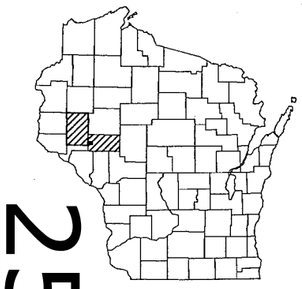
EAU JANUARY 2016

PROJECT ID: 7120-07-70

COUNTY: DUNN & EAU CLAIRE

ORDER OF SHEETS

TOTAL SHEETS = 142



25

N

DESIGN DESIGNATION 7120-07-70

A.A.D.T.	2016	=	3000
A.A.D.T.	2036	=	4000
D.H.V.		=	524
D.D.		=	60/40
T.		=	15.6%
DESIGN SPEED		=	60 MPH
ESALS		=	1,358,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

ROCK FALLS - EAU CLAIRE

1010TH STREET TO STH 37

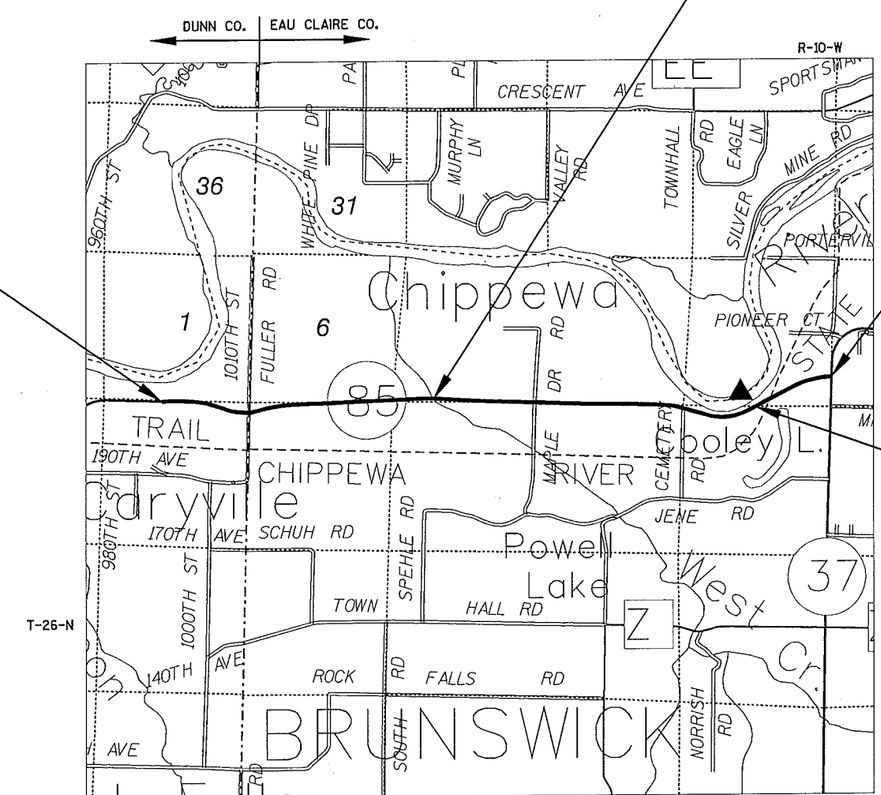
STH 85

DUNN & EAU CLAIRE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7120-07-70	WISC 2016039	1

STATE PROJECT NUMBER
7120-07-70

STRUCTURE B-18-89



BEGIN PROJECT
STA. 104+00
X = 298129.38
Y = 258586.49

END PROJECT
STA. 338+53.4

EQUATION: STA. 306+45.36 BK =
STA. 306+67.83 AH

T-26-N

TOTAL NET LENGTH OF CENTERLINE = 4.390

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, EAU CLAIRE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	FAA
Designer	GARY KRUG
Project Manager	TARA WEISS
Regional Examiner	DAN OJIBWAY
Regional Supervisor	TIMOTHY MASON

APPROVED FOR THE DEPARTMENT
DATE: 3/31/15 (Signature)

E

2

GENERAL NOTES

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

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

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE EROSION CONTROL IMPLEMENTATION PLAN. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.

RADIUS DIMENSIONS FOR CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

WHEN THE QUANTITY OF BASE COURSE IS MEASURED BY THE TONS, THE DEPTH OR THICKNESS AS SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND UPON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

DIGGERS HOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

DNR LIASON

AMY CRONK
ENVIRONMENTAL ANALYSIS AND REVIEW SPECIALIST
DEPARTMENT OF NATURAL RESOURCES
1300 W. CLAIREMONT AVE.
EAU CLAIRE, WI 54702-4001
715-635-4229

UTILITIES

EAU CLAIRE ENERGY COOPERATIVE (ELECTRICITY)
8214 USH 12
P.O. BOX 368
FALL CREEK WI 54742-0368
CONTACT: GARY BRECKA
PHONE: 715-836-6474
EMAIL: gbrecka@ecec.com

XCEL ENERGY (ELECTRICITY - TRANSMISSION)
8701 MONTICELLO LANE
MAPLE GROVE, MN 55369
CONTACT: CHARLIE DIENGER
PHONE: 651-955-1089 (OFFICE)
612-710-1368 (CELL)
EMAIL: Charles.g.dienger@xcelenergy.com

WISDOT (ELECTRICITY)
5009 US 53 SOUTH
EAU CLAIRE WI 54701
CONTACT: NWR ELECTRICAL UNIT
PHONE: 715-839-3787

UTILITIES

AT&T WISCONSIN (COMMUNICATION)
304 S DEWEY ST.
EAU CLAIRE WI 54701
CONTACT: RICK PODOLAK
PHONE: 715-839-5565 (OFFICE)
715-410-0656 (CELL)
EMAIL: Rp4514@att.com

DAIRYLAND POWER COOPERATIVE (ELECTRICITY - TRANSMISSION)
3200 EAST AVE. S
P.O. BOX 817
LA CROSSE WI 54602
CONTACT: JANE EGGEN
PHONE: 608-788-4000
EMAIL: jme@dairynet.com

WINDSTREAM KDL, INC. (COMMUNICATION)
13935 BISHOPS DRIVE
BROOKFIELD WI 53005
CONTACT: JIM KOSTUCH
PHONE: 262-792-7938
EMAIL: James.kostuch@windstream.com

UTILITIES

DUNN ENERGY COOPERATIVE (ELECTRICITY)
N5725 600TH STREET
P.O. BOX 220
MENOMONIE WI 54751
CONTACT: MIKE ANDRASCHKO
PHONE: 715-232-6240 (OFFICE)
715-308-1553 (CELL)
EMAIL: mandra@dunnenergy.com

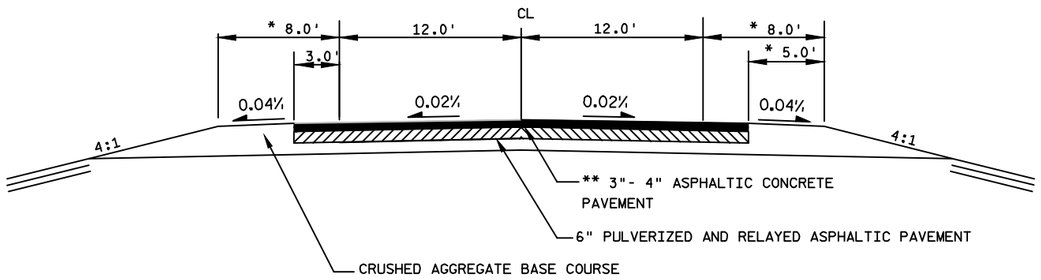
XCEL ENERGY (GAS/PETROLEUM)
P.O. BOX 8
EAU CLAIRE, WI 54702
CONTACT: SCOTT J. SEAHOLM
PHONE: 715-737-2584 (OFFICE)
715-577-3381 (CELL)
EMAIL: Scott.J.seaholm@xcelenergy.com

ABBREVIATIONS

A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC
B.A.D.	BASE AGGREGATE DENSE
C/L	CENTERLINE
C.P.S.	CULVERT PIPE STEEL
C.S.C.P.	CORRUGATED STEEL CULVERT PIPE
CY	CUBIC YARD
D.D.	DAILY DIRECTIONAL SPLIT (TRAFFIC VOLUME)
D.H.V.	DAILY HOURLY TRAFFIC
E.A.T.	ENERGY ABSORBING TERMINAL
EL.	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
FE	FIELD ENTRANCE
FO	FIBER OPTIC
INV.	INVERT
LB	POUND
LF	LINEAR FEET
LT.	LEFT
MAX.	MAXIMUM
MGS	MIDWEST GUARDRAIL SYSTEM
MIN.	MINIMUM
NOR.	NORMAL
NPZ	NO PASSING ZONE
OH	OVERHEAD
P.E.	PRIVATE ENTRANCE
P.I.	POINT OF INTERSECTION
R	RADIUS
REQ'D	REQUIRED
R/L	REFERENCE LINE
RT.	RIGHT
RW	RIGHT OF WAY
S.D.D.	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
STA.	STATION
SF	SQUARE FOOT
STH	STATE HIGHWAY
SY	SQUARE YARD
T.	PERCENT OF TRUCK TRAFFIC
TYP.	TYPICAL
VAR.	VARIES

* PER AS-BUILT. SEE BASE AGGREGATE SHOULDER CORRECTION DETAIL

** STATION 306+00 - STATION 336+00 RECEIVED A 1 1/4" ± MAINTENANCE OVERLAY IN FALL OF 2013

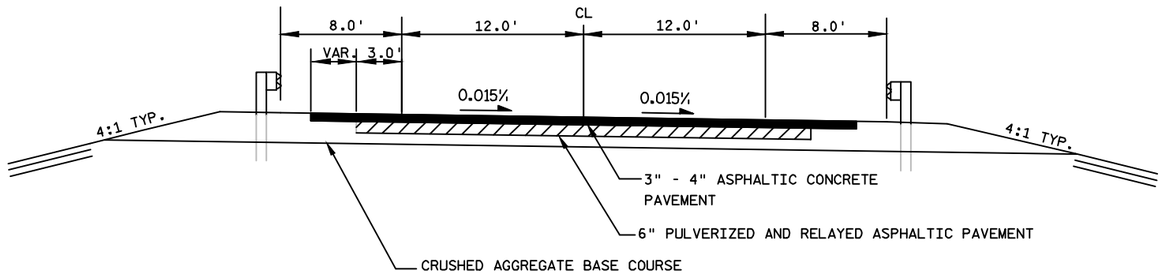


EXISTING TYPICAL SECTION

STA. 104+00 - STA. 188+26

STA. 193+21 - STA. 311+62

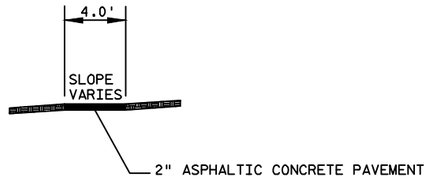
STA. 324+45 - STA. 338+53



EXISTING TYPICAL SECTION

STA. 188+26 - STA. 190+52

STA. 190+98 - STA. 193+21



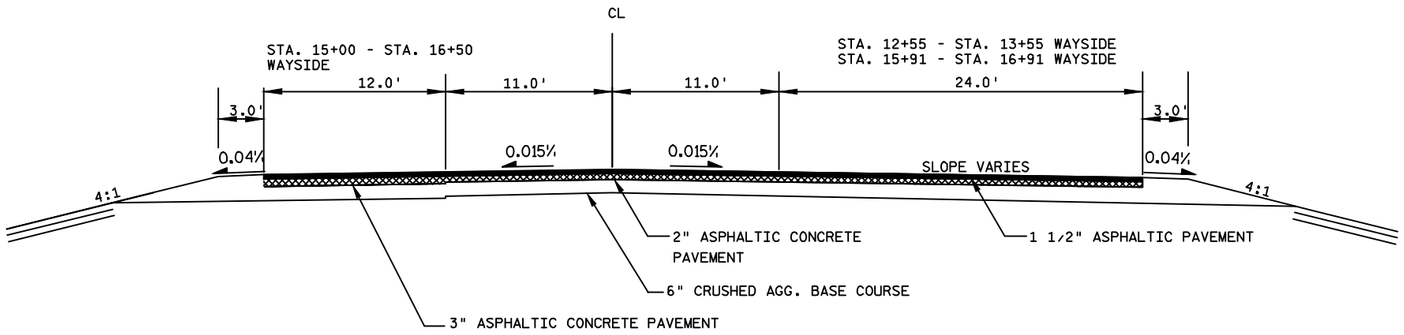
EXISTING TYPICAL SECTION

WAYSIDE WALKWAY

STA. 40+00 - STA. 41+11

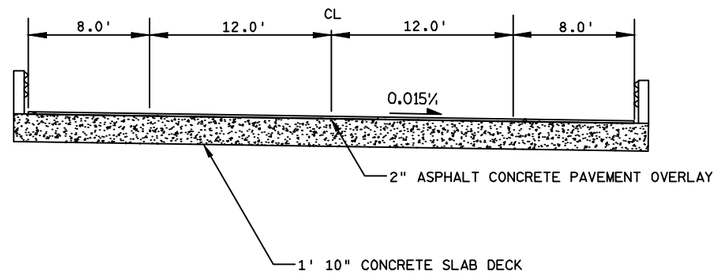
STA. 42+00 - STA. 42+34.6

NOTE: TYPICAL OF REMAINING WALKWAYS WITH NO STATIONING



EXISTING TYPICAL SECTION WAYSIDE

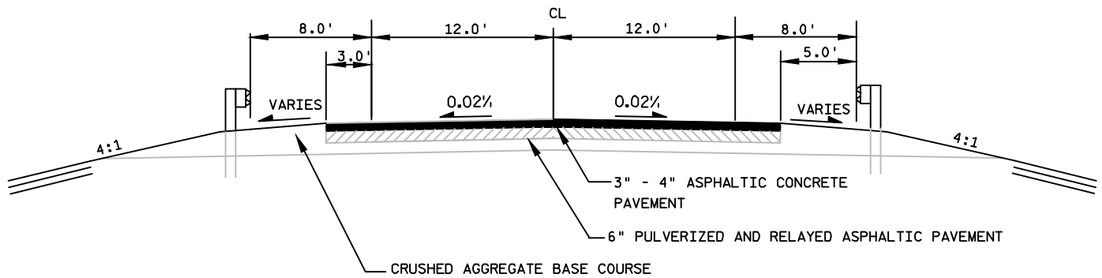
STA. 10+52.6 - STA. 19+68.0



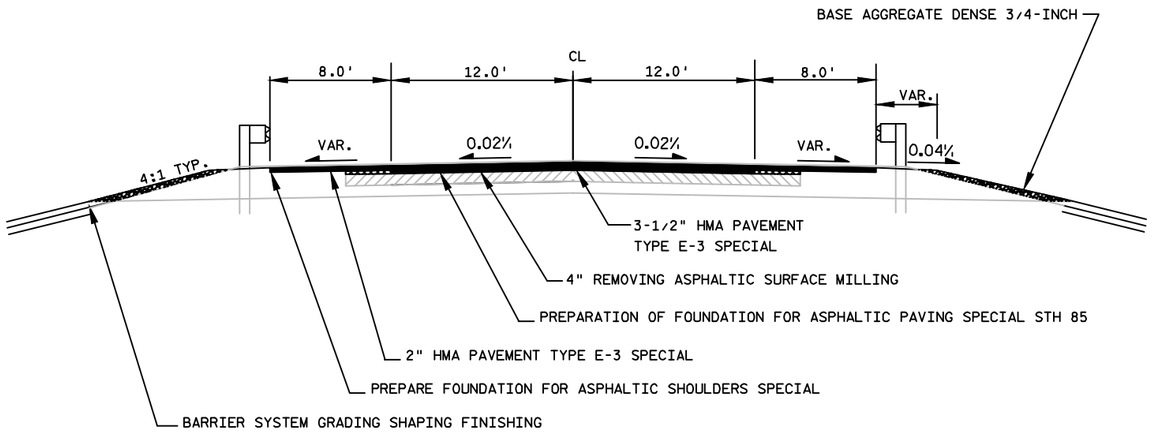
EXISTING TYPICAL SECTION

STA. 190+52 - STA. 190+98

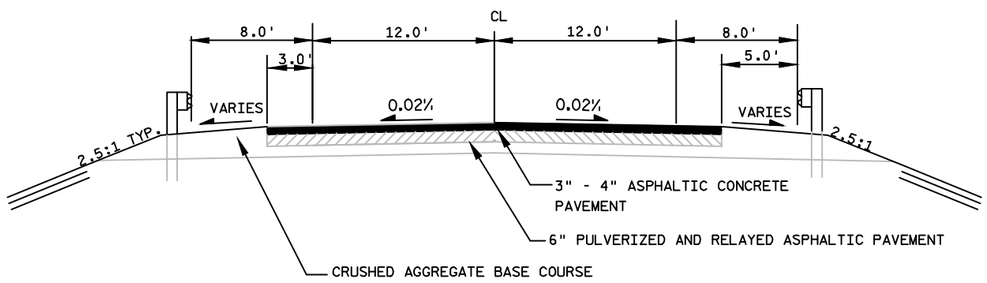
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	EXISTING TYPICAL SECTIONS	SHEET 3	E



EXISTING TYPICAL SECTION
STA. 311+62 - STA. 313+58
STA. 322+31 - STA. 324+45

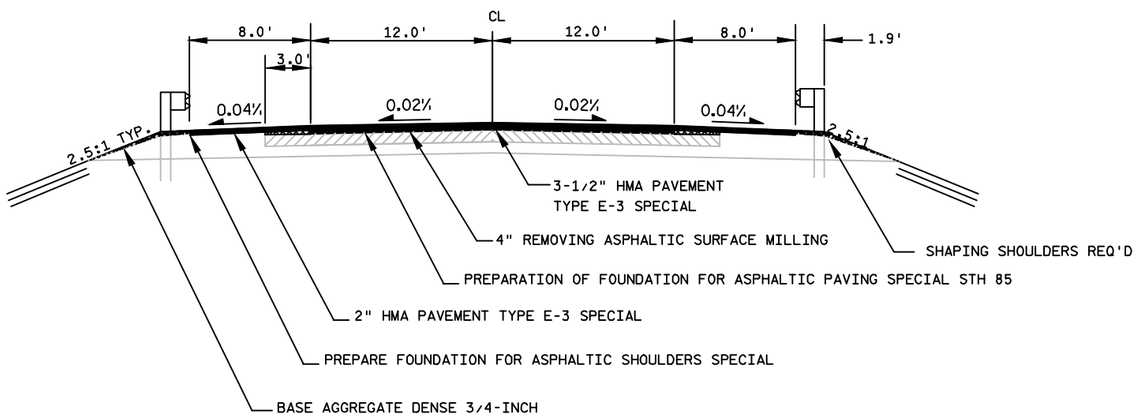


FINISHED TYPICAL SECTION
STA. 311+62 - STA. 313+58
STA. 322+31 - STA. 324+45



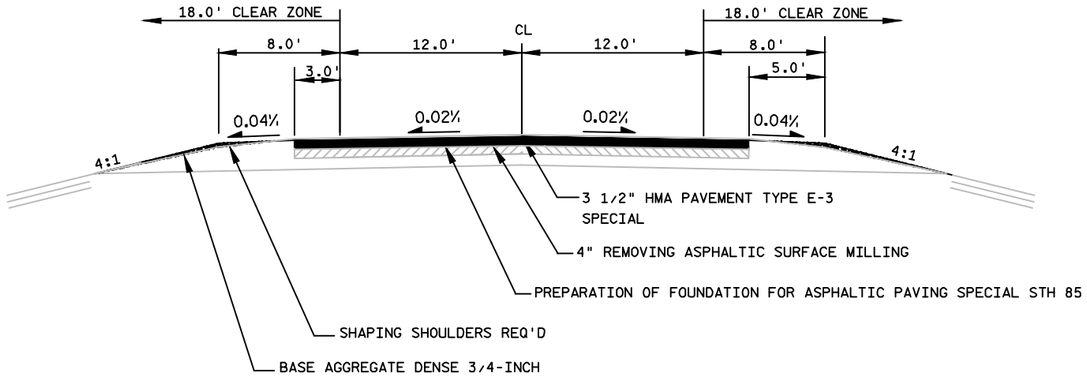
EXISTING TYPICAL SECTION
STA. 313+58 - STA. 322+31

NOTE: CONSTRUCT 3-1/2" HMA PAVEMENT TYPE E-3 SPECIAL WITH A 1-1/2" LEVELING 12.5 MM MIX LAYER AND A 2" UPPER 12.5 MM MIX LAYER

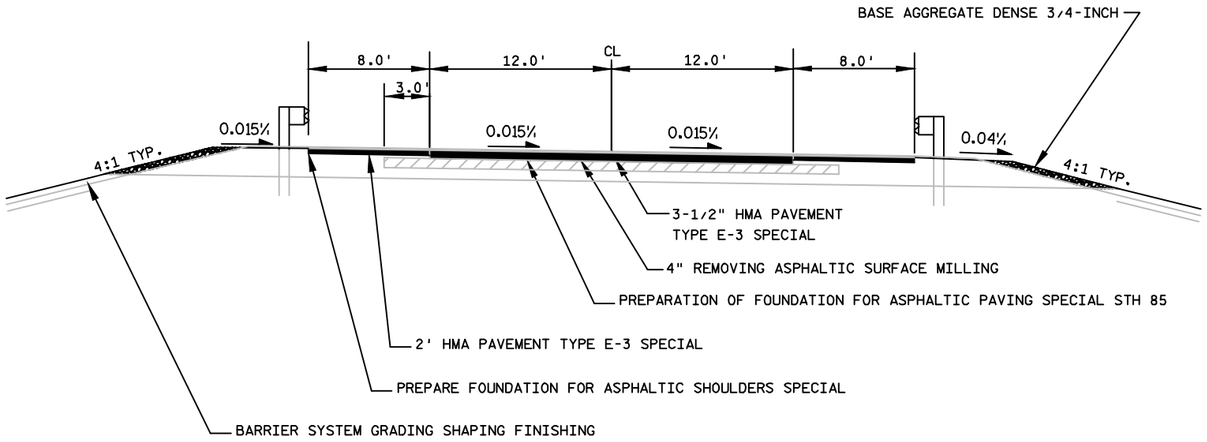


FINISHED TYPICAL SECTION
STA. 313+58 - STA. 322+31

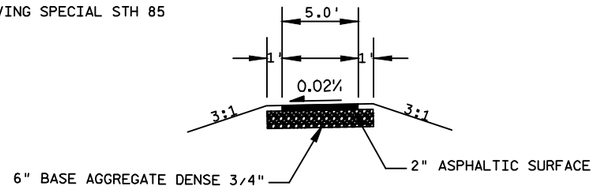
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	EXISTING/FINISHED TYPICAL SECTIONS	SHEET 4	E



FINISHED TYPICAL SECTION
STA. 104+00 - STA. 188+26
STA. 193+21 - STA. 311+62
STA. 324+45 - STA. 338+53

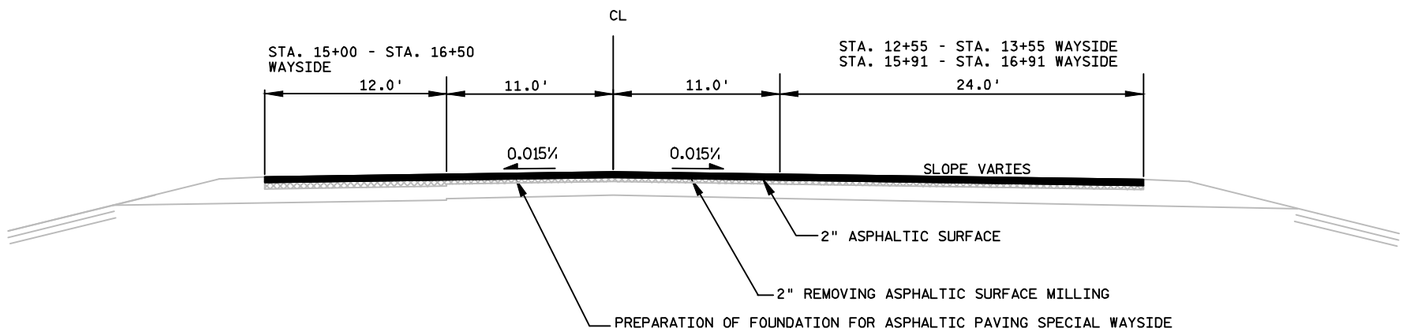


FINISHED TYPICAL SECTION
STA. 188+26 - STA. 190+52
STA. 190+98 - STA. 193+21



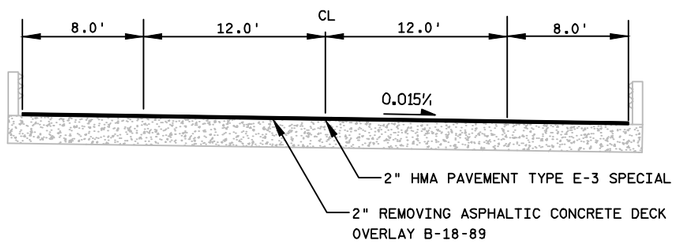
FINISHED TYPICAL SECTION
WAYSIDE WALKWAY
STA. 40+00 - STA. 41+11
STA. 42+00 - STA. 42+34.6

NOTE: REMAINING WALKWAYS PAVE 2" ASPHALTIC SURFACE AT THE EXISTING LOCATION AND PROFILE



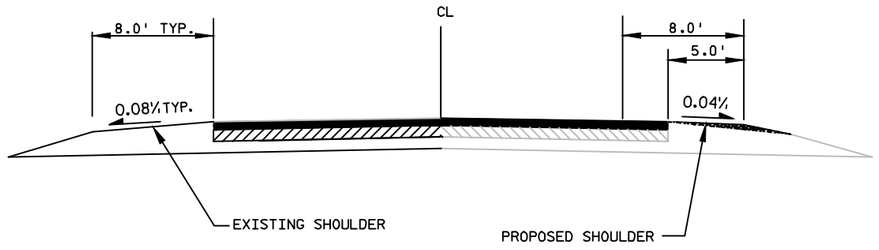
FINISHED TYPICAL SECTION WAYSIDE
STA. 10+52.6 - STA. 19+68.0

NOTE: CONSTRUCT 3-1/2" HMA PAVEMENT TYPE E-3 SPECIAL WITH A 1-1/2" LEVELING 12.5 MM MIX LAYER AND A 2" UPPER 12.5 MM MIX LAYER

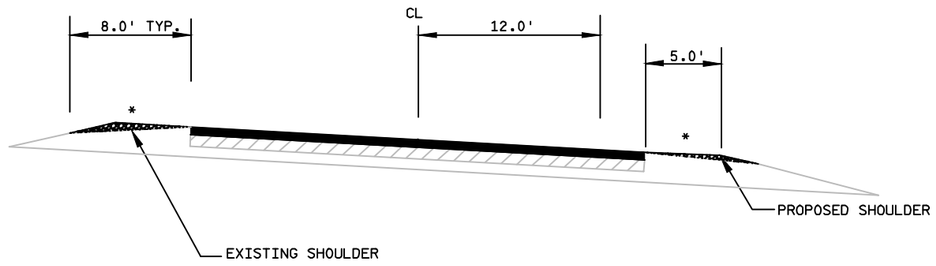


FINISHED TYPICAL SECTION
STA. 190+52 - STA. 190+98

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	FINISHED TYPICAL SECTIONS	SHEET 5	E



TANGENT SECTION



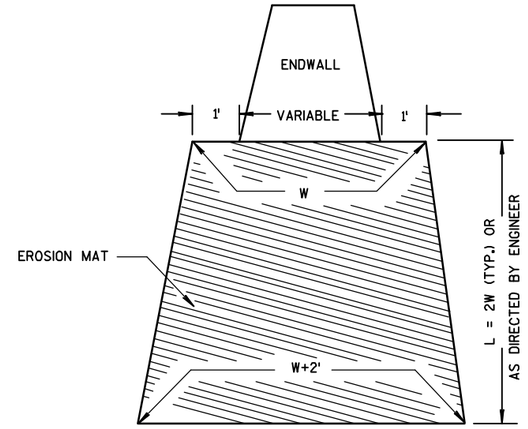
* SEE CHART FOR SHOULDER SLOPES

SUPERELEVATED SECTION

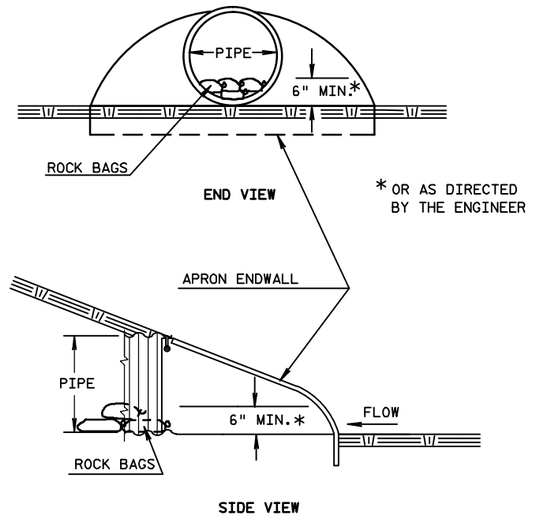
CURVE NO.	LEFT SIDE EXISTING SLOPE	LEFT SIDE PROPOSED SLOPE	RIGHT SIDE EXISTING SLOPE	RIGHT SIDE PROPOSED SLOPE
CURVE 1	-0.6%	+5.5%	-11.9%	-5.5%
CURVE 2	-9.8%	-5.5%	-4.4%	+5.5%
CURVE 3	-5.5%	+2.7%	-11.6%	-4.0%
CURVE 4	-7.1%	+1.5%	-8.7%	-4.0%
CURVE 5	10.1%	-4.0%	-10.7%	-4.0%
CURVE 6	-5.7%	+4.5%	-8.8%	-4.5%
CURVE 7	-11.7%	-5.3%	-5.5%	+5.3%
CURVE 8	-5.0%	+4.5%	-11.0%	-4.5%

NOTE: EXISTING SLOPES ARE THE AVERAGE THROUGH THE CURVE

BASE AGGREGATE SHOULDER CORRECTION DETAIL



EROSION MAT TREATMENT AT CULVERTS



CULVERT PIPE CHECK

SUPERELEVATION TABLES

STATION	LEFT	RIGHT	DESCRIPTION
CURVE 1	(e=5.5%, T=200.46, L=147)		
104+65	NC	NC	NORMAL CROWN
105+19	0.0	-2.0	LEVEL CROWN
105+72	2.0	-2.0	REVERSE CROWN
106+66	5.5	-5.5	FULL SUPER
111+67	5.5	-5.5	FULL SUPER
112+61	2.0	-2.0	REVERSE CROWN
113+14	0.0	-2.0	LEVEL CROWN
113+68	NC	NC	NORMAL CROWN

STATION	LEFT	RIGHT	DESCRIPTION
CURVE 2	(e=5.5%, T=200.46, L=147)		
114+70	NC	NC	NORMAL CROWN
115+24	-2.0	0.0	LEVEL CROWN
115+77	-2.0	2.0	REVERSE CROWN
116+71	-5.5	5.5	FULL SUPER
126+44	-5.5	5.5	FULL SUPER
127+38	-2.0	2.0	REVERSE CROWN
127+91	-2.0	0.0	LEVEL CROWN
128+45	NC	NC	NORMAL CROWN

STATION	LEFT	RIGHT	DESCRIPTION
CURVE 3	(e=2.7%, T=125.33, L=72)		
131+21	NC	NC	NORMAL CROWN
131+74	0.0	-2.0	LEVEL CROWN
132+27	2.0	-2.0	REVERSE CROWN
132+46	2.7	-2.7	FULL SUPER
142+14	2.7	-2.7	FULL SUPER
142+33	2.0	-2.0	REVERSE CROWN
142+86	0.0	-2.0	LEVEL CROWN
143+39	NC	NC	NORMAL CROWN

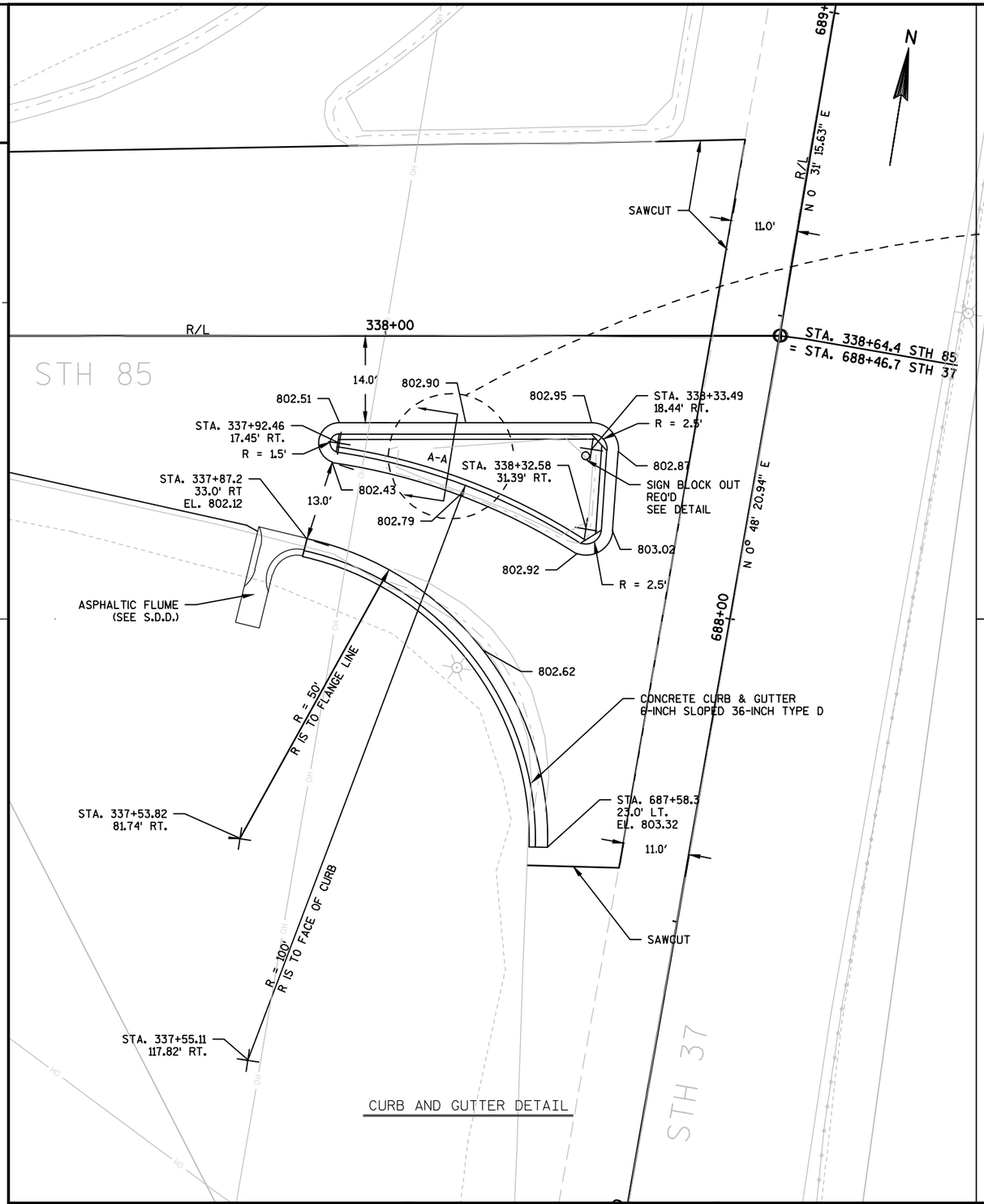
STATION	LEFT	RIGHT	DESCRIPTION
CURVE 4	(e=1.5%, T=92.75, L=53)		
183+84	NC	NC	NORMAL CROWN
184+37	0.0	-1.5	LEVEL CROWN
184+77	1.5	-1.5	FULL SUPER
195+04	1.5	-1.5	FULL SUPER
195+44	0.0	-1.5	LEVEL CROWN
195+97	NC	NC	NORMAL CROWN

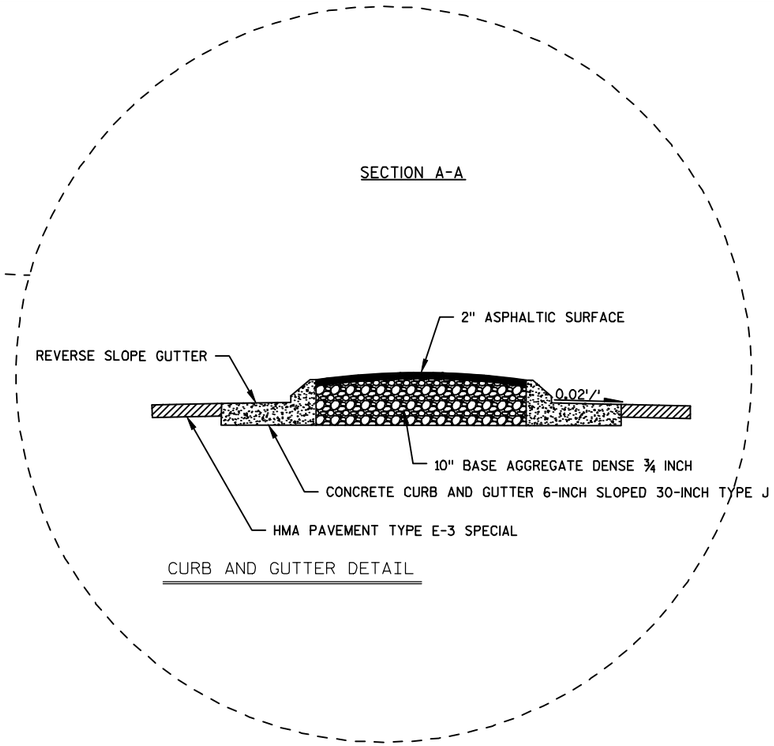
CURVE 5 (e=NC)

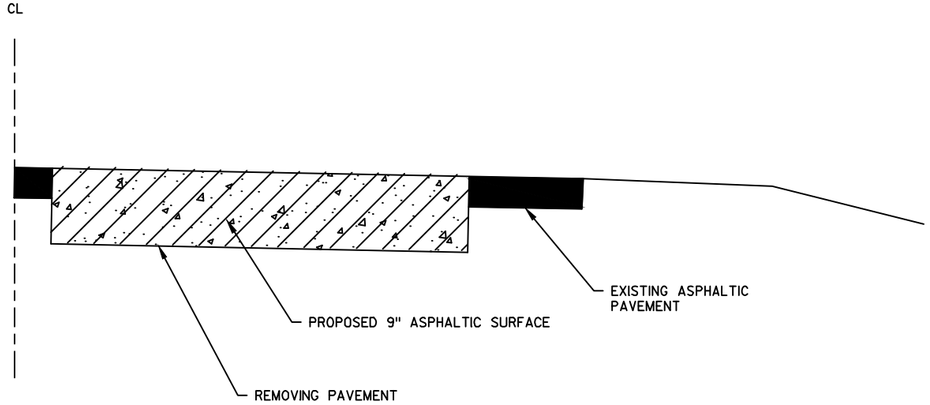
STATION	LEFT	RIGHT	DESCRIPTION
CURVE 6	(e=4.5%, T=173.33, L=120)		
273+49	NC	NC	NORMAL CROWN
274+02	0.0	-2.0	LEVEL CROWN
274+55	2.0	-2.0	REVERSE CROWN
275+22	4.5	-4.5	FULL SUPER
282+27	4.5	-4.5	FULL SUPER
282+93	2.0	-2.0	REVERSE CROWN
283+47	0.0	-2.0	LEVEL CROWN
284+00	NC	NC	NORMAL CROWN

STATION	LEFT	RIGHT	DESCRIPTION
CURVE 7	(e=5.3%, T=194.21, L=141)		
288+01	NC	NC	NORMAL CROWN
288+55	-2.0	0.0	LEVEL CROWN
289+08	-2.0	2.0	REVERSE CROWN
289+96	-5.3	5.3	FULL SUPER
305+96	-5.3	5.3	FULL SUPER
307+06	-2.0	2.0	REVERSE CROWN
307+59	-2.0	0.0	LEVEL CROWN
308+13	NC	NC	NORMAL CROWN

STATION	LEFT	RIGHT	DESCRIPTION
CURVE 8	(e=4.5%, T=173.33, L=120)		
322+72	NC	NC	NORMAL CROWN
323+26	0.0	-2.0	LEVEL CROWN
323+79	2.0	-2.0	REVERSE CROWN
324+46	4.5	-4.5	FULL SUPER
333+50	4.5	-4.5	FULL SUPER
334+17	2.0	-2.0	REVERSE CROWN
334+70	0.0	-2.0	LEVEL CROWN
335+23	NC	NC	NORMAL CROWN



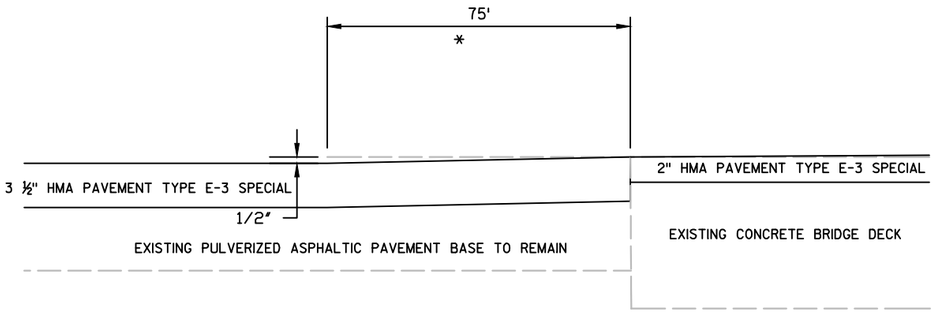




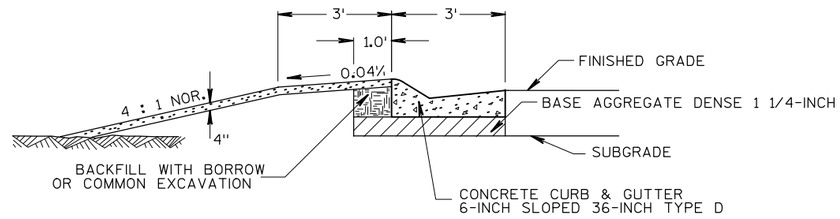
REMOVING PAVEMENT DETAIL

STA. 328+32 - STA. 328+56
STA. 331+17 - STA. 331+41
STA. 334+06 - STA. 334+28

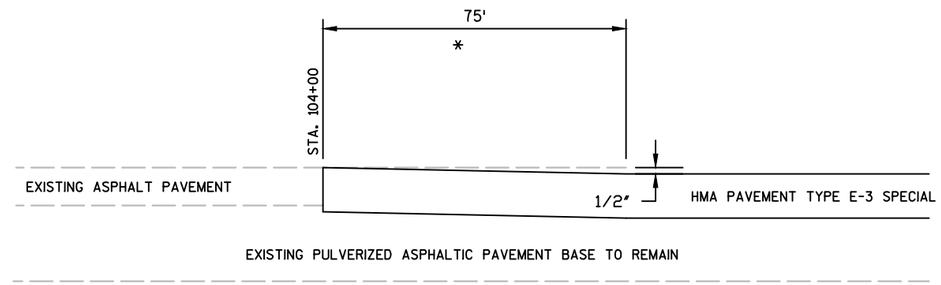
* TRANSITION MILL DEPTH FROM 4" TO 3 ½"



PAVING DETAIL AT STRUCTURE B-18-89



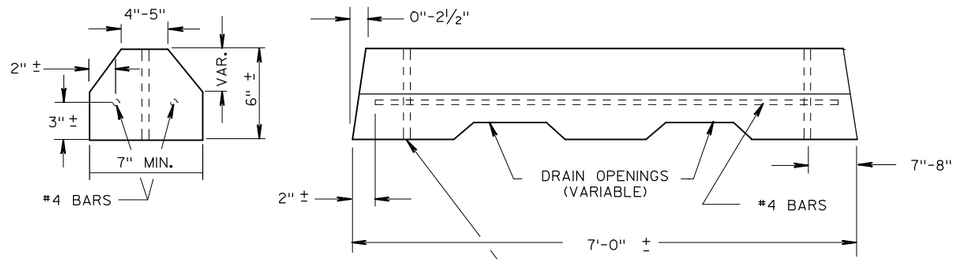
CURB & GUTTER DETAIL



* TRANSITION MILL DEPTH FROM 3 ½" TO 4"

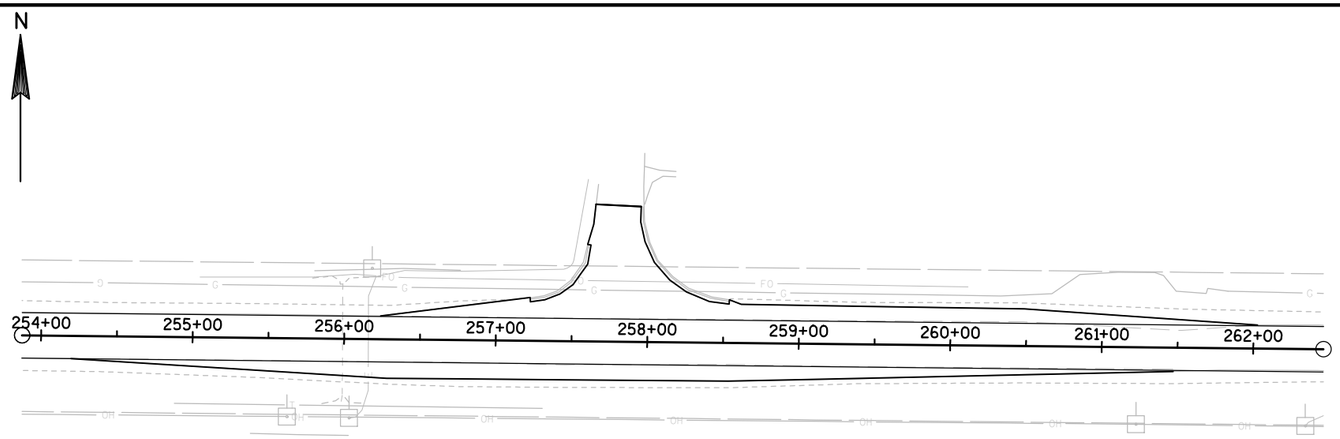
PAVING DETAIL AT BEGIN PROJECT

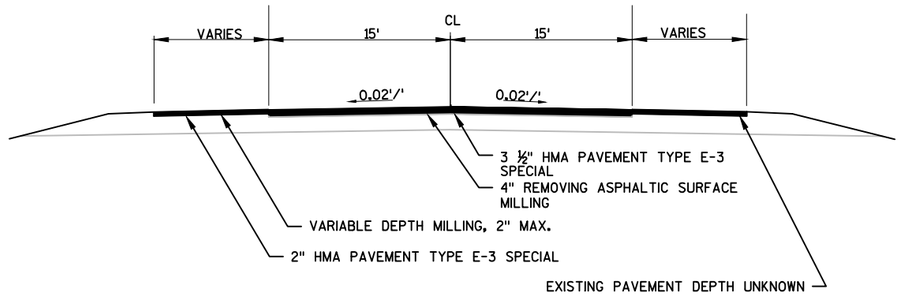
PINS: 2 PER BLOCK
MINIMUM ½" X 18"
SHALL BE COUNTERSUNK
½" AND GROUTED



NOTE: A COMMERCIALLY AVAILABLE PRODUCT OF SIMILAR DIMENSIONS MAY BE SUBSTITUTED

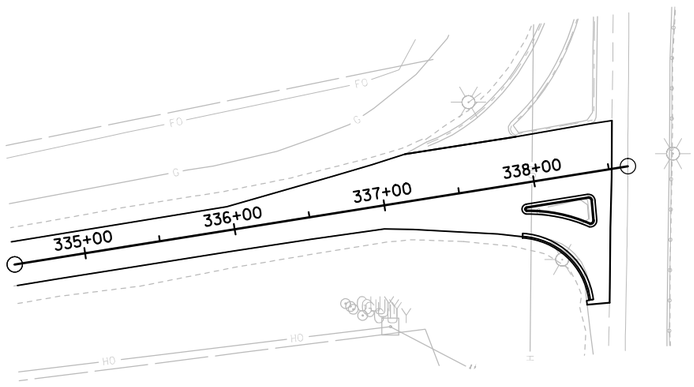
PRECAST CONCRETE CURB

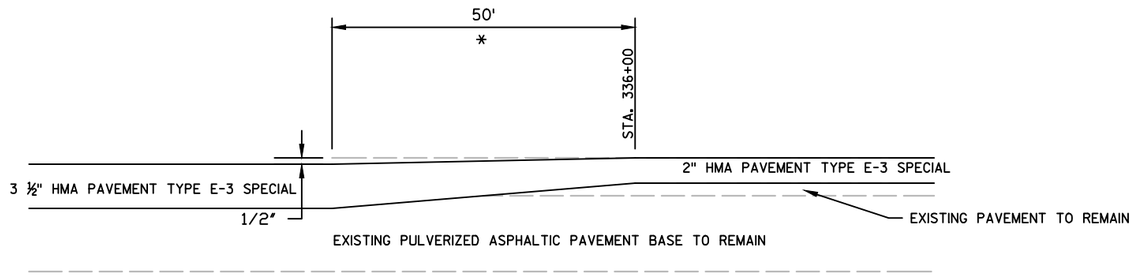




PAVING AND MILLING DETAIL

STATION 254+20 - STATION 262+03

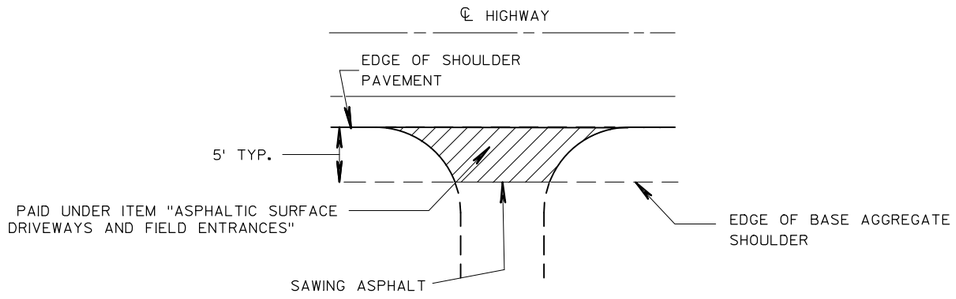




* TRANSITION MILLING DEPTH FROM 4" TO 2"

PAVING AND MILLING DETAIL

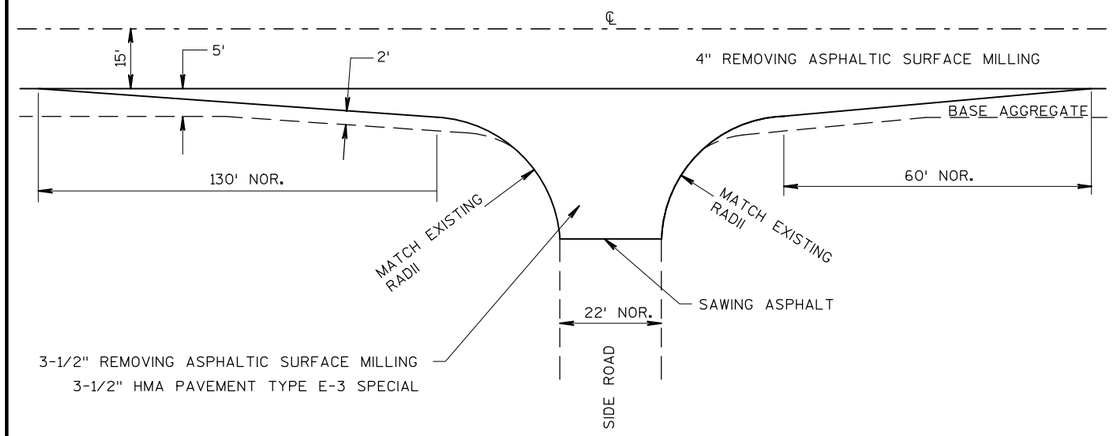
STATION 336+00 - STATION 338+53.4



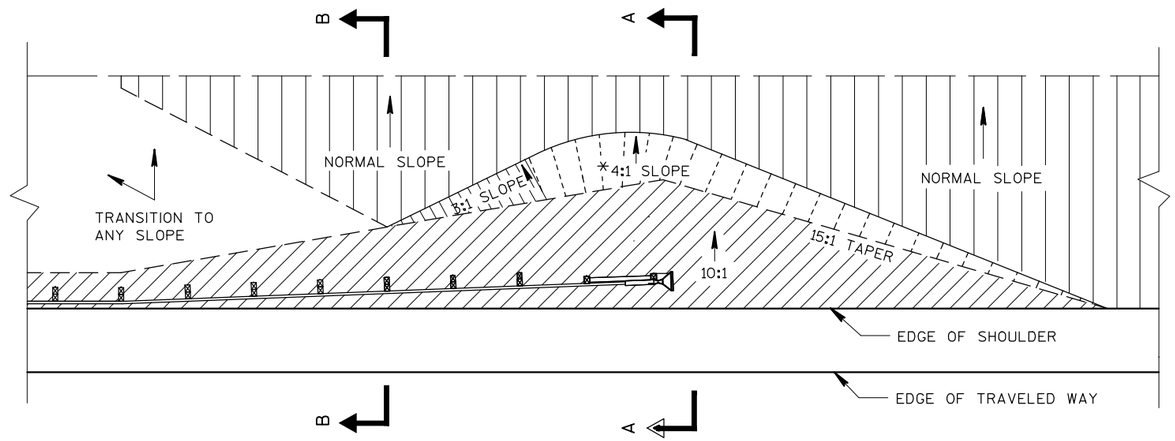
PLAN VIEW

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL PAVED DRIVEWAY DETAIL

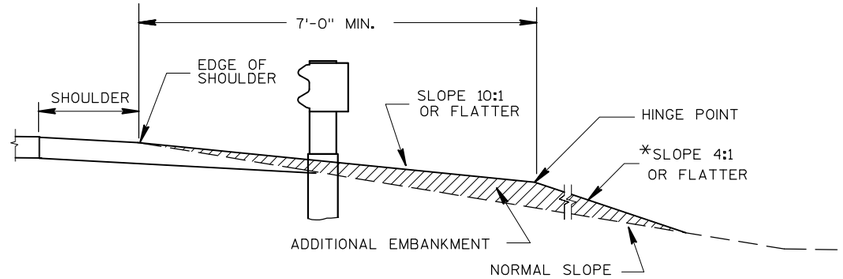


SIDE ROAD DETAIL
(BASE AGGREGATE SHOULDERS)

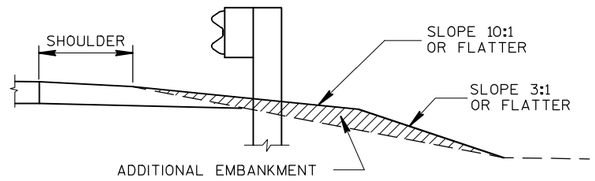


PLAN VIEW

*A 3:1 MAXIMUM SLOPE MAY BE USED FOR INSTALLATIONS ON EXISTING HIGHWAYS.

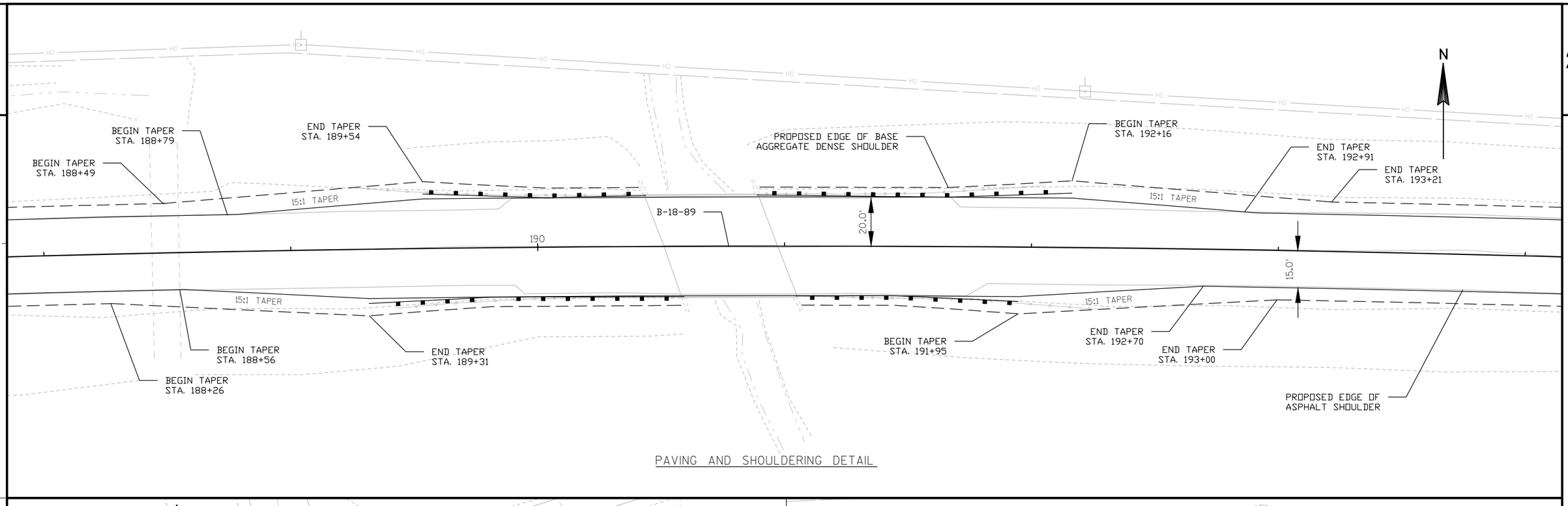


SECTION A-A

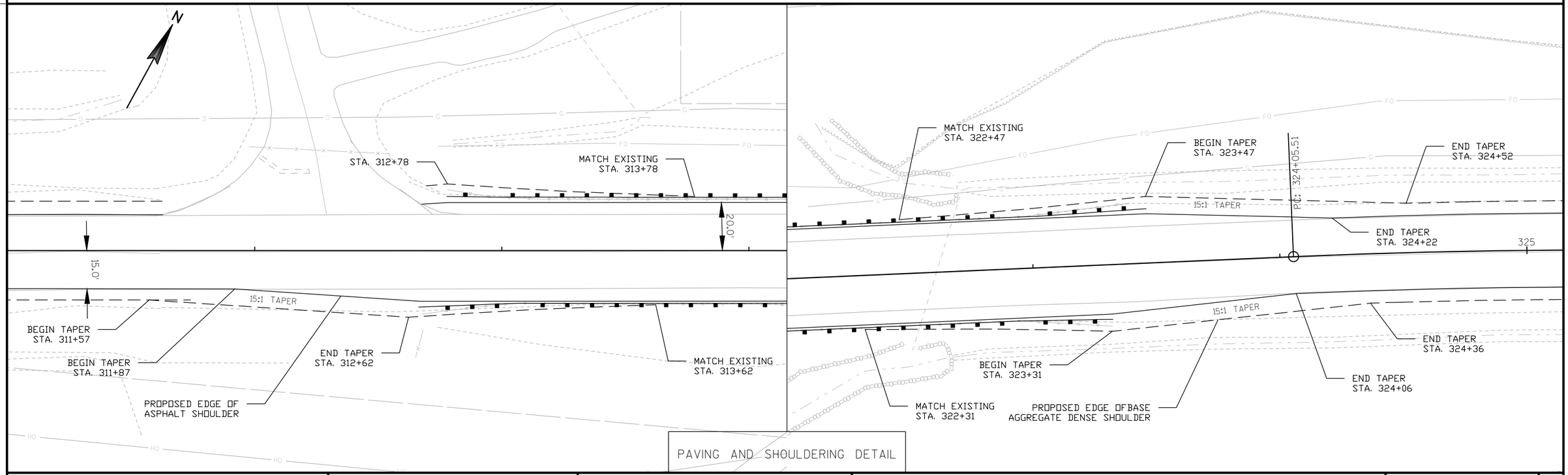


SECTION B-B

FILL AREA AT BEAM GUARD



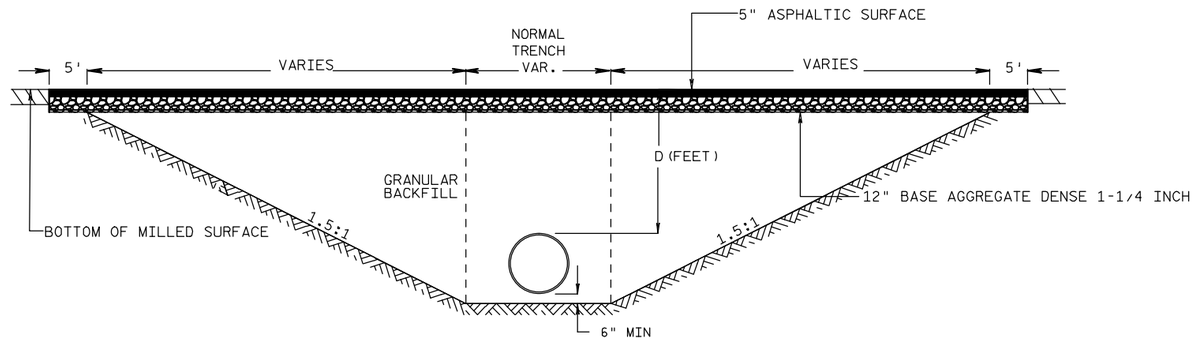
PAVING AND SHOULDERING DETAIL

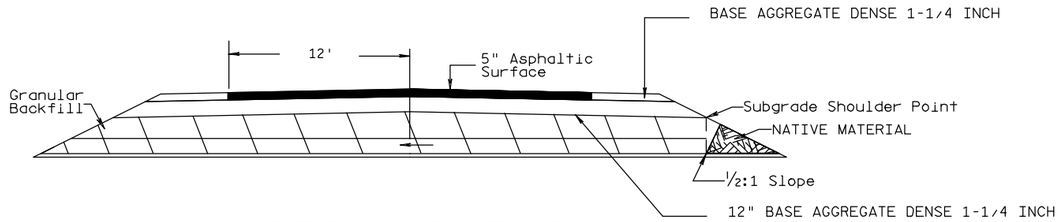


PAVING AND SHOULDERING DETAIL

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 11	E

2

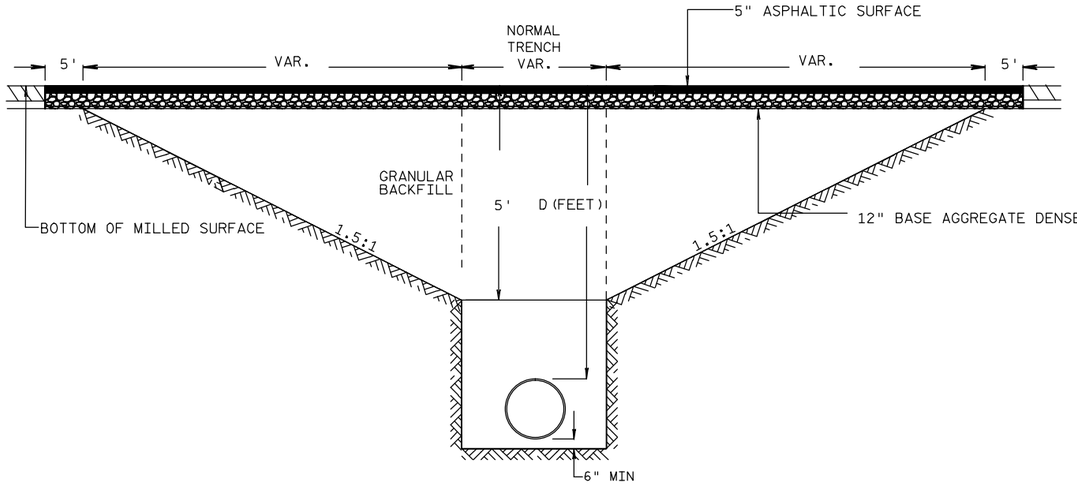


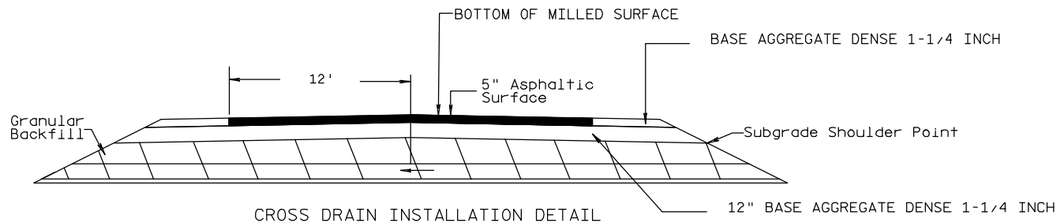


CROSS DRAIN INSTALLATION DETAIL

FOR D ≤ 5'

STA. 256+00



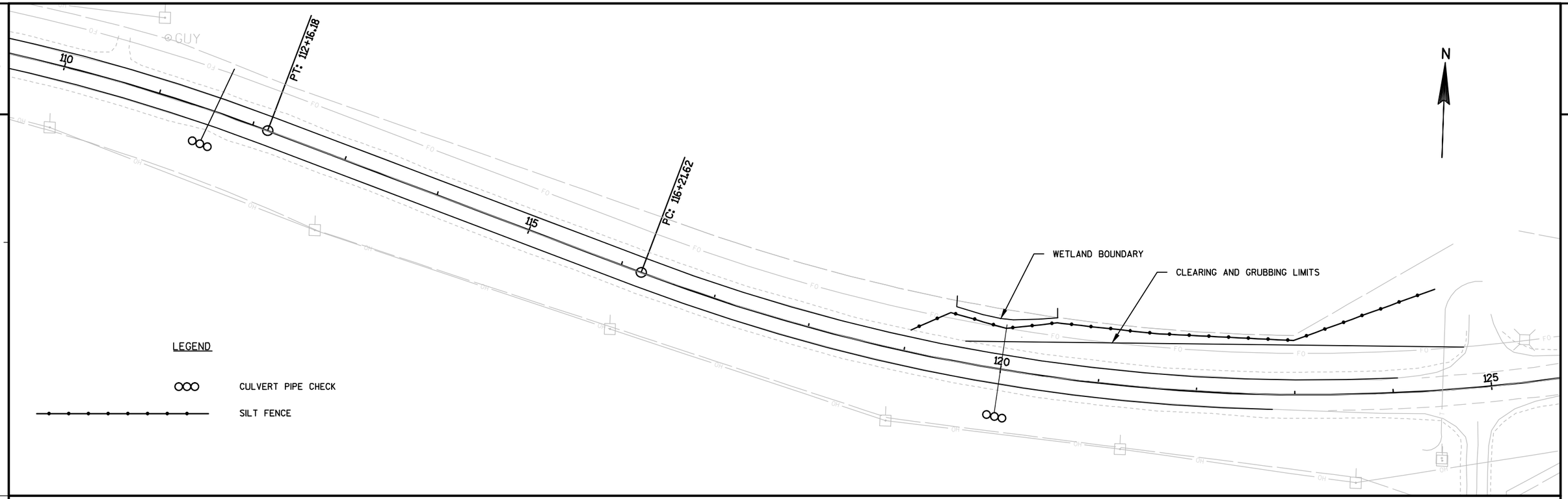


CROSS DRAIN INSTALLATION DETAIL

FOR D ≥ 5'

STA. 111+60
STA. 120+00
STA. 188+50 (DUAL PIPES)

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 12	E



PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	EROSION CONTROL PLAN	SHEET 13	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\022001_EC.DWG PLOT DATE : 4/22/2015 10:49 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

N

WETLAND BOUNDARY

PC: 184+63.33

185

190

EXISTING STRUCTURE
B-18-89

195

PT: 195+16.99

WETLAND BOUNDARY

LEGEND

- SLOPE INTERCEPT
- TURBIDITY BARRIER
- CULVERT PIPE CHECK
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE C

PI: 312+34.89

310

315

320

PC: 324+04.16

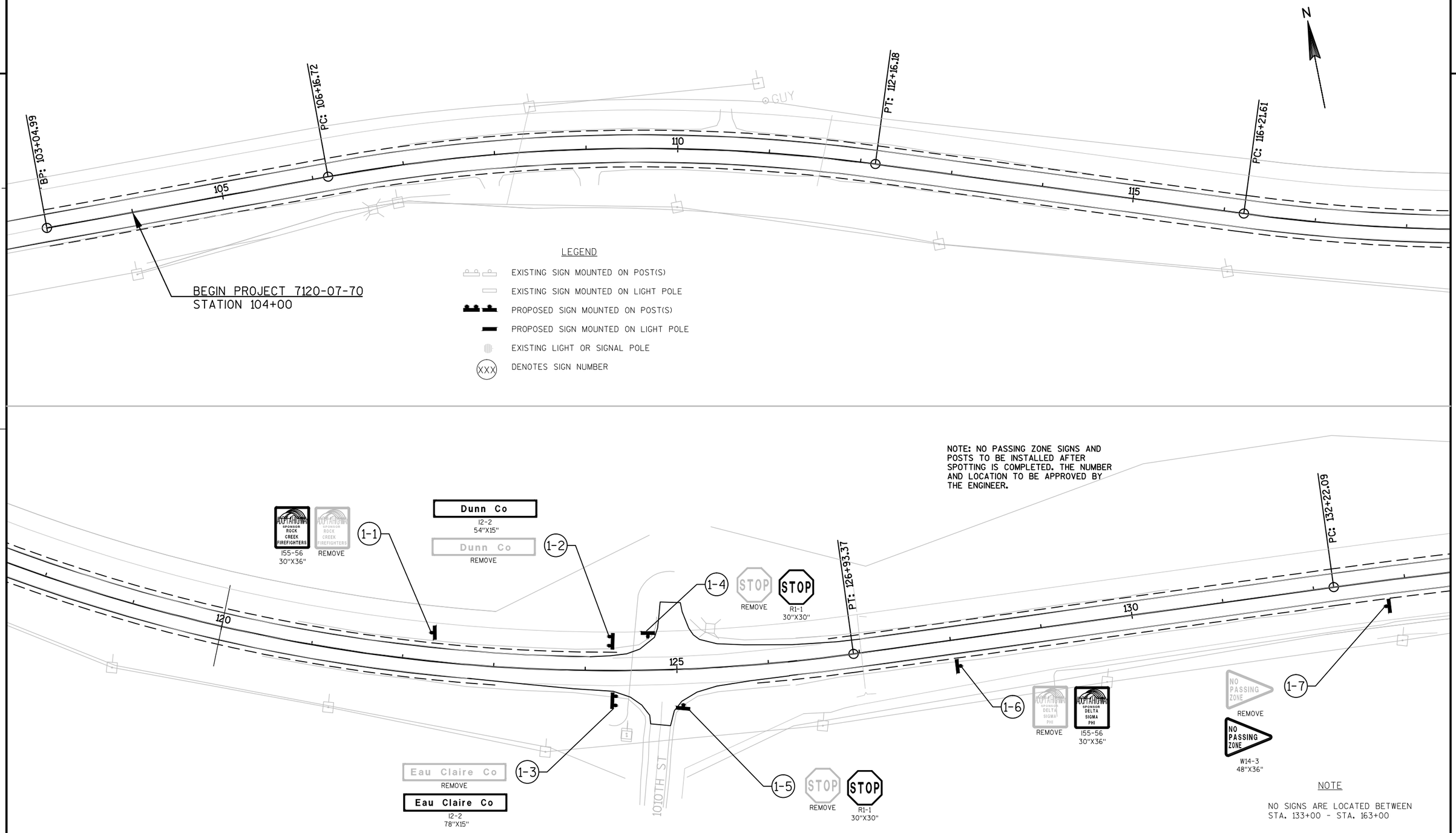
325

GUY

WETLAND BOUNDARY

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	EROSION CONTROL PLAN	SHEET 14	E

2



PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PERMANENT SIGNING	SHEET 15	E

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON LIGHT POLE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON LIGHT POLE

EXISTING LIGHT OR SIGNAL POLE

XXX DENOTES SIGN NUMBER

N

165 170 175

180 185 190

PC: 184+63.33

3-1 REMOVE

3-2 REMOVE

3-3 REMOVE

3-4 REMOVE

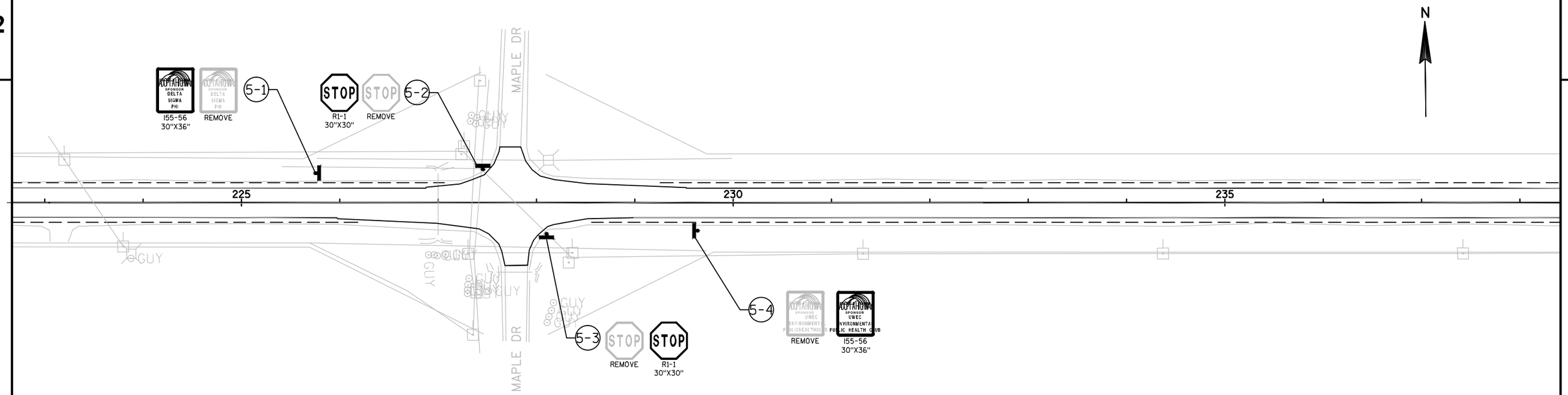
NOTE

NO SIGNS ARE LOCATED BETWEEN
STA. 193+00 - STA. 223+00

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PERMANENT SIGNING	SHEET 16	E

FILE NAME : N:\PDS\C3D\71200701\SHEETSPLAN\023201_PS.DWG PLOT DATE : 10/28/2015 11:03 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

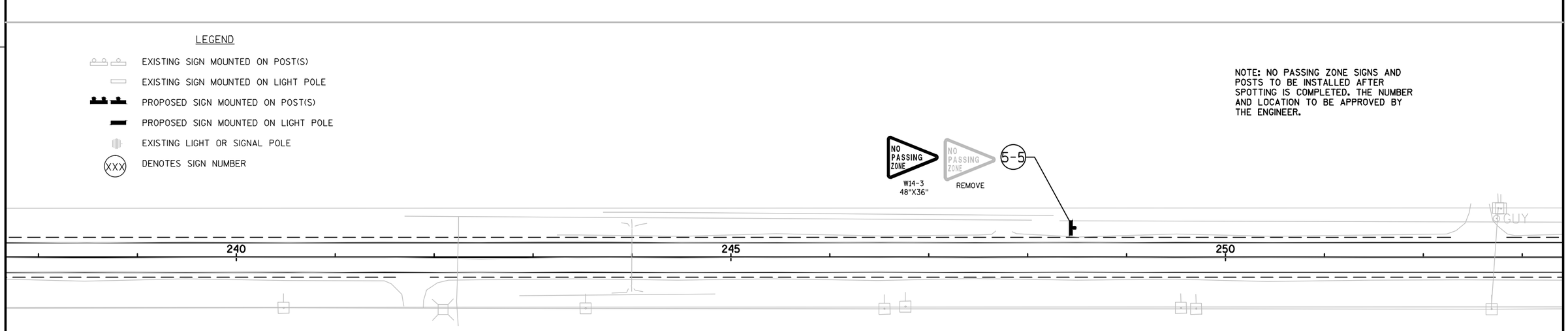
2



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT POLE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER

NOTE: NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE APPROVED BY THE ENGINEER.



PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PERMANENT SIGNING	SHEET 17	E

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON LIGHT POLE

PROPOSED SIGN MOUNTED ON POST(S)

PROPOSED SIGN MOUNTED ON LIGHT POLE

EXISTING LIGHT OR SIGNAL POLE

(XXX) DENOTES SIGN NUMBER

N

STOP R1-1 30"X30"

STOP REMOVE

6-1

GUY

255

260

265

PC: 274+82.15

PT: 282+66.52

6-2

NO PASSING ZONE REMOVE

NO PASSING ZONE W14-3 48"X36"

270

275

280

WAYSIDE 1/2 MILE D5-61 48"X24"

WAYSIDE 1/2 MILE DRINKING WATER REMOVE

6-3

6-4

STOP R1-1 30"X30"

STOP REMOVE

CEMETERY RD

NOTE: NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE APPROVED BY THE ENGINEER.

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PERMANENT SIGNING	SHEET 18	E

2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT POLE
- EXISTING LIGHT OR SIGNAL POLE
- (XXX) DENOTES SIGN NUMBER

N

PT: 282+66.52

PC: 289+48.60

285

290

295

GUY

7-1 STOP R1-1 30"X30" — STOP REMOVE

7-2 WAYSIDE D5-62-L 48"X24" — WAYSIDE REMOVE

7-3 R55-61 24"X18" — REMOVE

7-4 NO OVERNIGHT CAMPING R55-51 18"X18" — REMOVE

7-5 R55-61 24"X18" — REMOVE

7-6 D9-6 24"X24" — CAUTION UNEVEN SURFACE REMOVE

7-7 D9-6 24"X24"

7-8 M6-1 21"X21"

7-9 D9-6 24"X24"

7-10 M5-1R 21"X21"

7-11 RECYCLE AREA PLEASE DEPOSIT RECYCLABLES HERE — REMOVE

7-12 STOP R1-1 30"X30" — STOP REMOVE

7-13 R55-61 24"X18" — REMOVE

7-14 NO OVERNIGHT CAMPING R55-51 18"X18" — REMOVE

7-15 WAYSIDE D5-62-R 48"X24" — WAYSIDE REMOVE

R55-66 30"X18"

15

20

300

305

310

10+00

PT: 306+42.90

STA BACK = 306+45.36

STA AHEAD = 306+67.83

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PERMANENT SIGNING	SHEET	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\023201_PS.DWG PLOT DATE : 1/24/2014 8:46 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 41

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LIGHT POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LIGHT POLE
- EXISTING LIGHT OR SIGNAL POLE
- XXX DENOTES SIGN NUMBER

8-1 NO PASSING ZONE — REMOVE
8-1 NO PASSING ZONE — W14-3 48"X36"
8-2 NO PASSING ZONE — REMOVE
8-2 NO PASSING ZONE — W14-3 48"X36"
8-3 JCT END 37 85 — J1-2 48"X39"
8-3 JCT END 37 85 — REMOVE

PC: 324+05.51

315 320 325

GUY

NOTE: NO PASSING ZONE SIGNS AND POSTS TO BE INSTALLED AFTER SPOTTING IS COMPLETED. THE NUMBER AND LOCATION TO BE APPROVED BY THE ENGINEER.

8-4 W3-1 36"X36"
8-4 STOP AHEAD — REMOVE
8-5 I55-56 30"X36"
8-5 — REMOVE
8-6 WAYSIDE 1/2 MILE — D5-61 48"X24"
8-6 WAYSIDE 1/2 MILE TOILET — REMOVE
8-7 Eau Claire Mondovi — D1-2 72"X30"
8-7 Eau Claire Mondovi — REMOVE
8-8 WEST 85 — J4-1 24"X36"
8-9 WEST 85 Carryville 6 Rock Falls 9 Durand 24 — REMOVE
8-9 Carryville 6 Rock Falls 9 Durand 24 — D2-3 84"X36"
8-10 NORTH SOUTH 37 37 — J3-2 48"X57"
8-10 NORTH SOUTH 37 37 — REMOVE
8-11 STOP — REMOVE
8-11 STOP — R1-1 36"X36"
8-12 STOP — REMOVE
8-12 STOP — R1-1 36"X36"

PT: 333+89.89
EP: 338+64.36

330 335 338

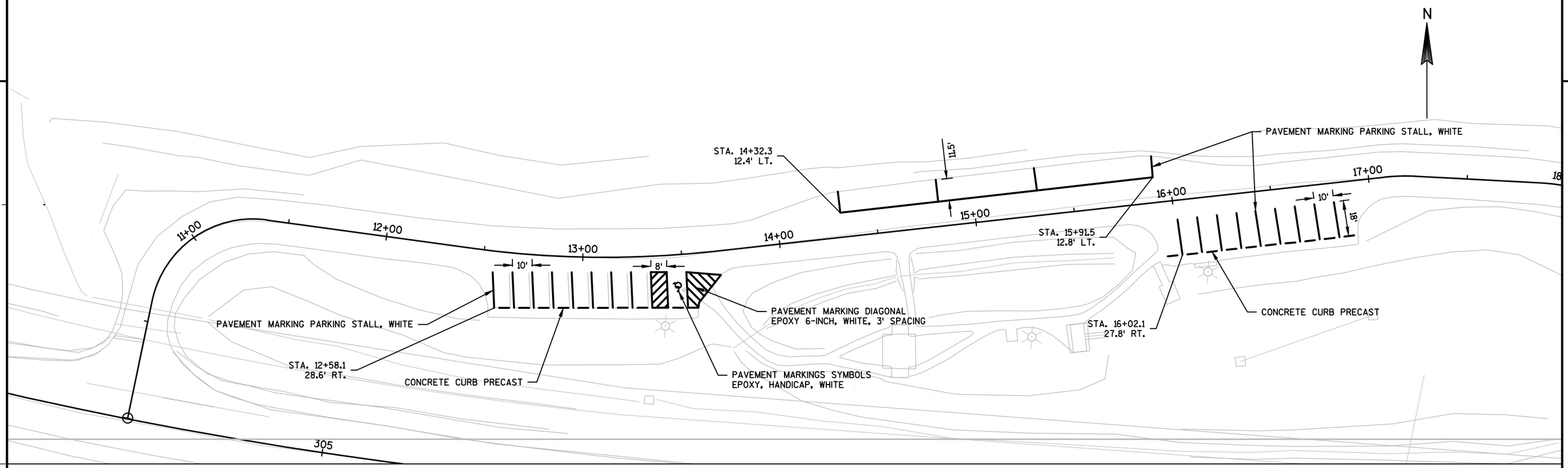
STH 85
STH 37

END PROJECT 7120-07-70
STATION 338+53.4

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PERMANENT SIGNING	SHEET 20	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\023201_PS.DWG PLOT DATE : 3/11/2015 11:46 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CONSTRUCTION DETAILS - PAVEMENT MARKING, WAYSIDE	SHEET 21	E

GENERAL NOTES

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

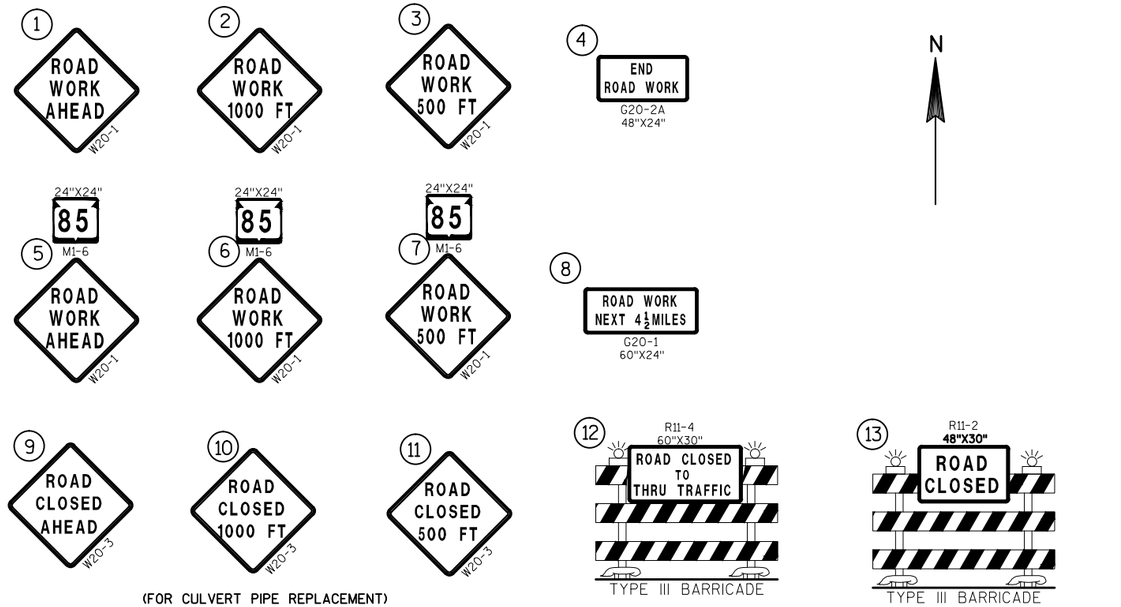
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

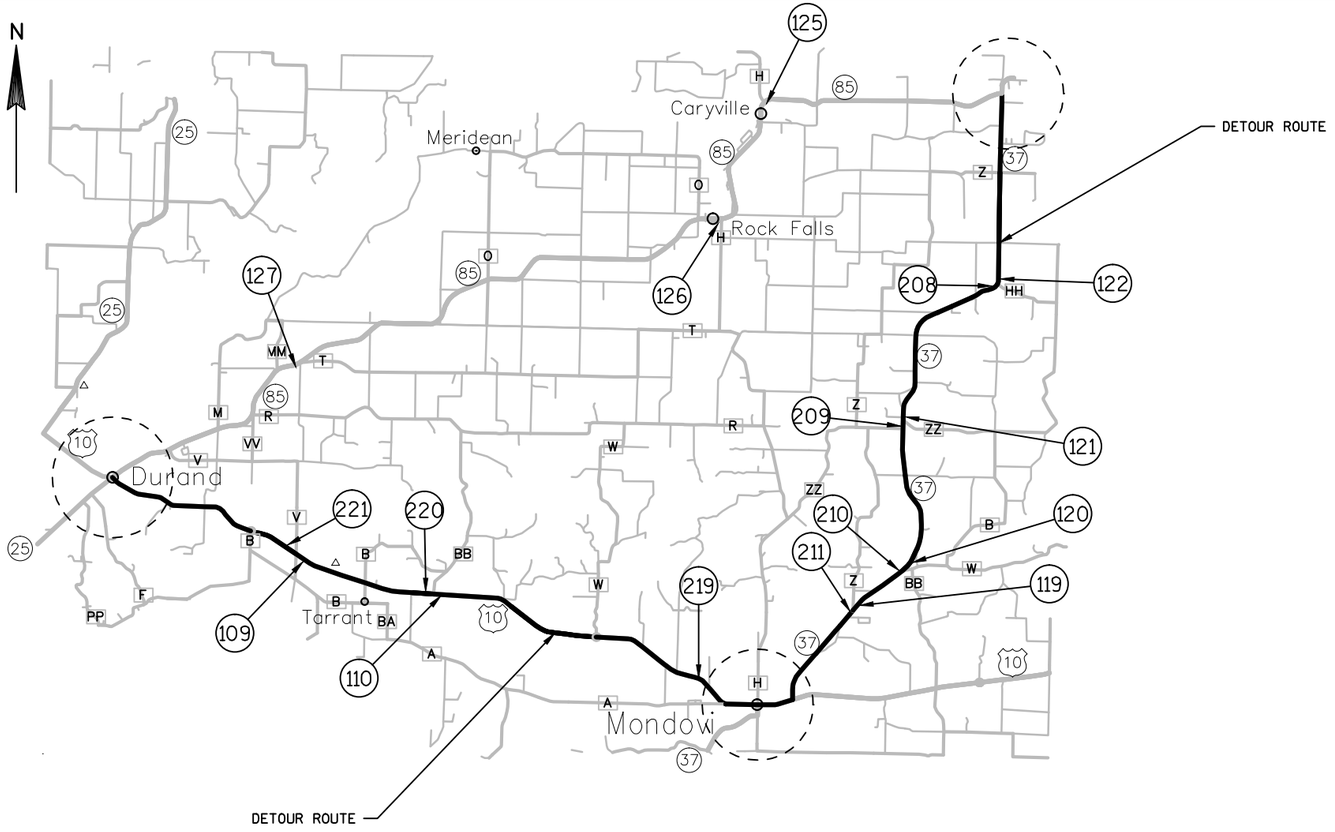
TYPE III BARRICADES OR TEMPORARY SIGN SUPPORTS MAY BE SUBSTITUTED FOR POST MOUNTED SIGNS IN SITUATIONS WHERE SIGN LOCATIONS ARE CONTINUALLY MOVING.

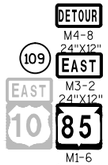
SEE STANDARD DETAIL DRAWING "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR CULVERT REPLACEMENT AND WAYSIDE CONSTRUCTION.

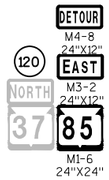
SEE STANDARD DETAIL DRAWING "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR GUARDRAIL GRADING AND CONSTRUCTION.

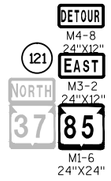


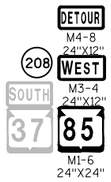
PROJECT NO: 7120-07-70	HWY: 85	COUNTY: DUNN & EAU CLAIRE	TRAFFIC CONTROL PLAN	SHEET 22	E

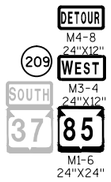


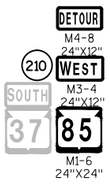


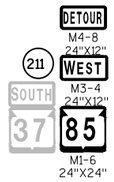


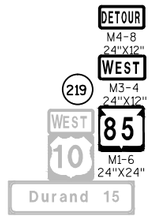




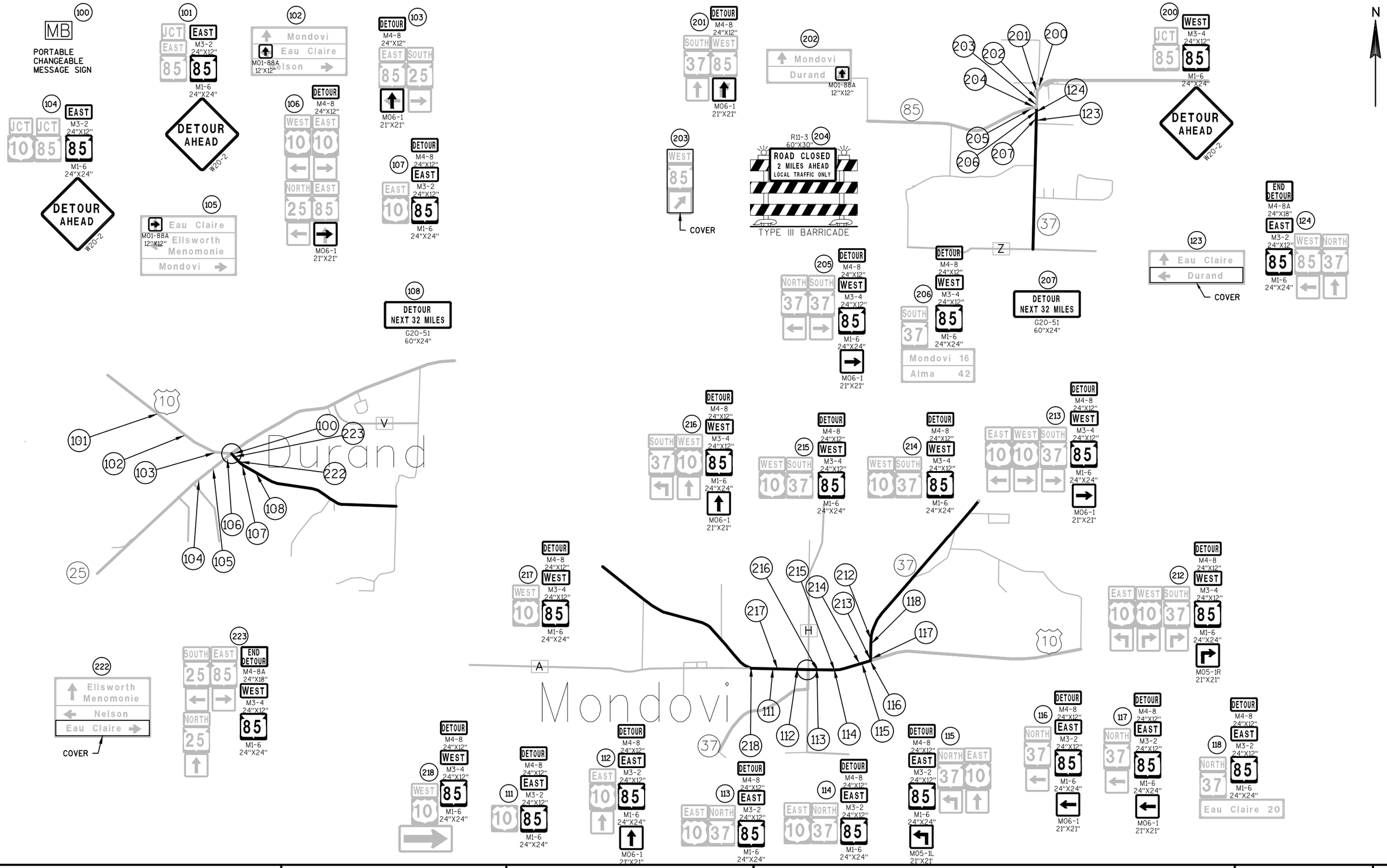








PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	DETOUR PLAN	SHEET 23	E


100
MB
PORTABLE CHANGEABLE MESSAGE SIGN
101
JCT EAST
EAST
85
M3-2 24"X12"
85
M1-6 24"X24"
DETOUR AHEAD
W20-2
102
Mondovi
Eau Claire
M01-88A 12"X12"
Nelson
103
DETOUR
M4-8 24"X12"
EAST SOUTH
85 25
M06-1 21"X21"
104
JCT JCT
10 85
EAST
M3-2 24"X12"
85
M1-6 24"X24"
DETOUR AHEAD
W20-2
105
Eau Claire
M01-88A 12"X12"
Ellsworth
Menomonie
Mondovi
106
DETOUR
M4-8 24"X12"
WEST EAST
10 10
NORTH EAST
25 85
M06-1 21"X21"
107
DETOUR
M4-8 24"X12"
EAST
M3-2 24"X12"
EAST
10
85
M1-6 24"X24"
108
DETOUR
NEXT 32 MILES
G20-51 60"X24"
Durand
V
H
A
Mondovi
10
25
37
Z
201
DETOUR
M4-8 24"X12"
SOUTH WEST
37 85
M06-1 21"X21"
202
Mondovi
Durand
M01-88A 12"X12"
203
WEST
85
COVER
204
R11-3 60"X30"
ROAD CLOSED
2 MILES AHEAD
LOCAL TRAFFIC ONLY
TYPE III BARRICADE
205
DETOUR
M4-8 24"X12"
NORTH SOUTH
37 37
WEST
M3-4 24"X12"
85
M1-6 24"X24"
M06-1 21"X21"
206
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
SOUTH
37
85
M1-6 24"X24"
Mondovi 16
Alma 42
207
DETOUR
NEXT 32 MILES
G20-51 60"X24"
200
WEST
M3-4 24"X12"
JCT
85
85
M1-6 24"X24"
DETOUR AHEAD
W20-2
123
Eau Claire
Durand
COVER
END DETOUR
M4-8A 24"X18"
EAST
M3-2 24"X12"
124
WEST NORTH
85 85 37
M1-6 24"X24"
216
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
SOUTH WEST
37 10
85
M1-6 24"X24"
M06-1 21"X21"
215
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
WEST SOUTH
10 37
85
M1-6 24"X24"
214
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
WEST SOUTH
10 37
85
M1-6 24"X24"
213
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
EAST WEST SOUTH
10 10 37
85
M1-6 24"X24"
M06-1 21"X21"
212
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
EAST WEST SOUTH
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85
M1-6 24"X24"
M05-1R 21"X21"
217
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
WEST
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85
M1-6 24"X24"
218
DETOUR
M4-8 24"X12"
WEST
M3-4 24"X12"
WEST
10
85
M1-6 24"X24"
111
DETOUR
M4-8 24"X12"
EAST
M3-2 24"X12"
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85
M1-6 24"X24"
112
DETOUR
M4-8 24"X12"
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M3-2 24"X12"
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M1-6 24"X24"
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DETOUR
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M3-2 24"X12"
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DETOUR
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M3-2 24"X12"
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DETOUR
M4-8 24"X12"
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M3-2 24"X12"
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M1-6 24"X24"
M05-1L 21"X21"
NORTH EAST
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116
DETOUR
M4-8 24"X12"
EAST
M3-2 24"X12"
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M1-6 24"X24"
M06-1 21"X21"
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DETOUR
M4-8 24"X12"
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M3-2 24"X12"
NORTH
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85
M1-6 24"X24"
M06-1 21"X21"
118
DETOUR
M4-8 24"X12"
EAST
M3-2 24"X12"
NORTH
37
85
M1-6 24"X24"
Eau Claire 20
222
Ellsworth
Menomonie
Nelson
Eau Claire
COVER
223
SOUTH EAST
25 85
END DETOUR
M4-8A 24"X18"
WEST
M3-4 24"X12"
NORTH
25
85
M1-6 24"X24"
117
118
N

DATE 16NOV15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7120-07-70 QUANTITY
0010	201.0105	Clearing	STA	5.000	5.000
0020	201.0205	Grubbing	STA	5.000	5.000
0030	201.0220	Grubbing	ID	66.000	66.000
0040	203.0100	Removing Small Pipe Culverts	EACH	6.000	6.000
0050	204.0100	Removing Pavement	SY	78.000	78.000
0060	204.0110	Removing Asphaltic Surface	SY	190.000	190.000
0070	204.0120	Removing Asphaltic Surface Milling	SY	85,770.000	85,770.000
0080	204.0150	Removing Curb & Gutter	LF	130.000	130.000
0090	204.0165	Removing Guardrail	LF	2,595.000	2,595.000
0100	204.9060.S	Removing (item description) 01.Parking Bumper	EACH	20.000	20.000
0110	205.0100	Excavation Common	CY	50.000	50.000
0120	208.0100	Borrow	CY	65.000	65.000
0130	213.0100	Finishing Roadway (project) 01. 7120-07-70	EACH	1.000	1.000
0140	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,640.000	3,640.000
0150	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	600.000	600.000
0160	305.0500	Shaping Shoulders	STA	453.000	453.000
0170	440.4410	Incentive IRI Ride	DOL	17,760.000	17,760.000
0180	455.0605	Tack Coat	GAL	4,020.000	4,020.000
0190	460.2000	Incentive Density HMA Pavement	DOL	6,100.000	6,100.000
0200	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	23,450.000	23,450.000
0210	465.0105	Asphaltic Surface	TON	910.000	910.000
0220	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0230	465.0115	Asphaltic Surface Detours	TON	5.000	5.000
0240	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	12.000	12.000
0250	465.0315	Asphaltic Flumes	SY	10.000	10.000
0260	465.0450	Asphaltic Intersection Rumble Strips	SY	80.000	80.000
0270	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	20,400.000	20,400.000
0280	509.9010.S	Removing Asphaltic Concrete Deck Overlay (structure) 01. B-18-89	SY	205.000	205.000
0290	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	4.000	4.000
0300	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000
0310	520.1048	Apron Endwalls for Culvert Pipe 48-Inch	EACH	4.000	4.000
0320	520.3148	Culvert Pipe Class III 48-Inch	LF	176.000	176.000
0330	520.3324	Culvert Pipe Class III-A 24-Inch	LF	72.000	72.000
0340	520.3330	Culvert Pipe Class III-A 30-Inch	LF	154.000	154.000
0350	520.8700	Cleaning Culvert Pipes	EACH	10.000	10.000
0360	521.0118	Culvert Pipe Corrugated Steel 18-Inch	LF	20.000	20.000
0370	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0380	601.0199.S	Concrete Curb Precast	EACH	20.000	20.000
0390	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	110.000	110.000
0400	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	65.000	65.000
0410	614.0010	Barrier System Grading Shaping Finishing	EACH	8.000	8.000
0420	614.0396	Guardrail Mow Strip Asphalt	SY	60.000	60.000
0430	614.2300	MGS Guardrail 3	LF	75.000	75.000
0440	614.2330	MGS Guardrail 3 K	LF	1,925.000	1,925.000
0450	614.2500	MGS Thrie Beam Transition	LF	157.600	157.600
0460	614.2610	MGS Guardrail Terminal EAT	EACH	8.000	8.000

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DATE 16NOV15 — E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7120-07-70 QUANTITY
0470	618.0100	Maintenance And Repair of Haul Roads (project) 01.7120-07-70	EACH	1.000	1.000
0480	619.1000	Mobilization	EACH	1.000	1.000
0490	625.0100	Topsoil	SY	860.000	860.000
0500	627.0200	Mulching	SY	600.000	600.000
0510	628.1504	Silt Fence	LF	2,000.000	2,000.000
0520	628.1520	Silt Fence Maintenance	LF	4,000.000	4,000.000
0530	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0540	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0550	628.2004	Erosion Mat Class I Type B	SY	1,300.000	1,300.000
0560	628.2006	Erosion Mat Urban Class I Type A	SY	280.000	280.000
0570	628.2027	Erosion Mat Class II Type C	SY	480.000	480.000
0580	628.6005	Turbidity Barriers	SY	300.000	300.000
0590	628.7555	Culvert Pipe Checks	EACH	40.000	40.000
0600	629.0210	Fertilizer Type B	CWT	0.700	0.700
0610	630.0140	Seeding Mixture No. 40	LB	15.000	15.000
0620	630.0300	Seeding Borrow Pit	LB	5.000	5.000
0630	633.5200	Markers Culvert End	EACH	8.000	8.000
0640	634.0414	Posts Wood 4x4-Inch X 14-FT	EACH	6.000	6.000
0650	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	19.000	19.000
0660	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	15.000	15.000
0670	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	1.000	1.000
0680	637.2210	Signs Type II Reflective H	SF	248.990	248.990
0690	637.2230	Signs Type II Reflective F	SF	39.000	39.000
0700	638.2602	Removing Signs Type II	EACH	41.000	41.000
0710	638.3000	Removing Small Sign Supports	EACH	41.000	41.000
0720	642.5001	Field Office Type B	EACH	1.000	1.000
0730	643.0100	Traffic Control (project) 01.7120-07-70	EACH	1.000	1.000
0740	643.0300	Traffic Control Drums	DAY	166.000	166.000
0750	643.0420	Traffic Control Barricades Type III	DAY	133.000	133.000
0760	643.0705	Traffic Control Warning Lights Type A	DAY	263.000	263.000
0770	643.0900	Traffic Control Signs	DAY	1,482.000	1,482.000
0780	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000
0790	643.1050	Traffic Control Signs PCMS	DAY	7.000	7.000
0800	643.2000	Traffic Control Detour (project) 01. 7120-07-70	EACH	1.000	1.000
0810	643.3000	Traffic Control Detour Signs	DAY	917.000	917.000
0820	646.0106	Pavement Marking Epoxy 4-Inch	LF	66,426.000	66,426.000
0830	646.0126	Pavement Marking Epoxy 8-Inch	LF	245.000	245.000
0840	646.0406	Pavement Marking Same Day Epoxy 4-Inch	LF	19,546.000	19,546.000
0850	647.0256	Pavement Marking Symbols Epoxy	EACH	1.000	1.000
0860	647.0456	Pavement Marking Curb Epoxy	LF	15.000	15.000
0870	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	66.000	66.000
0880	647.0606	Pavement Marking Island Nose Epoxy	EACH	1.000	1.000
0890	647.0656	Pavement Marking Parking Stall Epoxy	LF	625.000	625.000
0900	647.0706	Pavement Marking Diagonal Epoxy 6-Inch	LF	110.000	110.000
0910	648.0100	Locating No-Passing Zones	MI	4.390	4.390
0920	649.0402	Temporary Pavement Marking Paint 4-Inch	LF	16,335.000	16,335.000
0930	650.4500	Construction Staking Subgrade	LF	145.000	145.000
0940	650.5000	Construction Staking Base	LF	145.000	145.000
0950	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	175.000	175.000
0960	650.6000	Construction Staking Pipe Culverts	EACH	6.000	6.000

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DATE 16NOV15 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7120-07-70 QUANTITY
0970	650.8000	Construction Staking Resurfacing Reference	LF	24,520.000	24,520.000
0980	650.9910	Construction Staking Supplemental Control (project) 01.7120-07-70	LS	1.000	1.000
0990	650.9920	Construction Staking Slope Stakes	LF	145.000	145.000
1000	690.0150	Sawing Asphalt	LF	636.000	636.000
1010	SPV.0060	Special 01. Automatic Drainage Gates Salvaged 30-Inch	EACH	2.000	2.000
1020	SPV.0090	Special 01. Concrete Curb and Gutter Cure and Seal Treatment	LF	175.000	175.000
1030	SPV.0105	Special 01. Railing Steel Type "W" Rehabilitation	LS	1.000	1.000
1040	SPV.0105	Special 02. Material Transfer Vehicle	LS	1.000	1.000
1050	SPV.0105	Special 03.Milling and Removing Temporary Joint	LS	1.000	1.000
1060	SPV.0105	Special 04. Preparation of Foundation for Asphaltic Paving Special STH 85	LS	1.000	1.000
1070	SPV.0105	Special 05. Preparation of Foundation for Asphaltic Paving Special Wayside	LS	1.000	1.000
1080	SPV.0170	Special 01.Prepare Foundation for Asphaltic Shoulders Special	STA	33.000	33.000
1090	SPV.0195	Special 01. HMA Pavement Type E-3 Special	TON	15,552.000	15,552.000

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REMOVING (ITEM DESCRIPTION) 01. PARKING BUMPER

CATEGORY	STATION TO STATION	LOCATION	204.9060.S EACH
0020	12+58 - 13+52	WAYSIDE	10
0020	15+94 - 16+90	WAYSIDE	10
		TOTAL 0020	20

REMOVING ASPHALTIC SURFACE

CATEGORY	LOCATION	204.0110 SY	REMARKS
0020	WAYSIDE	25	FRONT WALKWAY
0020	WAYSIDE	70	WEST WALKWAY
0020	WAYSIDE	95	EAST WALKWAY
	TOTAL 0020	190	

REMOVING CURB & GUTTER

CATEGORY	STATION TO STATION	LOCATION	204.0150 LF
0010	338+00 - 338+24	RADIUS	50
0010	338+00 - 338+34	ISLAND	80
		TOTAL 0010	130

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REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH	REMARKS
0010	111+60	MAINLINE	1	30" X 72' C.S.C.P.
0010	120+00	MAINLINE	1	30" X 78' C.S.C.P.
0010	188+44	MAINLINE	1	48" X 88' C.S.C.P.
0010	188+55	MAINLINE	1	48" X 88' C.S.C.P.
0010	256+00	MAINLINE	1	24" X 72' C.S.C.P.
		TOTAL 0010	5	
0020	40+31	WAYSIDE	1	18" X 18' C.S.C.P.
		TOTAL 0020	1	
		TOTAL	6	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION TO STATION	LOCATION	204.0120 SY
0010	104+00 - 338+53	MAINLINE	78,200
0010		INTERSECTIONS	4,420
		TOTAL 0010	82,620
0020		WAYSIDE	3,150
		TOTAL 0020	3,150
		TOTAL	85,770

REMOVING GUARDRAIL

CATEGORY	STATION TO STATION	LOCATION	204.0165 LF
0010	189+27 - 190+42	LEFT	115
0010	189+42 - 190+59	RIGHT	117
0010	190+89 - 192+04	LEFT	115
0010	191+04 - 192+27	RIGHT	123
0010	312+78 - 323+40	LEFT	1,062
0010	312+68 - 323+31	RIGHT	1,063
		TOTAL 0010	2,595

REMOVING PAVEMENT

CATEGORY	STATION TO STATION	LOCATION	204.0100 SY
0010	328+32 - 328+56	RIGHT	28
0010	331+17 - 331+41	RIGHT	27
0010	334+06 - 334+28	RIGHT	23
		TOTAL 0010	78

CLEARING-GRUBBING

CATEGORY	STATION TO STATION	LOCATION	CLEARING 201.0105 STA	GRUBBING 201.0205 STA	GRUBBING 201.0220 ID
0010	120+00 - 125+00	LEFT	5	5	
		TOTAL 0010	5	5	0
0020	12+61	WAYSIDE			24
0020	16+13	WAYSIDE			24
0020	16+95	WAYSIDE			18
		TOTAL 0020	0	0	66

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EARTHWORK

CATEGORY	STATION TO STATION	LOCATION	COMMON 205.0100 CY	BORROW 208.0100 CY
0010	STH 37 INTERSECTION	SAFETY ISLAND	5	
0010	STH 37 INTERSECTION	RT. TURN CURB AND GUTTER	25	20
		TOTAL 0010	30	20
0020	40+00 - 41+11	WALKWAY	15	40
0020	42+00 - 42+34	WALKWAY	5	5
		TOTAL 0020	20	45
		TOTAL	50	65

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS SPECIAL

CATEGORY	STATION TO STATION	LOCATION	SPV.0170.01 STA
0010	188+79 - 190+44	LEFT	2
0010	188+56 - 190+56	RIGHT	2
0010	190+91 - 192+91	LEFT	2
0010	191+05 - 192+70	RIGHT	2
0010	311+87 - 324+06	RIGHT	13
0010	312+68 - 324+22	LEFT	12
		TOTAL 0010	33

PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL STH 85

CATEGORY	LOCATION	SPV.0105.04 LS	REMARKS
0010	STH 85	1	
	TOTAL 0010	1	

PREPARATION OF FOUNDATION FOR ASPHALTIC PAVING SPECIAL WAYSIDE

CATEGORY	LOCATION	SPV.0105.05 LS	REMARKS
0020	WAYSIDE	1	
	TOTAL 0020	1	

BASE AGGREGATE DENSE

CATEGORY	STATION TO STATION	LOCATION	3/4-INCH 305.0110 TON	1 1/4-INCH 305.0120 TON	REMARKS
0010	104+00 - 338+53	LEFT	1,490		SHOULDER
0010	104+00 - 338+53	RIGHT	1,525		SHOULDER
0010	188+26 - 193+21	LT & RT	145		E.A.T. WIDENING
0010	311+57 - 324+52	LT & RT	45		E.A.T. WIDENING
0010	VARIOUS	DRIVEWAYS	45		
0010	VARIOUS	CROSS DRAIN		450	SEE DETAIL
0010		CURB AND GUTTER		10	SEE DETAIL
0010	UNDISTRIBUTED		350	140	
		TOTAL 0010	3,600	600	
0020	40+00 - 41+11	WALKWAY	30		WAYSIDE
0020	42+00 - 42+34	WALKWAY	10		WAYSIDE
		TOTAL 0020	40	0	
		TOTAL	3,640	600	

SHAPING SHOULDERS

CATEGORY	STATION TO STATION	LOCATION	305.0500 STA
0010	104+00 - 188+26	RIGHT	85
0010	104+00 - 188+49	LEFT	85
0010	193+00 - 311+57	RIGHT	119
0010	193+21 - 311+60	LEFT	119
0010	313+62 - 322+31	RIGHT	9
0010	313+78 - 322+47	LEFT	9
0010	324+36 - 337+87	RIGHT	14
0010	324+52 - 337+20	LEFT	13
		TOTAL 0010	453

REHEATING HMA LONGITUDINAL JOINTS

CATEGORY	STATION TO STATION	LOCATION	460.4110.S LF
0010	104+00 - 338+53	MAINLINE	23,450
		TOTAL 0010	23,450

ASPHALTIC SURFACE

CATEGORY	STATION TO STATION	LOCATION	PATCHING 465.0110 TON	DETOURS 465.0115 TON	FLUMES 465.0315 SY
0010	UNDISTRIBUTED	PROJECT	50	5	
0010	337+85 RIGHT	TURN LANE			10
		TOTAL 0010	50	5	10

ASPHALTIC RUMBLE STRIP

CATEGORY	LOCATION	INTERSECTION 465.0450 SY	CENTER LINE 2-LANE RURAL 465.0475 LF
0010	STH 37 INT.	80	
0010	PROJECT		20,400
	TOTAL 0010	80	20,400

ASPHALTIC ITEMS

CATEGORY	STATION TO STATION	LOCATION	TACK COAT 455.0605 GAL	ASPHALTIC SURFACE 465.0105 TON	DRIVEWAYS AND FIELD ENTRANCES 465.0120 TON	HMA PAVEMENT TYPE E-3 SPECIAL SPV.0195.01 TON
0010	104+00 - 188+56	MAINLINE	1,410			5,525
0010	111+60	CROSS DRAIN		20		
0010	120+00	CROSS DRAIN		20		
0010	161+57	P.E. RIGHT			3	
0010	182+47	P.E. RIGHT			3	
0010	188+50	CROSS DRAIN		30		
0010	188+56 - 190+52	BRIDGE APPROACH	25			135
0010	190+98 - 192+91	BRIDGE APPROACH	25			130
0010	192+91 - 311+87	MAINLINE	1,980			7,775
0010	241+79	P.E. RIGHT			3	
0010	252+57	P.E. LEFT			3	
0010	254+20 - 261+77	BYPASS LANE	30			65
0010	256+00	CROSS DRAIN		15		
0010	256+25 - 262+03	CE INT.	45			95
0010	311+87 - 324+22	MAINLINE	165			870
0010	328+31 - 334+28	CONCRETE RUMBLES		40		
0010	324+22 - 336+00	MAINLINE	190			770
0010	336+00 - 338+53	STH 37 INT.	70			165
0010		SAFETY ISLAND		5		
0010	UNDISTRIBUTED	FOUNDATION PREP.		400		
		TOTAL 0010	3,940	530	12	15,530
0020	10+53 - 19+68	WAYSIDE	80	355		
0020		WAYSIDE WALKWAYS		25		
		TOTAL 0020	80	380	0	0
0030	190+52 - 190+98	B-18-89				22
		TOTAL 0030	0	0	0	22
		TOTAL	4,020	910	12	15,552

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 EACH
0010	151+00	MAINLINE	1
0010	184+43	MAINLINE	1
0010	184+54	MAINLINE	1
0010	214+00	MAINLINE	1
0010	216+00	MAINLINE	1
0010	227+00	MAINLINE	1
0010	244+00	MAINLINE	1
0010	269+00	MAINLINE	1
0010	281+87	MAINLINE	1
0010	282+49	MAINLINE	1
		TOTAL 0010	10

CONCRETE CURB PRECAST

CATEGORY	STATION TO STATION	LOCATION	601.0199.S EACH
0020	12+58 - 13+52	WAYSIDE	10
0020	15+94 - 16+90	WAYSIDE	10
		TOTAL 0020	20

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CONCRETE CURB & GUTTER ITEMS

CATEGORY	STATION TO STATION	LOCATION	6-INCH SLOPED 30-INCH TYPE J 601.0415 LF	6-INCH SLOPED 36-INCH TYPE D 601.0557 LF	STAKING 650.5500 LF	CURE AND SEAL TREATMENT SPV.0090.01 LF
0010	337+90 - 338+35	SAFETY ISLAND	110		110	110
0010	337+87 - 338+25	TURN LANE		65	65	65
		TOTAL 0010	110	65	175	175

FINISHING ITEMS

CATEGORY	STATION TO STATION	LOCATION	TOPSOIL 625.0100 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 40 630.0140 LB	SEEDING BORROW PIT 630.0300 LB
0010	119+60 - 124+75	LEFT	300	400	0.20	4	
0010		37 INT.	110		0.10	2	
0010	UNDISTRIBUTED		100	100	0.10	2	5
		TOTAL 0010	510	500	0.40	8	5
0020	40+00 - 41+11	WAYSIDE	185		0.10	4	
0020	42+00 - 42+34	WAYSIDE	65		0.10	1	
0020	GRUBBING AREAS	WAYSIDE	100	100	0.10	2	
		TOTAL 0020	350	100	0.30	7	0
		TOTAL	860	600	0.70	15	5

3

CULVERT PIPE ITEMS

CATEGORY	STATION	LOCATION	CULVERT PIPE CLASS III-A 24-INCH 520.3324 LF	CULVERT PIPE CLASS III-A 30-INCH 520.3330 LF	CULVERT PIPE CLASS III 48-INCH 520.3148 LF	THICKNESS (IN) STEEL	APRON ENDWALLS 24-INCH 520.1024 EACH	APRON ENDWALLS 30-INCH 520.1030 EACH	APRON ENDWALLS 48-INCH 520.1048 EACH	STAKING 650.6000 EACH	AUTOMATIC DRAINAGE GATES SALVAGED 30-INCH SPV.0060.01 EACH
0010	111+60	MAINLINE		76		0.079		1		1	1
0010	120+00	MAINLINE		78		0.079		1		1	1
0010	188+44	MAINLINE			88	0.109			2	1	
0010	188+55	MAINLINE			88	0.109			2	1	
0010	214+00	MAINLINE					2				
0010	256+00	MAINLINE	72			0.064	2			1	
		TOTAL 0010	72	154	176		4	2	4	5	2

CULVERT PIPE ITEMS (CONTINUED)

CATEGORY	STATION	LOCATION	CULVERT PIPE CORRUGATED STEEL 18-INCH 521.0118 LF	THICKNESS STEEL (IN)	APRON ENDWALLS STEEL 18-INCH 521.1018 EACH	STAKING 650.6000 EACH
0020	40+31	WAYSIDE	20	0.064	2	1
		TOTAL 0020	20		2	1

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
0010	ROADWAY	0.8
	TOTAL 0010	0.8
0020	WAYSIDE	0.1
	TOTAL 0020	0.1
0030	B-18-89	0.1
	TOTAL 0030	0.1
	TOTAL	1.0

3

EROSION MAT

CATEGORY	STATION TO STATION	LOCATION	CLASS I TYPE B 628.2004 SY	URBAN CLASS I TYPE A 628.2006 SY	CLASS II TYPE C 628.2027 SY
0010	111+50 - 111+70	LEFT	70		
0010	111+50 - 111+70	RIGHT	30		
0010	119+85 - 120+15	LEFT	70		
0010	119+85 - 120+15	RIGHT	60		
0010	188+30 - 188+70	LEFT	125		
0010	188+30 - 188+70	RIGHT	125		
0010	189+90 - 190+47	LEFT			125
0010	190+07 - 190+65	RIGHT			50
0010	190+80 - 191+33	LEFT			75
0010	191+02 - 191+50	RIGHT			130
0010	255+90 - 256+10	LEFT	30		
0010	255+90 - 256+10	RIGHT	20		
0010	312+67 - 313+83	LEFT	200		
0010	322+30 - 323+40	LEFT	80		
0010	322+30 - 323+35	RIGHT	80		
0010		37 INT.		110	
0010	CULVERT CLEANING	LT & RT	160		
0010	UNDISTRIBUTED		250	20	100
		TOTAL 0010	1,300	130	480
0020	40+00 - 41+11	WAYSIDE		95	
0020	42+00 - 42+34	WAYSIDE		30	
0020	UNDISTRIBUTED			25	
		TOTAL 0020	0	150	0
		TOTAL	1,300	280	480

SILT FENCE SUMMARY

CATEGORY	STATION TO STATION	LOCATION	SILT FENCE 628.1504 LF	MAINTENANCE 628.1520 LF
0010	119+00 - 124+50	LEFT	550	1,100
0010	188+10 - 188+38	LEFT	35	70
0010	188+10 - 188+38	RIGHT	35	70
0010	188+60 - 190+40	LEFT	200	400
0010	188+60 - 190+60	RIGHT	220	440
0010	190+85 - 193+20	LEFT	270	540
0010	191+10 - 193+00	RIGHT	210	420
0010	312+50 - 313+75	RIGHT	130	260
0010	UNDISTRIBUTED		350	700
		TOTAL 0010	2,000	4,000

MOBILIZATIONS EROSION

CATEGORY	LOCATION	EROSION 628.1905 EACH	EMERGENCY 628.1910 EACH
0010	PROJECT	3	2
	TOTAL 0010	3	2
0020	PROJECT	1	
	TOTAL 0020	1	0
	TOTAL	4	2

DETOUR SIGNING

CATEGORY	LOCATION	COVERING SIGNS TYPE II 643.0920 EACH	PROJECT 01. 7120-07-70 643.2000 EACH	SIGNS 643.3000 DAY	REMARKS
0010	PROJECT		1		
0010	EB DETOUR	1		476	SEE DETOUR PLAN
0010	WB DETOUR	2		441	SEE DETOUR PLAN
0010	UNDISTRIBUTED	1			
	TOTAL 0010	4	1	917	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH
0010	111+60	RIGHT	4
0010	120+00	RIGHT	4
0010	184+43	RIGHT	5
0010	184+54	RIGHT	5
0010	188+44	RIGHT	5
0010	188+55	RIGHT	5
0010	UNDISTRIBUTED		12
	TOTAL 0010		40

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH
0010	111+60	LT. & RT.	2
0010	120+00	LT. & RT.	2
0010	188+44	LT. & RT.	2
0010	256+00	LT. & RT.	2
	TOTAL 0010		8

PERMANENT SIGNING

CATEGORY	SIGN NUMBER	APPROX. STATION	LOCATION	CODE	CODE DESCRIPTION W/ VARIABLE MESSAGE	SIGN SIZE (W X H) IN	POSTS WOOD 4 X 4-INCH X 14 FT 634.0414 EACH	POSTS WOOD 4 X 6-INCH X 14 FT 634.0614 EACH	POSTS WOOD 4 X 6-INCH X 16 FT 634.0616 EACH	POSTS WOOD 4 X 6-INCH X 18 FT 634.0618 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH
0010	1-1	122+30	LEFT	I55-56	ADOPT-A-HIGHWAY, ROCK CREEK FIREFIGHTERS	30 X 36			1		7.50		1	1
0010	1-2	124+30	LEFT	I2-2	DUNN CO	54 X 15		2			5.63		1	2
0010	1-3	124+30	RIGHT	I2-2	EAU CLAIRE CO	78 X 15		2			8.13		1	2
0010	1-4	124+70	LEFT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	1-5	125+05	RIGHT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	1-6	128+05	RIGHT	I55-56	ADOPT-A-HIGHWAY, DELTA SIGMA PHI	30 X 36			1		7.50		1	1
0010	1-7	132+80	RIGHT	W14-3	NO PASSING ZONE	48 X 36			1			6.00	1	1
0010	3-1	190+35	LEFT										1	1
0010	3-2	190+55	RIGHT										1	1
0010	3-3	190+95	LEFT										1	1
0010	3-4	191+15	RIGHT										1	1
0010	5-1	225+75	LEFT	I55-56	ADOPT-A-HIGHWAY, DELTA SIGMA PHI	30 X 36			1		7.50		1	1
0010	5-2	227+45	LEFT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	5-3	228+10	RIGHT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	5-4	229+60	RIGHT	I55-56	ADOPT-A-HIGHWAY, UWEC ENVIRONMENTAL PUBLIC HEALTH CLUB	30 X 36			1		7.50		1	1
0010	5-5	248+45	LEFT	W14-3	NO PASSING ZONE	48 X 36			1			6.00	1	1
0010	6-1	257+45	LEFT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	6-2	268+75	LEFT	W14-3	NO PASSING ZONE	48 X 36			1			6.00	1	1
0010	6-3	277+55	RIGHT	D5-61	WAYSIDE 1/2 MILE	48 X 24		1			8.00		1	1
0010	6-4	282+13	RIGHT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	7-1	303+75	LEFT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	7-2	303+75	RIGHT	D5-62L	WAYSIDE LA	48 X 24		1			8.00		1	1
0010	7-12	311+95	LEFT	R1-1	STOP	30 X 30		1			5.18		1	1
0010	7-15	312+80	LEFT	D5-62R	WAYSIDE RA	48 X 24		1			8.00		1	1
0010	8-1	313+80	RIGHT	W14-3	NO PASSING ZONE	48 X 36			1			6.00	1	1
0010	8-2	318+30	LEFT	W14-3	NO PASSING ZONE	48 X 36			1			6.00	1	1
0010	8-3	328+15	RIGHT	J1-2	JUNCTION/END ASSEMBLY	48 X 39			1		13.00		1	1
0010	8-4	330+50	RIGHT	W3-1	STOP AHEAD	36 X 36			1			9.00	1	1
0010	8-5	331+00	LEFT	I55-56	ADOPT-A-HIGHWAY, UWEC ENVIRONMENTAL PUBLIC HEALTH CLUB	30 X 36			1		7.50		1	1
0010	8-6	333+00	LEFT	D5-61	WAYSIDE 1/2 MILE	48 X 24		1			8.00		1	1
0010	8-7	333+00	RIGHT	D1-2	2 DESTINATIONS W/ARROWS	72 X 30		2			15.00		1	2
0010	8-8	334+54	LEFT	J4-1	REASSURANCE ASSEMBLY	24 X 36			1		6.00		1	
0010	8-9	336+00	LEFT	D2-3	3 DESTINATIONS W/DISTANCES	84 X 36			2		21.00		1	2
0010	8-10	337+00	RIGHT	J3-2	DIRECTIONAL ASSEMBLY	48 X 57				1	19.00		1	1
0010	8-11	338+08	RIGHT	R1-1	STOP	36 X 36		1			7.46		1	
0010	8-12	338+30	RIGHT	R1-1	STOP	36 X 36					7.46		1	
					TOTAL 0010		0	19	15	1	213.62	39.00	36	37
0020	7-3	11+00	LEFT	R55-61	PLEASE HELP KEEP THE AREA CLEAN	24 X 18	1				3.00		1	1
0020	7-4	11+00	LEFT	R55-51	NO OVERNIGHT CAMPING	18 X 18					2.25			
0020	7-5	13+00	RIGHT	R55-61	PLEASE HELP KEEP THE AREA CLEAN	24 X 18	1				3.00		1	1
0020	7-6	13+60	RIGHT	D9-6	HANDICAPPED SYMBOL	24 X 24	1				4.00		1	1
0020	7-7	14+55	RIGHT	D9-6	HANDICAPPED SYMBOL	24 X 24	1				4.00			
0020	7-8	14+55	RIGHT	M6-1	ARROW PLAQUE	21 X 21					3.06			
0020	7-9	15+85	RIGHT	D9-6	HANDICAPPED SYMBOL	24 X 24	1				4.00			
0020	7-10	15+85	RIGHT	M5-1R	ARROW PLAQUE	21 X 21					3.06			
0020	7-11	16+15	RIGHT	R55-66	NO DUMPING OF HOUSEHOLD TRASH	30 X 18					3.75		1	
0020	7-13	18+35	LEFT	R55-61	PLEASE HELP KEEP THE AREA CLEAN	24 X 18	1				3.00		1	1
0020	7-14	18+35	LEFT	R55-51	NO OVERNIGHT CAMPING	18 X 18					2.25			
					TOTAL 0020		6	0	0	0	35.37	0.00	5	4

3

TRAFFIC CONTROL

CATEGORY	STATION TO STATION	LOCATION	DRUMS 643.0300 DAY	BARRICADES TYPE III 643.0420 DAY	WARNING LIGHTS TYPE A 643.0705 DAY	SIGNS 643.0900 DAY	SIGNS PCMS 643.1050 DAY	REMARKS
0010		PROJECT		7	14	1,440		SEE TRAFFIC CONTROL PLAN
0010		B-18-89	22					SEE S.D.D.
0010	307+75 - 324+30	LT. & RT.	144					SEE S.D.D.
0010		DETOUR ROUTE		28	53		7	SEE DETOUR PLAN
0010		CROSS DRAIN SITES		42	84	14		SEE TRAFFIC CONTROL PLAN
		TOTAL 0010	166	77	151	1,454	7	
0020		WAYSIDE		56	112	28		SEE S.D.D.
		TOTAL 0020	0	56	112	28	0	
		TOTAL	166	133	263	1,482	7	

MATERIAL TRANSFER VEHICLE

CATEGORY	STATION TO STATION	LOCATION	SPV.0105.02 LS
0010	104+00 - 338+53	MAINLINE	1
		TOTAL 0010	1

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MILLING AND REMOVING TEMPORARY JOINT

CATEGORY	STATION TO STATION	LOCATION	SPV.0105.03 LS
0010	104+00 - 338+53	MAINLINE	1
		TOTAL 0010	1

CONSTRUCTION STAKING

CATEGORY	STATION TO STATION	LOCATION	SUBGRADE 650.4500 LF	BASE 650.5000 LF	RESURFACING REFERENCE 650.8000 LF	SUPPLEMENTAL CONTROL 650.9910 LS	SLOPE STAKES 650.9920 LF
0010	104+00 - 338+53	STH 85			23,450	1	
0010	687+50 - 689+00	STH 37			150		
		TOTAL 0010	0	0	23,600	1	0
0020	10+52 - 19+68	WAYSIDE			920		
0020	40+00 - 41+11	WAYSIDE	110	110			110
0020	42+00 - 42+34	WAYSIDE	35	35			35
		TOTAL 0020	145	145	920	0	145
		TOTAL	145	145	24,520	1	145

SAWING ASPHALT

CATEGORY	STATION TO STATION	LOCATION	690.0150 LF	REMARKS
0010	104+00	BEGIN PROJECT	30	
0010	111+44	STH 85	30	CULVERT
0010	111+76	STH 85	30	CULVERT
0010	119+82	STH 85	30	CULVERT
0010	120+18	STH 85	30	CULVERT
0010	124+70 - 124+91	1010TH STREET	21	RIGHT
0010	124+84 - 125+07	1010th STREET	23	LEFT
0010	188+25	STH 85	30	CULVERT
0010	188+75	STH 85	30	CULVERT
0010	227+63 - 227+84	MAPLE DRIVE	21	RIGHT
0010	227+68 - 227+91	MAPLE DRIVE	23	LEFT
0010	255+86	STH 85	30	CULVERT
0010	256+14	STH 85	30	CULVERT
0010	257+65 - 257+97	C.E.	32	LEFT
0010	281+76 - 281+98	CEMETERY ROAD	22	RIGHT
0010	337+20 - 337+94	STH 85	74	LEFT
0010	687+57 - 688+77	STH 37 *	120	END PROJECT
0010	687+57	STH 37 *	15	LEFT
0010	688+77	STH 37 *	15	LEFT
		TOTAL 0010	636	

* SEE CURB AND GUTTER DETAIL

3

PAVEMENT MARKING

CATEGORY	STATION TO STATION	LOCATION	YELLOW LF	EPOXY 4-INCH 646.0106 WHITE LF	EPOXY 8-INCH 646.0126 LF	SAME DAY EPOXY 4-INCH 646.0406 LF	SYMBOLS EPOXY 647.0256 EACH	CURB EPOXY 647.0456 LF	STOP LINE EPOXY 18-INCH 647.0566 LF	ISLAND NOSE EPOXY 647.0606 EACH	PARKING STALL EPOXY 647.0656 LF	DIAGONAL EPOXY 6-INCH 647.0706 LF	TEMPORARY PAINT 4-INCH 649.0402 LF	REMARKS
0010	104+00 - 109+25	STH 85	662.5	1,050.0		662.5							565.0	NO PASSING EB
0010	109+25 - 121+39	STH 85	2,428.0	2,428.0		2,428.0							2,428.0	NO PASSING EB/WB
0010	121+39 - 131+42	STH 85	1,253.0	2,006.0		1,253.0							1,083.0	NO PASSING WB
0010	131+42 - 248+11	STH 85	2,917.0	23,338.0		2,917.0							934.0	PASSING EB/WB
0010	248+11 - 257+61	STH 85	1,187.5	1,900.0		1,187.5							1,026.0	NO PASSING EB
0010	257+61 - 268+70	STH 85	275.0	2,218.0		275.0							88.0	PASSING EB/WB
0010	258+50 - 260+50	STH 85			200.0									SEE S.D.D.
0010	268+70 - 279+26	STH 85	1,318.5	2,112.0		1,318.5							1,140.0	NO PASSING EB
0010	279+26 - 303+52	STH 85	4,852.0	4,852.0		4,852.0							4,852.0	NO PASSING EB/WB
0010	303+52 - 313+58	STH 85	1,256.0	2,012.0		1,256.0							1,086.0	NO PASSING WB
0010	313+58 - 317+81	STH 85	112.5	846.0		112.5							36.0	PASSING EB/WB
0010	317+81 - 328+90	STH 85	1,384.0	2,218.0		1,384.0							1,197.0	NO PASSING EB
0010	328+90 - 338+40	STH 85	1,900.0	1,900.0		1,900.0							1,900.0	NO PASSING EB/WB
0010	337+73 - 337+97	STH 85			45.0									SEE S.D.D.
0010	337+90 - 338+35	STH 85						15.0						ISLAND
0010	337+90	STH 85								1.0				
0010		STH 37 INT.							15.0					
0010		STH 37 RT. TURN							15.0					
0010		WAYSIDE WEST							18.0					
0010		WAYSIDE EAST							18.0					
		TOTAL 0010	19,546.0	46,880.0	245.0	19,546.0	0.0	15.0	66.0	1.0	0.0	0.0	16,335.0	
0020	12+66 - 13+42										260.0	110.0		SEE DETAIL
0020	13+50						1.0							SEE DETAIL
0020	14+32 - 15+91										205.0			SEE DETAIL
0020	16+02 - 16+82										160.0			SEE DETAIL
		TOTAL 0020	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	625.0	110.0	0.0	
		TOTAL		66,426.0	245.0	19,546.0	1.0	15.0	66.0	1.0	625.0	110.0	16,335.0	

NOTE: EPOXY 4-INCH INCLUDES EDGE LINE AND CENTER LINE WHICH IS FOR MARKING AFTER THE CENTER LINE RUMBLE STRIP 2-LANE RURAL ARE MILLED IN TO THE SURFACE.

3

BARRIER SYSTEM GRADING SHAPING FINISHING

CATEGORY	STATION TO STATION	LOCATION	614.0010 EACH	FOR INFORMATION ONLY BORROW CY	SALVAGED TOPSOIL SY	MULCHING SY	FERTILIZER TYPE B CWT	SEEDING # 20 LB	SLOPE STAKES LF
0010	188+26 - 190+52	RIGHT	1	80	280	215	0.20	7	225
0010	188+49 - 190+52	LEFT	1	145	365	215	0.30	10	200
0010	190+98 - 193+00	RIGHT	1	220	420	300	0.30	12	200
0010	190+98 - 193+21	LEFT	1	130	340	315	0.20	9	225
0010	311+57 - 313+62	RIGHT	1	50	90	90	0.10	3	205
0010	312+54 - 313+78	LEFT	1	105	205	0	0.10	5	125
0010	322+31 - 324+36	RIGHT	1	0	15	0	0.00	1	205
0010	322+47 - 324+52	LEFT	1	5	20	0	0.00	1	205
		TOTAL 0010	8	735	1,735	1,135	1	48	1,590

TURBIDITY BARRIERS

CATEGORY	STATION	LOCATION	628.6005 SY
0010	WEST CREEK	WEST SIDE	110
0010	WEST CREEK	EAST SIDE	130
0010	UNDISTRIBUTED		60
		TOTAL 0010	300

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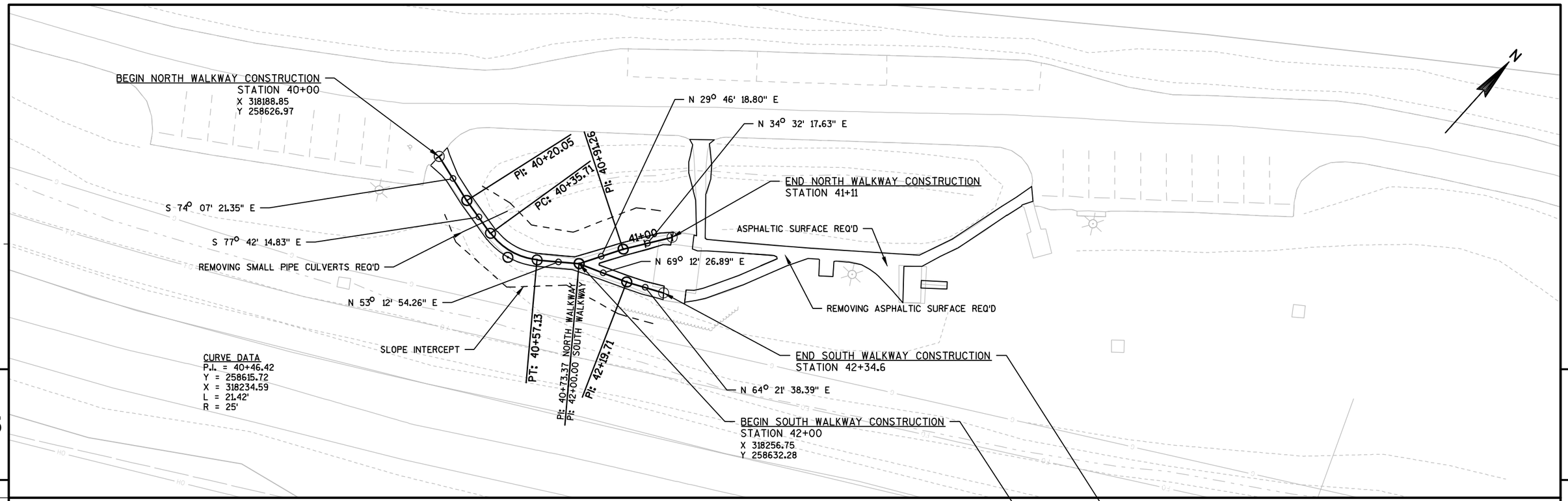
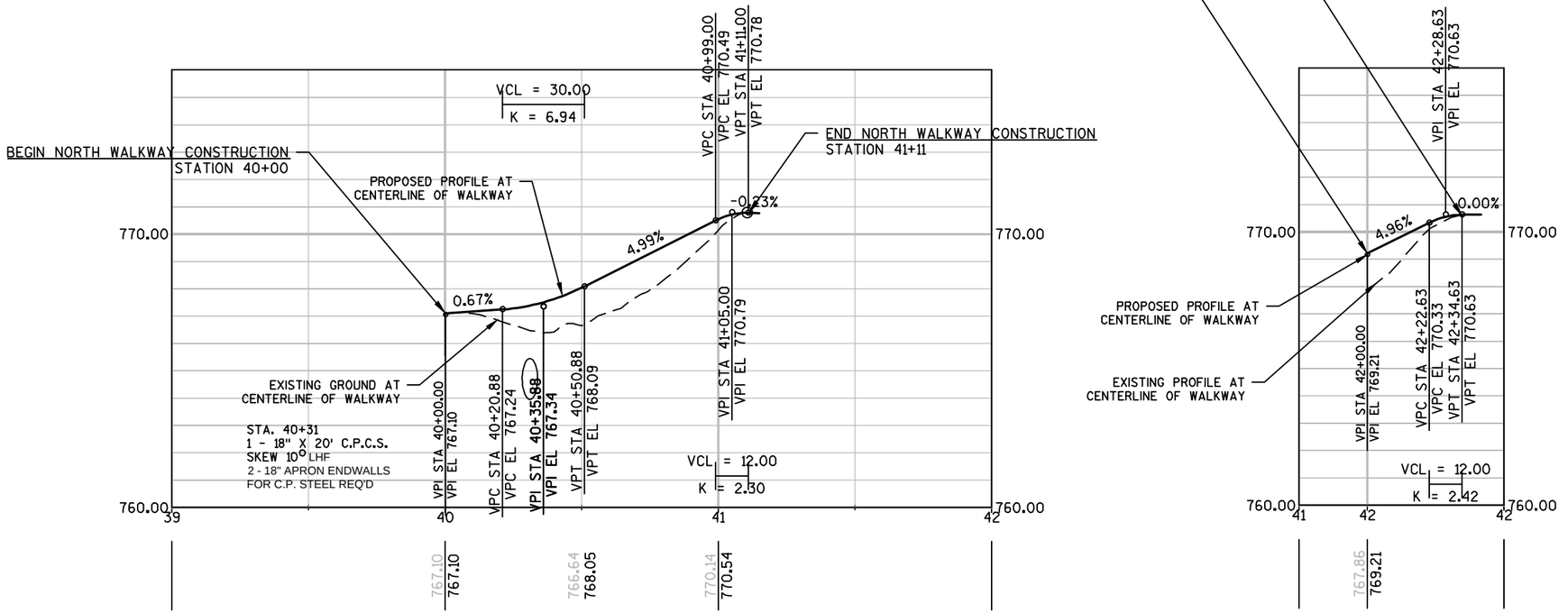
BARRIER SYSTEM ITEMS

CATEGORY	STATION TO STATION	LOCATION	GUARDRAIL MOWSTRIP ASPHALT 614.0396 SY	MGS GUARDRAIL 3 614.2300 LF	MGS GUARDRAIL 3 K 614.2330 LF	MGS THRIE BEAM TRANSITION 614.2500 LF	MGS GUARDRAIL TERMINAL EAT 614.2610 EACH
0010	189+31 - 189+85	RIGHT					1
0010	189+54 - 190+07	LEFT					1
0010	189+85 - 190+22	RIGHT		37.5			
0010	190+07 - 190+46	LEFT				39.4	
0010	190+22 - 190+61	RIGHT				39.4	
0010	190+86 - 191+26	LEFT				39.4	
0010	191+02 - 191+42	RIGHT				39.4	
0010	191+26 - 191+63	LEFT		37.5			
0010	191+42 - 191+95	RIGHT					1
0010	191+63 - 192+16	LEFT					1
0010	312+62 - 313+15	RIGHT					1
0010	312+78 - 313+31	LEFT					1
0010	313+15 - 322+78	RIGHT			962.5		
0010	313+31 - 322+94	LEFT			962.5		
0010	314+50 - 315+10	RIGHT	30				
0010	315+20 - 315+80	LEFT	30				
0010	322+78 - 323+31	RIGHT					1
0010	322+94 - 323+47	LEFT					1
		TOTAL 0010	60	75.0	1,925.0	157.6	8

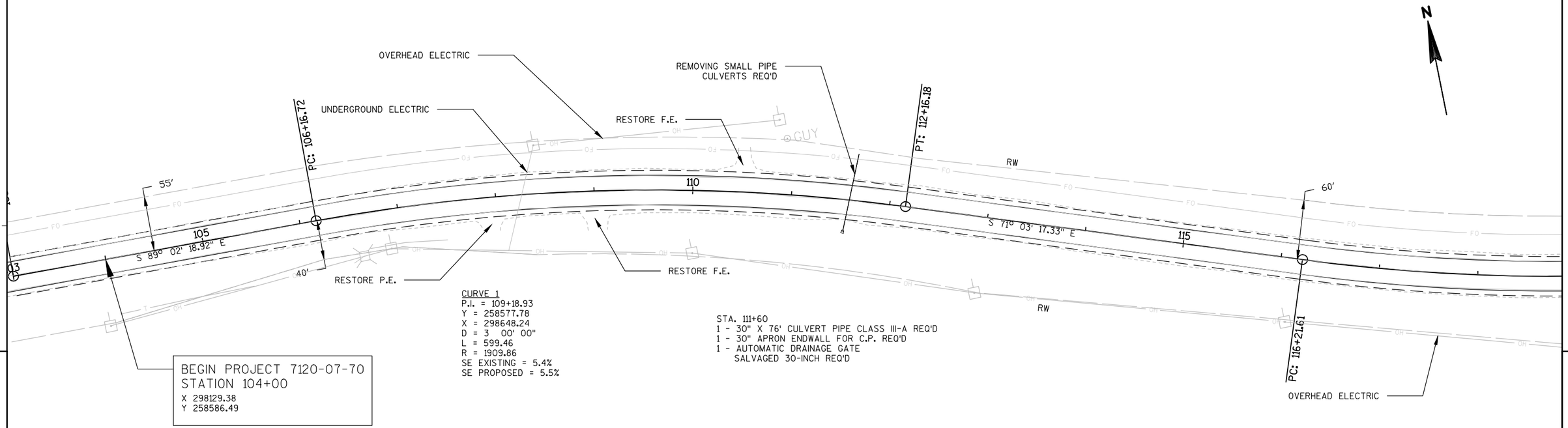
LOCATING NO-PASSING ZONES

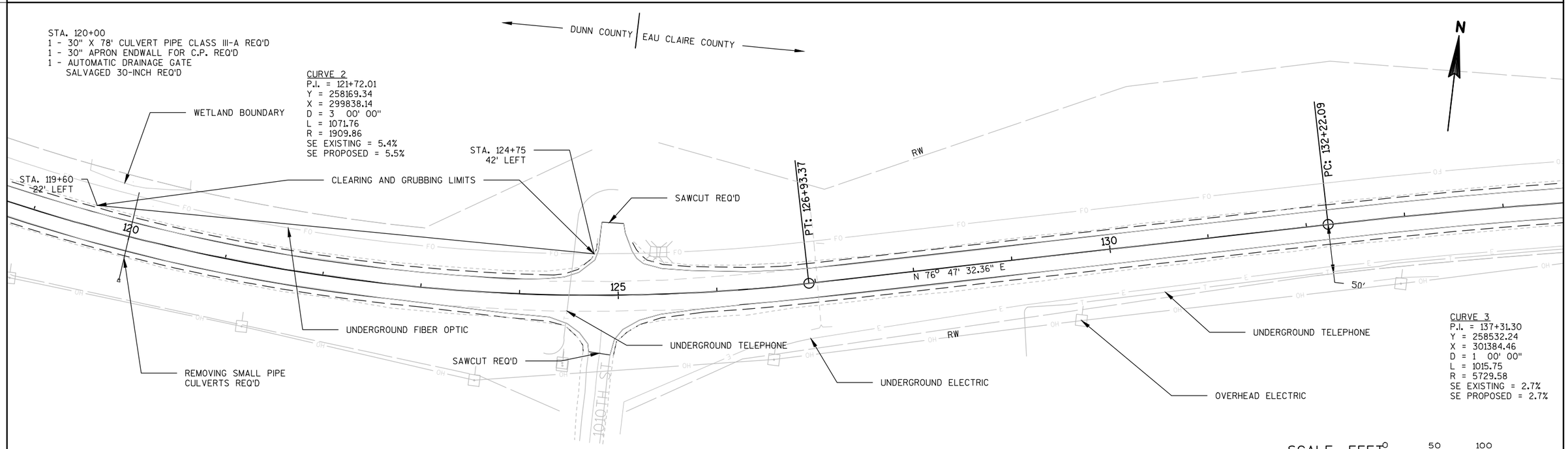
CATEGORY	STATION TO STATION	LOCATION	648.0100 MI
0010	104+00 - 338+53	PROJECT	4.39
		TOTAL 0010	4.39





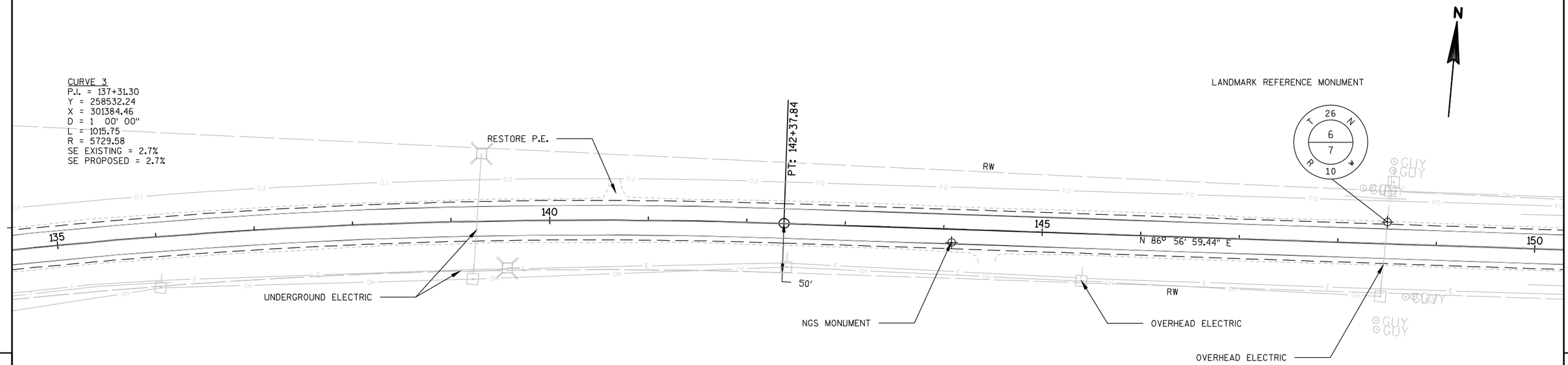
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN AND PROFILE: WAYSIDE WALKWAY	SHEET 37	E



