EAU

PROJECT ID: 7110-05-72

COUNTY: EAU CLAIRE

MARCH 2018

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 = 376



38

N

DESIGN DESIGNATION 7110-05-72

A.A.D.T.	2019	= 15000
A.A.D.T.	2039	= 17800
D.H.V.		= 1570
D.D.		= 59/41
T.		= 10.2%
DESIGN SPEED		= 55 MPH
ESALS		= 4,220,500

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 (300'EB)
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MONDOVI - EAU CLAIRE

IH 94 TO USH 12

STH 37

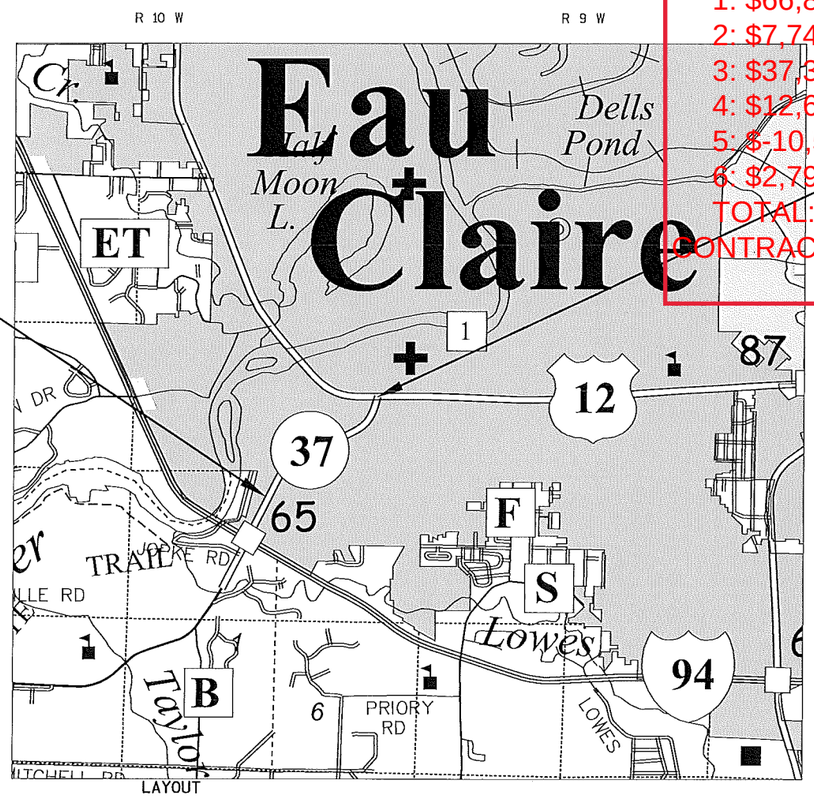
EAU CLAIRE

STATE PROJECT NUMBER
7110-05-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7110-05-72	WISC 2018163	1

BEGIN PROJECT 7110-05-72
STATION ~~39+25~~ 40+00
X = 331083.210
Y = 267599.083

T 27 N



TOTAL NET LENGTH OF CENTERLINE = 1.166

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

AS-BUILT

PROJECT LEADER: Mohamed Mounir - WisDOT
PRIME CONTRACTOR: HAAS Sons Inc.
BEGIN CONSTRUCTION: 05/14/2018
END CONSTRUCTION: 11/09/2018
FINAL CONTRACT COST: $4,907,802.25 KG, CS
CONTRACT MODS: 6 9/19/2019
1: $66,832.92
2: $7,744.00
3: $37,367.40
4: $12,610.93
5: $-10,501.07
6: $2,791.77
TOTAL: $116,845.95
CONTRACT ID: 20180313038

END PROJECT 7110-05-72
STATION 100+82

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NW REGION
Designer	GARY W KRUG
Project Manager	DAVID I KOEPP
Regional Examiner	JENNIFER OLDENBURG
Regional Supervisor	TIMOTHY MASON

APPROVED FOR THE DEPARTMENT
DATE: 11/2/2017 (Signature)

E

2

GENERAL NOTES

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

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

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

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

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

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

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

DIGGERS HOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

DNR LIASON

CHRIS WILLGER
DNR WEST CENTRAL REGION HQ
1300 W. CLAIREMONT AVE.
EAU CLAIRE, WI 54702-4001
715-839-1609
christopherj.willger@wisconsin.gov

UTILITIES

CITY OF EAU CLAIRE (SEWER & WATER)
LANE BERG
910 FOREST ST.
EAU CLAIRE, WI 54703
715-839-1876 (OFFICE)
715-828-6801 (MOBILE)EMAIL:
Lane.Berg@ci.eau-claire.wi.gov

XCEL ENERGY (ELECTRIC DISTRIBUTION)
DAN KLEIN
PO BOX 8
EAU CLAIRE, WI 54702-0008
715-737-4203 (OFFICE)
715-563-7729 (MOBILE)
daniel.j.klein@xcelenergy.com

XCEL ENERGY (GAS)
BRADY GARDOW
PO BOX 8
EAU CLAIRE, WI 54702-0008
715-737-1450 (OFFICE)
715-563-4081 (MOBILE)
brady.p.gardow@xcelenergy.com

UTILITIES

AT&T LEGACY
BRAD KEMPH (LOCATOR)
715-254-5238
COPY ALL CORRESPONDENCE TO:
BILL KOENIG (ENGINEER)
JMC ENGINEERS & ASSOCIATES
128 W SUNSET AVENUE
APPLETON, WI 54911
608-628-0575 (MOBILE)
wekoenig&att.net

AT&T WISCONSIN
RICK PODOLAK
304 SOUTH DEWEY STREET, 4TH FLOOR
EAU CLAIRE, WI 54701
715-839-5565 (OFFICE)
715-410-0656 (MOBILE)
Rp4514@att.com

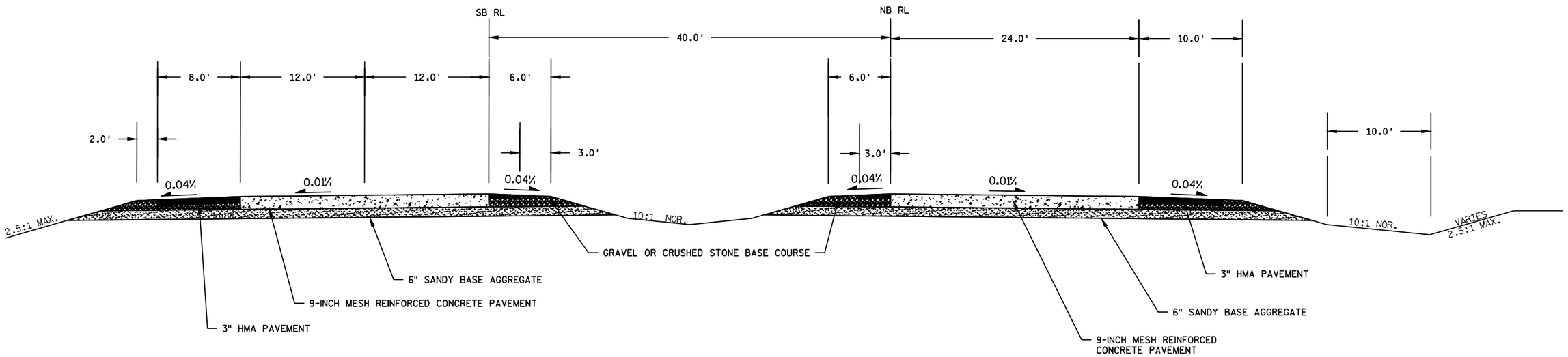
UTILITIES

WINDSTREAM
DENNIS RUESS
8531 CTH FF
WISCONSIN RAPIDS, WI 54494
812-456-1249 (OFFICE)
608-512-5587 (MOBILE)
Dennis.Ruess@windstream.com

