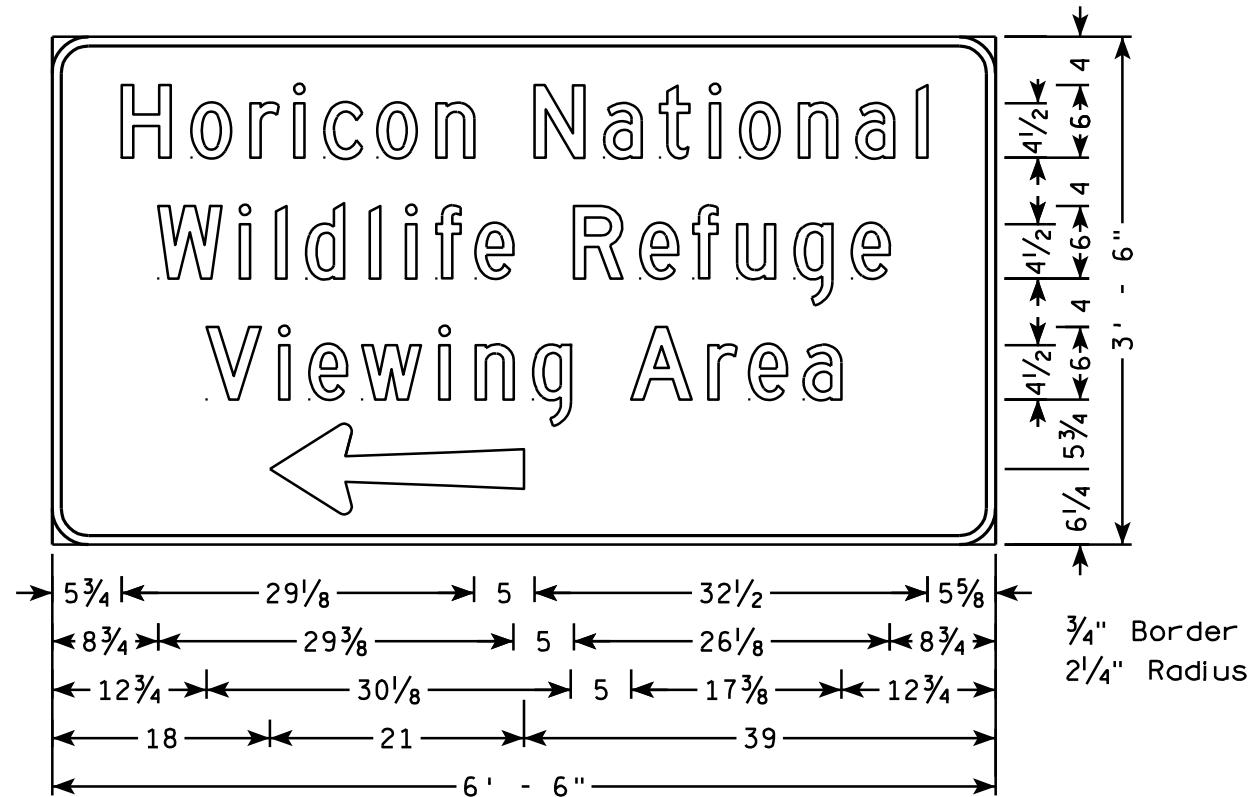
D2-1

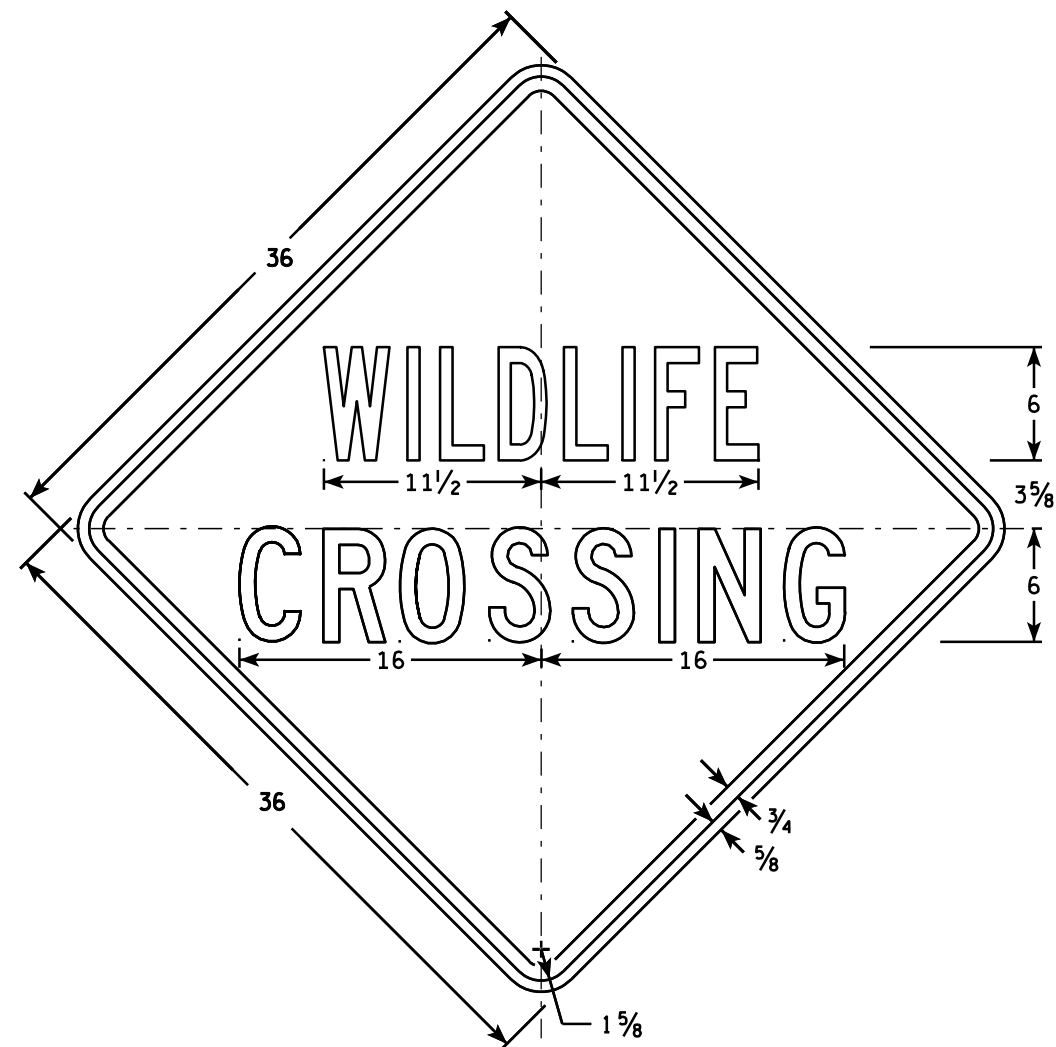


D2-2

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - BROWN
Message - WHITE
3. Message Series - D

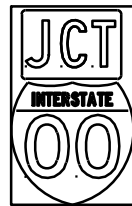




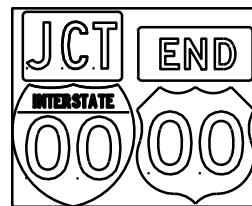
NOTES

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

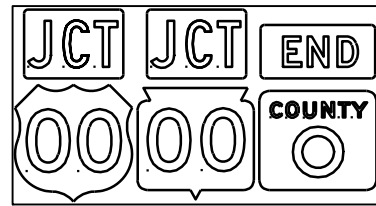
TYPICAL ASSEMBLIES



J1-1



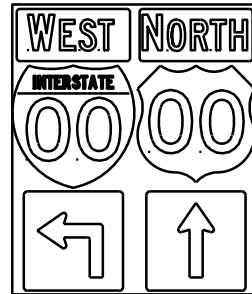
J1-2



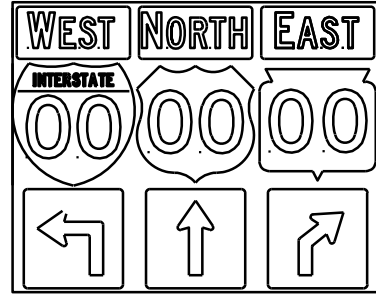
J1-3



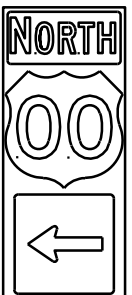
J2-1



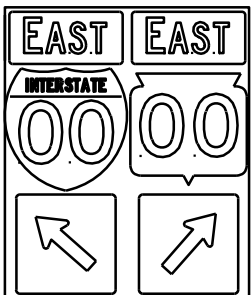
J2-2



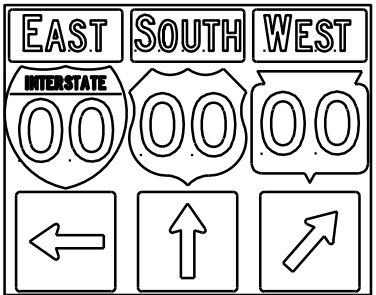
J2-3



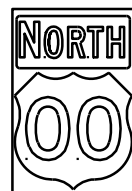
J3-1



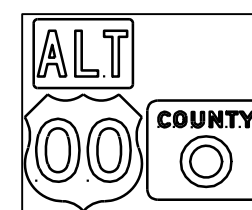
J3-2



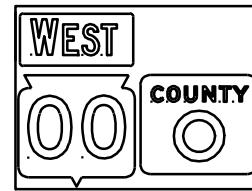
J3-3



J4-1



J4-2

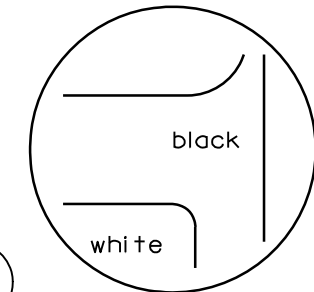
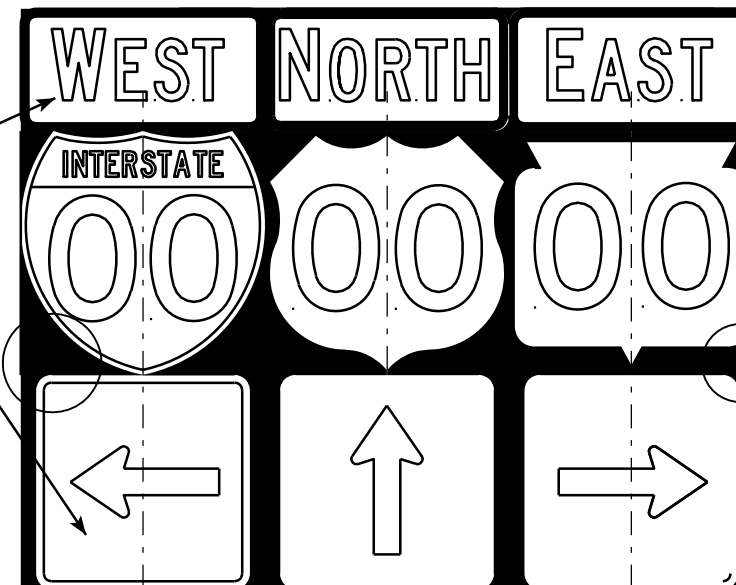
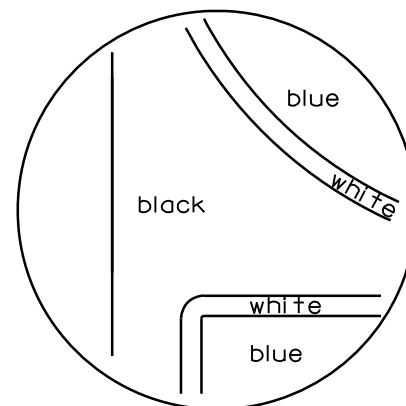


J4-2



JV

[blue background with interstate]



[black background]



J13-1



J12-1



J32-1



J33-1



J23-1



J22-1

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square since base material is plywood.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- 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.
- 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.
- 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.
- Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (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.

ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
For State Traffic Engineer

DATE 10/21/09

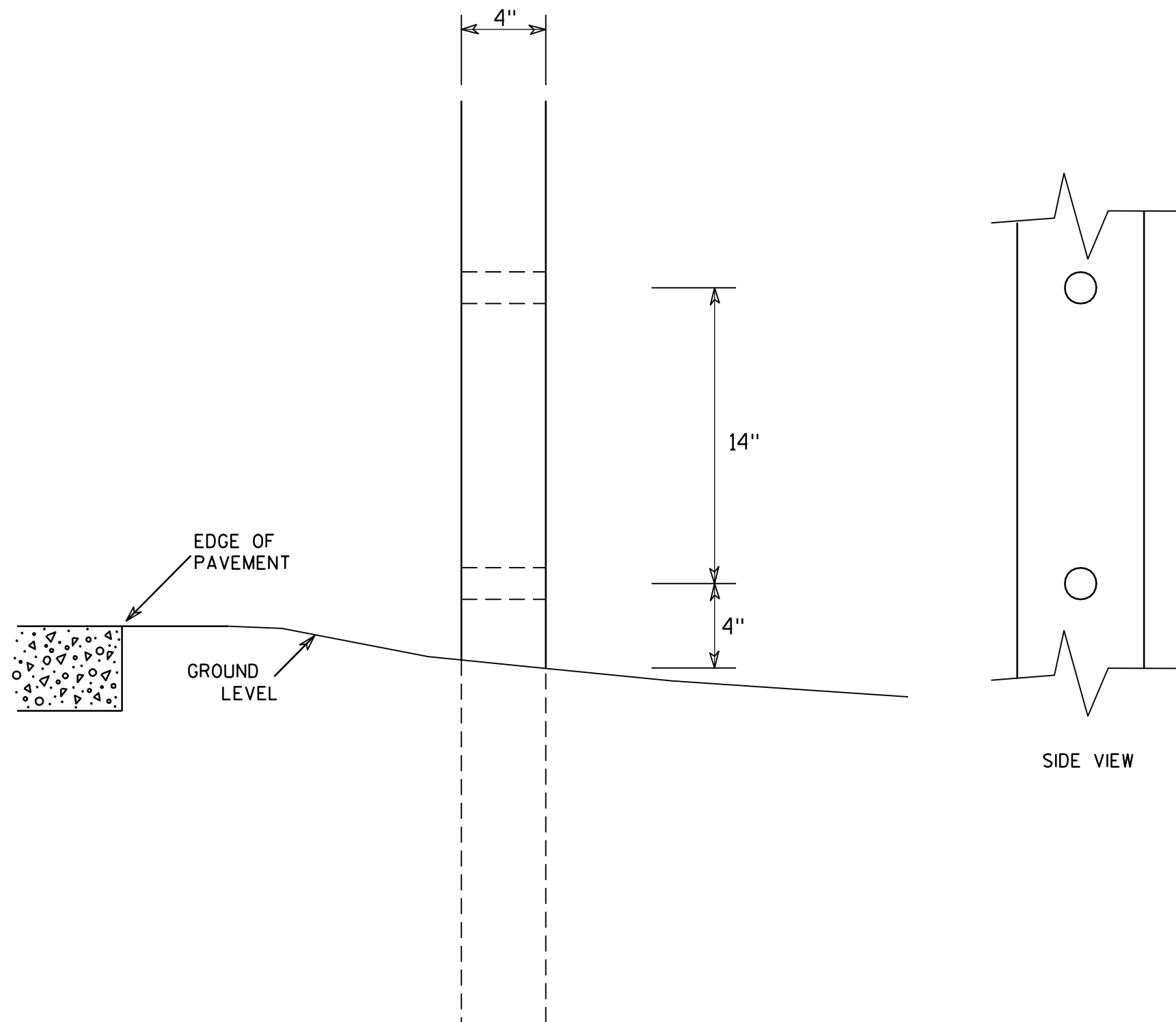
PLATE NO. A2-1S.6

PROJECT NO:

SHEET NO: 129

E

7



GENERAL NOTES

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

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

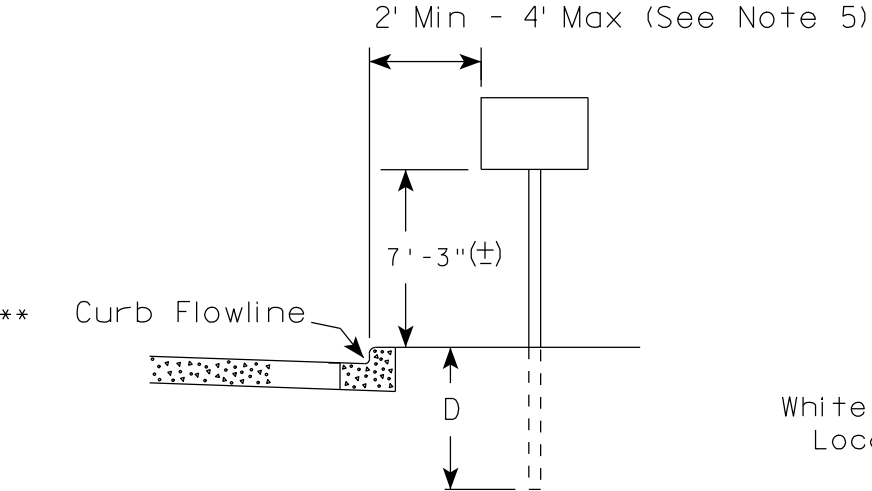
HWY:

COUNTY:

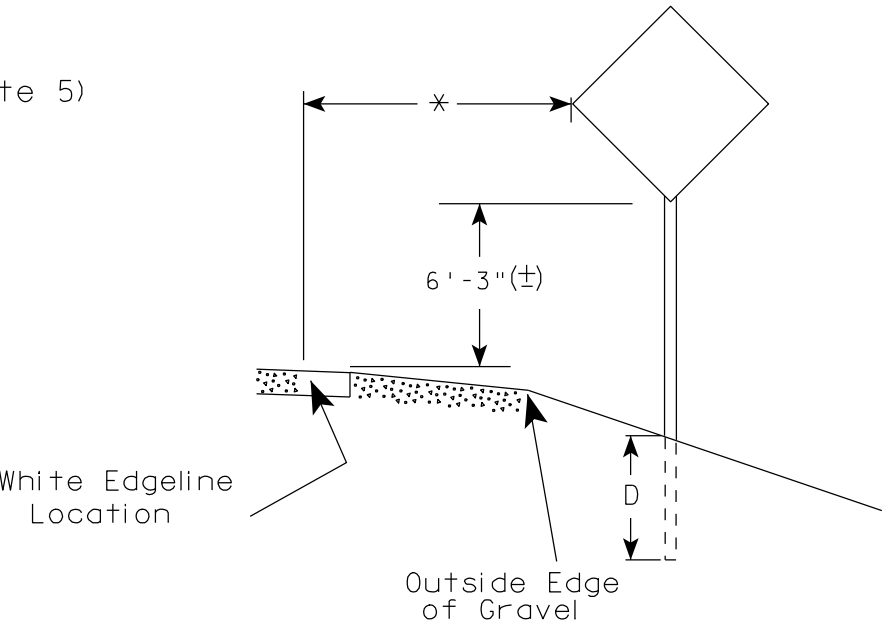
SHEET NO: 130

E

URBAN AREA

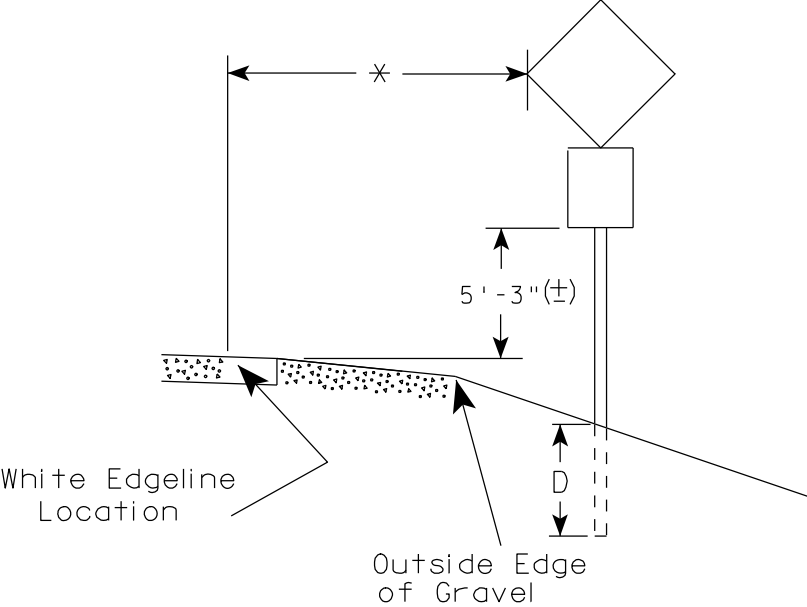
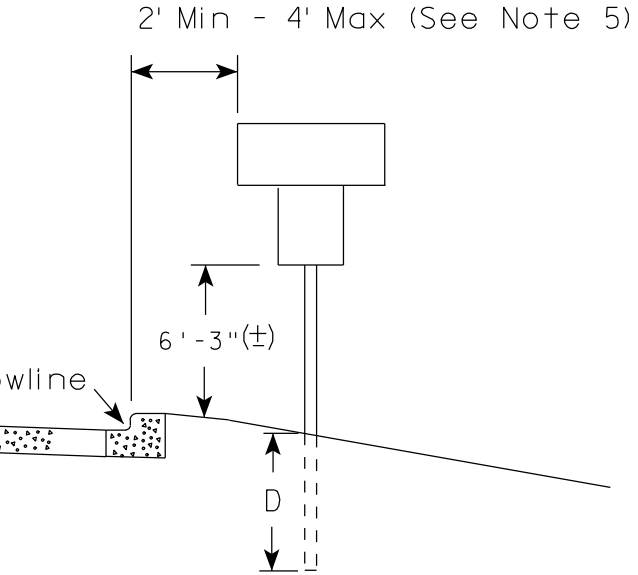


RURAL AREA (See Note 2)



GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. 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 (A4-5) 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 stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) 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.

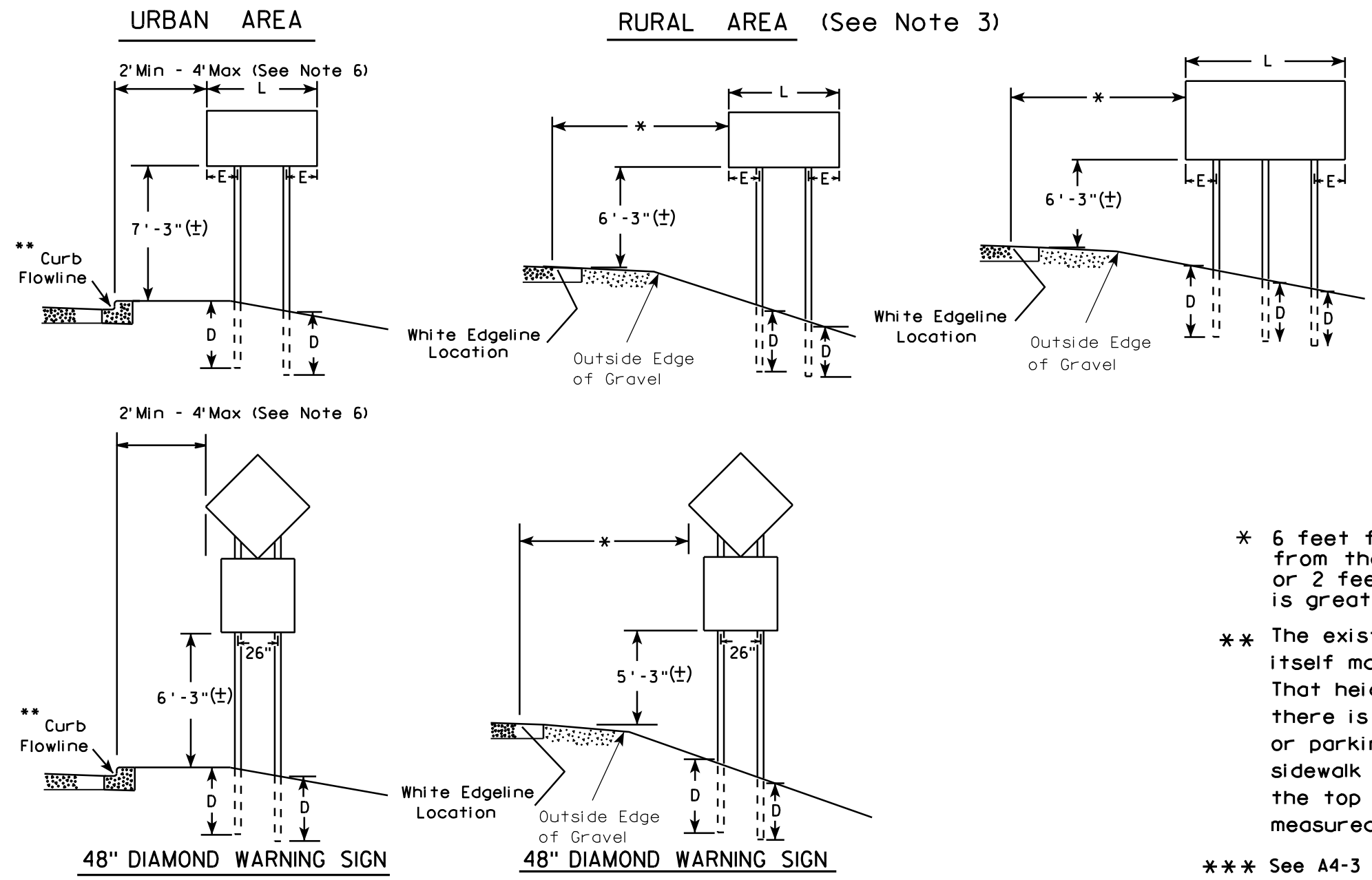
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/21/2011 PLATE NO. A4-3.16



GENERAL NOTES

1. For multiple 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 (A4-5) 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 stop signs (R1-1F) 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) & End of Road Markers (W5-56 & W5-56A) 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 or 20 S.F. or less in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

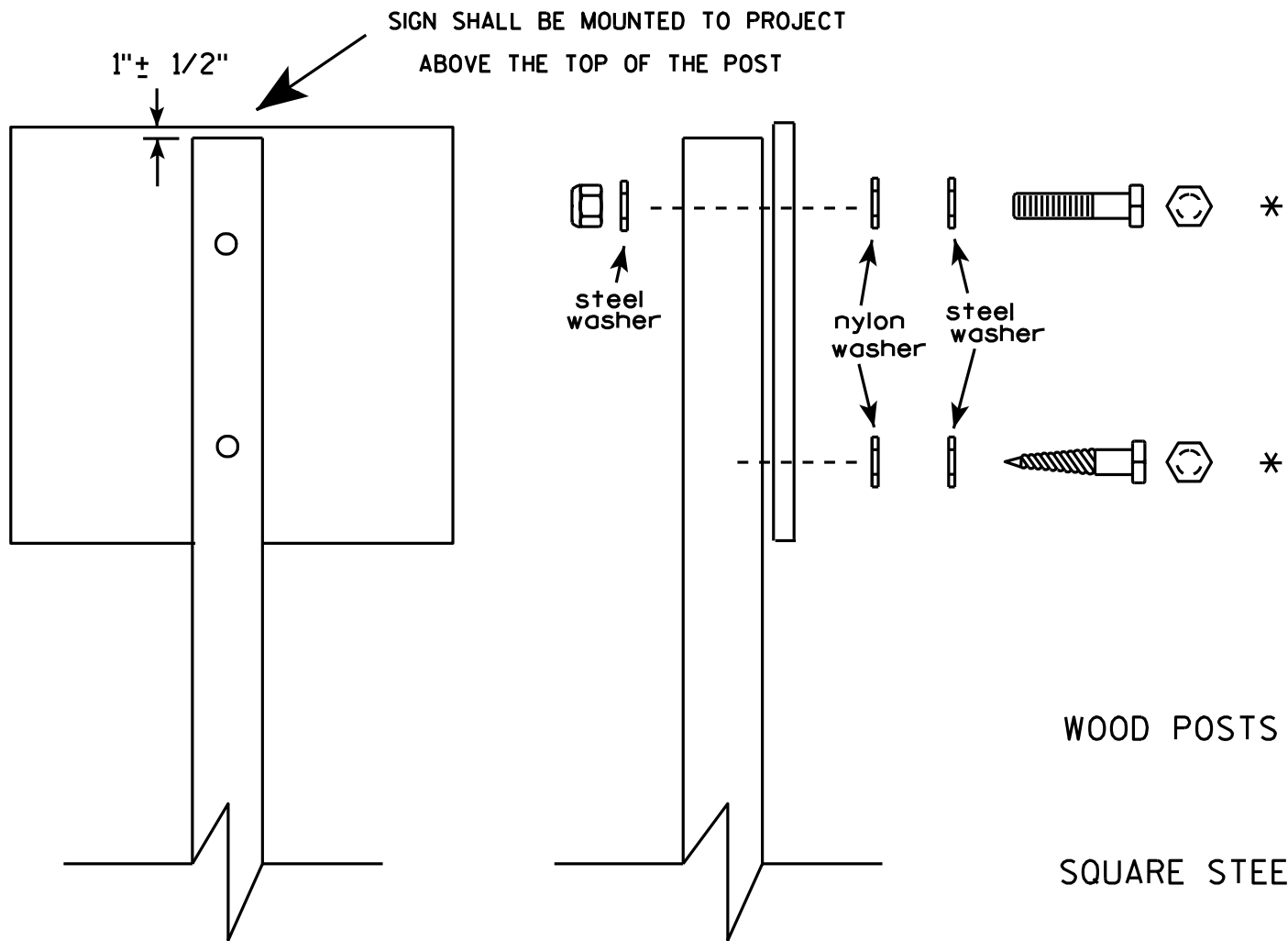
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/21/2011	PLATE NO. A4-4.11

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 132	E
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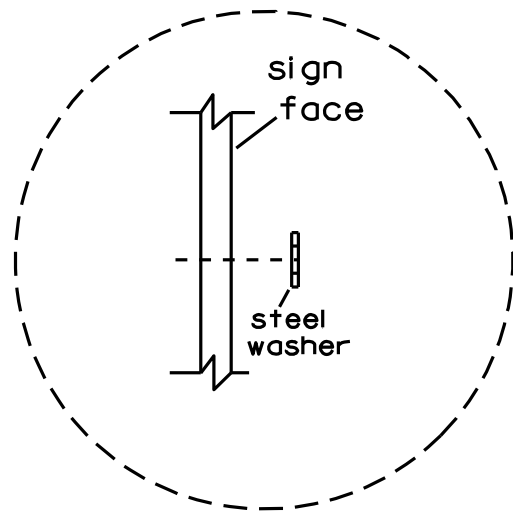


Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

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

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

- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3"
- MACHINE BOLTS - $\frac{5}{16}$ " X 6-1/2" or 7" Length w/ nuts
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON for all Type H signs.