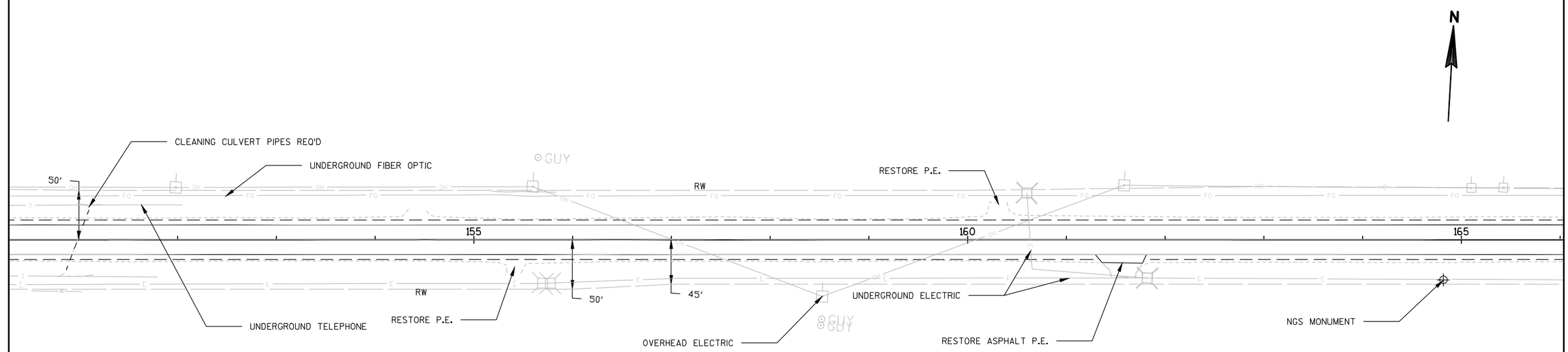


PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 38	E

CURVE 3
P.I. = 137+31.30
Y = 258532.24
X = 301384.46
D = 1 00' 00"
L = 1015.75
R = 5729.58
SE EXISTING = 2.7%
SE PROPOSED = 2.7%



SCALE, FEET 0 50 100

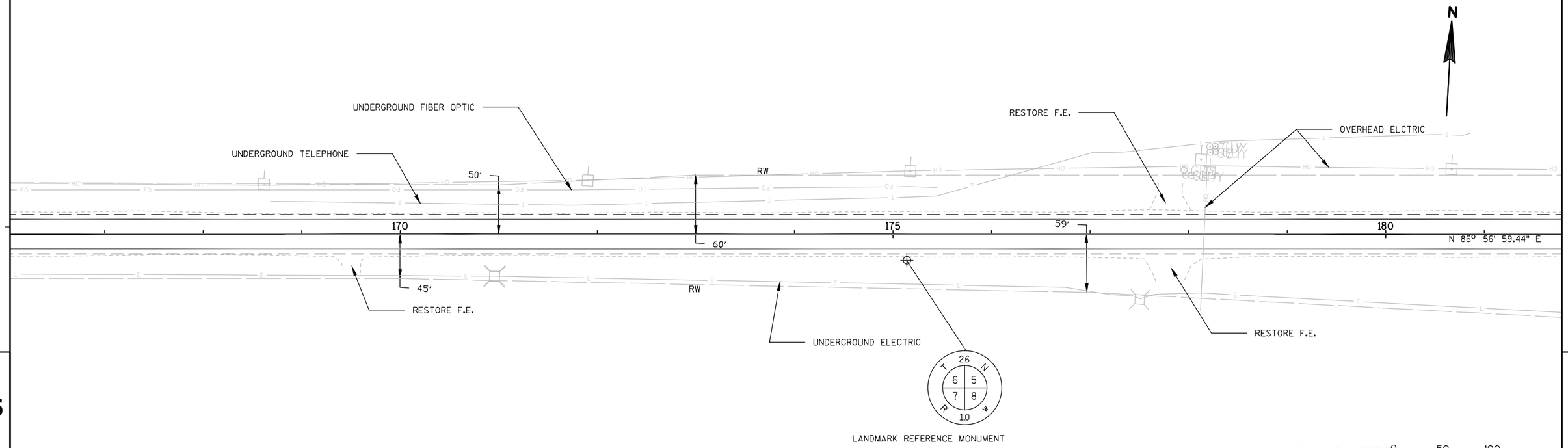


SCALE, FEET 0 50 100

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 39	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\050201_PN.DWG PLOT DATE : 4/15/2015 7:46 AM PLOT BY : KRUG, GARY W PLOT NAME : ---------- PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

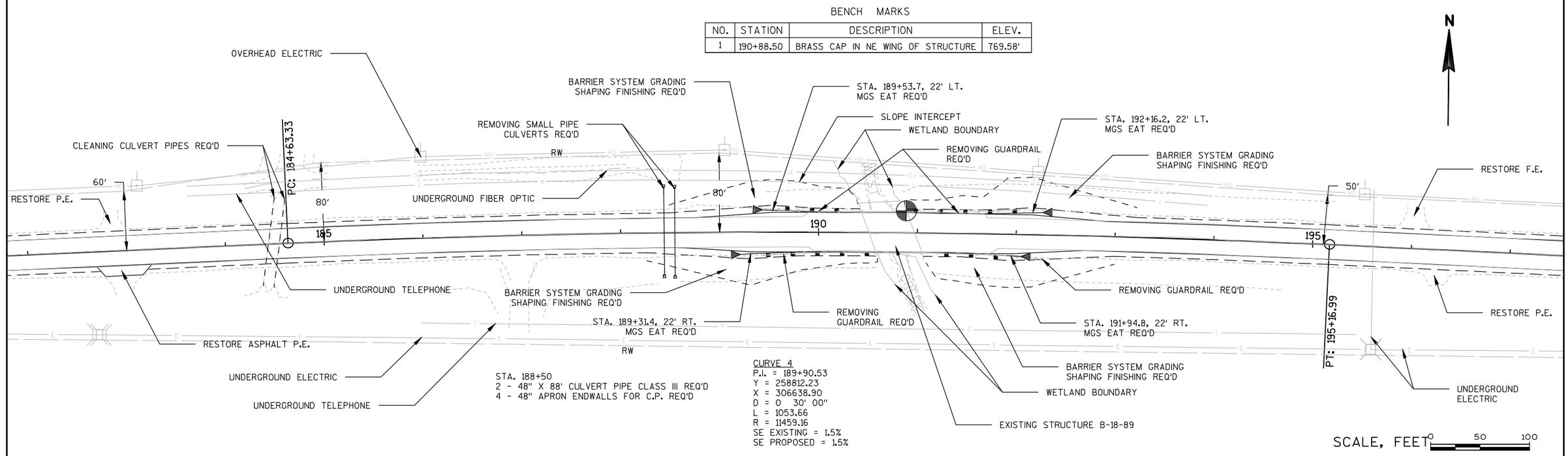


5

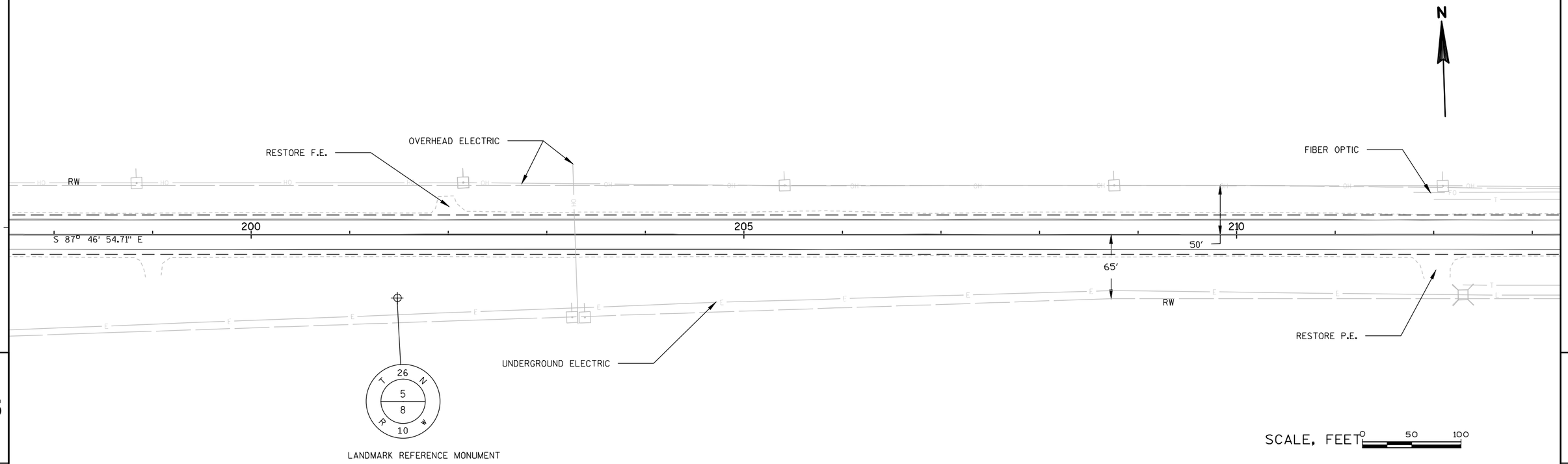
5

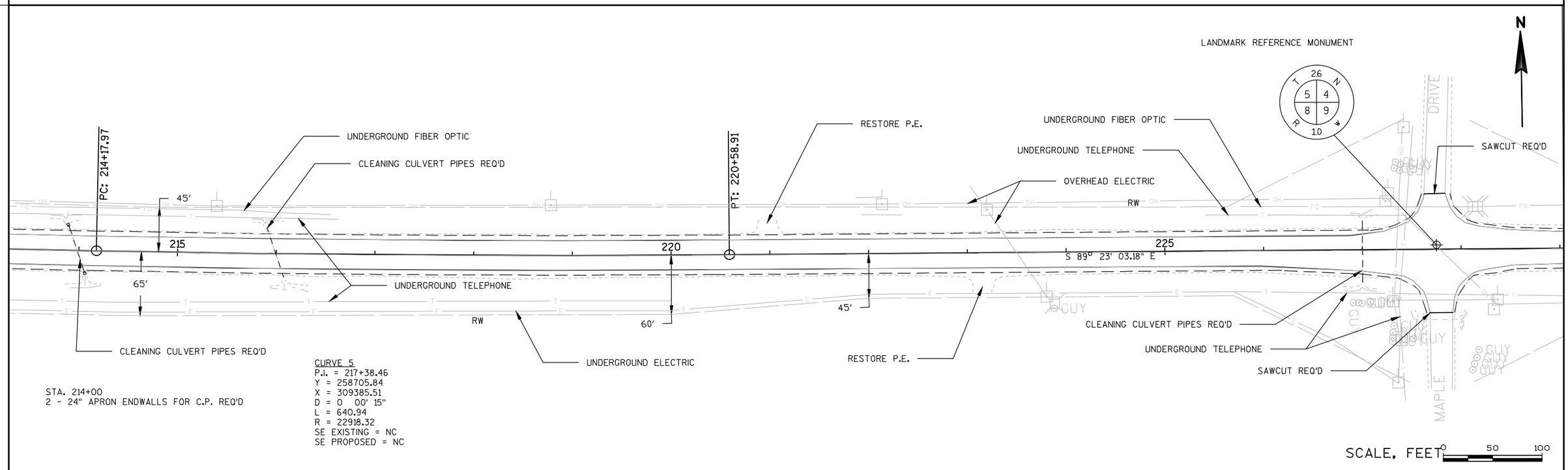
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
1	190+88.50	BRASS CAP IN NE WING OF STRUCTURE	769.58'

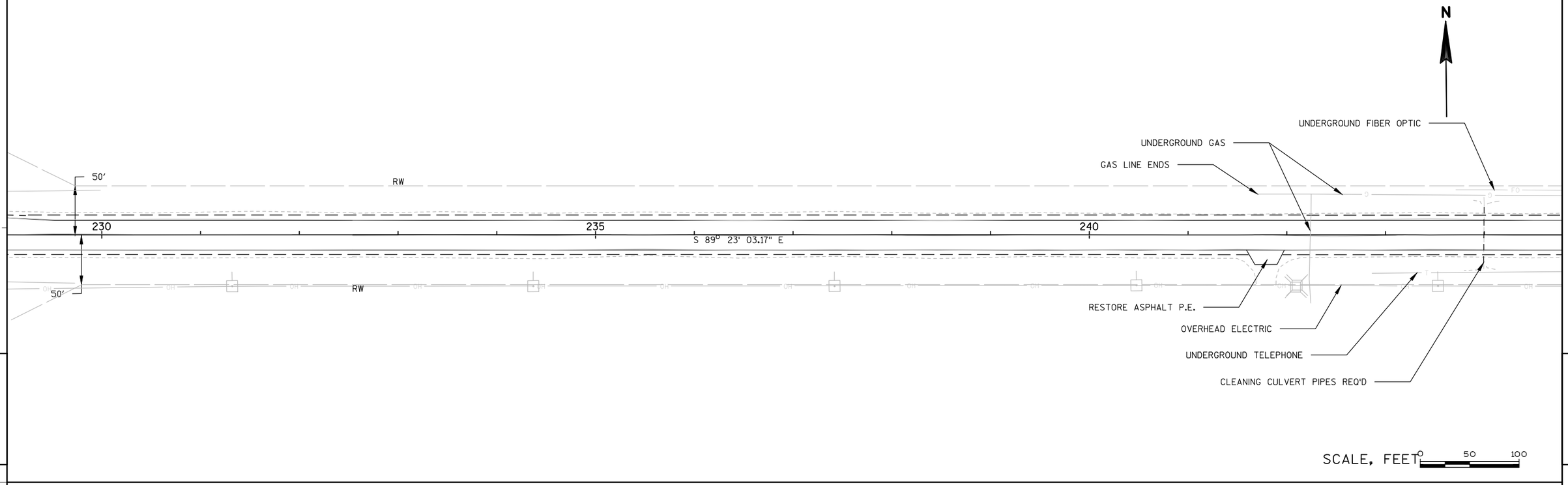


PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 40	E



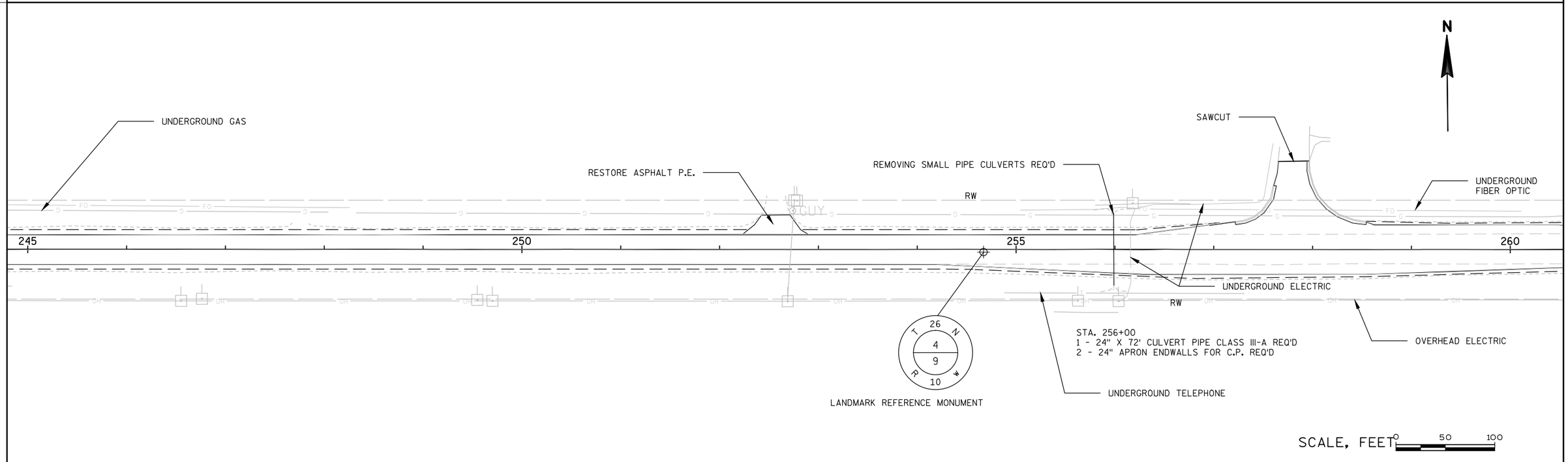


PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 41 E

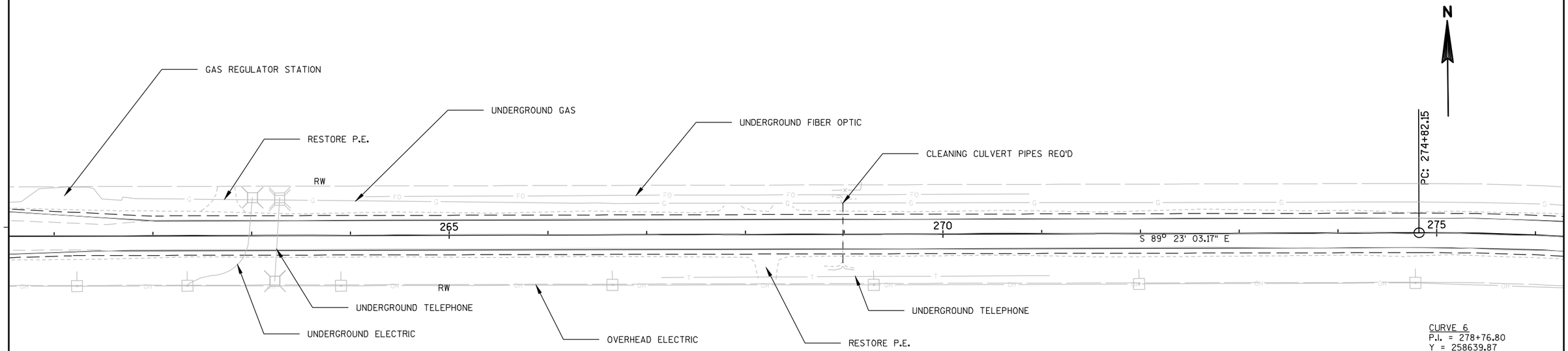


5

5

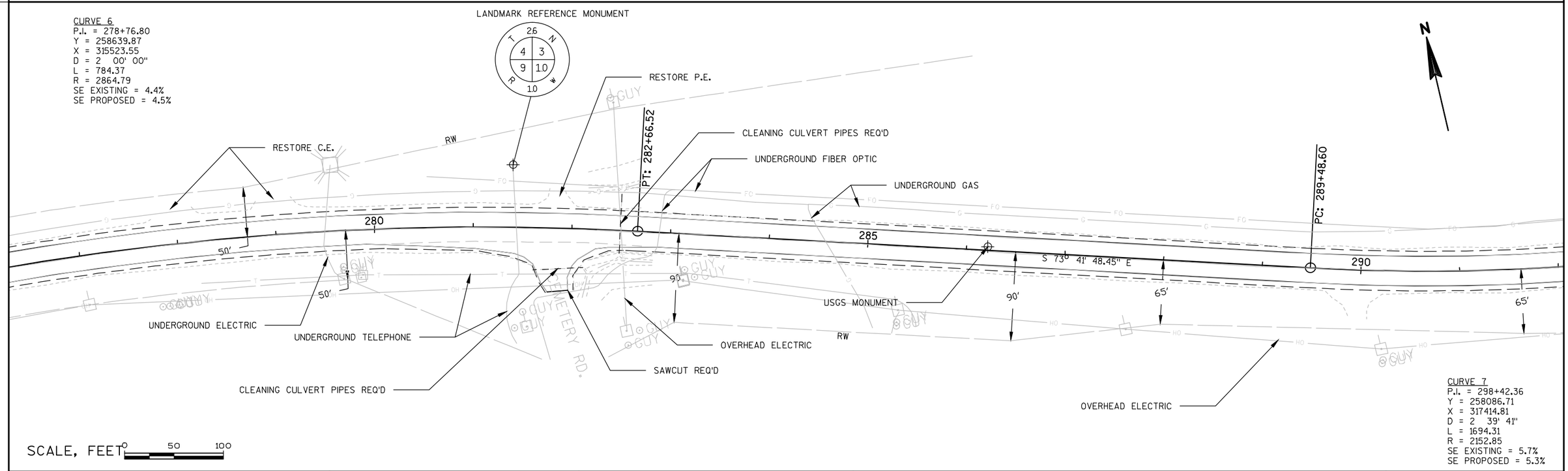


PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 42	E



CURVE 6
P.I. = 278+76.80
Y = 258639.87
X = 315523.55
D = 2 00' 00"
L = 784.37
R = 2864.79
SE EXISTING = 4.4%
SE PROPOSED = 4.5%

SCALE, FEET 0 50 100



CURVE 7
P.I. = 298+42.36
Y = 258086.71
X = 317414.81
D = 2 39' 41"
L = 1694.31
R = 2152.85
SE EXISTING = 5.7%
SE PROPOSED = 5.3%

SCALE, FEET 0 50 100

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 43	E

CURVE 7
P.I. = 298+41.15
Y = 258087.05
X = 317413.64
D = 2 39' 41"
L = 1692.22
R = 2152.85
SE EXISTING = 5.7%
SE PROPOSED = 5.3%

UNDERGROUND TELEPHONE
UNDERGROUND FIBER OPTIC
UNDERGROUND GAS
OVERHEAD ELECTRIC
NOTE: SEE WAYSIDE CONSTRUCTION DETAILS
PT: 306+42.90
STA BACK = 306+45.36
STA AHEAD = 306+67.83
RW
65'
50'
50'
295
300
305
GUY

SCALE, FEET 0 50 100

BENCH MARKS

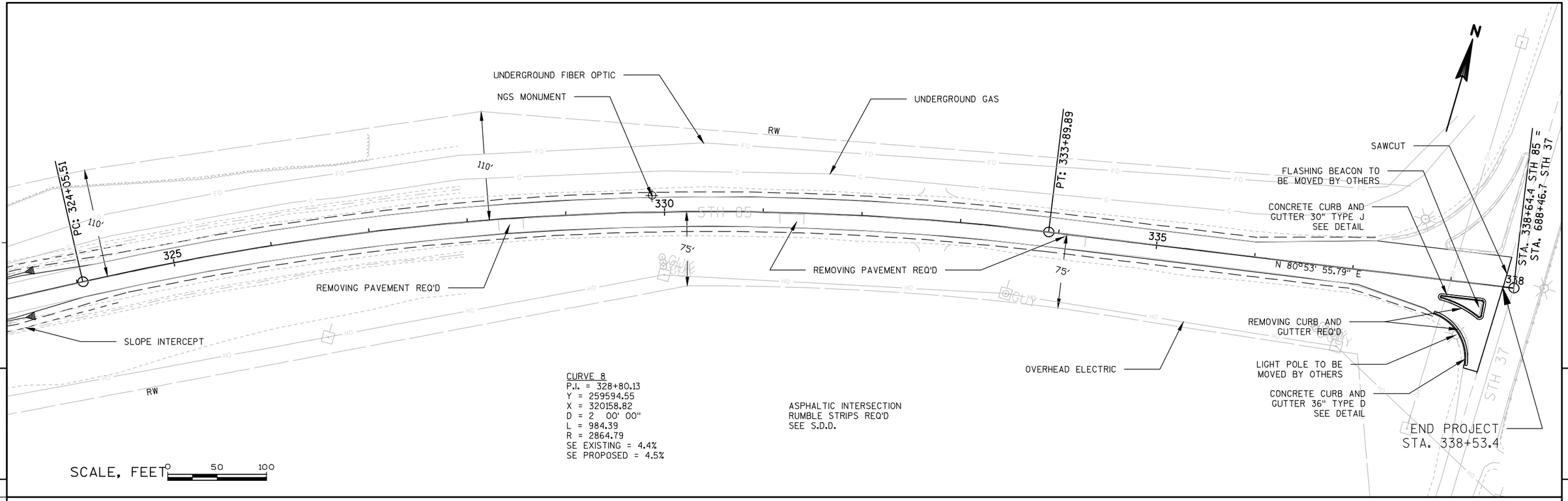
NO.	STATION	DESCRIPTION	ELEV.
2	314+94.97	BRASS CAP IN SE WING OF STRUCTURE	769.50'

NGS MONUMENT
LANDMARK REFERENCE MONUMENT
T 26 N
3
10
R 10 W
NOTE: SEE WAYSIDE CONSTRUCTION DETAILS
N 61° 12' 39.95" E
UNDERGROUND GAS
STA. 312+78, 22' LT.
MGS EAT REQ'D
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D
REMOVING GUARDRAIL REQ'D
MGS GUARDRAIL 3 K REQ'D
GUARDRAIL MOW STRIP ASPHALT REQ'D
UNDERGROUND FIBER OPTIC
SLOPE INTERCEPT
STA. 323+46.7, 22' LT.
MGS EAT REQ'D
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D
RESTORE P.E.
UNDERGROUND ELECTRIC
SLOPE INTERCEPT
STA. 312+62.3, 22' RT.
MGS EAT REQ'D
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D
OVERHEAD ELECTRIC
WETLAND BOUNDARY
MGS GUARDRAIL 3 K REQ'D
REMOVING GUARDRAIL REQ'D
BARRIER SYSTEM GRADING SHAPING FINISHING REQ'D
STA. 323+31, 22' RT.
MGS EAT REQ'D
OVERHEAD ELECTRIC
RW
60'
60'
85'
40'
110'
310
315
320
CHIPPEWA RIVER
GUY

SCALE, FEET 0 50 100

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 44	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\050201_PN.DWG PLOT DATE : 4/15/2015 7:49 AM PLOT BY : KRUG, GARY W PLOT NAME : ---------- PLOT SCALE : 1 IN:100 FT



CURVE 8
P.I. = 328+80.13
Y = 259594.55
X = 320158.82
D = 2 00' 00"
L = 984.39
R = 2864.79
SE EXISTING = 4.4%
SE PROPOSED = 4.5%

ASPHALTIC INTERSECTION
RUMBLE STRIPS REQ'D
SEE S.D.D.

5

5

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET MAINLINE	SHEET 45	E

CURVE DATA
P.I. = 11+09.21
Y = 258514.19
X = 317938.58
D = 110 11' 03"
L = 78.08'
R = 52'

CURVE DATA
P.I. = 13+05.26
Y = 258607.30
X = 318132.38
D = 11 27' 33"
L = 123.45'
R = 500'

CURVE DATA
P.I. = 17+15.96
Y = 258870.64
X = 318448.38
D = 57 17' 45"
L = 16.33'
R = 100'

CHIPPEWA RIVER

N

PC: 10+60.68

PT: 11+38.77

PC: 12+43.21

PT: 13+66.66

PC: 17+07.78

PT: 17+24.11

PC: 17+88.62

11+00

12+00

13+00

14+00

15+00

16+00

17+00

N 64 20' 22.15" E

N 50 11' 35.72" E

N 59 32' 55.37" E

EDGE OF PAVEMENT

GRUBBING REQ'D

GRUBBING REQ'D

GRUBBING REQ'D

REMOVING PARKING BUMPER
CONCRETE CURB PRECAST REQ'D

REMOVING PARKING BUMPER
CONCRETE CURB PRECAST REQ'D

BEGIN WAYSIDE CONSTRUCTION
STATION 10+52.6
X 317959.49
Y 258461.65

10+00

N 21 41' 48.77" W

305

STH 85

5

5

CURVE DATA
P.I. = 18+43.91
Y = 258935.50
X = 318558.71
D = 81 51' 04"
L = 93.60'
R = 70'

CHIPPEWA RIVER

N

PT: 18+82.22

EDGE OF ASPHALTIC SURFACE

19+00

20+00

20+27

S 43 50' 21.11" E

PC: 17+88.62

18+00

PT: 17+24.11

PC: 17+07.78

END WAYSIDE CONSTRUCTION
STATION 19+68

STH 85

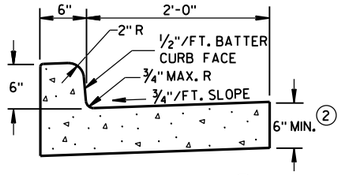
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	PLAN SHEET WAYSIDE	SHEET 46	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\050301_PN.DWG PLOT DATE : 6/29/2015 11:49 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:50 FT

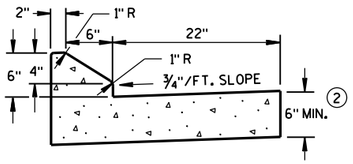
Standard Detail Drawing List

08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E09-06	SILT FENCE
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B28-03	GUARDRAIL MOW STRIP
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-04A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-04J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-07	SIGNING & MARKING FOR TWO LANE BRIDGES
15C07-12A	PAVEMENT MARKING SYMBOLS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

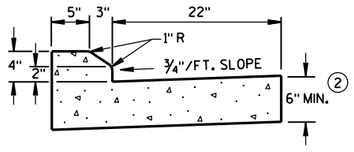
6



TYPES A & D ①

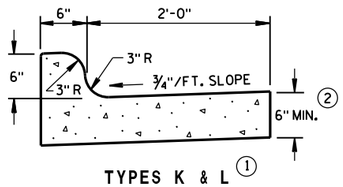


6" SLOPED CURB TYPES G & J ①

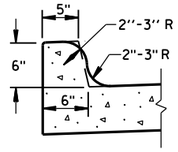


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

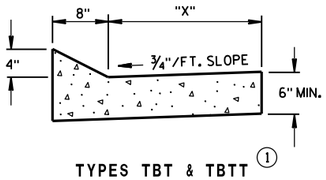


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

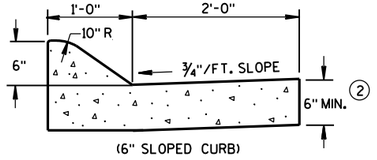
CONCRETE CURB & GUTTER 30"



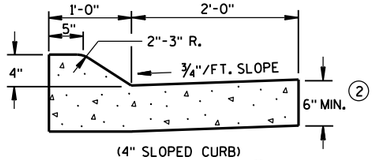
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

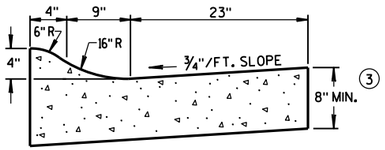


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

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

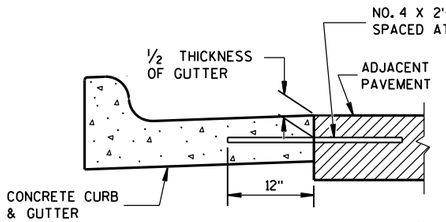
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

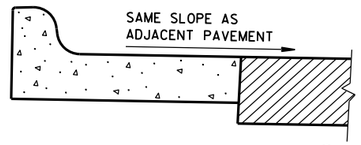
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

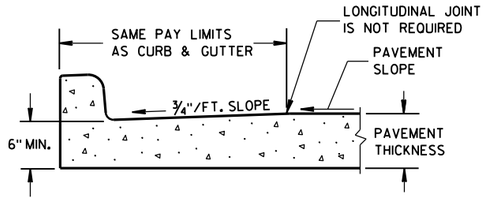
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



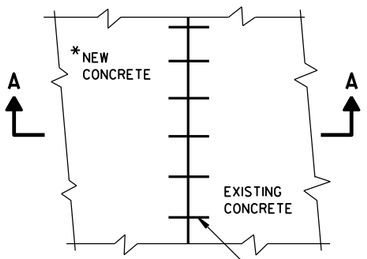
TYPICAL TIE BAR LOCATION ①



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

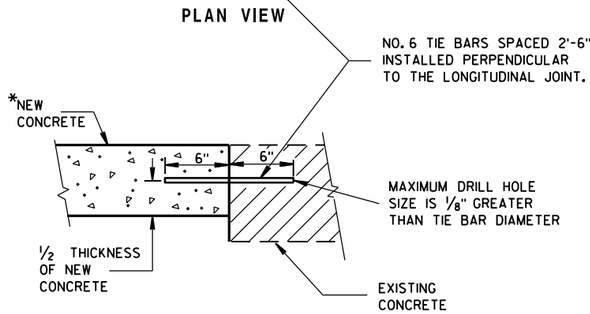


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



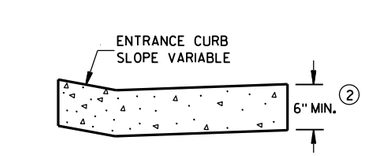
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

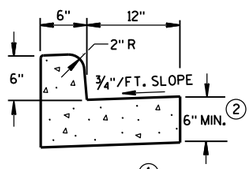


SECTION A-A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

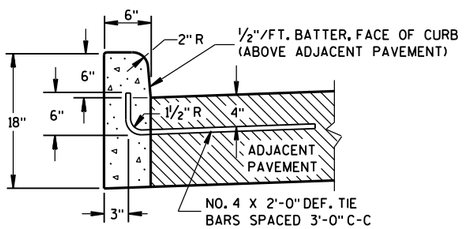


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

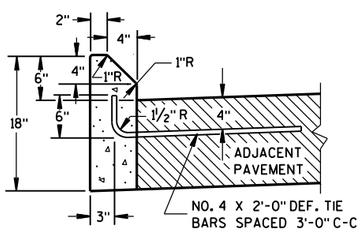


① TYPES A & D

CONCRETE CURB & GUTTER 18"

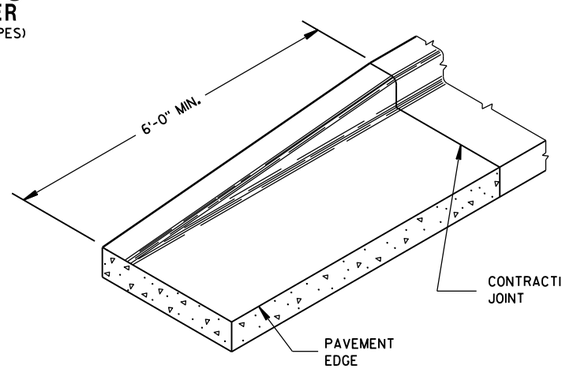


① TYPES A & D



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

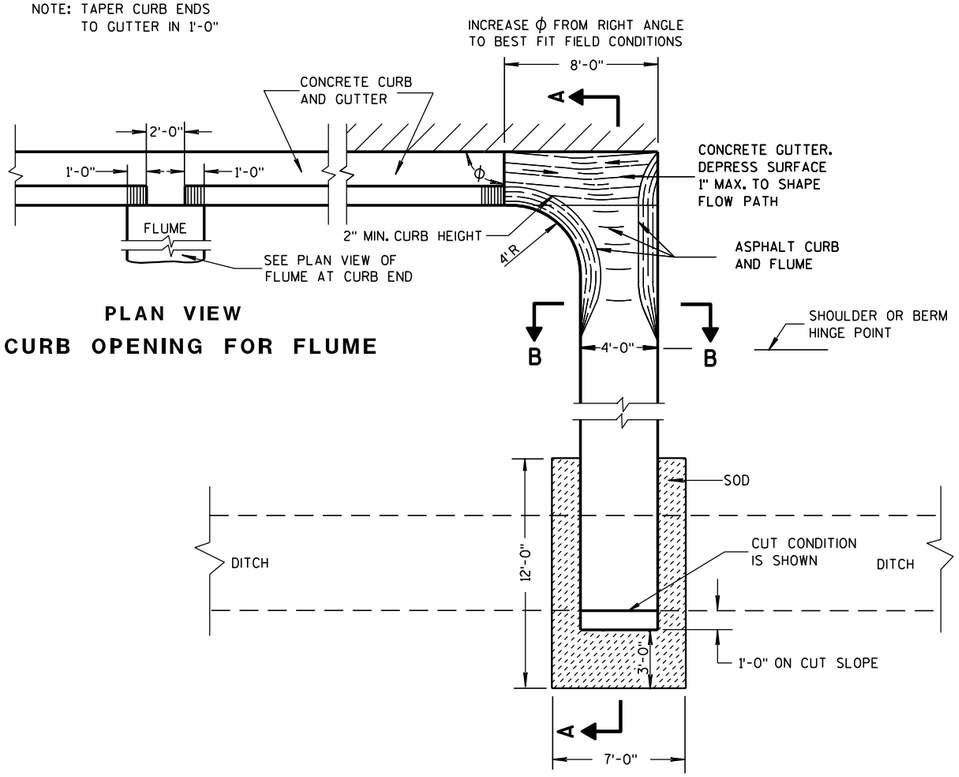
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

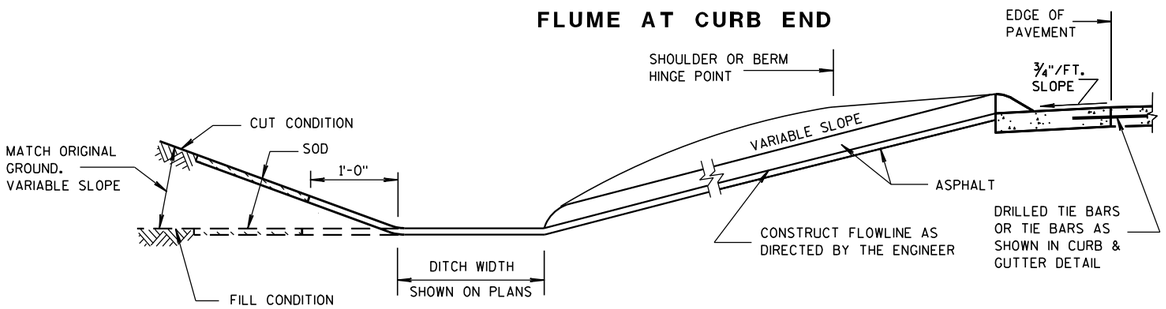
S.D.D. 8 D 1-18

ASPHALTIC FLUME

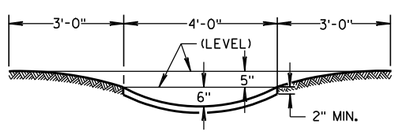


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

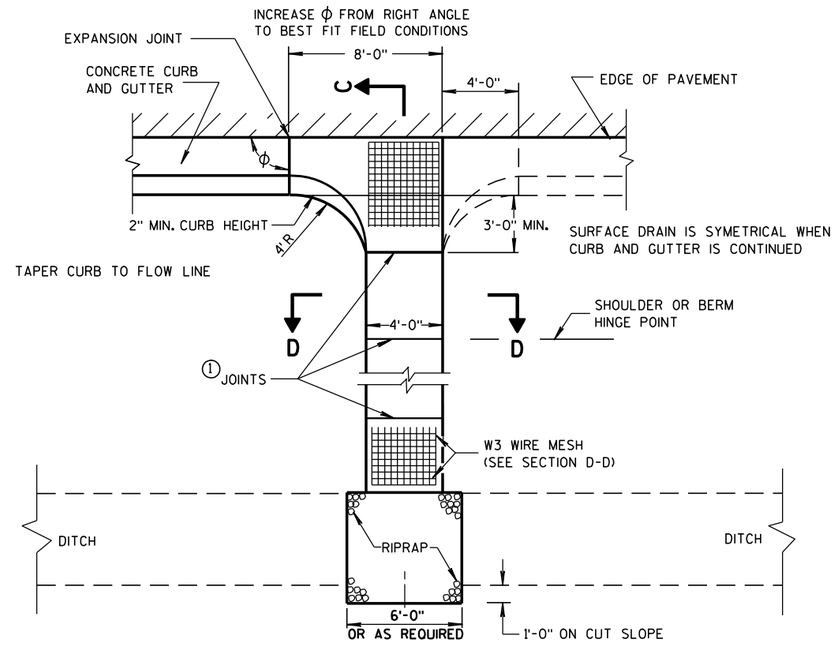
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

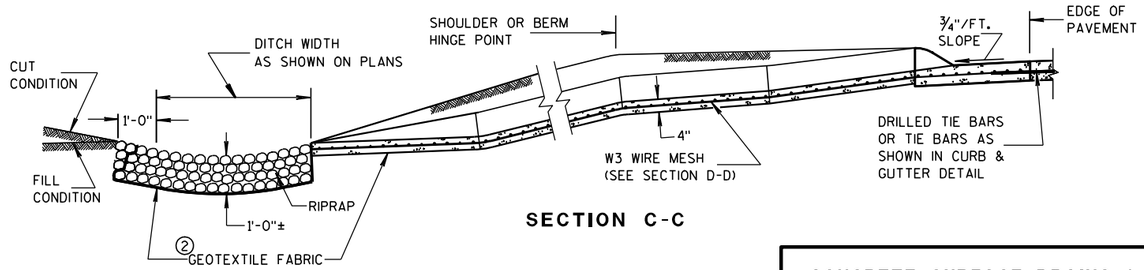
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

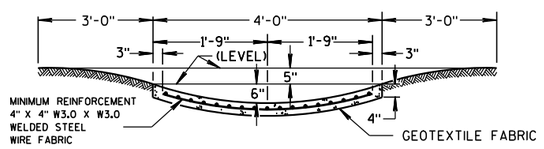
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

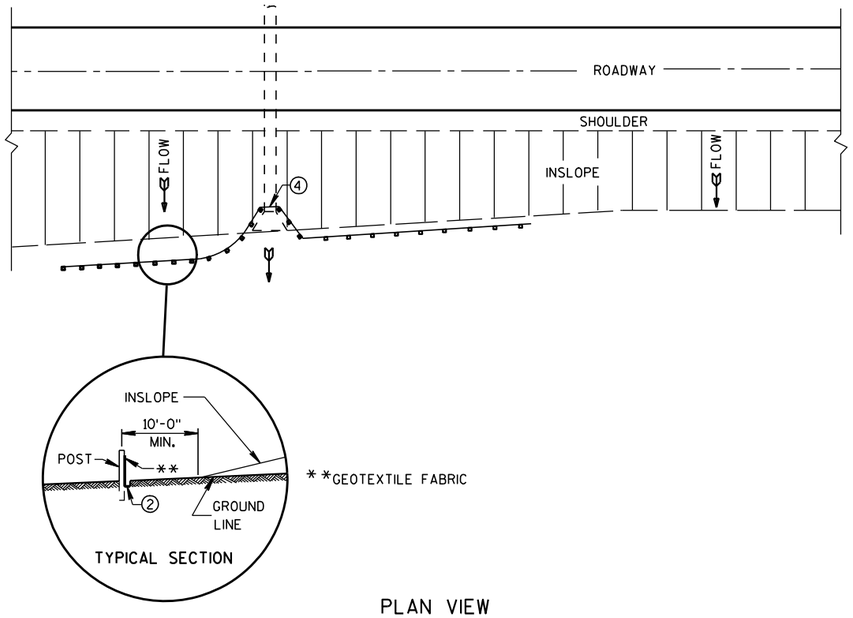
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

S.D.D. 8 D 4-5

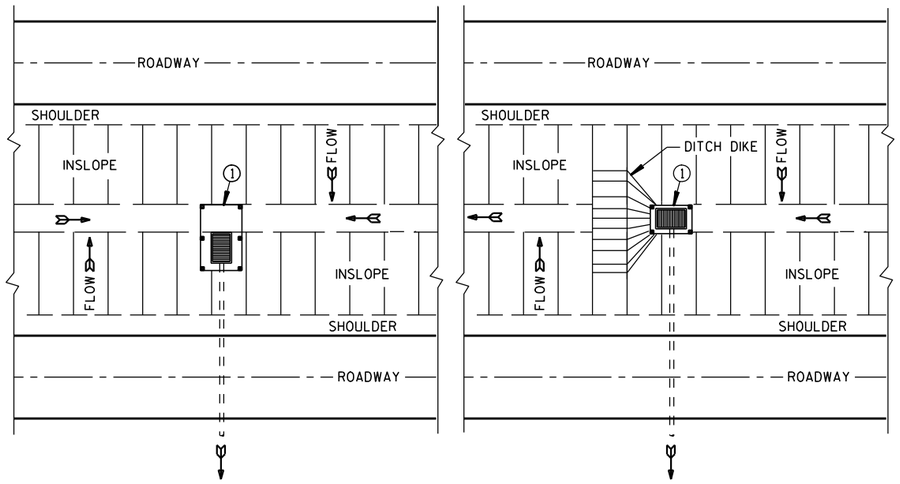
6

S.D.D. 8 D 4-5



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



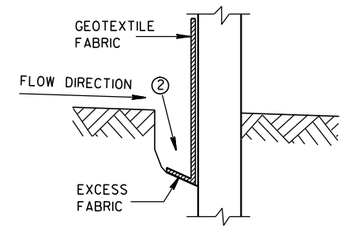
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

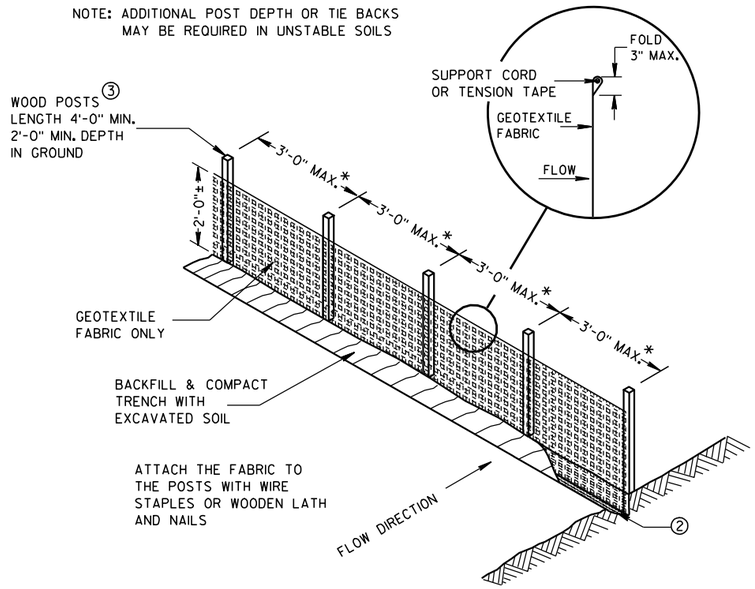
GENERAL NOTES

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

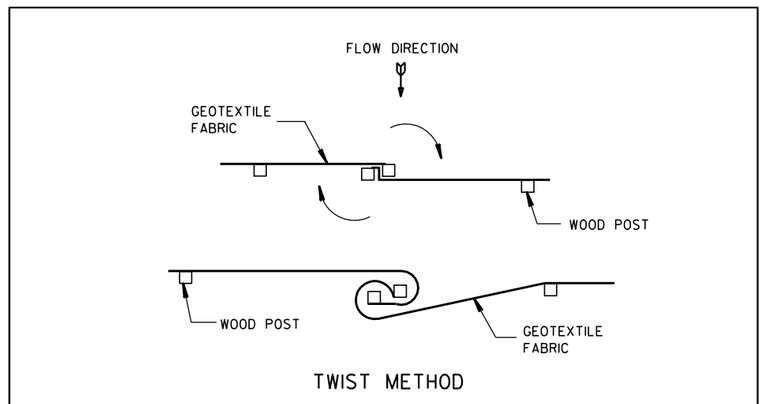
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



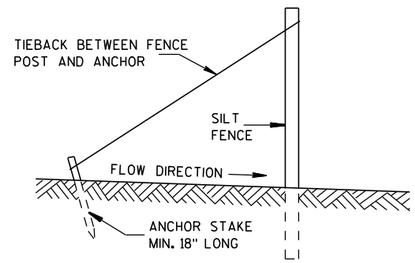
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

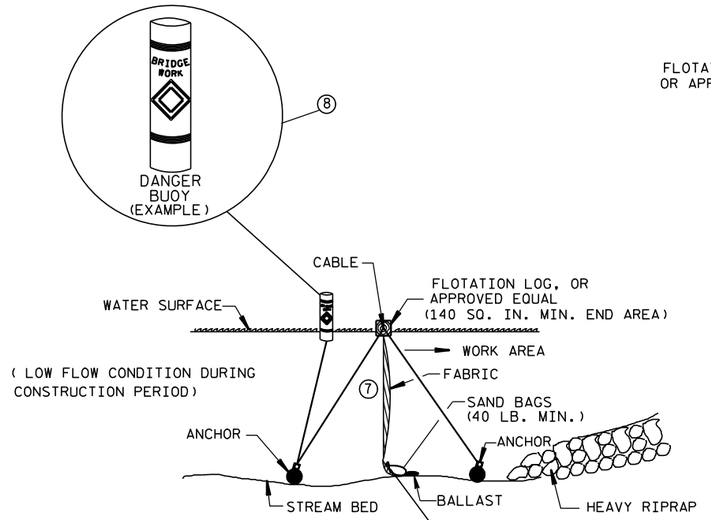
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

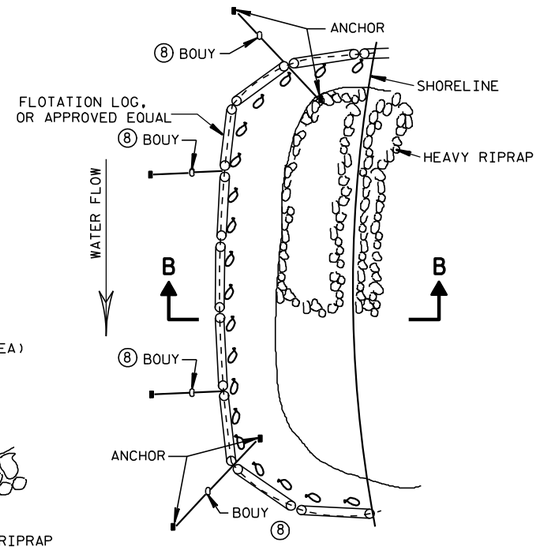
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

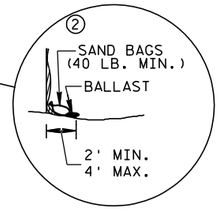
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 9-6

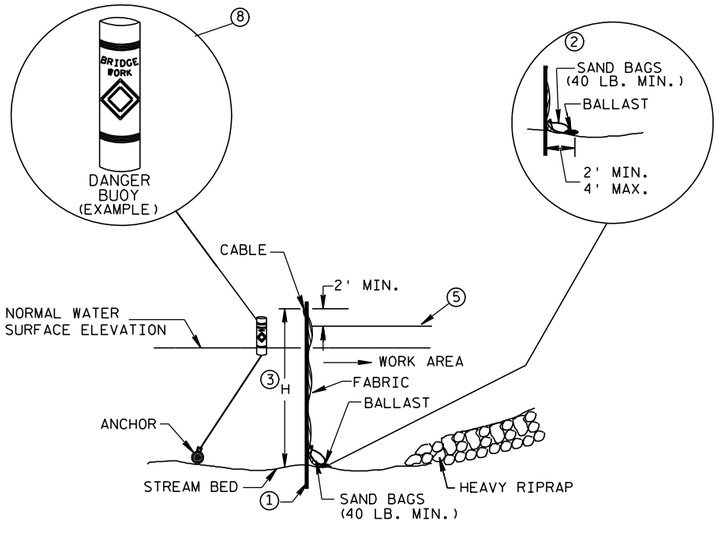


SECTION B-B

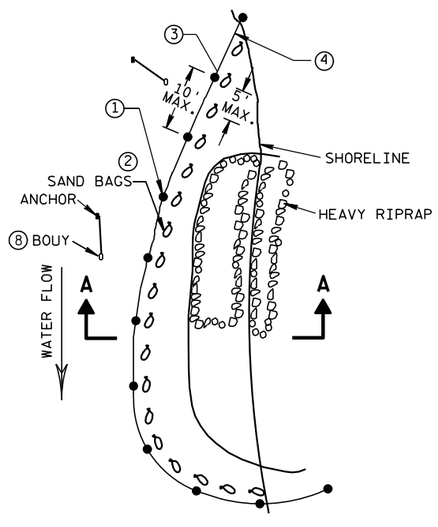




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A-A



PLAN VIEW

TURBIDITY BARRIER STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

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.

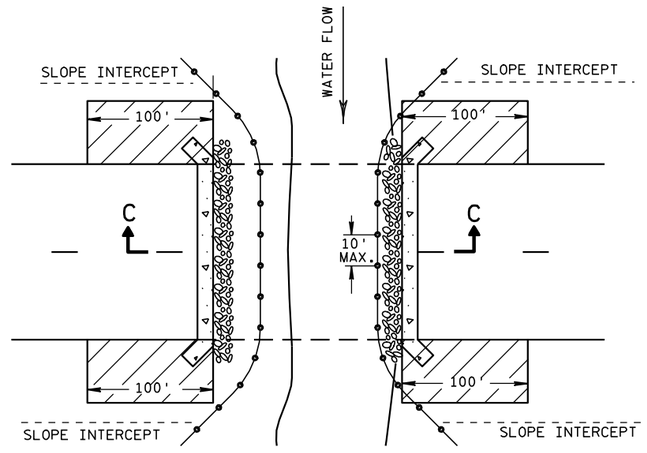
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE 02 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

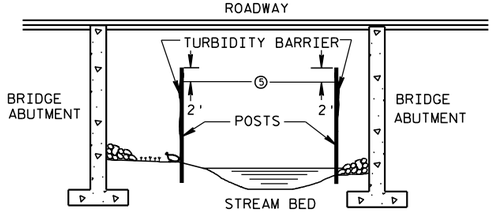
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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.



PLAN VIEW



SECTION C-C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

METAL APRON ENDWALLS

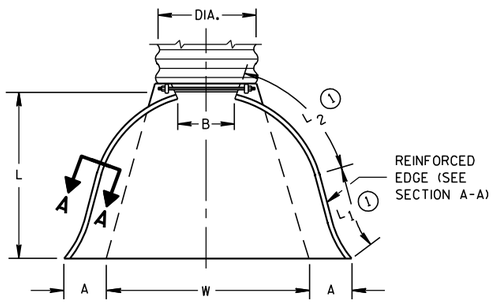
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

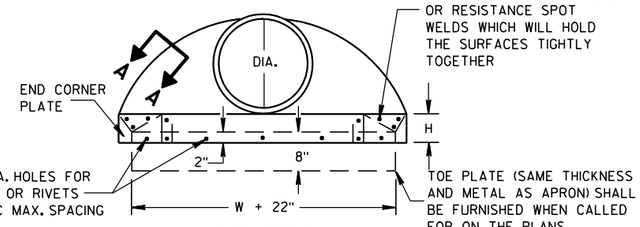
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	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 - ** 35	* 98 1/4 - ** 100	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

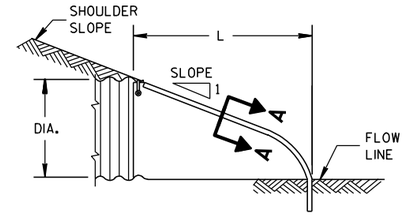
*MINIMUM
**MAXIMUM



PLAN VIEW

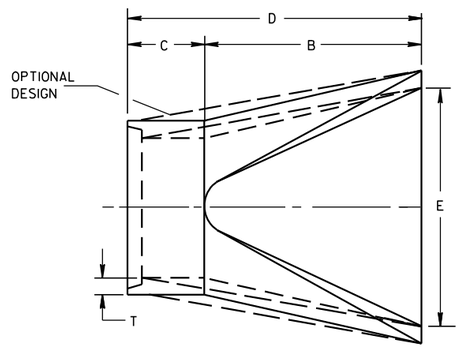


END VIEW

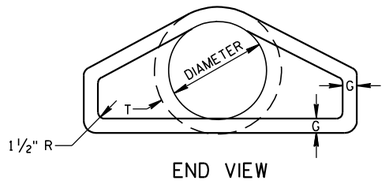


SIDE ELEVATION

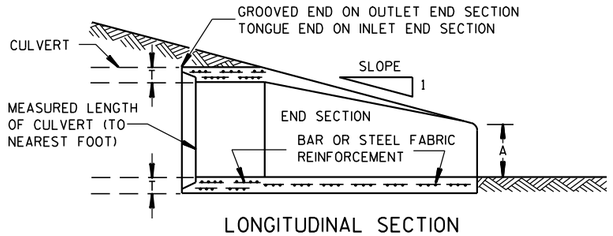
METAL ENDWALLS



PLAN

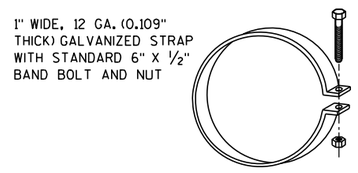


END VIEW



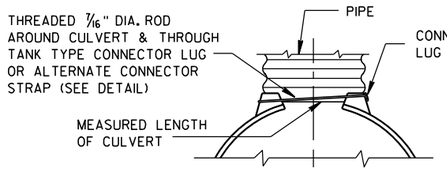
LONGITUDINAL SECTION

CONCRETE ENDWALLS

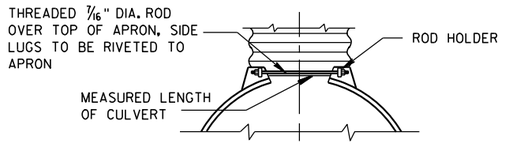


ALTERNATE FOR TYPE 1 CONNECTION

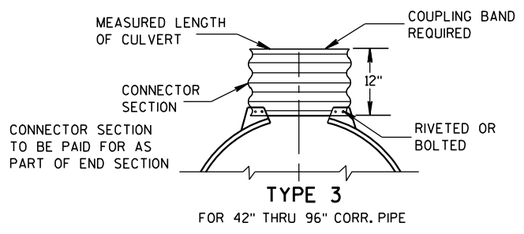
END SECTION CONNECTOR STRAP



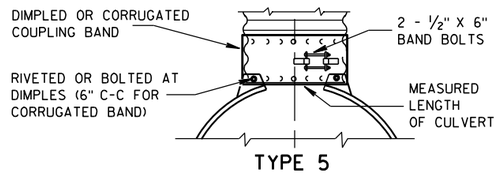
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

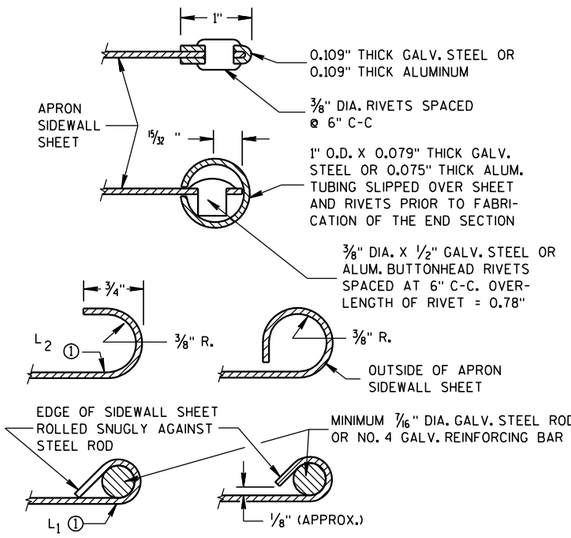
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

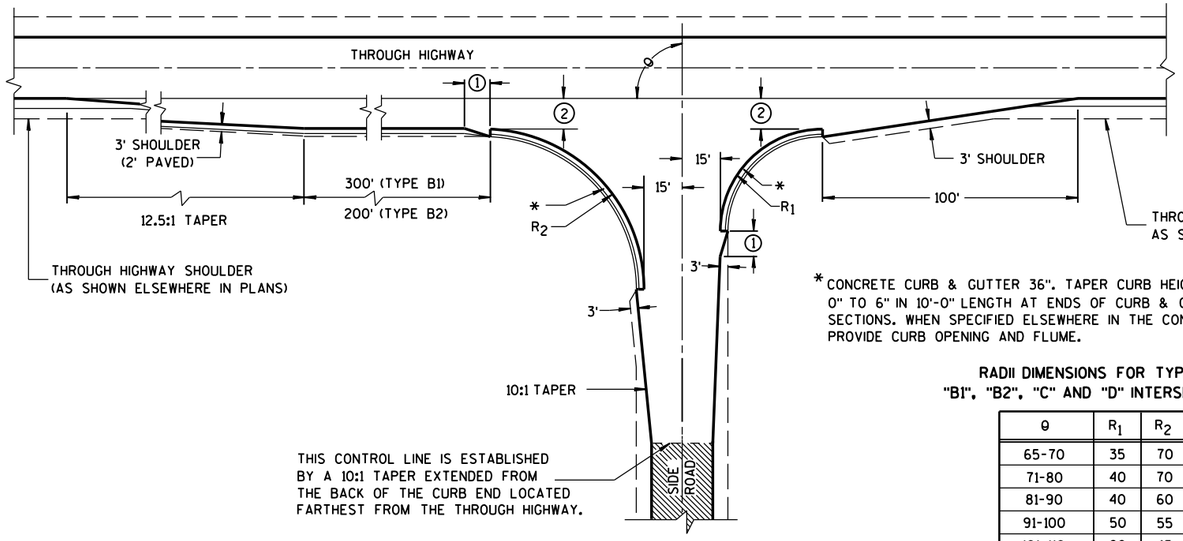
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11

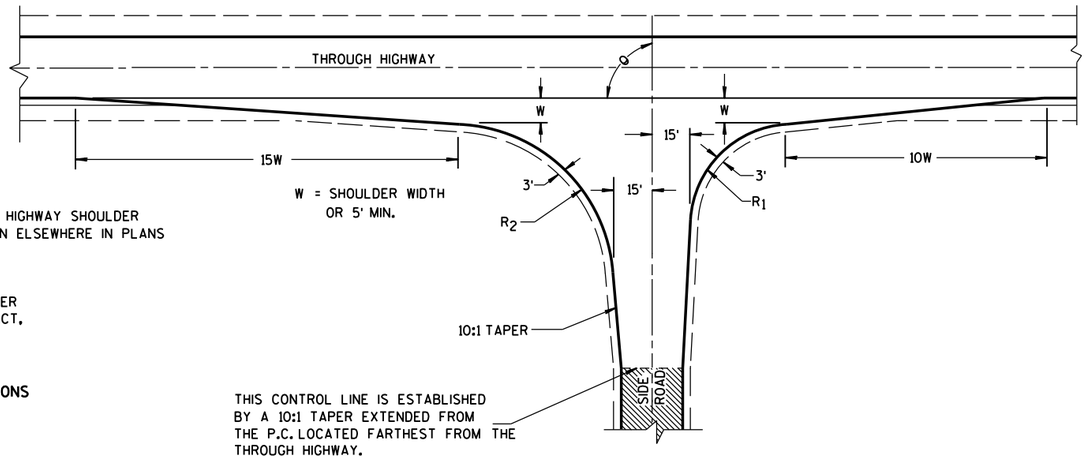


TYPE "B1" AND "B2"

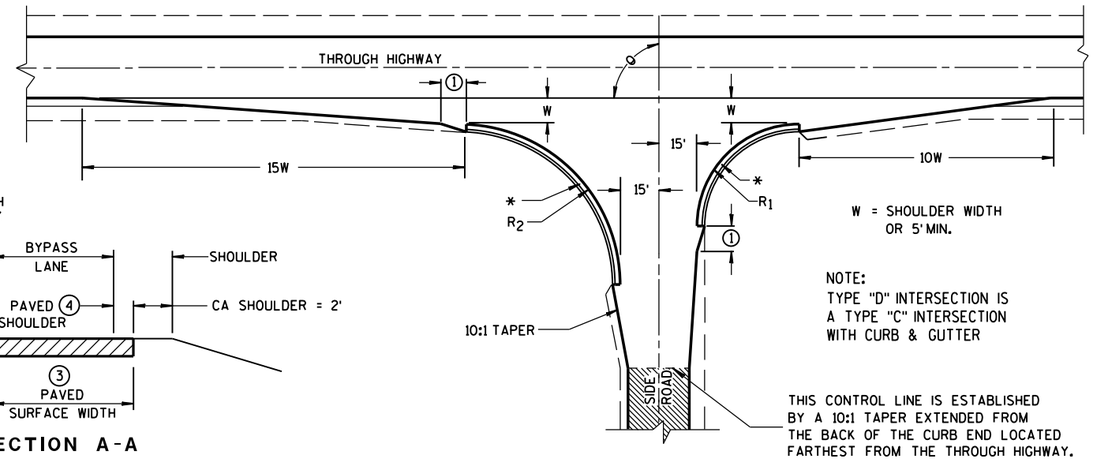
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

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



TYPE "C"



TYPE "D"

GENERAL NOTES

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

SIDE ROAD SURFACING NOTE

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

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

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

EXISTING PAVED SURFACE

BYPASS LANE

(1) 10-FT TYPICAL.

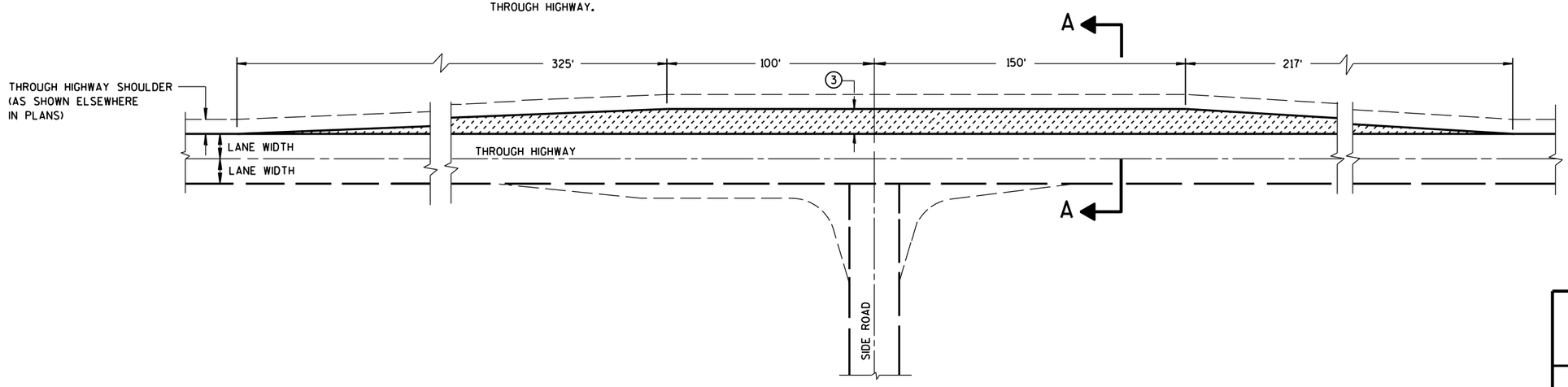
(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

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

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

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

SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



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 TRANSPO

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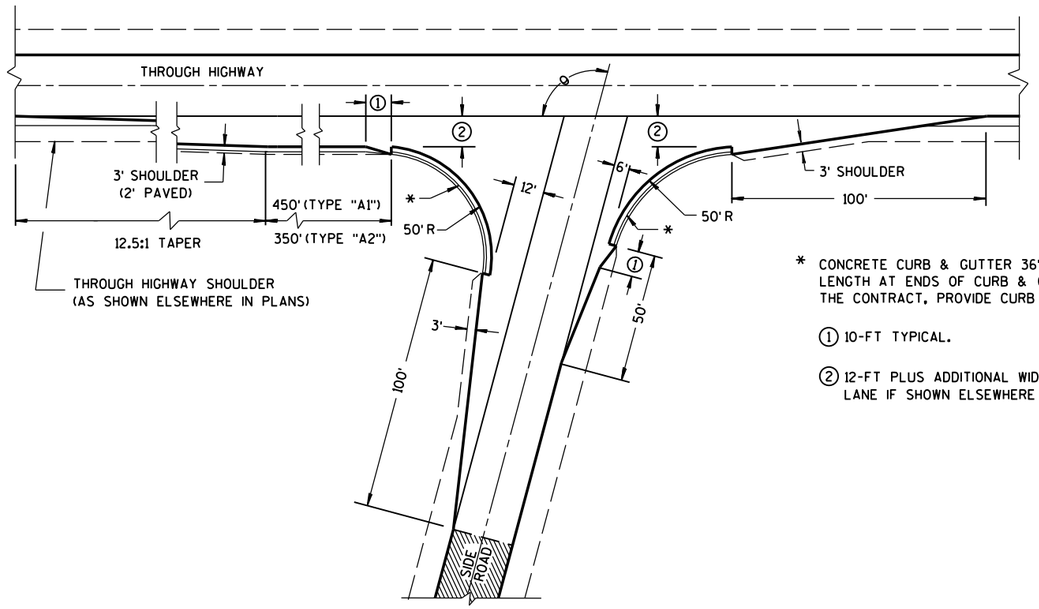
S.D.D. 9 A 1-13a



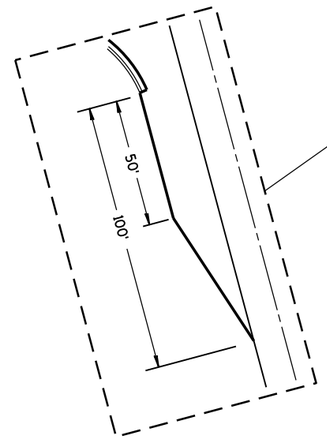
θ = MORE THAN 80°

* 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-FT TYPICAL.

② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE



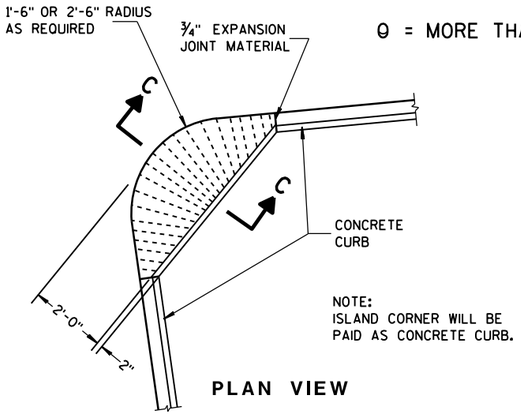
θ = ACUTE ANGLES 80° OR LESS

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)

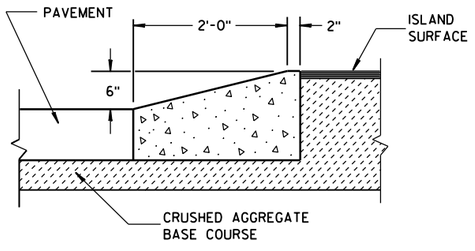
ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4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

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



NOTE:
ISLAND CORNER WILL BE
PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

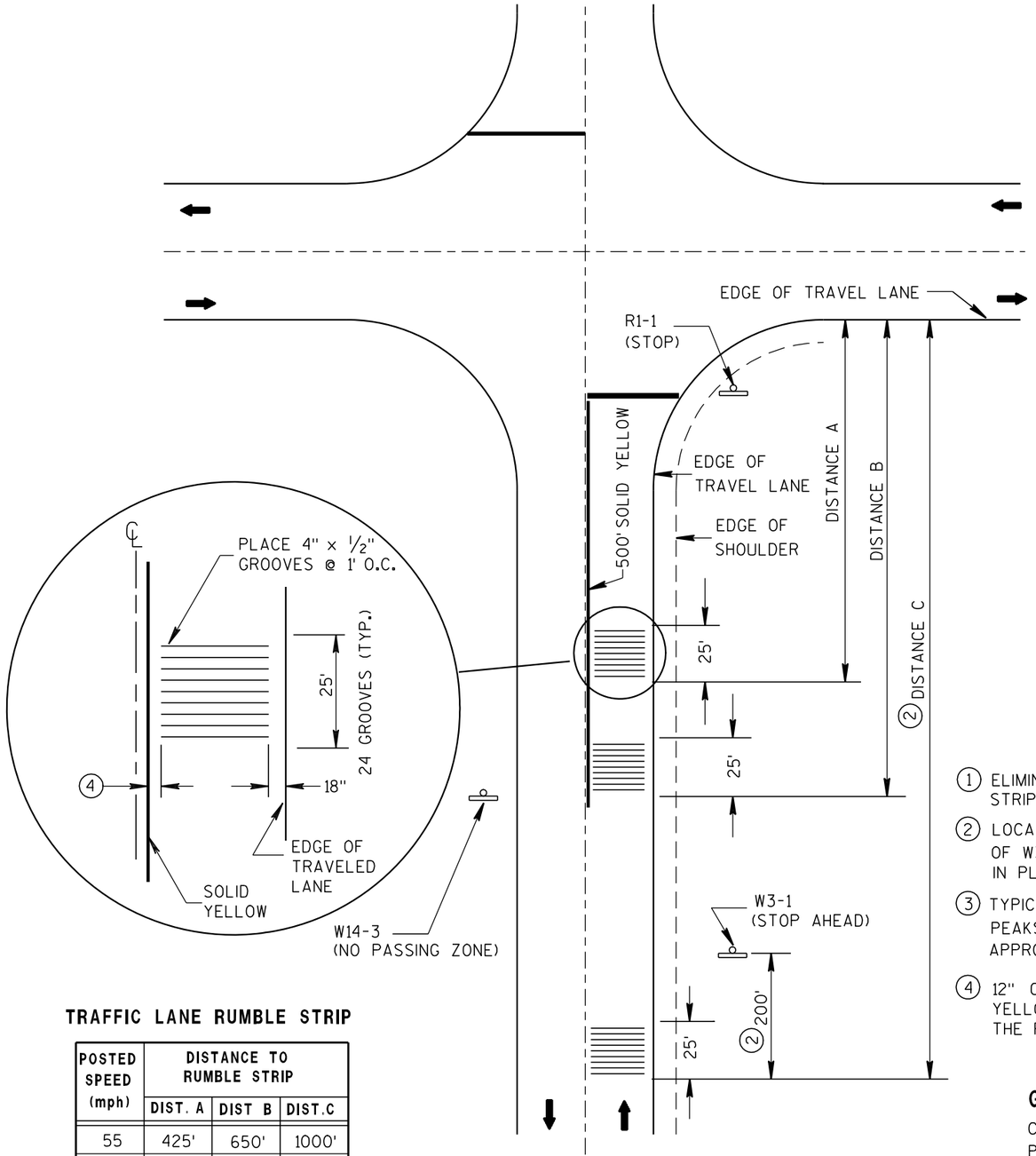
(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 9 A 1-13b



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

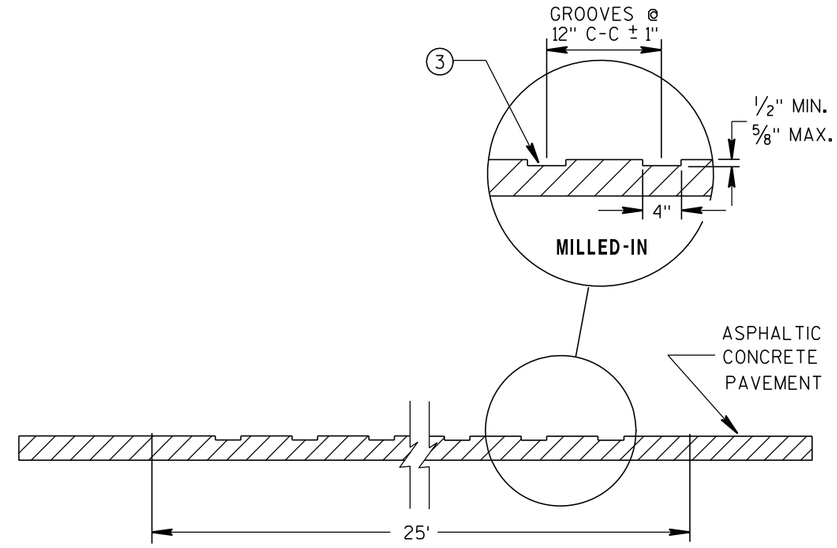
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

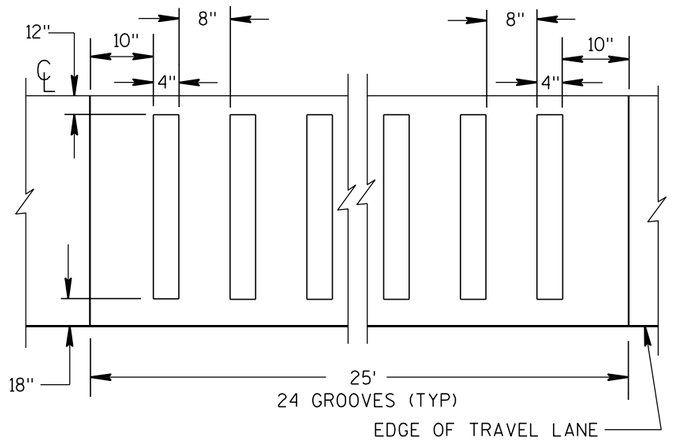
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS I 55
ENGINEER

FHWA

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S.D.D. 13 A 8-1

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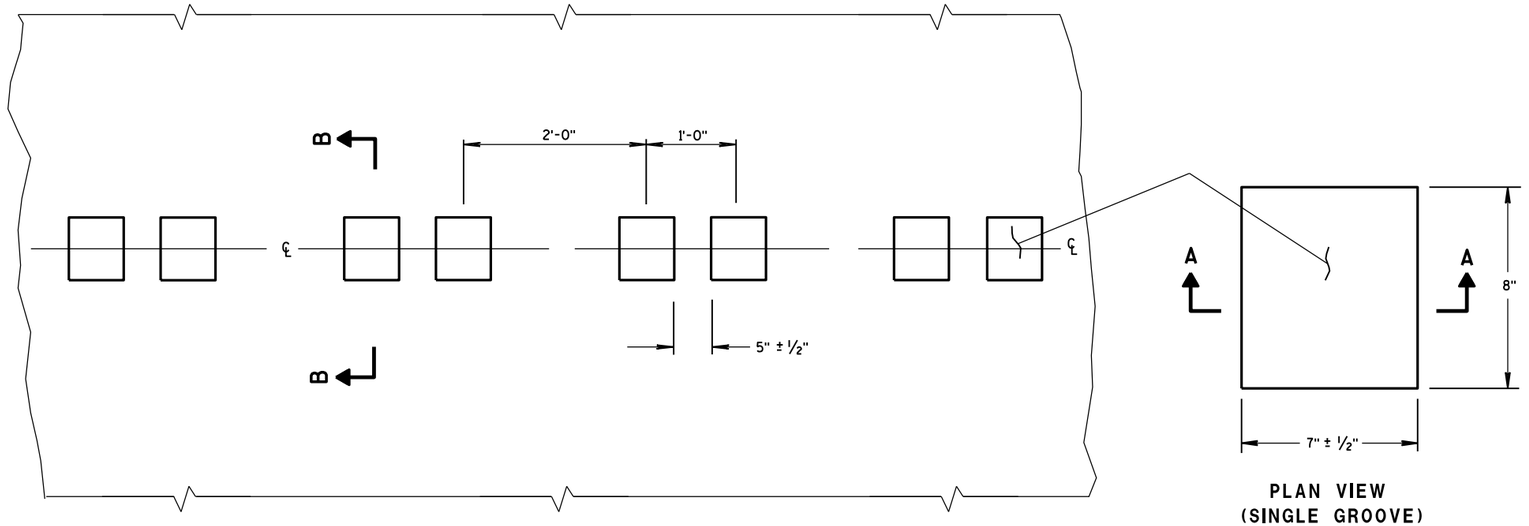
S.D.D. 13 A 8-1



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

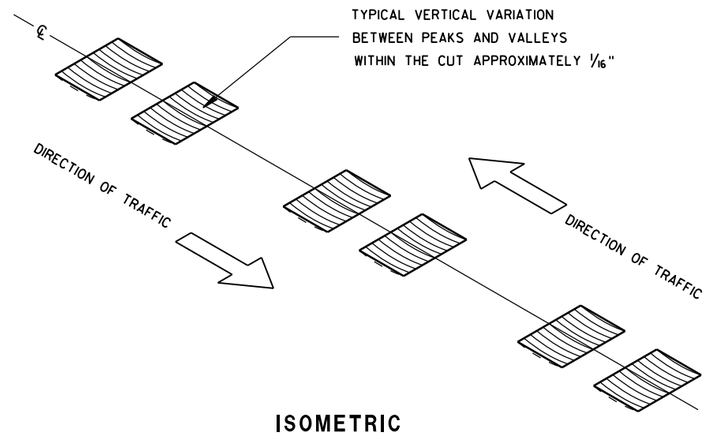
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

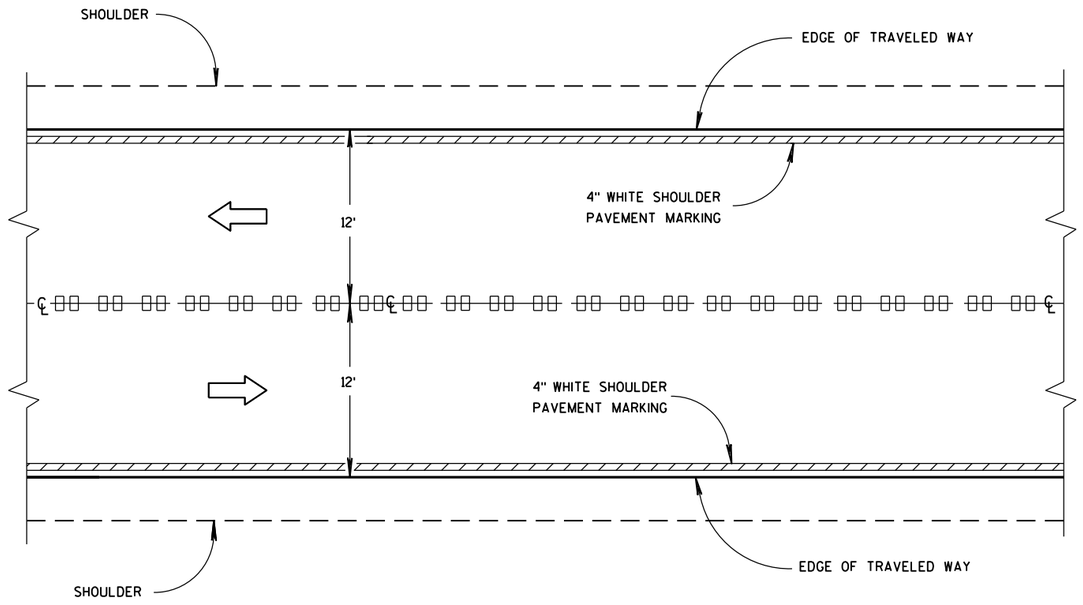
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

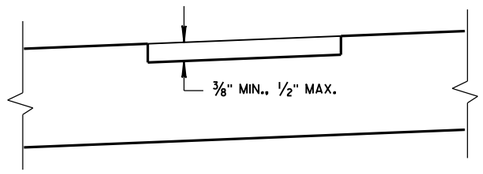
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



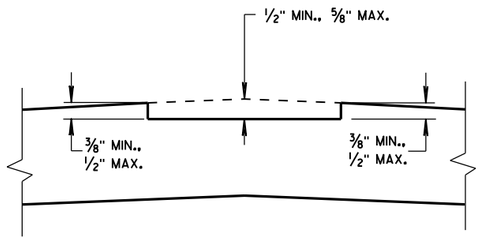
ISOMETRIC



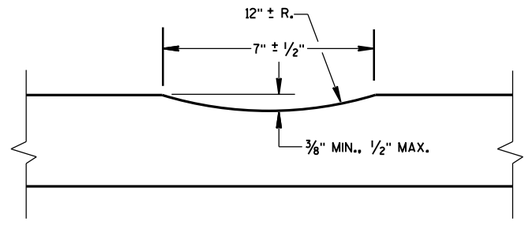
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

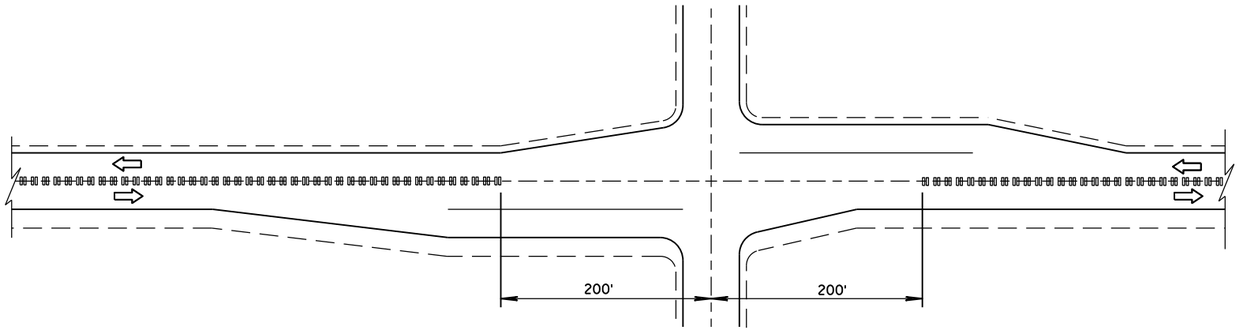
6

S.D.D. 13 A 11-2a

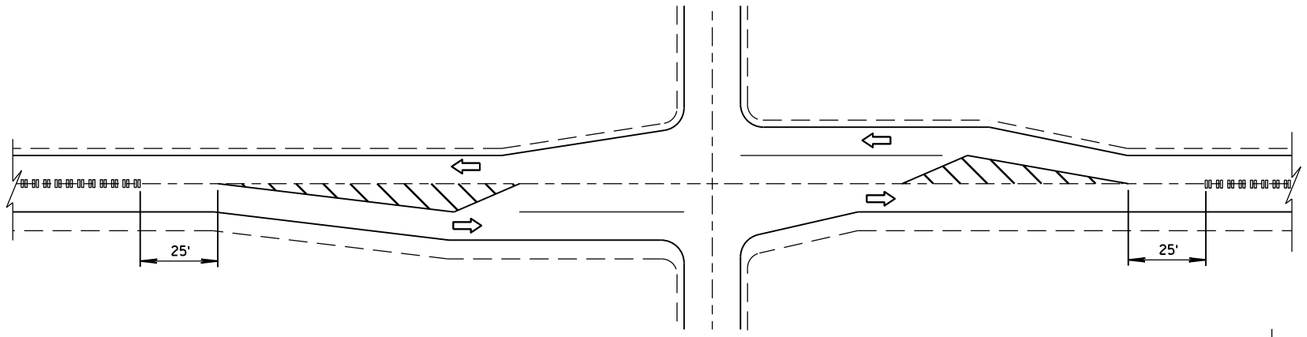
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

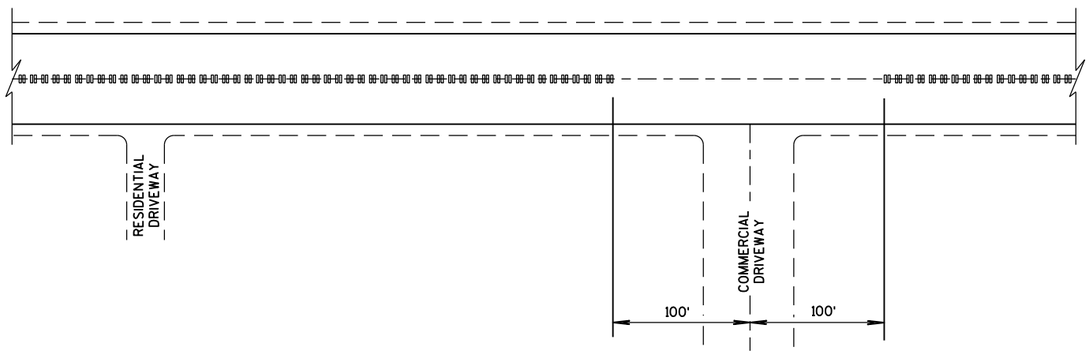
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



CENTER LINE GROOVES AT INTERSECTIONS

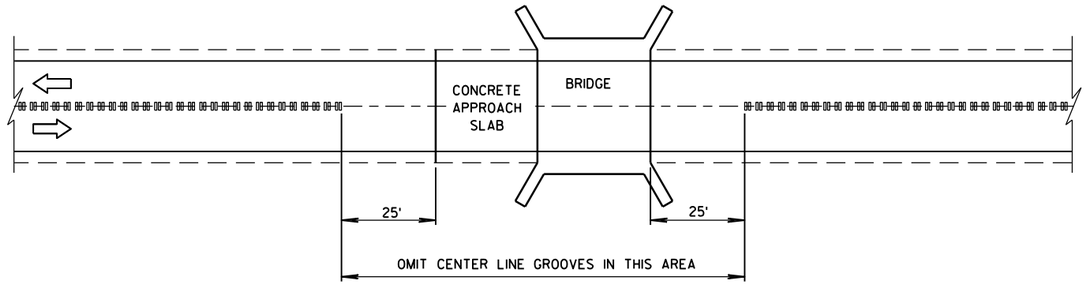


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

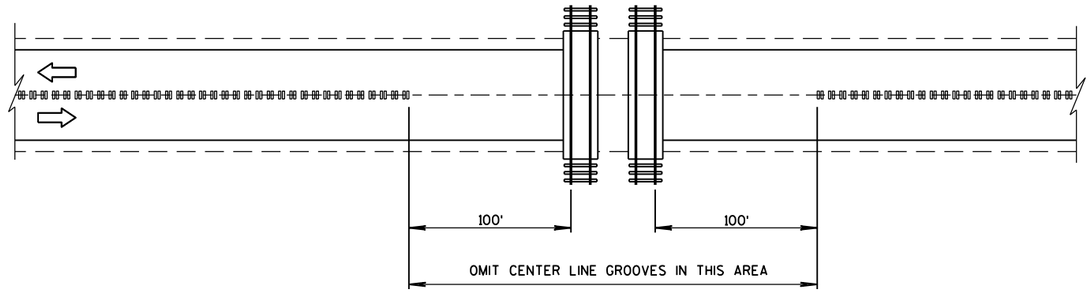


CENTER LINE GROOVES AT DRIVEWAYS (1)

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



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

6

S.D.D. 13 A 11-2b

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S.D.D. 13 A 11-2b

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

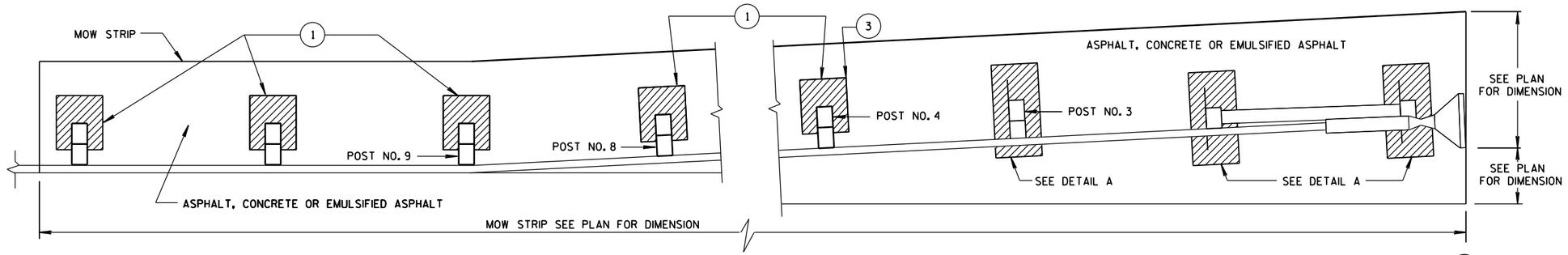
APPROVED

5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

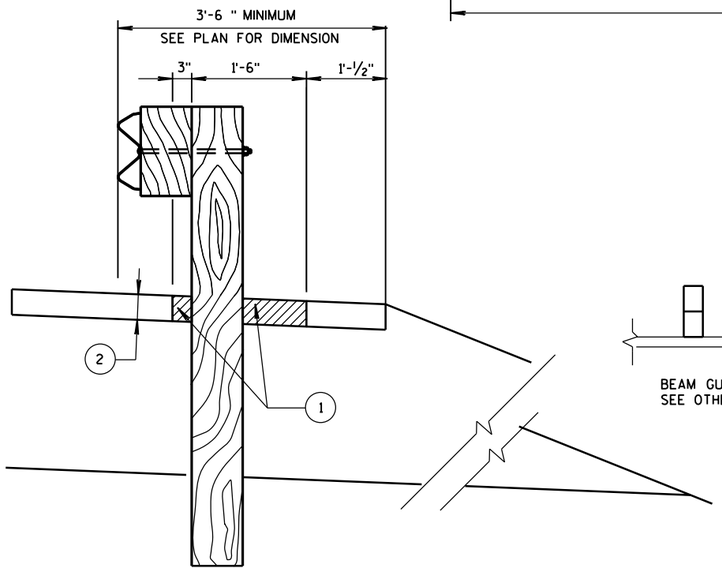
NT

FHWA

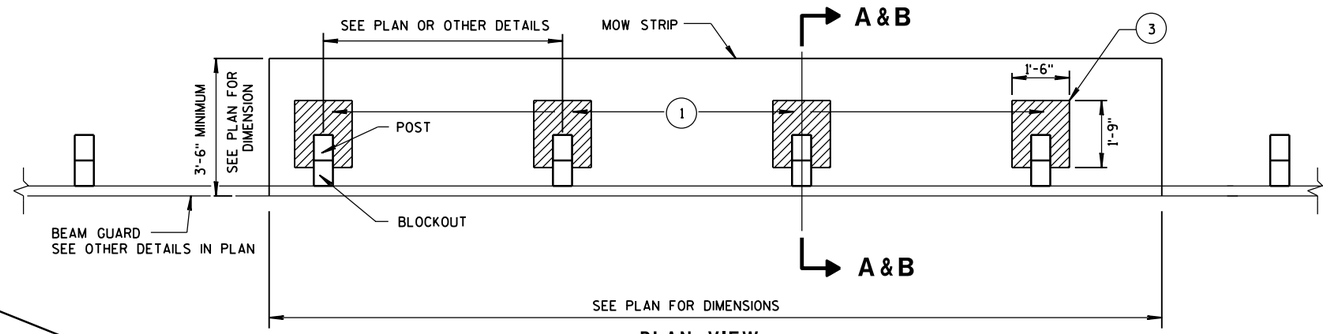


PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABORBING TERMINAL

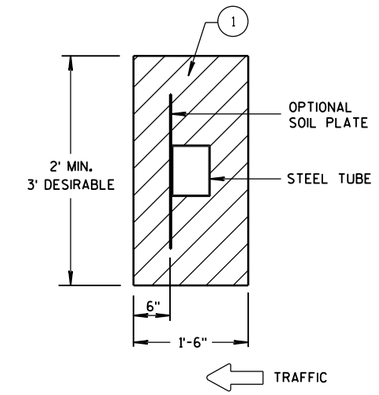


SECTION A-A

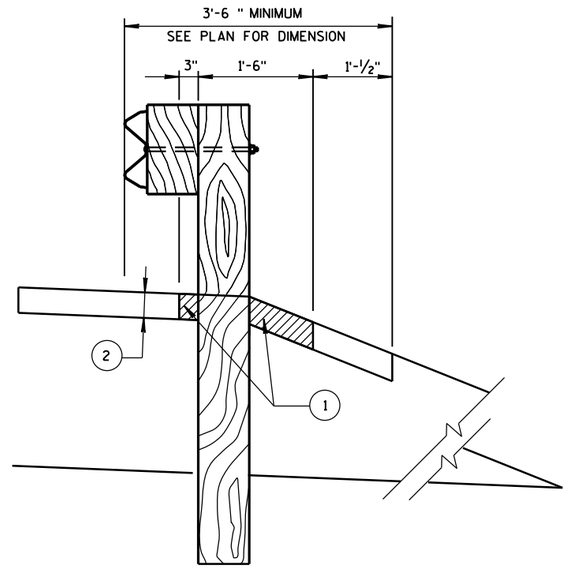


PLAN VIEW

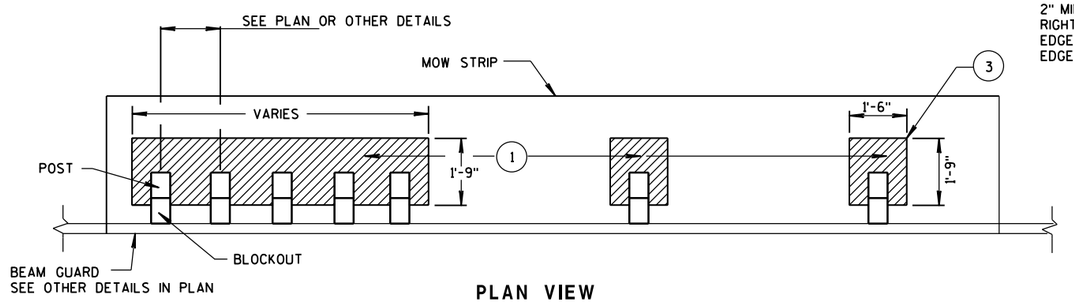
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



DETAIL A

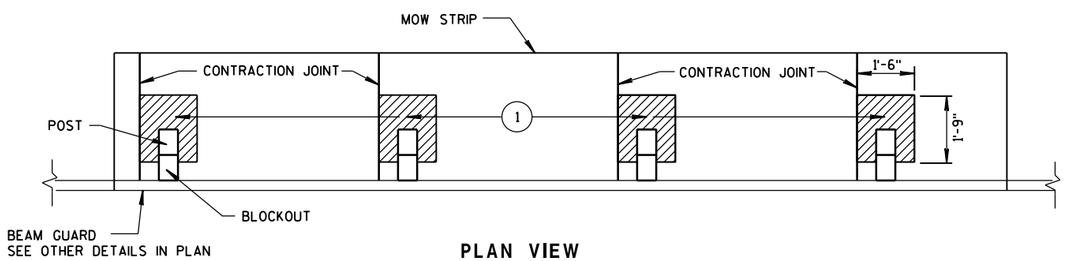


SECTION B-B



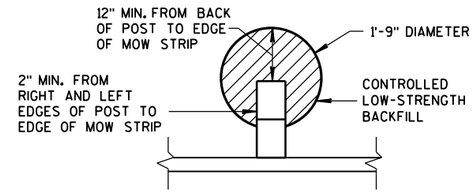
PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP



ALTERNATIVE HMA
MOW STRIP DESIGN

(1) CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.

(2) DEPTH OF MOW STRIP:
ASPHALT - 4"
CONCRETE - 4"
EMULSIFIED ASPHALT - 1" OR LESS

(3) FOR EMULSIFIED ASPHALT MOW STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS.)

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

NT

6

S.D.D. 14 B 28-3

6

S.D.D. 14 B 28-3

GENERAL NOTES

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

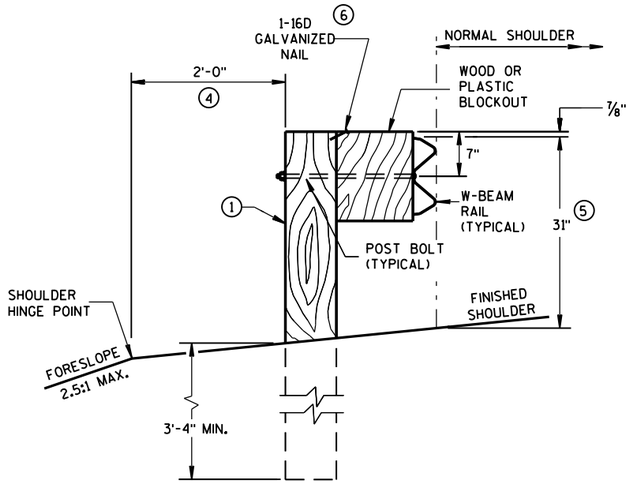
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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

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

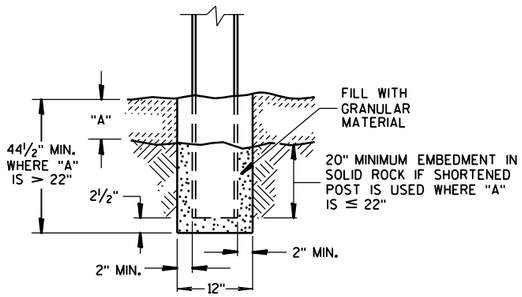
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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



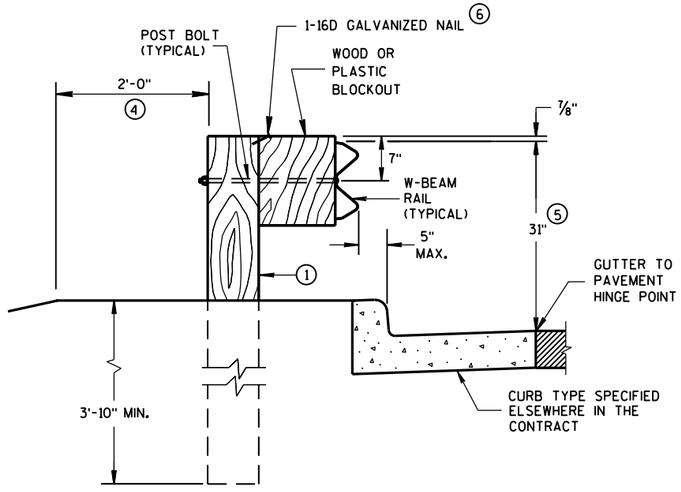
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



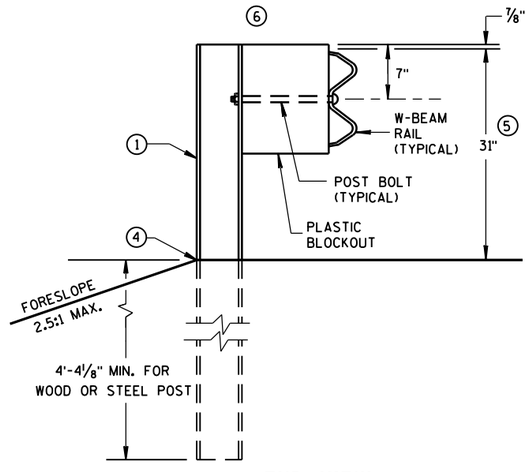
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



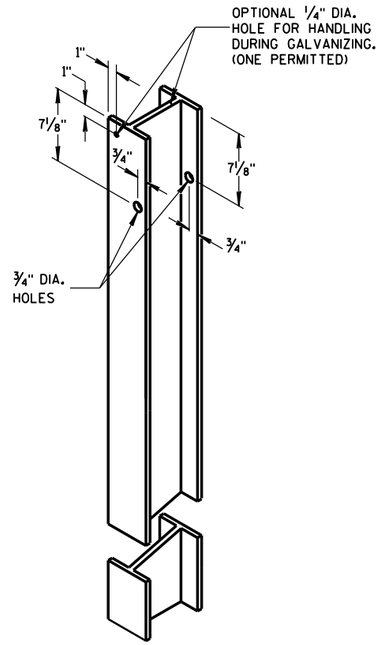
END VIEW

LOCATED ALONG A CURBED ROADWAY

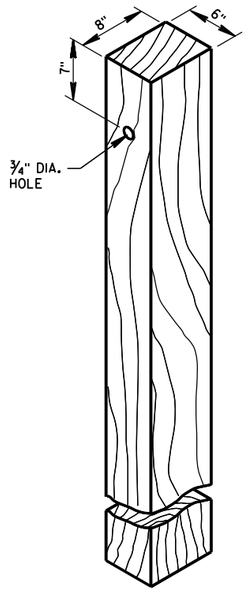


END VIEW

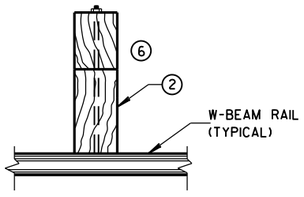
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



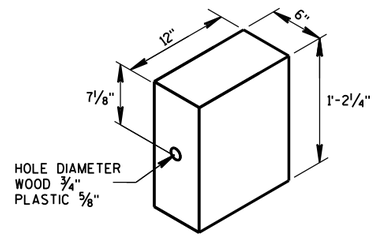
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



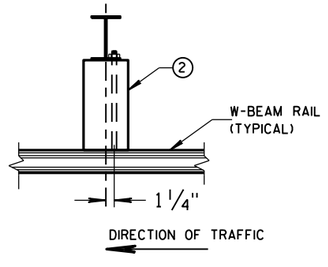
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)

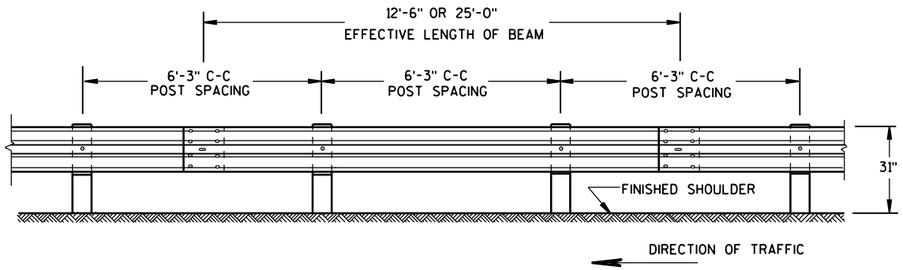


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

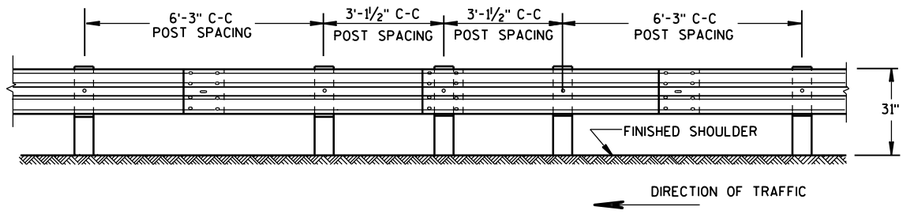
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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



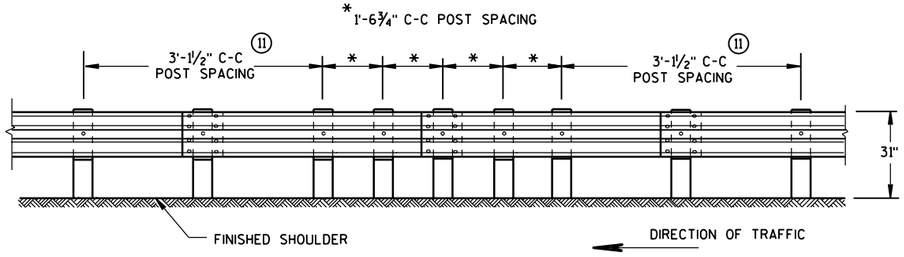
FRONT VIEW

POST SPACING STANDARD INSTALLATION



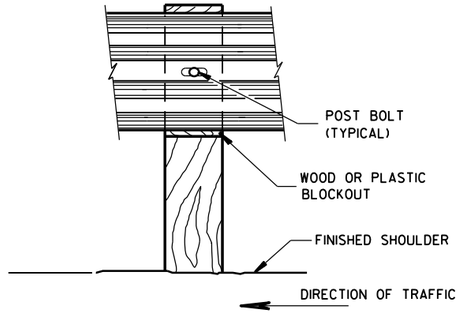
FRONT VIEW

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

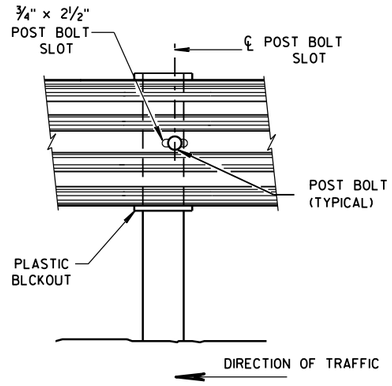


FRONT VIEW

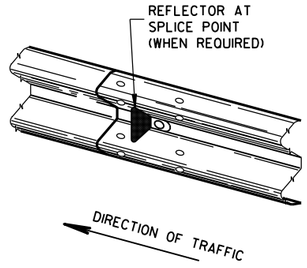
QUARTER POST SPACING (QS)

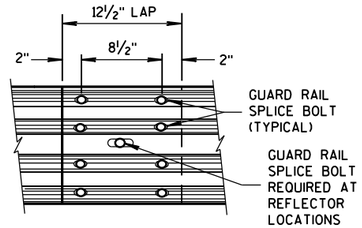


FRONT VIEW AT WOOD POST



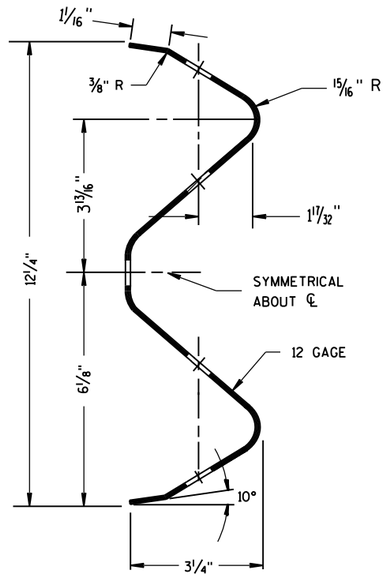
FRONT VIEW AT STEEL POST



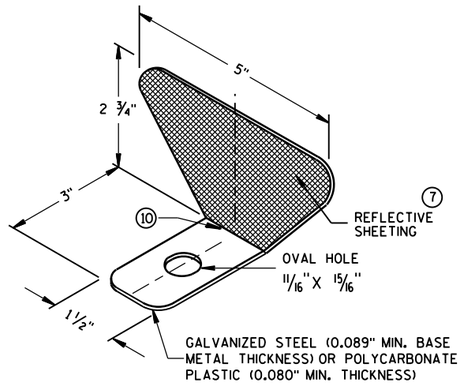


FRONT VIEW

MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ⑦

GENERAL NOTES

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

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

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

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

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

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING ⑧

	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 ⑨ 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ⑩	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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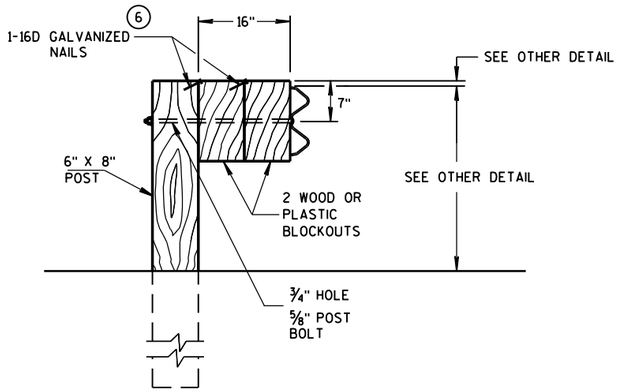
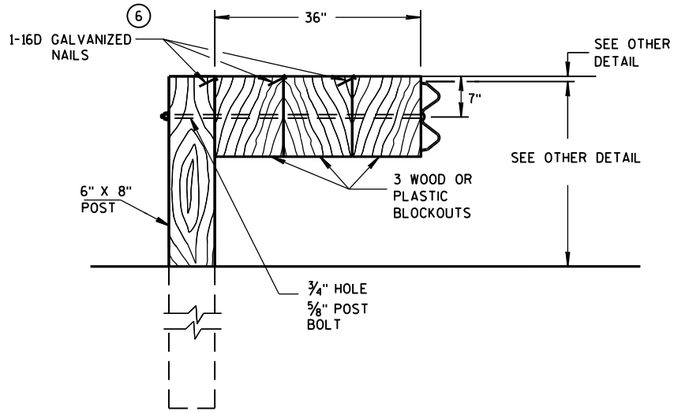


DETAIL FOR 16" BLOCKOUT DEPTH

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

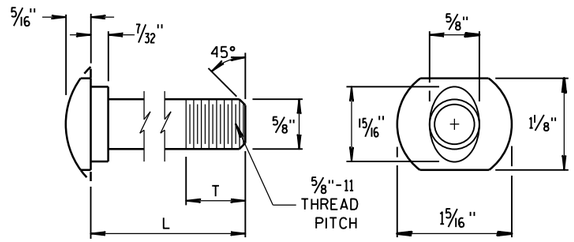


DETAIL FOR 36" BLOCKOUT DEPTH

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

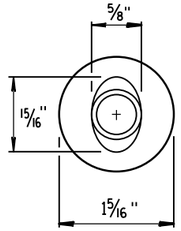
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

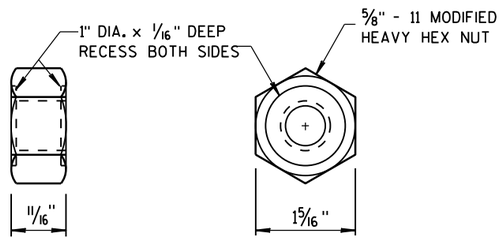


POST BOLT TABLE

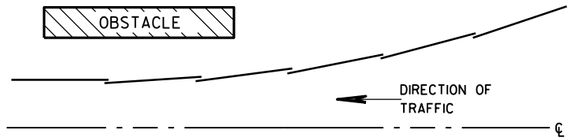
L	T (MIN.)
1¼"	1⅛"
2"	1¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

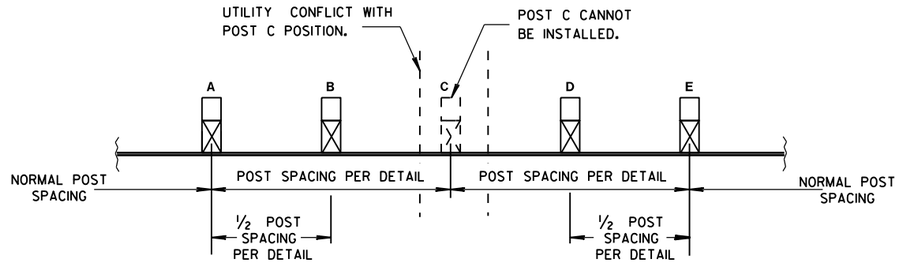


POST BOLT AND RECESS NUT

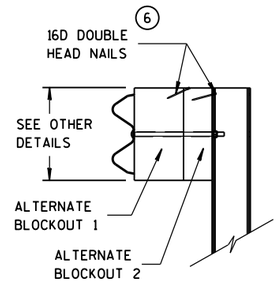


PLAN VIEW

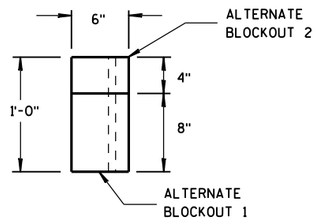
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

GENERAL NOTES

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

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

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

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

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

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

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

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

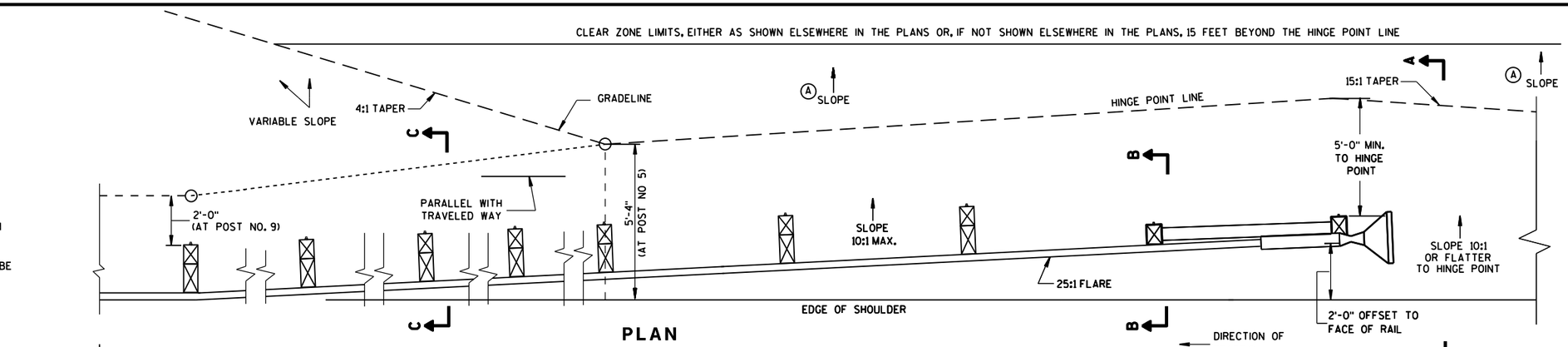
SEE SDD 14B42 FOR MORE INFORMATION.

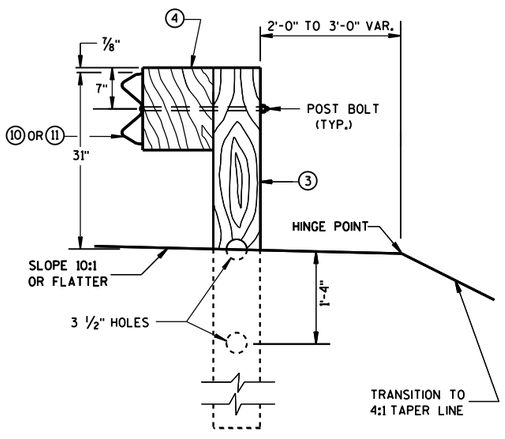
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

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

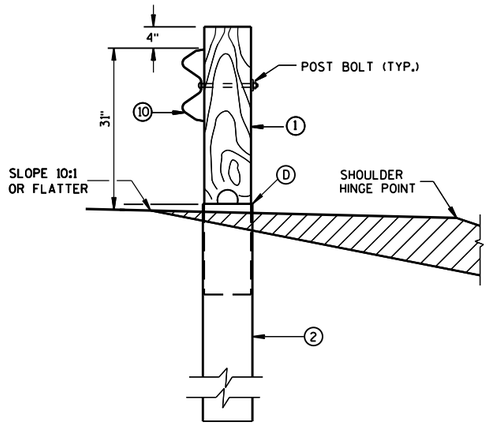
W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

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

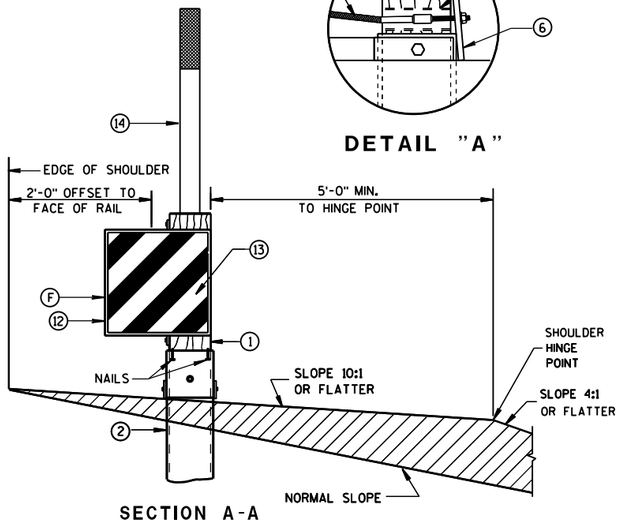




SECTION C-C
TYPICAL AT POST NOS. 3-9

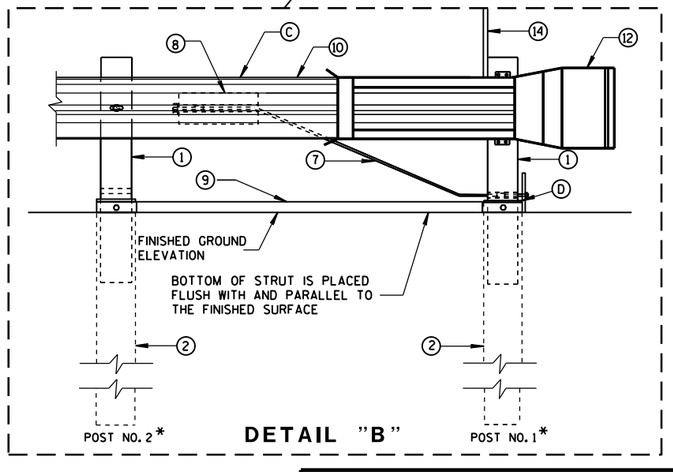


SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*

DETAIL "A"



DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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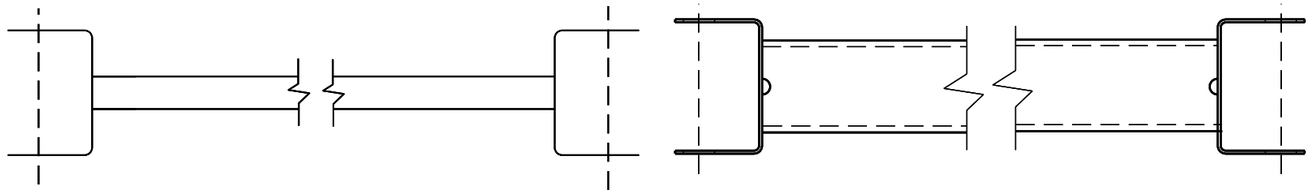
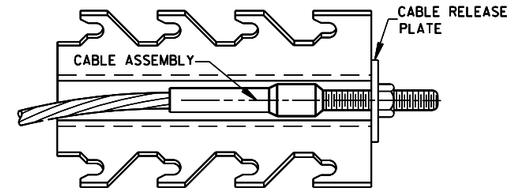


(9) (H)

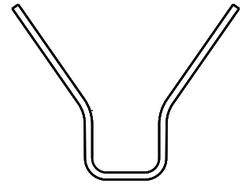
GENERIC GROUND STRUT

BILL OF MATERIALS

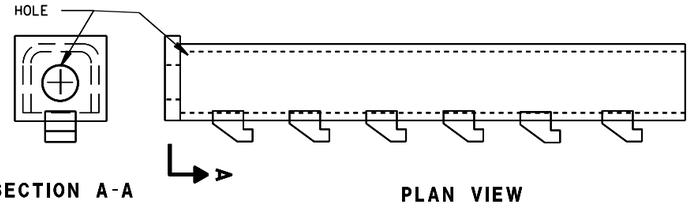
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR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



FRONT VIEW



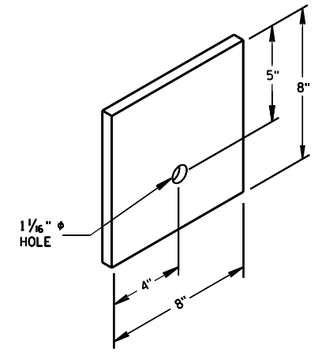
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)

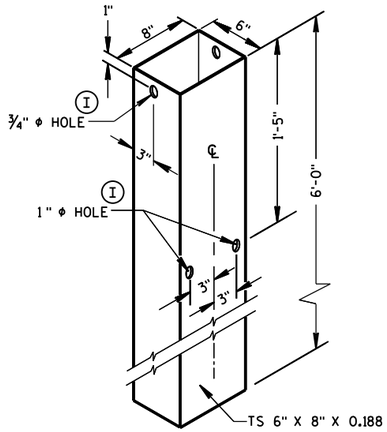


BEARING PLATE (6)

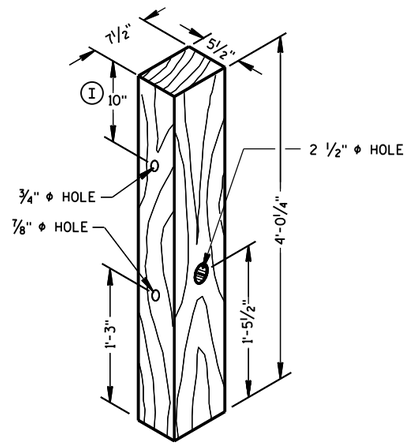
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

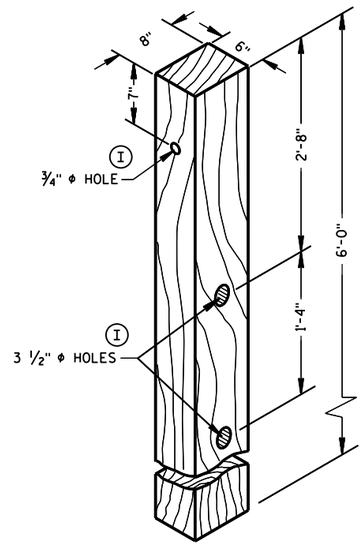


FOUNDATION TUBE (2)



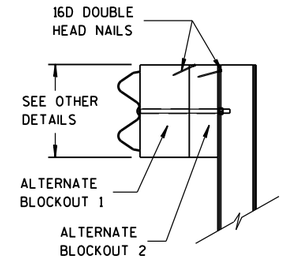
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

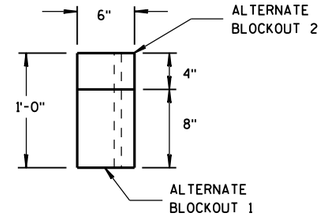


POSTS NUMBER 3-9

WOOD CRT POST (3)

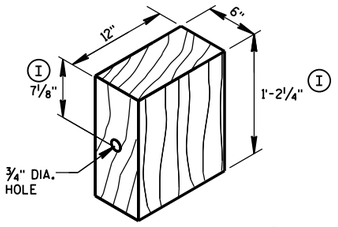


SIDE VIEW



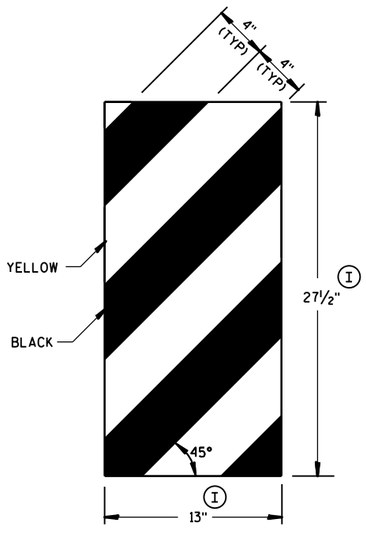
TOP VIEW

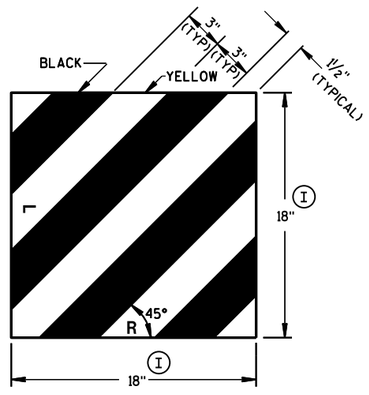
ALTERNATE WOOD BLOCKOUT DETAIL



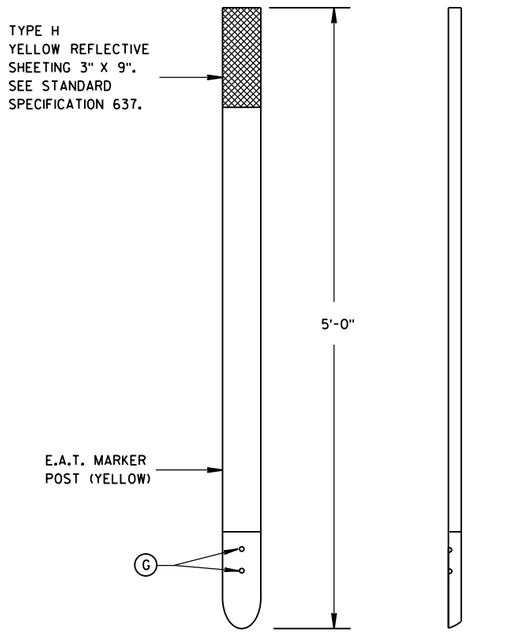
WOOD BLOCKOUT (4)

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





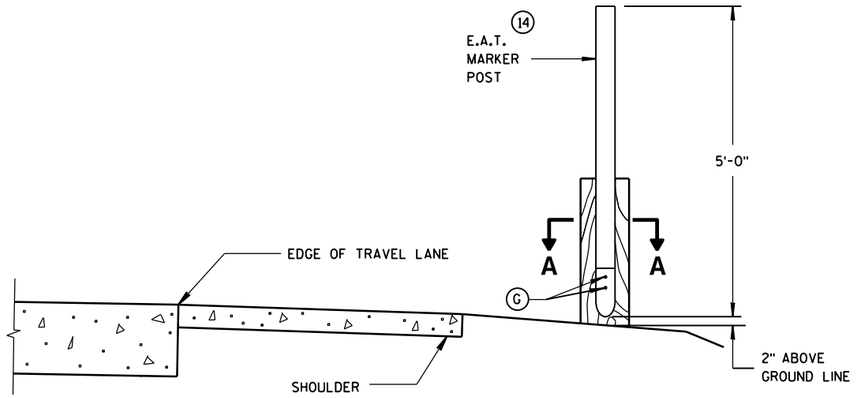
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

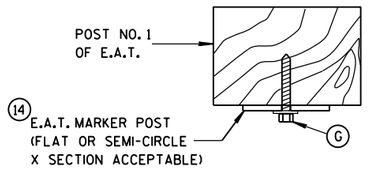
SIDE VIEW

E.A.T. MARKER POST (14)



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

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



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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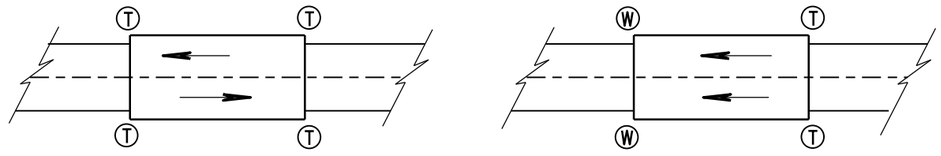
S.D.D. 14 B 44-2c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

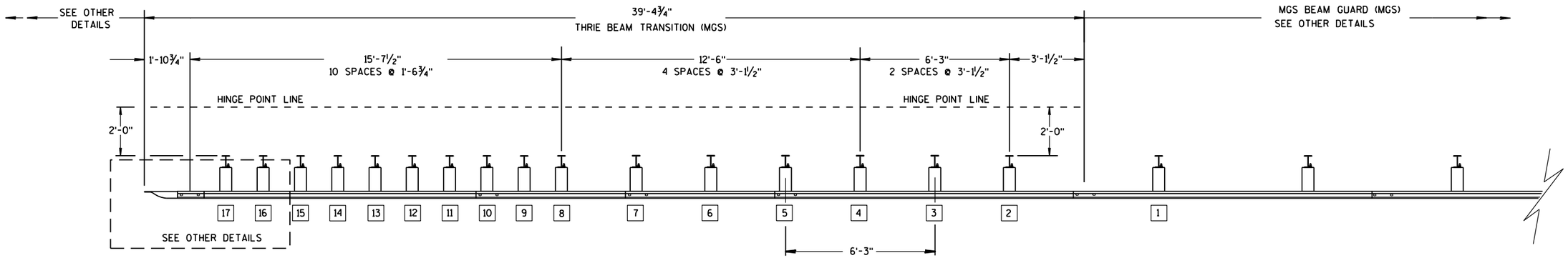
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

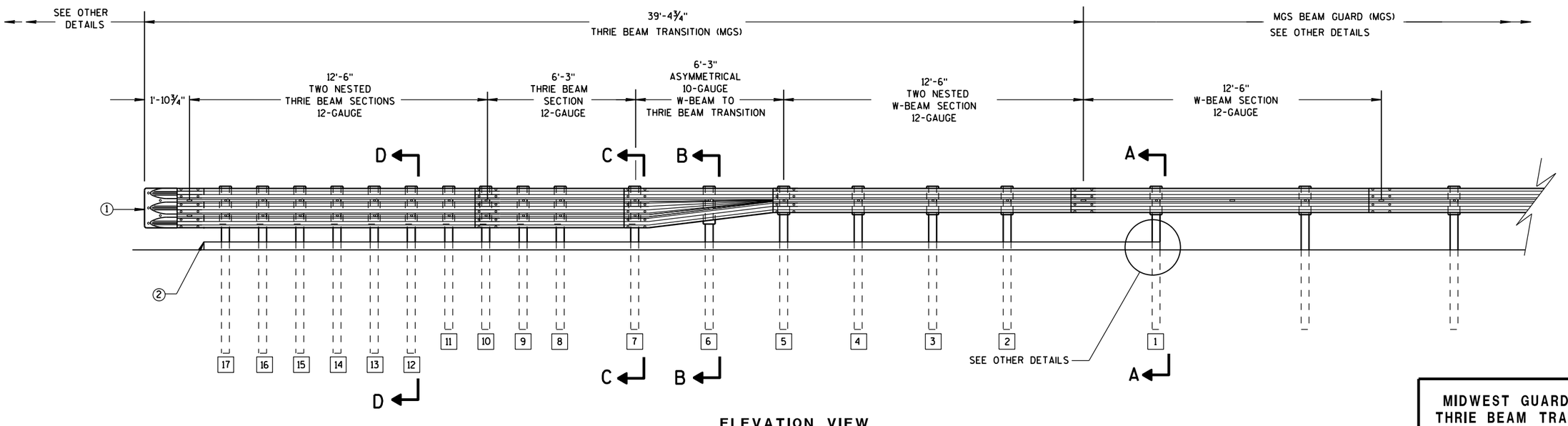
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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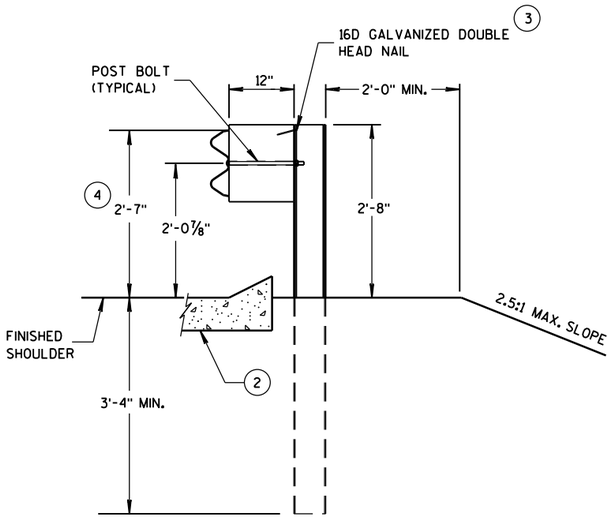
S.D.D. 14 B 45-4a

GENERAL NOTES

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

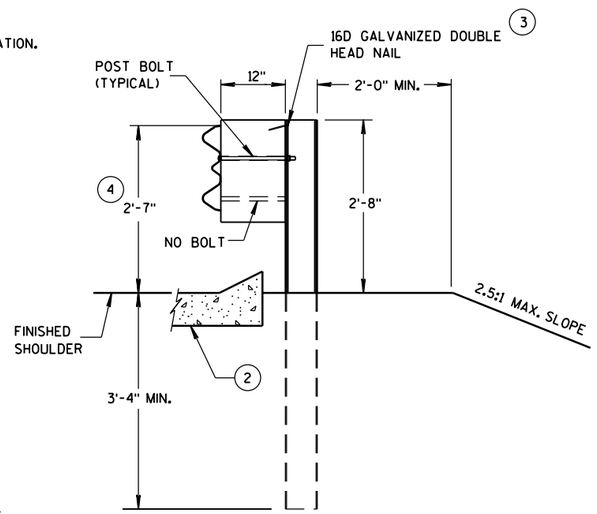
(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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



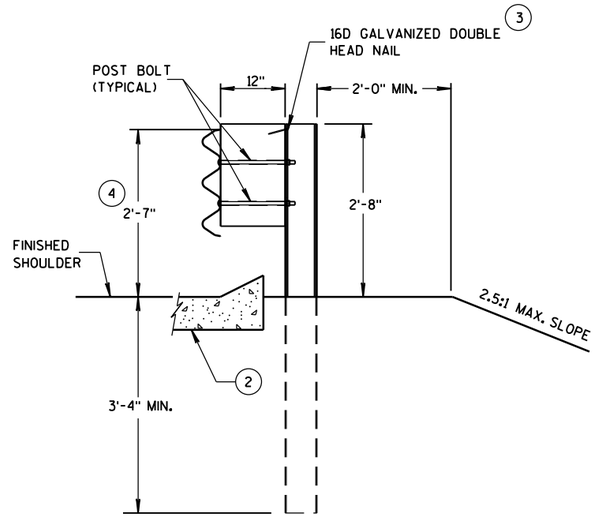
SECTION A-A

POSTS 1-5



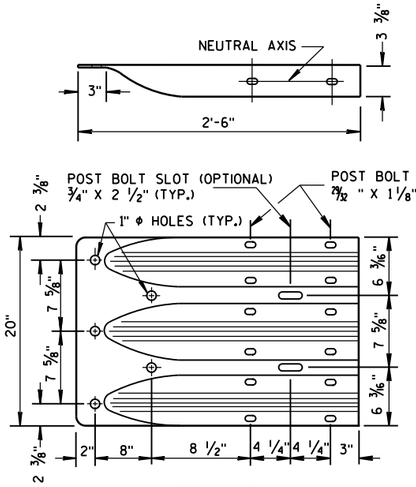
SECTION B-B

POST 6



SECTION C-C

POSTS 7-11



THRIE BEAM TERMINAL CONNECTOR

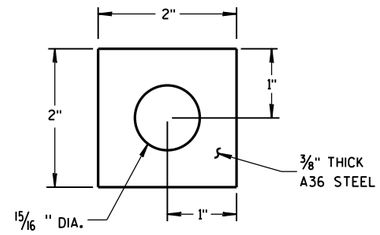
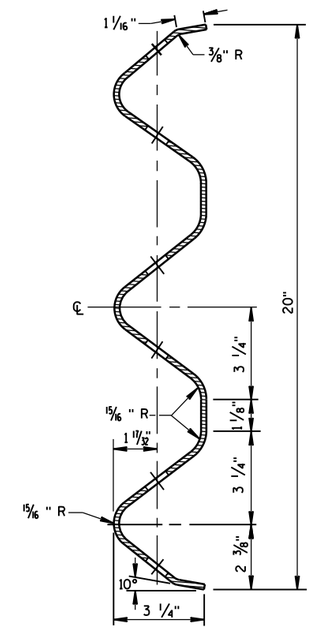
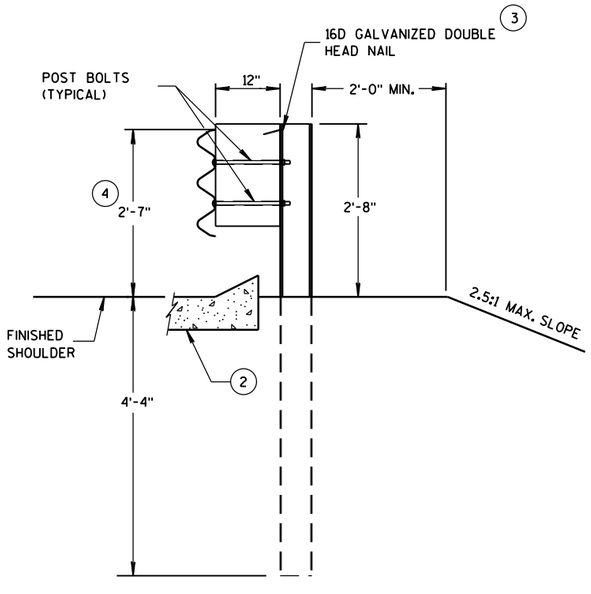


PLATE WASHER DETAIL

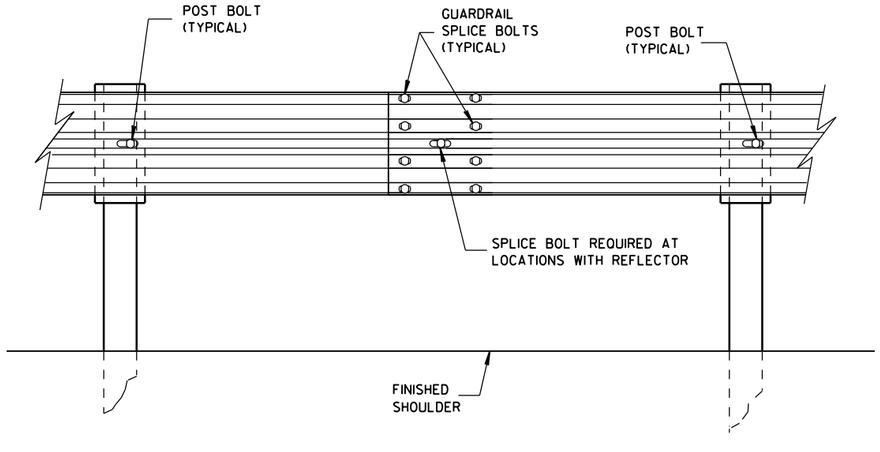


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-17



SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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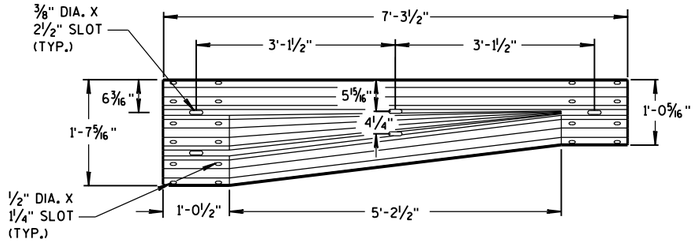
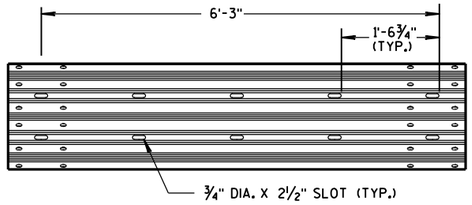
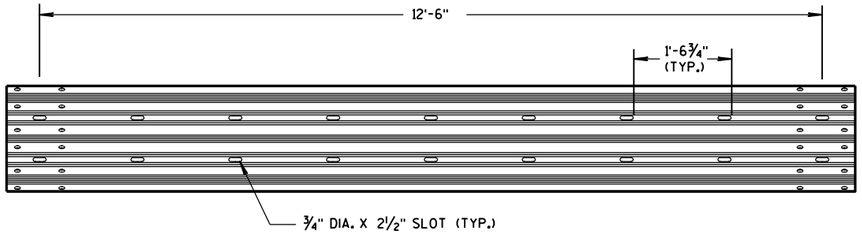
S.D.D. 14 B 45-4b



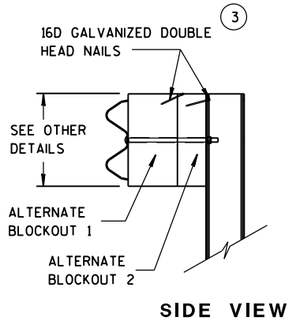
W-BEAM TO THRIE BEAM TRANSITION SECTION



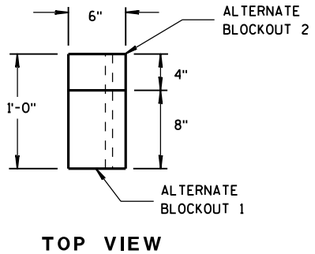
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

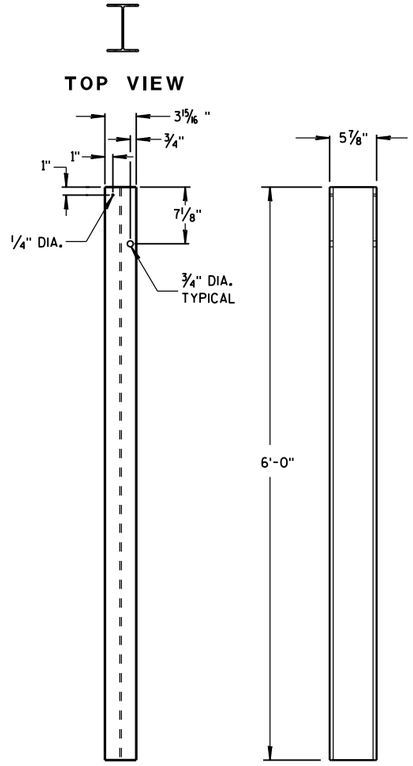


SIDE VIEW



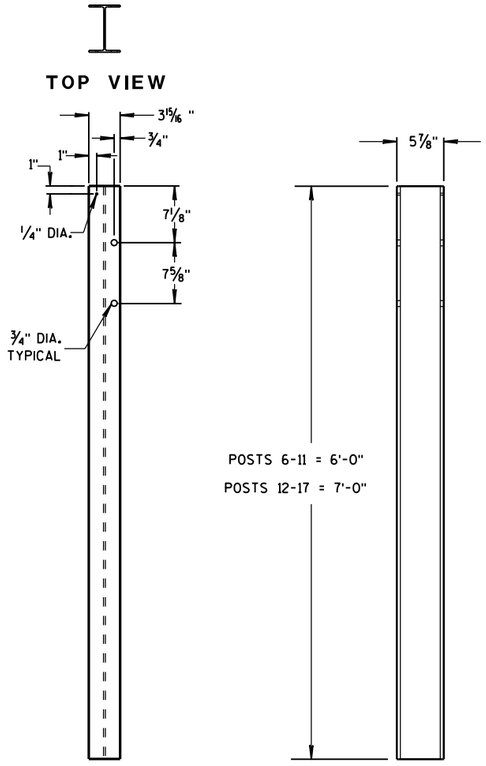
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



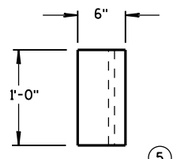
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5

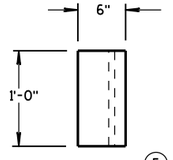


FRONT VIEW SIDE VIEW

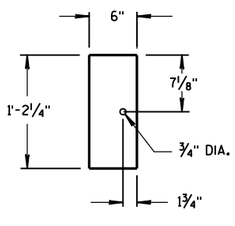
STEEL POSTS 6-17



TOP VIEW (5)

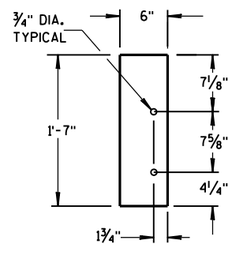


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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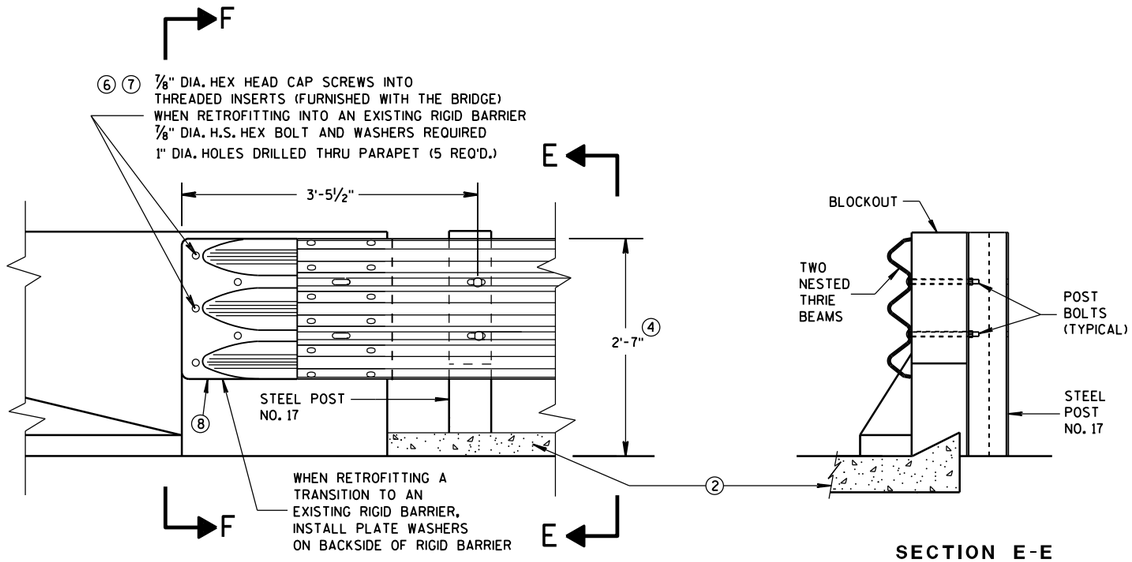
S.D.D. 14 B 45-4c
S.D.D. 14 B 45-4c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

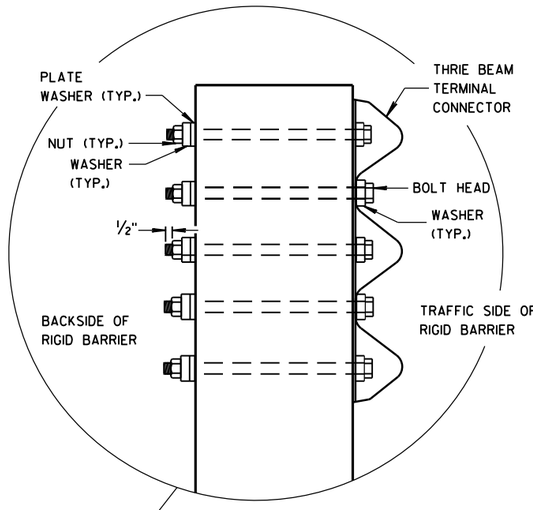
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

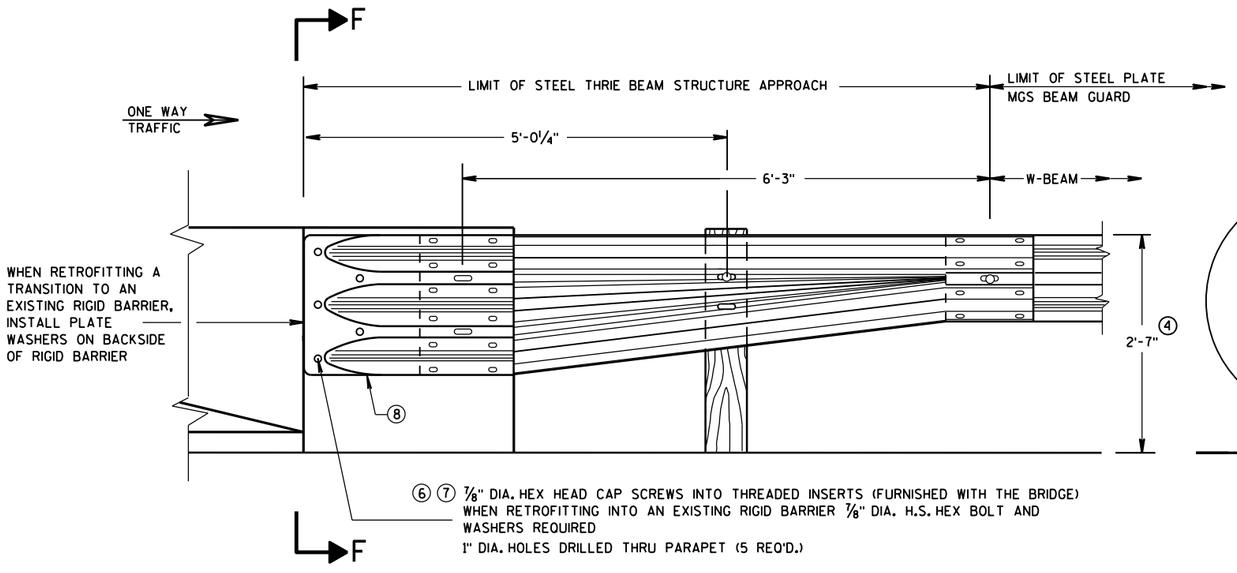
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

