GRE

NOV 2014

ORDER OF SHEETS

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

TOTAL SHEETS = 364

PROJECT ID: 1491-09-71

WITH: N/A

COUNTY: MARINETTE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CRIVITZ - MIDDLE INLET

PESHTIGO RIVER - CTH X

USH 141

MARINETTE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1491-09-71	WISC 2014388	1

STATE PROJECT NUMBER

1491-09-71



DESIGN DESIGNATION

A.A.D.T. 2013	=	8100
A.A.D.T. 2033	=	9900
D.H.V. 2033	=	1129
D.D.	=	60/40
T.	=	11.2%
DESIGN SPEED	=	60 MPH
ESALS	=	3,153,600

CONVENTIONAL SYMBOLS

PLAN

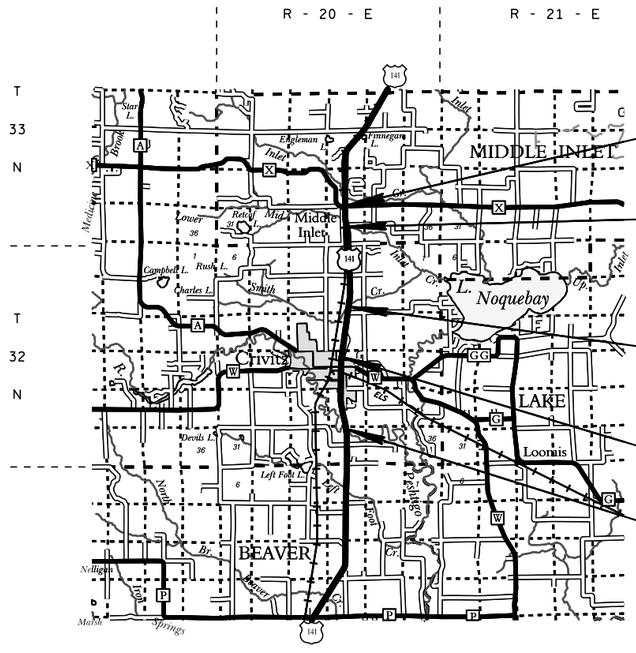
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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



LAYOUT SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 5.992 MI.

END PROJECT

STA 232+28.77

EXCEPTION TO NET & LENGTH

STA 197+29.17 TO 197+88.23
STRUCTURE B-38-37

EXCEPTION TO NET & LENGTH

STA 87+04.41 TO 87+25.58
STRUCTURE C-38-123

EQUATION

2+16.30 AH=

1701+00.82 BK

BEGIN PROJECT

STA 1613+95.48

Y = 709,933.326

X = 188,855.058

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), NAD 83 (1991) MARINETTE COUNTY.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	WISDOT NE REGION
Designer	J. BEHNKE
Project Manager	P. R. ZOELLNER
Regional Examiner	
Regional Supervisor	D. SEGERSTROM
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 7-1-2014 (Signature)

E

FILE NAME : F:\d3_149109\010101_ti.dgn PLOT DATE: 19-MAR-2014 08:28 PLOT BY : dotbrb PLOT NAME : 010101_ti ORG DATE : 5-9-2012 Originator : NE Region PLOT SCALE : 21140.00043:1

WISDOT/CADDS SHEET 10

UTILITIES

MIKE OLSEN
ATC MANAGEMENT, INC. - ELECTRICITY
801 O'KEEFE RD
PO BOX 6113
DE PERE, WI 54115-6113
(920) 338-6582
molsen@atcllc.COM

PAT TRACY
CENTURYLINK - COMMUNICATION LINE
PO BOX 260
WAUSAUKEE, WI 54177
(715) 856-9138
patrick.tracy@centurylink.com

WAYNE CRETTON
PACKERLAND BROADBAND - COMMUNICATION LINE
105 KENT ST
PO BOX 190
IRON MOUNTAIN, WI 49801
(906) 282-3768
wayne.cretton@plbb.us

GLEN FRANZEN
VILLAGE OF CRIVITZ - SEWER
800 HENRIETTE AVE
PO BOX 727
CRIVITZ, WI 54114
(715) 854-7778
gfranzen@vocwi.com

GLEN FRANZEN
VILLAGE OF CRIVITZ - WATER
800 HENRIETTE AVE
PO BOX 727
CRIVITZ, WI 54114
(715) 854-7778
gfranzen@vocwi.com

LORI BUTRY
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY & GAS
700 N ADAMS ST
PO BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
LAButry@integrysgroup.com

STEVE VAN CAMPENHOUT
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
1717 10TH AVENUE
MENOMINEE, MI 49858
(715) 923-0583
savancampenhout@wisconsinpublicservice.com

HOWARD SORENSEN
WISCONSIN PUBLIC SERVICE CORPORATION - GAS
1717 10TH AVENUE
MENOMINEE, MI 49858
(715) 923-6806
hjsorensen@wisconsinpublicservice.com

RICK VINCENT
WISCONSIN RSA #4
NSIGHT TELESERVICES - COMMUNICATION LINE
PO BOX 19079
GREEN BAY, WI 54313
(920) 617-7316
rick.vincent@insight.com

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

GENERAL NOTES

DO NOT REMOVE ANY TREES OR SHRUBS WITHOUT THE APPPOVAL OF THE ENGINEER.

RADIUS DIMENSIONS OF CURB AND GUTTER ARE TO THE FLANGE (FLAG) OF THE CURB UNLESS OTHERWISE NOTED.

STATIONING FOR THE BEAM GUARD IS APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER.

LOCATIONS OF DRIVEWAYS AND CULVERT PIPES ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER. CULVERT PIPE LENGTHS ARE BASED ON AS-BUILT PLANS. ACTUAL LENGTHS MAY VARY FROM MISCELLANEOUS QUANTITIES AND SHOULD BE VERIFIED.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT AREAS WITHIN THE FINISHED SHOULDER POINTS SHALL BE TOPSOILED, SEEDED, FERTILIZED AND MULCHED.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND ALL UTILITIES IN THE VICINITY OF THE PROJECT TO LOCATE THEIR FACILITIES AT LEAST THREE WORKING DAYS PRIOR TO BEGINNING WORK.

THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DRIVEWAYS SHALL BE REPLACED IN KIND. BASE AGGREGATE DENSE WILL BE USED UNDER ALL DRIVEWAYS.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NAVD88(91) VERTICAL DATUM.

PROPERTY OWNERS SHALL BE NOTIFIED 48 HOURS IN ADVANCE FOR DRIVEWAY CLOSURES AND ACCESS RESTRICTIONS TO THEIR PROPERTY.

COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

CONTACT: JOHN M LEFEBVRE - MARINETTE COUNTY
LAND INFORMATION DIRECTOR
MARINETTE COUNTY COURT HOUSE
1926 HALL AVE
MARINETTE, WI 54143
715-923-4794
jlefebvre@marinettecounty.com

DNR AREA LIAISON

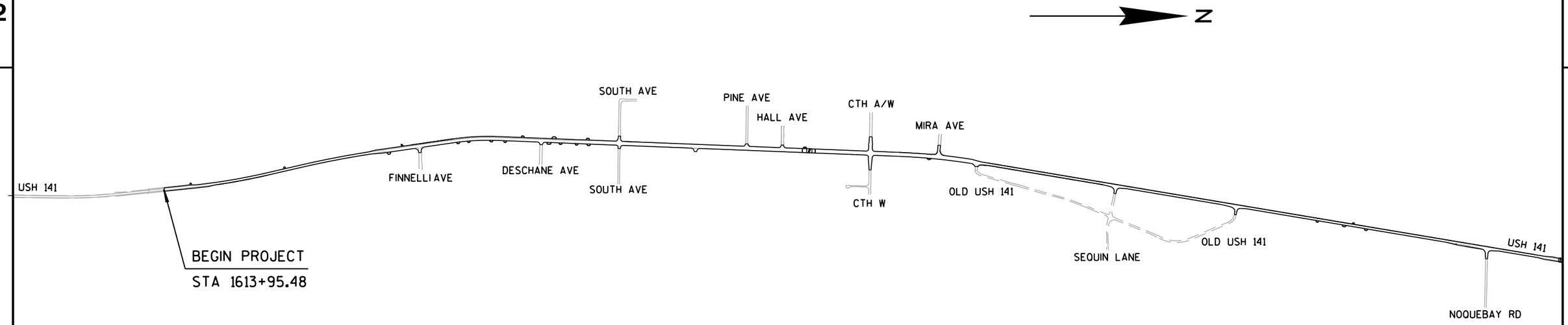
JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

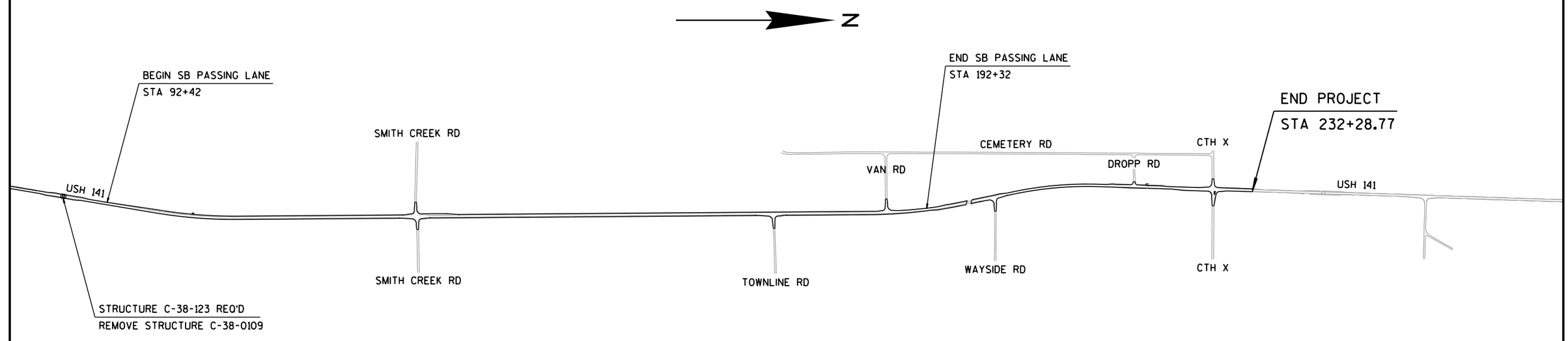
ESCANABA AND LAKE SUPERIOR RAILROAD CONTACTS

PRIMARY RAIL ROAD CONTACT
TOM KLIMEK, DIR-MARKETING, CUSTOMER
SERVICES GREEN BAY OPERATIONS
529 S JEFFERSON STREET SUITE 108
PO BOX 85
GREEN BAY, WI 54304
PHONE 920-435-8006
CELL 920-841-5062
FAX 906-435-6281
EMAIL elsklimek@gmail.com

TRAIN DISPATCH INFORMATION AND FLAGGING CONTACT
610 RAILROAD STREET
CHANNING, MI 49815
PHONE 906-542-3214
FAX 906-542-9811
DISPATCHER 800-200-2360

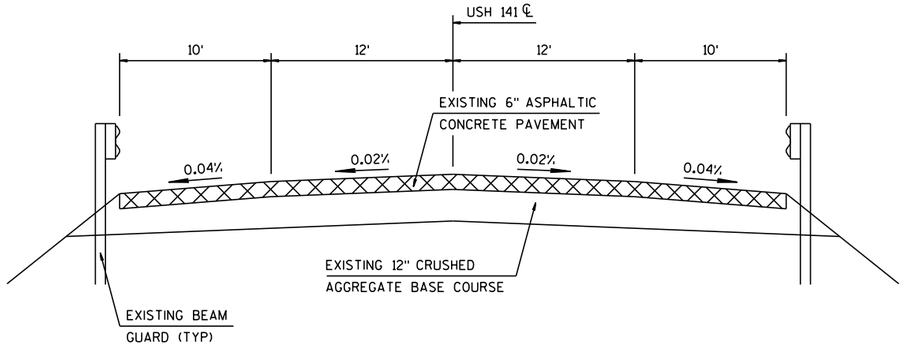
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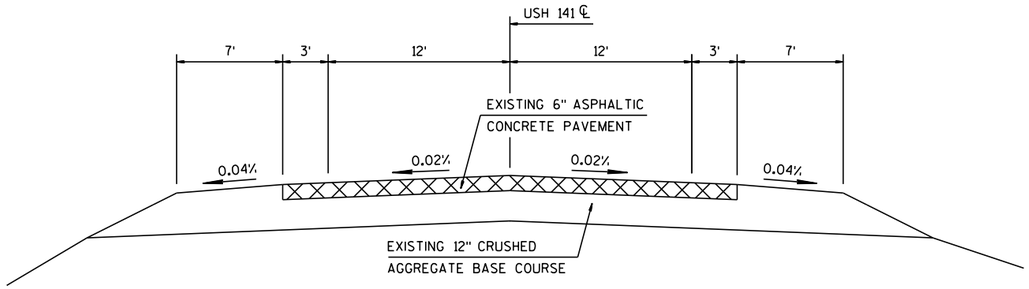
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PROJECT OVERVIEW	SHEET 3	E

2



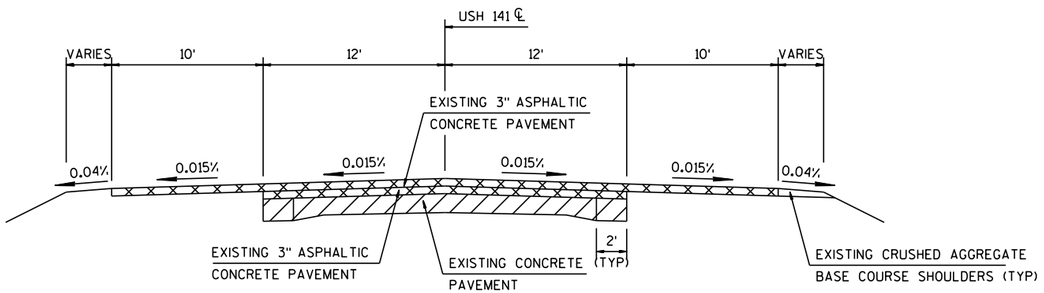
TYPICAL EXISTING CROSS SECTION FOR USH 141

1613+95 TO 1619+34



TYPICAL EXISTING CROSS SECTION FOR USH 141

1619+94 TO 1643+00



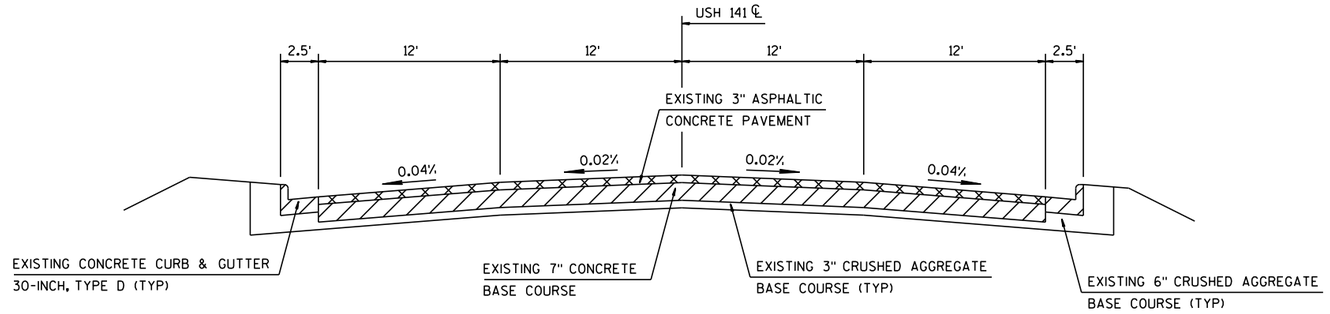
TYPICAL EXISTING CROSS SECTION FOR USH 141

1643+00 TO 1666+50

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 4	E

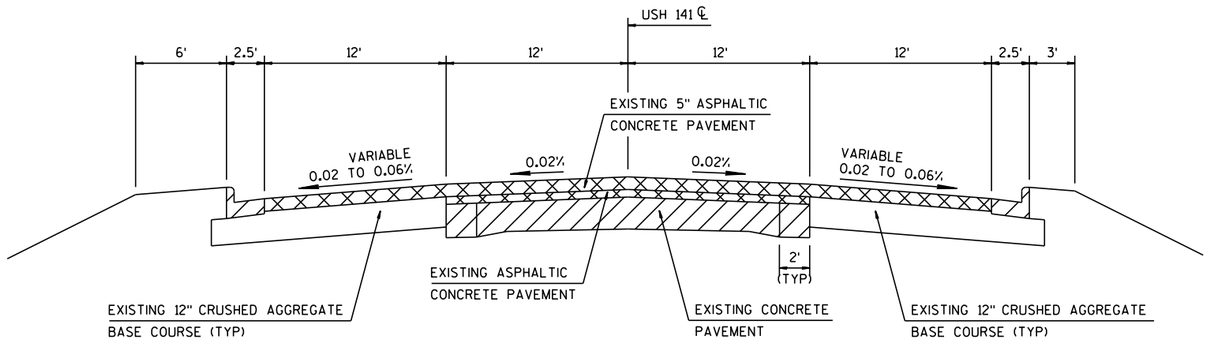
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WISDOT/CADDS SHEET 42



TYPICAL EXISTING CROSS SECTION FOR USH 141

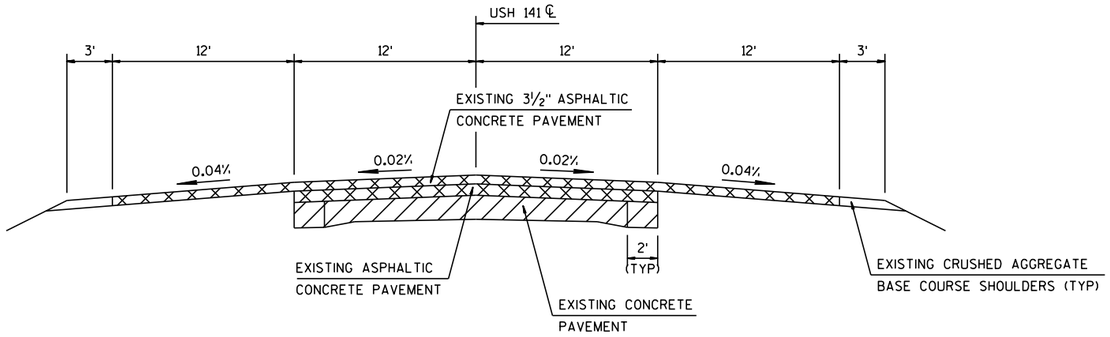
1698+45 TO 1701+00 BK = 2+16 AH TO 3+50



TYPICAL EXISTING CROSS SECTION FOR USH 141

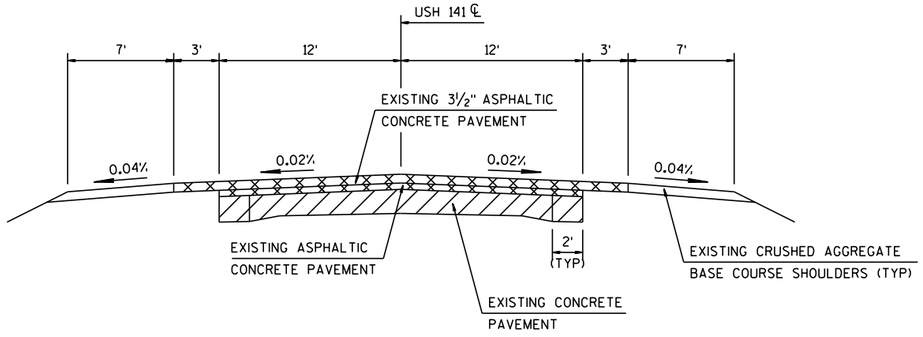
3+50 TO 8+90
1666+50 TO 1698+45

2



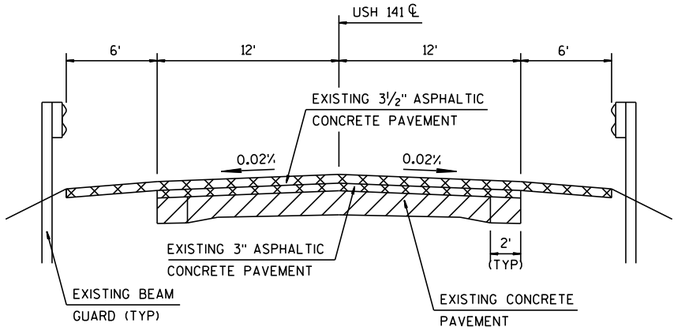
TYPICAL EXISTING CROSS SECTION FOR USH 141

8+90 TO 16+20



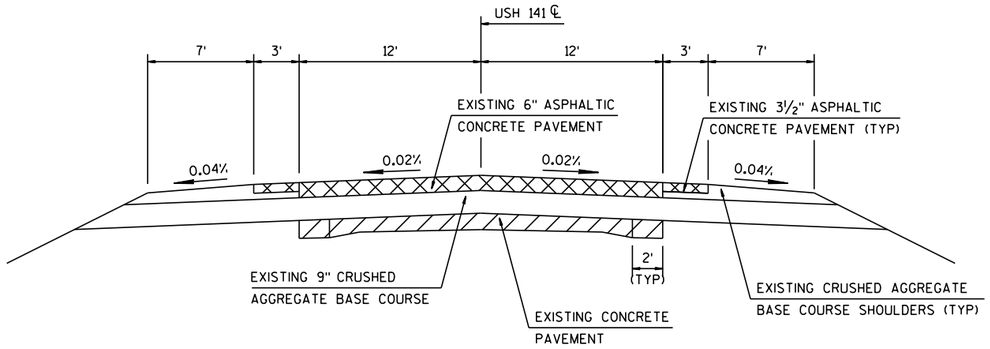
TYPICAL EXISTING CROSS SECTION FOR USH 141

16+20 TO 84+43
90+00 TO 148+00
158+00 TO 191+00



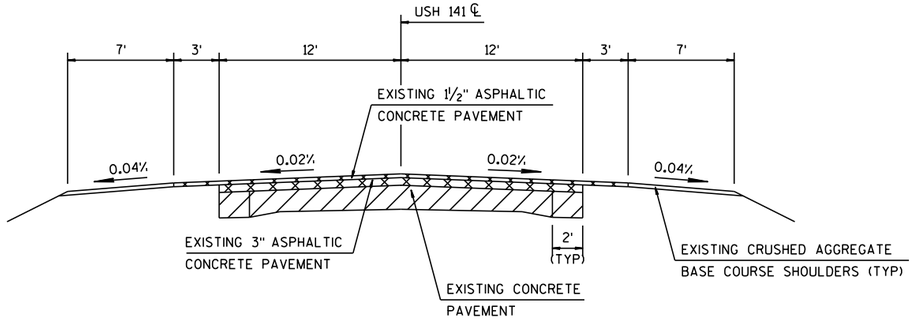
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85+27 TO 88+38



TYPICAL EXISTING CROSS SECTION FOR USH 141

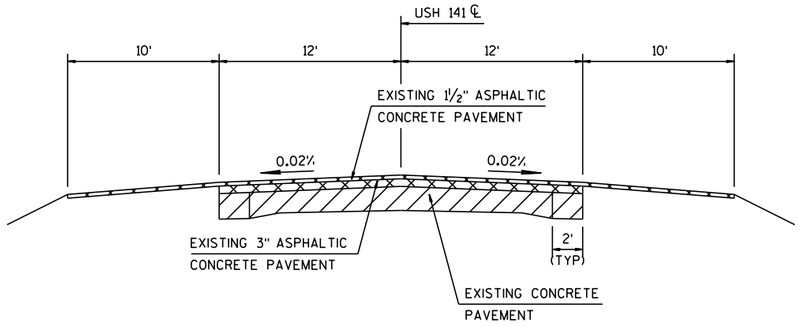
148+00 TO 158+00



TYPICAL EXISTING CROSS SECTION FOR USH 141

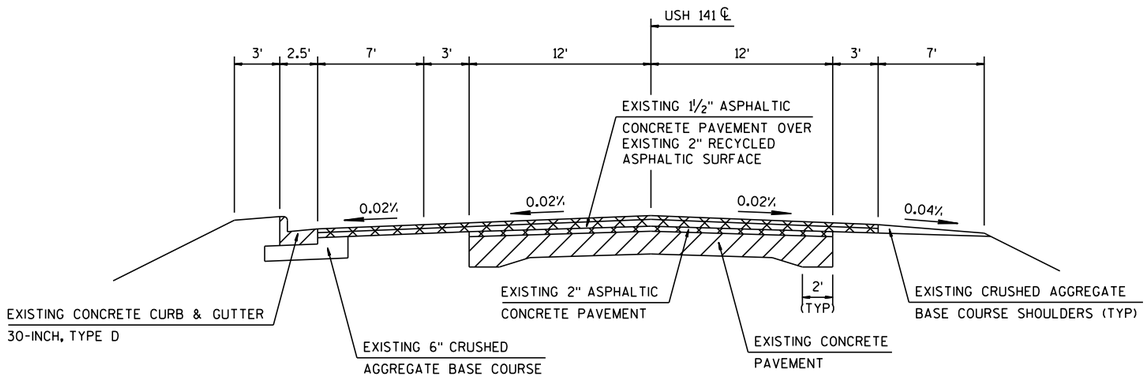
191+00 TO 192+28
202+30 TO 215+50
221+10 TO 226+75

2



TYPICAL EXISTING CROSS SECTION FOR USH 141

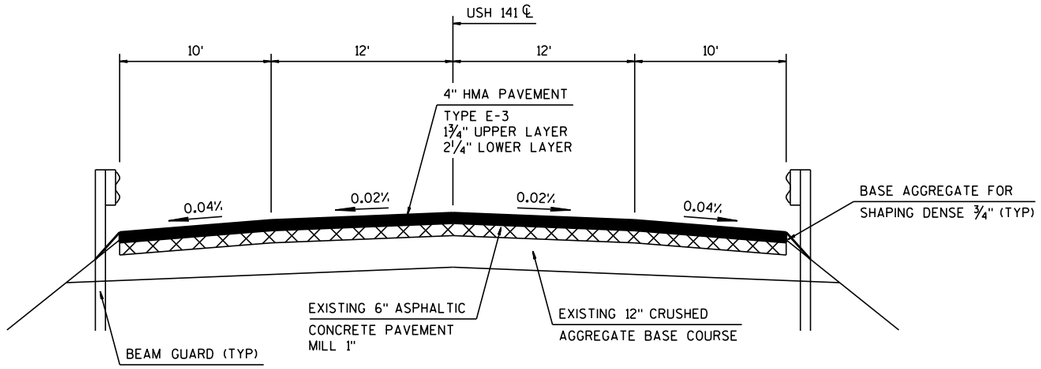
193+86 TO 201+39



TYPICAL EXISTING CROSS SECTION FOR USH 141

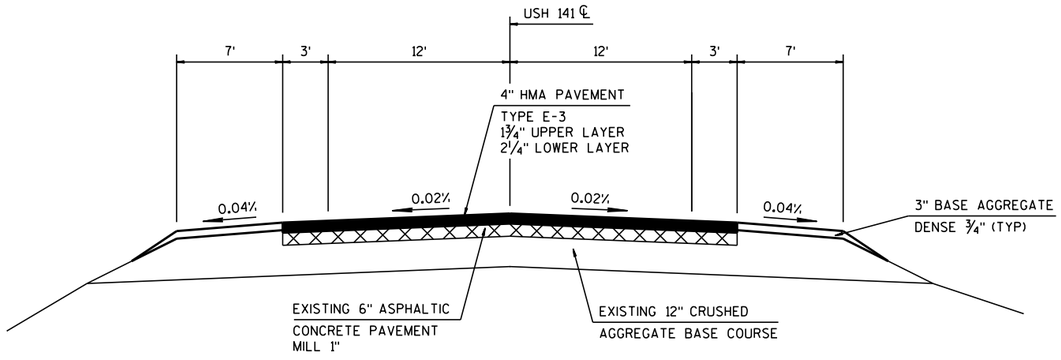
215+50 TO 221+10
228+04 TO 232+35

2



TYPICAL FINISHED CROSS SECTION FOR USH 141

1613+95 TO 1619+34

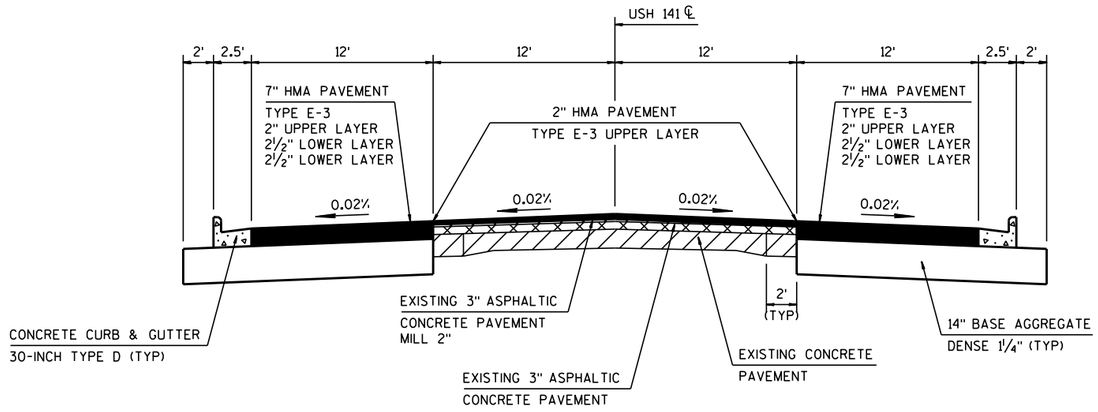


* TRANSITION MILLING FROM 1" TO 2" IN 300'
TRANSITION PAVING FROM 4" TO 2" IN 300'

TYPICAL FINISHED CROSS SECTION FOR USH 141

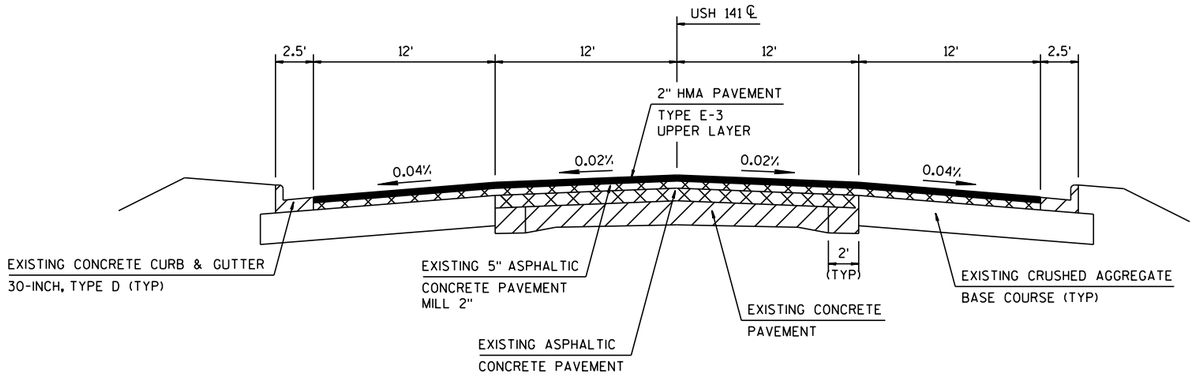
1619+94 TO 1637+33
* 1637+33 TO 1640+33

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 9	E



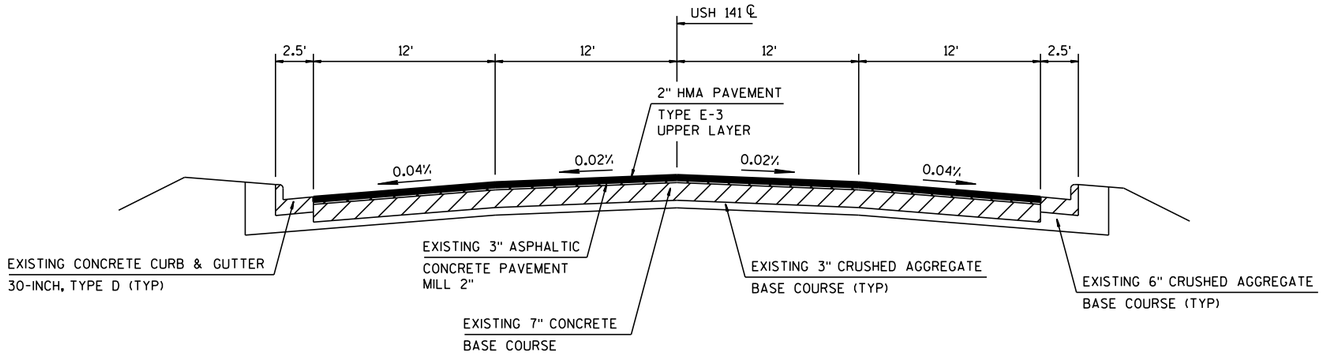
TYPICAL FINISHED CROSS SECTION FOR USH 141

1640+33 TO 1666+85



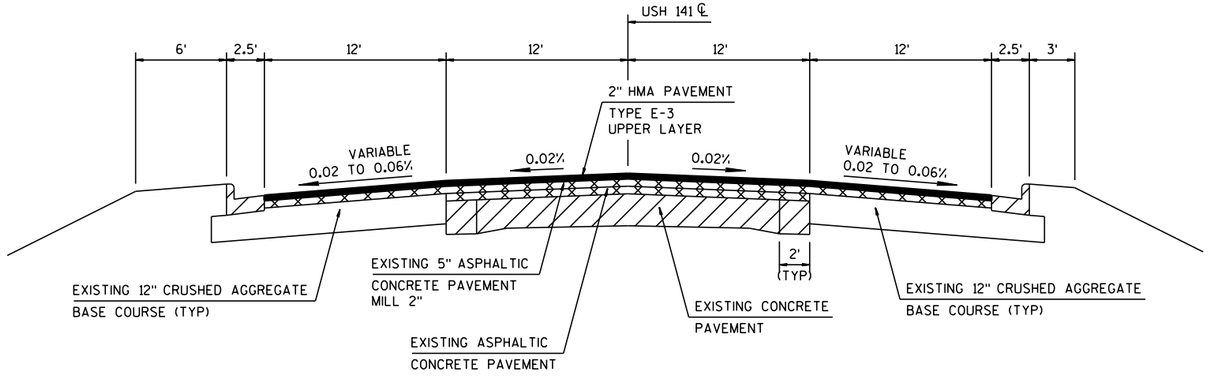
TYPICAL FINISHED CROSS SECTION FOR USH 141

1666+85 TO 1698+45
* SEE PLAN DETAIL
1692+30 TO 1693+87



TYPICAL FINISHED CROSS SECTION FOR USH 141

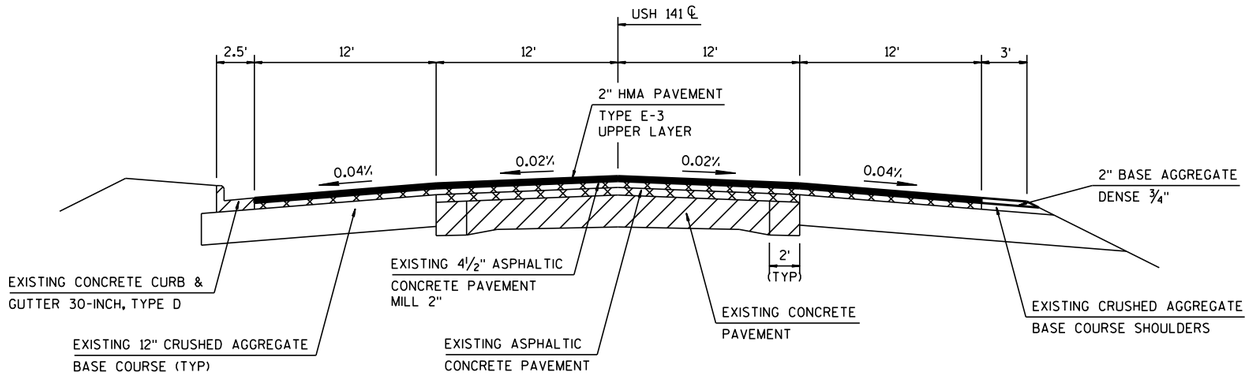
1698+45 TO 1701+00 BK = 2+16 AH TO 3+50



TYPICAL FINISHED CROSS SECTION FOR USH 141

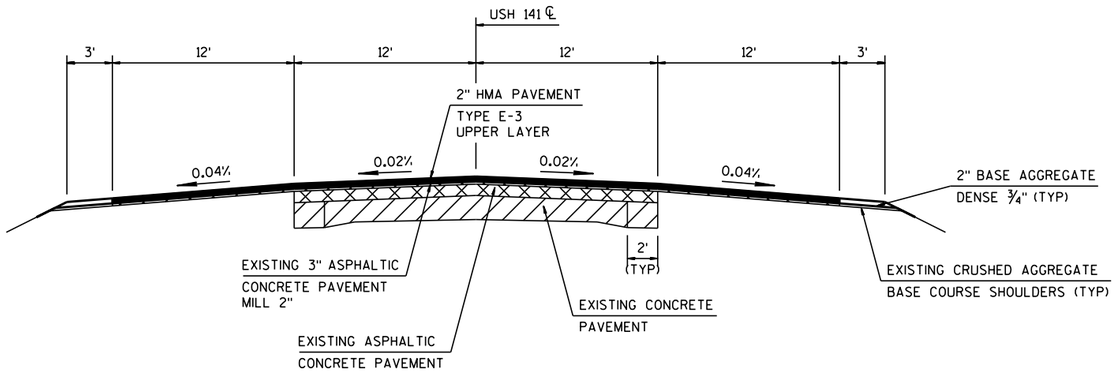
3+50 TO 5+28

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TYPICAL FINISHED CROSS SECTION FOR USH 141

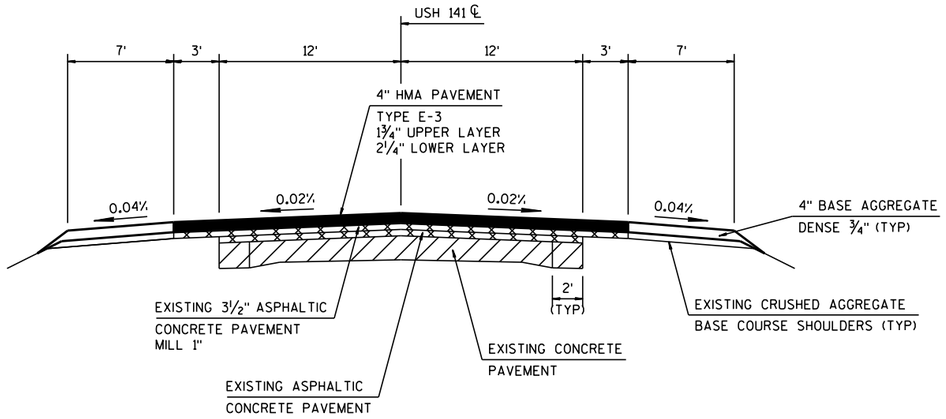
5+28 TO 8+40



* TRANSITION MILLING FROM 2" TO 1" IN 300'
TRANSITION PAVING FROM 2" TO 4" IN 300'

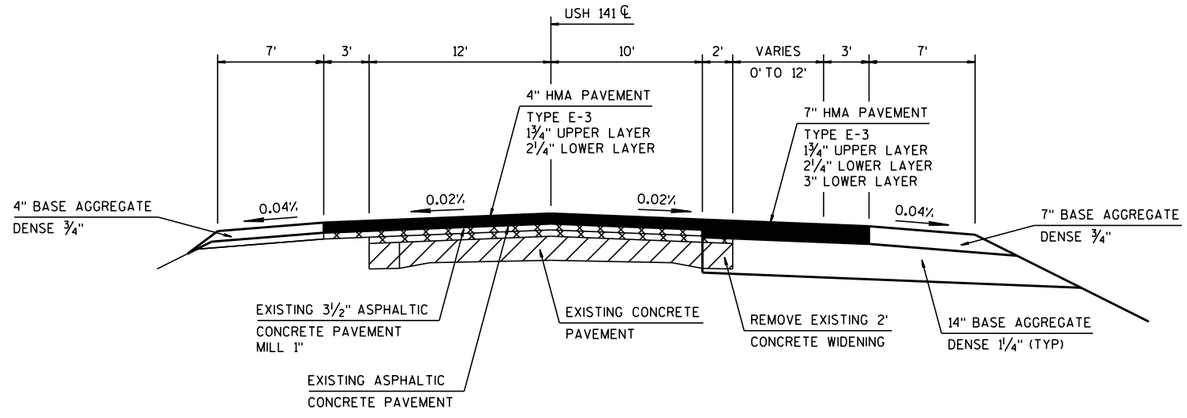
TYPICAL FINISHED CROSS SECTION FOR USH 141

8+40 TO 16+20
* 16+20 TO 19+20



TYPICAL FINISHED CROSS SECTION FOR USH 141

19+20 TO 72+50
80+00 TO 86+63
87+67 TO 92+40

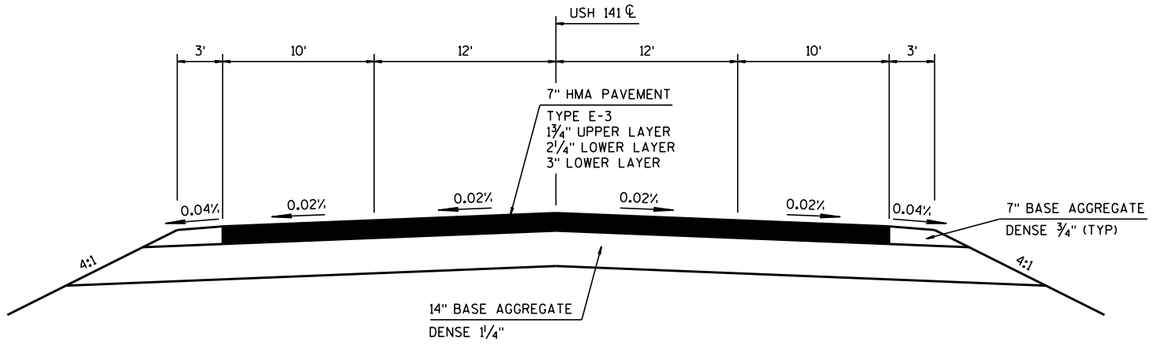


TYPICAL FINISHED CROSS SECTION FOR USH 141

72+50 TO 80+00

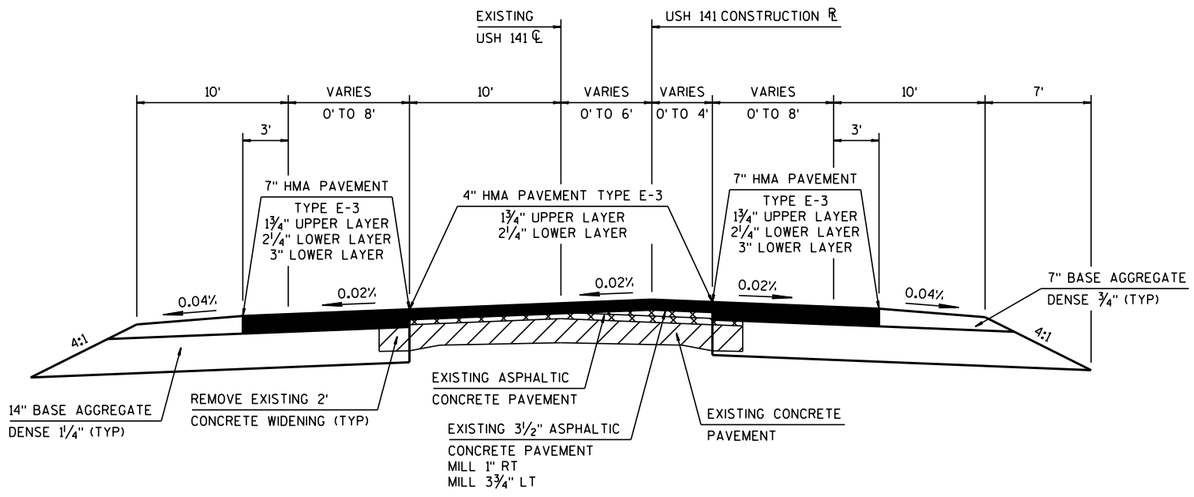
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 13	E

2



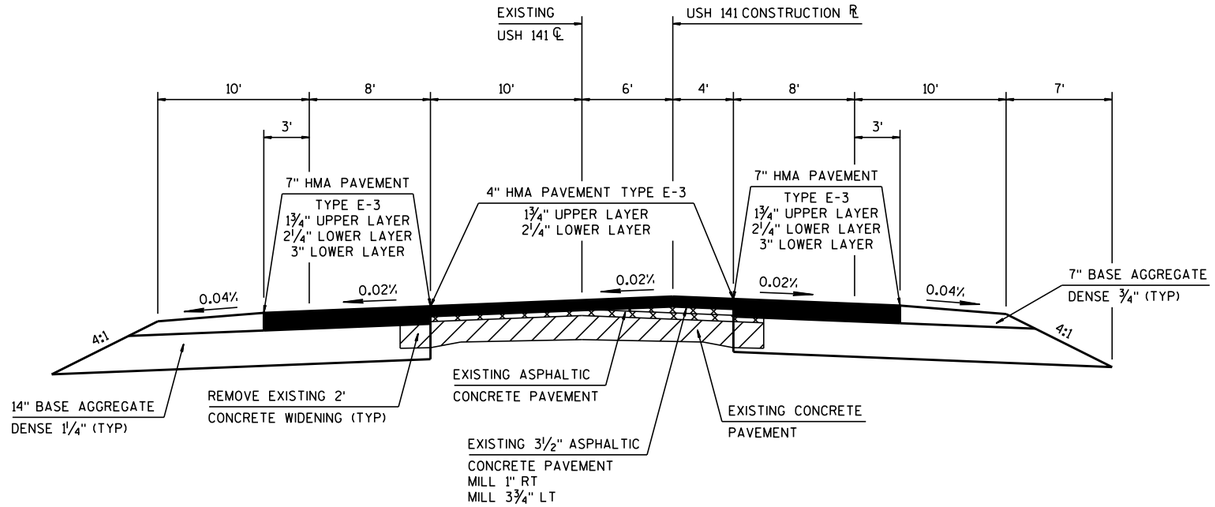
TYPICAL FINISHED CROSS SECTION FOR USH 141

86+63 TO 86+83.42
87+46.58 TO 87+67



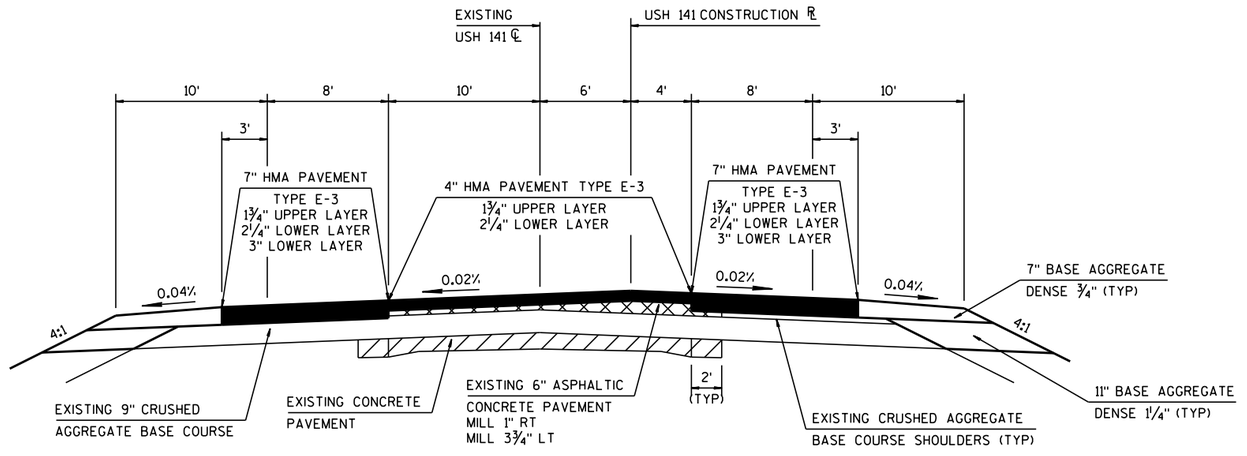
TYPICAL FINISHED CROSS SECTION FOR USH 141

92+40 TO 98+53
185+32 TO 193+86



TYPICAL FINISHED CROSS SECTION FOR USH 141

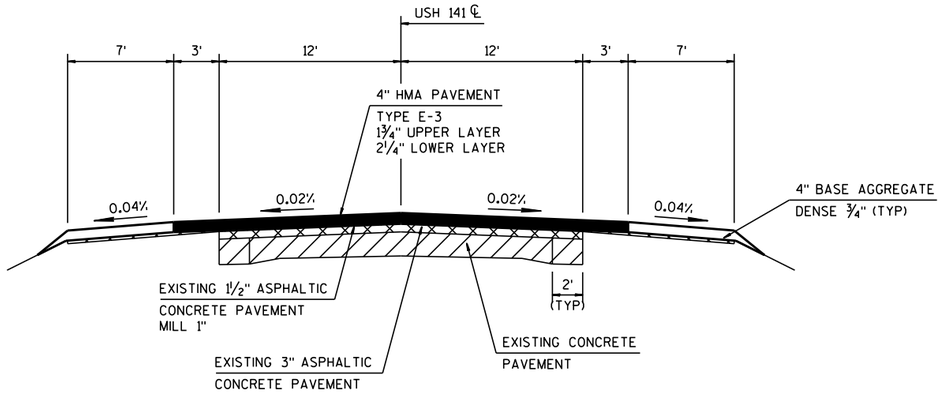
98+53 TO 148+00
158+00 TO 185+32



TYPICAL FINISHED CROSS SECTION FOR USH 141

148+00 TO 158+00

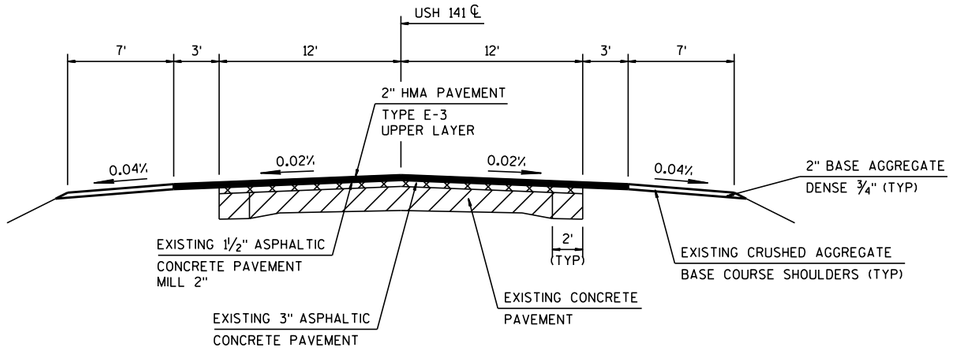
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 15	E



* TRANSITION MILLING FROM 1" TO 2" IN 300'
TRANSITION PAVING FROM 4" TO 2" IN 300'

TYPICAL FINISHED CROSS SECTION FOR USH 141

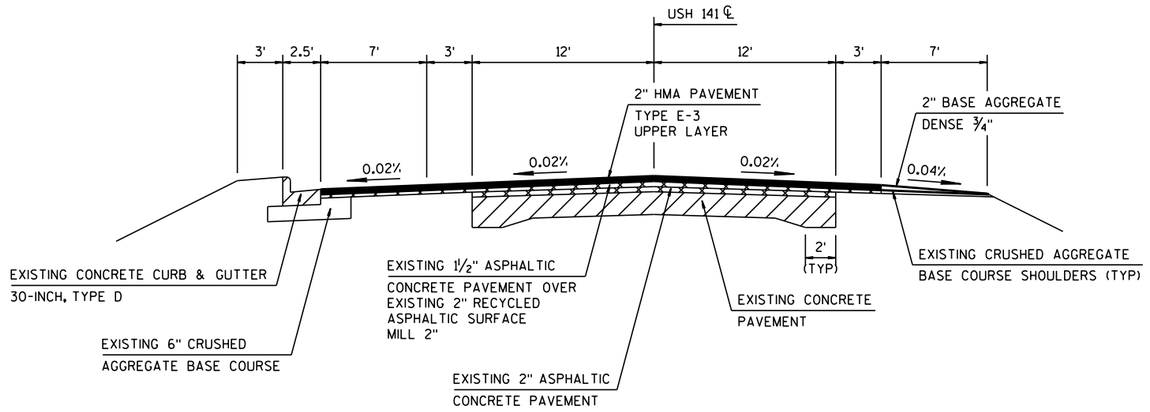
193+86 TO 197+23
197+83 TO 212+50
* 212+50 TO 215+40



TYPICAL FINISHED CROSS SECTION FOR USH 141

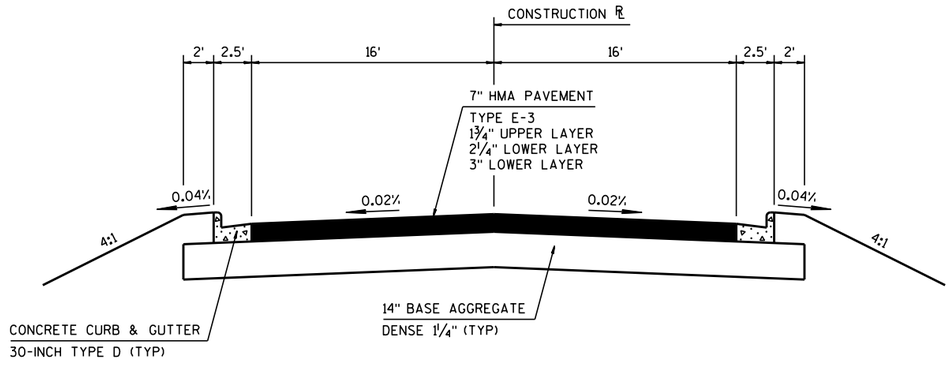
221+10 TO 228+04

2



TYPICAL FINISHED CROSS SECTION FOR USH 141

215+40 TO 221+10
228+04 TO 232+28.77

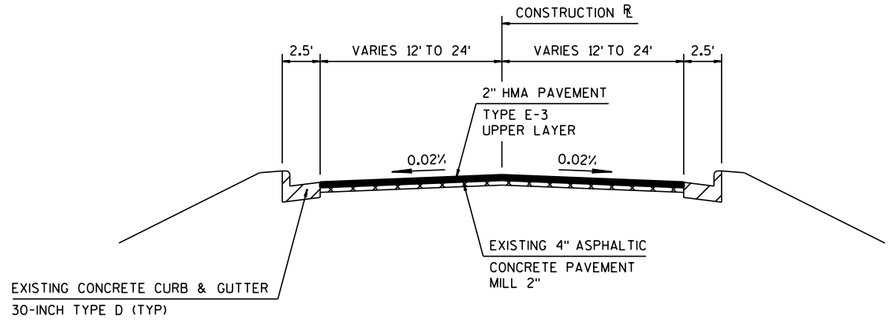


TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

FINNELLI AVE
DESCHANE AVE

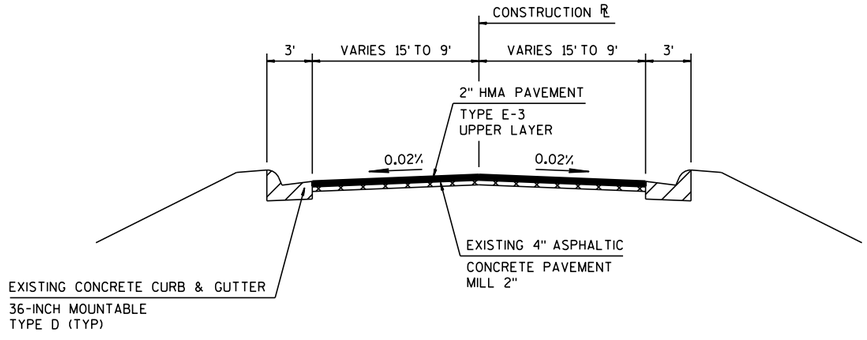
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 17	E

2



TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

SOUTH AVENUE WEST
SOUTH AVENUE EAST
WITT AVENUE
PINE AVENUE
HALL AVENUE
CTH A/W
CTH W
MIRA AVENUE

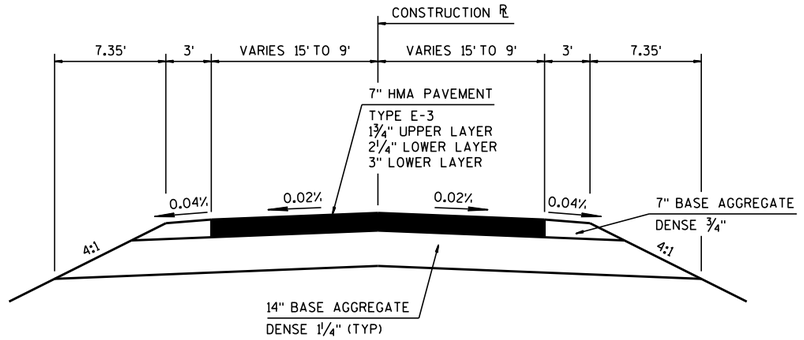


TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

OLD 141
SEQUIN LANE
OLD 141

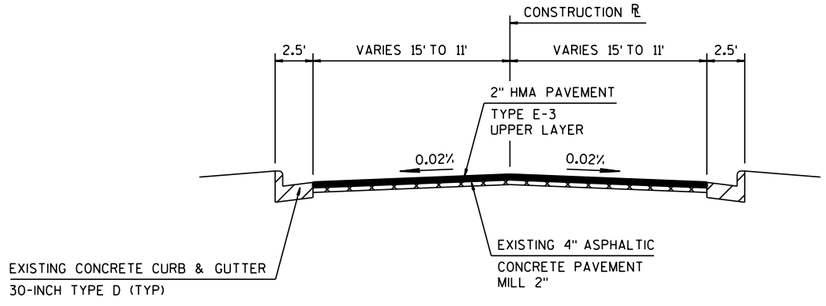
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 18	E

2



TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

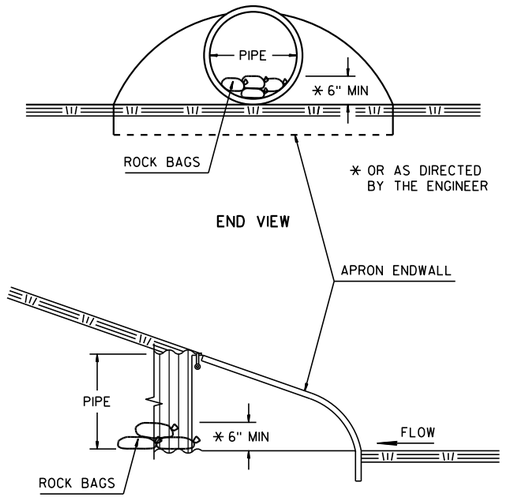
NOQUEBAY ROAD
SMITH CREEK ROAD WEST
SMITH CREEEK ROAD EAST
VAN ROAD
WAYSIDE ROAD
CTH X EAST



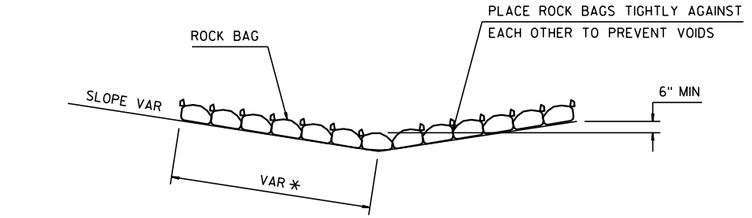
TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

CTH X WEST
DROPP ROAD

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 19	E



CULVERT PIPE CHECKS

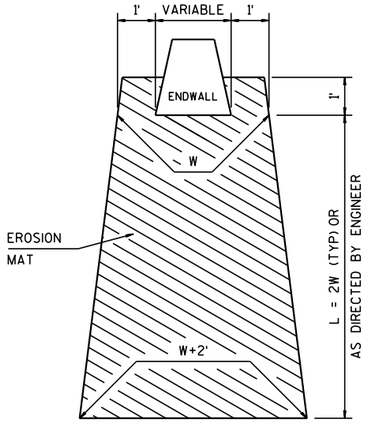


* LENGTH AND NUMBER OF BAGS MAY VARY DEPENDING ON DESIRED DEPTH OF WATER POOL

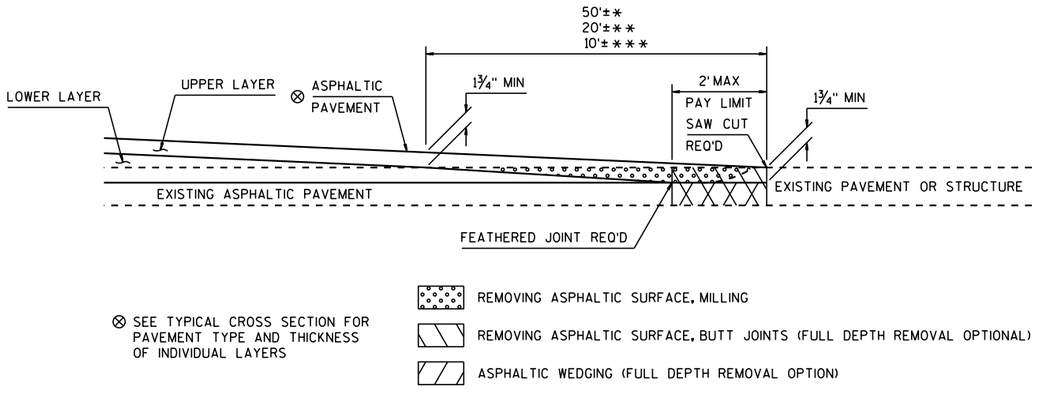
SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS

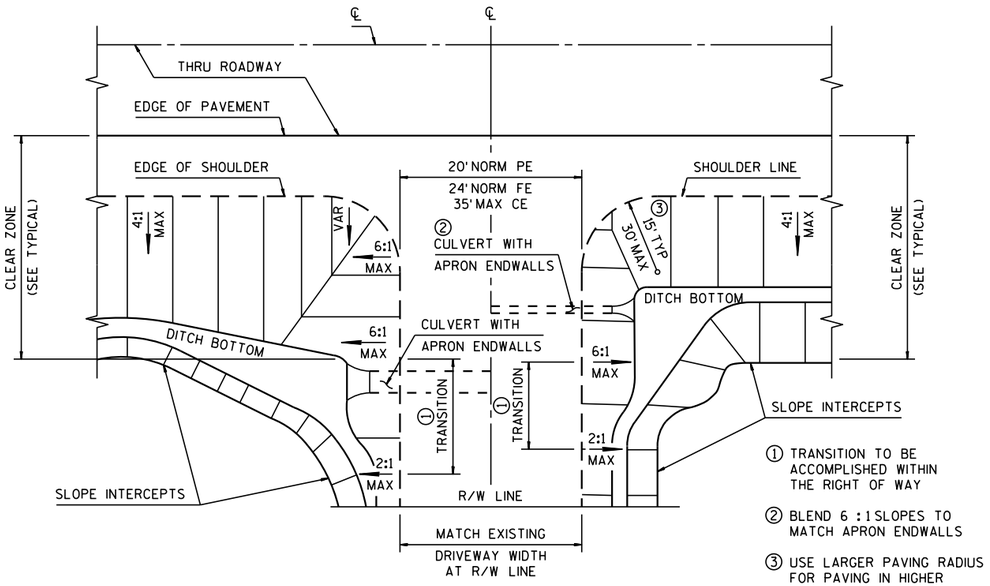


EROSION MAT TREATMENT AT CULVERTS



BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

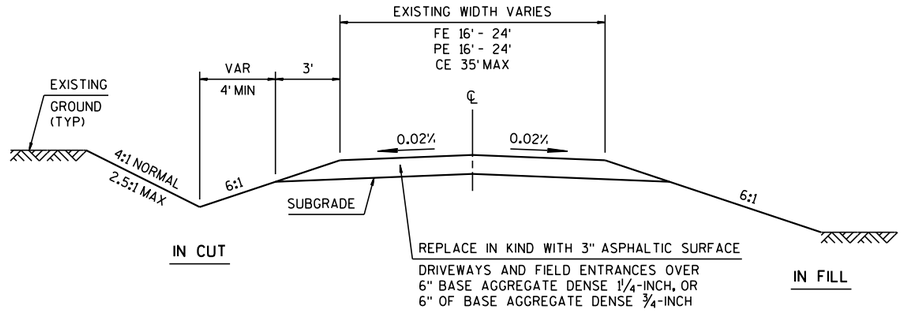


FOR CULVERTS OVER 24" DIAMETER

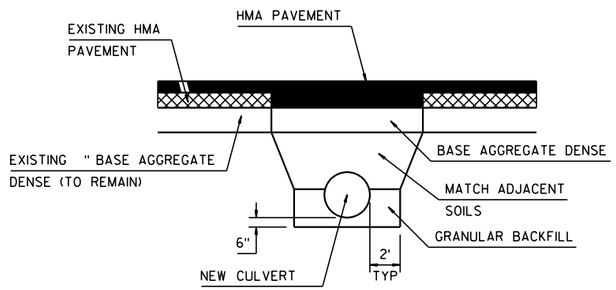
FOR CULVERTS 24" DIAMETER & LESS

PLAN VIEW

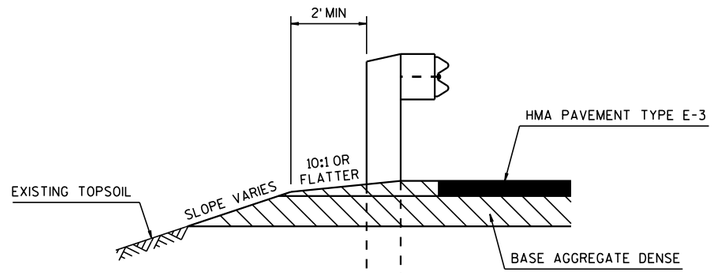
RURAL DRIVEWAY GRADING AND/OR PAVING DETAIL



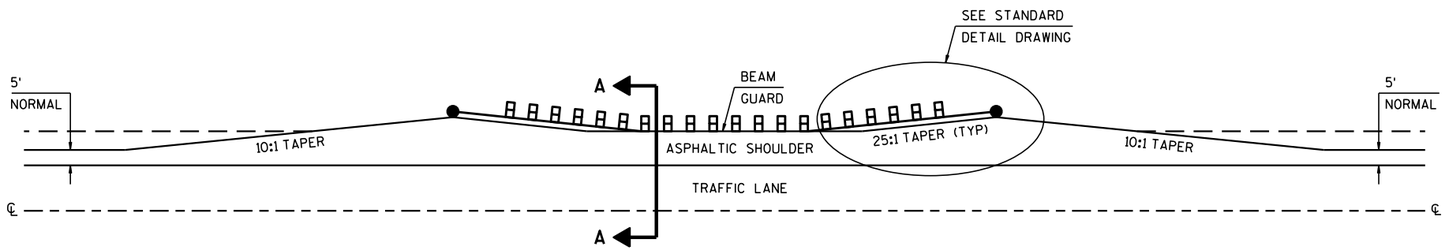
TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE



DETAIL FOR CULVERT REPLACEMENT

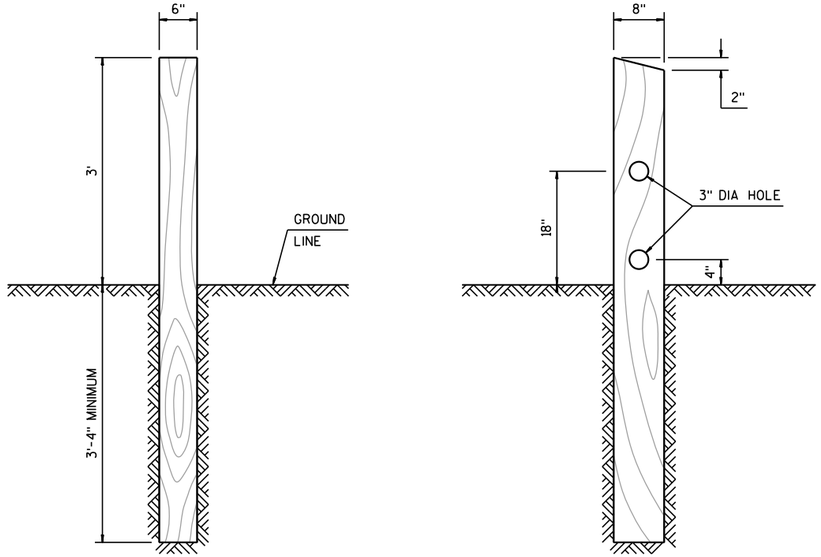


SECTION A-A



DETAIL FOR ASPHALTIC SHOULDER AT GUARDRAIL

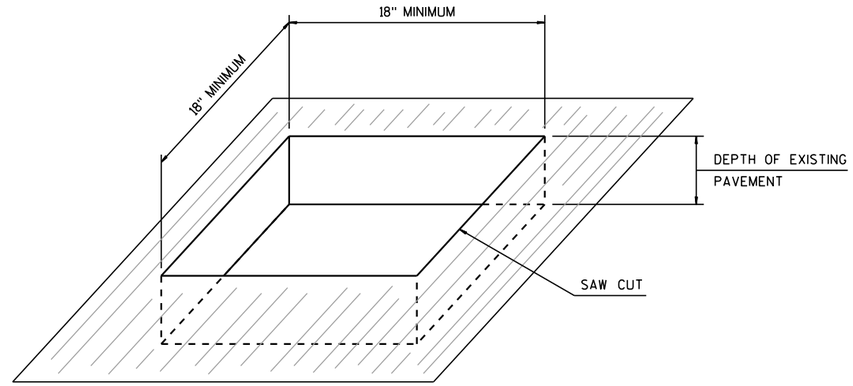
2



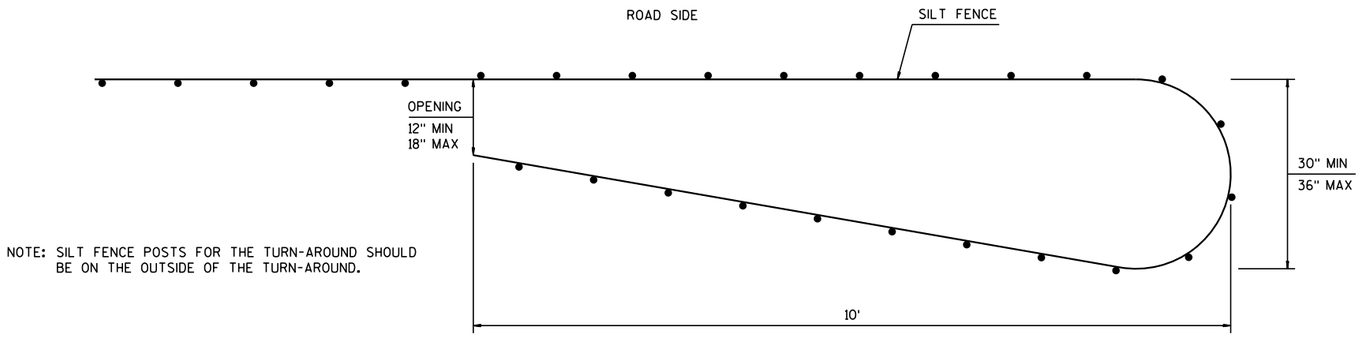
FRONT VIEW

SIDE VIEW

TIMBER GUARD POST

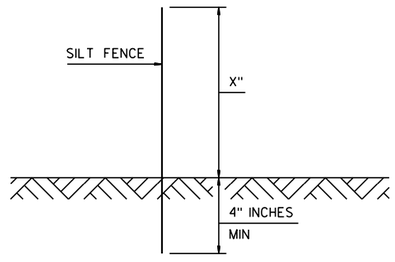


BOX-OUT FOR TIMBER GUARD POSTS



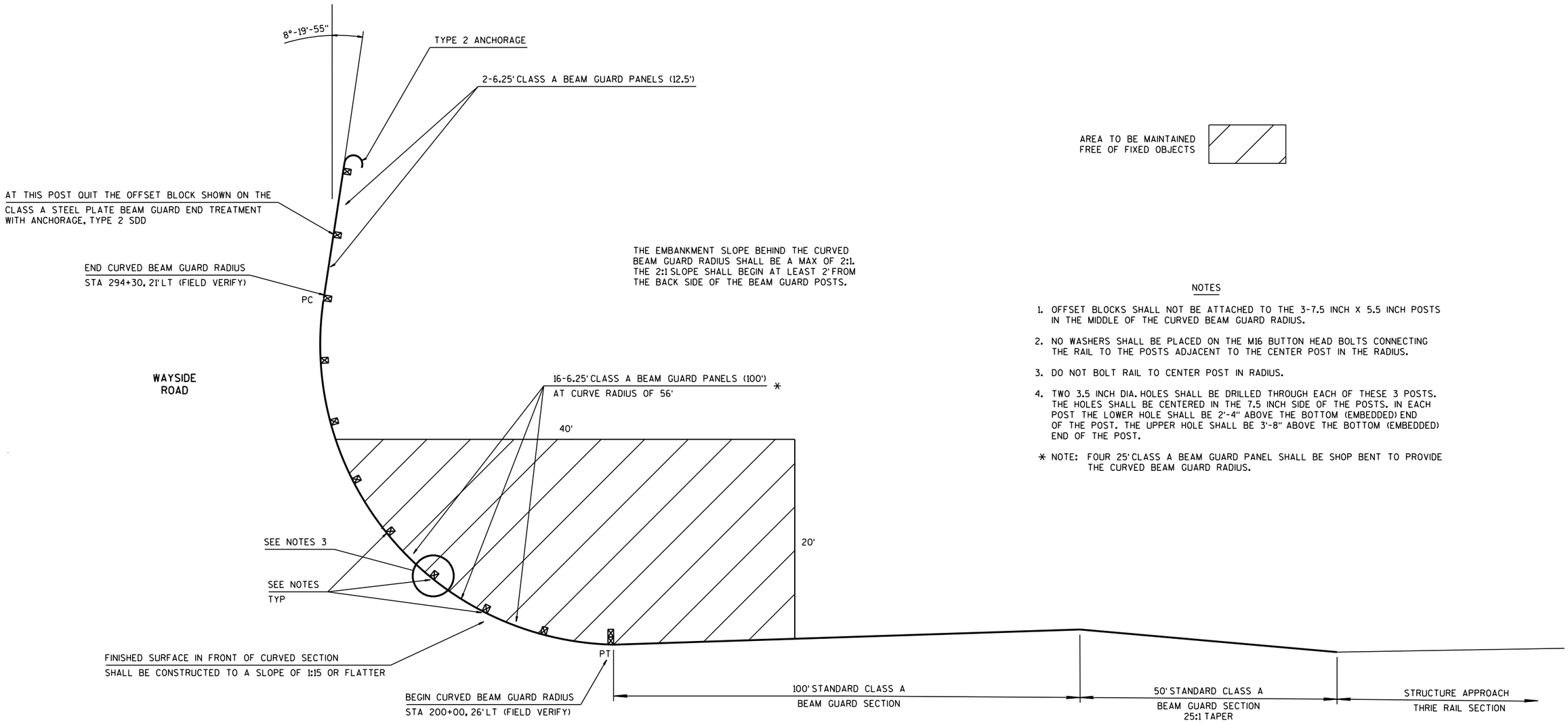
NOTE: SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.

PLAN VIEW



SILT FENCE TURN-AROUND DETAIL

2



THE EMBANKMENT SLOPE BEHIND THE CURVED BEAM GUARD RADIUS SHALL BE A MAX OF 2:1. THE 2:1 SLOPE SHALL BEGIN AT LEAST 2' FROM THE BACK SIDE OF THE BEAM GUARD POSTS.

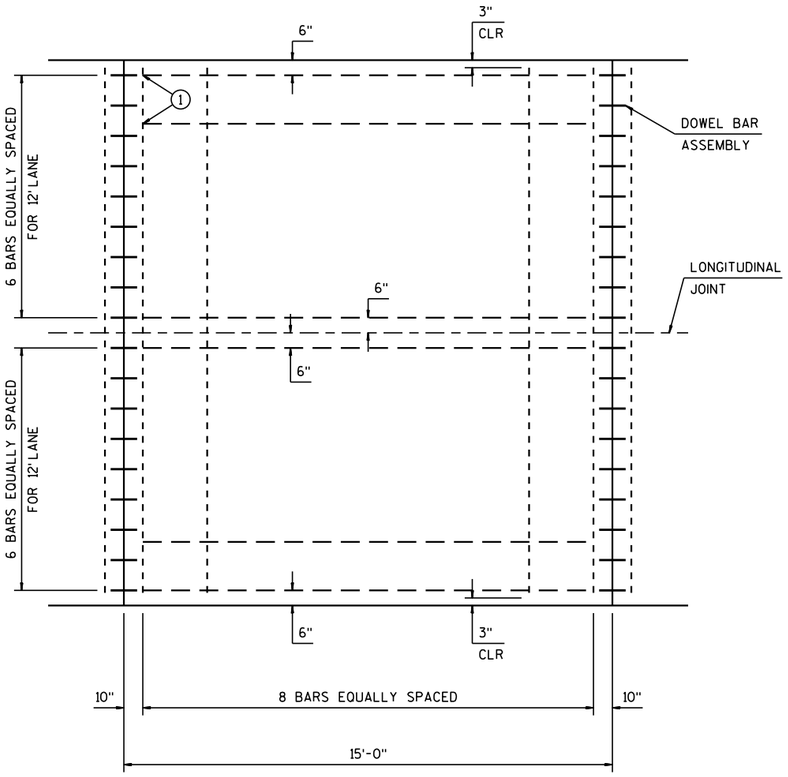
AREA TO BE MAINTAINED
FREE OF FIXED OBJECTS

NOTES

1. OFFSET BLOCKS SHALL NOT BE ATTACHED TO THE 3-7.5 INCH X 5.5 INCH POSTS IN THE MIDDLE OF THE CURVED BEAM GUARD RADIUS.
2. NO WASHERS SHALL BE PLACED ON THE M16 BUTTON HEAD BOLTS CONNECTING THE RAIL TO THE POSTS ADJACENT TO THE CENTER POST IN THE RADIUS.
3. DO NOT BOLT RAIL TO CENTER POST IN RADIUS.
4. TWO 3.5 INCH DIA. HOLES SHALL BE DRILLED THROUGH EACH OF THESE 3 POSTS. THE HOLES SHALL BE CENTERED IN THE 7.5 INCH SIDE OF THE POSTS. IN EACH POST THE LOWER HOLE SHALL BE 2'-4" ABOVE THE BOTTOM (EMBEDDED) END OF THE POST. THE UPPER HOLE SHALL BE 3'-8" ABOVE THE BOTTOM (EMBEDDED) END OF THE POST.

* NOTE: FOUR 25' CLASS A BEAM GUARD PANEL SHALL BE SHOP BENT TO PROVIDE THE CURVED BEAM GUARD RADIUS.

CURVED W-BEAM BEAM GUARD DETAIL



NOTES:

(1) TIE ALL PERIPHERAL INTERSECTIONS AND A SUFFICIENT NUMBER OF INTERMEDIATE INTERSECTIONS TO PREVENT SHIFTING.

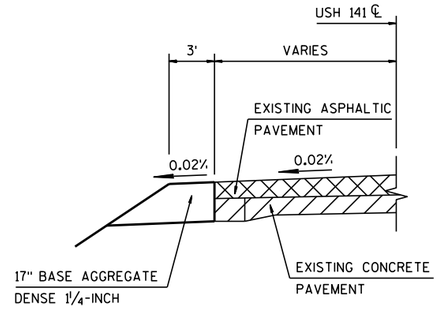
BAR SIZES: PAVEMENT T < 12" NO. 4 BARS.

BILL OF BARS *

BAR MARK			LENGTH		
LETTER	SIZE	NUMBER	* REQ'D	FT	IN
A	4	1	32	14	10
A	4	2	40	11	9
A	4	3	16	14	10
A	4	4	20	11	9

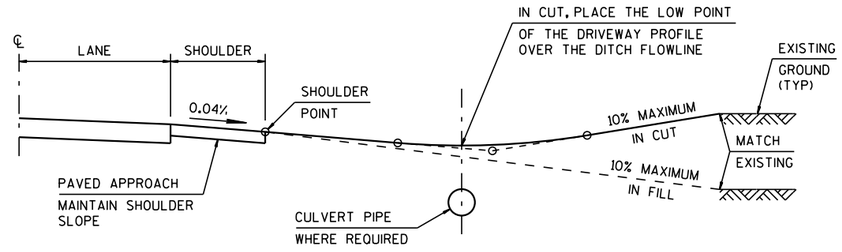
* FOR INFORMATION ONLY

BAR REINFORCEMENT PLAN FOR CONCRETE PAVEMENT REINFORCED 10-INCH



USH 141 TEMPORARY SHOULDER WIDENING

(PROVIDE WIDENED SHOULDER FOR TRAFFIC SAFETY)



TYPICAL DRIVEWAY PROFILES

2

N

A/C

V SIGN

GUY

GUY

EXISTING R/W

SAW CUT
REQ'D

CAUTION

74 | 75 | USH 141 | 76 | 77 | 78 | 79 | 80

77+86.12 USH 141=
67+00.00 NOQUEBAY RD

7'
15'
26'
24'
24'

150' TAPER
300'
100' TAPER

SLOPE INTERCEPTS

CONCRETE CURB & GUTTER
36-INCH TYPE D (TYP)

60' R
40' R

+74
+23
+73
+51

15'
15'
3'
3'
68
60' TAPER

PI: 67+95.15

EXISTING R/W

ASPHALTIC FLUME
REQ'D

STA 77+86.12
TYPE B1 INTERSECTION REQ'D

CONSTRUCTION LIMITS
STA 68+34
SAW CUT REQ'D

NOQUEBAY RD

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL	SHEET	E

2

CONSTRUCTION LIMITS
STA 75+08
SAW CUT REQ'D

N

STA 130+06.74
TYPE B1 INTERSECTION REQ'D

SMITH CREEK RD

STA 75+69
REMOVE EXISTING 15" CPCM
1-18" X 80' CPRC REQ'D
2-APRON ENDWALLS REQ'D

ASPHALTIC FLUME
REQ'D (TYP)

SAW CUT
REQ'D

EXISTING R/W

100' TAPER

40'R

60'R

300'

150'
TAPER

128 | USH 141 | 129 | 130 | 131 | 132 | 133 | 134

130+06.74 USH 141=
76+88.24 SMITH CREEK RD (WEST)

130+32.75 USH 141=
72+00.00 SMITH CREEK RD (EAST)

150' TAPER

100' TAPER

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

EXISTING R/W

SLOPE INTERCEPTS

STA 130+32.75
TYPE D INTERSECTION REQ'D

CONSTRUCTION LIMITS
STA 73+54
SAW CUT REQ'D

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL	SHEET	E

2

N

EXISTING R/W

SIGN

GUY

USH 141

171 172 173 174 175 176

173+65.00 USH 141=
78+00.00 TOWNLINE RD

7'
27'
15'
7'

22'
3'
150' TAPER
100' TAPER
40' R
60' R
+63
+22
+80
+93
15'
3'
79
80
TOWNLINE RD

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

SLOPE INTERCEPTS

SAW CUT
REQ'D

ASPHALTIC FLUME
REQ'D (TYP)

STA 173+65.00
TYPE D INTERSECTION REQ'D

CONSTRUCTION LIMITS
STA 79+73
SAW CUT REQ'D

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL	SHEET 27	E

FILE NAME : F:\d3_149109\021106_id.dgn PLOT DATE : 14-MAY-2014 11:45 PLOT BY : dotbrb PLOT NAME : 021106 id PLOT SCALE : 40:1

2

2

CONSTRUCTION LIMITS
STA 86+43
SAW CUT REQ'D

N

VAN ROAD

STA 187+38.53
TYPE D INTERSECTION REQ'D

EXISTING R/W

SAW CUT
REQ'D

PC: 185+32.41

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

187+38.53 USH 141=
88+15.54 VAN RD

SLOPE INTERCEPTS

EXISTING R/W

CAUTION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL	SHEET	E

2

2

N

LOWER MIDDLE

SAW CUT
REQ'D

197 198 USH 141 199 200 201 202 203

200+67.23 USH 141=
87+00.00 WAYSIDE RD

PC: 87+16.34

22' 22' 15' 15' 7' 15' 7'

100' TAPER

STEEL PLATE BEAM
GUARD REQ'D (TYP)

SLOPE INTERCEPTS

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

60' R

+95 +88

STA 87+84
REMOVE EXISTING 32" CPCM
1-36" X 96' CPRC REQ'D
2-APRON ENDWALLS REQ'D

80' TAPER

PT: 88+09.85

88 89

CONSTRUCTION LIMITS
STA 88+75
SAW CUT REQ'D

15' 40' R +58 +21 3'

ASPHALTIC FLUME
REQ'D (TYP)

STA 200+67.23
TYPE B2 INTERSECTION REQ'D

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL	SHEET	E

FILE NAME : F:\d3_149109\021108_id.dgn PLOT DATE : 14-MAY-2014 11:45 PLOT BY : dotbrb PLOT NAME : 021108 id PLOT SCALE : 40:1

2

2

CONSTRUCTION LIMITS
STA 109+67
SAW CUT REQ'D

CTH X

110

N

W

SIGN

PHONE

GUY

STA 227+45.88
TYPE B1 INTERSECTION REQ'D

SLOPE INTERCEPTS

EXISTING R/W

227+39.77 USH 141=
110+94.34 CTH X (WEST)

227+41.05 USH 141=
107+43.28 CTH X (EAST)

USH 141

225 226 227 228 229 230

227+38.55 BACK=
227+45.00 AHEAD

14'

200'R

50'R

55'R

108

109

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

+20
+35

+20
+73

SAW CUT
REQ'D

STA 226+40
REMOVE EXISTING 24" CPRC
1-24" X 88' CPRC REQ'D
2 APRON ENDWALLS REQ'D
SKEW 39°-43'-22.8" RHF

STA 107+91 CTH X
REMOVE EXISTING 24" CPCM
1-24" X 96' CPRC REQ'D
2 APRON ENDWALLS REQ'D

ASPHALTIC FLUME
REQ'D

STA 227+45.58
TYPE B1 MODIFIED
INTERSECTION REQ'D

CONSTRUCTION LIMITS
STA 109+46
SAW CUT REQ'D

CAUTION

PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL	SHEET E

FILE NAME : F:\d3_149109\021109_id.dgn PLOT DATE : 14-MAY-2014 14:43 PLOT BY : dotbrb PLOT NAME : 021109 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

SIGN

EXISTING R/W

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

SAW CUT
REQ'D

145' TAPER

3%

PT: 1640+35.91

7'
15'
15'
7'

24'

1638 1639 1640 1641 1642 1643 1644

USH 141

1640+32.89 USH 141=
10+00.00 OWL LANE

24'

+91

3%

1640+40.98 BACK
1640+33.32 AHEAD

EQUATION

EXISTING R/W

SLOPE INTERCEPTS

SIGN

SIGN

SIGN

11

EP: 11+54.25

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAILS	SHEET	E

2

N

SAW CUT
REQ'D

SLOPE INTERCEPTS

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

EXISTING R/W

PC: 1649+79.83

1644 1645 1646 1647 1648 1649 1650

USH 141

24'

1645+50.92 USH 141=
10+00.00 FINNELLI AVE

EXISTING R/W

16'

16'

PI: 10+98.97

11

CONSTRUCTION LIMITS
STA 10+84
SAW CUT REQ'D

FINNELLI AVE

12

SIGN

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAILS	SHEET	E

FILE NAME : F:\d3_149109\021202_pd.dgn PLOT DATE : 26-JUN-2014 10:42 PLOT BY : dotbrb PLOT NAME : 021202 pd PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

2

SAW CUT
REQ'D

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

SLOPE INTERCEPTS

EXISTING R/W

SIGN

PT 1655+05.61

1650 USH 141 1651 1652 1653 1654 1655 1656

24'

24'

SAW CUT
REQ'D (TYP)

EXISTING R/W

SIGN

SIGN

SIGN

SIGN

SIGN

SIGN

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAILS	SHEET	E

FILE NAME : F:\d3_149109\021203_pd.dgn PLOT DATE : 12-MAY-2014 08:23 PLOT BY : dotbrb PLOT NAME : 021203 pd PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

SAW CUT
REQ'D

SLOPE INTERCEPTS

SIGN

SIGN

SIGN

EXISTING R/W

1656

USH 141

1657

1658

1659

1660

1660+44.12 USH 141=
10+00.00 DESCHANE AVE

1661

1662

24'

SAW CUT
REQ'D (TYP)

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

EXISTING R/W

30' R

+54

+99

16'

16'

11

DESCHANE AVE

CONSTRUCTION LIMITS
STA 12+54
SAW CUT REQ'D

STA 12+41 DESCHANE AVE
REMOVE EXISTING 18" CPCM
1-18" X 56' CPRC REQ'D
2 APRON ENDWALLS REQ'D

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAILS	SHEET	E

2

N

2

SAW CUT
REQ'D

CONCRETE CURB & GUTTER
30-INCH TYPE D (TYP)

SLOPE INTERCEPTS

EXISTING R/W

1662 1663 1664 1665 1666 1667 1668

USH 141

24' +85

SIGN SIGN SIGN SIGN SIGN U/C U/C A/C INL

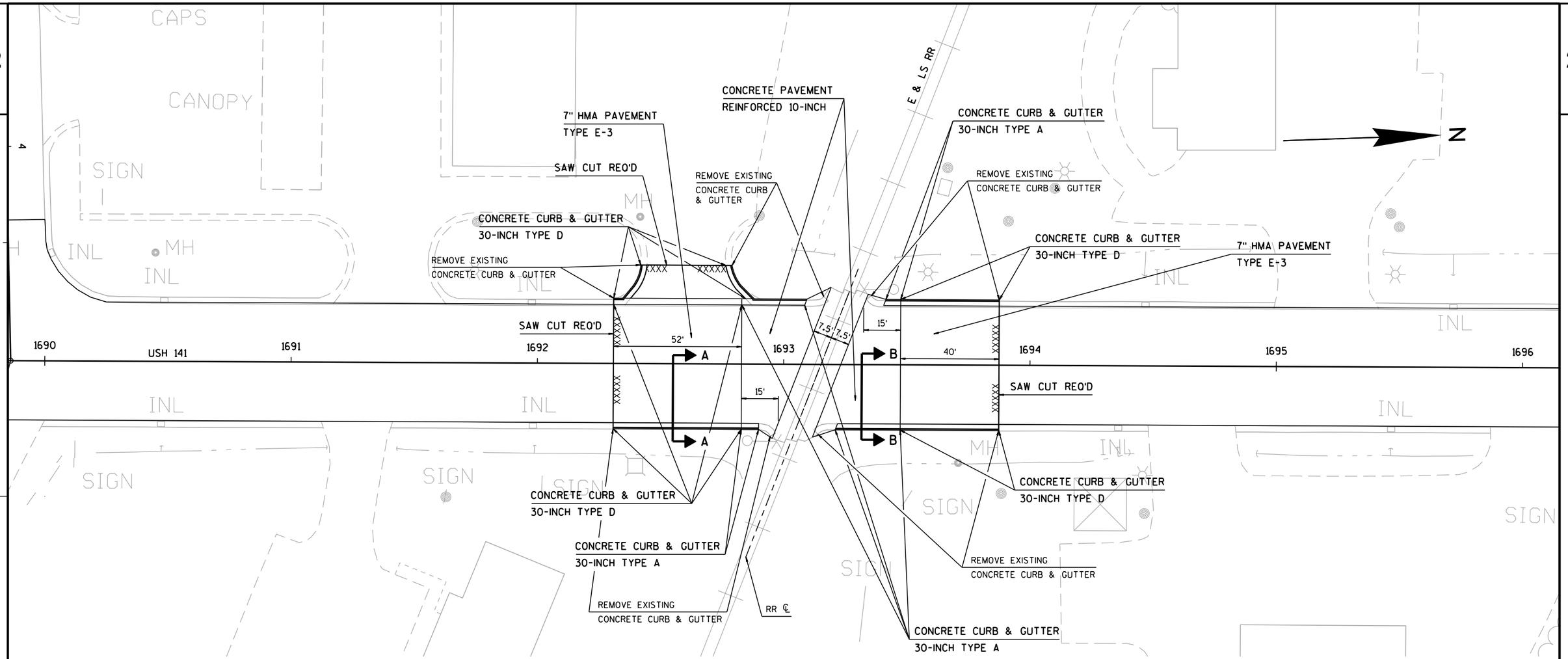
EXISTING R/W

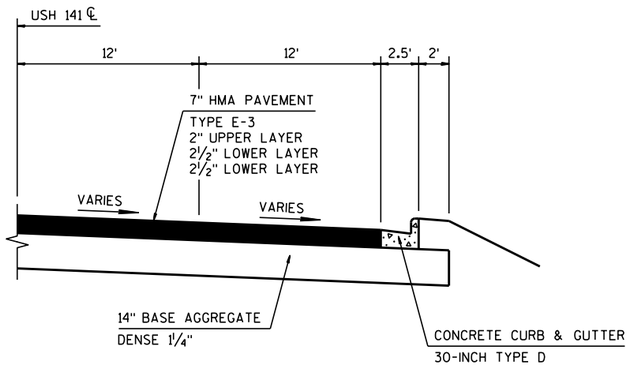
SAW CUT
REQ'D (TYP)

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAILS	SHEET E

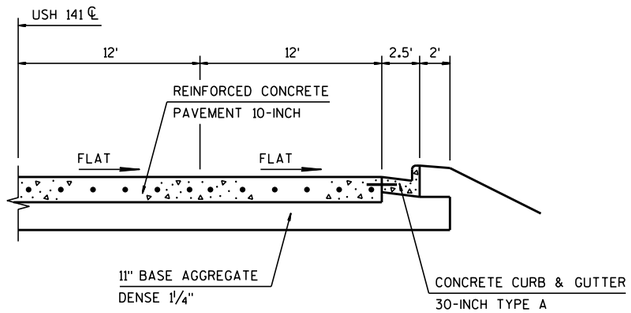
FILE NAME : F:\d3_149109\021205_pd.dgn PLOT DATE : 12-MAY-2014 08:23 PLOT BY : dotbrb PLOT NAME : 021205 pd PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42





SECTION A-A



SECTION B-B

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAIL	SHEET	E

2

2

DROPP ROAD

92

93

N

SAW CUT REQ'D

CONCRETE CURB & GUTTER
30-INCH TYPE D

TIMBER GUARD POST
SEE CONSTRUCTION DETAIL

SAW CUT
REQ'D (TYP)

SLOPE INTERCEPTS

EXISTING R/W

SIGN

7'

15'

217

USH 141

218

219

220

221

222

223

217+80.81 USH 141=
93+95.64 DROPP RD

CAUTION

GUY

EXISTING R/W

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAILS	SHEET	E

FILE NAME : F:\d3_149109\021207_pd.dgn PLOT DATE : 26-JUN-2014 10:51 PLOT BY : dotbrb PLOT NAME : 021207 pd PLOT SCALE : 40:1

2

N

SIGN

RIPRAP

RIPRAP

RIPRAP

1610

1615

PC: 1617+35.50

1620

1625

USH 141

RIPRAP

RIPRAP

RIPRAP

TOWER

EXISTING R/W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

SIGN

PT: 1626+66.59

1625

1630

PC: 1631+04.54

EXISTING R/W

1635

1640+32.89 USH 141=
10+00.00 OWL LANE

SIGN

1640

USH 141

EXISTING R/W

EP: 11+54.25

TOWER

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022002_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022002 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

SH 141=
LANE

1640

PT: 1640+35.91

USH 141

1640+40.98 BACK=
1640+33.32 AHEAD

4.25

1645+50.92 USH 141=
10+00.00 FINNELLI AVE

EXISTING R/W

PC: 1649+79.33

1645

1650

1655

PT: 1655+05.61

PI: 10+98.97

SIGN

EXISTING R/W

SIGN I

SIGN II

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

1655

PT: 1655+05.61

1660+44.12 USH 141=
10+00.00 DESCHANE AVE

USH 141

1660

EXISTING R/W

1665

SOUTH AVE

1670

INL

MH

W

U/C

A/C

T

2

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022003_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022003 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

SOUTH AVE

USH 141

1669+94.80 USH 141=
4+79.64 SOUTH AVE

1679+25.00 USH 141=
22+00 WITT AVE

EP: 23+60.00

1670 1675 1680 1685

N

1685 1690 1695 1700

USH 141

1685+50.00 USH 141=
5+29.94 PINE AVE

1689+86.16 USH 141=
4+86.93 HALL AVE

PI: 60+66.51

ESCANABA & LAKE SUPERIOR

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET E

FILE NAME : F:\d3_149109\022004_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022004 ec PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

N

PI: 58+17.16

CTH W

1700+59.76 USH 141=
60+00.11 CTH W

PC: 5+20.66

1700

USH 141

PI: 60+66.51

1701+00.82 BACK=
2+16.30 AHEAD

VOLLEYBALL COURT

10+04.78 USH 141=
13+00.00 MIRA AVE

14+78.54 USH 141=
0+00.00 OLD USH 141

PT: 14+86.28

EP: 0+95.31

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

USH 141

25

30

20

85.31

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022005_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022005 ec PLOT SCALE : 100:1

2

2

N

32+06.98 USH 141=
55+00.00 SEQUIN LA

35

40

45

SIGN

USH 141

SIGN

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

46+93.74 USH 141=
0+00.00 OLD USH 141

50

55

60

SIGN

SIGN

USH 141

W

W

SIGN

EP: 1+08.97

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022006_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022006 ec PLOT SCALE : 100:1

2

N

65

70

75

USH 141

W

U/C

A/C

V SIGN

FO

77+
67+

LEGEND

- EROSION MAT
- SILT FENCE
- TURBIDITY BARRIER
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

GUY

80

90

SIGN

USH 141

PI: 67+95.15

77+86.12 USH 141=
67+00.00 NOQUEBAY RD

SMITH CR

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022007_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022007 ec PLOT SCALE : 100:1

2

2

N

PC: 98+53.64

EXISTING R/W

100

USH 141

SIGN

FO

TFO

EXISTING R/W

W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

PT: 108+47.79

SIGN

EXISTING R/W

115

USH 141

FO

EXISTING R/W

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022008_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022008 ec PLOT SCALE : 100:1

2

N

130+06.74 USH 141=
76+88.24 SMITH CREEK RD

EXISTING R/W

USH 141

13+32.75 USH 141=
72+00.00 SMITH CREEK RD

SMITH CREEK RD

EXISTING R/W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

EXISTING R/W

USH 141

EXISTING R/W

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET 45	E

2

N

EXISTING R/W

SIGN

155

160

165

USH 141

SIGN

EXISTING R/W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

RUINS

GUY

SIGN

GUY

SIGN

EXISTING R/W

170

175

180

SIGN

USH 141

SIGN

EXISTING R/W

173+65.00 USH 141=
78+00.00 TOWNLINE RD

80

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET 46	E

FILE NAME : F:\d3_149109\022010_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022010 ec PLOT SCALE : 100:1

2

2

N

VAN RD

SEPTIC

SIGN

GUY

185

PC: 185+32.41

USH 141

190

195

187+38.53 USH 141=
88+15.54 VAN RD

N

LOWER MIDDLE INLET CR.

PT: 196+63.01

200

PC: 203+24.39

205

210

USH 141

PC: 87+16.34

200+67.23 USH 141=
87+00.00 WAYSIDE RD

PT: 88+09.85

WAYSIDE RD

TOWNLINE RD

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022011_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022011 ec PLOT SCALE : 100:1

2

2

N

DROPP RD

PT: 213+47.07

215

220

225

227+39.77
110+94.34

USH 141

217+80.81 USH 141=
93+95.64 DROPP RD

SIGN

GUY

FO

G

W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

N

CTH X

110

227+39.77 USH 141=
110+94.34 CTH X

PHONE

230

235

240

USH 141

227+38.55 BACK=
227+45.00 AHEAD

227+41.05 USH 141=
107+43.28 CTH X

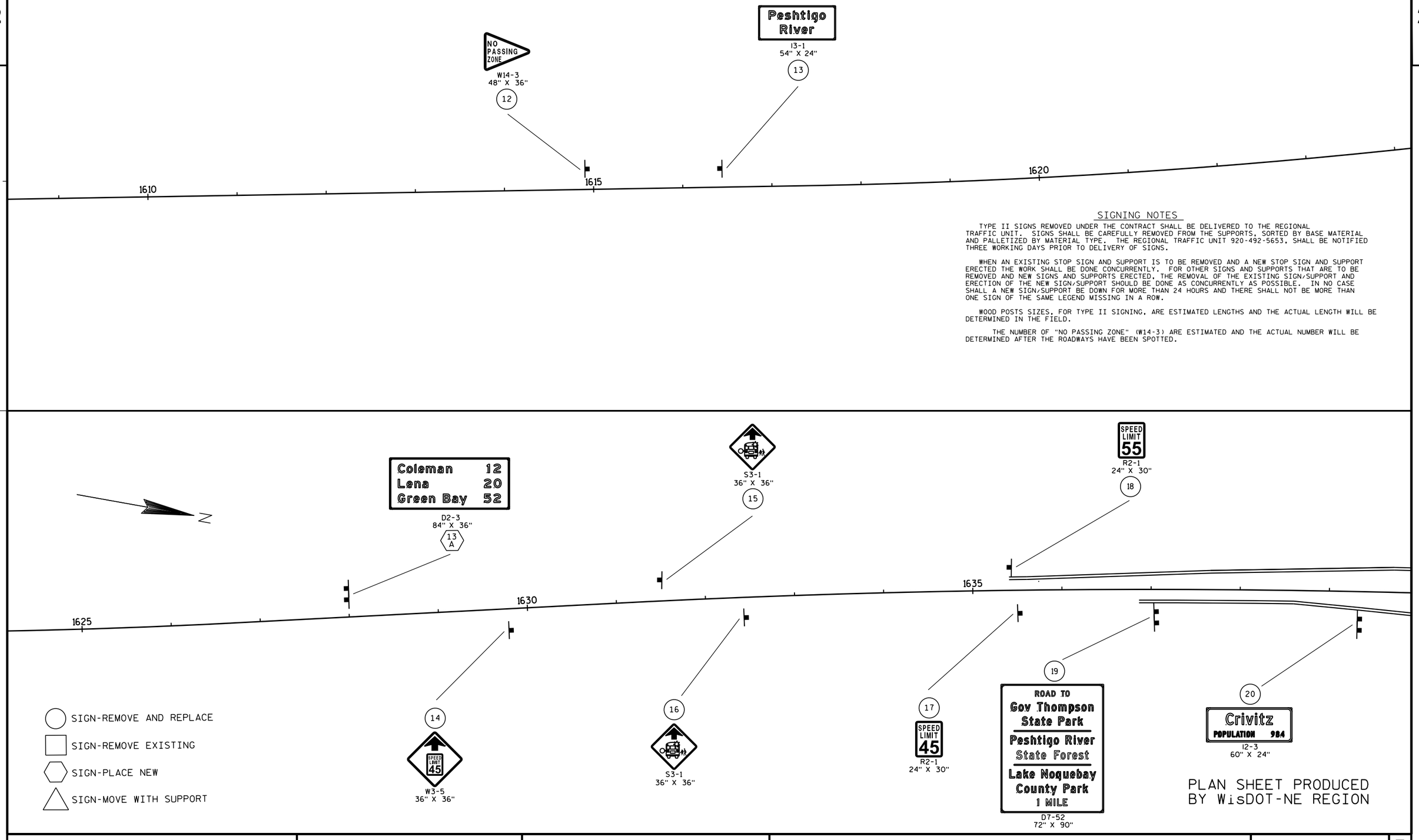
INLET

MIDDLE

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL	SHEET	E

FILE NAME : F:\d3_149109\022012_ec.dgn PLOT DATE : 26-JUN-2014 10:59 PLOT BY : dotbrb PLOT NAME : 022012 ec PLOT SCALE : 100:1

2



SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 49	E

2

SIGNING NOTES

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N

W4-2R
36" X 36"
24

SPEED LIMIT 45
R2-1
24" X 30"
26

PAVED SHOULDER ENDS
W8-3
29

1640 — 1645 — 1650 — 1655

21 — STOP — R1-1 30" X 30"

22 — SPEED LIMIT 35 — R2-1 24" X 30"

25 — STOP — R1-1 30" X 30"

27

Village Building Permits Sign

28 — SPEED LIMIT 35 — R2-1 24" X 30"

NO PASSING ZONE
W14-3
48" X 36"
30

1660 — 1665 — 1670

NO PARKING ANY TIME
R7-1D
18" X 24"
33

SPEED LIMIT 35
R2-1
24" X 30"
34

NO PARKING ANY TIME
R7-1D
18" X 24"
35

STOP
R1-1
30" X 30"
36

SPEED LIMIT 35
R2-1
24" X 30"
38

NO PARKING ANY TIME
R7-1D
18" X 24"
39

DESCHANE AVE

31 — STOP — R1-1 30" X 30"

Leave Community Wayfinder Sign As Is

32 — NO PARKING ANY TIME — R7-1D 24" X 30"

SOUTH ST

37 — STOP — R1-1 30" X 30"

SIGN-REMOVE AND REPLACE
SIGN-REMOVE EXISTING
SIGN-PLACE NEW
SIGN-MOVE WITH SUPPORT

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO:1491-09-71	HWY: USH 141	COUNTY:MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 50 E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-09-71 USH 141 Crivitz - Middle Inlet\023203_ps.dgn PLOT DATE : 05-AUG-2013 11:04 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

2

W4-2R
40
NO PARKING ANY TIME
R7-1D
18" X 24"
41

SPEED LIMIT 35
R2-1
24" X 30"
43
NO PARKING ANY TIME
R7-1D
18" X 24"
44

S OUTH 141
J4-1
24" X 36"
45
NO PARKING ANY TIME
R7-1D
18" X 24"
46

SPEED LIMIT 35
R2-1
24" X 30"
48
NO PARKING ANY TIME
R7-1D
18" X 24"
49

STOP
R1-1
30" X 30"
51

PINE AVE

1675 1680 1685

42
NO PARKING ANY TIME
R7-1D
24" X 30"

47
NO PARKING ANY TIME
R7-1D
24" X 30"

50
SPEED LIMIT 35
R2-1
24" X 30"

SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

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PLAN SHEET PRODUCED BY WisDOT-NE REGION

STOP
SCHOOL BUS FLASHING RED LIGHTS
R59-51
36" X 36"
54
NO PARKING ANY TIME
R7-1D
18" X 24"
55

JCT
COUNTY W
J1-1
24" X 39"
57

STOP
R1-1
30" X 30"
56

HALL AVE

SPEED LIMIT 35
R2-1
24" X 30"
60
NO PARKING ANY TIME
R7-1D
18" X 24"
61

W3-3
36" X 36"
63

NO PARKING ANY TIME
R7-1D
18" X 24"
64

SPEED LIMIT 35
R2-1
24" X 30"
66
NO PARKING ANY TIME
R7-1D
18" X 24"
67

R R
W10-1
36" X 36"
69
EXEMPT
W10-1A
24" X 12"
70

MOUNT TO TRAFFIC SIGNAL
NO PARKING ANY TIME
R7-1D
24" X 30"
71

STOP
R1-1F
36" X 36"
73

CTH W

STOP
R1-1F
36" X 36"
75A

TO COUNTY W COUNTY A
J2-2
48" X 57"
76

1690 1695 1700

52
R R
W10-1
36" X 36"
53
EXEMPT
W10-1A
24" X 12"

SIGN-REMOVE AND REPLACE
SIGN-REMOVE EXISTING
SIGN-PLACE NEW
SIGN-MOVE WITH SUPPORT

58
R R
W10-1
59
EXEMPT
W10-1A

62
Business District
Lake Noquebay County Park
D7-68L
84" X 48"

R&R CROSSING

65
W3-3
36" X 36"

68
Gov Thompson State Park
Peshtigo River State Forest
D7-53L
72" X 60"

MOUNT BOTH TO TRAFFIC SIGNAL
72
COUNTY W
J13-1
24" X 45"
72A
STOP
R1-1F
36" X 36"

CTH W

MOUNT TO TRAFFIC SIGNAL
74
STOP
R1-1F
36" X 36"

MOUNT TO TRAFFIC SIGNAL
75
SPEED LIMIT 35
R2-1
24" X 30"

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 51	E

2

SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

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MOUNT TO POWER POLE

78 — NO PARKING ANY TIME — R7-1D 24" X 30"

80 — NO PARKING ANY TIME — R7-1D 18" X 24"

81 — Lake Noquebay County Park / Business District — D7-68L 84" X 48"

82 — W3-3 36" X 36"

83 — NO PARKING ON THIS SIDE — R7-53L 18" X 24"

85 — SPEED LIMIT 35 — R2-1 24" X 30"

86 — STOP — R1-1 30" X 30"

89 — JCT COUNTY W — J1-1 24" X 39"

92 — Crivitz POPULATION 984 — I2-3 60" X 24"

77 — RIGHT LANE ENDS — W9-1R 30" X 30"

79 — NORTH 141 — J4-1 24" X 36"

84 — W4-2R 36" X 36"

87 — W5-52R 12" X 36"

88 — SPEED LIMIT 45 — R2-1 24" X 30"

90 — STOP — R1-1 30" X 30"

91 — STOP — R1-1 30" X 30"

93 — STOP SCHOOL BUS FLASHING RED LIGHTS STATE LAW — R59-51 36" X 36"

94 — NO PASSING ZONE — W14-3 48" X 36"

OLD HWY 141

95 — SPEED LIMIT 55 — R2-1 24" X 30"

96 — SPEED LIMIT 45 — R2-1 24" X 30"

97 — Sequin Ln — D1-1 72" X 15"

98 — SPEED LIMIT 45 — W3-5 36" X 36"

100 — Wausaukee 10 / Pembine 29 / Iron Mountain 44 — D2-3 84" X 36"

99 — STOP — R1-1 30" X 30"

SEQUIN LANE

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGN-MOVE WITH SUPPORT

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-09-71 USH 141 Crivitz - Middle Inlet\023205_ps.dgn PLOT DATE : 05-AUG-2013 11:04 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

2

SIGNING NOTES

TYPE II SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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

THE NUMBER OF "NO PASSING ZONE" (W14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

N

⇦ Sequin Ln
D1-1
72" X 15"
102

40 45 50

101
Old Hwy 141 Rd ⇨
D1-1
102" X 15"

OLD HWY 141

103
STOP
R1-1
30" X 30"

104
SPONSOR
Crivitz
High School
Student Council
I55-56
30" X 36"

NO PASSING ZONE
W14-3
48" X 36"
105

⇦ Old Hwy 141 Rd
D1-1
102" X 15"
106

55 60 65

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGN-MOVE WITH SUPPORT

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 53	E

2

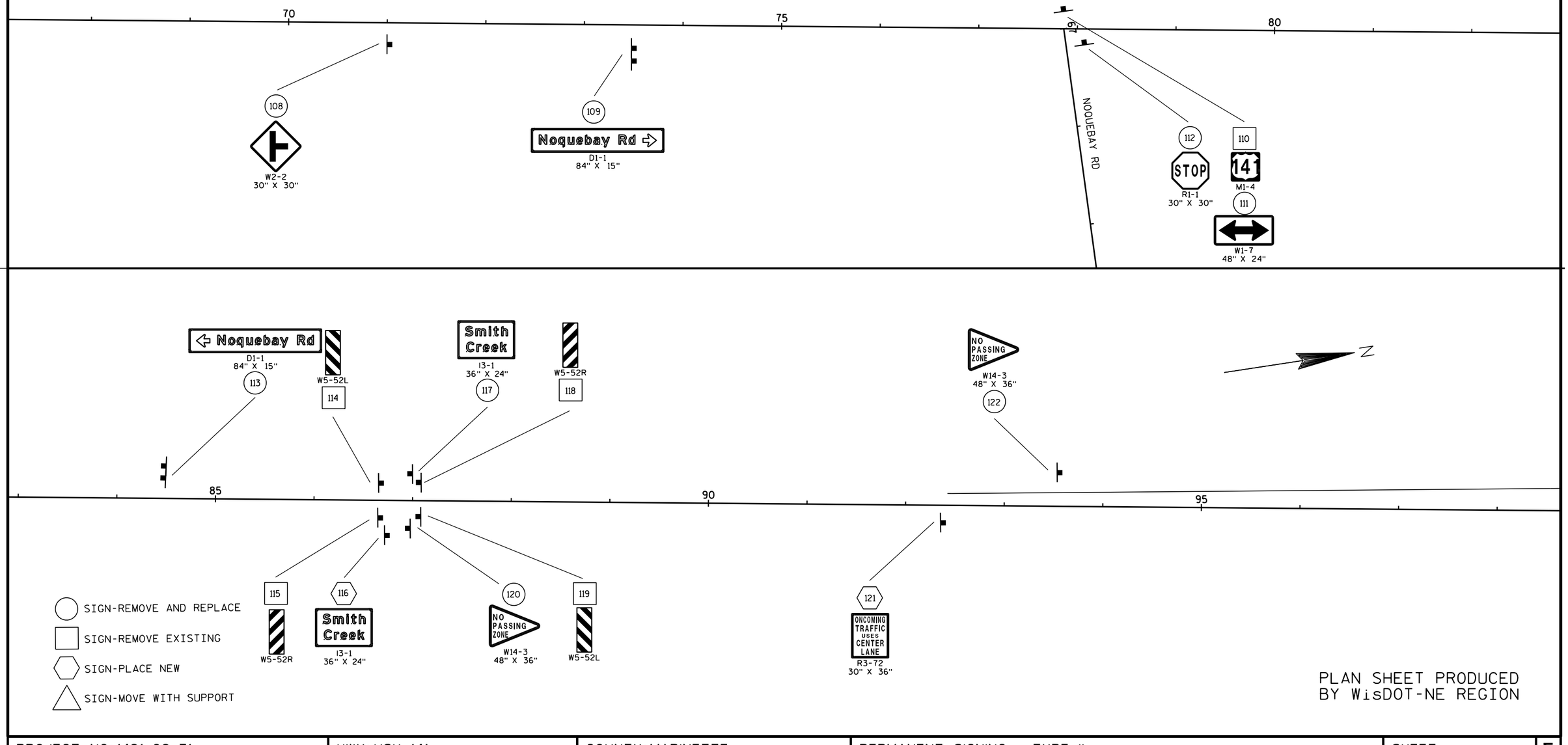
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PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 54	E

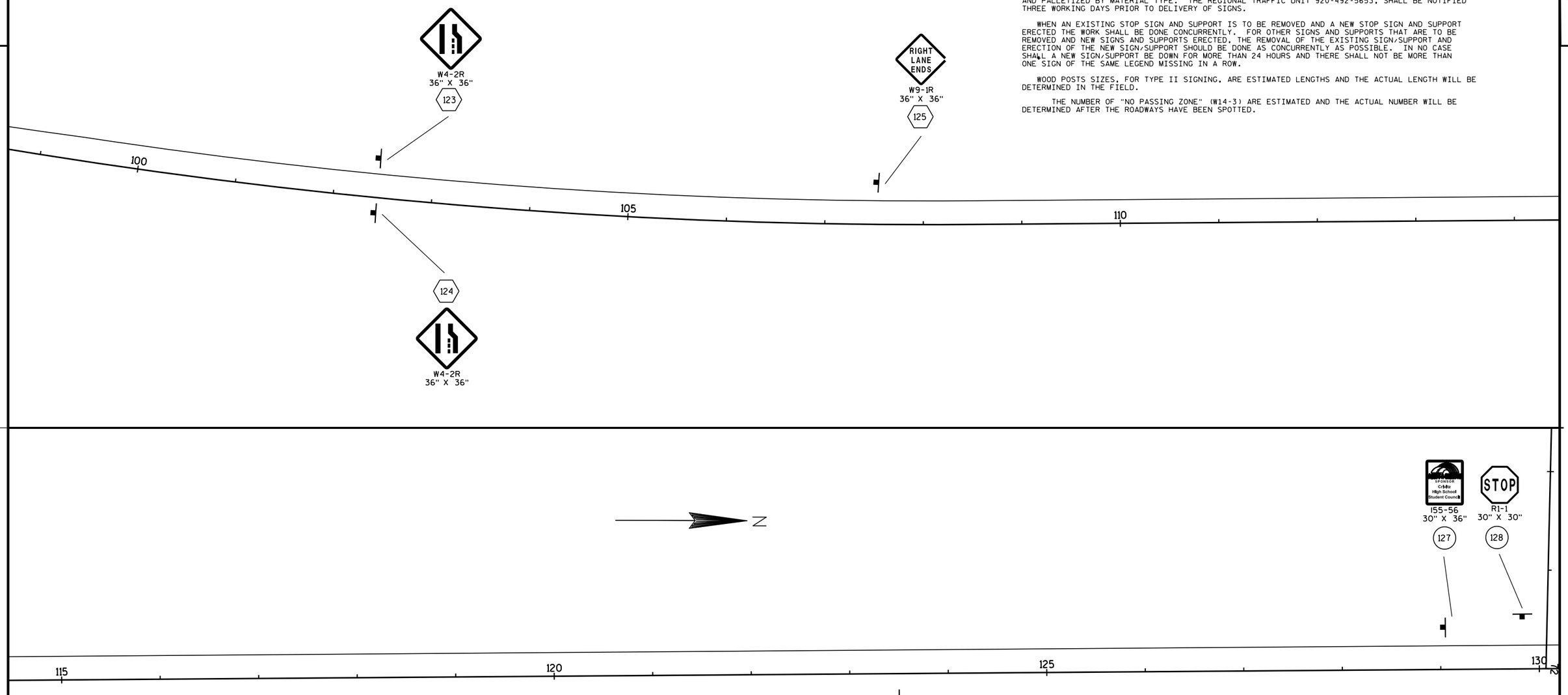
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SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGN-MOVE WITH SUPPORT

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 55	E

SMITH CREEK RD

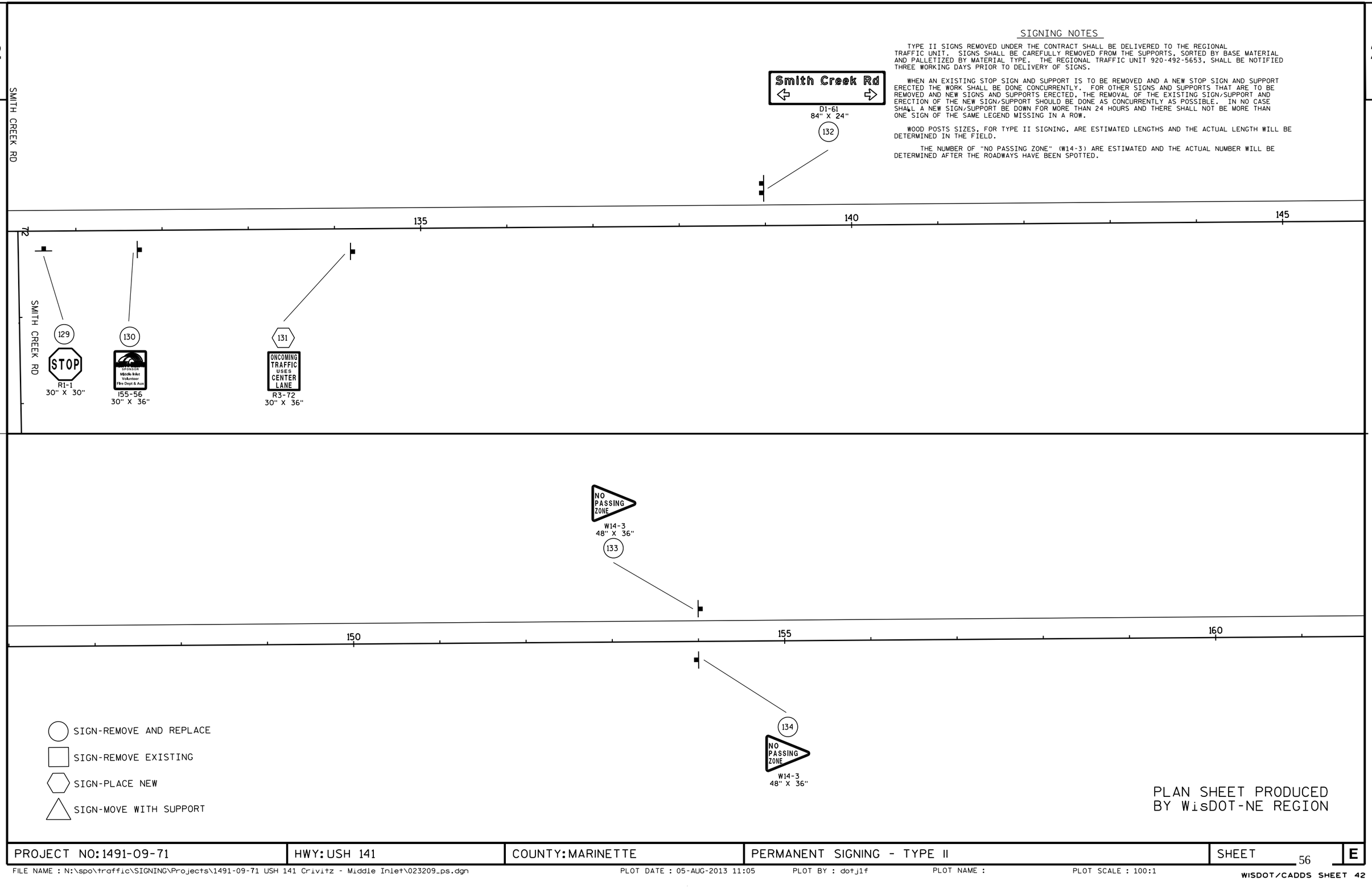
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- SIGN-REMOVE AND REPLACE
- SIGN-REMOVE EXISTING
- SIGN-PLACE NEW
- SIGN-MOVE WITH SUPPORT

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 56	E

SIGNING NOTES

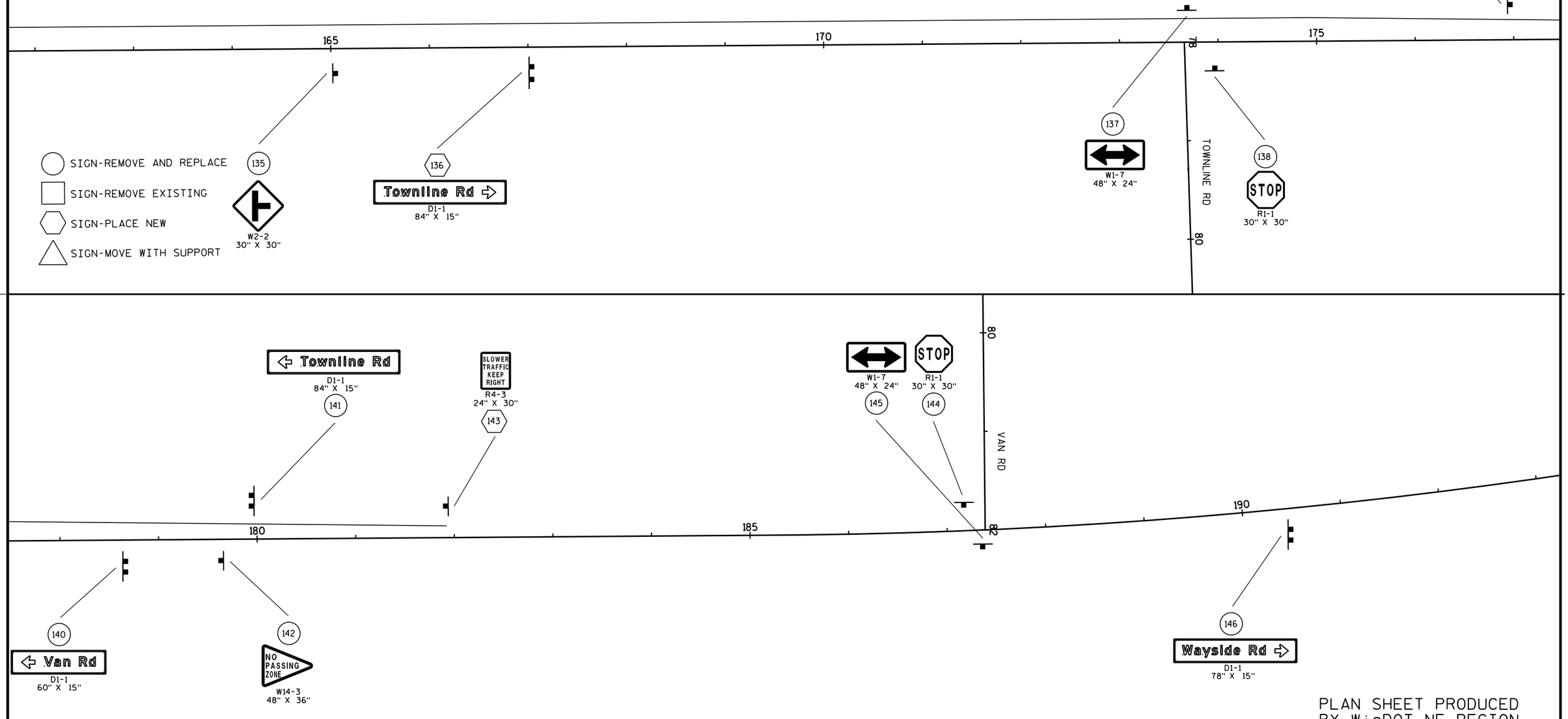
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SIGN-REMOVE AND REPLACE
SIGN-REMOVE EXISTING
SIGN-PLACE NEW
SIGN-MOVE WITH SUPPORT



PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET 57	E

SIGNING NOTES

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148 Van Rd ⇨ D1-1 60" X 15"

149 Lower Middle Inlet I3-1 66" X 24"

150 Lower Middle Inlet I3-1 66" X 24"

151 SPEED LIMIT 50 W3-5 36" X 36"

152 REDUCED SPEED AHEAD R2-5A / 50 M.P.H. W13-1W

153 STOP R1-1 30" X 30"

154 W1-7 48" X 24"

155 N ORTH 141 J4-1 24" X 36"

156 141 M1-4

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

158 Middle Inlet UNINCORPORATED I2-3 72" X 24"

159 ⇦ Wayside Rd D1-1 72" X 15"

160 PASSING LANE AHEAD 1/2 MILE R4-51 36" X 48"

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

163 SPEED LIMIT 55 R2-1 24" X 30"

161 SPEED LIMIT 50 R2-1 24" X 30"

164 S OUTH 141 J4-1

167 STOP R1-1 30" X 30"

169 SPEED LIMIT 50 R2-1 24" X 30"

170 SPONSOR Middle Inlet Volunteer Fire Dept & Aux I55-56 30" X 36"

172 SPEED LIMIT 50 R2-1 24" X 30"

174 S OUTH 141 J4-1 24" X 36"

165 W11-8 30" X 30"

166 JCT COUNTY X J1-1 24" X 39"

168 SPEED LIMIT 50 R2-1 24" X 30"

173 BEGIN RIGHT TURN LANE R3-20R

175 COUNTY X J13-1 24" X 45"

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

Wayside Rd

Dropp Rd

CTH X

CTH X

200 205 210 215 220 225

105 107

N

SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

SIGN-MOVE WITH SUPPORT

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING - TYPE II	SHEET E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-09-71 USH 141 Crivitz - Middle Inlet\023211_ps.dgn PLOT DATE : 05-AUG-2013 11:05 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

GENERAL NOTE

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

CONFIGURATION WITH HEAD NUMBERS	
3-V (R, Y, G)	1, 3, 4, 6 7, 9, 10, 12
3-H (R Y G)	2, 5, 8, 11

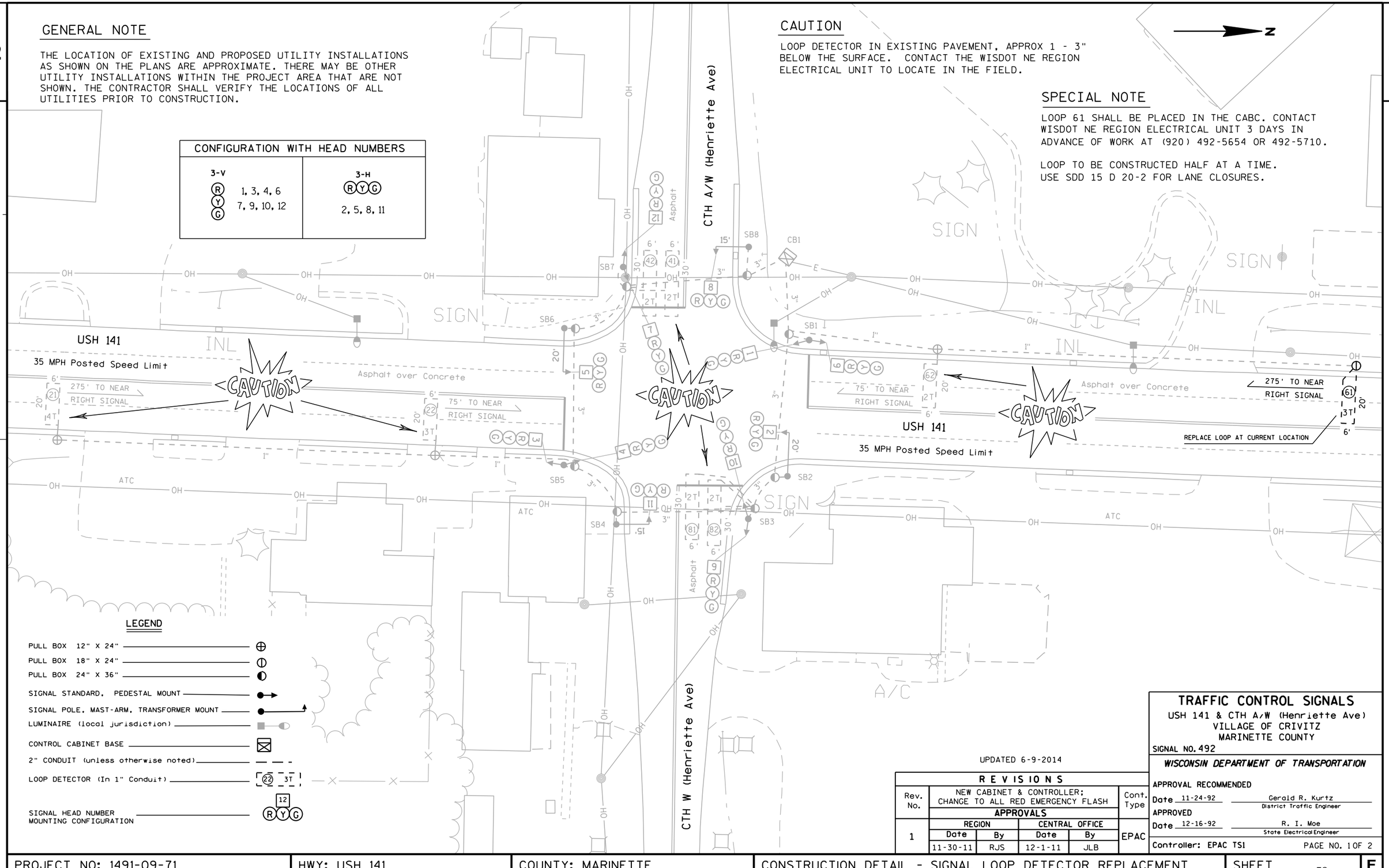
CAUTION

LOOP DETECTOR IN EXISTING PAVEMENT, APPROX 1 - 3" BELOW THE SURFACE. CONTACT THE WISDOT NE REGION ELECTRICAL UNIT TO LOCATE IN THE FIELD.

SPECIAL NOTE

LOOP 61 SHALL BE PLACED IN THE CABC. CONTACT WISDOT NE REGION ELECTRICAL UNIT 3 DAYS IN ADVANCE OF WORK AT (920) 492-5654 OR 492-5710.

LOOP TO BE CONSTRUCTED HALF AT A TIME.
USE SDD 15 D 20-2 FOR LANE CLOSURES.



LEGEND

- PULL BOX 12" X 24"
- PULL BOX 18" X 24"
- PULL BOX 24" X 36"
- SIGNAL STANDARD, PEDESTAL MOUNT
- SIGNAL POLE, MAST-ARM, TRANSFORMER MOUNT
- LUMINAIRE (local jurisdiction)
- CONTROL CABINET BASE
- 2" CONDUIT (unless otherwise noted)
- LOOP DETECTOR (In 1" Conduit) — 22, 3T
- SIGNAL HEAD NUMBER / MOUNTING CONFIGURATION — 12 (R Y G)

UPDATED 6-9-2014

REVISIONS					
Rev. No.	NEW CABINET & CONTROLLER; CHANGE TO ALL RED EMERGENCY FLASH				Cont. Type
	APPROVALS				
	REGION		CENTRAL OFFICE		
	Date	By	Date	By	
1	11-30-11	RJS	12-1-11	JLB	EPAC

TRAFFIC CONTROL SIGNALS

USH 141 & CTH A/W (Henriette Ave)
VILLAGE OF CRIVITZ
MARINETTE COUNTY

SIGNAL NO. 492

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 11-24-92 — Gerald R. Kurtz, District Traffic Engineer
APPROVED
Date 12-16-92 — R. I. Moe, State Electrical Engineer

Controller: EPAC TS1

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CONSTRUCTION DETAIL - SIGNAL LOOP DETECTOR REPLACEMENT	SHEET 59 E

2

2

MIRA AVE

12

9

USH 141

10

11

12

13

14

15

PT: 14+86.28

10+04.78 USH 141=
13+00.00 MIRA AVE

14+78.54 USH 141=
0+00.00 OLD USH 141

12'

50'

180' TAPER

100'

PAVEMENT MARKING EPOXY
4-INCH LANE LINE (WHITE)

PAVEMENT MARKING EPOXY
4-INCH LANE LINE (WHITE)

PAVEMENT MARKING EPOXY
4-INCH DOTTED LINE (WHITE)

OLD USH 141

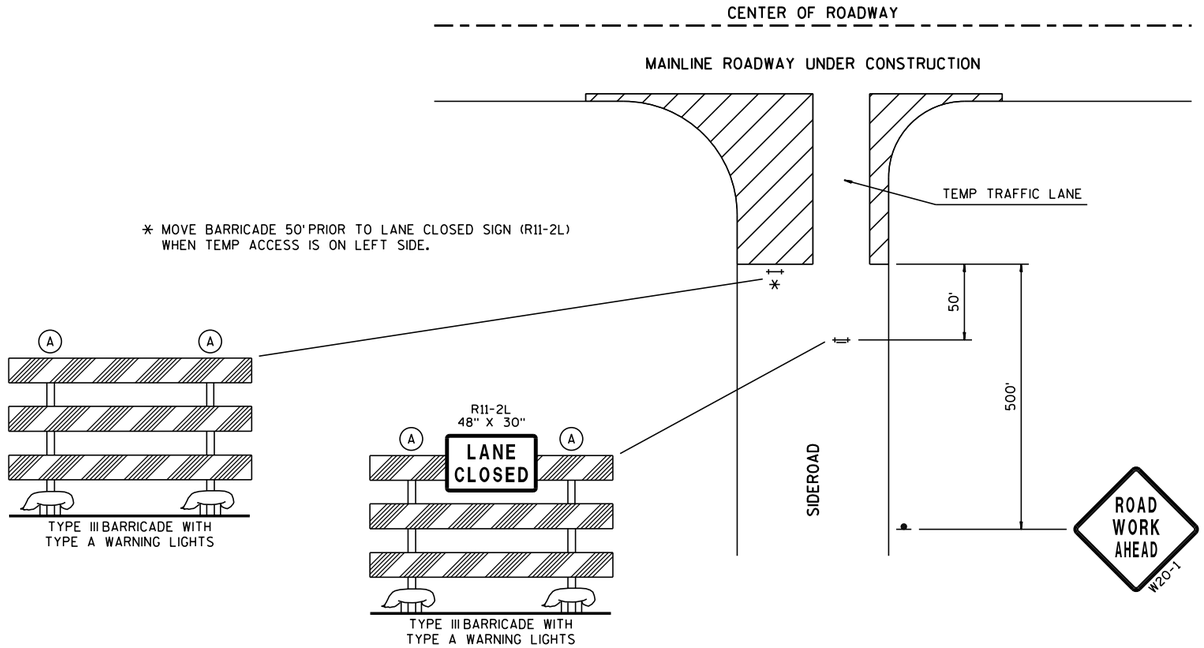
EP: 0+9

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PAVEMENT MARKING	SHEET	E

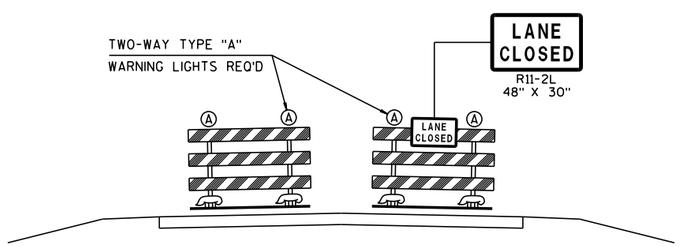
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WISDOT/CADDS SHEET 42

2



SIDEROAD LANE CLOSURE DETAIL



LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA

TRAFFIC CONTROL NOTES

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

ALL SIGNS ARE 48" X 48" 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.

TRAFFIC CONTROL NOTES

THIS DETAIL IS TYPICAL FOR SHIFTING TRAFFIC TO THE LEFT, REVERSE TRAFFIC CONTROL FOR SHIFTING TRAFFIC TO THE RIGHT.

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

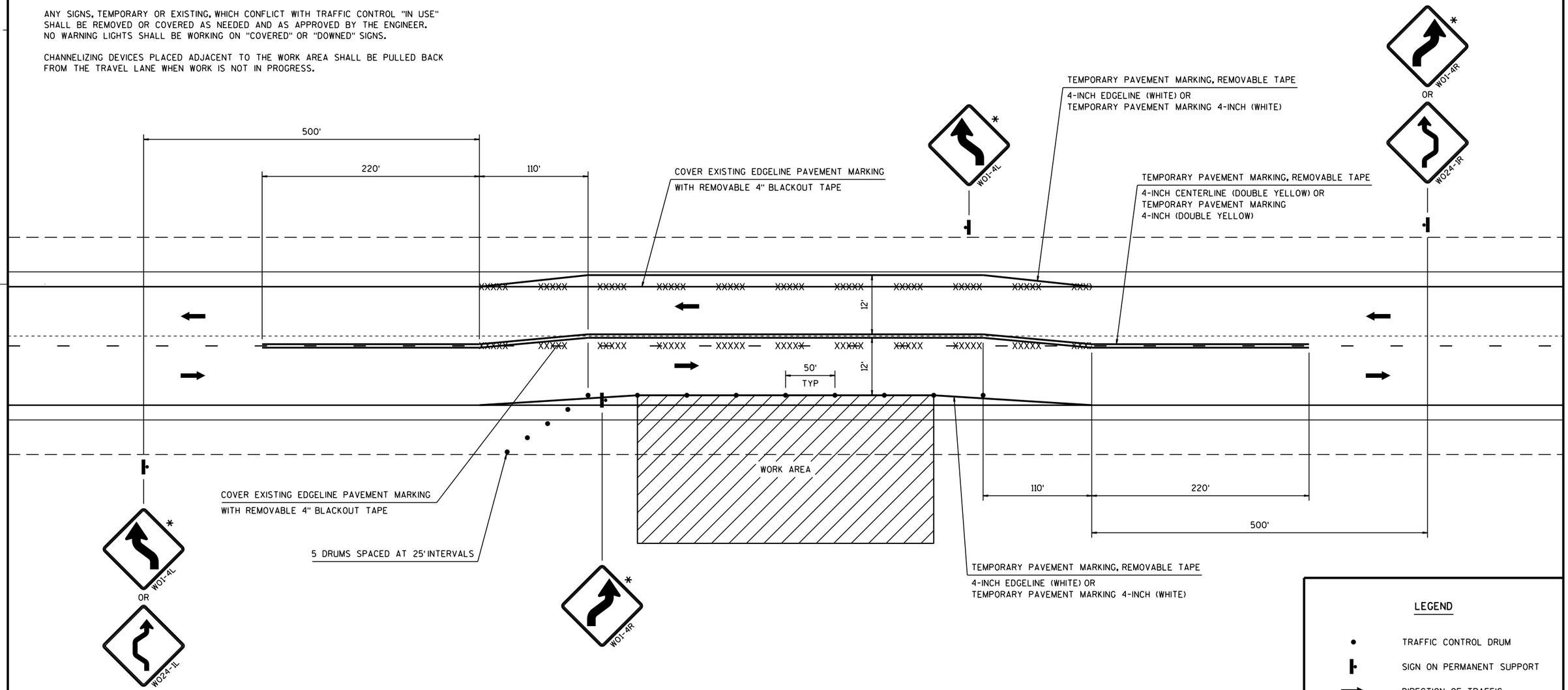
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

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



* USE W024-1 WHEN SHIFTED SECTION BETWEEN TAPERS IS 600' OR LESS.
USE W01-4 WHEN SHIFTED SECTION BETWEEN TAPERS IS GREATER THAN 600'.

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TRAFFIC CONTROL DETAIL	SHEET 62	E

MATCH LINE (SEE SHEET 4 OF 7)

N

BRIDGE OUT
8 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"
127

141

P

RAILROAD

DETOUR AHEAD
M20-2A
48" X 48"
4

DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"
6

DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"
8

15th ROAD

11th ROAD

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
20

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
22

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
60

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
62

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
63

DETAIL 1
(SEE SHEET 5 OF 7)

BRIDGE OUT
10 ½ MILES AHEAD
FOLLOW DETOUR
ROAD OPEN TO CRIVITZ
FIXED MESSAGE SIGN
180" X 84"
2

64

5th ROAD

3rd ROAD

W

BRIDGE ROAD

LESLIE ROAD

64

61
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"

D

(SEE SHEET 2 OF 7)

13th ROAD

N. 9th ROAD

Q

N. 3rd ROAD

TOWN LINE ROAD

AUGUSTINE ROAD

CP

Q

3
DETOUR AHEAD
W20-2A
48" X 48"

1
BRIDGE OUT
10 ½ MILES AHEAD
FOLLOW DETOUR
ROAD OPEN TO CRIVITZ
FIXED MESSAGE SIGN
180" X 84"

5
DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"

7
DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"

21
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"

23
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"

W

LITTLE RIVER ROAD

LOUCKS ROAD

WOODLAND ROAD

MATCH LINE

141

LEGEND

113 SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET

▶ PCMS 172 PORTABLE CHANGEABLE MESSAGE SIGN

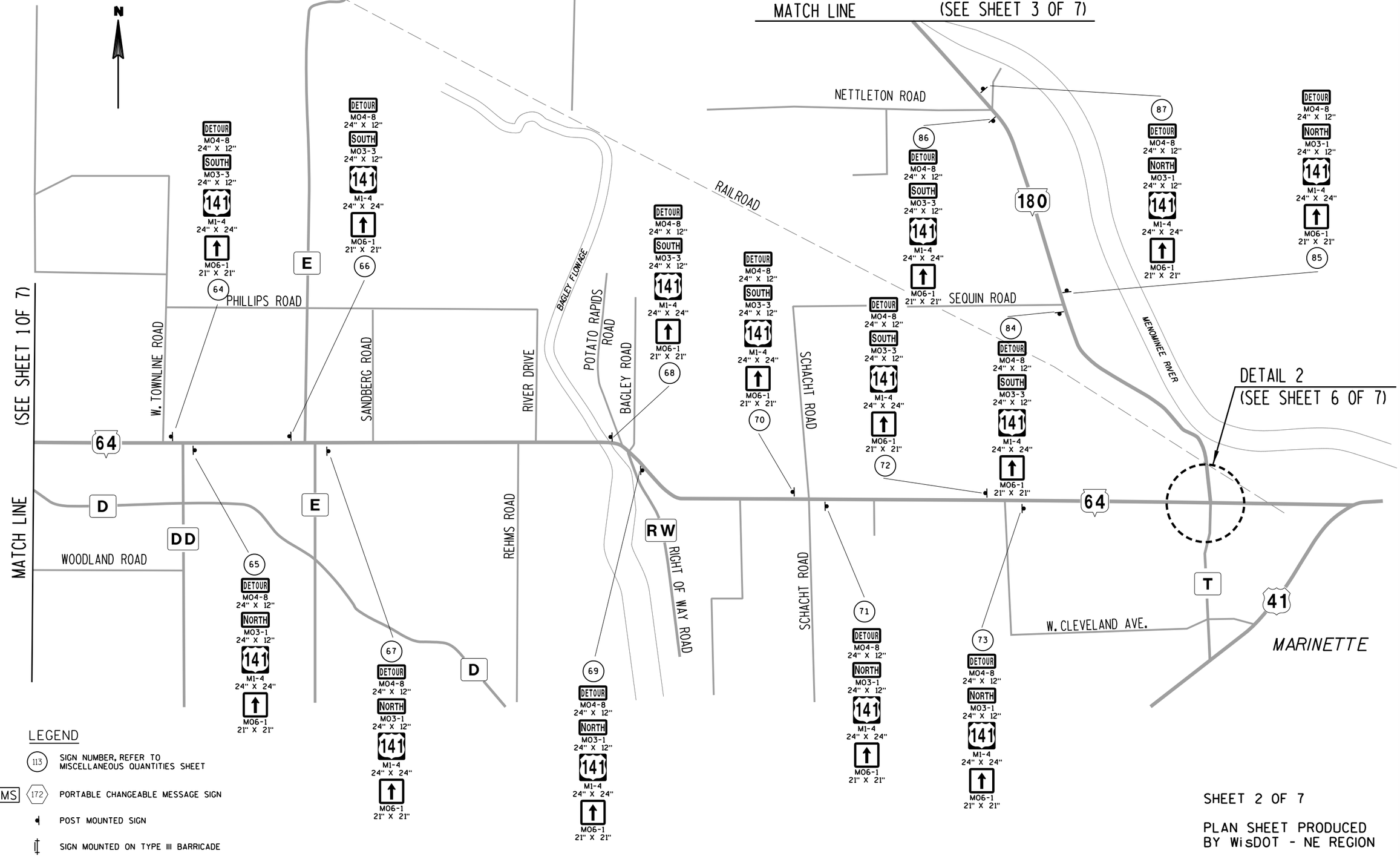
POST MOUNTED SIGN

SIGN MOUNTED ON TYPE III BARRICADE

SHEET 1 OF 7

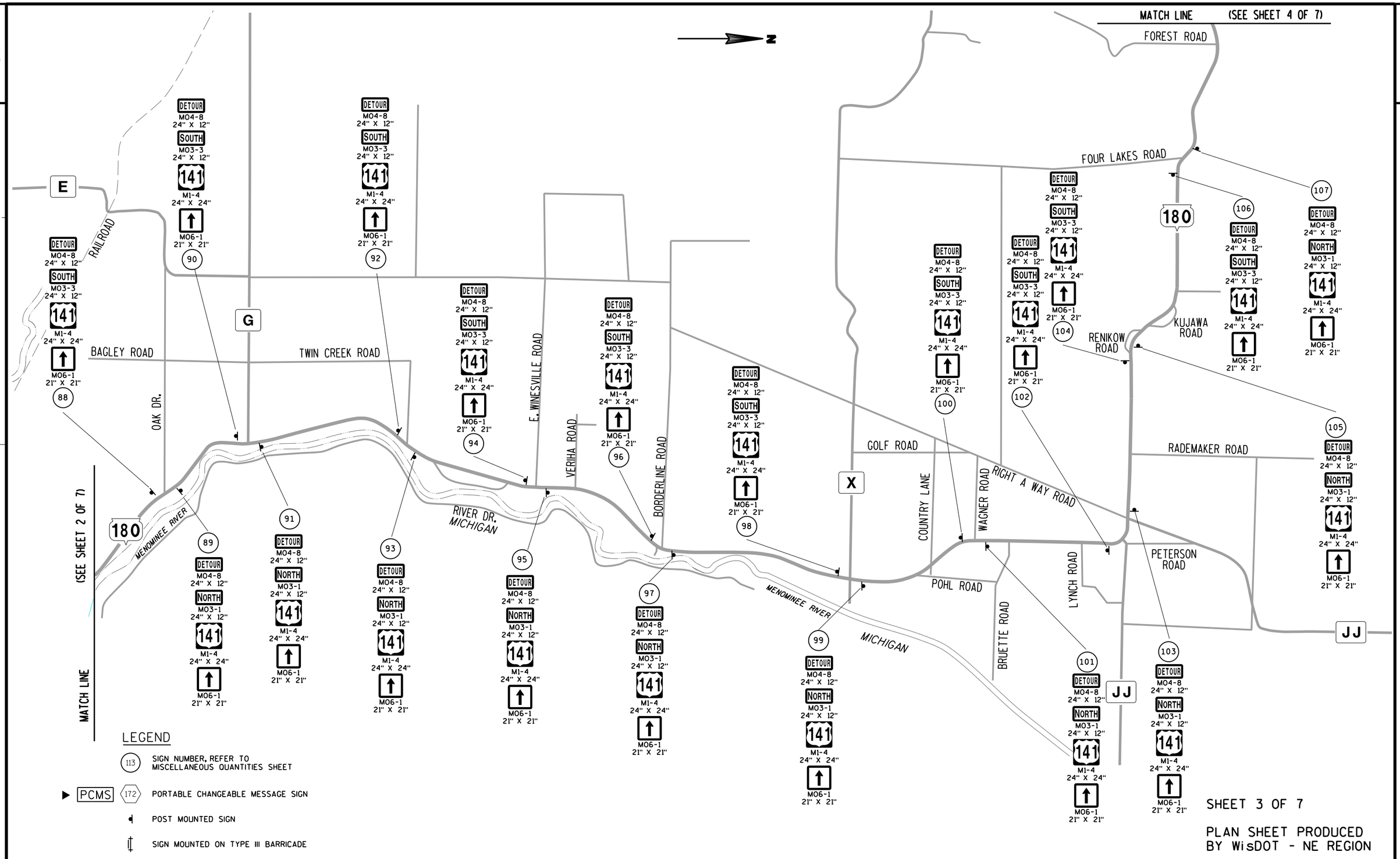
PLAN SHEET PRODUCED
BY WisDOT - NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET 63	E



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET 65	E

MATCH LINE (SEE SHEET 1 OF 7)

RAILROAD

17th RD.

W. 22Tth RD.

W. 24Tth RD.

E 18th RD.

141

AIRPORT ROAD

PESHTIGO RIVER

W

CRIVITZ

OLD W ROAD

128

BRIDGE OUT
1 3/4 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

NOQUEBAY ROAD

LOUISA ROAD

RAILROAD

130 PCMS

131 PCMS

ST. PAUL ROAD

SMITH CREEK

BRIDGE OUT
WORK ZONE

SOUTH CREEK ROAD

TOWN LINE ROAD

BRIDGE OUT
2¾ MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"

129

QUARRY ROAD

CEMETERY RD.

141

WAYSIDE ROAD

X

MOONSHINE HILL ROAD

THOMPSON ROAD

MOONSHINE HILL ROAD

SEE DETAIL 3
(SHEET 7 OF 7)

NEJEDIO ROAD

WAUSAUKEE

MCMAHON ROAD

MARTIN ROAD

JERMAC ROAD

LOVERS LANE

114

MODIFY

SCHLIES ROAD

FROM JCT 141 END 180

TO END DETOUR M4-8A 24" X 18" 141

DETOUR M04-8 24" X 12"
SOUTH M03-3 24" X 12"
141 M1-4 24" X 24"
M06-1 21" X 21"

112

113

DETOUR M04-8 24" X 12"
NORTH M03-1 24" X 12"
141 M1-4 24" X 24"
M06-1 21" X 21"

XX

MUD LAKE ROAD

DETOUR M04-8 24" X 12"
SOUTH M03-3 24" X 12"
141 M1-4 24" X 24"
M06-1 21" X 21"

110

111

180

109

DEER LN.

108

MENOMINEE RIVER

MATCH LINE (SEE SHEET 4 OF 7)

W

G

N

LEGEND

(113) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET

▶ PCMS (172) PORTABLE CHANGEABLE MESSAGE SIGN

POST MOUNTED SIGN

SIGN MOUNTED ON TYPE III BARRICADE

SHEET 4 OF 7

PLAN SHEET PRODUCED
BY WisDOT - NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

N

64

STH 64

USH 141 SB OFF-RAMP

USH 141 SB ON-RAMP

USH 141 NB OFF-RAMP

USH 141 NB ON-RAMP

13th ROAD

141

64

14
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
DETOUR AHEAD
W20-2A
48" X 48"

15
COVER
NORTH 141

16
BRIDGE OUT
10 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"
141
M1-4
24" X 24"
M06-1
21" X 21"

18
SOUTH WEST
141 64
NORTH 141
Iron Mountain
COVER

19
MODIFY
FROM
JCT 141
JCT BUSINESS 141
TO
END DETOUR
M4-8A
24" X 18"
141

11
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-2
21" X 21"

17
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"

12
M06-2
21" X 21"
DETOUR
M04-8
24" X 12"
COVER
141 NORTH
64 EAST

10
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M05-1R
21" X 21"

9
DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M06-2
30" X 30"

LEGEND

(113) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET

▶ PCMS (172) PORTABLE CHANGEABLE MESSAGE SIGN

POST MOUNTED SIGN

SIGN MOUNTED ON TYPE III BARRICADE

DETAIL #1

SHEET 5 OF 7

PLAN SHEET PRODUCED BY WisDOT - NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-2
21" X 21"
78

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-2
21" X 21"
76

180

RAILROAD

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
79

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
77

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M05-1R
21" X 21"
80

180

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
81A

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
81B

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M05-1R
21" X 21"
82

N

NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
DETOUR AHEAD
W20-2A
48" X 48"
83

VAN CLEVE AVE.

McALLISTER ST.

HIGHLAND AVE.

64

64

64

GILBERT ST.

MARINETTE

IRVING ST.

MALINOWSKI ROAD

74
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M05-1L
21" X 21"

75
DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"

T

LEGEND

(113) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET

▶ PCMS (172) PORTABLE CHANGEABLE MESSAGE SIGN

POST MOUNTED SIGN

SIGN MOUNTED ON TYPE III BARRICADE

DETAIL #2

SHEET 6 OF 7

PLAN SHEET PRODUCED BY WisDOT - NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET 68	E

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
1491-09-21		
FEDERAL PROJECT NUMBER	4.1	6

PLAT OF RIGHT-OF-WAY REQUIRED FOR

CRIVITZ - MIDDLE INLET

PESHTIGO RIVER - CTH X

US 141 MARINETTE CO.

CONSTRUCTION PROJECT NUMBER
1491-09-71

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.	JACKET	J.
HIGHWAY EASEMENT	H.E.	IMAGE	I.
LAND CONTRACT	LC	**CURVE DATA**	
MONUMENT	MON.	LONG CHORD	LCH
PAGE	P.	LONG CHORD BEARING	LCB
PERMANENT LIMITED EASEMENT	PLE	RADIUS	R
PROPERTY LINE	P.L.	DEGREE OF CURVE	D
RECORDED AS	(100')	CENTRAL ANGLE OR DELTA	DELTA
		LENGTH OF CURVE	L
		TANGENT	TAN

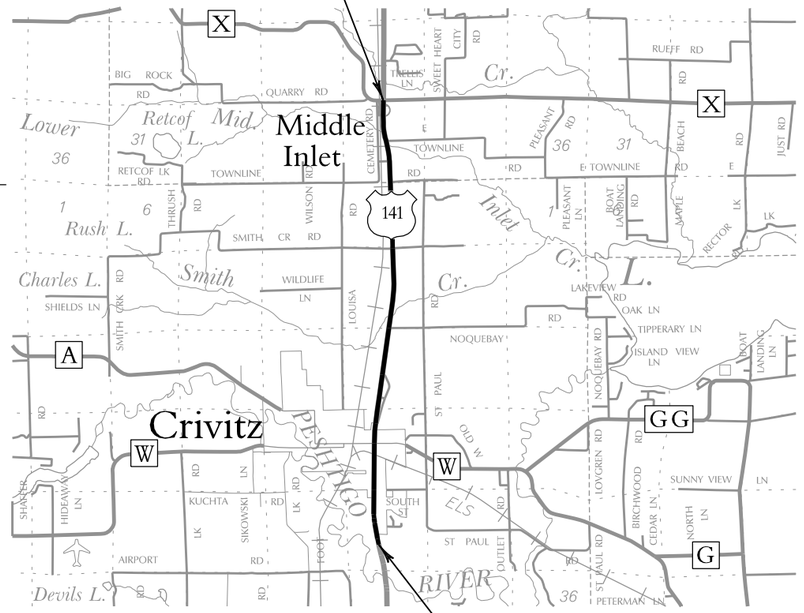
CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LS (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	○ •(SET)	PROPERTY LINE	
R/W STANDARD	△ •(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	⊕	CORPORATE LIMITS	
SECTION CORNER SYMBOL	SECTION CORNER MONUMENT	ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS RESTRICTED (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING (BLDG.)		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

END RELOCATION ORDER
482.00' NORTH OF AND 5.95' WEST OF
THE S1/4 COR. OF SEC. 27, T33N R20E



BEGIN RELOCATION ORDER
272.98' SOUTH OF AND 140.90' WEST OF
THE S1/4 COR. OF SEC. 27, T32N R20E

GN

NOTES

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, MARINETTE COUNTY, NAD 83 (1991) IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER SURVEYS OF PUBLIC RECORD.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING DEPARTMENT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

THE ALIGNMENT ON THIS PLAT DIFFERS FROM THE DESIGN ALIGNMENT. THIS ALIGNMENT IS CALULATED BASED ON EXISTING RAILROAD PLATS, RW PLATS, SURVEYS & EXISTING FIELD MONUMENTATION. THE DESIGN ALIGNMENT IS BASED ON EXISTING IMPROVEMENTS AND DOES NOT CORRELATE TO THE EXISTING RIGHT OF WAY.

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 6.05 MI.

emcs INC
PREPARED BY EMCS, INC.

WISCONSIN
KEVIN C BOYER
S-2675
KEWAUNEE
WI
10/17/13
LAND SURVEYOR

Kevin C Boyer
KEVIN C. BOYER, RLS - 2675
DATE: 10/17/13

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED FOR THE DEPARTMENT
DATE: 10/25/13 Curt VanEvery
(Signature)

69 E

SCHEDULE OF LANDS & INTERESTS REQUIRED

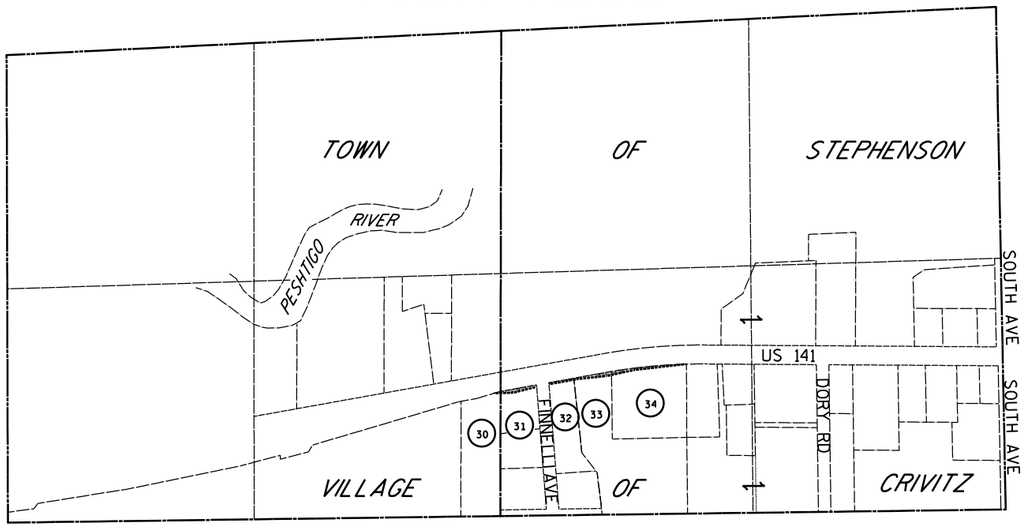
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSED ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

4

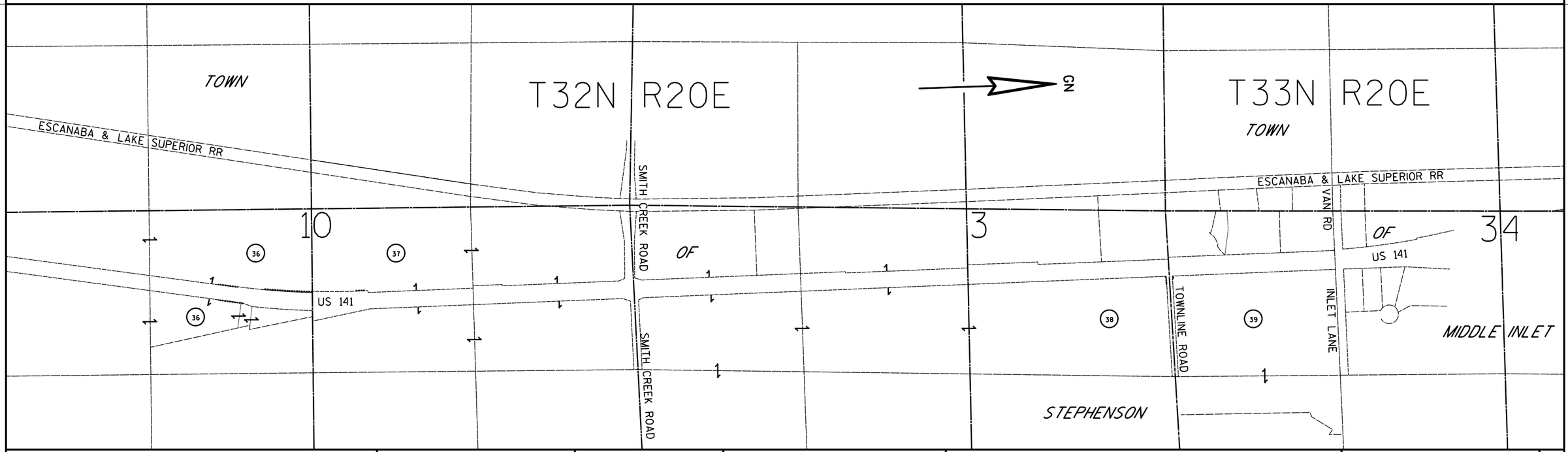
4

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
30	4.4	WIDG, LLC	TLE	---	---	---	0.01
31	4.4	PREMIUM PROPERTIES, LP	TLE	---	---	---	0.06
32	4.4	SMITTY'S USED CARS, LLC	TLE				0.04
33	4.4	JOSEPH B. BANASZAK AND LOIS RAE BANASZAK, AS TRUSTEES OF THE JOSEPH B BANASZAK AND LOIS RAE BANASZAK REVOCABLE TRUST DATED NOVEMBER 13, 1996, OR THEIR SUCCESSORS IN TRUST	TLE	---	---	---	0.07
34	4.4	PORTH REAL ESTATE, LLC	TLE	---	---	---	0.08
36	4.5	THE FRANCIS H. WIEDEMEIER TRUST, DATED AUGUST 1, 1998, TRUSTEE BEING FRANCIS H. WIEDEMEIER OR SUCCESSOR	TLE	---	---	---	0.07
37	4.5	JOHN AND VALENTINA DIKTANAS, HIS WIFE	TLE				0.01
38	4.6	MYRA I. ORLANDO, A MARRIED WOMAN	TLE	---	---	---	0.01
39	4.6	RICHARD PLADIES	TLE	---	---	---	0.01
40	4.4	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
42	4.4	CENTURYLINK	RELEASE OF RIGHTS	---	---	---	---
44	4.4,4.6	AMERICAN TRANSMISSION COMPANY	RELEASE OF RIGHTS	---	---	---	---

4



27



REVISION DATE	DATE 10/17/2013	NOT TO SCALE	HWY: US 141	STATE R/W PROJECT NUMBER 1491-09-21	PLAT SHEET 4.3
			COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-09-71	PS&E SHEET 71 E

FILE NAME : P:\47xx\4779.4750W06.SP.USH141.MARN\CADDS\Plan\040103_rp.dgn PLOT DATE : 10/17/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 70

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY J.3296, I.05, DOC.492169 & CSM 2435

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 1490-11-21	VARIES	1990
US 141	RW PLAT 348-C 226-RE-OP	VARIES	1990
US 141	CSM 3111	VARIES	2007
US 141	CSM 2435	VARIES	2004
US 141	CSM 3123	VARIES	2007
US 141	CSM 3077	100'	2006
FINNELLI AVENUE	CSM 3111	66'	2007
FINNELLI AVENUE	CSM 2435	66'	2004
FINNELLI AVENUE	CSM 3123	66'	2007

FND. ALUM. CAP MON.
Y=191817.685
X=707564.893

T 32 N R 20 E 28 27

S88°00'09"E 1801.40' COR. TO RW

NORTH LINE OF THE NE1/4 OF THE SW1/4 P.L.

NE/SW SEC. 27

TOWN OF VILLAGE OF CRIVITZ STEPHENSON

SE/NW SEC. 27

USH 51
CURVE DATA
PI= 953+48.89
Y = 192636.71
X = 709299.86
T = 277.49
L = 553.26
R = 2864.79
DELTA = 11°03'54" RT
D = 02°00'00"

L = 538.90'
LCH = 538.14'
R = 2929.79'
DELTA = 10°32'20" RT

GN

CENTURYLINK RELEASE OF RIGHTS PARCEL 30 NO EASEMENT OF RECORD

WISCONSIN PUBLIC SERVICE RELEASE OF RIGHTS PARCEL 30 NO EASEMENT OF RECORD

CENTURYLINK RELEASE OF RIGHTS PARCEL 31 NO EASEMENT OF RECORD

SLOPE INTERCEPT

549.49'

65'

N08°17'18"W 166.86'

90°00'

STA 944+55.06

944+00 946+00 948+00 950+00 952+00 954+00 956+00

US 141

N 8°17'18" W 308.32'

PC STA950+71.40

PI STA953+48.89

PT STA956+24.66

N 2°15'02" E

N02°15'02"E 248.09'

50'

S02°15'02"W 249.62'

S88°37'19"E 50.01'

STA 943+00

S81°42'42"W 65.00'

N13°23'14"W 27.58'

100.78'

S16°26'29"E 65.00'

S08°17'18"E 193.00'

66.32'

14'

STA 950+14 54.00'

STA 951+50.00 48.00'

STA 954+41.04 46.00'

L = 520.51'
LCH = 519.78'
R = 2829.79'
DELTA = 10°32'20" RT

AMERICAN TRANSMISSION COMPANY RELEASE OF RIGHTS 30' EASEMENT PARCEL 31 V.116 P.264 DOC. 128580

AMERICAN TRANSMISSION COMPANY RELEASE OF RIGHTS 30' EASEMENT PARCEL 32 V.116 P.264 DOC. 128580

AMERICAN TRANSMISSION COMPANY RELEASE OF RIGHTS 30' EASEMENT PARCEL 33 V.116 P.264 DOC. 128580

AMERICAN TRANSMISSION COMPANY RELEASE OF RIGHTS 30' EASEMENT PARCEL 34 V.116 P.264 DOC. 128580

AMERICAN TRANSMISSION COMPANY RELEASE OF RIGHTS 30' EASEMENT PARCEL 30 V.116 P.224 DOC. 128449

STA 944+14.00 38.36'

STA 945+14.00 54.00'

STA 946+40.72 45.00'

STA 946+41.71 35.00'

STA 947+08.03 35.00'

STA 947+06.64 49.00'

STA 949+00.00 49.00'

LOT 4 CSM 3123 V.21 P.109 DOC. 707552

(FORMERLY LOT 3) CSM 2435 V.16 P.77 DOC. 663978

LOT 1 CSM 3111 V.21 P.85 DOC. 706552

(FORMERLY LOT 1) CSM 2435 V.16 P.77 DOC. 663978

LOT 3 CSM 3077 V.21 P.3 DOC. 703393

30 WIDG, LLC

LOT 1 CSM 3182 V.21 P.240 DOC. 713451

31 PREMIUM PROPERTIES, LP

32 SMITTY'S USED CARS, LLC

33 JOSEPH B. BANASZAK & LOIS RAE BANASZAK, AS TRUSTEES OF THE JOSEPH B. BANASZAK AND LOIS RAE BANASZAK REVOCABLE TRUST DATED NOV. 13, 1996, OR THEIR SUCCESSORS IN TRUST

34 PORTH REAL ESTATE, LLC

42 CENTURYLINK RELEASE OF RIGHTS BLANKET EASEMENT PARCEL 33 V.5612 I.24 DOC. 548674

CENTURYLINK RELEASE OF RIGHTS BLANKET EASEMENT PARCEL 31 V.5612 I.24 DOC. 548674

CENTURYLINK RELEASE OF RIGHTS BLANKET EASEMENT PARCEL 32 V.5612 I.24 DOC. 548674

CENTURYLINK RELEASE OF RIGHTS BLANKET EASEMENT PARCEL 34 V.5612 I.24 DOC. 548674

N88°00'09"W 658.41' COR. TO RW

FINNELLI AVE 66'

P.L.

NORTH LINE OF THE SE1/4 OF THE NW1/4

2" I.P. PER CSM'S
Y=191728.406
X=710124.782

T 32 N R 20 E 27

REVISION DATE	DATE 10/17/2013	SCALE, FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-09-21	PLAT SHEET 4.4
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-09-71	PS&E SHEET 72 E

FILE NAME : P:\47xx\4779.4750W06.SP.USH141.MARN\CADDS\Plan\040104_rp.dgn PLOT DATE : 10/24/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	135'	1937

T 32 N R 20 E — 9 — 10

FND. MAG NAIL
Y=207683.799
X=707645.828

GN

TOWN

THE FRANCIS H. WIEDEMEIER TRUST, DATED AUG. 1, 1998, TRUSTEE BEING FRANCIS H. WIEDEMEIER

36

NW/SE SEC. 10

JOHN & VALENTINA DIKTANAS

37

SW/NE SEC. 10

S 88°42'34" E 3329.61' COR. TO RW

NORTH LINE OF THE NW1/4 OF THE SE1/4

P.L.

OF

USH 51
CURVE DATA
PI = 1103+28.51
Y = 207486.91
X = 711063.09
T = 498.82
L = 995.14
R = 5729.70
DELTA = 09°57'04" LT
D = 01°00'00"

L = 607.04'
LCH = 606.75'
R = 5664.70'
DELTA = 06°08'24" LT

L = 376.50'
LCH = 376.44'
R = 5654.70'
DELTA = 03°48'54" LT

STA 1095+00

N09°29'54"E 60'

STA 1096+75.00 60.00' & 63.00'

3'

N80°30'6"W 5.00'

329.69'

STA 1098+29.69 60.00' & 63.00'

65'

STA 1100+50.00 65.00' & 70.00'

STA 1102+50.00 71.00'

STA 1104+43.43 72.00'

75'

STA 1108+00.00 75.00' & 80.00'

5'

STA 1108+69.78 75.00' & 80.00'

S89°32'50"W 15.00'

N00°27'10"W 100.68'

60'

N00°27'10"W 74.50'

N80°30'6"W 60.00'

1096+00

1098+00

PC STA1098+29.69

N 9°29'54" E

1100+00

1102+00

US 141

1104+00

1106+00

1108+00

PT STA1108+24.82

N 0°27'10" W

STA 1110+00

N89°32'50"E 73.00'

SLOPE INTERCEPT

N88°42'34"W 10.00'

STA 1104+43.69 65.00'

STA 1104+46.04

S9°29'54"W 60'

381.72'

87.05'

S21°41'17"W

80'

PI STA1103+28.51

L = 490.67'
LCH = 490.53'
R = 5809.70'
DELTA = 04°50'21" LT

65.04'

80.05'

92.35'

S0°27'10"E

473.11'

73'

N88°42'34"W 85.14'

S10°8'19"E

P.L.

P.L.

30' UTILITY EASEMENT
AMERICAN TRANSMISSION COMPANY
(FORMERLY NORTHERN PAPER MILLS)
VOL. 116 PG. 395-398
DOC. 129042

N 88°42'34" W 1743.22' COR. TO RW

STEPHENSON

T 32 N R 20 E — 10 — 11

FND. RR SPK
Y=207564.135
X=712957.551

REVISION DATE	DATE 10/17/2013	SCALE. FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-09-21	PLAT SHEET 4.5	
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-09-71	PS&E SHEET 73	E

FILE NAME : P:\47xx\4779.4750W06.SP.USH141.MARN\CADDS\Plan\040105_rp.dgn PLOT DATE : 10/24/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 75

FND. BRASS CAP MONUMENT
Y=214525.017
X=710551.855

T32N R20E Sec 3 / T33N R20E Sec 34

TOWN OF NW/NE SEC. 3

WEST LINE OF THE SW1/4 OF THE SE1/4

P.L.

GN

PER TIES
Y=219879.173
X=710732.007

T 33 N R 20 E Sec 27 / 34

LOT 2
CSM 1796
V.12 P.12
DOC. 606571
TRANS 233 RESTRICTIONS APPLY
38-141-0498-00-C

1

S88°27'13"W 375.66' COR. TO RW

NORTH LINE OF THE NW1/4 OF THE NE1/4

S88°27'13"W 15.00'

75.39 N00°27'10"W

N00°27'10"W

80'

1208.02'

L = 138.71
LCH = 138.71
R = 5649.70
DELTA = 01°24'24" LT

FO

SLOPE INTERCEPT

STA 1173+76.63

65.00'

STA 1173+00 S89°32'50"W 73.00'

1174+00 1176+00 1178+00 1180+00 US 141 1182+00 1184+00 1186+00

N 0°27'10" W

PC STA1185+83.12

N89°16'01"E 80.01'

N89°16'01"E 74.69'

AMERICAN TRANSMISSION COMPANY
RELEASE OF RIGHTS
30' EASEMENT, PARCEL 58
V.117 P.570, DOC. 131919

73.01'

53.27'

1173+43.00 73.00'

24.75'

STA 1174+15.00 73.00'

S00°27'10"E

1319.80'

STA 1174+03.37 104.00'

73'

STA 1173+52.00 89.54'

STA 1173+52.00 140.00'

STA 1173+54.54 140.00'

49.5'

RICHARD PLADIES
39

SW/SE SEC. 34

AMERICAN TRANSMISSION COMPANY
RELEASE OF RIGHTS
30' EASEMENT
PARCEL 39
V.116 P.234
DOC. 120502
44

USH 51
CURVE 1 DATA
PI = 1191+52.80
Y = 216313.43
X = 710993.32
T = 569.68
L = 1135.63
R = 5729.70
DELTA = 11°21'22" LT
D = 01°00'00"

NORTH LINE OF THE SW1/4 OF THE SE1/4

MIDDLE INLET

MYRA I. ORLANDO
38

TOWNLINE RD

S88°27'13"W 2229.59' COR. TO R

STEVENSON

T32N R20E Sec 2 / T33N R20E Sec 35

FND. 0.75" IRON ROD
Y=214597.481
X=713236.139

HIGHWAY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
US 141	RW PLAT 3572	VARIES	1937
US 141	CSM 1796	153'	2000

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 1490-03-29

REVISION DATE	DATE 10/17/2013	SCALE. FEET 0 50 100	HWY: US 141	STATE R/W PROJECT NUMBER 1491-09-21	PLAT SHEET 4.6	
	GRID FACTOR 0.999986		COUNTY: MARINETTE	CONSTRUCTION PROJECT NUMBER 1491-09-71	PS&E SHEET 74	E

FILE NAME : P:\47xx\4779.4750W06.SP.USH141.MARN\CADDS\Plan\040106_rp.dgn PLOT DATE : 10/24/2013 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:100

DATE 07AUG14 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	1491-09-71 QUANTITY
0010	201.0105	CLEARING	STA	2.000	2.000
0020	201.0205	GRUBBING	STA	2.000	2.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	35.000	35.000
0050	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 01. 87+05	LS	1.000	1.000
0070	204.0100	REMOVING PAVEMENT	SY	6,050.000	6,050.000
0080	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	170.000	170.000
0090	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	108,400.000	108,400.000
0100	204.0150	REMOVING CURB & GUTTER	LF	1,450.000	1,450.000
0110	204.0165	REMOVING GUARDRAIL	LF	2,600.000	2,600.000
0150	204.9060.S	REMOVING (ITEM DESCRIPTION) 01. CULVERT PIPE MARKERS	EACH	16.000	16.000
0160	205.0100	EXCAVATION COMMON	CY	24,700.000	24,700.000
0170	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. C-38-123	LS	1.000	1.000
0190	208.0100	BORROW	CY	1,800.000	1,800.000
0200	210.0100	BACKFILL STRUCTURE	CY	110.000	110.000
0230	213.0100	FINISHING ROADWAY (PROJECT) 01. 1491-09-71	EACH	1.000	1.000
0260	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	13,800.000	13,800.000
0270	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	63,300.000	63,300.000
0280	390.0201	BASE PATCHING ASPHALTIC	TON	175.000	175.000
0290	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	155.000	155.000
0300	440.4410.S	INCENTIVE IRI RIDE	DOL	32,400.000	32,400.000
0310	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,970.000	1,970.000
0320	455.0605	TACK COAT	GAL	6,300.000	6,300.000
0330	460.1103	HMA PAVEMENT TYPE E-3	TON	35,700.000	35,700.000
0340	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	22,850.000	22,850.000
0350	460.4110.S	REHEATING HMA PAVEMENT LONGITUDINAL JOINTS	LF	83,000.000	83,000.000
0370	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	251.000	251.000
0380	465.0305	ASPHALTIC SURFACE SAFETY ISLANDS	TON	17.000	17.000
0390	465.0315	ASPHALTIC FLUMES	SY	174.000	174.000
0400	465.0475	ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL	LF	18,400.000	18,400.000
0410	502.0100	CONCRETE MASONRY BRIDGES	CY	262.000	262.000
0420	502.3200	PROTECTIVE SURFACE TREATMENT	SY	352.000	352.000
0440	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	6,200.000	6,200.000
0450	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	31,540.000	31,540.000
0460	513.7050	RAILING STEEL TYPE W (STRUCTURE) 01. C-38-123	LS	1.000	1.000
0480	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	24.000	24.000
0520	520.7000	CLEANING CULVERT PIPES	EACH	22.000	22.000
0530	521.0112	CULVERT PIPE CORRUGATED STEEL 12-INCH	LF	450.000	450.000
0540	521.0115	CULVERT PIPE CORRUGATED STEEL 15-INCH	LF	314.000	314.000
0550	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	288.000	288.000
0560	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	20.000	20.000
0570	521.1015	APRON ENDWALLS FOR CULVERT PIPE STEEL 15-INCH	EACH	14.000	14.000
0580	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	12.000	12.000
0590	522.0118	CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	136.000	136.000

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DATE 07AUG14 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	1491-09-71 QUANTITY
0600	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	480.000	480.000
0610	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	192.000	192.000
0620	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	96.000	96.000
0630	522.0142	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	104.000	104.000
0660	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	4.000	4.000
0670	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	12.000	12.000
0680	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	4.000	4.000
0690	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	2.000	2.000
0700	522.1042	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	EACH	2.000	2.000
0720	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	280.000	280.000
0740	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	63.000	63.000
0750	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	5,390.000	5,390.000
0760	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	1,060.000	1,060.000
0770	606.0300	RIPRAP HEAVY	CY	80.000	80.000
0810	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	180.000	180.000
0820	614.0010	BARRIER SYSTEM GRADING SHAPING FINISHING	EACH	6.000	6.000
0830	614.0115	ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2	EACH	1.000	1.000
0840	614.0345	STEEL PLATE BEAM GUARD SHORT RADIUS	LF	100.000	100.000
0850	614.2300	MGS GUARDRAIL 3	LF	1,688.000	1,688.000
0880	614.2500	MGS THRIE BEAM TRANSITION	LF	386.000	386.000
0890	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	7.000	7.000
0900	615.0300	GUARD POSTS TIMBER	EACH	30.000	30.000
0910	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1491-09-71	EACH	1.000	1.000
0930	619.1000	MOBILIZATION	EACH	0.500	0.500
0940	624.0100	WATER	MGAL	770.000	770.000
0950	625.0500	SALVAGED TOPSOIL	SY	58,100.000	58,100.000
0960	627.0200	MULCHING	SY	39,600.000	39,600.000
0970	628.1504	SILT FENCE	LF	21,300.000	21,300.000
0980	628.1520	SILT FENCE MAINTENANCE	LF	5,350.000	5,350.000
0990	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	6.000	6.000
1000	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
1010	628.2004	EROSION MAT CLASS I TYPE B	SY	20,000.000	20,000.000
1020	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	7,350.000	7,350.000
1030	628.6005	TURBIDITY BARRIERS	SY	140.000	140.000
1060	628.7015	INLET PROTECTION TYPE C	EACH	35.000	35.000
1070	628.7504	TEMPORARY DITCH CHECKS	LF	795.000	795.000
1080	628.7555	CULVERT PIPE CHECKS	EACH	71.000	71.000
1090	628.7570	ROCK BAGS	EACH	300.000	300.000
1100	629.0210	FERTILIZER TYPE B	CWT	37.000	37.000
1110	630.0120	SEEDING MIXTURE NO. 20	LB	1,360.000	1,360.000
1120	630.0140	SEEDING MIXTURE NO. 40	LB	140.000	140.000
1130	630.0200	SEEDING TEMPORARY	LB	525.000	525.000
1140	633.5200	MARKERS CULVERT END	EACH	20.000	20.000

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DATE 07AUG14 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	1491-09-71 QUANTITY
1150	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	83.000	83.000
1160	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	44.000	44.000
1170	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	21.000	21.000
1180	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	2.000	2.000
1190	637.2210	SIGNS TYPE II REFLECTIVE H	SF	849.690	849.690
1200	637.2215	SIGNS TYPE II REFLECTIVE H FOLDING	SF	29.840	29.840
1210	637.2230	SIGNS TYPE II REFLECTIVE F	SF	240.750	240.750
1220	638.2602	REMOVING SIGNS TYPE II	EACH	164.000	164.000
1230	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	142.000	142.000
1240	642.5001	FIELD OFFICE TYPE B 01. 1491-09-71	EACH	1.000	1.000
1250	643.0100	TRAFFIC CONTROL (PROJECT) 01. 1491-09-71	EACH	1.000	1.000
1270	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,622.000	1,622.000
1280	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	2,476.000	2,476.000
1290	643.0900	TRAFFIC CONTROL SIGNS	DAY	4,473.000	4,473.000
1300	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	6.000	6.000
1310	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	210.000	210.000
1320	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	14.000	14.000
1330	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 1491-09-71	EACH	1.000	1.000
1350	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	15,000.000	15,000.000
1360	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	180.000	180.000
1370	646.0103	PAVEMENT MARKING PAINT 4-INCH	LF	2,500.000	2,500.000
1380	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	10,550.000	10,550.000
1390	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	420.000	420.000
1400	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	45,550.000	45,550.000
1410	647.0110	PAVEMENT MARKING RAILROAD CROSSINGS EPOXY	EACH	2.000	2.000
1430	648.0100	LOCATING NO-PASSING ZONES	MI	5.992	5.992
1440	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	44,920.000	44,920.000
1450	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	124,600.000	124,600.000
1470	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	16,150.000	16,150.000
1480	650.5000	CONSTRUCTION STAKING BASE	LF	16,150.000	16,150.000
1490	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	7,550.000	7,550.000
1500	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	11.000	11.000
1510	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. C-38-123	LS	1.000	1.000
1530	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	31,700.000	31,700.000
1540	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1491-09-71	LS	1.000	1.000
1560	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	16,750.000	16,750.000
1570	652.0800	CONDUIT LOOP DETECTOR	LF	60.000	60.000
1580	653.0120	PULL BOXES STEEL 18X24-INCH	EACH	1.000	1.000
1590	653.0905	REMOVING PULL BOXES	EACH	1.000	1.000
1600	655.0800	LOOP DETECTOR WIRE	LF	200.000	200.000
1610	690.0150	SAWING ASPHALT	LF	7,350.000	7,350.000
1620	690.0250	SAWING CONCRETE	LF	22,450.000	22,450.000
1630	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	2,400.000	2,400.000
1640	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	2,100.000	2,100.000
1650	SPV.0085	SPECIAL 01. BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	1,600.000	1,600.000
1660	SPV.0090	SPECIAL 01. 4-INCH EPOXY YELLOW	LF	23,700.000	23,700.000

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DATE 07AUG14 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	1491-09-71 QUANTITY
1670	SPV.0090	SPECIAL 02. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH	LF	42,200.000	42,200.000
1680	SPV.0090	SPECIAL 03. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 8-INCH	LF	600.000	600.000
1690	SPV.0090	SPECIAL 04. CONCRETE CURB AND GUTTER 30-INCH HES TYPE D	LF	270.000	270.000
1700	SPV.0180	SPECIAL 01. REINFORCED CONCRETE PAVEMENT 10-INCH	SY	280.000	280.000

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CLEARING AND GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	78+30	-	80+00	USH 141 RT	2	2
				TOTAL	2	2

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	SIZE	PIPE MATERIAL	203.0100 EACH
0010	1650+30	USH 141 RT	15"	CMCP	1
0010	1651+50	USH 141 RT	15"	CMCP	1
0010	1654+30	USH 141 RT	15"	CMCP	1
0010	1656+00	USH 141 RT	15"	CMCP	1
0010	1659+70	USH 141 LT	12"	CMCP	1
0010	12+41	DESCHANE AVE	18"	CMCP	1
0010	1661+50	USH 141 RT	18"	CMCP	1
0010	1662+90	USH 141 RT	18"	POLY	1
0010	1664+60	USH 141 LT	15"	CMCP	1
0010	1664+80	USH 141 RT	18"	CMCP	1
0010	1666+15	USH 141 LT	15"	CMCP	1
0010	1666+25	USH 141 RT	18"	CMCP	1
0010	58+95	USH 141	24"	RCCP	1
0010	67+10	USH 141	30"	RCCP	1
0010	100+25	USH 141 LT	12"	CMCP	1
0010	103+00	USH 141 LT	12"	CMCP	1
0010	113+25	USH 141 RT	15"	CMCP	1
0010	115+40	USH 141	30"	RCCP	1
0010	124+40	USH 141 LT	12"	CMCP	1
0010	128+25	USH 141 RT	12"	CMCP	1
0010	75+69	SMITH CREEK RD	15"	CMCP	1
0010	130+75	USH 141	24"	RCCP	1
0010	135+90	USH 141 RT	12"	CMCP	1
0010	147+90	USH 141 LT	18"	CMCP	1
0010	148+25	USH 141 RT	18"	CMCP	1
0010	155+72	USH 141	24"	RCCP	1
0010	171+79	USH 141 LT	12"	CMCP	1
0010	175+32	USH 141 LT	12"	CMCP	1
0010	178+90	USH 141	42"	RCCP	1
0010	87+84	WAYSIDE RD	32"	CMCP	1
0010	208+25	USH 141	24"	RCCP	1
0010	224+80	USH 141 RT	12"	CMCP	1
0010	225+35	USH 141 RT	12"	CMCP	1
0010	226+40	USH 141	24"	RCCP	1
0010	107+91	CTH X EAST	24"	RCCP	1
		TOTAL			35

REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY	REMARKS
0010	1692+30	-	1693+07	USH 141	205.3	RAILROAD CROSSING REPLACEMENT
0010	1693+23	-	1693+87	USH 141	170.7	RAILROAD CROSSING REPLACEMENT
0010	4+90	-	4+98	USH 141 LT	10.7	LOOP DETECTOR REPLACEMENT
0010	58+85	-	59+05	USH 141	53.3	PIPE REPLACEMENT
0010	67+00	-	67+20	USH 141	53.3	PIPE REPLACEMENT
0010	72+50	-	79+55	USH 141 RT	156.7	NOQUEBAY RD
0010	86+63	-	87+05	USH 141	112.0	STRUCT C-38-123
0010	87+22	-	87+67	USH 141	120.0	STRUCT C-38-123
0010	92+41	-	193+16	USH 141 LT	2238.9	SB PASSING LANE
0010	92+41	-	193+16	USH 141 RT	2238.9	SB PASSING LANE
0010	115+30	-	115+50	USH 141	53.3	PIPE REPLACEMENT
0010	130+65	-	130+85	USH 141	44.4	PIPE REPLACEMENT
0010	155+60	-	155+80	USH 141	44.4	PIPE REPLACEMENT
0010	178+70	-	179+10	USH 141	88.9	PIPE REPLACEMENT
0010	199+35	-	202+24	USH 141 RT	64.2	WAYSIDE RD
0010	208+15	-	208+35	USH 141	53.3	PIPE REPLACEMENT
0010	219+34	-	219+69	USH 141 LT	9.7	BUSINESS PARKING LOT
0010	226+12	-	226+74	USH 141	151.6	PIPE REPLACEMENT
0010	222+24	-	229+54	USH 141 RT	162.2	CTH X
				TOTAL	6050	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	LOCATION	204.0115 SY	REMARKS
0010	1613+95	USH 141 PROJECT LIMITS	10	
0010	1617+25	USH 141 LT	4	DRIVEWAY
0010	1628+94	USH 141 LT	4	DRIVEWAY
0010	1692+99	USH 141 E&LS RR XING	11	
0010	1693+33	USH 141 E&LS RR XING	11	
0010	8+93	USH 141 RT	6	
0010	13+92	SOUTH AVE	6	PAVING LIMITS
0010	14+79	USH 141 LT	10	DRIVEWAY
0010	15+46	SOUTH AVE	6	PAVING LIMITS
0010	22+65	WITT AVE	7	PAVING LIMITS
0010	4+75	PINE AVE	7	PAVING LIMITS
0010	4+30	HALL AVE	6	PAVING LIMITS
0010	58+00	CTH A/W	7	PAVING LIMITS
0010	62+05	CTH A/W	5	PAVING LIMITS
0010	42+15	MIRA AVE	7	PAVING LIMITS
0010	56+94	USH 141 RT	5	DRIVEWAY
0010	60+25	USH 141 RT	7	DRIVEWAY
0010	61+34	USH 141 LT	3	DRIVEWAY
0010	62+96	USH 141 RT	6	DRIVEWAY
0010	103+00	USH 141 LT	3	DRIVEWAY
0010	197+23	USH 141	10	STRUCT B-38-0037
0010	197+83	USH 141	10	STRUCT B-38-0037
0010	214+04	USH 141 RT	3	DRIVEWAY
0010	93+37	DROPP RD	5	PAVING LIMITS
0010	224+46	USH 141 LT	11	DRIVEWAY
0010	109+67	CTH X WEST	5	
0010	232+29	USH 141 PROJECT LIMITS	8	
		TOTAL	170	

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REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 SY
0010	1613+95	-	1619+00	USH 141 LT	1115
0010	1613+95	-	1621+00	USH 141 RT	1638
0010	1619+00	-	1621+00	USH 141 LT	333
0010	1621+00	-	1637+33	USH 141	5443
0010	1637+33	-	1639+00	USH 141	557
0010	1639+00	-	1639+53	USH 141	159
0010	1639+53	-	1640+33	USH 141	213
0010	1640+33	-	1640+90.32	USH 141	152
0010	1640+90.32	-	1666+85	USH 141	6919
0010	1666+85	-	1692+99	USH 141	13941
0010	1693+33	-	14+13	USH 141	10477
0010	14+13	-	16+20	USH 141	920
0010	16+20	-	19+20	USH 141	1000
0010	19+20	-	72+50	USH 141	17767
0010	72+50	-	79+50	USH 141	1944
0010	79+50	-	84+15	USH 141	1550
0010	84+15	-	86+63	USH 141	1107
0010	86+63	-	86+83	USH 141	98
0010	87+46	-	87+66	USH 141	98
0010	87+66	-	90+15	USH 141	1107
0010	90+15	-	92+41	USH 141	753
0010	92+41	-	98+53	USH 141	1360
0010	98+53	-	128+53	USH 141	6667
0010	128+53	-	134+23	USH 141	1267
0010	134+23	-	171+88	USH 141	8367
0010	171+88	-	175+00	USH 141	693
0010	175+00	-	186+34	USH 141	2540
0010	186+34	-	188+94	USH 141	578
0010	188+94	-	193+16	USH 141	938
0010	193+16	-	197+24	USH 141	1942
0010	197+83	-	202+24	USH 141	1012
0010	202+24	-	212+50	USH 141	3420
0010	212+50	-	215+50	USH 141	1068
0010	215+50	-	222+24	USH 141	2971
0010	222+24	-	229+54	USH 141	2257
0010	229+54	-	232+29	USH 141	1124
0010	13+92	-	14+55	SOUTH AVE WEST	259
0010	15+03	-	15+46	SOUTH AVE EAST	165
0010	22+24	-	22+65	WITT AVE	224
0010	4+75	-	5+06	PINE AVE	149
0010	4+30	-	4+63	HALL AVE	152
0010	58+00	-	59+76	CTH A/W	848
0010	60+24	-	62+05	CTH W	790
0010	42+15	-	42+76	MIRA AVE	318
0010	30+24	-	30+95	OLD 141	341
0010	55+15	-	55+97	SEQUIN LANE	512
0010	60+15	-	61+09	OLD 141	532
0010	93+37	-	93+73	DROPP RD	140
0010	109+67	-	110+72	CTH X WEST	452
				TOTAL	108400

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 LF	REMARKS
0010	10+24	-	10+84	FINNELLI AVE LT	89	
0010	10+24	-	10+84	FINNELLI AVE RT	89	
0010	1692+30		1693+18	USH 141 LT	88	RAILROAD CROSSING REPLACEMENT
0010	1692+30		1692+97	USH 141 RT	67	RAILROAD CROSSING REPLACEMENT
0010	1692+30	-	1692+43	USH 141 LT	17	RAILROAD CROSSING REPLACEMENT
0010	1692+76	-	1692+90	USH 141 LT	19	RAILROAD CROSSING REPLACEMENT
0010	1693+12		1693+87	USH 141 RT	75	RAILROAD CROSSING REPLACEMENT
0010	1693+32		1693+87	USH 141 LT	55	RAILROAD CROSSING REPLACEMENT
0010	78+13	-	78+52	USH 141 RT	63	NOQUEBAY RD
0010	77+13	-	77+82	USH 141 RT	97	NOQUEBAY RD
0010	129+59	-	130+14	USH 141 RT	89	SMITH CREEK RD
0010	129+53	-	129+92	USH 141 LT	68	SMITH CREEK RD
0010	130+48	-	130+88	USH 141 RT	58	SMITH CREEK RD
0010	130+23	-	130+85	USH 141 LT	88	SMITH CREEK RD
0010	173+81	-	174+22	USH 141 RT	62	TOWNLINE RD
0010	172+92	-	173+50	USH 141 RT	97	TOWNLINE RD
0010	187+54	-	188+19	USH 141 LT	98	VAN RD
0010	186+85	-	187+24	USH 141 LT	62	VAN RD
0010	200+82	-	201+21	USH 141 RT	70	WAYSIDE RD
0010	199+88	-	200+48	USH 141 RT	99	WAYSIDE RD
0010	219+22	-	219+69	USH 141 LT	55	PARKING LOT
0010	226+73	-	227+25	USH 141 RT	80	CTH X EAST
0010	227+85	-	228+34	USH 141 RT	68	CTH X EAST
0010	107+68	-	108+08	CTH X ISLAND	94	
				TOTAL	1450	

REMOVING CULVERT PIPE MARKERS

CATEGORY	STATION	LOCATION	204.9060.S EACH
0010	58+95	USH 141 RT	1
0010	67+10	USH 141 LT & RT	2
0010	115+40	USH 141 RT	1
0010	130+75	USH 141 LT & RT	2
0010	155+70	USH 141 LT & RT	2
0010	178+90	USH 141 LT & RT	2
0010	201+10	USH 141 LT & RT	2
0010	208+25	USH 141 LT & RT	2
0010	226+40	USH 141 LT & RT	2
		TOTAL	16

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF	REMARKS
0010	1614+03	-	1617+09	USH 141 LT	300	STRUCT B-38-0028
0010	1613+88	-	1619+30	USH 141 RT	538	STRUCT B-38-0028
0010	85+11	-	87+04	USH 141 RT	188	STRUCT C-38-0109
0010	85+88	-	87+04	USH 141 LT	113	STRUCT C-38-0109
0010	87+25	-	88+41	USH 141 RT	113	STRUCT C-38-0109
0010	87+25	-	89+18	USH 141 LT	188	STRUCT C-38-0109
0010	193+64	-	197+11	USH 141 RT	350	STRUCT B-38-0037
0010	194+77	-	197+36	USH 141 LT	263	STRUCT B-38-0037
0010	197+71	-	200+06	USH 141 RT	238	STRUCT B-38-0037
0010	197+96	-	201+29	USH 141 LT	338	STRUCT B-38-0037
				TOTAL	2600	

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EARTHWORK SUMMARY

CATEGORY	ROADWAY	STATION TO STATION	205.0100 COMMON (1) CUT (2) CY	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) Factor 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW
0010	USH 141- MAINLINE	1640+34 - 1666+94	5,130	5,130	2,100	2,624	2,505	2,505	0
0010	USH 141- MAINLINE	1692+30 - 1693+87	526	526	0	0	526	526	0
0010	USH 141- MAINLINE	4+90 - 4+98	9	9	0	0	9	9	0
0010	USH 141- MAINLINE	72+50-80+00	741	741	67	84	658	658	0
0010	USH 141- MAINLINE	92+42-127+73	8,396	8,396	6,315	7,894	502	502	0
0010	USH 141- MAINLINE/ RT (NB)	128+00-134+59 141 RT (NB)	0	0	118	147	-147	0	-147
0010	USH 141- MAINLINE/ LT (SB)	128+00-134+60 141 LT (SB)	832	832	358	447	385	385	0
0010	USH 141- MAINLINE	134+60 - 148+00	2,630	2,630	793	991	1,639	1,639	0
0010	USH 141- MAINLINE	158+00 - 185+32	2,257	2,257	613	766	1,491	1,491	0
0010	USH 141- MAINLINE	185+50 - 192+62	1,856	1,856	1,488	1,860	-4	0	-4
0010	USH 141- MAINLINE	221+71 - 232+23 (END PROJECT)	993	993	211	264	729	729	0
		SUBTOTAL	23,371	23,371	15,078	15,078	8,293	8,444	-151
0010	BEAMGUARD-PESHITIGO RIVER	1616+55-1617+09 / 1618+78-1619+31	150	150	302	378	-228	0	-228
0010	USH 141 (MAINLINE) AND BEAMGUARD (MIDDLE INLET CRK)	192+68-203+00 (MAINLINE) 193+68-194+21 / 194+68-201+39	432	432	1,431	1,789	-1,357	0	-1,357
0010	BEAMGUARD (SMITH CRK)	193+68-194+21 / 194+68-201+39	672	672	233	292	380	380	0
		SUBTOTAL	1,254	1,254	1,967	2,459	-1,204	380	-1,585
0010	CTH X (WEST)	109+21 - 110+60	15	15	1	1	14	14	0
0010	CTH X (EAST)	107+76 - 109+12	25	25	103	129	-105	0	-105
0010	NOQUEBAY RD	67+34- 68+58	9	9	15	18	-9	0	-9
0010	SMITH CREEK (WEST)	75+50 - 76+33	10	10	37	47	-37	0	-37
0010	SMITH CREEK (EAST)	72+45 - 73+66	18	18	8	10	8	8	0
0010	TOWNLINE RD	78+40 - 79+45	14	14	22	27	-13	0	-13
0010	VAN RD	86+80 - 87+50	17	17	8	10	7	7	0
0010	WAYSIDE RD	87+35 - 88+74	78	78	75	94	-16	0	-16
0010	DESCHANE AVE	10+30 - 10+47	39	39	4	5	33	33	0
0010	FINNELLI AVE AVE	10+34 - 10+50	51	51	7	9	42	42	0
	SUBTOTAL		275	275	280	351	-75	105	-180
	GRANDTOTALS		24,625	24,625	14,029	17,536	7,089	8,825	-1,736

TOTAL EXCAVATION COMMON 24,700.00

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Borrow material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well.
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
6) Marsh Excavation - to be backfilled with Select Borrow Material. Note: this is designers choice, can be backfilled with Borrow, or Cut as well. Item number 20505
7) Rock Excavation item number 205.0200
8) Reduced Marsh in Fill - Excavated Marsh material is usuable in Fills outside the 1:1 slope. Marsh in Fill Reduction factor = 0.6
9) Reduced EBS in Fill - Excavated EBS material is usuable in Fills outside the 1:1 slope. EBS in Fill Reduction factor = 0.8
10) Expanded Marsh Backfill - This is to be filled with Select Borrow material. Marsh Backfill Factor = 1.5. Item number 208.1100
11) Expanded EBS Backfill - This is to be filled with Select Borrow material. EBS Backfill Factor = 1.3. Item number 208.1100
12) Expanded Rock - Factor = 1.1
13) Expanded Fill. Factor = 1.25
14) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

FINISHING ROADWAY (PROJECT) 01. 1491-09-71

CATEGORY	LOCATION	213.0100.01 EACH
0010	PROJECT	1
	TOTAL	1

3/4" BASE AGGREGATE DENSE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL
0010	1614+04	-	1640+41	USH 141 LT	494.1	4.94
0010	1613+89	-	1640+95	USH 141 RT	486.6	4.87
0010	5+28	-	8+79	USH 141 RT	17.2	0.17
0010	8+32	-	9+49	USH 141 LT	5.5	0.06
0010	9+06	-	14+13	USH 141 RT	26.5	0.27
0010	10+78	-	16+20	USH 141 LT	35.7	0.36
0010	15+35	-	16+20	USH 141 RT	10.0	0.10
0010	16+20	-	19+20	USH 141 LT	52.1	0.52
0010	16+20	-	19+20	USH 141 RT	52.1	0.52
0010	19+20	-	84+72	USH 141 LT	1337.3	13.37
0010	19+20	-	72+50	USH 141 RT	993.1	9.93
0010	72+50	-	79+50	USH 141 RT	109.9	1.10
0010	67+73	-	68+37	NOQUEBAY RD	26.6	0.27
0010	79+50	-	83+85	USH 141 RT	89.2	0.89
0010	83+85	-	87+00	USH 141 RT	62.5	0.63
0010	84+72	-	87+00	USH 141 LT	47.1	0.47
0010	87+28	-	92+42	USH 141 RT	88.2	0.88
0010	87+28	-	92+42	USH 141 LT	98.9	0.99
0010	92+42	-	129+59	USH 141 RT	1621.5	16.22
0010	92+42	-	129+53	USH 141 LT	1611.1	16.11
0010	75+05	-	76+14	SMITH CREEK RD	41.8	0.42
0010	72+62	-	73+57	SMITH CREEK RD	36.2	0.36
0010	130+88	-	172+92	USH 141 RT	1823.1	18.23
0010	130+84	-	186+85	USH 141 LT	2362.6	23.63
0010	174+22	-	193+16	USH 141 RT	824.9	8.25
0010	86+40	-	87+47	VAN RD	41.5	0.42
0010	188+19	-	193+16	USH 141 LT	208.3	2.08
0010	193+16	-	196+96	USH 141 RT	52.4	0.52
0010	193+16	-	197+23	USH 141 LT	65.3	0.65
0010	197+84	-	199+88	USH 141 RT	33.6	0.34
0010	87+58	-	88+78	WAYSIDE RD	43.9	0.44
0010	198+08	-	215+37	USH 141 LT	298.1	2.98
0010	201+21	-	216+90	USH 141 RT	301.8	3.02
0010	218+78	-	226+74	USH 141 RT	117.2	1.17
0010	221+14	-	226+74	USH 141 LT	63.9	0.64
0010	108+13	-	109+49	CTH X	57.9	0.58
0010	228+34	-	232+29	USH 141 RT	77.0	0.77
0010				UNDISTRIBUTED	85.0	0.85
				TOTAL	13800	140

CONCRETE PAVEMENT APPROACH SLAB

CATEGORY	STATION	TO	STATION	LOCATION	415.0410 SY	REMARKS
0010	86+67	-	86+83	USH 141 LT & RT	77	SMITH CREEK STRUCT
0010	87+46	-	87+62	USH 141 LT & RT	77	SMITH CREEK STRUCT
				TOTAL	155	

1-1/4 INCH BASE AGGREGATE DENSE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1-1/4 INCH TON	624.0100 WATER MGAL
0010	58+85	-	59+05	USH 141	105.2	1.05
0010	67+00	-	67+20	USH 141	105.2	1.05
0010	115+30	-	115+50	USH 141	105.2	1.05
0010	130+65	-	130+85	USH 141	43.2	0.43
0010	155+60	-	155+80	USH 141	43.2	0.43
0010	178+70	-	179+10	USH 141	86.4	0.86
0010	200+90	-	201+30	USH 141	167.9	1.68
0010	208+15	-	208+35	USH 141	105.2	1.05
0010	226+12	-	226+74	USH 141	250.1	2.50
0010	1639+53	-	1666+85	USH 141 RT	4534.3	45.34
0010	1639+00	-	1666+85	USH 141 LT	4657.8	46.58
0010	10+28	-	10+84	FINELLI AVE	329.1	3.29
0010	12+27	-	12+54	DESCHANE AVE	144.4	1.44
0010	72+50	-	79+55	USH 141 RT	1489.6	14.90
0010	67+28	-	68+06	NOQUEBAY RD	534.0	5.34
0010	86+63	-	87+03	USH 141	245.0	2.45
0010	87+26	-	87+67	USH 141	251.1	2.51
0010	92+41	-	129+13	USH 141 RT	6753.2	67.53
0010	92+41	-	129+00	USH 141 LT	8905.5	89.06
0010	129+13	-	131+35	USH 141 RT	544.1	5.44
0010	75+08	-	76+48	SMITH CREEK RD	675.6	6.76
0010	129+00	-	133+48	USH 141 LT	1173.7	11.74
0010	72+26	-	73+54	SMITH CREEK RD	624.7	6.25
0010	131+35	-	172+48	USH 141 RT	9352.3	93.52
0010	133+48	-	186+59	USH 141 LT	10526.9	105.27
0010	172+48	-	174+69	USH 141 RT	567.2	5.67
0010	78+26	-	79+73	TOWNLINE RD	684.7	6.85
0010	174+69	-	193+16	USH 141 RT	4133.9	41.34
0010	186+59	-	193+16	USH 141 LT	1113.9	11.14
0010	86+43	-	87+82	VAN RD	659.3	6.59
0010	199+35	-	202+24	USH 141 RT	516.4	5.16
0010	87+26	-	88+75	WAYSIDE RD	716.6	7.17
0010	219+22	-	219+69	USH 141 LT	29.2	0.29
0010	222+24	-	229+54	USH 141 RT	1395.1	13.95
0010	107+71	-	109+46	CTH X	1061.5	10.62
				TOTAL	63000	630

BASE PATCHING ASPHALTIC

CATEGORY	STATION	TO	STATION	LOCATION	390.0201 TON	REMARKS
0010	58+85	-	59+05	USH 141	15	PIPE REPLACEMENT
0010	67+00	-	67+20	USH 141	15	PIPE REPLACEMENT
0010	115+30	-	115+50	USH 141	15	PIPE REPLACEMENT
0010	130+65	-	130+85	USH 141	15	PIPE REPLACEMENT
0010	155+60	-	155+80	USH 141	15	PIPE REPLACEMENT
0010	178+70	-	179+10	USH 141	31	PIPE REPLACEMENT
0010	208+15	-	208+35	USH 141	15	PIPE REPLACEMENT
0010	219+32	-	219+69	USH 141 LT	2	PARKING LOT
0010	226+12	-	226+74	USH 141	49	PIPE REPLACEMENT
				TOTAL	175	

REHEATING HMA LONGITUDINAL JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	460.4110.S LF	REMARKS
0010	1613+95	-	1641+00	USH 141	5053	
0010	1640+33	-	1692+90	USH 141	5257	
0010	1640+33	-	1692+90	USH 141 LT	5257	
0010	1640+33	-	1692+90	USH 141 RT	5257	
0010	1693+42	-	1701+01	USH 141	759	
0010	1693+42	-	1701+01	USH 141 LT	759	
0010	1693+42	-	1701+01	USH 141 RT	759	
0010	2+16	-	10+00	USH 141	784	
0010	2+16	-	10+00	USH 141 LT	784	
0010	2+16	-	10+00	USH 141 RT	784	
0010	10+00	-	86+83	USH 141	14596	
0010	87+47	-	99+42	USH 141	1195	
0010	99+42	-	185+32	USH 141	17180	
0010	99+42	-	185+32	USH 141 LT	17180	FULL WIDTH PASSING LANE
0010	185+32	-	197+29	USH 141	2344	
0010	197+88	-	232+29	USH 141	5053	
				TOTAL	83000	

ASPHALTIC SURFACE SAFETY ISLANDS

CATEGORY	STATION	TO	STATION	LOCATION	465.0305 TON	REMARKS
0010	219+22	-	219+69	USH 141 LT	12	PARKING LOT
0010	107+68	-	108+08	CTH X LT	5	CTH X ISLAND
				TOTAL	17	

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 SY
0010	1642+20	USH 141 RT	3
0010	1642+96	USH 141 LT	5
0010	1643+87	USH 141 RT	5
0010	1644+75	USH 141 RT	5
0010	1645+75	USH 141 LT	5
0010	1647+16	USH 141 RT	3
0010	1647+16	USH 141 LT	6
0010	1649+94	USH 141 RT	6
0010	1650+86	USH 141 RT	6
0010	1652+72	USH 141 RT	6
0010	1654+71	USH 141 RT	6
0010	1656+42	USH 141 RT	5
0010	1656+42	USH 141 LT	5
0010	1659+96	USH 141 RT	5
0010	1661+90	USH 141 RT	5
0010	1661+50	USH 141 LT	6
0010	1663+76	USH 141 RT	5
0010	1663+76	USH 141 LT	6
0010	1665+70	USH 141 RT	5
0010	1665+70	USH 141 LT	6
0010	78+80	NOQUEBAY RD RT	4
0010	78+65	NOQUEBAY RD LT	4
0010	75+85	SMITH CREEK RD LT	7
0010	76+20	SMITH CREEK RD RT	7
0010	129+60	USH 141 RT	7
0010	130+63	USH 141 RT	8
0010	78+70	TOWNLINE RD LT	5
0010	78+85	TOWNLINE RD RT	5
0010	88+00	WAYSIDE RD RT	8
0010	87+63	WAYSIDE RD LT	8
0010	108+25	CTH X LT	7
			174

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	LOCATION	465.0120 TON
0010	1617+25	USH 141 LT	8
0010	1628+94	USH 141 LT	11
0010	1641+71	USH 141 RT	15
0010	1650+25	USH 141 RT	10
0010	1651+58	USH 141 RT	9
0010	1654+35	USH 141 RT	11
0010	1656+03	USH 141 RT	10
0010	1658+15	USH 141 LT	10
0010	1661+40	USH 141 RT	17
0010	1662+00	USH 141 LT	18
0010	1662+80	USH 141 RT	10
0010	1664+75	USH 141 RT	9
0010	1666+11	USH 141 LT	12
0010	1666+23	USH 141 RT	12
0010	1692+60	USH 141 LT	13
0010	8+93	USH 141 RT	9
0010	14+79	USH 141 LT	10
0010	56+94	USH 141 RT	10
0010	60+25	USH 141 RT	14
0010	61+34	USH 141 LT	8
0010	62+96	USH 141 RT	7
0010	103+00	USH 141 LT	6
0010	214+04	USH 141 RT	5
0010	224+46	USH 141 LT	9
		TOTAL	251

ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 LF
0010	1614+22	-	1633+40	USH 141	1919
0010	16+79	-	30+07	USH 141	1328
0010	34+07	-	44+94	USH 141	1087
0010	48+94	-	75+86	USH 141	2692
0010	79+86	-	86+58	USH 141	672
0010	87+71	-	128+09	USH 141	4038
0010	132+29	-	171+66	USH 141	3936
0010	175+66	-	185+38	USH 141	973
0010	189+38	-	196+97	USH 141	759
0010	202+63	-	212+32	USH 141	969
				TOTAL	18400

HMA SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	455.0105 HMA PAVEMENT TYPE E-3 TON	REMARKS
0010	1613+95	-	1619+00	USH 141 LT	14	56	256	4" TOTAL
0010	1613+95	-	1621+00	USH 141 RT	21	82	377	4" TOTAL
0010	1619+00	-	1621+00	USH 141 LT	4	17	77	4" TOTAL
0010	1621+00	-	1637+33	USH 141	69	272	1252	4" TOTAL
0010	1637+33	-	1639+00	USH 141	6	28	111	TRANSITION
0010	1639+00	-	1639+53	USH 141	1	8	25	TRANSITION
0010	1639+00	-	1640+33	USH 141 LT	3	6	50	7" TOTAL
0010	1639+53	-	1640+33	USH 141 RT	1	3	21	7" TOTAL
0010	1639+53	-	1640+33	USH 141	2	11	30	TRANSITION
0010	1640+33	-	1640+90.32	USH 141	1	4	18	2" TOTAL
0010	1640+33	-	1640+90.32	USH 141 RT	1	3	27	7" TOTAL
0010	1640+33	-	1640+90.32	USH 141 LT	2	4	30	7" TOTAL
0010	1640+90.32	-	1666+85	USH 141	46	173	830	2" TOTAL
0010	1640+90.32	-	1666+85	USH 141 RT	75	173	1367	7" TOTAL
0010	1640+90.32	-	1666+85	USH 141 LT	75	173	1367	7" TOTAL
0010	1666+85	-	1692+99	USH 141	92	349	1673	2" TOTAL
0010	1693+33	-	14+13	USH 141	69	262	1257	2" TOTAL
0010	14+13	-	16+20	USH 141	6	23	110	2" TOTAL
0010	16+20	-	19+20	USH 141	10	50	175	TRANSITION
0010	19+20	-	72+50	USH 141	225	888	4086	4" TOTAL
0010	72+50	-	79+50	USH 141	25	97	447	4" TOTAL
0010	72+50	-	79+50	USH 141 RT	22	51	405	7" TOTAL
0010	79+50	-	84+15	USH 141	20	78	357	4" TOTAL
0010	84+15	-	86+63	USH 141	14	55	255	4" TOTAL
0010	86+63	-	86+83	USH 141	2	5	39	7" TOTAL
0010	87+46	-	87+66	USH 141	2	5	39	7" TOTAL
0010	87+66	-	90+15	USH 141	14	55	255	4" TOTAL
0010	90+15	-	92+41	USH 141	10	38	173	4" TOTAL
0010	92+41	-	98+53	USH 141	17	68	313	4" TOTAL
0010	92+41	-	98+53	USH 141 LT	16	37	293	7" TOTAL
0010	92+41	-	98+53	USH 141 RT	7	15	119	7" TOTAL
0010	98+53	-	128+53	USH 141	84	333	1533	4" TOTAL
0010	98+53	-	128+53	USH 141 LT	100	229	1810	7" TOTAL
0010	98+53	-	128+53	USH 141 RT	59	137	1080	7" TOTAL
0010	128+53	-	134+23	USH 141	16	63	291	4" TOTAL
0010	128+53	-	134+23	USH 141 LT	26	59	467	7" TOTAL
0010	128+53	-	134+23	USH 141 RT	19	44	350	7" TOTAL
0010	134+23	-	171+88	USH 141	106	418	1924	4" TOTAL
0010	134+23	-	171+88	USH 141 LT	122	280	2209	7" TOTAL
0010	134+23	-	171+88	USH 141 RT	107	245	1937	7" TOTAL
0010	171+88	-	175+00	USH 141	9	35	159	4" TOTAL
0010	171+88	-	175+00	USH 141 LT	10	22	175	7" TOTAL
0010	171+88	-	175+00	USH 141 RT	13	31	244	7" TOTAL
0010	175+00	-	186+34	USH 141	32	127	584	4" TOTAL
0010	175+00	-	186+34	USH 141 LT	23	53	417	7" TOTAL
0010	175+00	-	186+34	USH 141 RT	34	78	619	7" TOTAL
0010	186+34	-	188+94	USH 141	7	29	133	4" TOTAL
0010	186+34	-	188+94	USH 141 LT	7	15	122	7" TOTAL
0010	186+34	-	188+94	USH 141 RT	7	17	132	7" TOTAL
0010	188+94	-	193+16	USH 141	12	47	216	4" TOTAL
0010	188+94	-	193+16	USH 141 LT	5	11	84	7" TOTAL
0010	188+94	-	193+16	USH 141 RT	9	21	165	7" TOTAL
0010	193+16	-	197+24	USH 141	25	97	447	4" TOTAL
0010	197+83	-	202+24	USH 141	13	51	233	4" TOTAL
0010	199+35	-	202+24	USH 141 RT	8	18	140	7" TOTAL
0010	202+24	-	212+50	USH 141	43	171	787	4" TOTAL
0010	212+50	-	215+50	USH 141	10	53	187	TRANSITION
0010	215+50	-	222+24	USH 141	20	74	357	2" TOTAL
0010	222+24	-	229+54	USH 141	15	56	271	2" TOTAL
0010	222+24	-	229+54	USH 141 RT	23	53	416	7" TOTAL
0010	229+54	-	232+29	USH 141	7	28	135	2" TOTAL
0010	10+24	-	10+83	FINNELLI AVE	7	17	132	7" TOTAL
0010	12+24	-	12+54	DESCHANE AVE	3	7	59	7" TOTAL
0010	13+92	-	14+55	SOUTH AVE WEST	2	6	31	2" TOTAL
0010	15+03	-	15+46	SOUTH AVE EAST	1	4	20	2" TOTAL
0010	22+24	-	22+65	WITT AVE	1	6	27	2" TOTAL
0010	4+75	-	5+06	PINE AVE	1	4	18	2" TOTAL
0010	4+30	-	4+63	HALL AVE	1	4	18	2" TOTAL
0010	58+00	-	59+76	CTH A/W	6	21	102	2" TOTAL
0010	60+24	-	62+05	CTH W	5	20	95	2" TOTAL
0010	42+15	-	42+76	MIRA AVE	2	8	38	2" TOTAL
0010	30+24	-	30+95	OLD 141	2	9	41	2" TOTAL
0010	55+15	-	55+97	SEQUIN LANE	3	13	61	2" TOTAL
0010	60+15	-	61+09	OLD 141	4	13	64	2" TOTAL
0010	67+24	-	68+34	NOQUEBAY RD	10	24	186	7" TOTAL
0010	75+08	-	76+52	SMITH CREEK WEST	13	29	227	7" TOTAL
0010	72+22	-	73+54	SMITH CREEK EAST	12	27	211	7" TOTAL
0010	86+43	-	87+86	VAN RD	12	28	222	7" TOTAL
0010	87+22	-	88+75	WAYSIDE RD	13	30	239	7" TOTAL
0010	93+37	-	93+73	DROPP RD	1	3	17	2" TOTAL
0010	109+67	-	110+72	CTH X WEST	3	11	54	2" TOTAL
0010	107+67	-	109+46	CTH X EAST	20	45	355	7" TOTAL
				TOTAL	1970	6300	35700	

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CULVERT PIPE SUMMARY

CATEGORY	STATION	LOCATION	CULVERT PIPE CORRUGATED STEEL 12-INCH 521.0112 LF	CULVERT PIPE CORRUGATED STEEL 15-INCH 521.0115 LF	CULVERT PIPE CORRUGATED STEEL 18-INCH 521.0118 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH 522.0118 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH 522.0124 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH 522.0130 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH 522.0136 LF	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH 522.0142 LF	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH 521.1012 EACH	APRON ENDWALLS FOR CULVERT PIPE STEEL 15-INCH 521.1015 EACH	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH 521.1018 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH 522.1018 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH 522.1024 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH 522.1030 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH 522.1036 EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH 522.1042 EACH	REMARKS
0010	1650+30	USH 141 RT	-	54	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	1651+50	USH 141 RT	-	46	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	1654+30	USH 141 RT	-	46	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	1656+00	USH 141 RT	-	46	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	1659+70	USH 141 LT	46	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	1661+50	USH 141 RT	-	-	58	-	-	-	-	-	-	-	2	-	-	-	-	-	-	DRIVEWAY
0010	1662+90	USH 141 RT	-	-	52	-	-	-	-	-	-	-	2	-	-	-	-	-	-	DRIVEWAY
0010	1664+60	USH 141 LT	-	26	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	1664+80	USH 141 RT	-	-	52	-	-	-	-	-	-		2	-	-	-	-	-	-	DRIVEWAY
0010	1666+15	USH 141 LT	-	56	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	1666+25	USH 141 RT	-	-	54	-	-	-	-	-	-	-	2	-	-	-	-	-	-	DRIVEWAY
0010	100+25	USH 141 LT	26	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	103+00	USH 141 LT	42	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	113+25	USH 141 RT	-	40	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	DRIVEWAY
0010	124+40	USH 141 LT	64	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	128+25	USH 141 RT	54	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	135+90	USH 141 RT	40	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	147+90	USH 141 LT	-	-	32	-	-	-	-	-	-	-	2	-	-	-	-	-	-	DRIVEWAY
0010	148+25	USH 141 RT	-	-	40	-	-	-	-	-	-	-	2	-	-	-	-	-	-	DRIVEWAY
0010	171+79	USH 141 LT	50	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	175+32	USH 141 LT	50	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	224+80	USH 141 RT	28	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	225+35	USH 141 RT	50	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	DRIVEWAY
0010	12+41	DESCHANE AVE	-	-	-	56	-	-	-	-	-	-	-	2	-	-	-	-	-	
0010	58+95	USH 141	-	-	-	-	64	-	-	-	-	-	-	-	2	-	-	-	-	
0010	75+69	SMITH CREEK RD	-	-	-	80	-	-	-	-	-	-	-	2	-	-	-	-	-	
0010	130+75	USH 141	-	-	-	-	88	-	-	-	-	-	-	-	2	-	-	-	-	
0010	155+72	USH 141	-	-	-	-	80	-	-	-	-	-	-	-	2	-	-	-	-	
0010	87+84	WAYSIDE RD	-	-	-	-	-	-	96	-	-	-	-	-	-	-	2	-	-	
0010	208+25	USH 141	-	-	-	-	64	-	-	-	-	-	-	-	2	-	-	-	-	
0010	226+40	USH 141	-	-	-	-	88	-	-	-	-	-	-	-	2	-	-	-	-	SKEW = 39° 43' 22.8" RHF
0010	107+91	CTH X EAST	-	-	-	-	96	-	-	-	-	-	-	-	2	-	-	-	-	
0010	67+10	USH 141	-	-	-	-	-	96	-	-	-	-	-	-	-	2	-	-	-	
0010	115+40	USH 141	-	-	-	-	-	96	-	-	-	-	-	-	-	2	-	-	-	
0010	178+90	USH 141	-	-	-	-	-	-	-	104	-	-	-	-	-	-	-	-	2	
		TOTAL	450	314	288	136	480	192	96	104	20	14	12	4	12	4	2	2		

CONCRETE CURB & GUTTER 30-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0411 LF	REMARKS
0010	1640+33	-	1666+85	USH 141 LT	2557	
0010	1640+91	-	1644+75	USH 141 RT	337	
0010	10+24	-	10+84	FINNELLI AVE LT	89	
0010	10+24	-	10+84	FINNELLI AVE RT	89	
0010	1646+16	-	1659+98	USH 141 RT	1382	
0010	12+24	-	12+54	DESCHANE AVE LT	44	
0010	12+24	-	12+54	DESCHANE AVE RT	44	
0010	1660+90	-	1666+85	USH 141 RT	471	
0010	1692+30	-	1692+82	USH 141 LT	52	
0010	1692+30	-	1692+82	USH 141 RT	52	
0010	1692+30	-	1692+43	USH 141 LT	17	DRIVEWAY
0010	1692+76	-	1692+90	USH 141 LT	19	DRIVEWAY
0010	1693+47	-	1693+87	USH 141 LT	40	
0010	1693+47	-	1693+87	USH 141 RT	40	
0010	219+22	-	219+69	USH 141 LT	74	PARKING LOT
0010	107+68	-	108+08	CTH X LT	82	CTH X ISLAND
				TOTAL	5390	

SPECIAL 01. CONCRETE PAVEMENT REINFORCED 10-INCH

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0180.01 SY	REMARKS
0010	1692+82	-	1693+07	USH 141 LT & RT	140	RAILROAD CROSSING
0010	1693+23	-	1693+47	USH 141 LT & RT	140	RAILROAD CROSSING
				TOTAL	280	

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	601.0557 LF	REMARKS
0010	77+23	-	77+82	USH 141 RT	83	NOQUEBAY RD
0010	78+13	-	78+52	USH 141 RT	65	NOQUEBAY RD
0010	129+53	-	129+92	USH 141 LT	59	SMITH CREEK RD
0010	129+59	-	130+14	USH 141 RT	91	SMITH CREEK RD
0010	130+23	-	130+85	USH 141 LT	93	SMITH CREEK RD
0010	130+48	-	130+88	USH 141 RT	60	SMITH CREEK RD
0010	172+92	-	173+50	USH 141 RT	90	TOWNLINE RD
0010	173+81	-	174+22	USH 141 RT	61	TOWNLINE RD
0010	186+85	-	187+24	USH 141 LT	58	VAN RD
0010	187+54	-	188+19	USH 141 LT	95	VAN RD
0010	199+88	-	200+48	USH 141 RT	101	WAYSIDE RD
0010	200+82	-	201+21	USH 141 RT	57	WAYSIDE RD
0010	226+73	-	227+25	USH 141 RT	80	CTH X EAST
0010	227+85	-	228+34	USH 141 RT	68	CTH X EAST
				TOTAL	1060	

SPECIAL 04. CONCRETE CURB AND GUTTER 30-INCH HES TYPE D

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.04 LF
0010	1641+48	-	1641+95	USH 141 RT	47
0010	1661+69	-	1662+29	USH 141 LT	60
0010	1662+61	-	1663+00	USH 141 RT	39
0010	1664+59	-	1664+94	USH 141 RT	35
0010	1665+89	-	1666+24	USH 141 LT	35
0010	1665+98	-	1666+48	USH 141 RT	50
				TOTAL	270

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.7000 EACH
0010	1667+78	USH 141 RT	1
0010	1668+79	USH 141 LT	1
0010	1669+27	USH 141 RT	1
0010	1670+50	USH 141 RT/LT	2
0010	1679+08	USH 141 LT	1
0010	1685+99	USH 141 RT/LT	2
0010	1687+99	USH 141 RT/LT	2
0010	1690+47	USH 141 RT	1
0010	1691+98	USH 141 RT	1
0010	1694+36	USH 141 RT	1
0010	1694+47	USH 141 LT	1
0010	1695+47	USH 141 RT	1
0010	1695+72	USH 141 LT	1
0010	1696+97	USH 141 LT	1
0010	1697+51	USH 141 RT	1
0010	1698+30	USH 141 RT	1
0010	1698+48	USH 141 LT	1
0010	2+40	USH 141 LT	1
0010	5+29	USH 141 LT	1
		TOTAL	22

CONCRETE CURB & GUTTER 30-INCH TYPE A

CATEGORY	STATION	TO	STATION	LOCATION	601.0409 LF
0010	1692+81	-	1693+08	USH 141 LT	26
0010	1692+81	-	1692+89	USH 141 RT	6
0010	1693+41		1693+49	USH 141 LT	6
0010	1693+22		1693+49	USH 141 RT	25
				TOTAL	63

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BARRIER SYSTEM GRADING SHAPING FINISHING

CATEGORY	STATION	TO	STATION	LOCATION	614.0010 EACH
0010	1616+55	-	1617+09	USH 141 LT	1
0010	1618+78	-	1619+31	USH 141 RT	1
0010	193+68	-	194+21	USH 141 RT	1
0010	194+68	-	195+21	USH 141 LT	1
0010	200+85	-	201+39	USH 141 LT	1
0010	199+98	-	200+22	USH 141 RT	1
				TOTAL	6

MGS THRIE BEAM TRANSITION

CATEGORY	STATION	TO	STATION	LOCATION	614.2500 LF
0010	1614+03	-	1614+43	USH 141 LT	39.4
0010	1613+88	-	1614+30	USH 141 RT	39.4
0010	86+38	-	86+75	USH 141 LT	37.5
0010	86+38	-	86+75	USH 141 RT	37.5
0010	87+35	-	87+72	USH 141 LT	37.5
0010	87+35	-	87+72	USH 141 RT	37.5
0010	196+72	-	197+11	USH 141 RT	39.4
0010	196+97	-	197+36	USH 141 LT	39.4
0010	197+71	-	198+10	USH 141 RT	39.4
0010	197+96	-	198+35	USH 141 LT	39.4
				TOTAL	386

STEEL PLATE BEAM GUARD SHORT RADIUS

CATEGORY	STATION	TO	STATION	LOCATION	614.0345 LF	REMARKS
0010	199+98	-	200+54	USH 141 RT	100	56' RADIUS
				TOTAL	100	

GUARD POSTS TIMBER

CATEGORY	STATION	TO	STATION	LOCATION	615.0300 EACH
0010	218+10	-	220+68	USH 141 LT	30
				TOTAL	30

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
0010	PROJECT	0.5
		0.5

MGS GUARDRAIL 3

CATEGORY	STATION	TO	STATION	LOCATION	614.2300 LF
0010	1614+43	-	1616+55	USH 141 LT	212.5
0010	1614+28	-	1618+78	USH 141 RT	450.0
0010	85+63	-	86+38	USH 141 RT	75.0
0010	87+72	-	88+60	USH 141 LT	87.5
0010	194+21	-	196+72	USH 141 RT	250.0
0010	195+21	-	196+97	USH 141 LT	175.0
0010	198+10	-	199+98	USH 141 RT	187.5
0010	198+35	-	200+85	USH 141 LT	250.0
				TOTAL	1688

MGS GUARDRAIL TERMINAL EAT

CATEGORY	STATION	TO	STATION	LOCATION	614.2610 EACH
0010	1616+55	-	1617+09	USH 141 LT	1
0010	1618+78	-	1619+31	USH 141 RT	1
0010	85+92	-	86+45	USH 141 LT	1
0010	85+05	-	85+58	USH 141 RT	1
0010	88+72	-	89+25	USH 141 LT	1
0010	87+85	-	88+38	USH 141 RT	1
0010	193+68	-	194+21	USH 141 RT	1
0010	194+68	-	195+21	USH 141 LT	1
0010	200+85	-	201+39	USH 141 LT	1
				TOTAL	7

ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2

CATEGORY	STATION	LOCATION	614.0115 EACH
0010	87+96	WAYSIDE RD	1
		TOTAL	1

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1491-09-71

CATEGORY	LOCATION	618.0100.01 EACH
0010	PROJECT	1
	TOTAL	1

LANDSCAPING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	REMARKS
0010	1639+50	-	1666+85	USH 141 RT	2917	2042	1.8	0.0	52.5	26.3	
0010	1639+50	-	1666+85	USH 141 LT	4627	3239	2.9	0.0	83.3	41.6	
0010	1692+30	-	1693+87	USH 141 RT	79	0	0.0	0.0	1.4	0.7	
0010	1692+30	-	1693+87	USH 141 LT	79	0	0.0	0.0	1.4	0.7	
0010	74+25	-	78+80	USH 141 RT	333	233	0.2	9.0		3.0	
0010	67+27	-	68+34	NOQUEBAY RD LT	10	7	0.0	0.3		0.1	
0010	67+27	-	68+34	NOQUEBAY RD RT	147	103	0.1	4.0		1.3	
0010	84+00	-	90+50	USH 141 LT	700	0	0.4	18.9		6.3	STRUCT C-38-123
0010	84+00	-	90+50	USH 141 RT	700	0	0.4	18.9		6.3	STRUCT C-38-123
0010	93+00	-	129+50	USH 141 LT	7060	4942	4.4	190.6		63.5	
0010	93+00	-	129+50	USH 141 RT	7180	5026	4.5	193.9		64.6	
0010	75+20	-	76+49	SMITH CREEK RD LT	180	126	0.1	4.9		1.6	
0010	75+20	-	76+49	SMITH CREEK RD RT	180	126	0.1	4.9		1.6	
0010	72+25	-	73+25	SMITH CREEK RD LT	100	70	0.1	2.7		0.9	
0010	72+25	-	73+25	SMITH CREEK RD RT	161	113	0.1	4.4		1.5	
0010	130+85	-	173+00	USH 141 LT	9256	6479	5.8	249.9		83.3	
0010	130+85	-	173+00	USH 141 RT	9256	6479	5.8	249.9		83.3	
0010	78+25	-	79+50	TOWNLINE RD LT	120	84	0.1	3.2		1.1	
0010	78+25	-	79+50	TOWNLINE RD RT	130	91	0.1	3.5		1.2	
0010	173+00	-	186+85	USH 141 LT	3263	2284	2.1	88.1		29.4	
0010	174+22	-	194+25	USH 141 RT	3900	2730	2.5	105.3		35.1	
0010	86+60	-	87+85	VAN RD LT	57	40	0.0	1.5		0.5	
0010	86+60	-	87+85	VAN RD RT	55	39	0.0	1.5		0.5	
0010	188+17	-	195+20	USH 141 LT	603	422	0.4	16.3		5.4	
0010	87+25	-	88+75	WAYSIDE RD LT	158	111	0.1	4.3		1.4	
0010	87+25	-	88+75	WAYSIDE RD RT	299	209	0.2	8.1		2.7	
0010	222+00	-	226+73	USH 141 RT	631	442	0.4	17.0		5.7	
0010	107+70	-	109+46	CTH X LT	426	298	0.3	11.5		3.8	
0010	107+70	-	109+00	CTH X RT	196	137	0.1	5.3		1.8	
0010				UNDISTRIBUTED	5280	3696	3.3	142.6		47.5	
				TOTAL	58100	39600	37	1360	140	525	

3

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.152 SILT FENCE MAINTENANCE LF
0010	1635+25	-	1639+80	USH 141 LT	455	114
0010	1640+40	-	1641+55	USH 141 RT	115	29
0010	1642+20	-	1645+30	USH 141 RT	310	78
0010	1643+40	-	1657+96	USH 141 LT	1456	364
0010	1645+74	-	1649+20	USH 141 RT	346	87
0010	1650+50	-	1651+25	USH 141 RT	75	19
0010	1651+75	-	1654+15	USH 141 RT	240	60
0010	1654+50	-	1655+85	USH 141 RT	135	34
0010	1656+20	-	1660+15	USH 141 RT	395	99
0010	1658+30	-	1659+50	USH 141 LT	120	30
0010	1659+90	-	1661+75	USH 141 LT	185	46
0010	1660+60	-	1661+15	USH 141 RT	55	14
0010	1661+60	-	1662+60	USH 141 RT	100	25
0010	1662+20	-	1664+50	USH 141 LT	230	58
0010	1663+00	-	1664+60	USH 141 RT	160	40
0010	1664+65	-	1665+90	USH 141 LT	125	31
0010	1664+90	-	1666+00	USH 141 RT	110	28
0010	1666+30	-	1666+97	USH 141 LT	67	17
0010	1666+45	-	1666+97	USH 141 RT	52	13
0010	77+50	-	80+10	USH 141 LT	260	65
0010	77+50	-	80+10	USH 141 RT	260	65
0010	83+15	-	86+95	USH 141 LT	380	95
0010	83+15	-	86+95	USH 141 RT	380	95
0010	87+15	-	90+00	USH 141 LT	285	71
0010	87+15	-	90+00	USH 141 RT	285	71
0010	92+00	-	98+75	USH 141 RT	675	169
0010	92+00	-	100+20	USH 141 LT	820	205
0010	99+30	-	102+10	USH 141 RT	280	70
0010	100+50	-	102+75	USH 141 LT	225	56
0010	103+20	-	107+20	USH 141 LT	400	100
0010	107+50	-	113+00	USH 141 RT	550	138
0010	107+50	-	118+00	USH 141 LT	1050	263
0010	113+40	-	122+00	USH 141 RT	860	215
0010	123+00	-	124+00	USH 141 LT	100	25
0010	124+60	-	130+00	USH 141 LT	540	135
0010	130+00	-	135+80	USH 141 LT	580	145
0010	136+15	-	142+95	USH 141 LT	680	170
0010	144+00	-	148+20	USH 141 RT	420	105
0010	148+20	-	158+00	USH 141 LT	980	245
0010	148+50	-	158+00	USH 141 RT	950	238
0010	163+80	-	171+10	USH 141 RT	730	183
0010	170+00	-	171+50	USH 141 LT	150	38
0010	171+95	-	174+40	USH 141 LT	245	61
0010	174+00	-	183+00	USH 141 RT	900	225
0010	176+00	-	181+00	USH 141 LT	500	125
0010	193+50	-	197+10	USH 141 RT	360	90
0010	198+00	-	202+10	USH 141 LT	410	103
0010	198+00	-	202+10	USH 141 RT	410	103
0010				UNDISTRIBUTED	1900	475
				TOTAL	21300	5350

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	1613+95	-	232+28	PROJECT	6	3
				TOTAL	6	3

EROSION MAT URBAN CLASS I TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	628.2008 SY	REMARKS
0010	1640+33	-	1666+85	USH 141 LT	2063	BACK OF CURB
0010	1640+91	-	1644+75	USH 141 RT	299	BACK OF CURB
0010	10+24	-	10+84	FINNELLI AVE LT	69	BACK OF CURB
0010	10+24	-	10+84	FINNELLI AVE RT	69	BACK OF CURB
0010	1646+16	-	1659+98	USH 141 RT	1075	BACK OF CURB
0010	12+24	-	12+54	DESCHANE AVE LT	34	BACK OF CURB
0010	12+24	-	12+54	DESCHANE AVE RT	34	BACK OF CURB
0010	1660+90	-	1666+85	USH 141 RT	463	BACK OF CURB
0010	77+23	-	77+82	USH 141 RT	65	NOQUEBAY RD BOC
0010	78+13	-	78+52	USH 141 RT	51	NOQUEBAY RD BOC
0010	129+53	-	129+92	USH 141 LT	46	SMITH CREEK RD BOC
0010	129+59	-	130+14	USH 141 RT	71	SMITH CREEK RD BOC
0010	130+23	-	130+85	USH 141 LT	72	SMITH CREEK RD BOC
0010	130+48	-	130+88	USH 141 RT	47	SMITH CREEK RD BOC
0010	172+92	-	173+50	USH 141 RT	70	TOWNLINE RD BOC
0010	173+81	-	174+22	USH 141 RT	47	TOWNLINE RD BOC
0010	186+85	-	187+24	USH 141 LT	45	VAN RD BOC
0010	187+54	-	188+19	USH 141 LT	74	VAN RD BOC
0010	199+88	-	200+48	USH 141 RT	79	WAYSIDE RD BOC
0010	200+82	-	201+21	USH 141 RT	44	WAYSIDE RD BOC
0010	215+40	-	217+66	USH 141 LT	47	BACK OF CURB
0010	217+91	-	221+13	USH 141 LT	24	BACK OF CURB
0010	226+75	-	227+25	USH 141 LT	57	CTH X WEST BOC
0010	226+73	-	227+25	USH 141 RT	62	CTH X EAST BOC
0010	227+57	-	232+29	USH 141 LT	239	BACK OF CURB
0010	227+85	-	228+34	USH 141 RT	53	CTH X EAST BOC
0010	83+00	-	90+00	USH 141 LT & RT	1089	WETLAND
0010	93+40	-	98+85	USH 141 RT	424	WETLAND
0010	93+40	-	100+25	USH 141 LT	533	WETLAND
0010	148+15	-	157+00	USH 141 LT	688	WETLAND
0010	178+25	-	179+75	USH 141 RT	117	WETLAND
0010	198+00	-	202+00	USH 141 LT & RT	622	WETLAND
				TOTAL	7350	

3

EROSION MAT CLASS I TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	628.2004 SY
0010	1635+40	-	1640+75	USH 141 LT & RT	832
0010	1640+05	-	1640+80	USH 141 LT	58
0010	1640+40	-	1641+50	USH 141 RT	86
0010	1641+15	-	1643+35	USH 141 LT	171
0010	1641+95	-	1645+25	USH 141 LT	257
0010	1643+70	-	1657+95	USH 141 LT	1108
0010	1645+75	-	1651+40	USH 141 RT	439
0010	1651+75	-	1654+15	USH 141 RT	187
0010	1654+50	-	1655+85	USH 141 RT	105
0010	1656+25	-	1660+20	USH 141 RT	307
0010	1658+35	-	1659+50	USH 141 LT	89
0010	1659+90	-	1661+75	USH 141 LT	144
0010	1660+65	-	1661+15	USH 141 RT	39
0010	1661+60	-	1662+60	USH 141 RT	78
0010	1662+25	-	1664+40	USH 141 LT	167
0010	1663+00	-	1664+60	USH 141 RT	124
0010	1664+60	-	1665+80	USH 141 LT	93
0010	1664+90	-	1666+00	USH 141 RT	86
0010	1666+40	-	1666+95	USH 141 LT & RT	86
0010	73+10	-	75+55	USH 141 LT	191
0010	73+10	-	75+85	USH 141 RT	214
0010	76+10	-	80+00	USH 141 LT & RT	607
0010	99+30	-	128+10	USH 141 RT	2240
0010	100+50	-	102+75	USH 141 LT	175
0010	103+20	-	107+20	USH 141 LT	311
0010	107+50	-	124+00	USH 141 LT	1283
0010	124+60	-	130+00	USH 141 LT	420
0010	128+45	-	130+00	USH 141 RT	121
0010	130+00	-	135+75	USH 141 LT & RT	894
0010	136+10	-	147+75	USH 141 LT & RT	1812
0010	157+00	-	165+10	USH 141 LT	630
0010	148+50	-	173+60	USH 141 RT	1952
0010	165+40	-	171+60	USH 141 LT	482
0010	172+00	-	175+00	USH 141 LT	233
0010	173+60	-	178+25	USH 141 RT	362
0010	179+75		184+90	USH 141 RT	401
0010	175+50	-	187+40	USH 141 LT	926
0010	185+15	-	187+40	USH 141 RT	175
0010	187+70	-	197+00	USH 141 RT	723
0010	222+90	-	224+15	USH 141 LT	97
0010	223+25	-	224+70	USH 141 RT	113
0010	224+75	-	226+90	USH 141 LT	167
0010	224+90	-	225+15	USH 141 RT	19
0010	225+50	-	227+45	USH 141 RT	152
0010	227+45	-	232+00	USH 141 RT	354
0010	229+00	-	230+75	USH 141 LT	136
0010				UNDISTRIBUTED	350
				TOTAL	20000

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF
0010	1635+40	USH 141 LT & RT	30
0010	1636+40	USH 141 LT & RT	30
0010	1637+40	USH 141 LT & RT	30
0010	1638+40	USH 141 LT & RT	30
0010	1639+40	USH 141 LT & RT	30
0010	1640+70	USH 141 LT & RT	30
0010	72+65	USH 141 RT	15
0010	73+50	USH 141 LT	15
0010	75+00	USH 141 LT & RT	30
0010	76+35	USH 141 LT	15
0010	77+00	USH 141 RT	15
0010	77+50	USH 141 LT	15
0010	79+00	USH 141 LT & RT	30
0010	80+00	USH 141 LT & RT	30
0010	82+00	USH 141 LT & RT	30
0010	90+00	USH 141 LT & RT	30
0010	91+00	USH 141 LT & RT	30
0010	92+00	USH 141 LT & RT	30
0010	93+50	USH 141 LT & RT	30
0010	95+00	USH 141 LT & RT	30
0010	167+30	USH 141 LT & RT	30
0010	168+80	USH 141 LT & RT	30
0010	170+10	USH 141 LT & RT	30
0010	171+25	USH 141 LT & RT	30
0010	172+50	USH 141 LT & RT	30
0010	173+60	USH 141 LT	15
0010	178+90	USH 141 RT	15
0010	203+00	USH 141 LT & RT	30
0010	204+00	USH 141 LT & RT	30
0010	205+00	USH 141 LT & RT	30
		TOTAL	795

ROCK BAGS

CATEGORY	LOCATION	628.7570 EACH
0010	UNDISTRIBUTED	300
	TOTAL	300

INLET PROTECTION TYPE C

CATEGORY	STATION	LOCATION	628.7015 EACH
0010	1667+78	USH 141 RT	1
0010	1668+79	USH 141 LT	1
0010	1669+27	USH 141 RT	1
0010	1670+50	USH 141 LT	1
0010	1670+50	USH 141 RT	1
0010	1673+49	USH 141 LT	1
0010	1673+49	USH 141 RT	1
0010	1676+15	USH 141 LT	1
0010	1676+15	USH 141 RT	1
0010	1679+08	USH 141 LT	1
0010	1682+60	USH 141 RT	1
0010	1682+60	USH 141 LT	1
0010	1685+99	USH 141 RT	1
0010	1685+99	USH 141 LT	1
0010	1687+99	USH 141 RT	1
0010	1687+99	USH 141 LT	1
0010	4+40	HALL AVE RT	1
0010	4+43	HALL AVE LT	1
0010	1690+47	USH 141 RT	1
0010	1690+47	USH 141 LT	1
0010	1691+98	USH 141 RT	1
0010	1691+98	USH 141 LT	1
0010	1694+36	USH 141 RT	1
0010	1694+47	USH 141 LT	1
0010	1695+47	USH 141 RT	1
0010	1695+72	USH 141 LT	1
0010	1696+97	USH 141 LT	1
0010	1697+51	USH 141 RT	1
0010	1698+30	USH 141 RT	1
0010	1698+48	USH 141 LT	1
0010	59+33	CTH A & W LT	1
0010	2+40	USH 141 LT	1
0010	3+55	USH 141 LT	1
0010	3+55	USH 141 RT	1
0010	5+29	USH 141 LT	1
		TOTAL	35

TURBIDITY BARRIER

CATEGORY	STATION	LOCATION	628.6005 SY	REMARKS
0010	87+12	USH 141	66	SHORE OF SMITH CREEK
0010	87+19	USH 141	66	SHORE OF SMITH CREEK
		TOTAL	140	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH
0010	10+39	OWL LANE	3
0010	12+41	DESCHANE AVE	3
0010	1650+00	DRIVEWAY RT	3
0010	1651+50	DRIVEWAY RT	3
0010	1654+30	DRIVEWAY RT	3
0010	1656+00	DRIVEWAY RT	3
0010	1661+50	DRIVEWAY RT	3
0010	1662+75	DRIVEWAY RT	3
0010	1664+50	DRIVEWAY RT	3
0010	1666+25	DRIVEWAY RT	3
0010	58+95	USH 141	4
0010	67+10	USH 141	4
0010	115+40	USH 141	4
0010	130+75	USH 141	4
0010	155+70	USH 141	4
0010	178+90	USH 141	5
0010	201+10	USH 141	4
0010	208+25	USH 141	4
0010	226+50	USH 141	4
0010	227+45	USH 141	4
		TOTAL	71

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH
0010	58+95	USH 141 LT & RT	2
0010	67+10	USH 141 LT & RT	2
0010	115+40	USH 141 LT & RT	2
0010	130+75	USH 141 LT & RT	2
0010	155+72	USH 141 LT & RT	2
0010	178+90	USH 141 LT & RT	2
0010	87+84	WAYSIDE RD	2
0010	208+25	USH 141 LT & RT	2
0010	226+50	USH 141 LT & RT	2
0010	107+91	CTH X	2
		TOTAL	20

FIELD OFFICE TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	642.5001 EACH
0010	1613+95	-	232+29	PROJECT	1
				TOTAL	1

TRAFFIC CONTROL (PROJECT) 01. 1491-09-71

CATEGORY	STATION	TO	STATION	LOCATION	643.0100.01 EACH
0010	1613+95	-	232+29	PROJECT	1
				TOTAL	1

TRAFFIC CONTROL DETOUR (PROJECT) 01. 1491-09-71

CATEGORY	LOCATION	643.2000.01 EACH
0010	PROJECT	1
	TOTAL	1

TRAFFIC CONTROL BARRICADES TYPE III

CATEGORY	LOCATION	BARRICADES	PROJECT DURATION	643.0420 DAY	REMARKS
0010	SIDE ROADS	22	21	462	SEE TRAFFIC CONTROL DETAIL
0010	STA. 1691+00 USH 141	5	21	105	RAILROAD CROSSING REPLACEMENT
0010	STA. 1694+00 USH 141	5	21	105	RAILROAD CROSSING REPLACEMENT
0010	SMITH CREEK (C-38-123)	14	50	700	
	TOTAL			1372 *	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	LOCATION	LIGHTS	PROJECT DURATION	643.0705 DAY	REMARKS
0010	SIDE ROADS	44	21	924	SEE TRAFFIC CONTROL DETAIL
0010	STA. 1691+00 USH 141	6	21	126	RAILROAD CROSSING REPLACEMENT
0010	STA. 1694+00 USH 141	6	21	126	RAILROAD CROSSING REPLACEMENT
0010	SMITH CREEK (C-38-123)	16	50	800	
	TOTAL			1976 *	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	637.2215 SIGNS FOLDING TYPE II REFLECTIVE H S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
	1 TO 11	VACANT												
0010	12	USH 141, AT PESHTIGO RIVER	W14-3	48" X 36"		6.00			1			1	1	
0010	13	"	I3-1	54" X 24"	9.00			1				1	1	PESHTIGO RIVER, SEE SIGN DETAIL SHEET
0010	13A	"	D2-3	84" X 36"	21.00					2				COLEMAN 12, LENA 20, GREEN BAY 52, SEE SIGN DETAIL SHEET
0010	14	USH 141, N. OF PESHTIGO RIVER	W3-5	36" X 36"		9.00			1			1	1	45 MPH
0010	15	"	S3-1	36" X 36"		9.00			1			1	1	
0010	16	"	S3-1	36" X 36"		9.00			1			1	1	
0010	17	USH 141, S. OF OWL LANE	R2-1	24" X 30"	5.00			1				1	1	45 MPH
0010	18	"	R2-1	24" X 30"	5.00			1				1	1	55 MPH
0010	19	"	D7-52	72" X 90"	45.00						2	1	2	SEE SIGN DETAIL SHEET
0010	20	"	I2-3	60" X 24"	10.00			2				1	2	CRIVITZ, SEE SIGN DETAIL SHEET
0010	21	OWL LANE	R1-1	30" X 30"	5.18			1				1	1	
0010	22	USH 141, N. OF OWL LANE	R2-1	24" X 30"	5.00			1				1	1	35 MPH
0010	23	"	D7-68	48" X 36"	12.00			1				1	1	SEE SIGN DETAIL SHEET
0010	24	"	W4-2R	36" X 36"		9.00			1					
0010	25	"	R1-1	30" X 30"	5.18			1				1	1	
0010	26	"	R2-1	24" X 30"	5.00			1				1	1	45 MPH
0010	27	"												KEEP VILLAGE BUILDING PERMIT SIGN AS IS
0010	28	"	R2-1	24" X 30"	5.00			1				1	1	35 MPH
0010	29	"	W8-3									1	1	
0010	30	USH 141, S. OF DESCHANE AVE	W14-3	48" X 36"		6.00			1			1	1	
0010	31	DESCHANE AVE	R1-1	30" X 30"	5.18			1				1	1	
0010	32	USH 141, S. OF SOUTH ST	R7-1D	24" X 30"	5.00			1				1	1	
0010	33	"	R7-1D	18" X 24"	3.00			1				1	1	
0010	34	"	R2-1	24" X 30"	5.00					1		1	1	35 MPH
		PAGE SUBTOTALS			150.54	48.00	0.00	14	6	3	2	21	23	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	637.2215 SIGNS FOLDING TYPE II REFLECTIVE H S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	35	USH 141, S. OF SOUTH ST	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #34
0010	36	SOUTH ST	R1-1	30" X 30"	5.18			1				1	1	
0010	37	"	R1-1	30" X 30"	5.18			1				1	1	
0010	38	USH 141, N. OF SOUTH ST	R2-1	24" X 30"	5.00					1		1	1	35 MPH
0010	39	"	R7-1D	18" X 24"	3.00							1		
0010	40	"	W4-2R									1	1	
0010	41	"	R7-1D	18" X 24"	3.00			1				1		
0010	42	"	R7-1D	24" X 30"	5.00			1				1	1	
0010	43	"	R2-1	24" X 30"	5.00					1		1	1	35 MPH
0010	44	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #43
0010	45	USH 141, S. OF PINE AVE	J4-1	24" X 36"	6.00				1			2	1	SOUTH USH 141
0010	46	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #45
0010	47	"	R7-1D	24" X 30"	5.00							1		
0010	48	"	R2-1	24" X 30"	5.00							1		
0010	49	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #48
0010	50	"	R2-1	24" X 30"	5.00			1				1	1	35 MPH
0010	51	PINE AVE	R1-1	30" X 30"	5.18			1				1	1	
0010	52	USH 141, N. OF PINE AVE	W10-1	36" X 36"	7.07				1			1	1	
0010	53	"	W10-1A	24" X 12"	2.00							1		MOUNT BELOW SIGN #52
0010	54	"	R59-51	36" X 36"	9.00					1		1	1	
0010	55	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #54
0010	56	HALL AVE	R1-1	30" X 30"	5.18			1				1	1	
0010	57	USH 141, N. OF HALL AVE	J1-1	24" X 39"	6.50				1			2	1	JCT CTH W
0010	58	"	W10-1									1	1	
0010	59	"	W10-1A									1		
0010	60	"	R2-1	24" X 30"	5.00					1		1	1	35 MPH
0010	61	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #60
0010	62	"	D7-68L	84" X 48"	28.00					2		1	2	SEE SIGN DETAIL SHEET
0010	63	"	W3-3	36" X 36"		9.00			1			1	1	
0010	64	"	R7-1D	18" X 24"	3.00							1		MOUNT ON BACKSIDE OF SIGN #63
0010	65	"	W3-3	36" X 36"		9.00			1			1	1	
0010	66	USH 141, S. OF CTH W	R2-1	24" X 30"	5.00					1		1	1	35 MPH
0010	67	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #66
0010	68	"	D7-53L	72" X 60"	30.00					2		1	2	SEE SIGN DETAIL SHEET
		PAGE SUBTOTALS			179.29	18.00	0.00	7	5	9	0	36	22	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	637.2215 SIGNS FOLDING TYPE II REFLECTIVE H S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	69	USH 141, S. OF CTH W	W10-1	36" X 36"	7.07					1		1	1	
0010	70	"	W10-1A	24" X 12"	2.00							1		MOUNT BELOW SIGN #69
0010	71	"	R7-1D	24" X 30"	5.00			1				1	1	
0010	72	"	J13-1	24" X 45"	7.50							2		CTH W, SEE PLAN SHEET, MOUNT TO TRAFFIC SIGNAL
0010	72A	"	R1-1F	36" X 36"			7.46							MOUNT BELOW SIGN #72 ON TRAFFIC SIGNAL
0010	73	CTH W	R1-1F	36" X 36"			7.46					1		MOUNT TO TRAFFIC SIGNAL
0010	74	"	R1-1F	36" X 36"			7.46					1		MOUNT TO TRAFFIC SIGNAL
0010	75	USH 141, N. OF CTH W	R2-1	24" X 30"	5.00			1				1	1	35 MPH
0010	75A	"	R1-1F	36" X 36"			7.46							MOUNT TO TRAFFIC SIGNAL
0010	76	"	J2-2	48" X 57"	19.00					1		5	1	CTH W, TO CTH A, SEE PLAN SHEET
0010	77	"	W9-1R	30" X 30"		6.25			1			1	1	
0010	78	"	R7-1D	24" X 30"	5.00				1			1	1	
0010	79	"	J4-1	24" X 36"	6.00				1			2	1	NORTH USH 141
0010	80	"	D7-68L	84" X 48"	28.00					2		1	2	SEE SIGN DETAIL SHEET
0010	81	"	R7-1D	18" X 24"	3.00							1		MOUNT BELOW SIGN #80 AND ON LEFT POST
0010	82	"	W3-3	36" X 36"		9.00				1		1	1	
0010	83	"	R7-53L	18" X 24"	3.00							1		MOUNT BELOW SIGN #82
0010	84	"	W4-2R	36" X 36"		9.00			1			1	1	
0010	85	"	R2-1	24" X 30"	5.00			1				1	1	35 MPH
0010	86	"	R1-1	30" X 30"	5.18			1				1	1	
0010	87	USH 141, S. OF OLD HWY 141	W5-52R	12" X 36"		3.00		1				1	1	
0010	88	"	R2-1	24" X 30"	5.00			1				1	1	45 MPH
0010	89	"	J1-1	24" X 39"	6.50				1			2	1	JCT CTH W
0010	90	OLD HWY 141	R1-1	30" X 30"	5.18			1				1	1	
0010	91	"	R1-1	30" X 30"	5.18			1				1	1	
0010	92	USH 141, N. OF OLD HWY 141	I2-3	60" X 24"	10.00			2				1	2	CRIVITZ, SEE SIGN DETAIL SHEET
0010	93	"	R59-51	36" X 36"	9.00				1			1	1	
0010	94	"	W14-3	48" X 36"		6.00						1		MOUNT ON BACKSIDE OF SIGN #93
0010	95	"	R2-1	24" X 30"	5.00			1				1	1	55 MPH
0010	96	"	R2-1	24" X 30"	5.00			1				1	1	45 MPH
0010	97	"	D1-1	72" X 15"	7.50			2				1	2	SEQUIN LN, SEE SIGN DETAIL SHEET
0010	98	"	W3-5	36" X 36"		9.00			1			1	1	45 MPH
0010	99	SEQUIN LANE	R1-1	30" X 30"	5.18			1				1	1	
0010	100	USH 141, N. OF SEQUIN LANE	D2-3	84" X 36"	21.00					2		1	2	WAUSAUKEE 10, PEMBINE 29, IRON MTN 44, SEE SIGN DETAIL
0010	101	"	D1-1	102" X 15"	10.63			2				1	2	OLD HWY 141, SEE SIGN DETAIL SHEET
0010	102	"	D1-1	72" X 15"	7.50			2				1	2	SEQUIN LA, SEE SIGN DETAIL SHEET
		PAGE SUBTOTALS			203.42	42.25	29.84	19	7	7	0	41	33	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	637.2215 SIGNS FOLDING TYPE II REFLECTIVE H S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	103	OLD HWY 141	R1-1	30" X 30"	5.18			1				1	1	
0010	104	USH 141, N. OF OLD HWY 141	I55-56	30" X 36"	7.50				1			1	1	
0010	105	"	W14-3	48" X 36"		6.00			1			1	1	
0010	106	"	D1-1	102" X 15"	10.63			2						OLD HWY 141, SEE SIGN DETAIL SHEET
0010	108	"	W2-2	30" X 30"		6.25			1			1	1	
0010	109	"	D1-1	84" X 15"	8.75			2				1	2	NOQUEBAY RD, SEE SIGN DETAIL SHEET
0010	110	USH 141, AT NOQUEBAY RD	M1-4									1		
0010	111	"	W1-7	48" X 24"		8.00		1				1	1	
0010	112	NOQUEBAY RD	R1-1	30" X 30"	5.18				1			1	1	
0010	113	USH 141, N. OF NOQUEBAY RD	D1-1	84" X 15"	8.75			2				1	2	NOQUEBAY RD, SEE SIGN DETAIL SHEET
0010	114	USH 141, AT SMITH CREEK	W5-52L									1	1	
0010	115	"	W5-52R									1	1	
0010	116	"	I3-1	36" X 24"	6.00			1						SMITH CREEK
0010	117	"	I3-1	36" X 24"	6.00			1				1	1	SMITH CREEK
0010	118	"	W5-52R									1	1	
0010	119	"	W5-52L									1	1	
0010	120	"	W14-3	48" X 36"		6.00			1			1	1	
0010	121	USH 141, N. OF SMITH CREEK	R3-72	30" X 36"	7.50				1					
0010	122	"	W14-3	48" X 36"		6.00			1			1	1	
0010	123	"	W4-2R	36" X 36"		9.00			1					
0010	124	"	W4-2R	36" X 36"		9.00			1					
0010	125	"	W9-1R	36" X 36"		9.00			1					
0010	126	USH 141, S. OF SMITH CREEK RD	D1-61	84" X 24"	14.00				2			1	2	SMITH CREEK RD, SEE SIGN DETAIL SHEET
0010	127	"	I55-56	30" X 36"	7.50				1			1	1	CRIVITZ HIGH SCHOOL STUDENT COUNCIL
0010	128	SMITH CREEK RD	R1-1	30" X 30"	5.18			1				1	1	
0010	129	"	R1-1	30" X 30"	5.18			1				1	1	
0010	130	USH 141, N. OF SMITH CREEK RD	I55-56	30" X 36"	7.50				1			1	1	MIDDLE INLET VOLUNTEER FIRE DEPT & AUX
0010	131	"	R3-72	30" X 36"	7.50				1					
0010	132	"	D1-61	84" X 24"	14.00				2			1	2	SMITH CREEK RD, SEE SIGN DETAIL SHEET
0010	133	"	W14-3	48" X 36"		6.00			1			1	1	
0010	134	"	W14-3	48" X 36"		6.00			1			1	1	
0010	135	USH 141, S. OF TOWNLINE RD	W2-2	30" X 30"		6.25		1				1	1	
0010	136	"	D1-1	84" X 15"	8.75			2						TOWNLINE RD, SEE SIGN DETAIL SHEET
		PAGE SUBTOTALS			135.10	77.50	0.00	15	19	0	0	25	28	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	637.2215 SIGNS FOLDING TYPE II REFLECTIVE H S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	137	USH 141, AT TOWNLINE RD	W1-7	48" X 24"		8.00		1				1	1	
0010	138	TOWNLINE RD	R1-1	30" X 30"	5.18			1				1	1	
0010	139	USH 141, N. OF TOWNLINE RD	W14-3	48" X 36"		6.00			1			1	1	
0010	140	"	D1-1	60" X 15"	6.25			2				1	2	VAN RD, SEE SIGN DETAIL SHEET
0010	141	"	D1-1	84" X 15"	8.75			2				1	2	TOWNLINE RD, SEE SIGN DETAIL SHEET
0010	142	"	W14-3	48" X 36"		6.00			1			1	1	
0010	143	"	R4-3	24" X 30"	5.00			1				1	1	
0010	144	VAN RD	R1-1	30" X 30"	5.18			1				1	1	
0010	145	USH 141, AT VAN RD	W1-7	48" X 24"		8.00		1				1	1	
0010	146	USH 141, N. OF VAN RD	D1-1	78" X 15"	8.13			2				1	2	WAYSIDE RD, SEE SIGN DETAIL SHEET
0010	148	"	D1-1	60" X 15"	6.25			2				1	1	VAN RD, SEE SIGN DETAIL SHEET
0010	149	"	I3-1	66" X 24"	11.00			1				1	1	LOWER MIDDLE INLET, SEE SIGN DETAIL SHEET
0010	150	"	I3-1	66" X 24"	11.00			1				1	1	LOWER MIDDLE INLET, SEE SIGN DETAIL SHEET
0010	151	"	W3-6	36" X 36"		9.00			1					50 MPH
0010	152	"										2	1	ALSO REMOVE W13-1W
0010	153	WAYSIDE RD	R1-1	30" X 30"	5.18			1				1	1	
0010	154	USH 141, AT WAYSIDE RD	W1-7	48" X 24"	8.00			1				1	1	
0010	155	USH 141, N. OF WAYSIDE RD	J4-1	24" X 36"	6.00				1			2	1	NORTH USH 141
0010	156	"	M1-4									1		
0010	157	"	W14-3	48" X 36"		6.00						1		MOUNT ON BACKSIDE OF SIGN #155
0010	158	"	I2-3	72" X 24"	12.00			2				1	2	MIDDLE INLET, SEE SIGN DETAIL SHEET
0010	159	"	D1-1	72" X 15"	7.50			2				1	2	WAYSIDE RD, SEE SIGN DETAIL SHEET
0010	160	"	R4-51	36" X 48"	12.00					1				1/2 MILE
0010	161	"	R2-1	24" X 30"	5.00			1				1	1	50 MPH
0010	162	"	W14-3	48" X 36"		6.00						1		
0010	163	"	R2-1	24" X 30"	5.00			1				1	1	55 MPH
0010	164	USH 141, S. OF DROPP RD	J4-1									2	1	
0010	165	"	W11-8	30" X 30"	6.25			1				1	1	
0010	166	"	J1-1	24" X 39"	6.50				1			2	1	JCT CTH X
0010	167	DROPP RD	R1-1	30" X 30"	5.18			1				1	1	
0010	168	USH 141, N. OF DROPP RD	R2-1	24" X 30"	5.00			1				1	1	50 MPH
0010	169	"	R2-1	24" X 30"	5.00			1				1	1	50 MPH
0010	170	"	I55-56	30" X 36"	7.50				1			1	1	MIDDLE INLET VOLUNTEER FIRE DEPT & AUX
0010	172	USH 141, S. OF CTH X	R2-1	24" X 30"	5.00			1				1	1	50 MPH
0010	173	"	R3-20R											
0010	174	"	J4-1	24" X 36"	6.00				1			2	1	SOUTH USH 141
0010	175	"	J13-1	24" X 45"	7.50					1		2	1	CTH X, SEE PLAN SHEET
0010	176	"	W14-3	48" X 36"		6.00						1		MOUNT ON BACKSIDE OF SIGN #175
		PAGE SUBTOTALS			181.35	55.00	0.00	28	7	2	0	41	36	
		PROJECT TOTALS			**849.69**	**240.75**	**29.84**	**83**	**44**	**21**	**2**	**164**	**142**	

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TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	SIGNS	PROJECT DURATION	643.0900 DAY	REMARKS
0010	SOUTH PROJECT END	5	30	150	
0010	NORTH PROJECT END	5	30	150	
0010	2 MILES INTO WORK NB	1	30	30	ROAD WORK NEXT X MILES
0010	4 MILES INTO WORK NB	1	30	30	ROAD WORK NEXT X MILES
0010	2 MILES INTO WORK SB	1	30	30	ROAD WORK NEXT X MILES
0010	4 MILES INTO WORK SB	1	30	30	ROAD WORK NEXT X MILES
0010	FINELLI AVE	2	80	160	ADVANCED WARNING SIGNS
0010	DESCHANE AVE	2	80	160	ADVANCED WARNING SIGNS
0010	SOUTH AVE (WEST)	2	80	160	ADVANCED WARNING SIGNS
0010	SOUTH AVE (EAST)	2	80	160	ADVANCED WARNING SIGNS
0010	PINE AVE	2	80	160	ADVANCED WARNING SIGNS
0010	HALL AVE	2	80	160	ADVANCED WARNING SIGNS
0010	STA. 1691+00 USH 141	1	21	21	RAILROAD CROSSING REPLACEMENT
0010	STA. 1694+00 USH 141	1	21	21	RAILROAD CROSSING REPLACEMENT
0010	CTH A/W	2	80	160	ADVANCED WARNING SIGNS
0010	CTH W	2	80	160	ADVANCED WARNING SIGNS
0010	MIRA AVE	2	80	160	ADVANCED WARNING SIGNS
0010	OLD USH 141	2	80	160	ADVANCED WARNING SIGNS
0010	SEQUIN LANE	2	80	160	ADVANCED WARNING SIGNS
0010	OLD USH 141	2	80	160	ADVANCED WARNING SIGNS
0010	NOQUEBAY RD	2	80	160	ADVANCED WARNING SIGNS
0010	SMITH CREEK (C-38-123)	2	50	100	BRIDGE OUT
0010	SMITH CREEK RD (WEST)	2	80	160	ADVANCED WARNING SIGNS
0010	SMITH CREEK RD (EAST)	2	80	160	ADVANCED WARNING SIGNS
0010	TOWNLINE RD	2	80	160	ADVANCED WARNING SIGNS
0010	VAN RD	2	80	160	ADVANCED WARNING SIGNS
0010	WAYSIDE RD	2	80	160	ADVANCED WARNING SIGNS
0010	DROPP RD	2	80	160	ADVANCED WARNING SIGNS
0010	CTH X (WEST)	2	80	160	ADVANCED WARNING SIGNS
0010	CTH X (EAST)	2	80	160	ADVANCED WARNING SIGNS
0010	SOUTH END OF SHIFT	2	80	160	TRAFFIC SHIFT
0010	NORTH END OF SHIFT	2	80	160	TRAFFIC SHIFT
0010	SIDE ROADS	11	21	231	SIGN R11-2L, SEE TRAFFIC CONTROL DETAIL
	TOTAL			4473	

PAVEMENT MARKING PAINT 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0103 LF	REMARKS
0010	92+42	-	99+42	USH 141 LT	174	3'SKIPS
0010	99+42	-	185+32	USH 141 LT	2150	12.5' SKIPS
0010	185+32	-	192+32	USH 141 LT	174	3' SKIPS
				TOTAL	2500	

PAVEMENT MARKING EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0126 LF
0010	223+73	-	226+73	USH 141 RT	300
0010	107+99	-	108+56	CTH X ISLAND LT	114
				TOTAL	420

PAVEMENT MARKING SAME DAY EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0406 LF
0010	1614+22	-	1633+40	USH 141	2776
0010	1633+40	-	1640+41	USH 141	876
0010	1640+41	-	1645+35	USH 141	988
0010	1645+67	-	1660+28	USH 141	2922
0010	1660+60	-	1669+79	USH 141	1838
0010	1670+11	-	1679+09	USH 141	1796
0010	1679+41	-	1685+34	USH 141	1186
0010	1685+66	-	1689+70	USH 141	808
0010	1690+02	-	1700+38	USH 141	2072
0010	1700+82	-	1701+01	USH 141	38
0010	2+16	-	9+89	USH 141	1546
0010	10+21	-	10+78	USH 141	114
0010	10+78	-	15+50	USH 141	585
0010	15+50	-	51+00	USH 141	888
0010	51+00	-	87+25	USH 141	4525
0010	87+25	-	91+47	USH 141	100
0010	91+47	-	137+00	USH 141	9106
0010	137+00	-	153+25	USH 141	2025
0010	153+25	-	165+25	USH 141	2400
0010	165+25	-	175+50	USH 141	1288
0010	175+50	-	191+00	USH 141	3100
0010	191+00	-	202+00	USH 141	1375
0010	202+00	-	209+00	USH 141	175
0010	209+00	-	227+00	USH 141	2250
0010	227+00	-	232+50	USH 141	138
0010	57+90	-	59+51	CTH A & W	161
0010	60+51	-	62+14	CTH W	163
0010	109+55	-	110+46	CTH X	91
0010	107+77	-	109+55	CTH X	178
				TOTAL	45550

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PAVEMENT MARKING EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0106 WHITE LF	REMARKS
0010	1613+00	-	1614+13	USH 141 RT	113	EDGELINE
0010	1613+00	-	1614+28	USH 141 LT	128	EDGELINE
0010	1633+40	-	1640+91	USH 141 RT	763	EDGELINE
0010	1633+40	-	1640+41	USH 141 LT	701	EDGELINE
0010	1640+91	-	1700+38	USH 141 RT	1488	LANE SKIPS
0010	1640+41	-	1700+38	USH 141 LT	1500	LANE SKIPS
0010	1700+82	-	1701+01	USH 141 RT	13	LANE SKIPS
0010	1700+82	-	1701+01	USH 141 LT	13	LANE SKIPS
0010	2+16	-	13+00	USH 141 LT	275	LANE SKIPS
0010	2+16	-	9+49	USH 141 RT	300	LANE SKIPS
0010	5+24	-	12+75	USH 141 RT	751	EDGELINE
0010	12+75	-	14+14	USH 141 RT	34	3' SKIPS
0010	10+78	-	16+79	USH 141 LT	601	EDGELINE
0010	15+34	-	16+79	USH 141 RT	145	EDGELINE
0010	86+71	-	87+39	USH 141 LT	68	EDGELINE
0010	86+71	-	87+39	USH 141 RT	68	EDGELINE
0010	196+97	-	202+63	USH 141 LT	566	EDGELINE
0010	196+97	-	198+38	USH 141 RT	141	EDGELINE
0010	198+38		199+88	USH 141 RT	36	3' SKIPS
0010	201+21	-	202+63	USH 141 RT	142	EDGELINE
0010	212+32	-	217+38	USH 141 LT	506	EDGELINE
0010	212+32	-	226+73	USH 141 RT	1441	EDGELINE
0010	218+22	-	226+73	USH 141 LT	851	EDGELINE
0010	228+00	-	232+50	USH 141 LT	450	EDGELINE
0010	228+34	-	232+50	USH 141 RT	416	EDGELINE
				TOTAL	10550	

TEMPORARY PAVEMENT MARKING 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0100 LF
0010	1614+22	-	1633+40	USH 141	2776
0010	1633+40	-	1640+41	USH 141	876
0010	1640+41	-	1645+35	USH 141	988
0010	1645+67	-	1660+28	USH 141	2922
0010	1660+60	-	1669+79	USH 141	1838
0010	1670+11	-	1679+09	USH 141	1796
0010	1679+41	-	1685+34	USH 141	1186
0010	1685+66	-	1689+70	USH 141	808
0010	1690+02	-	1700+38	USH 141	2072
0010	1700+82	-	1701+01	USH 141	38
0010	2+16	-	9+89	USH 141	1546
0010	10+21	-	10+78	USH 141	114
0010	10+78	-	15+50	USH 141	585
0010	15+50	-	51+00	USH 141	888
0010	51+00	-	87+25	USH 141	4525
0010	87+25	-	91+47	USH 141	100
0010	91+47	-	137+00	USH 141	9106
0010	137+00	-	153+25	USH 141	2025
0010	153+25	-	165+25	USH 141	2400
0010	165+25	-	175+50	USH 141	1288
0010	175+50	-	191+00	USH 141	3100
0010	191+00	-	202+00	USH 141	1375
0010	202+00	-	209+00	USH 141	175
0010	209+00	-	227+00	USH 141	2250
0010	227+00	-	232+50	USH 141	138
				TOTAL	44920

LOCATING NO-PASSING ZONES

CATEGORY	STATION	TO	STATION	LOCATION	648.0100 MI
0010	1613+95	-	232+28	USH 141	5.992
				TOTAL	5.992

PAVEMENT MARKING RAILROAD CROSSING EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	647.011 EACH
0010	1690+27	-	1692+77	USH 141 RT	1
0010	1693+54	-	1696+04	USH 141 LT	1
				TOTAL	2

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TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0400 LF	REMARKS
0010	70+90	-	81+15	USH 141 LT	1025	WHITE EDGELINE, SHIFT LEFT
0010	70+90	-	81+15	USH 141 LT	1025	BLACK OUT EXIST EDGELINE
0010	68+70	-	83+35	USH 141	2930	DOUBLE YELLOW, SHIFT LEFT
0010	70+90	-	81+15	USH 141	1275	BLACK OUT EXIST CENTERLINE
0010	90+82	-	128+50	USH 141 RT	3768	WHITE EDGELINE, SHIFT RIGHT
0010	90+82	-	128+50	USH 141 RT	3768	BLACK OUT EXIST EDGELINE
0010	90+82	-	128+50	USH 141 LT	3768	WHITE EDGELINE, SHIFT RIGHT
0010	88+62	-	196+12	USH 141 RT	21500	DOUBLE YELLOW, SHIFT RIGHT
0010	90+82	-	193+92	USH 141	16000	BLACK OUT EXIST CENTERLINE
0010	90+82	-	128+50	USH 141 RT	3768	WHITE EDGELINE, SHIFT LEFT
0010	90+82	-	128+50	USH 141 LT	3768	WHITE EDGELINE, SHIFT LEFT
0010	88+62	-	196+12	USH 141 RT	21500	DOUBLE YELLOW, SHIFT LEFT
0010	130+83	-	172+90	USH 141 RT	4207	WHITE EDGELINE, SHIFT RIGHT
0010	130+83	-	172+90	USH 141 RT	4207	BLACK OUT EXIST EDGELINE
0010	130+83	-	172+90	USH 141 LT	4207	WHITE EDGELINE, SHIFT RIGHT
0010	130+83	-	172+90	USH 141 RT	4207	WHITE EDGELINE, SHIFT LEFT
0010	130+83	-	172+90	USH 141 LT	4207	WHITE EDGELINE, SHIFT LEFT
0010	174+20	-	193+92	USH 141 RT	1972	WHITE EDGELINE, SHIFT RIGHT
0010	174+20	-	193+92	USH 141 RT	1972	BLACK OUT EXIST EDGELINE
0010	174+20	-	193+92	USH 141 LT	1972	WHITE EDGELINE, SHIFT RIGHT
0010	174+20	-	193+92	USH 141 RT	1972	WHITE EDGELINE, SHIFT LEFT
0010	174+20	-	193+92	USH 141 LT	1972	WHITE EDGELINE, SHIFT LEFT
0010	197+75	-	203+84	USH 141 LT	609	WHITE EDGELINE, SHIFT LEFT
0010	197+75	-	203+84	USH 141 LT	609	BLACK OUT EXIST EDGELINE
0010	195+55	-	206+04	USH 141	2098	DOUBLE YELLOW, SHIFT LEFT
0010	197+75	-	203+84	USH 141	567	BLACK OUT EXIST CENTERLINE
0010	220+64	-	231+14	USH 141 LT	921	WHITE EDGELINE, SHIFT LEFT
0010	220+64	-	231+14	USH 141 LT	921	BLACK OUT EXIST EDGELINE
0010	218+44	-	233+34	USH 141	2980	DOUBLE YELLOW, SHIFT LEFT
0010	220+64	-	231+14	USH 141	888	BLACK OUT EXIST CENTERLINE
				TOTAL	124600	

SPECIAL 01. 4-INCH EPOXY YELLOW

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.01 LF
0010	1614+22	-	1633+40	USH 141	1919
0010	16+79	-	30+07	USH 141	325
0010	34+07	-	44+94	USH 141	263
0010	48+94	-	75+86	USH 141	3149
0010	79+86	-	86+58	USH 141	835
0010	87+71	-	128+09	USH 141	7412
0010	132+29	-	171+66	USH 141	6171
0010	175+66	-	185+38	USH 141	1944
0010	189+38	-	196+97	USH 141	1071
0010	202+63	-	212+32	USH 141	582
				TOTAL	23700

SPECIAL 02. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.02 LF	REMARKS
0010	1614+13	-	1633+40	USH 141 RT	1927	EDGELINE
0010	1614+28	-	1633+40	USH 141 LT	1912	EDGELINE
0010	16+79	-	31+39	USH 141 RT	1352	EDGELINE
0010	16+79	-	86+71	USH 141 LT	6992	EDGELINE
0010	32+53	-	46+15	USH 141 RT	1255	EDGELINE
0010	47+44	-	77+22	USH 141 RT	2978	EDGELINE
0010	78+51	-	86+71	USH 141 RT	820	EDGELINE
0010	87+39	-	129+55	USH 141 LT	4216	EDGELINE
0010	87+39	-	128+05	USH 141 RT	4066	EDGELINE
0010	128+05	-	129+55	USH 141 RT	38	3' SKIPS
0010	92+42	-	99+42	USH 141 LT	174	3' SKIPS
0010	130+85	-	186+85	USH 141 LT	5600	EDGELINE
0010	130+88	-	171+43	USH 141 RT	4055	EDGELINE
0010	171+43		172+93	USH 141 RT	38	3' SKIPS
0010	99+42	-	185+32	USH 141 LT	2150	12.5' SKIPS
0010	188+19	-	196+97	USH 141 LT	878	EDGELINE
0010	174+22	-	196+97	USH 141 RT	2275	EDGELINE
0010	185+32	-	192+32	USH 141 LT	174	3' SKIPS
0010	202+63	-	212+32	USH 141 LT	969	EDGELINE
0010	202+63	-	212+32	USH 141 RT	969	EDGELINE
				TOTAL	42200	

SPECIAL 03. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.03 LF
0010	74+23	-	77+23	USH 141 RT	300
0010	130+85	-	133+85	USH 141 LT	300
				TOTAL	600

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TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
0010	1	500' N OF TYPE 1 (64; ANTIGO/MARINETTE; EXIT 1 MILE) ON HWY 141 (NB)	FMS	15'-0"x7'-0"						105.00			SEE SIGN DETAIL
0010	2	ACROSS FROM SIGN # 1 (MEDIAN SIDE)	FMS	15'-0"x7'-0"						105.00			SEE SIGN DETAIL
0010	3	1000' N OF TYPE 1 (64; ANTIGO/MARINETTE; EXIT 1 MILE) ON HWY 141 (NB)	W20-2-A	48"x48"	1	50	50						
0010	4	ACROSS FROM SIGN # 3 (MEDIAN SIDE)	W20-2-A	48"x48"	1	50	50						
0010	5	1500' N OF SIGN # 3 ON HWY 141 NB	MO 4-8	36"x18"	1	50	50						
0010		"	MO 3-1	36"x18"	1	50	50						
0010		"	M1-4	36"x36"	1	50	50						141
0010		"	MO 5-2-R	30"x30"	1	50	50						
0010	6	ACROSS FROM SIGN # 5 (MEDIAN SIDE)	MO 4-8	36"x18"	1	50	50						
0010		"	MO 3-1	36"x18"	1	50	50						
0010		"	M1-4	36"x36"	1	50	50						141
0010		"	MO 5-2-R	30"x30"	1	50	50						
0010	7	1500' N OF SIGN # 5 ON HWY 141 NB	MO 4-8	36"x18"	1	50	50						
0010		"	MO 3-1	36"x18"	1	50	50						
0010		"	M1-4	36"x36"	1	50	50						141
0010		"	MO 5-2-R	30"x30"	1	50	50						
0010	8	ACROSS FROM SIGN # 7 (MEDIAN SIDE)	MO 4-8	36"x18"	1	50	50						
0010		"	MO 3-1	36"x18"	1	50	50						
0010		"	M1-4	36"x36"	1	50	50						141
0010		"	MO 5-2-R	30"x30"	1	50	50						
0010	9	LT OF TYPE 1 (64; ANTIGO/MARINETTE; EXIT TILT RIGHT ONLY) ON HWY 141 (NB)	MO 4-8	36"x18"	1	50	50						
0010		"	MO 3-1	36"x18"	1	50	50						
0010		"	M1-4	36"x36"	1	50	50						141
0010		"	MO 6-2	30"x30"	1	50	50						RIGHT
0010	10	LT OF W 2-6 (ROUND-A-BOUT AHEAD) ON NB OFF-RAMP TO HWY 64	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 5-1-R	21"x21"	1	50	50						
0010	11	100' S OF R1-2 (YIELD) ON NB OFF-RAMP @ HWY 64 EAST RAB	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-2	21"x21"	1	50	50						RIGHT
0010	12	MODIFY D2-2 (TILT LT 141 NORTH; 64 EAST TILT RT)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	EXISTING									
0010		"	M1-4	EXISTING									141
0010		"	MO 6-2	21"x21"	1	50	50						RIGHT - PLACE OVER EXISTING ARROW
0010		**GAP IN SIGN NUMBERING (13)**											
0010	14	100' E OF D4-5 (PARK & RIDE) SIGN ON HWY 64 (EB)	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	WO 20-2-A	48"x48"	1	50	50						
0010	15	D 1-1 (NORTH-141-TILT RT)									1		NORTH 141 TILT RT
0010	16	ACROSS FROM SIGN # 15 (RIGHT SIDE)	R 11-3-B	60"x30"	1	50	50	50	100				10 1/2 MILES
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						LEFT
0010	17	LT OF J4-1 (EAST-64) ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	18	D 1-62 ROUND-A-BOUT AHEAD (S-141/W-64, AHEAD; N-141-IRON MOUNTIAN)									1		NORTH-141-IRON MOUNTIAN
0010	19	MODIFY J1-2 (JCT 141; JCT BUS 141)	MO 4-8-A	24"x18"	1	50	50						
0010		"	M1-4	EXISTING									141
0010	20	200' W OF CTY Q INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	21	200' E OF CTY Q INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	22	200' W OF AUGUSTINE RD INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
		PAGE TOTAL			55		2,750	50	100	210	2	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
0010	23	200' E OF AUGUSTINE RD INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010		**GAP IN SIGN NUMBERING (23-59)**											
0010	60	LT OF J4-1 (W-64) @ CTY W ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	61	LT OF J4-1 (E-64) @ CTY W ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	62	LT OF J4-1 (W-64) @ CTY D ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	63	LT OF J4-1 (E-64) @ CTY D ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	64	200' W OF CTY DD INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	65	200' E OF CTY DD INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	66	LT OF J4-1 (W-64) @ CTY E (WEST LEG) ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	67	200' E OF CTY E (EAST LEG)INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	68	200' W OF CTY RW INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	69	LT OF J4-1 (E-64) @ CTY RW INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	70	200' W OF SCHACHT RD INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	71	200' E OF SCHACHT RD INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	72	200' W OF CLEVELAND RD INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	73	200' E OF CLEVELAND RD INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	74	ABOVE J1-2 (JCT 180; JCT T) ON HWY 64 (EB) @ HWY 180	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 5-1-L	21"x21"	1	50	50						
		PAGE TOTAL			64		3,200	0	0	0	0	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
0010	75	ABOVE J3-2 (N-180-LT; T-RT) ON HWY 64 (EB) @ HWY 180	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						LEFT
0010	76	ABOVE D1-1 (N-180-TILT RT) ON NORTH SPLITTER ISLAND @ HWY 180 INTERSECTION	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-2	21"x21"	1	50	50						RIGHT
0010	77	LT OF J4-1 (W-64) ON HWY 64 (WB) @ HWY 180 INTERSECTION	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	78	ABOVE D1-1 (W-64-TILT RT) ON WEST SPLITTER ISLAND @ HWY 180 INTERSECTION	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-2	21"x21"	1	50	50						RIGHT
0010	79	150' N OF HWY 64 INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						RIGHT
0010	80	RT OF D1-62 (RAB DIAGRAMTIC) ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 5-1-R	21"x21"	1	50	50						
0010	81A	LT OF J4-1 (N-180) ON HWY 180 (NB) @ HWY 64 INTERSECTION	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	81B	ABOVE J3-2 (T-LT; N-180-RT) ON HWY 64 (WB) @ HWY 180	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						RIGHT
0010	82	100' E OF J2-2 (W-64-AH; N-180-AH RT) ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 5-1-R	21"x21"	1	50	50						
0010	83	250' E OF SIGN # 82 ON HWY 64 (WB)	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	WO 20-2-A	48"x48"	1	50	50						
0010	84	200' S OF SEQUIN RD INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	85	200' N OF SEQUIN RD INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	86	LT OF J4-1 (S-180) @ NETTLETON RD ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	87	LT OF J4-1 (N-180) @ NETTLETON RD ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	88	200' S OF OAK DR INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
		PAGE TOTAL			59		2,950	0	0	0	0	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
0010	89	200' N OF OAK DR INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	90	LT OF J4-1 (S-180) @ CTY G ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	91	LT OF J4-1 (N-180) @ CTY G ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	92	LT OF J4-1 (S-180) @ TWIN CREEK RD ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	93	LT OF J4-1 (N-180) @ TWIN CREEK RD ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	94	LT OF J4-1 (S-180) @ WINESVILLE RD ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	95	LT OF J4-1 (N-180) @ WINESVILLE RD ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	96	200' S OF BORDERLINE RD INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	97	200' N OF BORDERLINE RD INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	98	LT OF J4-1 (S-180) @ CTY X ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	99	LT OF J4-1 (N-180) @ CTY X ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	100	LT OF J4-1 (S-180) @ WAGNER RD ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	101	LT OF J4-1 (N-180) @ WAGNER RD ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	102	LT OF J4-1 (S-180) @ CTY JJ (EAST LEG) ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	103	LT OF J4-1 (N-180) @ CTY JJ (WEST LEG) ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	104	200' S OF RENIKOW RD INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
		PAGE TOTAL			64		3,200	0	0	0	0	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
0010	105	200' N OF RENIKOW RD INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	106	200' S OF FOUR LAKE RD INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	107	200' N OF FOUR LAKE RD INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	108	200' S OF DEER LN INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	109	200' N OF DEER LN INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	110	LT OF J4-1 (S-180) @ CTY XX ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	111	LT OF J4-1 (N-180) @ CTY XX ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	112	200' S OF SCHLIES RD INTERSECTION ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	113	200' N OF SCHLIES RD INTERSECTION ON HWY 180 (NB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-1	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	114	MODIFY J1-2 (JCT 141; END 180)	MO 4-8-A	24"x18"	1	50	50						
0010		"	M1-4	EXISTING									141
0010	115	D1-3 (LT-GREEN BAY; PEMBINE/IRON MT-RT)									1		LEFT-GREEN BAY
0010	116	LT OF J4-1 (S-180) @ HWY 141 ON HWY 180 (SB)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	117	J3-2 (S-141-LT; N-141-RT)									1		SOTH-141-LEFT
0010	118	SW QUAD OF HWY 141 & HWY 180 INTERSECTION	R-11-3-B	60"x30"	1	50	50	50	100				8 1/4 MILES
0010	119	BELOW SIGN # 118	MO 4-9-R	30"X24"	1	50	50						
0010	120	J4-1 (S-141) @ HWY 180 ON HWY 141 (SB)									1		SOUTH 180
0010	121	BACKSIDE J3-1 (S-180-RT) ON HWY 141 (SB) FAR LT	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						LEFT
0010	122	RT OF J3-1 (S-180-LT) ON HWY 141 (SB) NEAR RT	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	24"x12"	1	50	50						
0010		"	M1-4	24"x24"	1	50	50						141
0010		"	MO 6-1	21"x21"	1	50	50						LEFT
0010	123	D1-3 (AH-CRIVITZ/GREEN BAY; MARINETTE-LT)									1		AHEAD-CTIVITZ/GREEN BAY
0010	124	MODIFY J2-2 (S-180-AH-LT; S-141-AH)	MO 4-8	24"x12"	1	50	50						
0010		"	MO 3-3	EXISTING									
0010		"	M1-4	EXISTING									141
0010		"	MO 6-1	21"x21"	1	50	50						AHEAD
0010	125	150' S OF J1-1 (JCT 180) ON HWY 141 (SB)	W20-2-A	48"x48"	1	50	50						
0010	126	ACROSS FROM SIGN # 125 (LT SIDE-FACING NB)	W20-2-A	48"x48"	1	50	50						
0010	127	NE QUAD OF HWY 141 & CTY P INTERSECTION	R-11-3-B	60"x30"	1	50	50	50	100				8 1/2 MILES
0010	128	NE QUAD OF HWY 141 & CTY W/A INTERSECTION	R-11-3-B	60"x30"	1	50	50	50	100				1 3/4 MILES
0010	129	SW QUAD OF HWY 141 & CTY X INTERSECTION	R-11-3-B	60"x30"	1	50	50	50	100				2 3/4 MILES
0010	130	FIELD DETERMINED - SB			1							7	PRIOR TO CONSTRUCTION
0010	131	FIELD DETERMINED - NB			1							7	PRIOR TO CONSTRUCTION
			PAGE TOTAL		58		2,900	200	400	0.00	4	14	
			GRAND TOTAL		300		15000	250 *	500 *	210	6	14	*

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

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CONSTRUCTION STAKING CURB AND GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	650.5500 LF	REMARKS
0010	1640+33	-	1666+85	USH 141 LT	2652	
0010	1640+91	-	1644+75	USH 141 RT	384	
0010	10+24	-	10+84	FINNELLI AVE LT	89	
0010	10+24	-	10+84	FINNELLI AVE RT	89	
0010	1646+16	-	1659+98	USH 141 RT	1382	
0010	12+24	-	12+54	DESCHANE AVE LT	44	
0010	12+24	-	12+54	DESCHANE AVE RT	44	
0010	1660+90	-	1666+85	USH 141 RT	595	
0010	107+68	-	108+08	CTH X LT	82	
0010	77+23	-	77+82	USH 141 RT	83	NOQUEBAY RD
0010	78+13	-	78+52	USH 141 RT	65	NOQUEBAY RD
0010	129+53	-	129+92	USH 141 LT	59	SMITH CREEK RD
0010	129+59	-	130+14	USH 141 RT	91	SMITH CREEK RD
0010	130+23	-	130+85	USH 141 LT	93	SMITH CREEK RD
0010	130+48	-	130+88	USH 141 RT	60	SMITH CREEK RD
0010	172+92	-	173+50	USH 141 RT	90	TOWNLINE RD
0010	173+81	-	174+22	USH 141 RT	61	TOWNLINE RD
0010	186+85	-	187+24	USH 141 LT	58	VAN RD
0010	187+54	-	188+19	USH 141 LT	95	VAN RD
0010	199+88	-	200+48	USH 141 RT	101	WAYSIDE RD
0010	200+82	-	201+21	USH 141 RT	57	WAYSIDE RD
0010	215+40	-	217+66	USH 141 LT	233	
0010	217+91	-	221+13	USH 141 LT	340	
0010	226+75	-	227+25	USH 141 LT	73	CTH X WEST
0010	226+73	-	227+25	USH 141 RT	80	CTH X EAST
0010	227+57	-	232+29	USH 141 LT	481	
0010	227+85	-	228+34	USH 141 RT	68	CTH X EAST
				TOTAL	7550	

CONSTRUCTION STAKING PIPE CULVERTS

CATEGORY	STATION	LOCATION	650.6000 EACH
0010	12+41	DESCHANE AVE	1
0010	58+95	USH 141	1
0010	130+75	USH 141	1
0010	155+70	USH 141	1
0010	87+84	WAYSIDE RD	1
0010	208+25	USH 141	1
0010	226+44	USH 141	1
0010	107+91	CTH X EAST	1
0010	67+10	USH 141	1
0010	115+40	USH 141	1
0010	178+90	USH 141	1
		TOTAL	11

CONSTRUCTION STAKING SUBGRADE

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 LF
0010	1639+00	-	1667+00	USH 141	2800
0010	10+50	-	10+85	FINELLI AVE	35
0010	72+50	-	79+50	USH 141	700
0010	67+50	-	68+34	NOQUEBAY RD	84
0010	83+50	-	90+50	USH 141	700
0010	92+41	-	193+16	USH 141	10075
0010	75+08	-	76+38	SMITH CREEK RD	130
0010	72+50	-	73+54	SMITH CREEK RD	104
0010	78+53	-	79+73	TOWNLINE RD	120
0010	86+43	-	87+46	VAN RD	103
0010	199+35	-	202+24	USH 141	289
0010	87+50	-	88+75	WAYSIDE RD	125
0010	222+25	-	229+50	USH 141	725
0010	107+90	-	109+46	CTH X EAST	156
				TOTAL	16150

CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 LF
0010	1613+95	-	232+28	USH 141	31700
				TOTAL	31700

CONSTRUCTION STAKING BASE

CATEGORY	STATION	TO	STATION	LOCATION	650.5000 LF
0010	1639+00	-	1667+00	USH 141	2800
0010	10+50	-	10+85	FINELLI AVE	35
0010	72+50	-	79+50	USH 141	700
0010	67+50	-	68+34	NOQUEBAY RD	84
0010	83+50	-	90+50	USH 141	700
0010	92+41	-	193+16	USH 141	10075
0010	75+08	-	76+38	SMITH CREEK RD	130
0010	72+50	-	73+54	SMITH CREEK RD	104
0010	78+53	-	79+73	TOWNLINE RD	120
0010	86+43	-	87+46	VAN RD	103
0010	199+35	-	202+24	USH 141	289
0010	87+50	-	88+75	WAYSIDE RD	125
0010	222+25	-	229+50	USH 141	725
0010	107+90	-	109+46	CTH X EAST	156
				TOTAL	16150

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1491-09

CATEGORY	STATION	TO	STATION	LOCATION	650.9910 LS
0010	1613+95	-	232+28	USH 141	1
				TOTAL	1

CONSTRUCTION STAKING SLOPE STAKES

CATEGORY	STATION	TO	STATION	LOCATION	650.9920 LF
0010	1639+00	-	1667+00	USH 141	2800
0010	10+50	-	10+85	FINELLI AVE	35
0010	72+50	-	80+00	USH 141	750
0010	67+50	-	68+50	NOQUEBAY RD	100
0010	83+50	-	90+50	USH 141	700
0010	92+00	-	196+00	USH 141	10400
0010	75+00	-	76+21	SMITH CREEK RD	121
0010	72+57	-	73+50	SMITH CREEK RD	93
0010	78+53	-	79+75	TOWNLINE RD	122
0010	86+00	-	87+46	VAN RD	146
0010	199+00	-	203+00	USH 141	400
0010	87+65	-	88+75	WAYSIDE RD	110
0010	222+00	-	230+00	USH 141	800
0010	107+90	-	109+50	CTH X EAST	160
				TOTAL	16750

PULL BOXES STEEL

CATEGORY	LOCATION	653.0120 18x24-INCH EACH
0010	USH 141 & CTH A-W (S-492)	1
	TOTALS	1

REMOVING PULL BOX

CATEGORY	LOCATION	653.0905 EACH
0010	USH 141 & CTH A-W (S-492)	1
	TOTALS	1

LOOP DETECTORS

CATEGORY	LOCATION	LOOP NO.	# of Turns	652.0800 Conduit LF	655.0800 Wire LF
0010	USH 141 & CTH A-W (S-492)	61	3	60	200
	TOTALS			60	200

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF	REMARKS
0010	1613+95			USH 141 PROJECT LIMITS	46	
0010	1617+25			DRIVEWAY LT	18	
0010	1639+53	-	1666+85	USH 141 LT	2808	
0010	1639+00	-	1666+85	USH 141 RT	2755	
0010	1628+94			DRIVEWAY LT	17	
0010	1641+71			DRIVEWAY RT	30	
0010	10+84			FINELLI AVE	32	
0010	1650+25			DRIVEWAY RT	32	
0010	1651+58			DRIVEWAY RT	26	
0010	1654+35			DRIVEWAY RT	27	
0010	1656+03			DRIVEWAY RT	25	
0010	1658+15			DRIVEWAY LT	24	
0010	12+54			DESCHANE AVE	32	
0010	1661+40			DRIVEWAY RT	43	
0010	1662+00			DRIVEWAY LT	36	
0010	1662+80			DRIVEWAY RT	27	
0010	1664+75			DRIVEWAY RT	27	
0010	1666+11			DRIVEWAY LT	29	
0010	1666+23			DRIVEWAY RT	31	
0010	13+92			SOUTH AVE W	27	
0010	15+46			SOUTH AVE E	28	
0010	22+65			WITT AVE	32	
0010	4+75			PINE AVE	30	
0010	4+30			HALL AVE	28	
0010	1692+30			USH 141 LT	12	
0010	1692+30			USH 141 RT	12	
0010	1692+44	-	1692+77	USH 141 LT	32	DRIVEWAY LT
0010	1693+87			USH 141 LT	12	
0010	1693+87			USH 141 RT	12	
0010	58+00			CTH A/W	32	
0010	62+05			CTH A/W	24	
0010	4+90			USH 141 LT	12	LOOP DETECTOR REPLACEMENT
0010	4+90	-	4+98	USH 141 LT	8	"
0010	4+98			USH 141 LT	12	LOOP DETECTOR REPLACEMENT
0010	8+93			DRIVEWAY RT	26	
0010	42+15			MIRA AVE	30	
0010	14+79			DRIVEWAY LT	43	
0010	56+94			DRIVEWAY RT	22	
0010	58+85			USH 141	6	PIPE REPLACEMENT
0010	59+05			USH 141	6	PIPE REPLACEMENT

SAWING ASPHALT CONT'D

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF	REMARKS
0010	60+25			DRIVEWAY RT	32	
0010	61+34			DRIVEWAY LT	14	
0010	62+96			DRIVEWAY RT	26	
0010	67+00			USH 141	6	PIPE REPLACEMENT
0010	67+20			USH 141	6	PIPE REPLACEMENT
0010	72+50			USH 141 RT	3	NOQUEBAY RD
0010	79+55			USH 141 RT	3	NOQUEBAY RD
0010	68+50			NOQUEBAY RD	24	
0010	86+63			USH 141	16	STRUCT C-38-123
0010	87+67			USH 141	16	STRUCT C-38-123
0010	92+41			USH 141 LT	3	SB PASSING LANE
0010	92+41			USH 141 RT	3	SB PASSING LANE
0010	115+30			USH 141	6	PIPE REPLACEMENT
0010	115+50			USH 141	6	PIPE REPLACEMENT
0010	193+16			USH 141 LT	3	SB PASSING LANE
0010	193+16			USH 141 RT	3	SB PASSING LANE
0010	103+00			DRIVEWAY LT	14	
0010	75+08			SMITH CREEK RD W	21	
0010	73+54			SMITH CREEK RD E	22	
0010	79+73			TOWNLINE RD	19	
0010	86+43			VAN RD	20	
0010	199+35			USH 141 RT	10	WAYSIDE RD
0010	202+24			USH 141 RT	3	WAYSIDE RD
0010	88+75			WAYSIDE RD	19	
0010	197+23			USH 141	50	STRUCT B-38-0037
0010	197+83			USH 141	50	STRUCT B-38-0037
0010	208+15			USH 141	6	PIPE REPLACEMENT
0010	208+35			USH 141	6	PIPE REPLACEMENT
0010	214+04			DRIVEWAY RT	13	
0010	93+37			DROPP RD	23	
0010	217+77			DRIVEWAY RT	124	
0010	219+22			USH 141 LT	12	PARKING LOT
0010	219+32	-	219+69	USH 141 LT	41	PARKING LOT
0010	224+46			DRIVEWAY LT	48	
0010	222+24			USH 141 RT	3	
0010	109+46			CTH X	22	CTH X EAST
0010	226+12			USH 141	4	PIPE REPLACEMENT
0010	226+74			USH 141	8	PIPE REPLACEMENT
0010	229+54			USH 141 RT	3	
0010	109+67			CTH X	23	CTH X WEST
0010	109+67	-	110+35	CTH X LT	68	
0010	232+29			USH 141 PROJECT LIMITS	13	
				TOTAL	7350	

SAWING CONCRETE

CATEGORY	STATION	TO	STATION	LOCATION	690.0250 LF	REMARKS
0010	10+83			FINELLI AVE LT	3	
0010	10+83			FINELLI AVE RT	3	
0010	12+54			DESCHANE AVE LT	3	
0010	12+54			DESCHANE AVE RT	3	
0010	1666+85			USH 141 LT	3	
0010	1666+85			USH 141 RT	3	
0010	1692+30			USH 141 LT	3	RAILROAD CROSSING
0010	1692+30			USH 141	24	"
0010	1692+30			USH 141 RT	3	"
0010	1692+42			USH 141 LT	3	DRIVEWAY CURB
0010	1692+78			USH 141 LT	3	DRIVEWAY CURB
0010	1693+87			USH 141 LT	3	"
0010	1693+87			USH 141	24	"
0010	1693+87			USH 141 RT	3	RAILROAD CROSSING
0010	4+90			USH 141 LT	12	LOOP DETECTOR REPLACEMENT
0010	4+90	-	4+98	USH 141	8	"
0010	4+98			USH 141 LT	12	LOOP DETECTOR REPLACEMENT
0010	58+85			USH 141	24	PIPE REPLACEMENT
0010	59+05			USH 141	24	PIPE REPLACEMENT
0010	67+00			USH 141	24	PIPE REPLACEMENT
0010	67+20			USH 141	24	PIPE REPLACEMENT
0010	72+50	-	79+55	USH 141 RT	715	NOQUEBAY RD
0010	86+63			USH 141	20	STRUCT C-38-123
0010	87+67			USH 141	20	STRUCT C-38-123
0010	92+41	-	193+16	USH 141 LT	10079	SB PASSING LANE
0010	92+41	-	193+16	USH 141 RT	10079	SB PASSING LANE
0010	115+30			USH 141	24	PIPE REPLACEMENT
0010	115+50			USH 141	24	PIPE REPLACEMENT
0010	130+65			USH 141	20	PIPE REPLACEMENT
0010	130+85			USH 141	20	PIPE REPLACEMENT
0010	155+60			USH 141	20	PIPE REPLACEMENT
0010	155+80			USH 141	20	PIPE REPLACEMENT
0010	178+70			USH 141	20	PIPE REPLACEMENT
0010	179+10			USH 141	20	PIPE REPLACEMENT
0010	199+35	-	202+24	USH 141 RT	293	WAYSIDE RD
0010	208+15			USH 141	24	PIPE REPLACEMENT
0010	208+35			USH 141	24	PIPE REPLACEMENT
0010	219+22			USH 141 LT	3	PARKING LOT
0010	219+32			USH 141 LT	3	PARKING LOT
0010	219+69			USH 141 LT	3	PARKING LOT
0010	222+24	-	229+54	USH 141 RT	728	CTH X
0010	226+12			USH 141	22	PIPE REPLACEMENT
0010	226+74			USH 141	22	PIPE REPLACEMENT
0010	232+29			USH 141 PROJECT LIMITS	24	
				TOTAL	22450	

BEGIN PROJECT
STA 1613+95.48

PESHTIGO RIVER

MGS GUARDRAIL
POST #1 STA 1617+08.03 USH 141 LT
POST #5 STA 1616+83.03 USH 141 LT
POST #9 STA 1616+58.03 USH 141 LT

USH 141
CURVE NOTES
PI = 1622+01.62
Y = 189,656.83
X = 709,849.44
∠ = 173°-01'-01"
Δ = 6°-58-59"
D = 0°-45'-00"
T = 466.12'
L = 931.09'
R = 7,639.44'
RUNOFF =
SE =
SE TRANSITION =

N

PT: 1608+13.98
PC: 1617+35.50
PT: 1626+66.59
PC: 1631+04.54

1605 1610 1615 1620 1625 1630 1635

USH 141

RIPRAP

SLOPE INTERCEPTS

MGS GUARDRAIL
REQ'D (TYP)

EXISTING R/W

STA 1614+00 TO 1639+00
MILL 1" PAVE 4"
HMA PAVEMENT TYPE E-3

MGS GUARDRAIL
POST #1 STA 1619+30.53 USH 141 RT
POST #5 STA 1619+05.53 USH 141 RT
POST #9 STA 1618+80.53 USH 141 RT

USH 141
CURVE NOTES
PI = 1635+74.32
Y = 190,995.70
X = 709,541.43
∠ = 184°-41'-42"
Δ = 4°-41'-42"
D = 0°-30'-00"
T = 469.78'
L = 939.03'
R = 11,459.16'
RUNOFF =
SE =
SE TRANSITION =

5

USH 141
CURVE NOTES
PI = 1635+74.32
Y = 190,995.70
X = 709,541.43
∠ = 184°-41'-42"
Δ = 4°-41'-42"
D = 0°-30'-00"
T = 469.78'
L = 939.03'
R = 11,459.16'
RUNOFF =
SE =
SE TRANSITION =

STA 1640+33.32 LT
STA 1640+91 RT
BEGIN 4 LANE
4 - 12' LANES
CONCRETE CURB & GUTTER
30-INCH TYPE D
MILL 2" PAVE 2"
HMA PAVEMENT TYPE E-3

N

1640+32.89 USH 141=
10+00.00 OWL LANE

PT: 1640+35.91

SLOPE INTERCEPTS

1645+50.92 USH 141=
10+00.00 FINNELLI AVE

PC: 1649+79.33
PT: 1655+05.61

1635 1640 1645 1650 1655 1660 1665

USH 141

EXISTING R/W

PI: 10+98.97

EP: 11+54.25

1640+40.98 BACK=
1640+33.32 AHEAD

CONSTRUCTION LIMITS
STA 10+84
SAW CUT REQ'D

EP: 13+01.83

STA 1650+30 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 1651+50 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

USH 141
CURVE NOTES
PI = 1652+43.22
Y = 192,655.39
X = 709,300.47
∠ = 190°-31'-32"
Δ = 10°-31'-32"
D = 2°-00'-00"
T = 263.88'
L = 526.28'
R = 2864.79'
RUNOFF =
SE =
SE TRANSITION =

STA 1654+30 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 1656+00 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 1661+50 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

1660+44.12 USH 141=
12+00.00 DESCHANE AVE

CONSTRUCTION LIMITS
STA 12+54
SAW CUT REQ'D

STA 12+41 DESCHANE AVE
REMOVE EXISTING 18" CPCM
1-18" X 56' CPRC REQ'D
2 APRON ENDWALLS REQ'D

EP: 15+01.16

STA 1662+90 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

STA 1664+80 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

SOUTH AVE

CONSTRUCTION LIMITS
STA 13+92
SAW CUT REQ'D

SLOPE INTERCEPTS

1665

EXISTING R/W

USH 141

EXISTING R/W

1669+94.80 USH 141=
14+79.64 SOUTH AVE

CONSTRUCTION LIMITS
STA 15+46
SAW CUT REQ'D

STA 1666+25 RT
REMOVE DRIVEWAY PIPE
REPLACE PIPE

EP: 19+67.04

1670

1675

1679+25.00 USH 141=
22+00 WITT AVE

1680

CONSTRUCTION LIMITS
STA 22+65
SAW CUT REQ'D

WITT AVE

EP: 23+60.00

CONSTRUCTION LIMITS
STA 4+75
SAW CUT REQ'D

1685

1685+50.00 USH 141=
5+29.94 PINE AVE

PINE AVE

CONSTRUCTION LIMITS
STA 4+30
SAW CUT REQ'D

1689+86.16 USH 141=
4+86.93 HALL AVE

HALL AVE

1690

SAW CUT REQ'D

ESCANBA & LAKE SUPERIOR RR

1695

CTH W

CONSTRUCTION LIMITS
STA 58+00
SAW CUT REQ'D

PI: 58+17.16

1700+59.76 USH 141=
60+00.11 CTH W

PC: 5+20.66

1700

1695

USH 141

PI: 60+66.51

1701+00.82 BACK=
2+16.30 AHEAD

CONSTRUCTION LIMITS
STA 62+05
SAW CUT REQ'D

CTH W

CONSTRUCTION LIMITS
STA 42+15
SAW CUT REQ'D

BP: 40+16.25

14+78.54 USH 141=
30+00.00 OLD HWY 141

PT: 14+86.28

10+04.80 USH 141=
43+00.00 MIRA AVE

CONSTRUCTION LIMITS
STA 30+95

EP: 30+95.31

CURVE NOTES

PI	=	10+04.11
Y	=	198,297.88
X	=	709,523.62
∠	=	187°-14'-31"
Δ	=	7°-14'-31"
D	=	0°-45'-00"
T	=	483.45'
L	=	965.62'
R	=	7,639.50'
RUNOFF	=	
SE	=	
SE TRANSITION	=	

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

FILE NAME : F:\d3_149109\050202_pn.dgn PLOT DATE : 18-JUN-2014 08:28 PLOT BY : dotbrb PLOT NAME : 050202 pn PLOT SCALE : 200:1

N

30 35 40 45 50 55

USH 141

32+06.98 USH 141=
55+00.00 SEQUIN LA

46+93.74 USH 141=
60+00.00 OLD HWY 141

EP: 61+08.97

CONSTRUCTION LIMITS
STA 55+97

EP: 57+97.66

CONSTRUCTION LIMITS
STA 61+09

5

5

N

60 65 70 75 80 85

USH 141

SLOPE INTERCEPTS

PI: 67+95.15

77+86.12 USH 141=
67+00.00 NOQUEBAY RD

CONSTRUCTION LIMITS
STA 68+34
SAW CUT REQ'D

STA 77+86.12
TYPE B1 INTERSECTION REQ'D

MGS GUARDRAIL
REQ'D (TYP)

NOQUEBAY RD

70

STA 58+95
REMOVE EXISTING 24" CPCM
1-24" X 64' CPRC REQ'D
2 APRON ENDWALLS REQ'D

STA 67+10
REMOVE EXISTING 30" CPRC
1-30" X 96' CPRC REQ'D
2 APRON ENDWALLS REQ'D

PROJECT NO: 1491-08-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

MGS GUARDRAIL
POST #1 STA 85+84.72 USH 141 LT
POST #5 STA 86+09.72 USH 141 LT
POST #9 STA 86+34.72 USH 141 LT

MGS GUARDRAIL
POST #1 STA 89+12.79 USH 141 LT
POST #5 STA 88+87.79 USH 141 LT
POST #9 STA 88+62.79 USH 141 LT

STRUCTURE C-38-123 REQ'D
REMOVE STRUCTURE C-996-37

STA 92+42
END SB PASSING LANE TAPER

PC: 98+53.64

STA 99+42
BEGIN SB PASSING LANE TAPER
FULL LANE ENDS

USH 141
CURVE NOTES

PI = 103+51.97
Y = 207,518.61
X = 711,067.79
∠ = 170°-03'-32"
Δ = 9°-56'-28"
D = 1°-00'-00"
T = 498.32'
L = 994.14'
R = 5729.70'
RUNOFF =
SE =
SE TRANSITION =

PT: 108+47.79

N

90 95 100 105 110 115

EXISTING R/W

USH 141

MGS GUARDRAIL
POST #1 STA 88+25.29 USH 141 RT
POST #5 STA 88+00.29 USH 141 RT
POST #9 STA 87+75.29 USH 141 RT

SLOPE INTERCEPTS

EXISTING R/W

STA 115+40
REMOVE EXISTING 30" CPRC
1-30" X 96' CPRC REQ'D
2 APRON ENDWALLS REQ'D

MGS GUARDRAIL
REQ'D (TYP)

MGS GUARDRAIL
POST #1 STA 85+09.72 USH 141 RT
POST #5 STA 85+34.72 USH 141 RT
POST #9 STA 85+59.72 USH 141 RT

5

5

STA 130+06.74
TYPE B1 INTERSECTION REQ'D

CONSTRUCTION LIMITS
STA 75+08
SAW CUT REQ'D

SMITH CREEK RD

N

STA 75+69 SMITH CREEK ROAD
REMOVE EXISTING 15" CPCM
1-18" X 80' CPRC REQ'D
2 APRON ENDWALLS REQ'D

75

130+06.74 USH 141=
76+88.24 SMITH CREEK RD

120 125 130 135 140 145

EXISTING R/W

USH 141

SLOPE INTERCEPTS

EXISTING R/W

130+32.75 USH 141=
72+00.00 SMITH CREEK RD

CONSTRUCTION LIMITS
STA 73+54
SAW CUT REQ'D

75

STA 130+75
REMOVE EXISTING 24" CPRC
1-24" X 88' CPRC REQ'D
2 APRON ENDWALLS REQ'D

STA 130+32.75
TYPE D INTERSECTION REQ'D

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

N

USH 141

150 155 160 165 170 175

EXISTING R/W

STA 173+65.00
TYPE D INTERSECTION REQ'D

SLOPE INTERCEPTS

173+65.00 USH 141=
78+00.00 TOWNLINE RD

STA 155+70
REMOVE EXISTING 24" CPRC
1-24" X 80' CPRC REQ'D
2 APRON ENDWALLS REQ'D

CONSTRUCTION LIMITS
STA 79+73
SAW CUT REQ'D

TOWNLINE RD

5

5

N

USH 141
CURVE NOTES
PI = 190+99.55
Y = 216,268.45
X = 711,001.47
∠ = 168°-41'-39"
Δ = 11°-28'-21"
D = 1°-00'-00"
T = 567.14'
L = 1,130.59'
R = 5,729.70'
RUNOFF =
SE =
SE TRANSITION =

CONSTRUCTION LIMITS
STA 86+43
SAW CUT REQ'D

VAN RD

STA 185+32
END SB PASSING LANE TAPER
BEGIN FULL WIDTH

PC: 185+32.41

STA 192+32
BEGIN SB PASSING
LANE TAPER

MGS GUARDRAIL
POST #1 STA 194+68.48 USH 141 LT
POST #5 STA 194+93.48 USH 141 LT
POST #9 STA 195+18.48 USH 141 LT

PT: 196+63.01

EXCEPTION TO NET ℄ LENGTH
STA 197+29.17 TO STA 197+88.33
B-38-37

MGS GUARDRAIL
POST #1 STA 201+38.53 USH 141 LT
POST #5 STA 201+13.53 USH 141 LT
POST #9 STA 200+88.53 USH 141 LT

PC: 203+24.39

180 185 190 195 200 205

EXISTING R/W

SLOPE INTERCEPTS

187+38.53 USH 141=
88+15.54 VAN RD

MGS GUARDRAIL
POST #1 STA 193+68.48 USH 141 RT
POST #5 STA 193+93.48 USH 141 RT
POST #9 STA 193+18.48 USH 141 RT

MGS GUARDRAIL
REQ'D (TYP)

PC: 87+16.34

PT: 88+09.85

200+67.23 USH 141=
87+00.00 WAYSIDE RD

CONSTRUCTION LIMITS
STA 88+75
SAW CUT REQ'D

USH 141
CURVE NOTES
PI = 208+38.16
Y = 217,974.29
X = 710,646.96
∠ = 193°-38'-07"
Δ = 13°-38'-07"
D = 1°-20'-00"
T = 513.77'
L = 1,022.68'
R = 4,297.30'
RUNOFF =
SE =
SE TRANSITION =
PT = 213+47.07

STA 178+90
REMOVE EXISTING 42" CPRC
1-24" X 104' CPRC REQ'D
2-APRON ENDWALLS REQ'D

STA 187+38.53
TYPE D INTERSECTION REQ'D

STA 200+67.23
TYPE B2 INTERSECTION REQ'D

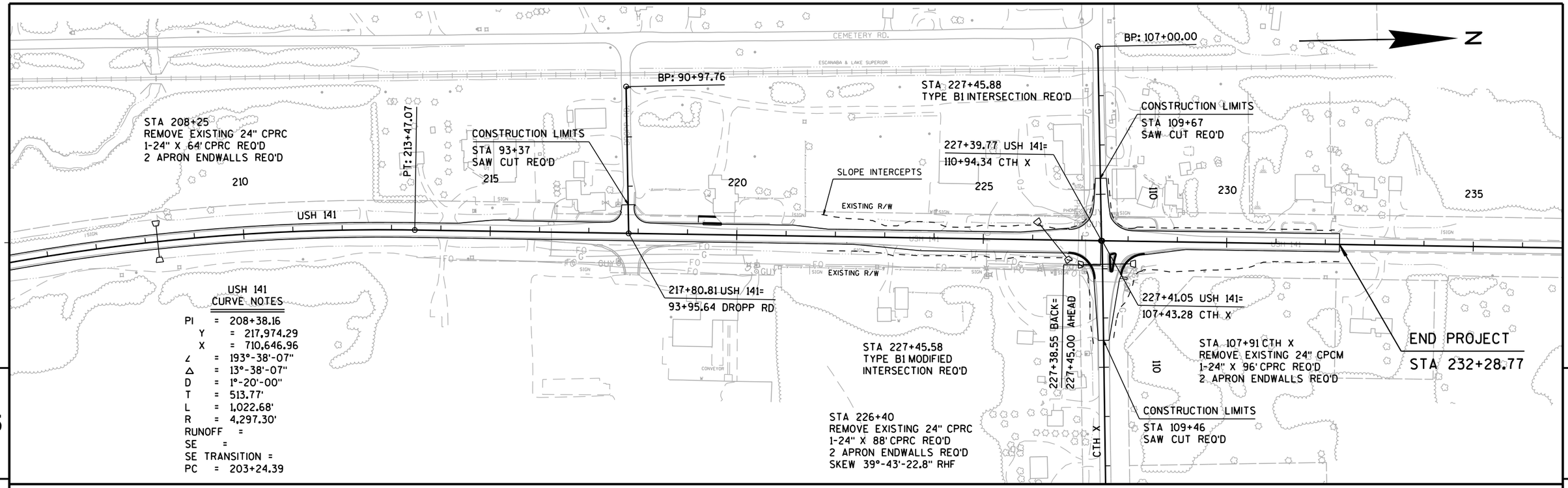
WAYSIDE ROAD

STA 87+84 WAYSIDE ROAD
REMOVE EXISTING 32" CPCM
1-36" X 96' CPRC REQ'D
2-APRON ENDWALLS REQ'D

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET 113	E

FILE NAME : F:\d3_149109\050205_pn.dgn PLOT DATE : 26-JUN-2014 11:32 PLOT BY : dotbrb PLOT NAME : 050205 pn PLOT SCALE : 200:1

WISDOT/CADDS SHEET 44

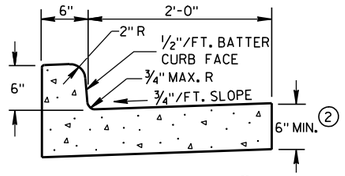


PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

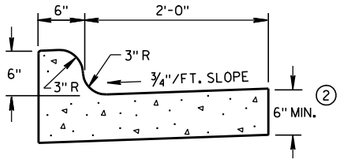
Standard Detail Drawing List

08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B01-10	PAVEMENT DETAILS FOR RAILROAD APPROACH
13B02-06	CONCRETE PAVEMENT APPROACH SLAB
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B29-01	SAFETY EDGE
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	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
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

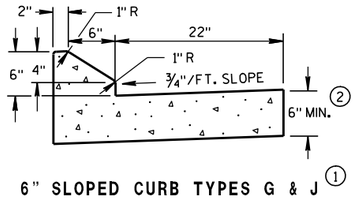
6



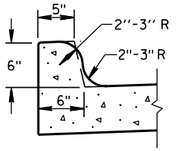
TYPES A & D (1)



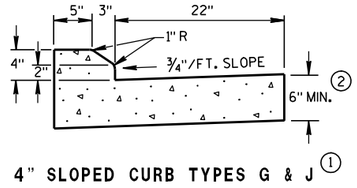
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

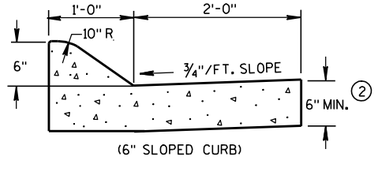


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

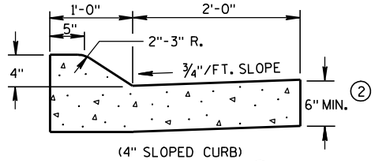


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

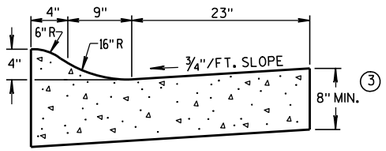


(6" SLOPED CURB)



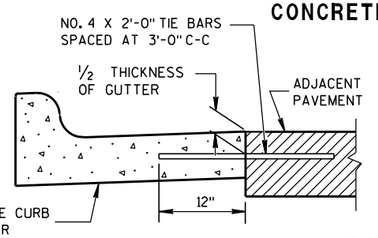
(4" SLOPED CURB)

TYPES A & D (1)

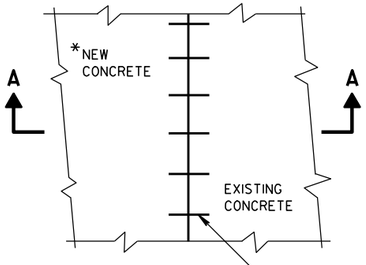


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

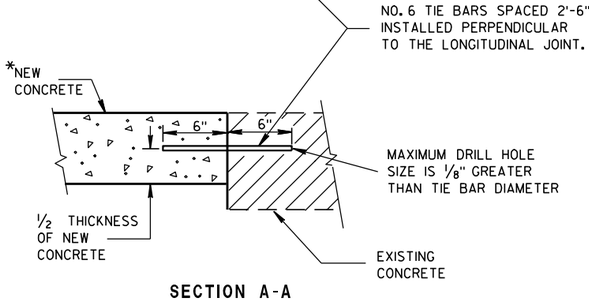


TYPICAL TIE BAR LOCATION (1)



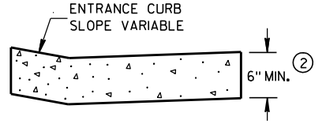
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



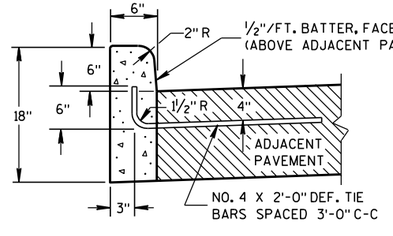
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



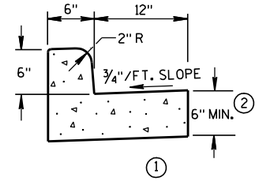
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



(1)

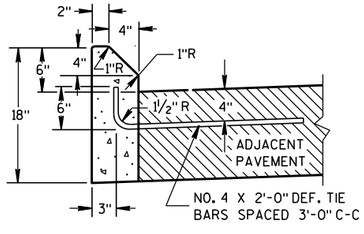
TYPES A & D



(1)

TYPES A & D

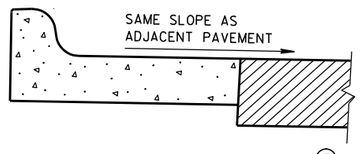
CONCRETE CURB & GUTTER 18"



(1)

TYPES G & J

CONCRETE CURB



(5)

REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

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

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

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

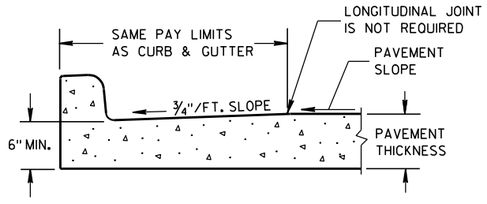
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

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

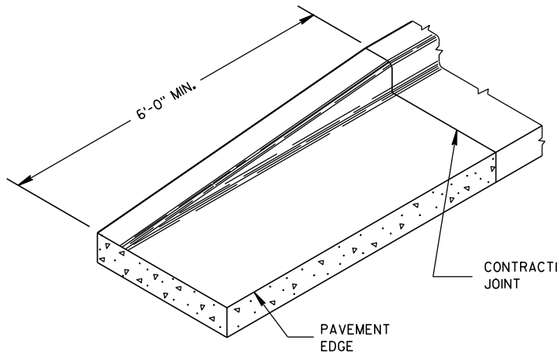
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

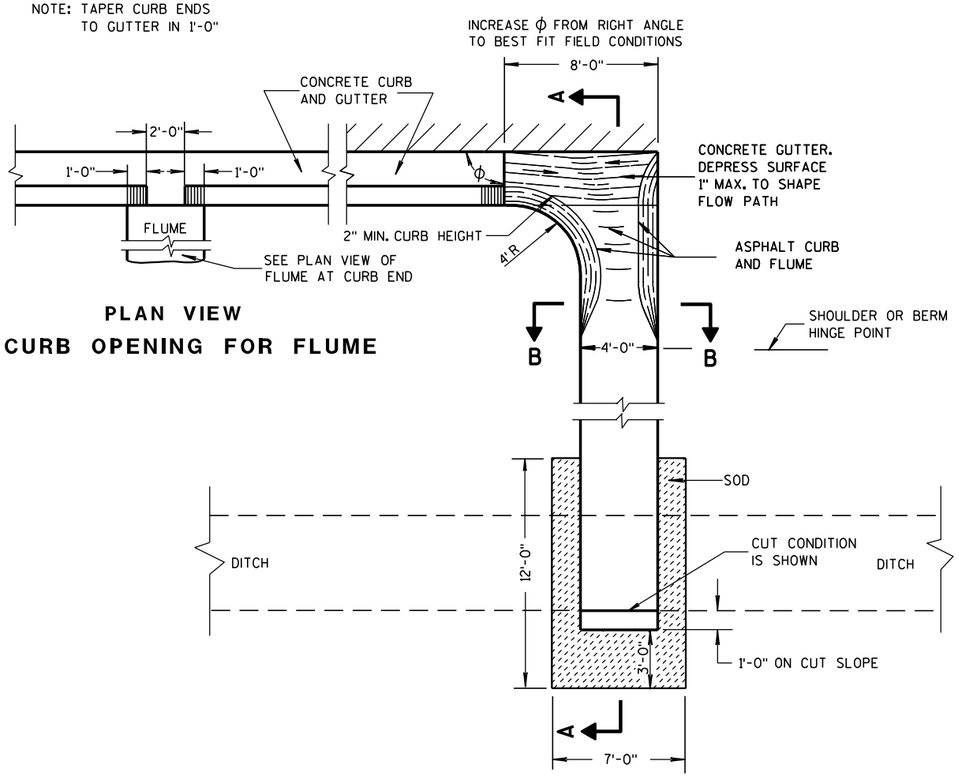
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S.D.D. 8 D 1-17

6

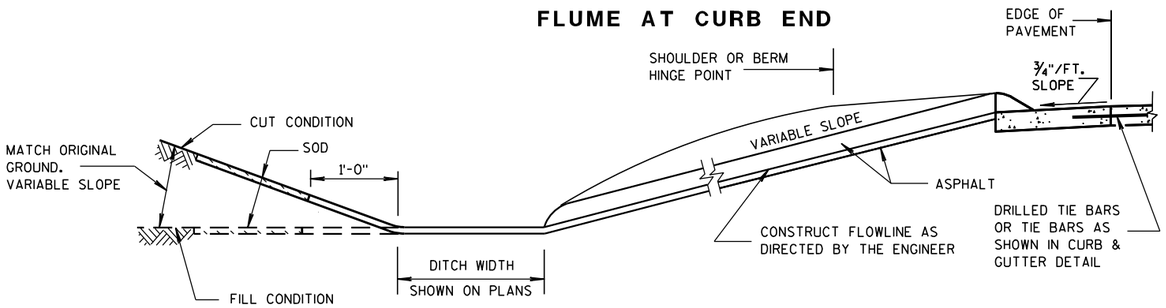
S.D.D. 8 D 1-17

ASPHALTIC FLUME

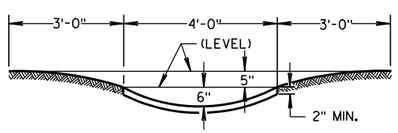


PLAN VIEW
CURB OPENING FOR FLUME

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.