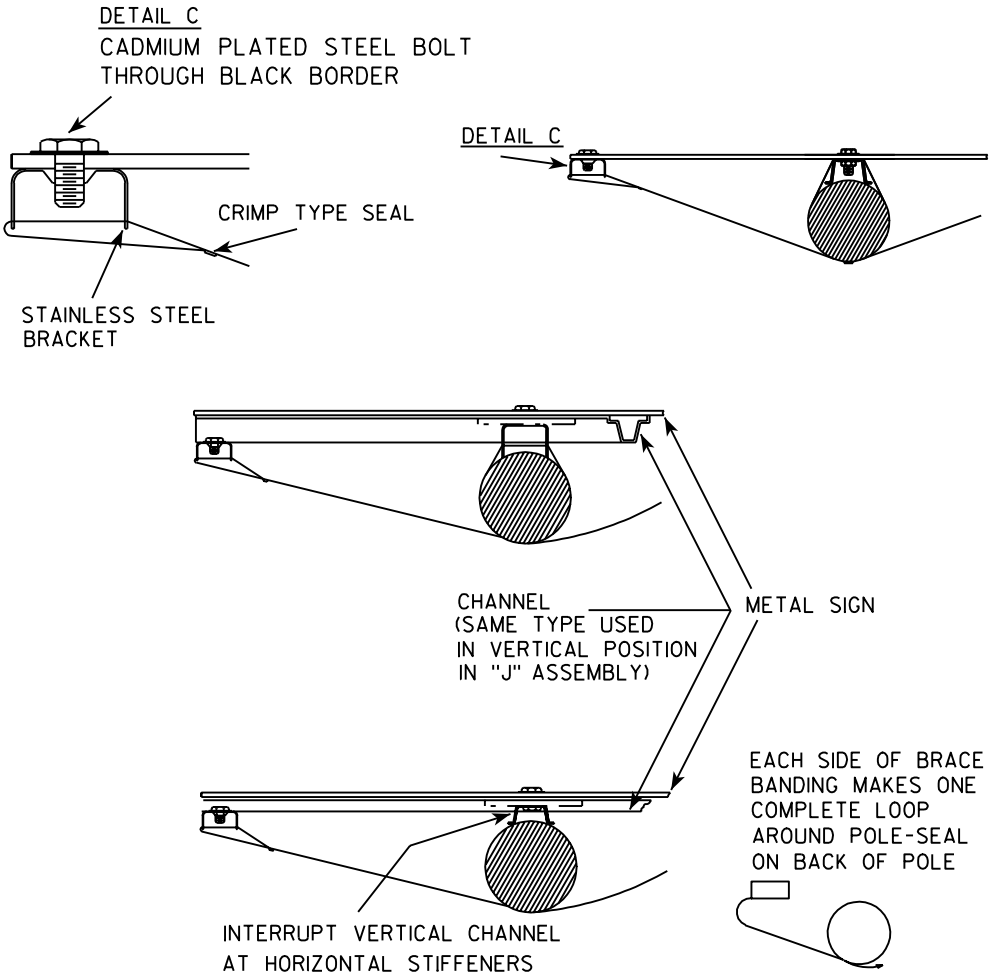


Washer Placement when Sign Has Other Than Type H or Type F Face

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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/23/10	PLATE NO. A4-8.7

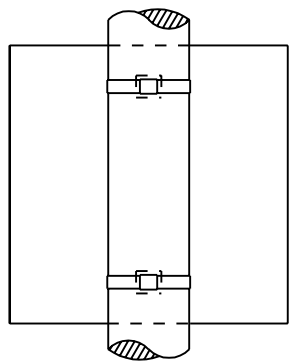
BRACE BANDING



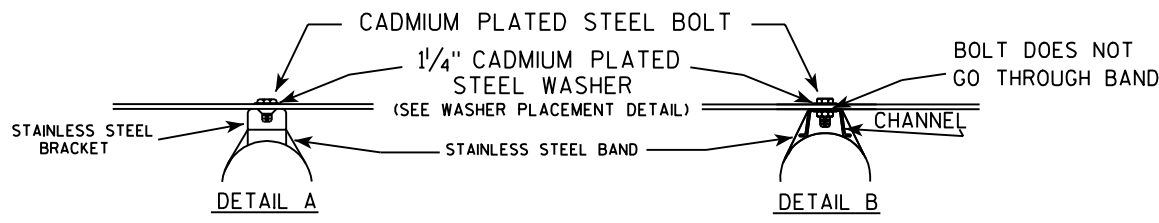
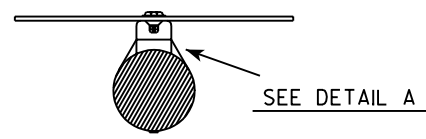
BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY
BUT NOT SO TIGHT AS TO APPRECIABLY
CURVE FACE OF SIGN.

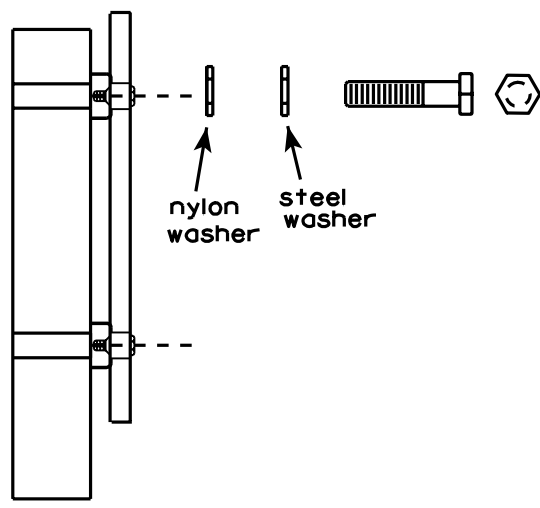
SINGLE SIGN



BRACKET BANDING

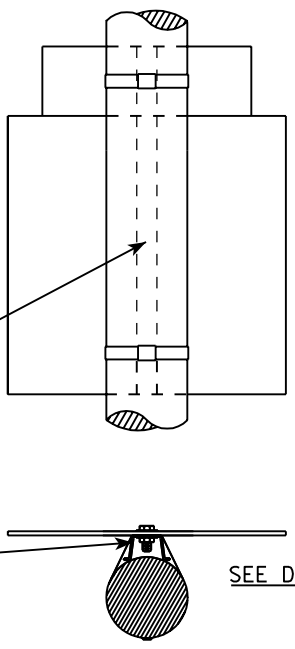


WASHER PLACEMENT



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

"J" ASSEMBLY



SEE DETAIL B

GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

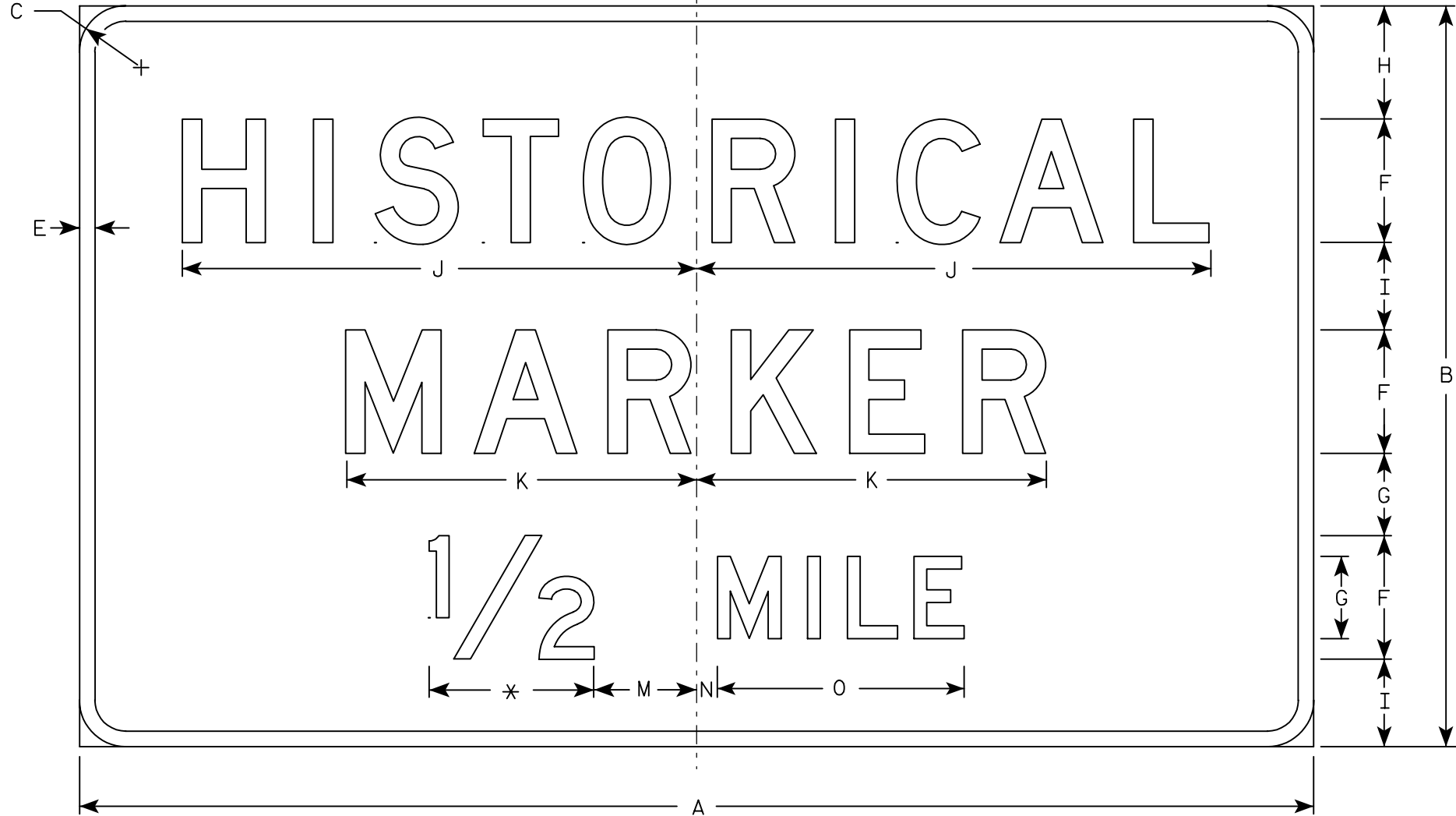
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

50, 53, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6



D5-63 * See Note 5

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
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																												
2	60	36	2 1/4		3/4	6	4	5 1/2	4 1/4	25	17		5	1	12												15.0	1.35
3																												
4																												
5																												

STATE PROJECT NUMBER:

FILE NAME : C:\Users\Projects\tr_std\plate\D563.DGN

PLOT DATE : 09-JAN-2002 13:18

ORG DATE : 3/23/99

Originator : Don Kluever

STANDARD SIGN
D5-63

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
for State Traffic Engineer

DATE 3/23/99 PLATE NO. D5-63.9

SHEET NO: 135

E

NOTES

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

7

58, 59, 60, 61, 62, 63

7

LEVELS ON - 2, 3, 5, 6, 10.



D5-64R

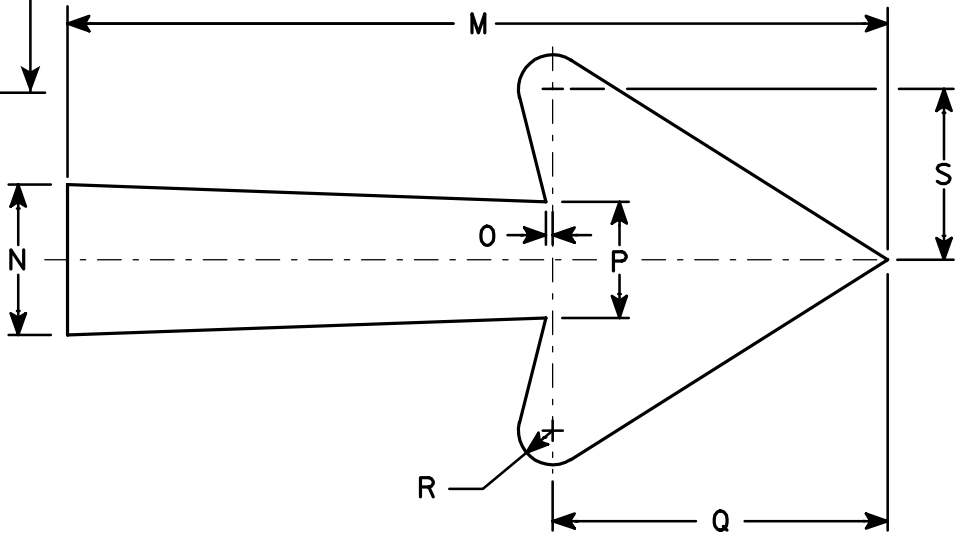
Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
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 sq. m.
1																												
2	60	36	2 1/4		3/4	6	5 1/2	4 1/4	7	7 1/4	25	17	15	2 3/4	1/8	2 1/8	6 1/8	5/8	3 1/8								15.0	1.35
3																												
4																												
5																												

NOTES

1. Sign Is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Brown
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.
5. D5-64L is the same as D5-64R except the arrow is reversed.



Arrow Detail

STANDARD SIGN
D5-64

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Christa J. Sperry*
for State Traffic Engineer
DATE 1/09/02 PLATE NO. D5-64.5

STATE PROJECT NUMBER:

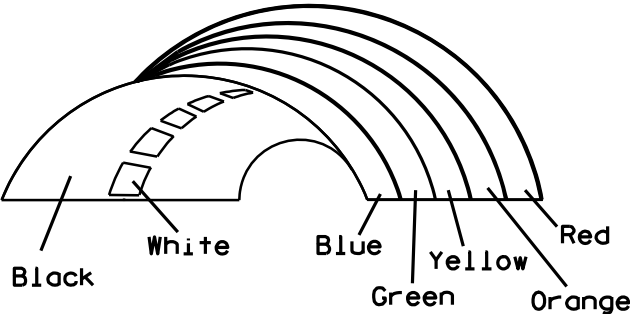
SHEET NO: 136

E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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.

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																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 137

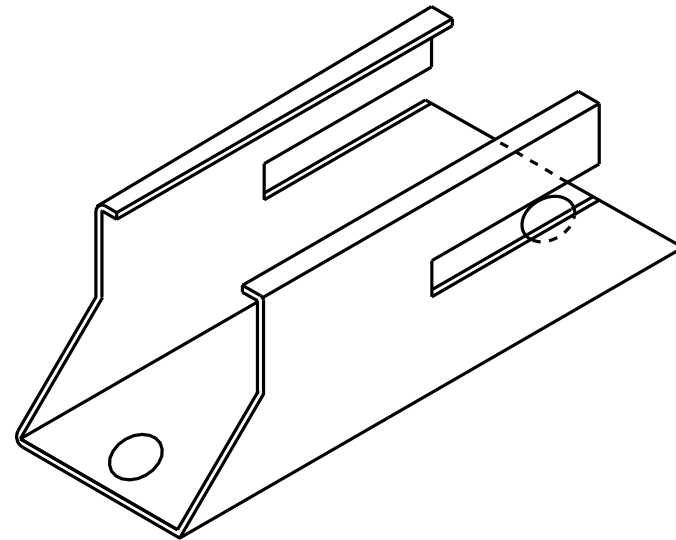
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

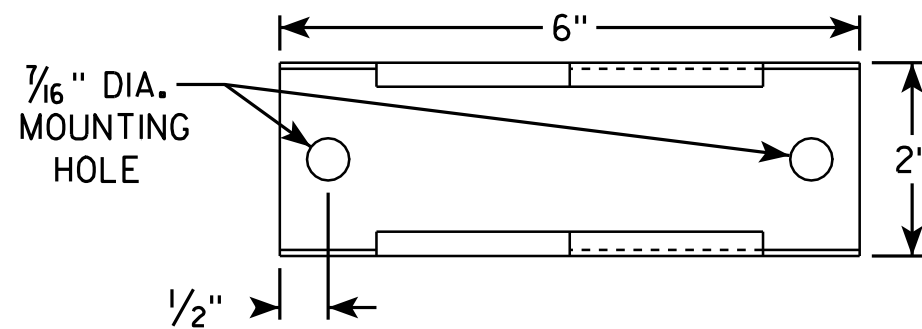
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

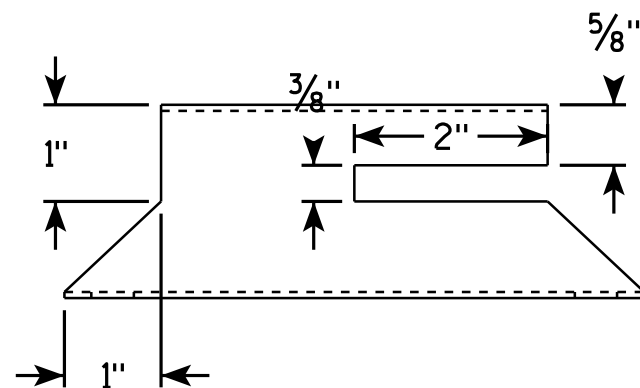
ISOMETRIC VIEW



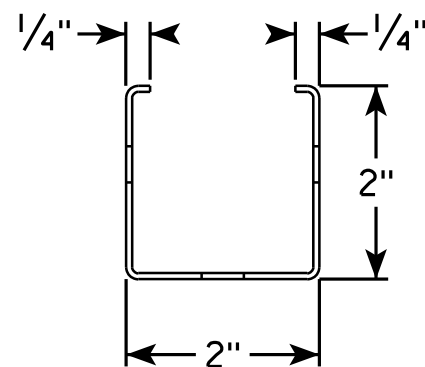
TOP VIEW



SIDE VIEW



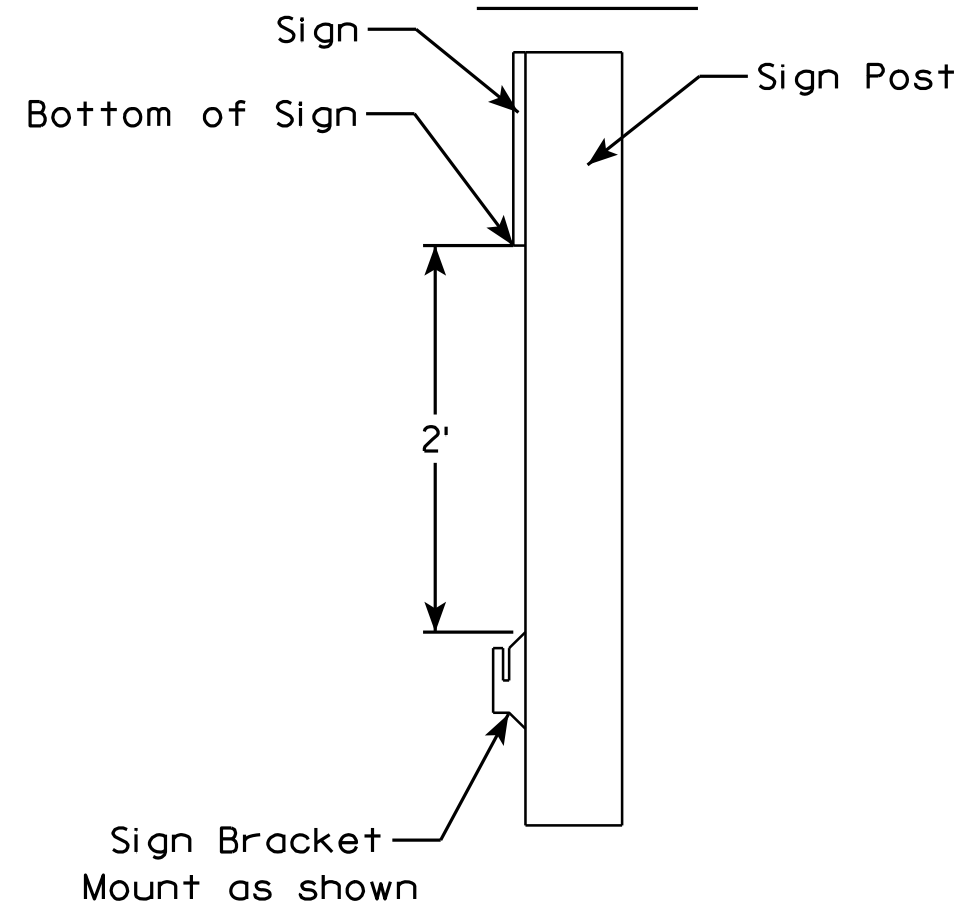
END VIEW



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

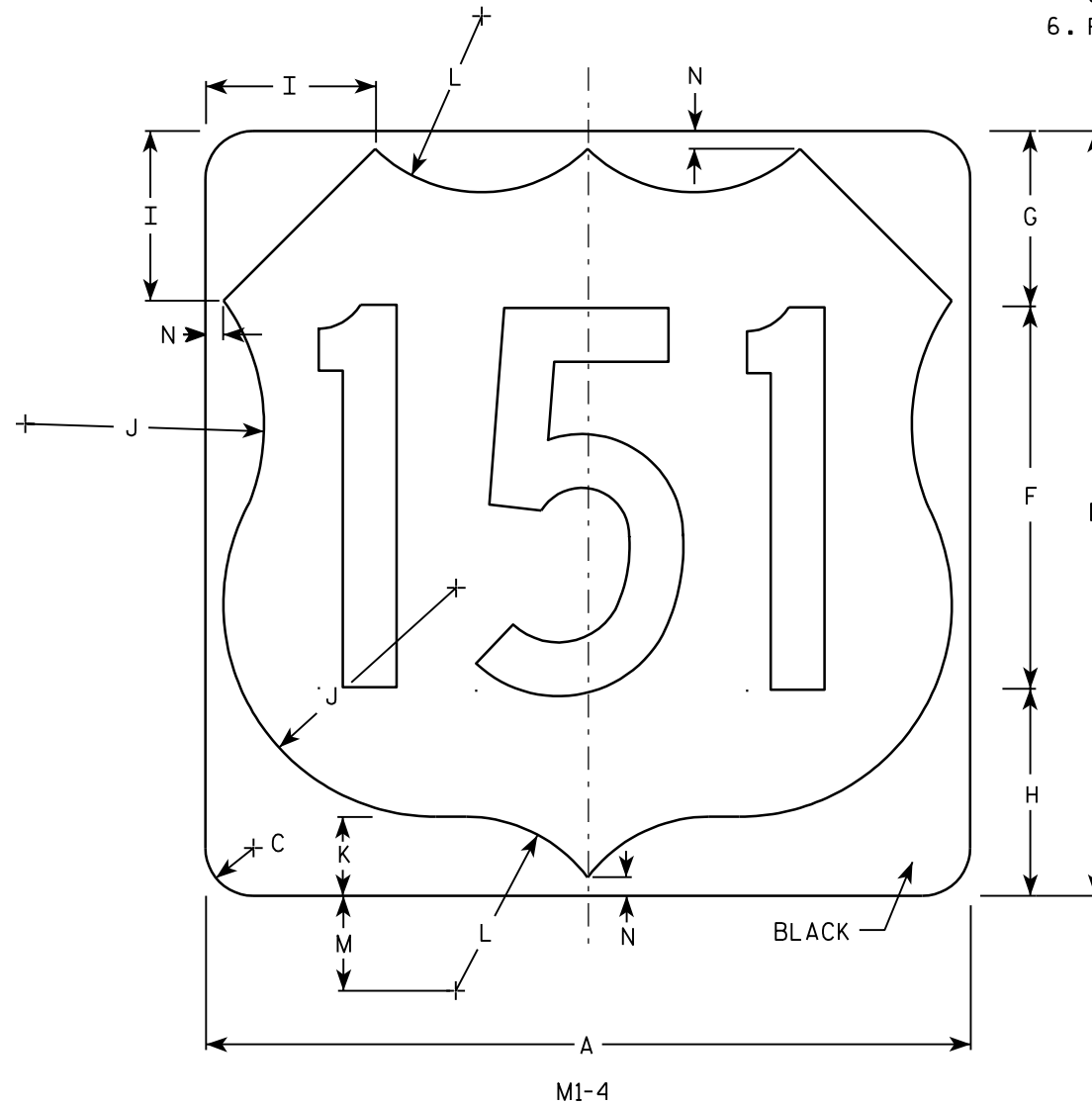
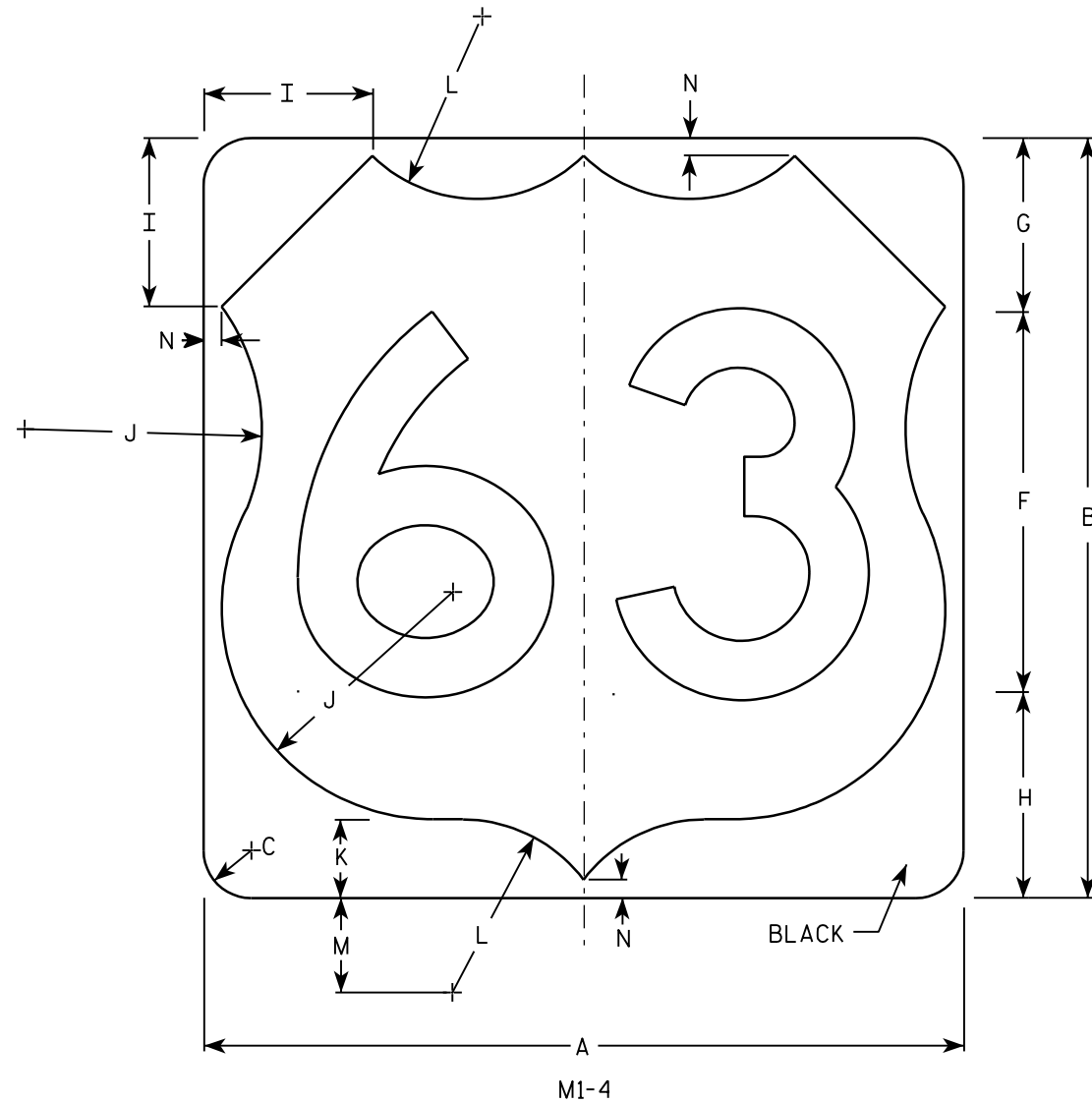
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