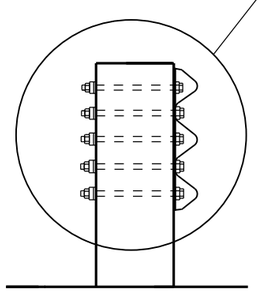
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

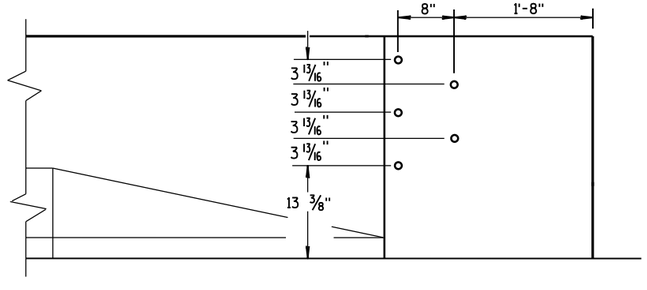




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

GENERAL NOTES

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

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

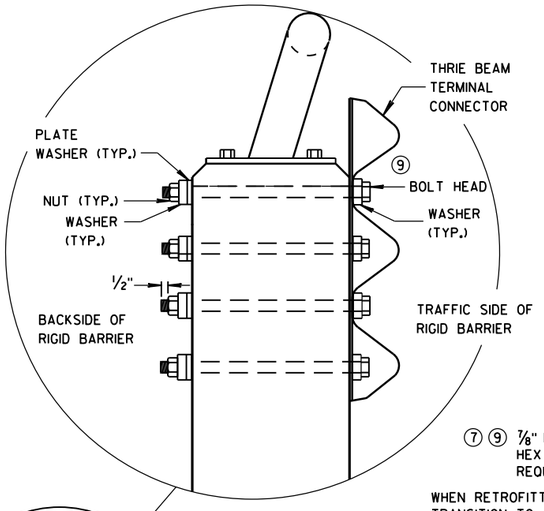
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

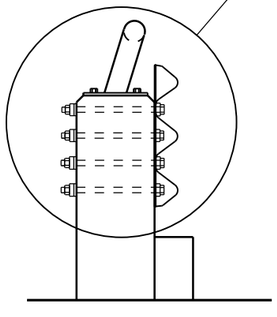
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

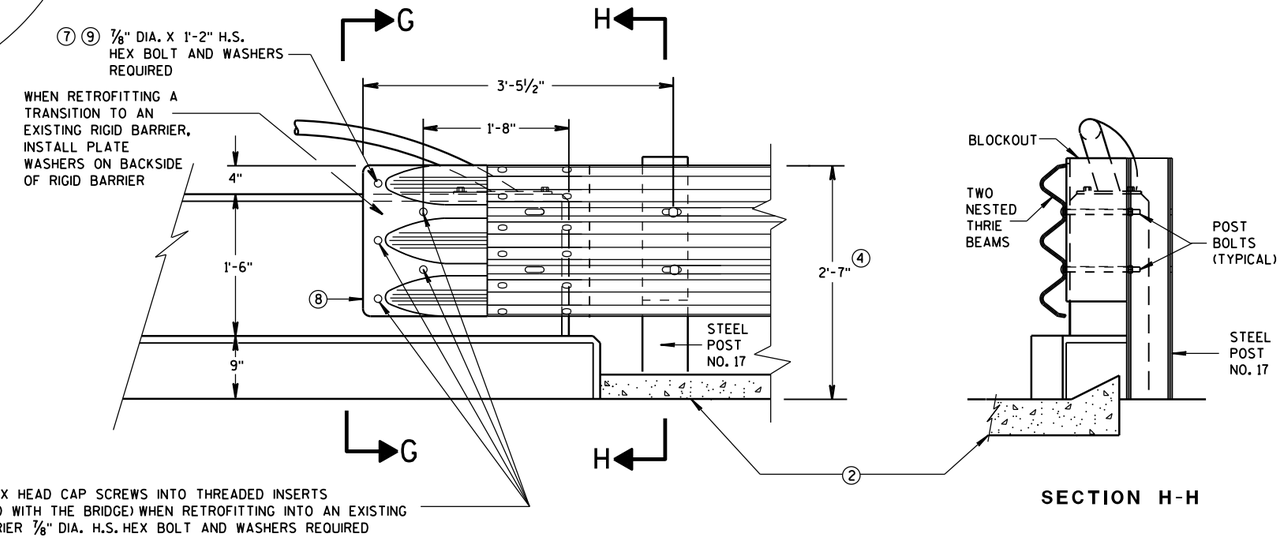
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

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





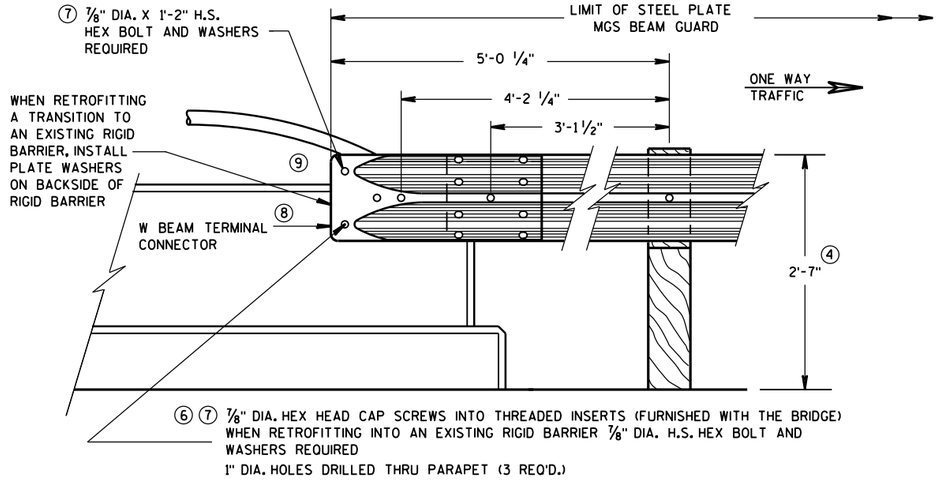
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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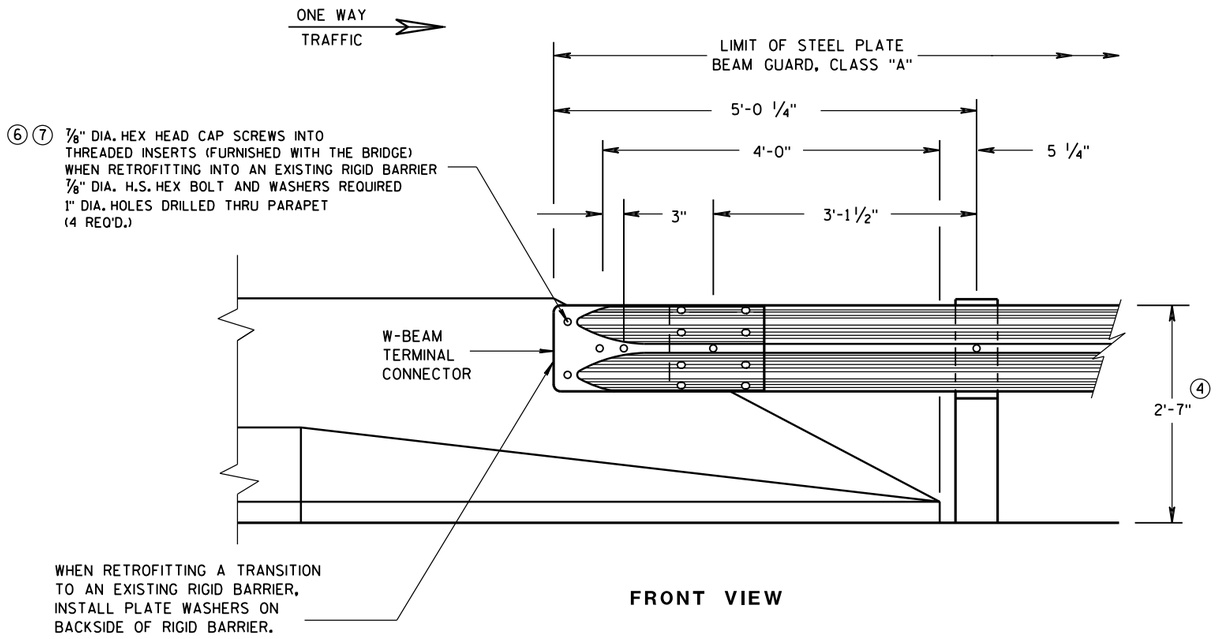


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

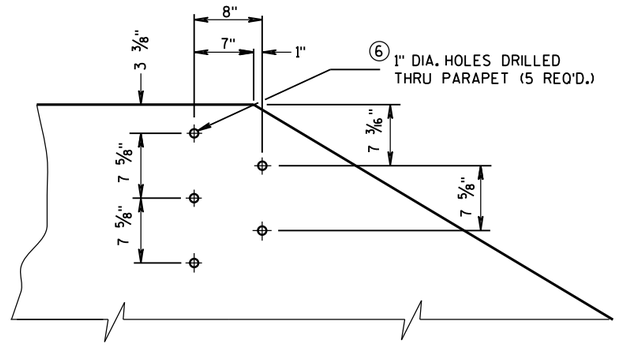
GENERAL NOTES

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

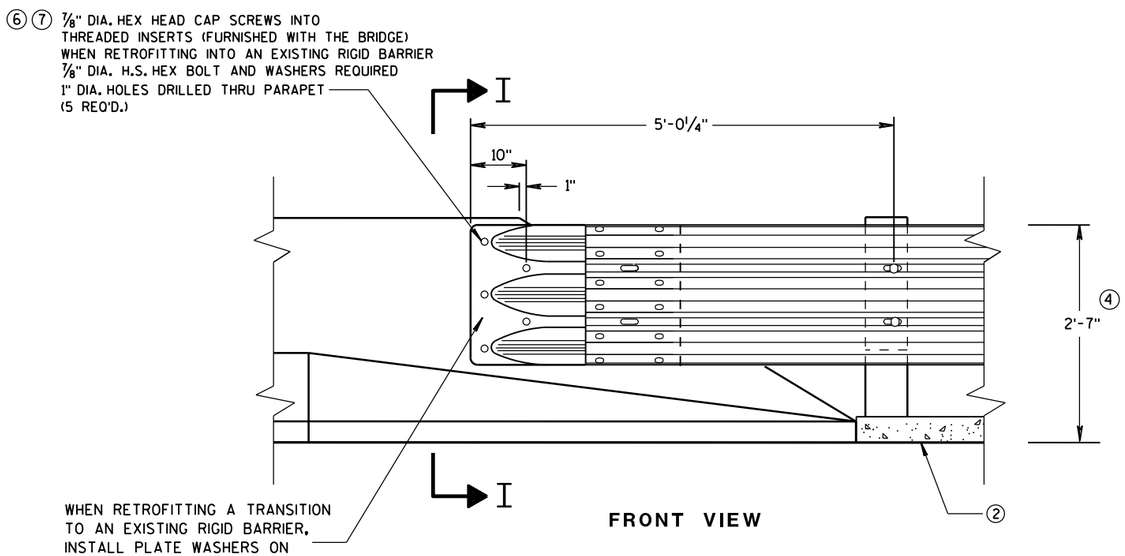
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

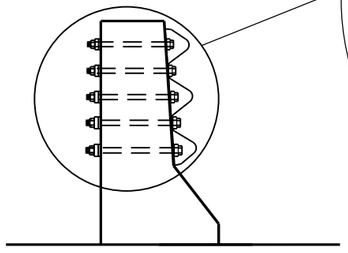
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



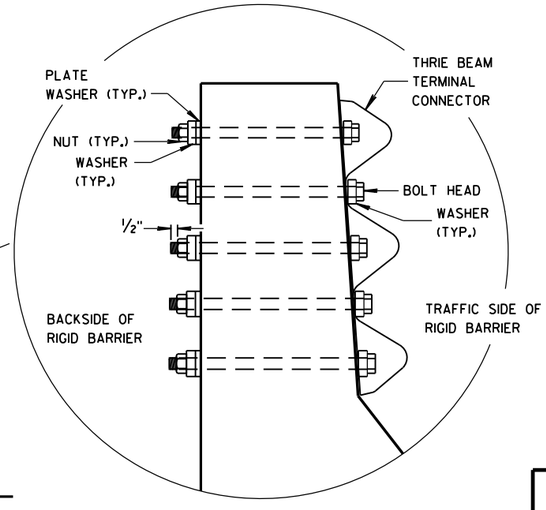
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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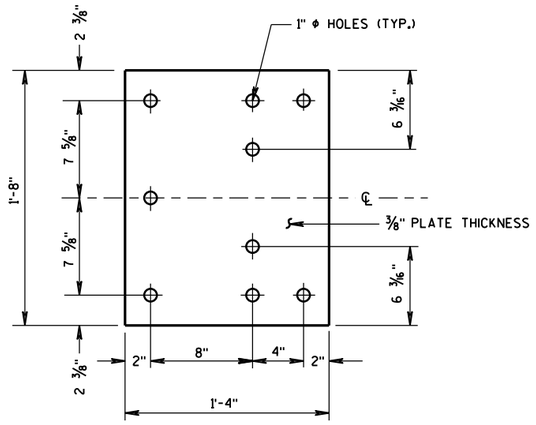
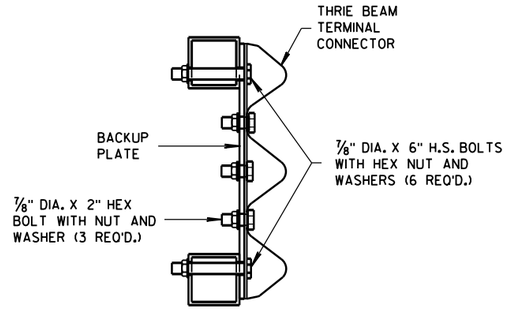
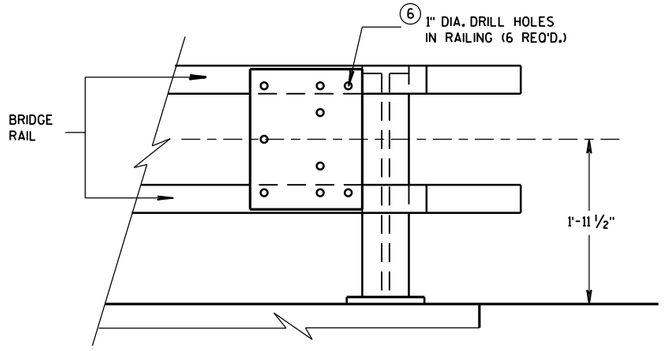
S.D.D. 14 B 45-4f



BACK-UP PLATE DETAIL



SECTION J-J

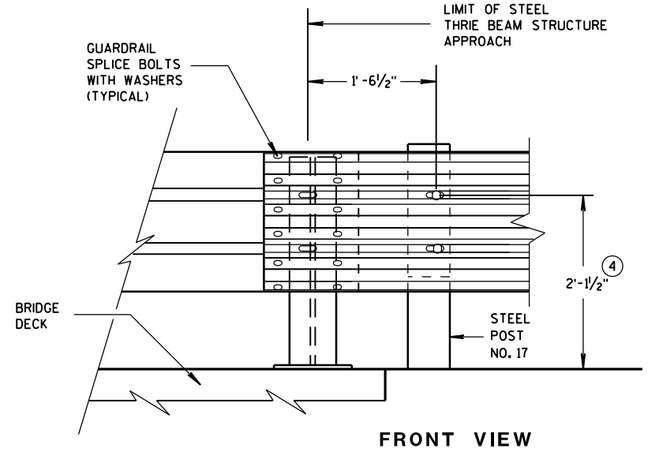


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

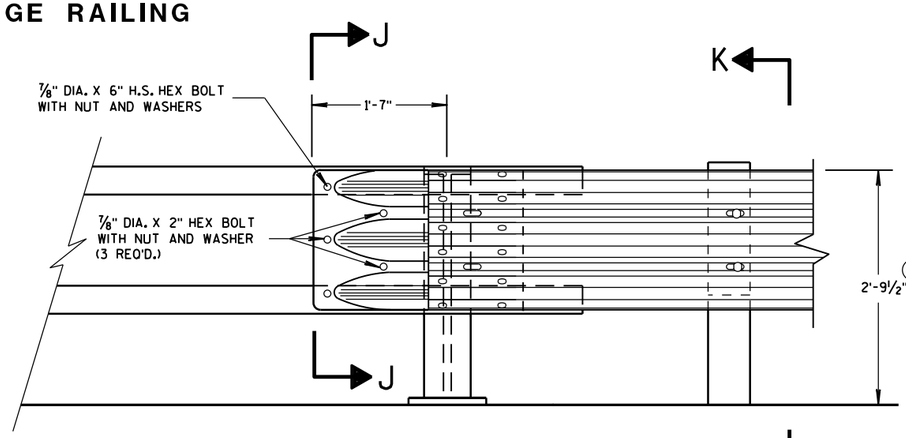
4 TOLERANCE FOR TOP OF BEAM IS ± 1".

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

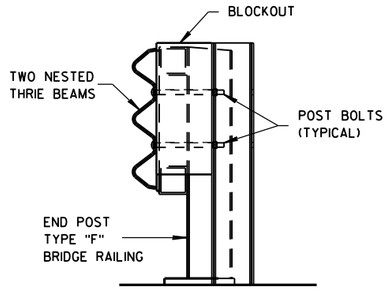


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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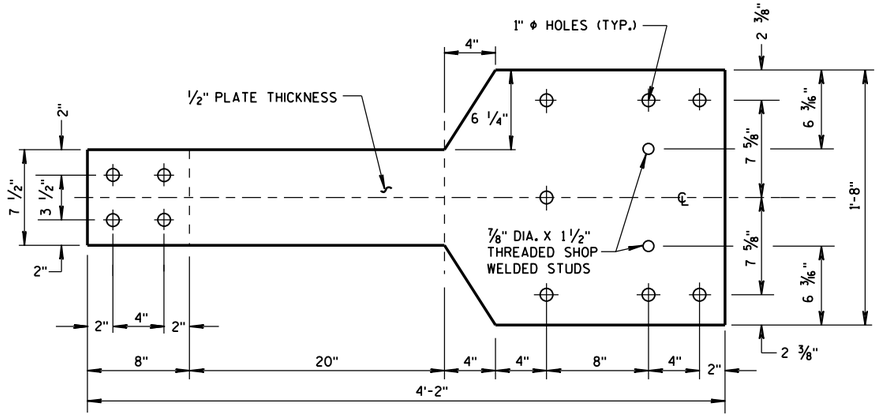
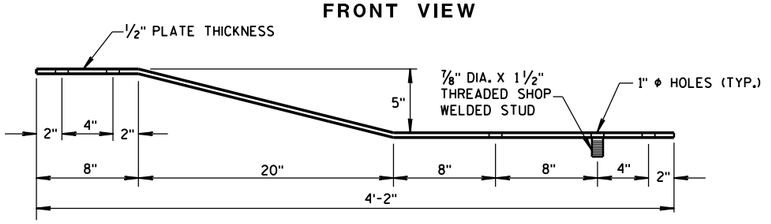
GENERAL NOTES

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

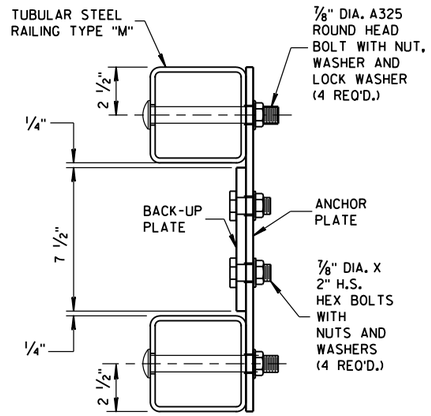


FRONT VIEW

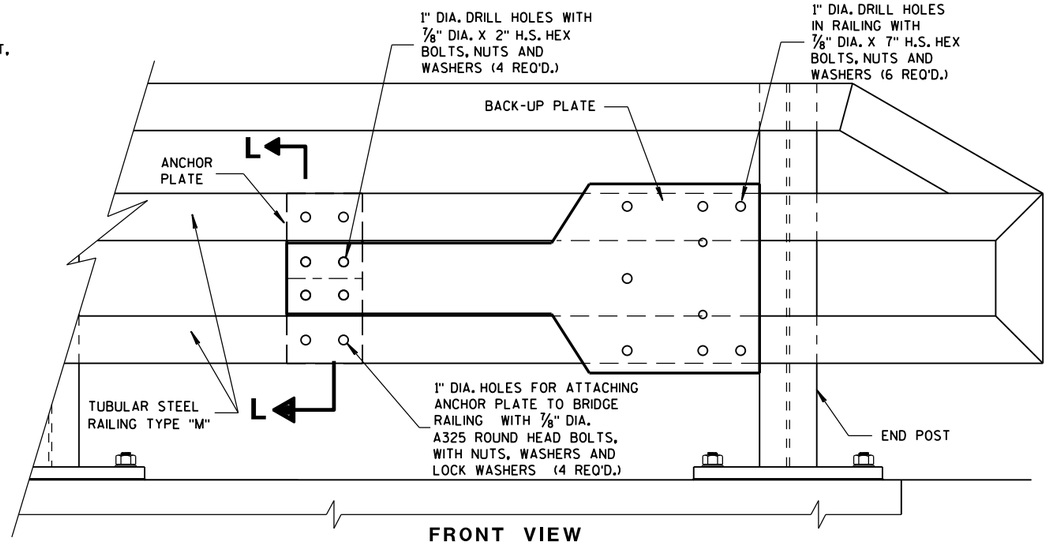


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

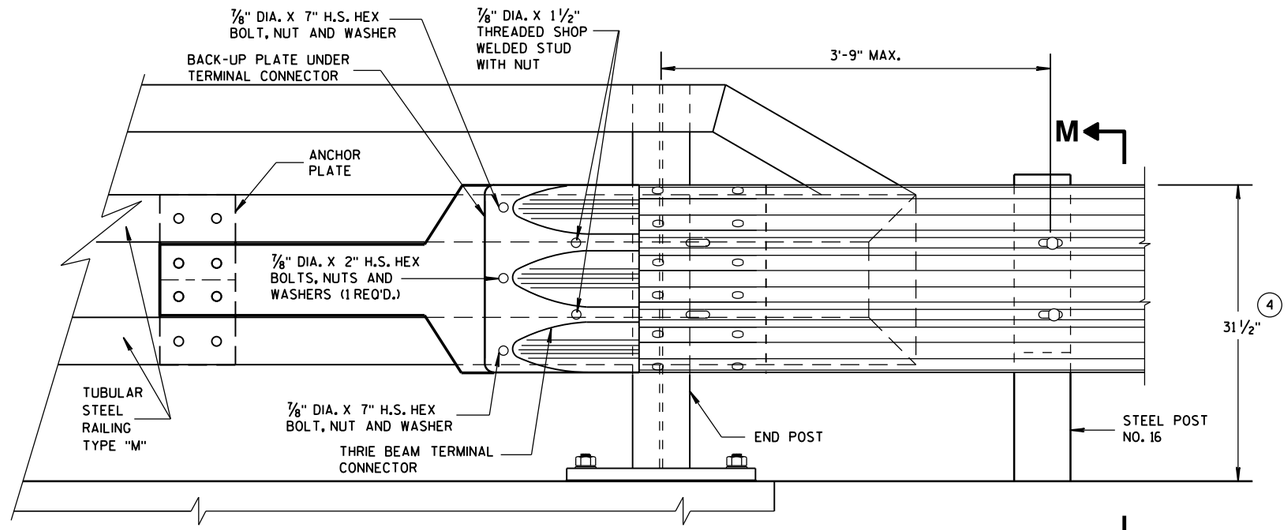


SECTION L-L

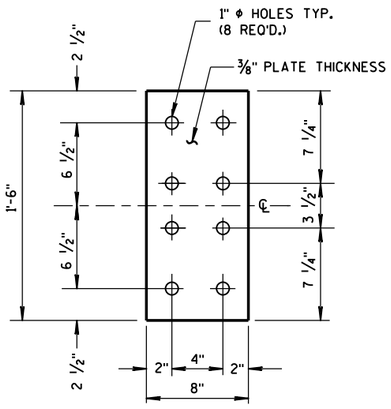


FRONT VIEW

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

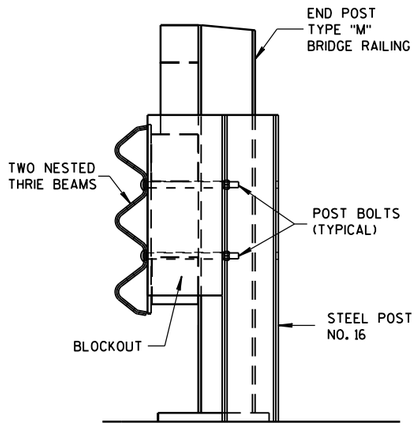


FRONT VIEW

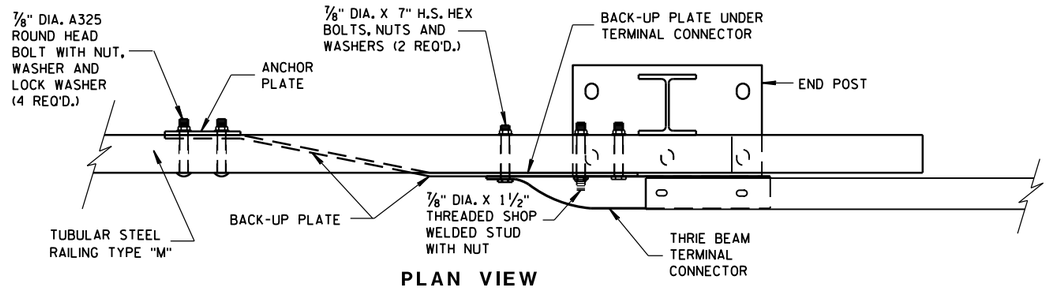


FRONT VIEW

ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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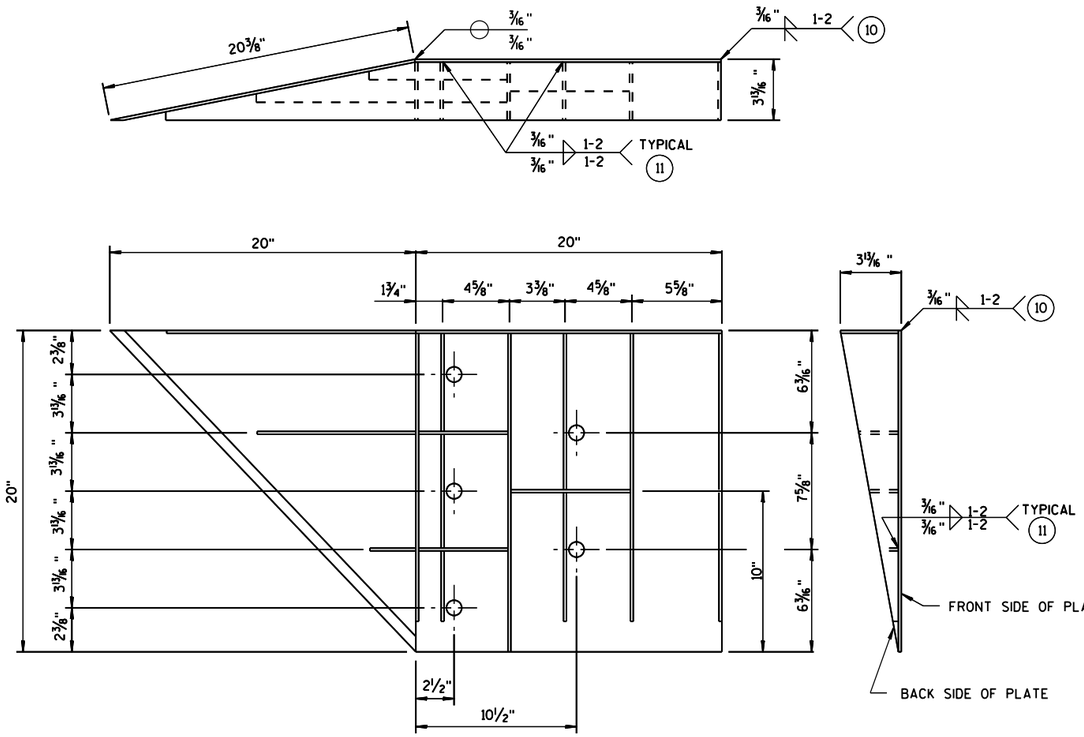

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

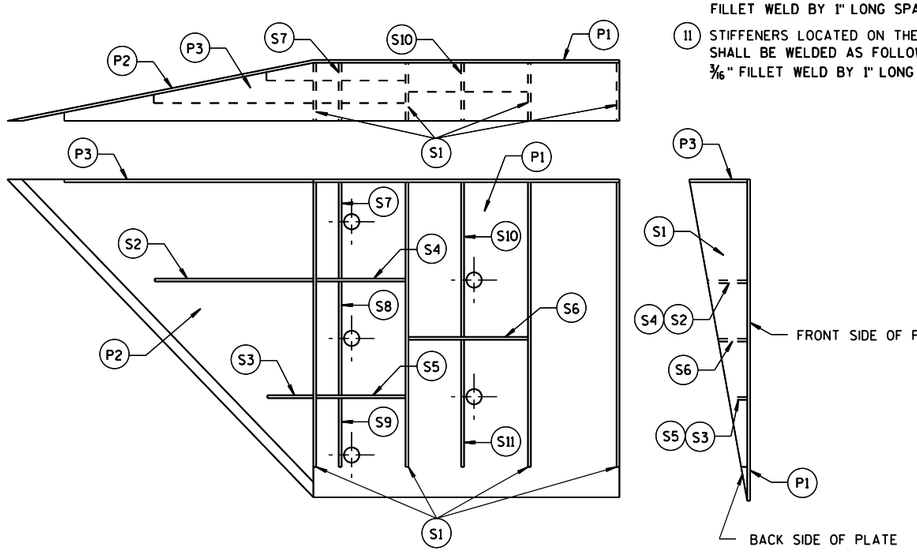

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

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

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015 — DATE
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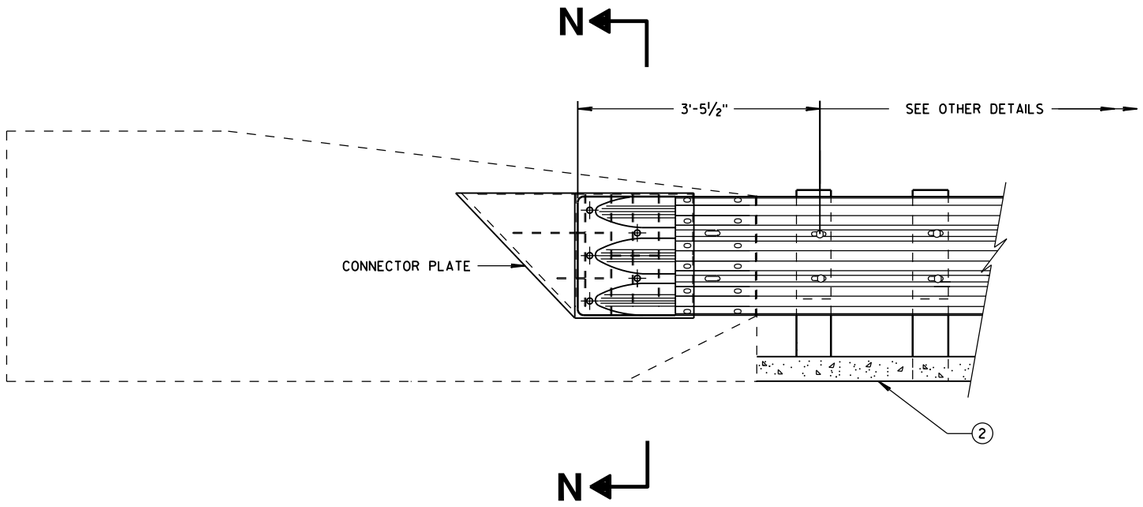
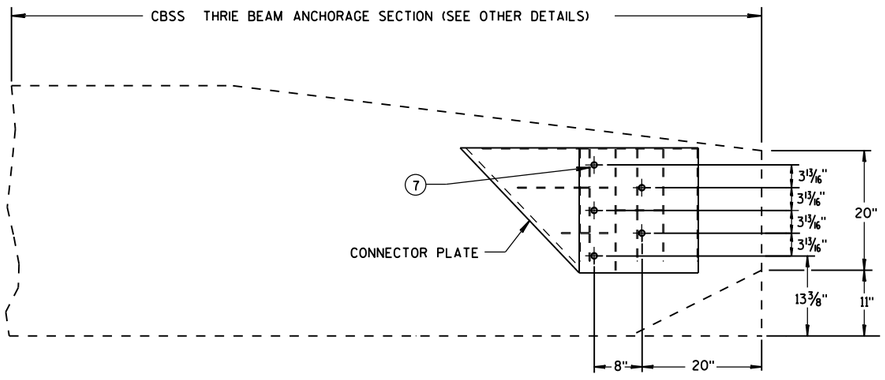


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



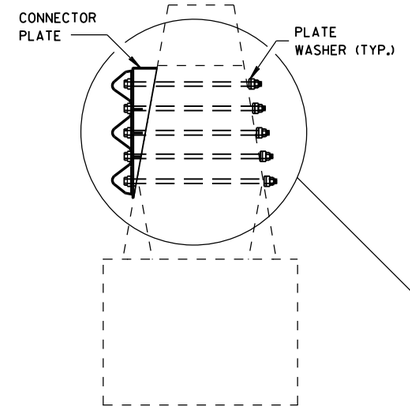
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

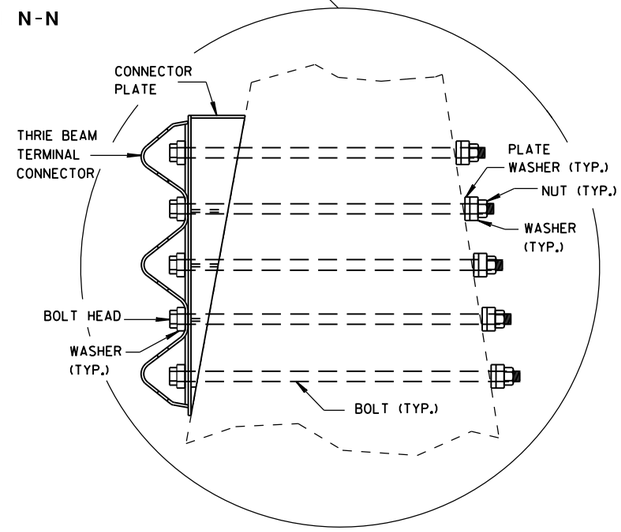
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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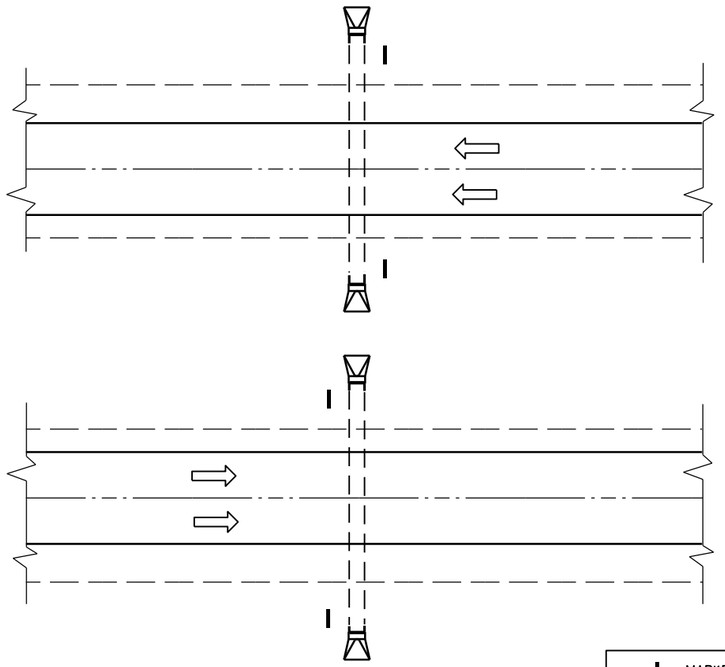
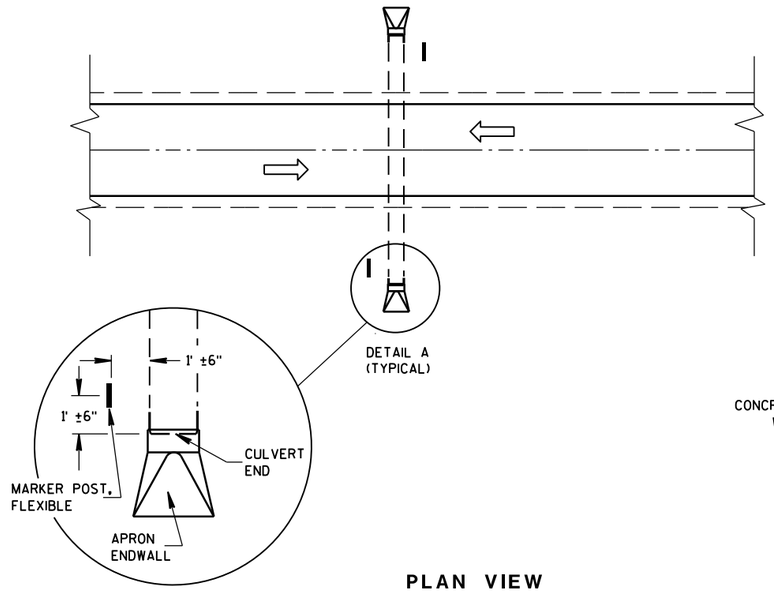


PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

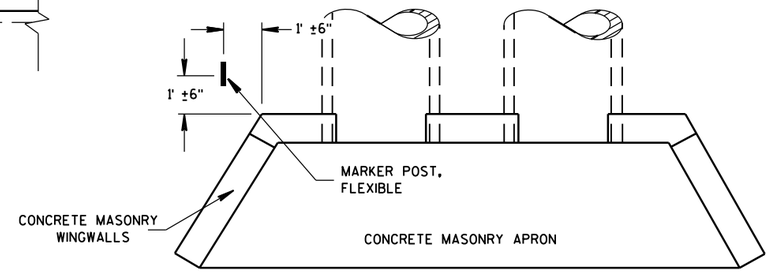
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

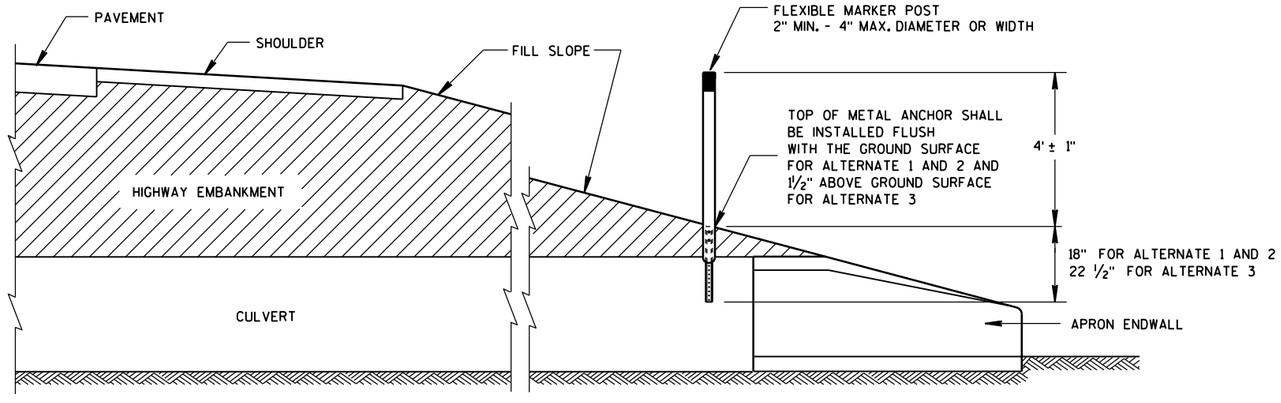
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

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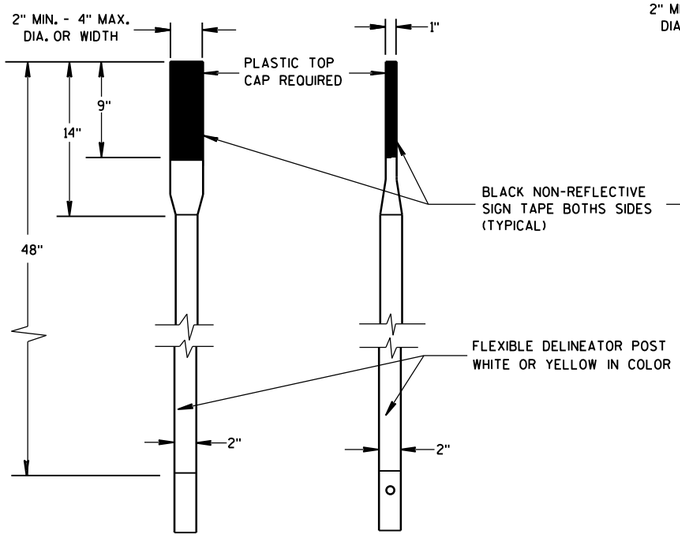
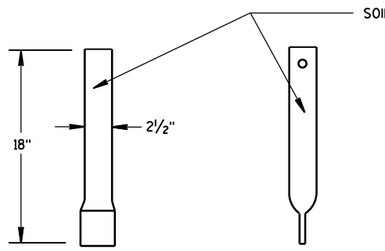
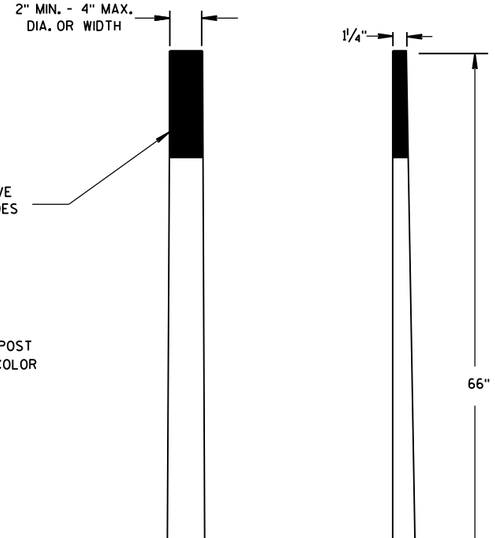
S.D.D. 15 A 3-2a





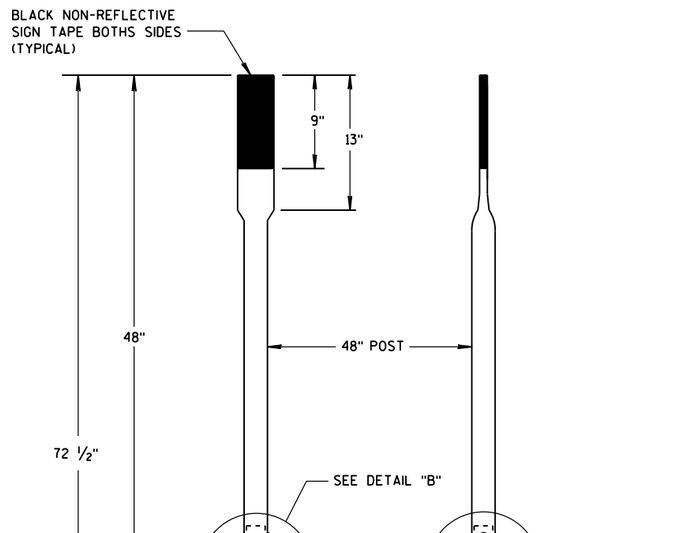
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

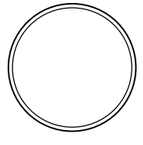
ALTERNATE 2



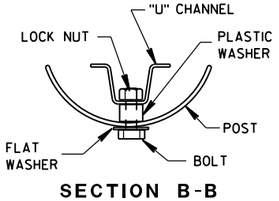
FRONT VIEW SIDE VIEW

ALTERNATE 3

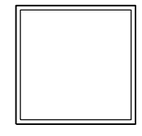
FLEXIBLE MARKER POSTS



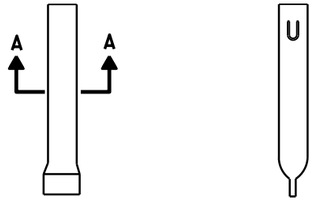
SECTION A-A



SECTION B-B

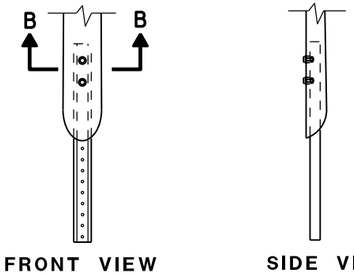


SECTION C-C



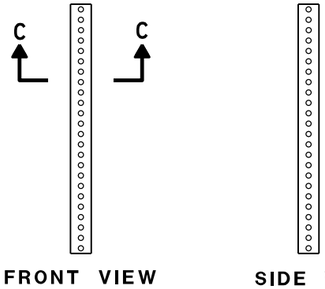
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

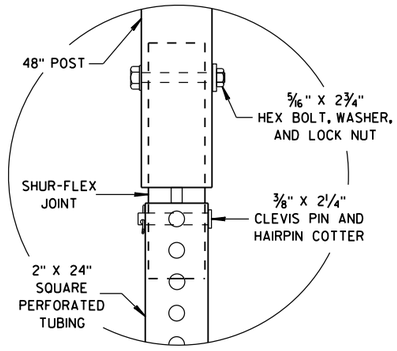
ALTERNATE 2



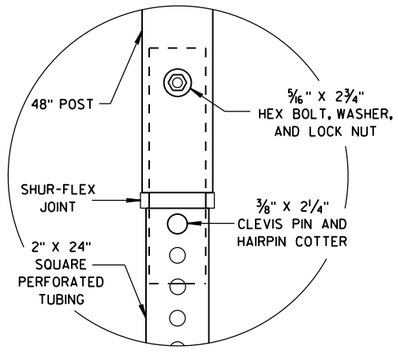
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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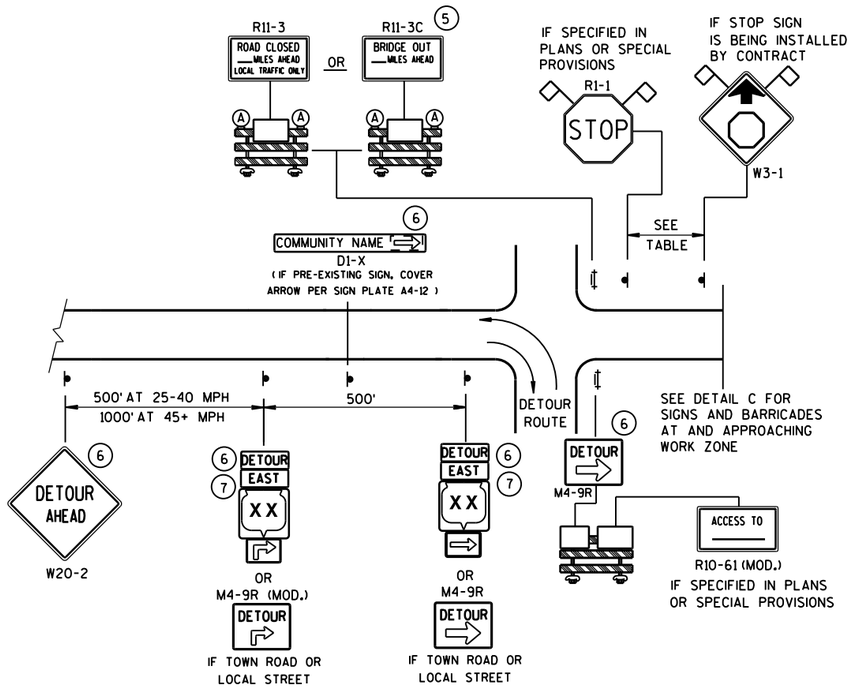
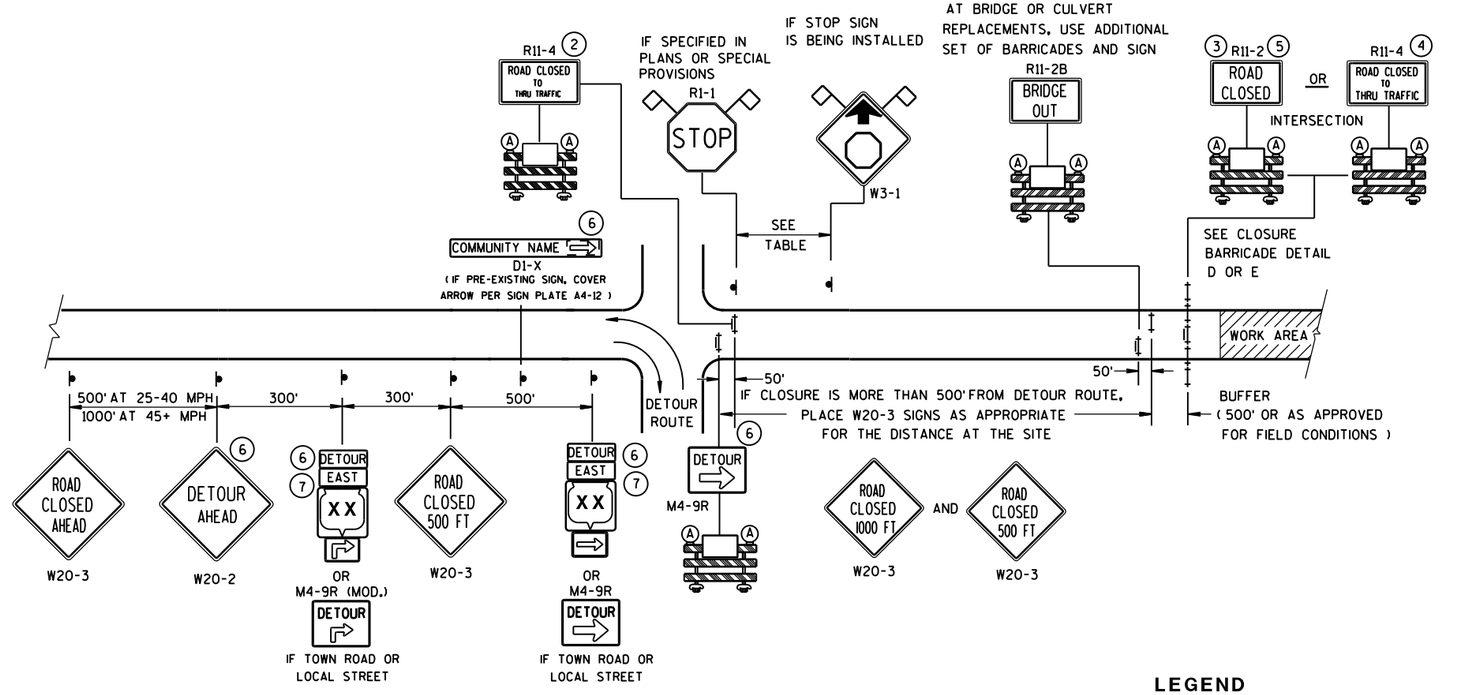


DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

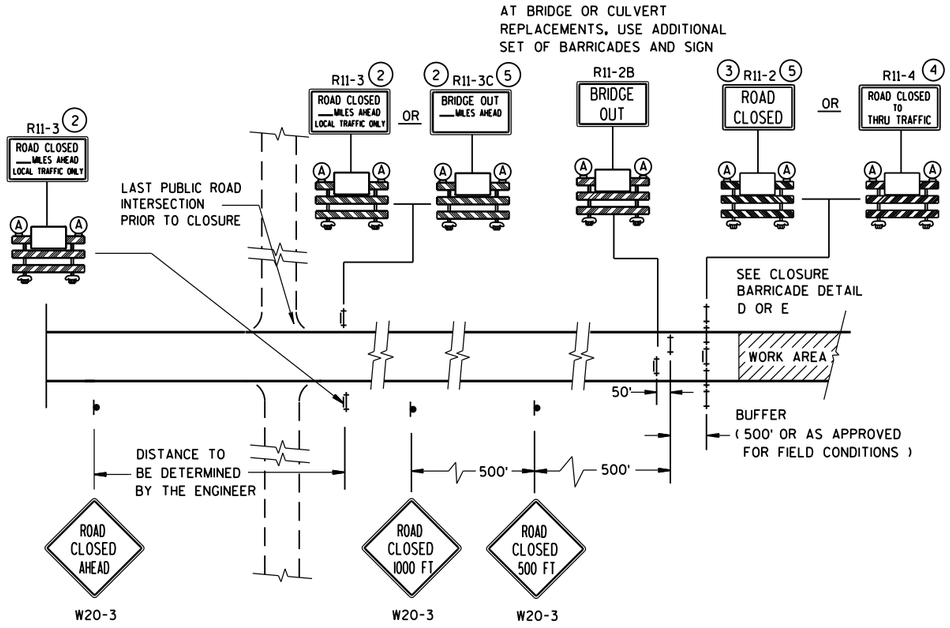
WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

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

SEE SDD 15C2-SHEET "**b**" FOR GENERAL NOTES AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 2-5a

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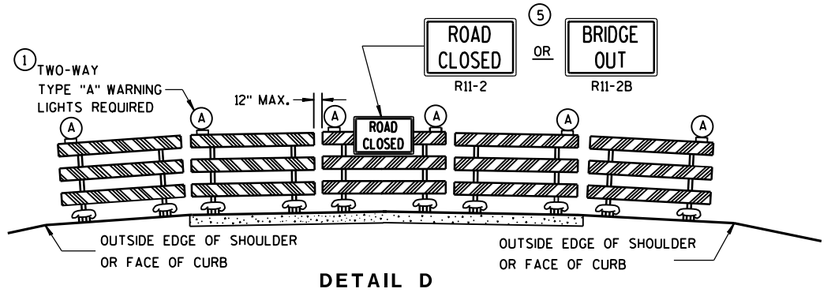
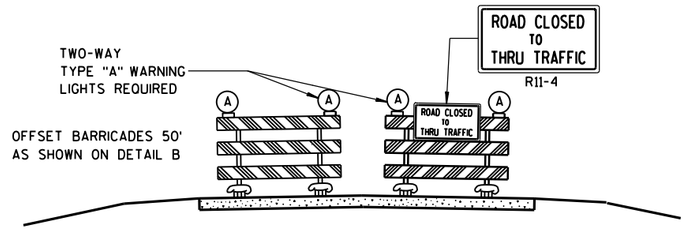
S.D.D. 15 C 2-5a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-SHEET "**a**" 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.

"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 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 2-5b

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

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.

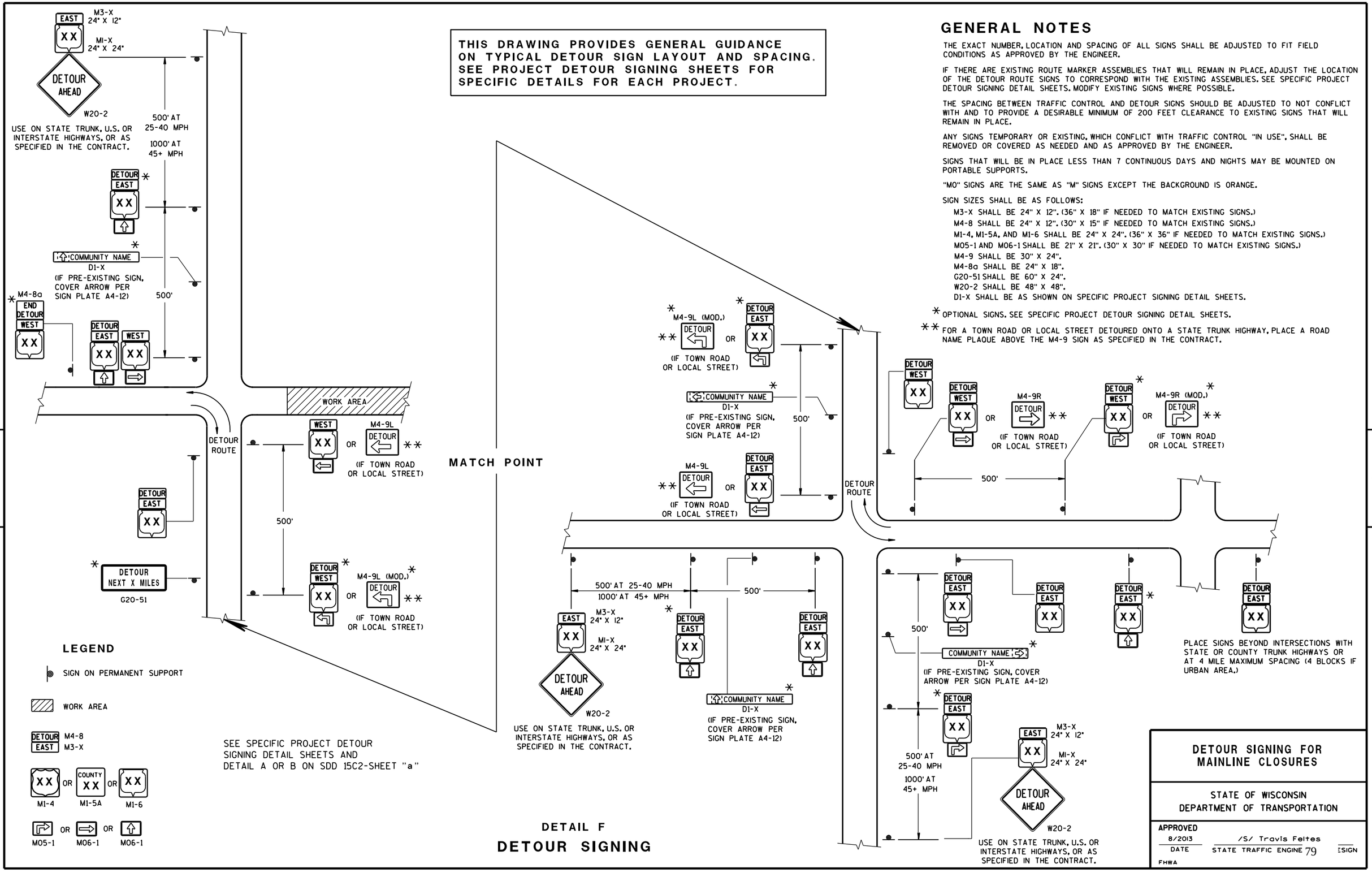
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- 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.



DETAIL F

DETOUR SIGNING

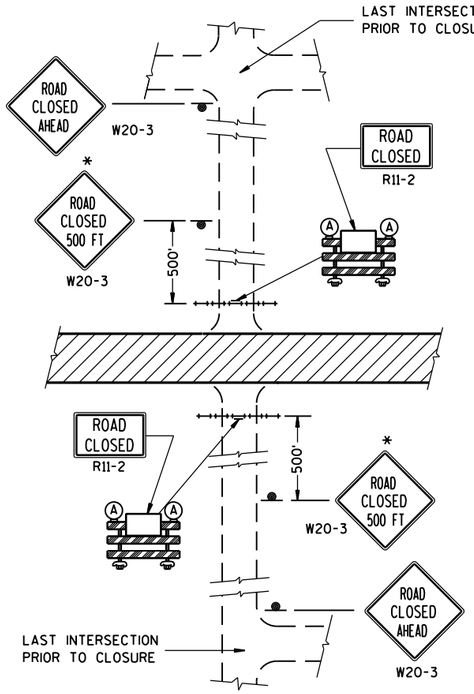
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/2013 DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINE 79 ESIGN
FHWA

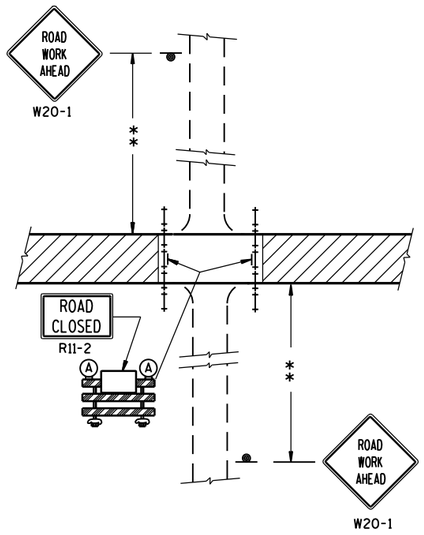
6

S.D.D. 15 C 2-5c



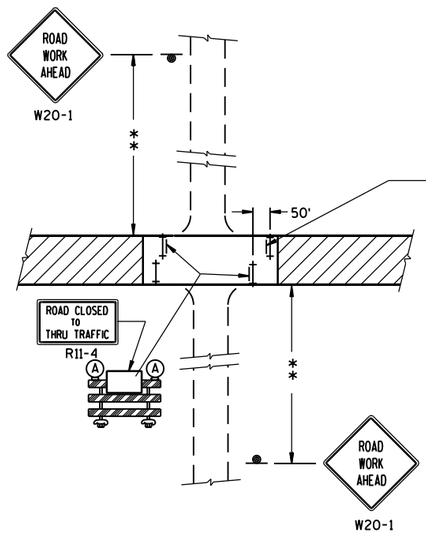
DETAIL 1

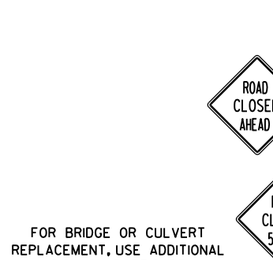
(NO ACCESS TO PROJECT)



DETAIL 2

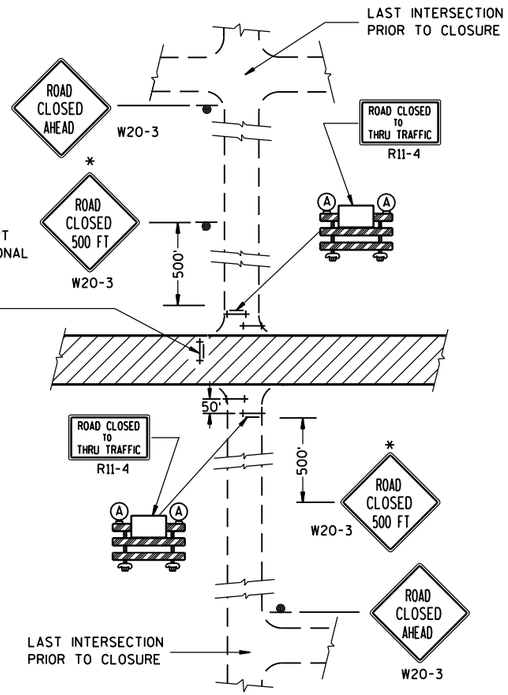
(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).





DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

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.

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.

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 AND R11-4 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.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

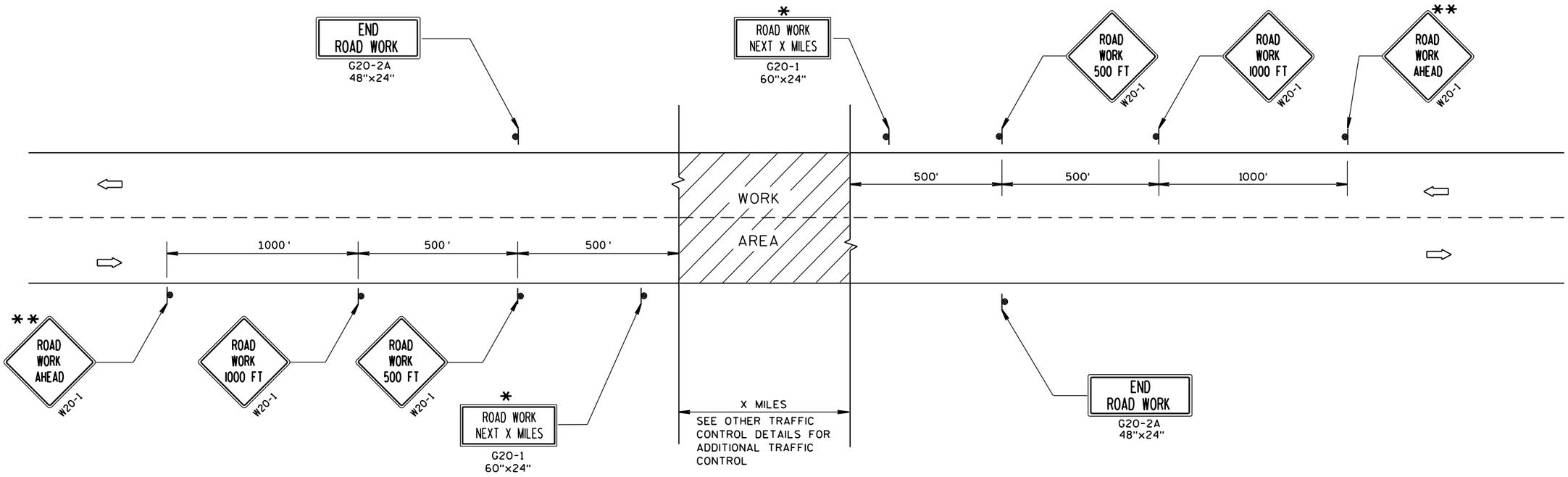
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 3-2

6

S.D.D. 15 C 3-2



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

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

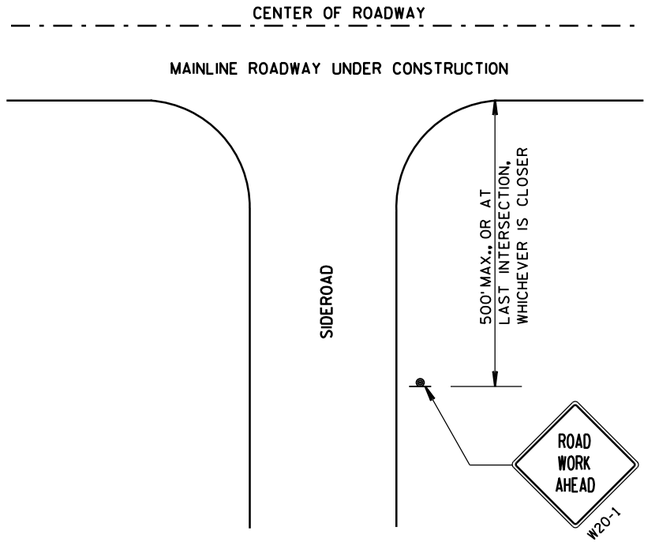
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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



LEGEND

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

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 — DATE

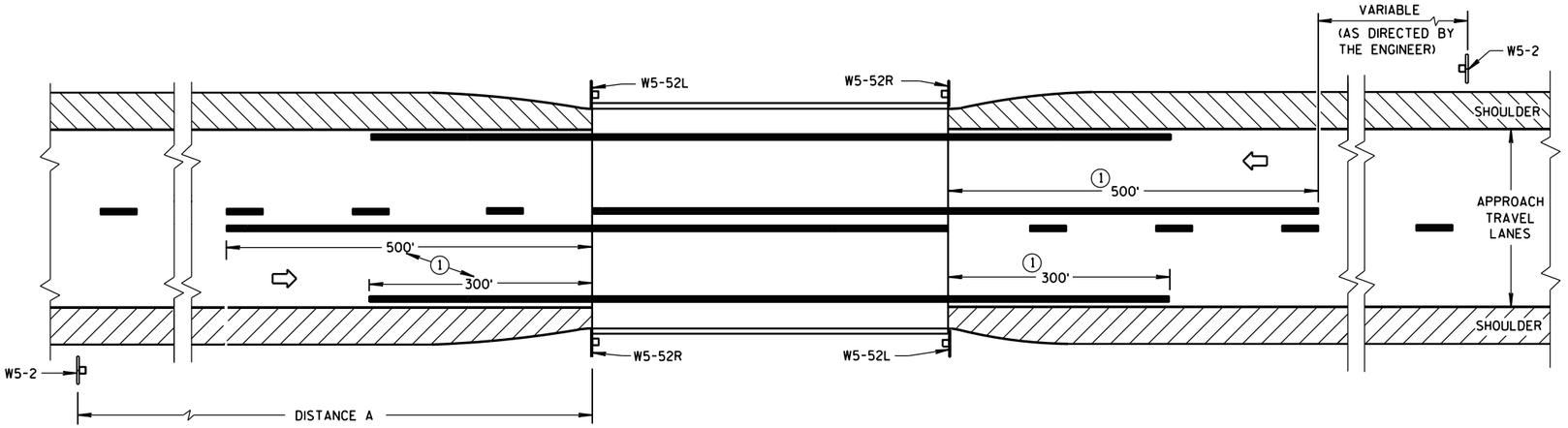
/S/ Travis Feltes — STATE TRAFFIC ENGINEER

SIGN

FHWA

6

S.D.D. 15 C 4-2



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.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

(1) MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

(2) FACE OF OBJECT MARKERS W5-52R, AND W5-52L SHALL BE COVERED WITH TYPE F REFLECTIVE SHEETING.

(3) LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

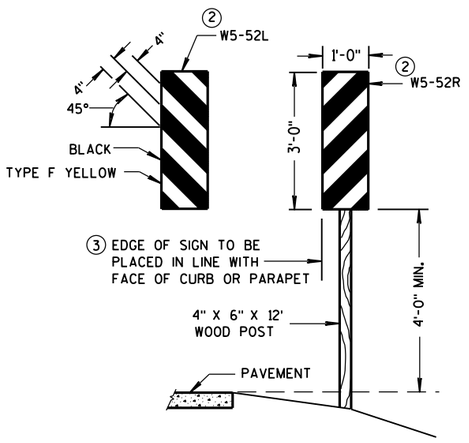
DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

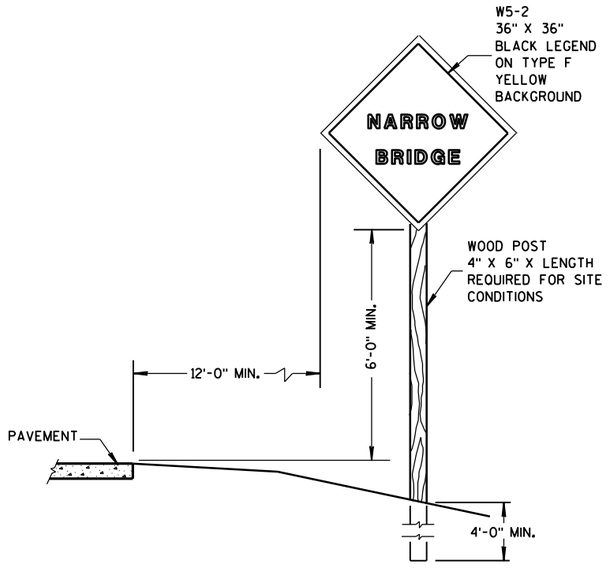
SITUATION 1

WARRANTING CRITERIA:

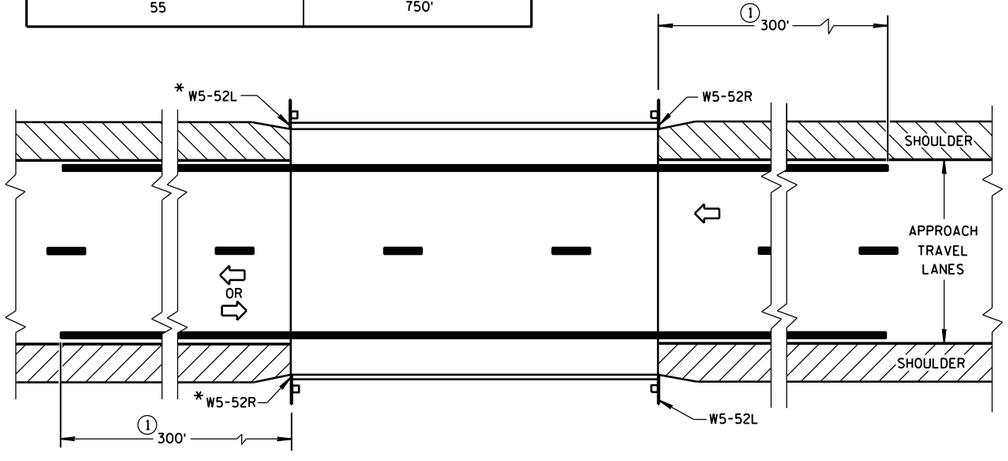
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET



OBJECT MARKER PLACEMENT



SIGN PLACEMENT



*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.

SIGNING & MARKING
FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3-2014 DATE

/S/ Travis Feltes STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 6-7

6

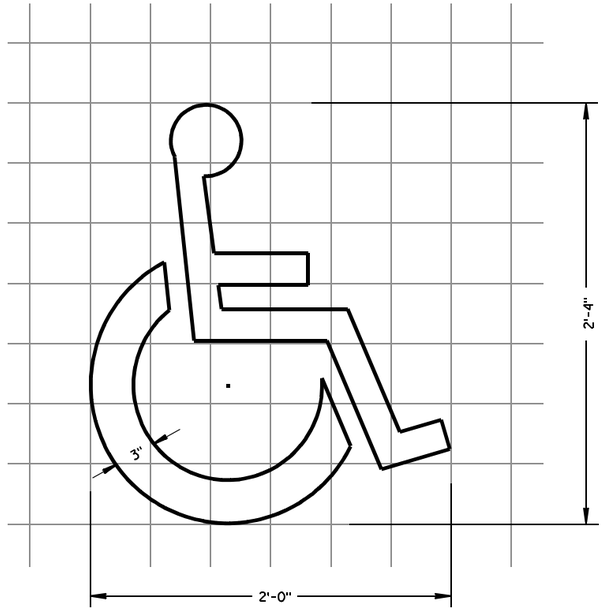
S.D.D. 15 C 6-7

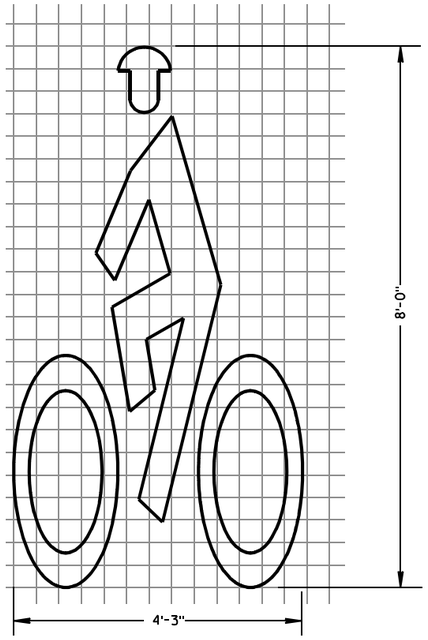
GENERAL NOTES

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.