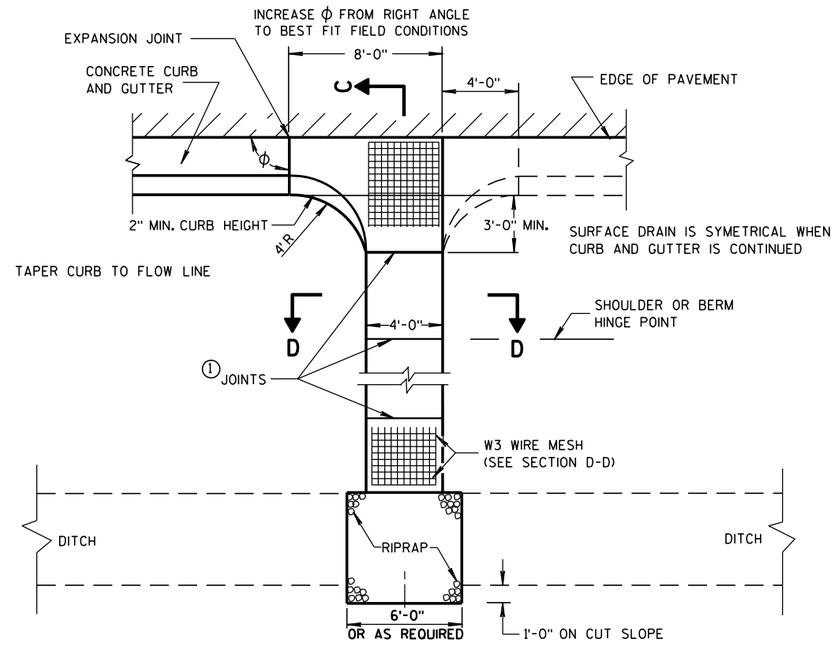
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

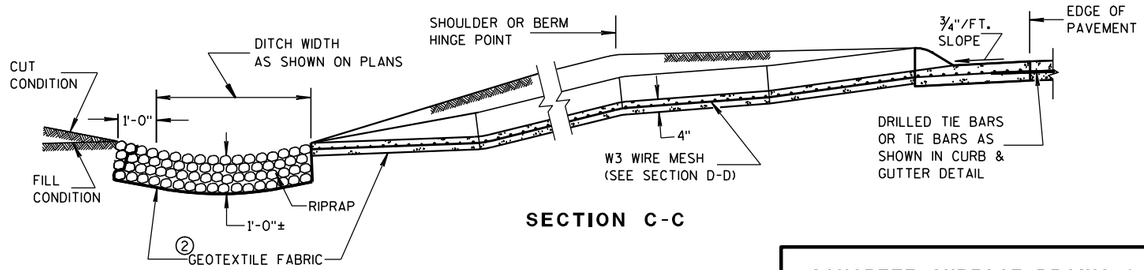
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

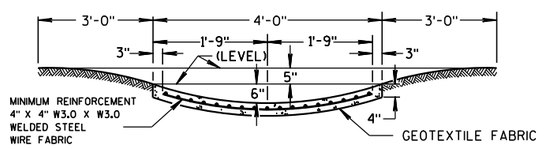
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

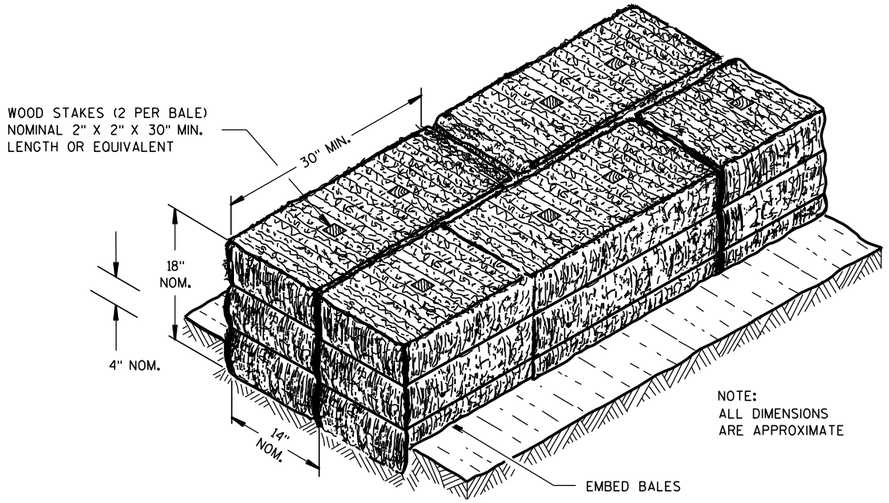
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

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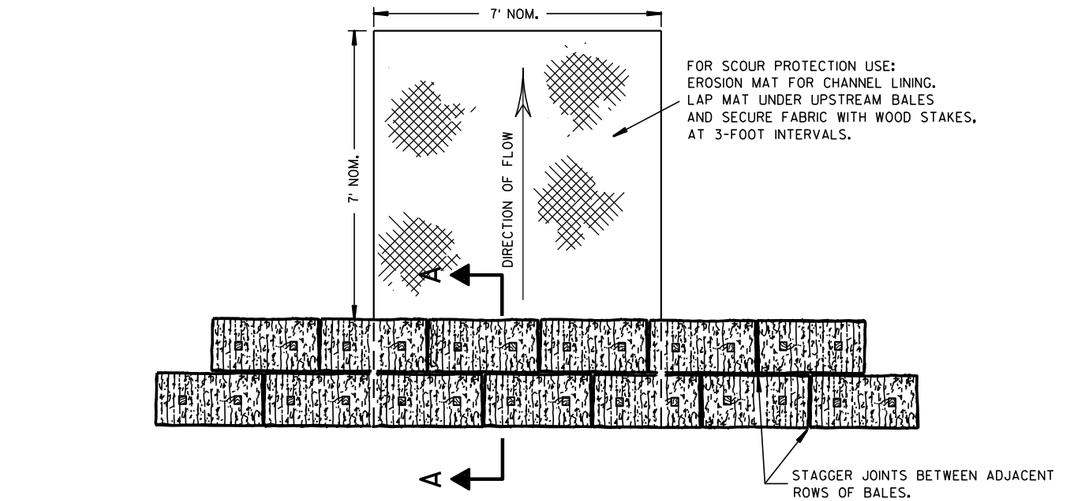
S.D.D. 8 D 4-5

6

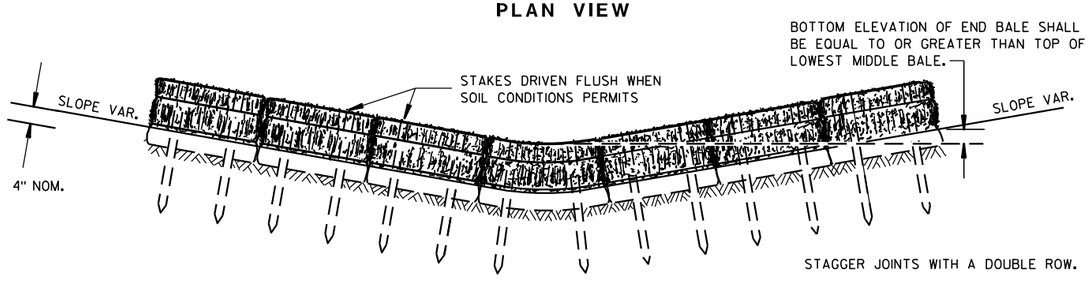
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



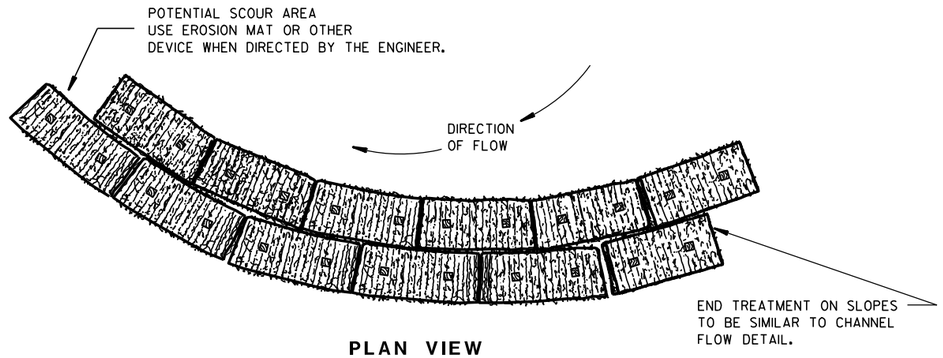
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

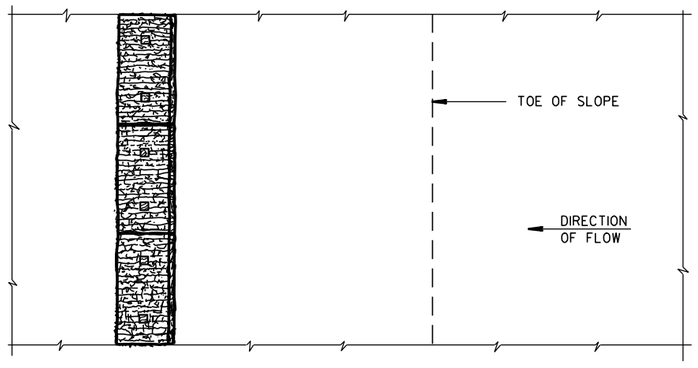
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

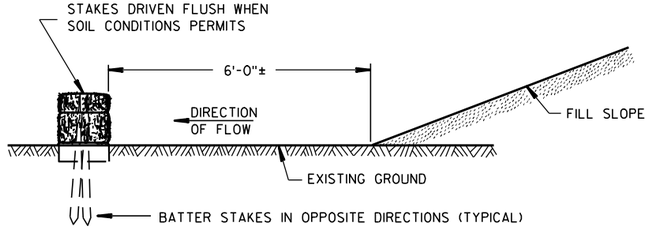


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

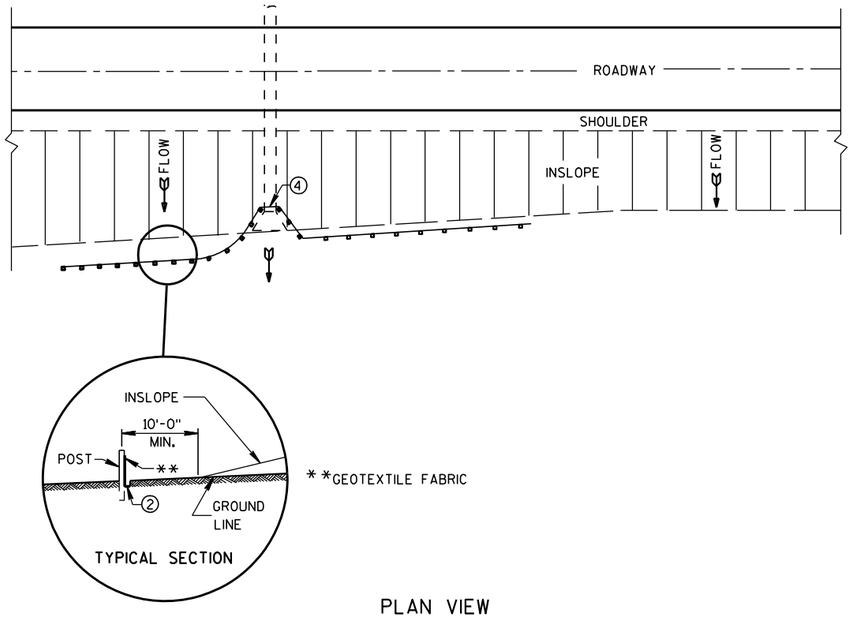
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

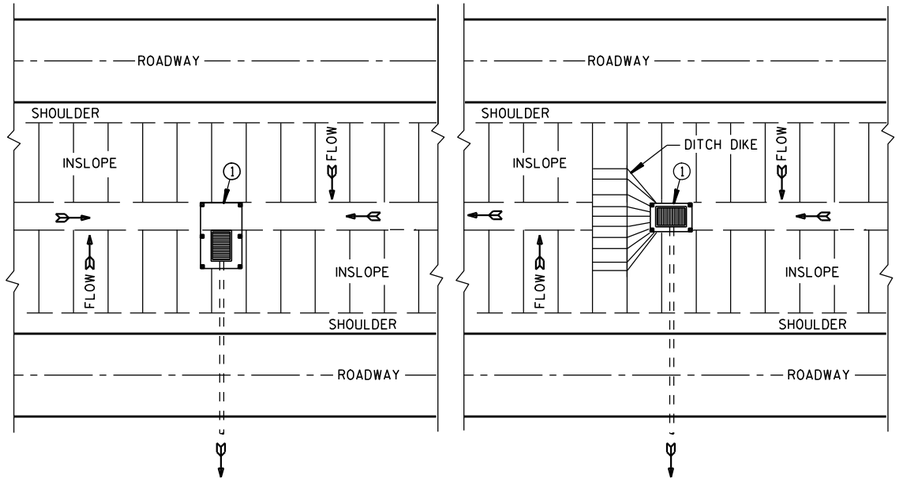
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

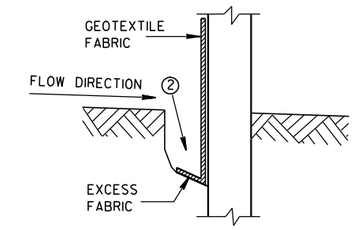
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

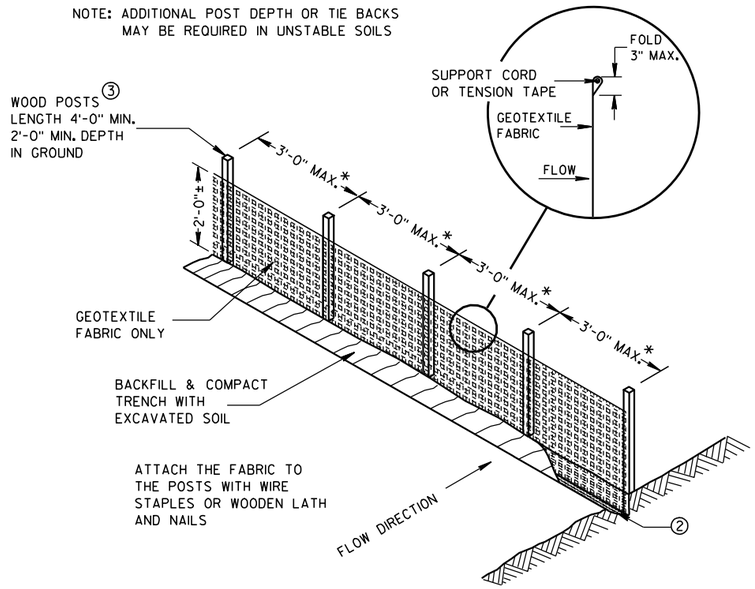
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

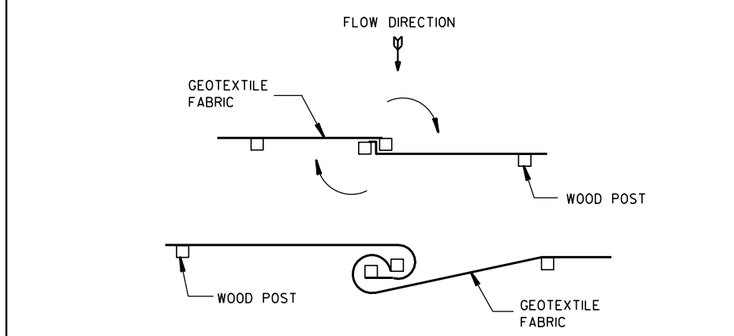
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



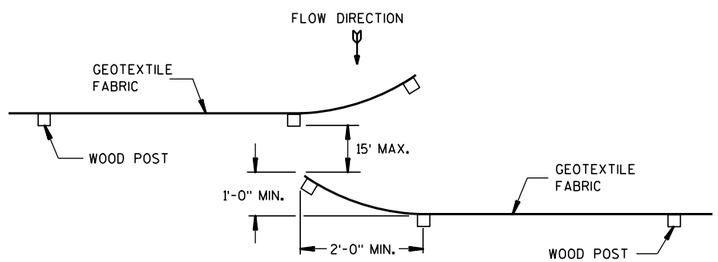
TRENCH DETAIL



SILT FENCE

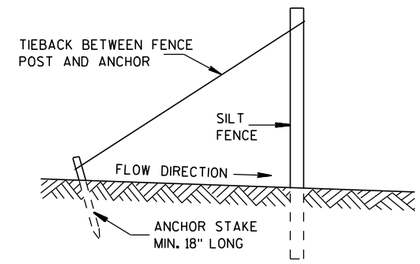


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

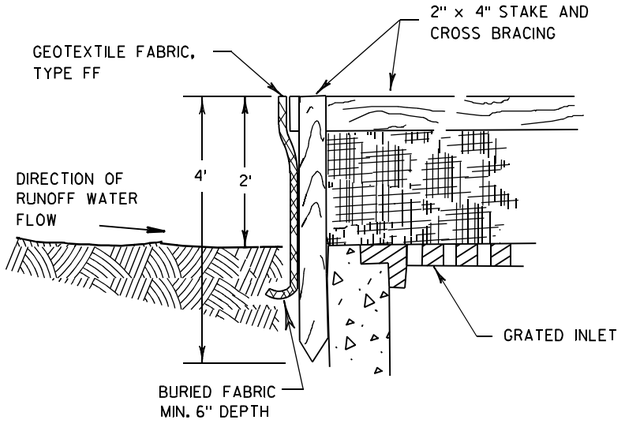
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

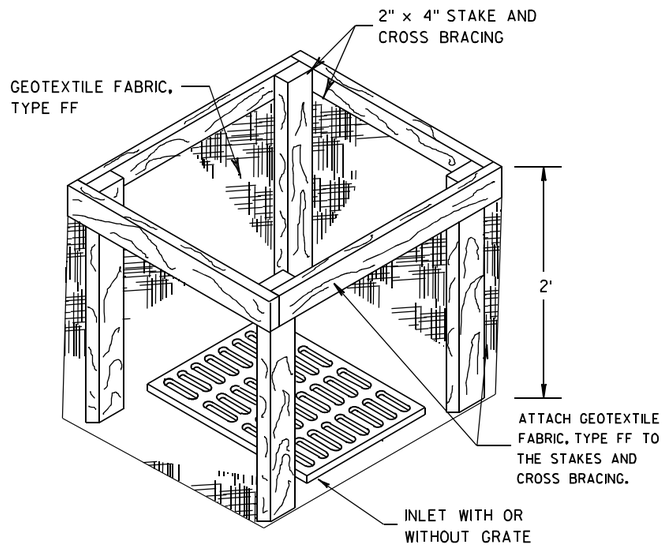
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S.D.D. 8 E 9-6

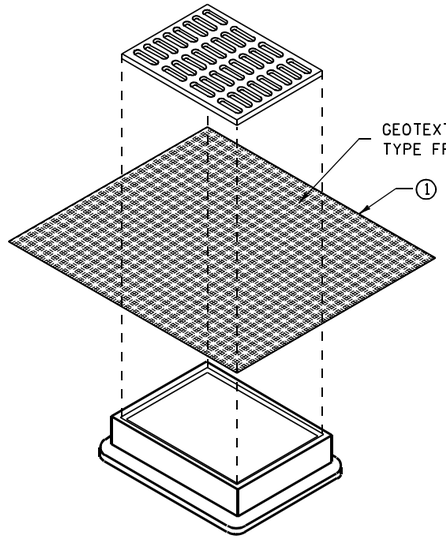
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S.D.D. 8 E 9-6



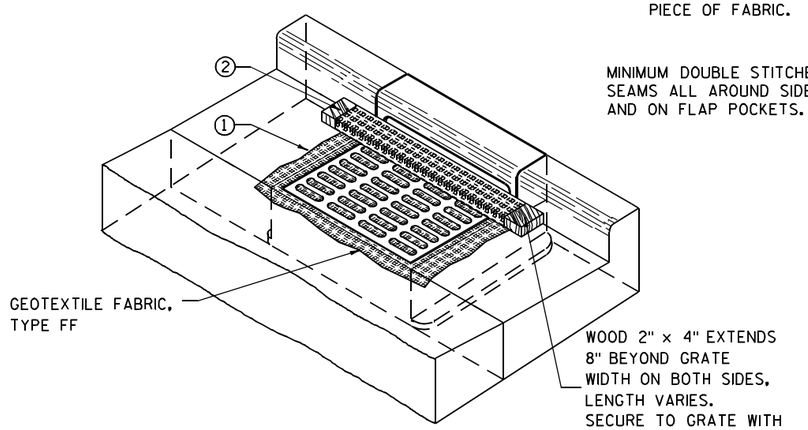


INLET PROTECTION, TYPE A

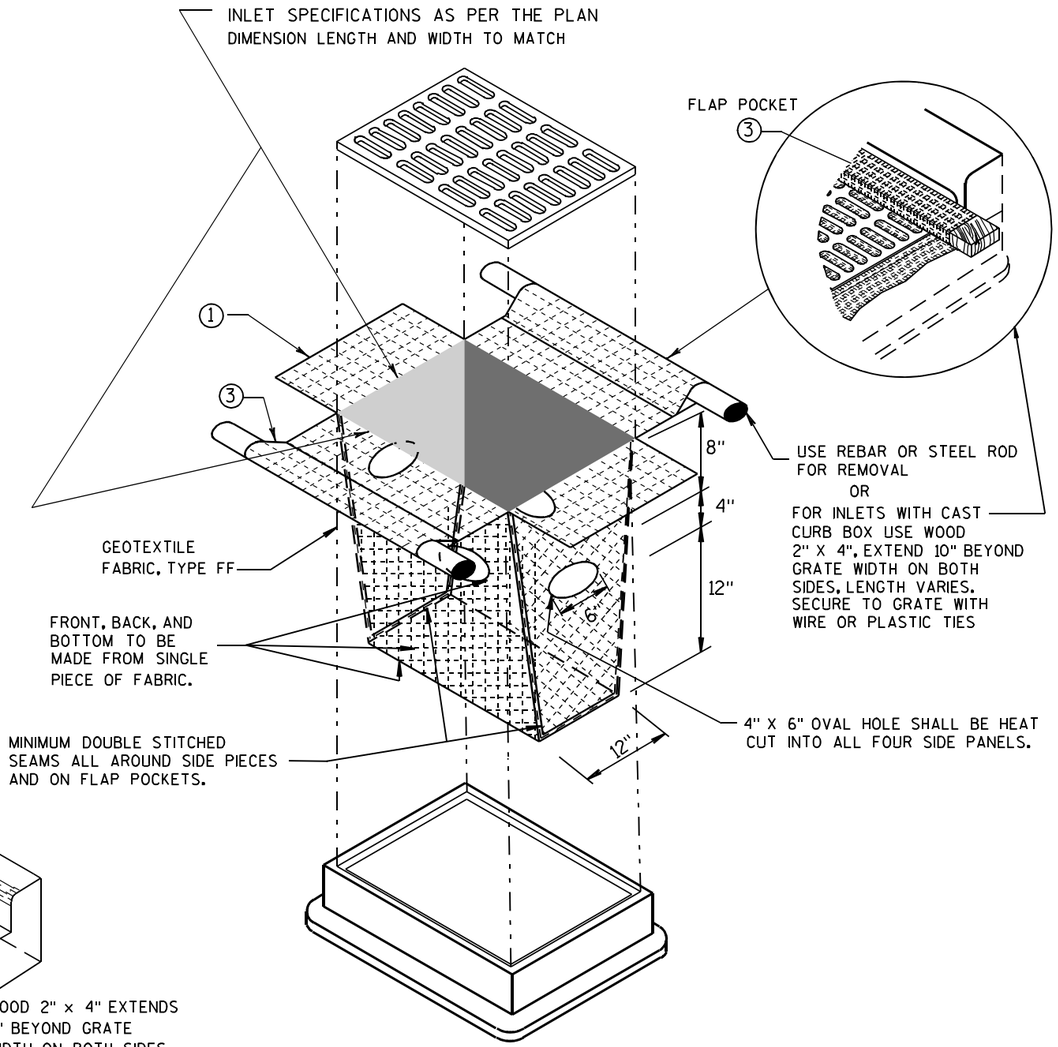


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

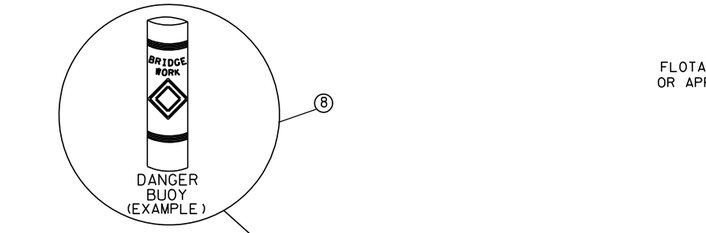
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

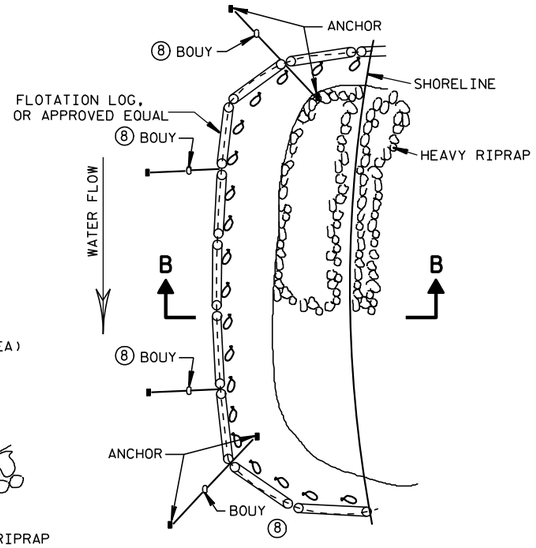
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

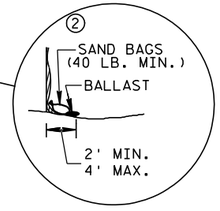
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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

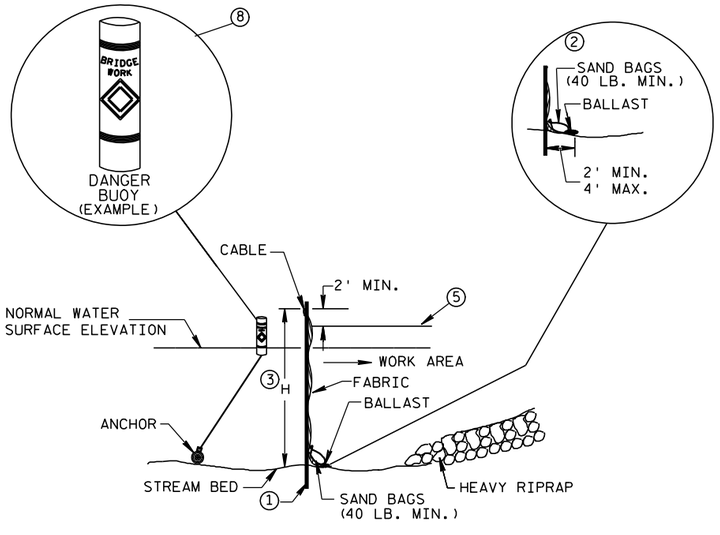


SECTION B-B

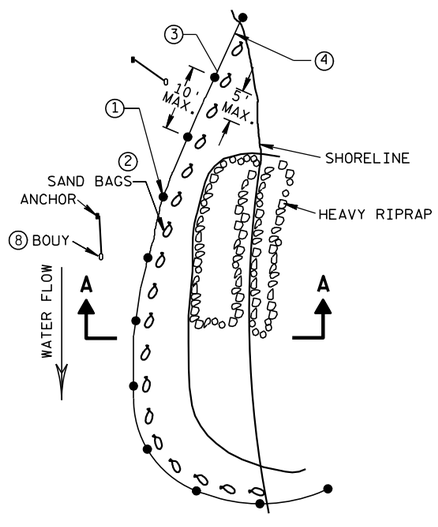




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

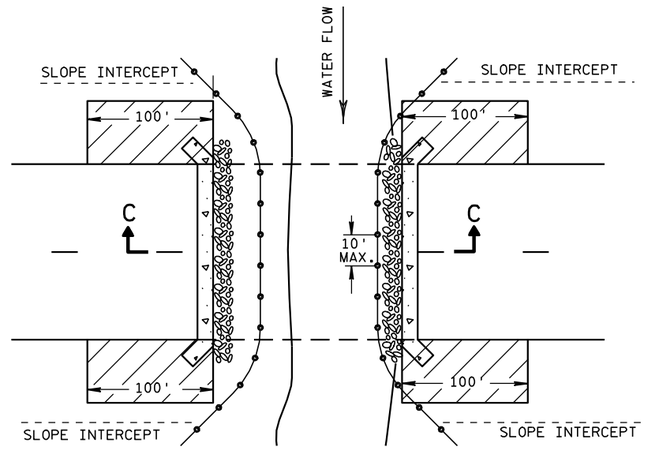
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MIMIMUM BARRIER HEIGHT SHALL BE 2'GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WICHEVER IS GREATER.

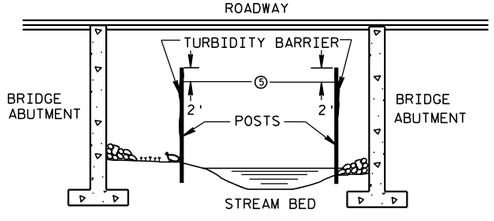
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

6

S.D.D. 8 E 11-2

6

S.D.D. 8 E 11-2

METAL APRON ENDWALLS

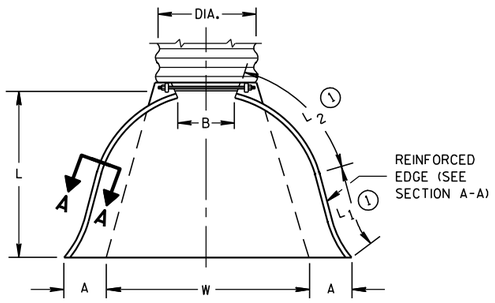
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

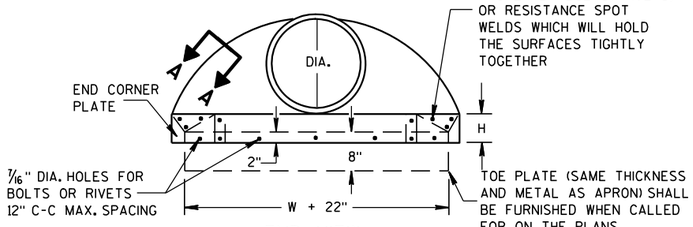
REINFORCED CONCRETE APRON ENDWALLS

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

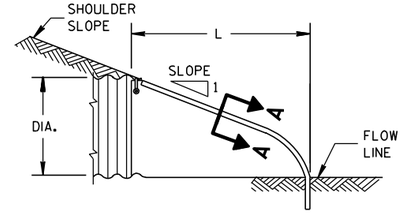
*MINIMUM
**MAXIMUM



PLAN VIEW

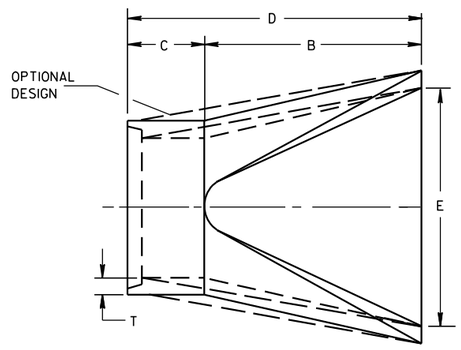


END VIEW

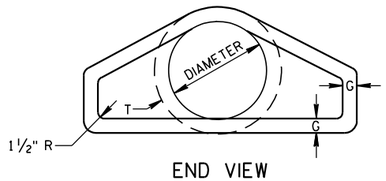


SIDE ELEVATION

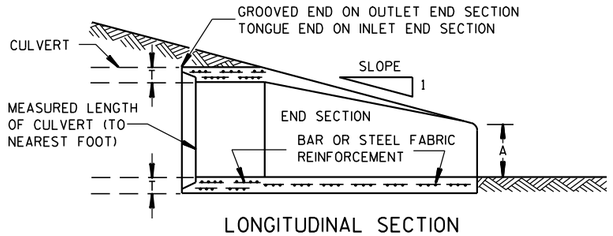
METAL ENDWALLS



PLAN

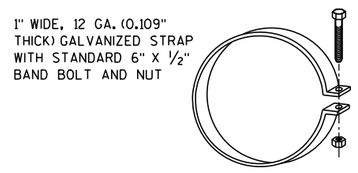


END VIEW



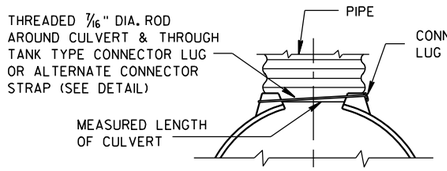
LONGITUDINAL SECTION

CONCRETE ENDWALLS

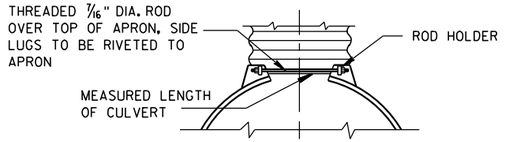


ALTERNATE FOR TYPE 1 CONNECTION

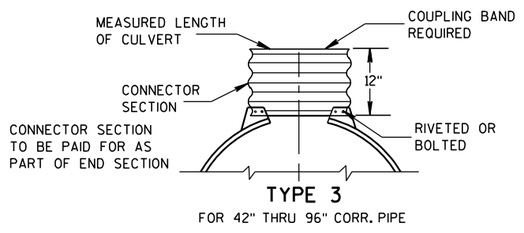
END SECTION CONNECTOR STRAP



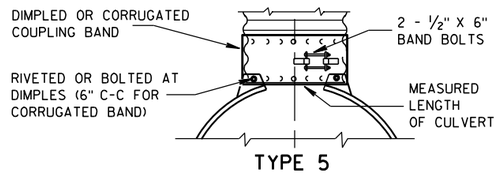
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

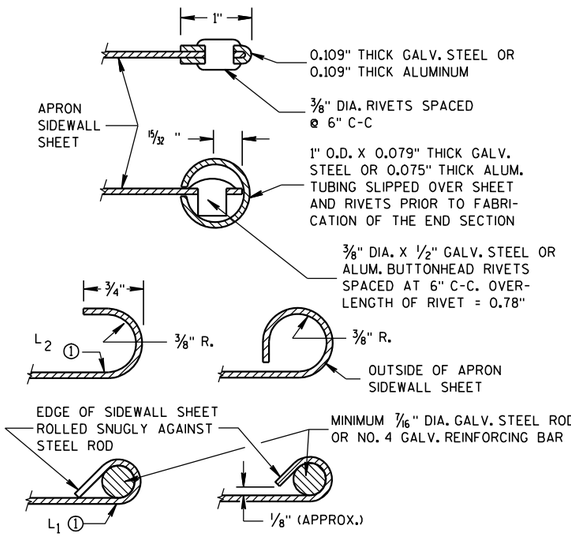
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

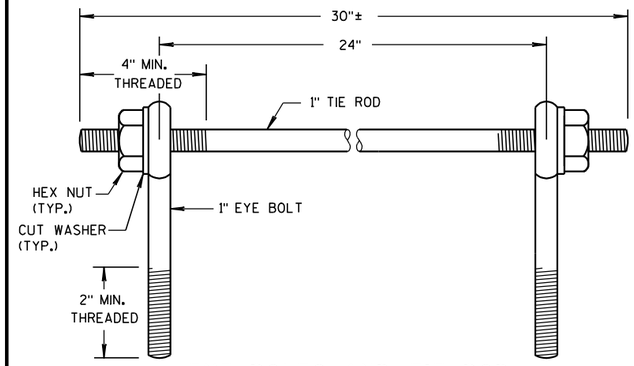
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

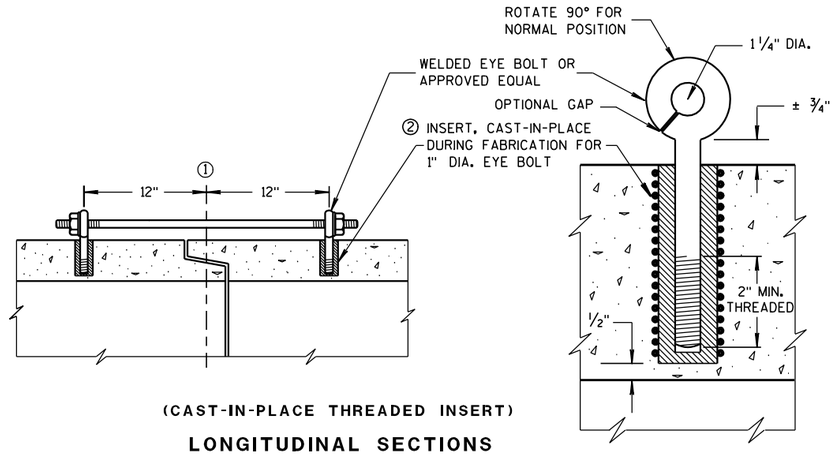
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

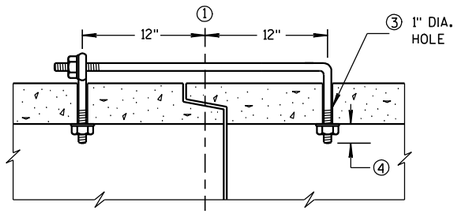
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

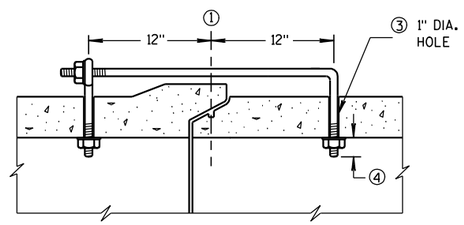
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

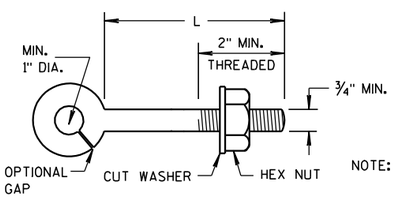


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

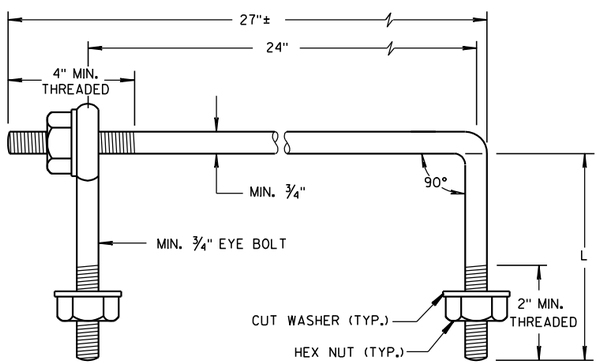
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

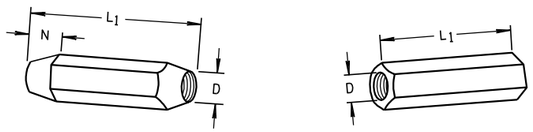
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

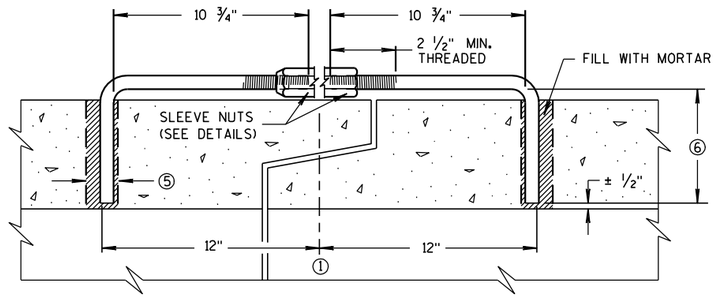
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

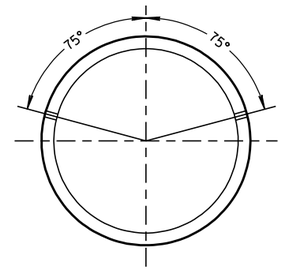
SLEEVE NUTS



LONGITUDINAL SECTION

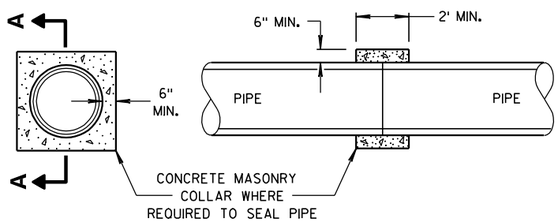
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

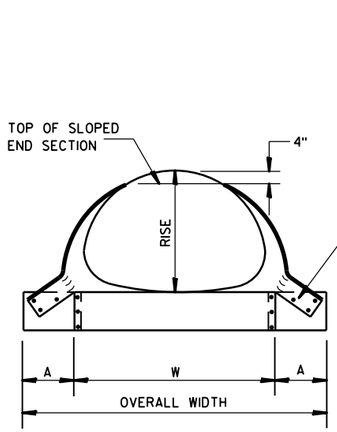
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

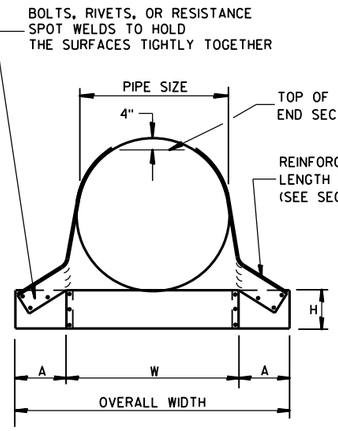
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
123
FHWA

6

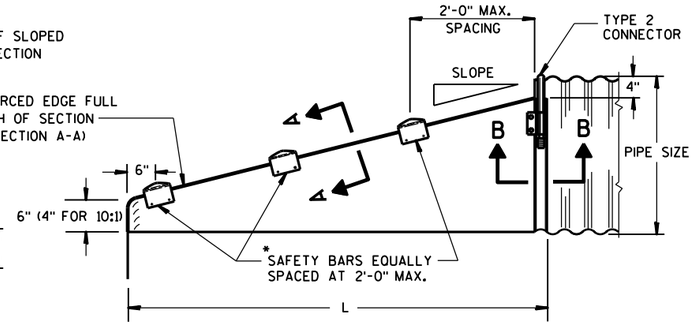
S.D.D. 8 F 4-7



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

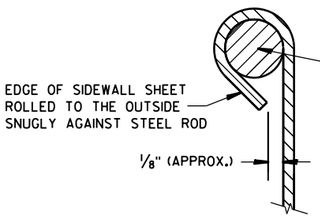
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

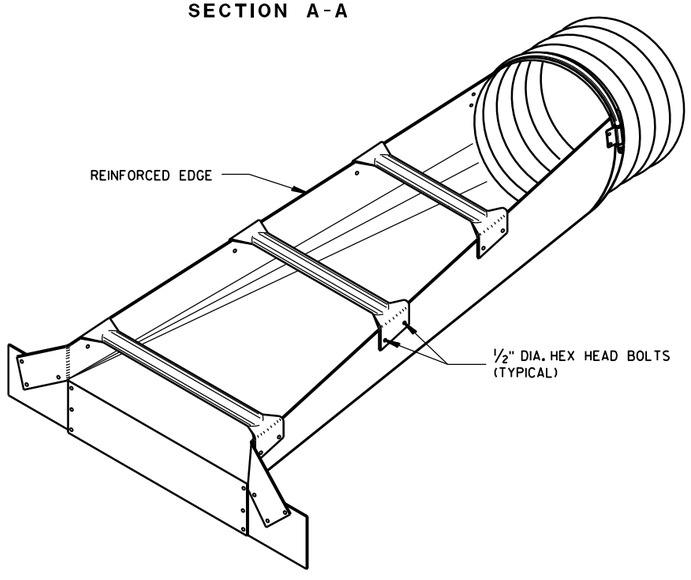
SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



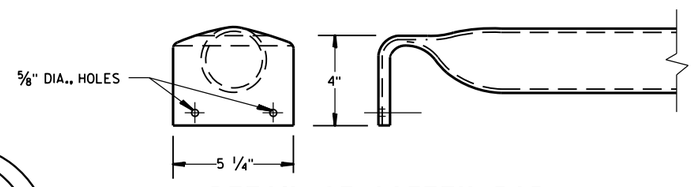
SECTION A-A



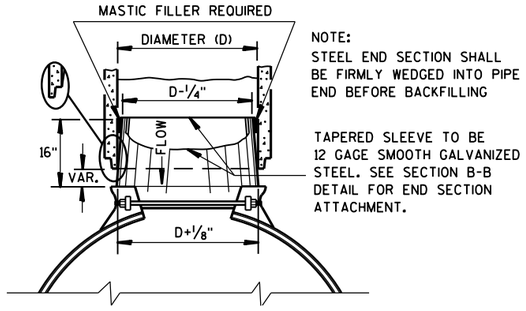
ISOMETRIC VIEW

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.



DETAIL OF SAFETY BAR

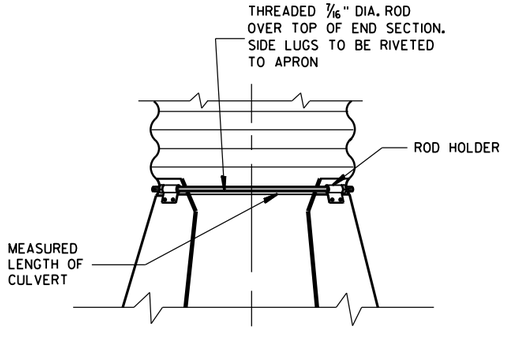


STEEL ADAPTER SLEEVE FOR CONCRETE PIPE

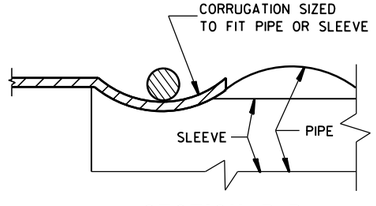
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

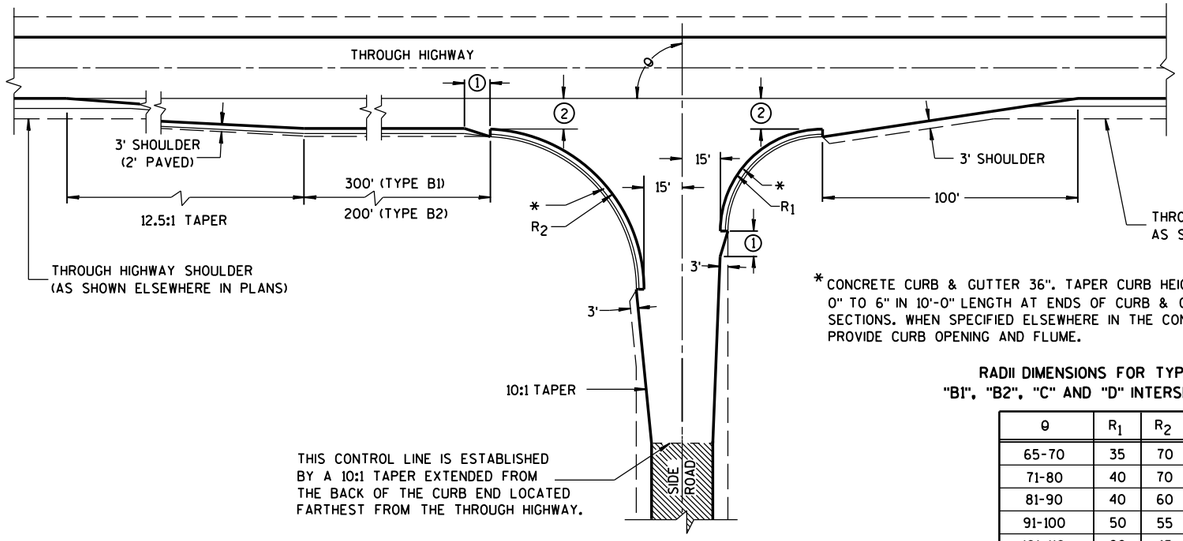
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 7-5

6

S.D.D. 8 F 7-5

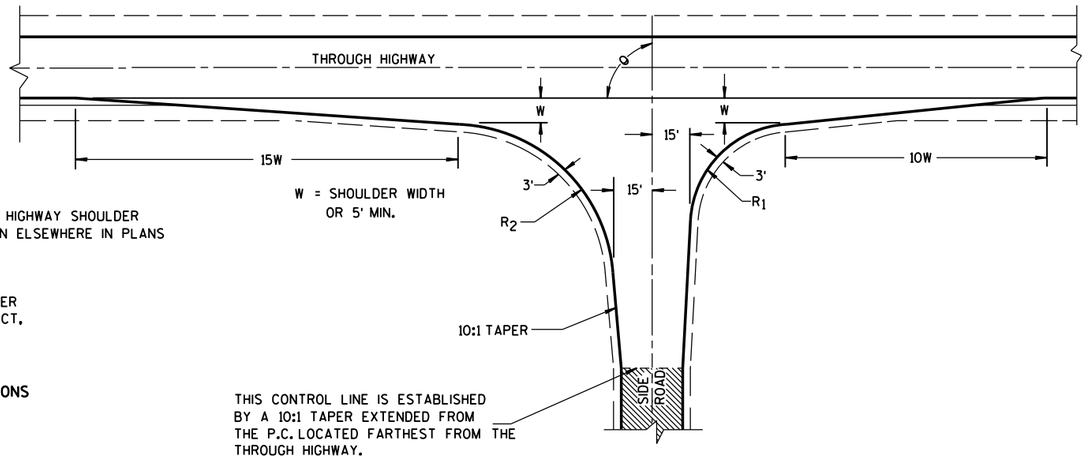


TYPE "B1" AND "B2"

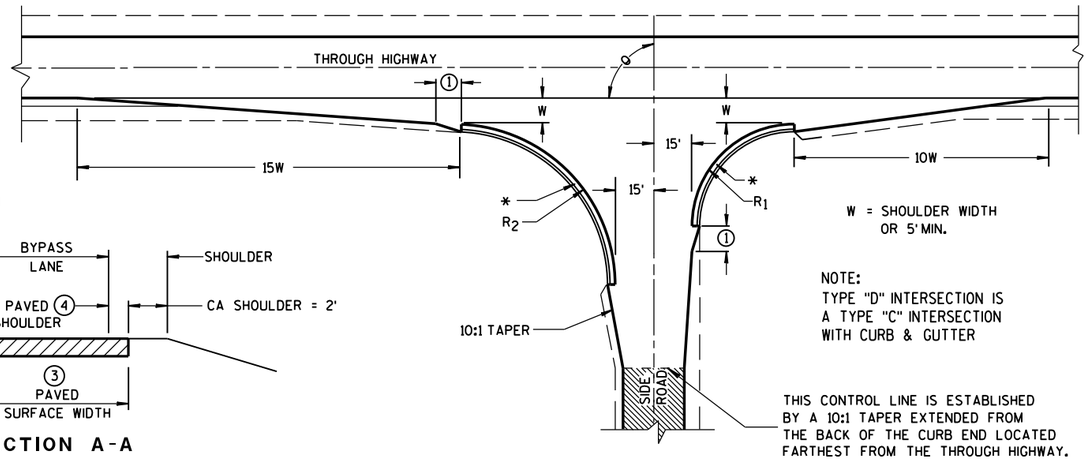
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

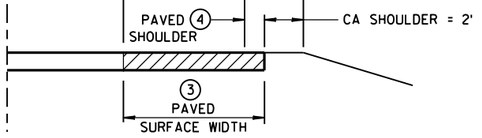
(1) 10-FT TYPICAL.

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

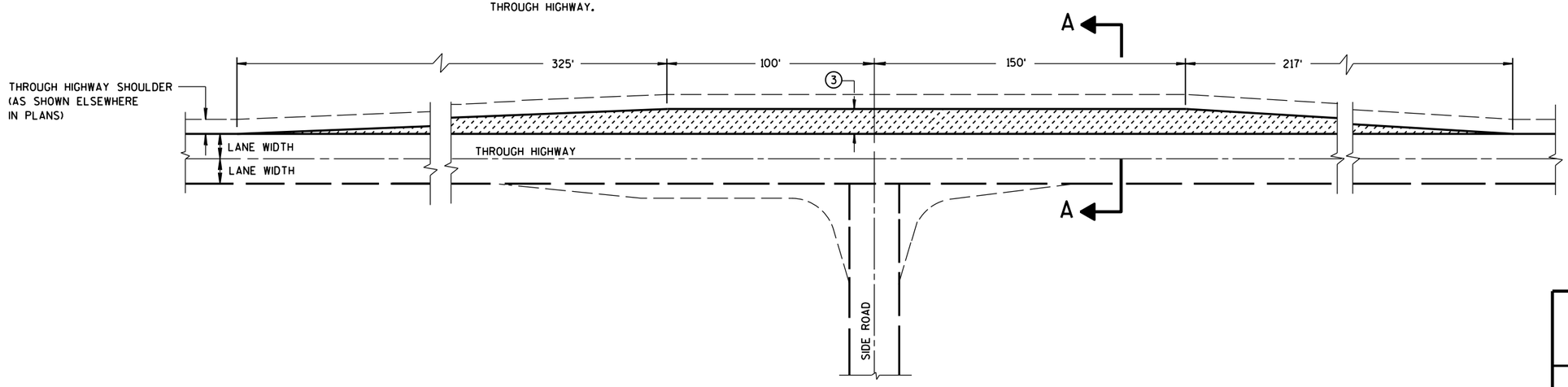
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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

6

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

GENERAL NOTES

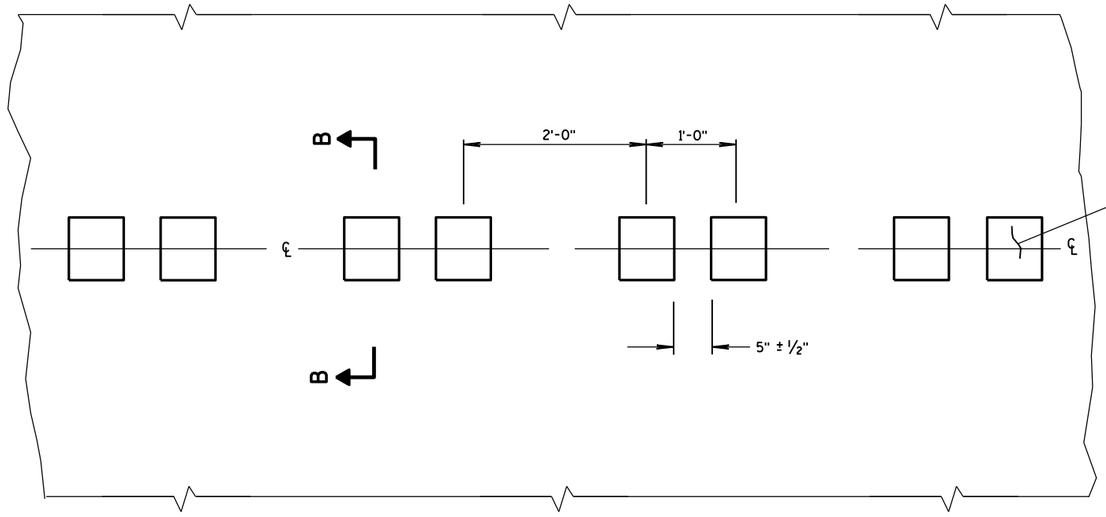
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

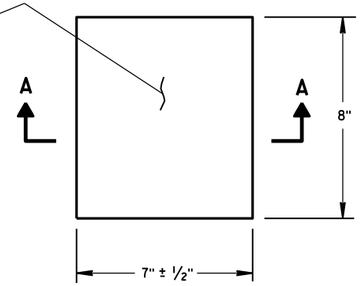
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

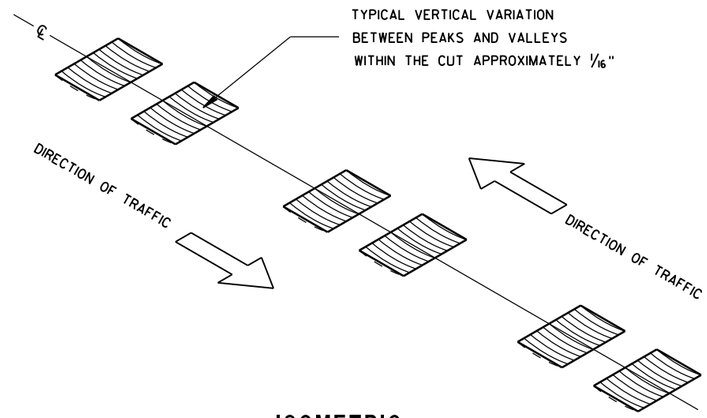
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



PLAN VIEW
CENTER LINE WITH GROOVES

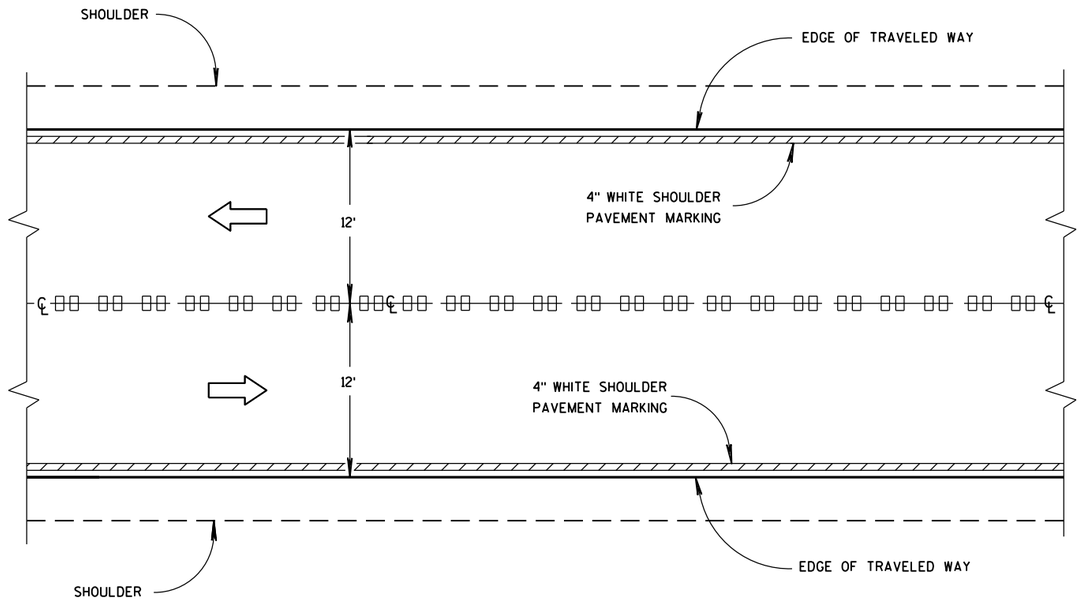


PLAN VIEW
(SINGLE GROOVE)

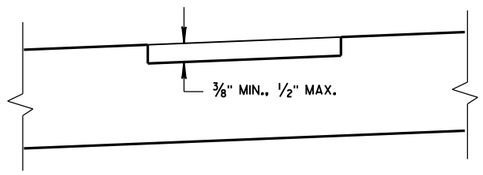


ISOMETRIC

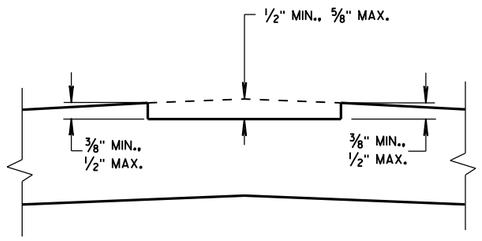
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



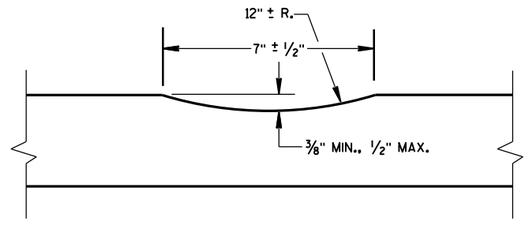
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

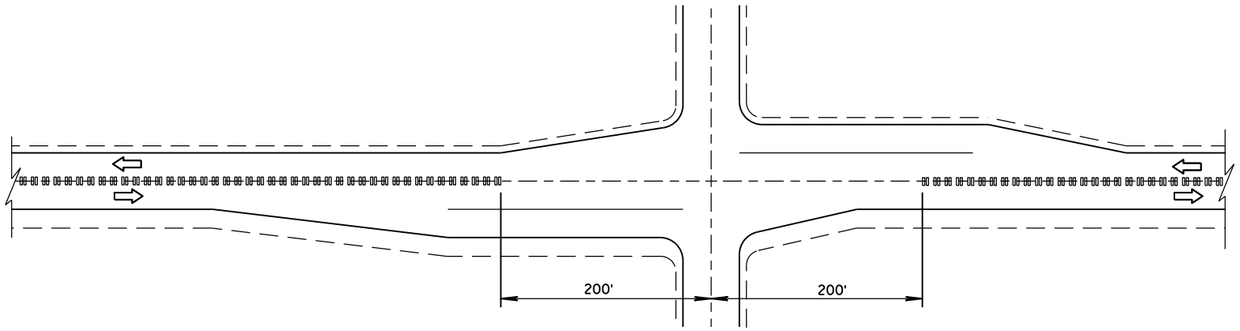
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

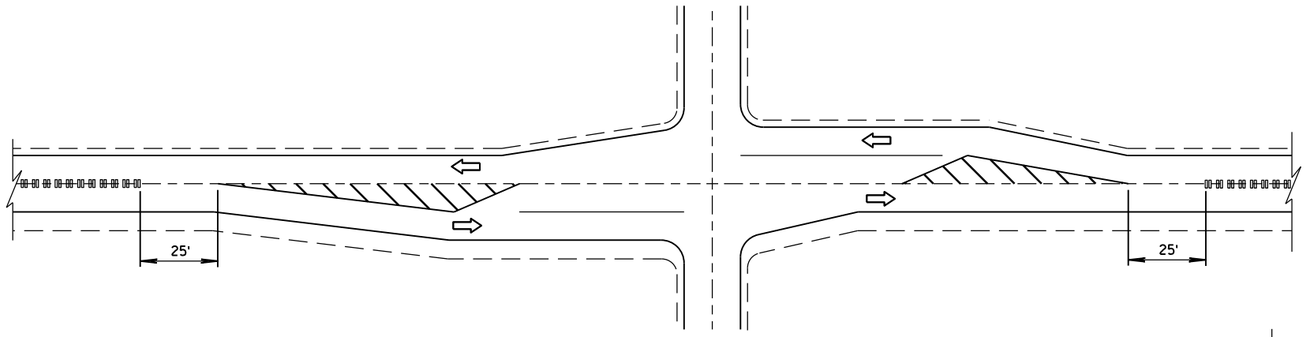
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

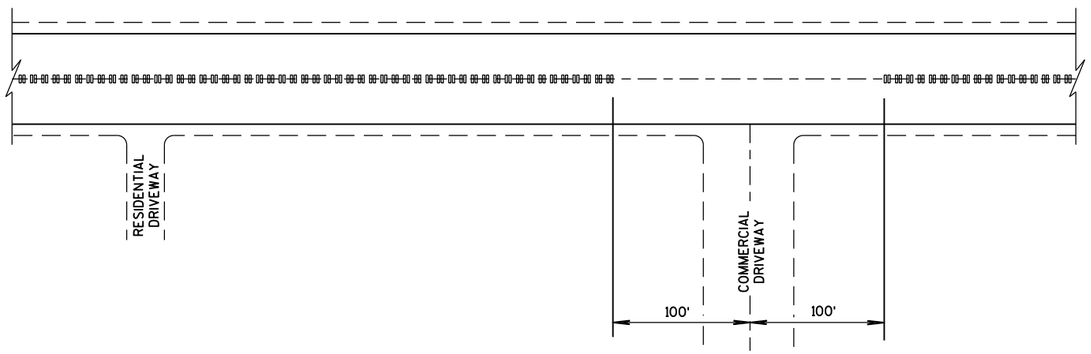
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

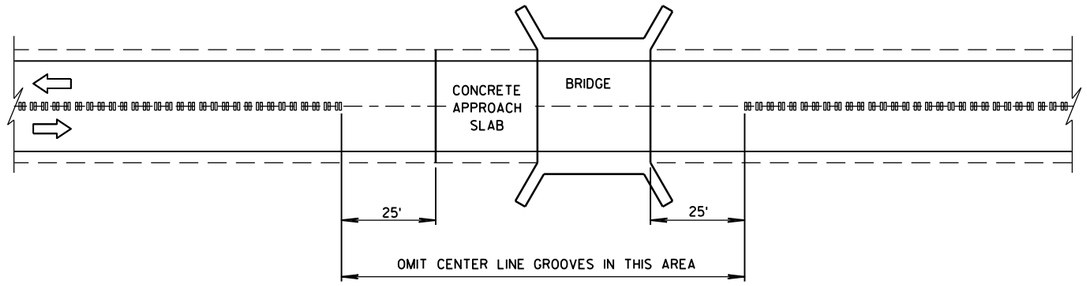


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

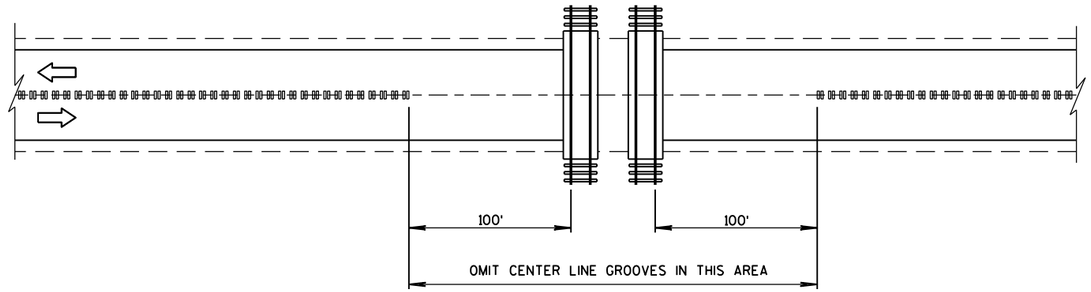


CENTER LINE GROOVES AT DRIVEWAYS (1)

(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

6

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

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

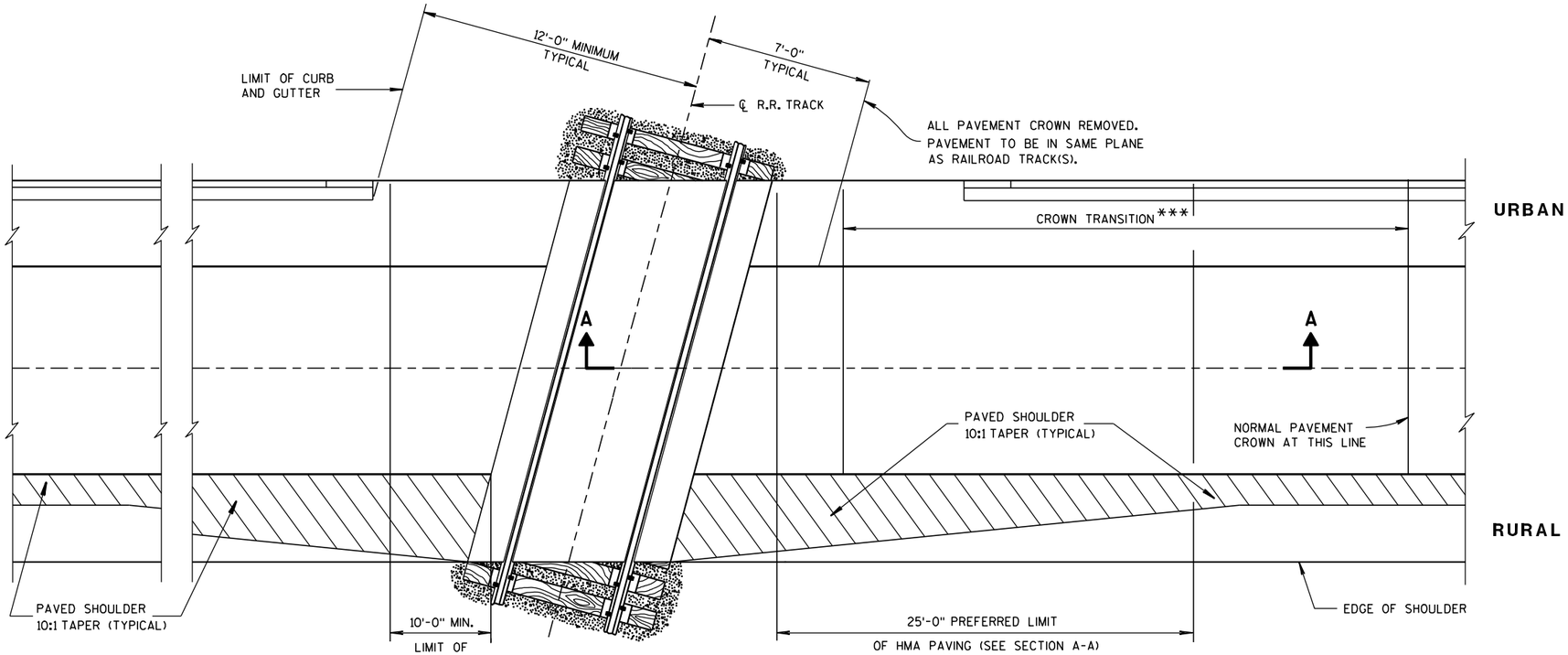
APPROVED

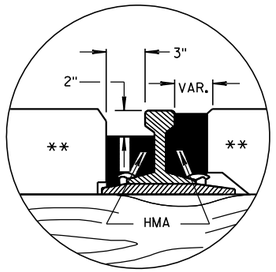
5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

NT

FHWA





DETAIL B

HMA FLANGEWAY AND FIELD FILLERS

GENERAL NOTES

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

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

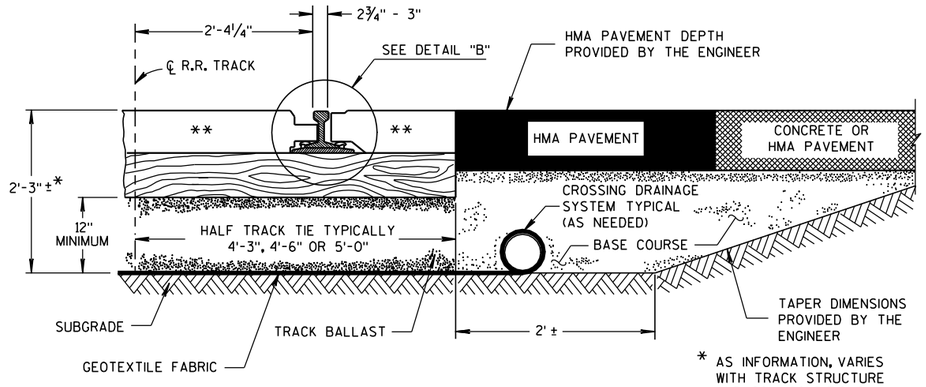
HMA PAVEMENT APPROACHES AND HMA PAVEMET CROSSING SURFACES TO BE PLACED BY CONTRACTOR UNLESS OTHERWISE PROVIDED.

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

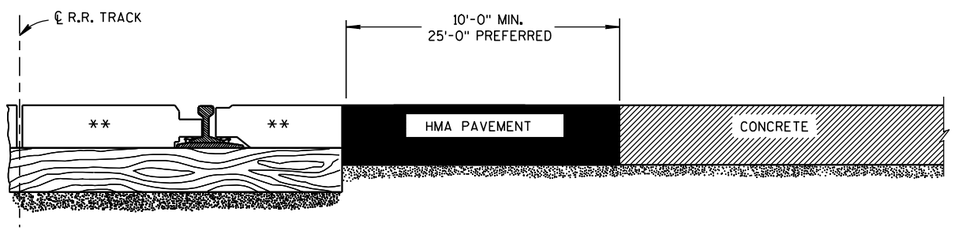
HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

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

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

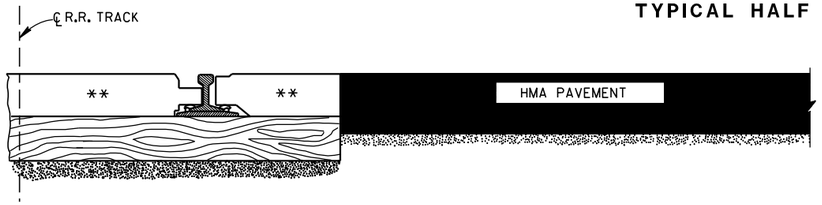


TYPICAL HALF SECTION



SECTION A-A

CONCRETE PAVEMENT APPROACH



SECTION A-A

HMA PAVEMENT APPROACH

EXAMPLES OF PAVEMENT APPROACHES

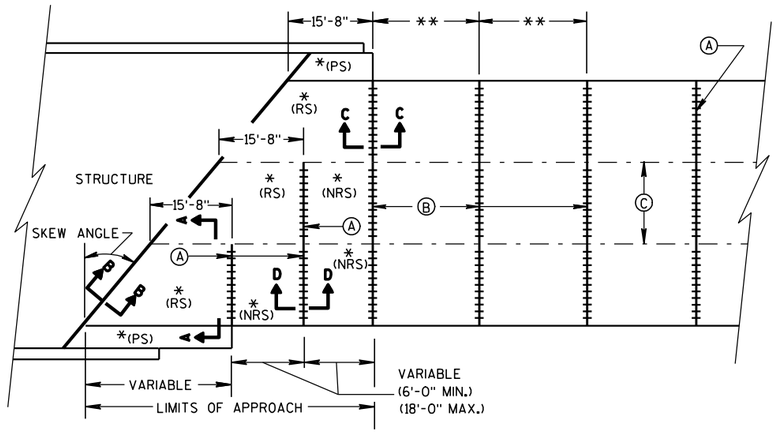
PAVEMENT DETAILS FOR RAILROAD APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

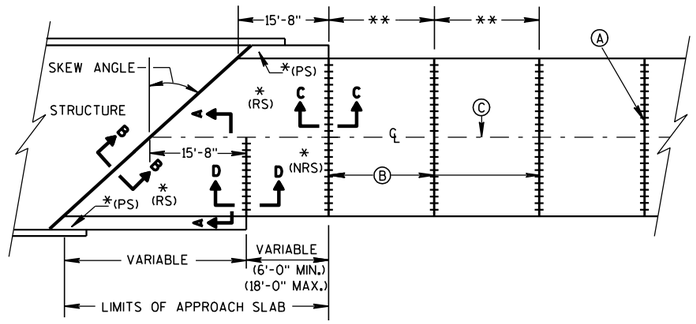
APPROVED
8-28-09 DATE
/S/ Ronald E. Adams
CHIEF, RAILROADS & HAI CTION
FHWA

6

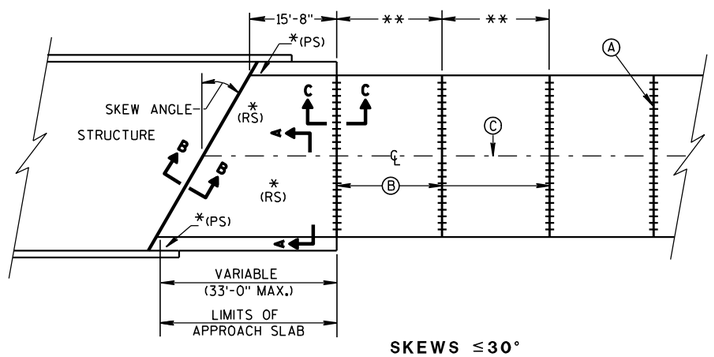
S.D.D. 13 B 1-10



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



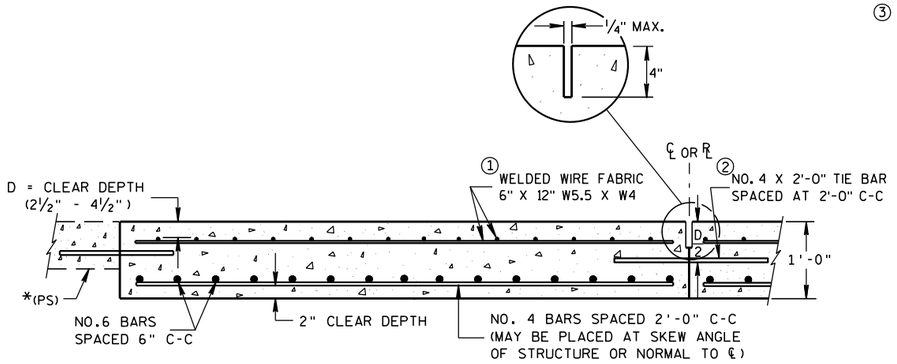
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

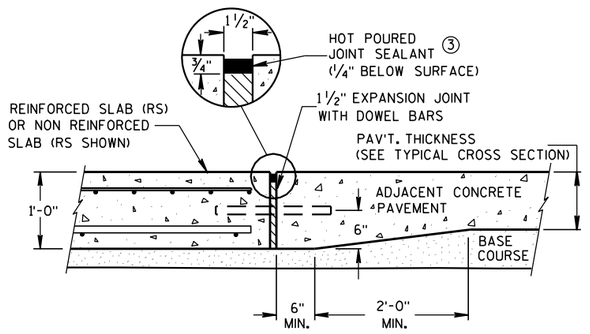
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

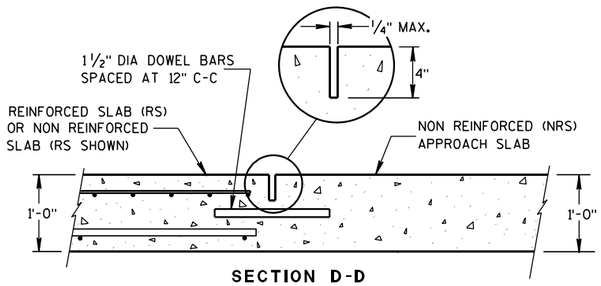
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

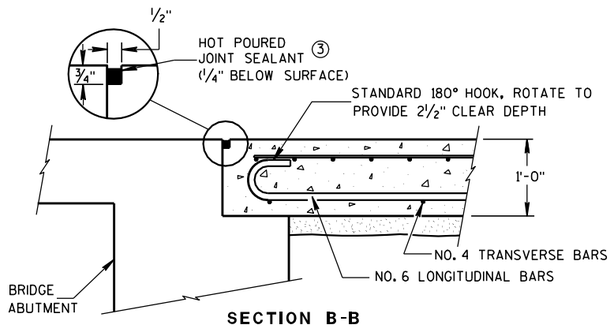
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

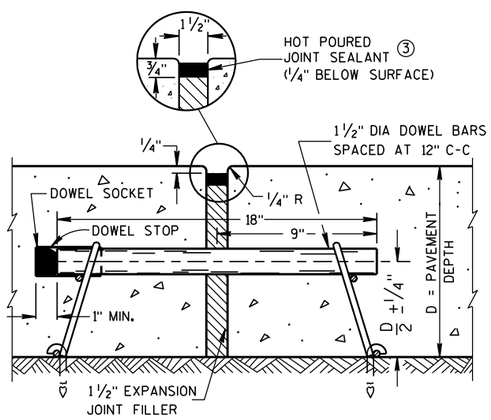
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

③ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT



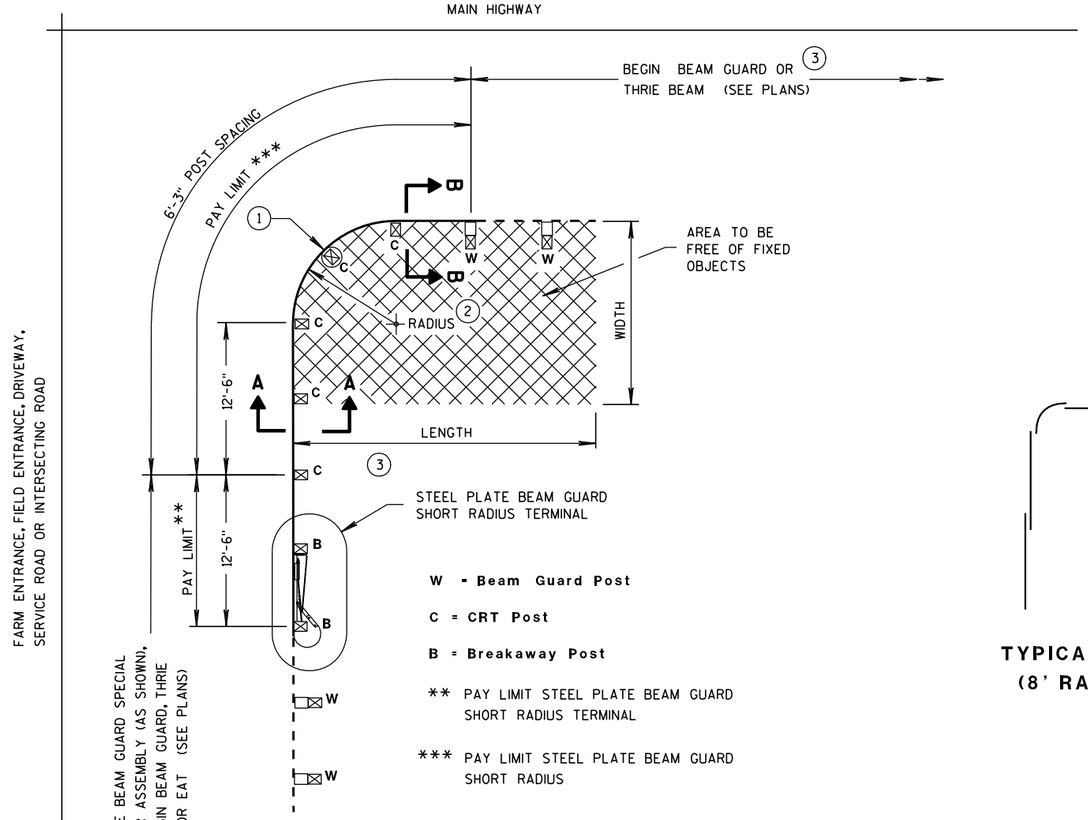
EXPANSION JOINT

CONCRETE PAVEMENT APPROACH SLAB

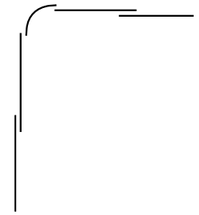
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/2009 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DE ENGINEER
FHWA

6
S.D.D. 13 B 2-6



TYPICAL LAYOUT
(8' RADIUS SHOWN)



TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

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

SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

(1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.

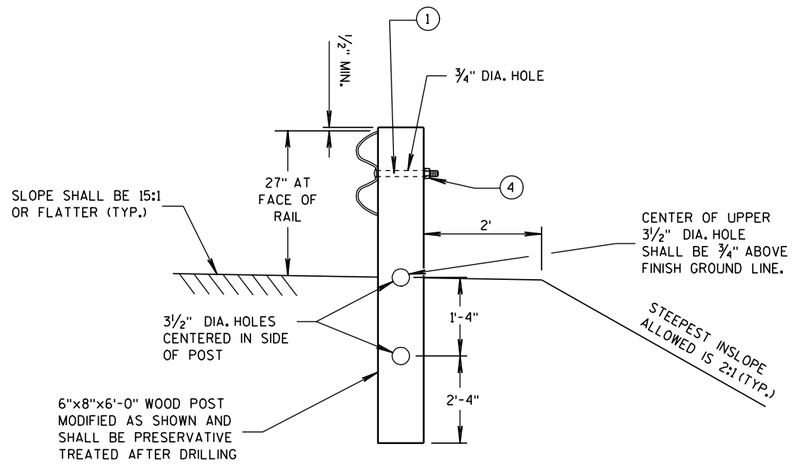
(2) RADIUS FROM 8' - 36'. SEE PLAN.

(3) HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.

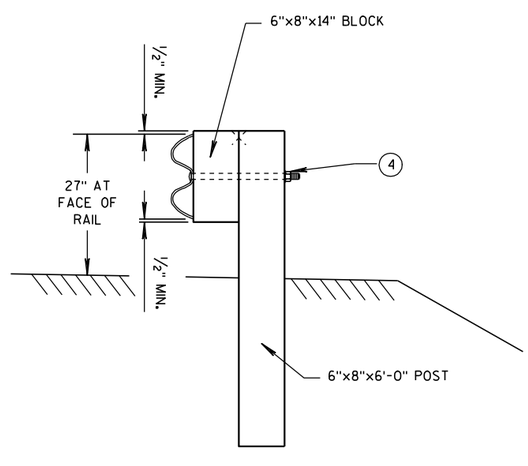
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

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

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



SECTION A-A
(CRT POST)



SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

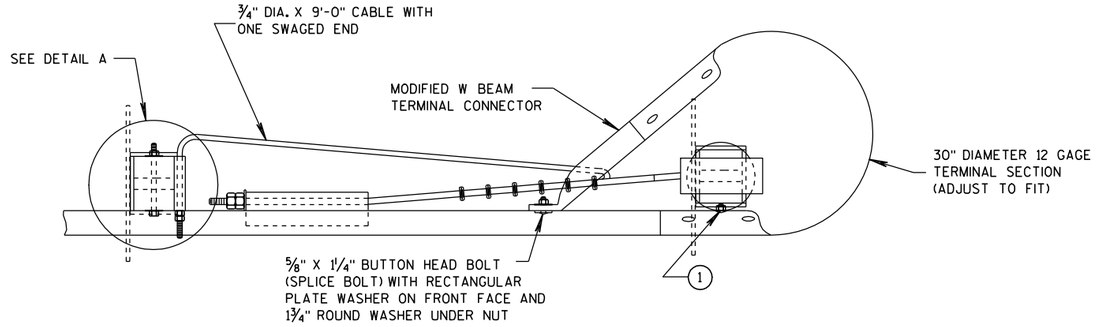
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

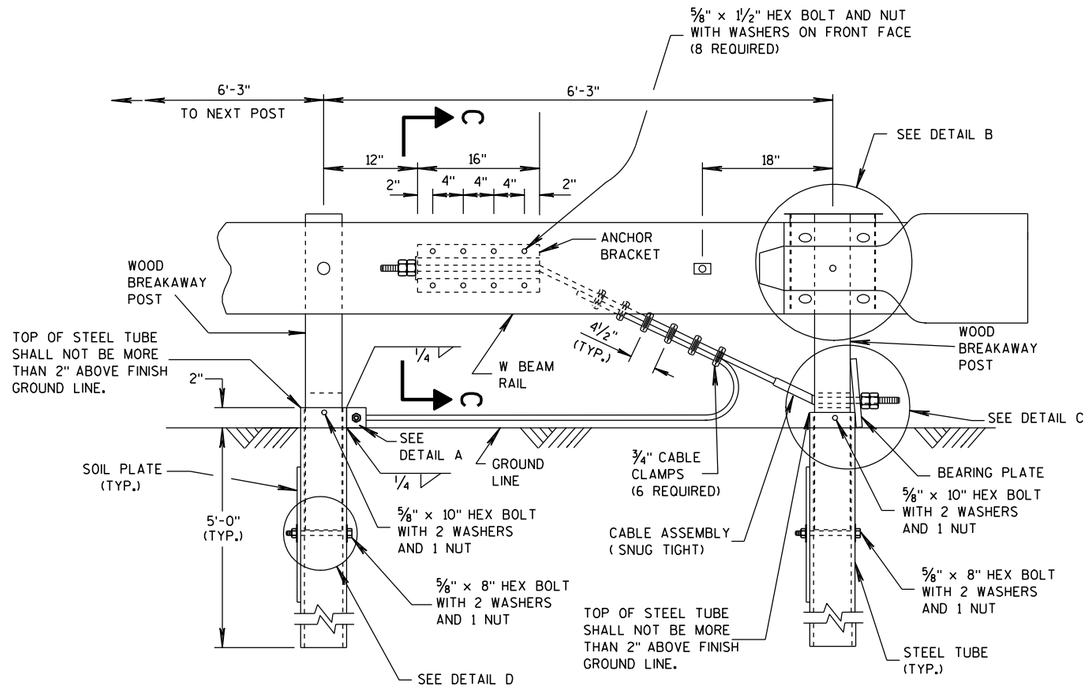
S.D.D. 14 B 27-1a

6

S.D.D. 14 B 27-1a



PLAN VIEW



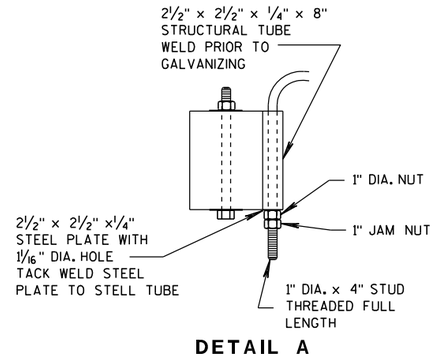
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

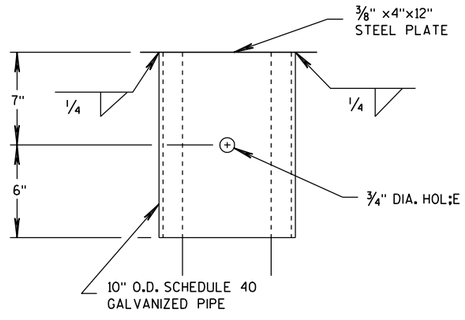
GENERAL NOTES

(1) ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A ⅝" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED ¾" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A



DETAIL B

(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

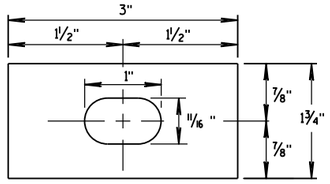
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

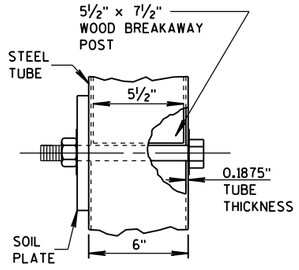
S.D.D. 14 B 27-1b

6

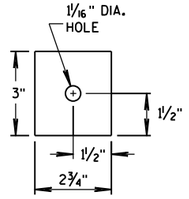
S.D.D. 14 B 27-1b



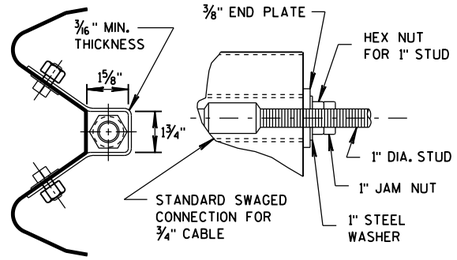
RECTANGULAR PLATE WASHER



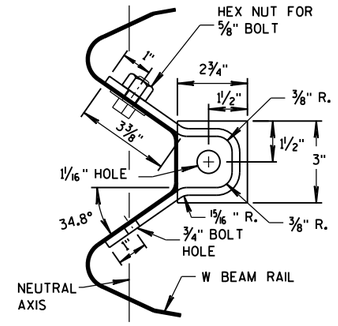
DETAIL D



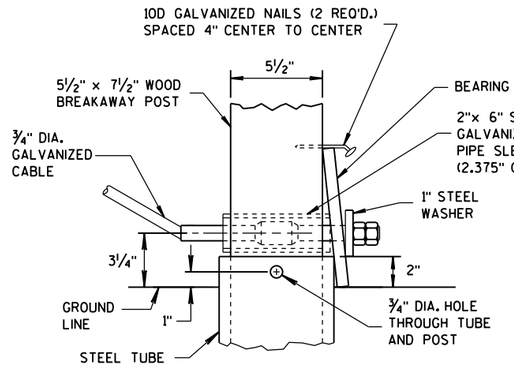
END PLATE



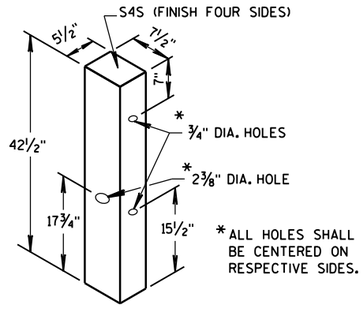
SECTION C-C
(END PLATE REMOVED)



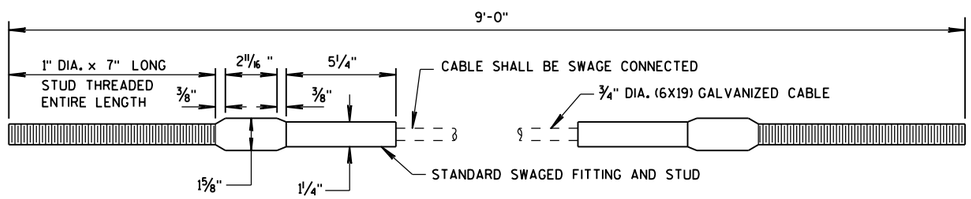
ANCHOR BRACKET



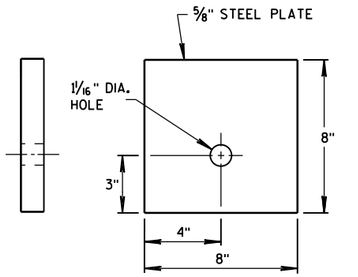
DETAIL C



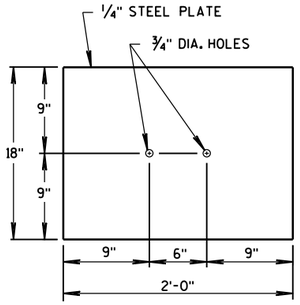
WOOD BREAKAWAY POST



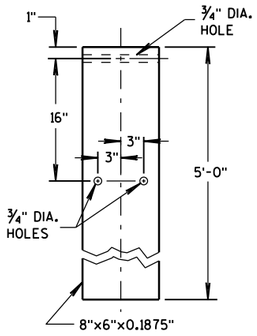
CABLE ASSEMBLY



BEARING PLATE



SOIL PLATE



STEEL TUBE

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

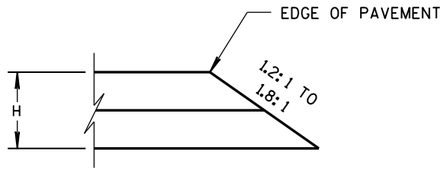
APPROVED
12/18/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 27-1c

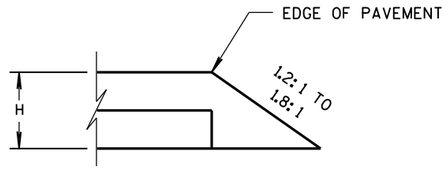
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S.D.D. 14 B 27-1c



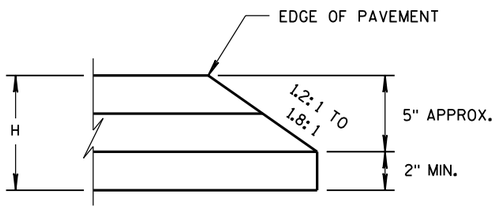
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



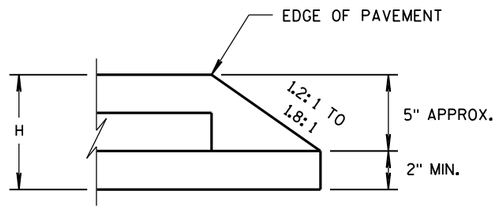
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

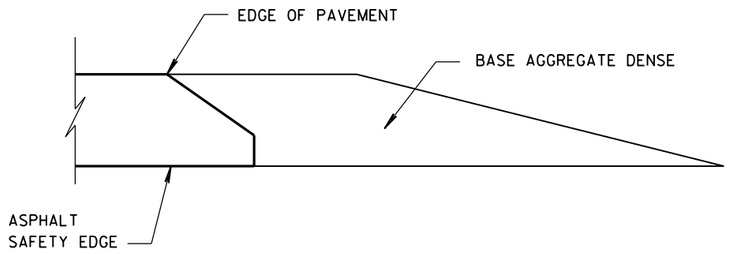
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

S.D.D. 14 B 29-1

GENERAL NOTES

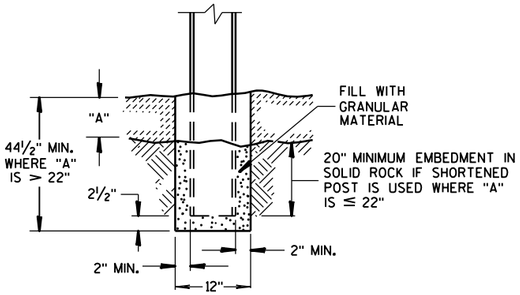
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

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.

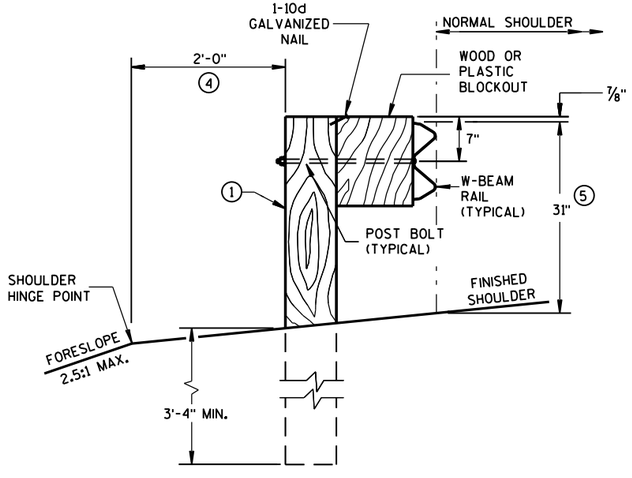
3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO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

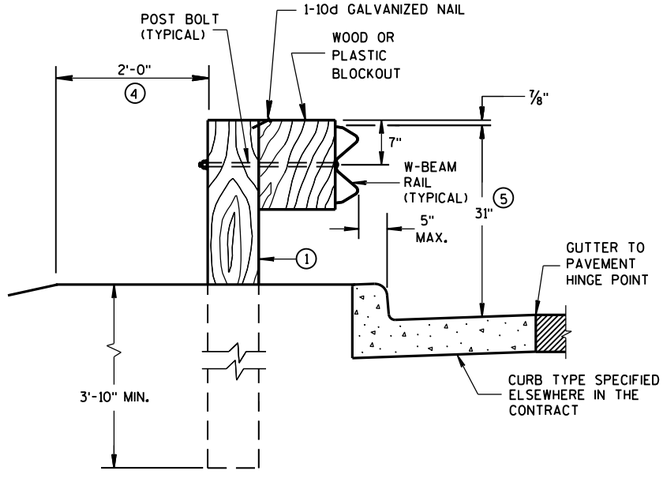
5. FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".



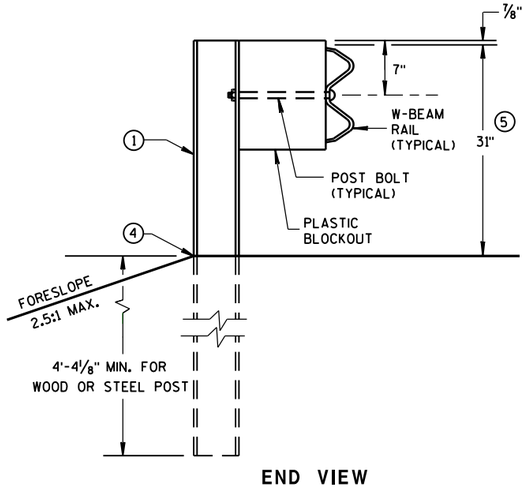
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



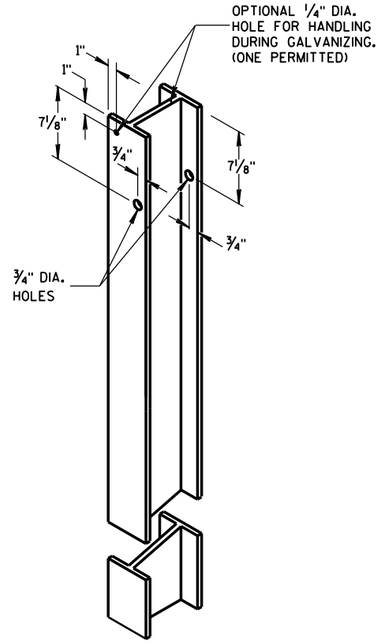
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



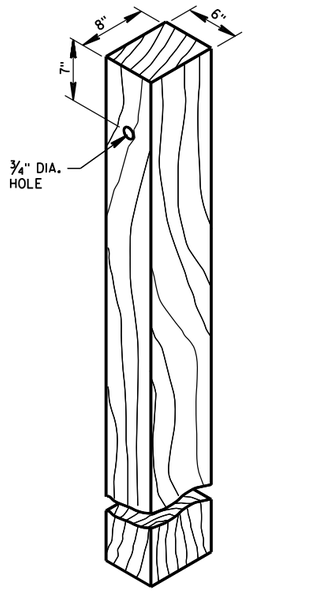
END VIEW
LOCATED ALONG A CURBED ROADWAY



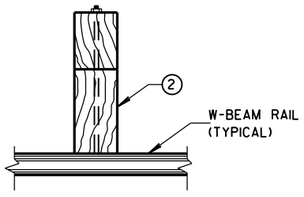
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



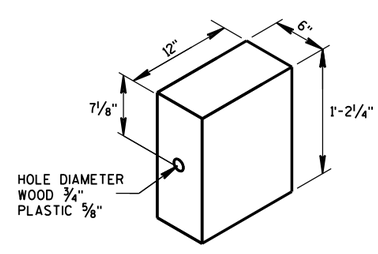
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



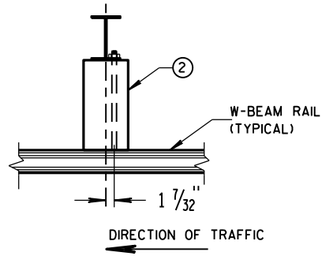
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

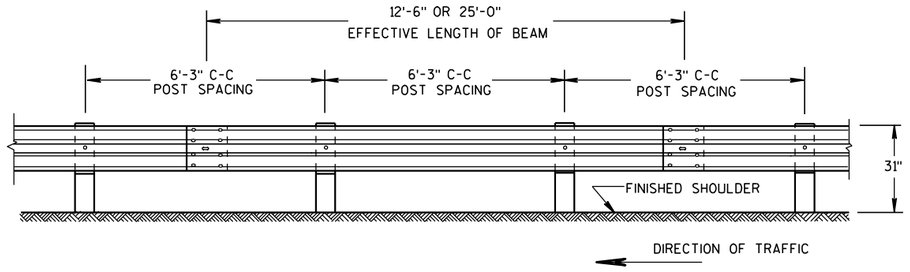


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

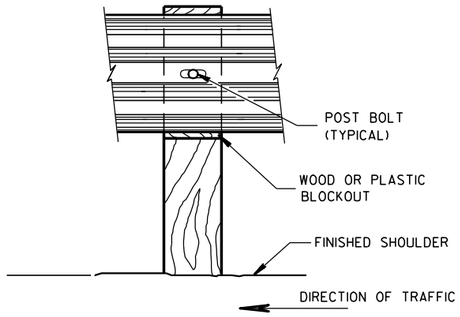
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



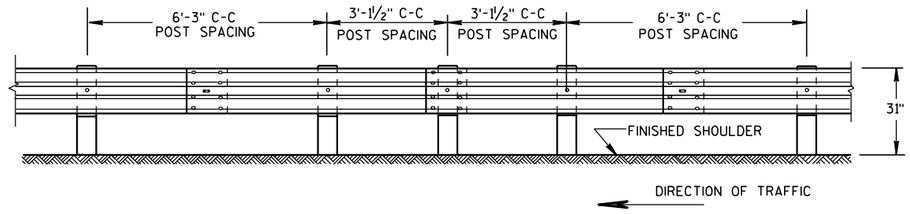
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

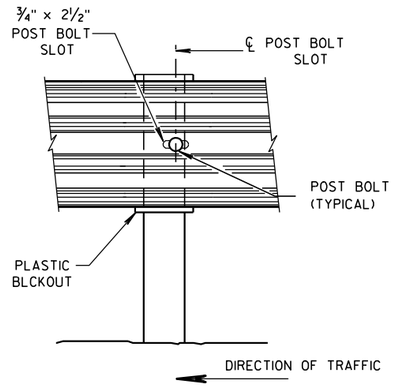
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

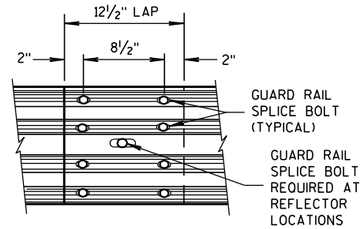


FRONT VIEW

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

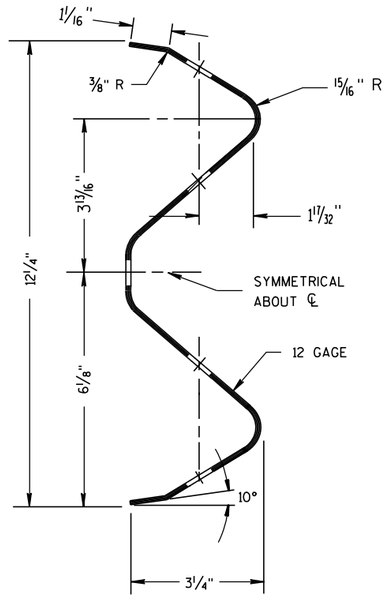


FRONT VIEW AT STEEL POST

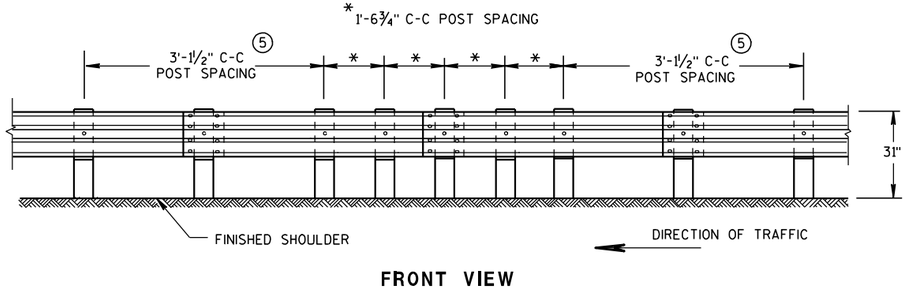


FRONT VIEW

MID-SPAN BEAM SPLICE

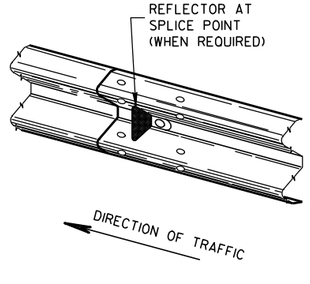


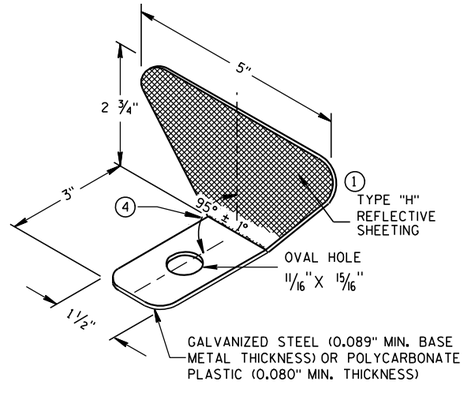
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

REFLECTOR SPACING ②

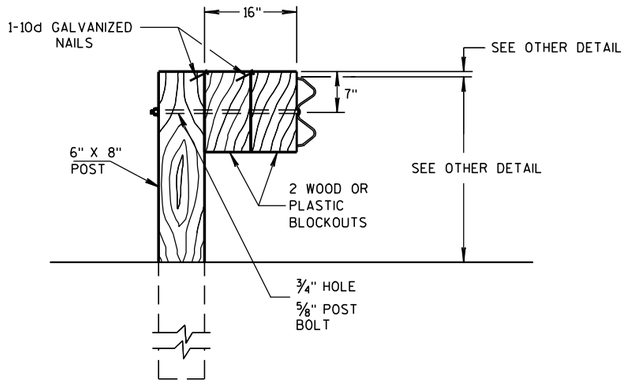
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1 ③	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ④	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

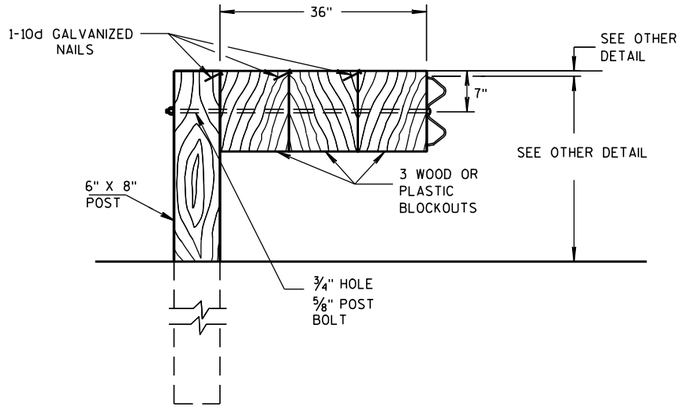
S.D.D. 14 B 42-2b

S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

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

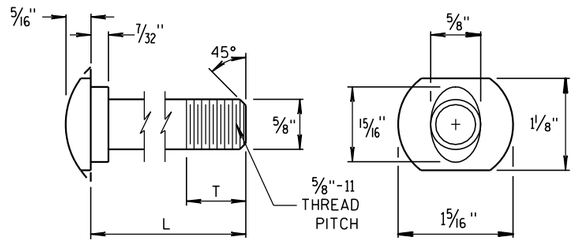


DETAIL FOR 36" BLOCKOUT DEPTH

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

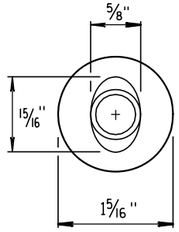
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

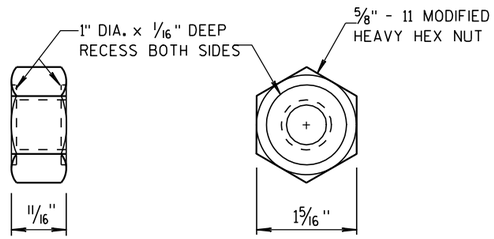


POST BOLT TABLE

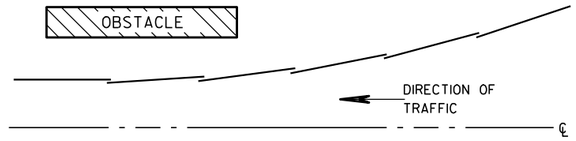
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

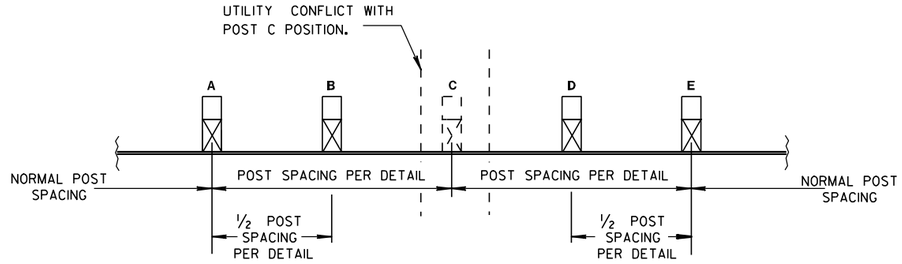


POST BOLT AND RECESS NUT

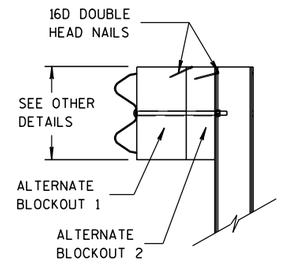


PLAN VIEW

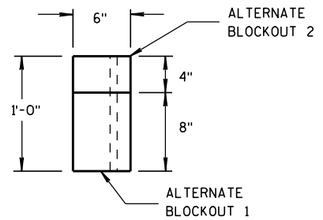
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

ENT

6

S.D.D. 14 B 42-2c

6

S.D.D. 14 B 42-2c

GENERAL NOTES

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

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

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

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

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(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.

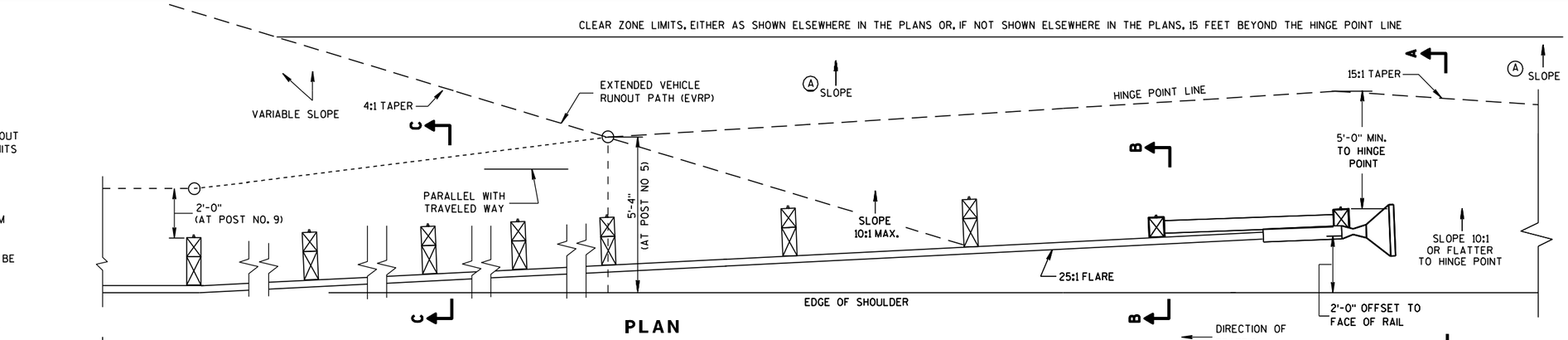
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

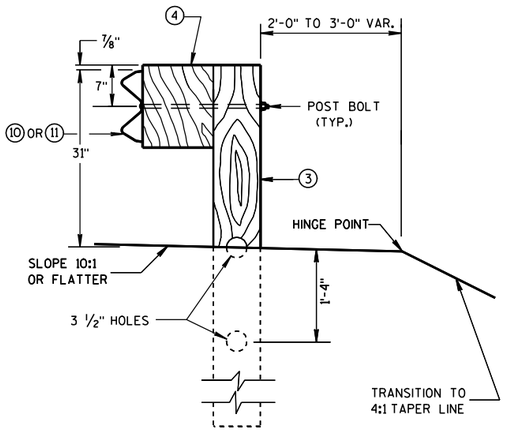
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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.

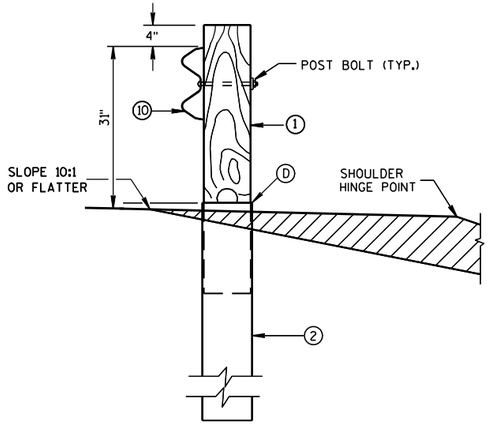
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

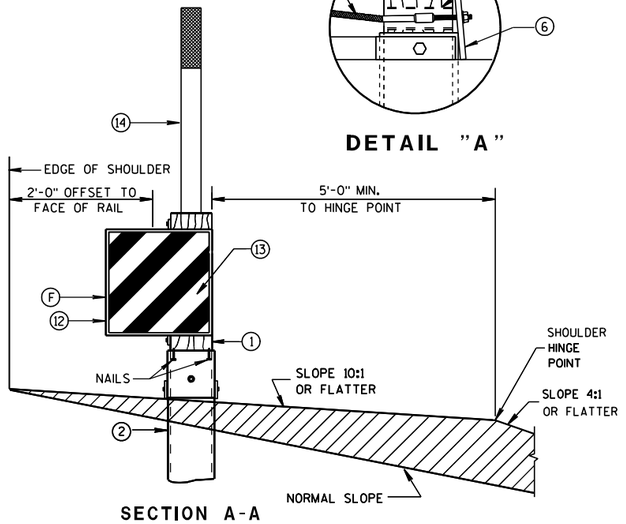




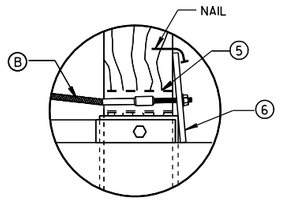
SECTION C-C
TYPICAL AT POST NOS. 3-9



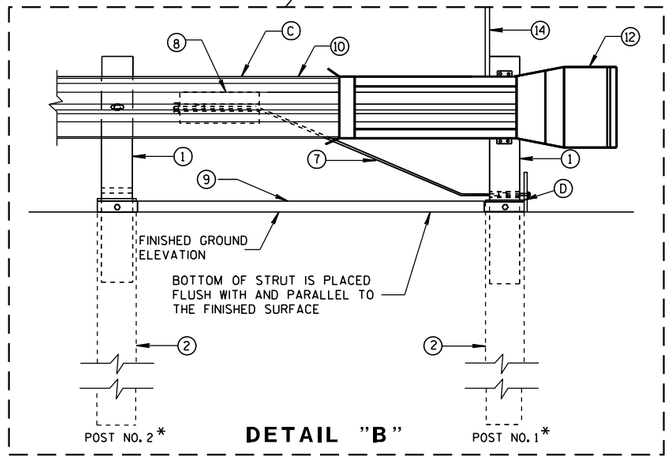
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



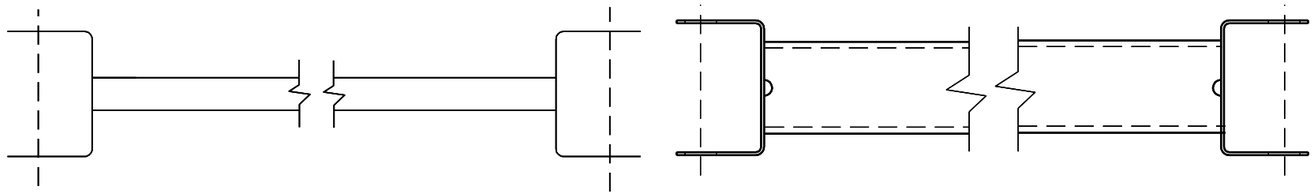
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 44-1a

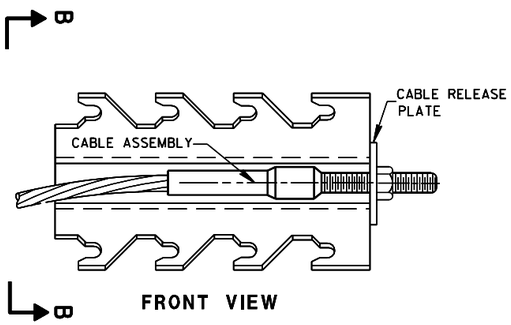
6



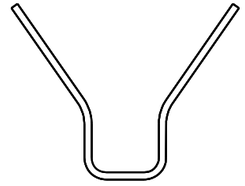
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

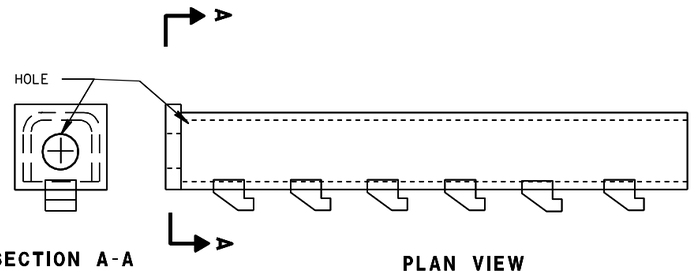
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR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



FRONT VIEW



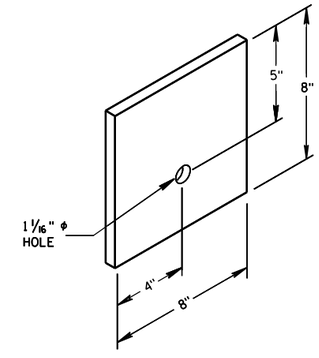
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



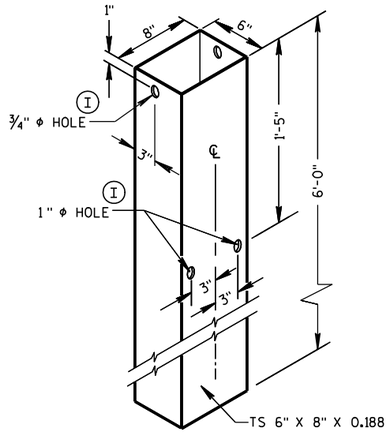
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

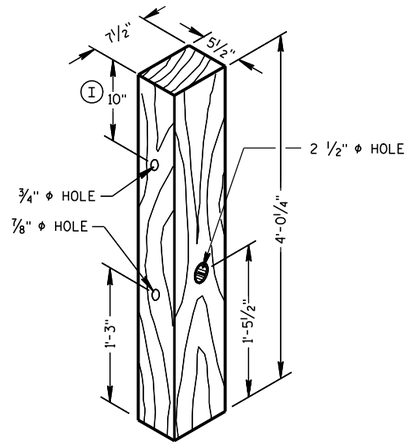
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1b

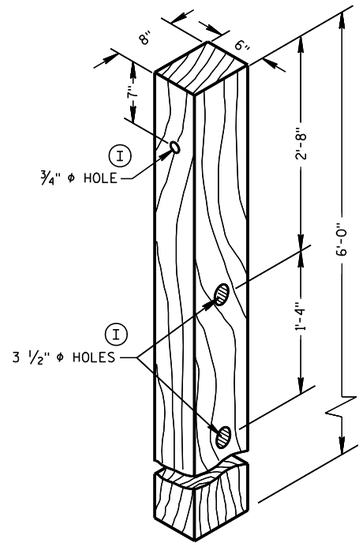


FOUNDATION TUBE (2)



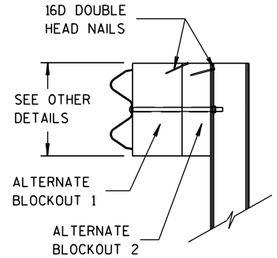
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

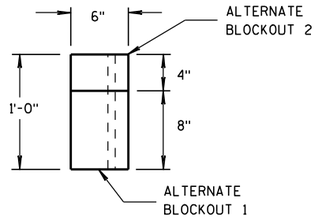


POSTS NUMBER 3-9

WOOD CRT POST (3)

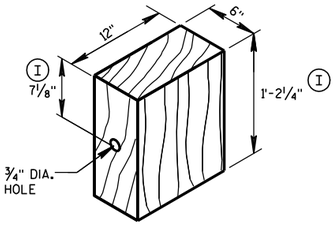


SIDE VIEW



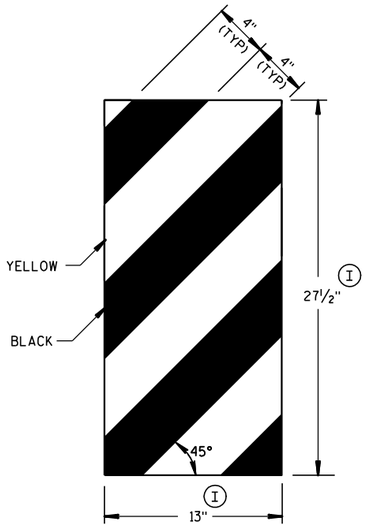
TOP VIEW

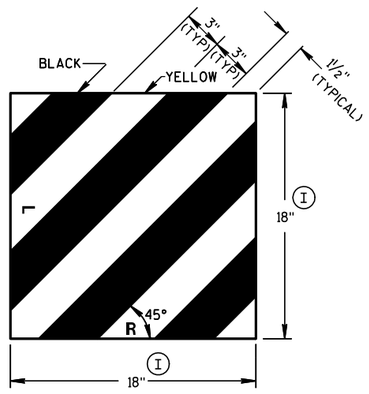
ALTERNATE WOOD BLOCKOUT DETAIL



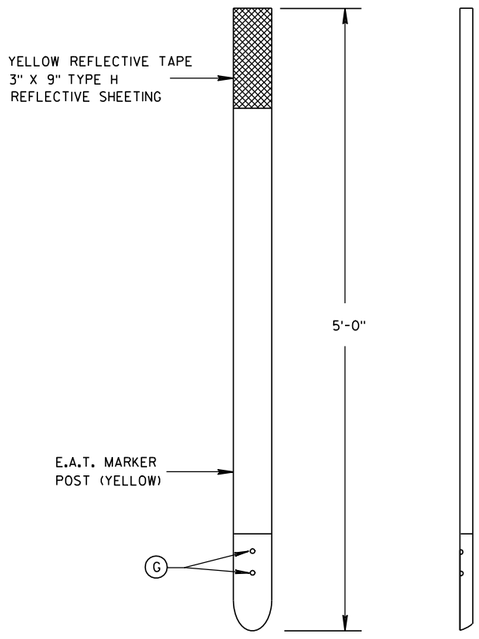
WOOD BLOCKOUT (4)

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





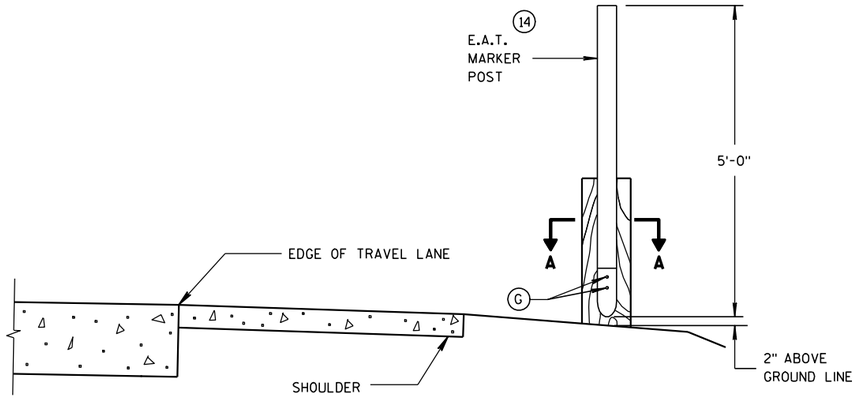
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

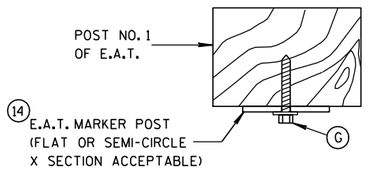
SIDE VIEW

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)



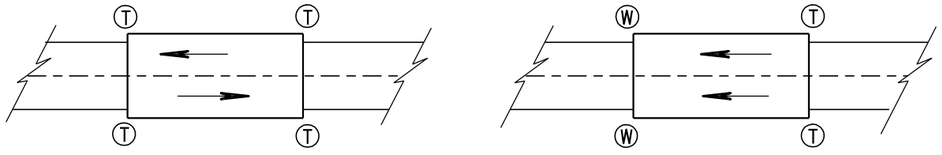
SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 14 B 44-1c



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

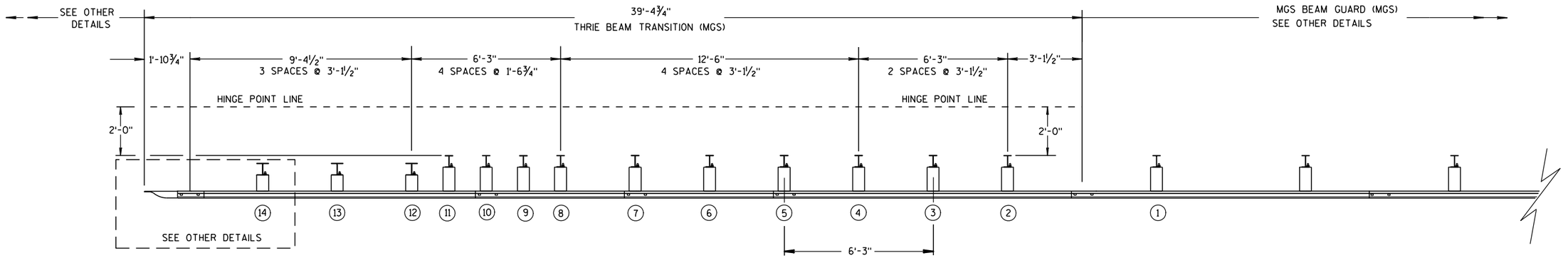
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

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

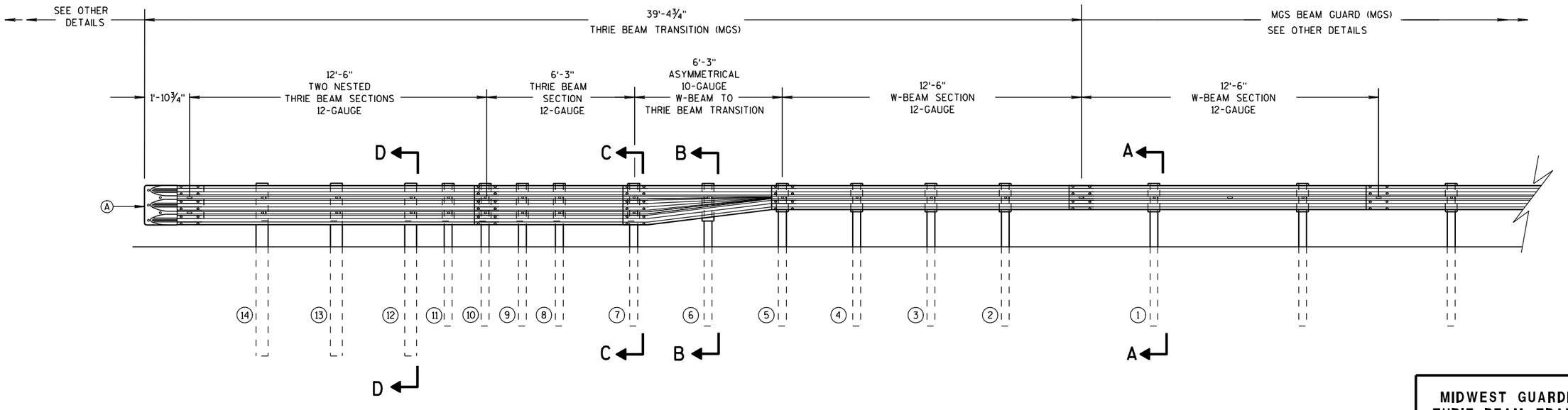
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

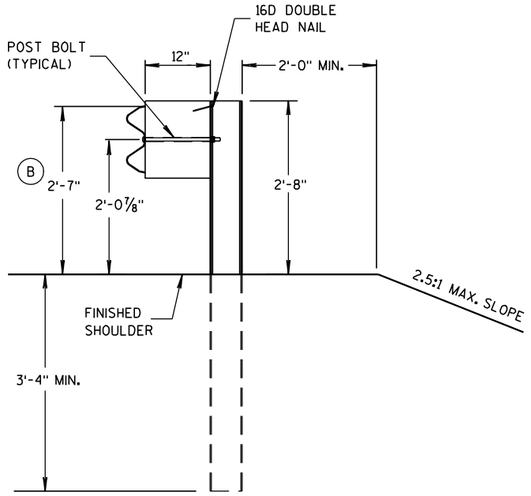
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 45-3a

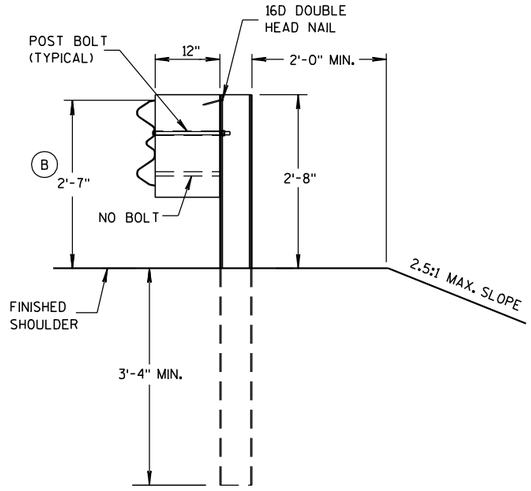
GENERAL NOTES

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



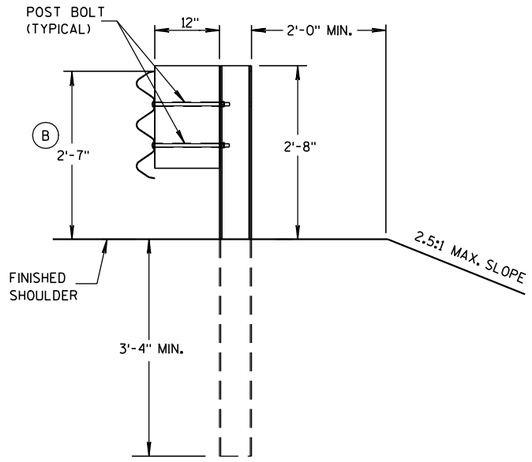
SECTION A-A

POSTS 1-5



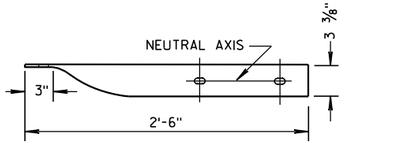
SECTION B-B

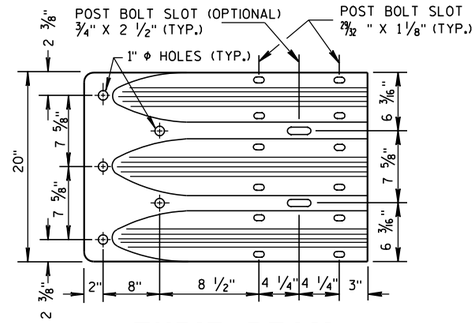
POST 6



SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR

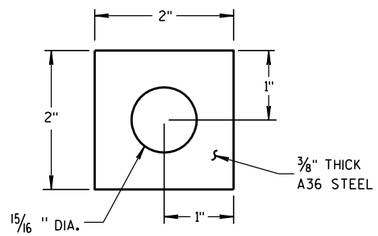
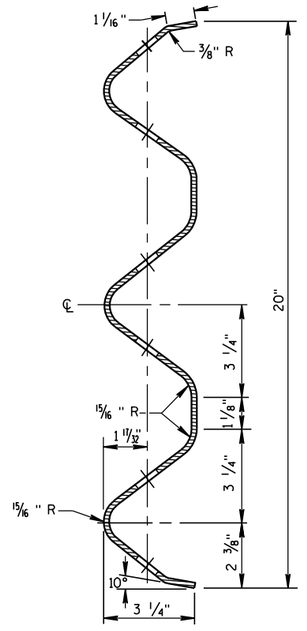
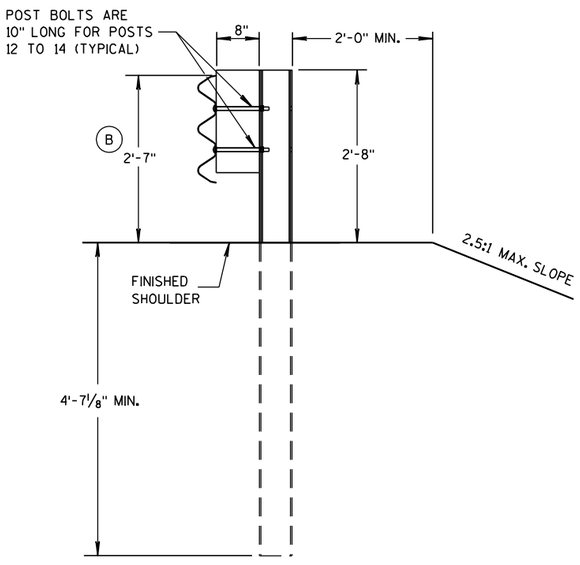


PLATE WASHER DETAIL

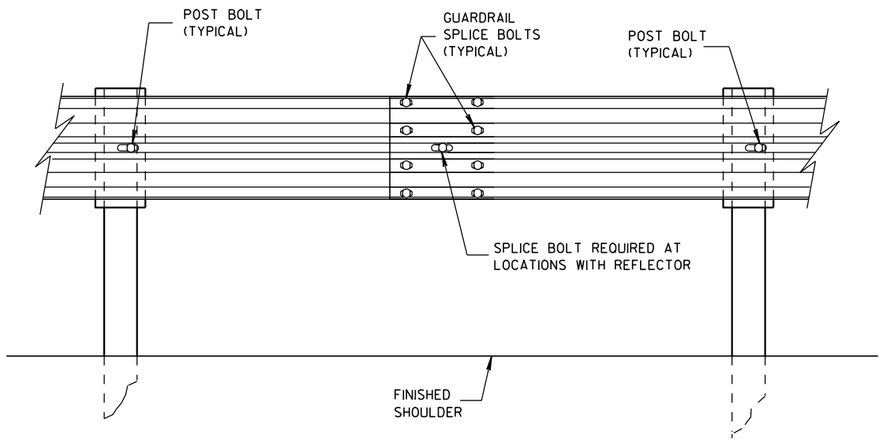


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-14



SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

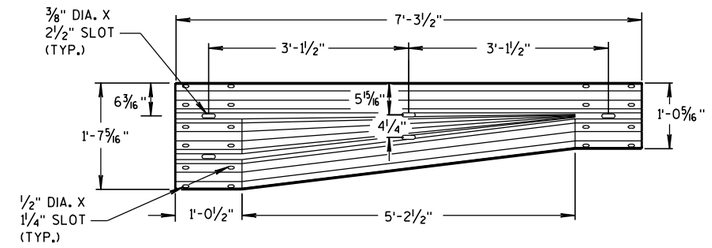
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

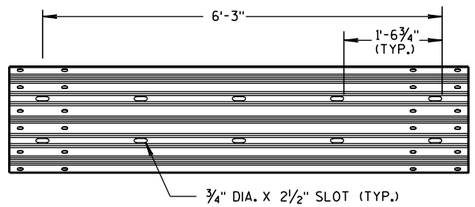
S.D.D. 14 B 45-3b

6

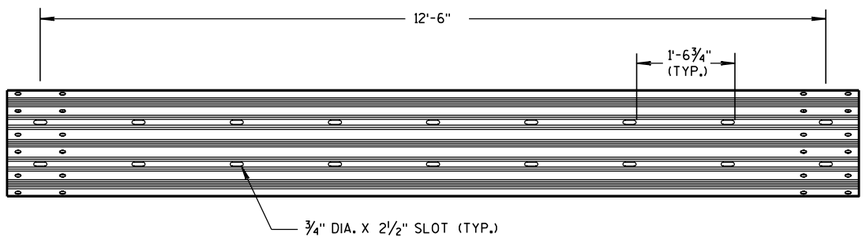
S.D.D. 14 B 45-3b



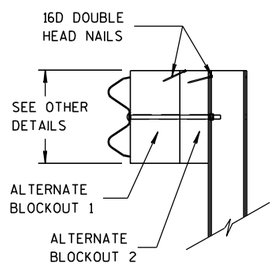
W-BEAM TO THRIE BEAM TRANSITION SECTION



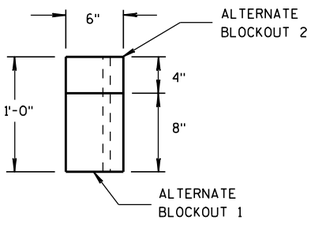
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

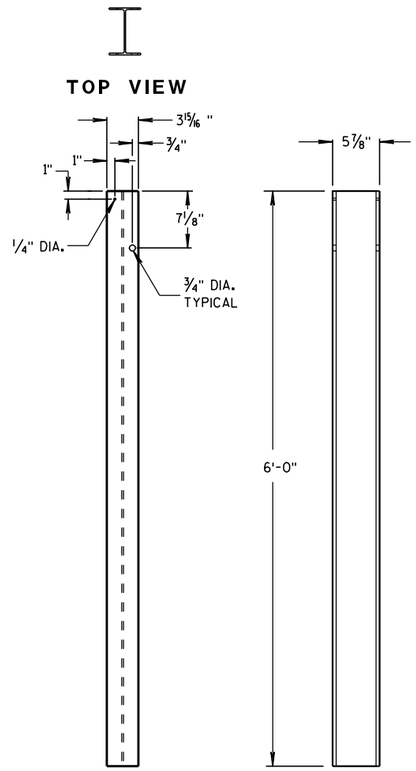


SIDE VIEW

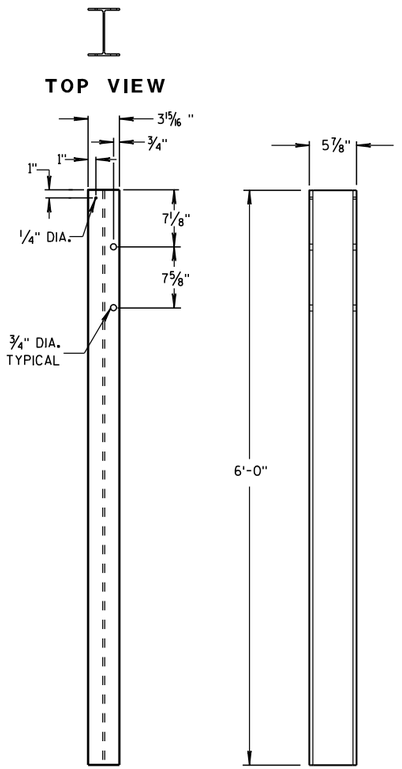


TOP VIEW

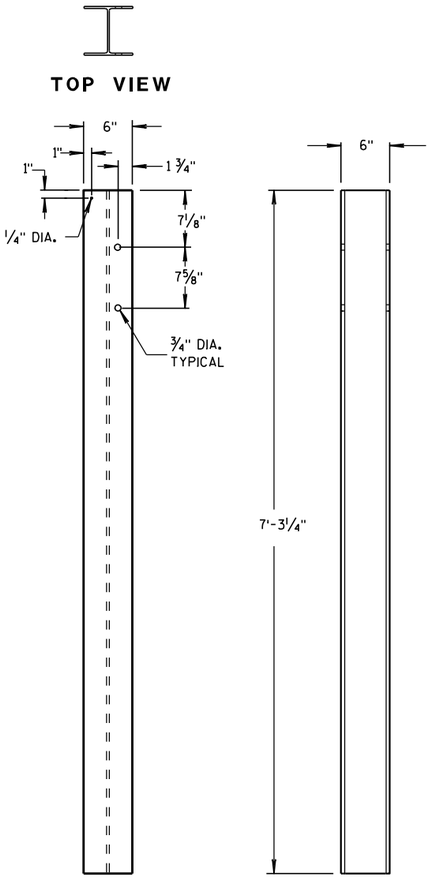
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

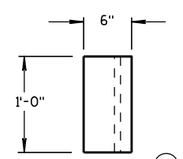


STEEL POSTS 6-11

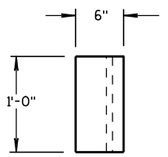


STEEL POSTS 12-14

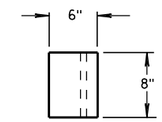
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



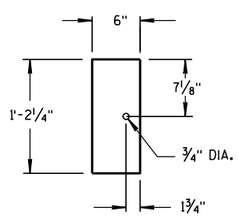
TOP VIEW (1)



TOP VIEW (1)

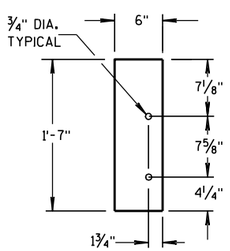


TOP VIEW



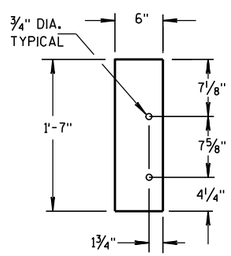
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

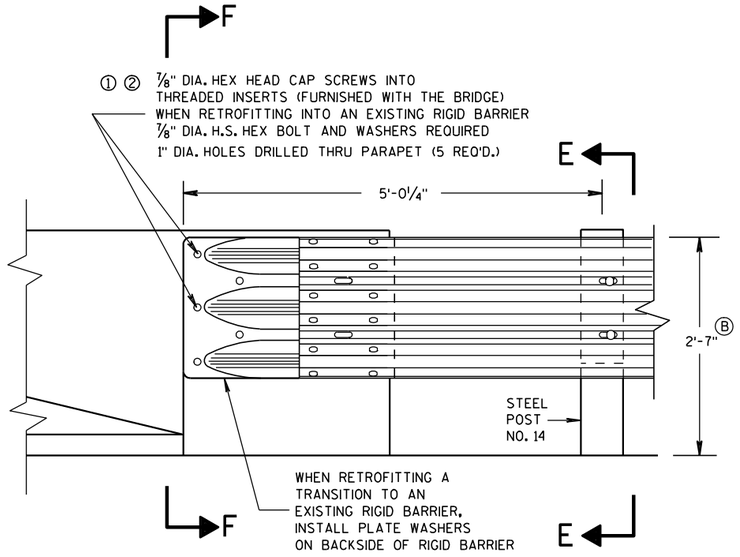
STEEL POST SIZES

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

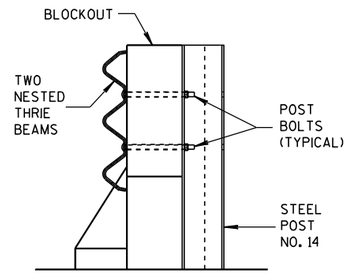
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

GENERAL NOTES

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

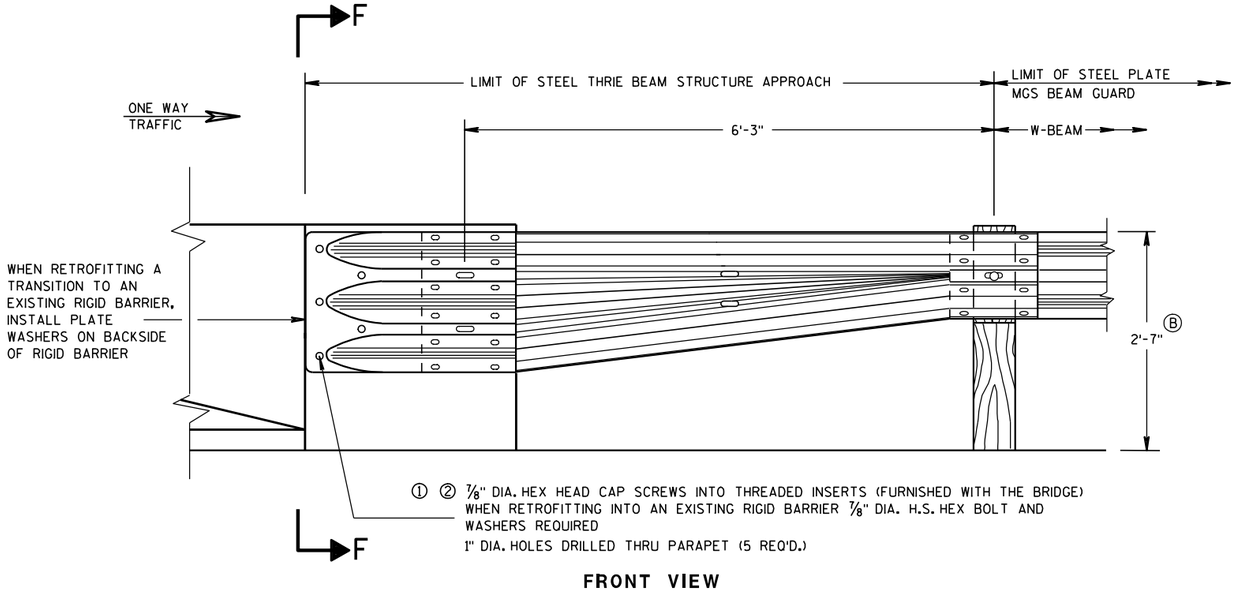
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

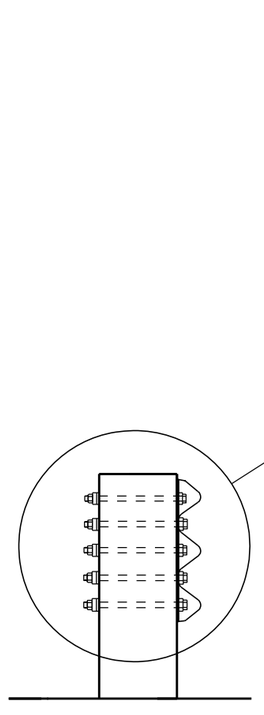
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

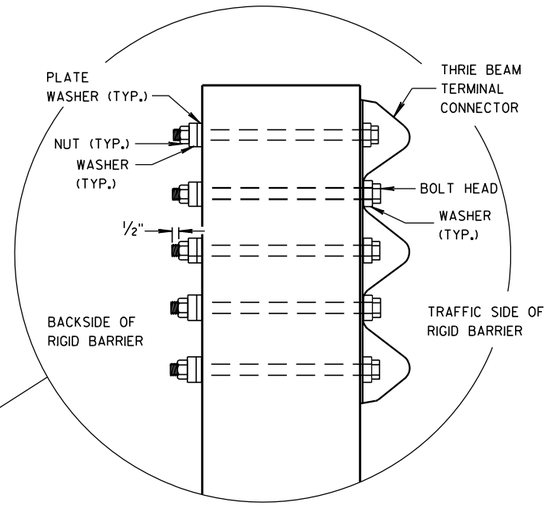
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F



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

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

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

6

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

GENERAL NOTES

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

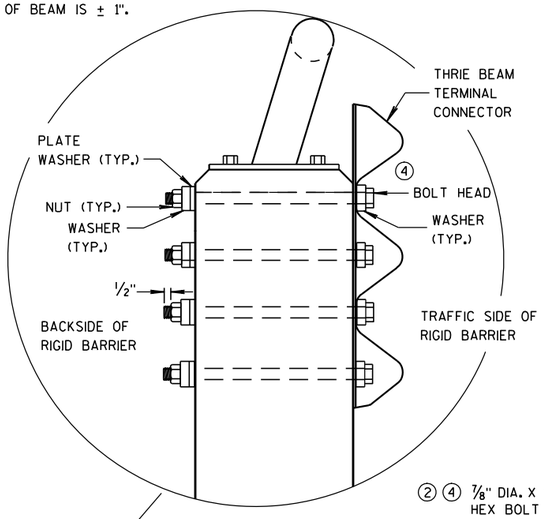
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

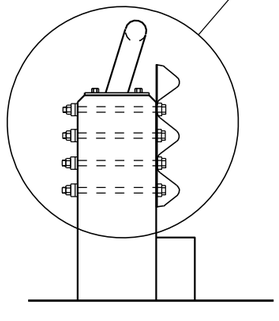
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

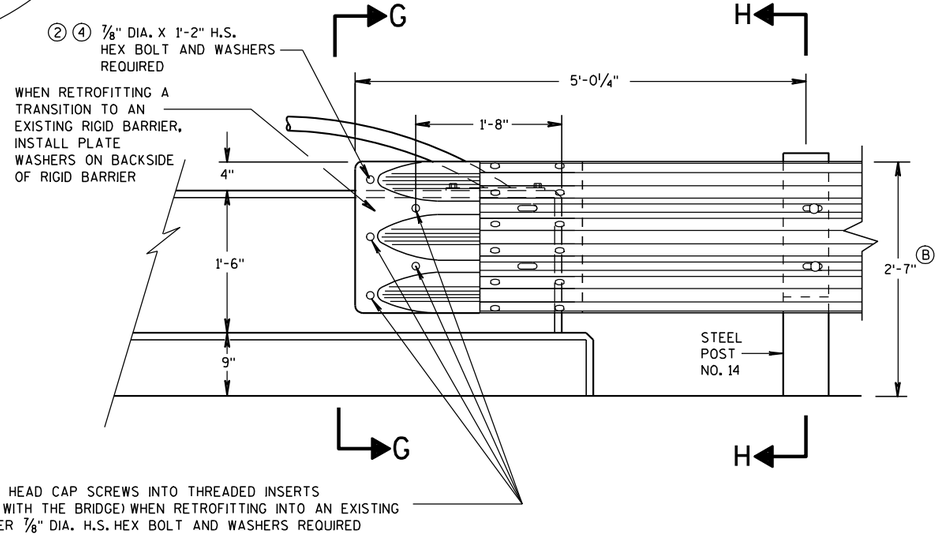
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

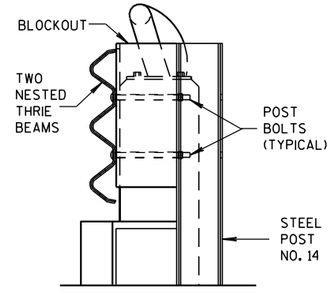




SECTION G-G

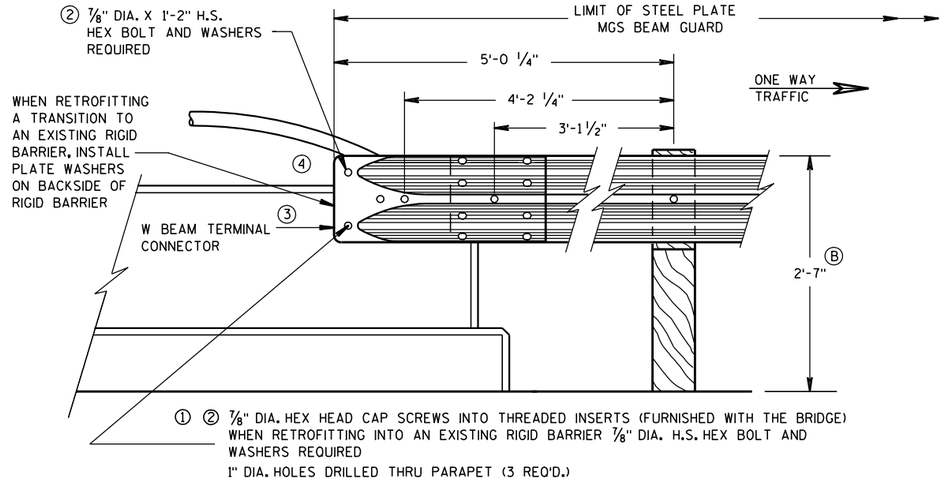


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

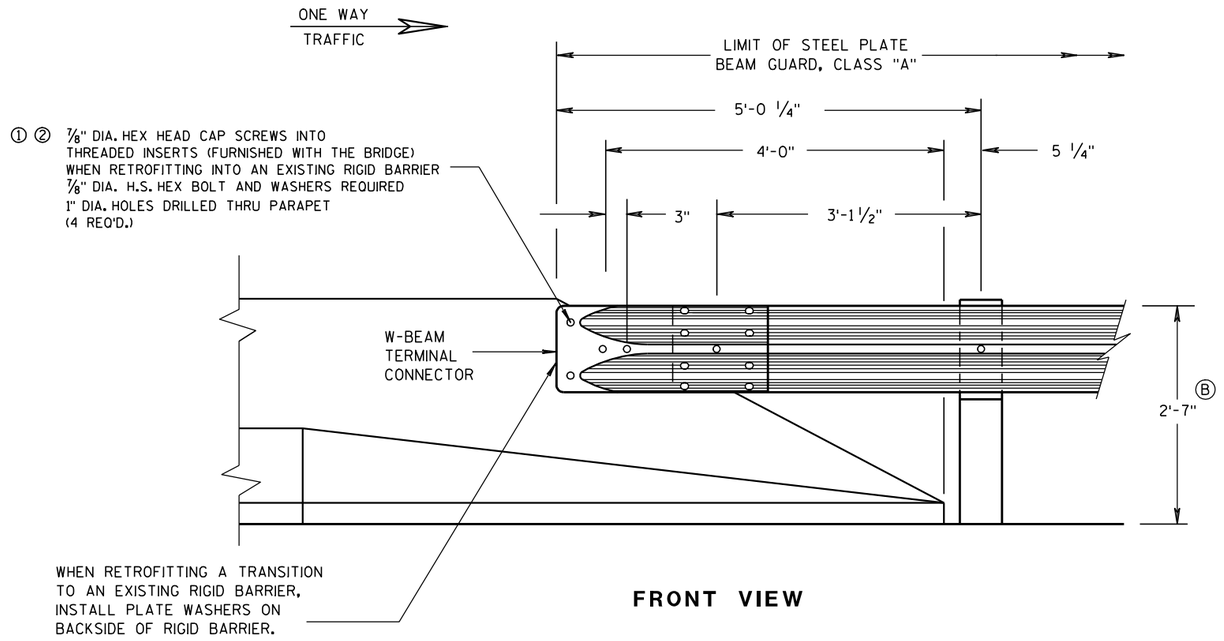


FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

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



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

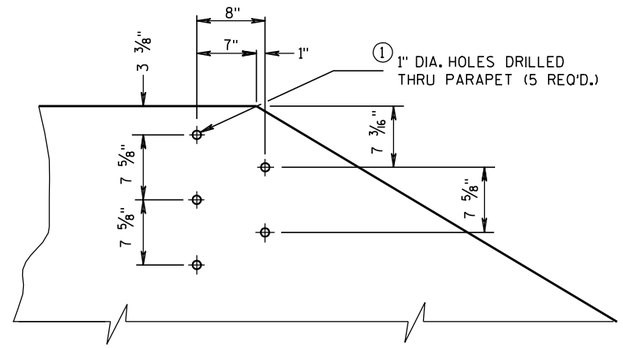
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

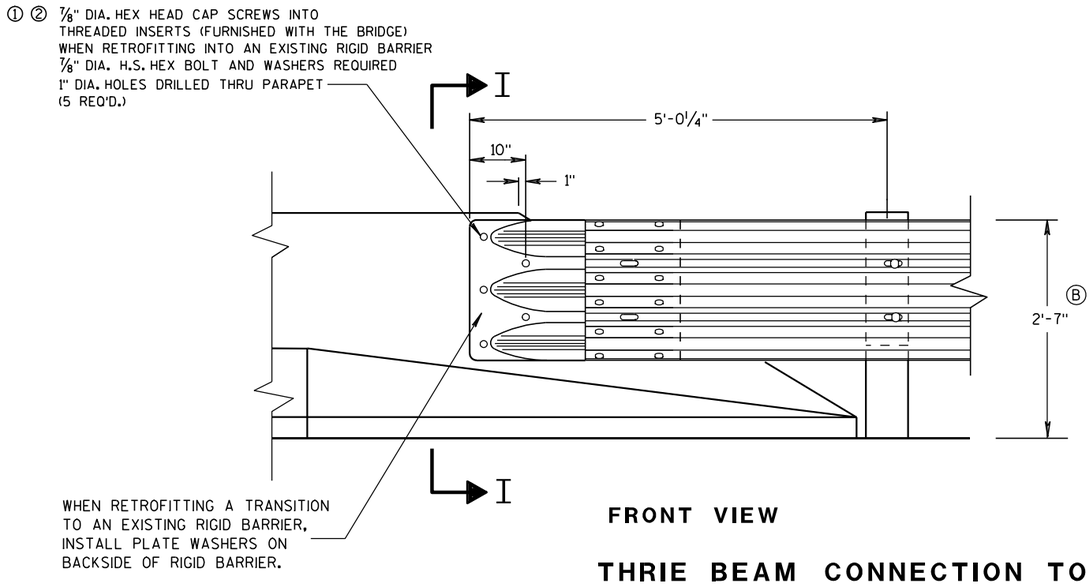
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② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED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

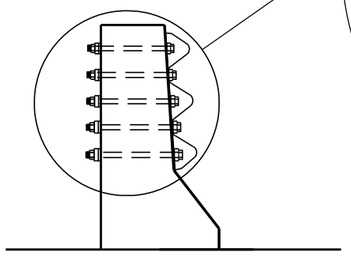
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



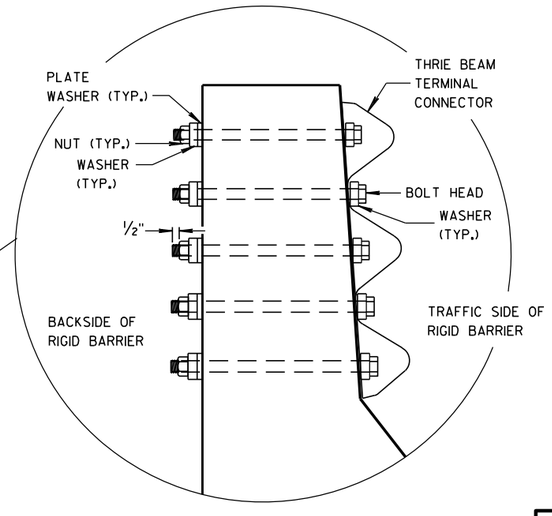
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



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

8/31/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

145

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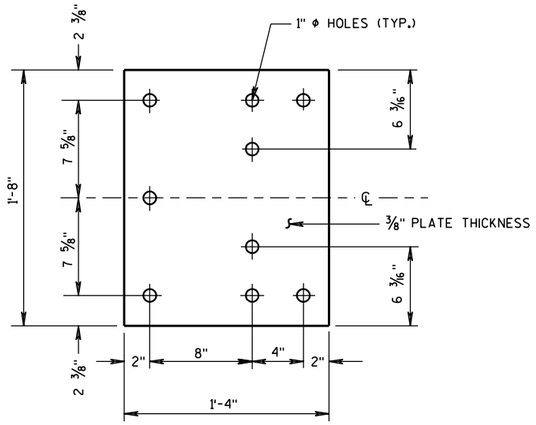
FHWA

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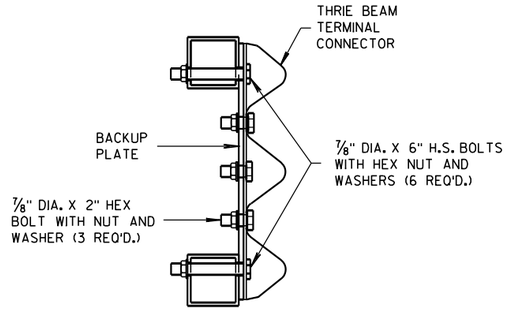
S.D.D. 14 B 45-3f

6

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



BACK-UP PLATE DETAIL

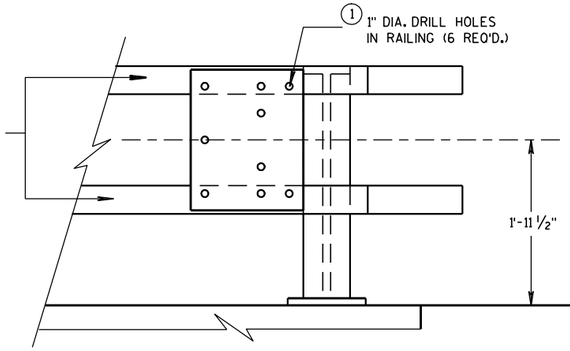


SECTION J-J

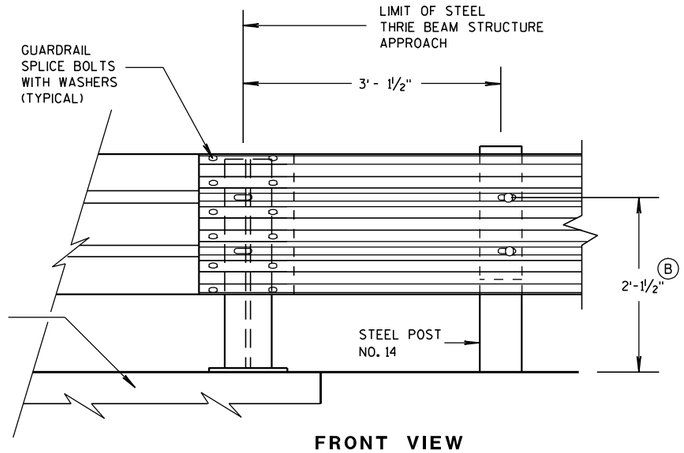
GENERAL NOTES

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

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

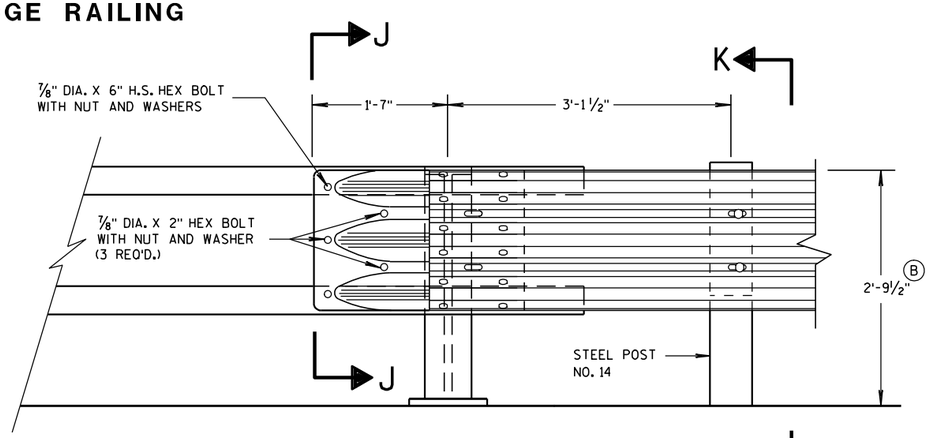


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

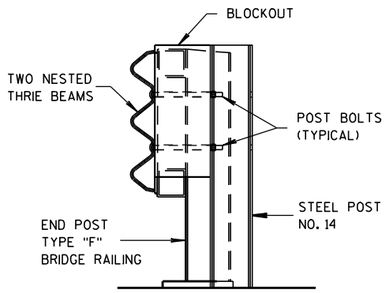


FRONT VIEW

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

6

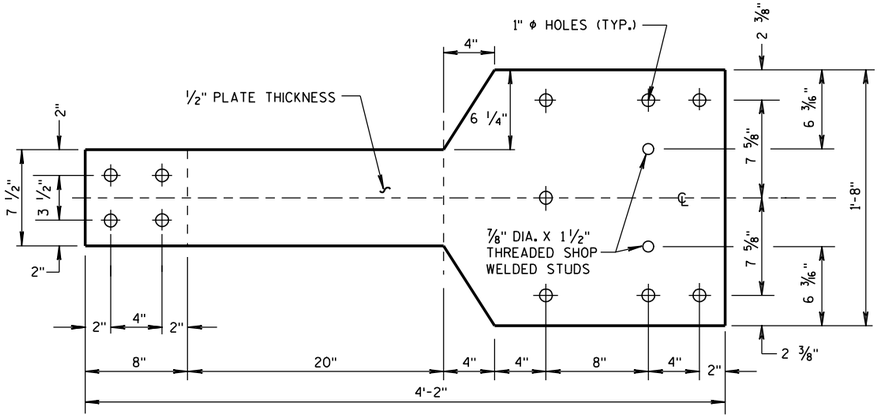
S.D.D. 14 B 45-3g

6

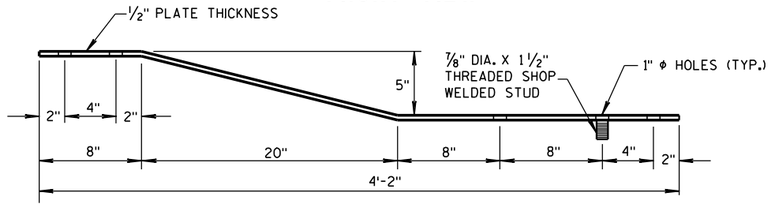
S.D.D. 14 B 45-3g

GENERAL NOTES

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

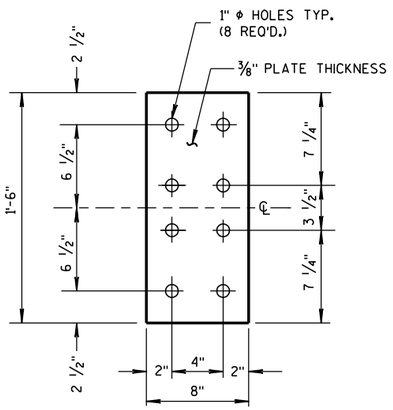


FRONT VIEW



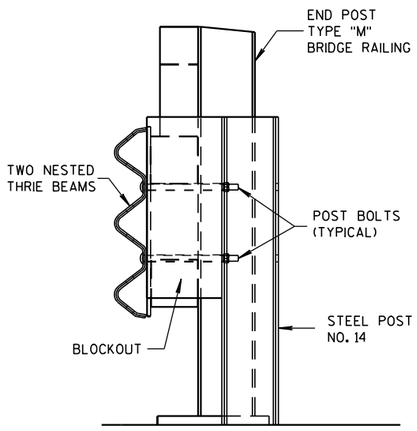
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

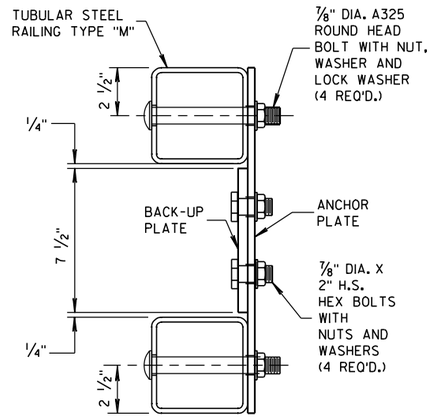


FRONT VIEW

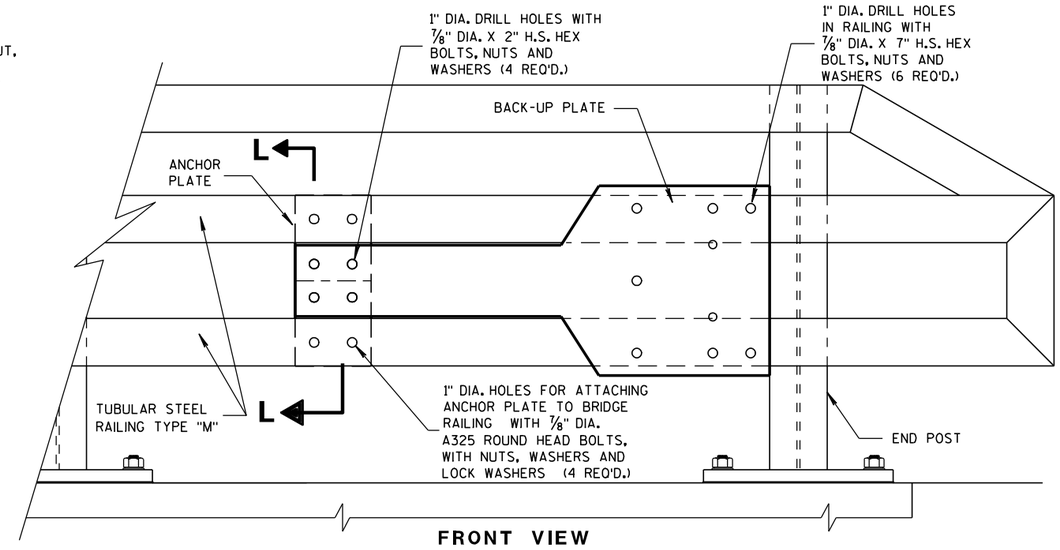
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

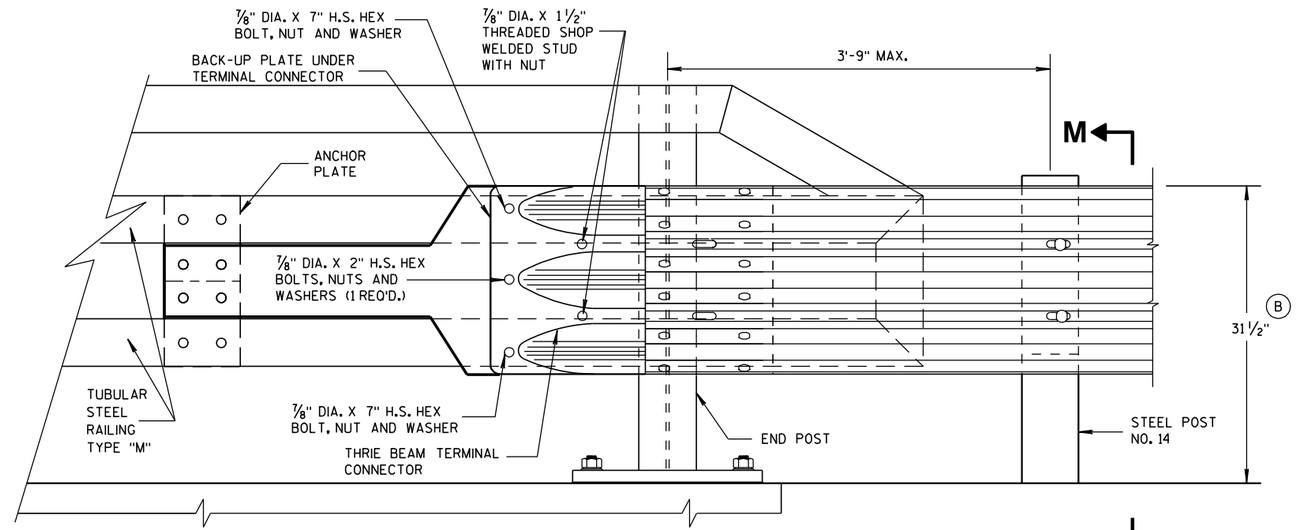


SECTION L-L

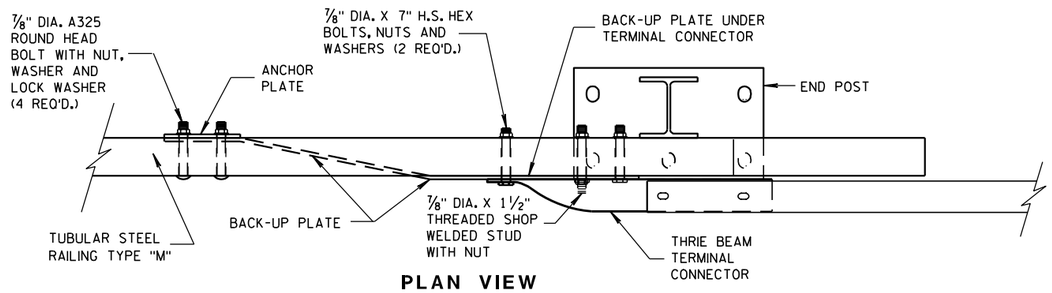


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA ENT

6

S.D. 14 B 45-3h

6

S.D. 14 B 45-3h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

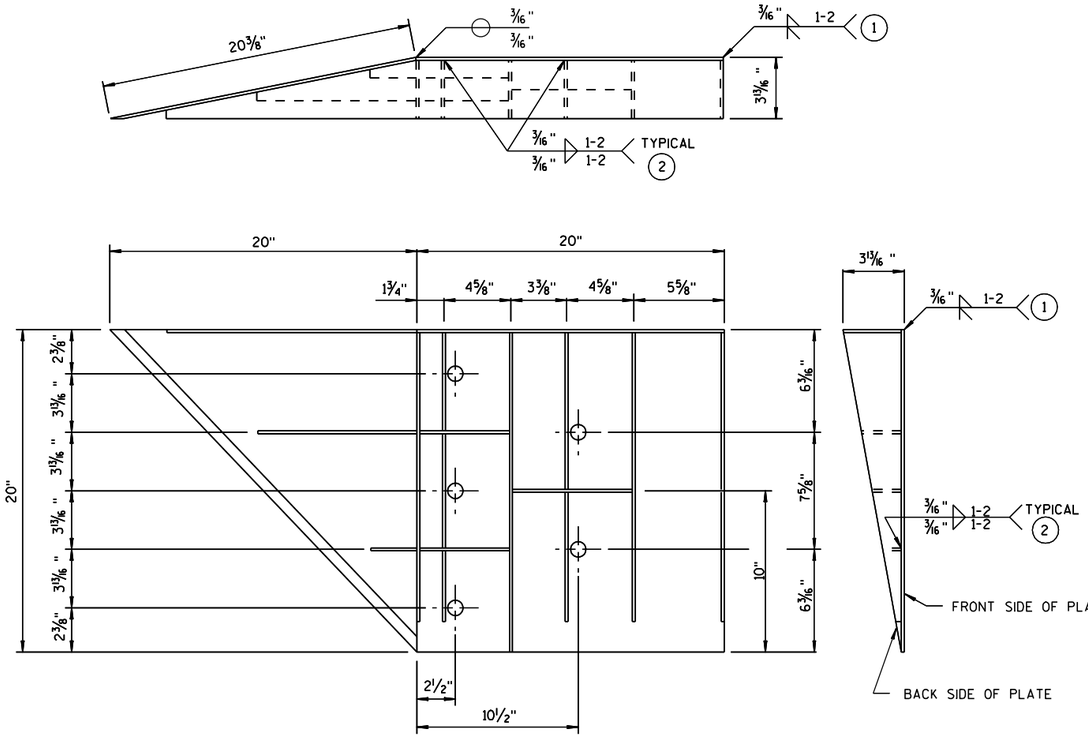
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

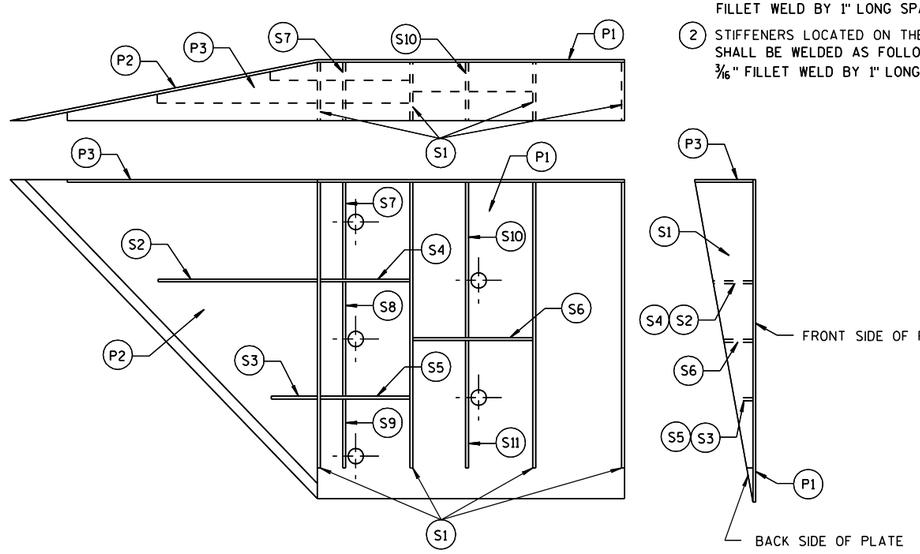


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

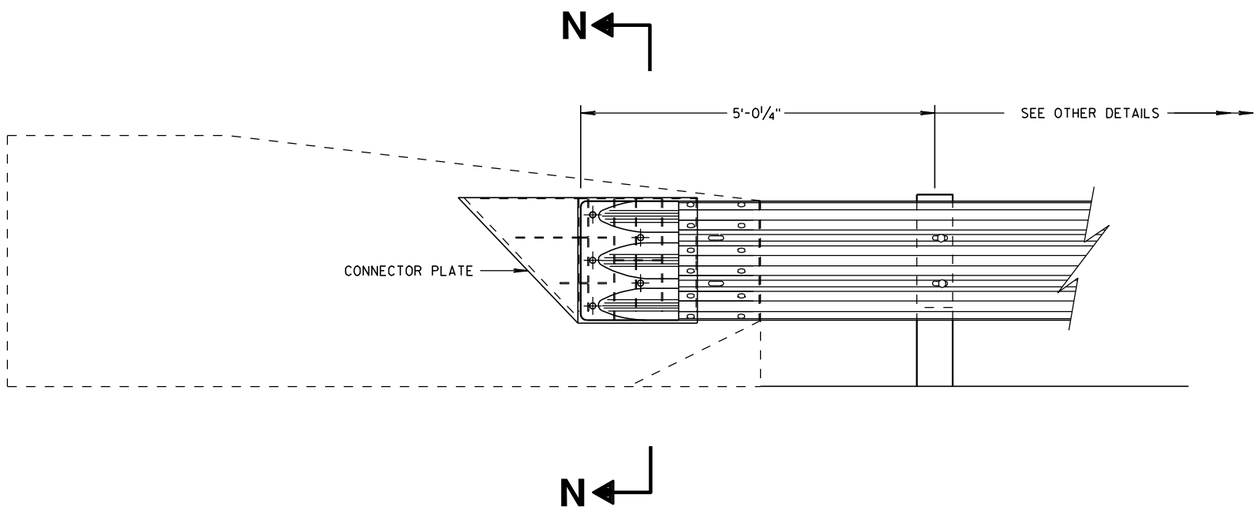
APPROVED
8/31/2012 DATE
/S/ Jerry H ____
ROADWAY STANDARDS ENGINEER
148
FHWA

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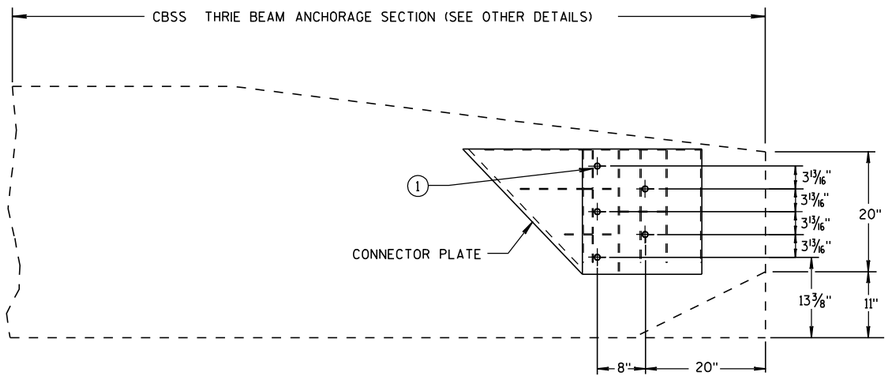
S.D.D. 14 B 45-3i

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



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

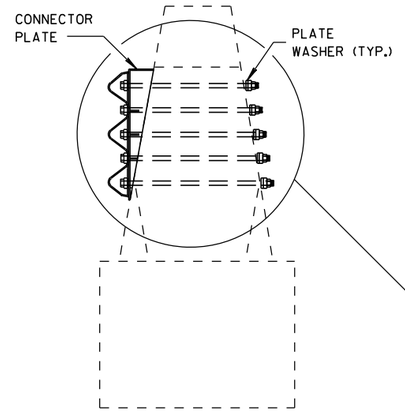


SINGLE SLOPE CONNECTION PLATE PLACEMENT

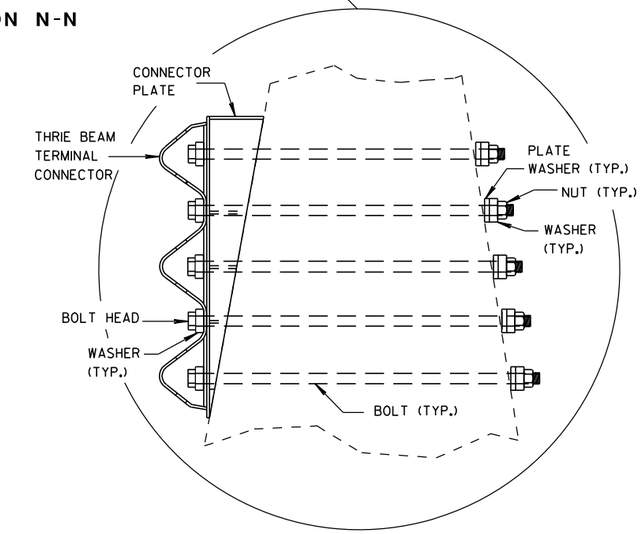
GENERAL NOTES

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

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



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER

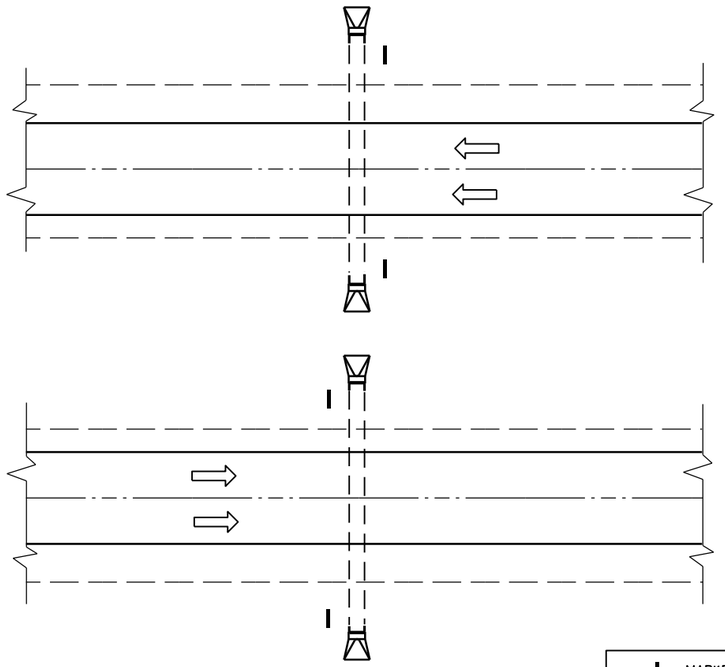
FHWA

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

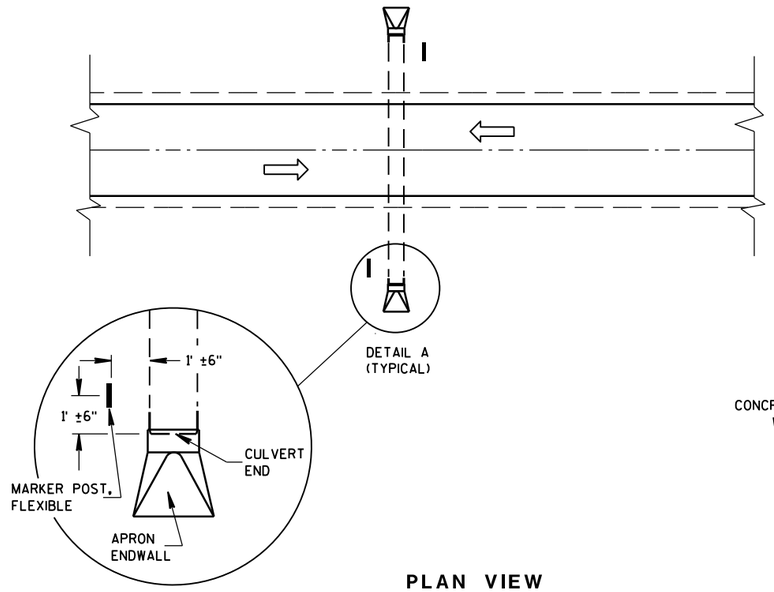
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S.D.D. 14 B 45-3j



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

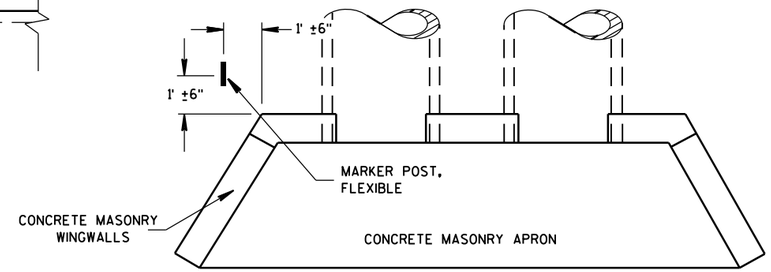
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

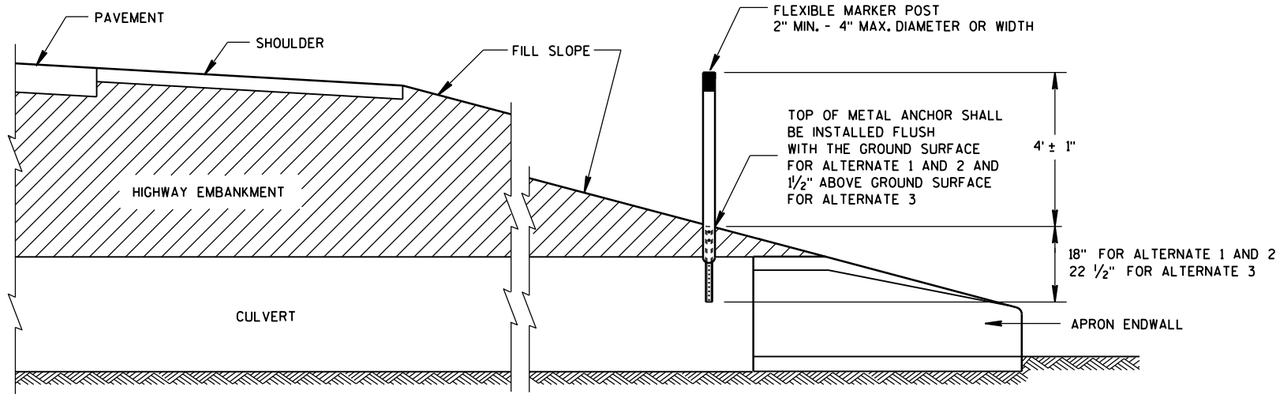
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

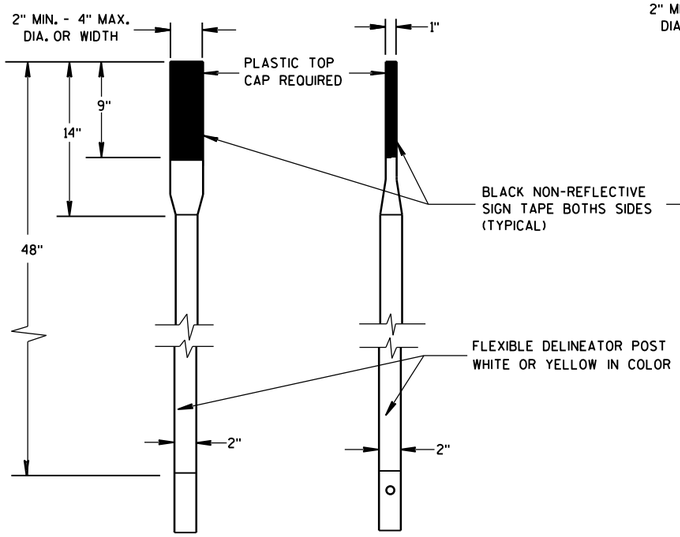
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

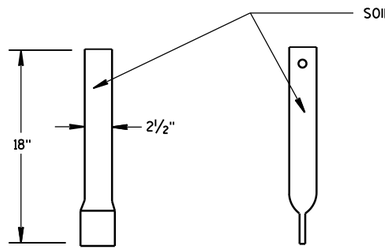
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S.D.D. 15 A 3-2a

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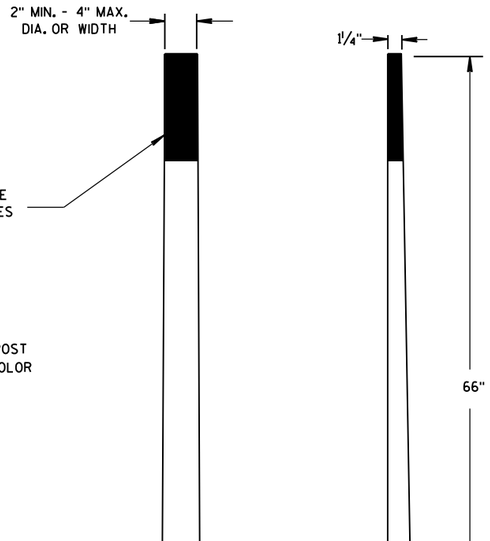
S.D.D. 15 A 3-2a





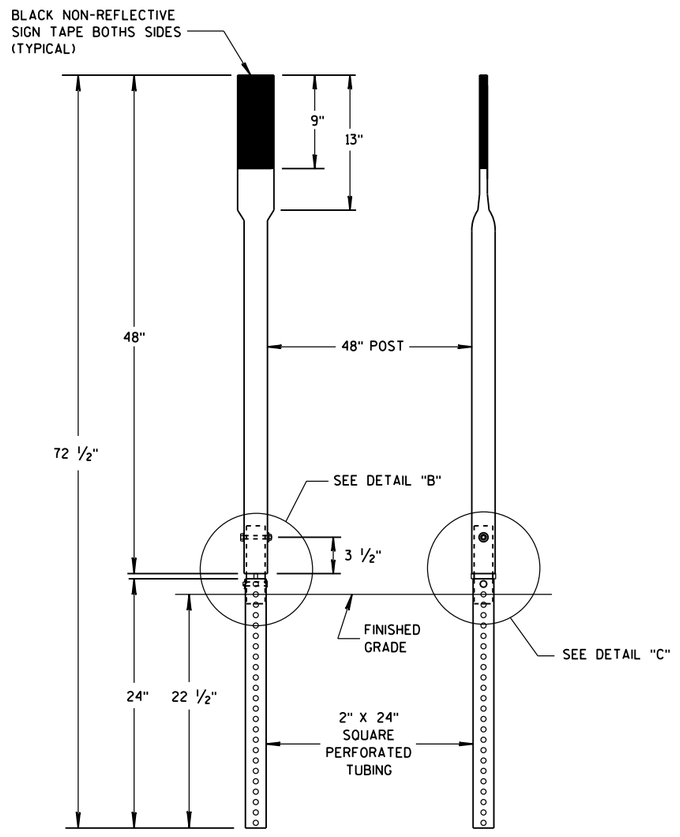
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

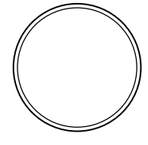
ALTERNATE 2



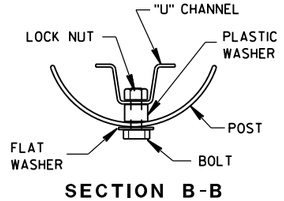
FRONT VIEW SIDE VIEW

ALTERNATE 3

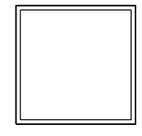
FLEXIBLE MARKER POSTS



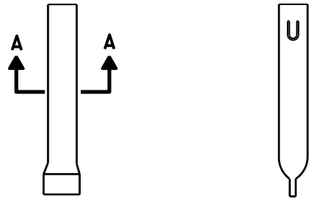
SECTION A-A



SECTION B-B

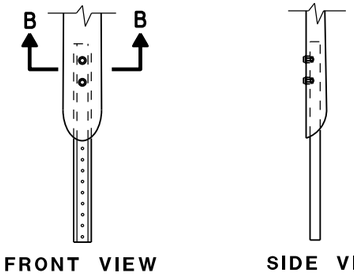


SECTION C-C



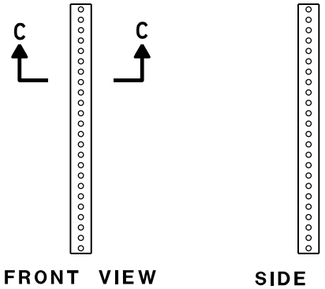
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

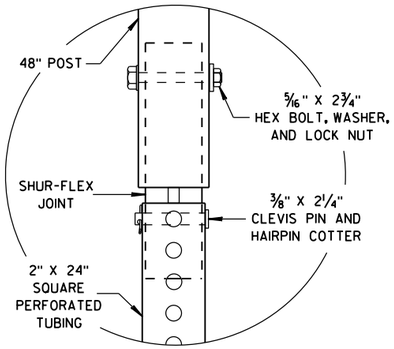
ALTERNATE 2



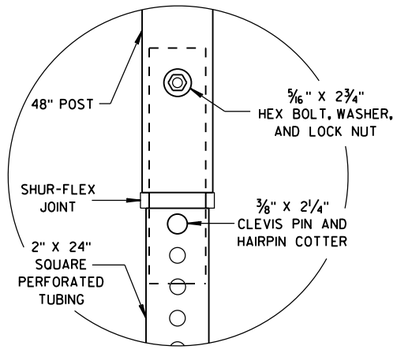
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

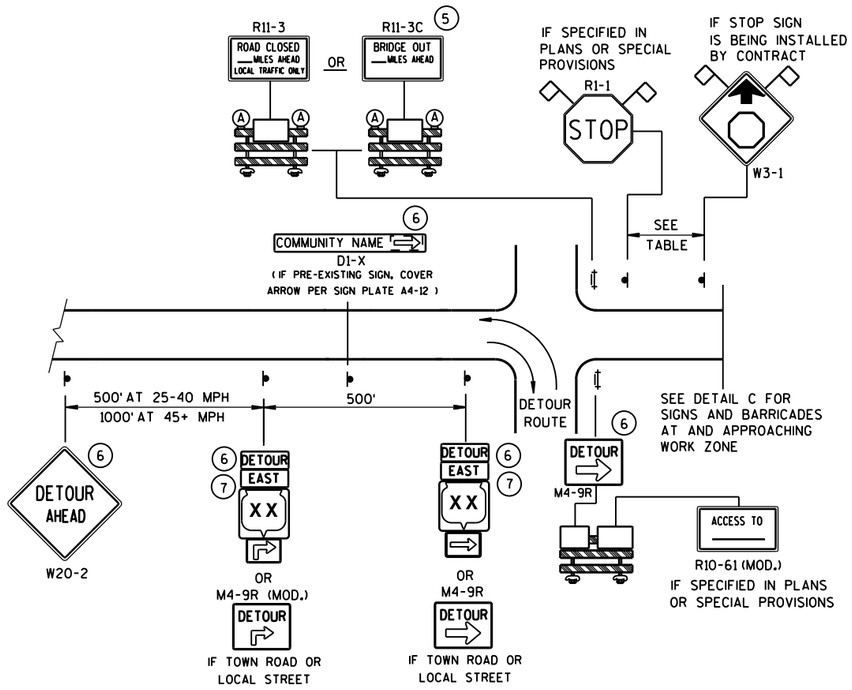
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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

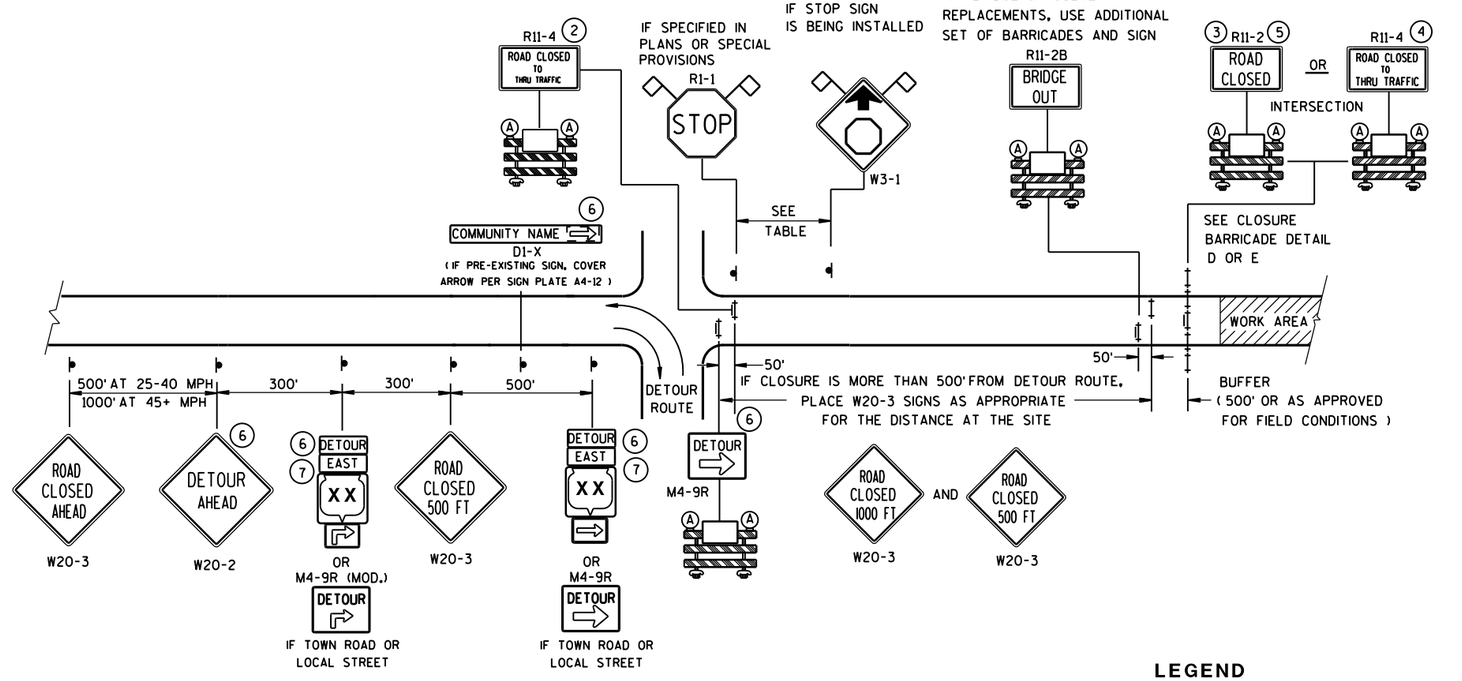
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S.D.D. 15 A 3-2b



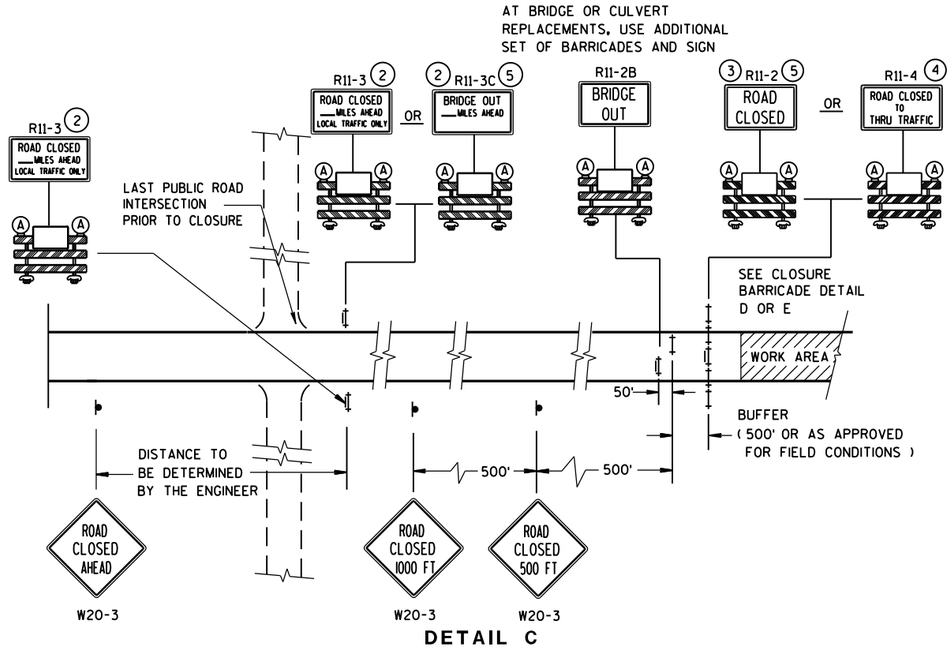
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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)

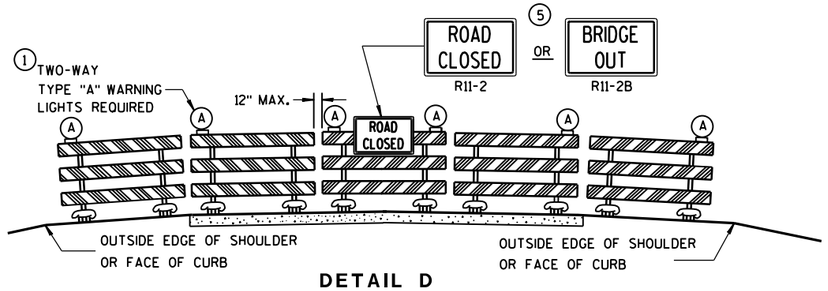
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

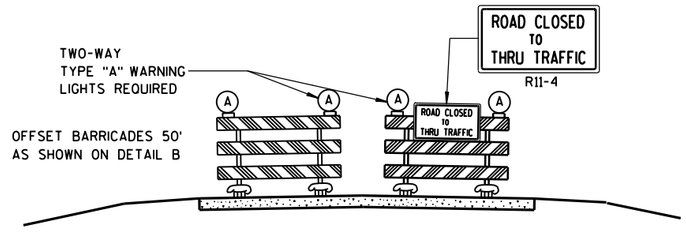
6
S.D.D. 15 C 2-5a



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

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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.

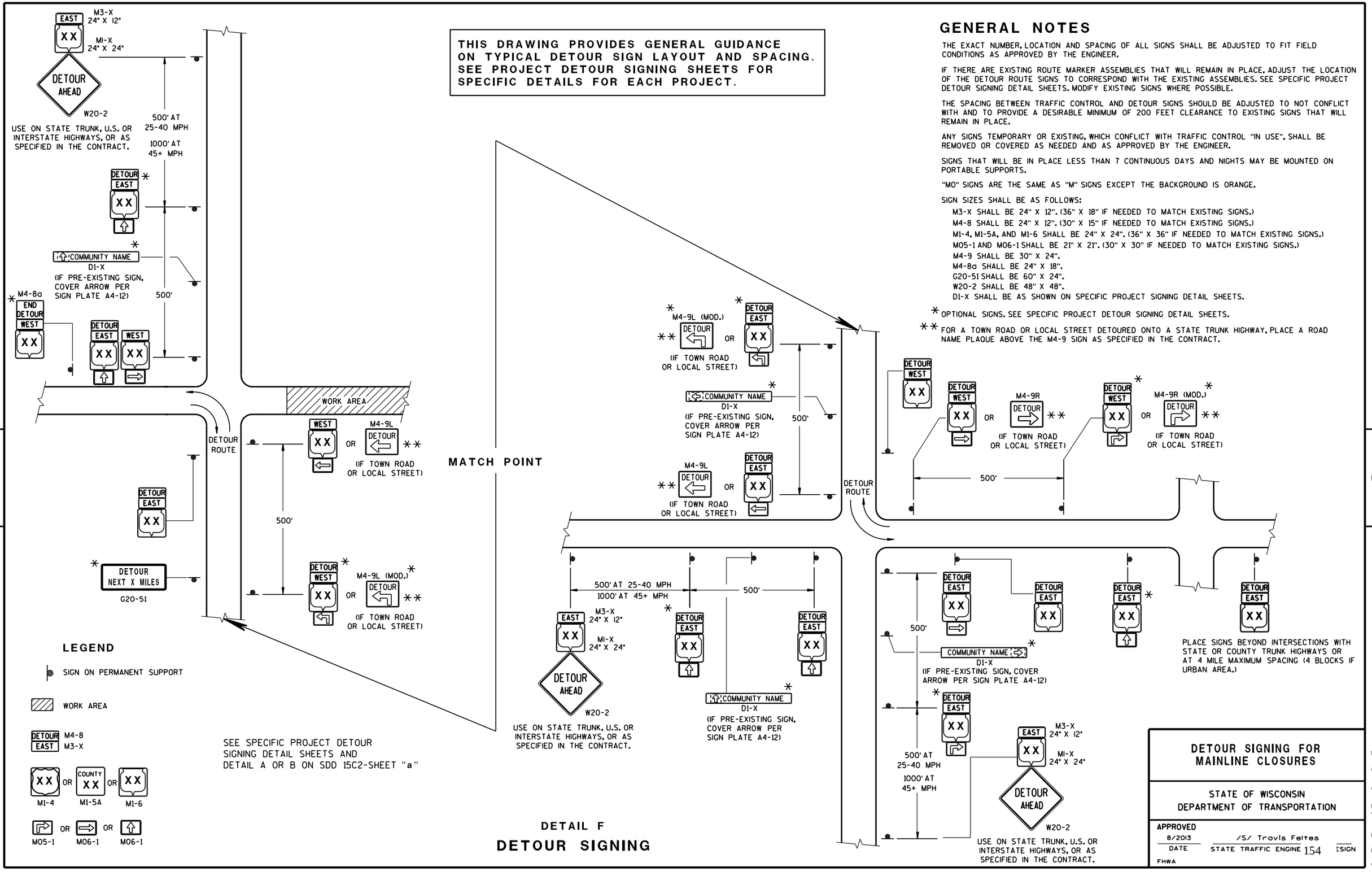
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- MO5-1 OR MO6-1 OR MO6-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

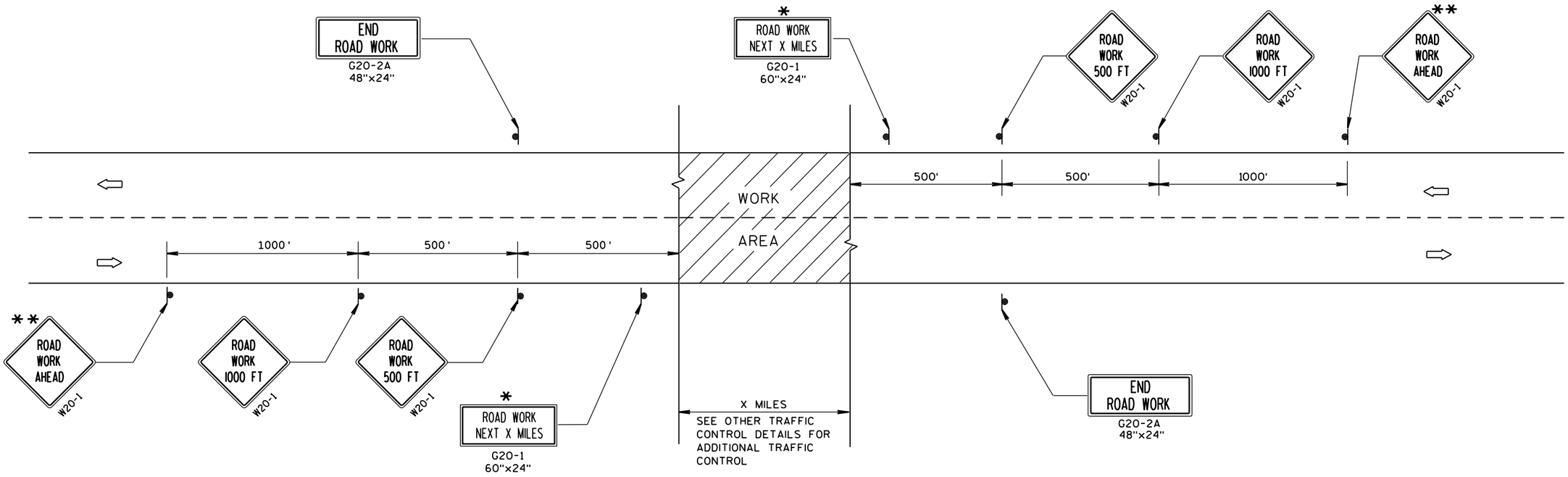
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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6

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



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.

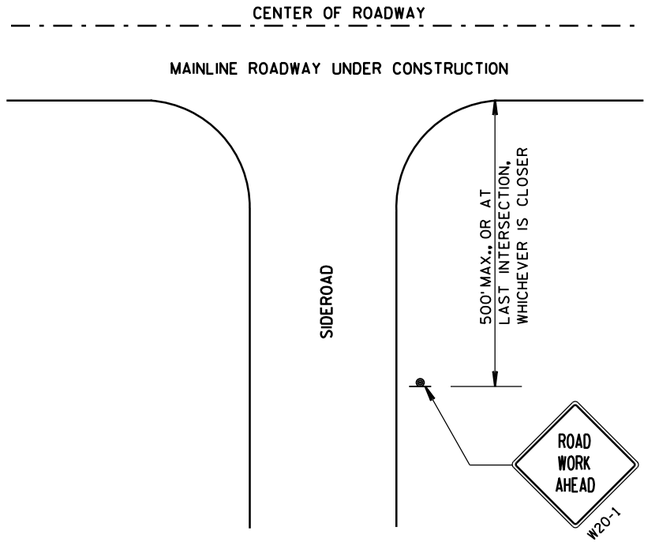
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

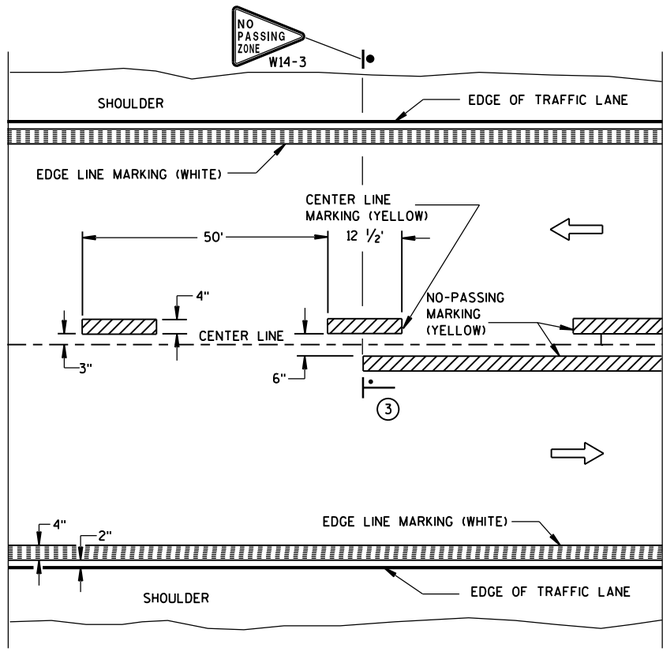
FHWA

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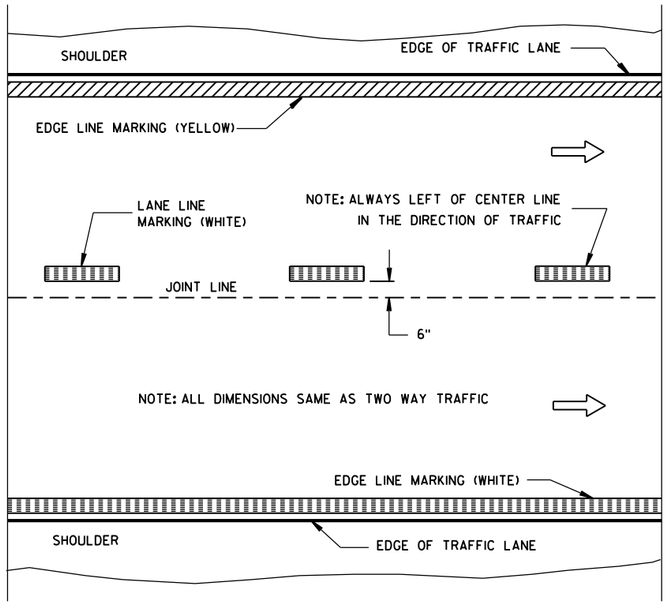
S.D.D. 15 C 4-2

6

S.D.D. 15 C 4-2

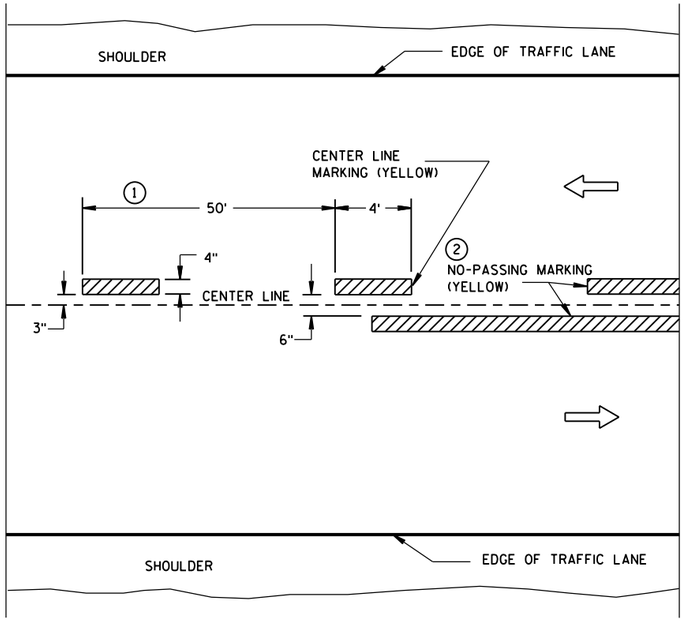


TWO WAY TRAFFIC

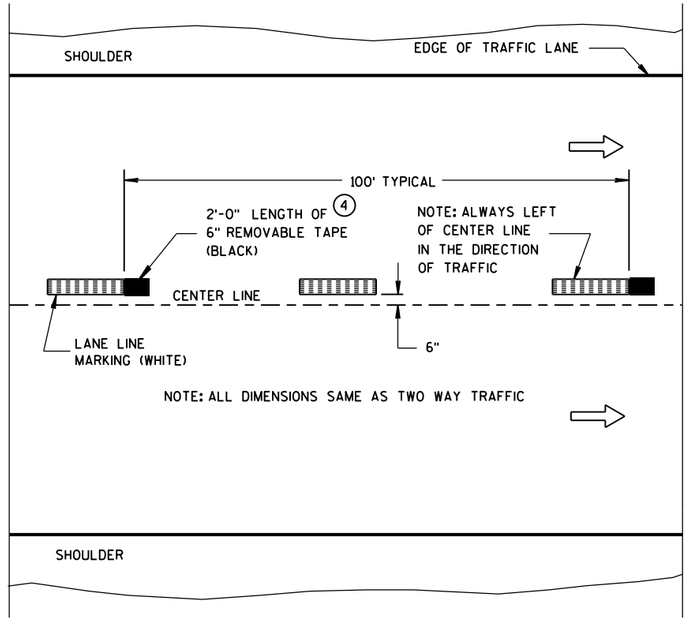


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

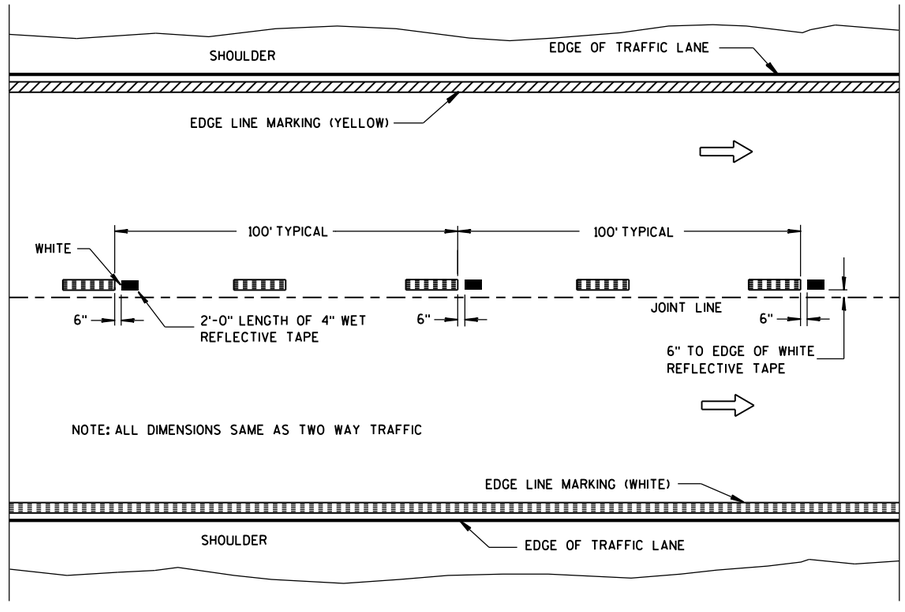
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 — DATE

/S/ Travis Feltes — STATE TRAFFIC E

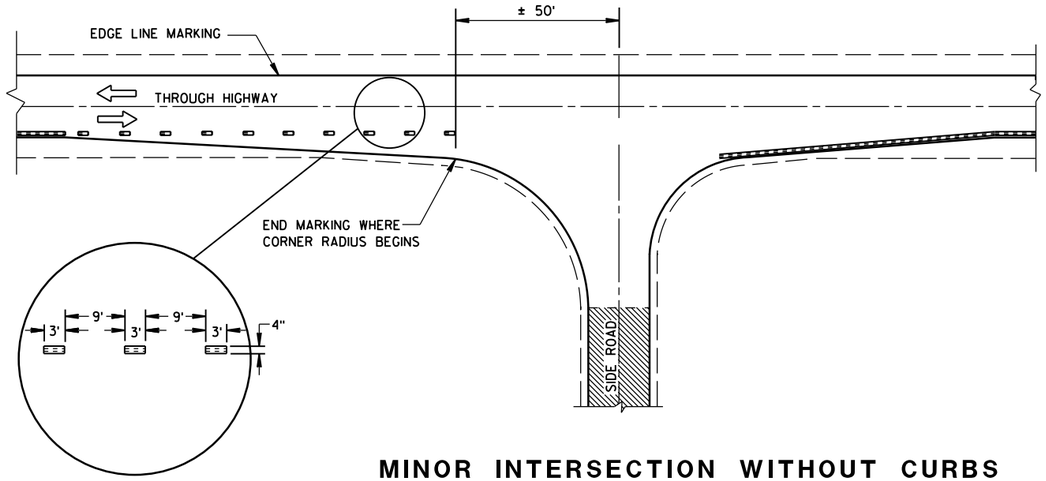
FHWA

6

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

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

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

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

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

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

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

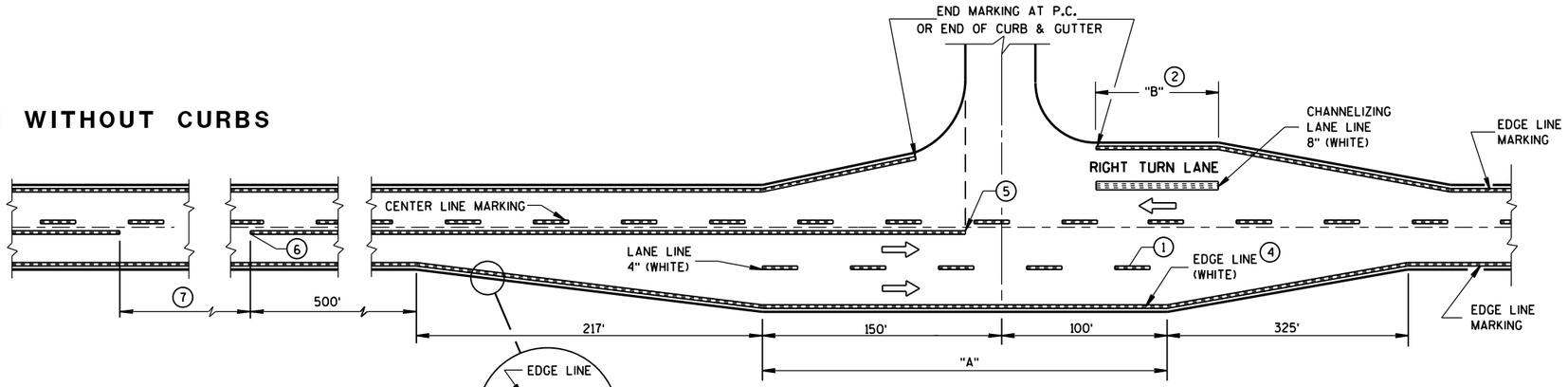
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

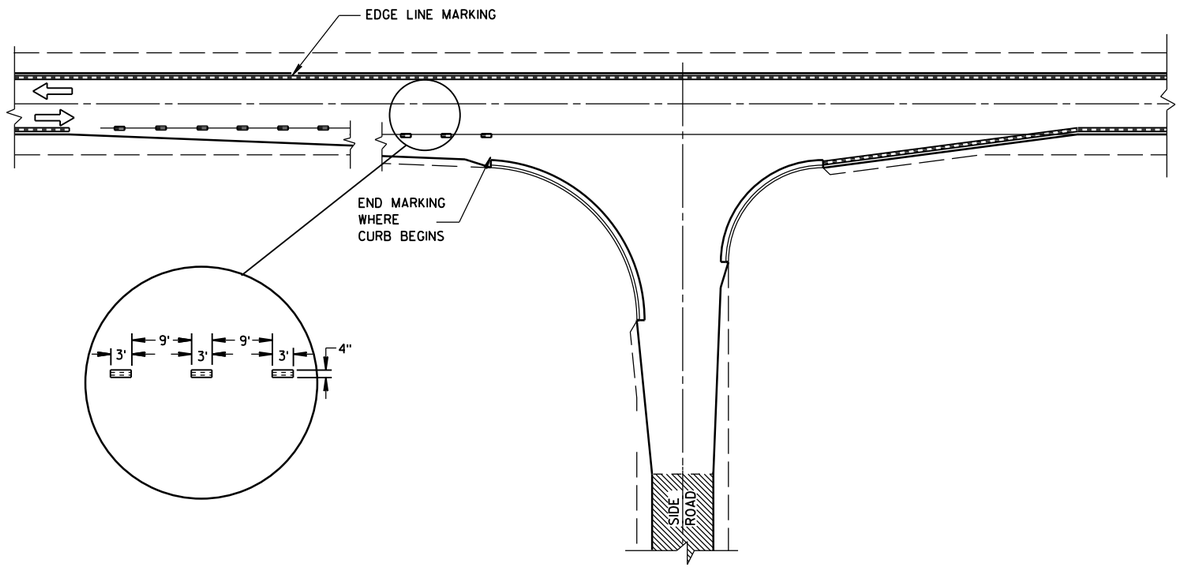
(7)

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



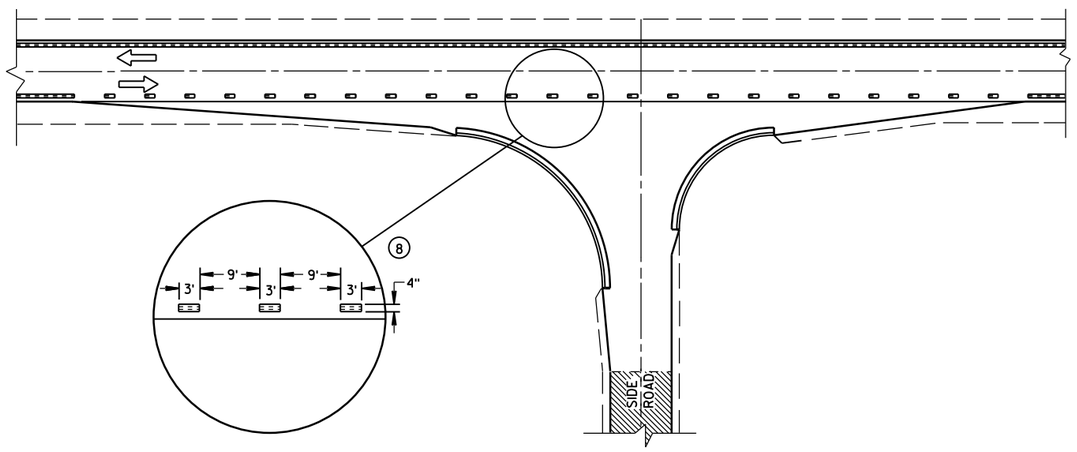
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

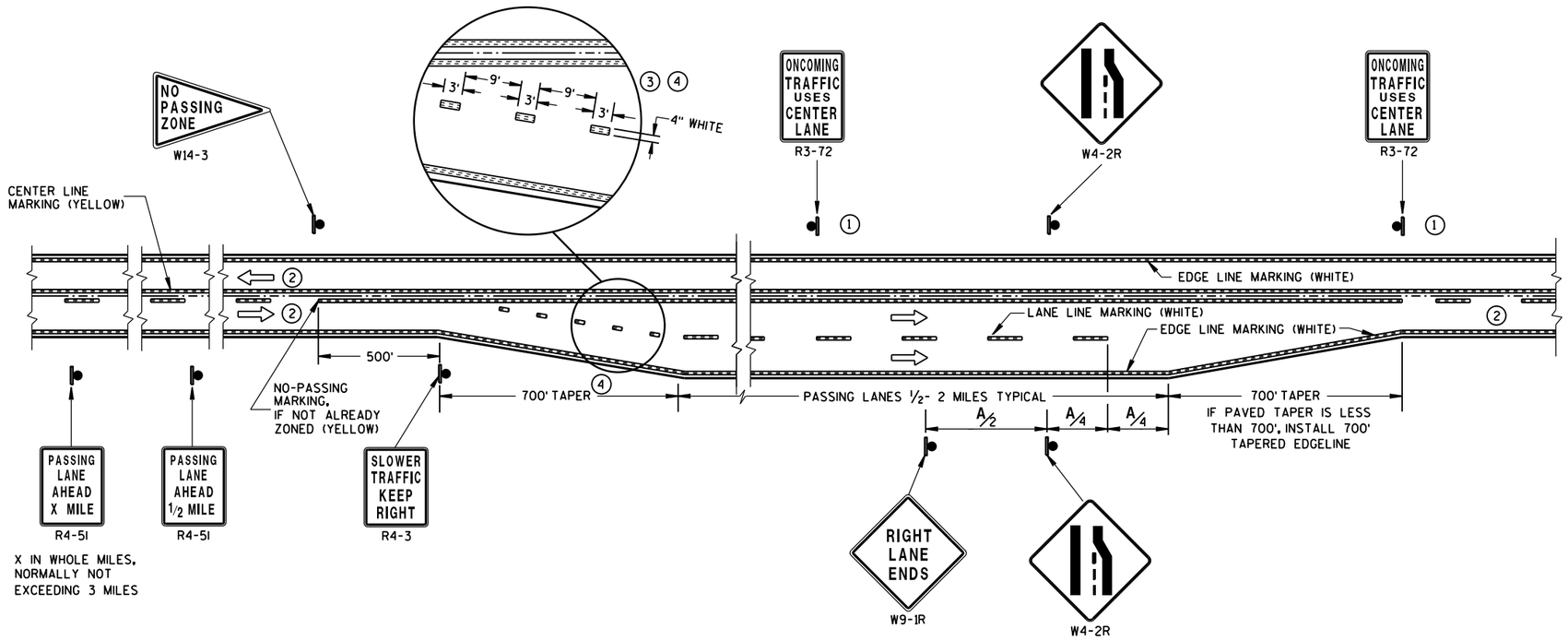
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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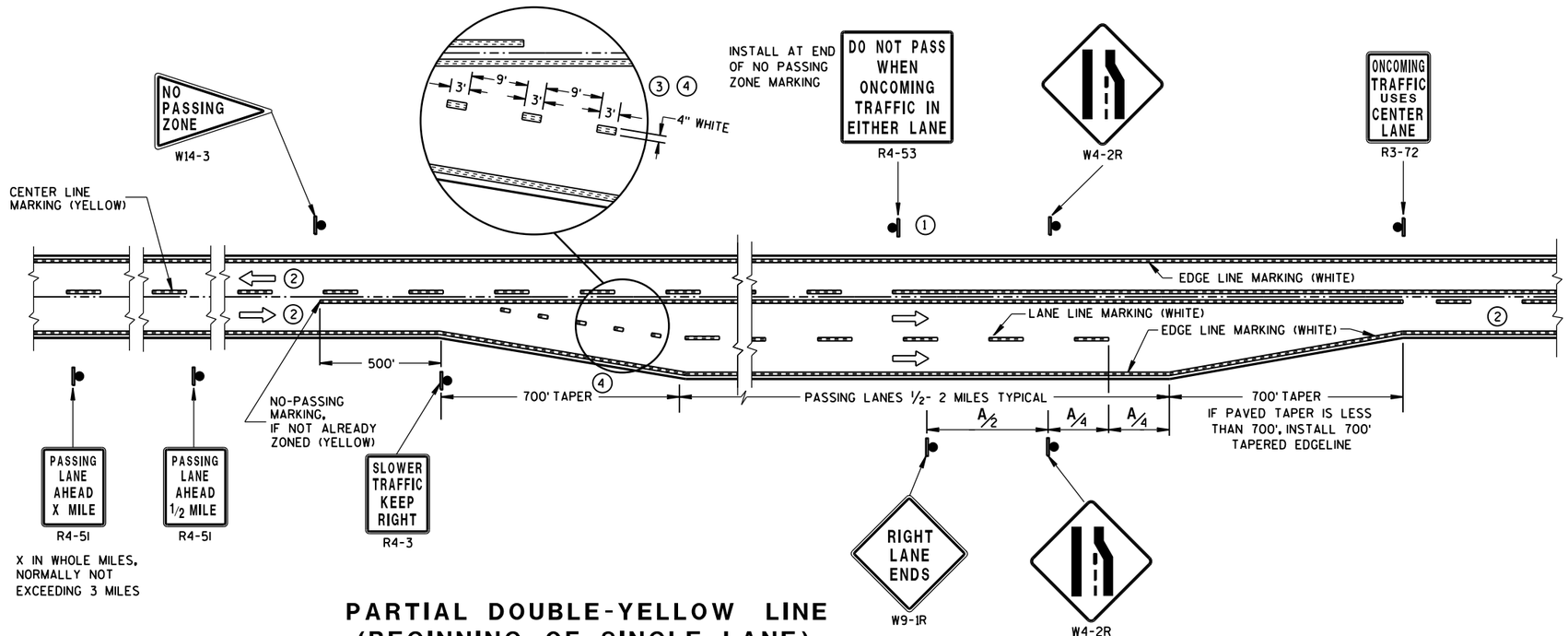
S.D.D. 15 C 8-16b

6

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



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



PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

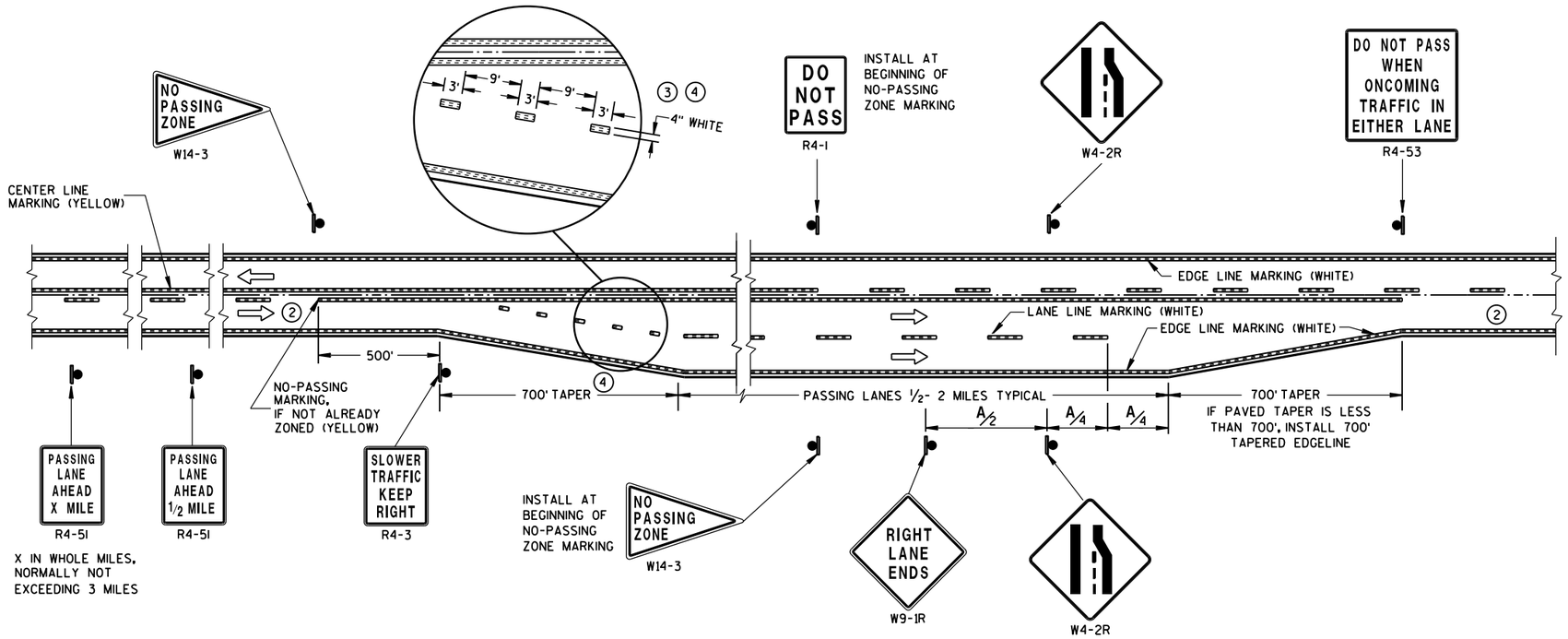
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

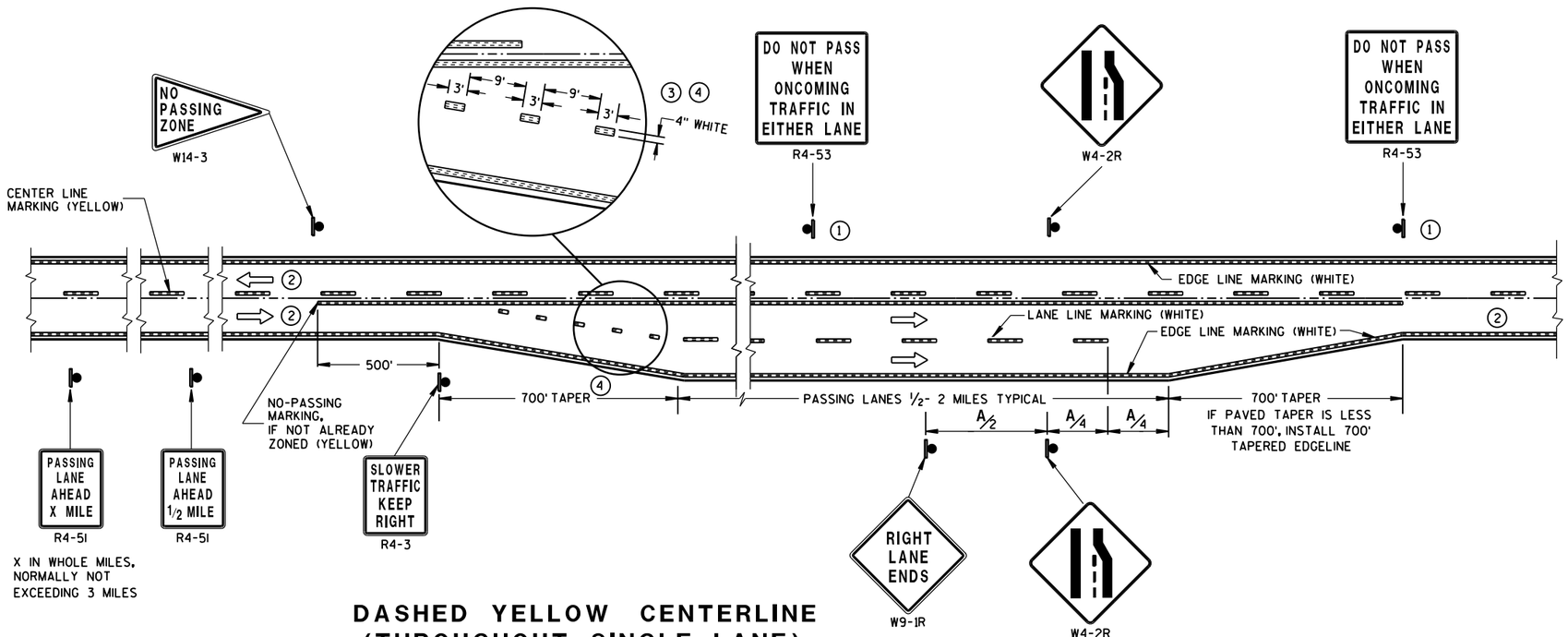
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



SOLID DOUBLE-YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW CENTERLINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

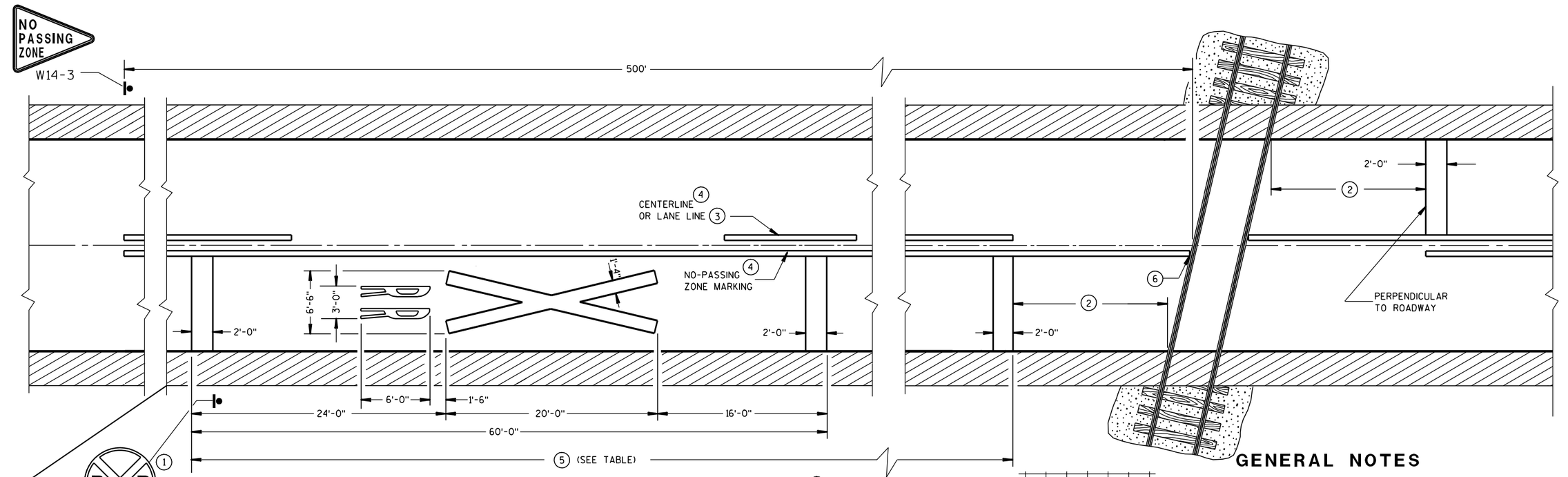
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

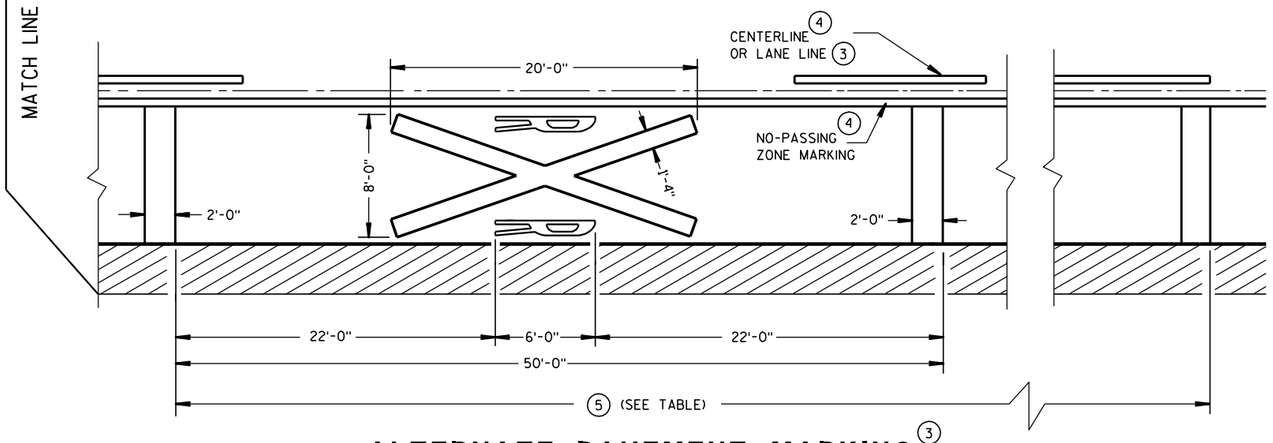
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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



PREFERRED PAVEMENT MARKING 3

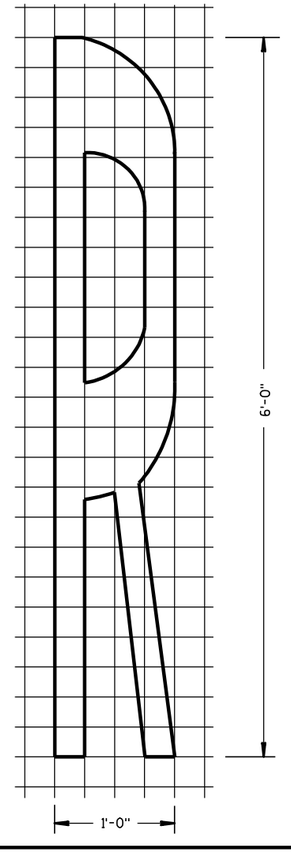


ALTERNATE PAVEMENT MARKING 3

5

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

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



GENERAL NOTES

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

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

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

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

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

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1-9-2012
DATE

/S/ Thomas N. [illegible]
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 9-9a

6

S.D.D. 15 C 9-9a

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

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

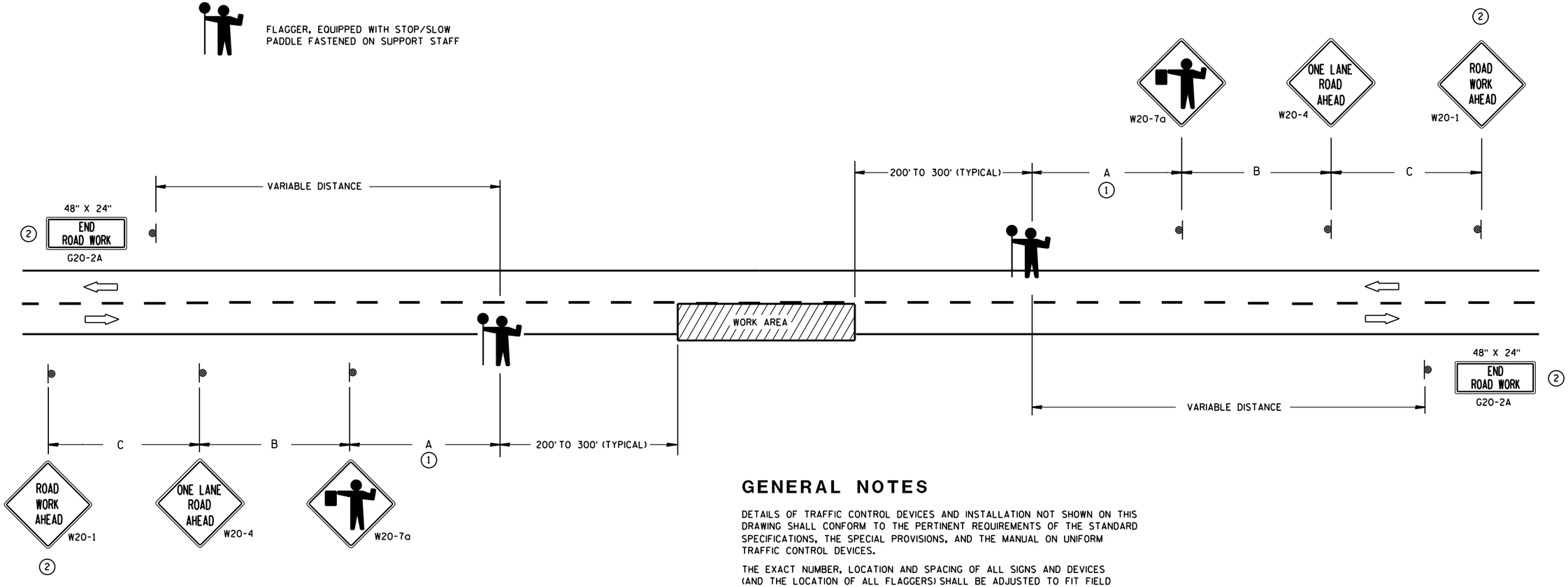
SIGN SPACING TABLE

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

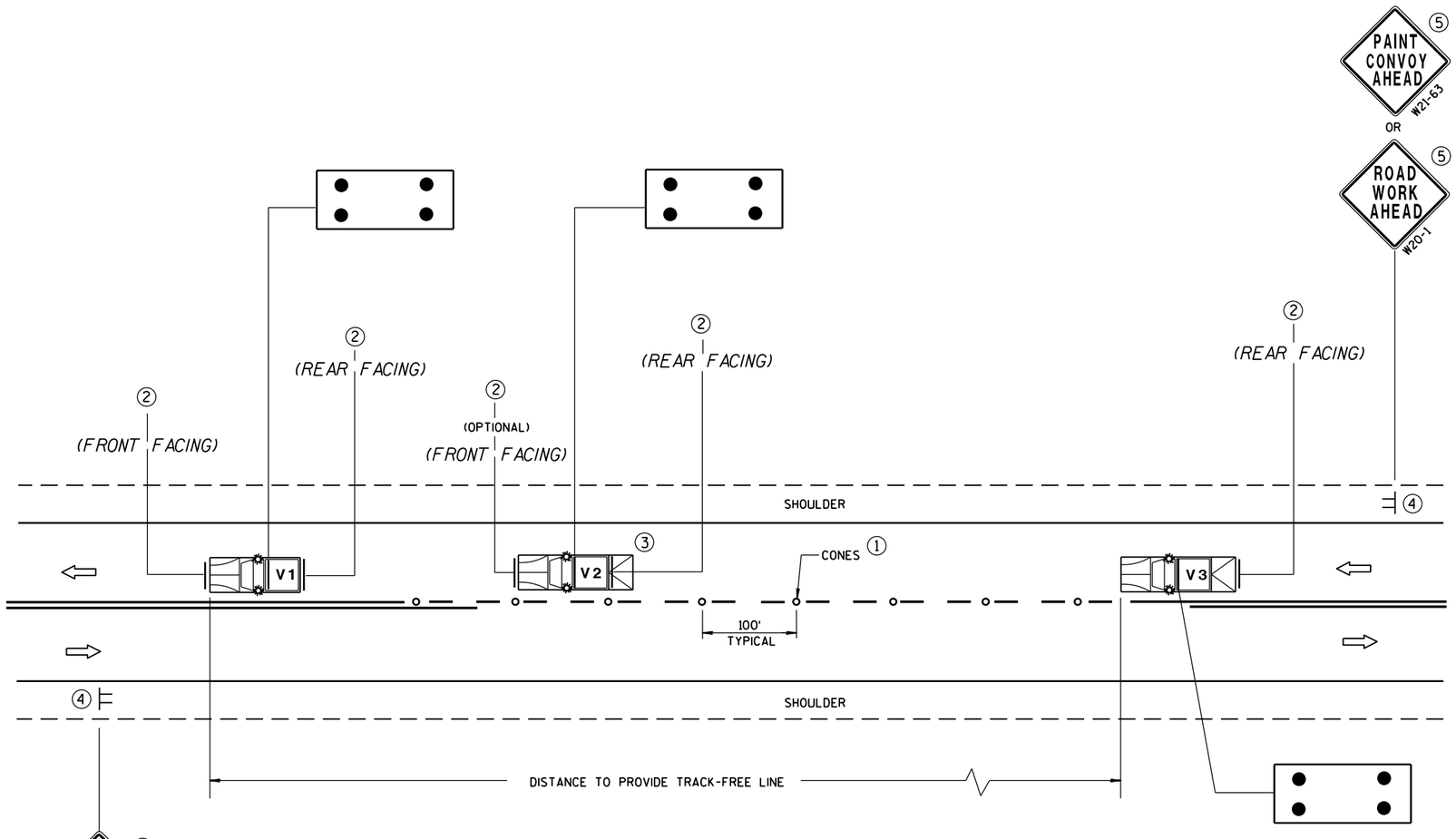
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

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

MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/3/2013 DATE	/S/ Travis Feltes STATE TRAFFIC E
FHWA	

6

S.D.D. 15 C 19-2a

6

S.D.D. 15 C 19-2a

GENERAL NOTES

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

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

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

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

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

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

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

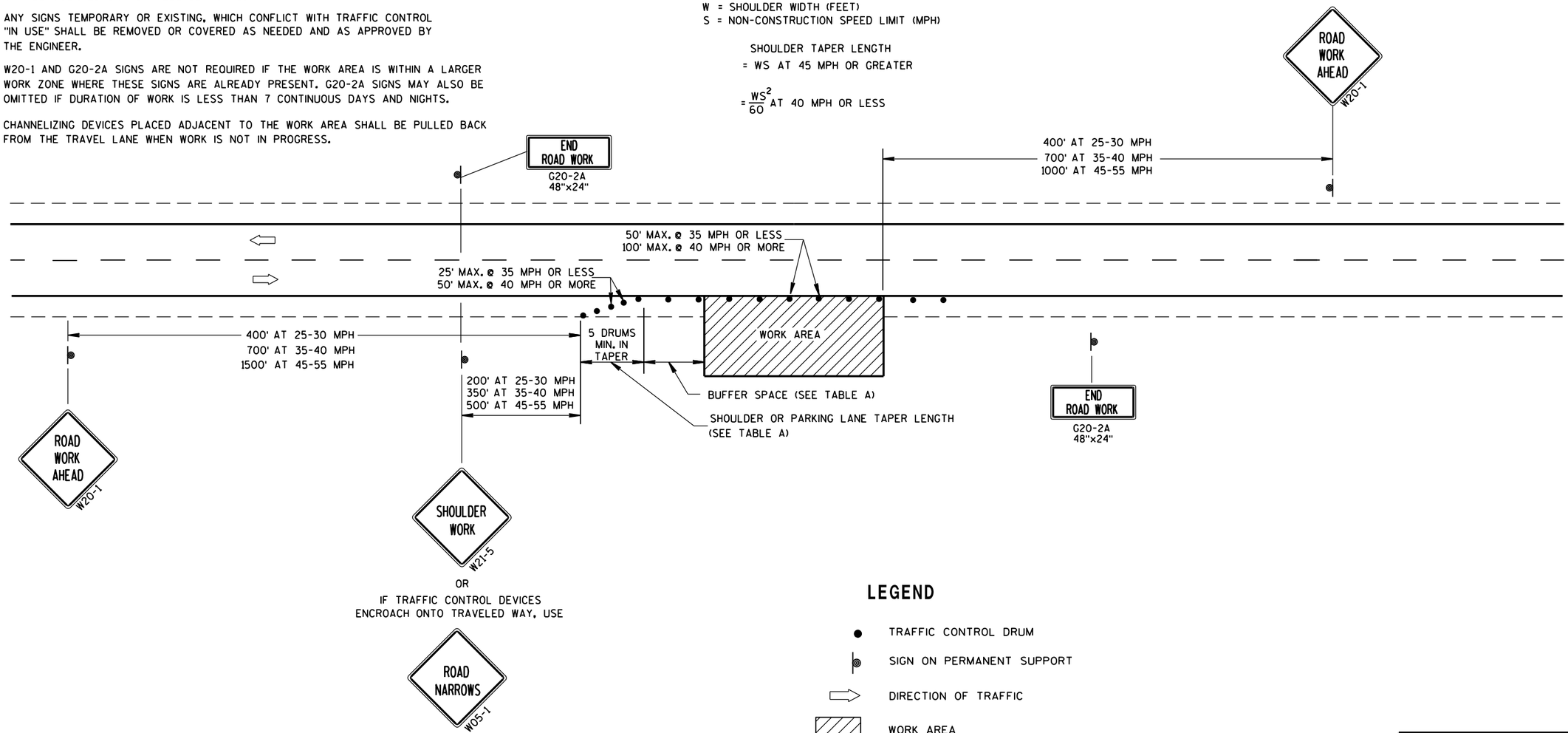
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

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

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

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



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

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

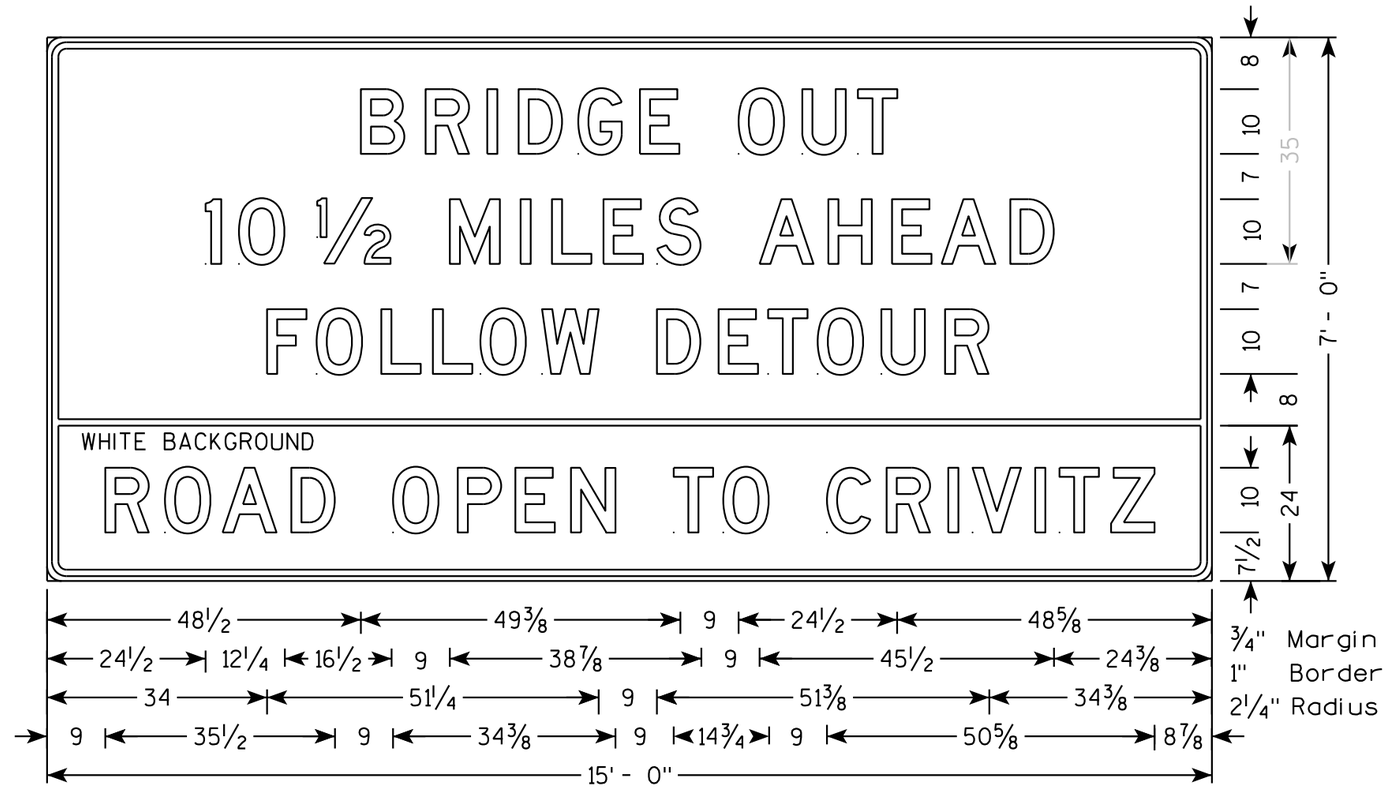
FHWA

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S.D.D. 15 D 28-2

NOTES

1. All Sign Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE except as Shown
   Message - BLACK
3. Message Series - D

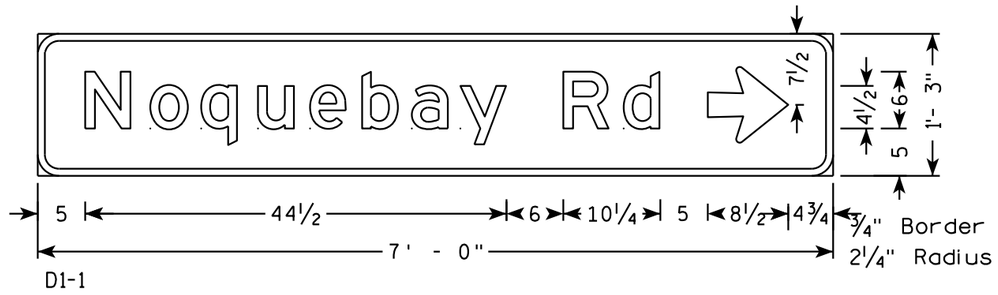


PLAN SHEET PRODUCED BY WisDOT-NE REGION

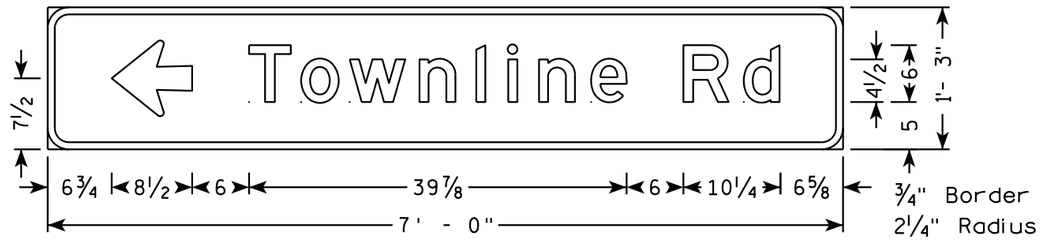
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	TEMPORARY SIGNING	SHEET NO: 164	E

NOTES

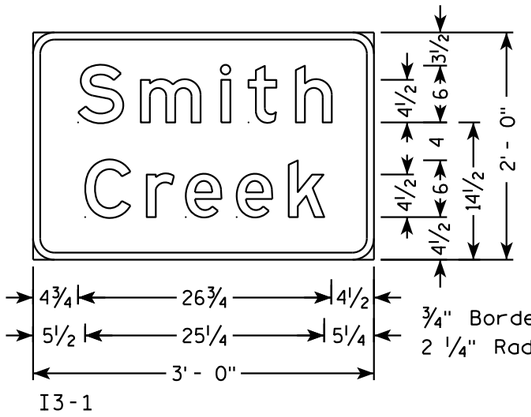
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN except as Shown
   Message - WHITE
3. Message Series - E except as Shown



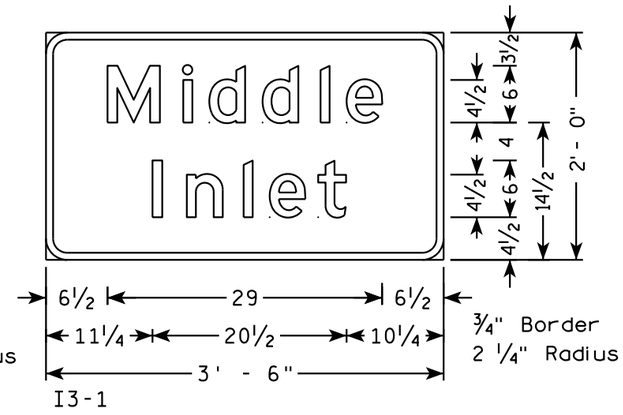
D1-1



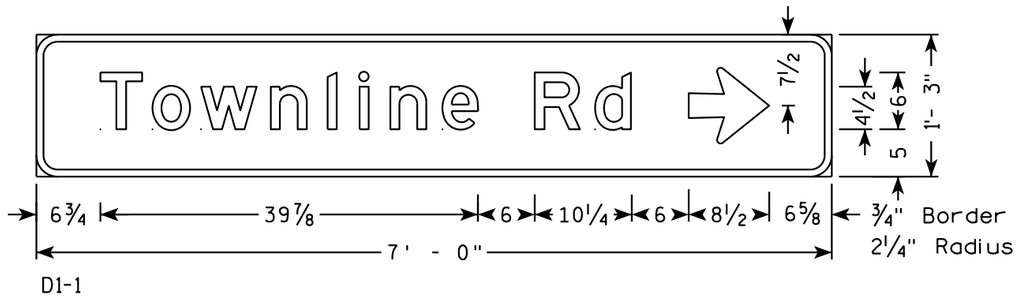
D1-1



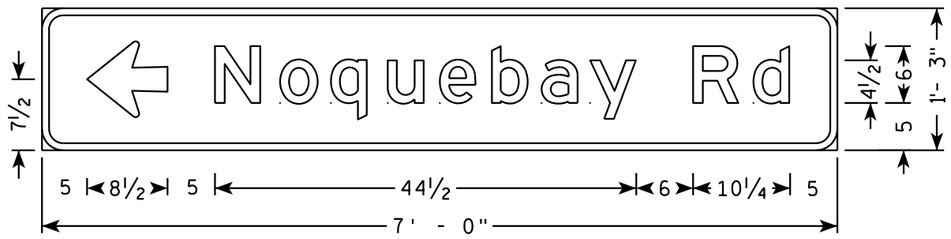
I3-1



I3-1



D1-1

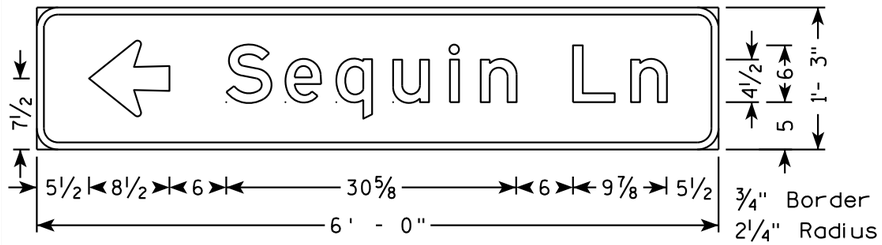


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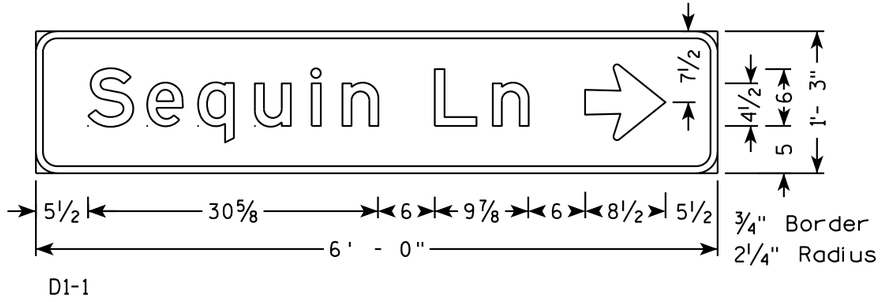
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING	SHEET NO: 165	E

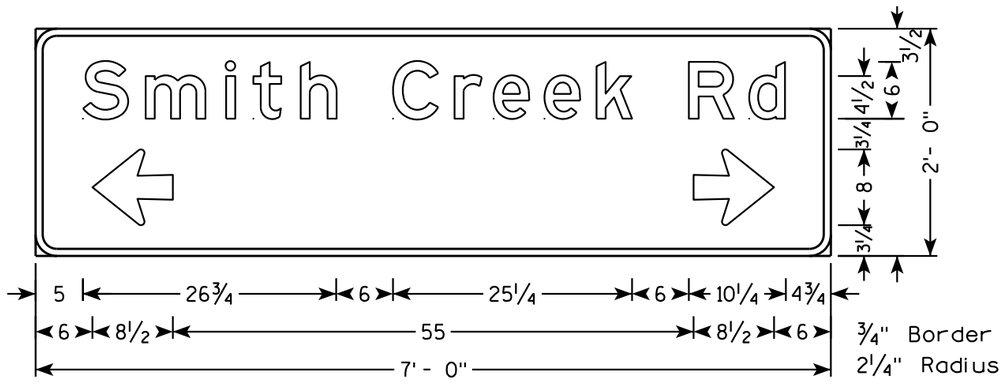
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D1-1



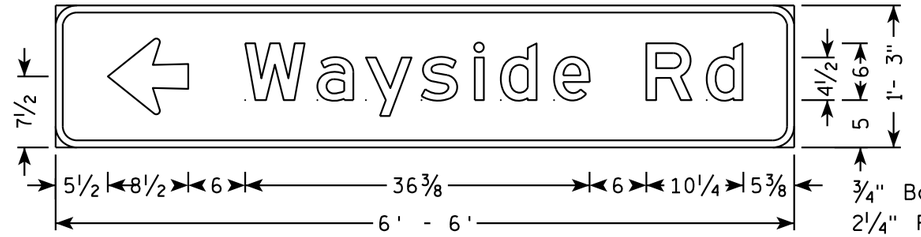
D1-1



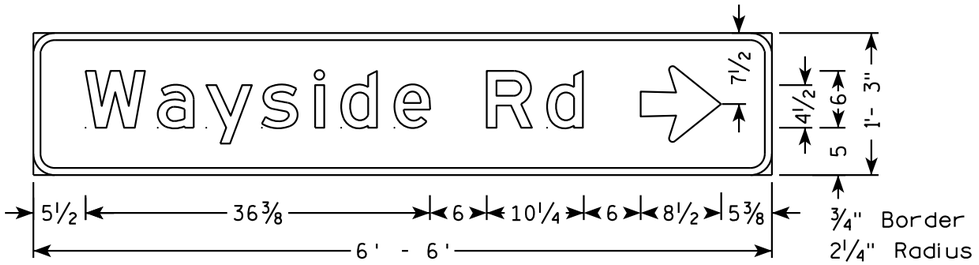
D1-60

NOTES

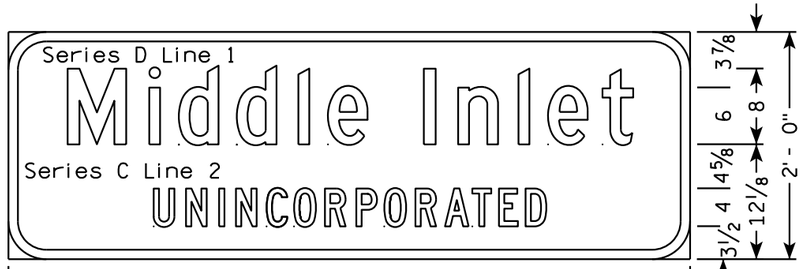
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as Shown



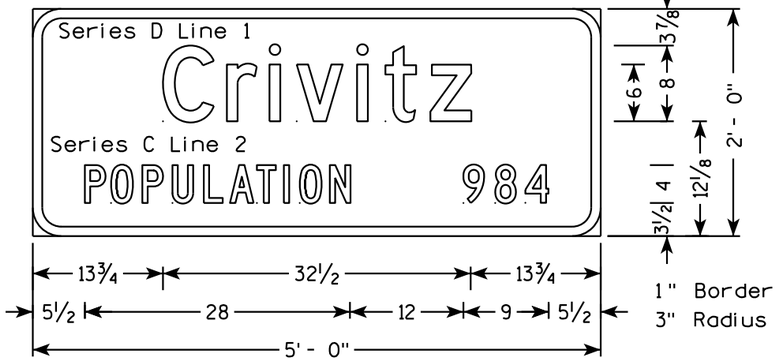
D1-1



D1-1



I2-3



I2-3

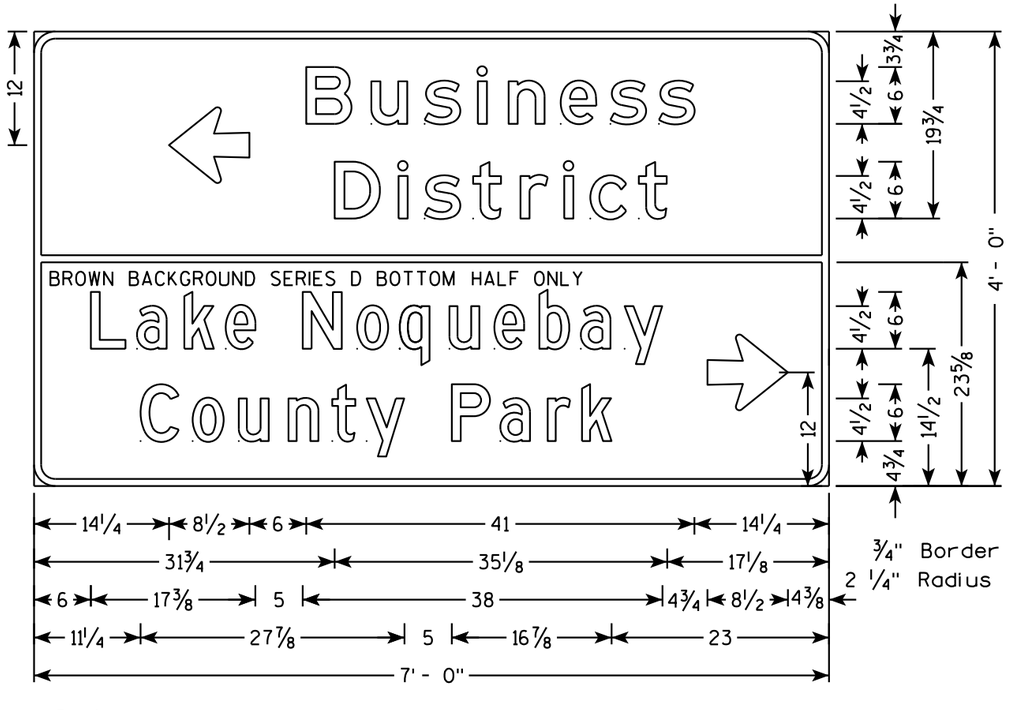
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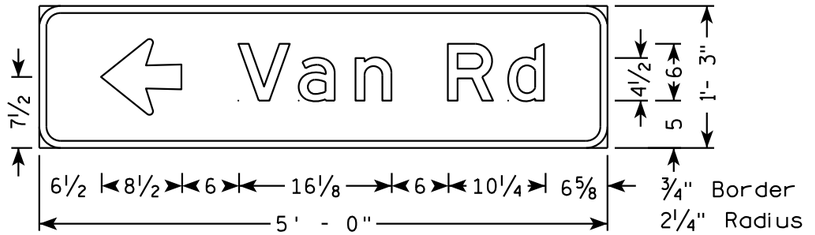
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NOTES

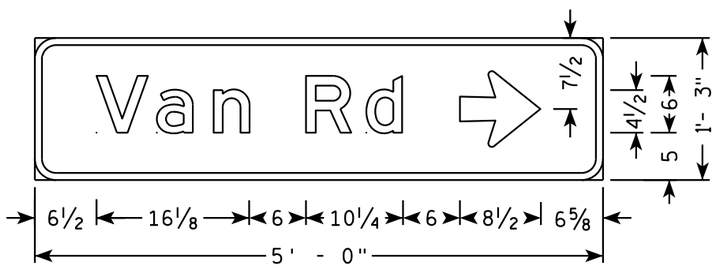
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN except as Shown
   Message - WHITE
3. Message Series - E except as Shown



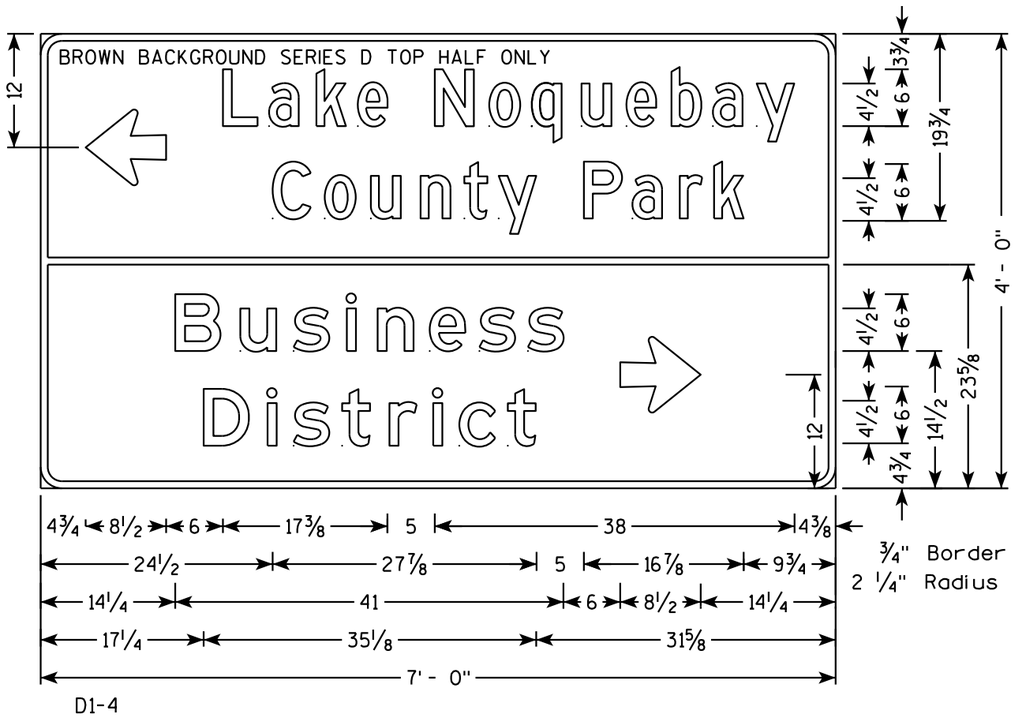
D1-4



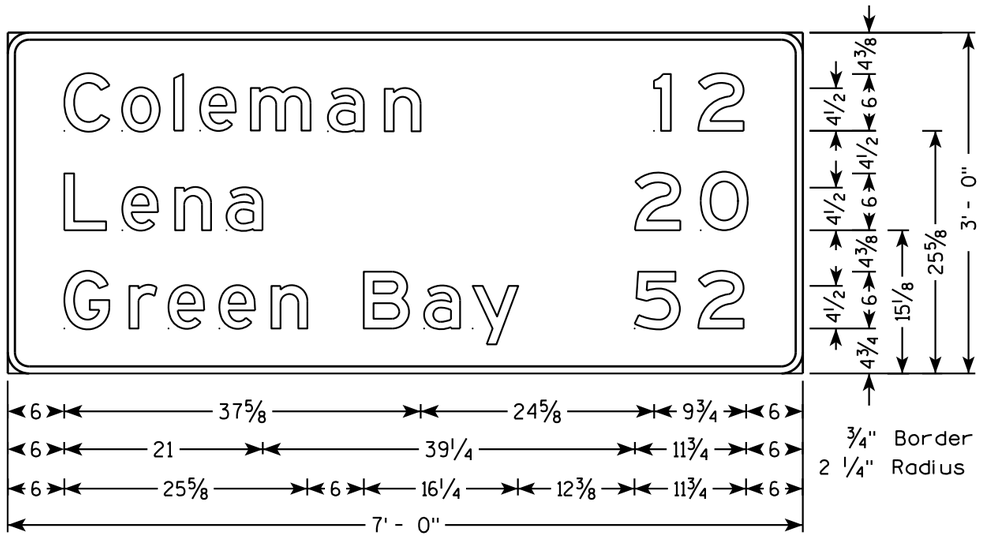
D1-1



D1-1



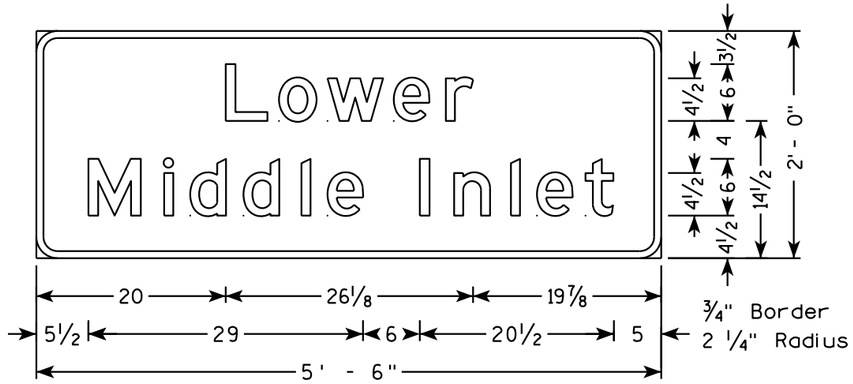
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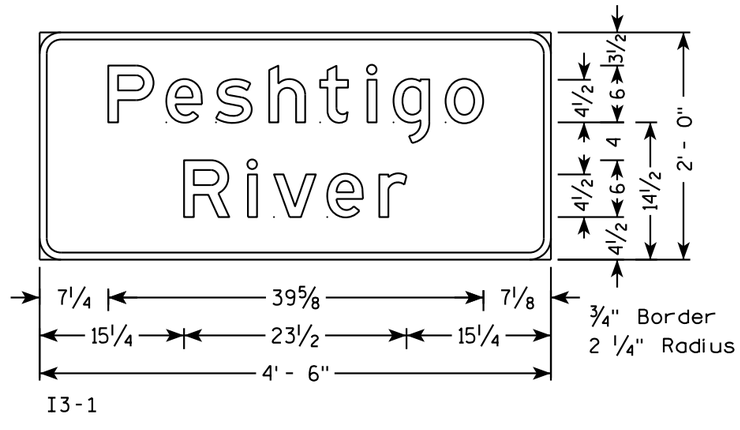
D2-3

NOTES

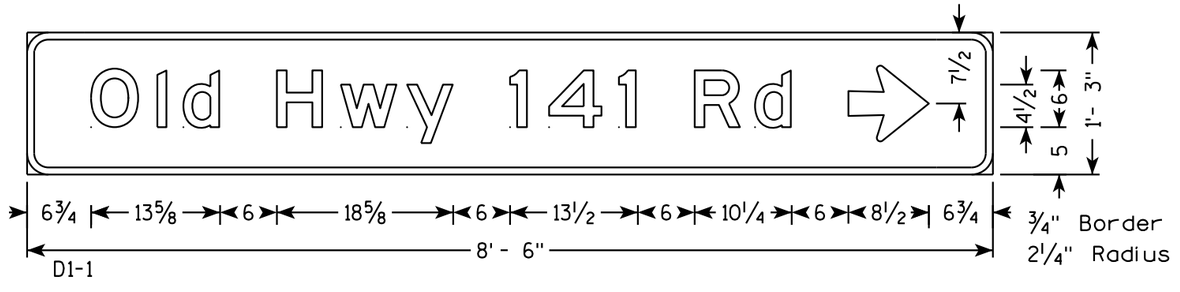
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



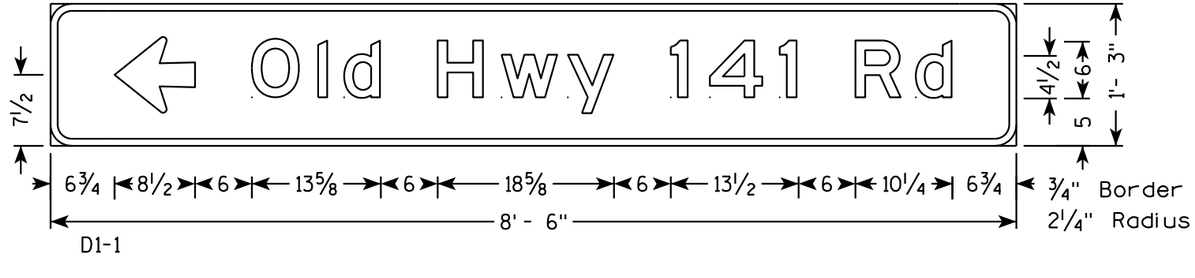
I3-1



I3-1



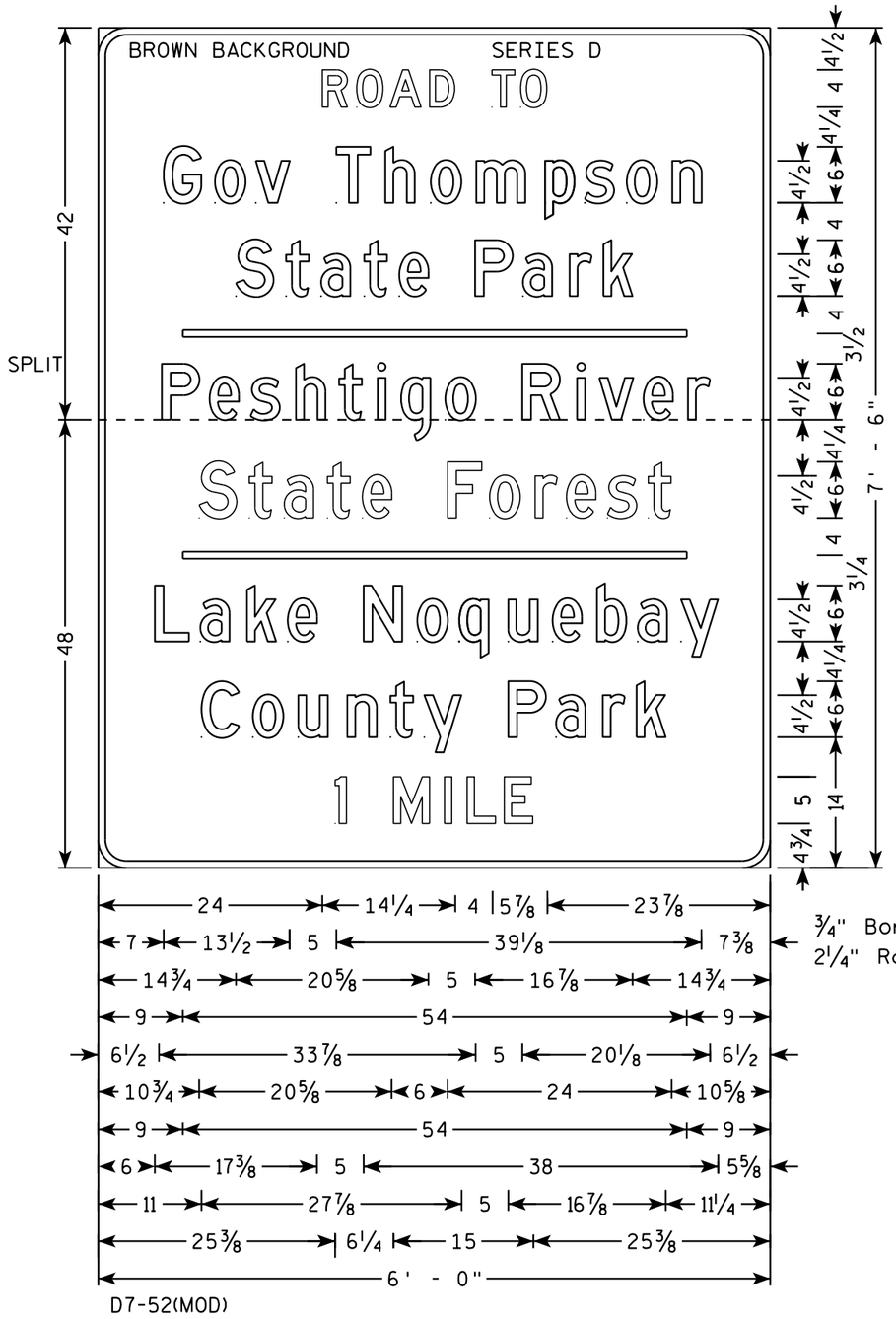
D1-1



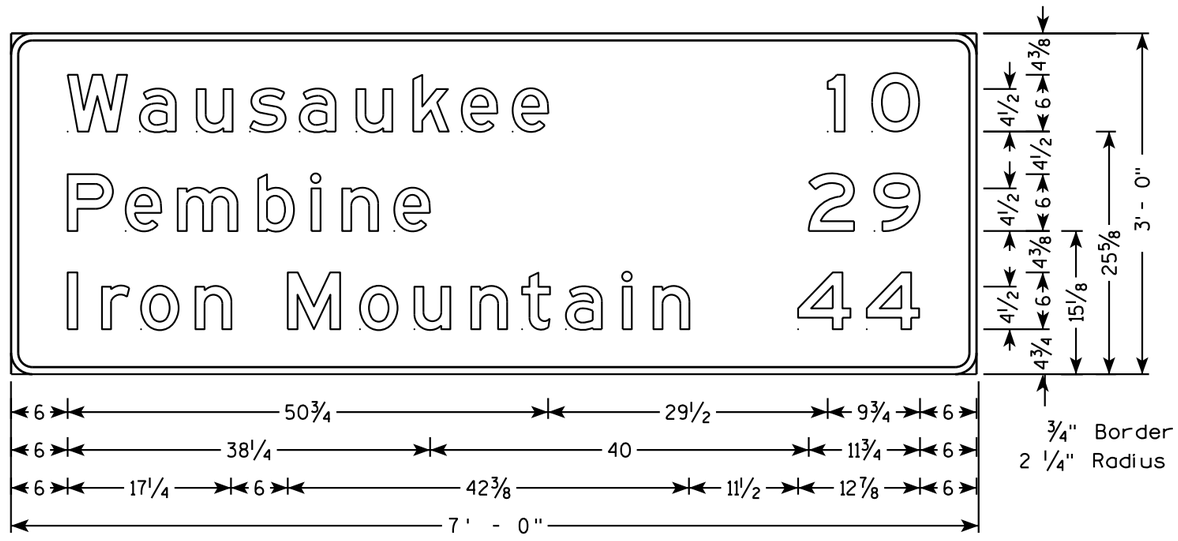
D1-1

7

7



D7-52(MOD)



D2-3

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 except as Shown
   Message - WHITE
3. Message Series - E except as Shown

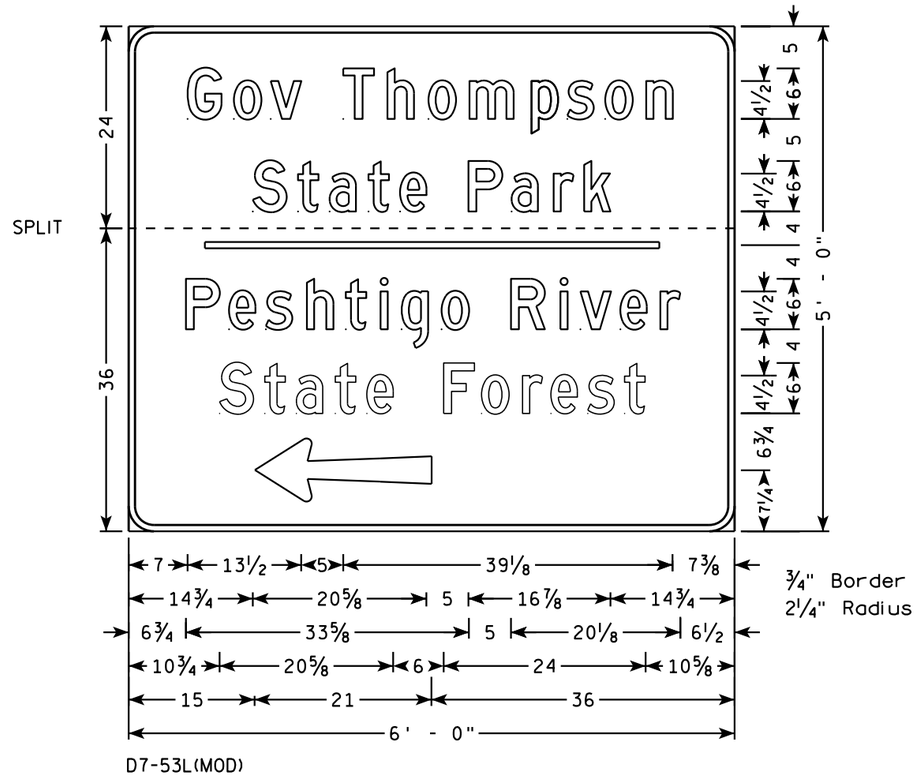
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7

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING	SHEET NO: 169	E

NOTES

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



D7-53L(MOD)

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	SIGN DETAILS	SHEET NO: 170	E

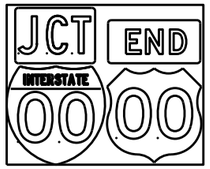
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WISDOT/CADDS SHEET 42

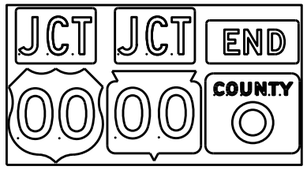
TYPICAL ASSEMBLIES



J1-1



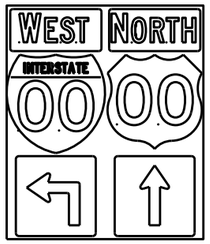
J1-2



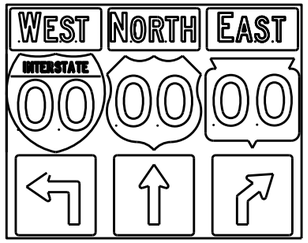
J1-3



J2-1



J2-2

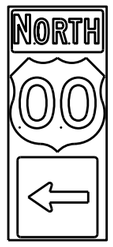


J2-3

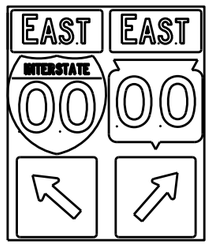


JV

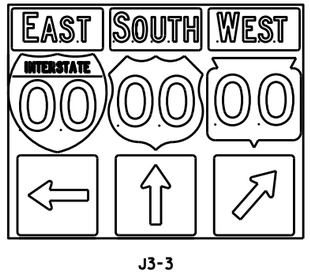
(Typical Vertical J-Assembly
See Note 10 and 11)



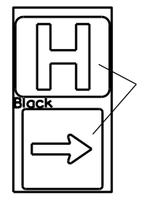
J3-1



J3-2



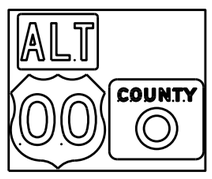
J3-3



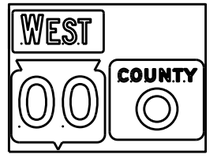
JH-1



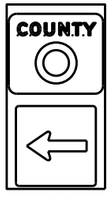
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

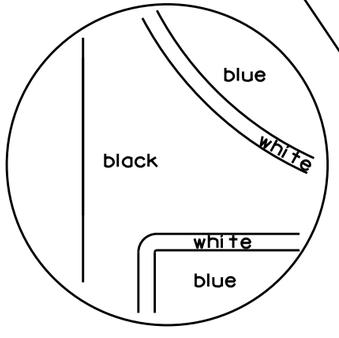


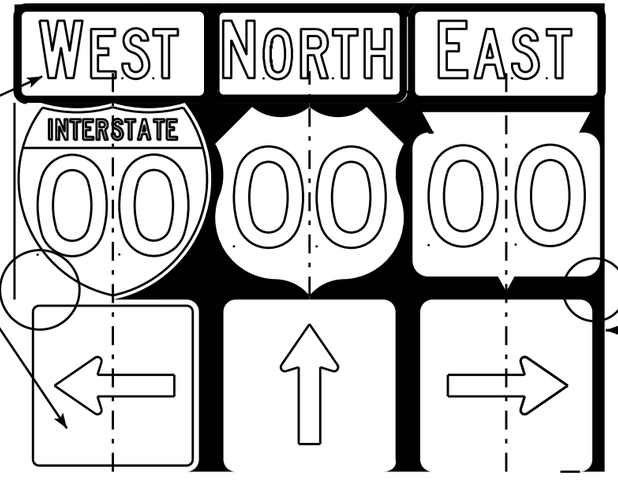
J23-1

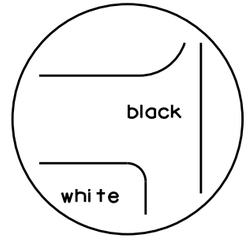


J22-1

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

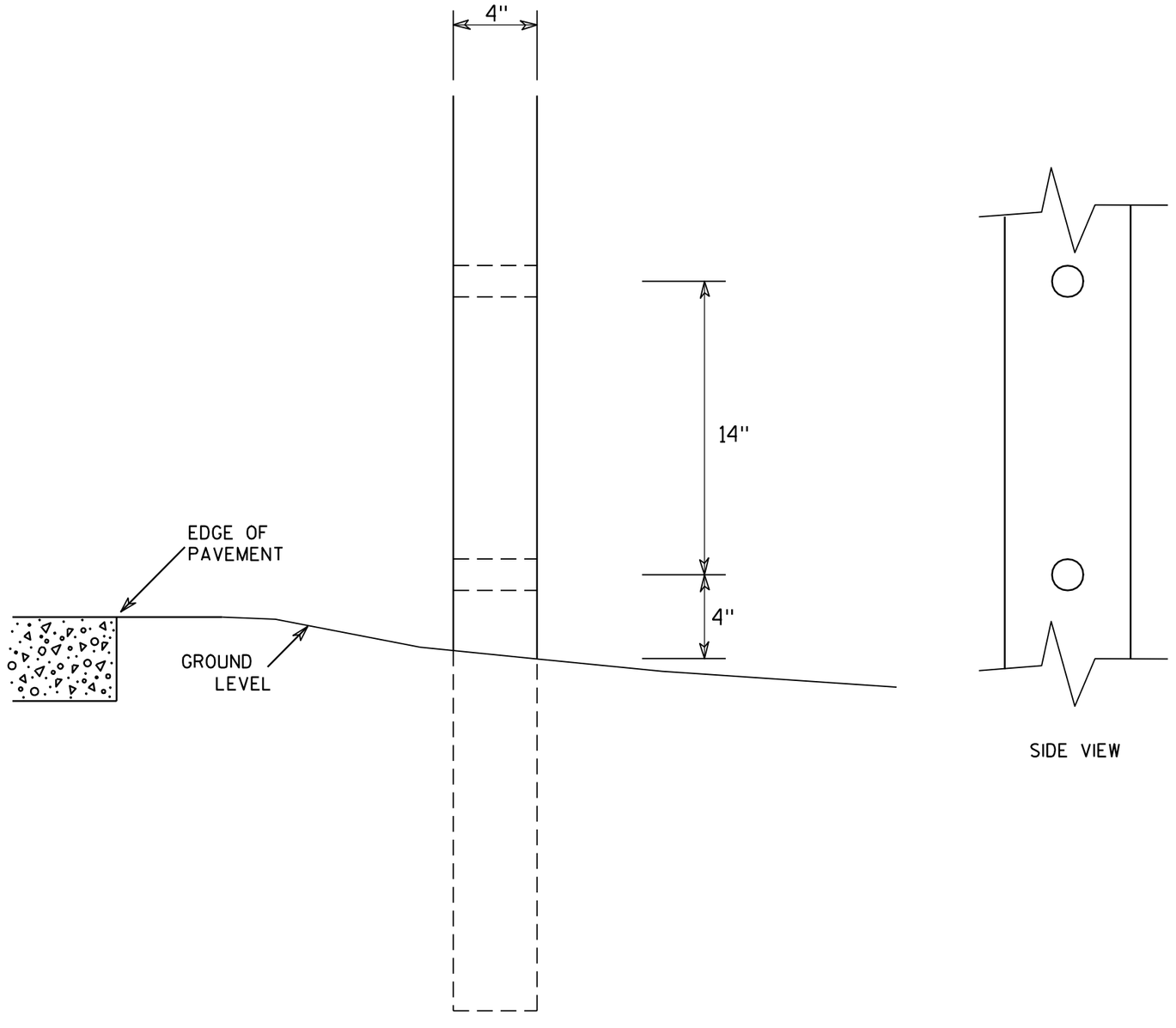
DATE 2/06/14 PL... A2-1S.8

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



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

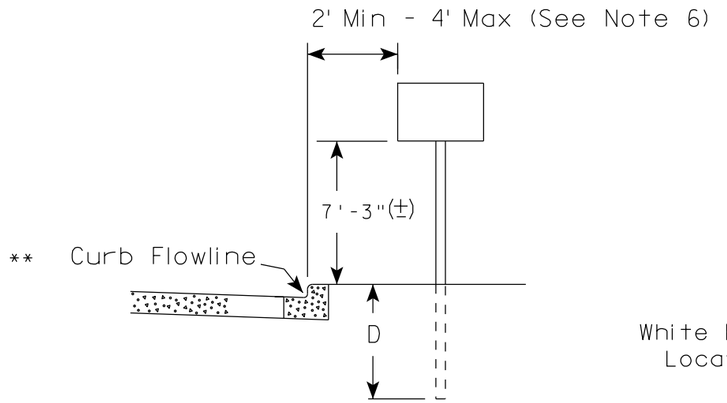
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

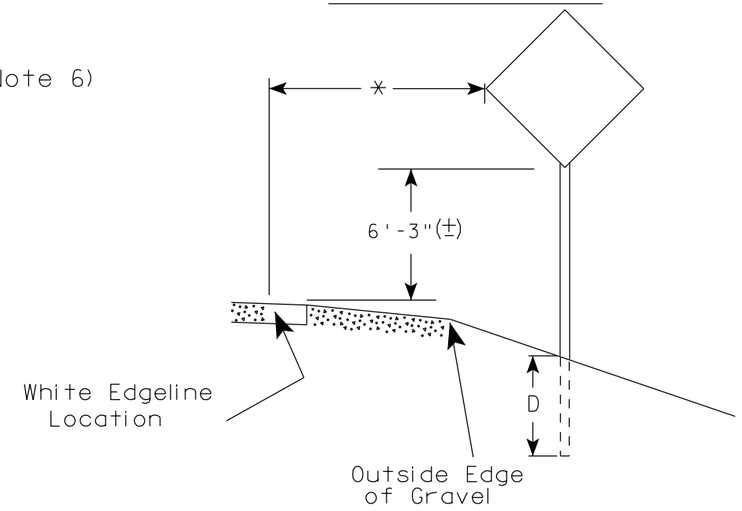
DATE 3/27/97 PLATE NO. A4-11.2

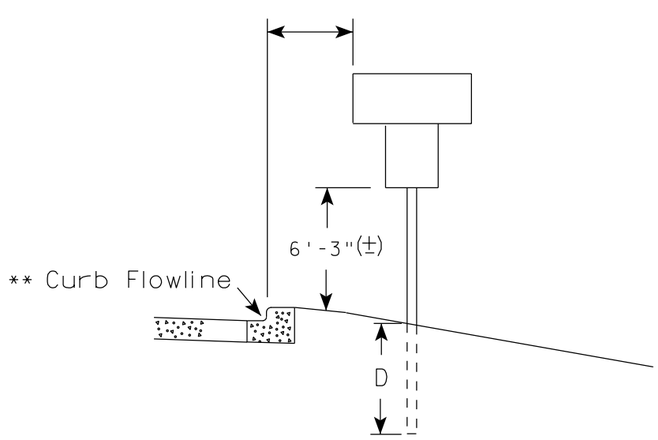
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 172	E

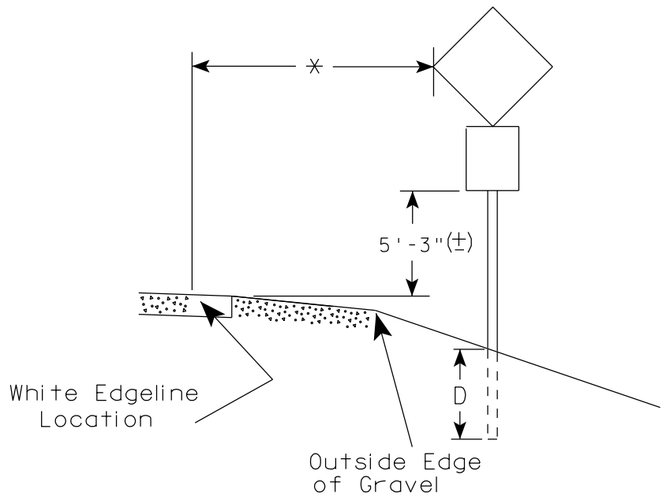
URBAN AREA



RURAL AREA (See Note 2)







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

GENERAL NOTES

1. Signs wider than 4 feet, 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 (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

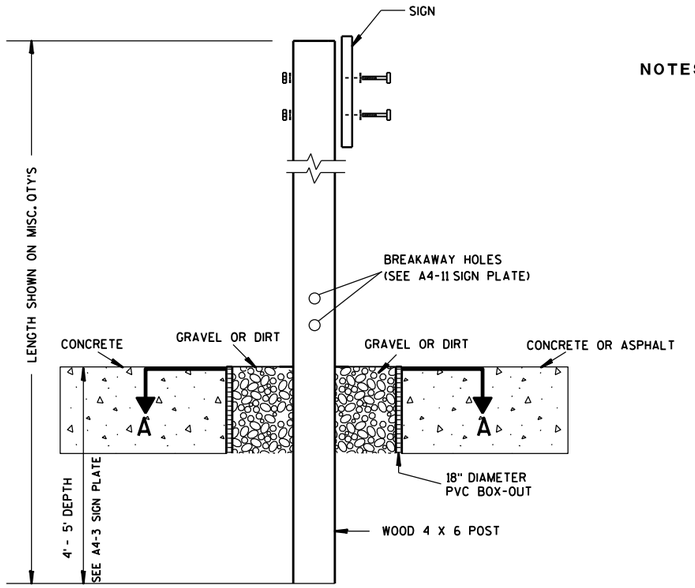
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

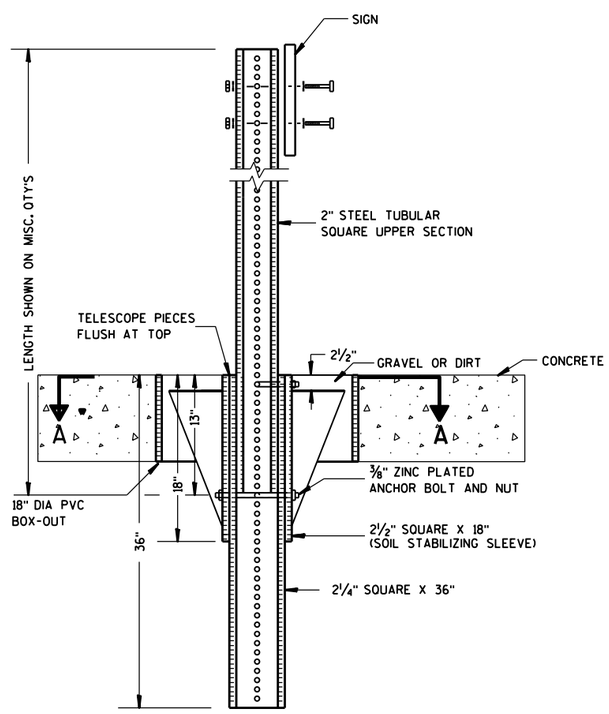
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A43.DGN PLOT DATE : 30-SEP-2013 13:25 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 99.237937:1.000000 WISDOT/CADDS SHEET 42



ELEVATION VIEW

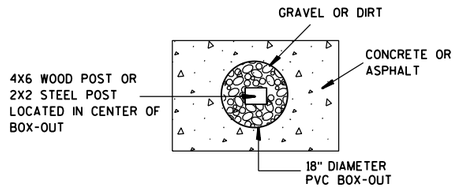
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

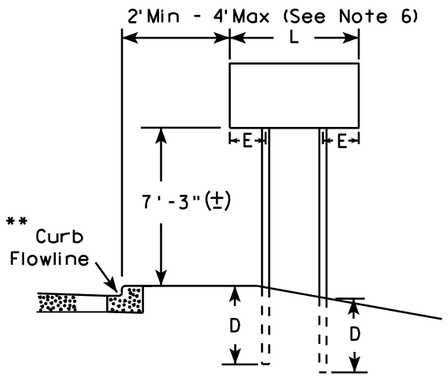
APPROVED Matthew R Rauch
for State Traffic Engineer

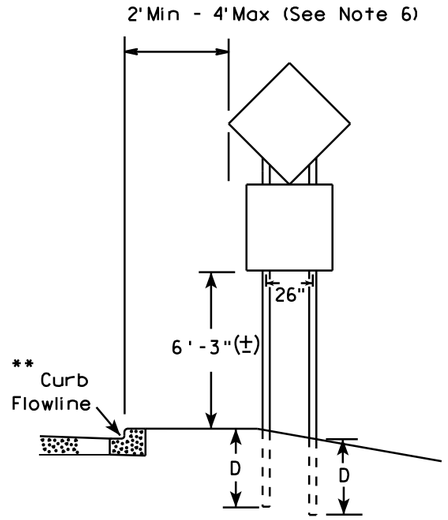
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

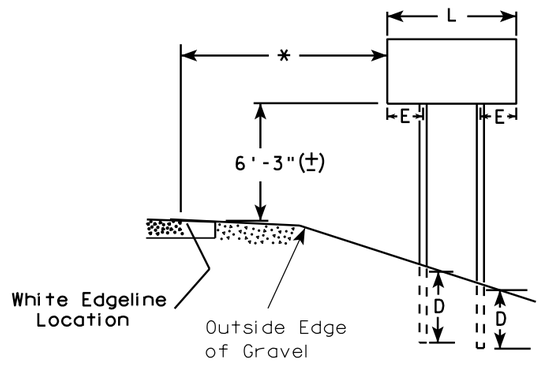
URBAN AREA

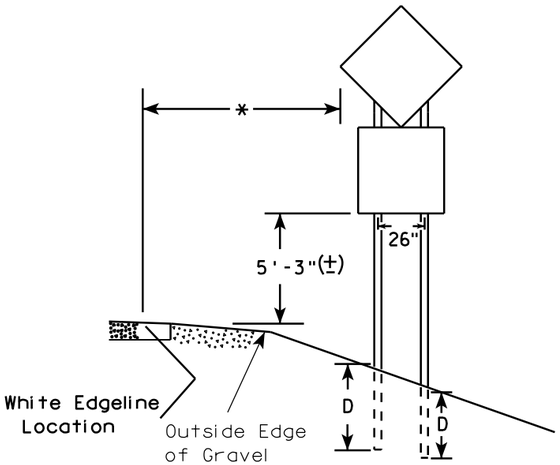




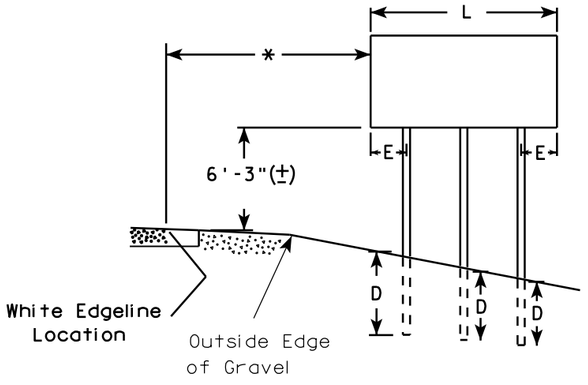
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

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

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

*** See A4-3 sign plate for signs 4' or less in width or 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'

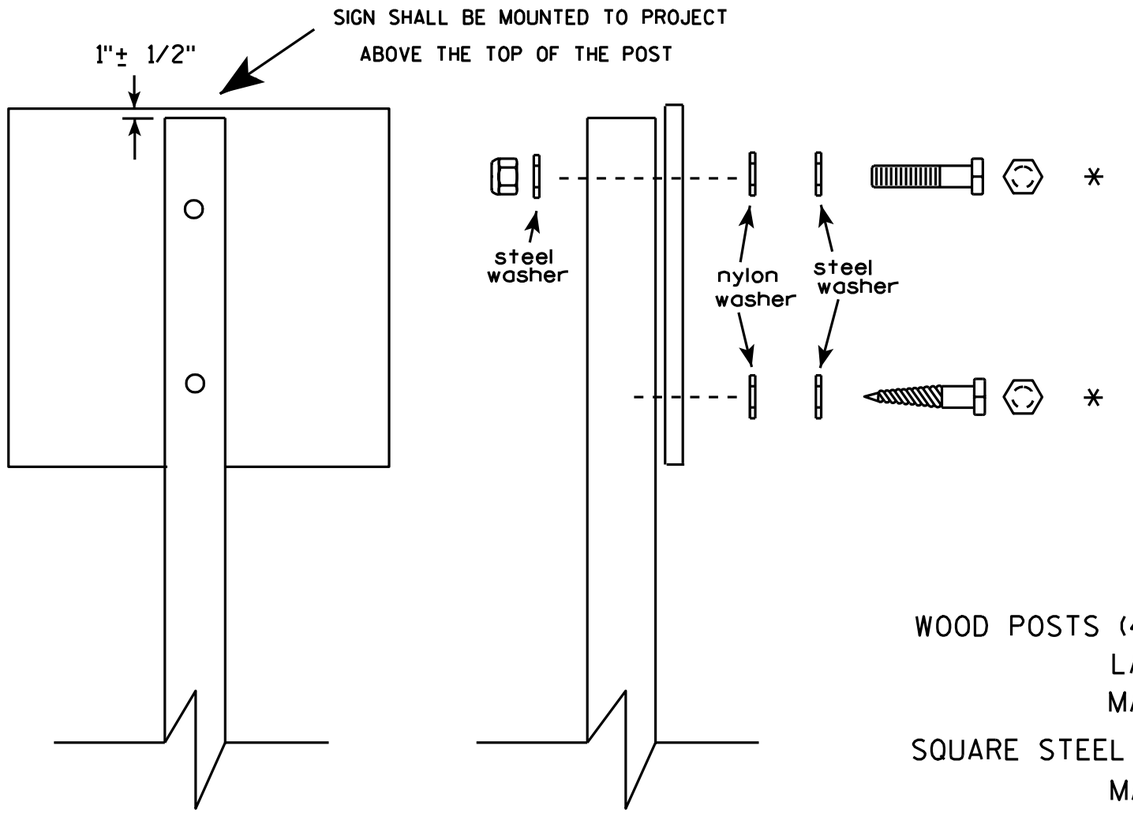
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/29/14 PLATE NO. A4-4 13

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

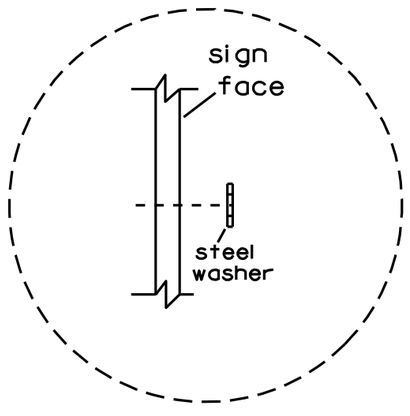
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

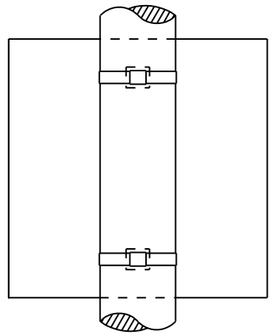
WISCONSIN DEPT OF TRANSPORTATION

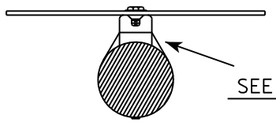
APPROVED Matthew R Rauch
for State Traffic Engineer

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

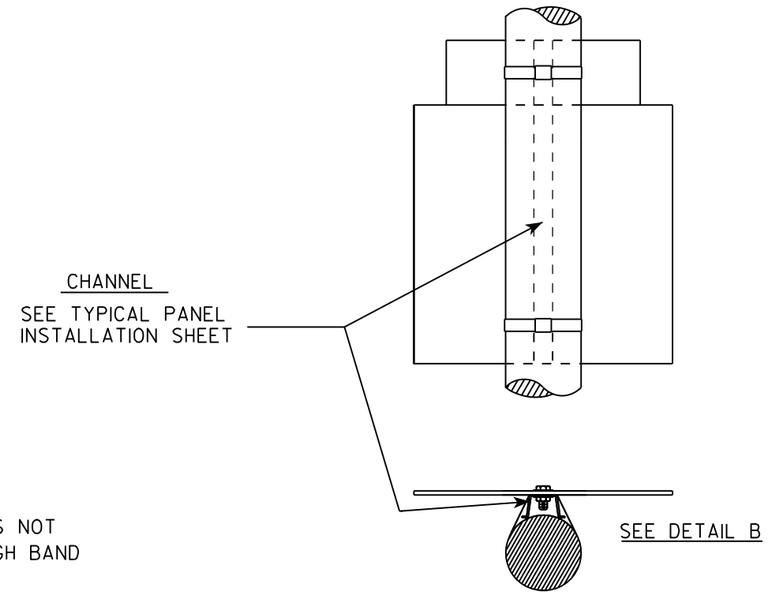
BANDING

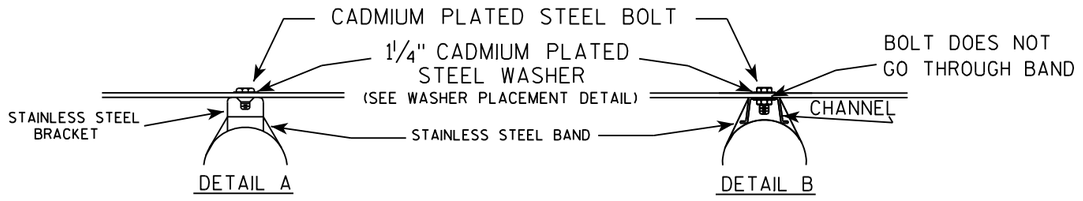
SINGLE SIGN



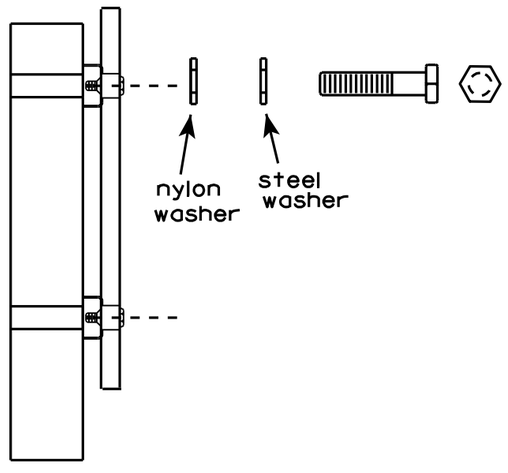


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 177	E

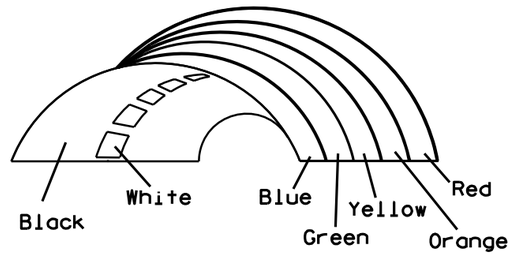


* VARIES

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

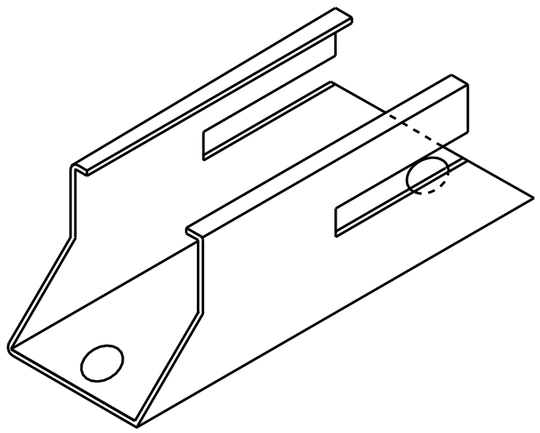
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 178

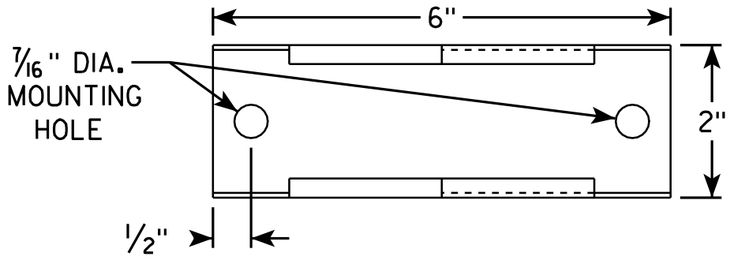
ISOMETRIC VIEW



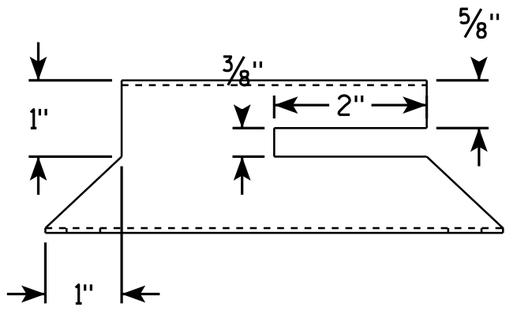
NOTES

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.