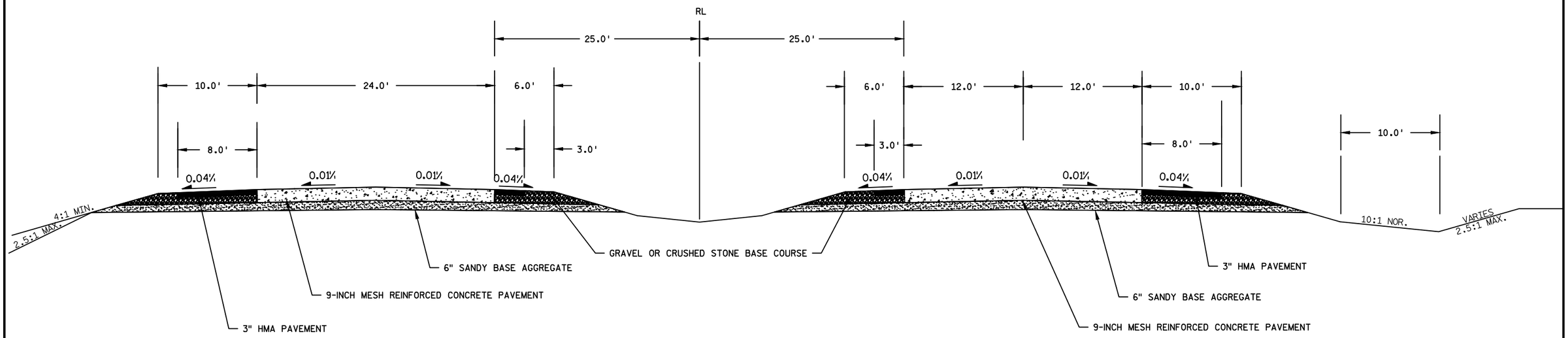
CHARTER COMMUNICATIONS (SPECTRUM)
SHANE YODER
1201 McCANN DRIVE
ALTOONA, WI 54720
715-831-8940 EXT 51113 (OFFICE)
715-370-7870 (MOBILE)
shane.yoder@charter.com

ABBREVIATIONS

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

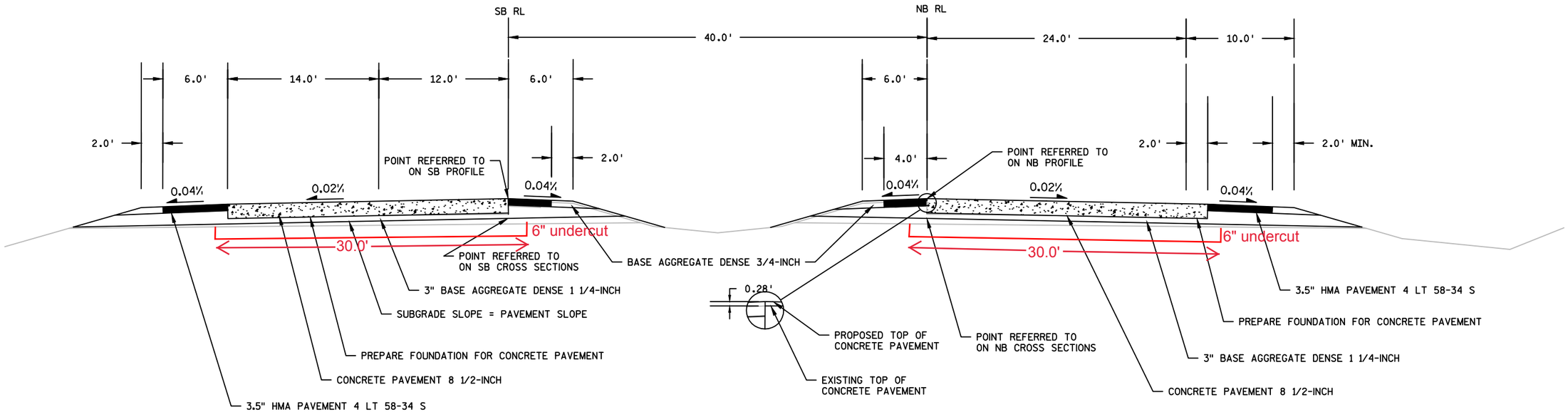


EXISTING TYPICAL SECTION
STA. 39+25 - STA. 52+65.85

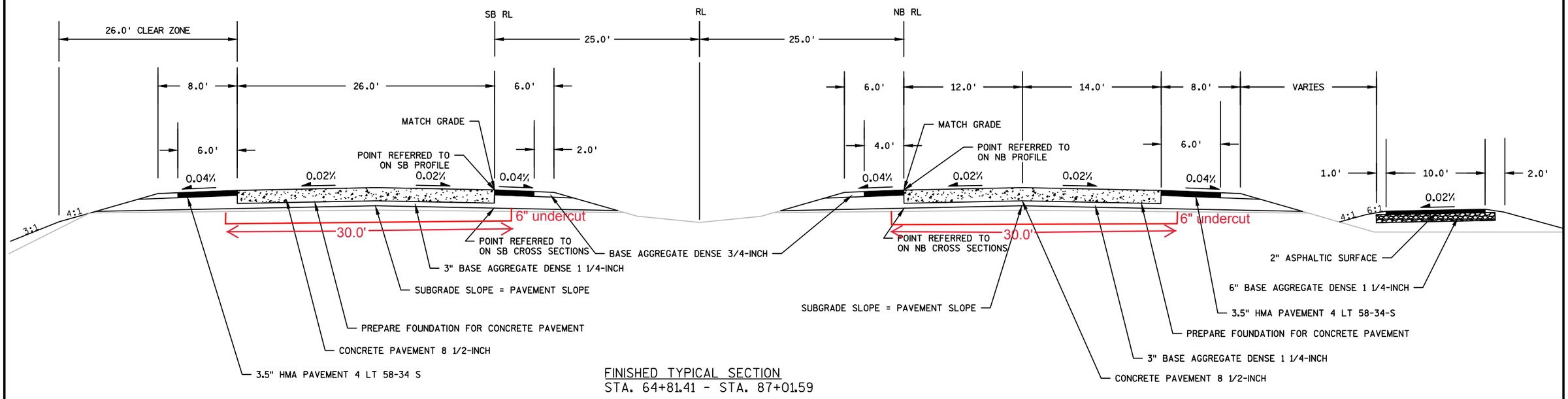


EXISTING TYPICAL SECTION
STA. 64+81.41 - STA. 87+01.59

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EXISTING TYPICAL SECTIONS	SHEET 3	E