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



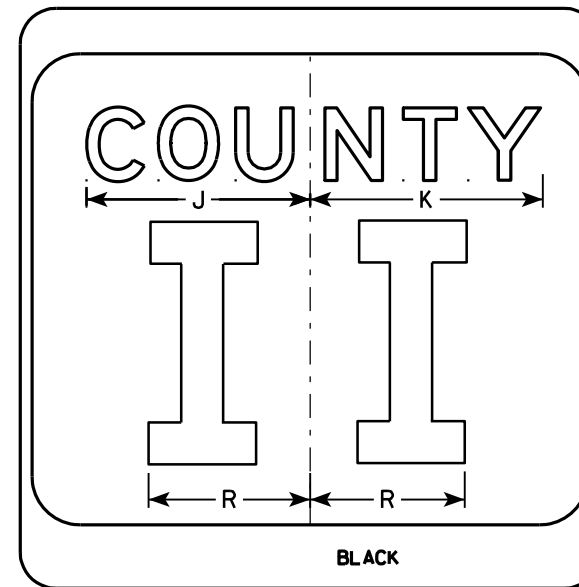
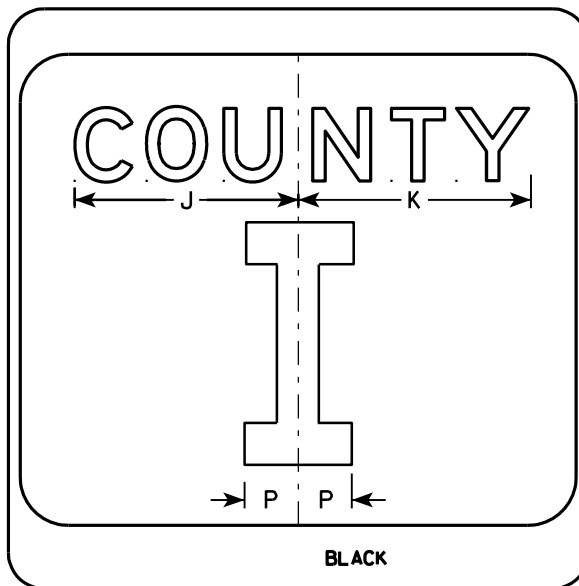
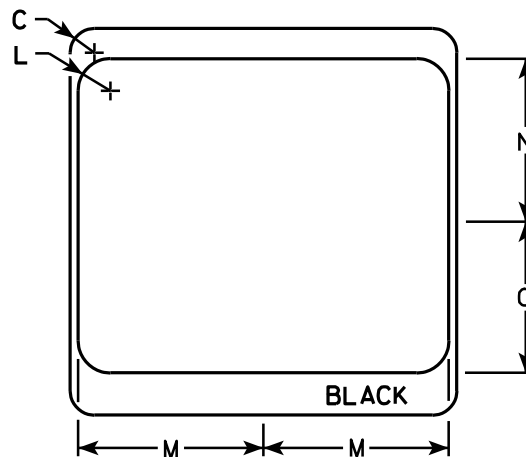
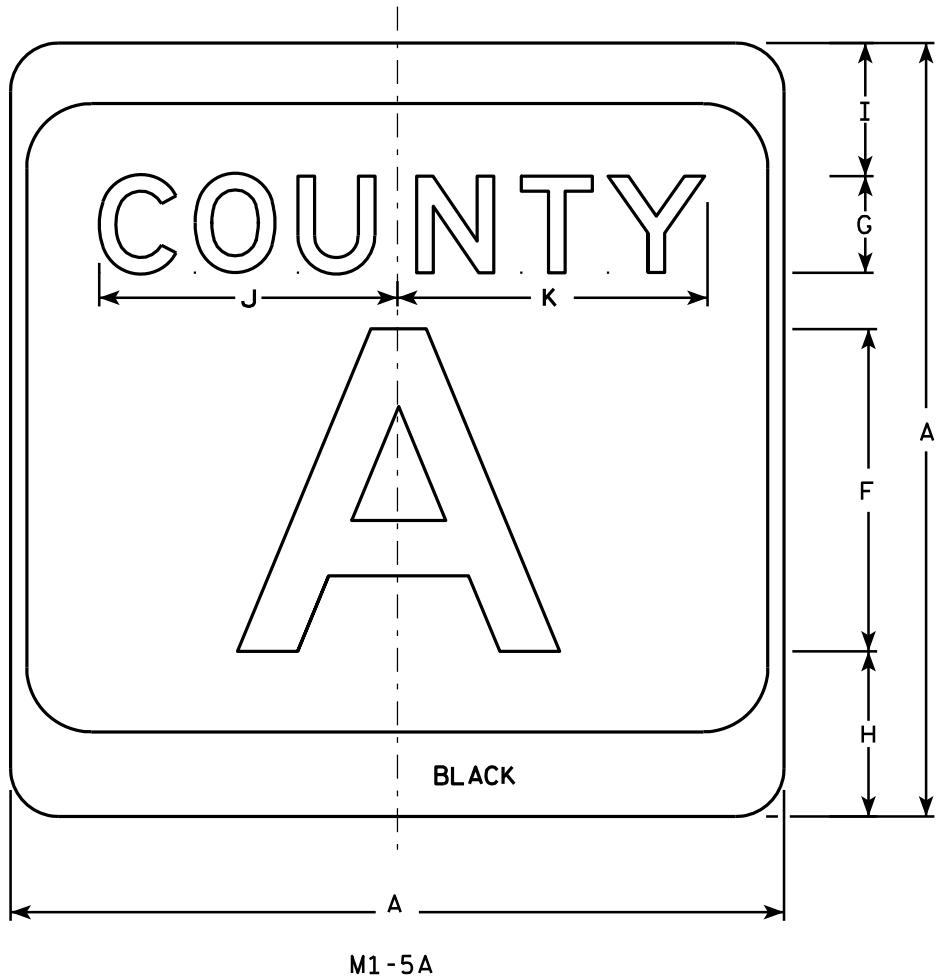
Metric equivalent
for this sign is:

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	Areq sq. ft.	Areq m ²
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

PROJECT NO: HWY: COUNTY: SHEET NO: 139 E

7



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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 140	E
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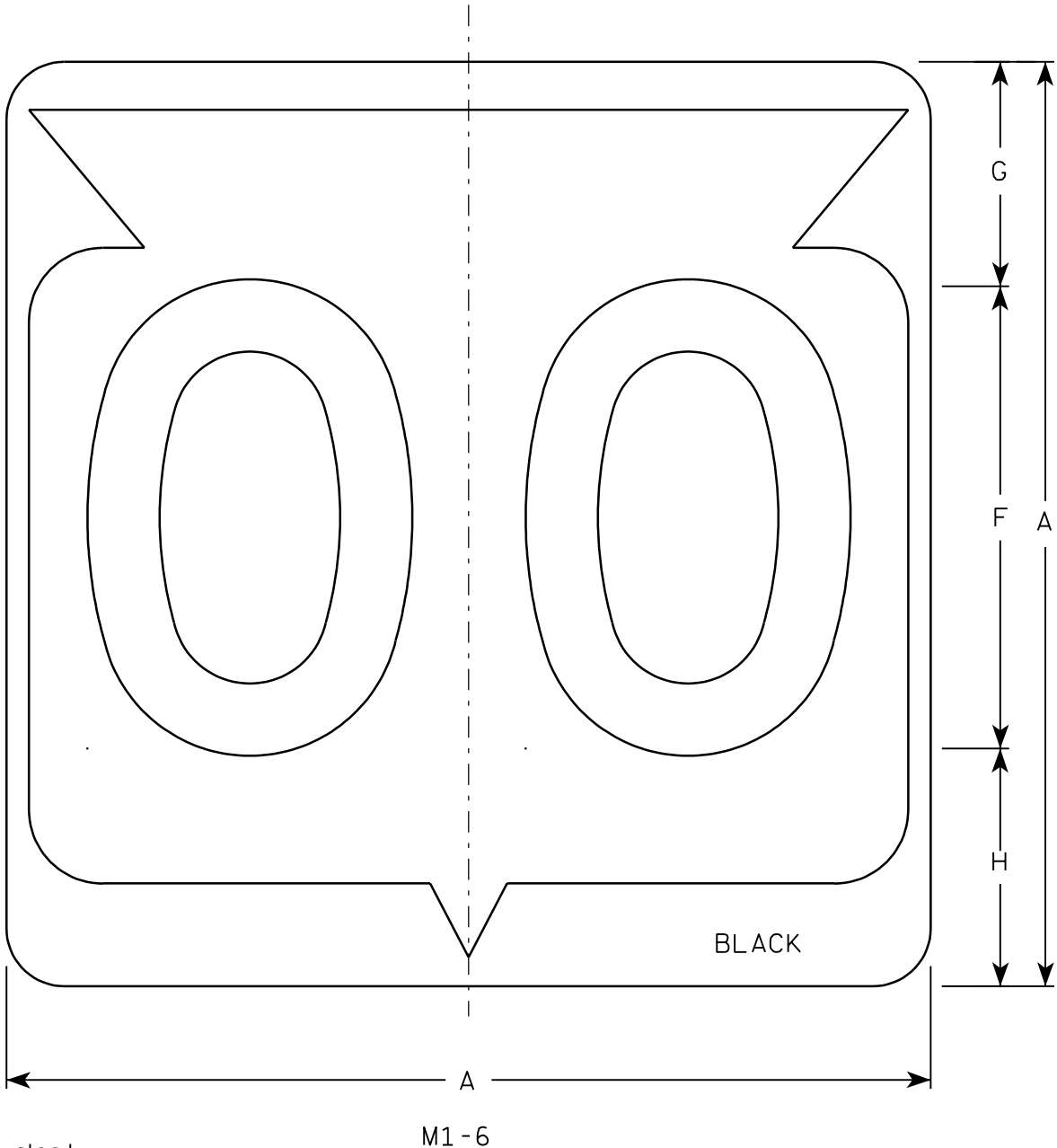
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

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 m ²
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

PROJECT NO:

HWY:

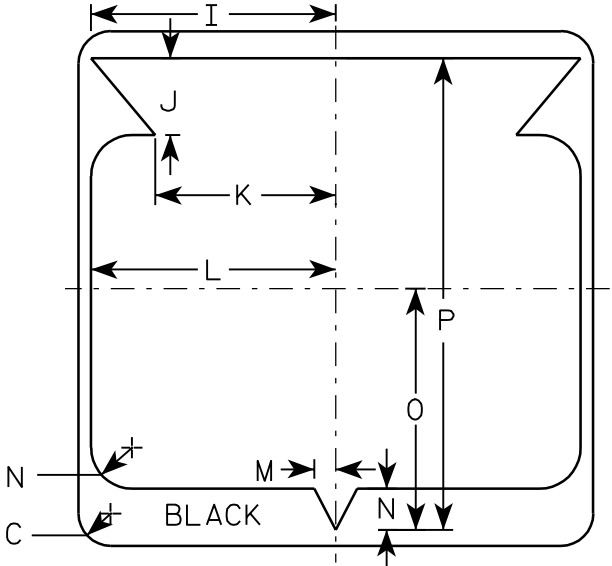
COUNTY:

SHEET NO: 141

E

NOTES

- Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 6
Message - Black
- Message Series - See note 5
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- Substitute appropriate Series numerals and adjust spacing as per plate A10-1.
- Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

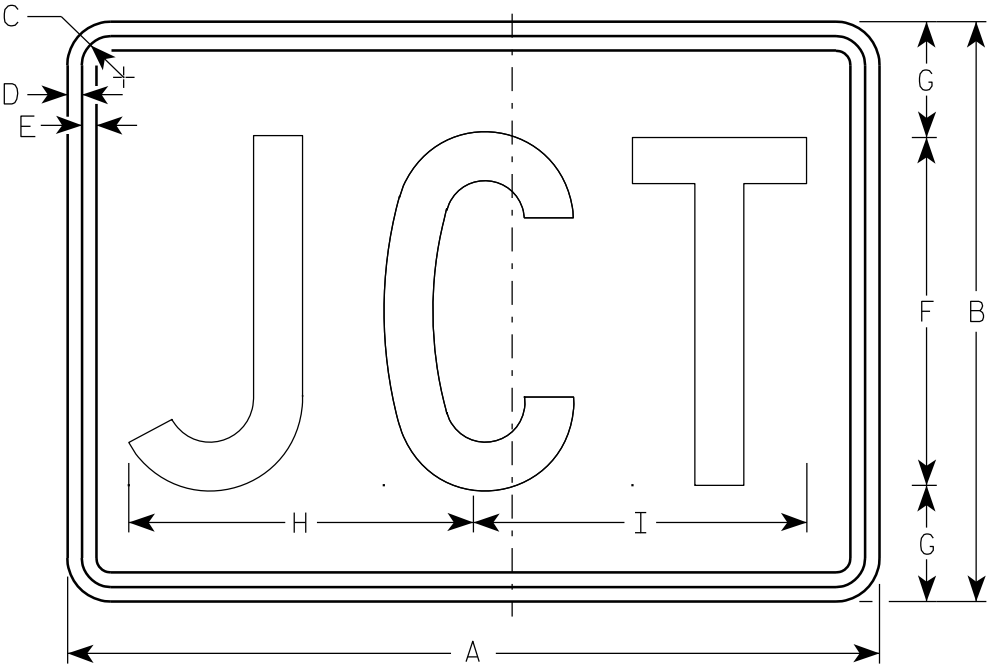


STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J. Spang
for State Traffic Engineer
DATE 3/20/02 PLATE NO. M1-6.9

7



M2-1
MK2-1
MM2-1
MR2-1

Metric equivalent
for this sign is:

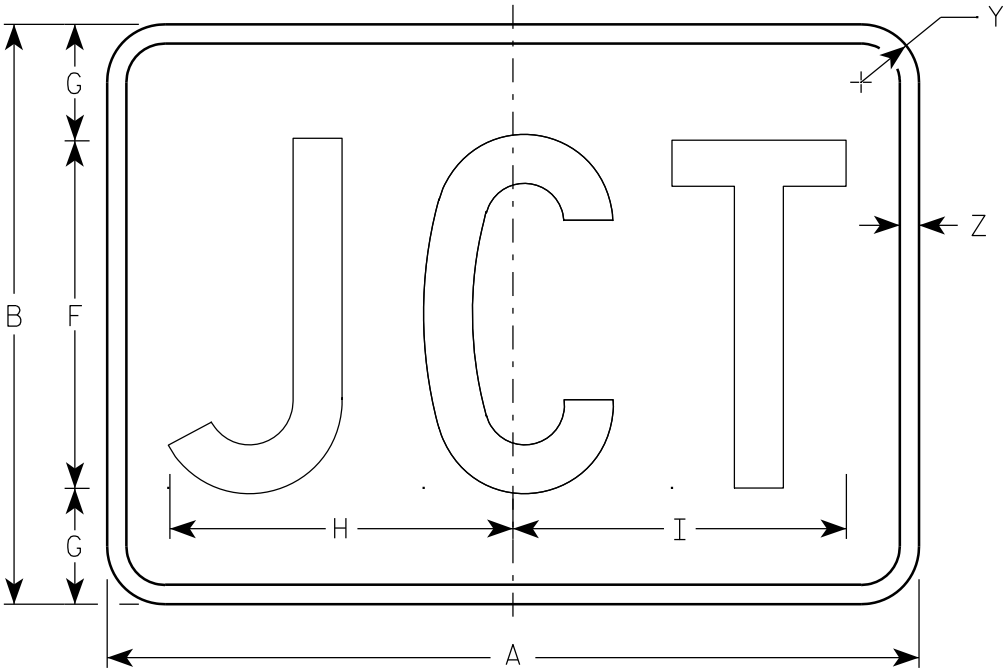
SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 mm

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 m ²
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	0.20
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	0.20
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	0.20
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	0.20

PROJECT NO:			HWY:			COUNTY:			SHEET NO: 142			E
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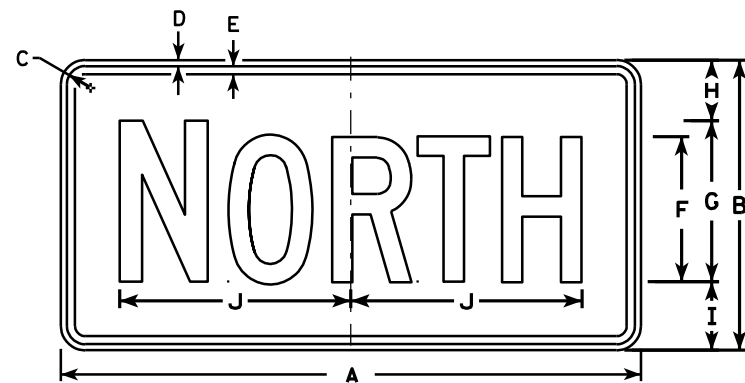
NOTES

- Sign is Type II - See Note 5 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- Message Series - C
- 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.
- M2-1 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB2-1 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG2-1 Background - Green
Message - White - Type H Reflective
MK2-1 Background - Green
Message - White - Type H Reflective
MM2-1 Background - White - Type H Reflective
Message - Green
MN2-1 Background - Brown
Message - White - Type H Reflective
MR2-1 Background - Brown
Message - Yellow - Type H Reflective



MB2-1
MG2-1
MN2-1

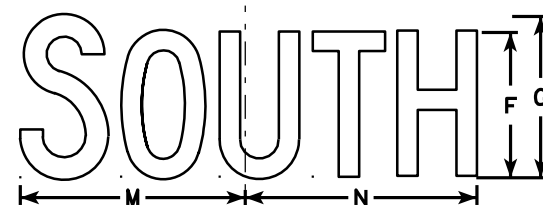
7



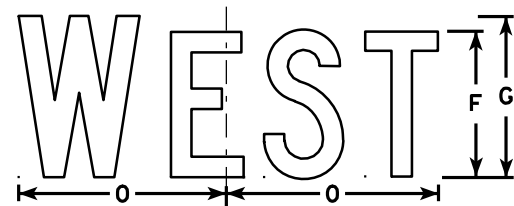
M3-1
MK3-1
M03-1



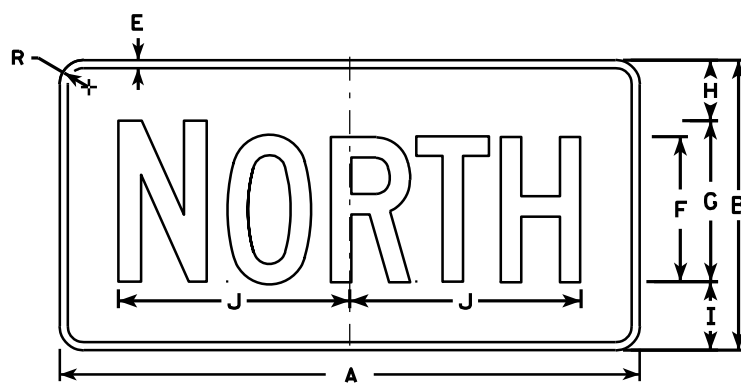
M3-2
MK3-2
M03-2



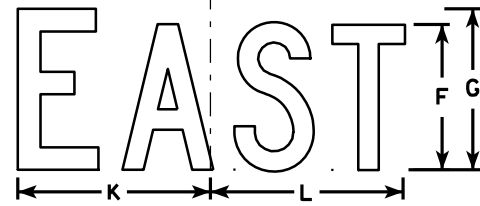
M3-3
MK3-3
M03-3



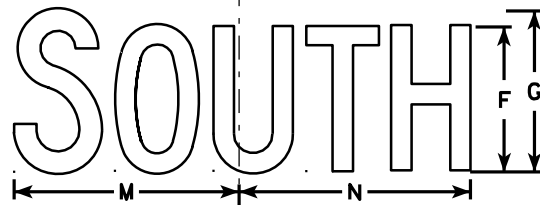
M3-4
MK3-4
M03-4



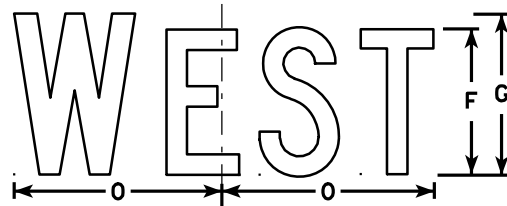
MB3-1
MG3-1
MM3-1
MN3-1



MB3-2
MG3-2
MM3-2
MN3-2



MB3-3
MG3-3
MM3-3
MN3-3



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective (Detour or temporary signs - Reflective)
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White - Type H Reflective (Detour or temporary signs - Reflective)
MG3-1 thru MG3-4 Background - Green
Message - White - Type H Reflective
MK3-1 thru MK3-4 Background - Green
Message - White - Type H Reflective
MM3-1 thru MM3-4 Background - White - Type H Reflective
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White - Type H Reflective
M03-1 thru M03-4 Background - Orange - Reflective
Message - Black
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

PROJECT NO: HWY: COUNTY: SHEET NO: 143 E

STANDARD SIGNS M3-1 thru M3-4 SERIES

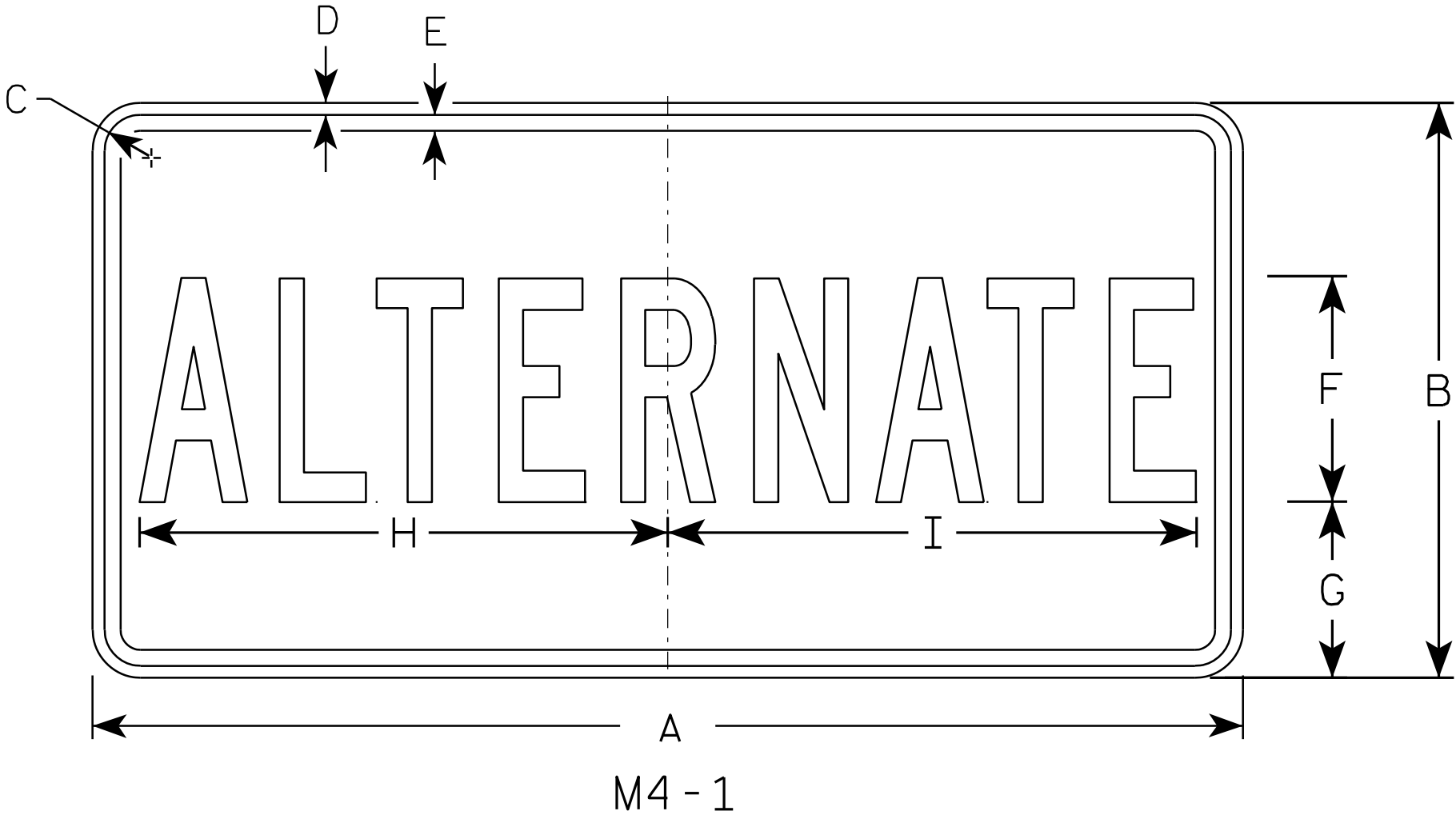
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

NOTES

- 1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - See Note 5
 - Message - See note 5
- 3. Message Series - B
- 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. M4-1 Background - White - Type H Reflective Message - Black
 - MB4-1 Background - Blue Message - White - Type H Reflective
 - M04-1 Background - Orange - Reflective Message - Black



7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	4	4	9 3/4	9 1/2																		2.00
3	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	7	5 1/2	16 3/8	16 1/2																		4.5

STANDARD SIGN
M4 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-1.7

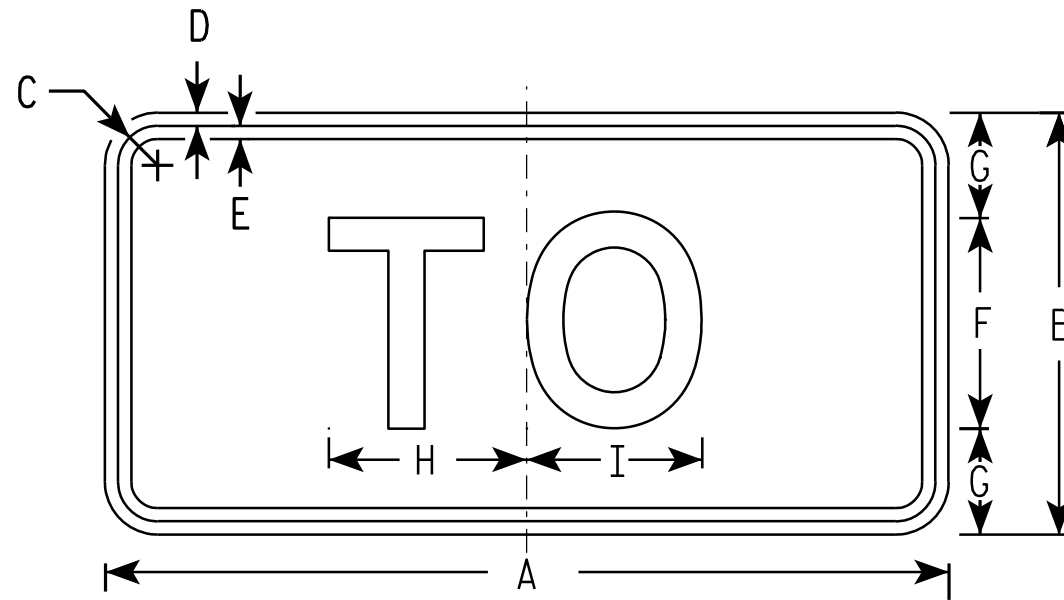
PROJECT NO:

HWY:

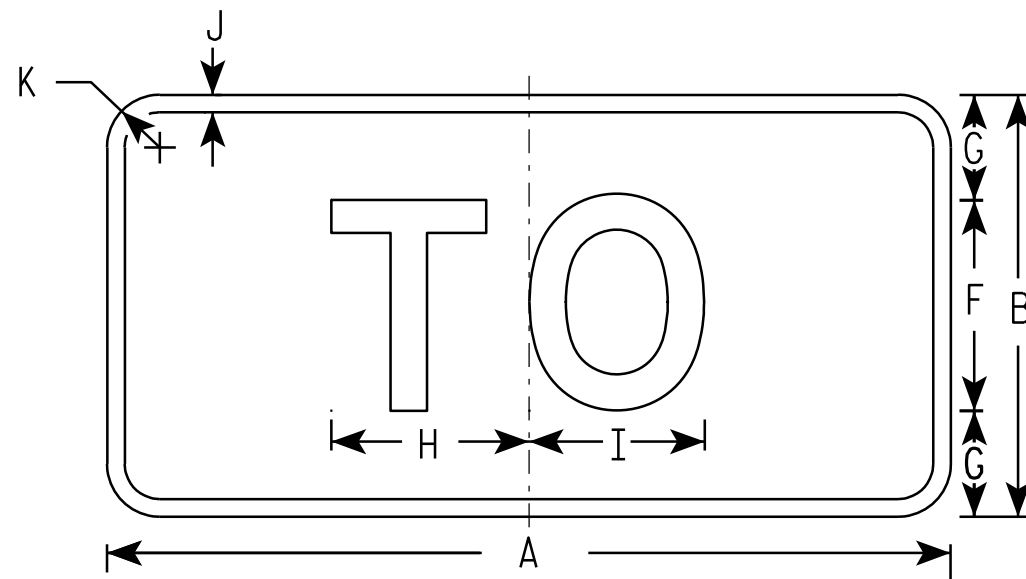
COUNTY:

SHEET NO: 144

E



M4-5
MK4-5
MM4-5



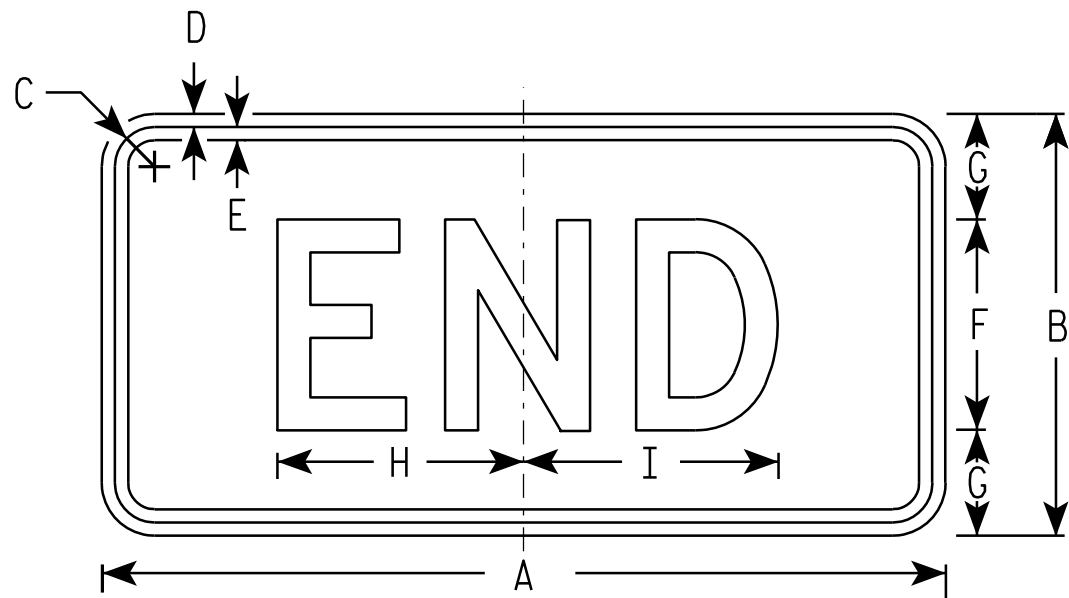
MB4-5
MG4-5
MN4-5

NOTES

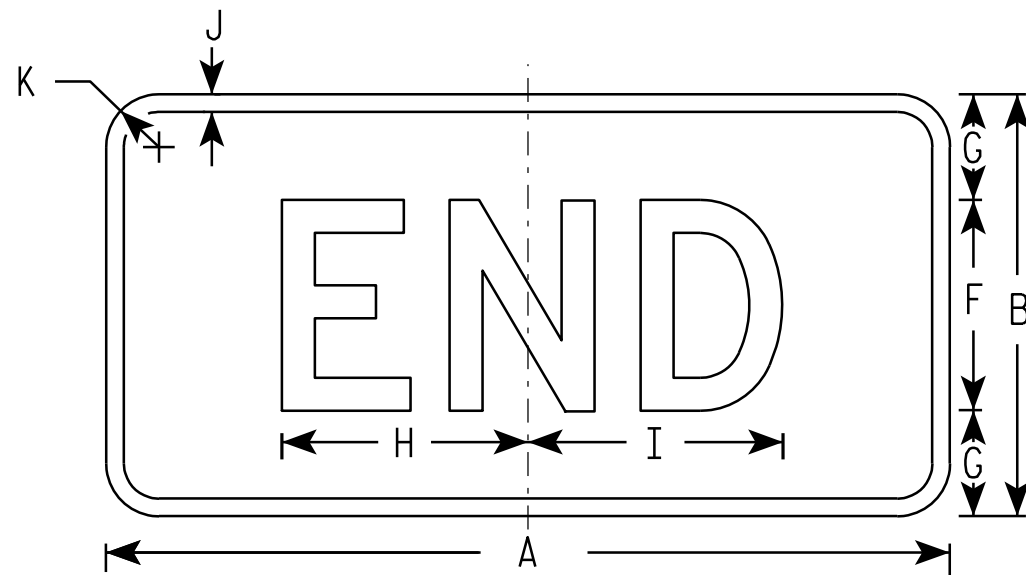
1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB4-5 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG4-5 Background - Green
Message - White - Type H Reflective
MK4-5 Background - Green
Message - White - Type H Reflective
MM4-5 Background - White - Type H Reflective
Message - Green
MN4-5 Background - Brown
Message - White - Type H 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	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

PROJECT NO: HWY: COUNTY: SHEET NO: 145 E



M4-6
MK4-6
MM4-6
MR4-6



MB4-6
MG4-6
MN4-6

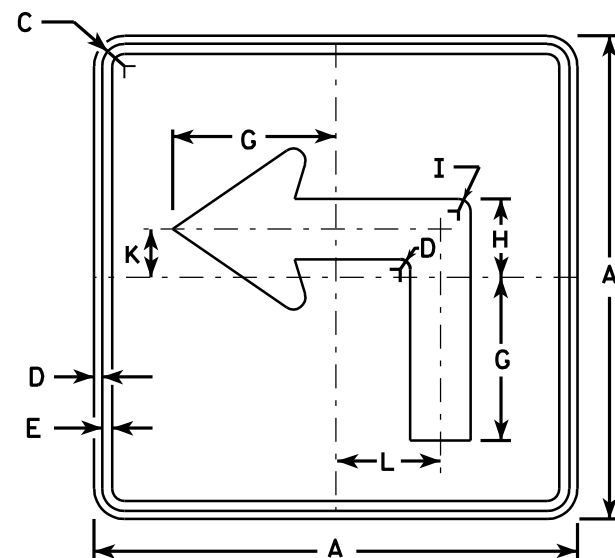
NOTES

- Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 5
Message - See note 5
- Message Series - D
- 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.
- M4-6 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB4-6 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG4-6 Background - Green
Message - White - Type H Reflective
MK4-6 Background - Green
Message - White - Type H Reflective
MM4-6 Background - White - Type H Reflective
Message - Green
MN4-6 Background - Brown
Message - White - Type H Reflective
MR4-6 Background - Brown
Message - Yellow - Type H Reflective

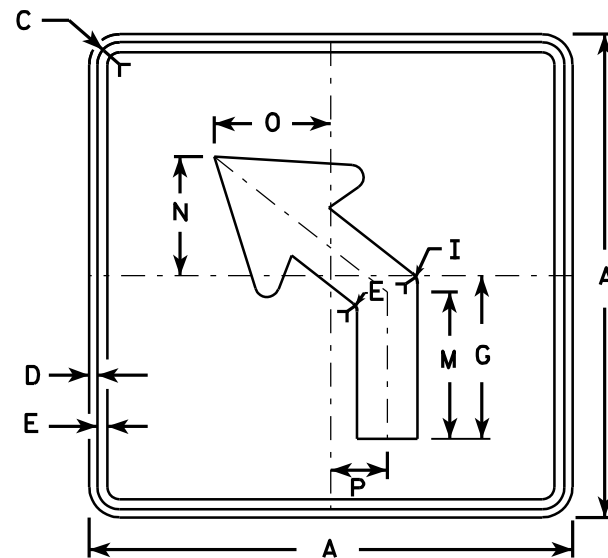
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	7	7 1/4	1/2	1 1/2																2.00
3	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
4	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5
5	36	18	1 1/8	3/8	1/2	9	4 1/2	12	11 7/8	1/2	1 1/2																4.5

PROJECT NO: HWY: COUNTY: SHEET NO: 146 E

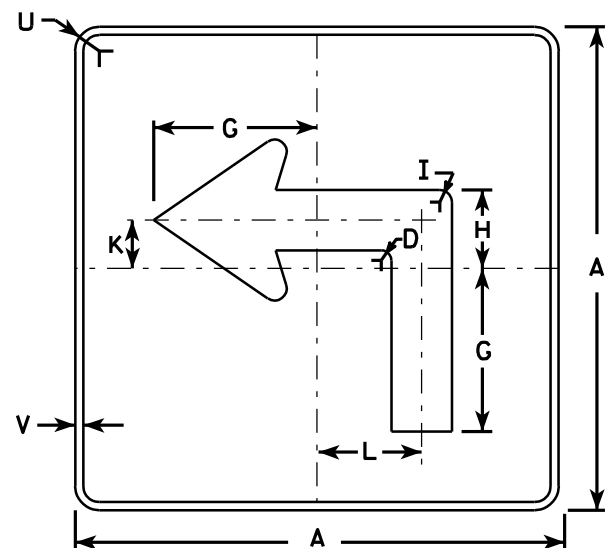
STANDARD SIGN M4 - 6	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 11/10/10	PLATE NO. M4-6.7



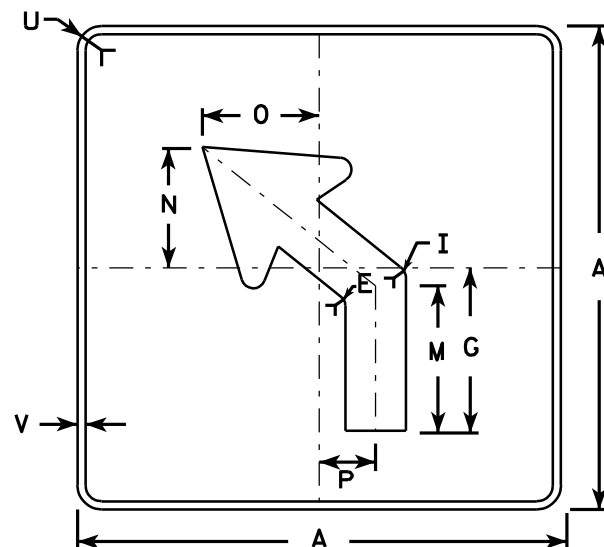
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



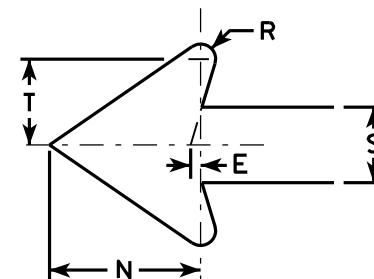
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area sq.
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	0.28
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	0.56
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	0.56
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	0.56

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 147	E
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NOTES

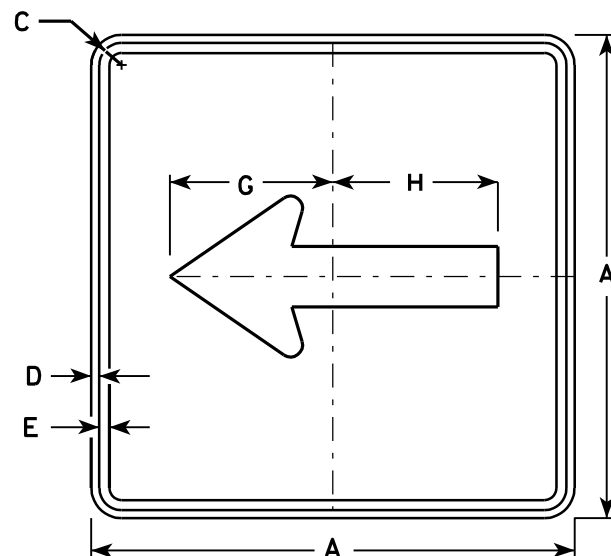
- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective)
Message - Black
MB5-1 and MB5-2 Background - Blue
Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
MG5-1 and MG5-2 Background - Green
Message - White - Type H Reflective
MK5-1 and MK5-2 Background - Green
Message - White Type H Reflective
MM5-1 and MM5-2 Background - White - Type H Reflective
Message - Green
MN5-1 and MN5-2 Background - Brown
Message - White - Type H Reflective
MO5-1 and MO5-2 Background - Orange - Reflective
Message - Black
MR5-1 and MR5-2 Background - Brown
Message - Yellow - Type H Reflective
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

STANDARD SIGN
M5-1 & M5-2

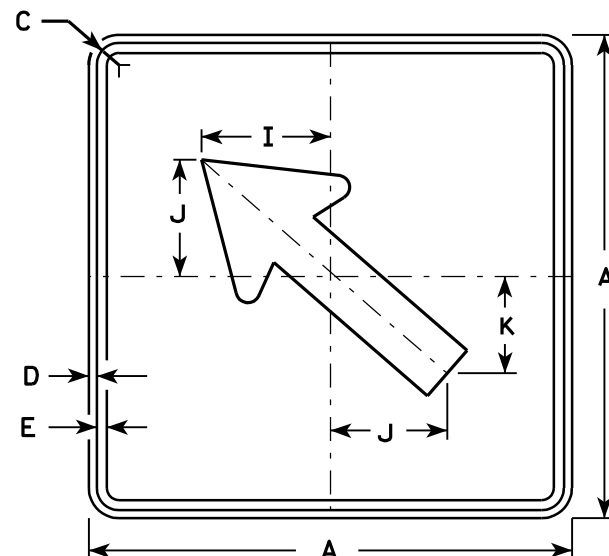
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

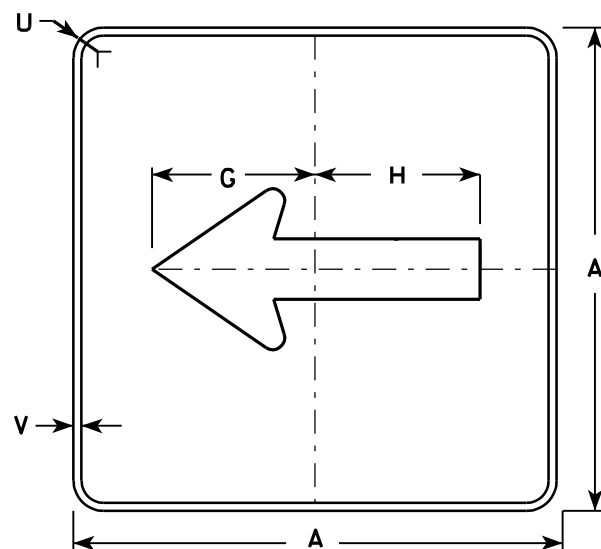
DATE 3/16/10 PLATE NO. M5-1.11



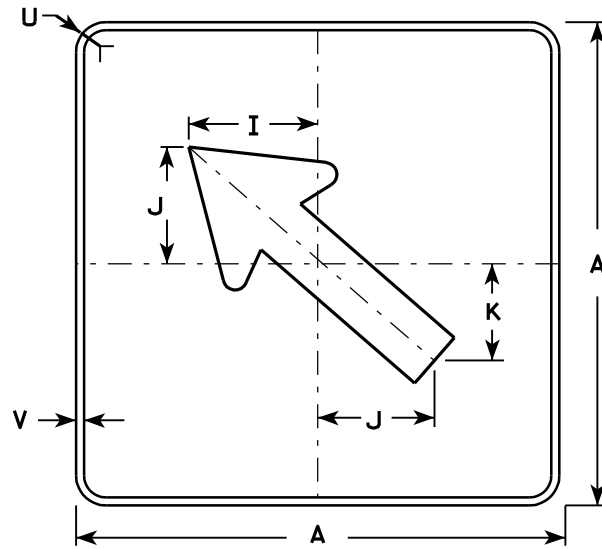
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



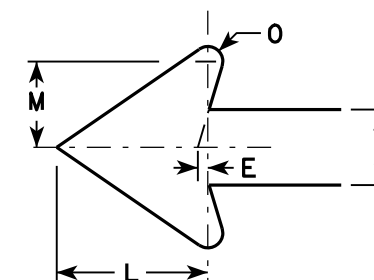
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See note 4
Message - See note 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.
- M6-1 and M6-2 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-1 and MG6-2 Background - Green
Message - White - Type H Reflective
MK6-1 and MK6-2 Background - Green
Message - White - Type H Reflective
MM6-1 and MM6-2 Background - White - Type H Reflective
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White - Type H Reflective
MO6-1 and MO6-2 Background - Orange - Reflective
Message - Black
MR6-1 and MR6-2 Background - Brown
Message - Yellow - Type H Reflective



Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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	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	0.28
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	0.56
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	0.56
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	0.56

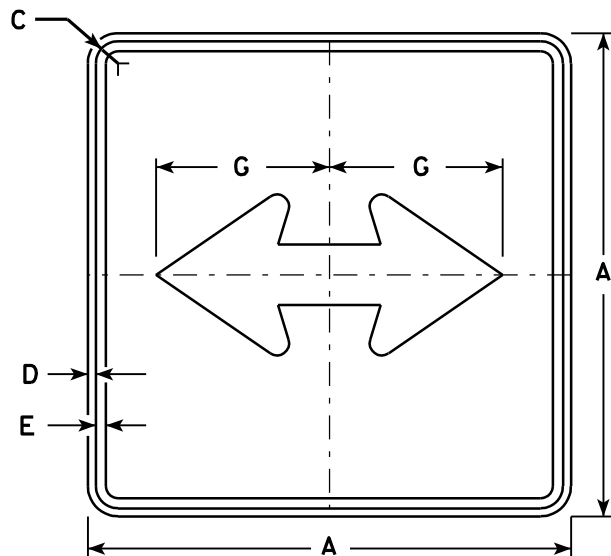
PROJECT NO: HWY: COUNTY: SHEET NO: 148 E

STANDARD SIGN M6-1 & M6-2 SERIES

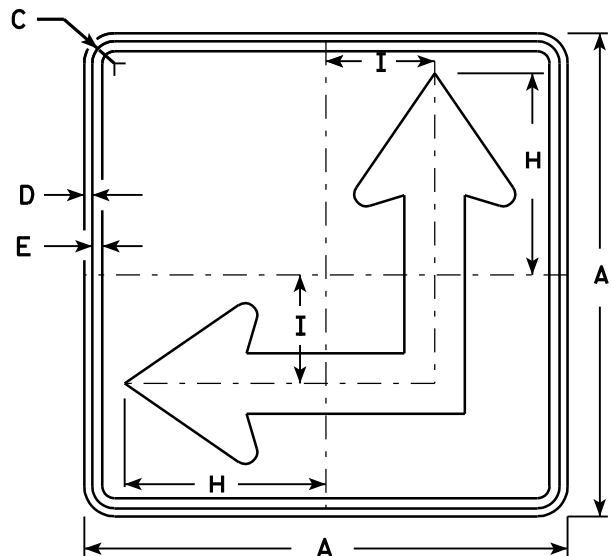
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

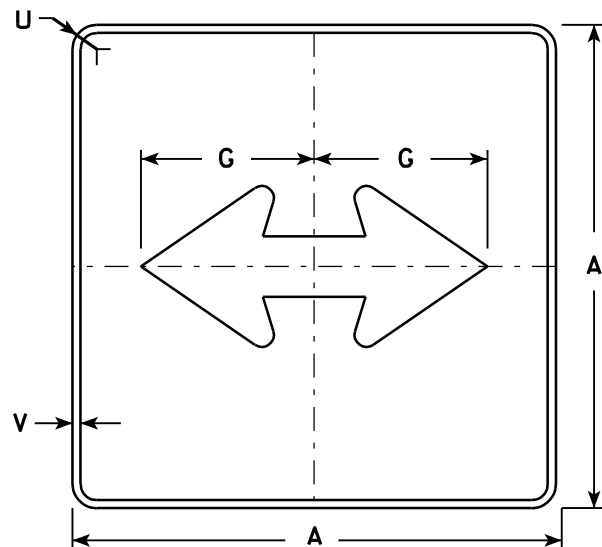
DATE 3/16/10 PLATE NO. M6-1.12



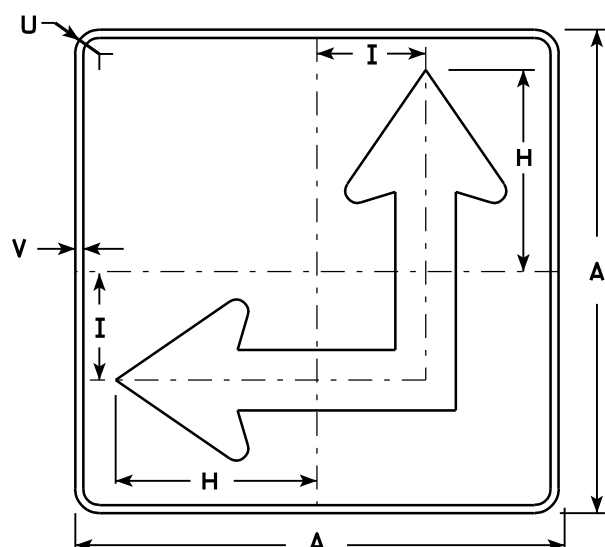
M6 - 4
MK6 - 4
MM6 - 4
MO6 - 4
MR6 - 4



M6 - 6
MK6 - 6
MM6 - 6
MO6 - 6
MR6 - 6



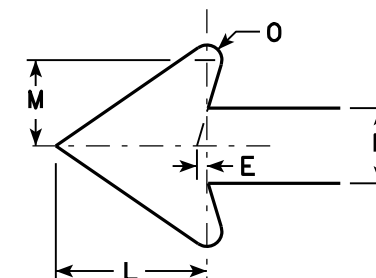
MB6 - 4
MG6 - 4
MN6 - 4



MB6 - 6
MG6 - 6
MN6 - 6

NOTES

- Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - See Note 4
Message - See Note 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.
- M6-4 and M6-6 Background - White - Type H Reflective
(Detour or temporary Signs - Reflective)
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White - Type H Reflective
(Detour or temporary Signs - Reflective)
MG6-4 and MG6-6 Background - Green
Message - White - Type H Reflective
MK6-4 and MK6-6 Background - Green
Message - White - Type H Reflective
MM6-4 and MM6-6 Background - White - Type H Reflective
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White - Type H Reflective
MO6-4 and MO6-6 Background - Orange - Reflective
Message - Black
MR6-4 and MR6-6 Background - Brown
Message - Yellow - Type H Reflective
- M6-6R same as M6-6L except arrow points ahead and right.



Metric equivalent
for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 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 m ²
1																												
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

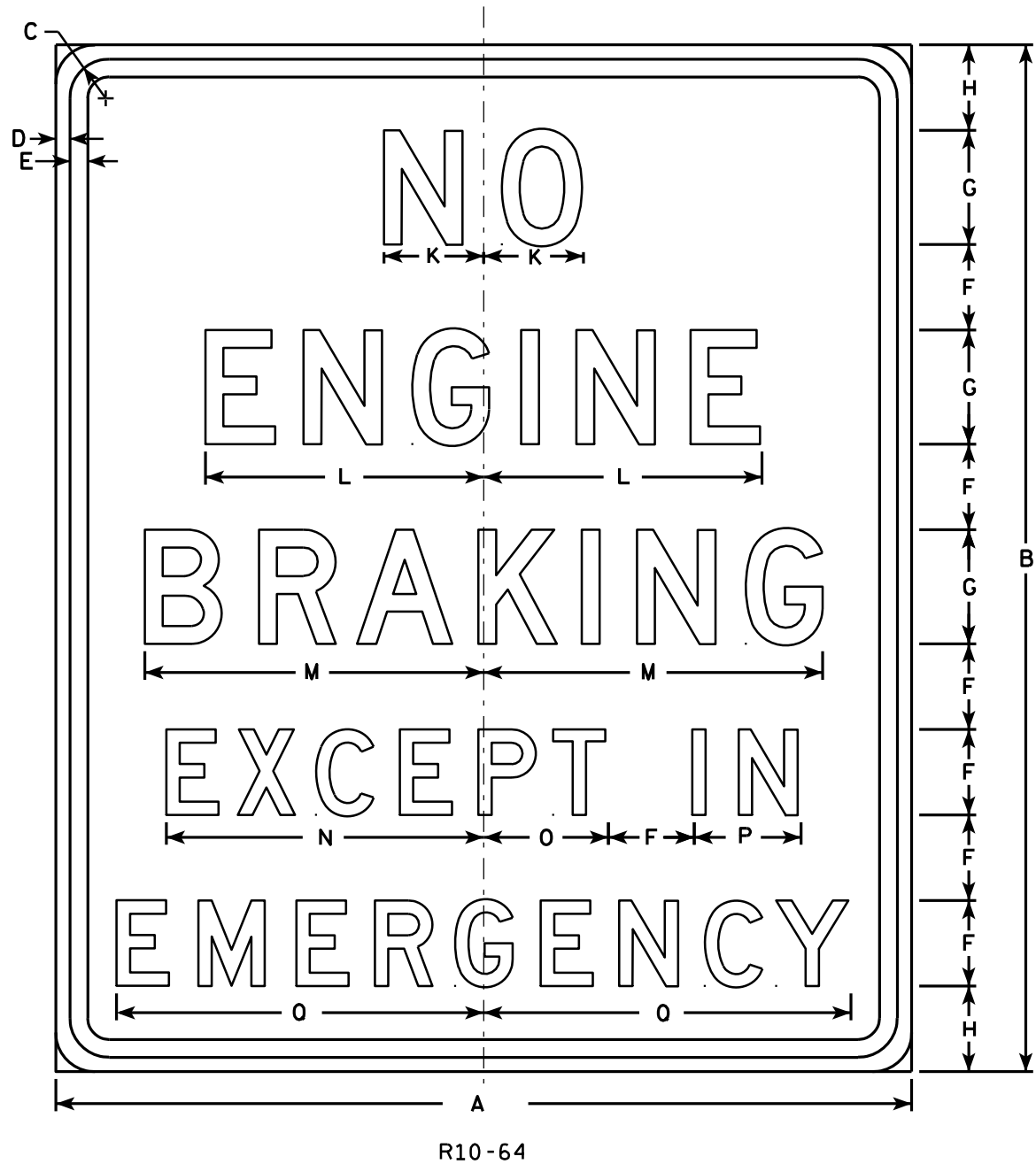
PROJECT NO:	HWY:	COUNTY:	SHEET NO: 149	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

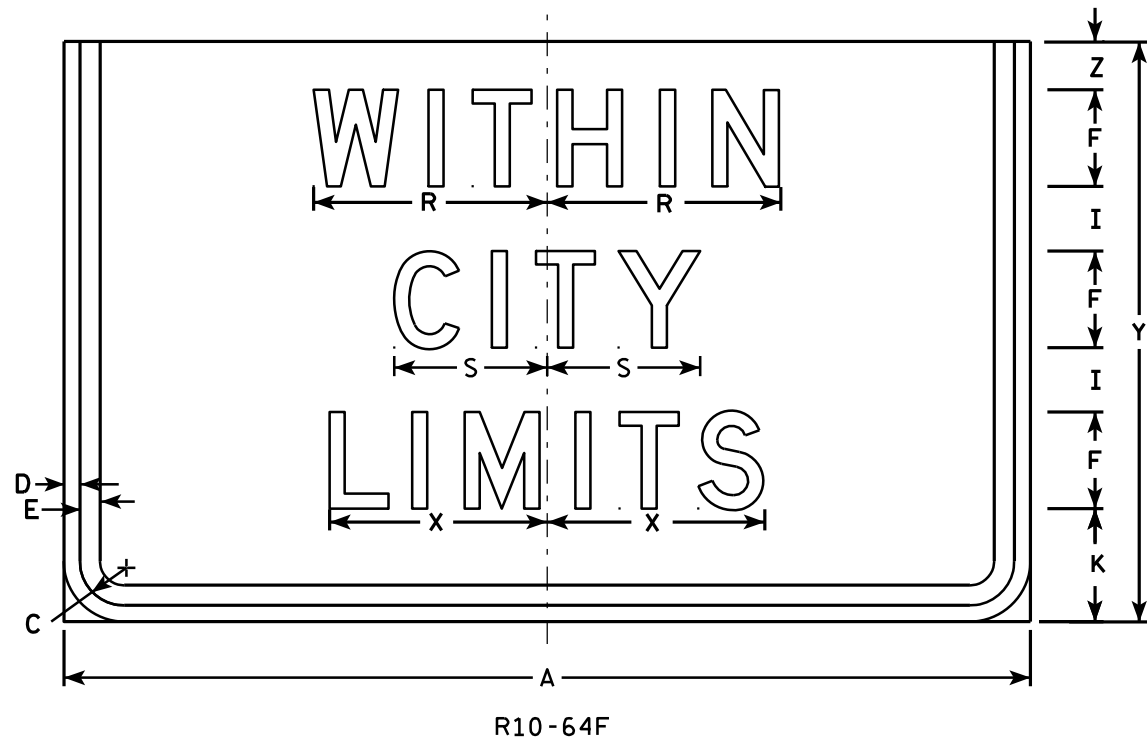
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-4.7



- NOTES
1. Signs are 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 See note 5
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Line 2 of R10-64F is Series C for "TOWNSHIP" Only



VILLAGE

Area sq. ft.
3.75
7.0

TOWNSHIP

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	30	36	1 3/8	1/2	5/8	3	4	3	2		3 1/2	9 3/4	11 7/8	11 1/8	4 3/8	3 3/4	12 7/8	7 1/4	4 3/4		8 1/4	8 3/4	5/8	6 3/4	18	1 1/2	7.5
2S	30	36	1 3/8	1/2	5/8	3	4	3	2		3 1/2	9 3/4	11 7/8	11 1/8	4 3/8	3 3/4	12 7/8	7 1/4	4 3/4		8 1/4	8 3/4	5/8	6 3/4	18	1 1/2	7.5
2M	30	36	1 3/8	1/2	5/8	3	4	3	2		3 1/2	9 3/4	11 7/8	11 1/8	4 3/8	3 3/4	12 7/8	7 1/4	4 3/4		8 1/4	8 3/4	5/8	6 3/4	18	1 1/2	7.5
3	42	48	1 3/8	1/2	5/8	4	5	4 1/2	3		4	12 1/4	14 7/8	14 1/8	5 1/4	4 3/4	16 1/4	9	6		11	11 1/4	1 1/2	8 1/2	24	2	14.0
4																											
5																											

PROJECT NO:

HWY:

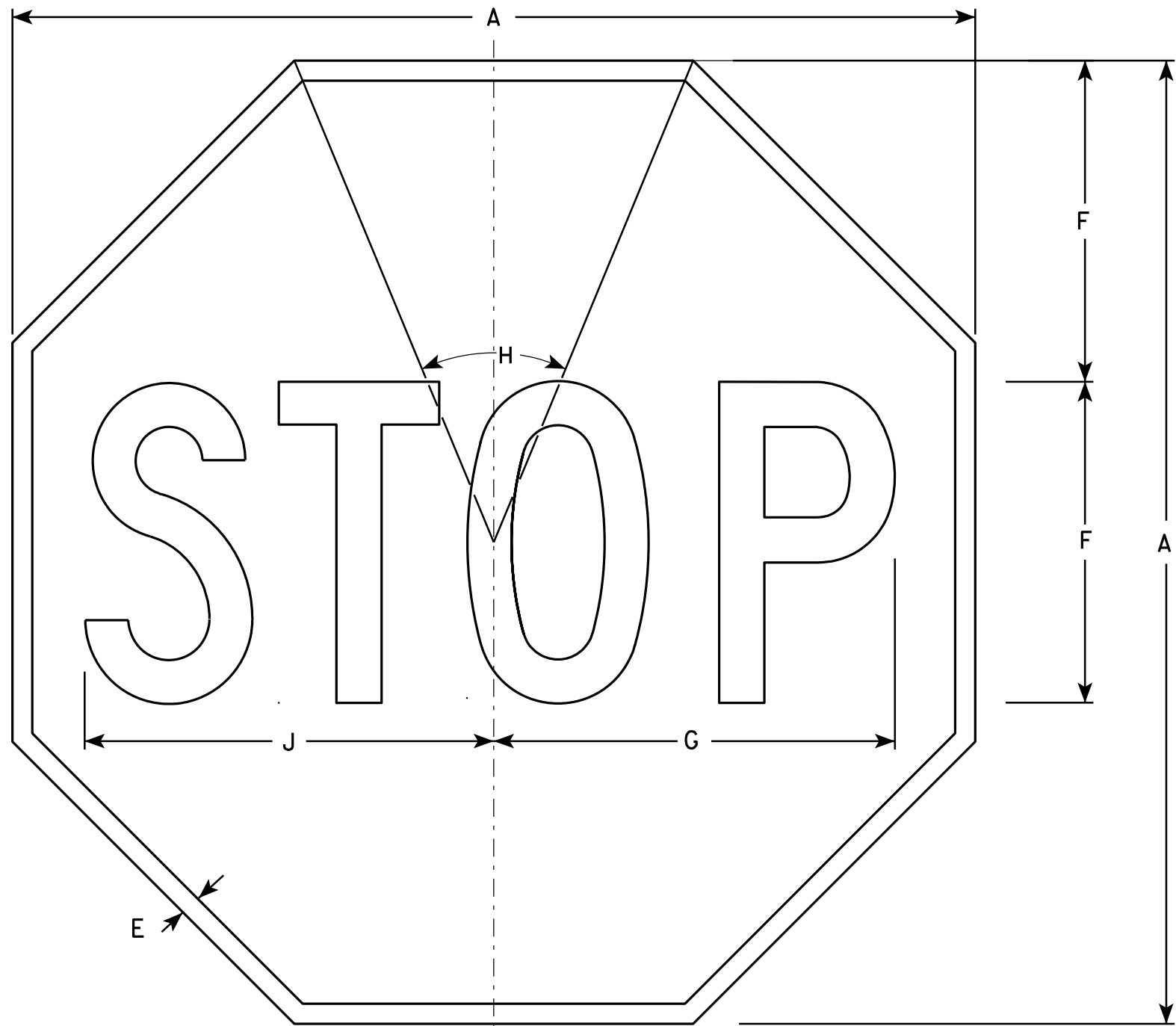
COUNTY:

DATE: 4/4/11

PLATE NO. R10-64.7

SHEET NO: 150

E



NOTES

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

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN
R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

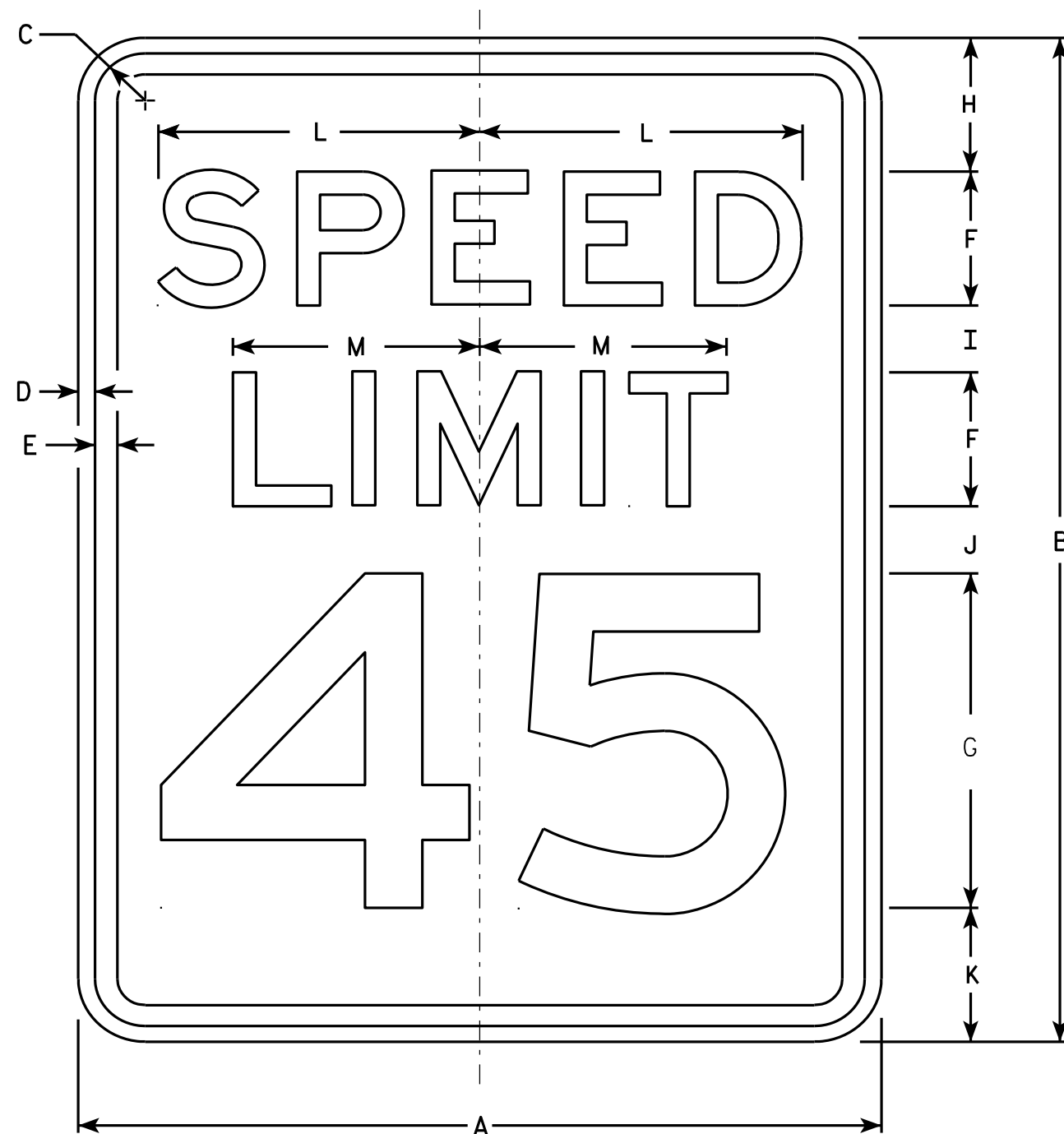
DATE 12/03/10 PLATE NO. R1-1.12

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 151



R2-1

NOTES

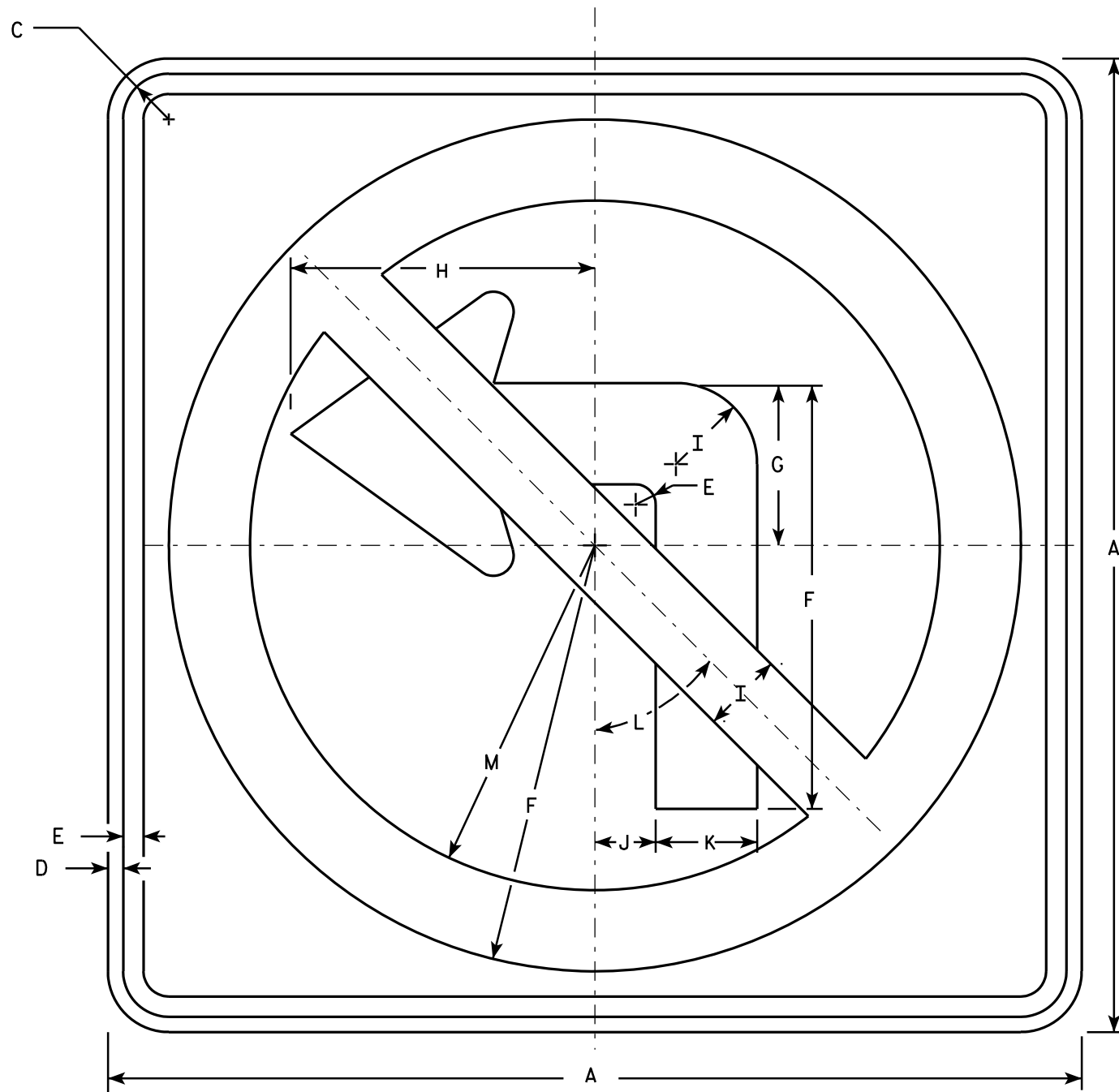
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

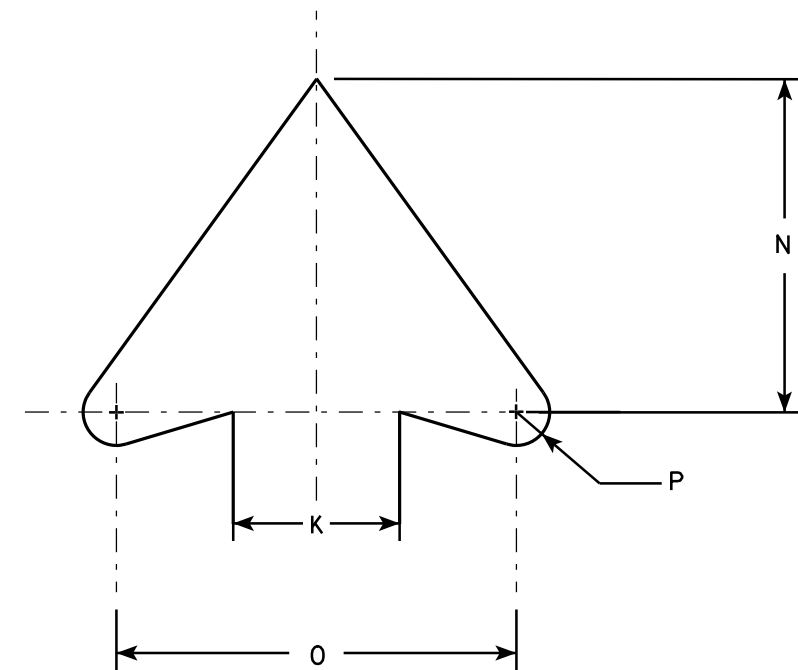
PROJECT NO: HWY: COUNTY: SHEET NO: 152 E



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

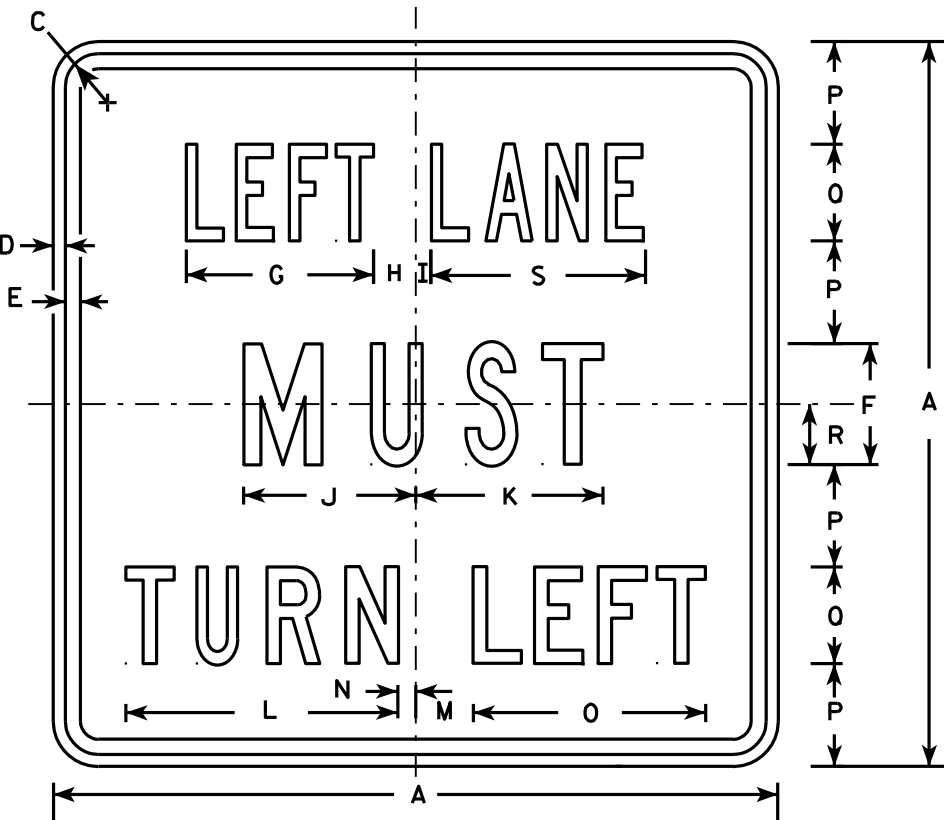
PROJECT NO:

HWY:

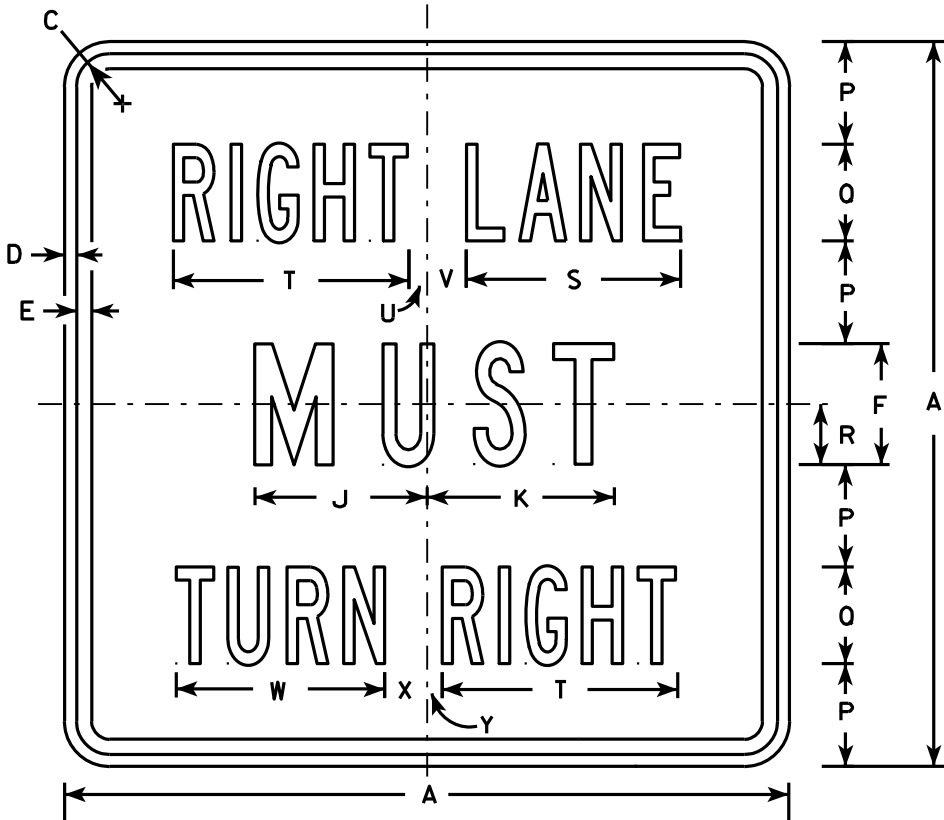
COUNTY:

SHEET NO: 153

E



R3-7L



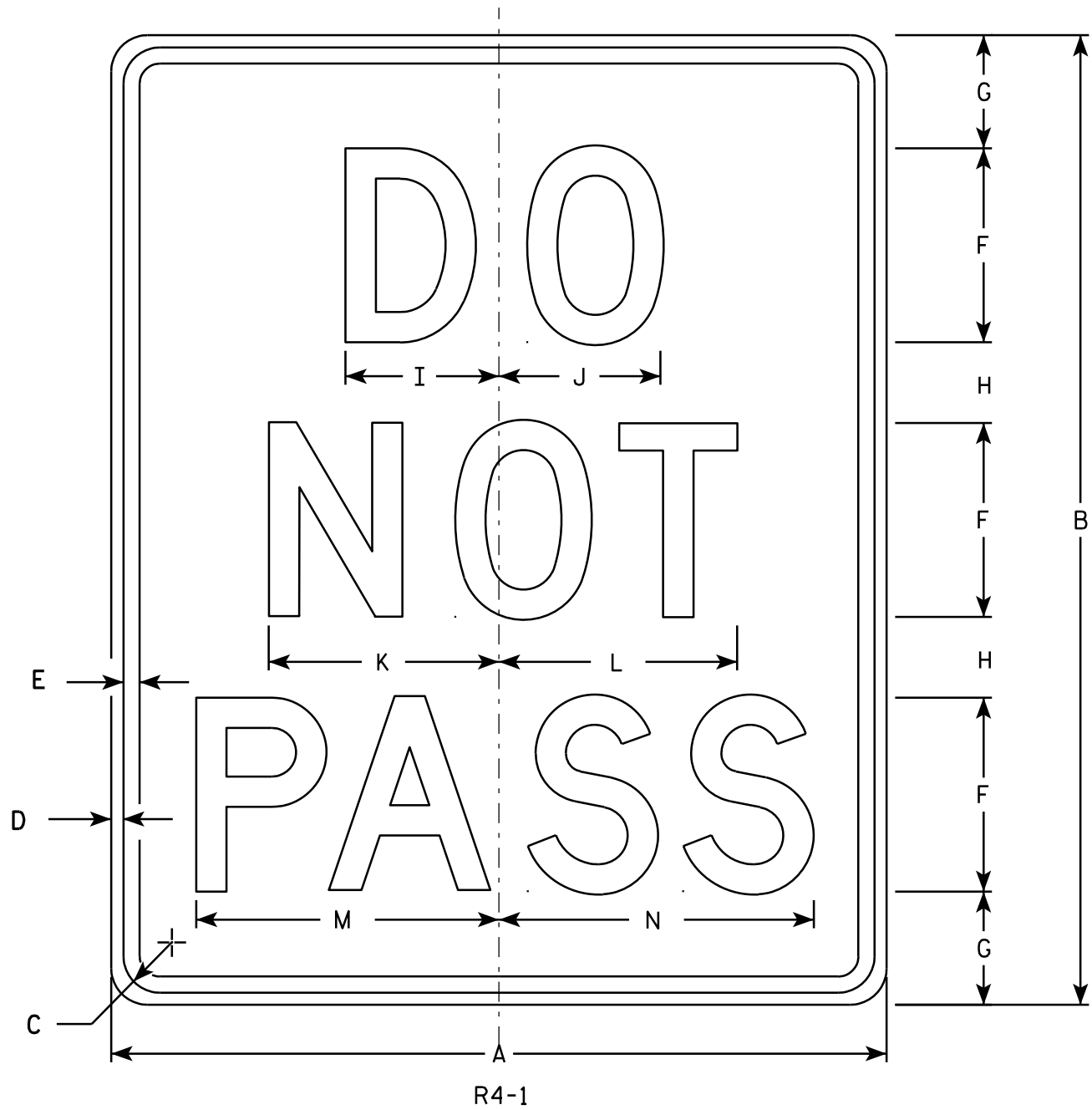
R3-7R

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 - Line 1 is Series B.
Line 2 is Series C.
Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
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	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

7



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.

7

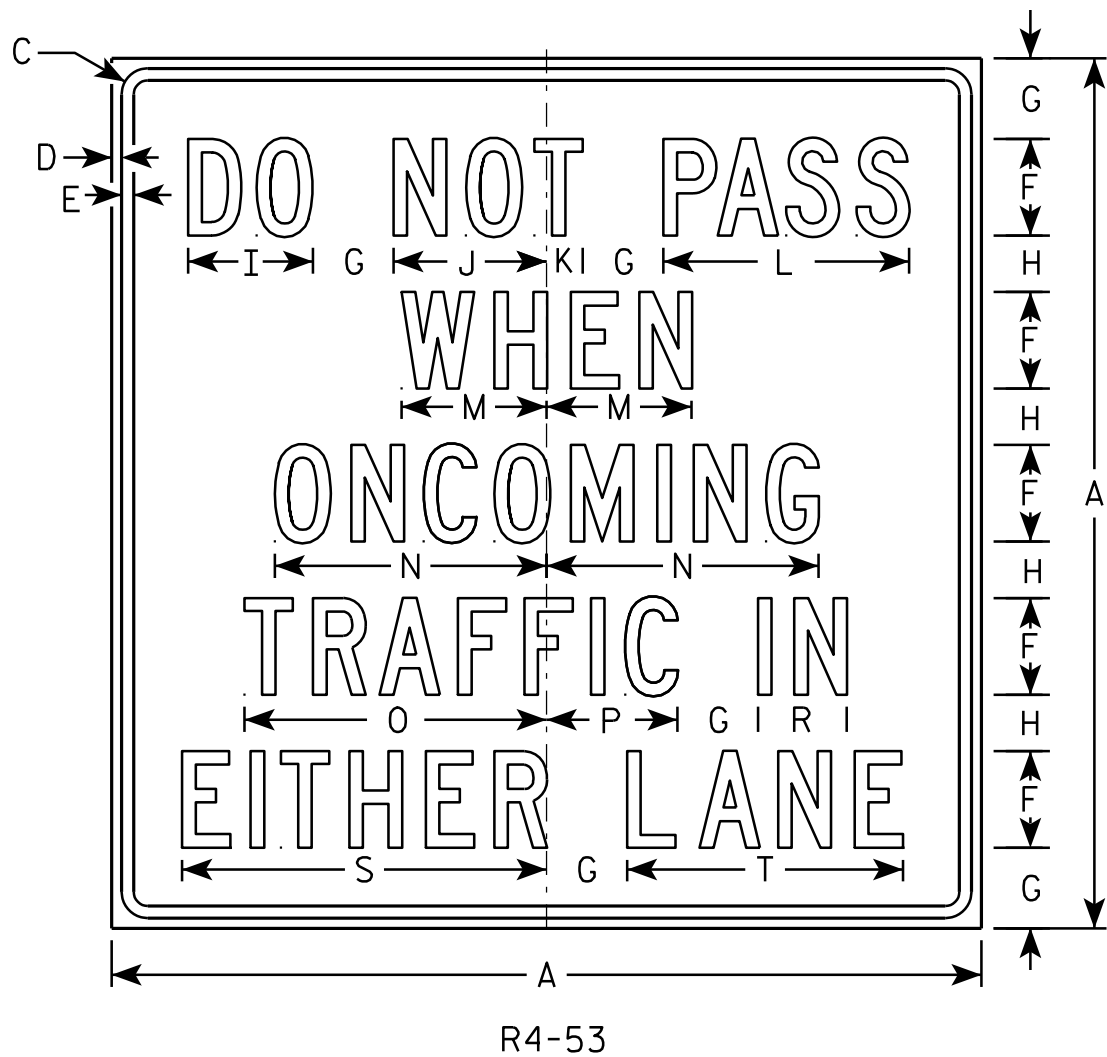
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

STANDARD SIGN
R4 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



NOTES

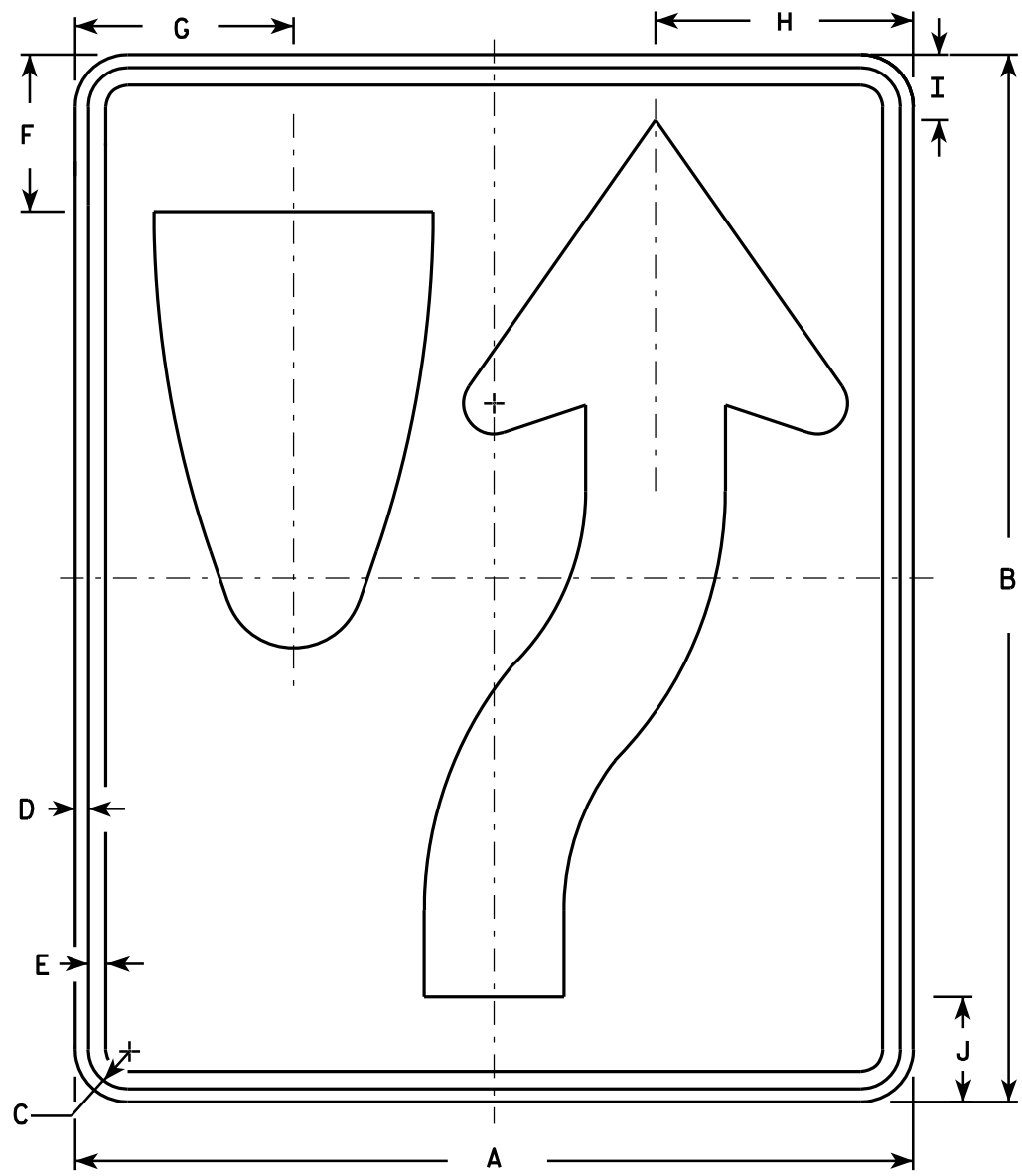
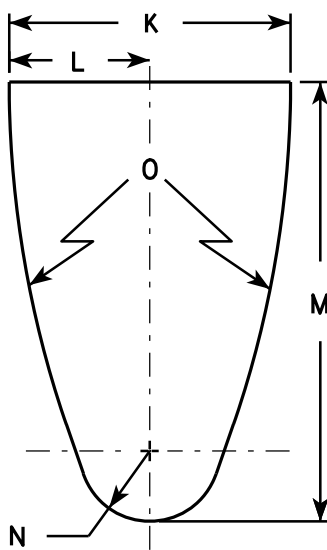
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - WHITE
Message - BLACK
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as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

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	54		1 5/8	5/8	3/4	6	5	3 1/2	7 3/4	9 1/2	2 1/4	15 1/4	9	16 7/8	18 3/4	8 1/8		5 1/2	22 5/8	17 1/8							20.25
2M	54		1 5/8	5/8	3/4	6	5	3 1/2	7 3/4	9 1/2	2 1/4	15 1/4	9	16 7/8	18 3/4	8 1/8		5 1/2	22 5/8	17 1/8							20.25
3																											
4																											
5																											

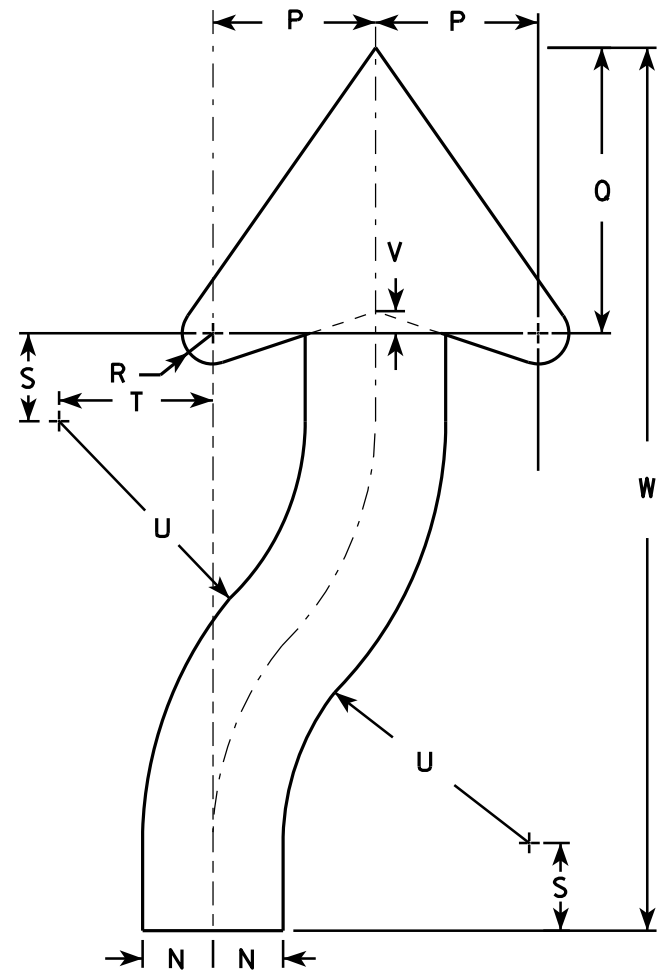
STANDARD SIGN R4-53	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 6/2/10	PLATE NO. R4-53.1

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.