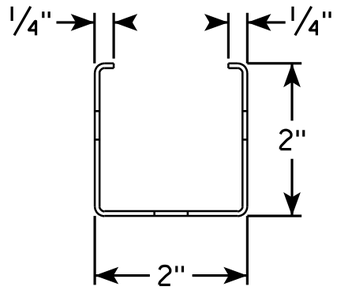
TOP VIEW



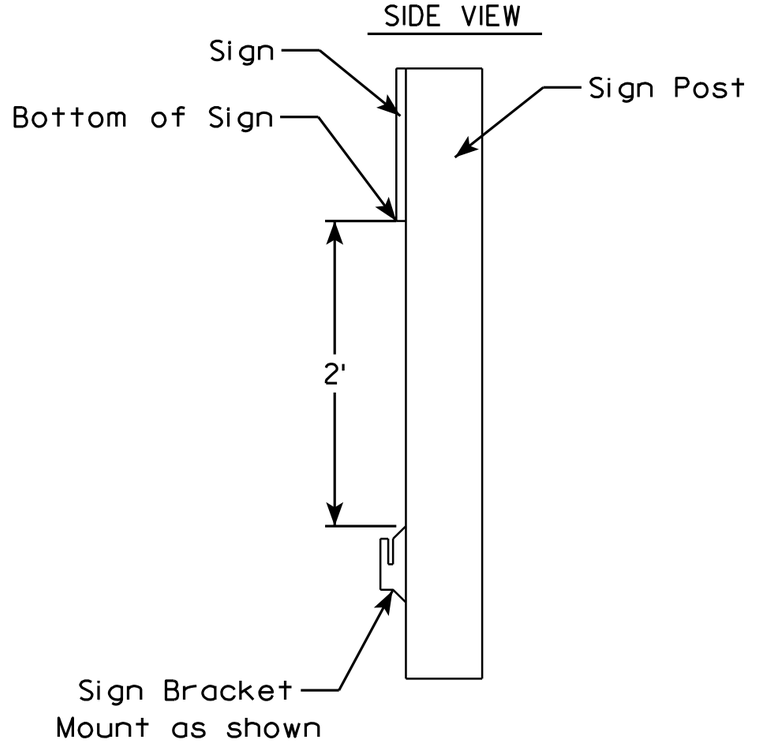
SIDE VIEW



END VIEW



SIDE VIEW



7

7

ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

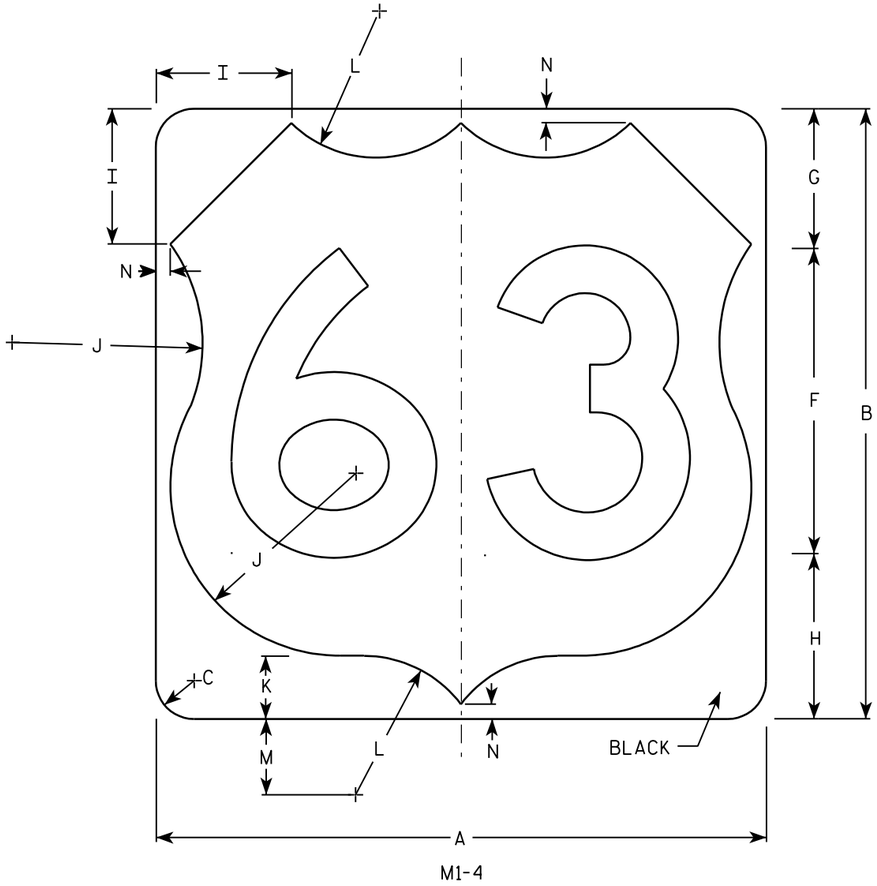
APPROVED Matthew R Rauch
for State Traffic Engineer

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

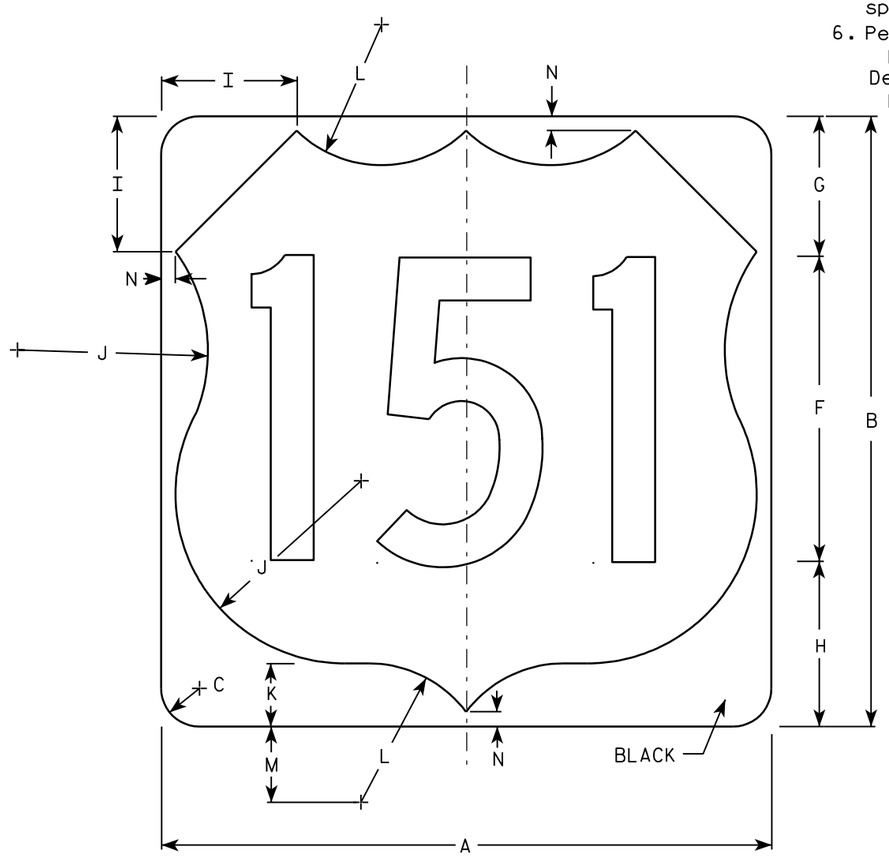
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 179	E

NOTES

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



M1-4



M1-4

7

7

Metric equivalent for this sign is:

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

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

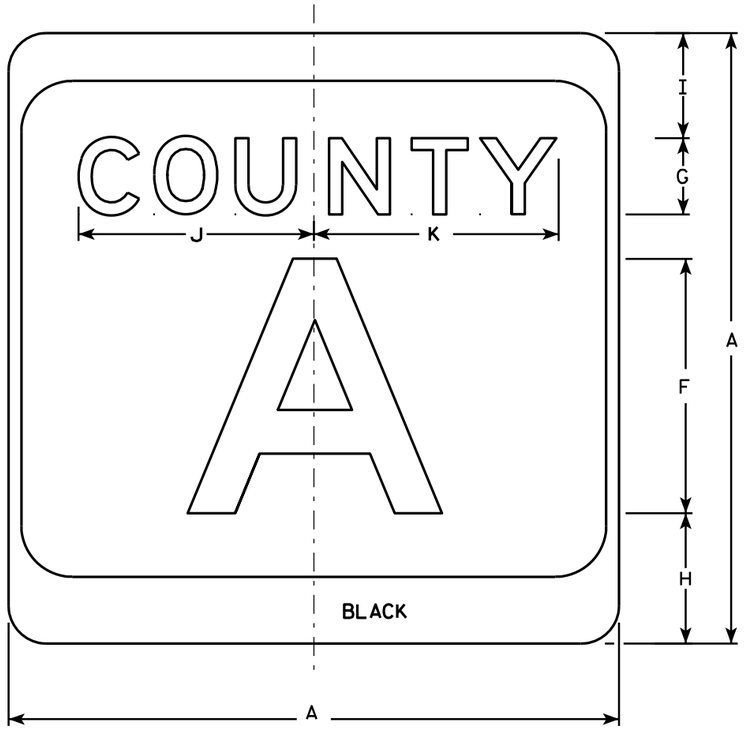
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

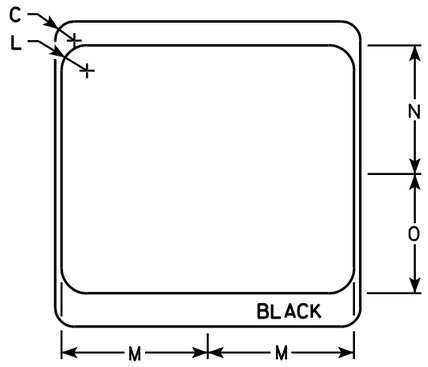
APPROVED Matthew R Rauch
for State Traffic Engineer

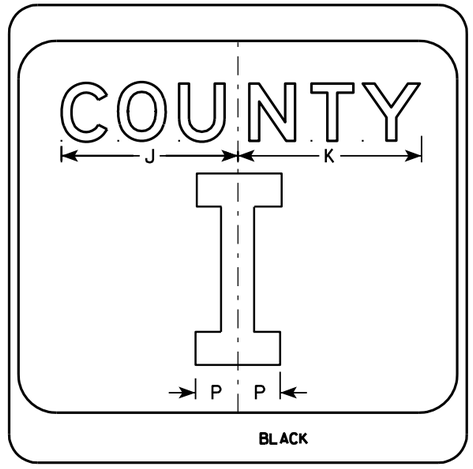
DATE 08/25/05 PLATE NO. M1-4.9

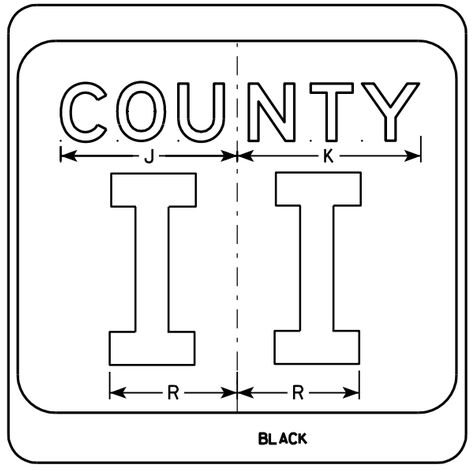
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 180	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

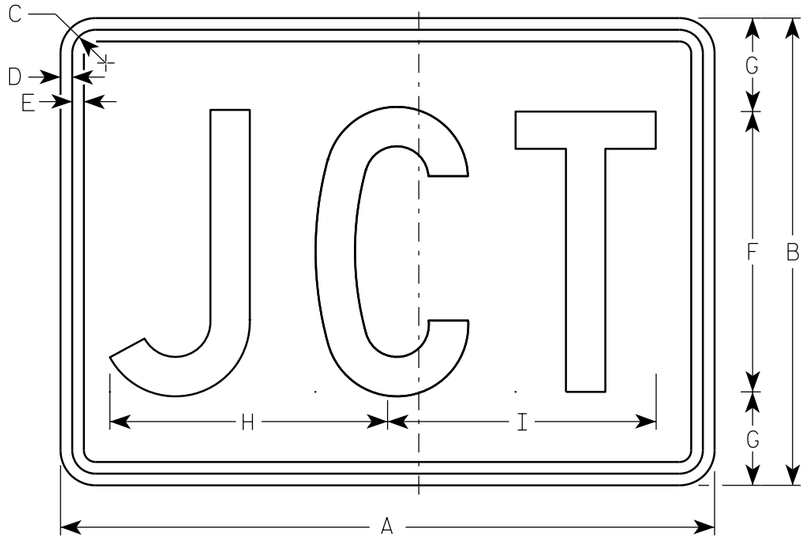
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

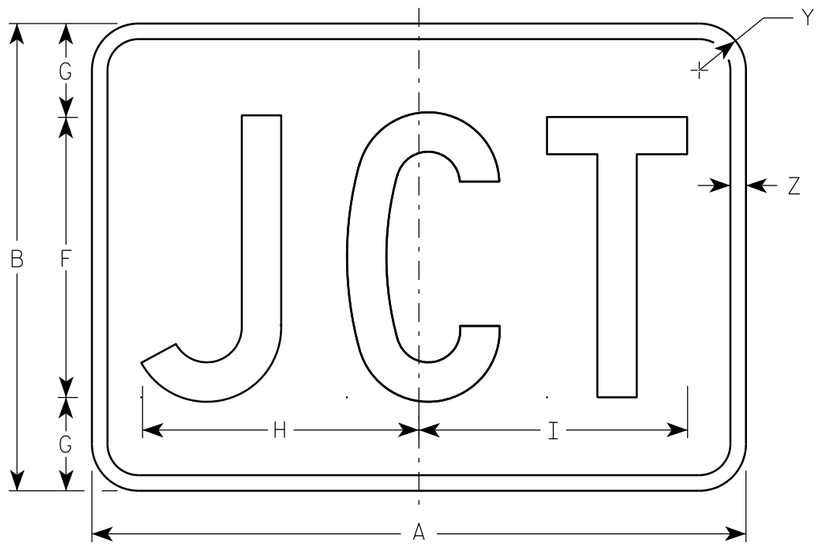
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 181	E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

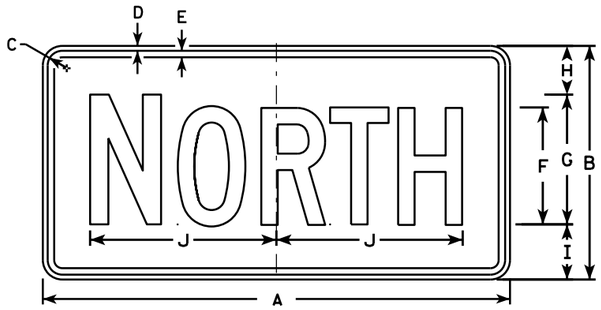
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

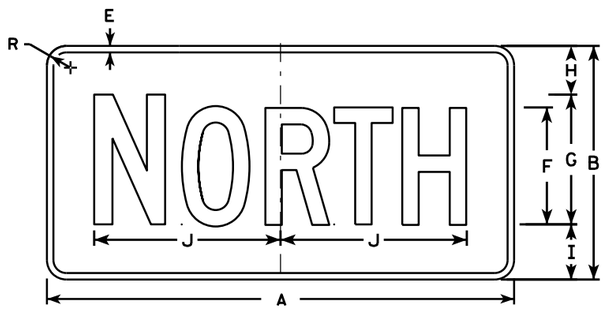
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 182 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M3-1
MK3-1
MM3-1
MN3-1



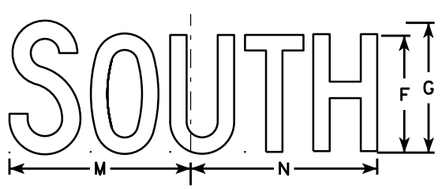
MB3-1



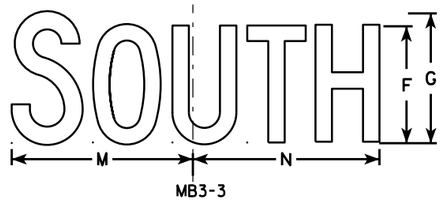
M3-2
MK3-2
MM3-2
MN3-2



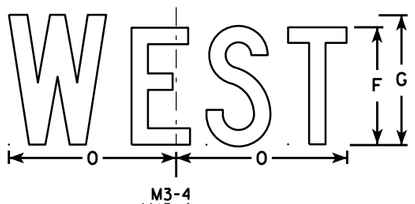
MB3-2



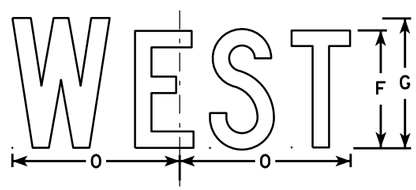
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

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
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

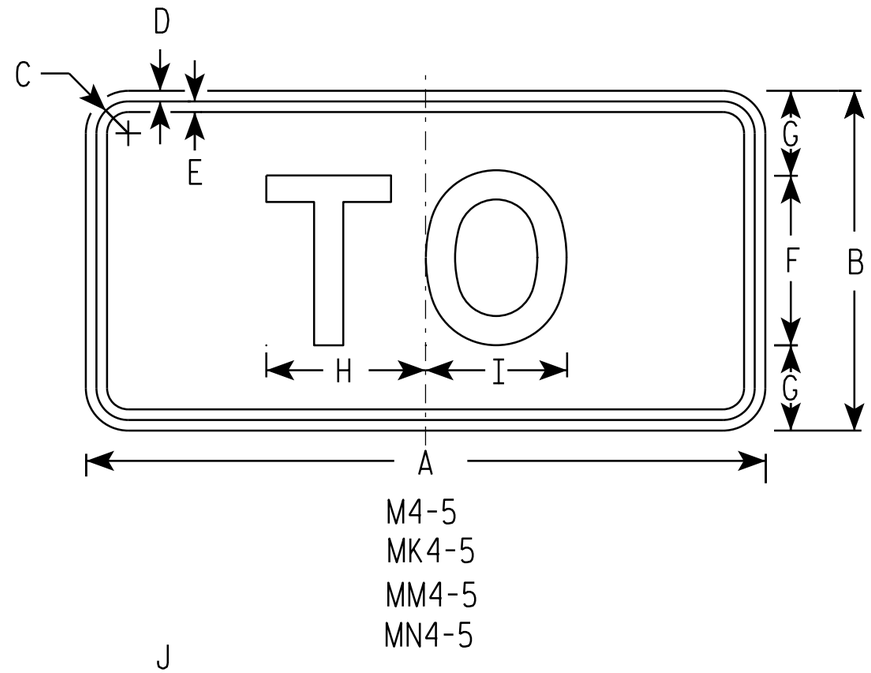
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

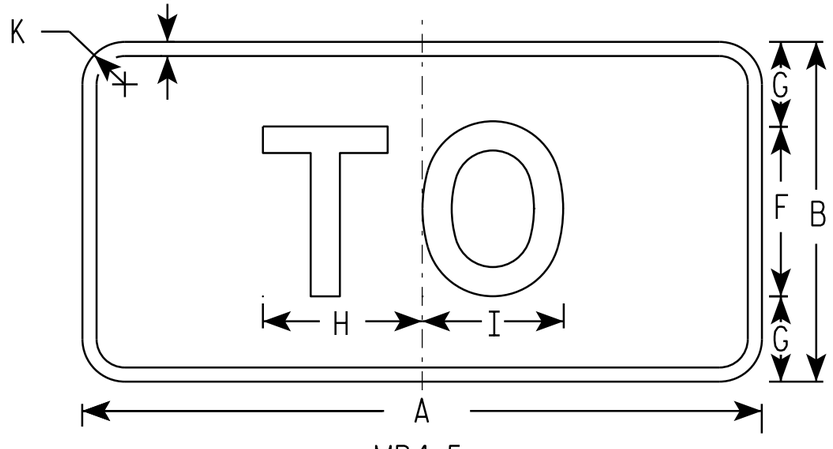
DATE 6/30/14 PLATE NO M3-1.13

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

7



M4-5
MK4-5
MM4-5
MN4-5



MB4-5

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

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

STANDARD SIGN
M4-5

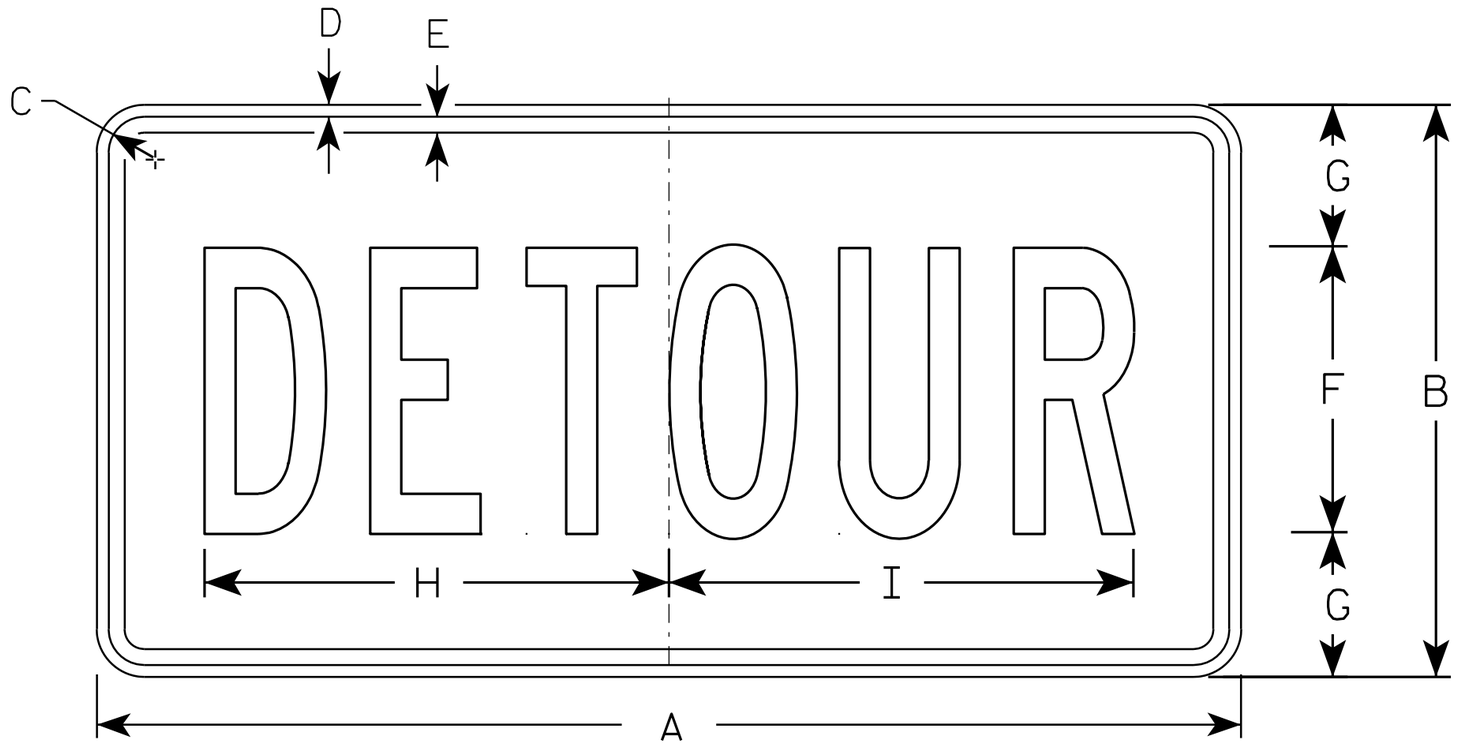
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/30/14 PLATE M4-5.7

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M45.DGN PLOT DATE : 30-JUN-2014 12:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.351066:1.000000
WISDOT/CADDS SHEET 42



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																											

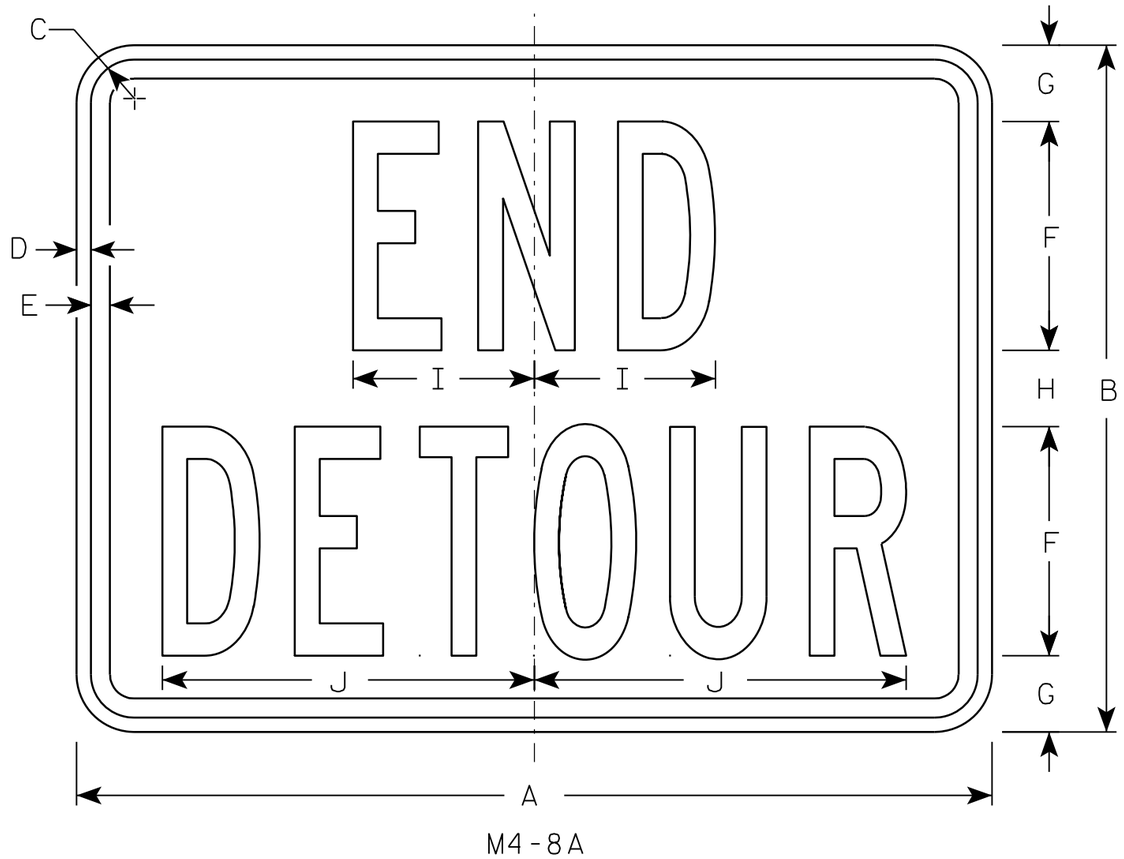
STANDARD SIGN
M4-8

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: 185	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																											

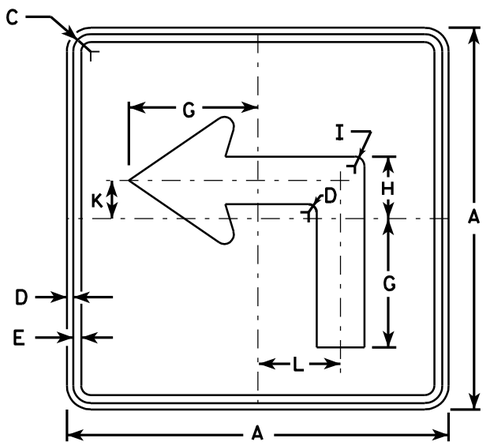
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

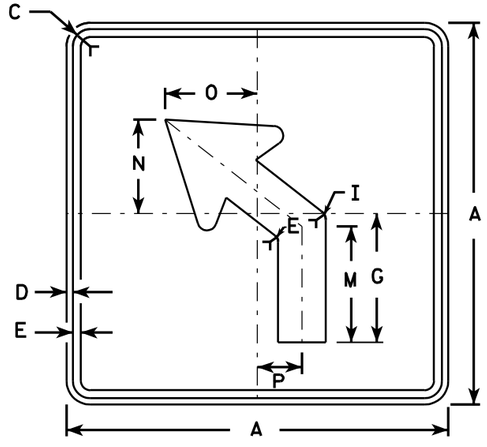
APPROVED Matthew R Rauch
for State Traffic Engineer

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

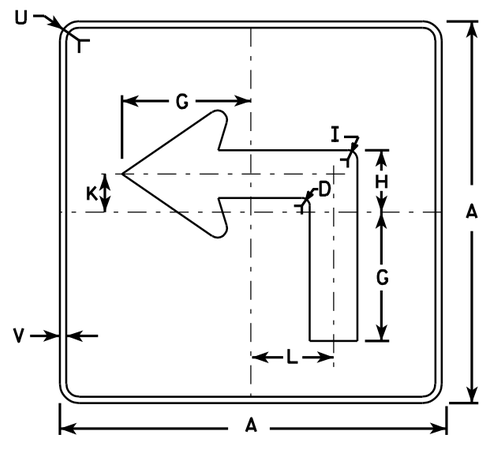
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 186	E



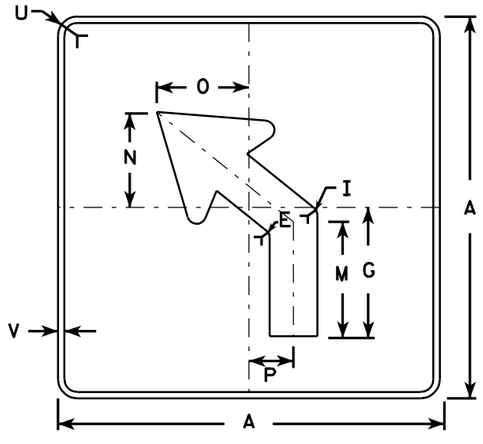
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



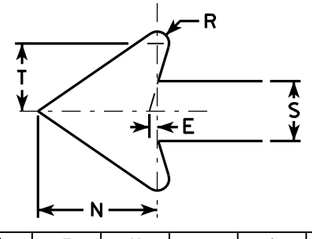
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



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



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



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - 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 - Type H Reflective
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 1/8	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 1/8	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 1/8	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

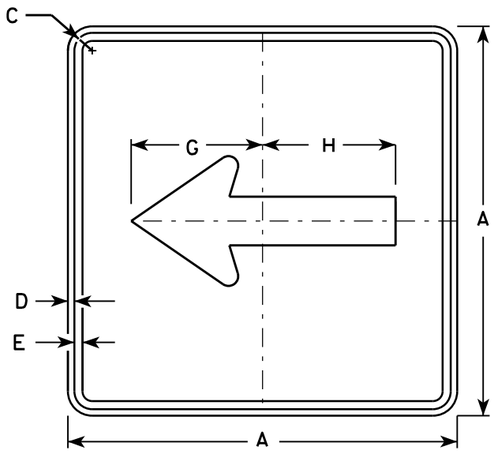
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

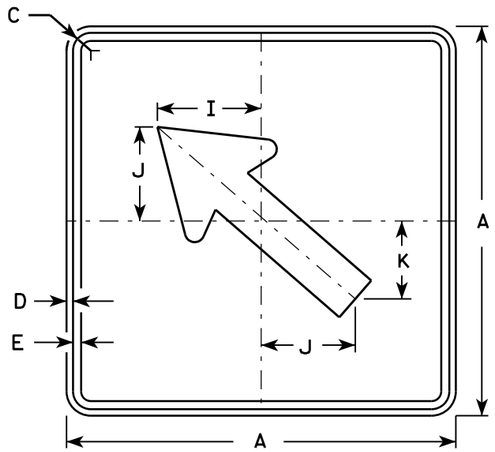
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000
WISDOT/CADDS SHEET 42



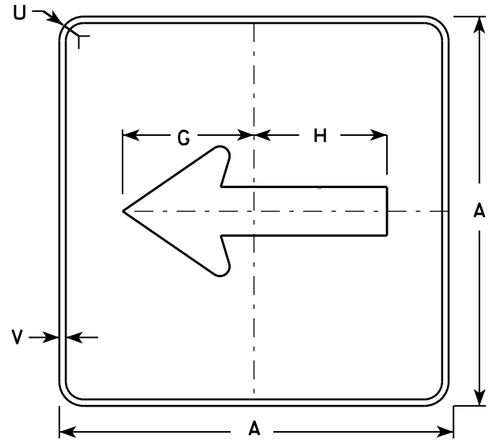
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



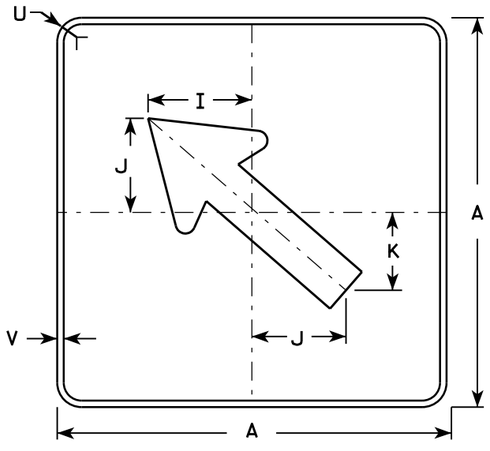
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

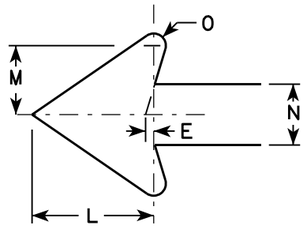
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   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



MB6-2



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

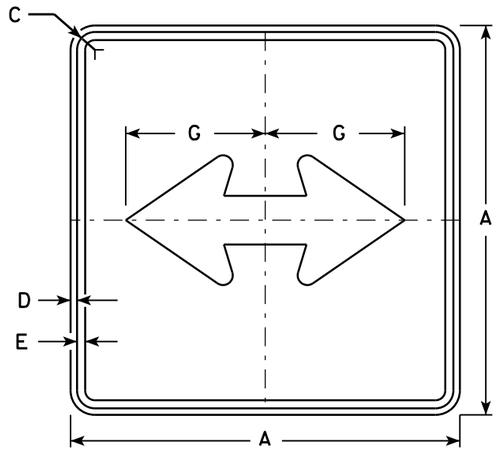
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

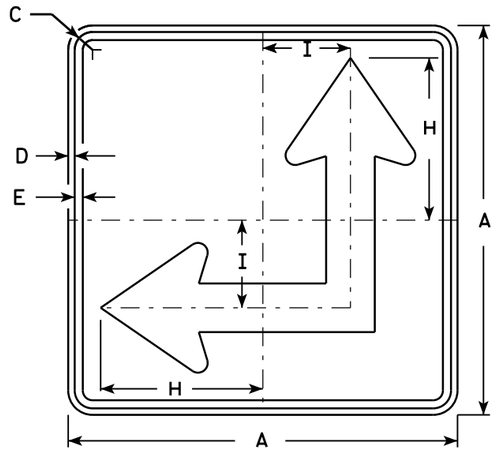
DATE 7/03/14 PLATE 188 M6-1.14

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

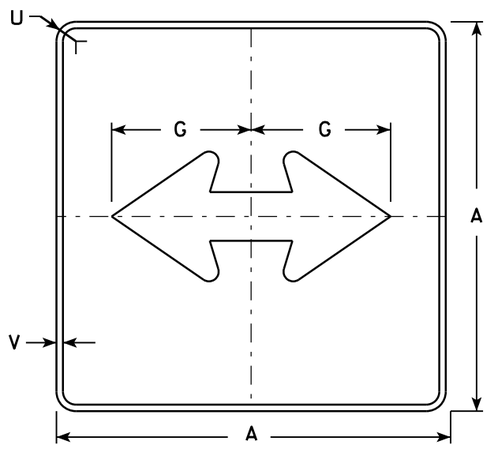
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000



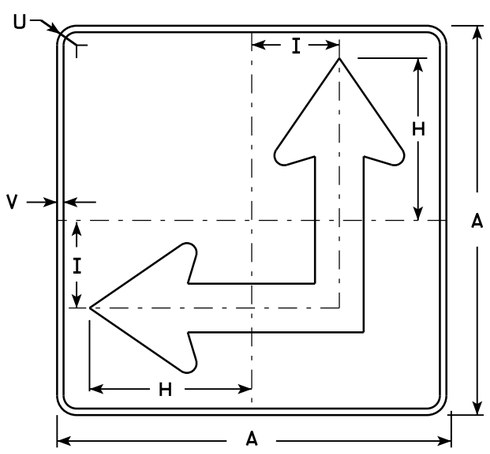
M6-4
MK6-4
MM6-4
MN6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MN6-6
MO6-6
MP6-6
MR6-6



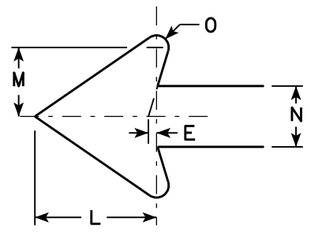
MB6-4



MB6-6

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. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and 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 1/2	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN M6-4 & M6-6 SERIES

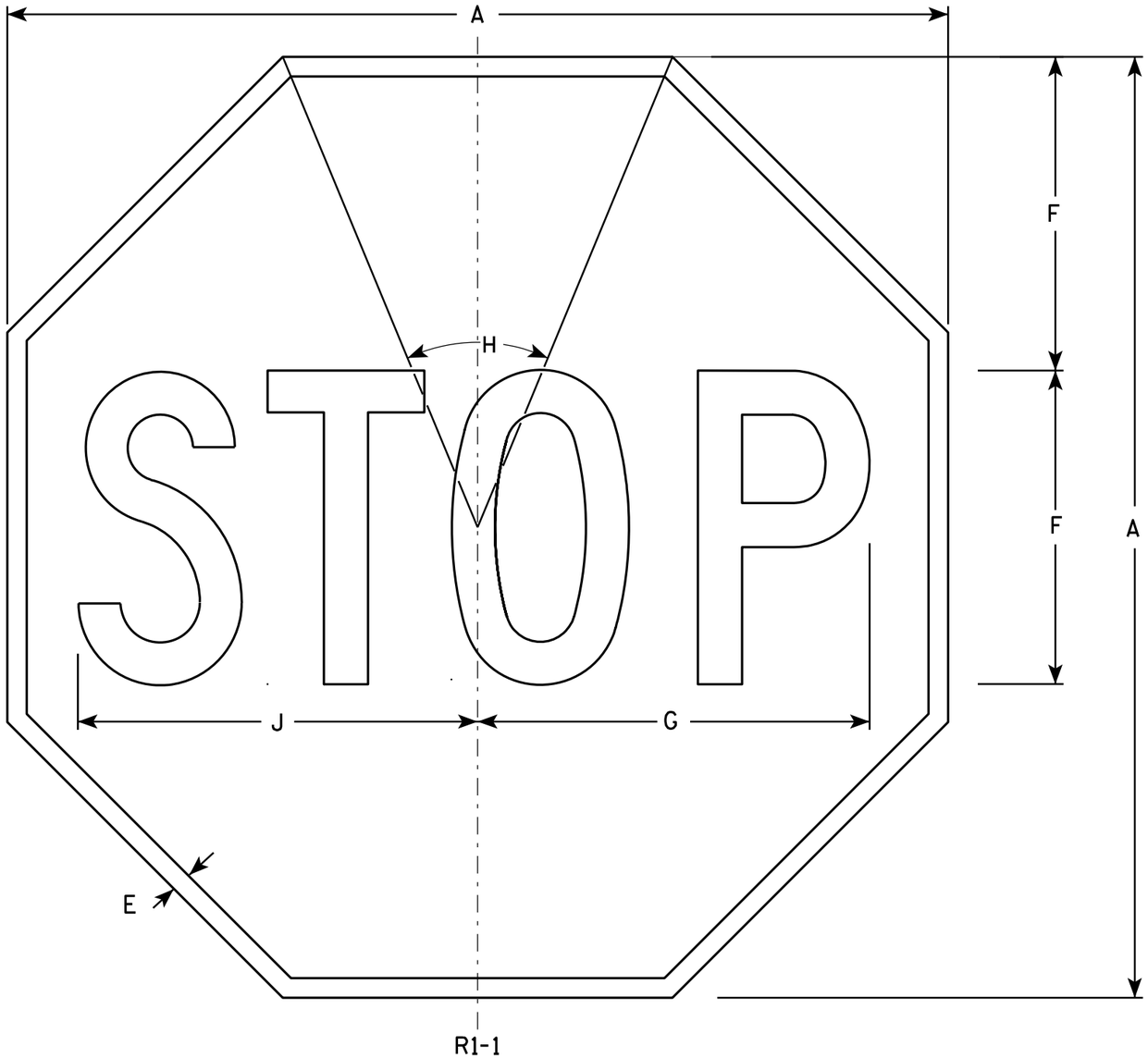
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/03/14 PLATE M6-4.9

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 03-JUL-2014 14:56 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

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

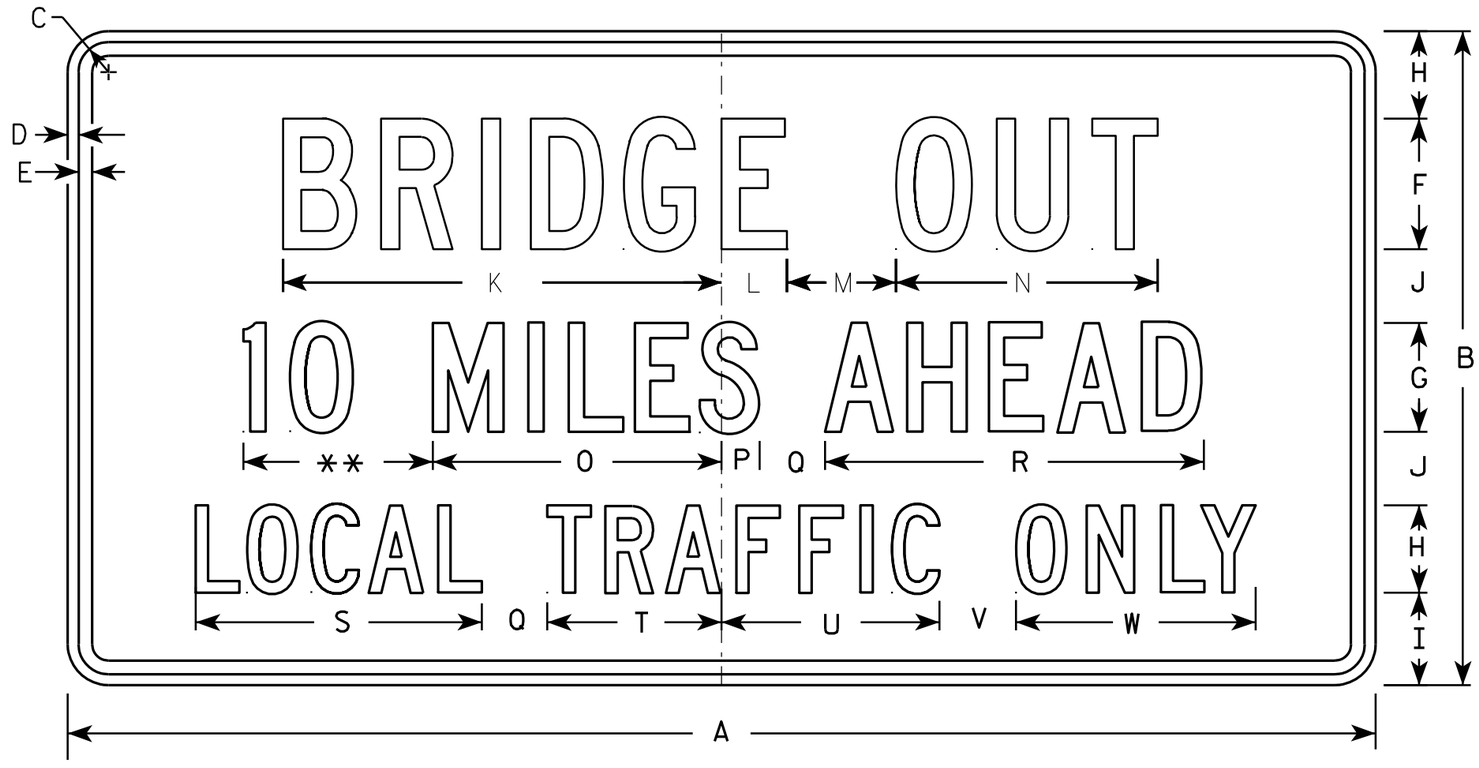
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E



R11-3B

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	13 1/4	2 1/4	3	8	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	20 1/8	3	5	12	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	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

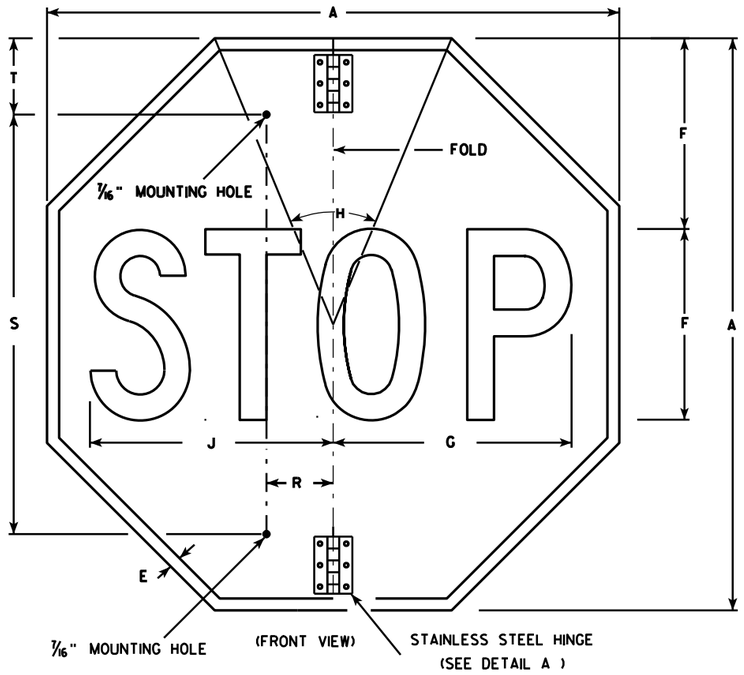
STANDARD SIGN
R11-3B

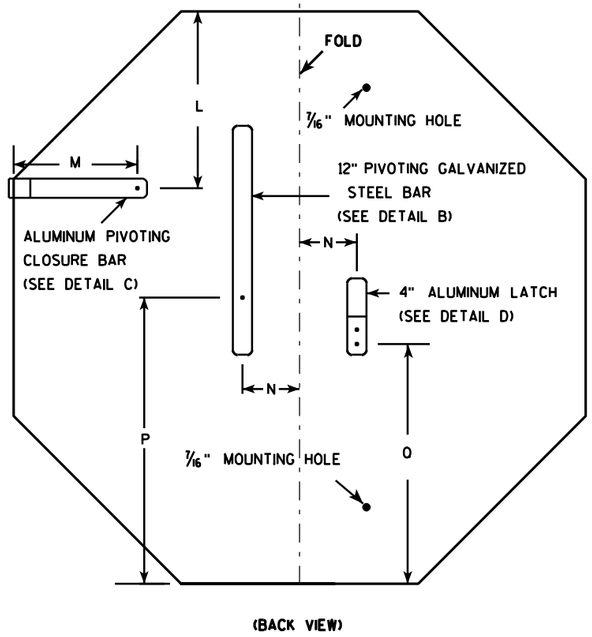
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3B.2

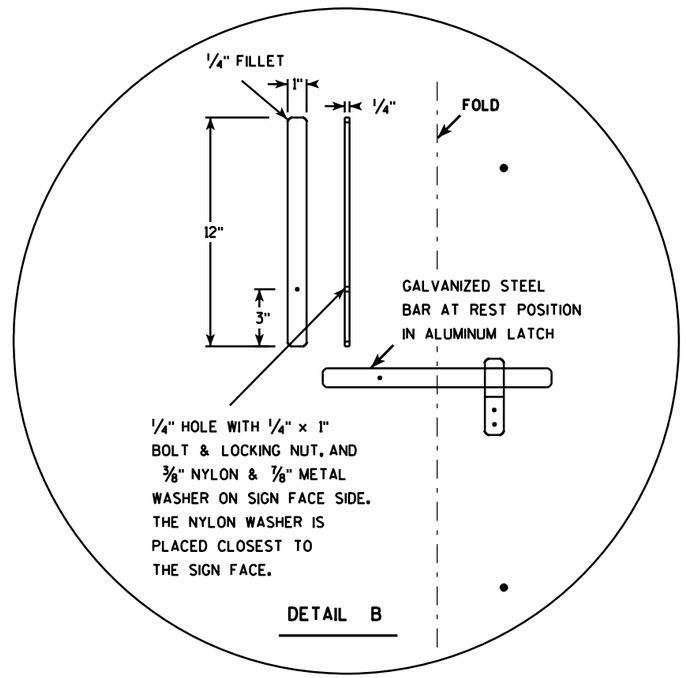
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E

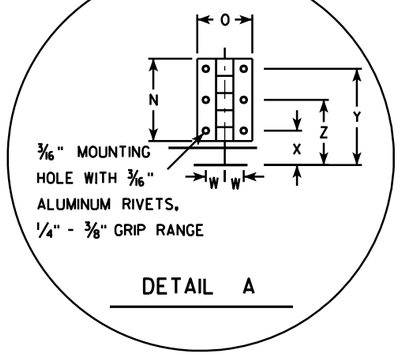


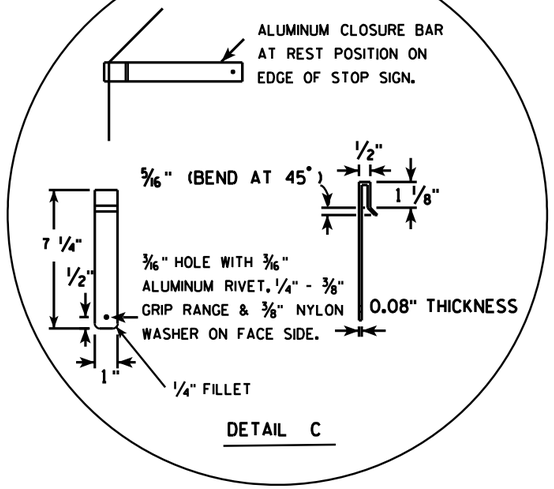


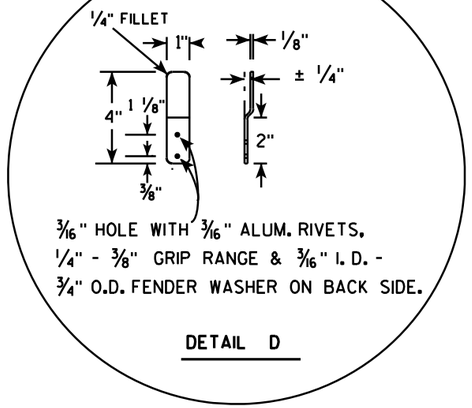
NOTES

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
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

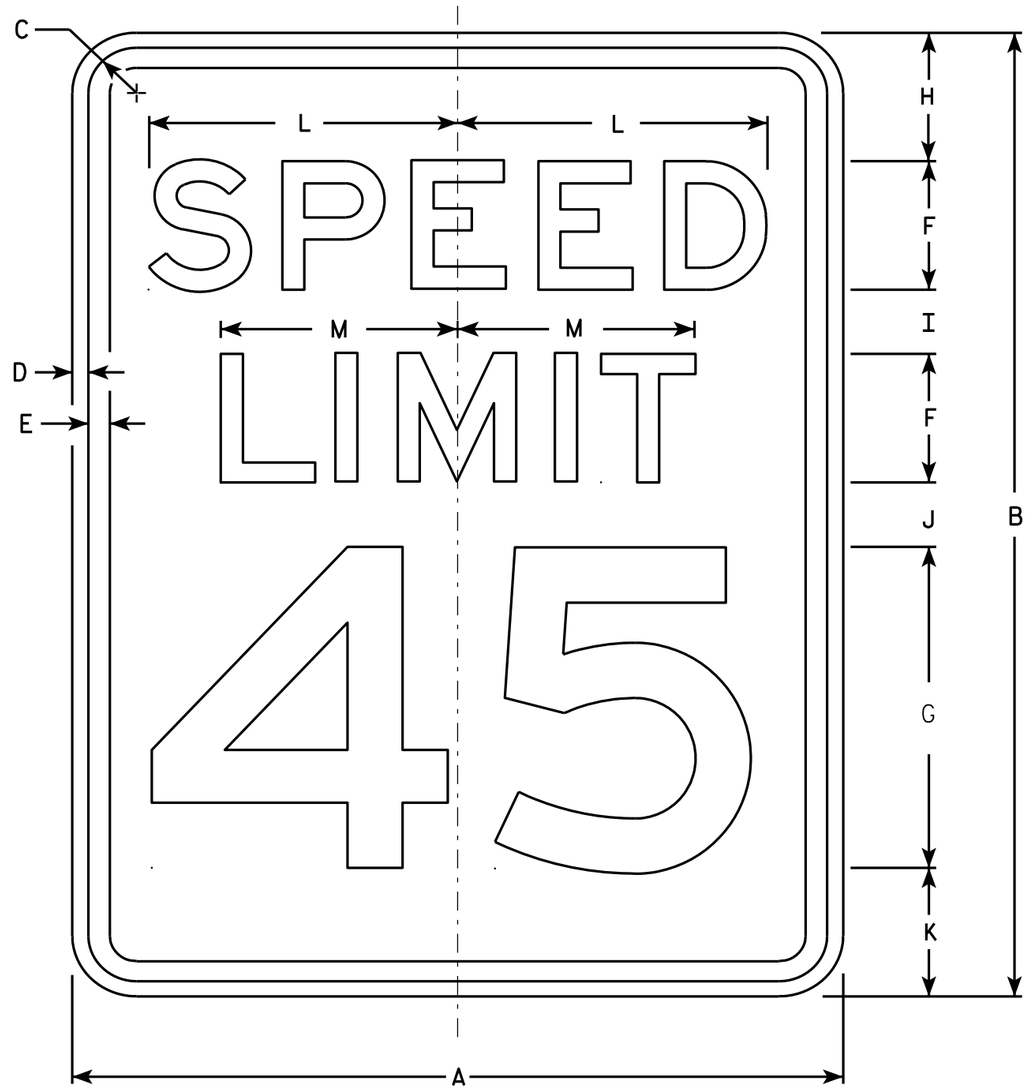
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 192 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R2-1

NOTES

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

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

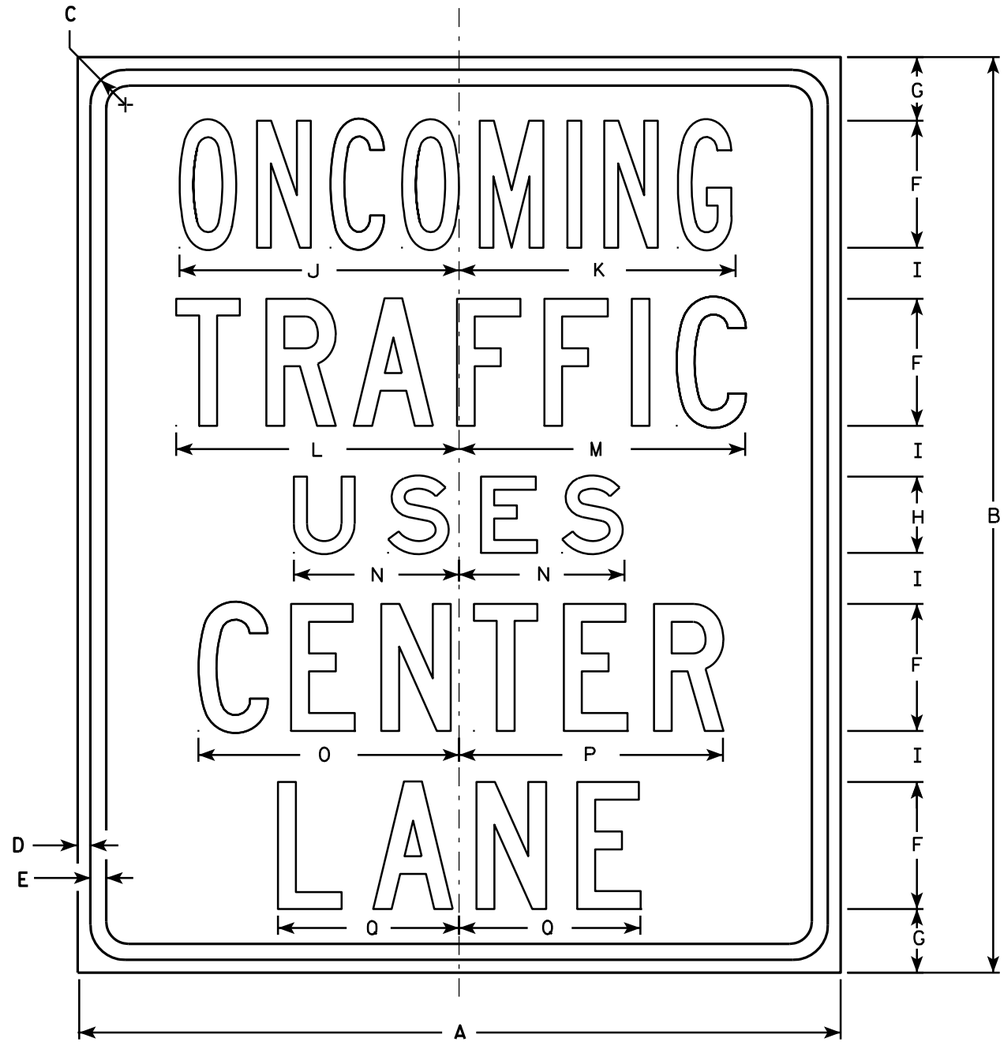
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E



R3-72

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B, Lines 2, 4 and 5 are Series C, and Line 3 is 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	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
2S	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
2M	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
3																											
4																											
5																											

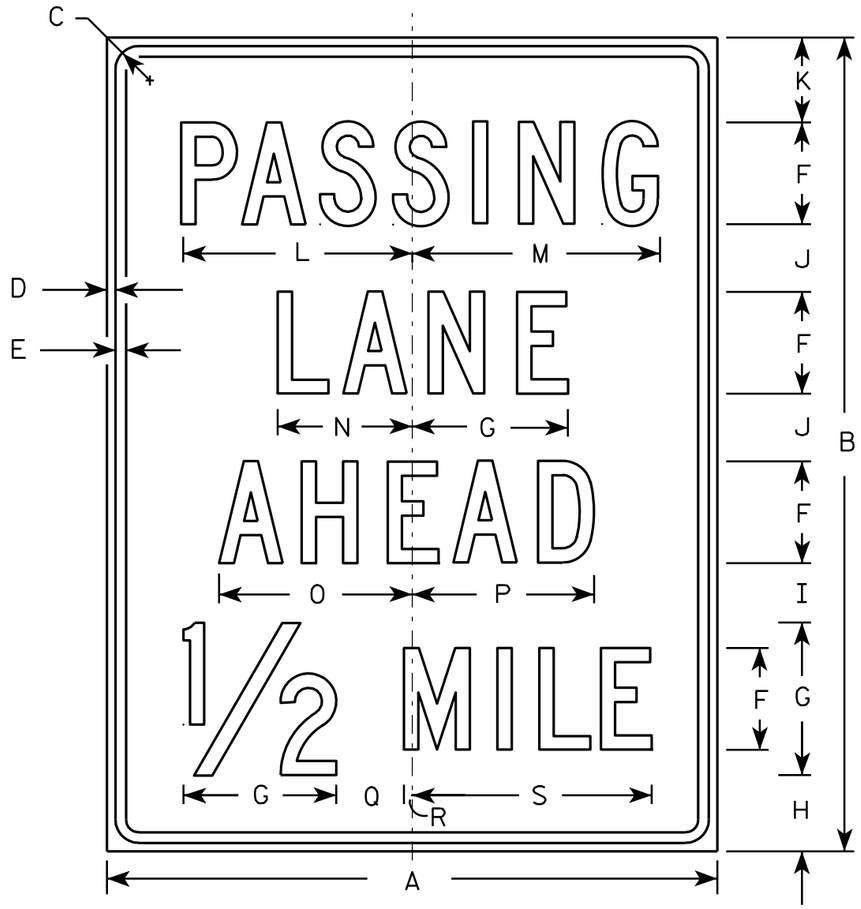
STANDARD SIGN
R3-72

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R3-72.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 194	E



R4-51

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 - 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	36	48	1 3/8	1/2	5/8	6	9	4 1/2	3 1/2	4	5	13 5/8	14 1/2	8	11 3/8	10 3/4	4	1/2	14 1/8								12.0
2M	36	48	1 3/8	1/2	5/8	6	9	4 1/2	3 1/2	4	5	13 5/8	14 1/2	8	11 3/8	10 3/4	4	1/2	14 1/8								12.0
3																											
4																											
5																											

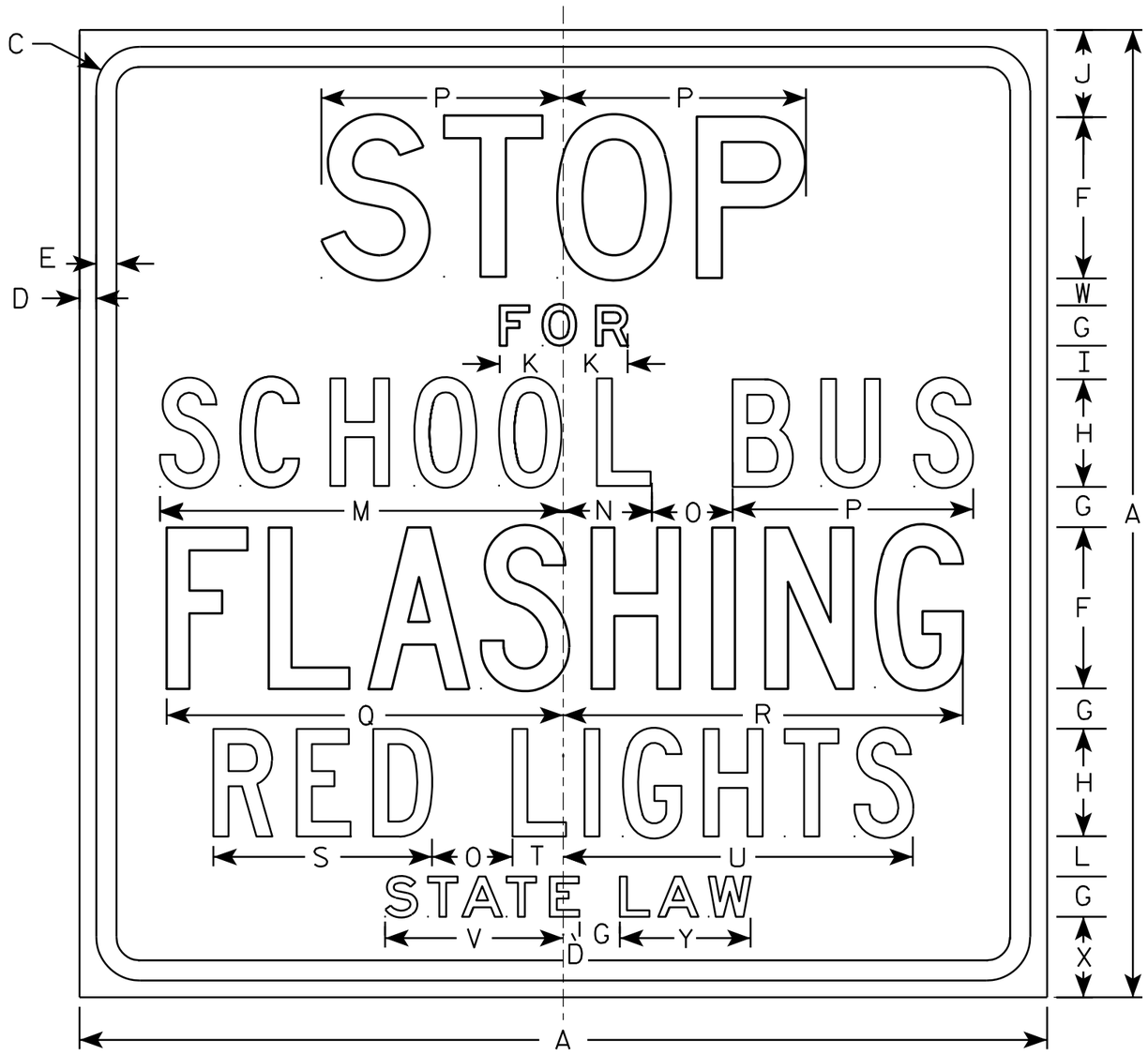
STANDARD SIGN
R4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R4-51.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 195 | E



R59-51

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 - 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
   Lines 2 & 6 are Series E
   Line 3, 4 & 5 are Series C

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

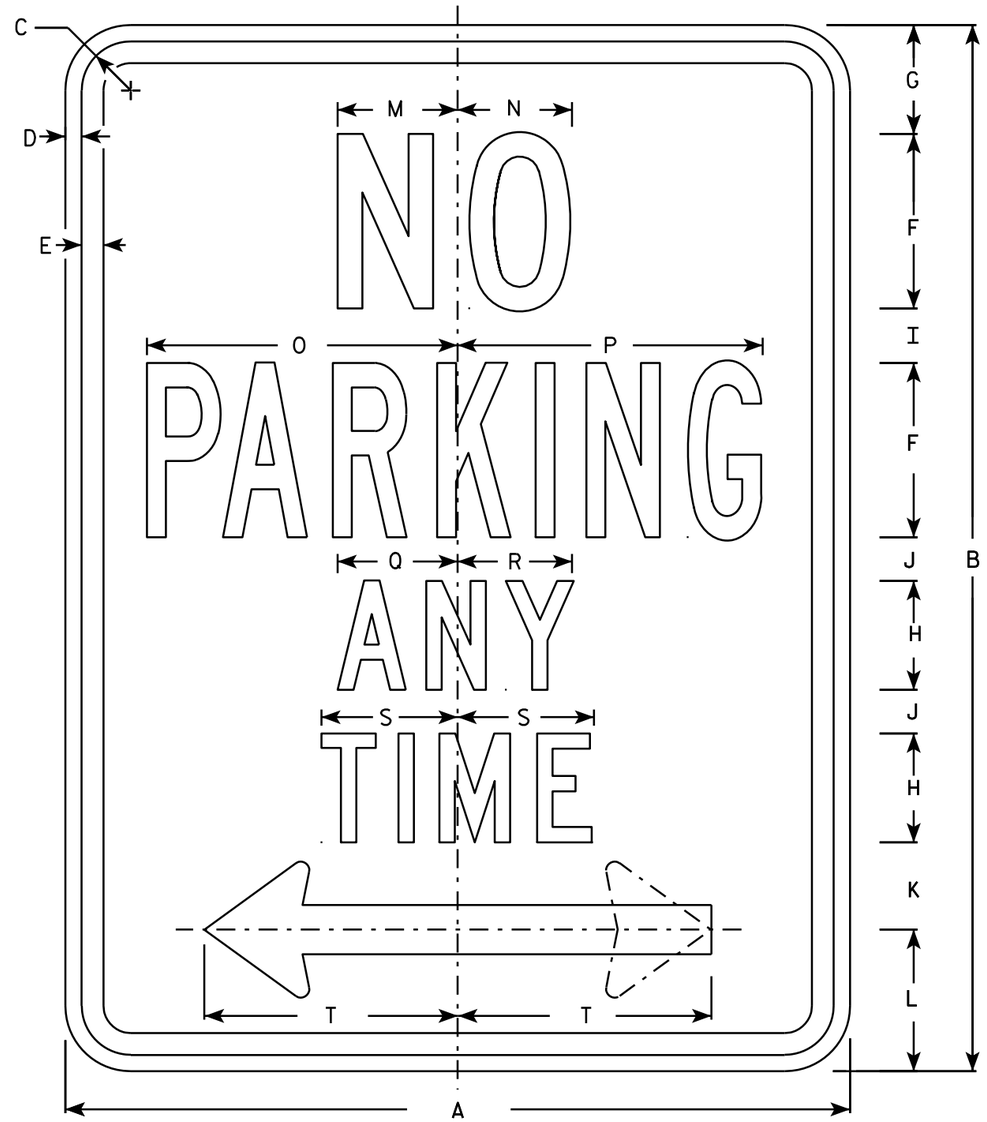
STANDARD SIGN
R59-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/30/11 PLATE NO. R59-51.10

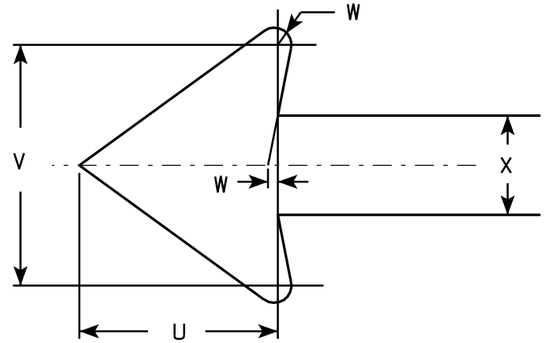
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 196 | E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 197	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R71.DGN PLOT DATE : 31-MAR-2011 09:20 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000

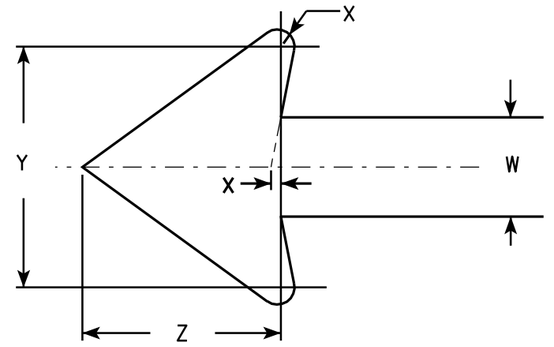
WISDOT/CADDS SHEET 42



R7-53

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
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, 3 and 4 are series C, line 2 is series B.
6. R7-53D (double arrow)
   R7-53L (left arrow)
   R7-53R (right arrow)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 5/8	1 3/4	1/4	4 1/2	2 3/8	3 7/8	3/4	1/8	1 3/4	1 1/2	1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	3 3/8	1 1/2	5/8	5 3/8	3	5 7/8	1 1/8	1/4	2 5/8	2 1/4	3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	4	2	5/8	6 5/8	3 5/8	7 3/4	1 1/2	1/4	3 1/2	3	5.0
4																											
5																											

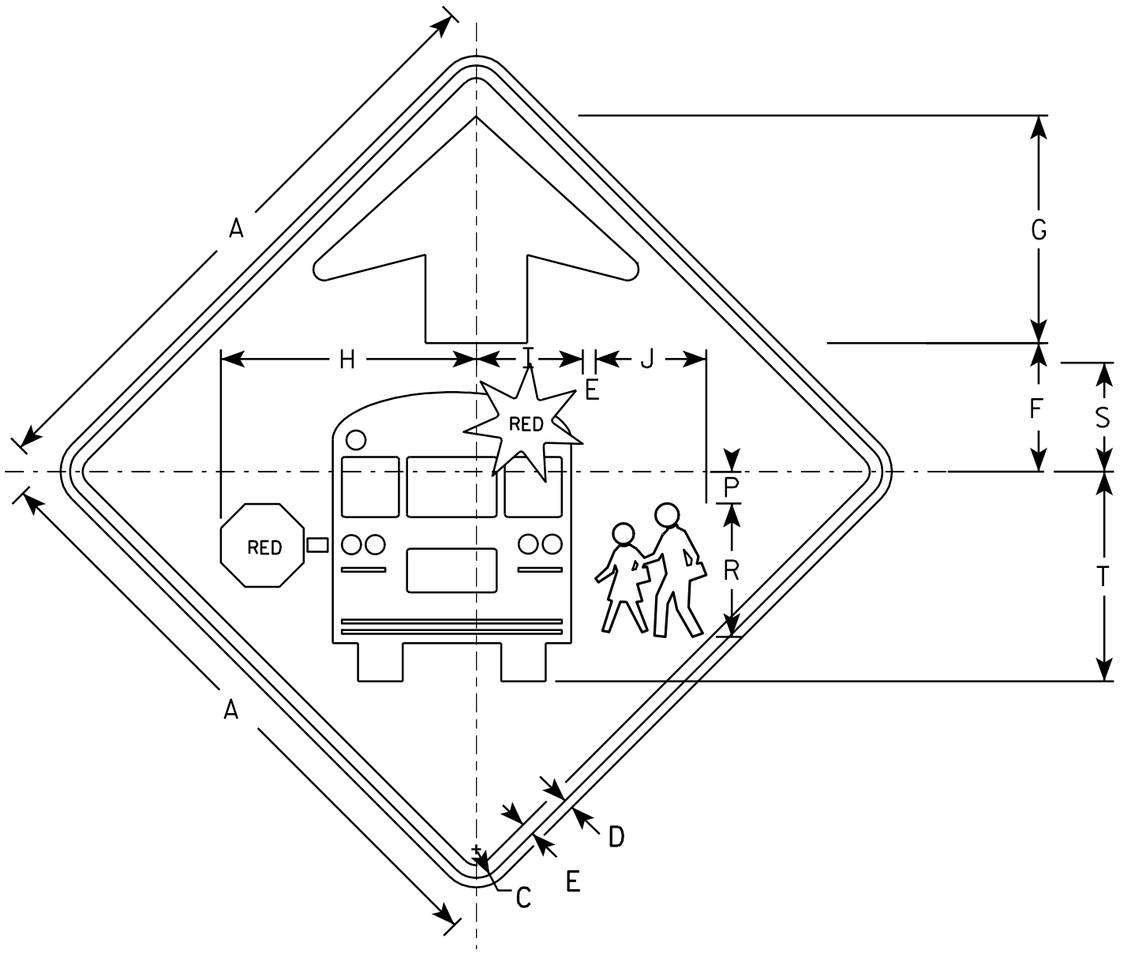
STANDARD SIGN
R7-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-53.6

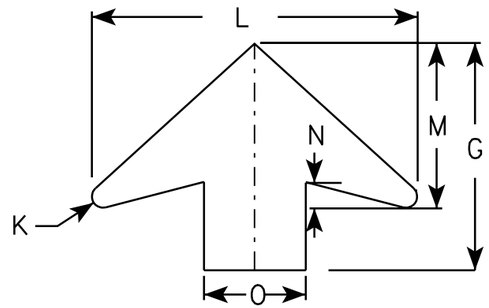
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 198	E



S3-1

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-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

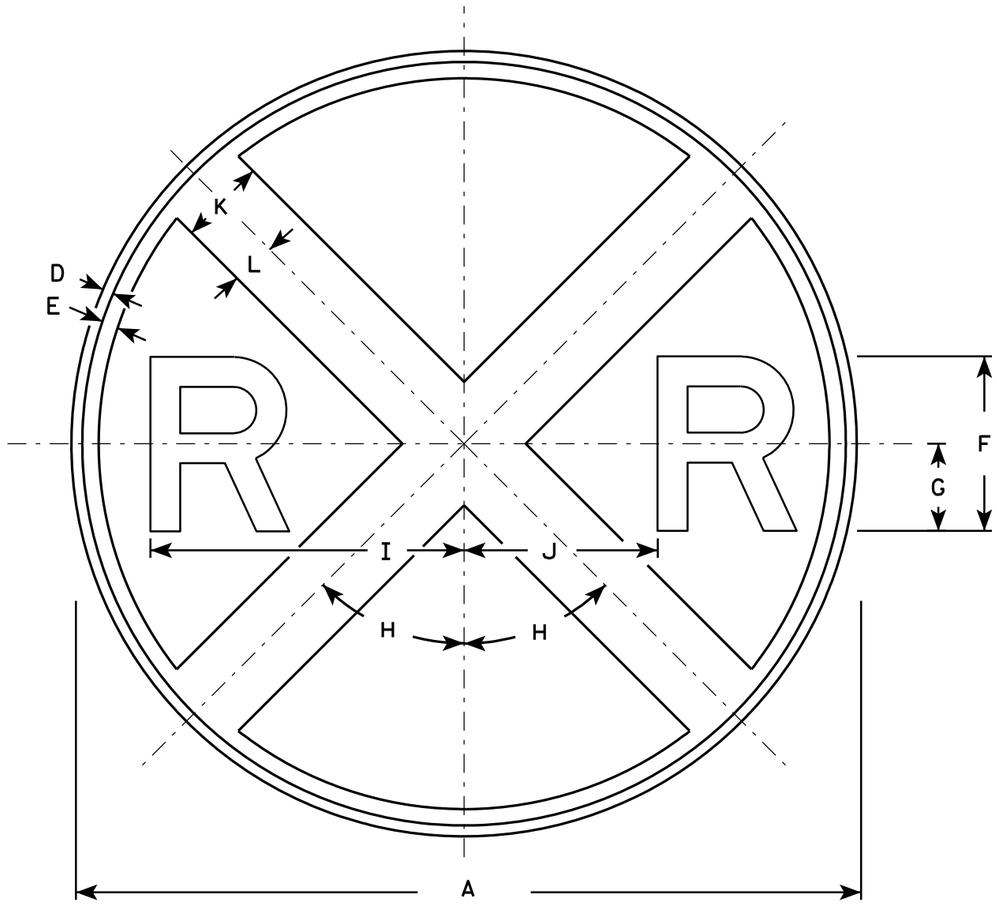
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

SHEET NO: 199 E



W10-1

NOTES

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

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

STANDARD SIGN
W10-1

WISCONSIN DEPT OF TRANSPORTATION

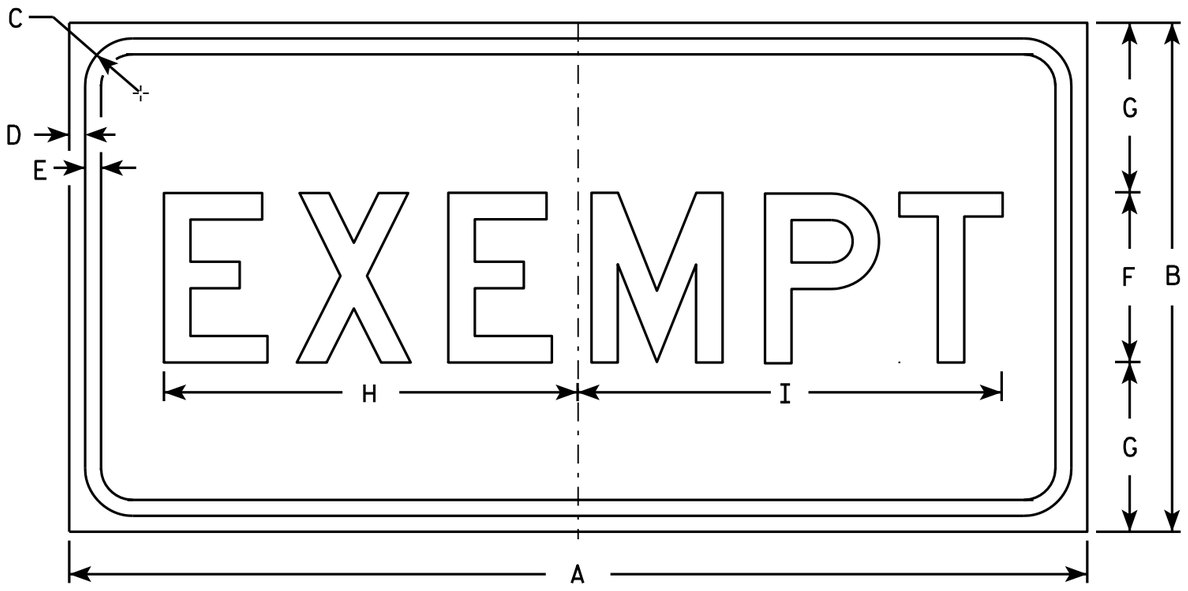
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/13/13 PLATE NO. W10-1.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 200	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 - See Note 5
   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. Background - R15-3 is White Type H Reflective
   W10-1A is Yellow.



R15-3
and
W10-1A

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

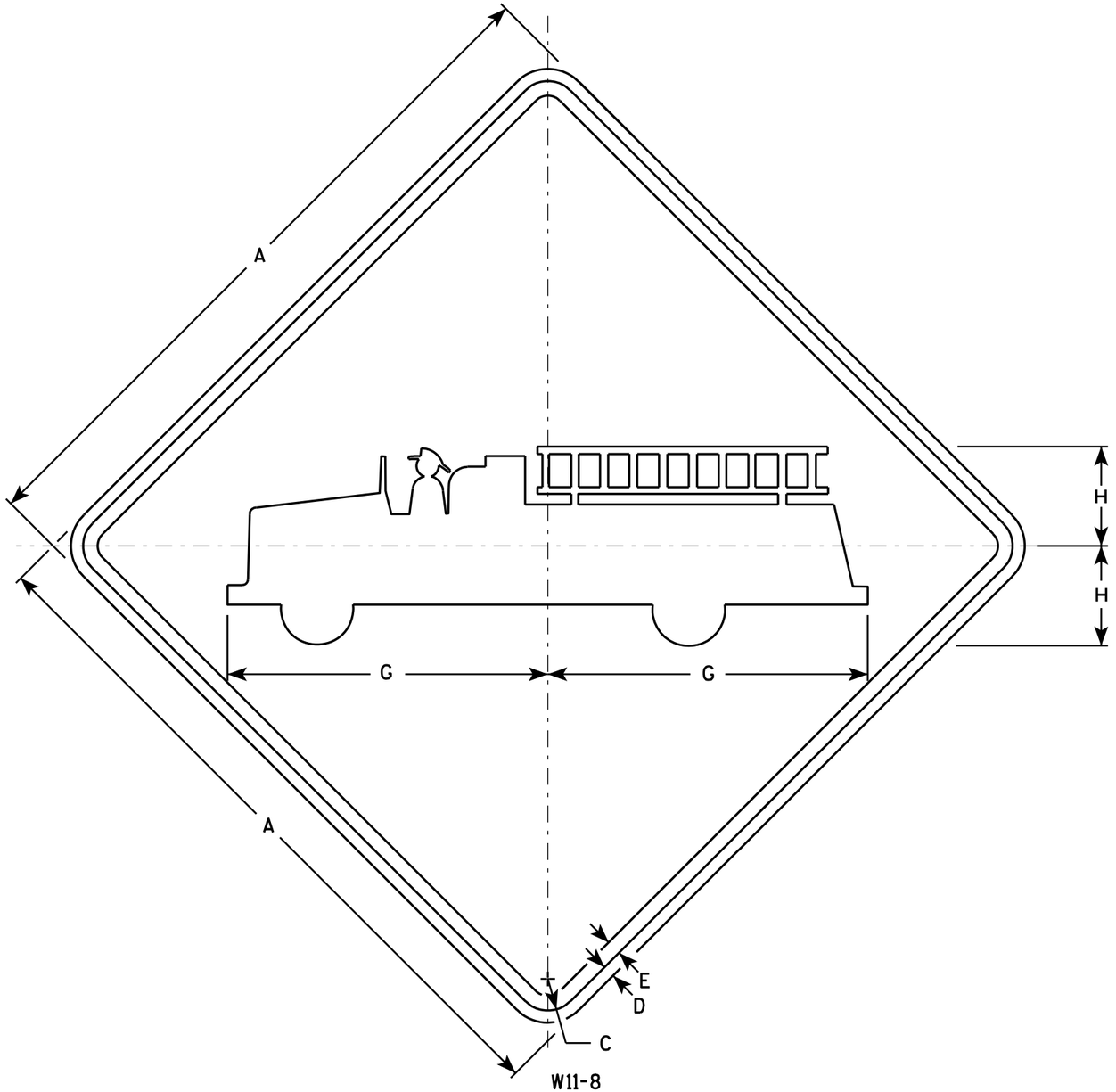
STANDARD SIGN
R15-3 & W10-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. R15-3.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 201	E



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

STANDARD SIGN
W11-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

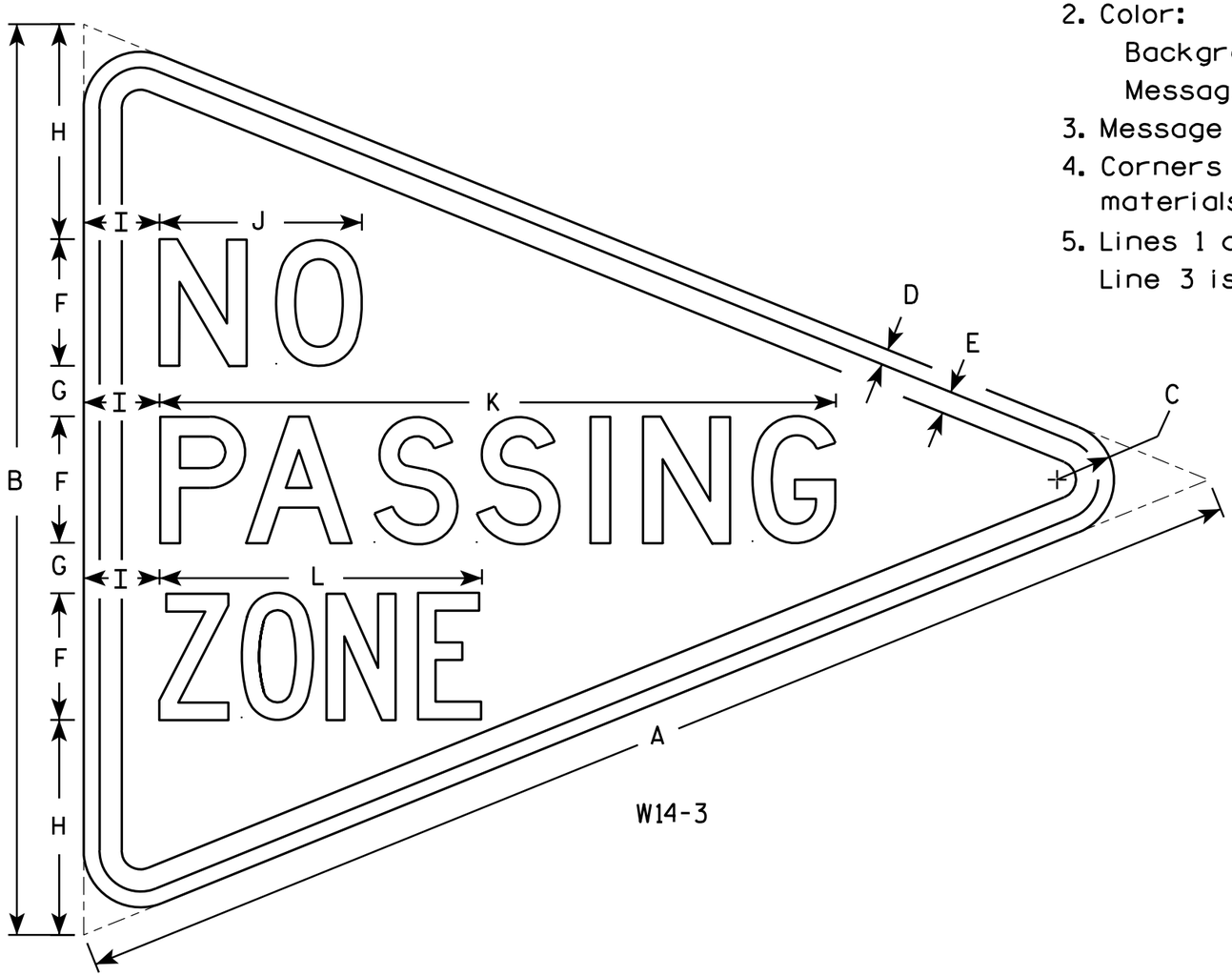
DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

SHEET NO: 202 E

NOTES

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



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	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																											

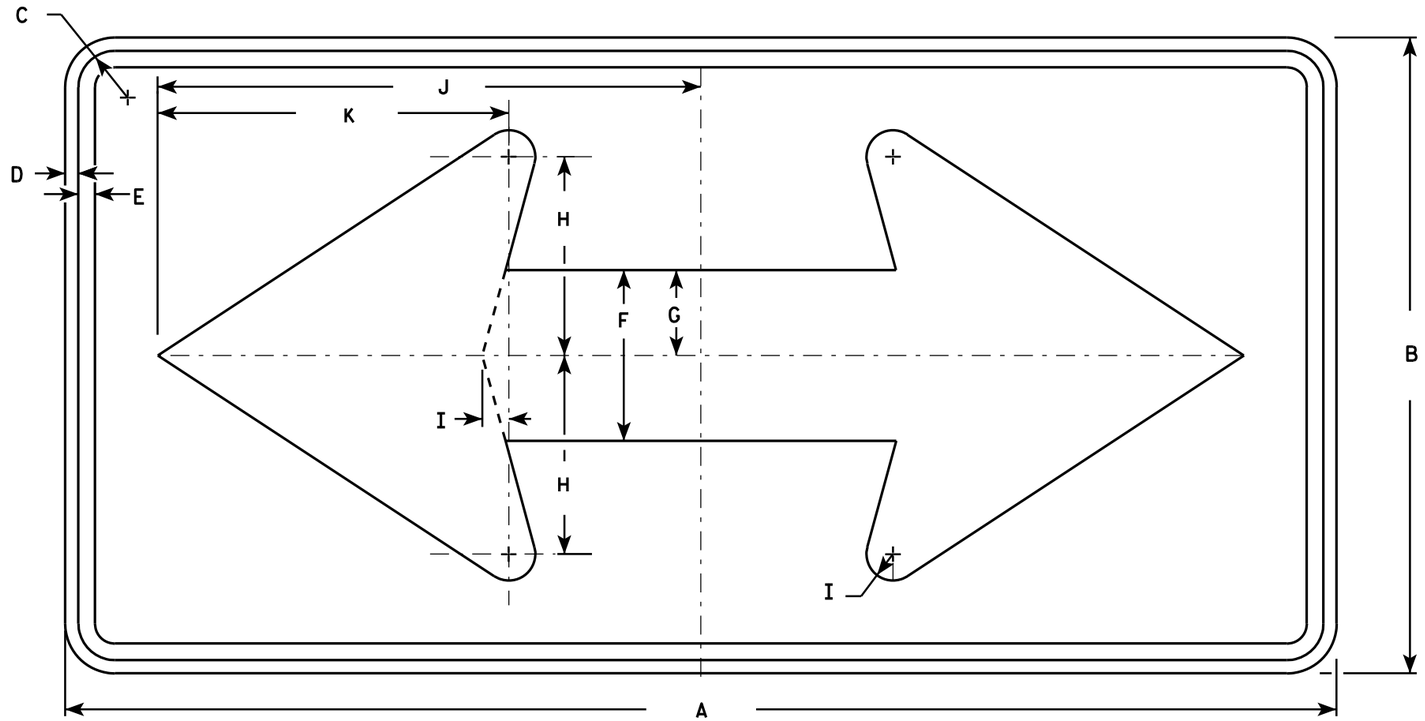
STANDARD SIGN
W14-3

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: 203	E



W1-7

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

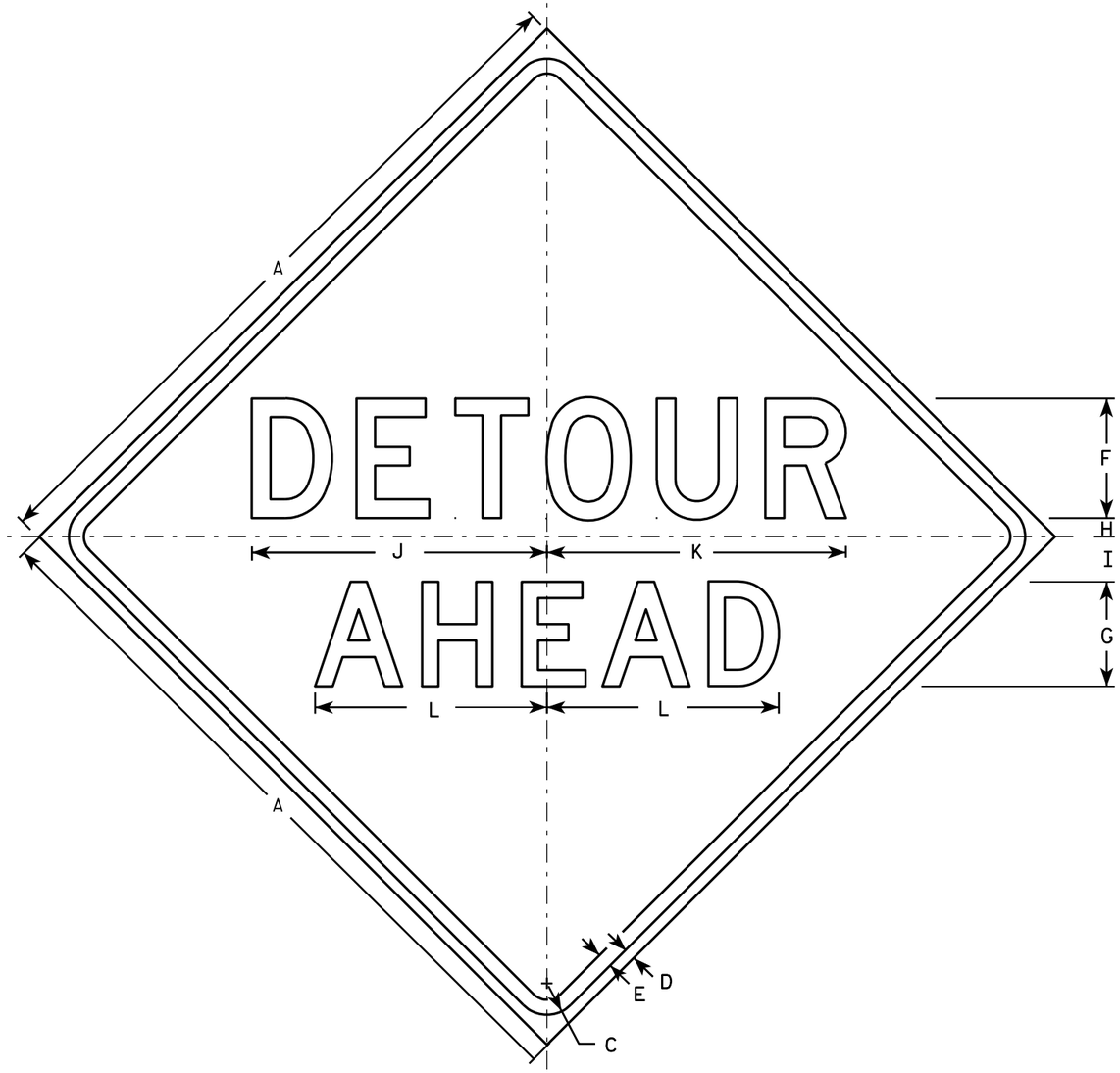
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

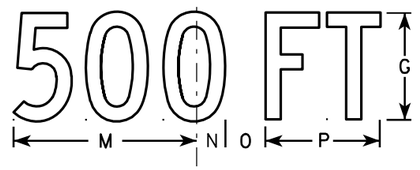
APPROVED Matthew R Rauch
for State Traffic Engineer

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

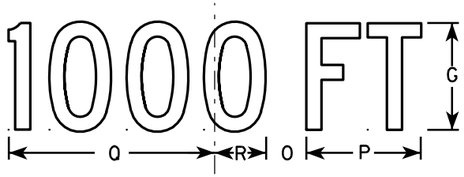
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 | E



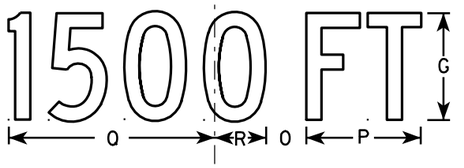
W20-2A



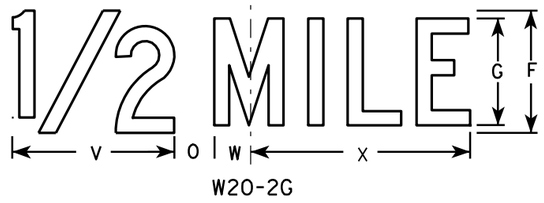
W20-2D



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

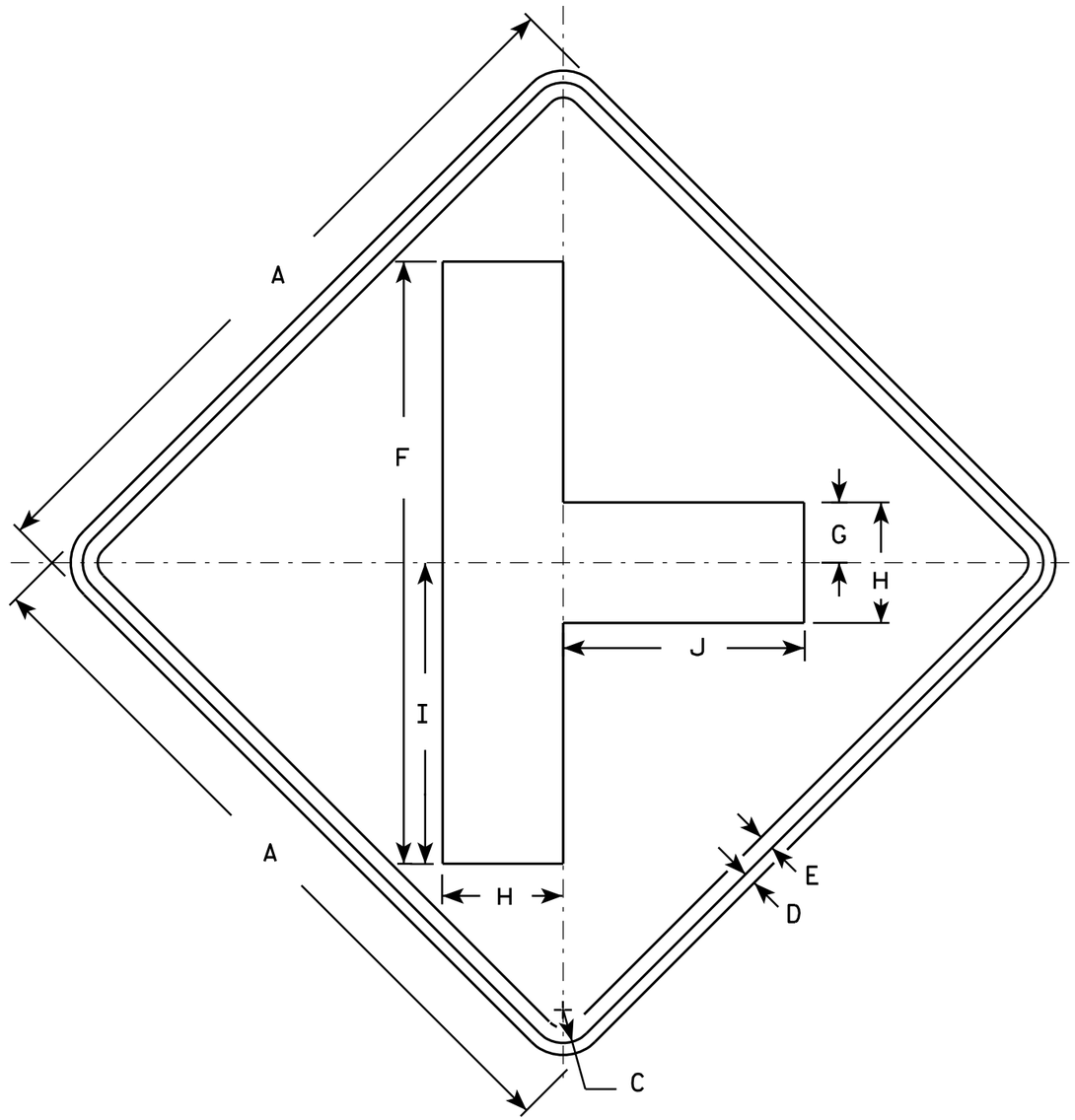
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E

7

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



W2-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

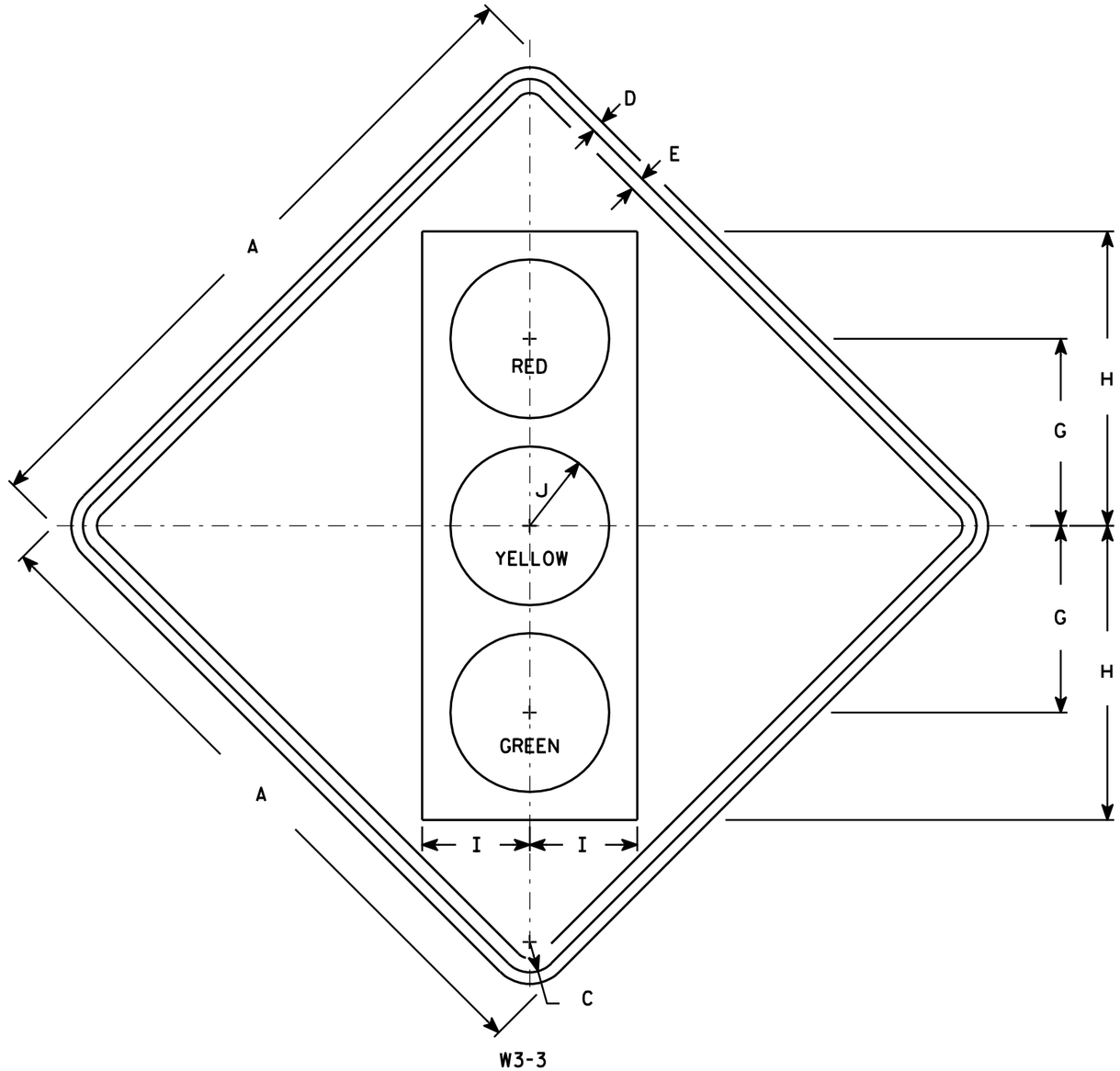
STANDARD SIGN
W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 206	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

WISCONSIN DEPT OF TRANSPORTATION

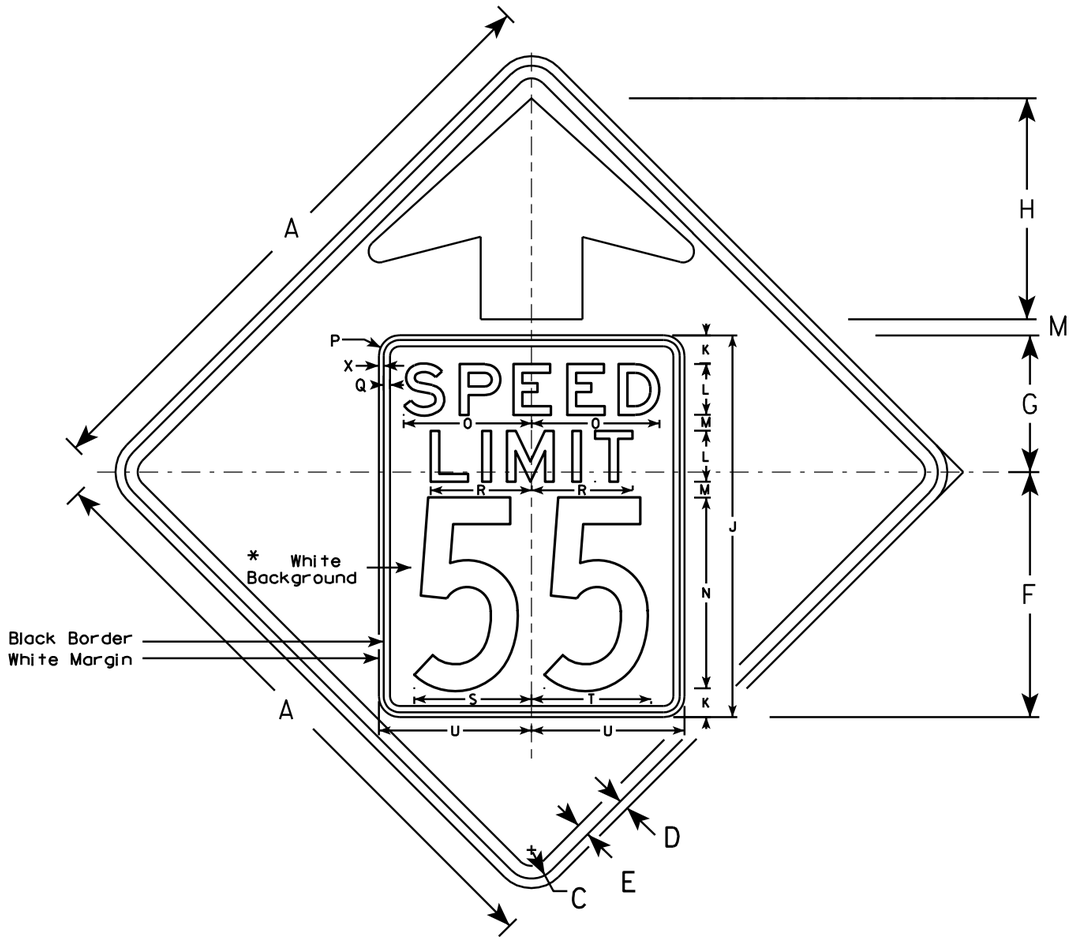
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 207 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000

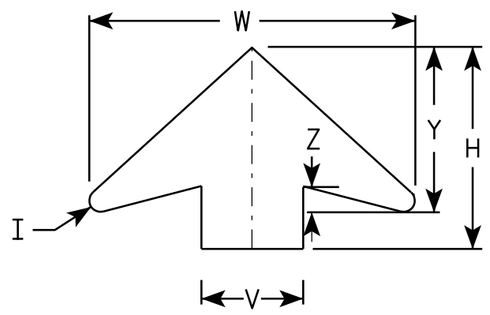


W3-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

STANDARD SIGN
W3-5

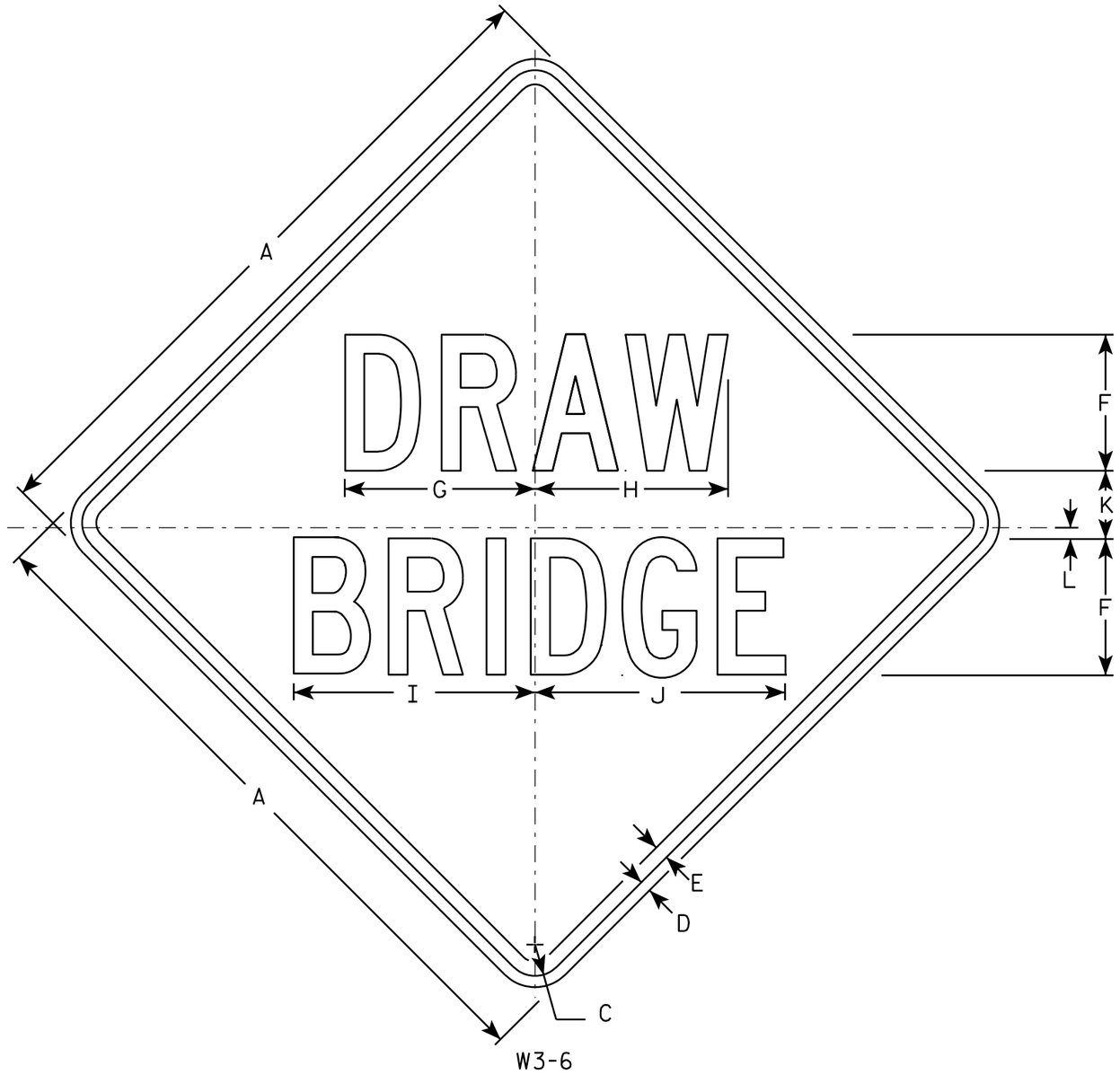
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 208 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - 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	30		1 3/8	1/2	5/8	6	8 3/8	8 1/2	10 5/8	11	3	1/2															6.25
2S	36		1 5/8	5/8	3/4	7	10 1/8	10	13 1/2	12 3/4	3 5/8	5/8															9.0
2M	36		1 5/8	5/8	3/4	7	10 1/8	10	13 1/2	12 3/4	3 5/8	5/8															9.0
3	48		2 1/4	3/4	1	10	14	14 1/8	17 3/4	18 1/4	4 3/4	3/4															16.0
4	48		2 1/4	3/4	1	10	14	14 1/8	17 3/4	18 1/4	4 3/4	3/4															16.0
5																											

STANDARD SIGN
W3-6

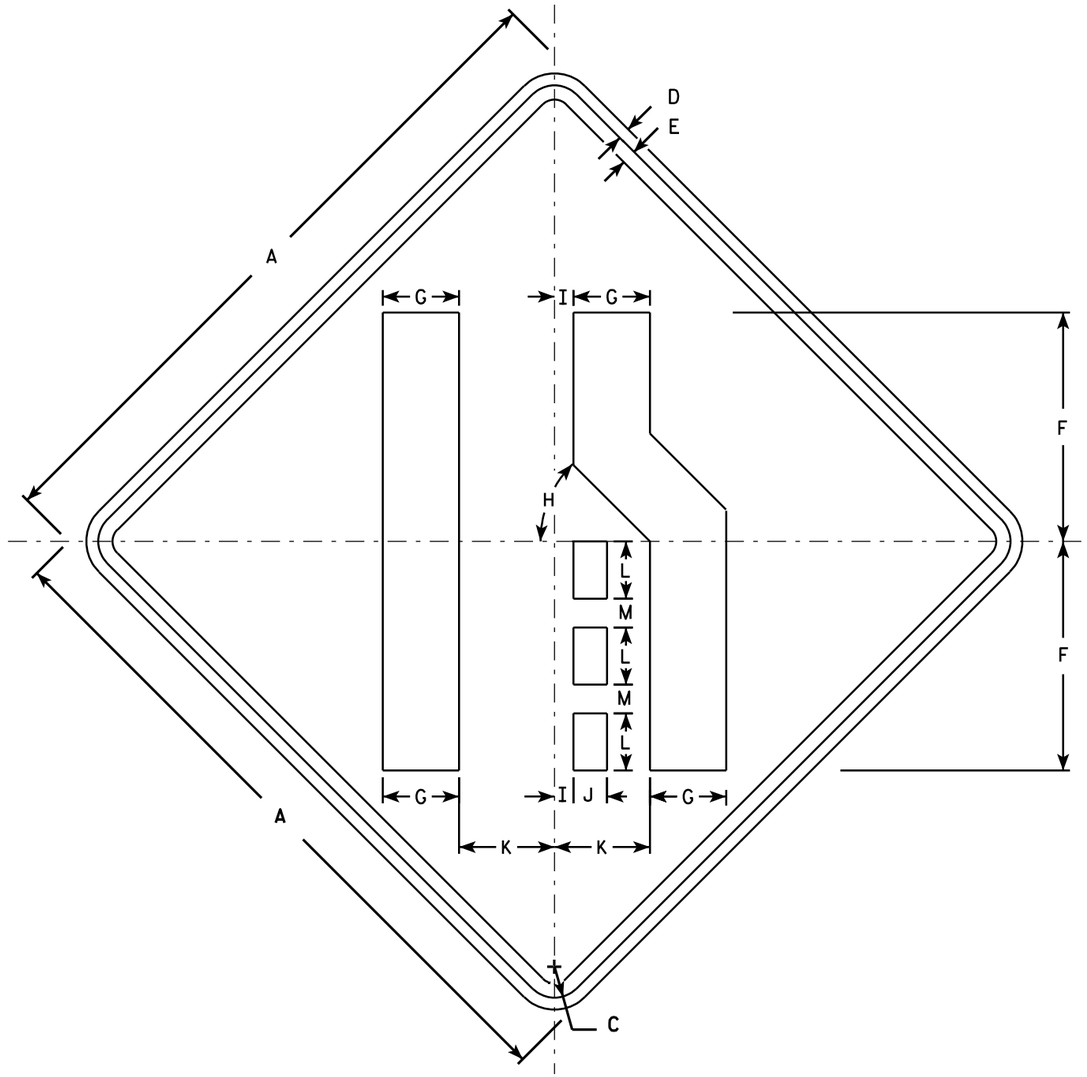
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W3-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W36.DGN PLOT DATE : 12-MAR-2013 10:35 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.991615:1.000000



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

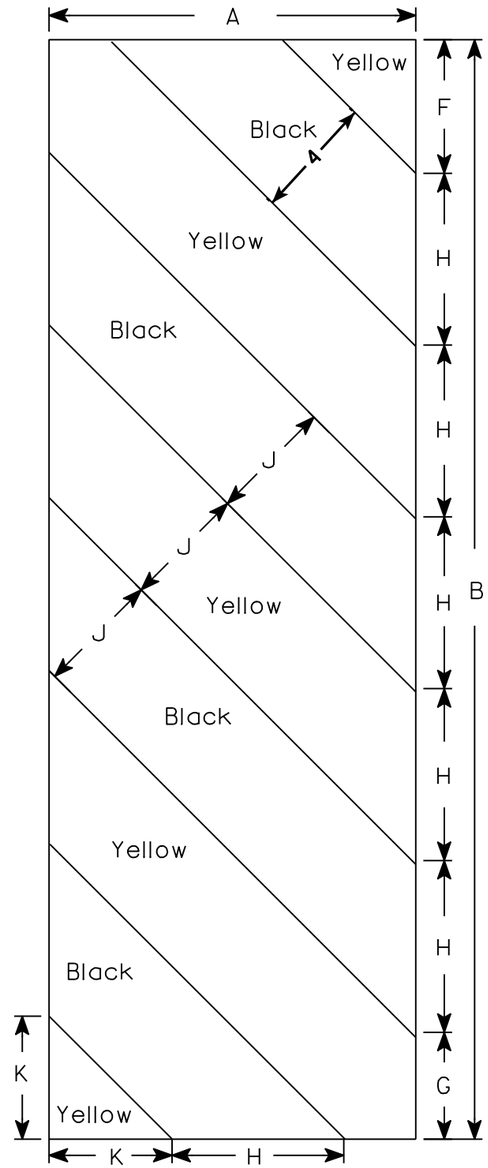
STANDARD SIGN
W4-2

WISCONSIN DEPT OF TRANSPORTATION

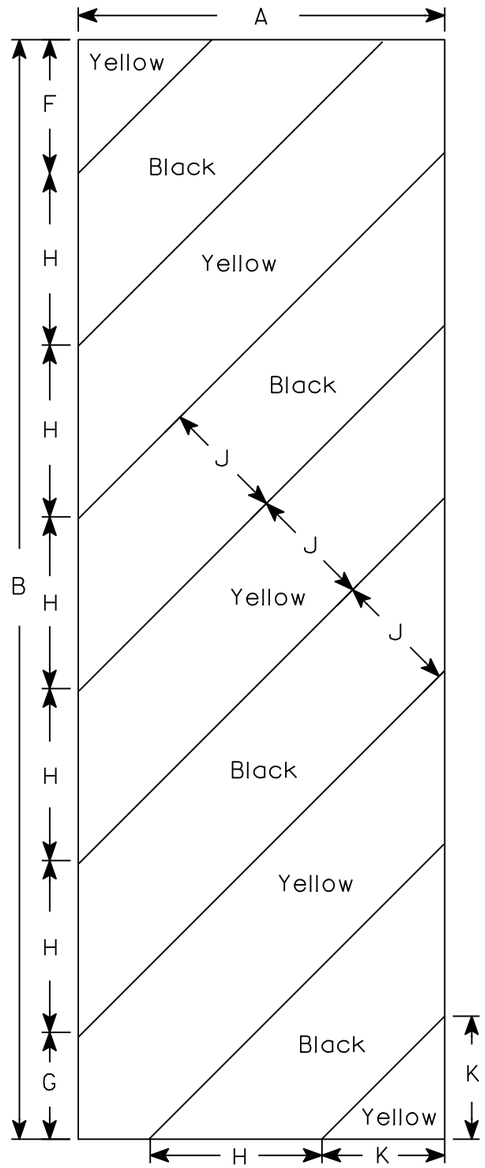
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO: | SHEET NO: 210 | E



W5-52L



W5-52R

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

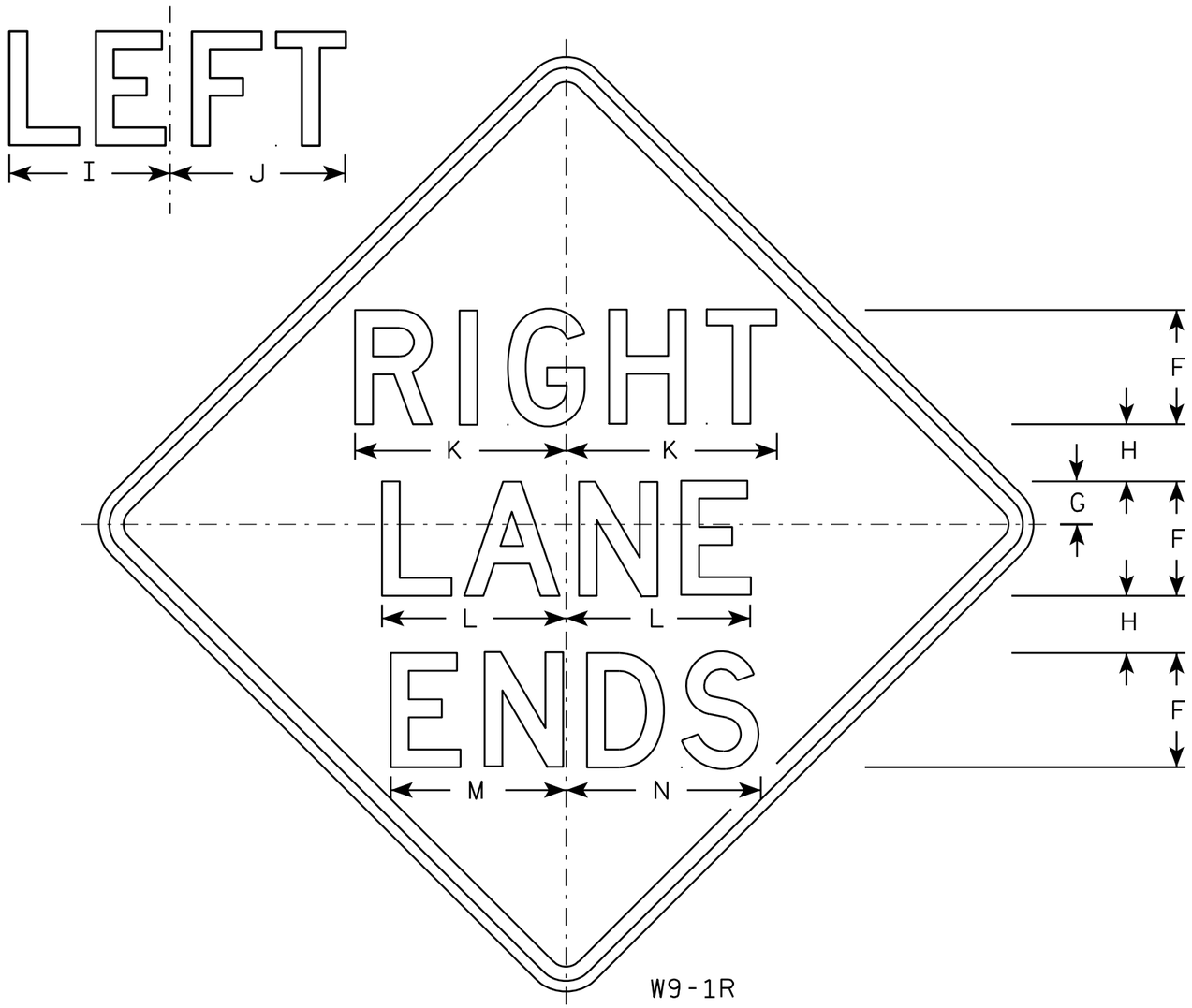
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 211	E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

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

STANDARD SIGN
W9-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

SHEET NO: 212 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W91.DGN PLOT DATE : 18-MAR-2013 11:42 PLOT BY : mscsja

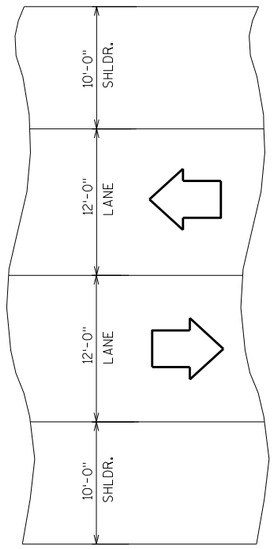
WISDOT/CADDS SHEET 42

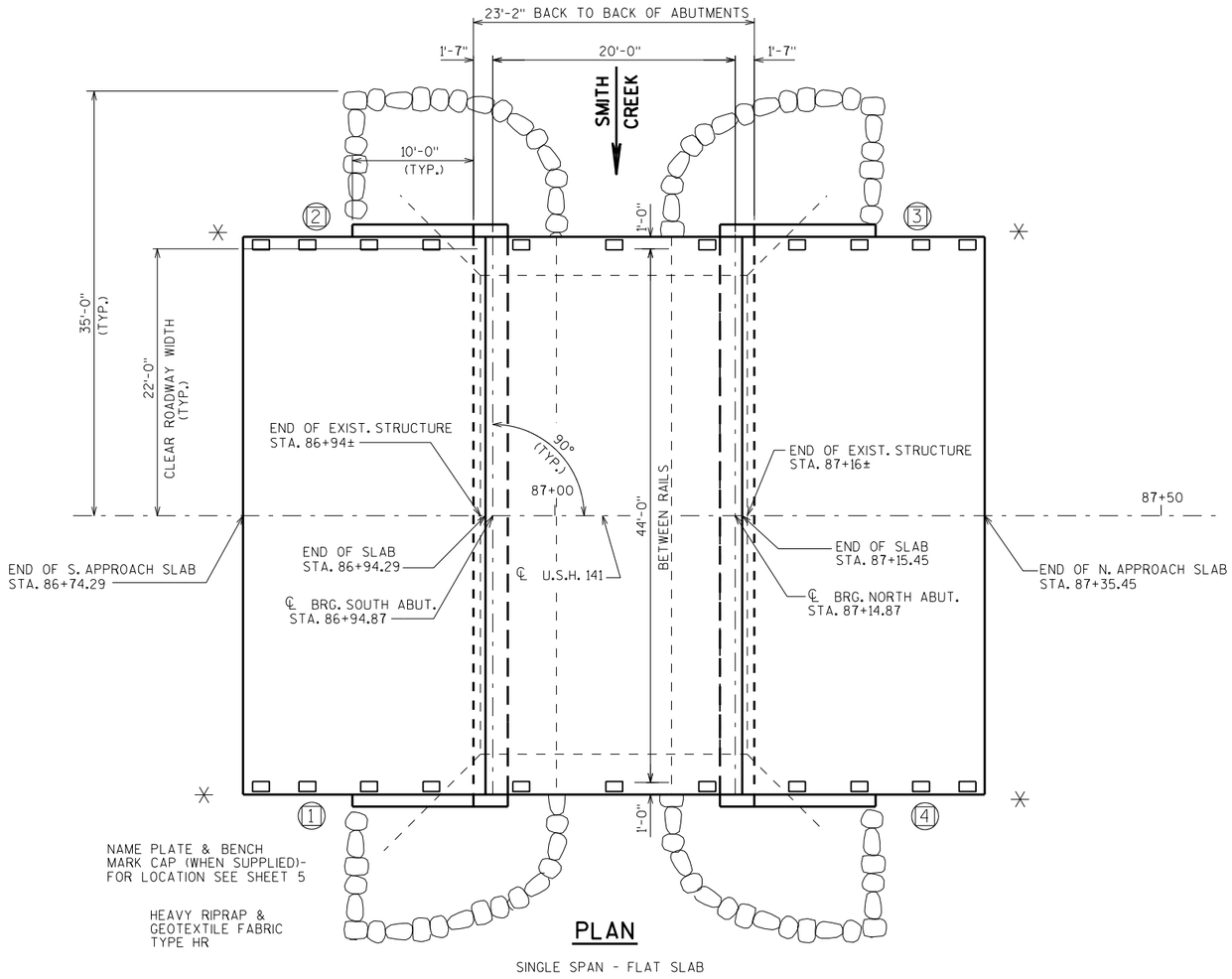
STATE PROJECT NUMBER

1491-09-71

PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT.

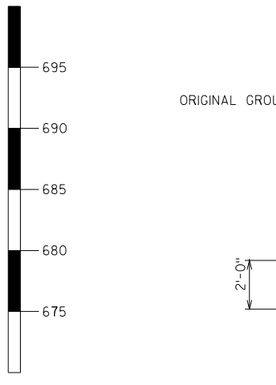
INDICATES WING NUMBER

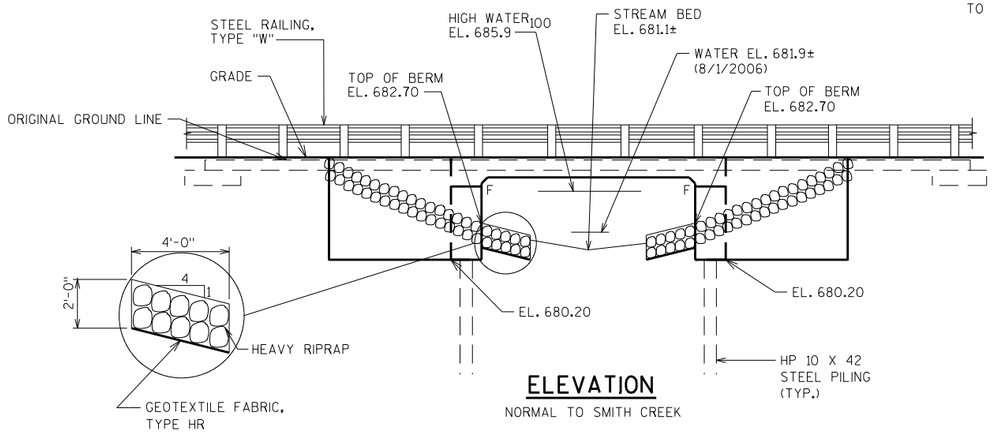




PLAN

SINGLE SPAN - FLAT SLAB





ELEVATION

NORMAL TO SMITH CREEK

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR; RF=1.17
OPERATING RATING FACTOR; RF=1.51
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV); 240 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY — SLAB — f'c = 4,000 P.S.I. — ALL OTHER — f'c = 3,500 P.S.I.
STRUCTURAL APPROACH SLAB — f'c = 4,000 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
BAR STEEL REINFORCEMENT STAINLESS STEEL, GRADE 60 — fy = 60,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10 X 42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 90 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 20' LONG.

** THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} =225 C.F.S.
VEL. =3.54 F.P.S.
HW.= EL. 685.9
WATERWAY AREA= 64 SQ. FT.
DRAINAGE AREA= 11.4 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 =85 C.F.S.
$HW._2$= EL. 684.5

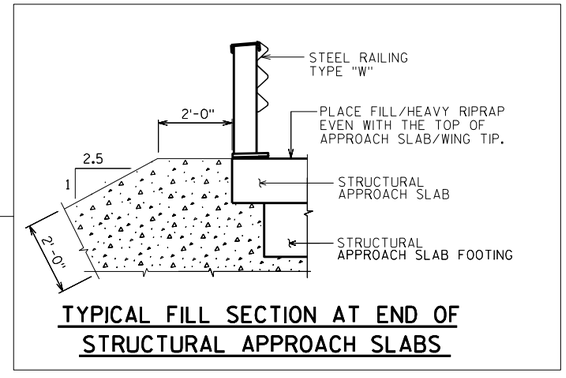
TRAFFIC VOLUME

U.S.H. 141
A.D.T.=7500 (2029)
R.D.S.=60 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. SUPERSTRUCTURE
9. SUPERSTRUCTURE DETAILS
10. S. STRUCTURAL APPROACH SLAB
11. N. STRUCTURAL APPROACH SLAB
12. STEEL RAILING TYPE "W"

EXISTING STRUCTURE (C-996-37) IS A SINGLE SPAN STEEL GIRDER BRIDGE WITH A CONCRETE DECK SUPPORTED ON CONCRETE & TIMBER ABUTMENTS TO BE REMOVED.



TYPICAL FILL SECTION AT END OF STRUCTURAL APPROACH SLABS

STRUCTURE DESIGN CONTACT:

BRANDAN BURGER (608) 267-4019
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 7/1/14
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-38-123

U.S.H. 141 OVER SMITH CREEK

COUNTY MARINETTE — TOWN/~~CITY/VILLAGE~~ STEPHENSON

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
MLH/MAS	BLB	WWR	BLB

GENERAL PLAN

SHEET 1 OF 12

213

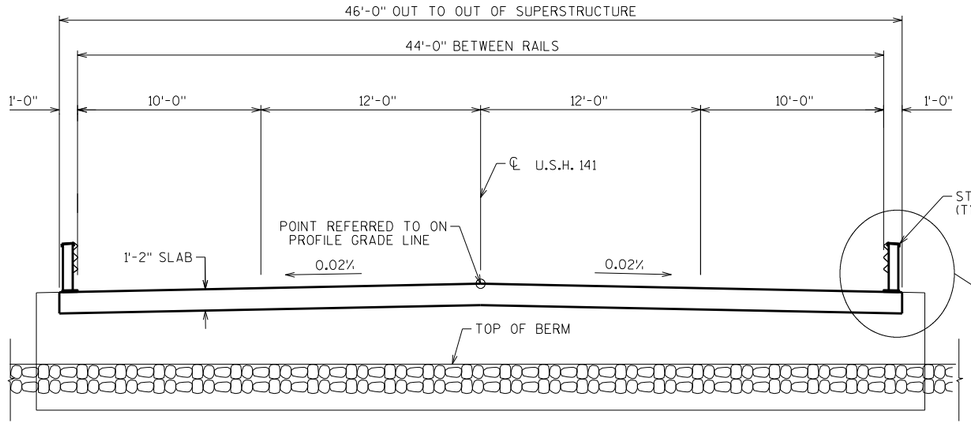
I.D. 1491-09-00

DATE: JUNE 2014

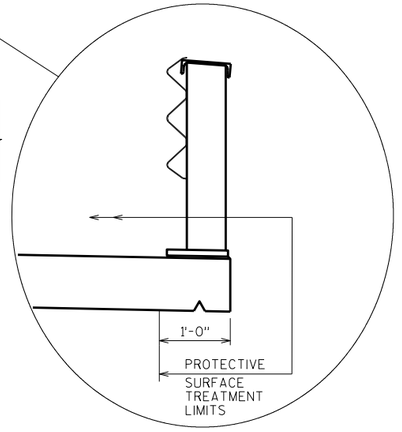
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STATE PROJECT NUMBER

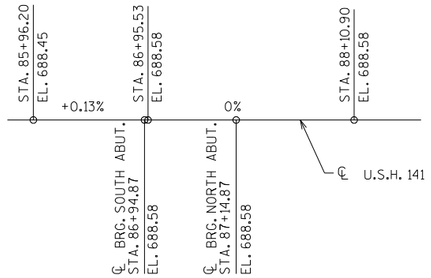
1491-09-71



CROSS SECTION THRU ROADWAY LOOKING NORTH



EDGE OF SLAB DETAIL



PROFILE GRADE LINE U.S.H. 141

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SOUTH APPROACH	SOUTH ABUT.	NORTH ABUT.	NORTH APPROACH	SUPER.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 87+05	LS	———	———	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES C-38-123	LS	———	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	55	55	———	———	110
305.0120	BASE AGGREGATE DENSE 1¼" -INCH	TON	150	———	———	150	———	300
502.0100	CONCRETE MASONRY BRIDGES	CY	58	48	48	58	50	262
502.3200	PROTECTIVE SURFACE TREATMENT	SY	103	3	3	103	140	352
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	3,100	3,100	———	———	6,200
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	9,870	1,430	1,430	9,870	8,940	31,540
513.7050	RAILING STEEL TYPE W C-38-123	LS	———	———	———	———	———	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	12	12	———	———	24
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	140	140	———	———	280
606.0300	RIPRAP HEAVY	CY	———	40	40	———	———	80
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	90	90	———	———	180
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	———	90	90	———	———	180
SPV.0085	BAR STEEL REINFORCEMENT HS STAINLESS BRIDGES	LB	800	———	———	800	———	1,600
	NON-BID ITEMS							
	FILLER	SIZE	———	———	———	———	———	½", ¾", 1½"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

PROTECTIVE SURFACE TREATMENT SHALL BE APPLIED TO THE TOP OF WINGS, TOP OF APPROACH SLAB SURFACES, THE ENTIRE TOP OF SLAB SURFACE, BOTH SIDES OF SLAB, AND 1'-0" UNDERSIDES FROM EDGES OF SLAB.

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

DRAWN BY WWR | PLANS CK'D. BLB

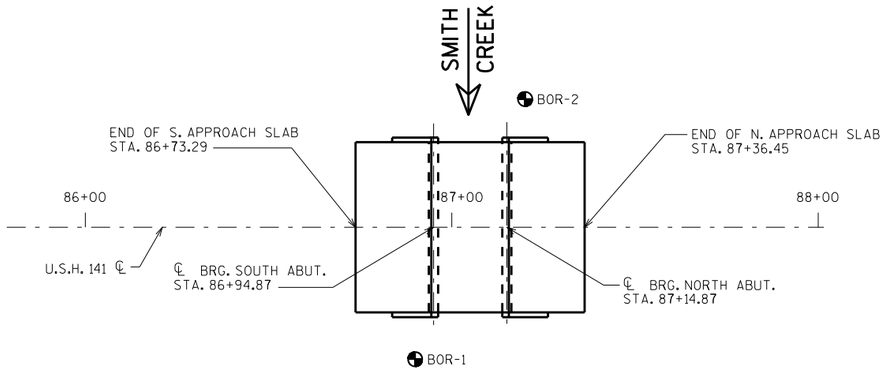
CROSS SECTION & QUANTITIES

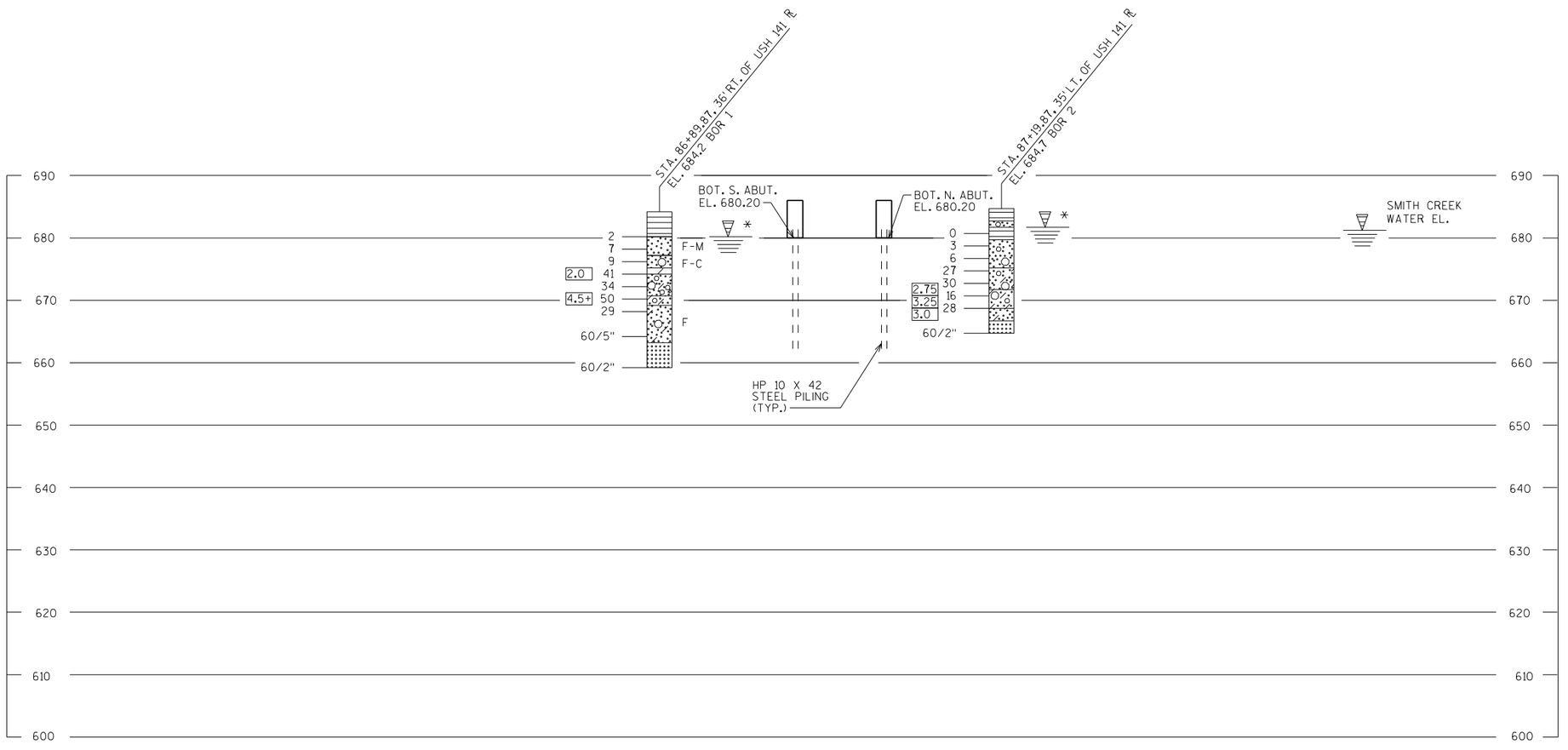
SHEET 2

214

SCALE = 4

U.S.H. 141 OVER SMITH CREEK
CRIVITZ TO MIDDLE INLET
PESHTIGO RIVER - CTH X





* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

STATE PROJECT NUMBER

1491-09-71

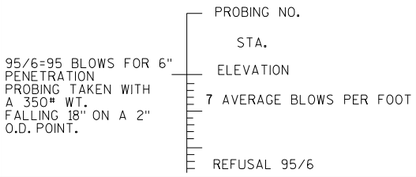
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

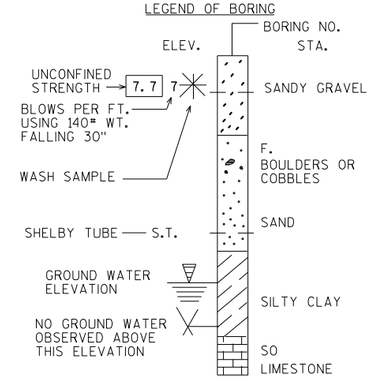
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

DRAWN BY WWR PLANS CK'D. BLB

SUBSURFACE EXPLORATION

SHEET 3

215

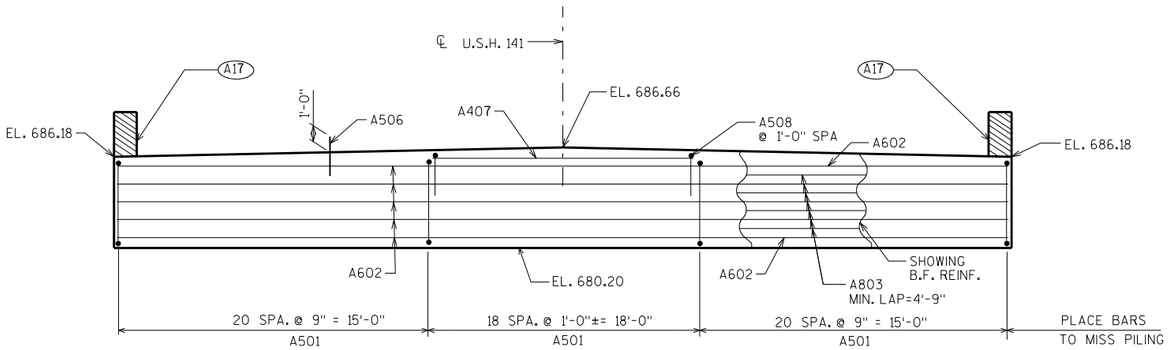
SCALE = 10

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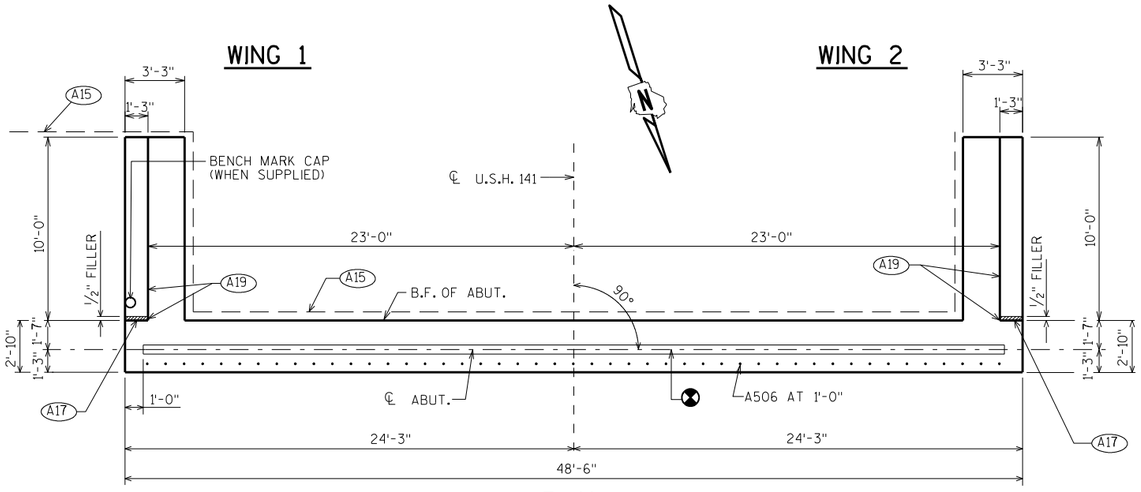
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1491-09-71

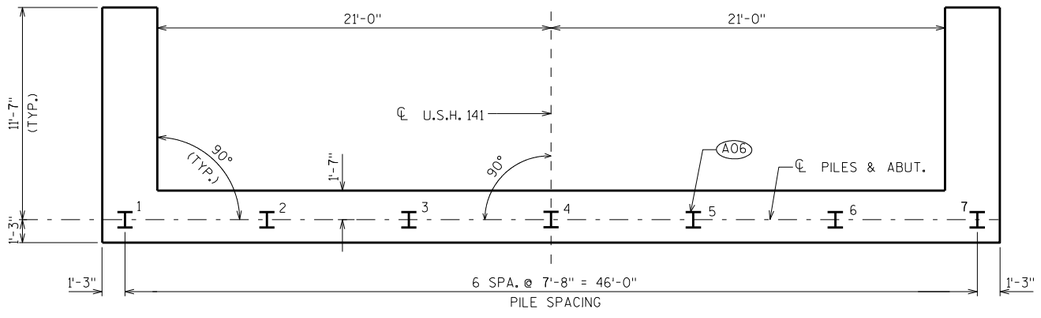


ELEVATION

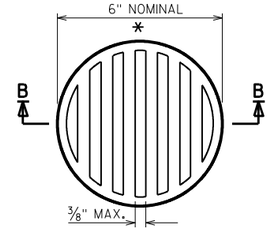
(LOOKING SOUTH)



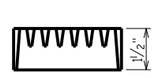
PLAN



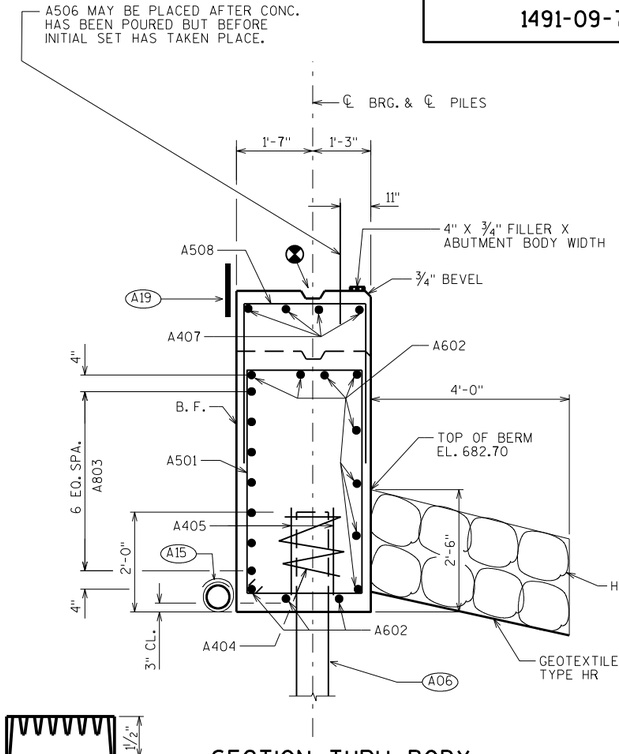
PILE PLAN



RODENT SCREEN DETAIL



SECTION B-B



SECTION THRU BODY

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

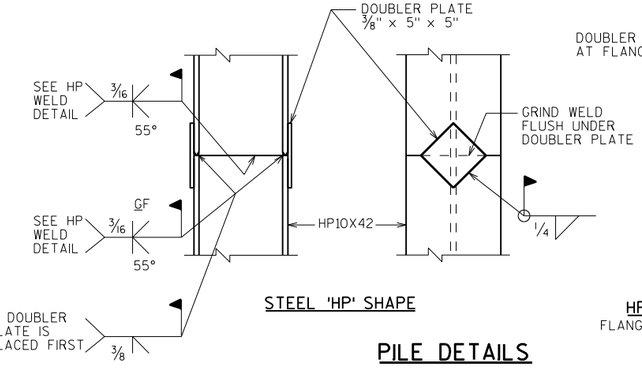
(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 20'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

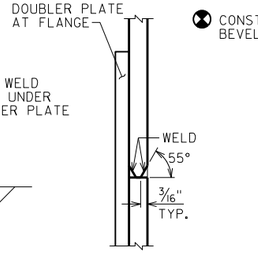
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

⊠ CONSTRUCTION JOINT KEYWAY FORMED BY A SURFACED, BEVELED 2" X 6"



STEEL 'HP' SHAPE

PILE DETAILS



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

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SOUTH ABUTMENT

SHEET 4

216

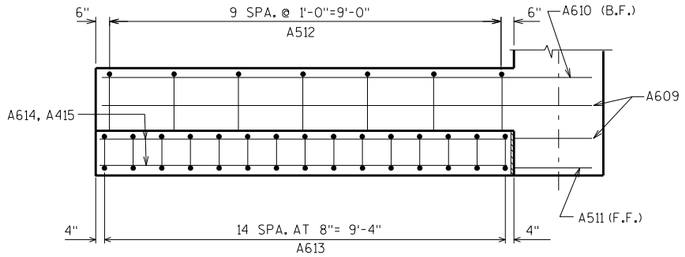
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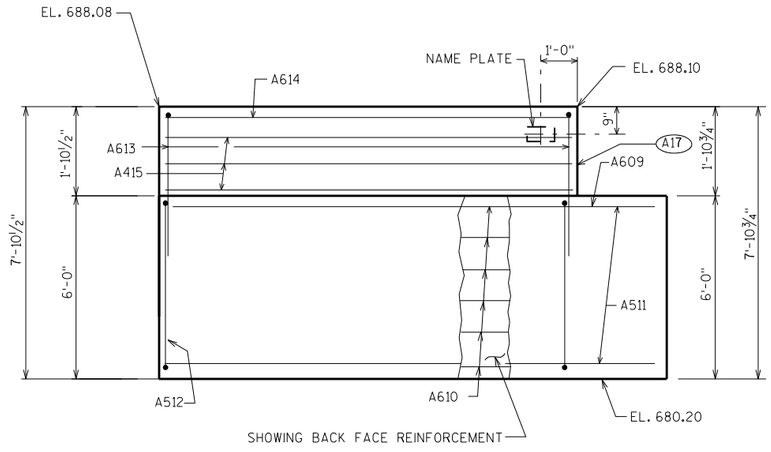
STATE PROJECT NUMBER

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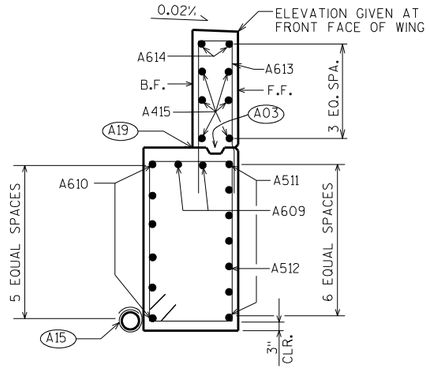


WING PLAN

WING 1 SHOWN - WING 2 SIMILAR



WING 1 ELEVATION

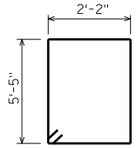


SECTION THRU WING 1

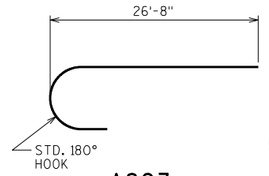
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

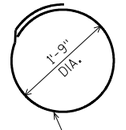
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		59	15-10	X		BODY STIRRUPS
A602		11	48-2			BODY HORIZ.
A803		14	27-7	X		BODY HORIZ.
A404		7	28-0	X		BODY 1 PER PILE
A405		14	2-3			BODY 2 PER PILE
A506	X	45	2-0			BODY TOP VERT.
A407		4	16-8			BODY TOP HORIZ.
A508		17	5-7	X		BODY TOP VERT.
A609	X	4	11-11			WINGS HORIZ.
A610	X	12	11-11			WINGS BF HORIZ.
A511	X	14	11-9			WINGS FF HORIZ.
A512	X	20	17-4	X		WINGS STIRRUP BOTTOM
A613	X	30	8-5	X		WINGS TOP VERT.
A614	X	4	9-8			WINGS TOP HORIZ.
A415	X	12	9-8			WINGS HORIZ.



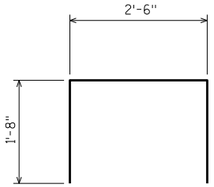
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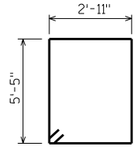
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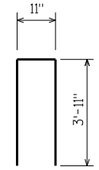
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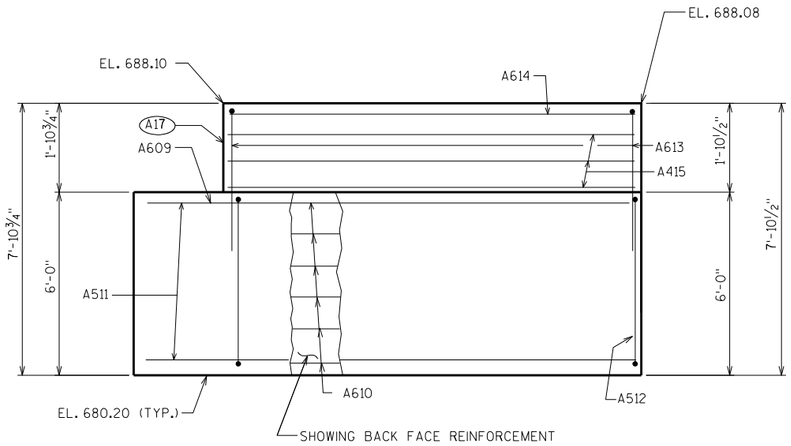
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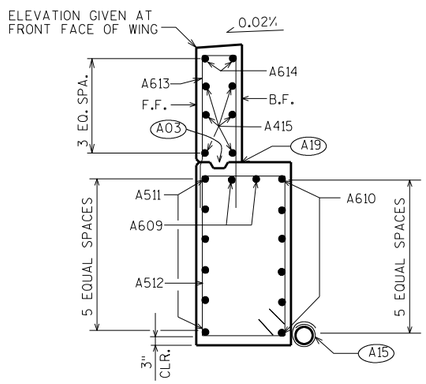
A512



A613



WING 2 ELEVATION



SECTION THRU WING 2

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

A15 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

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STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

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SOUTH ABUTMENT DETAILS

SHEET 5

217

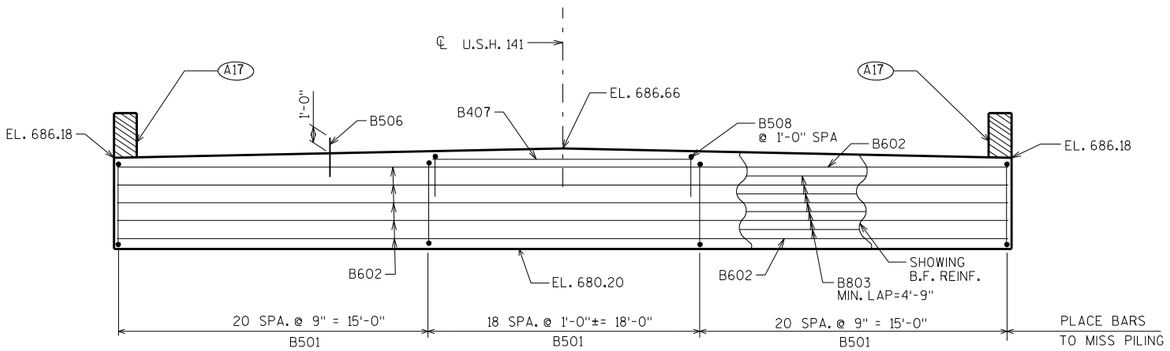
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STATE PROJECT NUMBER

1491-09-71



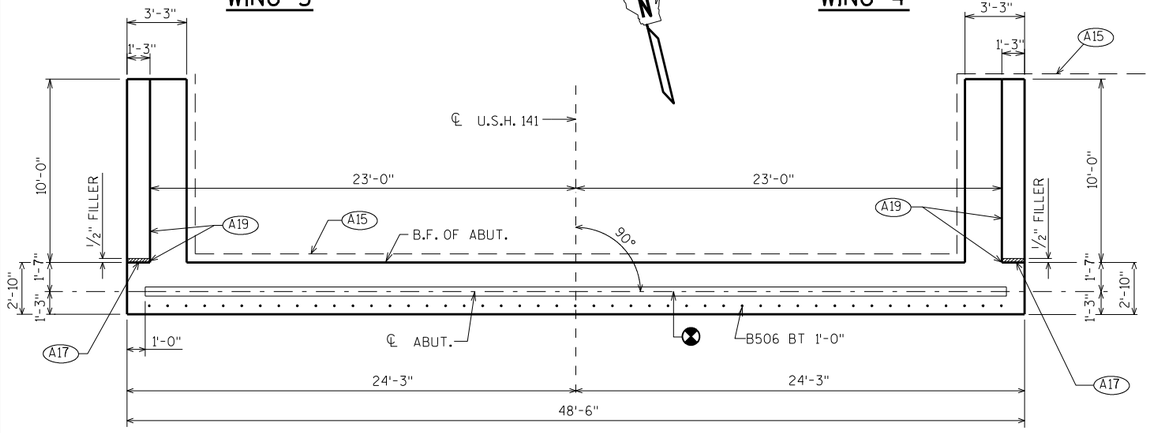
ELEVATION

(LOOKING NORTH)

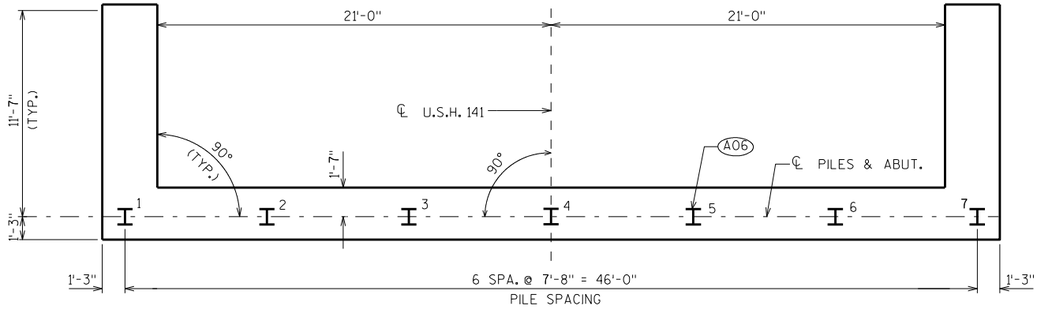


WING 3

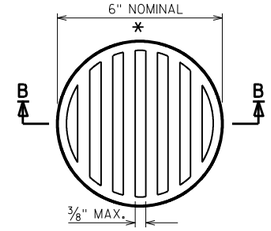
WING 4



PLAN

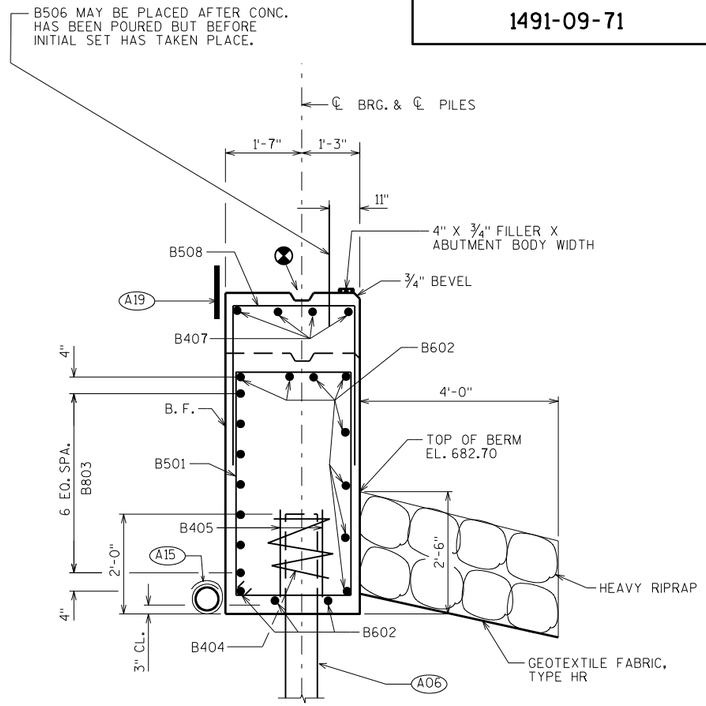


PILE PLAN



RODENT SCREEN DETAIL

SECTION B-B



SECTION THRU BODY

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

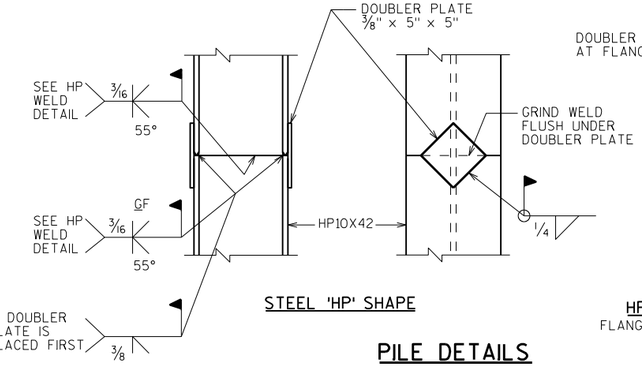
(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 20'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

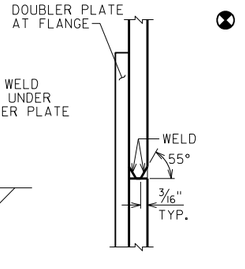
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

CONSTRUCTION JOINT KEYWAY FORMED BY A SURFACED, BEVELED 2" X 6"



STEEL 'HP' SHAPE

PILE DETAILS



HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

DRAWN BY WWR | PLANS CK'D. BLB

NORTH ABUTMENT

SHEET 6

218

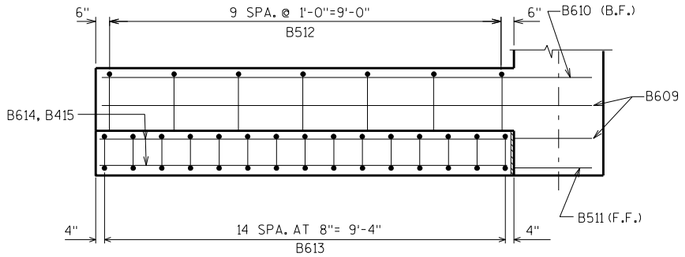
SCALE = 4

8

8

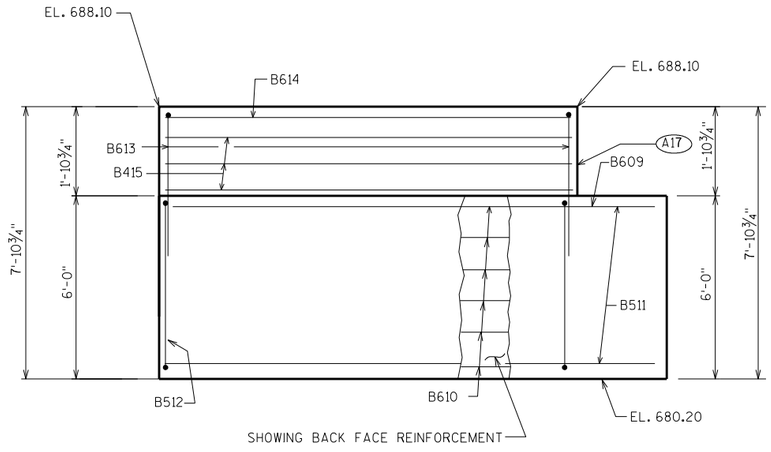
STATE PROJECT NUMBER

1491-09-71

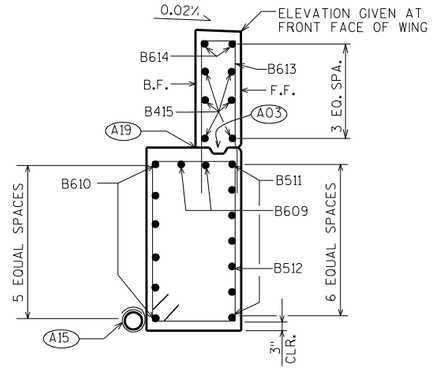


WING PLAN

WING 3 SHOWN - WING 4 SIMILAR



WING 3 ELEVATION

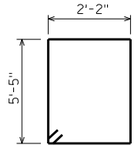


SECTION THRU WING 3

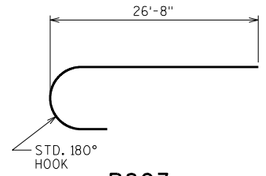
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

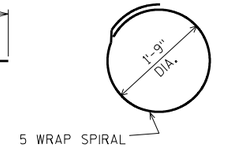
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		59	15-10	X		BODY STIRRUPS
B602		11	48-2			BODY HORIZ.
B803		14	27-7	X		BODY HORIZ.
B404		7	28-0	X		BODY 1 PER PILE
B405		14	2-3			BODY 2 PER PILE
B506	X	45	2-0			BODY TOP VERT.
B407		4	16-8			BODY TOP HORIZ.
B508		17	5-7	X		BODY TOP VERT.
B609	X	4	11-11			WINGS HORIZ.
B610	X	12	11-11			WINGS BF HORIZ.
B511	X	14	11-9			WINGS FF HORIZ.
B512	X	20	17-4	X		WINGS STIRRUP BOTTOM
B613	X	30	8-5	X		WINGS TOP VERT.
B614	X	4	9-8			WINGS TOP HORIZ.
B415	X	12	9-8			WINGS HORIZ.



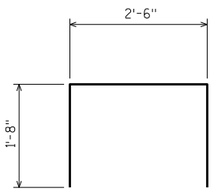
B501



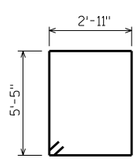
B803



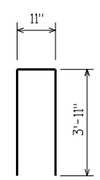
B404



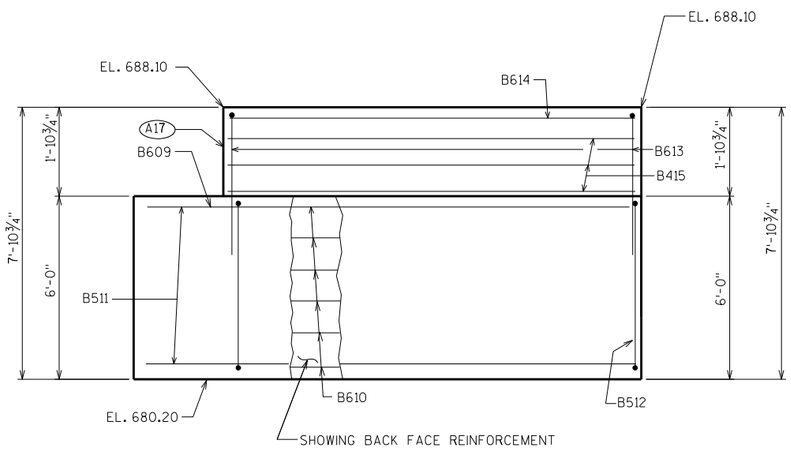
B508



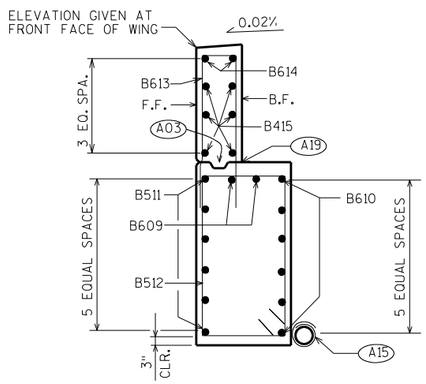
B512



B613



WING 4 ELEVATION



SECTION THRU WING 4

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

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NORTH ABUTMENT DETAILS

SHEET 7

219

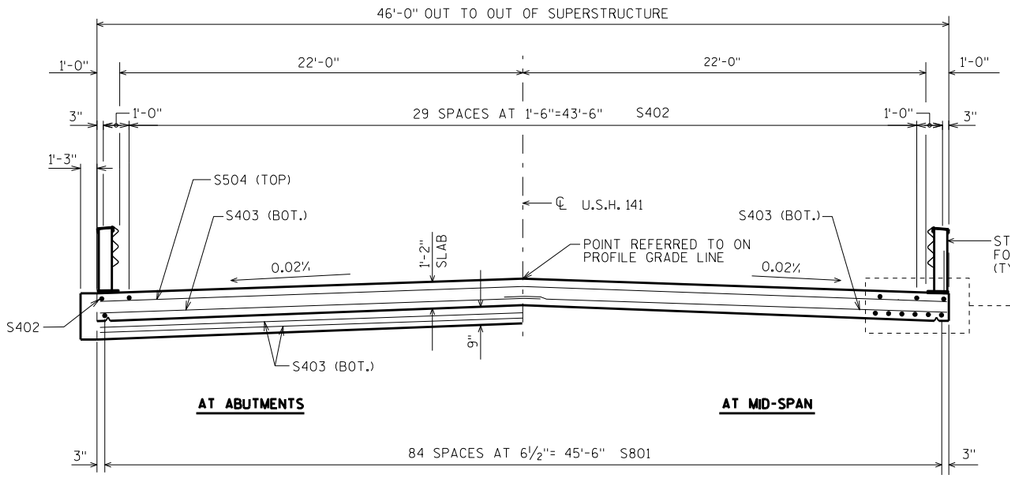
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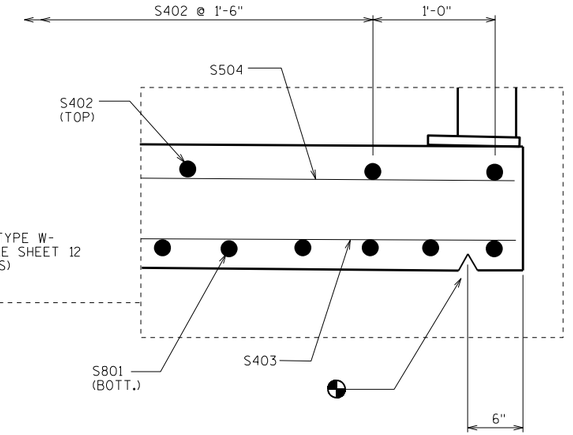
STATE PROJECT NUMBER

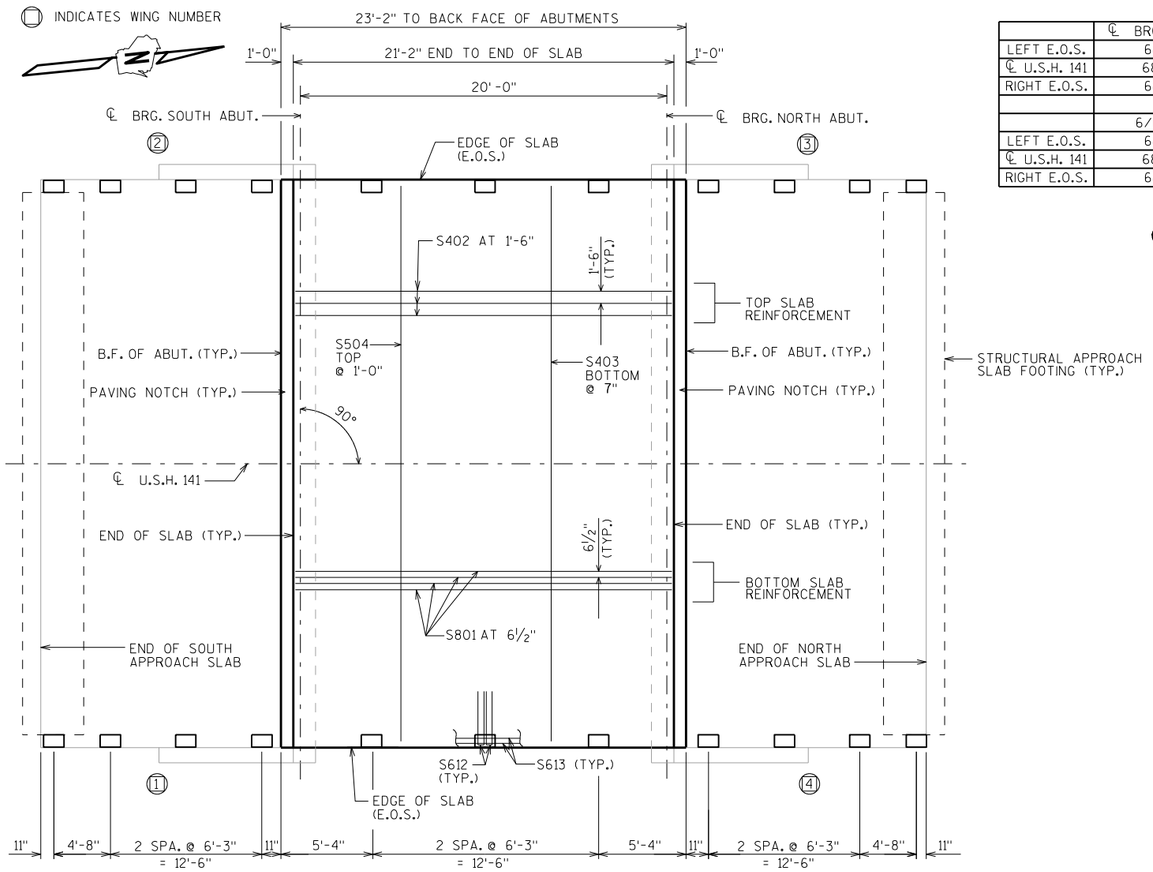
1491-09-71



CROSS SECTION THRU ROADWAY

(LOOKING NORTH)





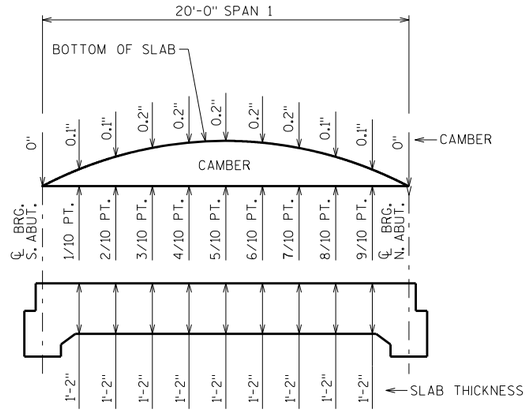
PLAN

TOP OF SLAB ELEVATIONS

	℄ BRG. S. ABUT	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.
LEFT E.O.S.	688.12	688.12	688.12	688.12	688.12	688.12
℄ U.S.H. 141	688.58	688.58	688.58	688.58	688.58	688.58
RIGHT E.O.S.	688.12	688.12	688.12	688.12	688.12	688.12

	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	℄ BRG. N. ABUT
LEFT E.O.S.	688.12	688.12	688.12	688.12	688.12
℄ U.S.H. 141	688.58	688.58	688.58	688.58	688.58
RIGHT E.O.S.	688.12	688.12	688.12	688.12	688.12

◔ ¾" V-GROOVE. EXTEND V-GROOVE TO THE FILLET ADJACENT TO THE ABUTMENTS. V-GROOVES ARE REQUIRED.



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR CENTERLINE FOLLOW THIS PROCEDURE:

TOP OF SLAB ELEVATION AT FINAL GRADE
MINUS (-) SLAB THICKNESS
PLUS (+) CAMBER
PLUS (+) FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
= TOP OF SLAB FALSEWORK ELEVATION.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER.

NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS TO BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

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SUPERSTRUCTURE

SHEET 8

220

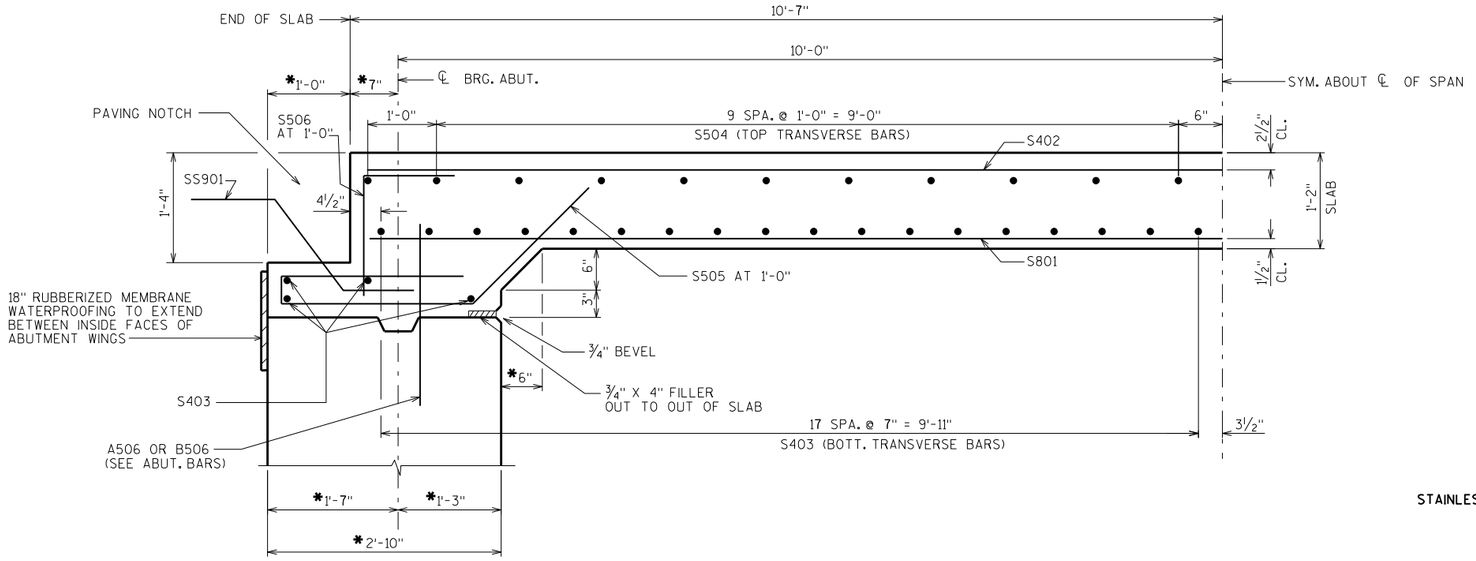
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8

STATE PROJECT NUMBER

1491-09-71



HALF LONGITUDINAL SECTION THRU SLAB

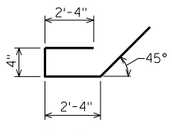
(SHOWING SECTION AT ROADWAY PAVING NOTCH)

*NORMAL TO ℄ OF ABUTMENT

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

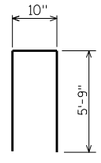
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	LOCATION
S801	X	85	20'-10"		SLAB - BOTTOM - LONGIT.
S402	X	32	20'-10"		SLAB - TOP - LONGIT.
S403	X	44	45'-8"		SLAB - BOT. - TRANS.
S504	X	22	45'-8"		SLAB -TOP - TRANS.
S505	X	94	6'-7"	X	ABUT. DIAPH. - VERT.
S506	X	94	3'-0"	X	ABUT. DIAPH. - VERT.
S407	X	8	3'-7"		ABUT. DIAPH. CORNER - TRANS.
S508	X	8	8'-6"	X	ABUT. DIAPH. CORNER - VERT.
S509	X	8	0'-11"		ABUT. DIAPH. CORNER - TRANS.
S510	X	8	4'-2"		ABUT. DIAPH. CORNER - TRANS.
S511	X	8	1'-6"		ABUT. DIAPH. CORNER - VERT.
S612	X	12	12'-0"	X	SLAB -AT RAIL POSTS (2 PER POST)
S613	X	12	4'-0"		SLAB -AT RAIL POSTS - LONGIT.
STAINLESS STEEL → SS901		47	5'-0"	X	ABUT. DIAPH./APPR. SLAB - VERT.



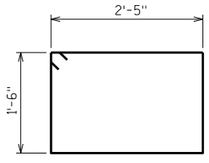
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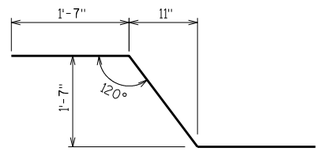
S506



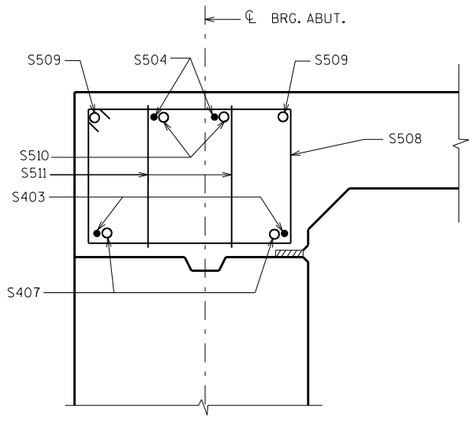
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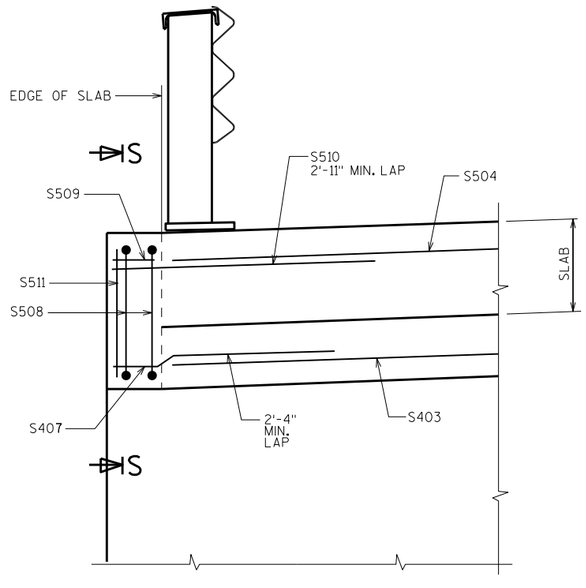
S508



SS901



SECTION S-S



SECTION THRU ABUTMENT DIAPHRAGM

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

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SUPERSTRUCTURE DETAILS

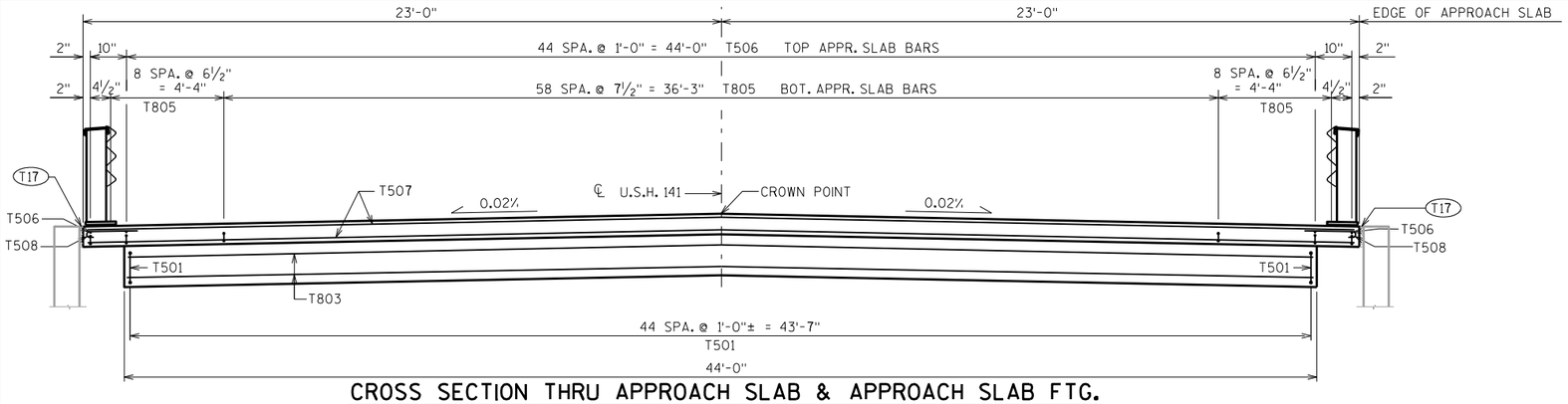
SHEET 9

221

SCALE = 2.667

STATE PROJECT NUMBER

1491-09-71



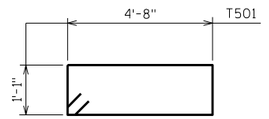
CROSS SECTION THRU APPROACH SLAB & APPROACH SLAB FTG.

(LOOKING NORTH)

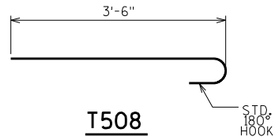
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	45	12'-2"	X		APPROACH SLAB FTG. - STIRRUP
T502	—	NOT	USED	—	—	—
T803	X	12	43'-8"			APPROACH SLAB FTG. - TRANS. - TOP & BTM.
T804	—	NOT	USED	—	—	—
T805	X	77	21'-4"	X		APPROACH SLAB - LONGIT. - BTM.
T506	X	47	19'-6"			APPROACH SLAB - LONGIT. - TOP
T507	X	42	45'-8"			APPROACH SLAB - TRANS. - TOP & BTM.
T508	X	40	4'-1"	X		APPROACH SLAB - TRANS. - TOP - WING
T909	—	NOT	USED	—	—	—
T610	X	16	12'-0"	X		APPROACH SLAB- AT RAIL POSTS (2 PER POST)
T611	X	16	4'-0"			APPROACH SLAB- AT RAIL POSTS- LONGIT.



T501

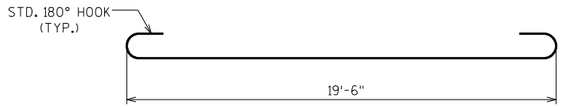


T508

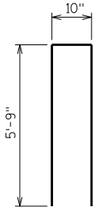
(T02) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF FOOTING.

(T03) PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL) OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF THE SUBGRADE.

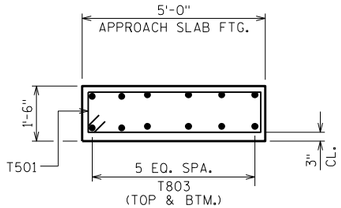
(T17) 1/2" FILLER. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).



T805

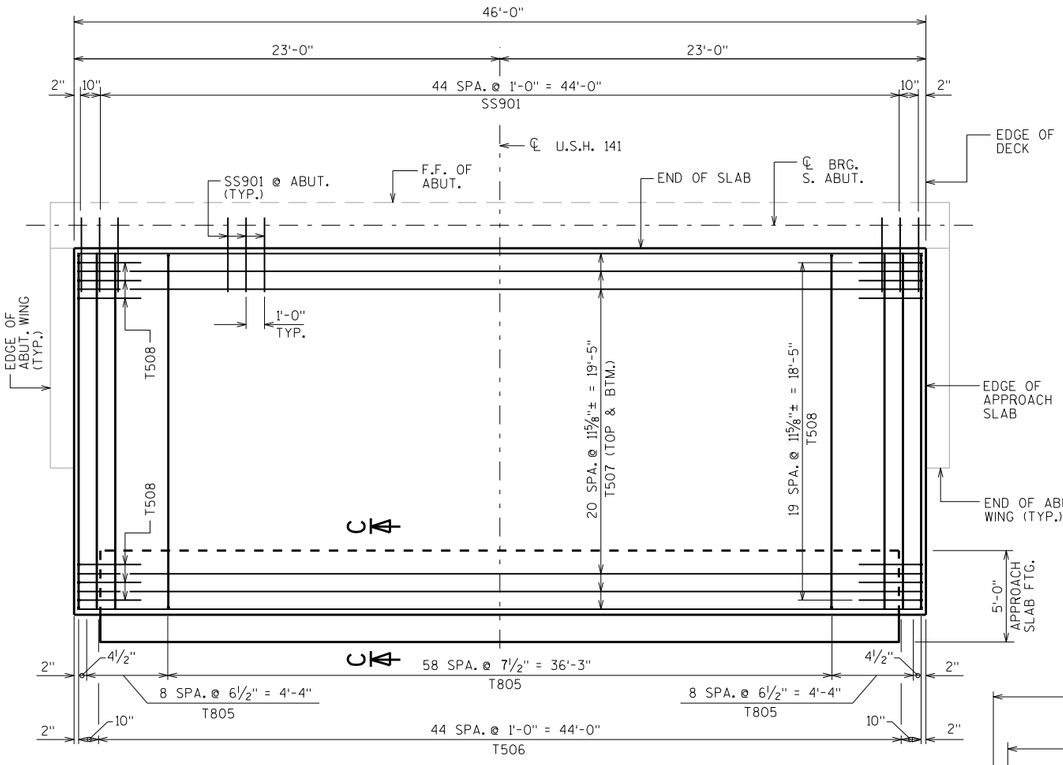


T610



SECTION C-C

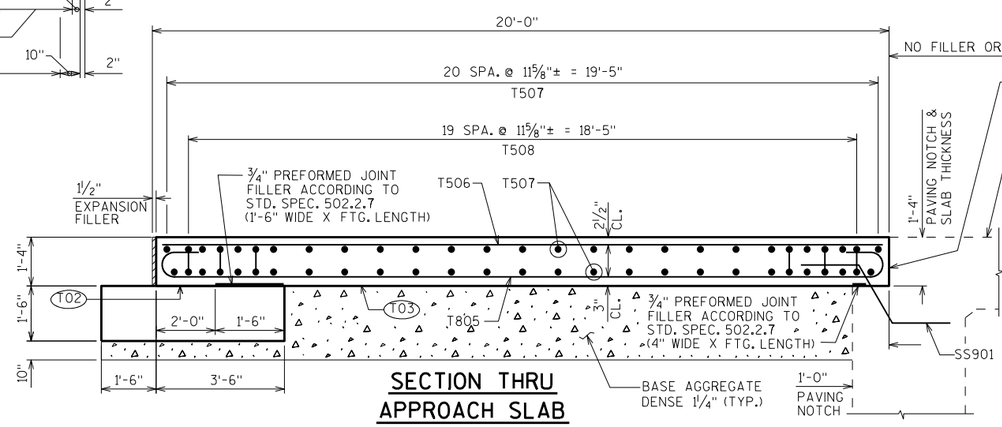
(SHOWING FOOTING ONLY)



APPROACH SLAB REINF. PLAN

APPROACH SLAB ELEVATION TABLE

TOP OF APPROACH SLAB ELEVATIONS		
	SLAB END	B.F. ABUT.
W. EDGE OF APPROACH SLAB	688.09	688.12
℄ U.S.H. 141 CROWN POINT	688.55	688.58
E. EDGE OF APPROACH SLAB	688.09	688.12



SECTION THRU APPROACH SLAB

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

DRAWN BY WWR | PLANS CK'D. BLB

S. STRUCTURAL APPROACH SLAB

SHEET 10

222

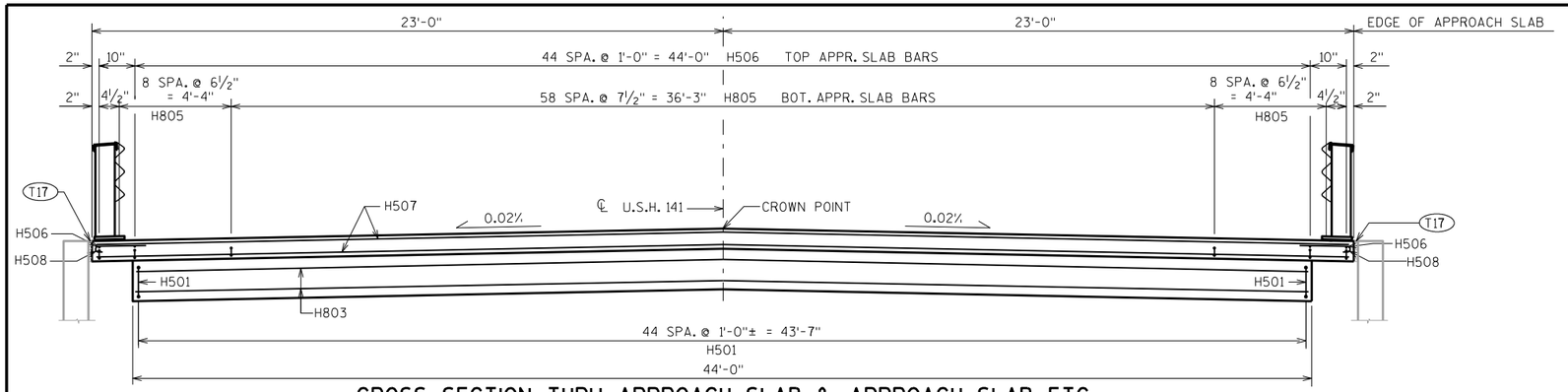
8

8

SCALE =

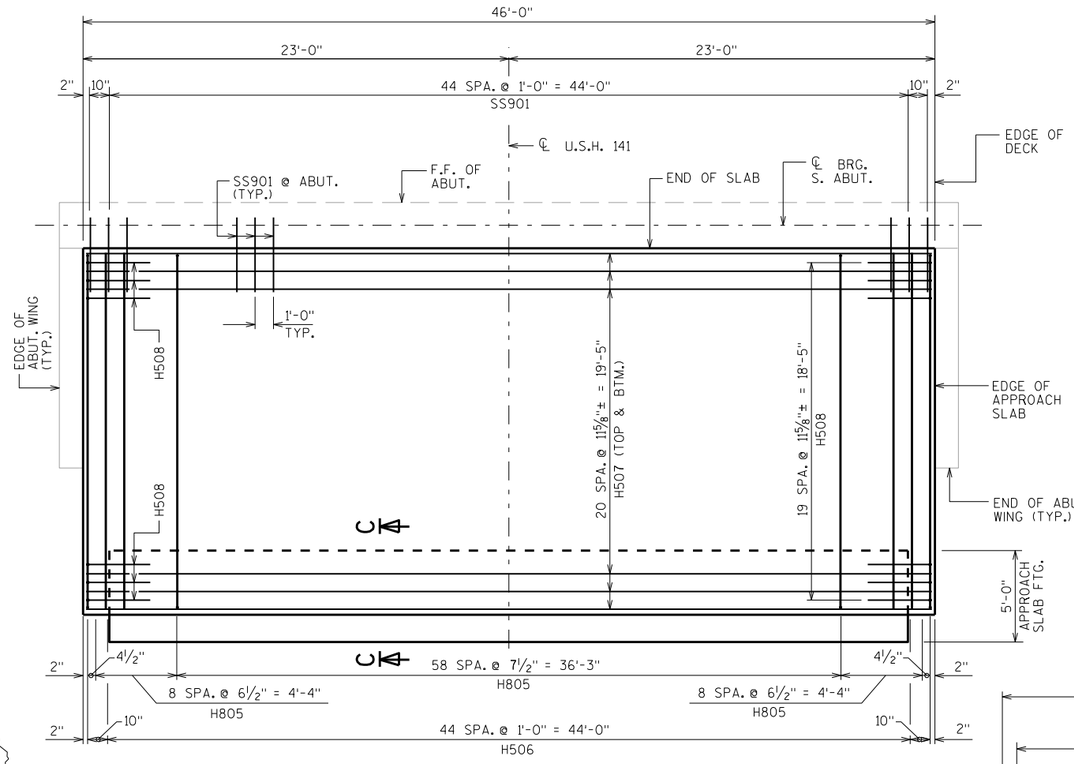
STATE PROJECT NUMBER

1491-09-71



CROSS SECTION THRU APPROACH SLAB & APPROACH SLAB FTG.

(LOOKING NORTH)

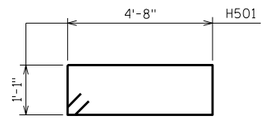


APPROACH SLAB REINF. PLAN

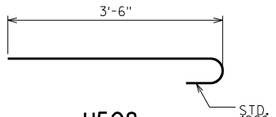
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

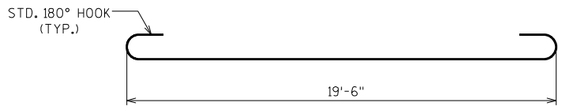
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
H501	X	45	12'-2"	X		APPROACH SLAB FTG. - STIRRUP
H502	—	NOT	USED			
H803	X	12	43'-8"			APPROACH SLAB FTG. - TRANS. - TOP & BTM.
H804	—	NOT	USED			
H805	X	77	21'-4"	X		APPROACH SLAB - LONGIT. - BTM.
H506	X	47	19'-6"			APPROACH SLAB - LONGIT. - TOP
H507	X	42	45'-8"			APPROACH SLAB - TRANS. - TOP & BTM.
H508	X	40	4'-1"	X		APPROACH SLAB - TRANS. - TOP - WING
H909	—	NOT	USED			
H610	X	16	12'-0"	X		APPROACH SLAB- AT RAIL POSTS (2 PER POST)
H611	X	16	4'-0"			APPROACH SLAB- AT RAIL POSTS- LONGIT.



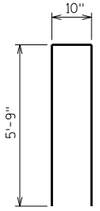
H501



H508



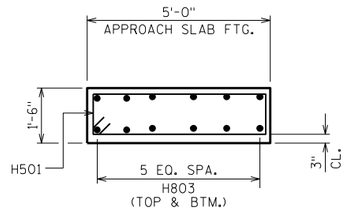
H805



H610

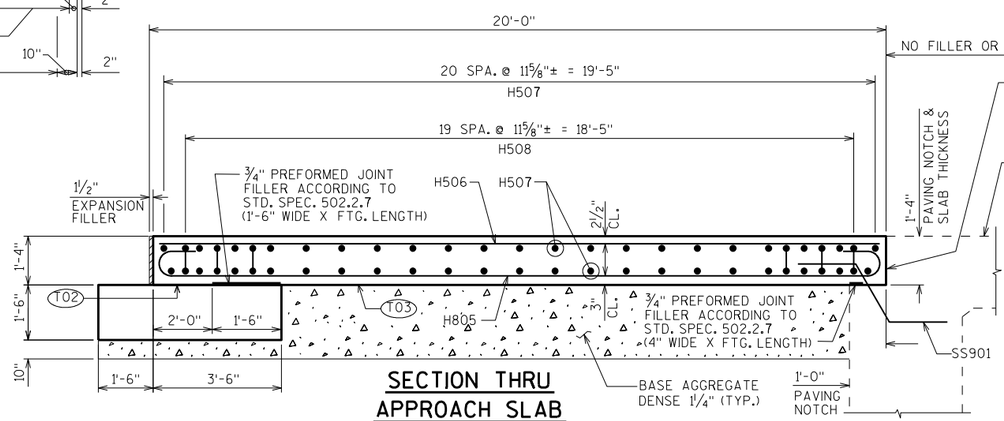
APPROACH SLAB ELEVATION TABLE

TOP OF APPROACH SLAB ELEVATIONS		
	SLAB END	B.F. ABUT.
W. EDGE OF APPROACH SLAB	688.12	688.12
℄ U.S.H. 141 CROWN POINT	688.58	688.58
E. EDGE OF APPROACH SLAB	688.12	688.12



SECTION C-C

(SHOWING FOOTING ONLY)



SECTION THRU APPROACH SLAB

T02 STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER ENTIRE TOP OF FOOTING.

T03 PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL) OF POLYETHYLENE SHEETS OVER ENTIRE LENGTH OF THE SUBGRADE.

T17 1/2" FILLER. SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

DRAWN BY WWR | PLANS CK'D. BLB

N. STRUCTURAL APPROACH SLAB

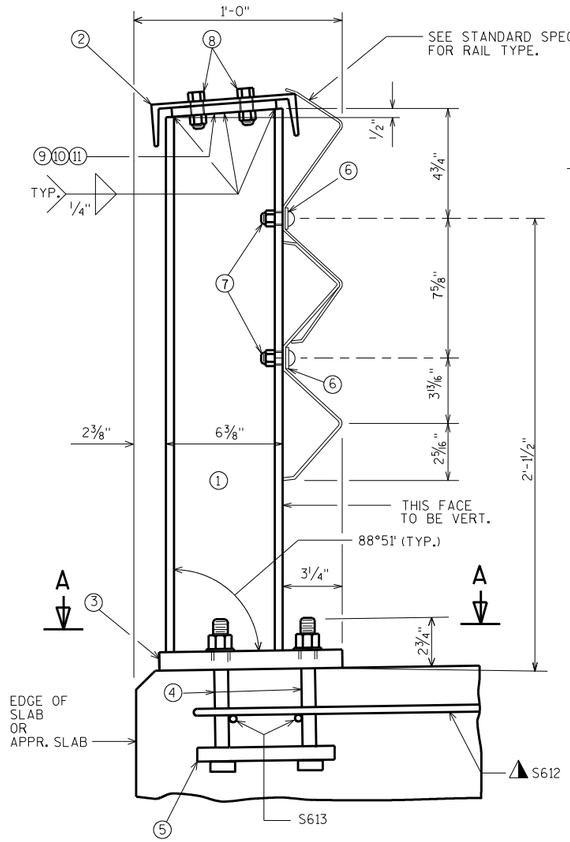
SHEET 11

223

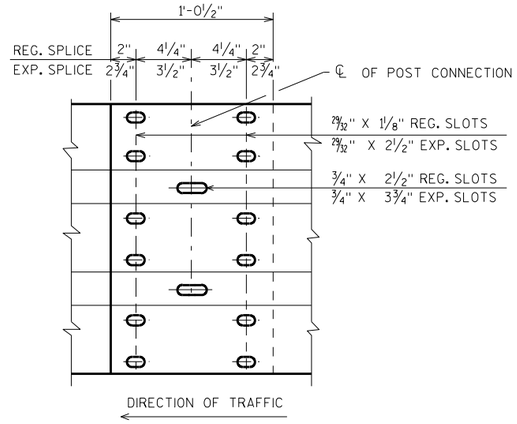
SCALE =

STATE PROJECT NUMBER

1491-09-71



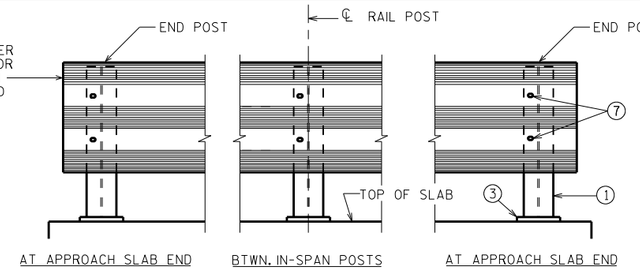
SECTION THRU RAILING



RAIL MEMBER SPLICE

5/8" DIA. BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX NUTS AT ALL SLOTS.

AT END POSTS, RAIL MEMBER SHALL HAVE PROVISIONS FOR A THRIE BEAM CONNECTION AS SHOWN ON SDD 14 B 20 STANDARDS.



ELEVATION

LEGEND

① W6x25 WITH 2 - 3/4" x 2 1/2" VERT. SLOTS IN FLG. (SLOT ON OTHER SIDE OF WEB IS OPTIONAL) FOR NO. 7. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POSTS VERTICAL AND NORMAL TO GRADE LINE.

② C8x11.5 WITH 13/16" DIA. HOLES FOR NO. 8.

③ BASE PLATE 1" X 9 1/2" x 10" WITH 1 1/16" x 1 1/2" SLOTTED HOLES FOR ANCHOR BOLTS NO. 4. WELD TO NO. 1 AS SHOWN.

④ A325 - 7/8" DIA. HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 14" LONG AT END POSTS. USE 8" LONG AT ALL OTHER LOCATIONS. 4 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 3. CHAMFER TOP OF BOLTS BEFORE THREADING.

⑤ 1/4" x 8" x 8" FLAT BAR WITH 15/16" DIA. HOLES FOR ANCHOR BOLTS NO. 4.

⑥ 1 3/4" x 3" MOUNTING BOLT WASHER (GALVANIZED).

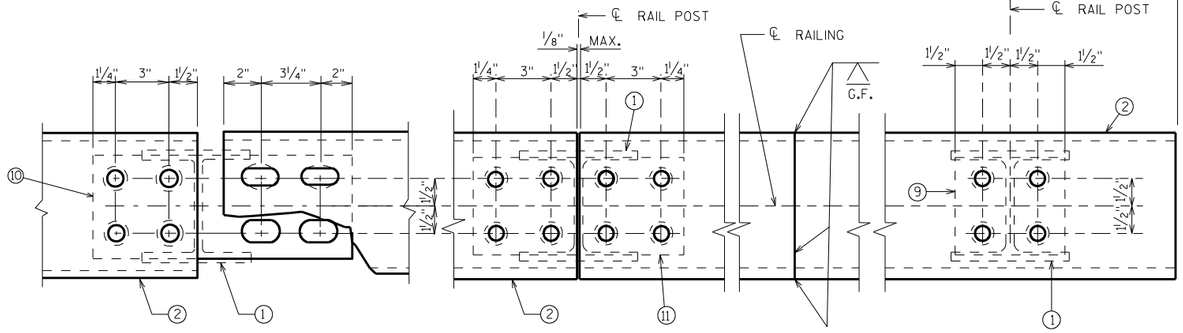
⑦ 5/8" DIA. BUTTON HEAD POST MOUNTING BOLT WITH ROUND WASHER AND NUT.

⑧ 5/8" DIA. x 2" HEX BOLTS WITH NUT AND TWO WASHERS EACH.

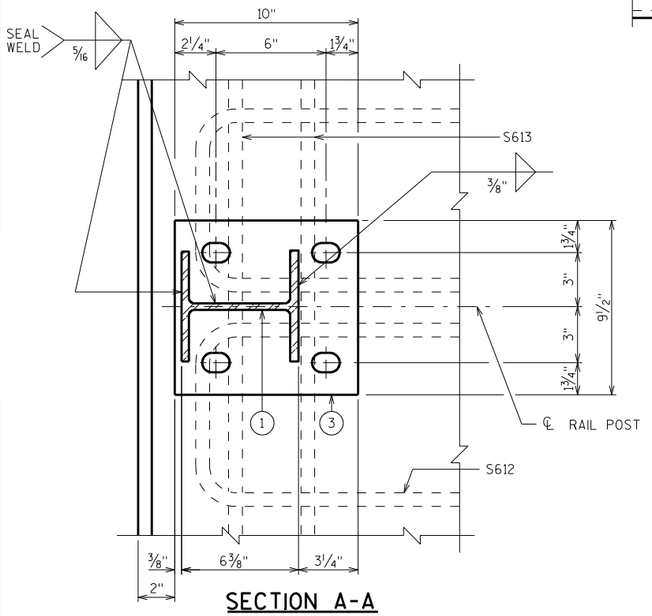
⑨ PLATE 1/2" x 5 3/4" x 6" AT BASIC POST CONNECTION. 1 1/4" DIA. HOLES IN PLATE. 13/16" DIA. HOLES IN CHANNEL.

⑩ PLATE 1/2" x 5 3/4" x 1'-2 1/2". 1 1/4" DIA. HOLES IN PLATE. 13/16" DIA. HOLES IN CHANNEL. EXPANSION SLOTS ON JOINT SIDE OF POST. 1 1/16" x 2 1/4" IN PLATE, 13/16" X 2 1/4" IN CHANNEL. (AT EXPANSION SPLICE.)

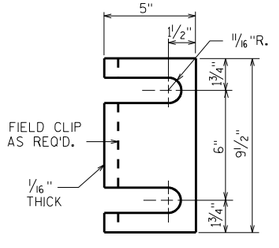
⑪ PLATE 1/2" x 5 3/4" x 11 1/2". 1 1/4" DIA. HOLES IN PLATE, 13/16" DIA. HOLES IN CHANNEL. (AT TYPICAL SPLICE.)



CHANNEL MEMBER DETAILS

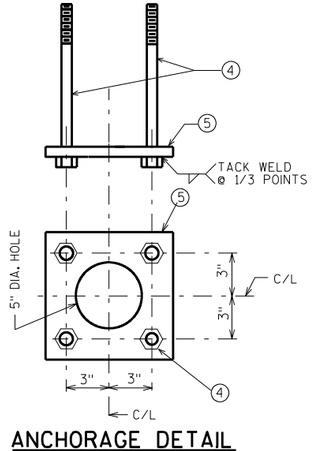


SECTION A-A



POST SHIM DETAIL

(4 PER POST)



ANCHORAGE DETAIL

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE W C-38-123" WHICH INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL NO. 5 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND CHANNELS SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY SSPC SPECS.

ALL MATERIAL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 3 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CHANNEL MEMBER SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT (EXCEPT AT ABUTMENTS).

AT EXPANSION SLOTS IN RAIL AND CHANNEL MEMBERS, TIGHTEN BOLTS, BACK OFF ONE HALF TURN AND BURR THREADS. RAIL MEMBERS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC AND THE UPPER RAIL SHALL LAP THE LOWER RAIL.

STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.

⚠ PLACE BELOW AND TIE TO TOP MAT OF STEEL.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-123

DRAWN BY WWR | PLANS CK'D. BLB

STEEL RAILING TYPE "W"

SHEET 12

224

8

8

SCALE =

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
1640+33.5(2)	0.00	23.67	14.84	0	0	0	0	0.00
1640+50(2)	16.50	17.64	19.13	13	10	13	13	-0.35
1640+75(2)	25.00	22.24	12.89	18	15	31	31	-0.41
1641+00(2)	25.00	44.76	11.98	31	12	62	46	16.22
1641+25(2)	25.00	64.12	13.52	50	12	113	61	51.87
1641+50(2)	25.00	51.60	16.34	54	14	166	78	88.17
1641+75(2)	25.00	50.59	17.38	47	16	213	97	115.96
1642+00(2)	25.00	53.86	15.05	48	15	262	116	145.55
1642+25(2)	25.00	48.26	14.76	47	14	309	133	175.58
1642+50(2)	25.00	50.58	9.99	46	11	355	148	207.01
1642+75(2)	25.00	54.39	7.09	49	8	403	158	245.72
1643+00(2)	25.00	48.16	7.53	47	7	451	166	284.73
1643+25(2)	25.00	54.61	3.78	48	5	498	173	325.77
1643+50(2)	25.00	49.79	4.73	48	4	547	178	369.18
1643+75(2)	25.00	48.54	18.88	46	11	592	191	401.05
1644+00(2)	25.00	55.81	35.08	48	25	641	222	418.13
1644+25(2)	25.00	46.34	29.07	47	30	688	260	428.30
1644+50(2)	25.00	47.33	42.11	43	33	731	301	430.47
1644+75(2)	25.00	46.10	34.65	43	36	775	345	429.31
1645+00(2)	25.00	28.24	21.65	34	26	809	378	431.14
1645+25(2)	25.00	31.35	8.95	28	14	837	396	441.03
1645+50(2)	25.00	29.69	19.04	28	13	865	412	453.09
1645+75(2)	25.00	29.79	26.27	28	21	892	438	454.40
1646+00(2)	25.00	30.09	20.48	28	22	920	465	455.07
1646+25(2)	25.00	55.99	17.78	40	18	960	487	472.78
1646+50(2)	25.00	56.26	18.46	52	17	1,012	508	503.78
1646+75(2)	25.00	55.96	20.31	52	18	1,064	531	533.30
1647+00(2)	25.00	55.89	17.01	52	17	1,116	552	563.48
1647+25(2)	25.00	55.91	14.01	52	14	1,167	570	597.29
1647+50(2)	25.00	57.76	14.55	53	13	1,220	587	633.38
1647+75(2)	25.00	58.18	17.41	54	15	1,274	605	668.56
1648+00(2)	25.00	59.77	18.40	55	17	1,328	626	702.44
1648+25(2)	25.00	58.49	23.52	55	19	1,383	650	732.93
1648+50(2)	25.00	57.81	31.92	54	26	1,437	682	754.69
1648+75(2)	25.00	54.83	39.07	52	33	1,489	723	765.76
1649+00(2)	25.00	51.03	46.50	49	40	1,538	773	765.25
1649+25(2)	25.00	50.62	39.68	47	40	1,585	823	762.44
1649+50(2)	25.00	47.46	41.69	45	38	1,630	870	760.76
1649+75(2)	25.00	48.80	52.02	45	43	1,675	924	751.10
1650+00(2)	25.00	47.02	65.51	44	54	1,719	992	727.44
1650+25(2)	25.00	52.80	64.30	46	60	1,766	1,067	698.54
1650+50(2)	25.00	51.09	64.41	48	60	1,814	1,142	672.15
1650+75(2)	25.00	52.68	48.07	48	52	1,862	1,207	655.10
1651+00(2)	25.00	51.73	38.62	48	40	1,910	1,257	653.27
1651+25(2)	25.00	52.29	34.17	48	34	1,958	1,299	659.31
1651+50(2)	25.00	56.23	24.31	50	27	2,009	1,333	675.71
SUBTOTAL				**2,009**	**1,066**			

CONTINUED

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
134+59.64(3)	0.00	46.76	51.01	0	0	0	0	0.00
135+00(3)	40.36	47.40	41.01	70	69	70	86	-15.60
135+50(3)	50.00	49.76	35.79	90	71	160	175	-14.53
136+00(3)	50.00	61.82	0.01	103	33	264	216	47.34
136+50(3)	50.00	51.45	31.99	105	30	369	253	115.19
137+00(3)	50.00	47.22	21.69	91	50	460	315	144.43
137+50(3)	50.00	51.18	14.12	91	33	551	357	194.10
138+00(3)	50.00	53.84	9.95	97	22	648	385	263.49
138+50(3)	50.00	56.77	8.65	102	17	751	406	344.39
139+00(3)	50.00	54.81	10.53	103	18	854	428	425.49
139+50(3)	50.00	51.33	11.48	98	20	952	454	498.29
140+00(3)	50.00	55.67	9.75	99	20	1,051	479	572.79
140+50(3)	50.00	57.69	8.50	105	17	1,156	500	656.63
141+00(3)	50.00	53.70	5.25	103	13	1,259	516	743.85
141+50(3)	50.00	49.41	12.81	95	17	1,355	536	818.42
142+00(3)	50.00	52.07	16.63	94	27	1,449	571	878.30
142+50(3)	50.00	56.68	4.90	101	20	1,550	596	954.08
143+00(3)	50.00	49.62	9.66	98	13	1,648	612	1,035.65
143+50(3)	50.00	51.87	11.69	94	20	1,742	637	1,104.90
144+00(3)	50.00	52.56	14.15	97	24	1,839	667	1,171.68
144+50(3)	50.00	53.88	12.52	99	25	1,937	698	1,239.38
145+00(3)	50.00	49.01	16.52	95	27	2,032	731	1,301.04
145+50(3)	50.00	49.24	13.91	91	28	2,123	767	1,356.79
146+00(3)	50.00	51.73	17.12	93	29	2,217	803	1,414.36
146+50(3)	50.00	52.74	20.45	97	35	2,314	846	1,467.61
147+00(3)	50.00	52.83	25.71	98	43	2,411	899	1,511.93
147+50(3)	50.00	56.12	15.19	101	38	2,512	947	1,565.48
147+99.91(3)	49.91	71.31	23.03	118	35	2,630	991	1,639.11
		SUBTOTAL		**2,630**	**793**			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
1651+75(2)	25.00	48.90	25.96	49	23	2,057	1,362	695.29
1652+00(2)	25.00	54.95	33.02	48	27	2,105	1,396	709.24
1652+25(2)	25.00	48.66	36.03	48	32	2,153	1,436	717.24
1652+50(2)	25.00	43.04	38.43	42	34	2,196	1,479	716.61
1652+75(2)	25.00	46.41	39.52	41	36	2,237	1,524	712.91
1653+00(2)	25.00	52.66	35.92	46	35	2,283	1,568	715.11
1653+25(2)	25.00	48.30	30.50	47	31	2,330	1,606	723.42
1653+50(2)	25.00	50.18	26.12	46	26	2,375	1,639	736.25
1653+75(2)	25.00	52.31	23.81	47	23	2,423	1,668	754.80
1654+00(2)	25.00	52.45	20.45	49	20	2,471	1,694	777.70
1654+25(2)	25.00	49.10	22.94	47	20	2,518	1,719	799.60
1654+50(2)	25.00	41.37	29.31	42	24	2,560	1,749	811.25
1654+75(2)	25.00	54.50	27.78	44	26	2,605	1,782	822.59
1655+00(2)	25.00	60.47	24.33	53	24	2,658	1,812	845.66
1655+25(2)	25.00	51.38	24.18	52	22	2,710	1,840	869.36
1655+50(2)	25.00	54.33	23.08	49	22	2,758	1,868	890.95
1655+75(2)	25.00	50.81	27.33	49	23	2,807	1,897	910.45
1656+00(2)	25.00	57.08	17.76	50	21	2,857	1,923	934.31
1656+25(2)	25.00	52.87	19.98	51	17	2,908	1,945	963.37
1656+50(2)	25.00	49.38	24.13	47	20	2,955	1,970	985.18
1656+75(2)	25.00	53.51	21.20	48	21	3,003	1,996	1,006.58
1657+00(2)	25.00	58.47	16.63	52	18	3,055	2,018	1,036.53
1657+25(2)	25.00	61.31	17.55	55	16	3,110	2,038	1,072.20
1657+50(2)	25.00	64.97	13.87	58	15	3,169	2,056	1,112.49
1657+75(2)	25.00	61.25	14.46	58	13	3,227	2,073	1,154.53
1658+00(2)	25.00	61.53	10.21	57	11	3,284	2,087	1,197.10
1658+25(2)	25.00	61.64	12.37	57	10	3,341	2,100	1,241.06
1658+50(2)	25.00	66.10	12.31	59	11	3,400	2,114	1,285.92
1658+75(2)	25.00	61.14	14.73	59	13	3,459	2,130	1,329.19
1659+00(2)	25.00	60.22	9.64	56	11	3,515	2,144	1,371.27
1659+25(2)	25.00	58.78	10.67	55	9	3,570	2,156	1,414.61
	SUBTOTAL			**1,562**	**658**			CONTINUED

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
1659+50(2)	25.00	56.32	7.07	53	8	3,624	2,166	1,457.63
1659+75(2)	25.00	57.69	8.70	53	7	3,676	2,175	1,501.28
1660+00(2)	25.00	60.99	12.15	55	10	3,731	2,187	1,544.16
1660+25(2)	25.00	37.23	11.43	45	11	3,777	2,201	1,575.99
1660+50(2)	25.00	37.28	12.96	34	11	3,811	2,215	1,596.36
1660+75(2)	25.00	37.25	12.07	35	12	3,846	2,229	1,616.38
1661+00(2)	25.00	60.89	21.49	45	16	3,891	2,249	1,642.40
1661+25(2)	25.00	59.92	14.64	56	17	3,947	2,270	1,677.42
1661+50(2)	25.00	59.41	16.28	55	14	4,002	2,288	1,714.77
1661+75(2)	25.00	62.87	4.65	57	10	4,059	2,300	1,759.27
1662+00(2)	25.00	59.96	7.32	57	6	4,116	2,307	1,809.21
1662+25(2)	25.00	60.35	6.01	56	6	4,172	2,314	1,857.20
1662+50(2)	25.00	68.73	11.49	60	8	4,231	2,325	1,906.83
1662+75(2)	25.00	58.32	10.53	59	10	4,290	2,337	1,952.90
1663+00(2)	25.00	56.12	15.88	53	12	4,343	2,353	1,990.60
1663+25(2)	25.00	55.33	27.85	52	20	4,395	2,378	2,016.90
1663+50(2)	25.00	54.93	24.93	51	24	4,446	2,408	2,037.40
1663+75(2)	25.00	54.19	28.75	51	25	4,496	2,440	2,056.86
1664+00(2)	25.00	52.79	25.13	50	25	4,546	2,471	2,075.21
1664+25(2)	25.00	51.65	26.46	48	24	4,594	2,501	2,093.70
1664+50(2)	25.00	51.89	6.04	48	15	4,642	2,519	2,122.83
1664+75(2)	25.00	54.88	4.37	49	5	4,692	2,525	2,166.23
1665+00(2)	25.00	54.55	15.18	51	9	4,742	2,537	2,205.58
1665+25(2)	25.00	53.82	19.33	50	16	4,792	2,557	2,235.78
1665+50(2)	25.00	53.25	18.80	50	18	4,842	2,579	2,263.28
1665+75(2)	25.00	56.52	16.61	51	16	4,893	2,599	2,293.61
1666+00(2)	25.00	55.64	2.87	52	9	4,945	2,610	2,334.26
1666+25(2)	25.00	54.46	1.75	51	2	4,996	2,613	2,382.55
1666+50(2)	25.00	56.10	6.23	51	4	5,047	2,618	2,429.12
1666+75(2)	25.00	57.97	2.80	53	4	5,100	2,623	2,476.71
1666+93.57(2)	18.57	29.75	0.41	30	1	5,130	2,624	2,505.50
	SUBTOTAL			**1,560**	**375**			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
72+50(3)	0.00	25.64	0.00	0	0	0	0	0.00
73+00(3)	50.00	26.05	0.00	48	0	48	0	47.86
73+50(3)	50.00	24.50	0.03	47	0	95	0	94.62
74+00(3)	50.00	30.03	0.00	50	0	145	0	145.07
74+50(3)	50.00	26.03	2.80	52	3	197	3	193.74
75+00(3)	50.00	27.51	3.80	50	6	247	11	235.68
75+50(3)	50.00	24.19	3.72	48	7	295	20	274.85
76+00(3)	50.00	41.71	0.00	61	3	356	24	331.57
76+52.74(3)	52.74	26.22	7.71	66	8	422	33	388.51
77+00(3)	47.26	31.71	1.43	51	8	473	43	429.21
77+50(3)	50.00	46.26	0.00	72	1	545	45	499.75
78+00(3)	50.00	9.60	0.00	52	0	596	45	551.47
78+50(3)	50.00	26.96	0.85	34	1	630	46	584.33
79+00(3)	50.00	23.79	4.19	47	5	677	52	625.48
79+50(3)	50.00	22.62	11.61	43	15	720	70	650.16
80+00(3)	50.00	0.00	0.00	21	11	741	84	657.67
		SUBTOTAL		**741**	**67**			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT	FILL	
						1.00	1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
92+42(3)	0.00	40.27	43.87	0	0	0	0	0.00
93+00(3)	58.00	46.27	30.86	93	80	93	100	-7.37
93+50(3)	50.00	46.15	36.41	86	62	179	178	0.35
94+00(3)	50.00	46.49	35.53	86	67	264	261	2.87
94+50(3)	50.00	65.25	23.35	103	55	368	330	38.18
95+00(3)	50.00	48.27	31.38	105	51	473	393	79.94
95+50(3)	50.00	46.05	50.81	87	76	560	488	72.15
96+00(3)	50.00	45.14	71.31	84	113	645	629	15.26
96+50(3)	50.00	40.31	102.67	79	161	724	831	-106.99
97+00(3)	50.00	47.11	121.47	81	208	805	1,090	-285.48
97+50(3)	50.00	50.39	142.65	90	245	895	1,396	-500.90
98+00(3)	50.00	49.51	119.53	93	243	987	1,699	-711.86
98+50(3)	50.00	41.97	116.50	85	219	1,072	1,973	-900.35
99+00(3)	50.00	46.36	36.70	82	142	1,154	2,150	-995.89
99+50(3)	50.00	39.95	51.17	80	81	1,234	2,252	-1,017.68
100+00(3)	50.00	54.09	28.29	87	74	1,321	2,344	-1,022.57
100+50(3)	50.00	54.80	34.96	101	59	1,422	2,417	-994.95
101+00(3)	50.00	85.84	37.63	130	67	1,552	2,501	-948.74
101+50(3)	50.00	78.11	34.11	152	66	1,704	2,584	-879.96
102+00(3)	50.00	103.73	29.10	168	59	1,872	2,657	-784.74
102+50(3)	50.00	121.42	22.88	208	48	2,081	2,717	-636.44
103+00(3)	50.00	142.37	20.31	244	40	2,325	2,767	-442.17
103+50(3)	50.00	145.50	17.16	267	35	2,591	2,810	-218.99
104+00(3)	50.00	115.19	15.01	241	30	2,833	2,848	-14.85
104+50(3)	50.00	63.52	19.18	165	32	2,998	2,887	111.05
105+00(3)	50.00	52.96	21.22	108	37	3,106	2,934	172.14
105+50(3)	50.00	63.38	14.35	108	33	3,214	2,975	238.69
106+00(3)	50.00	54.51	21.31	109	33	3,323	3,016	306.59
		SUBTOTAL		**3,214**	**2,413**			CONTINUED

EARTHWORK DETAIL - USH 141

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT	FILL	
						1.00	1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
106+50(3)	50.00	81.68	28.78	126	46	3,449	3,074	374.71
107+00(3)	50.00	78.27	40.57	148	64	3,597	3,155	442.54
107+50(3)	50.00	59.92	55.02	128	89	3,725	3,265	459.86
108+00(3)	50.00	126.63	62.51	173	109	3,898	3,401	496.55
108+50(3)	50.00	158.36	67.40	264	120	4,162	3,552	610.06
109+00(3)	50.00	60.43	66.69	203	124	4,364	3,707	657.45
109+50(3)	50.00	48.01	81.74	100	137	4,465	3,879	586.05
110+00(3)	50.00	48.12	90.40	89	159	4,554	4,078	475.82
110+50(3)	50.00	54.06	78.94	95	157	4,648	4,274	374.43
111+00(3)	50.00	54.29	82.55	100	150	4,749	4,461	287.84
111+50(3)	50.00	53.17	75.59	99	146	4,848	4,644	204.31
112+00(3)	50.00	51.14	82.11	97	146	4,945	4,826	118.36
112+50(3)	50.00	50.42	85.68	94	155	5,039	5,021	18.21
113+00(3)	50.00	48.91	70.45	92	145	5,131	5,201	-70.53
113+50(3)	50.00	55.02	72.65	96	133	5,227	5,367	-139.93
114+00(3)	50.00	52.65	76.85	100	138	5,327	5,540	-213.26
114+50(3)	50.00	51.06	71.11	96	137	5,423	5,711	-288.48
115+00(3)	50.00	53.50	63.11	97	124	5,520	5,867	-347.02
115+50(3)	50.00	51.35	57.76	97	112	5,617	6,007	-389.83
116+00(3)	50.00	54.03	32.39	98	83	5,714	6,111	-396.60
116+50(3)	50.00	55.54	25.74	101	54	5,816	6,178	-362.43
117+00(3)	50.00	73.13	13.59	119	36	5,935	6,224	-288.81
117+50(3)	50.00	87.54	20.47	149	32	6,084	6,263	-179.45
118+00(3)	50.00	56.23	20.27	133	38	6,217	6,310	-93.47
118+50(3)	50.00	139.20	22.61	181	40	6,398	6,360	37.87
119+00(3)	50.00	56.25	22.55	181	42	6,579	6,412	166.57
119+50(3)	50.00	50.42	33.58	99	52	6,677	6,477	200.37
120+00(3)	50.00	54.45	35.09	97	64	6,775	6,557	218.00
120+50(3)	50.00	48.36	51.66	95	80	6,870	6,657	212.79
121+00(3)	50.00	55.24	36.40	96	82	6,966	6,759	206.81
121+50(3)	50.00	55.16	49.92	102	80	7,068	6,859	209.13
122+00(3)	50.00	58.54	40.47	105	84	7,173	6,963	209.80
122+50(3)	50.00	52.04	49.80	102	84	7,276	7,068	207.72
123+00(3)	50.00	54.07	46.54	98	89	7,374	7,179	194.46
123+50(3)	50.00	59.21	31.17	105	72	7,479	7,269	209.40
124+00(3)	50.00	74.84	27.07	124	54	7,603	7,337	266.11
124+50(3)	50.00	84.82	19.54	148	43	7,751	7,391	360.00
125+00(3)	50.00	52.41	35.45	127	51	7,878	7,454	423.41
125+50(3)	50.00	52.78	28.84	97	60	7,975	7,529	446.40
126+00(3)	50.00	54.27	35.74	99	60	8,074	7,603	470.78
126+50(3)	50.00	52.02	40.07	98	70	8,173	7,691	481.46
127+00(3)	50.00	45.48	30.86	90	66	8,263	7,773	489.64
127+50(3)	50.00	50.48	35.43	89	61	8,352	7,850	501.77
127+73(3)	23.00	53.84	47.39	44	35	8,396	7,894	502.11
		SUBTOTAL		**5,073**	**3,902**			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
157+99.99(3)	0.00	60.88	11.20	0	0	0	0	0.00
158+50(3)	50.01	59.06	11.57	111	21	111	26	84.72
159+00(3)	50.00	55.77	12.56	106	22	217	54	163.12
159+50(3)	50.00	51.15	14.37	99	25	316	85	230.95
160+00(3)	50.00	54.22	16.45	98	29	414	121	292.83
160+50(3)	50.00	50.38	15.95	97	30	511	159	352.18
161+00(3)	50.00	54.19	12.61	97	26	608	192	415.95
161+50(3)	50.00	51.72	13.32	98	24	706	222	484.01
162+00(3)	50.00	56.67	12.81	100	24	806	252	554.13
162+50(3)	50.00	54.80	12.39	103	23	909	281	628.18
163+00(3)	50.00	54.34	12.13	101	23	1,010	309	700.85
163+50(3)	50.00	52.00	12.09	98	22	1,109	338	771.29
164+00(3)	50.00	52.77	13.28	97	23	1,206	367	838.93
164+50(3)	50.00	55.71	11.33	100	23	1,306	395	910.89
165+00(3)	50.00	52.15	13.65	100	23	1,406	424	981.85
165+50(3)	50.00	54.71	13.30	99	25	1,505	455	1,049.59
166+00(3)	50.00	54.71	14.71	101	26	1,606	488	1,118.48
166+50(3)	50.00	57.50	14.87	104	27	1,710	522	1,188.15
167+00(3)	50.00	52.55	14.84	102	28	1,812	557	1,255.67
167+50(3)	50.00	52.40	19.82	97	32	1,909	597	1,312.75
168+00(3)	50.00	52.26	19.77	97	37	2,006	642	1,363.85
168+50(3)	50.00	52.35	23.41	97	40	2,103	692	1,410.73
169+00(3)	50.00	57.13	20.27	101	40	2,205	743	1,461.55
169+50(3)	50.00	0.00	0.00	53	19	2,257	766	1,490.99
170+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
170+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
171+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
171+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
172+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
172+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
173+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
173+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
174+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
174+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
175+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
175+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
176+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
176+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
177+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
177+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
178+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
178+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
179+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
179+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
180+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
180+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
181+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
181+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
181+99.99(3)	49.99	0.00	0.00	0	0	2,257	766	1,490.99
182+50(3)	50.01	0.00	0.00	0	0	2,257	766	1,490.99
183+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
183+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
184+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
184+50(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
185+00(3)	50.00	0.00	0.00	0	0	2,257	766	1,490.99
185+32.45(3)	32.45	0.00	0.00	0	0	2,257	766	1,490.99
		SUBTOTAL		**2,257**	**613**			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT 1.00	FILL 1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
185+50(3)	0.00	43.04	29.43	0	0	0	0	0.00
186+00(3)	50.00	39.98	32.67	77	57	77	72	5.00
186+50(3)	50.00	35.68	33.73	70	61	147	149	-1.79
187+00(3)	50.00	48.63	11.99	78	42	225	202	23.36
187+50(3)	50.00	24.40	0.01	68	11	293	216	77.09
188+00(3)	50.00	40.44	3.88	60	4	353	220	132.61
188+50(3)	50.00	45.65	14.45	80	17	432	241	191.10
189+00(3)	50.00	38.83	20.44	78	32	511	282	228.94
189+50(3)	50.00	35.39	14.23	69	32	579	322	257.53
190+00(3)	50.00	36.61	6.86	67	20	646	346	299.79
190+50(3)	50.00	38.04	1.37	69	8	715	356	359.40
191+00(3)	50.00	68.04	0.00	98	1	813	357	456.04
191+50(3)	50.00	56.42	0.00	115	0	929	357	571.28
192+00(3)	50.00	51.62	0.55	100	1	1,029	358	670.68
192+50(3)	50.00	50.14	1.15	94	2	1,123	360	762.94
		SUBTOTAL		**1,123**	**288**			

EARTHWORK DETAIL - USH 141

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
221+71.25(3)	0.00	0.00	0.00	0	0	0	0	0.00
221+83.97(3)	12.72	5.63	9.09	1	2	1	3	-1.35
222+50(3)	66.03	32.38	2.94	46	15	48	21	26.74
223+00(3)	50.00	36.42	0.00	64	3	112	24	87.04
223+49.91(3)	49.91	30.72	0.77	62	1	174	25	148.20
223+75.12(3)	25.22	32.39	5.23	29	3	203	29	174.16
224+00(3)	24.88	35.86	2.04	31	3	234	33	201.42
224+50(3)	50.00	35.32	1.07	66	3	300	37	263.73
225+00(3)	50.00	34.11	0.84	64	2	365	39	325.80
225+75.01(3)	75.01	35.31	2.74	96	5	461	45	416.01
226+25(3)	49.99	34.95	2.81	65	5	526	52	474.63
226+76.63(3)	51.63	32.24	11.04	64	13	590	68	522.32
227+00(3)	23.37	54.81	0.04	38	5	628	74	554.01
227+50(4)	43.55	30.13	0.00	69	0	697	74	622.47
227+99.97(4)	49.97	6.52	0.00	34	0	730	74	656.39
228+33.01(4)	33.04	33.04	40.30	24	25	755	105	649.77
228+50(4)	16.99	33.39	37.36	21	24	776	135	640.13
229+00(4)	50.00	30.89	23.40	60	56	835	206	629.32
229+39.7(4)	39.70	30.46	15.52	45	29	880	242	638.65
230+00(4)	60.30	8.43	0.10	43	17	924	263	660.27
230+50(4)	50.00	7.95	0.00	15	0	939	263	675.33
231+00(4)	50.00	9.54	0.03	16	0	955	264	691.49
231+50(4)	50.00	6.18	0.20	15	0	970	264	705.78
232+00(4)	50.00	9.35	0.00	14	0	984	264	719.93
232+28.67(4)	28.67	8.46	0.03	9	0	993	264	729.36
		SUBTOTAL		**993**	**211**			

EARTHWORK DETAIL - BEAMGUARD (PESHITIGO RIVER)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
1616+24.85(1)	0.00	6.65	42.47	0	0	0	0	0.00
1616+55(1)	30.15	3.37	4.56	6	26	6	33	-27.24
1616+84(1)	29.00	6.24	0.72	5	3	11	36	-25.62
1617+09(1)	25.00	8.34	0.00	7	0	18	37	-19.29
1618+09(1)	100.00	8.26	5.43	31	10	48	49	-1.11
1618+62.62(1)	53.62	10.91	39.81	19	45	67	106	-38.24
1618+78(1)	15.38	3.54	58.96	4	28	71	141	-69.29
1619+06.02(1)	28.02	5.11	73.87	4	69	76	227	-150.97
1619+30.9(1)	24.87	5.45	48.35	5	56	81	297	-216.47
1620+00(1)	69.10	22.58	0.64	36	63	117	376	-258.94
1620+31(1)	31.00	13.27	1.40	21	1	137	377	-239.82
1620+47.47(1)	16.47	28.18	0.95	13	1	150	378	-228.08
			SUBTOTAL	**150**	**302**			

EARTHWORK DETAIL - BEAMGUARD (SMITH CREEK)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
84+24.8(3)	0.00	22.43	3.78	0	0	0	0	0.00
84+50(3)	25.20	17.91	2.78	19	3	19	4	15.00
84+92.39(3)	42.39	19.62	3.18	29	5	48	10	38.61
85+08.12(3)	15.73	25.99	4.66	13	2	62	13	49.04
85+58.52(3)	50.40	22.57	6.31	45	10	107	25	81.57
85+90.98(3)	32.46	17.80	13.67	24	12	131	40	90.82
86+42.38(3)	51.40	35.47	26.50	51	38	182	88	93.74
87+00(3)	57.62	76.84	0.00	120	28	302	123	178.24
87+25.34(3)	25.34	31.24	21.90	51	10	352	136	216.10
87+30.01(3)	4.67	34.99	12.35	6	3	358	140	218.13
87+98.9(3)	68.89	41.14	18.64	97	40	455	189	265.83
88+34.87(3)	35.97	21.04	8.46	41	18	497	212	284.68
89+21.87(3)	87.00	19.09	9.14	65	28	561	247	313.91
89+28(3)	6.13	20.21	5.50	4	2	566	250	316.29
90+25.03(3)	97.03	38.95	13.29	106	34	672	292	380.38
			SUBTOTAL	**672**	**233**			

EARTHWORK DETAIL - USH 141 AND BEAMGUARD (MIDDLE INLET CREEK)

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT	FILL	
						1.00	1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
192+67.73(3)	0.00	6.91	0.26	0	0	0	0	0.00
193+68.33(3)	100.59	7.74	16.30	27	31	27	39	-11.27
193+93.28(3)	24.95	8.07	15.11	7	15	35	57	-22.11
194+21.26(3)	27.98	11.40	34.12	10	26	45	89	-43.89
194+68.29(3)	47.03	8.47	64.84	17	86	62	196	-134.32
194+92.99(3)	24.70	5.89	1.89	7	31	69	234	-165.90
195+21.92(3)	28.93	15.72	21.96	12	13	80	250	-170.30
195+49.95(3)	28.03	13.96	25.84	15	25	96	281	-185.91
196+00(3)	50.05	16.91	6.77	29	30	124	319	-195.08
197+04.51(3)	104.51	14.74	89.89	61	187	185	553	-367.70
198+08.72(3)	104.21	15.37	75.36	58	319	244	952	-708.24
198+50(3)	41.28	14.31	40.74	23	89	266	1,063	-796.49
199+00(3)	50.00	11.18	34.53	24	70	290	1,150	-860.00
199+50(3)	50.00	9.37	32.52	19	62	309	1,227	-918.58
199+88.01(3)	38.01	18.28	25.50	19	41	328	1,278	-950.16
200+85.92(3)	97.92	5.07	36.22	42	112	371	1,418	-1,047.73
201+11.31(3)	25.39	9.18	34.91	7	33	377	1,460	-1,082.83
201+38(3)	26.69	13.04	43.26	11	39	388	1,508	-1,120.15
201+67.74(3)	29.74	9.10	43.51	12	48	401	1,568	-1,167.68
202+00(3)	32.26	5.60	51.57	9	57	409	1,639	-1,229.90
202+38.75(3)	38.75	6.34	39.32	9	65	418	1,721	-1,302.85
202+99.4(3)	60.65	6.66	9.43	15	55	432	1,789	-1,356.70
		SUBTOTAL		432	1,431			

EARTHWORK DETAIL - FINNELLI AVE

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT	FILL	
						1.00	1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
10+34.45	0.00	137.52	0.55	0	0	0	0	0.00
10+40	5.55	87.78	13.07	23	1	23	2	21.41
10+49.55	9.55	70.88	18.52	28	6	51	9	42.49
		SUBTOTAL		**51**	**7**			

EARTHWORK DETAIL - DESCHANE ROAD

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT	FILL	
						1.00	1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
10+30	0.00	42.12	0.00	0	0	0	0	0.00
10+40	10.00	70.14	10.65	21	2	21	2	18.32
10+47.46	7.46	58.87	6.71	18	2	39	5	33.14
		SUBTOTAL		**39**	**4**			

EARTHWORK DETAIL - NOQUEBAY ROAD

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
				205.0100				
		CUT	FILL	CUT	FILL	CUT	FILL	
						1.00	1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
67+34.49	0.00	0.28	2.32	0	0	0	0	0.00
67+35	0.51	0.35	2.80	0	0	0	0	-0.05
67+40	5.00	1.03	9.56	0	1	0	1	-1.36
67+45	5.00	3.54	7.73	0	2	1	3	-2.94
67+49.92	4.92	3.45	4.59	1	1	1	5	-3.70
67+50	0.08	3.41	4.59	0	0	1	5	-3.71
67+50.25	0.25	3.31	4.57	0	0	1	5	-3.73
68+00	49.75	1.62	0.00	5	4	6	10	-4.45
68+50	50.00	1.61	5.27	3	5	9	16	-7.57
68+57.67	7.67	1.60	6.26	0	2	9	18	-9.16
		SUBTOTAL		**9**	**15**			

EARTHWORK DETAIL - SMITH CREEK ROAD (WEST)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
75+13.95	0.00	1.08	0.06	0	0	0	0	0.00
75+50	36.05	1.56	0.01	2	0	2	0	1.70
75+92.83	42.83	2.93	17.56	4	14	5	17	-12.15
76+00.76	7.94	2.14	19.76	1	5	6	24	-18.27
76+09.66	8.89	1.66	16.86	1	6	7	32	-25.17
76+10	0.34	1.68	16.95	0	0	7	32	-25.42
76+15	5.00	0.55	20.54	0	3	7	36	-29.55
76+20	5.00	2.05	20.11	0	4	7	41	-34.02
76+25	5.00	4.70	12.23	1	3	8	45	-37.13
76+30	5.00	7.93	1.24	1	1	9	46	-37.52
76+32.87	2.87	7.40	0.23	1	0	10	47	-36.81
		SUBTOTAL		**10**	**37**			

EARTHWORK DETAIL - SMITH CREEK ROAD (EAST)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
72+40.44	0.00	2.31	0.00	0	0	0	0	0.00
72+45	4.56	5.36	0.17	1	0	1	0	0.63
72+50	5.00	9.50	4.06	1	0	2	1	1.52
72+55	5.00	5.04	8.43	1	1	3	2	1.42
72+60	5.00	3.80	6.62	1	1	4	4	0.49
72+65	5.00	3.34	2.74	1	1	5	5	0.07
72+65.45	0.45	3.33	2.63	0	0	5	5	0.07
72+69.12	3.67	3.56	2.21	0	0	5	5	0.13
73+00	30.88	1.39	1.73	3	2	8	8	0.14
73+50	50.00	6.08	0.00	7	2	15	10	5.06
73+66.25	16.25	3.78	0.08	3	0	18	10	8.00
		SUBTOTAL		**18**	**8**			

EARTHWORK DETAIL - TOWNLINE ROAD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
78+40.55	0.00	1.42	0.88	0	0	0	0	0.00
78+45	4.45	8.27	2.04	1	0	1	0	0.50
78+50	5.00	7.31	2.18	1	0	2	1	1.45
78+55	5.00	4.65	10.65	1	1	3	2	1.07
78+60	5.00	2.25	9.94	1	2	4	5	-0.67
78+65	5.00	1.62	8.99	0	2	4	7	-2.50
78+66.36	1.36	1.48	10.26	0	0	4	7	-3.03
79+00	33.64	5.33	6.56	4	10	9	21	-11.89
79+45	45.00	1.49	0.00	6	5	14	27	-13.04
		SUBTOTAL		**14**	**22**			

EARTHWORK DETAIL - VAN ROAD

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME 205.0100 FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
86+54.42	0.00	0.00	0.00	0	0	0	0	0.00
87+00	45.58	1.58	1.10	1	1	1	1	0.17
87+50	50.00	3.95	3.61	5	4	6	7	-0.16
87+58.02	8.02	8.17	1.44	2	1	8	8	0.70
87+60	1.98	8.48	1.47	1	0	9	8	1.17
87+65	5.00	10.08	2.13	2	0	11	8	2.48
87+70	5.00	11.50	3.34	2	1	13	9	3.84
87+75	5.00	10.02	1.89	2	0	15	9	5.23
87+80	5.00	5.94	0.00	1	0	16	10	6.49
87+85	5.00	2.04	0.00	1	0	17	10	7.23
87+86.98	1.98	0.98	0.00	0	0	17	10	7.34
		SUBTOTAL		**17**	**8**			

EARTHWORK DETAIL - WAYSIDE ROAD

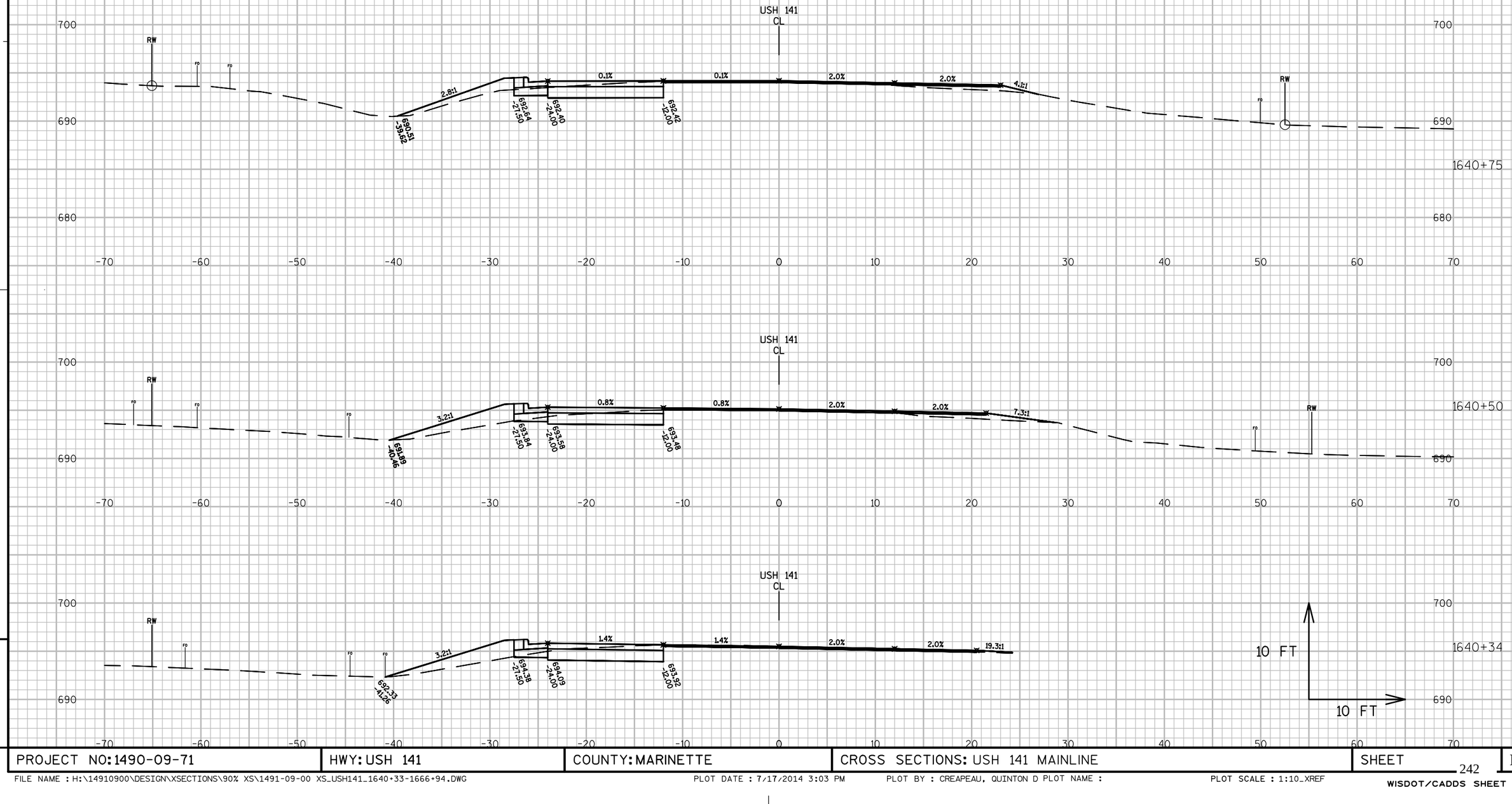
STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
		CUT	FILL	205.0100 CUT	FILL	CUT 1.00	FILL 1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
87+32	0.00	12.93	0.00	0.00	0.00	0.00	0.00	0.00
87+35	2.96	22.31	0.00	1.93	0.00	1.93	0.00	1.93
87+40	5.00	39.94	0.00	5.76	0.00	7.70	0.00	7.70
87+41	0.56	41.56	0.00	0.84	0.00	8.54	0.00	8.54
87+43	2.70	42.04	1.79	4.18	0.09	12.72	0.11	12.61
87+50	6.74	36.79	3.96	9.84	0.72	22.56	1.01	21.55
88+00	50.00	5.31	34.05	38.98	35.20	61.54	45.00	16.54
88+10	9.85	5.40	22.10	1.95	10.25	63.50	57.81	5.69
88+50	40.15	5.41	9.19	8.04	23.26	71.54	86.88	-15.35
88+74	23.65	8.75	3.68	6.20	5.64	77.74	93.93	-16.19
		SUBTOTAL		77.74	75.14			

EARTHWORK DETAIL - CTH X (WEST)

STATION	DISTANCE	END AREA		INCREMENTAL VOLUME		CUMULATIVE VOLUME		MASS ORDINATE
		CUT	FILL	205.0100 CUT	FILL	CUT 1.00	FILL 1.25	
	FT	SF	SF	CY	CY	CY	CY	CY
109+20.89	0.00	0.00	0.00	0	0	0	0	0.00
109+50	29.11	1.09	0.01	1	0	1	0	0.58
110+00	50.00	1.18	0.00	2	0	3	0	2.66
110+19.88	19.88	3.84	0.34	2	0	5	0	4.35
110+20	0.12	3.89	0.35	0	0	5	0	4.37
110+25	5.00	4.88	0.22	1	0	5	0	5.11
110+30	5.00	5.82	0.28	1	0	6	0	6.04
110+35	5.00	6.35	0.92	1	0	7	0	7.03
110+37.6	2.60	7.50	0.97	1	0	8	1	7.58
110+40	2.40	7.18	0.71	1	0	9	1	8.14
110+45	5.00	7.69	0.70	1	0	10	1	9.36
110+50	5.00	8.37	0.27	1	0	12	1	10.73
110+55	5.00	7.41	0.55	1	0	13	1	12.10
110+60	5.00	4.11	0.00	1	0	14	1	13.10
110+65	5.00	0.67	0.00	0	0	15	1	13.54
110+65.61	0.61	0.45	0.00	0	0	15	1	13.56
		SUBTOTAL		**15**	**1**			

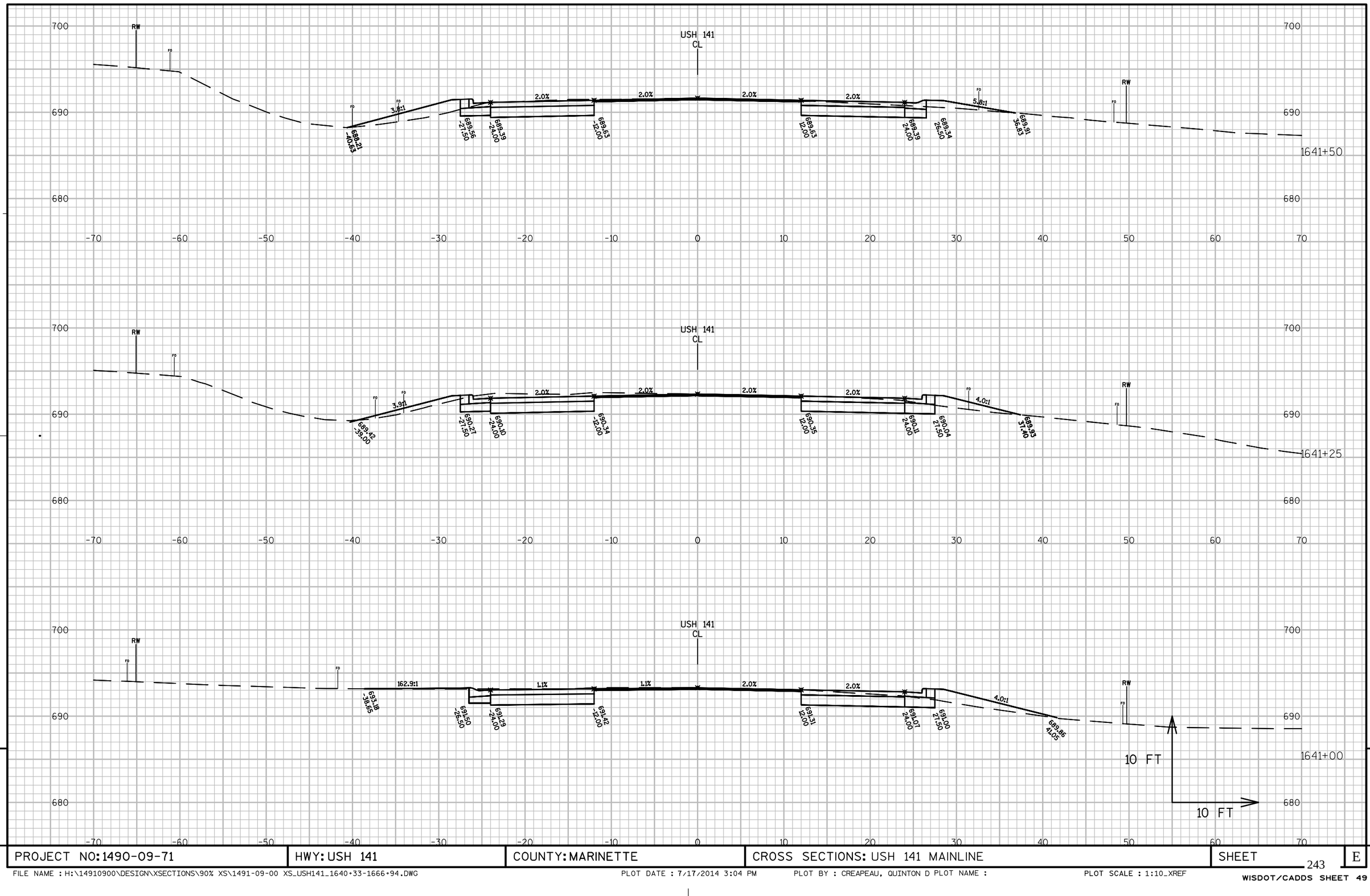
EARTHWORK DETAIL - CTH X (EAST)

STATION	DISTANCE FT	END AREA CUT SF	END AREA FILL SF	INCREMENTAL VOLUME 205.0100 CUT CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT 1.00 CY	CUMULATIVE VOLUME FILL 1.25 CY	MASS ORDINATE CY
107+76.03	0.00	1.62	0.00	0	0	0	0	0.00
107+80	3.97	6.80	0.00	1	0	1	0	0.62
107+85	5.00	9.36	1.17	1	0	2	0	1.98
107+90	5.00	12.27	12.95	2	1	4	2	2.35
107+95	5.00	10.30	16.32	2	3	6	5	1.05
107+96.38	1.38	9.97	20.99	1	1	7	6	0.37
108+00	3.62	9.59	41.24	1	4	8	12	-3.53
108+06.4	6.40	7.99	55.07	2	11	10	26	-15.70
108+06.48	0.08	8.01	54.88	0	0	10	26	-15.88
108+50	43.52	3.35	21.35	9	61	19	103	-83.53
109+00	50.00	1.95	1.27	5	21	24	129	-104.80
109+12.12	12.12	0.00	0.00	0	0	25	129	-104.72
		SUBTOTAL		**25**	**103**			



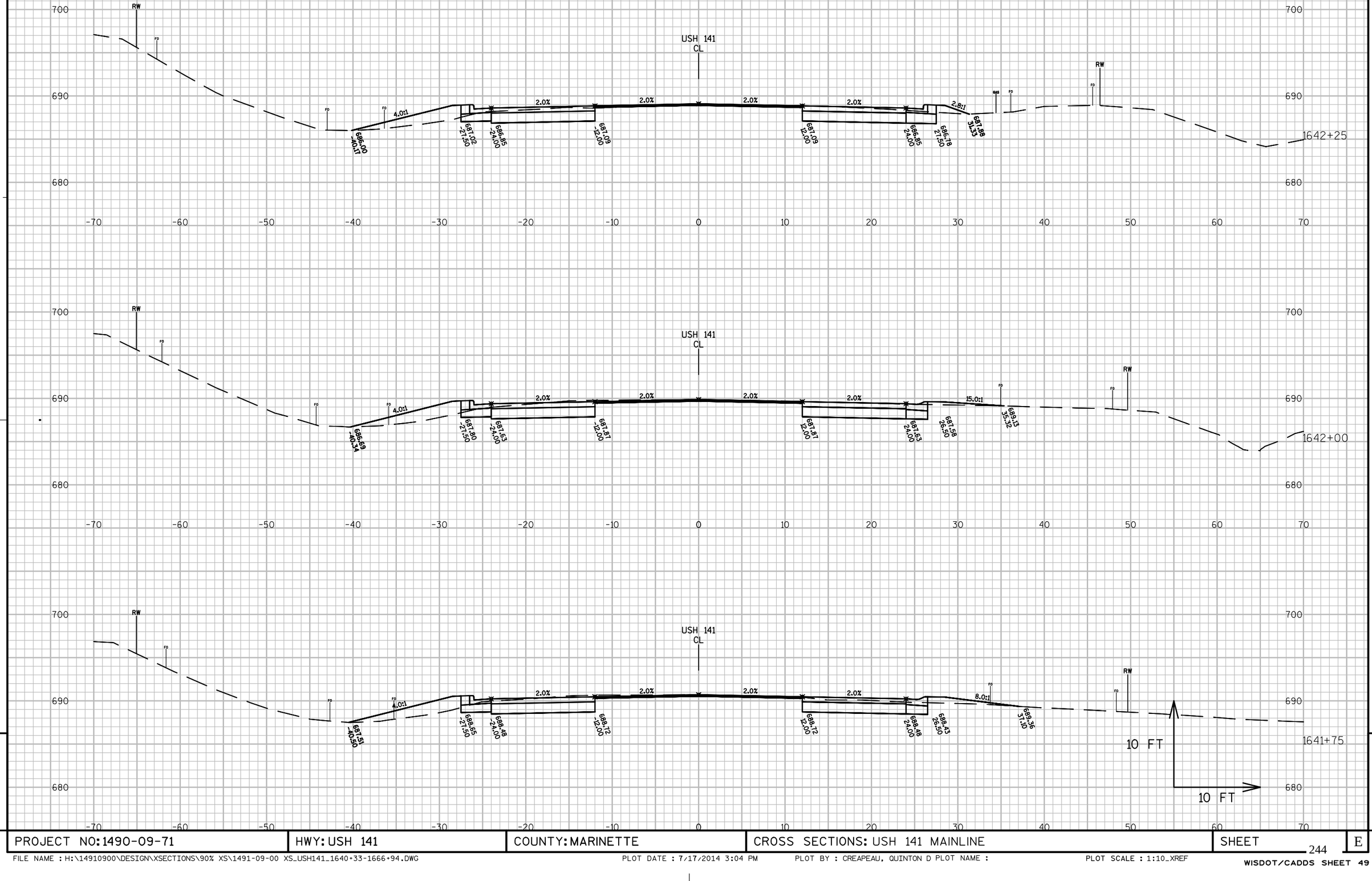
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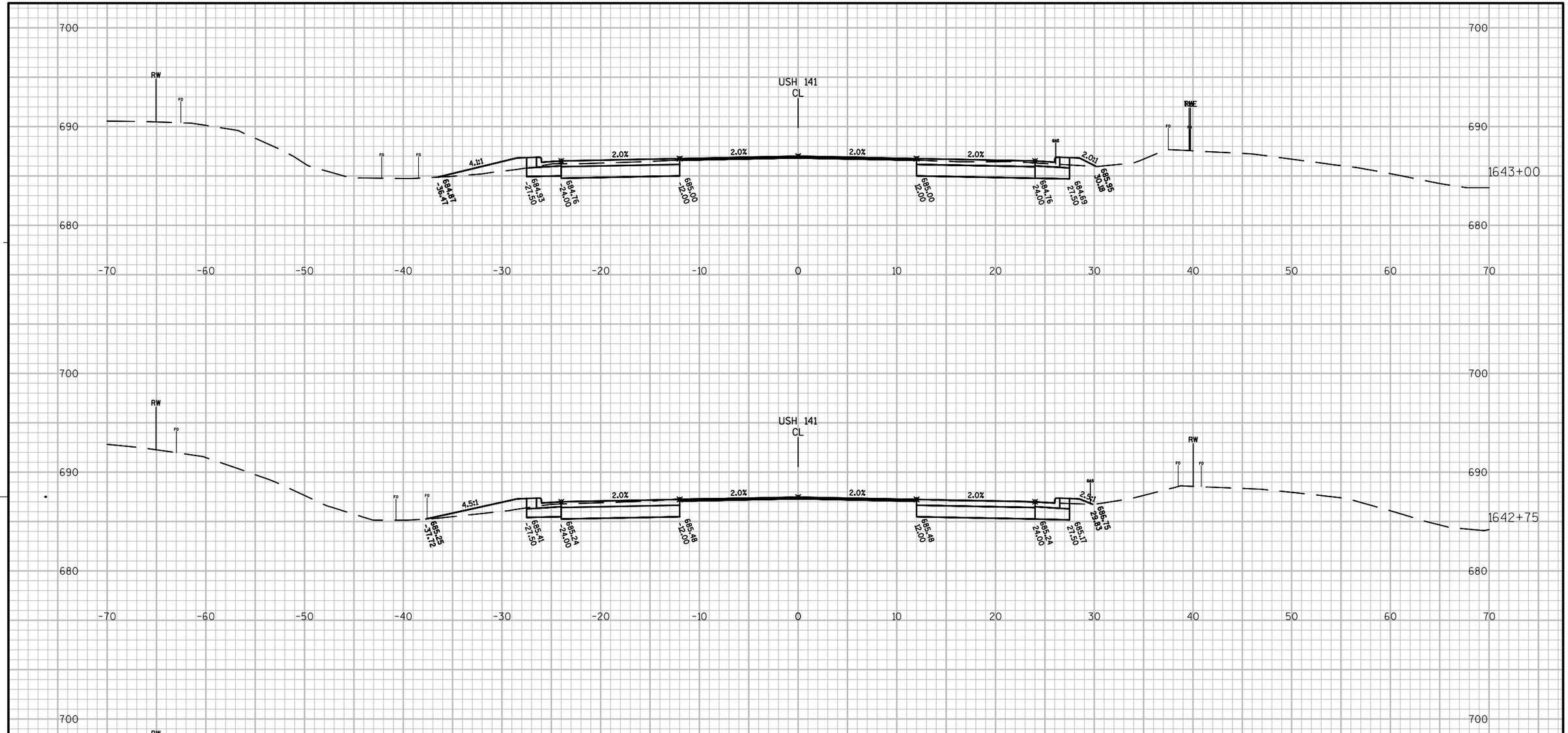


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WISDOT/CADDS SHEET 49

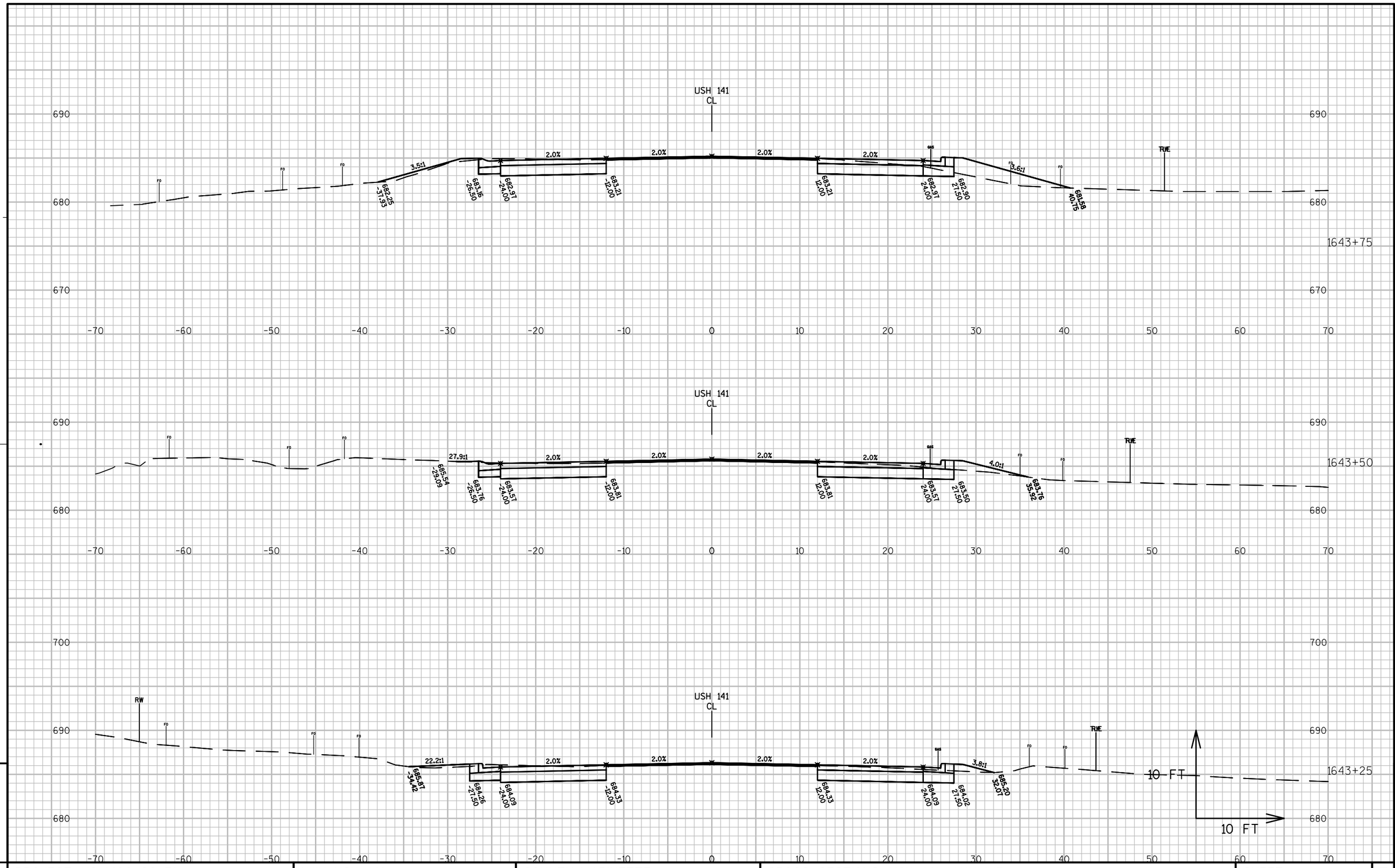


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 244	E



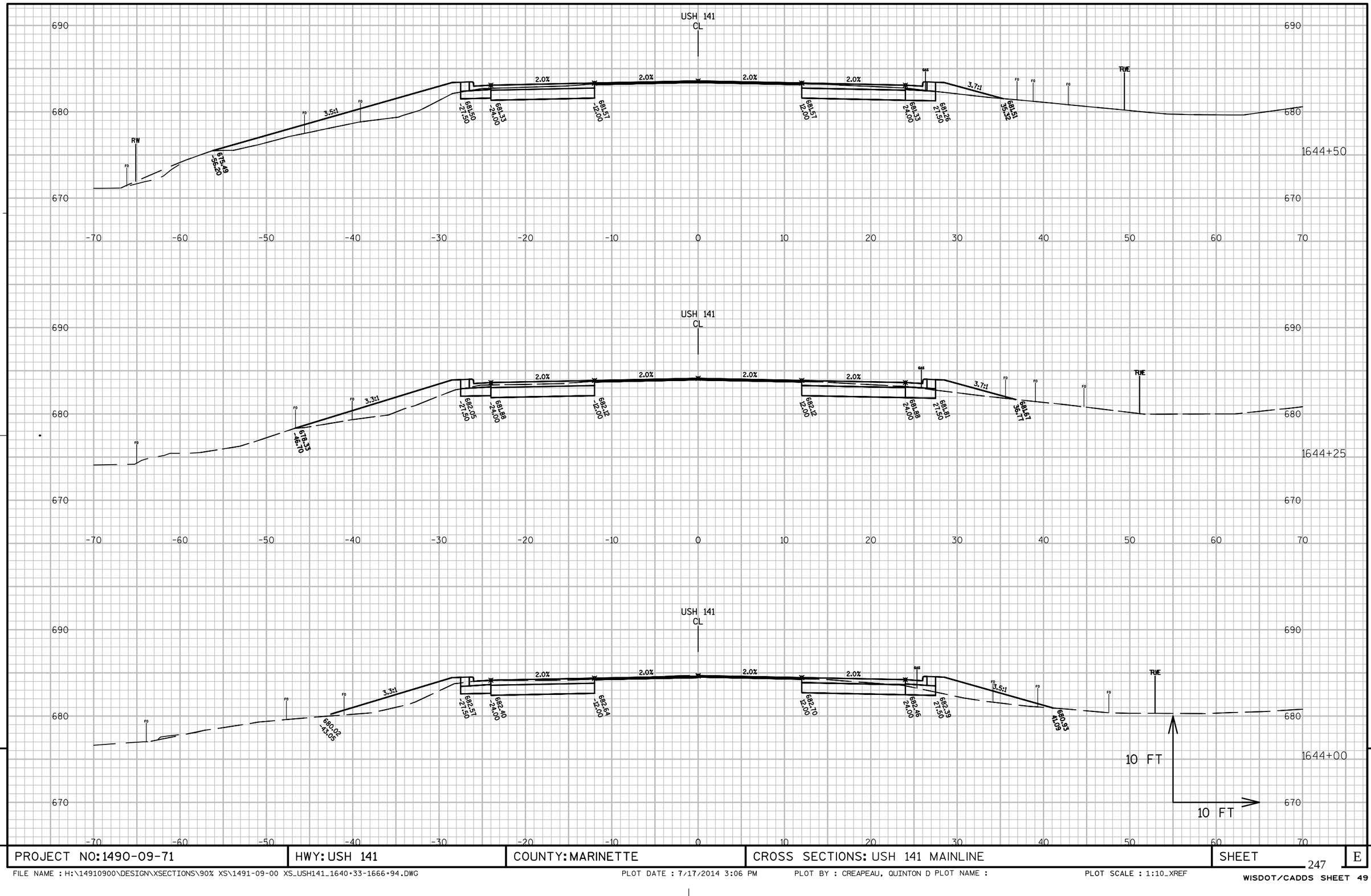
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

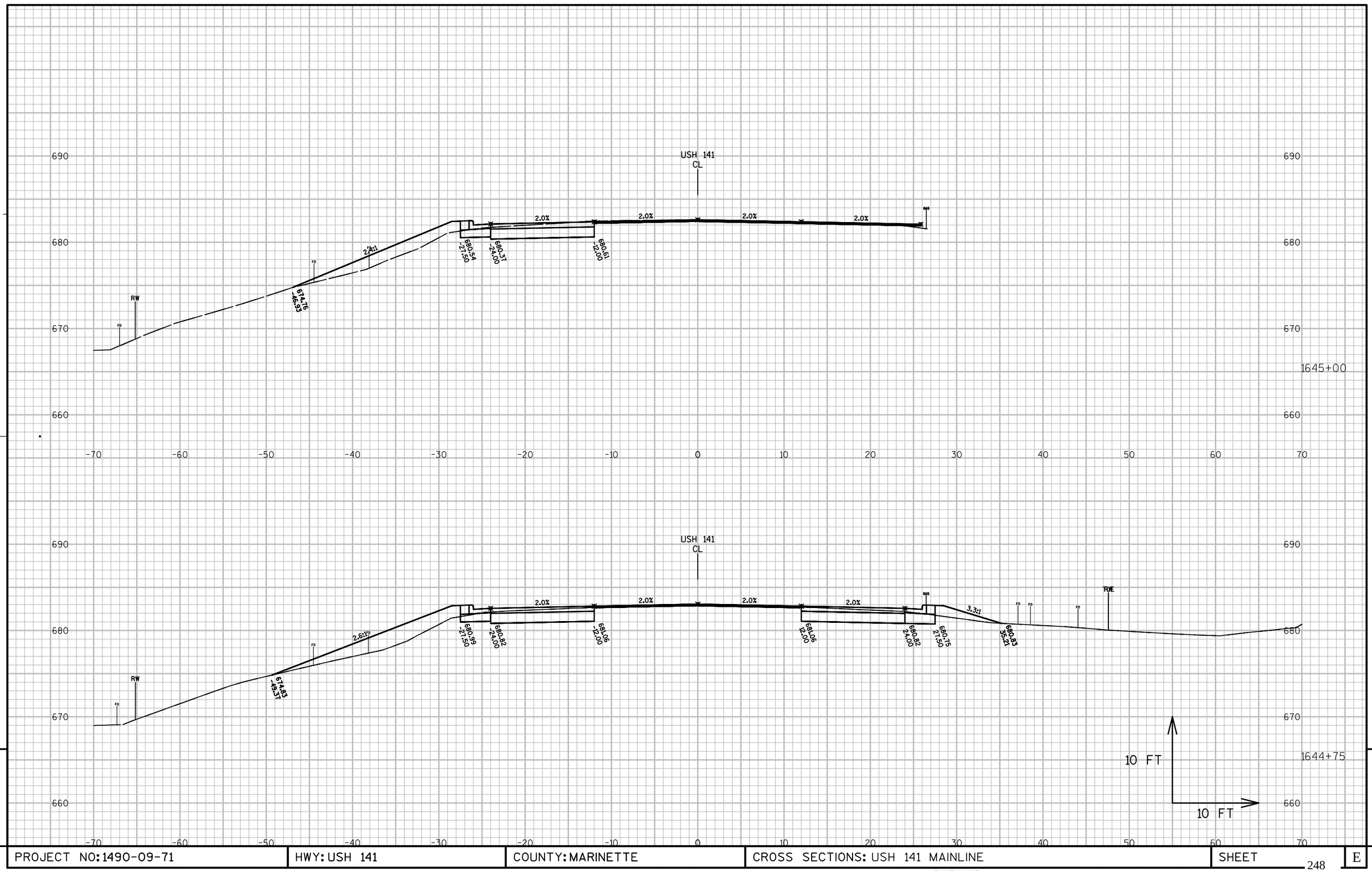


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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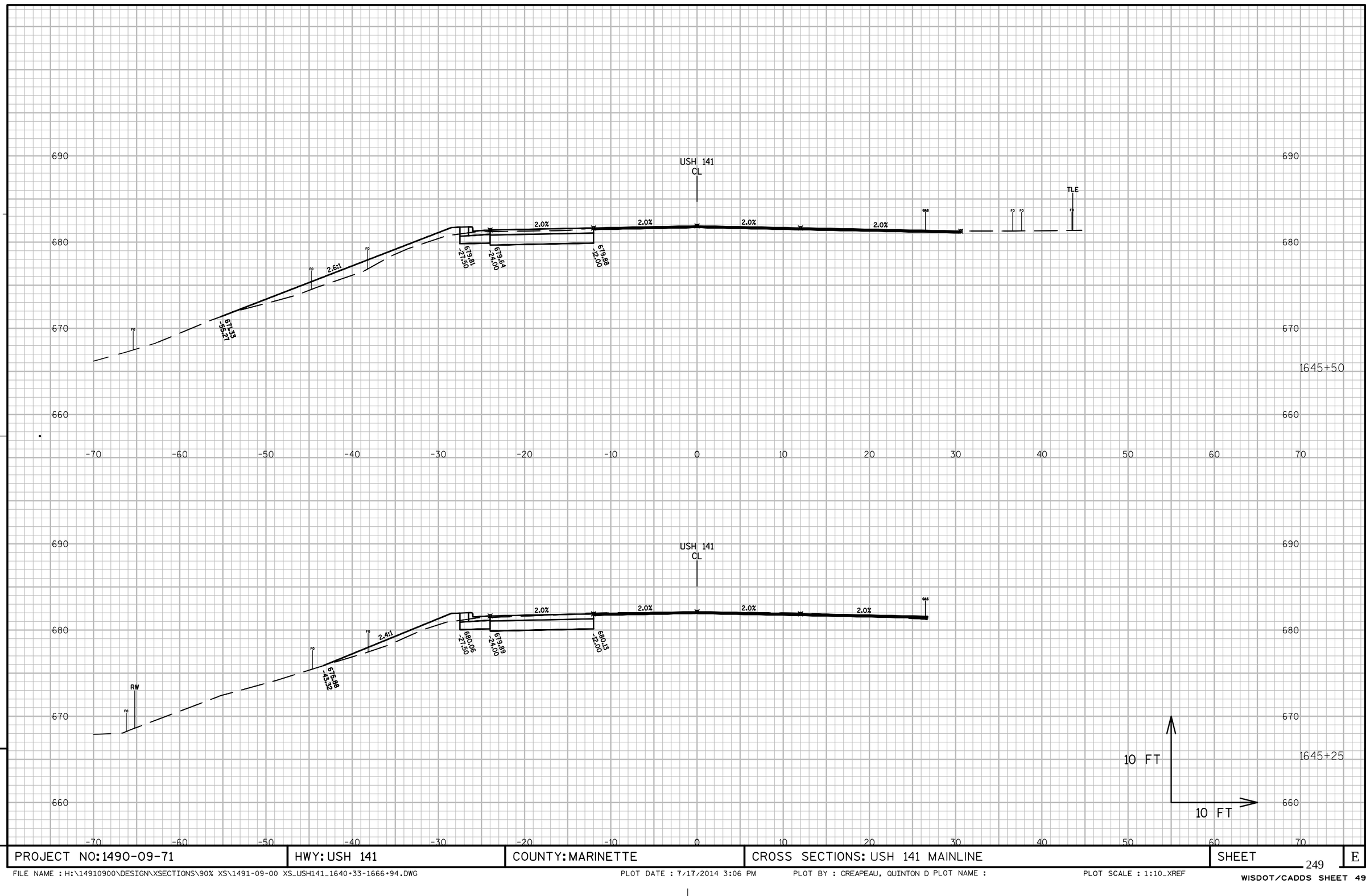


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 247	E



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

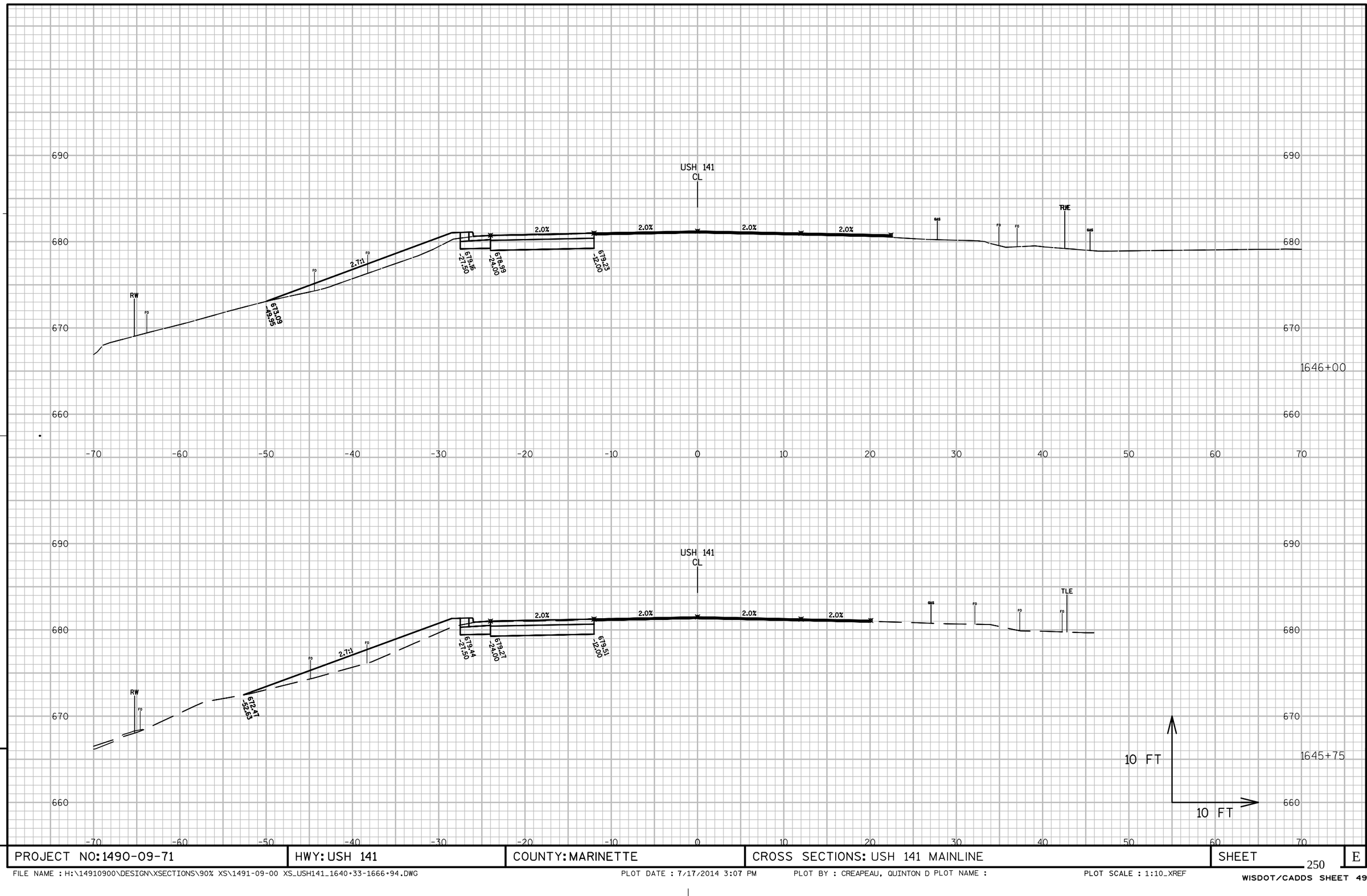
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 249	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

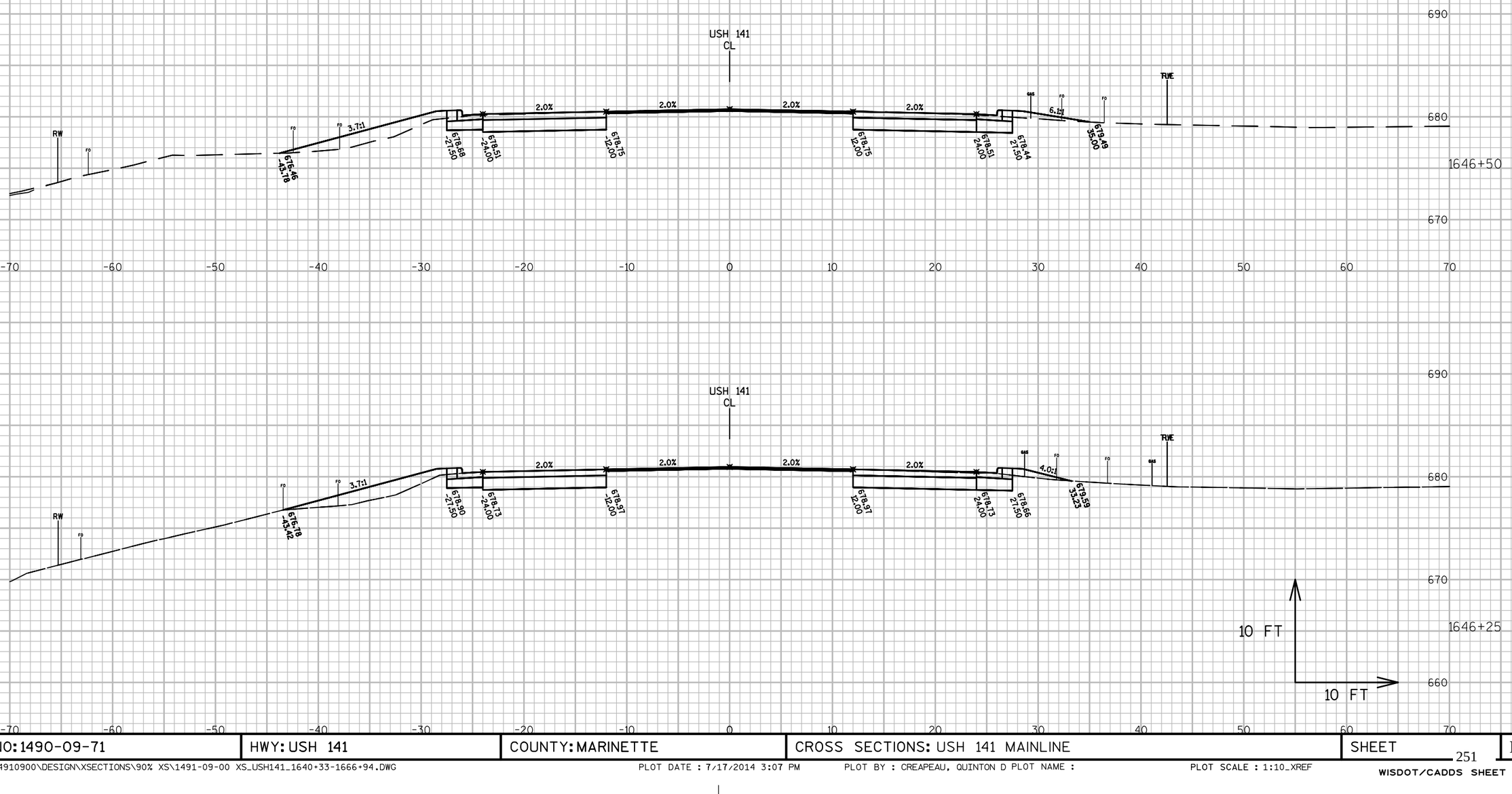
WISDOT/CADDS SHEET 49



9

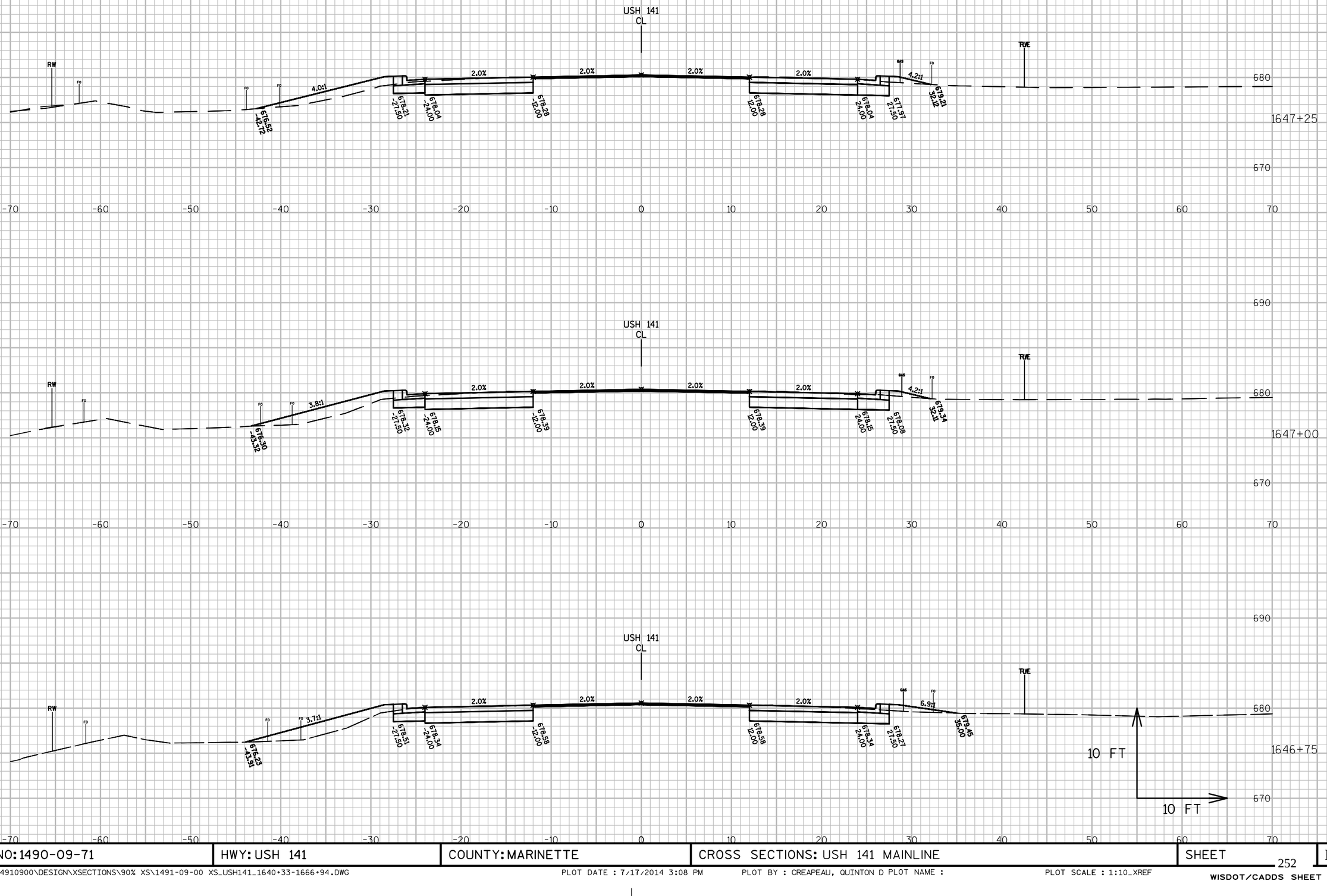
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 250	E

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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 251	E

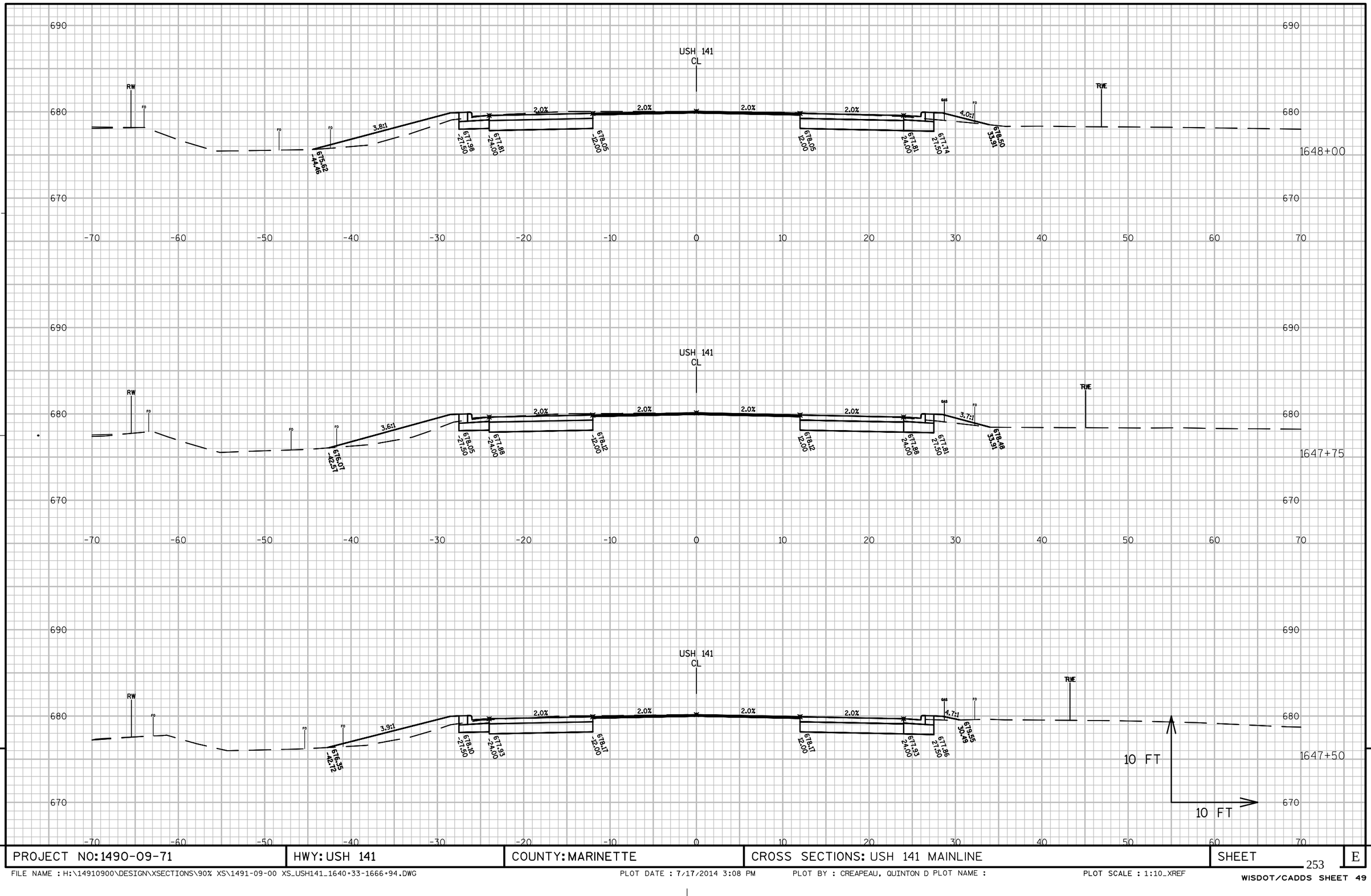
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	
				252	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:08 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

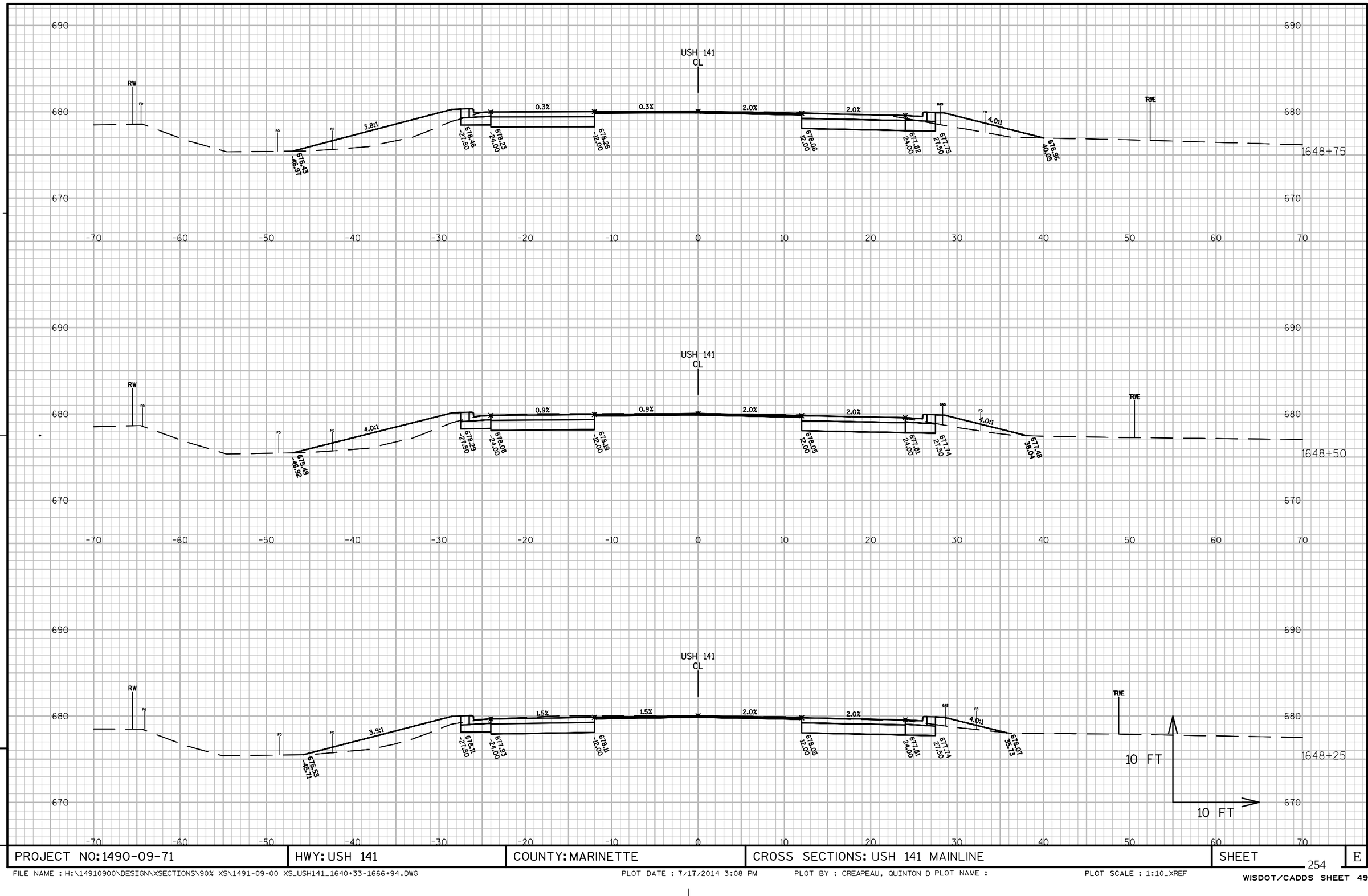
WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 253	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:08 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

WISDOT/CADDS SHEET 49



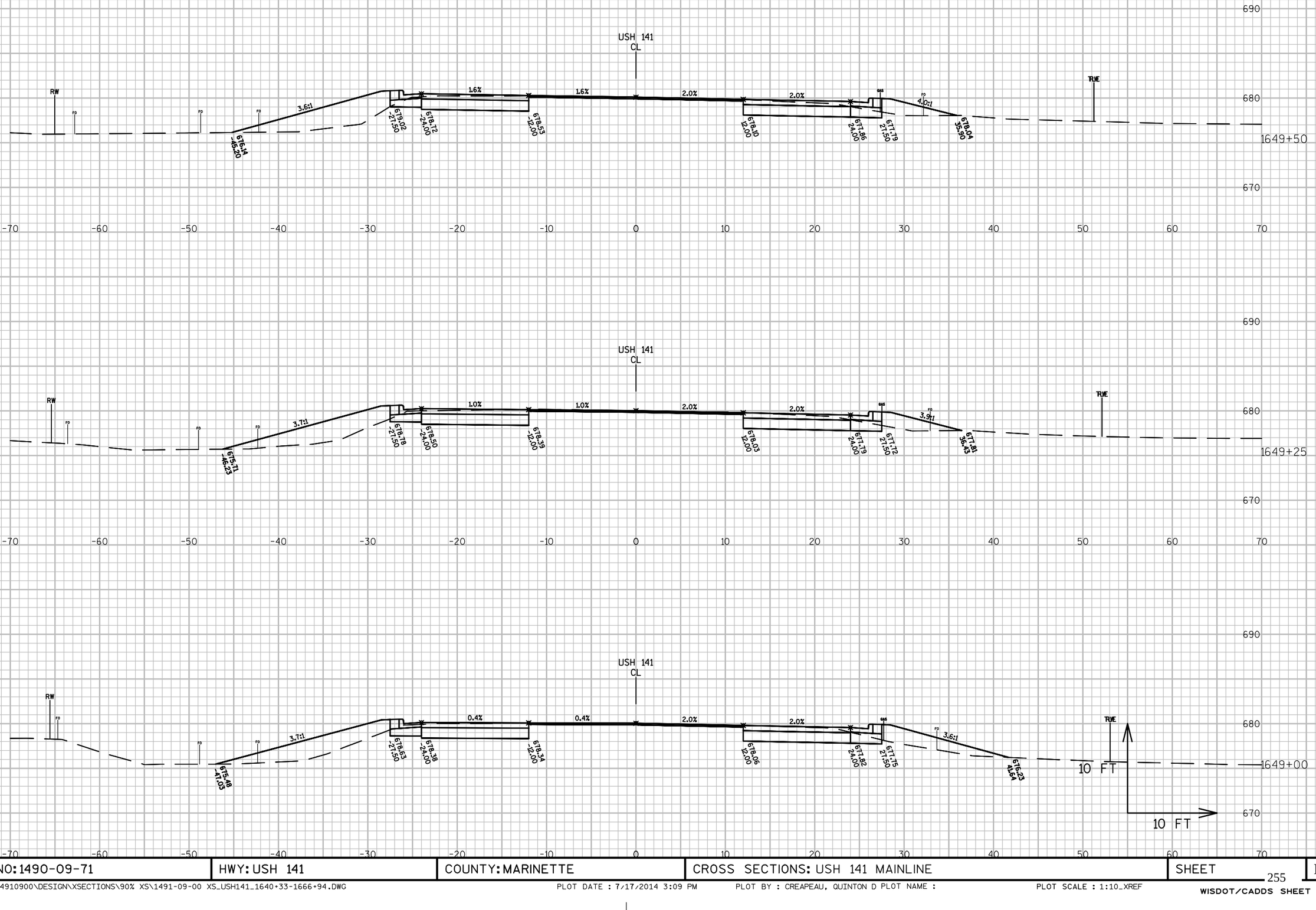
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 254	E

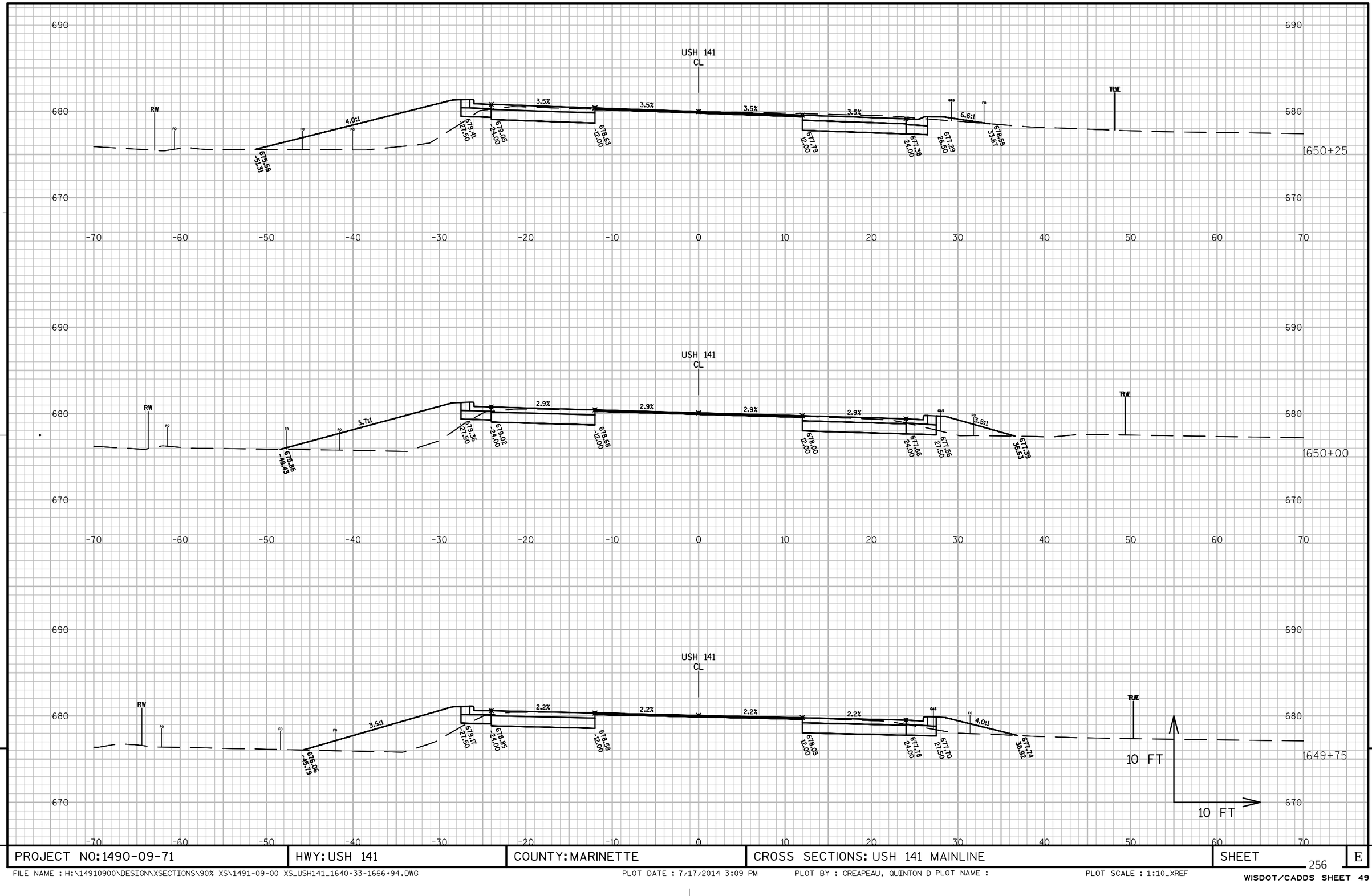
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WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 255	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:09 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

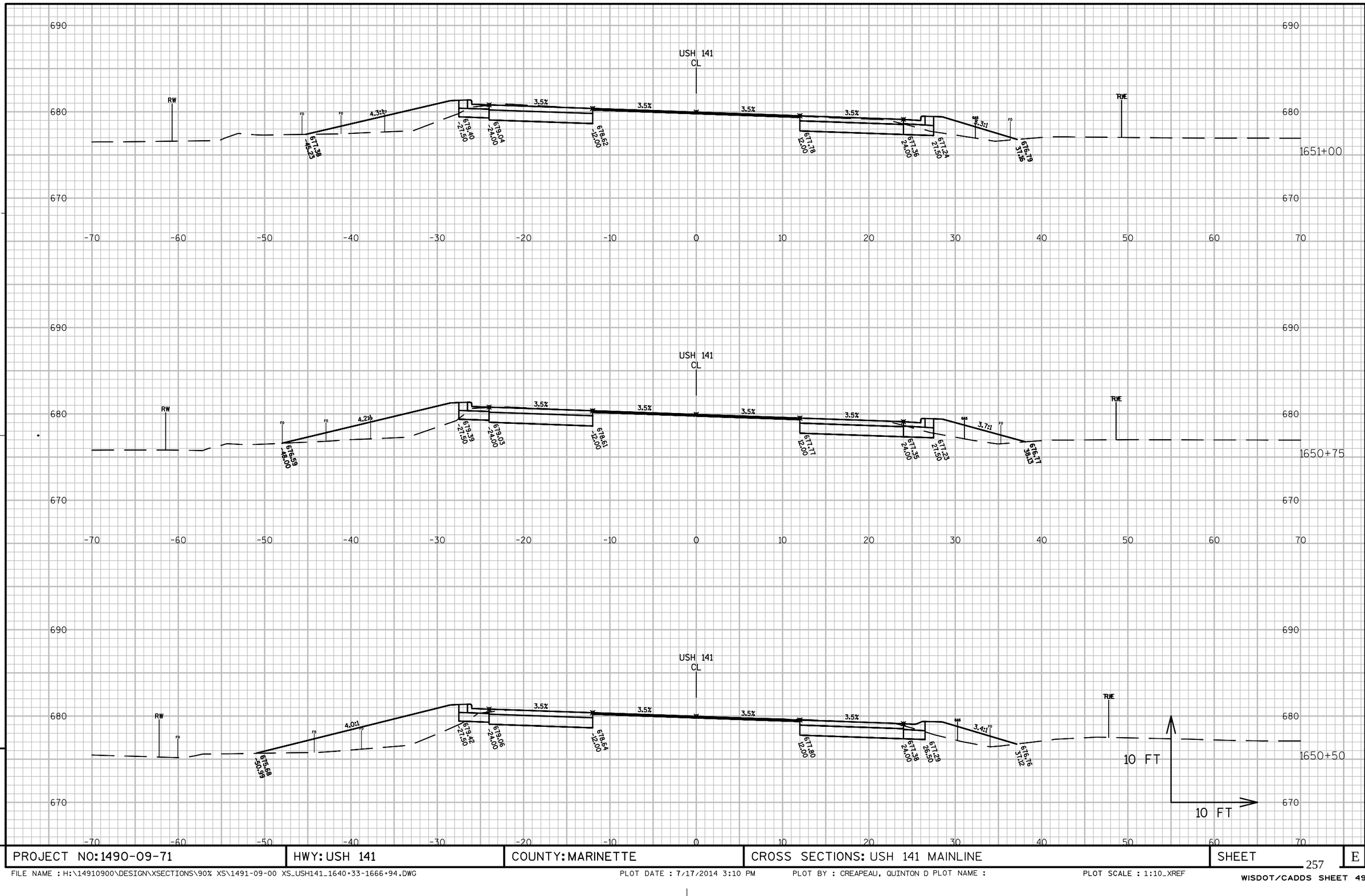


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

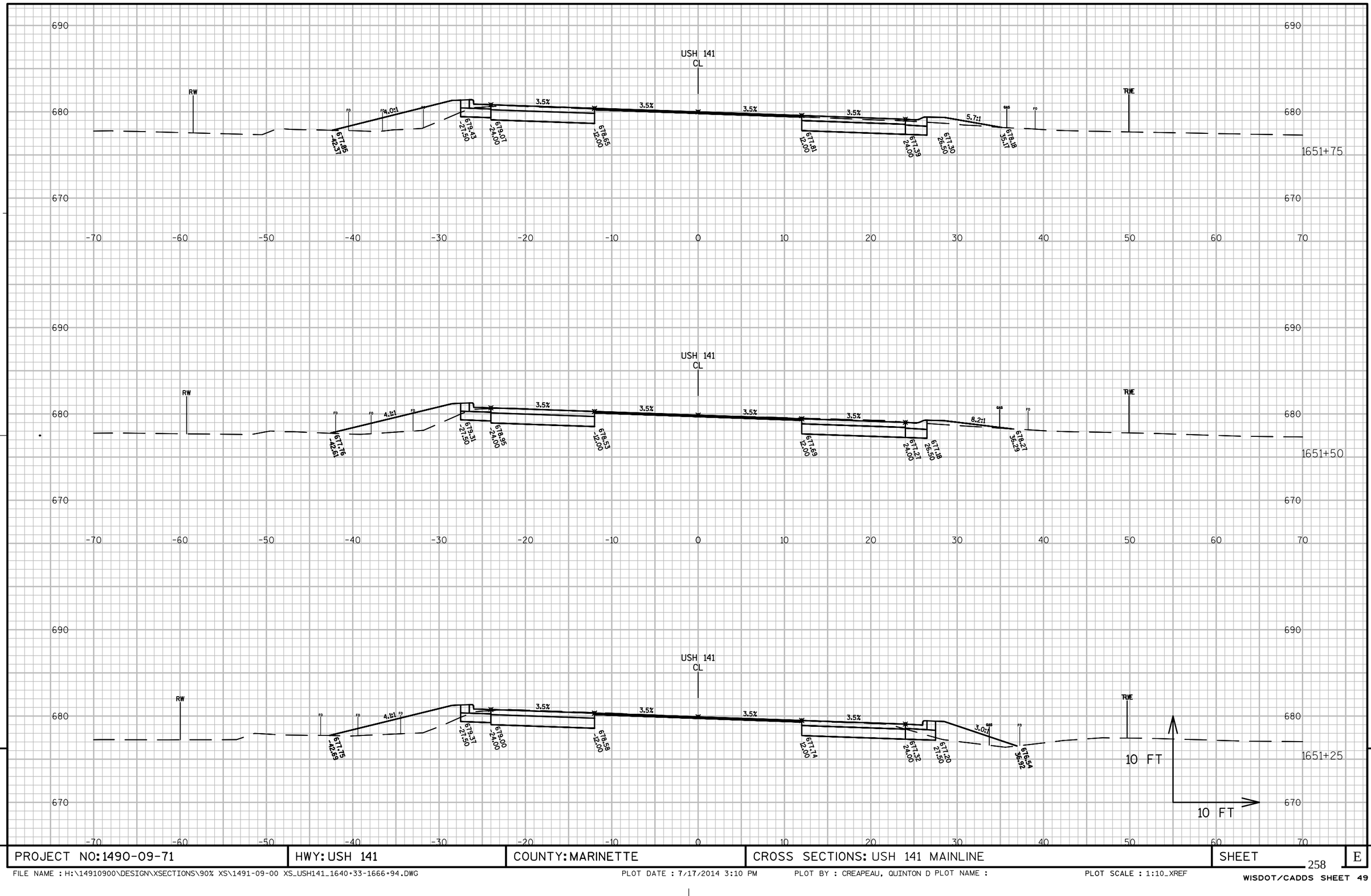
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 257	E

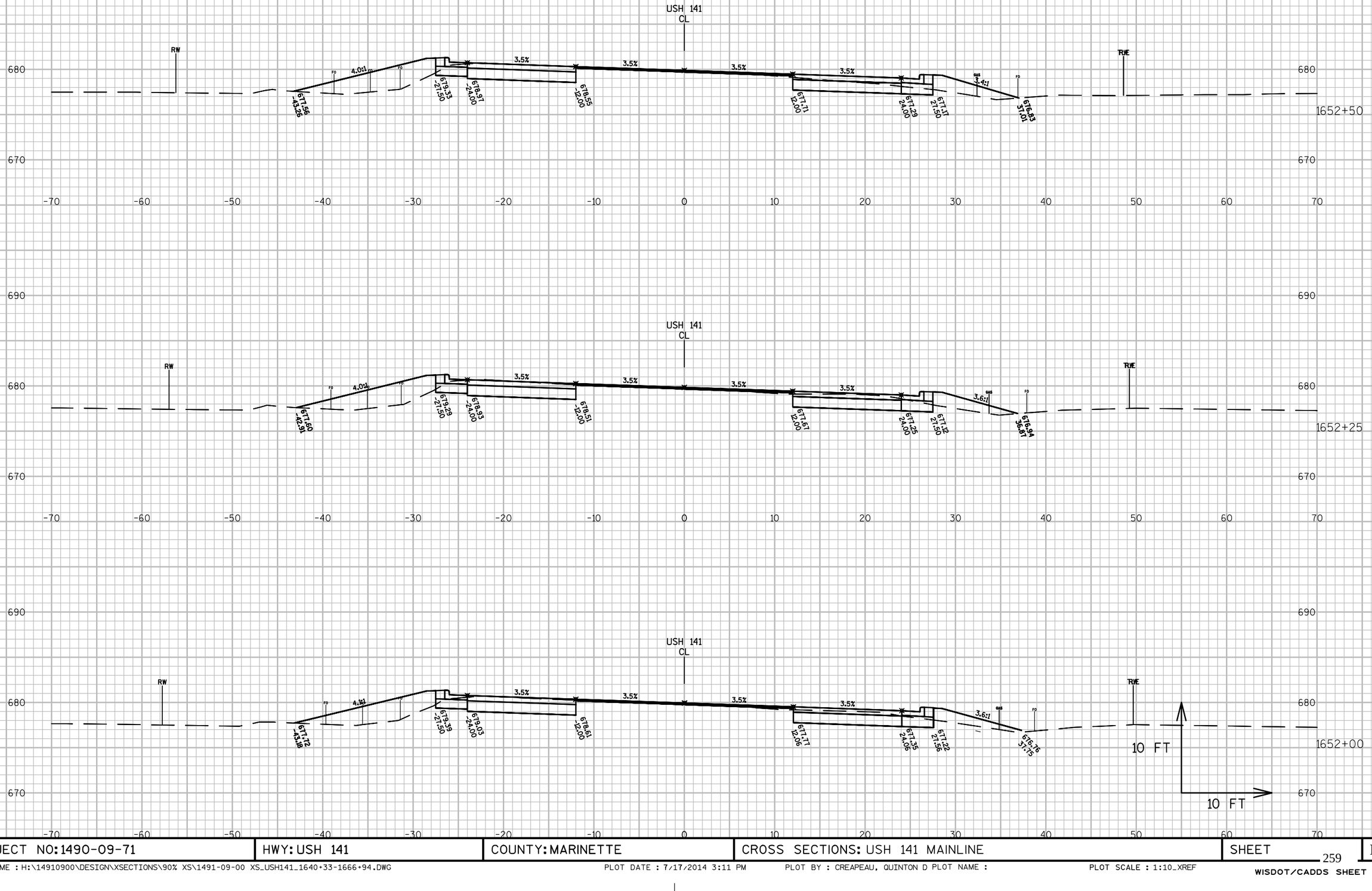
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WISDOT/CADDS SHEET 49



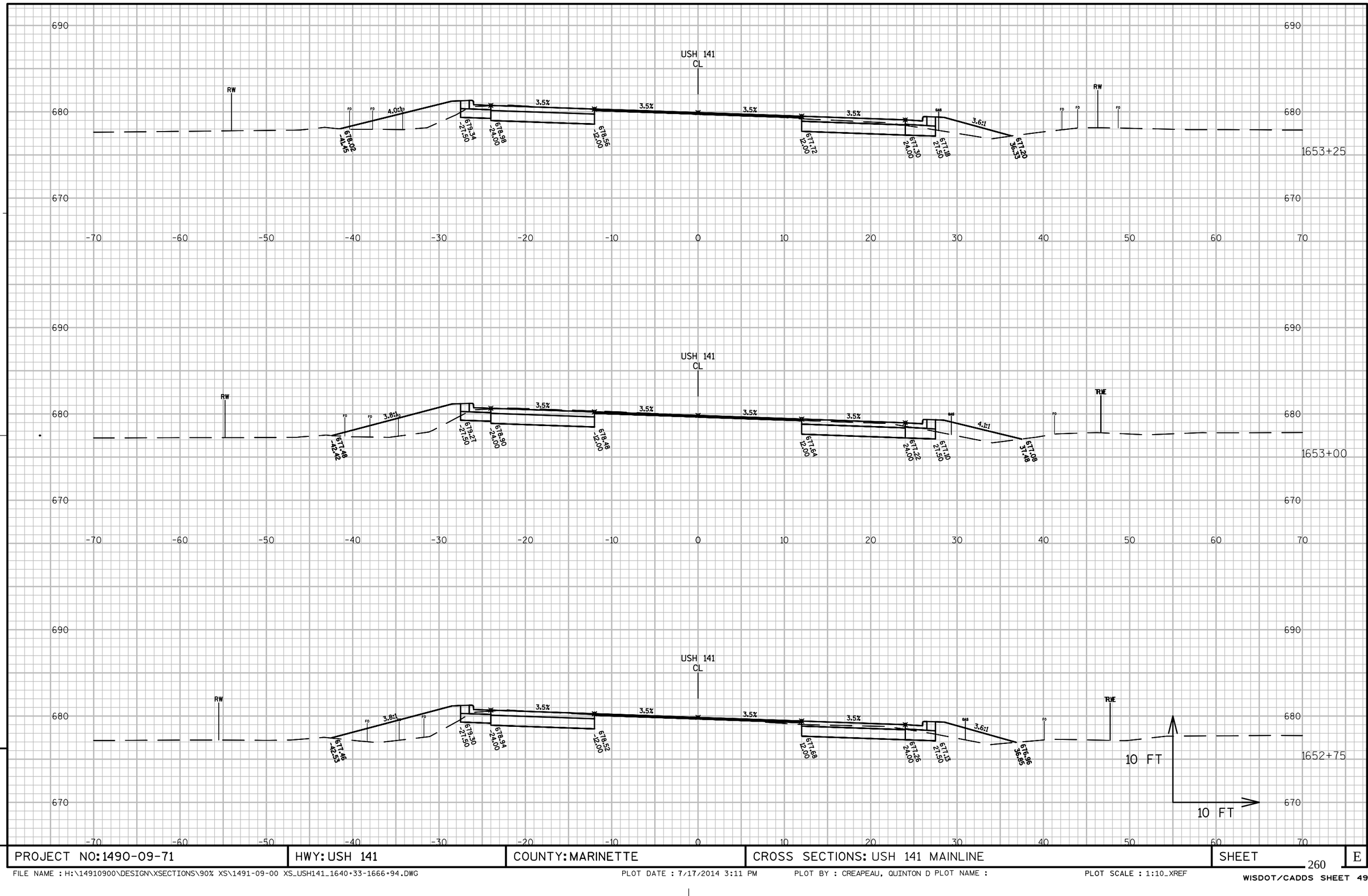
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FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:10 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 259	E

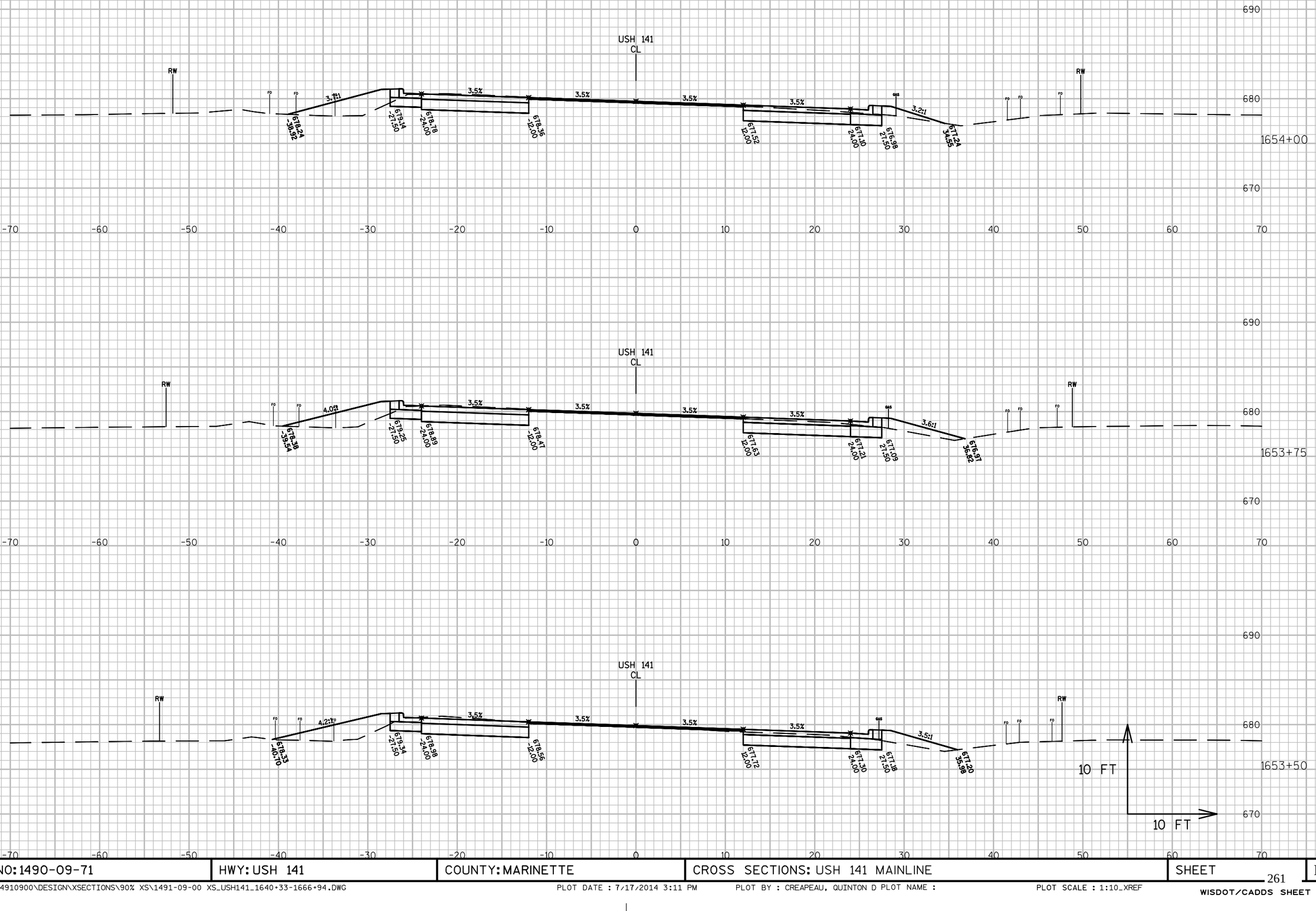
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

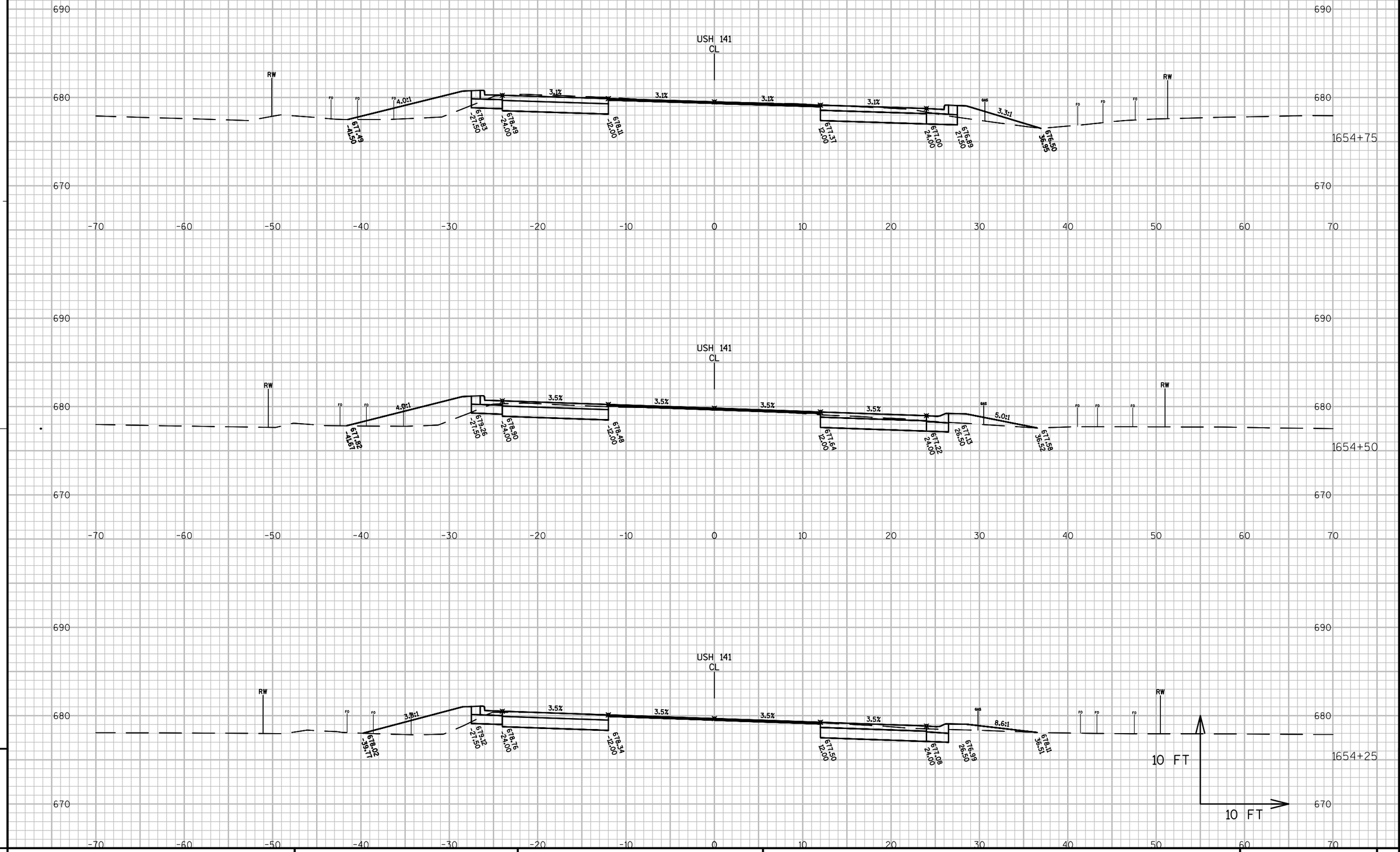
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WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