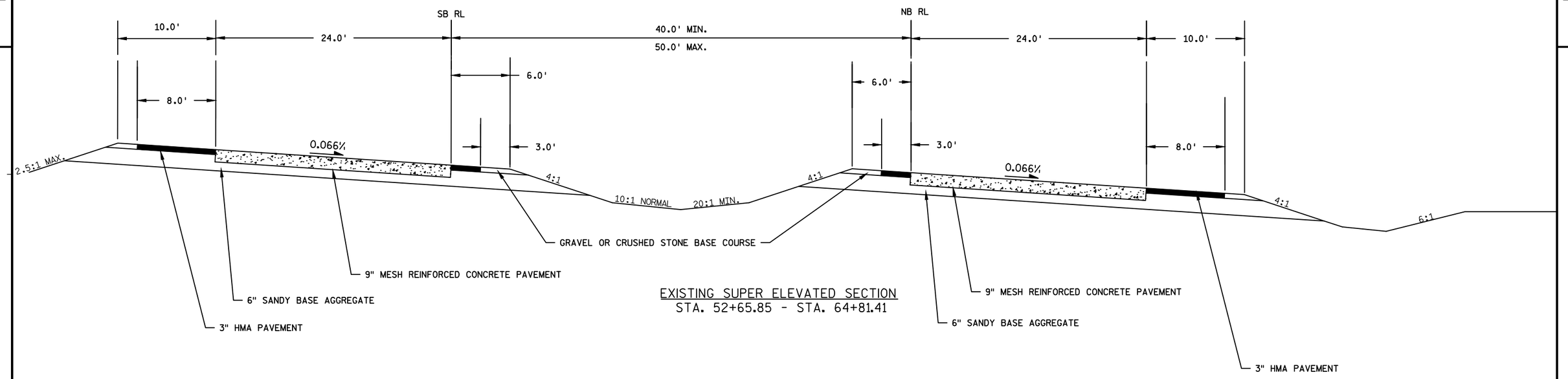


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STA. 39+25 - STA. 52+65.85

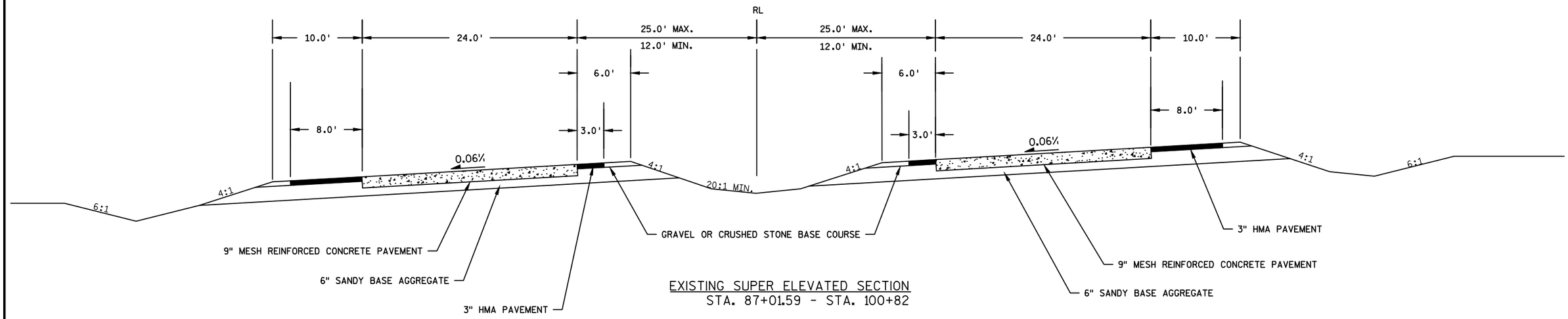


FINISHED TYPICAL SECTION
STA. 64+81.41 - STA. 87+01.59

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	FINISHED TYPICAL SECTIONS	SHEET 4	E