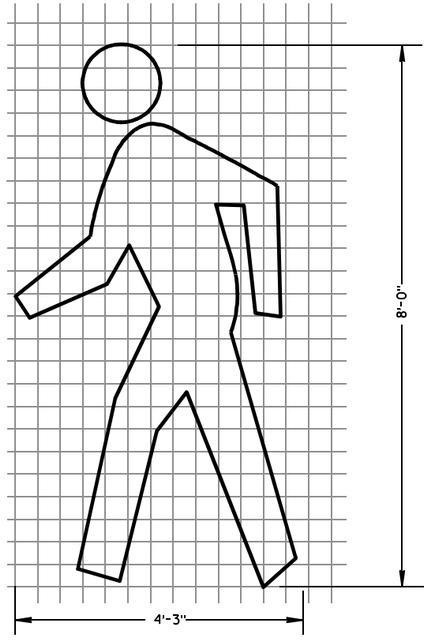
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

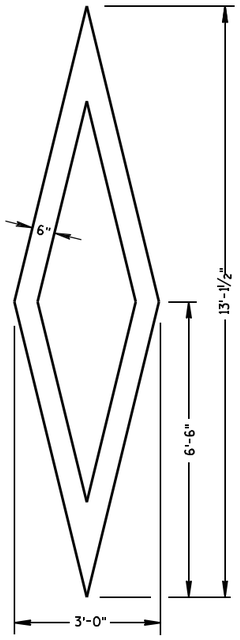




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

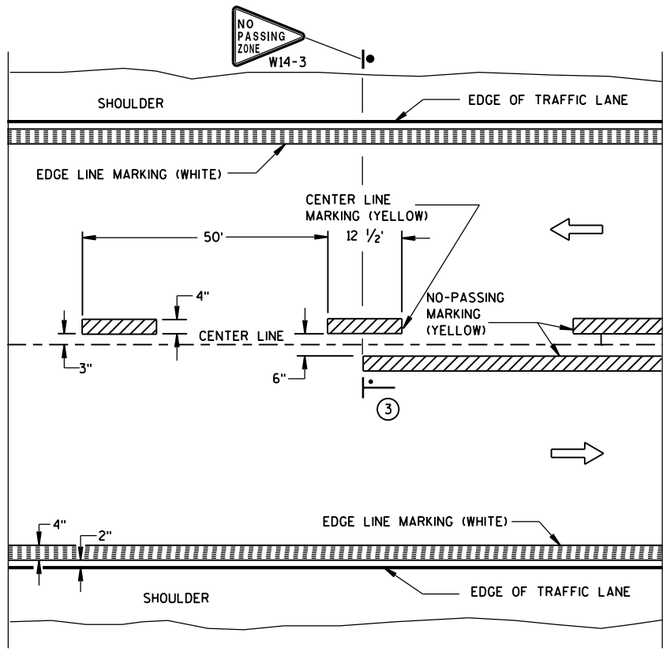
7/1/11 DATE

/S/ Thomas N Nathan STATE TRAFFIC ENGINEER

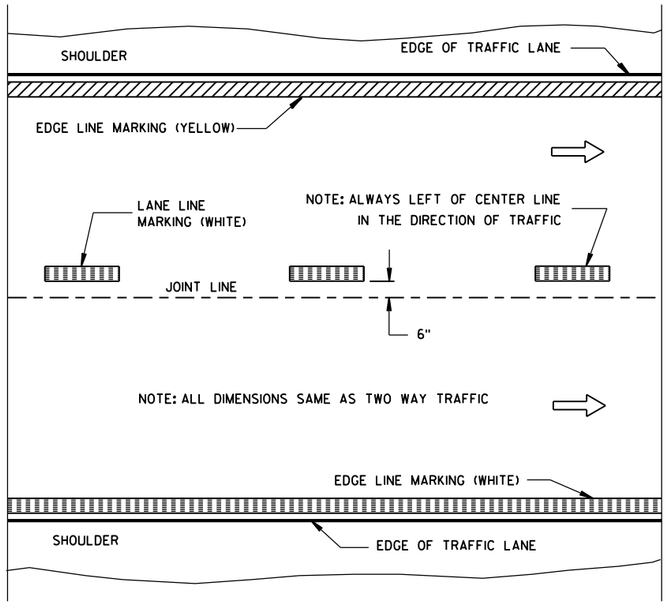
FHWA

6

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

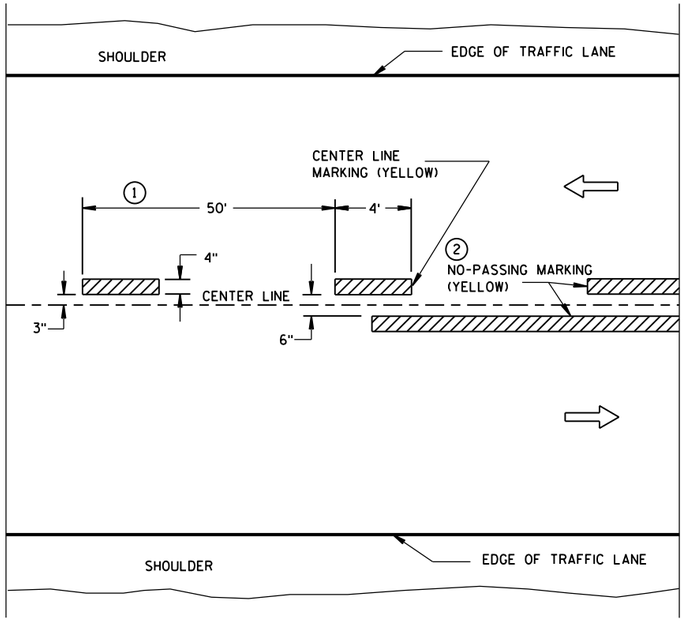


TWO WAY TRAFFIC

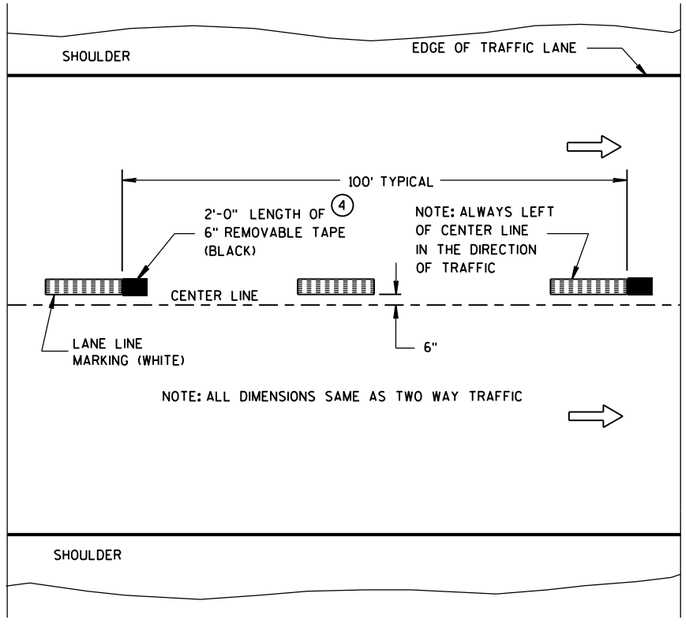


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

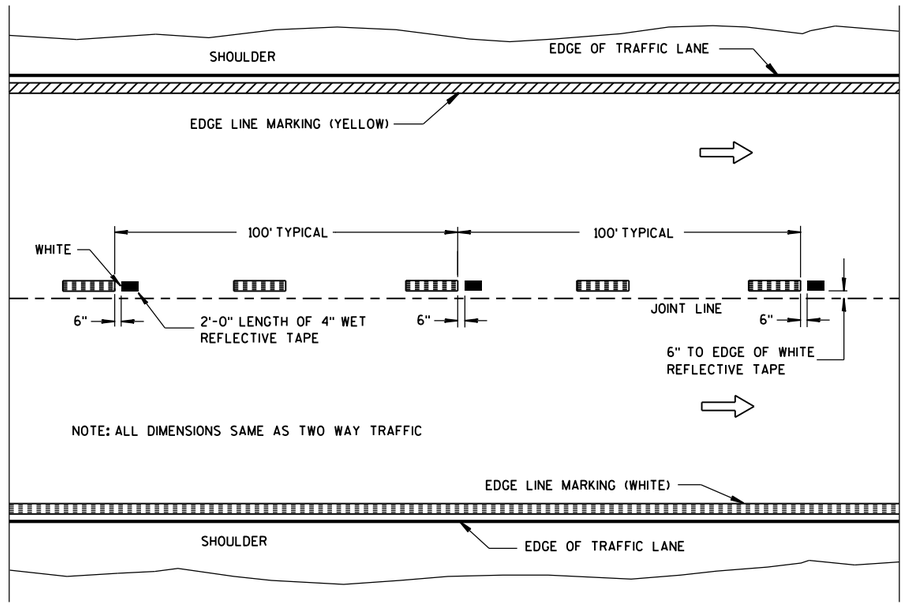
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

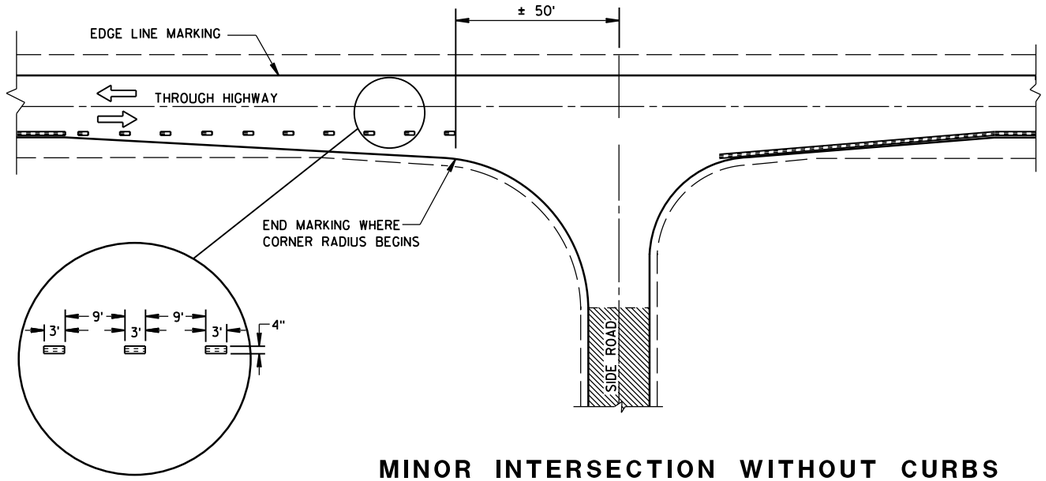
PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

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

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

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

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

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

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

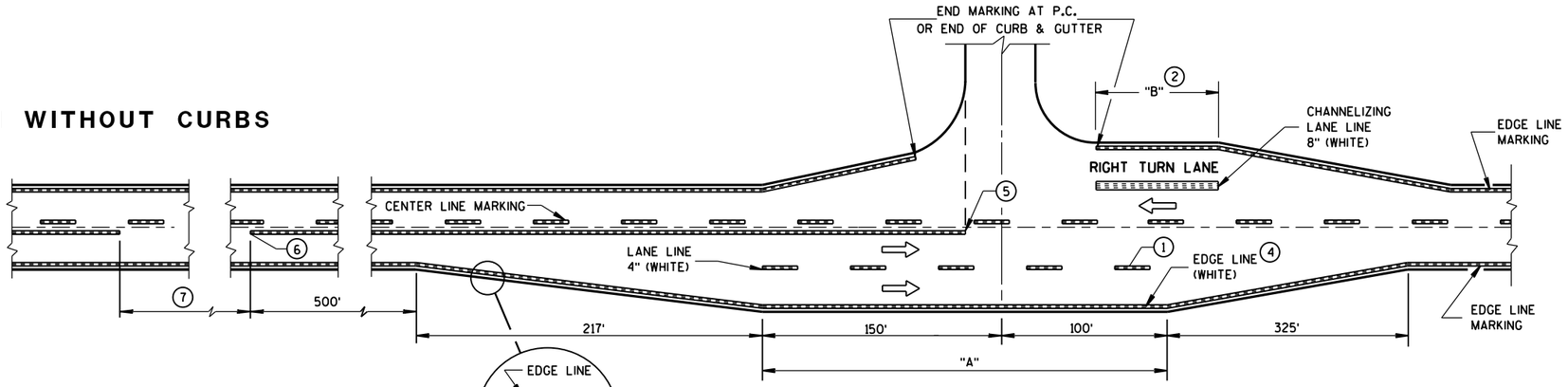
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

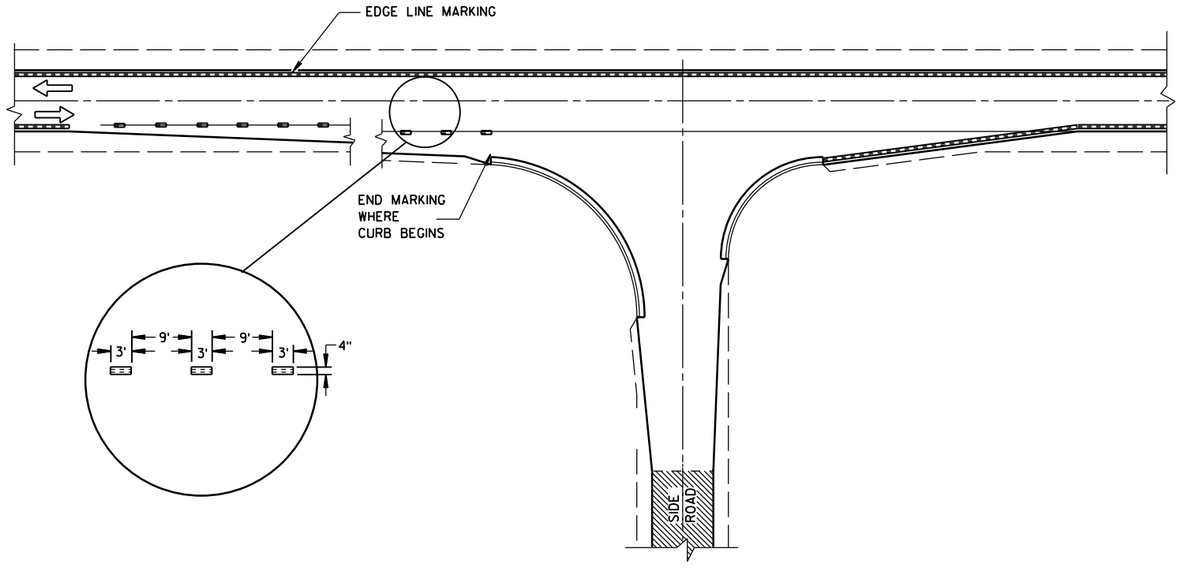
(7)

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



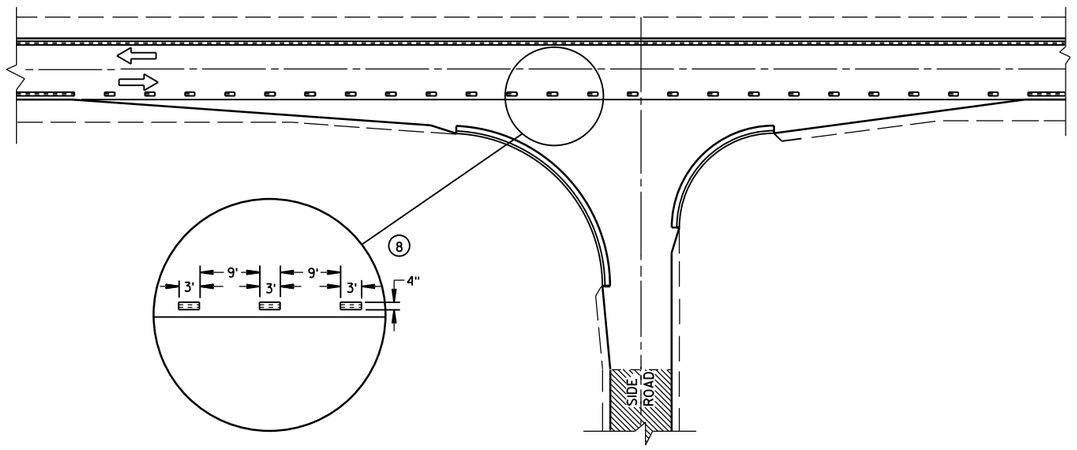
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

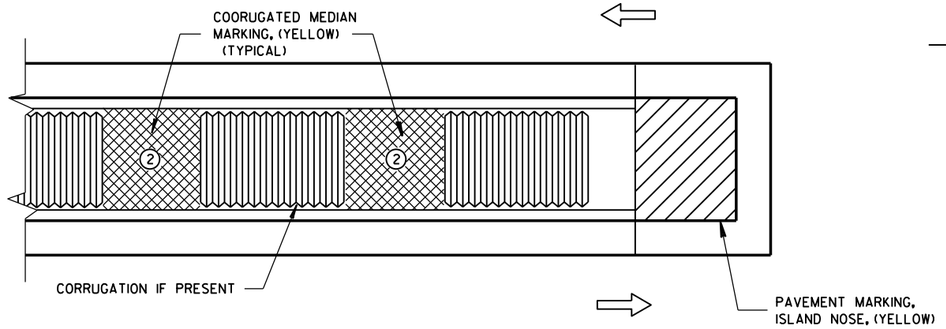
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

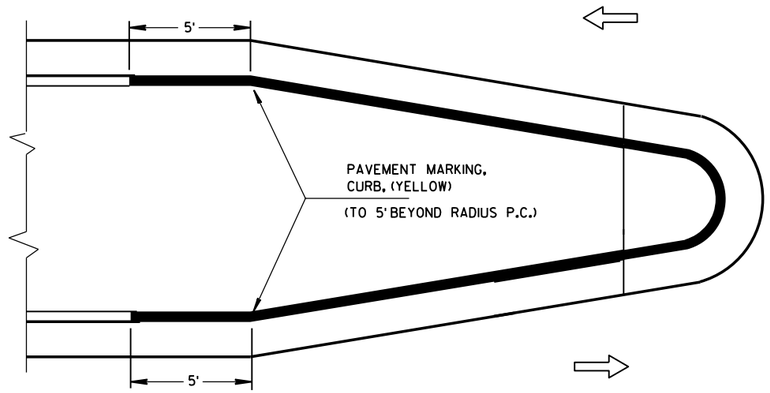
S.D.D. 15 C 8-16b

6

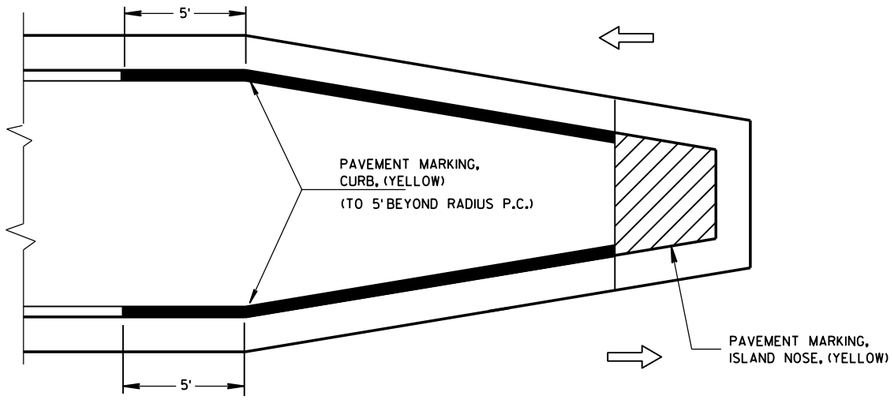
S.D.D. 15 C 8-16b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

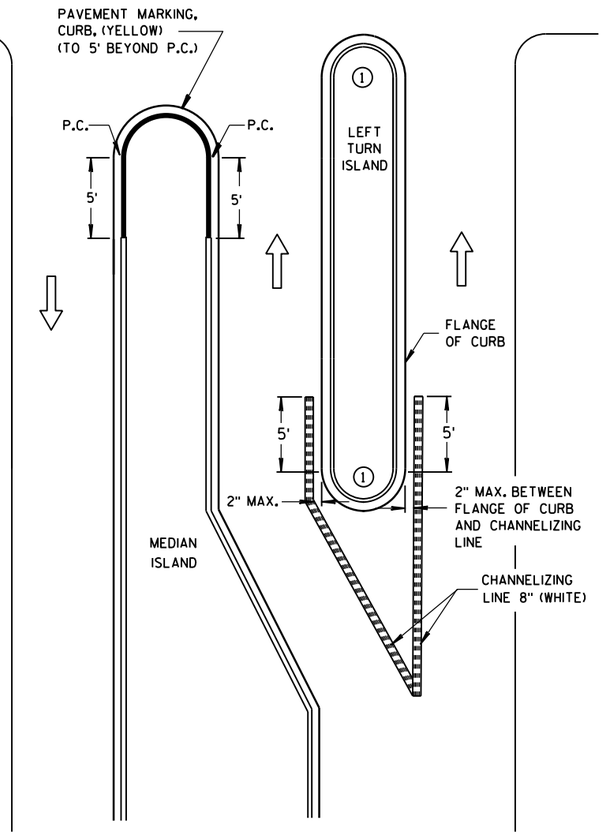


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

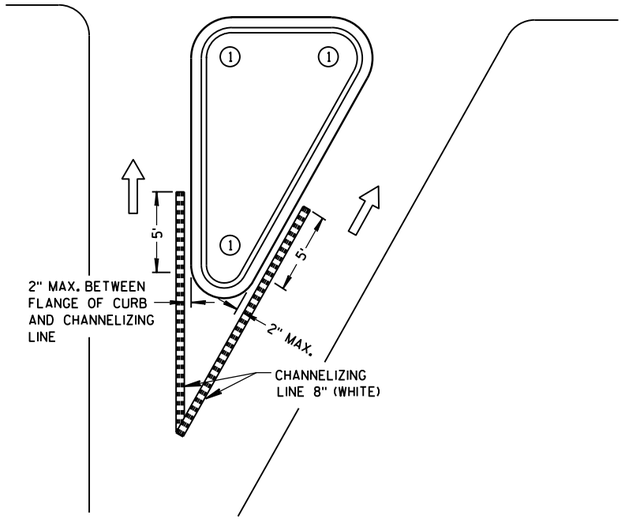


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

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

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



RIGHT TURN ISLAND

LEGEND

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

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

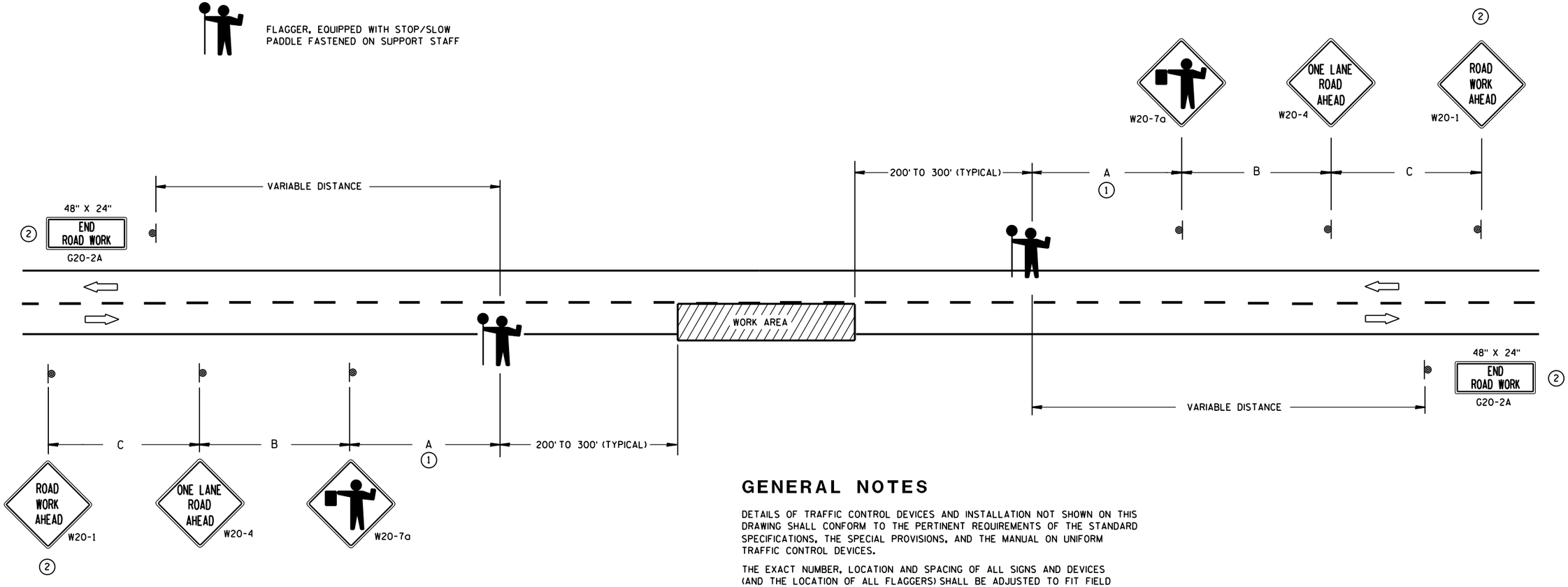
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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

W3-4

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



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

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

GENERAL NOTES

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

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

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

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

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

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

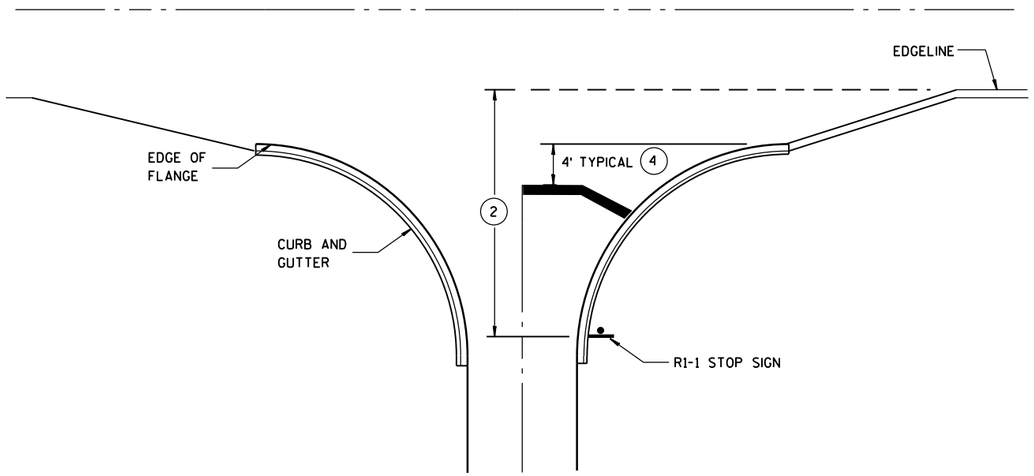
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
DESIGN
FHWA

6

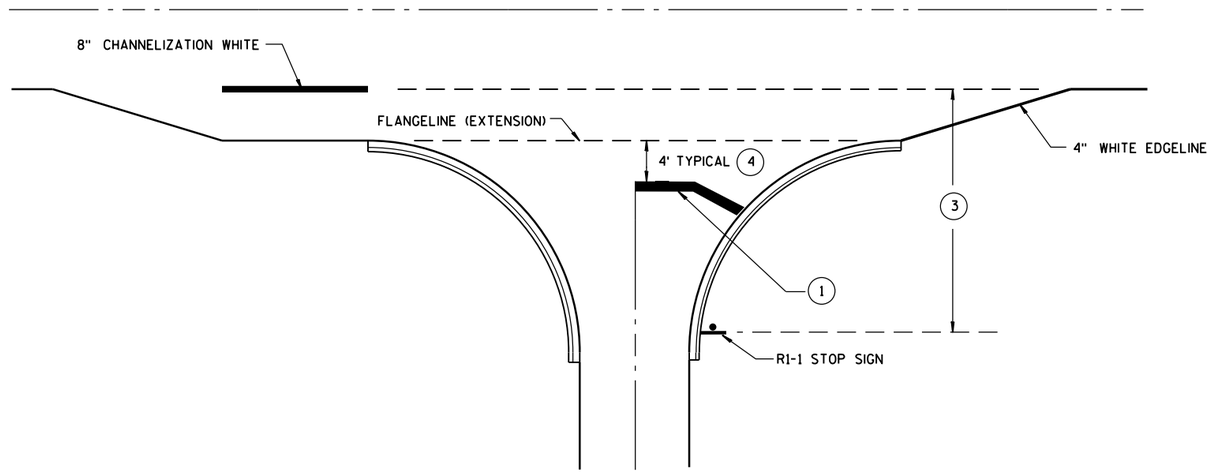
S.D.D. 15 C 12-4

6

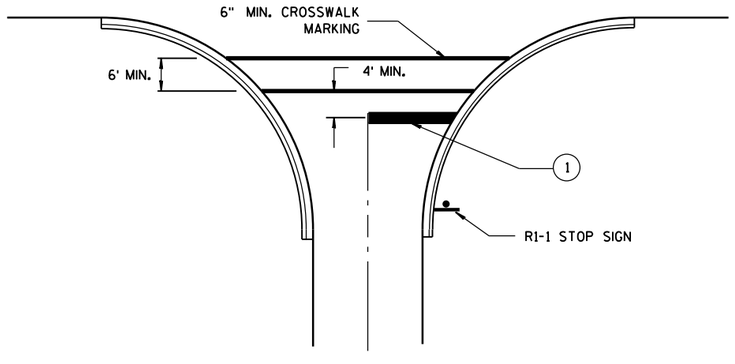
S.D.D. 15 C 12-4



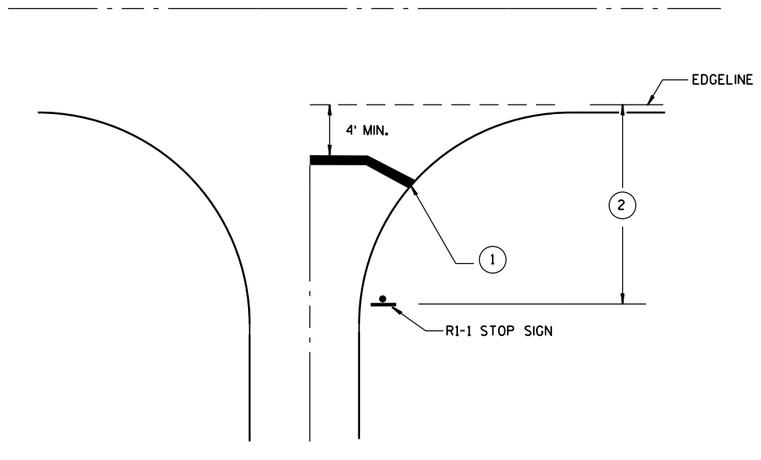
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

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

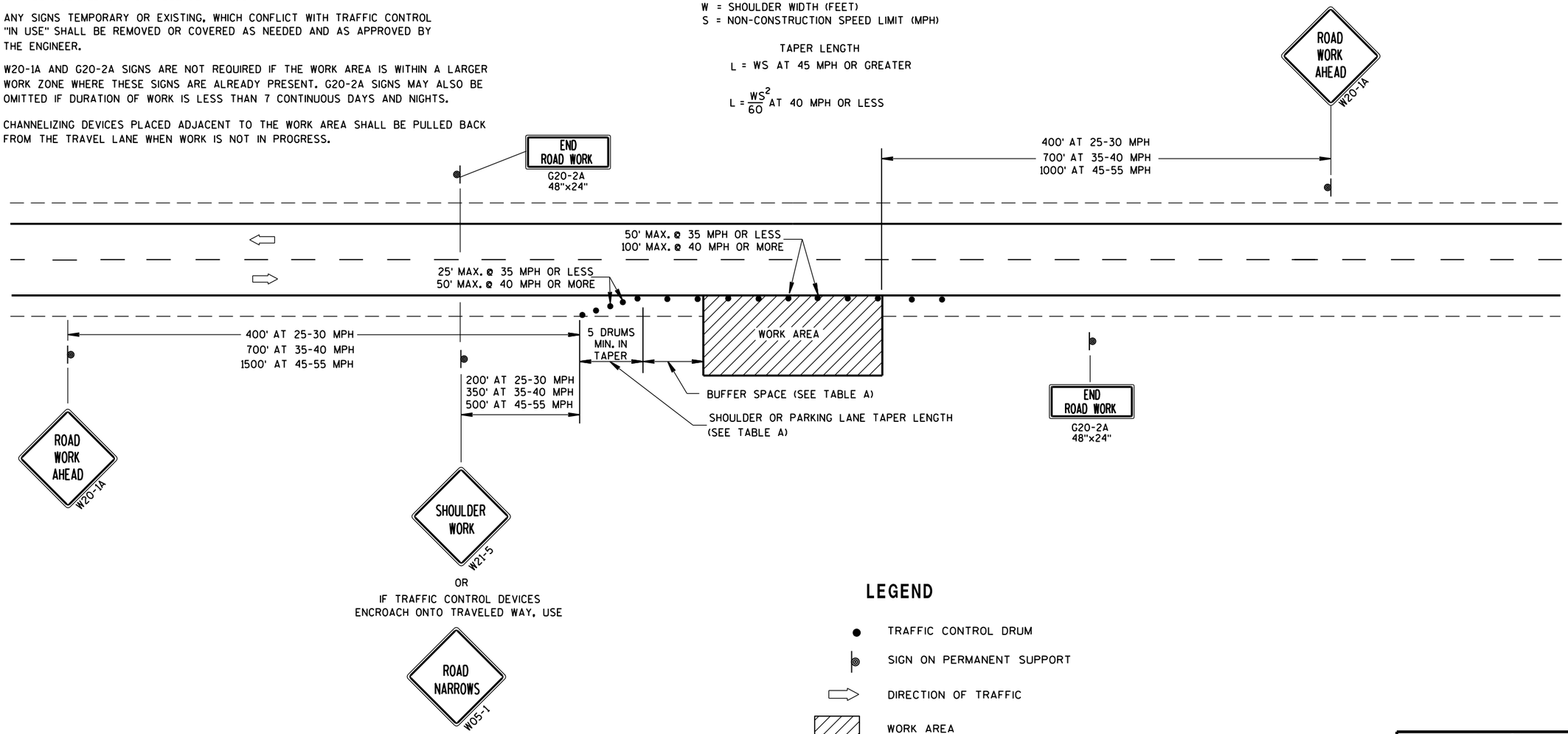
W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH

L = WS AT 45 MPH OR GREATER

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

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



LEGEND

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

July 14, 2015 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible] — FIC

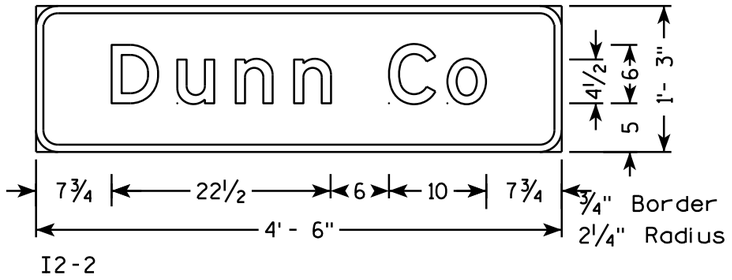
FHWA

6

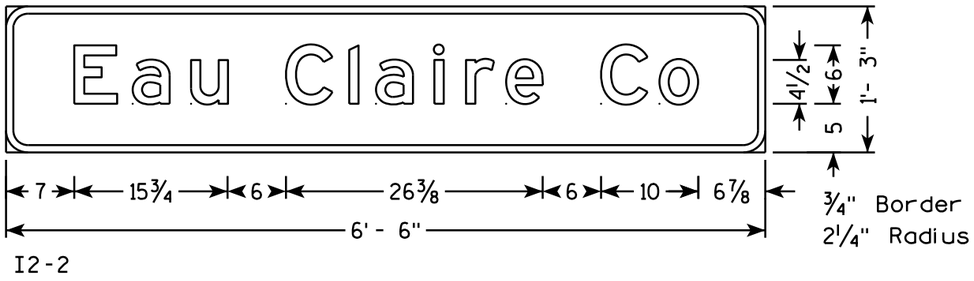
S.D.D. 15 D 28-3

6

S.D.D. 15 D 28-3



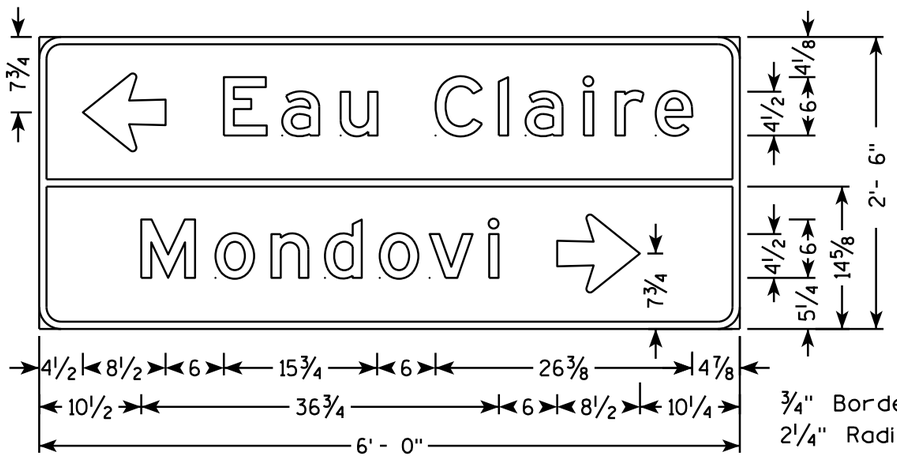
I2-2



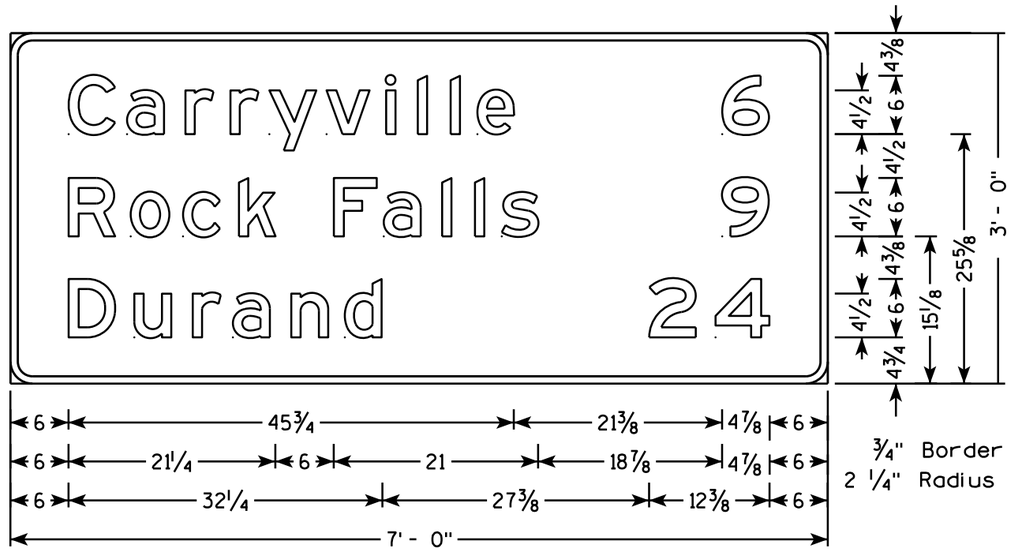
I2-2

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



D1-2



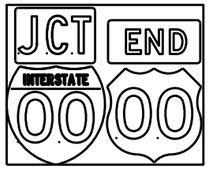
D2-3

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO:	E

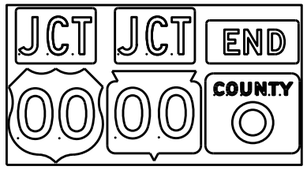
FILE NAME : C:\CAEFiles\Projects\tr_d6\6184AN13.dgn PLOT DATE : 14-NOV-2013 10:07 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 15.566735:1.000000 WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

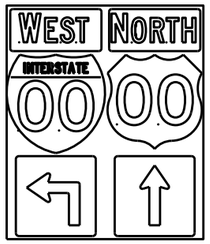


J1-2

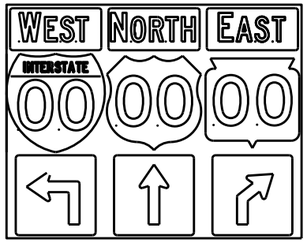


J1-3

J2-1



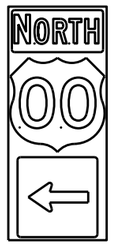
J2-2



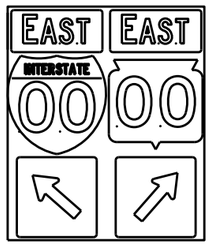
J2-3

JV

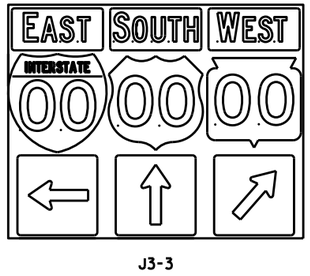
(Typical Vertical J-Assembly
See Note 10 and 11)



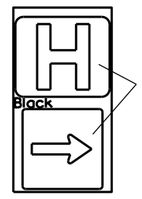
J3-1



J3-2

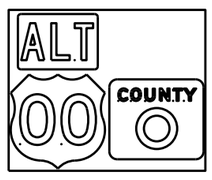


J3-3

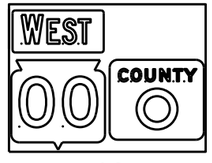


JH-1

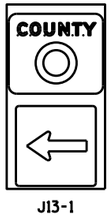
J4-1



J4-2



J4-2



J13-1

J12-1

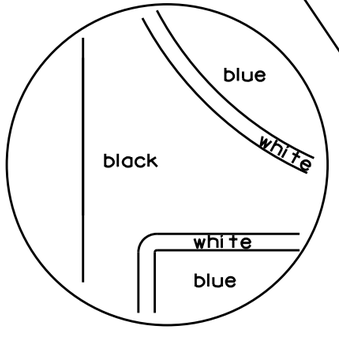
J32-1

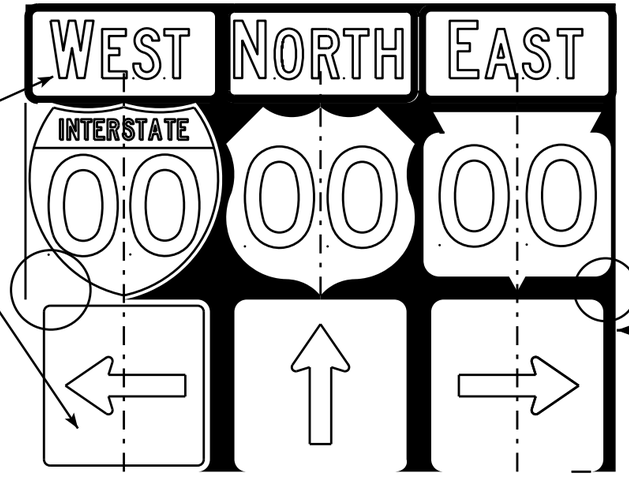
J33-1

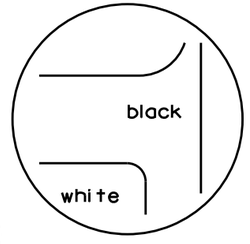
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

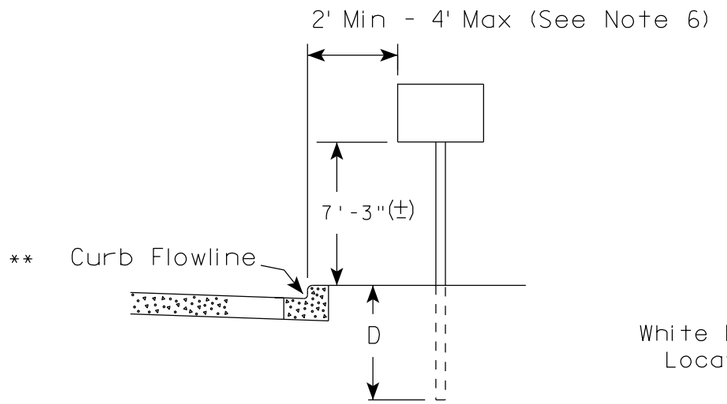
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

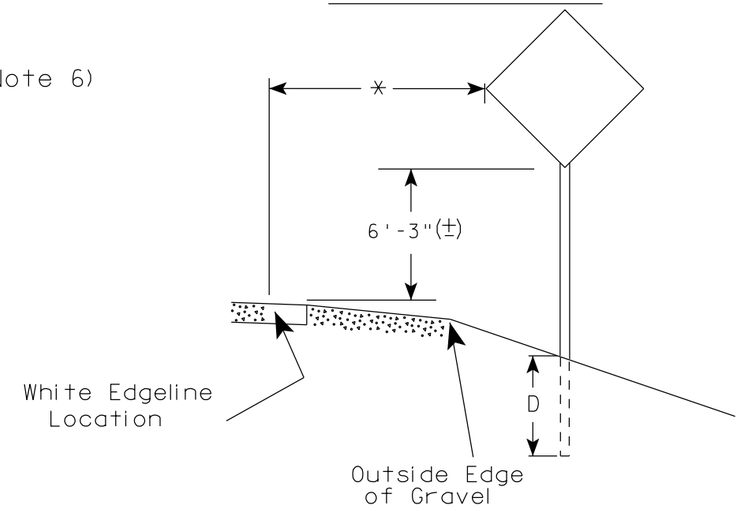
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

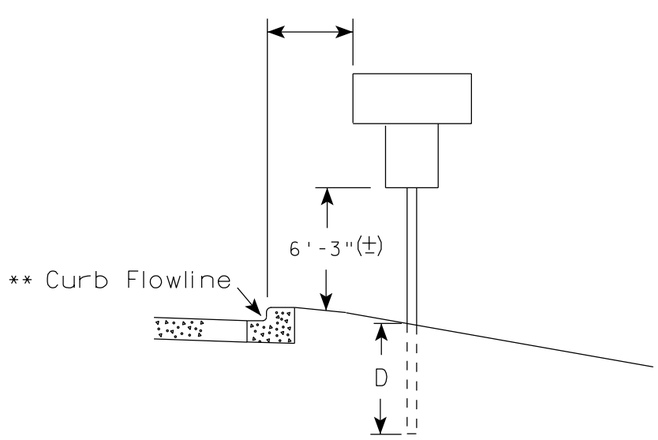
WISDOT/CADDS SHEET 42

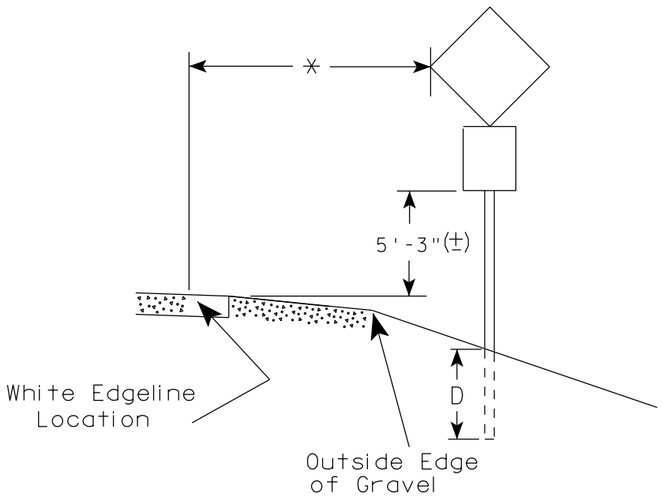
URBAN AREA



RURAL AREA (See Note 2)







GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

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

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

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

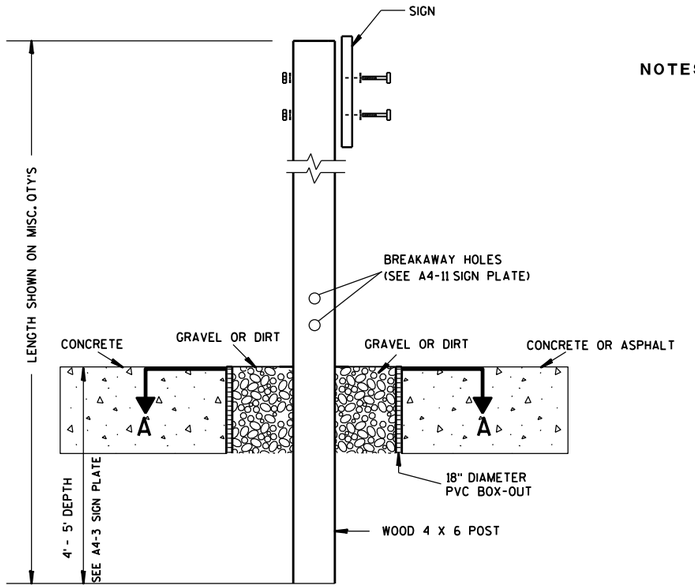
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

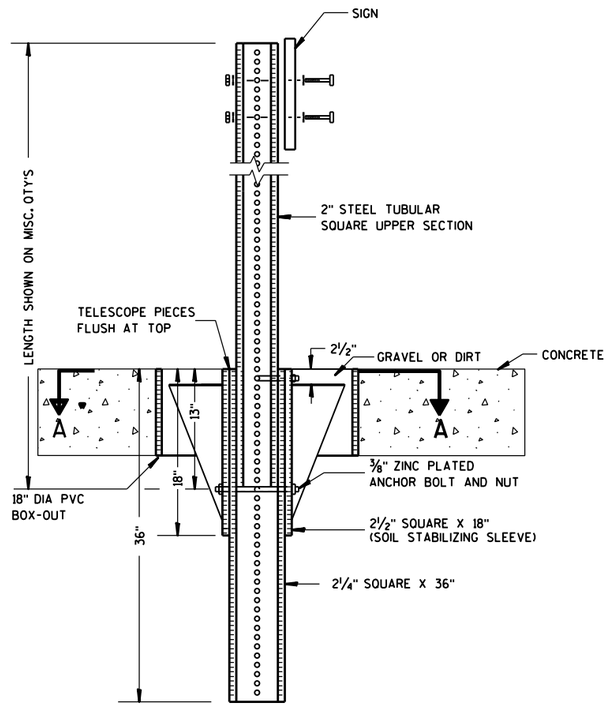
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

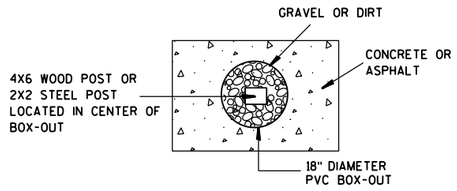
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

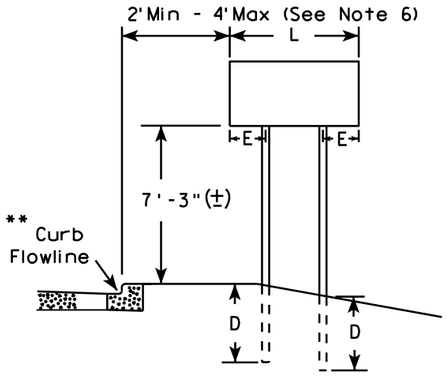
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

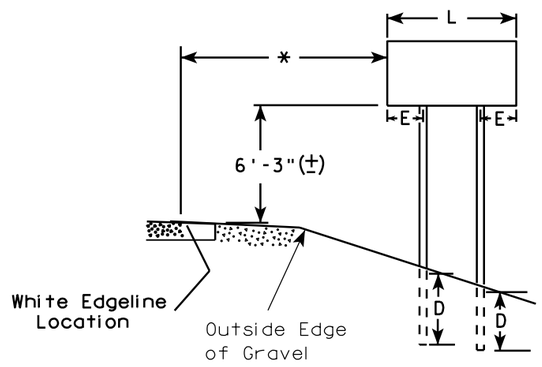
DATE 1/27/14 PLATE NO. A4-3B.1

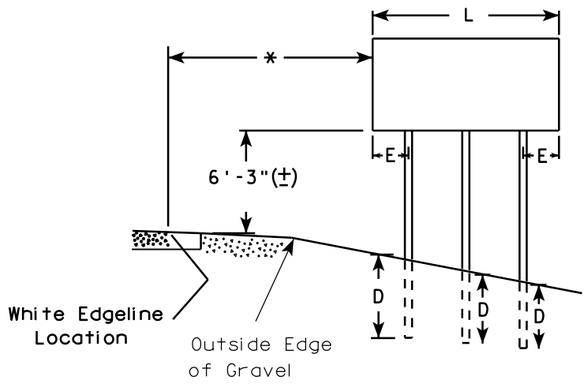
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

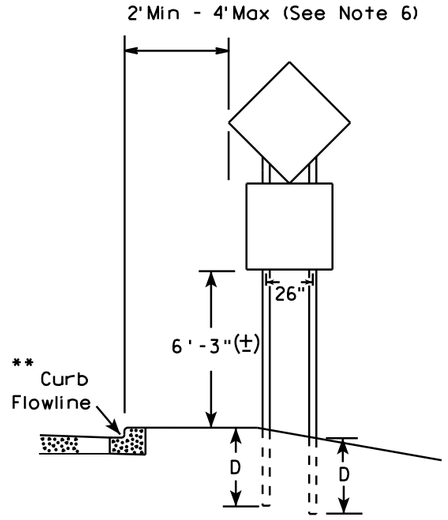
URBAN AREA



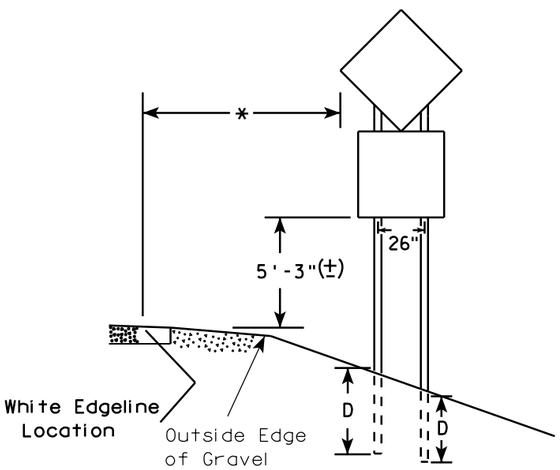
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

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

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

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

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

***

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

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

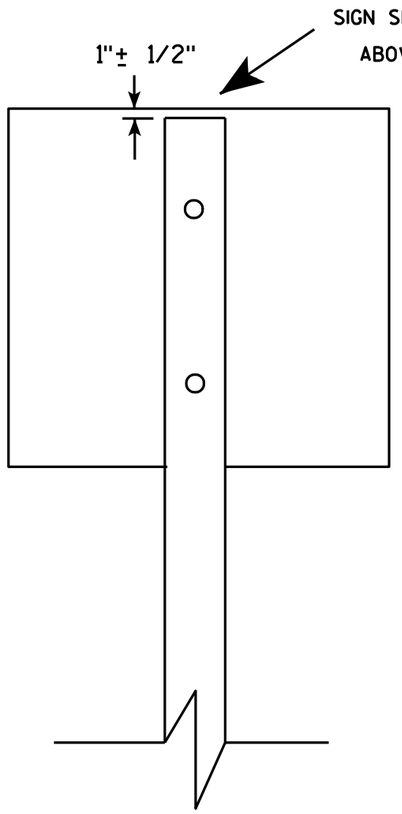
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

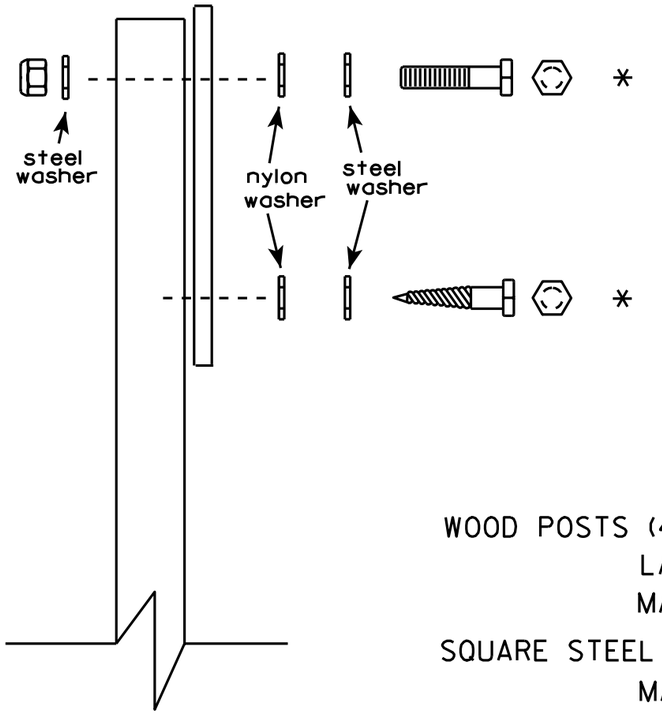
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-4 14
94

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E





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

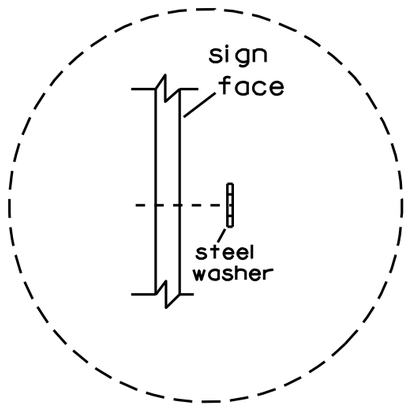
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

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

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

7

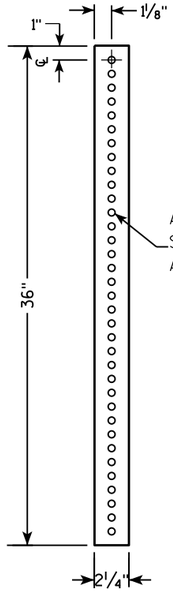
7

PROJECT NO:

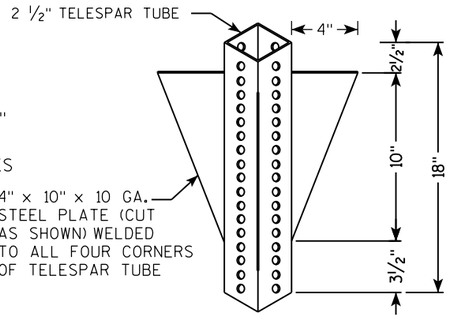
SHEET NO: 95 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

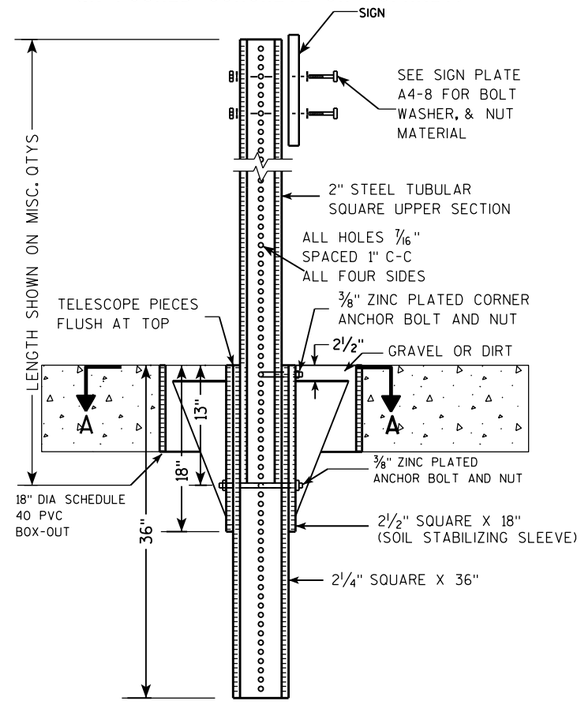
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



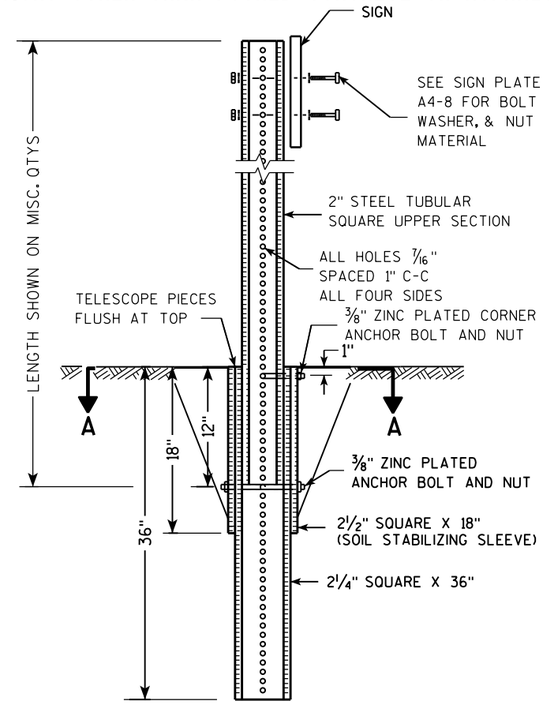
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

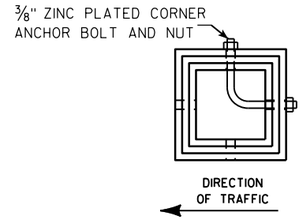


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

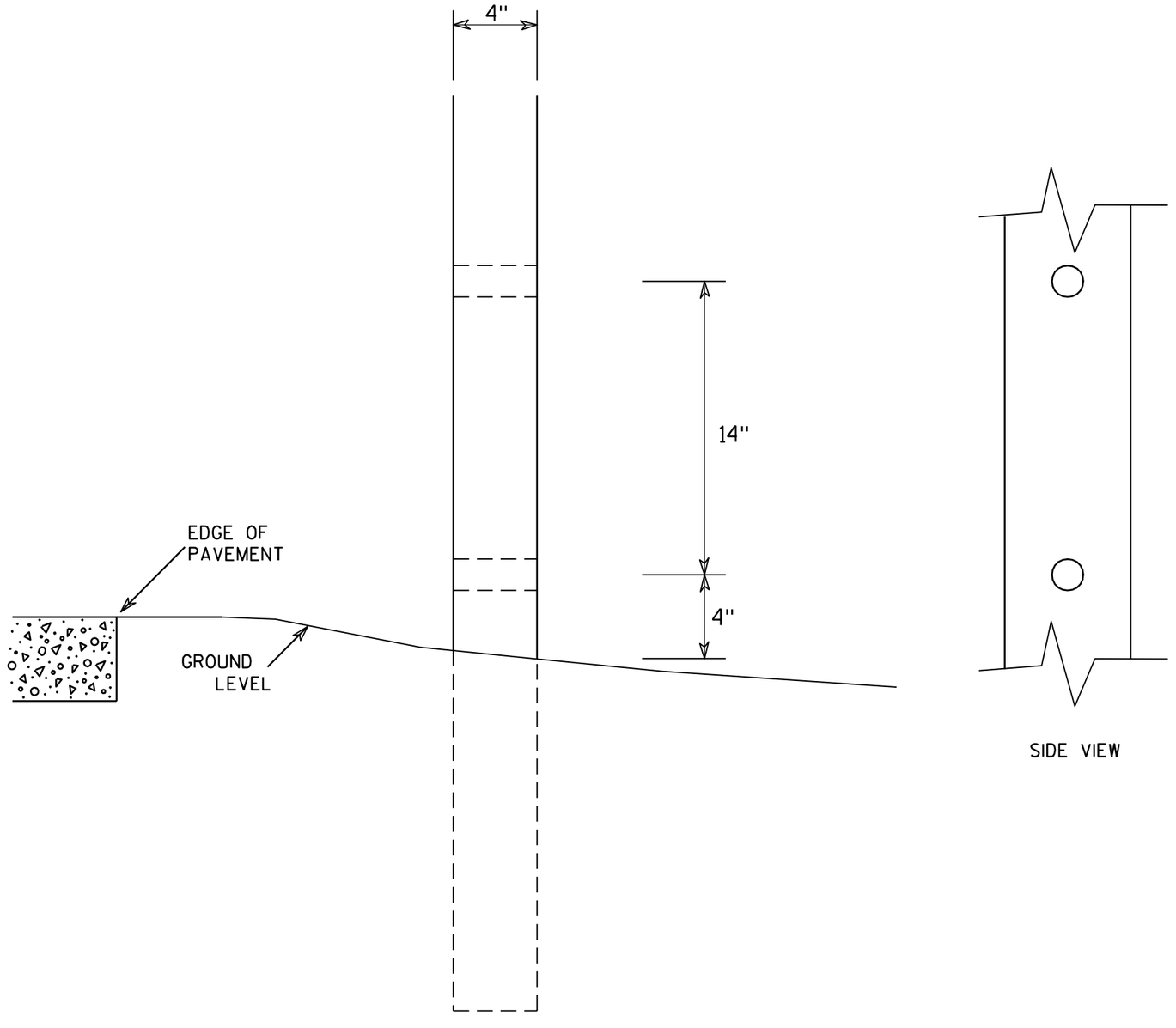
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 96 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

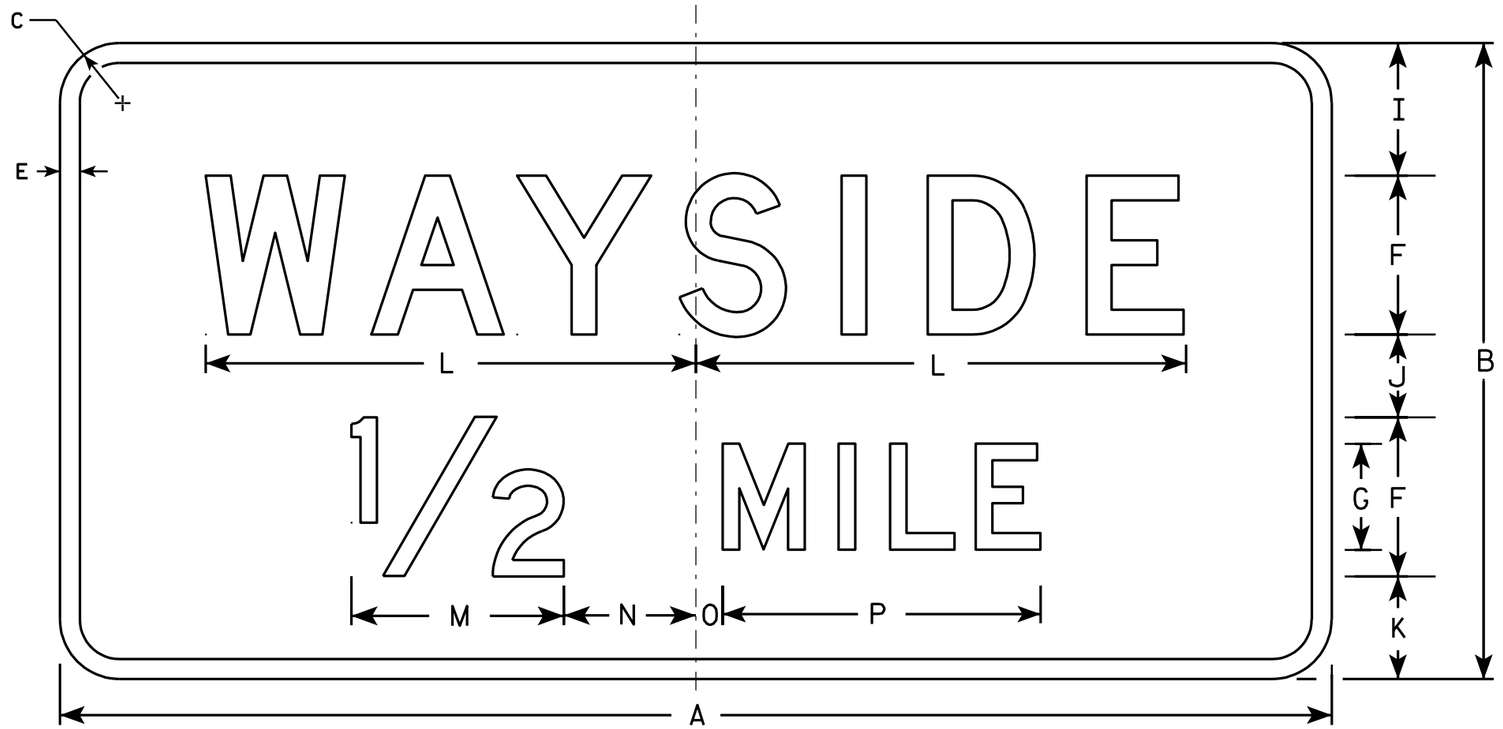
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 97	E



D5-61

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 600 mm
3	
4	1950 mm X 1050 mm
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		
1																												
2	48	24	2 1/4		3/4	6	4	6	5	3 1/8	3 7/8	18 1/2	8	5	1	12											8.0	0.72
3																												
4	78	42	3		1	10	7	10 1/2	8 3/4	5 3/4	7	30 1/8	14	8 3/4	1 3/4	21											22.8	2.05
5																												

STANDARD SIGN
D5-61

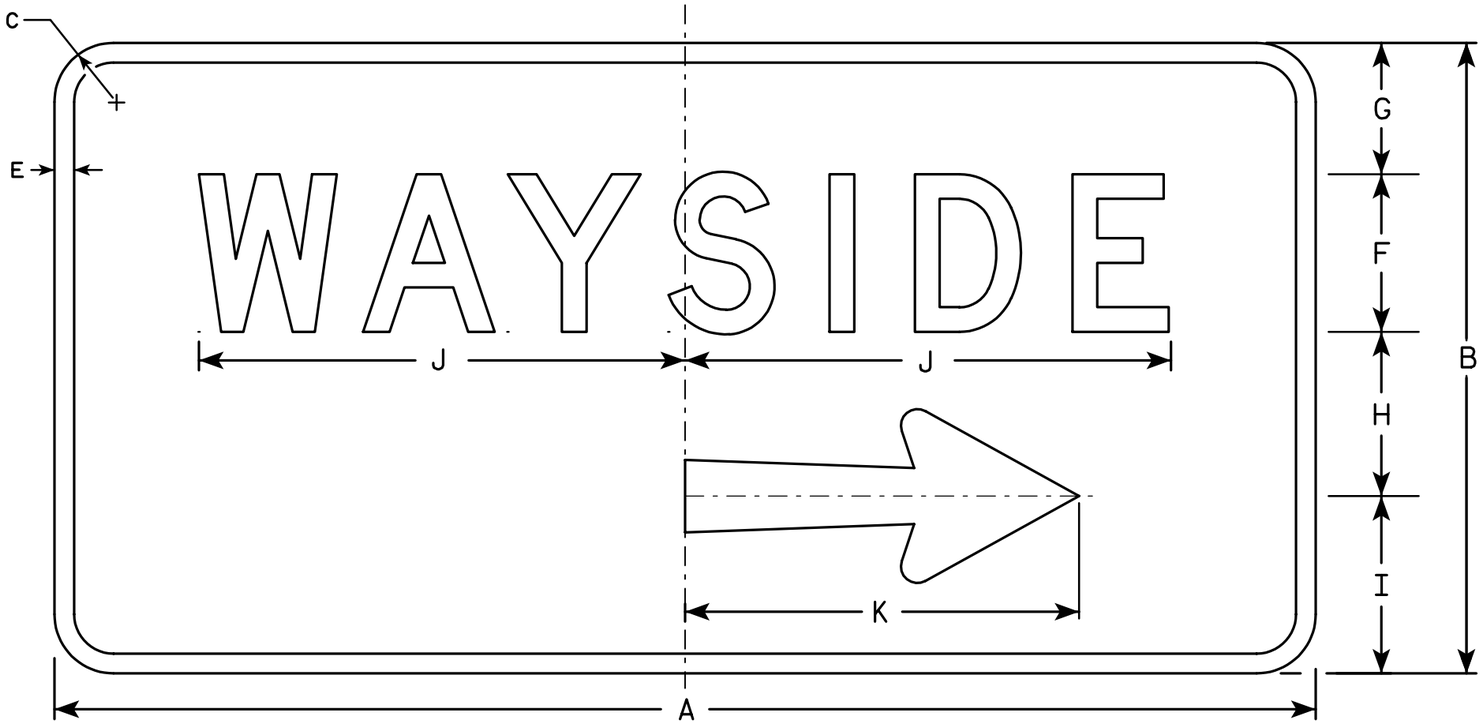
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

DATE 1/09/02 PLATE NO. D5-61.9

STATE PROJECT NUMBER:

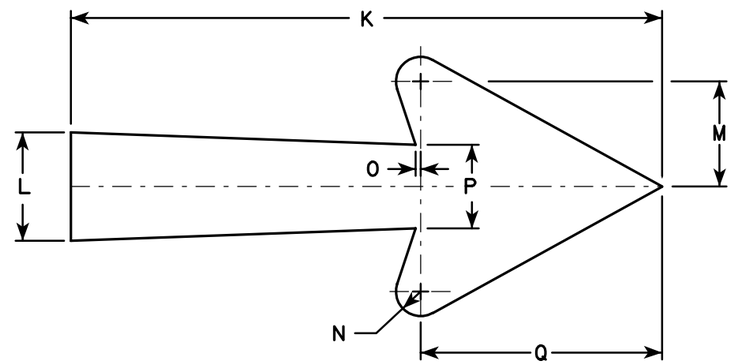
SHEET NO: 98 E



D5-62R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White
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. D5-62L is the same as D5-62R except that the arrow is rotated 180° about the vertical center line.