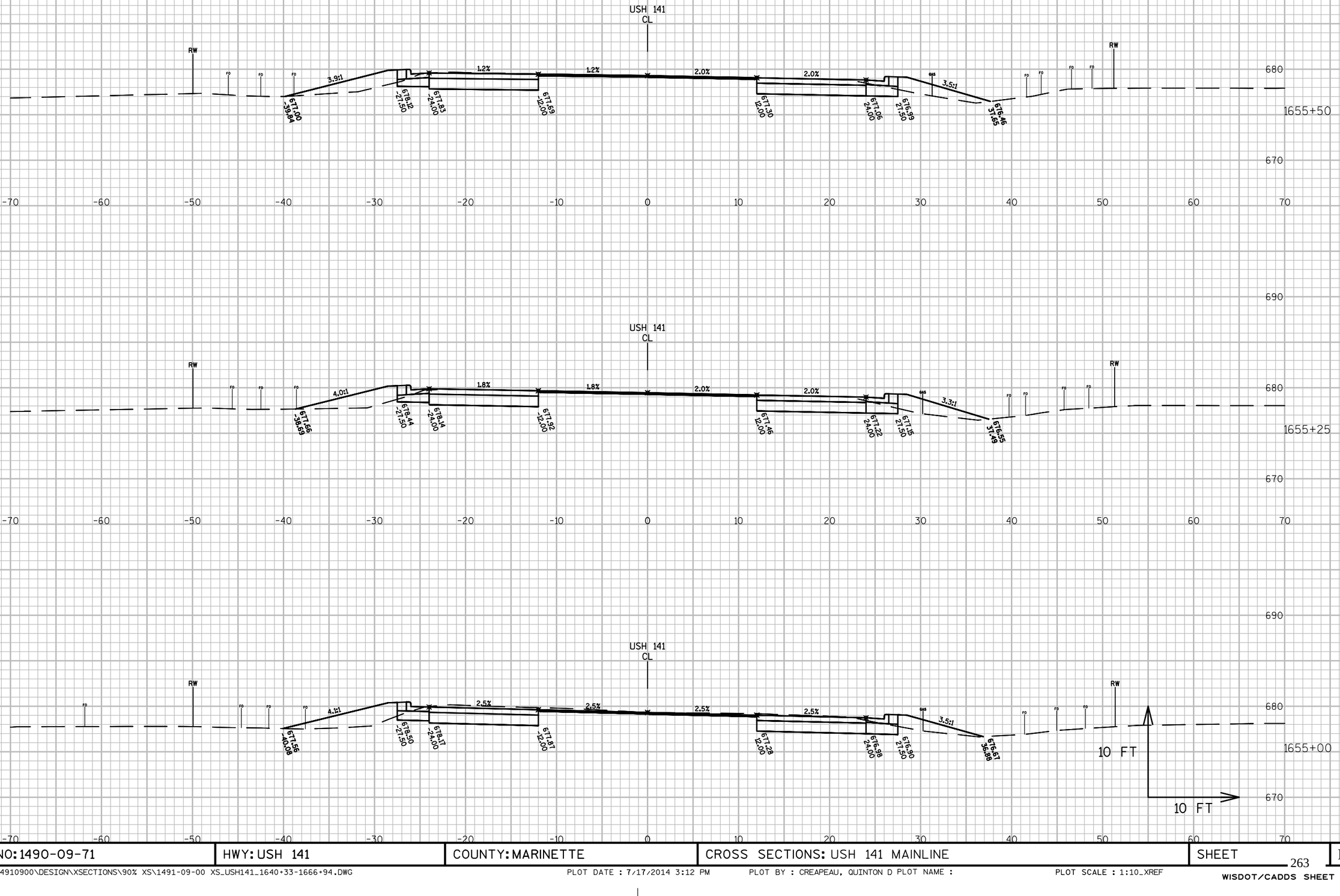
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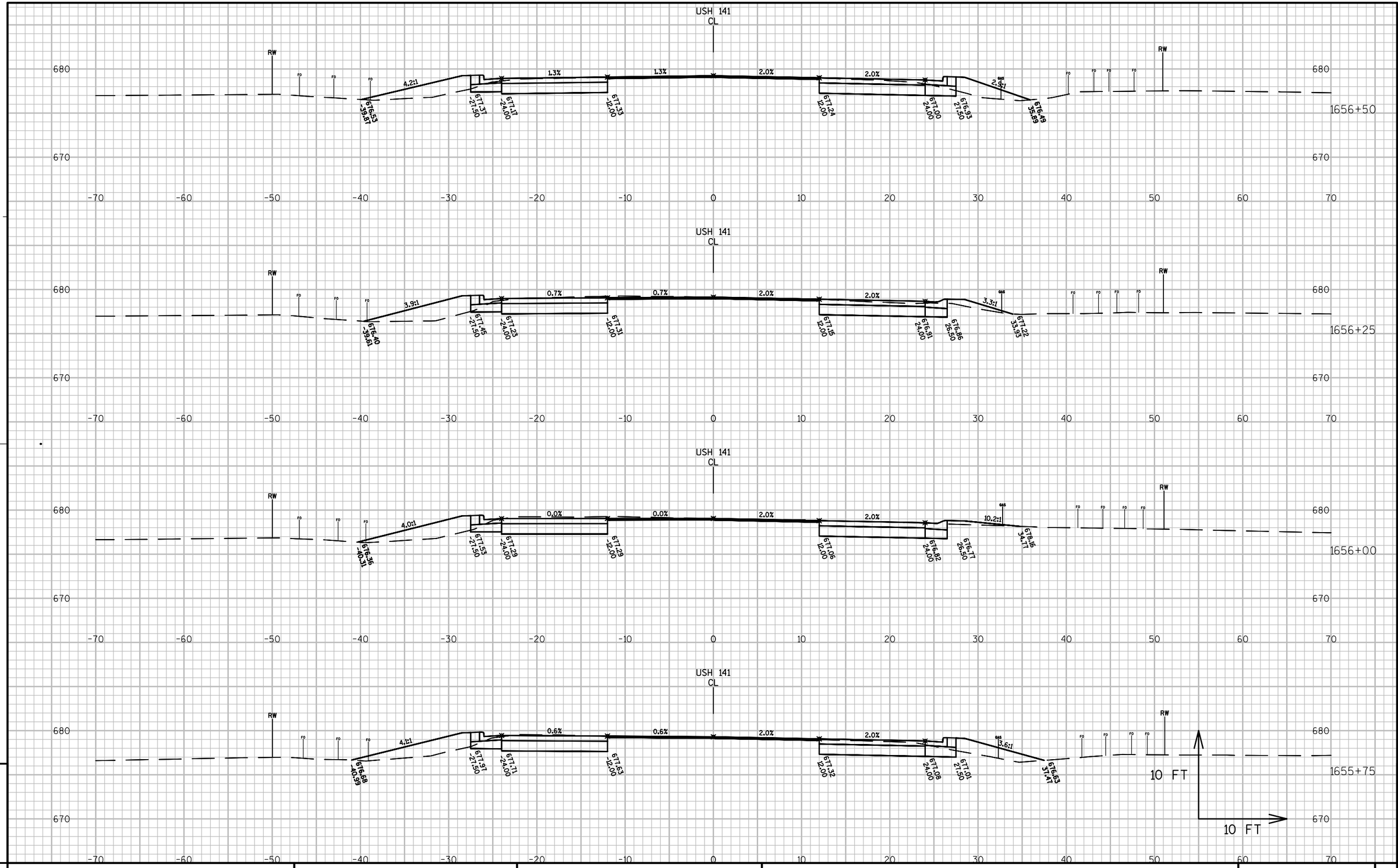
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E



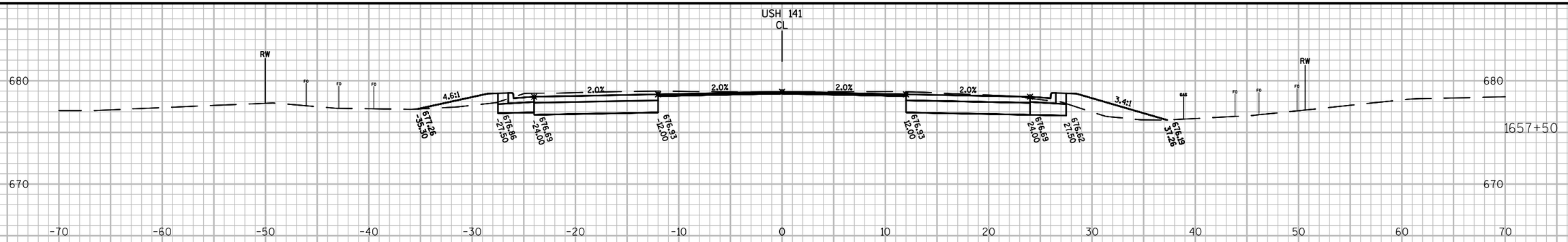
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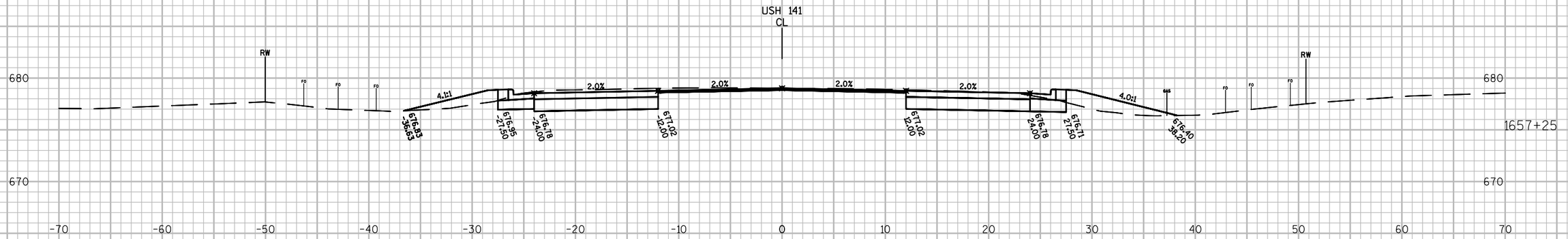
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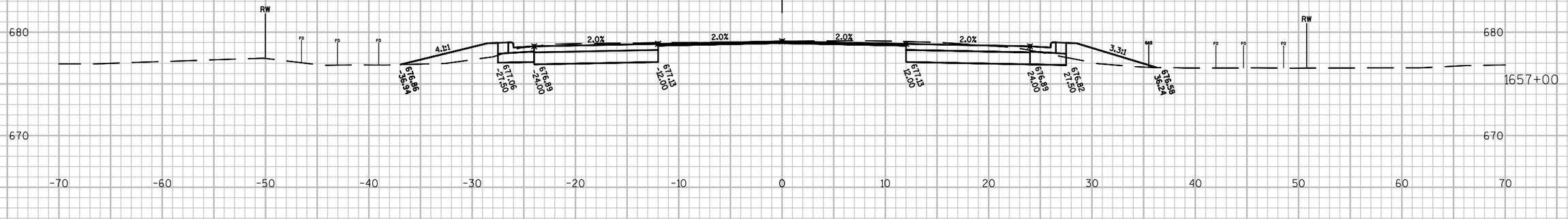


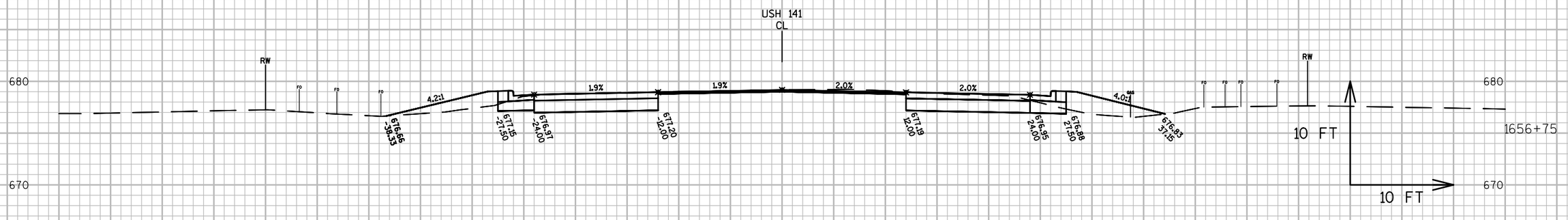
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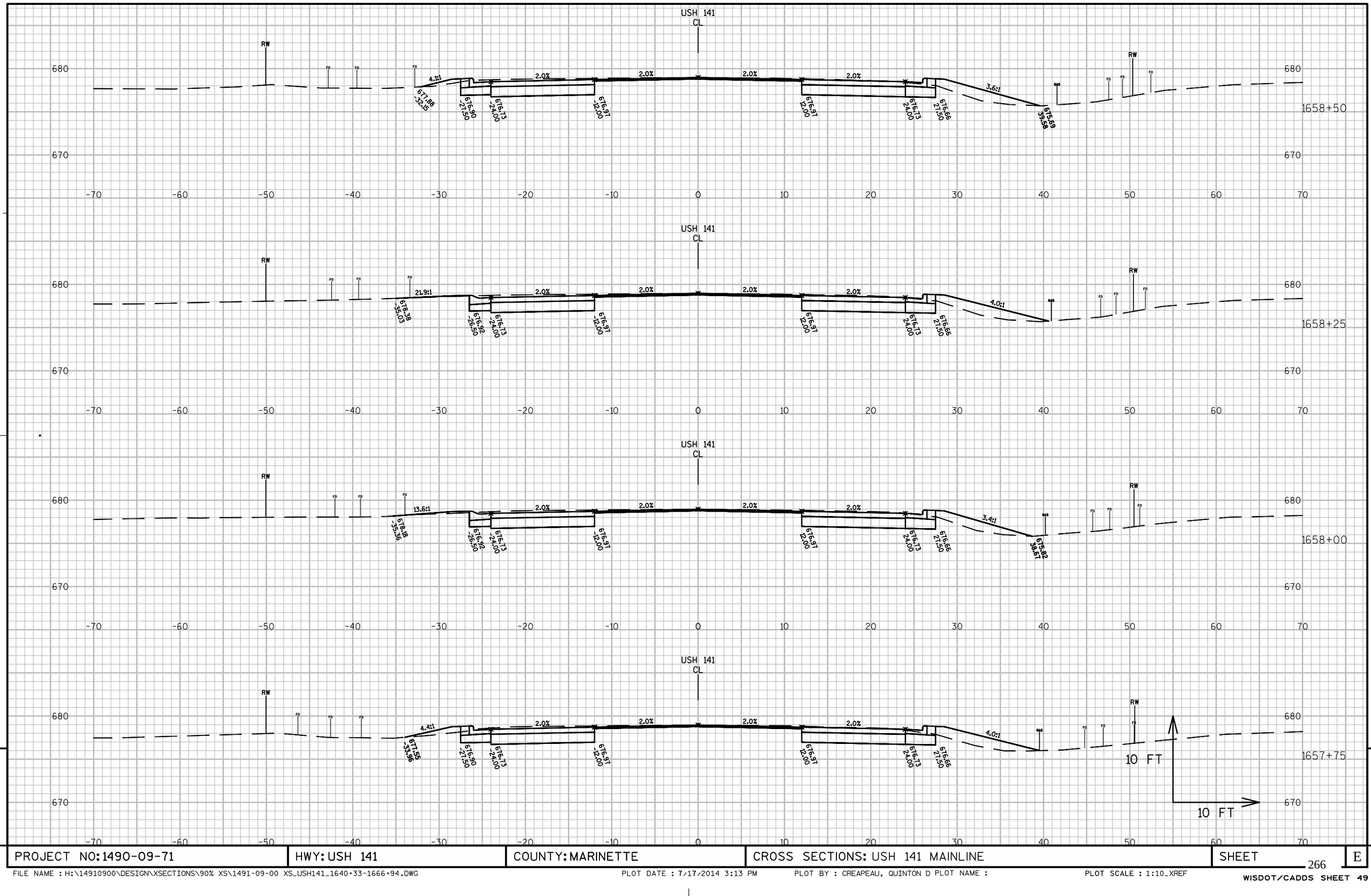


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

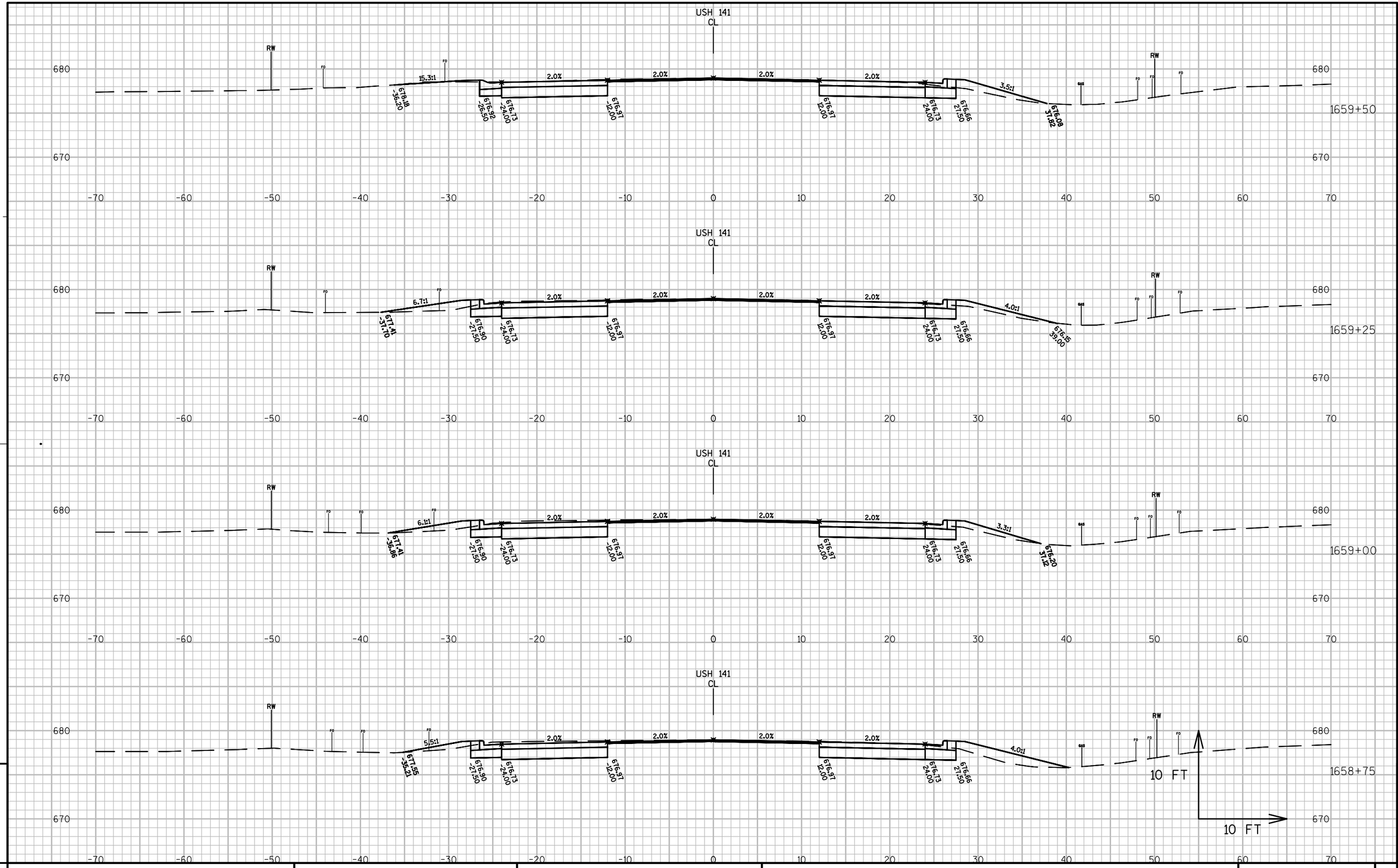
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 XS_USH141_1640+33-1666+94.DWG PLOT DATE : 7/17/2014 3:13 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:10_XREF

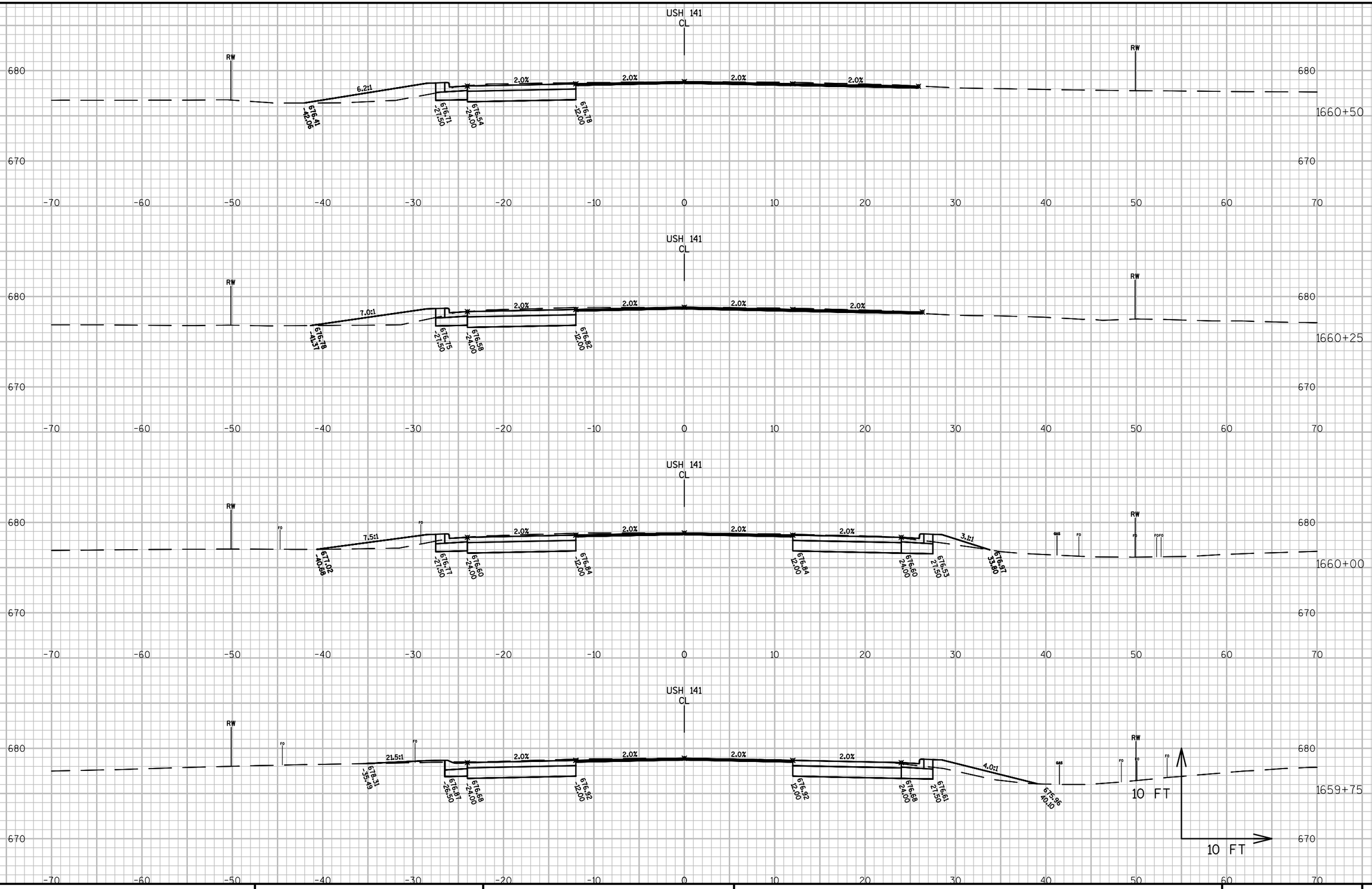
WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 267	E

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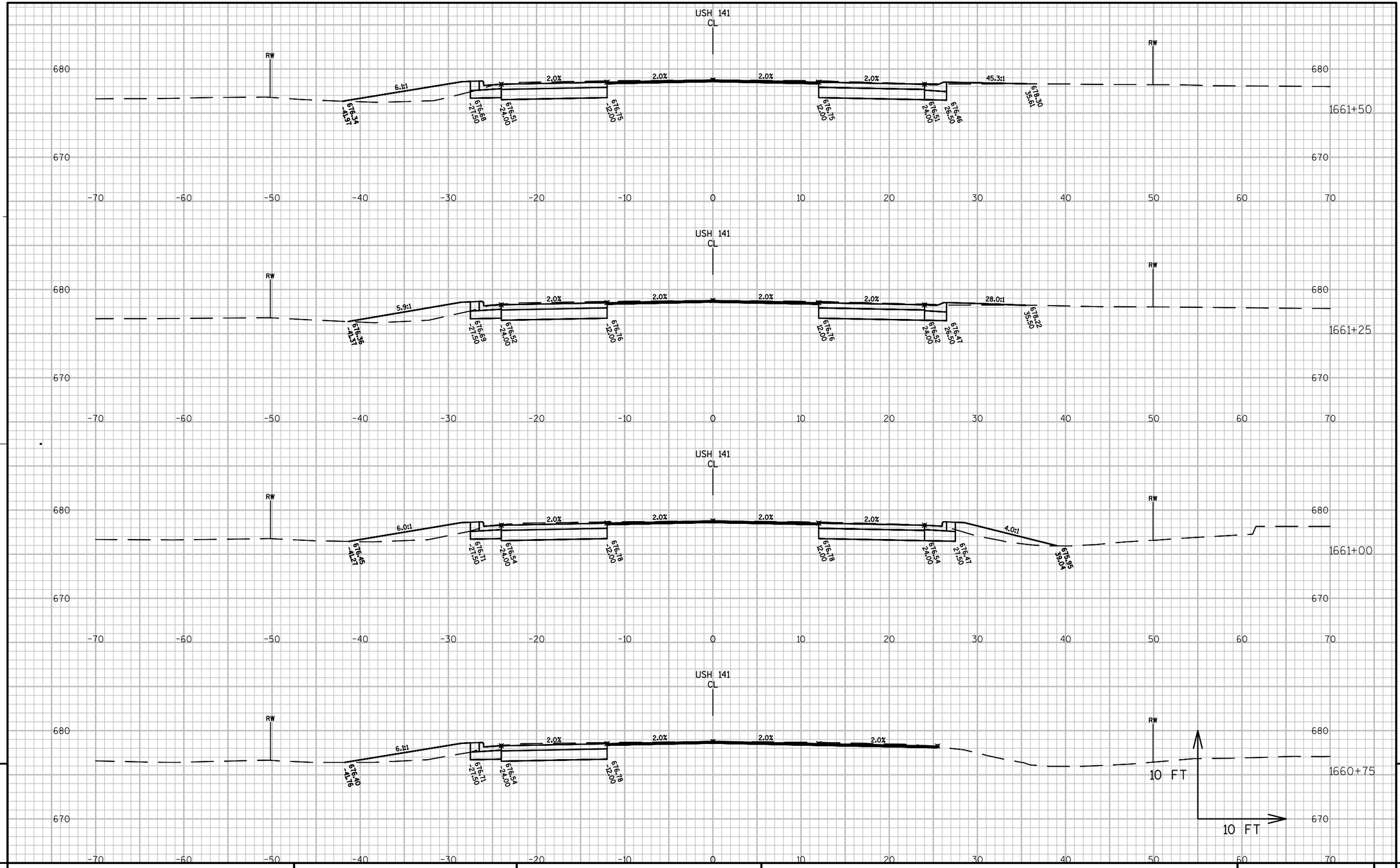
WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 268	E

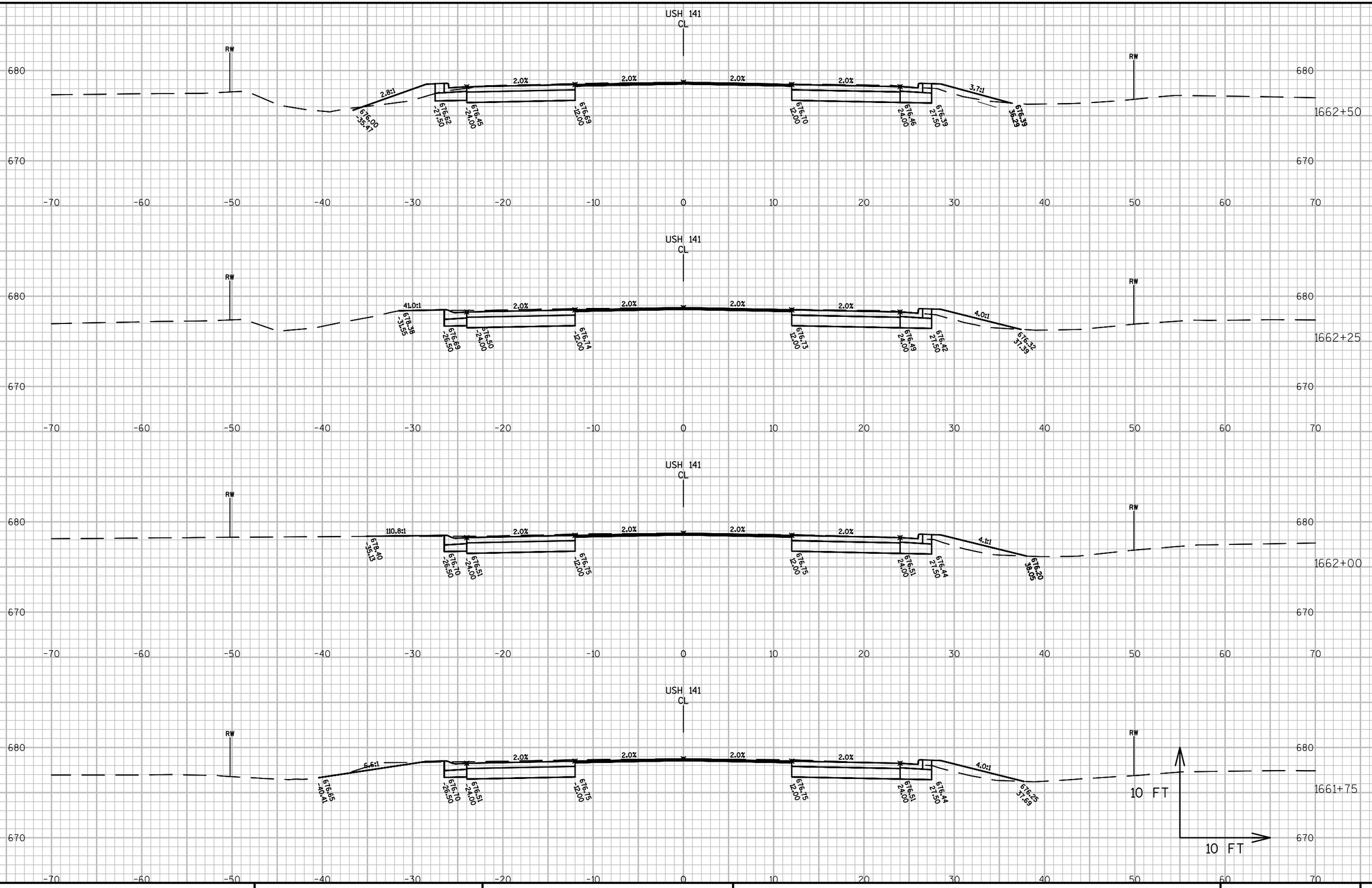
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WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

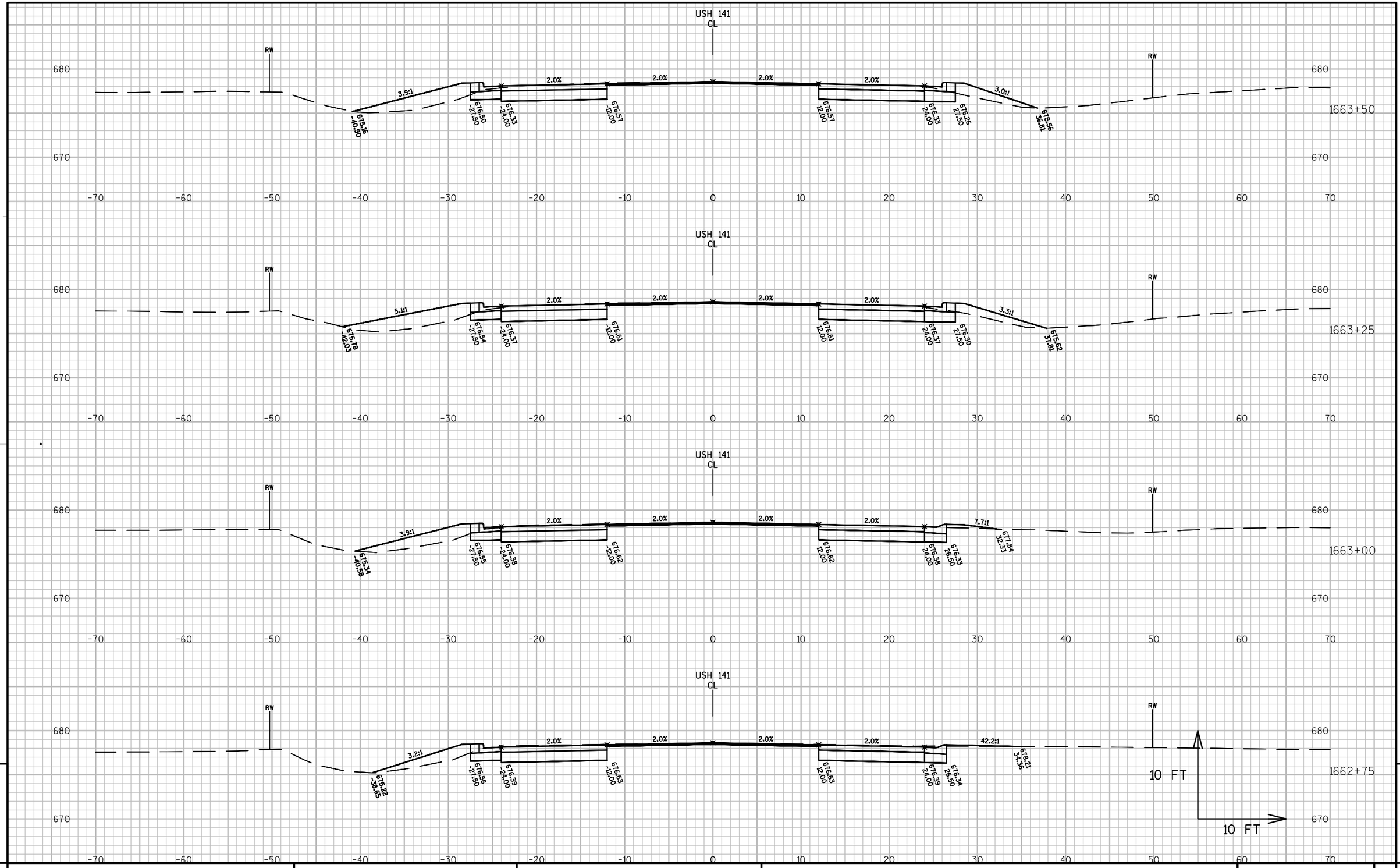
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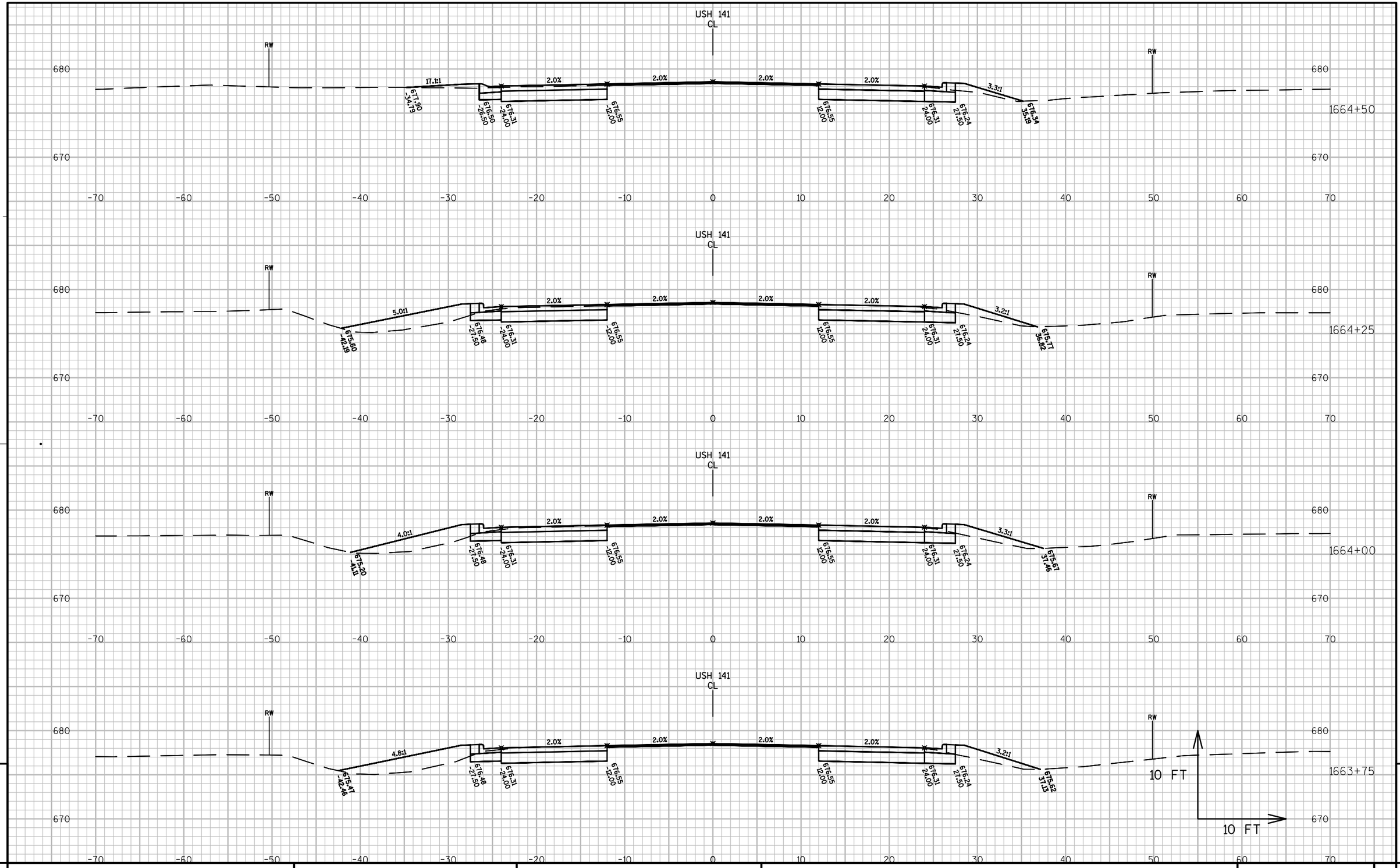
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 270	E



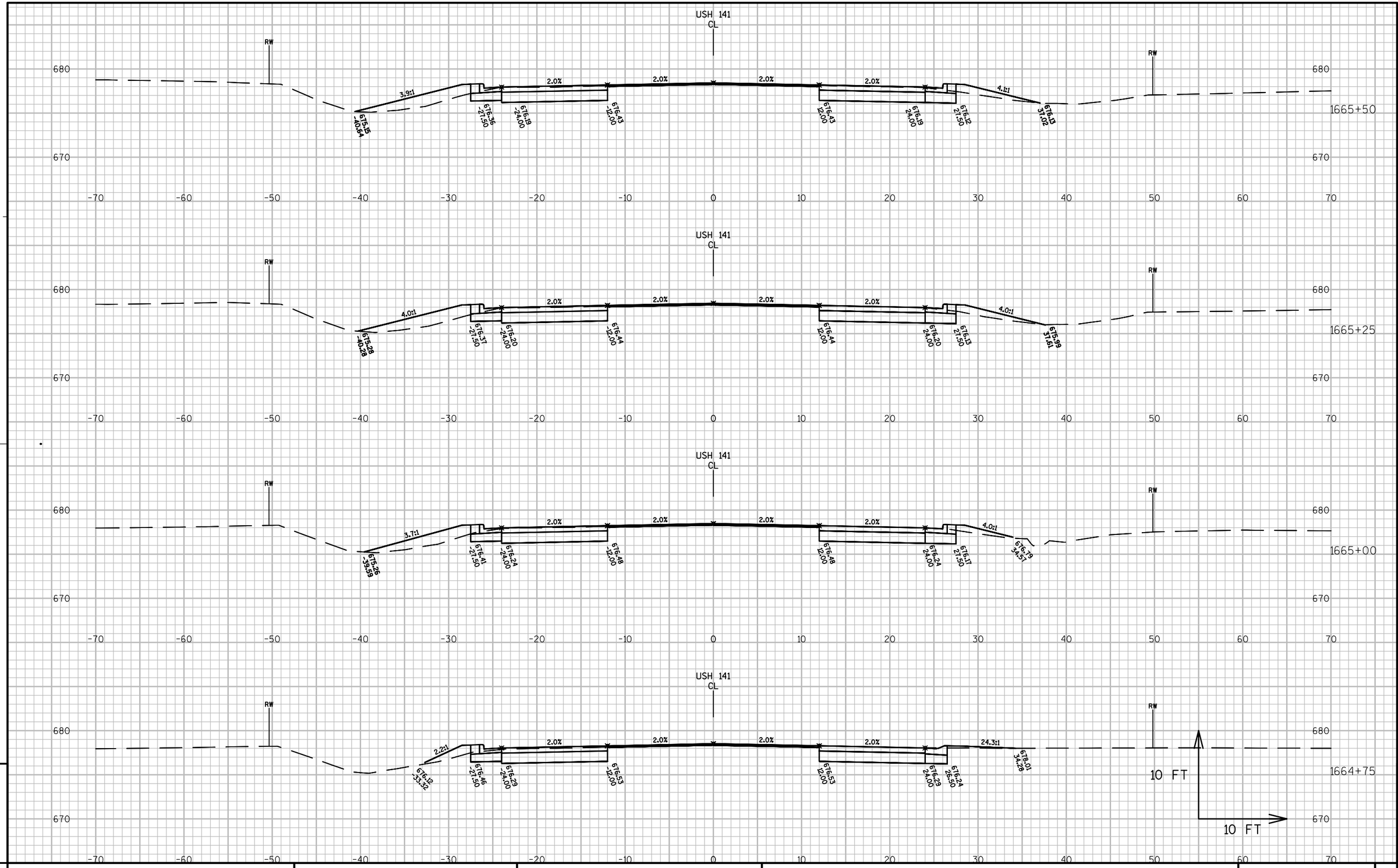
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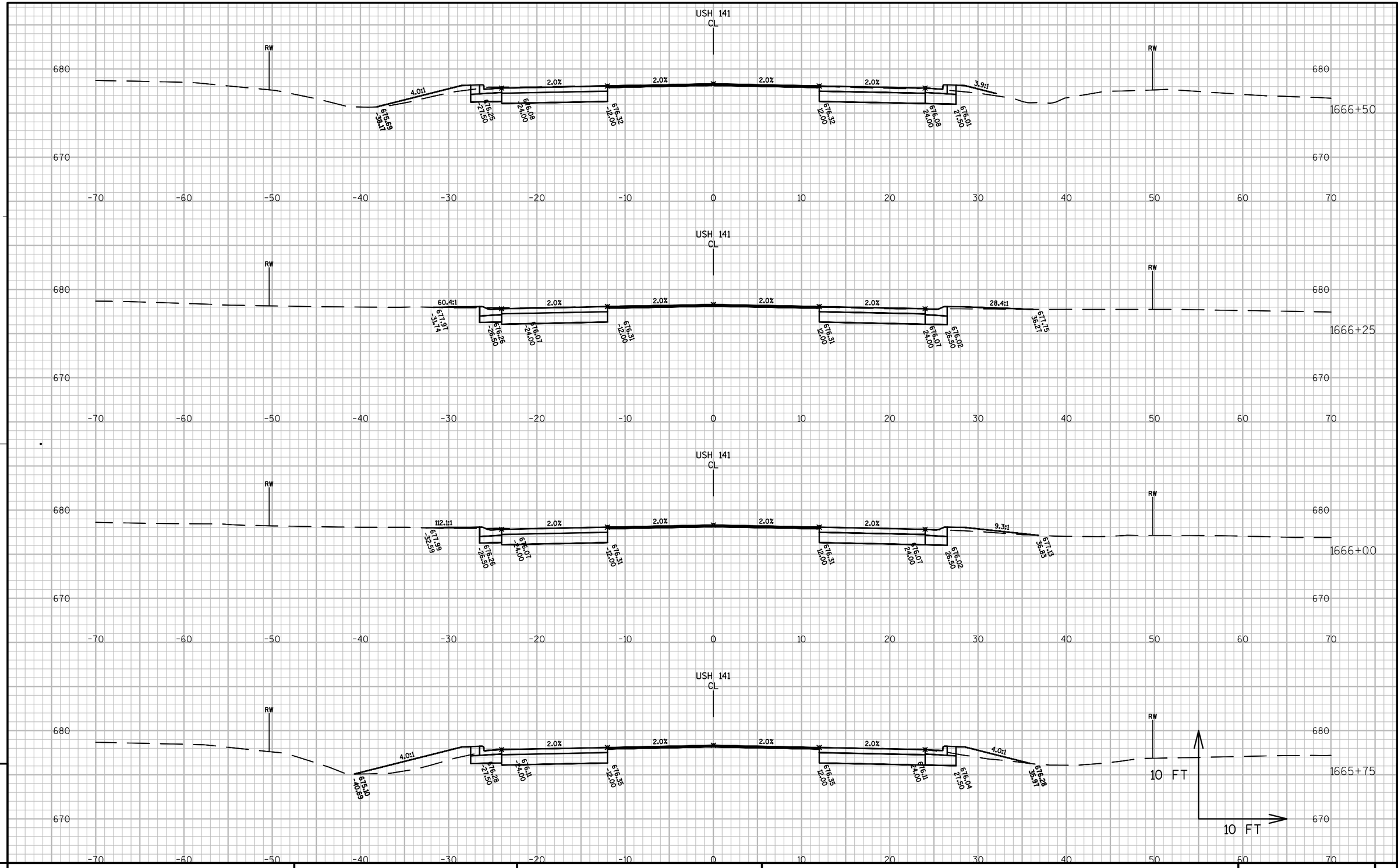


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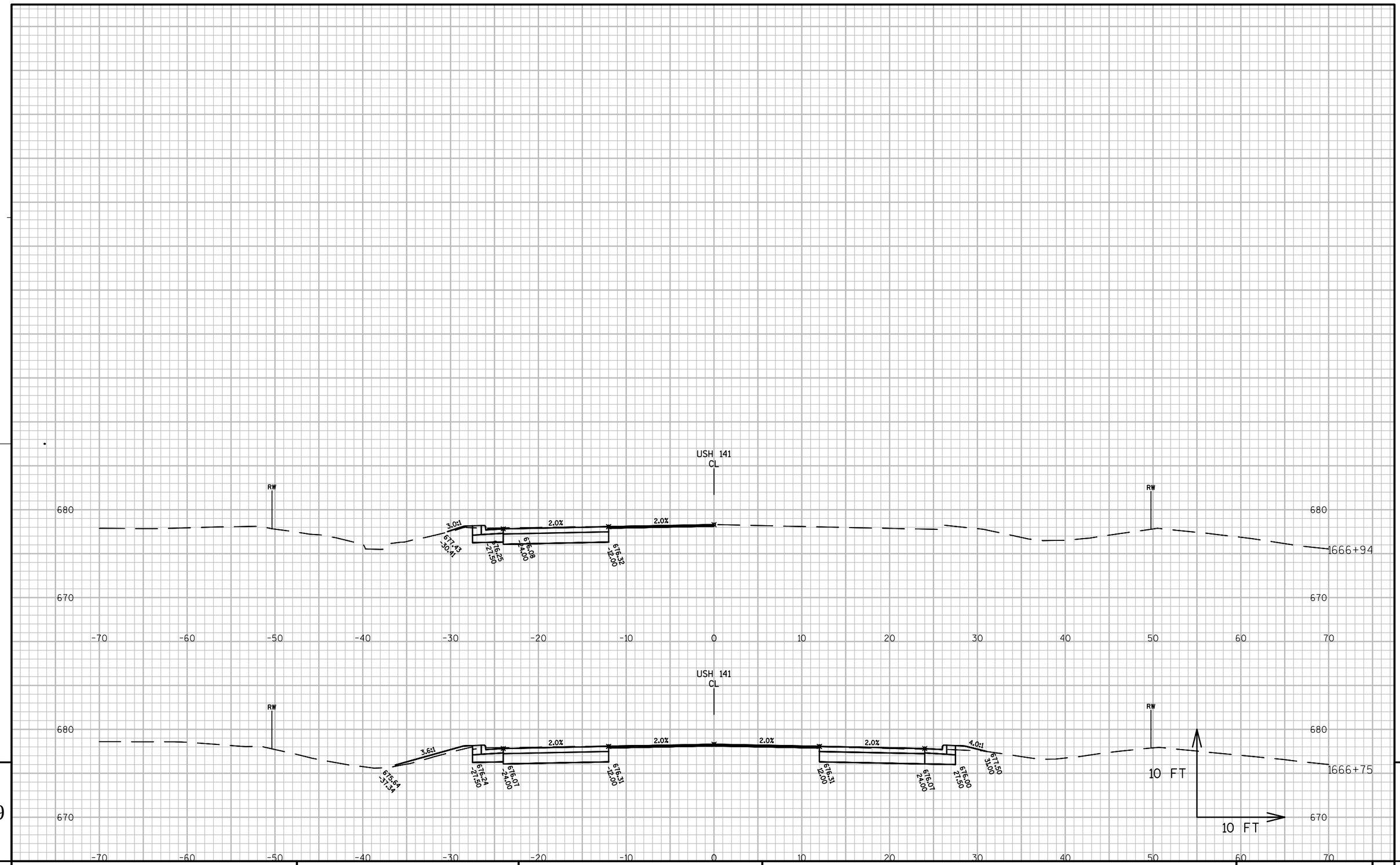
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 273	E

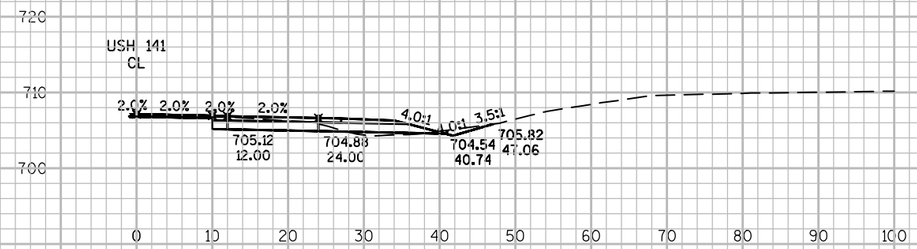


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 274	E

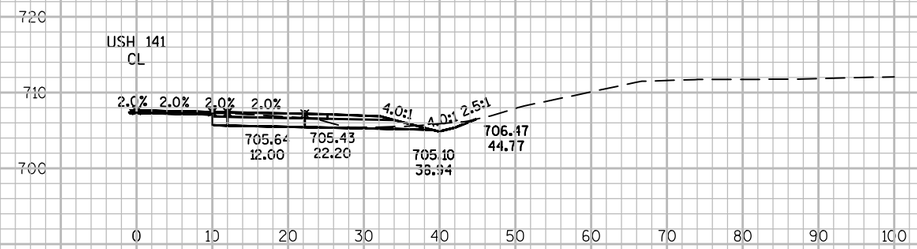


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

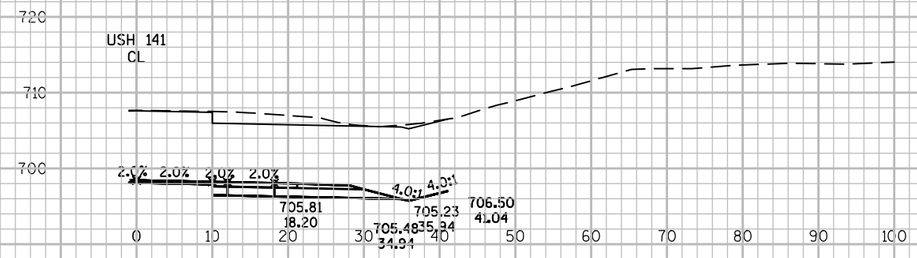
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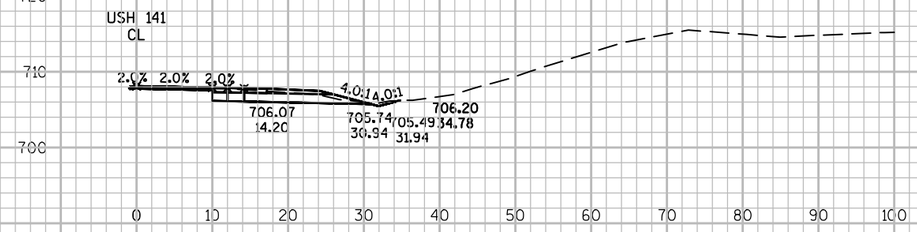
74+50



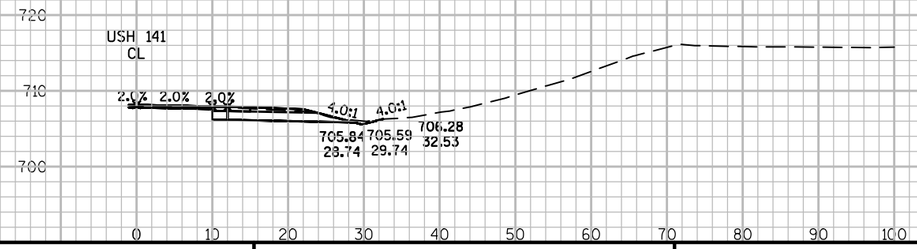
74+00



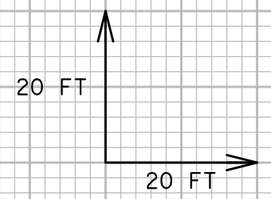
73+50



73+00



72+50

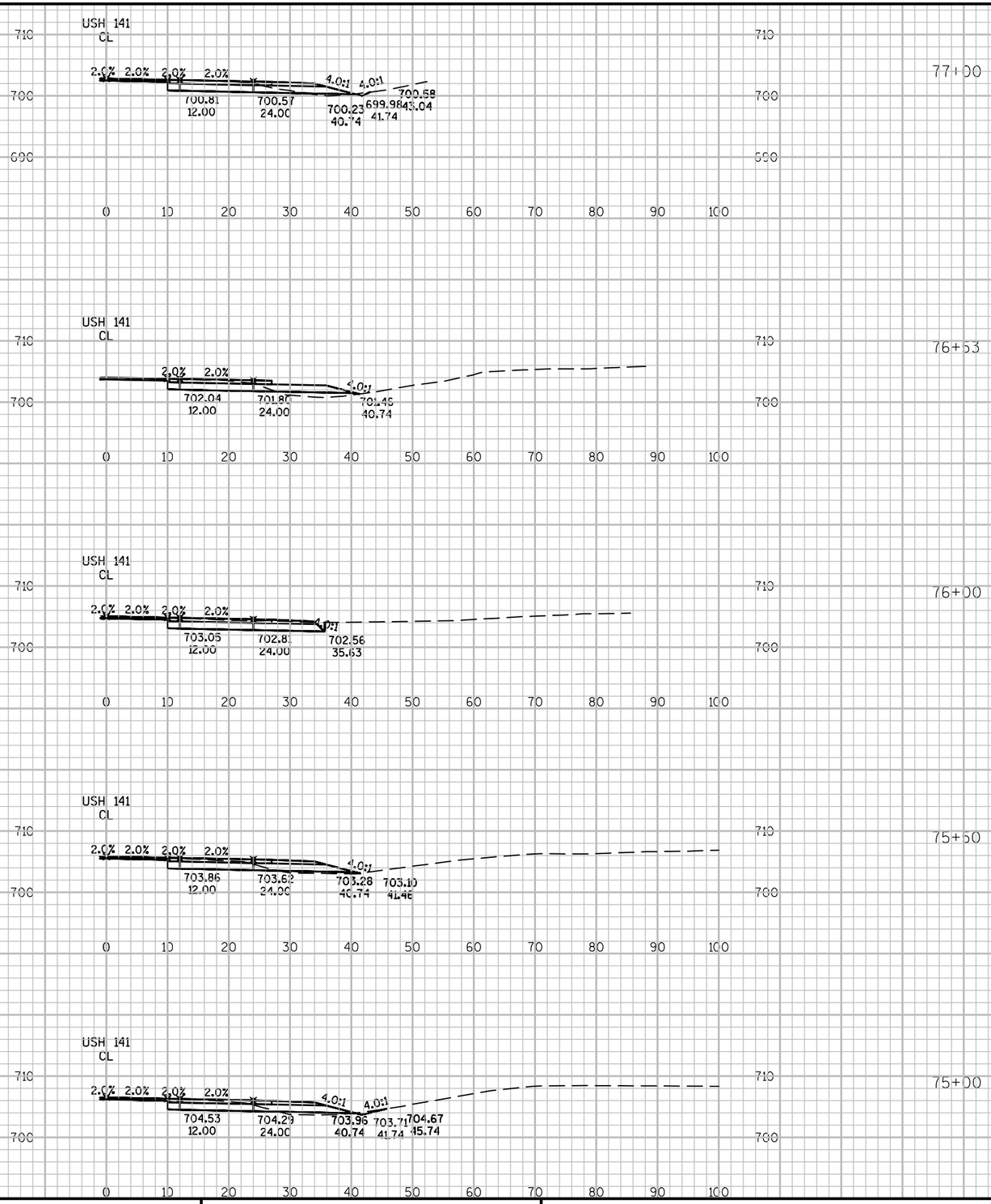


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/21/2014 11:29 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

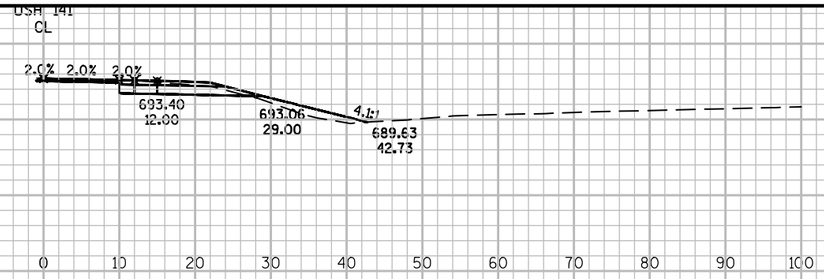


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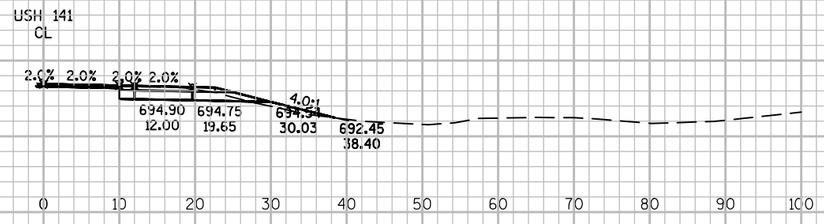
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

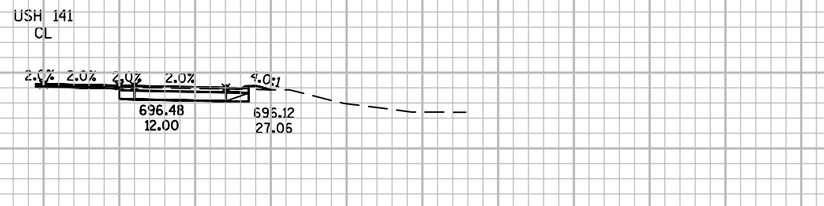
FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/21/2014 11:30 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



79+50



79+00



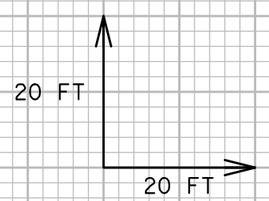
78+50



78+00



77+50

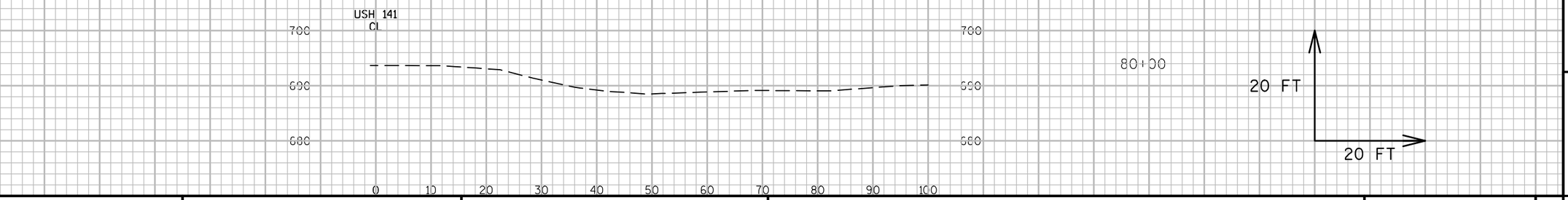


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/21/2014 11:30 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

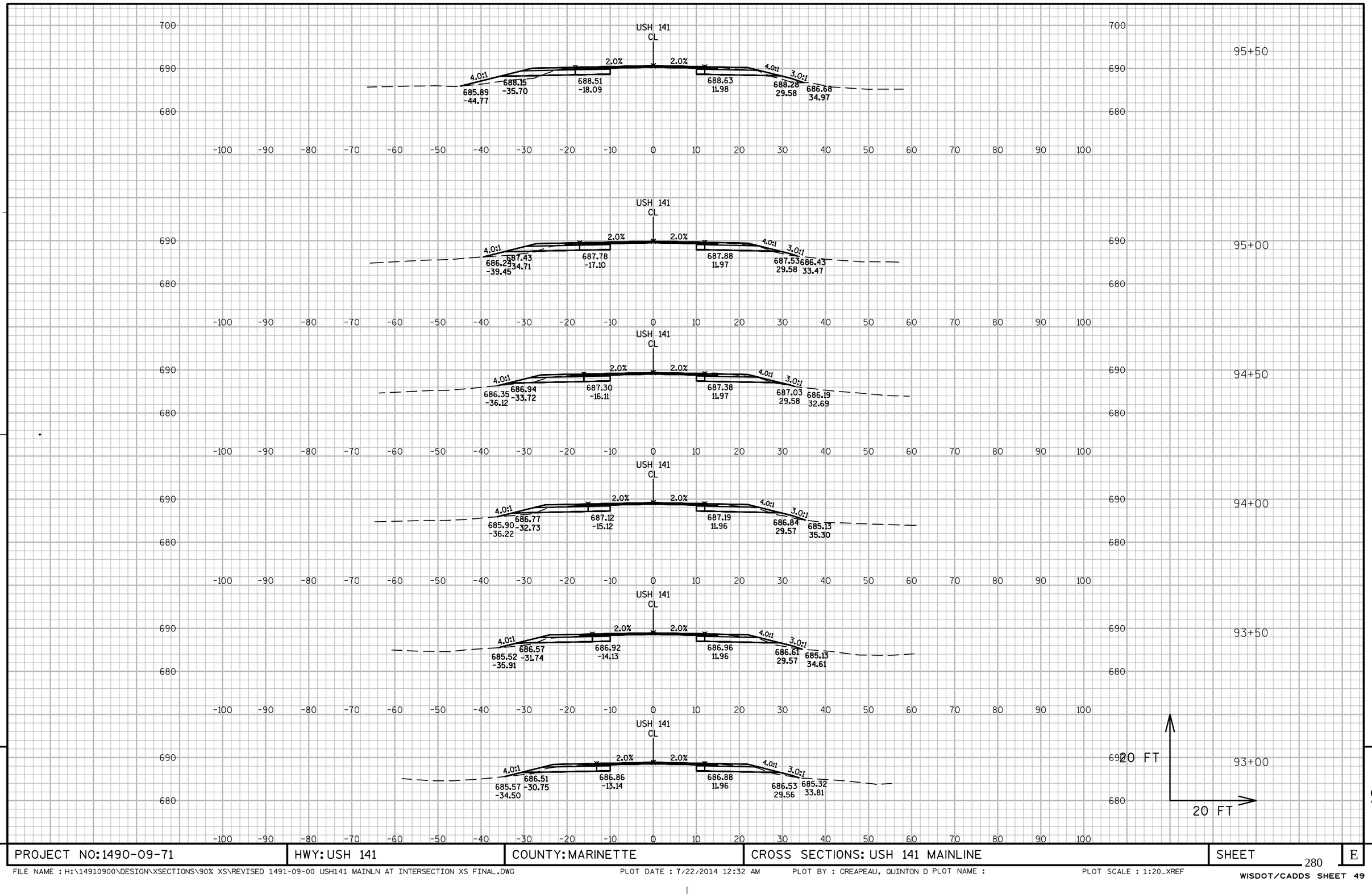


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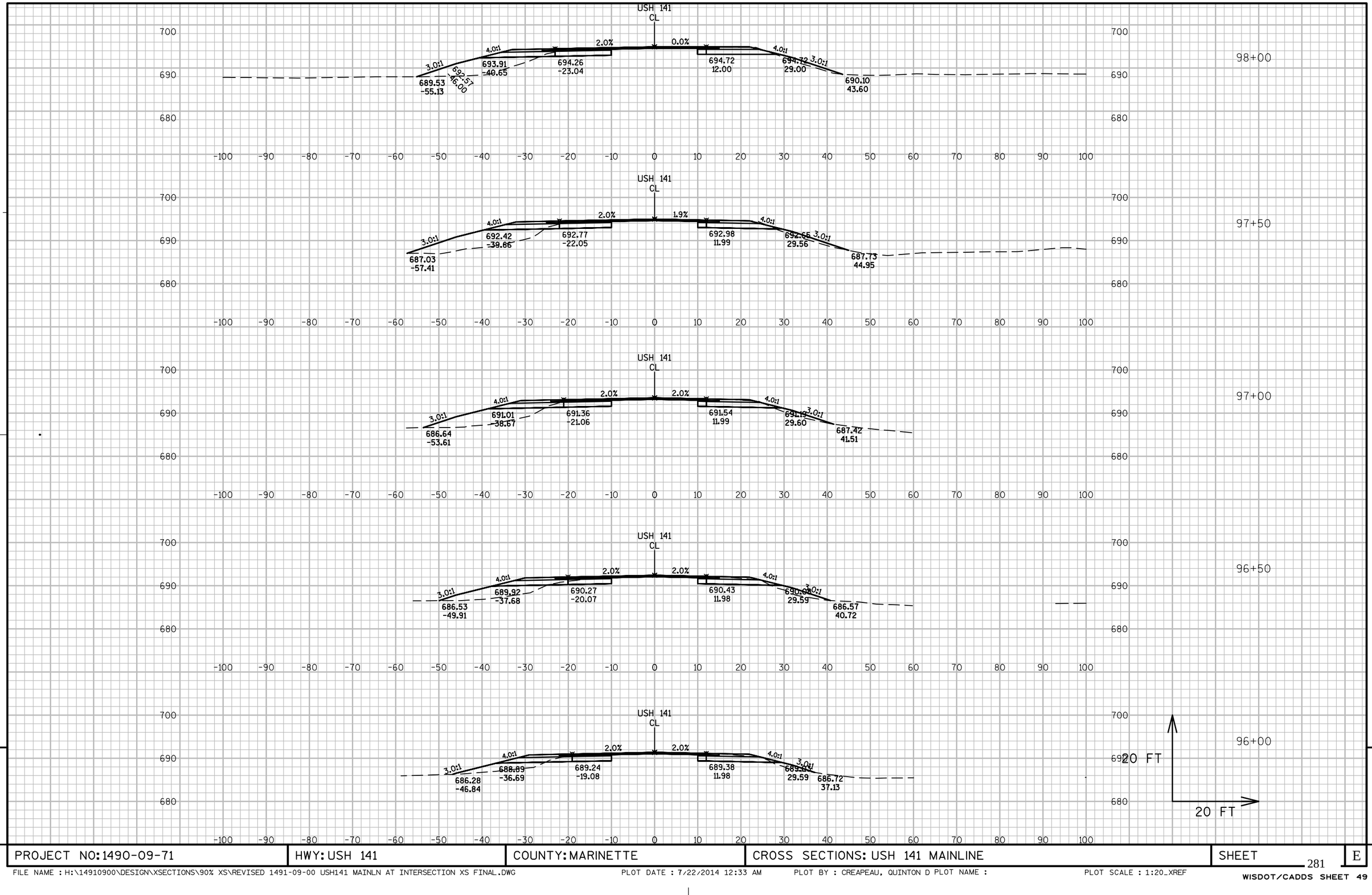
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/21/2014 11:30 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:32 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

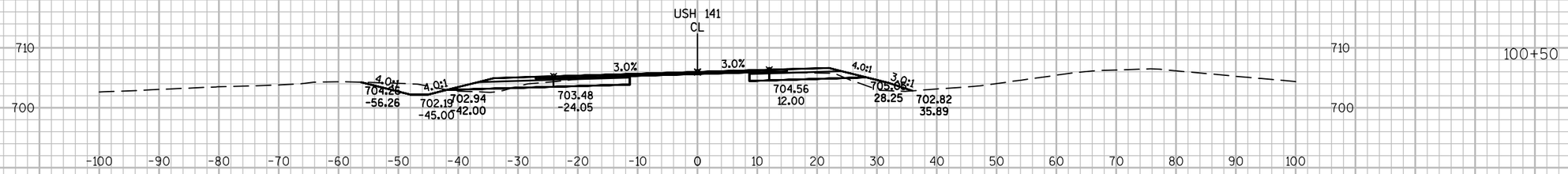


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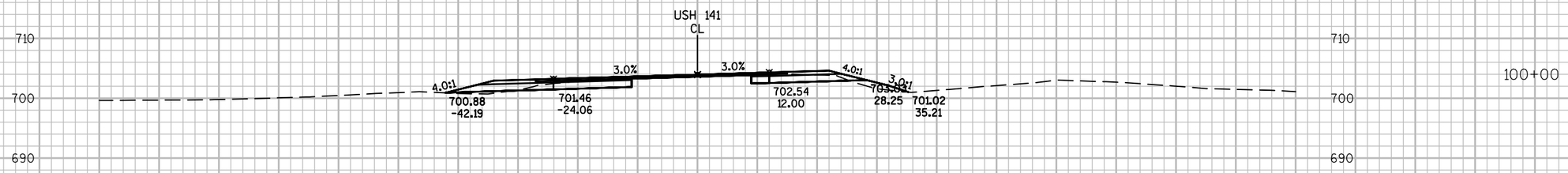
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

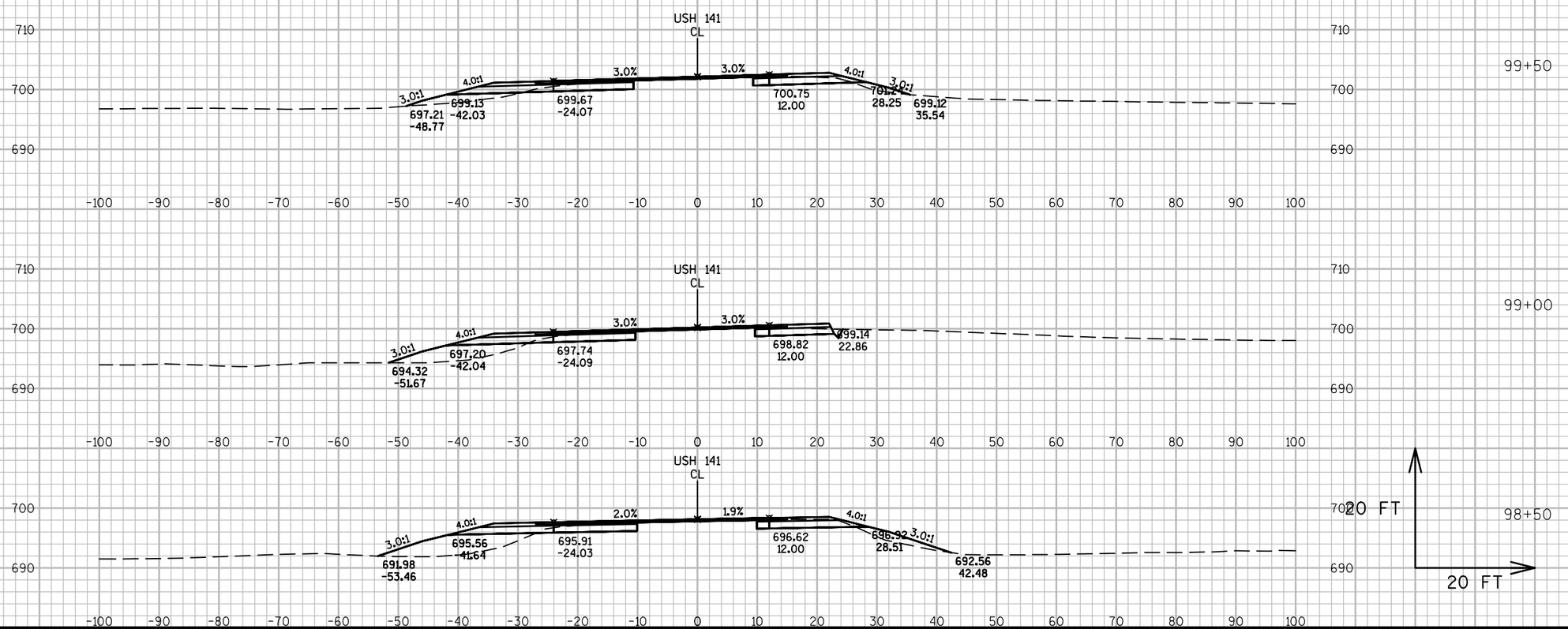
FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:33 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



100+50



100+00



99+50

99+00

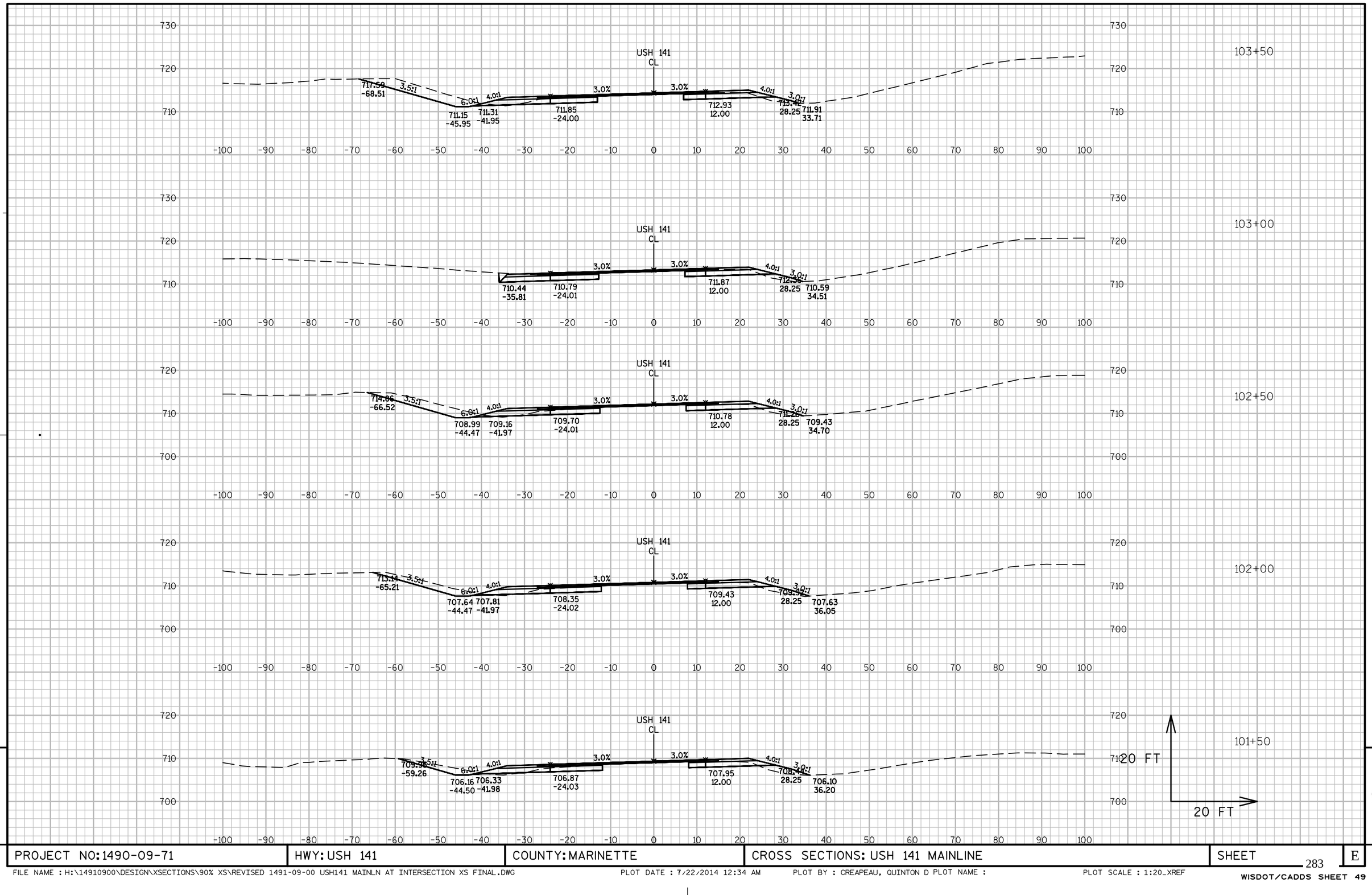
98+50

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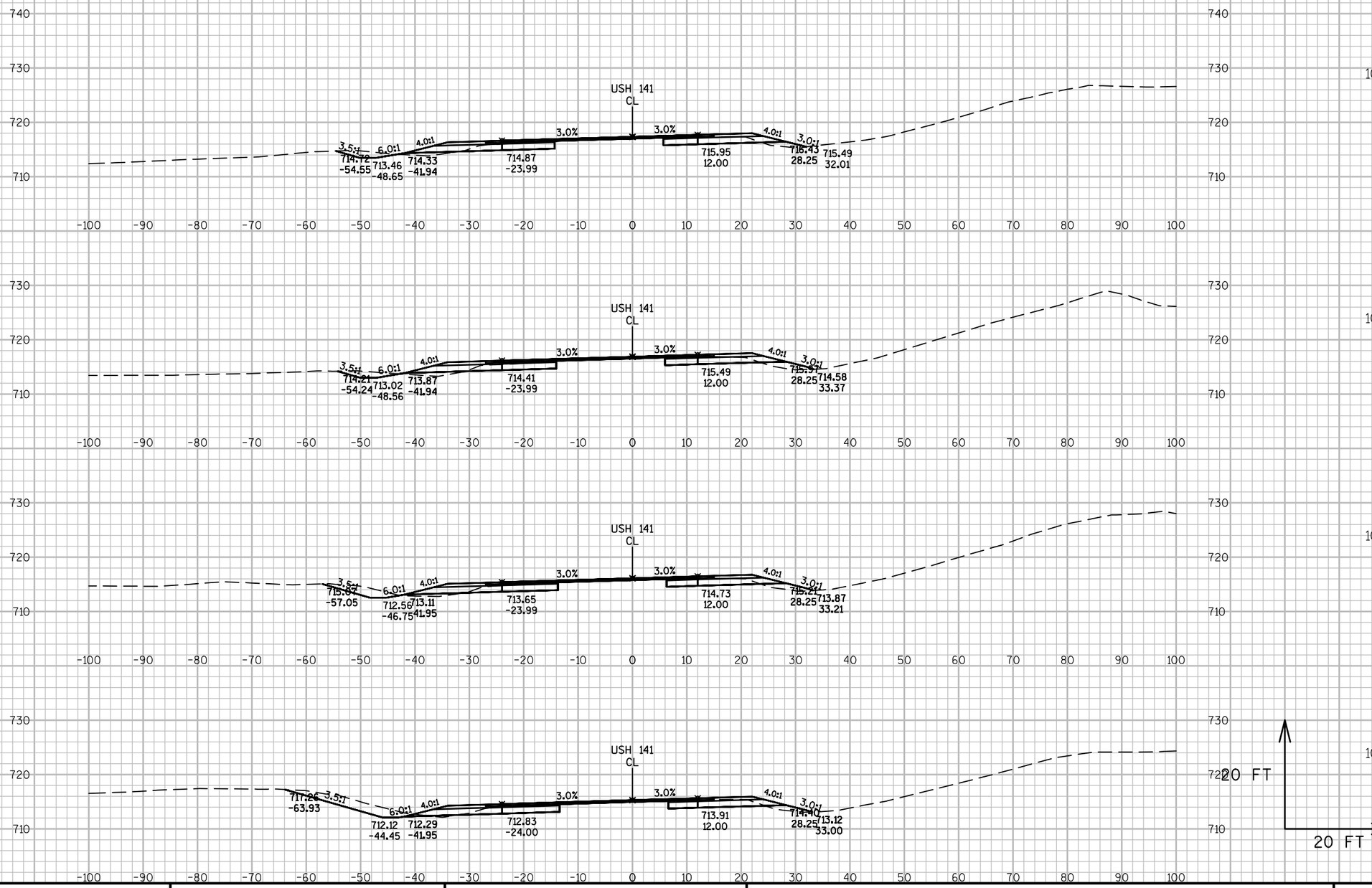
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:33 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF
WISDOT/CADDS SHEET 49



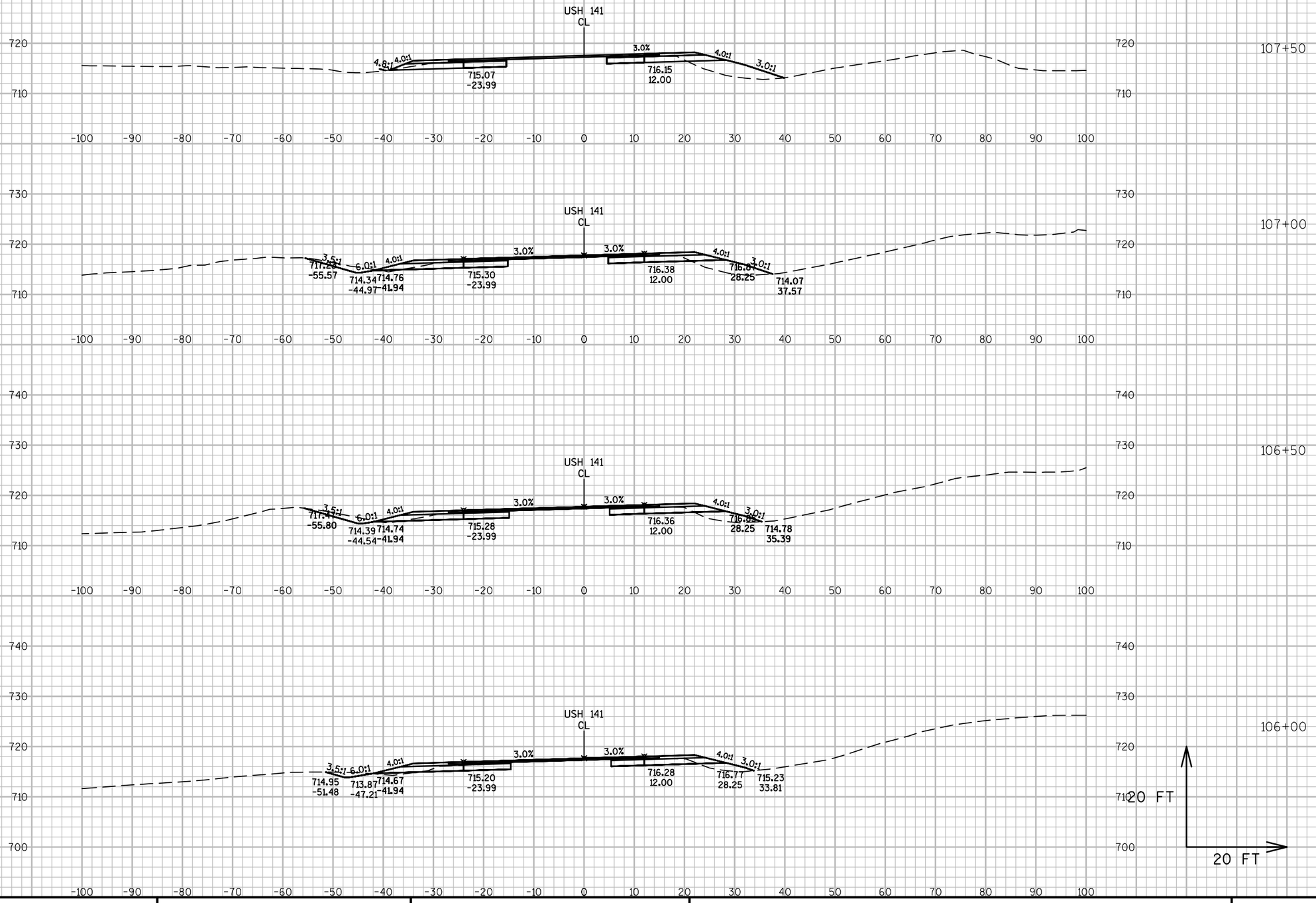
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 284	E

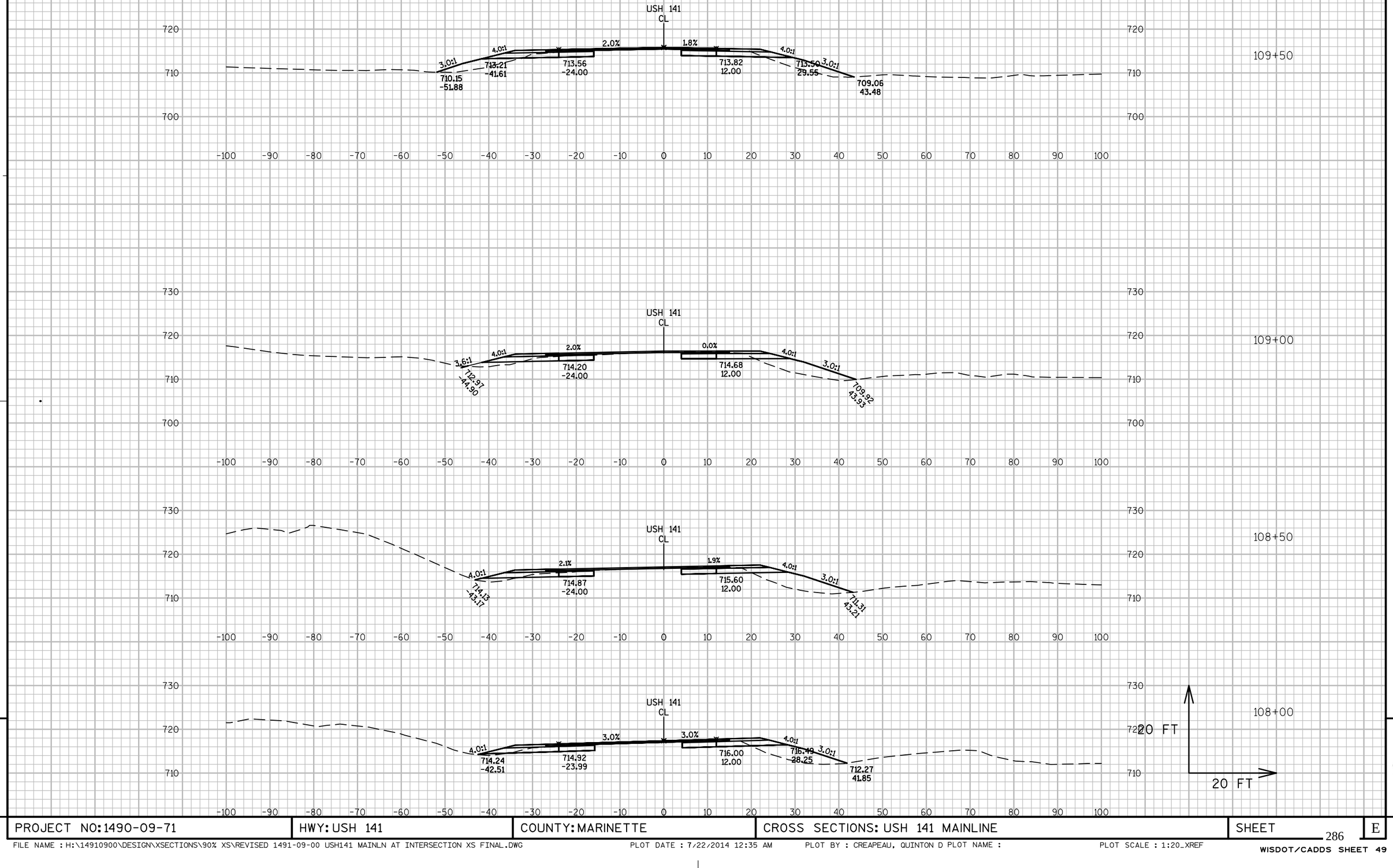
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WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 285	E

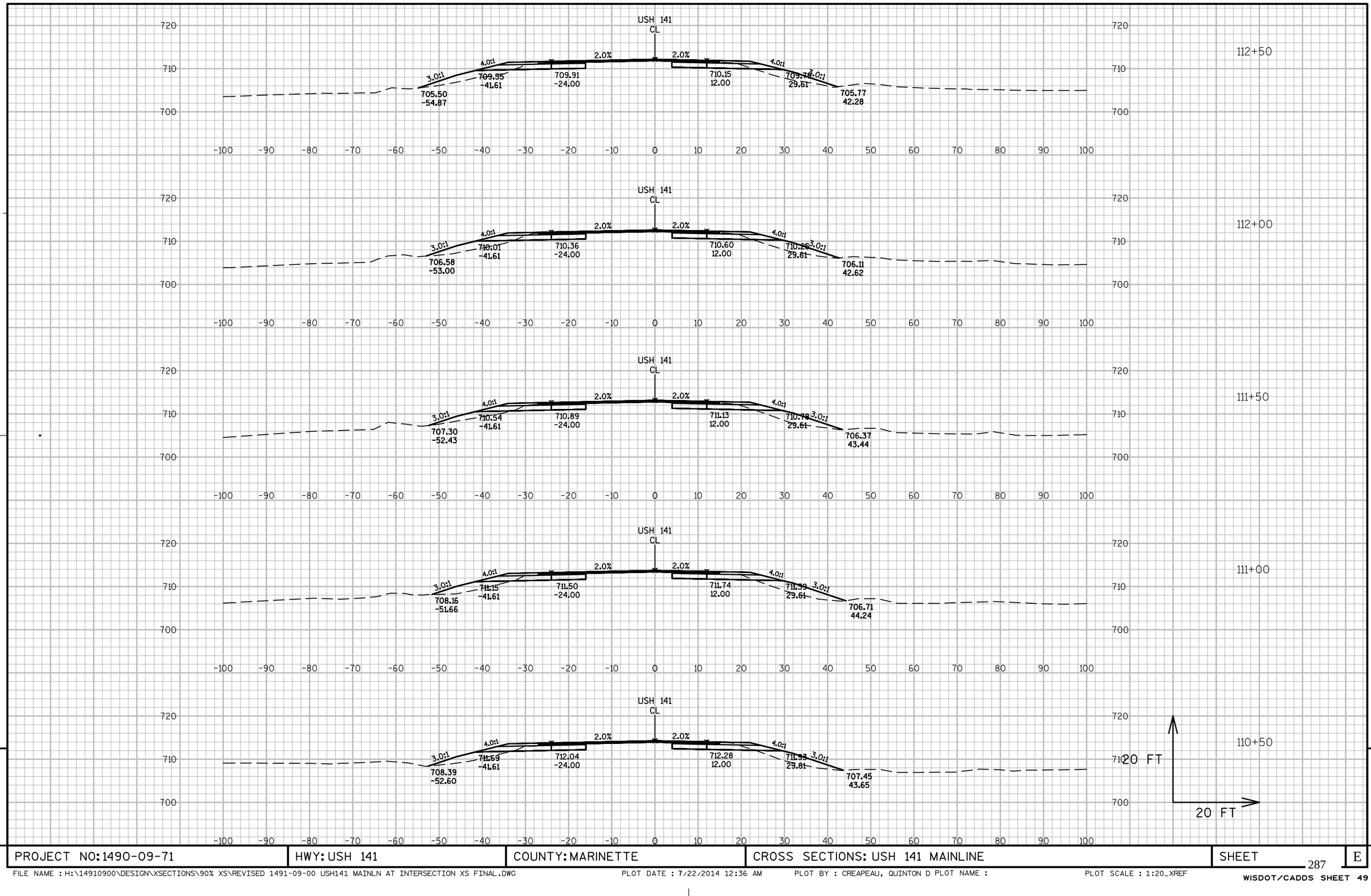
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

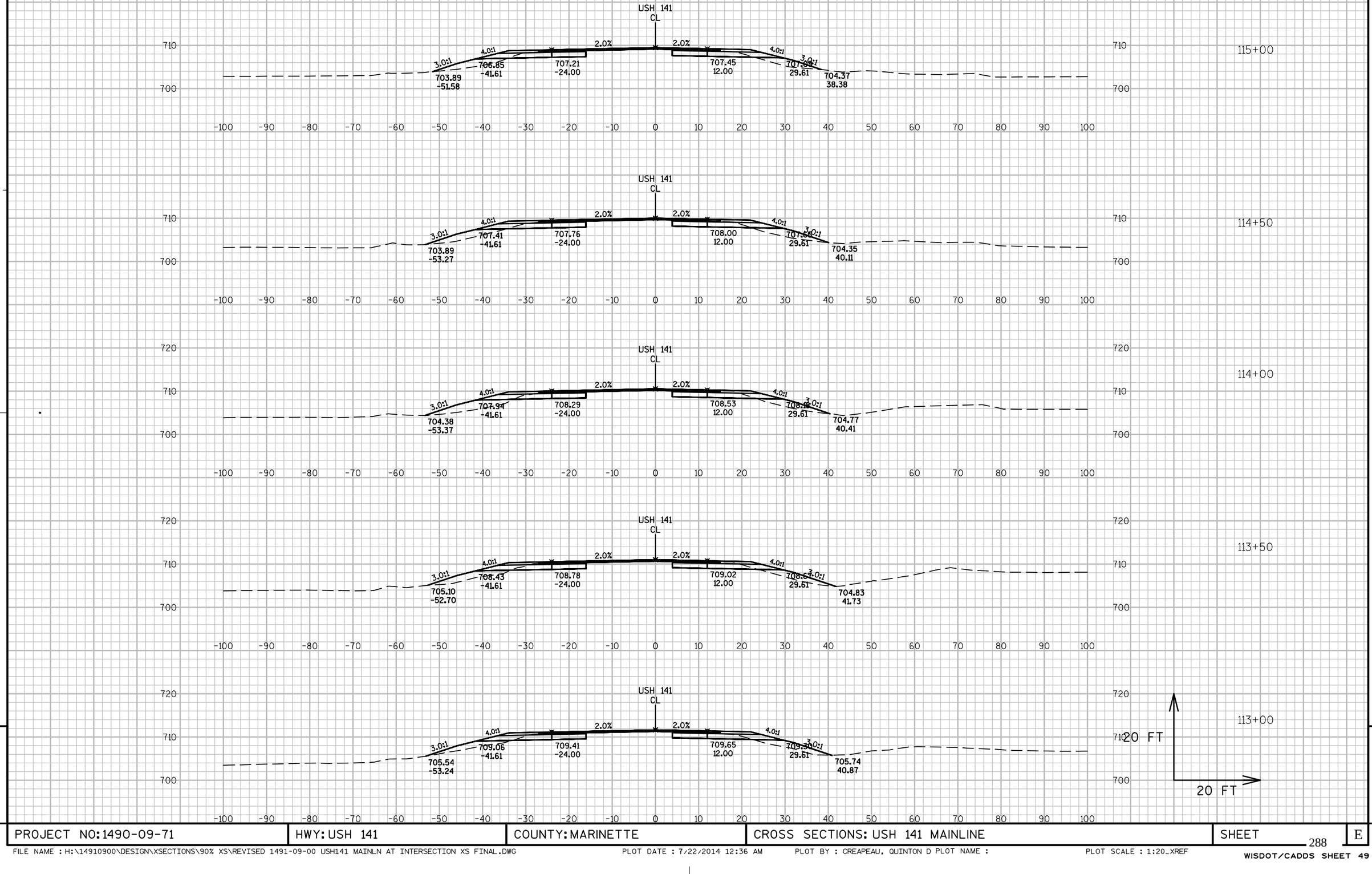
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WISDOT/CADDS SHEET 49



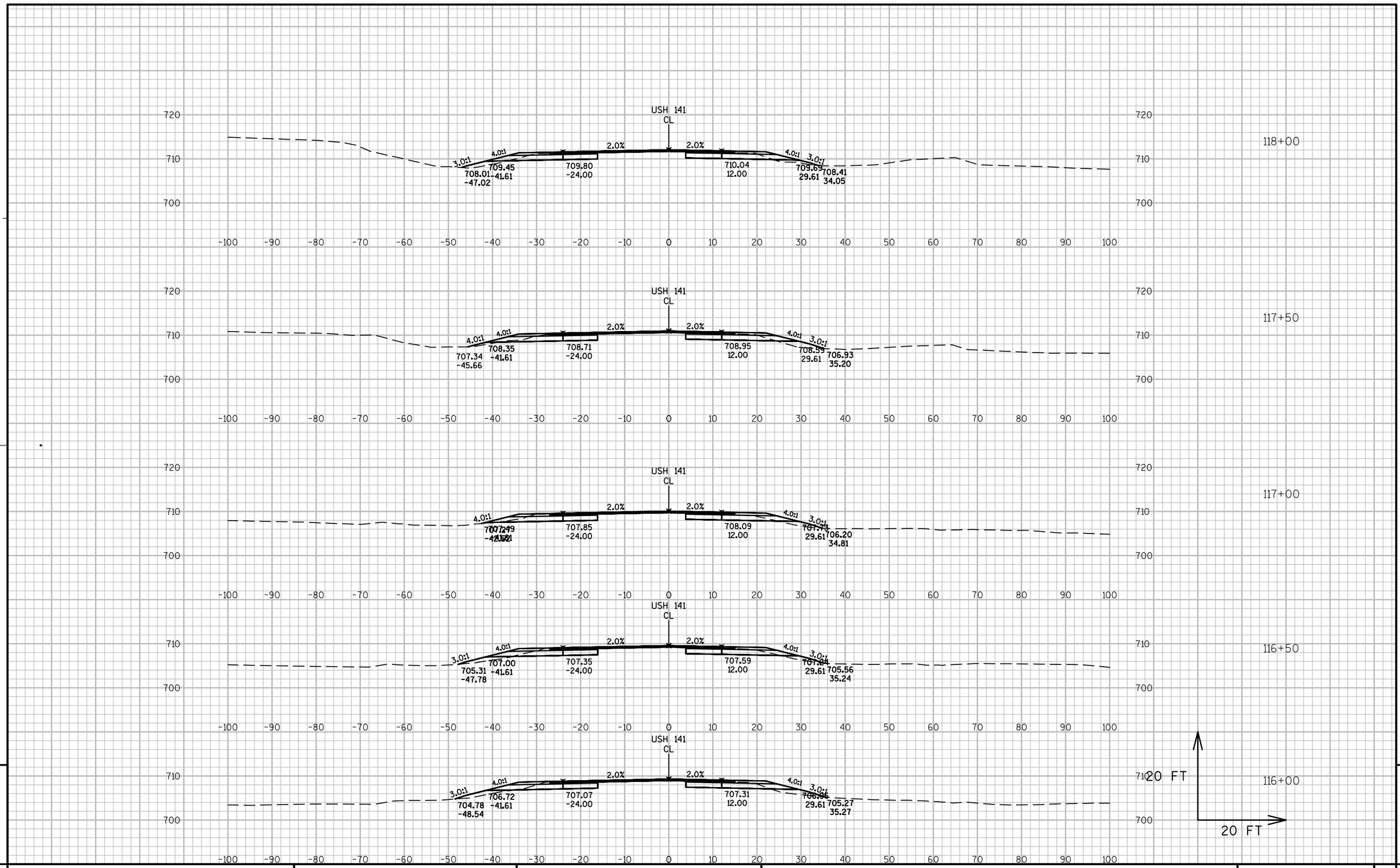
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:36 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

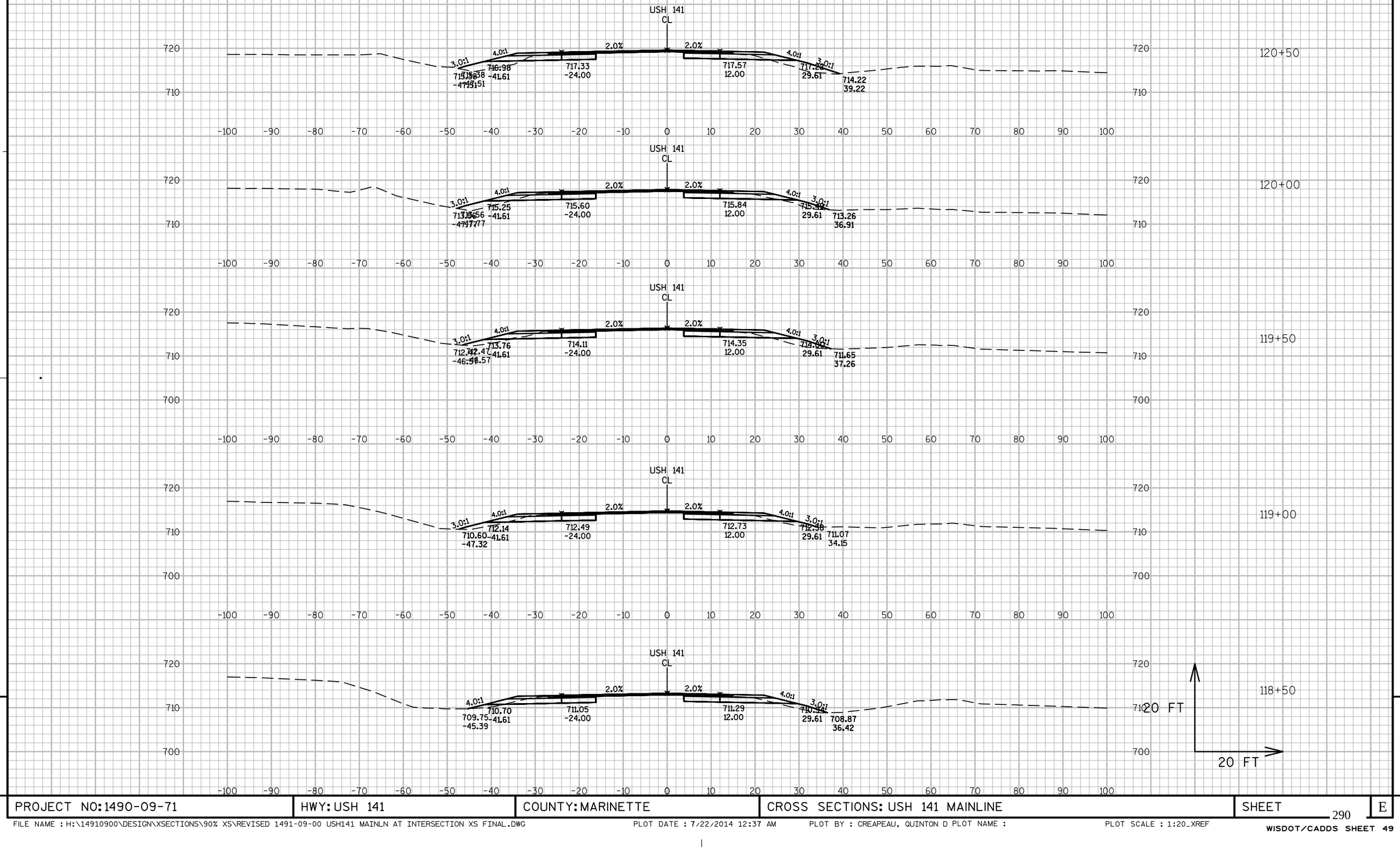


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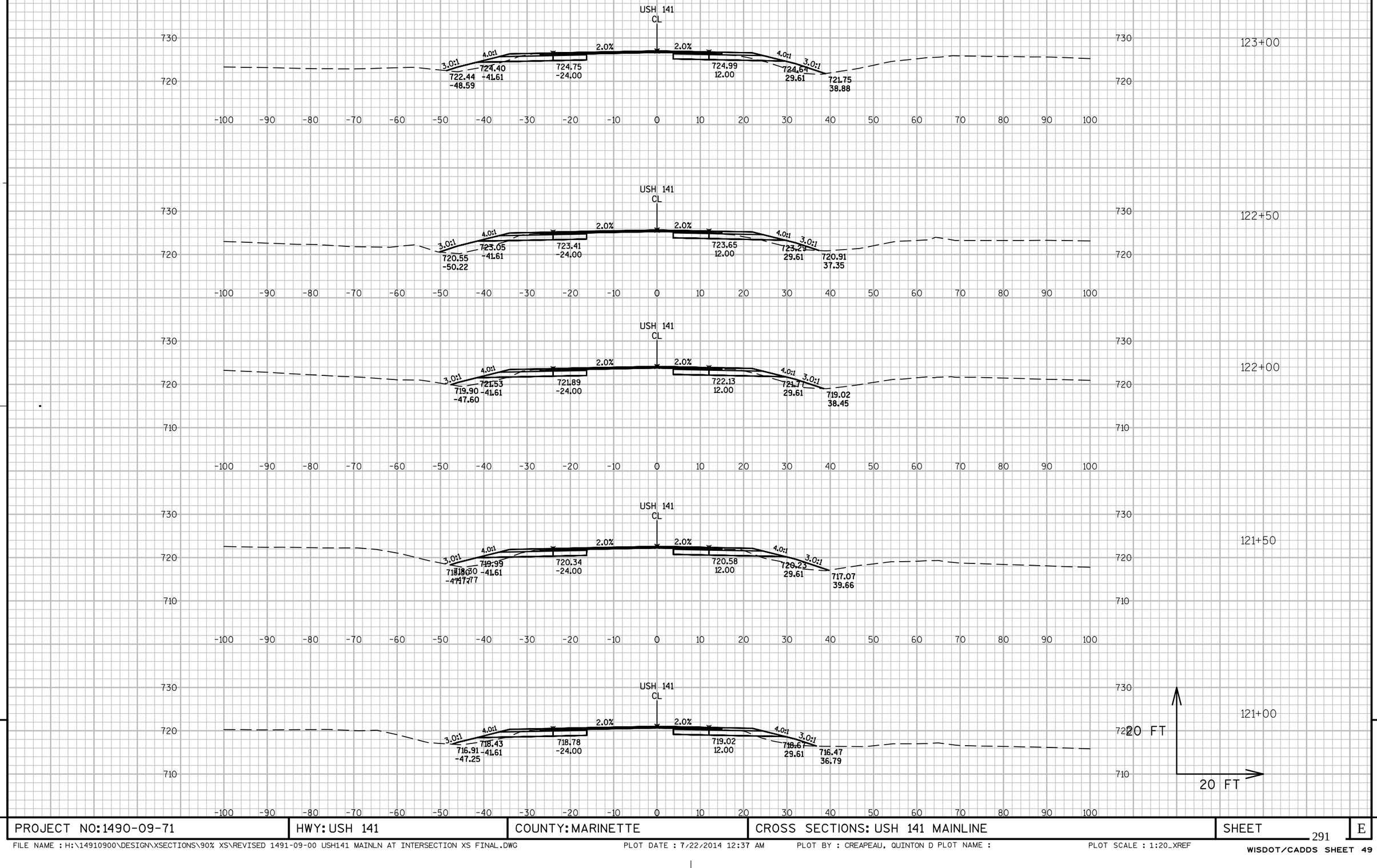
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 290	E

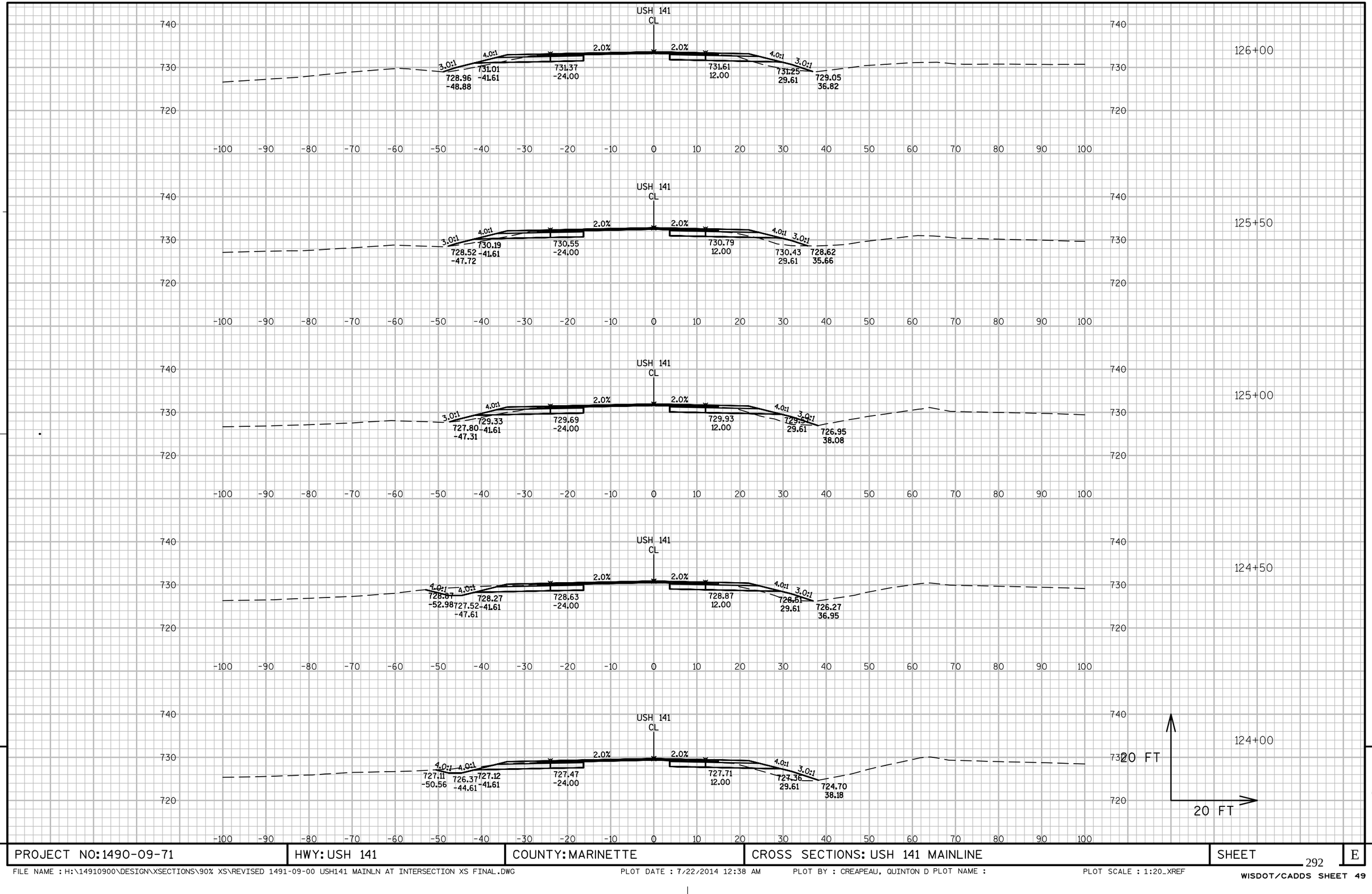


9

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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:37 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

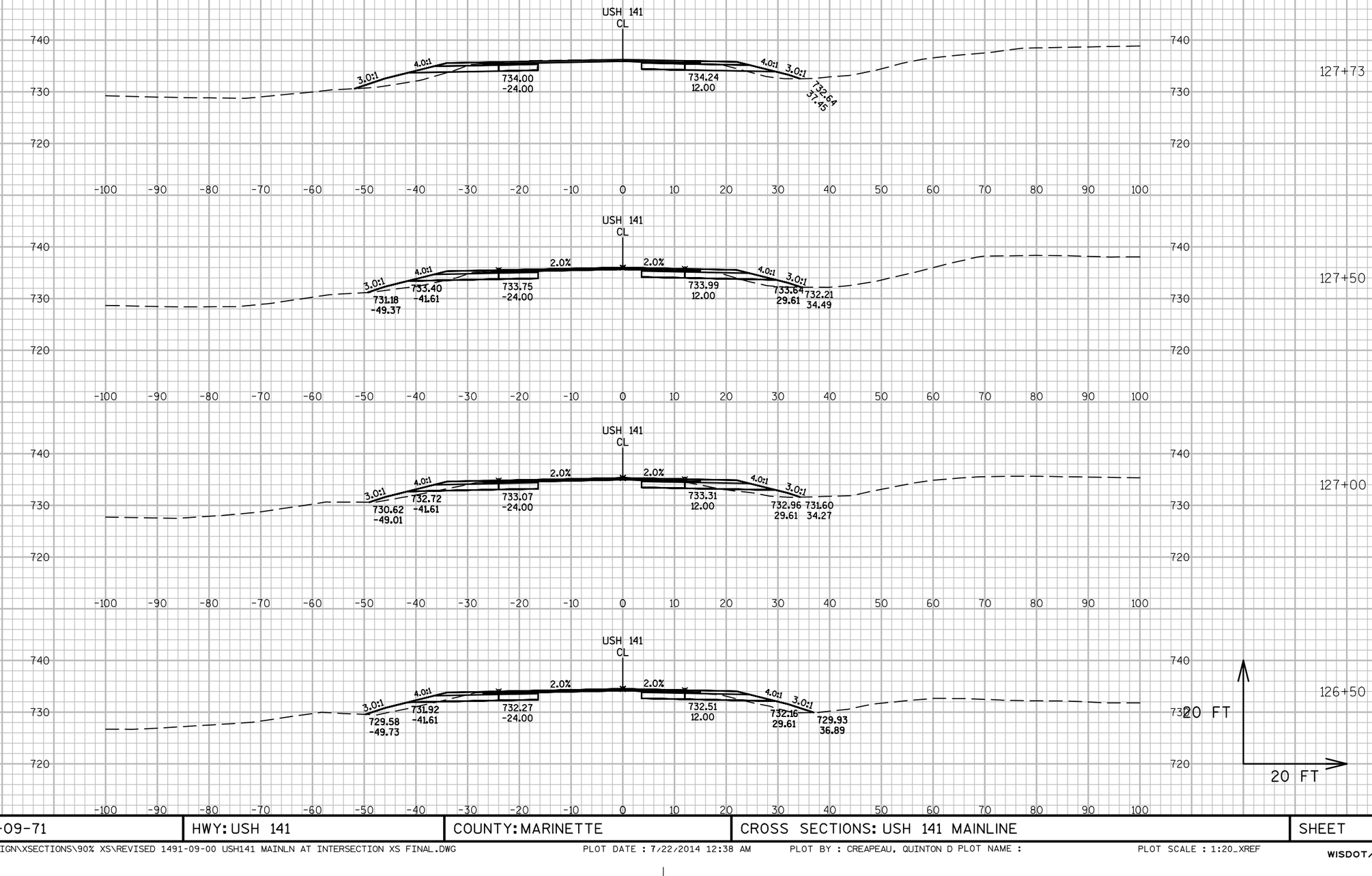


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

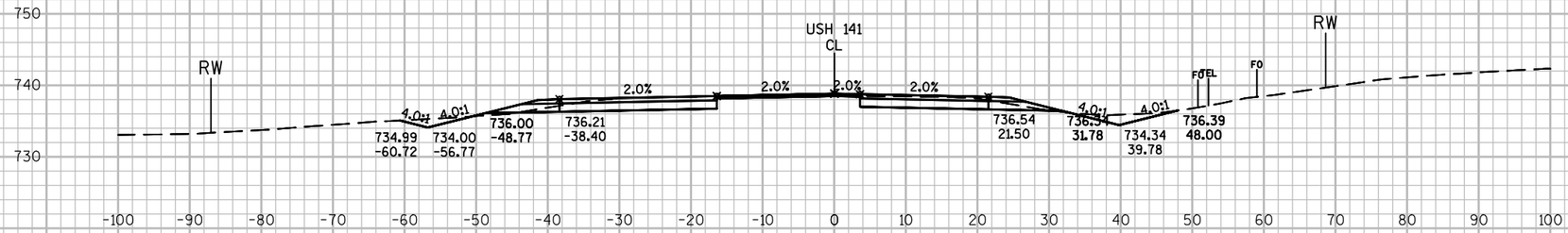
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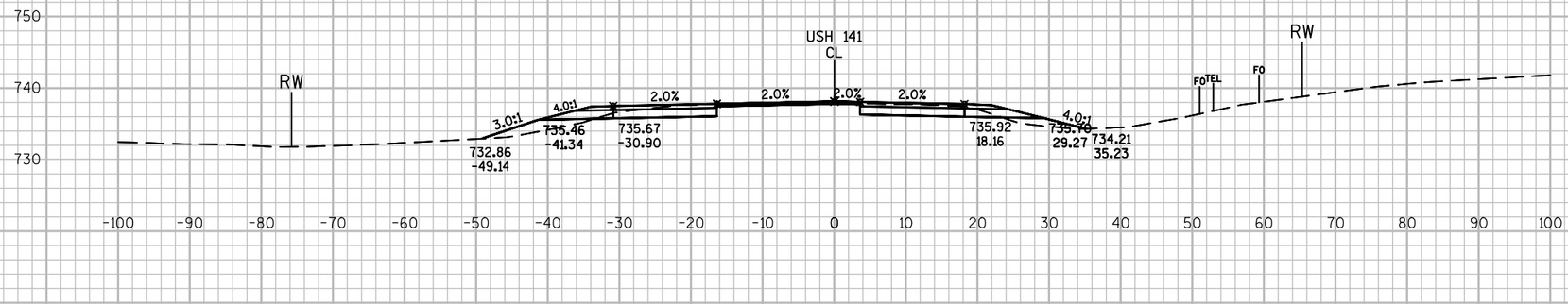
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:38 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

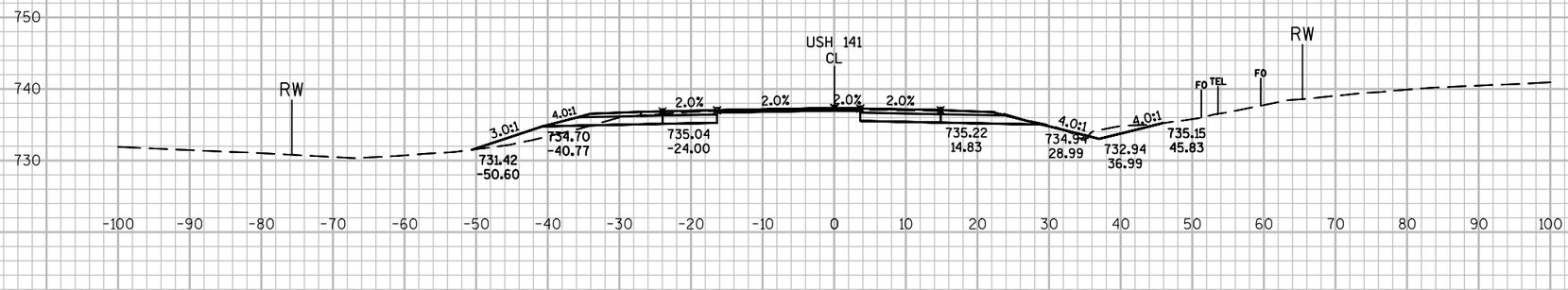
WISDOT/CADDS SHEET 49



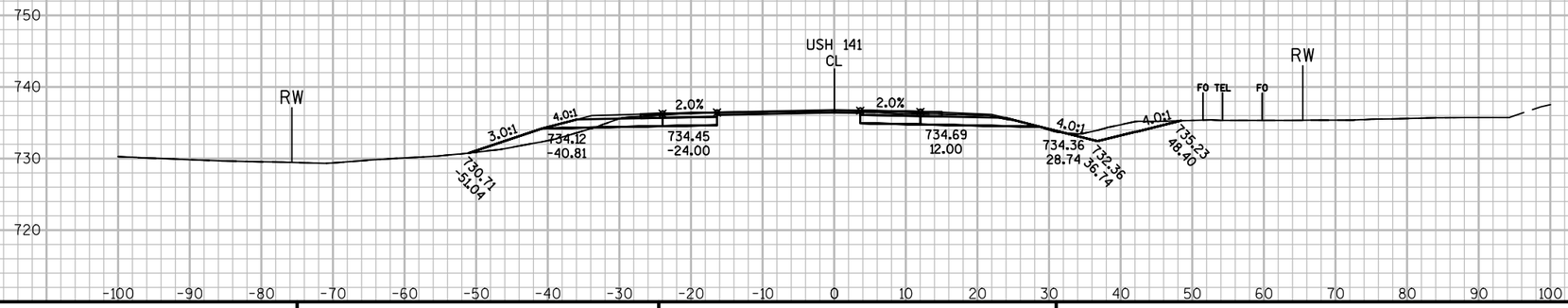
129+50



129+00



128+50



128+01

20 FT

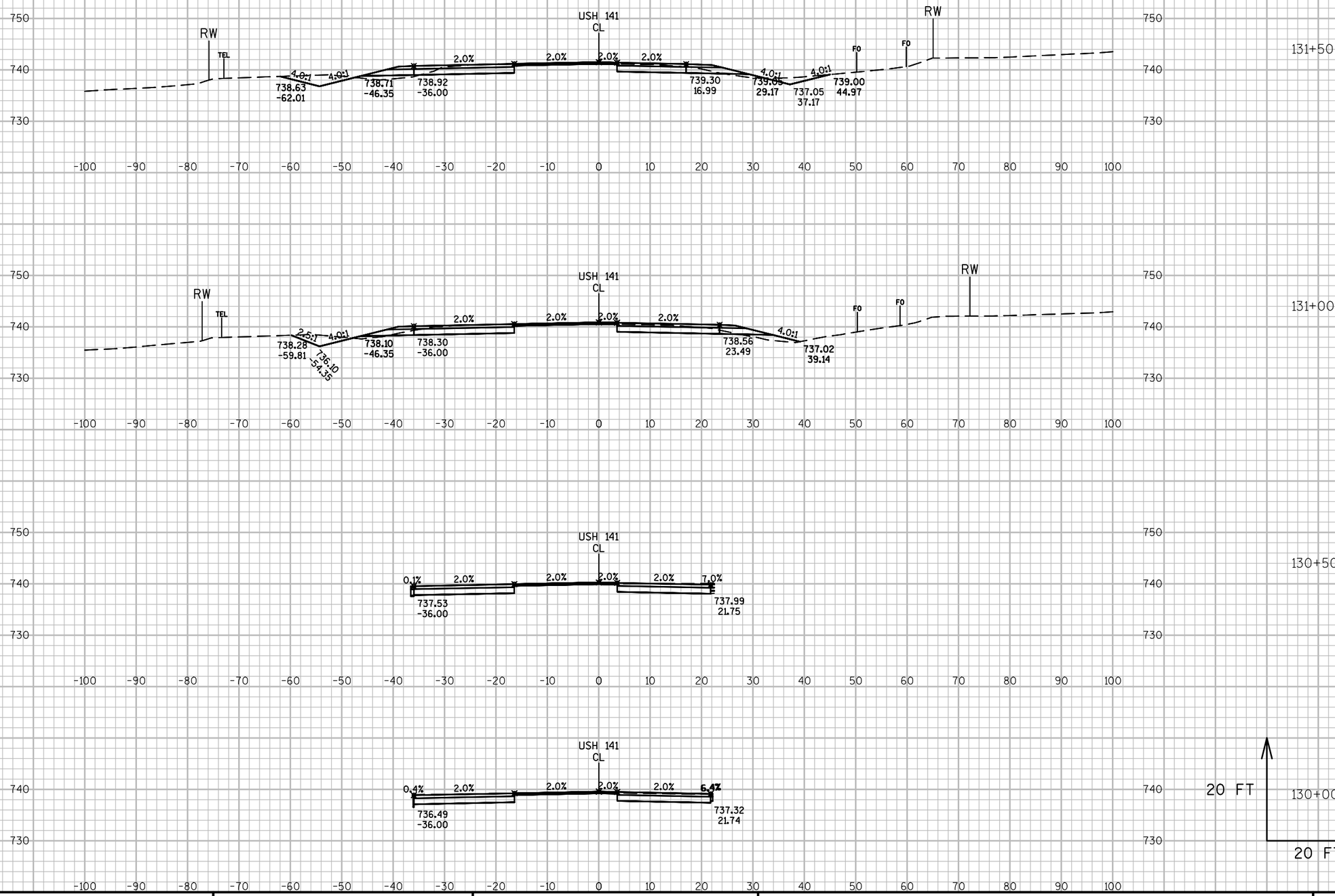
20 FT

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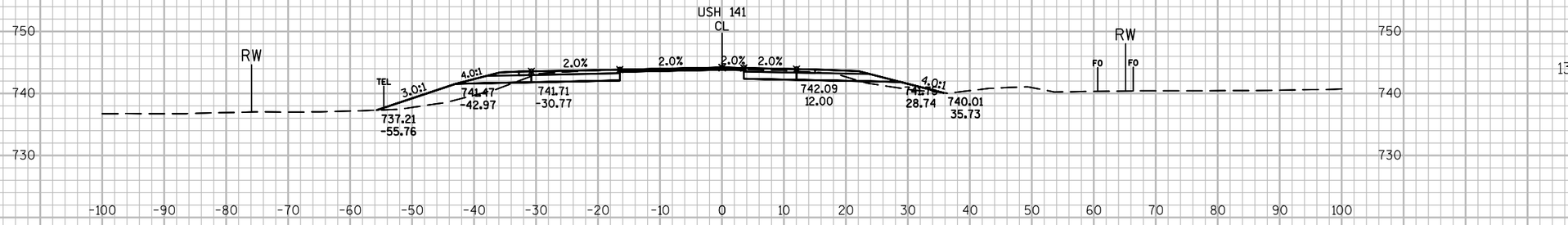
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:51 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

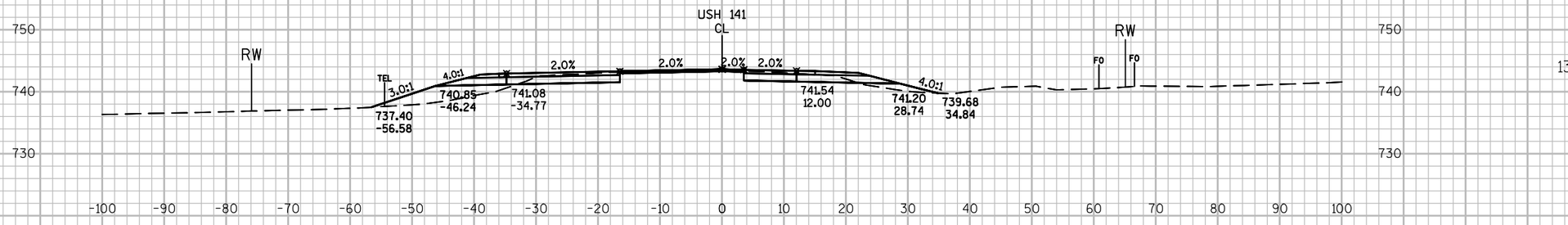


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

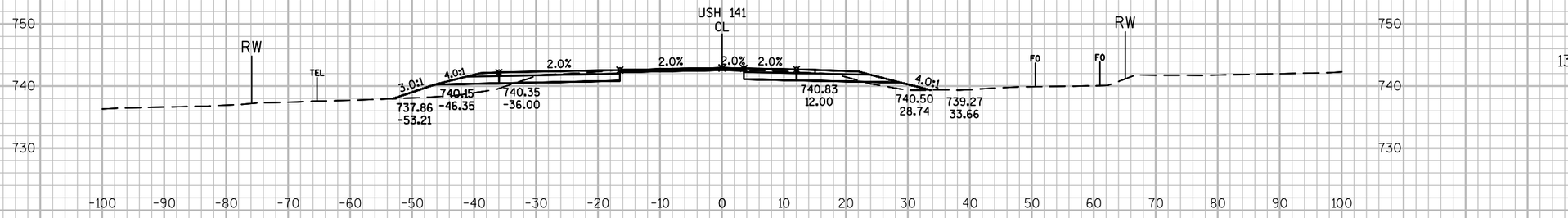
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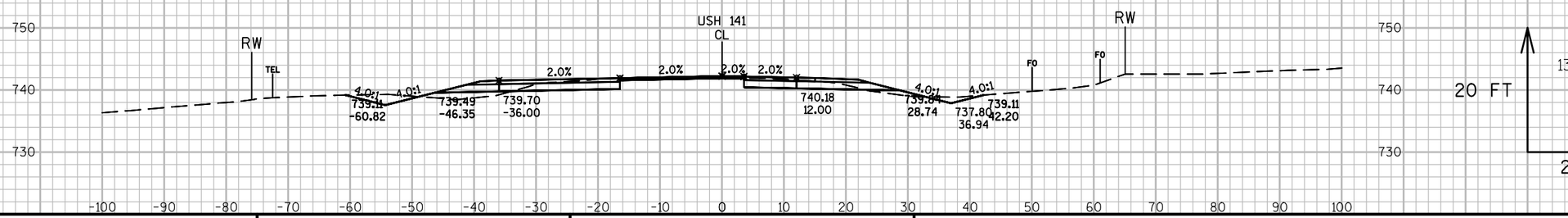
133+50



133+00



132+50



132+00

20 FT

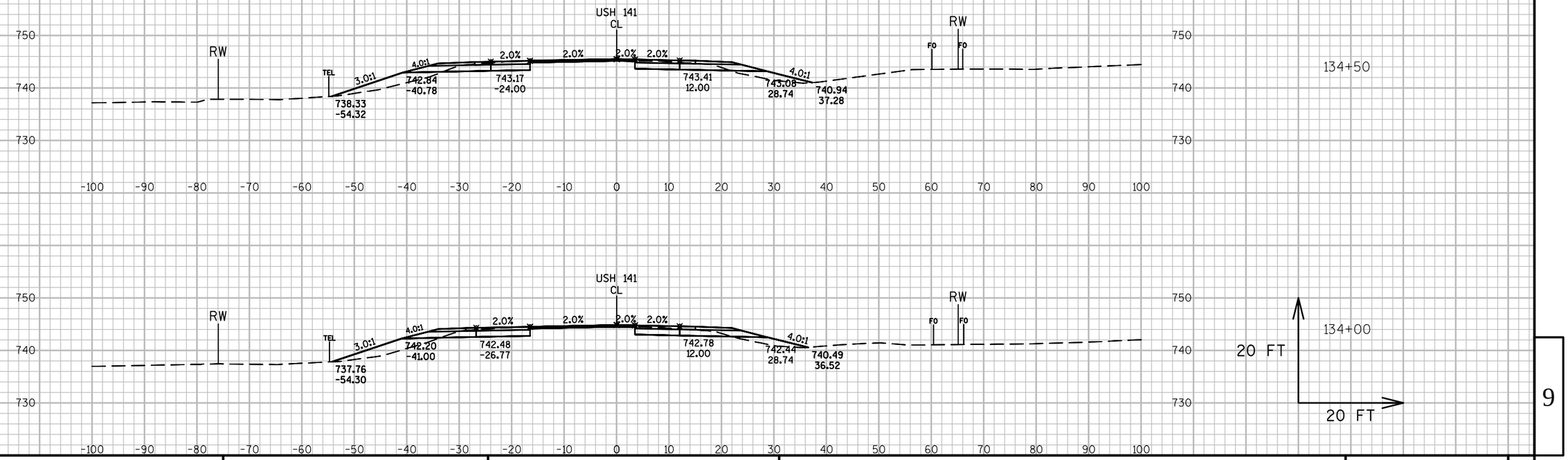
20 FT

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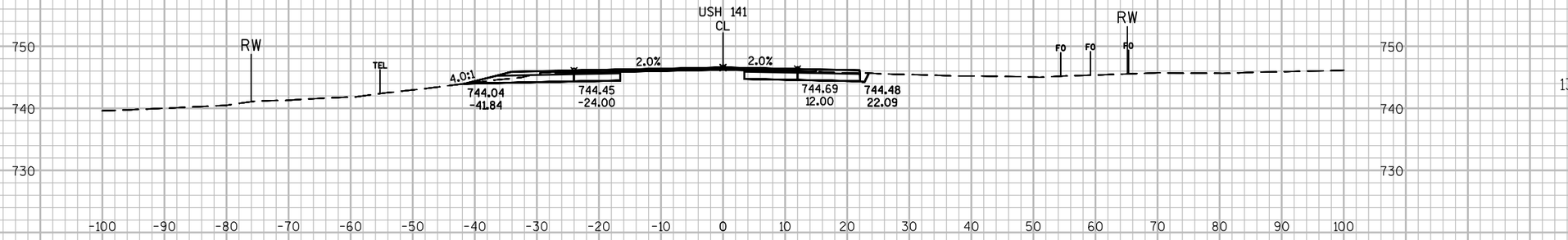
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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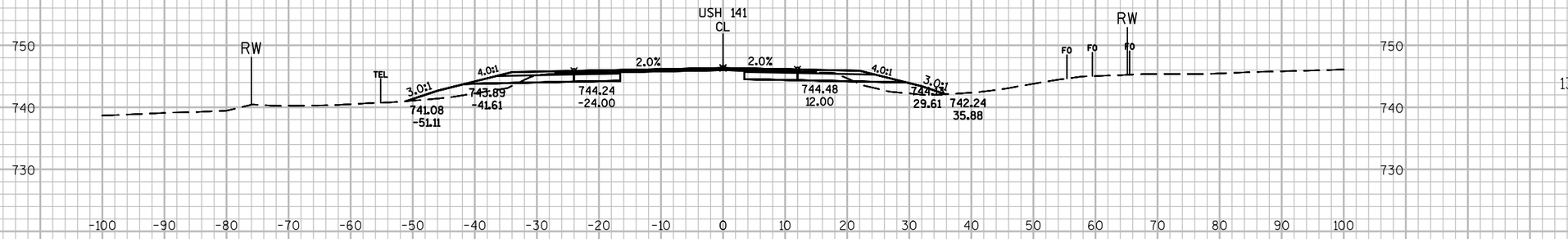


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

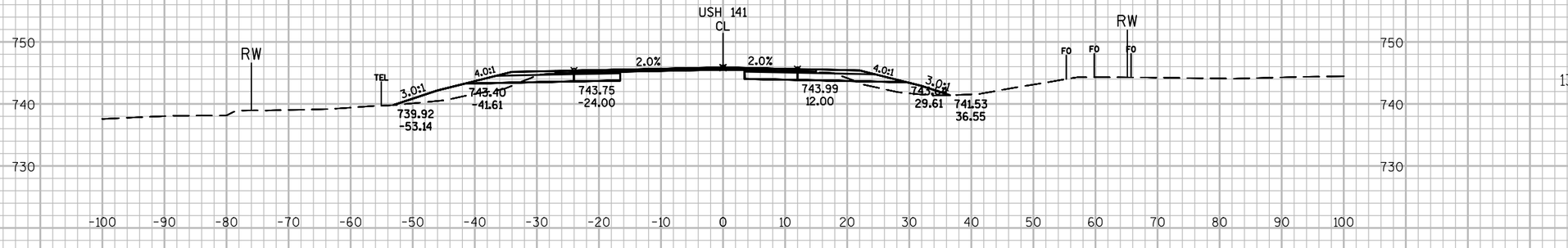
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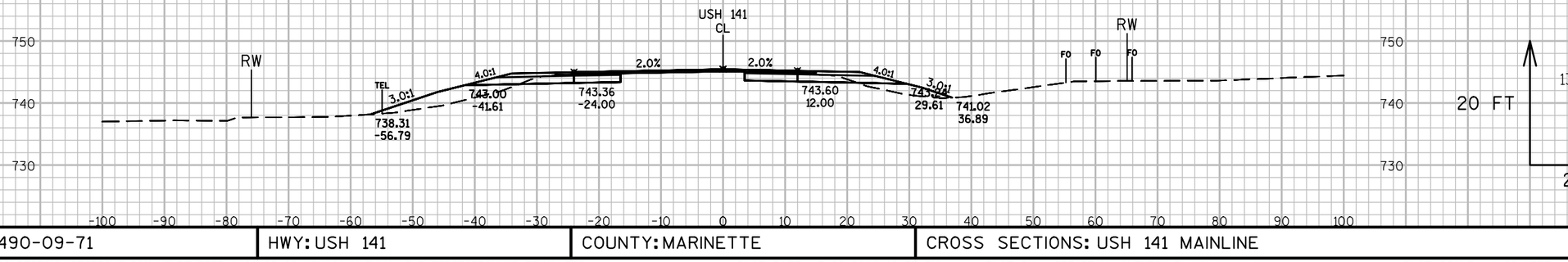
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135+50



135+00



134+60

20 FT

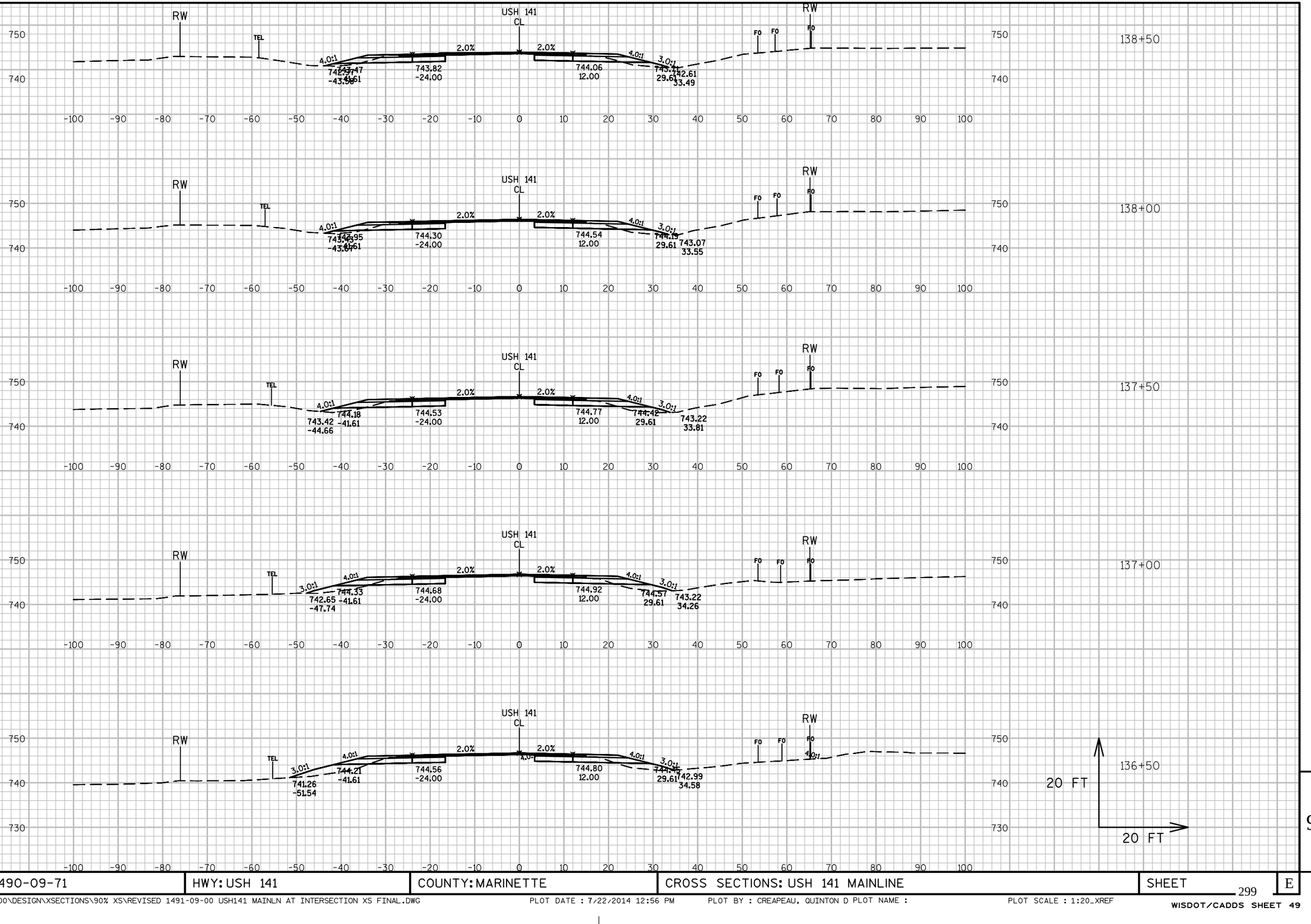
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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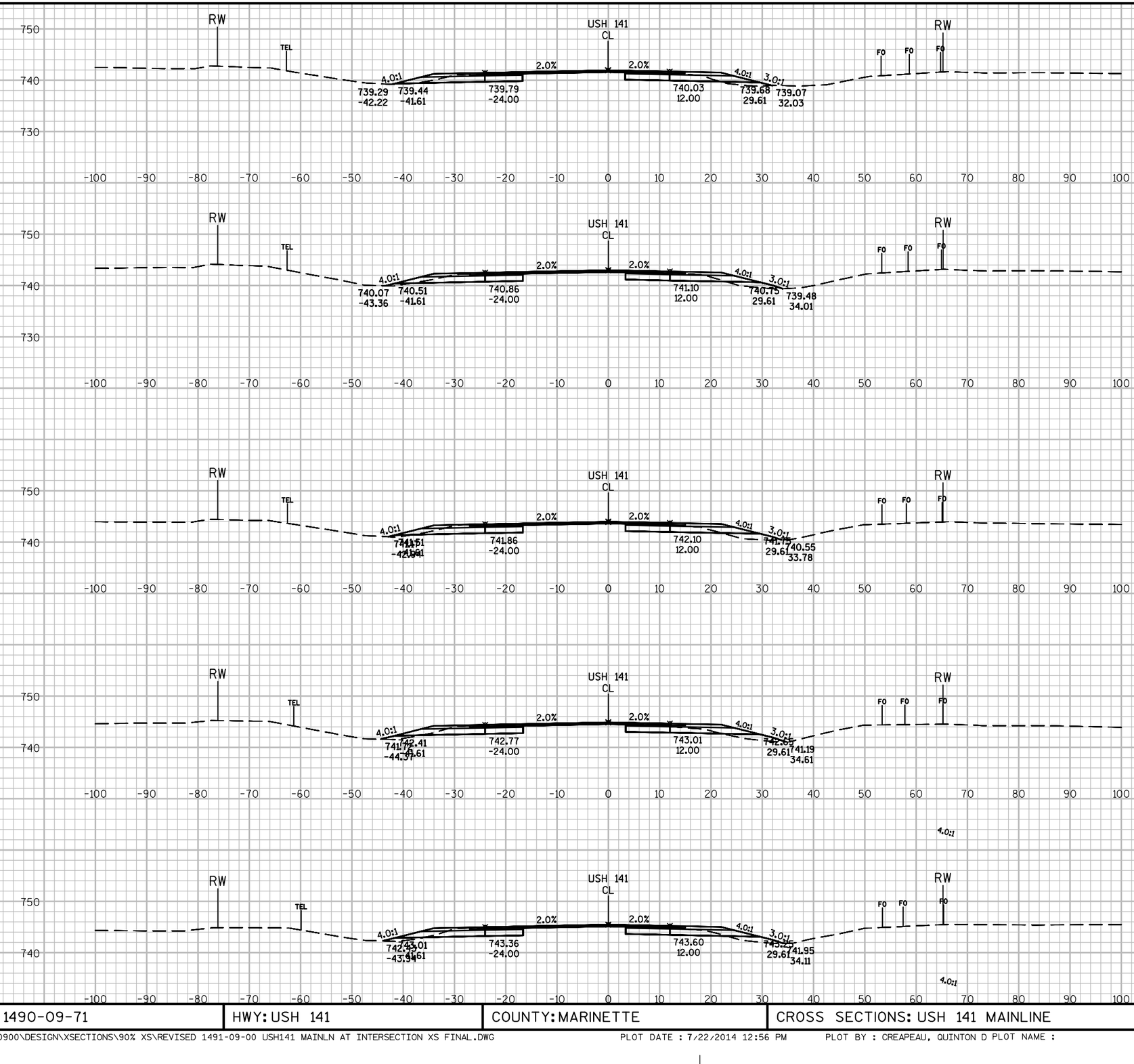


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:56 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



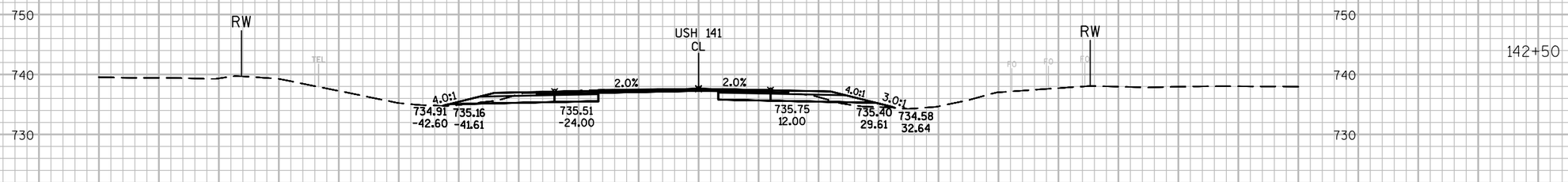
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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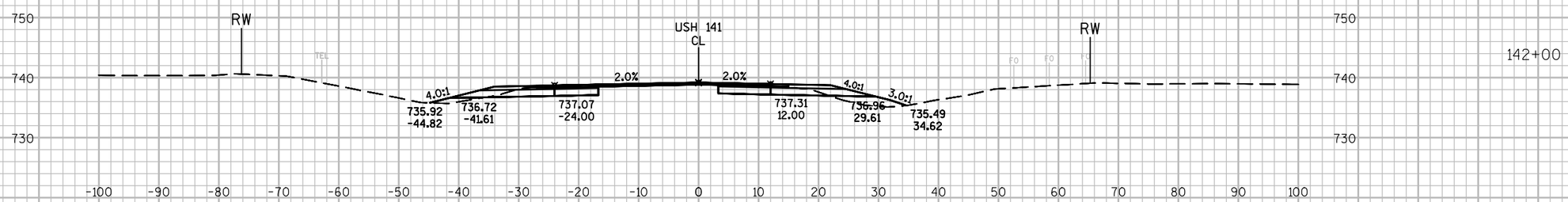
WISDOT/CADDS SHEET 49



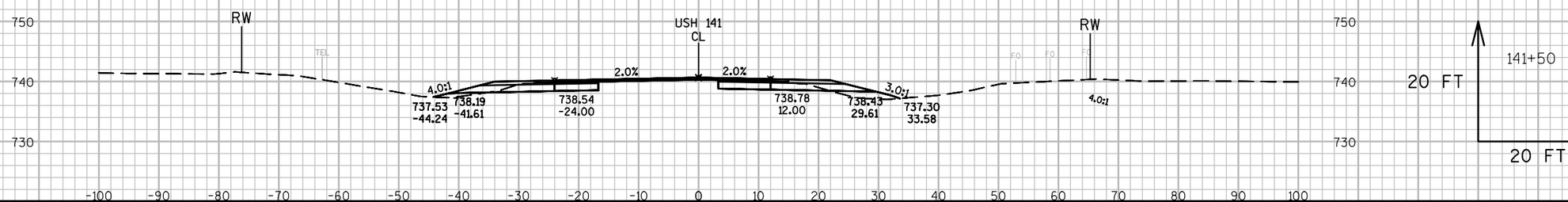
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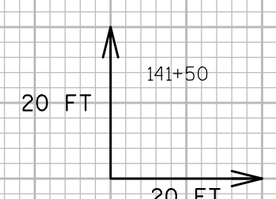
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142+00

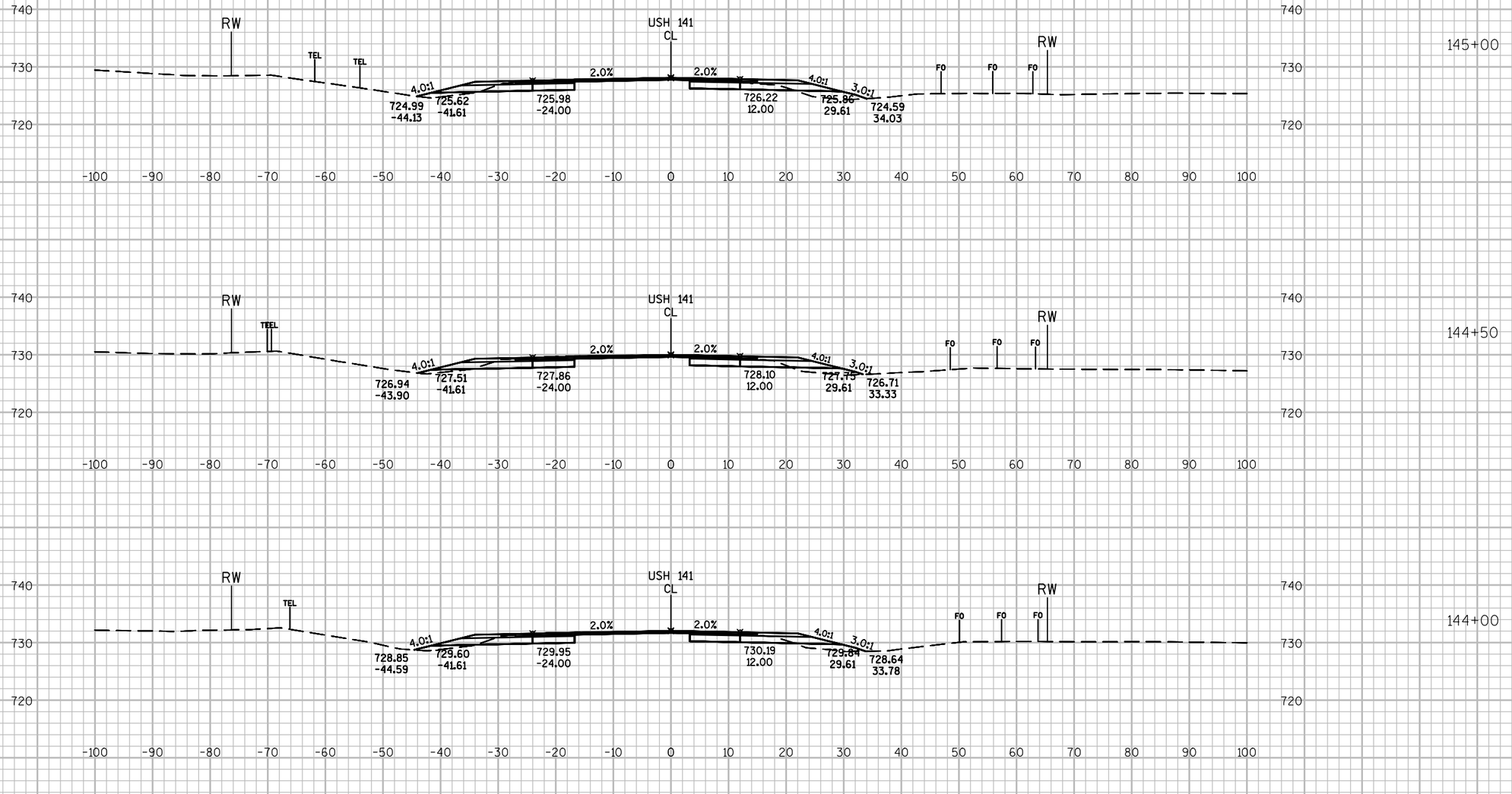


141+50



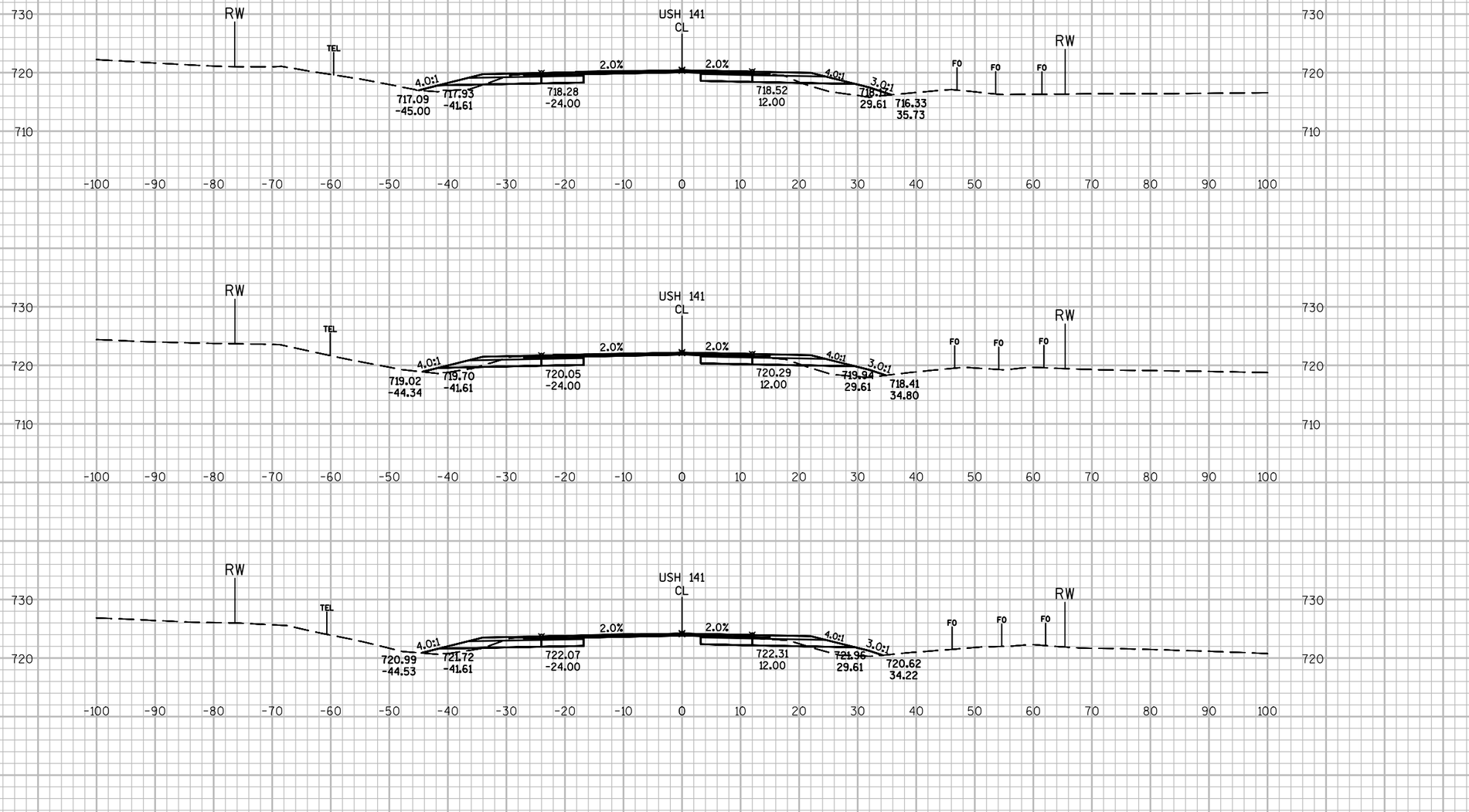
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 12:57 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF

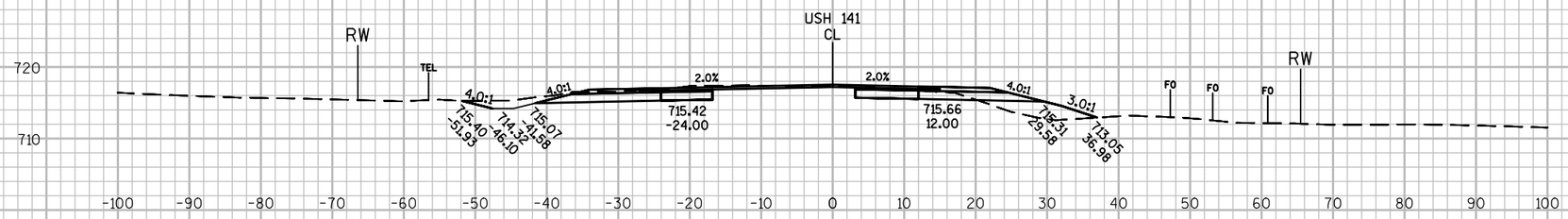


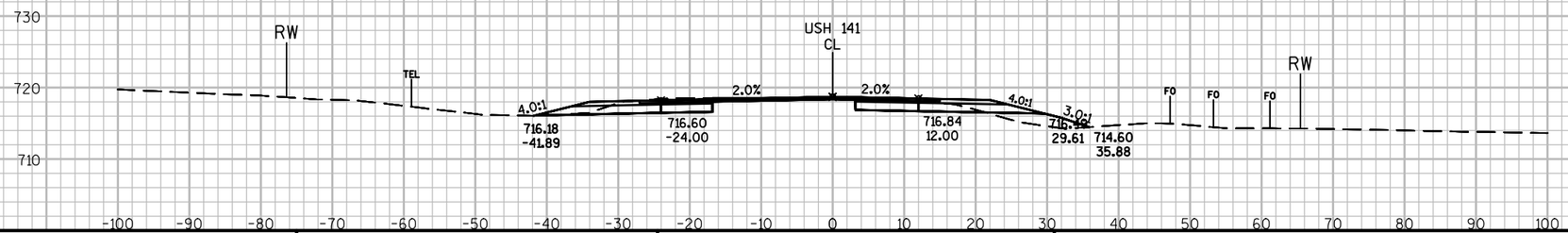
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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WISDOT/CADDS SHEET 49



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E



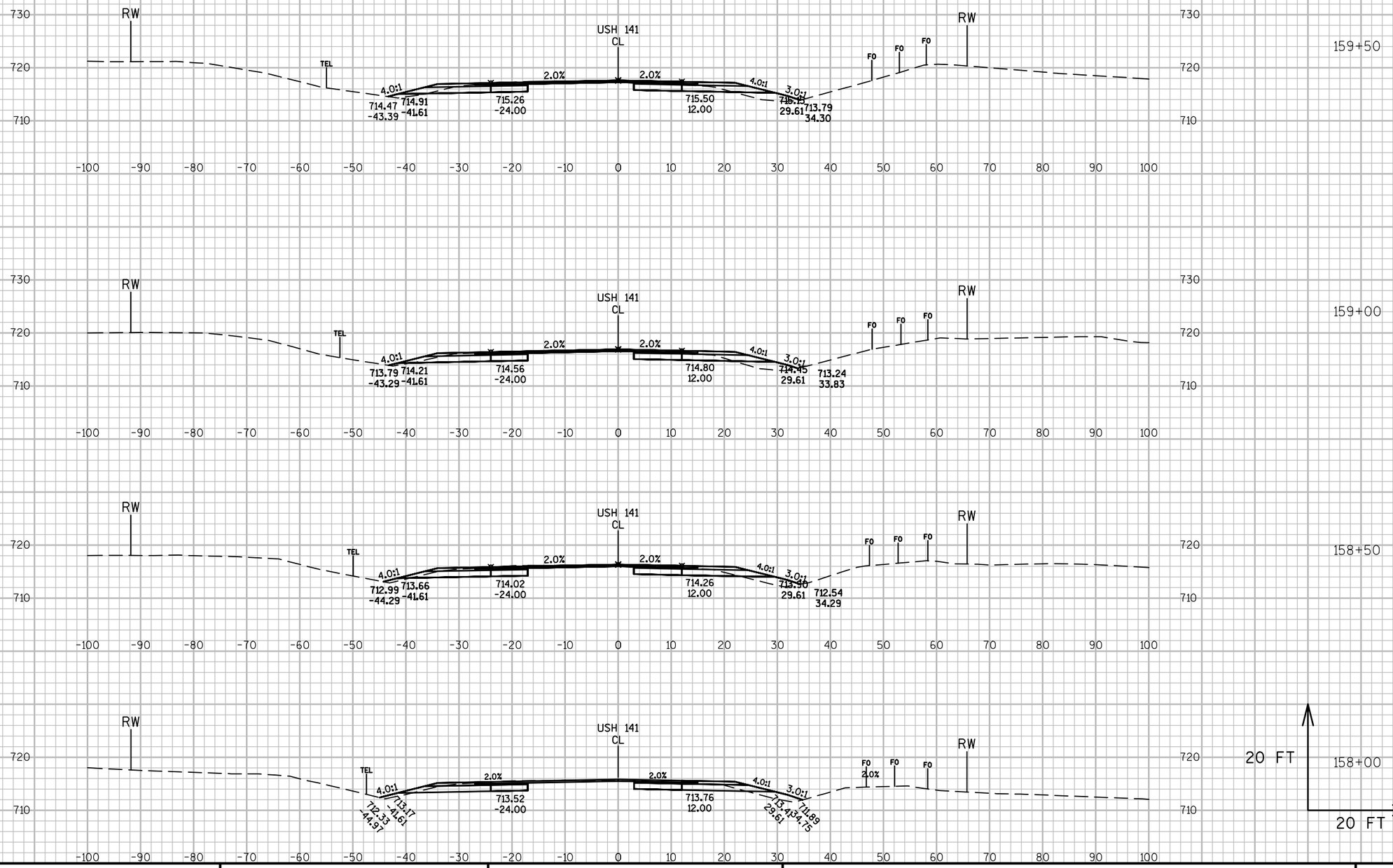


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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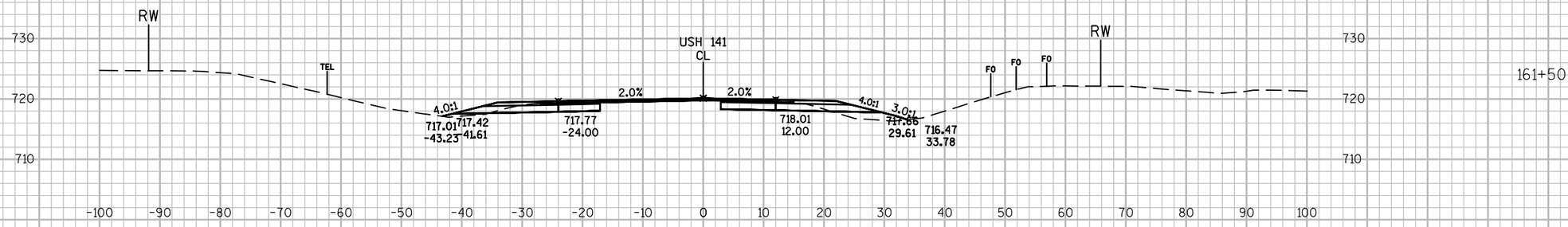


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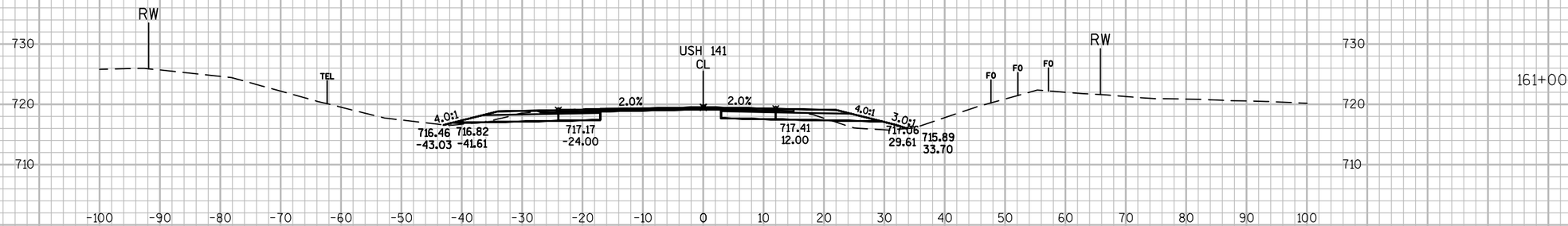
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

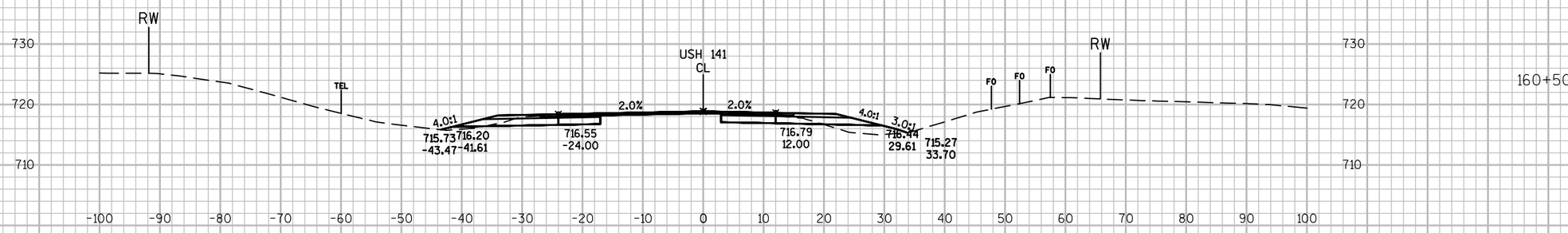
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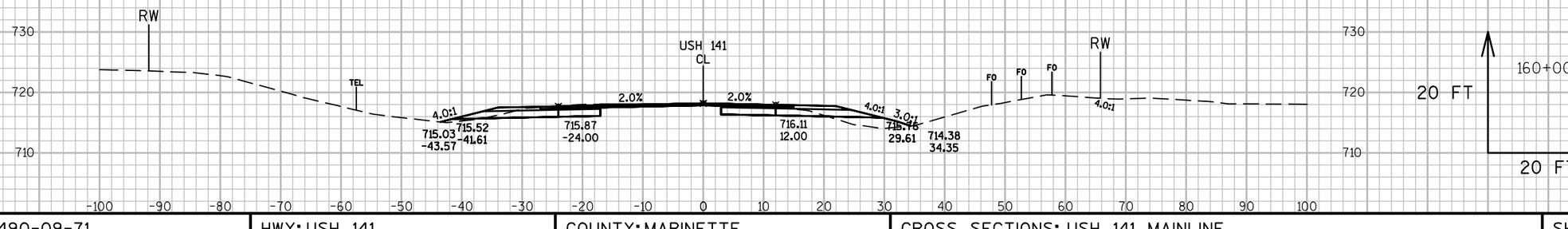
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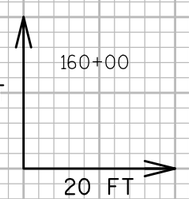
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160+00

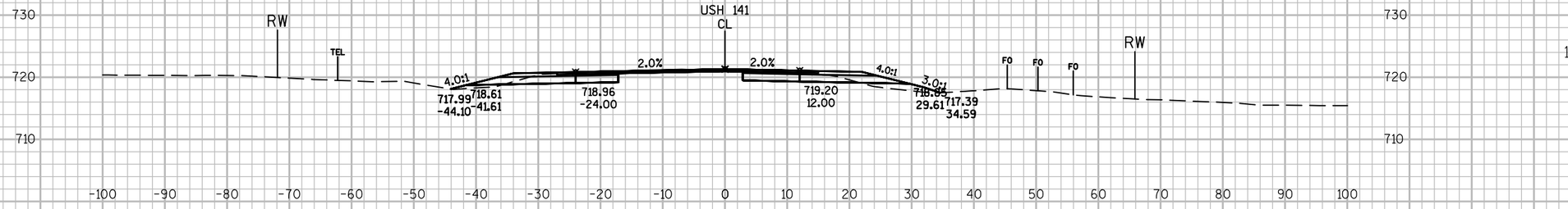


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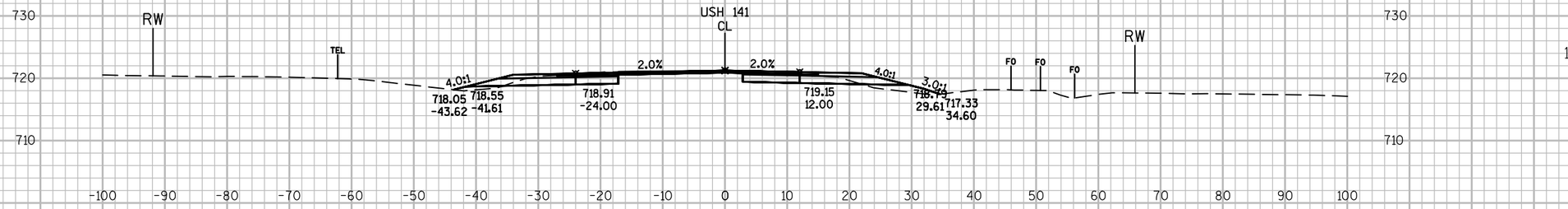
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

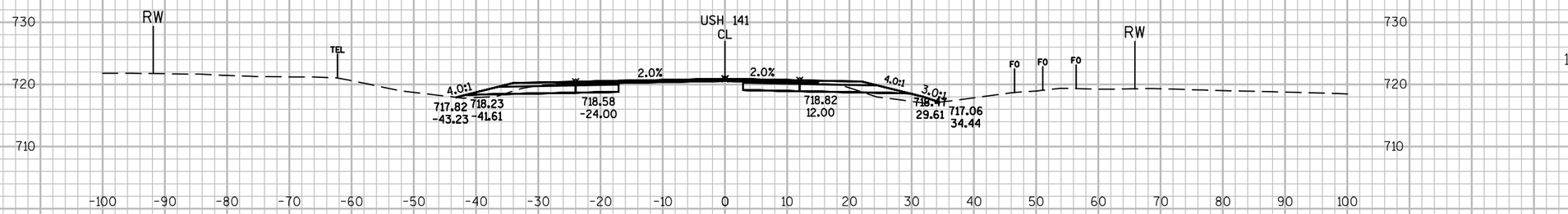
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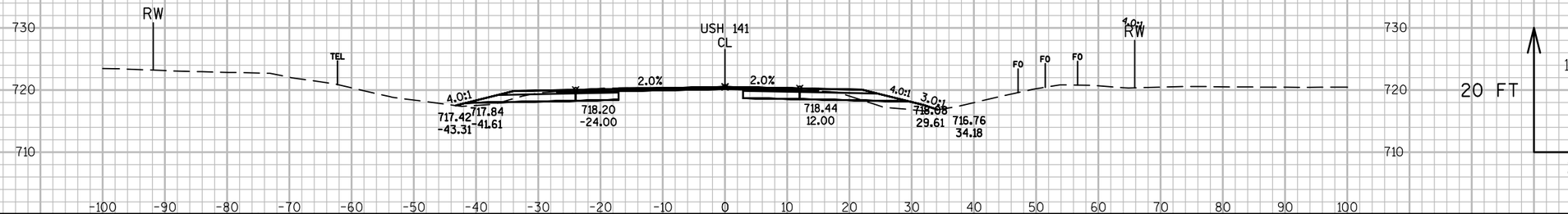
163+50



163+00



162+50



162+00

20 FT

20 FT

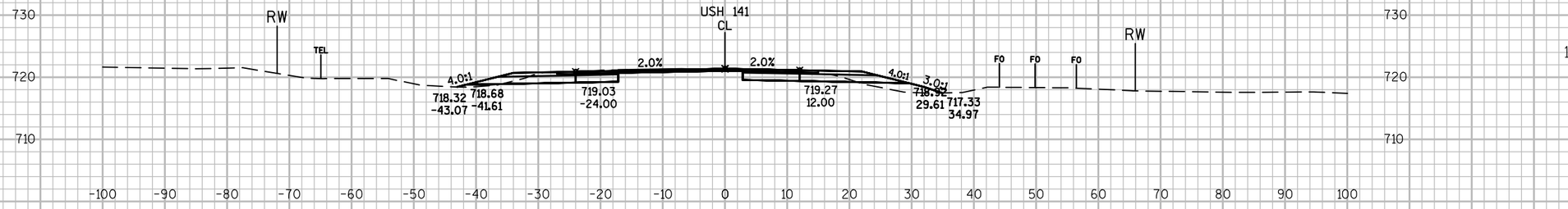
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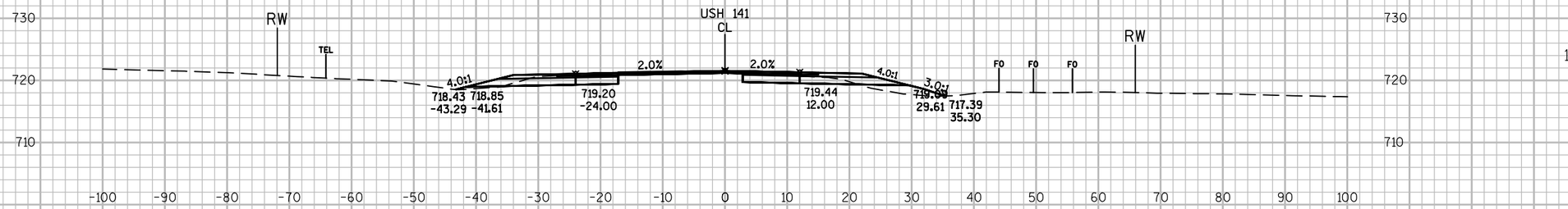
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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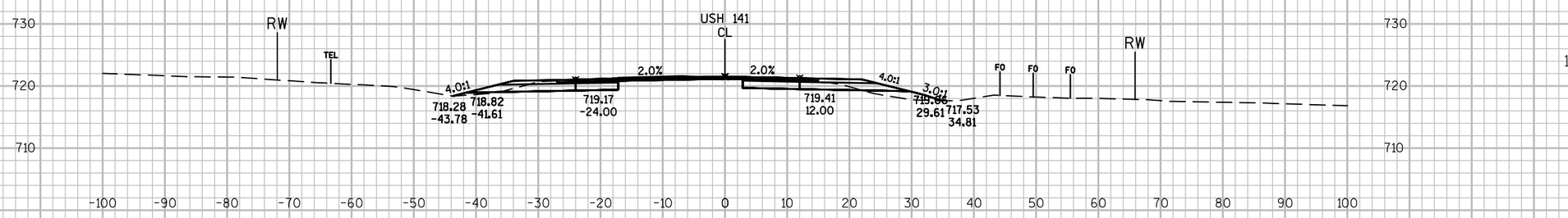
WISDOT/CADDS SHEET 49



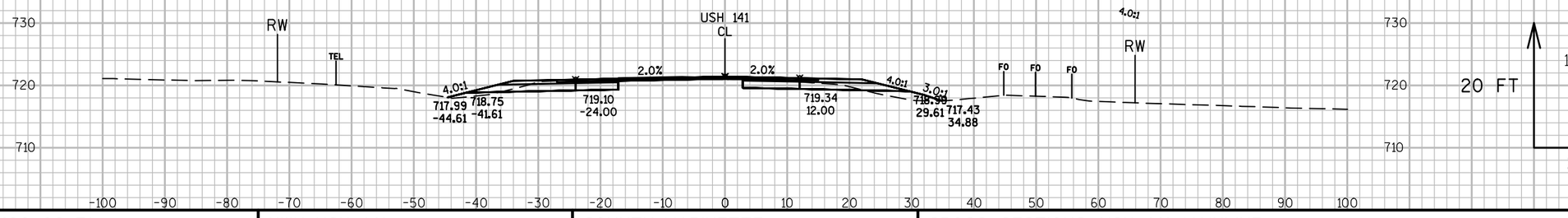
165+50



165+00



164+50



164+00

20 FT

20 FT

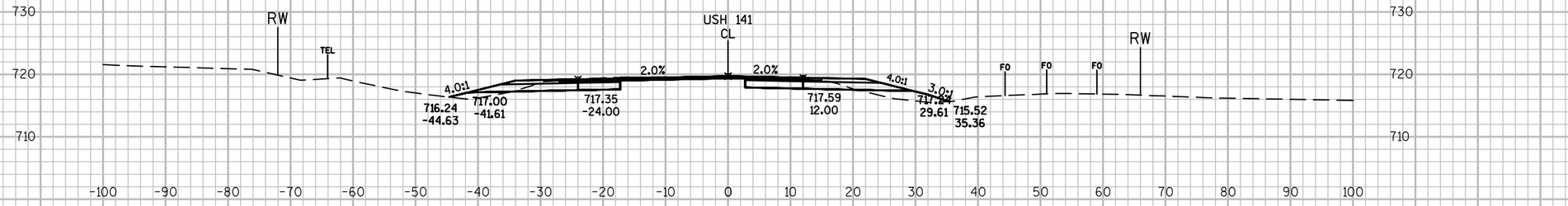
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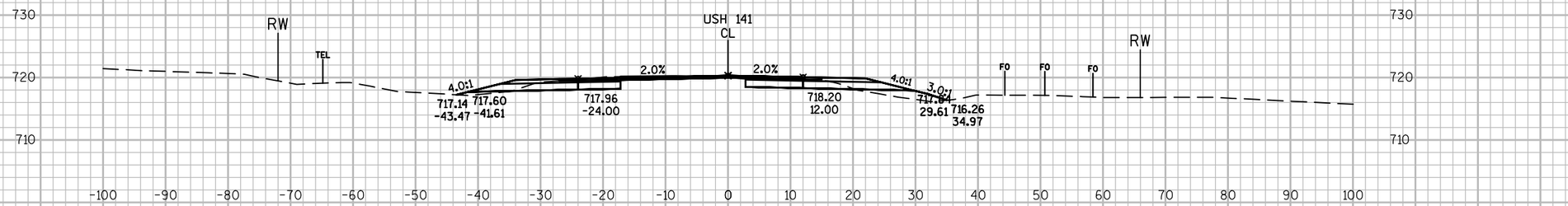
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

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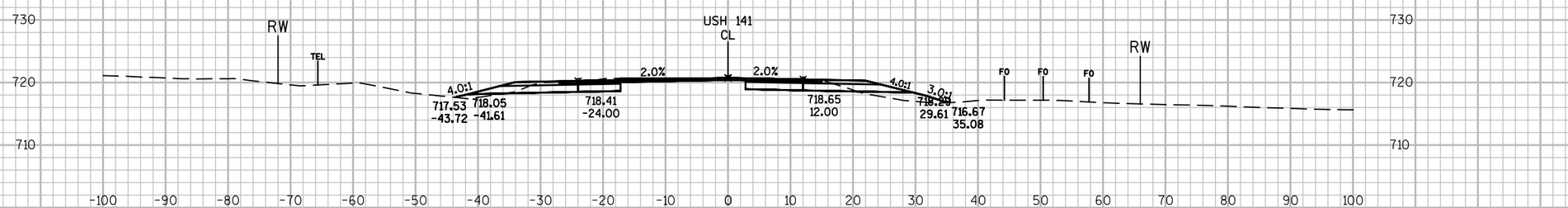
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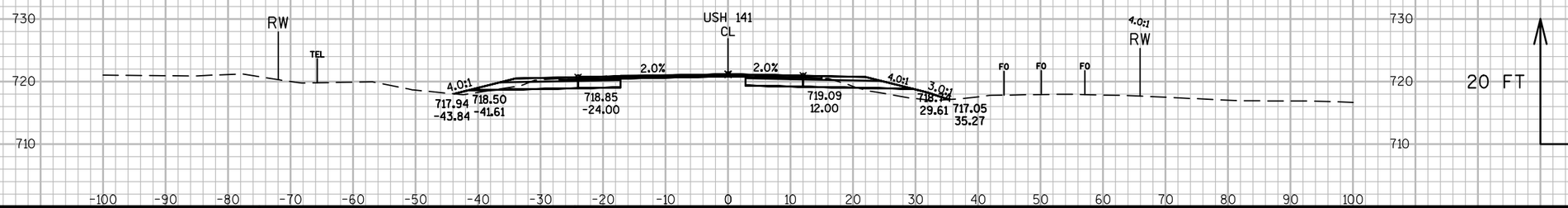
167+50



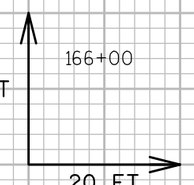
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166+50



166+00

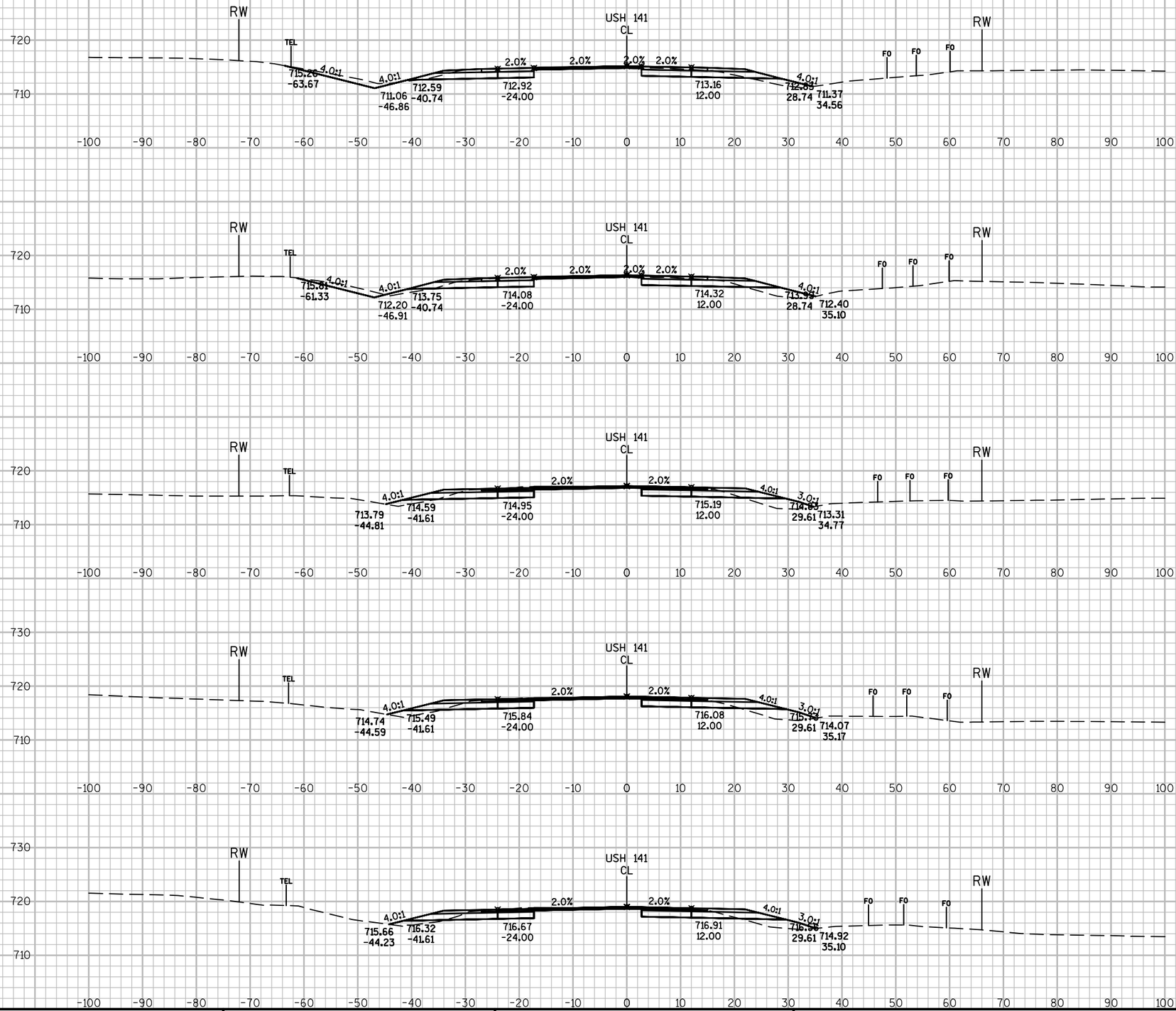


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

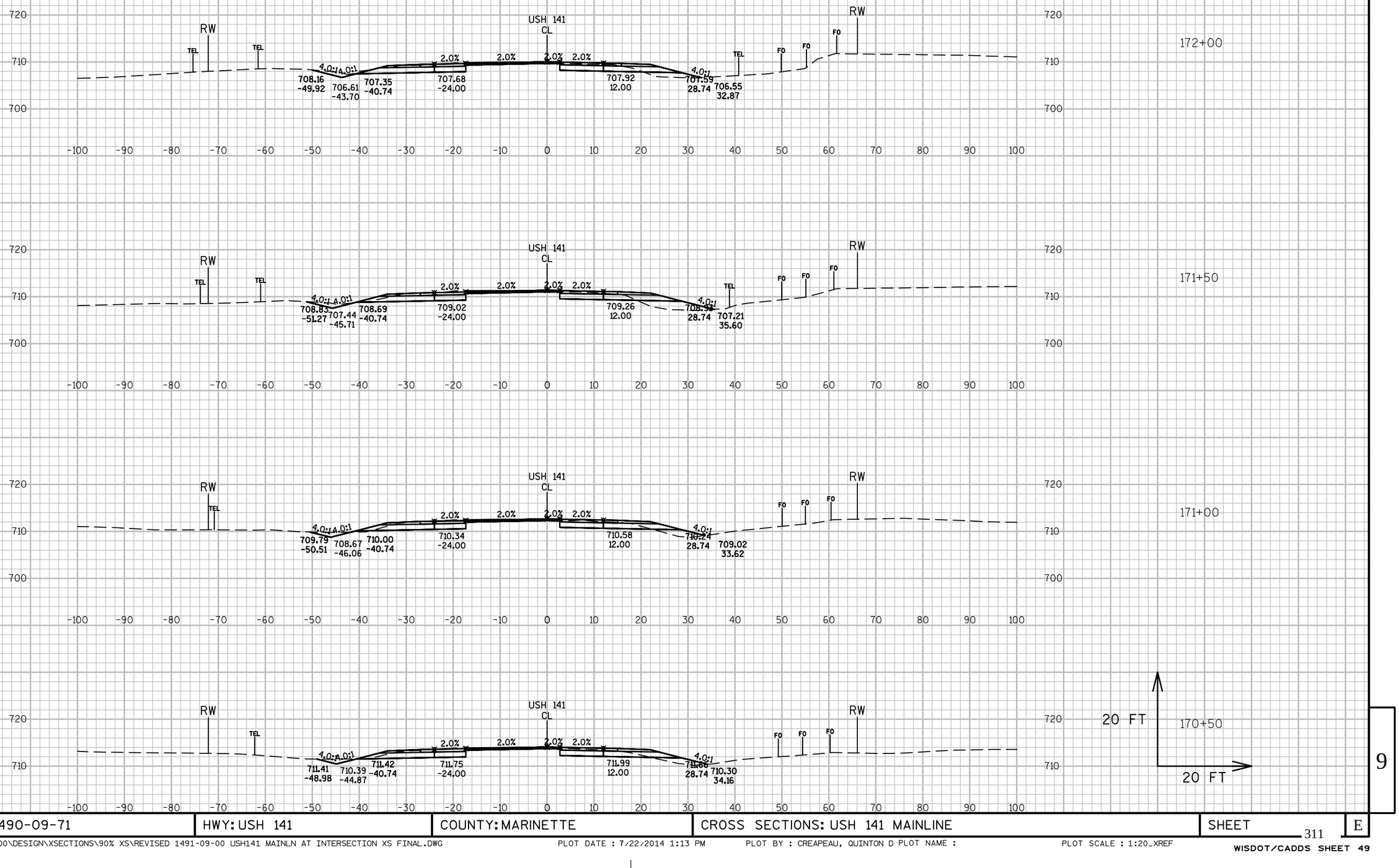
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET 310	E

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WISDOT/CADDS SHEET 49

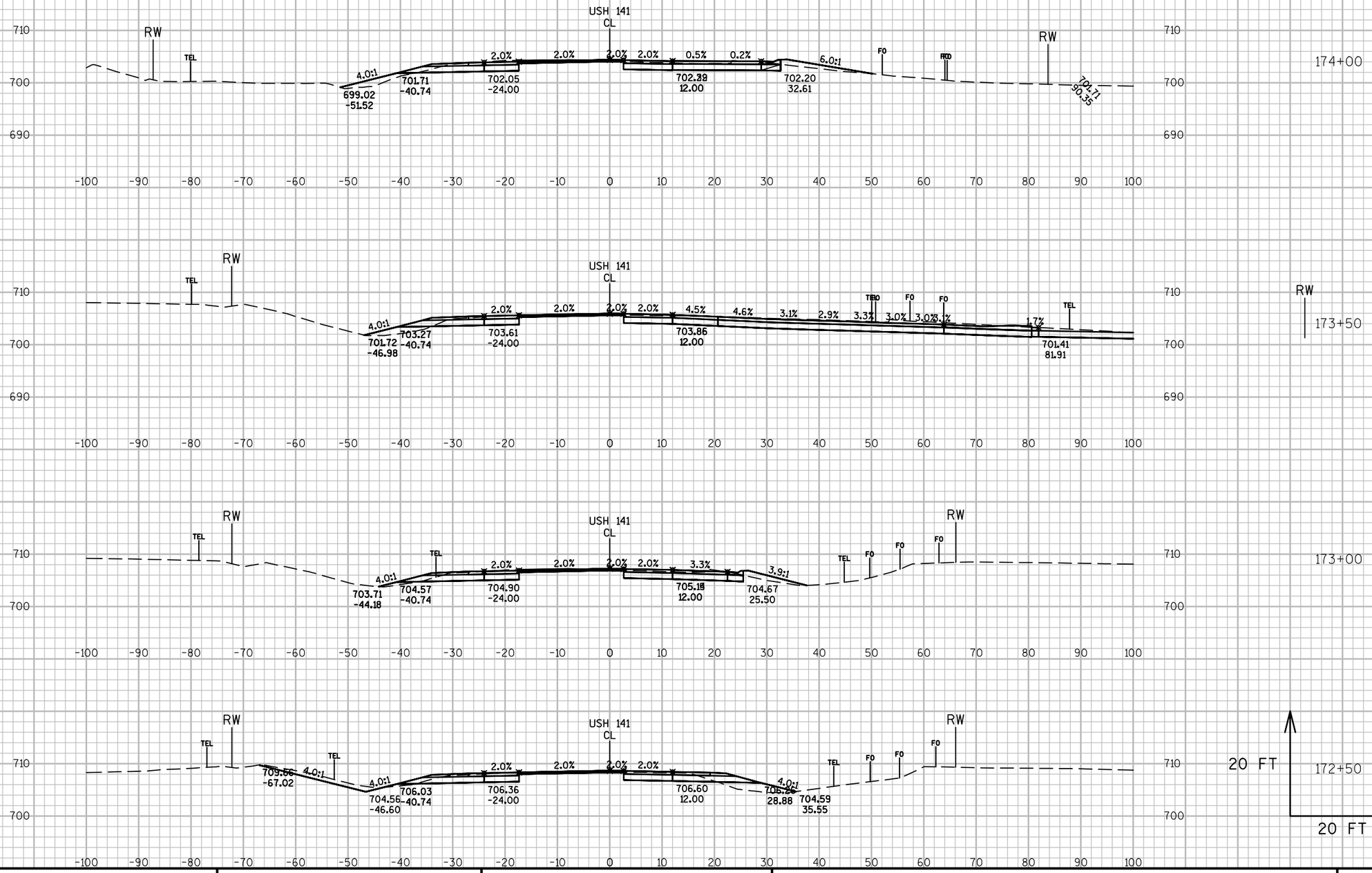


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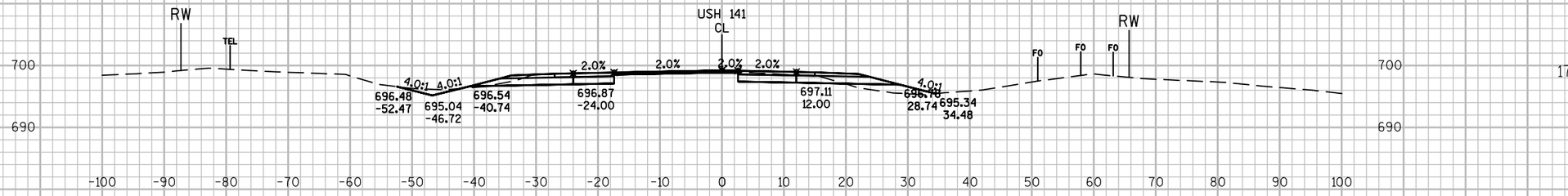
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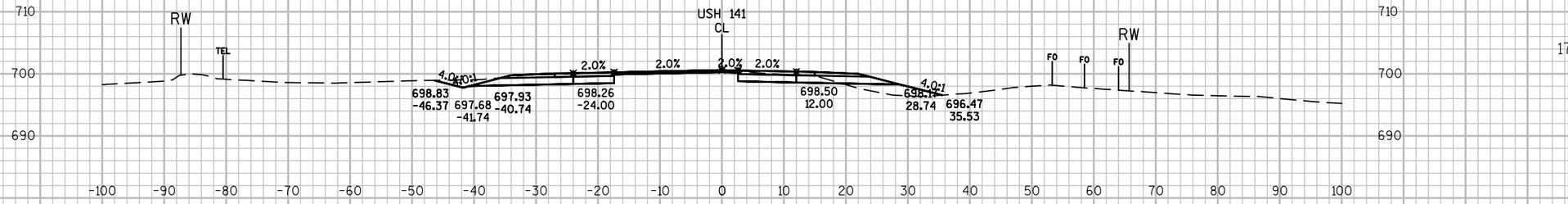
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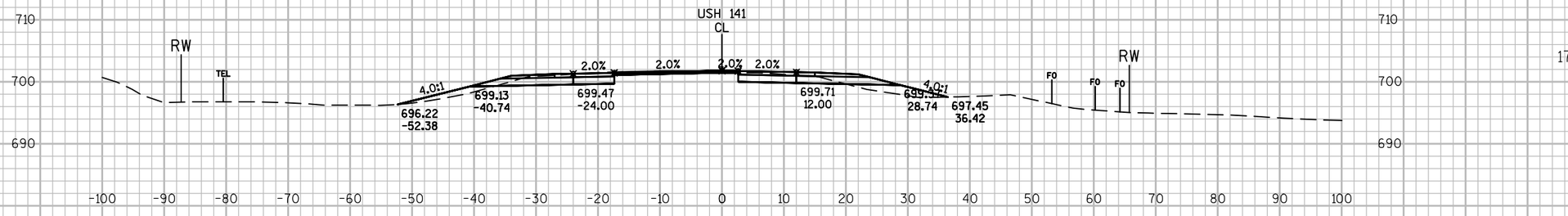
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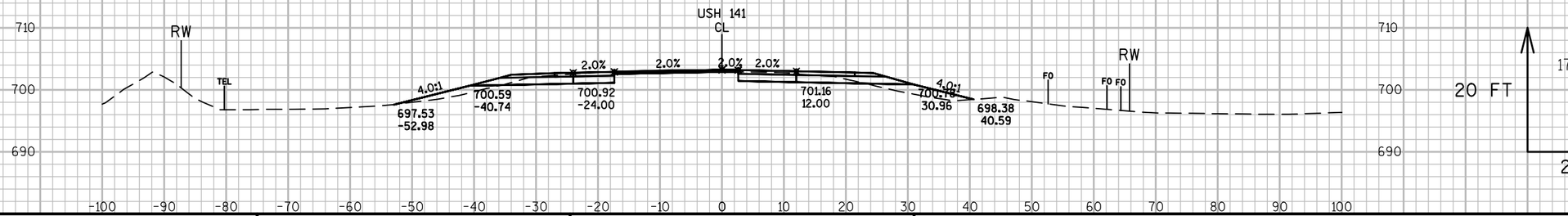
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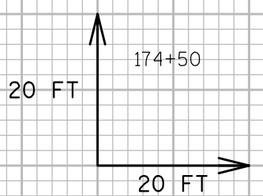
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175+00



174+50

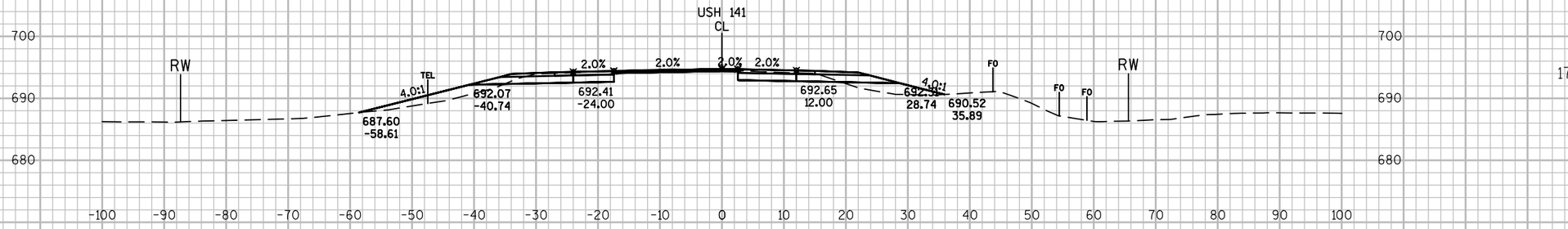


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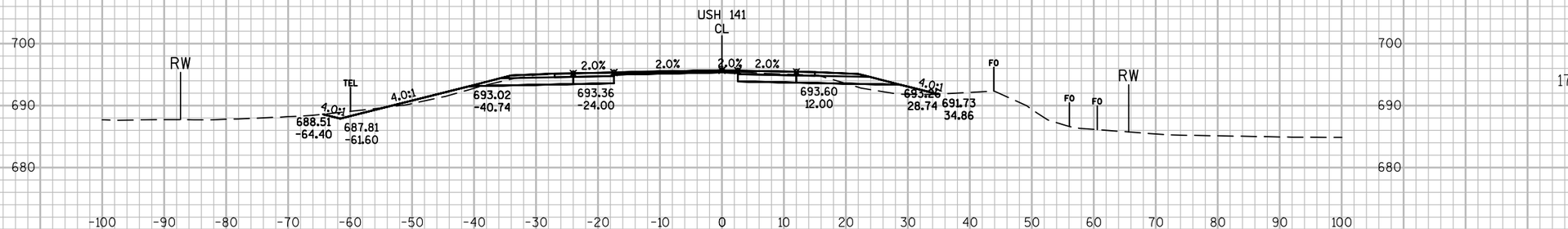
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

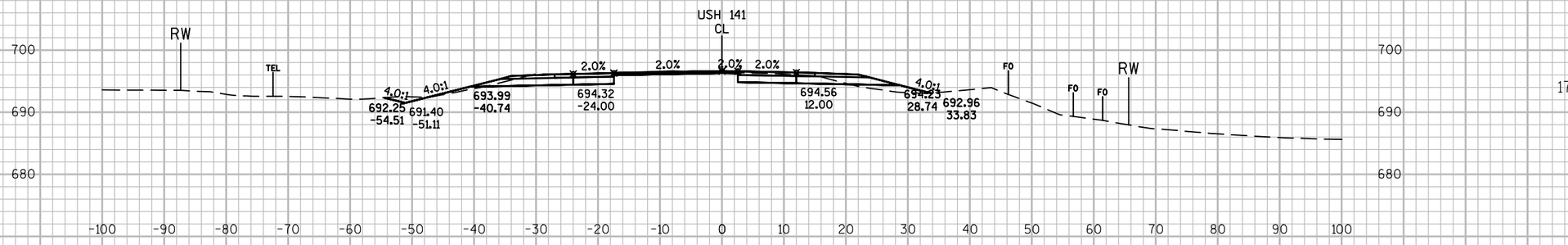
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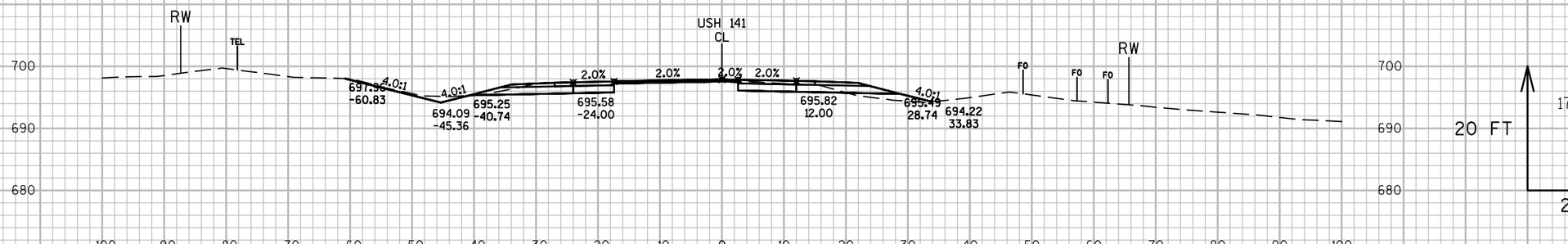
178+00



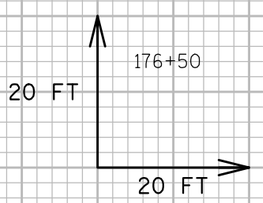
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177+00



176+50

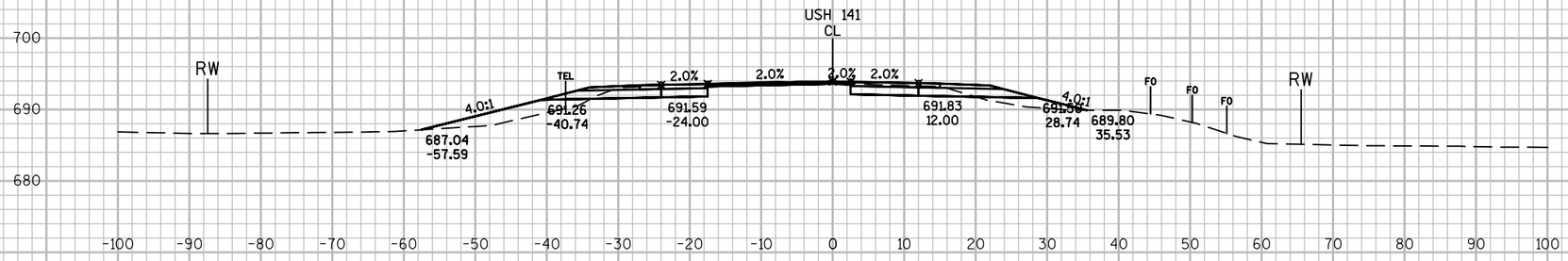


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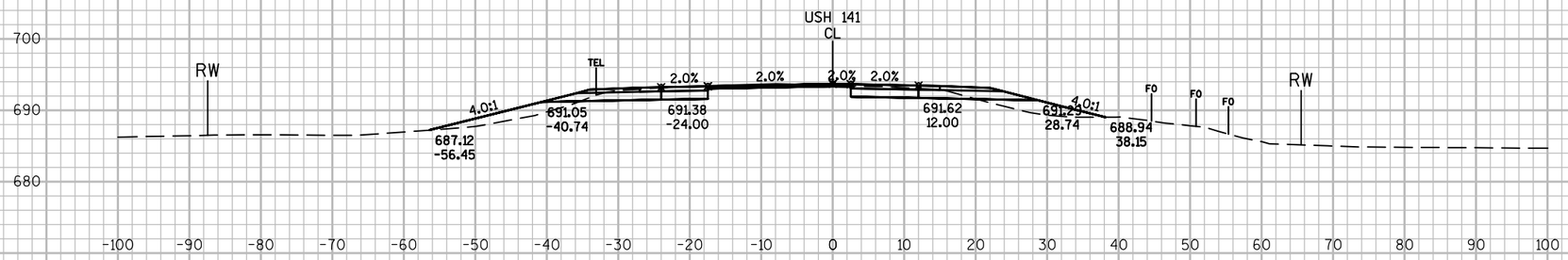
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

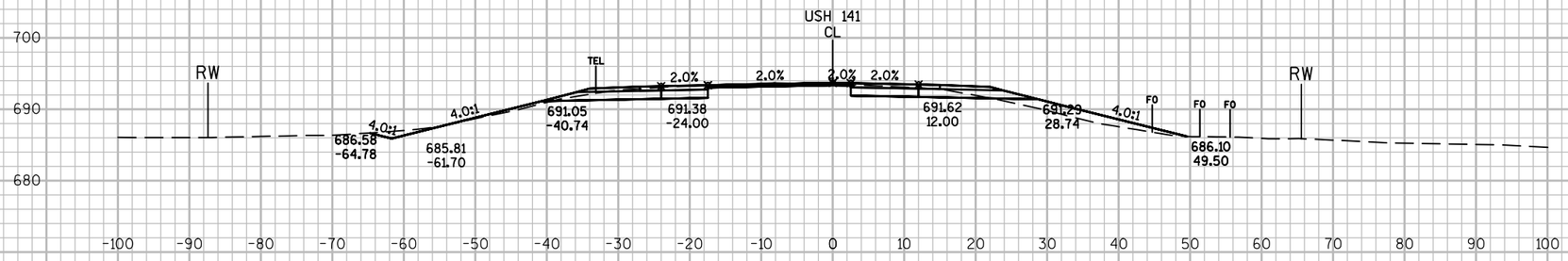
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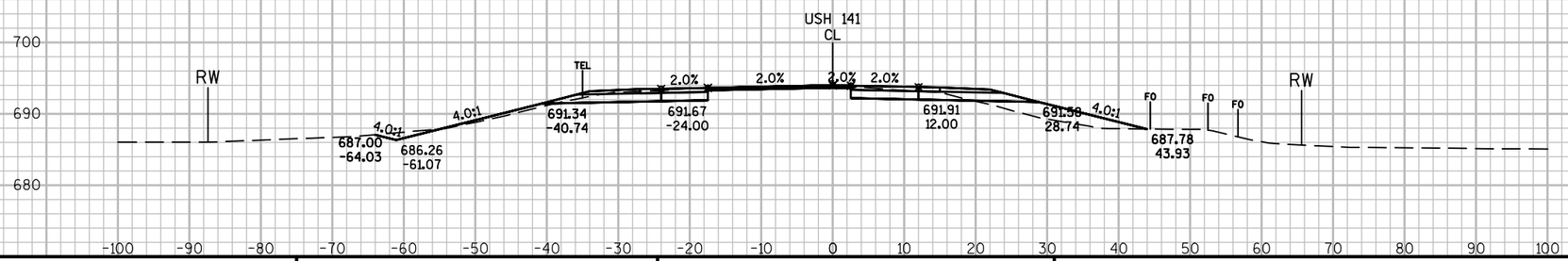
180+00



179+50



179+00



178+50

20 FT

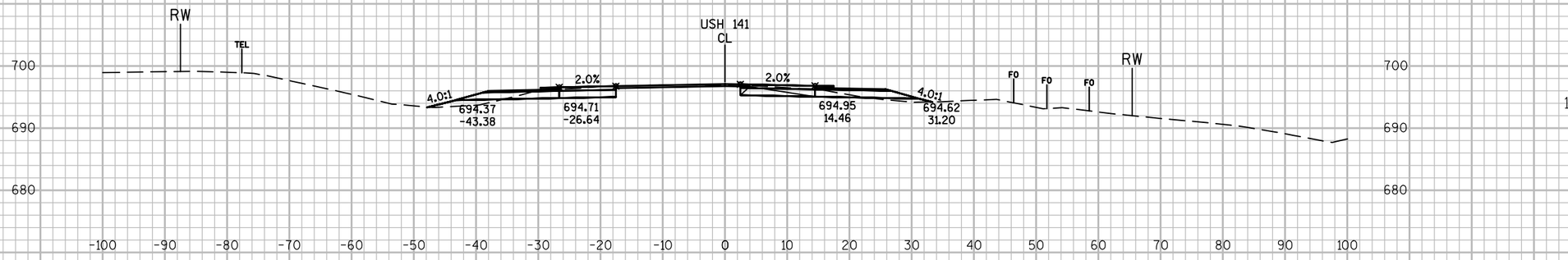
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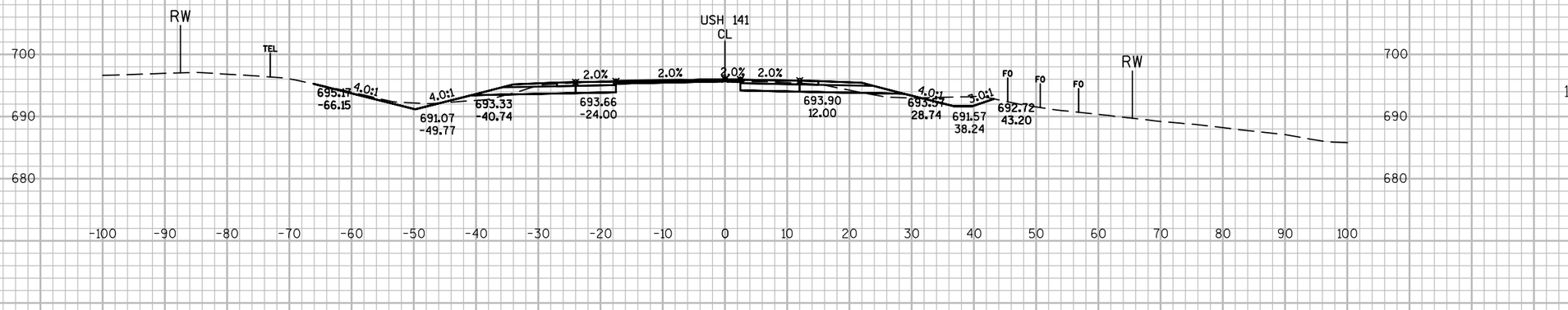
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

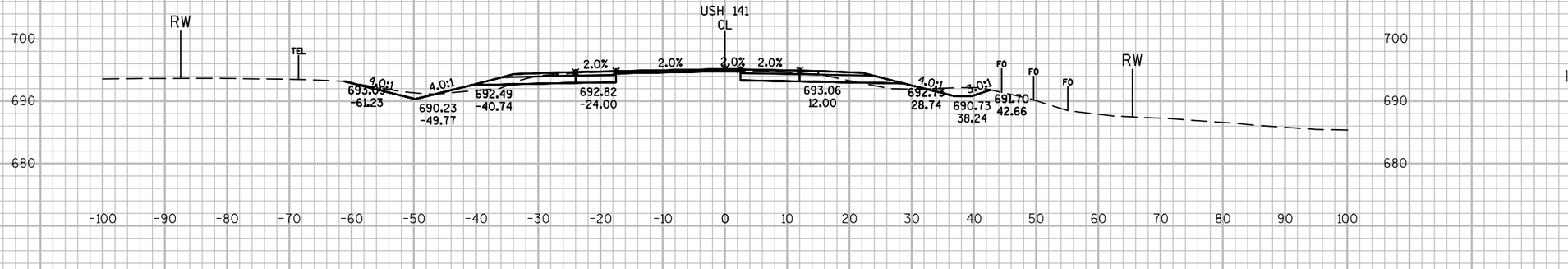
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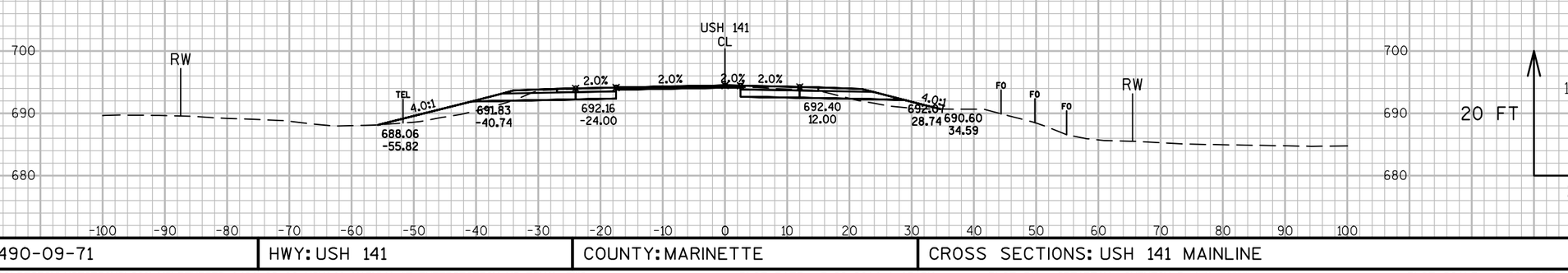
182+00



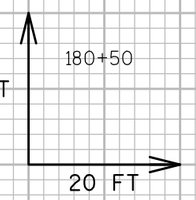
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181+00



180+50

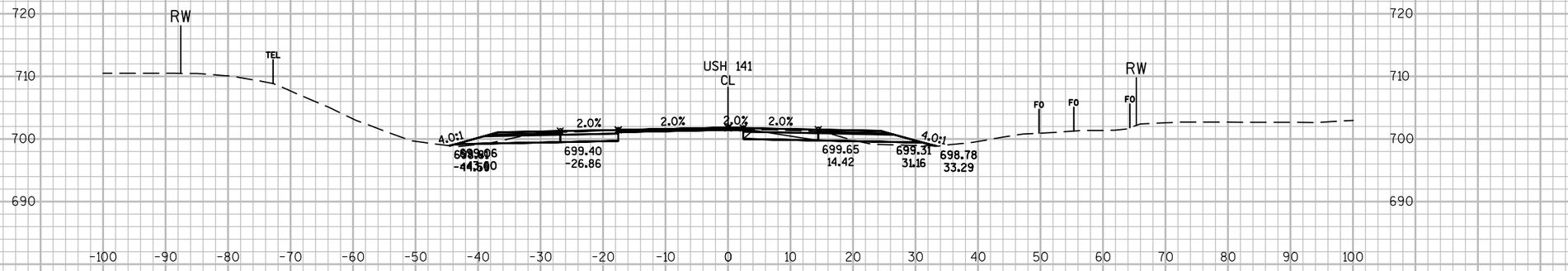


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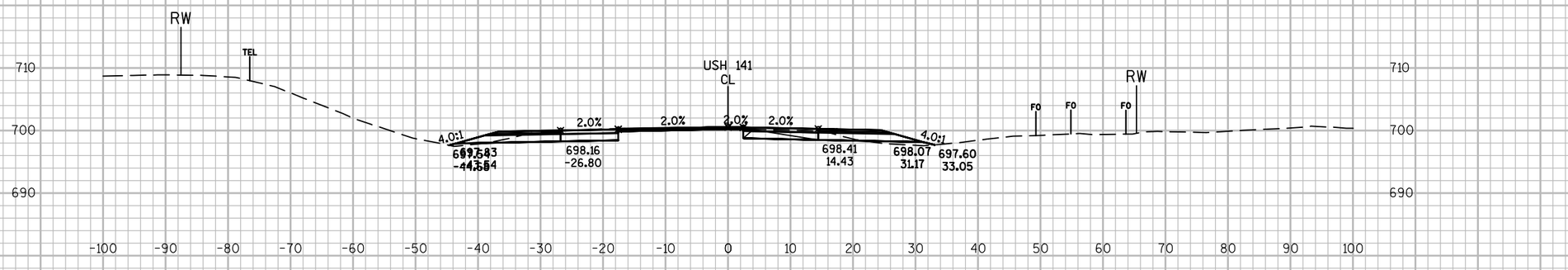
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

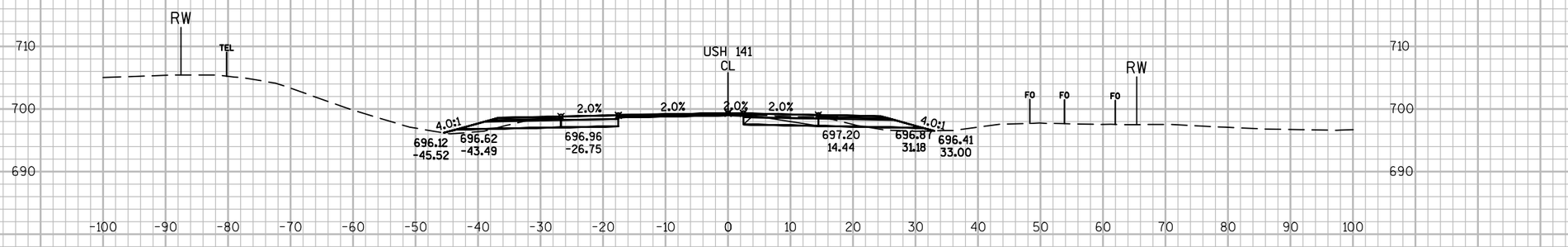
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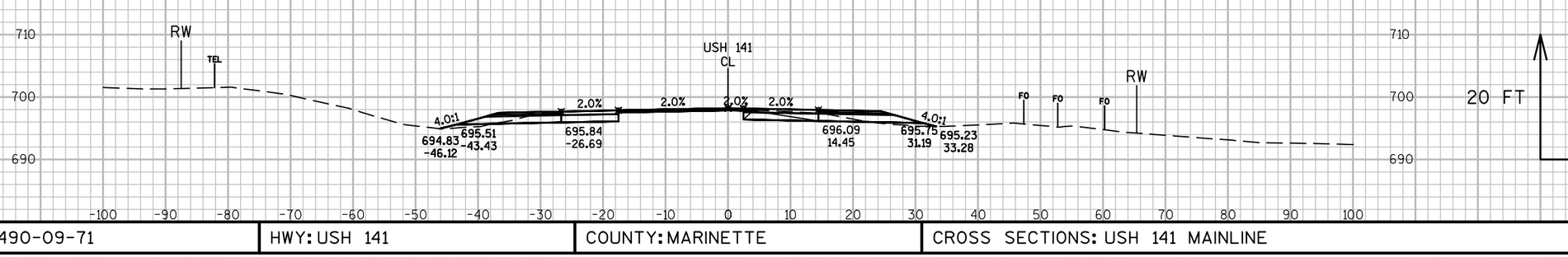
184+00



183+50



183+00



182+50

20 FT

20 FT

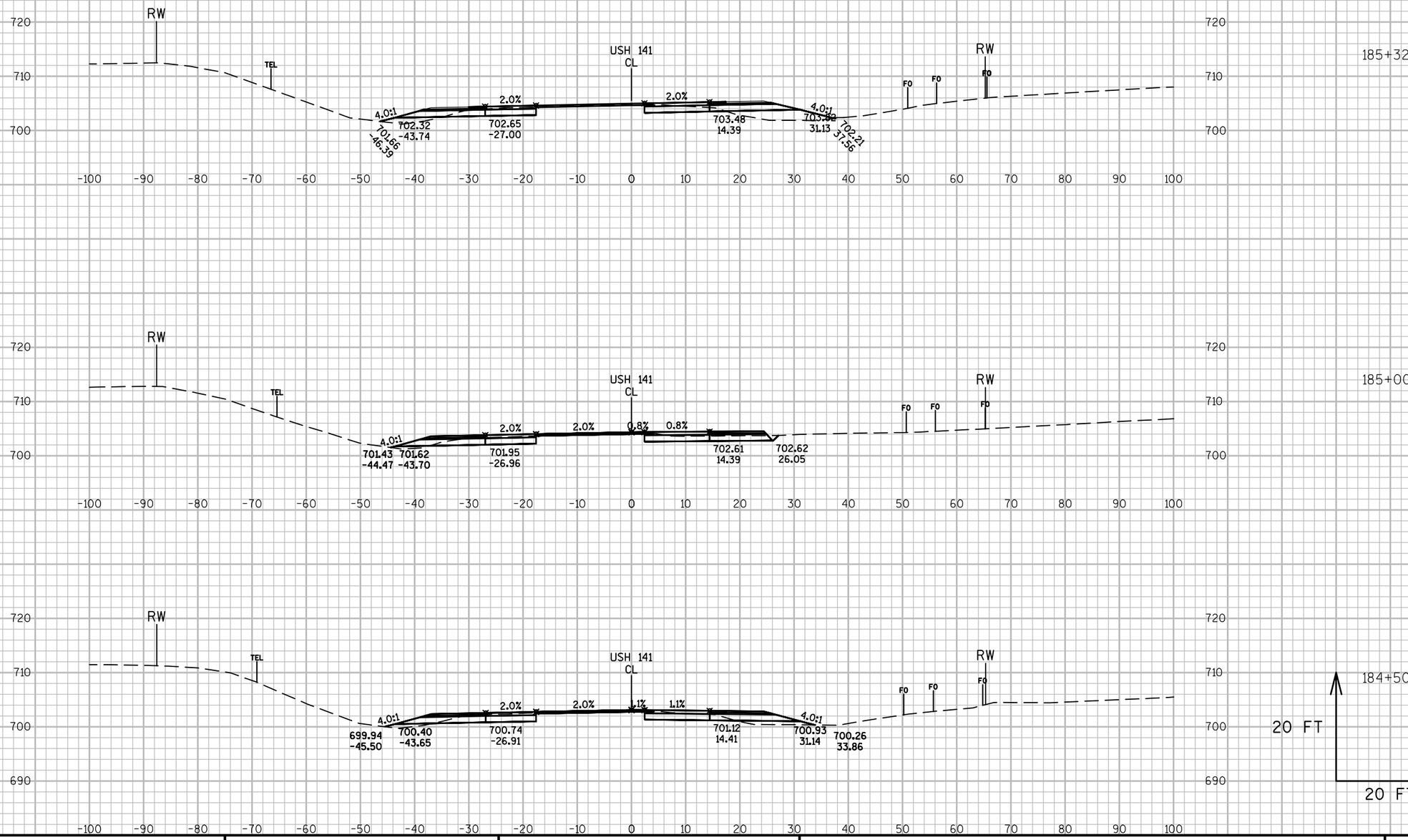
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

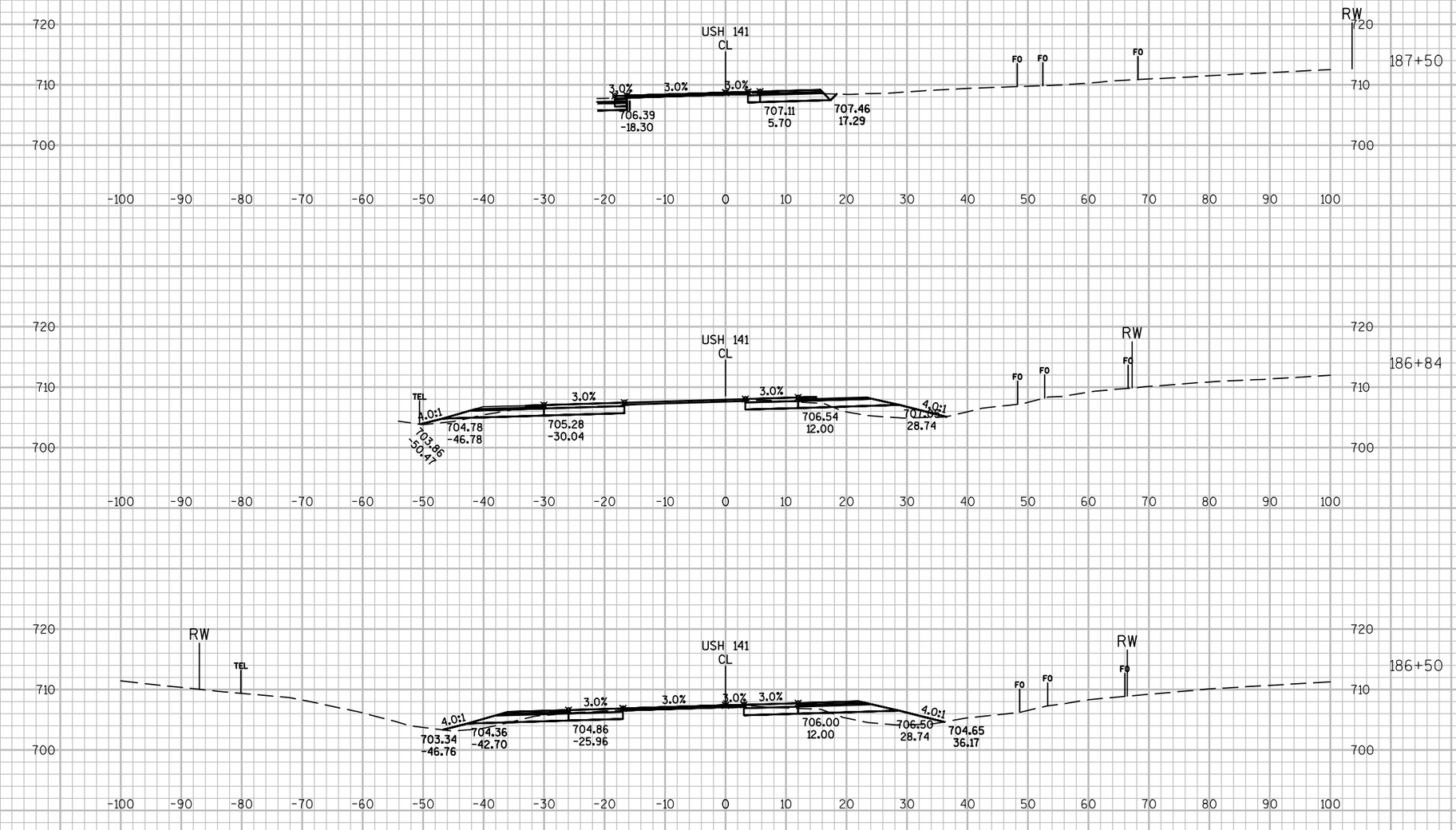
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WISDOT/CADDS SHEET 49

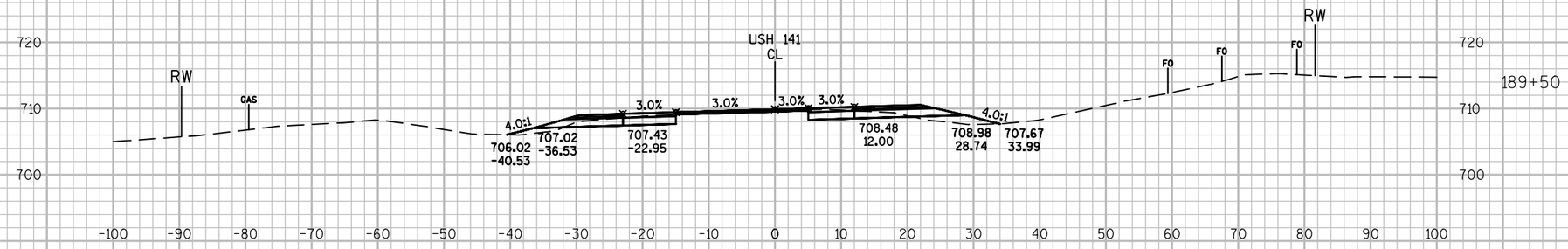


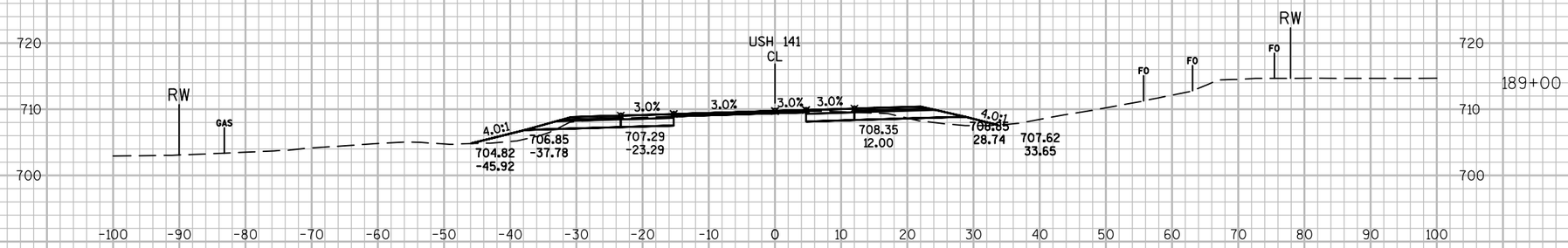
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

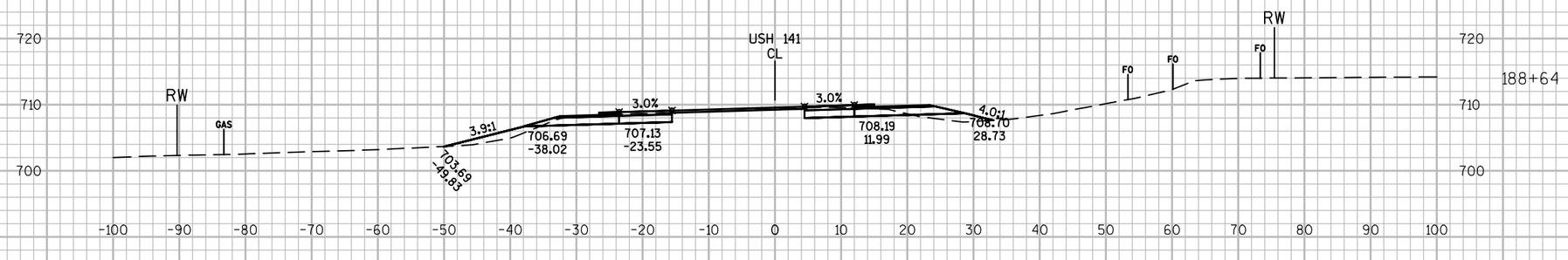
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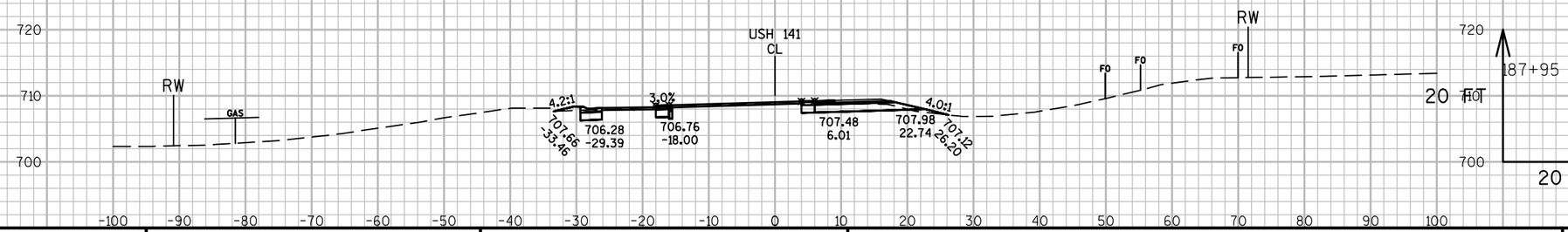


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E







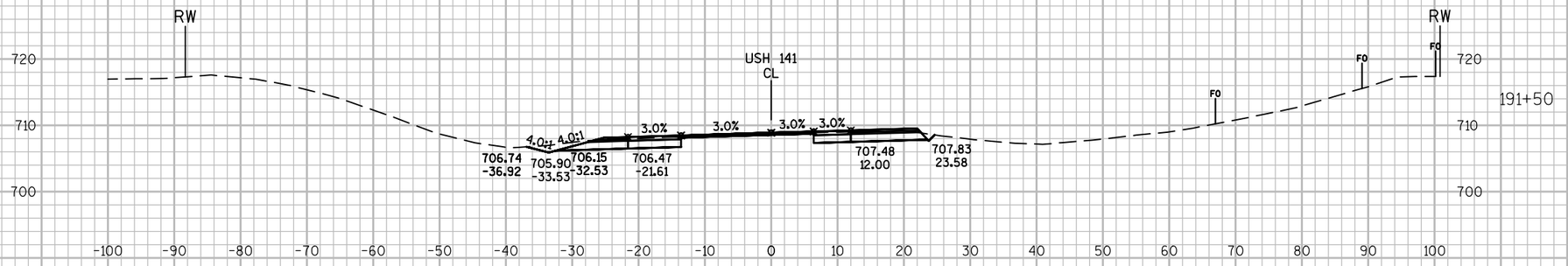


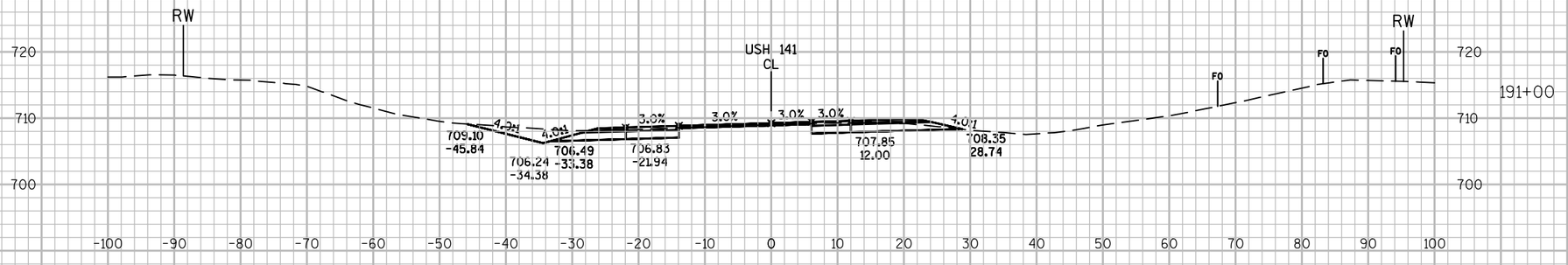
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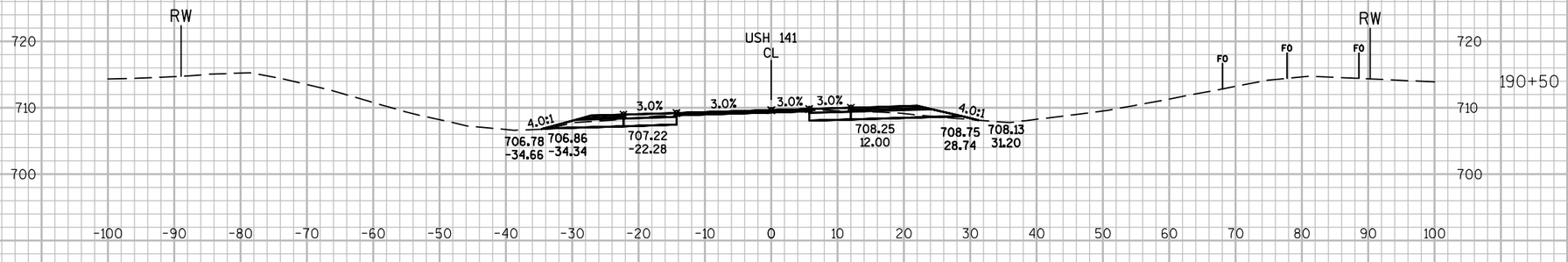
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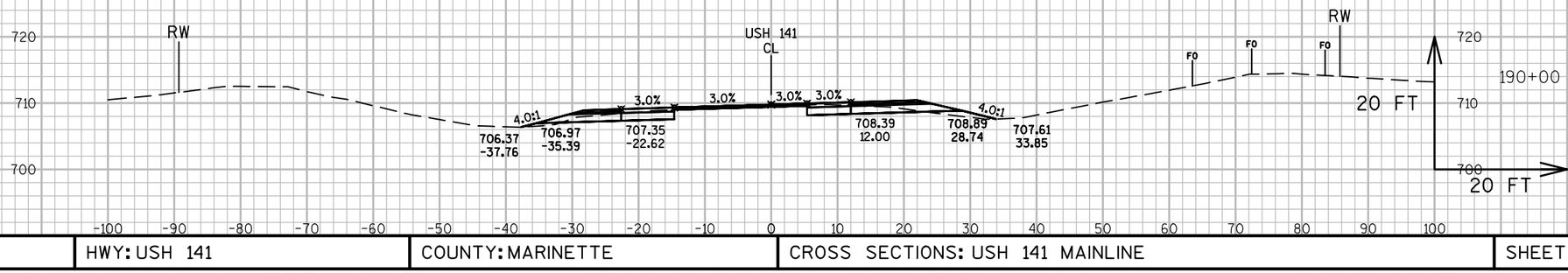
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FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/30/2014 8:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF







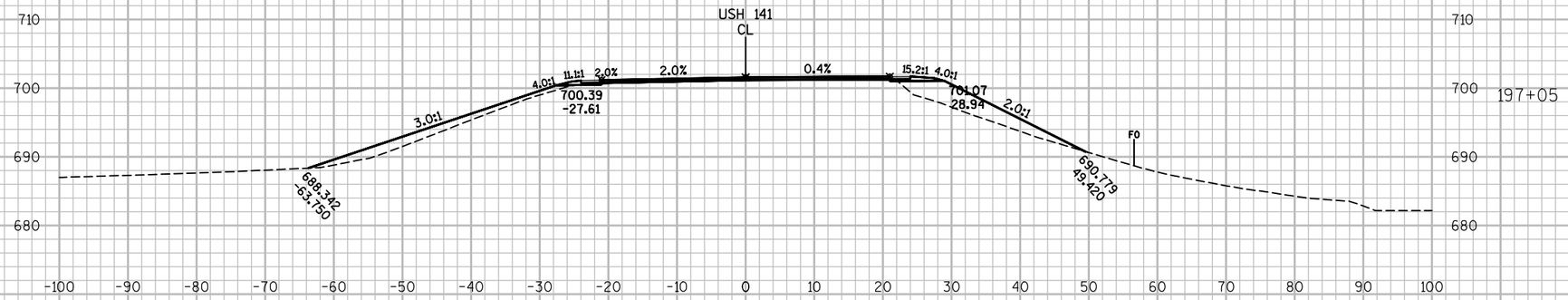


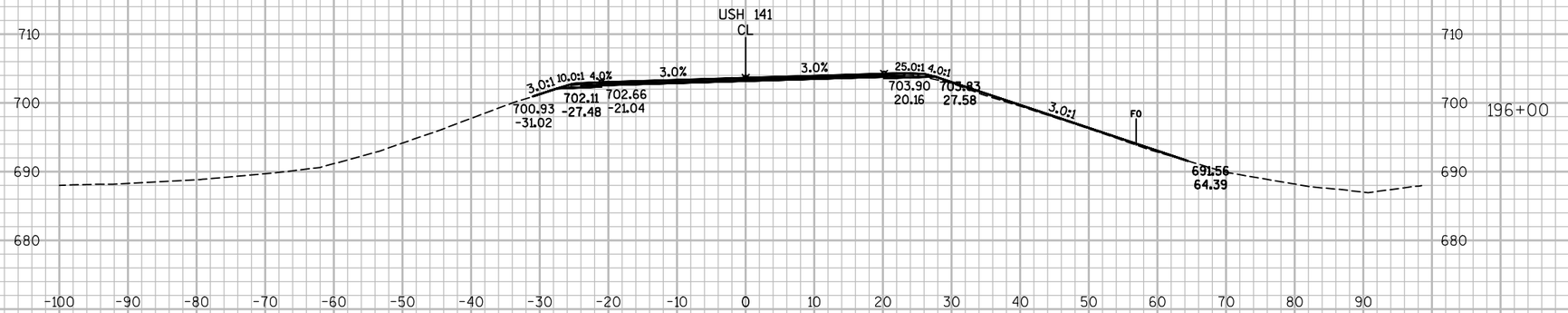
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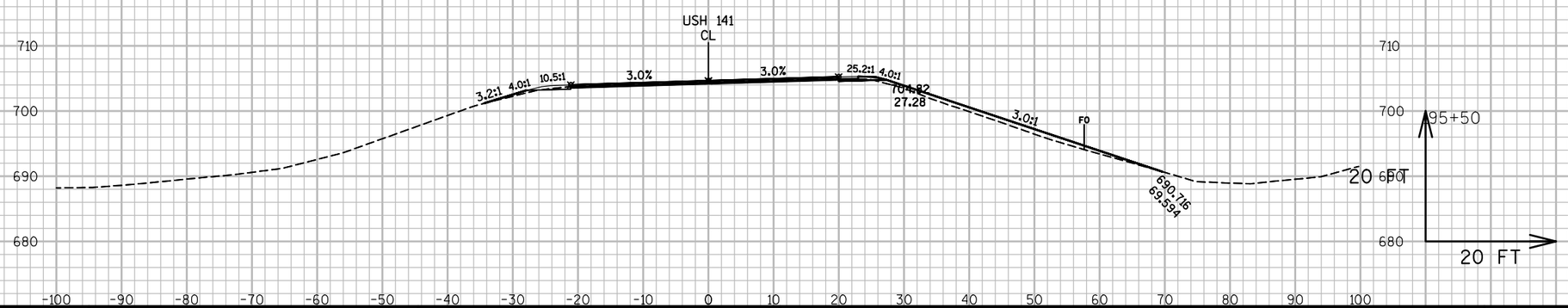
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/30/2014 8:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



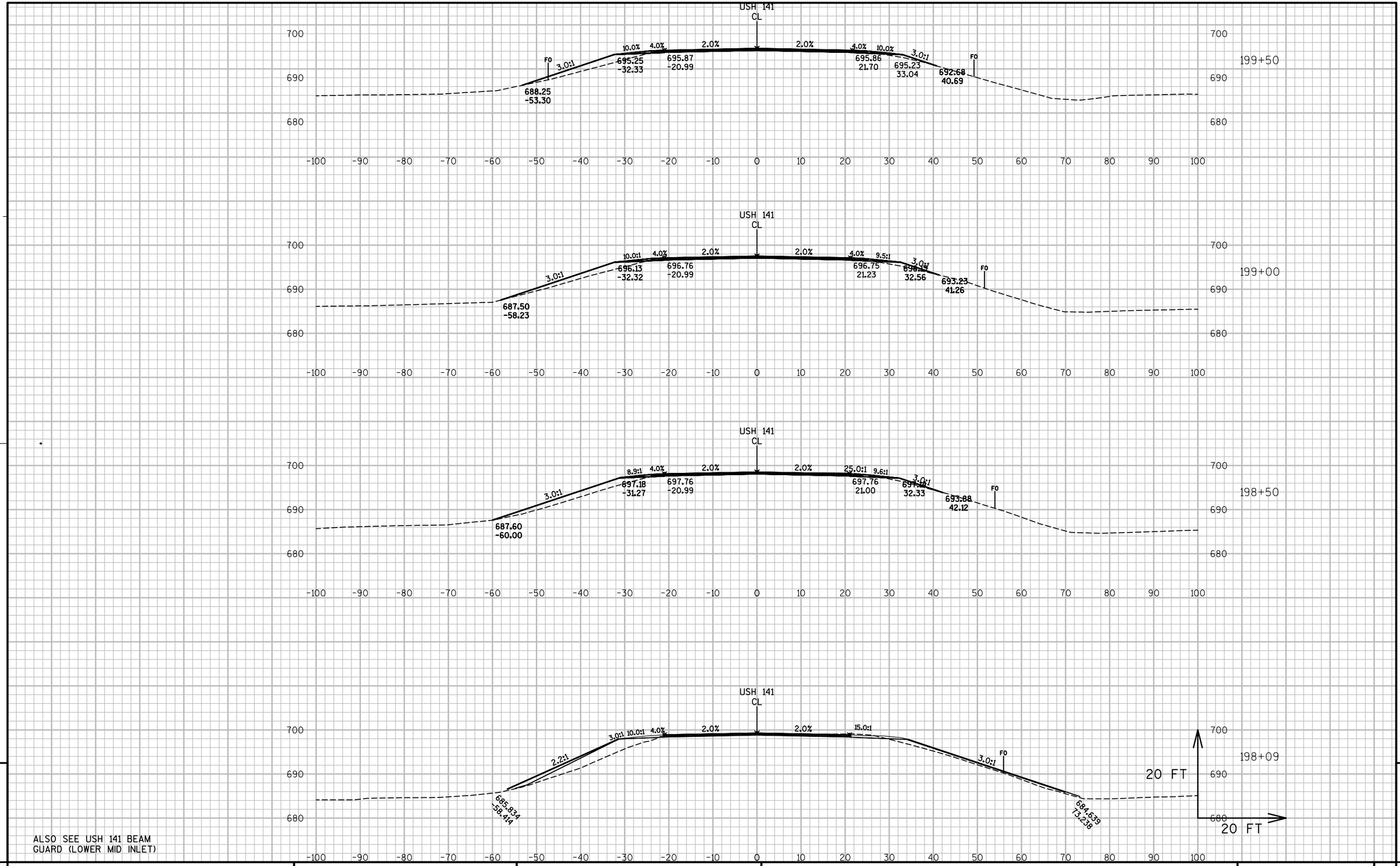




ALSO SEE USH 141 BEAM GUARD (LOWER MID INLET)

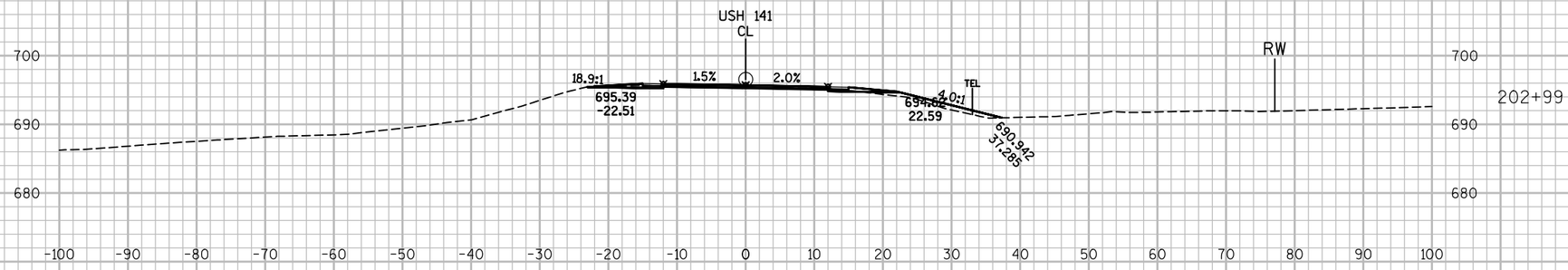
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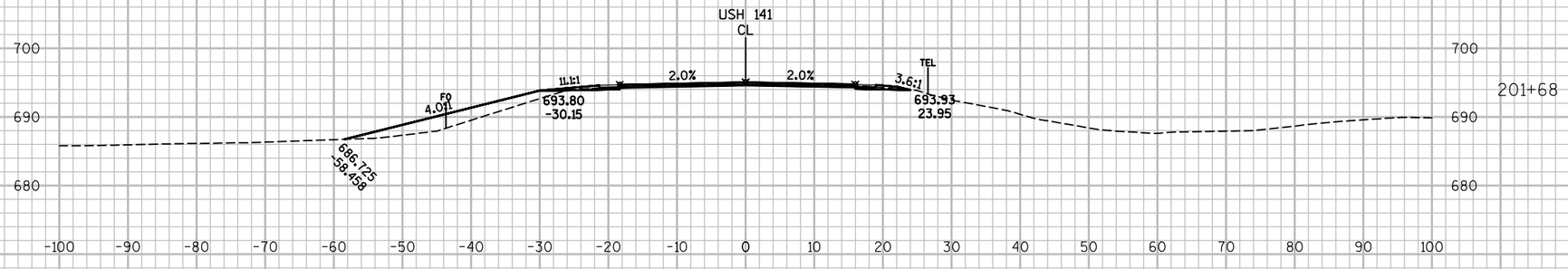
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WISDOT/CADDS SHEET 49

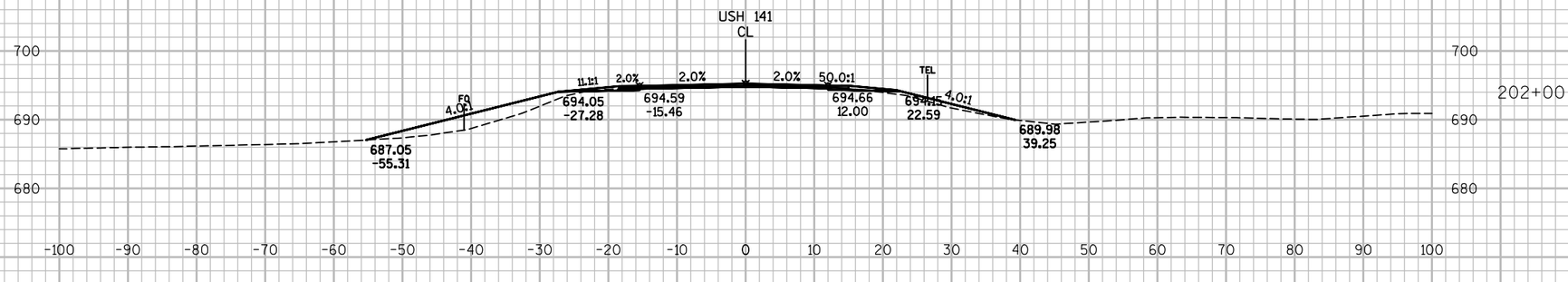


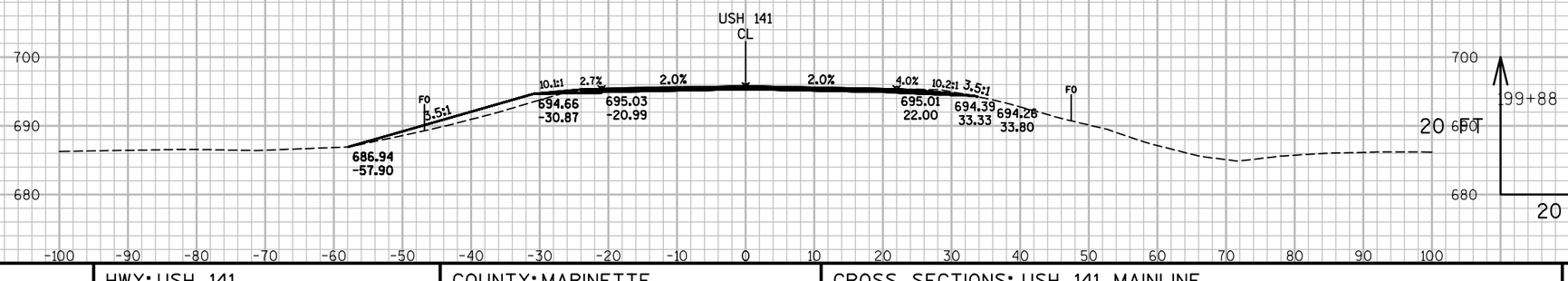
ALSO SEE USH 141 BEAM GUARD (LOWER MID INLET)

PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E





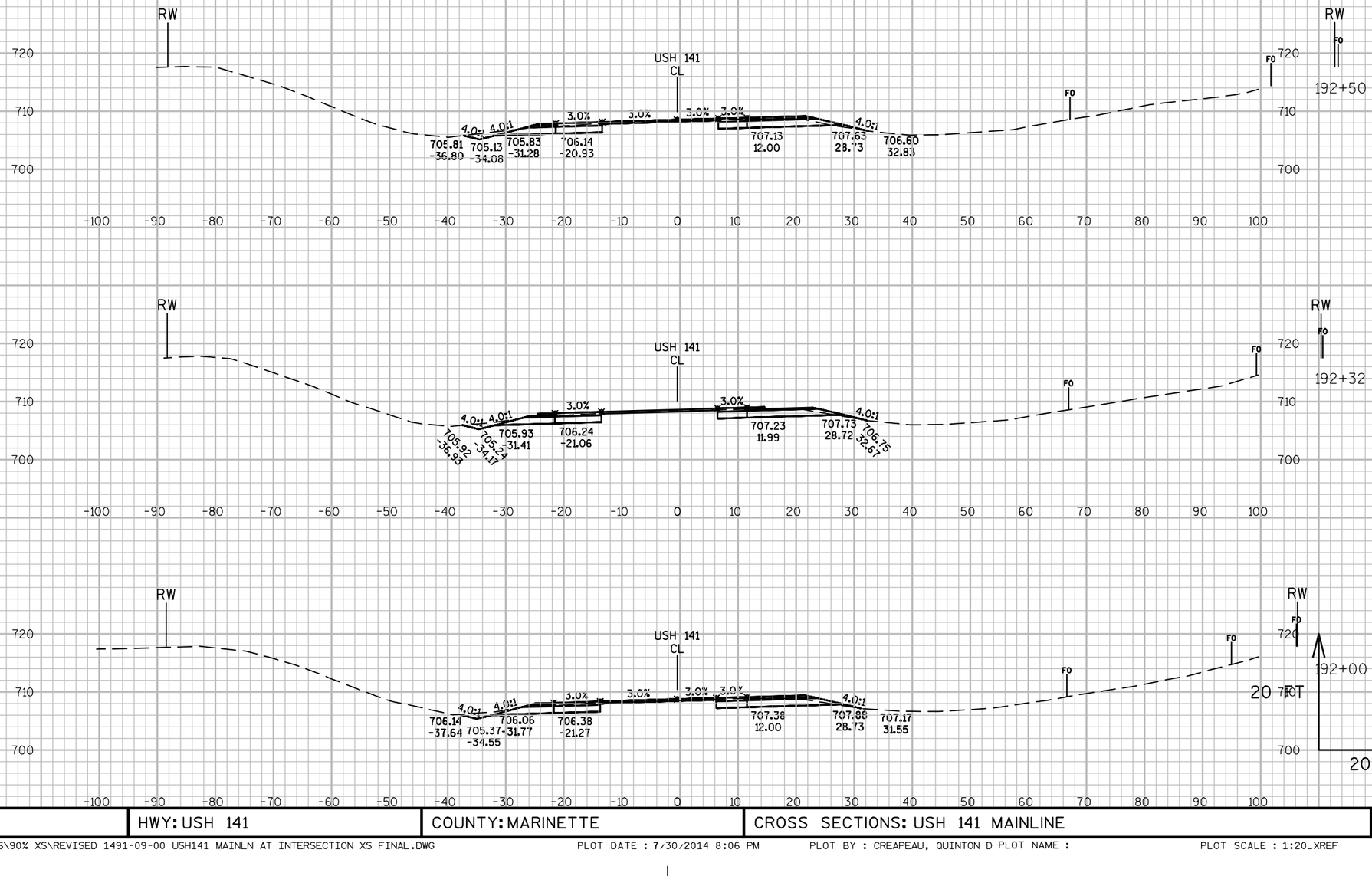




ALSO SEE USH 141 BEAM GUARD
(LOWER MID INLET)

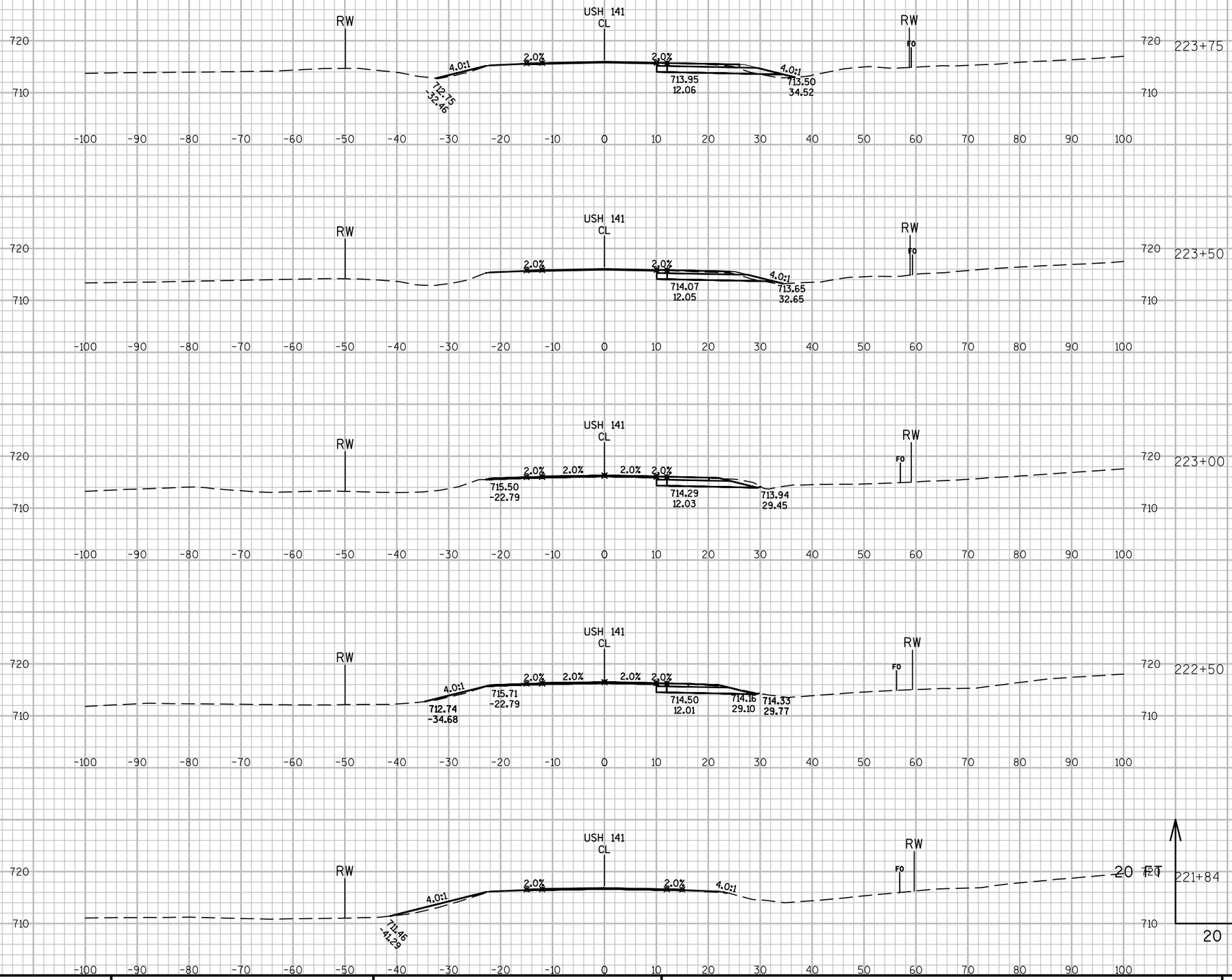
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\XS USH 141 BEAM GUARD.DWG PLOT DATE : 7/31/2014 2:26 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

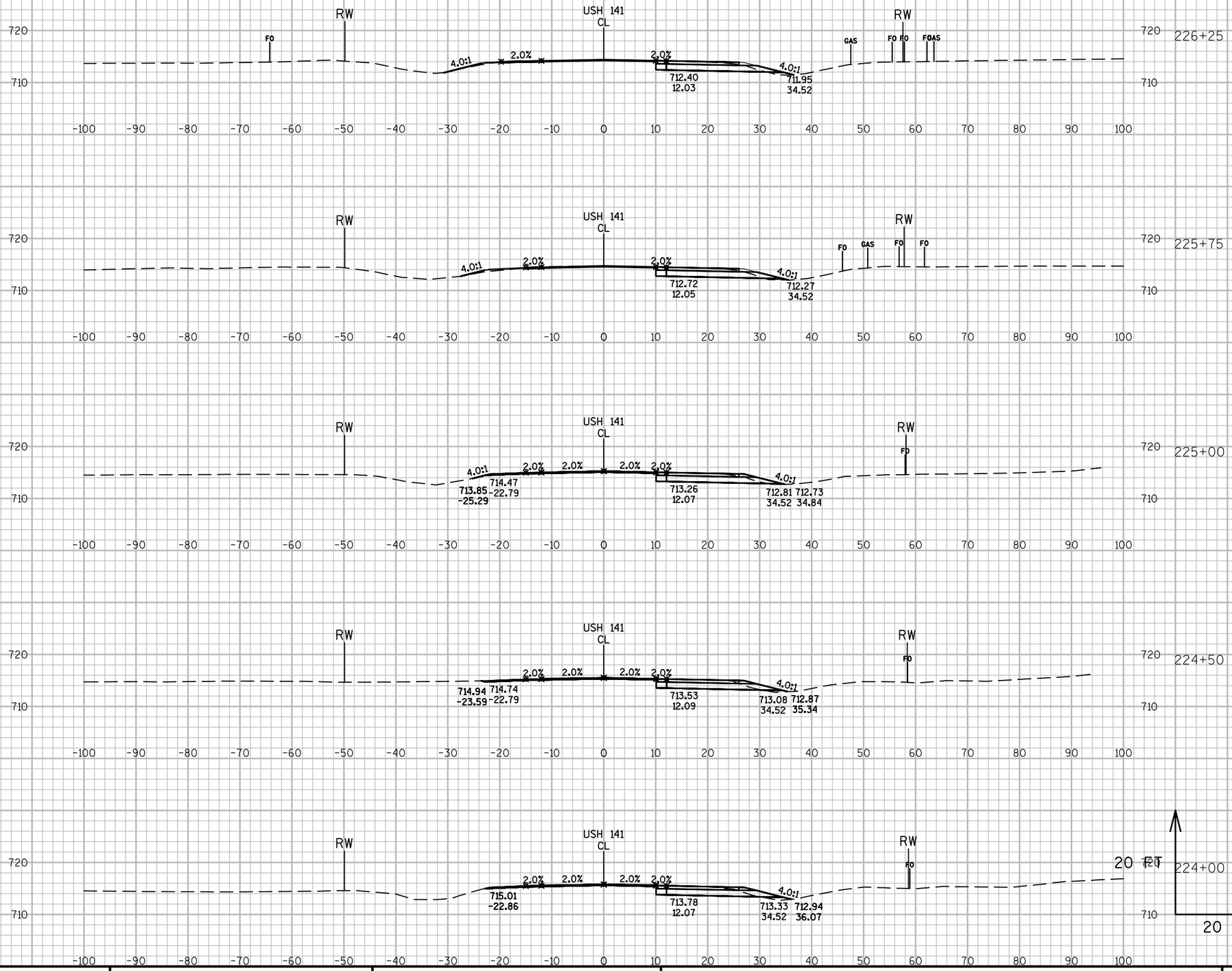


PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/30/2014 8:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



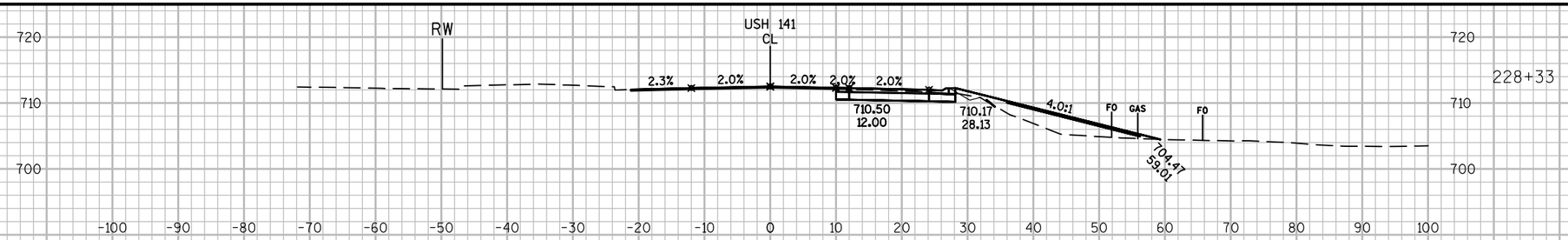
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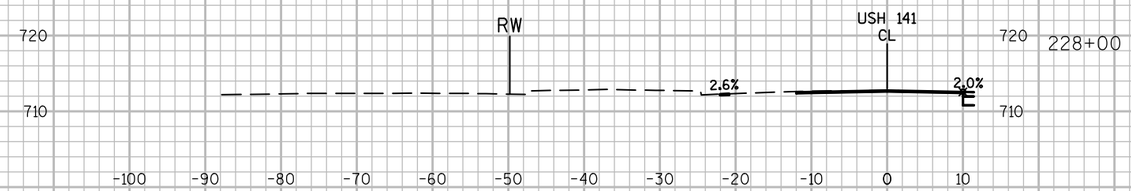


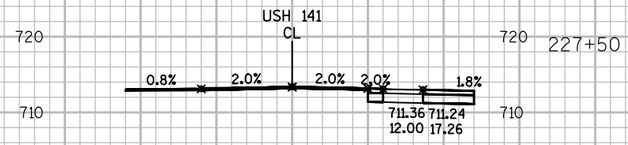
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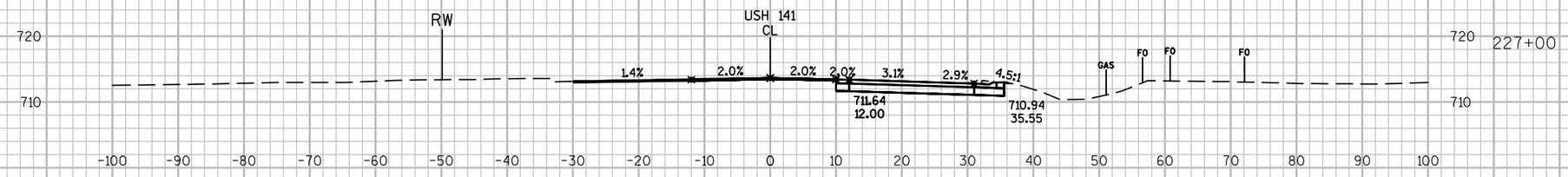
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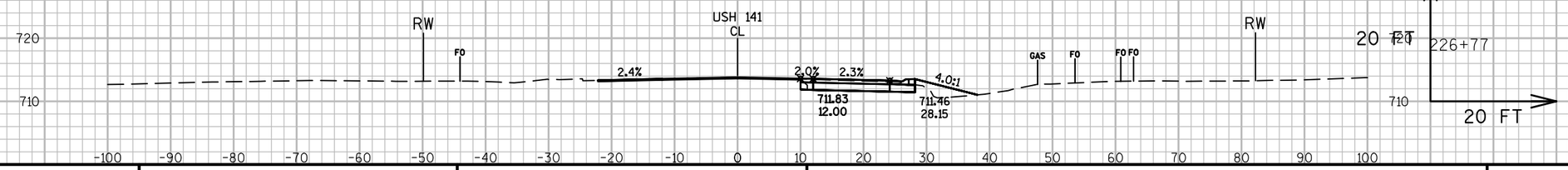
WISDOT/CADDS SHEET 49









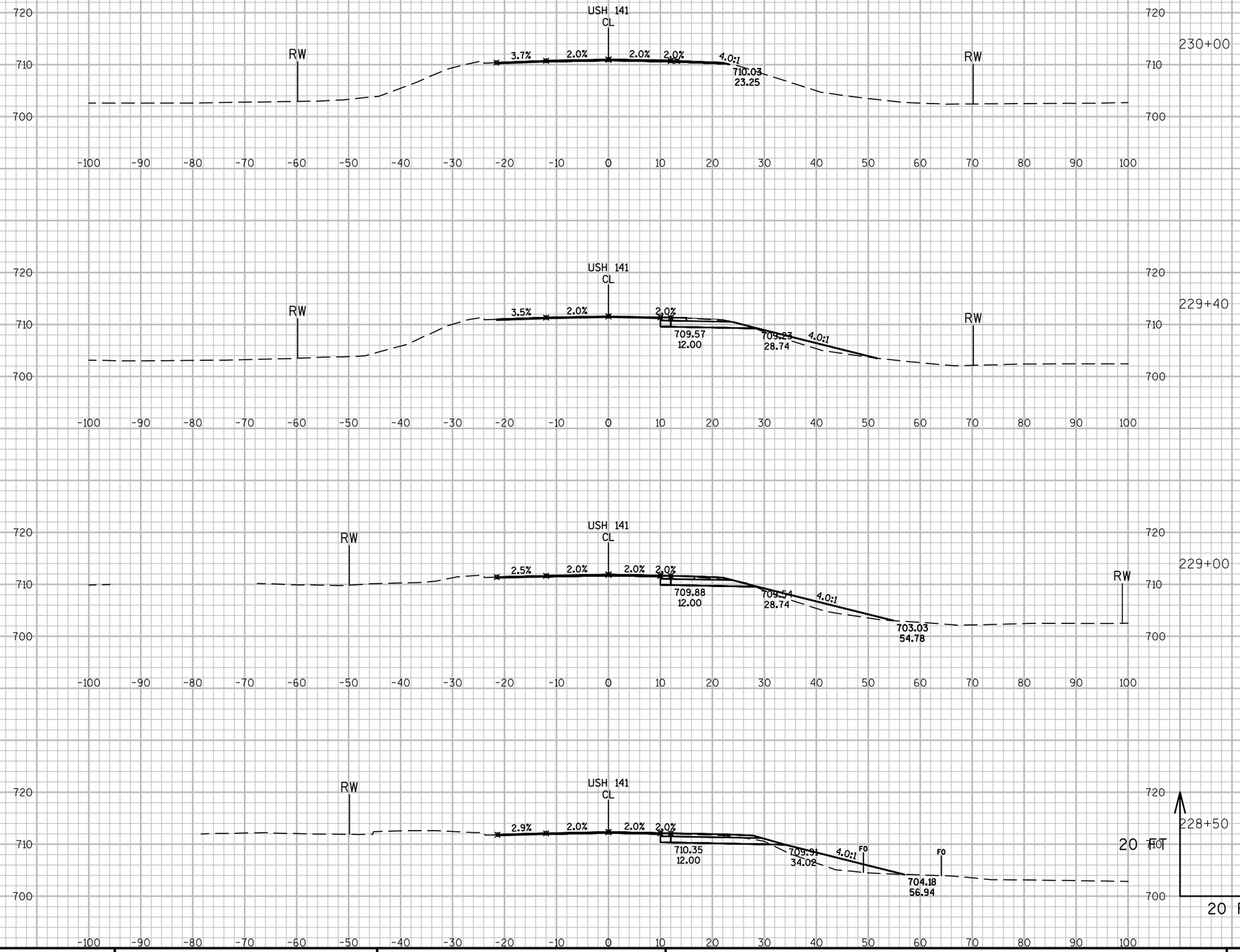


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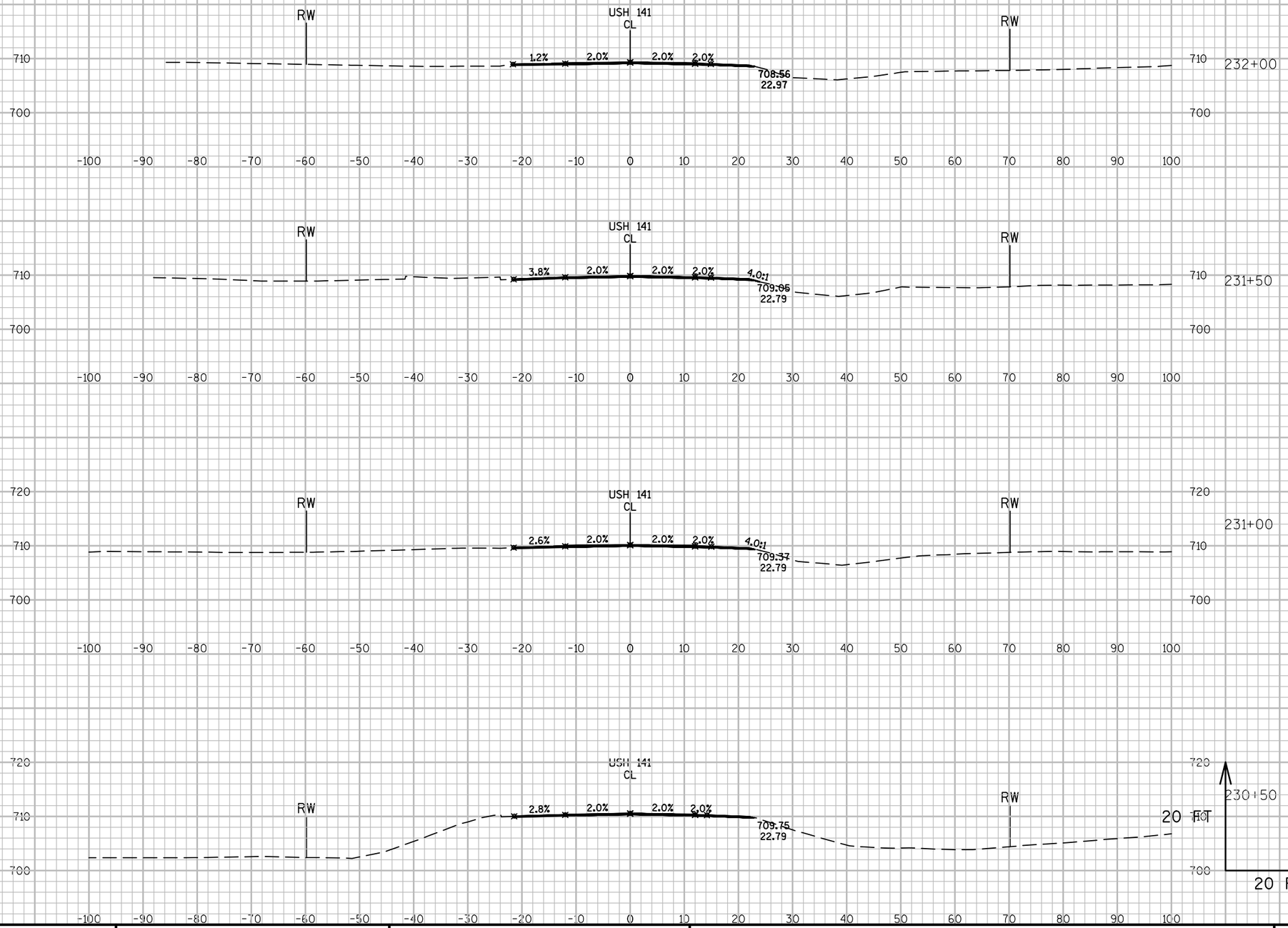
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/30/2014 11:34 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 USH141 MAINLN AT INTERSECTION XS FINAL.DWG PLOT DATE : 7/30/2014 11:35 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1:20_XREF



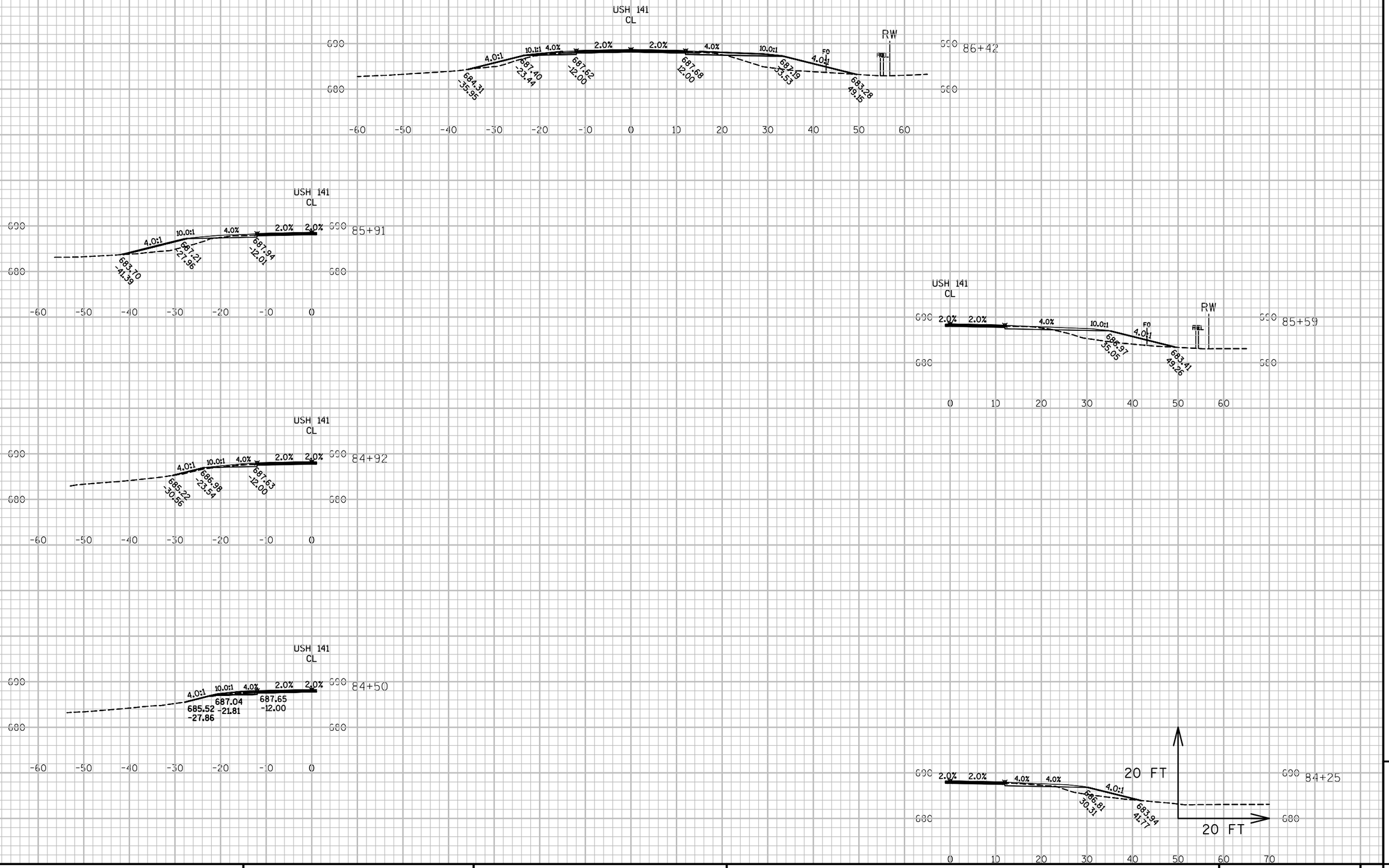
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE	SHEET	E

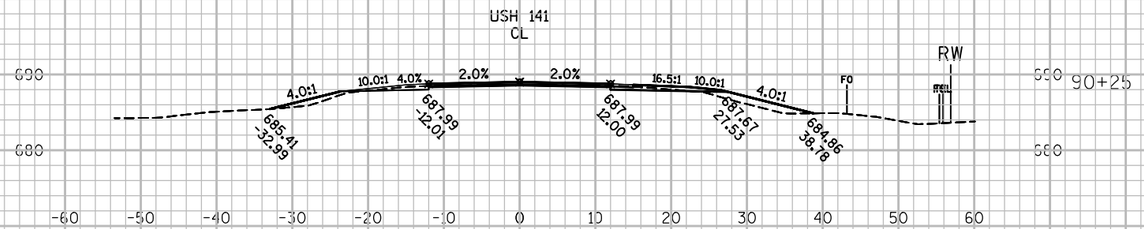
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WISDOT/CADDS SHEET 49

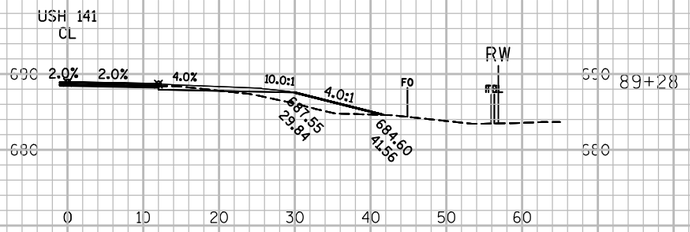


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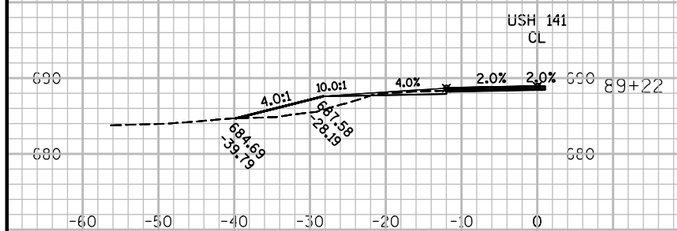
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 BEAM GUARD (SMITH CREEK)	SHEET	E



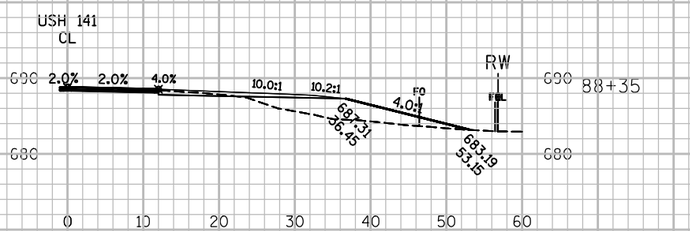
90+25



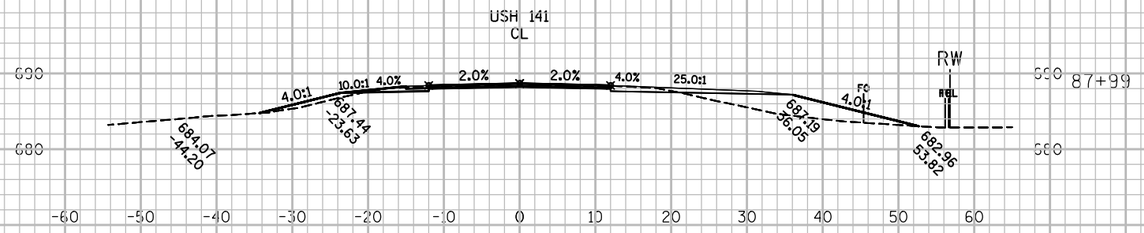
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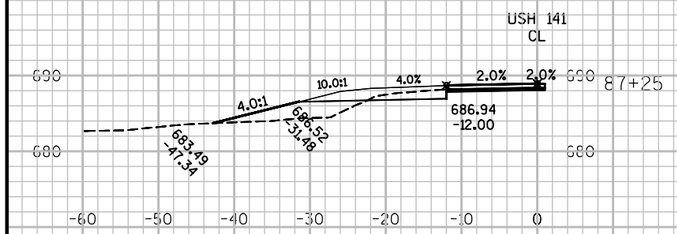
89+22



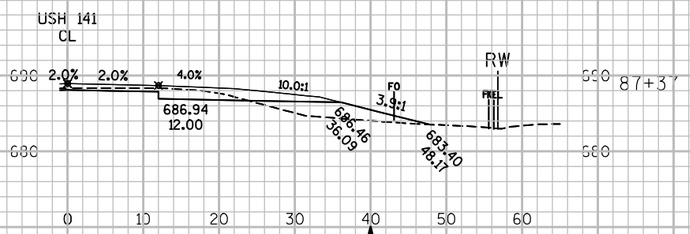
88+35



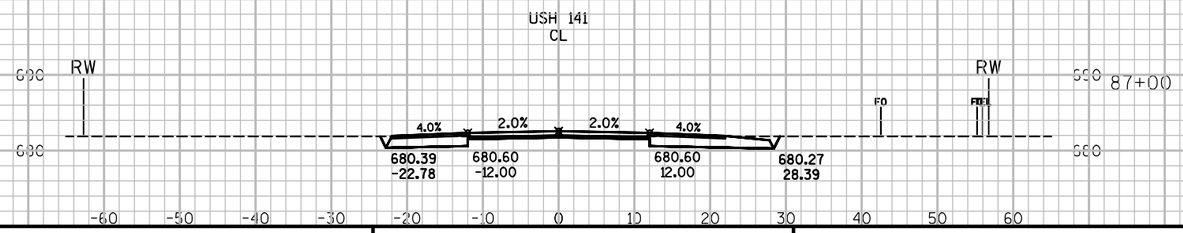
87+99



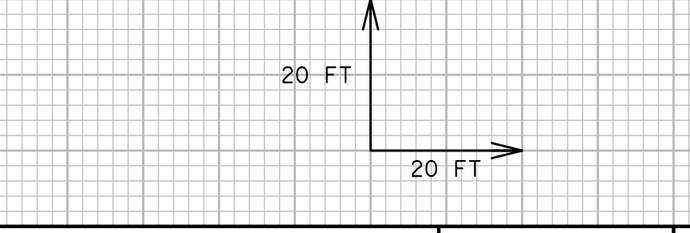
87+25



87+37



87+00



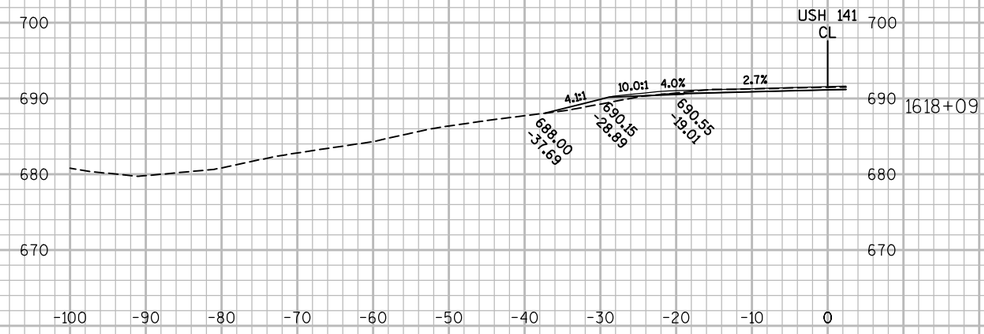
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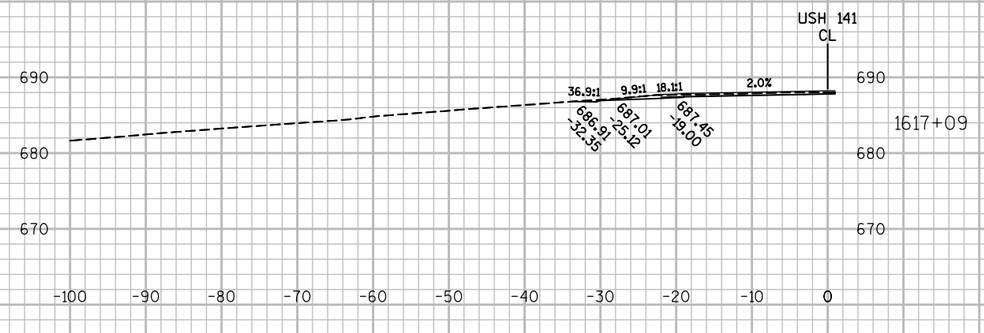
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 BEAM GUARD (SMITH CREEK)	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\XS USH 141 BEAM GUARD.DWG PLOT DATE : 7/27/2014 7:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

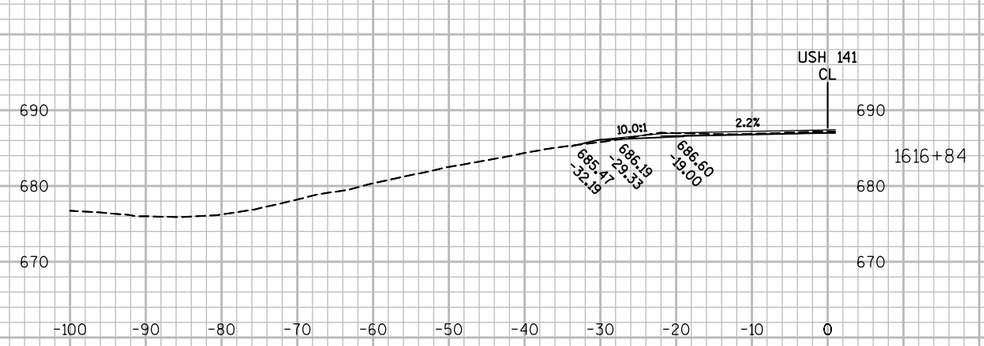
WISDOT/CADDS SHEET 49



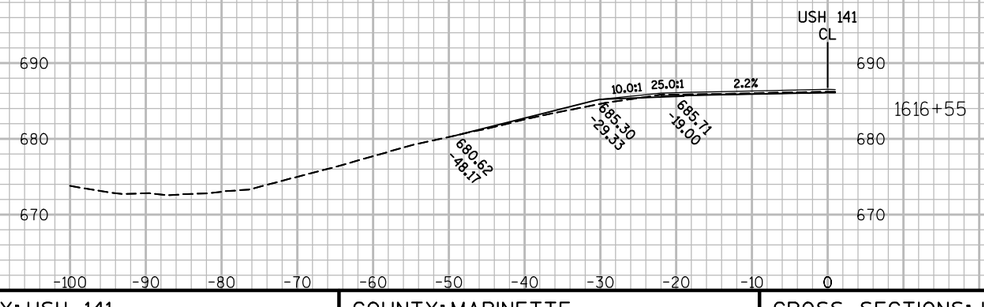
1618+09



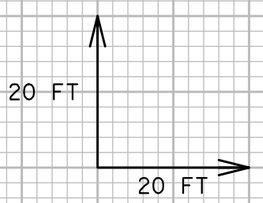
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1616+84



1616+55



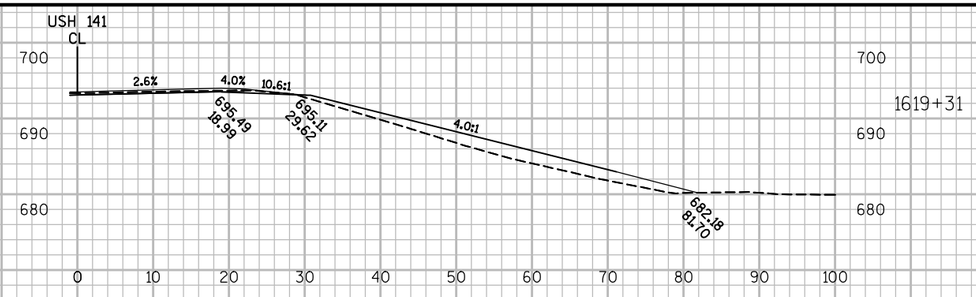
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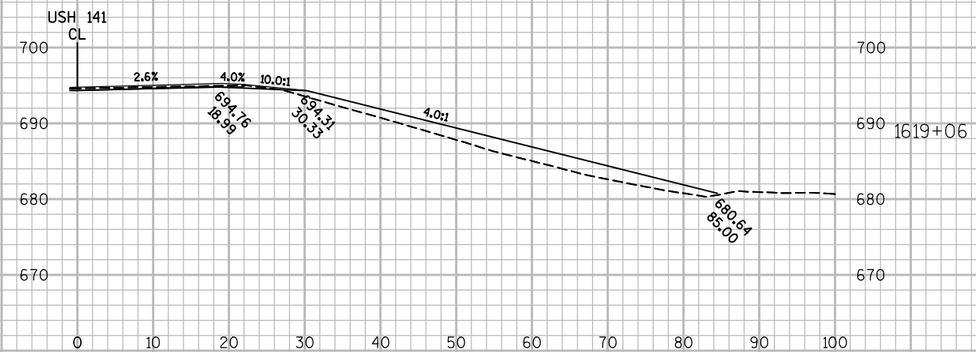
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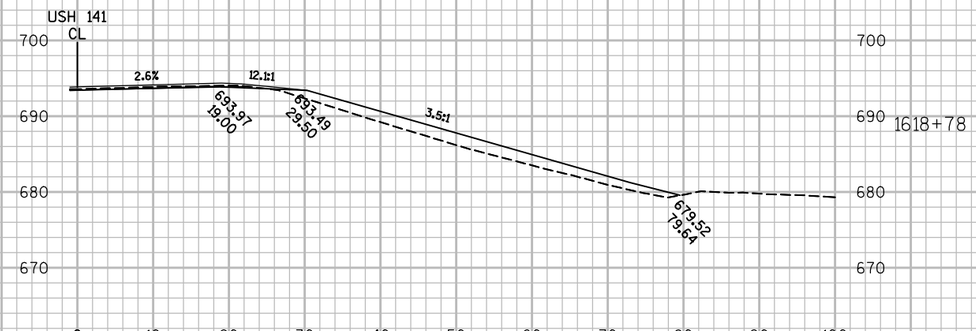
PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 BEAM GUARD (PESHITIGO RIVER)	SHEET	E

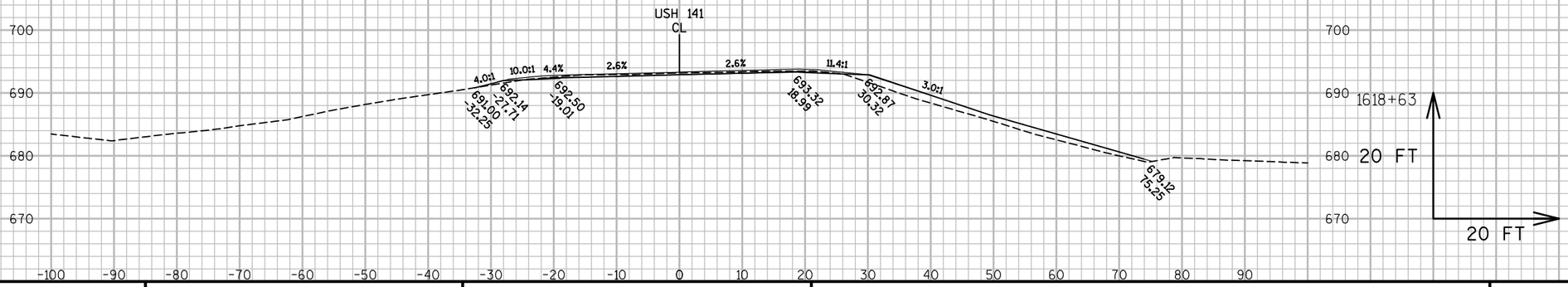
FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\XS USH 141 BEAM GUARD.DWG PLOT DATE : 7/27/2014 7:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49







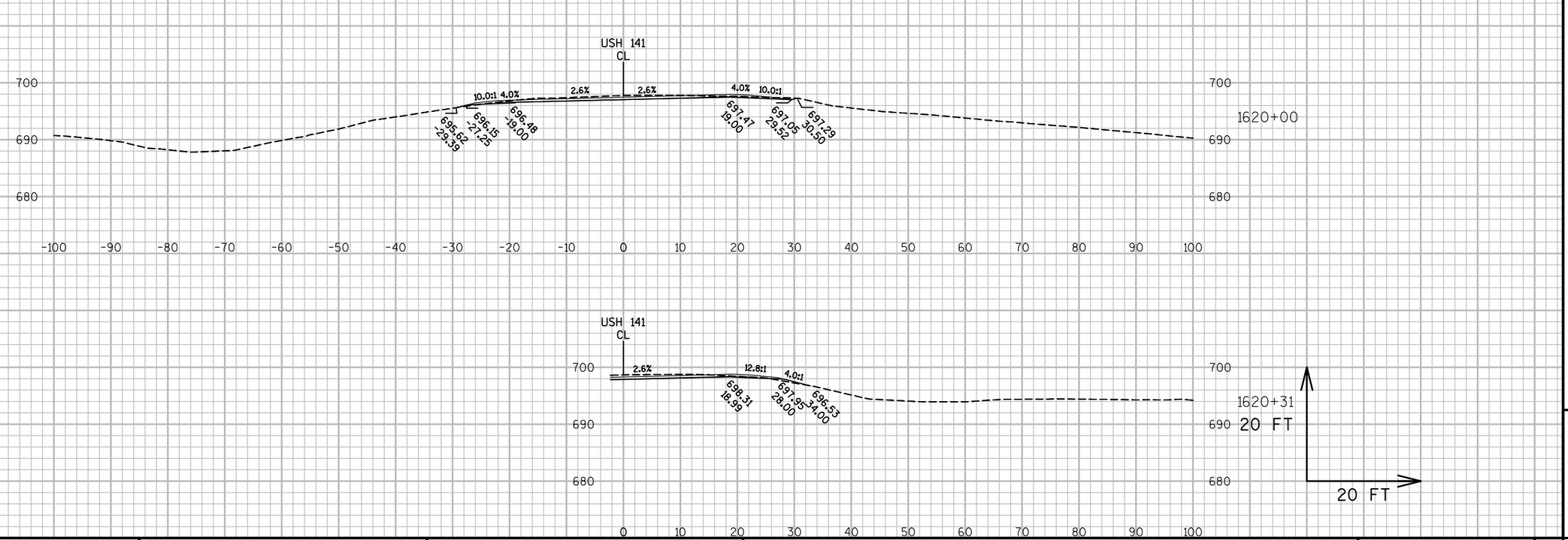


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 BEAM GUARD (PESHITIGO RIVER)	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\XS USH 141 BEAM GUARD.DWG PLOT DATE : 7/27/2014 7:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

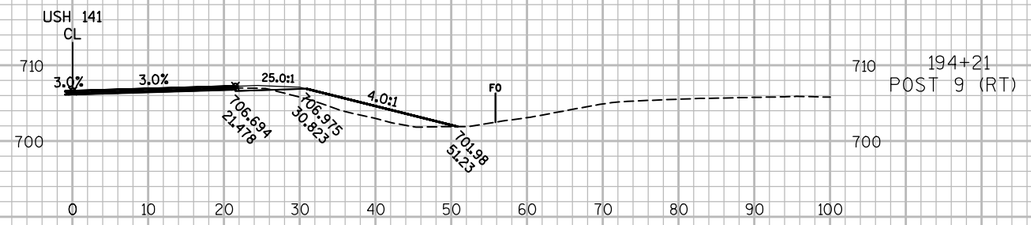


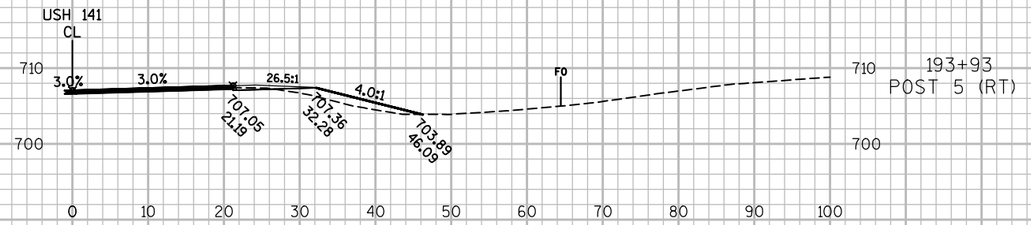
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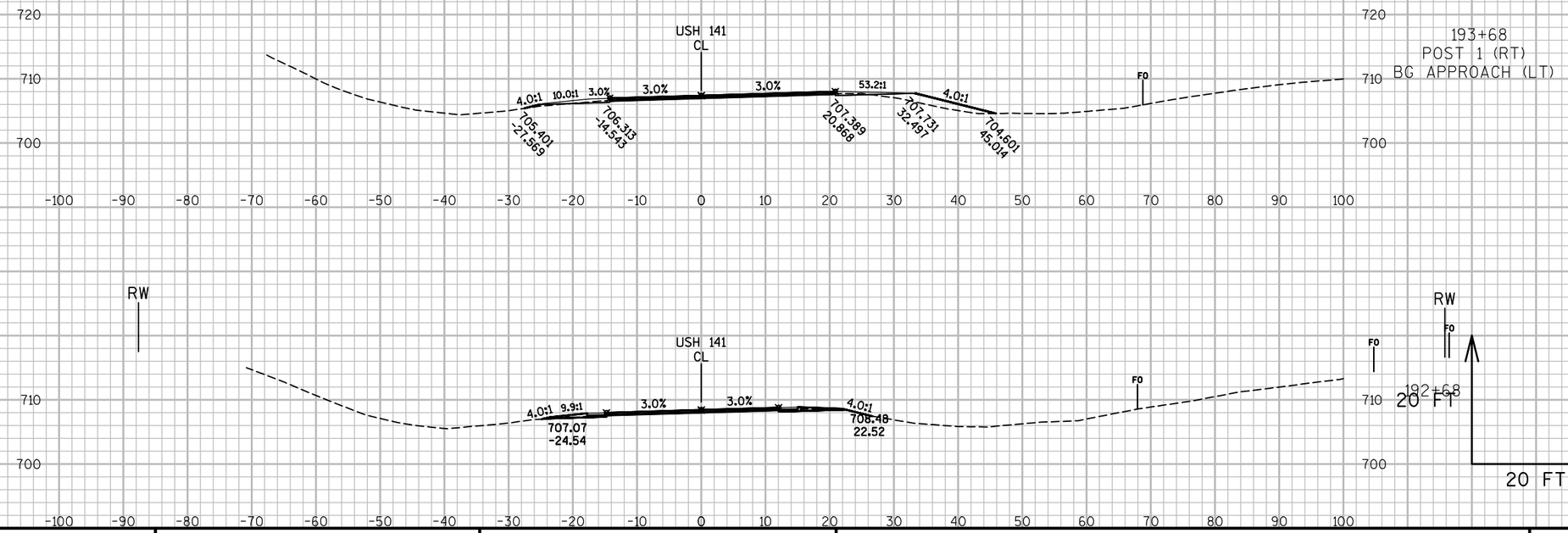
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 BEAM GUARD (PESHITIGO RIVER)	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\XS USH 141 BEAM GUARD.DWG PLOT DATE : 7/27/2014 7:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF





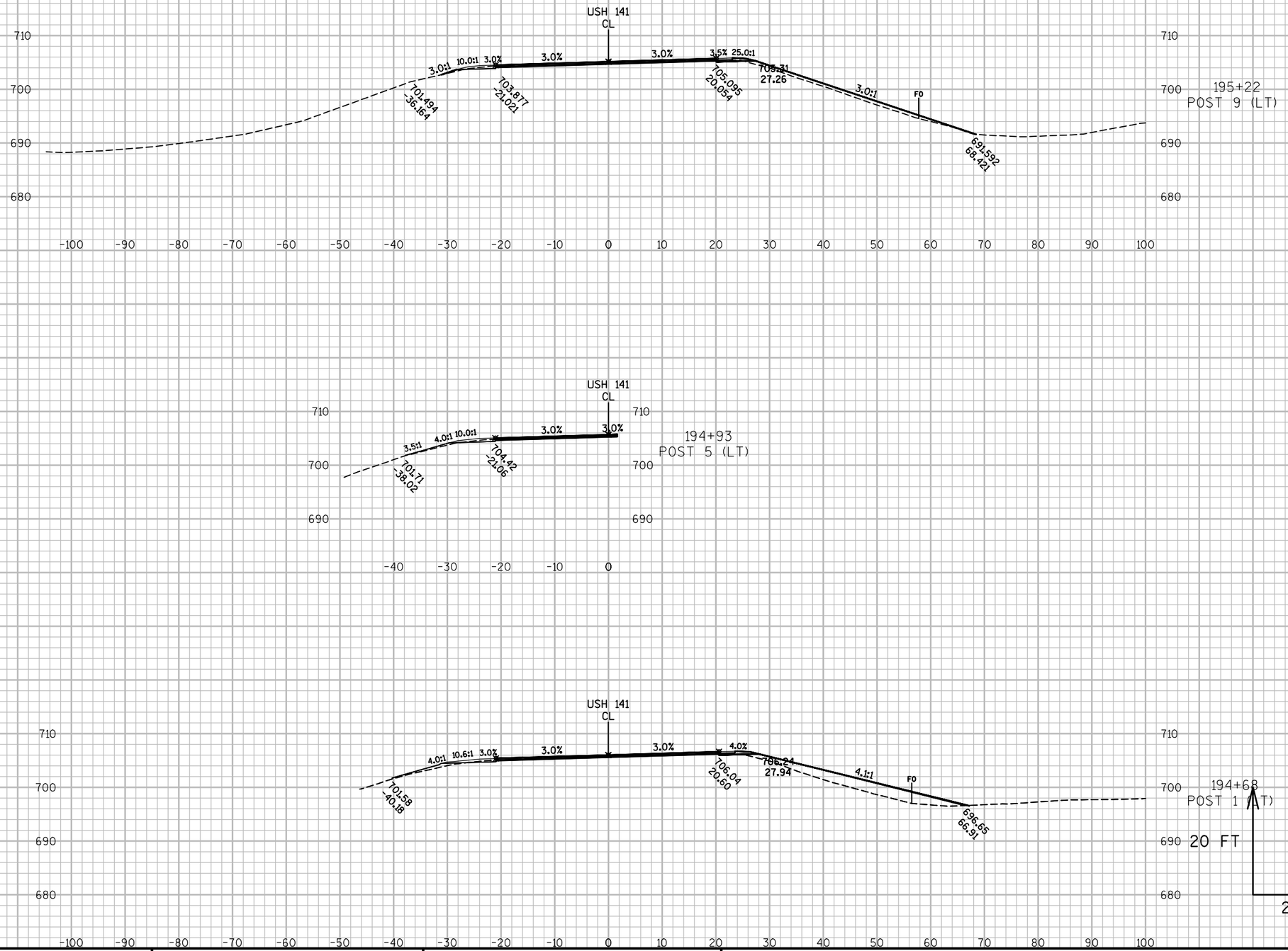


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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE BEAM GUARD (LOWER MID INLET)	SHEET	E

9

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\XS USH 141 BEAM GUARD.DWG PLOT DATE : 7/31/2014 1:44 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF
WISDOT/CADDS SHEET 49

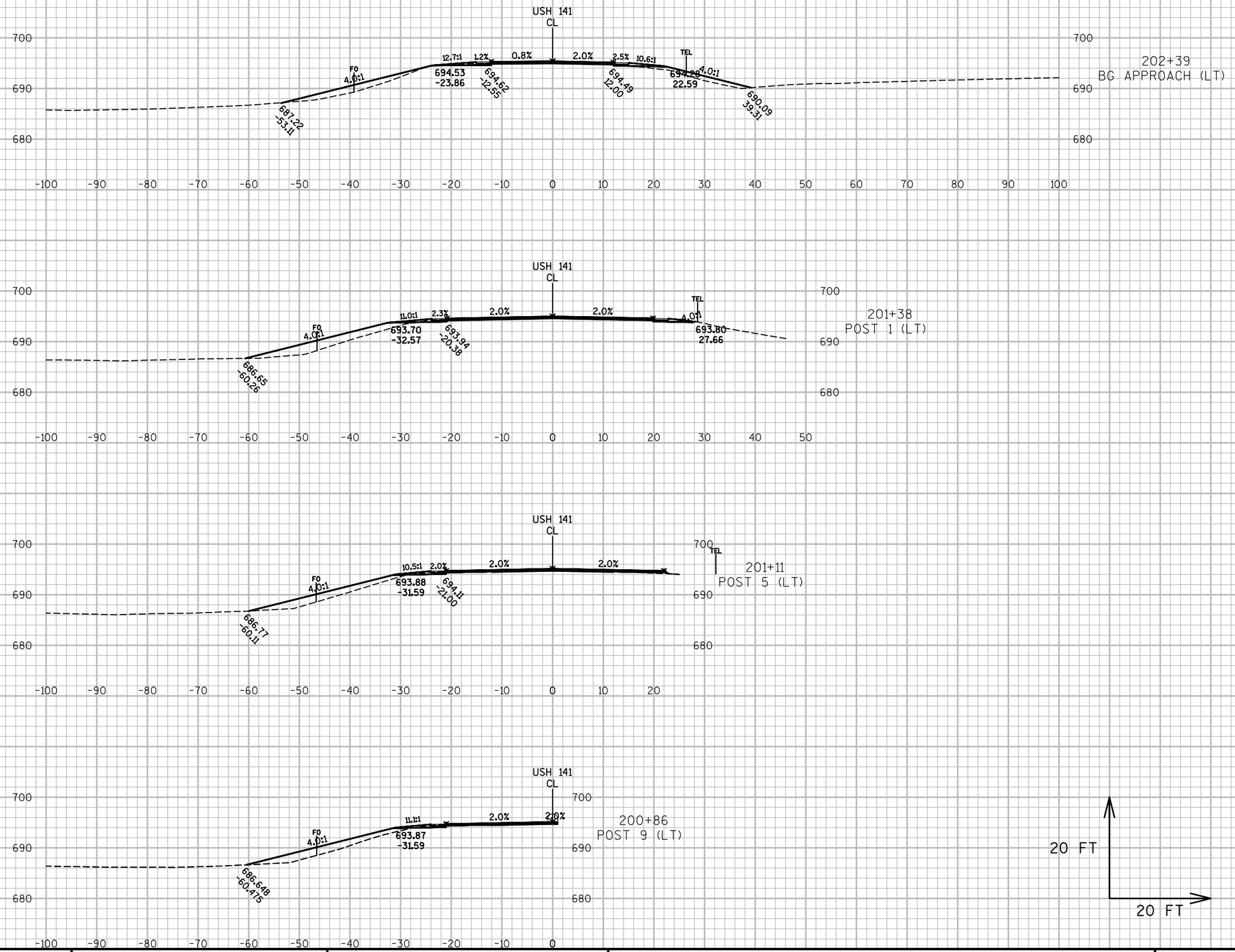


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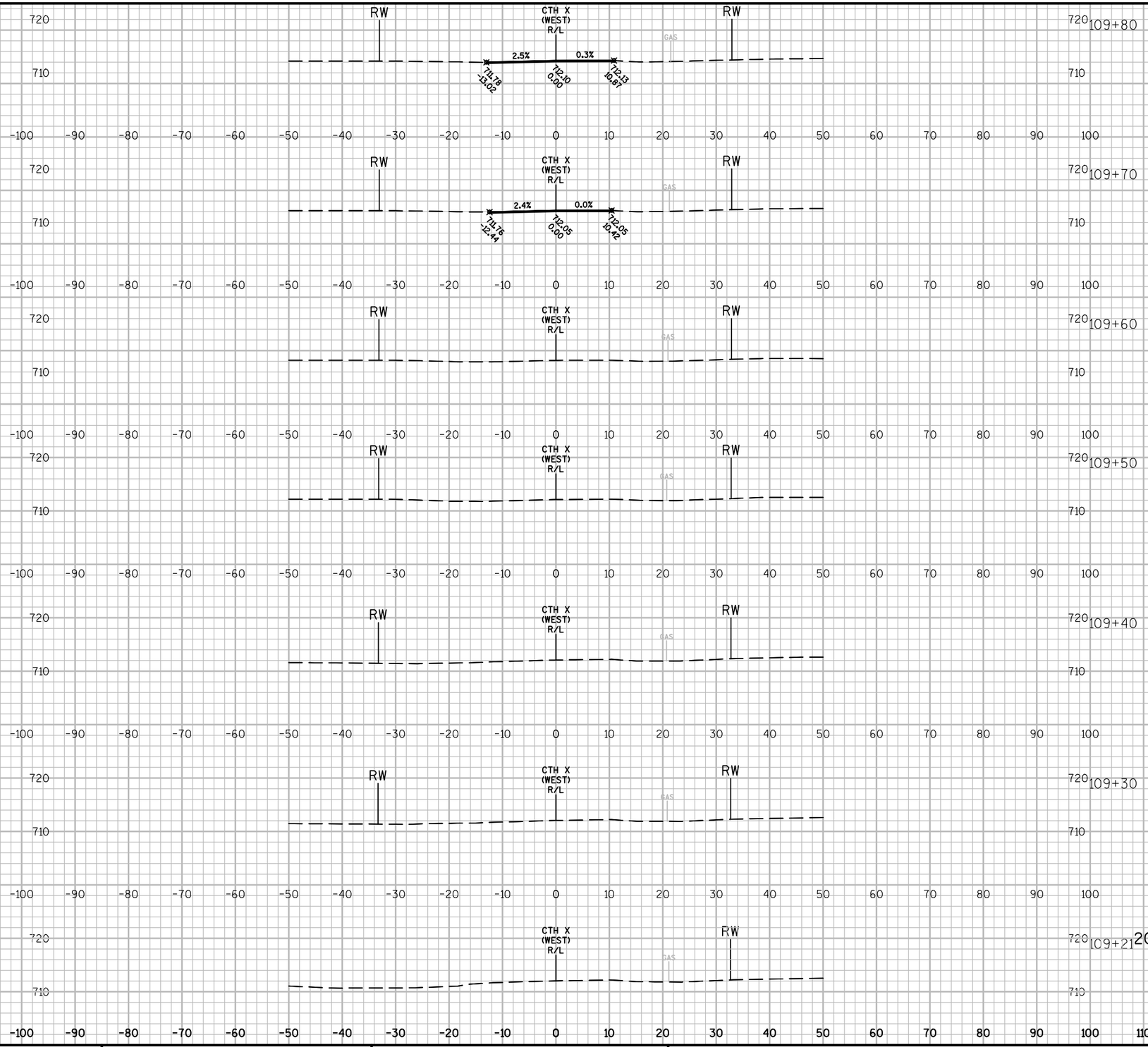
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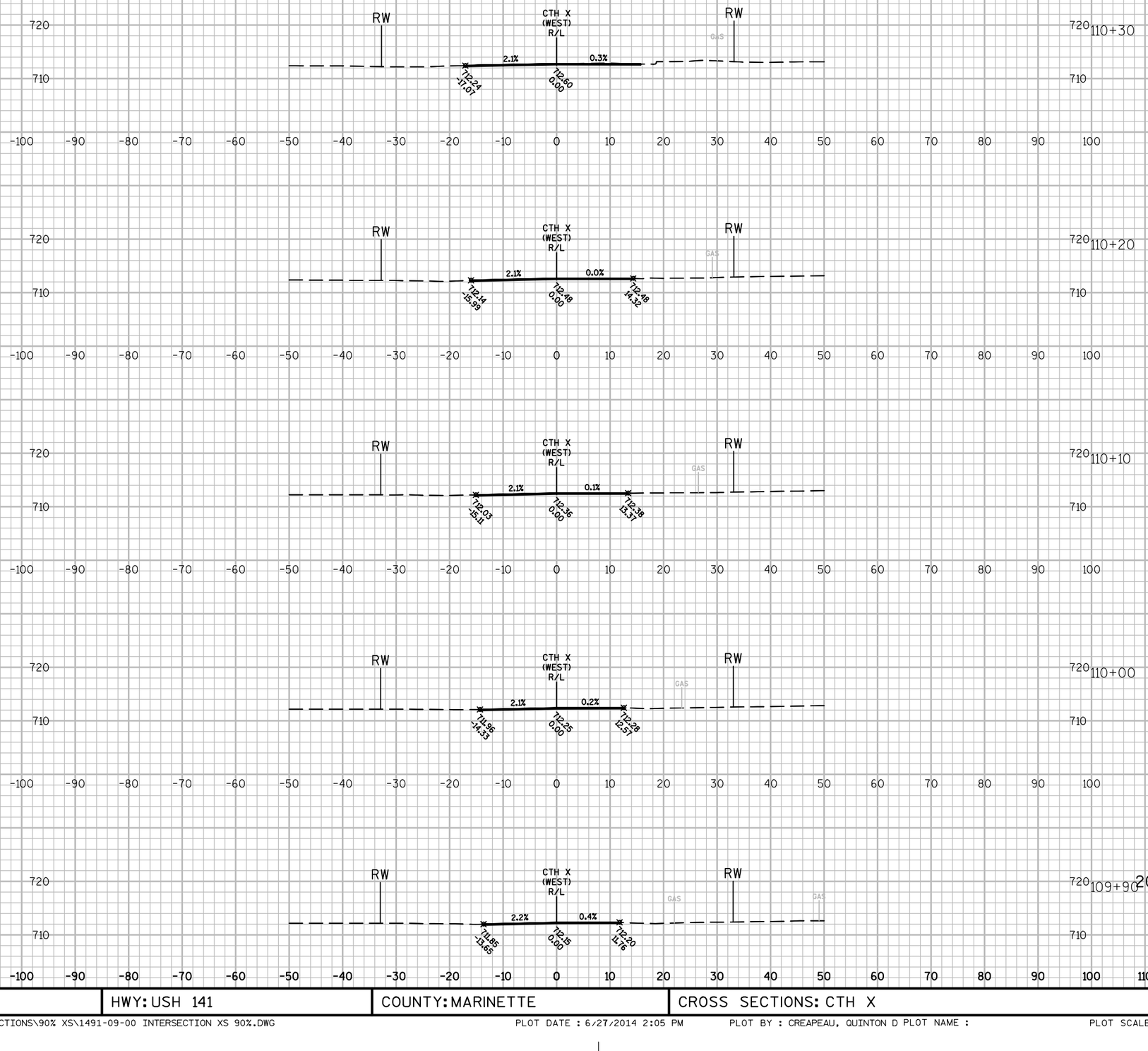
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PROJECT NO: 1490-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 MAINLINE BEAM GUARD (LOWER MID INLET)	SHEET 338	E



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH X	SHEET	E



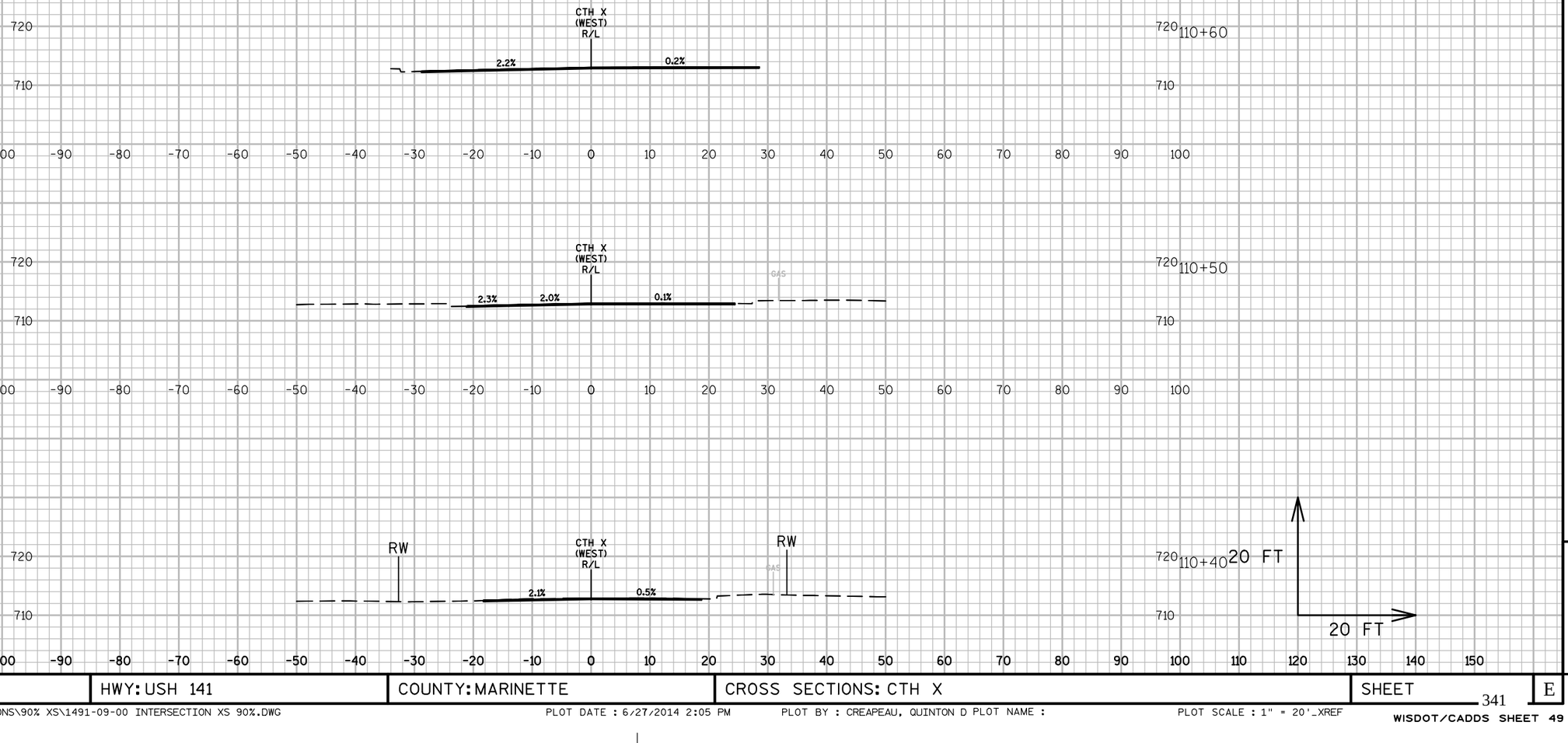
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH X	SHEET	E

FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:05 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

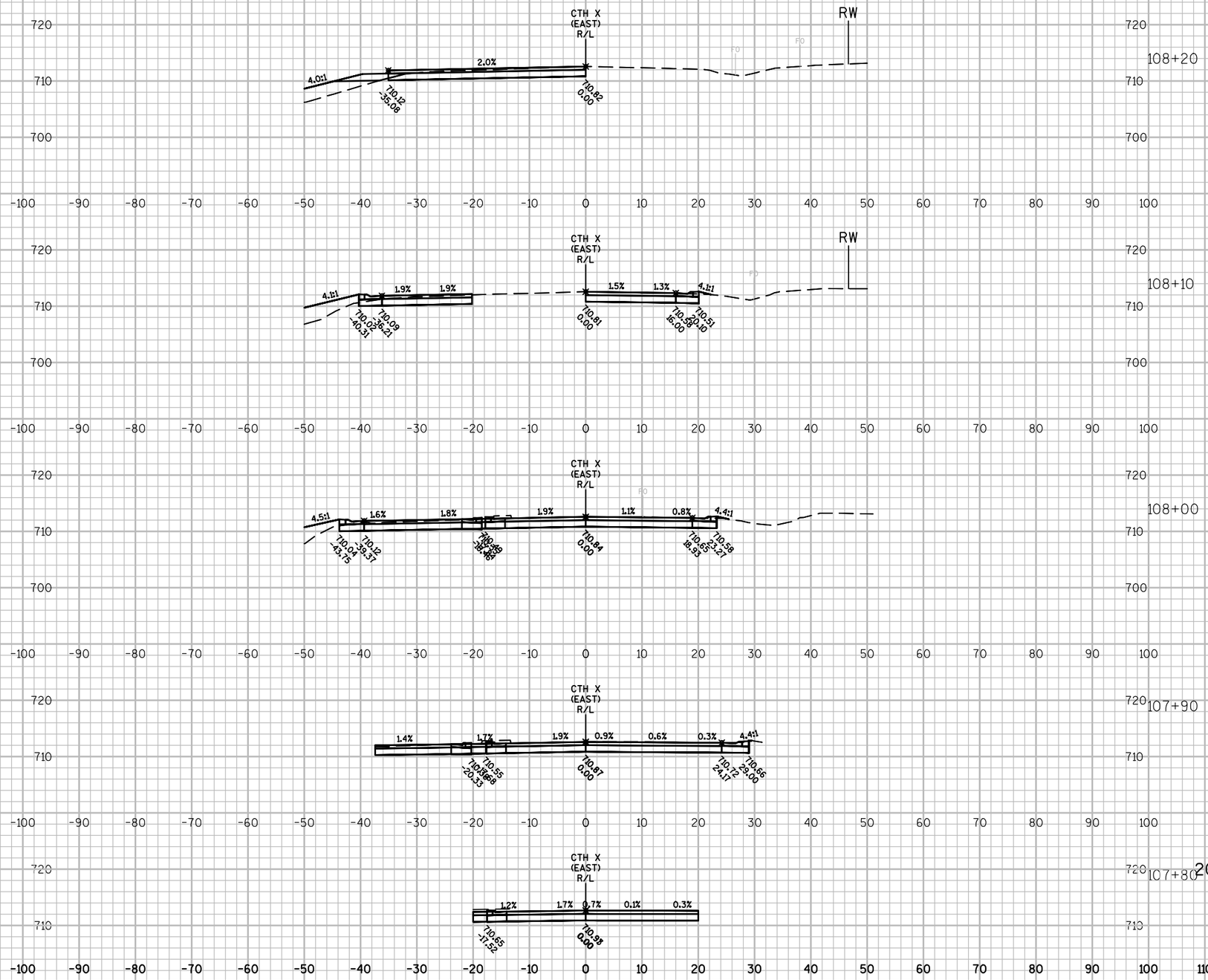
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH X	SHEET 341	E

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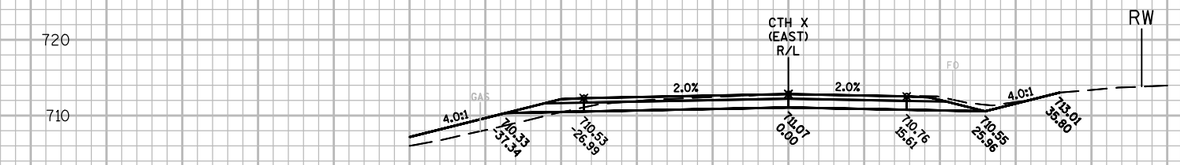
WISDOT/CADDS SHEET 49