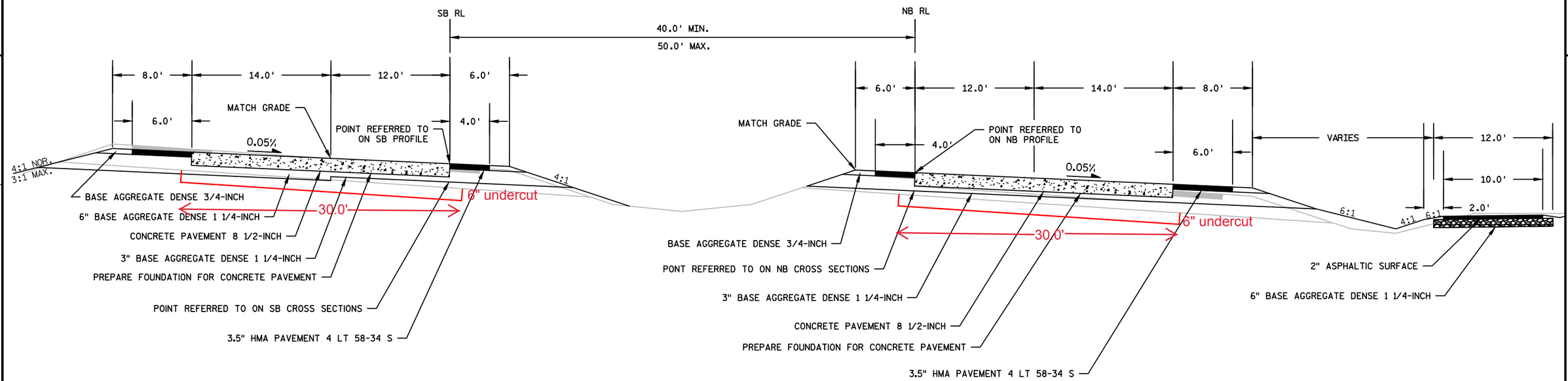


EXISTING SUPER ELEVATED SECTION
STA. 52+65.85 - STA. 64+81.41

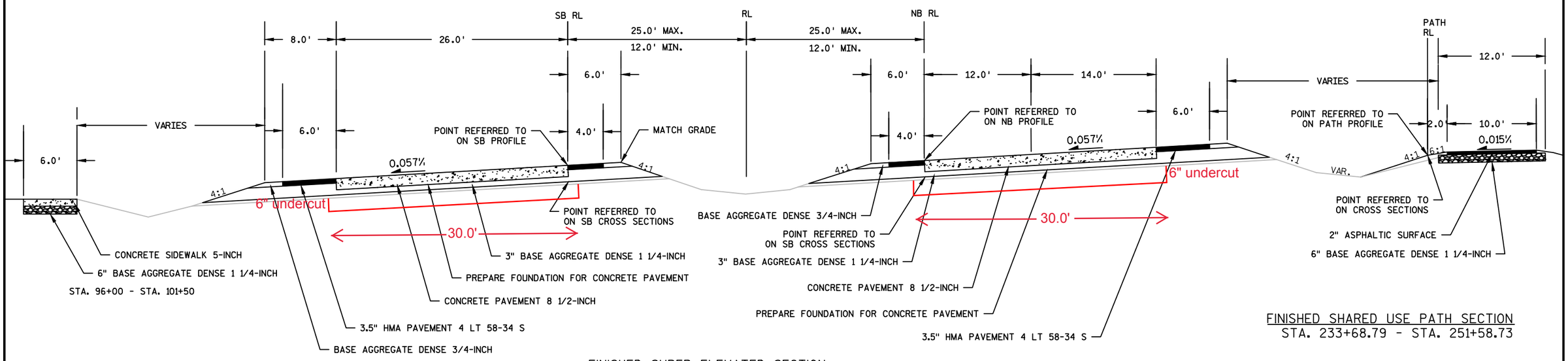


EXISTING SUPER ELEVATED SECTION
STA. 87+01.59 - STA. 100+82

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EXISTING TYPICAL SECTIONS	SHEET 5	E



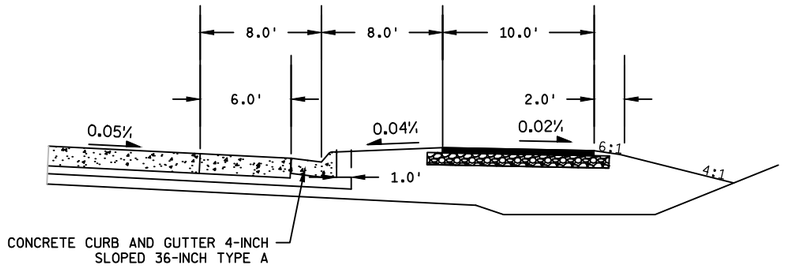
FINISHED SUPER ELEVATED SECTION
STA. 52+65.85 - STA. 64+81.41



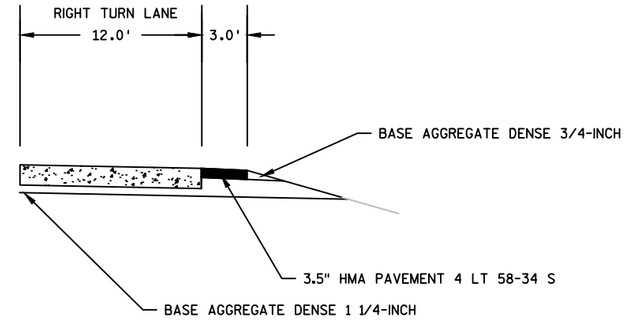
FINISHED SUPER ELEVATED SECTION
STA. 87+01.59 - STA. 100+82

FINISHED SHARED USE PATH SECTION
STA. 233+68.79 - STA. 251+58.73

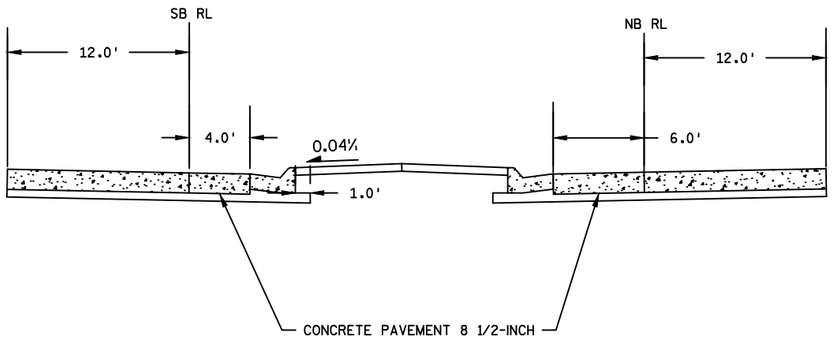
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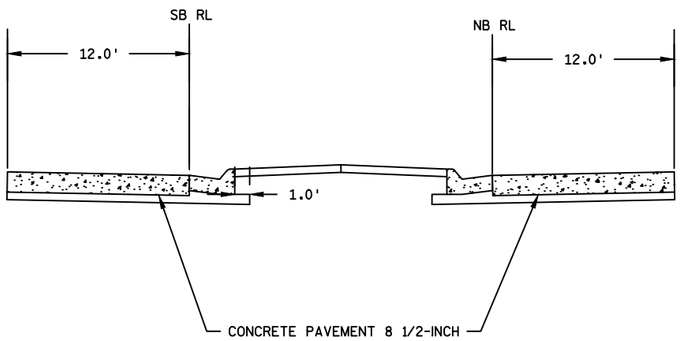
CURB AND GUTTER SECTION
STA. 52+65.85 - STA. 58+00 NB