Arrow Detail

Metric equivalent for this sign is:

SIZE	
1	
2	1200 mm X 600 mm
3	
4	1950 mm X 1050 mm
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	48	24	2 1/4		3/4	6	4	6 1/4	6 3/4	18 1/2	15	2 3/4	3 1/8	5/8	1/8	2 1/8	6 1/8										8.0	0.72
3																												
4	78	42	3		1	10	8 3/4	11	12 1/4	30 1/8	26 1/4	4 3/4	4 5/8	1 1/8	1/4	3 3/4	10 3/4										22.8	2.05
5																												

STANDARD SIGN
D5-62

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

DATE 1/09/02 PLATE NO. D5-62.10

STATE PROJECT NUMBER:

SHEET NO: 99 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 - Blue
   Message - White - Type H Reflective
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

D9-6

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	750 mmX 750 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	1/2			15	1 1/2																			2.25
2	24		1 1/2	1/2			20	2																			4.0
3	30		1 7/8	3/4			25	2 1/2																			6.25
4																											
5																											

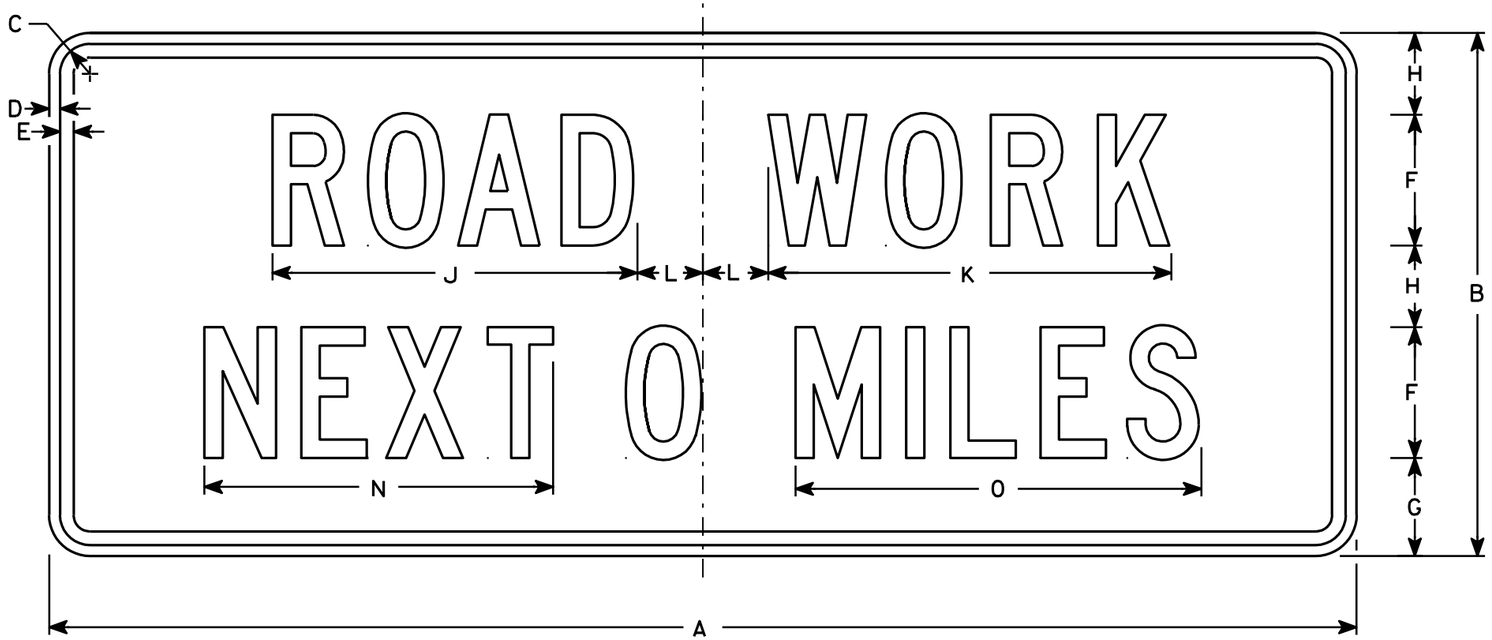
STANDARD SIGN
D9-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 1/15/02 PLATE NO. D9-6.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 100	E



G20-1

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
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	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10	.90
3																												
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10	.90
5																												

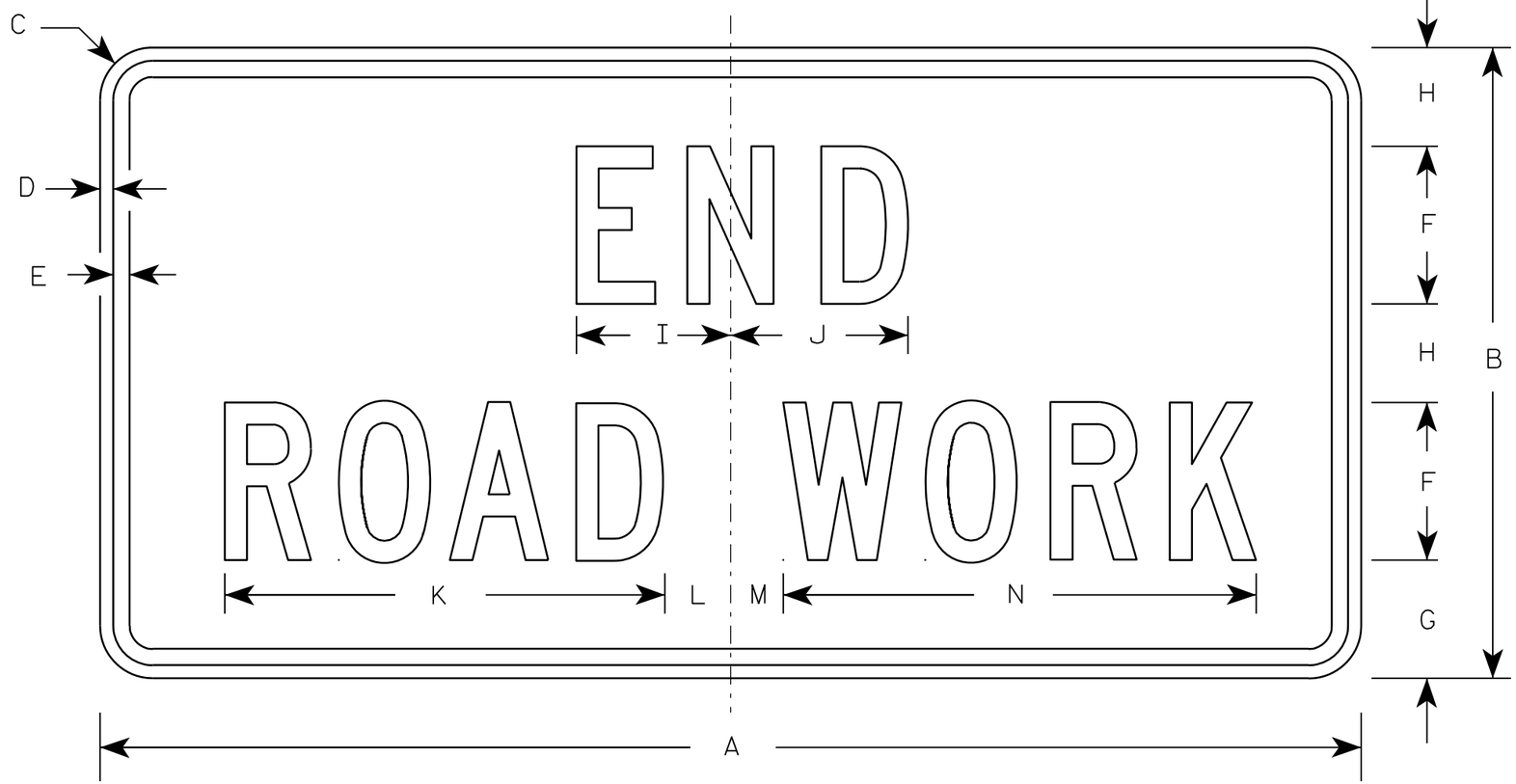
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spray for State Traffic Engineer

DATE 4/8/97 PLATE NO. G20-1.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 101	E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

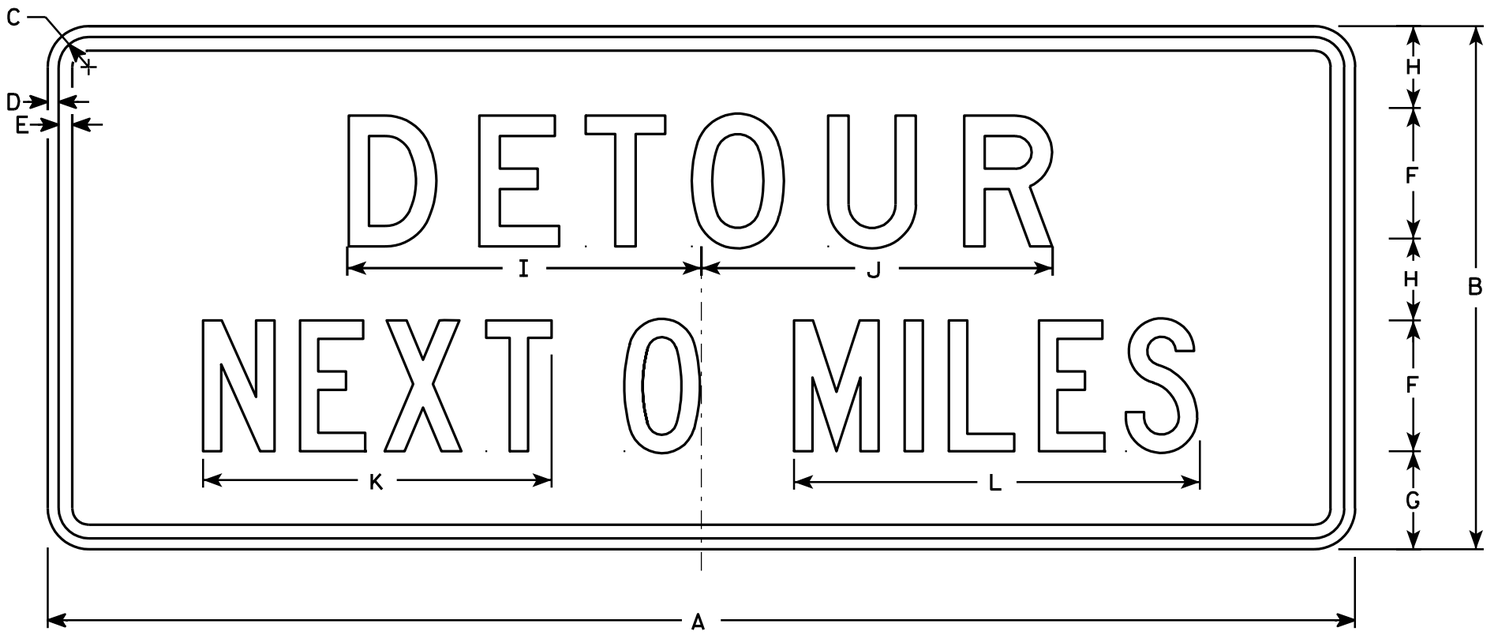
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 102	E



G20-51

NOTES

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

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
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	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10	.90
3																												
4	60	24	1 3/8	1/2	5/8	6	4 1/2	3 3/4	16 1/4	16 1/8	16	18 5/8															10	.90
5																												

STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

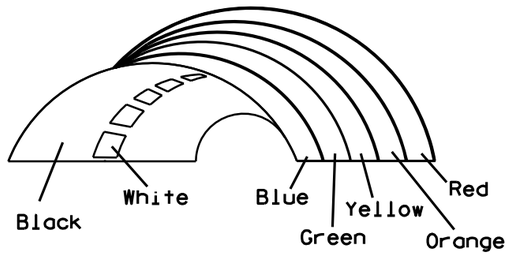
DATE 12/20/02 PLATE NO. G20-51.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 103	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 - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

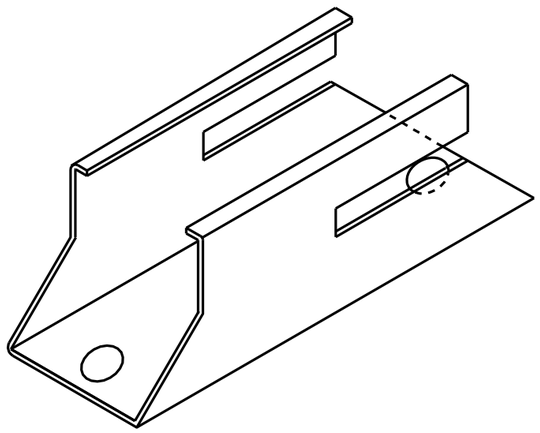
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 104

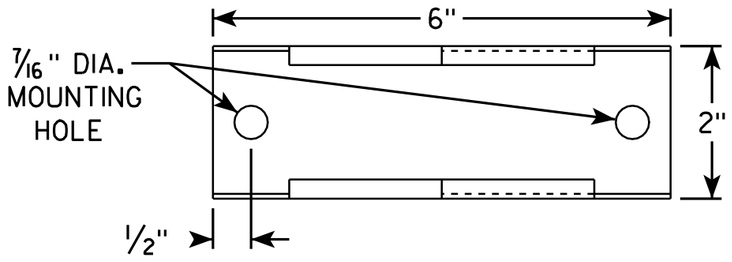
ISOMETRIC VIEW



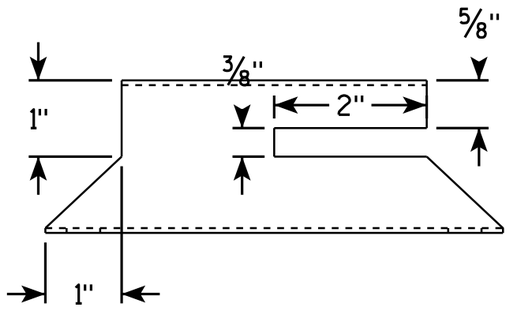
NOTES

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.

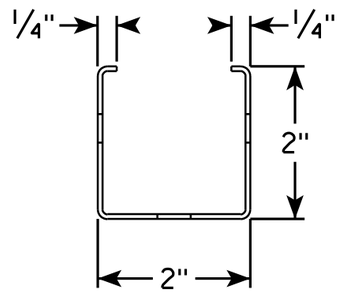
TOP VIEW



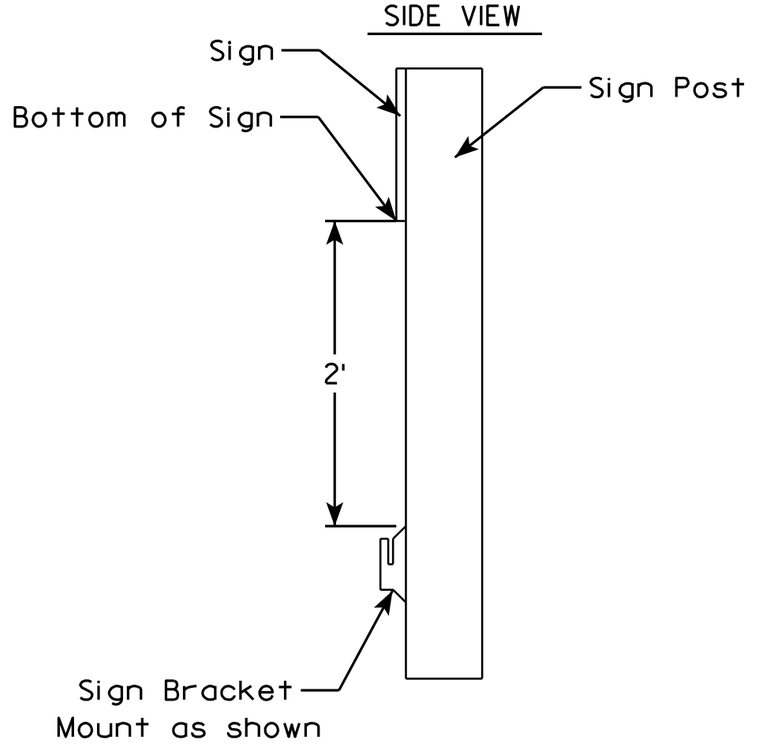
SIDE VIEW



END VIEW



SIDE VIEW



7

7

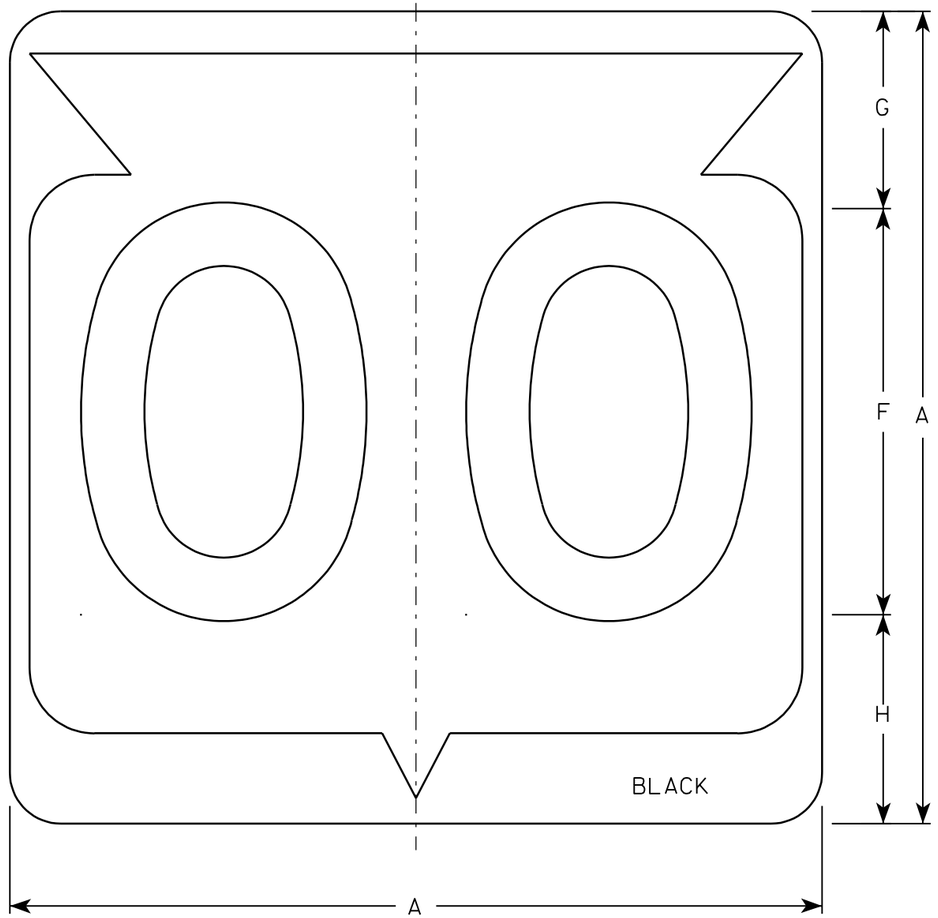
ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

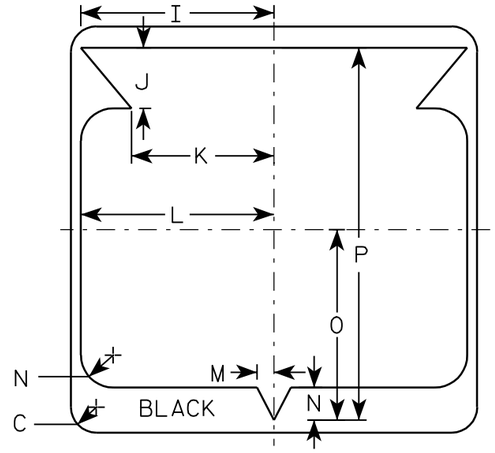
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 105	E



M1-6

NOTES

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



Metric equivalent for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

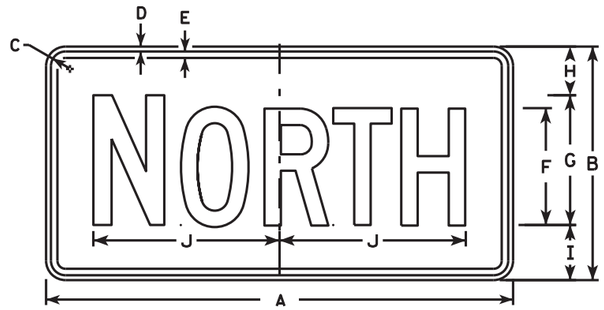
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

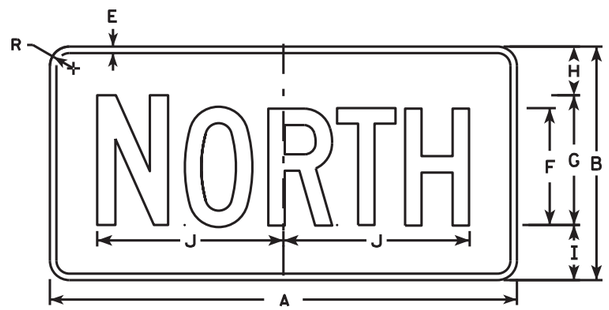
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/20/02 PLATE NO. M1-6.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 106	E



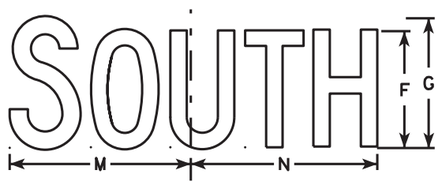
M3-1
MM3-1
MP3-1



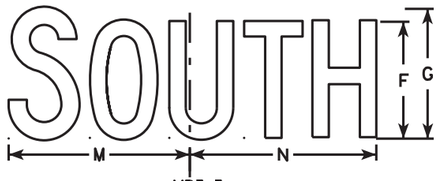
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

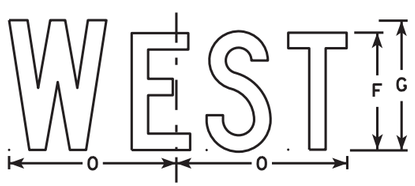
MB3-2
MK3-2
MN3-2



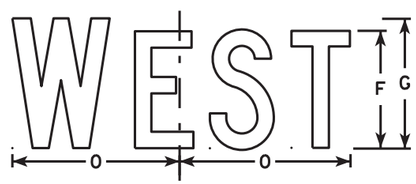
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

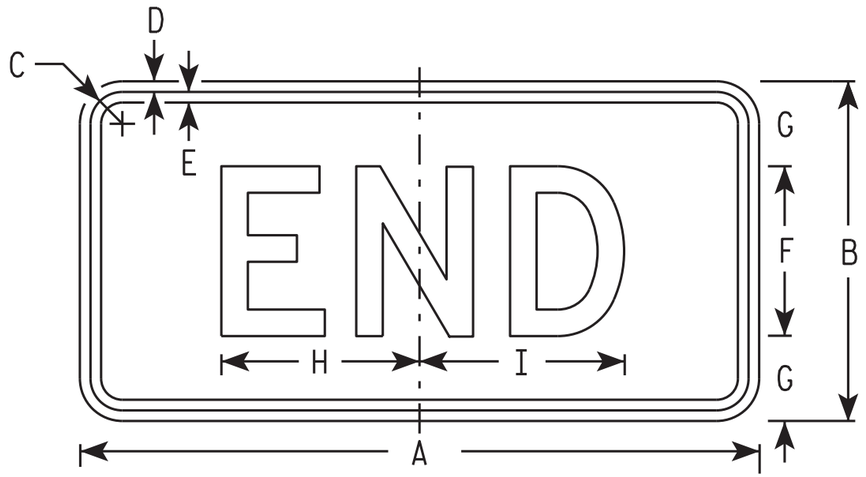
APPROVED Matthew R Rauch for State Traffic Engineer

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

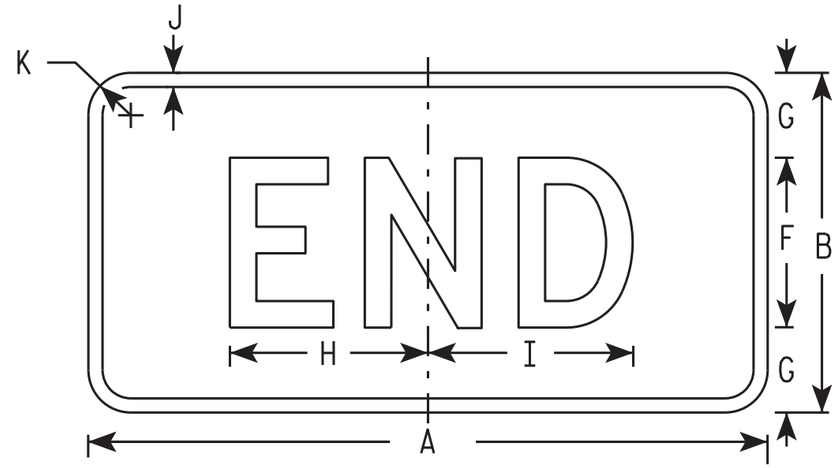
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 15-OCT-2015 12:16 PLOT BY : ss...plotuser...ss PLOT NAME : PLOT SCALE : 18.607113:1.000000
WISDOT/CADDS SHEET 42



M4-6
MM4-6
MP4-6



MB4-6
MK4-6
MN4-6
MR4-6

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
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. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 Background - Brown
   Message - Yellow

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

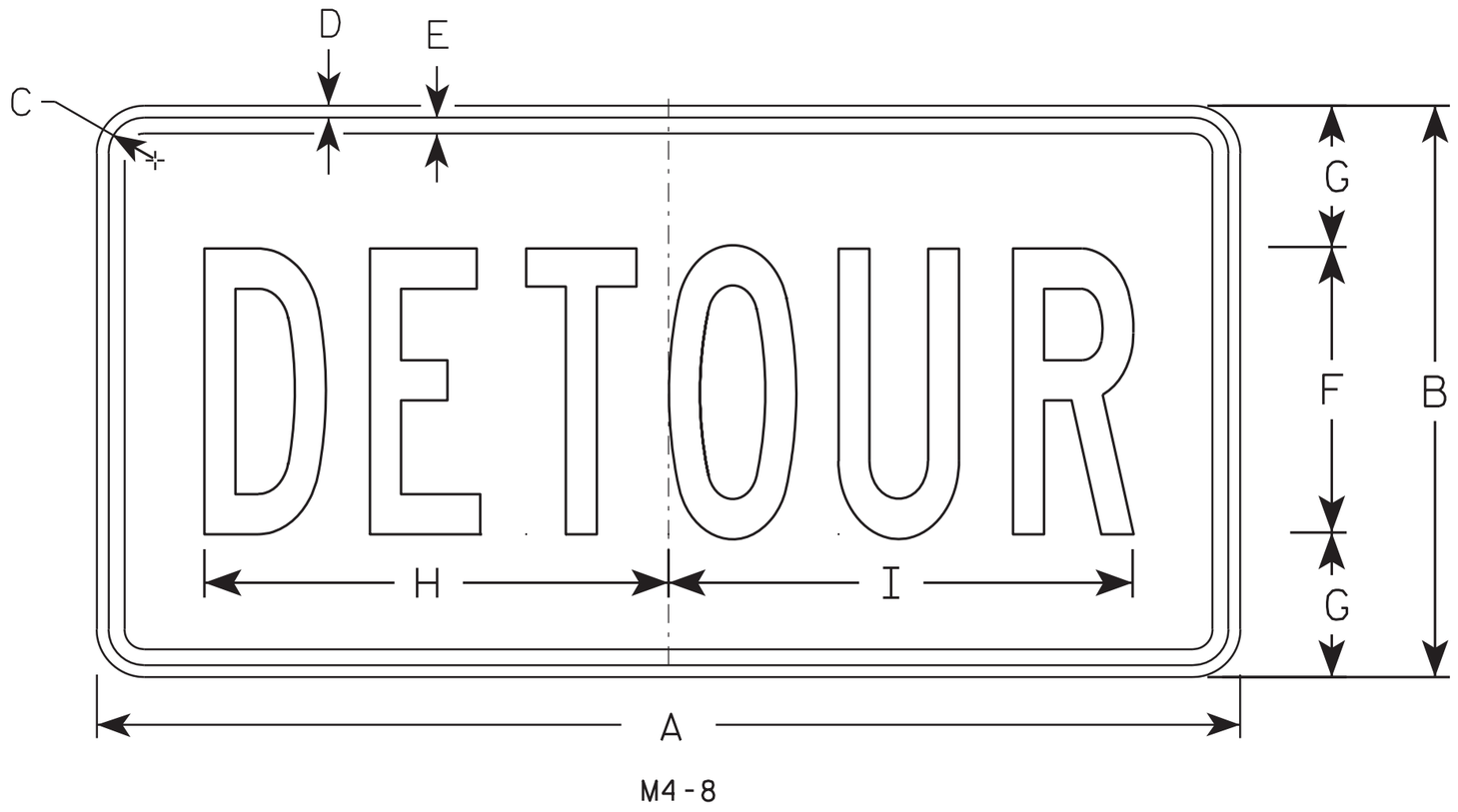
STANDARD SIGN
M4-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M4-7.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-8

NOTES

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

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	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

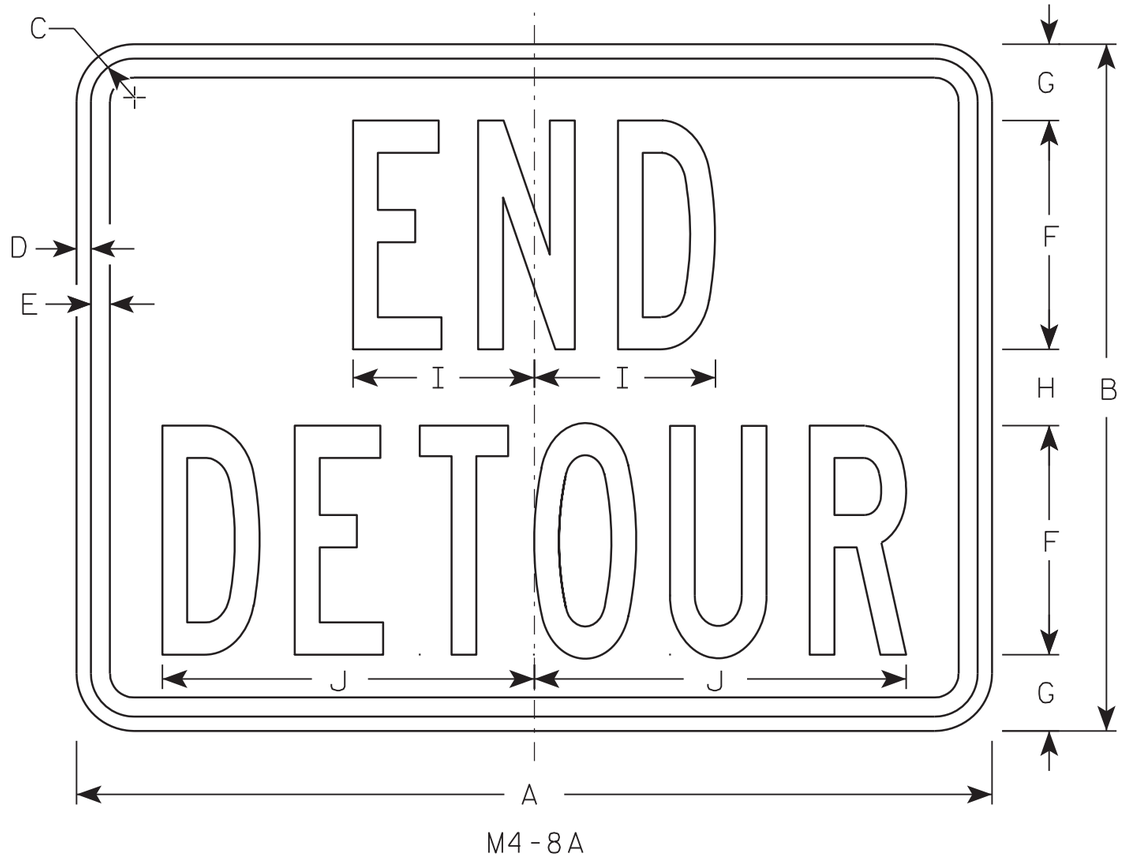
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 109	E



M4-8A

NOTES

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

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	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

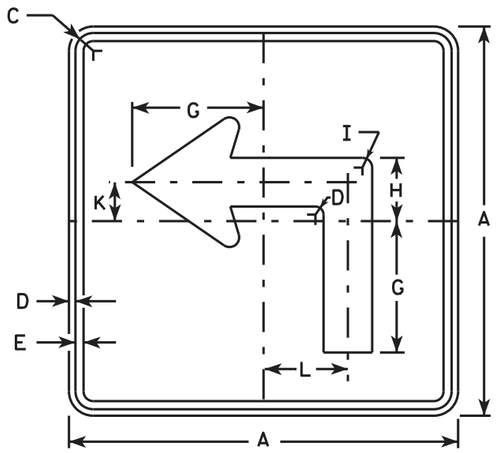
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

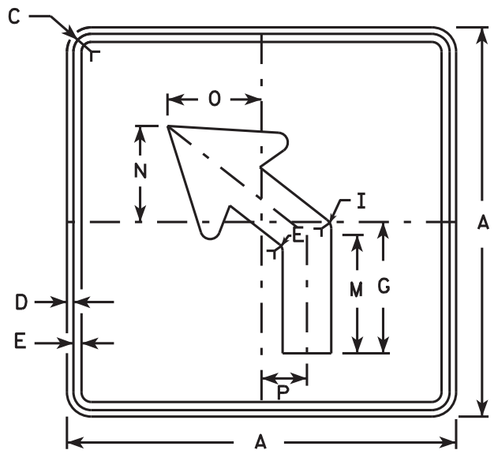
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

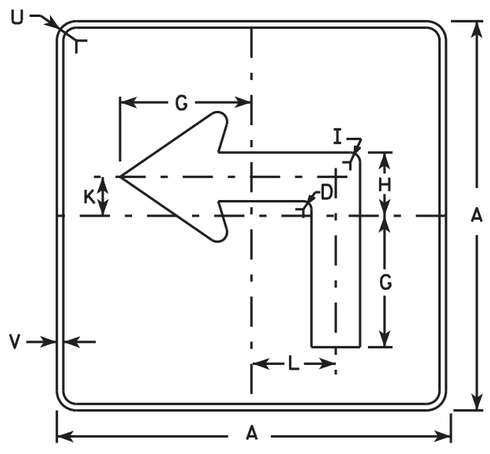
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 110	E



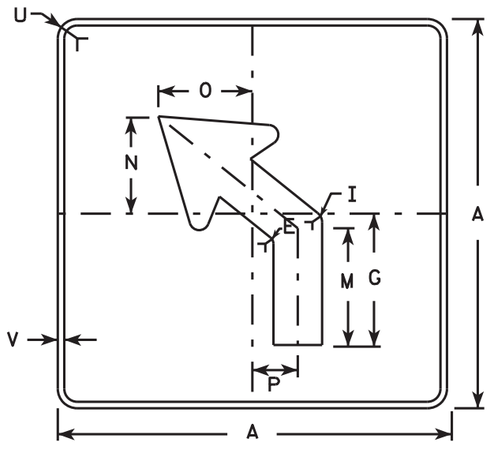
M5-1L
MM5-1L
MO5-1L
MP5-1L



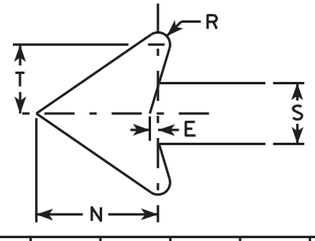
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4.
   M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

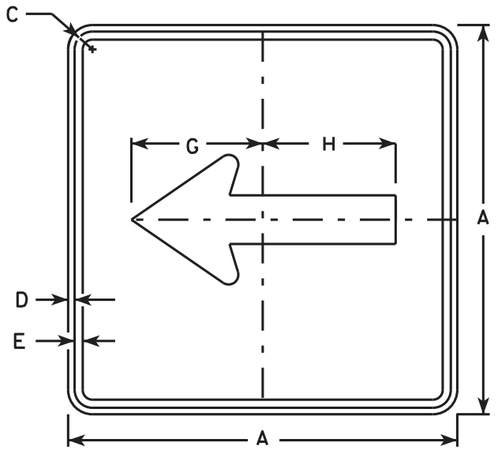
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

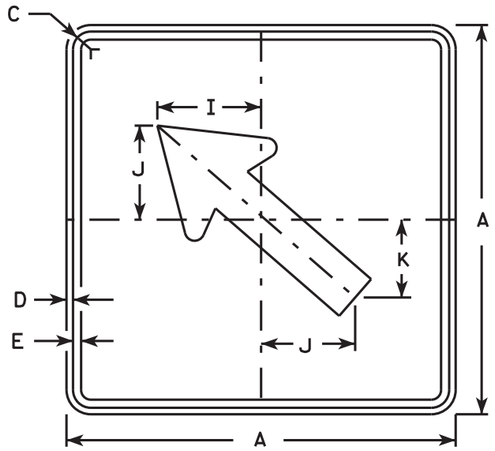
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



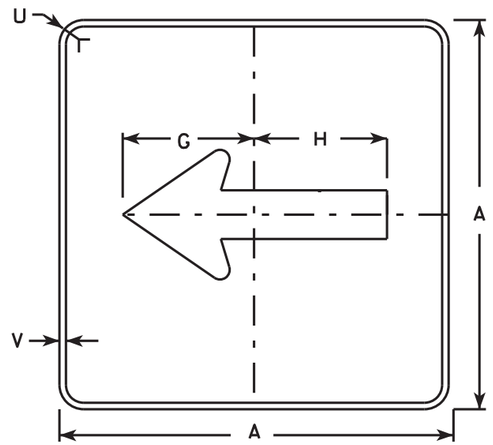
M6-1
MM6-1
MO6-1
MP6-1



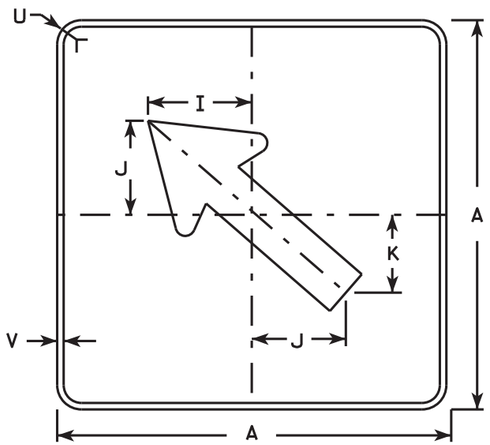
M6-2
MM6-2
MO6-2
MP6-2

NOTES

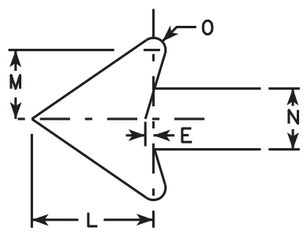
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

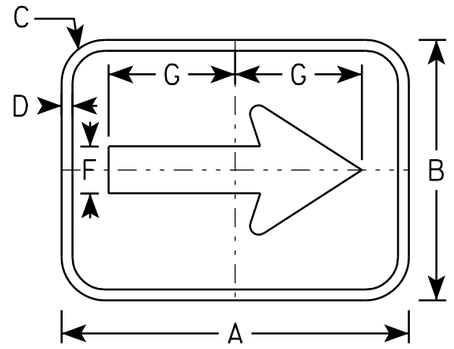
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

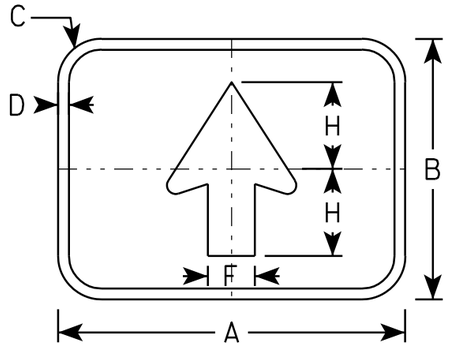
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15

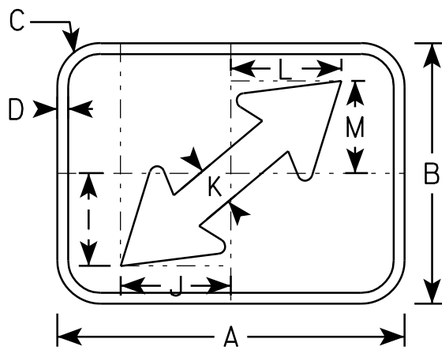
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



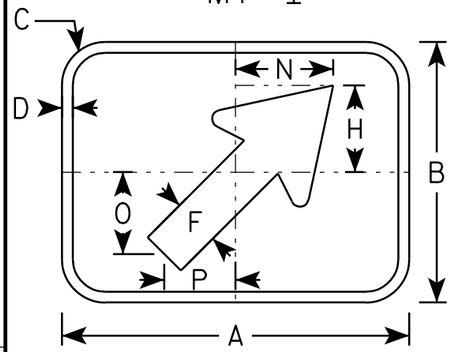
M7-1



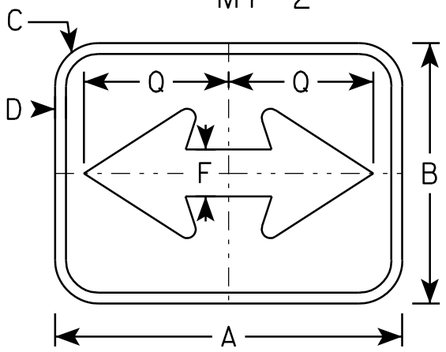
M7-2



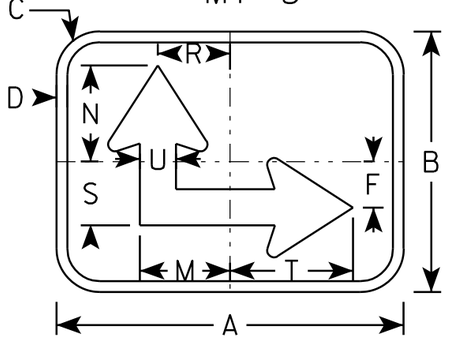
M7-3



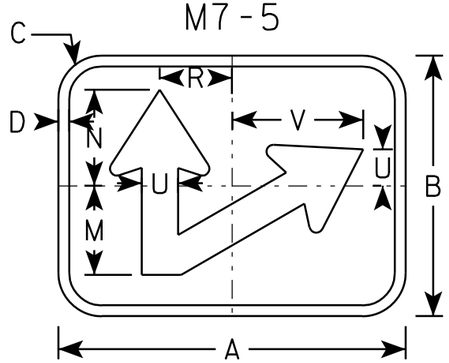
M7-4



M7-5



M7-6



M7-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message -White
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																											
2	12	9	1 1/2	3/8		1 5/8	4 3/8	3	3 1/4	3 3/4	1 3/8	3 7/8	3 1/8	3 3/8	2 7/8	2 1/2	5	2 1/2	2 1/4	4 1/4	1 1/4	4 1/2					.75
3																											
4																											
5																											

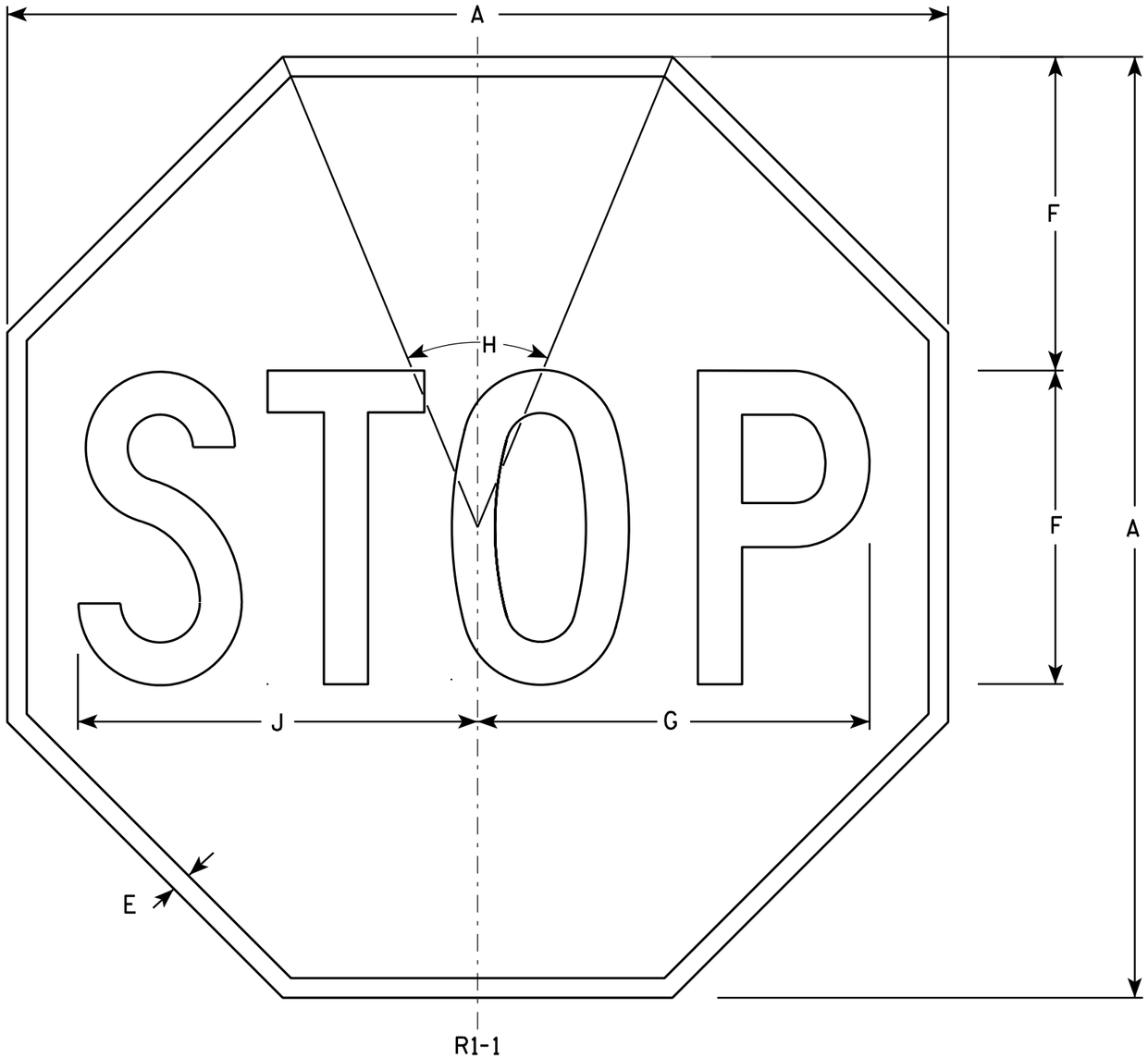
STANDARD SIGN
M7 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 05/04/10 PLATE NO. M7-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 113	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

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

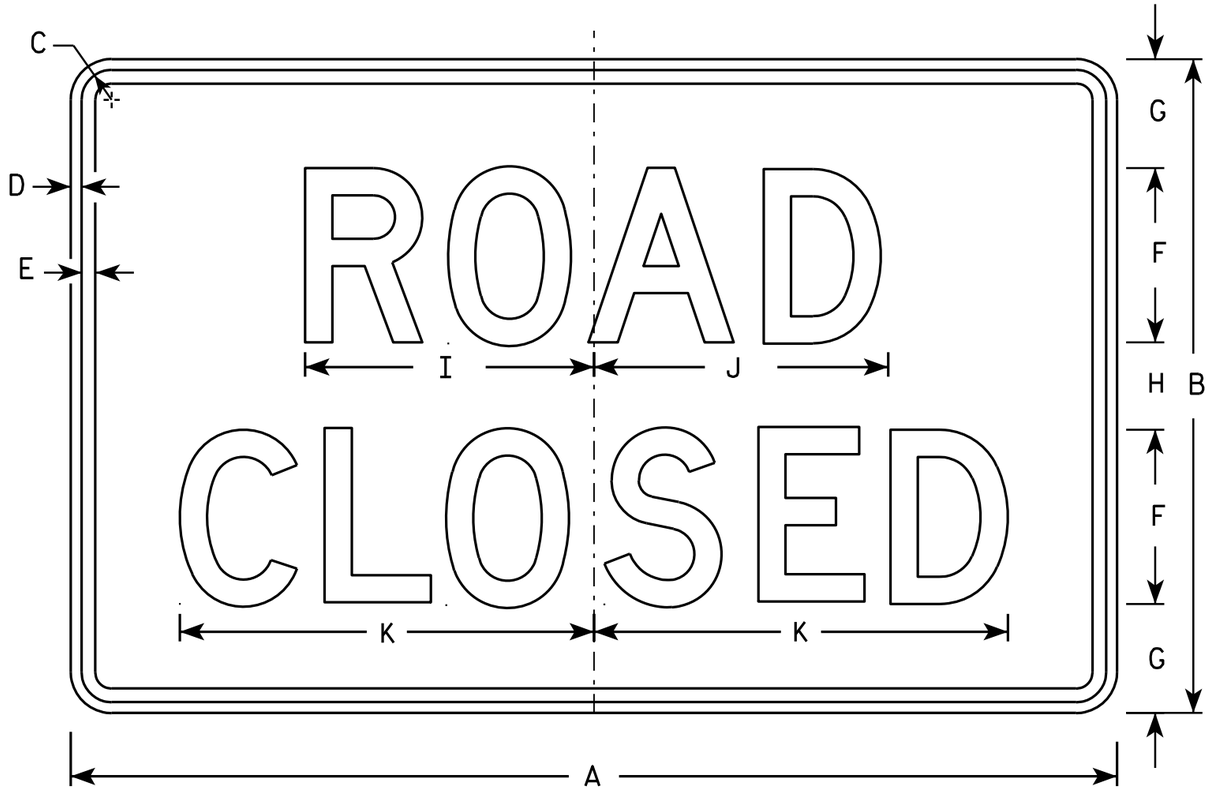
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

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

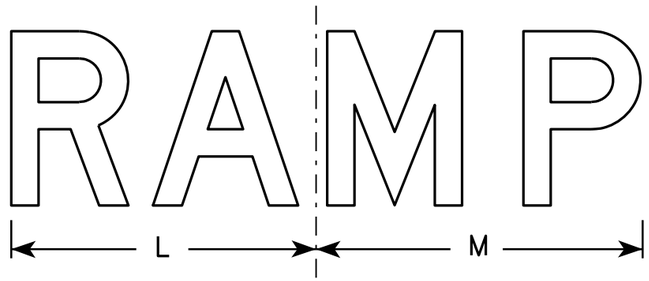
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 114	E



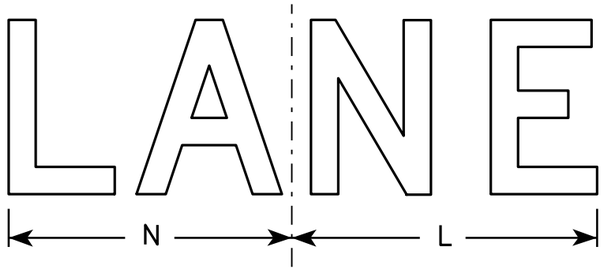
R11-2

NOTES

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



R11-2R



R11-2L

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

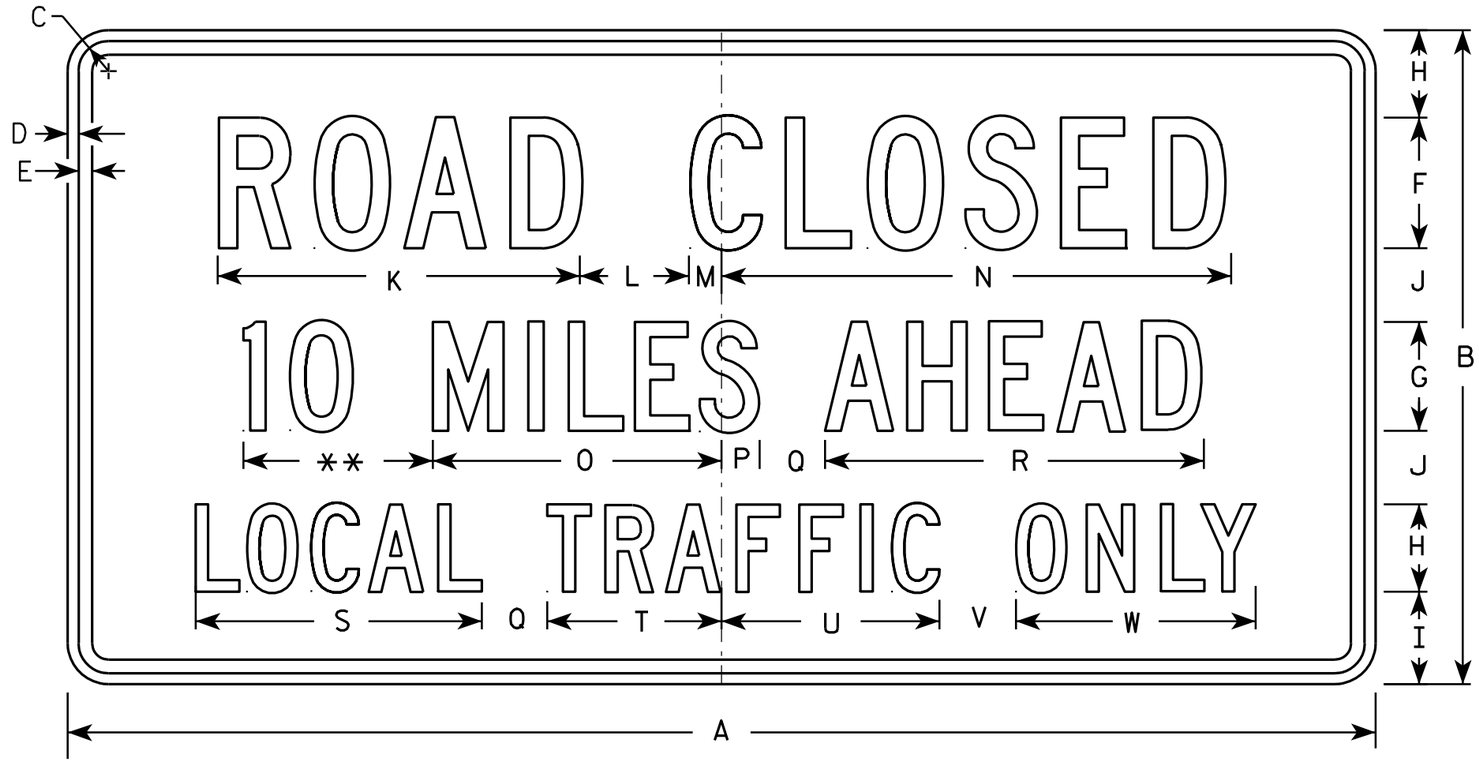
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 115	E



R11-3

NOTES

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

** See Note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

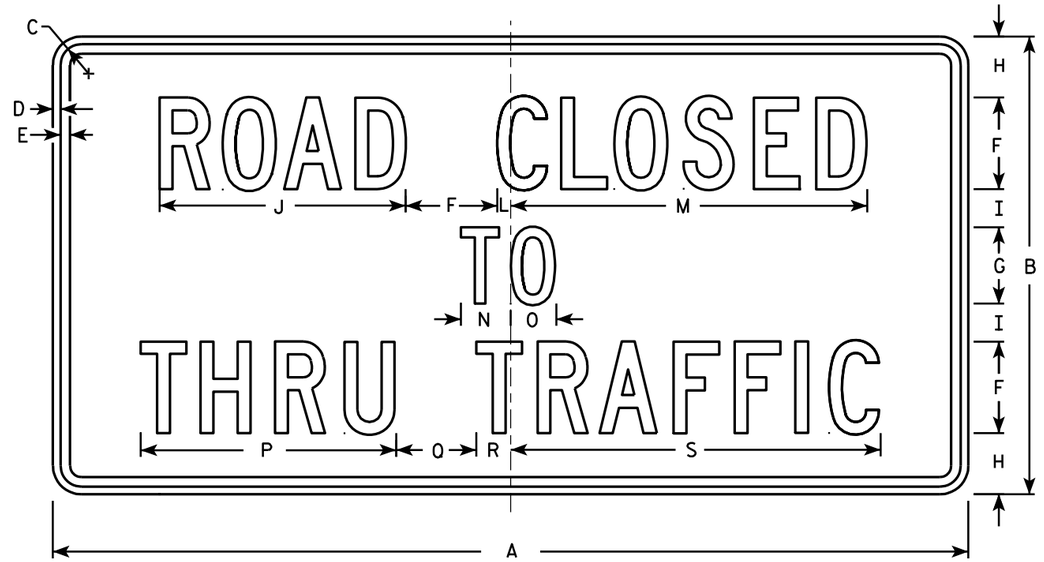
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 116 | E



R11-4

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	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 117 | E

R55-51

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 - Black
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.

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	18		1 1/2	3/8	3/8	4	3	2	1 1/2	2	2 1/8	6 7/8	7	7 1/4													2.25
2M	18		1 1/2	3/8	3/8	4	3	2	1 1/2	2	2 1/8	6 7/8	7	7 1/4													2.25
3																											
4																											
5																											

STANDARD SIGN
R55-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/30/11 PLATE NO. R55-51.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 118	E

R55-61

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 - 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. Lines 1 and 2 are Series B.
   Lines 3, 4, 5 and 6 are Series D.

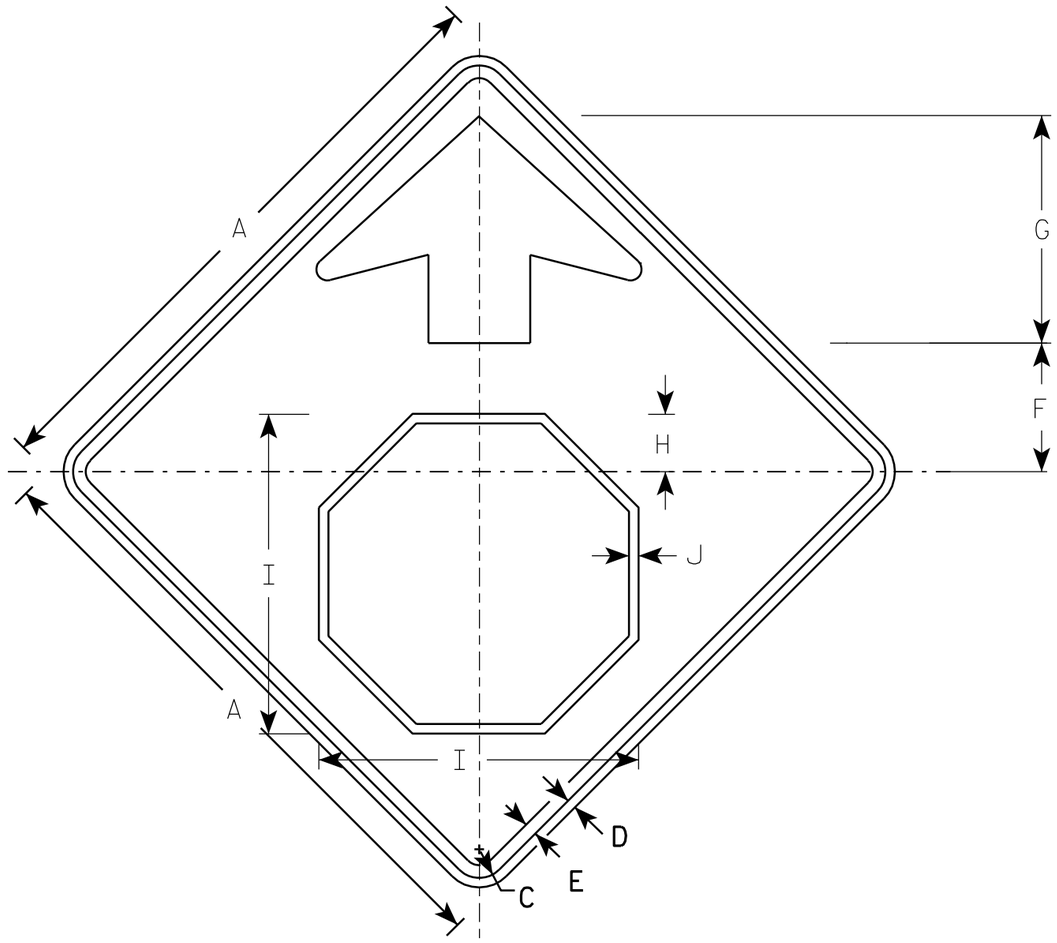
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	1/2	2	5/8	1 3/4	7/8	3 3/4	1 3/8	4 3/8		8 1/4	3	1	10 5/8	5 1/2	7 1/2	9 3/8	3/4	6 5/8	4 7/8	7 1/4	8 1/2		3.0
2S	24	18	1 1/8	3/8	1/2	2	5/8	1 3/4	7/8	3 3/4	1 3/8	4 3/8		8 1/4	3	1	10 5/8	5 1/2	7 1/2	9 3/8	3/4	6 5/8	4 7/8	7 1/4	8 1/2		3.0
2M	24	18	1 1/8	3/8	1/2	2	5/8	1 3/4	7/8	3 3/4	1 3/8	4 3/8		8 1/4	3	1	10 5/8	5 1/2	7 1/2	9 3/8	3/4	6 5/8	4 7/8	7 1/4	8 1/2		3.0
3																											
4																											
5																											

STANDARD SIGN
R55-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/30/11 PLATE NO. R55-61.6

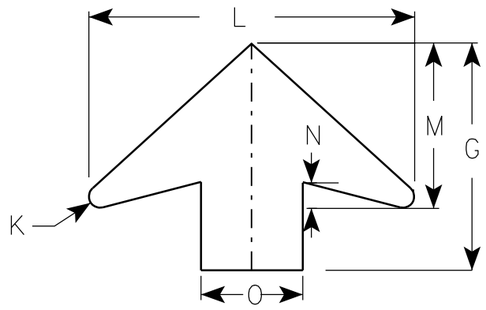
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 119	E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED 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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

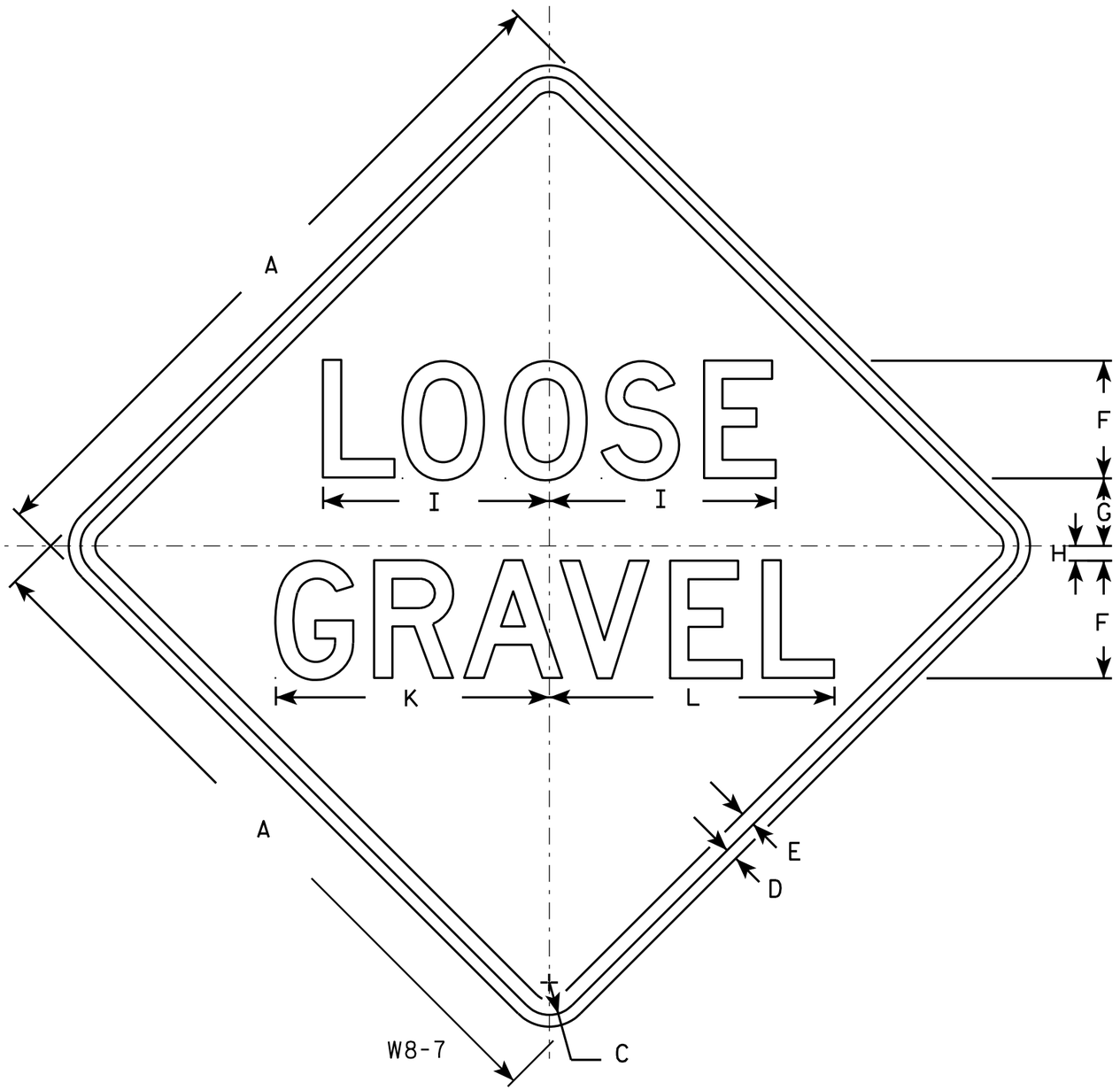
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

SHEET NO: 120 E



NOTES

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

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 3/4	1/2	7 3/4		9 1/4	9 3/4															4.0
2S	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
2M	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
3	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
4	36		1 5/8	5/8	3/4	6	4 1/8	3/4	11 5/8		14	14 1/2															9.0
5	48		2 1/4	3/4	1	8	5 1/2	1	15 1/2		18 5/8	19 3/8															16.0

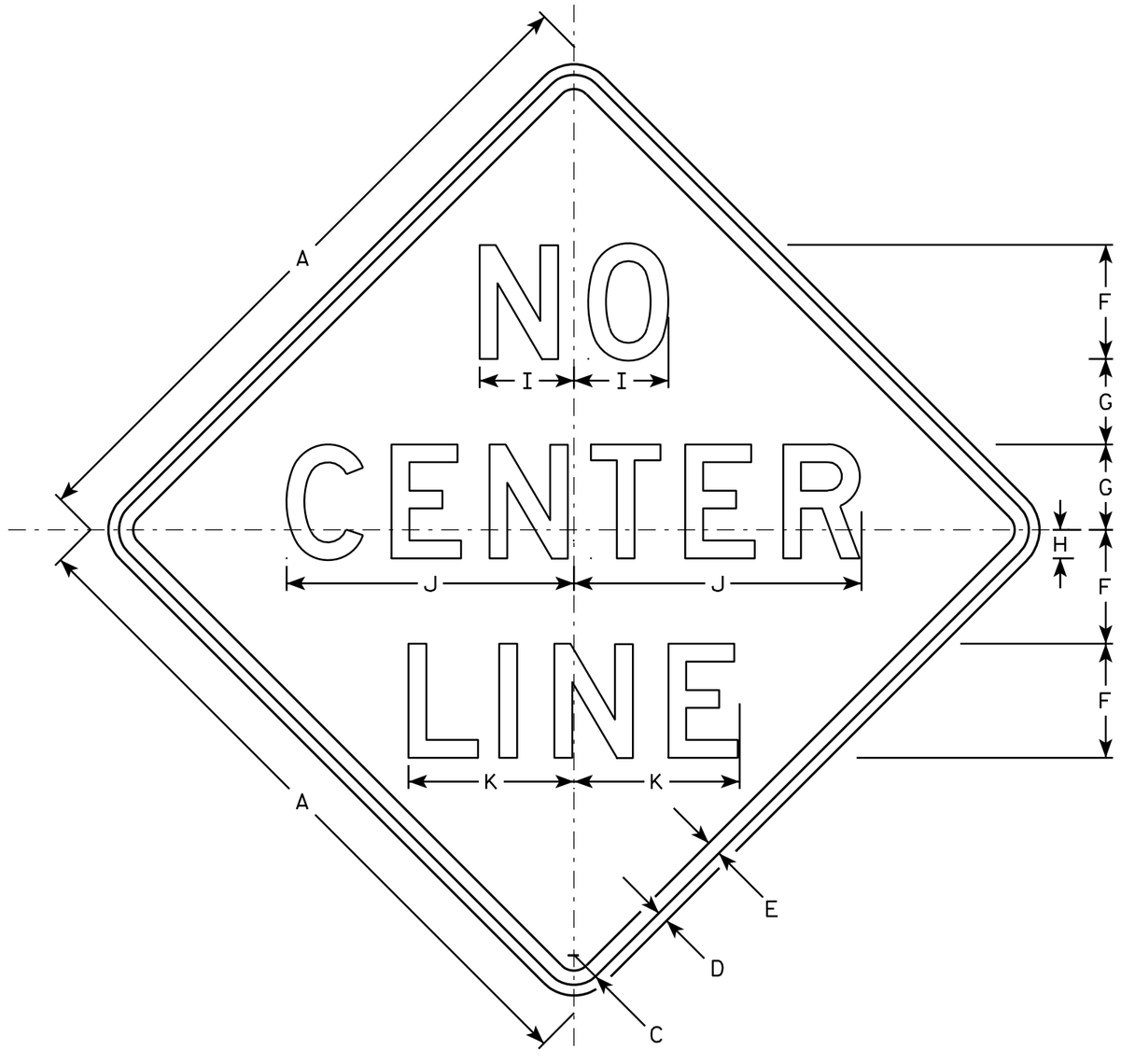
STANDARD SIGN
W8-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/30/12 PLATE NO. W8-7.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 121	E



W8-12

NOTES

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

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	6	4 1/2	1 1/2	5 1/8	16	9																9.0
2M	36		1 5/8	5/8	3/4	6	4 1/2	1 1/2	5 1/8	16	9																9.0
3	48		2 1/4	3/4	1	8	6	2	6 5/8	20 1/4	11 5/8																16.0
4	48		2 1/4	3/4	1	8	6	2	6 5/8	20 1/4	11 5/8																16.0
5	48		2 1/4	3/4	1	8	6	2	6 5/8	20 1/4	11 5/8																16.0

STANDARD SIGN
W8-12

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rausch
for State Traffic Engineer

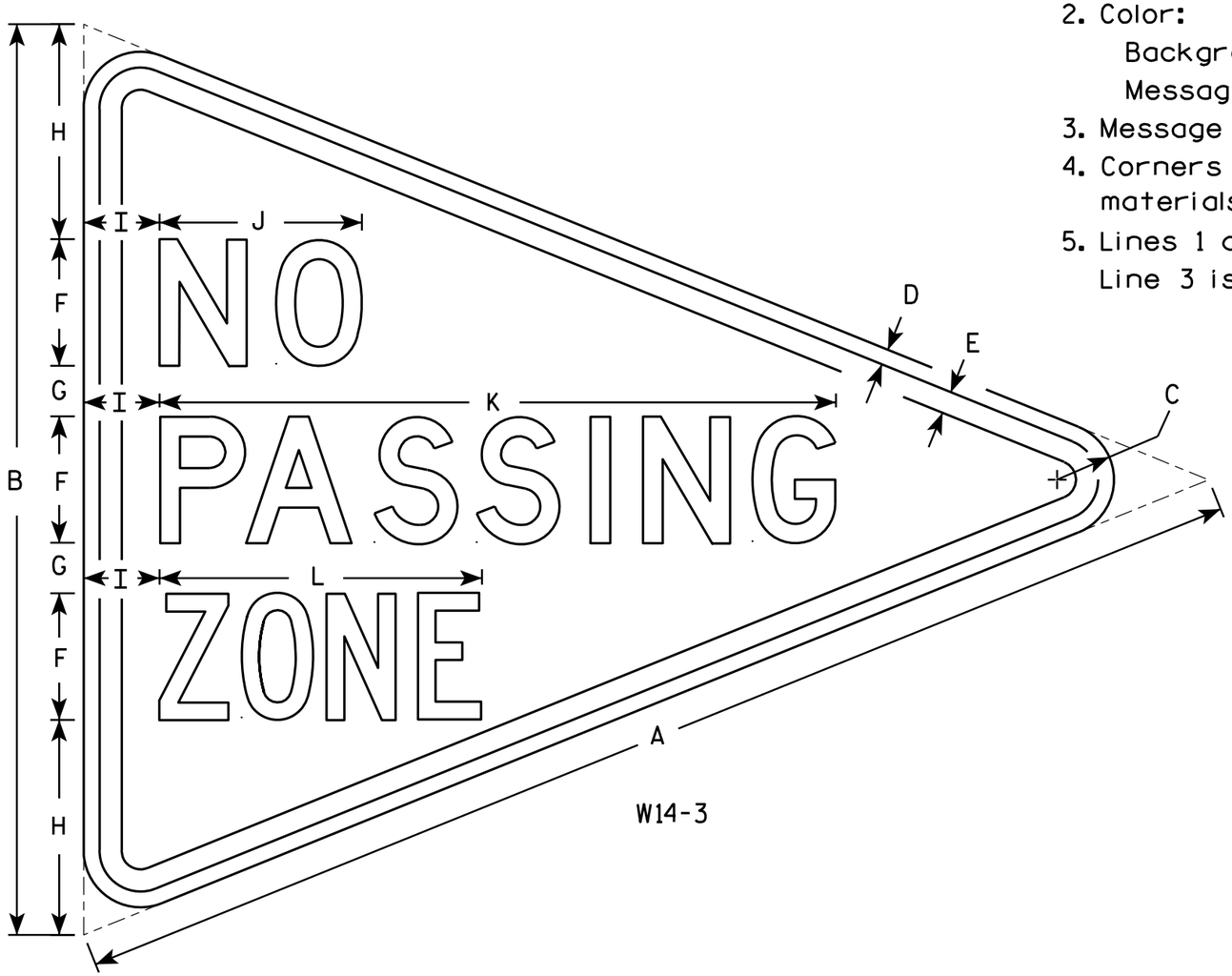
DATE 8/24/10 PLATE NO. W8-12.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 122 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W812.DGN PLOT DATE : 24-AUG-2010 13:34 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42

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	O	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																											

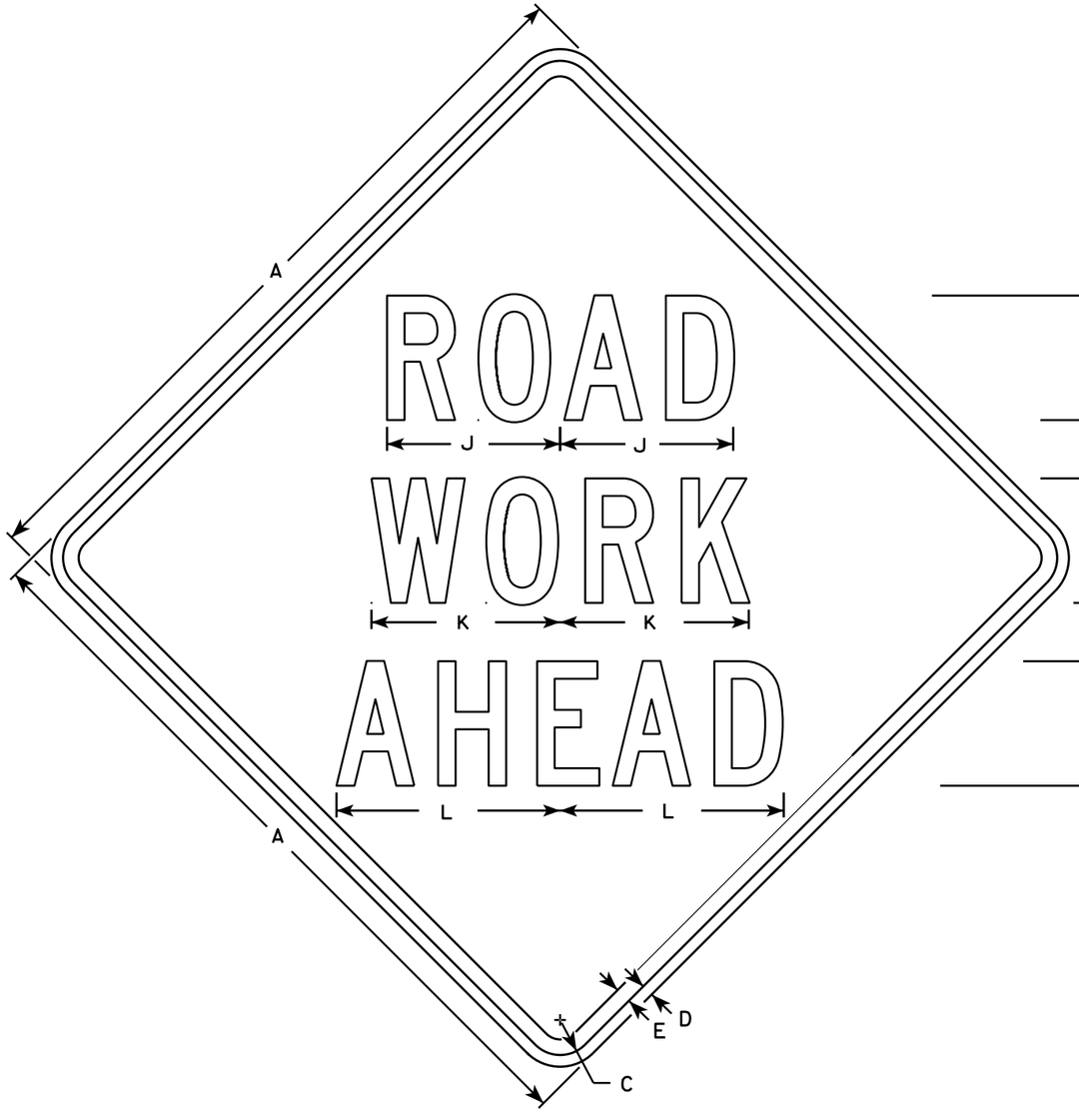
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