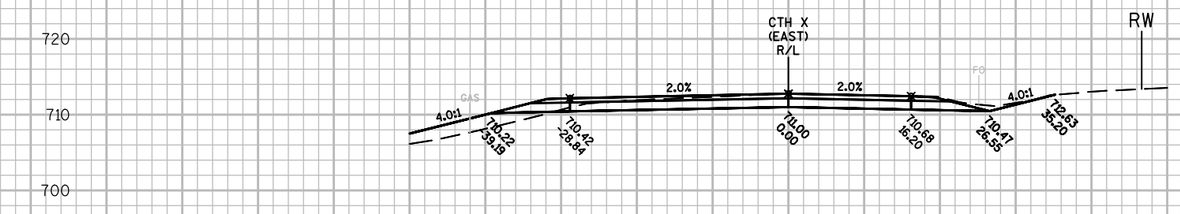


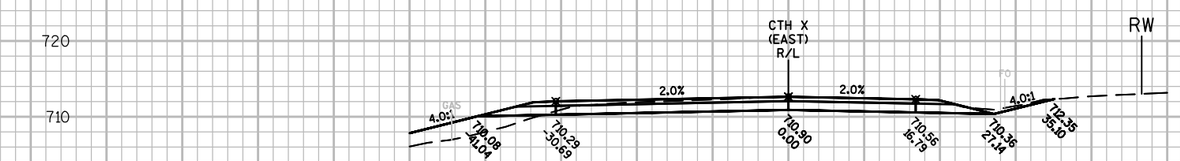
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH X	SHEET	E

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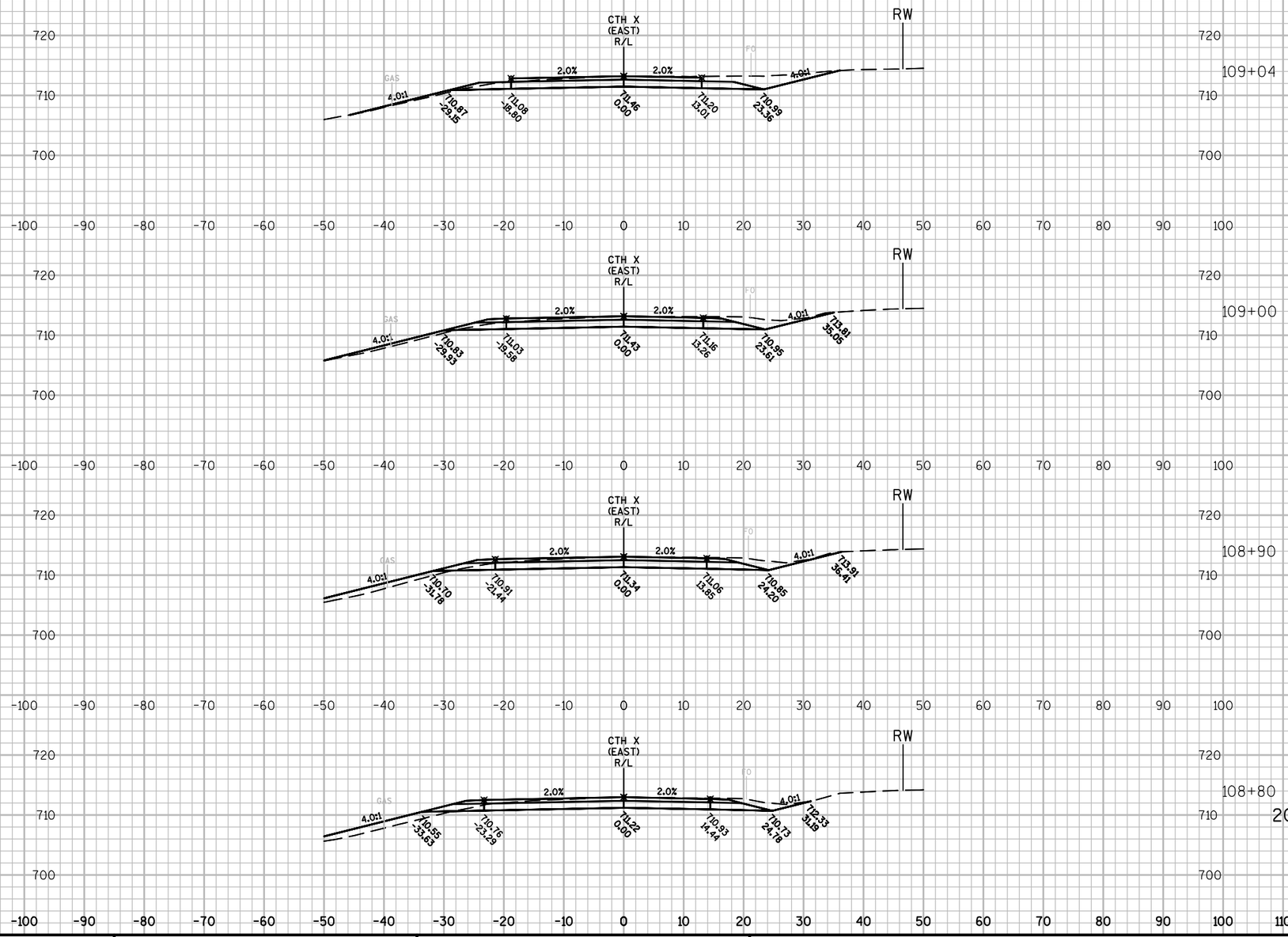




PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH X	SHEET	E

FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:06 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

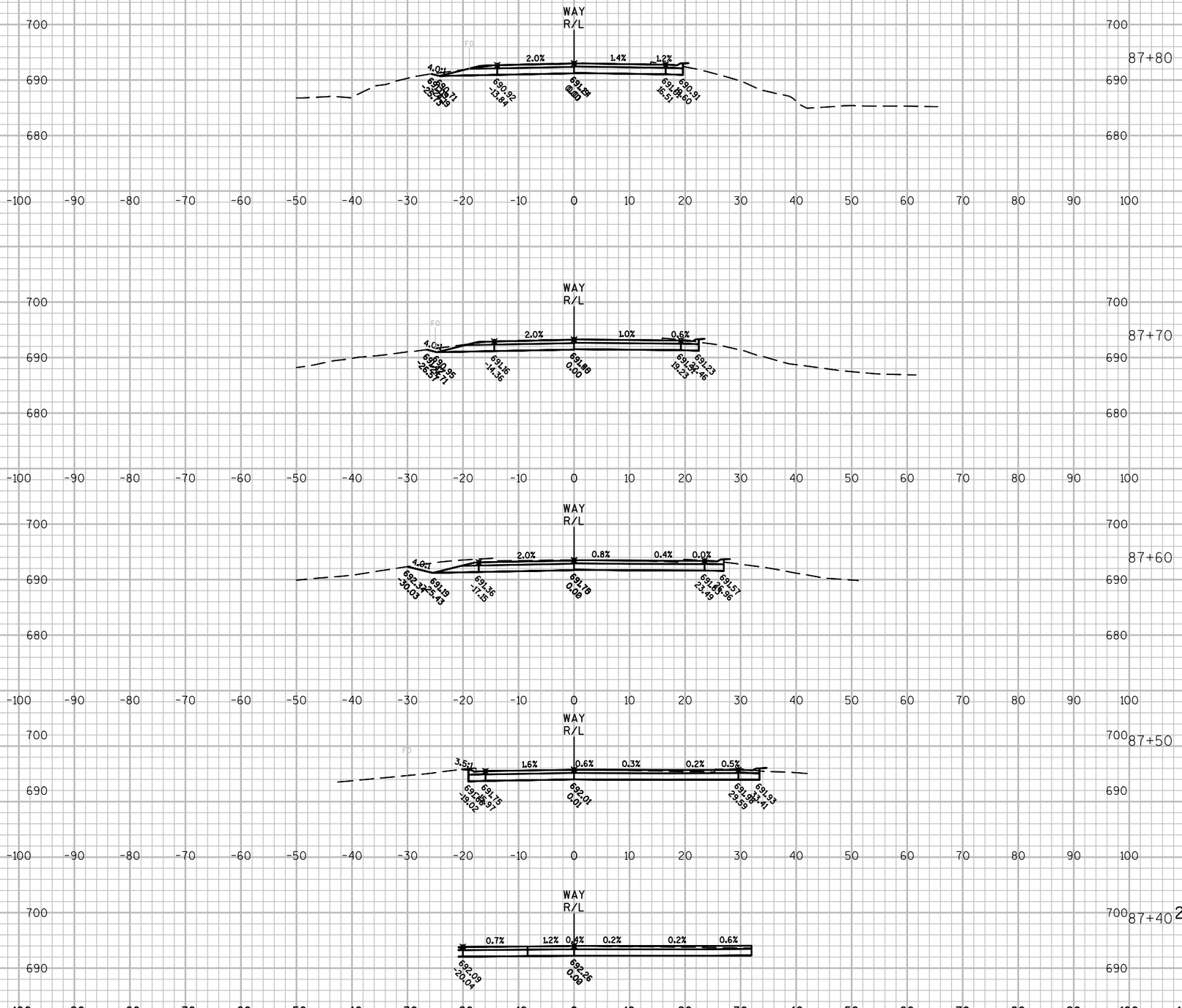
WISDOT/CADDS SHEET 49



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH X	SHEET 344	E

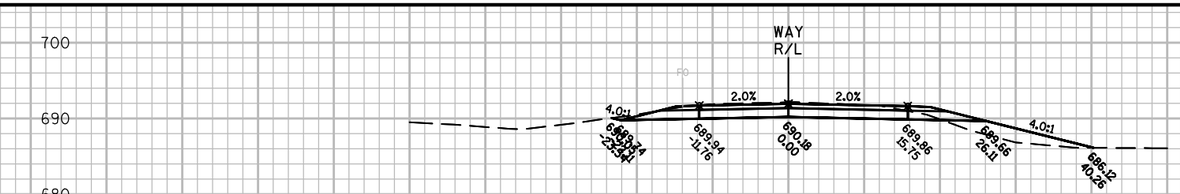
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WISDOT/CADDS SHEET 49

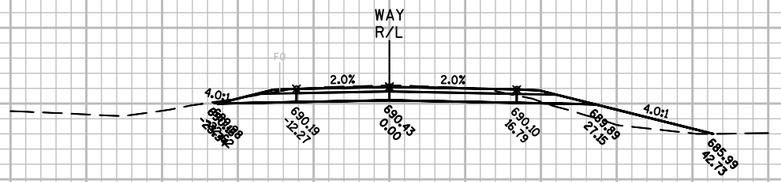


PROJECT NO: 1491-0971	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: WAYSIDE RD	SHEET E

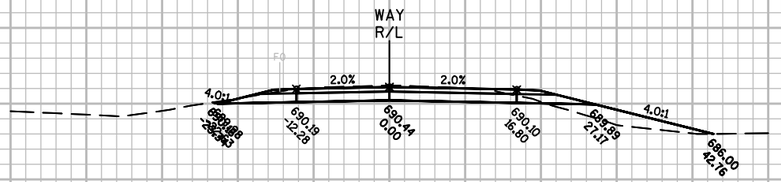
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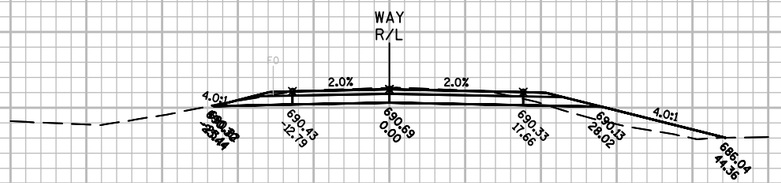
88+20



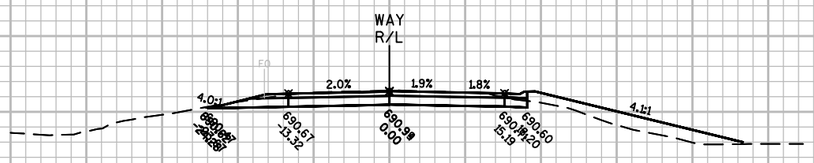
88+10



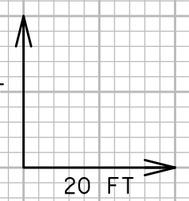
88+10



88+00

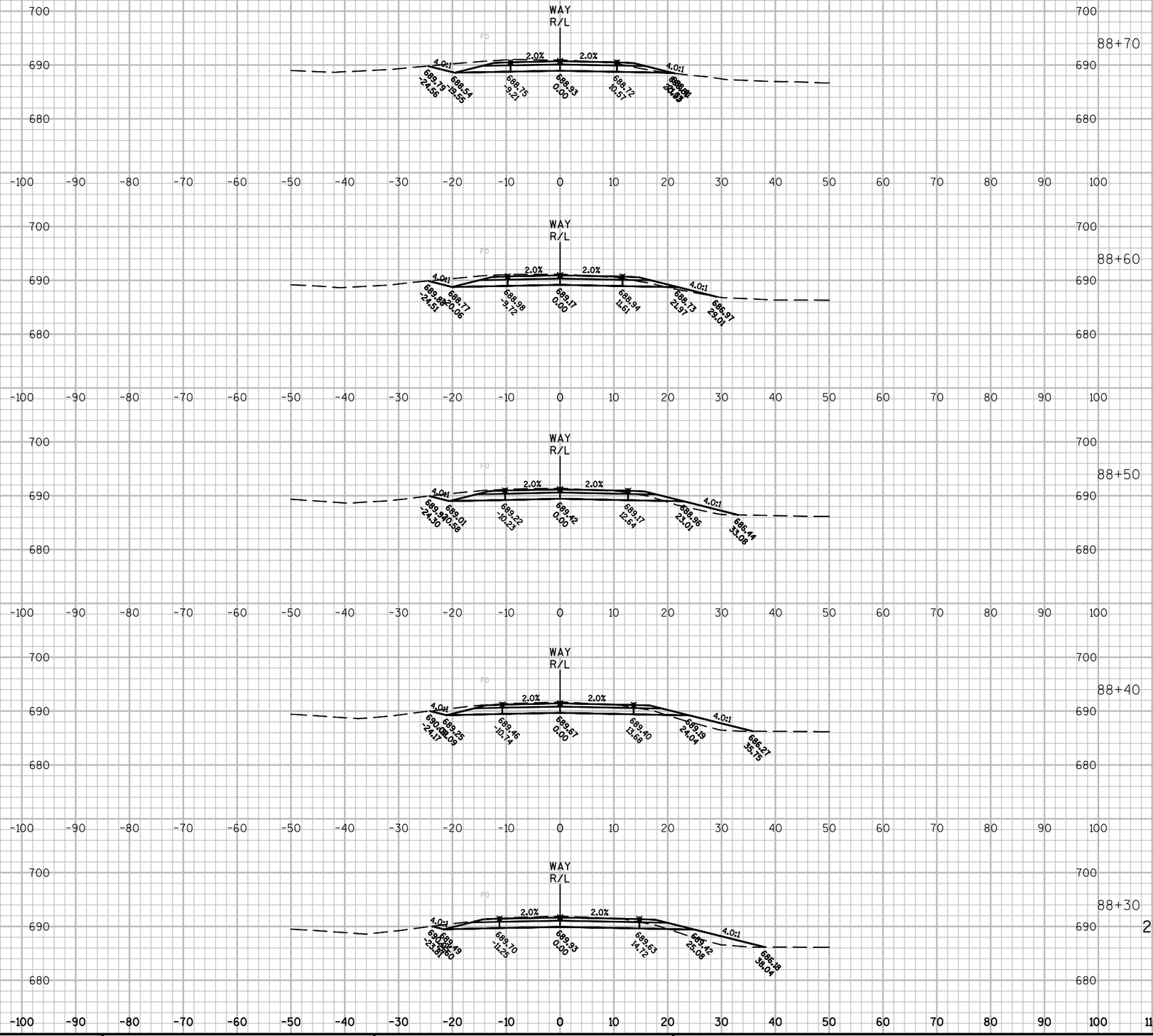


87+90



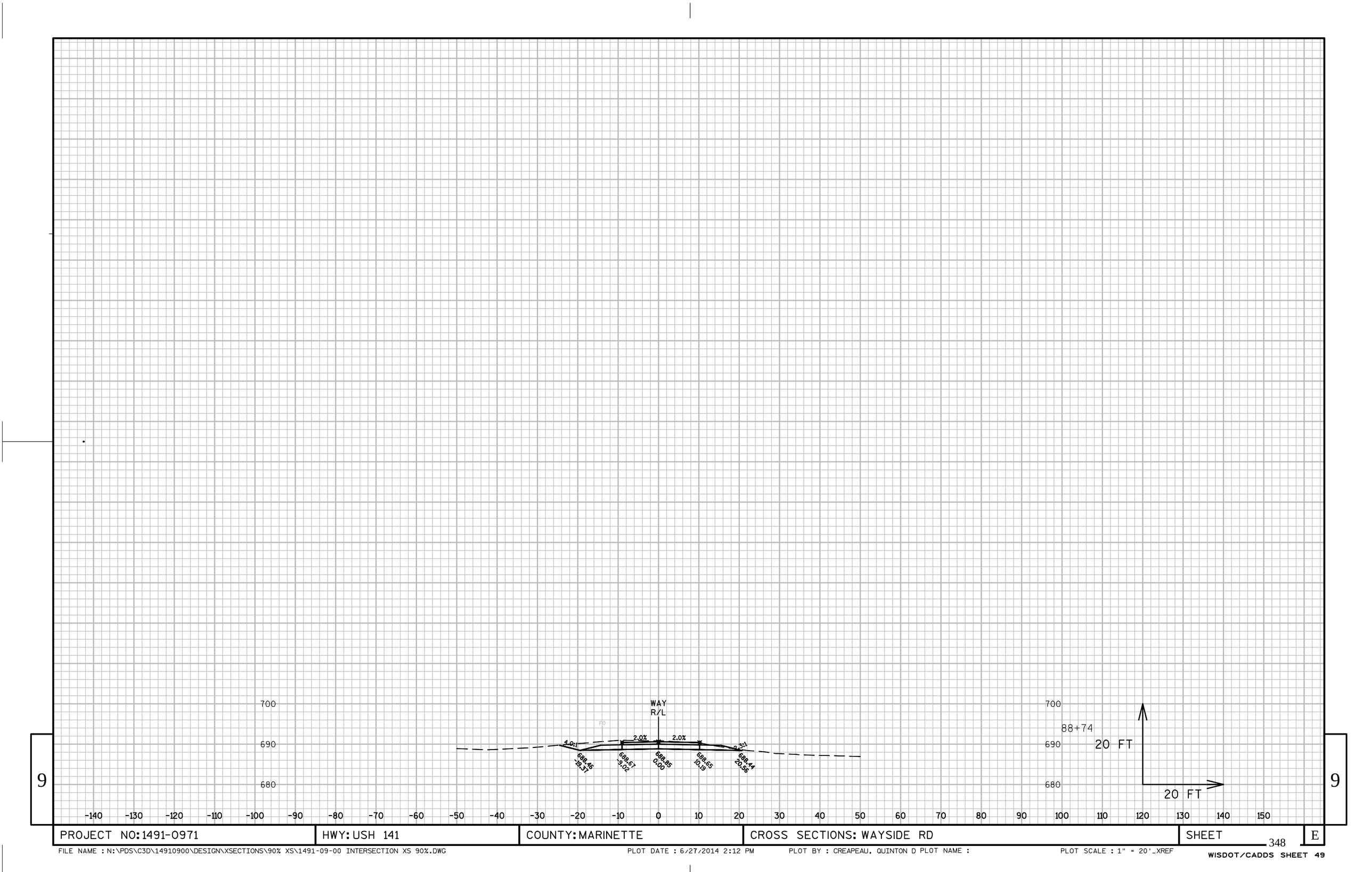
PROJECT NO: 1491-0971	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: WAYSIDE RD	SHEET	E

FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:11 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF



PROJECT NO: 1491-0971	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: WAYSIDE RD	SHEET	E

FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:11 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF



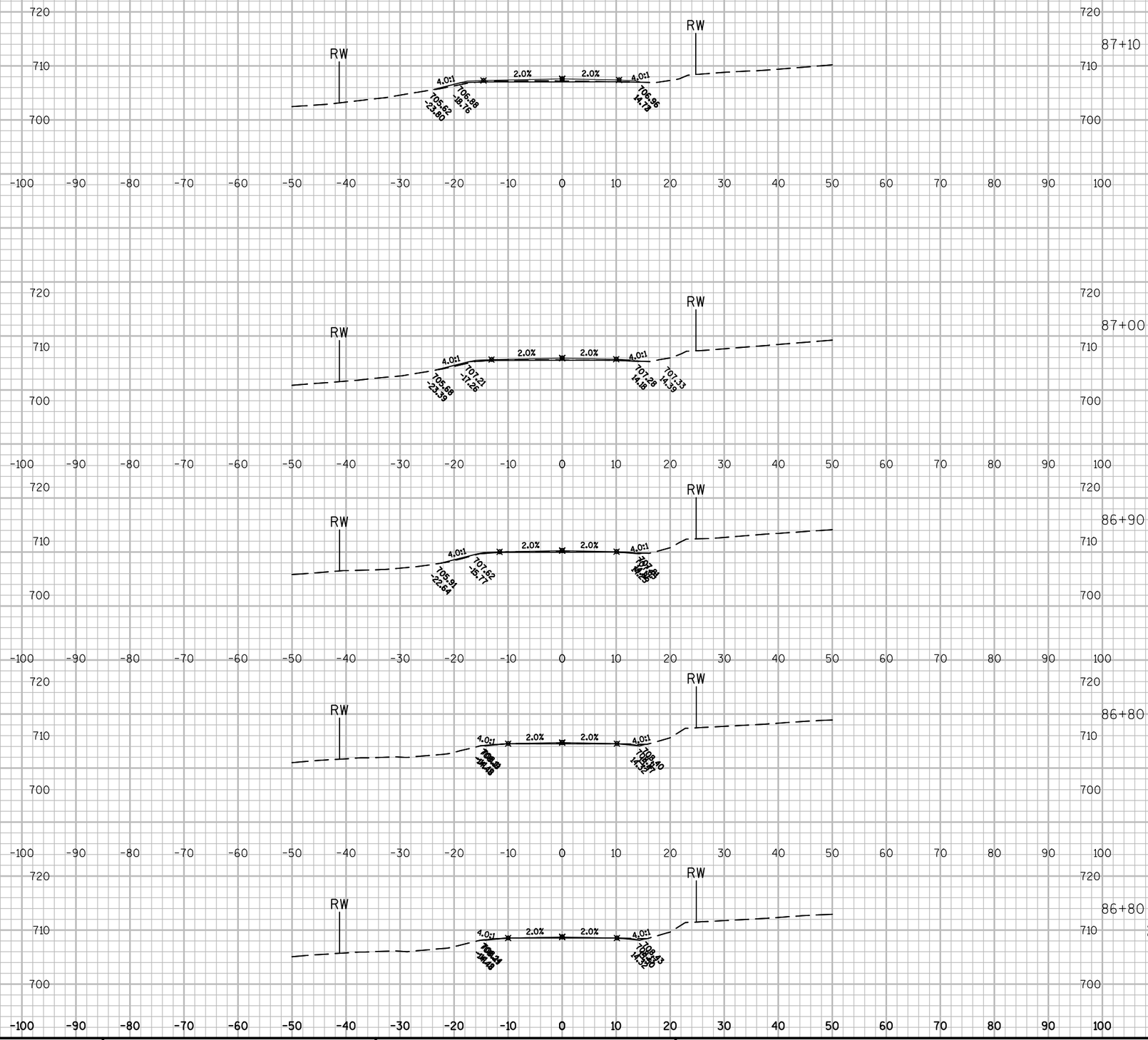
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PROJECT NO: 1491-0971	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: WAYSIDE RD	SHEET	E

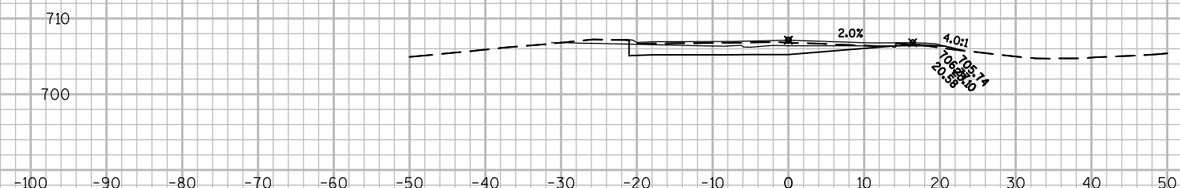
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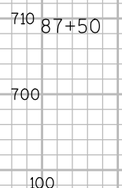
WISDOT/CADDS SHEET 49

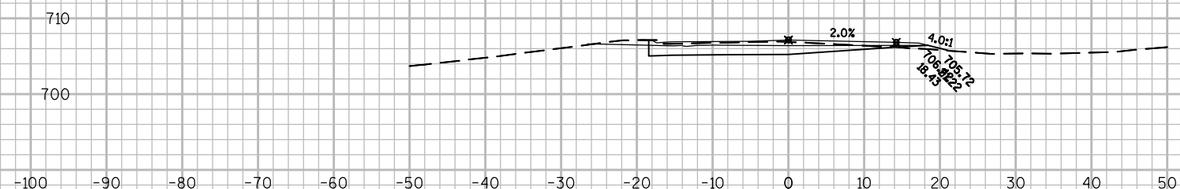


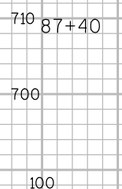
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FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:12 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

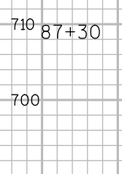


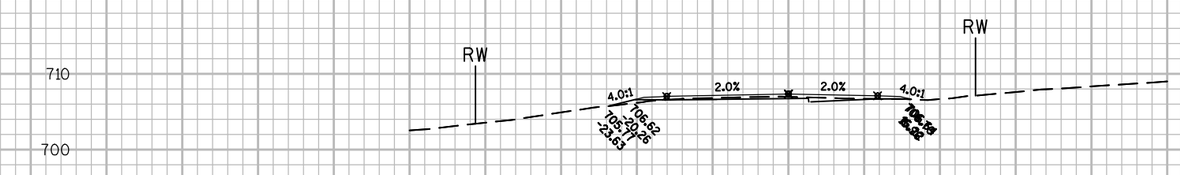


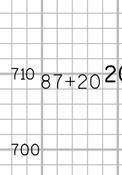










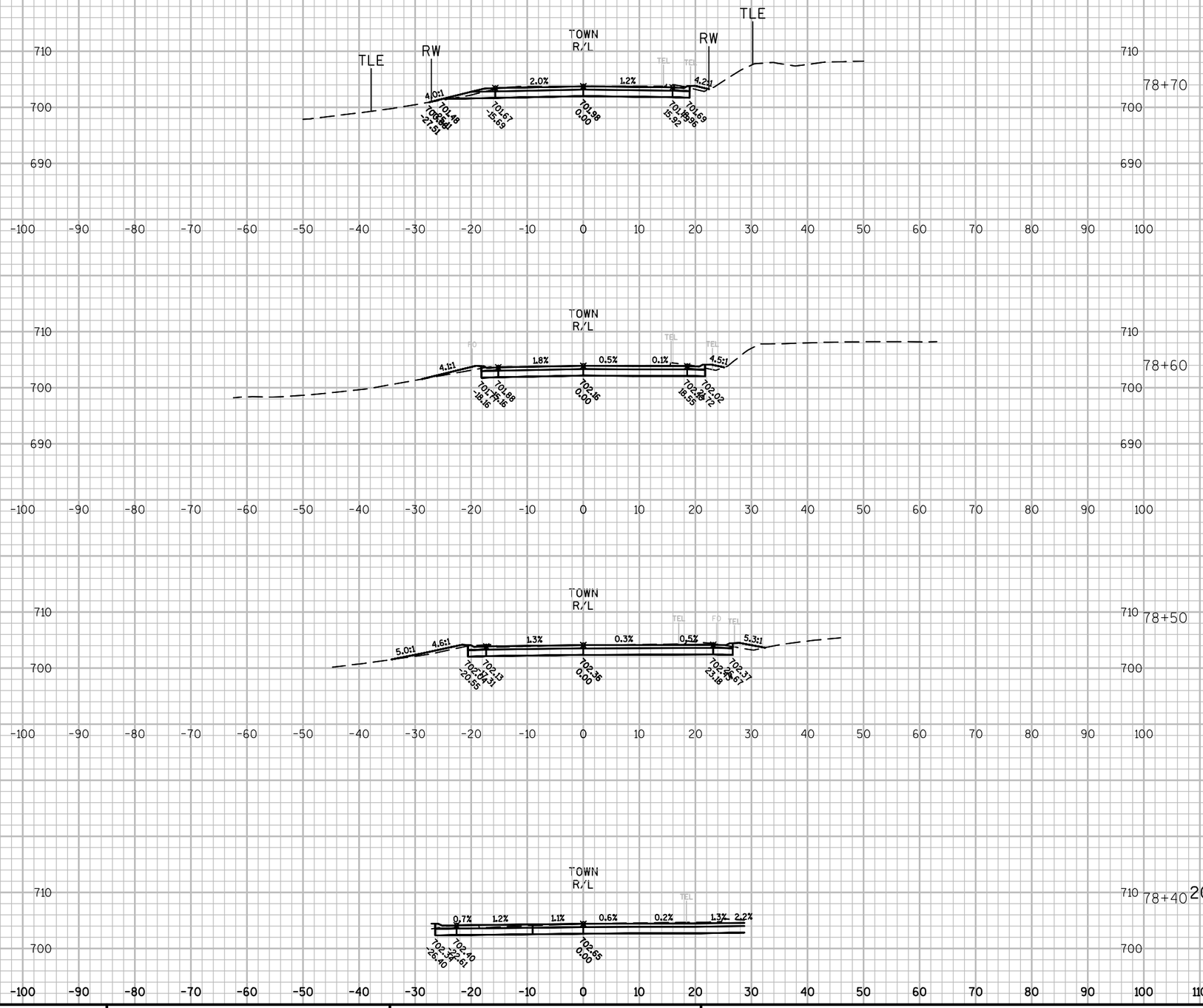


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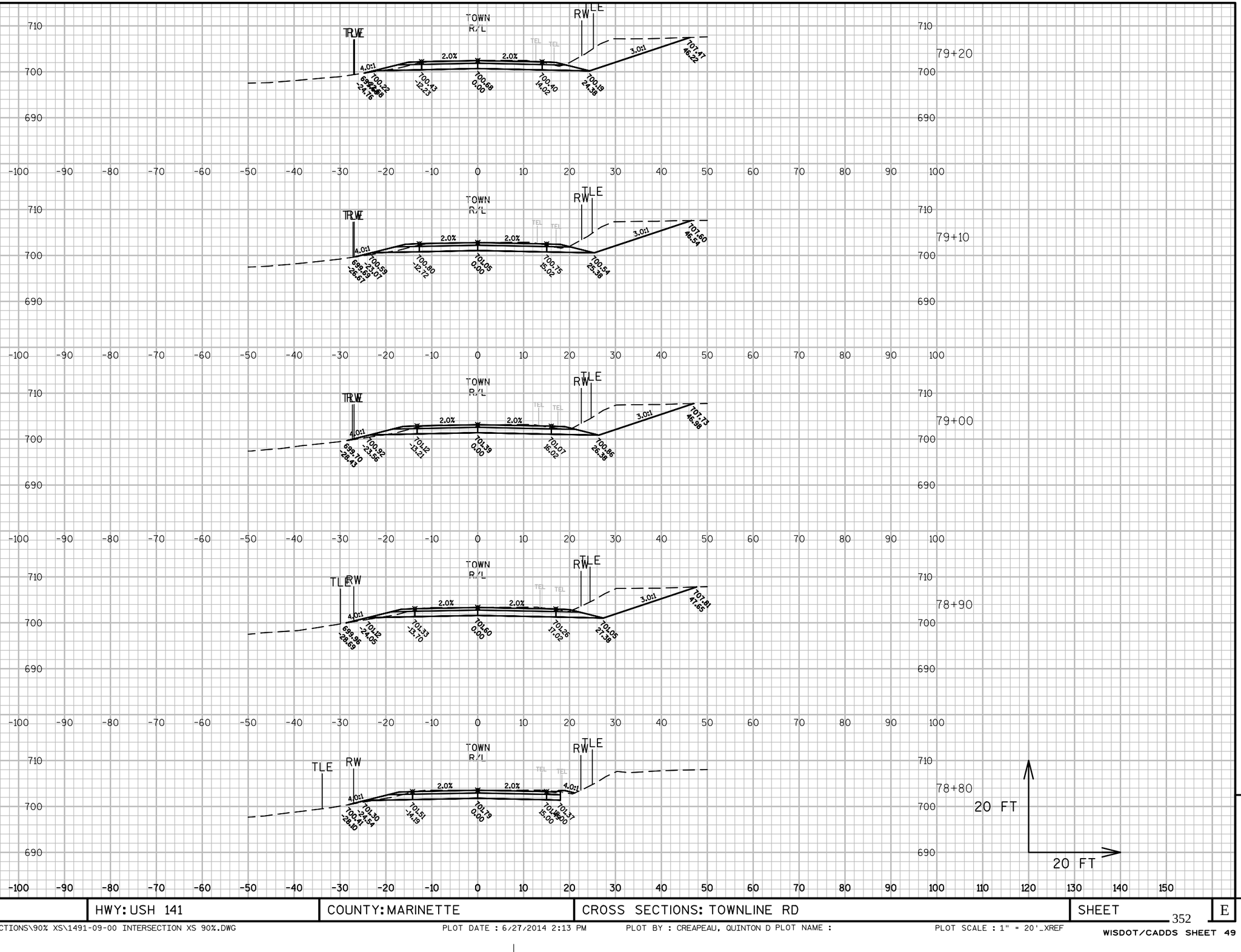
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: VAN RD	SHEET	E

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WISDOT/CADDS SHEET 49



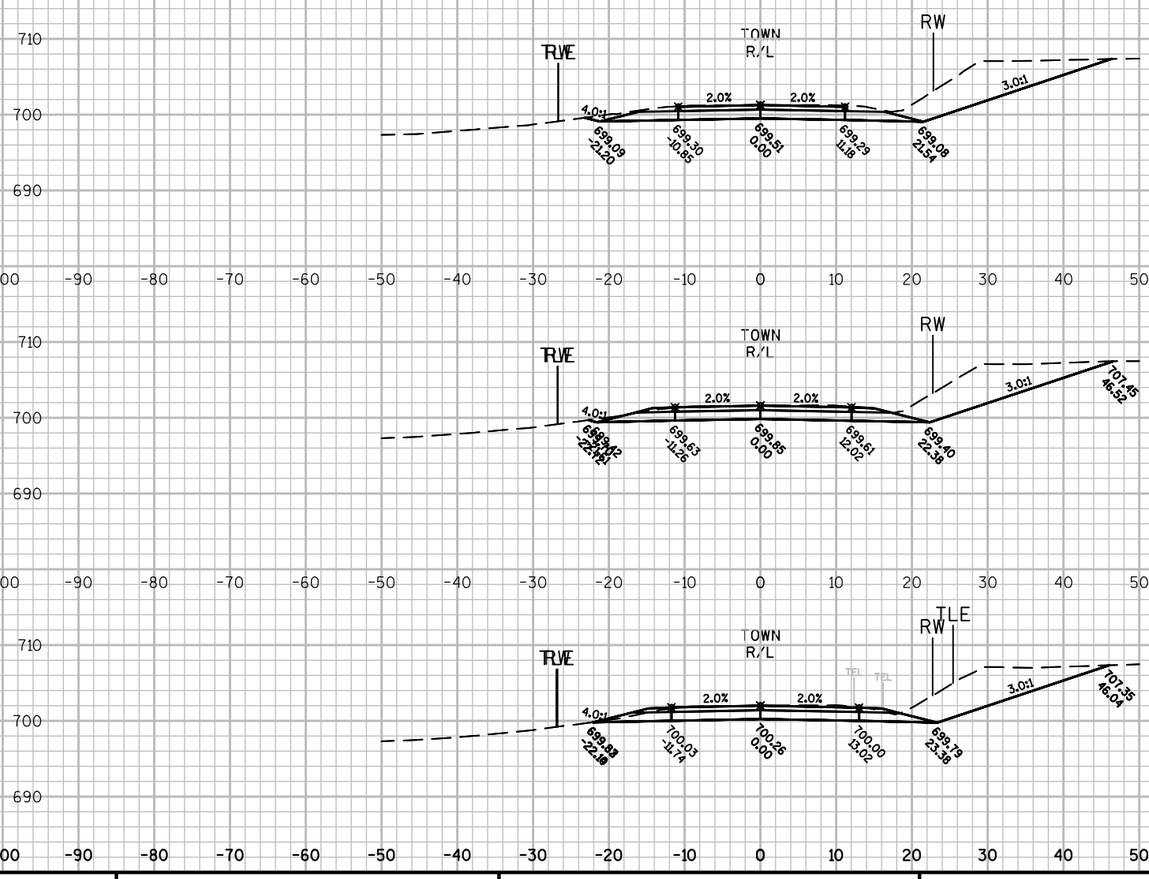
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: TOWNLINE RD	SHEET	E

FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:13 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

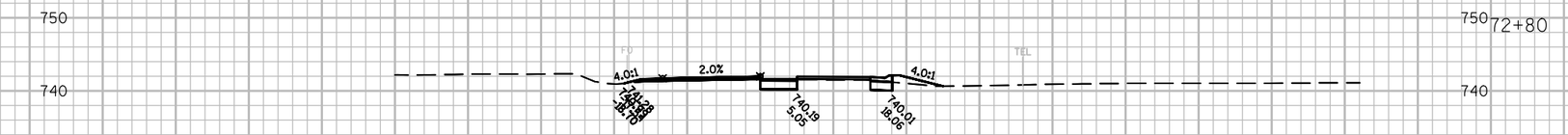
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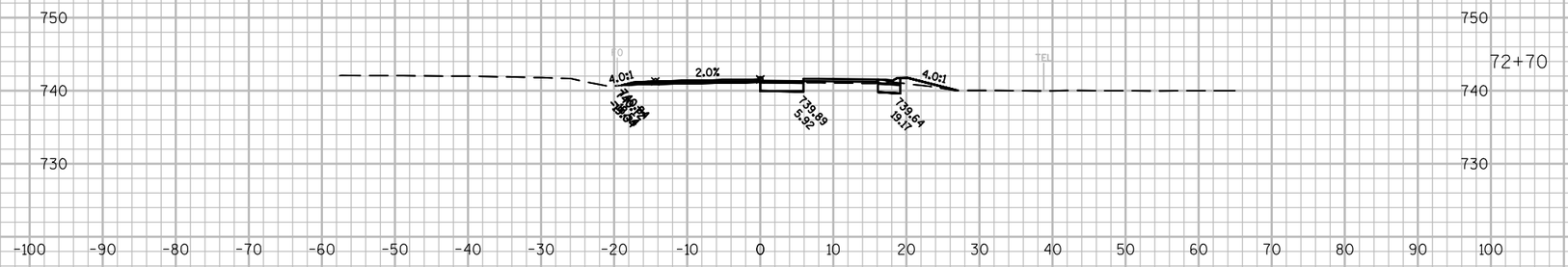
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WISDOT/CADDS SHEET 49



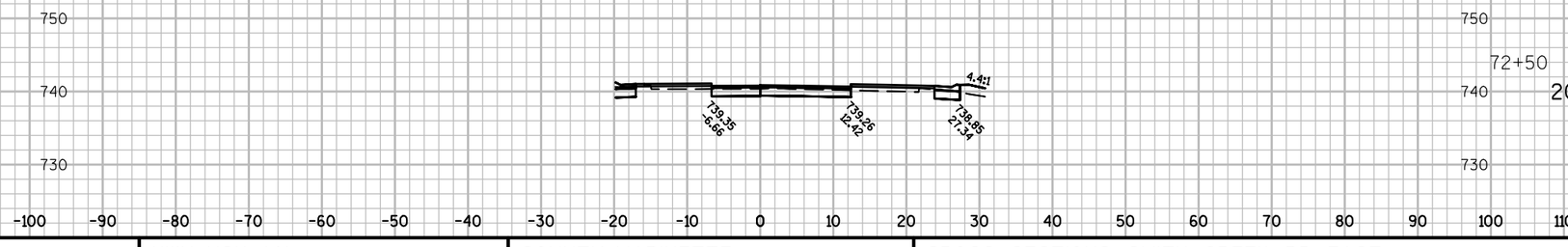
72+80



72+70



72+60

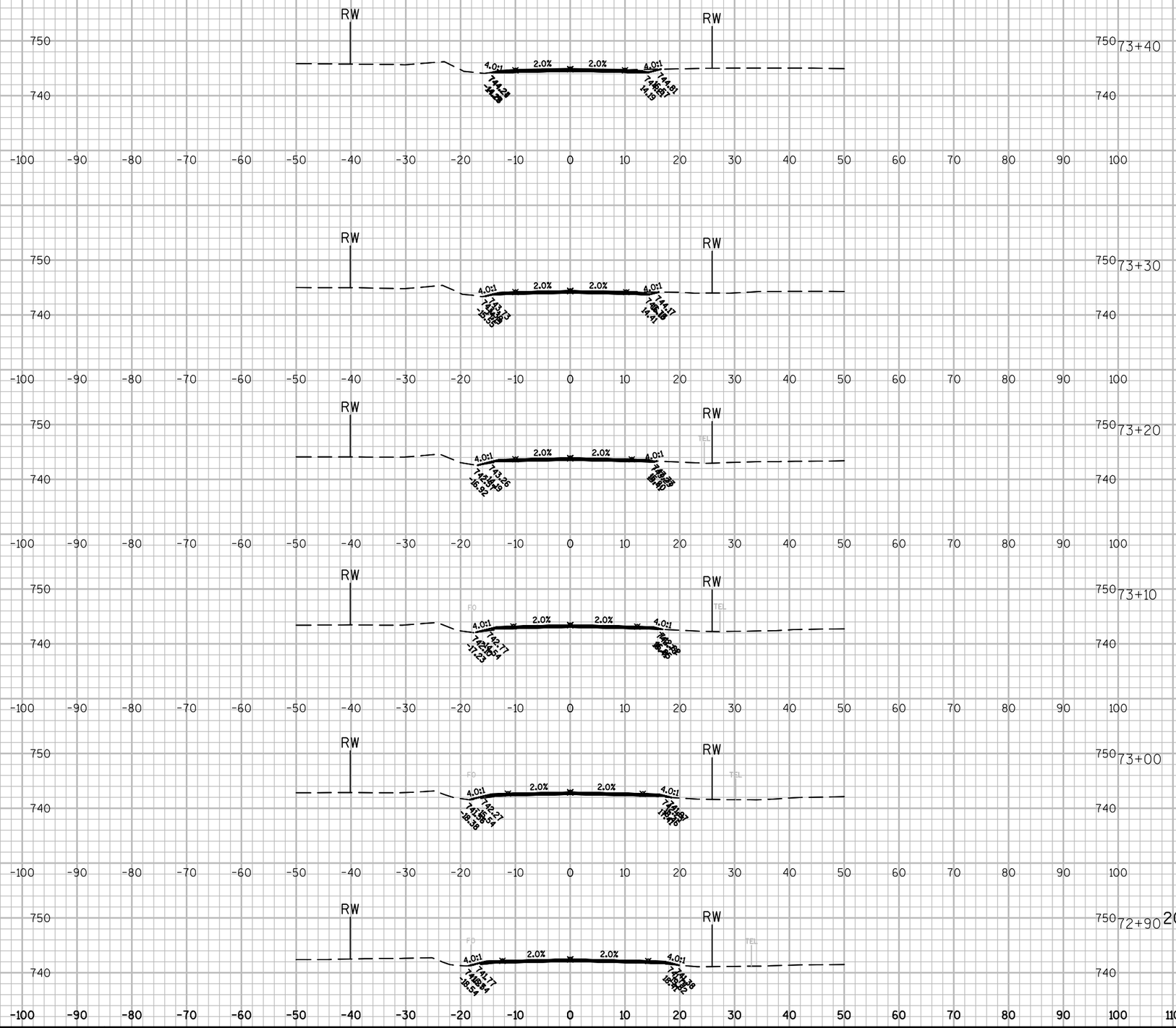


72+50

9

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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: SMITH CREEK RD EAST	SHEET 354	E

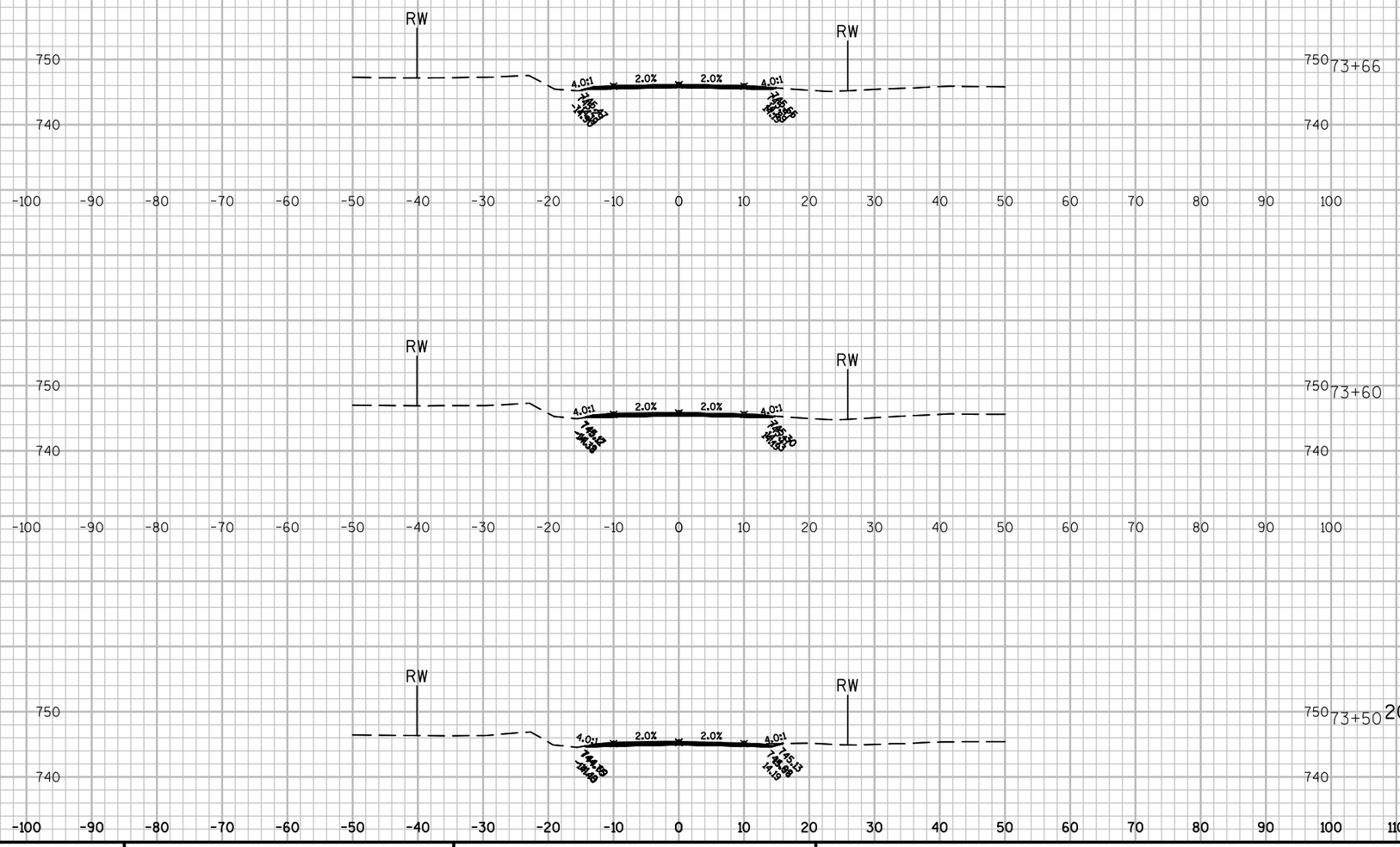


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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: SMITH CREEK RD EAST	SHEET	E

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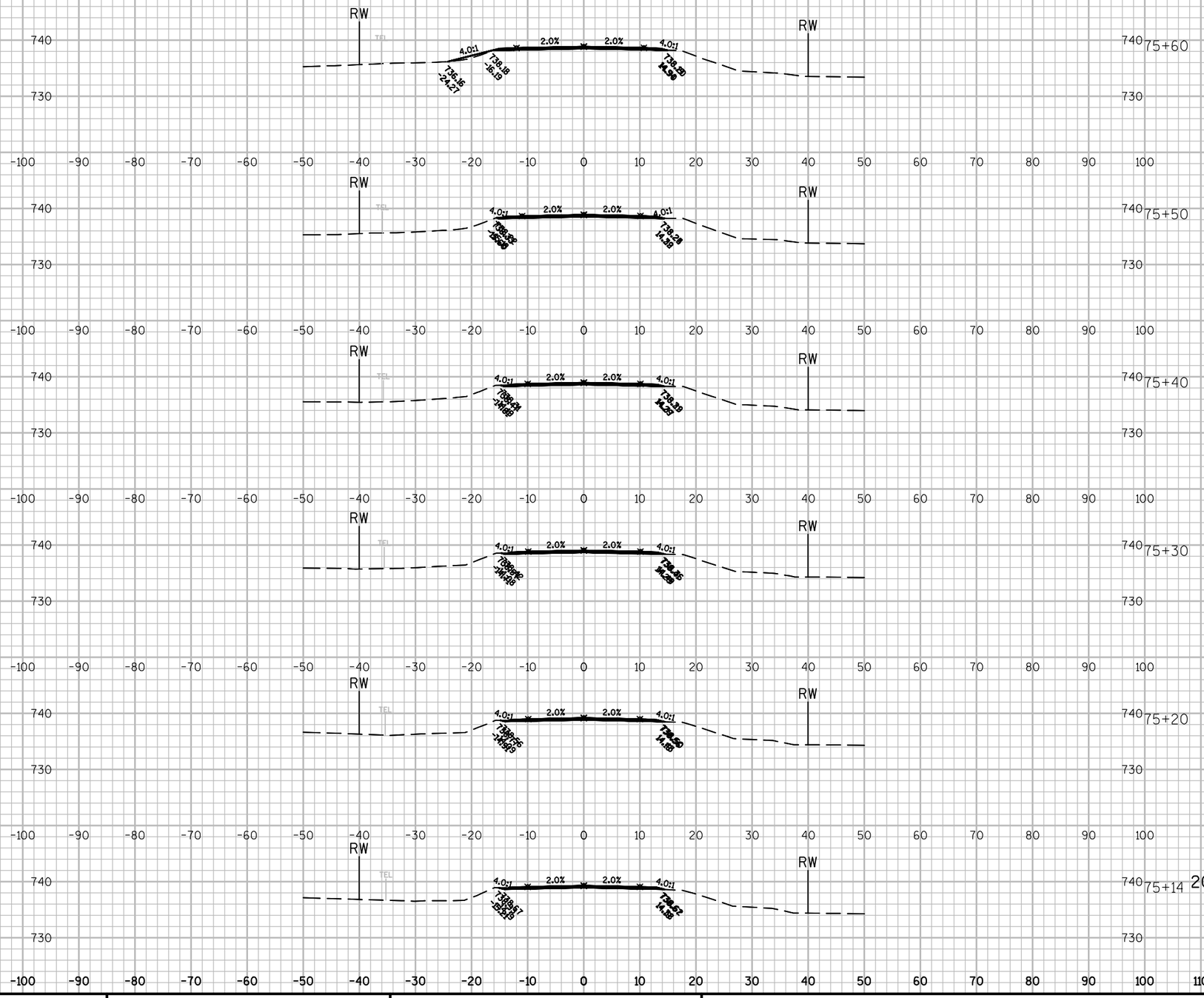


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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: SMITH CREEK RD EAST	SHEET	E

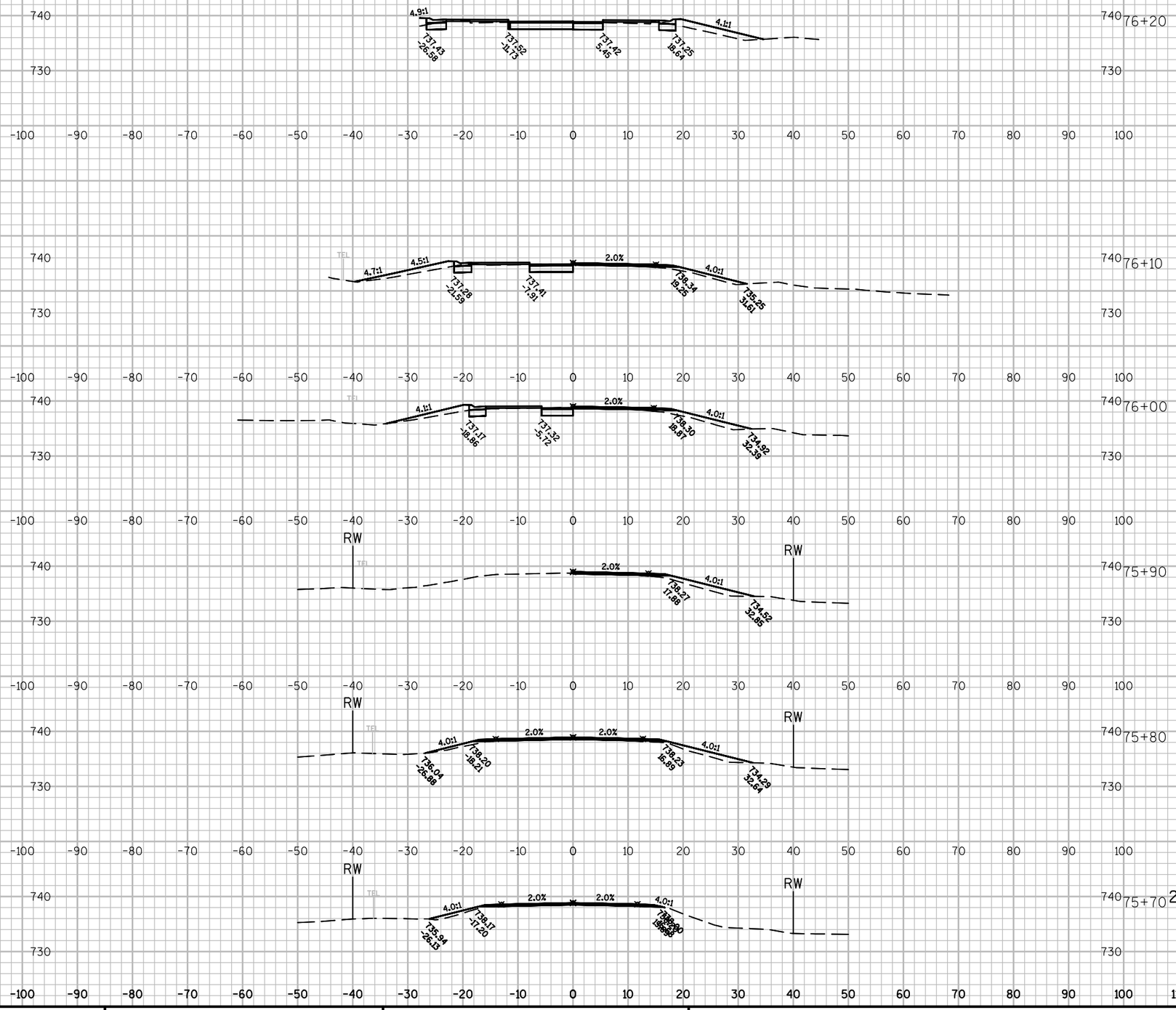
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WISDOT/CADDS SHEET 49



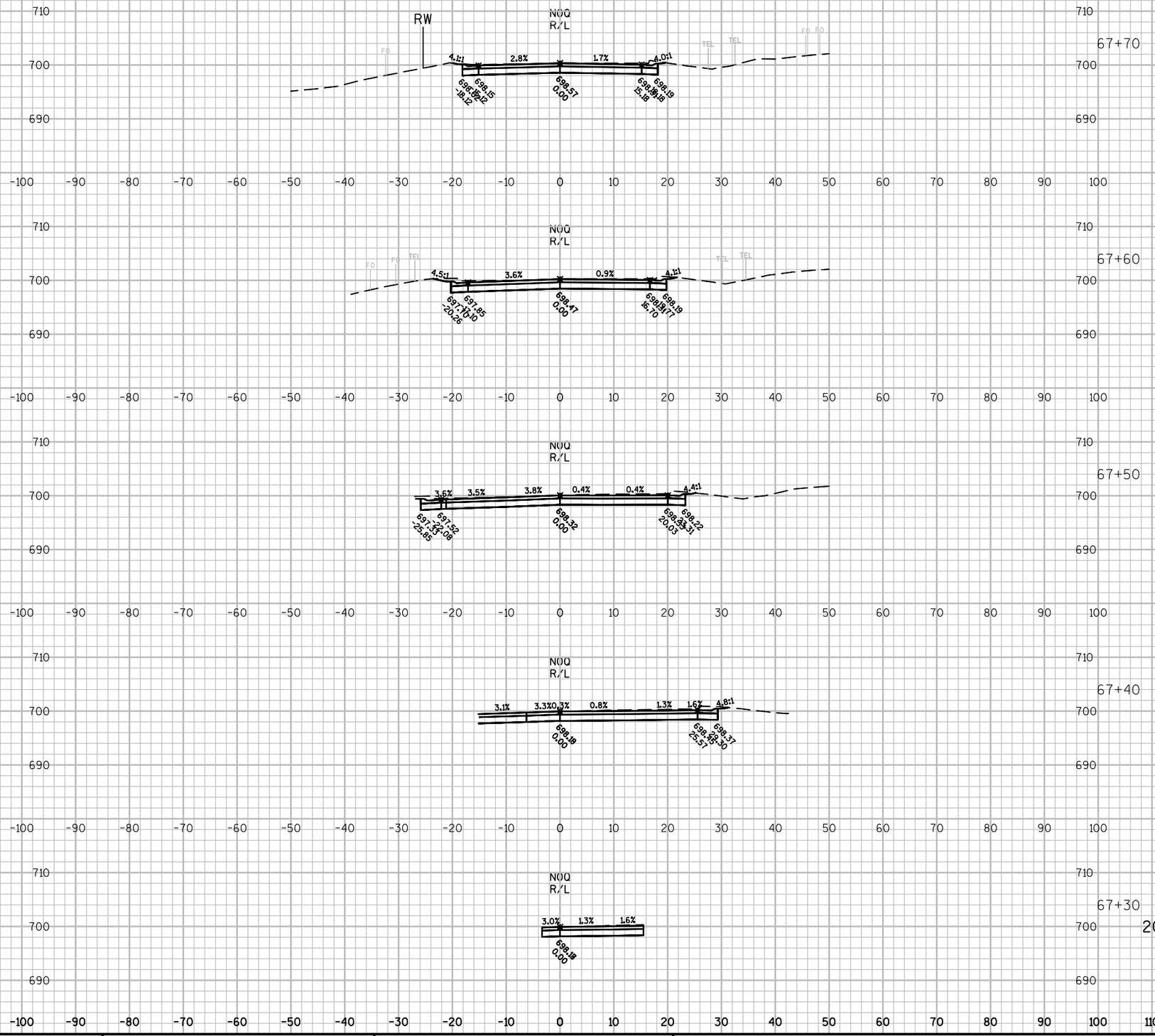
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: SMITH CREEK RD WEST	SHEET	E



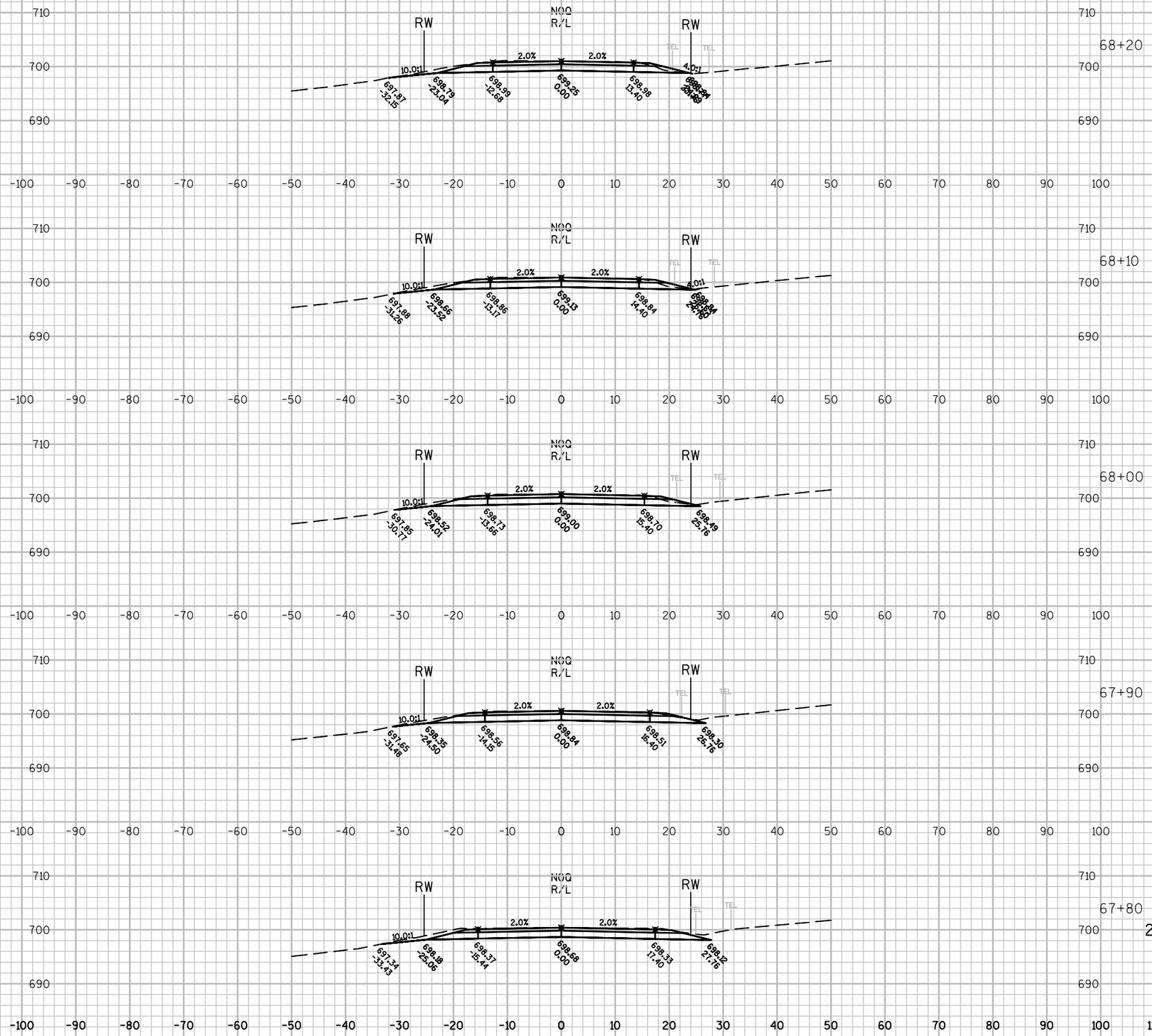
PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: SMITH CREEK RD WEST	SHEET	E



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: NOQUEBAY RD	SHEET 359	E

FILE NAME : N:\PDS\C3D\14910900\DESIGN\XSECTIONS\90% XS\1491-09-00 INTERSECTION XS 90%.DWG PLOT DATE : 6/27/2014 2:17 PM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49



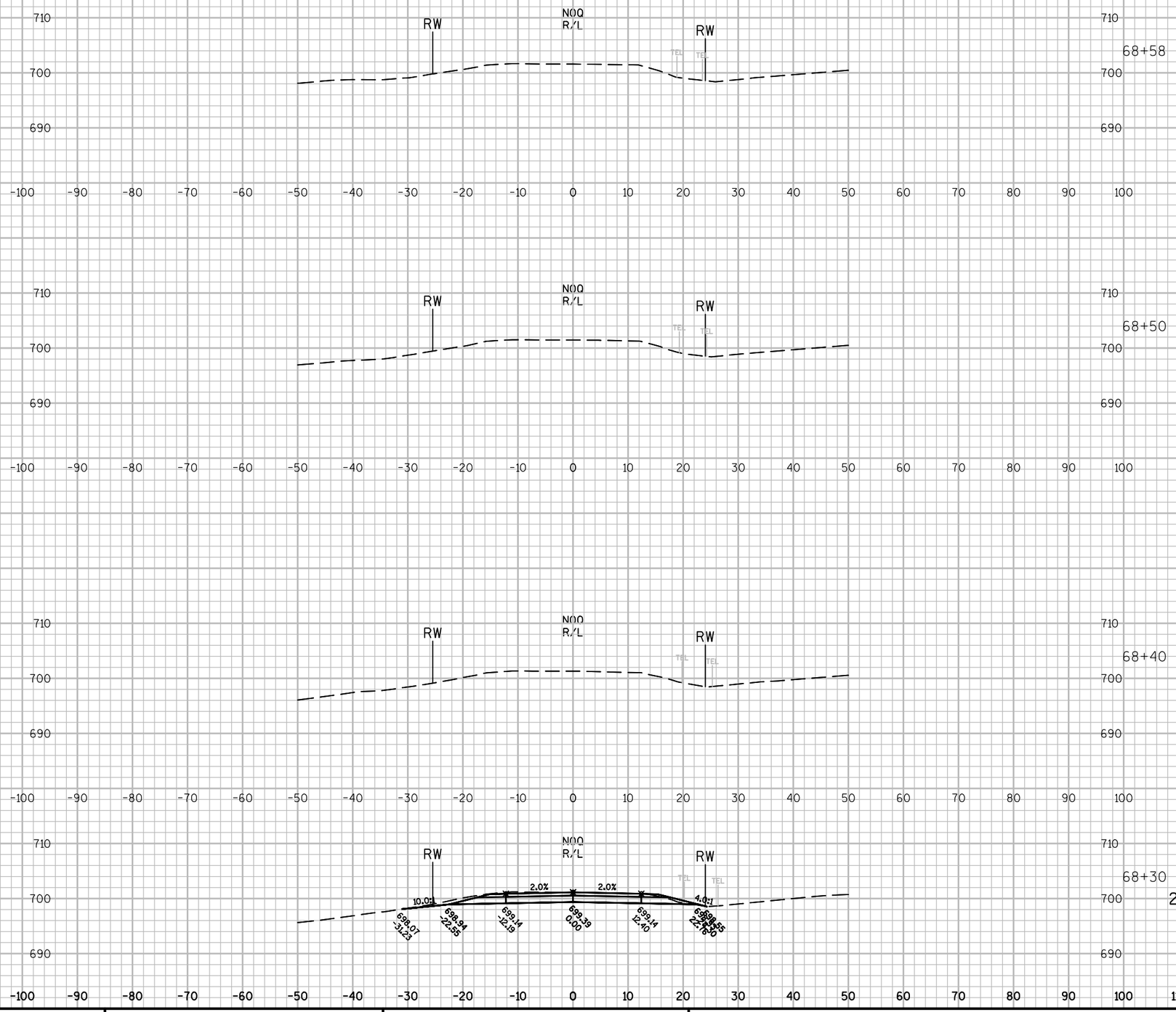
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: NOQUEBAY RD	SHEET 360	E

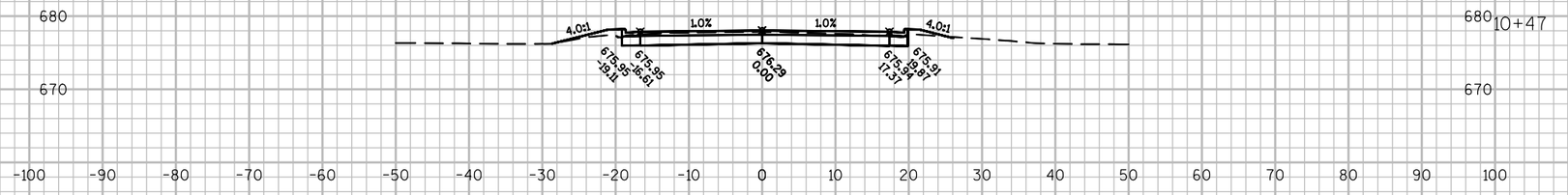
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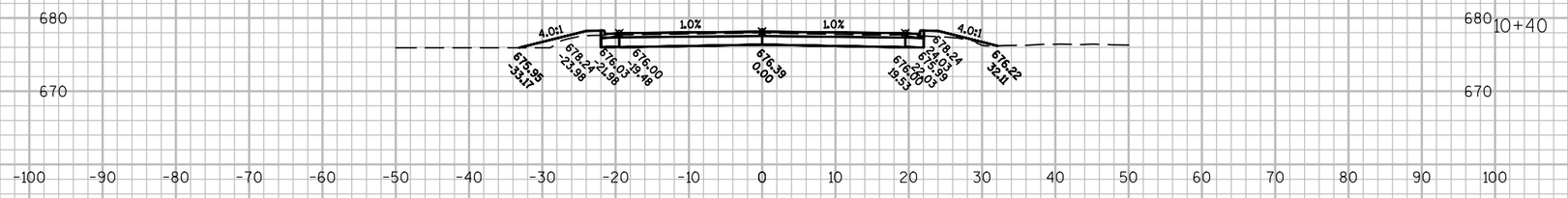
WISDOT/CADDS SHEET 49

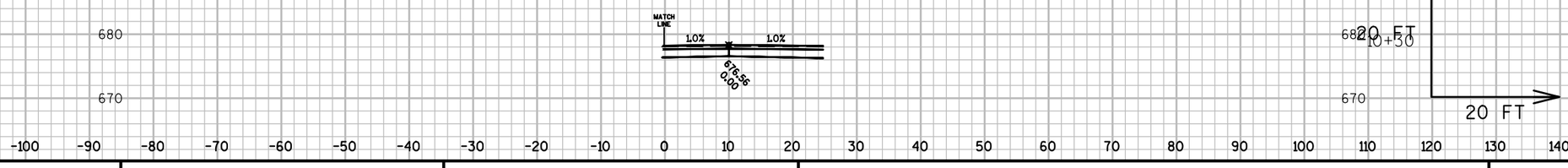


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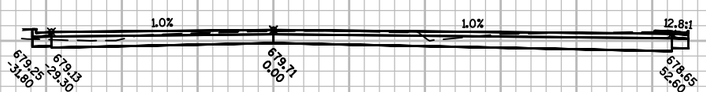
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PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: DESCHANE	SHEET 362	E









10+50

10+40

10+34

9

9

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: FINNELLI AVE	SHEET	E

FILE NAME : H:\14910900\DESIGN\XSECTIONS\90% XS\REVISED 1491-09-00 INTERSECTION XS FINAL.DWG PLOT DATE : 7/22/2014 1:56 AM PLOT BY : CREAPEAU, QUINTON D PLOT NAME : PLOT SCALE : 1" = 20'_XREF

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

GRE

Nov 2014

PROJECT ID: 1491-10-71
WITH: N/A

COUNTY: MARINETTE

ORDER OF SHEETS

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

TOTAL SHEETS = 312

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1491-10-71	WISC 2014389	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BEAVER - PESHTIGO RIVER BR

S BR BEAVER CREEK - PESHTIGO RIVER

USH 141

MARINETTE COUNTY

STATE PROJECT NUMBER
1491-10-71



DESIGN DESIGNATION

A.A.D.T.	2013	=	8100
A.A.D.T.	2033	=	9900
D.H.V.	2033	=	1129
D.D.		=	60/40
T.		=	11.2%
DESIGN SPEED		=	60 MPH
ESALS		=	3,153,600

CONVENTIONAL SYMBOLS

PLAN

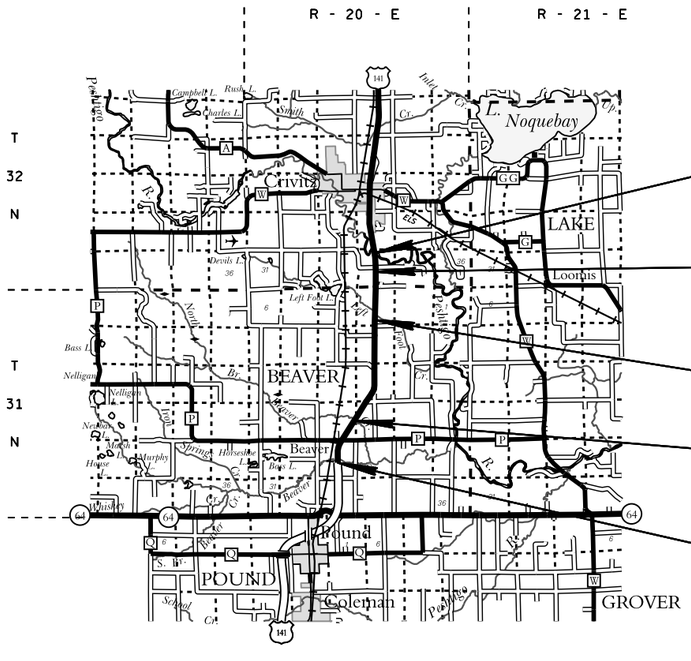
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

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



END PROJECT 1491-10-71

STA 1612+11

EQUATION
1601+25.65 AH=
1601+13.44 BK

EQUATION
1518+00 AH=
1501+36.4 BK

EXCEPTION TO NET & LENGTH
STA 1293+12 TO STA 1293+46
B-38-82

BEGIN PROJECT 1491-10-71

STA 1278+66.5
Y = 158,541.20
X = 703,936.88

LAYOUT
SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 5.992 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), NAD 83 (1991) MARINETTE COUNTY.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT NE REGION
Designer	J. BEHNKE
Project Manager	P. R. ZOELLNER
Regional Examiner	
Regional Supervisor	D. SEGERSTOM
C.O. Examiner	

APPROVED FOR THE DEPARTMENT
DATE: 7/1/14 (Signature)

E

FILE NAME : F:\d3_149110\010101_ti.dgn PLOT DATE: 10-JUN-2014 08:12 PLOT BY : ditjbs PLOT NAME : 010101_ti ORG DATE : 9-29-2011 Originator : NE Region PLOT SCALE : 21100:1

WISDOT/CADDS SHEET 10

UTILITIES

MIKE OLSEN
ATC MANAGEMENT INC - ELECTRICITY
8010 KEEFE RD
PO BOX 6113
DE PERE WI 54115-6113
(920) 338-6582
MOLSEN@ATCLLC.COM

PAT TRACY
CENTURYLINK - COMMUNICATION
PO BOX 260
WAUSAUKEE WI 54177
(715) 856-9138
PATRICK.TRACY@CENTURYLINK.COM

WAYNE CRETTON
PACKERLAND BROADBAND - COMMUNICATION
105 KENT ST
PO BOX 190
IRON MOUNTAIN MI 49801
(906) 282-3768
WAYNE.CRETTON@PLBB.US

GLEN FRANZEN
VILLAGE OF CRIVITZ - SEWER & WATER
800 HENRIETTE AVE
PO BOX 727
CRIVITZ WI 54114
(715) 854-7778
GFRANZEN@VOCWI.COM

LORI BUTRY
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY & GAS
700 N ADAMS ST
PO BOX 19001
GREEN BAY, WI 54307-9001
(920) 433-1703
LABUTRY@INTEGRYSGROUP.COM

STEVE VANCAMPENHOUT
WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICITY
1717 10TH AVENUE
MENOMINEE MI 49858
(715) 923-0583
SAVANCAMPENHOUT@WISCONSINPUBLICSERVICE.COM

HOWARD SORENSEN
WISCONSIN PUBLIC SERVICE CORPORATION - GAS
1717 10TH AVENUE
MENOMINEE MI 49858
(715) 923-6806
HJSORENSEN@WISCONSINPUBLICSERVICE.COM

GENERAL NOTES

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

CURB AND GUTTER RADII ARE SHOWN TO THE FRONT FACE OF CURB.

PROPERTY OWNERS SHALL BE NOTIFIED 48 HOURS IN ADVANCE FOR DRIVEWAY CLOSURES AND ACCESS RESTRICTIONS TO THEIR PROPERTY.

BUTT JOINTS SHALL BE CONSTRUCTED AT THE BEGINNING AND END OF FULL THICKNESS PROJECT PAVING LIMITS AT ALL PRIVATE PAVED ENTRANCES.

STATIONING FOR THE BEAM GUARD IS APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER.

LOCATIONS OF DRIVEWAYS AND CULVERT PIPES ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER. CULVERT PIPE LENGTHS ARE BASED ON AS-BUILT PLANS ACTUAL LENGTHS MAY VARY FROM MISCELLANEOUS QUALITIES AND SHOULD BE VERIFIED.

THE EXACT LOCATION OF SILT FENCE SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT OF WAY SHALL BE SALVAGED TOPSOIL SEEDED FERTILIZED AND MULCHED AS DIRECTED BY THE ENGINEER.

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

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

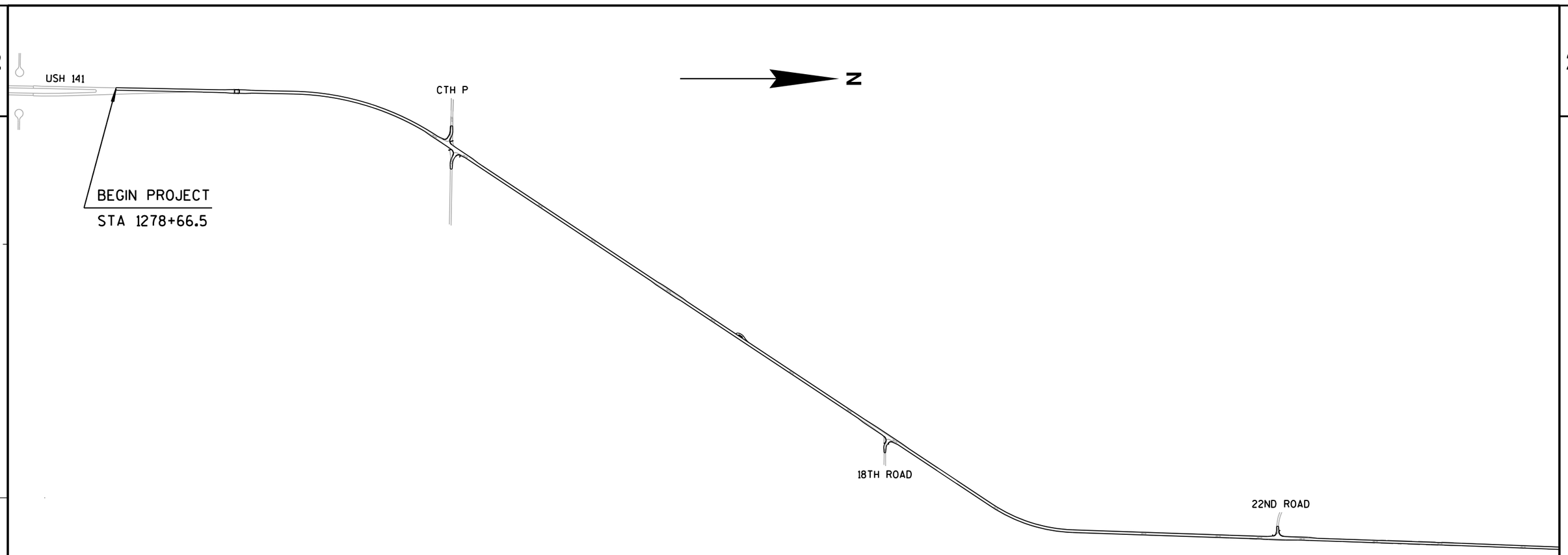
COUNTY SURVEYOR OR SURVEYS CONTACT PERSON

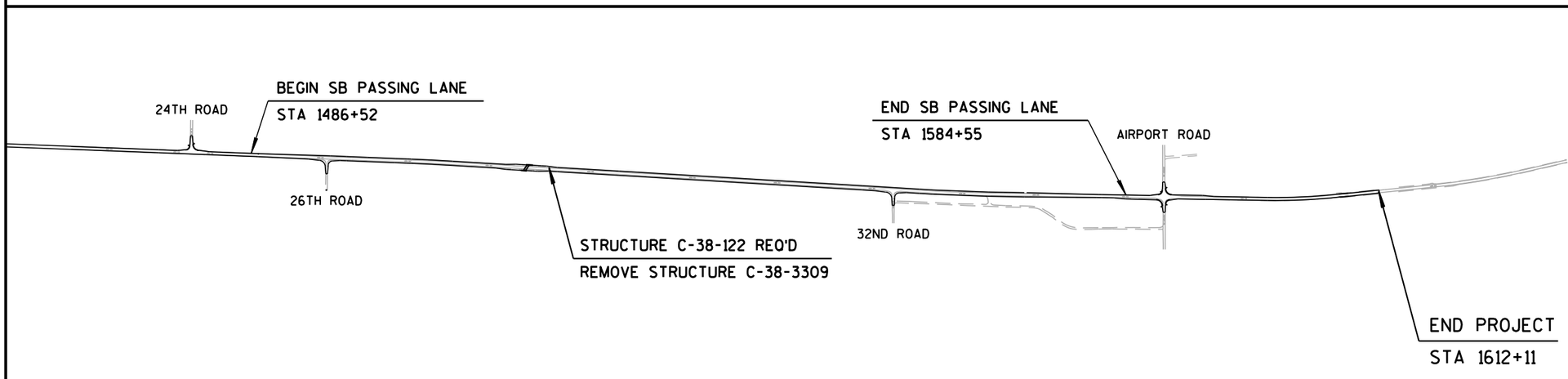
CONTACT: JOHN M LEFEBVRE - MARINETTE COUNTY
LAND INFORMATION DIRECTOR
MARINETTE COUNTY COURT HOUSE
1926 HALL AVE
MARINETTE, WI 54143
715-923-4794
JLEFEBVRE@MARINETTECOUNTY.COM

DNR AREA LIAISON

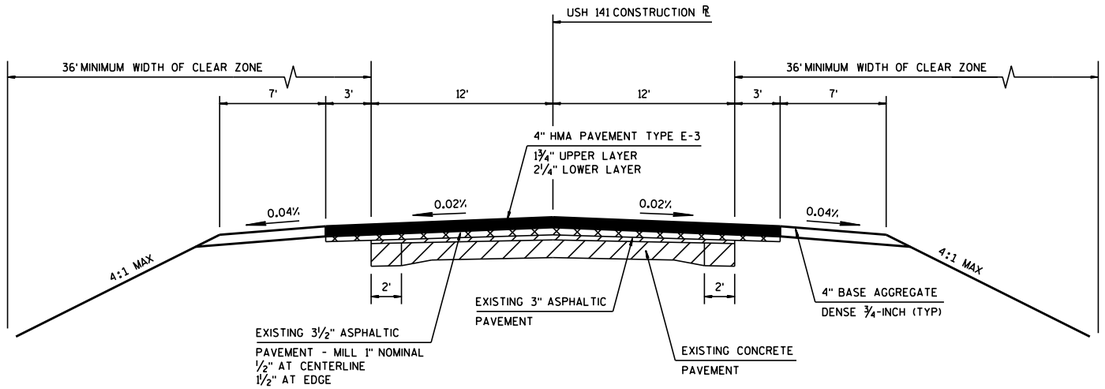
JAMES DOPERALSKI JR
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
920-662-5119
JAMES.DOPERALSKI@WISCONSIN.GOV

2



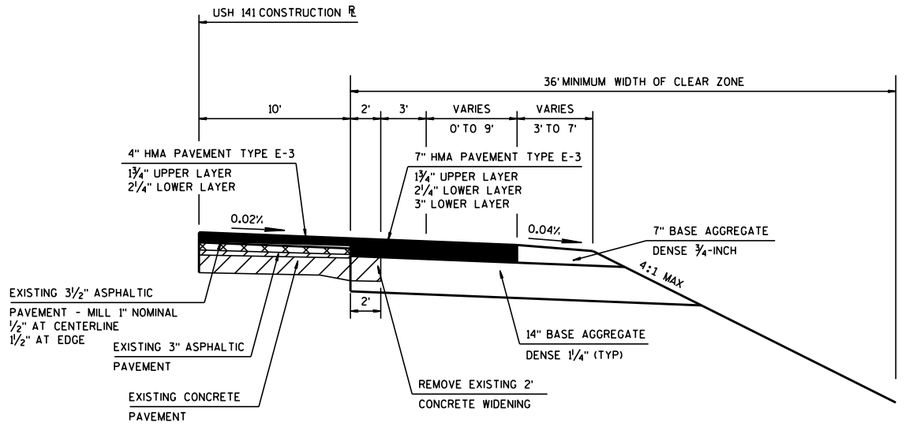


PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PROJECT OVERVIEW	SHEET 3	E



TYPICAL FINISHED CROSS SECTION FOR USH 141

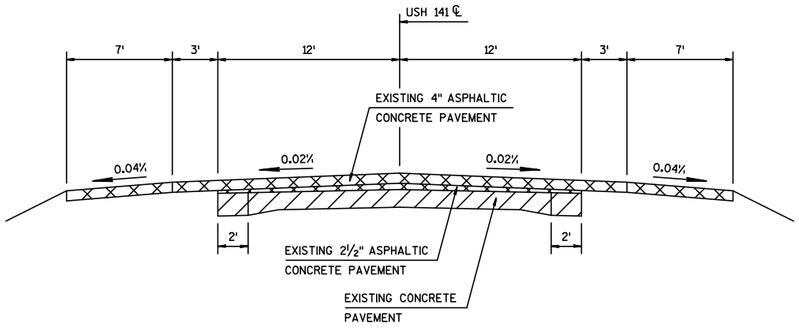
1439+67 TO 1478+52
1481+95 TO 1486+51
1584+55 TO 1586+86
1596+23 TO 1612+11



NOTE: ESTABLISH REMOVAL DEPTHS
OFF OF CORRECTED CROSS SLOPE
AT EDGE OF PAVEMENT.

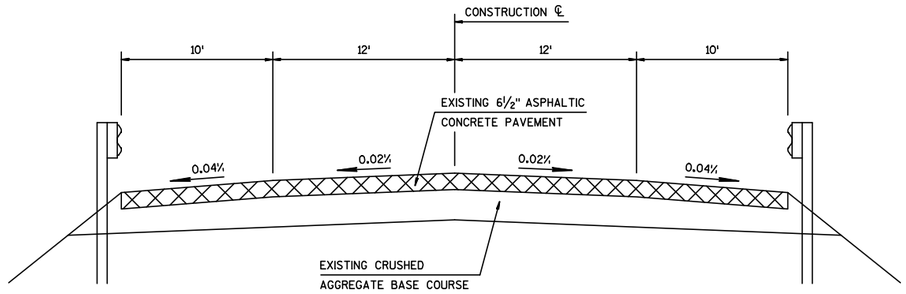
½ TYPICAL FINISHED CROSS SECTION FOR USH 141

1435+42.08 TO 1439+67 LT
1478+52 TO 1481+95 LT
1585+86 TO 1592+57 RT
1589+53 TO 1596+23 LT



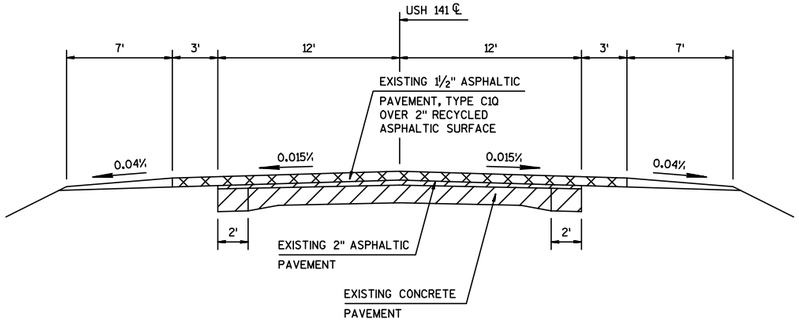
TYPICAL EXISTING CROSS SECTION FOR USH 141

1292+65 TO 1292+88
1293+70 TO 1294+45.5



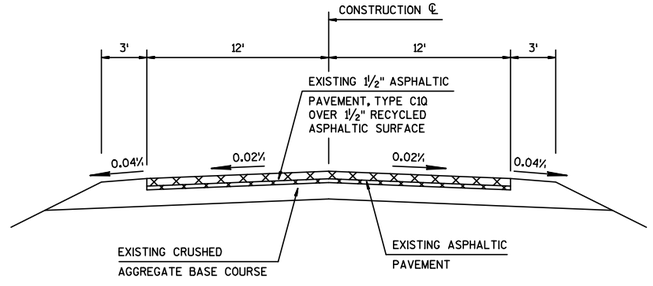
TYPICAL EXISTING CROSS SECTION FOR USH 141

1292+88 TO 1293+12
1293+46 TO 1293+70



TYPICAL EXISTING CROSS SECTION FOR USH 141

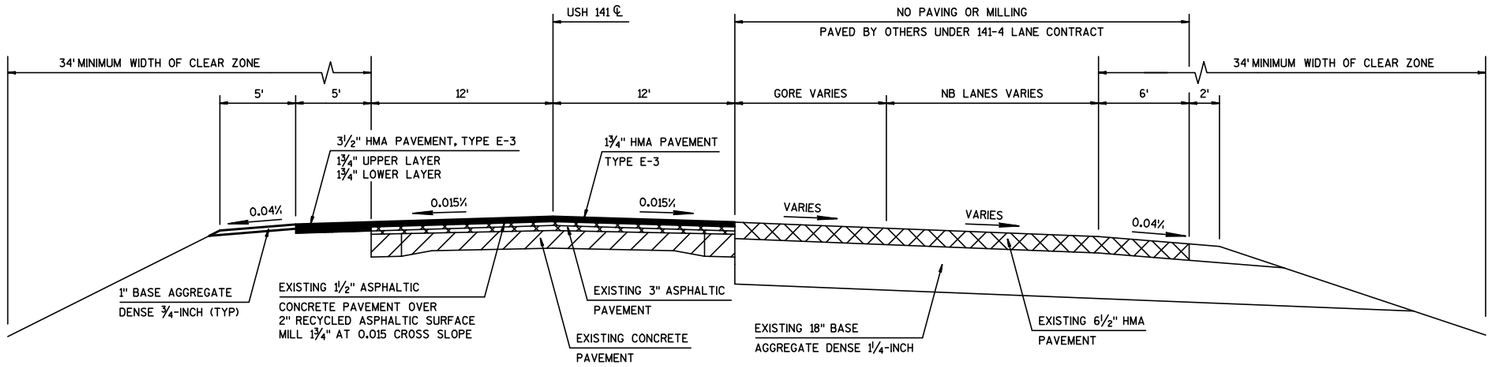
1293+70 TO 1612+10



TYPICAL EXISTING CROSS SECTION FOR CTH P

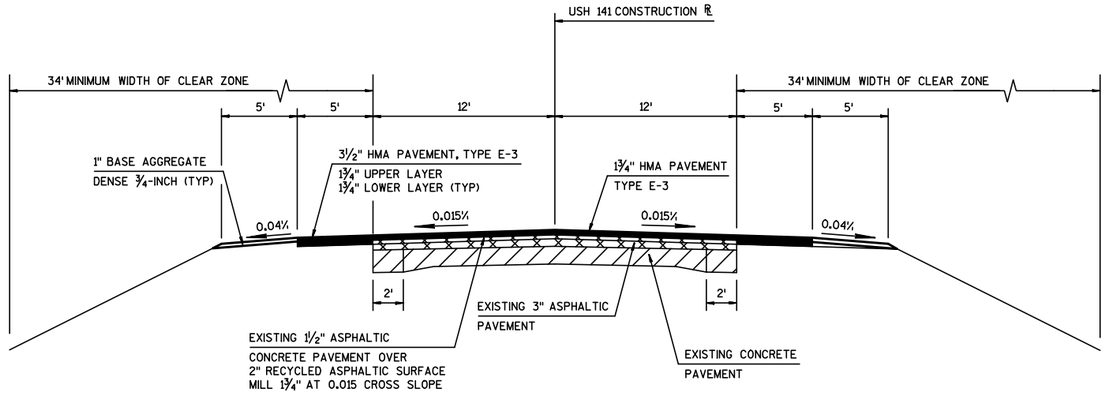
17+00 TO 19+50
20+50 TO 23+00

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET 5	E



TYPICAL FINISHED CROSS SECTION FOR USH 141

1278+66.5 TO 1289+24

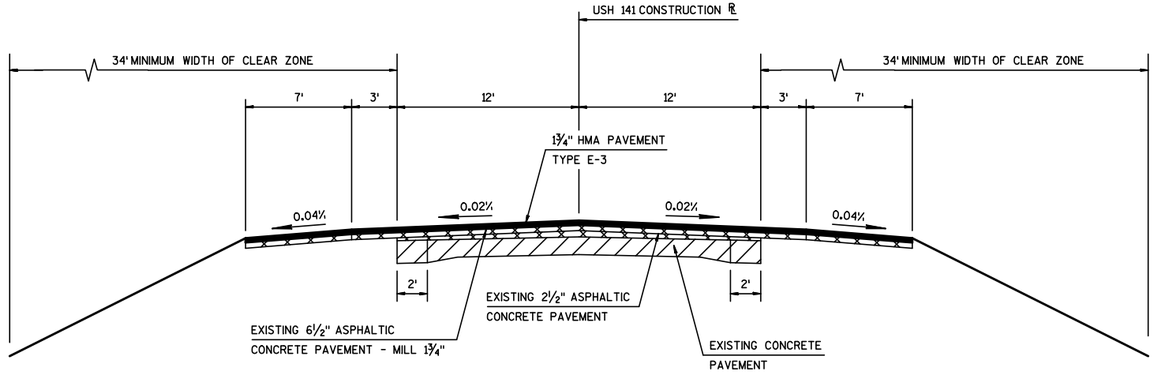


TYPICAL FINISHED CROSS SECTION FOR USH 141

1289+24 TO 1292+65

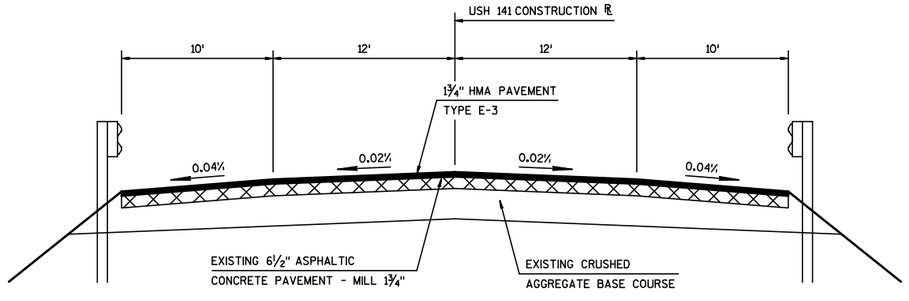
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	TYPICAL CROSS SECTIONS	SHEET	E

2



TYPICAL FINISHED CROSS SECTION FOR USH 141

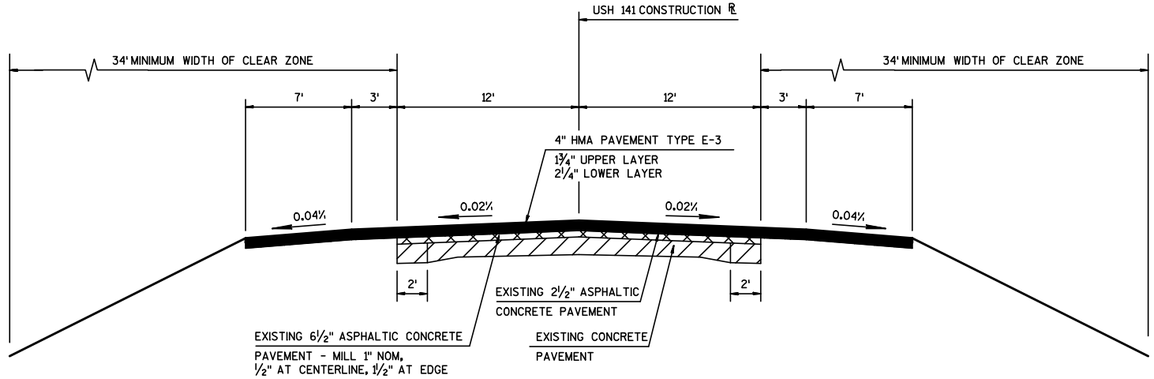
1292+65 TO 1292+88



TYPICAL FINISHED CROSS SECTION FOR USH 141

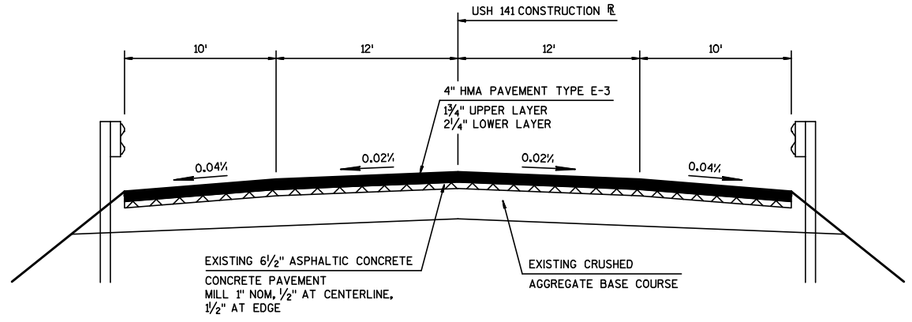
1292+88 TO 1293+12

2



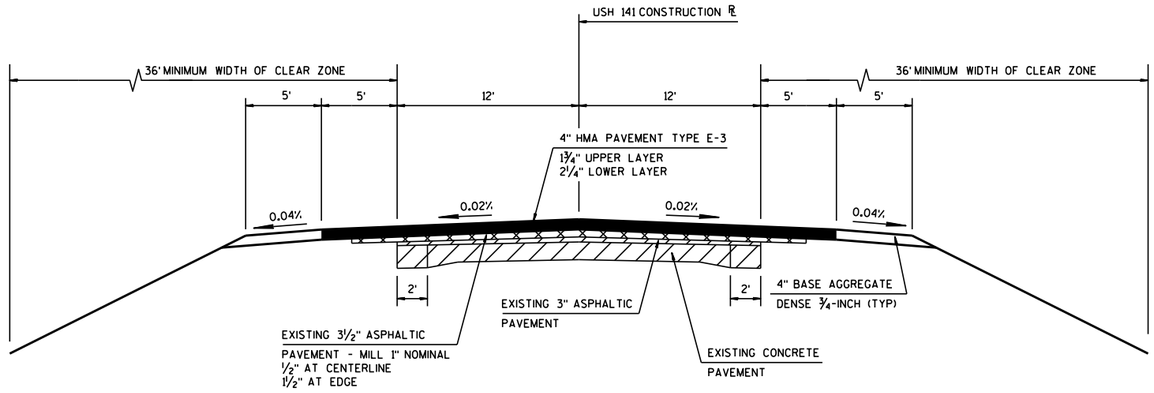
TYPICAL FINISHED CROSS SECTION FOR USH 141

1293+70 TO 1294+45.5



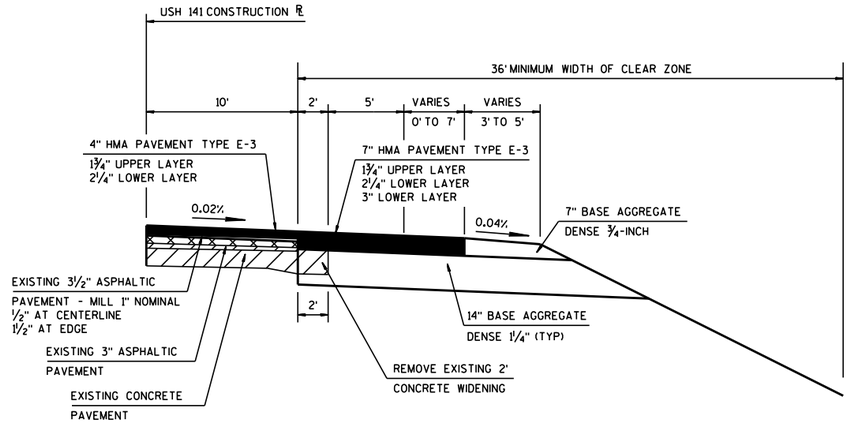
TYPICAL FINISHED CROSS SECTION FOR USH 141

1293+46 TO 1293+70



TYPICAL FINISHED CROSS SECTION FOR USH 141

1294+45.5 TO 1298+66.5
1325+40 TO 1380+84
1386+68 TO 1398+27
1412+00 TO 1432+39

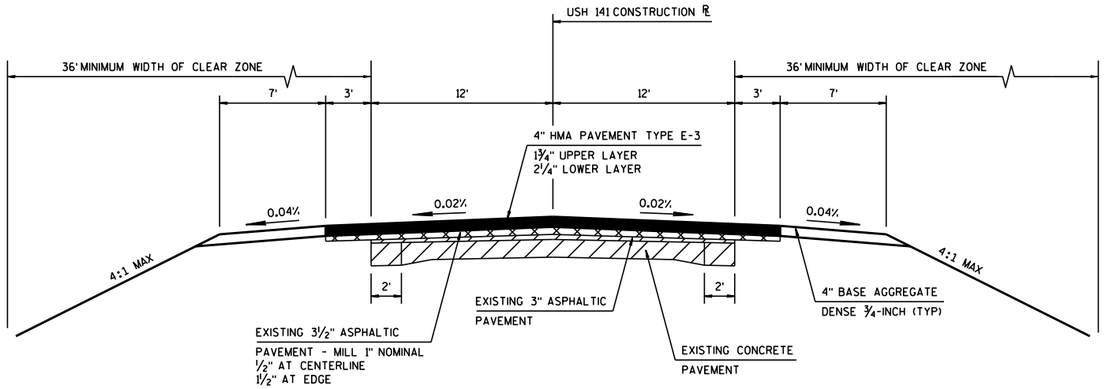


NOTE: ESTABLISH REMOVAL DEPTHS
OFF OF CORRECTED CROSS SLOPE
AT EDGE OF PAVEMENT.

½ TYPICAL FINISHED CROSS SECTION FOR USH 141

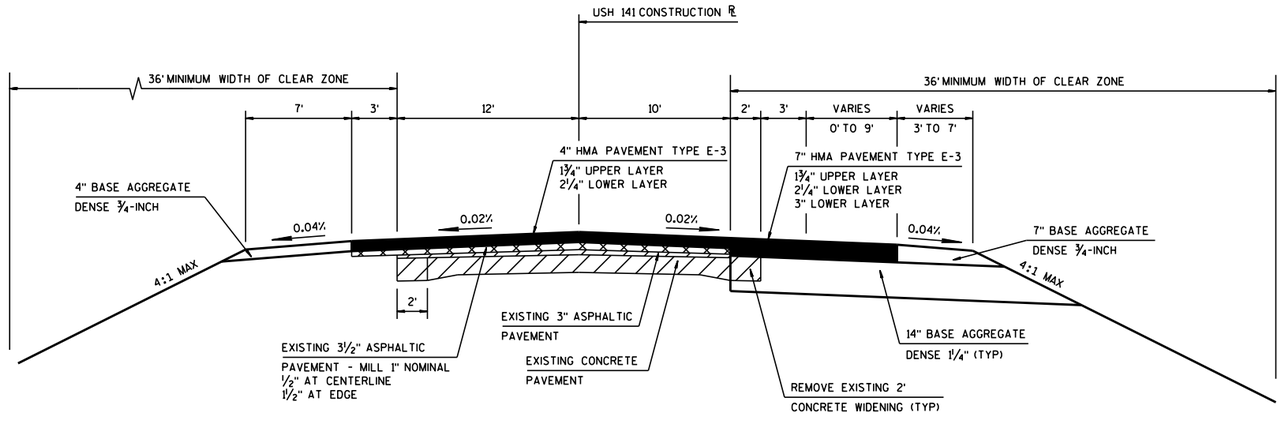
1317+60 TO 1323+45 RT
1318+56 TO 1325+40 LT
1380+84 TO 1386+68 RT
1432+39 TO 1437+93 RT
1433+85 TO 1435+42.08 LT

2



TYPICAL FINISHED CROSS SECTION FOR USH 141

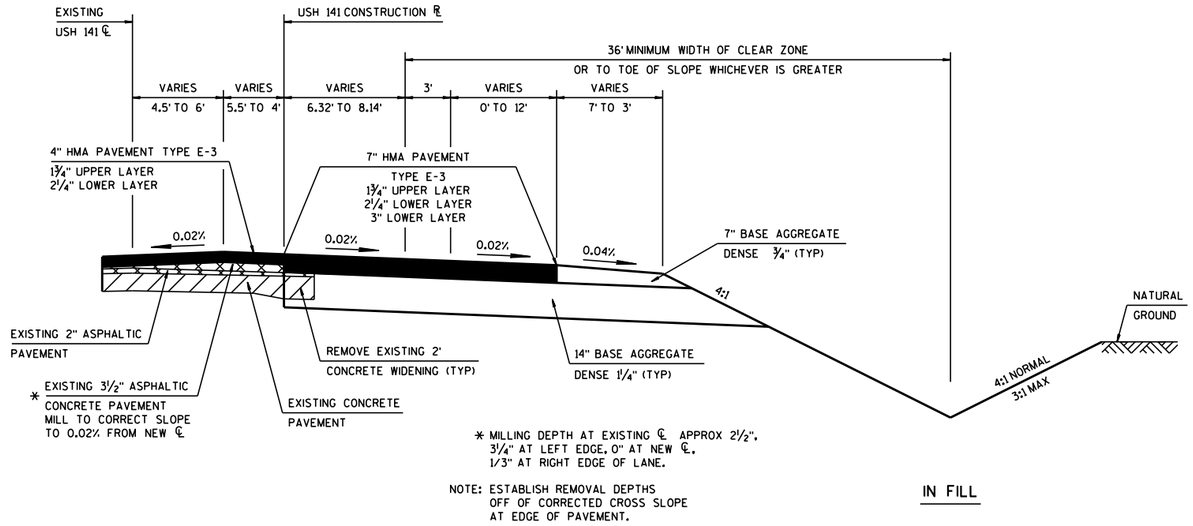
1437+91 TO 1433+85 LT
1412+00 TO 1486+51 RT
1439+67 TO 1478+52 LT
1481+95 TO 1486+51 LT
1584+55 TO 1586+86 RT
1584+55 TO 1589+53 LT
1592+68 TO 1612+11 RT
1595+35 TO 1612+11 LT



NOTE: ESTABLISH REMOVAL DEPTHS
OFF OF CORRECTED CROSS SLOPE
AT EDGE OF PAVEMENT.

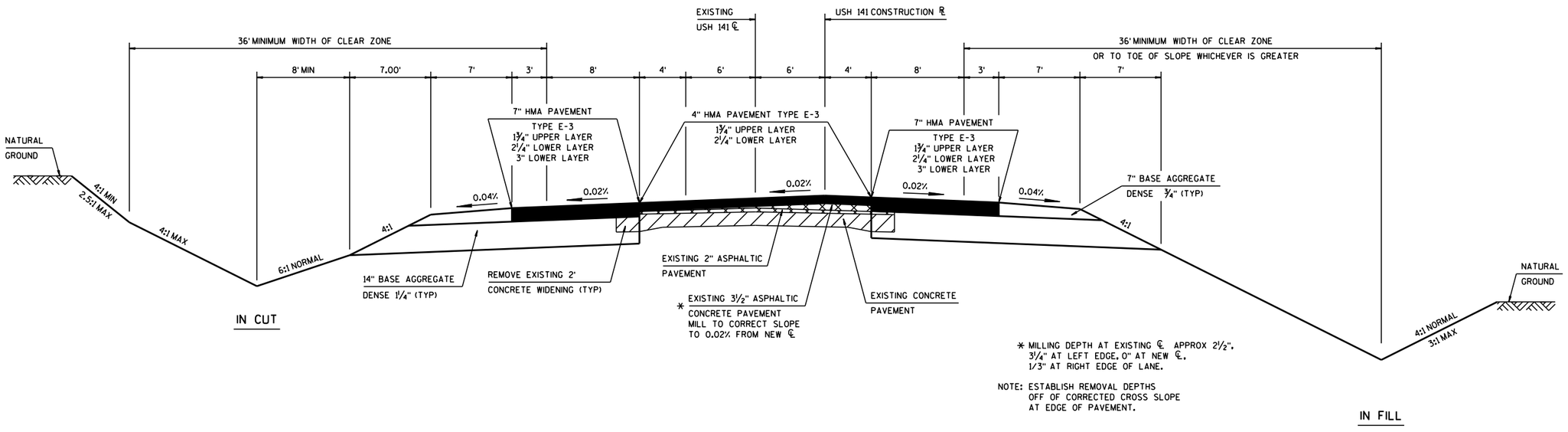
TYPICAL FINISHED CROSS SECTION FOR USH 141

1435+42.08 TO 1439+67 LT
1478+52 TO 1481+95 LT
1586+86 TO 1592+68 RT
1589+53 TO 1595+35 LT



½ TYPICAL FINISHED CROSS SECTION FOR USH 141

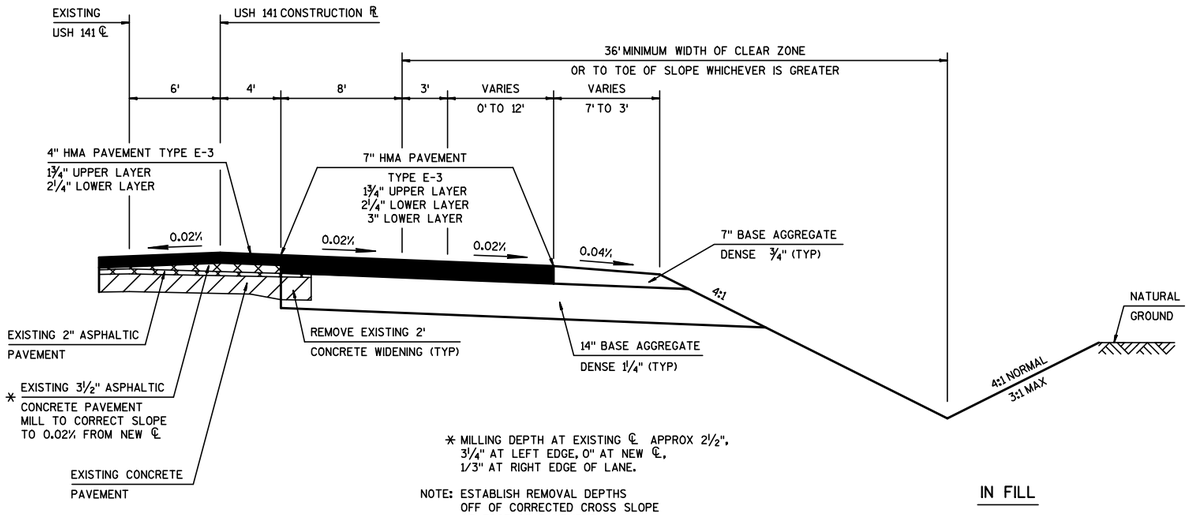
1491+94 TO 1494+17 RT



TYPICAL FINISHED CROSS SECTION FOR USH 141

1494+17 TO 1563+61
1565+85 TO 1577+79

2



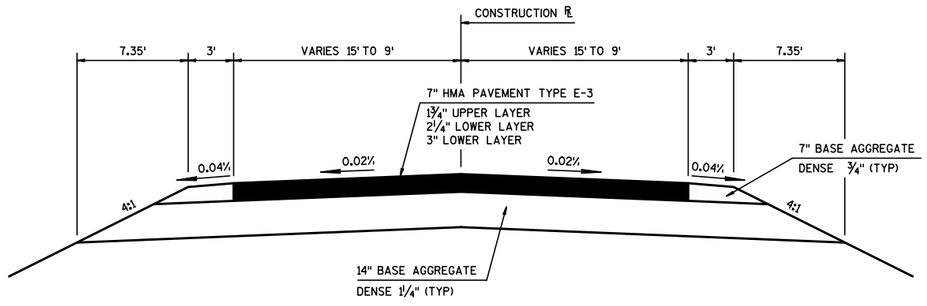
* MILLING DEPTH AT EXISTING ℄ APPROX 2½",
3¼" AT LEFT EDGE, 0" AT NEW ℄,
1/3" AT RIGHT EDGE OF LANE.

NOTE: ESTABLISH REMOVAL DEPTHS
OFF OF CORRECTED CROSS SLOPE
AT EDGE OF PAVEMENT.

IN FILL

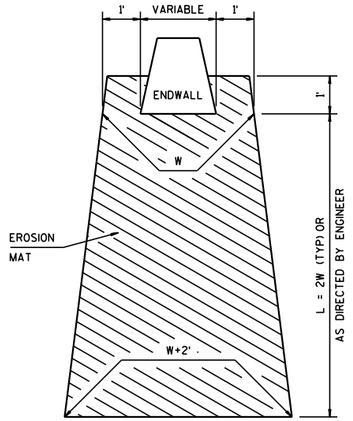
½ TYPICAL FINISHED CROSS SECTION FOR USH 141

1563+61 TO 1565+85 RT

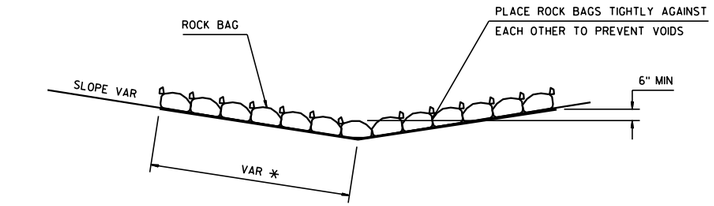


TYPICAL FINISHED CROSS SECTION FOR SIDE ROADS

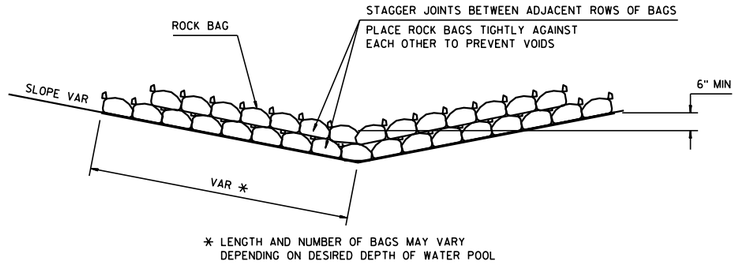
CTH P
18TH ROAD
22ND ROAD
24TH ROAD
26TH ROAD
32ND ROAD
AIRPORT ROAD



EROSION MAT TREATMENT AT CULVERTS



SIDE VIEW (SINGLE LAYER)

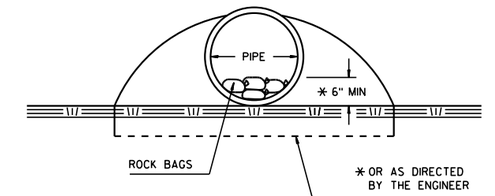


* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL

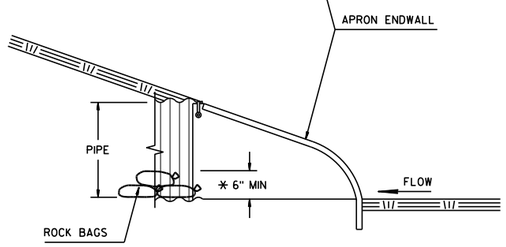
SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS

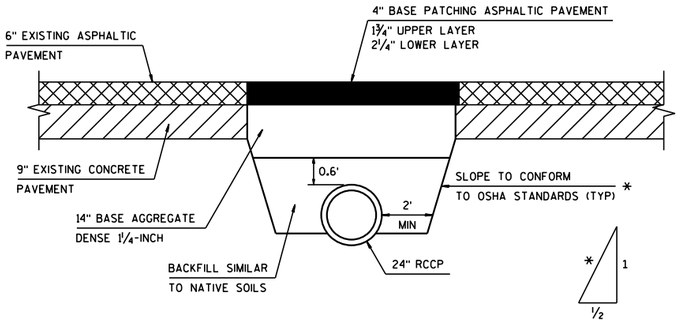


END VIEW

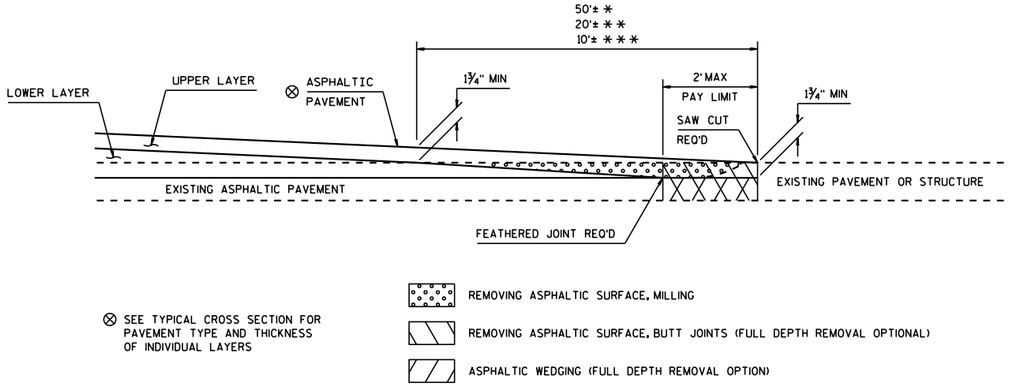


SIDE VIEW

CULVERT PIPE CHECKS



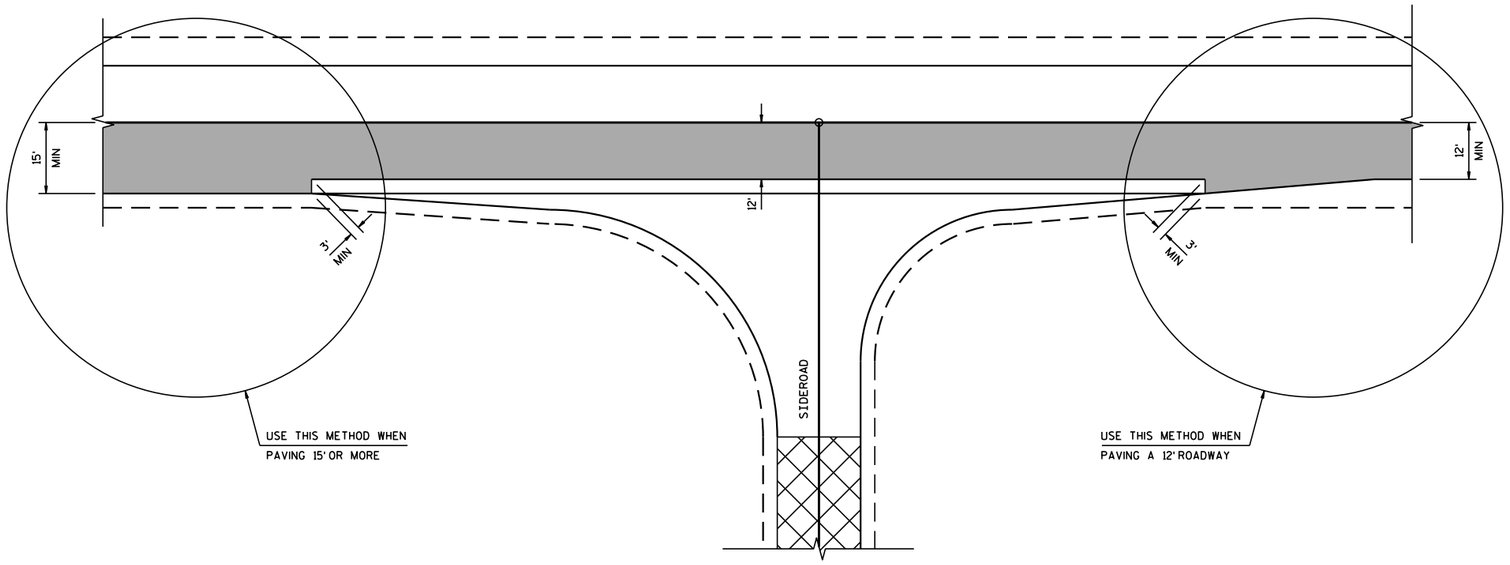
CULVERT PIPE REPLACEMENT



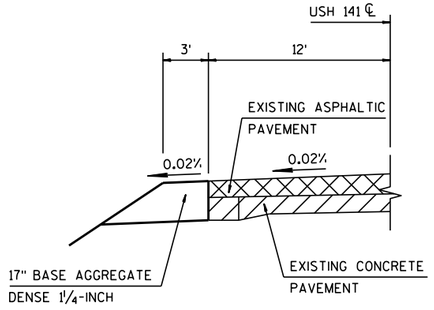
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

2

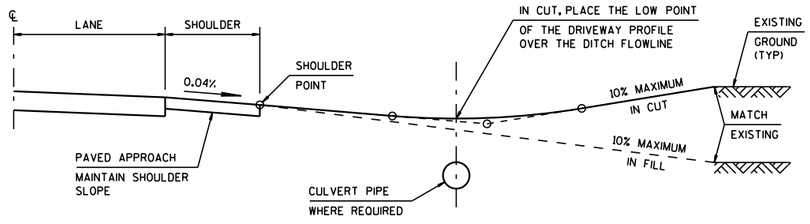


FINAL UPPER LAYER ASPHALTIC CONCRETE PAVING DETAIL AT INTERSECTIONS AND BYPASS LANES



USH 141 TEMPORARY SHOULDER WIDENING

(PROVIDE WIDENED SHOULDER FOR TRAFFIC SAFETY)



TYPICAL DRIVEWAY PROFILES

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CONSTRUCTION DETAILS	SHEET 14	E

2

CTH W

STH 64

STOP
R1-1
36" X 36"

DO NOT ENTER
R5-1
30" X 30"

50' MAX

19.1'

6.7'

11.6'

7.4'

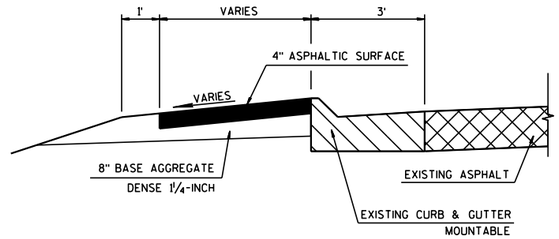
4" ASPHALTIC SURFACE OVER
BASE AGGREGATE DENSE
1¼-INCH

TRAVEL WAY

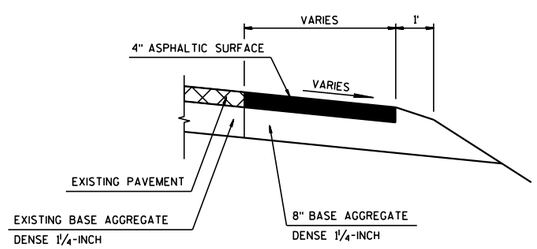
PAVEMENT MARKING
18-INCH EPOXY WHITE

GUY

HO FO OH T



SECTION A-A



SECTION B-B

4" ASPHALTIC SURFACE OVER
BASE AGGREGATE DENSE
1¼-INCH

68.7'

10'

9.3'

SIGN
SIGN
WELL

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CONSTRUCTION DETAIL- INTERSECTION UPGRADE FOR DETOUR	SHEET	E

CTH P WEST
CURVE NOTES

PI = 18+71.01
Y = 162629.99
X = 704486.89
∠ = 212°-18'-02"
Δ = 32-18'-02"
D = 39°-30'-52"
T = 41.99'
L = 81.74'
R = 145.00'

CONSTRUCTION LIMITS
17+70

CTH P WEST

SAW CUT
REQ'D

1320+12.00
TYPE B1 INTERSECTION REQ'D

EXISTING R/W

TYPE 3 INLET REQ'D

EXISTING STORM SEWER
REMOVE

PC 18+29.02

EXISTING MANHOLE
REMOVE

EXISTING STORM SEWER
REMOVE

EXISTING STORM SEWER
ABANDON

EXISTING STORM SEWER
REMOVE

ASPHALTIC FLUME
REQ'D (TYP)

60' TAPER

PT 19+10.76

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

TYPE 3
INLET REQ'D

+35
+65

38' R

58' R

+16
+78

EXISTING R/W

SLOPE INTERCEPT

100' TAPER

300'

PI 1320+25.15
Δ = 180°-15'-46"

1317
USH 141
1318
1319
1320
1321
1322

1320+12.00 USH 141=
19+99.96 CTH P WEST

1321+86.79 USH 141=
20+00.00 CTH P EAST

PT 1318+82.79

150' TAPER

SAW CUT
REQ'D

SLOPE INTERCEPT

EXISTING R/W

CTH P EAST

+84.5
+11

PC 20+89.64

EXISTING CMCP
REMOVE

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - CTH P WEST	SHEET 16	E

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

EXISTING R/W

SAW CUT REQ'D

SLOPE INTERCEPT

300'

150' TAPER

1321

1321+86.79 USH 141=
20+00.00 CTH P EAST

1322

1323

1324

1325

1326

SLOPE INTERCEPT

100' TAPER

CTH P EAST

ASPHALTIC FLUME
REQ'D (TYP)

PC 20+89.64

1321+86.79
TYPE B1 INTERSECTION REQ'D

EXISTING STORM SEWER
REMOVE

60' TAPER

CTH P EAST
CURVE NOTES

PI = 21+36.40
Y = 162627.90
X = 704806.45
∠ = 147°-25'-15"
Δ = 32-34'-45"
D = 35°-48'-36"
T = 46.76'
L = 90.98'
R = 160.00'

PT 21+80.62

SAW CUT REQ'D

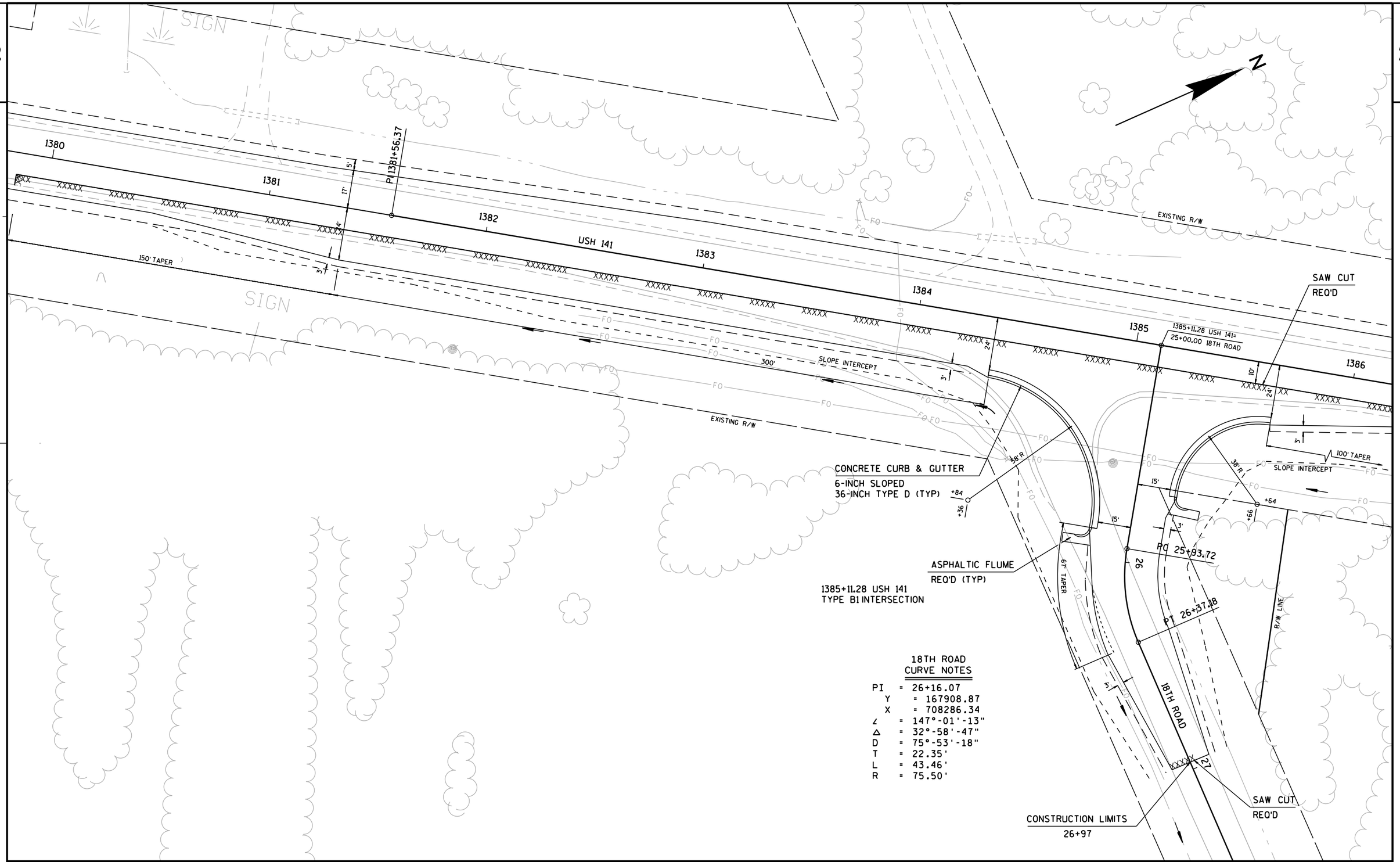
CONSTRUCTION LIMITS
22+40

PI 22+82.40

SEPTIC

SIGN

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - CTH P EAST	SHEET E



18TH ROAD
CURVE NOTES

PI = 26+16.07
Y = 167908.87
X = 708286.34
∠ = 147°-01'-13"
Δ = 32°-58'-47"
D = 75°-53'-18"
T = 22.35'
L = 43.46'
R = 75.50'

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - 18TH ROAD	SHEET E

FILE NAME : F:\d3_149110\021103_id.dgn PLOT DATE : 25-MAR-2014 13:27 PLOT BY : ditjbs PLOT NAME : 021103 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

SAW CUT
REO'D

CONSTRUCTION LIMITS
38+55

22ND ROAD

38

39

1435+42.08 USH 141
TYPE B1 INTERSECTION

PT 38+70.68

R/W LINE

43' TAPER

EXISTING R/W

3'

15'

+13
+19

58' R

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

SAW CUT
REO'D

+33
+84

38' R

ASPHALTIC FLUME
REO'D (TYP)

100' TAPER

300'

SLOPE INTERCEPT

150' TAPER

P.I. 1439+30.60
180°-03'-43"

1434
USH 141
1435
87°-24'-44"
1436
1437
1438
1439

1435+42.08 USH 141=
40+00.00 22ND ROAD

24'

17'

15'

10'

5'

6'

1'

+91

P.I. 1434+32.10
179°-58'-00"

+41

+93

SLOPE INTERCEPT

EXISTING R/W

FO

GUY

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - 22ND ROAD	SHEET 19	E

2

2

N

CONSTRUCTION LIMITS
48+38

SAW CUT
REO'D

24TH ROAD

48

49

1480+00.60 USH 141
TYPE D INTERSECTION

ASPHALTIC FLUME
REO'D (TYP)

80' TAPER

R/W LINE

3'

15'

+74
+20

EXISTING R/W

+37
+44

38' R

58' R

CONCRETE CURB & GUTTER
6-INCH SLOPED
36-INCH TYPE D (TYP)

100' TAPER

150' TAPER

SLOPE INTERCEPT

7'
15'
15'
7'

1478
USH 141
1479
1480
1481
1482
1483
1484

1480+00.60 USH 141=
50+00.00 24TH ROAD

10'

SAW CUT
REO'D

SIGN

EXISTING R/W

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - 24TH ROAD	SHEET	E

FILE NAME : F:\d3_149110\021105_id.dgn PLOT DATE : 25-MAR-2014 13:27 PLOT BY : ditjbs PLOT NAME : 021105 id PLOT SCALE : 40:1

2

N

EXISTING R/W

700' TAPER

SAW CUT
REQ'D

PI 1495+08.30
Δ = 180°-02'-02"

SLOPE INTERCEPT

1490 USH 141 1491 1492 1493 1494 1495 1496

1493+17.83 USH 141=
50+05.71 26TH ROAD

150' TAPER

100' TAPER

SLOPE INTERCEPT

EXISTING R/W

PI 1493+51.23
Δ = 179°-29'-34"

R/W LINE

60' R

40' R

+85
+46

+69
+74

15'
3'
51

70' TAPER

1493+17.83
TYPE C INTERSECTION REQ'D

26TH ROAD

52

CONSTRUCTION LIMITS
51+55

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - 26TH ROAD	SHEET E

FILE NAME : F:\d3_149110\021106_id.dgn PLOT DATE : 25-MAR-2014 13:27 PLOT BY : ditjbs PLOT NAME : 021106 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

2

EXISTING R/W

R/W LINE

SLOPE INTERCEPT

SAW CUT REQ'D

USH 141

1562 1563 1564 1565 1566 1567 1568

1564+84.23 USH 141=
40+06.00 32ND ROAD

150' TAPER

100' TAPER

SLOPE INTERCEPT

PI 1567+38.08
Δ = 179°-59'-58"

EXISTING R/W

60' R

+84
+14

40' R

+71
+43

15'

41

70' TAPER

R/W LINE

1564+84.23
TYPE C INTERSECTION REQ'D

32ND ROAD

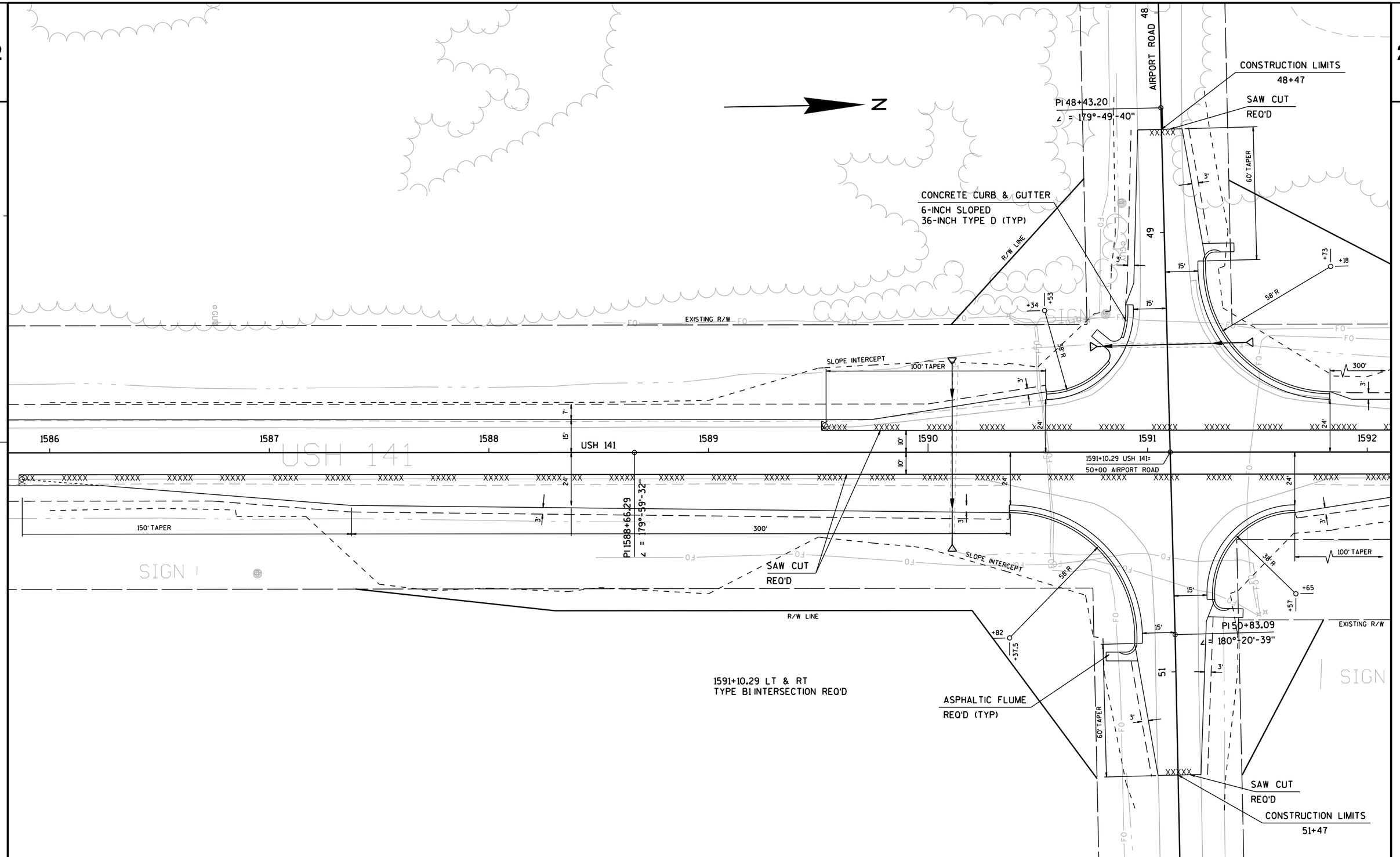
CONSTRUCTION LIMITS
41+54

42

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - 32ND ROAD	SHEET 22	E

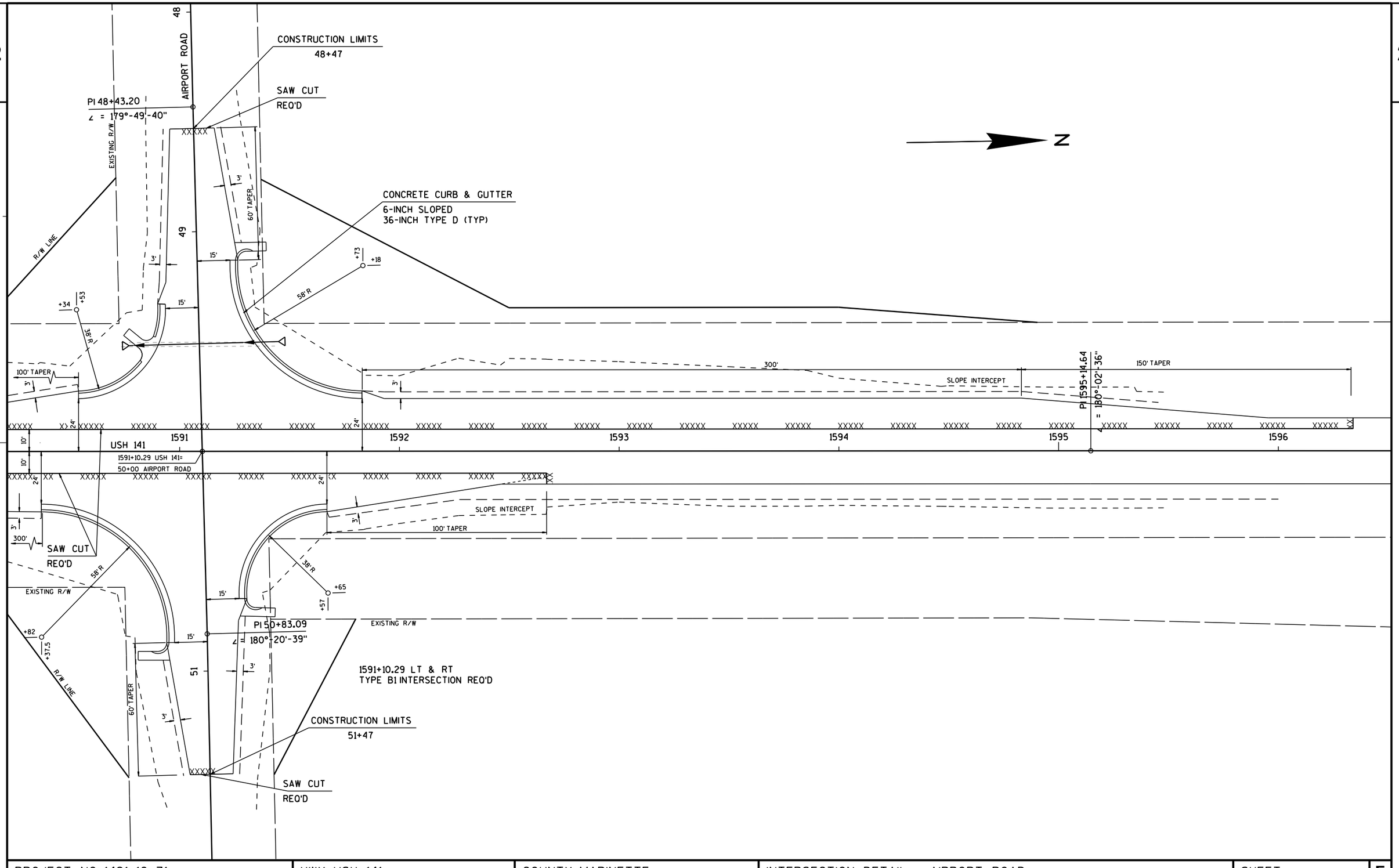
FILE NAME : F:\d3_149110\021107_id.dgn PLOT DATE : 25-MAR-2014 13:27 PLOT BY : ditjbs PLOT NAME : 021107 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - AIRPORT ROAD	SHEET 23	E

2



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	INTERSECTION DETAIL - AIRPORT ROAD	SHEET	E

FILE NAME : F:\d3_149110\021109_id.dgn PLOT DATE : 25-MAR-2014 13:27 PLOT BY : ditjbs PLOT NAME : 021109 id PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

MGS GUARDRAIL
POST 1 STA 1351+69.75 USH 141 LT
POST 5 STA 1351+94.75 USH 141 LT
POST 9 STA 1352+19.75 USH 141 LT

MGS GUARDRAIL
POST 1 STA 1354+63.5 USH 141 LT
POST 5 STA 1354+38.5 USH 141 LT
POST 9 STA 1354+13.5 USH 141 LT

GRAVEL DRIVEWAY
(REMOVE & RELOCATE
EXISTING DRIVEWAY)

EXISTING R/W

1350 USH 141 1351 1352 1353 1354 1355 1356

MGS GUARDRAIL
POST 1 STA 1351+00 USH 141 RT
POST 5 STA 1351+25 USH 141 RT
POST 9 STA 1351+50 USH 141 RT

MGS GUARDRAIL
POST 1 STA 1353+93.75 USH 141 RT
POST 5 STA 1353+68.75 USH 141 RT
POST 9 STA 1353+43.75 USH 141 RT

N BRANCH BEAVER CREEK

EXISTING R/W

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAIL	SHEET	E

2

2

N

SAWCUT REQ'D
(REMOVE EXISTING PAVEMENT)

SEE HISTORICAL MARKING
CROSS SECTION

SAWCUT REQ'D
(1' OUTSIDE FLANGE LINE)

EXISTING R/W

USH 141

1360

1361

1362

1363

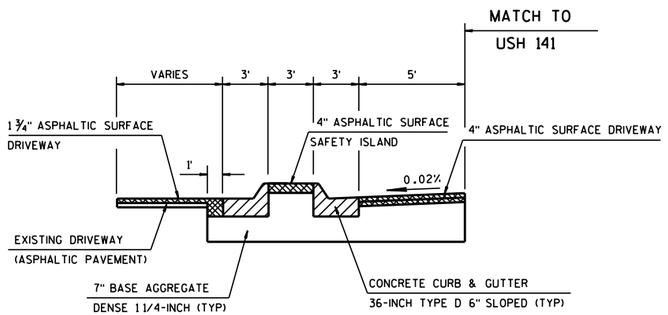
1364

1365

USH 141

EXISTING R/W

SIGN



HISTORICAL MARKING CROSS SECTION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAIL	SHEET	E

FILE NAME : F:\d3_149110\021203_pd.dgn PLOT DATE : 27-MAR-2014 17:21 PLOT BY : ditjbs PLOT NAME : 021203 pd PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
728		CHISELED □ SW WALL OF BOX CULVERT AT LEFT CROOK CREEK	668.38

N

MGS GUARDRAIL
POST 1 STA 1528+22.47 USH 141 LT
POST 5 STA 1528+47.47 USH 141 LT
POST 9 STA 1528+72.47 USH 141 LT

MGS GUARDRAIL
POST 1 STA 1531+08.22 USH 141 LT
POST 5 STA 1530+83.22 USH 141 LT
POST 9 STA 1530+58.22 USH 141 LT

R/ W LINE

EXISTING R/W

SLOPE INTERCEPT

SAW CUT
REQ'D

1526 1527 1528 1529 1530 1531 1532

USH 141

27' 7' 22.5' +18 8' 34' +22.5 34' +65 34' +8.22 8'

15' +16 22' +16 7' +03 8' 22' +83 22' +39.5 8' 15' +39.5 7' +53

SLOPE INTERCEPT

STRUCTURE C-38-122
REQ'D

SAW CUT
REQ'D

EXISTING R/W

MGS GUARDRAIL
POST 1 STA 1527+15.72 USH 141 RT
POST 5 STA 1527+40.72 USH 141 RT
POST 9 STA 1527+65.72 USH 141 RT

SIGN

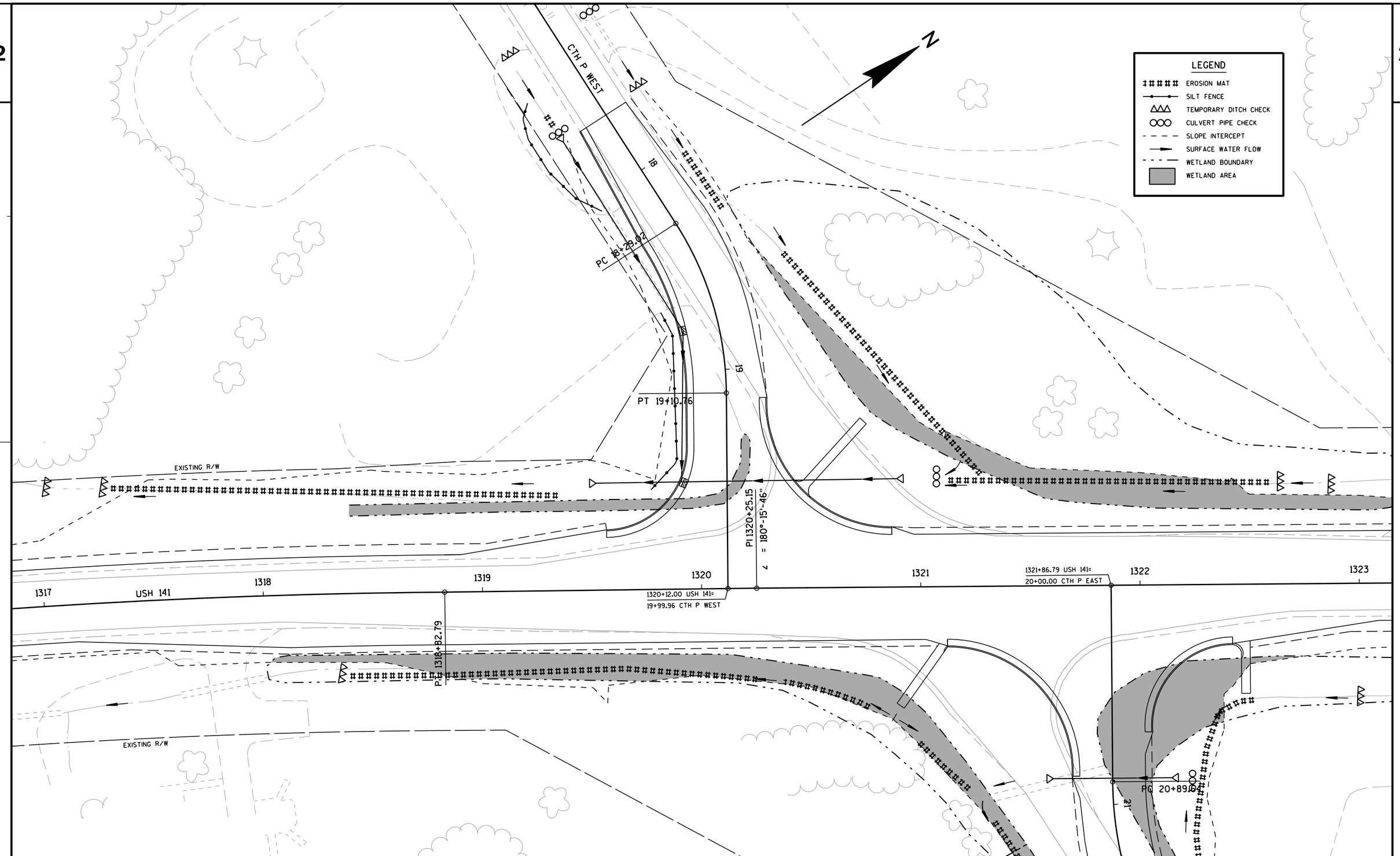
MGS GUARDRAIL
POST 1 STA 1530+39.45 USH 141 RT
POST 5 STA 1530+14.45 USH 141 RT
POST 9 STA 1529+89.45 USH 141 RT

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN DETAIL	SHEET	E

FILE NAME : F:\d3_149110\021201_pd.dgn PLOT DATE : 26-JUN-2014 13:39 PLOT BY : dtjbs PLOT NAME : 021201pd PLOT SCALE : 40:1

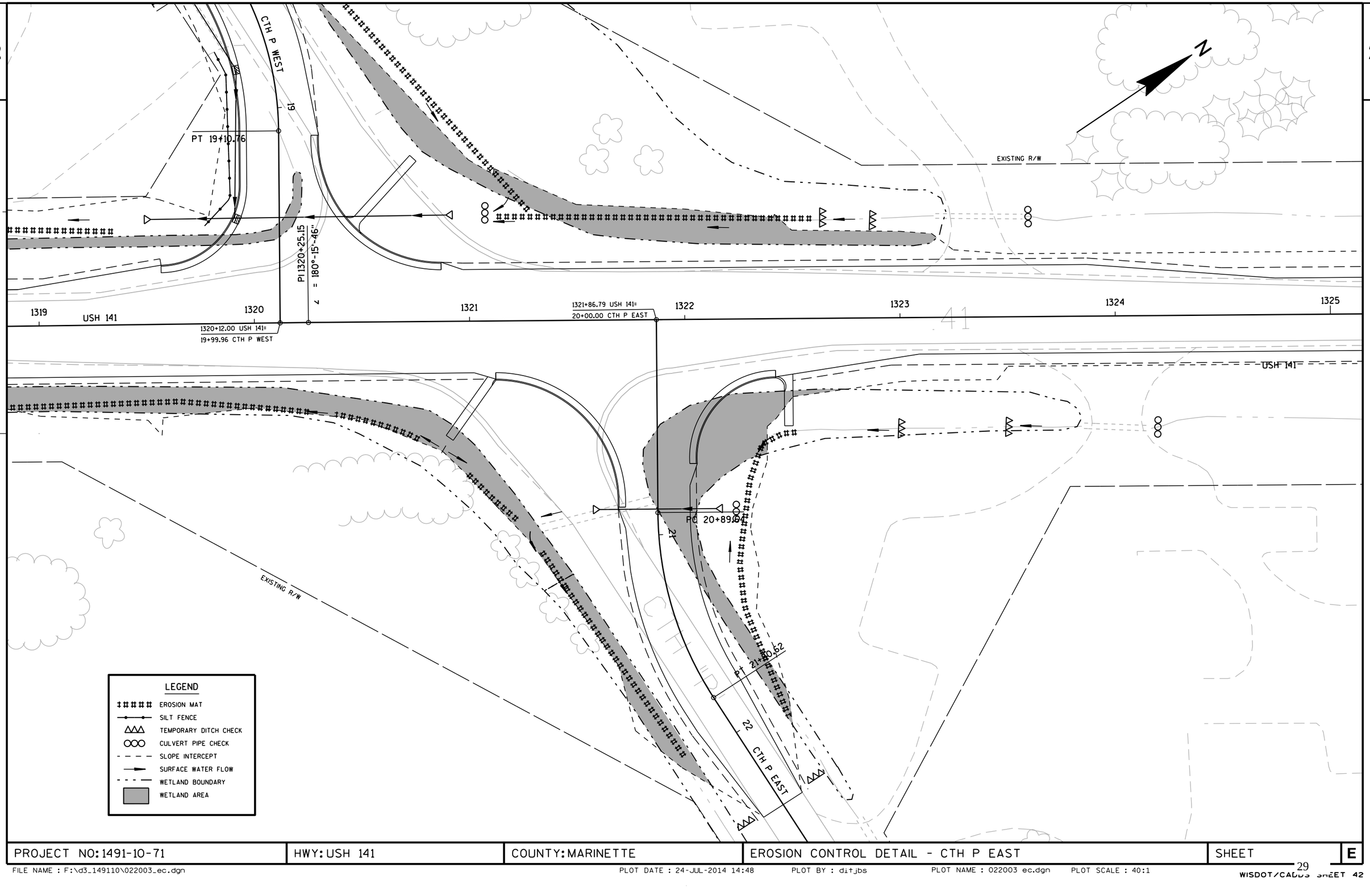
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - CTH P WEST	SHEET 28	E

2



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - CTH P EAST	SHEET	E

FILE NAME : F:\d3_149110\022003_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022003 ec.dgn PLOT SCALE : 40:1

2

2

N

EXISTING R/W

1382 USH 141 1383 1384 1385 1385+11.28 USH 141= 25+00.00 18TH ROAD 1386 1387 1388

USH 141

PI 1387+67.30
Δ = 179°-59'-37"

EXISTING R/W

PC 25+93.72

26

PT 26+87.18

R/W LINE

18TH ROAD

27

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - 18TH ROAD	SHEET 30	E

2

2

N

22ND ROAD

38

39

PT 38+70.68

R/W LINE

EXISTING R/W

1434

USH 141

1435

1436

1437

1438

1439

1435+42.08 USH 141=
40+00.00 22ND ROAD

PI 1434+32.10
Δ = 179°-58'-00"

PI 1439+30.60
Δ = 180°-03'-43"

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

EXISTING R/W

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL - 22ND ROAD	SHEET	E

FILE NAME : F:\d3_149110\022005_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022005 ec PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

24TH ROAD

48

49

R/W LINE

EXISTING R/W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

1478 USH 141 1479 1480 1481 1482 1483 1484

1480+00.60 USH 141=
50+00.00 24TH ROAD

EXISTING R/W

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - 24TH ROAD	SHEET E

FILE NAME : F:\d3_149110\022006_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022006 ec PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

EXISTING R/W

PI 1495+08.30
Δ = 180°-02'-02"

1490 USH 141 1491 1492 1493 1494 1495 1496

1493+17.83 USH 141=
50+05.71 26TH ROAD

EXISTING R/W

R/W LINE

PI 1493+51.23
Δ = 179°-29'-34"

R/W LINE

51

26TH ROAD

52

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - 26TH ROAD	SHEET E

FILE NAME : F:\d3_149110\022007_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022007 ec PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

STRUCTURE C-38-122 REQ'D
REMOVE STRUCTURE C-38-3309

R/W LINE

EXISTING R/W

1526 USH 141 1527 1528 1529 1530 1531 1532

EXISTING R/W

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- TURBIDITY BARRIER
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - LEFT FOOT CREEK STRUCTURE	SHEET	E

FILE NAME : F:\d3_149110\022008_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022008 ec PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

N

EXISTING R/W

R/W LINE

Δ = 180°-02'-23"

1562 USH 141 1563 1564 1565 1566 1567 1568

1564+84.23 USH 141=
40+06.00 32ND ROAD

PI 1567+38.08
Δ = 179°-59'-58"

EXISTING R/W

R/W LINE

41

42

LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - 32ND ROAD	SHEET	E

FILE NAME : F:\d3_149110\022009_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022009 ec PLOT SCALE : 40:1

WISDOT/CADDS SHEET 42

2

2

N

AIRPORT ROAD

PI 48+43.20
∠ = 179°-49'-40"

R/W LINE

EXISTING R/W

1588 USH 141 1589 1590 1591 1592 1593 1594

PI 1588+66.29
∠ = 179°-59'-32"

1591+10.29 USH 141=
50+00 AIRPORT ROAD

R/W LINE

PI 50+83.09
∠ = 180°-20'-39"

EXISTING R/W

49

51

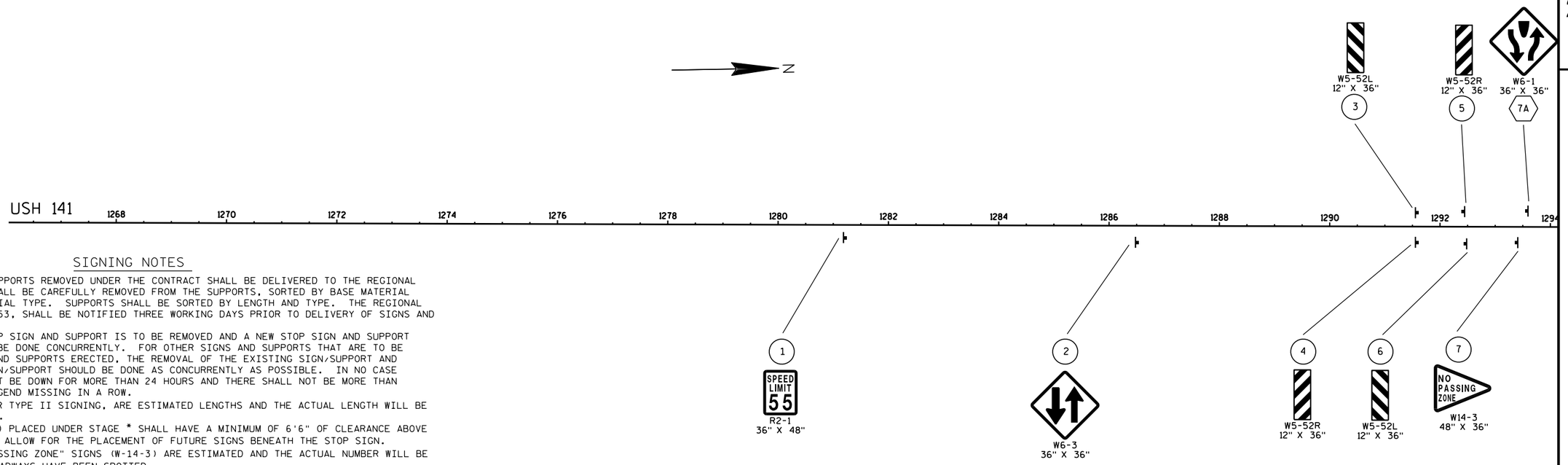
LEGEND

- EROSION MAT
- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- WETLAND BOUNDARY
- WETLAND AREA

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	EROSION CONTROL DETAIL - AIRPORT ROAD	SHEET E

FILE NAME : F:\d3_149110\022010_ec.dgn PLOT DATE : 24-JUL-2014 14:48 PLOT BY : ditjbs PLOT NAME : 022010 ec PLOT SCALE : 40:1

2



SIGNING NOTES

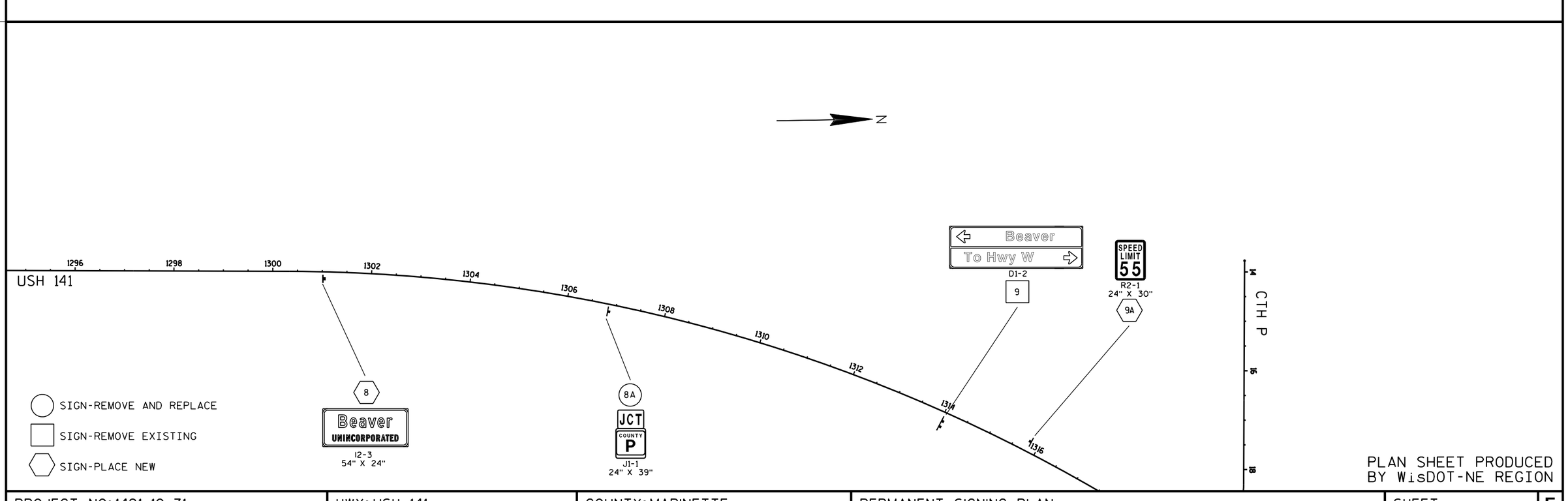
TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING PLAN	SHEET 37	E

2

SIGNING NOTES

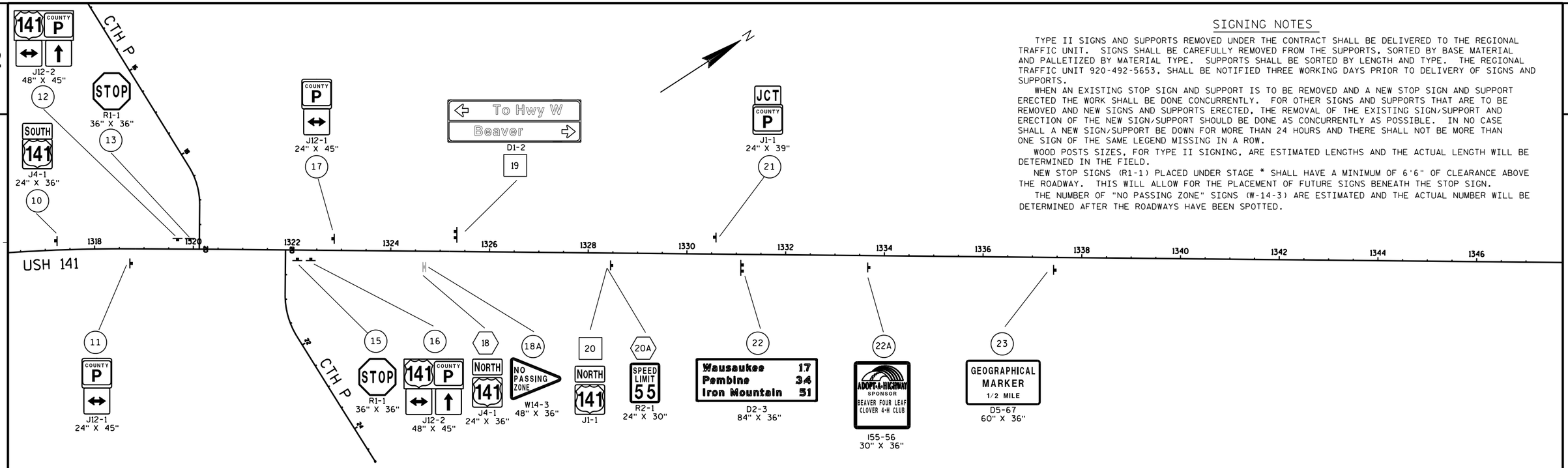
TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

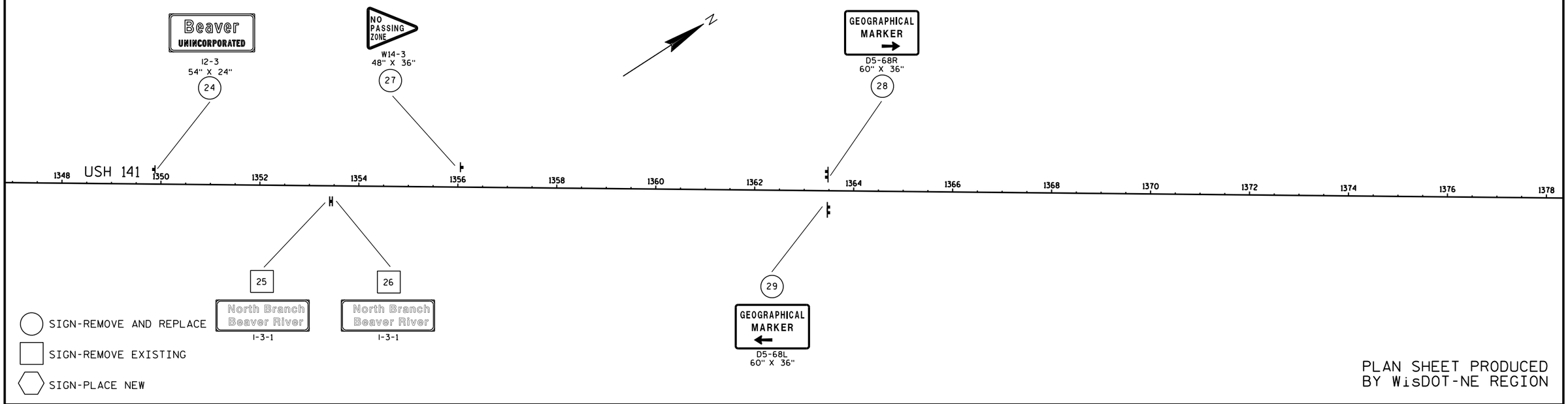
WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

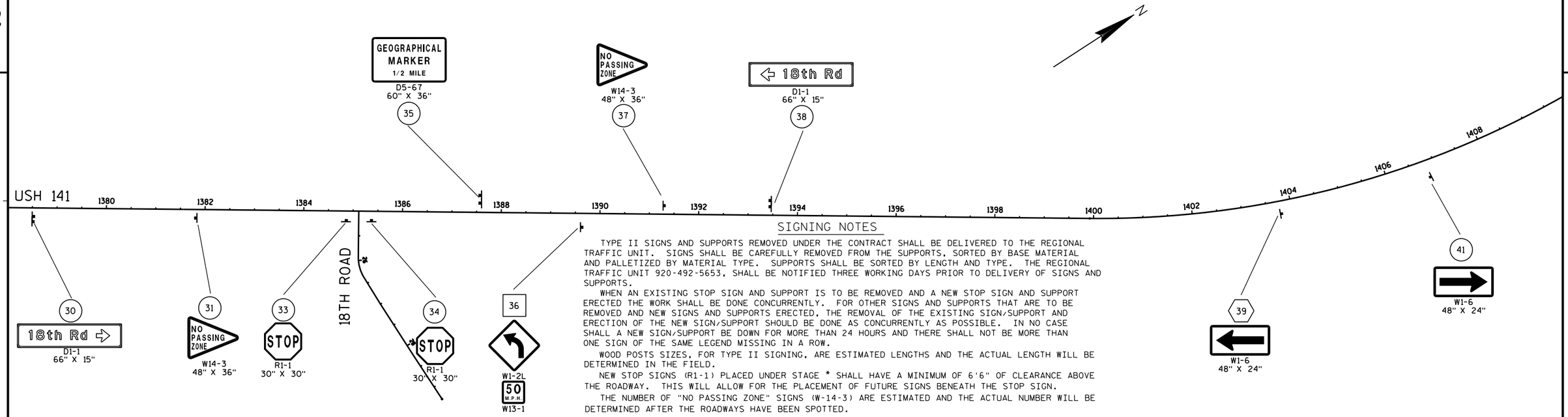




PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING PLAN	SHEET 38 E

2



SIGNING NOTES

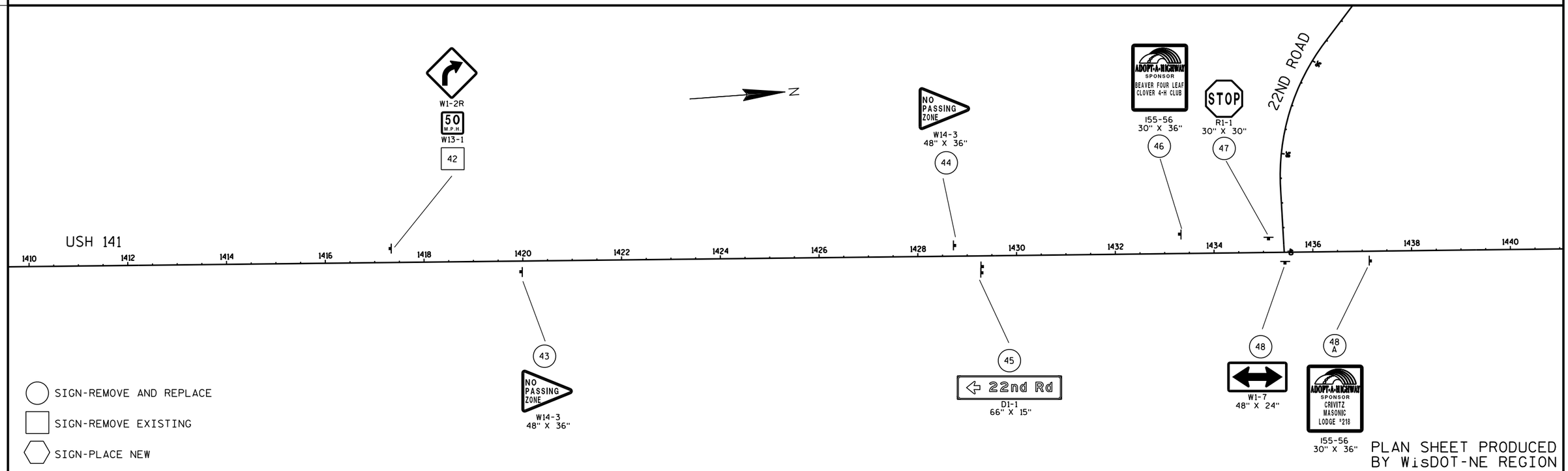
TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

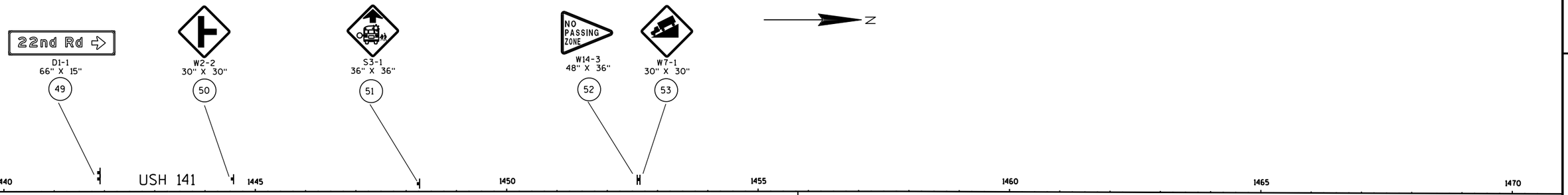
SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING PLAN	SHEET 39	E

FILE NAME : N:\spo\traffic\SIGNING\Projects\1491-10-71 USH 141 Beaver Creek-Crivitz\023203_ps.dgn PLOT DATE : 06-AUG-2013 14:55 PLOT BY : dotj1f PLOT NAME : PLOT SCALE : 200:1

WISDOT/CADDS SHEET 42



SIGNING NOTES

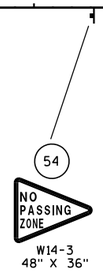
TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

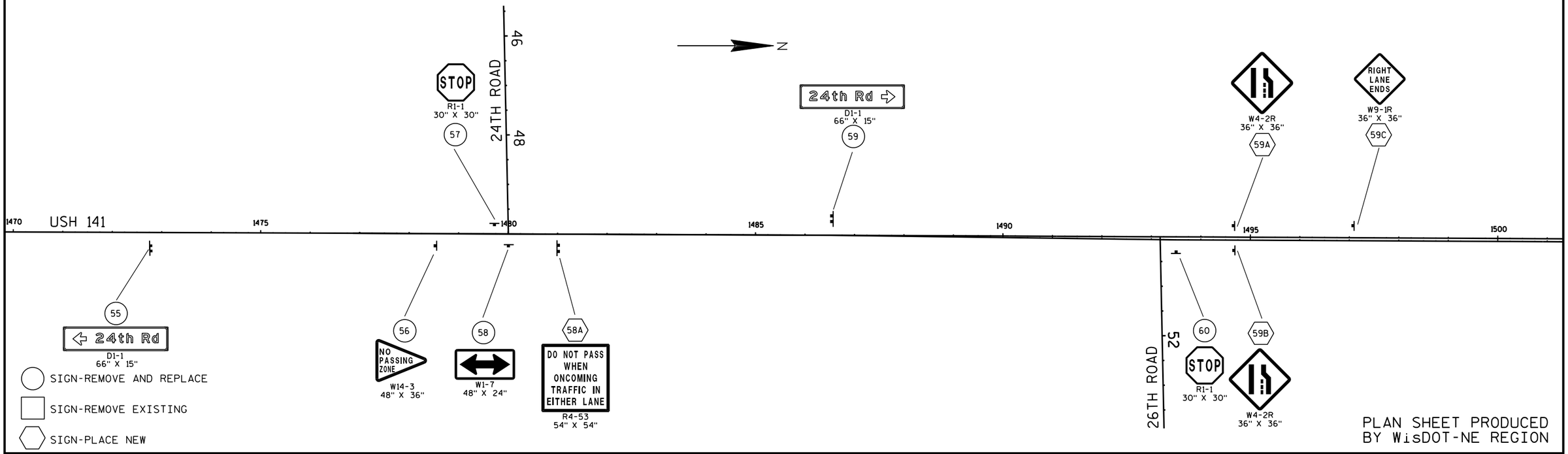
WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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

NEW STOP SIGNS (R1-1) PLACED UNDER STAGE * SHALL HAVE A MINIMUM OF 6'6" OF CLEARANCE ABOVE THE ROADWAY. THIS WILL ALLOW FOR THE PLACEMENT OF FUTURE SIGNS BENEATH THE STOP SIGN.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.





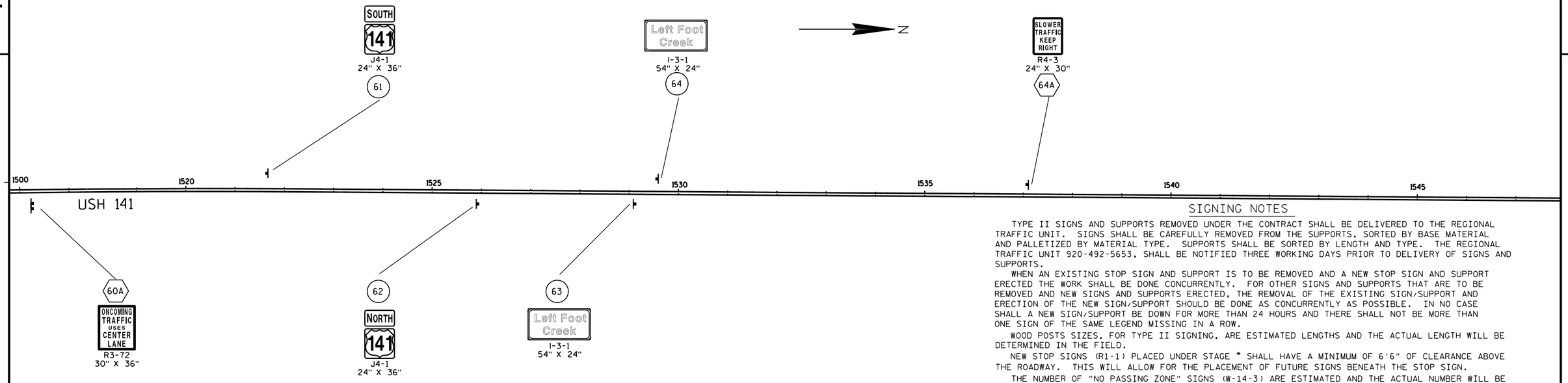
SIGN-REMOVE AND REPLACE

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING PLAN	SHEET 40 E



SIGNING NOTES

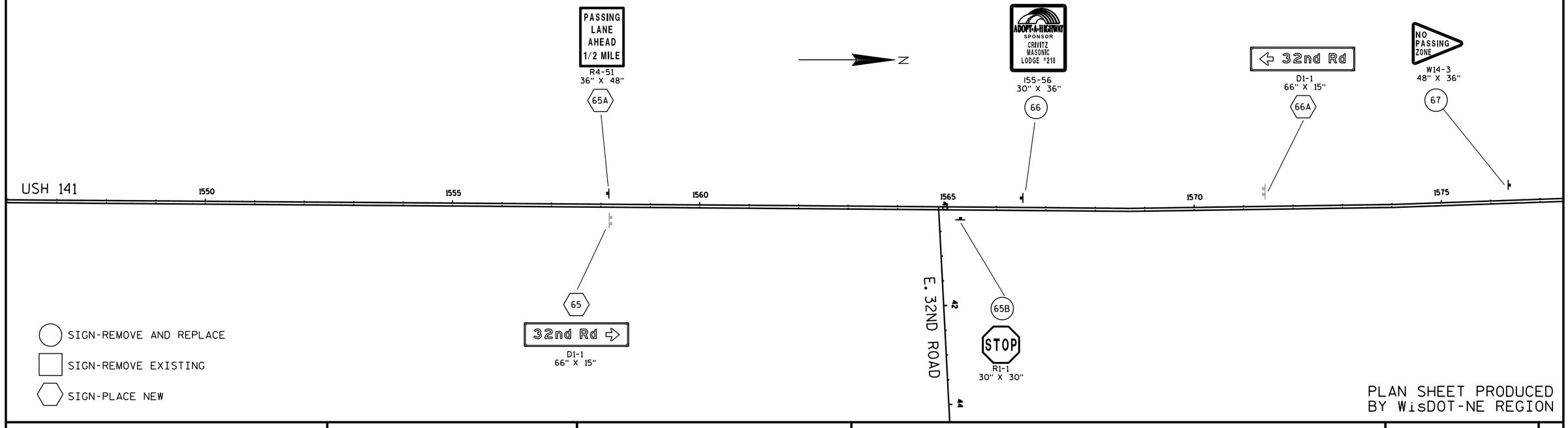
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WHEN AN EXISTING STOP SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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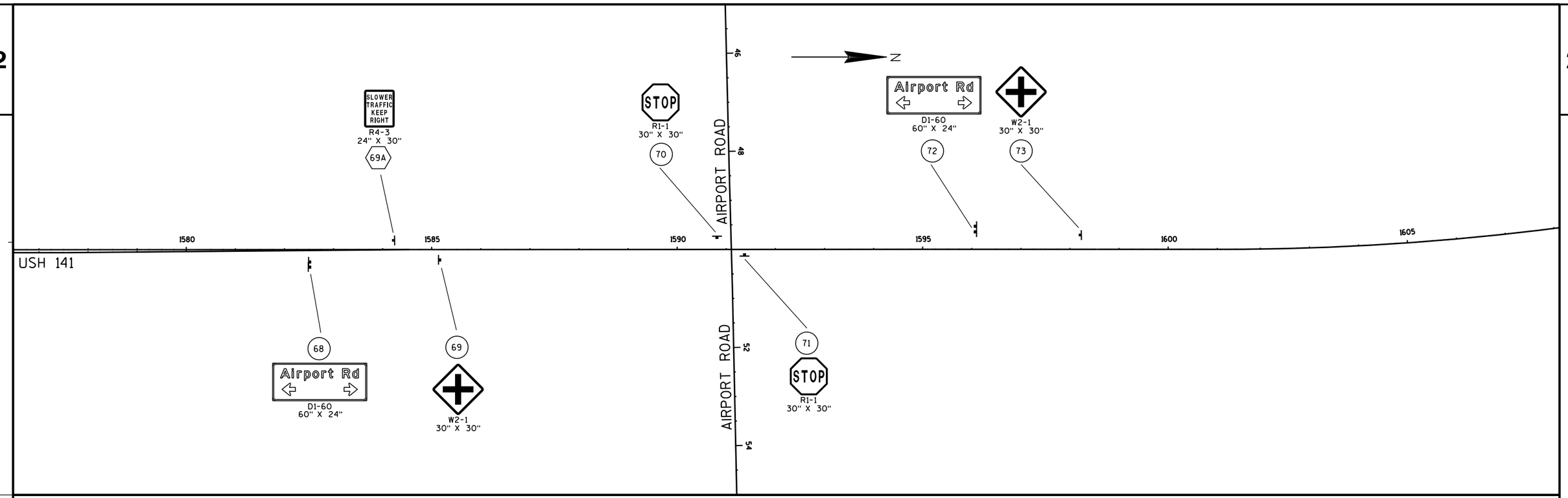
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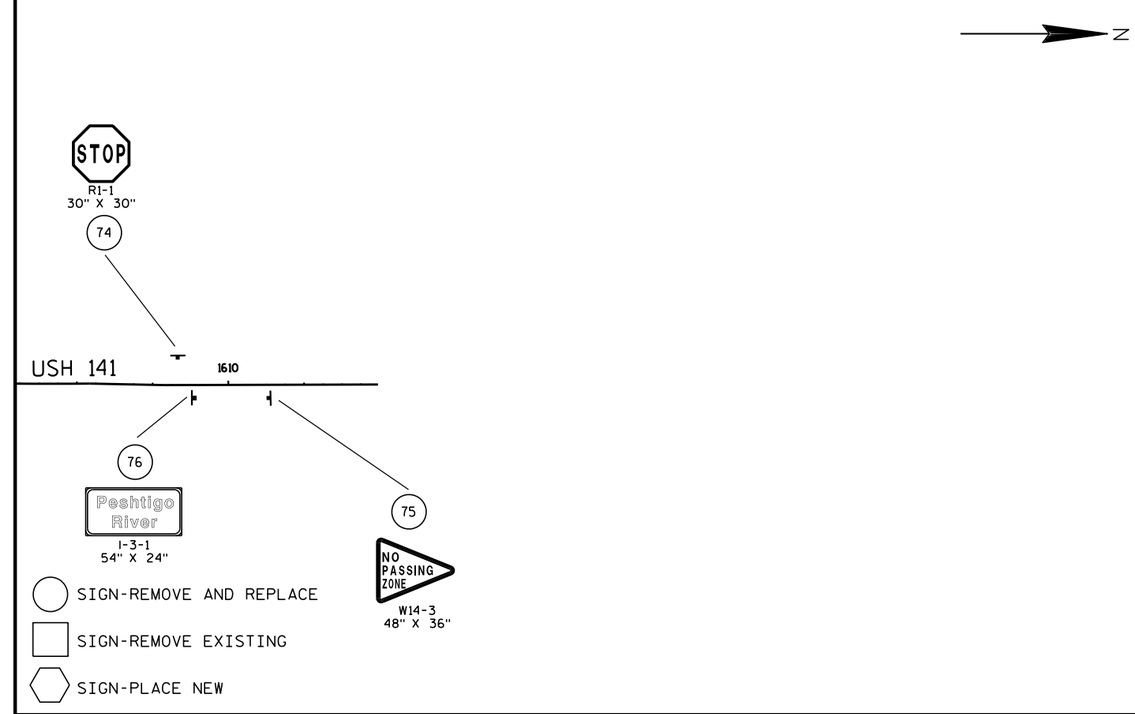
THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.



PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING PLAN	SHEET 41	E





SIGNING NOTES

TYPE II SIGNS AND SUPPORTS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE REGIONAL TRAFFIC UNIT. SIGNS SHALL BE CAREFULLY REMOVED FROM THE SUPPORTS, SORTED BY BASE MATERIAL AND PALLETIZED BY MATERIAL TYPE. SUPPORTS SHALL BE SORTED BY LENGTH AND TYPE. THE REGIONAL TRAFFIC UNIT 920-492-5653, SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF SIGNS AND SUPPORTS.

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THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING PLAN	SHEET 42	E

TRAFFIC CONTROL NOTES

THIS DETAIL IS TYPICAL FOR SHIFTING TRAFFIC TO THE LEFT, REVERSE TRAFFIC CONTROL FOR SHIFTING TRAFFIC TO THE RIGHT.

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

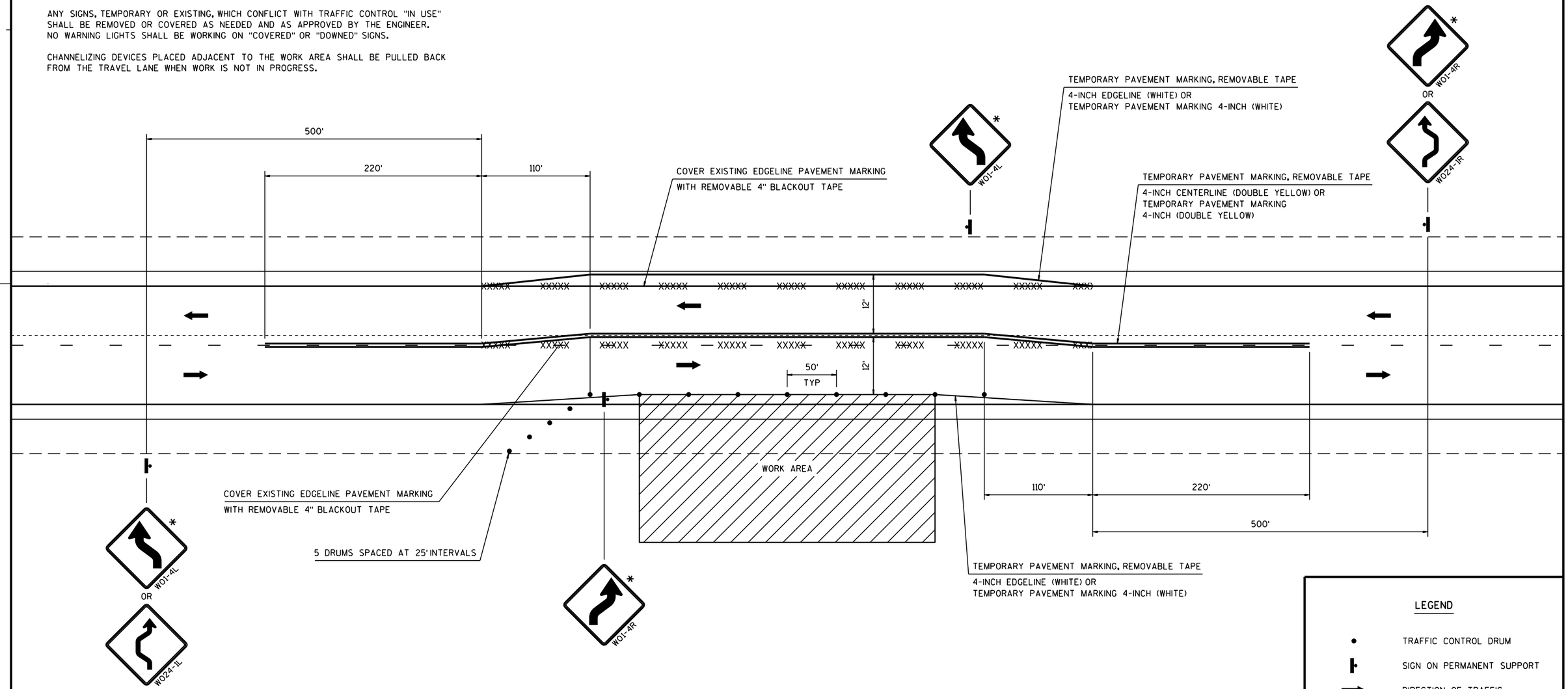
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

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

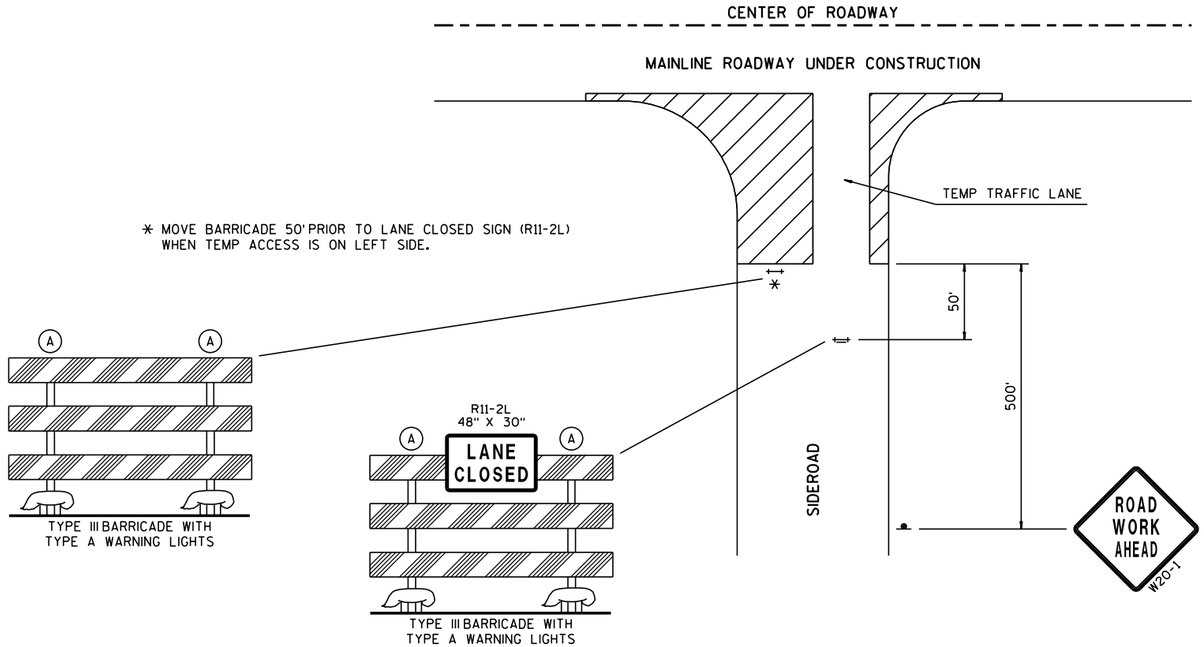


* USE W024-1 WHEN SHIFTED SECTION BETWEEN TAPERS IS 600' OR LESS.
USE W01-4 WHEN SHIFTED SECTION BETWEEN TAPERS IS GREATER THAN 600'.

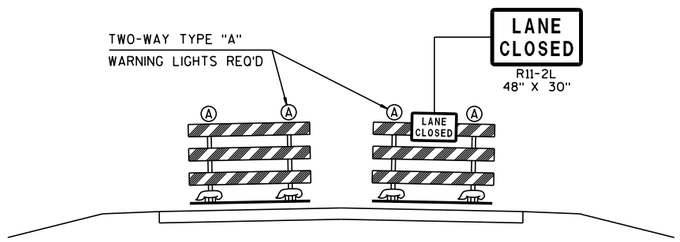
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	TRAFFIC CONTROL DETAIL	SHEET 43	E

FILE NAME : F:\d3_149110\025001_tc.dgn PLOT DATE : 17-JUN-2014 07:40 PLOT BY : ditjbs PLOT NAME : 025001tc PLOT SCALE : 200:1

2



SIDEROAD LANE CLOSURE DETAIL



LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA

TRAFFIC CONTROL NOTES

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

ALL SIGNS ARE 48" X 48" 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.

MATCH LINE

(SEE SHEET 2 OF 5)

BRIDGE OUT
3 1/2 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60" X 30"
54

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
36

N

DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"
6

DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"
8

DETOUR AHEAD
M20-2A
48" X 48"
4

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
20

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
22

35

DETOUR
M04-8
24" X 12"
SOUTH
M03-3
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"

DETAIL 1
(SEE SHEET 3 OF 5)

DETAIL 2
(SEE SHEET 4 OF 5)

BRIDGE OUT
4½ MILES AHEAD
FOLLOW DETOUR
FIXED MESSAGE SIGN
144" X 60"
2

BRIDGE OUT
4½ MILES AHEAD
FOLLOW DETOUR
FIXED MESSAGE SIGN
144" X 60"
1

DETOUR AHEAD
W20-2A
48" X 48"
3

DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"
5

DETOUR
M04-8
36" X 18"
NORTH
M03-1
36" X 18"
141
M1-4
36" X 36"
M05-2R
30" X 30"
7

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
21

DETOUR
M04-8
24" X 12"
NORTH
M03-1
24" X 12"
141
M1-4
24" X 24"
M06-1
21" X 21"
23

RAILROAD
13th ROAD
15th ROAD
11th ROAD
5th ROAD
3rd ROAD
RIVERVIEW ROAD
2 MILE ROAD
PESHTIGO RIVER
BRIDGE ROAD
LESLIE ROAD
N. 9th ROAD
N. 3rd ROAD
TOWN LINE ROAD
AUGUSTINE ROAD
WOODLAND ROAD
LITTLE RIVER ROAD
LOUCKS ROAD
141
64
P
Q
W
D
CP

LEGEND

(113) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET

▶ PCMS (172) PORTABLE CHANGEABLE MESSAGE SIGN

POST MOUNTED SIGN

SIGN MOUNTED ON TYPE III BARRICADE

SHEET 1 OF 5

PLAN SHEET PRODUCED BY WisDOT - NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET 45	E

DETAIL 3
(SEE SHEET 5 OF 5)

CRIVITZ

W

141

OLD W ROAD

LEFT FOOT LAKE ROAD

ST. PAUL ROAD

N

GG

PIONEER ROAD

BIRCHWOOD ROAD

RIGHT OF WAY ROAD

MAPLE CREST ROAD

G

RAILROAD

AIRPORT ROAD

PESHTIGO RIVER

LOOMIS ROAD

RIVERVIEW ROAD

BEECH ROAD

17th RD.

W. 24th RD.

W. 22nd RD.

E. 26th RD.

E 18th RD.

LEFT FOOT CREEK

RAILROAD

WORK ZONE
BRIDGE OUT

PCMS

55

56

44 — DETOUR M04-8 24" X 12" — NORTH M03-1 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

43 — DETOUR M04-8 24" X 12" — SOUTH M03-3 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

42 — DETOUR M04-8 24" X 12" — NORTH M03-1 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

40 — DETOUR M04-8 24" X 12" — NORTH M03-1 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

41 — DETOUR M04-8 24" X 12" — SOUTH M03-3 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

39 — DETOUR M04-8 24" X 12" — SOUTH M03-3 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

38 — DETOUR M04-8 24" X 12" — NORTH M03-1 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

37 — DETOUR M04-8 24" X 12" — SOUTH M03-3 24" X 12" — 141 M1-4 24" X 24" — ↑ M06-1 21" X 21"

LEGEND

- (113) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET
- ▶ PCMS (172) PORTABLE CHANGEABLE MESSAGE SIGN
- POST MOUNTED SIGN
- SIGN MOUNTED ON TYPE III BARRICADE

MATCH LINE

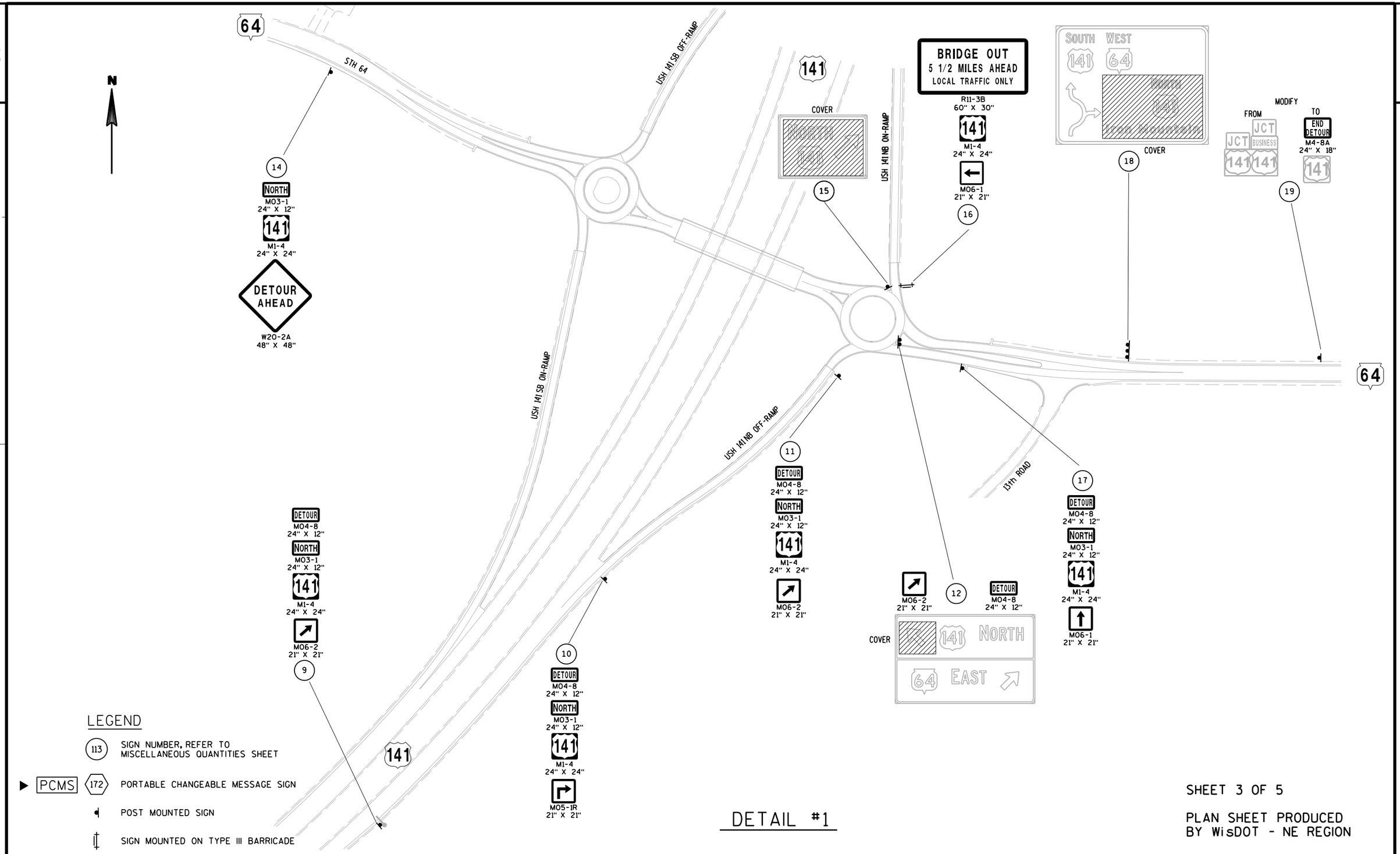
(SEE SHEET 1 OF 5)

SHEET 2 OF 5

PLAN SHEET PRODUCED BY WisDOT - NE REGION

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET E

FILE NAME : L:\450377 CCAD JV\JV#12\027002_dt.dgn PLOT DATE : 11/18/2013 PLOT BY : soufalk PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42



LEGEND

- (113) SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITIES SHEET
- ▶ PCMS (172) PORTABLE CHANGEABLE MESSAGE SIGN
- POST MOUNTED SIGN
- SIGN MOUNTED ON TYPE III BARRICADE

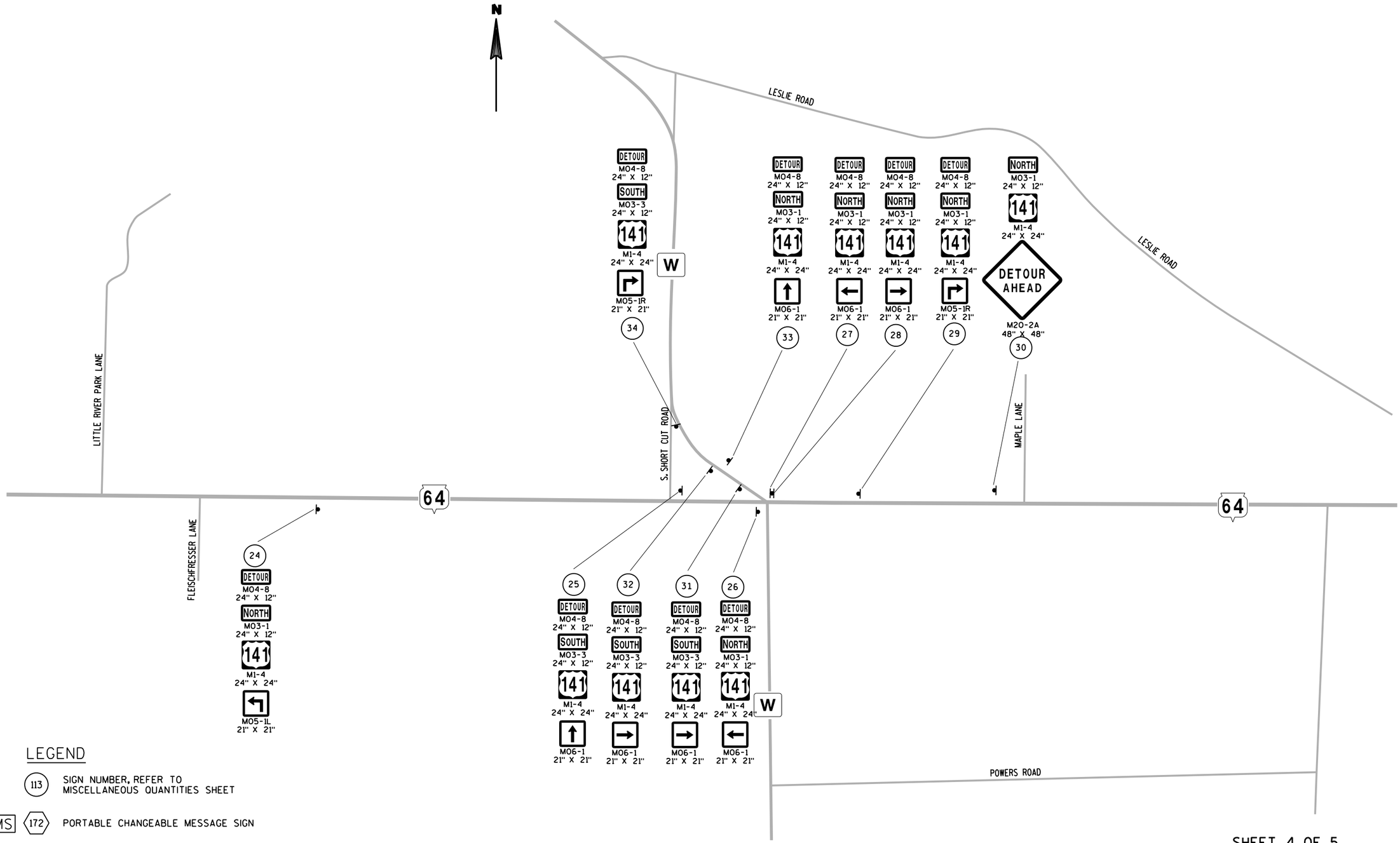
DETAIL #1

SHEET 3 OF 5

PLAN SHEET PRODUCED BY WisDOT - NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET 47	E

2



DETAIL #2

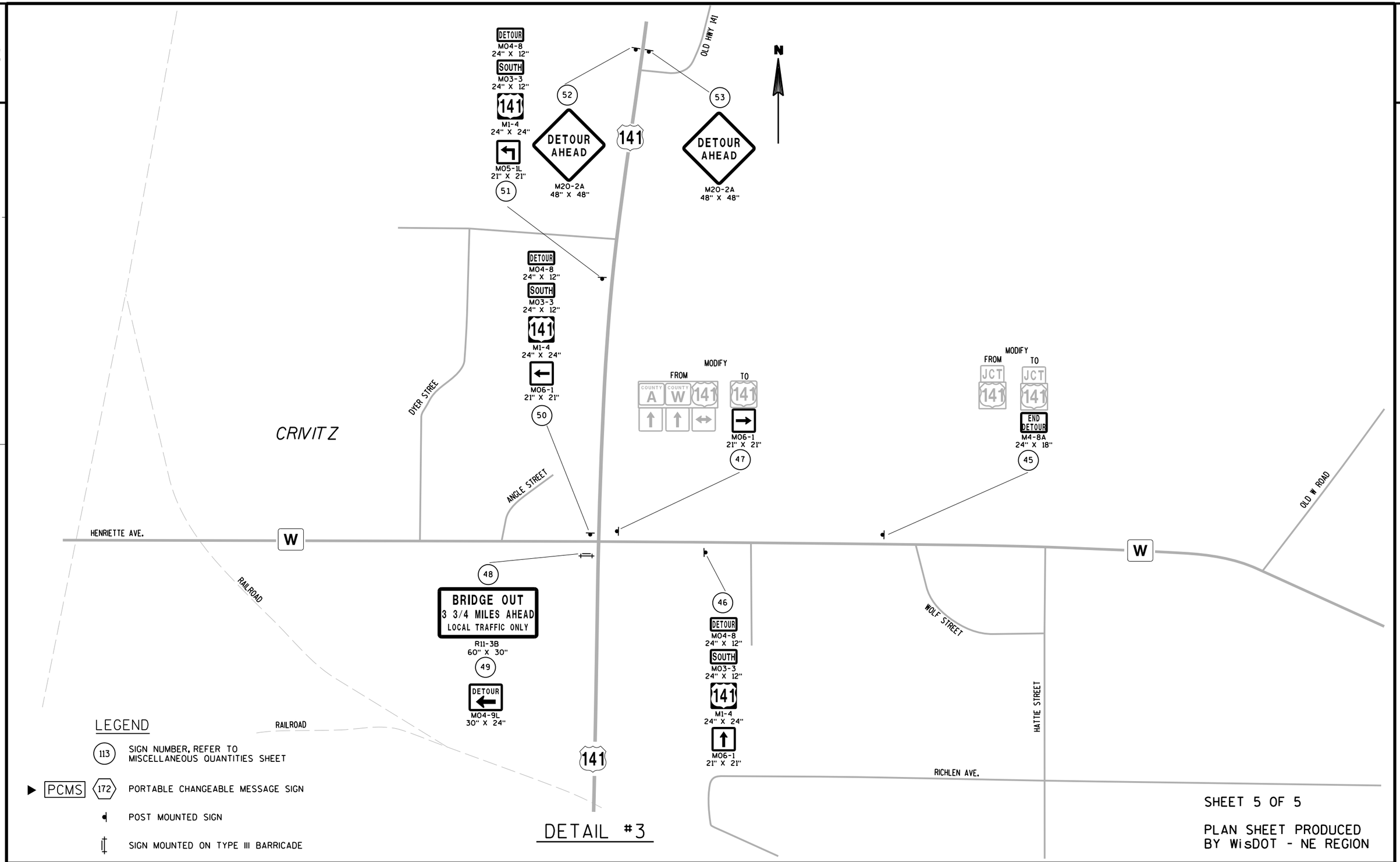
SHEET 4 OF 5

PLAN SHEET PRODUCED BY WisDOT - NE REGION

PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET	E

FILE NAME : L:\450377 CCAD JV\JV#12\027004_dt.dgn PLOT DATE : 11/18/2013 PLOT BY : soufalk PLOT NAME : PLOT SCALE : 1:400

WISDOT/CADDS SHEET 42



PROJECT NO: 1491-09-71	HWY: USH 141	COUNTY: MARINETTE	DETOUR SIGNING DETAIL	SHEET 49	E

DATE 19AUG14 — 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	1491-10-71 QUANTITY
0010	201.0105	CLEARING	STA	3.000	3.000
0020	201.0205	GRUBBING	STA	3.000	3.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	12.000	12.000
0040	203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL (STRUCTURE) 01. C-38-3309	LS	1.000	1.000
0060	203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS (STATION) 02. 1529+20	LS	1.000	1.000
0070	204.0100	REMOVING PAVEMENT	SY	5,015.000	5,015.000
0080	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	50.000	50.000
0090	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	96,200.000	96,200.000
0100	204.0150	REMOVING CURB & GUTTER	LF	890.000	890.000
0110	204.0165	REMOVING GUARDRAIL	LF	3,900.000	3,900.000
0120	204.0170	REMOVING FENCE	LF	220.000	220.000
0130	204.0210	REMOVING MANHOLES	EACH	1.000	1.000
0140	204.0291.S	ABANDONING SEWER	CY	45.000	45.000
0160	205.0100	EXCAVATION COMMON	CY	22,600.000	22,600.000
0180	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 02. C-38-122	LS	1.000	1.000
0200	210.0100	BACKFILL STRUCTURE	CY	376.000	376.000
0210	211.0400	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	STA	19.000	19.000
0220	211.0500	PREPARE FOUNDATION FOR BASE AGGREGATE	STA	2.000	2.000
0240	213.0100	FINISHING ROADWAY (PROJECT) 02. 1491-10-71	EACH	1.000	1.000
0250	214.0100	OBLITERATING OLD ROAD	STA	5.000	5.000
0260	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	13,200.000	13,200.000
0270	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	40,200.000	40,200.000
0280	390.0201	BASE PATCHING ASPHALTIC	TON	130.000	130.000
0300	440.4410.S	INCENTIVE IRI RIDE	DOL	28,400.000	28,400.000
0310	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,910.000	1,910.000
0320	455.0605	TACK COAT	GAL	6,310.000	6,310.000
0330	460.1103	HMA PAVEMENT TYPE E-3	TON	34,700.000	34,700.000
0340	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	22,200.000	22,200.000
0350	460.4110.S	REHEATING HMA PAVEMENT LONGITUDINAL JOINTS	LF	75,400.000	75,400.000
0360	465.0105	ASPHALTIC SURFACE	TON	18.000	18.000
0370	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	110.000	110.000
0380	465.0305	ASPHALTIC SURFACE SAFETY ISLANDS	TON	3.000	3.000
0390	465.0315	ASPHALTIC FLUMES	SY	165.000	165.000
0400	465.0475	ASPHALT CENTER LINE RUMBLE STRIPS 2-LANE RURAL	LF	28,510.000	28,510.000
0410	502.0100	CONCRETE MASONRY BRIDGES	CY	188.000	188.000
0430	502.6500	PROTECTIVE COATING CLEAR	GAL	1.000	1.000
0440	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	7,790.000	7,790.000
0450	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	22,120.000	22,120.000
0470	513.7050	RAILING STEEL TYPE W (STRUCTURE) 02. C-38-122	LS	1.000	1.000
0480	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	38.000	38.000
0490	516.0610.S	SHEET MEMBRANE WATERPROOFING FOR TOP SLAB (STRUCTURE) 02. C-38-122	SY	167.000	167.000
0500	520.0124	CULVERT PIPE CLASS III 24-INCH	LF	26.000	26.000
0510	520.1024	APRON ENDWALLS FOR CULVERT PIPE 24-INCH	EACH	2.000	2.000

3

DATE 19AUG14 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	1491-10-71 QUANTITY
0590	522.0118	CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	138.000	138.000
0600	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	364.000	364.000
0610	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	130.000	130.000
0640	522.0148	CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	66.000	66.000
0650	522.0330	CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH	LF	86.000	86.000
0660	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	7.000	7.000
0670	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	10.000	10.000
0680	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	6.000	6.000
0710	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	2.000	2.000
0730	550.2102	PILING CIP CONCRETE 10 3/4 X 0.219-INCH	LF	1,085.000	1,085.000
0760	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	1,320.000	1,320.000
0770	606.0300	RIPRAP HEAVY	CY	143.000	143.000
0780	608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	300.000	300.000
0790	611.0627	INLET COVERS TYPE HM	EACH	2.000	2.000
0800	611.3003	INLETS 3-FT DIAMETER	EACH	2.000	2.000
0810	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	276.000	276.000
0820	614.0010	BARRIER SYSTEM GRADING SHAPING FINISHING	EACH	14.000	14.000
0850	614.2300	MGS GUARDRAIL 3	LF	1,025.000	1,025.000
0860	614.2330	MGS GUARDRAIL 3 K	LF	1,588.000	1,588.000
0870	614.2340	MGS GUARDRAIL 3 L	LF	225.000	225.000
0880	614.2500	MGS THRIE BEAM TRANSITION	LF	385.000	385.000
0890	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	18.000	18.000
0920	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. 1491-10-71	EACH	1.000	1.000
0930	619.1000	MOBILIZATION	EACH	0.500	0.500
0940	624.0100	WATER	MGAL	530.000	530.000
0950	625.0500	SALVAGED TOPSOIL	SY	19,300.000	19,300.000
0960	627.0200	MULCHING	SY	14,200.000	14,200.000
0970	628.1504	SILT FENCE	LF	3,450.000	3,450.000
0980	628.1520	SILT FENCE MAINTENANCE	LF	860.000	860.000
0990	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	5.000	5.000
1000	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	6.000	6.000
1010	628.2004	EROSION MAT CLASS I TYPE B	SY	1,600.000	1,600.000
1020	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	5,000.000	5,000.000
1030	628.6005	TURBIDITY BARRIERS	SY	200.000	200.000
1040	628.7005	INLET PROTECTION TYPE A	EACH	2.000	2.000
1050	628.7010	INLET PROTECTION TYPE B	EACH	2.000	2.000
1070	628.7504	TEMPORARY DITCH CHECKS	LF	180.000	180.000
1080	628.7555	CULVERT PIPE CHECKS	EACH	89.000	89.000
1090	628.7570	ROCK BAGS	EACH	300.000	300.000
1100	629.0210	FERTILIZER TYPE B	CWT	12.000	12.000
1110	630.0120	SEEDING MIXTURE NO. 20	LB	530.000	530.000
1130	630.0200	SEEDING TEMPORARY	LB	270.000	270.000
1140	633.5200	MARKERS CULVERT END	EACH	27.000	27.000

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DATE 19AUG14 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	1491-10-71 QUANTITY
1150	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	18.000	18.000
1160	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	63.000	63.000
1170	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	17.000	17.000
1190	637.2210	SIGNS TYPE II REFLECTIVE H	SF	441.470	441.470
1210	637.2230	SIGNS TYPE II REFLECTIVE F	SF	195.000	195.000
1220	638.2602	REMOVING SIGNS TYPE II	EACH	88.000	88.000
1230	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	78.000	78.000
1260	643.0100	TRAFFIC CONTROL (PROJECT) 02. 1491-10-71	EACH	1.000	1.000
1270	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	1,228.000	1,228.000
1280	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	1,856.000	1,856.000
1290	643.0900	TRAFFIC CONTROL SIGNS	DAY	2,469.000	2,469.000
1300	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	2.000	2.000
1310	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	120.000	120.000
1320	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	14.000	14.000
1340	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 02. 1491-10-71	EACH	1.000	1.000
1350	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	7,750.000	7,750.000
1360	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	220.000	220.000
1370	646.0103	PAVEMENT MARKING PAINT 4-INCH	LF	2,010.000	2,010.000
1380	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	1,100.000	1,100.000
1400	646.0406	PAVEMENT MARKING SAME DAY EPOXY 4-INCH	LF	40,700.000	40,700.000
1420	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	23.000	23.000
1430	648.0100	LOCATING NO-PASSING ZONES	MI	5.992	5.992
1440	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	41,500.000	41,500.000
1450	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	127,150.000	127,150.000
1460	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	2.000	2.000
1470	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	14,450.000	14,450.000
1480	650.5000	CONSTRUCTION STAKING BASE	LF	14,450.000	14,450.000
1490	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	1,320.000	1,320.000
1500	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	11.000	11.000
1520	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. C-38-122	LS	1.000	1.000
1530	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	19,900.000	19,900.000
1550	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 1491-10-71	LS	1.000	1.000
1560	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	14,450.000	14,450.000
1610	690.0150	SAWING ASPHALT	LF	3,110.000	3,110.000
1620	690.0250	SAWING CONCRETE	LF	21,900.000	21,900.000
1630	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	2,400.000	2,400.000
1640	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	2,100.000	2,100.000
1660	SPV.0090	SPECIAL 01. 4-INCH EPOXY YELLOW	LF	32,900.000	32,900.000
1670	SPV.0090	SPECIAL 02. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 4-INCH	LF	62,650.000	62,650.000
1680	SPV.0090	SPECIAL 03. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 8-INCH	LF	1,800.000	1,800.000

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CLEARING AND GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	25+00	-	26+00	18TH RD	1	1
0010	38+49	-	40+00	22ND RD	2	2
				TOTAL	3	3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	LOCATION	204.0115 SY	REMARKS
0010	1293+46.06	USH 141	10	SB BEAVER CREEK STRUCT
0010	1612+11	USH 141 PROJECT LIMITS	10	PESHTIGO R. STRUCT
0010	1294+84	USH 141 RT	3	P.E.
0010	1295+34	USH 141 RT	3	P.E.
0010	1326+38	USH 141 RT	4	P.E.
0010	1333+83	USH 141 RT	3	P.E.
0010	1338+75	USH 141 LT	7	P.E.
0010	1344+51	USH 141 RT	4	P.E.
0010	1351+32	USH 141 LT	4	P.E.
0010	1370+16	USH 141 RT	3	P.E.
		TOTAL	50	

REMOVING CURB & GUTTER

CATEGORY	LOCATION	204.0150 LF
0010	NE QUAD USH 141 / CTH P EAST	71
0010	SE QUAD USH 141 / CTHP EAST	83
0010	SW QUAD USH 141 / CTH P WEST	64
0010	NW QUAD USH 141 / CTH P WEST	57
0010	SE QUAD USH 141 / 18TH ROAD	92
0010	NE QUAD USH 141 / 18TH ROAD	50
0010	SW QUAD USH 141 / 22ND ROAD	68
0010	NW QUAD USH 141 / 22ND ROAD	89
0010	SW QUAD USH 141 / 24TH ROAD	58
0010	NW QUAD USH 141 / 24TH ROAD	91
0010	SW QUAD USH 141 / AIRPORT ROAD	61
0010	NW QUAD USH 141 / AIRPORT ROAD	98
	TOTAL	890

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 EACH
0010	18+39	CTH P RT	1
0010	20+83	CTH P	1
0010	1336+65	USH 141	1
0010	1342+75	USH 141	1
0010	1433+48	USH 141	1
0010	1453+69	USH 141	1
0010	39+45	22ND ROAD	1
0010	1537+00	USH 141 LT	1
0010	1545+36	USH 141	1
0010	40+47	32ND ROAD	1
0010	1577+91	USH 141	1
0010	1590+11	USH 141	1
0010	49+51	AIRPORT ROAD	1
		TOTAL	12

REMOVING PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY
0010	1278+66.5	-	1291+65	USH 141 LT	440
0010	1287+60	-	1291+15	USH 141 RT	122
0010	1316+60	-	1323+42	USH 141 10' RT	152
0010	1318+65	-	1325+38	USH 141 10' LT	152
0010	1361+98	-	1362+57	USH 141 LT	52
0010	1362+80	-	1363+36	USH 141 LT	46
0010	1379+85	-	1386+66	USH 141 10' RT	151
0010	1432+90	-	1437+95	USH 141 10' RT	112
0010	1433+85	-	1440+63	USH 141 10' LT	151
0010	1478+52	-	1481+95	USH 141 10' LT	76
0010	1486+50.5	-	1528+50	USH 141 LT	564
0010	1486+50.5	-	1528+50	USH 141 RT	564
0010	1528+50	-	1528+68	USH 141	84
0010	1529+66	-	1529+84	USH 141	84
0010	1529+84	-	1584+57	USH 141 LT	1216
0010	1529+84	-	1584+57	USH 141 RT	1216
0010	1585+86	-	1592+57	USH 141 10' RT	149
0010	1589+53	-	1596+23	USH 141 10' LT	149
0010	1317+81	-		USH 141 RT P.E.	61
0010	1340+32	-		USH 141 LT P.E.	36
				TOTAL	5015

REMOVING MANHOLES

CATEGORY	STATION	LOCATION	204.0210 EACH
0010	19+04	CTH P RT	1
		TOTAL	1

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 SY
0010	1278+66.5	-	1289+23.5	USH 141	3171
0010	1289+23.5	-	1293+11.94	USH 141	981
0010	1289+23.5	-	1293+11.94	USH 141 LT	235
0010	1289+23.5	-	1293+11.94	USH 141 RT	265
0010	1293+46.06	-	1295+68.06	USH 141 LT	214
0010	1293+46.06	-	1295+68.06	USH 141 RT	230
0010	1293+46.06		1295+68.06	USH 141	539
0010	1295+68.06	-	1317+60	USH 141	7307
0010	1317+60	-	1318+56	USH 141	267
0010	1318+56	-	1323+45	USH 141	1087
0010	1323+45	-	1325+40	USH 141	542
0010	1325+40	-	1350+28	USH 141	8160
0010	1350+28	-	1354+39	USH 141	1752
0010	1354+39	-	1380+84	USH 141	8817
0010	1380+84	-	1386+68	USH 141	2002
0010	1386+68	-	1433+85	USH 141	15656
0010	1433+85	-	1439+67	USH 141	1617
0010	1439+67	-	1446+40	USH 141	2243
0010	1446+40	-	1447+22	USH 141	298
0010	1447+22	-	1447+45	USH 141	91
0010	1447+45	-	1448+09	USH 141	272
0010	1448+09	-	1456+57	USH 141	3695
0010	1456+57	-	1457+24	USH 141	264
0010	1457+24	-	1478+52	USH 141	7093
0010	1478+52	-	1481+95	USH 141	953
0010	1481+95	-	1486+50	USH 141	1517
0010	1486+50.5	-	1528+50	USH 141	5638
0010	1529+84	-	1584+56	USH 141	12160
0010	1584+56	-	1586+86	USH 141	767
0010	1586+86	-	1589+53	USH 141	742
0010	1589+53	-	1592+68	USH 141	700
0010	1592+68	-	1595+35	USH 141	742
0010	1595+35	-	1607+06	USH 141	3863
0010	1607+06	-	1608+00	USH 141 LT	215
0010	1607+06	-	1607+51	USH 141 RT	75
0010	1607+51	-	1608+12	USH 141 RT	125
0010	1608+00	-	1608+48	USH 141 LT	135
0010	1608+48	-	1608+54	USH 141 LT	16
0010	1608+54	-	1609+38.5	USH 141 LT	195
0010	1608+12	-	1608+70	USH 141 RT	143
0010	1608+70	-	1612+05	USH 141 RT	770
0010	1609+38.5	-	1612+10.75	USH 141 LT	641
				TOTAL	96200

REMOVING FENCE

CATEGORY	STATION	TO	STATION	LOCATION	204.0170 LF
0010	1320+68	-	1321+00	USH 141 RT	142
0010	21+69	-	22+16	CTH P RT	78
				TOTAL	220

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA
0010	1278+66.5	-	1291+65	USH 141 LT	14
0010	1287+60	-	1291+15	USH 141 RT	5
				TOTAL	19

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF
0010	1291+81	-	1293+12	USH 141 RT	131
0010	1292+31	-	1293+12	USH 141 LT	81
0010	1293+46	-	1294+40	USH 141 RT	94
0010	1293+46	-	1294+77	USH 141 LT	131
0010	1351+26	-	1353+29	USH 141 RT	200
0010	1352+04	-	1353+67	USH 141 LT	163
0010	1447+24	-	1456+62	USH 141 RT	938
0010	1448+14	-	1456+65	USH 141 LT	850
0010	1527+00	-	1530+13	USH 141 RT	313
0010	1528+01	-	1530+64	USH 141 LT	263
0010	1608+08	-	1612+04	USH 141 RT	396
0010	1608+84	-	1612+18	USH 141 LT	334
				TOTAL	3900

EARTHWORK SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	205.0100 COMMON EXCAVATION CY	**** AVAILABLE MATERIAL FROM COMMON CY	**** UNEXPANDED FILL CY	**** REQUIRED FILL (EXPANDED) CY	**** WASTE MATERIAL CY	REMARKS
0010	1316+50	-	1325+50	USH 141	1692	1692	64	80	1612	
0010	17+50	-	19+74.5	CTH P WEST	459	459	52	65	394	
0010	20+27.46	-	22+50	CTH P EAST	578	578	211	264	314	
0010	1353+75	-	1355+25	USH 141 LT	10	10	-	-	10	PE RELOCATE
0010	1379+00	-	1389+50	USH 141	679	679	168	210	469	
0010	25+27.25	-	29+00	18TH RD	222	222	133	166	56	
0010	1432+00	-	1441+50	USH 141	1044	1044	65	81	963	
0010	38+48	-	39+76	22ND RD	425	425	42	52	373	
0010	1477+50	-	1483+00	USH 141	283	283	0	0	283	
0010	48+00	-	49+78	24TH RD	326	326	26	32	294	
0010	1486+50	-	1584+57	USH 141	14340	14340	2295	2869	11471	
0010	50+28.75	-	52+00	26TH RD	105	105	75	94	11	
0010	40+28.75	-	42+00	32ND RD	387	387	5	6	381	
0010	1585+50	-	1596+50	USH 141	1284	1284	62	78	1206	
0010	48+00	-	49+75	AIRPORT RD WEST	390	390	11	14	376	
0010	50+24.25	-	52+00	AIRPORT RD EAST	272	272	118	147	125	
0010		-		STH 64 / CTH W LT	19	19	-	-	19	
0010		-		STH 64 / CTH W RT	13	13	-	-	13	
				SUBTOTAL	22528	-		-	-	
				PROJECT TOTALS	22600	22528	3326	4158	18370	

**** FOR INFORMATION ONLY
NOTE: EXPANSION FACTOR FOR FILL USED: 1.25
SEE SECTION 9 FOR DETAILED CALCULATIONS

FINISHING ROADWAY (PROJECT) 02. 1491-10-71

CATEGORY	LOCATION	213.0100.02 EACH
0010	PROJECT	1
	TOTAL	1

ABATEMENT OF ASBESTOS CONTAINING MATERIAL STRUCTURE C-38-3309

CATEGORY	LOCATION	213.0210.S LS
0010	LEFT FOOT CREEK STRUCT	1
	TOTAL	1

OBLITERATING OLD ROAD

CATEGORY	LOCATION	214.0100 STA
0010	CTH P WEST	2
0010	CTH P EAST	2
0010	18TH RD	1
	TOTAL	5

ABANDONING SEWER

CATEGORY	STATION	-	STATION	LOCATION	204.0291.S CY
0010	1317+22	-	1319+29	USH 141 LT	45
				TOTAL	45

PREPARE FOUNDATION FOR BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	211.0500 PREPARE FOUNDATION FOR BASE AGGREGATE STA
0010	1362+65	-	1363+54	USH 141 LT	2
				TOTAL	2

3/4" BASE AGGREGATE DENSE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4 INCH TON	624.0100 WATER MGAL	REMARKS
0010	1278+66.5	-	1316+50	USH 141 LT	100	1.0	
0010	1289+50	-	1316+50	USH 141 RT	27	0.3	
0010	1316+50	-	1325+40	USH 141 LT	33	0.3	
0010	1316+50	-	1325+40	USH 141 RT	22	0.2	
0010	17+71	-	19+15.5	CTH P WEST LT & RT	4	0.0	
0010	20+66	-	22+39	CTH P EAST LT & RT	7	0.1	
0010	1355+00	-		USH 141 LT	3	0.0	PE
0010	1325+40	-	1380+50	USH 141 LT	332	3.3	
0010	1325+40	-	1380+50	USH 141 RT	587	5.9	
0010	1380+50	-	1387+00	USH 141 LT	93	0.9	
0010	1380+50	-	1387+00	USH 141 RT	140	1.4	
0010	25+75	-	26+96.4	18TH RD LT	25	0.2	
0010	26+00	-	26+96.4	18TH RD RT	22	0.2	
0010	1387+00	-	1432+50	USH 141 LT	495	5.0	
0010	1387+00	-	1432+50	USH 141 RT	990	9.9	
0010	1432+50	-	1440+00	USH 141 LT	119	1.2	
0010	1432+50	-	1440+00	USH 141 RT	168	1.7	
0010	38+49	-	39+13.8	22ND RD LT	14	0.1	
0010	38+49	-	39+32.7	22ND RD RT	15	0.1	
0010	1440+00	-	1478+00	USH 141 LT	844	8.4	
0010	1440+00	-	1478+00	USH 141 RT	842	8.4	
0010	1478+00	-	1482+50	USH 141 LT	103	1.0	
0010	1478+00	-	1482+50	USH 141 RT	81	0.8	
0010	48+39	-	49+18	24TH RD LT	17	0.2	
0010	48+39	-	49+39	24TH RD RT	20	0.2	
0010	1482+50	-	1492+50	USH 141 LT	328	3.3	
0010	1482+50	-	1492+50	USH 141 RT	297	3.0	
0010	50+08	-	51+55	26TH RD LT	42	0.4	
0010	50+11	-	51+55	26TH RD RT	36	0.4	
0010	1492+50	-	1529+15	USH 141 LT	794	7.9	
0010	1493+71	-	1528+68	USH 141 RT	730	7.3	
0010	1536+50			USH 141 LT	4	0.0	PE
0010	1529+80.5	-	1564+12	USH 141 LT	1267	12.7	
0010	1529+21	-	1564+11	USH 141 RT	1269	12.7	
0010	39+92	-	41+58.5	32ND RD RT	40	0.4	
0010	40+01	-	41+58.8	32ND RD LT	33	0.3	
0010	1564+12	-	1584+56	USH 141 LT	756	7.6	
0010	1565+50	-	1584+56	USH 141 RT	702	7.0	
0010	1584+56	-	1586+00	USH 141 LT	34	0.3	
0010	1584+56	-	1586+00	USH 141 RT	51	0.5	
0010	1586+00	-	1595+50	USH 141 LT	162	1.6	
0010	1586+00	-	1595+50	USH 141 RT	262	2.6	
0010	48+36	-	49+35	AIRPORT RD WEST RT	18	0.2	
0010	48+36	-	49+17	AIRPORT RD WEST LT	16	0.2	
0010	50+83	-	51+63.5	AIRPORT RD EAST RT	14	0.1	
0010	50+65	-	51+63.5	AIRPORT RD EAST LT	20	0.2	
0010	1595+50	-	1612+11	USH 141 LT	629	6.3	
0010	1595+50	-	1612+11	USH 141 RT	624	6.2	
				TOTAL	13200	130 *	

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

1-1/4" BASE AGGREGATE DENSE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1-1/4 INCH TON	624.0100 WATER MGAL	REMARKS
0010	1318+56	-	1325+40	USH 141 LT	110	1.1	
0010	1317+60	-	1323+45	USH 141 RT	99	1.0	
0010	17+71	-	19+74.5	CTH P WEST	90	0.9	
0010	20+24	-	22+39	CTH P EAST	96	1.0	
0010	1336+55	-	1336+75	USH 141	84	0.8	PIPE REPLACEMENT
0010	1342+65	-	1342+85	USH 141	84	0.8	PIPE REPLACEMENT
0010	1380+84	-	1386+68	USH 141 RT	855	8.6	
0010	25+24	-	26+96.4	18TH RD	722	7.2	
0010	1433+38	-	1433+58	USH 141	84	0.8	PIPE REPLACEMENT
0010	1433+86	-	1439+66.5	USH 141 LT	851	8.5	
0010	1432+92	-	1437+92.5	USH 141 RT	650	6.5	
0010	38+49	-	39+76	22ND RD	541	5.4	
0010	1453+49	-	1453+89	USH 141	168	1.7	PIPE REPLACEMENT
0010	1478+52	-	1481+95	USH 141 LT	404	4.0	
0010	48+39	-	49+78	24TH RD	577	5.8	
0010	1486+50	-	1529+23	USH 141 LT	4671	46.7	
0010	1486+50	-	1529+06	USH 141 RT	4747	47.5	
0010	50+28.75	-	51+57.75	26TH RD	572	5.7	
0010	1545+26	-	1545+46	USH 141	35	0.3	PIPE REPLACEMENT
0010	1577+76	-	1578+06	USH 141	52	0.5	PIPE REPLACEMENT
0010	1529+23	-	1584+56	USH 141 LT	10430	104.3	
0010	1529+12	-	1584+56	USH 141 RT	10634	106.3	
0010	40+28.75	-	41+58.50	32ND RD	531	5.3	
0010	1590+01	-	1590+21	USH 141	35	0.4	PIPE REPLACEMENT
0010	1589+53	-	1595+34.5	USH 141 LT	918	9.2	
0010	1586+85	-	1592+66.75	USH 141 RT	910	9.1	
0010	48+36	-	49+75.75	AIRPORT RD WEST	563	5.6	
0010	50+24.25	-	51+63.5	AIRPORT RD EAST	585	5.9	
0010				STH 64 LT @ CTH W	15	0.2	WIDENING FOR DETOUR
0010				STH 64 RT @ CTH W	12	0.1	WIDENING FOR DETOUR
				TOTAL	40200	400 *	

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

BASE PATCHING ASPHALTIC SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	390.0201 BASE PATCHING ASPHALTIC TON
0010	1336+55	-	1336+75	USH 141	15
0010	1342+65	-	1342+85	USH 141	15
0010	1433+38	-	1433+58	USH 141	15
0010	1453+49	-	1453+89	USH 141	31
0010	1545+26	-	1545+46	USH 141	15
0010	1577+76	-	1578+06	USH 141	23
0010	1590+01	-	1590+21	USH 141	15
				TOTALS	130

HMA SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	455.0105 ASPHALTIC MATERIAL PG58-28 TON	455.0605 TACK COAT GAL	460.1103 HMA PAVEMENT TYPE E-3 TON
0010	1278+66.5	-	1289+23.5	USH 141	23	85	422
0010	1289+23.5	-	1293+11.94	USH 141	11	40	205
0010	1293+46.06	-	1295+68.06	USH 141	13	50	238
0010	1295+68.06	-	1317+60	USH 141	105	390	1905
0010	17+70.5	-	19+74.5	CTH P WEST	17	39	311
0010	20+24.46	-	22+39	CTH P EAST	18	41	326
0010	1317+60	-	1325+40	USH 141	60	177	1090
0010	1325+40	-	1380+84	USH 141	270	1005	4904
0010	1380+84	-	1386+68	USH 141	42	138	767
0010	25+24.25	-	26+96.40	18TH RD	14	33	263
0010	1386+68	-	1433+85	USH 141	225	839	4098
0010	38+49.25	-	39+76	22ND RD	11	26	205
0010	1433+85	-	1439+67	USH 141	37	119	674
0010	1439+67	-	1478+52	USH 141	179	707	3257
0010	1478+52	-	1481+95	USH 141	20	66	367
0010	48+39	-	49+78	24TH RD	12	27	227
0010	1481+95	-	1528+50	USH 141	224	664	4068
0010	50+28.75	-	51+57.75	26TH RD	11	24	192
0010	1528+50	-	1529+84	USH 141	18	42	330
0010	1529+84	-	1586+86	USH 141	452	1311	8215
0010	40+28.75	-	41+58.50	32ND RD	11	25	195
0010	1586+86	-	1595+35	USH 141	61	185	1100
0010	48+35	-	49+75.75	AIRPORT RD WEST	12	28	220
0010	50+24.25	-	51+64.50	AIRPORT RD EAST	12	28	218
0010	1595+35	-	1607+06	USH 141	49	193	888
				TOTALS	1910	6285 *	34700

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	455.0605 TACK COAT GAL	REMARKS
0010	1294+84	USH 141 RT	3.9	0.9	SURFACE
0010	1295+34	USH 141 RT	3.9	0.9	SURFACE
0010	1317+81	USH 141 RT	12.3	1.5	BINDER AND SURFACE
0010	1326+38	USH 141 RT	4.8	1.1	SURFACE
0010	1333+83	USH 141 RT	6.0	1.4	SURFACE
0010	1338+75	USH 141 LT	10.5	2.5	SURFACE
0010	1344+51	USH 141 RT	7.6	1.8	SURFACE
0010	1351+32	USH 141 LT	7.1	1.7	SURFACE
0010	1370+16	USH 141 RT	6.7	1.6	SURFACE
0010	1363+22	USH 141 LT	47.0	9.9	HISTORICAL MARKER
		TOTALS	110	25 *	

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 SY
0010	19+50	WEST CTH P LT	19
0010	1321+35	USH 141 RT	21
0010	1322+45	USH 141 RT	16
0010	25+87	18TH RD RT	11
0010	25+66	18TH RD LT	12
0010	1434+84	USH 141 LT	14
0010	39+14	22ND RD LT	8
0010	49+34	24TH RD RT	9
0010	49+14	24TH RD LT	11
0010	49+69	WEST AIRPORT RD RT	15
0010	49+12	WEST AIRPORT RD LT	5
0010	50+71	EAST AIRPORT RD LT	9
0010	50+88	EAST AIRPORT RD RT	13
		TOTAL	165

ASPHALTIC SURFACE

CATEGORY	LOCATION	465.0105 TON	REMARKS
0010	STH 64 RT @ CTH W	6	WIDENING FOR DETOUR
0010	STH 64 LT @ CTH W	12	WIDENING FOR DETOUR
	TOTALS	18	

ASPHALTIC SURFACE SAFETY ISLANDS

CATEGORY	STATION	-	STATION	LOCATION	465.0305 ASPHALTIC SURFACE SAFETY ISLANDS TON	REMARKS
0010	1362+84	-	1363+32	USH 141 LT	3	HISTORICAL MARKER
				TOTALS	3	

REHEATING HMA PAVEMENT LONGITUDINAL JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	460.4110.S LF
0010	1278+66.5	-	1292+80	USH 141	1414
0010	1293+46	-	1486+00	USH 141	38508
0010	1493+52	-	1577+79	USH 141	13525
0010	1486+00	-	1586+00	USH 141	16671
0010	1586+00	-	1612+11	USH 141	5222
				TOTAL	75400

3

CROSS PIPE SUMMARY

CATEGORY	STATION	LOCATION	522.0118 CPRC CLASS III 18-INCH LF	522.0124 CPRC CLASS III 24-INCH LF	522.0130 CPRC CLASS III 30-INCH LF	522.0330 CPRC CLASS IV 30-INCH LF	522.0148 CPRC CLASS III 48-INCH LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH
0010	39+45	22ND ROAD	68	-	-	-	-	1
0010	49+51	AIRPORT ROAD	70	-	-	-	-	1
0010	20+86	CTH P	-	72	-	-	-	1
0010	1342+75	USH 141	-	62	-	-	-	1
0010	40+47	32ND ROAD	-	68	-	-	-	1
0010	1577+91	USH 141	-	86	-	-	-	1
0010	1590+11	USH 141	-	76	-	-	-	1
0010	1336+65	USH 141	-	-	58	-	-	1
0010	1433+48	USH 141	-	-	-	-	66	1
0010	1453+69	USH 141	-	-	-	86	-	1
0010	1545+36	USH 141	-	-	72	-	-	1
		TOTALS	138	364	130	86	66	11

* ADDITIONAL QUANTITY SHOWN ELSEWHERE
** INCIDENTAL; FOR INFORMATION ONLY

ASPHALT CENTER LINE RUMBLE STRIP 2-LANE RURAL

CATEGORY	STATION	-	STATION	LOCATION	465.0475 LF
0010	1278+67	-	1292+86	USH 141	1419
0010	1293+71	-	1318+12	USH 141	2441
0010	1323+87	-	1383+11	USH 141	5924
0010	1387+12	-	1433+42	USH 141	4630
0010	1437+42	-	1478+00	USH 141	4058
0010	1482+00	-	1491+17	USH 141	917
0010	1495+17	-	1501+37.4	USH 141	620
0010	1518+00	-	1528+79	USH 141	1079
0010	1529+51	-	1562+84	USH 141	3333
0010	1566+85	-	1585+09.36	USH 141	1824
0010	1585+08.21	-	1589+10	USH 141	402
0010	1593+11	-	1601+13.44	USH 141	802
0010	1601+25.65	-	1611+85	USH 141	1059
				TOTAL	28510

STORM SEWER PIPE SUMMARY

CATEGORY	FROM STRUCT	TO STRUCT	INVERT ELEVATION (FT) INLET	INVERT ELEVATION (FT) DISCH	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	522.1018 AE FOR CULVERT PIPE REINFORCED CONC 18-INCH EACH	**** JOINT TIES EACH
0010	EW 54	IN 53	660.55'	659.6'	96	1	6
0010	IN 53	IN 52	659.6'	658.98'	68	-	-
0010	EW 51	IN 52	659.24'	658.98'	96	1	6
0010	IN 52	EW 50	658.98'	658.88'	40	1	6
				TOTALS	300	3 *	18

* ADDITIONAL QUANTITY SHOW ELSEWHERE
**** INCIDENTAL, FOR INFORMATION ONLY

STORM SEWER STRUCTURE SUMMARY

CATEGORY	STRUCTURE ID	STATION	LOCATION	OFFSET	611.3003 INLETS 3-FT DIAMETER EACH	611.0627 INLET COVERS TYPE HM EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	RIM/PVT ELEVATION	TOP OF STRUCTURE ELEVATION	FLOWLINE ELEVATION	DEPTH
0010	53	18+79	CTH P WEST	16.5' RT	1	1	1	663.07	662.57	659.6'	3.47
0010	52	19+52	CTH P WEST	20.8' RT	1	1	1	662.92	662.42	658.98'	3.94
				TOTALS	2	2	2				

APRON ENDWALLS FOR REINFORCED CONCRETE PIPE SUMMARY

CATEGORY	STATION	LOCATION	522.1018 AEW FOR CPRC 18-INCH EACH	522.1024 AEW FOR CPRC 24-INCH EACH	522.1030 AEW FOR CPRC 30-INCH EACH	522.1048 AEW FOR CPRC 48-INCH EACH
0010	39+45	22ND ROAD	2	-	-	-
0010	49+51	AIRPORT ROAD	2	-	-	-
0010	20+86	CTH P	-	2	-	-
0010	1342+75	USH 141	-	2	-	-
0010	40+47	32ND ROAD	-	2	-	-
0010	1577+91	USH 141	-	2	-	-
0010	1590+11	USH 141	-	2	-	-
0010	1336+65	USH 141	-	-	2	-
0010	1433+48	USH 141	-	-	-	2
0010	1453+69	USH 141	-	-	2	-
0010	1545+36	USH 141	-	-	2	-
		TOTALS	4 *	10	6	2

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

CONCRETE CURB AND GUTTER SUMMARY

CATEGORY	STATION	-	STATION	LOCATION	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	REMARKS
0010	1319+65	-	1319+94	USH 141 LT	52	52	SW CRN CTP P WEST
0010	17+70	-	19+35	CTH P RT	165	165	
0010	1320+30	-	1320+88	USH 141 LT	91	91	NW CRN CTH P WEST
0010	1321+11	-	1321+69	USH 141 RT	91	91	SE CRN CTH P EAST
0010	1322+05	-	1322+43	USH 141 RT	59	59	NE CRN CTH P EAST
0010	1362+81	-	1363+35	USH 141 LT	105	105	HISTORICAL MARKER
0010	1384+36	-	1384+94	USH 141 RT	91	91	NE CRN 18TH RD
0010	1385+29	-	1385+67	USH 141 RT	60	60	NE CRN 18TH RD
0010	1434+86	-	1435+24	USH 141 LT	59	59	SW CRN 22ND RD
0010	1435+55	-	1436+13	USH 141 LT	93	93	NW CRN 22ND RD
0010	1479+44	-	1479+82	USH 141 LT	58	58	SW CRN 24TH RD
0010	1480+19	-	1480+77	USH 141 LT	93	93	NW CRN 24TH RD
0010	1590+34	-	1590+92	USH 141 RT	93	93	SE CRN AIRPORT RD
0010	1591+28	-	1591+66	USH 141 RT	58	58	NE CRN AIRPORT RD
0010	1590+54	-	1590+92	USH 141 LT	93	93	NW CRN AIRPORT RD
0010	1591+28	-	1591+86	USH 141 LT	58	58	SW CRN AIRPORT RD
				TOTAL	1320	1320	

MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. 1491-10-71

CATEGORY	LOCATION	618.0100.02 EACH
0010	PROJECT	1
	TOTAL	1

PRIVATE ENTRANCE PIPES

CATEGORY	STATION	LOCATION	520.0124 CMCP CLASS III 24-INCH LF	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH
0010	1537+00	USH 141 LT	26	2
		TOTALS	26	2

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
0010	PROJECT	0.5
	TOTAL	0.5

STEEL PLATE BEAM GUARD

CAT	STATION	-	STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING, SHAPING, FINISHING EACH	614.2300 MGS GUARD-RAIL 3 LF	614.2330 MGS GUARD-RAIL 3 K LF	614.2340 MGS GUARD-RAIL 3 L LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARD-RAIL TERMINAL EAT EACH
0010	1291+46	-	1291+99	USH 141 RT	1	-	-	-	-	1
0010	1291+99	-	1292+74	USH 141 RT	-	75	-	-	-	-
0010	1292+74	-	1293+12	SW CRN OF B-38-82	-	-	-	-	39	-
0010	1291+83.5	-	1292+36.5	USH 141 LT	1	-	-	-	-	1
0010	1292+36.5	-	1292+74	USH 141 LT	-	37.5	-	-	-	-
0010	1292+74	-	1293+12	SE CRN OF B-38-82	-	-	-	-	39	-
0010	1293+46	-	1293+84	NE CRN OF B-38-82	-	-	-	-	39	-
0010	1293+84	-	1293+96.5	USH 141 RT	-	12.5	-	-	-	-
0010	1293+96.5	-	1294+49.5	USH 141 RT	1	-	-	-	-	1
0010	1293+46	-	1293+84	NW CRN OF B-38-82	-	-	-	-	39	-
0010	1293+84	-	1294+59	USH 141 LT	-	75	-	-	-	-
0010	1294+59	-	1295+12	USH 141 LT	1	-	-	-	-	1
0010	1351+00	-	1351+53	USH 141 RT	1	-	-	-	-	1
0010	1351+53	-	1351+90.5	USH 141 RT	-	37.5	-	-	-	-
0010	1351+90.5	-	1353+03	USH 141 RT	-	-	-	112.5	-	-
0010	1353+03	-	1353+40.5	USH 141 RT	-	37.5	-	-	-	-
0010	1353+40.5	-	1353+93.5	USH 141 RT	1	-	-	-	-	1
0010	1351+70	-	1352+23	USH 141 LT	1	-	-	-	-	1
0010	1352+23	-	1352+60.5	USH 141 LT	-	37.5	-	-	-	-
0010	1352+60.5	-	1353+73	USH 141 LT	-	-	-	112.5	-	-
0010	1353+73	-	1354+10.5	USH 141 LT	-	37.5	-	-	-	-
0010	1354+10.5	-	1354+63.5	USH 141 LT	1	-	-	-	-	1
0010	1447+20	-	1447+73	USH 141 RT	1	-	-	-	-	1
0010	1447+73	-	1456+10.5	USH 141 RT	-	-	837.5	-	-	-
0010	1456+10.5	-	1456+63.5	USH 141 RT	1	-	-	-	-	1
0010	1448+10	-	1448+63	USH 141 LT	1	-	-	-	-	1
0010	1448+63	-	1456+13	USH 141 LT	-	-	750	-	-	-
0010	1456+13	-	1456+66	USH 141 LT	1	-	-	-	-	1
0010	1527+13	-	1527+66	USH 141 RT	-	-	-	-	-	1
0010	1527+66	-	1528+28.5	USH 141 RT	-	62.5	-	-	-	-
0010	1528+28.5	-	1528+66.5	SE CRN OF C-38-0122	-	-	-	-	39	-
0010	1528+21	-	1528+74	USH 141 LT	-	-	-	-	-	1
0010	1528+74	-	1529+12	SW CRN OF C-38-0122	-	-	-	-	39	-
0010	1529+81	-	1530+19	NW CRN OF C-38-0122	-	-	-	-	39	-
0010	1530+19	-	1530+56.5	USH 141 LT	-	37.5	-	-	-	-
0010	1530+56.5	-	1531+09.5	USH 141 LT	-	-	-	-	-	1
0010	1529+23.5	-	1529+61.5	NE CRN OF C-38-0122	-	-	-	-	39	-
0010	1529+61.5	-	1529+86.5	USH 141 RT	-	25	-	-	-	-
0010	1529+86.5	-	1530+39.5	USH 141 RT	-	-	-	-	-	1
0010	1608+89.5	-	1609+42.5	USH 141 LT	1	-	-	-	-	1
0010	1609+42.5	-	1611+80	USH 141 LT	-	237.5	-	-	-	-
0010	1611+80	-	1612+18	SW CRN OF B-38-48	-	-	-	-	39	-
0010	1608+00.5	-	1608+53.5	USH 141 RT	1	-	-	-	-	1
0010	1608+53.5	-	1611+66	USH 141 RT	-	312.5	-	-	-	-
0010	1611+66	-	1612+04	SE CRN OF B-38-48	-	-	-	-	39	-
				TOTALS	14	1025	1588	225	385	18

GRADING AND SHAPING SUMMARY

STATION	-	STATION	*BORROW EXCAVATION CY	*SALVAGED TOPSOIL SY	*SEED NO. 20 LB	*FERTILIZER TYPE B CWT	*MULCHING SY
1291+46 RT	-	1291+99 RT	25	120	3.2	7.6	120
1291+83.5 LT	-	1292+36.5 LT	25	120	3.2	7.6	120
1293+96.5 RT	-	1294+49.5 RT	25	120	3.2	7.6	120
1294+59 LT	-	1295+12 LT	25	120	3.2	7.6	120
1351+00 RT	-	1351+53 RT	25	120	3.2	7.6	120
1351+70 LT	-	1352+23 LT	25	120	3.2	7.6	120
1353+40.5 RT	-	1353+93.5 RT	25	120	3.2	7.6	120
1354+10.5 LT	-	1354+63.5 LT	25	120	3.2	7.6	120
1447+20 RT	-	1447+73 RT	25	120	3.2	7.6	120
1448+10 LT	-	1448+63 LT	25	120	3.2	7.6	120
1456+10.5 RT	-	1456+63.5 RT	25	120	3.2	7.6	120
1456+13 LT	-	1456+66 LT	25	120	3.2	7.6	120
1608+00.5 RT	-	1608+53.5 RT	25	120	3.2	7.6	120
1608+89.5 LT	-	1609+42.5 LT	25	120	3.2	7.6	120

* FOR INFORMATION ONLY

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CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	627.0200 MULCHING SY
0010	1317+00	-	1319+94.5	USH 141 LT (SOUTH OF CTH P)	827	0.52	22.3	11.2	652
0010	1320+31	-	1323+25	USH 141 LT (NORTH OF CTH P)	653	0.41	17.6	8.8	528
0010	1318+56	-	1321+69	USH 141 RT (SOUTH OF CTH P)	600	0.38	16.2	8.1	386
0010	1322+04.5	-	1322+50	USH 141 LT (NORTH OF CTH P)	38	0.02	1.0	0.5	38
0010	17+70.5	-	19+30	CTH P LT (WEST)	179	0.11	4.8	2.4	47
0010	17+70.5	-	19+40	CTH P RT (WEST)	136	0.09	3.7	1.8	128
0010	20+64	-	22+39	CTH P LT (EAST)	231	0.15	6.2	3.1	52
0010	20+84	-	22+39	CTH P RT (EAST)	296	0.19	8.0	4.0	176
0010	1384+36	-	1387+00	USH 141 RT (AT 18TH ROAD)	352	0.22	9.5	4.8	352
0010	25+84	-	26+96.4	18TH ROAD RT	88	0.06	2.4	1.2	49
0010	25+64	-	26+96.4	18TH ROAD LT	106	0.07	2.9	1.4	106
0010	1433+00	-	1435+50	USH 141 RT (AT 22ND ROAD)	314	0.20	8.5	4.2	308
0010	1436+50	-	1439+41	USH 141 LT (AT 22ND ROAD)	195	0.12	5.3	2.6	6
0010	39+00	-	39+76	22ND ROAD LT	108	0.07	2.9	1.5	102
0010	39+13.75	-	39+76	22ND ROAD RT	109	0.07	2.9	1.5	103
0010	48+50	-	49+78	24TH ROAD LT	116	0.07	3.1	1.6	116
0010	49+18	-	49+75	24TH ROAD RT	57	0.04	1.5	0.8	6
0010	1486+00	-	1582+50	USH 141 LT (PASSING LANE)	4964	3.13	134.0	67.0	2571
0010	1486+50	-	1581+50	USH 141 RT (PASSING LANE)	6468	4.07	174.6	87.3	5087
0010	50+35	-	51+58	26TH ROAD RT	49	0.03	1.3	0.7	49
0010	50+35	-	51+60	26TH ROAD LT	69	0.04	1.9	0.9	69
0010	40+28.75	-	41+65	32ND ROAD RT	36	0.02	1.0	0.5	36
0010	40+35	-	41+65	32ND ROAD LT	6	0.00	0.2	0.1	6
0010	1589+00	-	1594+00	USH 141 LT (AT AIRPORT ROAD)	327	0.21	8.8	4.4	260
0010	1587+16.6	-	1590+37	USH 141 RT (AT AIRPORT ROAD)	834	0.53	22.5	11.3	816
0010	49+35	-	49+75.75	AIRPORT ROAD RT (WEST)	32	0.02	0.9	0.4	23
0010	48+50	-	49+75.75	AIRPORT ROAD LT (WEST)	106	0.07	2.9	1.4	97
0010	50+24.25	-	51+63.5	AIRPORT ROAD RT (EAST)	187	0.12	5.1	2.5	187
0010	50+24.25	-	51+50	AIRPORT ROAD LT (EAST)	103	0.06	2.8	1.4	40
0010				UNDISTRIBUTED	1760	1.11	47.5	23.8	1760
				TOTAL	19300	12	530	270	14200

SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	17+46	-	18+05	CTH P RT	59	15
0010	18+68.5	-	19+48	CTH P RT	80	20
0010	25+40	-	26+05	18TH RD RT	70	18
0010	25+52.5	-	26+42.5	18TH RD LT	77	19
0010	1385+63	-	1386+50	USH 141 RT	90	23
0010	39+13	-	39+37.5	22ND RD RT	20	5
0010	1433+78.5	-	1435+26	USH 141 RT	167	42
0010	1434+43	-	1437+97	USH 141 LT	50	13
0010	49+10	-	49+25	24TH RD LT	110	28
0010	1491+00	-	1492+50	USH 141 RT	158	40
0010	50+45	-	51+62	26TH RD RT	145	36
0010	50+55	-	51+62	26TH RD LT	118	30
0010	1493+57	-	1495+05	USH 141 RT	155	39
0010	1525+75	-	1528+79	USH 141 RT	320	80
0010	1526+40	-	1529+00	USH 141 LT	290	73
0010	1530+40	-	1531+60	USH 141 LT	150	38
0010	1531+71.5	-	1532+50	USH 141 LT	110	28
0010	1529+25	-	1532+50	USH 141 RT	345	86
0010	1587+30	-	1589+97	USH 141 RT	278	70
0010	1589+20	-	1590+45	USH 141 LT	125	31
0010	50+43	-	51+60	AIRPORT RD RT	102	26
0010	1590+08	-	1590+53	USH 141 RT	45	11
0010		-		UNDISTRIBUTED	383	96
				TOTAL	3450	860

EROSION MAT CLASS I TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	628.2004 SY	REMARKS
0010	1317+25	-	1318+40	USH 141 LT	175	DITCH LINER
0010	17+65	-	17+75	CTH P RT	8	END OF PIPE
0010	18+00	-	18+40	CTH P LT	31	DITCH LINER
0010	26+25	-	26+75	18TH RD RT	39	DITCH LINER
0010	1336+65	-		USH 141 LT & RT	12	ENDS OF PIPE
0010	1342+75	-		USH 141 LT & RT	12	ENDS OF PIPE
0010	1433+48	-		USH 141 LT & RT	12	ENDS OF PIPE
0010	39+45	-		22ND ROAD LT & RT	12	ENDS OF PIPE
0010	1436+65	-	1439+00	USH 141 LT	183	DITCH LINER
0010	1453+69	-		USH 141 LT & RT	116	
0010	49+25	-	49+60	24TH RD RT	51	DITCH LINER
0010	1559+70	-	1564+55	USH 141 LT	377	DITCH LINER
0010	1564+78	-	1567+75	USH 141 LT	231	DITCH LINER
0010	1564+40	-		USH 141 RT	8	END OF PIPE
0010	1565+28	-		USH 141 RT	8	END OF PIPE
0010	1589+97	-	1590+08	USH 141 RT	9	
0010	1590+11	-		USH 141 LT	9	END OF PIPE
0010	1590+11	-		USH 141 RT	9	END OF PIPE
0010	49+51	-		AIRPORT ROAD RT	9	END OF PIPE
0010	49+51	-		AIRPORT ROAD LT	9	END OF PIPE
0010	50+50	-	51+30	AIRPORT ROAD LT	63	DITCH LINER
0010	1592+00	-	1592+75	USH 141 LT	58	DITCH LINER
0010		-		UNDISTRIBUTED	150	
				TOTAL	1600	

MOBILIZATIONS EROSION CONTROL AND MOBILIZATIONS EMERGENCY EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
0010	1316+50	-	1595+50	PROJECT	5	6
				TOTAL	5	6

EROSION MAT URBAN CLASS I TYPE B

CATEGORY	STATION	TO	STATION	LOCATION	628.2008 SY	REMARKS
0010	1319+65	-	1319+94	USH 141 LT	40	CTH P BOC
0010	17+70	-	19+35	CTH P RT	128	CTH P BOC
0010	1320+30	-	1320+88	USH 141 LT	71	CTH P BOC
0010	1321+11	-	1321+69	USH 141 RT	71	CTH P BOC
0010	1322+05	-	1322+43	USH 141 RT	46	CTH P BOC
0010	1384+36	-	1384+94	USH 141 RT	71	18TH RD BOC
0010	1385+29	-	1385+67	USH 141 RT	47	18TH RD BOC
0010	1434+86	-	1435+24	USH 141 LT	46	22ND RD BOC
0010	1435+55	-	1436+13	USH 141 LT	72	22ND RD BOC
0010	1479+44	-	1479+82	USH 141 LT	45	24TH RD BOC
0010	1480+19	-	1480+77	USH 141 LT	72	24TH RD BOC
0010	1590+34	-	1590+92	USH 141 RT	72	AIRPORT RD BOC
0010	1591+28	-	1591+66	USH 141 RT	45	AIRPORT RD BOC
0010	1590+54	-	1590+92	USH 141 LT	72	AIRPORT RD BOC
0010	1591+28	-	1591+86	USH 141 LT	45	AIRPORT RD BOC
0010	1318+40	-	1319+50	USH 141 LT	86	DITCH BOTTOM
0010	1318+75	-	1321+31	USH 141 RT	214	DITCH BOTTOM
0010	1320+90	-	1322+50	USH 141 LT	125	DITCH BOTTOM
0010	18+60	-	19+48	CTH P LT	101	DITCH BOTTOM
0010	20+45	-	21+00	CTH P LT	93	DITCH BOTTOM
0010	20+90	-		CTH P RT	27	DITCH BOTTOM
0010	21+00	-	22+10	CTH P LT	86	DITCH BOTTOM
0010	21+00	-	22+20	CTH P RT	93	DITCH BOTTOM
0010	1524+75	-	1528+66	USH 141 RT	360	LEFT FOOT CREEK
0010	1524+50	-	1529+00	USH 141 LT	1000	LEFT FOOT CREEK
0010	1529+24	-	1536+75	USH 141 RT	1005	LEFT FOOT CREEK
0010	1529+81	-	1536+85	USH 141 LT	785	LEFT FOOT CREEK
				TOTAL	5000	

INLET PROTECTION

CATEGORY	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	REMARKS
0010	18+78.22	CTH P RT	1	1	CTH P STORM SEWER
0010	19+51.86	CTH P RT	1	1	CTH P STORM SEWER
		TOTAL	2	2	

TURBIDITY BARRIERS

CATEGORY	STATION	LOCATION	628.6005 SY	REMARKS
0010	1529+13	USH 141	94	SHORE OF LEFT FOOT CREEK
0010	1529+18	USH 141	101	SHORE OF LEFT FOOT CREEK
		TOTAL	200	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH	REMARKS
0010	19+52	CTH P WEST LT	3	
0010	20+87.6	CTH P EAST LT	6	
0010	1336+65	USH 141	10	INLET END
0010	1342+75	USH 141	6	INLET END
0010	1380+20	USH 141	10	INLET END
0010	1433+48	USH 141 LT	10	
0010	39+45	22ND RD LT	3	
0010	1453+69	USH 141 LT	10	
0010	1545+36	USH 141	10	INLET END
0010	40+47	32ND RD LT	6	
0010	1577+91	USH 141 LT	6	
0010	1590+11	USH 141 LT	6	
0010	49+51	AIRPORT ROAD WEST	3	
		TOTAL	89	

ROCK BAGS

CATEGORY	STATION	LOCATION	628.7570 EACH	REMARKS
0010		UNDISTRIBUTED	300	AS NEEDED TO ASSIST WITH EROSION CONTROL
		TOTAL	300	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF
0010	17+68	CTH P LT	8
0010	17+38	CTH P RT	8
0010	1317+25	USH 141 LT	11
0010	1317+00	USH 141 LT	11
0010	1318+75	USH 141 RT	11
0010	1322+50	USH 141 LT	11
0010	1323+00	USH 141 LT	11
0010	1323+00	USH 141 RT	11
0010	1323+50	USH 141 RT	11
0010	22+40	CTH P LT	8
0010	22+40	CTH P RT	8
0010	1384+20	USH 141 RT	11
0010	1386+50	USH 141 RT	11
0010	26+98	18TH RD RT	8
0010	26+98	18TH RD LT	8
0010	1434+00	USH 141 LT	11
0010	1434+50	USH 141 LT	11
0010	1435+00	USH 141 LT	11
		TOTAL	180

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH
0010	17+70	CTH P 23' RT	1
0010	1319+54	USH 141 49' LT	1
0010	1320+90	USH 141 50' LT	1
0010	20+87.6	CTH P 30' LT	1
0010	20+87.6	CTH P 55' RT	1
0010	1336+65	USH 141 LT & RT	2
0010	1342+75	USH 141 LT & RT	2
0010	1380+29	USH 141 LT & RT	2
0010	1433+48	USH 141 LT & RT	2
0010	1453+69	USH 141 LT & RT	2
0010	39+45	22ND RD LT & RT	2
0010	1545+36	USH 141 LT & RT	2
0010	40+47	32ND RD LT & RT	2
0010	1577+91	USH 141 LT & RT	2
0010	1590+11	USH 141 LT & RT	2
0010	49+51	AIRPORT RD LT & RT	2
		TOTAL	27

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	S. OF CTH P	R2-1	36" X 48"	12.00				1	1	1	55 MPH
2	"	W6-3	36" X 36"		9.00		1		1	1	
3	"	W5-52L	12" X 36"		3.00	1			1	1	
4	"	W5-52R	12" X 36"		3.00	1			1	1	
5	"	W5-52R	12" X 36"		3.00	1			1	1	
6	"	W5-52L	12" X 36"		3.00	1			1	1	
7	"	W14-3	48" X 36"		6.00		1		1	1	
7A	"	W6-1	36" X 36"		9.00		1		1	1	
8	"	I2-3	54" X 24"	9.00			1				BEAVER, SEE SIGN DETAIL SHEET
8A	"	J1-1	24" X 39"	6.50				1	2	1	CTH P, SEE PLAN SHEET
9	"	D1-2							1	2	
9A	"	R2-1	24" X 30"	6.00			1				55 MPH
10	"	J4-1	24" X 36"	6.00			1		2	1	SOUTH USH 141, SEE PLAN SHEET
11	"	J12-1	24" X 45"	7.50			1		2	1	CTH P, SEE PLAN SHEET
12	"	J12-2	48" X 45"	15.00			1		3	1	USH 141, CTH P, SEE PLAN SHEET
13	CTH P	R1-1	36" X 36"	7.46			1		1	1	
14	VACANT										
15	CTH P	R1-1	36" X 36"	7.46			1		1	1	
16	CTH P AT USH 141	J12-2	48" X 45"	15.00			1		3	1	USH 141, CTH P, SEE PLAN SHEET
17	N. OF CTH P	J12-1	24" X 45"	7.50			1		1	1	CTH P, SEE PLAN SHEET
18	"	J4-1	24" X 36"	6.00			1				USH 141, SEE PLAN SHEET
18A	"	W14-3	48" X 36"		6.00		1		1	1	MOUNT ON BACK OF SIGN #18
19	"	D1-2							1	2	
20	"	J1-1							2	1	
20A	"	R2-1	24" X 36"	6.00			1				55 MPH
21	"	J1-1	24" X 39"	6.50				1	2	1	JCT CTH P, SEE PLAN SHEET
22	"	D2-3	84" X 36"	21.00			1	1	1	2	WAUSAUKEE 17, PEMBINE 36, IRON MTN 51, SEE SIGN DETAIL
22A	"	I55-56	30" X 36"	7.50			1		1	1	BEAVER FOUR LEAF CLOVER 4-H CLUB, SEE PLAN SHEET
23	"	D5-67	60" X 36"	15.00			1	1	1	1	1/2 MILE
24	"	I2-3	54" X 24"	9.00		1			1	1	BEAVER, SEE SIGN DETAIL SHEET
25	"	I3-1							1	1	
26	"	I3-1							1		
27	"	W14-3	48" X 36"		6.00		1		1	1	
28	"	D5-68R	60" X 36"	15.00			1	1	1	1	
29	"	D5-68L	60" X 36"	15.00			1	1	1	1	
30	S. OF 18TH RD	D1-1	66" X 15"	6.88		1	1		1	1	18TH RD, SEE SIGN DETAIL SHEET
31	"	W14-3	48" X 36"		6.00		1		1	1	
	PAGE SUBTOTALS			207.30	54.00	6	23	7	41	34	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
32	VACANT										
33	18TH RD	R1-1	30" X 30"	5.18			1		1	1	
34	"	R1-1	30" X 30"	5.18			1		1	1	
35	N. OF 18TH RD	D5-67	60" X 36"	15.00			1	1	1	1	1/2 MILE
36	"	W1-2L							2	1	REMOVE W13-1 ALSO
37	"	W14-3	48" X 36"		6.00		1		1	1	
38	"	D1-1	66" X 15"	6.88		1	1		1	1	18TH RD, SEE SIGN DETAIL SHEET
39	"	W1-6	48" X 24"		8.00	1					
40	VACANT										
41	N. OF 18TH RD	W1-6	48" X 24"		8.00	1			1	1	
42	S. OF 22ND RD	W1-2R							2	1	REMOVE W13-1 ALSO
43	"	W14-3	48" X 36"		6.00		1		1	1	
44	"	W14-3	48" X 36"		6.00		1		1	1	
45	"	D1-1	66" X 15"	6.88		1	1		1	1	22ND RD, SEE SIGN DETAIL SHEET
46	"	I55-56	30" X 36"	7.50			1		1	1	BEAVER FOUR LEAF CLOVER 4-H CLUB, SEE PLAN SHEET
47	22ND RD	R1-1	30" X 30"	5.18			1		1	1	
48	USH 141 AT 22ND RD	W1-7	48" X 24"		8.00	1			1	1	
48A	N. OF 22ND RD	I55-56	30" X 36"	7.50			1		1	1	CRIVITZ MASONIC LODGE #218, SEE PLAN SHEET
49	"	D1-1	66" X 15"	6.88		1	1		1	1	22ND RD, SEE SIGN DETAIL SHEET
50	"	W2-2	30" X 30"		6.25		1		1	1	
51	"	S3-1	36" X 36"		9.00		1		1	1	
52	"	W14-3	48" X 36"		6.00		1		1	1	
53	"	W7-1	30" X 30"		6.25				1		MOUNT ON BACK OF SIGN #52
54	"	W14-3	48" X 36"		6.00		1		1	1	
55	S. OF 24TH RD	D1-1	66" X 15"	6.88		1	1		1	1	24TH RD, SEE SIGN DETAIL SHEET
56	"	W14-3	48" X 36"		6.00		1		1	1	
58	USH 141 AT 24TH RD	W1-7	48" X 24"		8.00	1			1	1	
58A	N. OF 24TH RD	R4-53	54" X 54"	20.25				2			
59	S. OF 26TH RD	D1-1	66" X 15"	6.88			1	1	1	1	24TH RD, SEE SIGN DETAIL SHEET
59A	"	W4-2R	36" X 36"		9.00		1				
59B	"	W4-2R	36" X 36"		9.00		1				
59C	"	W9-1R	36" X 36"		9.00		1				
60	26TH RD	R1-1	30" X 30"	5.18			1		1	1	
60A	N. OF 26TH RD	R3-72	30" X 36"	7.50				1			
61	"	J4-1	24" X 36"	6.00			1		2	1	SOUTH USH 141, SEE PLAN SHEET
62	"	J4-1	24" X 36"	6.00			1		2	1	NORTH USH 141, SEE PLAN SHEET
63	"	I3-1	54" X 24"	9.00		1			1	1	LEFT FOOT CREEK, SEE SIGN DETAIL
64	"	I3-1	54" X 24"	9.00		1			1	1	LEFT FOOT CREEK, SEE SIGN DETAIL
	PAGE SUBTOTALS			148.03	116.50	10	26	5	35	30	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE F S.F.	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	64A	N. OF 26TH RD.	R4-3	24" X 30"	5.00				1			
0010	65	S. OF E. 32ND RD.	D1-1	66" X 15"	6.88		1	1				32ND RD, SEE SIGN DETAIL SHEET
0010	65A	"	R1-1	30" X 30"	5.18			1		1	1	
0010	65B	E. 32ND RD	R1-1	30" X 30"	5.18			1		1	1	
0010	66	N. OF 32ND RD	I55-56	30" X 36"	7.50			1		1	1	CRIVITZ MASONIC LODGE #218, SEE PLAN SHEET
0010	66A	"	D1-1	66" X 15"	6.88		1	1				32ND RD, SEE SIGN DETAIL
0010	67	"	W14-3	48" X 36"		6.00		1		1	1	
0010	68	S. OF AIRPORT RD	D1-60	60" X 24"	10.00			1	1	1	2	AIRPORT RD, SEE SIGN DETAIL SHEET
0010	69	"	W2-1	30" X 30"		6.25		1		1	1	
0010	69A	"	R4-3	24" X 30"	5.00				1			
0010	70	AIRPORT RD	R1-1	30" X 30"	5.18			1		1	1	
0010	71	"	R1-1	30" X 30"	5.18			1		1	1	
0010	72	N. OF AIRPORT RD	D1-60	60" X 24"	10.00			1	1	1	2	AIRPORT RD, SEE SIGN DETAIL SHEET
0010	73	"	W2-1	30" X 30"		6.25		1		1	1	
0010	74	"	R1-1	30" X 30"	5.18			1		1	1	
0010	75	"	W14-3	48" X 36"		6.00						
0010	76	"	I3-1	54" X 24"	9.00			1	1	1	1	PESHTIGO RIVER, SEE SIGN DETAIL SHEET
		PAGE SUBTOTALS			86.15	24.50	2	14	5	12	14	
		PROJECT TOTALS			**441.47**	**195.00**	**18**	**63**	**17**	**88**	**78**	

TRAFFIC CONTROL (PROJECT) 02. 1491-10-71

CATEGORY	STATION	TO	STATION	LOCATION	643.0100.02 EACH
0010	1278+66.5	-	1612+11	PROJECT	1
				TOTAL	1

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
1	500' N OF TYPE 1 (64; ANTIGO/MARINETTE; EXIT 1 MILE) ON HWY 141 (NB)	FMS	12'-0"X5'-0"	1					60.00			SEE SIGN DETAIL
2	ACROSS FROM SIGN # 1 (MEDIAN SIDE)	FMS	12'-0"X5'-0"	1					60.00			SEE SIGN DETAIL
3	1000' N OF TYPE 1 (64; ANTIGO/MARINETTE; EXIT 1 MILE) ON HWY 141 (NB)	W20-2-A	48"x48"	1	50	50						
4	ACROSS FROM SIGN # 3 (MEDIAN SIDE)	W20-2-A	48"x48"	1	50	50						
5	1500' N OF SIGN # 3 ON HWY 141 NB	MO 4-8	36"x18"	1	50	50						
	"	MO 3-1	36"x18"	1	50	50						
	"	M1-4	36"x36"	1	50	50						141
	"	MO 5-2-R	30"x30"	1	50	50						
6	ACROSS FROM SIGN # 5 (MEDIAN SIDE)	MO 4-8	36"x18"	1	50	50						
	"	MO 3-1	36"x18"	1	50	50						
	"	M1-4	36"x36"	1	50	50						141
	"	MO 5-2-R	30"x30"	1	50	50						
7	1500' N OF SIGN # 5 ON HWY 141 NB	MO 4-8	36"x18"	1	50	50						
	"	MO 3-1	36"x18"	1	50	50						
	"	M1-4	36"x36"	1	50	50						141
	"	MO 5-2-R	30"x30"	1	50	50						
8	ACROSS FROM SIGN # 7 (MEDIAN SIDE)	MO 4-8	36"x18"	1	50	50						
	"	MO 3-1	36"x18"	1	50	50						
	"	M1-4	36"x36"	1	50	50						141
	"	MO 5-2-R	30"x30"	1	50	50						
9	LT OF TYPE 1 (64; ANTIGO/MARINETTE; EXIT TILT RIGHT ONLY) ON HWY 141 (NB)	MO 4-8	36"x18"	1	50	50						
	"	MO 3-1	36"x18"	1	50	50						
	"	M1-4	36"x36"	1	50	50						141
	"	MO 6-2	30"x30"	1	50	50						RIGHT
10	LT OF W 2-6 (ROUND-A-BOUT AHEAD) ON NB OFF-RAMP TO HWY 64	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 5-1-R	21"x21"	1	50	50						
11	100' S OF R1-2 (YIELD) ON NB OFF-RAMP @ HWY 64 EAST RAB	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-2	21"x21"	1	50	50						RIGHT
12	MODIFY D2-2 (TILT LT 141 NORTH; 64 EAST TILT RT)	MO 4-8	24"x12"	1	50	50						ABOVE NORTH-141
	"	MO 3-1	EXISTING									
	"	M1-4	EXISTING									141
	"	MO 6-2	21"x21"	1	50	50						RIGHT - PLACE OVER EXISTING
	GAP IN SIGN NUMBERING (13)											
14	100' E OF D4-5 (PARK & RIDE) SIGN ON HWY 64 (EB)	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	WO 20-2-A	48"x48"	1	50	50						
		PAGE TOTAL		37		1,750	0	0	120	0	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
15	D 1-1 (NORTH-141-TILT RT)									1		NORTH 141 TILT RT
16	ACROSS FROM SIGN # 15 (RIGHT SIDE)	R 11-3-B	60"x30"	1	50	50	50	100				5 1/2 MILES
17	LT OF J4-1 ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
18	D 1-62 ROUND-A-BOUT AHEAD (S-141/W-64, AHEAD; N-141-IRON MOUNTIAN)									1		NORTH-141-IRON MOUNTIAN
19	MODIFY J1-2 (JCT 141; JCT BUS 141)	MO 4-8-A	24"x18"	1	50	50						
	"	M1-4	EXISTING									141
20	200' W OF CTY Q INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
21	200' E OF CTY Q INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
22	200' W OF AUGUSTINE RD INTERSECTION ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
23	200' E OF AUGUSTINE RD INTERSECTION ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
24	LT OF J1-1 (JCT W) ON HWY 64 (EB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 5-1-L	21"x21"	1	50	50						
25	LT OF J4-1 (W-64) ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
26	LT OF J13-1 (W-LT & RT) ON HWY 64 (EB) (NEAR RT)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						LEFT
27	BACKSIDE OF J13-1 (W-LT & RT) ON HWY 64 (WB) (FAR LT - FACING EB TRAFFIC)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						LEFT
		PAGE TOTAL		38		1,900	50	100	0	2	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
28	LT OF J13-1 (W-LT & RT) ON HWY 64 (WB) (NEAR RT)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						RIGHT
29	LT OF J1-1 (JCT W) ON HWY 64 (WB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 5-1-R	21"x21"	1	50	50						
30	500' E OF SIGN # 29 ON HWY 64 (WB)	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	WO 20-2-A	48"x48"	1	50	50						
31	LT OF J4-2 (W-AH; 64-LT & RT) ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						RIGHT
32	200' N OF SIGN # 31 ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						RIGHT
33	200' N OF HWY 64 INTERSECTION ON CTY W (NB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
34	500' N OF SIGN # 32 ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 5-1-R	21"x21"	1	50	50						
35	200' S OF CTY P INTERSECTION ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
36	200' N OF CTY P INTERSECTION ON CTY W (NB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
37	200' S OF BEECH RD INTERSECTION ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
38	200' N OF BEECH RD INTERSECTION ON CTY W (NB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
		PAGE TOTAL		43		2,150	0	0	0	0	0	

TRAFFIC CONTROL DETOUR SIGNS AND COVERING SIGNS CONT'D

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 50 DAYS	643.3000 DETOUR SIGNS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.1000 SIGNS FIXED MESSAGE S.F.	643.0920 COVERING SIGNS TYPE II EACH	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	REMARKS
39	200' S OF LOOMIS RD INTERSECTION ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
40	200' N OF LOOMIS RD INTERSECTION ON CTY W (NB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
41	200' S OF CTY G INTERSECTION ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
42	200' N OF CTY G INTERSECTION ON CTY W (NB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
43	200' S OF CTY GG INTERSECTION ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
44	200' N OF CTY GG INTERSECTION ON CTY W (NB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-1	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
45	MODIFY J1-1 (JCT 141) ON CTY W (NB)	MO 4-8-A	24"x18"	1	50	50						
	"	M1-4	EXISTING									141
46	200' S OF HWY 141 INTERSECTION ON CTY W (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						AHEAD
47	MODIFY J4-3 (A-AH; W-AH; 141- LT & RT)	M1-4	EXISTING									141
	"	MO 6-1	21"x21"	1	50	50						RIGHT
48	SW QUAD OF HWY 141 & CTY W INTERSECTION	R 11-3-B	60"x30"	1	50	50	50	100				3 1/4 MILES
49	BELOW SIGN # 48	MO 4-9-L	30"x24"	1	50	50						
50	LT OF J13-2 (W-LT & RT; A-RT) ON HWY 141 (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 6-1	21"x21"	1	50	50						LEFT
51	LT OF J1-1 (JCT W) ON HWY 141 (SB)	MO 4-8	24"x12"	1	50	50						
	"	MO 3-3	24"x12"	1	50	50						
	"	M1-4	24"x24"	1	50	50						141
	"	MO 5-1-L	21"x21"	1	50	50						
52	500' N OF SIG N# 51 ON HWY 141 (SB)	WO 20-2-A	48"x48"	1	50	50						
53	ACROSS FROM SIGN # 52 (FACING SB TRAFFIC)	WO 20-2-A	48"x48"	1	50	50						
54	NE QUAD OF HWY 141 & CTY P INTERSECTION	R 11-3-B	60"x30"	1	50	50	50	100				3 1/2 MILES
55	FIELD LOCATED - SB TRAFFIC			1							7	
56	FILED LOCATED - NB TRAFFIC			1							7	
		PAGE TOTAL		45		1,950	100	200	0	0	14	
		GRAND TOTAL		163		7,750	150 *	300 *	120	2	14	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

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TRAFFIC CONTROL BARRICADES TYPE III

CATEGORY	LOCATION	BARRICADES	PROJECT DURATION	643.0420 DAY	REMARKS
0010	SIDE ROADS	18	21	378	SEE TRAFFIC CONTROL DETAIL
0010	LEFT FOOT CREEK (C-38-122)	14	50	700	
		TOTAL		1078 *	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

TRAFFIC CONTROL WARNING LIGHTS TYPE A

CATEGORY	LOCATION	LIGHTS	PROJECT DURATION	643.0705 DAY	REMARKS
0010	SIDE ROADS	36	21	756	SEE TRAFFIC CONTROL DETAIL
0010	LEFT FOOT CREEK (C-38-122)	16	50	800	
		TOTAL		1556 *	

* ADDITIONAL QUANTITIES ARE SHOWN ELSEWHERE

TRAFFIC CONTROL SIGNS

CATEGORY	LOCATION	SIGNS	PROJECT DURATION	643.0900 DAY	REMARKS
0010	SOUTH PROJECT END	5	30	150	
0010	NORTH PROJECT END	5	30	150	
0010	2 MILES INTO WORK NB	1	30	30	ROAD WORK NEXT X MILES
0010	4 MILES INTO WORK NB	1	30	30	ROAD WORK NEXT X MILES
0010	2 MILES INTO WORK SB	1	30	30	ROAD WORK NEXT X MILES
0010	4 MILES INTO WORK SB	1	30	30	ROAD WORK NEXT X MILES
0010	CTH P (WEST)	2	80	160	ADVANCED WARNING SIGNS
0010	CTH P (EAST)	2	80	160	ADVANCED WARNING SIGNS
0010	18TH ROAD	2	80	160	ADVANCED WARNING SIGNS
0010	22ND ROAD	2	80	160	ADVANCED WARNING SIGNS
0010	24TH ROAD	2	80	160	ADVANCED WARNING SIGNS
0010	26TH ROAD	2	80	160	ADVANCED WARNING SIGNS
0010	LEFT FOOT CREEK (C-38-122)	2	50	100	BRIDGE OUT
0010	32ND ROAD	2	80	160	ADVANCED WARNING SIGNS
0010	AIRPORT ROAD (WEST)	2	80	160	ADVANCED WARNING SIGNS
0010	AIRPORT ROAD (EAST)	2	80	160	ADVANCED WARNING SIGNS
0010	SOUTH END OF SHIFT	2	80	160	TRAFFIC SHIFT
0010	NORTH END OF SHIFT	2	80	160	TRAFFIC SHIFT
0010	SIDE ROADS	9	21	189	SIGN R11-2L, SEE TRAFFIC CONTROL DETAIL
		TOTAL		2469	

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LOCATING NO-PASSING ZONES

CATEGORY	STATION	-	STATION	LOCATION	648.0100 MI
0010	1278+66	-	1612+11	USH 141	5.99
				TOTAL	5.99

TRAFFIC CONTROL DETOUR (PROJECT) 01. 1491-10-71

CATEGORY	LOCATION	643.2000 EACH
0010	PROJECT	1
	TOTAL	1

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	646.0406 EPOXY YELLOW SAME DAY 4-INCH LF	646.0106 EPOXY WHITE 4-INCH LF	649.0100 TEMPORARY PAVEMENT MARKING 4-INCH LF
0010	1292+86	-	1293+71	USH 141 LT	-	85	-
0010	1292+86	-	1293+71	USH 141 RT	-	85	-
0010	1528+79	-	1529+51	USH 141 LT	-	72	-
0010	1528+79	-	1529+51	USH 141 RT	-	72	-
0010	1611+85	-	1613+00	USH 141 LT	-	115	-
0010	1611+85	-	1613+00	USH 141 RT	-	115	-
0010	1278+66.5	-	1612+11	USH 141	39800	-	39800
0010	17+50	-	19+52	CTH P WEST	404	166	808
0010	20+50	-	22+60	CTH P EAST	420	372	840
				SUBTOTAL	40624	1082	41448
				TOTALS	40700	1100	41500

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

CATEGORY	LOCATION	647.0566 LF
0010	STH 64 / CTH W	23
	TOTAL	23

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010				PROJECT	-	-	-	1	-
0010	1278+50	-	1317+60	USH 141	-	-	3910	-	-
0010	1317+60	-	1325+40	USH 141	780	780	-	-	780
0010	17+71	-	19+74.5	CTH P WEST	204	204	-	-	204
0010	20+24	-	22+39	CTH P EAST	215	215	-	-	215
0010	1325+40	-	1380+84	USH 141	-	-	5544	-	-
0010	1380+84	-	1386+68	USH 141	584	584	-	-	584
0010	25+24	-	26+96.4	18TH RD	172	172	-	-	172
0010	1386+68	-	1432+92	USH 141	-	-	4624	-	-
0010	1432+92	-	1439+66.5	USH 141	675	675	-	-	675
0010	38+49	-	39+76	22ND RD	127	127	-	-	127
0010	1439+66.5		1478+52	USH 141	-	-	3886	-	-
0010	1478+52	-	1481+95	USH 141	343	343	-	-	343
0010	48+39	-	49+78	24TH RD	139	139	-	-	139
0010	1486+50	-	1584+56	USH 141	9806	9806	-	-	9806
0010	50+28.75	-	51+57.75	26TH RD	129	129	-	-	129
0010	40+28.75	-	41+58.50	32ND RD	130	130	-	-	130
0010	1584+56	-	1586+85	USH 141	-	-	229	-	-
0010	1586+85	-	1595+34.5	USH 141	850	850	-	-	850
0010	48+36	-	49+75.75	AIRPORT RD WEST	140	140	-	-	140
0010	50+24.5	-	51+63.5	AIRPORT RD EAST	139	139	-	-	139
0010	1595+34.5	-	1612+11	USH 141	-	-	1677	-	-
				TOTALS	14450	14450	19900	1	14450

SPECIAL 03. PAVEMENT MARKING GROOVED WET REFLECTIVE EPOXY 8-INCH

CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.03 LF
0010	1318+11	-	1321+11	USH 141 RT	300
0010	1320+88	-	1323+88	USH 141 LT	300
0010	1381+36	-	1384+36	USH 141 RT	300
0010	1436+13	-	1439+13	USH 141 LT	300
0010	1587+38	-	1590+38	USH 141 RT	300
0010	1591+73	-	1594+73	USH 141 LT	300
				TOTAL	1800

SPECIAL 02. PAVEMENT MARKING GROOVED WET REFLECTIVE 4-INCH

CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.02 LF	REMARKS
0010	1278+67	-	1292+86	USH 141 LT	1419	EDGELINE
0010	1288+00	-	1292+86	USH 141 RT	486	EDGELINE
0010	1293+71	-	1319+65	USH 141 LT	2594	EDGELINE
0010	1293+71	-	1321+11	USH 141 RT	2740	EDGELINE
0010	1320+88	-	1434+84	USH 141 LT	11396	EDGELINE
0010	1322+42	-	1384+36	USH 141 RT	6194	EDGELINE
0010	1385+66	-	1490+96	USH 141 RT	10530	EDGELINE
0010	1490+96	-	1492+46	USH 141 RT	39	3' SKIPS
0010	1436+13	-	1479+44	USH 141 LT	4331	EDGELINE
0010	1480+74	-	1482+24	USH 141 LT	39	3' SKIPS
0010	1482+24	-	1501+37	USH 141 LT	1913	EDGELINE
0010	1518+00	-	1528+79	USH 141 LT	1079	EDGELINE
0010	1493+74	-	1501+37	USH 141 RT	763	EDGELINE
0010	1518+00	-	1528+79	USH 141 RT	1079	EDGELINE
0010	1486+52		1493+52	USH 141 LT	174	3' SKIPS
0010	1493+52	-	1501+37	USH 141 LT	200	12.5' SKIPS
0010	1518+00	-	1528+79	USH 141 LT	263	12.5' SKIPS
0010	1529+51	-	1590+53	USH 141 LT	6102	EDGELINE
0010	1529+51	-	1562+64	USH 141 RT	3313	EDGELINE
0010	1529+51	-	1577+55	USH 141 LT	1200	12.5' SKIPS
0010	1577+55		1584+55	USH 141 LT	174	3' SKIPS
0010	1562+64	-	1564+14	USH 141 RT	39	3' SKIPS
0010	1565+43	-	1590+38	USH 141 RT	2495	EDGELINE
0010	1591+73	-	1611+85	USH 141 LT	2012	EDGELINE
0010	1591+57	-	1611+85	USH 141 RT	2028	EDGELINE
				TOTAL	62650	

PAVEMENT MARKING PAINT 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.0103 LF	REMARKS
0010	1486+52		1493+52	USH 141 LT	174	3' SKIPS
0010	1493+52	-	1501+37	USH 141 LT	200	12.5' SKIPS
0010	1518+00	-	1528+79	USH 141 LT	263	12.5' SKIPS
0010	1529+51	-	1577+55	USH 141 LT	1200	12.5' SKIPS
0010	1577+55		1584+55	USH 141 LT	174	3' SKIPS
				TOTAL	2010	

SPECIAL 01. 4-INCH EPOXY YELLOW

CATEGORY	STATION	-	STATION	LOCATION	SPV.0090.01 LF
0010	1278+67	-	1292+86	USH 141	2838
0010	1293+71	-	1318+12	USH 141	3732
0010	1323+87	-	1383+11	USH 141	3988
0010	1387+12	-	1433+42	USH 141	4617
0010	1437+42	-	1478+00	USH 141	5608
0010	1482+00	-	1491+17	USH 141	691
0010	1495+17	-	1501+37	USH 141	770
0010	1518+00	-	1528+79	USH 141	1342
0010	1529+51	-	1562+84	USH 141	4158
0010	1566+85	-	1585+09	USH 141	1768
0010	1585+08	-	1589+10	USH 141	804
0010	1593+11	-	1601+13	USH 141	1319
0010	1601+26	-	1611+85	USH 141	1237
				TOTAL	32900

TEMPORARY PAVEMENT MARKING REMOVEABLE TAPE 4-INCH

649.0400

CATEGORY	STATION	-	STATION	LOCATION	LF	REMARKS
0010	1313+06	-	1326+97	USH 141 LT	2782	DOUBLE YELLOW, SHIFT LEFT
0010	1315+26	-	1319+26	USH 141 LT	400	WHITE EDGELINE, SHIFT LEFT
0010	1315+26	-	1324+77	USH 141	1248	BLACK OUT EXIST CENTERLINE
0010	1315+26	-	1319+26	USH 141 LT	400	BLACK OUT EXIST EDGELINE
0010	1315+26	-	1318+76	USH 141 RT	350	WHITE EDGELINE, SHIFT LEFT
0010	1324+77	-	1326+75	USH 141	50	BLACK OUT EXIST CENTERLINE
0010	1313+06	-	1328+75	USH 141 RT	3138	DOUBLE YELLOW, SHIFT RIGHT
0010	1376+29	-	1390+23	USH 141 LT	2788	DOUBLE YELLOW, SHIFT LEFT
0010	1378+49	-	1388+03	USH 141 LT	954	WHITE EDGELINE, SHIFT LEFT
0010	1378+49	-	1388+03	USH 141	488	BLACK OUT EXIST CENTERLINE
0010	1378+49	-	1388+03	USH 141 LT	954	BLACK OUT EXIST EDGELINE
0010	1428+84	-	1441+48	USH 141 LT	2528	DOUBLE YELLOW, SHIFT LEFT
0010	1431+04	-	1439+28	USH 141 LT	665	WHITE EDGELINE, SHIFT LEFT
0010	1431+04	-	1439+28	USH 141	665	BLACK OUT EXIST EDGELINE
0010	1431+04	-	1439+28	USH 141	1024	BLACK OUT EXIST CENTERLINE
0010	1431+04	-	1439+28	USH 141 RT	665	WHITE EDGELINE, SHIFT LEFT
0010	1428+84	-	1444+18	USH 141 RT	3068	DOUBLE YELLOW, SHIFT RIGHT
0010	1439+28	-	1441+98	USH 141	333	BLACK OUT EXIST CENTERLINE
0010	1430+00	-	1439+60	USH 141 RT	960	WHITE EDGELINE, SHIFT RIGHT
0010	1474+86	-	1485+82	USH 141 RT	2192	DOUBLE YELLOW, SHIFT RIGHT
0010	1477+06	-	1483+62	USH 141 RT	656	WHITE EDGELINE, SHIFT RIGHT
0010	1477+06	-	1483+62	USH 141	307	BLACK OUT EXIST CENTERLINE
0010	1477+06	-	1483+62	USH 141 RT	656	BLACK OUT EXIST EDGELINE
0010	1482+95	-	1528+50	USH 141 RT	9110	DOUBLE YELLOW, SHIFT RIGHT
0010	1485+16	-	1528+50	USH 141 RT	4334	WHITE EDGELINE, SHIFT RIGHT
0010	1485+16	-	1528+50	USH 141	1075	BLACK OUT EXIST CENTERLINE
0010	1485+16	-	1528+50	USH 141 RT	4334	BLACK OUT EXIST EDGELINE
0010	1485+16	-	1528+50	USH 141 LT	4334	WHITE EDGELINE, SHIFT RIGHT
0010	1482+95	-	1528+50	USH 141 LT	9110	DOUBLE YELLOW, SHIFT LEFT
0010	1485+16	-	1528+50	USH 141 RT	4334	WHITE EDGELINE, SHIFT LEFT
0010	1485+16	-	1528+50	USH 141 LT	4334	WHITE EDGELINE, SHIFT LEFT
0010	1529+84	-	1599+78	USH 141 RT	13988	DOUBLE YELLOW, SHIFT RIGHT
0010	1529+84	-	1597+58	USH 141 RT	6774	WHITE EDGELINE, SHIFT RIGHT
0010	1529+84	-	1597+58	USH 141 LT	6774	WHITE EDGELINE, SHIFT RIGHT
0010	1529+84	-	1597+58	USH 141	3828	BLACK OUT EXIST CENTERLINE
0010	1529+84	-	1597+58	USH 141 RT	6774	BLACK OUT EXIST EDGELINE
0010	1529+84	-	1599+78	USH 141 LT	13988	DOUBLE YELLOW, SHIFT LEFT
0010	1529+84	-	1597+58	USH 141 RT	6774	WHITE EDGELINE, SHIFT LEFT
0010	1529+84	-	1597+58	USH 141 RT	6774	WHITE EDGELINE, SHIFT LEFT
				TOTAL	127150	

3

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF	REMARKS
0010	1278+66.5	-		USH 141	27	PROJECT LIMITS
0010	1278+66.5	-	1291+65	USH 141 LT	1304	SHOULDER PREPARATION
0010	1278+66.5	-	1287+60	USH 141 RT	896	
0010	1287+60	-	1291+15	USH 141 RT	365	SHOULDER PREPARATION
0010	1293+46.06			USH 141	44	SB BEAVER CREEK STRUCT
0010	1317+60	-		USH 141 RT	3	
0010	1317+81			USH 141 RT	24	P.E.
0010	1323+45	-		USH 141 RT	3	
0010	22+40	-		CTH P EAST	22	PROJECT LIMITS
0010	17+70	-		CTH P WEST	22	PROJECT LIMITS
0010	1318+56	-		USH 141 LT	3	
0010	1325+40	-		USH 141 LT	3	
0010	1362+38	-	1361+57	USH 141 LT	30	HISTORICAL MARKER
0010	1362+80	-	1363+36	USH 141 LT	76	HISTORICAL MARKER
0010	1379+84	-		USH 141 RT	3	
0010	1386+68	-		USH 141 RT	3	
0010	26+96.5	-		18TH RD	18	PROJECT LIMITS
0010	38+55	-		22ND RD	22	PROJECT LIMITS
0010	1432+39			USH 141 RT	3	
0010	1437+93			USH 141 RT	3	
0010	1433+85	-		USH 141 LT	3	
0010	1440+63	-		USH 141 LT	3	
0010	48+38	-		24TH RD	19	PROJECT LIMITS
0010	1478+41	-		USH 141 LT	3	
0010	1482+27	-		USH 141 LT	3	
0010	1486+50.5	-		USH 141 LT	3	
0010	1486+50.5	-		USH 141 RT	3	
0010	1528+50	-		USH 141 LT	10	
0010	1528+50	-		USH 141 RT	10	
0010	1529+84	-		USH 141 LT	10	
0010	1529+84	-		USH 141 RT	10	
0010	1584+57	-		USH 141 LT	3	
0010	1584+57	-		USH 141 RT	3	
0010	1585+86	-		USH 141 RT	3	
0010	1592+57	-		USH 141 RT	3	
0010	1589+53	-		USH 141 LT	3	
0010	1596+23	-		USH 141 LT	3	
0010	51+64	-		AIRPORT RD	20	PROJECT LIMITS
0010	48+36	-		AIRPORT RD	20	PROJECT LIMITS
0010	1612+11	-		USH 141	44	PROJECT LIMITS
0010	1336+55	-		USH 141	6	
0010	1336+75	-		USH 141	6	
0010	1342+65	-		USH 141	6	
0010	1342+85	-		USH 141	6	
0010	1433+38	-		USH 141	6	
0010	1433+58	-		USH 141	6	
0010	1453+49	-		USH 141	6	
0010	1453+89	-		USH 141	6	
0010	1432+90	-		USH 141 RT	3	
0010	1437+95	-		USH 141 RT	3	
				TOTAL	3110	

3

SAWING CONCRETE

CATEGORY	STATION	TO	STATION	LOCATION	690.0250 LF	REMARKS
0010	1316+60	-	1323+42	USH 141 10' RT	686	
0010	1318+65	-	1325+38	USH 141 10' LT	677	
0010	1379+85	-	1386+66	USH 141 10' RT	685	
0010	1433+85	-	1440+63	USH 141 10' LT	683	
0010	1432+39	-	1437+93	USH 141 10' RT	534	
0010	1478+41	-	1482+27	USH 141 10' LT	390	
0010	1486+50.5	-	1528+50	USH 141 10' LT	2541	
0010	1486+50.5	-	1528+50	USH 141 10' RT	2541	
0010	1529+84	-	1584+57	USH 141 10' LT	5477	
0010	1529+84	-	1584+57	USH 141 10' RT	5477	
0010	1528+50	-		USH 141	20	
0010	1529+84	-		USH 141	20	
0010	1585+86	-	1592+57	USH 141 10' RT	675	
0010	1589+53	-	1596+23	USH 141 10' LT	674	
0010	1336+55	-		USH 141	24	
0010	1336+75	-		USH 141	24	
0010	1342+65	-		USH 141	24	
0010	1342+85	-		USH 141	24	
0010	1433+38	-		USH 141	22	
0010	1433+58	-		USH 141	22	
0010	1453+49	-		USH 141	24	
0010	1453+89	-		USH 141	24	
0010	1545+26	-		USH 141	20	
0010	1545+46	-		USH 141	20	
0010	1577+76	-		USH 141	20	
0010	1578+06	-		USH 141	20	
0010	1590+01	-		USH 141	20	
0010	1590+21	-		USH 141	20	
0010	1432+90	-	1437+95	USH 141 RT	509	
				TOTAL	21900	

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.01

PART OF UNPLATTED LANDS IN THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4, SECTION 15 AND PART OF UNPLATTED LANDS IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, SECTION 22, ALL LOCATED WITHIN THE T31N-R20E, TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN.

THE SE 1/4 - SW 1/4 OF SECTION 15 AND THE NE 1/4 - NW 1/4 OF SECTION 22, TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	ACCESS RIGHTS	AR
ACRES	AC	CHORD BEARING	CH BRG
CHORD DISTANCE	CH DIS	DEED	DD
DOCUMENT	DOC	EAST BOUND	EB
GAS VALVE	GV	INLET	IN
LENGTH OF CURVE	L	MANHOLE	MH
MONUMENT	MON	NORTH BOUND	NB
PAGE	PG	PERMANENT	PERM
PERMANENT LIMITED EASEMENT	PLE	PRIVATE DRIVEWAY	PD
PROPERTY LINE	PL	RADIUS	RAD
REFERENCE LINE	R	REMAINING	REM
RIGHT OF WAY	R/W	SECTION	SEC
SECTION LINE	SL	FOUND IRON PIPE	FIP
STATION	STA	TEMPORARY LIMITED EASEMENT	TLE
TIE POINT	TIE	VOLUME	VOL
ADJOINING LANDS		WITH SAME OWNER	
PARALLEL TO LINE		BUILDING TO BE RAZED	
FEE ACQUISITION	VARIOUS WIDTHS		

SECTION CORNER (MATERIAL AS NOTED)
SET R/W MONUMENT W/CAP 1-1/4" OUTSIDE DIA. x 18" IRON PIPE 1.13 LBS/FT
SET P.K. NAIL
PROPOSED R/W
BOUNDARY POINT
CORPORATE LIMITS
EXISTING R/W
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
PROPOSED OR NEW R/W LINE
PROPOSED EASEMENT LINE
PARCEL NUMBER
UTILITY PARCEL NUMBER
PROPERTY LINE
LOT, TIE AND OTHER MINOR DASHED LINES
ACCESS CONTROL (By Previous Acquisition or Covenant)
NO ACCESS (By Acquisition)
NO ACCESS (By Statutory Authority)
LIMITED EASEMENT (Temporary or Permanent)

BURIED FIBER OPTICS CABLE — FO
BURIED TELEPHONE CABLE — T
BURIED GAS LINE — G
STORM SEWER LINE — SAN
BURIED WATER LINE — W
BURIED ELECTRIC LINE — E
OVERHEAD ELECTRIC LINE — OH

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	♦	◇
TELEPHONE POLE	✱	✱
SIGN	▮	▮
TELEPHONE PEDESTAL	▪	▫

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, ZONE (NAD), NAD OF 1983 (1991) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECTS: 1490-14-22, 1490-18-21, 1490-19-22, 1494-05-21, 3418 1226-18-OF/3418-01, 3512 & COUNTY MAPS

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECTS: 1490-02-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

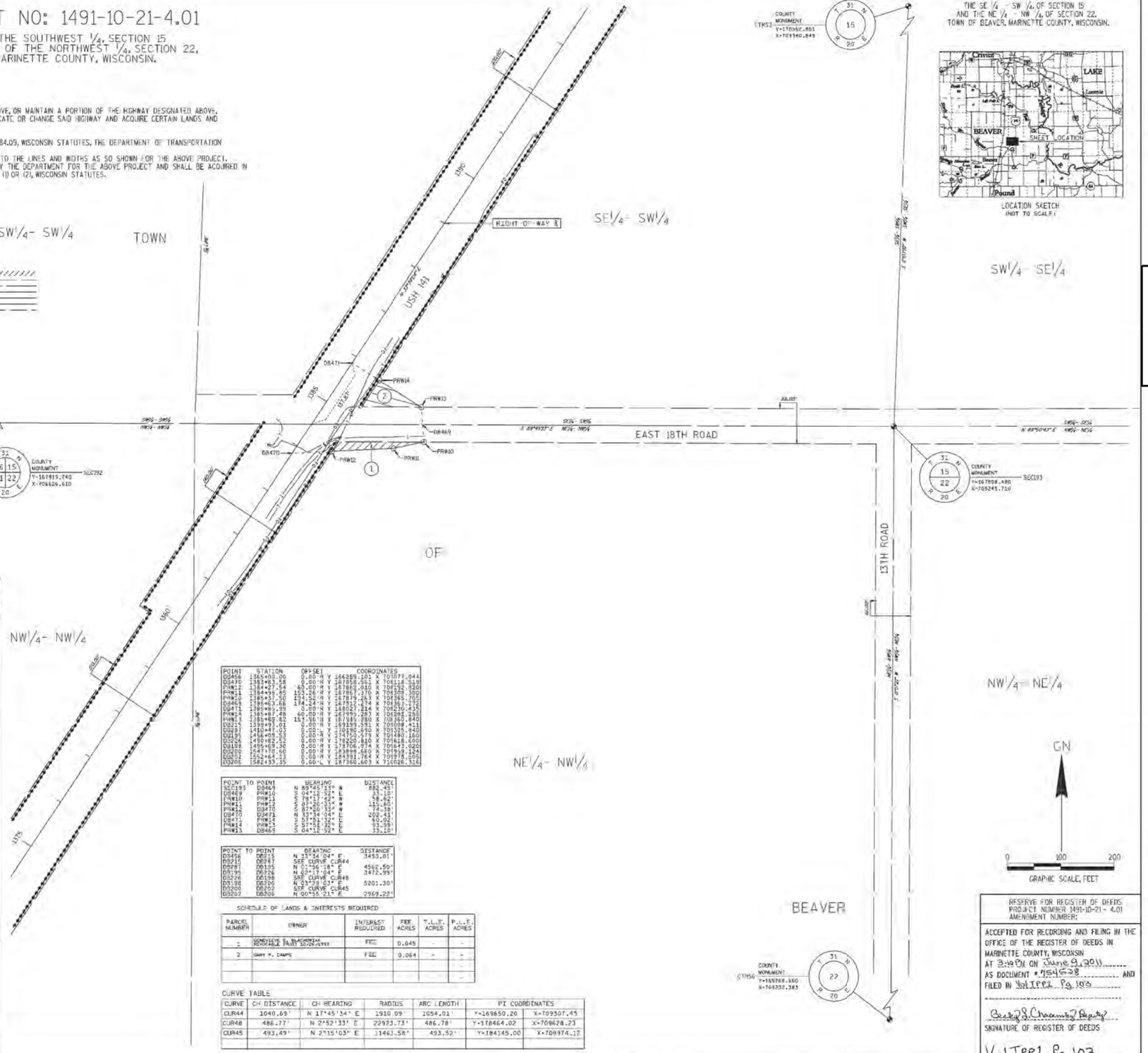
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

THEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL — PRINTED NAME — SIGNATURE — 05/24/2011 DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK — PRINTED NAME — SIGNATURE — 05/24/2011 DATE



POINT	STATION	OFFSET	COORDINATES
D8466	1365+00.00	0.00' RT	Y 166269.101 X 707079.044
D8470	1383+83.58	0.00' RT	Y 167858.061 X 706116.518
PRW12	1384+27.54	60.00' RT	Y 167862.010 X 709292.826
PRW11	1384+39.80	153.26' RT	Y 167867.370 X 706309.300
PRW10	1385+33.50	173.52' RT	Y 167879.263 X 706365.705
D8469	1385+63.66	174.24' RT	Y 167912.274 X 706362.572
D8471	1385+87.99	0.00' RT	Y 168021.214 X 706236.435
PRW14	1385+87.98	60.00' RT	Y 167990.283 X 706865.255
PRW13	1385+88.82	153.16' RT	Y 167985.280 X 708360.840
D8215	1390+91.01	0.00' RT	Y 169259.581 X 709098.411
D8287	1410+47.03	0.00' LT	Y 170190.690 X 705335.940
D8195	1456+05.53	0.00' RT	Y 174750.579 X 701480.160
D8226	1490+82.52	0.00' RT	Y 178520.810 X 705618.600
D8198	1495+69.36	0.00' RT	Y 178706.974 X 709847.060
D8200	1547+10.60	0.00' RT	Y 183898.660 X 709959.124
D8202	1552+64.23	0.00' RT	Y 184391.764 X 709978.205
D8206	1582+33.35	0.00' LT	Y 187360.603 X 710026.316

POINT TO POINT		BEARING	DISTANCE
SEE193	D8460	N 89°45'19" W	882.45'
D8469	PRW10	S 04°18'52" E	33.18'
PRW10	PRW11	S 78°17'42" W	58.62'
PRW11	PRW12	S 87°20'33" W	151.60'
PRW12	D8470	S 87°20'33" W	74.38'
D8470	D8471	N 13°34'04" E	202.41'
D8471	PRW14	S 57°51'32" E	60.92'
PRW14	PRW13	S 57°51'32" E	93.59'
PRW13	D8468	S 04°18'52" E	33.18'

POINT TO POINT		BEARING	DISTANCE
D8456	D8215	N 13°34'04" E	3483.81'
D8215	D8287	SEE CURVE CUR44	
D8287	D8195	N 0°36'08" E	4562.59'
D8195	D8226	N 62°17'04" E	3472.99'
D8226	D8198	SEE CURVE CUR48	
D8198	D8200	N 03°38'03" E	5201.30'
D8200	D8202	SEE CURVE CUR45	
D8202	D8206	N 90°55'21" E	2969.22'

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
1	SCHUSTER Tr. By AGREEMENT DATED 12/28/1993	FEE	0.045	-	-
2	GARY M. CAMPS	FEE	0.064	-	-
					-
					-

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES	
CUR44	1040.69'	N 17°45'34" E	1910.09'	1054.01'	Y=169650.20	X=709307.45
CUR48	486.77'	N 2°52'33" E	22923.73'	486.78'	Y=178464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11461.58'	493.52'	Y=184145.00	X=709974.12

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21 - 4.01
AMENDMENT NUMBER:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN
AT 3:18 PM ON June 9, 2011
AS DOCUMENT # 754538 AND FILED IN Vol 1PP1 Pg 103

Beverly S. Cravenay Deputy
SIGNATURE OF REGISTER OF DEEDS

Vol 1PP1 Pg. 103

FILE NAME : C:\users\P\D3\149109A\dgn\1491001\040101_~w.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 23-MAY-2011 09:03 PLOT BY : $$...plotuser...$$ PLOT NAME : D3 PLOT SCALE = 100.000000:1.000000

4.

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.02

PART OF UNPLATTED LANDS IN THE NORTHEAST 1/4 OF THE NORTHWEST 1/4, SECTION 15, T31N-R20E, LOCATED WITHIN THE TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP (1-1/4" OUTSIDE DIA.x18" IRON PIPE 1.13 LBS/FT)	○
ACRES	AC	SET P.K. NAIL	△
CHORD BEARING	CH BRG	PROPOSED R/W BOUNDARY POINT	PRWPOINT
CHORD DISTANCE	CH DIS	CORPORATE LIMITS	
DEED	(D)	EXISTING R/W	
DOCUMENT	DOC	SECTION LINE	
EAST BOUND	EB	QUARTER LINE	
GAS VALVE	GV	SIXTEENTH LINE	
INLET	⊡IL	PROPOSED OR NEW R/W LINE	
LENGTH OF CURVE	L	PROPOSED EASEMENT LINE	
MANHOLE	●MH	PARCEL NUMBER	(00)
MONUMENT	MON	UTILITY PARCEL NUMBER	000
NORTH BOUND	NB	PROPERTY LINE	PL
PAGE	PG	LOT, TIE AND OTHER MINOR DASHED LINES	
PERMANENT	PERM	ACCESS CONTROL (By Previous Acquisition or Covenant)	
PERMANENT LIMITED EASEMENT	PLE	NO ACCESS (By Acquisition)	
PRIVATE DRIVEWAY	PD	NO ACCESS (By Statutory Authority)	
PROPERTY LINE	PL	LIMITED EASEMENT (Temporary or Permanent)	
RADIUS	RAD		
REFERENCE LINE	R		
REMAINING	REM		
RIGHT OF WAY	R/W		
SECTION	SEC		
SECTION LINE	SL		
FOUND IRON PIPE	●FIP		
STATION	STA		
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	(28)		
VOLUME	VOL		
ADJOINING LANDS WITH SAME OWNER			
PARALLEL TO LINE	00°		
BUILDING TO BE RAZED			
FEE ACQUISITION	VARIOUS WIDTHS (R/W)		

BURIED FIBER OPTICS CABLE	FO
BURIED TELEPHONE CABLE	T
BURIED GAS LINE	G
STORM SEWER LINE	SAN
BURIED WATER LINE	W
BURIED ELECTRIC LINE	E
OVERHEAD ELECTRIC LINE	OH

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	♦	n
TELEPHONE POLE	●	n
SIGN	▶	▶
TELEPHONE PEDESTAL	■	n

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

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COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, (ENGLISH) NAD OF 1983 (1991) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECTS: 1490-14-22, 1490-11-21, 1490-11-22, 1494-03-11, 3488 (276-18-09/349-03, 3577 & COUNTY MAPS

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S): 1490-07-29

RIGHT OF WAY REFERENCE LINE MAY MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

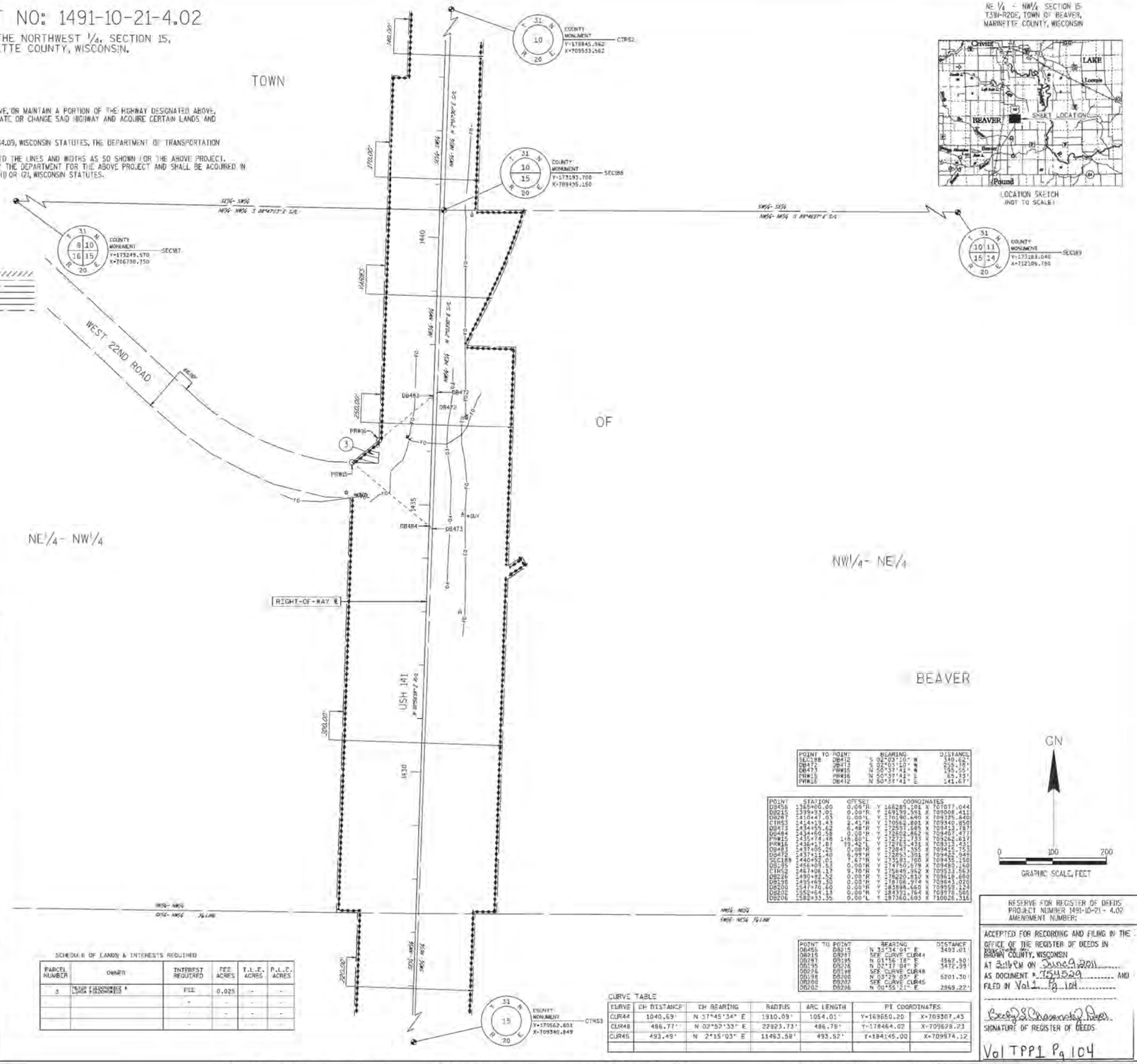
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL — PRINTED NAME — SIGNATURE — 05/24/2011 — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK — PRINTED NAME — SIGNATURE — 05/24/2011 — DATE



NE 1/4 - NW 1/4 SECTION 15 T31N-R20E, TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN

LOCATION SKETCH (NOT TO SCALE)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
3	PETER F BEDNORZ & LINDA A BEDNORZ	FEE	0.025	-	-
		-	-	-	-
		-	-	-	-
		-	-	-	-

POINT TO POINT	BEARING	DISTANCE
SEC188 - DB412	S 02°03'10" W	340.62'
DB473 - DB413	S 02°03'10" W	255.18'
DB473 - PRW15	N 50°37'43" E	195.55'
PRW15 - PRW16	N 50°37'43" E	65.73'
PRW16 - DB412	N 50°37'43" E	141.67'

POINT	STATION	OFFSET	COORDINATES
DB456	1365+06.00	0.00°R	Y 168288.191 X 707877.044
DB215	1379+93.01	0.00°R	Y 169139.591 X 709008.411
DB287	1410+47.03	0.00°L	Y 170180.690 X 709135.840
CIR53	1414+19.43	2.42°R	Y 170562.801 X 709340.849
DB473	1434+55.42	0.48°R	Y 172593.755 X 709427.197
DB484	1434+60.58	0.00°R	Y 172602.852 X 709467.477
PRW15	1435+74.48	149.80°L	Y 172721.733 X 709526.637
PRW16	1436+31.87	99.42°L	Y 172763.431 X 709313.431
DB483	1437+05.26	0.08°R	Y 172847.355 X 709412.753
DB472	1437+11.40	6.99°R	Y 172853.301 X 709422.949
SEC188	1440+55.01	7.67°R	Y 173193.700 X 709435.150
DB195	1456+09.53	0.00°R	Y 174750.679 X 709480.140
CIR52	1457+06.17	9.70°R	Y 175645.962 X 709533.582
DB226	1490+82.52	0.00°R	Y 176220.810 X 709618.660
DB199	1495+98.30	0.00°R	Y 176710.914 X 709641.026
DB200	1547+70.60	0.00°R	Y 181896.460 X 709950.226
DB202	1550+64.13	0.00°R	Y 184933.764 X 709876.506
DB206	1582+43.35	0.00°L	Y 187360.693 X 710026.316

POINT TO POINT	BEARING	DISTANCE
DB456 - DB215	N 33°34'04" E	3493.01'
DB215 - DB287	SEE CURVE CUR44	
DB287 - DB195	N 01°56'18" E	4567.50'
DB195 - DB226	N 02°17'04" E	3472.39'
DB226 - DB198	SEE CURVE CUR48	
DB198 - DB200	N 03°28'05" E	5201.30'
DB200 - DB202	SEE CURVE CUR45	
DB202 - DB206	N 00°55'21" E	2969.22'

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PT COORDINATES	
					Y=169650.20	X=709307.43
CUR44	1040.69'	N 17°45'34" E	1910.09'	1054.01'		
CUR48	486.77'	N 02°52'33" E	22823.73'	486.78'	Y=178464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11463.58'	493.52'	Y=184145.00	X=709974.12

GN

0 100 200

GRAPHIC SCALE, FEET

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21 - 4.02
AMENDMENT NUMBER:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN
AT 3:11PM ON June 9, 2011
AS DOCUMENT # 754529 AND
FILED IN Vol 1 Pg 104

SIGNATURE OF REGISTER OF DEEDS

Vol TPP1 Pg 104

FILE NAME : C:\users\P\D3\149109A\dgn\14911001\040102...rw.dgn
PLOT DATE : 23-MAY-2011 09:06
PLOT BY : ss...plotuser...ss
PLOT NAME : D3
PLOT SCALE : 100.000000:1.000000
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.03

PART OF UNPLATTED LANDS IN THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 AND THE NORTHWEST 1/4 OF THE NORTHEAST 1/4, SECTION 10; AND UNPLATTED LANDS IN THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4, SECTION 3, ALL LOCATED WITHIN T31N-R20E THE TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN.