RIGHT TURN LANE SECTION

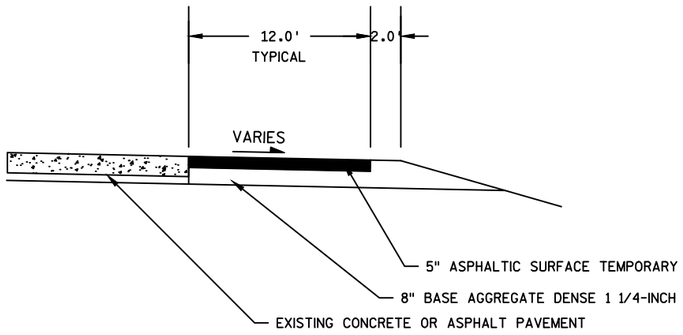


TYPICAL SECTION WITH CURB AND GUTTER MEDIAN
STA. 82+00 - STA. 84+45 SB
STA, 85+25 - STA. 87+65 NB

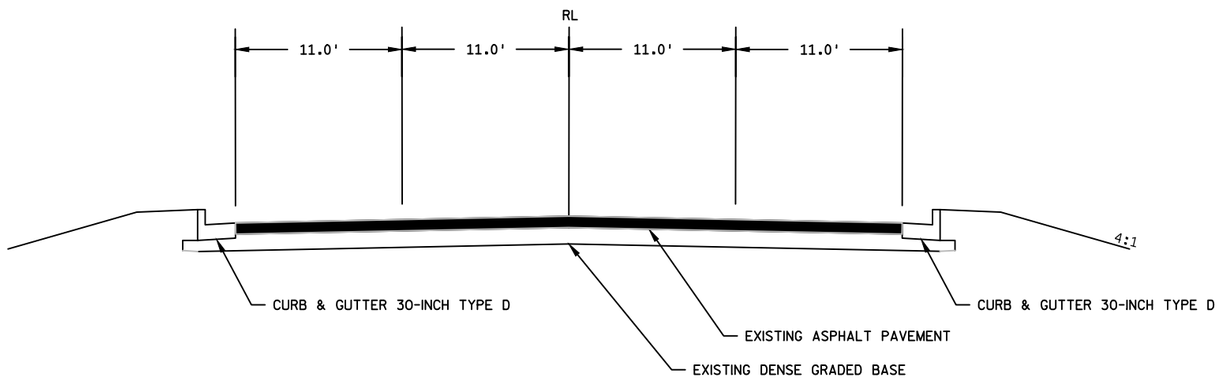


TYPICAL SECTION WITH CURB AND GUTTER MEDIAN
STA. 48+25 - STA. 50+39 SB
STA. 51+67 - STA. 53+27 NB
STA. 96+00 - STA. 100+79 NB
STA. 96+00 - STA. 101+12 SB

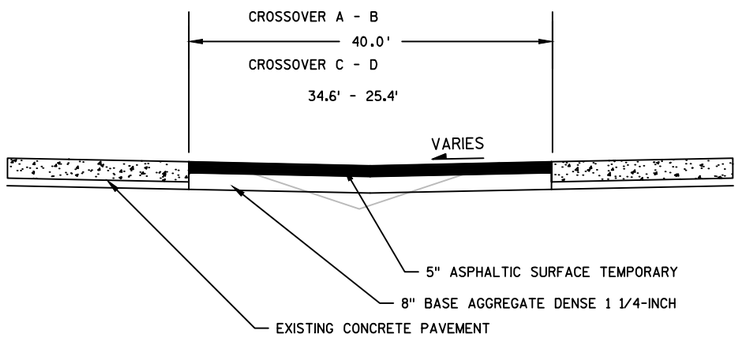
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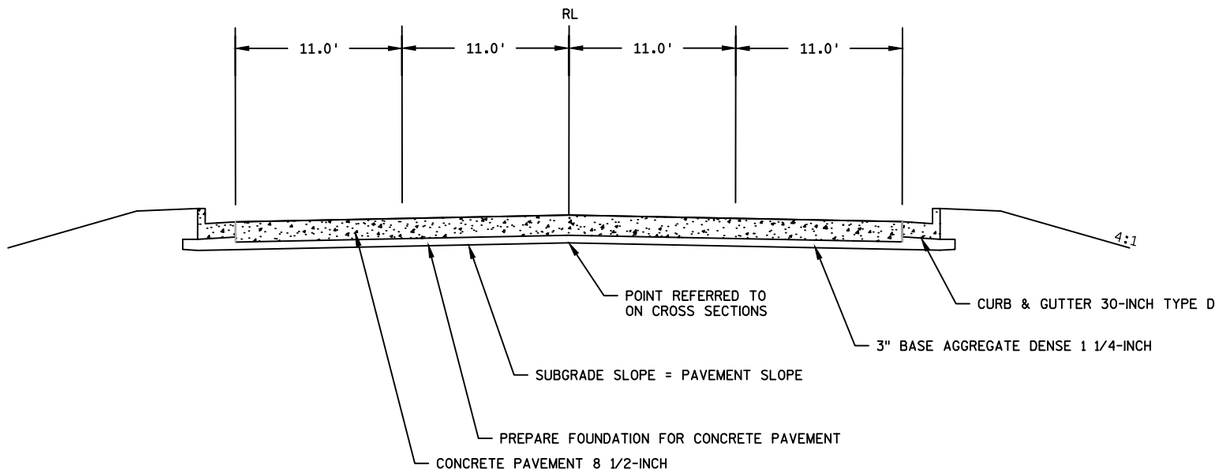
TEMPORARY WIDENING SECTION