R4-7



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:

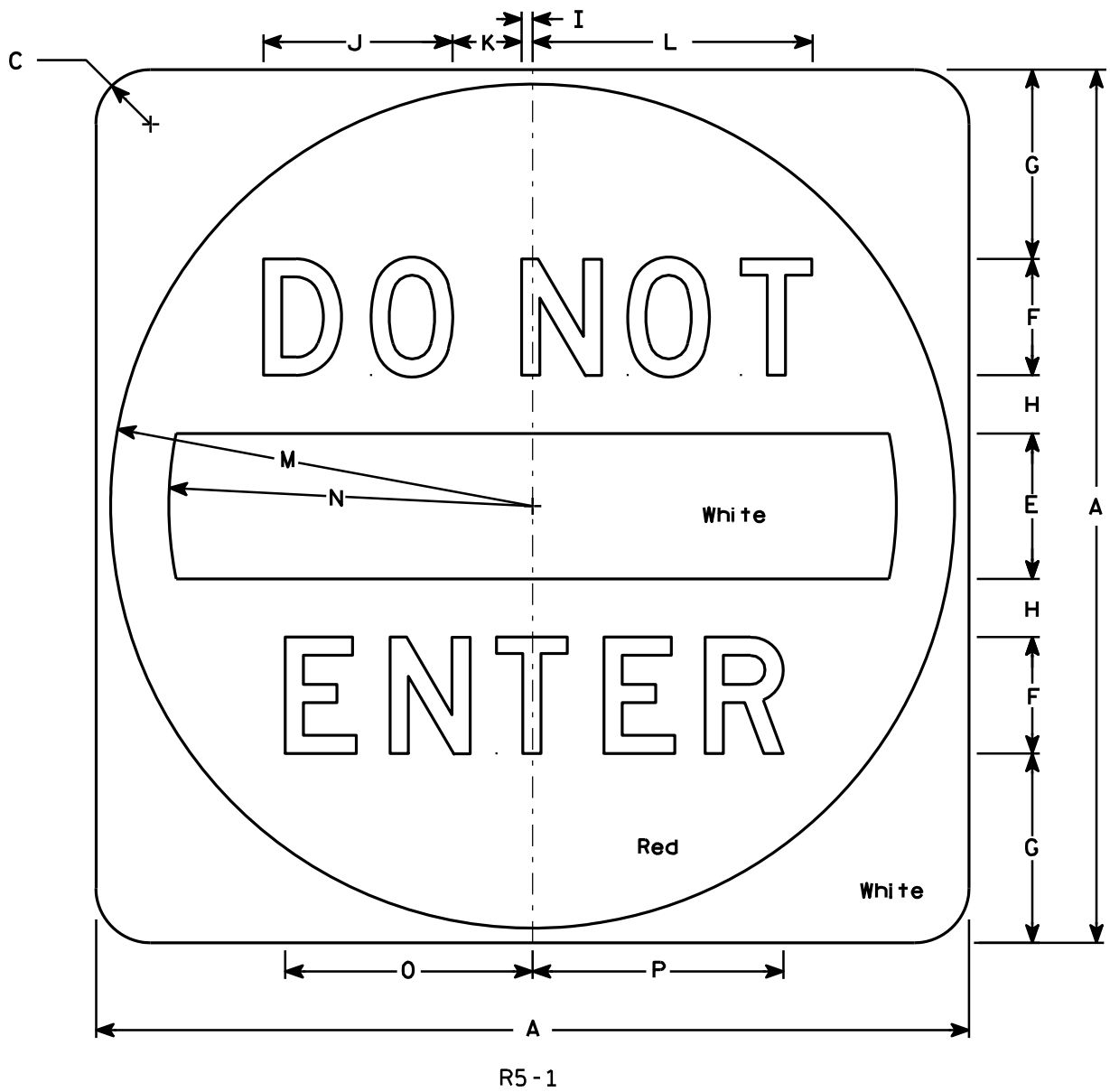
COUNTY:

SHEET NO: 157

E

NOTES

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

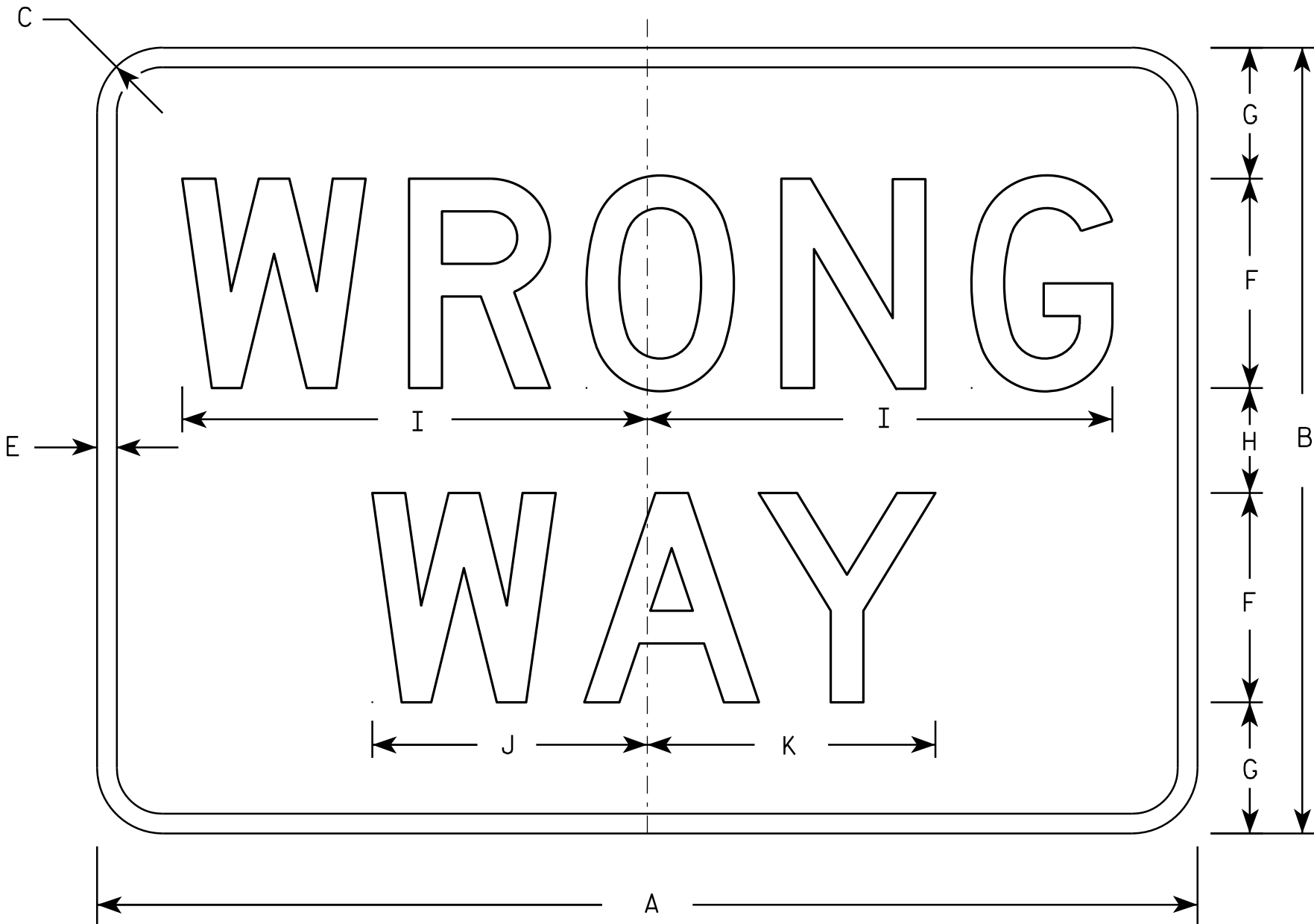
STANDARD SIGN

R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15



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

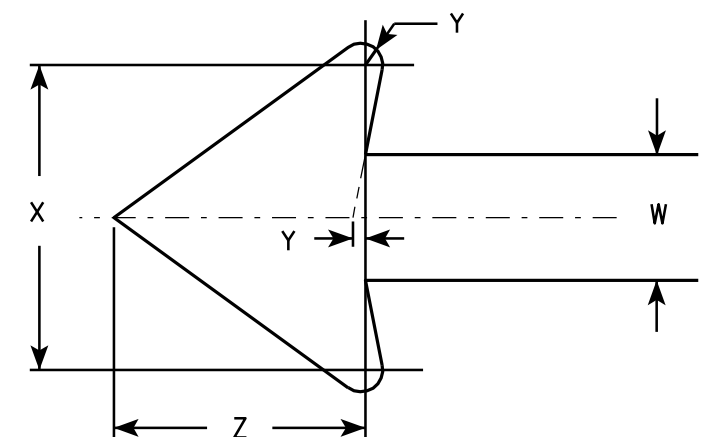
STANDARD SIGN R5-1A	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/17/10	PLATE NO. R5-1A.2



R7-51

NOTES

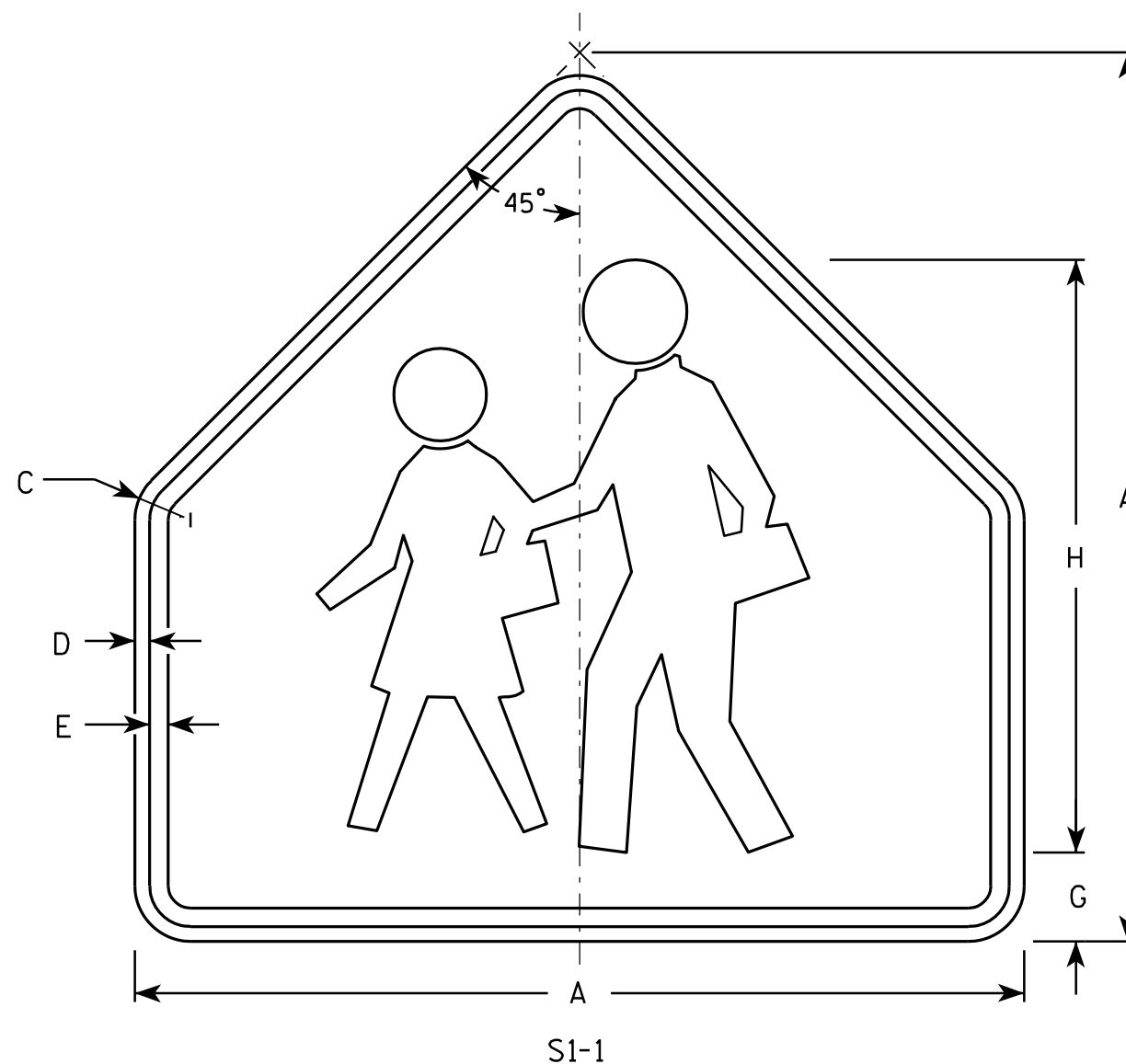
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Red
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R7-51D (double arrow)
R7-51R (right arrow)
R7-51L (left arrow)
6. Lines 1, 3 and 4 are Series C.
Line 2 is Series B.



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	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	4 7/8	5/8	1 3/4	2 1/2	4 3/8	3 7/8	3/4	1 3/4	1/8	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	5 3/4	1 1/8	1 1/2	3 1/8	5 1/2	5 7/8	1 1/8	2 5/8	1/4	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	7 1/8	1 1/4	2	3 3/4	6 1/2	7 3/4	1 1/2	3 1/2	1/4	3	5.0
4																											
5																											

STANDARD SIGN R7-51	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/31/2011	PLATE NO. R7-51.6



NOTES

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

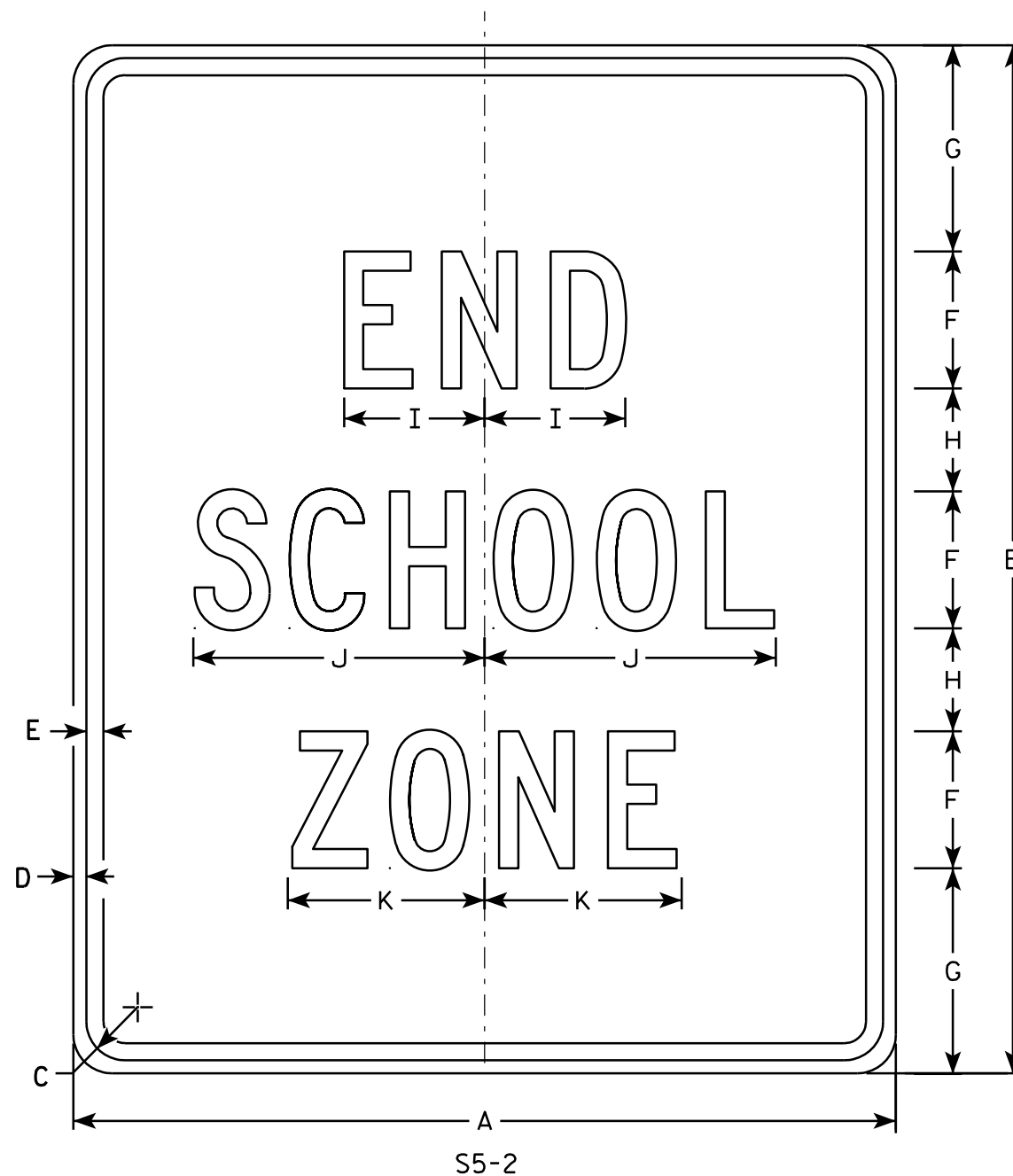
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN S1-1

WISCONSIN DEPT OF TRANSPORTATION

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

PROJECT NO: HWY: COUNTY: SHEET NO: 161 E



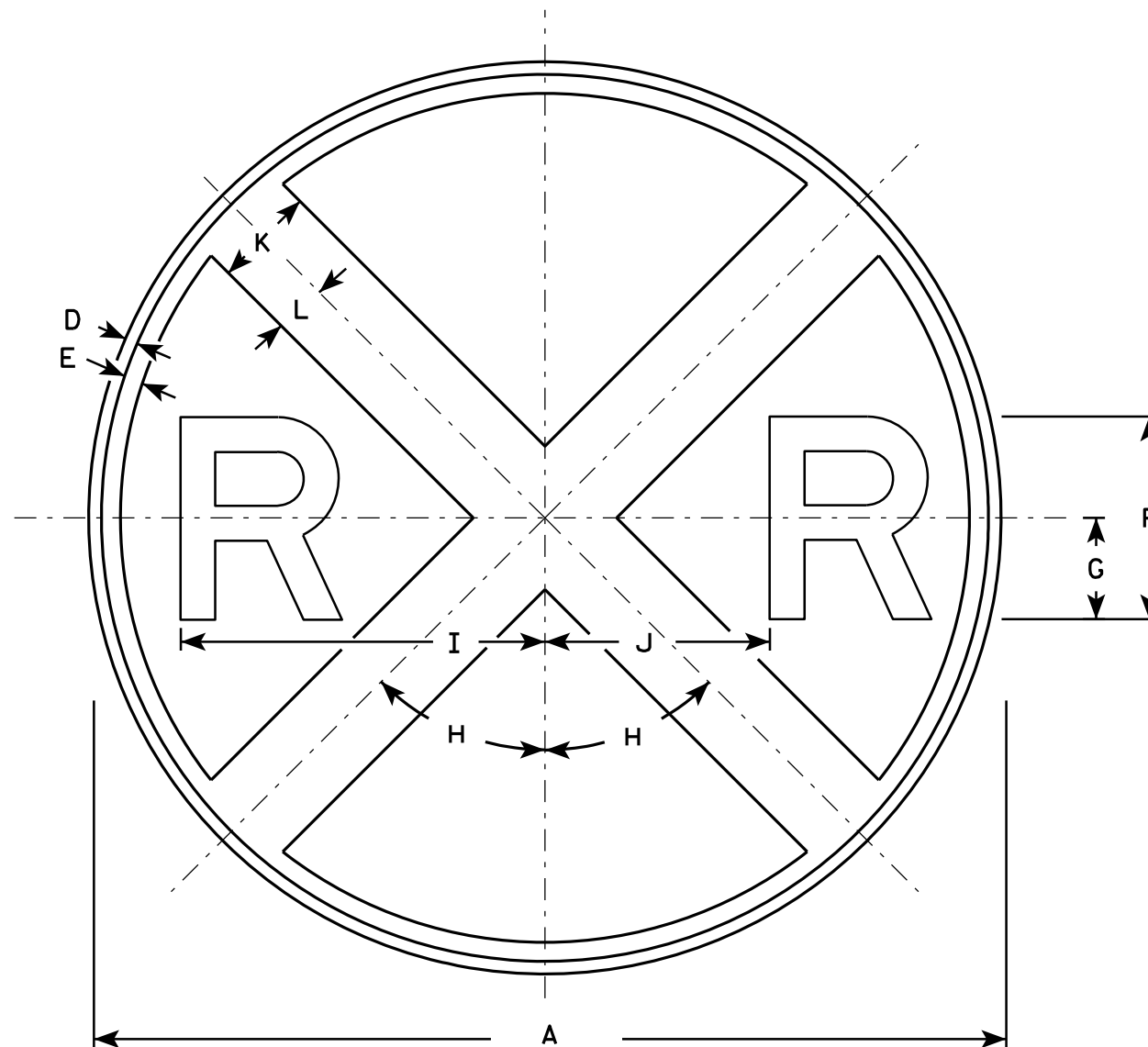
NOTES

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

[illegible]

STANDARD SIGN	
S5-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<u>Matthew P. Rauch</u> For State Traffic Engineer
DATE <u>3/8/11</u>	PLATE NO. <u>S5-2.2</u>

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E
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W10-1

NOTES

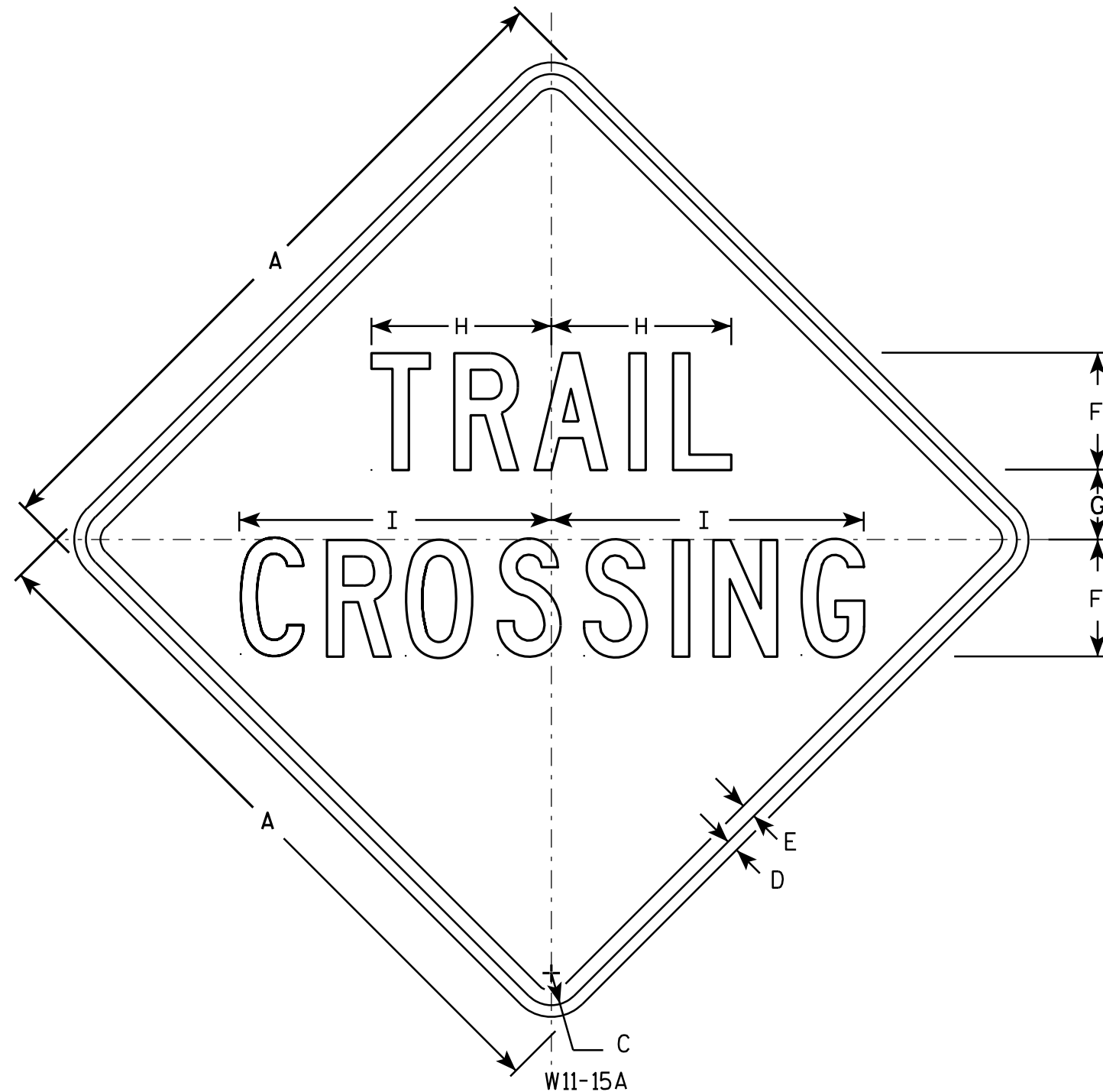
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - E

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3																											
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

STANDARD SIGN	
W10-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i>
DATE 3/15/11	for State Traffic Engineer PLATE NO. W10-1.7



NOTES

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

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	4	2 3/8	6 1/8	10 3/4																		4.0
2S	30		1 3/8	1/2	5/8	5	3	7 3/4	13 3/8																		6.25
2M	36		1 5/8	5/8	3/4	6	3 1/2	9 1/4	16																		9.0
3	36		1 5/8	5/8	3/4	6	3 1/2	9 1/4	16																		9.0
4	48		2 1/4	3/4	1	8	5	12 7/8	21 1/4																		16.0
5																											

STANDARD SIGN W11-15A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/21/10 PLATE NO. W11-15A.1