SE1/4-NW1/4, NW1/4-NE1/4 SECTION 10, AND SW1/4-SE1/4, SECTION 3, T31N-R20E, MARINETTE COUNTY, WISCONSIN

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP	
ACRES	AC	O.D. 1¼" OUTSIDE DIA. x 18" IRON PIPE 1.13 LBS/FT	
CHORD BEARING	CH BRG	SET P.K. NAIL	
CHORD DISTANCE	CH DIS	PROPOSED R/W BOUNDARY POINT	PRW000
DEED	DD	CORPORATE LIMITS	
DOCUMENT	DOC	EXISTING R/W	
EAST BOUND	EB	SECTION LINE	
GAS VALVE	GV	QUARTER LINE	
INLET	▭	SIXTEENTH LINE	
LENGTH OF CURVE	L	PROPOSED OR NEW R/W LINE	
MANHOLE	MH	PROPOSED EASEMENT LINE	
MONUMENT	MON	PARCEL NUMBER	00
NORTH BOUND	NB	UTILITY PARCEL NUMBER	000
PAGE	PG	PROPERTY LINE	PL
PERMANENT	PERM	LOT, TIE AND OTHER MINOR DASHED LINES	
PERMANENT LIMITED EASEMENT	PLE	ACCESS CONTROL (By Previous Acquisition or Covenant)	
PRIVATE DRIVEWAY	PD	NO ACCESS (By Acquisition)	
PROPERTY LINE	PL	NO ACCESS (By Statutory Authority)	
RADIUS	RAD	LIMITED EASEMENT (Temporary or Permanent)	
REFERENCE LINE	℄		
REMAINING	REM		
RIGHT OF WAY	R/W		
SECTION	SEC		
SECTION LINE	℄		
FOUND IRON PIPE	●		
STATION	STA		
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	TIE		
VOLUME	VOL		
ADJOINING LANDS WITH SAME OWNER			
PARALLEL TO LINE	00'		
BUILDING TO BE RAZED			
FEE ACQUISITION	VARIOUS PARCELS		

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	♦	◇
TELEPHONE POLE	■	□
SIGN	▮	▯
TELEPHONE PEDESTAL	▪	▫

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
40	FAIRPOINT BROADBAND	RELEASE OF RIGHTS
42	CENTURYLINK	RELEASE OF RIGHTS

BURIED FIBER OPTICS CABLE —FO—
BURIED TELEPHONE CABLE —T—
BURIED GAS LINE —G—
STORM SEWER LINE —SAN—
BURIED WATER LINE —W—
BURIED ELECTRIC LINE —E—
OVERHEAD ELECTRIC LINE —OH—

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE, AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, (ENGLISH), NAD OF 1983 (1997) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECTS: 1490-14-22, 1490-11-21, 1490-11-22, 1494-05-21, 3436-1226-RE-OP/348-01, 3572 & COUNTY MAPS

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT#: 1490-02-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
4	KYLE N. FIEDOROWICZ	FEE	0.058	-	-
6	DAN J. ELSON	FEE	0.066	-	-
7	HAROLD N. SORLAG & GLORIA M. SORLAG	FEE	0.039	-	-
			-	-	-
			-	-	-
			-	-	-

THEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL — PRINTED NAME — SIGNATURE — 05/24/2011 DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK — PRINTED NAME — SIGNATURE — 05/24/2011 DATE

TOWN

SW1/4- SE1/4

NE1/4- NW1/4

NW1/4- NE1/4

SE1/4- NW1/4

SW1/4- NE1/4

OF

BEAVER

EAST 26TH ROAD

WEST 24TH ROAD

USH 141

RIGHT OF WAY ℄

CTR51 — COUNTY MONUMENT: Y=181113.282 X=709782.654

SEC84 — COUNTY MONUMENT: Y=178486.230 X=707000.590

SEC83 — COUNTY MONUMENT: Y=178466.550 X=709836.820

SEC84 — COUNTY MONUMENT: Y=178435.980 X=712272.870

CTR51 — COUNTY MONUMENT: Y=175845.962 X=709533.582

POINT	STATION	OFFSET		COORDINATES
DB456	1365+00.00	0.00	RT	Y 166289.191 X 707077.044
DB215	1389+83.01	0.00	RT	Y 169159.591 X 709908.411
DB287	1418+47.03	0.00	LT	Y 170190.698 X 709326.840
DB195	1456+09.53	0.00	RT	Y 174845.519 X 709480.160
DB226	1467+26.12	8.70	RT	Y 176145.362 X 709532.462
DB415	1478+62.86	8.46	RT	Y 177061.567 X 709576.445
PRW17	1479+16.71	59.70	LT	Y 177058.370 X 709524.480
PRW18	1479+19.87	120.87	LT	Y 177124.500 X 709437.880
DB474	1480+11.92	176.06	LT	Y 177158.082 X 709359.557
DB485	1480+17.38	0.00	RT	Y 177156.353 X 709516.731
SIXT12	1480+17.38	6.05	RT	Y 177156.256 X 709516.181
DB226	1490+62.52	0.00	RT	Y 178220.810 X 709618.800
DB476	1491+93.91	2.54	RT	Y 178331.999 X 709605.907
PRW19	1492+27.31	40.49	RT	Y 178363.609 X 709665.330
PRW20	1493+00.10	122.42	RT	Y 178432.165 X 709750.714
SEC183	1493+28.56	0.15	RT	Y 178469.550 X 709620.800
DB476	1494+53.54	133.22	RT	Y 178469.162 X 709750.555
PRW21	1493+66.36	132.51	RT	Y 178498.268 X 709750.596
PRW22	1494+03.02	35.00	RT	Y 178539.092 X 709668.468
DB477	1494+17.41	1.60	RT	Y 178565.249 X 709625.888
DB198	1495+69.30	0.00	RT	Y 178706.924 X 709643.026
DB200	1547+70.60	0.00	RT	Y 183698.660 X 709950.124
DB202	1552+64.13	0.00	RT	Y 184391.764 X 709978.535
DB206	1562+33.35	0.00	LT	Y 187360.805 X 710026.316

POINT TO POINT		BEARING		DISTANCE
SEC183	DB477	N 03°17'00"	E	88.84'
DB477	PRW22	S 62°37'16"	E	36.36'
PRW22	PRW21	S 62°37'16"	E	32.12'
PRW21	DB476	S 00°14'43"	W	33.00'
DB478	PRW20	S 00°14'43"	W	33.00'
PRW20	PRW18	S 52°16'58"	W	109.58'
PRW18	DB476	S 52°16'58"	W	50.53'
DB476	SEC183	N 02°07'10"	E	134.65'
SEC183	SIXT12	S 02°07'10"	W	1311.20'
SIXT12	DB475	S 02°07'30"	W	151.70'
DB475	PRW17	N 48°26'39"	W	85.49'
PRW17	PRW18	N 48°26'39"	W	39.69'
PRW18	DB474	N 48°26'39"	W	50.62'
DB474	SIXT12	S 89°25'33"	E	185.25'

POINT TO POINT		BEARING		DISTANCE
DB456	DB215	N 33°34'04"	E	3693.01'
DB215	DB287	SEE CURVE CUR44		
DB287	DB195	N 01°56'58"	E	4562.50'
DB195	DB226	N 02°17'04"	E	3412.99'
DB226	DB198	SEE CURVE CUR48		
DB198	DB200	N 01°29'03"	E	5201.30'
DB200	DB202	SEE CURVE CUR45		
DB202	DB206	N 00°55'21"	E	2989.22'

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES	
CUR44	1040.69'	N 1°45'34" E	1910.09'	1054.01'	Y=165650.28	X=709307.43
CUR48	486.77'	N 2°52'33" E	22923.73'	486.78'	Y=178464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11467.58'	493.52'	Y=184145.00	X=709974.12

LOCATION SKETCH (NOT TO SCALE)

GRAPHIC SCALE, FEET: 0, 100, 200

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21 - 4.01
AMENDMENT NUMBER:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN
AT 3:19PM ON June 9, 2011 AND
AS DOCUMENT # 1645830 AND
FILED IN Vol TPP1 Pg 105

Barbara Chernay Deputy
SIGNATURE OF REGISTER OF DEEDS

Vol TPP1 Pg 105

FILE NAME : C:\users\P\D3\149109A\dgn\14911001\040103_rw.dgn
PLOT DATE : 23-MAY-2011 10:27
PLOT BY : $$...plotuser...$$
PLOT NAME : D3
PLOT SCALE : 100.000000:1.000000
APPRAISAL PLAT DATE :

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.04

PART OF UNPLATTED LANDS IN THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, AND THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4, ALL LOCATED WITHIN SECTION 3, T31N-R20E, THE TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP (1-1/4" OUTSIDE DIA.x18" IRON PIPE 1.13 LBS/FT)	○
ACRES	AC		
CHORD BEARING	CH BRG		
CHORD DISTANCE	CH DIS		
DEED	(D)	SET P.K. NAIL	△
DOCUMENT	DOC		
EAST BOUND	EB	PROPOSED R/W BOUNDARY POINT	PRW000
GAS VALVE	GV		
(MEAS)	(M)		
LENGTH OF CURVE	L	CORPORATE LIMITS	
MANHOLE	MH	EXISTING R/W	
MONUMENT	MON	SECTION LINE	
NORTH BOUND	NB	QUARTER LINE	
PAGE	PG	SIXTEENTH LINE	
PERMANENT	PERM	PROPOSED OR NEW R/W LINE	
PERMANENT LIMITED EASEMENT	PLE	PROPOSED EASEMENT LINE	
PRIVATE DRIVEWAY	PD		
PROPERTY LINE	PL	PARCEL NUMBER	00
RADIUS	RAD		
REFERENCE LINE	℄	UTILITY PARCEL NUMBER	000
REMAINING	REM		
RIGHT OF WAY	R/W	PROPERTY LINE	PL
SECTION	SEC	LOT, TIE AND OTHER MINOR DASHED LINES	
SECTION LINE	SL		
FOUND IRON PIPE	FIP	ACCESS CONTROL (By Previous Acquisition or Covenant)	
STATION	STA		
TEMPORARY LIMITED EASEMENT	TLE	NO ACCESS (By Acquisition)	
TIE POINT	(TP)		
VOLUME	VOL	NO ACCESS (By Statutory Authority)	
ADJOINING LANDS WITH SAME OWNER		LIMITED EASEMENT (Temporary or Permanent)	
PARALLEL TO LINE	00'		
BUILDING TO BE RAZED			
FEE ACQUISITION	VARIOUS (MTD-2NE)		

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	●	⊗
TELEPHONE POLE	■	⊠
SIGN	▶	▷
TELEPHONE PEDESTAL	✖	⊻

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
42	CENTURYLINK	RELEASE OF EASEMENT

BURIED FIBER OPTICS CABLE —FO—
BURIED TELEPHONE CABLE —T—
BURIED GAS LINE —G—
STORM SEWER LINE —SAN—
BURIED WATER LINE —W—
BURIED ELECTRIC LINE —E—
OVERHEAD ELECTRIC LINE —OH—

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, (ENGLISH) NAD OF 1983 (1999) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECTS: 1490-14-22, 1490-11-21, 1490-11-22, 1494-16-21, 3416-1226-RE-07/348-01, 3572 & COUNTY MAPS

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S): 1490-02-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL	Jon L Herbel	06/6/2011
PRINTED NAME	SIGNATURE	DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK	Norman V. Pawelczyk	06/6/2011
PRINTED NAME	SIGNATURE	DATE

POINT	STATION	OFFSET	COORDINATES
DB456	1365+00.00	0.00'R	Y 166289.181 X 707077.044
DB215	1389+93.01	0.00'R	Y 169199.591 X 709008.411
DB287	1410+47.03	0.00'L	Y 170390.690 X 709325.840
DB195	1456+09.53	0.00'R	Y 174750.579 X 709486.160
DB226	1490+92.52	0.00'R	Y 178220.810 X 709618.600
SEC183	1493+26.56	1.15'R	Y 174466.550 X 709630.800
DB138	1493+89.30	0.00'R	Y 178706.974 X 709643.020
PRW26	1503+49.06	85.00'L	Y 180088.347 X 709642.029
DB481	1504+40.36	3.37'L	Y 180084.466 X 709723.624
PRW25	1506+45.28	94.74'L	Y 180165.980 X 709638.160
PRW1	1510+59.27	102.78'L	Y 180536.370 X 709637.160
PRW2	1512+61.17	102.78'L	Y 180398.086 X 709642.810
PRW27	1512+85.09	85.00'L	Y 180424.760 X 709662.950
DB482	1512+90.36	4.45'L	Y 180420.146 X 709740.872
PRW28	1518+55.40	85.00'L	Y 180394.010 X 709697.110
DB479	1518+55.42	8.45'L	Y 180089.249 X 709775.533
C1RS1	1525+79.45	6.88'L	Y 181113.265 X 709782.635
DB480	1528+41.59	7.12'L	Y 181160.897 X 709991.511
PRW29	1529+48.88	84.59'L	Y 181187.110 X 710709.280
DB200	1547+70.60	0.00'R	Y 183058.660 X 709955.124
SEC178	1548+16.93	16.74'L	Y 183945.840 X 709945.130
DB202	1553+24.11	0.00'R	Y 184391.744 X 709978.505
DB206	1582+54.33	0.00'L	Y 187360.605 X 710026.916

POINT TO POINT		BEARING	DISTANCE
SEC183	DB481	N 03°17'00" E	1620.76'
DB481	PRW26	N 86°43'00" W	81.73'
PRW26	PRW25	N 03°17'34" W	56.11'
PRW25	PRW1	N 05°40'00" W	50.64'
PRW1	PRW2	N 03°24'54" E	102.00'
PRW2	PRW27	N 36°52'20" E	33.33'
PRW27	DB482	S 86°43'00" E	80.55'
DB482	DB481	S 03°17'00" W	336.03'
SEC183	DB479	N 03°17'00" E	2526.85'
DB479	PRW28	N 86°43'00" W	79.55'
PRW28	PRW29	N 05°36'23" E	193.48'
PRW29	DB480	S 85°24'02" E	77.46'
DB480	C1RS1	S 04°17'00" W	67.73'
C1RS1	DB479	S 03°17'00" W	124.24'
DB479	DB482	S 03°17'00" W	570.04'

SCHEDULE OF LANDS & INTERESTS REQUIRED

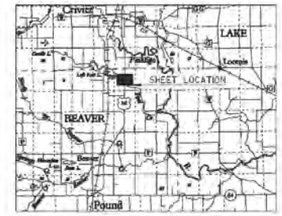
PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
8	RICHARD S. NOVAK	FEE	0.098	-	-
9	SAID OWNER'S OF RECORD	FEE	0.110	-	-
		-	-	-	-
		-	-	-	-

POINT TO POINT		BEARING	DISTANCE
DB456	DB215	N 33°34'04" E	3493.03'
DB215	DB287	SEE CURVE CUR44	
DB287	DB195	N 01°56'18" E	4562.50'
DB195	DB226	N 05°11'04" E	3472.99'
DB226	DB138	SEE CURVE CUR48	
DB138	DB200	N 03°55'03" E	5201.30'
DB206	DB202	SEE CURVE CUR45	
DB202	DB206	N 00°55'21" E	2988.22'

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES	
CUR44	1040.69'	N 17°45'34" E	1910.09'	1054.01'	Y=169650.20	X=709307.43
CUR48	486.77'	N 2°52'33" E	22923.73'	486.78'	Y=178464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11463.58'	493.52'	Y=184145.00	X=709974.12

NE1/4- SW1/4 & SE1/4- NW1/4
SECTION 3, T31N R20E,
MARINETTE COUNTY, WISCONSIN



LOCATION SKETCH
(NOT TO SCALE)

SE1/4- NW1/4 | SW1/4- NE1/4 | NE1/4- SW1/4 | NW1/4- SE1/4

TOWN OF BEAVER

USH 141

COUNTY MONUMENT Y=183945.840 X=709945.130 SEC178

COUNTY MONUMENT Y=181118.380 X=707101.370 SEC180

COUNTY MONUMENT Y=181115.282 X=709782.634 C1RS1

COUNTY MONUMENT Y=178446.550 X=709630.800 SEC183

COUNTY MONUMENT SEC181 Y=183108.360 X=712357.790

RIGHT-OF-WAY ℄

CN

0 100 200
GRAPHIC SCALE, FEET

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21 - 4.04
AMENDMENT NUMBER:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE AND BROWN COUNTY, WISCONSIN
AT 8:28 AM ON June 9, 2011
AS DOCUMENT # 754531 AND
FILED IN Vol TPP1 Pg 106

Becky S. Chaney Hoe
SIGNATURE OF REGISTER OF DEEDS

Vol TPP1 Pg 106

FILE NAME : C:\users\P\D3\149109A\dgn\14911001\040104_rw.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 06-JUN-2011 10:08
PLOT BY : ss...plotuser...$$
PLOT NAME : D3
PLOT SCALE : 100.000000:1.000000

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.05

PART OF UNPLATTED LANDS IN THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4, AND SOUTHWEST 1/4 OF THE SOUTHEAST 1/4, SECTION 34, T32N-R20E, LOCATED WITHIN THE TOWN OF BEAVER, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP	
ACRES	AC	(1-1/4" OUTSIDE DIA.x18" IRON PIPE 1.13 LBS/FT)	
CHORD BEARING	CH BRG	SET P.K. NAIL	
CHORD DISTANCE	CH DIS	PROPOSED R/W	PRWOO
DEED	DD	BOUNDARY POINT	
DOCUMENT	DOC	CORPORATE LIMITS	
EAST BOUND	EB	EXISTING R/W	
GAS VALVE	GV	SECTION LINE	
INLET	IN	QUARTER LINE	
LENGTH OF CURVE	L	SIXTEENTH LINE	
MANHOLE	MH	PROPOSED OR NEW R/W LINE	
MONUMENT	MON	PROPOSED EASEMENT LINE	
NORTH BOUND	NB	PARCEL NUMBER	00
PAGE	PG	UTILITY PARCEL NUMBER	000
PERMANENT	PERM	PROPERTY LINE	PL
PERMANENT LIMITED EASEMENT	PLE	LOT, TIE AND OTHER MINOR DASHED LINES	
PRIVATE DRIVEWAY	PD	ACCESS CONTROL (By Previous Acquisition or Covenant)	
PROPERTY LINE	PL	NO ACCESS (By Acquisition)	
RADIUS	RAD	NO ACCESS (By Statutory Authority)	
REFERENCE LINE	R	LIMITED EASEMENT (Temporary or Permanent)	
REMAINING	REM		
RIGHT OF WAY	R/W		
SECTION	SEC		
SECTION LINE	S		
FOUND IRON PIPE	FIP		
STATION	STA		
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	TIE		
VOLUME	VOL		
ADJOINING LANDS WITH SAME OWNER			
PARALLEL TO LINE	00'		
BUILDING TO BE RAZED			
FEE ACQUISITION	VARIES IN WIDTH		

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	●	△
TELEPHONE POLE	■	□
SIGN	♦	◊
TELEPHONE PEDESTAL	×	×

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
42	CENTURYLINK	RELEASE OF RIGHTS
44	WISCONSIN PUBLIC SERVICE CORP.	RELEASE OF RIGHTS
46	AMERICAN TRANSMISSION COMPANY	RELEASE OF RIGHTS

BURIED FIBER OPTICS CABLE — FO
BURIED TELEPHONE CABLE — T
BURIED GAS LINE — G
STORM SEWER LINE — SAN
BURIED WATER LINE — W
BURIED ELECTRIC LINE — E
OVERHEAD ELECTRIC LINE — OH

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND RIGHT TRANSFERS.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, (ENGLISH), NAD OF 1983 (1991) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTHS.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECTS: 1490-14-22, 1490-11-21, 1490-11-22, 1494-05-11, 3416-02-26-RE-07/3419-03, 3572 & COUNTY MAPS

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECTS: 1490-02-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

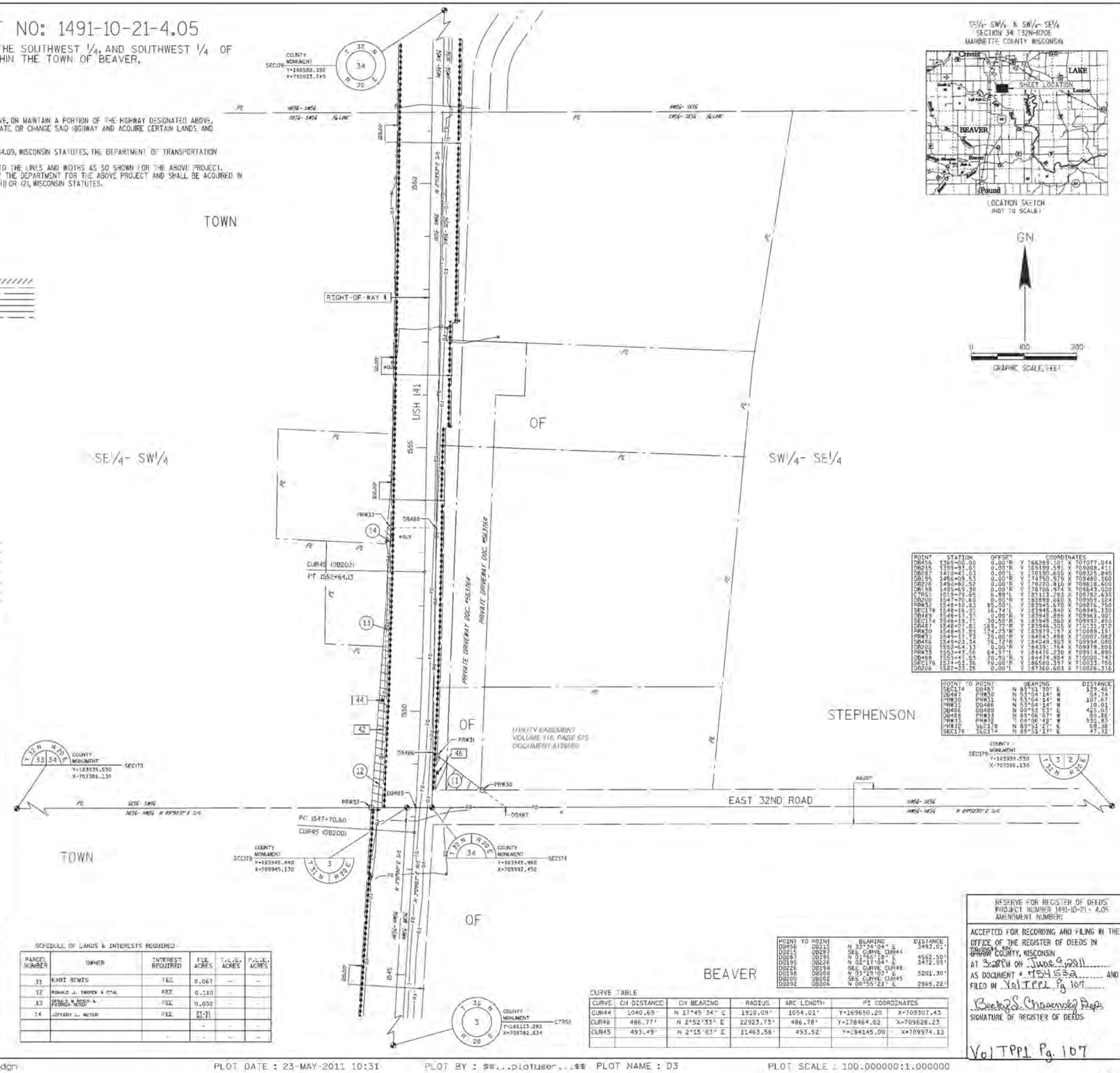
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

THEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. HERBEL — PRINTED NAME — SIGNATURE — 05/24/2010 DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWLICZYK — PRINTED NAME — SIGNATURE — 05/24/2010 DATE



SW1/4- SW1/4 & SW1/4- SE1/4 SECTION 34, T32N-R20E MARINETTE COUNTY, WISCONSIN

LOCATION SKETCH (NOT TO SCALE)

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
11	KARI BEMIS	FEE	0.067	-	-
12	RONALD J. THORER & ETAL	FEE	0.110	-	-
13	DONALD W. BISCH & PATRICIA M. BISCH	FEE	0.030	-	-
14	JEFFERY L. MEYER	FEE	31.71 43.71	-	-
			-	-	-
			-	-	-

POINT	STATION	OFFSET	COORDINATES
DB456	1365+00.00	0.00'R	Y 166283.101 X 707077.044
DB215	1398+93.01	0.00'R	Y 165999.591 X 709008.411
DB087	1401+67.03	0.00'L	Y 170150.650 X 709325.840
DB195	1456+09.53	0.00'R	Y 174750.575 X 709480.166
DB226	1490+82.52	0.00'R	Y 178220.810 X 709816.600
DB198	1493+63.30	0.00'R	Y 178708.974 X 709843.020
CTR51	1519+79.65	6.89'L	Y 181113.282 X 709782.634
DB200	1547+70.60	0.00'R	Y 183899.680 X 709959.124
PRW32	1548+19.63	85.00'L	Y 183945.670 X 709876.750
SEC178	1548+19.63	16.74'L	Y 183945.840 X 709945.130
DB489	1548+11.91	0.00'R	Y 183945.886 X 709963.901
SEC174	1548+19.71	30.50'R	Y 183945.960 X 709982.450
DB487	1548+27.81	165.72'R	Y 183946.305 X 710133.912
PRW30	1548+41.80	324.23'R	Y 183978.197 X 710288.151
PRW31	1549+17.73	76.00'R	Y 184043.686 X 710002.082
DB486	1549+23.24	76.72'R	Y 184049.903 X 709994.080
DB202	1552+64.13	0.00'R	Y 184391.764 X 709978.505
PRW33	1553+47.55	84.97'L	Y 184476.230 X 709914.899
DB488	1553+47.55	20.90'R	Y 184474.654 X 710006.742
SEC176	1574+51.36	70.00'R	Y 186580.397 X 710033.748
DB208	1587+33.35	0.00'L	Y 187760.603 X 710026.318

POINT TO POINT	BEARING	DISTANCE
SEC174 DB487	N 89°53'30" E	139.46'
DB487 PRW30	N 53°04'14" W	54.74'
PRW30 PRW31	N 53°04'14" W	107.67'
PRW31 DB486	N 53°04'14" W	10.01'
DB486 DB488	N 00°53'53" E	425.01'
DB488 PRW33	N 89°06'07" W	85.86'
PRW33 PRW32	N 89°06'07" W	535.91'
PRW32 SEC178	N 89°53'27" E	68.38'
SEC178 SEC179	N 89°53'27" E	47.32'

POINT TO POINT	BEARING	DISTANCE
DB456 DB215	N 33°34'04" E	3493.01'
DB215 DB087	SEE CURVE CUR44	
DB087 DB195	N 01°56'18" E	4562.50'
DB195 DB226	N 02°11'04" E	3472.99'
DB226 DB198	SEE CURVE CUR48	
DB198 DB200	N 01°29'03" E	5201.30'
DB200 DB202	SEE CURVE CUR45	
DB202 DB208	N 00°55'21" E	2969.22'

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PT COORDINATES	
CUR44	1040.69'	N 17°48'34" E	1910.09'	1054.01'	Y=169650.20	X=709307.43
CUR48	486.77'	N 2°52'33" E	22923.73'	486.78'	Y=170464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11463.56'	493.52'	Y=184145.00	X=709974.12

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21 - 4.05
AMENDMENT NUMBER:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN BROWN COUNTY, WISCONSIN
AT 3:28PM ON June 9, 2011
AS DOCUMENT # 1754538 AND FILED IN Vol TPP1 Pg 107
Becky S. Chaverney Deputy
SIGNATURE OF REGISTER OF DEEDS

Vol TPP1 Pg. 107

FILE NAME : C:\users\P\D3\149109A\dgn\1491001\040105.rw.dgn
PLOT DATE : 23-MAY-2011 10:31
PLOT BY : ss...plotuser...$$
PLOT NAME : D3
PLOT SCALE : 100.000000:1.000000
APPRAISAL PLAT DATE :

4.

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.06
AMENDMENT NUMBER 1

AMENDS PARCEL 18 OF TRANSPORTATION PROJECT PLAT 1491-10-21-4.06 RECORDED AS DOCUMENT #754533, AND FILED IN VOL. TPP 1 PG. 108
PART OF UNPLATTED LANDS IN THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4, AND THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, ALL LOCATED WITHIN SECTION 34, T32N-R20E, THE TOWN OF STEPHENSON, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21- 4.06
AMENDMENT NUMBER: 1

DOC. #: 773658
RENEE MILLER
MARINETTE COUNTY
REGISTER OF DEEDS
April 17, 2013 3:30 PM
Fee Amount: $25.00

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP (1-1/4" OUTSIDE DIA.x18" IRON PIPE 1.13 LBS/FT)	○
ACRES	AC	SET P.K. NAIL	△
CHORD BEARING	CH BRG	PROPOSED R/W	PRW000
CHORD DISTANCE	CH DIS	BOUNDARY POINT	
DEED	(D)	CORPORATE LIMITS	
DOCUMENT	DOC	EXISTING R/W	
EAST BOUND	EB	SECTION LINE	
GAS VALVE	GV	QUARTER LINE	
INLET		SIXTEENTH LINE	
LENGTH OF CURVE	L	PROPOSED OR NEW R/W LINE	
MANHOLE	MH	PROPOSED EASEMENT LINE	
MONUMENT	MON	PARCEL NUMBER	00
NORTH BOUND	NB	UTILITY PARCEL NUMBER	000
PAGE	PG	PROPERTY LINE	
PERMANENT	PERM	LOT, TIE AND OTHER MINOR DASHED LINES	
PERMANENT LIMITED EASEMENT	PLE	ACCESS CONTROL (By Previous Acquisition or Covenant)	
PRIVATE DRIVEWAY	PD	NO ACCESS (By Acquisition)	
PROPERTY LINE	PL	NO ACCESS (By Statutory Authority)	
RADIUS	RAD	LIMITED EASEMENT (Temporary or Permanent)	
REFERENCE LINE	RL		
REMAINING	REM		
RIGHT OF WAY	R/W		
SECTION	SEC		
SECTION LINE	SL		
FOUND IRON PIPE	IP●		
STATION	STA		
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	OBJ		
VOLUME	VOL		
ADJOINING LANDS WITH SAME OWNER	00'		
PARALLEL TO LINE	00'		
BUILDING TO BE RAZED			
FEE ACQUISITION	VARIOUS HATCHING		

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	●	●
TELEPHONE POLE	●	●
SIGN	▶	▶
TELEPHONE PEDESTAL	×	×

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
40	BACKBLAND BROADBAND	RELEASE OF RIGHTS
42	CENTURYLINK	RELEASE OF RIGHTS
44	WISCONSIN PUBLIC SERVICE CORP. - ELECTRIC	RELEASE OF RIGHTS

BURIED FIBER OPTICS CABLE —FO—
BURIED TELEPHONE CABLE —T—
BURIED GAS LINE —G—
STORM SEWER LINE —SAN—
BURIED WATER LINE —W—
BURIED ELECTRIC LINE —E—
OVERHEAD ELECTRIC LINE —OH—

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, ENGLISH, NAD OF 1983 (1991) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTH.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECTS: 1490-14-22, 1490-11-21, 1490-11-22, 1494-05-21, 3416 (226-RE-09/348-C), 3572 & COUNTY MAPS.

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECTS: 1490-02-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

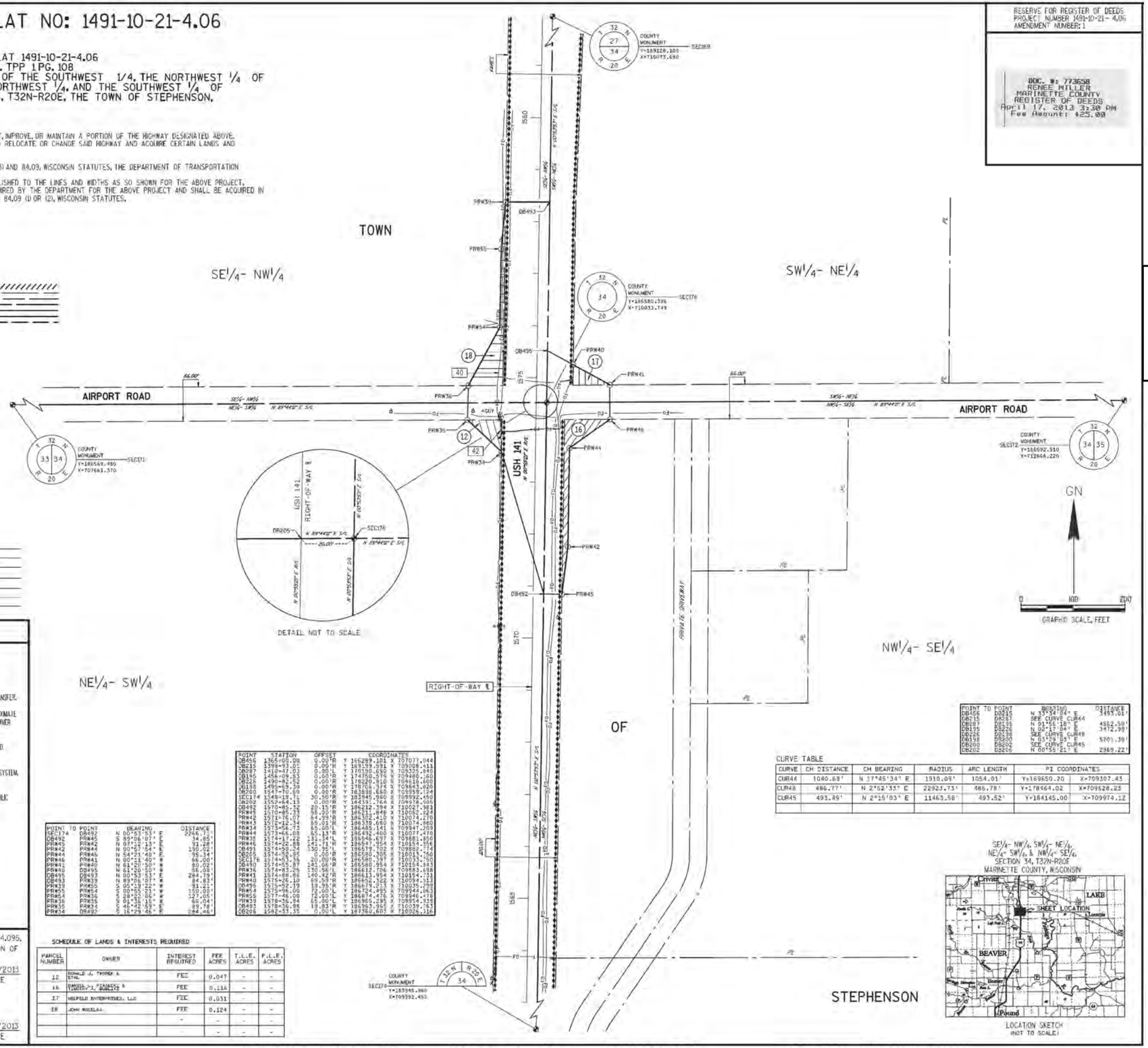
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

JON L. KERBEL — PRINTED NAME — Jon L. Kerbel — SIGNATURE — 04/09/2013 — DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

BRUCE ENKE — PRINTED NAME — H Bruce Enke — SIGNATURE — 04/09/2013 — DATE



POINT TO POINT	BEARING	DISTANCE
SEC174 - DB492	N 00°53'53" E	2266.72'
DB492 - PRW45	S 89°06'07" E	34.65'
PRW45 - PRW42	N 07°22'13" E	93.26'
PRW42 - PRW44	N 00°53'54" E	150.02'
PRW44 - PRW46	N 54°21'40" E	95.34'
PRW46 - PRW41	N 00°21'40" E	66.00'
PRW41 - PRW40	N 61°20'50" E	80.02'
PRW40 - DB495	N 61°20'50" E	56.08'
DB495 - DB493	N 00°53'53" E	264.79'
DB493 - PRW39	N 89°06'07" W	84.83'
PRW39 - PRW55	S 05°19'22" W	93.21'
PRW55 - PRW54	S 00°53'21" W	150.00'
PRW54 - PRW36	S 89°53'06" E	127.05'
PRW36 - PRW35	S 01°38'15" W	66.04'
PRW35 - PRW34	S 46°29'59" E	89.78'
PRW34 - DB492	S 16°29'46" E	284.46'

POINT	STATION	OFFSET	COORDINATES
DB456	1365+00.00	0.00°R	Y 166289.181 X 707077.044
DB215	1398+93.01	0.00°R	Y 163159.691 X 709008.411
DB287	1410+47.03	0.00°L	Y 170150.690 X 705325.848
DB195	1456+09.53	0.00°R	Y 174750.576 X 709480.160
DB226	1490+82.52	0.00°R	Y 178020.910 X 709618.400
DB198	1495+69.30	0.00°R	Y 178706.374 X 709643.020
DB200	1547+70.69	0.00°L	Y 183808.650 X 709959.124
SEC174	1548+19.71	30.50°R	Y 183945.980 X 709992.450
DB202	1553+64.13	0.00°R	Y 184313.764 X 709978.606
DB492	1570+85.52	20.15°R	Y 186212.394 X 710027.983
PRW45	1570+85.52	86.00°R	Y 186212.848 X 710092.524
PRW42	1571+76.07	64.99°R	Y 186302.410 X 710074.470
PRW43	1571+32.34	65.03°R	Y 186338.680 X 710074.960
PRW34	1573+56.73	65.00°L	Y 186485.141 X 709947.709
PRW44	1573+66.08	65.13°R	Y 186492.400 X 710077.470
PRW35	1574+17.22	131.34°L	Y 186548.497 X 709881.850
PRW46	1574+22.88	142.71°R	Y 186547.954 X 710154.956
PRW41	1574+50.24	130.96°L	Y 186578.702 X 709892.714
DB205	1574+52.95	0.00°R	Y 186580.305 X 710015.750
SEC176	1574+53.36	20.00°R	Y 186580.395 X 710033.750
DB490	1574+55.87	145.06°R	Y 186580.954 X 710154.243
PRW36	1574+83.25	130.56°L	Y 186612.706 X 709883.498
PRW43	1574+88.86	140.42°R	Y 186613.954 X 710154.733
PRW40	1575+26.10	69.59°R	Y 186662.322 X 710094.313
DB495	1575+52.19	19.35°R	Y 186678.213 X 710076.299
PRW54	1575+96.00	72.00°L	Y 186724.495 X 709944.063
PRW55	1577+46.00	72.00°L	Y 186874.476 X 709946.478
PRW39	1578+36.94	65.00°L	Y 186965.295 X 709954.335
DB493	1578+39.06	19.83°R	Y 186962.995 X 710039.451
DB206	1582+31.35	0.00°L	Y 187360.603 X 710026.316

POINT TO POINT	BEARING	DISTANCE
DB456 - DB215	N 33°34'04" E	3493.01'
DB215 - DB287	SEE CURVE CUR44	
DB287 - DB195	N 01°55'18" E	4562.50'
DB195 - DB226	N 02°17'04" E	3472.99'
DB226 - DB198	SEE CURVE CUR48	
DB198 - DB200	N 03°39'03" E	5201.39'
DB200 - DB202	SEE CURVE CUR45	
DB202 - DB206	N 00°55'21" E	2969.22'

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES	
CUR44	1040.68'	N 17°45'34" E	1910.09'	1054.01'	Y=169650.20	X=709307.43
CUR48	486.77'	N 2°52'33" E	22923.73'	486.78'	Y=178464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11463.58'	493.52'	Y=184145.00	X=709974.12

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
12	DONALD J. TROREK & ETAL	FEE	0.047	-	-
16	DANIEL J. PEARSON & TIMOTHY J. BARETTA	FEE	0.116	-	-
17	WESFIELD ENTERPRISES, LLC	FEE	0.031	-	-
18	JOHN WISELKA	FEE	0.124	-	-
		-	-	-	-
			-	-	-

SE1/4- NW1/4, SW1/4- NE1/4, NE1/4- SW1/4, & NW1/4- SE1/4, SECTION 34, T32N-R20E, MARINETTE COUNTY, WISCONSIN

LOCATION SKETCH (NOT TO SCALE)

TRANSPORTATION PROJECT PLAT NO: 1491-10-21-4.06

PART OF UNPLATTED LANDS IN THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4, THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4, AND THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4, ALL LOCATED WITHIN SECTION 34, T32N-R20E, THE TOWN OF STEPHENSON, MARINETTE COUNTY, WISCONSIN.

RELOCATION ORDER USH 141 MARINETTE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP (1-1/4" OUTSIDE DIA. x 18" IRON PIPE 1.13 LBS/FT)	○
ACRES	AC	SET P.K. NAIL	△
CHORD BEARING	CH BRG	PROPOSED R/W	PRW000
CHORD DISTANCE	CH DIS	BOUNDARY POINT	
DEED	DD	CORPORATE LIMITS	
DOCUMENT	DOC	EXISTING R/W	
EAST BOUND	EB	SECTION LINE	
GAS VALVE	GV	QUARTER LINE	
INLET	⊡IL	SIXTEENTH LINE	
LENGTH OF CURVE	L	PROPOSED OR NEW R/W LINE	
MANHOLE	●MH	PROPOSED EASEMENT LINE	
MONUMENT	MON	PARCEL NUMBER	(00)
NORTH BOUND	NB	UTILITY PARCEL NUMBER	000
PAGE	PG	PROPERTY LINE	PL
PERMANENT	PERM	LOT, TIE AND OTHER MINOR DASHED LINES	
PERMANENT LIMITED EASEMENT	PLE	ACCESS CONTROL (By Previous Acquisition or Covenant)	
PRIVATE DRIVEWAY	PD	NO ACCESS (By Acquisition)	
PROPERTY LINE	PL	NO ACCESS (By Statutory Authority)	
RADIUS	RAD	LIMITED EASEMENT (Temporary or Permanent)	
REFERENCE LINE	℄		
REMAINING	REM		
RIGHT OF WAY	R/W		
SECTION	SEC		
SECTION LINE	SL		
FOUND IRON PIPE	FIP ●		
STATION	STA		
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	UBI		
VOLUME	VOL		
ADJOINING LANDS WITH SAME OWNER			
PARALLEL TO LINE	00'		
BUILDING TO BE RAZED			
FEE ACQUISITION	VARIES IN WIDTH-FEE		

	COMPENSABLE	NON-COMPENSABLE
POWER POLE	▲	D
TELEPHONE POLE	●	P
SIGN	▶	▶
TELEPHONE PEDESTAL	■	H

BURIED FIBER OPTICS CABLE —FO—
BURIED TELEPHONE CABLE —T—
BURIED GAS LINE —G—
STORM SEWER LINE —SAN—
BURIED WATER LINE —W—
BURIED ELECTRIC LINE —E—
OVERHEAD ELECTRIC LINE —OH—

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
40	ACKERLAND BROADBAND	RELEASE OF RIGHTS
42	CENTURYLINK	RELEASE OF RIGHTS
44	WISCONSIN PUBLIC SERVICE CORP - ELECTRIC	RELEASE IN RIGHTS

RESERVE FOR CLAUSES AND NOTE INFORMATION

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARINETTE COUNTY, ENGLISH, NAD OF 1983 (1991) ADJUSTMENT. ALL PLAT DISTANCES ARE GROUND LENGTHS.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECT(S): 1490-14-22, 1490-11-21, 1490-11-72, 1984-05-21, 3415 (226-08-CP)/348-01, 3512 & COUNTY MAPS

EXISTING ACCESS CONTROL WAS ACQUIRED UNDER PROJECT(S): 1990-02-29

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTERESTS TO DEPARTMENT OF TRANSPORTATION.

I HEREBY CERTIFY THAT THIS PLAT MEETS ALL REQUIREMENTS OF SECTION 84.095, WISCONSIN STATUTES. THIS PLAT WAS PREPARED BY OR UNDER THE DIRECTION OF

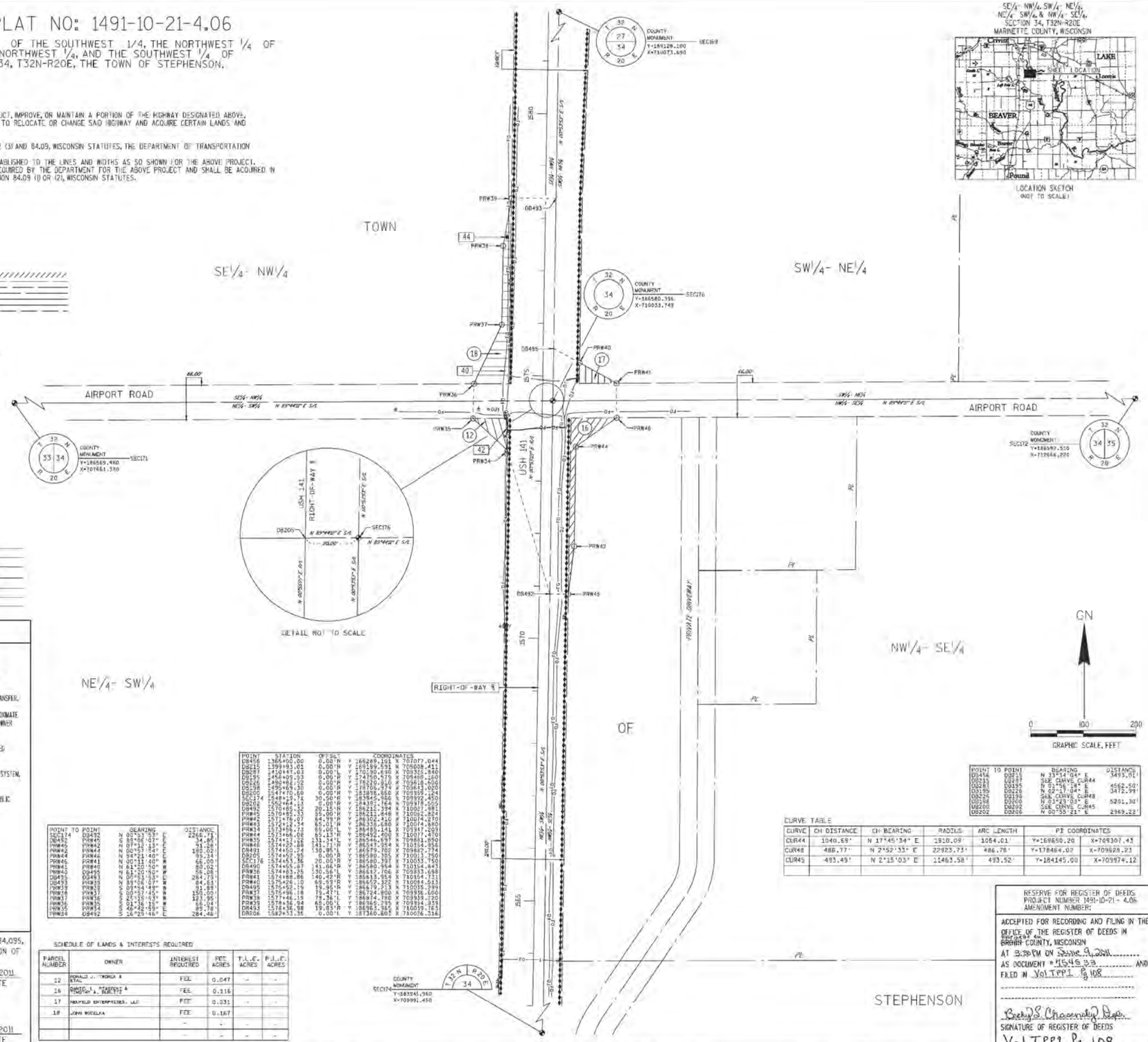
JON L. HERBEL (PRINTED NAME) — SIGNATURE — 06/6/2011 (DATE)

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

NORMAN PAWELCZYK (PRINTED NAME) — SIGNATURE — 06/6/2011 (DATE)

SE¼- NW¼, SW¼- NE¼, NE¼- SW¼, & NW¼- SE¼, SECTION 34, T32N-R20E, MARINETTE COUNTY, WISCONSIN

LOCATION SKETCH (NOT TO SCALE)



POINT	STATION	OFFSET	COORDINATES
DB496	1554+60.00	0.00'R	Y 186289.101 X 709707.044
DB515	1399+93.01	0.00'R	Y 189189.591 X 709008.411
DB287	1410+47.03	0.00'L	Y 190190.696 X 709325.840
DB295	1454+09.53	0.00'R	Y 174750.575 X 709490.260
DB246	1490+86.52	0.00'R	Y 178220.940 X 709618.600
DB198	1495+69.30	0.00'R	Y 178709.577 X 709643.020
DB200	1547+70.60	0.00'R	Y 183898.860 X 709359.124
SEC174	1548+33.76	30.50'R	Y 183945.960 X 709992.450
DB202	1552+64.13	0.00'R	Y 184301.764 X 709978.509
DB492	1570+65.00	0.00'R	Y 185812.394 X 710007.981
PRW45	1570+85.33	55.00'R	Y 186211.848 X 710062.824
PRW44	1571+76.07	55.00'R	Y 186202.410 X 710074.270
PRW43	1572+12.54	65.01'R	Y 186336.680 X 710074.680
PRW34	1573+56.78	65.00'L	Y 186480.146 X 709347.200
PRW44	1573+66.68	65.41'R	Y 186492.400 X 710071.470
PRW35	1574+11.88	133.34'L	Y 186546.699 X 709861.650
PRW46	1574+11.88	141.21'R	Y 186547.954 X 710154.956
DB493	1574+50.24	130.95'L	Y 186579.702 X 709862.774
DB205	1574+57.55	0.00'R	Y 186580.305 X 710033.750
SEC176	1574+53.36	20.00'R	Y 186580.397 X 710053.750
PRW40	1574+65.87	141.06'R	Y 186580.954 X 710154.643
PRW36	1574+83.25	130.56'L	Y 186612.706 X 709883.698
PRW41	1574+88.86	140.42'R	Y 186633.954 X 710154.733
PRW40	1575+26.10	69.53'R	Y 186652.322 X 710094.513
DB495	1576+50.19	79.98'R	Y 186679.213 X 710015.399
PRW37	1576+99.11	79.47'L	Y 186724.800 X 709916.600
PRW38	1577+46.14	79.36'L	Y 186814.780 X 709939.220
PRW39	1578+36.94	65.00'L	Y 186965.295 X 709934.833
DB493	1578+36.98	19.83'R	Y 186965.365 X 710059.165
DB206	1582+53.35	0.00'L	Y 187360.803 X 710026.316

POINT TO POINT	BEARING	DISTANCE
SEC174 DB492	N 00°33'33" E	2266.71'
DB492 PRW45	S 89°06'07" E	34.85'
PRW45 PRW44	N 01°32'13" E	91.26'
PRW42 PRW44	N 00°57'54" E	198.02'
PRW44 PRW40	N 34°23'40" E	95.34'
PRW45 PRW41	N 00°33'40" W	66.00'
PRW41 PRW40	N 61°20'50" W	80.02'
PRW40 DB495	N 61°20'50" W	56.08'
DB495 DB493	N 09°51'53" E	284.79'
DB493 PRW39	N 89°06'07" W	84.83'
PRW39 PRW38	S 09°51'46" W	94.89'
PRW38 PRW37	S 09°51'46" W	150.00'
PRW37 PRW36	S 25°15'15" W	123.95'
PRW36 PRW35	S 01°36'13" W	56.04'
PRW35 PRW34	S 46°42'59" E	99.78'
PRW34 DB492	S 16°23'46" E	284.46'

POINT TO POINT	BEARING	DISTANCE
DB456 DB215	N 33°14'04" E	3493.01'
DB215 DB287	SEE CURVE CUR44	
DB287 DB195	N 01°56'18" E	4562.50'
DB195 DB226	N 02°19'04" E	3472.99'
DB226 DB199	SEE CURVE CUR48	
DB198 DB200	N 01°23'03" E	5201.30'
DB200 DB202	SEE CURVE CUR45	
DB202 DB206	N 00°55'23" E	2969.23'

CURVE TABLE

CURVE	CH DISTANCE	CH BEARING	RADIUS	ARC LENGTH	PI COORDINATES	
CUR44	1040.68'	N 17°45'34" E	1910.09'	1054.01'	Y=189850.20	X=709307.43
CUR48	488.77'	N 2°52'33" E	22923.73'	486.78'	Y=178464.02	X=709628.23
CUR45	493.49'	N 2°15'03" E	11463.58'	493.52'	Y=184145.00	X=709974.12

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE ACRES	T.L.E. ACRES	P.L.E. ACRES
12	RONALD J. WOJCIK & ETAL	FEE	0.047	-	-
16	DANIEL J. KASPERSKI & JONATHAN A. BLEITZ	FEE	0.116	-	-
17	NEWFIELD ENTERPRISES, LLC	FEE	0.331	-	-
18	JOHN WOJCIK	FEE	0.167	-	-
		-	-	-	-
		-	-	-	-

RESERVE FOR REGISTER OF DEEDS
PROJECT NUMBER 1491-10-21- 4.06
AMENDMENT NUMBER:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARINETTE COUNTY, WISCONSIN
AT 3:30 PM ON June 9, 2011
AS DOCUMENT # 1545133 AND FILED IN Vol TPP1 Pg 108

Becky S. Chaconas Deputy
SIGNATURE OF REGISTER OF DEEDS
Vol TPP1 Pg. 108

FILE NAME : C:\users\P\D3\149109A\dgn\1491001\040106srw.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 06-JUN-2011 10:12 PLOT BY : ss...plotuser...$$ PLOT NAME : D3 PLOT SCALE = 100.000000:1.000000

N

BEGIN PROJECT
STA 1278+66.5

1270 1275 1280 1285 1290 1295 1300

USH 141

MGS GUARDRAIL
POST 1 STA 1291+83.9 USH 141 LT
POST 5 STA 1292+08.9 USH 141 LT
POST 9 STA 1292+33.9 USH 141 LT

MGS GUARDRAIL
POST 1 STA 1295+11.6 USH 141 LT
POST 5 STA 1294+86.6 USH 141 LT
POST 9 STA 1294+61.6 USH 141 LT

EXISTING R/W

MGS GUARDRAIL
POST 1 STA 1291+46.4 USH 141 RT
POST 5 STA 1291+71.4 USH 141 RT
POST 9 STA 1291+96.4 USH 141 RT

MGS GUARDRAIL
POST 1 STA 1294+49.1 USH 141 RT
POST 5 STA 1294+24.1 USH 141 RT
POST 9 STA 1293+99.1 USH 141 RT

PC 1300+33.20

5

5

N

CONSTRUCTION LIMITS
17+70

STA 18+39 CTH P RT
REMOVE DRIVEWAY PIPE

PI 16+59.31

17

1320+12.00
TYPE B1 INTERSECTION REQ'D

PC 18+29.02

PT 19+10.76

1321+86.79 USH 141 =
20+00.00 CTH P EAST

PI 1320+25.16
180°-15'-46"

PI 1325+18.97
180°-02'-10"

1300 1305 1310 1315 1320 1325 1330

USH 141

EXISTING R/W

EXISTING R/W

PT 1318+82.79

1320+12.00 USH 141=
19+99.96 CTH P WEST

PC 20+89.64

SLOPE INTERCEPT

PT 21+80.62

22

PI 22+82.40

CTH P

CONSTRUCTION LIMITS
22+40

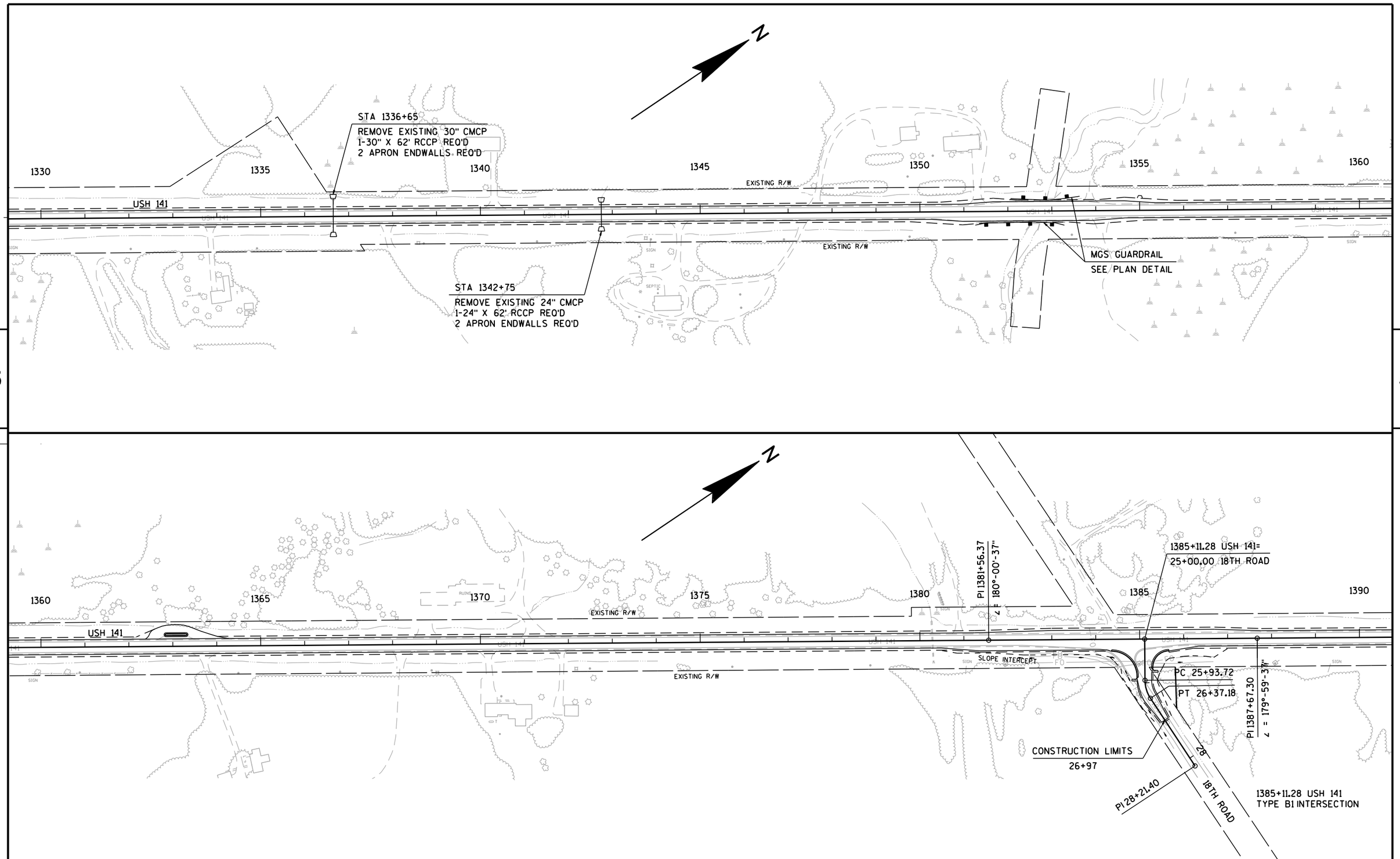
1321+86.79
TYPE B1 INTERSECTION REQ'D

PC 1301+43.20

USH 41
CURVE NOTES
PI = 1309+83.40
R = 3274.04'
SE = 0.041%
RO = 164'
SE TRANSITION = 244'

STA 20+88 CTH P
REMOVE EXISTING 24" CMCP
1-24" X 72' RCCP REQ'D
2 APRON ENDWALLS REQ'D

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET 87	E

FILE NAME : F:\d3_149110\050202_pn.dgn PLOT DATE : 26-JUN-2014 15:36 PLOT BY : ditjbs PLOT NAME : 050202 pn.dgn PLOT SCALE : 200:1

USH 41
CURVE NOTES

PI = 1405+34.00
R = 1909.86'
SE = 0.056%
RO = 220'
SE TRANSITION = 300'

N

1390
1395
USH 141
1400
PC 1399+92.20
1405
EXISTING R/W
PT 1410+45.70
1410
1415
1420

5

5

N

1435+42.08 USH 141
TYPE B1 INTERSECTION

STA 39+45 18TH RD
REMOVE EXISTING 18" CMCP
1-18" X 68' RCCP REQ'D
2 APRON ENDWALLS REQ'D

W 22ND ROAD
PC 35+54.84

CONSTRUCTION LIMITS
38+55

PT 38+70.68

EXISTING R/W
1420
1425
1430
1435
1440
1445
1450
USH 141

PI 1439+30.60
∠ = 180°-03'-43"

PI 1443+28.14
∠ = 180°-01'-08"

MGS GUARDRAIL
POST 1 STA 1448+09.75 USH 141 LT
POST 5 STA 1448+34.75 USH 141 LT
POST 9 STA 1448+59.75 USH 141 LT

SLOPE INTERCEPT

EXISTING R/W

PI 1429+56.67
∠ = 179°-57'-56"

STA 1433+48
REMOVE EXISTING 48" CMCP
1-48" X 66' RCCP REQ'D
2 APRON ENDWALLS REQ'D

PI 1434+32.10
∠ = 179°-58'-00"

1435+42.08 USH 141=
40+00.00 22ND ROAD

MGS GUARDRAIL
POST 1 STA 1447+20 USH 141 RT
POST 5 STA 1447+45 USH 141 RT
POST 9 STA 1447+70 USH 141 RT

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

FILE NAME : F:\d3_149110\050203_pn.dgn PLOT DATE : 26-JUN-2014 15:36 PLOT BY : ditjbs PLOT NAME : 050203 pn.dgn PLOT SCALE : 200:1
WISDOT/CADDS SHEET 42

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
727		TOP OF NW BOLT HIGH VOLTAGE POLE 55' E OF ℄ 141, 500' S OF 24TH RD	668.18

N

MGS GUARDRAIL
POST 1 STA 1456+66 USH 141 LT
POST 5 STA 1456+41 USH 141 LT
POST 9 STA 1456+16 USH 141 LT

PI 1454+04.76
∠ = 180°-00'-13"

PI 1457+79.86
∠ = 180°-13'-58"

1450 1455 1460 1465 1470 1475 1480

EXISTING R/W

USH 141

MGS GUARDRAIL
POST 1 STA 1456+63.75 USH 141 RT
POST 5 STA 1456+38.75 USH 141 RT
POST 9 STA 1456+13.75 USH 141 RT

STA 1453+69
REMOVE EXISTING 30" CMCP
1-30" X 86' RCCP REQ'D
2 APRON ENDWALLS REQ'D

EXISTING R/W

PI 45+38.80

46 24TH ROAD

CONSTRUCTION LIMITS
48+40

R/W LINE

SLOPE INTERCEPT

PI 1476+86.12
∠ = 180°-01'-30"

1480+00.60 USH 141
TYPE D INTERSECTION

SUBSTATION

5 5

N

46 24TH ROAD

CONSTRUCTION LIMITS
48+40

STA 1486+52
END SB PASSING LANE TAPER

PI 1486+50.81
∠ = 180°-31'-20"

1480 1485 1490 1495 1500 1520 1525

EXISTING R/W

SLOPE INTERCEPT

USH 141

1480+00.60 USH 141=
50+00.00 24TH ROAD

1480+00.60 USH 141
TYPE D INTERSECTION

1493+17.83 USH 141=
50+05.71 26TH ROAD

STA 1493+52
BEGIN SB PASSING LANE TAPER
FULL LANE ENDS

R/W LINE

CONSTRUCTION LIMITS
51+57

PI 1493+51.23
∠ = 179°-29'-34"

PI 53+87.29

1493+17.83
TYPE C INTERSECTION REQ'D

PI 1495+08.30
∠ = 180°-02'-02"

PI 1497+05.34
∠ = 179°-59'-40"

PI 1499+79.56
∠ = 180°-00'-59"

EQUATION

PC 1500+91.41

PT 1501+36.41
PC 1518+00.99
1501+37.4 BK =
1518+00 AH

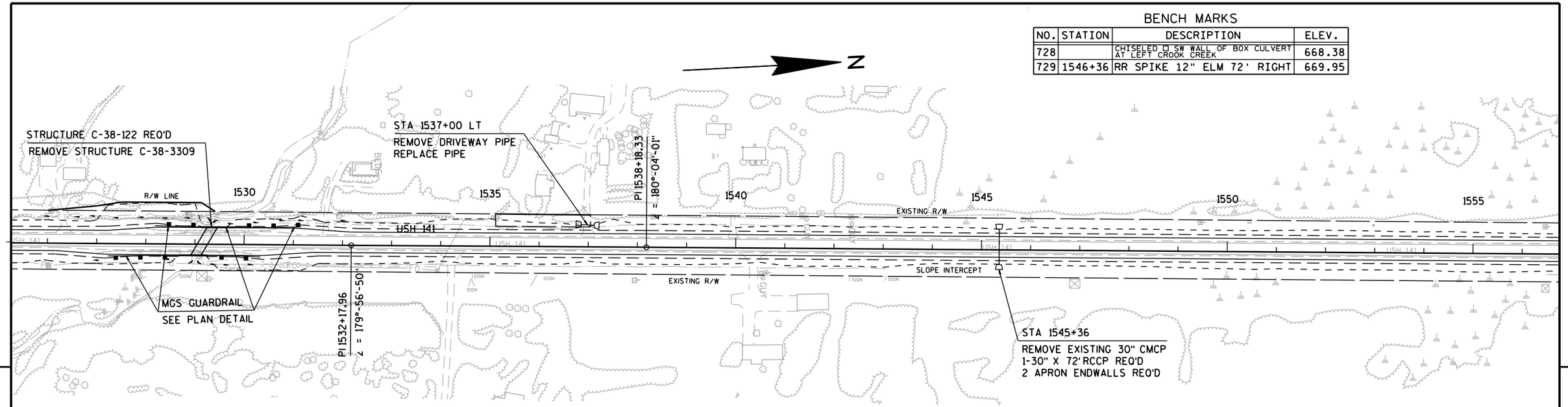
PT 1522+01.80

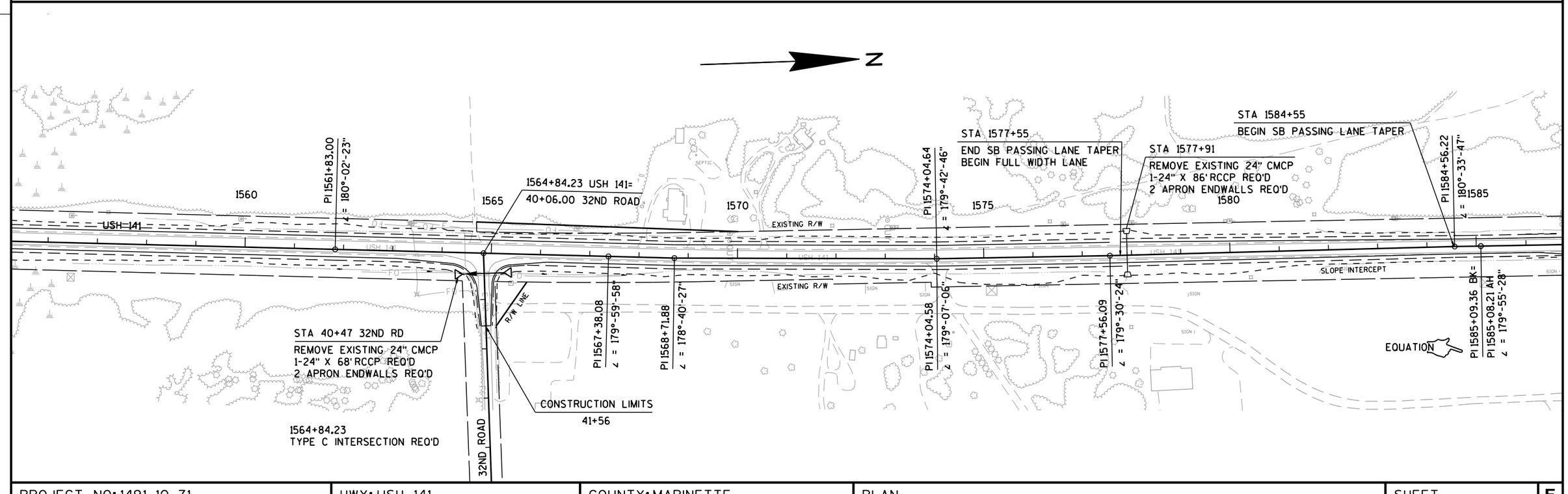
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

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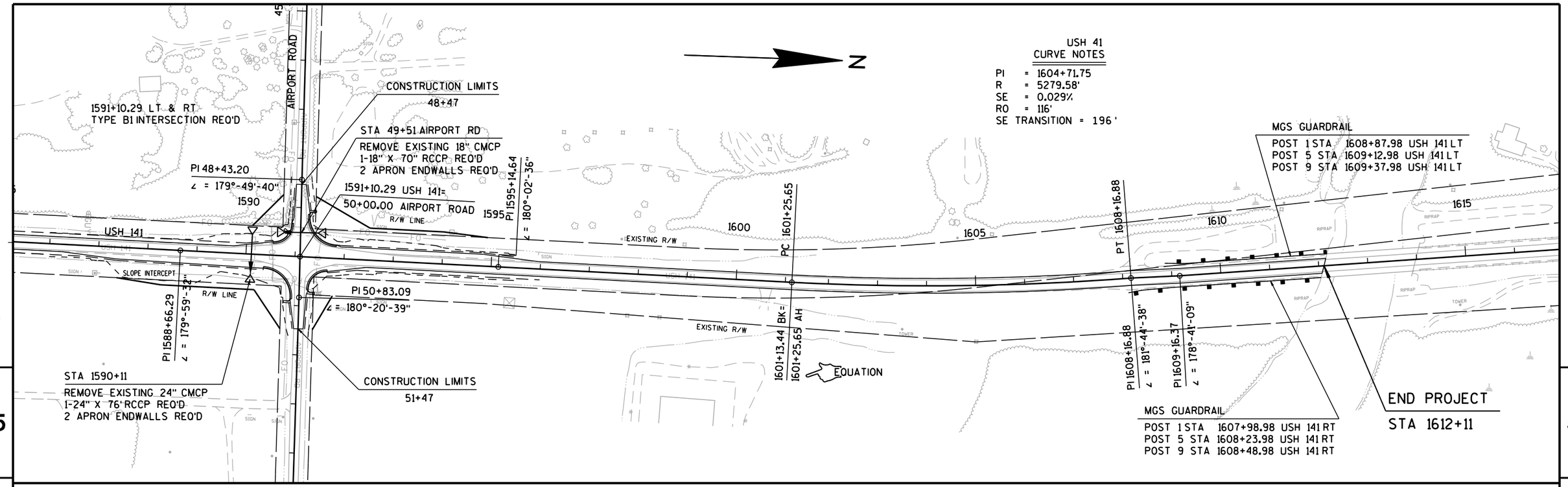
BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
728		CHISELED □ SW WALL OF BOX CULVERT AT LEFT CROOK CREEK	668.38
729	1546+36	RR SPIKE 12" ELM 72' RIGHT	669.95





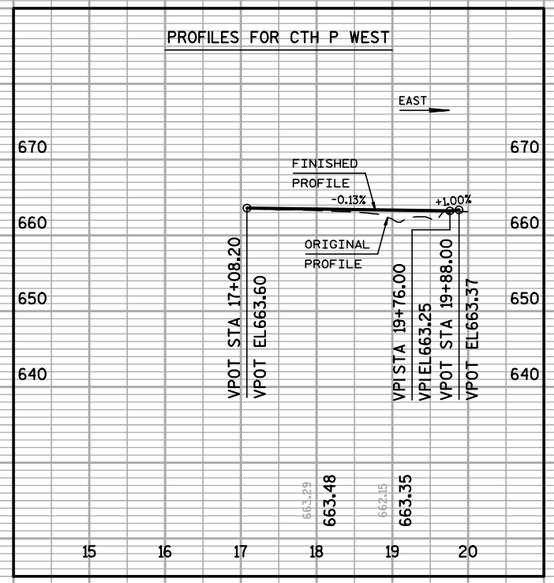
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E

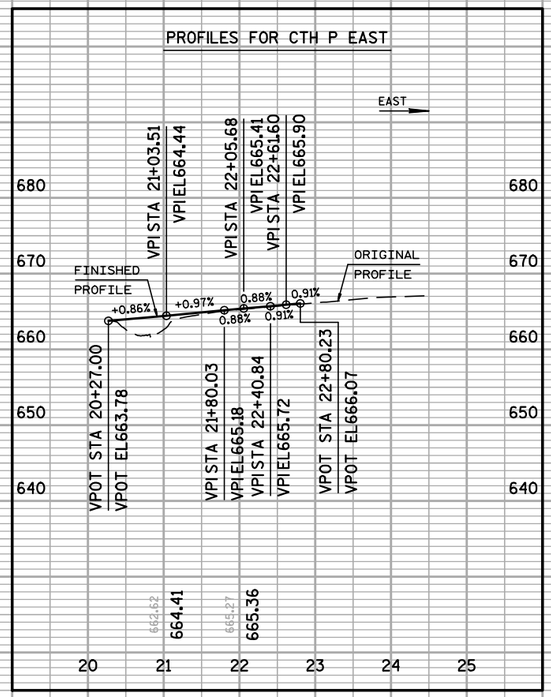


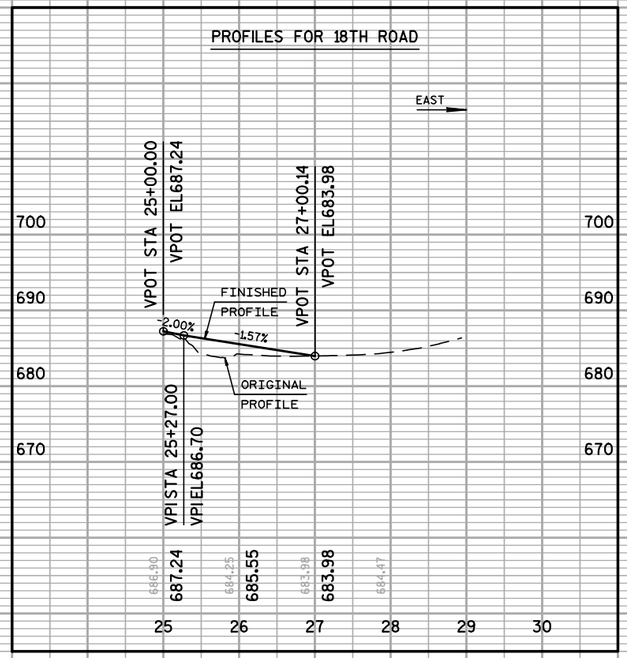
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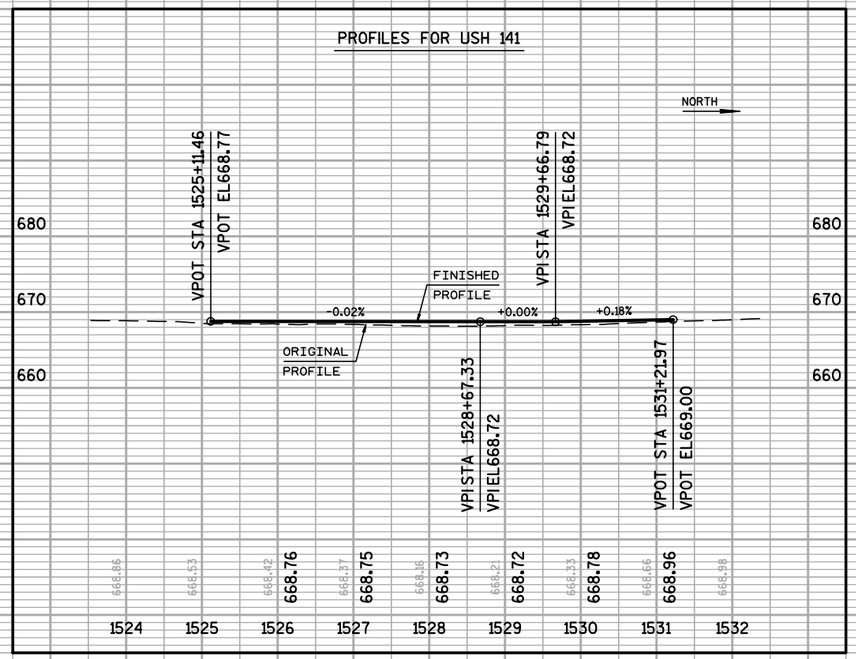
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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PLAN	SHEET	E







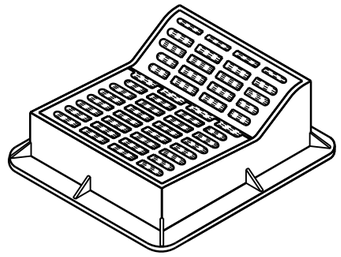


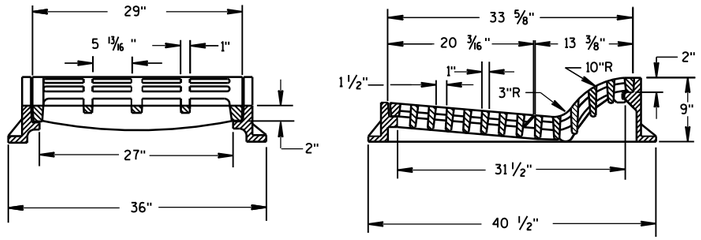
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	SIDE ROAD PROFILES	SHEET 92	E

Standard Detail Drawing List

08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B29-01	SAFETY EDGE
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-03A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-03B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-03C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	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
15C04-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16C	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C08-16D	PAVEMENT MARKING (CLIMBING LANE & PASSING LANE)
15C09-09A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C19-02A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D28-02	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

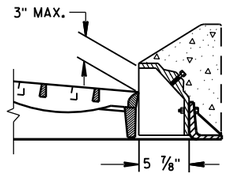
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TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

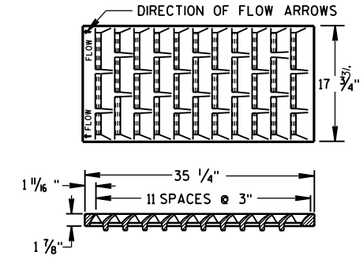
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

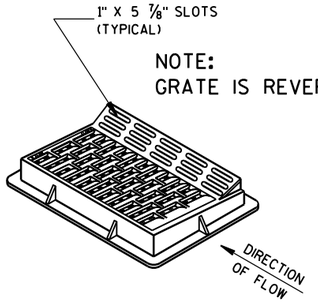
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

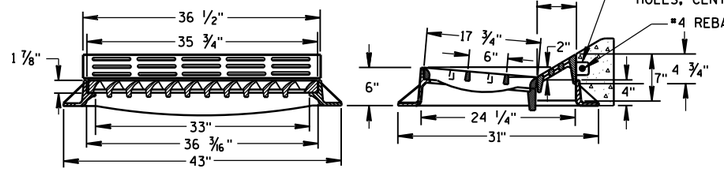
GENERAL NOTES

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

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



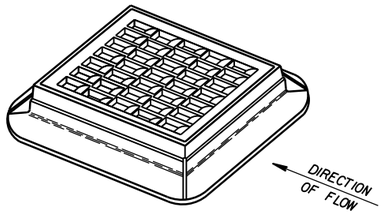


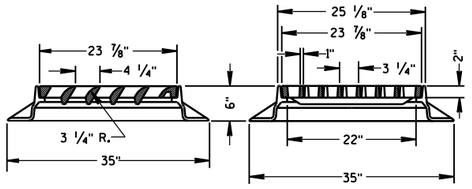


TYPE "HM"

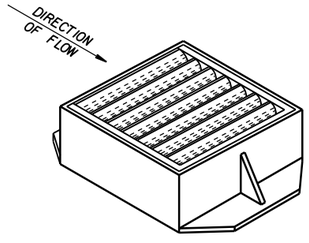
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

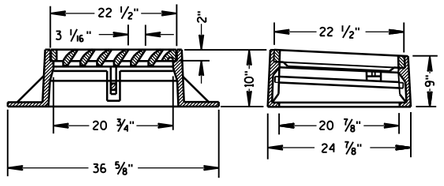
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



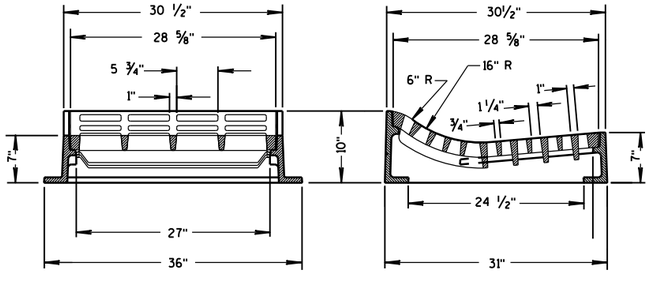


TYPE "S"



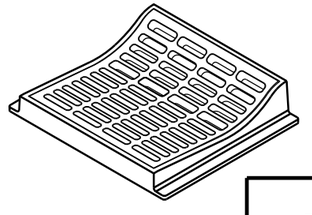


TYPE "V"



TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

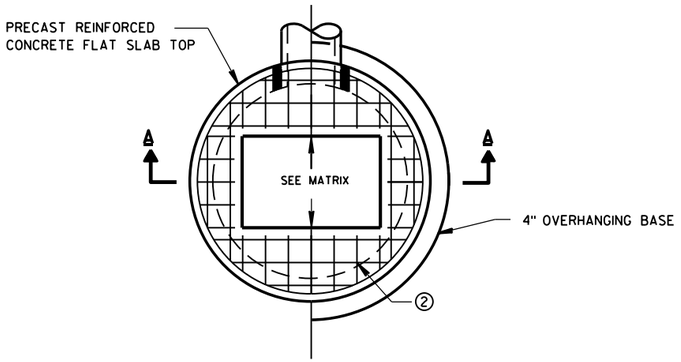
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

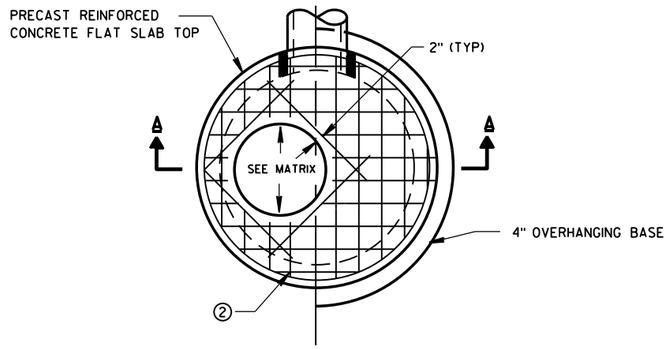
FHWA

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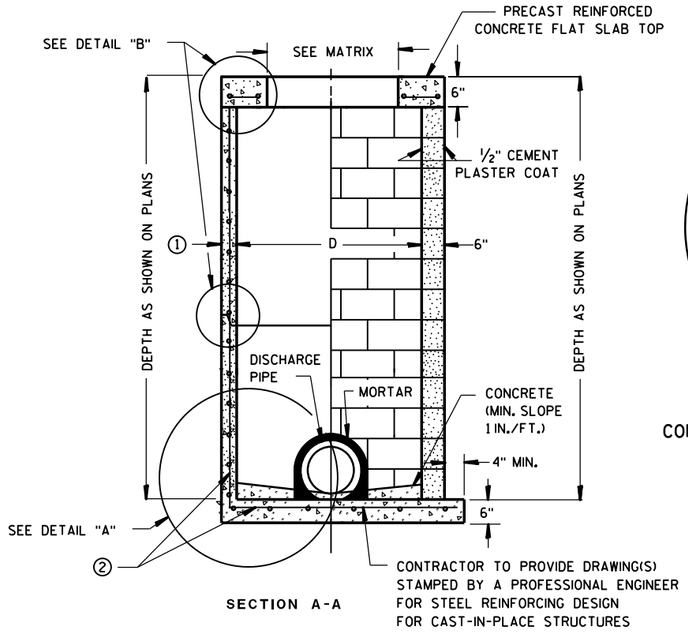
S.D.D. 8 A 5-19c



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

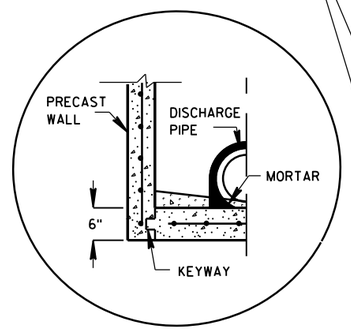


SECTION A-A

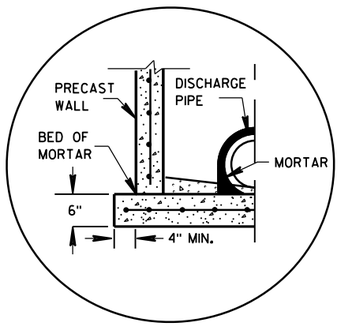
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

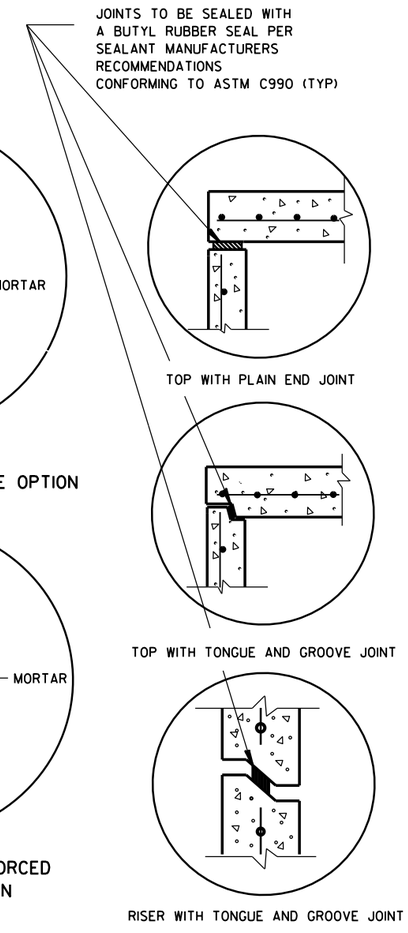


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

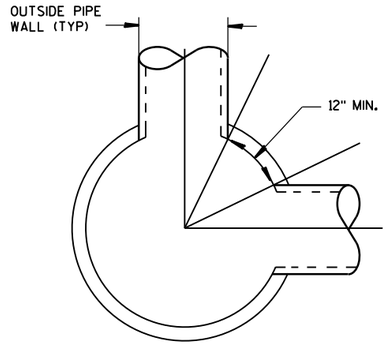
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

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



DETAIL "C"

PIPE MATRIX

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

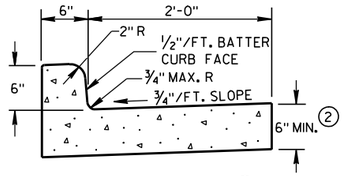
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

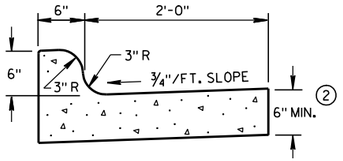
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

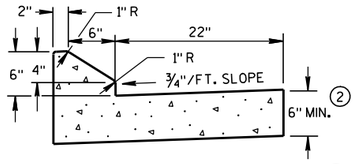
S.D.D. 8 C 6-1



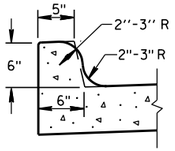
TYPES A & D (1)



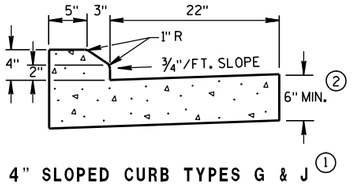
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

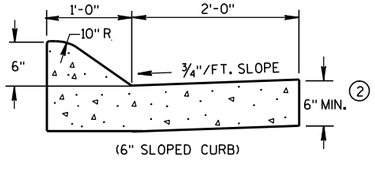


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

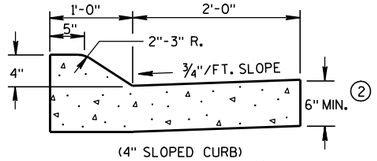


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

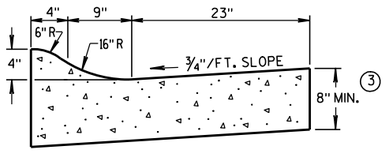


(6" SLOPED CURB)



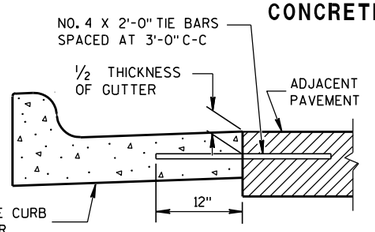
(4" SLOPED CURB)

TYPES A & D (1)

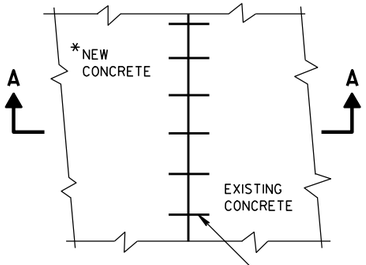


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

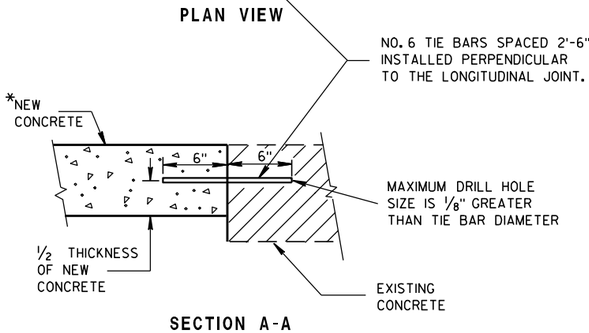


TYPICAL TIE BAR LOCATION (1)



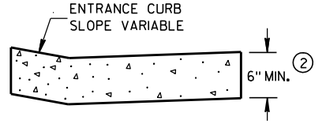
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



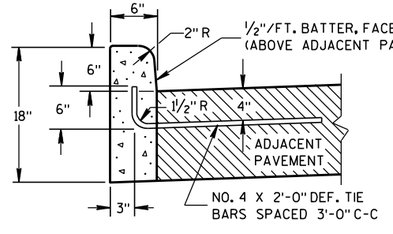
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT

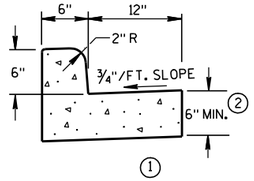


DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

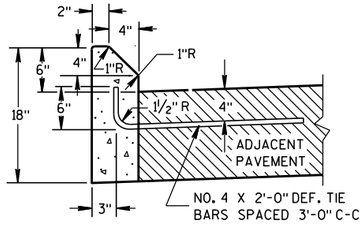


(1)
TYPES A & D



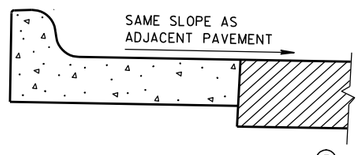
(1)
TYPES A & D

CONCRETE CURB & GUTTER 18"



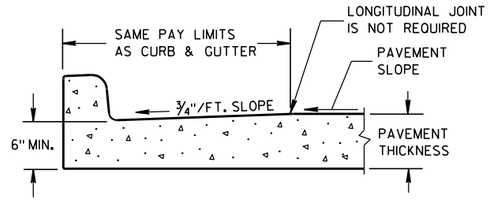
(1)
TYPES G & J

CONCRETE CURB

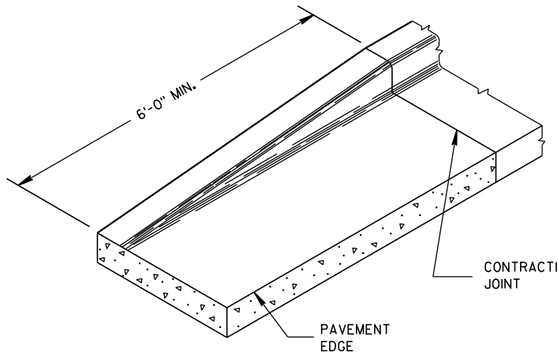


REVERSE SLOPE GUTTER (5)

(TYPICAL FOR ALL CURB & GUTTER TYPES)



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08 — DATE

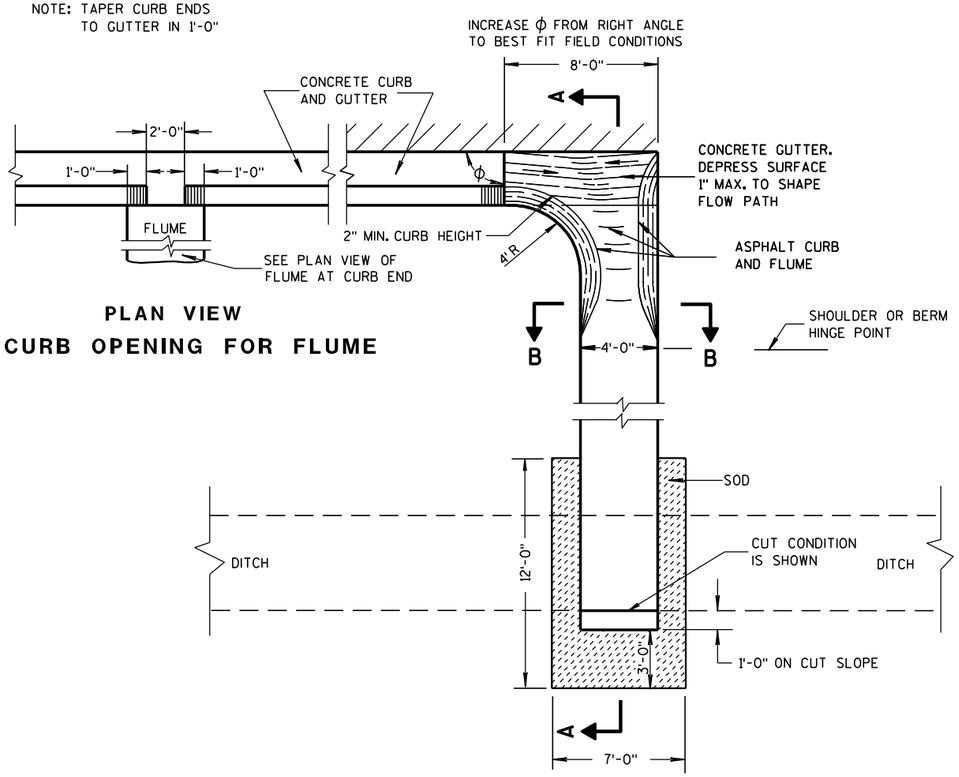
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER

FHWA

6

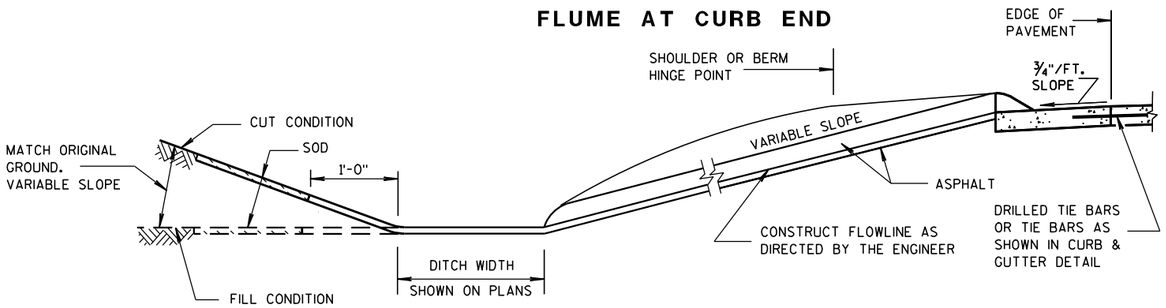
S.D.D. 8 D 1-17

ASPHALTIC FLUME

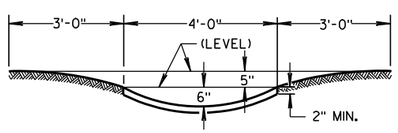


PLAN VIEW
CURB OPENING FOR FLUME

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.

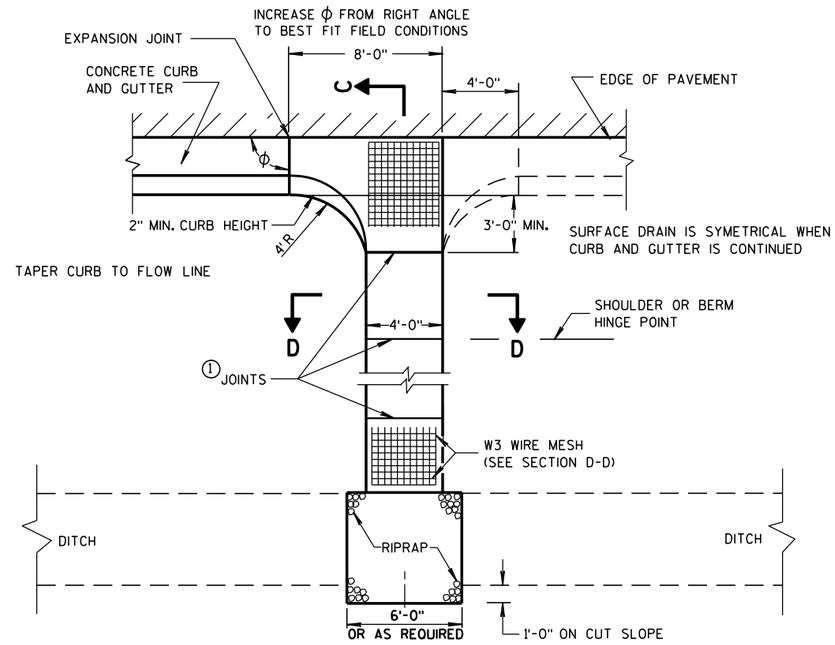
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

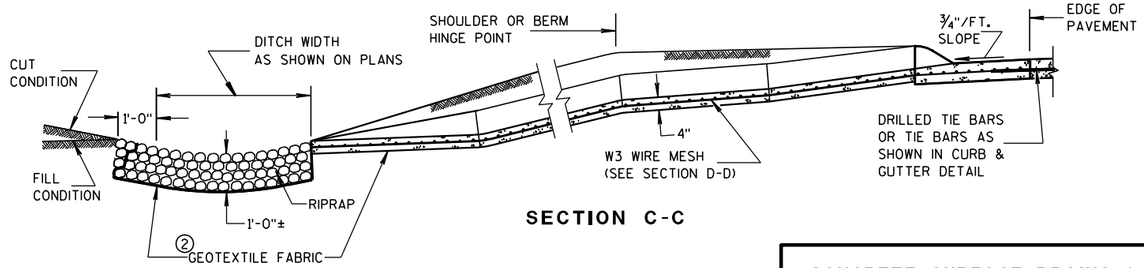
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

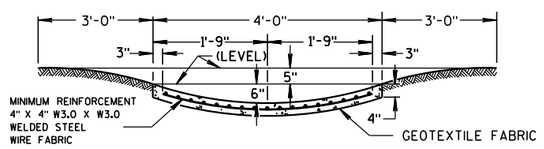
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



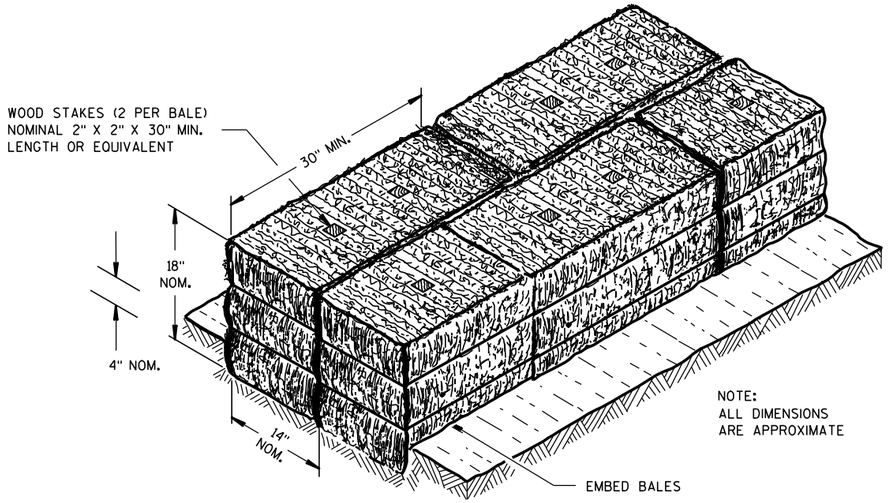
SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

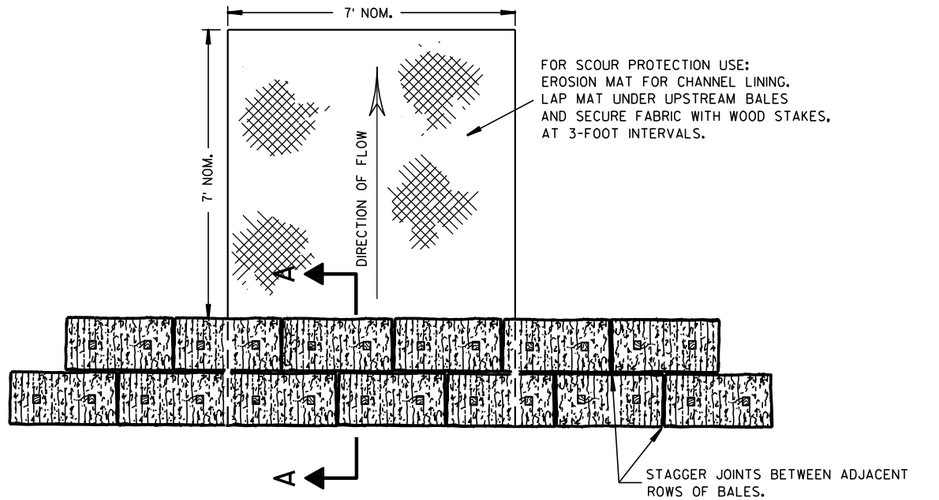
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
97
MENT

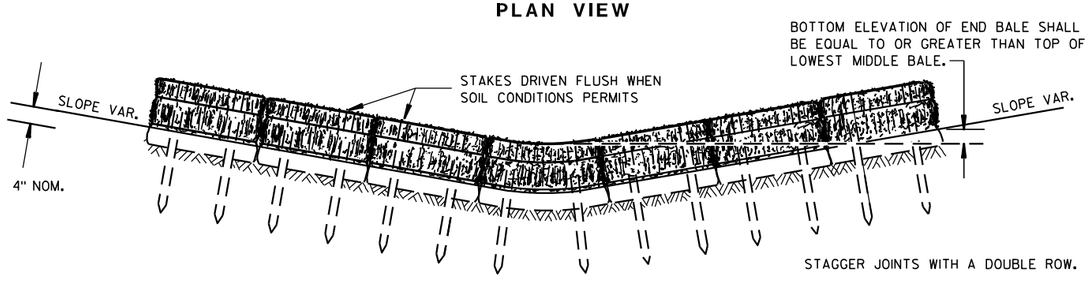
FHWA



SECTION A-A



PLAN VIEW



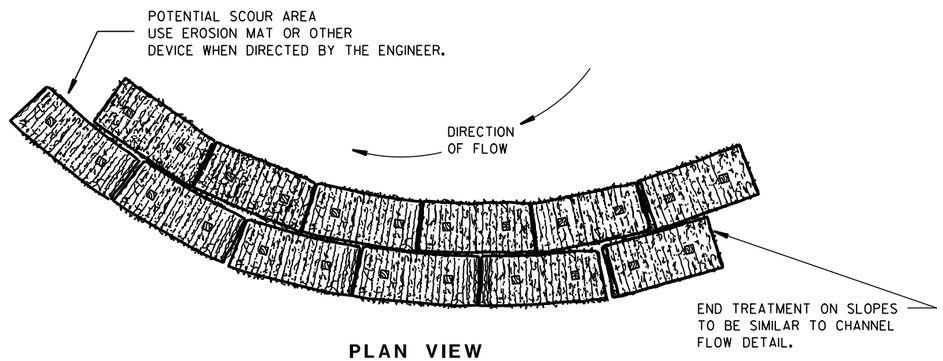
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

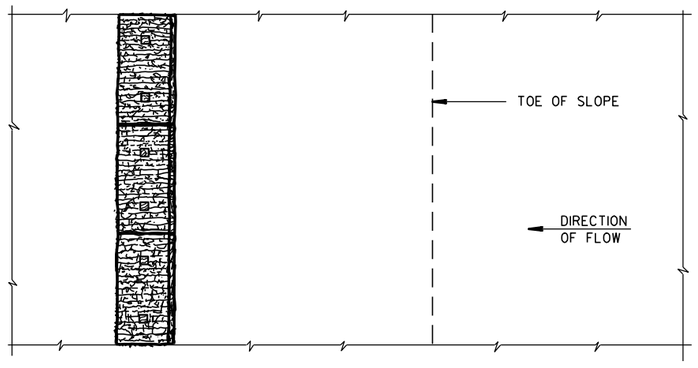
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

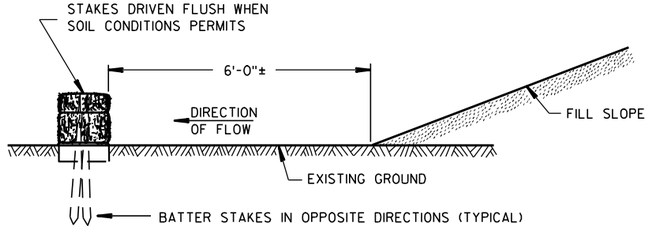


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

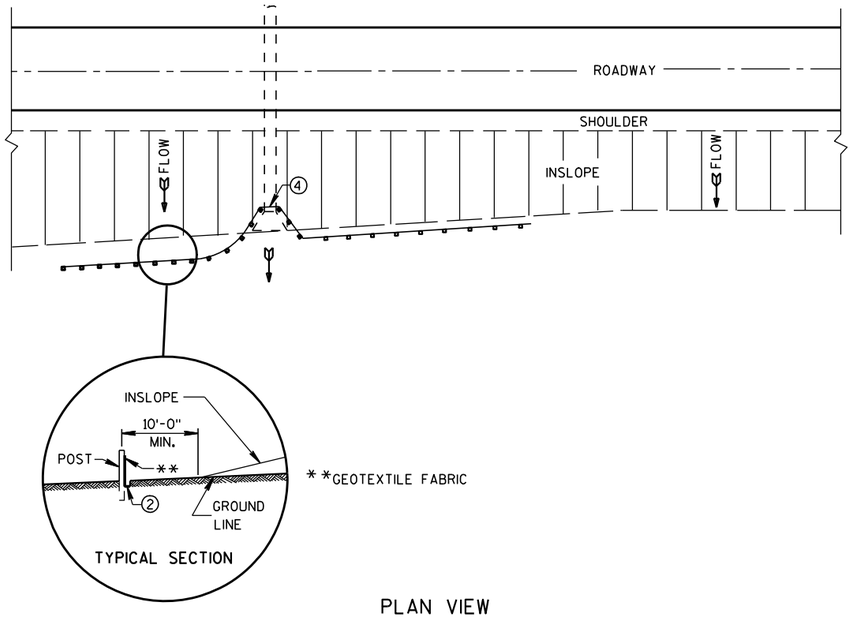
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

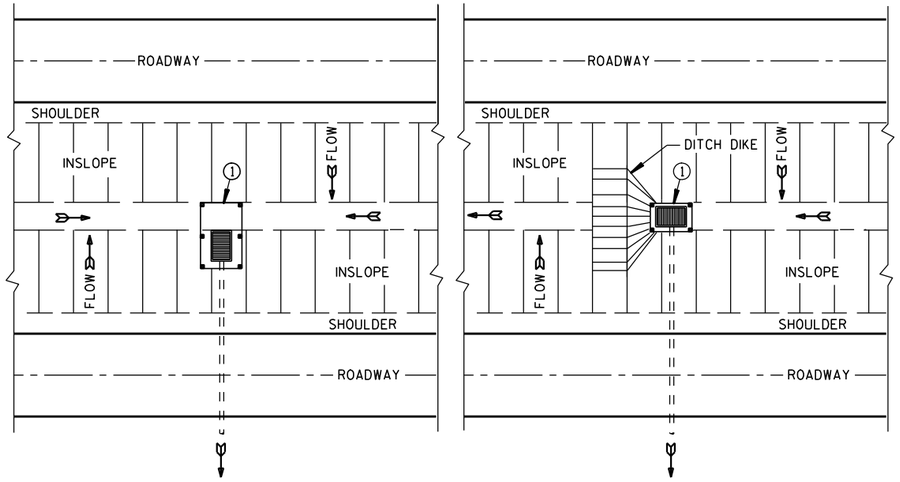
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



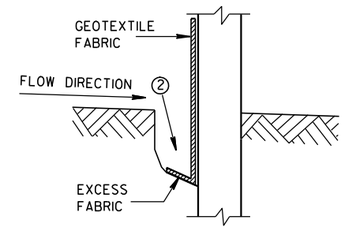
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

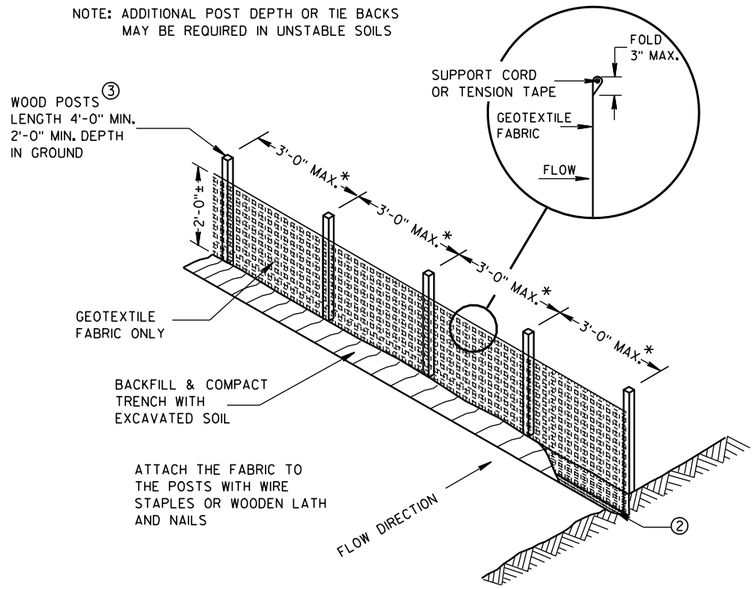
GENERAL NOTES

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.

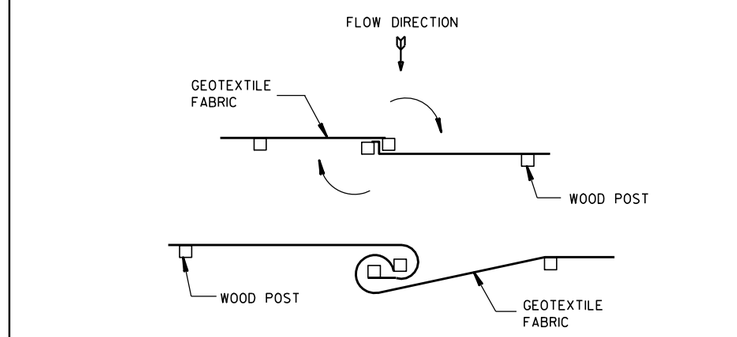


TRENCH DETAIL

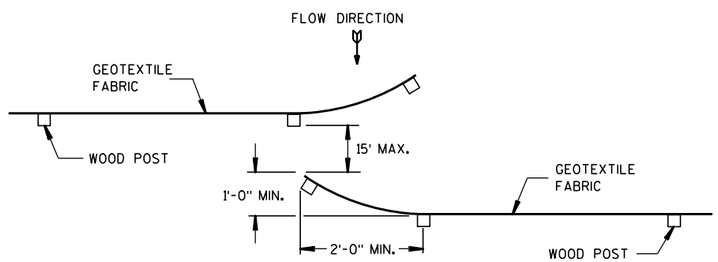


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

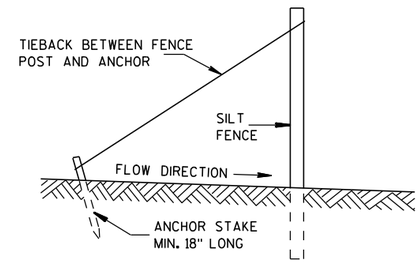


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

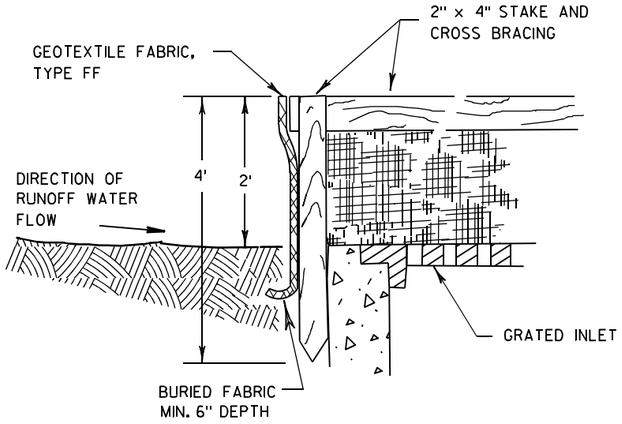
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

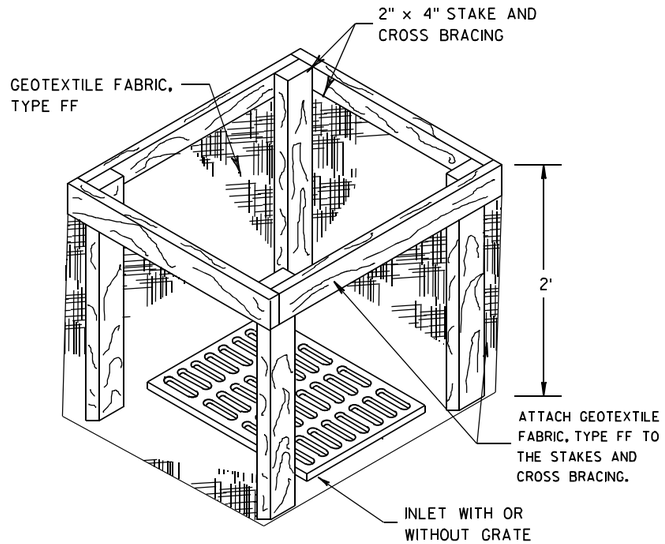
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S.D.D. 8 E 9-6

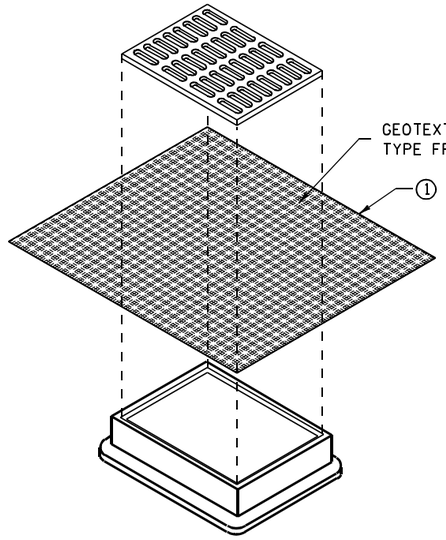
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S.D.D. 8 E 9-6



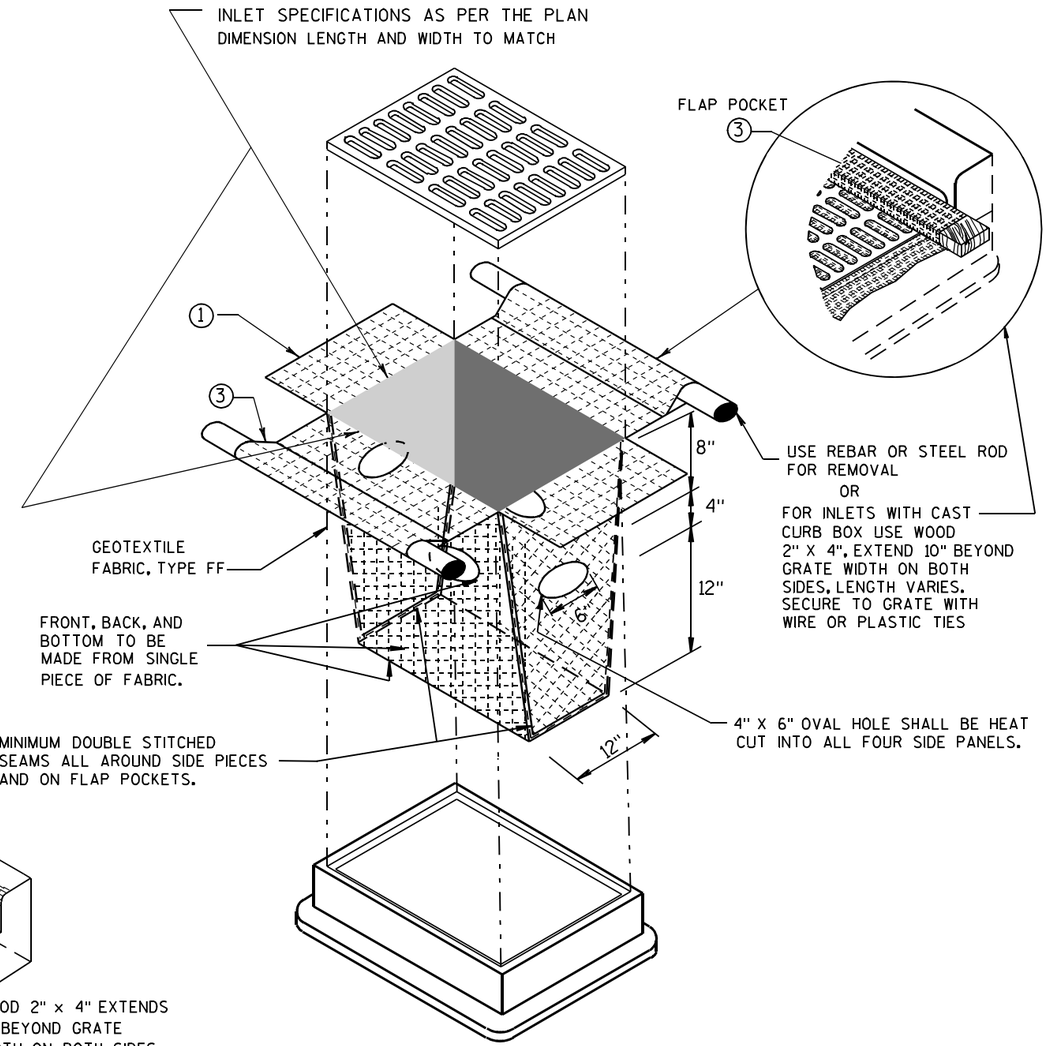


INLET PROTECTION, TYPE A



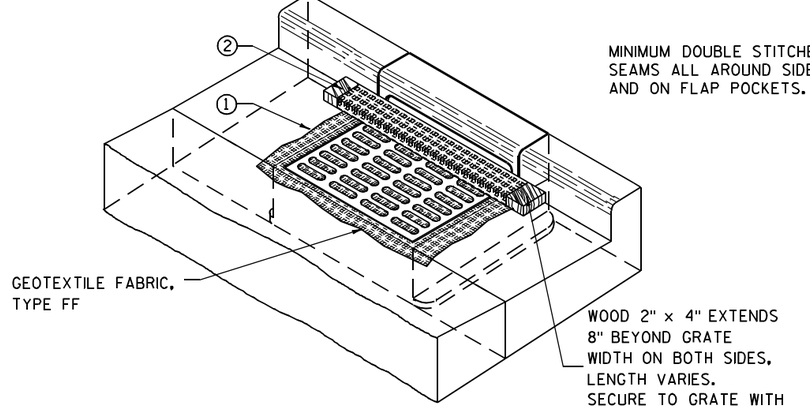
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

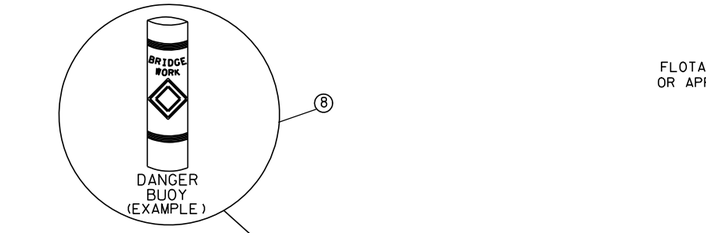
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

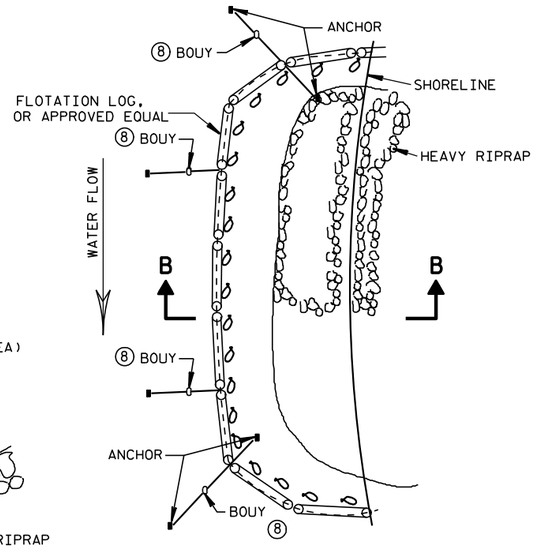
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

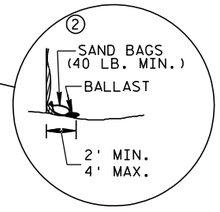
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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

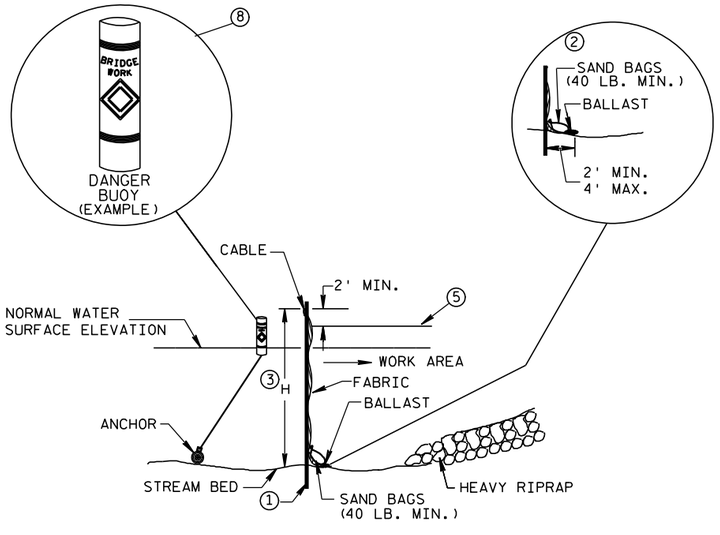


SECTION B-B

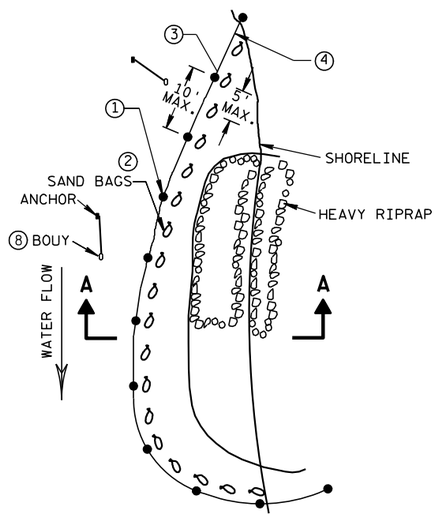




TURBIDITY BARRIER FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



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.

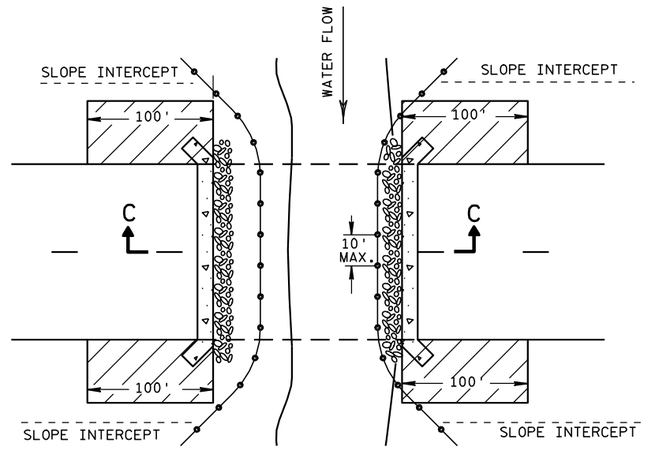
④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

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.

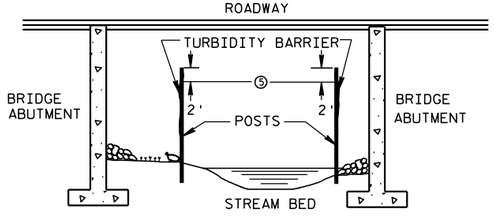
⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.

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

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METAL APRON ENDWALLS

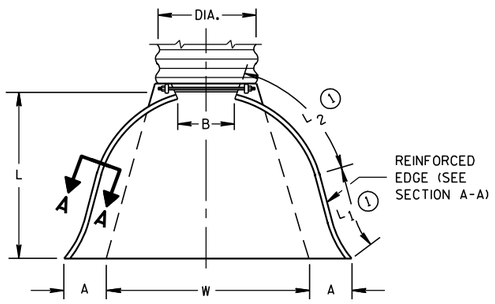
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

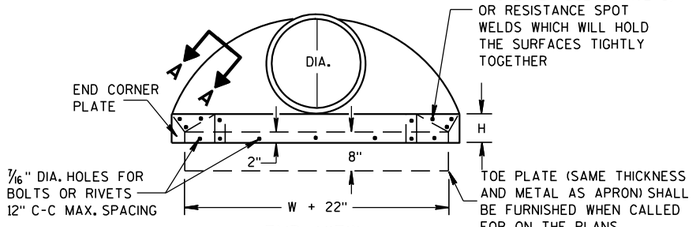
REINFORCED CONCRETE APRON ENDWALLS

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

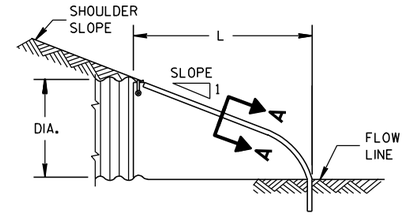
*MINIMUM
**MAXIMUM



PLAN VIEW

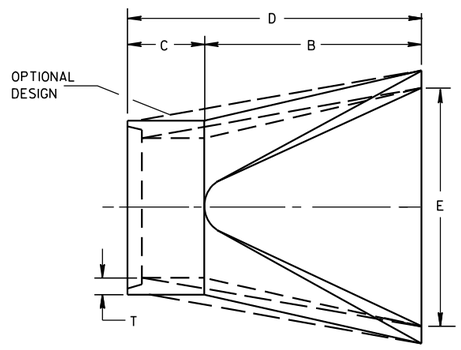


END VIEW

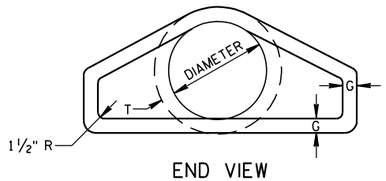


SIDE ELEVATION

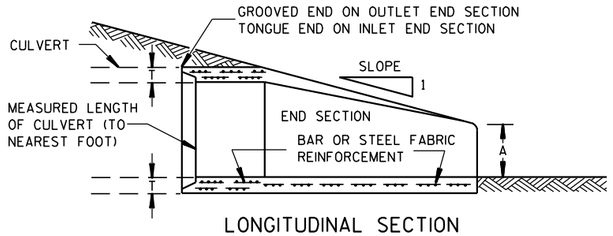
METAL ENDWALLS



PLAN

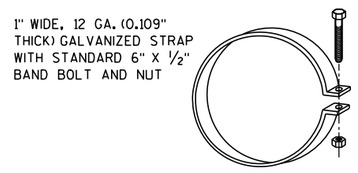


END VIEW



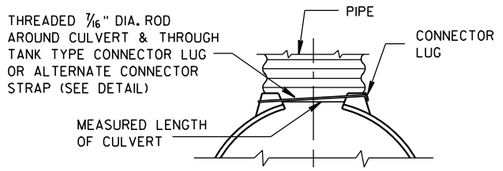
LONGITUDINAL SECTION

CONCRETE ENDWALLS

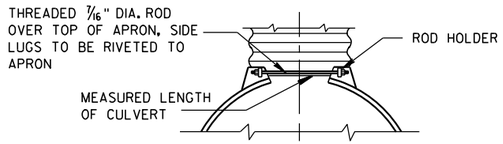


ALTERNATE FOR TYPE 1 CONNECTION

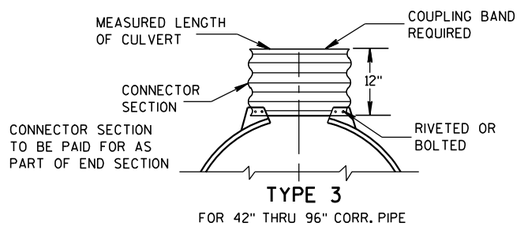
END SECTION CONNECTOR STRAP



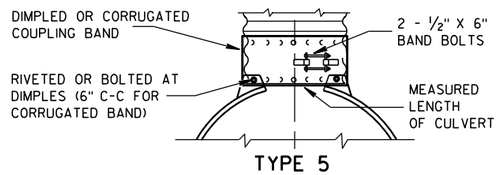
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

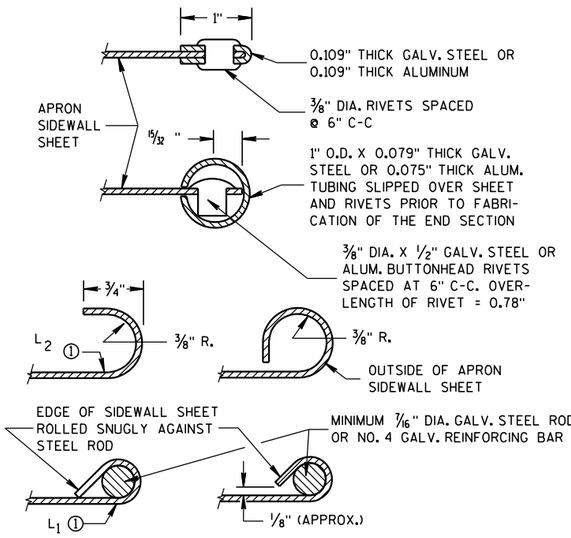
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

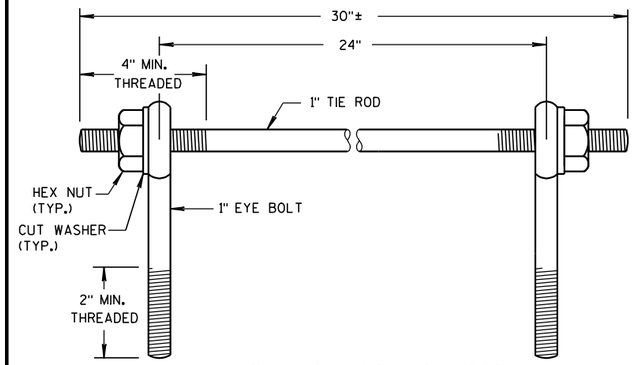
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

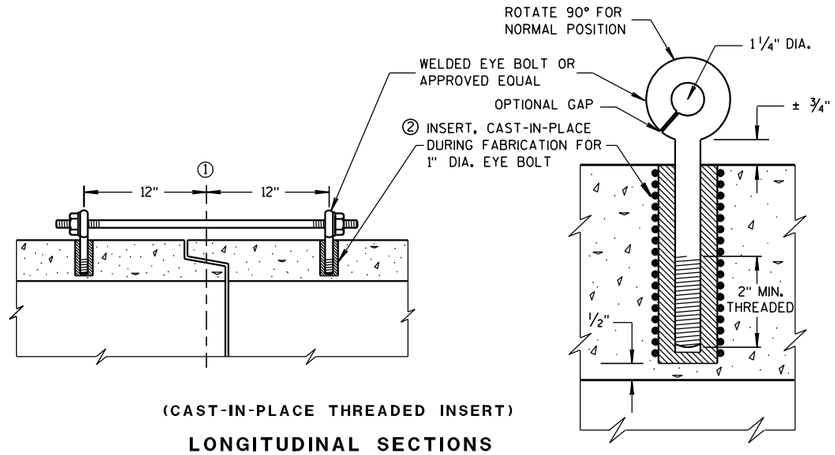
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

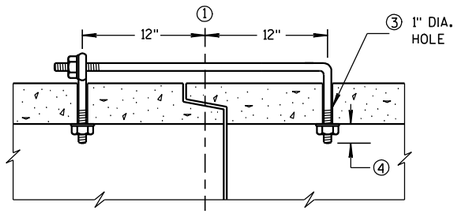
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

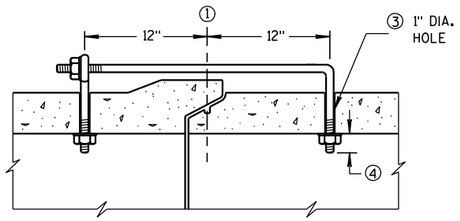
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

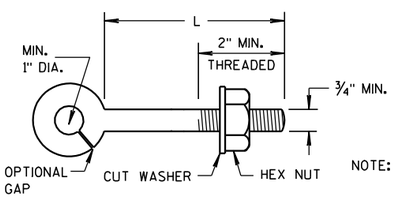


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

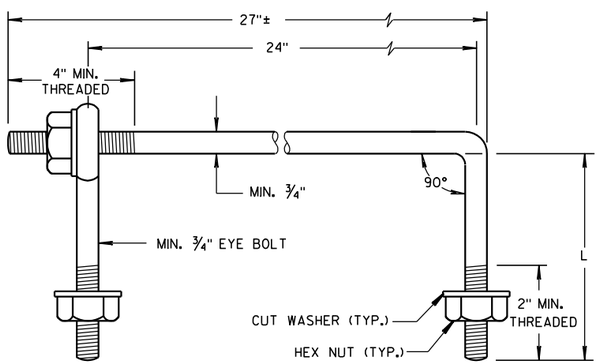
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

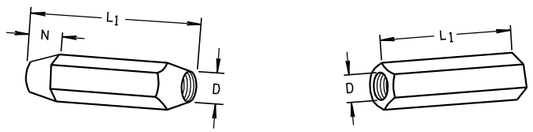
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

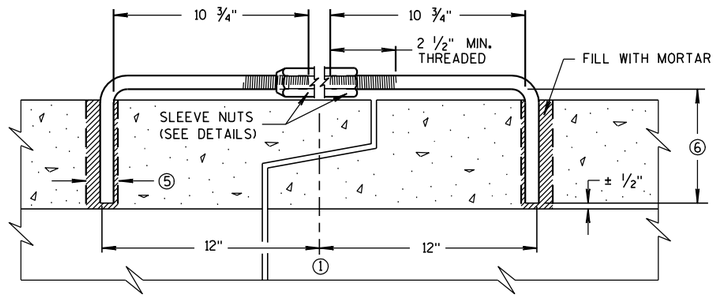
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

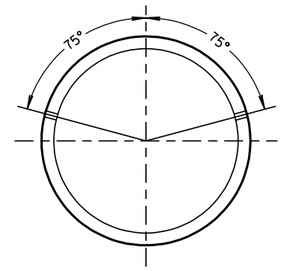
SLEEVE NUTS



LONGITUDINAL SECTION

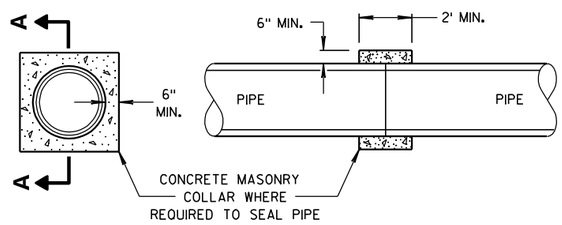
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER

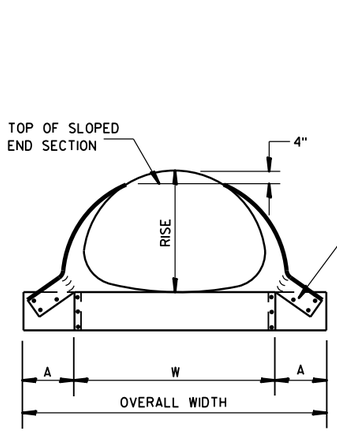
FHWA

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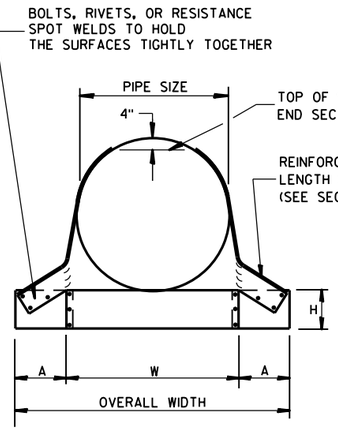
S.D.D. 8 F 4-7

6

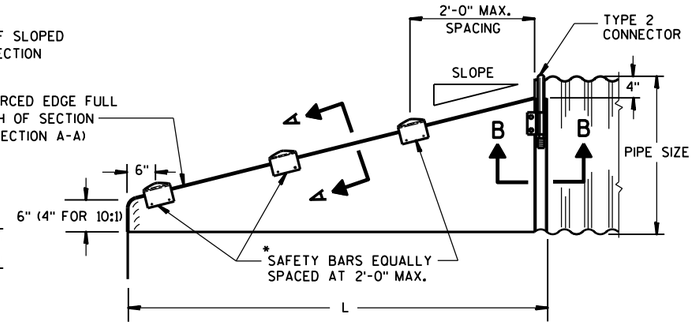
S.D.D. 8 F 4-7



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

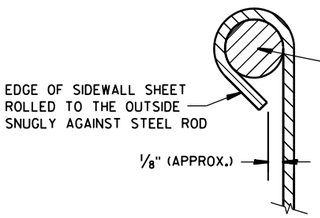
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

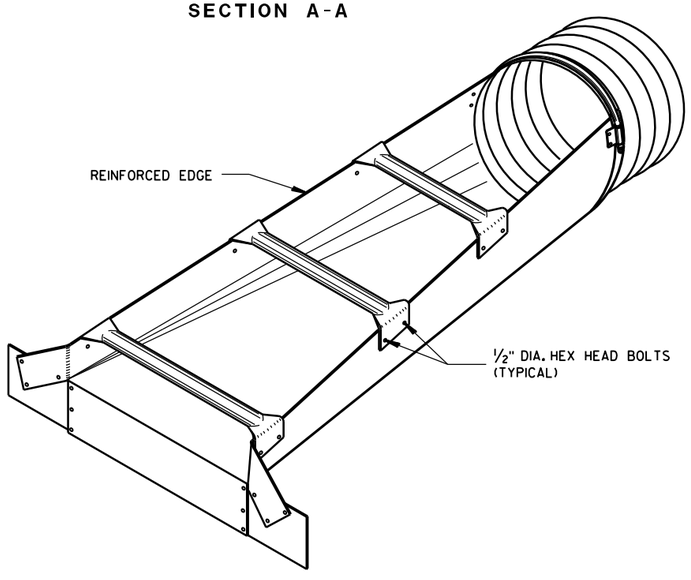
SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

STEEL APRON ENDWALLS FOR CULVERT PIPE
SLOPED SIDE DRAINS

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	6:1	300	——	——



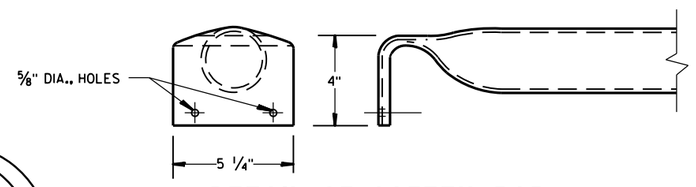
SECTION A-A



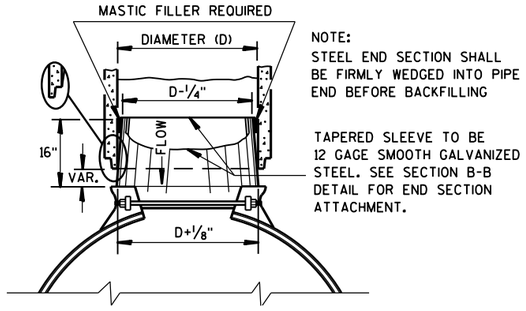
ISOMETRIC VIEW

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.



DETAIL OF SAFETY BAR

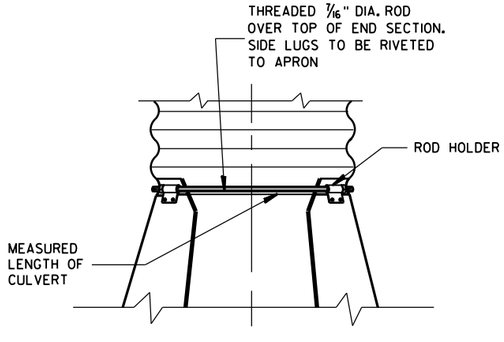


STEEL ADAPTER SLEEVE FOR CONCRETE PIPE

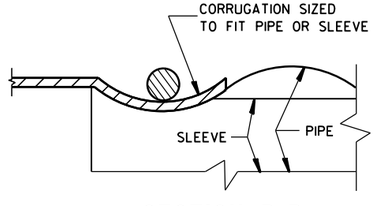
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



TYPE 2
CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

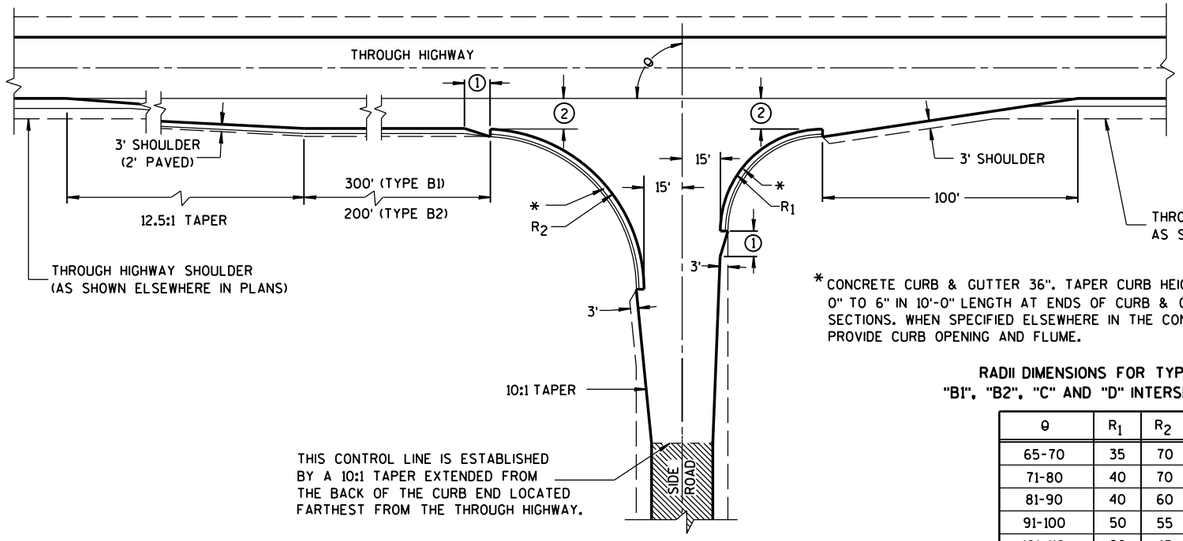
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 7-5

6

S.D.D. 8 F 7-5

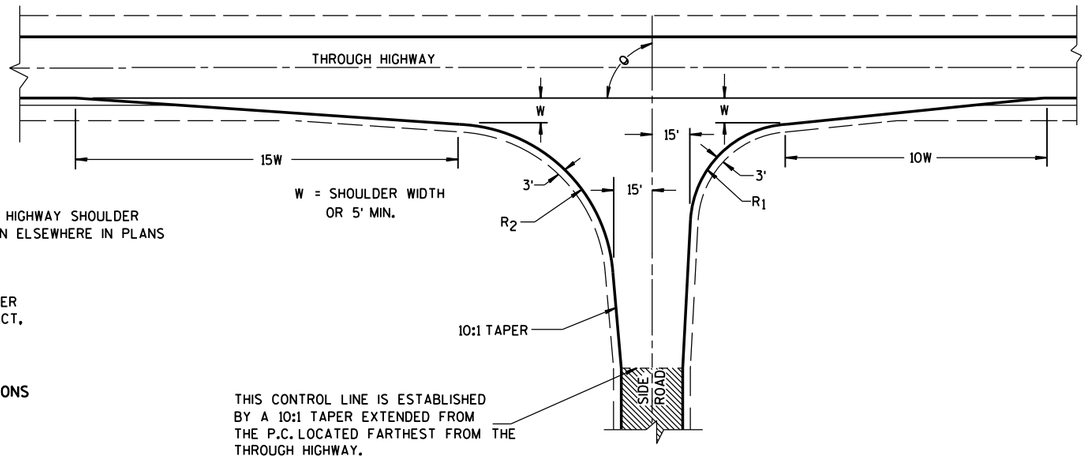


TYPE "B1" AND "B2"

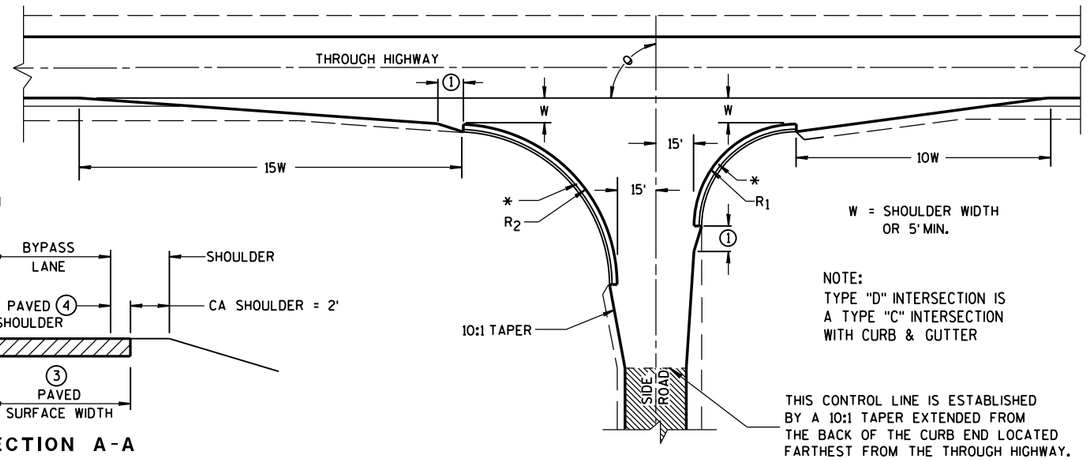
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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

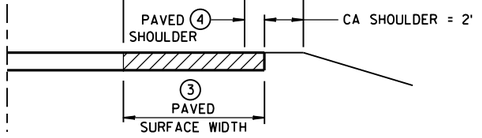
(1) 10-FT TYPICAL.

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

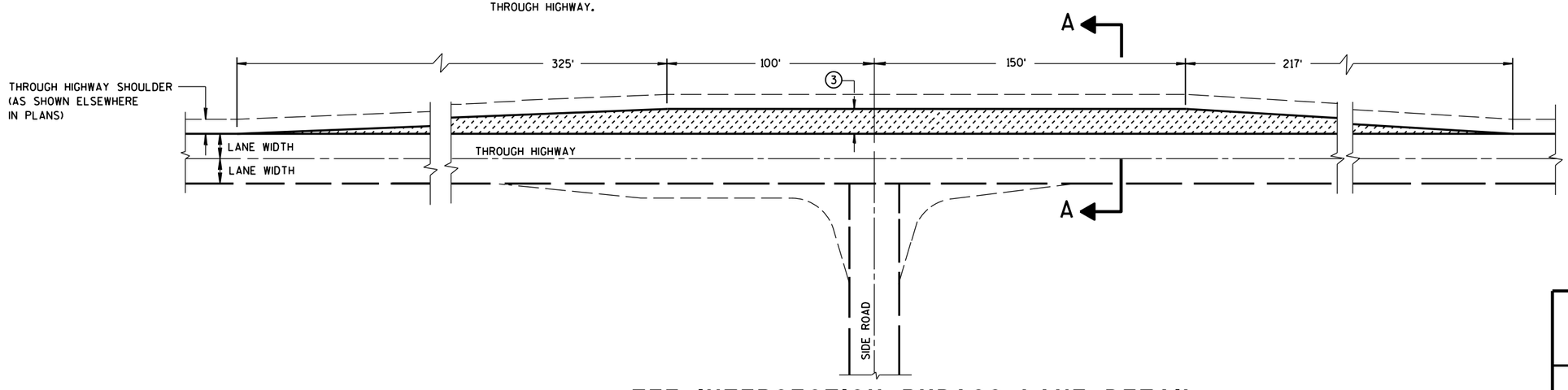
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(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)



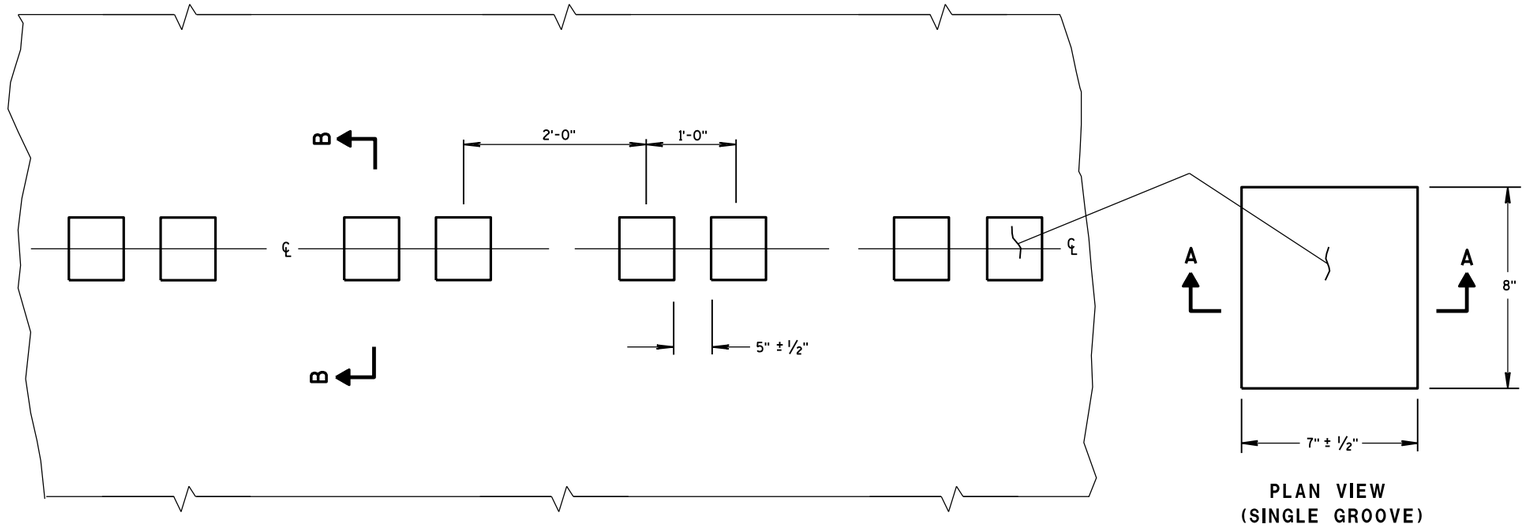
TEE INTERSECTION BYPASS LANE DETAIL

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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



PLAN VIEW
CENTER LINE WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

GENERAL NOTES

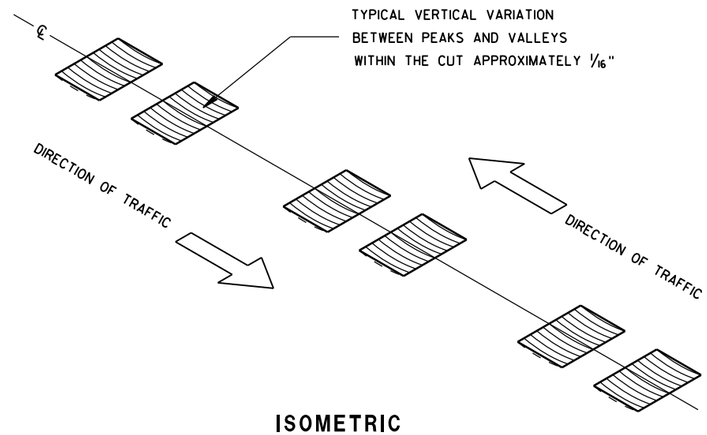
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

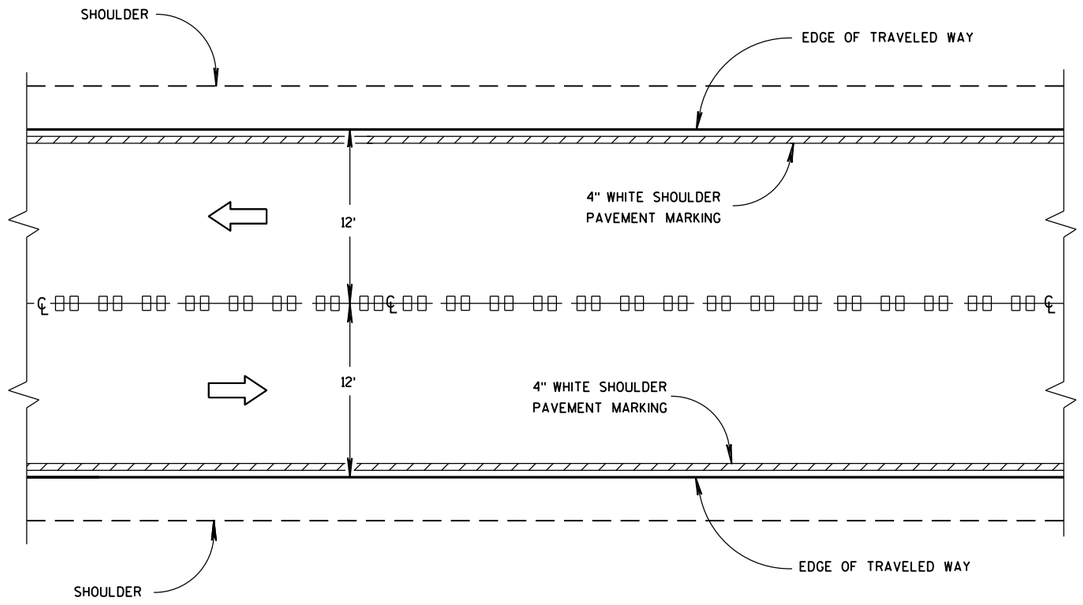
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

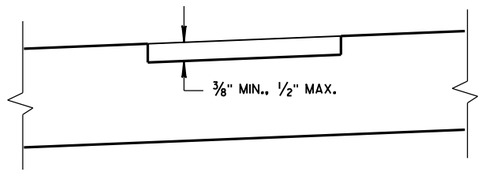
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



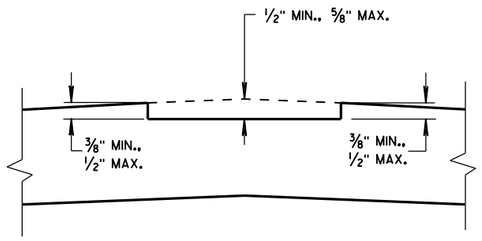
ISOMETRIC



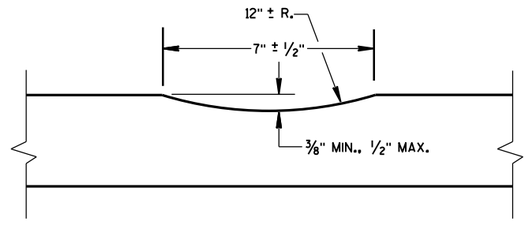
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



SECTION B-B
CROWNED ROADWAY



SECTION A-A

6

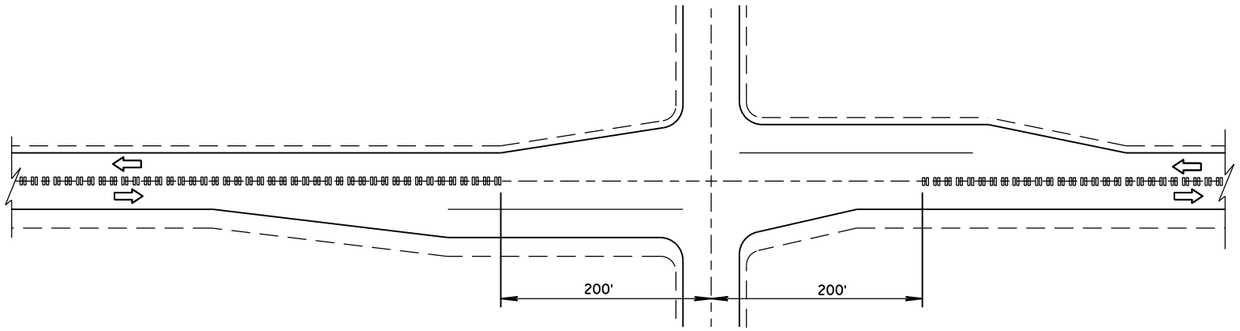
S.D.D. 13 A 11-2a

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

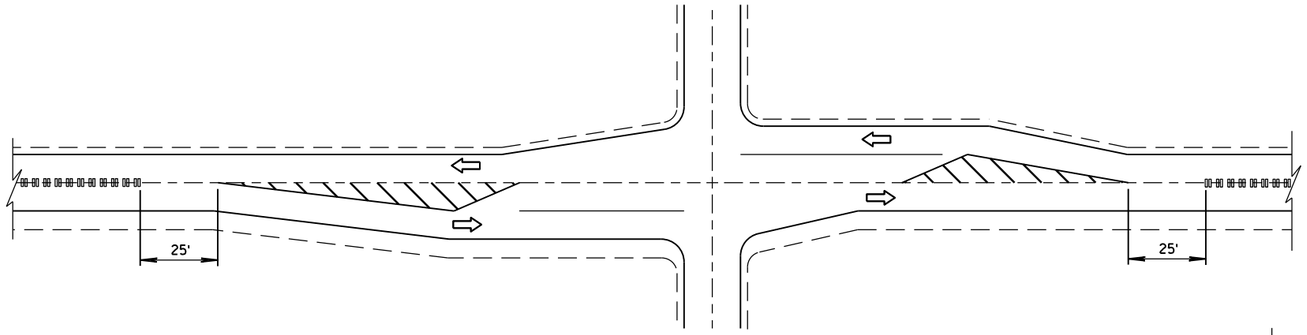
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

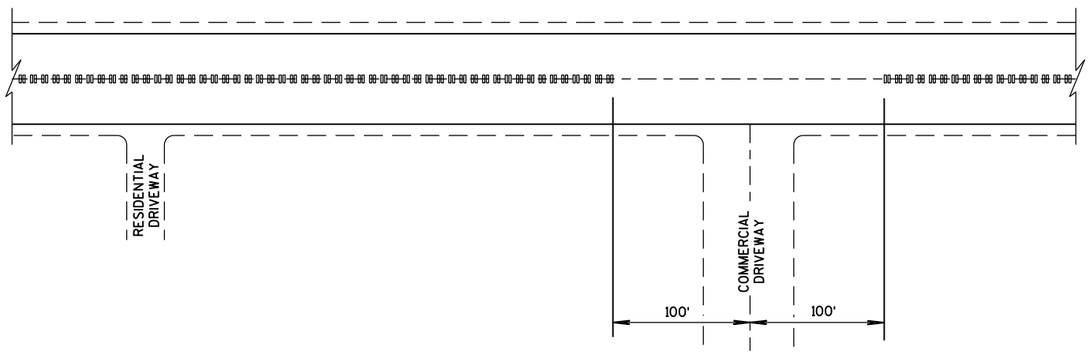
S.D.D. 13 A 11-2a



CENTER LINE GROOVES AT INTERSECTIONS

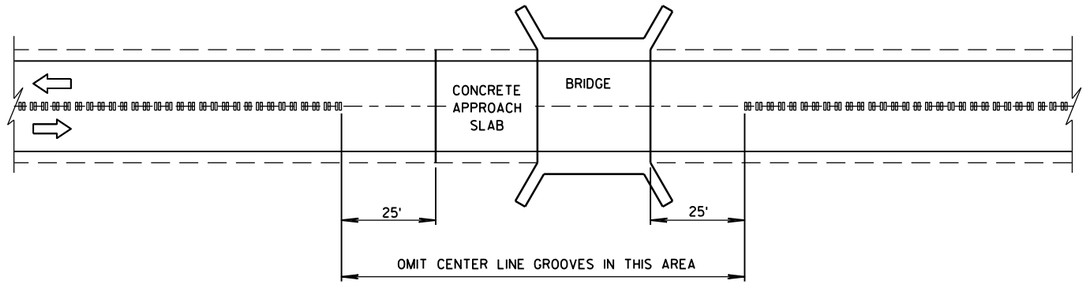


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

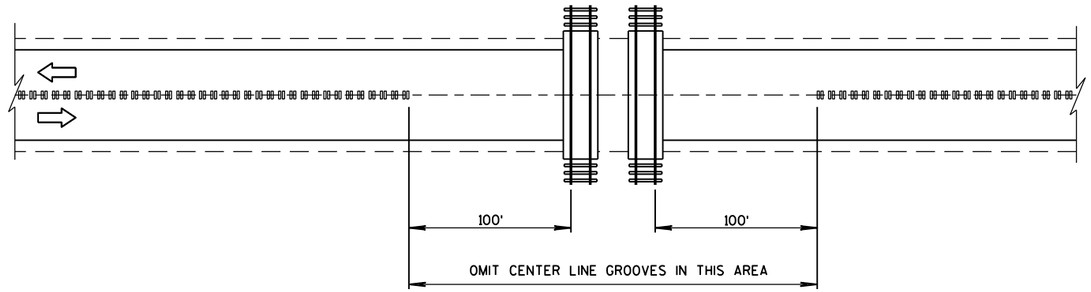


CENTER LINE GROOVES AT DRIVEWAYS (1)

(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

6

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

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

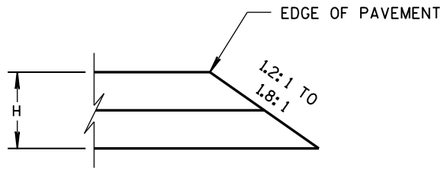
APPROVED

5/15/2013
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

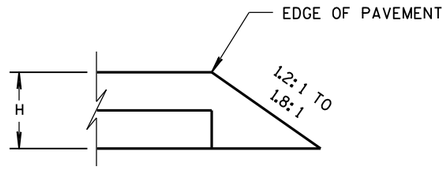
NT

FHWA



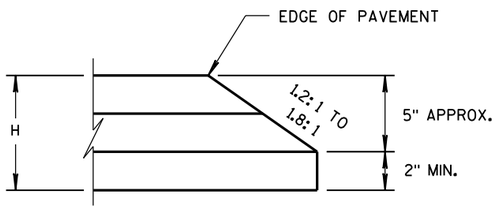
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



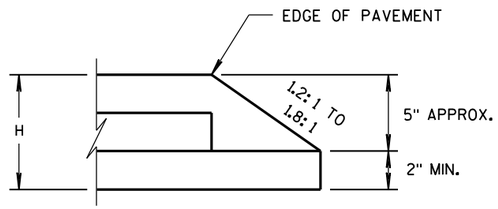
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

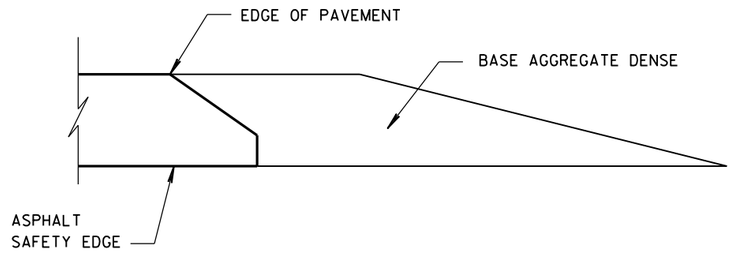
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

GENERAL NOTES

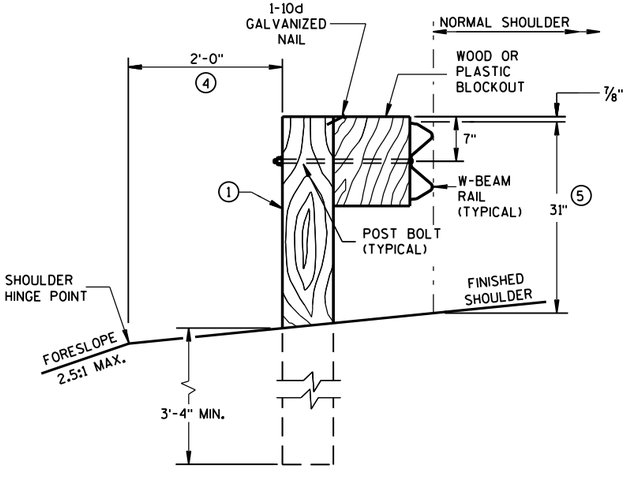
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

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

3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½INCHES 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.

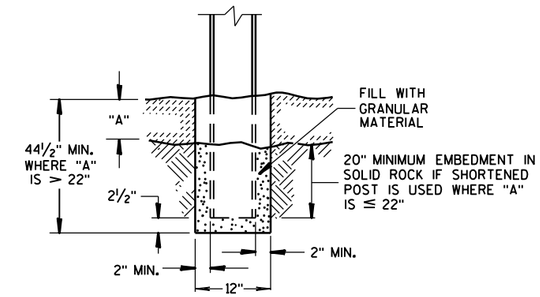
4. WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

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".



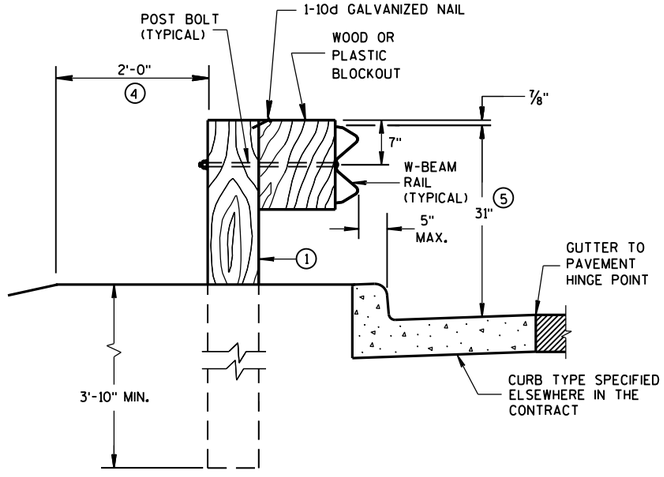
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



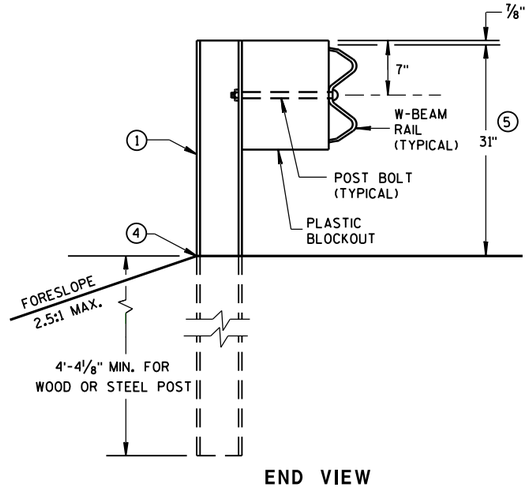
END VIEW

SETTING STEEL OR WOOD POST IN ROCK ③



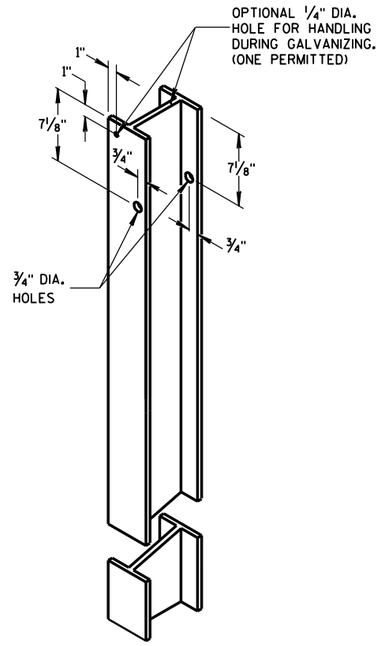
END VIEW

LOCATED ALONG A CURBED ROADWAY

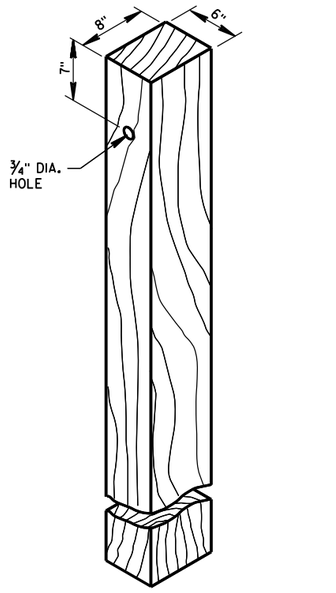


END VIEW

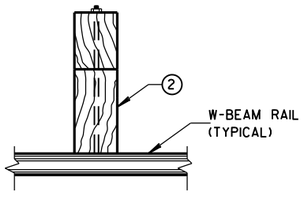
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



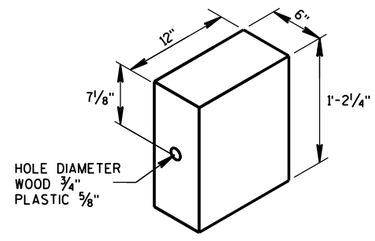
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



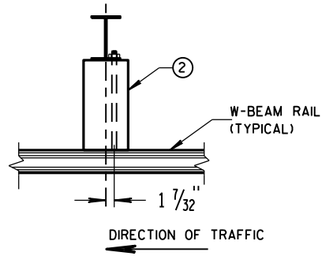
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

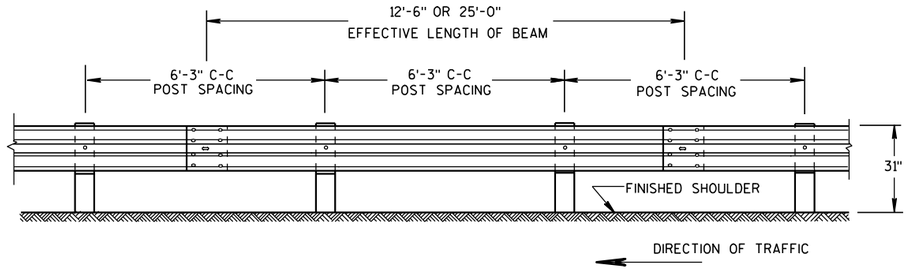


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

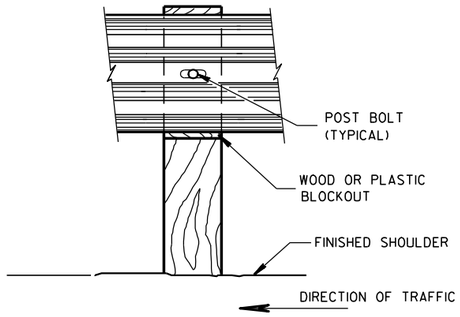
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



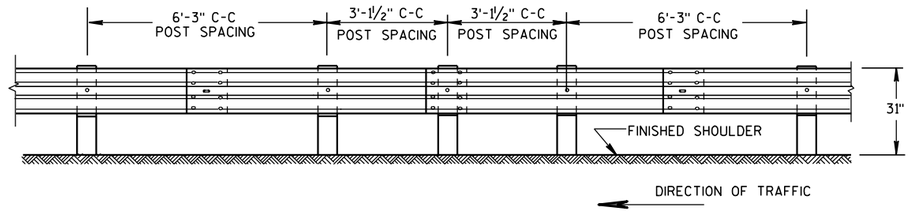
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

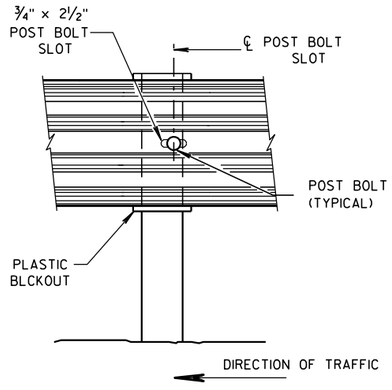
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

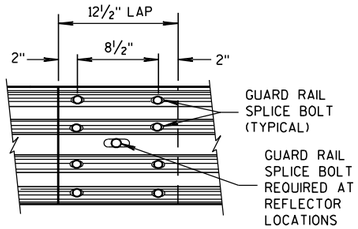


FRONT VIEW

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

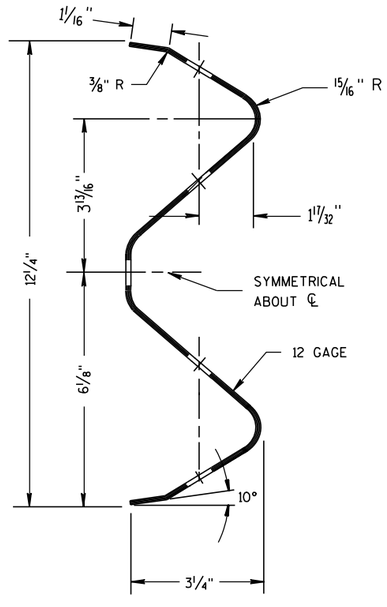


FRONT VIEW AT STEEL POST

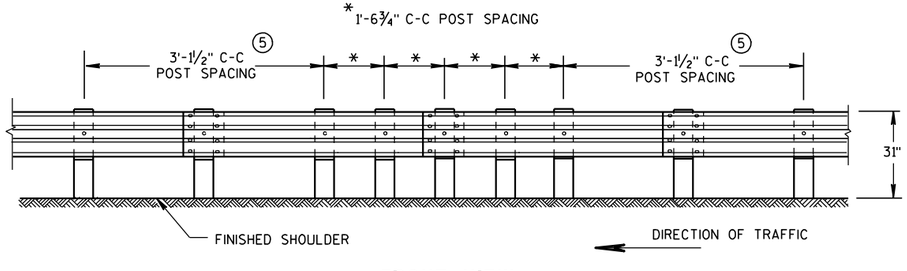


FRONT VIEW

MID-SPAN BEAM SPLICE

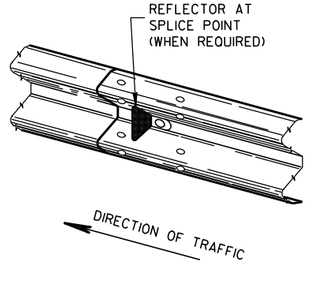


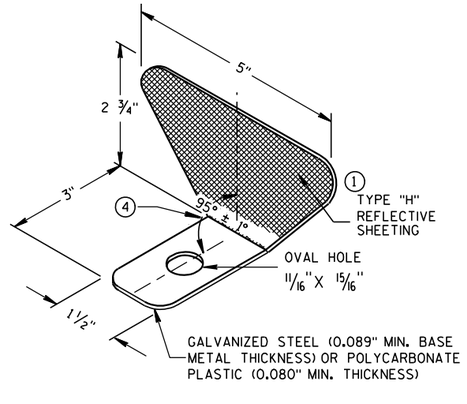
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

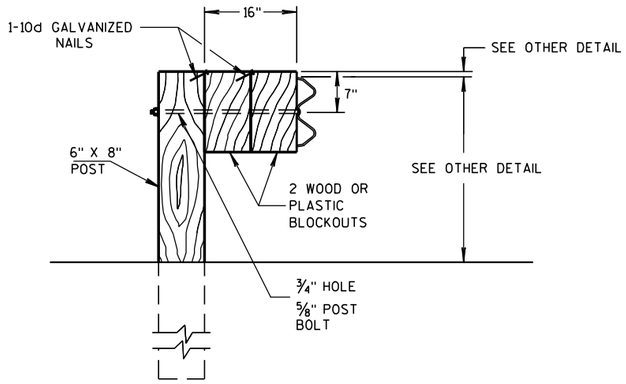
REFLECTOR SPACING ②

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

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

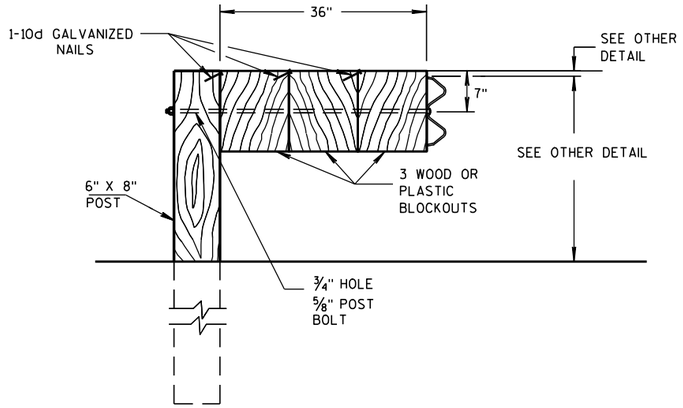
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

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

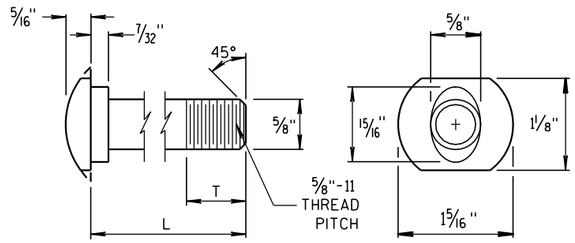


DETAIL FOR 36" BLOCKOUT DEPTH

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

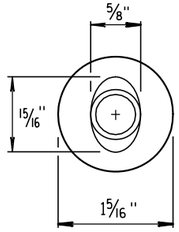
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

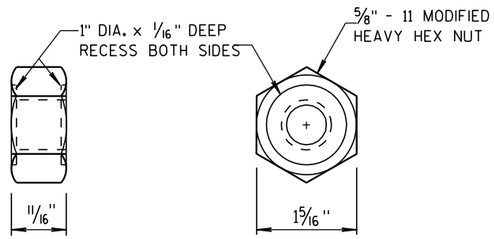


POST BOLT TABLE

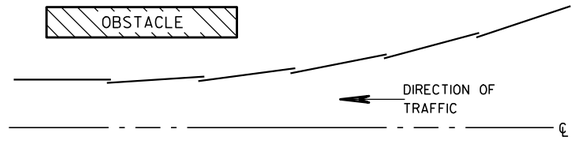
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

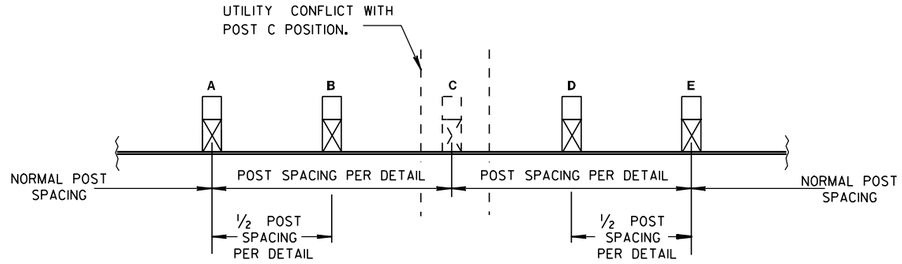


POST BOLT AND RECESS NUT

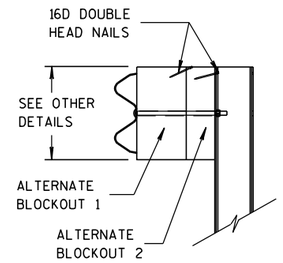


PLAN VIEW

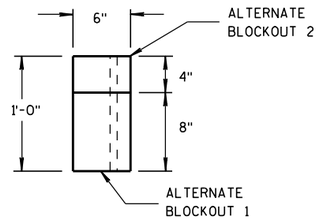
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

ENT

6

S.D.D. 14 B 42-2c

6

S.D.D. 14 B 42-2c

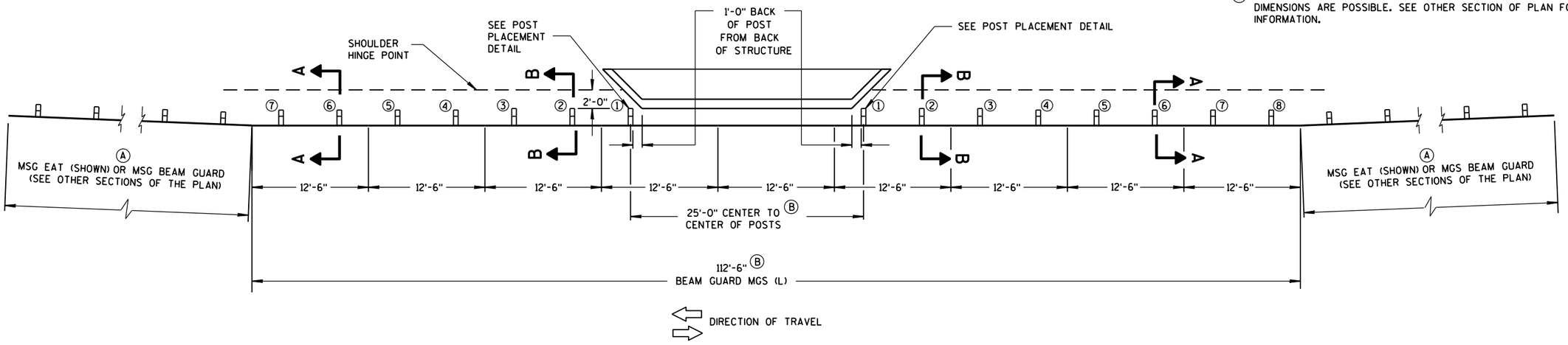
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

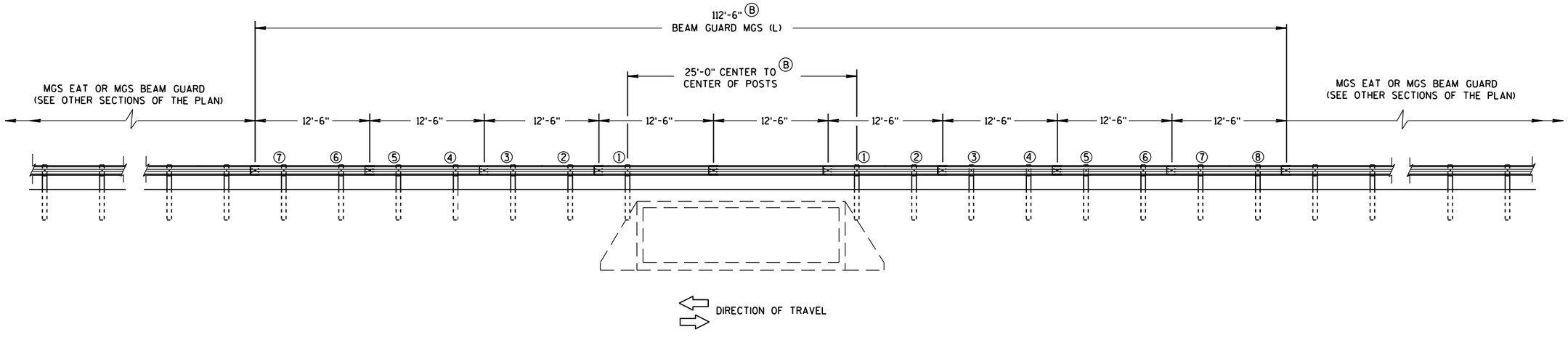
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
STATE OF WISCONSIN DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 43-3a

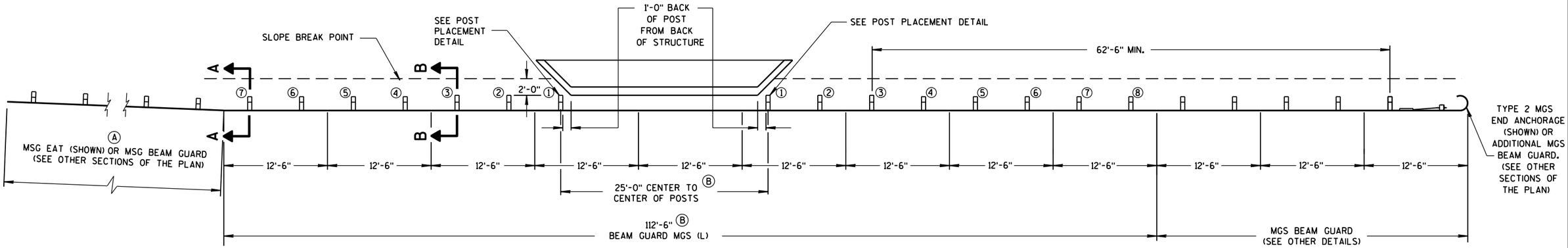
GENERAL NOTES

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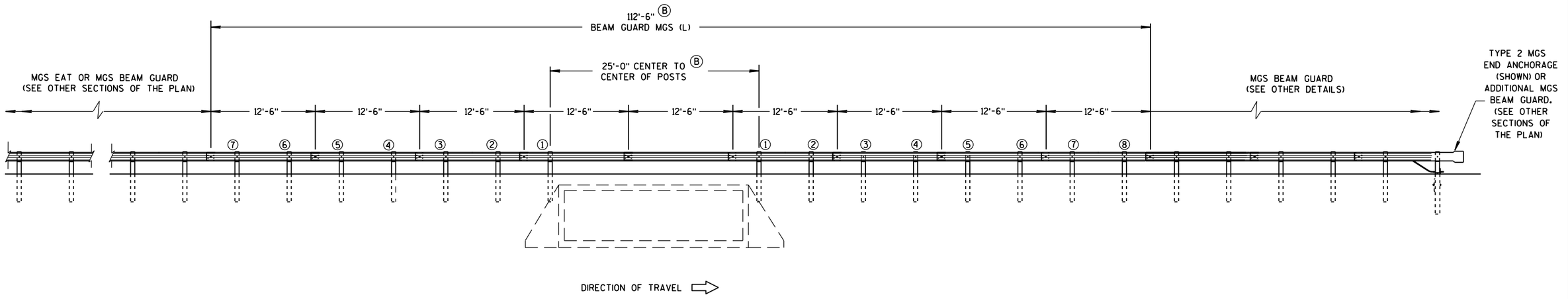
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

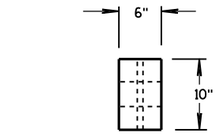
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

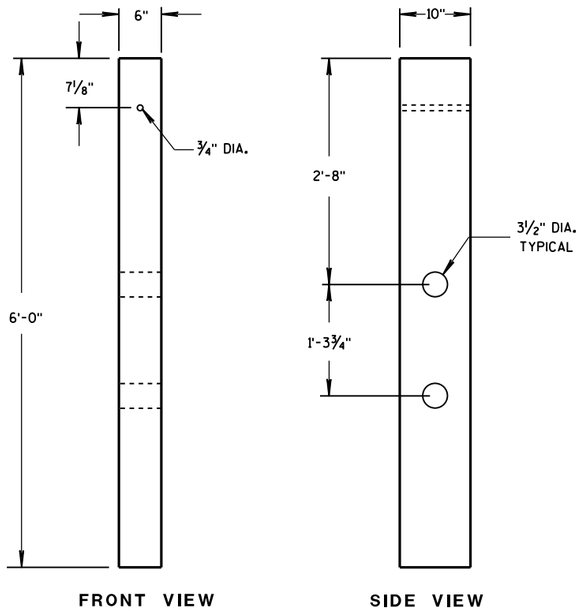
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 43-3b

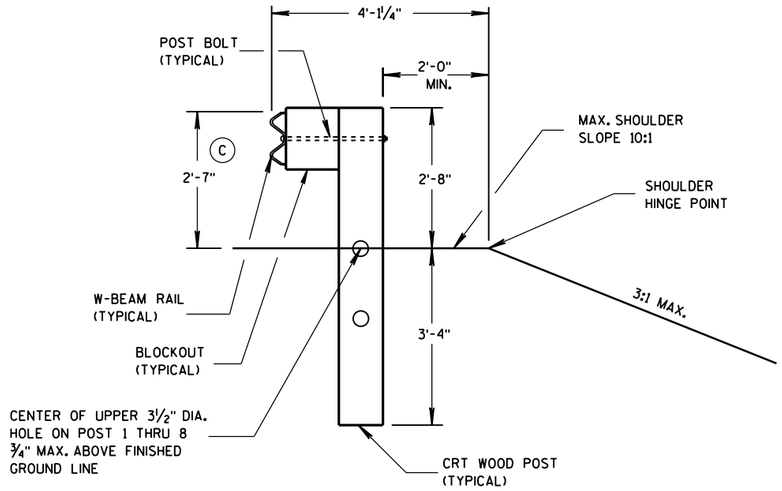


PLAN VIEW



FRONT VIEW SIDE VIEW

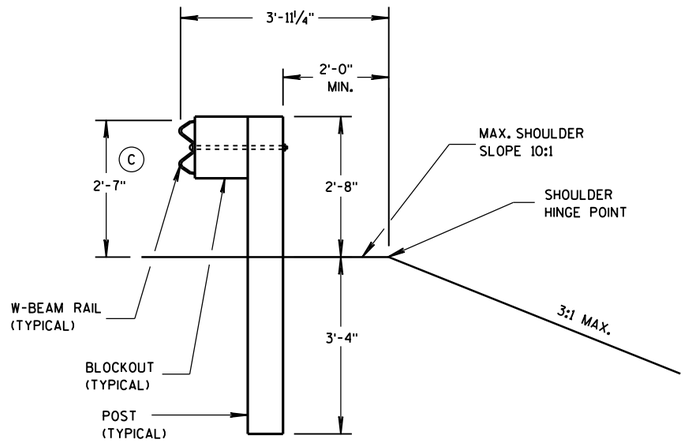
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



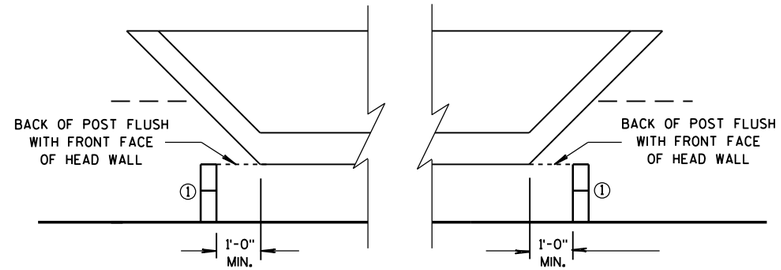
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

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



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/10/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

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S.D.D. 14 B 43-3c

GENERAL NOTES

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

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

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

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

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(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.

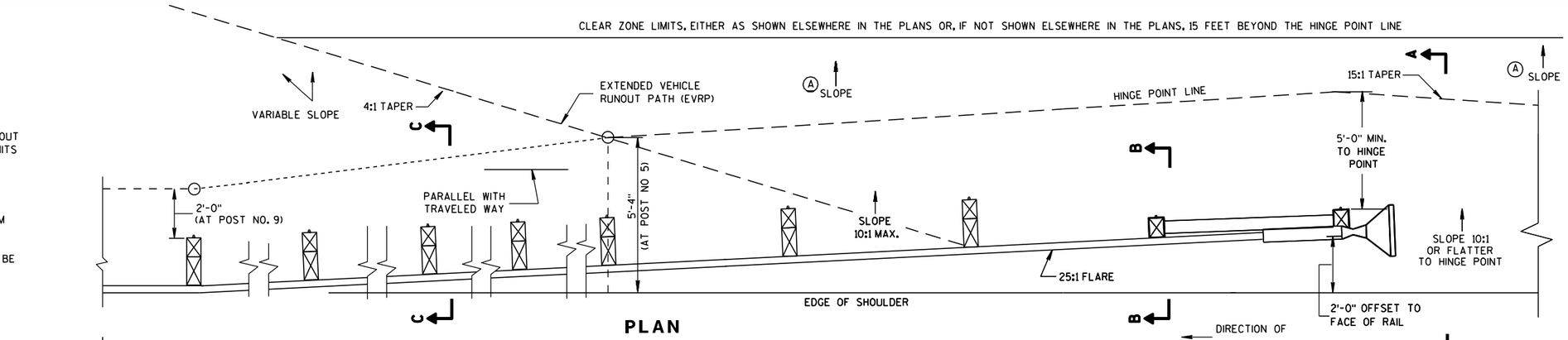
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

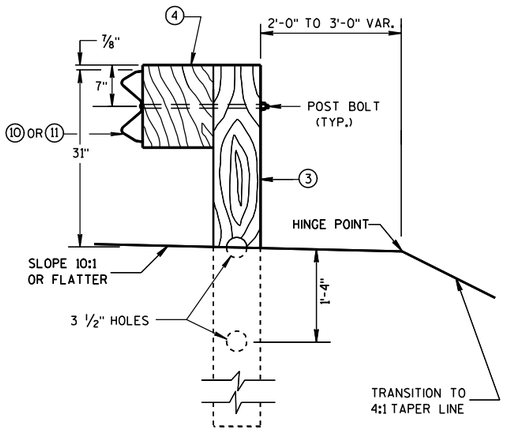
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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.

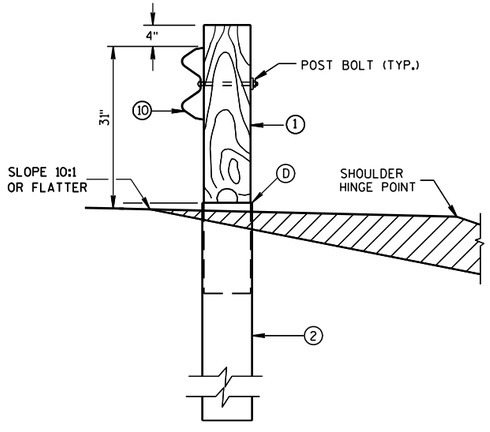
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

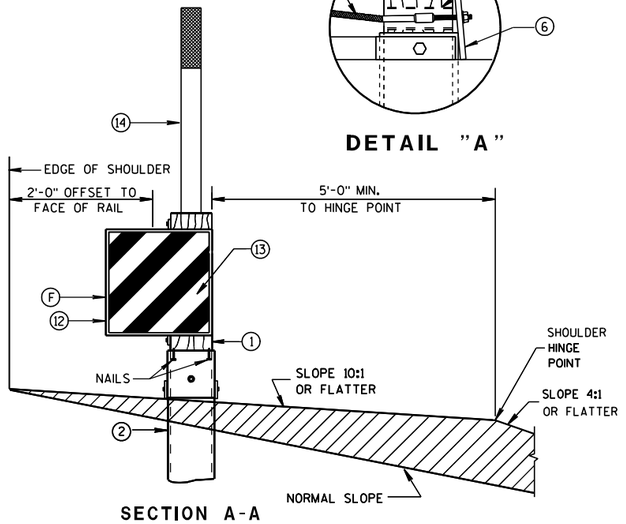




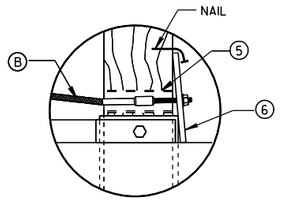
SECTION C-C
TYPICAL AT POST NOS. 3-9



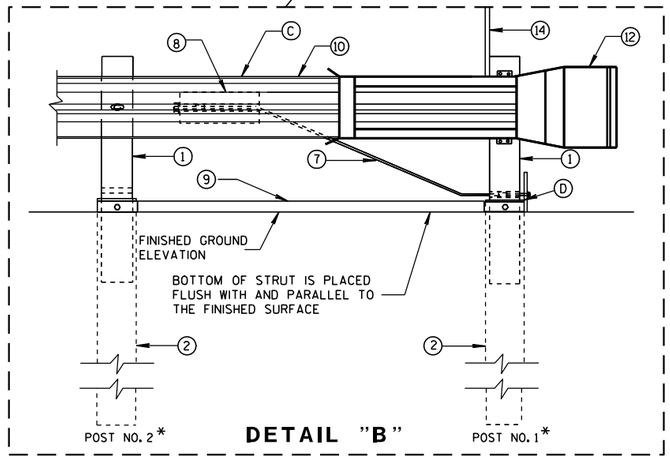
SECTION B-B
TYPICAL AT POST NO. 2*



SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



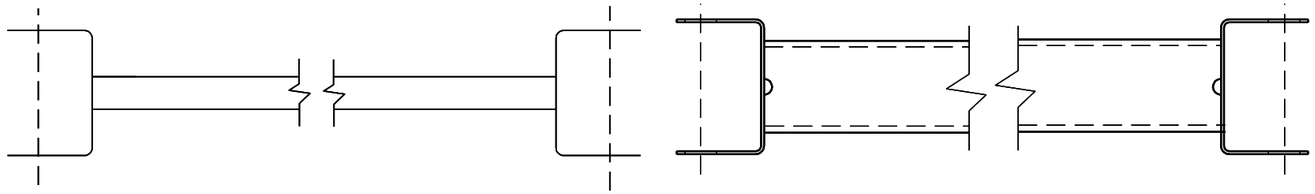
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 44-1a

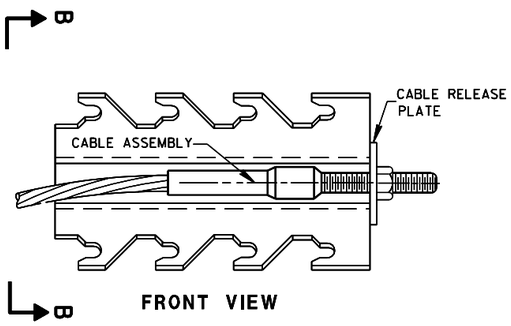
6



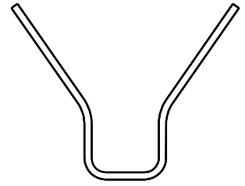
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

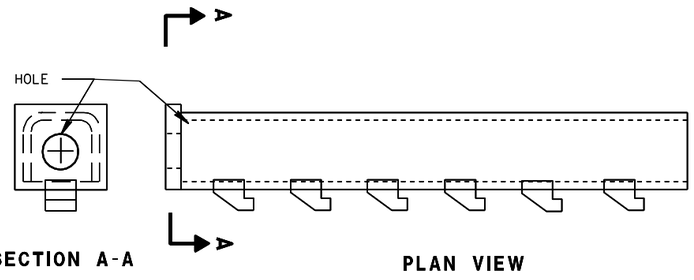
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR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



FRONT VIEW



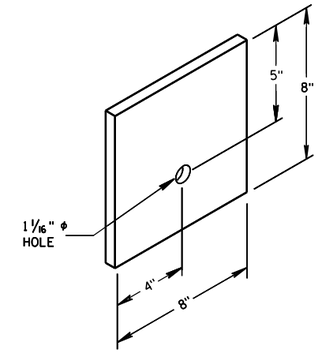
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



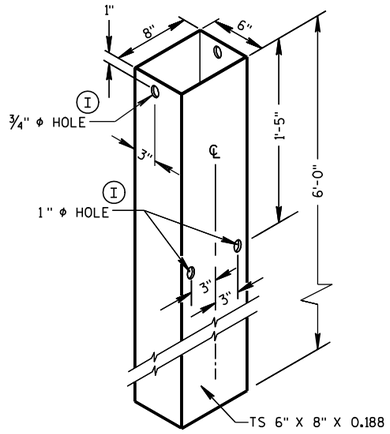
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

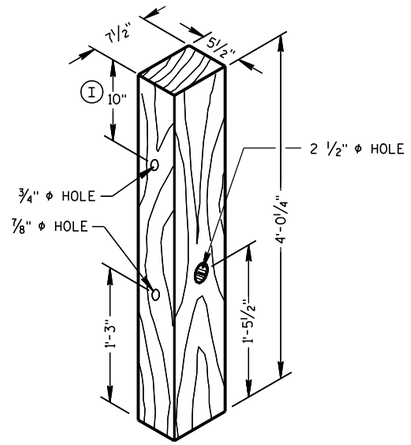
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1b

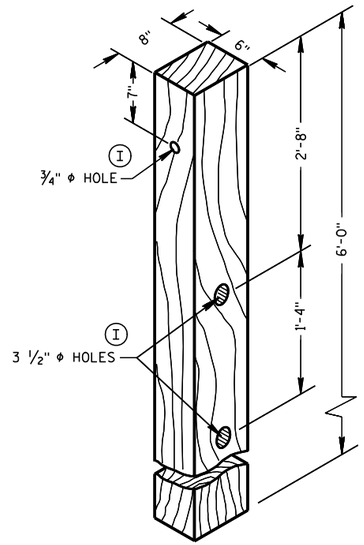


FOUNDATION TUBE (2)



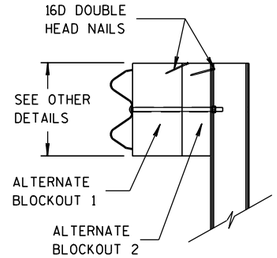
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

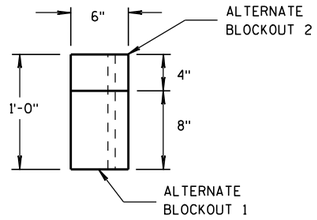


POSTS NUMBER 3-9

WOOD CRT POST (3)

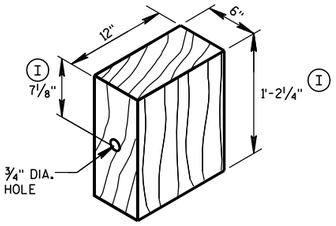


SIDE VIEW



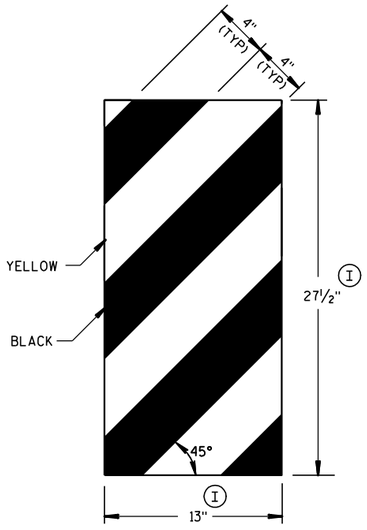
TOP VIEW

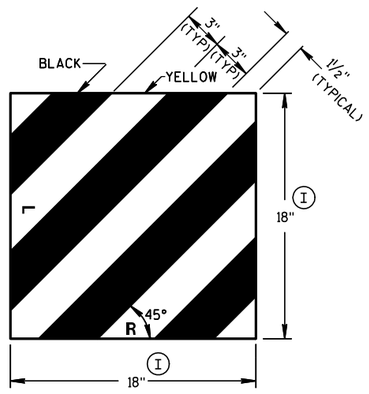
ALTERNATE WOOD BLOCKOUT DETAIL



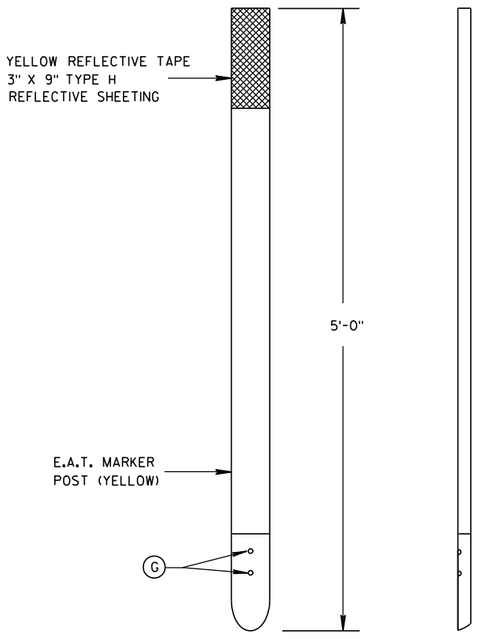
WOOD BLOCKOUT (4)

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





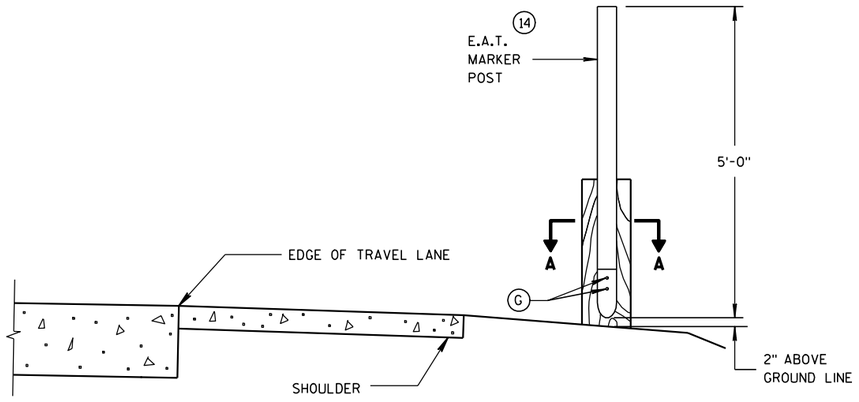
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

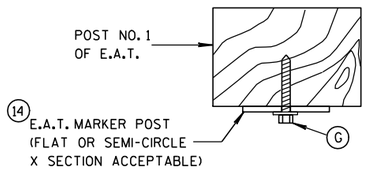
SIDE VIEW

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

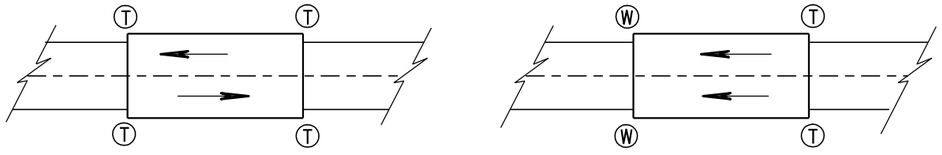
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
[illegible]ENT
FHWA

6

S.D.D. 14 B 44-1c



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

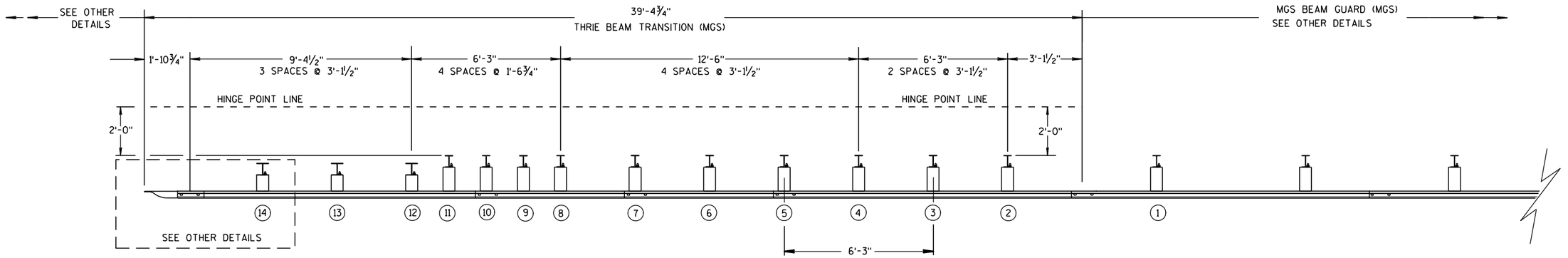
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

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

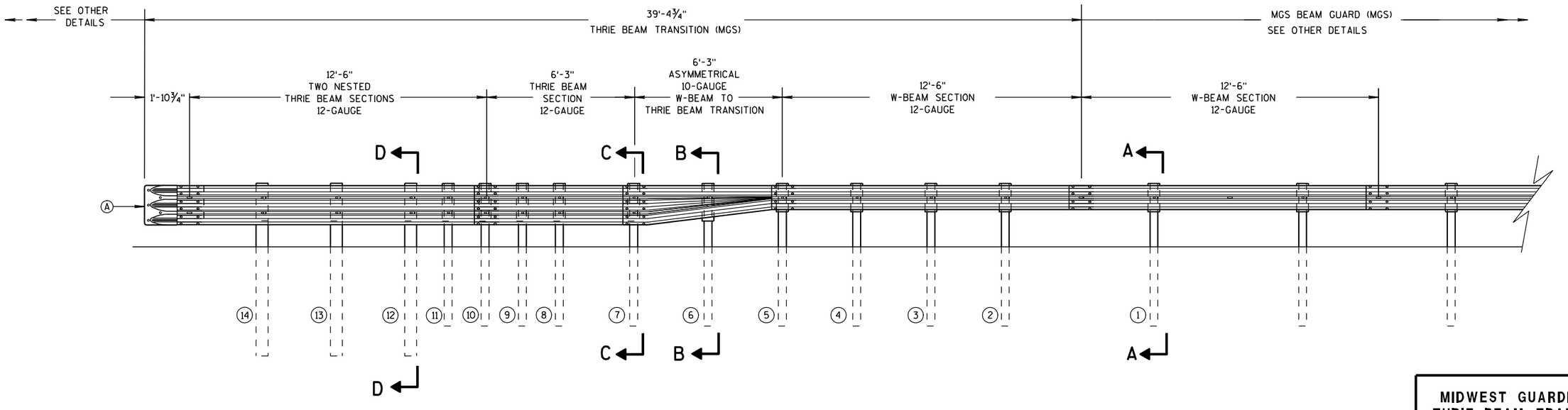
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

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



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

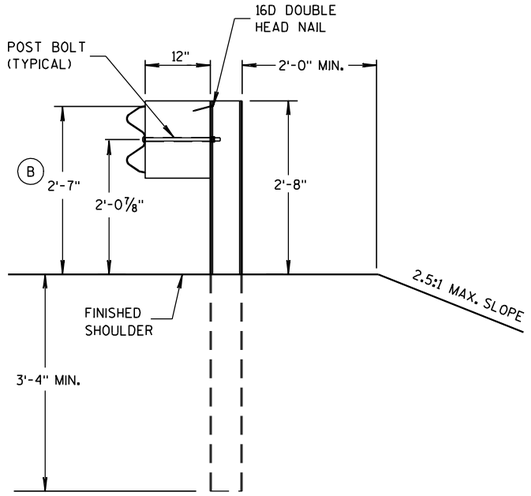
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3a

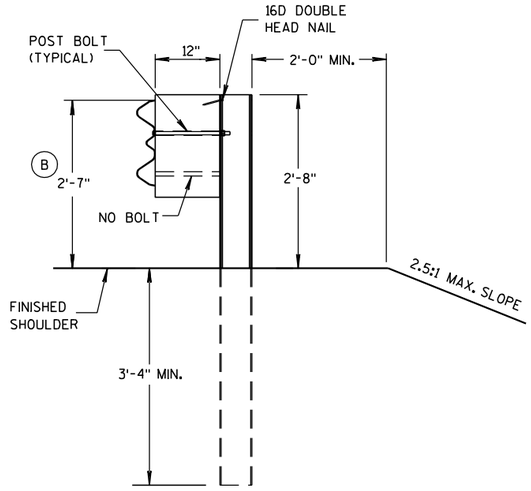
GENERAL NOTES

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



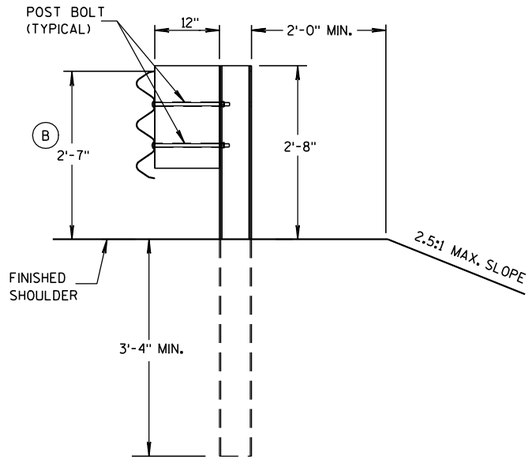
SECTION A-A

POSTS 1-5



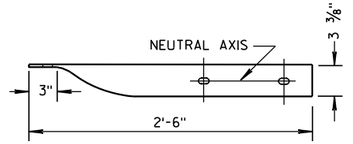
SECTION B-B

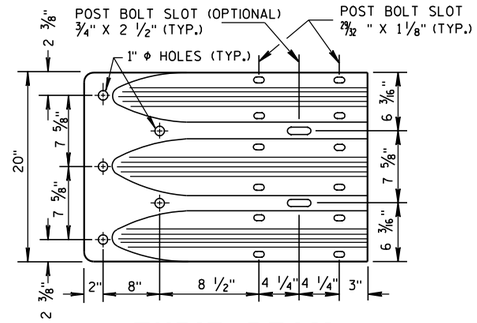
POST 6



SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR

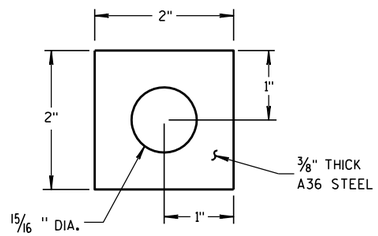
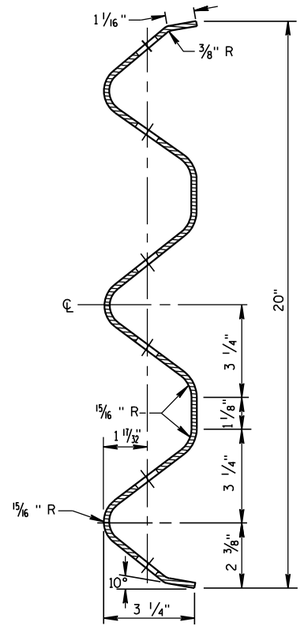
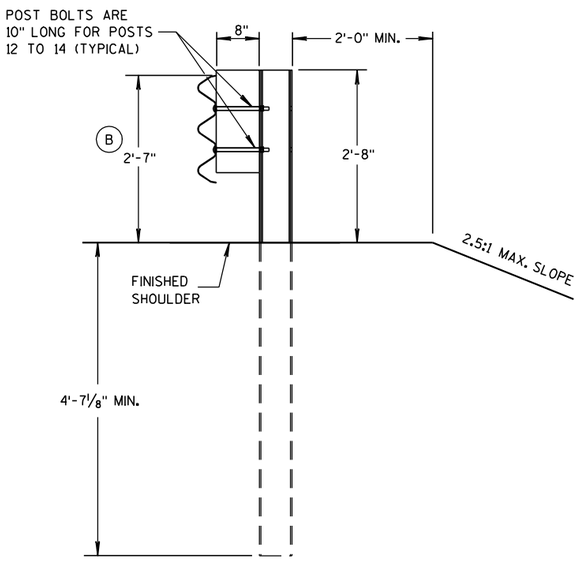


PLATE WASHER DETAIL

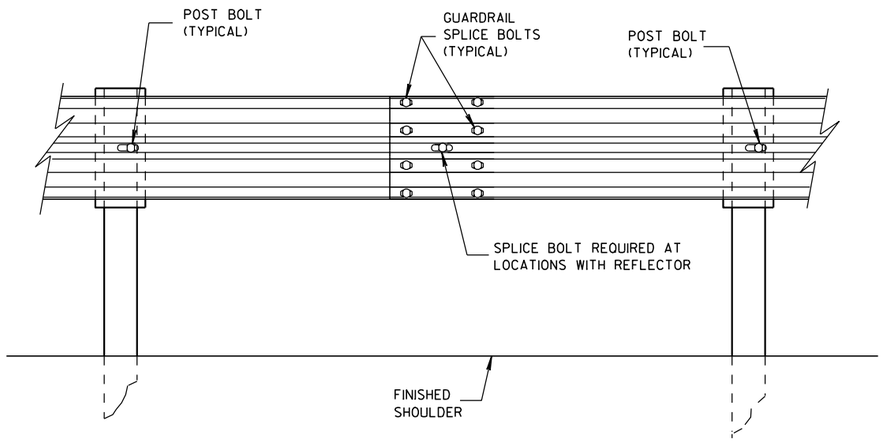


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-14

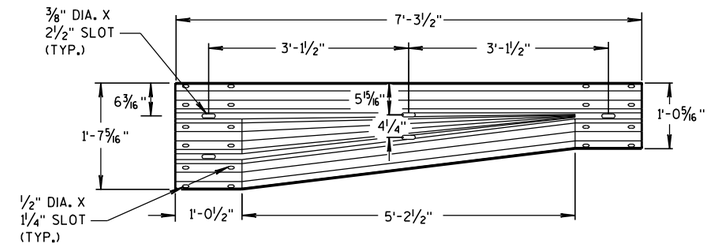


SPLICE DETAIL

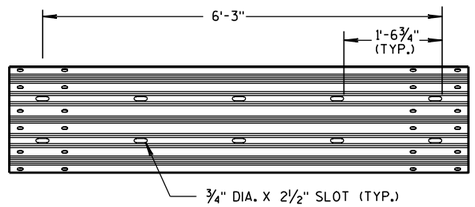
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

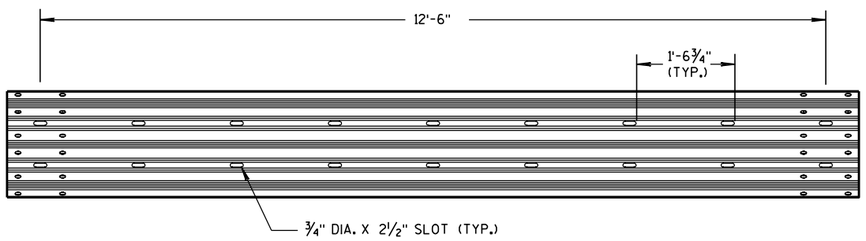
6
S.D.D. 14 B 45-3b



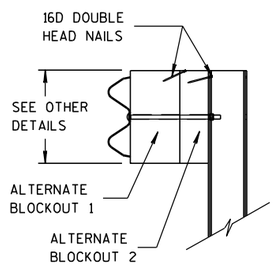
W-BEAM TO THRIE BEAM TRANSITION SECTION



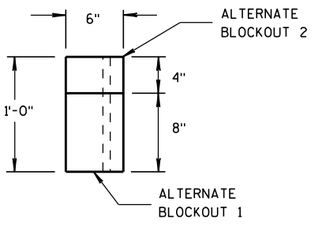
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

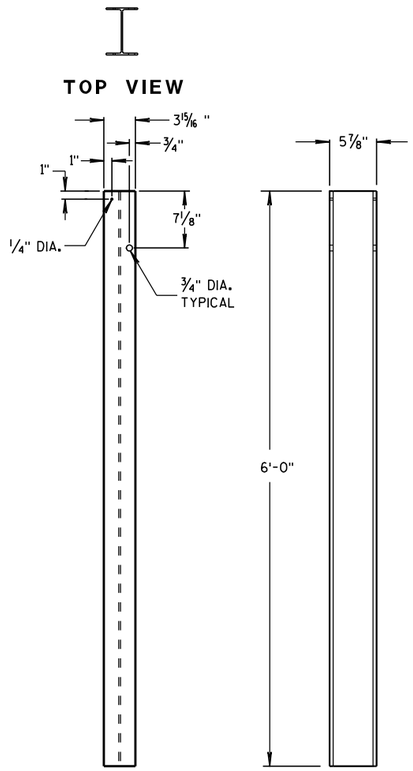


SIDE VIEW

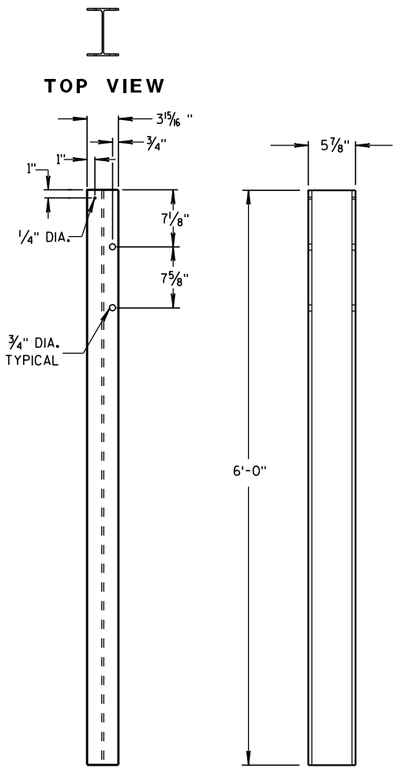


TOP VIEW

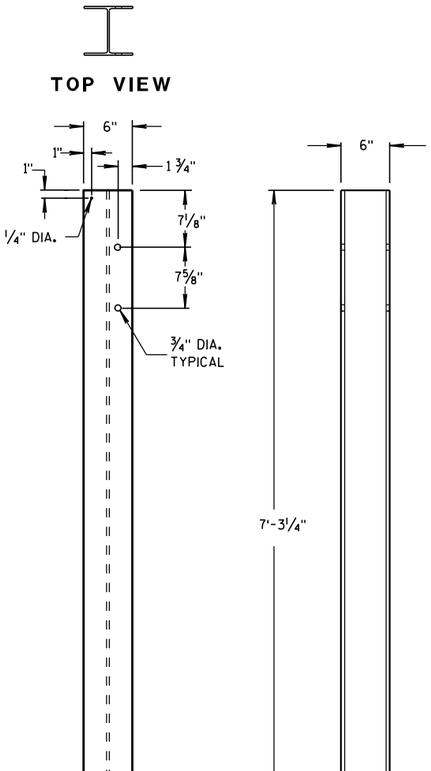
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

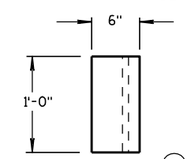


STEEL POSTS 6-11

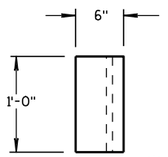


STEEL POSTS 12-14

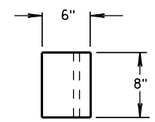
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



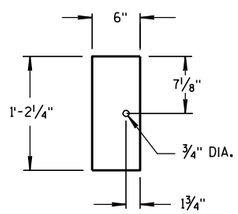
TOP VIEW (1)



TOP VIEW (1)

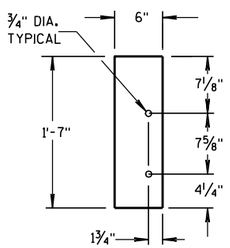


TOP VIEW



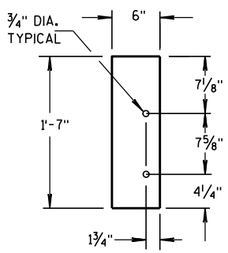
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

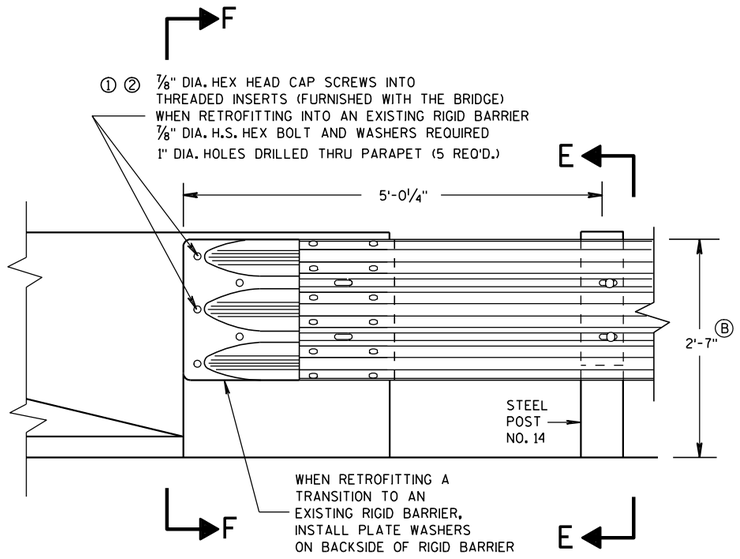
STEEL POST SIZES

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

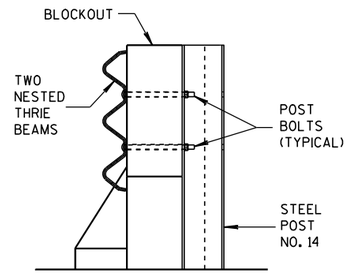
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-3c



FRONT VIEW



SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

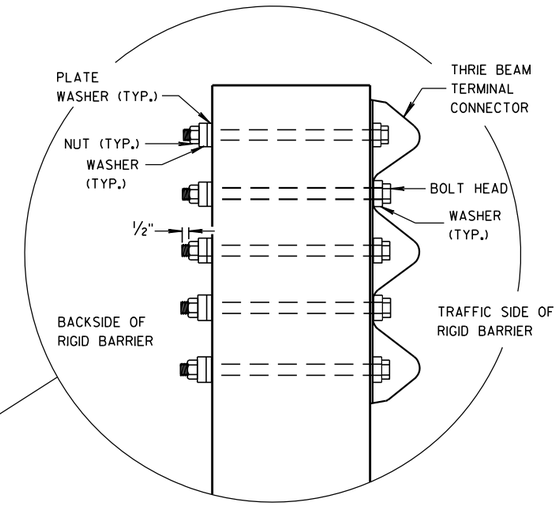
THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

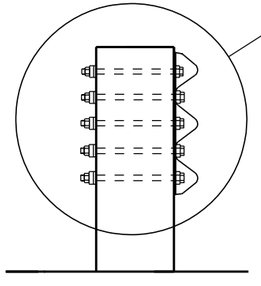
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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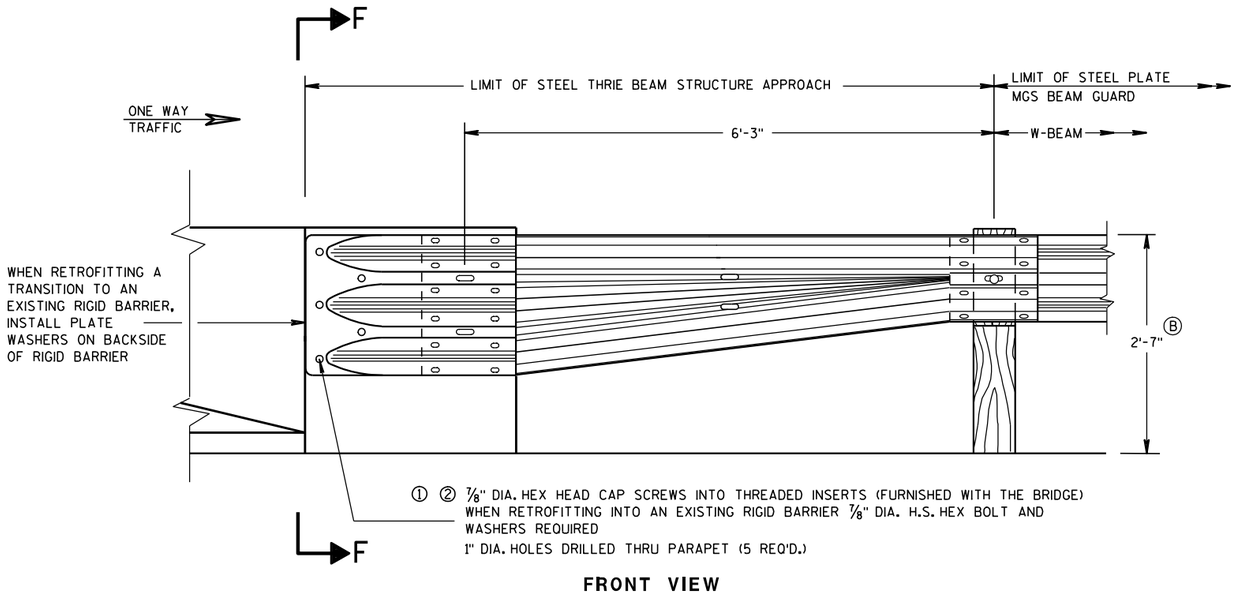
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".





SECTION F-F



FRONT VIEW

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

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS [illegible] ENGINEER

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

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GENERAL NOTES

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

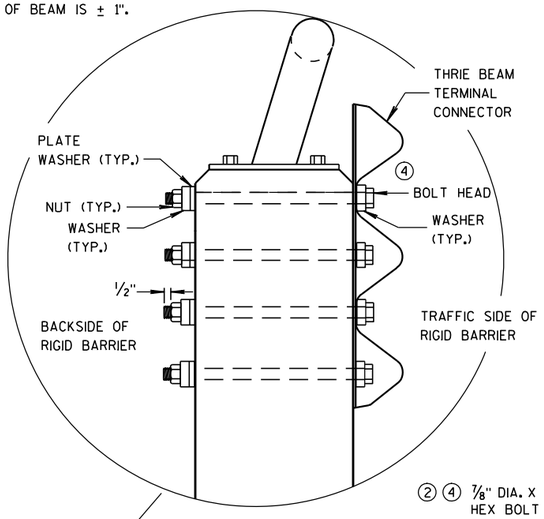
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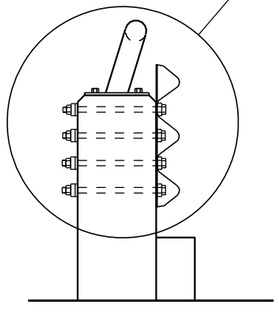
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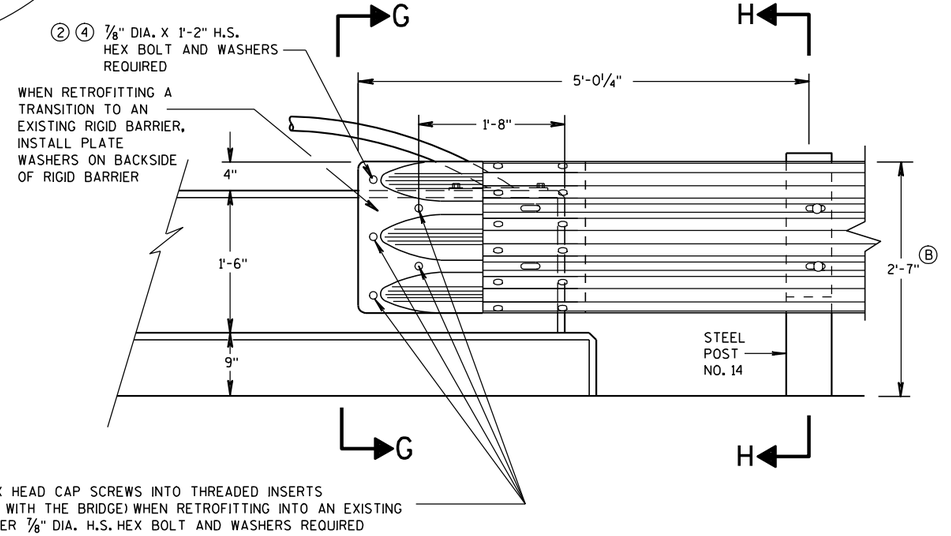
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

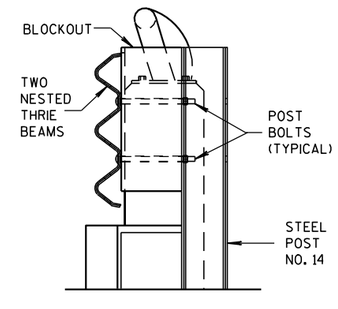




SECTION G-G

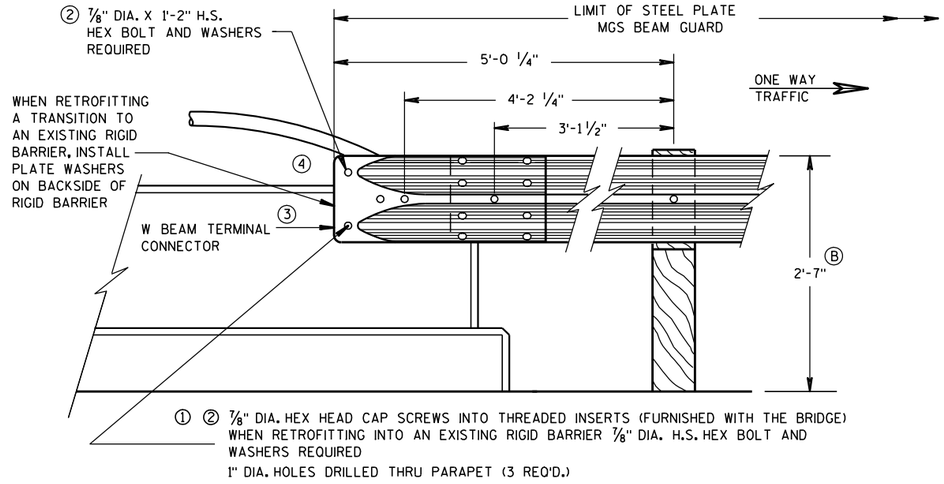


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012 — DATE

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

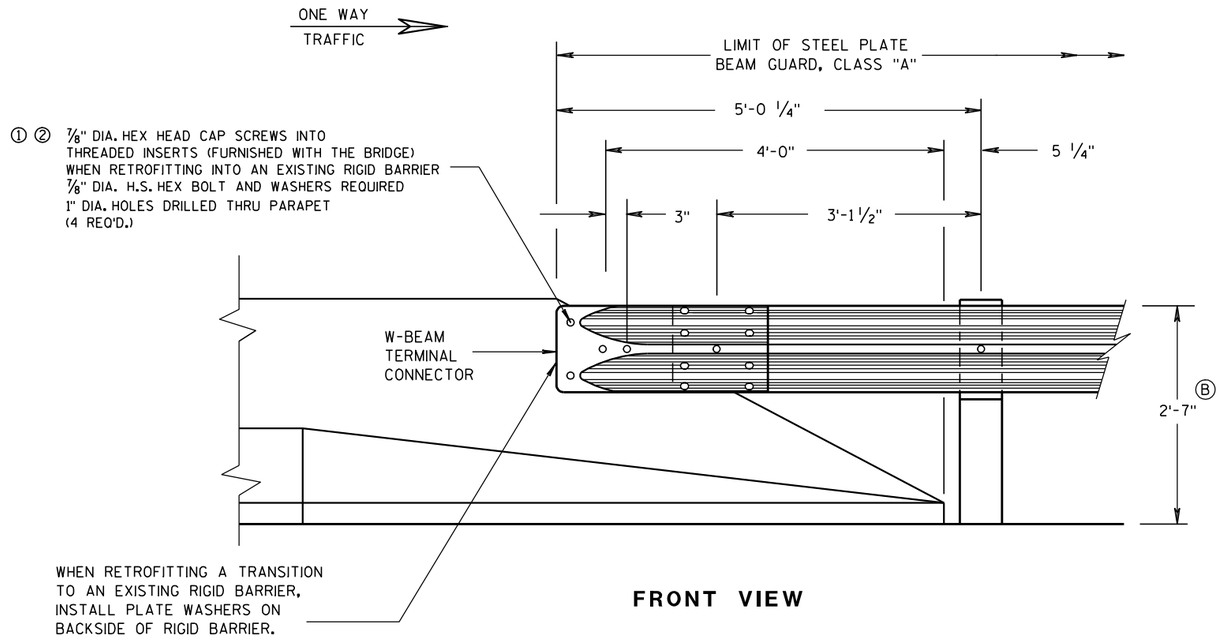
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S.D.D. 14 B 45-3e

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



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

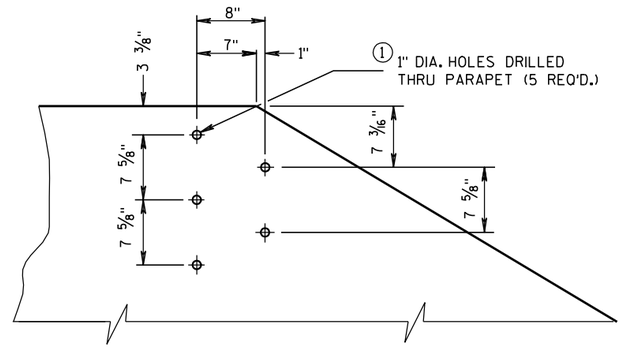
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

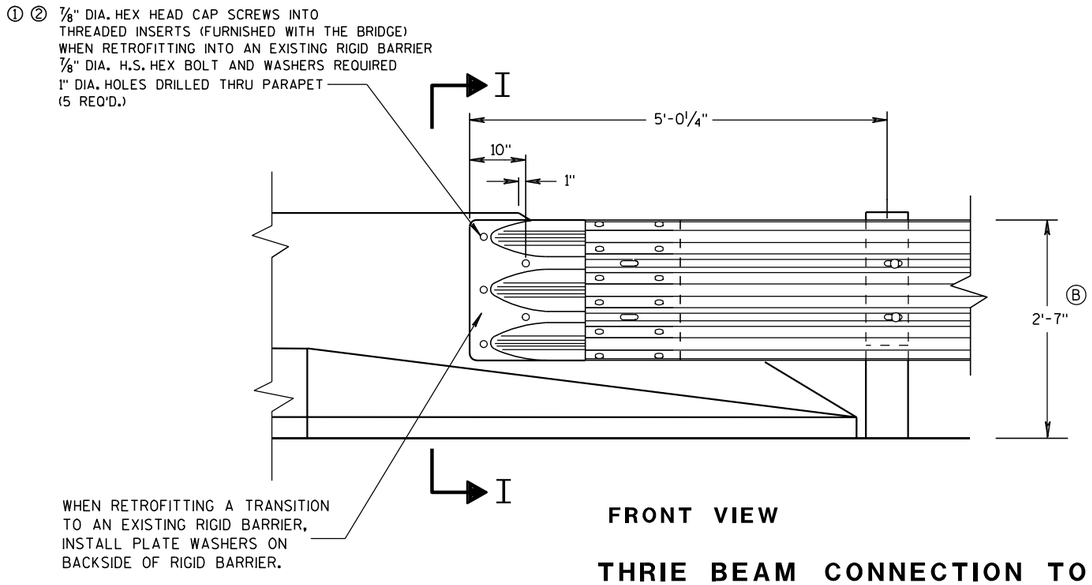
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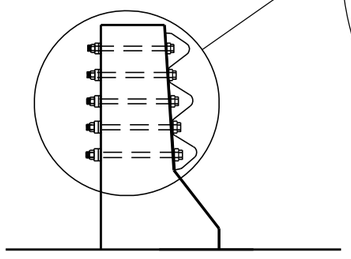
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



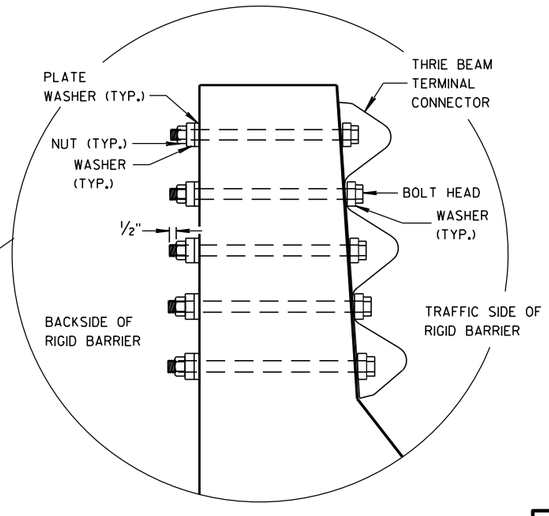
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



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

8/31/2012 DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

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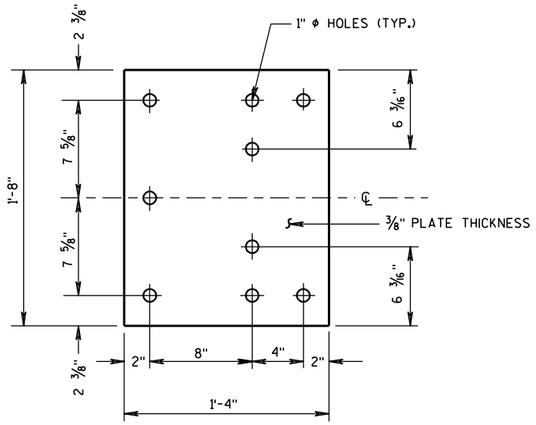
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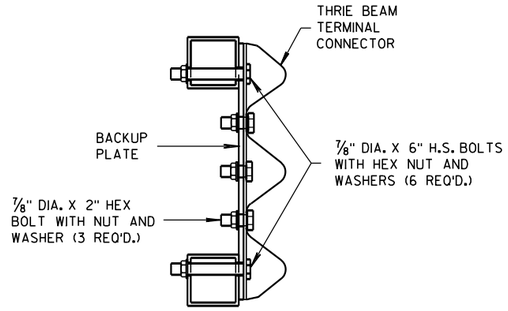
S.D.D. 14 B 45-3f

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



BACK-UP PLATE DETAIL

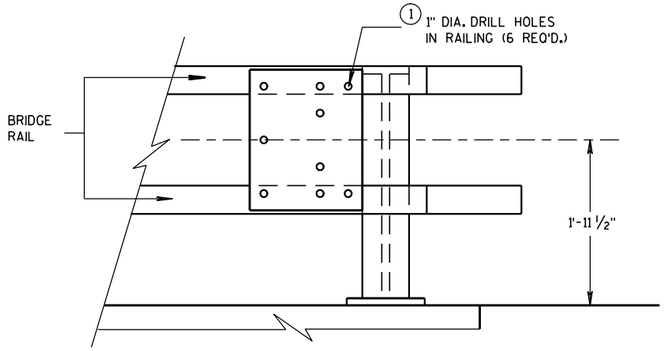


SECTION J-J

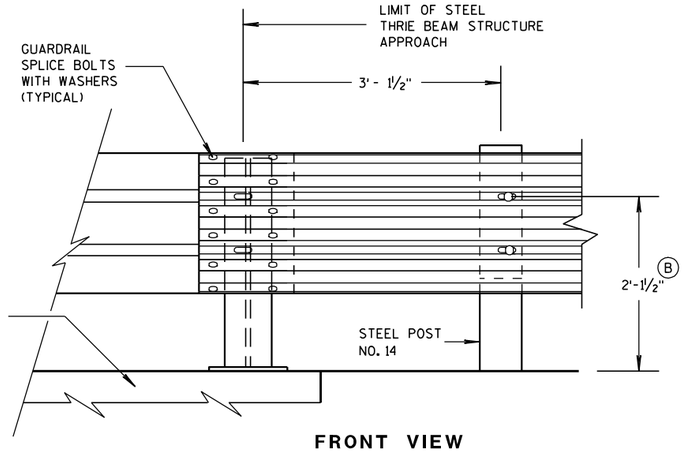
GENERAL NOTES

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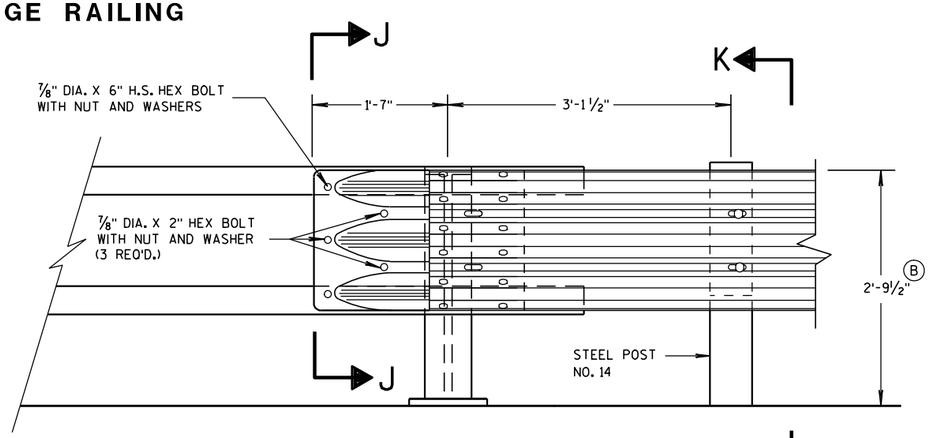


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

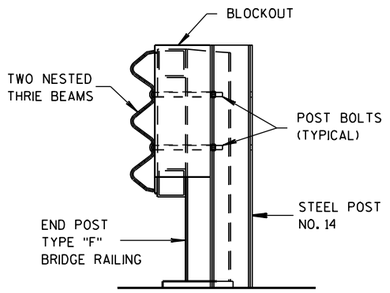


FRONT VIEW

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
8/31/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
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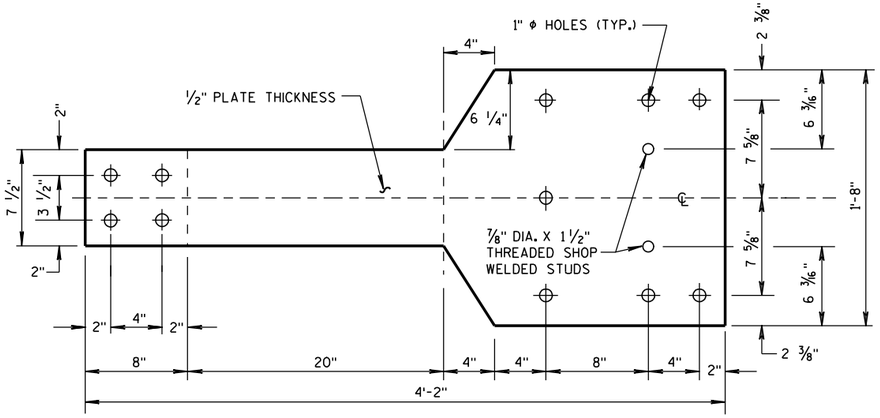
S.D.D. 14 B 45-3g

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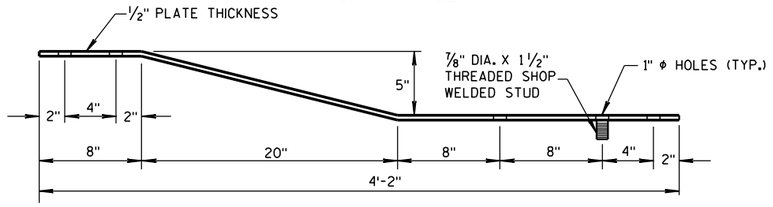
S.D.D. 14 B 45-3g

GENERAL NOTES

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

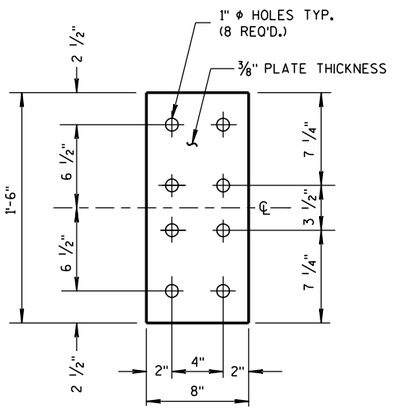


FRONT VIEW



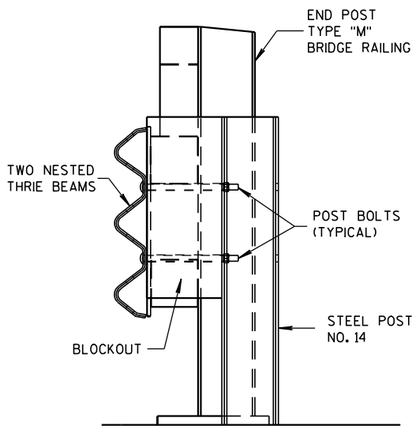
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

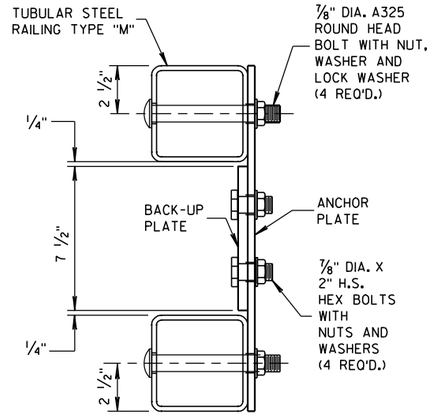


FRONT VIEW

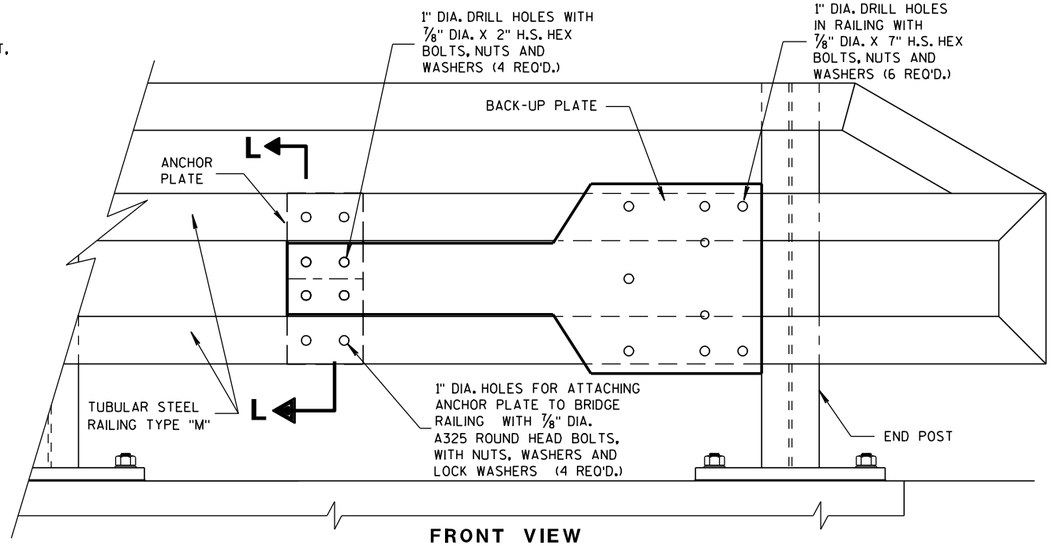
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

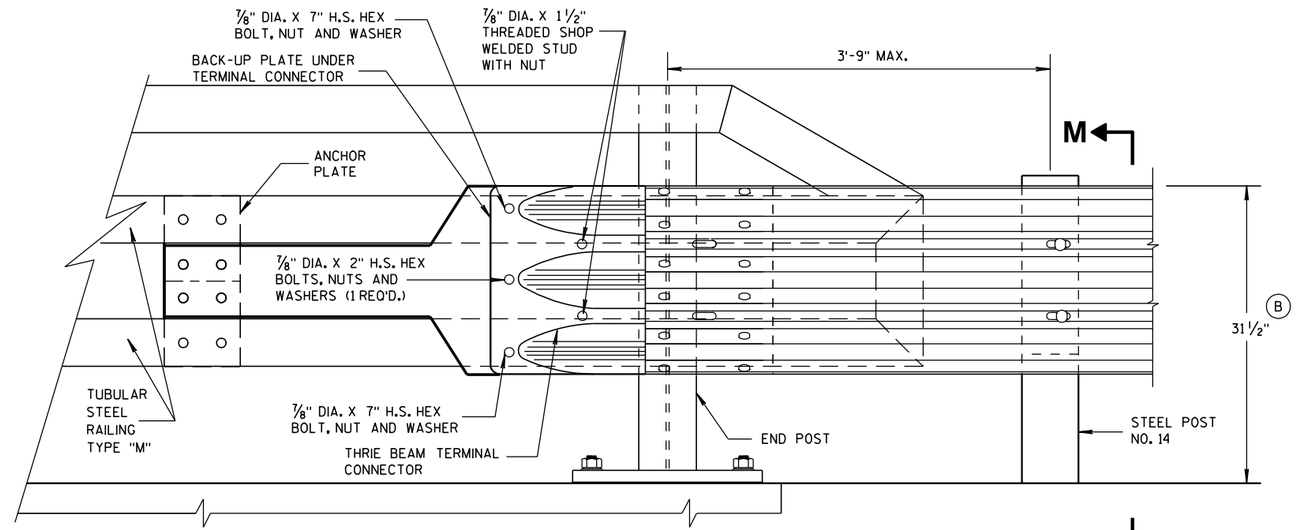


SECTION L-L

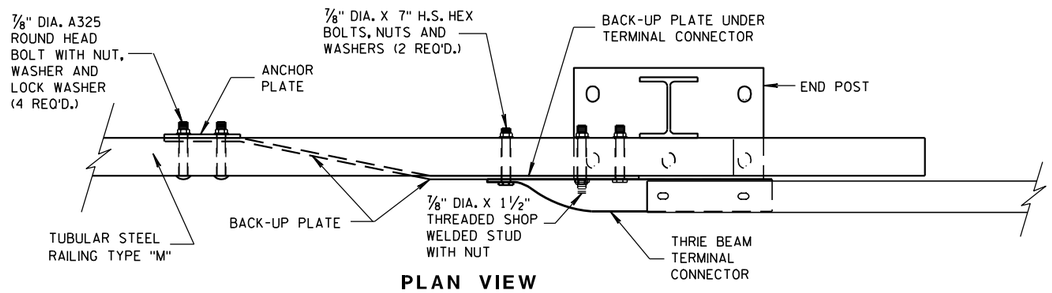


FRONT VIEW

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



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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S.D. 14 B 45-3h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

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

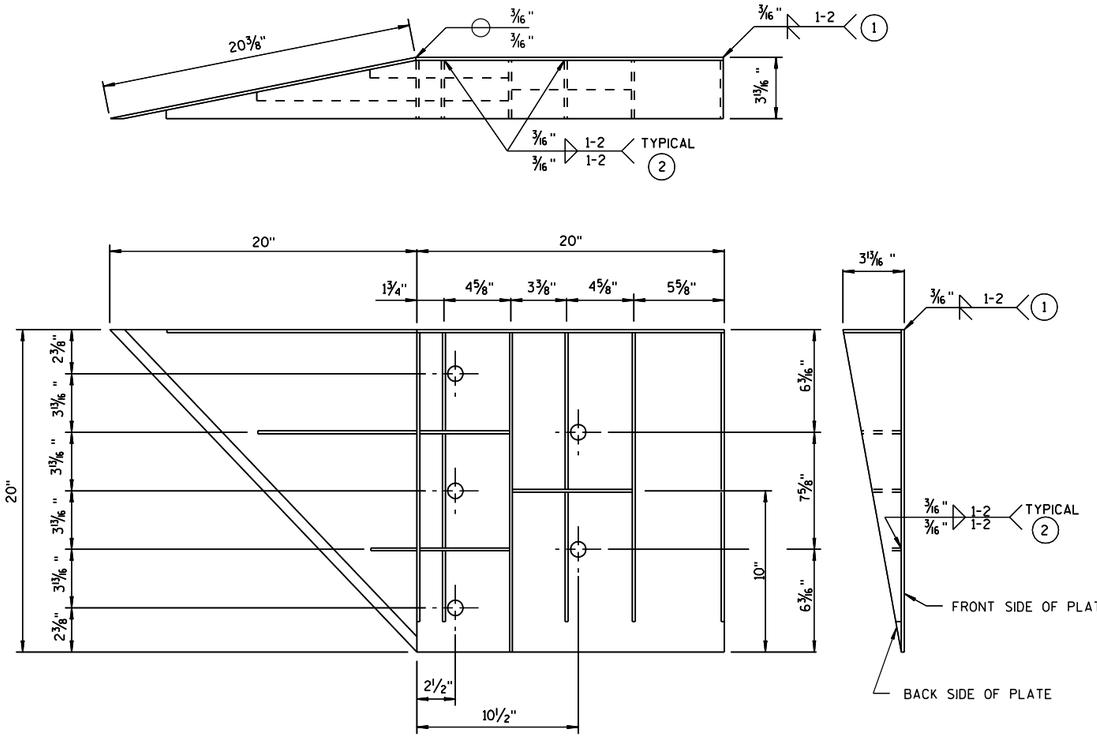
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

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

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



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

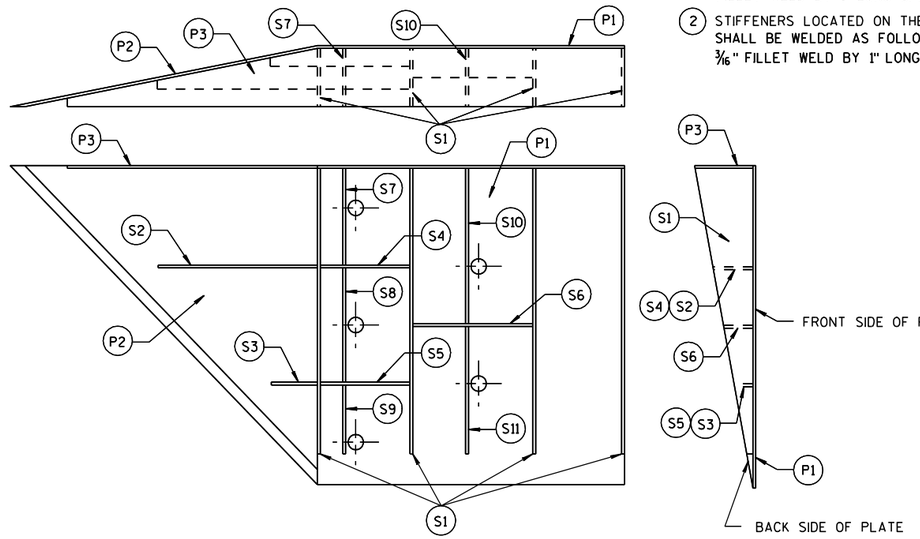


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

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

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

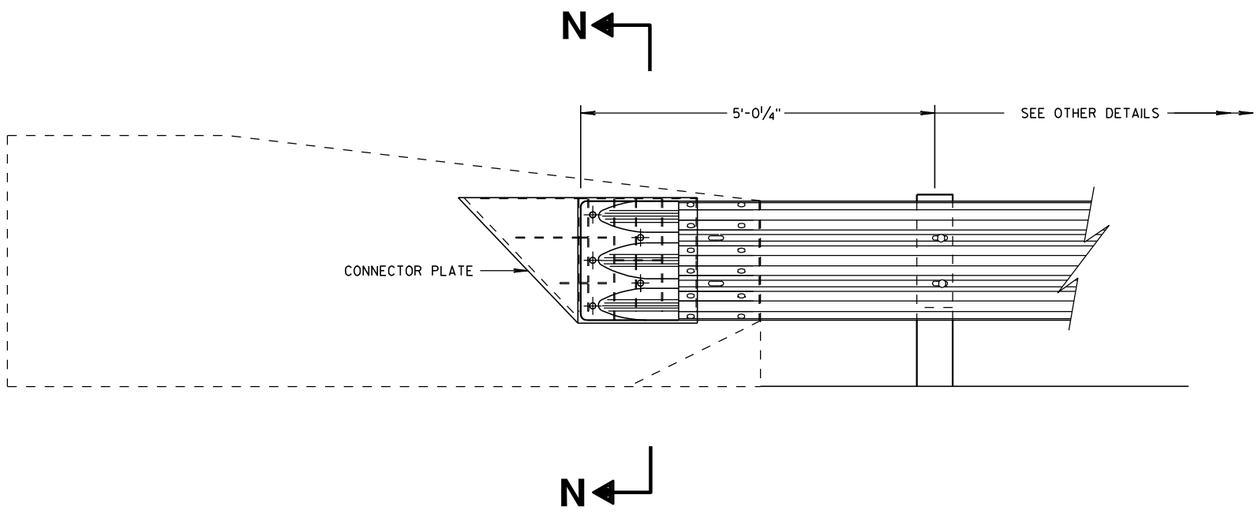
APPROVED
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FHWA

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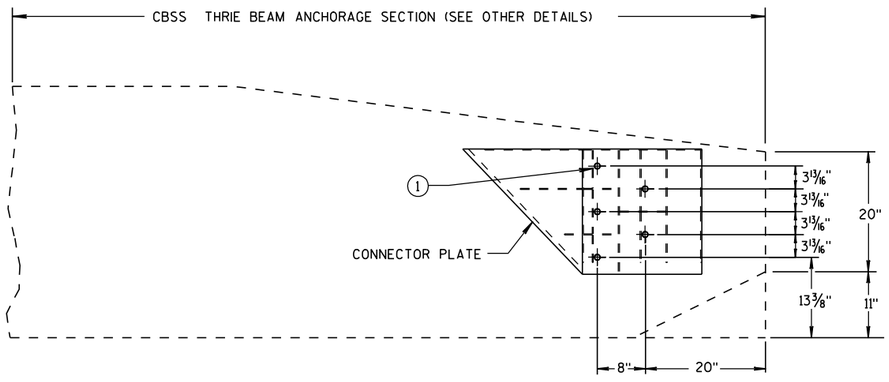
S.D.D. 14 B 45-3i

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



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

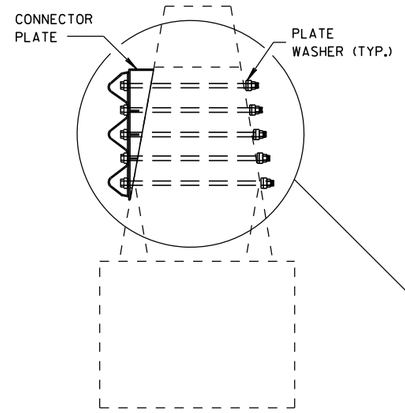


SINGLE SLOPE CONNECTION PLATE PLACEMENT

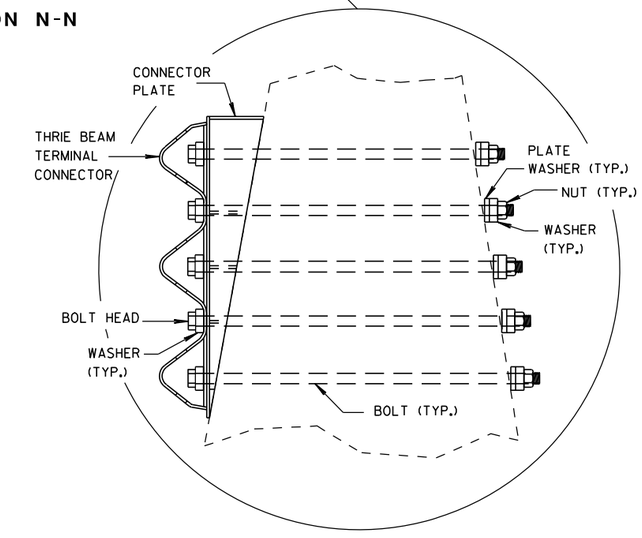
GENERAL NOTES

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

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SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

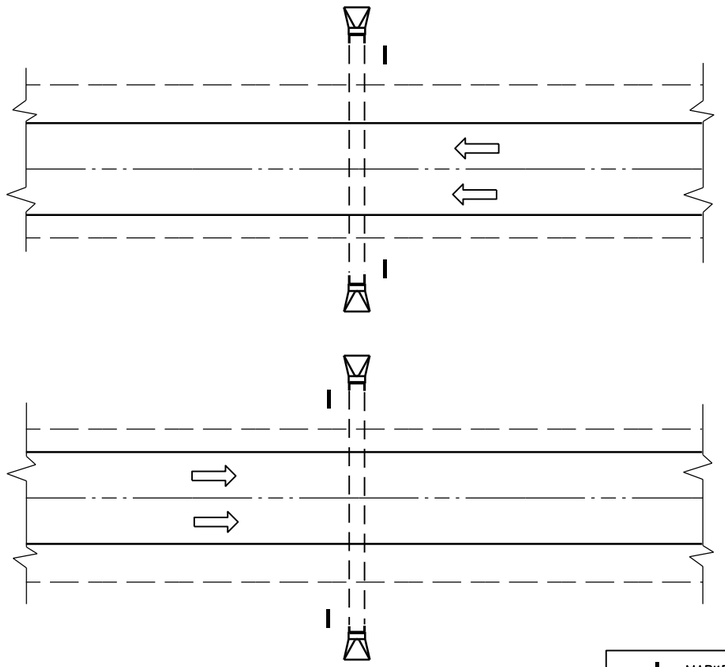
APPROVED
8/31/2012 — DATE
/S/ Jerry H. [illegible] — ROADWAY STANDARDS ENGINEER
FHWA

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

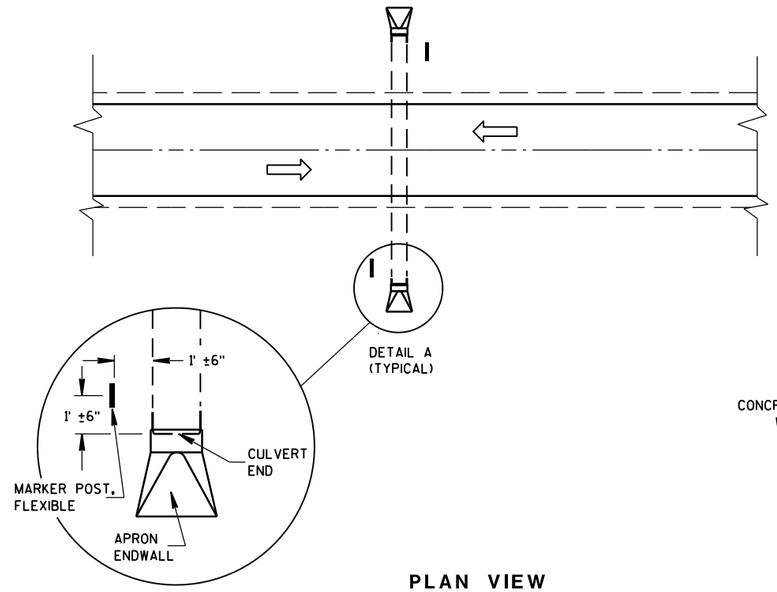
6

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



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

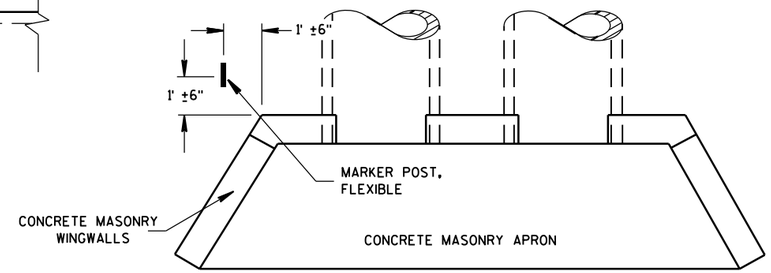
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

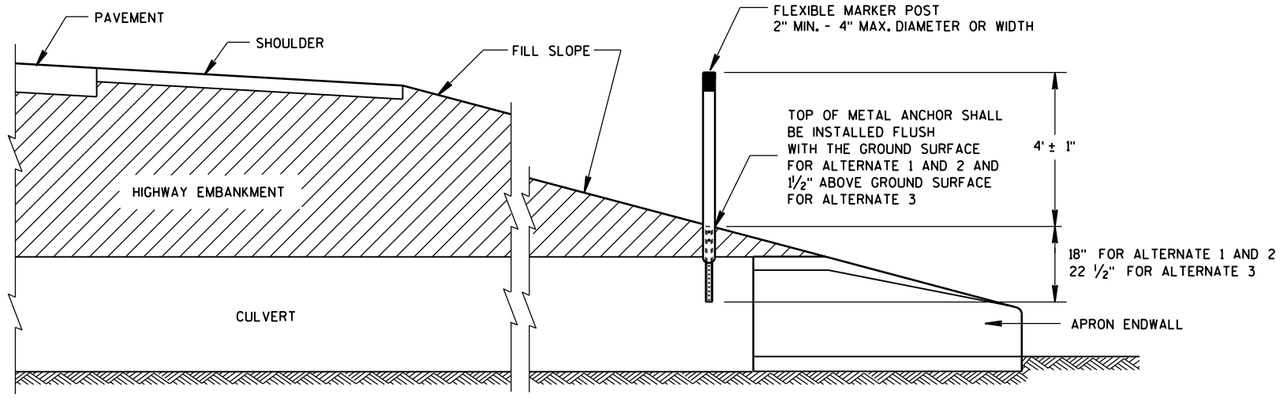
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

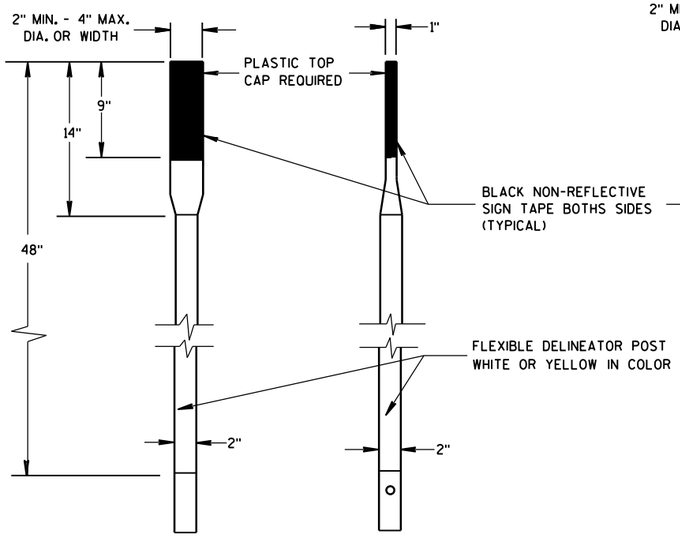
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

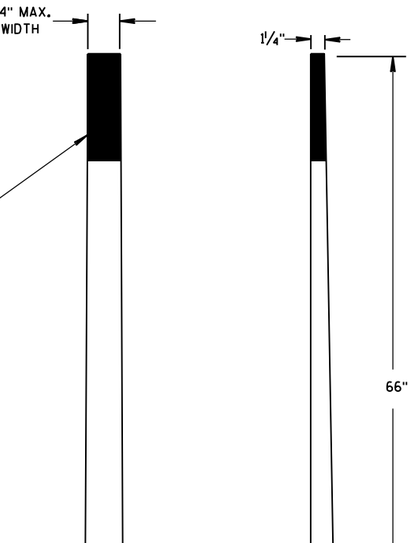
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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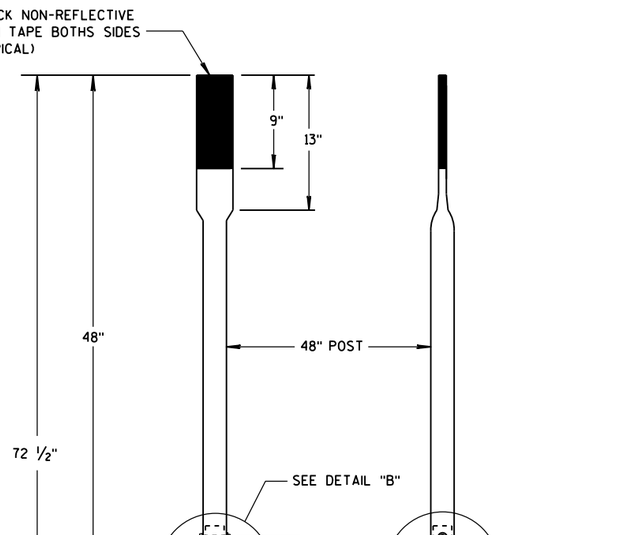
S.D.D. 15 A 3-2a



ALTERNATE 1

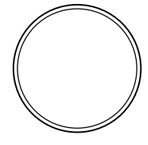


ALTERNATE 2

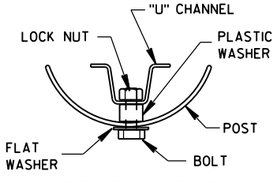


ALTERNATE 3

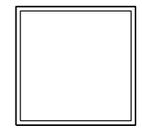
FLEXIBLE MARKER POSTS



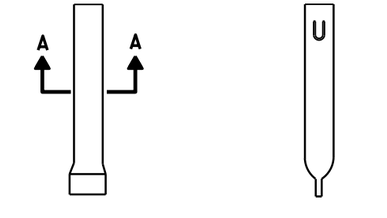
SECTION A-A



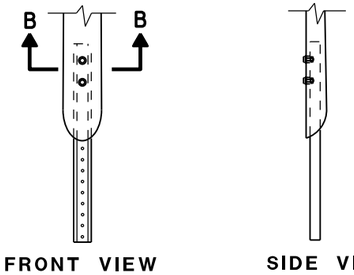
SECTION B-B



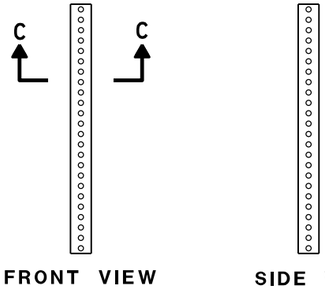
SECTION C-C



ALTERNATE 1

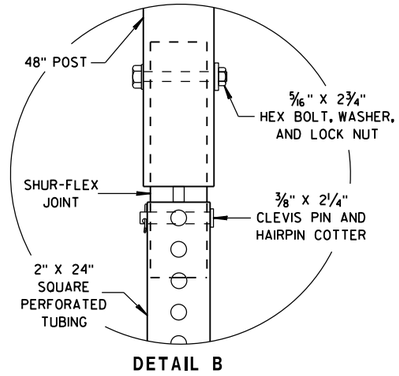


ALTERNATE 2

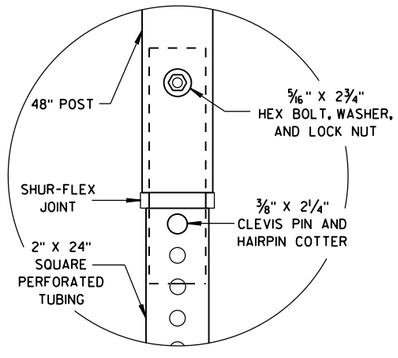


ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

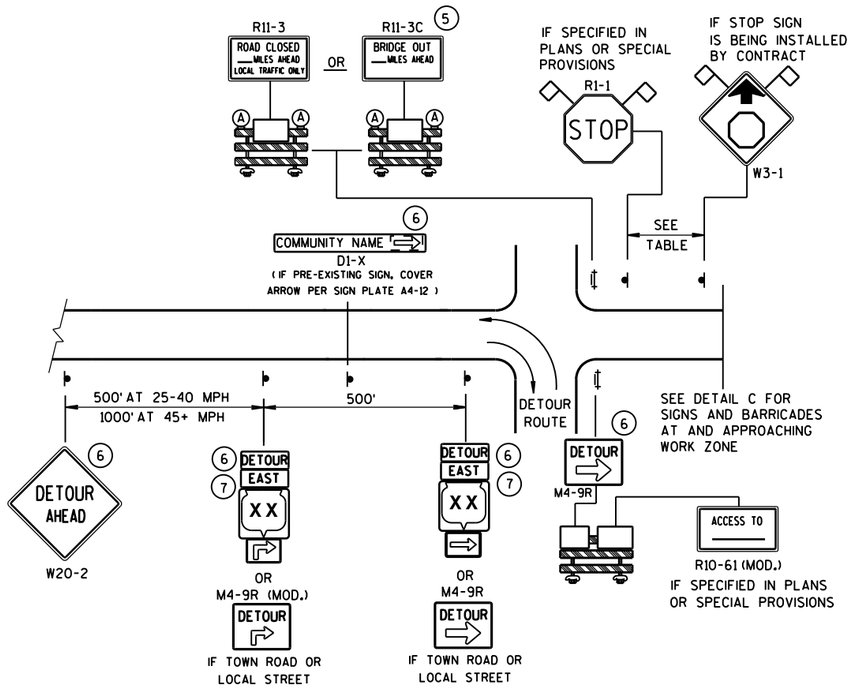
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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

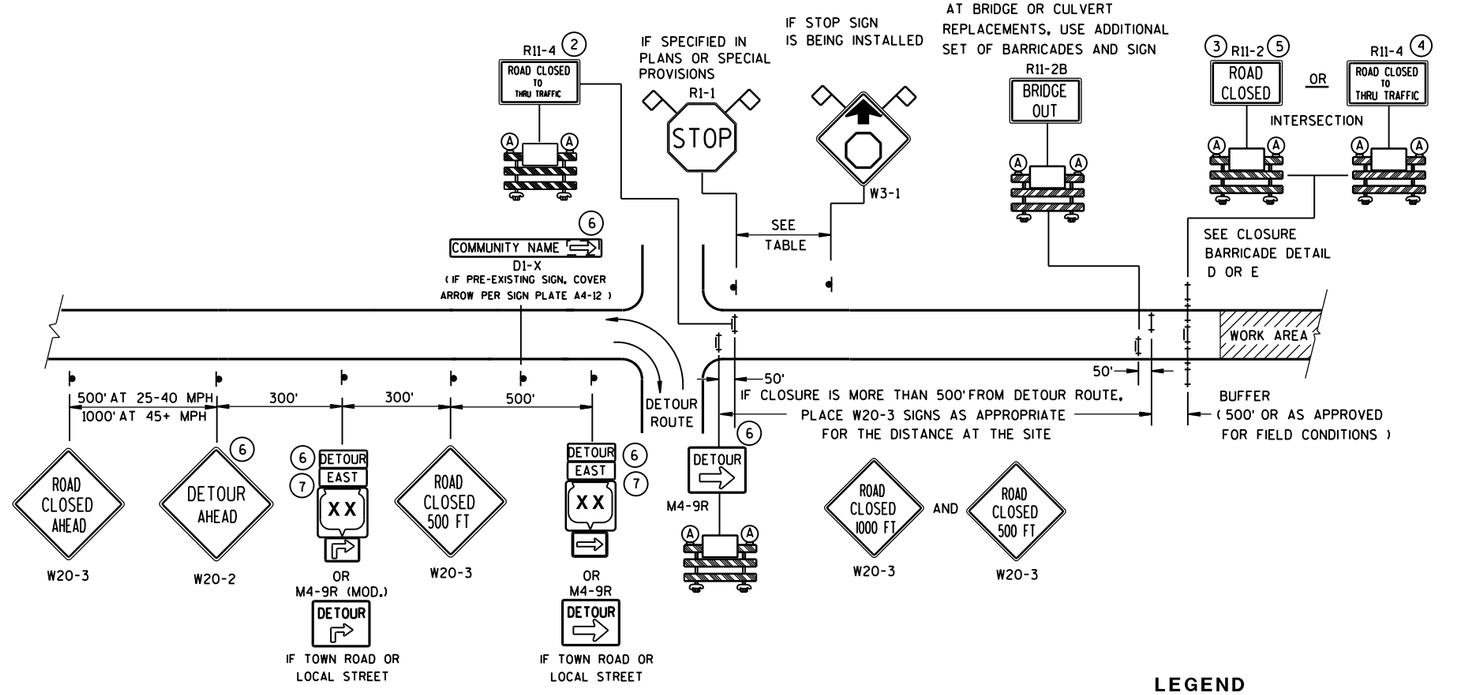
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S.D.D. 15 A 3-2b



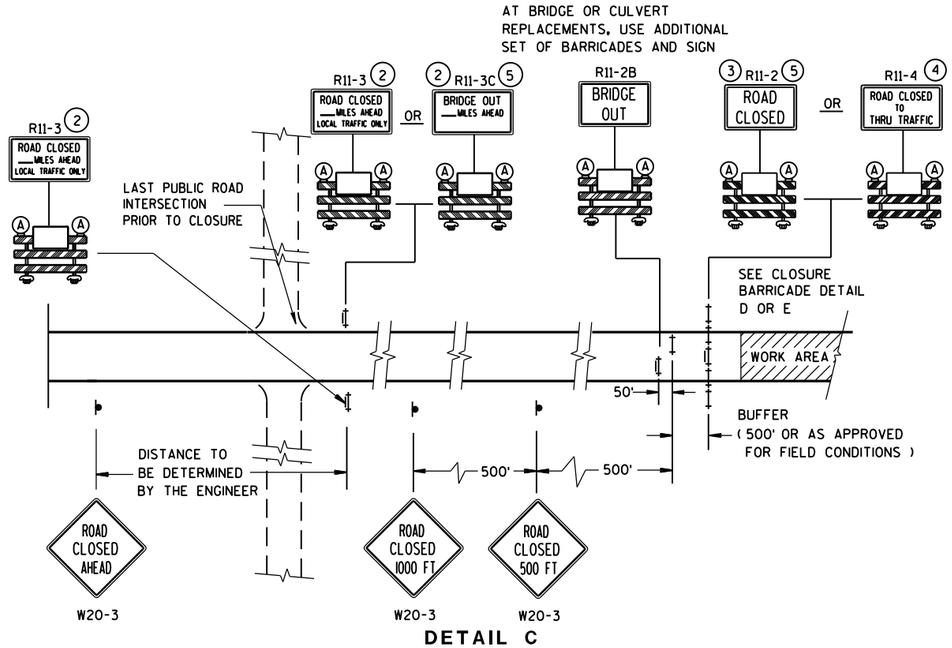
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

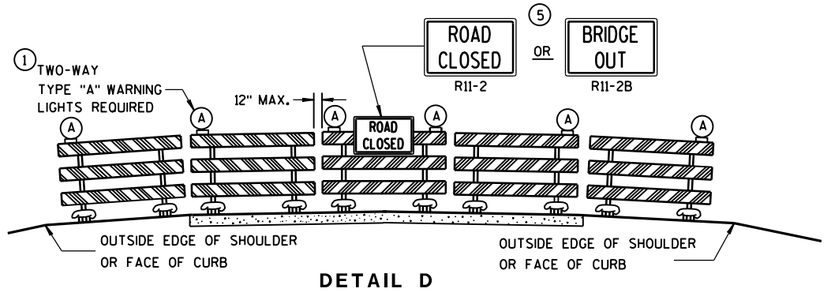
8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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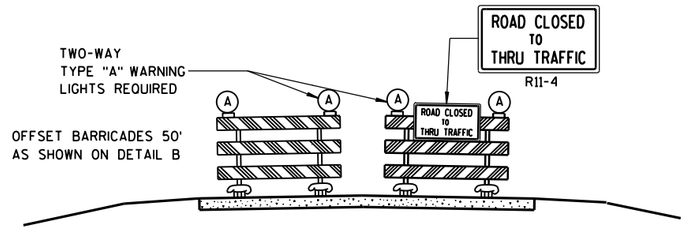
S.D.D. 15 C 2-5a



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.

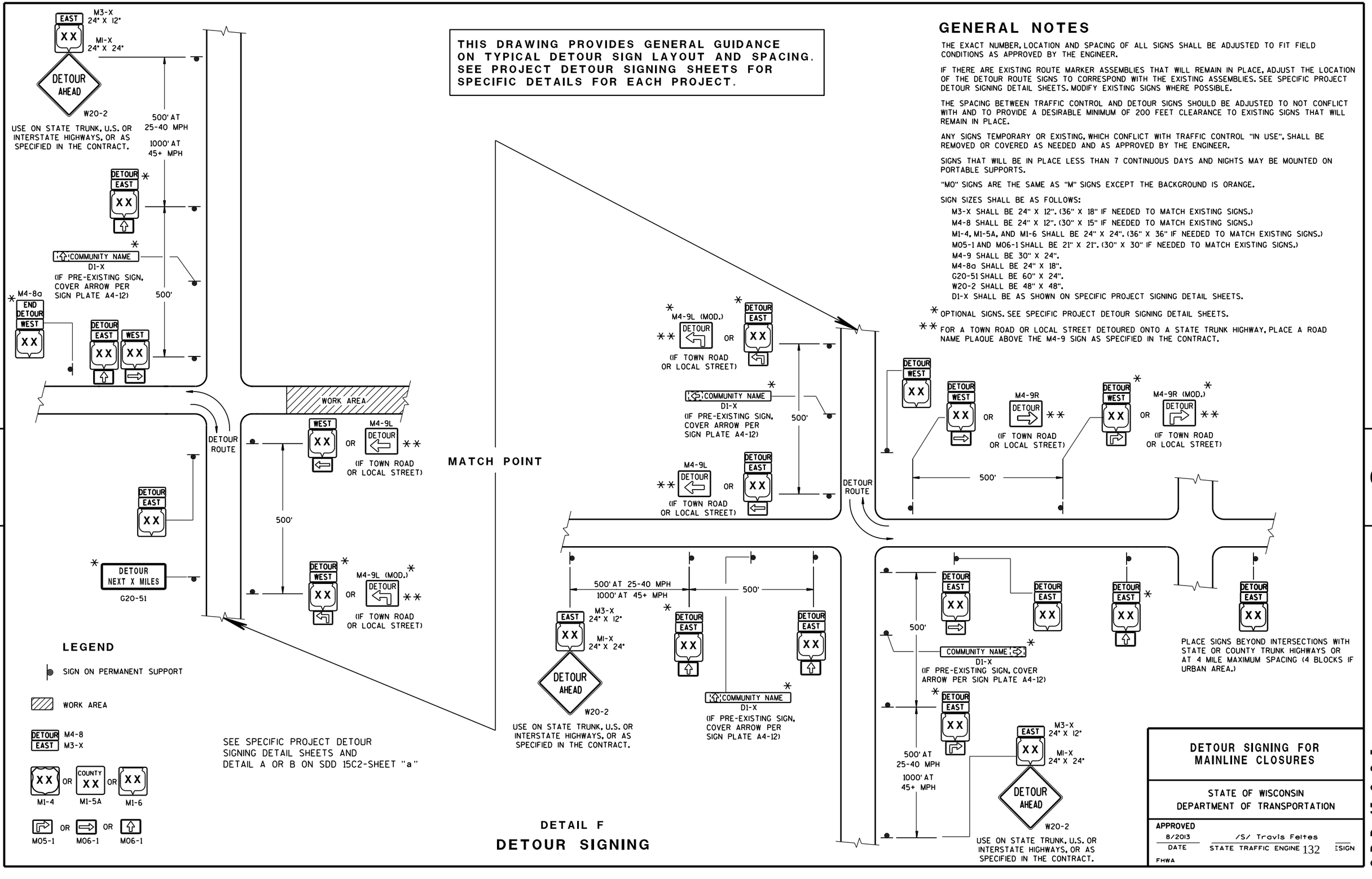
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.



LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST — M4-8 / M3-X
- XX OR COUNTY XX OR XX — M1-4 / M1-5A / M1-6
- M05-1 OR M06-1 OR M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

DETAIL F

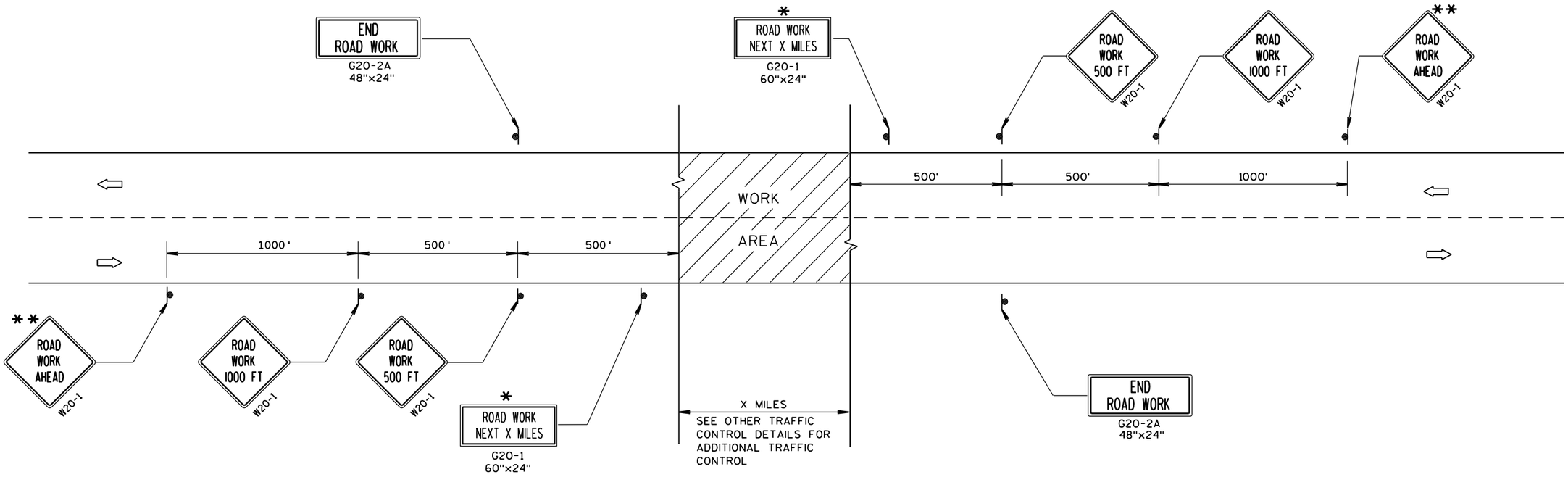
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



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.

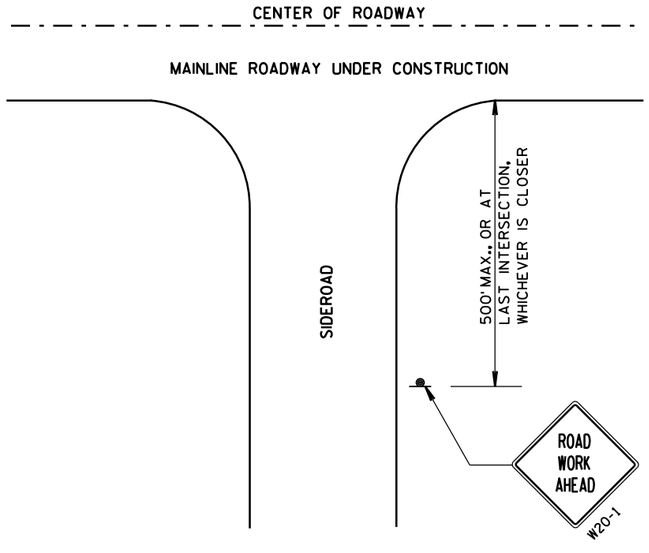
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

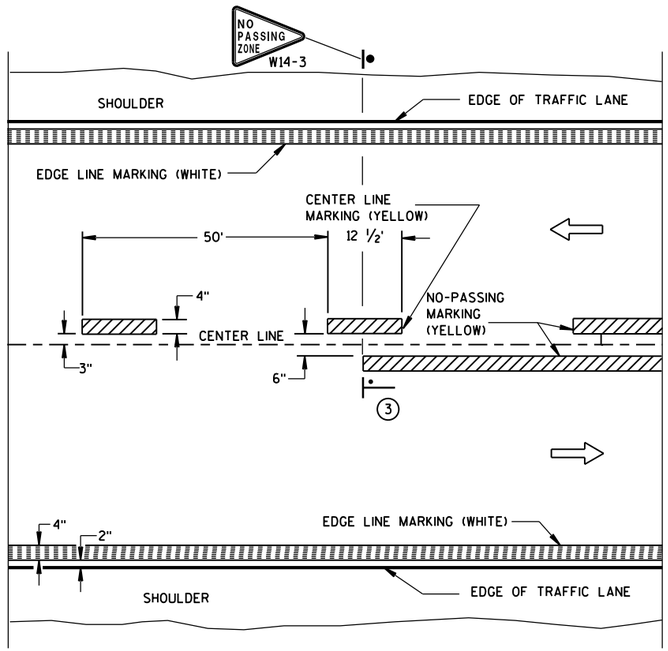
FHWA

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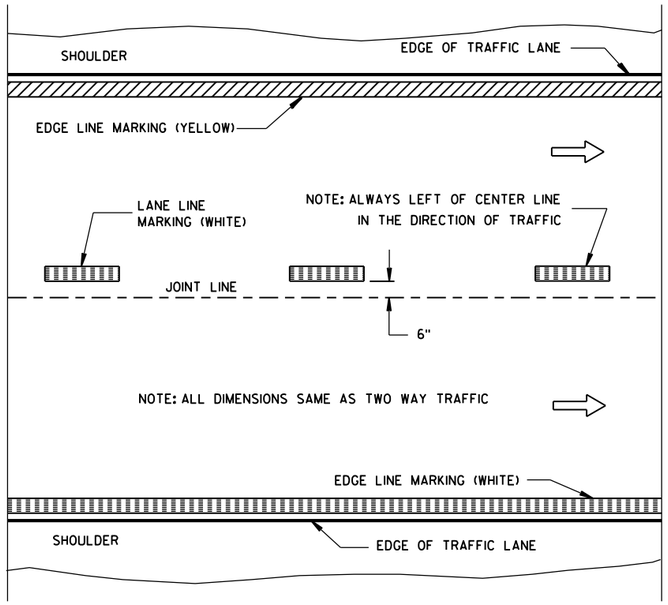
S.D.D. 15 C 4-2

6

S.D.D. 15 C 4-2

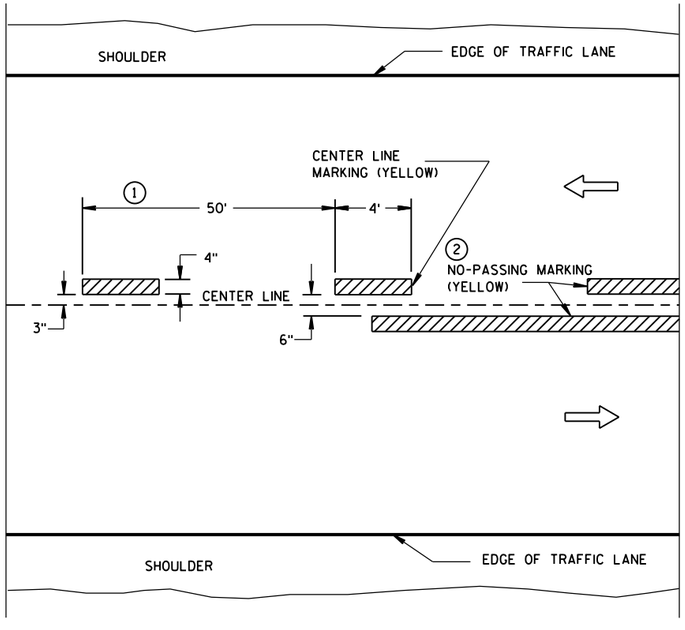


TWO WAY TRAFFIC

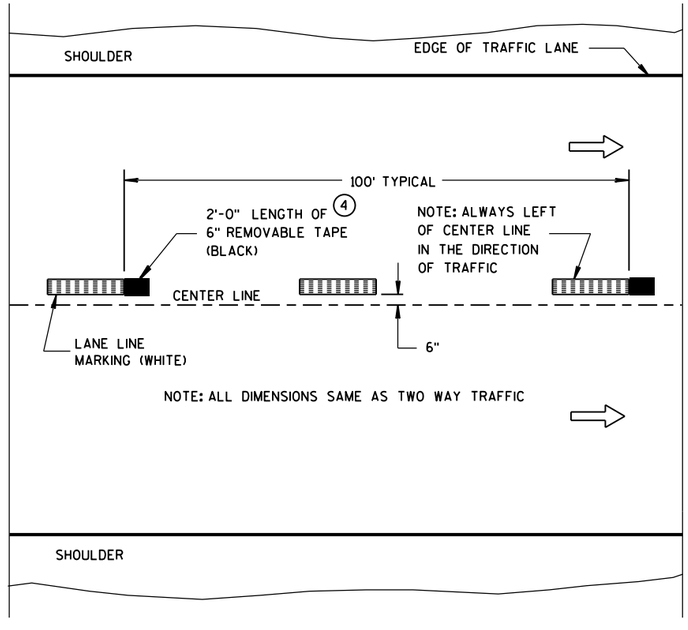


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

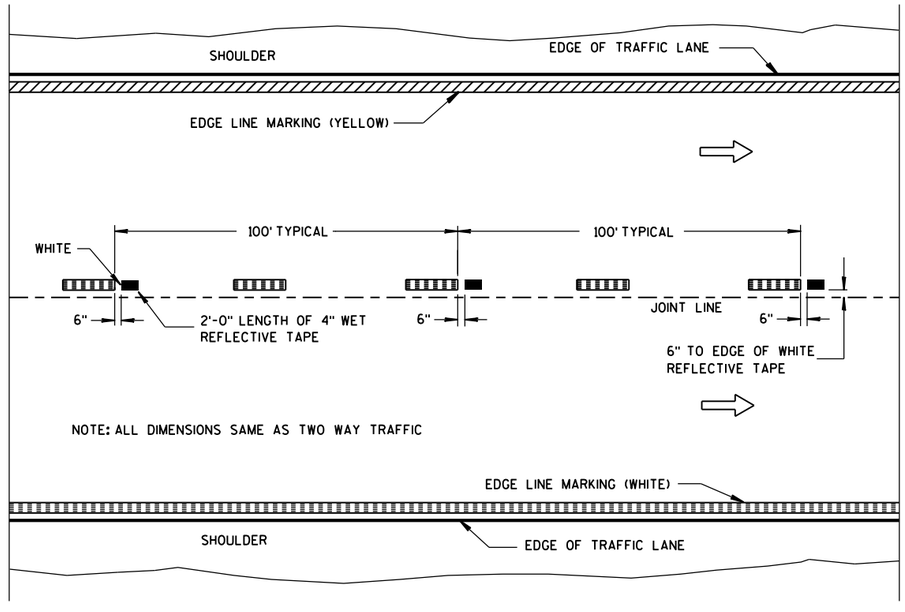
GENERAL NOTES

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

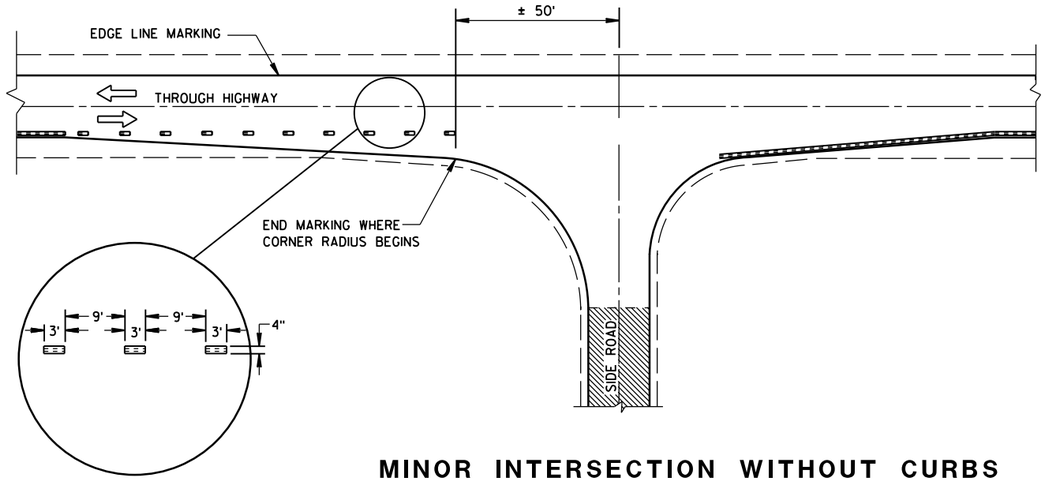
FHWA

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

6

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



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

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

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

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

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

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

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

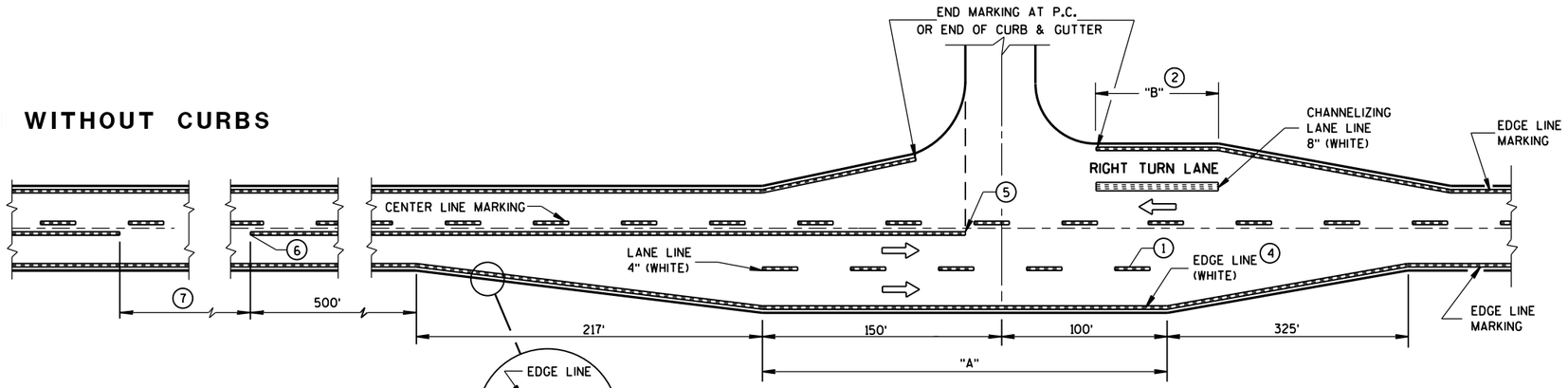
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

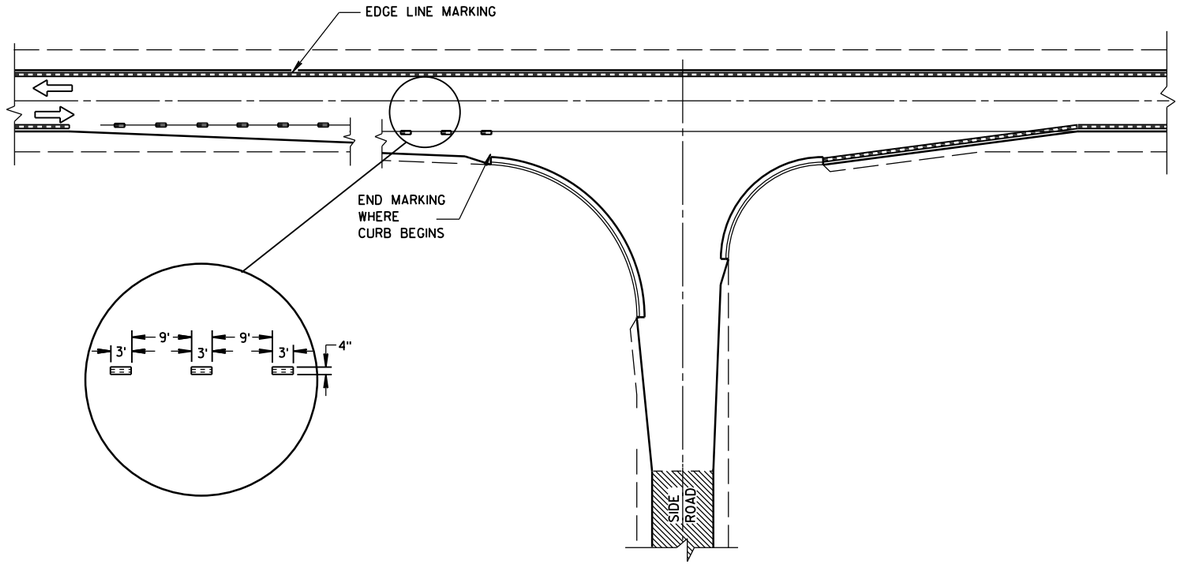
(7)

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



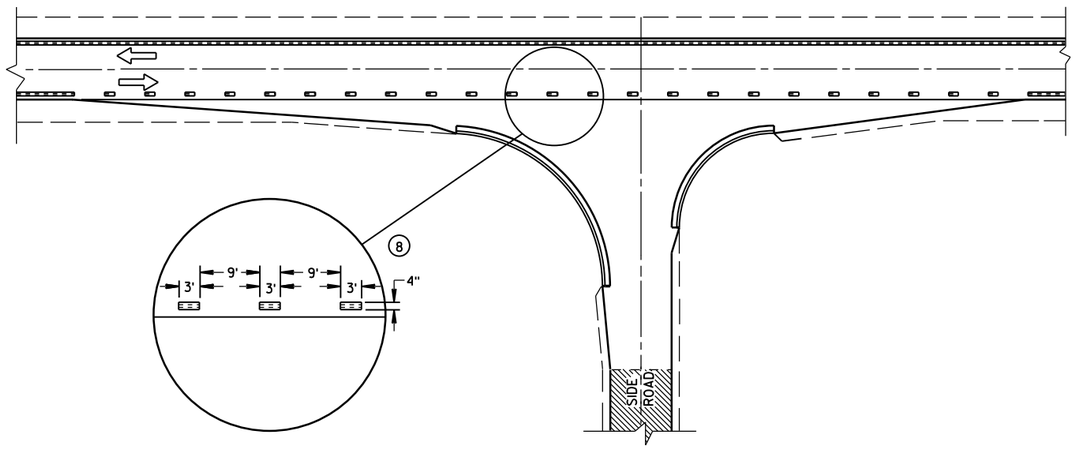
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

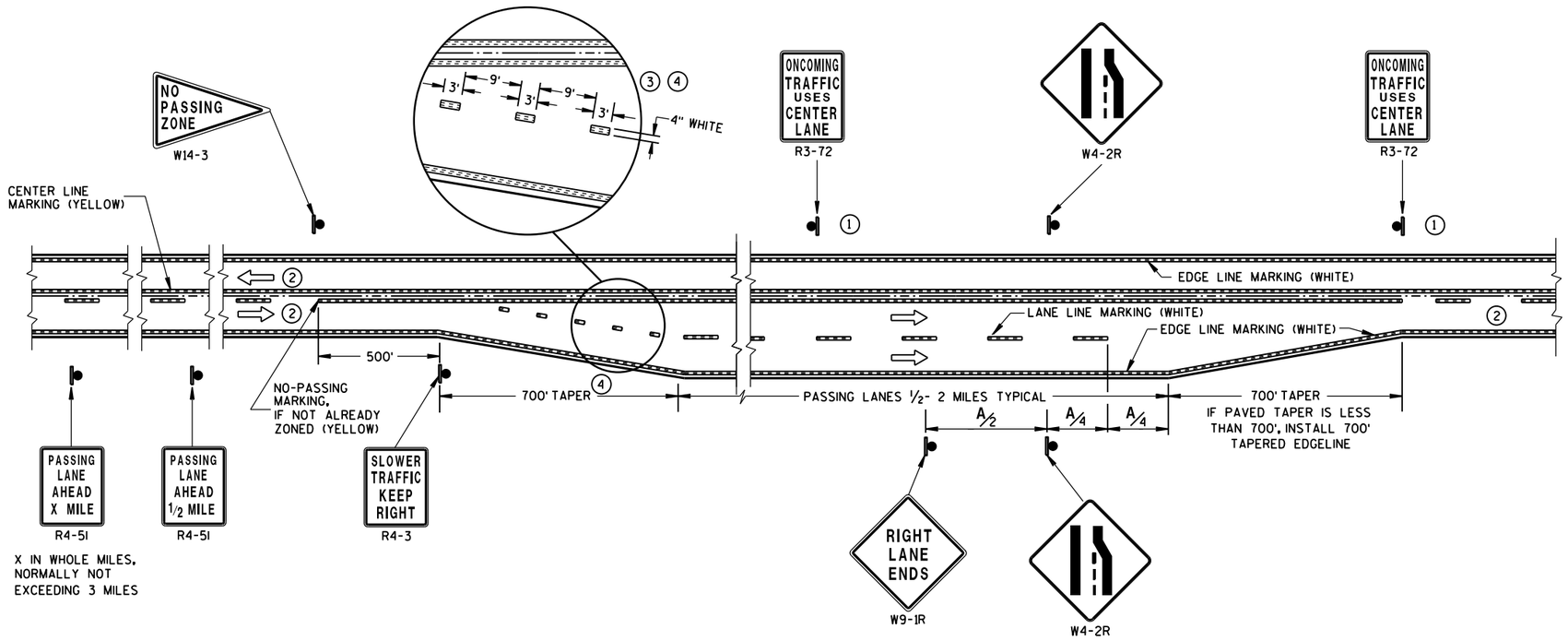
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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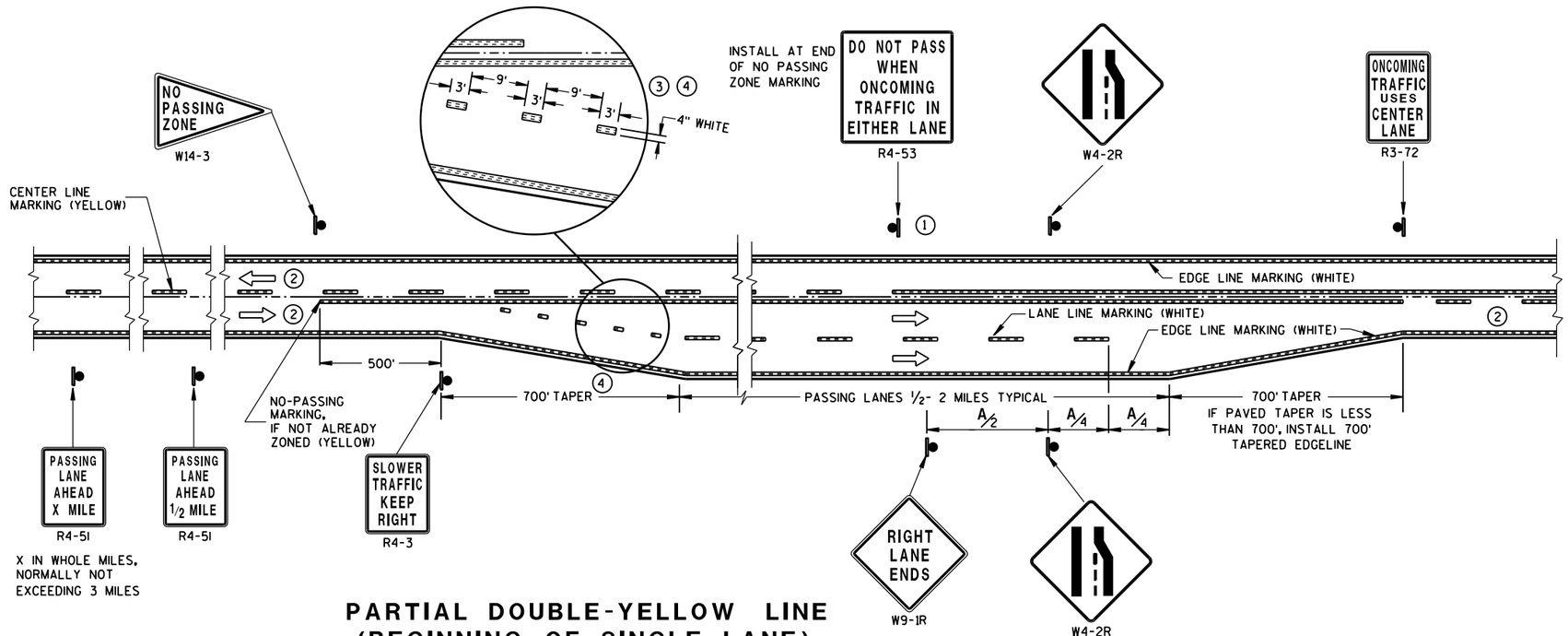
S.D.D. 15 C 8-16b

6

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



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



PARTIAL DOUBLE-YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

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

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

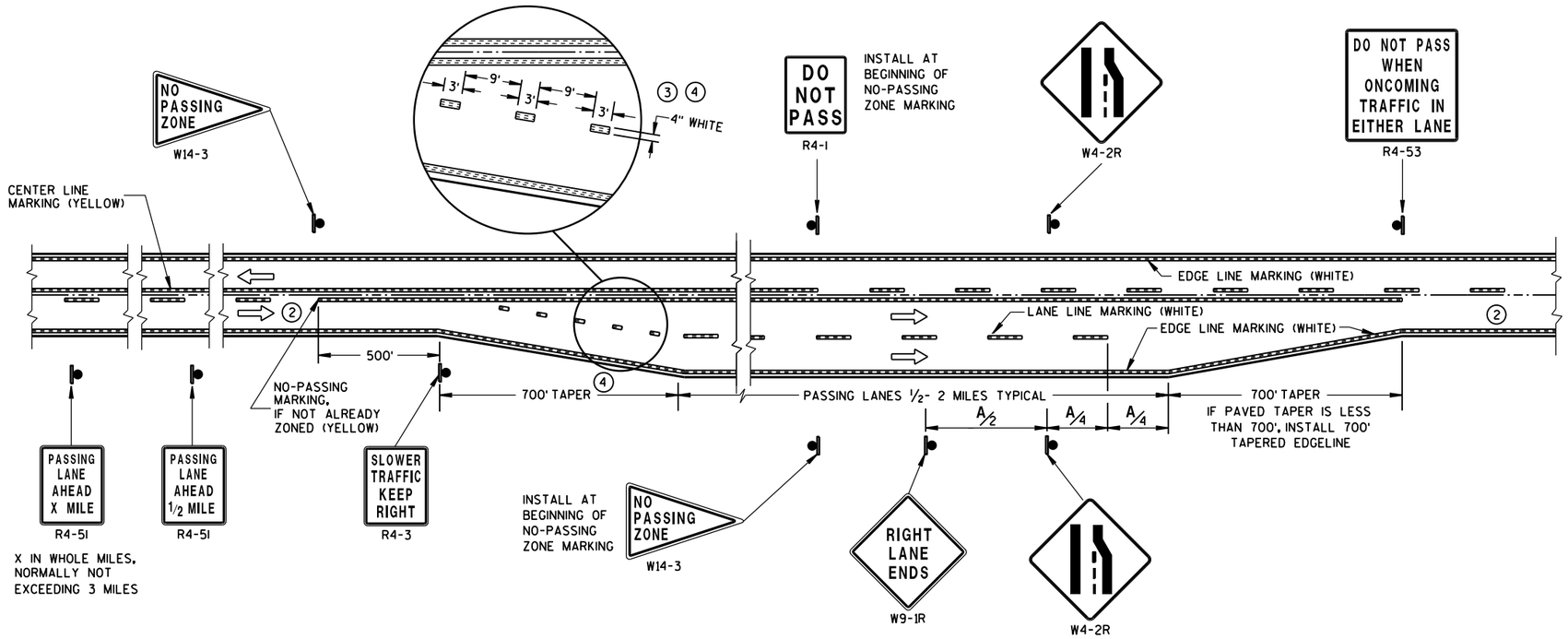
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

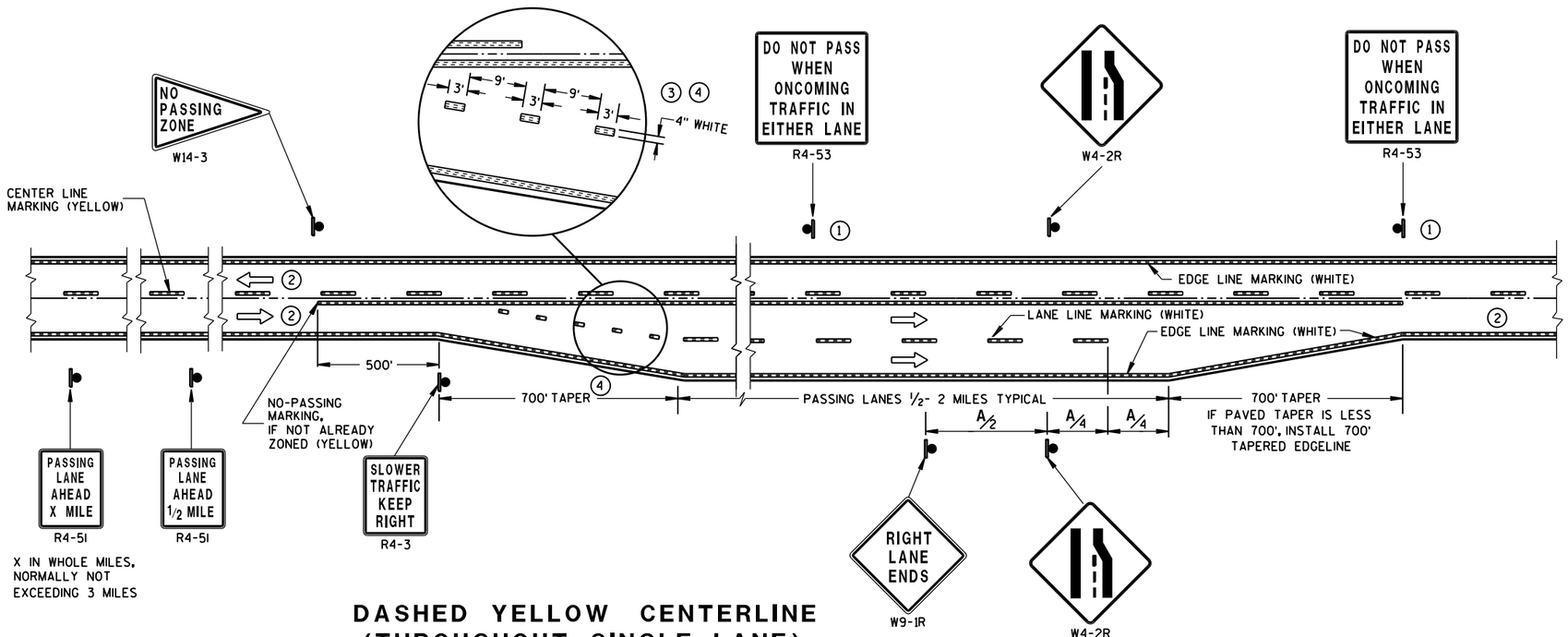
S.D.D. 15 C 8-16c

6

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



SOLID DOUBLE-YELLOW LINE (END OF SINGLE LANE)



DASHED YELLOW CENTERLINE (THROUGHOUT SINGLE LANE)

GENERAL NOTES

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

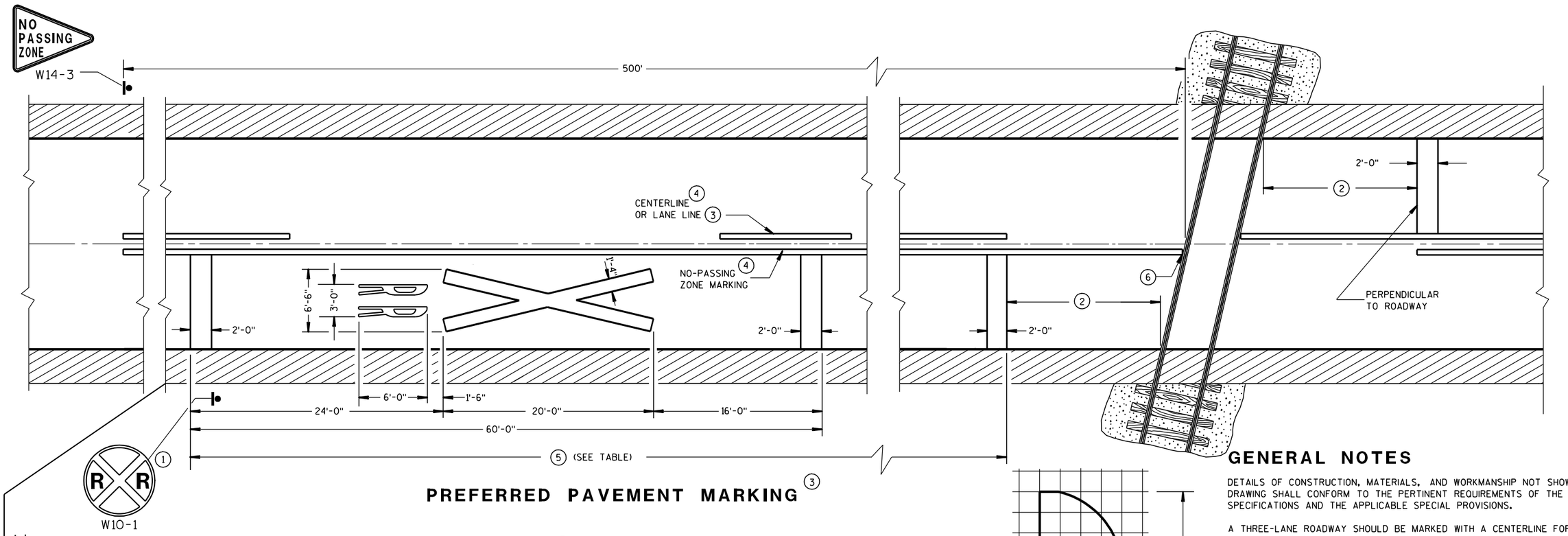
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	750
50	850
55	950

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

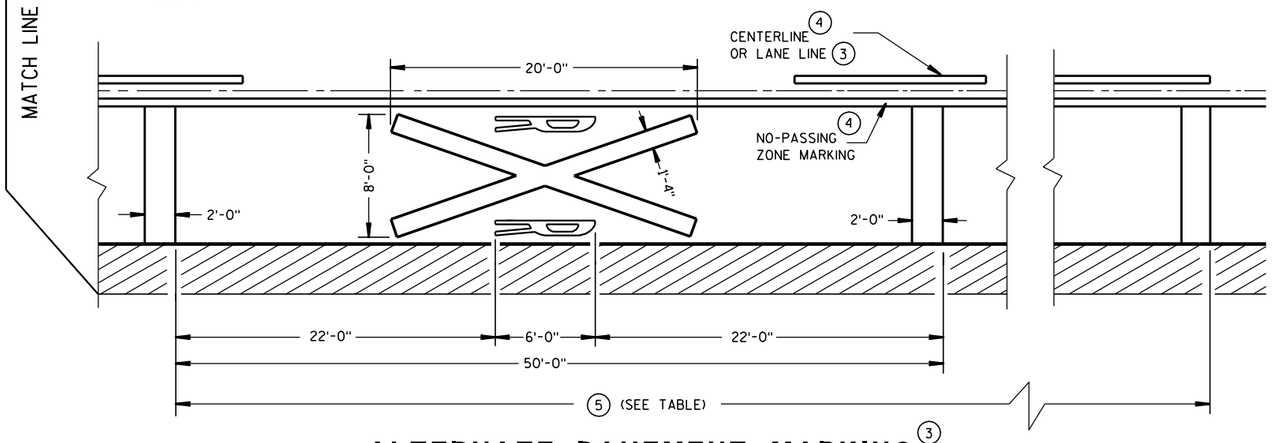
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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



PREFERRED PAVEMENT MARKING 3

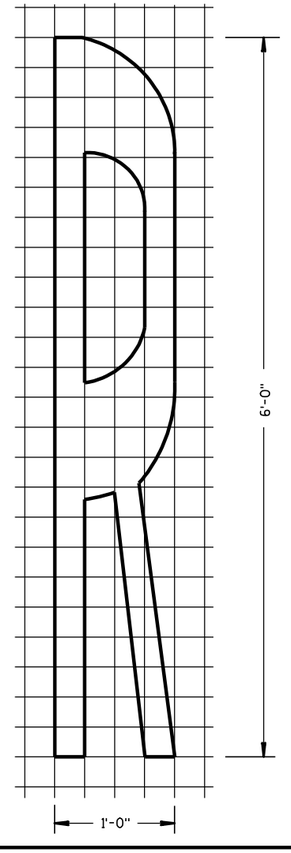


ALTERNATE PAVEMENT MARKING 3

5

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

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



GENERAL NOTES

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

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

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

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

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

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1-9-2012
DATE

/S/ Thomas N. [illegible]
STATE TRAFFIC ENGINEER

FHWA

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S.D.D. 15 C 9-9a

6

S.D.D. 15 C 9-9a

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

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

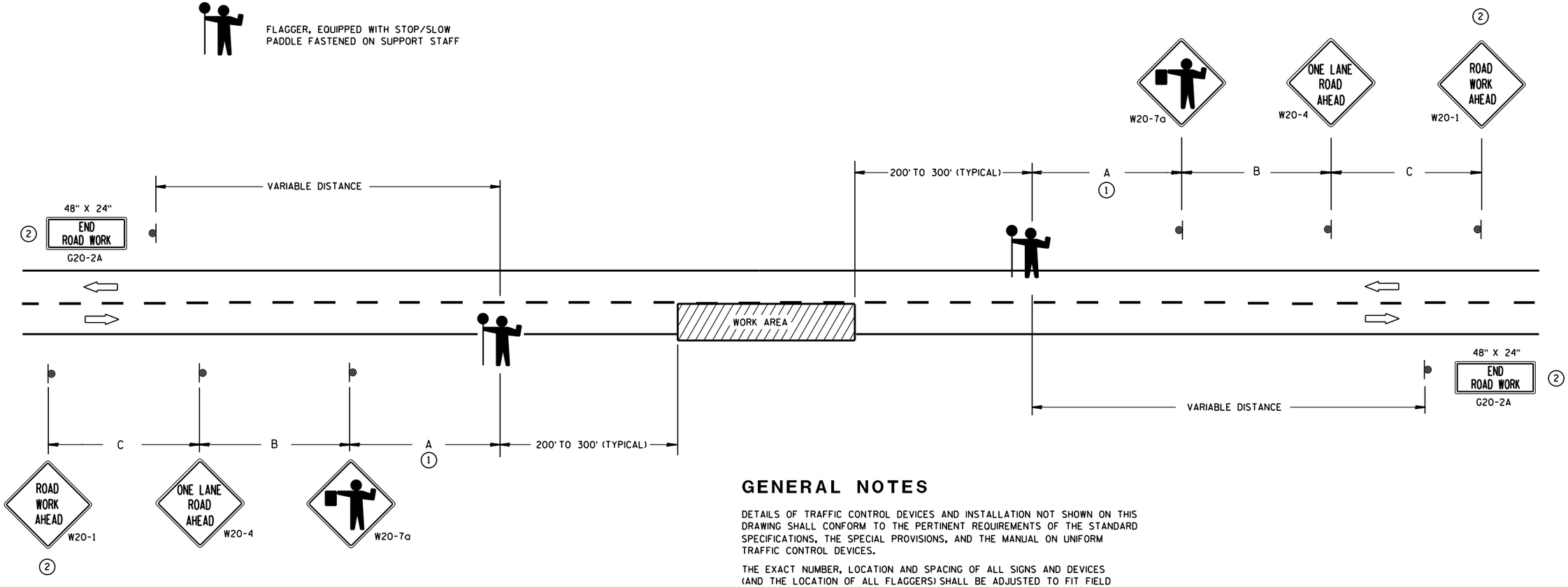
SIGN SPACING TABLE

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

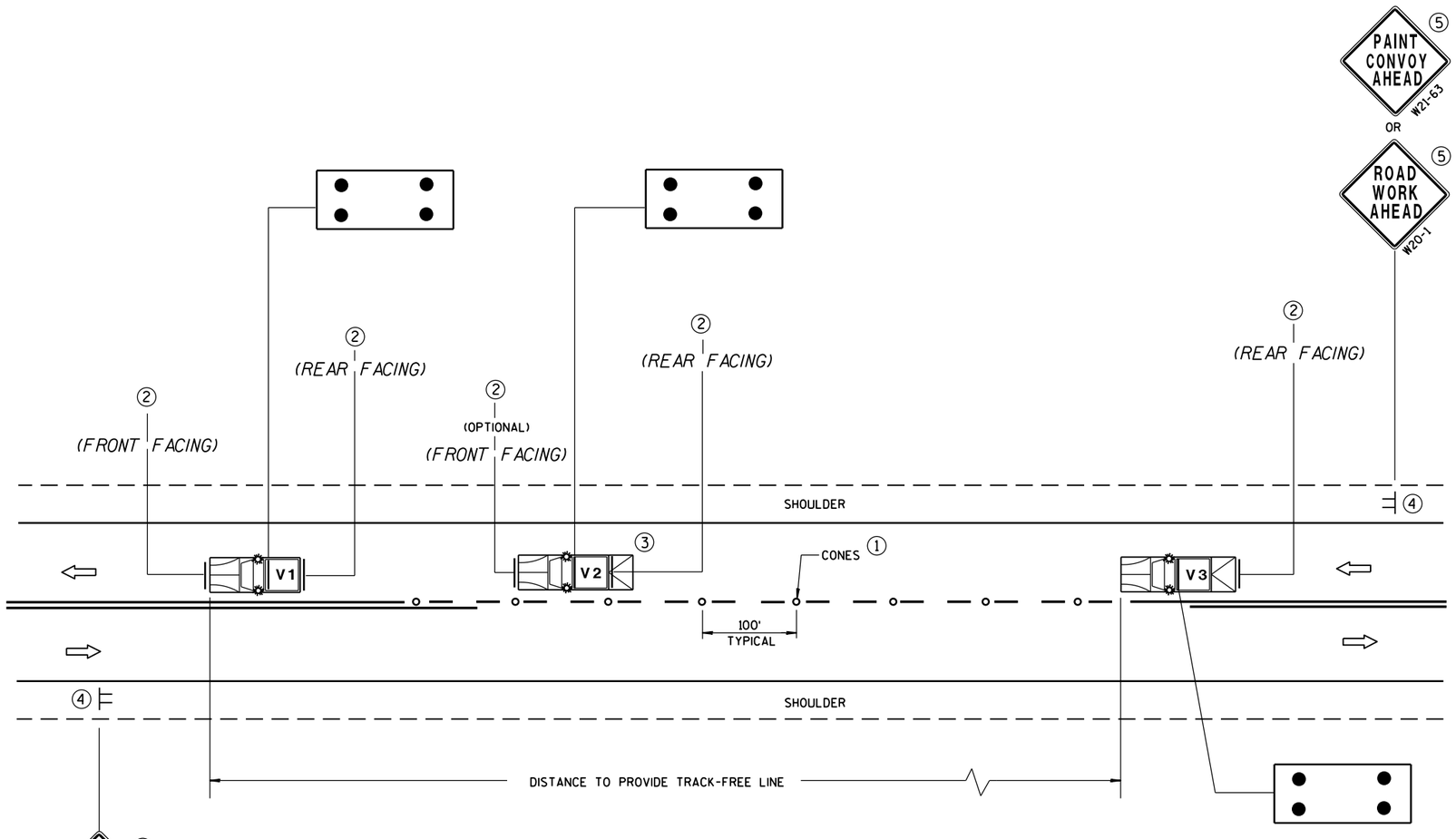
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 15 C 12-4

6

S.D.D. 15 C 12-4



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

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

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

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

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

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

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

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

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

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

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

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

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

LEGEND

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

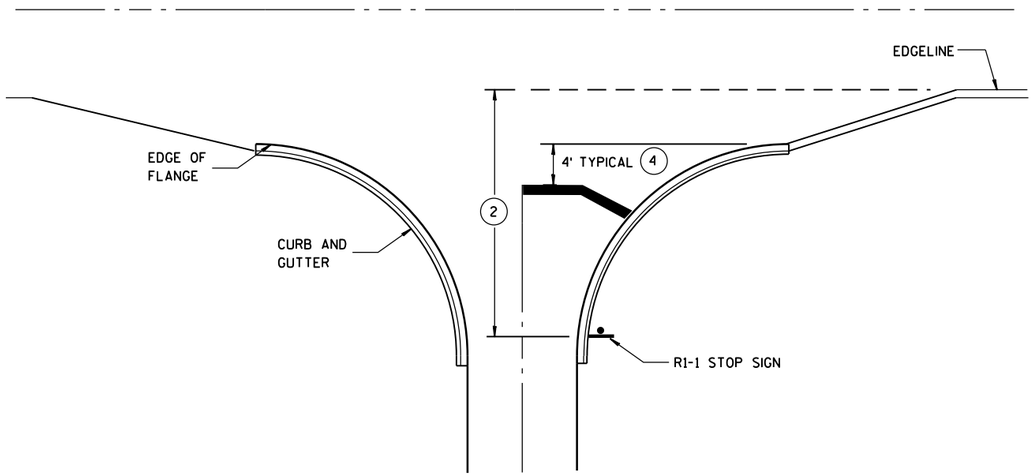
MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/3/2013 DATE FHWA	/S/ Travis Feltes STATE TRAFFIC E

6

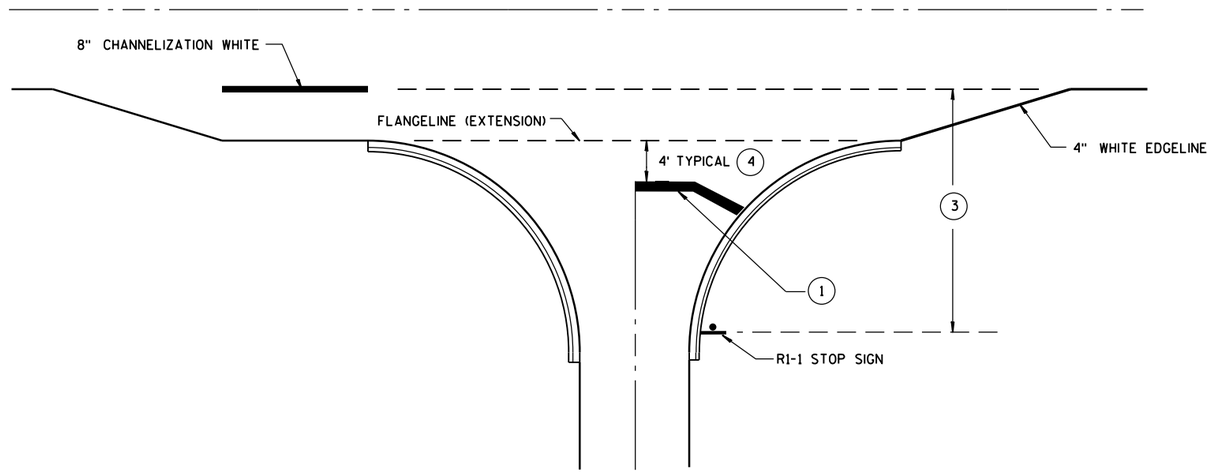
S.D.D. 15 C 19-2a

6

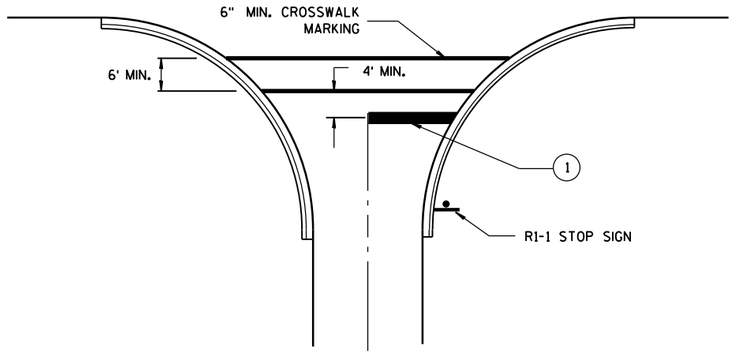
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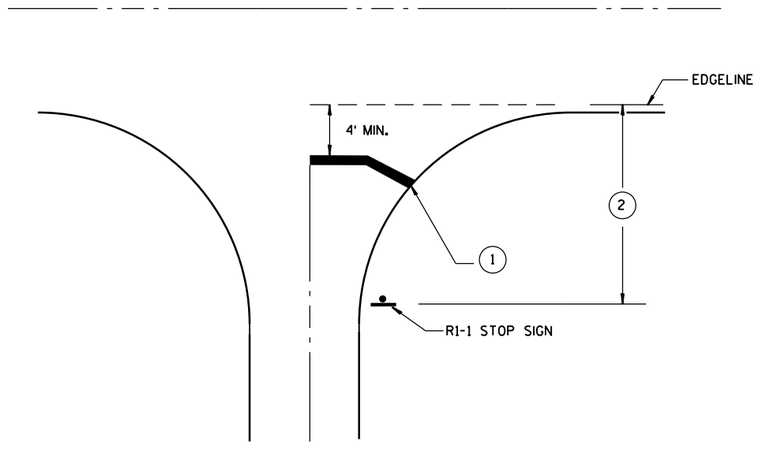
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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.