EXISTING SECTION CRAIG ROAD
STA. 8+00 - STA. 9+39
STA. 10+60 - STA. 12+11

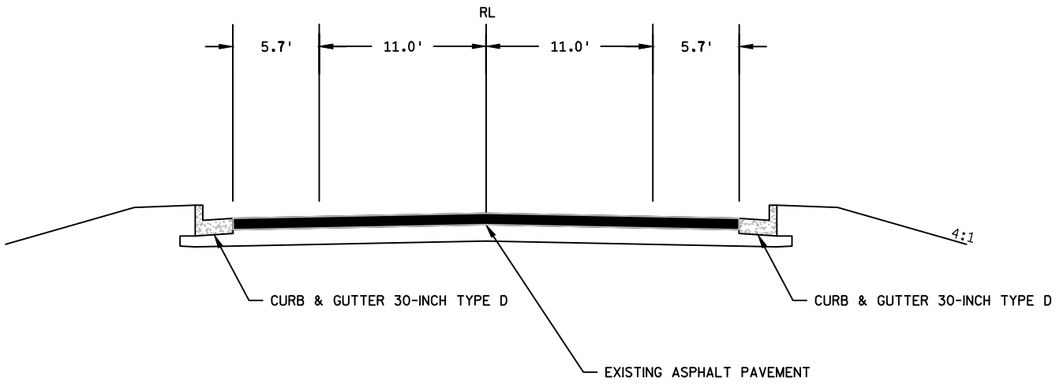


FINISHED SECTION CROSSOVERS
STA. 40+20 - STA. 45+00
STA. 94+36 - STA. 99+00

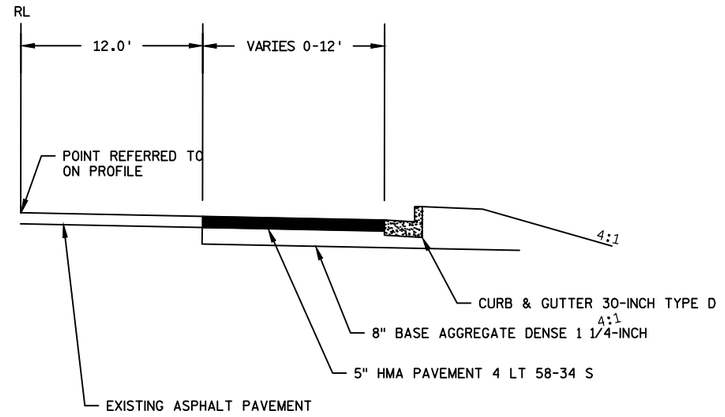


FINISHED SECTION CRAIG ROAD
STA. 8+00 - STA. 9+39
STA. 10+60 - STA. 12+11

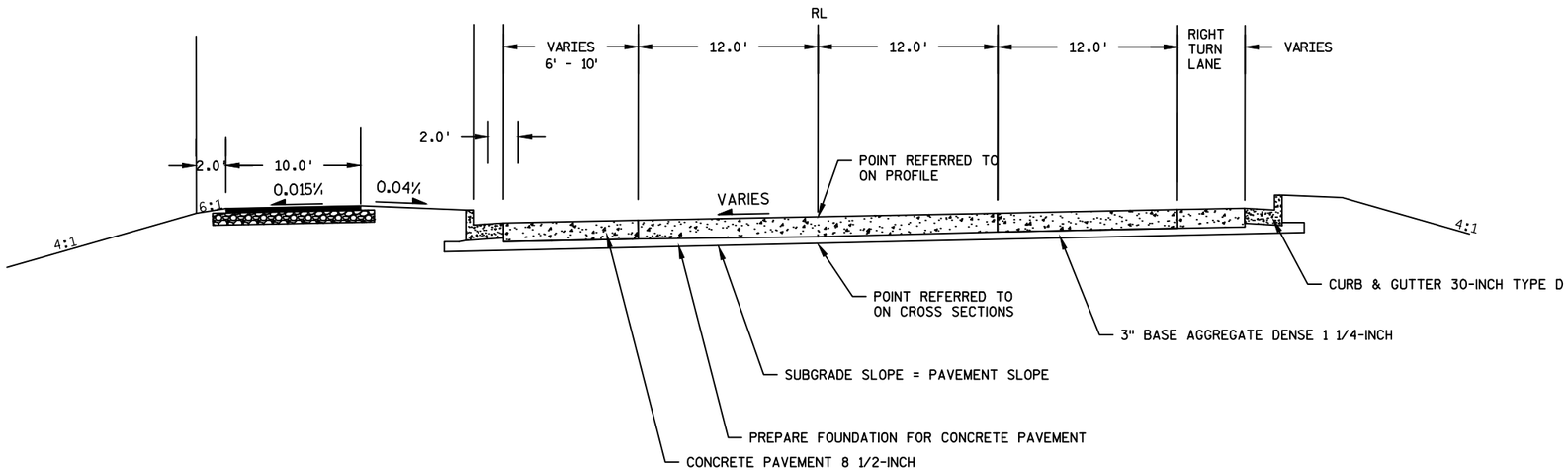
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	FINISHED TYPICAL SECTIONS	SHEET 8	E



EXISTING SECTION SHORT STREET
STA. 40+55 - 44+68

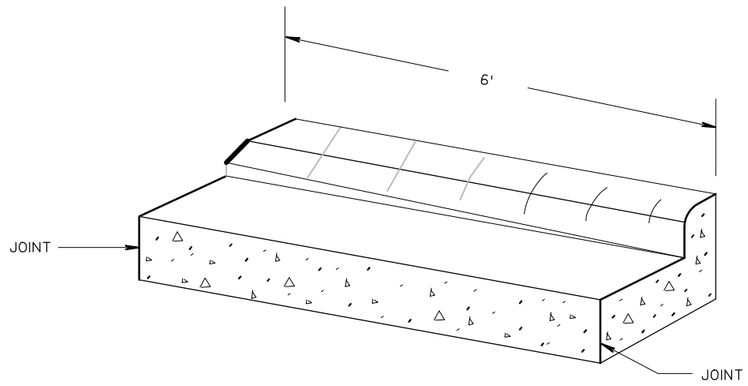


FINISHED TYPICAL SECTION SHORT STREET
STA. 40+55 - STA. 42+05



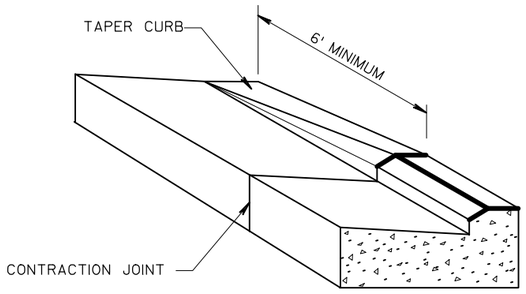
FINISHED TYPICAL SECTION SHORT STREET
STA. 42+05 - STA. 44+68

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	FINISHED TYPICAL SECTIONS	SHEET 9	E

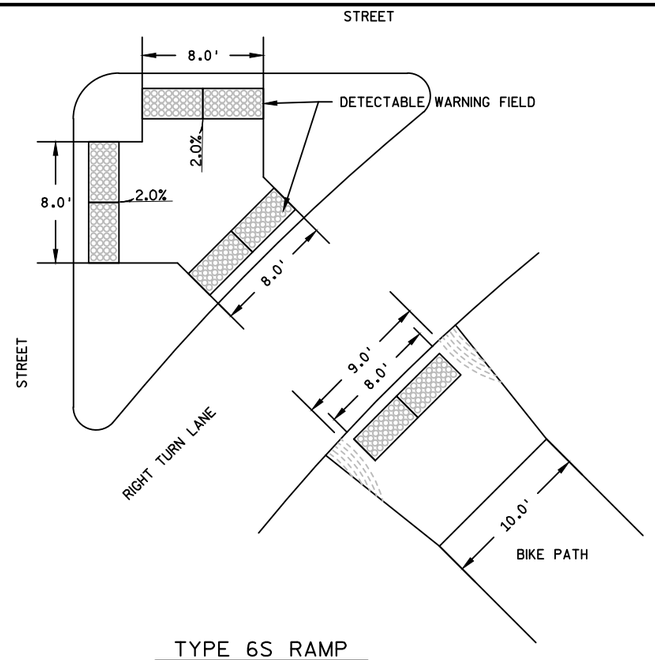


TRANSITION DETAIL

36" TYPE "A" CURB & GUTTER TO 30" TYPE "D" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 36" CONC. C&G)