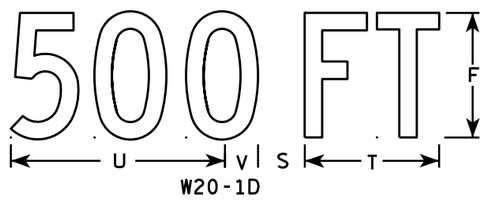
APPROVED Matthew R Rauch
for State Traffic Engineer

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

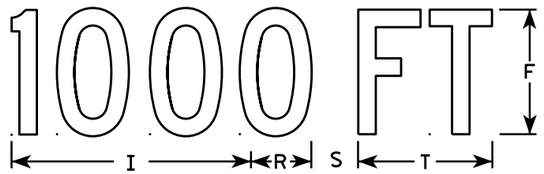
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 123	E



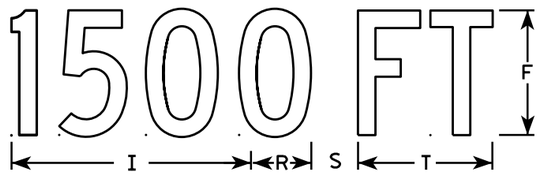
W20-1A



W20-1D



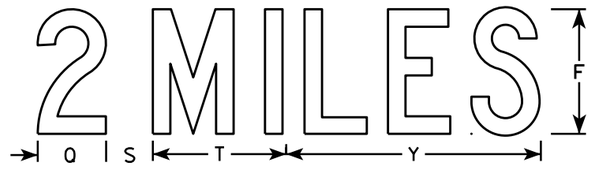
W20-1C



W20-1B

W20-1G

W20-1F



W20-1E

NOTES

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

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

STANDARD SIGN
W20-1A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

State Traffic Engineer

DATE 5/07/15 PLATE NO. W20-1.10

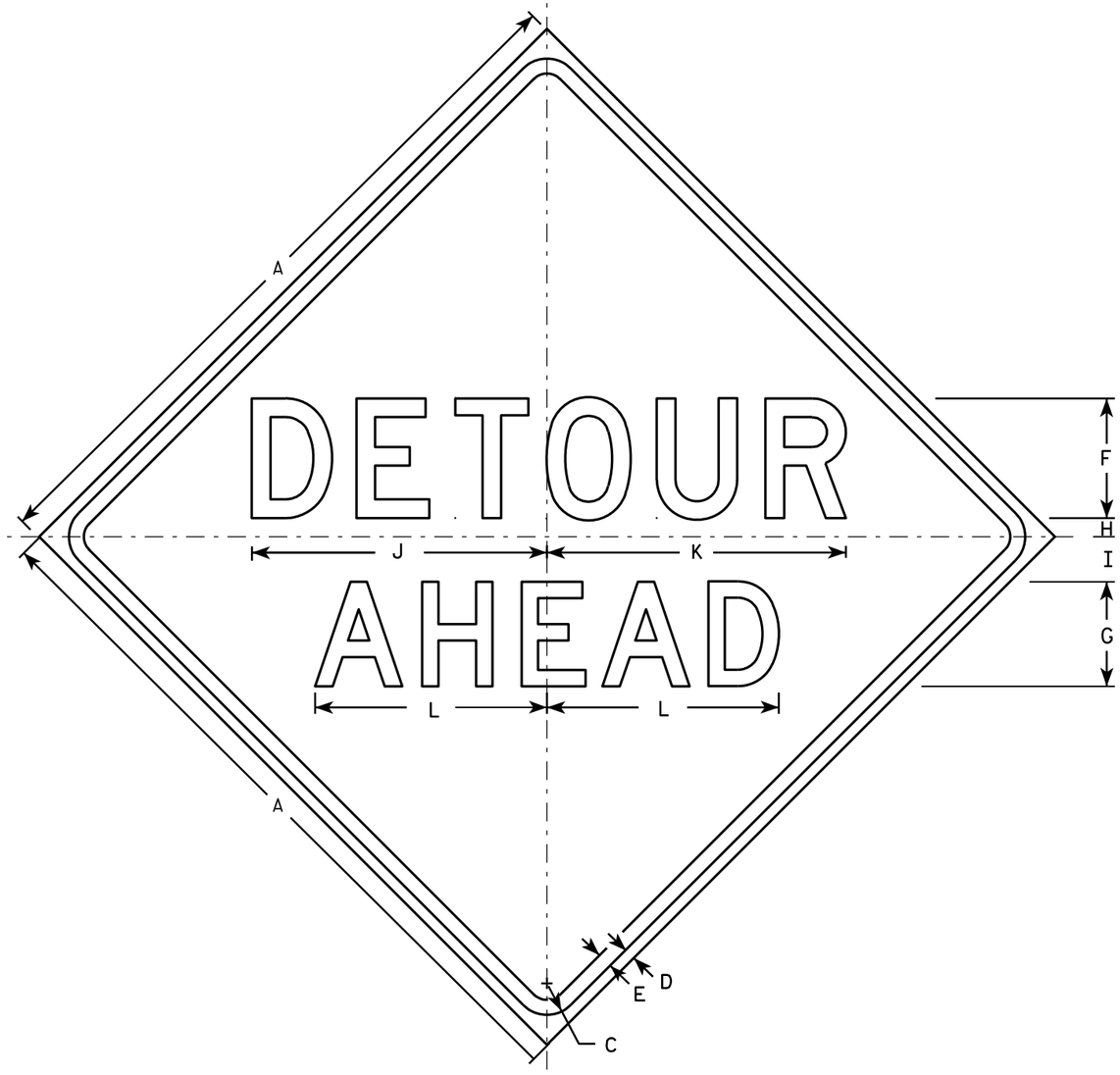
PROJECT NO:

SHEET NO: E

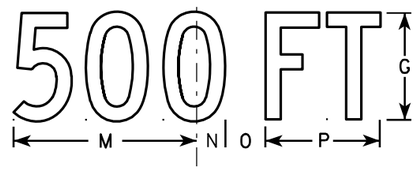
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W201.dgn PLOT DATE : 27-MAY-2015 15:58 PLOT BY : mscsja

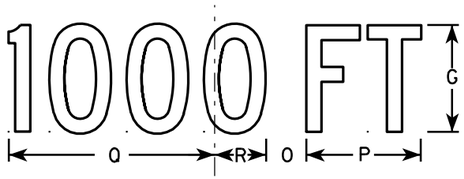
WISDOT/CADDS SHEET 42



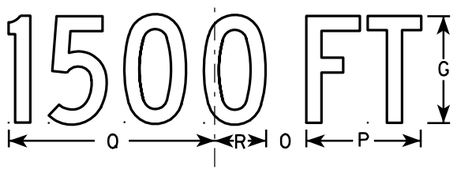
W20-2A



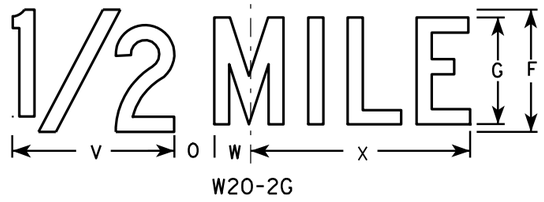
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

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	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

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

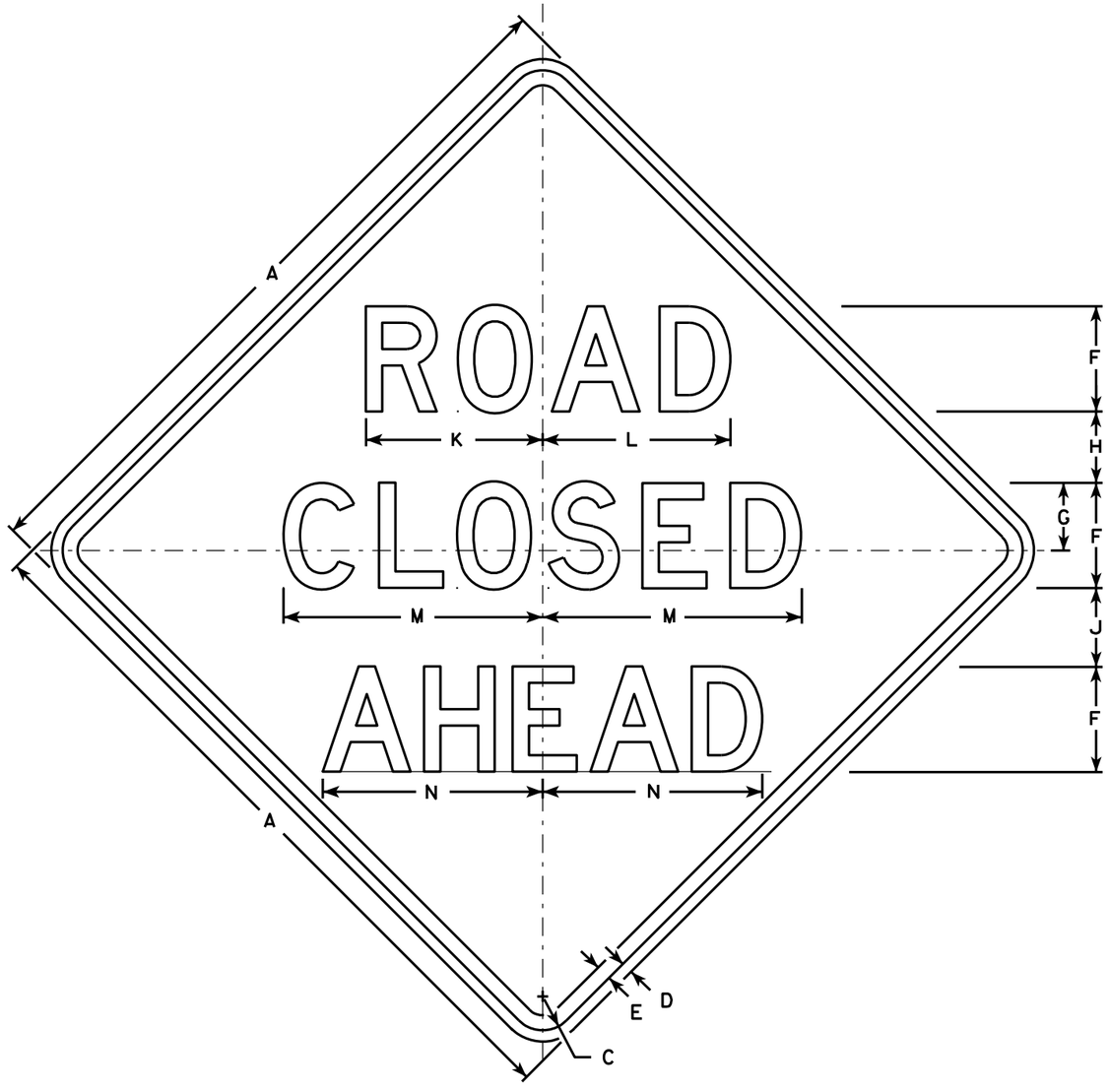
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

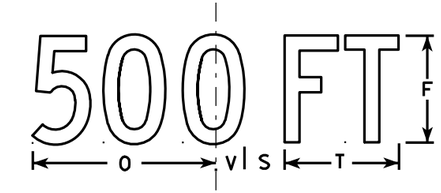
DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 125 | E

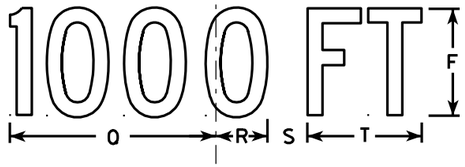
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



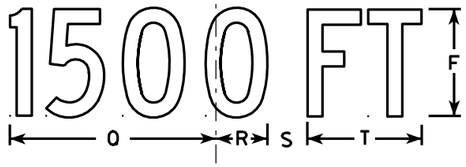
W20-3A



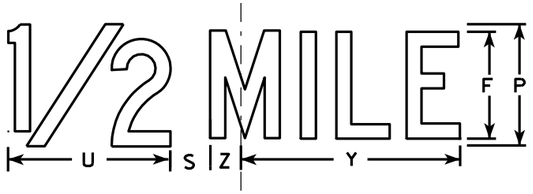
W20-3D



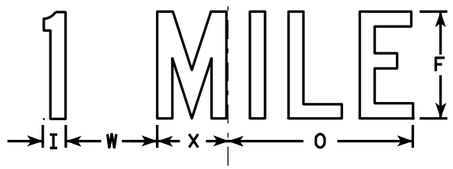
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

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

STANDARD SIGN
W20-3A, B, C, D, F & G

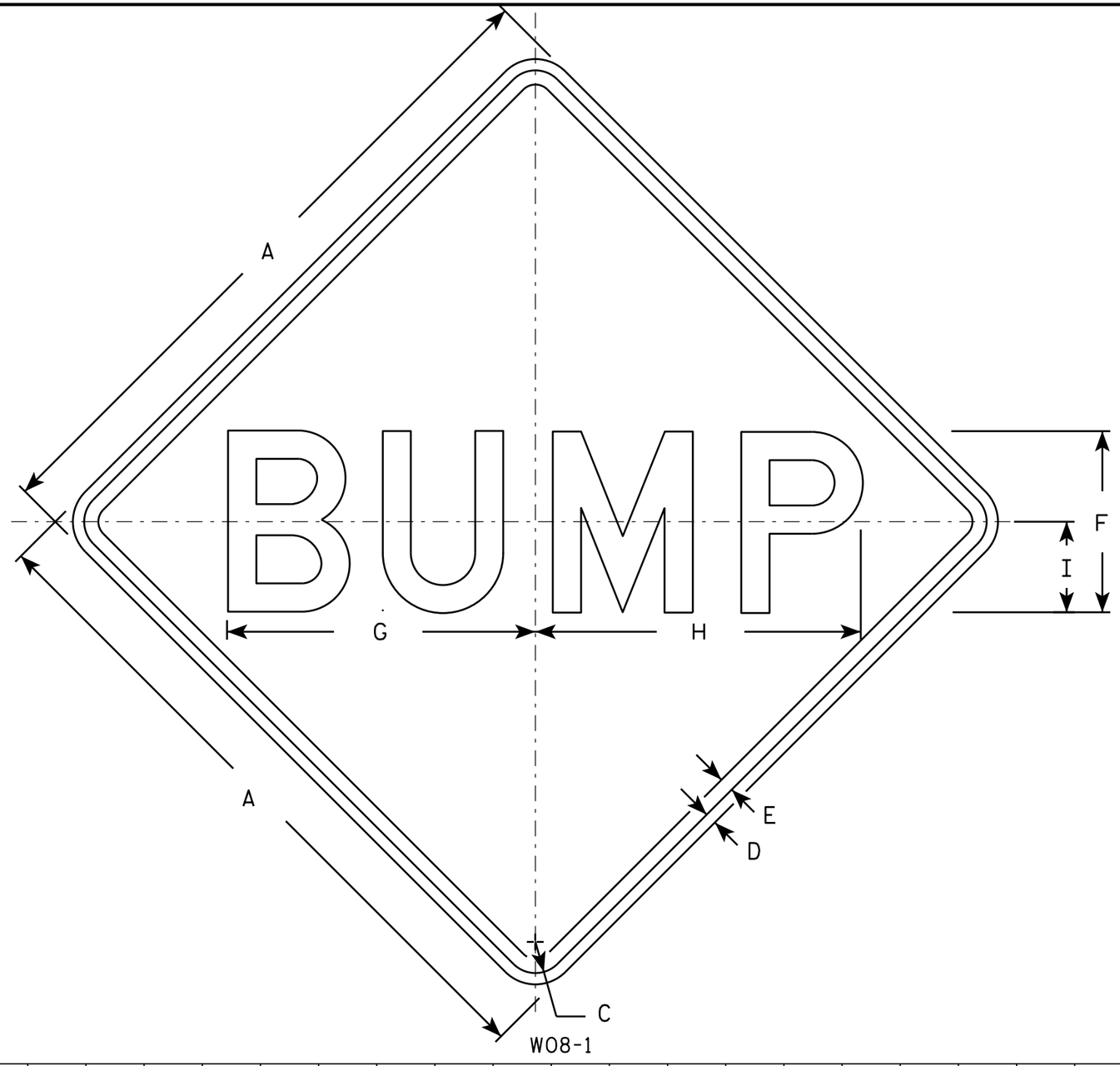
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 126 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



NOTES

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

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

STANDARD SIGN
W08-1

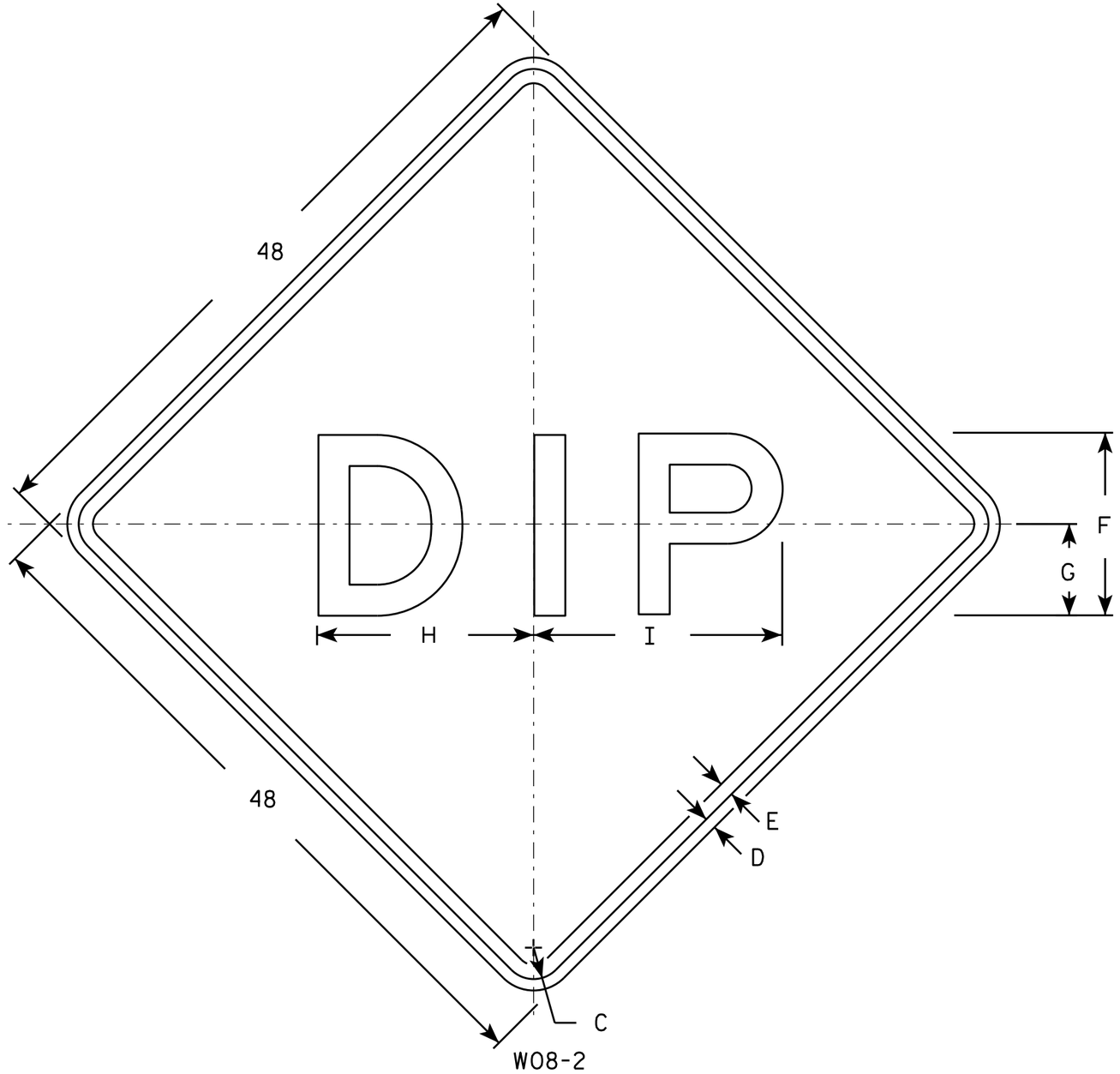
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 127 W08-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W081.DGN PLOT DATE : 20-NOV-2013 12:24 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.688833:1.000000 WISDOT/CADDS SHEET 42



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 - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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

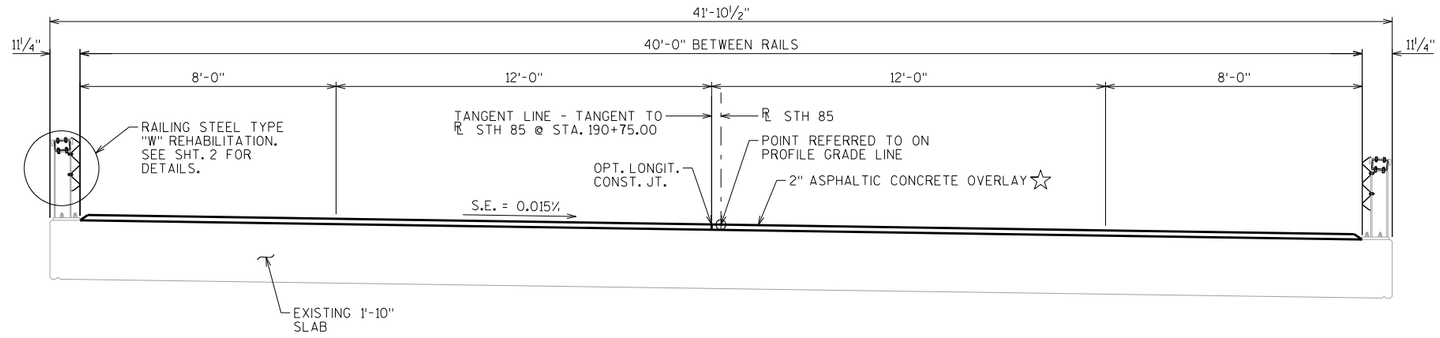
STANDARD SIGN
W08-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 128 8-2.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

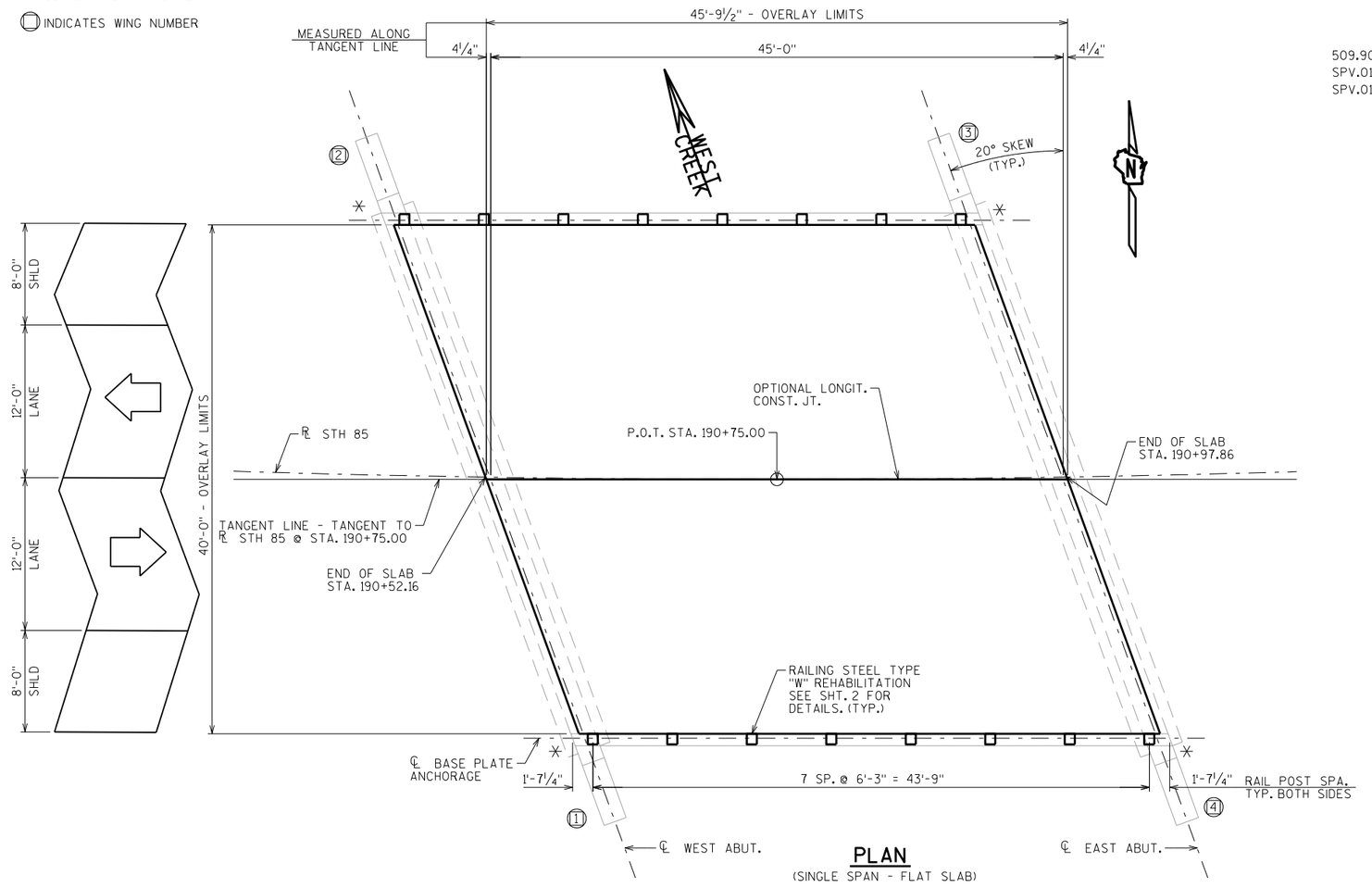


CROSS-SECTION THRU ROADWAY

(LOOKING EAST)

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

ⓝ INDICATES WING NUMBER



PLAN

(SINGLE SPAN - FLAT SLAB)

DESIGN DATA

STATE PROJECT NUMBER

7120-07-70

LIVE LOAD:

DESIGN RATING; HS-20
INVENTORY RATING; HS-20
OPERATIONAL RATING; HS-33
MAXIMUM STANDARD PERMIT VEHICLE LOAD = 250 KIPS.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

CURVE DATA

STH 85

P.I. = STA. 189+94.84
Δ = 05°-14'-50"
D = 00°-30'
T = 525.10'
L = 1049.47'
R = 11,459.16'
S.E. = 0.015%
P.C. = 184+69.74
P.T. = 195+19.21

TRAFFIC VOLUME

STH 85

A.D.T.=3000 (2016)
R.D.S.=55 M.P.H.

TOTAL ESTIMATED QUANTITIES

509.9010.S	REMOVING ASPHALTIC CONCRETE DECK OVERLAY B-18-89	205	SY
SPV.0105.01	RAILING STEEL TYPE "W" REHABILITATION	1	LS
SPV.0195.01	HMA PAVEMENT TYPE E-3 SPECIAL	22	TON

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE EXISTING ORIGINAL STRUCTURE PLANS.

CONTACT THE BUREAU OF STRUCTURES BEFORE PLACEMENT OF OVERLAY IF THE AVERAGE THICKNESS OF THE NEW OVERLAY WILL EXCEED THE AVERAGE OVERLAY SHOWN ON THE PLANS BY MORE THAN ½".

☆ THE EXISTING OVERLAY SHALL BE REMOVED FROM THE BRIDGE DECK UNDER BID ITEM "REMOVING ASPHALTIC CONCRETE DECK OVERLAY B-18-89".

LIST OF DRAWINGS

1. ASPHALTIC OVERLAY
2. RAILING STEEL, TYPE W, REHABILITATION DETAIL

STRUCTURE DESIGN CONTACT:

NICK RICE (608) 266-5092
DAVE KIEKBUSCH (608) 266-5084

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 1/28/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-18-89

STH 85 OVER WEST CREEK

COUNTY	TOWN/~~CITY/VILLAGE~~
EAU CLAIRE	BRUNSWICK

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
NAR	ADS	NAR	ADS

ASPHALTIC OVERLAY

SHEET 1 OF 2

129

I.D. 7120-07-01

DATE: NOV. 2013

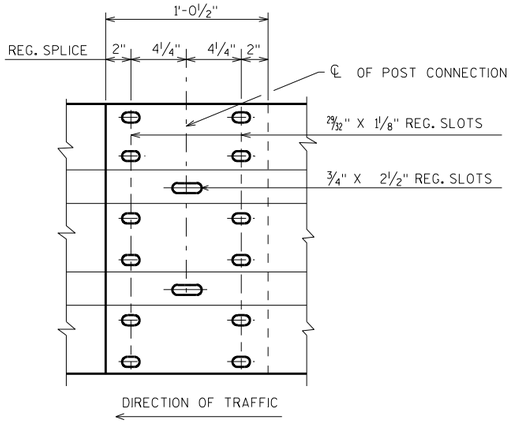
SCALE = 8

8

8

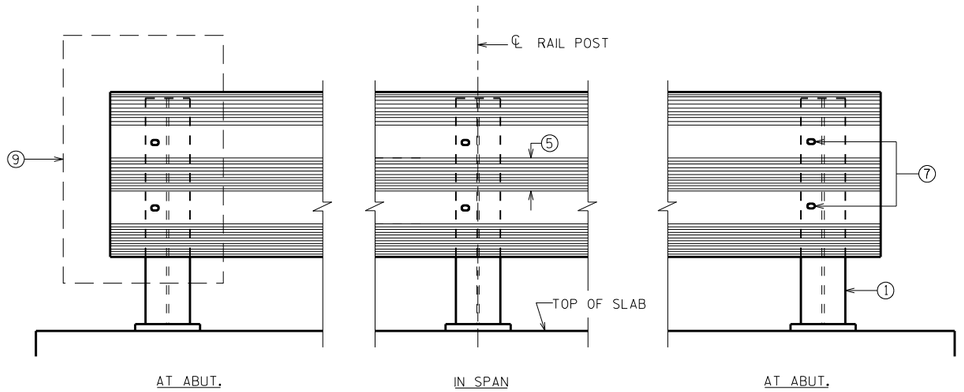
STATE PROJECT NUMBER

7120-07-70

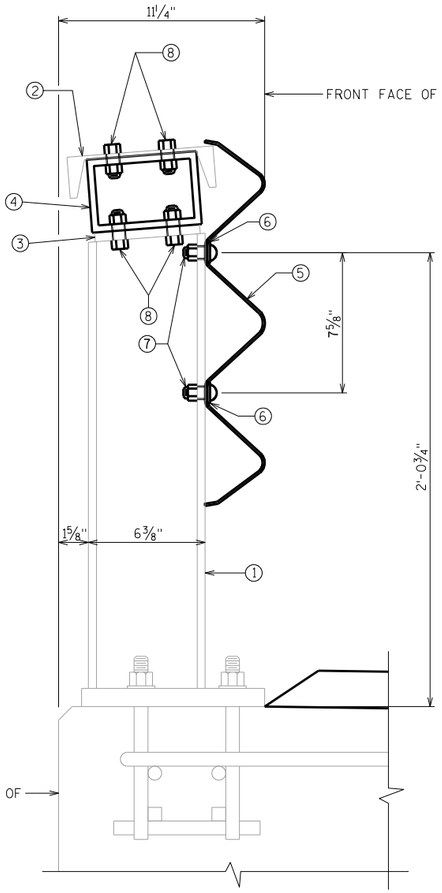


RAIL MEMBER SPLICE

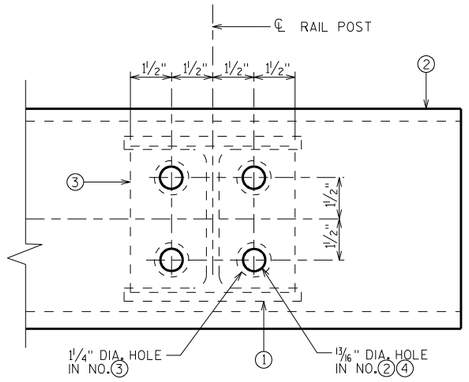
⅝" DIA. BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX NUTS AT ALL SLOTS.



ELEVATION



SECTION THRU RAILING



AT POST CONNECTION

CHANNEL MEMBER DETAILS

TOTAL ESTIMATED QUANTITIES

STRUCTURE NUMBER	EXISTING POSTS EACH		RAIL MEMBER LIN. FT.	
	LT	RT	LT	RT
B-18-89	8	8	45	45

LEGEND

① EXISTING W6X25, DRILL 2 - ¾" DIA. HOLES FOR BOLT NO. 7.

② EXISTING C8X11.5, WITH 13/16" DIA. HOLES, ATTACH TO NO. 4 WITH BOLTS NO. 8

③ EXISTING PLATE ½" X 5¾" X 6", WITH 1¼" DIA. HOLE FOR BOLTS NO. 8.

④ STRUCTURAL TUBE 6" X 4" X ⅜", WITH 13/16" DIA. HOLES, 6" LONG, ATTACH TO NO. 3 WITH BOLTS NO. 8. (NEW)

⑤ REMOVE AND INSTALL RAIL (THRIE BEAM) AND ATTACH TO NO. 1 WITH BOLTS NO. 7. (NEW)

⑥ 1¾" x 3" MOUNTING BOLT WASHER, EIGHT GAGE GALVANIZED. (NEW)

⑦ ⅝" DIA. BUTTON HEAD RAIL MOUNTING BOLT WITH ROUND WASHER AND NUT, 2 PER POST. (NEW)

⑧ ⅝" DIA. x 2" LG. HEX. BOLTS WITH NUT AND TWO WASHERS EACH, 4 REQ'D PER POST CONNECTION. (NEW)

⑨ INSTALL THRIE BEAM CONNECTION PER SDD "MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION". SEE DETAIL FOR CONNECTION TO RAILING STEEL TYPE "W" CONNECTION PAID FOR UNDER ROADWAY BID ITEMS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

BID ITEM SHALL BE "RAILING STEEL TYPE "W" REHABILITATION" WHICH SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY TO RAISE ITEMS NO. 2 & NO. 5 BETWEEN THE LONGIT. LIMITS OF RAILING AS SHOWN IN ELEVATION AND SHALL BE PAID FOR AS A LUMP SUM ITEM.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

SHIM PLATES 6" X 1/16" X 6" MAY BE USED BETWEEN TOP OF POST AND CHANNEL MEMBER TO ACHIEVE VERTICAL ALIGNMENT.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL STRUCTURAL TUBE SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

RAIL MEMBERS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC AND THE UPPER RAIL SHALL LAP THE LOWER RAIL.

NEW BOLTS AND REFLECTORS SHALL BE FURNISHED AND USED TO RAISE THE RAILING AND INSTALL NEW THRIE BEAM.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-18-89

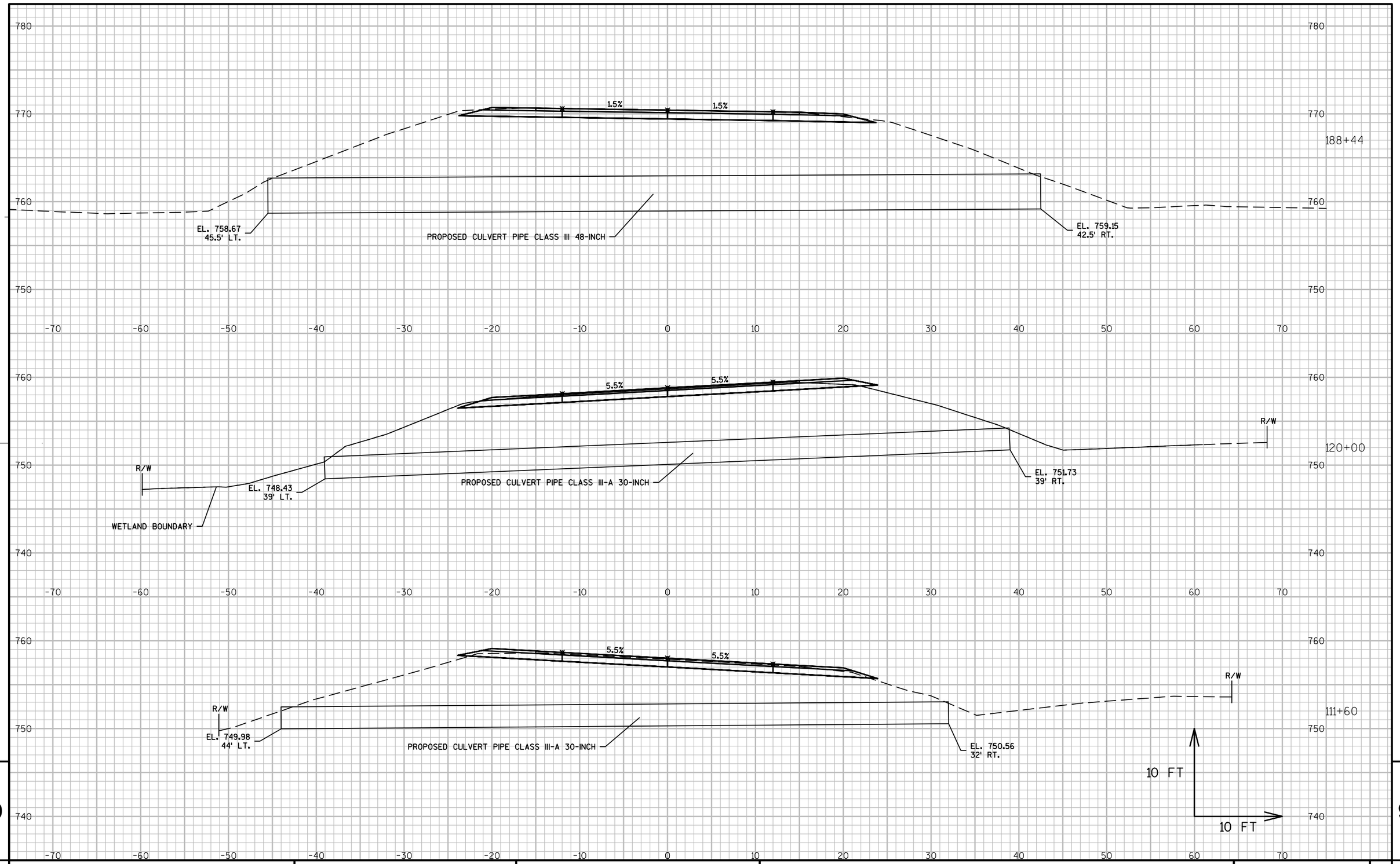
DRAWN BY NAR | PLANS CK'D. ADS

RAILING STEEL, TYPE W, REHAB. DETAIL

SHEET 2

130

SCALE = 0.333



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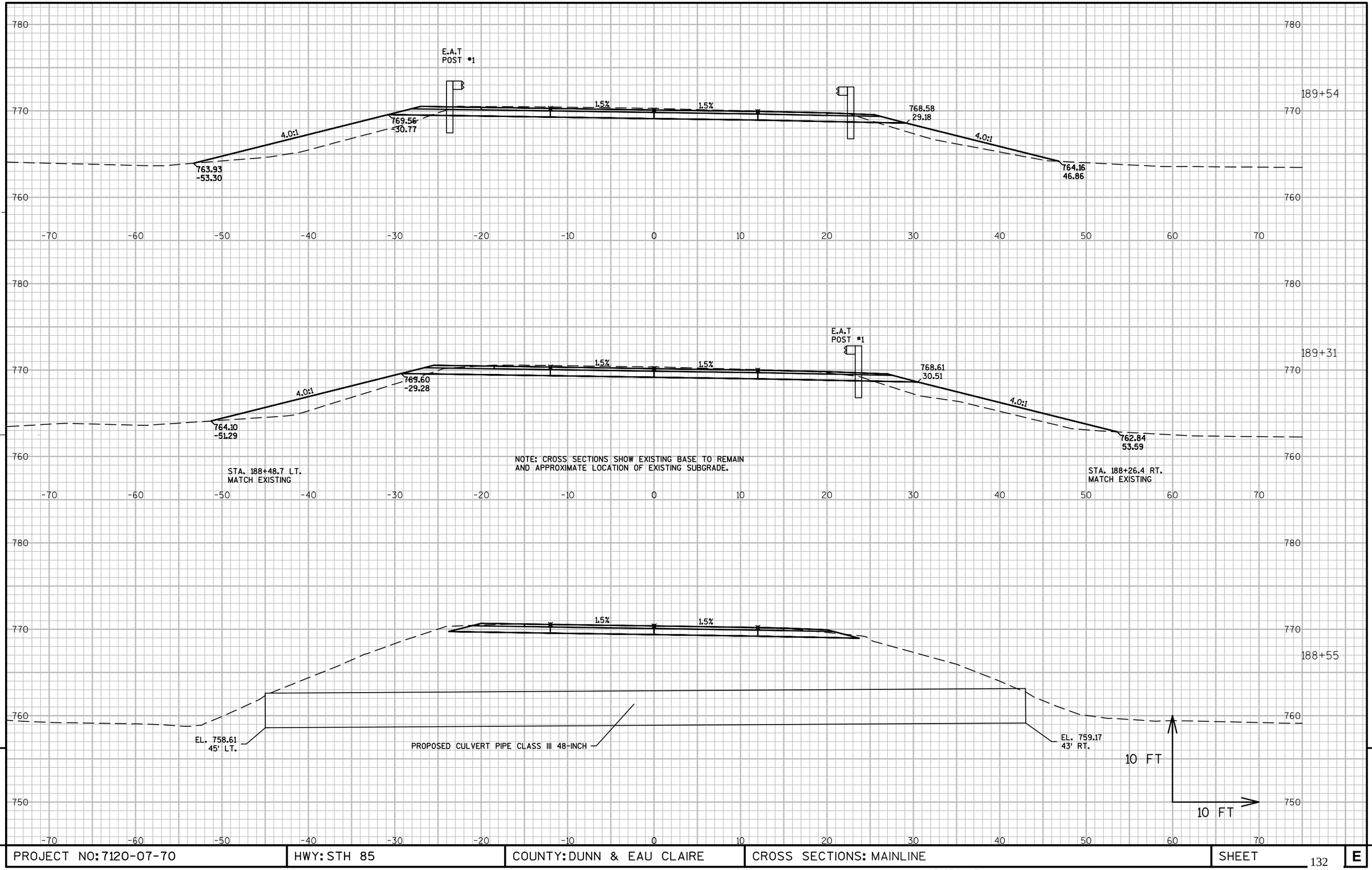
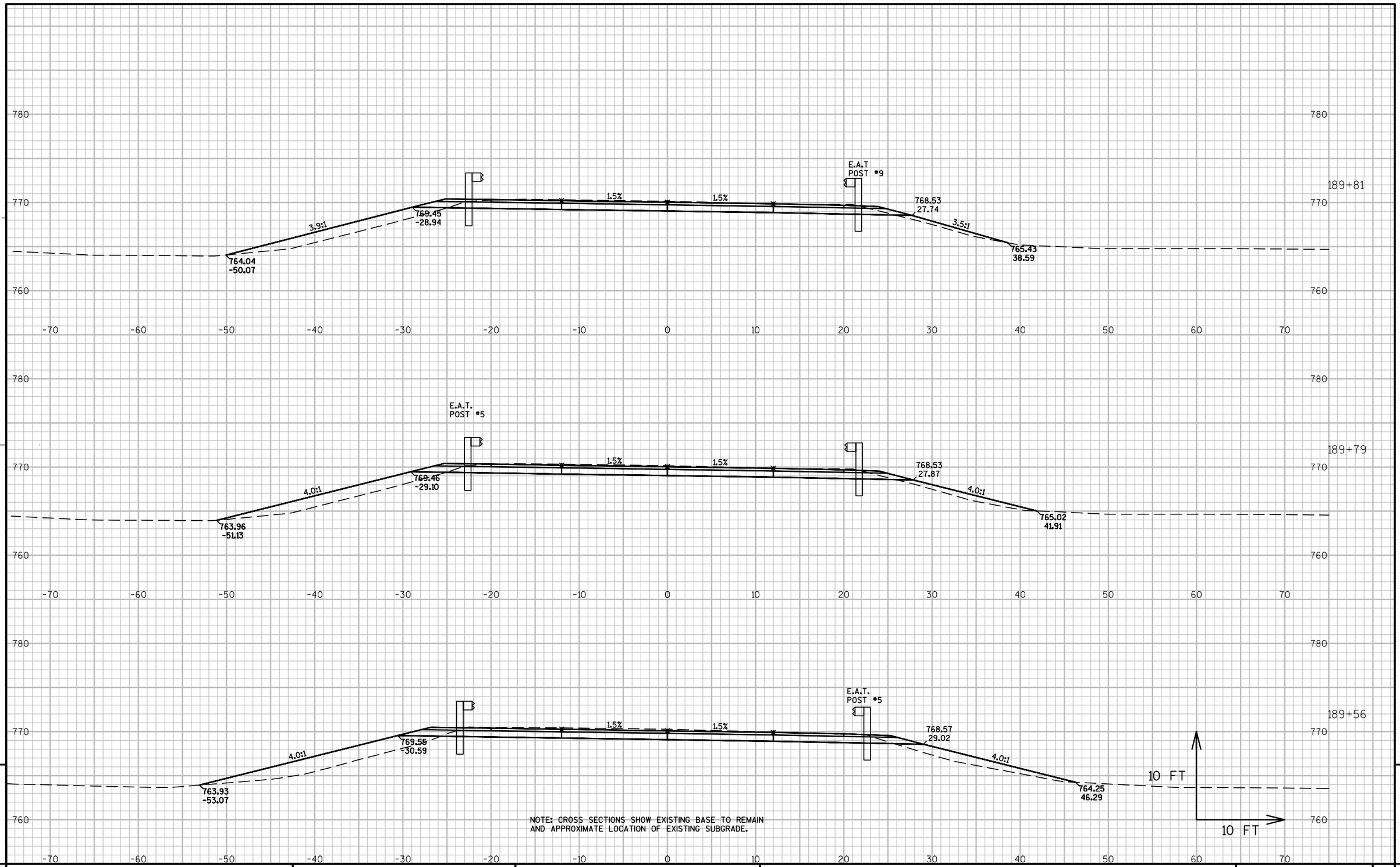
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 131	E



PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 132	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\090101_XS.DWG PLOT DATE : 1/15/2014 12:52 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



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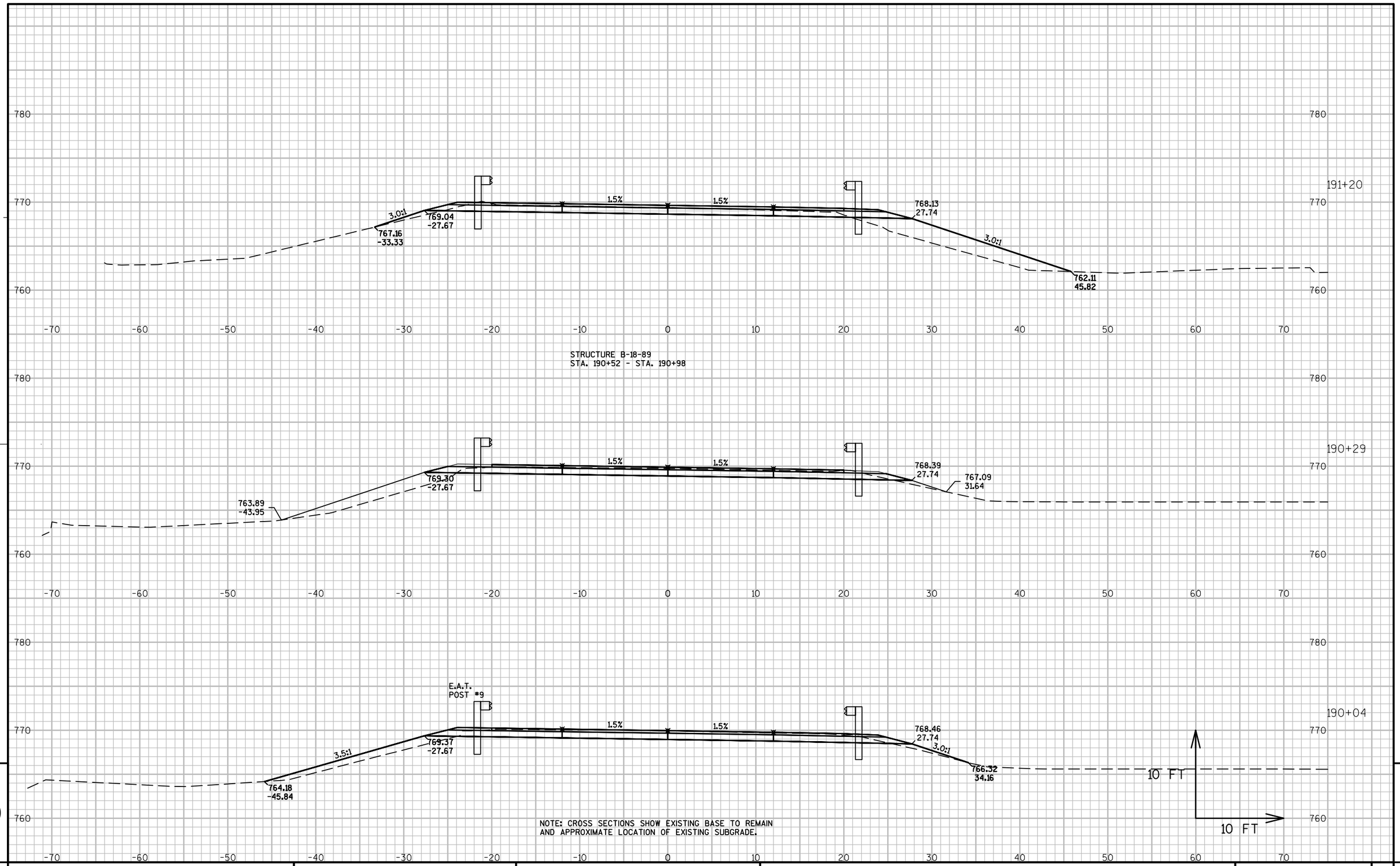
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 133	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\090101_XS.DWG PLOT DATE : 1/15/2014 11:53 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT



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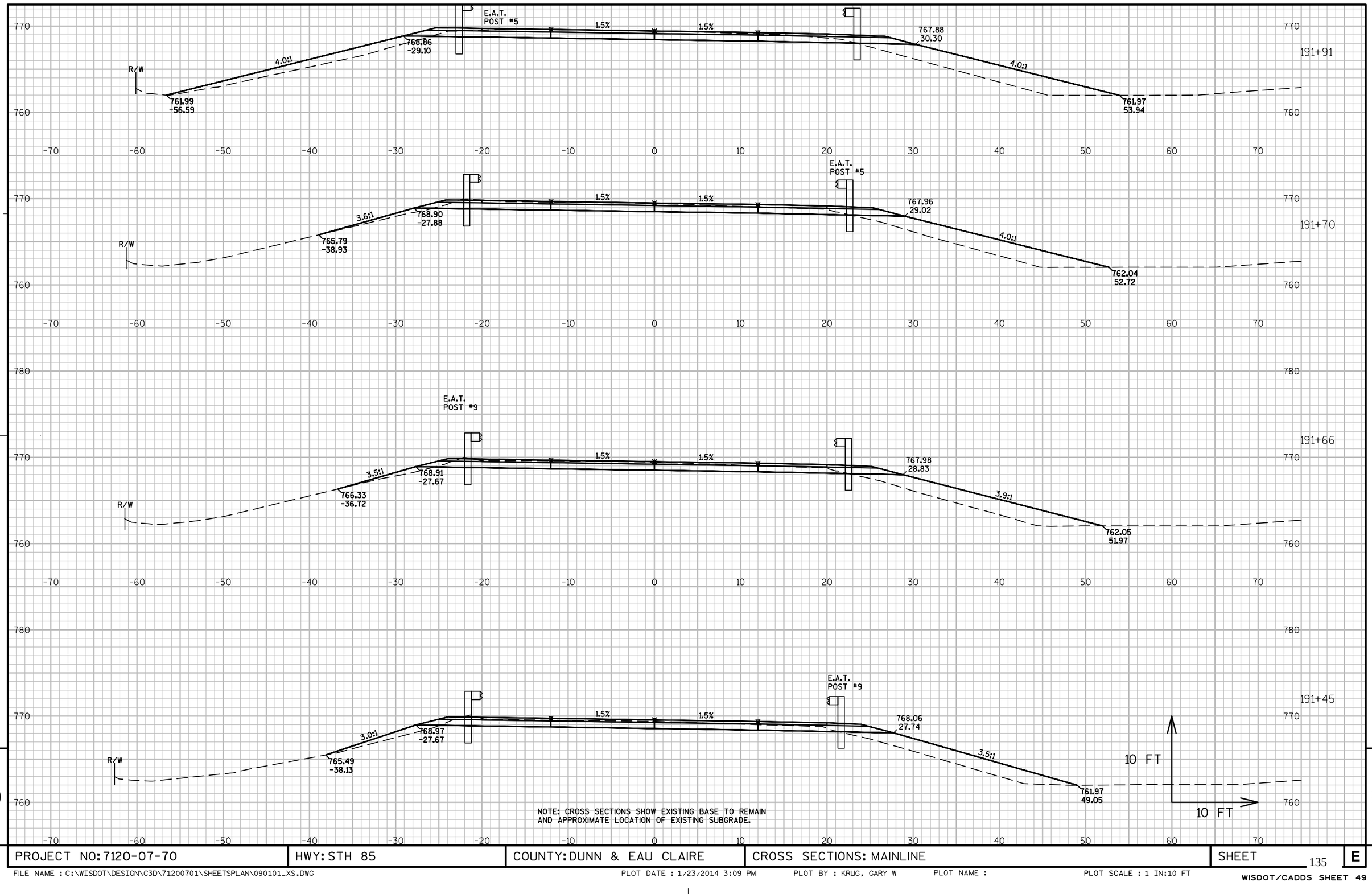
9

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 134	E



NOTE: CROSS SECTIONS SHOW EXISTING BASE TO REMAIN AND APPROXIMATE LOCATION OF EXISTING SUBGRADE.

9

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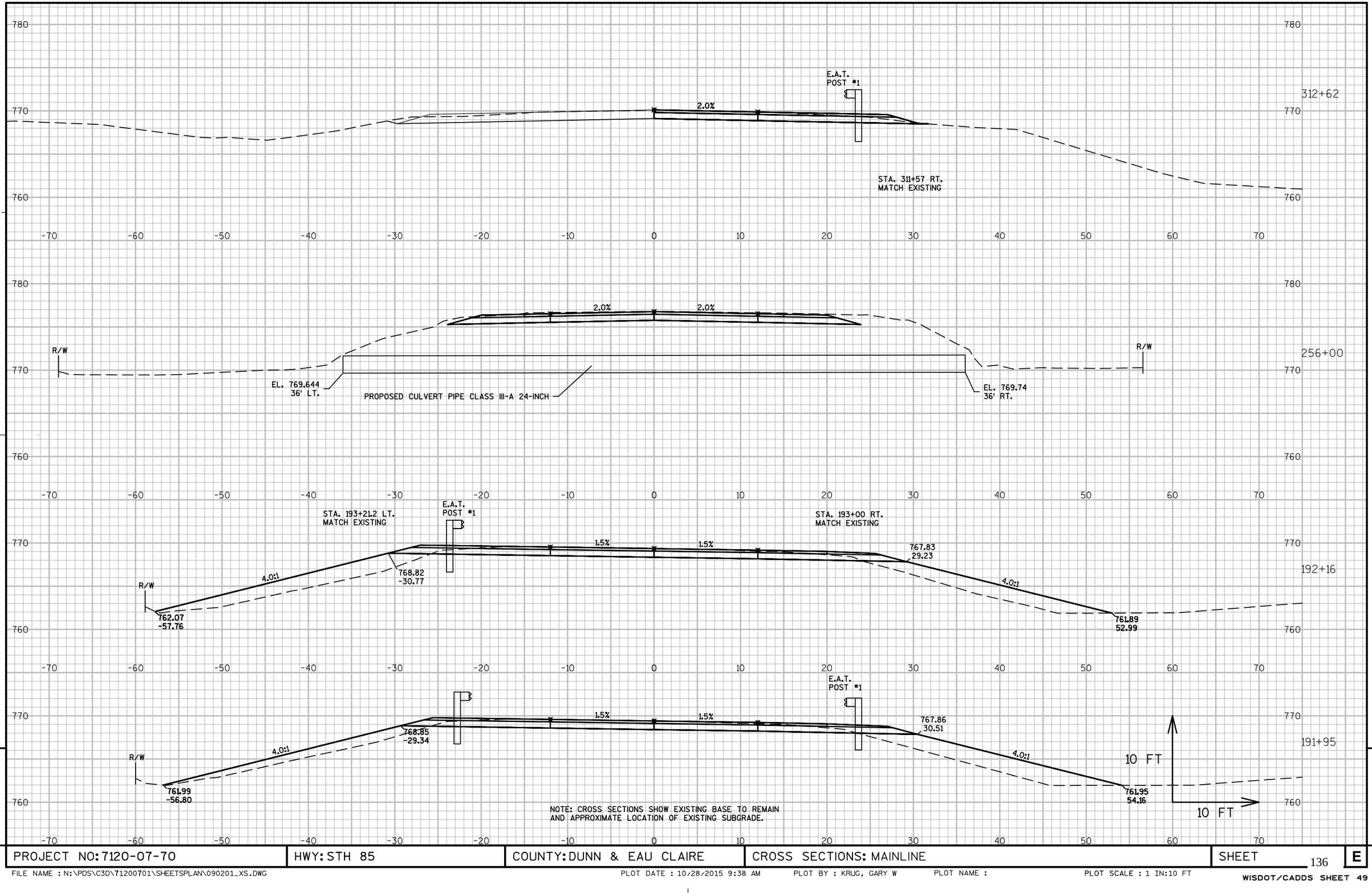
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 135	E



9

9

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 136	E

FILE NAME : N:\PDS\C3D\71200701\SHEETSPLAN\090201_XS.DWG PLOT DATE : 10/28/2015 9:38 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT

313+03

E.A.T.
POST #5

763.54
-48.98

4.0:1

768.57
-28.87

2.0%

2.0%

768.47
29.02

3.7:1

765.68
39.33

312+87

E.A.T.
POST #5

764.44
-47.18

4.0:1

768.54
-30.77

2.0%

2.0%

768.46
29.63

4.0:1

766.76
36.45

312+78

E.A.T.
POST #1

764.83
-45.70

4.0:1

768.57
-30.74

2.0%

2.0%

768.48
30.04

4.0:1

767.44
34.19

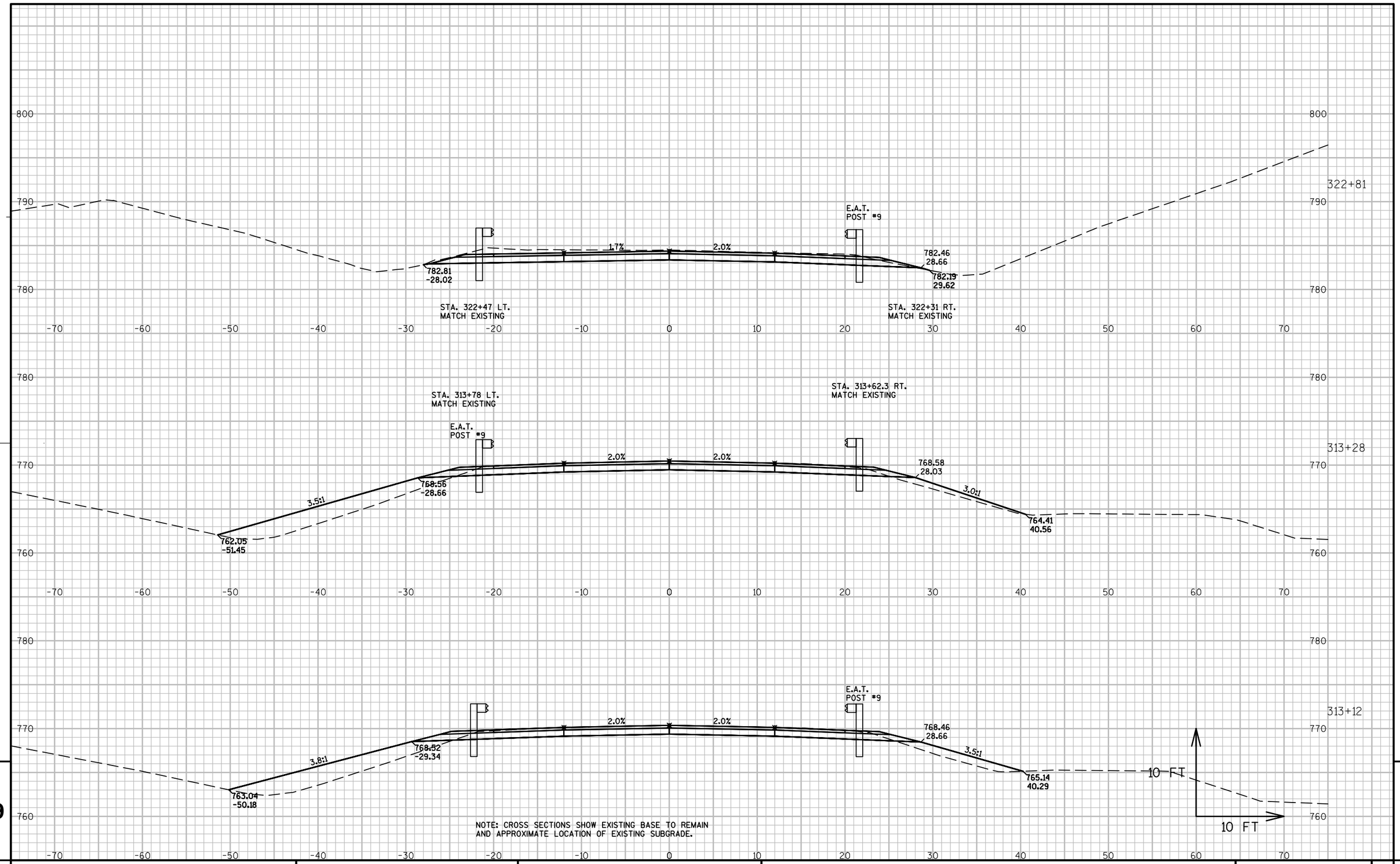
10 FT

10 FT

NOTE: CROSS SECTIONS SHOW EXISTING BASE TO REMAIN
AND APPROXIMATE LOCATION OF EXISTING SUBGRADE.

PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 137	E

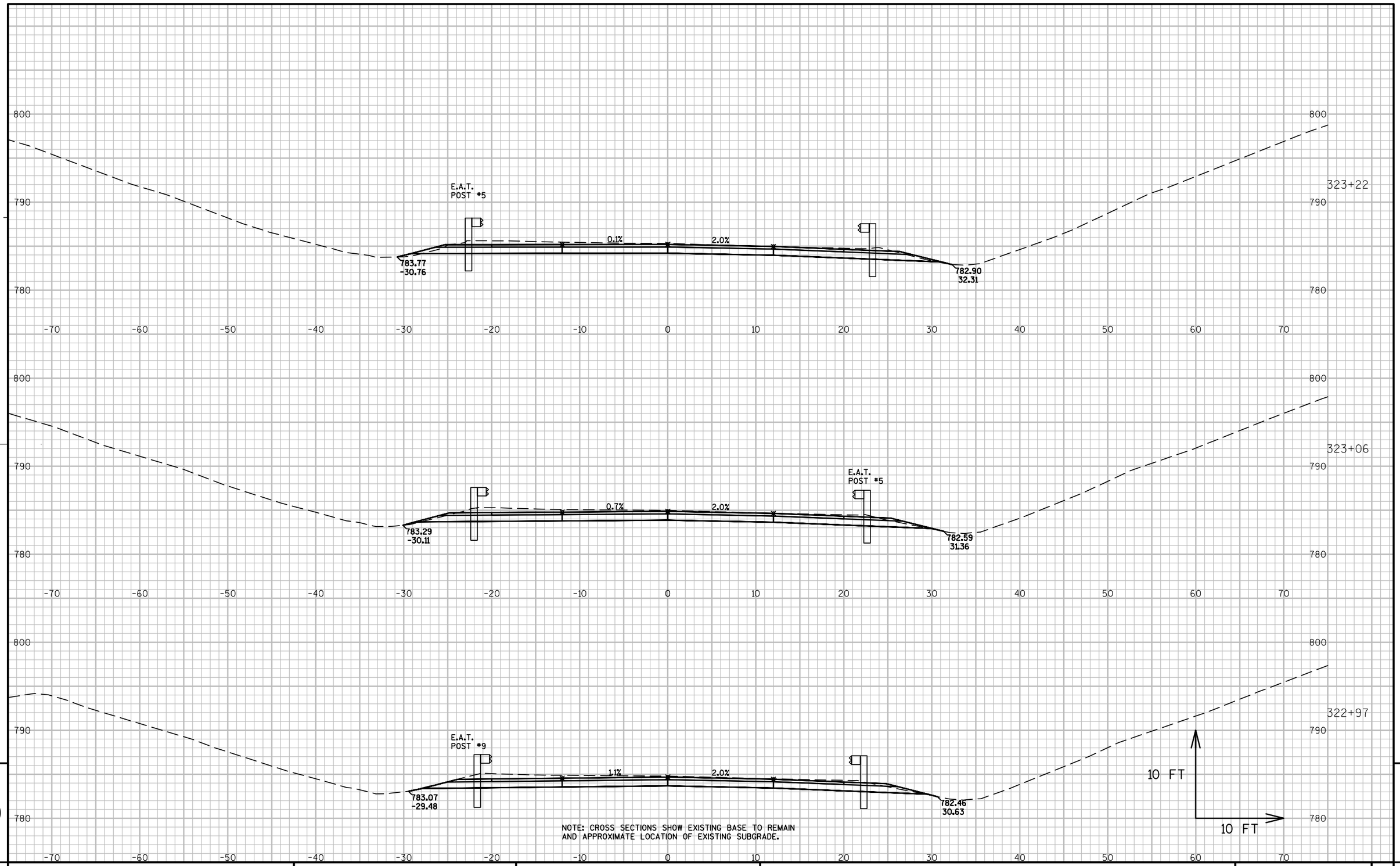
FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\090101_XS.DWG PLOT DATE : 1/15/2014 11:54 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT



PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 138	E

FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\090101_XS.DWG PLOT DATE : 1/15/2014 11:54 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 49



NOTE: CROSS SECTIONS SHOW EXISTING BASE TO REMAIN AND APPROXIMATE LOCATION OF EXISTING SUBGRADE.

9

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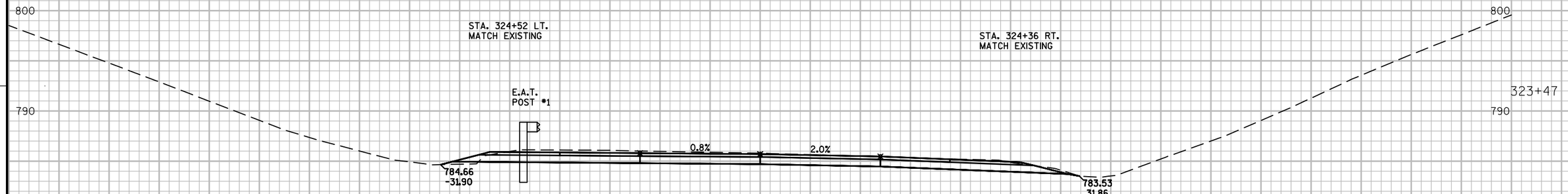
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 139	E

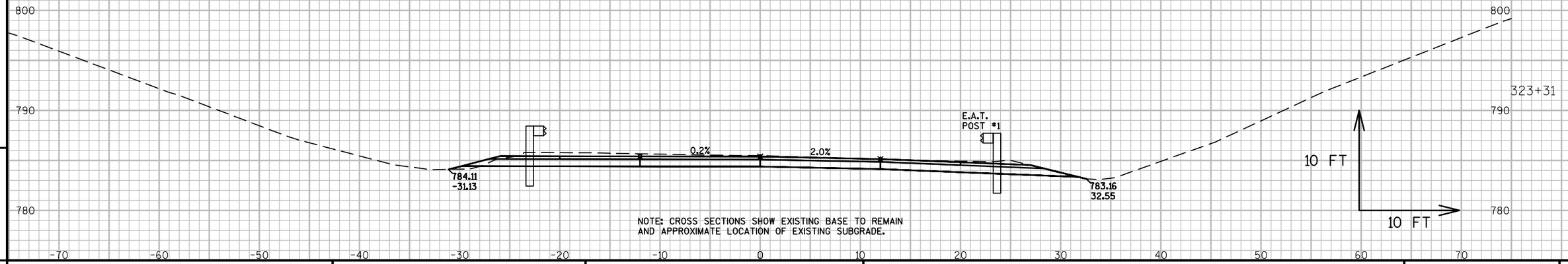
STA. 324+52 LT.
MATCH EXISTING

E.A.T.
POST #1

STA. 324+36 RT.
MATCH EXISTING

323+47





323+31

E.A.T.
POST #1

10 FT

10 FT

NOTE: CROSS SECTIONS SHOW EXISTING BASE TO REMAIN
AND APPROXIMATE LOCATION OF EXISTING SUBGRADE.

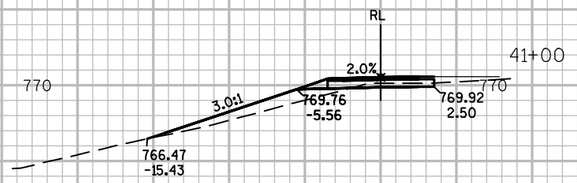
9

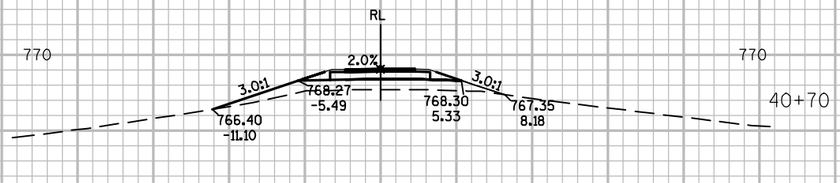
9

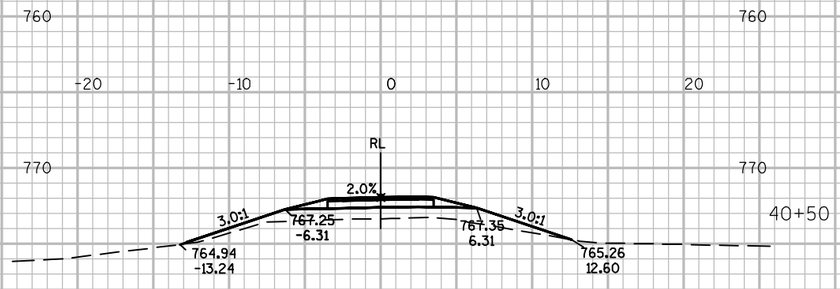
PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: MAINLINE	SHEET 140	E

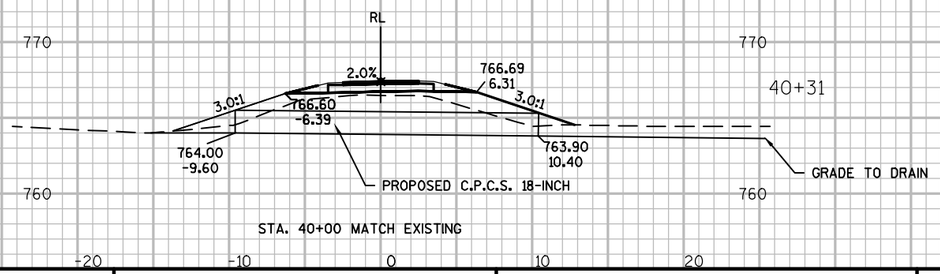
FILE NAME : C:\WISDOT\DESIGN\C3D\71200701\SHEETSPLAN\090101_XS.DWG PLOT DATE : 1/15/2014 11:56 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT

STA. 41+10.69 MATCH EXISTING



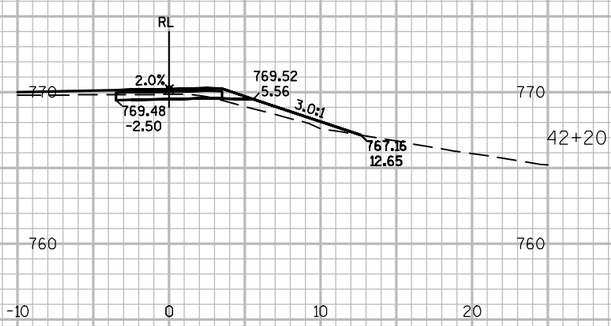


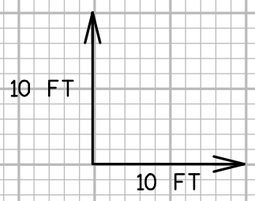




STA. 40+00 MATCH EXISTING

STA. 42+34+59 MATCH EXISTING





PROJECT NO: 7120-07-70	HWY: STH 85	COUNTY: DUNN & EAU CLAIRE	CROSS SECTIONS: WAYSIDE WALKWAY	SHEET 141	E

Wisconsin Department of Transportation

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