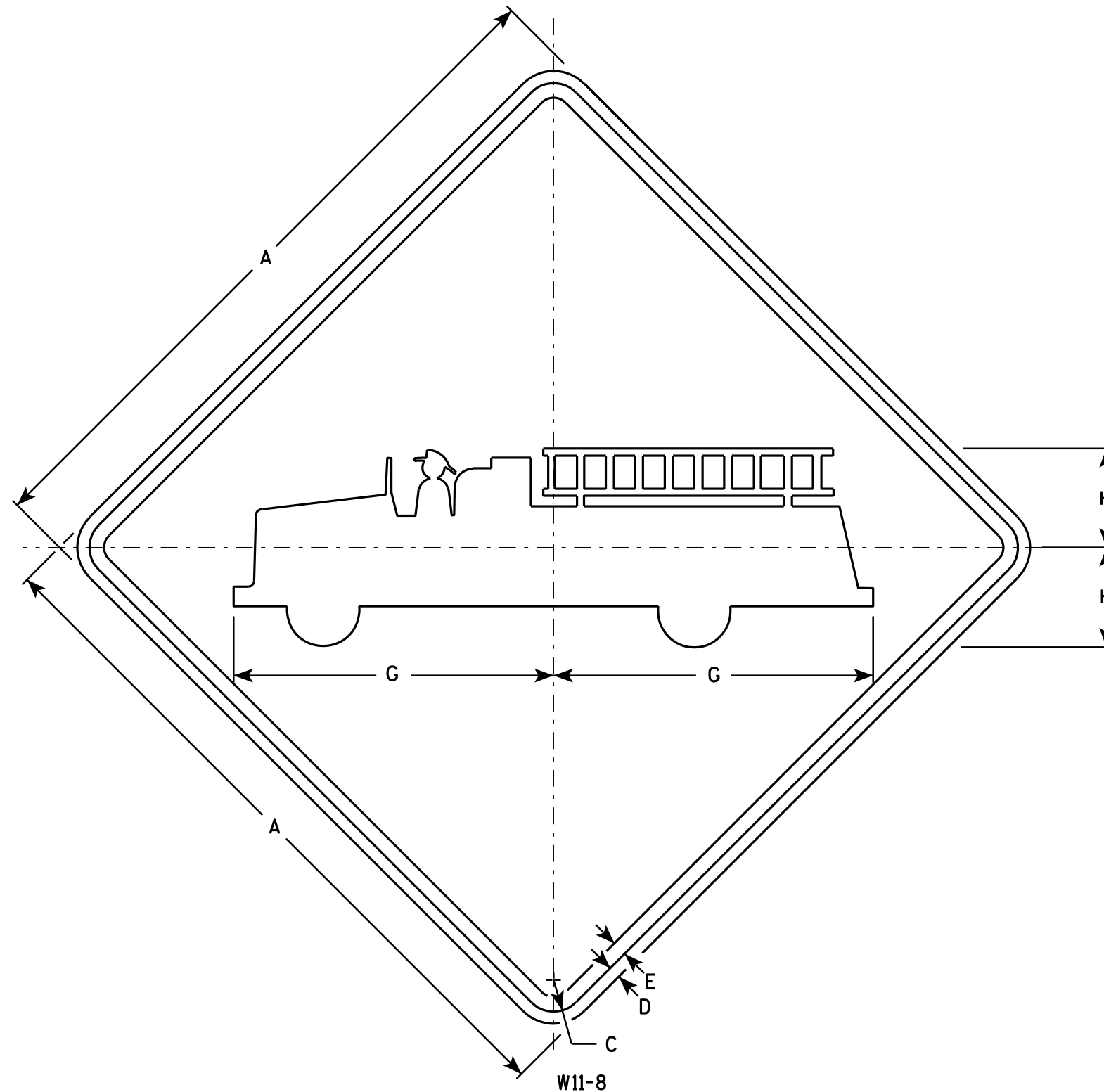
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 164

E



NOTES

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

W11-8

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		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN W11-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W11-8.6

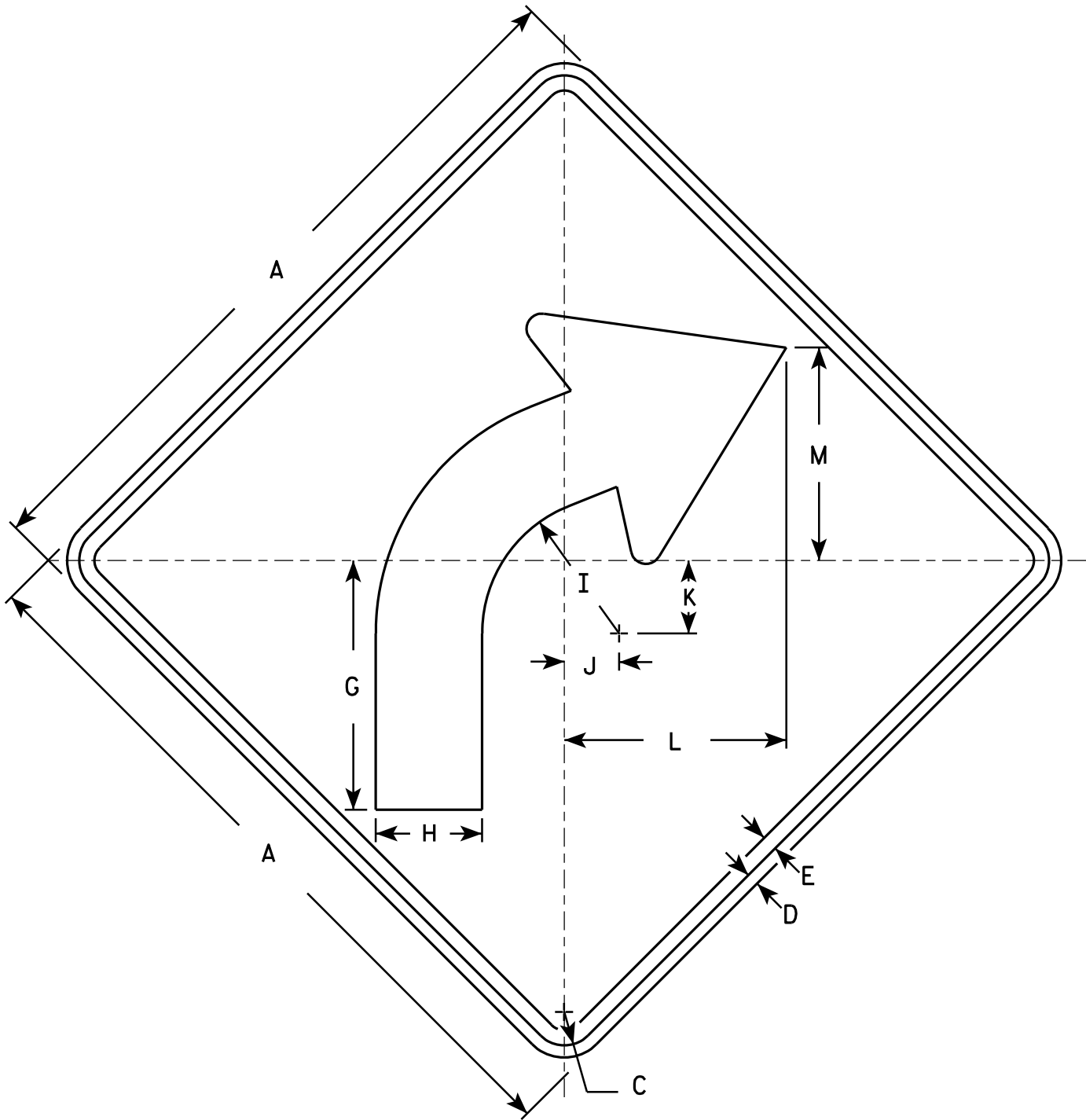
PROJECT NO:

SHEET NO: 165

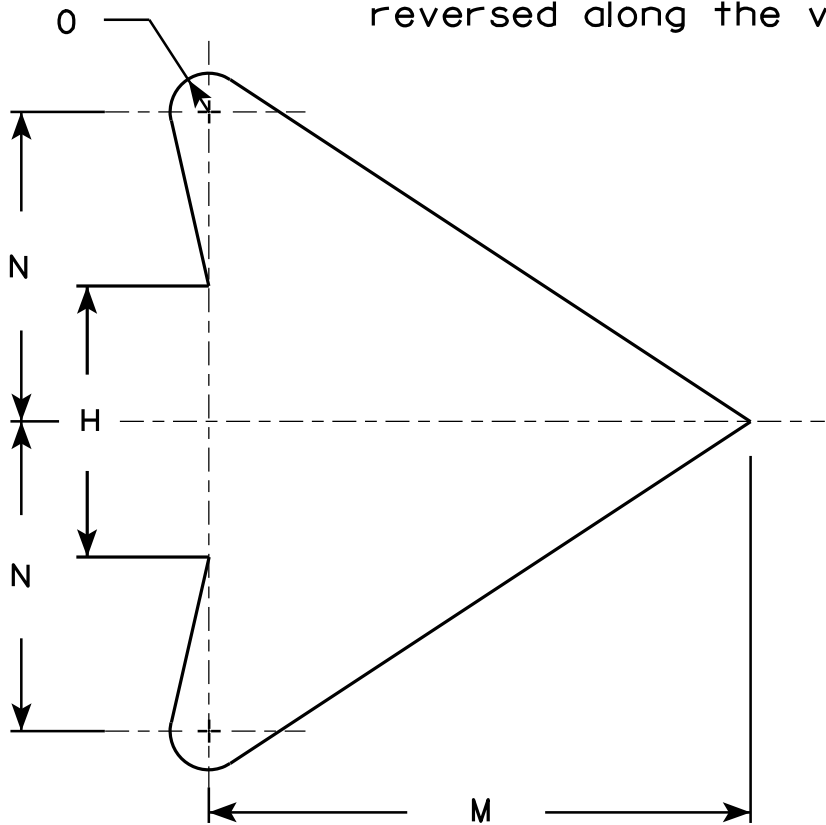
E

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 - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

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

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 5/15/12

PLATE NO. W1-2.10

PROJECT NO:

HWY:

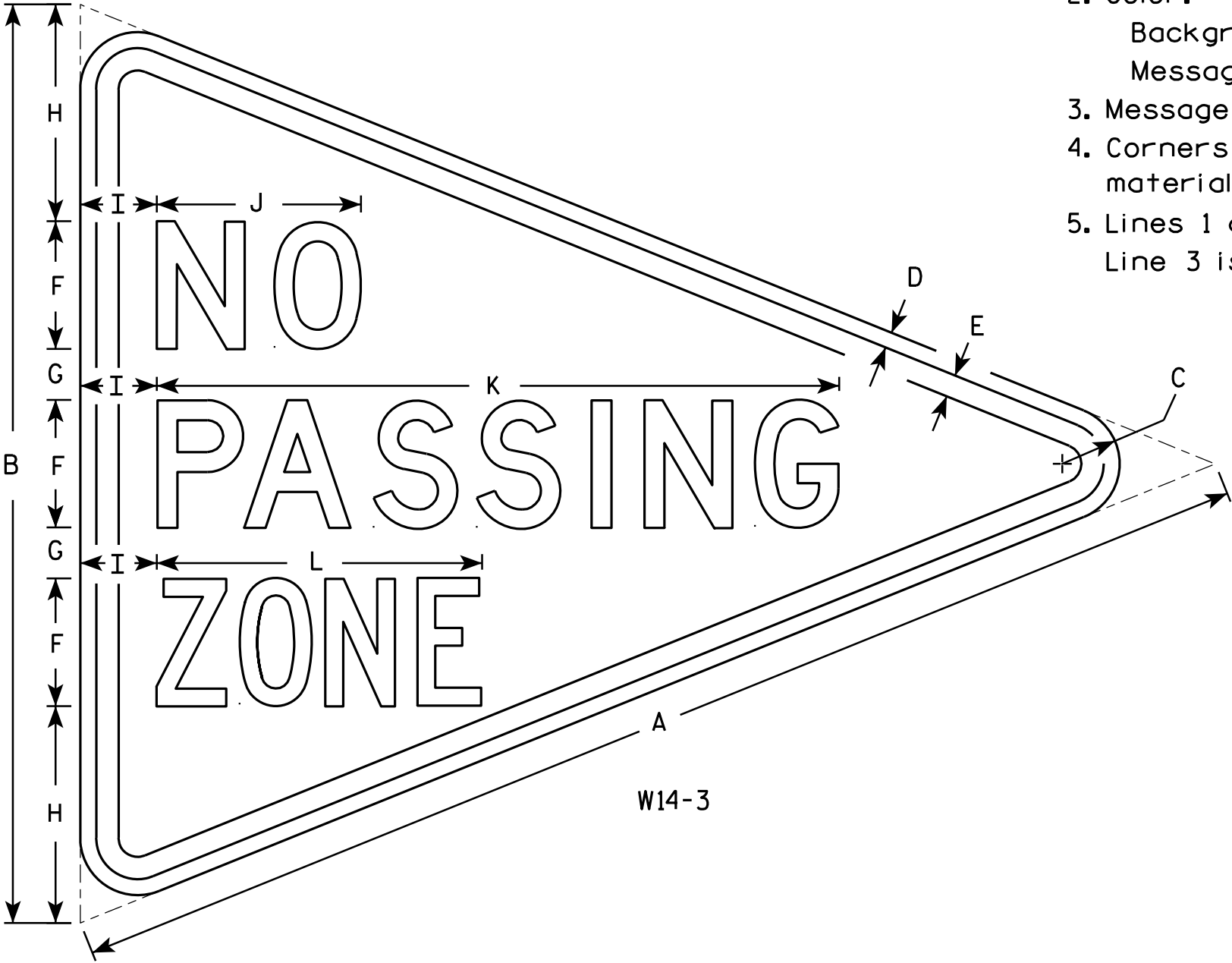
COUNTY:

SHEET NO: 166

E

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

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	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

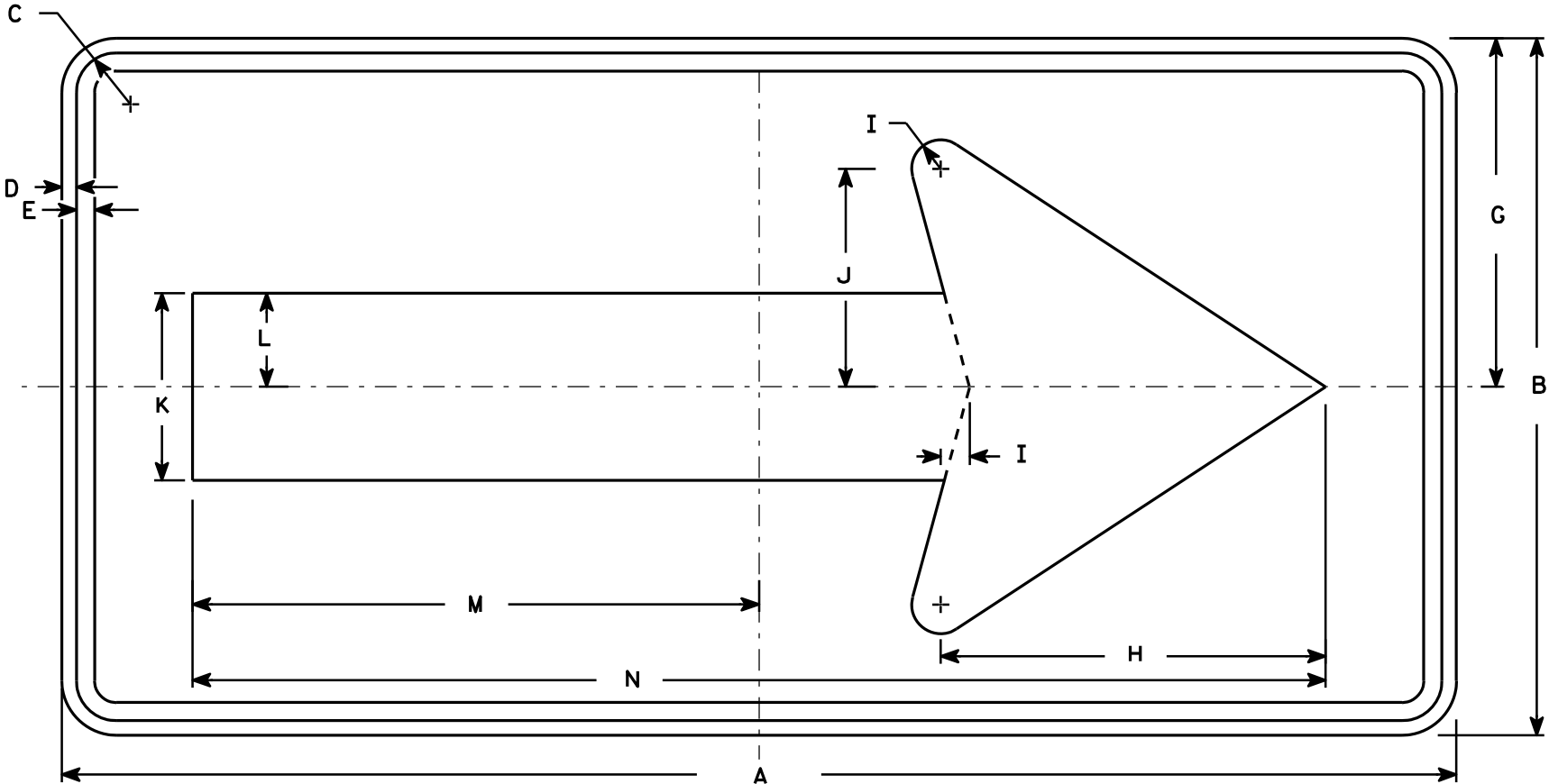
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

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.



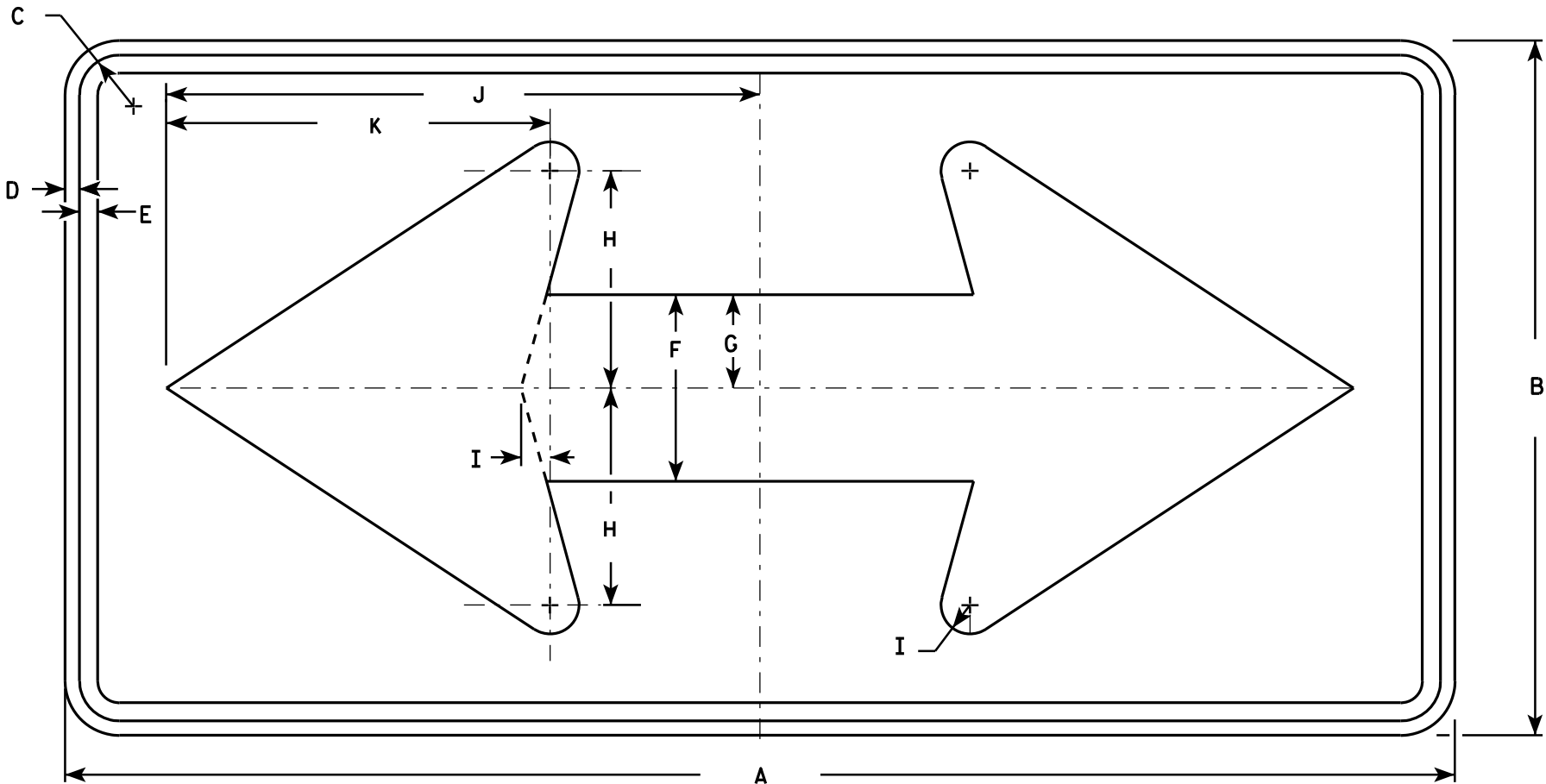
W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
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	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8



W1-7

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.

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	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

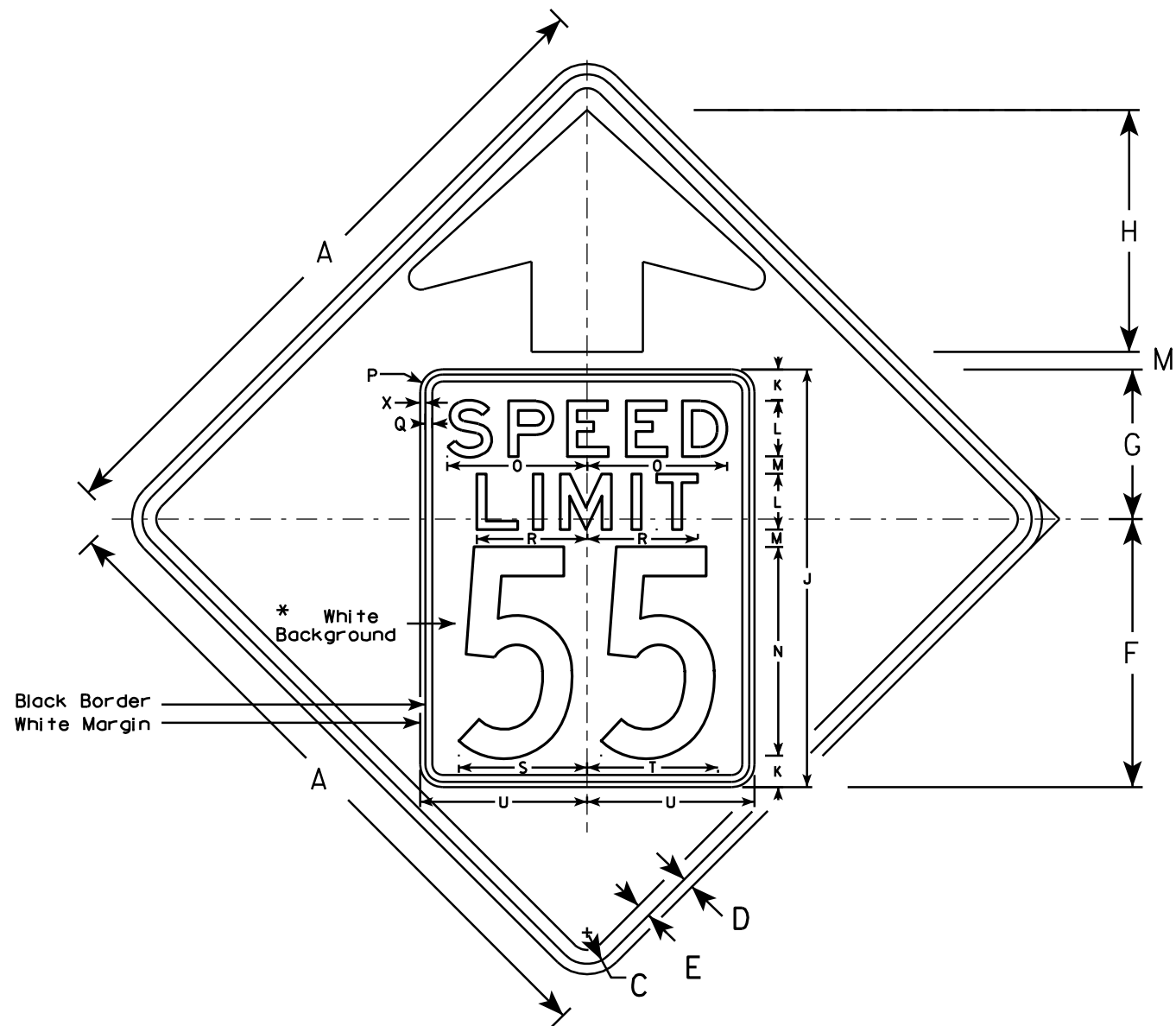
PROJECT NO:	HWY:	COUNTY:	SHEET NO: 169	E
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STANDARD SIGN
W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

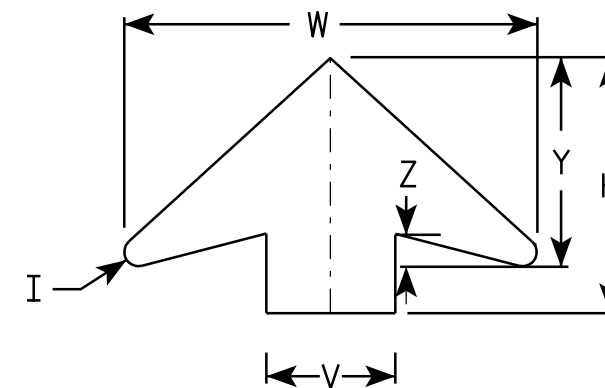


W3-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

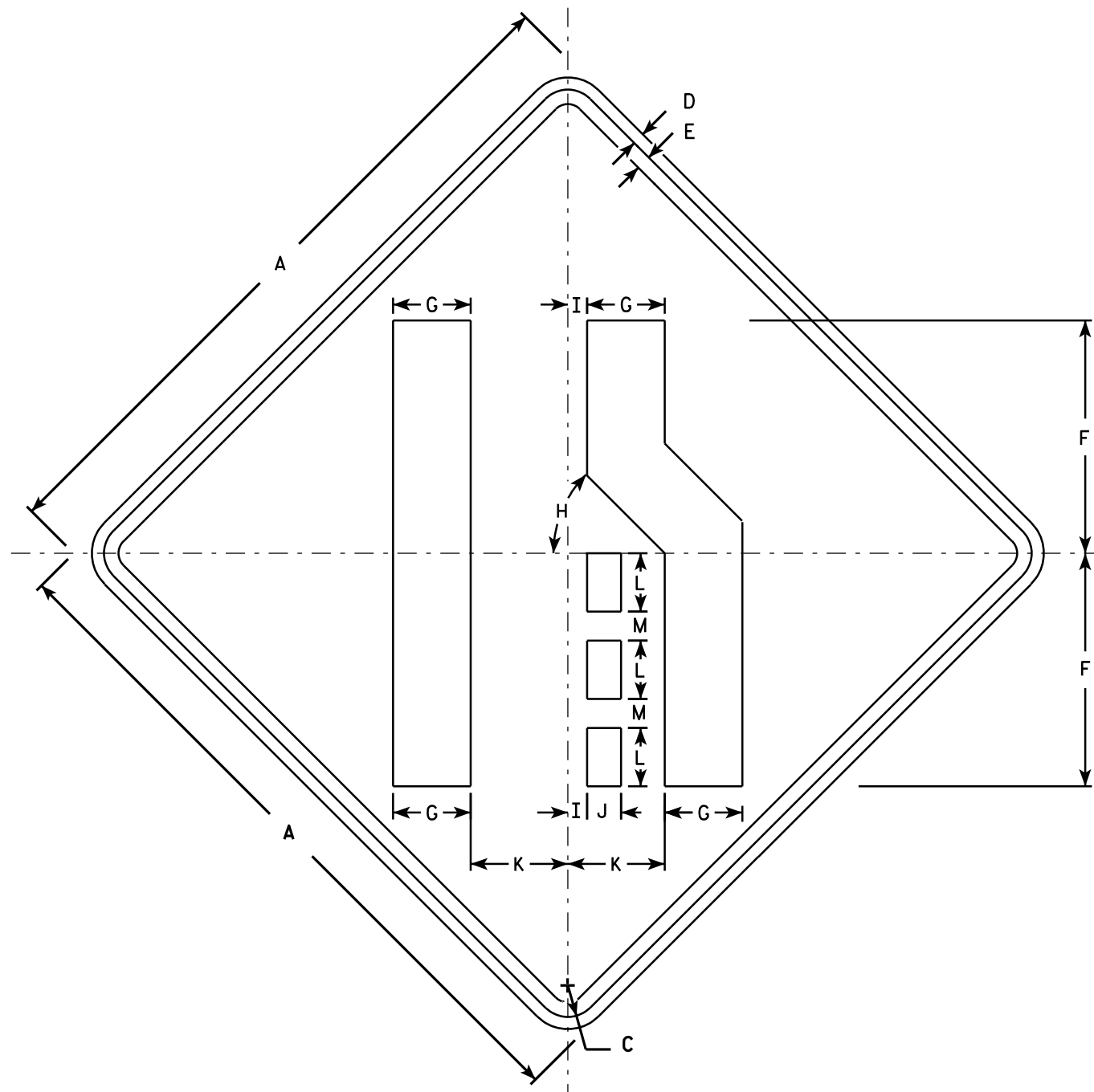
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 170