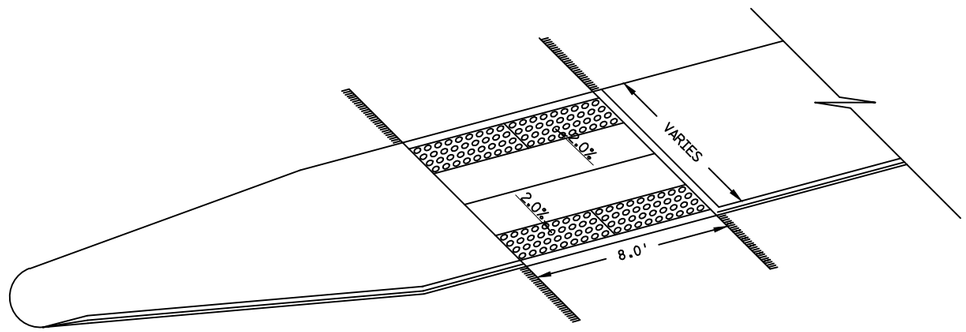


DETAIL OF CURB & GUTTER TERMINI



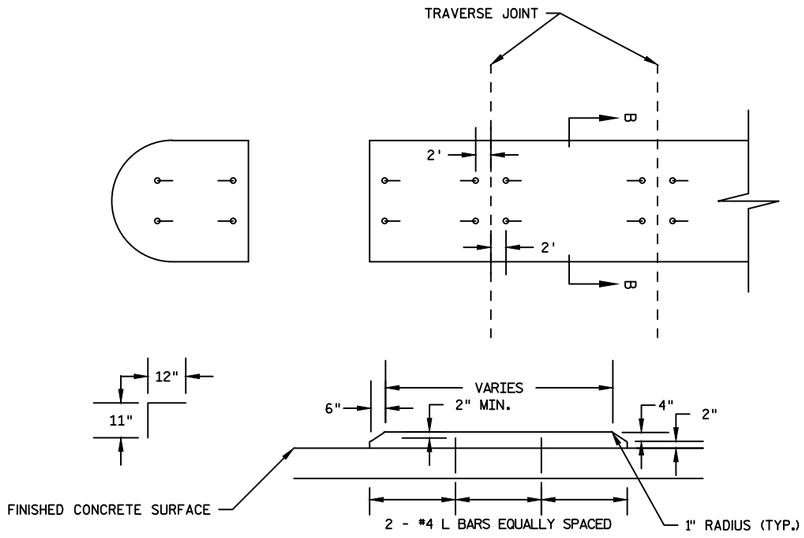
TYPE 6S RAMP

SEE S.D.D. CURB RAMPS FOR ADDITIONAL INFORMATION



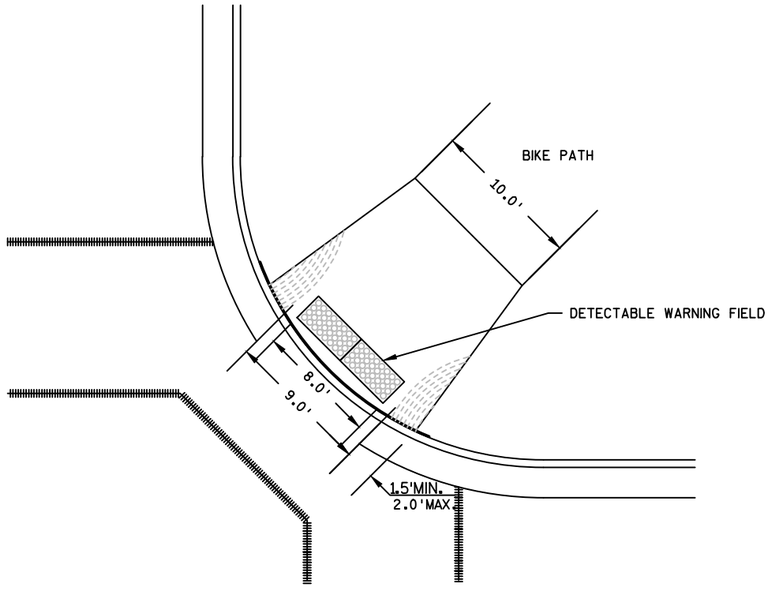
TYPE 5S RAMP

SEE S.D.D. CURB RAMPS FOR ADDITIONAL INFORMATION



SECTION B - B

CONCRETE SAFETY ISLANDS



TYPE 1S RAMP

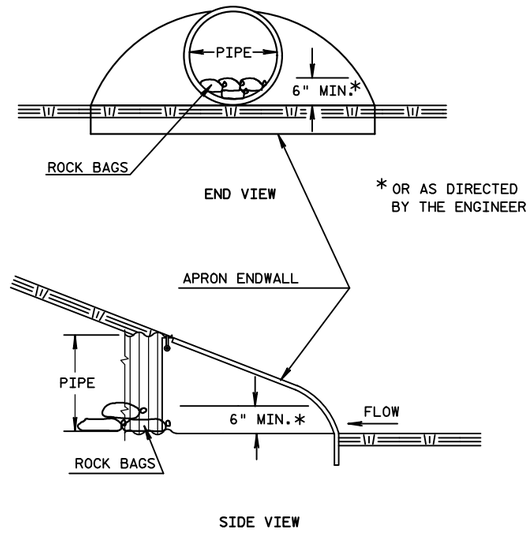
SEE S.D.D. CURB RAMPS FOR ADDITIONAL INFORMATION

2

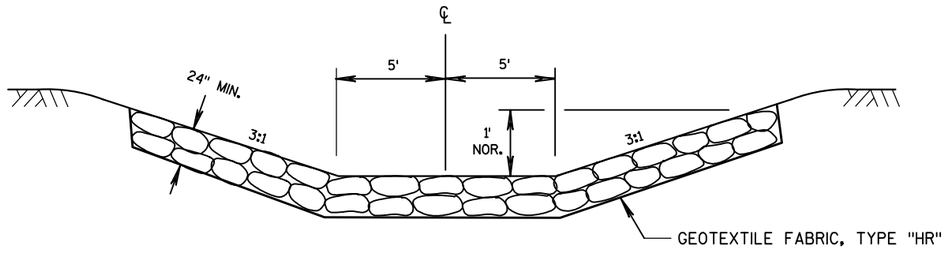
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

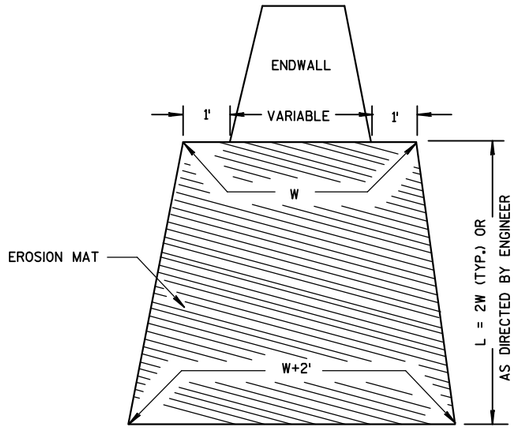
TOTAL PROJECT AREA = 45.55 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 25.67 ACRES