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

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

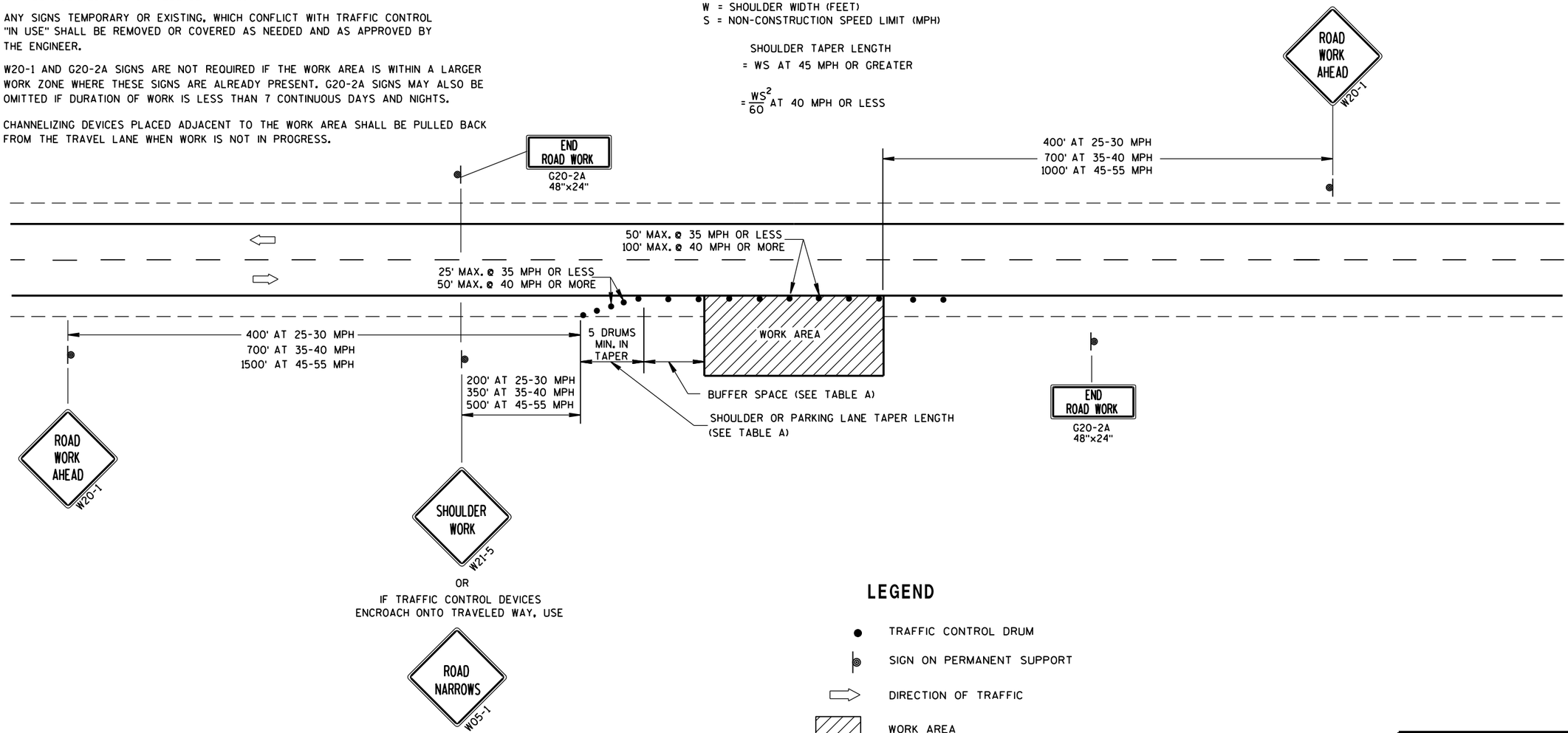
TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

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

SHOULDER TAPER LENGTH
= WS AT 45 MPH OR GREATER

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



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

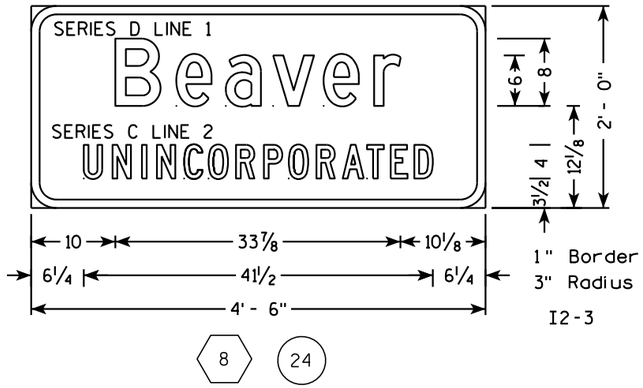
8/2013 DATE

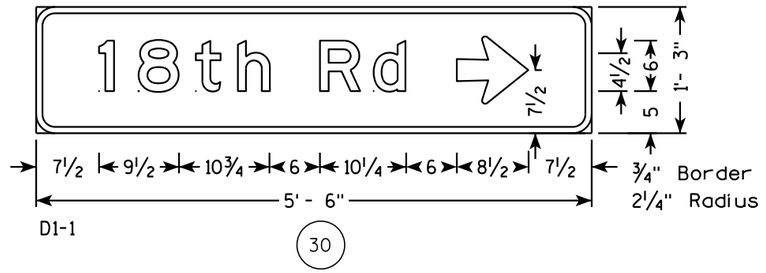
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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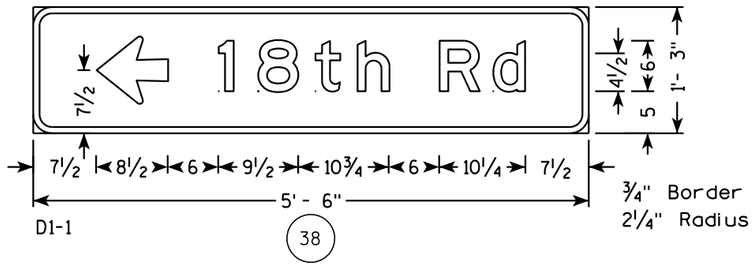
S.D.D. 15 D 28-2

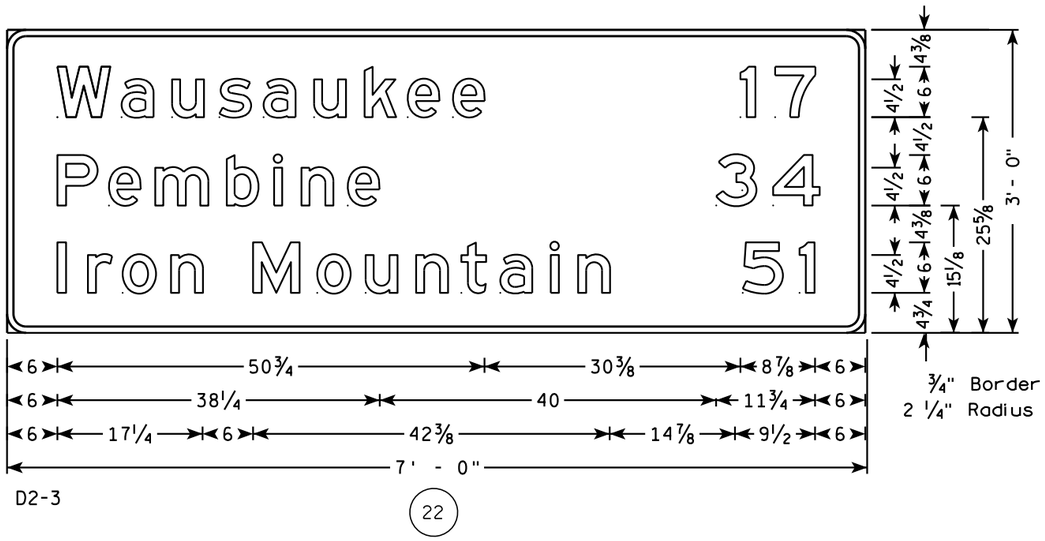


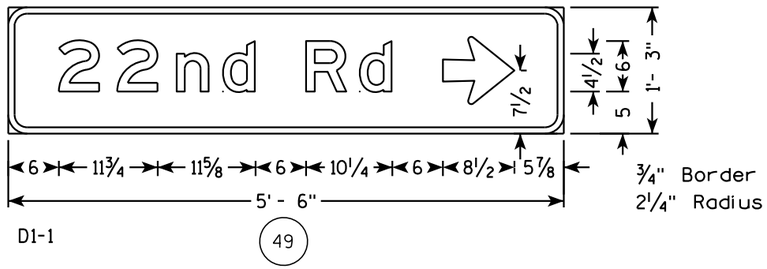


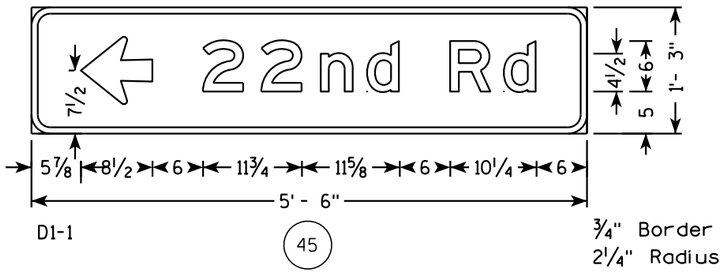
NOTES

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 except as Noted



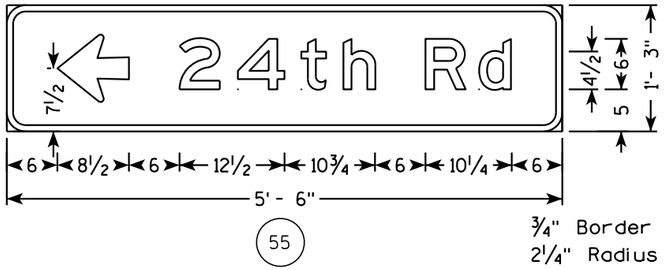




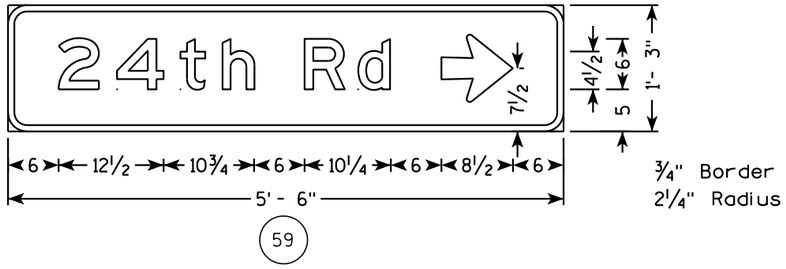


PLAN SHEET PRODUCED BY WisDOT-NE REGION

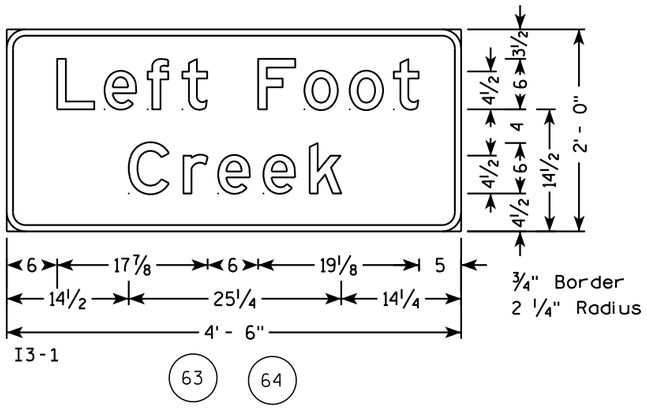
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	SIGN DETAILS	SHEET NO: 143	E



55

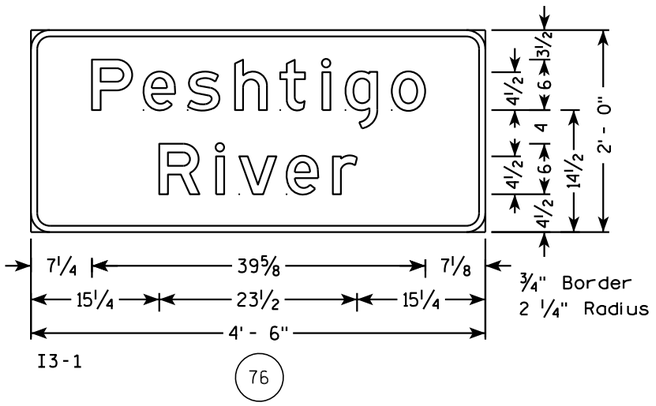


59



I3-1

63 64

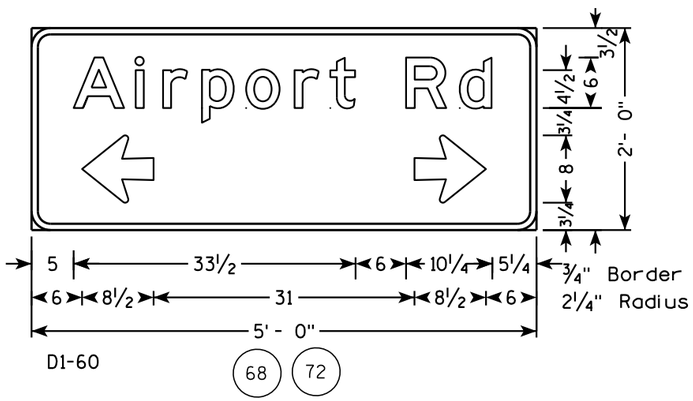


I3-1

76

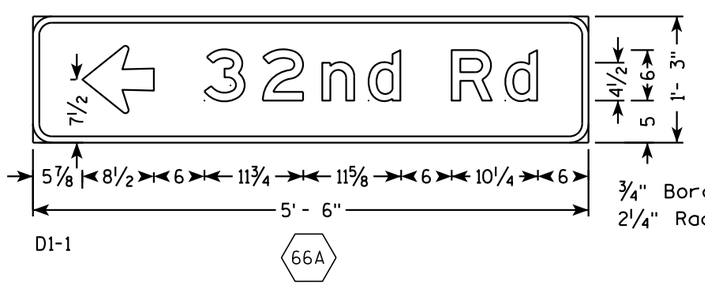
NOTES

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



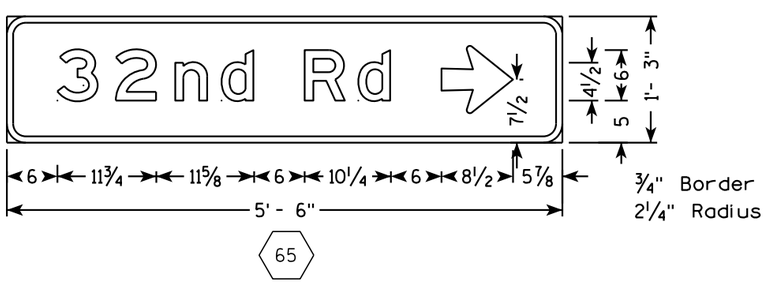
D1-60

68 72



D1-1

66A



65

PLAN SHEET PRODUCED
BY WisDOT-NE REGION

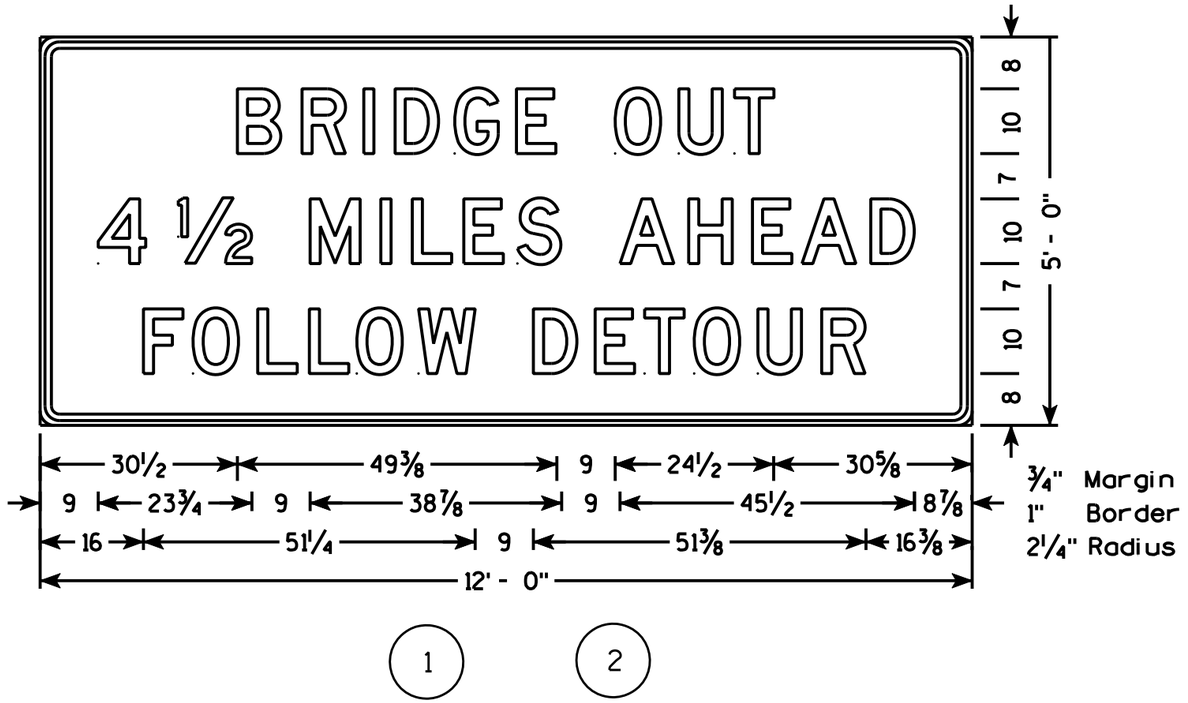
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7

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	SIGN DETAILS	SHEET NO: 144	E

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE except as Shown
   Message - BLACK
3. Message Series - D



PLAN SHEET PRODUCED
BY WisDOT-NE REGION

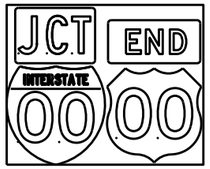
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	PERMANENT SIGNING	SHEET NO:	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

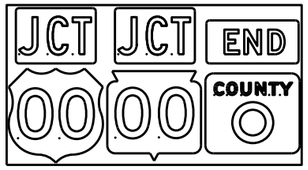
TYPICAL ASSEMBLIES



J1-1



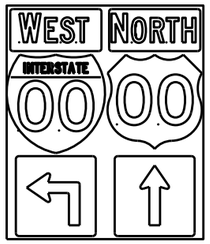
J1-2



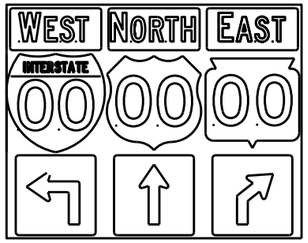
J1-3



J2-1



J2-2

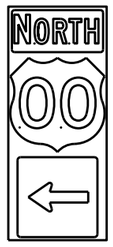


J2-3

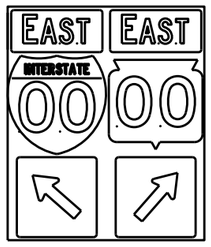


JV

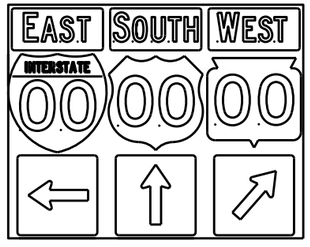
(Typical Vertical J-Assembly
See Note 10 and 11)



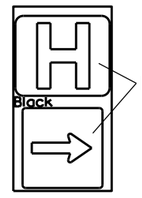
J3-1



J3-2



J3-3

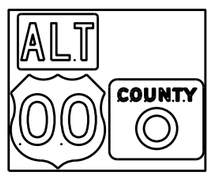


Blue Background

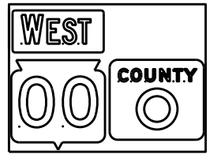
JH-1



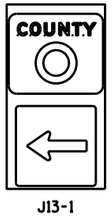
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

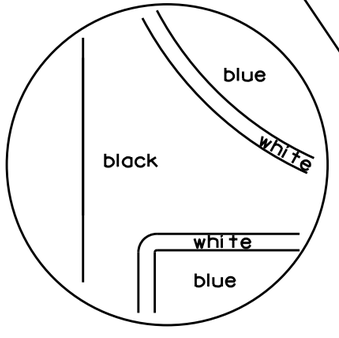


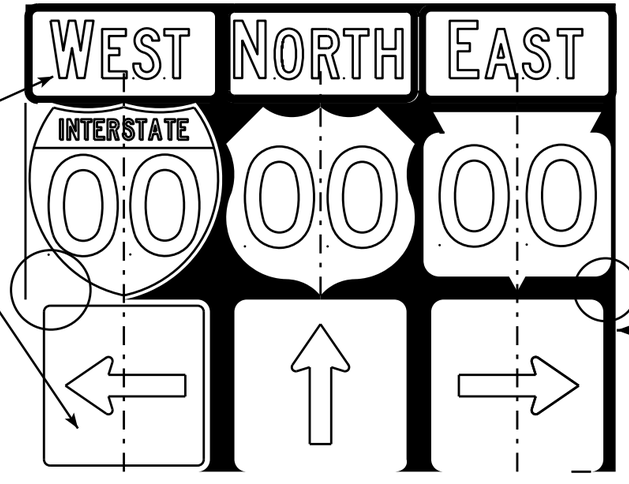
J23-1

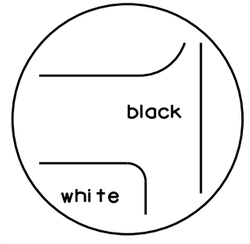


J22-1

blue background
with interstate







black background

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

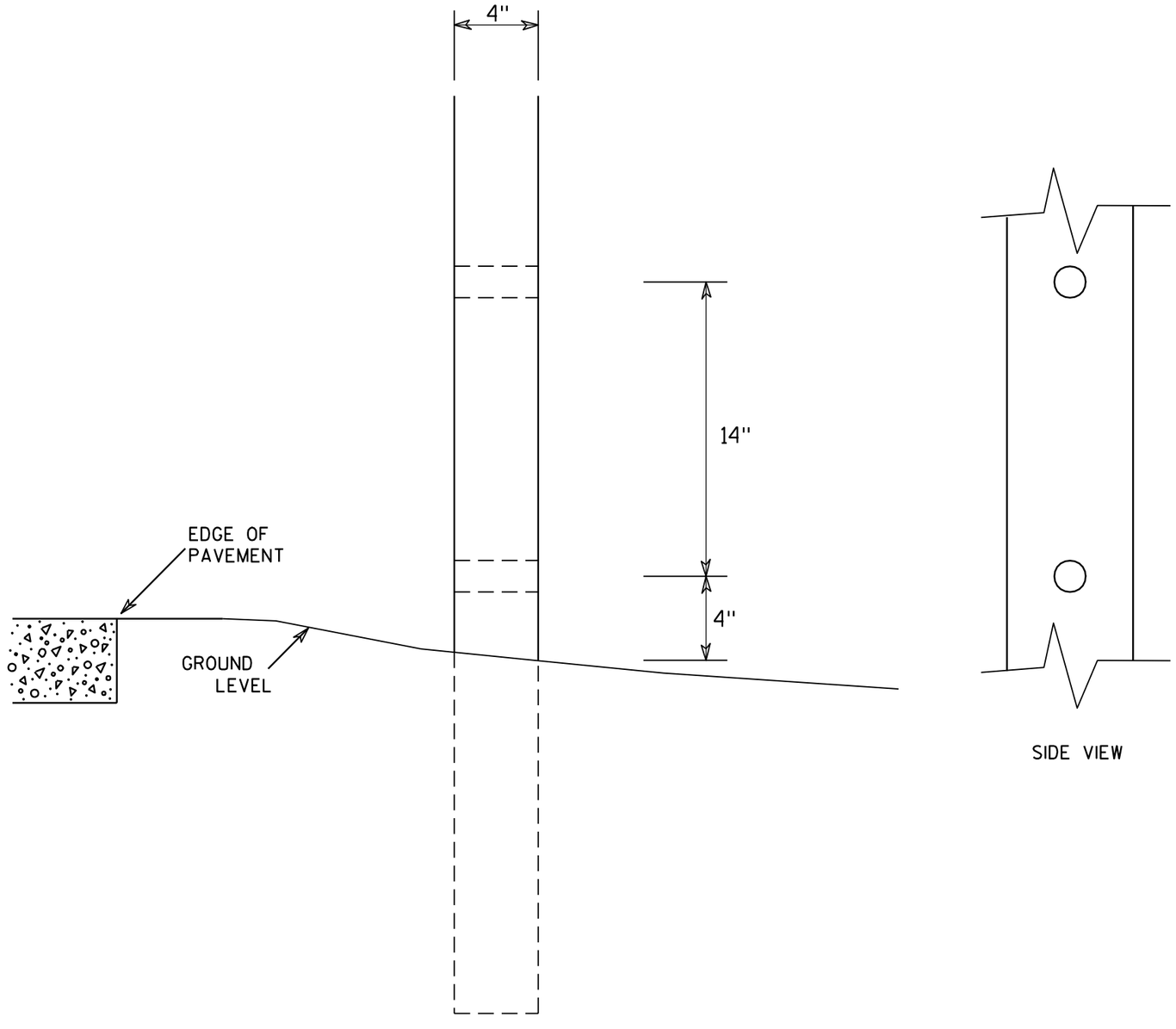
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | SHEET NO: E

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

WISDOT/CADDS SHEET 42



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

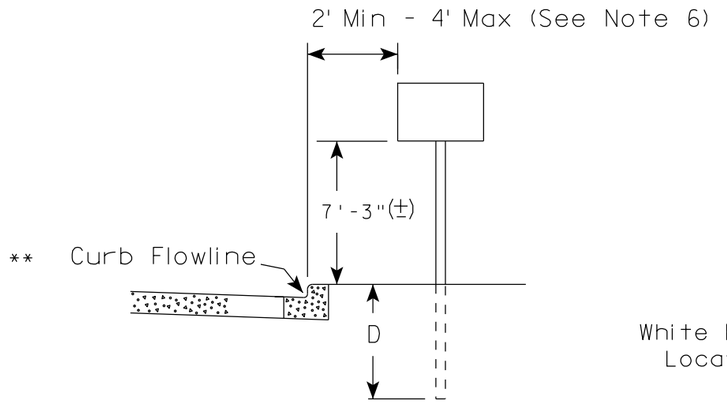
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

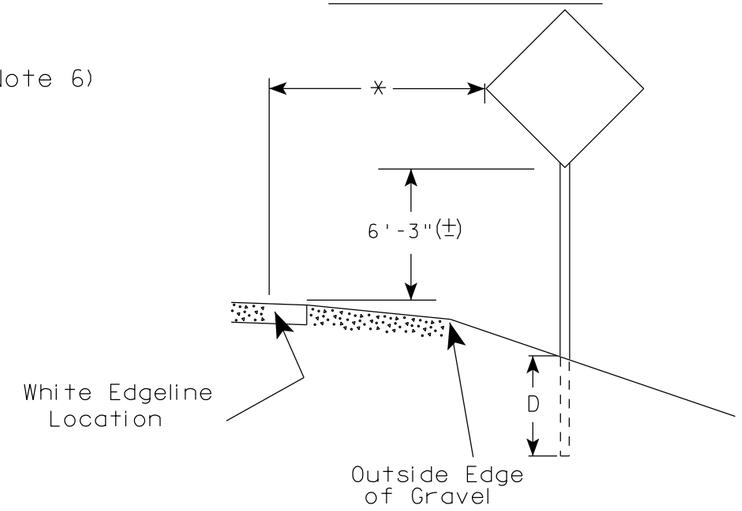
DATE 3/27/97 PLATE NO. A4-11.2

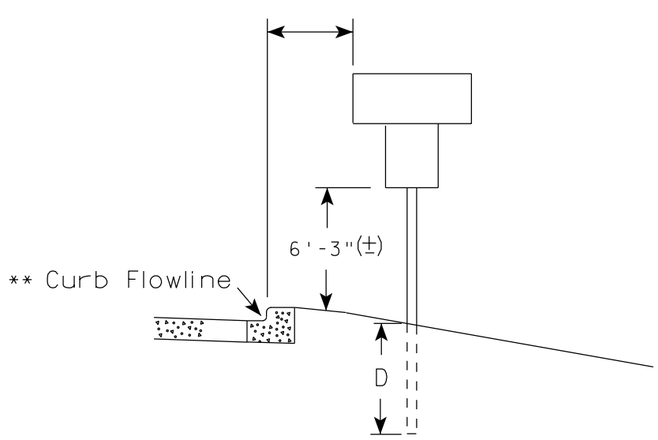
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 147	E

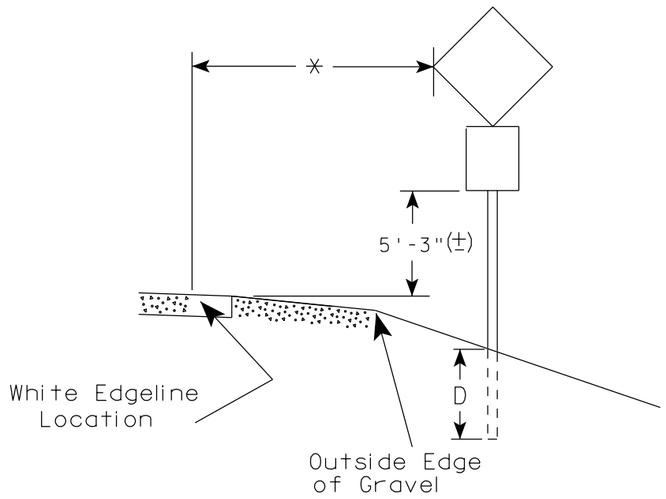
URBAN AREA



RURAL AREA (See Note 2)







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

GENERAL NOTES

1. Signs wider than 4 feet, 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 (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series) & End of Rod Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (+).

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

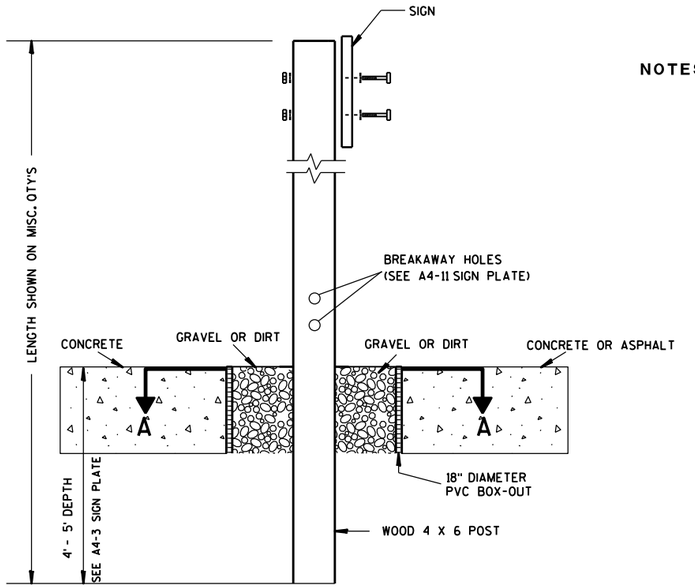
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/13 PLATE NO. A4-3.18

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

7

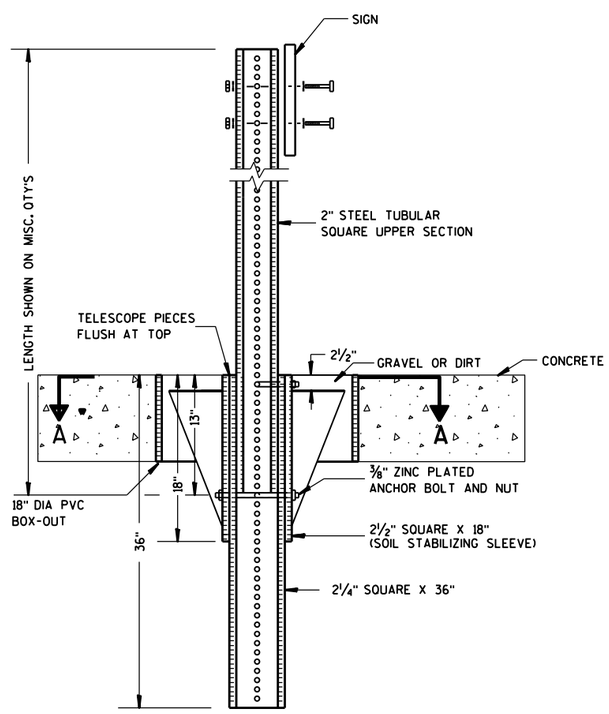
7



ELEVATION VIEW

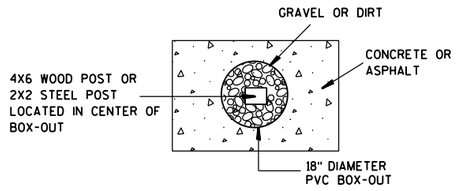
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

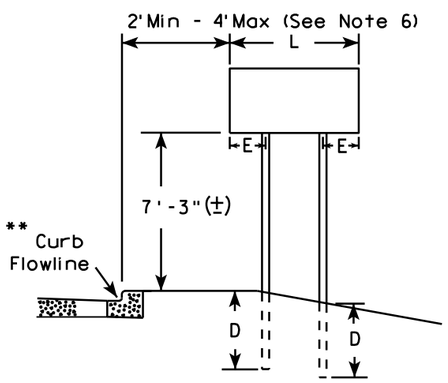
APPROVED Matthew R Rauch
for State Traffic Engineer

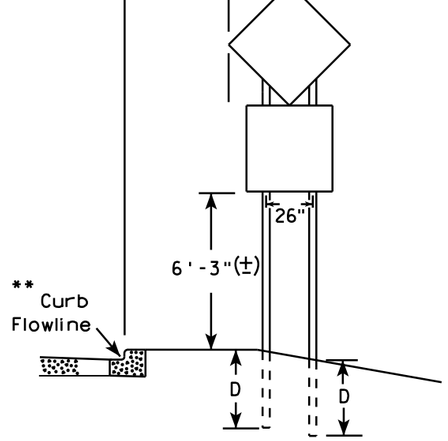
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

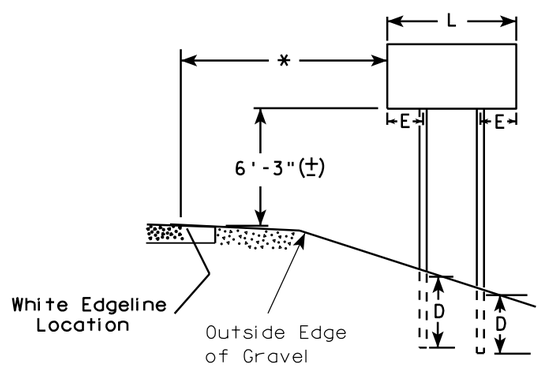
URBAN AREA

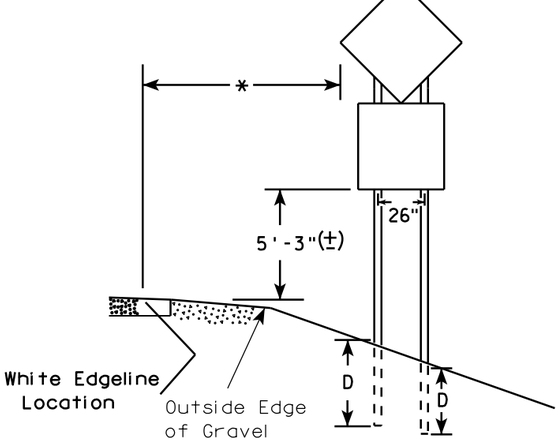




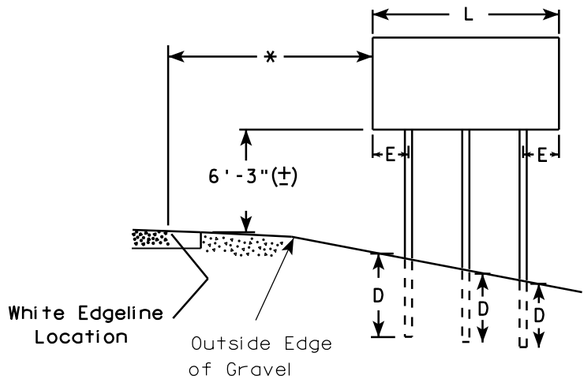
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

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

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

*** See A4-3 sign plate for signs 4' or less in width or 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 4/29/14 PLATE NO. A4-4 13

150

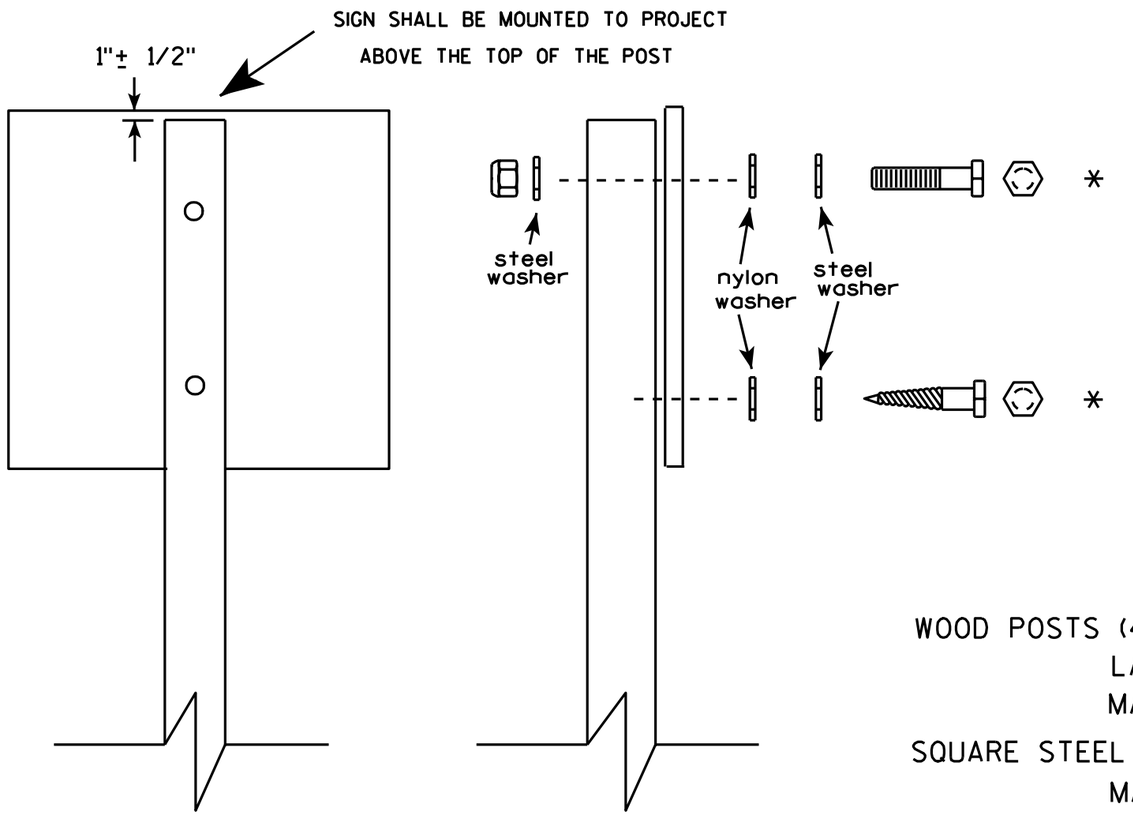
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 30-APR-2014 13:10 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 107.021305:1.000000

WISDOT/CADDS SHEET 42

7

7



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

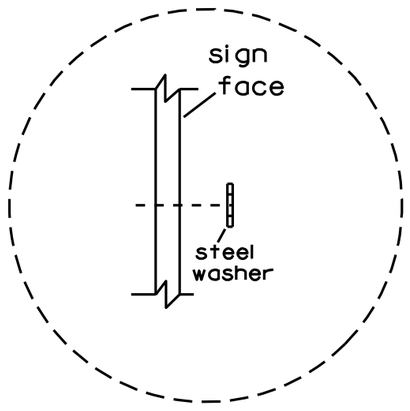
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

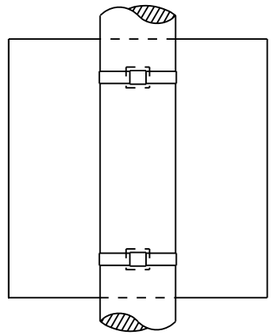
7

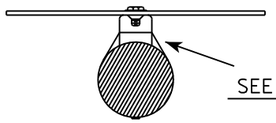
PROJECT NO:

SHEET NO: 151 E

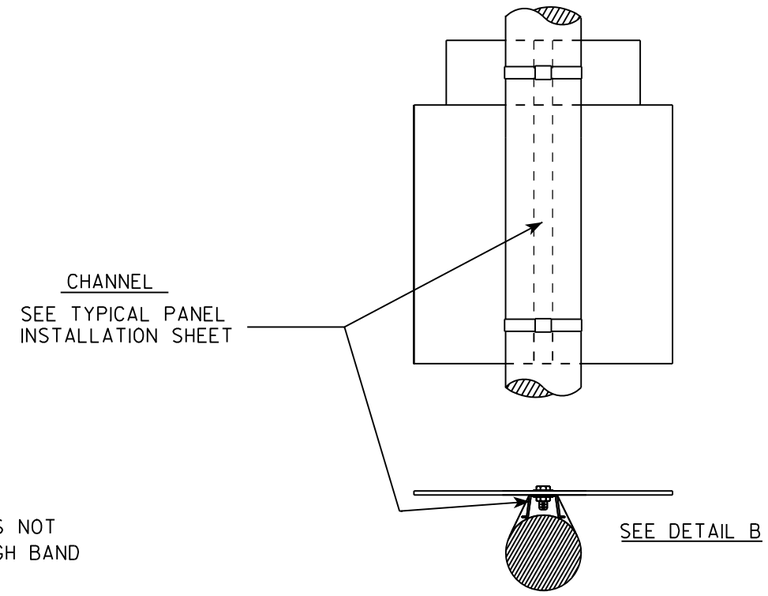
BANDING

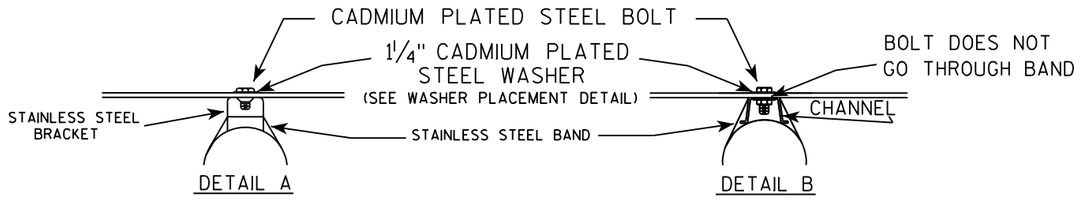
SINGLE SIGN



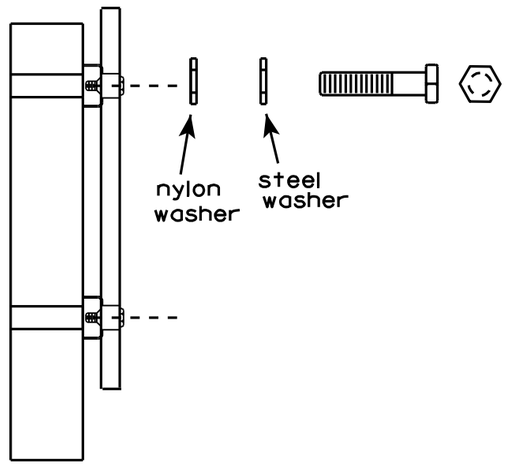


"J" ASSEMBLY





WASHER PLACEMENT



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

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.

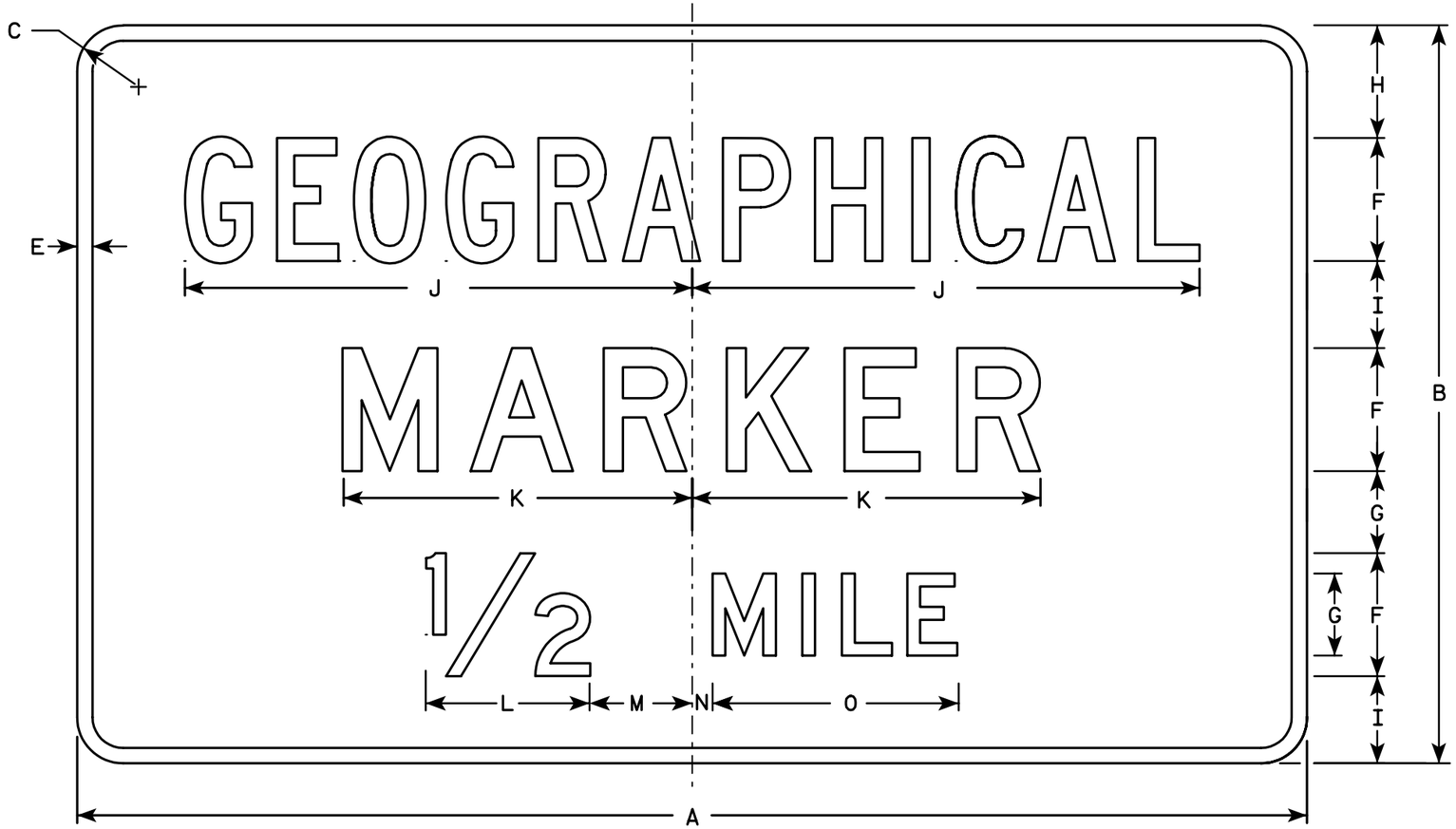
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

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



D5-67

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. 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 C
   Lines 2 & 3 are Series D

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m²
1																												
2	60	36	2 1/4		3/4	6	4	5 1/2	4 1/4	24 3/4	17	8	5	1	12												15.0	1.35
3																												
4																												
5																												

STANDARD SIGN
D5-67

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Charles J Spang for State Traffic Engineer

DATE 6/13/97 PLATE NO. D5-67.9

STATE PROJECT NUMBER: | SHEET NO: 153 | E

FILE NAME : C:\Users\Projects\tr_stdplate\D567.DGN PLOT DATE : 09-JAN-2002 13:40 ORG DATE : 6/13/97 Originator : Don Kluever

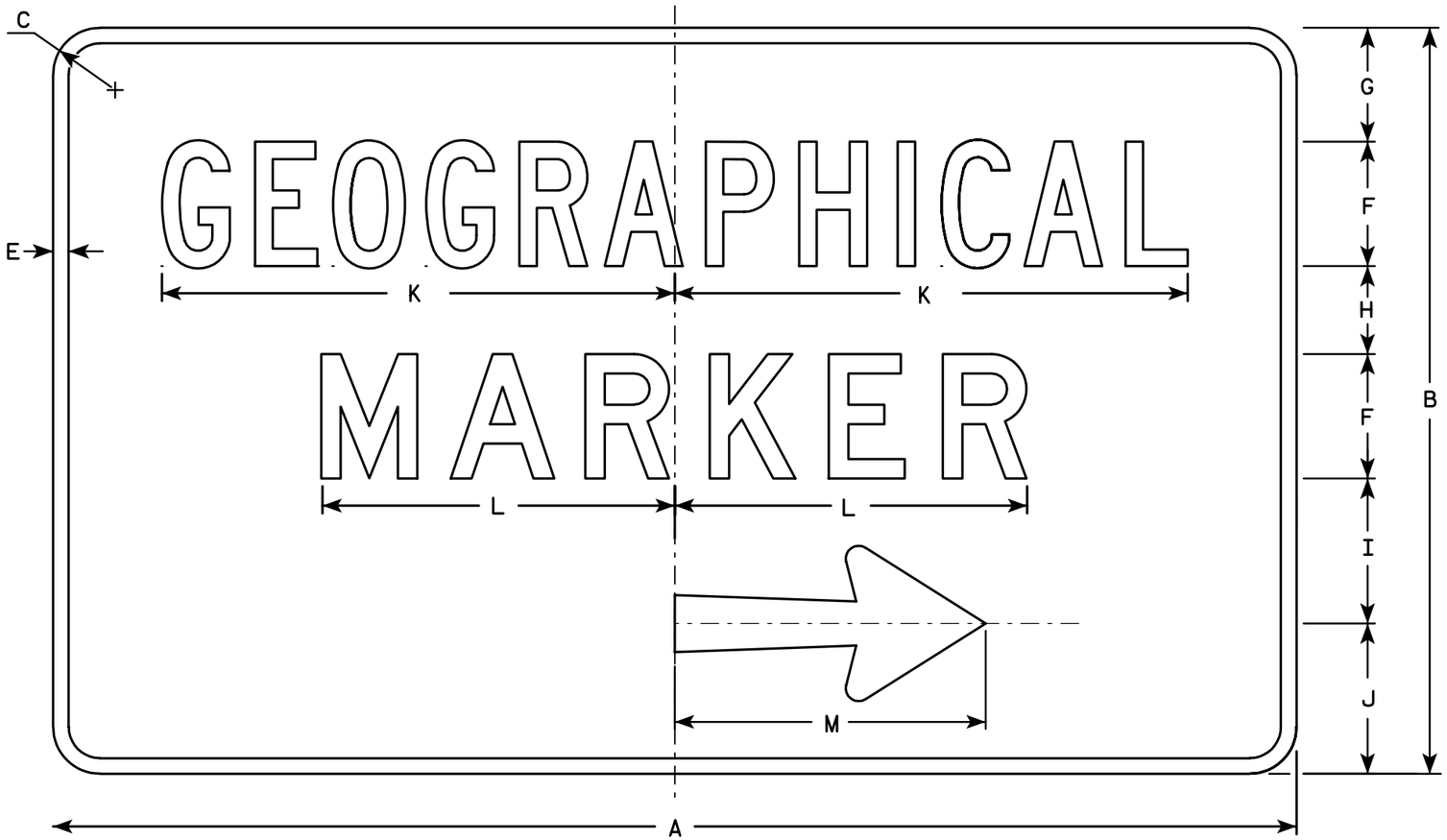
WISDOT/CADDS SHEET 42

58,59,60,61,62,63

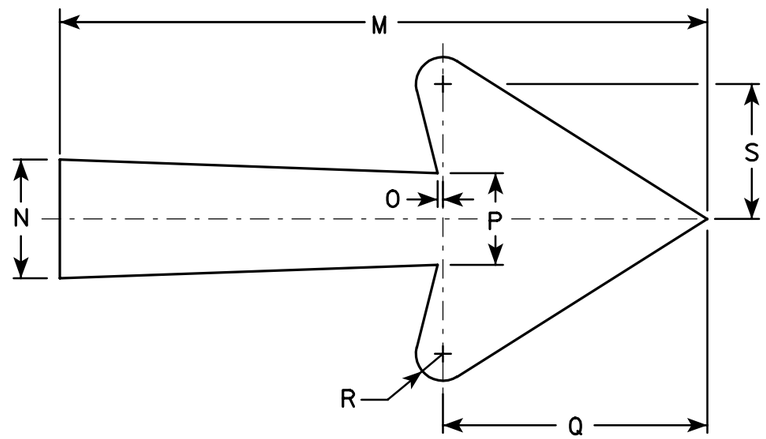
LEVELS ON - 2,3, 5,6, 10,

7

7



D5-68R



Arrow Detail

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. 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 C
   Lines 2 is Series D
6. D5-68L is the same as D5-68R except the arrow is reversed.

Metric equivalent for this sign is:

SIZE	
1	
2	1500 mm X 900 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	60	36	2 1/4		3/4	6	5 1/2	4 1/4	7	7 1/4	24 3/4	17	15	2 3/4	1/8	2 1/8	6 1/8	5/8	3 1/8								15.0	1.35
3																												
4																												
5																												

STANDARD SIGN
D5-68

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Sprague for State Traffic Engineer

DATE 1/09/02 PLATE NO. D5-68.11

STATE PROJECT NUMBER:

SHEET NO: 154 E

7

7

58.59.60.61.62.63

LEVELS ON - 2.3. 5.6. 10.

FILE NAME : C:\Users\Projects\tr_stdplate\D568.DGN PLOT DATE : 09-JAN-2002 14:13 ORG DATE : 8/14/97 Originator : DON KLUEVER

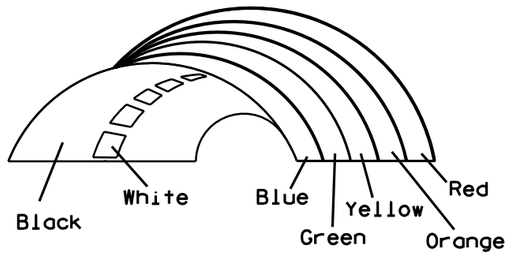
WISDOT/CADDS SHEET 42



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

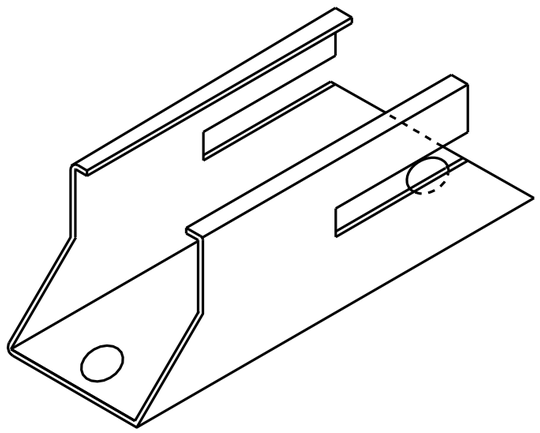
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 155

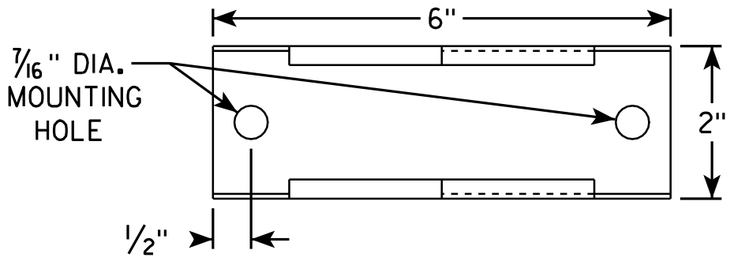
ISOMETRIC VIEW



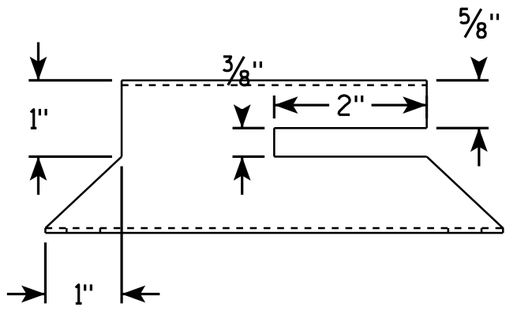
NOTES

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.

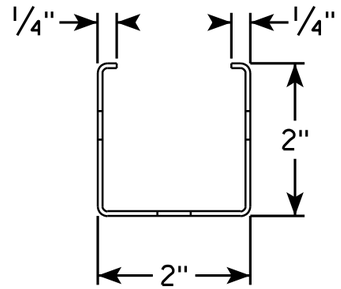
TOP VIEW



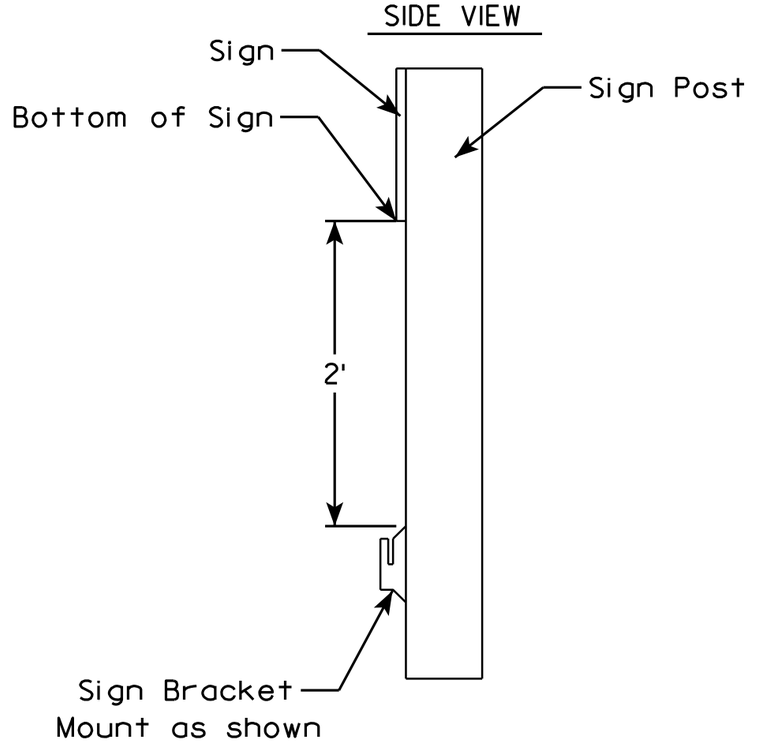
SIDE VIEW



END VIEW



SIDE VIEW



7

7

ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

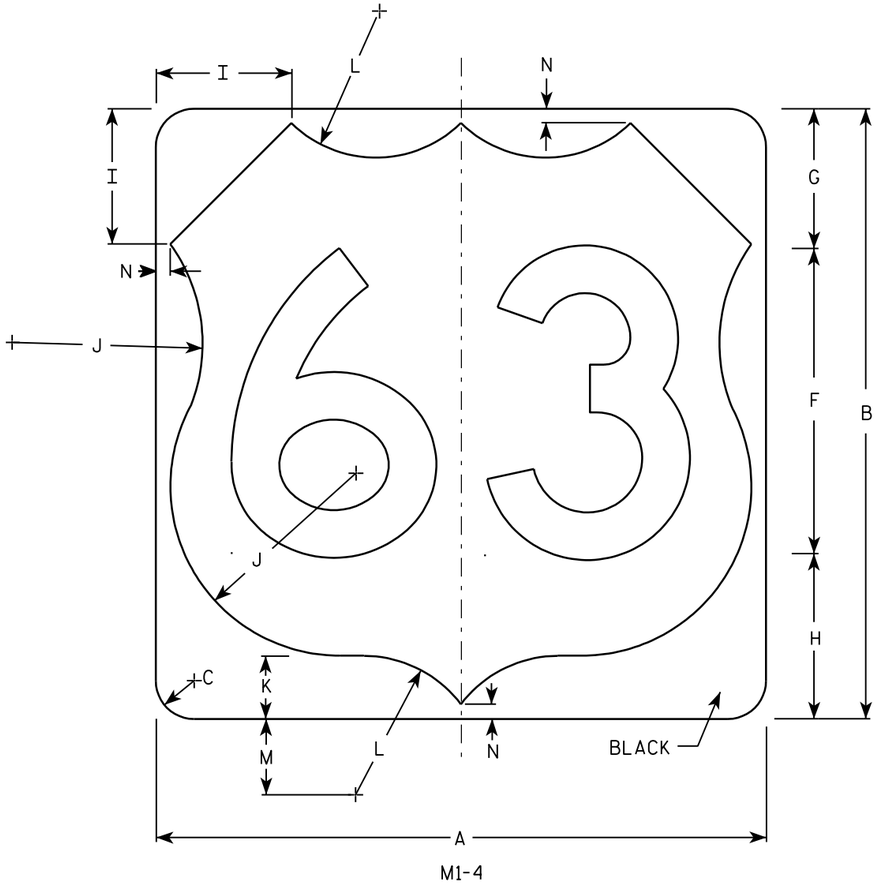
APPROVED Matthew R Rauch
for State Traffic Engineer

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

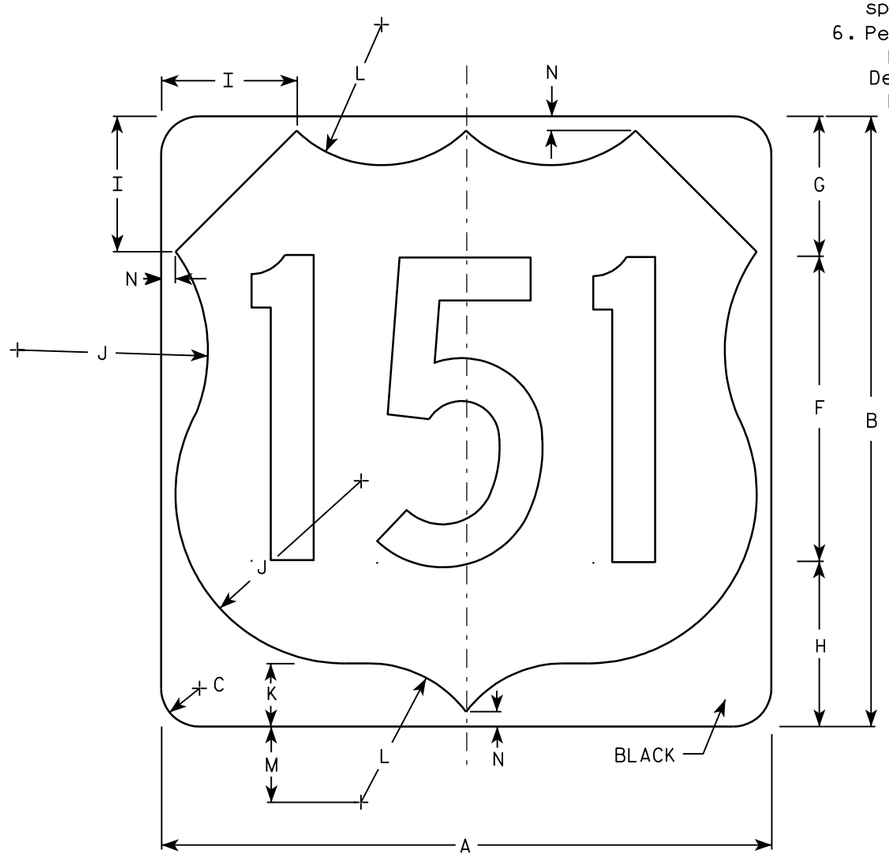
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 156	E

NOTES

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



M1-4



M1-4

Metric equivalent for this sign is:

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

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

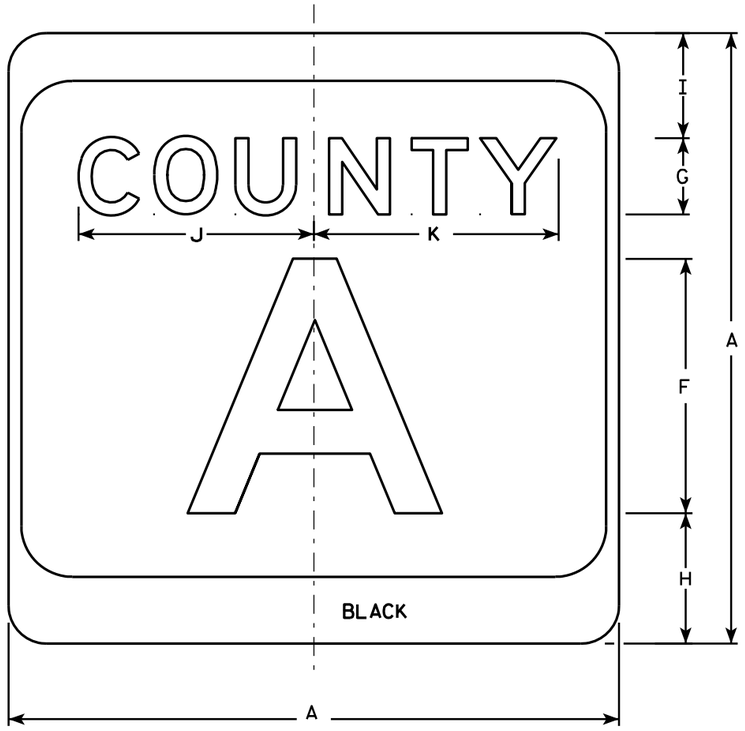
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

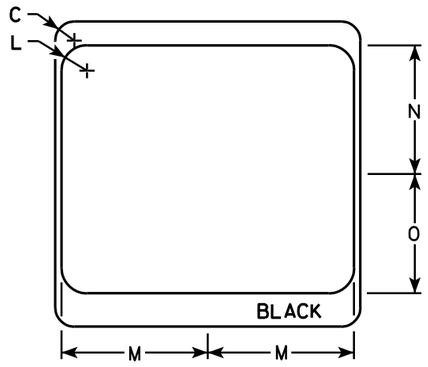
APPROVED Matthew R Rauch
for State Traffic Engineer

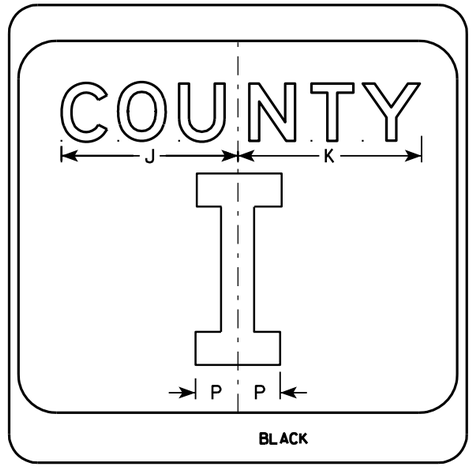
DATE 08/25/05 PLATE NO. M1-4.9

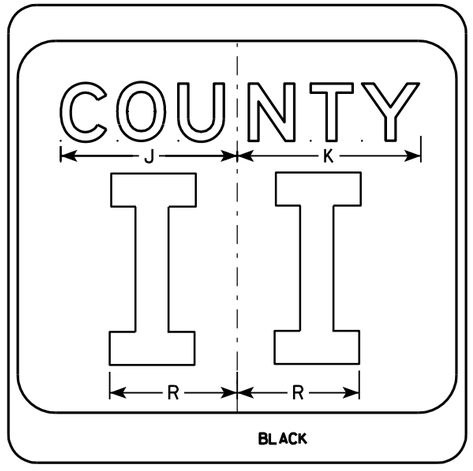
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 157 | E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

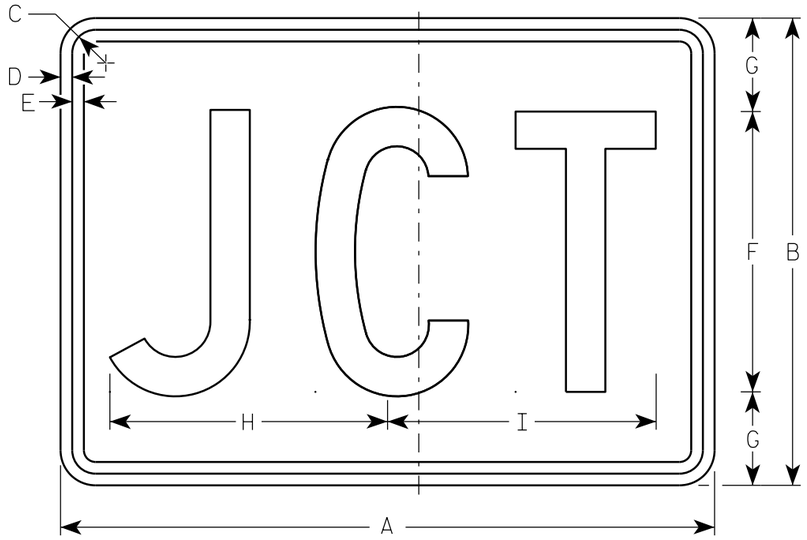
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

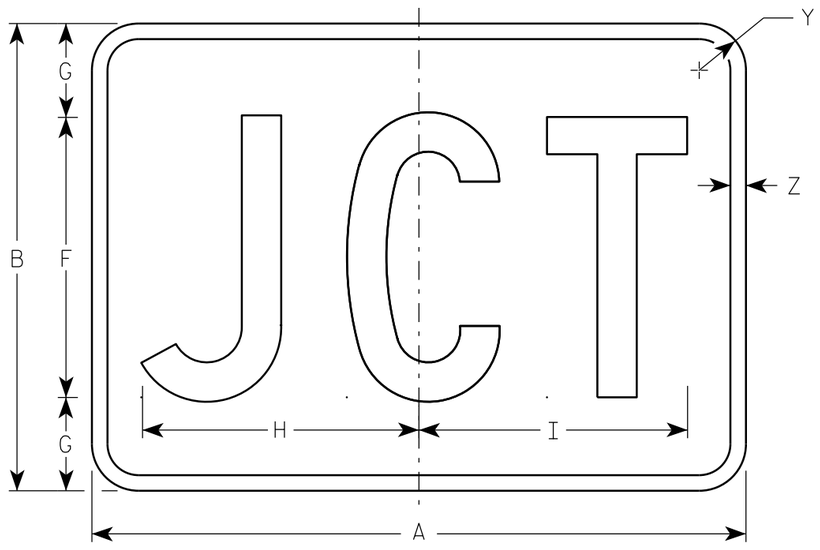
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 158	E



M2-1
MK2-1
MM2-1
MN2-1
MR2-1



MB2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

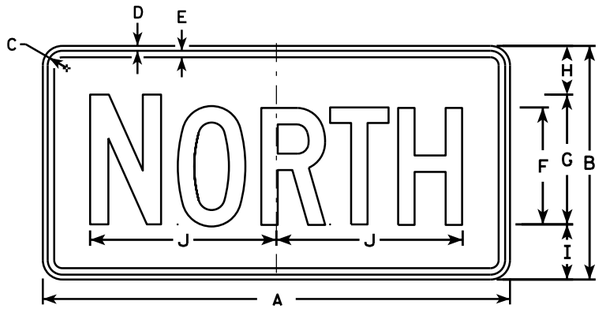
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

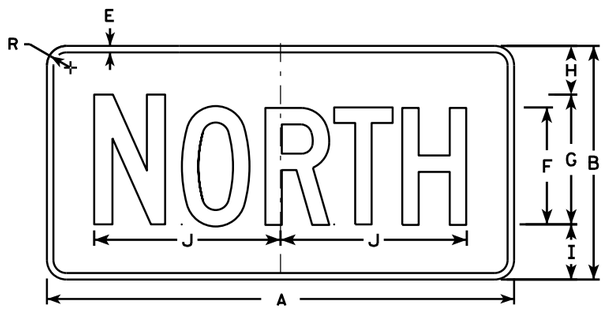
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/30/14 PLATE 159 12-1.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M3-1
MK3-1
MM3-1
MN3-1



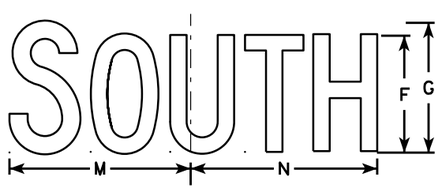
MB3-1



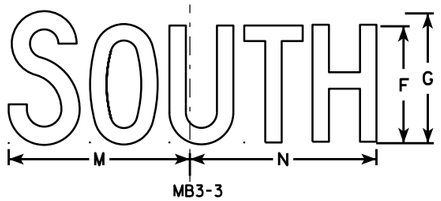
M3-2
MK3-2
MM3-2
MN3-2



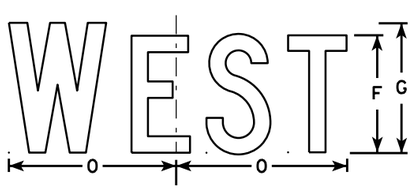
MB3-2



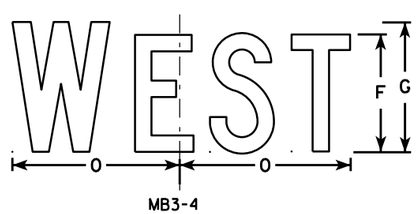
M3-3
MK3-3
MM3-3
MN3-3



MB3-3



M3-4
MK3-4
MM3-4
MN3-4



MB3-4

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
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

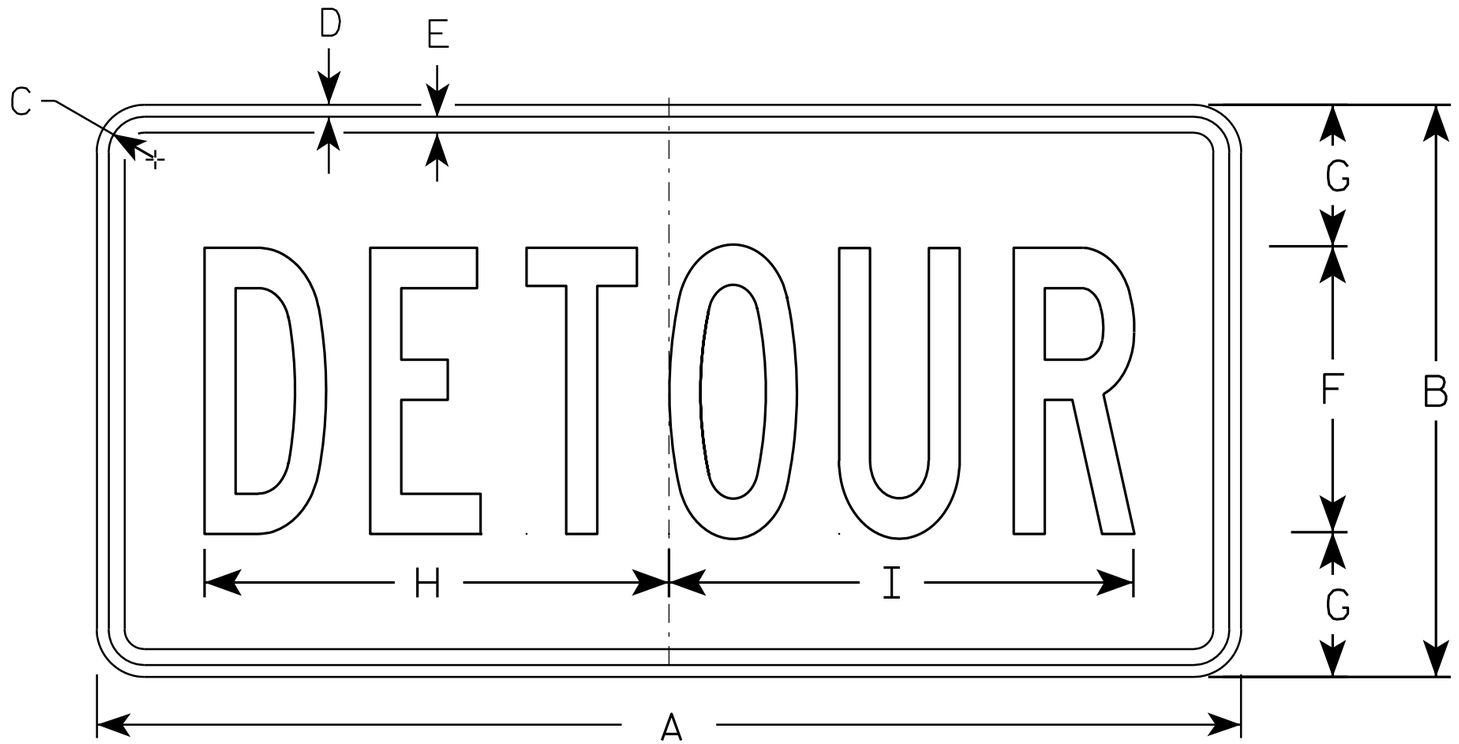
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/30/14 PLATE NO M3-1.13

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

7



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																											

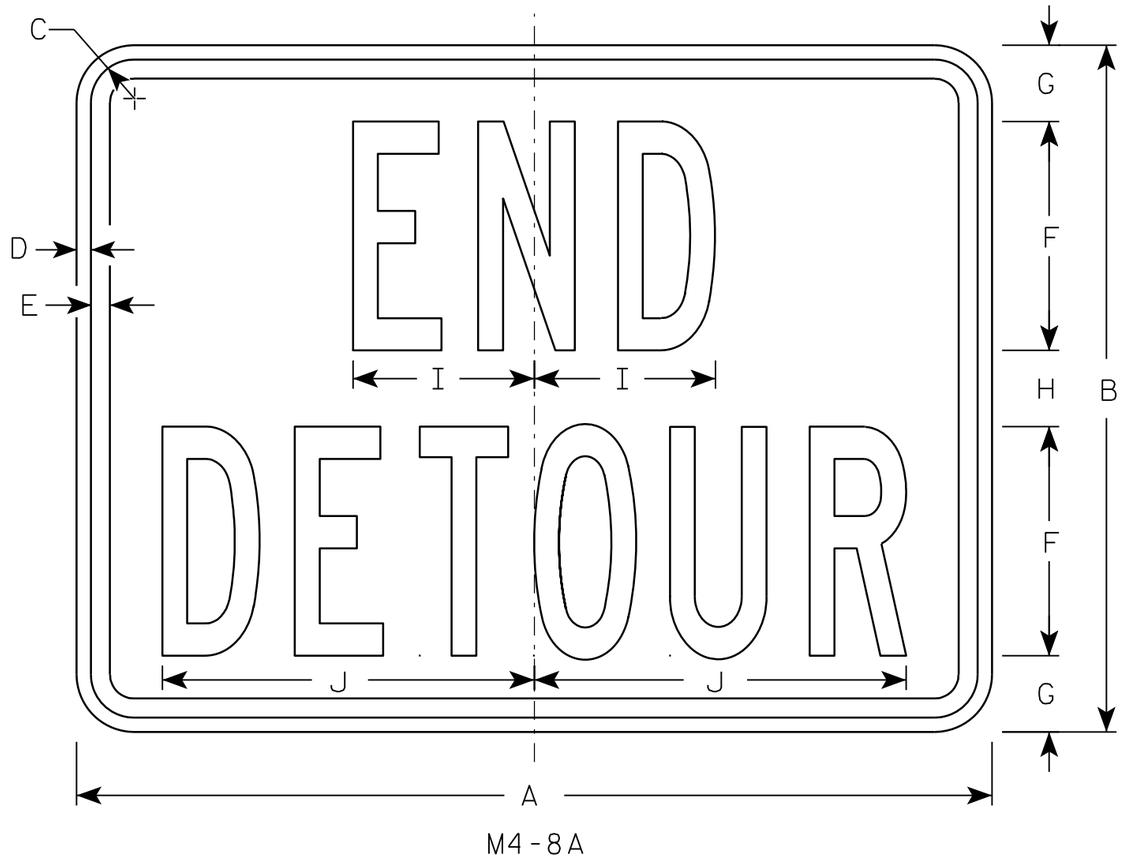
STANDARD SIGN
M4-8

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: 161	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																											

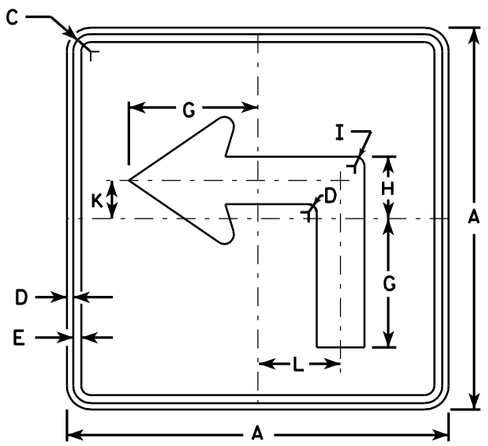
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

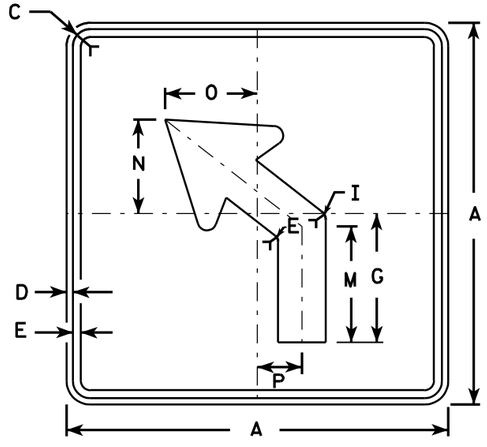
APPROVED Matthew R Rauch
for State Traffic Engineer

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

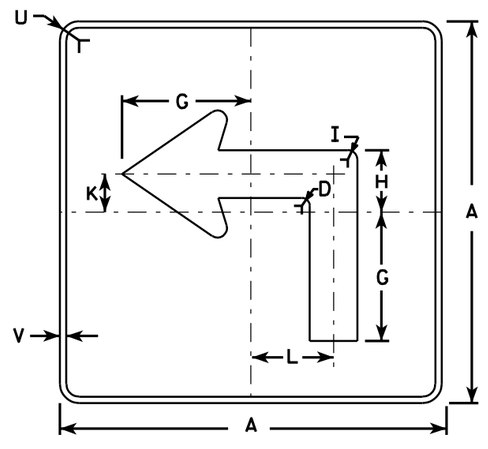
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	E



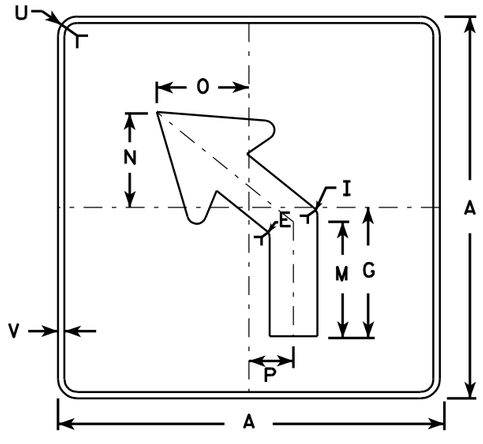
M5-1L
MK5-1L
MM5-1L
MO5-1L
MP5-1L
MR5-1L



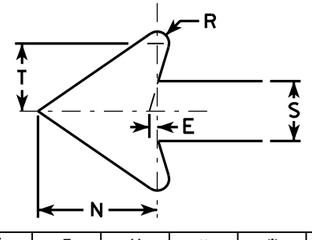
M5-2L
MK5-2L
MM5-2L
MO5-2L
MP5-2L
MR5-2L



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



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



NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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 - Type H Reflective
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White - Type H Reflective
   MG5-1 and MG5-2 Background - Green
   Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green
   Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - 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 - Type H Reflective
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 1/8	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 1/8	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 1/8	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

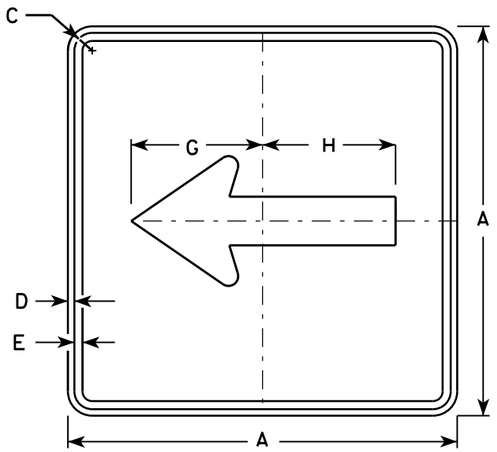
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/29/13 PLATE NO. M5-1.12

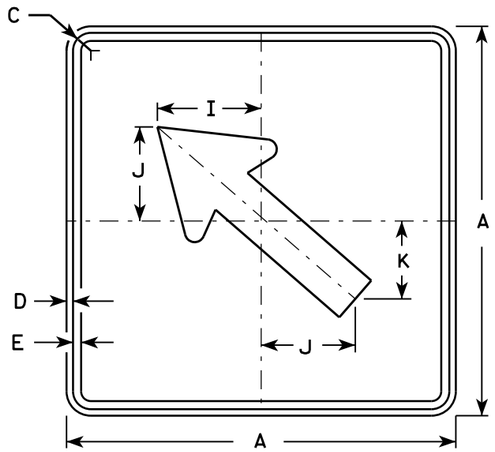
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 163	E

7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 29-JUL-2013 13:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.908552:1.000000



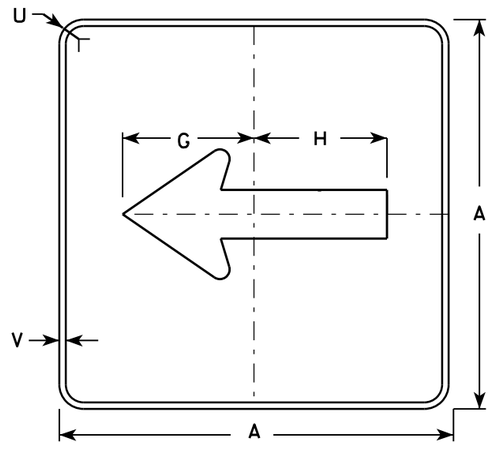
M6-1
MK6-1
MM6-1
MN6-1
MO6-1
MP6-1
MR6-1



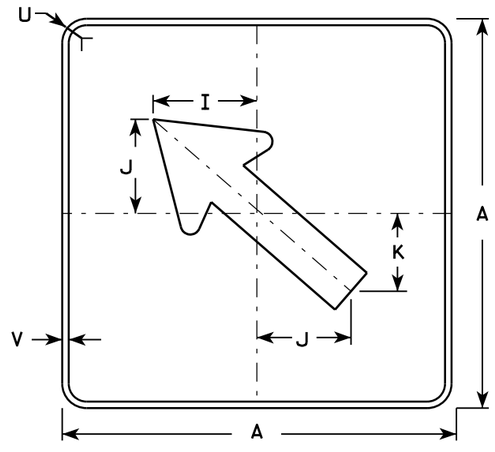
M6-2
MK6-2
MM6-2
MN6-2
MO6-2
MP6-2
MR6-2

NOTES

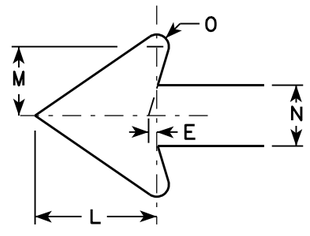
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MG6-1 and MG6-2 Background - Green
   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



MB6-2



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

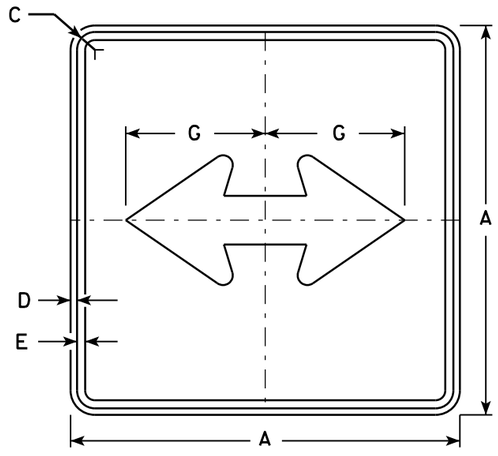
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

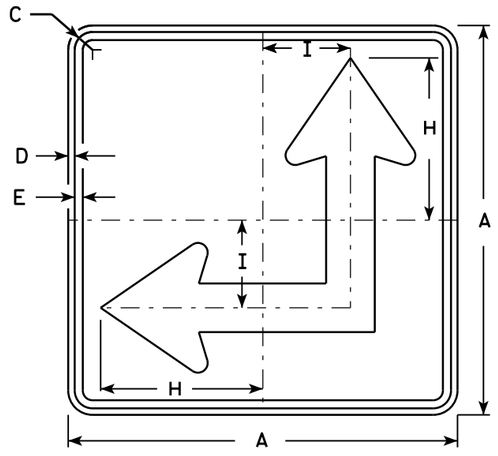
DATE 7/03/14 PLATE M6-1.14

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

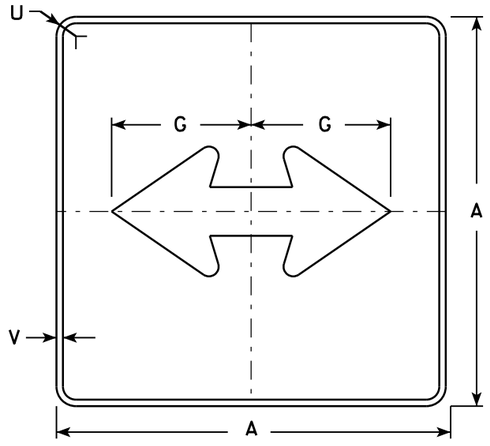
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 03-JUL-2014 14:28 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000
WISDOT/CADDS SHEET 42



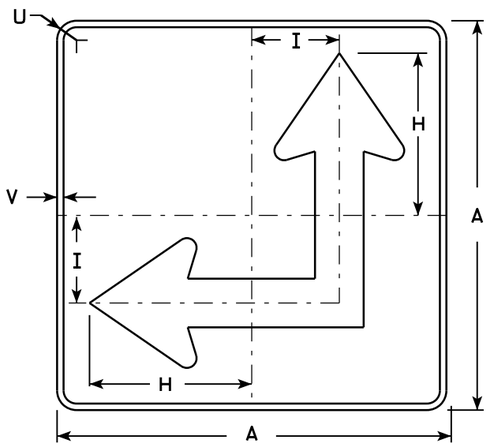
M6-4
MK6-4
MM6-4
MN6-4
MO6-4
MP6-4
MR6-4



M6-6
MK6-6
MM6-6
MN6-6
MO6-6
MP6-6
MR6-6



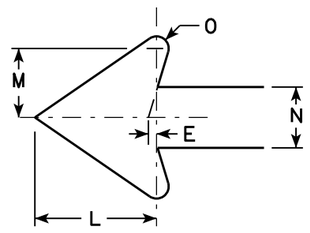
MB6-4



MB6-6

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. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and 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 1/2	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN M6-4 & M6-6 SERIES

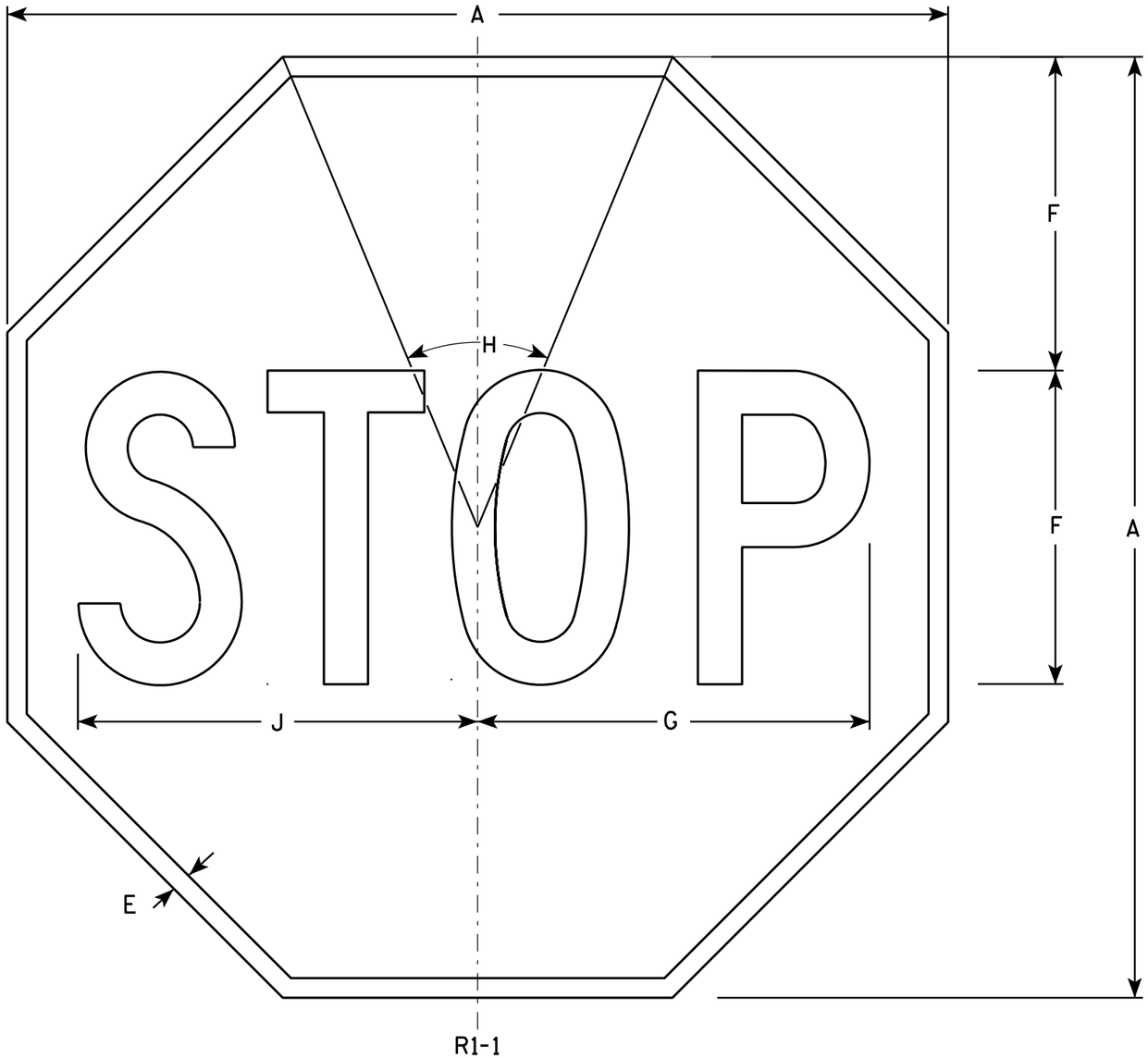
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 7/03/14 PLATE M6-4.9

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 03-JUL-2014 14:56 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

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

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

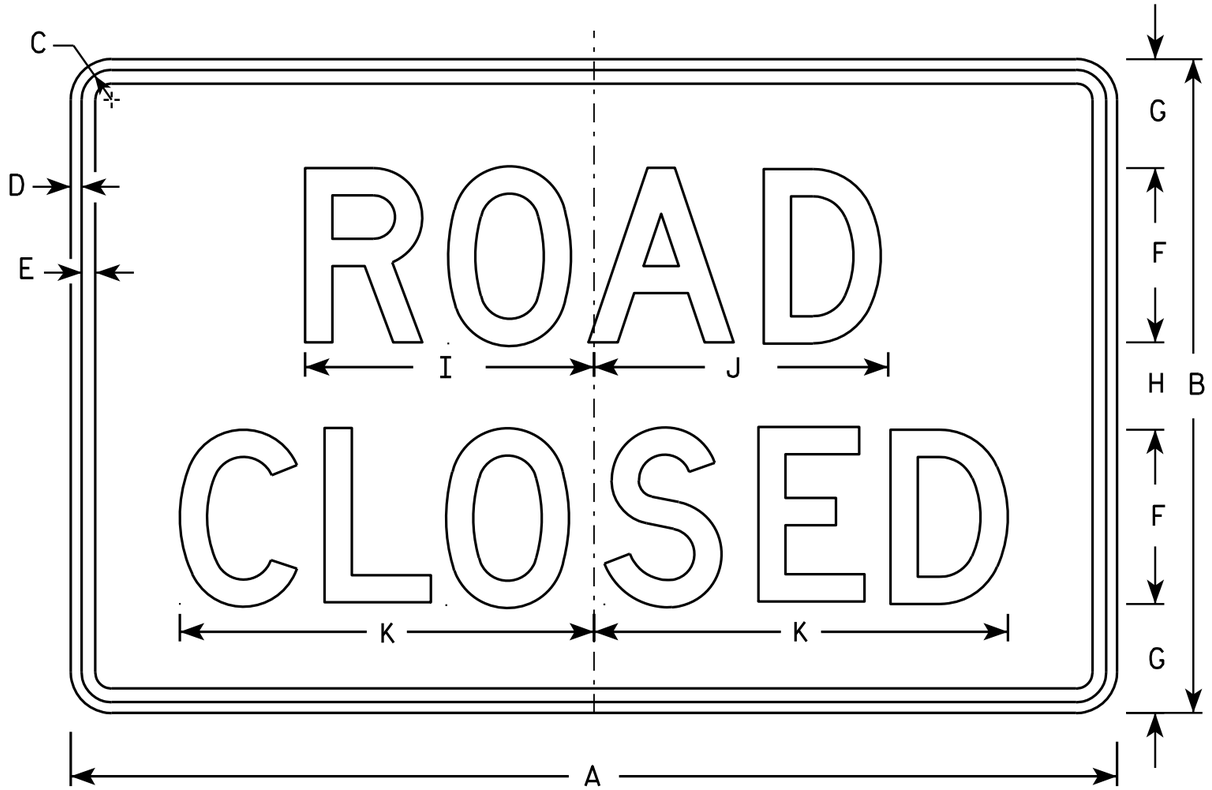
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

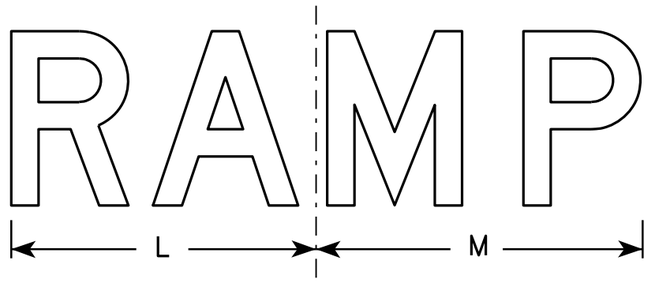
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	E



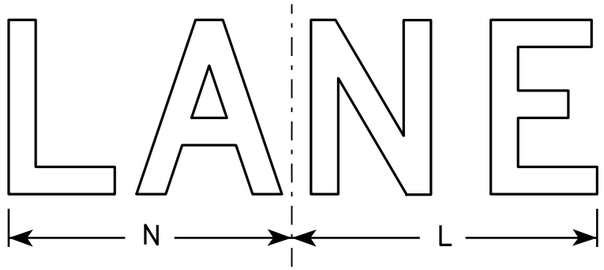
R11-2

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

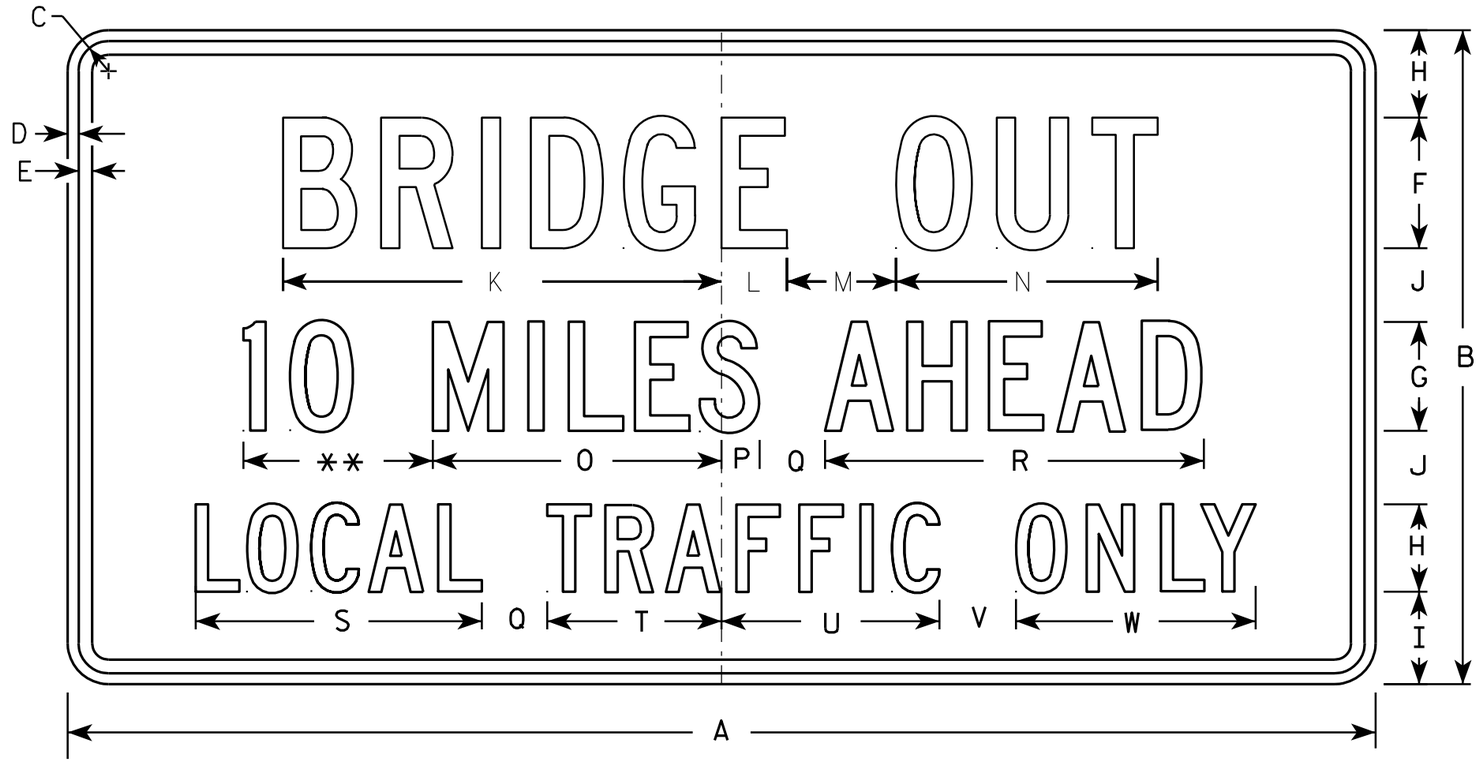
STANDARD SIGN
R11-2

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: 167 | E



R11-3B

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	13 1/4	2 1/4	3	8	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	20 1/8	3	5	12	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	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

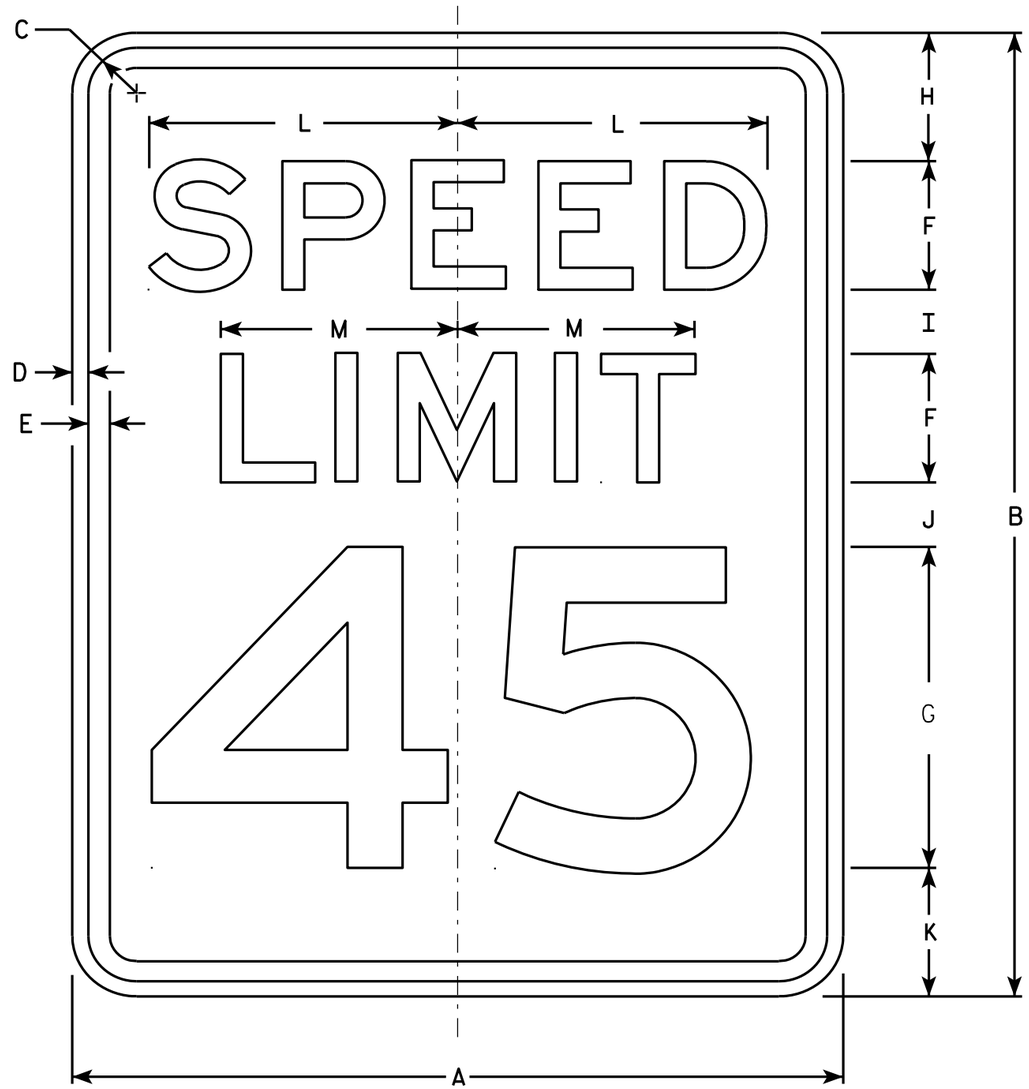
STANDARD SIGN
R11-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-3B.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 | E



R2-1

NOTES

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

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

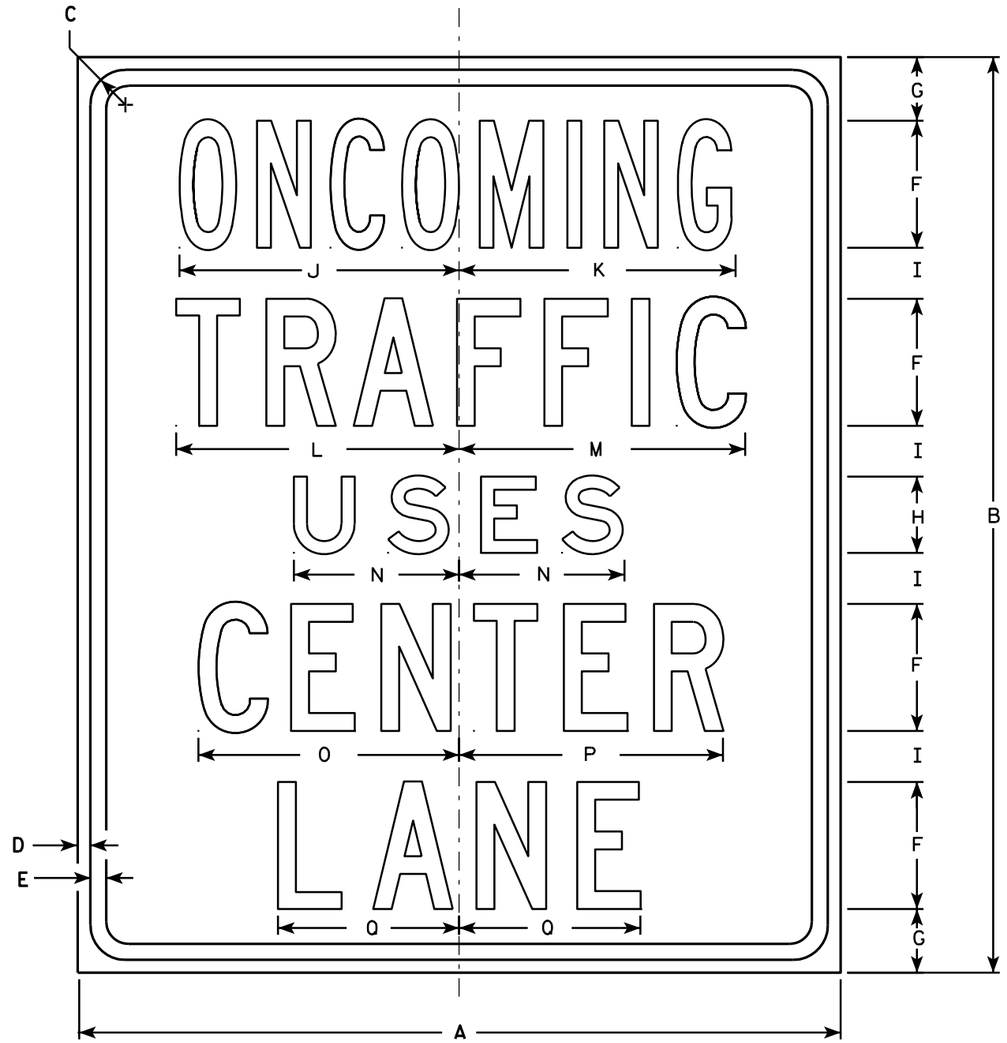
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 169 | E



R3-72

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B, Lines 2, 4 and 5 are Series C, and Line 3 is 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	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
2S	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
2M	30	36	1 3/8	1/2	5/8	5	2 1/2	3	2	11	10 7/8	11 1/8	11 1/4	6 1/2	10 1/4	10 3/8	7 1/8										7.50
3																											
4																											
5																											

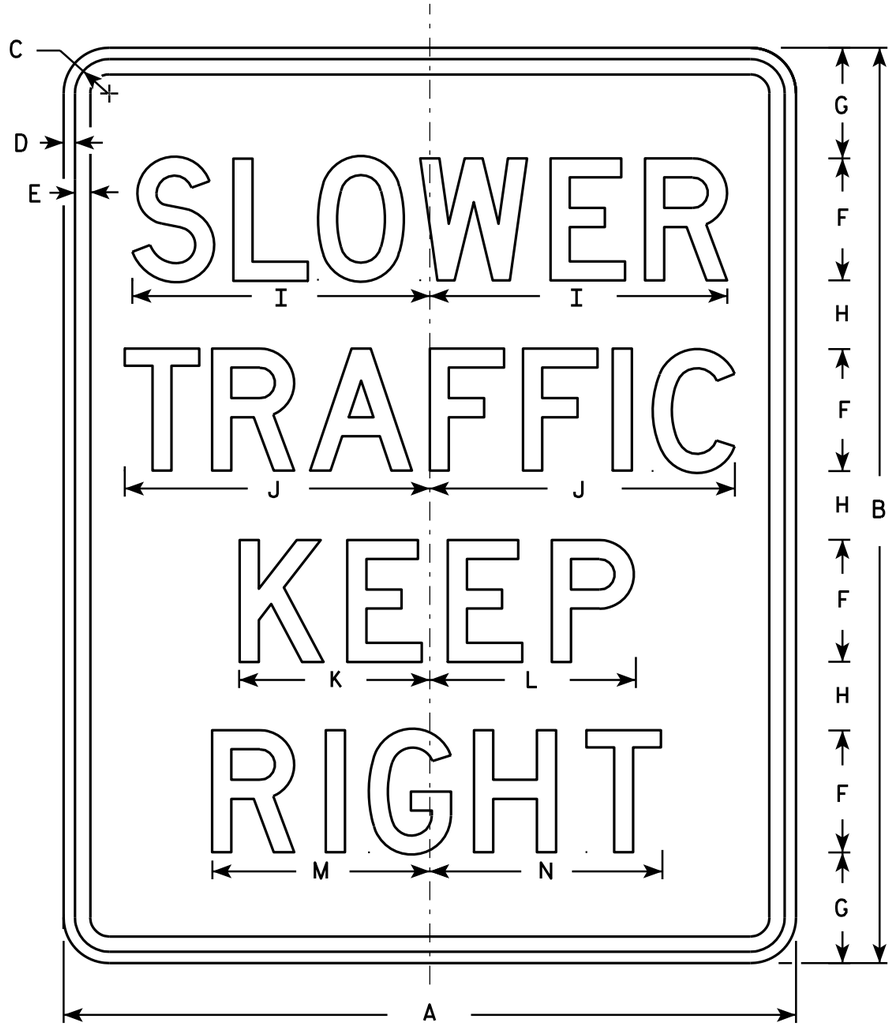
STANDARD SIGN
R3-72

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R3-72.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 170	E



R4-3

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-3.8

PROJECT NO:

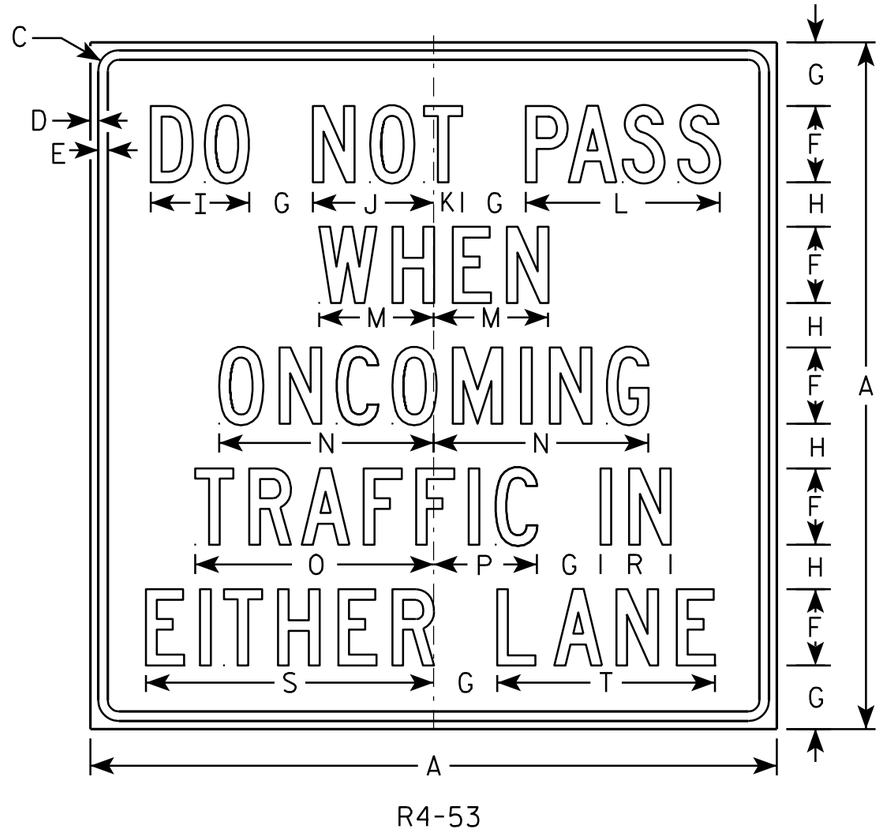
SHEET NO: 171 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R43.DGN PLOT DATE : 25-MAR-2011 13:40 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7



R4-53

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	54		1 5/8	5/8	3/4	6	5	3 1/2	7 3/4	9 1/2	2 1/4	15 1/4	9	16 7/8	18 3/4	8 1/8		5 1/2	22 5/8	17 1/8							20.25
2M	54		1 5/8	5/8	3/4	6	5	3 1/2	7 3/4	9 1/2	2 1/4	15 1/4	9	16 7/8	18 3/4	8 1/8		5 1/2	22 5/8	17 1/8							20.25
3																											
4																											
5																											

STANDARD SIGN
R4-53

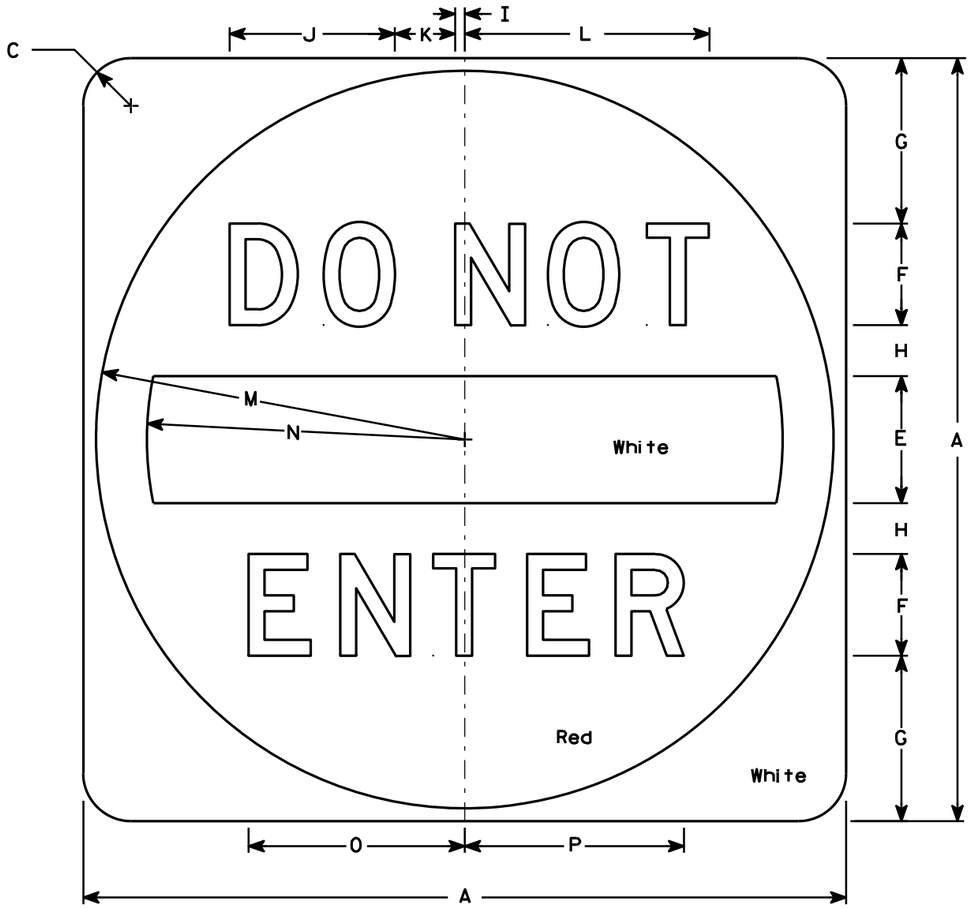
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/2/10 PLATE NO. R4-53.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 172 | E

7



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

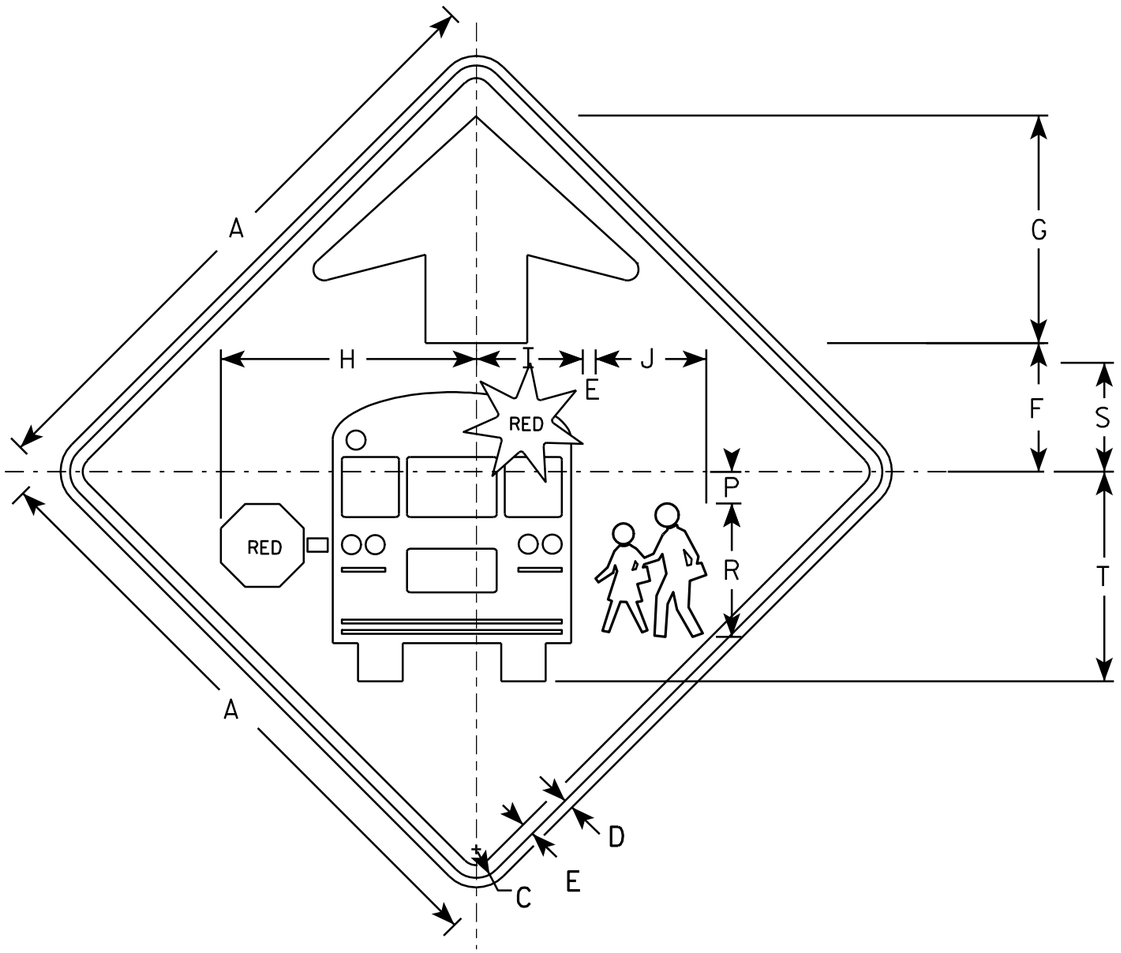
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

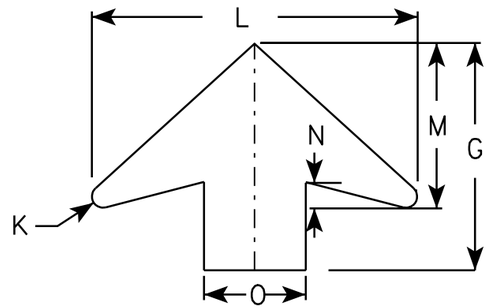
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 173 | E



S3-1

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-GREEN
   Message - BLACK except as noted
   Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	12 1/2	5 1/4	5 1/2	1/2	16	8	1 1/4	5	1 1/2		6 5/8	5 3/8	10 3/8							6.25
2	36		1 5/8	5/8	3/4	7 1/2	13 1/2	15 1/8	6 1/4	6 1/2	5/8	19 1/4	9 3/4	1 5/8	6	1 7/8		7 7/8	6 3/8	12 3/8							9.0
3	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
4	48		2 1/4	3/4	1	10	17 7/8	20 1/8	8 3/8	8 3/4	7/8	25 5/8	13	2	8	2 1/2		10 1/2	8 1/2	16 1/2							16.0
5																											

STANDARD SIGN
S3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

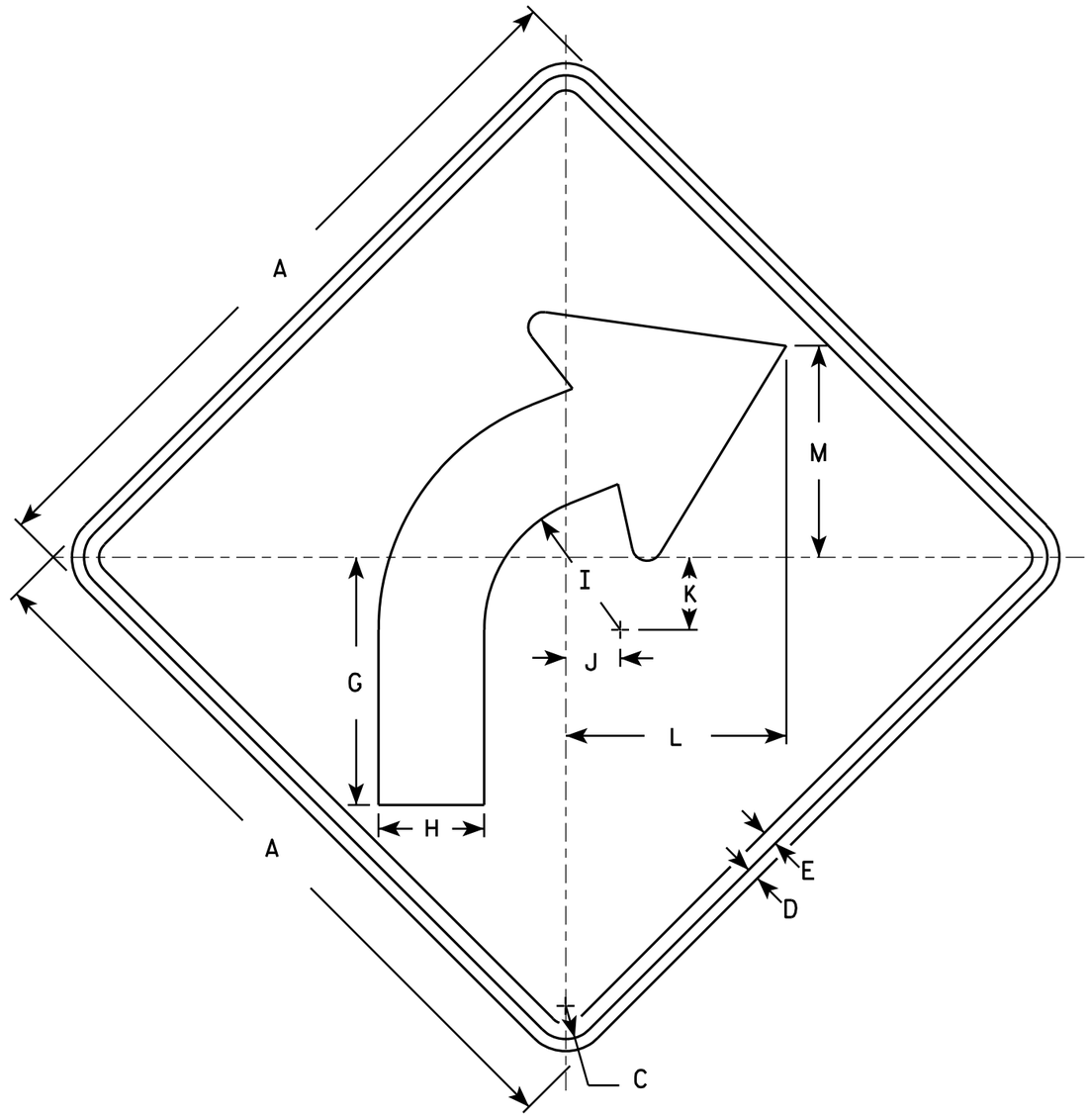
DATE 6/8/10 PLATE NO. S3-1.6

PROJECT NO:

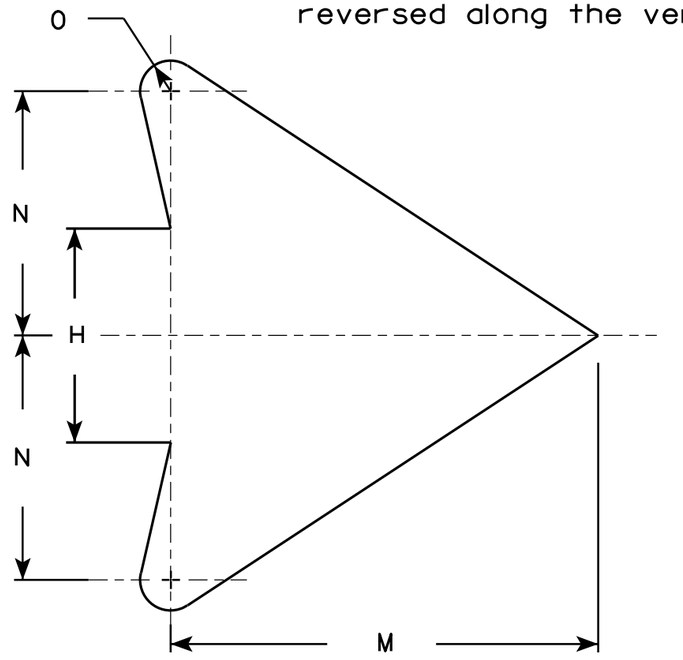
SHEET NO: 174 E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

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

STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

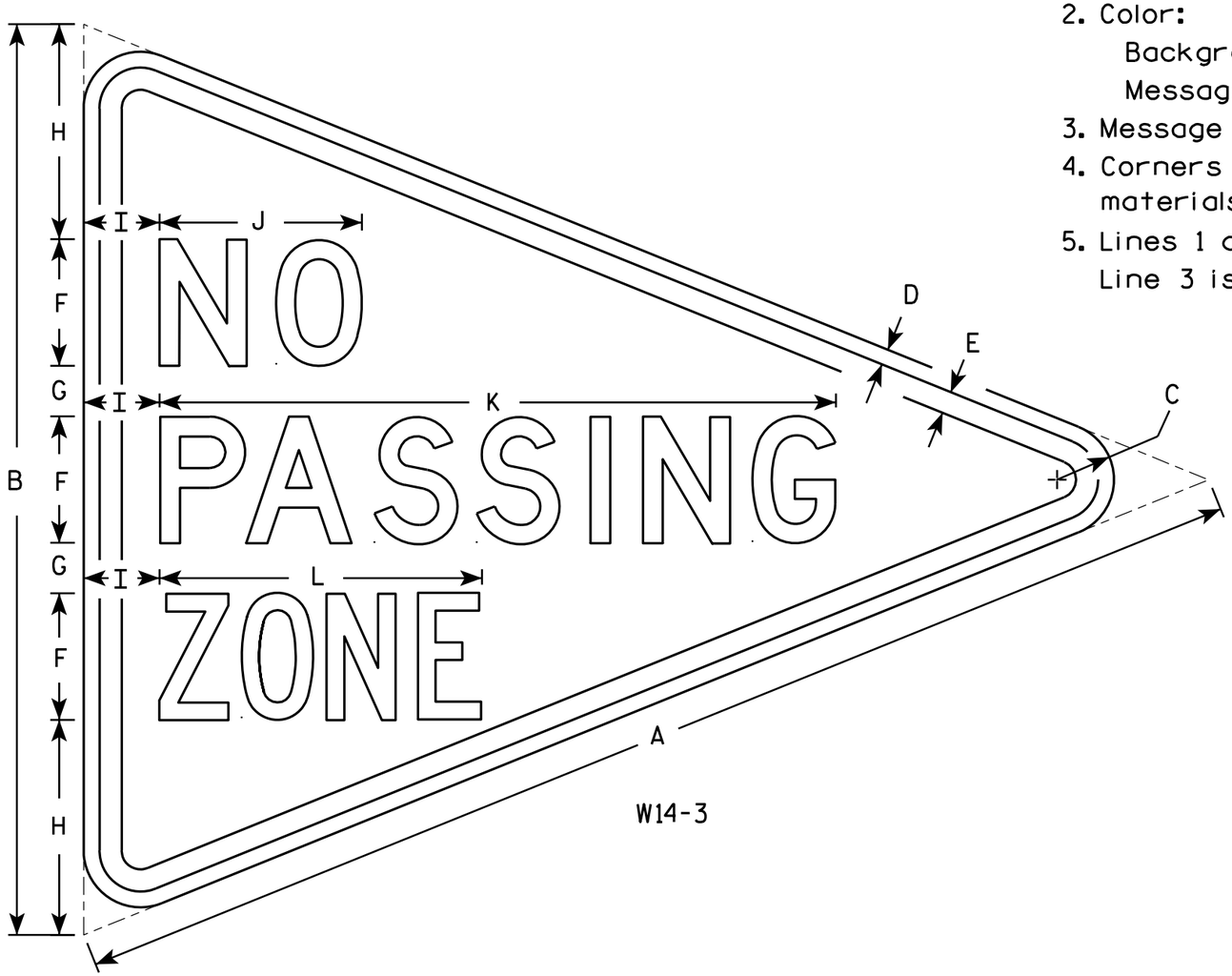
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 175	E

NOTES

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



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	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																											

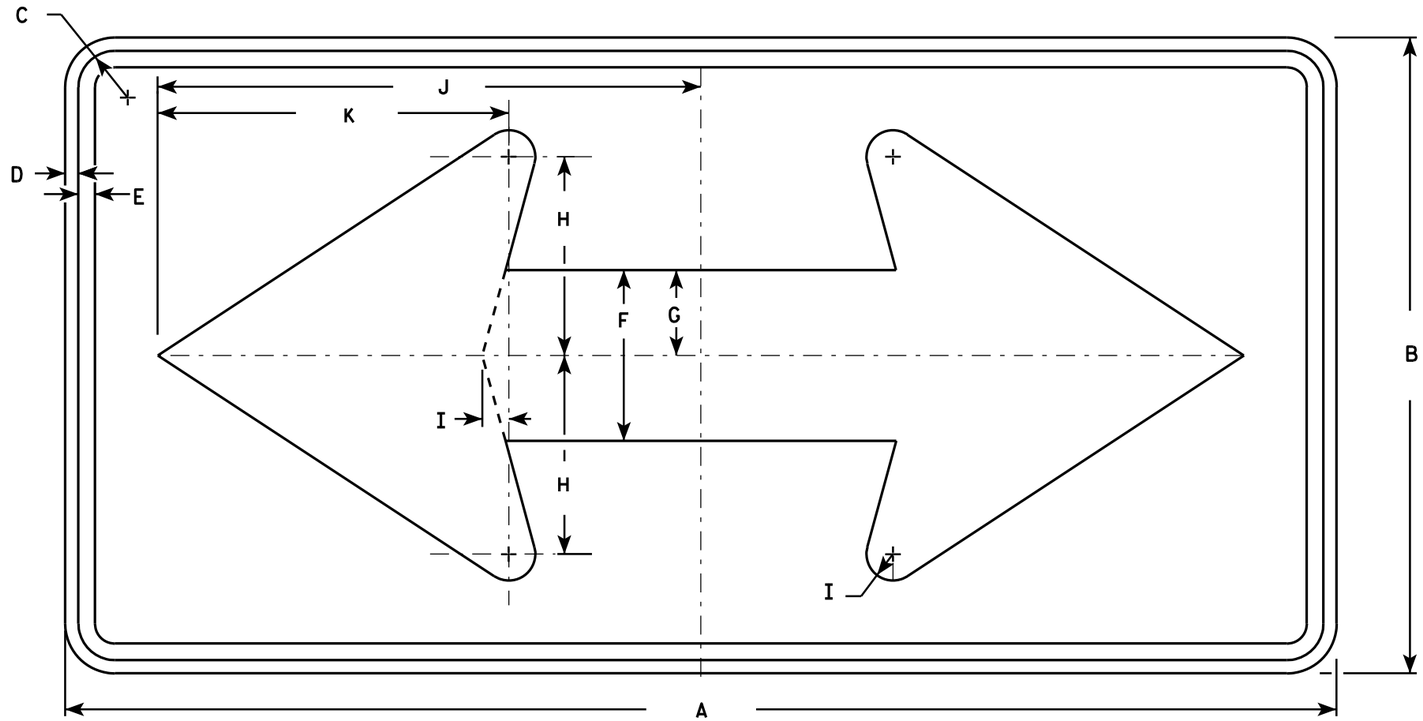
STANDARD SIGN
W14-3

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: 176	E



W1-7

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

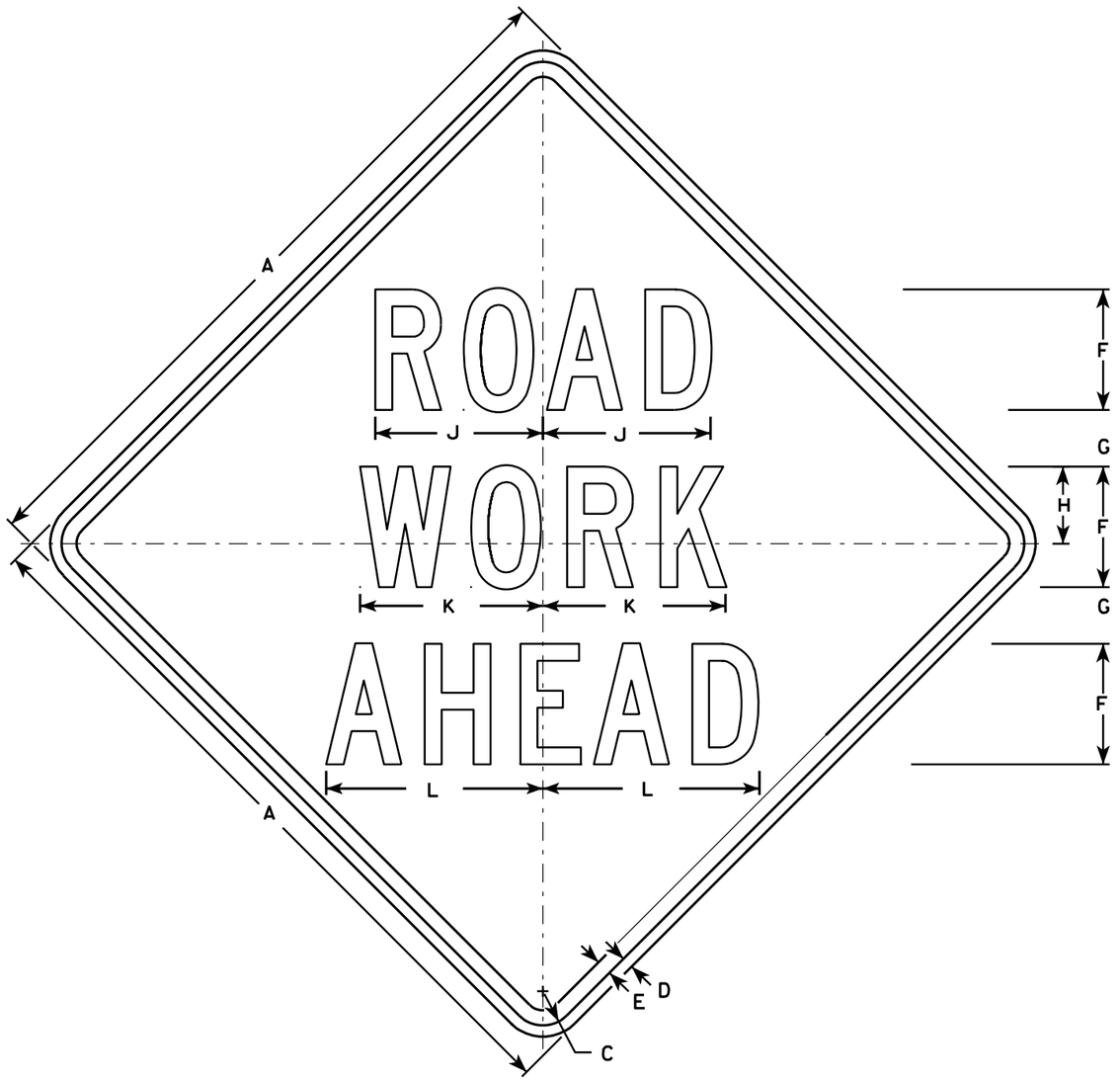
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

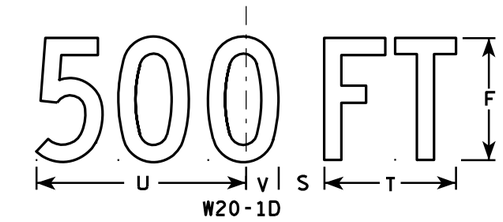
APPROVED Matthew R Rauch
for State Traffic Engineer

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

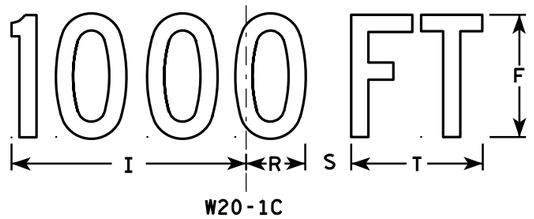
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 | E



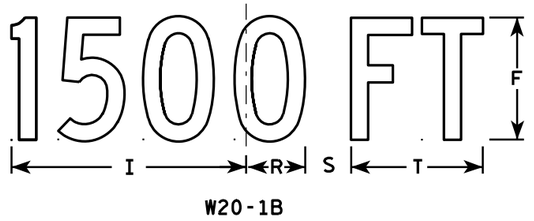
W20-1A



W20-1D



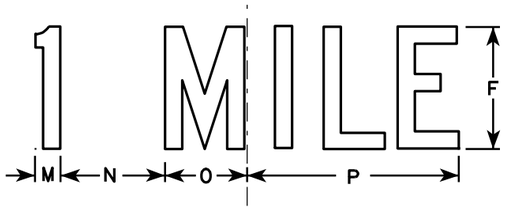
W20-1C



W20-1B



W20-1G



W20-1F

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.

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	1 7/8	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		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		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		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		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		3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-1.9

PROJECT NO:

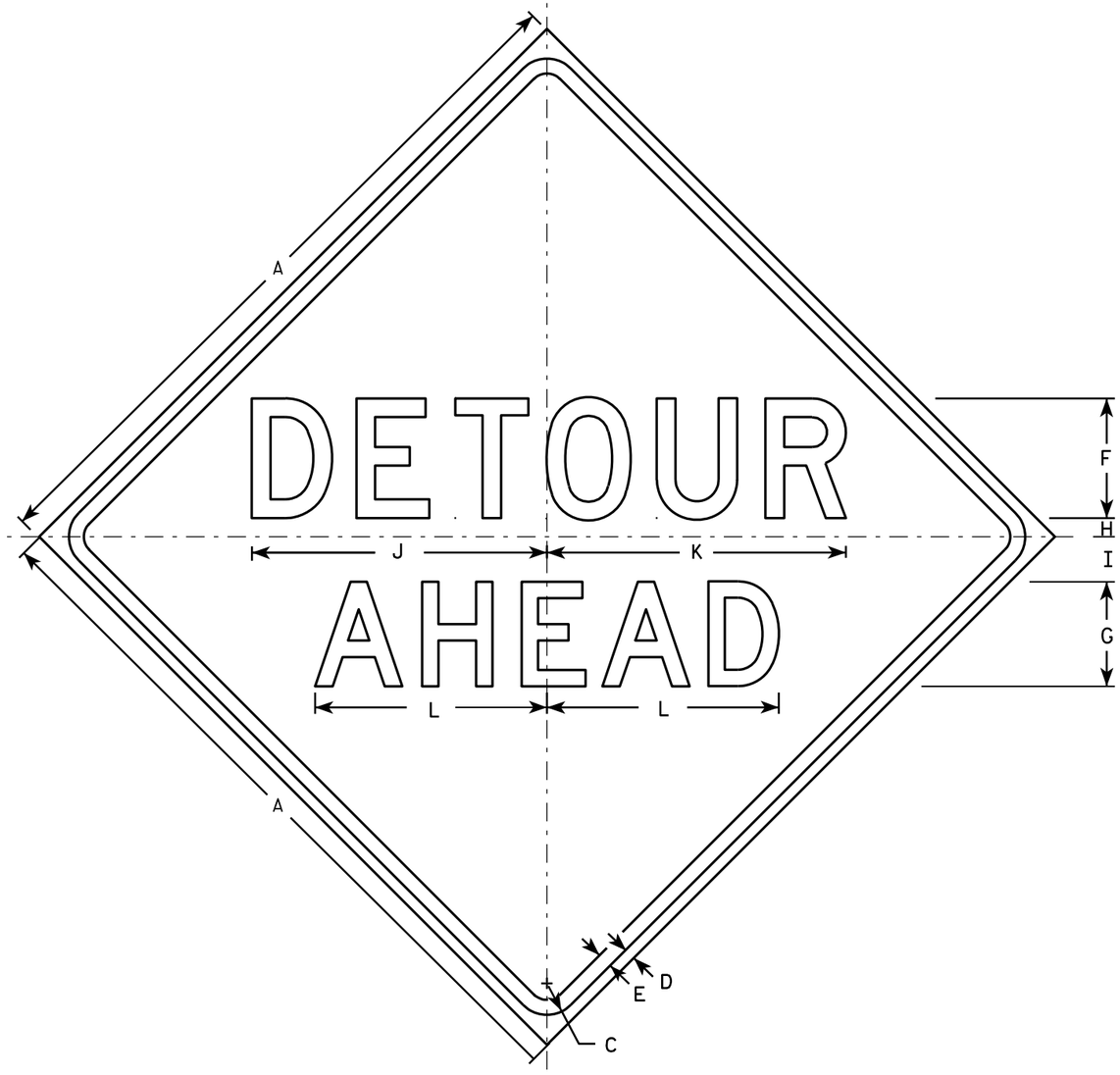
SHEET NO: 178 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W201.DGN PLOT DATE : 18-MAR-2011 09:56 PLOT BY : mscj9h

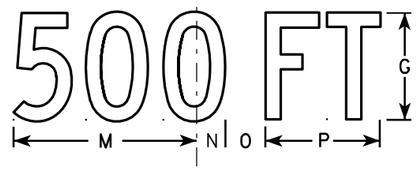
WISDOT/CADDS SHEET 42

7

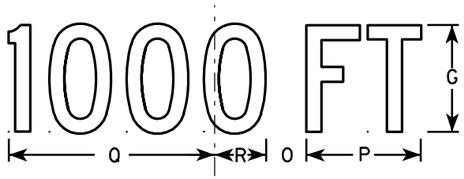
7



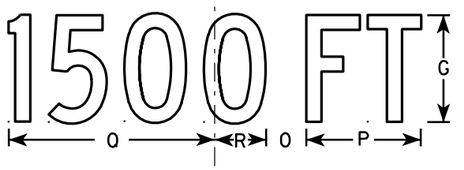
W20-2A



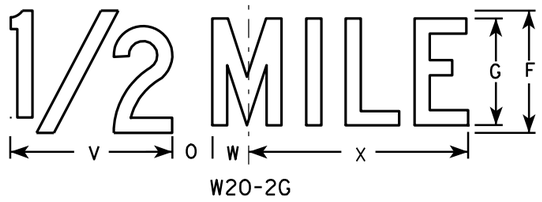
W20-2D



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

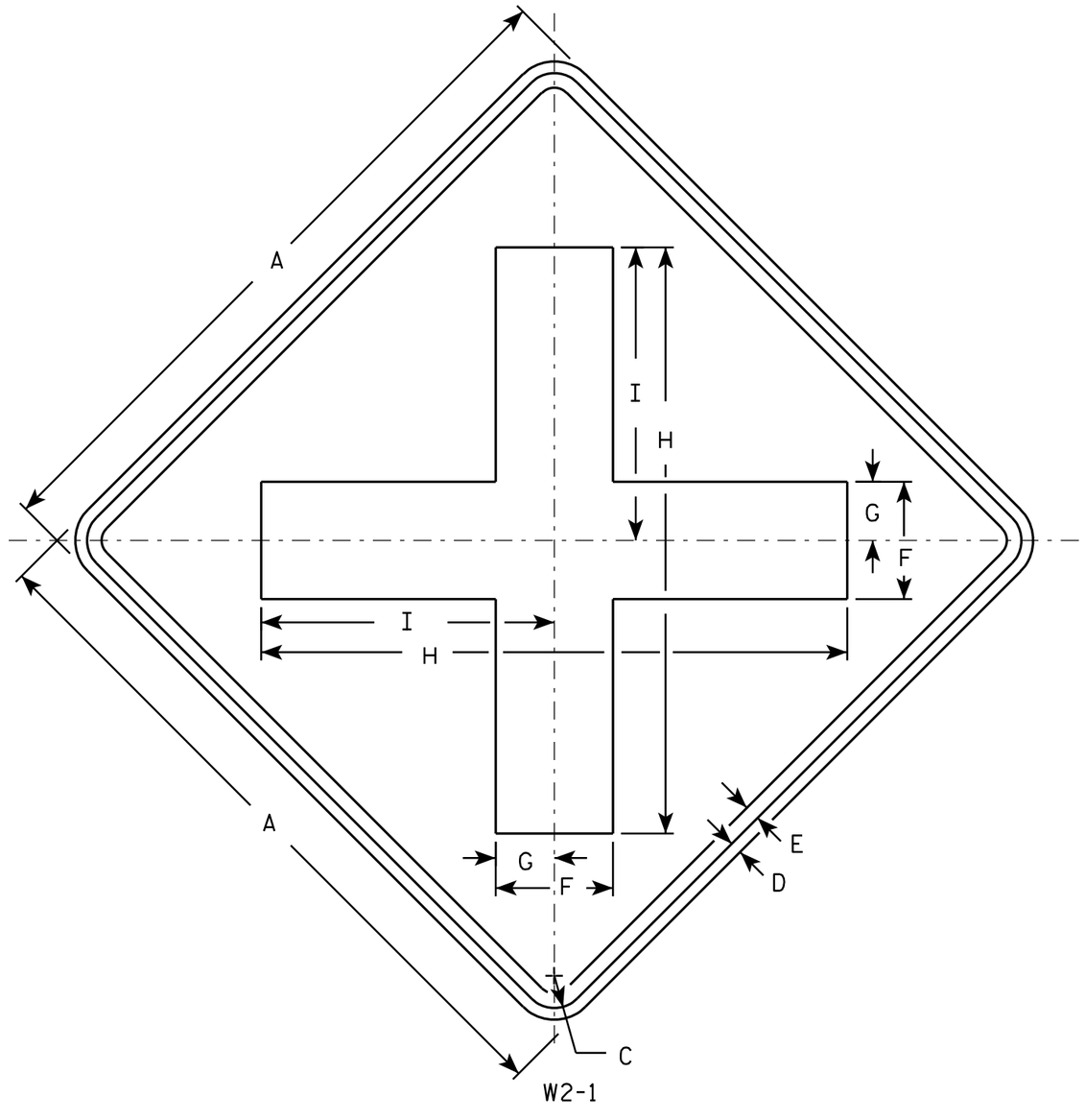
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E

7

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



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2	20	10																		4.0
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	15																		9.0
4	48		2 1/4	3/4	1	8	4	40	20																		16.0
5																											

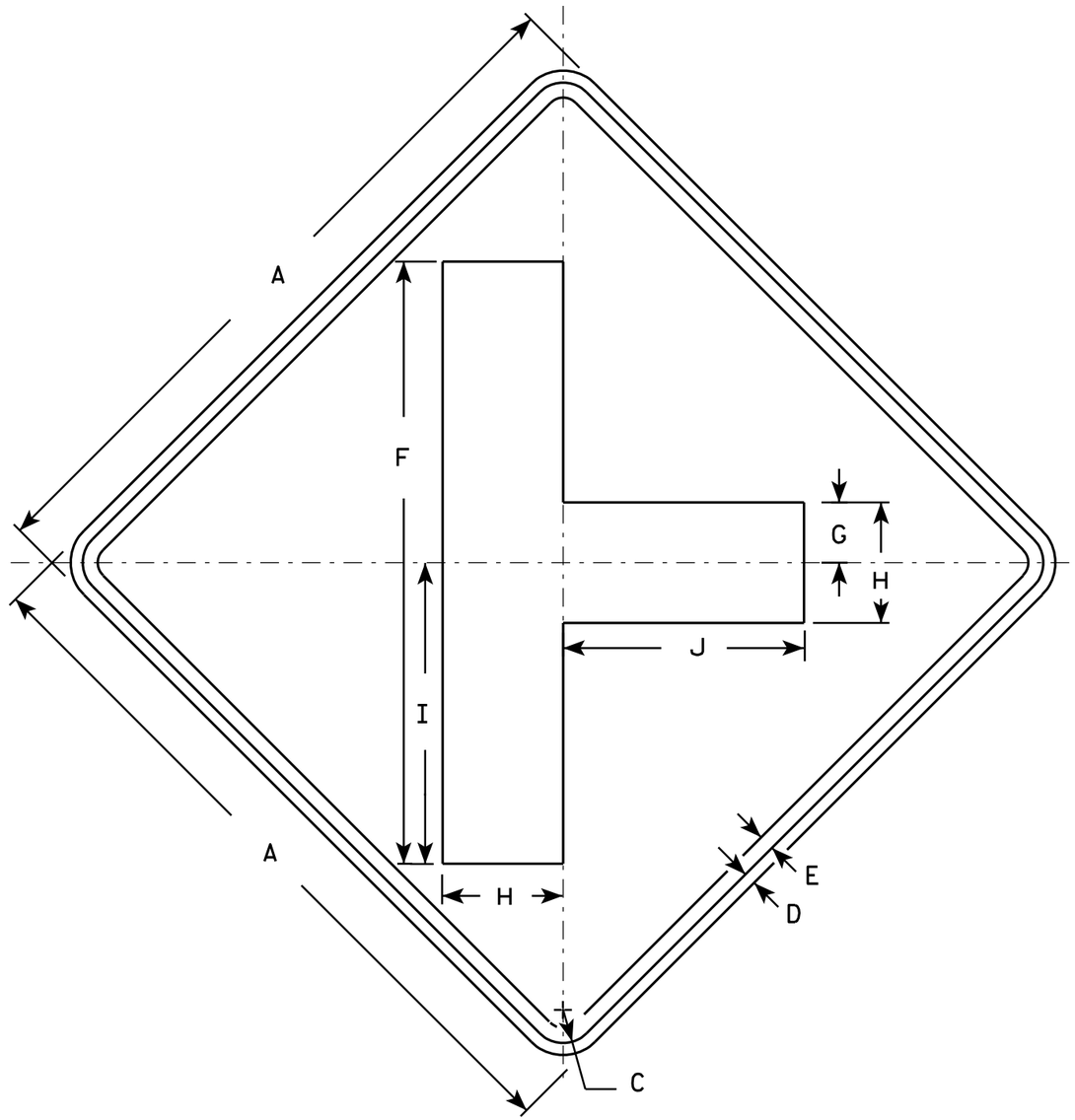
STANDARD SIGN
W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 180	E



W2-2

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

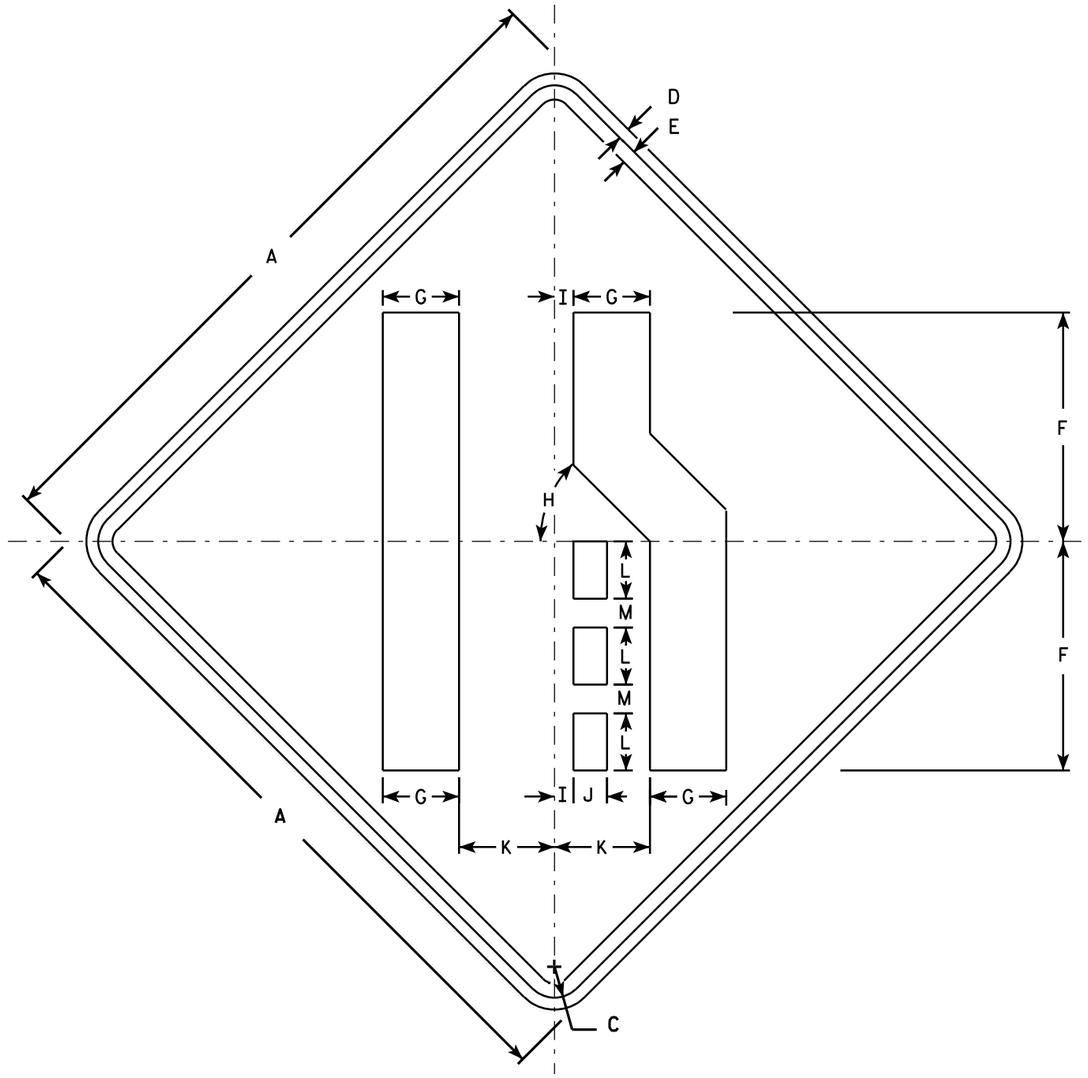
STANDARD SIGN
W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 181	E



W4-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

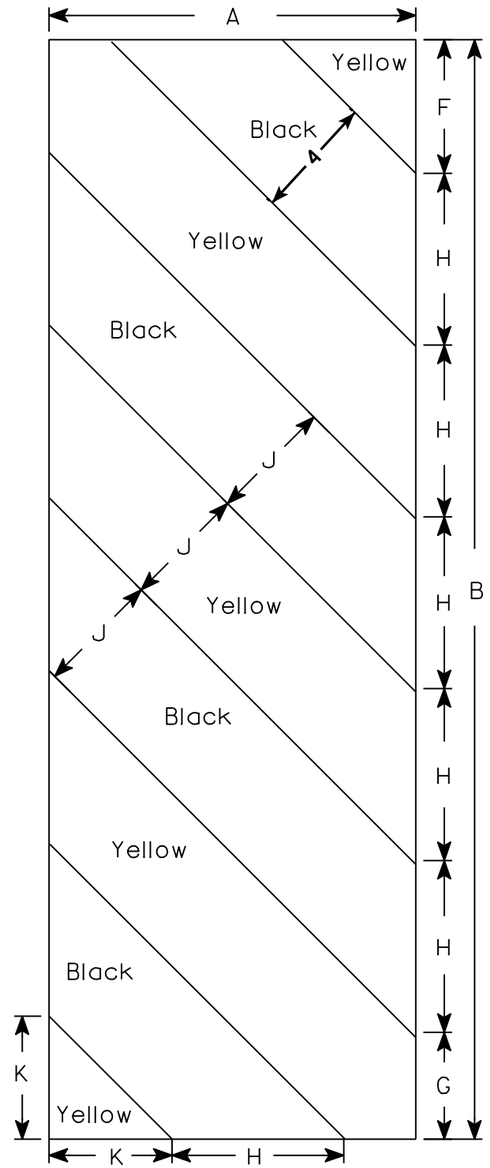
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

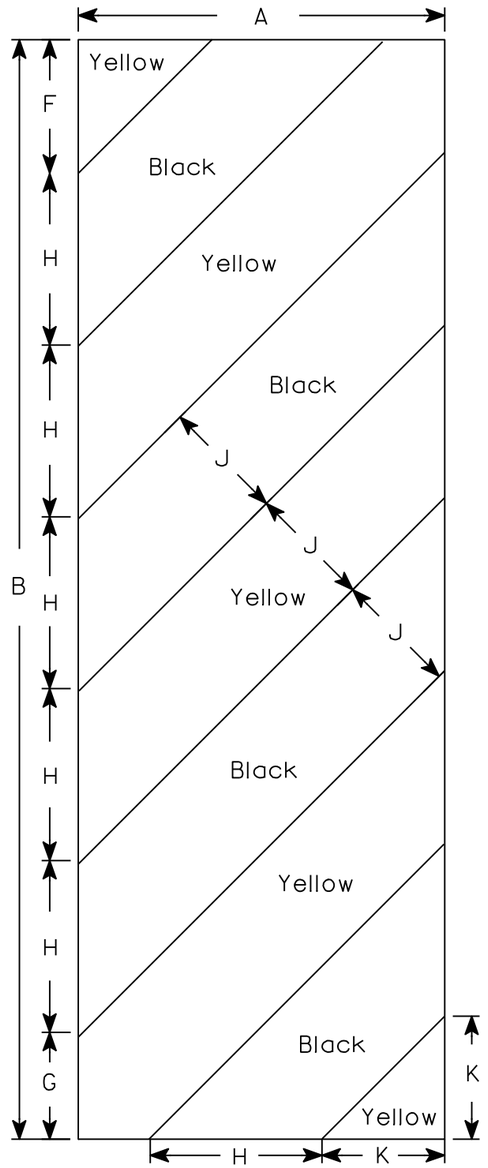
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 182 E



W5-52L



W5-52R

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

STANDARD SIGN

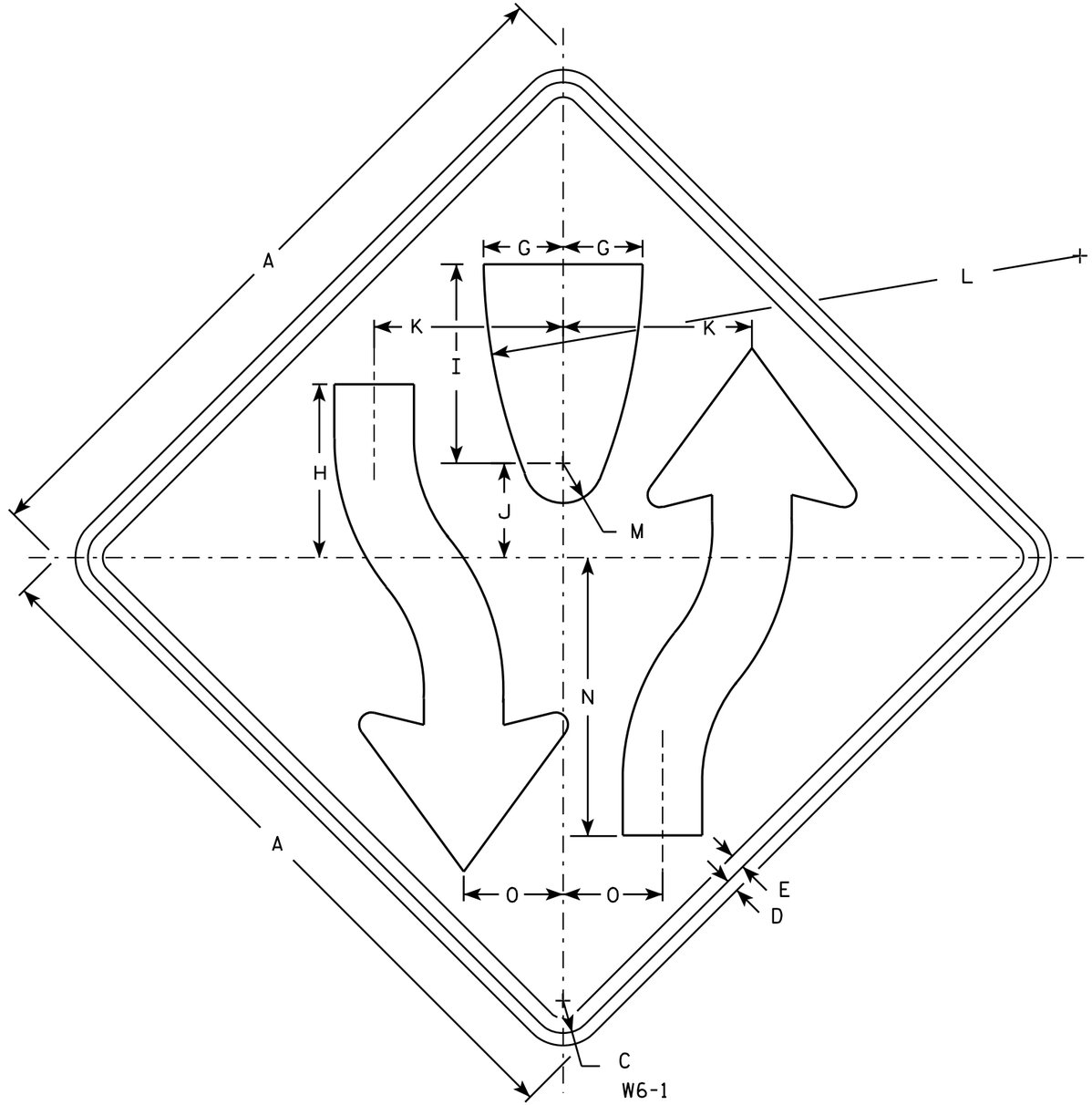
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

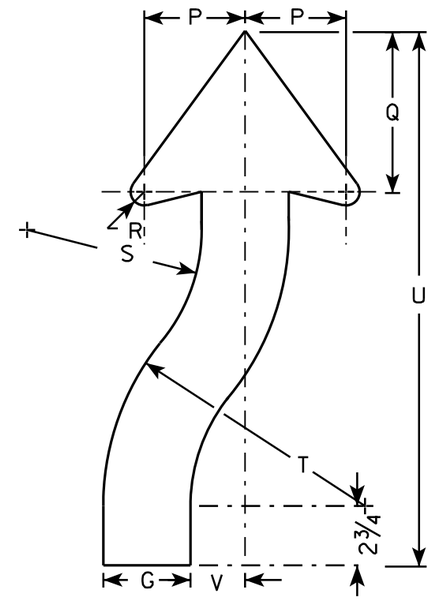
DATE 5/29/12 PLATE NO. W5-52.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

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

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

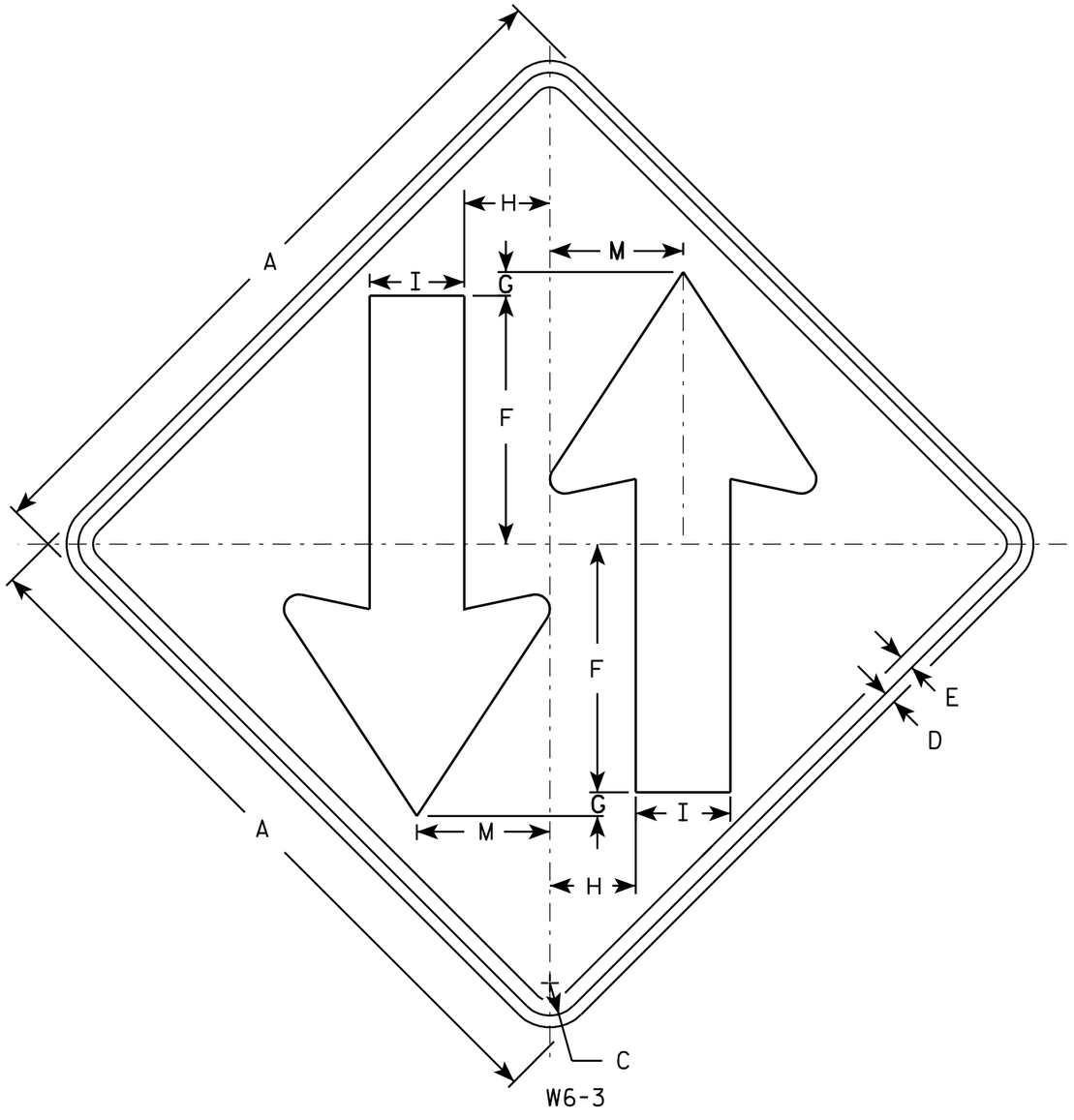
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 184	E

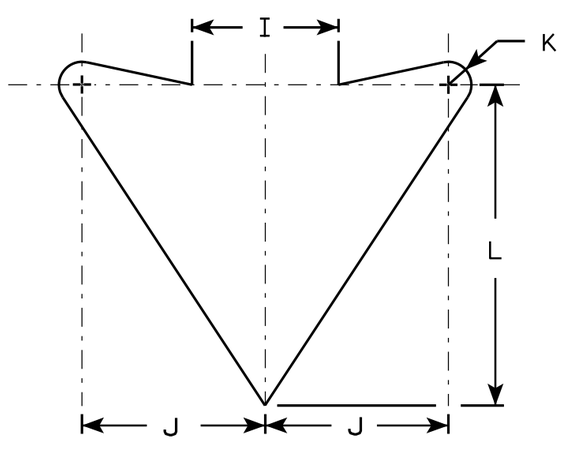
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
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. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

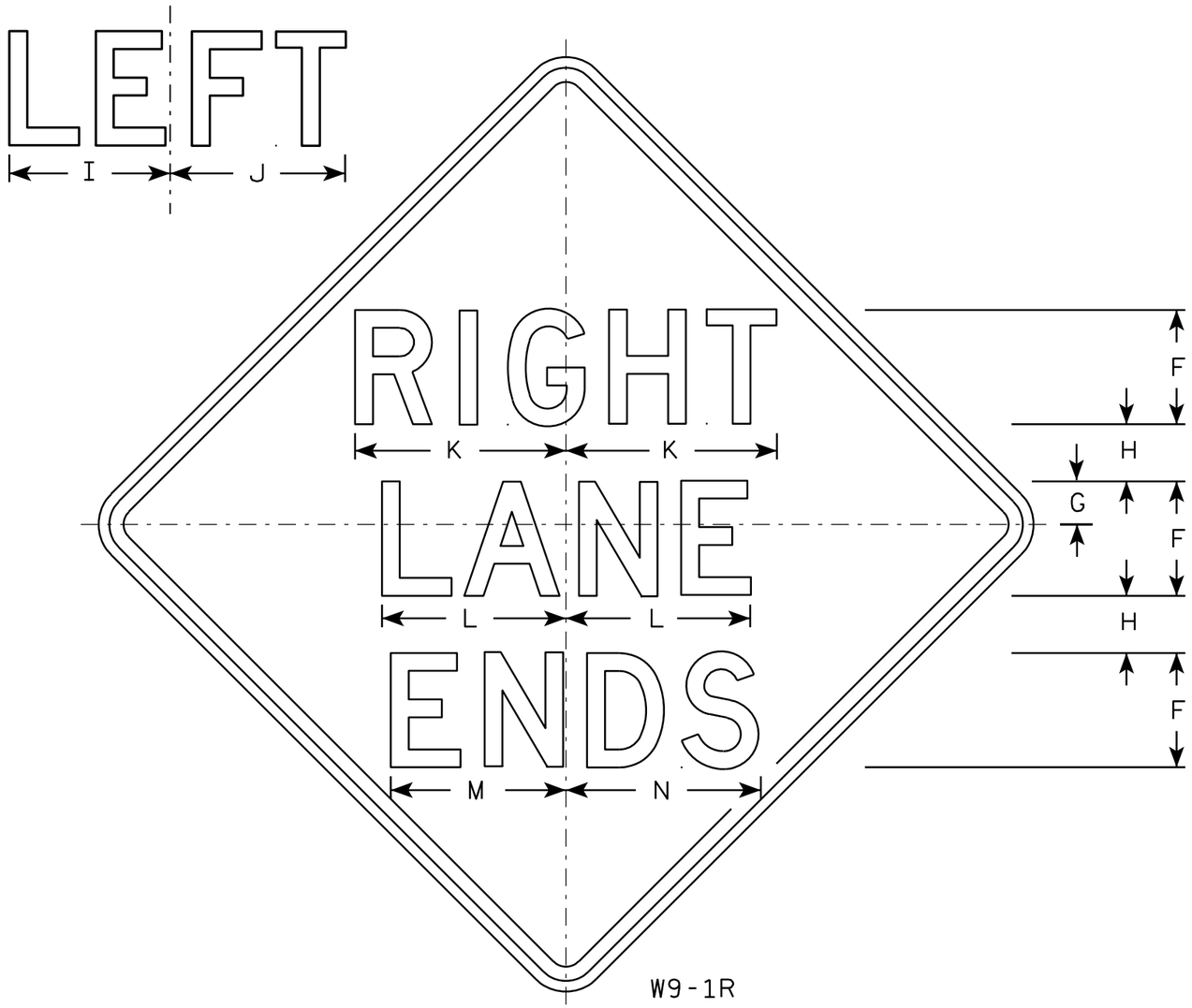
STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 185 | E



W9-1R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. W9-1L same as W9-1R except the word Left replaces Right.

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

STANDARD SIGN
W9-1

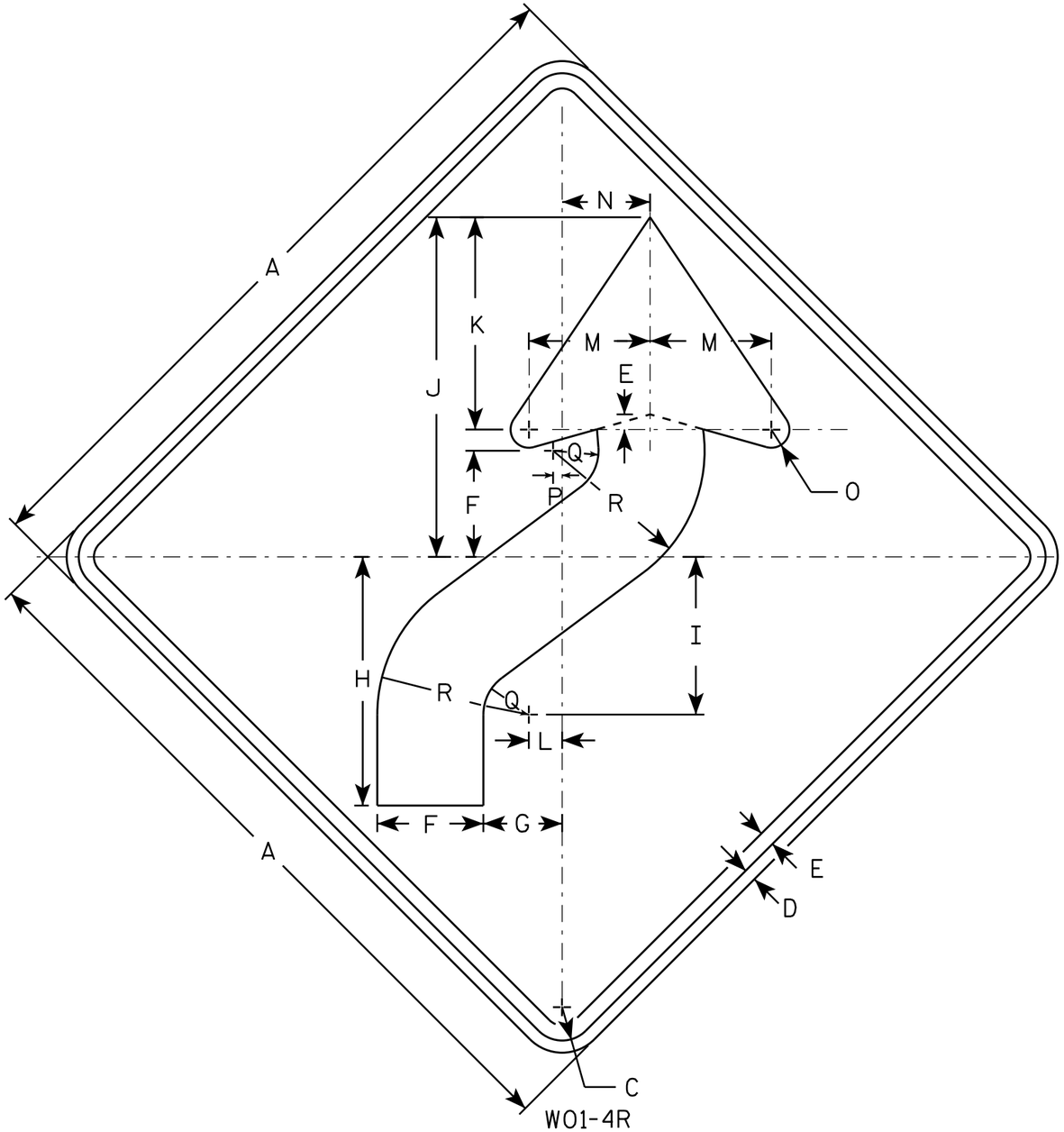
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-1.8

PROJECT NO:

SHEET NO: 186 E



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

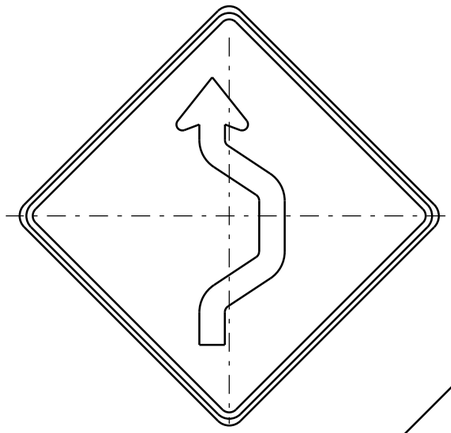
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

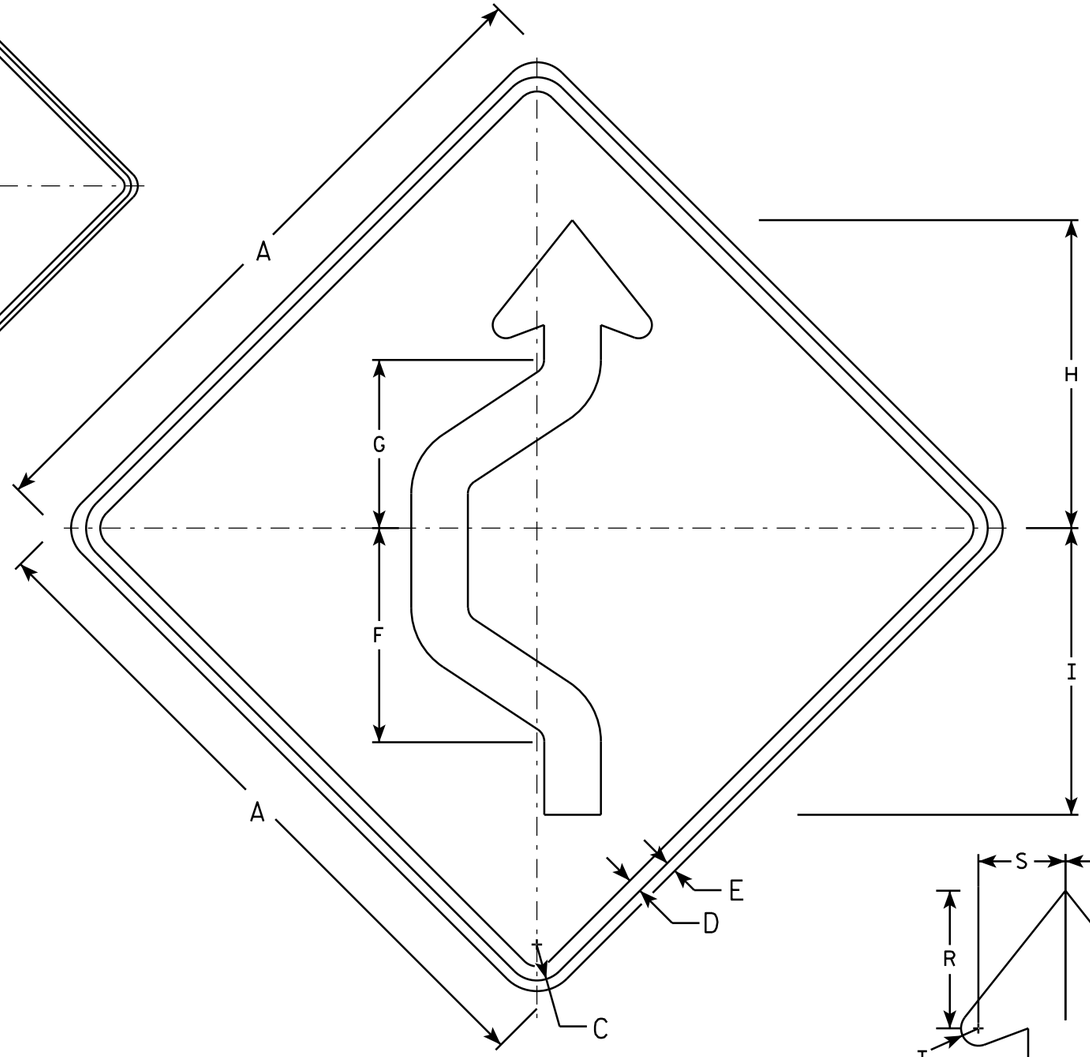
DATE 11/18/13 PLATE NO W01-4.1

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

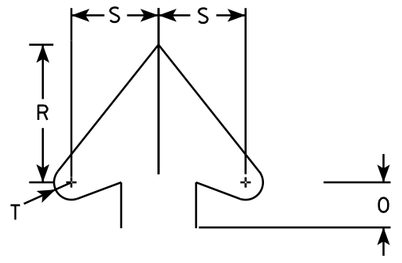
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WISDOT/CADDS SHEET 42



W024-1R



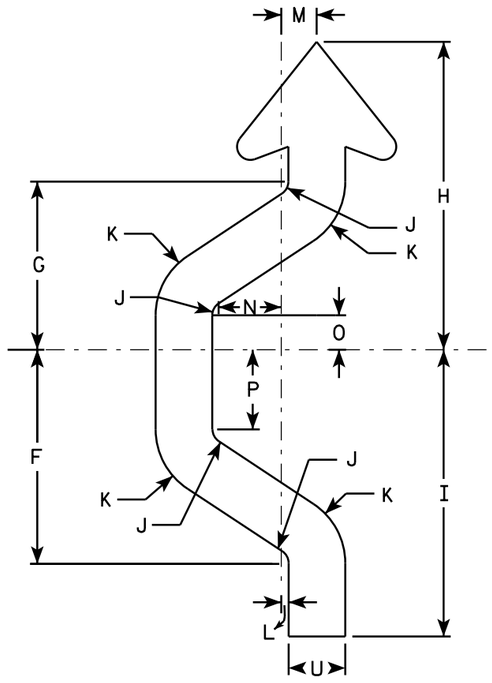
W024-1L



Arrowhead Detail

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W024-1R is the same as W024-1L except reversed along the vertical centerline.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 3/8	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9
2S	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
2M	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
3	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
4	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
5	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16

STANDARD SIGN
W024-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/2013 PLATE NO. W024-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

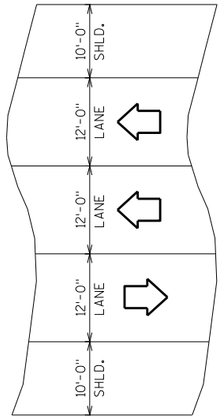
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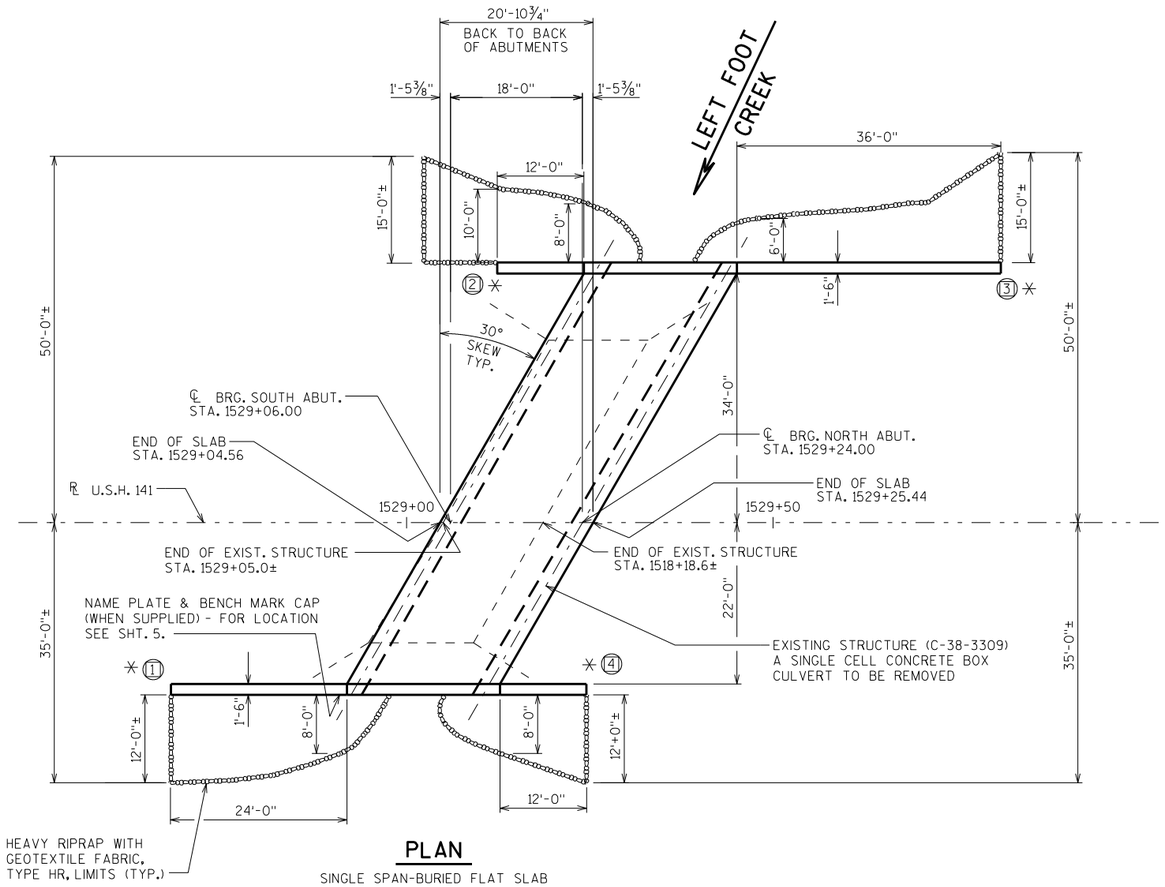
STATE PROJECT NUMBER

1491-10-71

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT

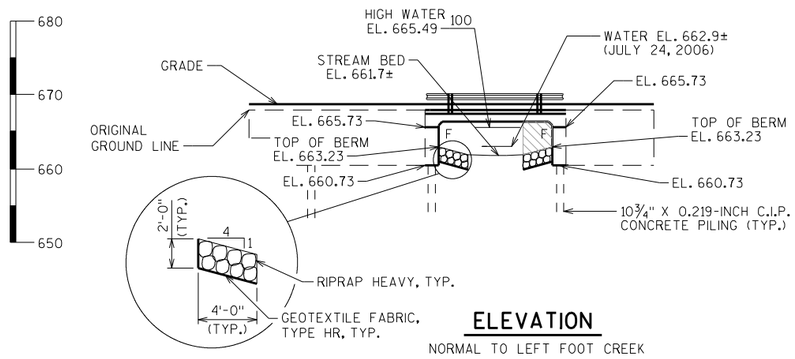
(1) INDICATES WING NUMBER





PLAN

SINGLE SPAN-BURIED FLAT SLAB



ELEVATION

NORMAL TO LEFT FOOT CREEK

COST OF EXCAVATION IN HATCHED AREAS SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES C-38-122."

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF= 1.11
OPERATING RATING FACTOR: RF= 1.44
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 220 (KIPS)
STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 P.S.F.

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.

EARTH/OVERBURDEN LOAD:

DESIGNED FOR 1'-2" OF HMA FILL, AT 140 P.S.F., ON SLAB.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON 10-3/4" X 0.219-INCH CIP CONC. PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 90 TONS ✳✳ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED 35'-0" LONG.

✳✳ THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

HYDRAULIC DATA

100 YEAR FREQUENCY

Q_{100} = 120 C.F.S.
VEL. = 3.04 F.P.S.
HW. = EL. 665.49
WATERWAY AREA = 39 SQ. FT.
DRAINAGE AREA = 6.5 SQ. MI.
ROAD OVERTOPPING = NA
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY

Q_2 = 45 C.F.S.
$HW._2$ = EL. 664.06

TRAFFIC VOLUME

U.S.H. 141
A.D.T. = 8800 (2028)
R.D.S. = 60 M.P.H.

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. NORTH ABUTMENT DETAILS
9. WING 3 DETAILS
10. SUPERSTRUCTURE
11. SUPERSTRUCTURE DETAILS
12. STEEL RAILING TYPE "W"
13. ALTERNATE CONSTRUCTION JOINT

STRUCTURE DESIGN CONTACTS:

ALEX CRABTREE (608) 266-3686
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY

Plans Prepared By **WISDOT**
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher LLS — CHIEF STRUCTURES DESIGN ENGINEER — 7/1/14 DATE

STRUCTURE C-38-122

U.S.H. 141 OVER LEFT FOOT CREEK

COUNTY MARINETTE | TOWN/~~CITY/VILLAGE~~ BEAVER

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
ARC	DFD	ARC	CRJ

GENERAL PLAN

SHEET 1 OF 13

189

8

8

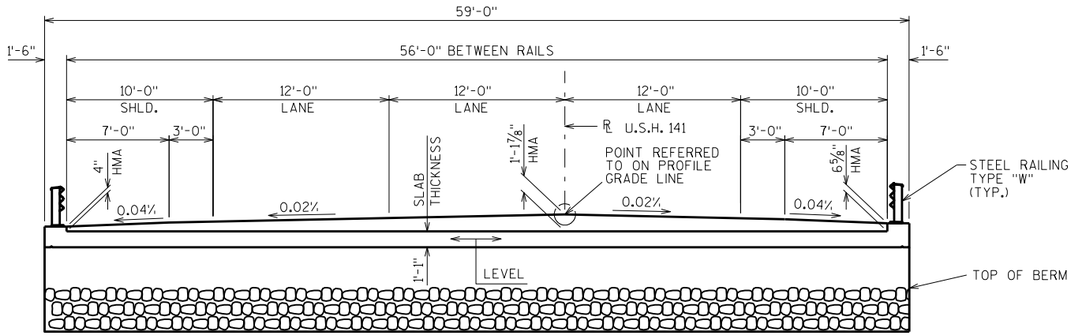
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I.D. 1491-10-00

DATE: JUNE 2014

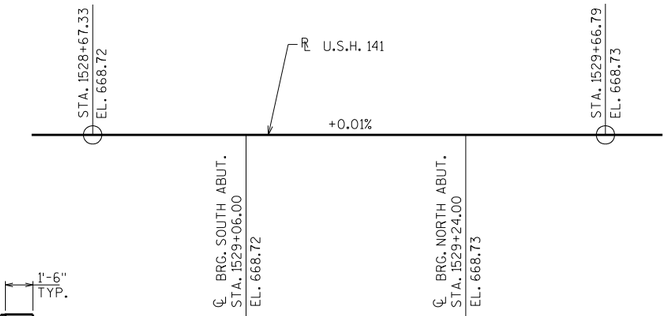
STATE PROJECT NUMBER

1491-10-71

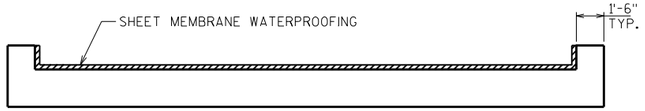


CROSS SECTION THRU ROADWAY LOOKING NORTH

(HMA ATOP SHEET MEMBRANE WATERPROOFING)

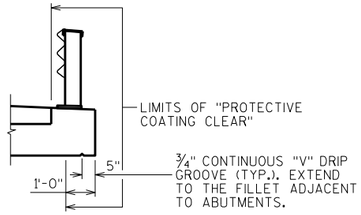


PROFILE GRADE LINE U.S.H. 141

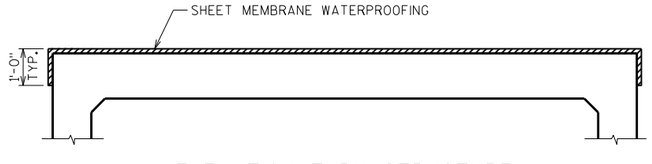


CROSS SECTION THRU STRUCTURE

SHOWING SHEET MEMBRANE WATERPROOFING LIMITS



EDGE OF DECK DETAIL



ELEVATION THRU STRUCTURE

SHOWING SHEET MEMBRANE WATERPROOFING LIMITS

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE FABRIC TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1 AND IN THE ABUTMENT DETAILS.

PLACE SHEET MEMBRANE WATERPROOFING ON ENTIRE TOP SLAB, BETWEEN 1'-6" WIDE HEADERS, AND EXTEND DOWN 1'-0" AT ABUTMENT ENDS AS SHOWN.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	TOTALS
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STA. 1529+20	LS	———	———	———	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES C-38-122	LS	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	188	188	376
502.0100	CONCRETE MASONRY BRIDGES	CY	62	55	71	188
502.6500	PROTECTIVE COATING CLEAR	GAL	1	———	———	1
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	3,650	4,140	7,790
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	14,730	3,620	3,770	22,120
513.7050	RAILING STEEL TYPE W C-38-122	LS	———	———	———	1
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	16	22	38
516.0610.S	SHEET MEMBRANE WATERPROOFING FOR TOP SLAB C-38-122	SY	167	———	———	167
550.2102	PILING CIP CONCRETE 10-3/4" X 0.219-INCH	LF	———	350	735	1,085
606.0300	RIPRAP HEAVY	CY	———	71	72	143
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	111	165	276
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	———	110	110	220
	NON-BID ITEMS					
	FILLER	SIZE	———	———	———	1/2" & 3/4"
			———	———	———	

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

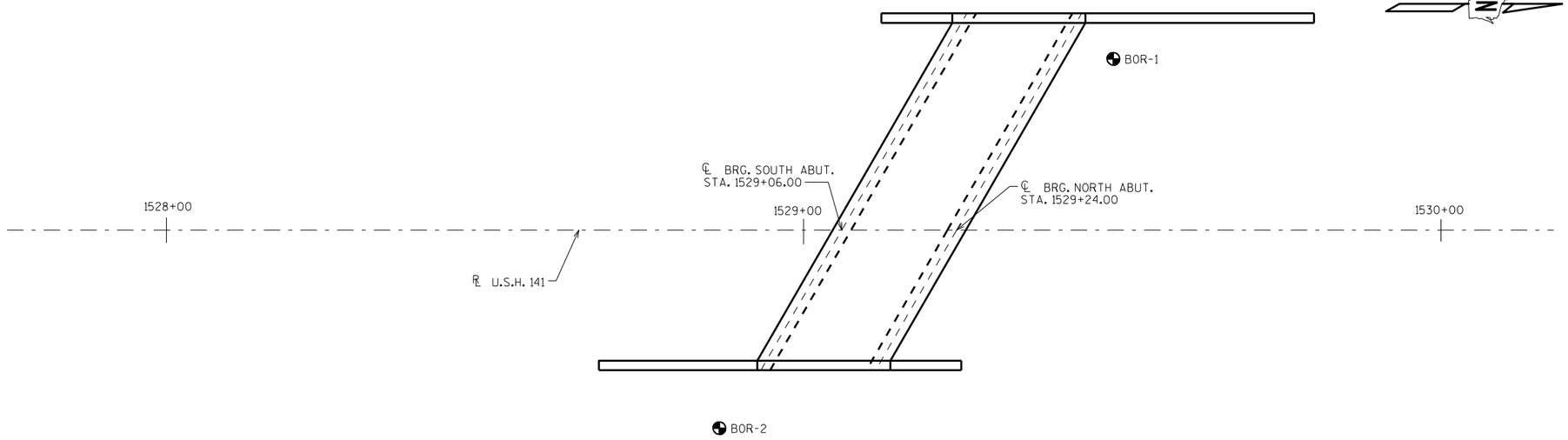
CROSS SECTION & QUANTITIES

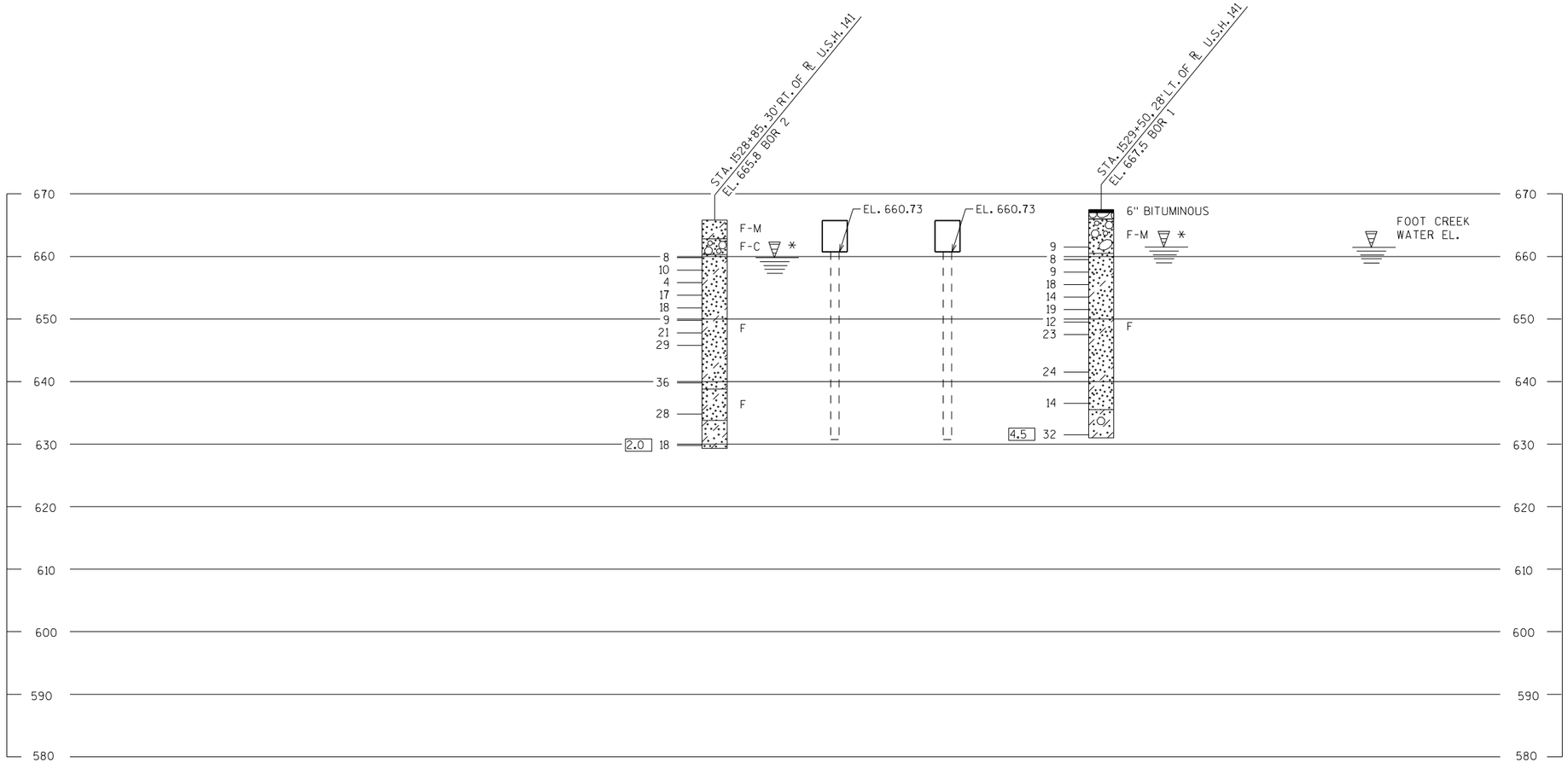
SHEET 2

190

SCALE = 5

U.S.H. 141 OVER LEFT FOOT CREEK
S. BRANCH BEAVER CREEK TO PESHTIGO RIVER





* THE GROUND WATER ELEVATION WAS DETERMINED FROM WHERE THE SOIL SAMPLE WAS DESCRIBED AS WET.

STATE PROJECT NUMBER

1491-10-71

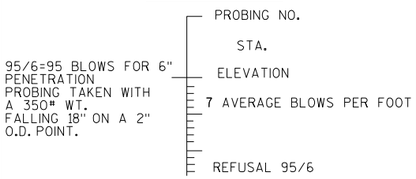
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

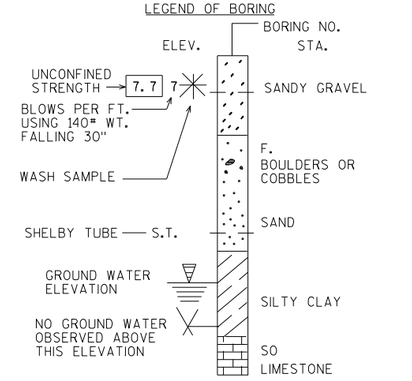
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

SUBSURFACE EXPLORATION

SHEET 3

191

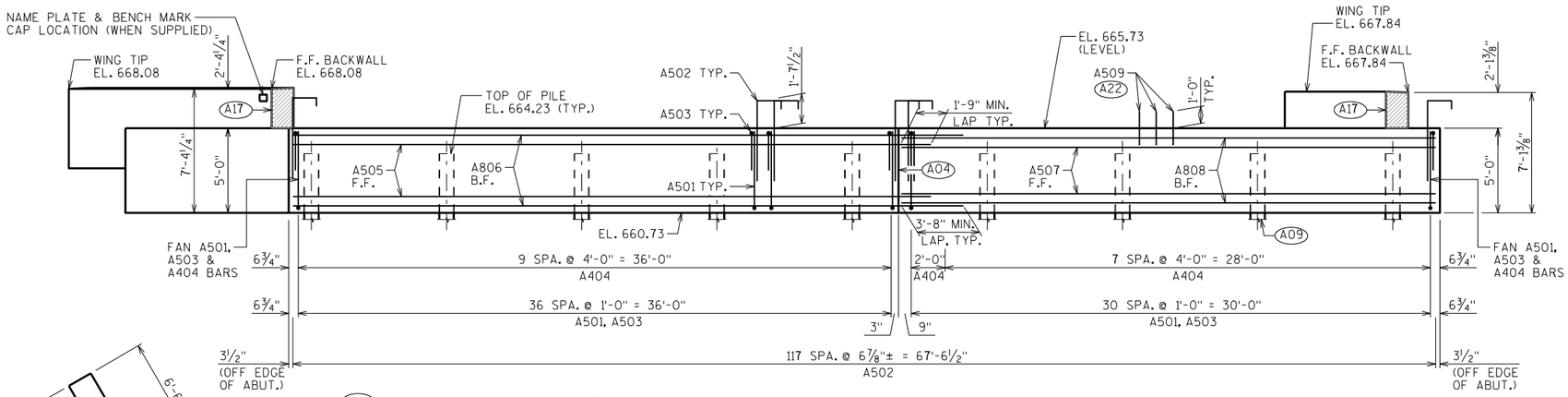
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8

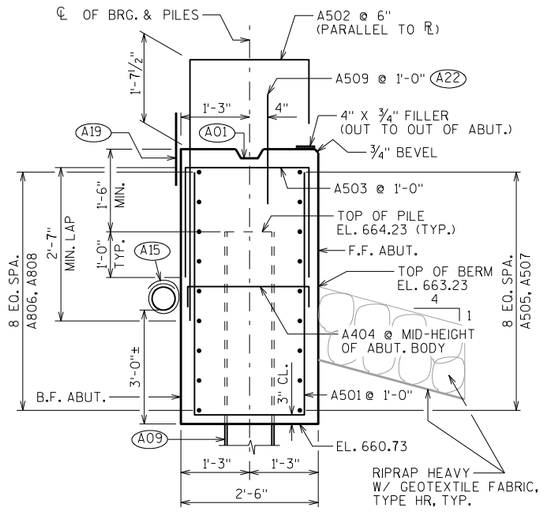
STATE PROJECT NUMBER

1491-10-71



ELEVATION LOOKING SOUTH

ADJUST STIRRUP SPACING AS REQUIRED TO AVOID THE PILES.

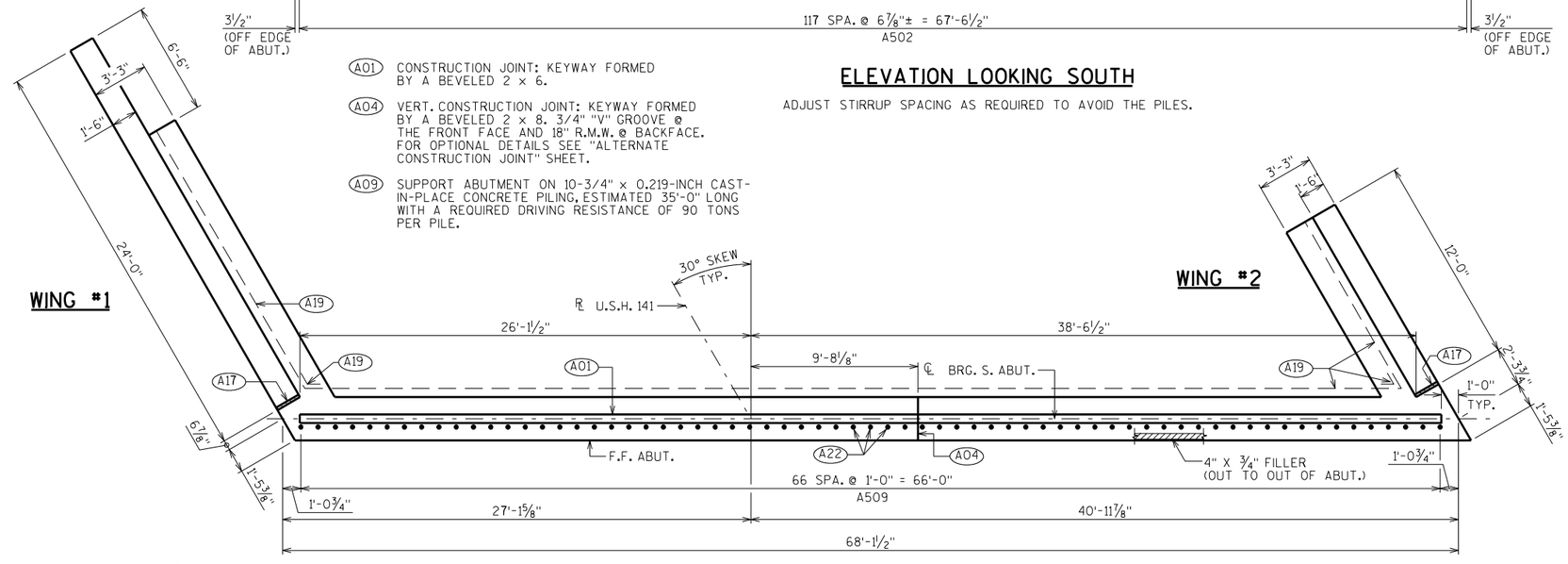


SECTION THRU BODY

A01 CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

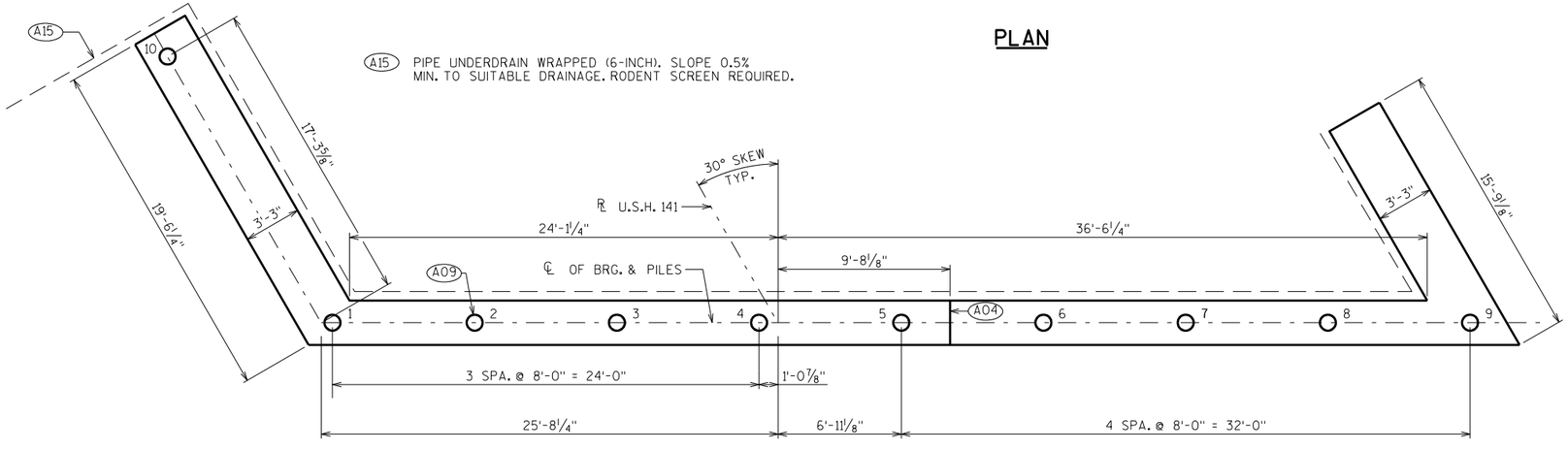
A04 VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A09 SUPPORT ABUTMENT ON 10-3/4" x 0.219-INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.



PLAN

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

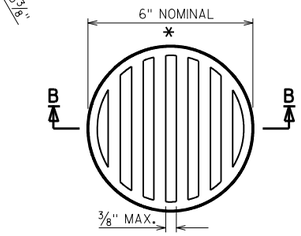


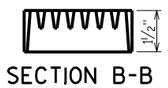
PILE/FOOTING PLAN

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A22 BARS @ 1'-0" CENTERS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)





SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

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SOUTH ABUTMENT

SHEET 4

192

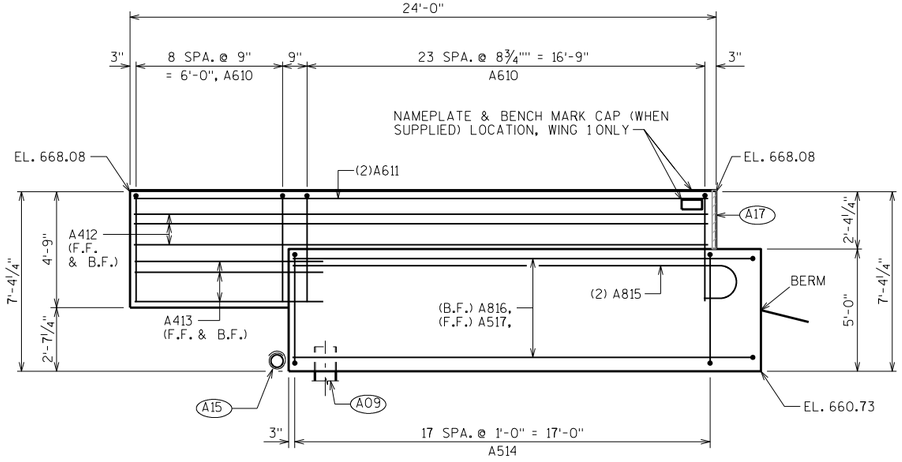
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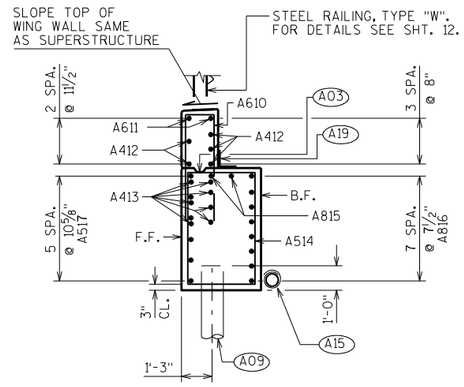
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STATE PROJECT NUMBER

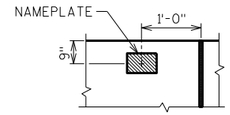
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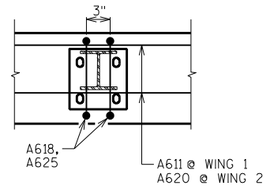
WING 1 ELEVATION



WING 1 SECTION

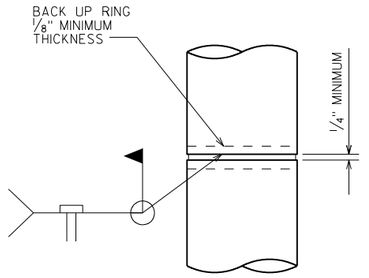


NAME PLATE LOCATION WING 1 ONLY

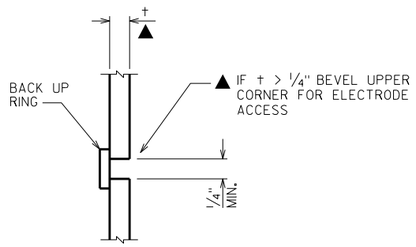


SHOWING POST ANCHORAGE REINF.

(SEE SHT. 10 FOR LOCATIONS)

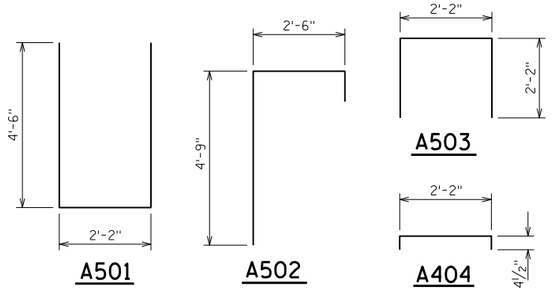


CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS



BILL OF BARS

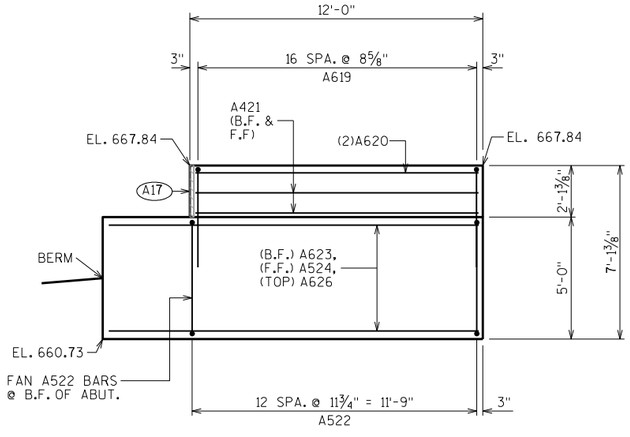
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		68	10'-11"	X		BODY - VERTICAL
A502	X	118	7'-10"	X		ABUT. BODY/DIAPHRAGM - VERTICAL
A503		68	6'-3"	X		BODY - VERTICAL - TOP
A404		19	2'-9"	X		BODY - VERTICAL TIES
A505		9	38'-0"			BODY - HORIZONTAL F.F.
A806		9	41'-3"	X		BODY - HORIZONTAL B.F.
A507		9	31'-6"			BODY - HORIZONTAL F.F.
A808		9	31'-5"	X		BODY - HORIZONTAL B.F.
A509	X	67	2'-0"			BODY - TOP - VERTICAL DOWEL BARS
A610	X	33	9'-8"	X		WING 1 - VERTICAL
A611	X	2	23'-8"			WING 1 - HORIZONTAL - TOP
A412	X	5	23'-8"			WING 1 - HORIZONTAL - F.F. & B.F.
A413	X	7	7'-9"			WING 1 - HORIZONTAL - F.F. & B.F.
A514	X	18	15'-8"	X		WING 1 - VERTICAL - STIRRUPS
A815	X	2	20'-7"	X		WING 1 - TOP - HORIZONTAL
A816	X	8	21'-8"	X		WING 1 - HORIZONTAL B.F.
A517	X	6	18'-7"			WING 1 - HORIZONTAL F.F.
A618	X	8	4'-10"	X		WING 1 - VERTICAL POST REINF.
A619	X	17	8'-10"	X		WING 2 - VERTICAL
A620	X	2	11'-8"			WING 2 - HORIZONTAL - F.F. & B.F.
A421	X	5	11'-8"			WING 2 - HORIZONTAL - F.F. & B.F.
A522	X	13	15'-8"	X		WING 2 - VERTICAL - STIRRUPS
A623	X	7	12'-11"			WING 2 - HORIZONTAL - B.F.
A524	X	6	14'-6"			WING 2 - HORIZONTAL - F.F.
A625	X	4	4'-10"	X		WING 2 - VERTICAL POST REINF.
A626	X	2	14'-2"			WING 2 - HORIZONTAL - TOP

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. & 3/4" "V" GROOVE @ F.F. IF JOINT IS USED).

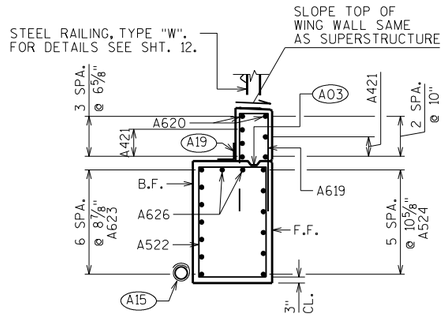
(A09) SUPPORT ABUTMENT ON 10-3/4" x 0.219-INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

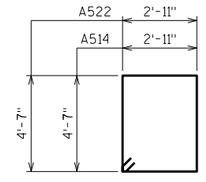
(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.



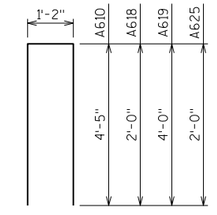
WING 2 ELEVATION



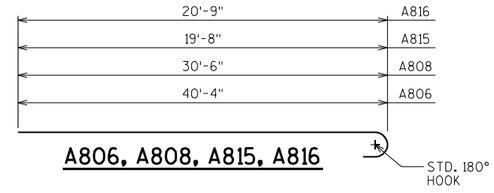
WING 2 SECTION



A514, A522



A610, A618, A619, A625



A806, A808, A815, A816

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

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SOUTH ABUTMENT DETAILS

SHEET 5

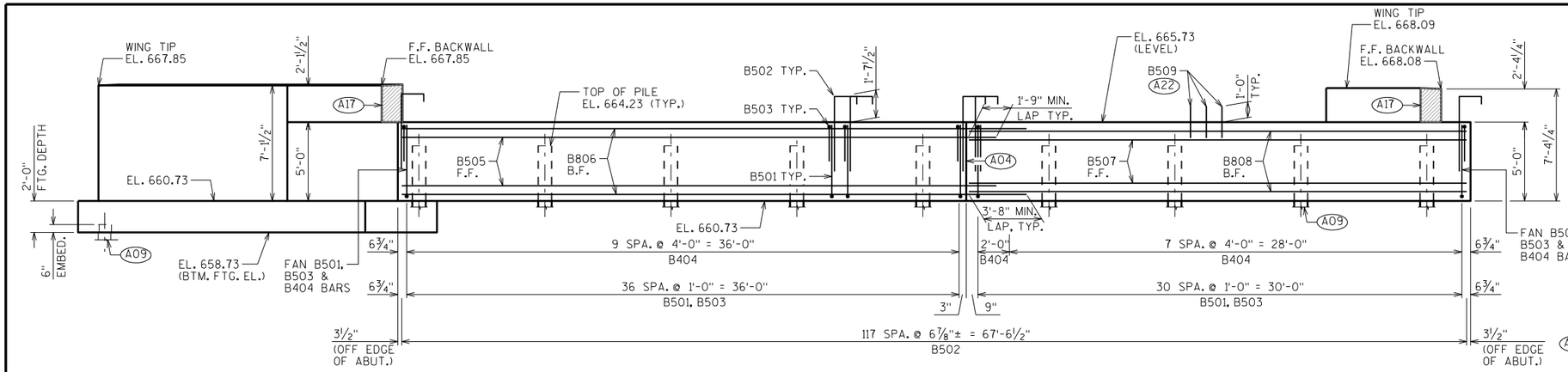
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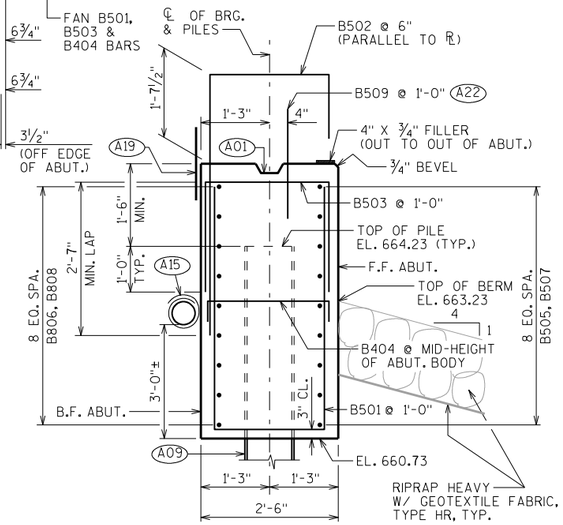
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STATE PROJECT NUMBER
1491-10-71

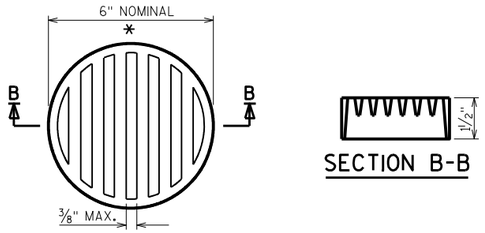


ELEVATION LOOKING NORTH

ADJUST STIRRUP SPACING AS REQUIRED TO AVOID THE PILES.



SECTION THRU BODY



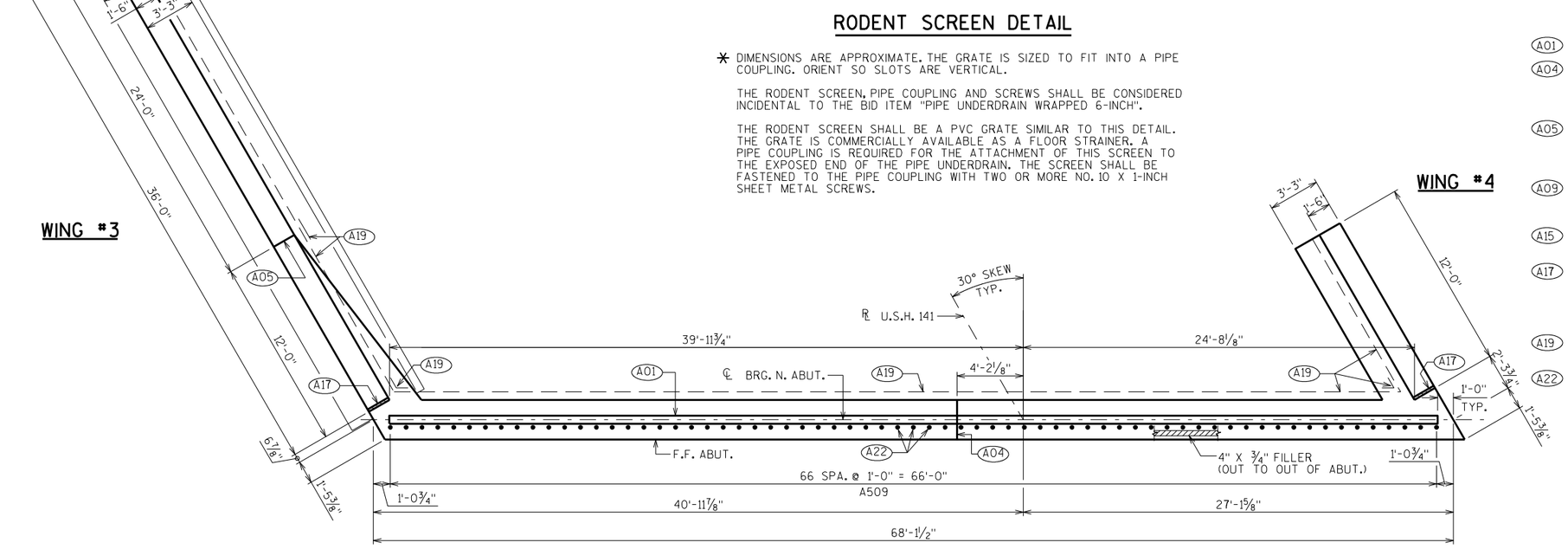
SECTION B-B

RODENT SCREEN DETAIL

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.



PLAN

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A05) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6. ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A09) SUPPORT ABUTMENT ON 10-¾" x 0.219-INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) BARS @ 1'-0" CENTERS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

NORTH ABUTMENT

SHEET 6

194

SCALE = 4

STATE PROJECT NUMBER

1491-10-71

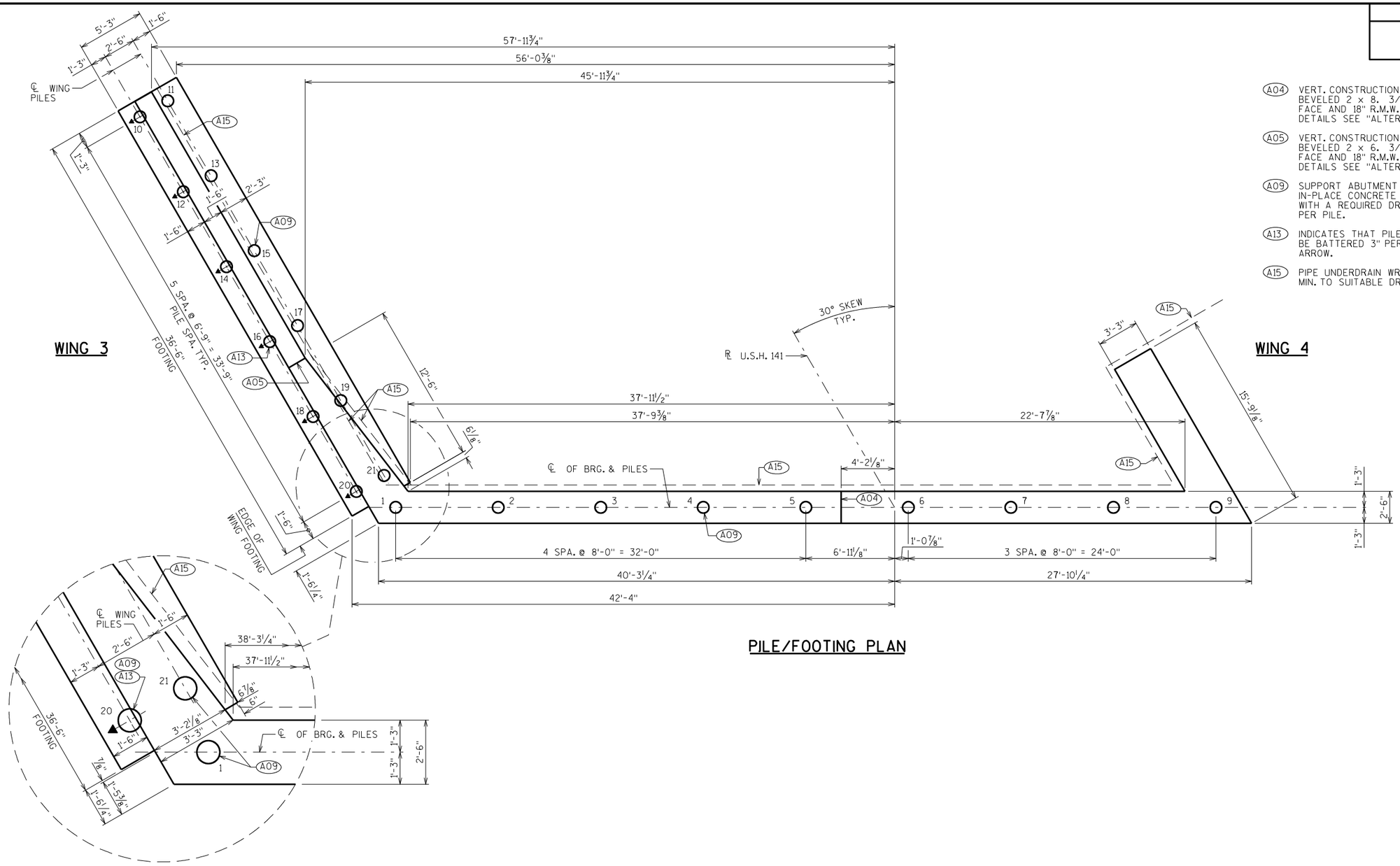
(A04) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A05) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

(A09) SUPPORT ABUTMENT ON 10-3/4" x 0.219-INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

(A13) INDICATES THAT PILES 10, 12, 14, 16, 18 & 20 ARE TO BE BATTERED 3" PER FOOT IN THE DIRECTION OF THE ARROW.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.



PILE/FOOTING PLAN

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

NORTH ABUTMENT DETAILS

SHEET 7

195

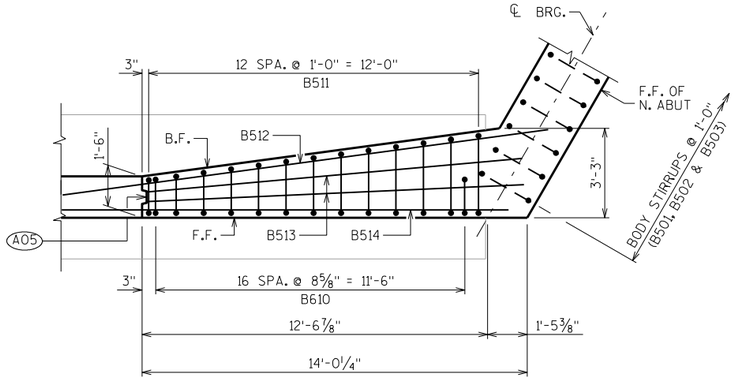
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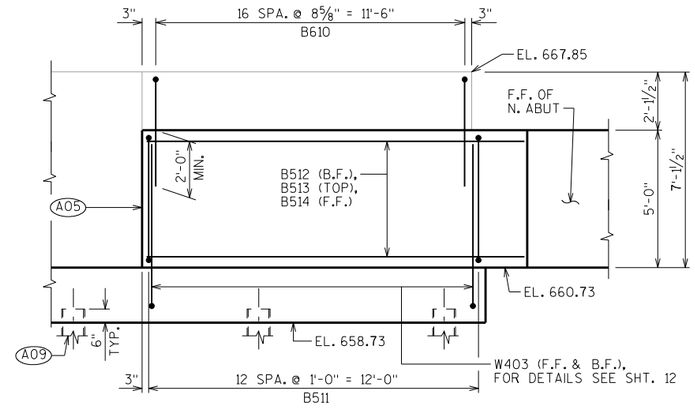
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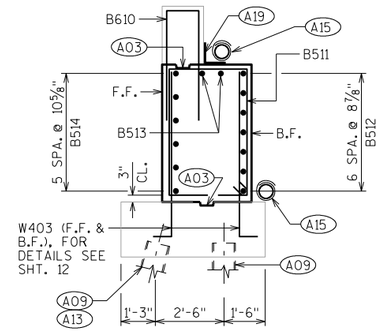
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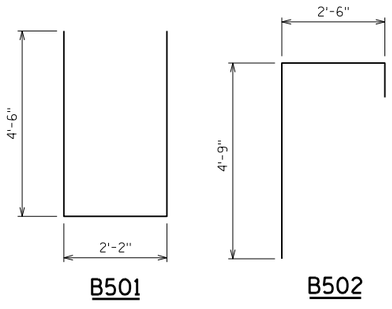
WING 3 PLAN

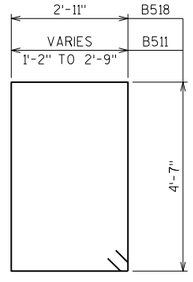


WING 3 ELEVATION



WING 3 SECTION



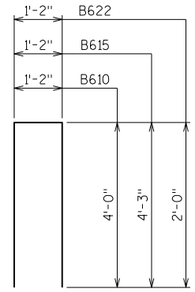


B511, B518

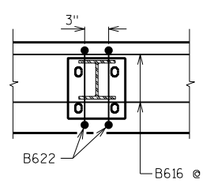
BAR SERIES TABLE

MARK	NO. REQ'D.	LENGTH
B511	1 SERIES OF 13	12'-2" TO 15'-4"

BUNDLE AND TAG EACH SERIES SEPARATELY.



B610, B615, B622



SHOWING POST ANCHORAGE REINF.

(SEE SHT. 10 FOR LOCATIONS)

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		68	10'-11"	X		BODY - VERTICAL
B502	X	118	7'-10"	X		ABUT. BODY/DIAPHRAGM - VERTICAL
B503		68	6'-3"	X		BODY - VERTICAL - TOP
B404		19	2'-9"	X		BODY - VERTICAL TIES
B505		9	38'-0"			BODY - HORIZONTAL - F.F.
B806		9	41'-3"			BODY - HORIZONTAL - B.F.
B507		9	31'-6"			BODY - HORIZONTAL - F.F.
B808		9	31'-5"			BODY - HORIZONTAL - B.F.
B509	X	67	2'-0'			BODY - TOP - VERTICAL DOWEL BARS
B610	X	17	8'-10"	X		WING 3 - VERTICAL - B.F.
B511	X	13	13'-9"	X	▲	WING 3 - VERTICAL - STIRRUPS
B512	X	7	17'-10"			WING 3 - HORIZONTAL - B.F.
B513	X	2	13'-5"			WING 3 - HORIZONTAL - TOP
B514	X	6	16'-3"			WING 3 - HORIZONTAL - F.F.
B615	X	17	9'-4"	X		WING 4 - VERTICAL
B616	X	2	11'-8"			WING 4 - HORIZONTAL - F.F. & B.F.
B417	X	5	11'-8"			WING 4 - HORIZONTAL - F.F. & B.F.
B518	X	13	15'-8"	X		WING 4 - VERTICAL - STIRRUPS
B619	X	7	12'-11"			WING 4 - HORIZONTAL - B.F.
B520	X	6	14'-6"			WING 4 - HORIZONTAL - F.F.
B621	X	2	14'-2"			WING 4 - HORIZONTAL - TOP
B622	X	4	4'-10"	X		WING 4 - VERTICAL POST REINF.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

(A03) OPTIONAL CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 × 6. (18" R.M.W. @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED.

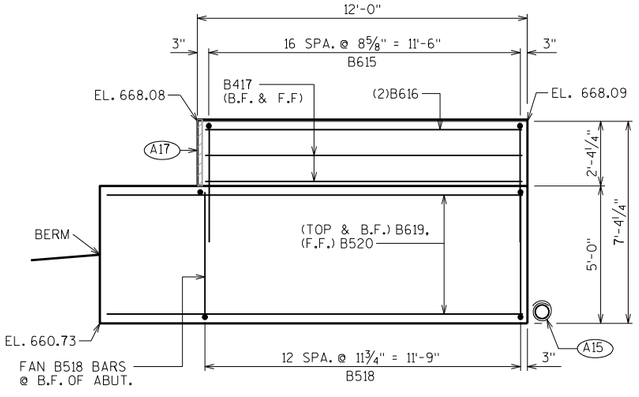
(A05) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 × 6. 3/4" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT," SHT. 13.

(A09) SUPPORT WING ON 10-3/4" X 0.219-INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

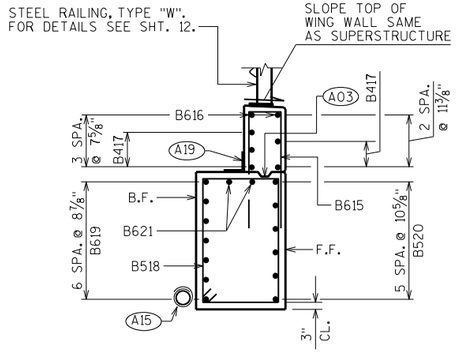
(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

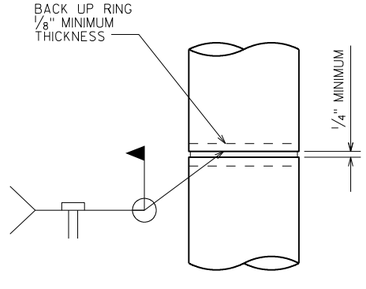
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



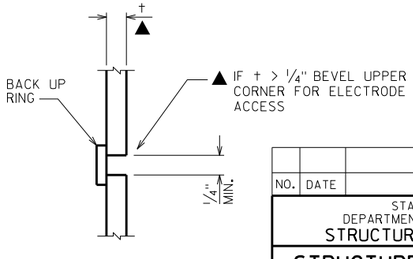
WING 4 ELEVATION



WING 4 SECTION



CAST-IN-PLACE 'PIPE PILE'



C.I.P. PILE WELD DETAIL

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

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NORTH ABUTMENT DETAILS

SHEET 8

196

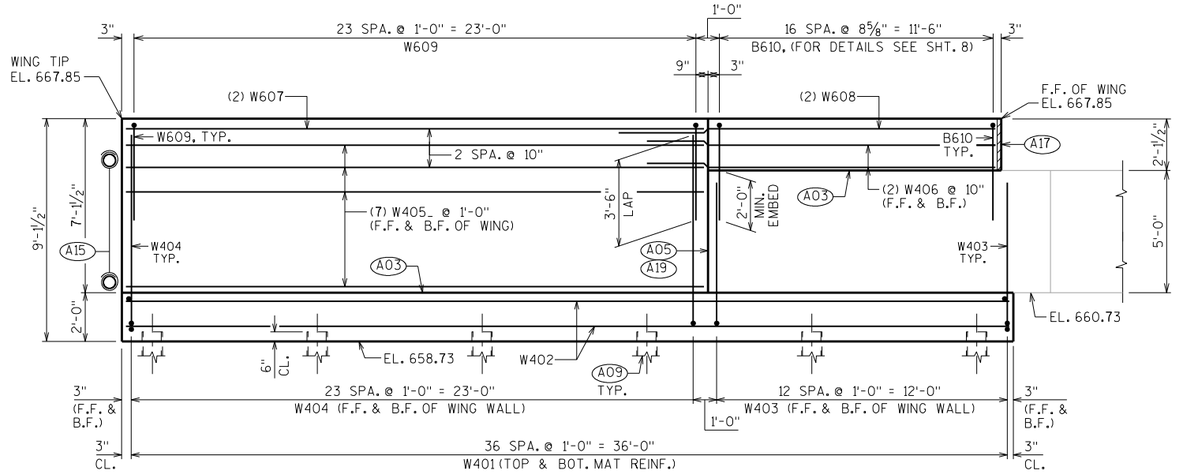
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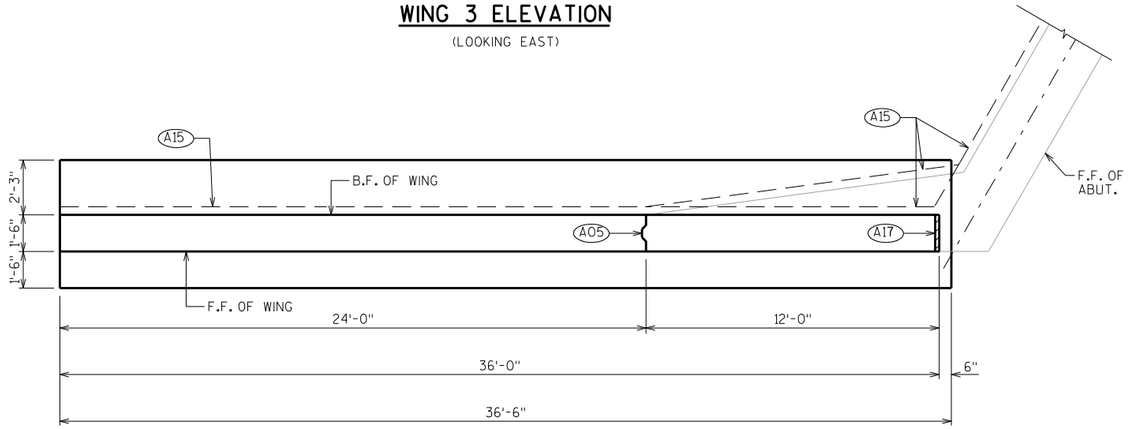
STATE PROJECT NUMBER

1491-10-71

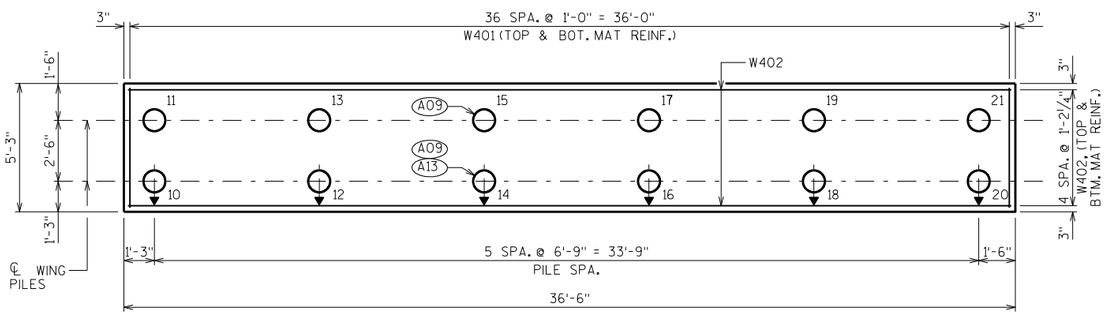


WING 3 ELEVATION

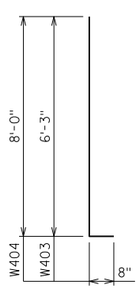
(LOOKING EAST)



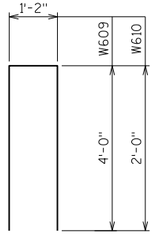
PLAN



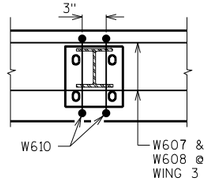
FOOTING/PILE PLAN



W403, W404

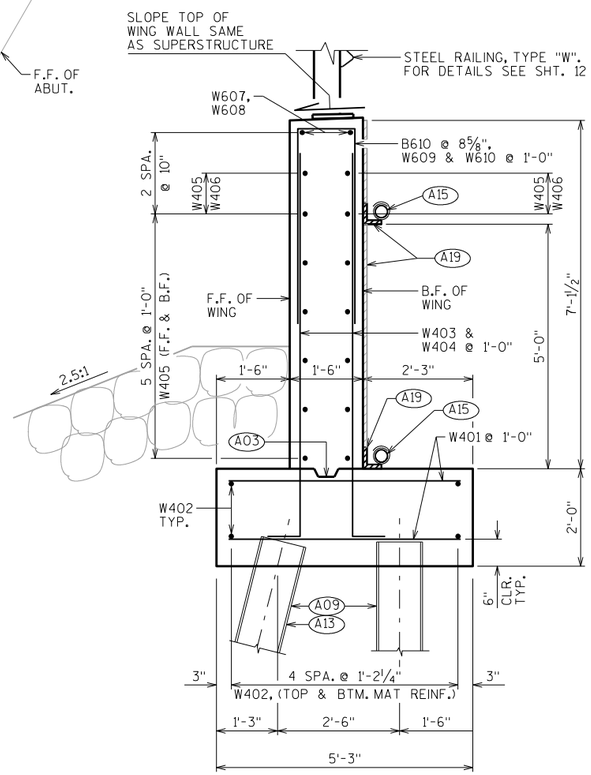


W609, W610



SHOWING POST ANCHORAGE REINF.

(SEE SHT. 10 FOR LOCATIONS)



SECTION THRU WING 3

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
W401		74	4'-11"			FOOTING - TRANSVERSE - TOP & BTM.
W402		10	36'-2"			FOOTING - LONGITUDINAL - TOP & BTM.
W403	X	26	6'-10"	X		WING 3 - VERTICAL - F.F. & B.F.
W404	X	48	8'-7"	X		WING 3 - VERTICAL - F.F. & B.F.
W405	X	14	23'-8"			WING 3 - HORIZONTAL - F.F. & B.F.
W406	X	4	14'-2"			WING 3 - HORIZONTAL - F.F. & B.F.
W607	X	2	23'-8"			WING 3 - HORIZONTAL - TOP
W608	X	2	15'-4"			WING 3 - HORIZONTAL - TOP
W609	X	24	8'-10"	X		WING 3 - VERTICAL - TOP
W610	X	12	4'-10"	X		WING 3 - VERTICAL POST REINF.

(A03) OPTIONAL CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 X 6. (18" R.M.W. @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A05) VERT. CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 X 6. ¾" "V" GROOVE @ THE FRONT FACE AND 18" R.M.W. @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT," SHT. 13

(A09) SUPPORT WING ON 10-3/4" X 0.219-INCH CAST-IN-PLACE CONCRETE PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 90 TONS PER PILE.

(A13) INDICATES THAT PILES 10, 12, 14, 16, 18, & 20 ARE TO BE BATTERED 3" PER FOOT IN THE DIRECTION OF THE ARROW.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

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WING 3 DETAILS

SHEET 9

197

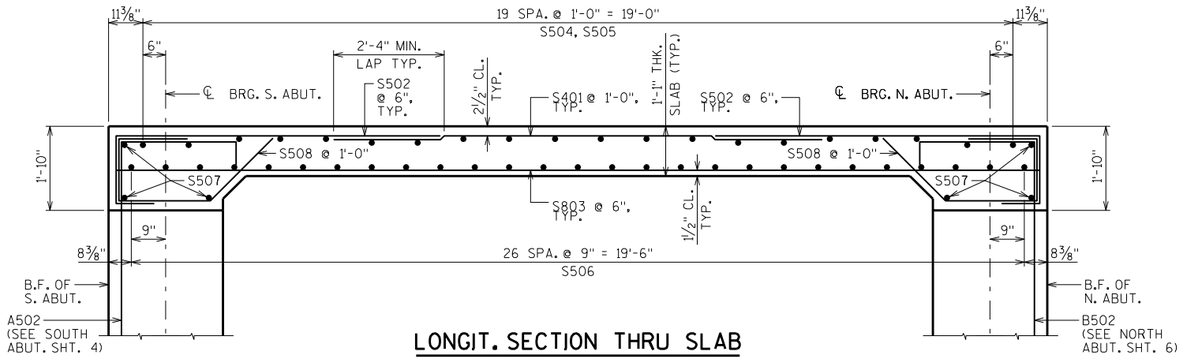
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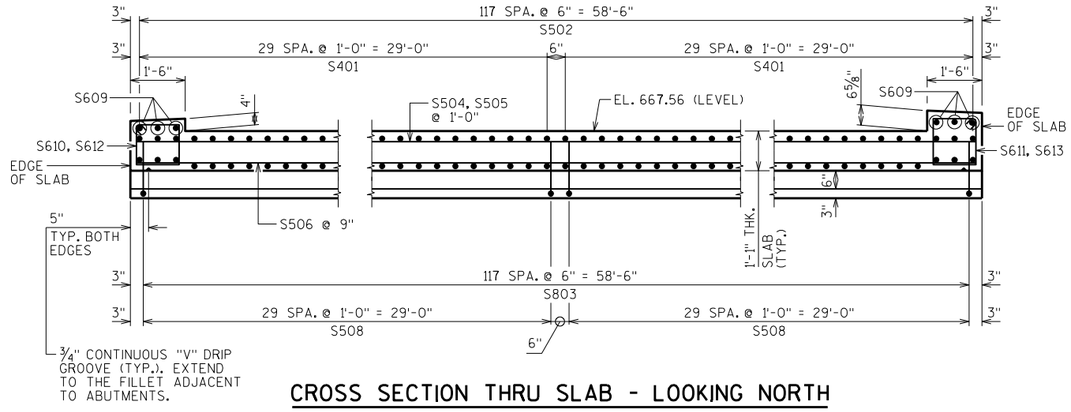
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STATE PROJECT NUMBER

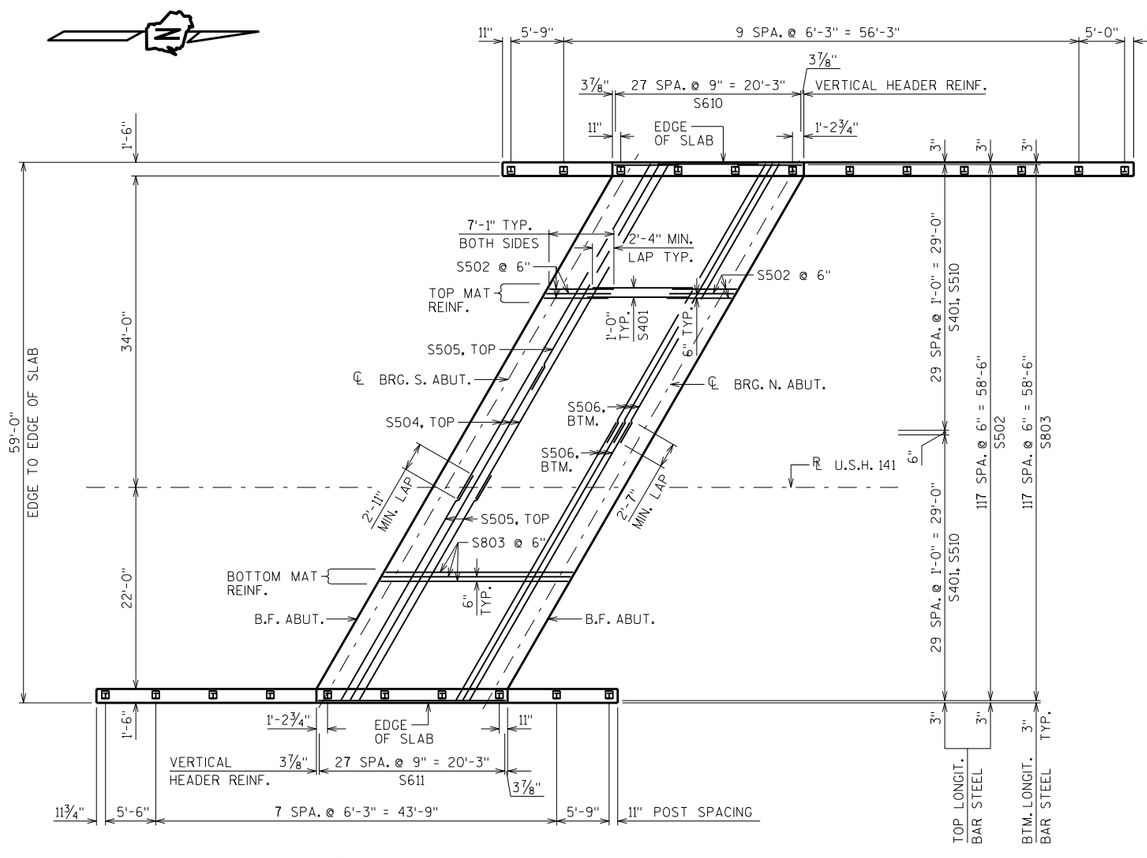
1491-10-71



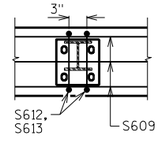
LONGIT. SECTION THRU SLAB



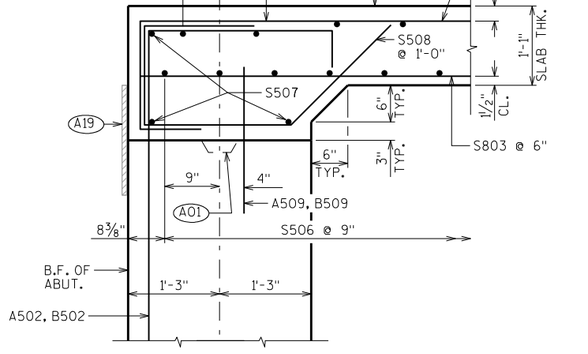
CROSS SECTION THRU SLAB - LOOKING NORTH



PLAN



SHOWING POST ANCHORAGE REINF.



CROSS SECTION TRU SLAB AT ABUT.

(NORMAL TO ABUTS.)

(A01) CONSTRUCTION JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

SUPERSTRUCTURE

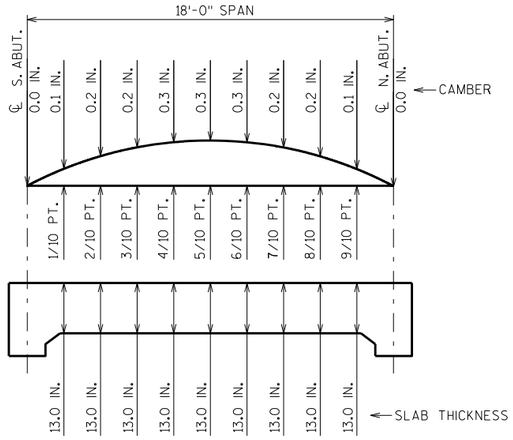
SHEET 10

198

8

8

SCALE = 8



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEADLOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS SHOWN ABOVE THE HORIZ. CONST. JT. SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR CENTERLINE FOLLOW THIS PROCEDURE:

	TOP OF DECK ELEVATION AT FINAL GRADE
LESS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF DECK ELEVATIONS AT THE ℄ OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER.

STATE PROJECT NUMBER

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BILL OF BARS

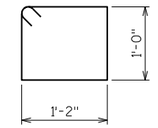
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S401	X	60	11'-1"			SLAB - LONGITUDINAL - TOP
S502	X	236	9'-4"	X		SLAB/ABUT. DIAPHRAGM - LONGITUDINAL
S803	X	118	20'-6"			SLAB - LONGITUDINAL - BOTTOM
S504	X	20	42'-3"			SLAB - TRANSVERSE - TOP
S505	X	20	28'-6"			SLAB - TRANSVERSE - TOP
S506	X	54	35'-2"			SLAB - TRANSVERSE - BOTTOM
S507	X	12	35'-2"			SLAB/ABUT. DIAPHRAGM - TRANSVERSE
S508	X	120	6'-11"	X		ABUT. DIAPHRAGM - VERTICAL
S609	X	6	20'-6"			HEADER - HORIZONTAL
S610	X	28	5'-3"	X		WEST HEADER - STIRRUPS
S611	X	28	5'-7"	X		EAST HEADER - STIRRUPS
S612	X	8	5'-3"	X		WEST HEADER - POST REINF. STIRRUPS
S613	X	8	5'-7"	X		EAST HEADER - POST REINF. STIRRUPS

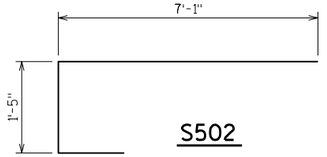
NOTES

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS TO BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

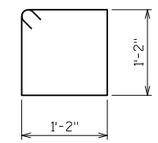
SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).



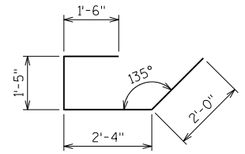
S610, S612



S502



S611, S613



S508

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

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SUPERSTRUCTURE DETAILS

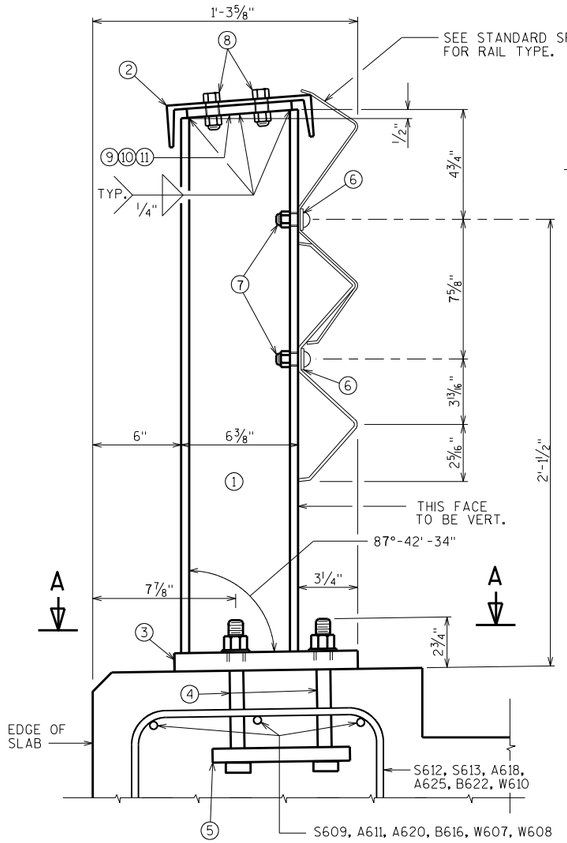
SHEET 11

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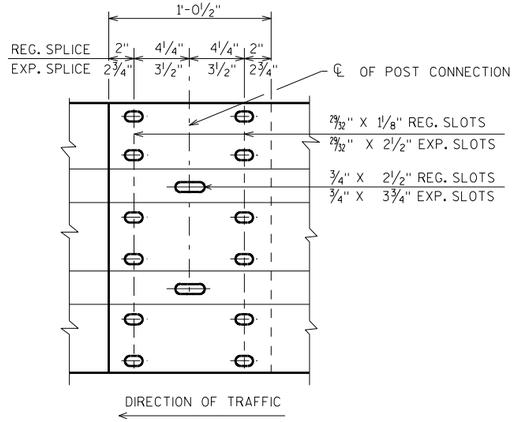
STATE PROJECT NUMBER

1491-10-71



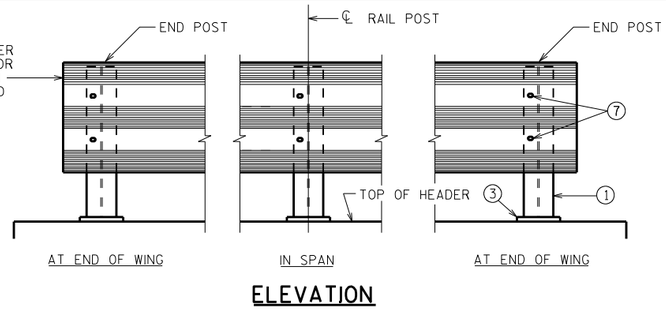
SECTION THRU RAILING

AT END POSTS, RAIL MEMBER SHALL HAVE PROVISIONS FOR A THRIE BEAM CONNECTION AS SHOWN ON SDD 14 B 20 STANDARDS.



RAIL MEMBER SPLICE

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



ELEVATION

LEGEND

① W6x25 WITH 2 - ¾" x 2½" VERT. SLOTS IN FLG. (SLOT ON OTHER SIDE OF WEB IS OPTIONAL) FOR NO. 7. CUT BOTTOM OF POST TO MATCH CROSS SLOPE OF ROADWAY. PLACE POSTS VERTICAL AND NORMAL TO GRADE LINE.

② C8x11.5 WITH ¹³⁄₁₆" DIA. HOLES FOR NO. 8.

③ BASE PLATE 1" X 9½" x 10" WITH 1⁵⁄₁₆" x 1½" SLOTTED HOLES FOR ANCHOR BOLTS NO. 4. WELD TO NO. 1 AS SHOWN.

④ A325 - ⅞" DIA. HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 14" LONG AT END POSTS AND AT POSTS ON CONCRETE SLAB SUPERSTRUCTURES WHERE THE SLAB THICKNESS IS > 15". USE 8" LONG AT ALL OTHER LOCATIONS. 4 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 3. CHAMFER TOP OF BOLTS BEFORE THREADING.

⑤ ¼" x 8" x 8" FLAT BAR WITH ¹⁵⁄₁₆" DIA. HOLES FOR ANCHOR BOLTS NO. 4.

⑥ 1¾" x 3" MOUNTING BOLT WASHER (GALVANIZED).

⑦ ⅝" DIA. BUTTON HEAD POST MOUNTING BOLT WITH ROUND WASHER AND NUT.

⑧ ⅝" DIA. x 2" HEX BOLTS WITH NUT AND TWO WASHERS EACH.

⑨ PLATE ½" x 5¾" x 6" AT BASIC POST CONNECTION. 1¼" DIA. HOLES IN PLATE. ¹³⁄₁₆" DIA. HOLES IN CHANNEL.

⑩ PLATE ½" x 5¾" x 1'-2½". 1¼" DIA. HOLES IN PLATE. ¹³⁄₁₆" DIA. HOLES IN CHANNEL. EXPANSION SLOTS ON JOINT SIDE OF POST. 1⁵⁄₁₆" x 2¼" IN PLATE. ¹³⁄₁₆" X 2¼" IN CHANNEL. (AT EXPANSION SPLICE.)

⑪ PLATE ½" x 5¾" x 11½". 1¼" DIA. HOLES IN PLATE. ¹³⁄₁₆" DIA. HOLES IN CHANNEL. (AT TYPICAL SPLICE.)

GENERAL NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE W C-38-122" WHICH INCLUDES ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUTS.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL NO. 5 SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND CHANNELS SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY SSPC SPECS.

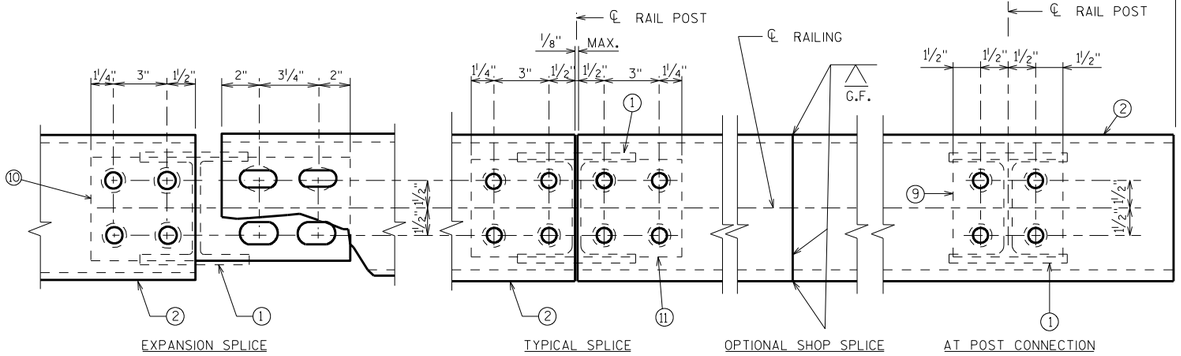
ALL MATERIAL USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO ASTM DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

FILL BOLT SLOT OPENINGS IN POST SHIMS & PLATE NO. 3 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

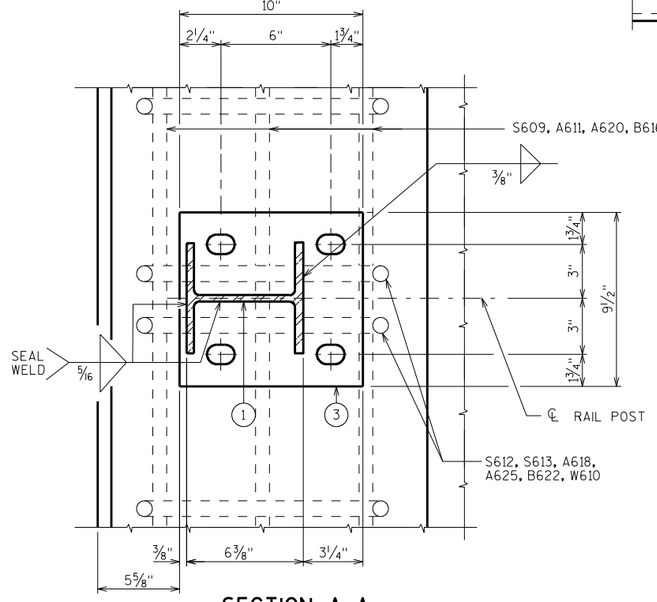
CHANNEL MEMBER SHALL BE ATTACHED CONTINUOUSLY TO A MINIMUM OF FOUR POSTS AND A MAXIMUM OF EIGHT (EXCEPT AT ABUTMENTS).

AT EXPANSION SLOTS IN RAIL AND CHANNEL MEMBERS, TIGHTEN BOLTS, BACK OFF ONE HALF TURN AND BURR THREADS. RAIL MEMBERS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC AND THE UPPER RAIL SHALL LAP THE LOWER RAIL.

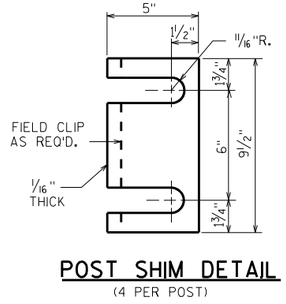
STEEL POST SHIMS MAY BE USED UNDER POSTS WHERE REQ'D. FOR ALIGNMENT.



CHANNEL MEMBER DETAILS

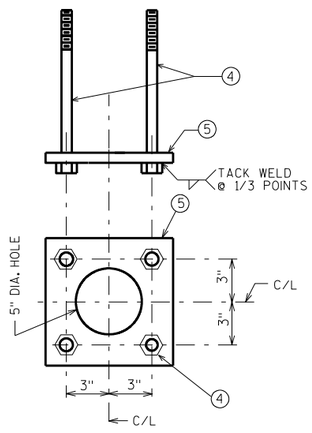


SECTION A-A



POST SHIM DETAIL

(4 PER POST)



ANCHORAGE DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

STEEL RAILING TYPE "W"

SHEET 12

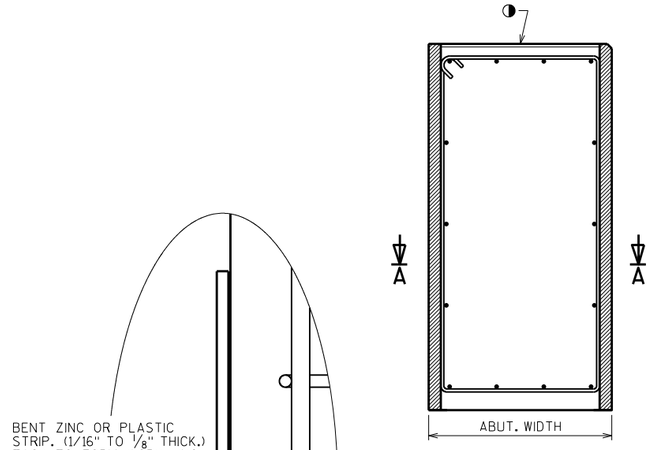
200

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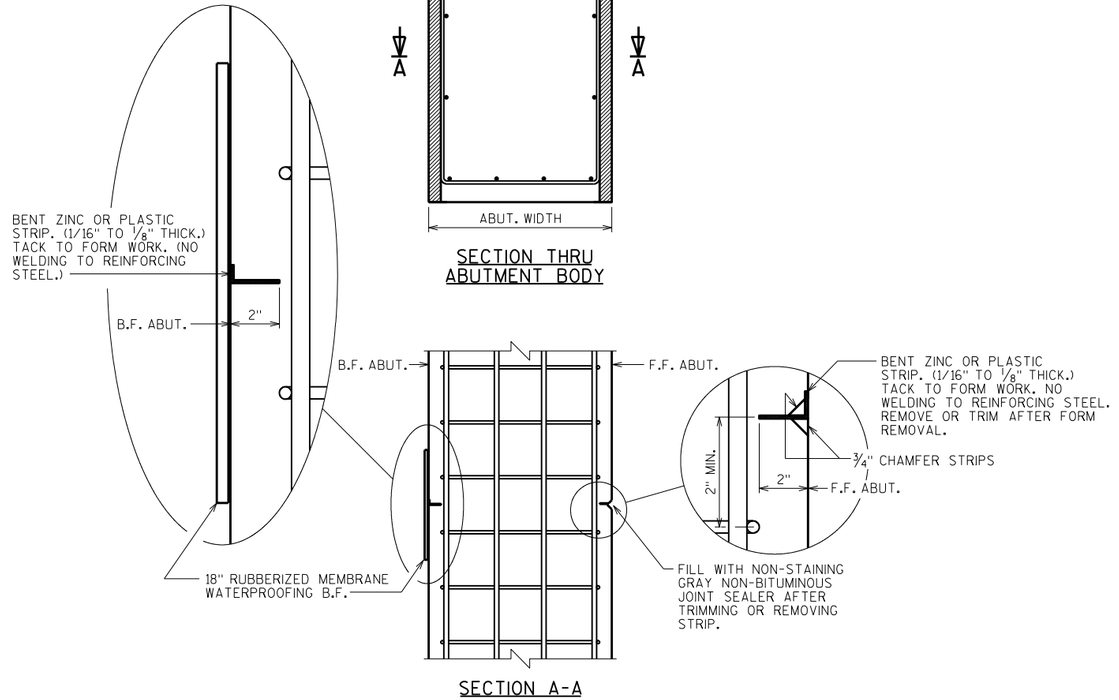
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STATE PROJECT NUMBER
1491-10-71



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-38-122

DRAWN BY ARC | PLANS CK'D. CRJ

ALTERNATE CONSTRUCTION JOINT

SHEET 13

201

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SCALE = 1.0

EARTHWORK - USH 141 AT CTH P

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV / UNUSABLE PAVT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV / UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
1316+00.00		0	4	0						
1316+50.00	50	2	4	5	2	7	4	2	5	-10.77
1316+62.00	12	22	0	4	5	1	2	7	8	-8.61
1317+00.00	38	20	4	4	30	3	6	37	15	11.37
1317+23.00	23	18	0	5	16	2	4	54	20	20.89
1317+50.00	27	52	4	6	35	2	6	88	27	46.71
1318+00.00	50	59	4	4	102	7	10	191	39	129.55
1318+11.00	11	56	0	4	23	1	2	214	41	150.10
1318+50.00	39	52	4	3	79	3	5	293	47	219.51
1318+57.00	7	68	0	0	16	1	0	308	48	234.01
1319+00.00	43	66	4	2	107	3	2	416	51	334.94
1319+50.00	50	71	4	6	127	7	7	543	60	445.59
1319+56.50	7	76	0	4	18	0	1	561	62	461.30
1319+57.00	1	42	0	3	1	0	0	562	62	462.31
1320+00.00	43	46	4	0	70	3	3	632	65	525.87
1320+50.00	50	65	4	0	103	7	0	735	66	621.13
1320+86.50	37	91	0	0	106	3	0	841	66	724.22
1320+87.00	1	172	0	0	2	0	0	843	66	726.66
1321+00.00	13	218	4	0	94	1	0	937	66	819.74
1321+11.50	12	231	0	0	96	1	0	1,033	66	914.57
1321+12.00	1	51	0	0	3	0	0	1,036	66	917.19
1321+50.00	38	74	4	0	88	3	0	1,123	66	1,002.31
1322+00.00	50	52	4	0	116	7	0	1,240	66	1,111.39
1322+41.50	42	45	0	2	75	3	2	1,315	68	1,181.23
1322+42.00	1	57	0	2	1	0	0	1,316	68	1,182.13
1322+50.00	8	55	4	2	17	1	1	1,333	69	1,197.39
1323+00.00	50	47	4	2	94	7	4	1,427	74	1,279.16
1323+44.00	44	48	0	0	77	3	2	1,504	76	1,350.42
1323+50.00	6	28	4	1	8	0	0	1,512	76	1,358.28
1323+87.00	37	29	0	2	39	3	2	1,552	78	1,392.82
1324+00.00	13	29	4	1	14	1	1	1,566	79	1,405.25
1324+50.00	50	24	0	0	49	4	1	1,615	80	1,449.86
1324+71.00	21	24	0	0	19	0	0	1,633	80	1,468.48
1325+00.00	29	22	4	0	25	2	0	1,658	80	1,490.94
1325+36.00	36	21	0	0	28	3	0	1,686	80	1,516.67
1325+50.00	14	1	4	0	6	1	0	1,692	80	1,521.19
SUBTOTAL:					1,692	91	64			

EARTHWORK - USH 141 AT 18TH RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV / UNUSABLE PVMT MATERIALS SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV / UNUSABLE PVMT MATERIALS CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
1379+00.00		2	0	2						
1379+50.00	50	3	0	8	4	0	10	4	12	-7.74
1379+84.50	35	5	0	5	5	0	9	9	23	-13.62
1379+85.50	1	23	0	3	1	0	0	10	23	-13.29
1380+00.00	15	23	2	0	12	1	1	22	24	-2.39
1380+50.00	50	22	2	0	42	4	0	65	24	36.13
1380+73.00	23	25	0	0	20	1	0	85	24	55.67
1381+00.00	27	28	2	0	27	1	0	112	24	81.28
1381+35.50	36	27	0	0	36	1	0	148	24	115.96
1381+50.00	15	27	2	0	15	1	0	162	24	129.93
1382+00.00	50	29	2	0	52	4	0	215	25	178.27
1382+50.00	50	31	2	0	56	4	0	270	25	230.29
1383+00.00	50	30	2	0	57	4	0	327	25	283.23
1383+50.00	50	31	2	0	56	4	0	384	26	335.50
1384+00.00	50	31	2	0	57	4	0	441	26	388.25
1384+35.50	36	31	0	0	41	1	0	481	26	427.57
1384+36.50	1	22	0	0	1	0	0	482	26	428.56
1384+50.00	14	23	2	0	11	1	0	494	26	439.33
1385+00.00	50	21	2	0	40	4	0	534	26	475.83
1385+50.00	50	19	2	0	37	4	0	571	26	508.87
1385+65.50	16	19	0	0	11	1	0	581	26	519.11
1385+66.50	1	21	0	9	1	0	0	582	26	519.65
1386+00.00	34	19	2	9	25	1	11	607	40	529.53
1386+35.00	35	19	0	6	25	1	10	632	52	540.99
1386+50.00	15	20	2	7	11	1	4	643	56	546.78
1386+67.50	18	19	0	12	13	1	6	655	64	551.11
1386+68.50	1	3	0	15	0	0	0	655	65	550.89
1387+00.00	32	2	2	18	3	1	20	658	89	528.07
1387+50.00	50	1	2	21	3	4	37	662	135	481.93
1388+00.00	50	1	2	12	2	4	30	664	173	442.45
1388+50.00	50	4	2	7	5	4	18	669	195	421.43
1389+00.00	50	3	0	2	6	2	9	675	206	414.91
1389+50.00	50	2	0	1	4	0	3	679	210	415.07
				SUBTOTAL:	679	54	168			

EARTHWORK - USH 141 AT 22ND RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV / UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV / UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
1432+50.00		5		0						
1432+89.50	40	6	0	0	8	0	0	8	0	8.49
1432+90.50	1	26	0	0	1	0	0	9	0	9.09
1433+00.00	10	26	2	0	9	0	0	18	0	18.02
1433+50.00	50	21	2	26	44	4	24	62	30	28.12
1433+84.50	35	23	0	0	28	1	17	90	51	34.16
1433+85.50	1	44	0	0	1	0	0	92	51	35.40
1434+00.00	15	44	2	0	23	1	0	115	51	58.16
1434+24.50	25	44	0	2	40	1	1	155	53	95.57
1434+50.00	26	53	2	0	46	1	1	201	54	139.19
1434+85.00	35	68	0	0	78	1	0	279	54	216.27
1434+86.00	1	46	0	0	2	0	0	282	54	218.37
1435+00.00	14	48	2	0	24	1	0	306	54	242.28
1435+50.00	50	48	2	0	89	4	0	395	54	328.04
1436+00.00	50	41	2	0	82	4	0	478	54	406.61
1436+15.50	16	39	0	0	23	1	0	500	54	428.80
1436+16.50	1	49	0	0	2	0	0	502	54	430.42
1436+50.00	34	48	2	0	60	1	0	562	54	489.19
1437+00.00	50	45	0	0	86	2	0	648	55	572.91
1437+50.00	50	43	2	1	82	2	1	730	56	651.00
1437+95.00	45	41	0	2	70	2	2	800	59	716.98
1437+96.00	1	22	0	2	1	0	0	801	59	718.05
1438+00.00	4	21	2	2	3	0	0	804	59	720.74
1438+50.00	50	21	2	4	39	4	5	843	66	749.73
1439+00.00	50	23	2	5	41	4	8	884	76	776.06
1439+12.50	13	25	0	3	11	0	2	895	79	784.24
1439+50.00	38	29	2	0	37	1	2	932	81	817.66
1439+93.50	44	24	0	0	43	2	0	975	81	858.83
1440+00.00	7	25	2	0	6	0	0	981	81	864.49
1440+50.00	50	25	2	0	46	4	0	1,027	81	907.28
1440+63.50	14	26	0	0	13	1	0	1,040	81	919.49
1440+64.50	1	5	0	0	1	0	0	1,041	81	920.07
1441+00.00	36	0	2	0	3	1	0	1,044	81	922.21
1441+50.00	50	0	2	0	0	4	0	1,044	81	918.51
				SUBTOTAL:	1,044	45	65			

EARTHWORK - USH 141 AT 24TH RD

STATION	DISTANCE	END AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		MASS ORDINATE
			SALV/UNUSABLE			SALV/UNUSABLE			1.25	
		CUT	PVMT MATERIAL	FILL	CUT	PVMT MATERIAL	FILL	CUT	EXP. FILL	
	FT	SF	SF	SF	CY	CY	CY	CY	CY	CY
1477+50.00		0	0	0						
1478+00.00	50	3	2	0	2	2	0	2	0	0.59
1478+50.00	50	4	2	0	6	4	0	8	0	2.81
1478+52.25	2	21	0	0	1	0	0	9	0	3.77
1479+00.00	48	21	2	0	38	2	0	47	0	39.73
1479+44.00	44	0	0	0	17	2	0	64	0	55.37
1479+44.75	1	28	0	0	0	0	0	65	0	55.76
1479+45.75	1	18	0	0	1	0	0	66	0	56.60
1479+50.00	4	18	2	0	3	0	0	68	0	59.22
1480+00.00	50	22	2	0	36	4	0	105	0	91.97
1480+50.00	50	18	2	0	37	4	0	142	0	125.12
1480+75.00	25	19	0	0	17	1	0	159	0	141.41
1480+75.25	0	0	0	0	0	0	0	159	0	141.49
1480+76.00	1	29	0	0	0	0	0	159	0	141.90
1481+00.00	24	27	2	0	25	1	0	185	0	166.09
1481+18.75	19	26	0	0	18	1	0	203	0	183.76
1481+50.00	31	26	2	0	30	1	0	233	0	212.26
1481+95.00	45	23	0	0	41	2	0	273	0	251.11
1482+00.00	5	3	2	0	2	0	0	275	0	253.33
1482+50.00	50	2	2	0	5	4	0	280	0	254.58
1483+00.00	50	0	2	0	2	4	0	283	0	253.02
				SUBTOTAL:	283	30	0			

EARTHWORK - USH 141 (LEFT FOOT CREEK PASSING LANE)

STATION	DISTANCE	END AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		MASS ORDINATE
		CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	1.25 EXP. FILL	
	FT	SF	SF	SF	CY	CY	CY	CY	CY	CY
1486+00.00		0	0	0						
1486+50.00	50	10	3	0	9	3	0	9	0	5.44
1486+50.85	1	50	0	0	1	0	0	10	0	6.32
1487+00.00	49	46	3	0	87	3	0	97	1	89.95
1487+50.00	50	39	3	2	79	6	2	176	4	159.89
1488+00.00	50	38	3	5	72	6	6	247	12	217.22
1488+50.00	50	39	3	8	72	6	12	319	27	267.90
1489+00.00	50	40	3	7	73	6	13	393	44	318.27
1489+50.00	50	40	3	5	74	6	10	467	57	372.87
1490+00.00	50	42	3	4	75	6	8	542	67	432.03
1490+50.00	50	45	3	3	80	6	7	622	75	497.54
1491+00.00	50	49	3	3	87	6	5	709	81	571.61
1491+50.00	50	49	3	2	91	6	5	800	87	650.52
1492+00.00	50	52	3	2	94	6	4	893	92	733.31
1492+50.00	50	54	3	2	98	6	4	991	97	820.17
1492+51.00	1	51	0	0	2	0	0	993	97	821.99
1493+00.00	49	51	3	0	92	3	0	1,085	97	911.36
1493+50.00	50	54	3	0	98	6	0	1,183	97	1,002.78
1493+70.00	20	53	0	0	40	1	0	1,223	97	1,041.43
1493+71.00	1	54	0	6	2	0	0	1,225	97	1,043.28
1494+00.00	29	53	3	3	58	2	5	1,283	103	1,093.08
1494+50.00	50	52	3	3	97	6	5	1,379	109	1,177.70
1495+00.00	50	54	3	4	98	6	6	1,477	116	1,261.90
1495+50.00	50	58	3	0	104	6	4	1,581	121	1,354.95
1496+00.00	50	65	3	0	114	6	1	1,695	121	1,462.46
1496+50.00	50	64	3	0	120	6	0	1,815	122	1,575.90
1497+00.00	50	65	3	0	120	6	0	1,934	122	1,689.12
1497+50.00	50	61	3	0	117	6	0	2,051	122	1,799.24
1498+00.00	50	56	3	1	108	6	1	2,160	123	1,900.51
1498+50.00	50	57	3	0	104	6	1	2,264	124	1,997.50
1499+00.00	50	61	3	0	109	6	0	2,373	124	2,100.27
1499+50.00	50	60	3	0	113	6	0	2,485	124	2,206.69
1500+00.00	50	65	3	0	117	6	0	2,602	124	2,316.95
1500+50.00	50	68	3	0	123	6	0	2,725	124	2,434.07
1501+00.00	50	68	3	0	126	6	0	2,851	124	2,553.79
1518+00.00	36	0	3	0	46	5	0	2,897	121	2,595.27
1518+50.00	50	51	3	1	47	6	1	2,944	122	2,635.21
1519+00.00	50	54	3	1	97	6	1	3,041	123	2,724.38
1519+50.00	50	53	3	1	99	6	1	3,140	124	2,815.91
1520+00.00	50	53	3	1	99	6	1	3,239	125	2,906.48
1520+50.00	50	54	3	1	99	6	2	3,338	126	2,997.13
1521+00.00	50	53	3	1	99	6	2	3,436	126	3,087.24
1521+50.00	50	50	3	2	96	6	3	3,532	127	3,173.22
1522+00.00	50	45	3	2	88	6	4	3,620	129	3,250.66
1522+50.00	50	52	3	2	90	6	4	3,710	129	3,329.35
1523+00.00	50	46	3	10	90	6	11	3,800	143	3,399.12
1523+50.00	50	50	3	6	88	6	15	3,889	162	3,462.81
				SUBTOTAL:	3,889	246	144			

EARTHWORK - USH 141 (LEFT FOOT CREEK PASSING LANE)

STATION	DISTANCE	END AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		MASS ORDINATE
		CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	1.25 EXP. FILL	
	FT	SF	SF	SF	CY	CY	CY	CY	CY	CY
1524+00.00	50	53	3	1	95	6	6	3,984	170	3,543.75
1524+50.00	50	60	3	2	105	6	3	4,089	174	3,638.55
1525+00.00	50	42	3	13	95	6	13	4,183	190	3,710.31
1525+50.00	50	35	3	13	72	6	24	4,255	220	3,745.63
1525+93.00	43	36	0	13	57	3	21	4,311	246	3,773.51
1526+00.00	7	36	3	15	9	0	4	4,321	251	3,778.00
1526+50.00	50	42	3	14	72	6	27	4,393	284	3,810.96
1526+87.00	37	35	0	21	52	2	24	4,445	314	3,831.41
1527+00.00	13	34	3	25	17	1	11	4,462	327	3,833.39
1527+22.00	22	94	0	41	52	1	27	4,514	362	3,850.35
1527+50.00	28	99	3	46	100	2	45	4,615	418	3,892.49
1527+72.00	22	99	0	48	81	1	38	4,696	466	3,924.41
1528+00.00	28	96	3	51	101	2	52	4,797	530	3,959.69
1528+19.00	19	102	0	53	70	1	37	4,867	576	3,982.43
1528+50.00	31	86	3	50	108	2	59	4,975	650	4,014.84
1528+51.00	1	111	0	42	4	0	2	4,979	652	4,016.29
1528+68.00	17	95	0	22	65	0	20	5,043	677	4,055.92
1528+78.00	10	108	0	26	38	0	9	5,081	688	4,082.56
1529+00.00	22	71	3	30	73	1	23	5,154	716	4,126.03
1529+15.00	15	3	0	0	20	1	8	5,175	726	4,135.32
1529+21.00	6	1	0	0	0	0	0	5,175	726	4,135.70
1529+50.00	29	73	3	16	40	2	9	5,215	737	4,162.60
1529+62.00	12	74	0	16	33	1	7	5,247	746	4,185.55
1529+80.50	19	77	0	15	52	0	10	5,299	759	4,224.10
1529+81.50	1	77	0	30	3	0	1	5,302	761	4,225.92
1529+84.00	3	76	0	31	7	0	3	5,309	764	4,229.52
1529+85.00	1	48	0	35	2	0	1	5,311	766	4,230.29
1530+00.00	15	51	3	35	28	1	20	5,339	790	4,232.44
1530+32.00	32	56	0	35	64	2	42	5,403	843	4,241.64
1530+50.00	18	53	3	29	37	1	22	5,439	870	4,250.04
1530+64.00	14	51	0	25	27	1	14	5,466	887	4,258.50
1531+00.00	36	53	3	22	70	2	32	5,536	927	4,286.43
1531+15.00	15	57	0	20	31	1	12	5,566	941	4,301.54
1531+50.00	35	46	3	10	66	2	20	5,633	966	4,341.28
1531+63.00	13	57	0	7	25	1	4	5,657	971	4,360.01
1532+00.00	37	42	3	12	68	2	12	5,725	987	4,409.72
1532+45.00	45	41	0	11	69	3	19	5,794	1,010	4,452.72
1532+50.00	5	41	3	11	8	0	2	5,802	1,013	4,457.46
1533+00.00	50	42	3	10	77	6	19	5,879	1,037	4,504.43
1533+50.00	50	41	3	8	77	6	16	5,956	1,057	4,555.25
1534+00.00	50	47	3	5	81	6	12	6,038	1,072	4,615.70
1534+50.00	50	53	3	6	92	6	10	6,129	1,084	4,689.09
1535+00.00	50	55	3	9	100	6	14	6,229	1,101	4,765.05
1535+50.00	50	48	3	9	96	6	17	6,325	1,123	4,833.09
1536+00.00	50	43	3	9	84	6	16	6,409	1,143	4,890.41
1536+50.00	50	52	3	3	87	6	11	6,496	1,157	4,957.90
1537+00.00	50	58	3	1	101	6	4	6,597	1,162	5,047.94
1537+50.00	50	54	3	7	103	6	7	6,700	1,171	5,135.45
1538+00.00	50	44	3	9	91	6	14	6,791	1,189	5,202.22
				SUBTOTAL:	2,902	136	821			

EARTHWORK - USH 141 (LEFT FOOT CREEK PASSING LANE)

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
1538+50.00	50	44	3	8	82	6	15	6,872	1,208	5,258.60
1539+00.00	50	44	3	8	81	6	14	6,953	1,225	5,315.42
1539+50.00	50	40	3	9	77	6	16	7,030	1,245	5,366.79
1540+00.00	50	49	3	3	82	6	12	7,112	1,259	5,427.93
1540+50.00	50	47	3	3	89	6	6	7,201	1,267	5,503.26
1541+00.00	50	41	3	8	82	6	10	7,282	1,280	5,565.79
1541+50.00	50	39	3	14	74	6	20	7,357	1,305	5,608.39
1542+00.00	50	40	3	10	72	6	22	7,429	1,332	5,647.58
1542+50.00	50	42	3	8	75	6	17	7,505	1,353	5,695.61
1543+00.00	50	41	3	13	77	6	20	7,581	1,378	5,741.00
1543+50.00	50	43	3	4	77	6	16	7,659	1,398	5,792.16
1544+00.00	50	45	3	4	82	6	8	7,740	1,408	5,857.93
1544+50.00	50	42	3	4	81	6	8	7,821	1,418	5,922.63
1545+00.00	50	41	3	4	77	6	8	7,898	1,428	5,983.72
1545+50.00	50	46	3	1	80	6	5	7,978	1,434	6,051.67
1546+00.00	50	40	3	8	79	6	8	8,057	1,445	6,113.85
1546+50.00	50	37	3	7	71	6	13	8,128	1,462	6,161.71
1547+00.00	50	37	3	8	68	6	14	8,197	1,479	6,206.84
1547+50.00	50	38	3	4	69	6	12	8,266	1,493	6,255.48
1548+00.00	50	36	3	7	68	6	11	8,334	1,506	6,304.58
1548+50.00	50	39	3	7	70	6	13	8,404	1,522	6,352.52
1549+00.00	50	41	3	7	74	6	13	8,478	1,538	6,404.35
1549+50.00	50	37	3	11	72	6	17	8,550	1,559	6,449.46
1550+00.00	50	35	3	14	67	6	23	8,617	1,587	6,482.14
1550+50.00	50	37	3	14	67	6	25	8,684	1,618	6,511.55
1551+00.00	50	41	3	7	72	6	19	8,756	1,642	6,553.23
1551+50.00	50	42	3	9	77	6	15	8,833	1,661	6,605.80
1552+00.00	50	40	3	12	77	6	19	8,910	1,684	6,653.00
1552+50.00	50	38	3	11	72	6	21	8,982	1,710	6,693.03
1553+00.00	50	38	3	9	70	6	19	9,052	1,734	6,732.92
1553+50.00	50	38	3	9	70	6	18	9,122	1,756	6,775.11
1554+00.00	50	39	3	8	72	6	16	9,194	1,776	6,820.04
1554+50.00	50	37	3	13	70	6	19	9,264	1,800	6,859.76
1555+00.00	50	35	3	16	66	6	26	9,330	1,833	6,886.67
1555+50.00	50	36	3	11	65	6	25	9,395	1,864	6,914.66
1556+00.00	50	42	3	8	72	6	17	9,467	1,886	6,959.01
1556+50.00	50	44	3	6	80	6	12	9,547	1,901	7,017.05
1557+00.00	50	42	3	5	80	6	10	9,627	1,914	7,078.07
1557+50.00	50	42	3	3	78	6	8	9,705	1,924	7,139.82
1558+00.00	50	45	3	4	80	6	7	9,785	1,933	7,204.99
1558+50.00	50	51	3	1	88	6	5	9,873	1,939	7,280.59
1559+00.00	50	54	3	1	97	6	2	9,970	1,942	7,368.99
1559+50.00	50	55	3	1	101	6	2	10,072	1,944	7,461.34
1560+00.00	50	63	3	0	109	6	2	10,180	1,946	7,562.02
1560+50.00	50	63	3	1	116	6	1	10,296	1,948	7,670.19
1561+00.00	50	56	3	4	110	6	4	10,407	1,953	7,768.90
1561+50.00	50	48	3	4	97	6	7	10,503	1,962	7,850.82
1562+00.00	50	56	3	3	97	6	6	10,600	1,970	7,933.71
1562+50.00	50	48	3	2	96	6	5	10,697	1,976	8,018.00
				SUBTOTAL:	3,906	303	630			

EARTHWORK - USH 141 (LEFT FOOT CREEK PASSING LANE)

STATION	DISTANCE	END AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		MASS ORDINATE
		CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	1.25 EXP. FILL	
	FT	SF	SF	SF	CY	CY	CY	CY	CY	CY
1563+00.00	50	45	3	2	86	6	4	10,783	1,980	8,092.96
1563+50.00	50	47	3	3	85	6	5	10,868	1,986	8,165.85
1564+00.00	50	48	3	6	88	6	9	10,955	1,998	8,235.90
1564+11.00	11	45	0	6	19	1	3	10,974	2,001	8,250.93
1564+12.00	1	43	0	2	2	0	0	10,976	2,001	8,252.38
1564+50.00	38	45	3	2	62	2	3	11,038	2,004	8,309.22
1565+00.00	50	50	3	1	88	6	2	11,126	2,007	8,388.04
1565+49.00	49	43	0	1	84	3	1	11,211	2,009	8,467.64
1565+50.00	1	44	3	6	2	0	0	11,212	2,009	8,469.03
1566+00.00	50	42	3	3	80	6	9	11,292	2,020	8,531.57
1566+50.00	50	41	3	6	77	6	8	11,369	2,030	8,592.32
1567+00.00	50	41	3	9	76	6	14	11,445	2,047	8,645.18
1567+50.00	50	40	3	12	75	6	20	11,520	2,072	8,689.05
1568+00.00	50	46	3	9	80	6	20	11,600	2,097	8,737.97
1568+50.00	50	44	3	6	84	6	14	11,684	2,115	8,797.87
1569+00.00	50	52	3	1	89	6	7	11,773	2,124	8,872.51
1569+50.00	50	43	3	1	88	6	2	11,861	2,126	8,951.84
1570+00.00	50	45	3	3	82	6	4	11,943	2,131	9,021.83
1570+50.00	50	50	3	1	88	6	4	12,031	2,136	9,099.33
1571+00.00	50	42	3	12	85	6	12	12,116	2,151	9,163.20
1571+50.00	50	38	3	20	74	6	30	12,190	2,188	9,193.54
1572+00.00	50	37	3	18	70	6	35	12,260	2,231	9,213.84
1572+50.00	50	38	3	20	70	6	35	12,330	2,275	9,233.93
1573+00.00	50	43	3	20	75	6	37	12,405	2,321	9,256.58
1573+50.00	50	48	3	19	84	6	36	12,489	2,367	9,289.05
1574+00.00	50	48	3	4	88	6	21	12,577	2,393	9,344.59
1574+50.00	50	57	3	8	97	6	11	12,673	2,406	9,421.74
1575+00.00	50	53	3	6	101	6	13	12,774	2,422	9,500.38
1575+50.00	50	57	3	7	101	6	12	12,876	2,438	9,579.73
1576+00.00	50	62	3	13	109	6	19	12,985	2,462	9,659.29
1576+50.00	50	52	3	13	105	6	25	13,090	2,493	9,727.17
1577+00.00	50	44	3	10	88	6	22	13,178	2,520	9,781.84
1577+50.00	50	40	3	18	78	6	26	13,256	2,553	9,821.17
1578+00.00	50	43	3	18	78	6	32	13,334	2,593	9,851.96
1578+50.00	50	44	3	15	81	6	30	13,415	2,631	9,889.18
1579+00.00	50	45	3	13	82	6	26	13,497	2,663	9,933.02
1579+50.00	50	43	3	23	81	6	33	13,578	2,704	9,967.23
1580+00.00	50	42	3	21	79	6	40	13,658	2,754	9,990.39
1580+50.00	50	41	3	10	77	6	28	13,735	2,789	10,026.10
1581+00.00	50	44	3	2	79	6	12	13,814	2,804	10,084.04
1581+50.00	50	44	3	1	81	6	4	13,895	2,808	10,154.57
1582+00.00	50	42	3	5	79	6	6	13,974	2,815	10,220.85
1582+50.00	50	42	3	3	77	6	7	14,051	2,824	10,283.31
1583+00.00	50	39	3	2	74	6	5	14,126	2,830	10,345.63
1583+50.00	50	38	3	3	71	6	5	14,197	2,835	10,404.68
1584+00.00	50	37	3	4	69	6	6	14,266	2,843	10,459.85
1584+50.00	50	35	3	2	66	6	6	14,332	2,850	10,512.69
1584+56.00	6	34	0	3	8	0	1	14,339	2,850	10,519.31
1584+57.00	1	0	0	9	1	0	0	14,340	2,851	10,519.67
				SUBTOTAL:	3,643	266	700			
				GRAND TOTAL:	14,340	951	2,295			

EARTHWORK - USH 141 AT AIRPORT ROAD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV / UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME Cut CUT CY	INCREMENTAL VOLUME SALV / UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
1585+50.00		5	0	1						
1585+85.00	35	5	0	1	6	0	2	6	2	6.39
1585+87.00	2	23	0	0	1	0	0	7	2	7.36
1586+00.00	13	22	5	0	11	1	0	18	2	17.06
1586+50.00	50	25	5	0	44	9	0	62	2	51.51
1586+75.70	26	24	0	0	24	2	0	86	2	72.64
1587+00.00	24	24	5	0	22	2	0	107	2	92.13
1587+37.00	37	34	0	1	40	3	1	147	3	127.31
1587+50.00	13	30	5	1	15	1	0	162	4	140.74
1588+00.00	50	26	5	0	51	9	1	213	5	181.53
1588+50.00	50	34	5	0	55	9	0	269	5	227.51
1589+00.00	50	28	5	0	58	9	0	326	5	276.16
1589+50.00	50	22	5	3	47	9	3	373	9	309.77
1589+52.00	2	22	0	3	2	0	0	375	9	310.88
1589+54.00	2	39	0	14	2	0	1	377	10	312.31
1589+93.45	39	40	0	23	58	0	27	434	43	336.29
1590+00.00	7	42	5	15	10	1	5	444	49	339.91
1590+36.50	37	52	0	2	64	3	12	508	64	385.08
1590+37.50	1	49	0	0	2	0	0	510	64	386.88
1590+50.00	13	54	5	0	24	1	0	533	64	409.34
1590+53.50	4	53	0	0	7	0	0	540	64	415.92
1590+54.50	1	39	0	0	2	0	0	542	64	417.62
1591+00.00	46	44	5	0	70	4	0	612	64	483.31
1591+50.00	50	37	5	0	75	9	0	687	64	549.05
1591+66.50	17	41	0	0	24	2	0	711	64	571.44
1591+67.50	1	46	0	0	2	0	0	712	64	573.05
1591+82.50	15	44	0	0	25	0	0	738	64	598.12
1591+83.50	1	61	0	0	2	0	0	740	64	600.08
1592+00.00	17	54	5	0	35	2	0	775	64	633.67
1592+27.00	27	45	0	2	49	3	1	824	66	679.01
1592+50.00	23	44	5	4	38	2	3	862	69	711.49
1592+66.80	17	45	0	3	28	2	2	890	72	734.93
1592+67.80	1	27	0	3	1	0	0	891	72	736.11
1593+00.00	32	25	5	2	31	3	3	922	76	760.32
1593+50.00	50	25	5	0	47	9	2	969	78	795.91
1594+00.00	50	32	5	0	53	9	0	1,022	78	840.10
1594+50.00	50	35	5	0	62	9	0	1,084	78	892.90
1594+83.00	33	33	0	0	41	3	0	1,126	78	931.31
1595+00.00	17	29	5	0	19	2	0	1,145	78	949.23
1595+44.00	44	25	0	0	44	4	0	1,189	78	988.87
1595+50.00	6	25	5	0	5	1	0	1,195	78	993.80
1596+00.00	50	27	5	0	48	9	0	1,242	78	1,032.04
1596+33.00	33	30	0	0	35	3	0	1,277	78	1,063.76
1596+34.00	1	11	0	0	1	0	0	1,278	78	1,064.52
1596+50.00	16	10	0	0	6	0	0	1,284	78	1,070.83
SUBTOTAL:					1,284	137	62			

EARTHWORK - WEST CTH P

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
17+50.00		0	0	0						
17+69.50	20	0	0	0	0	0	0	0	0	0.00
17+70.50	1	54	0	0	1	0	0	1	0	0.99
18+00.00	30	56	11	15	60	6	8	61	10	44.55
18+30.00	30	59	11	5	64	12	11	124	24	82.34
18+50.00	20	57	11	6	43	8	4	168	29	112.27
19+00.00	50	47	11	2	97	20	7	264	38	179.24
19+14.75	15	47	14	3	26	7	1	290	40	196.40
19+15.50	1	45	14	6	1	0	0	291	40	197.15
19+50.00	35	70	28	6	73	27	7	364	49	234.35
19+60.00	10	74	36	25	27	12	6	391	57	241.81
19+70.00	10	153	46	8	42	15	6	433	64	260.88
19+74.50	5	159	58	0	26	9	1	459	65	277.41
			SUBTOTAL:		459	117	52			

EARTHWORK - EAST CTH P

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
20+24.46		185	46	0						
20+35.46	11	125	34	18	63	16	4	63	5	42.10
20+42.46	7	82	26	48	27	8	9	90	15	50.40
20+50.00	8	100	18	61	25	6	15	115	34	50.58
20+66.00	16	72	11	73	51	9	40	166	84	43.16
20+88.00	22	69	11	38	58	9	45	224	141	35.29
21+00.00	12	96	10	34	37	5	16	260	161	47.41
21+25.00	25	77	10	26	80	9	28	340	195	83.68
21+50.00	25	62	9	18	64	9	20	405	220	113.77
21+75.00	25	63	9	21	58	8	18	463	243	141.06
22+00.00	25	58	9	7	56	8	13	519	259	172.97
22+39.00	39	36	9	0	69	13	5	588	266	222.16
22+50.00	11	0	0	0	7	2	0	595	266	227.76
			SUBTOTAL:		595	102	213			

EARTHWORK - 18TH RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
25+24.25		134	54	0						
25+40.00	16	60	17	50	57	21	15	57	18	17.94
25+50.00	10	29	13	90	17	5	26	73	51	-3.37
25+66.50	17	15	11	49	13	7	42	86	104	-50.33
25+75.00	9	14	9	33	4	3	13	91	120	-65.10
25+88.00	13	14	10	20	7	4	13	98	136	-78.81
26+00.00	12	22	9	13	8	4	7	106	145	-83.94
26+50.00	50	39	8	4	57	16	16	162	165	-63.15
26+96.40	46	40	5	0	68	12	4	230	169	-12.02
27+00.00	4	0	0	0	3	0	0	233	169	-9.73
				SUBTOTAL:	233	73	135			

EARTHWORK - 22ND RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
38+48.00		0	0	0						
38+49.25	1	59	10	0	1	0	0	1	0	1.13
38+50.00	1	61	10	0	2	0	0	3	0	2.52
38+70.68	21	63	11	0	47	8	0	50	0	42.08
39+00.00	29	70	13	0	72	13	0	123	0	101.44
39+13.75	14	70	15	6	36	7	1	158	2	128.25
39+32.65	19	71	15	30	49	10	12	208	17	151.73
39+44.21	12	89	17	43	34	7	16	242	37	159.81
39+50.00	6	100	18	19	20	4	7	262	45	168.03
39+60.00	10	134	26	5	43	8	4	305	51	197.68
39+65.00	5	156	32	3	27	5	1	332	51	218.32
39+70.00	5	198	40	1	33	7	0	365	52	244.00
39+76.00	6	340	73	0	60	13	0	425	52	291.09
				SUBTOTAL:	425	82	42			

EARTHWORK - 24TH RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
48+00.00		0	0	0						
48+38.50	39	52	8	0	37	6	0	37	0	31.30
48+50.00	12	53	8	0	22	3	0	59	0	50.33
49+00.00	50	31	11	0	78	18	0	137	0	110.41
49+18.00	18	28	13	17	20	8	6	157	8	114.86
49+39.00	21	43	14	13	28	11	11	185	22	117.71
49+50.00	11	59	16	8	21	6	4	206	27	127.10
49+55.00	5	75	18	7	12	3	1	218	29	134.61
49+60.00	5	95	19	3	16	3	1	234	30	145.74
49+65.00	5	117	21	3	20	4	1	253	31	160.92
49+70.00	5	141	23	2	24	4	0	277	31	180.12
49+75.00	5	157	33	0	28	5	0	305	32	202.27
49+78.00	3	219	56	0	21	5	0	326	32	218.25
				SUBTOTAL:	326	76	25			

EARTHWORK - 26TH RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
50+28.75		135	94	0						
50+35.00	6	41	46	1	20	16	0	20	0	3.99
50+40.00	5	25	30	33	6	7	3	26	4	-0.96
50+50.00	10	10	0	45	6	6	15	33	22	-18.23
50+60.00	10	5	0	36	3	0	15	36	41	-34.17
50+70.00	10	5	0	30	2	0	12	38	57	-47.71
50+87.21	17	0	0	0	1	0	10	39	69	-58.25
51+00.00	13	10	0	13	2	0	3	41	72	-59.77
51+50.00	50	26	0	3	33	0	14	75	90	-44.51
51+56.75	7	29	0	2	7	0	1	82	91	-38.42
51+57.75	1	29	0	2	1	0	0	83	91	-37.46
52+00.00	42	0	0	0	23	0	2	105	94	-17.06
				SUBTOTAL:	105	29	75			

EARTHWORK - 32ND RD

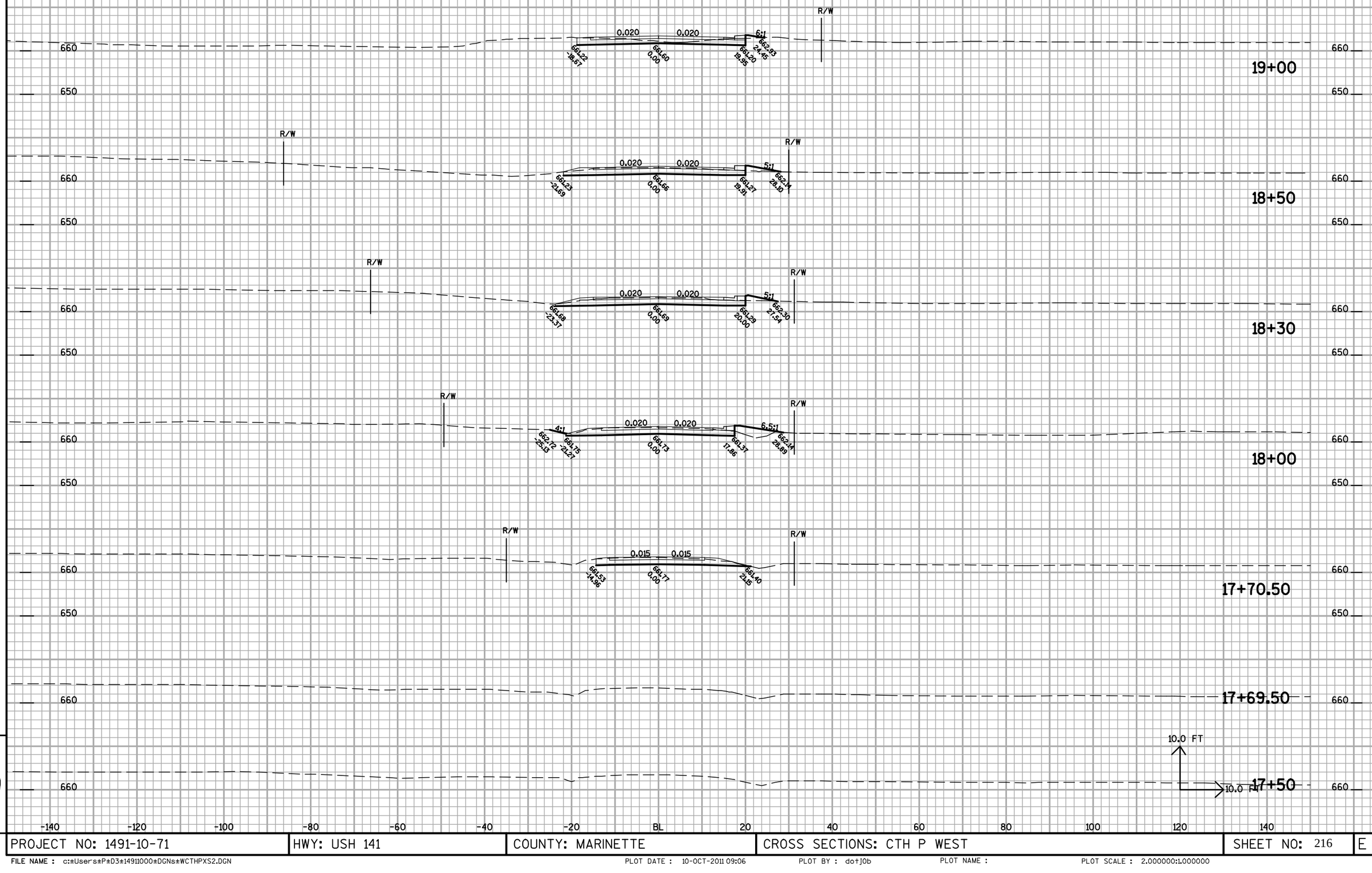
STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
40+28.75		154	75	0						
40+35.00	6	95	30	5	29	12	1	29	1	15.88
40+50.00	15	67	15	4	45	13	3	74	4	44.99
40+65.00	15	77	0	0	40	4	1	114	6	79.27
40+80.00	15	76	0	0	43	0	0	156	6	121.92
41+00.00	20	70	0	0	54	0	0	211	6	176.09
41+50.00	50	59	0	0	119	0	0	330	6	295.14
41+57.50	8	58	0	0	16	0	0	346	6	311.36
41+58.50	1	50	0	0	2	0	0	348	6	313.37
42+00.00	42	0	0	0	39	0	0	387	6	352.05
				SUBTOTAL:	387	29	5			

EARTHWORK - WEST AIRPORT RD

STATION	DISTANCE FT	END AREA CUT SF	END AREA SALV/UNUSABLE PVMT MATERIAL SF	END AREA FILL SF	INCREMENTAL VOLUME CUT CY	INCREMENTAL VOLUME SALV/UNUSABLE PVMT MATERIAL CY	INCREMENTAL VOLUME FILL CY	CUMULATIVE VOLUME CUT CY	CUMULATIVE VOLUME 1.25 EXP. FILL CY	MASS ORDINATE CY
48+00.00		0	0	0						
48+35.00	35	0	0	0	0	0	0	0	0	0.00
48+36.00	1	55	7	0	1	0	0	1	0	0.89
48+50.00	14	55	7	0	28	4	0	29	0	25.64
49+00.00	50	58	10	0	105	16	0	134	0	114.52
49+16.00	16	61	11	0	35	6	0	169	0	143.66
49+17.00	1	55	11	2	2	0	0	171	0	145.35
49+35.00	18	64	11	1	40	7	1	211	2	176.65
49+36.00	1	62	11	10	2	0	0	213	2	178.35
49+50.00	14	88	15	9	39	7	5	252	8	204.67
49+58.00	8	110	18	9	29	5	3	281	11	225.64
49+66.50	9	149	29	2	41	7	2	322	13	256.65
49+75.75	9	249	52	0	68	14	0	390	14	310.52
				SUBTOTAL:	390	66	11			

EARTHWORK - EAST AIRPORT RD

STATION	DISTANCE	END AREA			INCREMENTAL VOLUME			CUMULATIVE VOLUME		Mass Ordinate
		CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	SALV/UNUSABLE PVMT MATERIAL	FILL	CUT	1.25 EXP. FILL	
	FT	SF	SF	SF	CY	CY	CY	CY	CY	Note 8
50+24.25		188	49	0		0				
50+33.00	9	95	20	19	46	11	3	46	4	30.74
50+41.00	8	57	14	49	23	5	10	68	17	35.52
50+50.00	9	43	11	70	17	4	20	85	41	23.32
50+64.00	14	39	9	47	21	5	30	106	79	1.43
50+65.00	1	41	8	41	1	0	2	108	81	0.54
50+83.00	18	37	8	38	26	5	26	134	114	-11.74
50+84.00	1	36	7	17	1	0	1	135	116	-11.93
51+00.00	16	40	7	16	23	4	10	158	127	-5.46
51+50.00	50	53	7	1	86	13	15	244	147	48.51
51+63.50	14	56	7	0	27	4	0	271	147	72.01
51+64.50	1	0	0	0	1	0	0	272	147	72.91
52+00.00	36	0	0	0	0	0	0	272	147	72.91
				SUBTOTAL:	272	52	118			

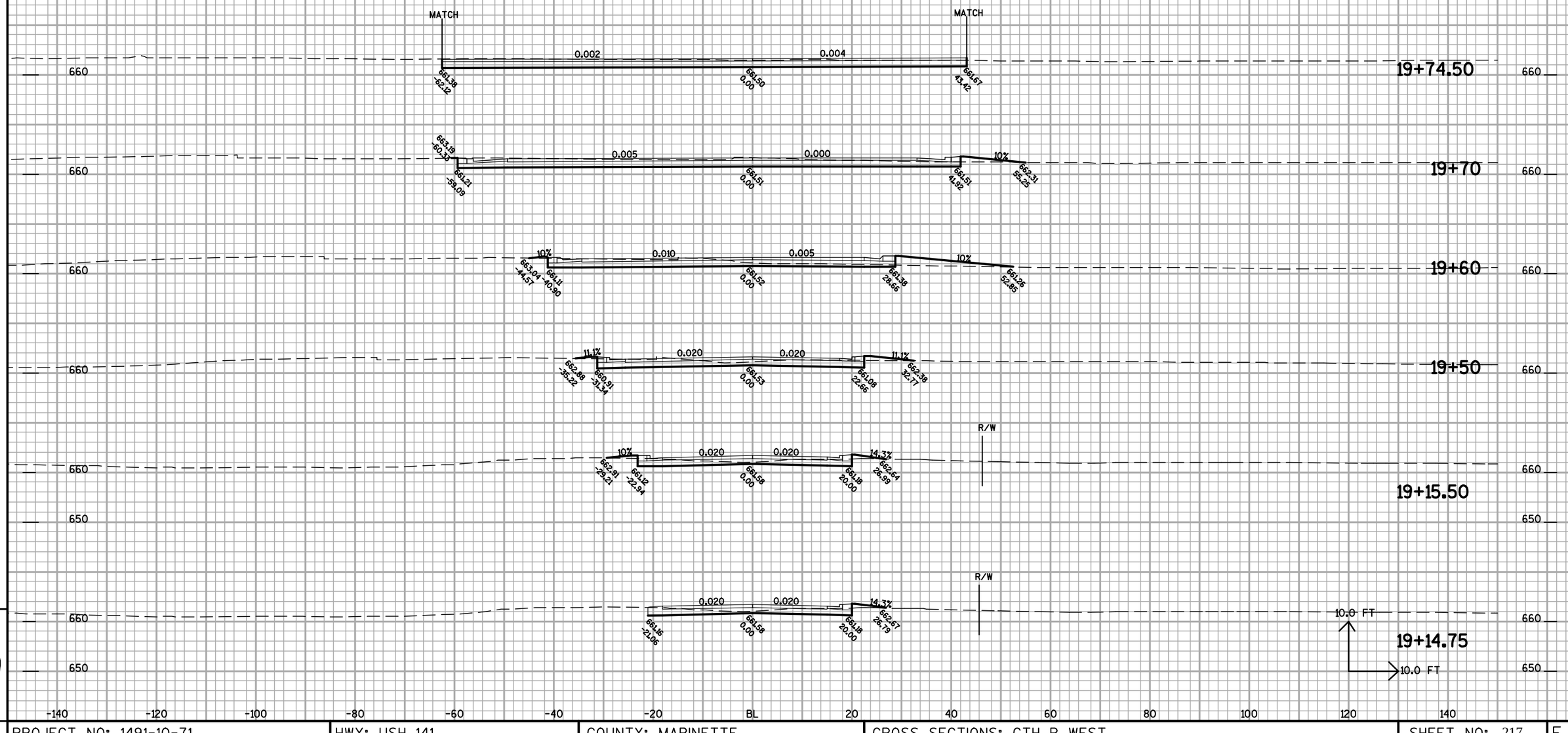


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH P WEST	SHEET NO: 216	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±WCTHPXS2.DGN PLOT DATE : 10-OCT-2011 09:06 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

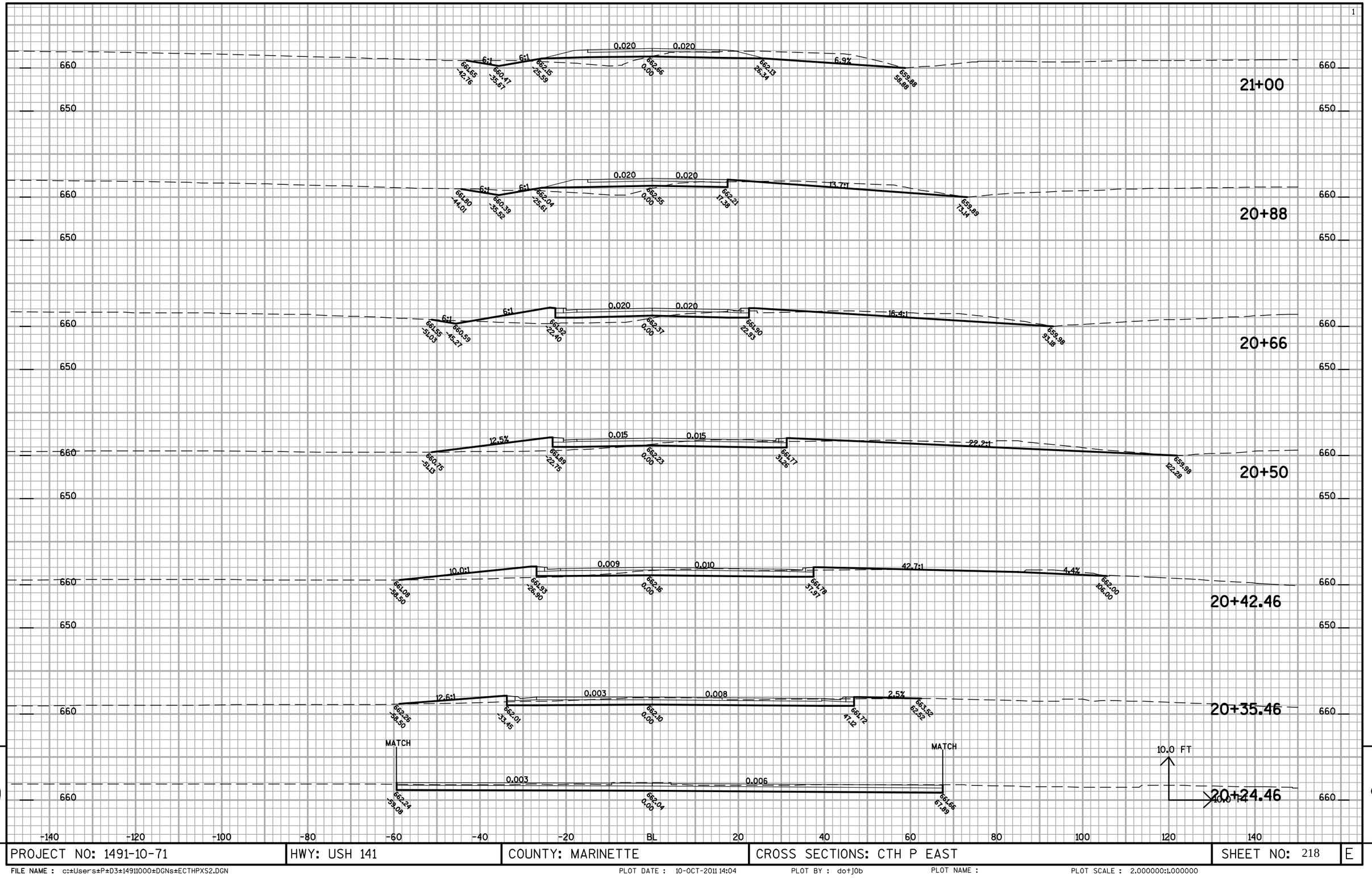


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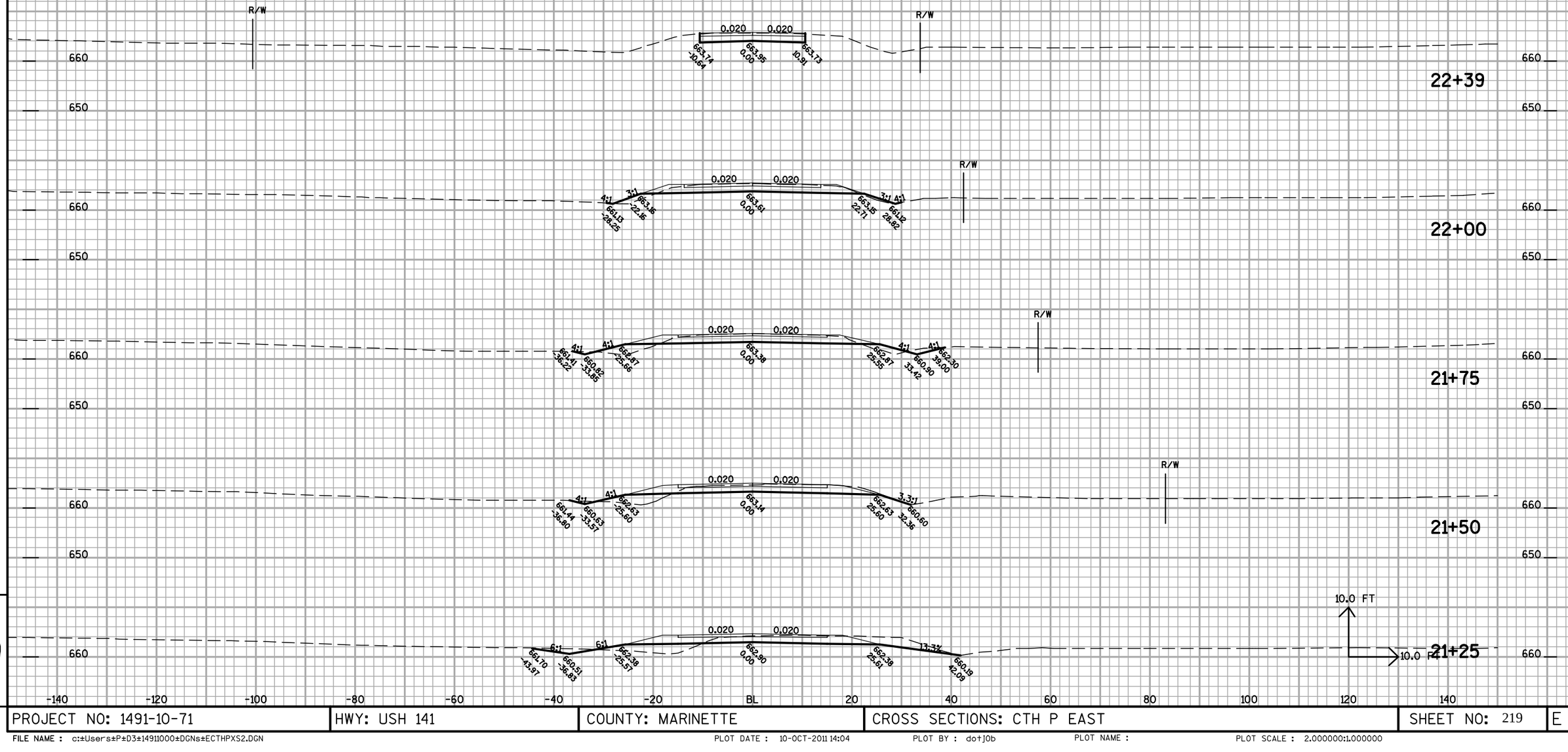
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH P WEST	SHEET NO: 217	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±WCTHPXS2.DGN PLOT DATE : 10-OCT-2011 09:06 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH P EAST	SHEET NO: 218 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±ECTHPXS2.DGN PLOT DATE : 10-OCT-2011 14:04 PLOT BY : dot‡Job PLOT NAME : PLOT SCALE : 2.000000:1.000000