E



W4-2R

NOTES

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

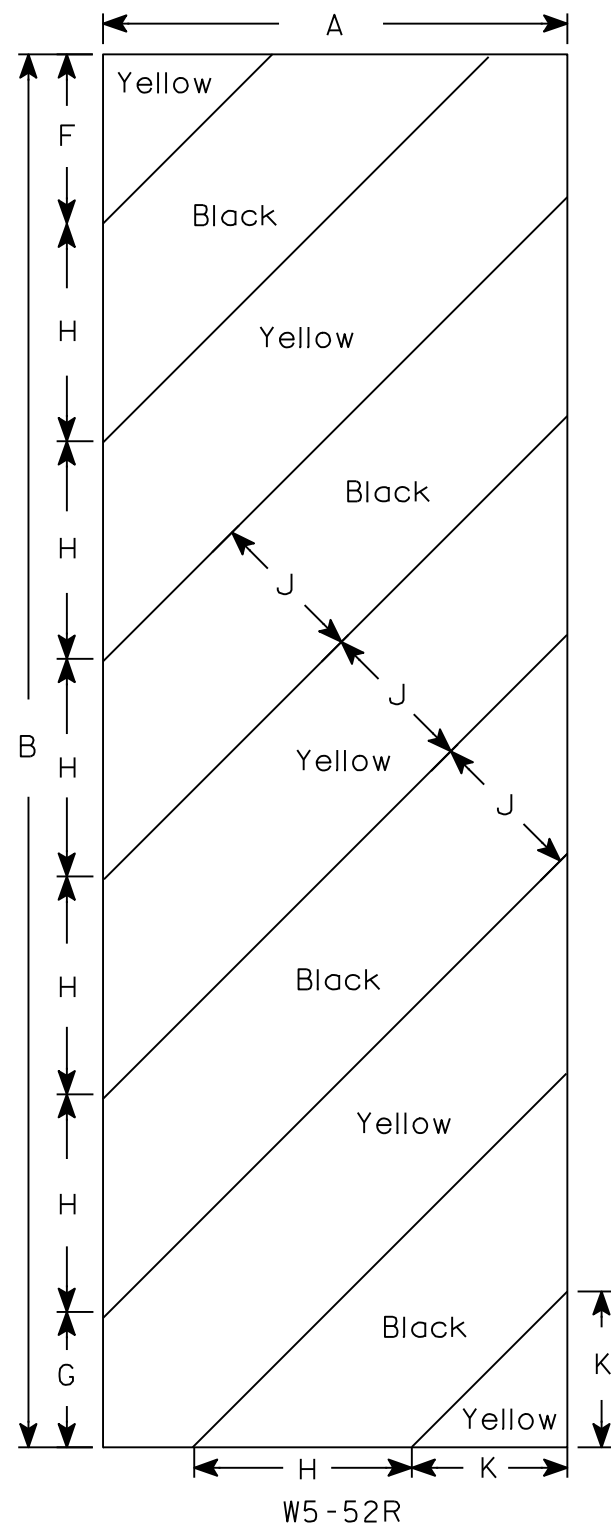
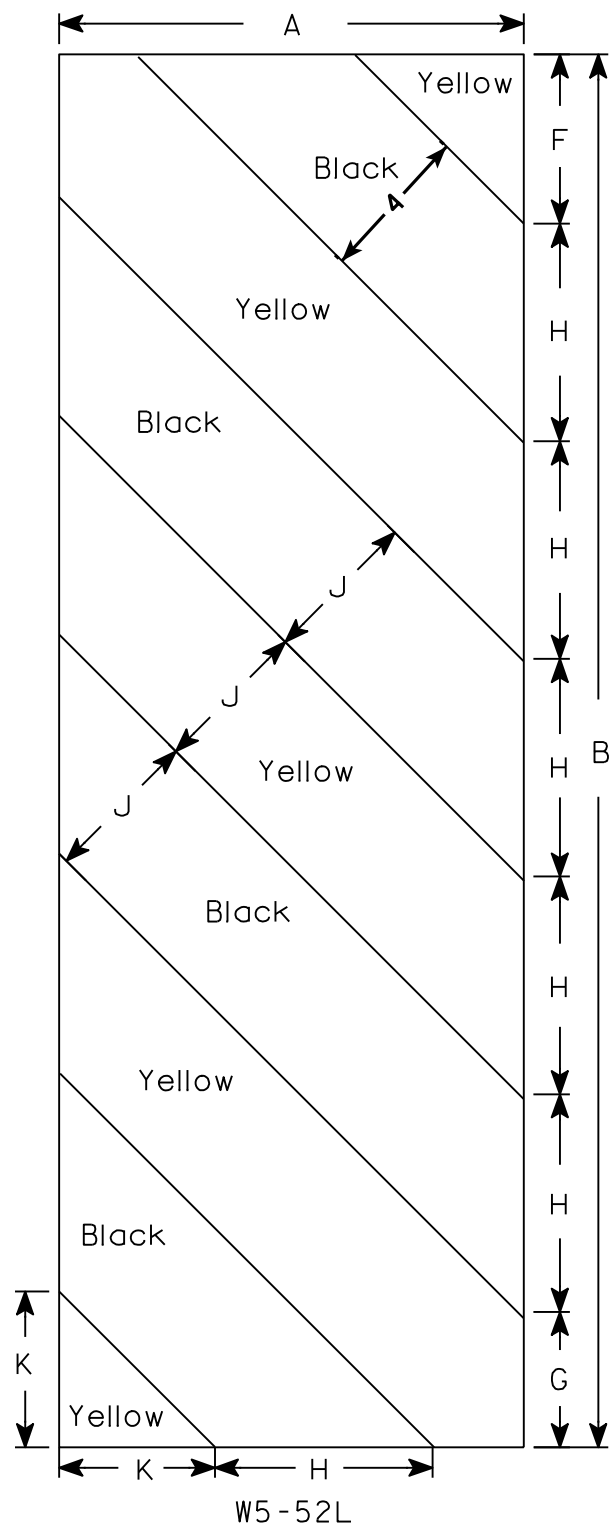
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/29/2012 PLATE NO. W4-2.13

PROJECT NO:

SHEET NO: 171

E



NOTES

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

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	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
2M	12	36				4 3⁄8	3 1⁄2	5 5⁄8	45°	4	4																3.0
3	18	54				6	5 1⁄2	8 1⁄2	45°	6	6 9⁄16																6.75
4																											
5																											

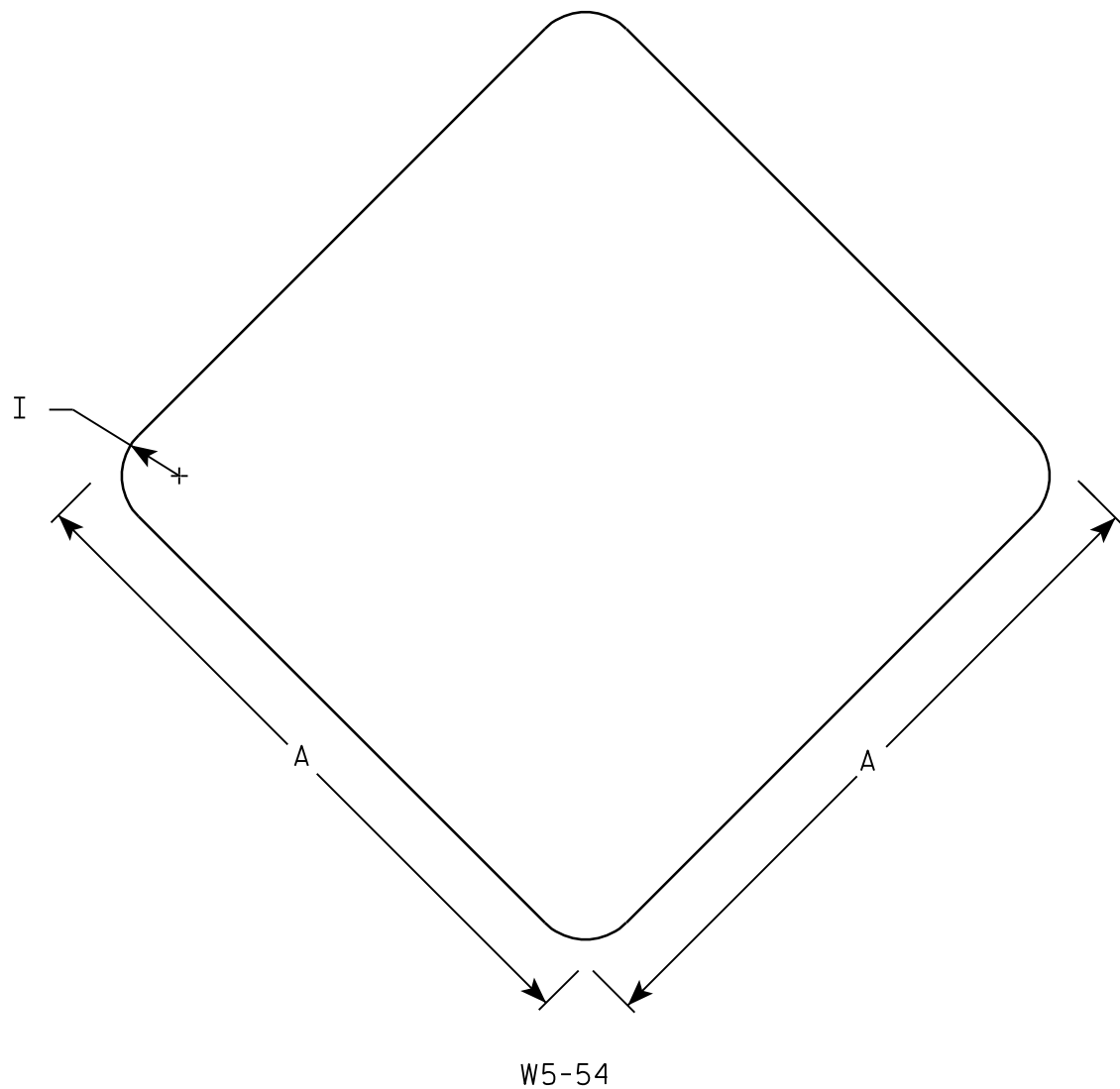
STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W5-52.9

7



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
- 3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 1/2																		2.25
2M	18								1 1/2																		2.25
3																											
4																											
5																											

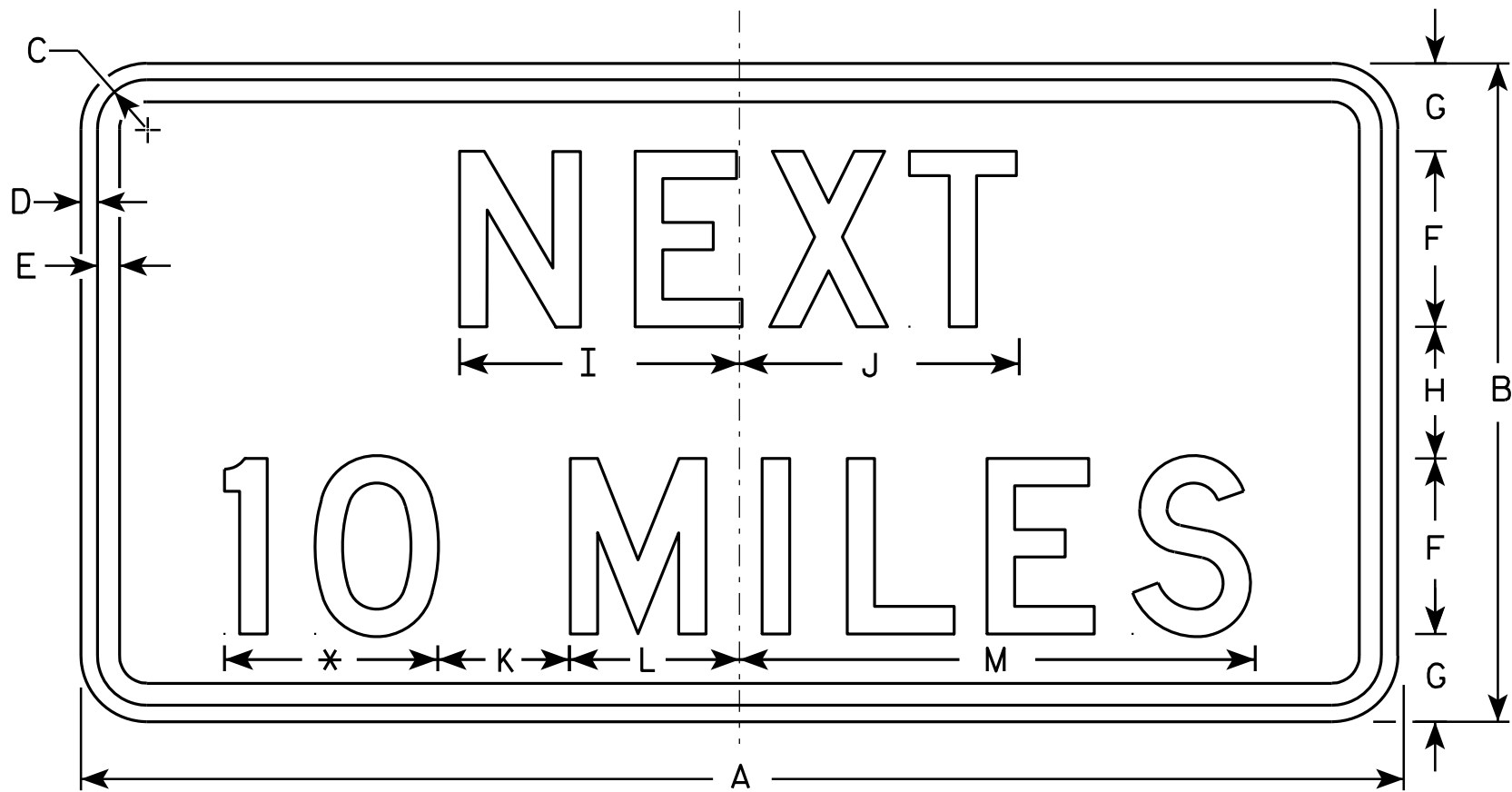
STANDARD SIGN

W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8



W57-51

- NOTES**
- 1. Sign is Type II - Type H 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. 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	24	12	1 1/8	3/8	3/8	3	1 3/4	2 1/2	5	5 1/8	3	2 3/4	9 5/8														2.0
2S	30	15	1 1/8	3/8	1/2	4	2	3	6 3/8	6 3/8	3	3 7/8	11 3/4														3.13
2M	36	18	1 1/8	3/8	1/2	5	2 5/8	2 3/4	7 7/8	8	5	4 1/8	15 3/8														4.5
3	36	18	1 1/8	3/8	1/2	5	2 5/8	2 3/4	7 7/8	8	5	4 1/8	15 3/8														4.5
4	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0

STANDARD SIGN
W57-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/18/11 PLATE NO. W57-51.8

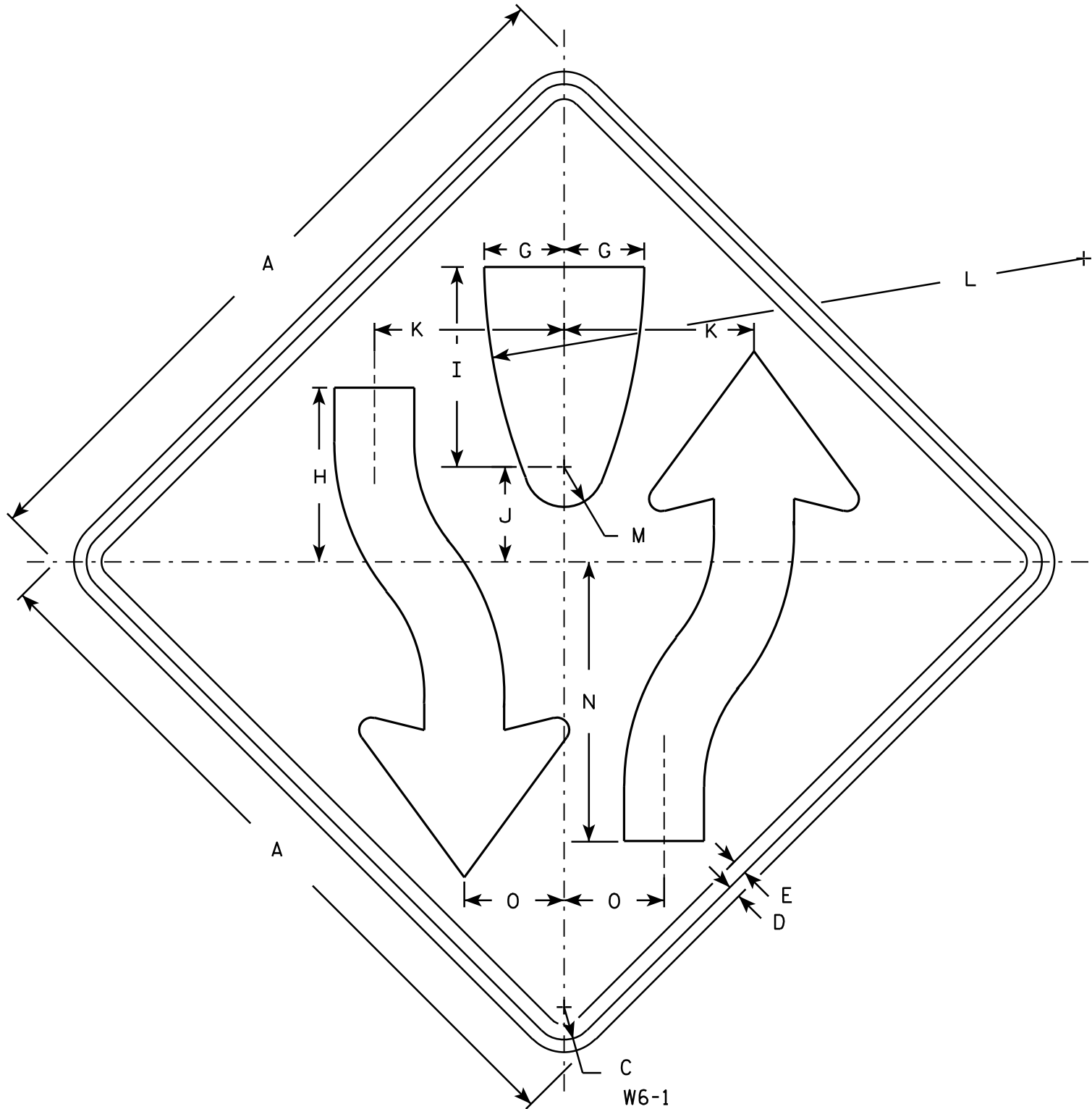
PROJECT NO:

HWY:

COUNTY:

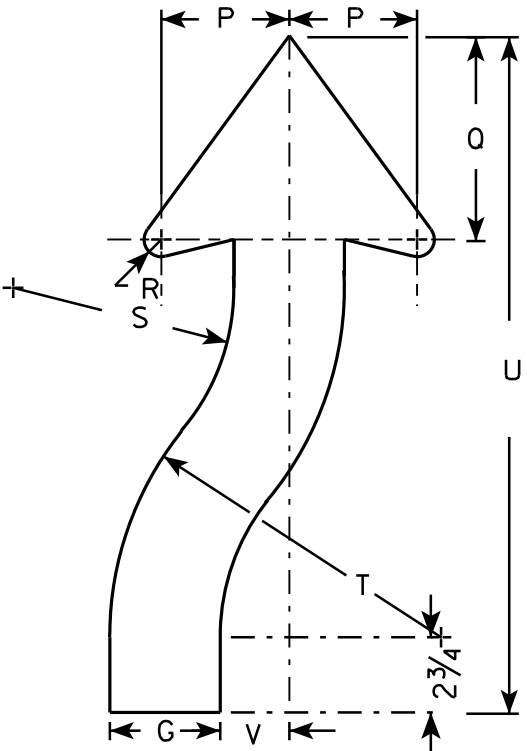
SHEET NO: 174

E



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - 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. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

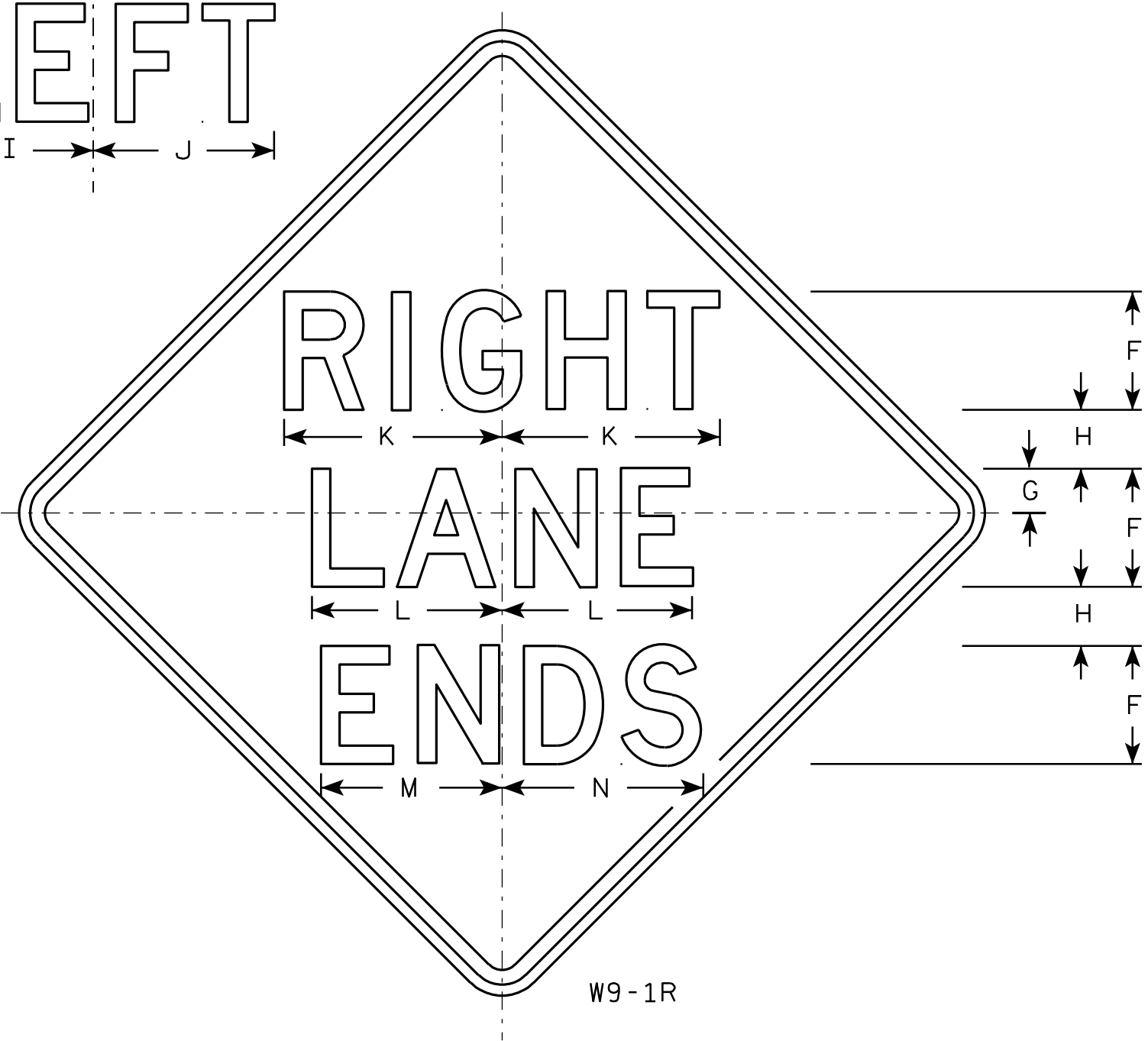
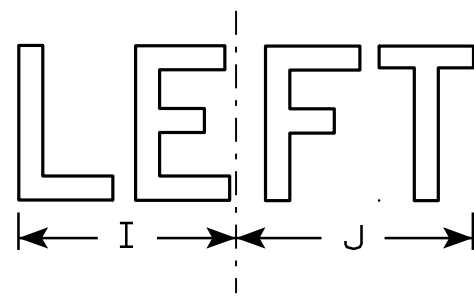
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3⁄8	1⁄2	5⁄8		3 1⁄4	8	8 1⁄4	4 1⁄8	7 7⁄8	25	1 3⁄4	11 5⁄8	4 1⁄8	3 7⁄8	6 3⁄4	5⁄8	6 5⁄8	9 7⁄8	21 5⁄8	2					6.25
2S	36		1 5⁄8	5⁄8	3⁄4		4	8 3⁄4	10	4 3⁄4	9 1⁄2	30	2	14	5	4 5⁄8	7 3⁄8	7⁄8	8	12	24 1⁄2	2 1⁄2					9.0
2M	36		1 5⁄8	5⁄8	3⁄4		4	8 3⁄4	10	4 3⁄4	9 1⁄2	30	2	14	5	4 5⁄8	7 3⁄8	7⁄8	8	12	24 1⁄2	2 1⁄2					9.0
3																											
4	48		2 1⁄4	3⁄4	1		5 3⁄8	11 5⁄8	13 3⁄8	6 3⁄8	12 5⁄8	40	2 5⁄8	18 5⁄8	6 5⁄8	6 1⁄4	9 7⁄8	1 1⁄4	10 5⁄8	16	32 5⁄8	3 3⁄8					16.0
5	48		2 1⁄4	3⁄4	1		5 3⁄8	11 5⁄8	13 3⁄8	6 3⁄8	12 5⁄8	40	2 5⁄8	18 5⁄8	6 5⁄8	6 1⁄4	9 7⁄8	1 1⁄4	10 5⁄8	16	32 5⁄8	3 3⁄8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-1.13



W9-1R

NOTES

1. Sign is Type II - Type H 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.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		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

PROJECT NO:				SHEET NO: 176	E
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STANDARD SIGN

W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

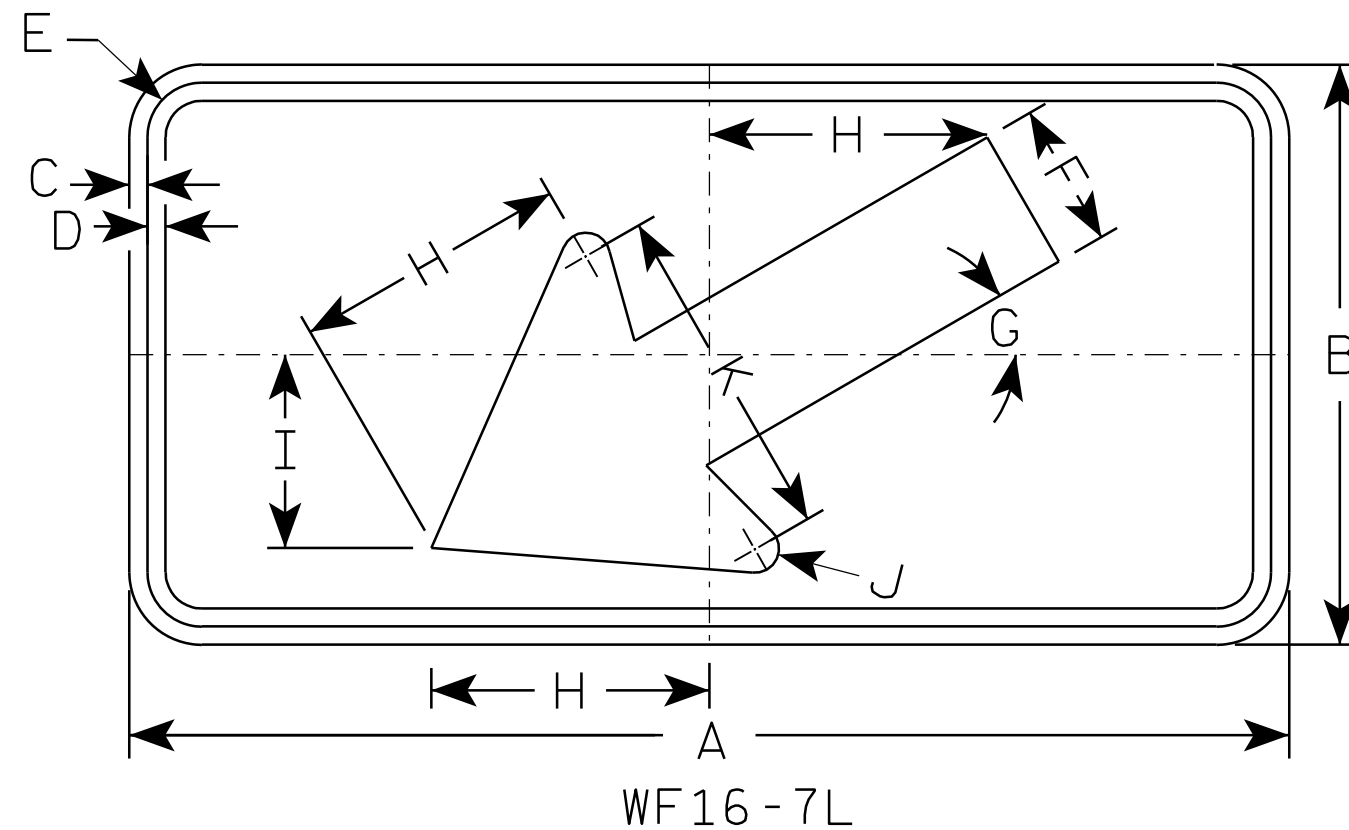
for State Traffic Engineer

DATE 12/20/10

PLATE NO. W9-1.7

NOTES

1. Sign is Type II - Type F Reflective -
reference WIS DOT Standard Specification for
HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow-Green
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. WF16-7R are the same as
WF-16-7L except the arrow is reversed along
the vertical centerline.

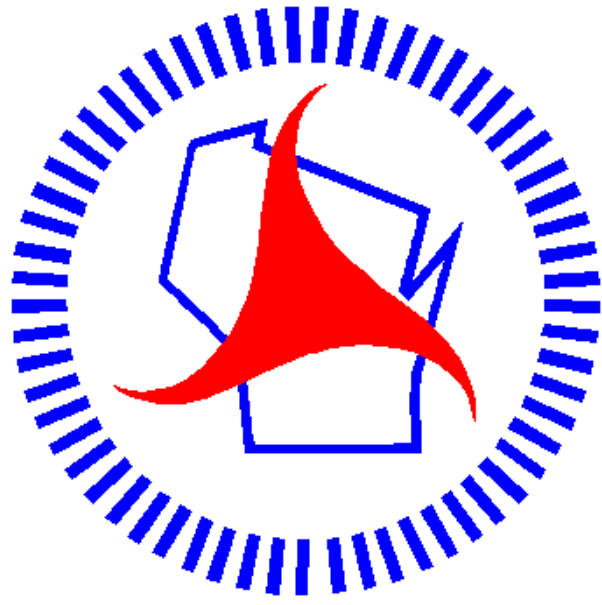


WF16-7L

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	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN	
WF16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/21/10	PLATE NO. WF16-7.3

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 177	E
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Wisconsin Department of Transportation

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