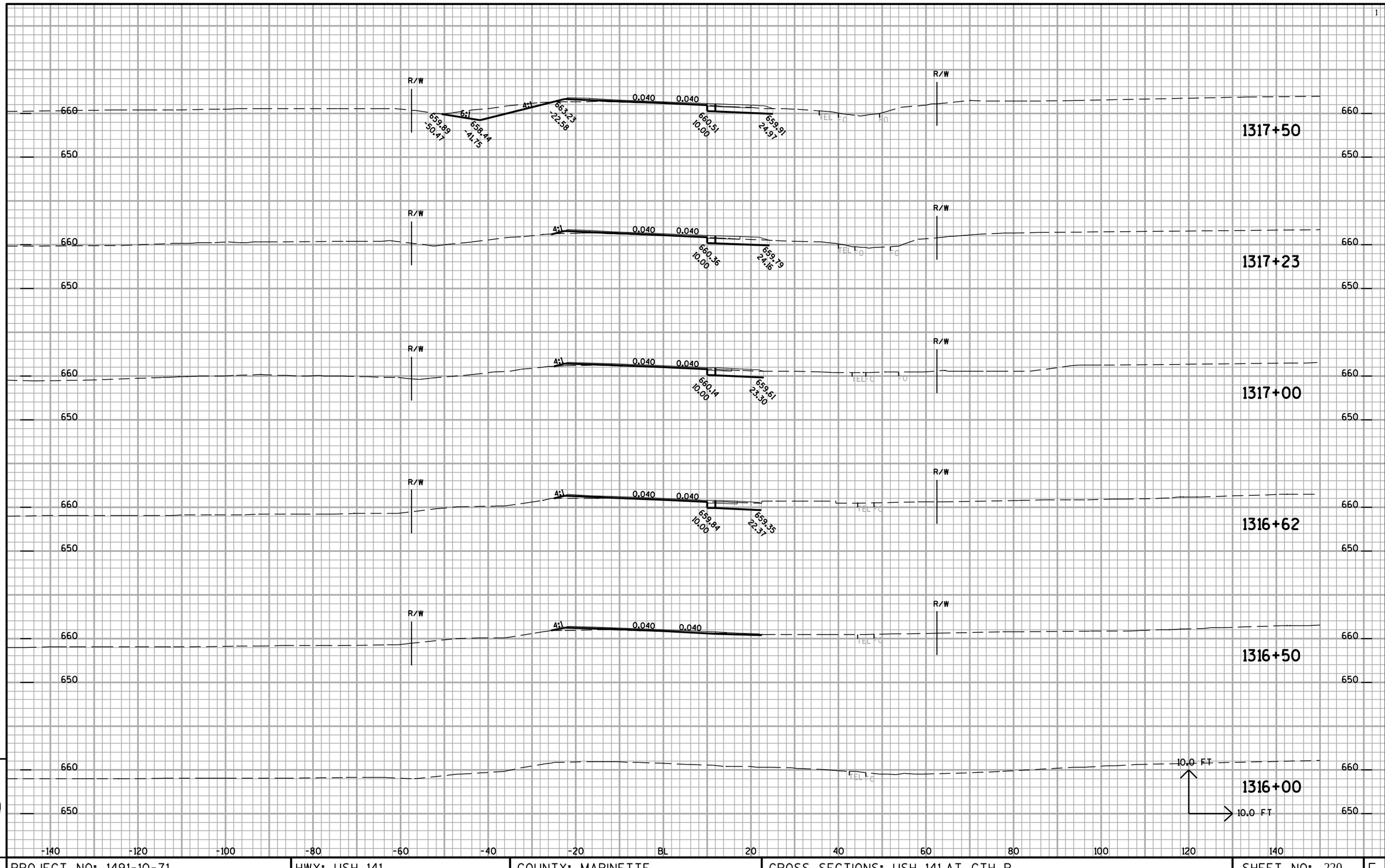


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: CTH P EAST	SHEET NO: 219	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±ECTHPXS2.DGN PLOT DATE : 10-OCT-2011 14:04 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000

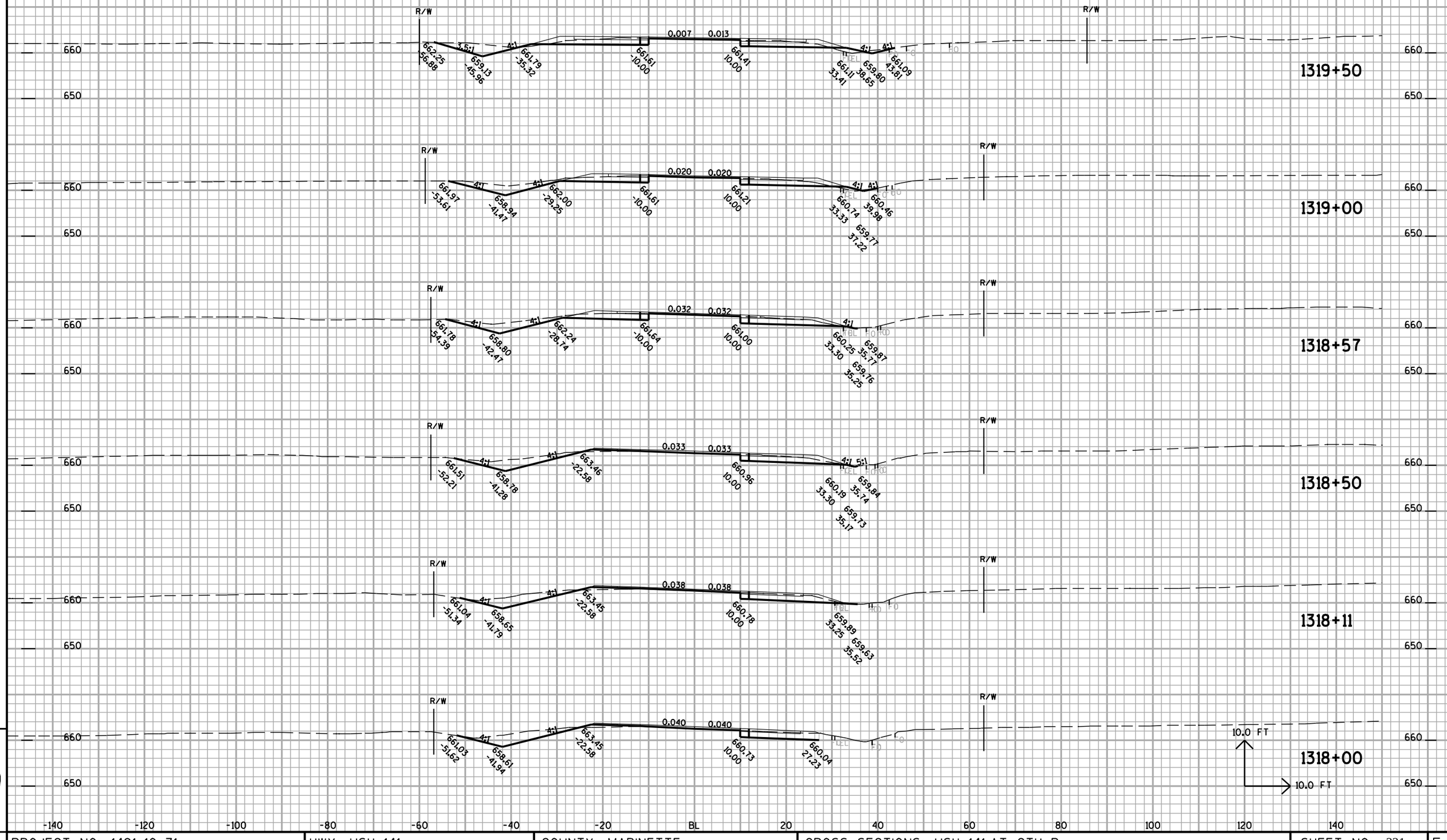


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 220	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1

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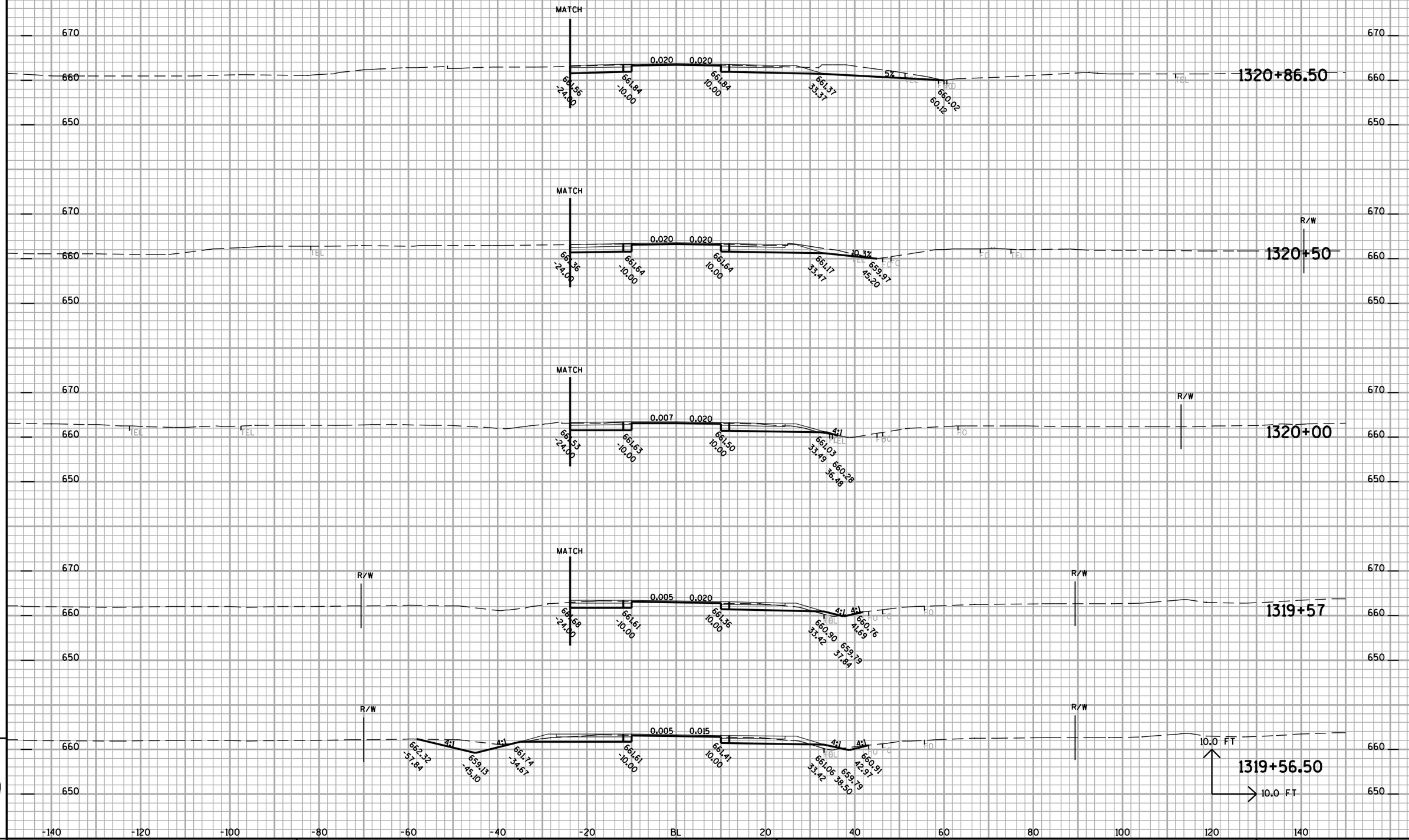


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 221	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1

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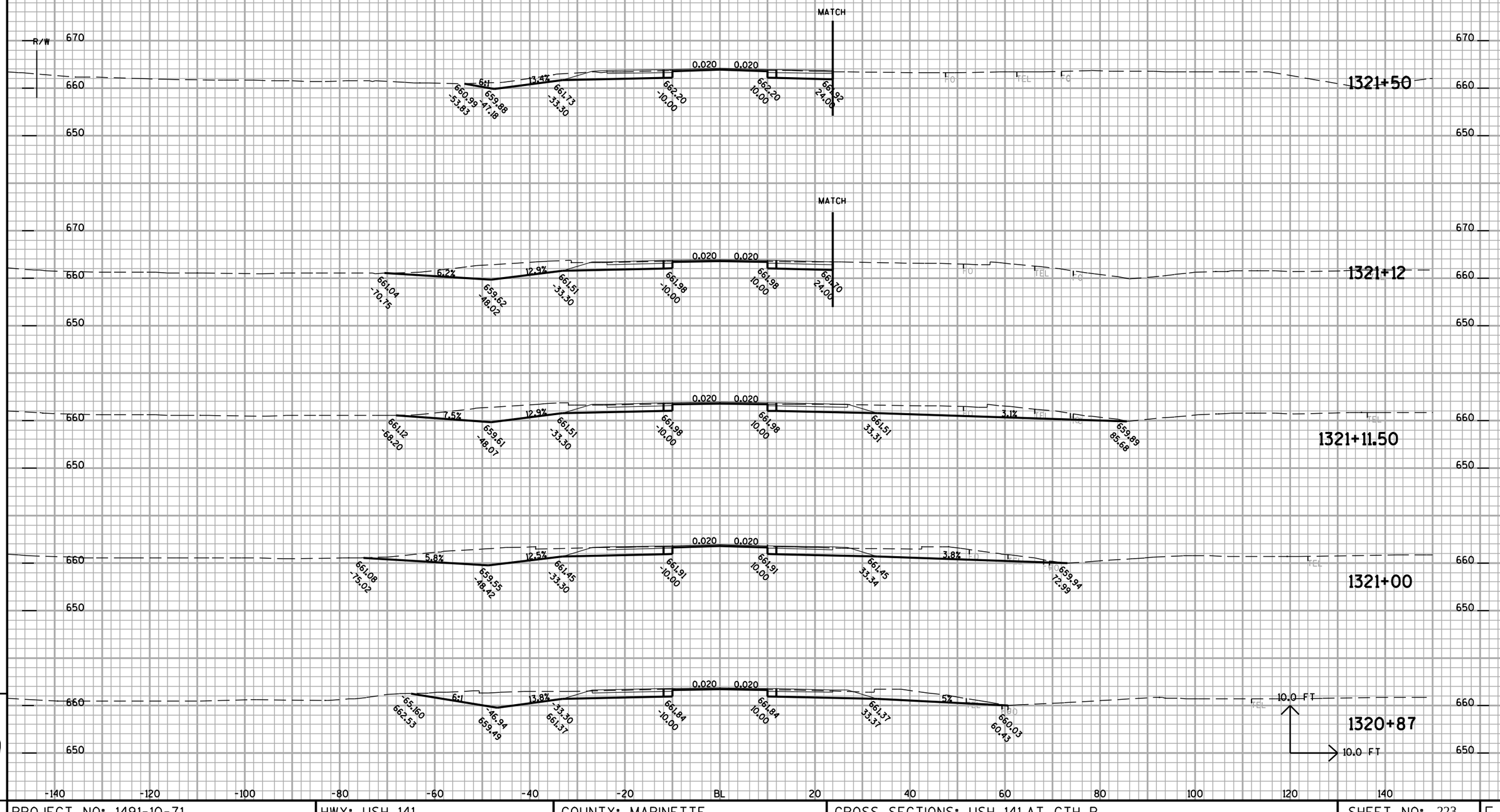


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 222	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1

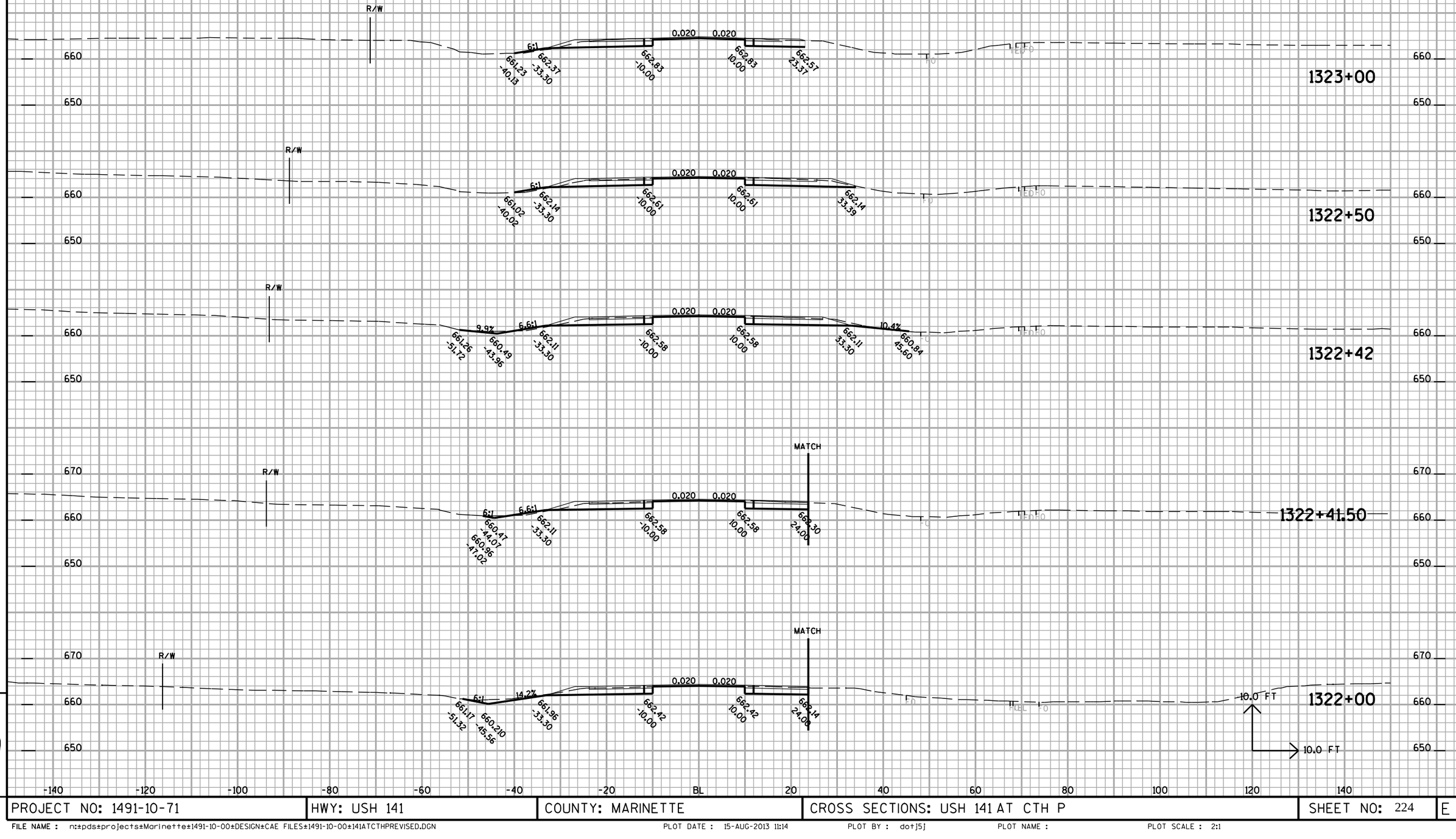


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 223	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 224	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotj5j PLOT NAME : PLOT SCALE : 2:1

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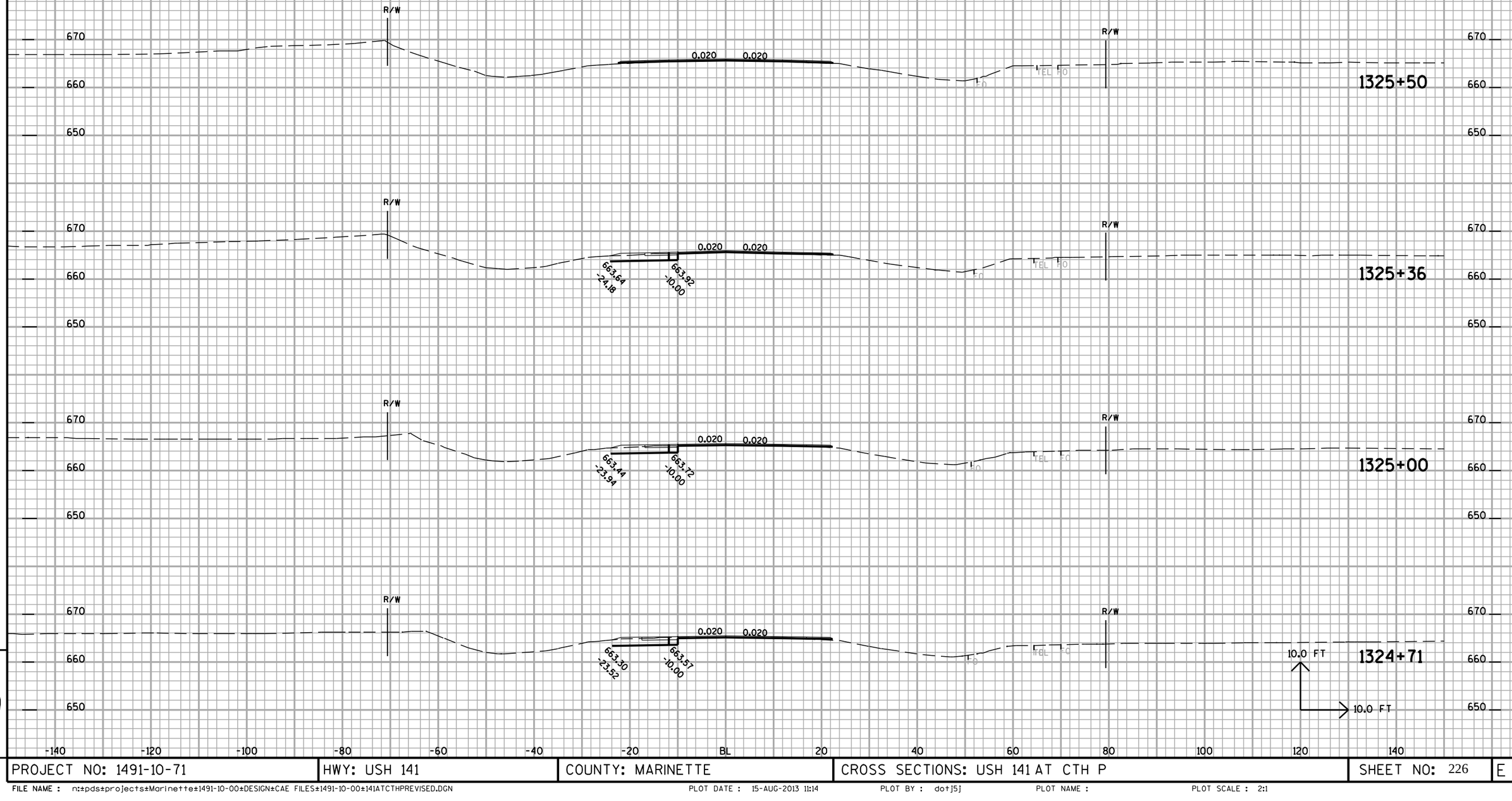


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 225	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1

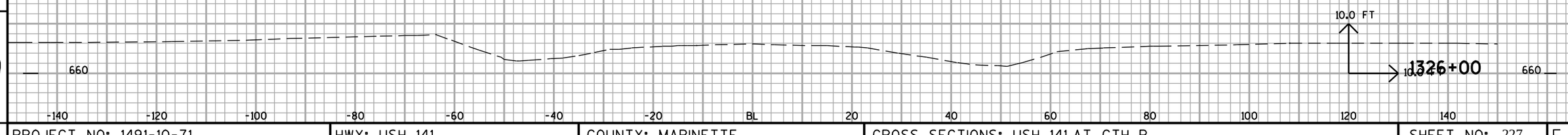


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT CTH P	SHEET NO: 226	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1

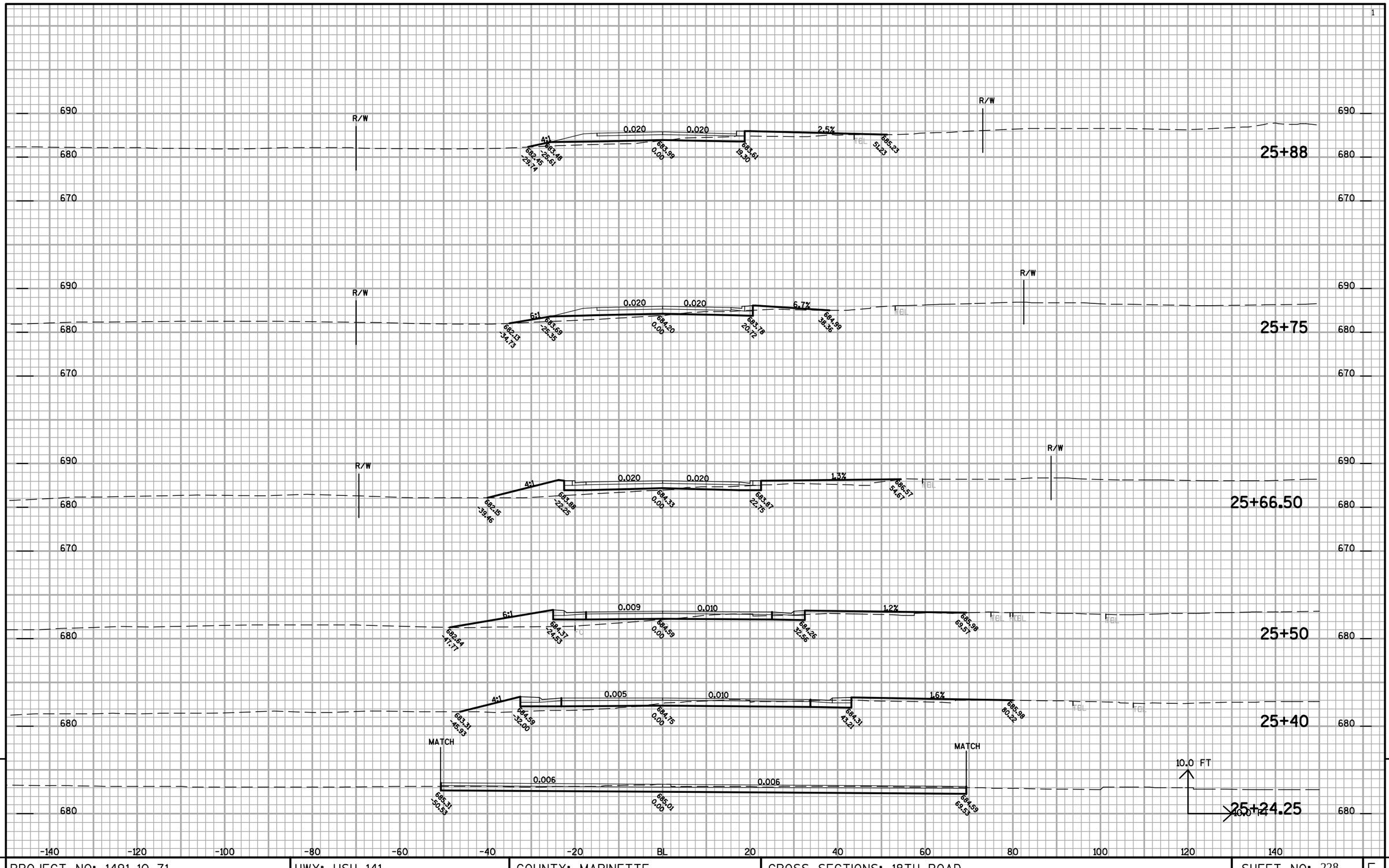


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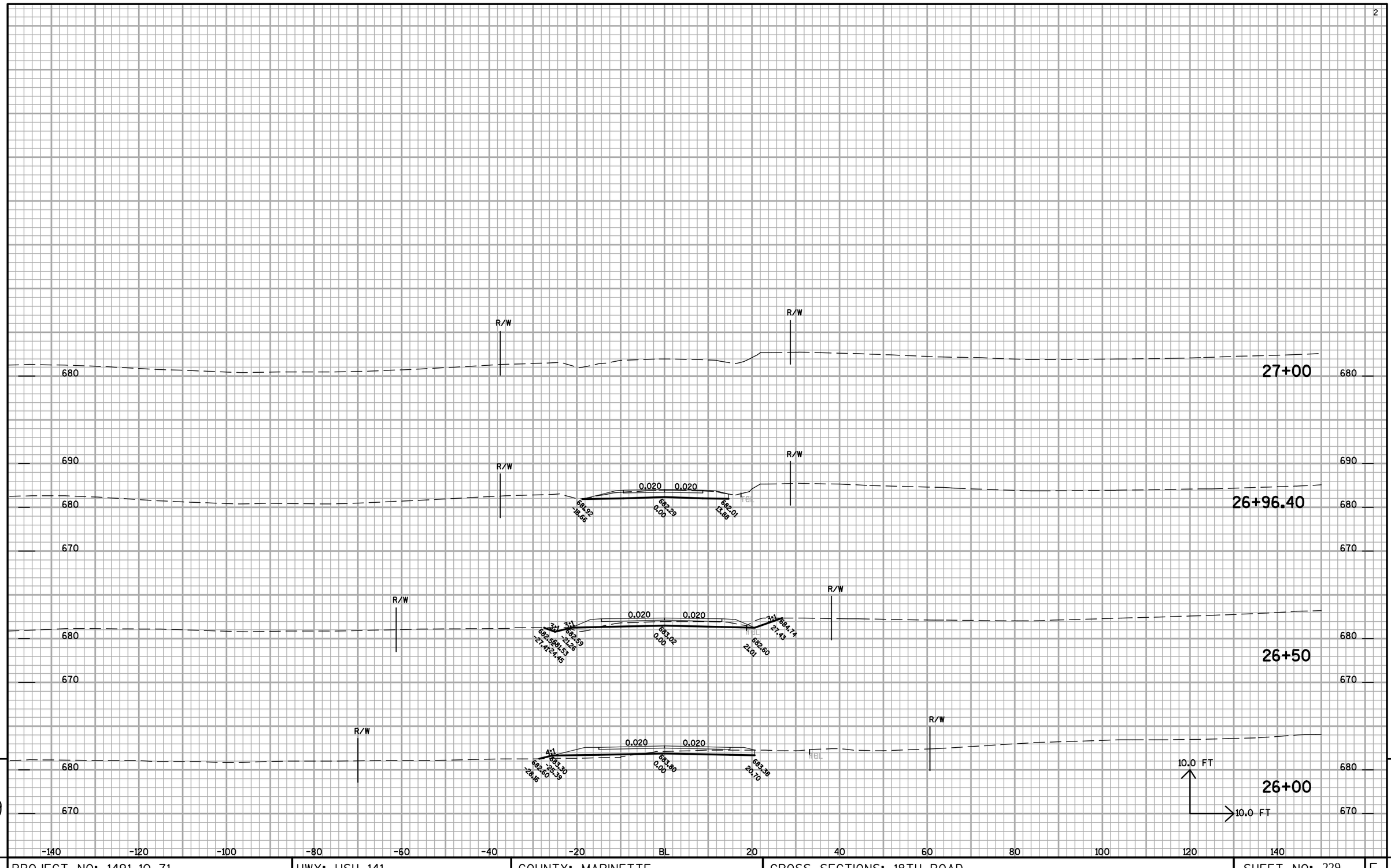
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FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141ATCTHPREVISED.DGN PLOT DATE : 15-AUG-2013 11:14 PLOT BY : dotJSJ PLOT NAME : PLOT SCALE : 2:1



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 18TH ROAD	SHEET NO: 228	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±18THRD.DGN PLOT DATE : 19-OCT-2011 15:56 PLOT BY : dot‡0b PLOT NAME : PLOT SCALE : 2.000000:1.000000

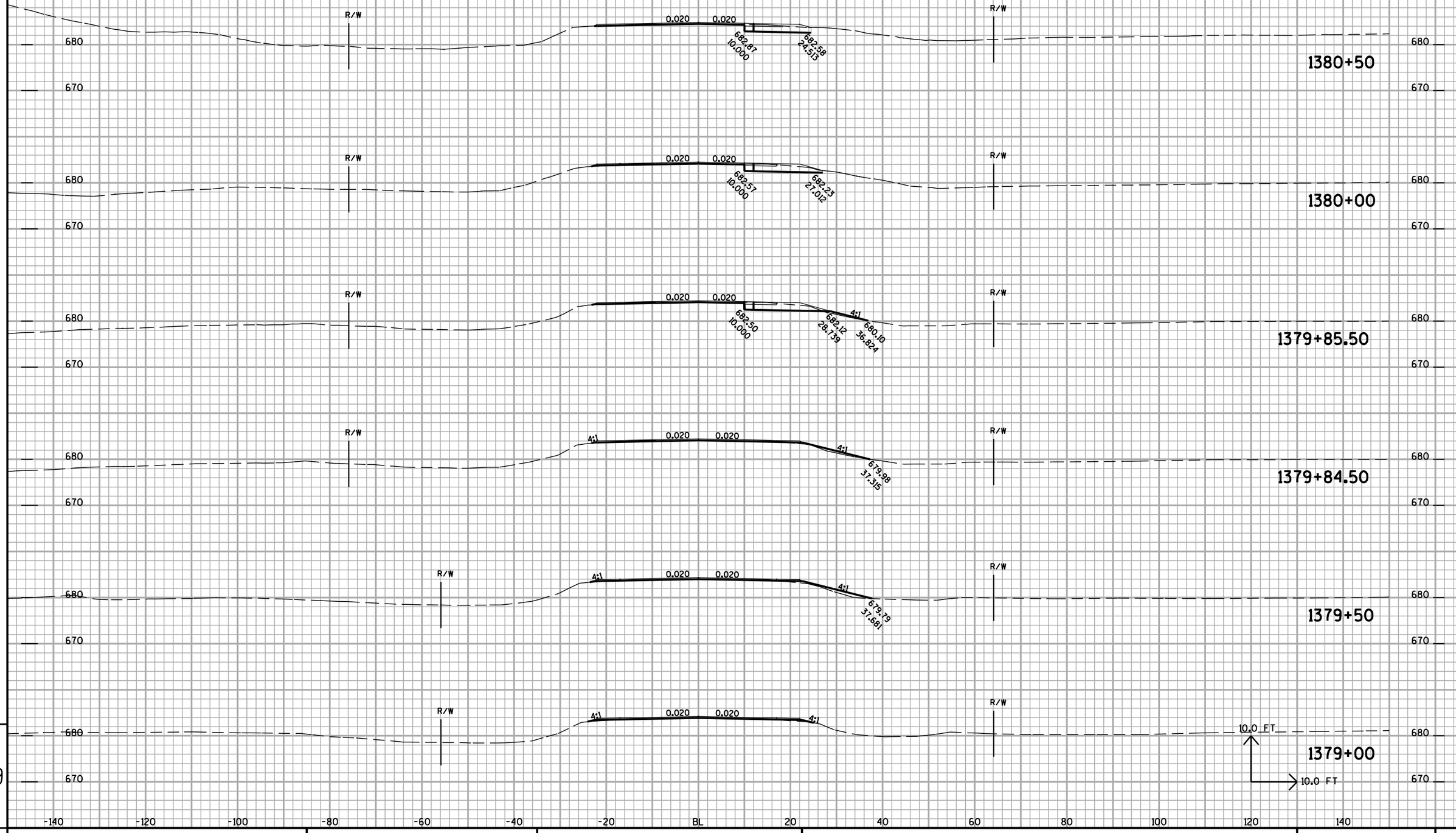


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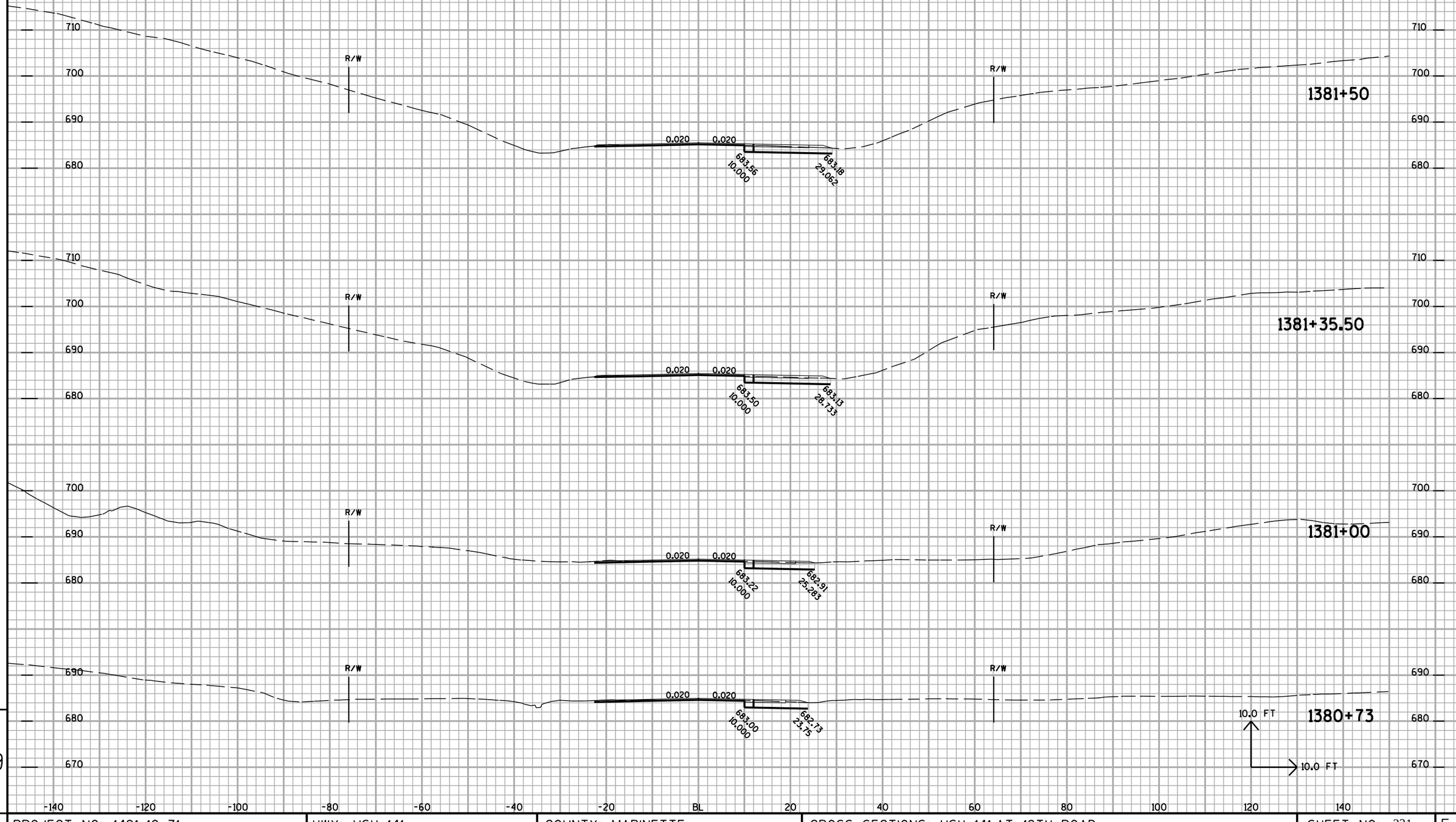
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 18TH ROAD	SHEET NO: 229	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±18THRD.DGN PLOT DATE : 19-OCT-2011 15:56 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 230	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 13:59 PLOT BY : dotjsj PLOT NAME : PLOT SCALE : 2:1

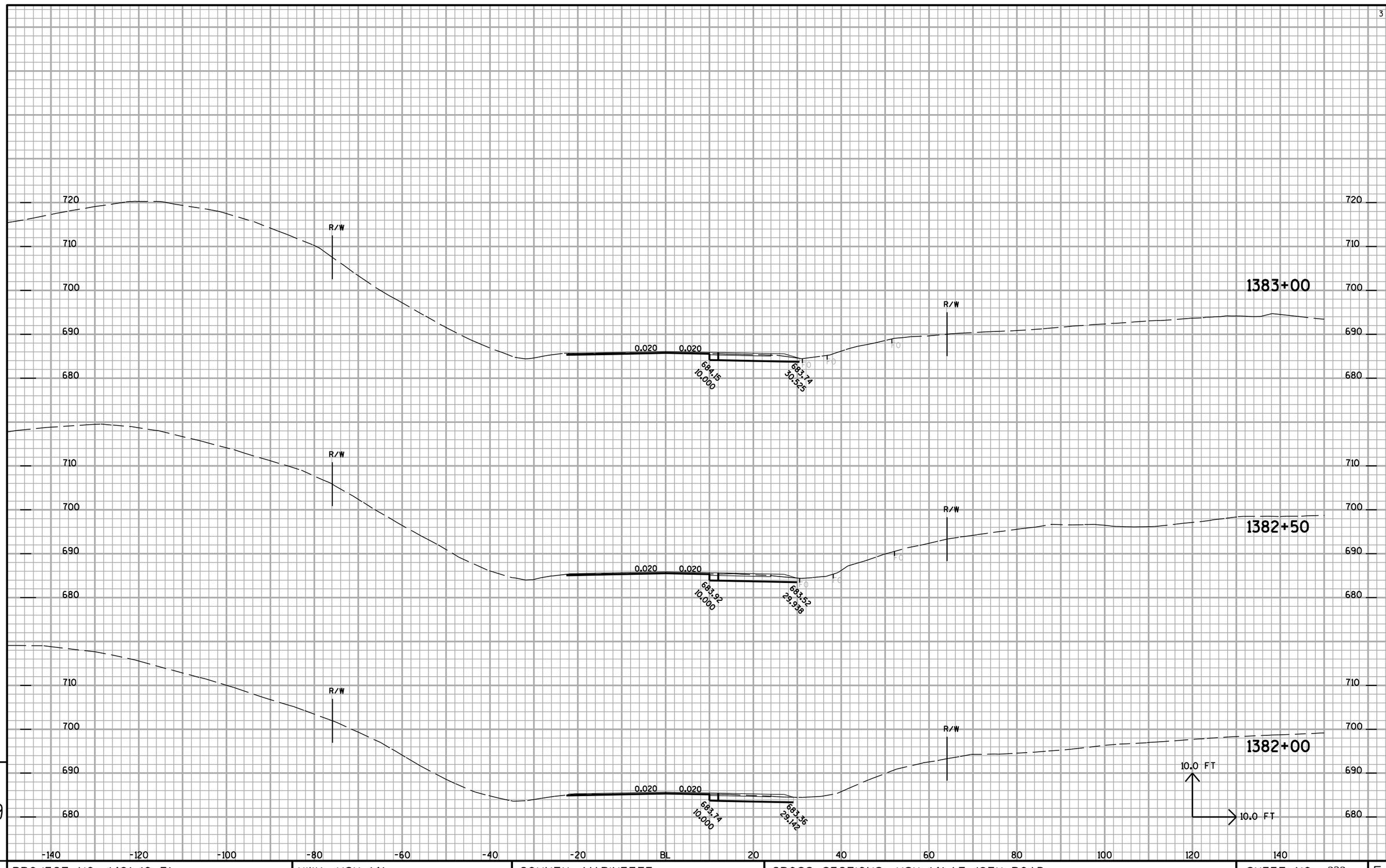


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 231	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotJ5j PLOT NAME : PLOT SCALE : 2:1

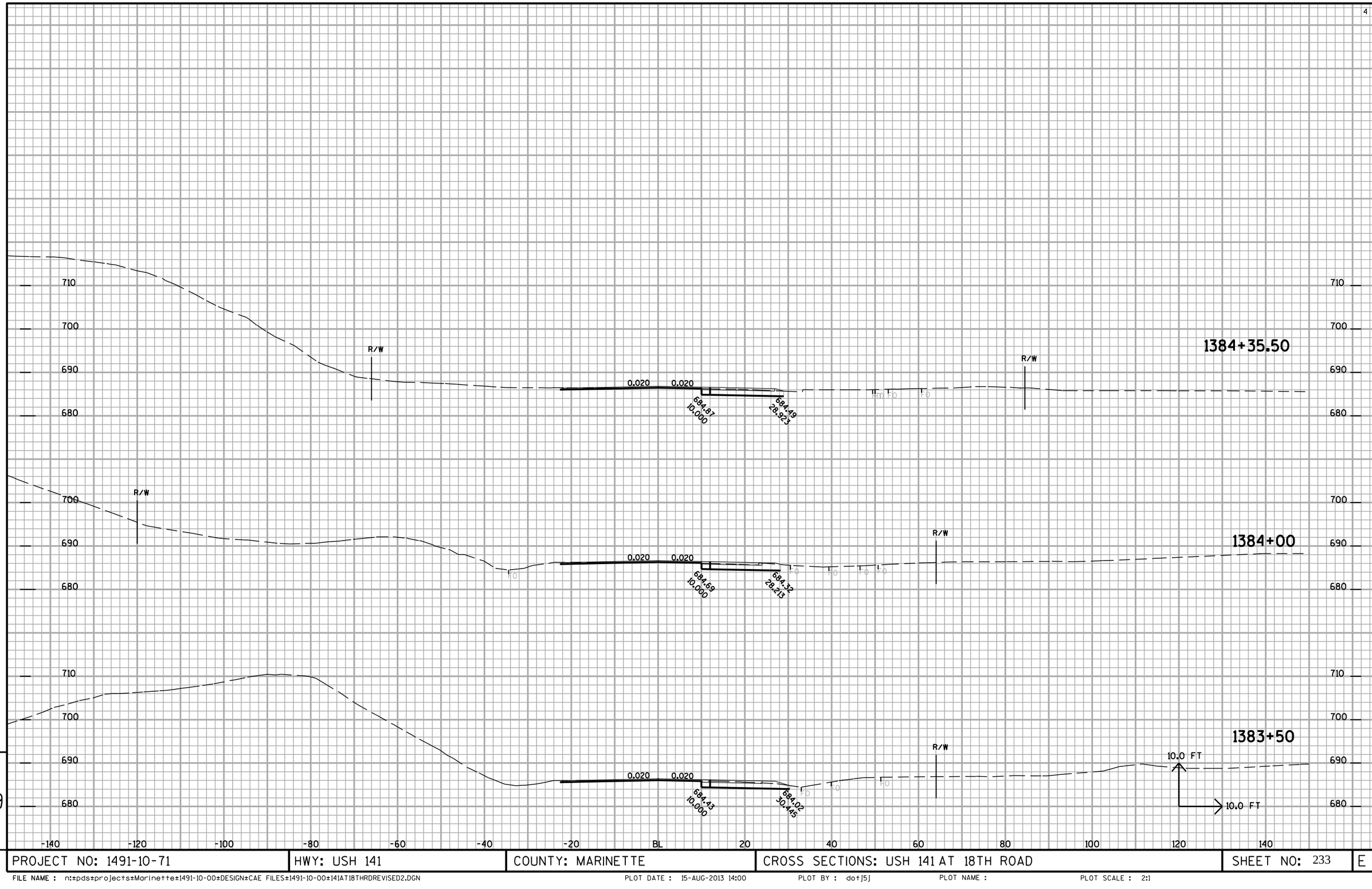


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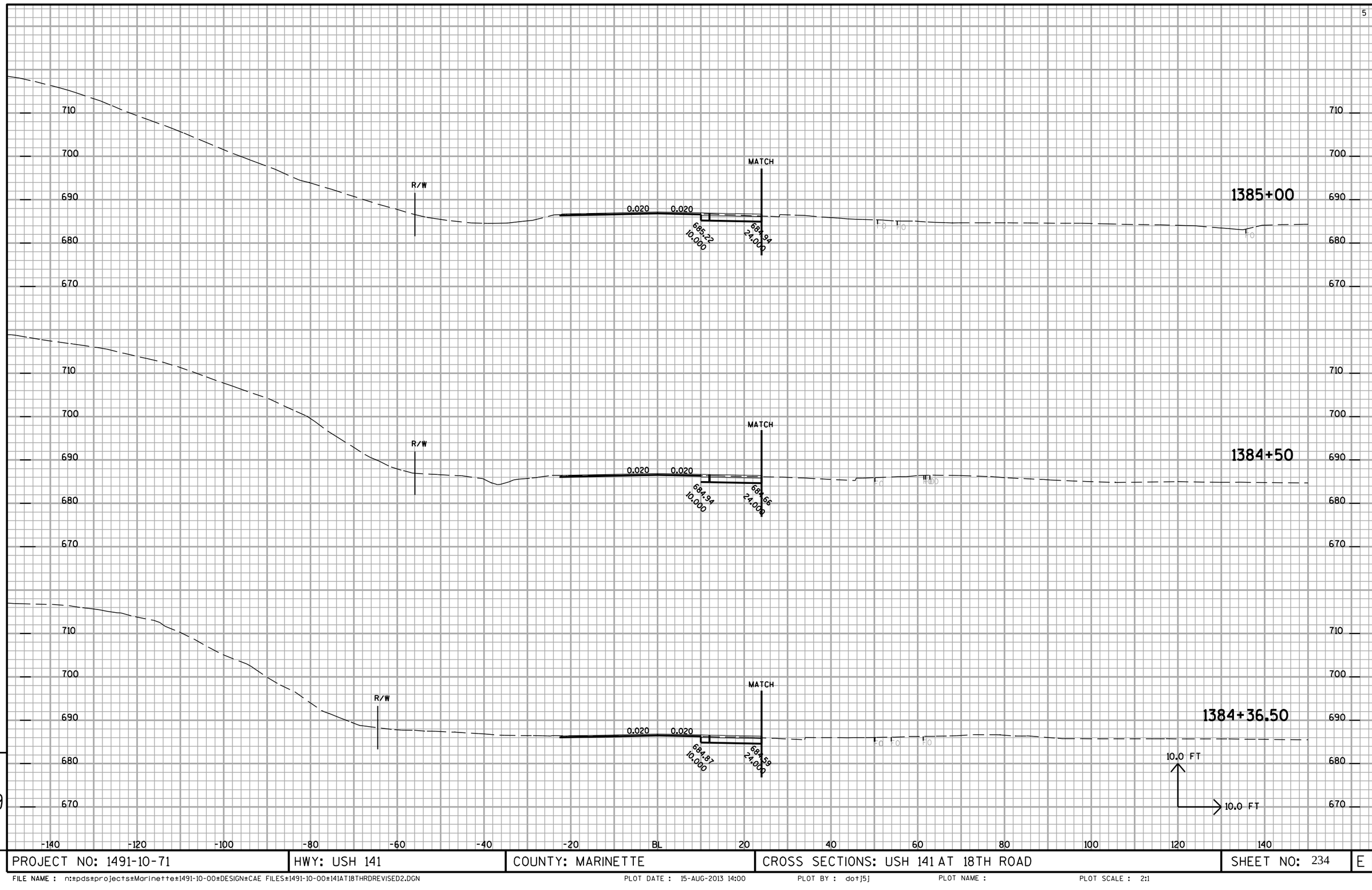
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 232	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotJ5j PLOT NAME : PLOT SCALE : 2:1



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 233	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotjsj PLOT NAME : PLOT SCALE : 2:1

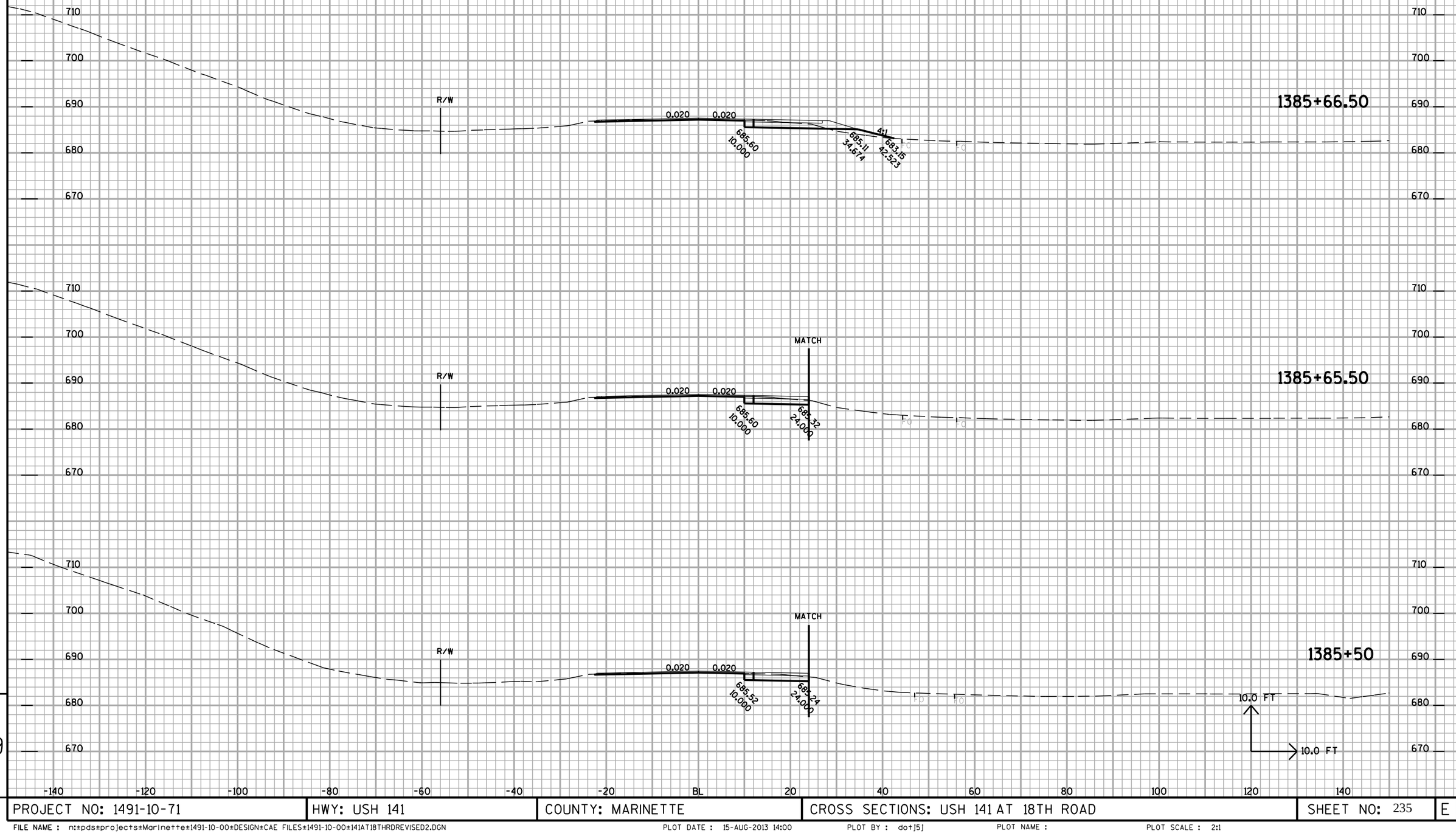


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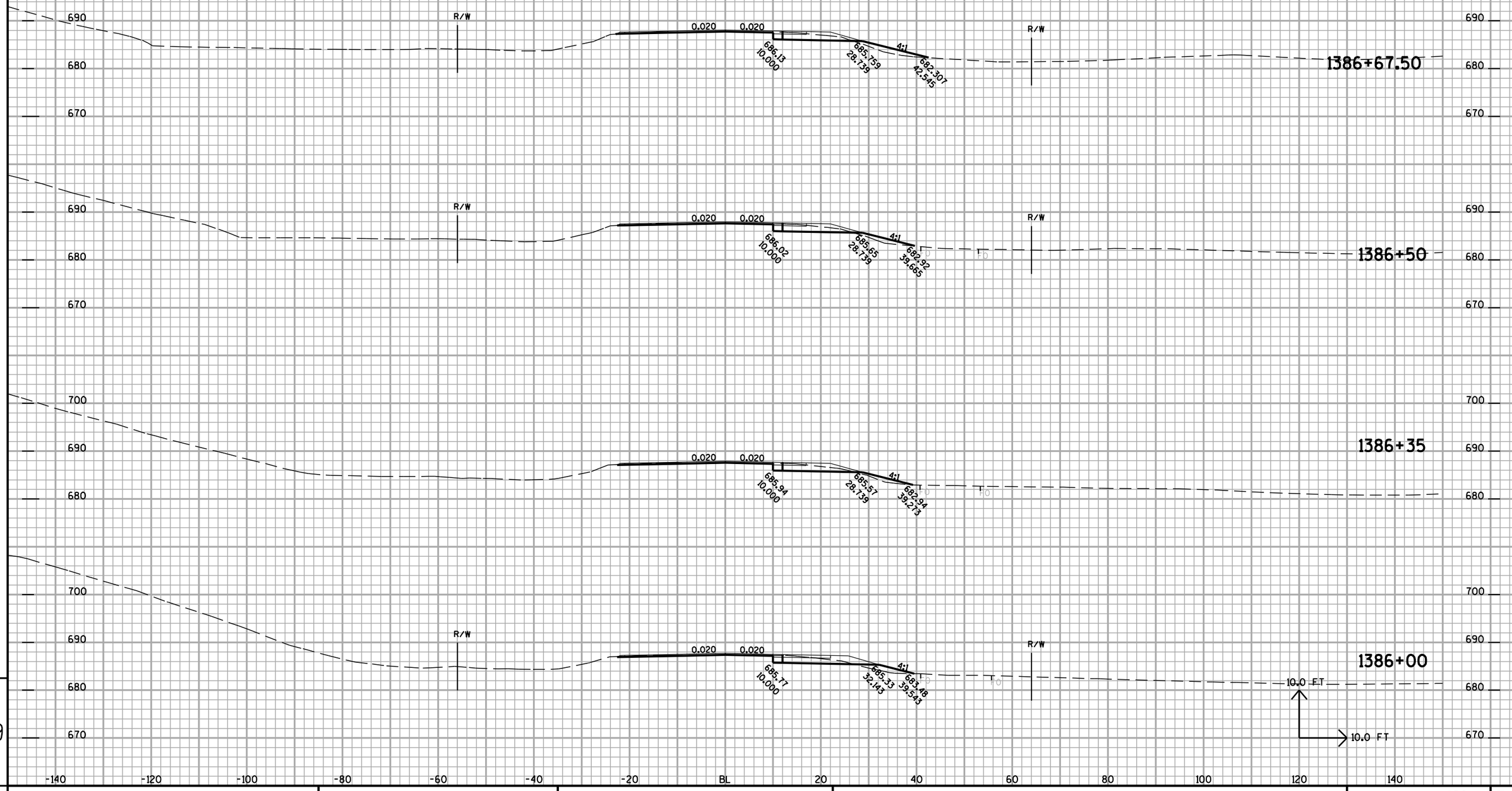
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 234	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotJ5j PLOT NAME : PLOT SCALE : 2:1



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 235	E

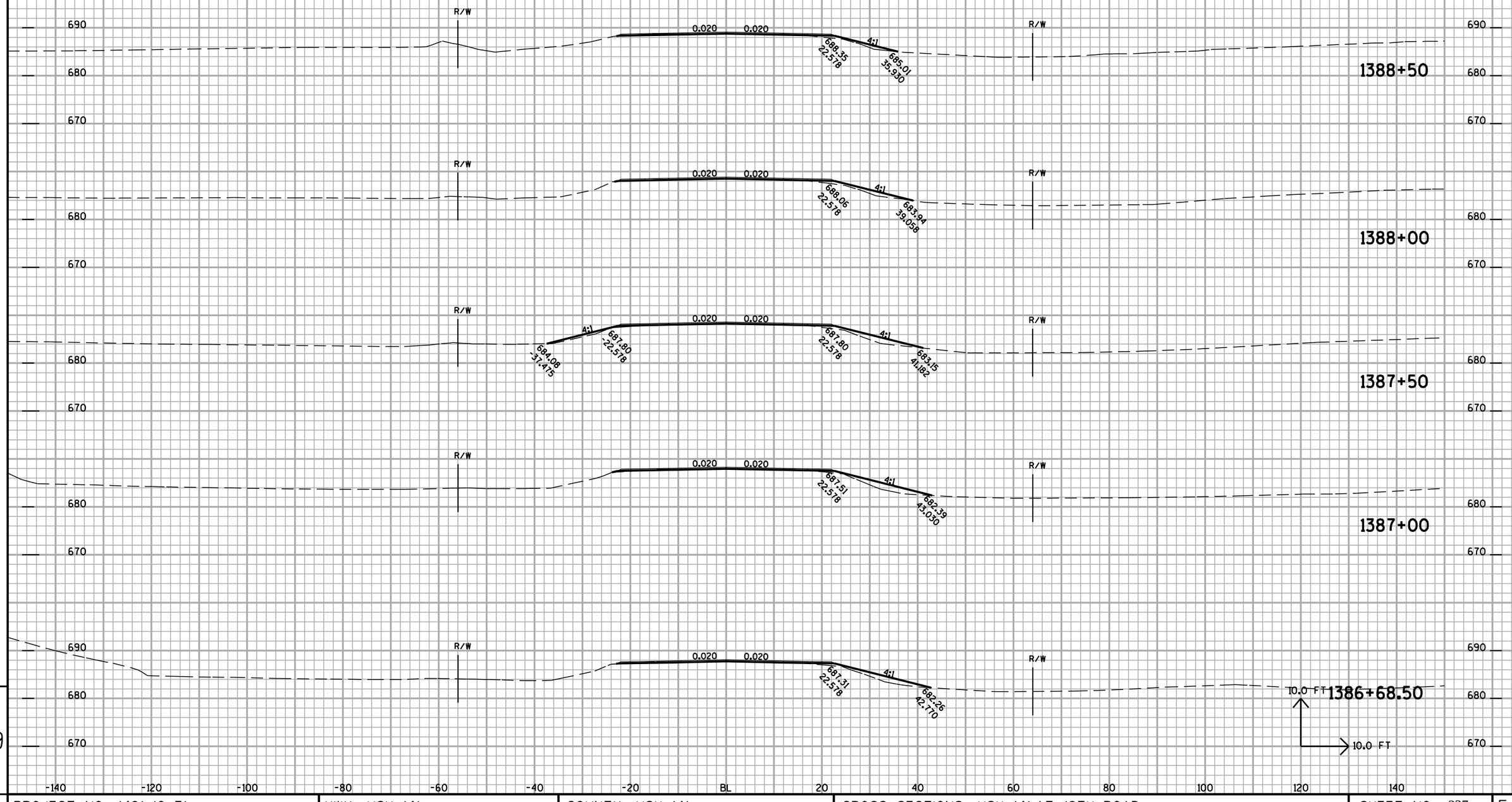
FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotjsj PLOT NAME : PLOT SCALE : 2:1



9

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 236	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotjsj PLOT NAME : PLOT SCALE : 2:1

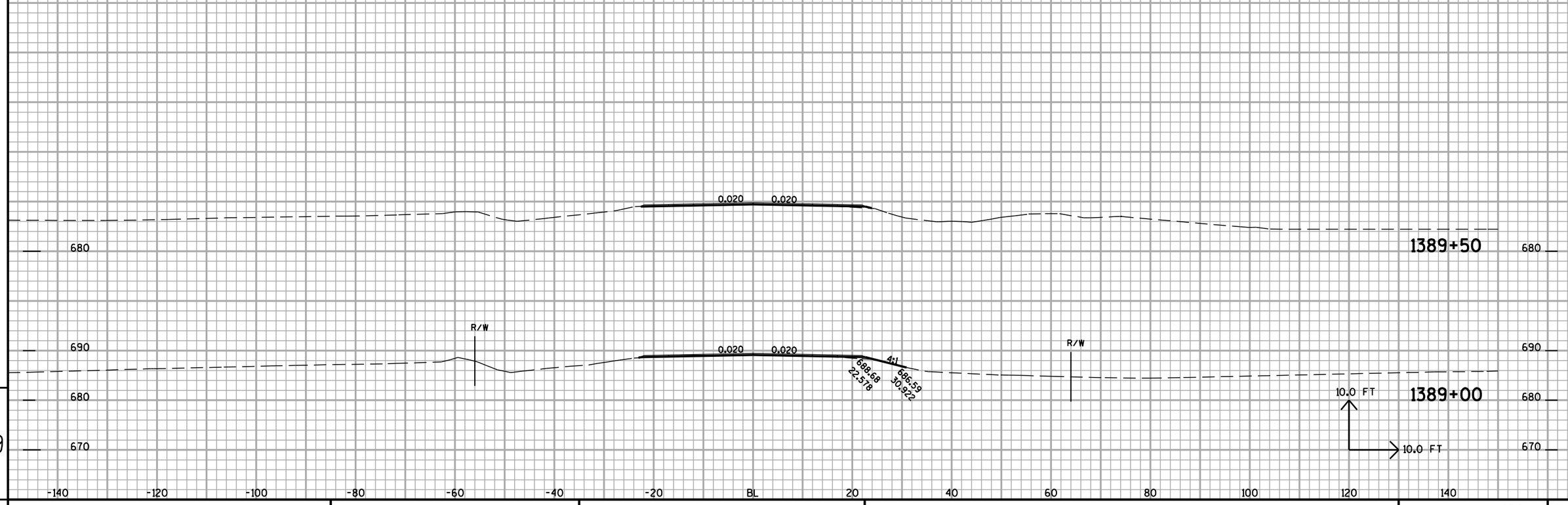


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: USH 141	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 237	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotJ5j PLOT NAME : PLOT SCALE : 2:1



9

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 18TH ROAD	SHEET NO: 238	E

FILE NAME : n:±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±141AT18THRDREVISED2.DGN PLOT DATE : 15-AUG-2013 14:00 PLOT BY : dotjsj PLOT NAME : PLOT SCALE : 2:1

38+50

R/W

0.020 0.020

670.79 -15.73 | 671.11 0.00 | 670.85 12.74

700 690 680 670 660

38+49.25

R/W R/W

0.010 0.010

670.92 -16.23 | 671.12 0.00 | 670.95 13.18

700 690 680 670 660

38+48

10.0 FT

10.0 FT

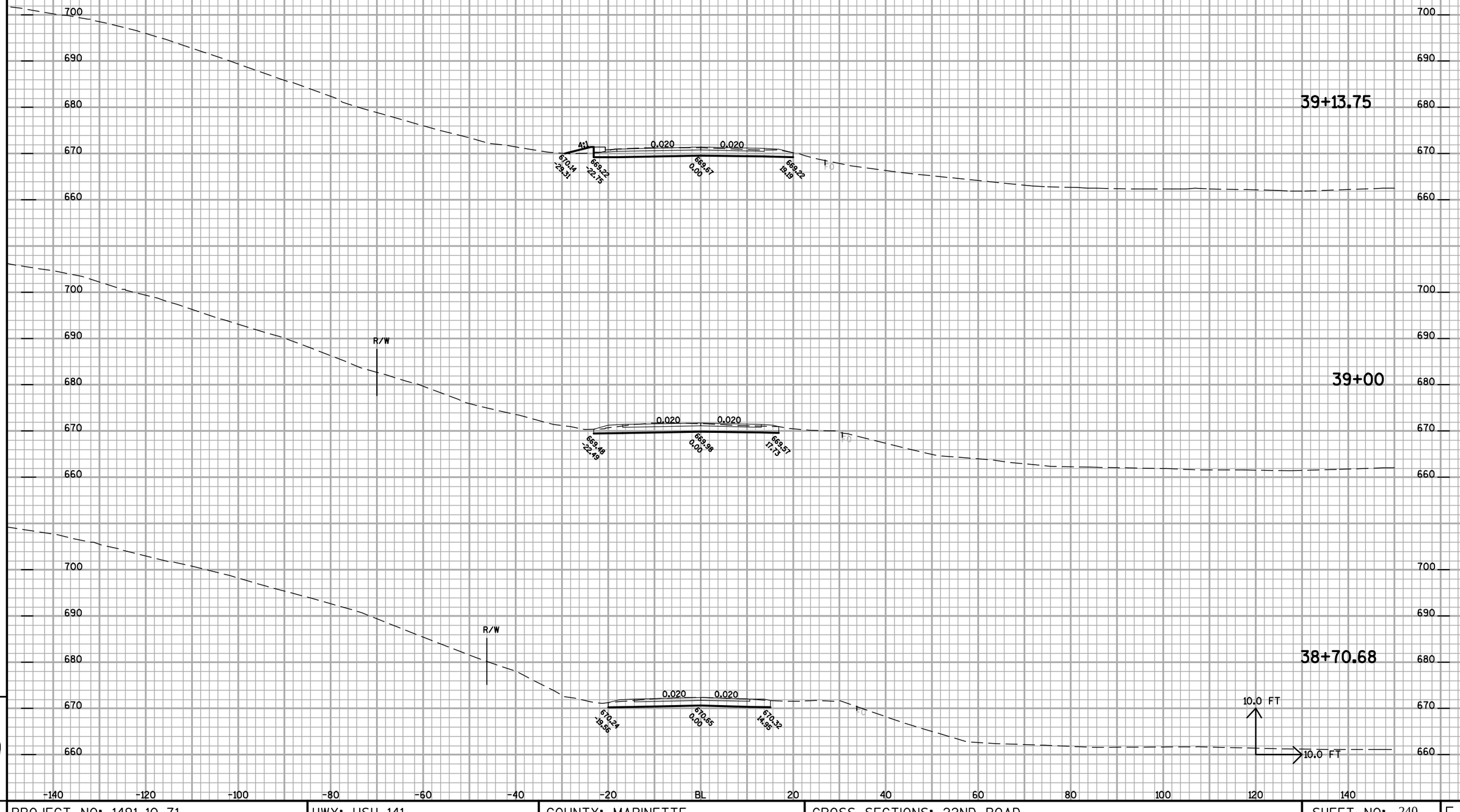
700 690 680 670 660

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 22ND ROAD	SHEET NO: 239	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±22NDRD.DGN PLOT DATE : 26-OCT-2011 16:02 PLOT BY : dot†Ob PLOT NAME : PLOT SCALE : 2.000000:1.000000

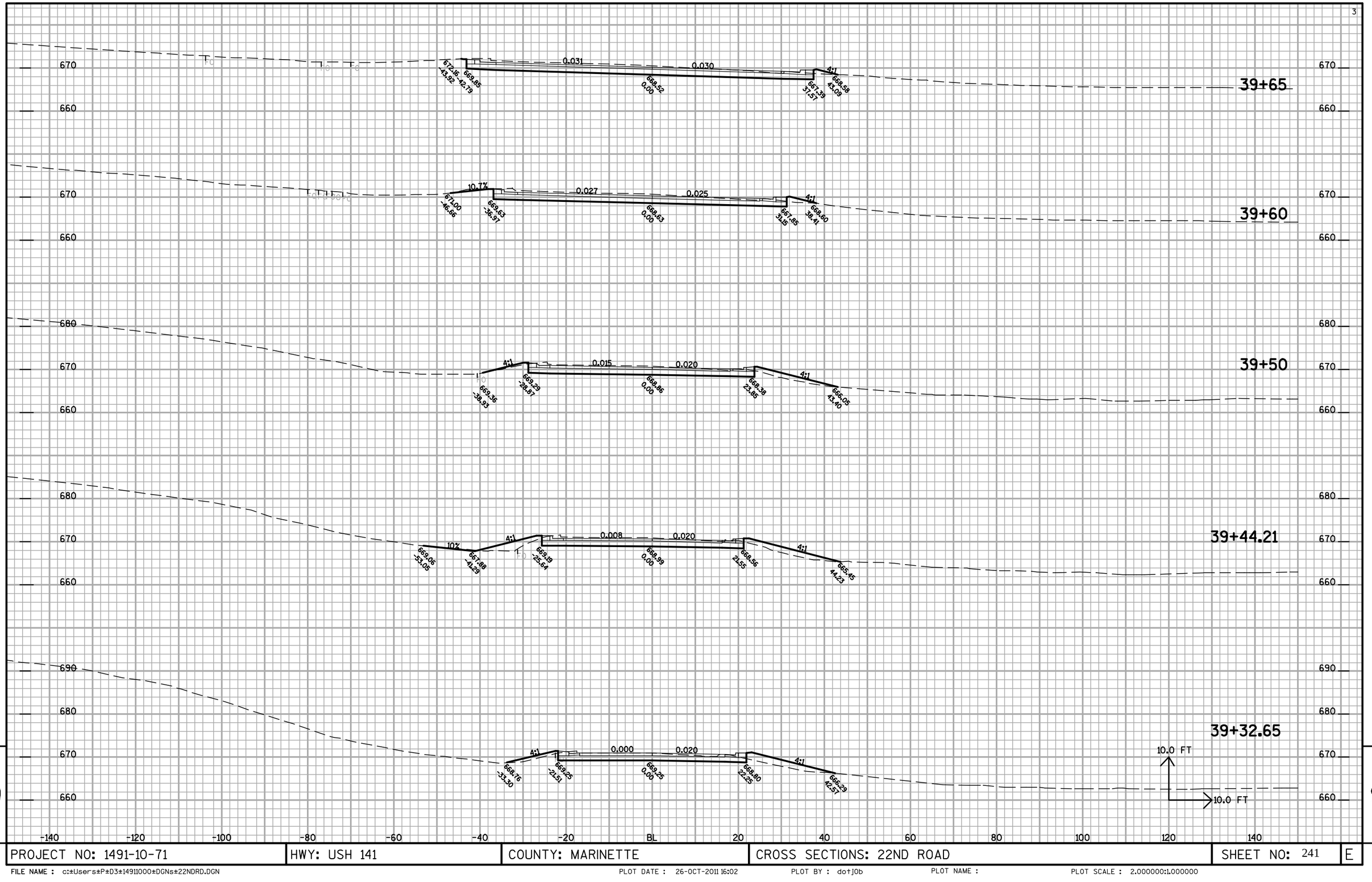


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 22ND ROAD	SHEET NO: 240	E

9

FILE NAME : c:±Users±P±D3±14911000±DGNs±22NDRD.DGN PLOT DATE : 26-OCT-2011 16:02 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000

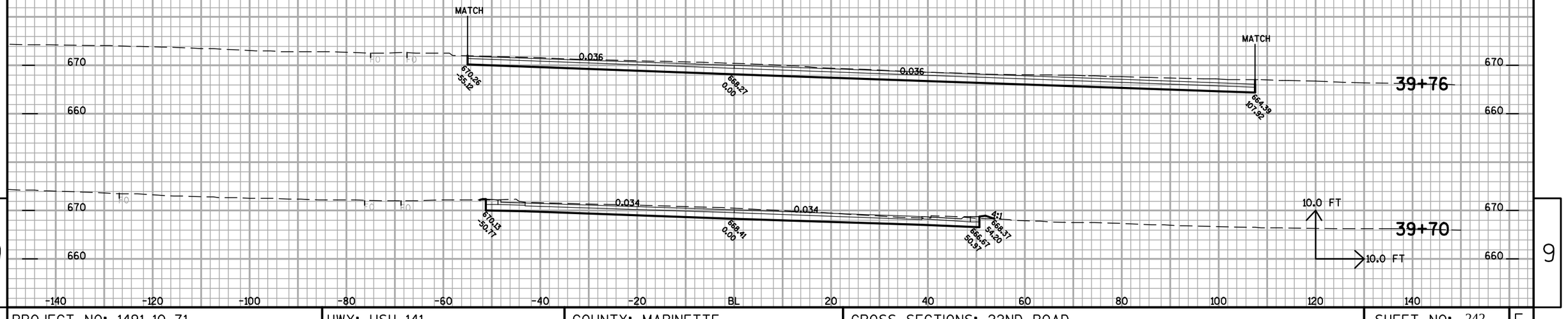


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 22ND ROAD	SHEET NO: 241	E

9

FILE NAME : c:±Users±P±D3±14911000±DGNs±22NDRD.DGN PLOT DATE : 26-OCT-2011 16:02 PLOT BY : do†J0b PLOT NAME : PLOT SCALE : 2.000000:1.000000

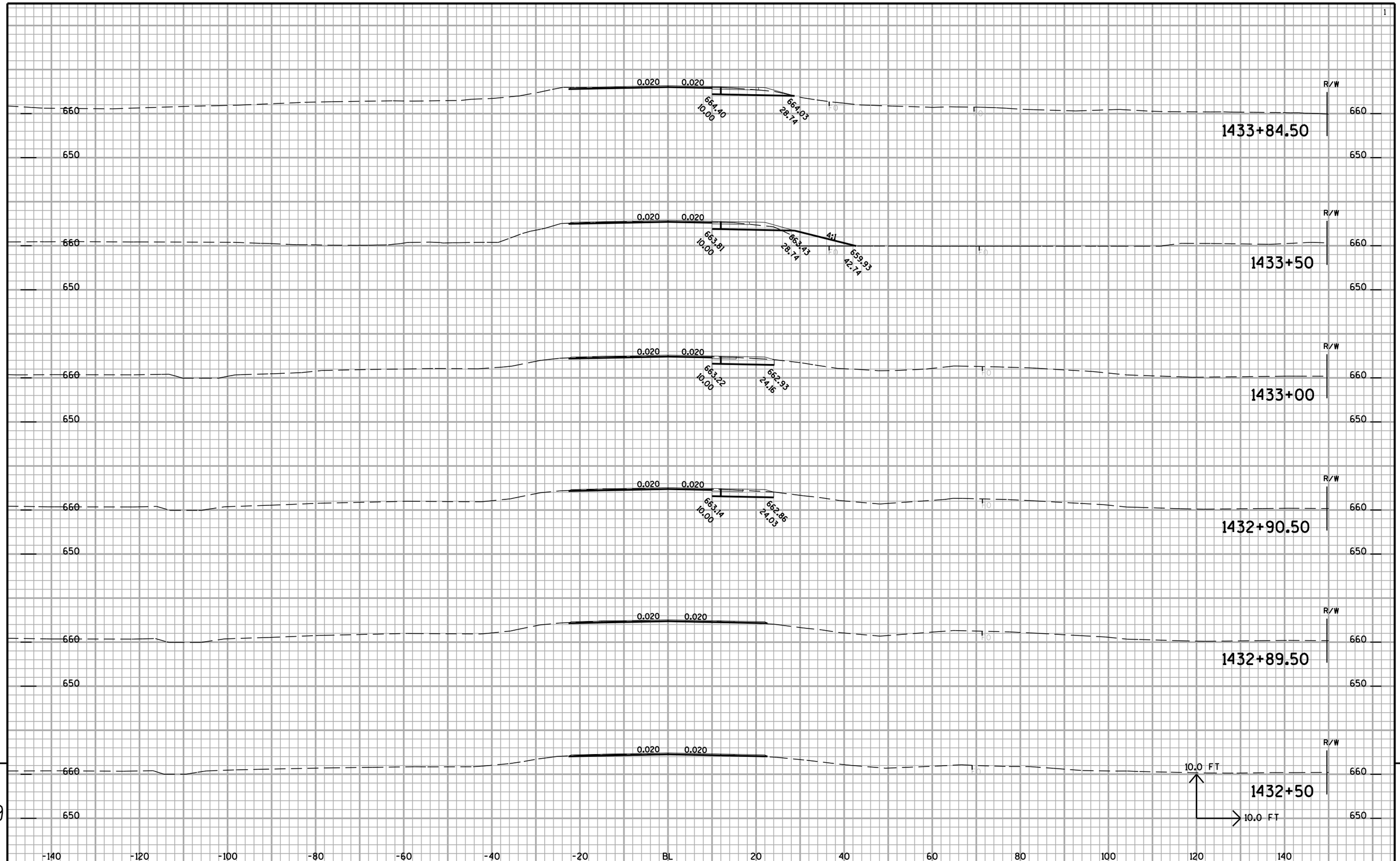


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 22ND ROAD	SHEET NO: 242	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±22NDRD.DGN PLOT DATE : 26-OCT-2011 16:02 PLOT BY : dot‡Ob PLOT NAME : PLOT SCALE : 2.000000:1.000000

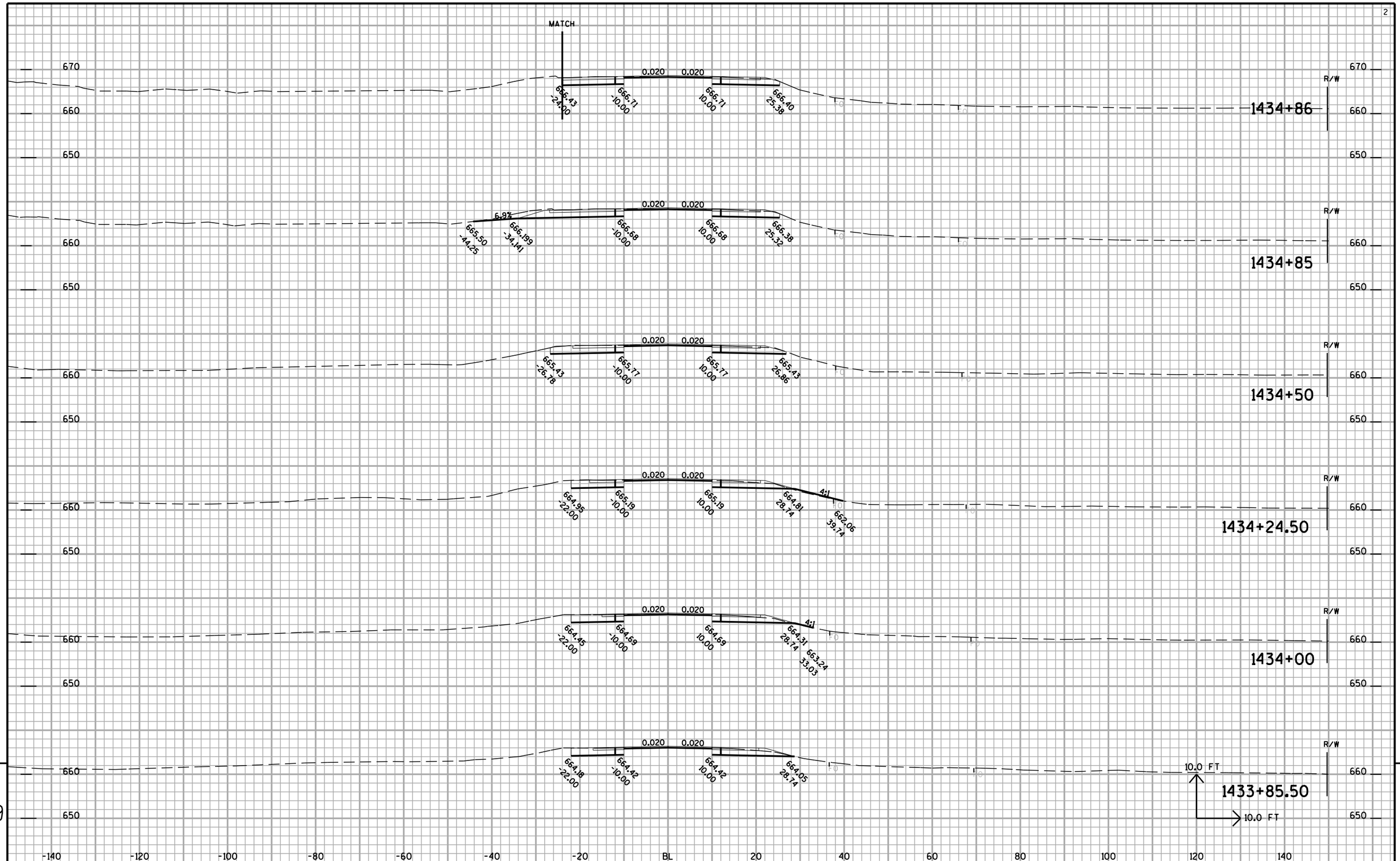


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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 243	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1

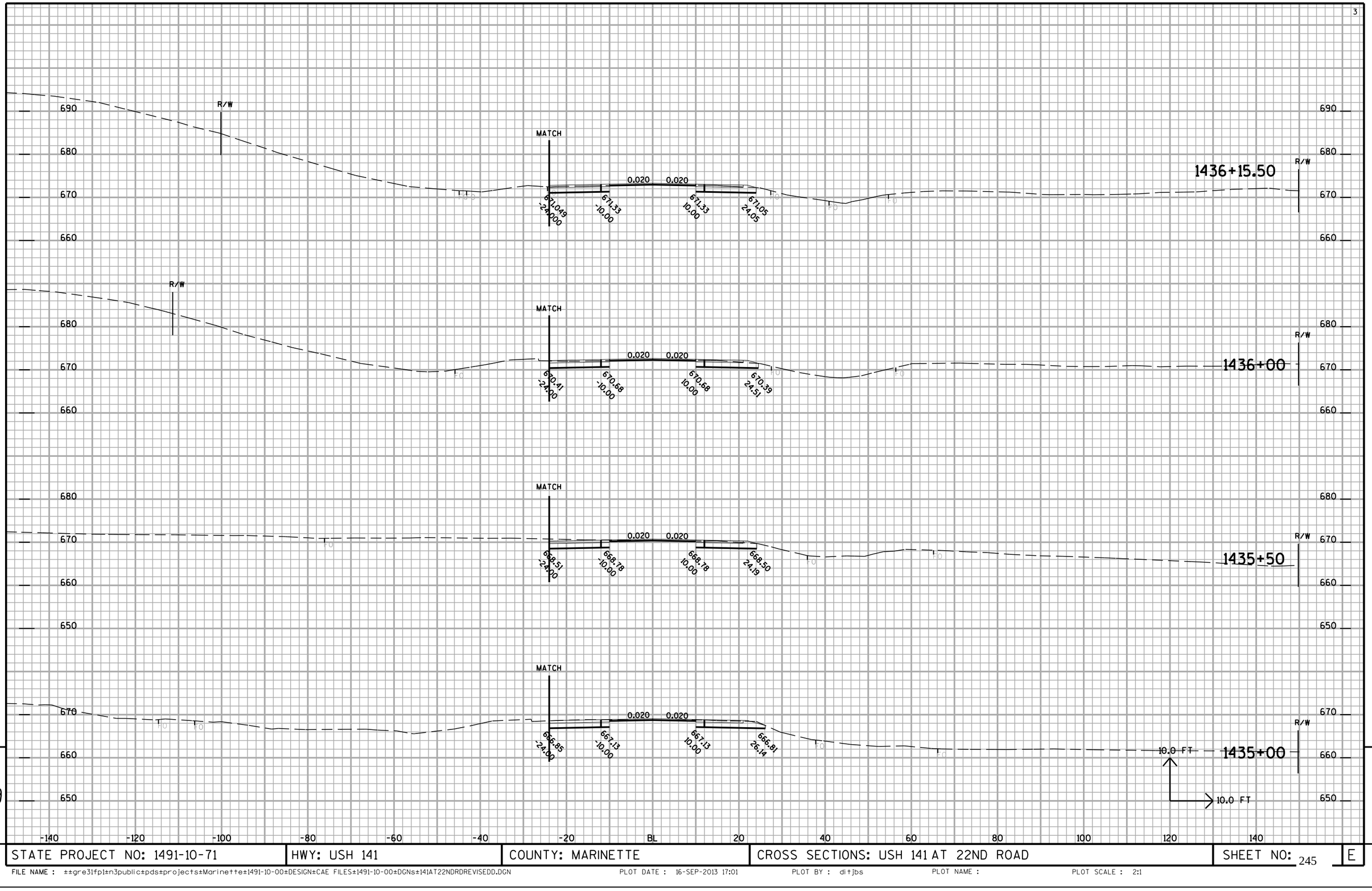


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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 244	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1

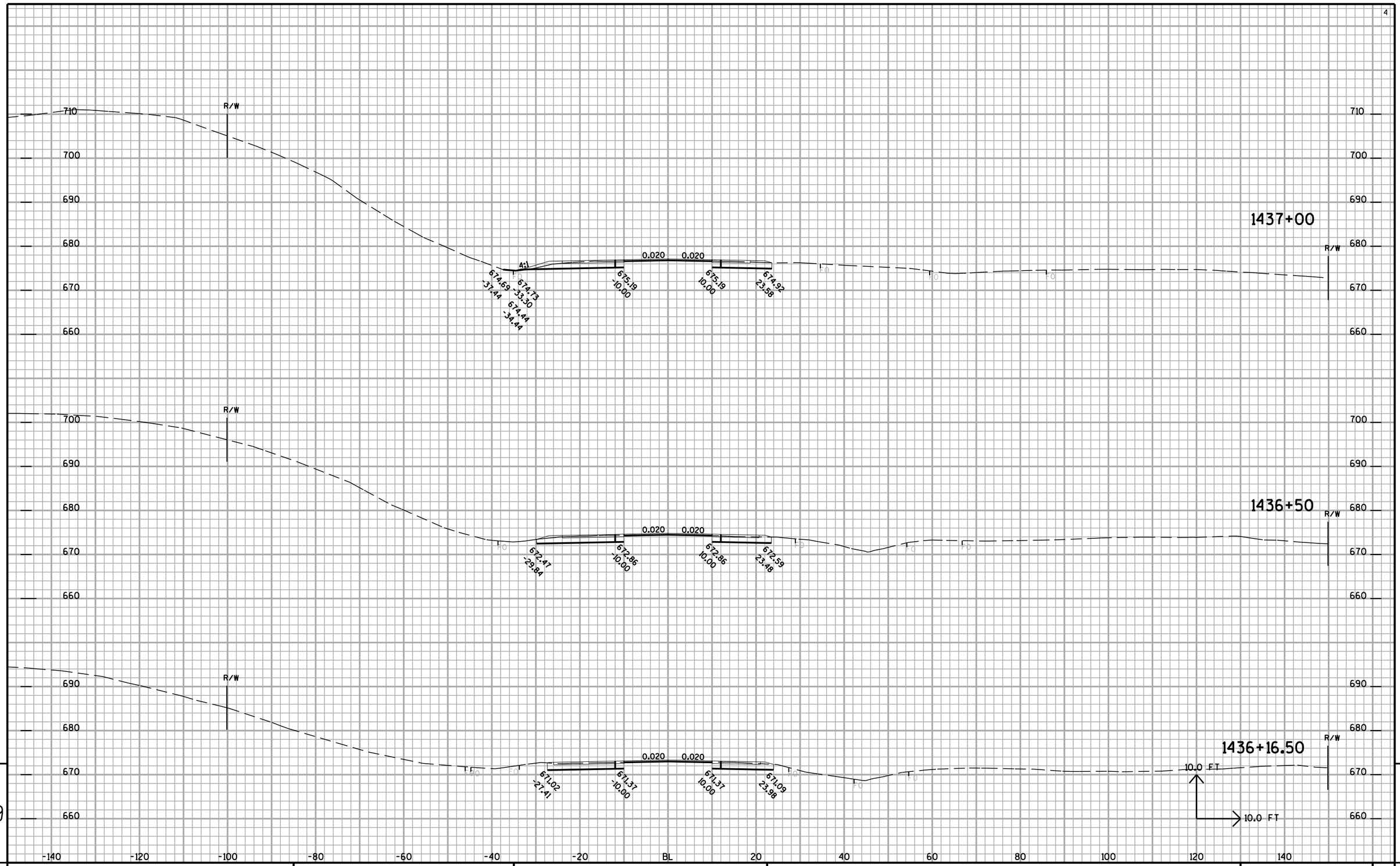


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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 245	E

FILE NAME : ±±gre31fpl±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1

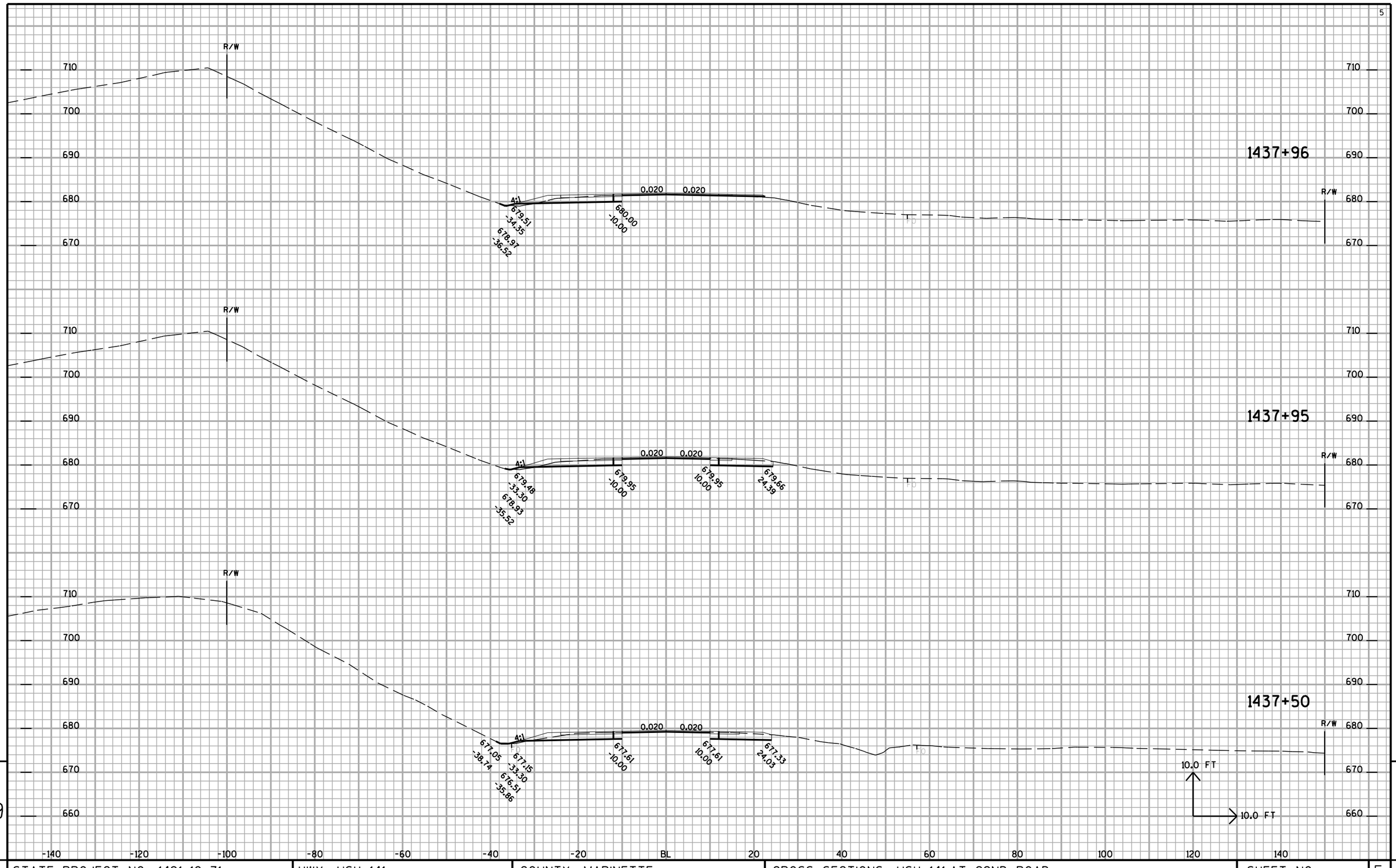


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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 246	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1

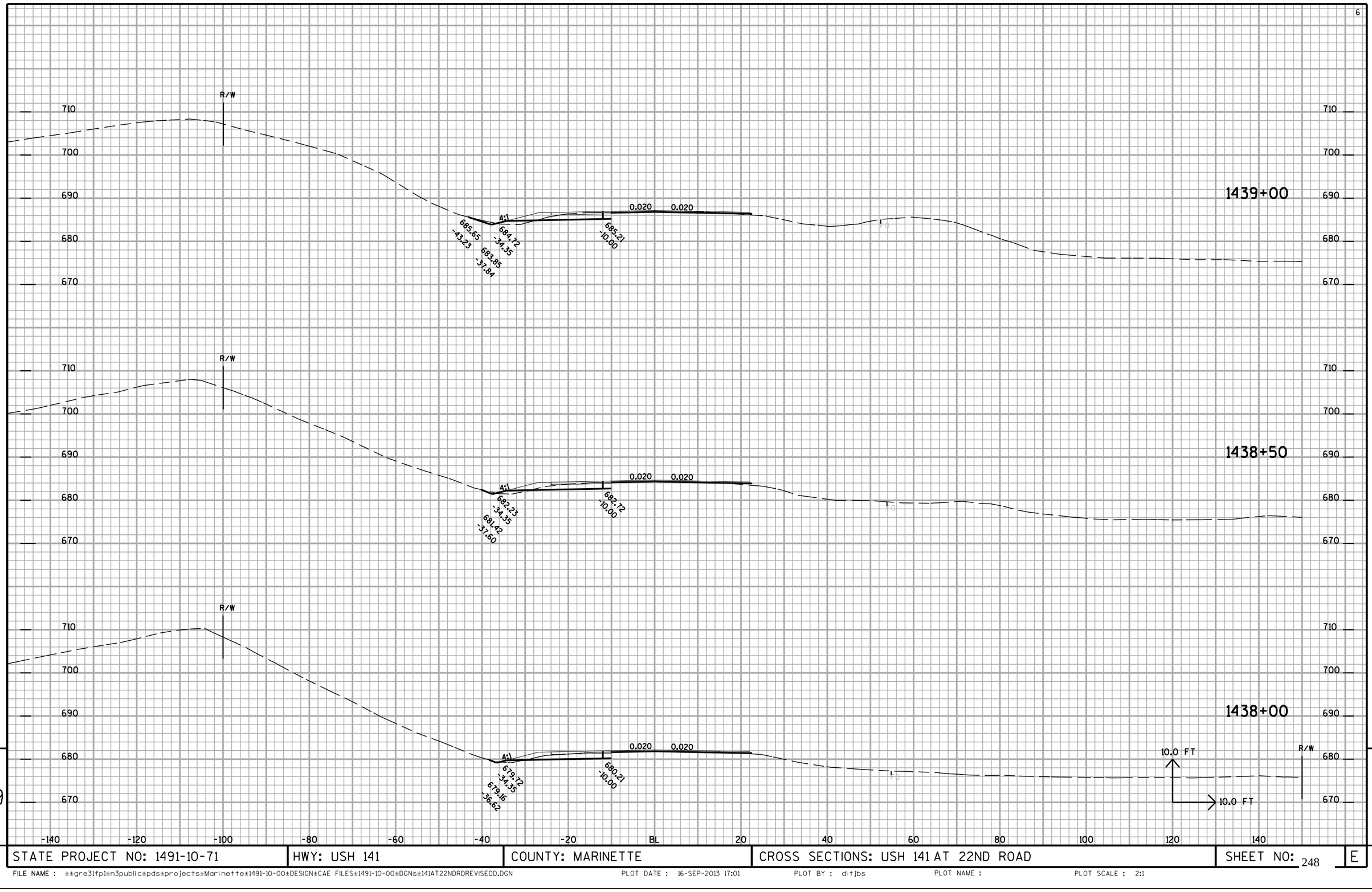


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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 247	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1



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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 248	E

FILE NAME : ±±gre31fpl±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1

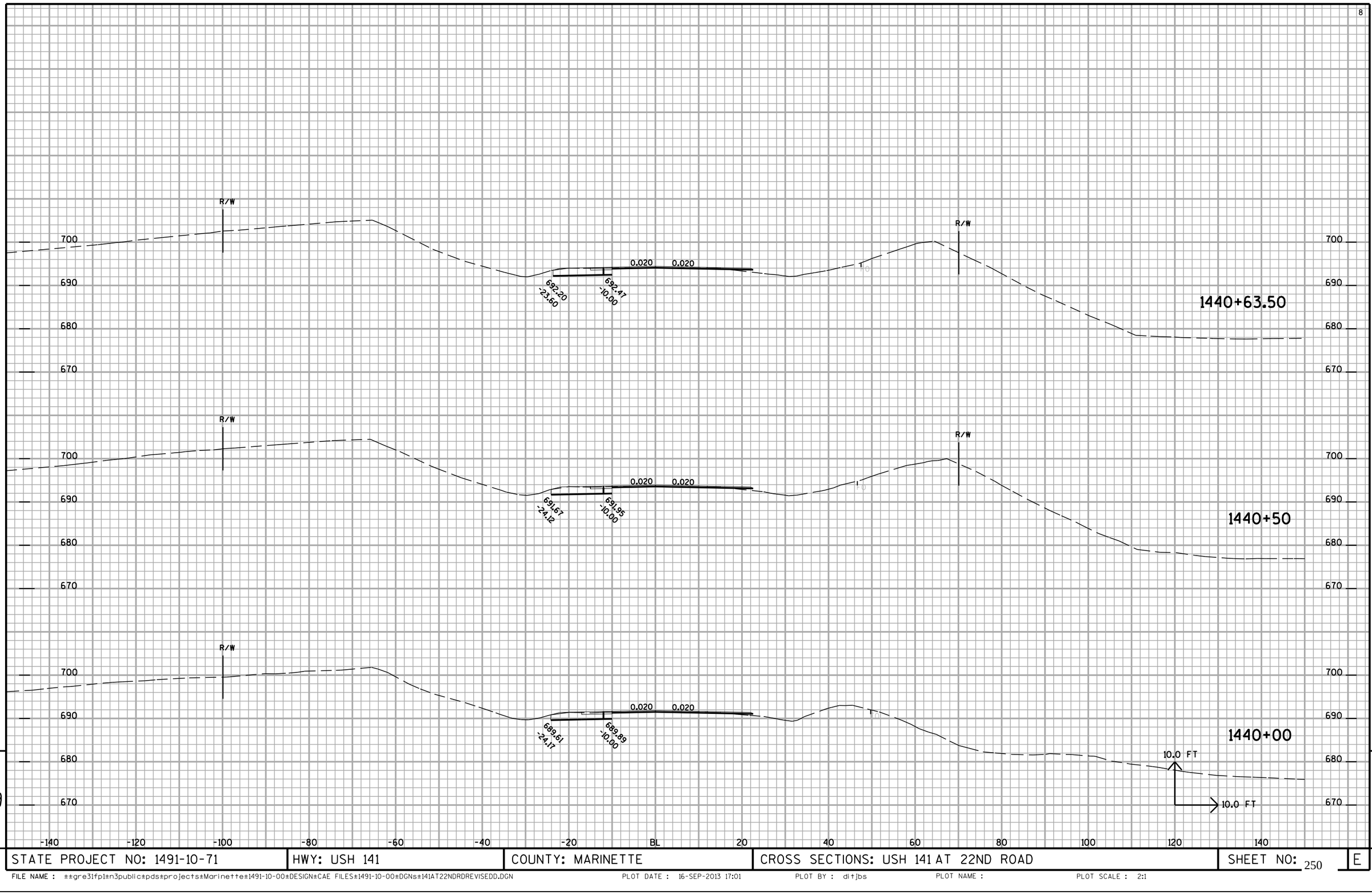


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STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 249	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1

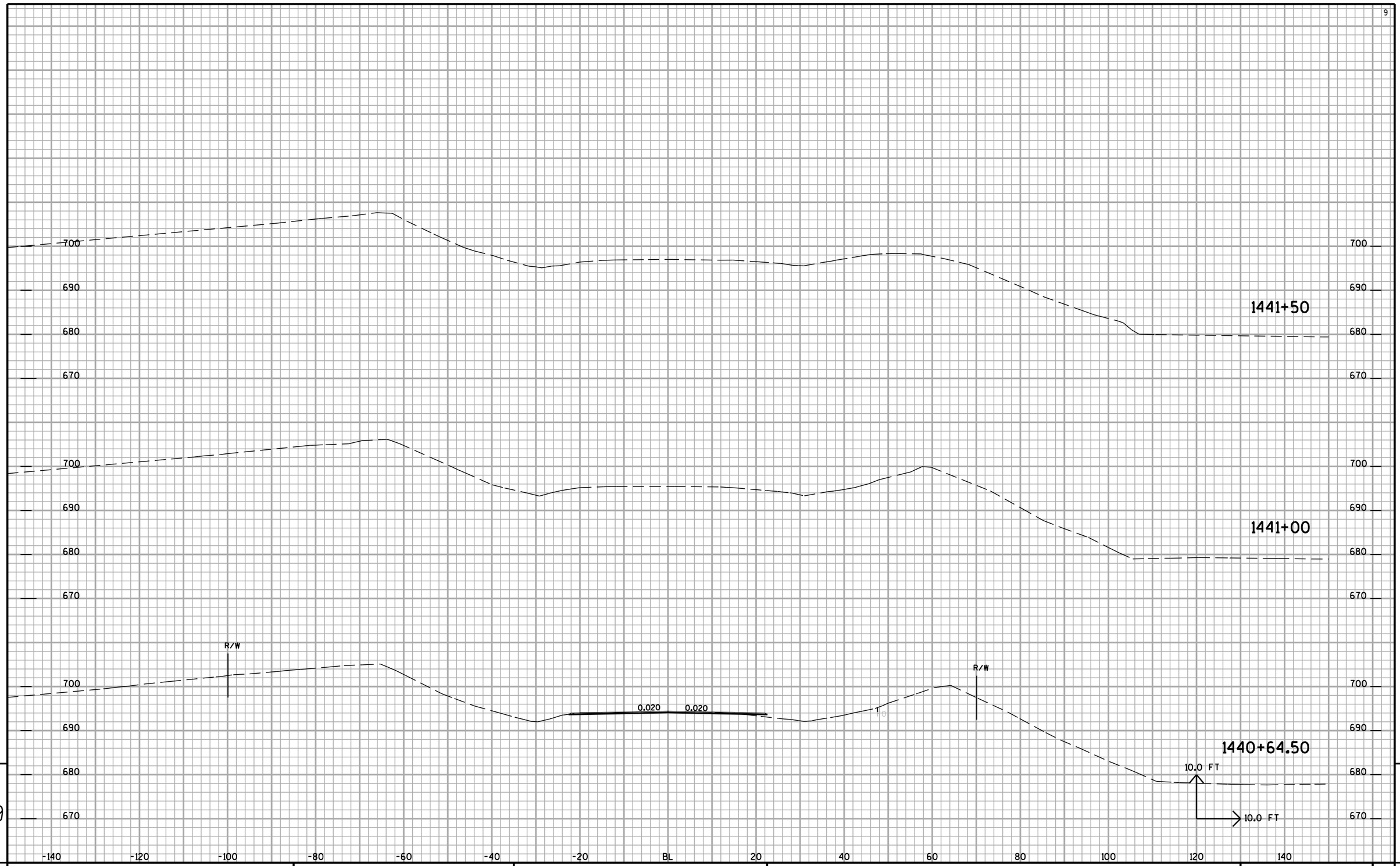


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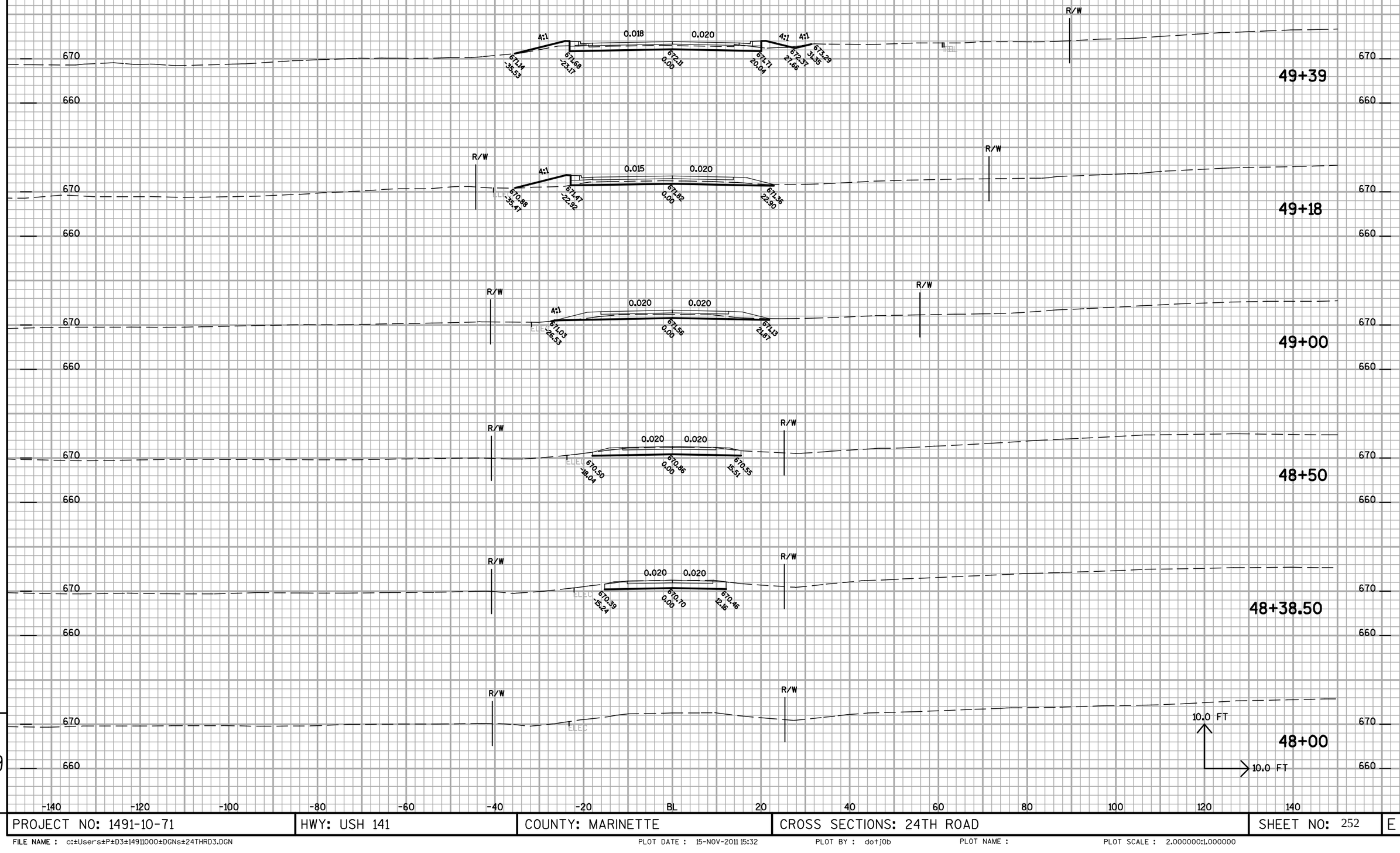
STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 250	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1



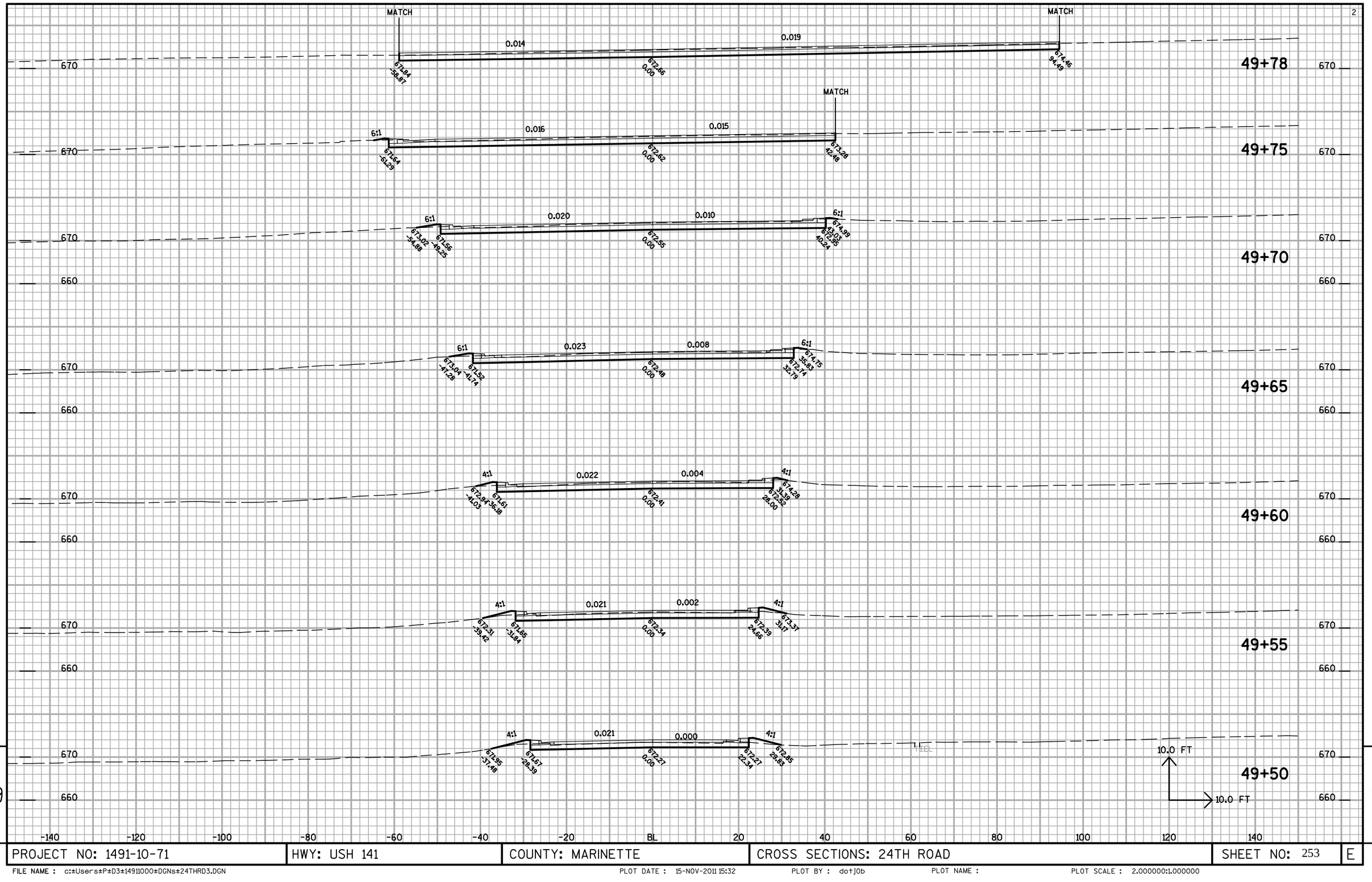
STATE PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 22ND ROAD	SHEET NO: 251	E

FILE NAME : ±±gre31fp1±n3public±pds±projects±Marinette±1491-10-00±DESIGN±CAE FILES±1491-10-00±DGNs±141AT22NDRDREVISEDD.DGN PLOT DATE : 16-SEP-2013 17:01 PLOT BY : ditjbs PLOT NAME : PLOT SCALE : 2:1



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 24TH ROAD	SHEET NO: 252	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±24THRD3.DGN PLOT DATE : 15-NOV-2011 15:32 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

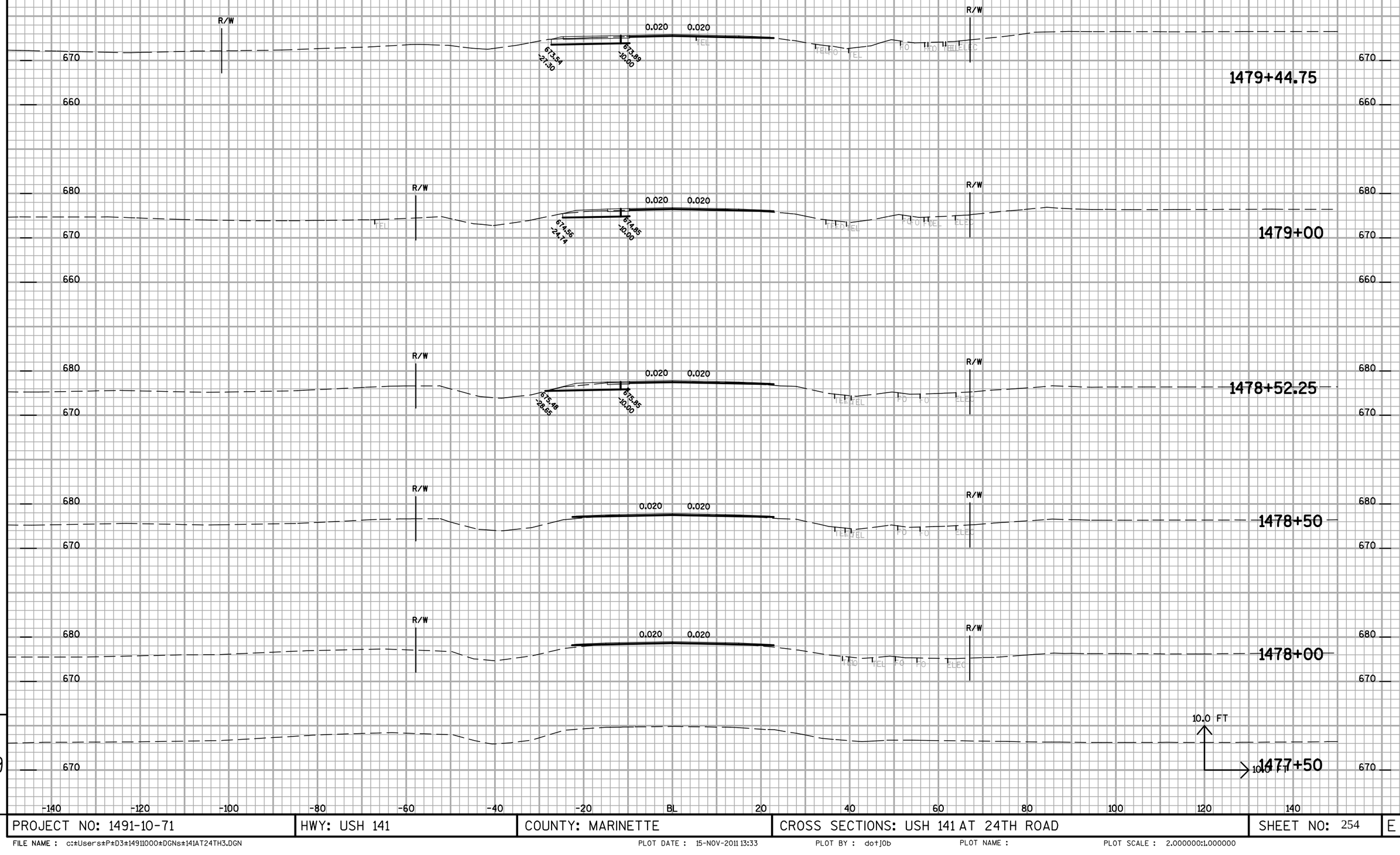


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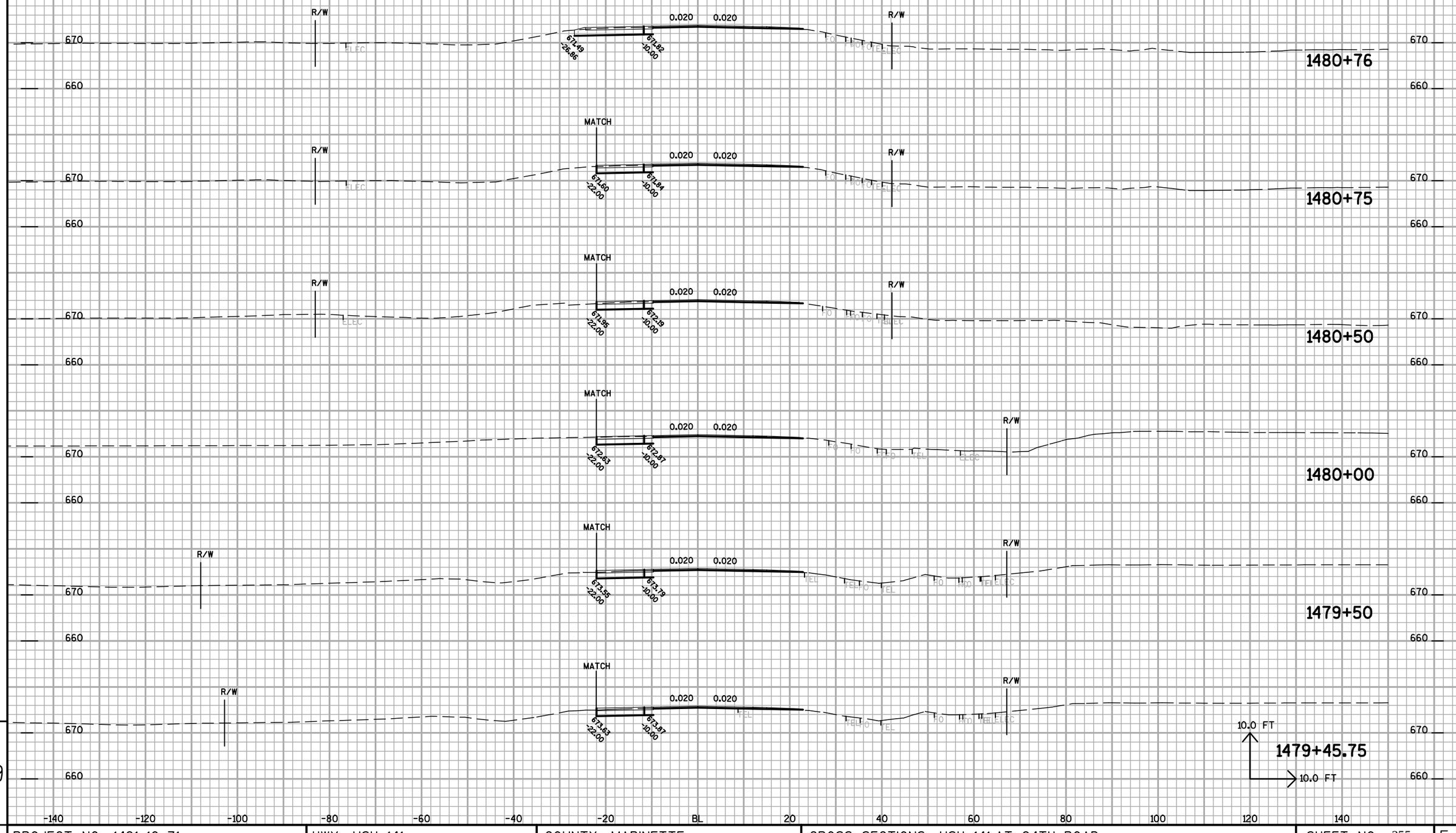
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 24TH ROAD	SHEET NO: 253	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±24THRD3.DGN PLOT DATE : 15-NOV-2011 15:32 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 24TH ROAD	SHEET NO: 254	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±141AT24TH3.DGN PLOT DATE : 15-NOV-2011 13:33 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



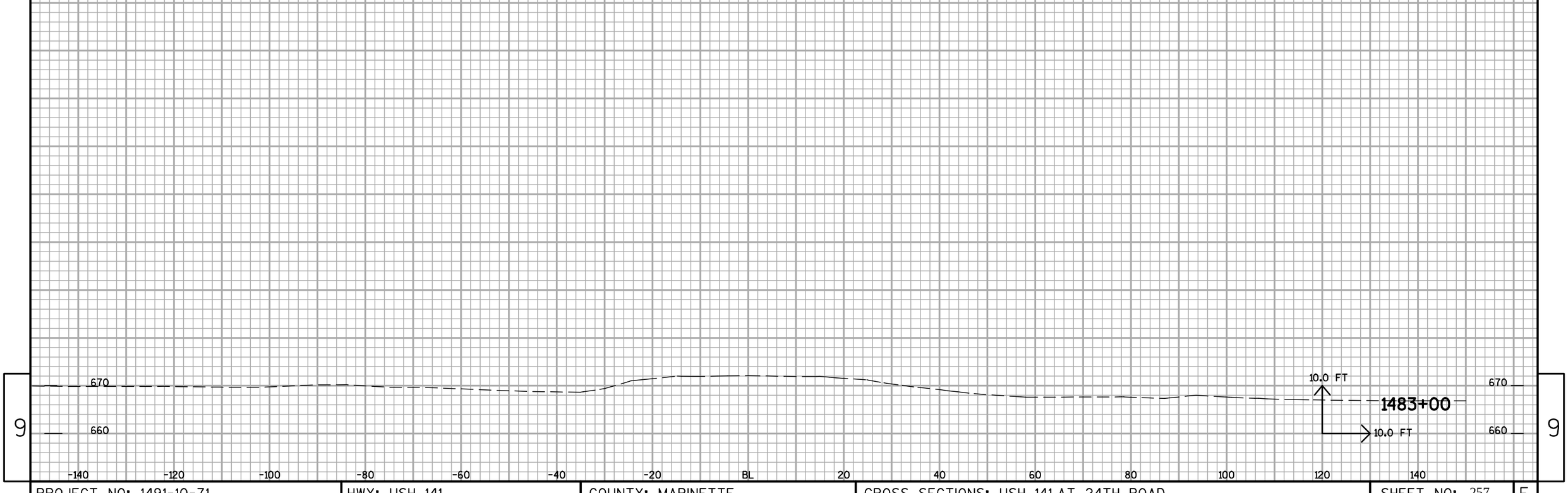
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 24TH ROAD	SHEET NO: 255	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±141AT24TH3.DGN PLOT DATE : 15-NOV-2011 13:33 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 24TH ROAD	SHEET NO: 256	E

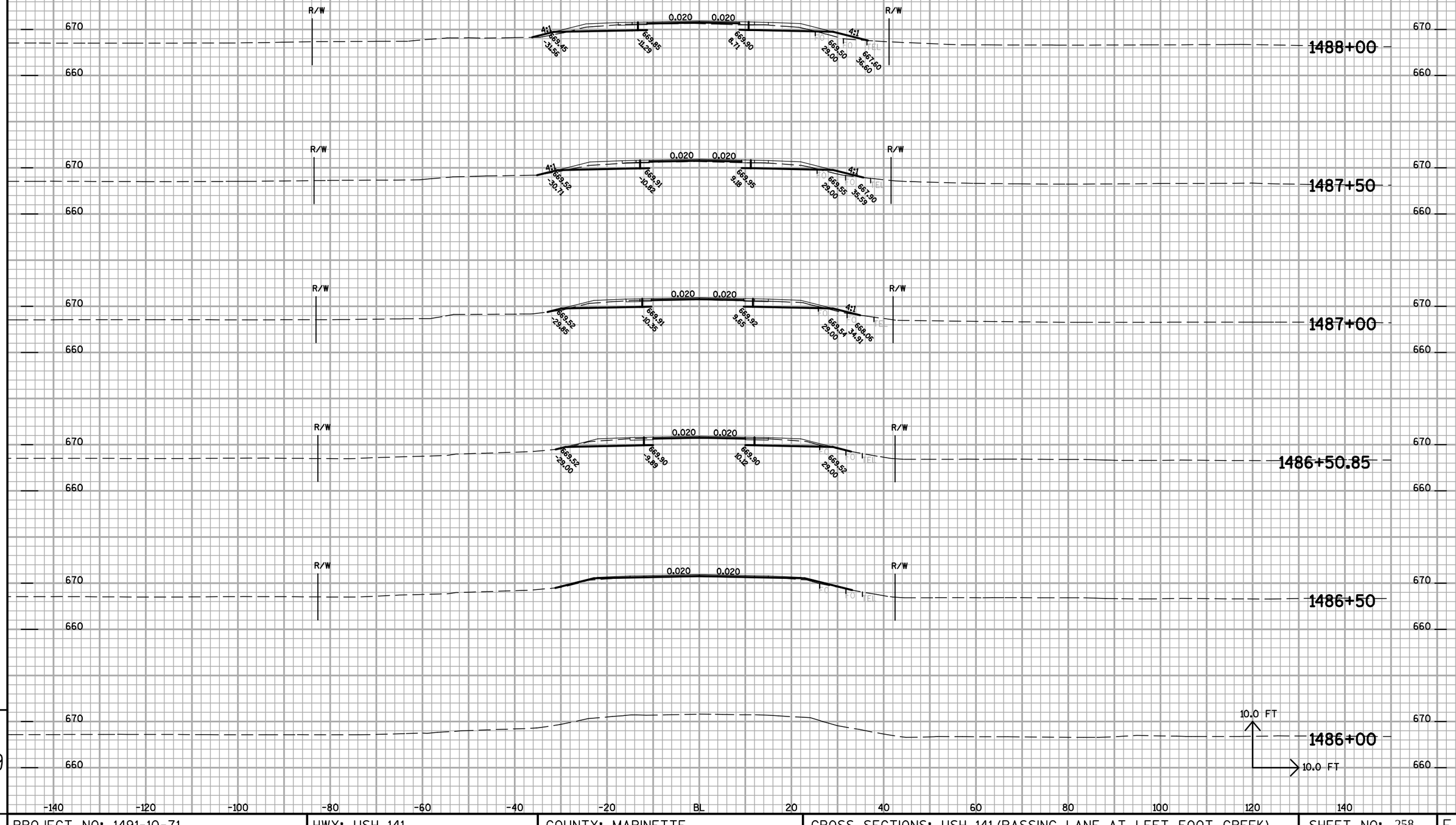
FILE NAME : c:±Users±P±D3±14911000±DGNs±141AT24TH3.DGN PLOT DATE : 15-NOV-2011 13:33 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



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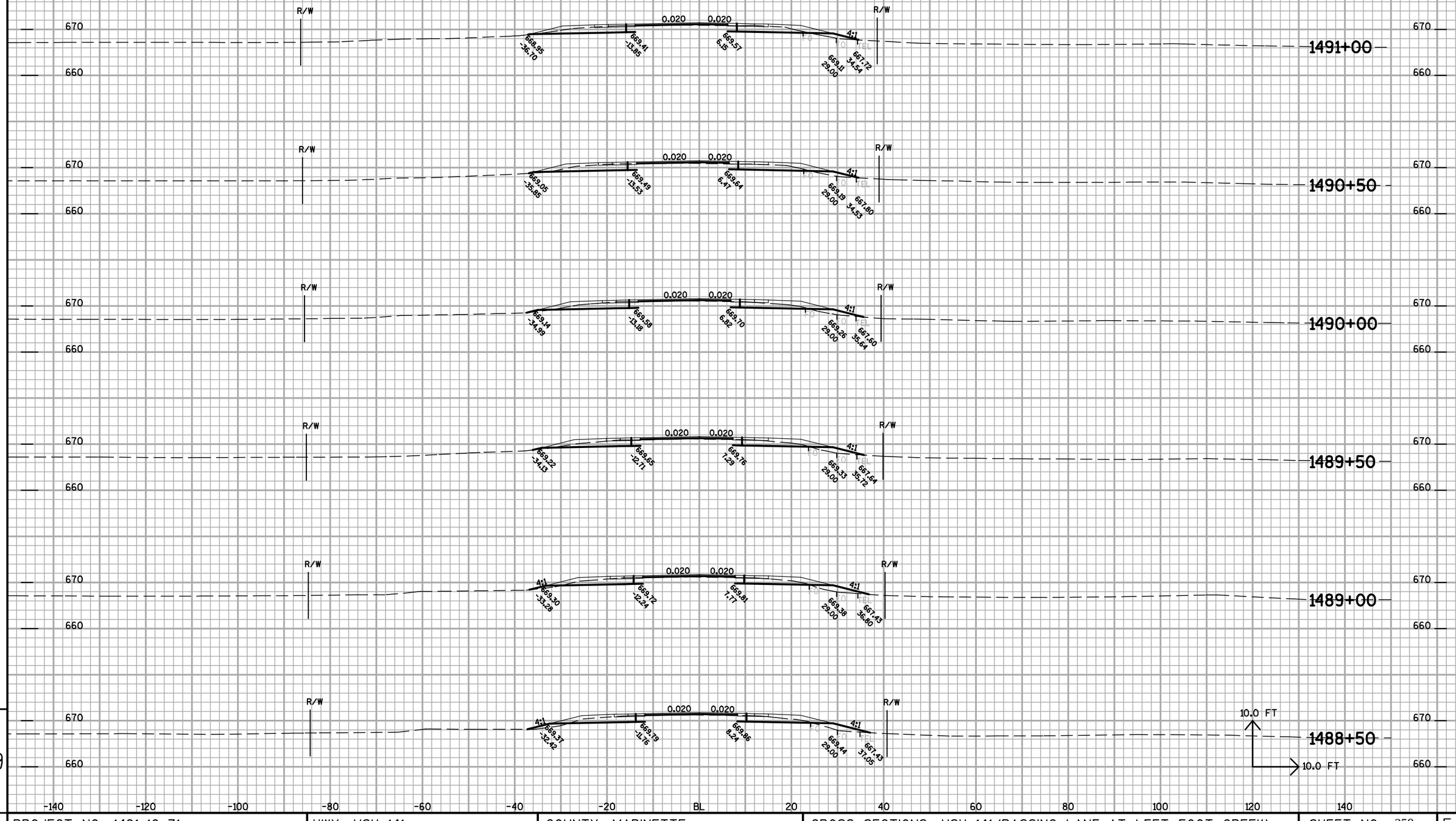
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT 24TH ROAD	SHEET NO: 257	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±141AT24TH3.DGN PLOT DATE : 15-NOV-2011 13:33 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



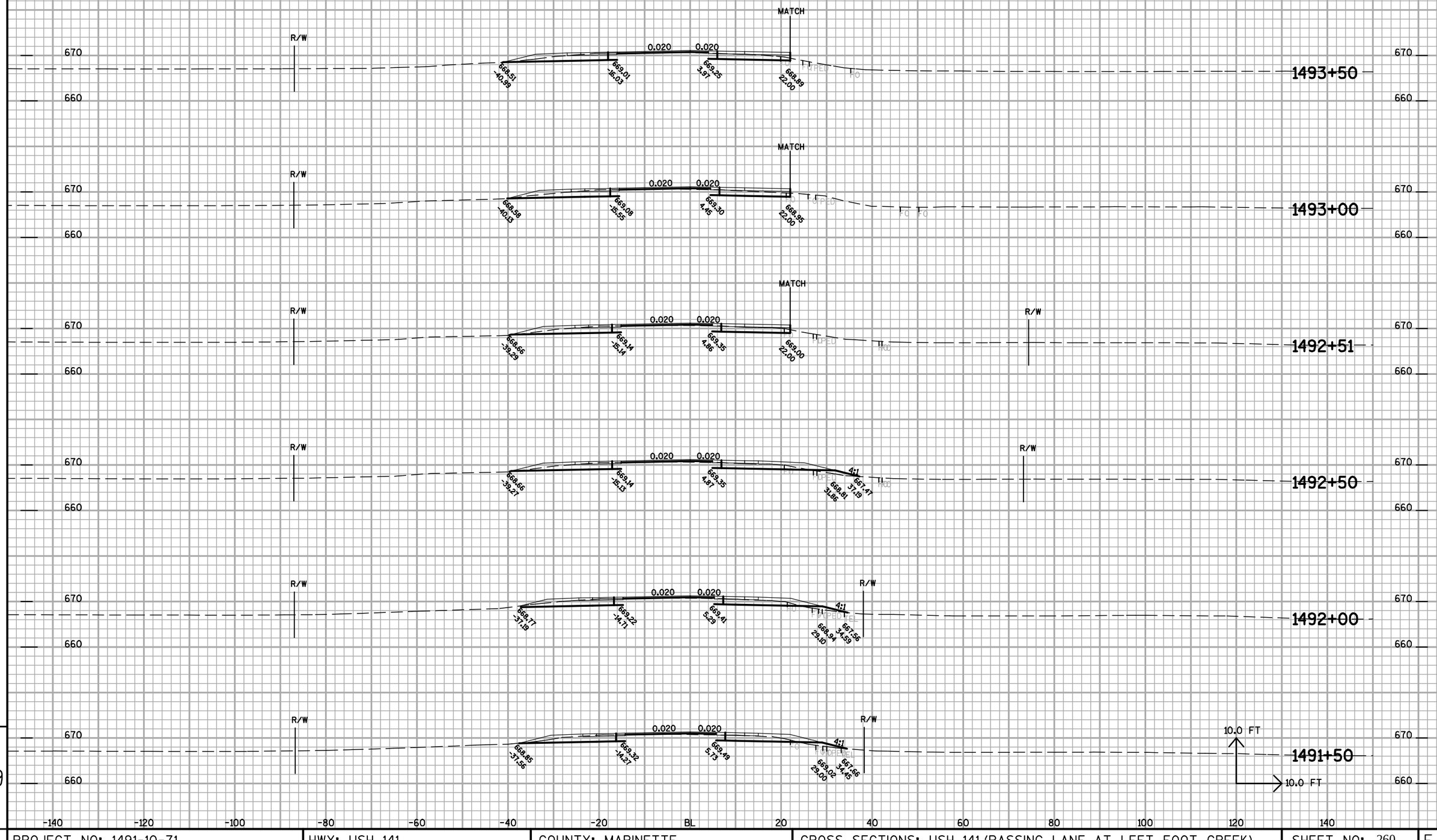
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 258	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:26 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



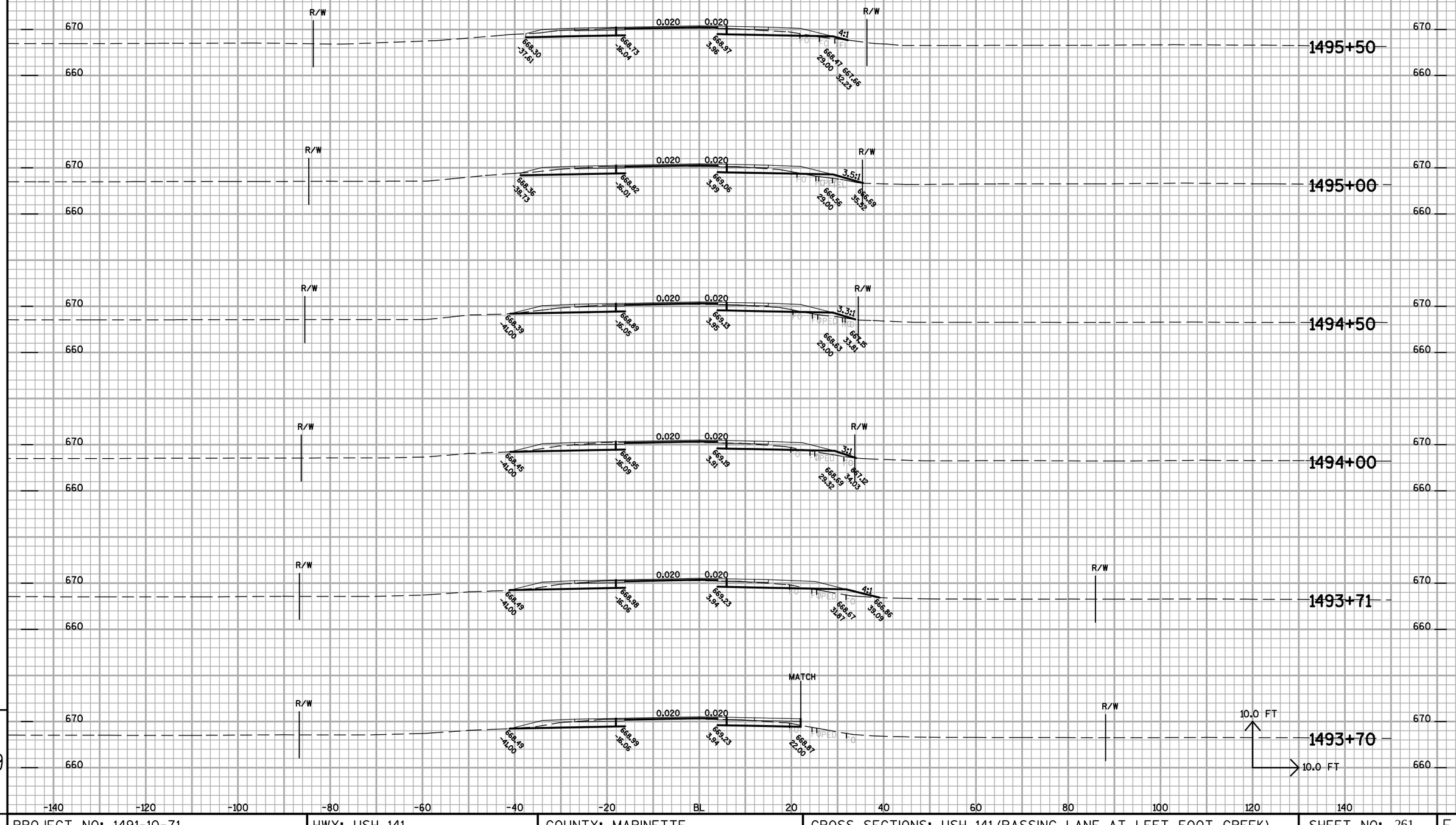
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 259	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:26 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



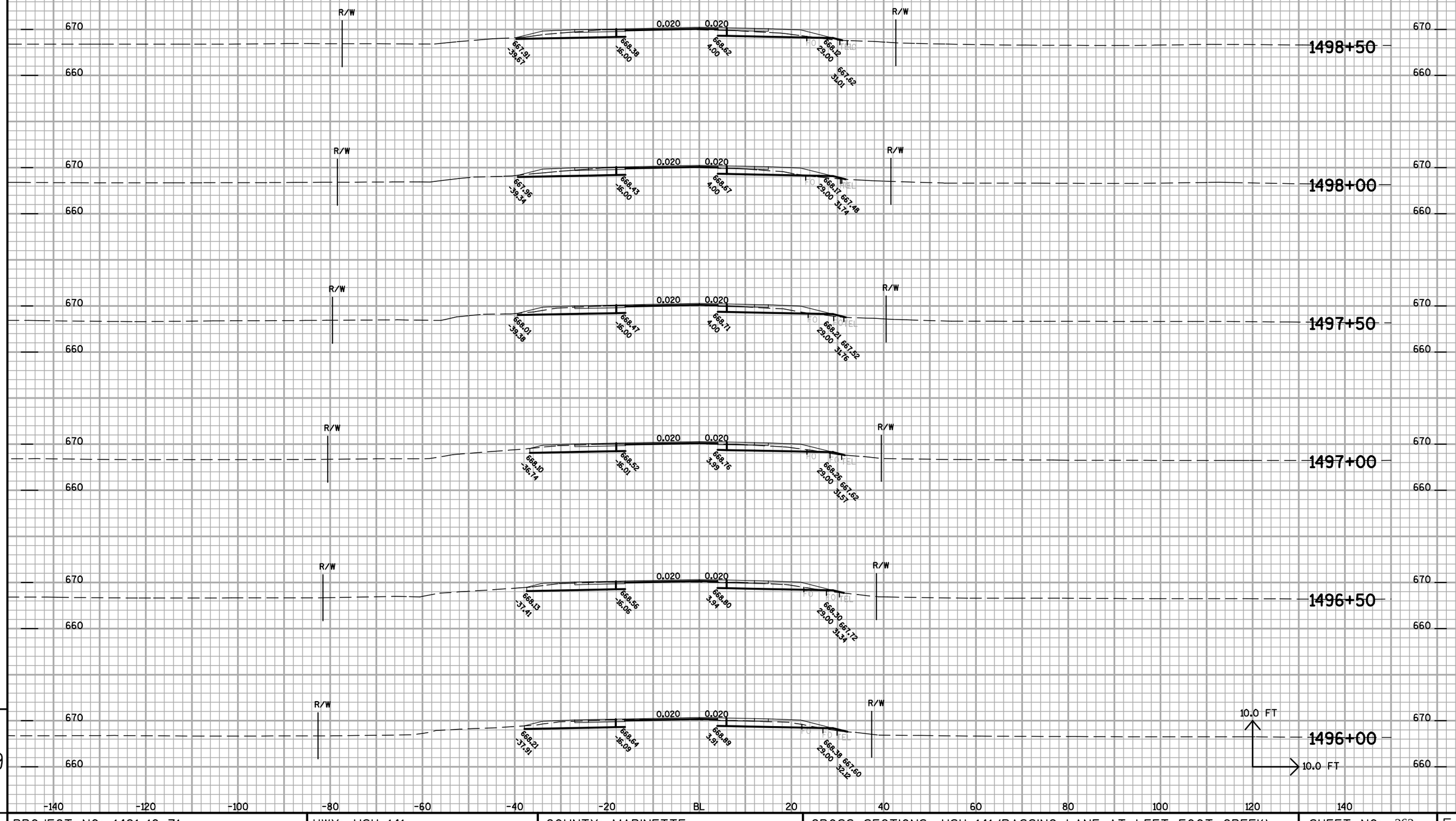
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 260	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:26 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



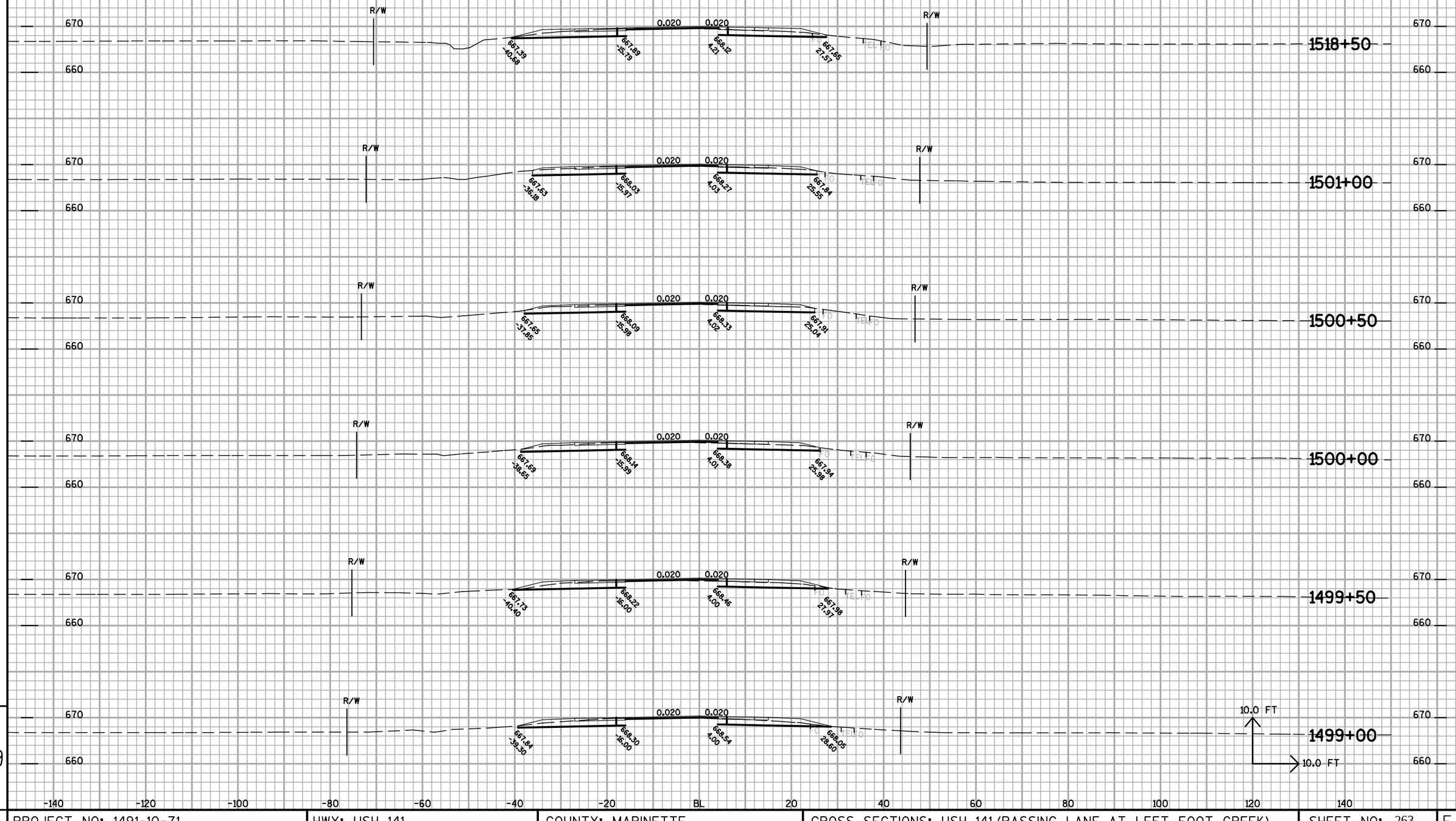
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 261 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



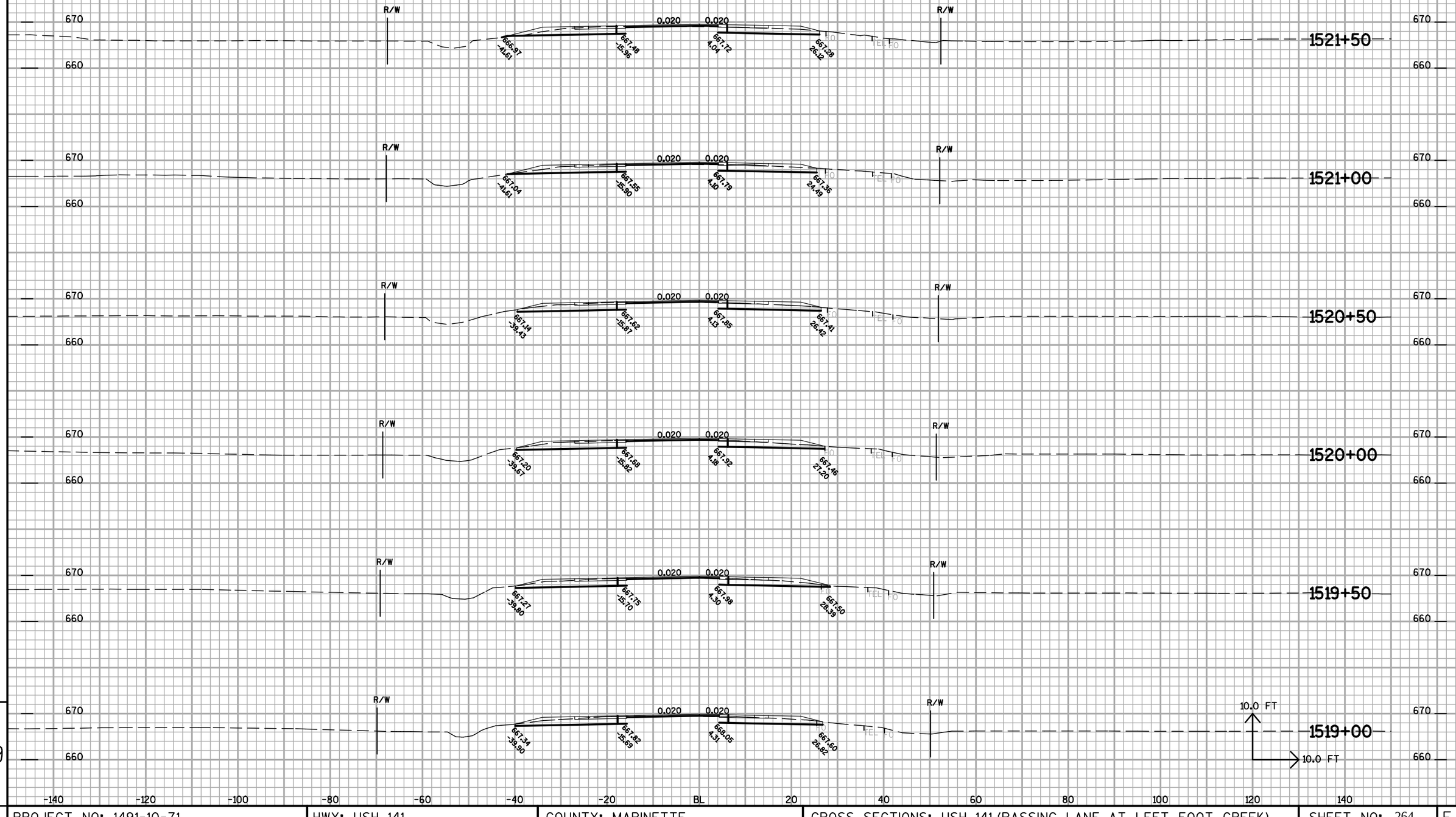
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 262	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



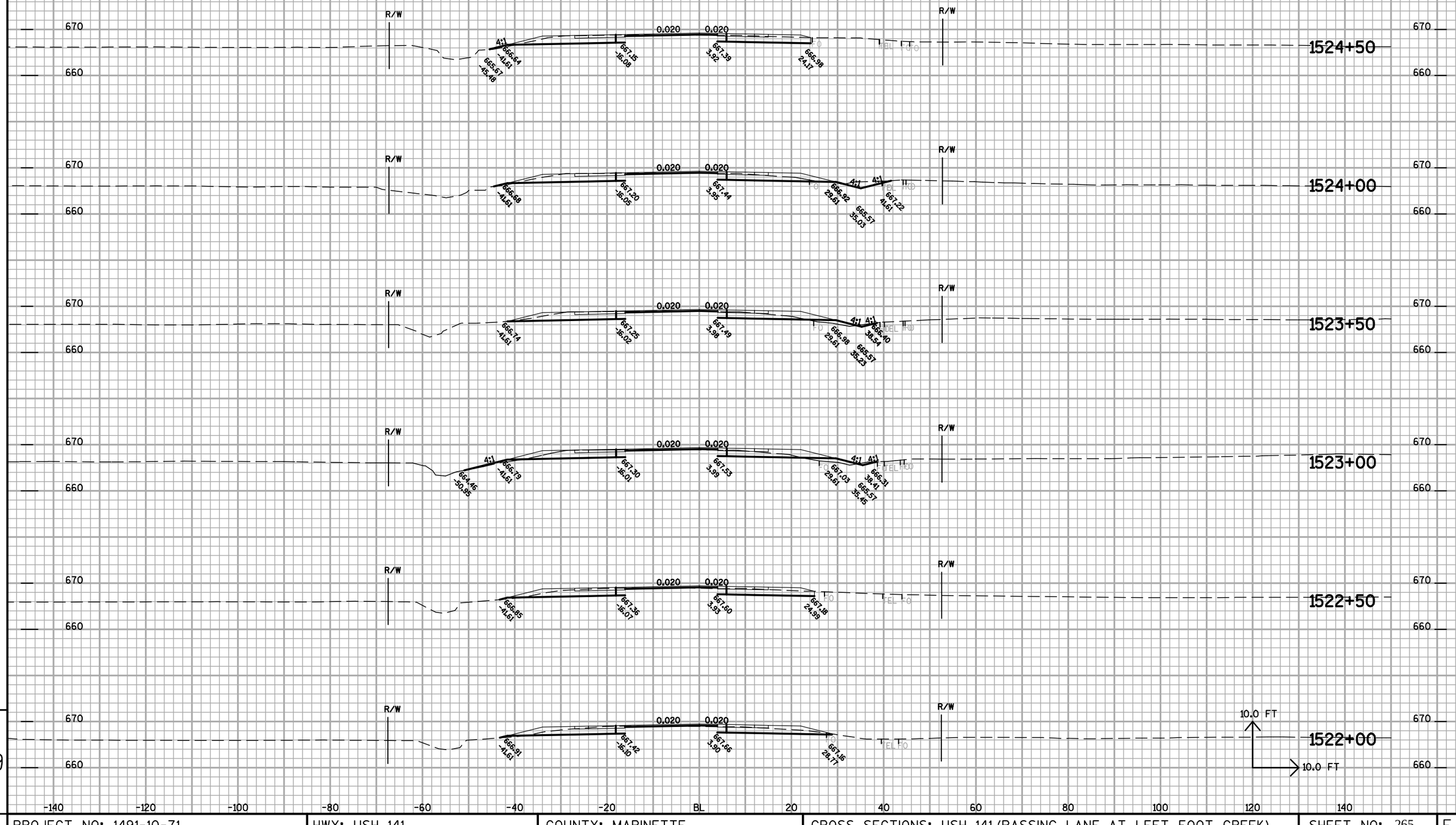
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 263 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 264	E

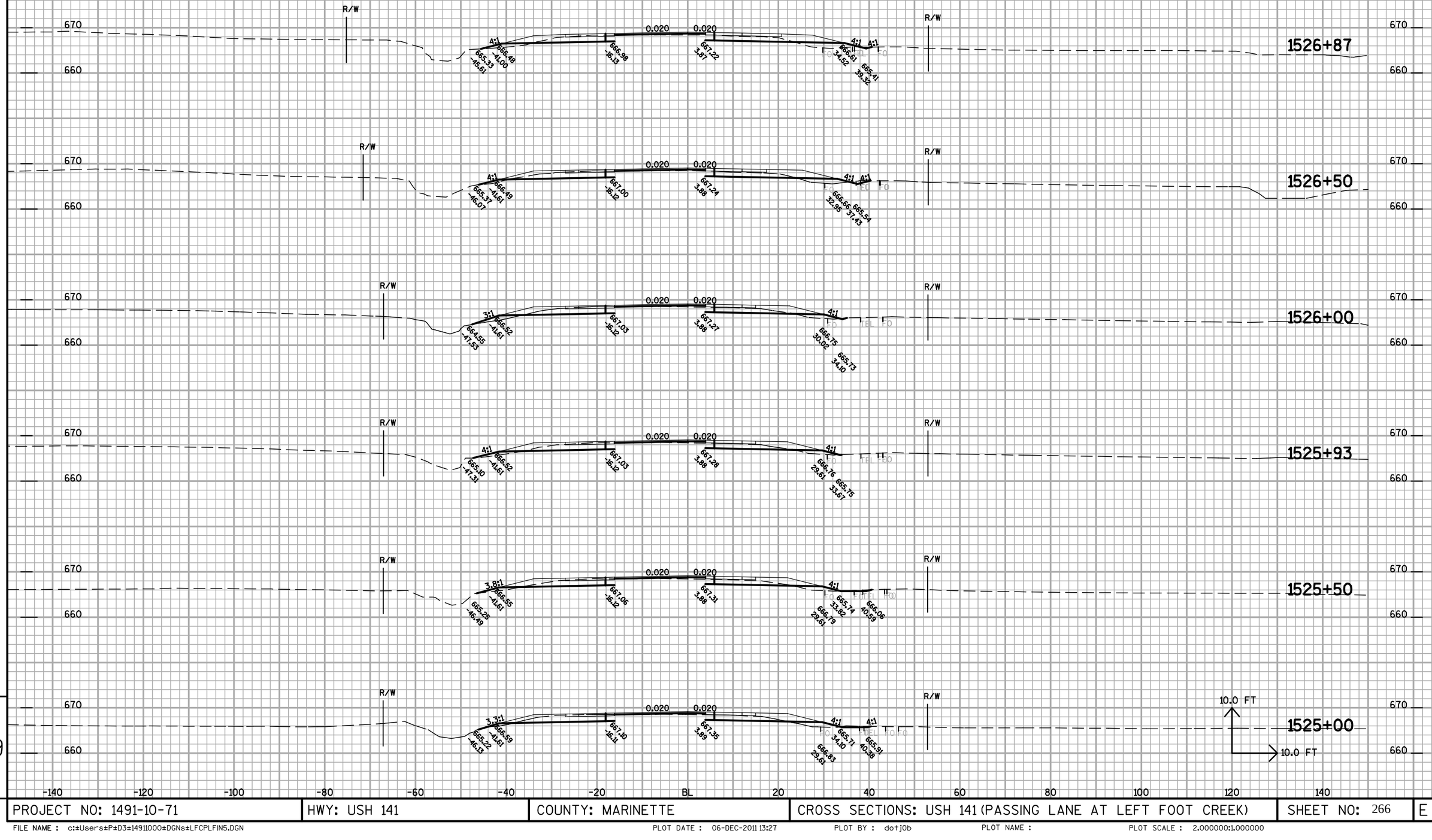
FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 265	E

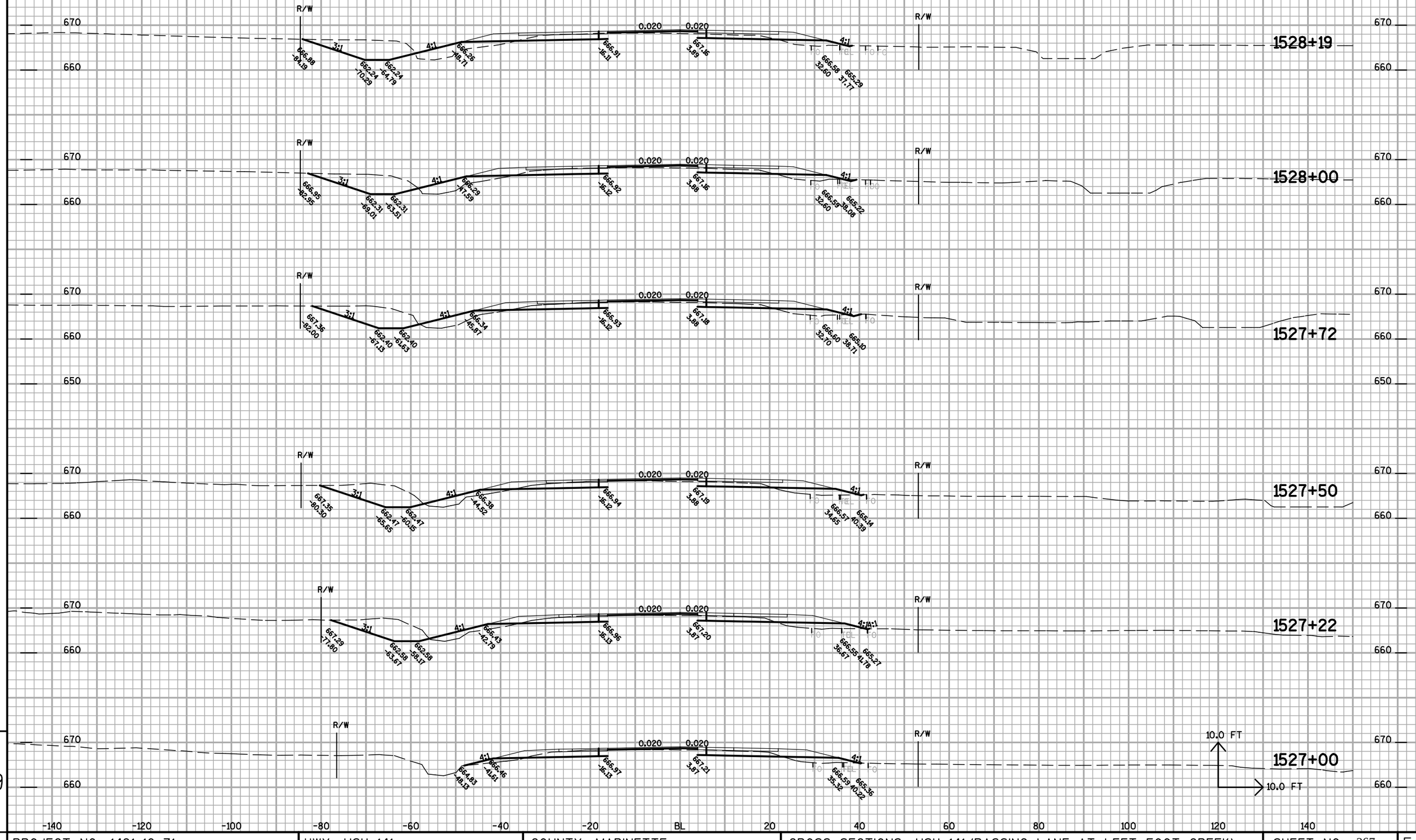
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FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 266	E

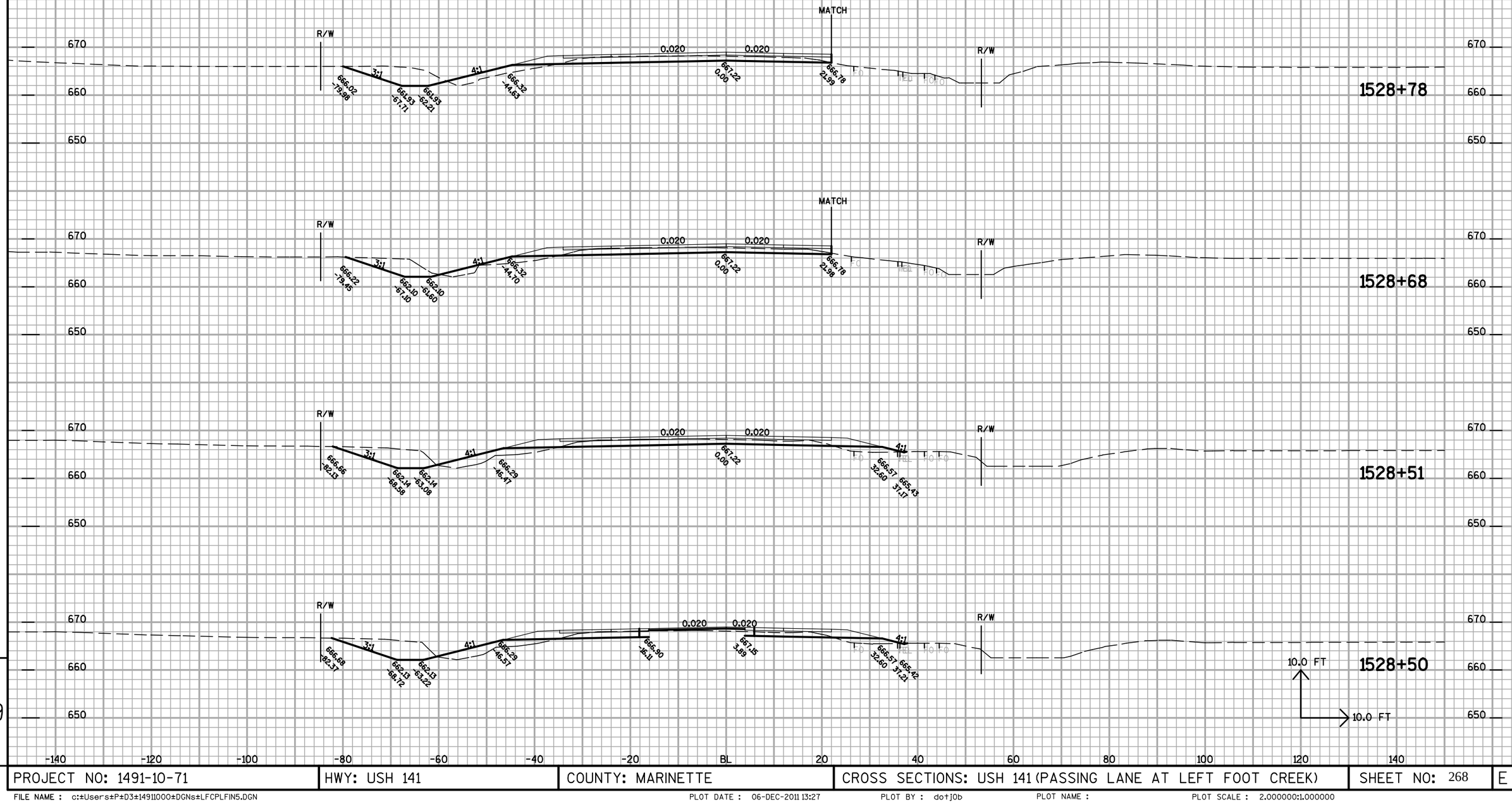
FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 267	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

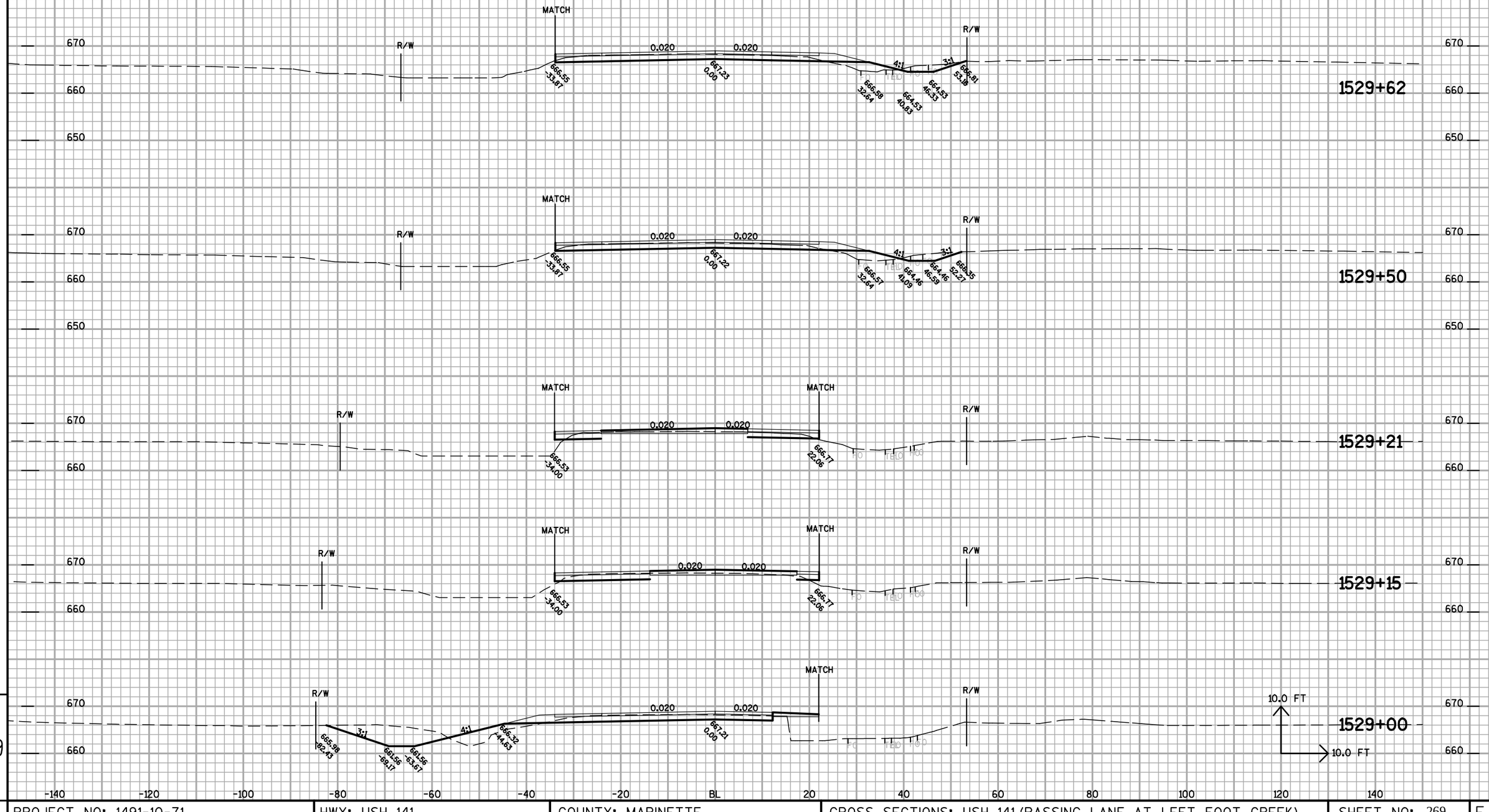


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 268	E

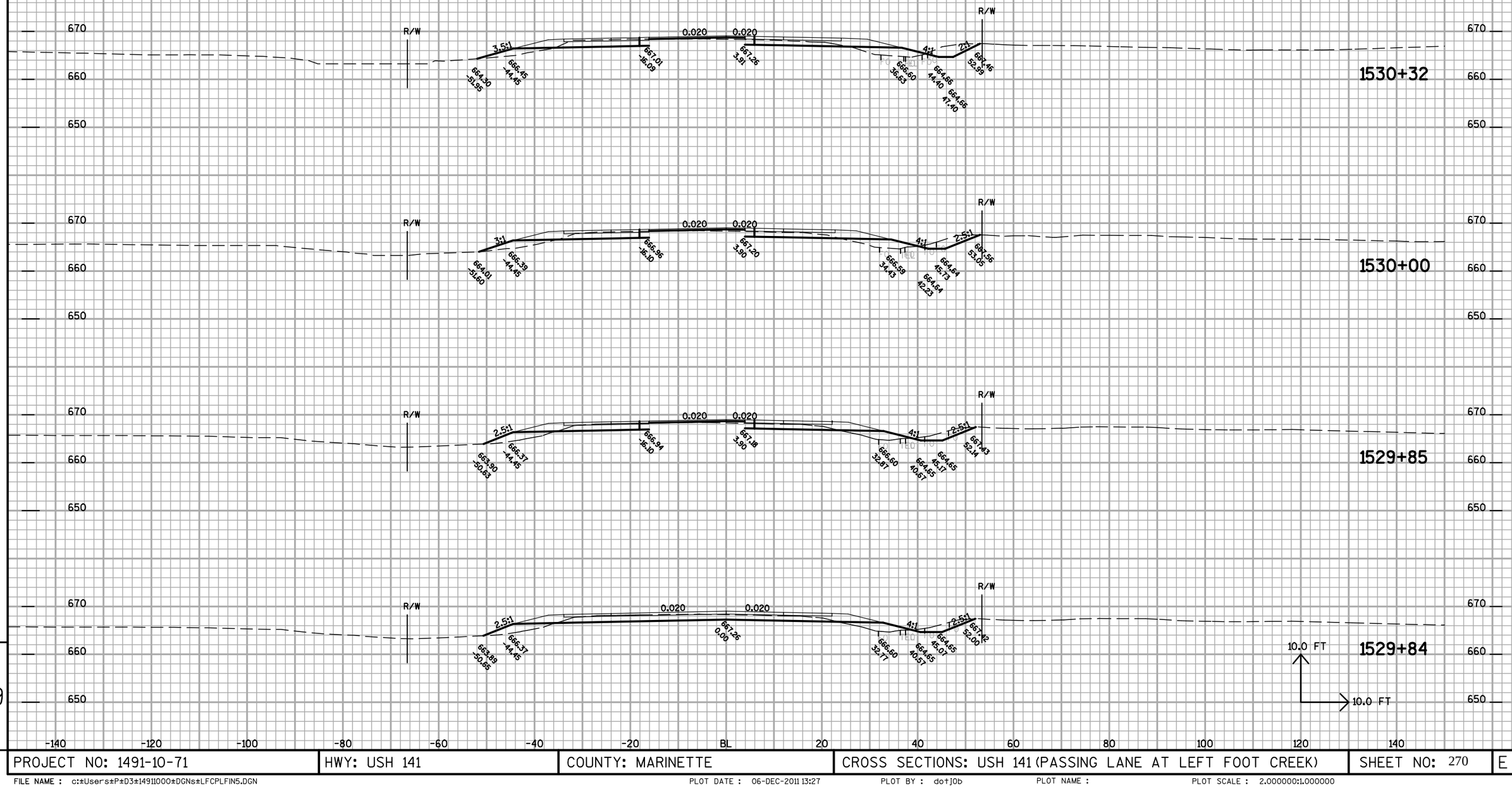
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FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 269	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

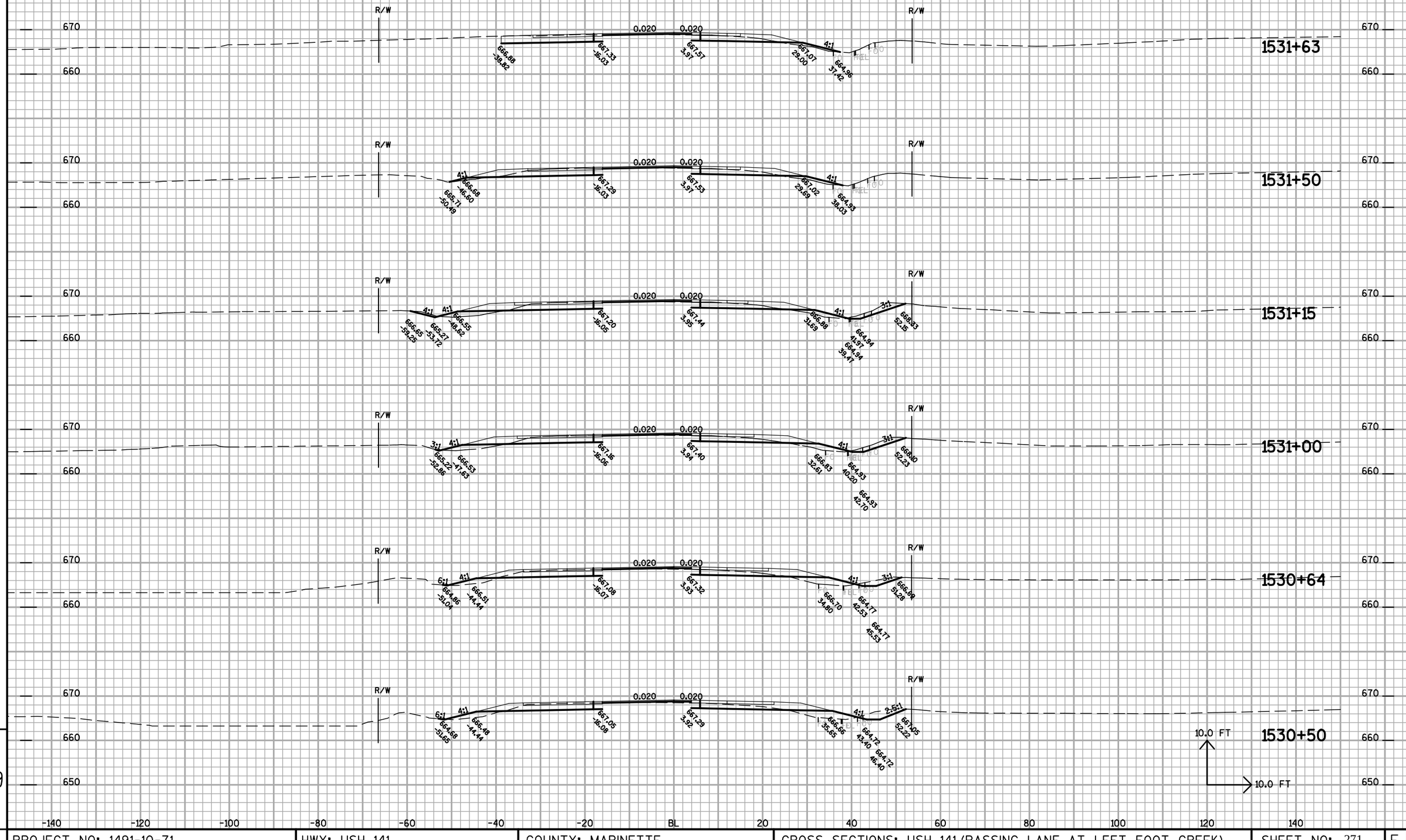


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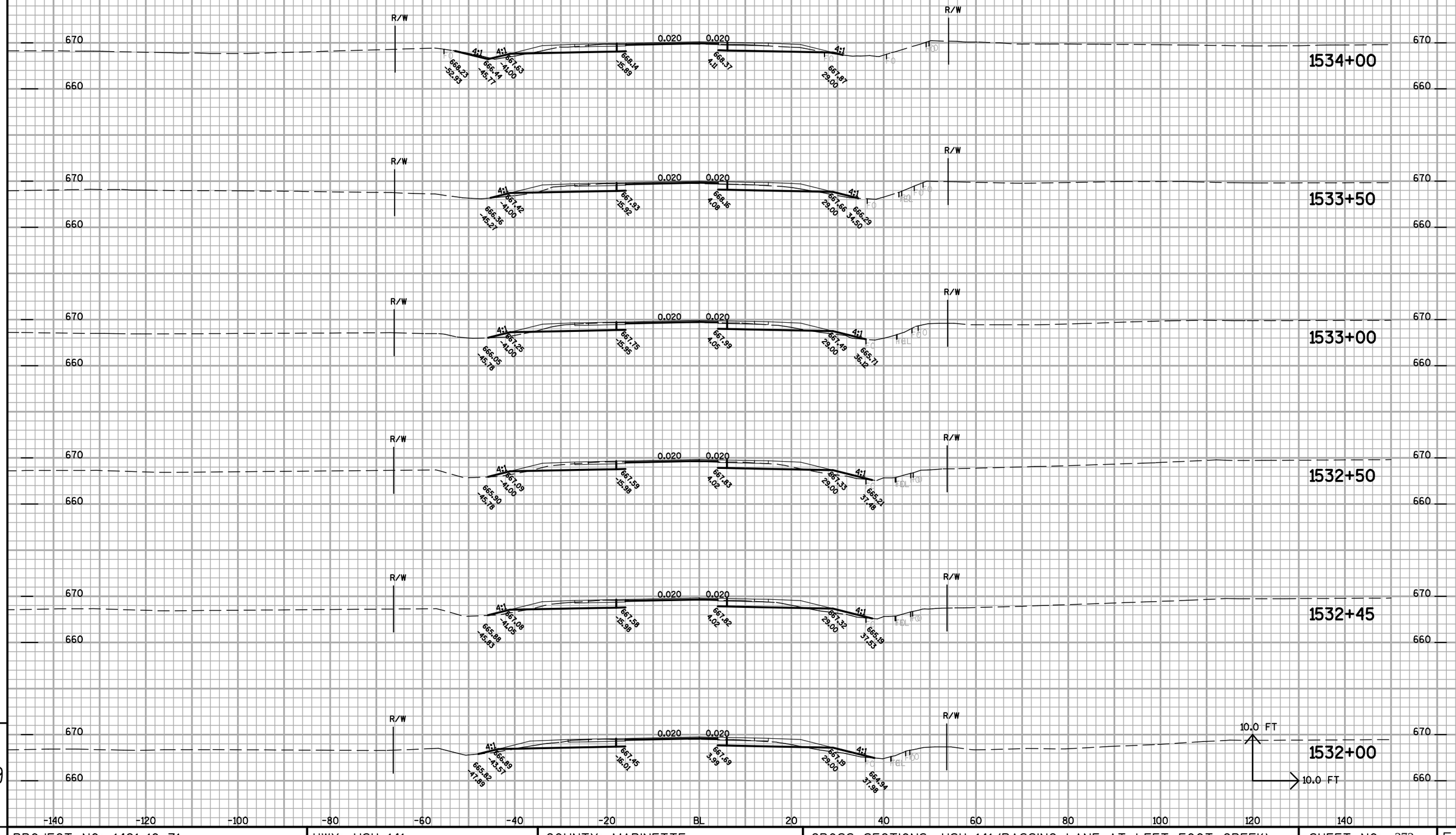
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 270	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:27 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000



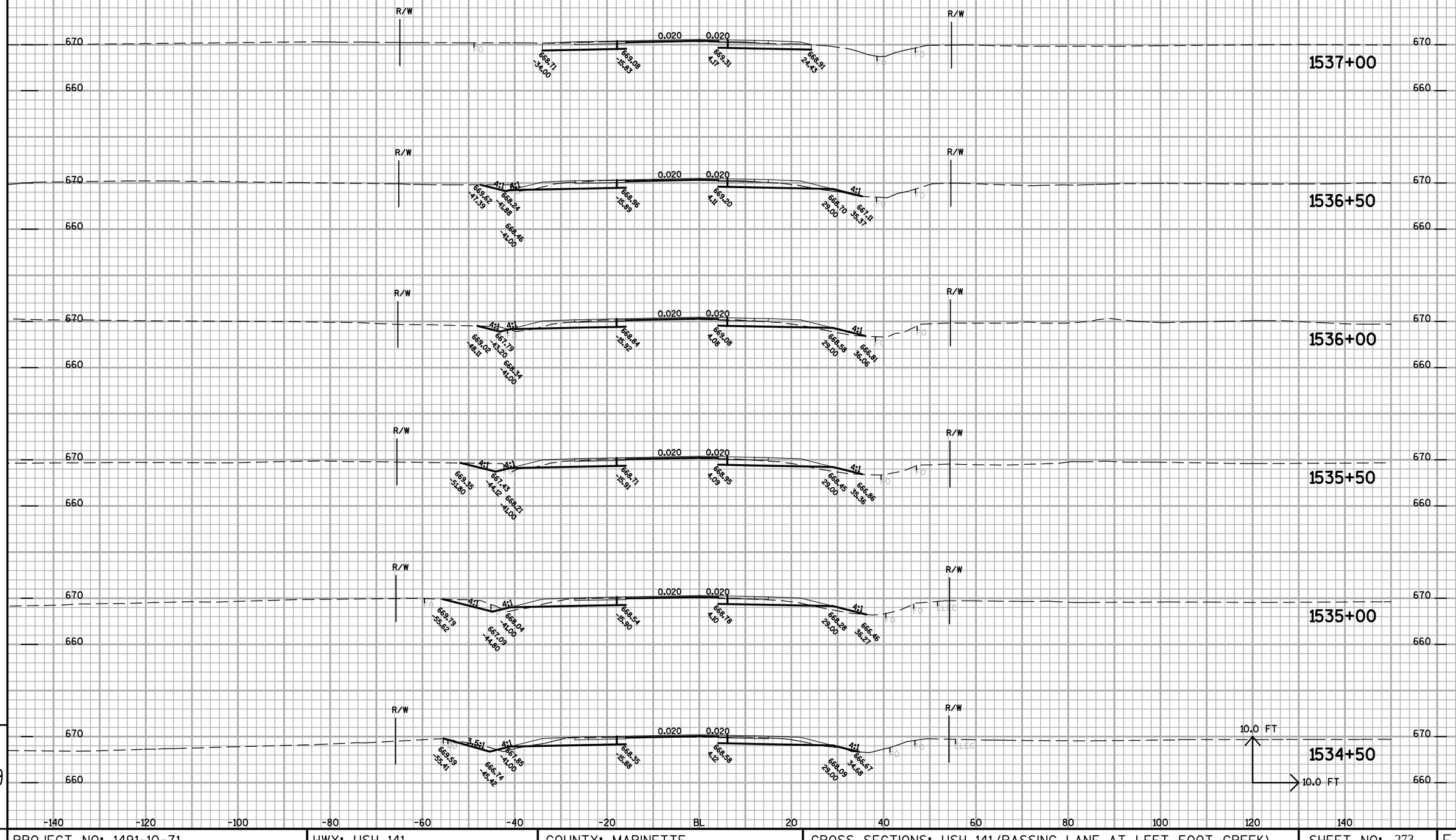
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 271	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dot j0b PLOT NAME : PLOT SCALE : 2.000000:1.000000



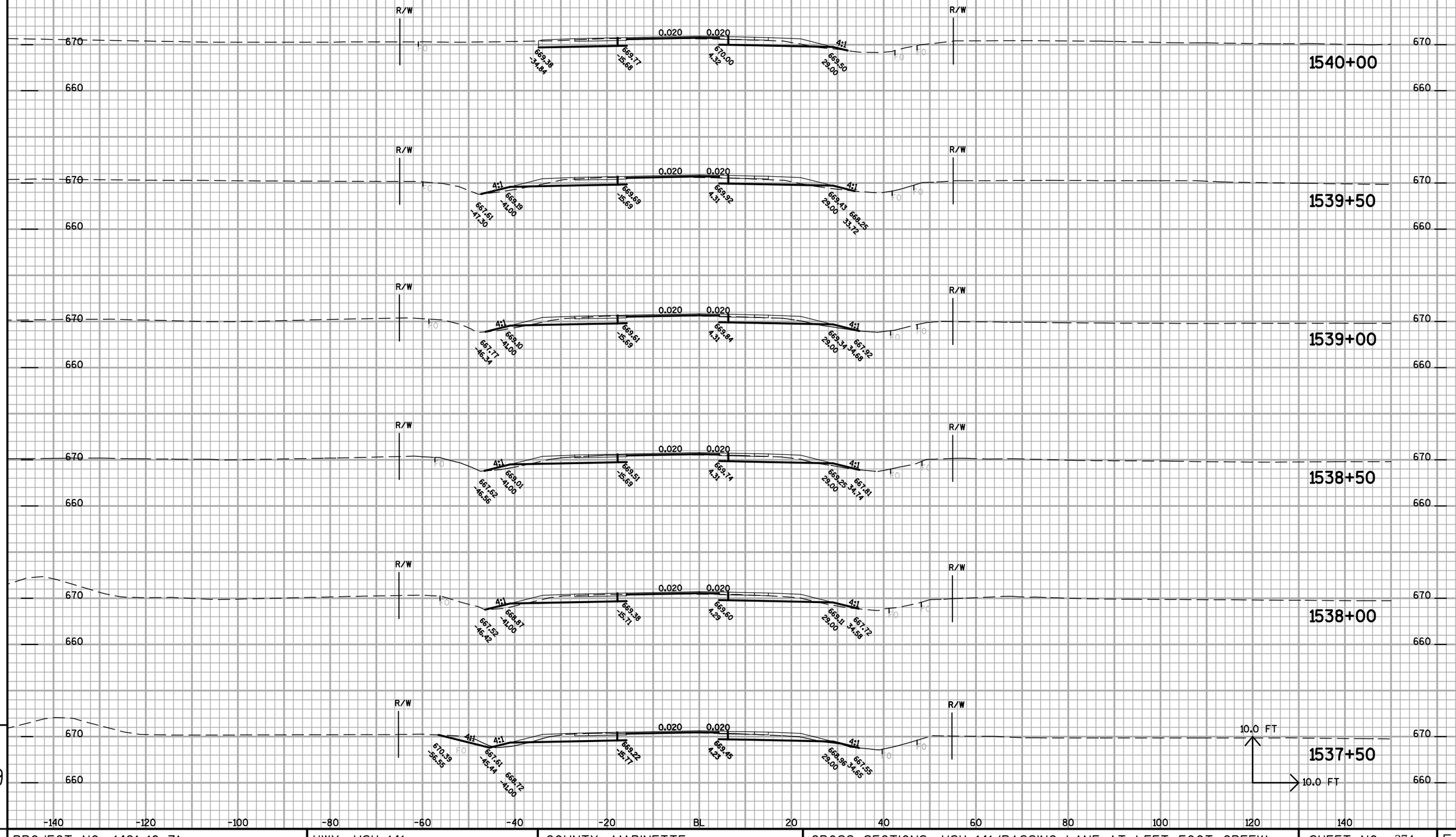
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 272 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



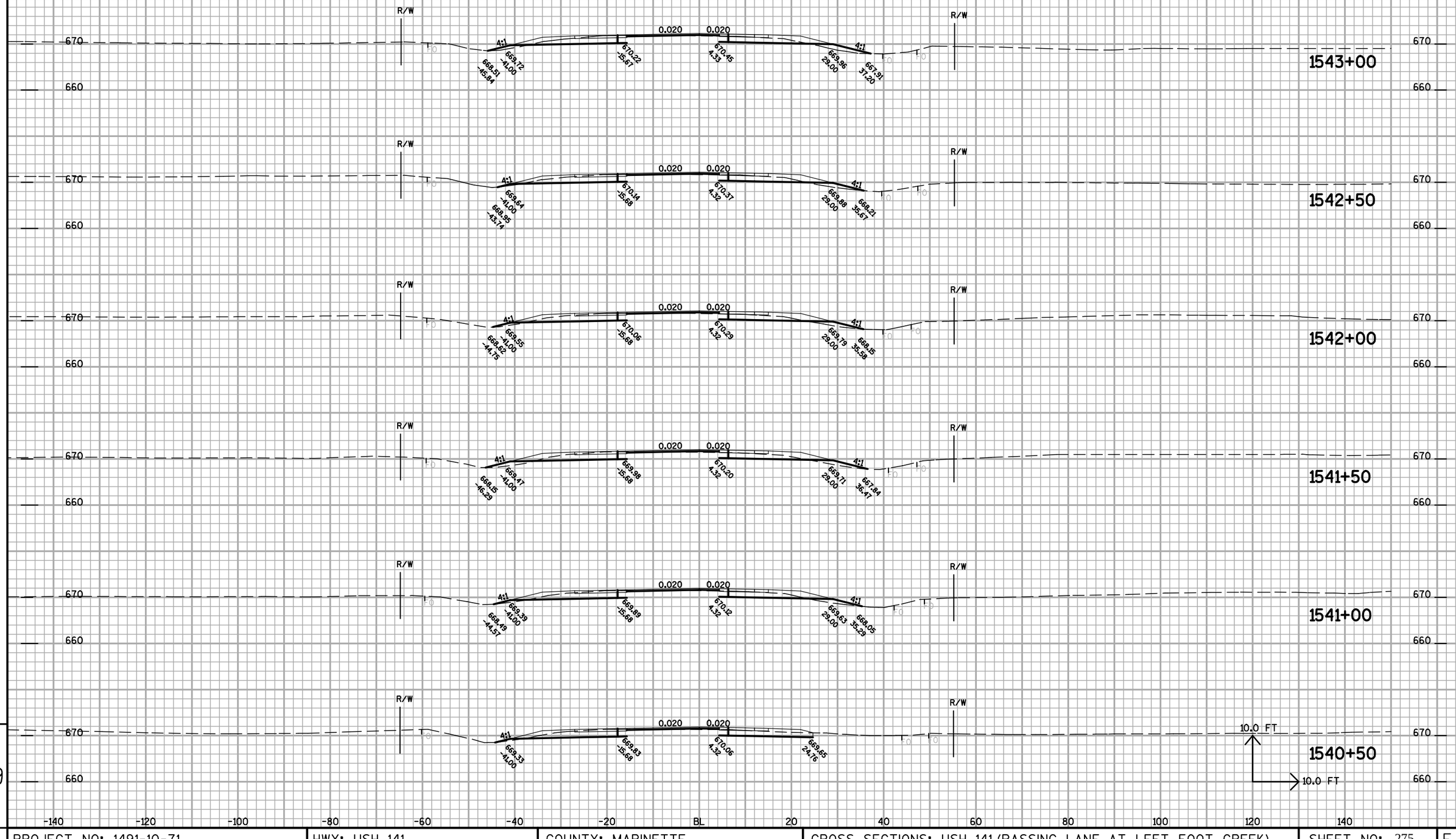
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 273	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 274	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

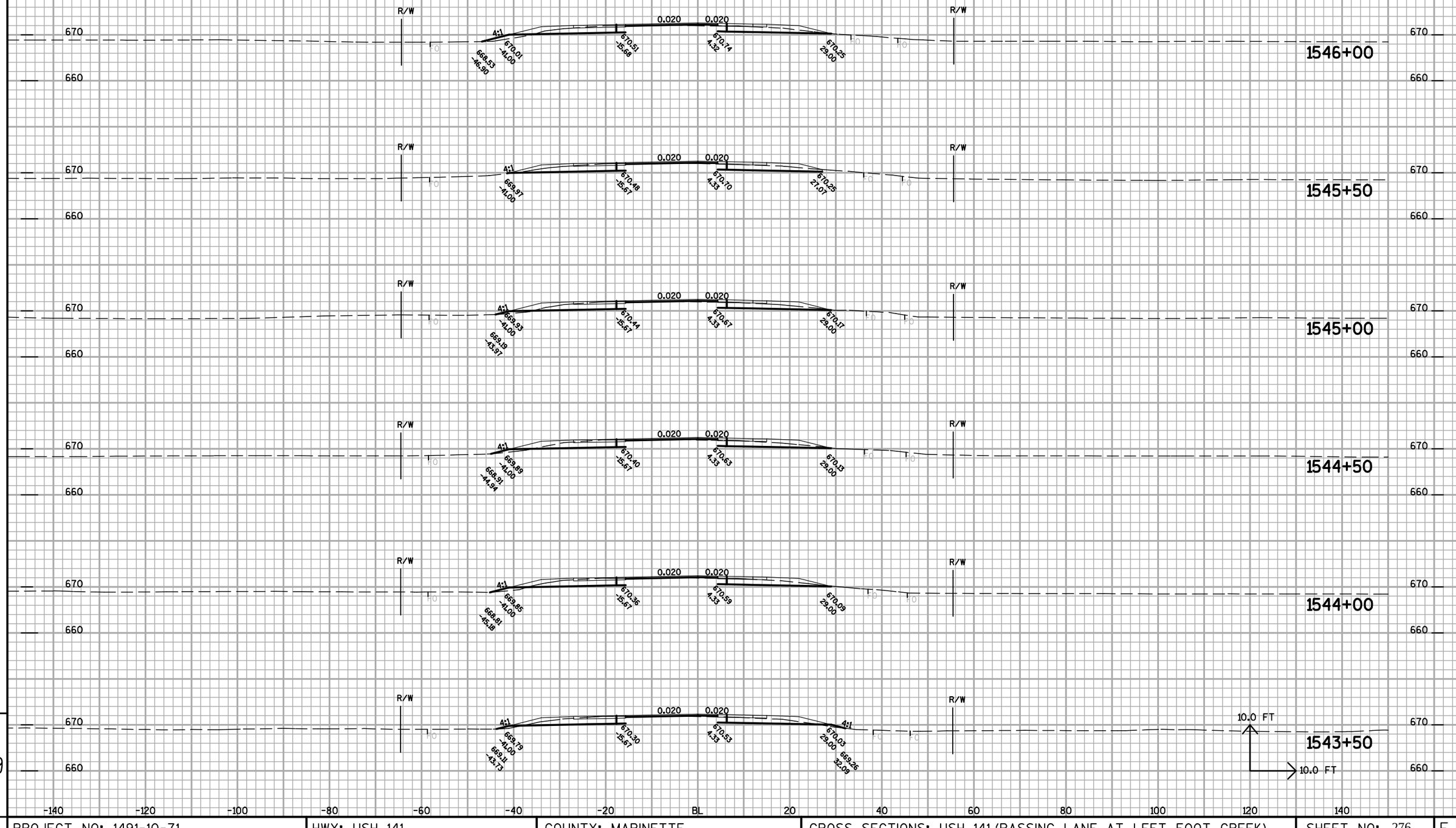


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 275	E

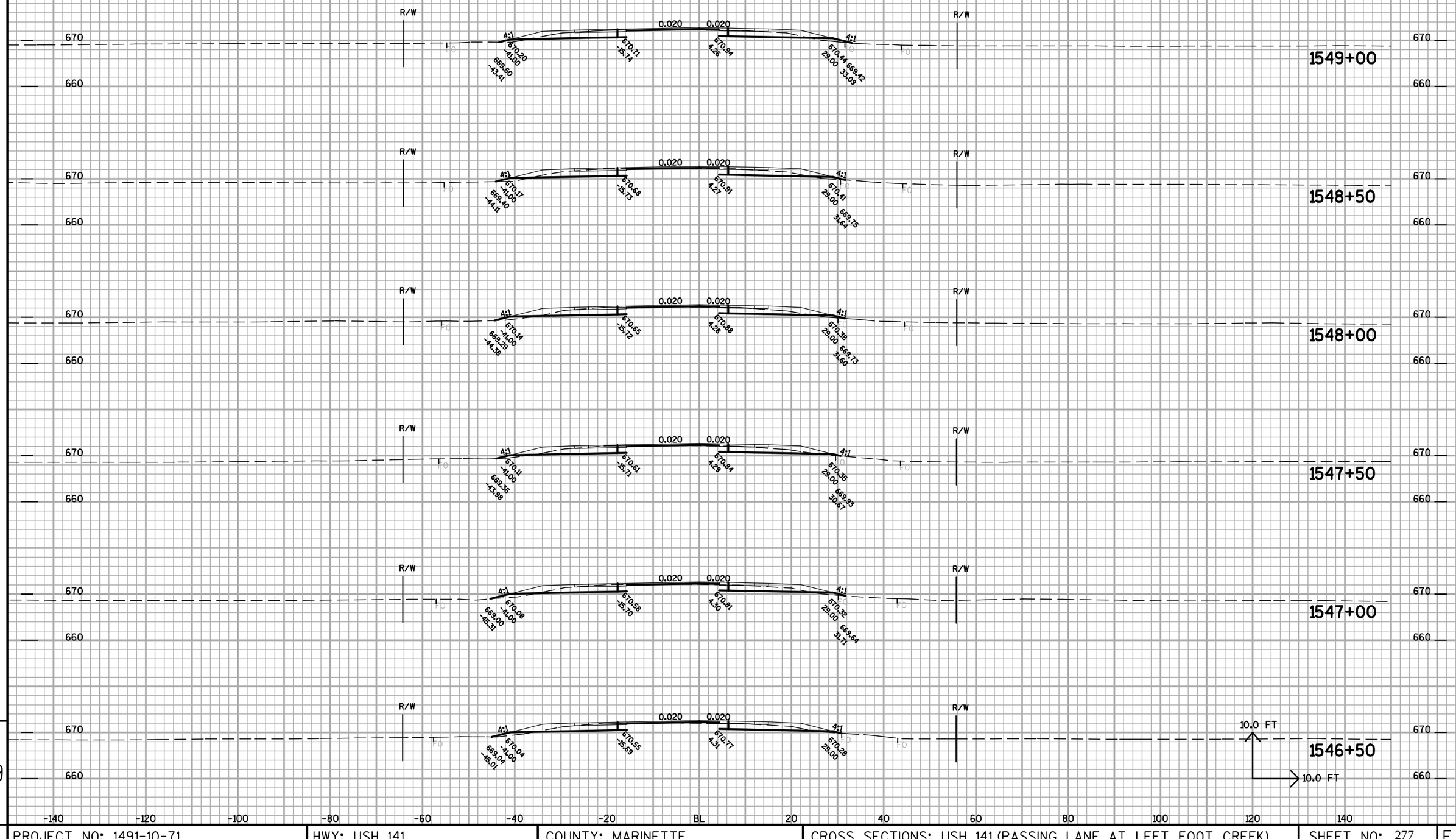
FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 276	E

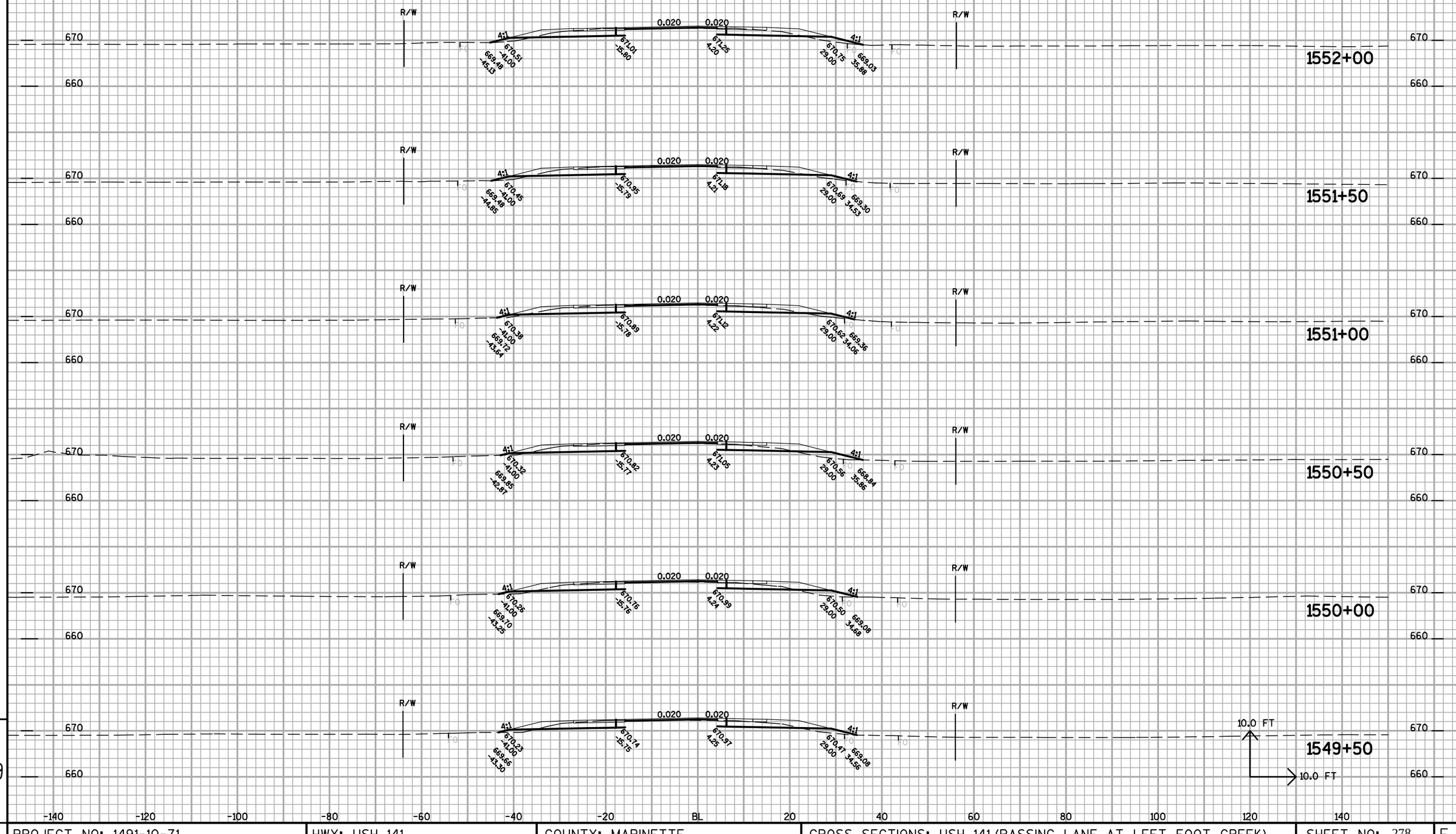
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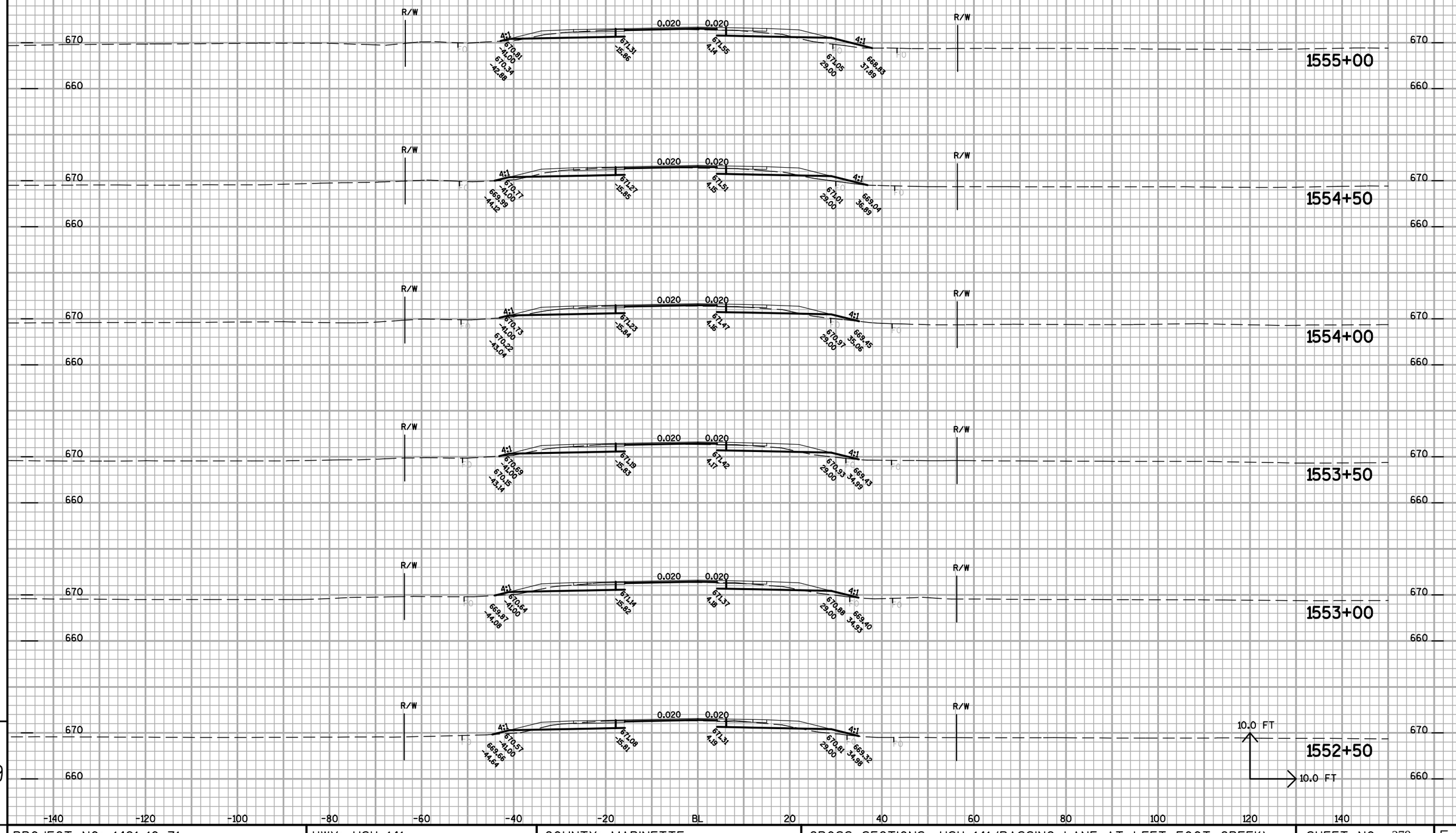
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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 277	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

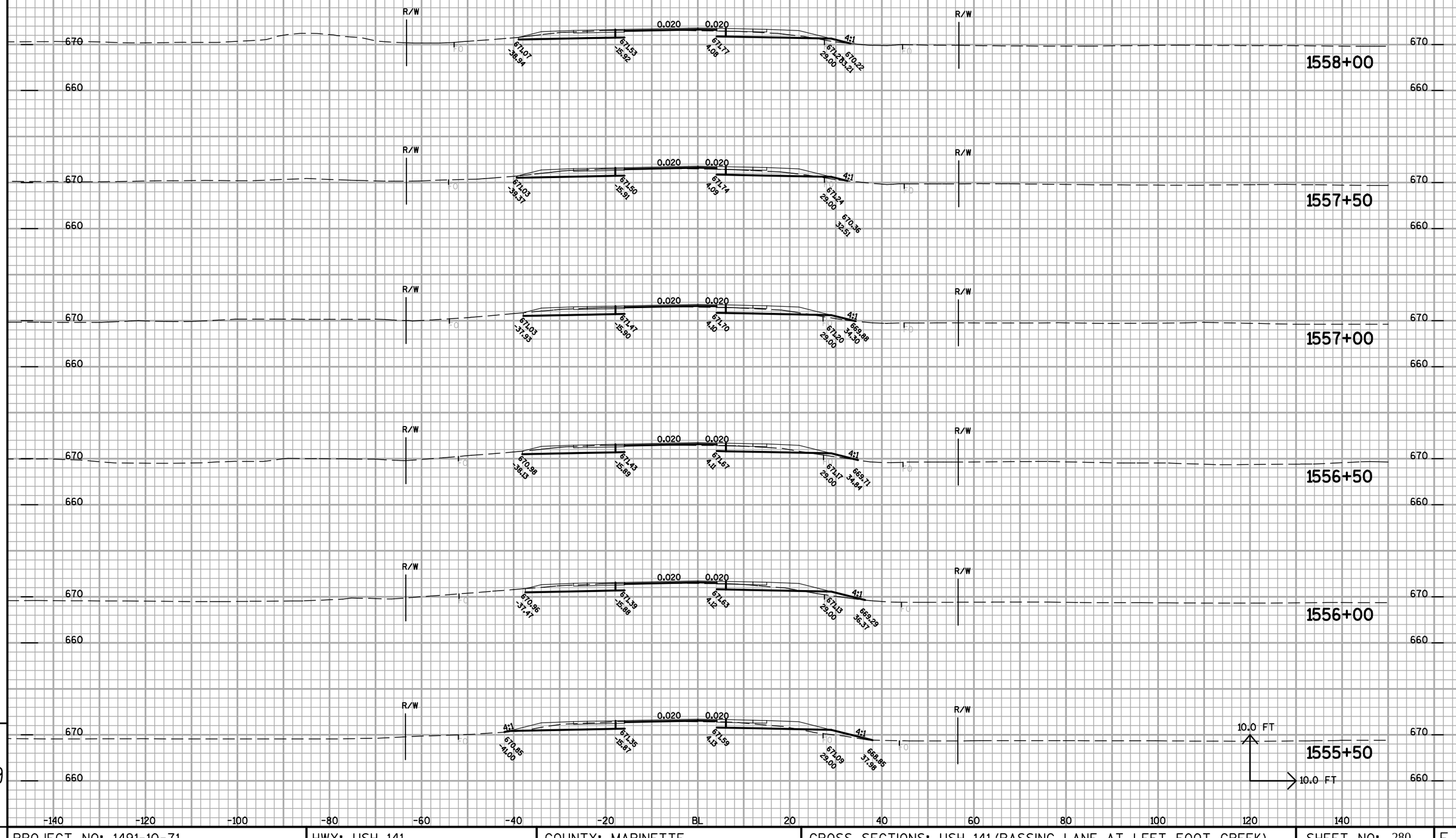


PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 278	E



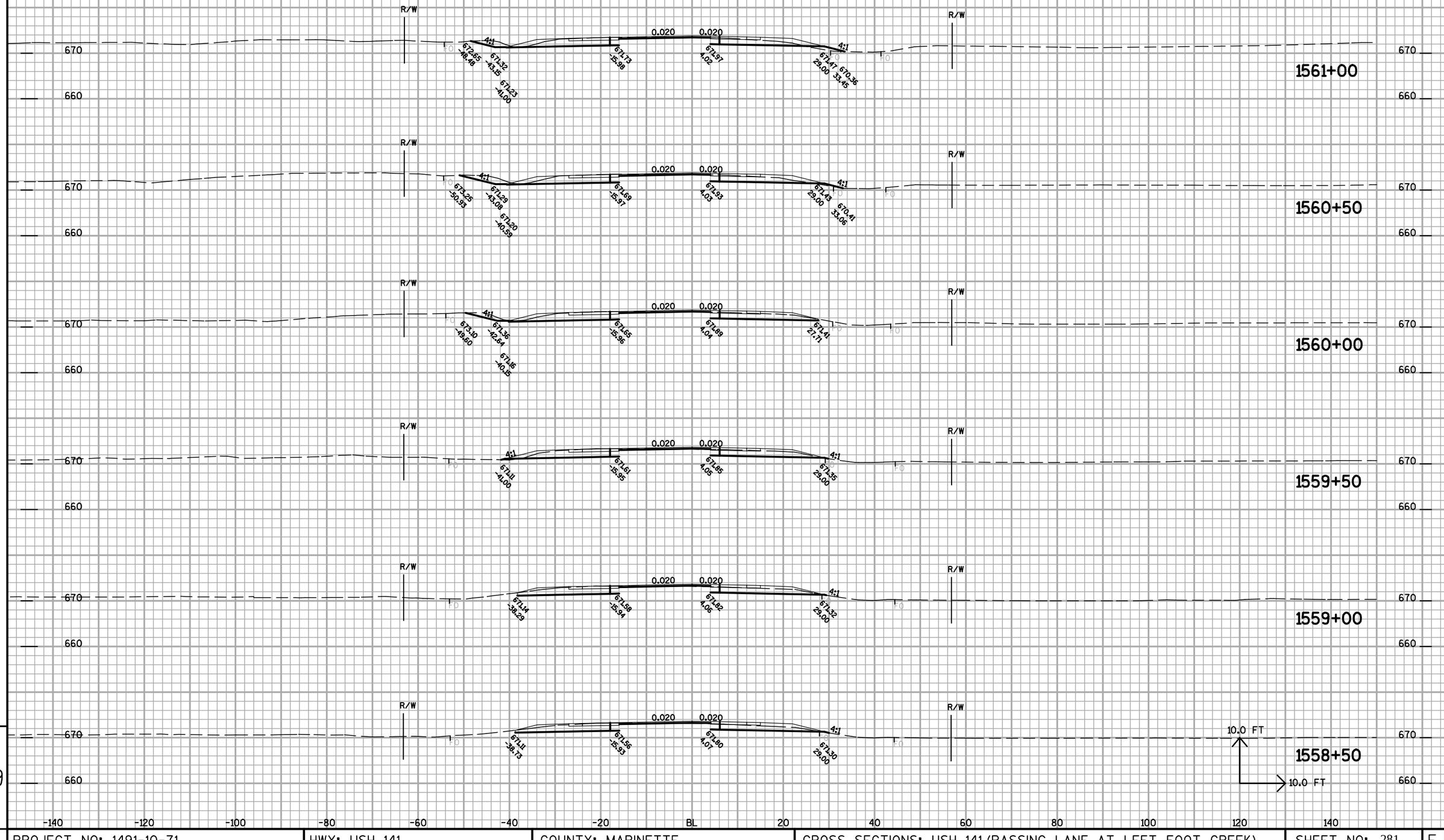
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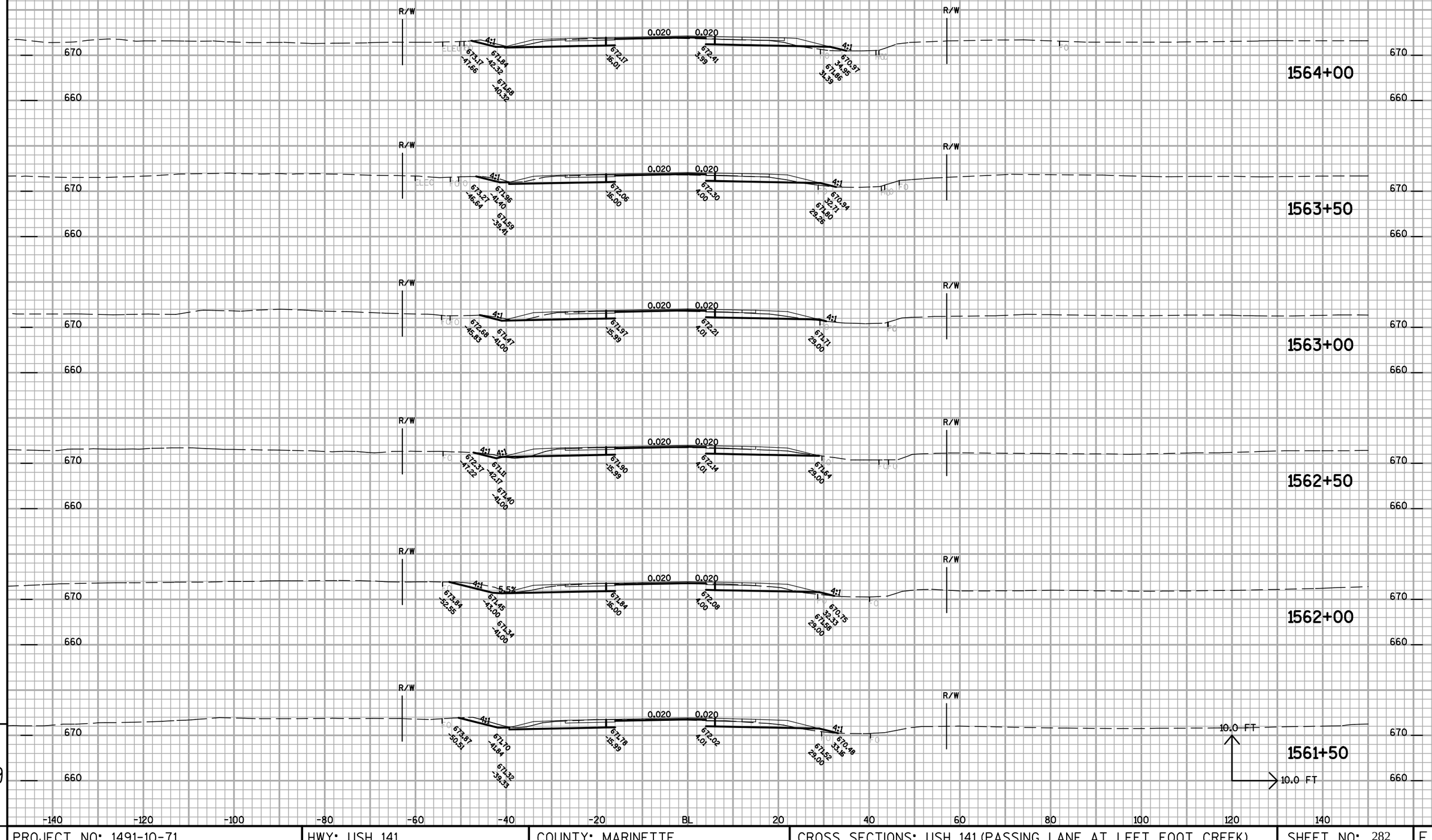
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 280	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



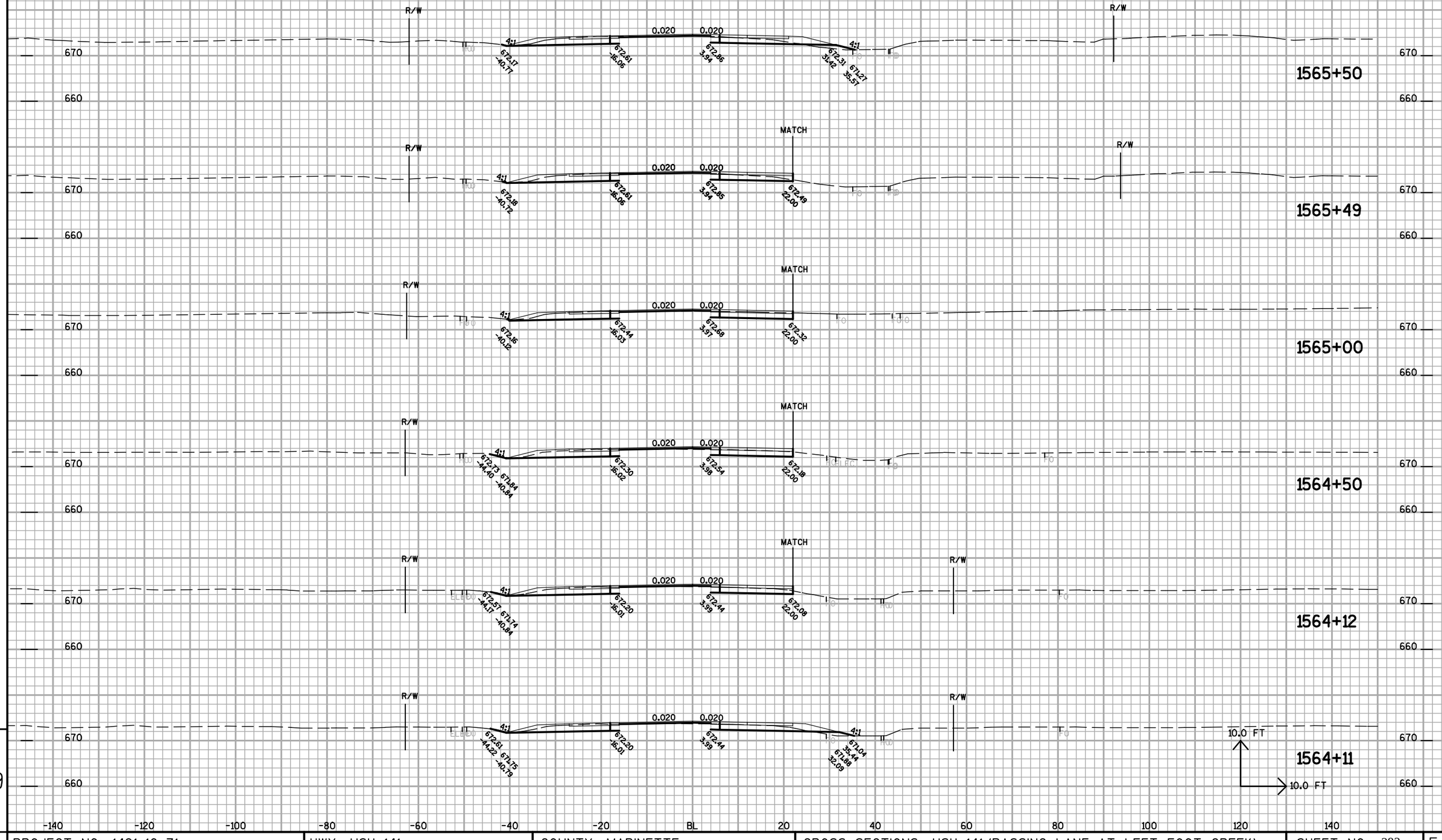
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 281	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:28 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



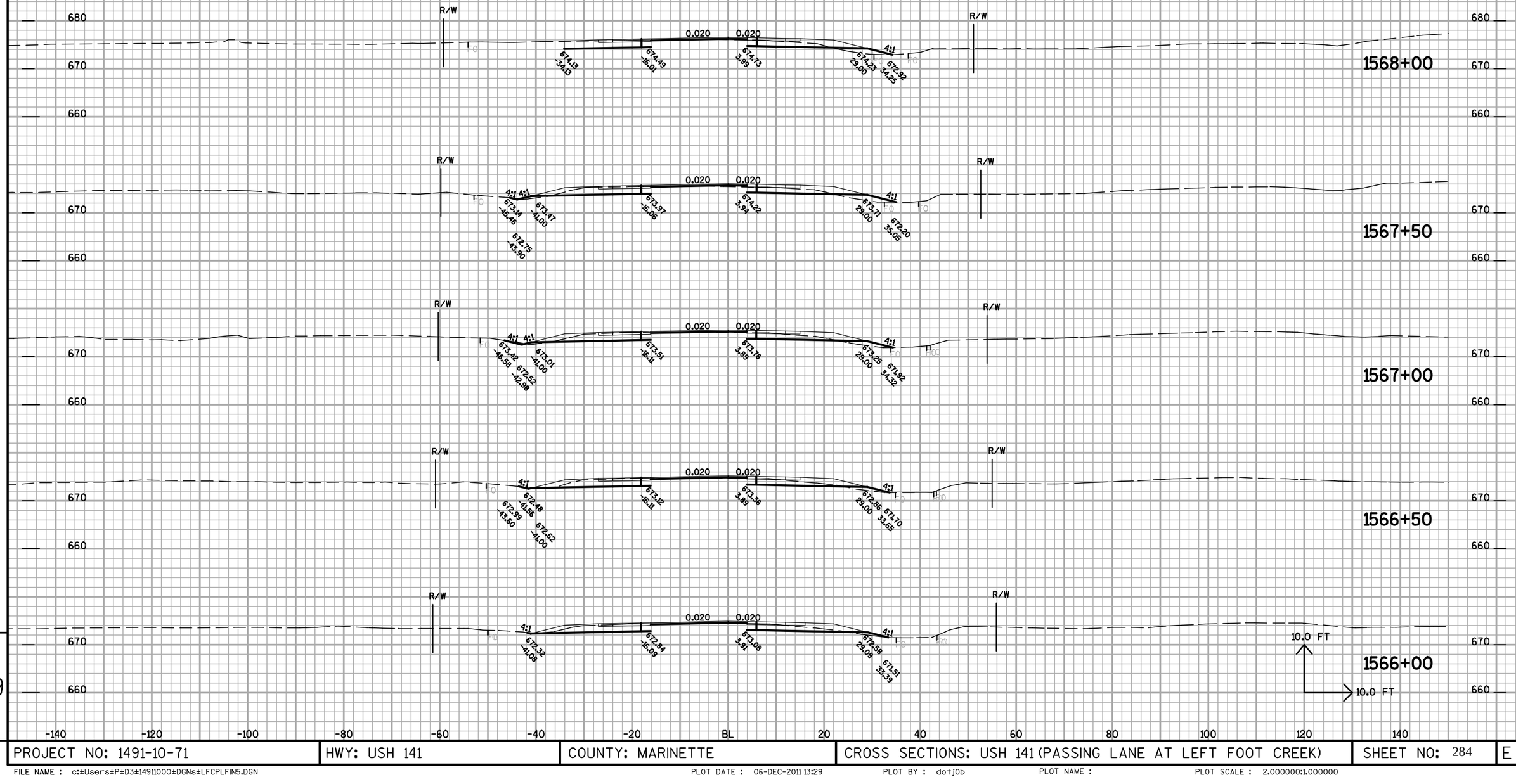
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 282 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



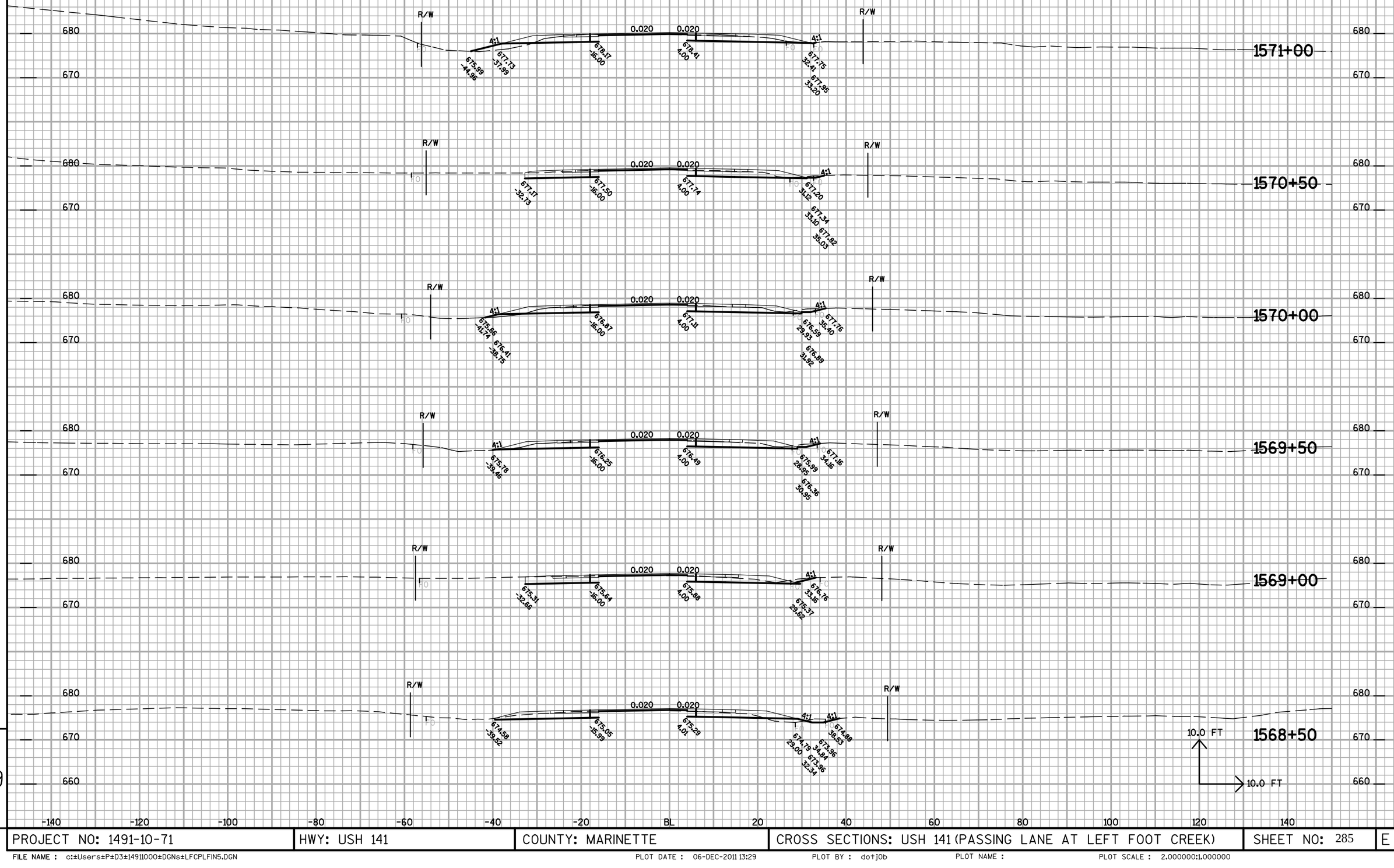
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 283	E

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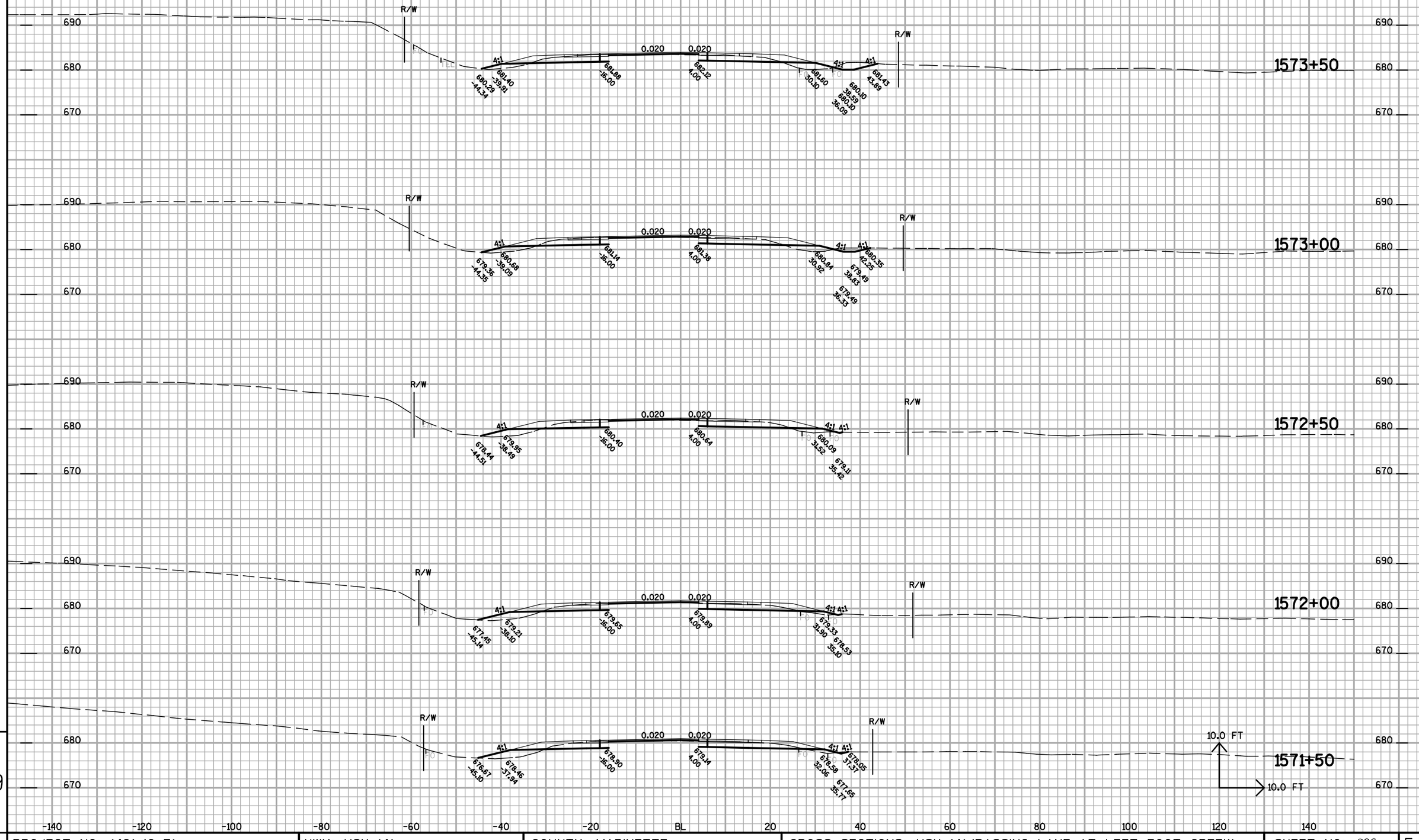
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 284	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 285	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

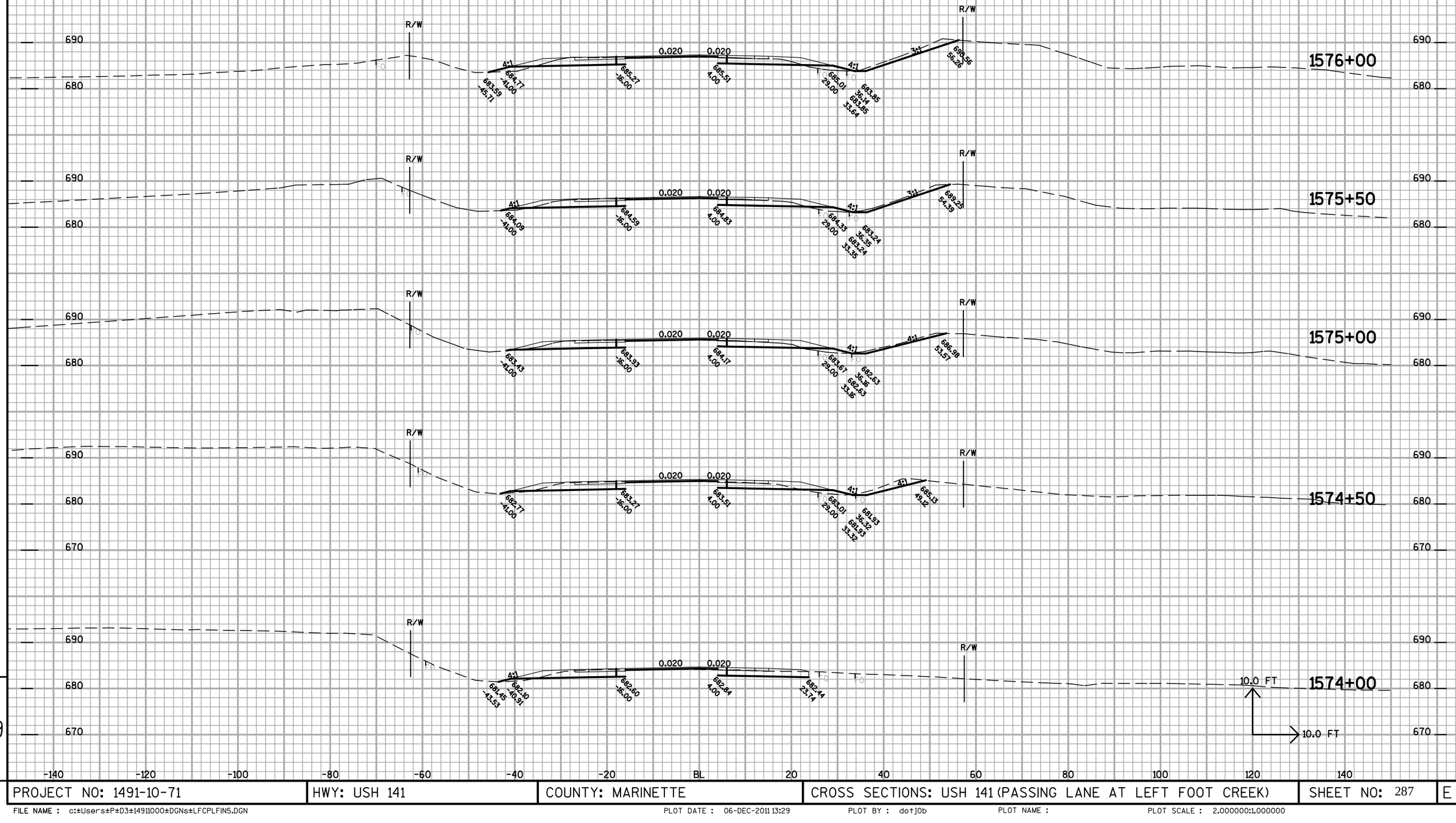


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 286	E

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FILE NAME : c:\Users\P\D3\14911000\DGNs\LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000

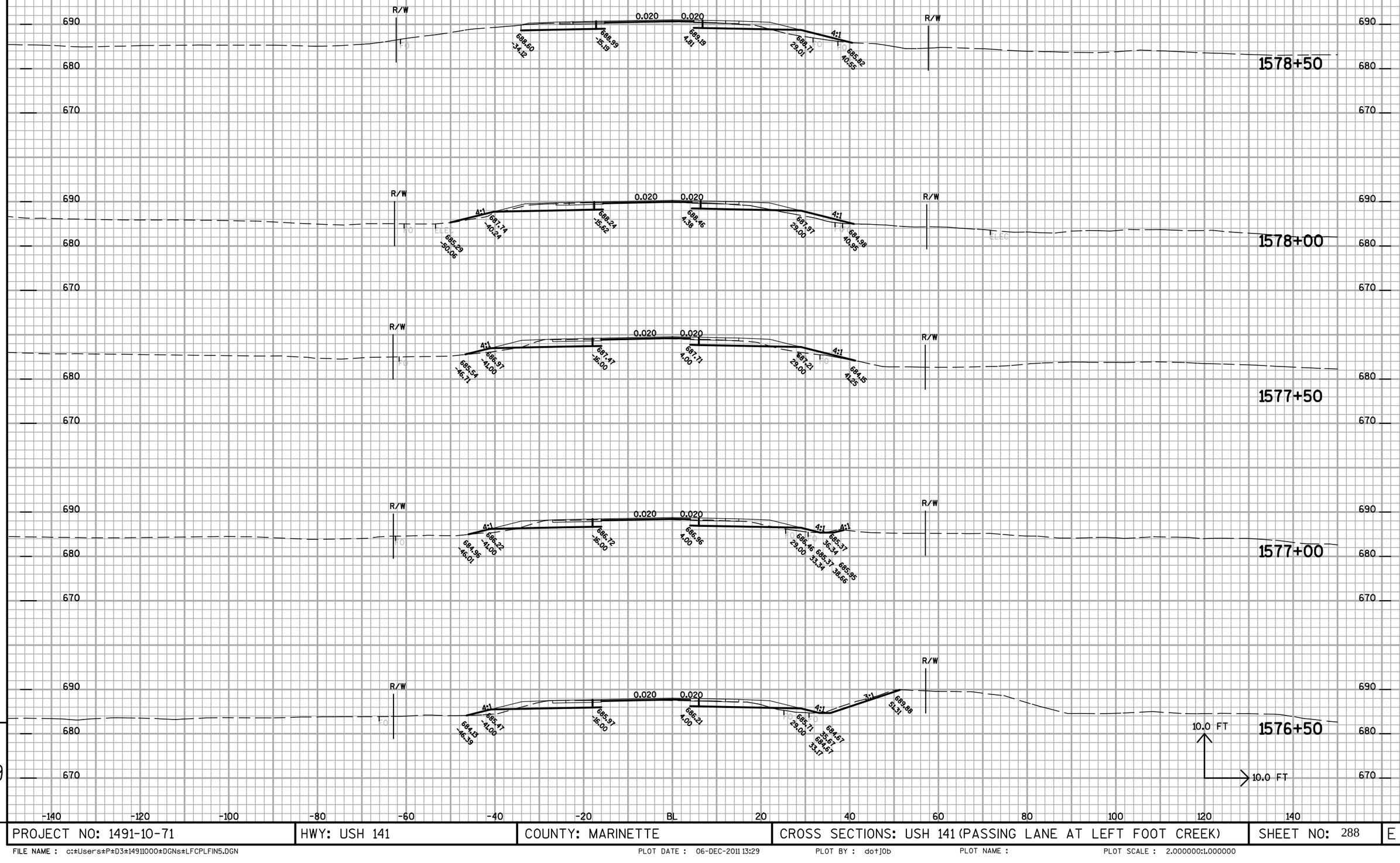


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 287	E

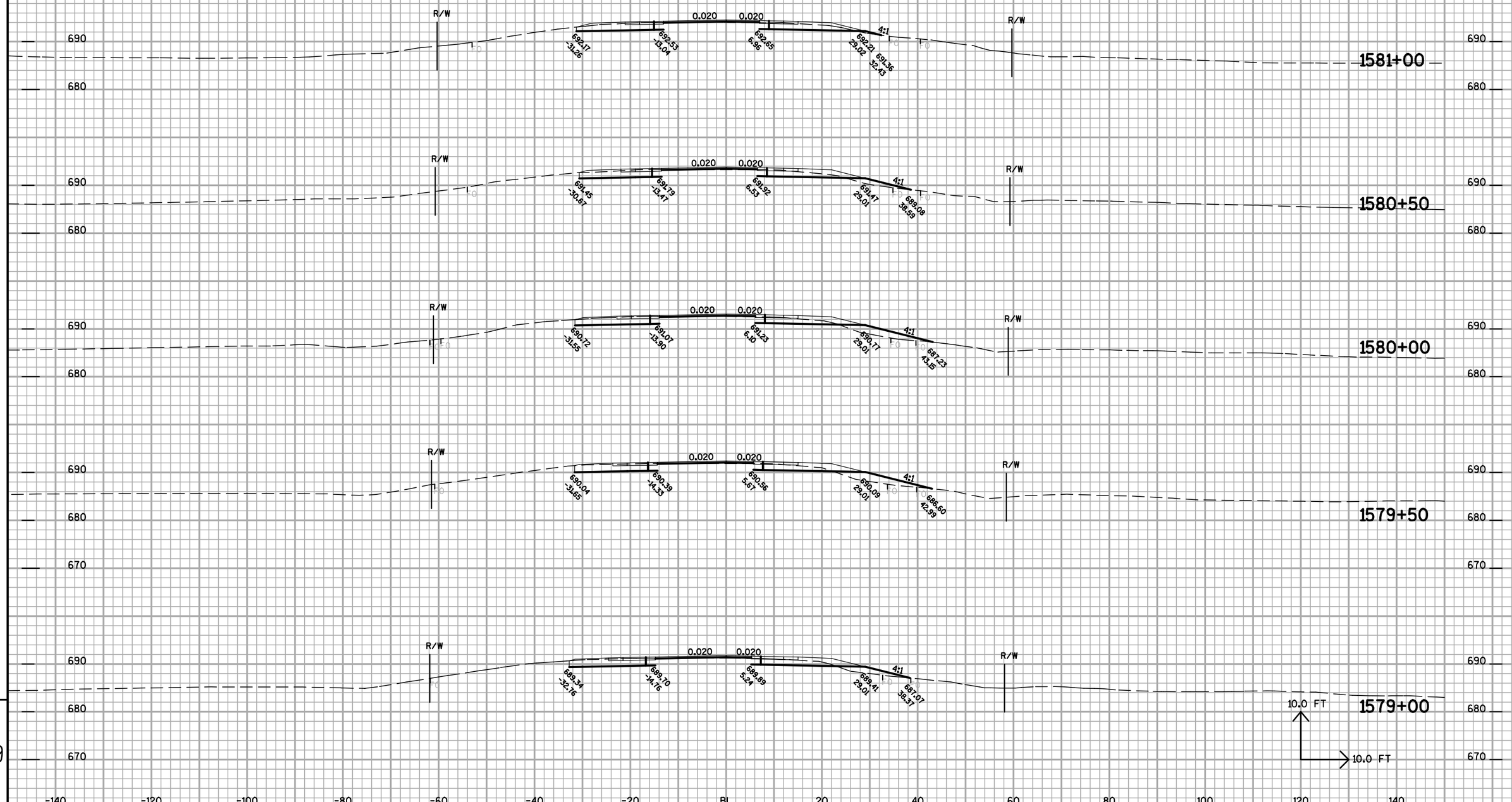
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FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dot‡Job PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 288	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

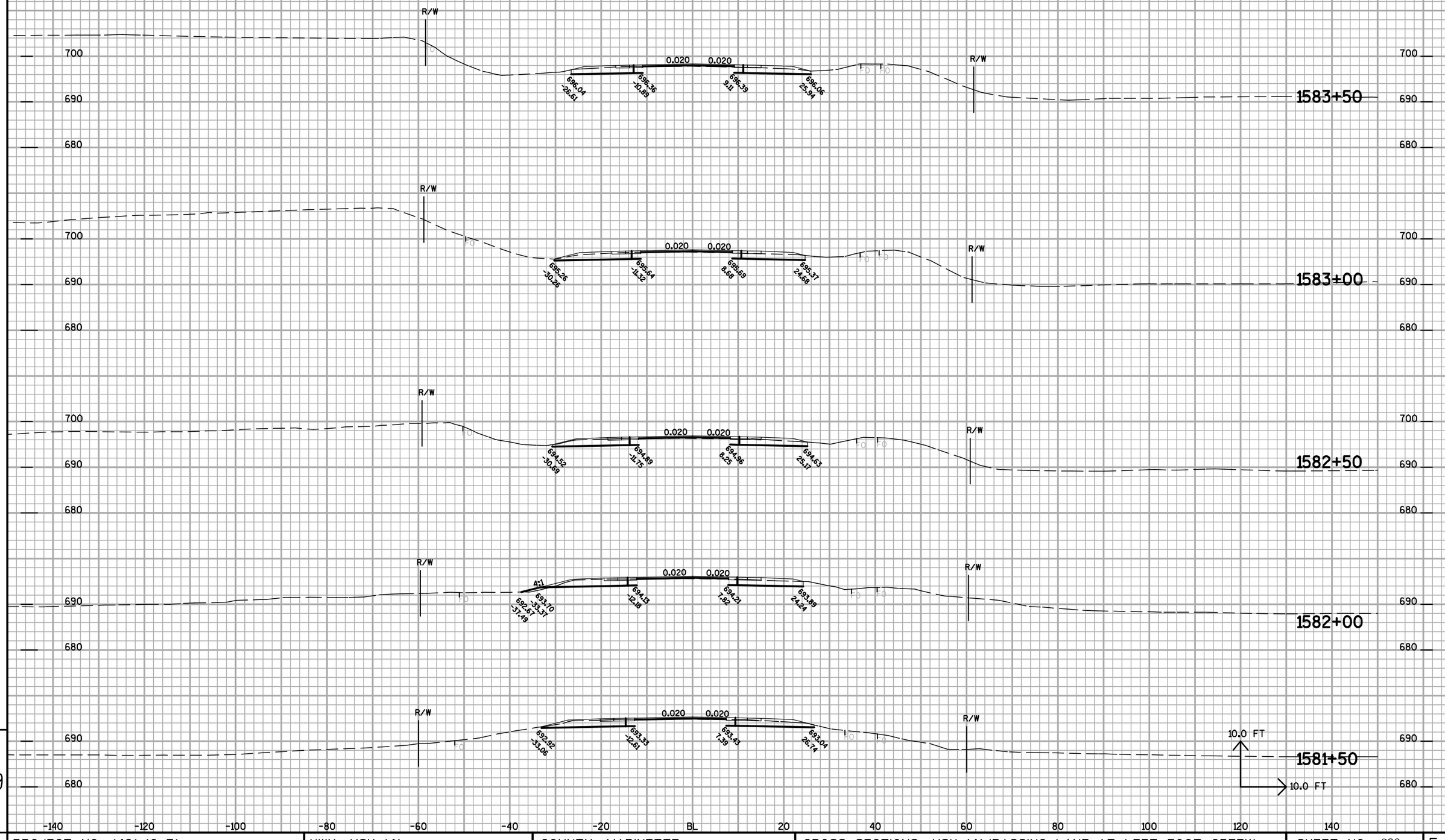


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 289	E

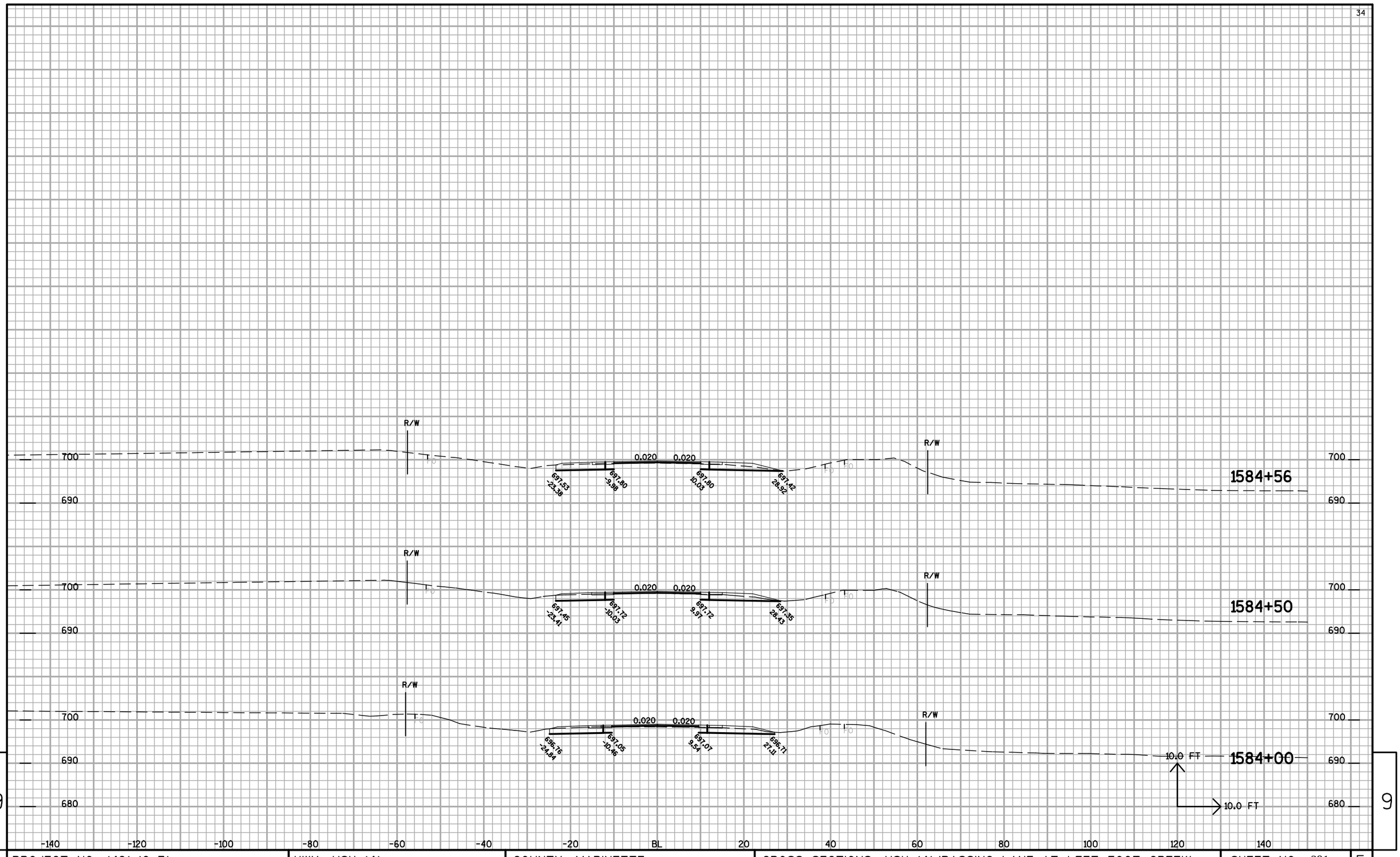
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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 (PASSING LANE AT LEFT FOOT CREEK)	SHEET NO: 290	E

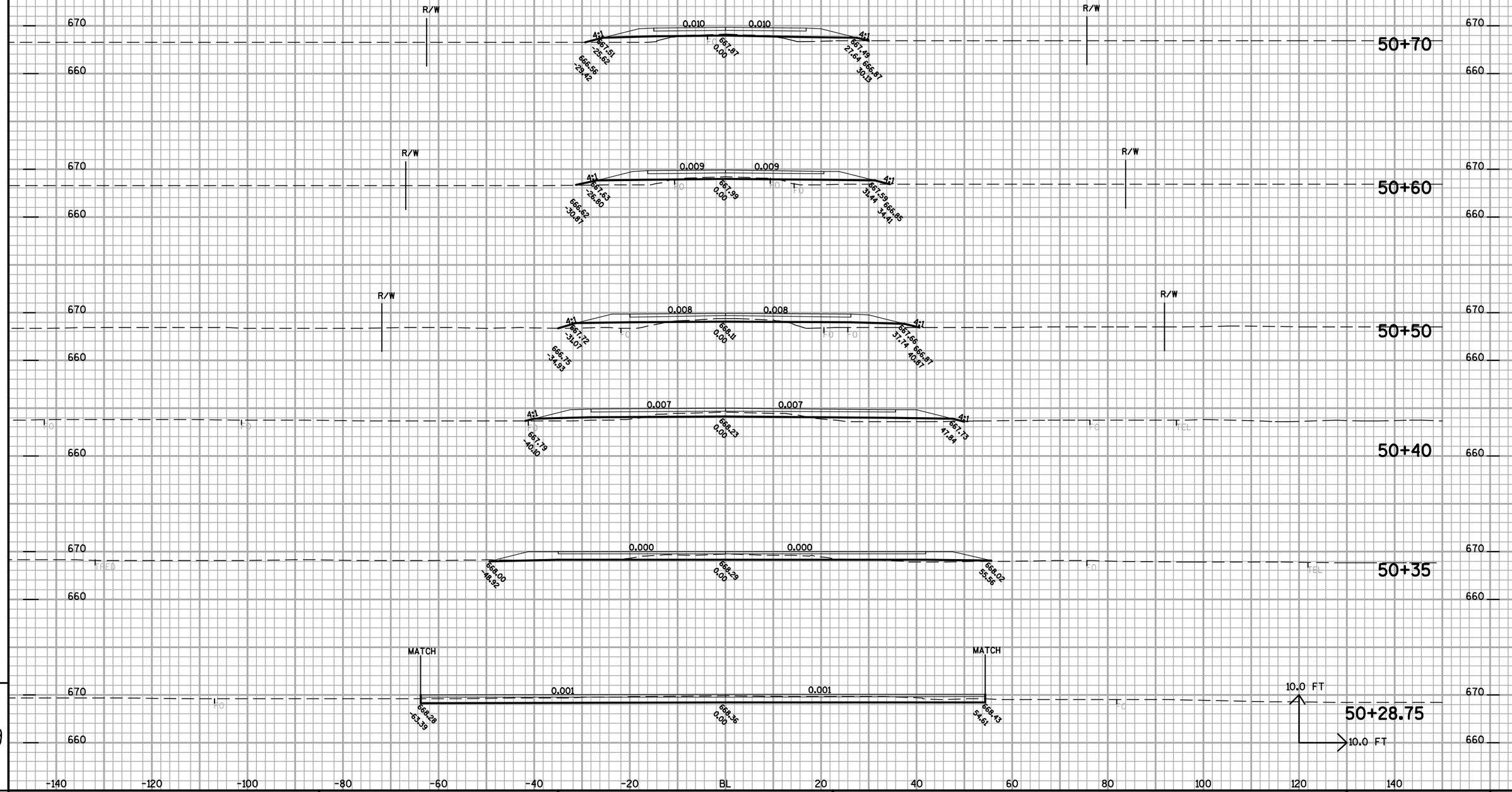
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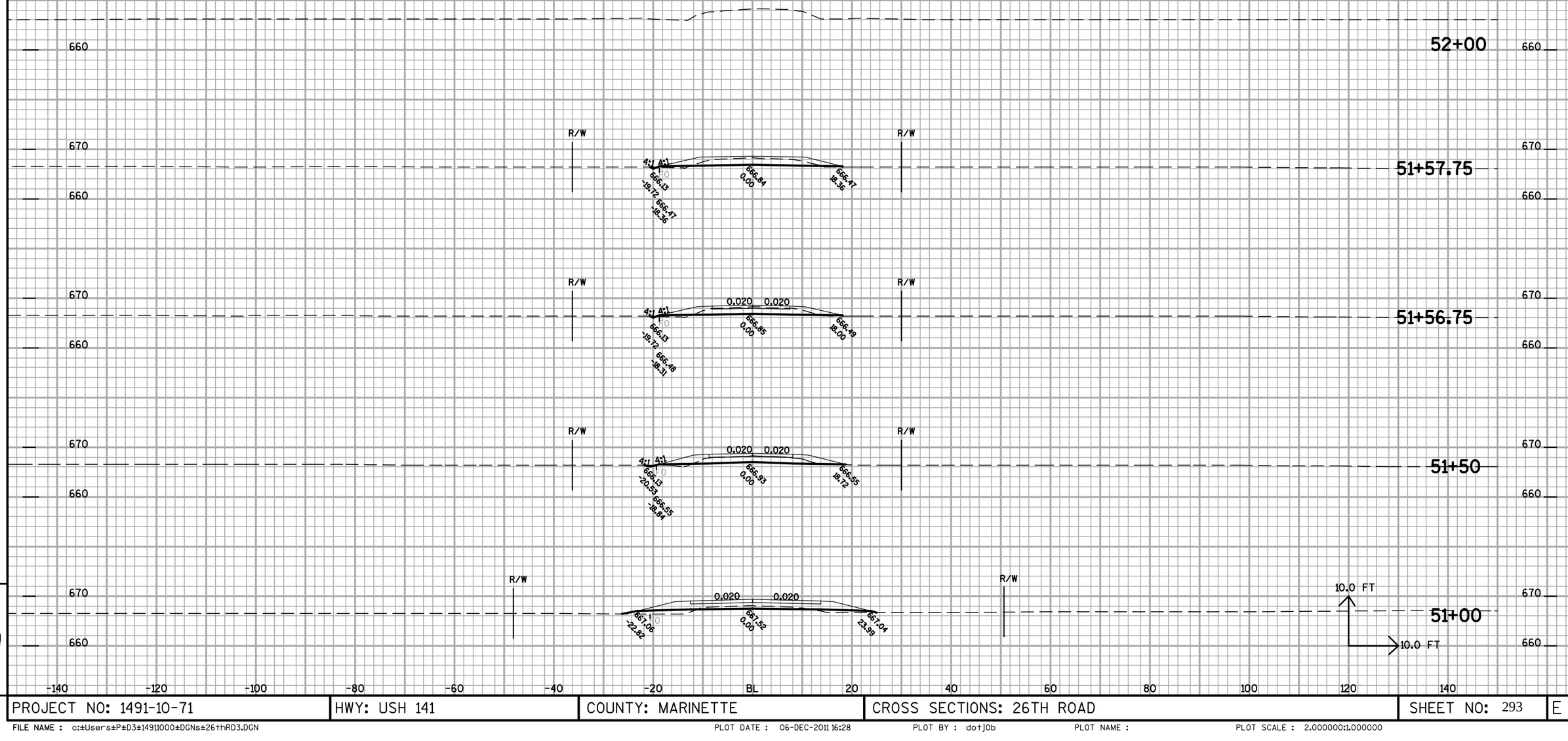
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FILE NAME : c:±Users±P±D3±14911000±DGNs±LFCPLFIN5.DGN PLOT DATE : 06-DEC-2011 13:29 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 26TH ROAD	SHEET NO: 292	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±26thRD3.DGN PLOT DATE : 06-DEC-2011 16:28 PLOT BY : dotJ0b PLOT NAME : PLOT SCALE : 2.000000:1.000000

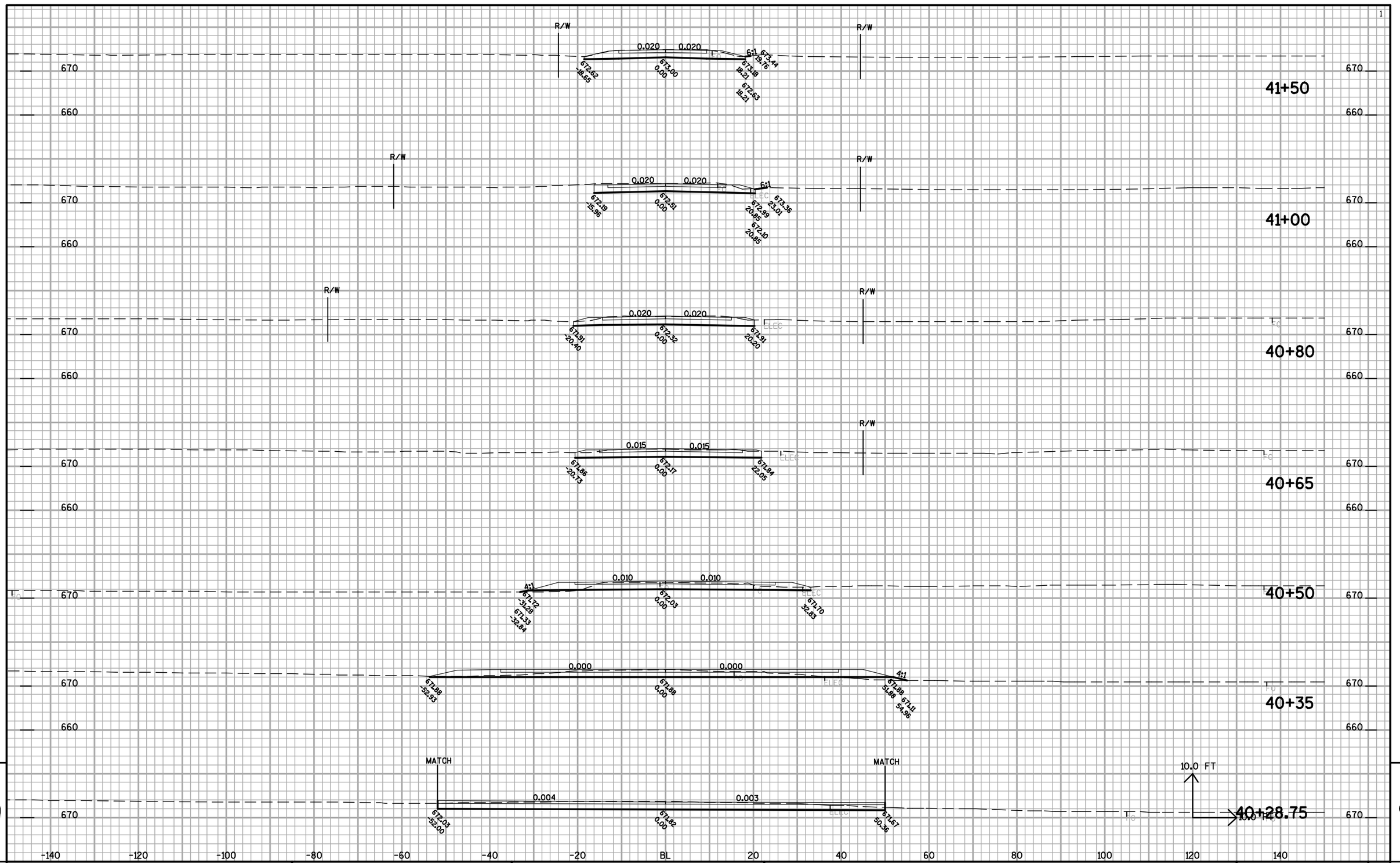


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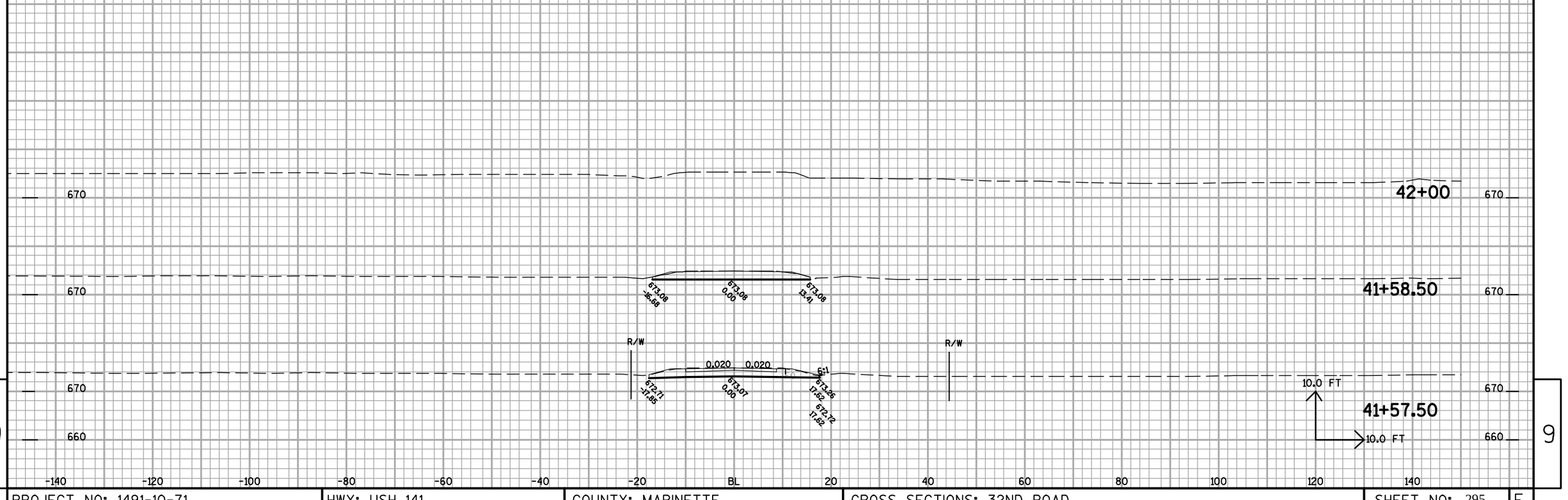
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 26TH ROAD	SHEET NO: 293	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±26thRD3.DGN PLOT DATE : 06-DEC-2011 16:28 PLOT BY : dotJ0b PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 32ND ROAD	SHEET NO: 294 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±32NDRD3.DGN PLOT DATE : 07-DEC-2011 10:39 PLOT BY : dot‡0b PLOT NAME : PLOT SCALE : 2.000000:1.000000

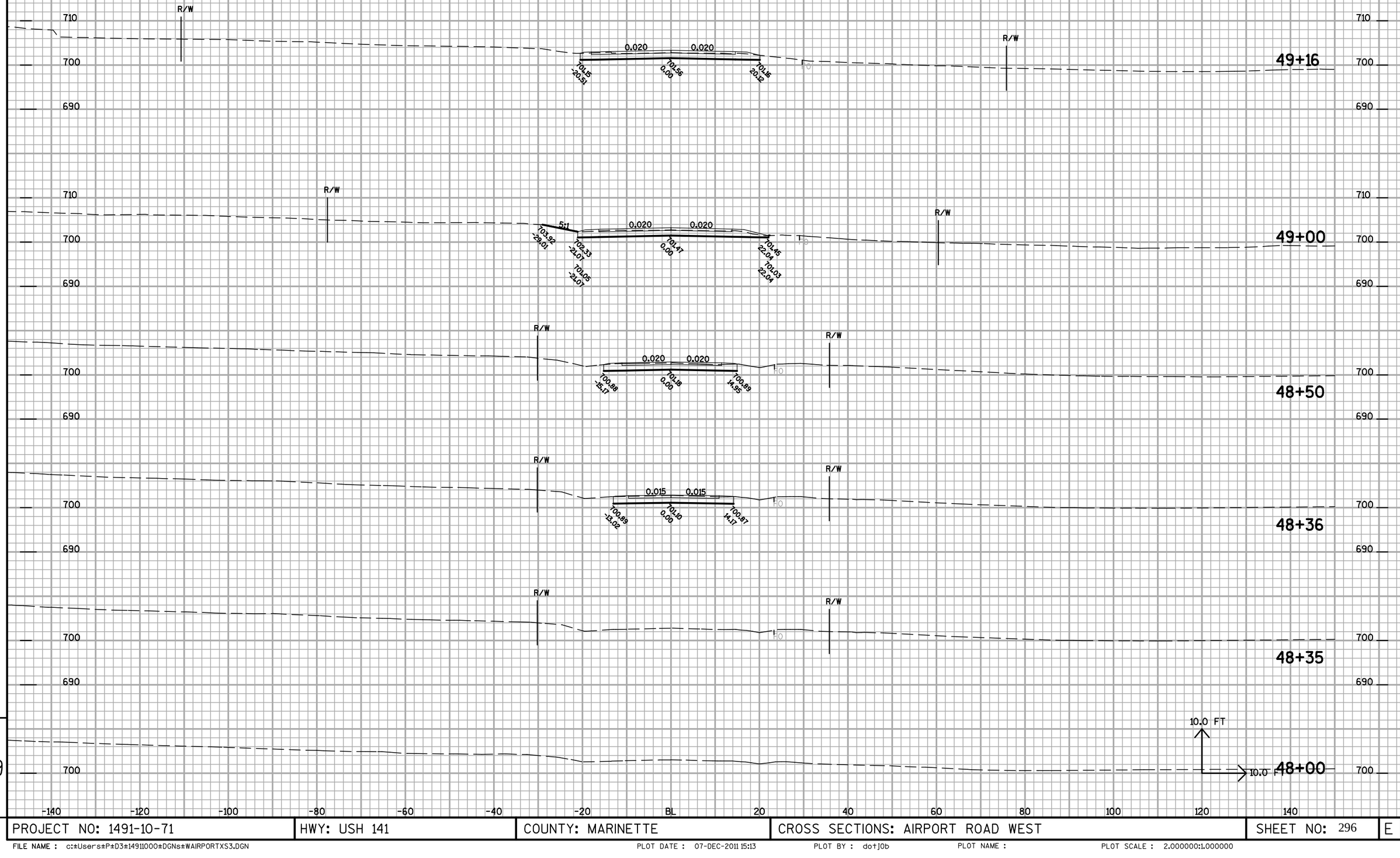


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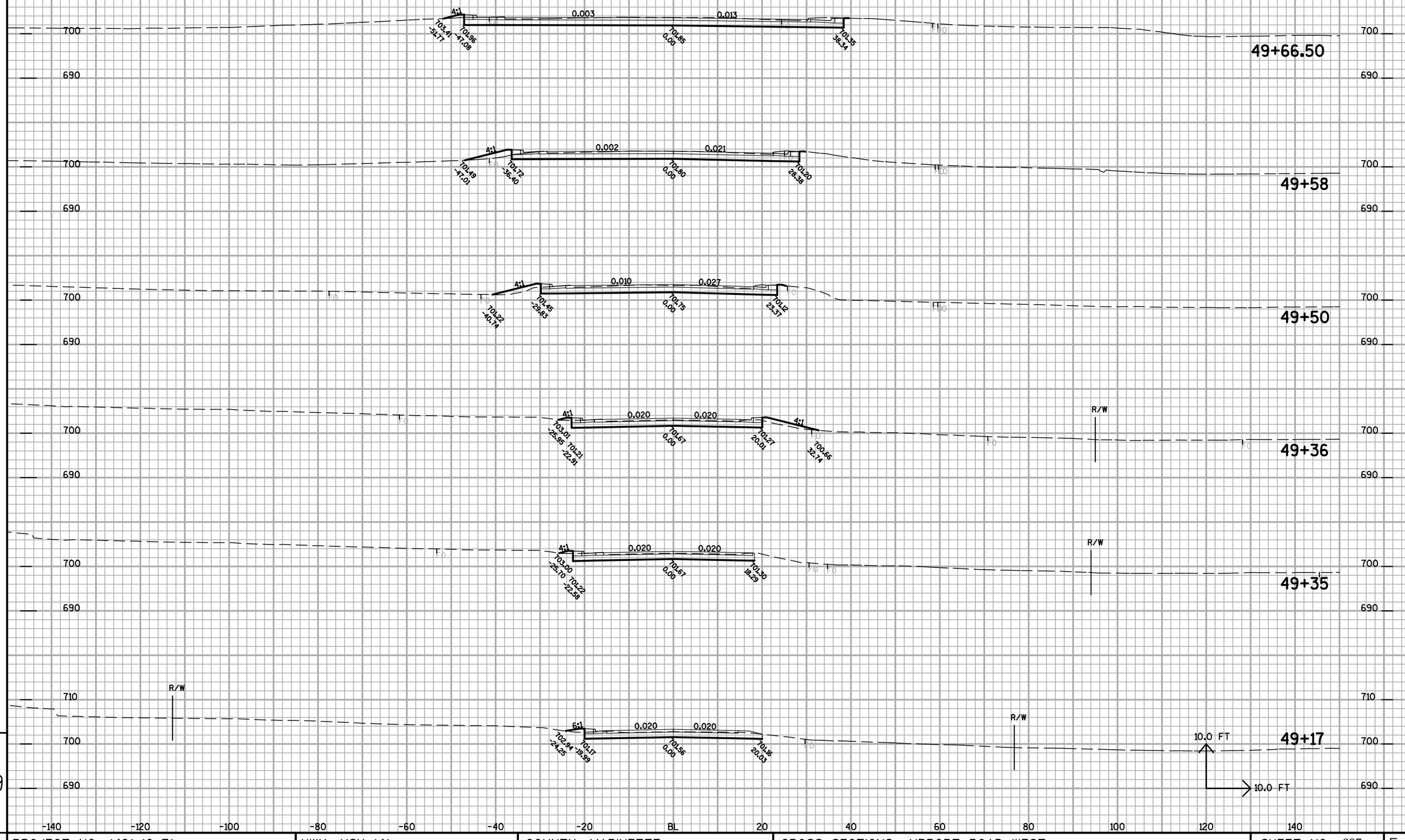
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: 32ND ROAD	SHEET NO: 295	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±32NDRD3.DGN PLOT DATE : 07-DEC-2011 10:39 PLOT BY : do†J0b PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: AIRPORT ROAD WEST	SHEET NO: 296	E

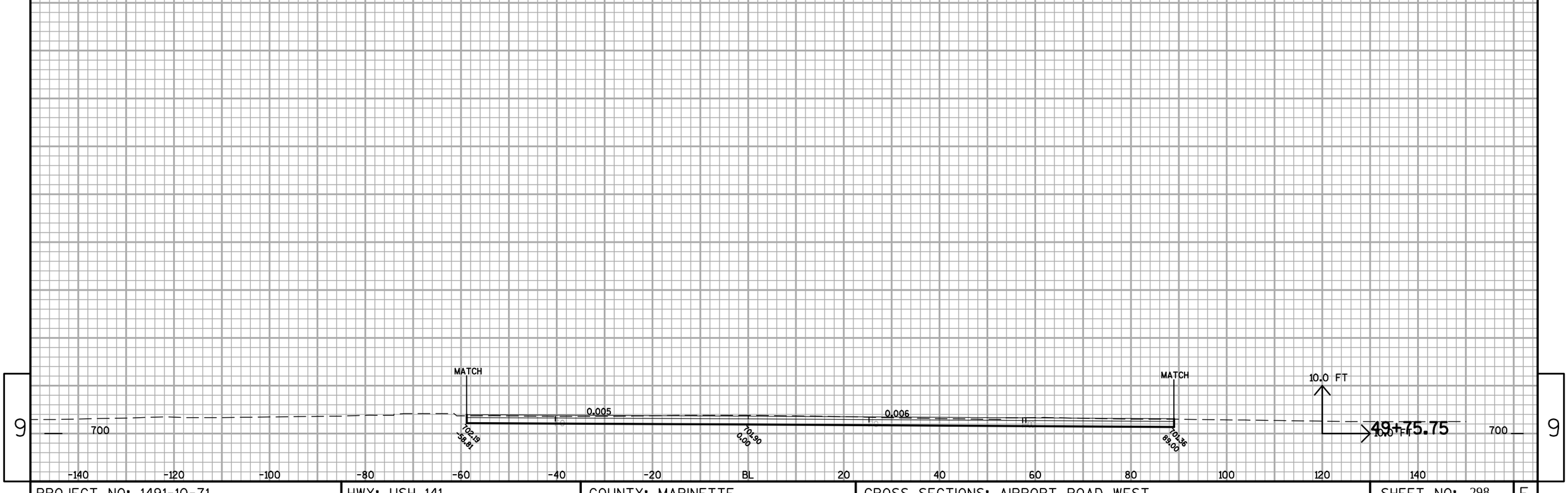
FILE NAME : c:±Users±P±D3±14911000±DGNs±WAIRPORTXS3.DGN PLOT DATE : 07-DEC-2011 15:13 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



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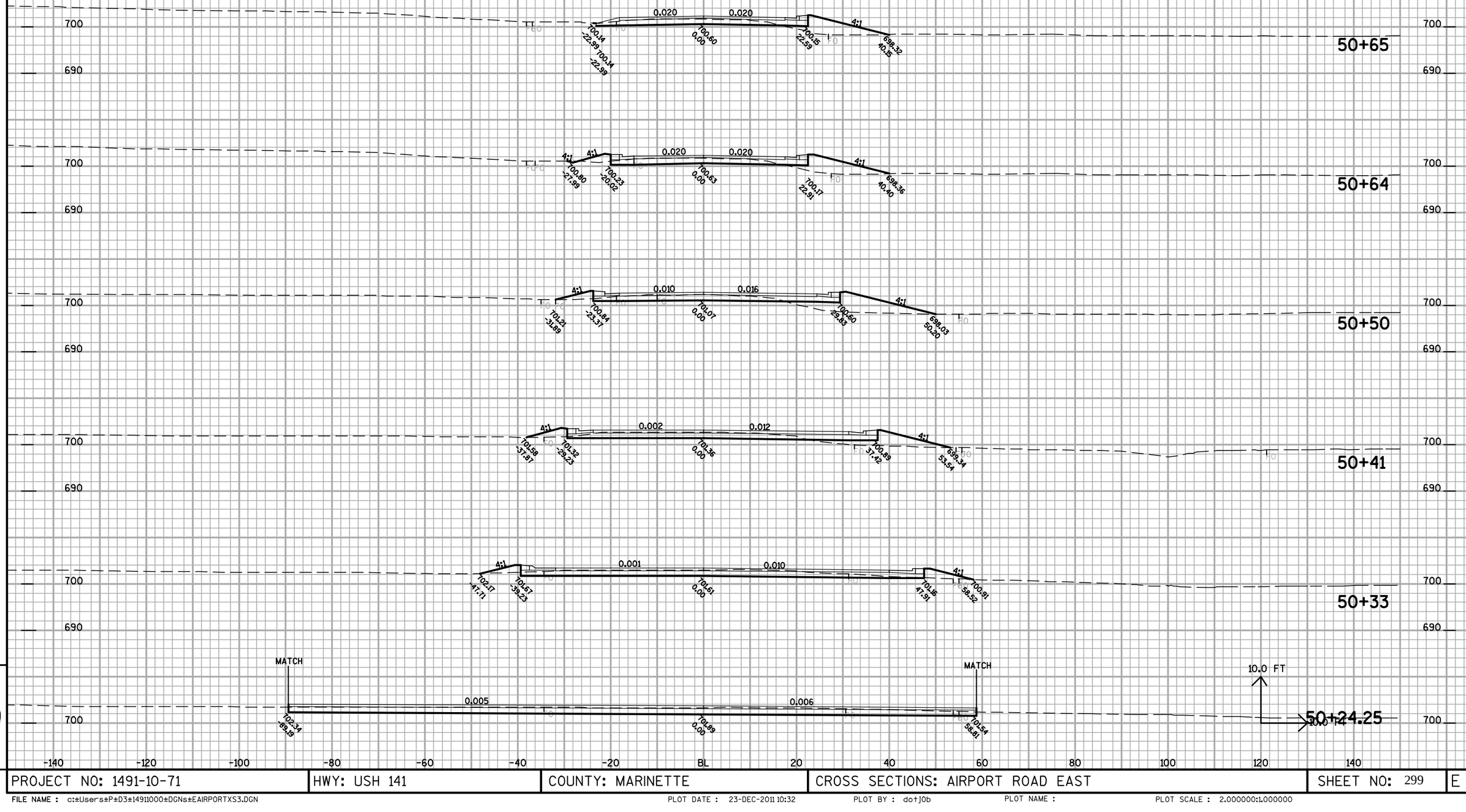
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: AIRPORT ROAD WEST	SHEET NO: 297	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±WAIRPORTXS3.DGN PLOT DATE : 07-DEC-2011 15:13 PLOT BY : dotJOb PLOT NAME : PLOT SCALE : 2.000000:1.000000



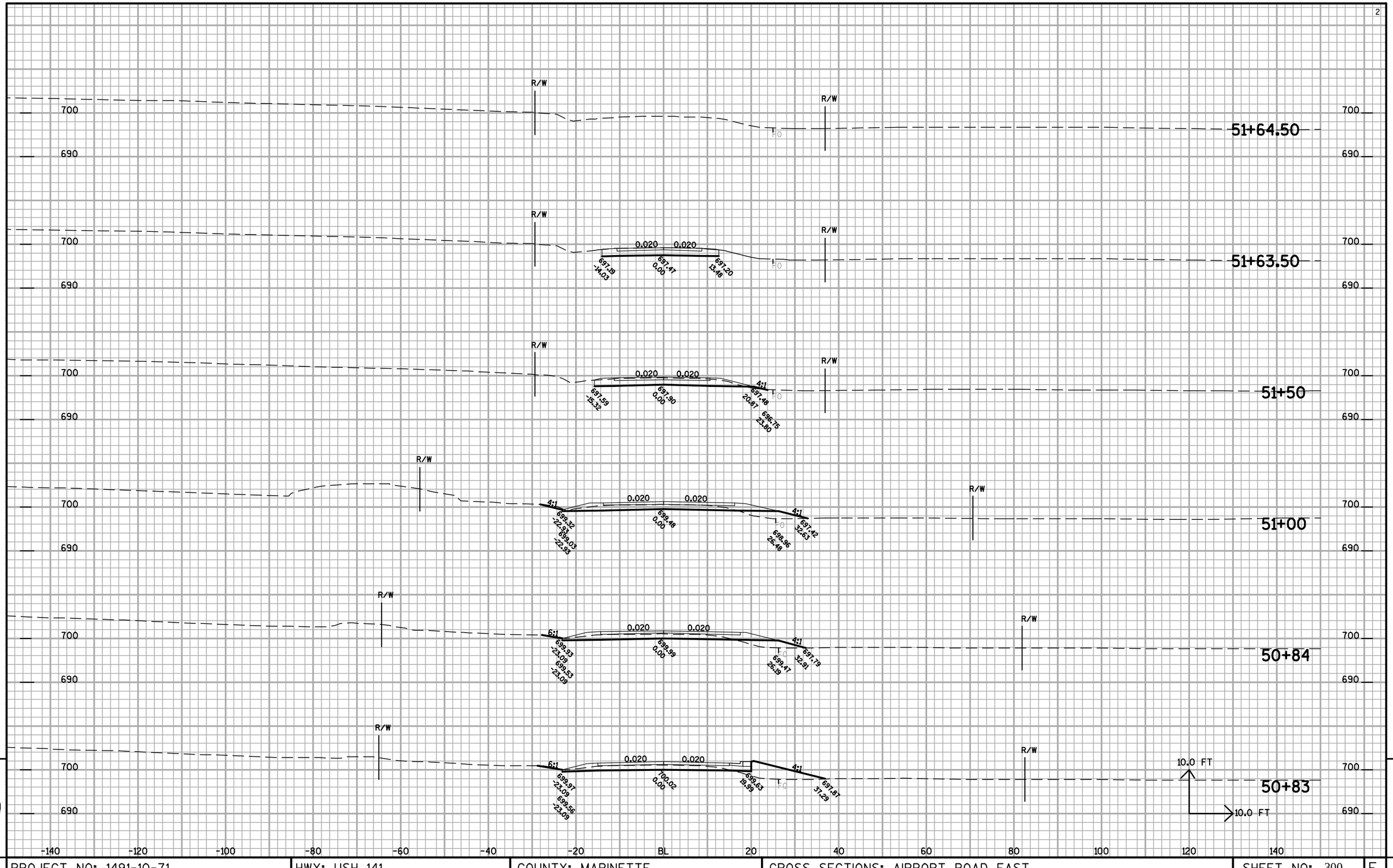
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FILE NAME : c:±Users±P±D3±14911000±DGNs±WAIRPORTXS3.DGN PLOT DATE : 07-DEC-2011 15:13 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



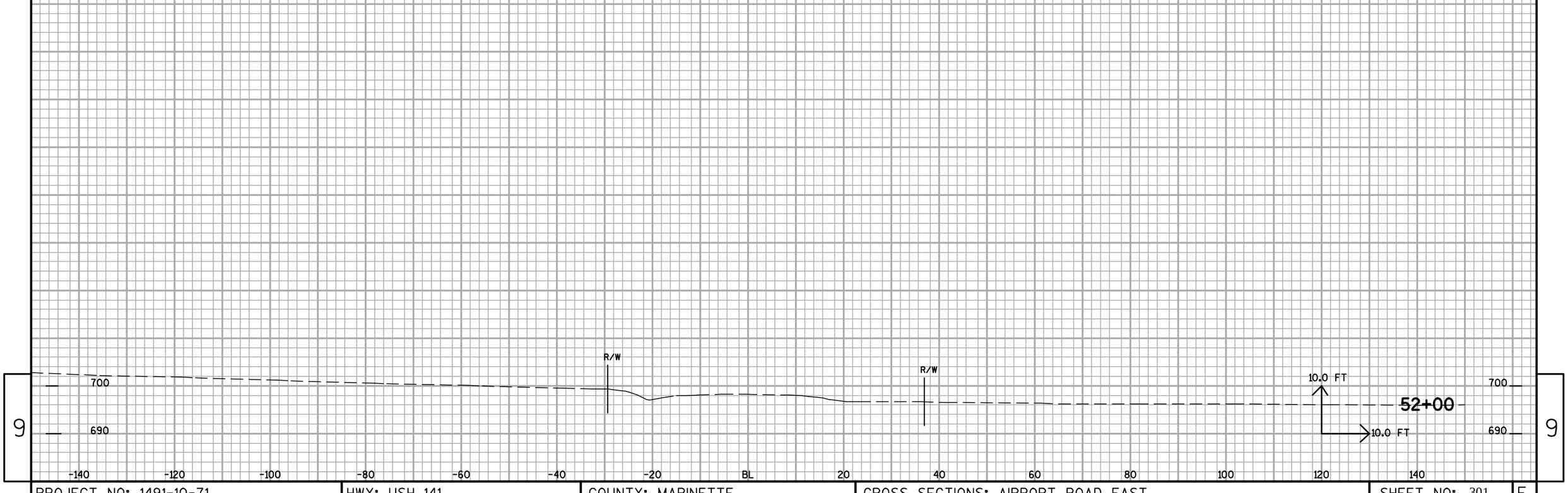
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: AIRPORT ROAD EAST	SHEET NO: 299	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±EAIRPORTXS3.DGN PLOT DATE : 23-DEC-2011 10:32 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: AIRPORT ROAD EAST	SHEET NO: 300	E

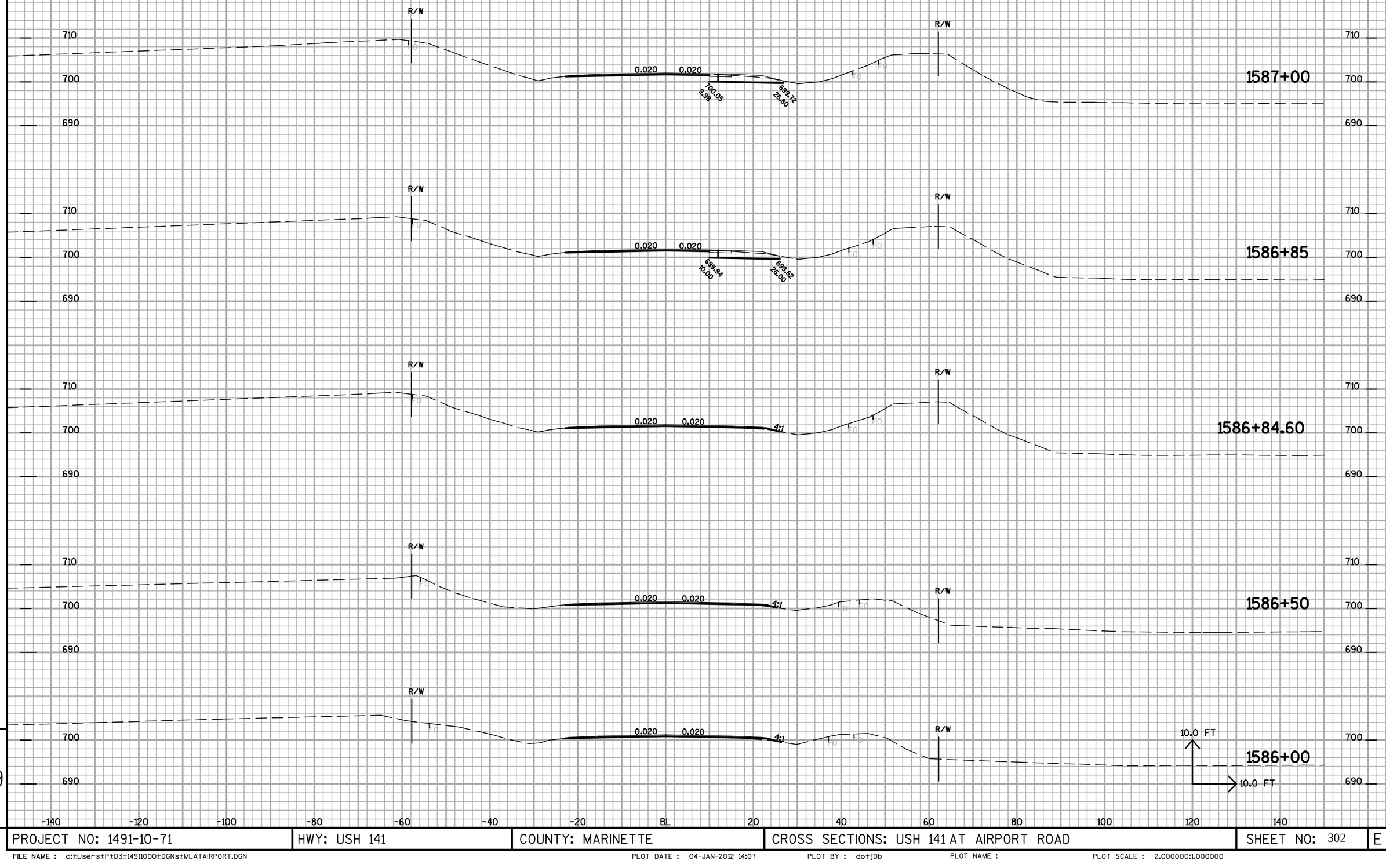
FILE NAME : c:±Users±P±D3±14911000±DGNs±EAIRPORTXS3.DGN PLOT DATE : 23-DEC-2011 10:33 PLOT BY : dot‡Job PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: AIRPORT ROAD EAST	SHEET NO: 301	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±EAIRPORTXS3.DGN PLOT DATE : 23-DEC-2011 10:33 PLOT BY : do†J0b PLOT NAME : PLOT SCALE : 2.000000:1.000000

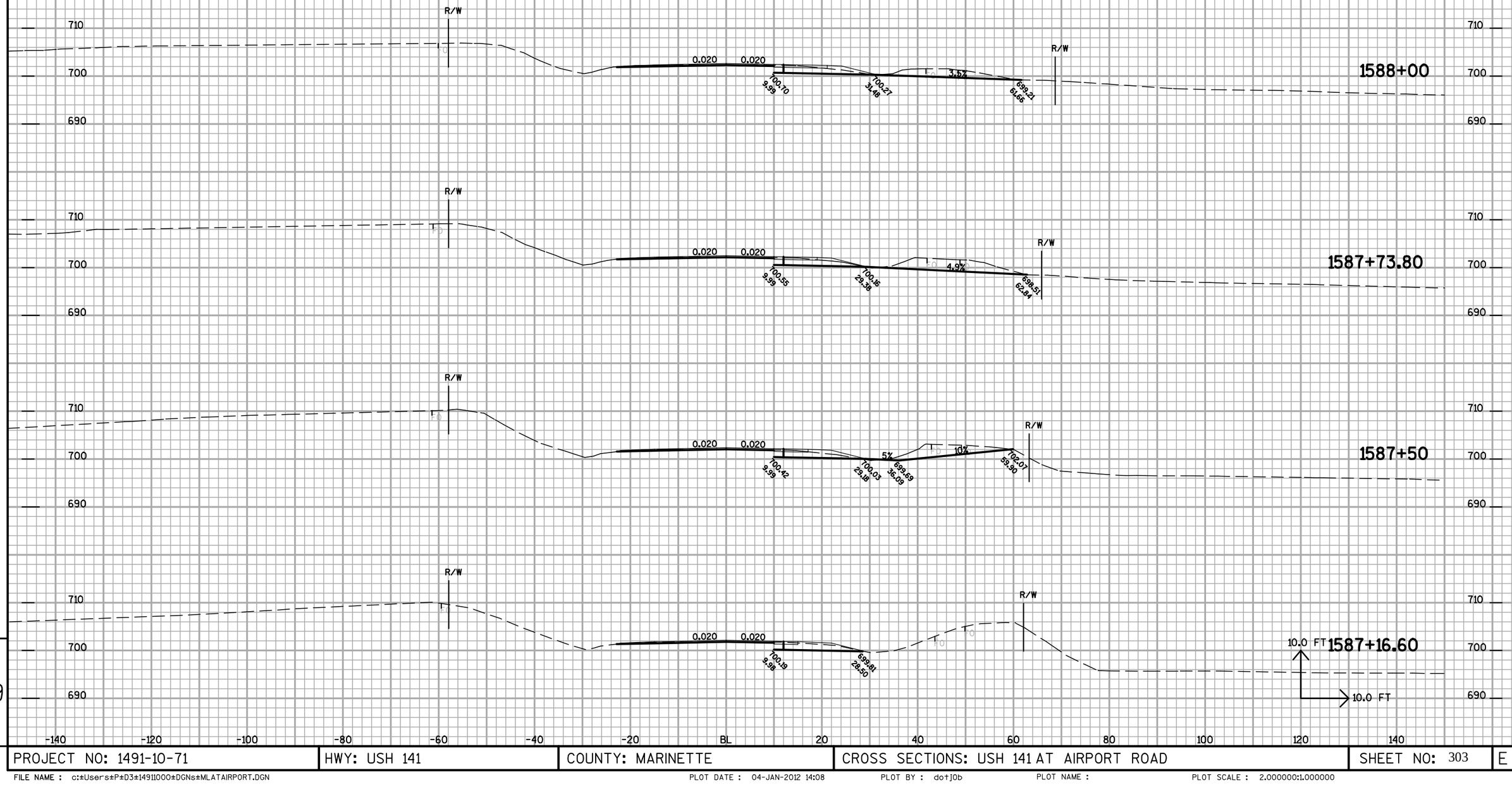


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 302	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:07 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

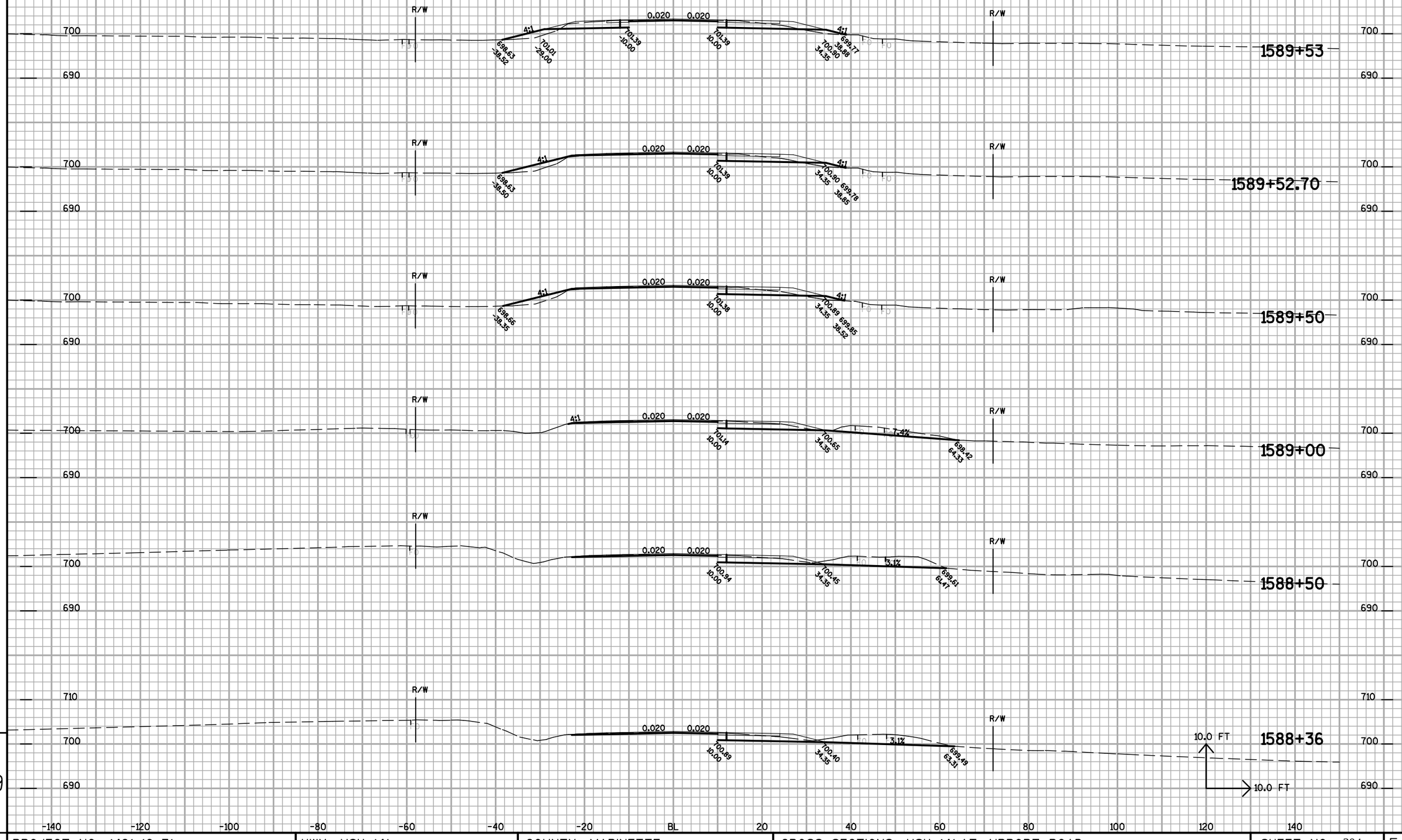


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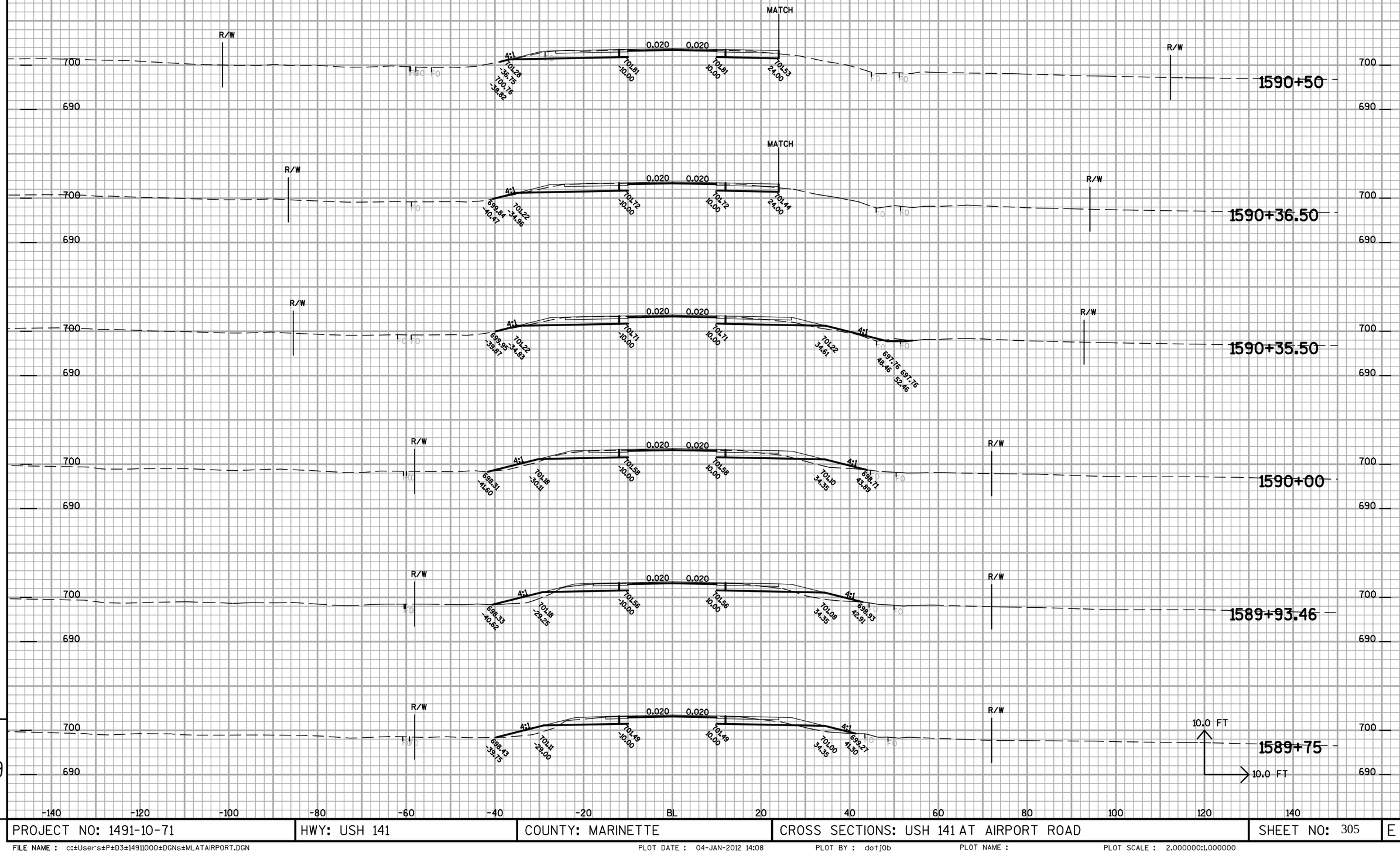
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 303	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



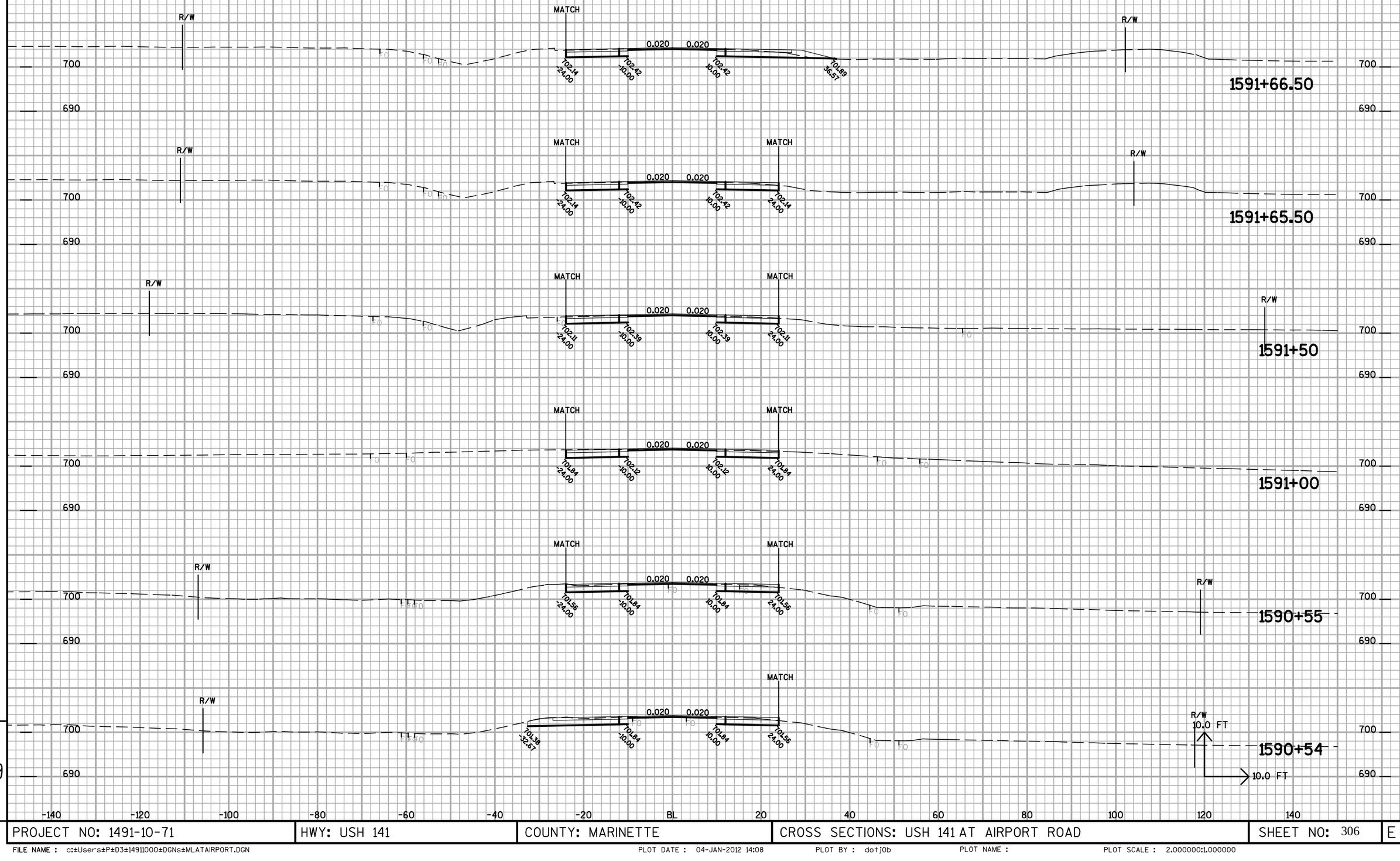
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 304 E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dot]Job PLOT NAME : PLOT SCALE : 2.000000:1.000000



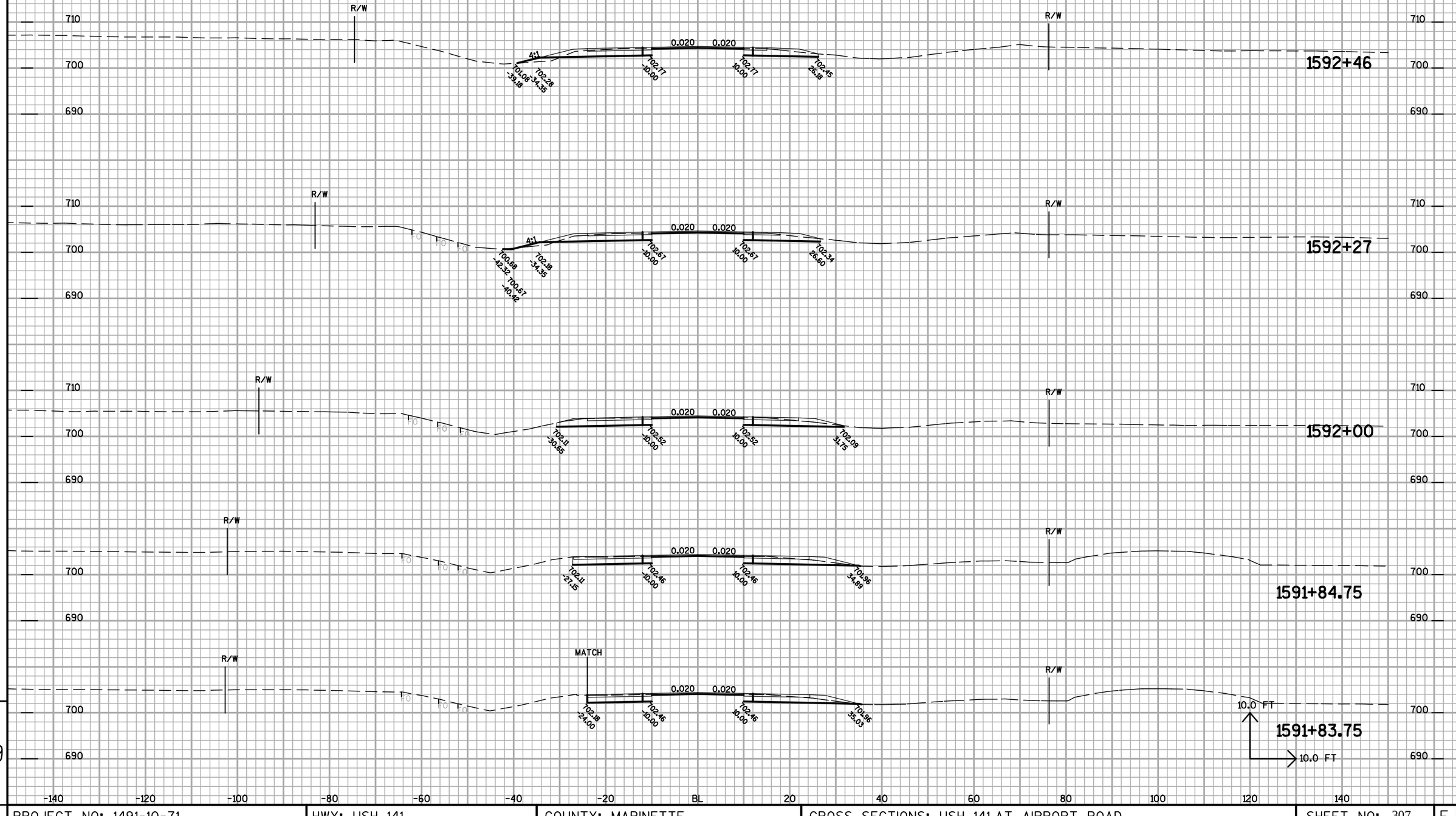
PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 305	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 306	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

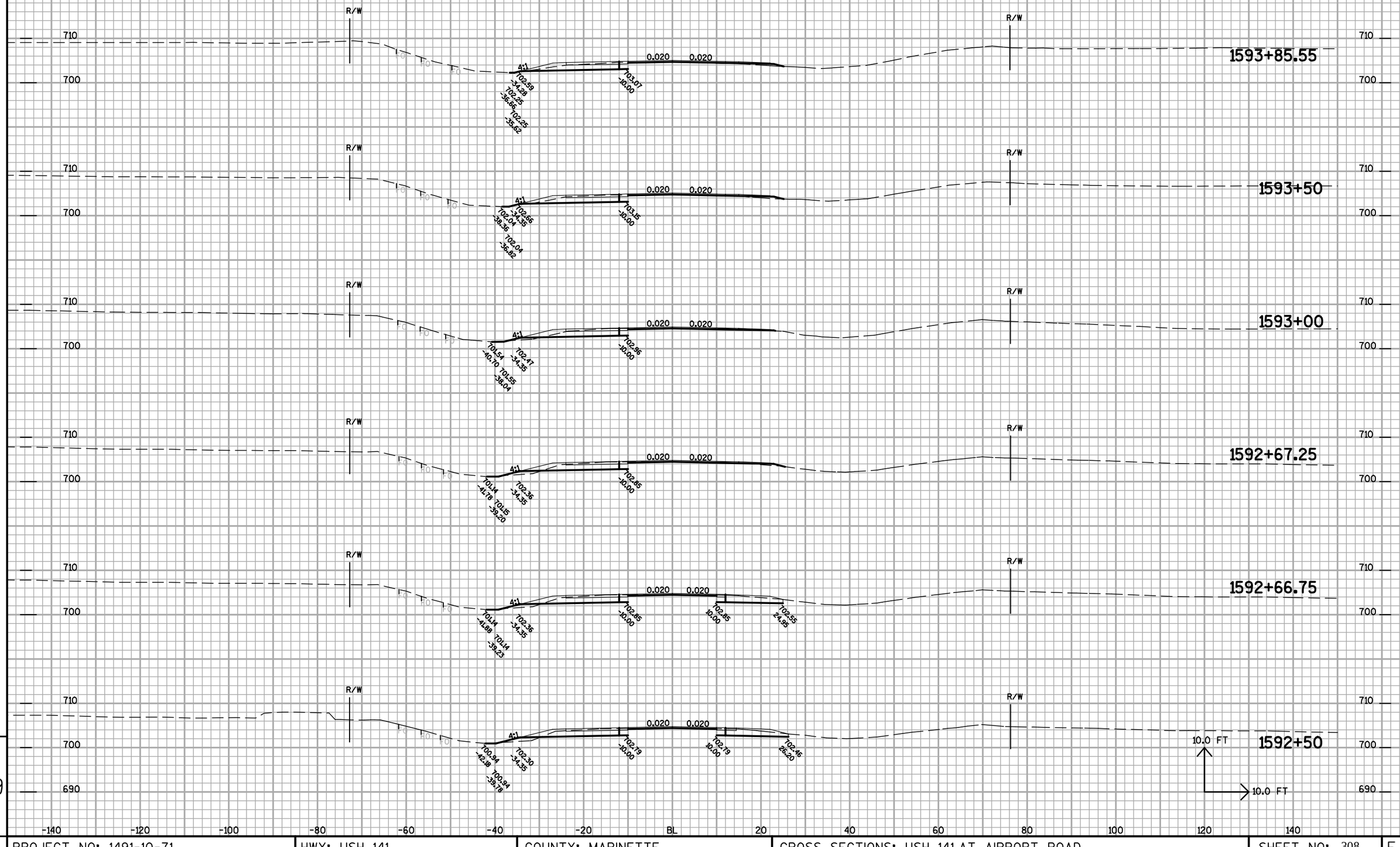


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 307	E

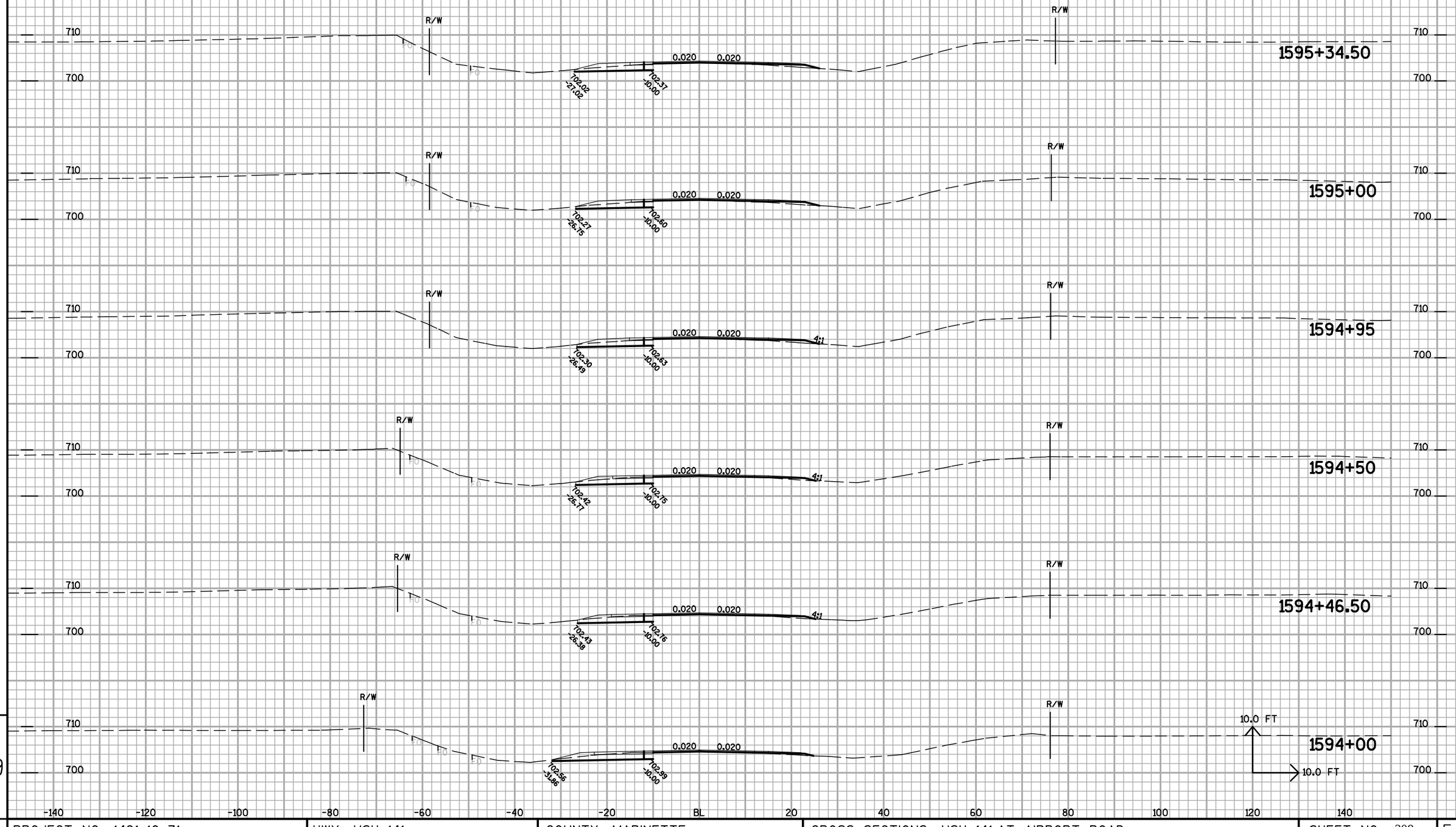
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FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 308	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

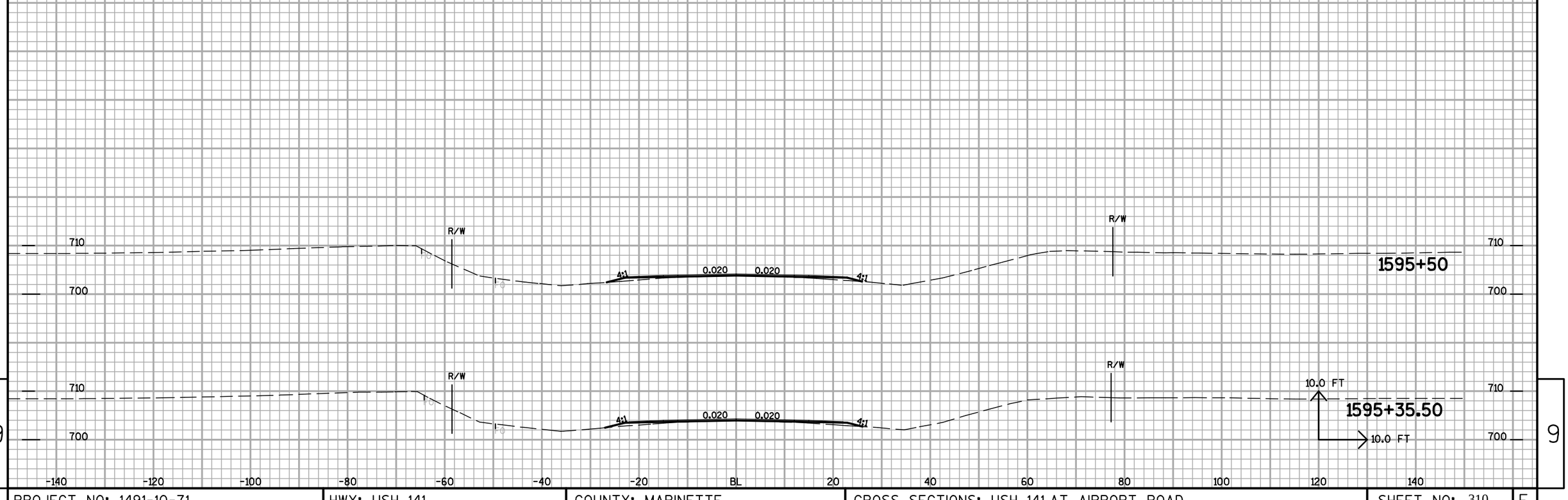


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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 309	E

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FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 1491-10-71	HWY: USH 141	COUNTY: MARINETTE	CROSS SECTIONS: USH 141 AT AIRPORT ROAD	SHEET NO: 310	E

FILE NAME : c:±Users±P±D3±14911000±DGNs±MLATAIRPORT.DGN PLOT DATE : 04-JAN-2012 14:08 PLOT BY : dotjob PLOT NAME : PLOT SCALE : 2.000000:1.000000

Notes

Wisconsin Department of Transportation

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