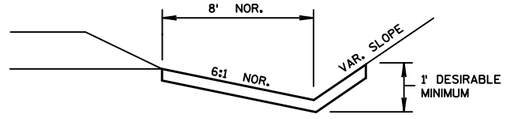
CULVERT PIPE CHECKS



DETAIL FOR SPECIAL DITCH WITH RIPRAP HEAVY AND GEOTEXTILE FABRIC

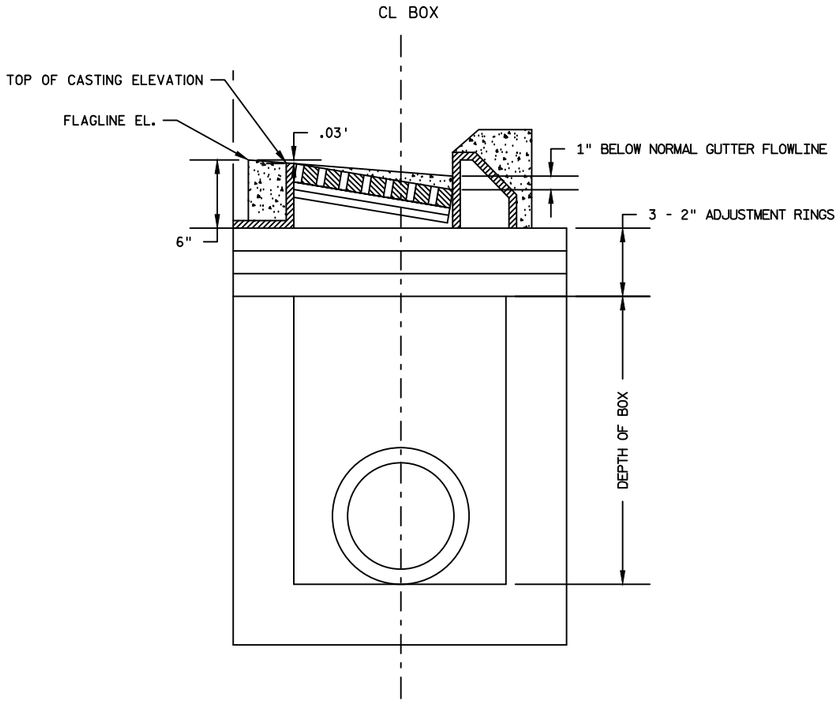


EROSION MAT TREATMENT AT CULVERTS

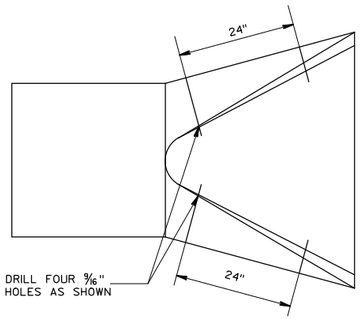


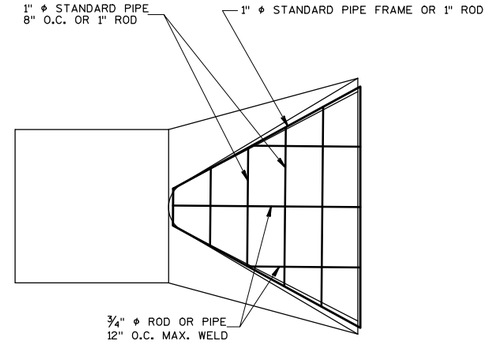
EROSION MAT DETAIL FOR DITCHES

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN: CONSTRUCTION DETAILS	SHEET 12	E

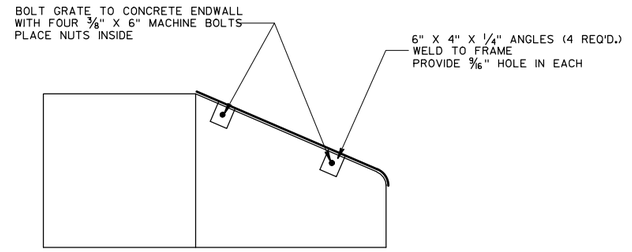


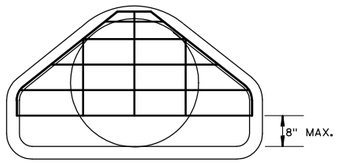
INLET DETAIL



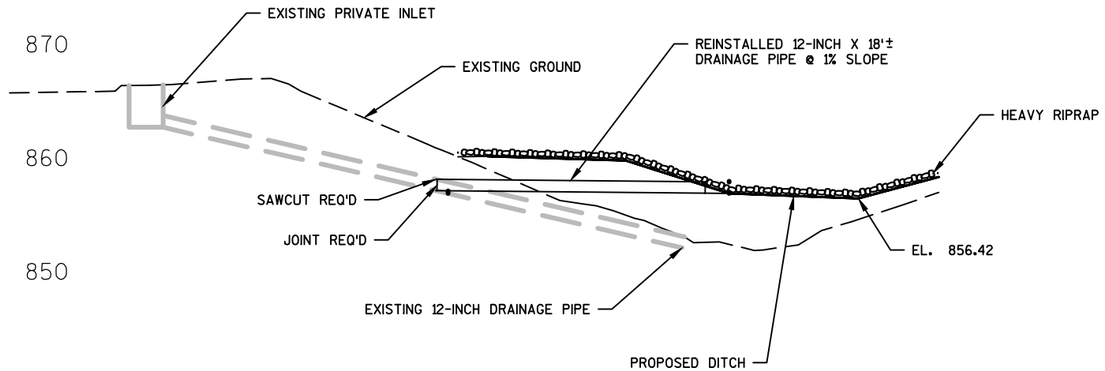


AT EACH PIPE





PIPE GRATE DETAIL



CONSTRUCTION DETAILS

REMOVE, SALVAGE, AND REINSTALL DRAINAGE PIPE, STATION 83+71 LT

PROJECT NO: 8180-02-70	HWY: STH 27	COUNTY: RUSK	PLAN: DETAILS	SHEET 14	E

2

N

40+00

41+00

42+00

43+00

44+00

STA. 40+54 12' RT

STA. 42+05 24' RT

STA. 44+15 24' RT

ASPHALTIC SURFACE TEMPORARY

SLOPE INTERCEPT

SHORT STREET

HAMILTON A

SIGN

INL

MH

AG

50+00

51+00

52+00

26+00

N

53+00

54+00

55+00

56+00

SB STH 3

NB STH 37

ASPHALTIC SURFACE TEMPORARY

STA. 51+48 38' RT

STA. 52+00 36' RT

STA. 53+20 36' RT

STA. 54+93 30' RT

STA. 55+92 24' RT

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY WIDENING DETAILS	SHEET 15	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\WIDENING DETAILS.DWG
LAYOUT NAME - TC_SHORTY 4

PLOT DATE : 10/17/2017 4:13 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

SB STH 37

NB STH 37

77+00 78+00 79+00 80+00 81+00 82+00 83+00 84+00

ASPHLATIC SURFACE TEMPORARY

3.2'

STA. 78+70 46.4' RT

STA. 80+78 60' RT

STA. 81+68 60' RT

ASPHALTIC SURFACE TEMPORARY

11.2'

STA. 83+99 64.2' RT

9+00 10+00 11+00

85+00 86+00 87+00 88+00 89+00 90+00 91+00

PC: 87+01.89

ASPHALTIC SURFACE TEMPORARY

11.2'

38'

36'

12'

STA. 85+01 64.3' RT

STA. 85+28 62.3' RT

STA. 86+40 62.4' RT

STA. 89+53 47.6' RT

MH INL

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY WIDENING DETAILS	SHEET 16	E

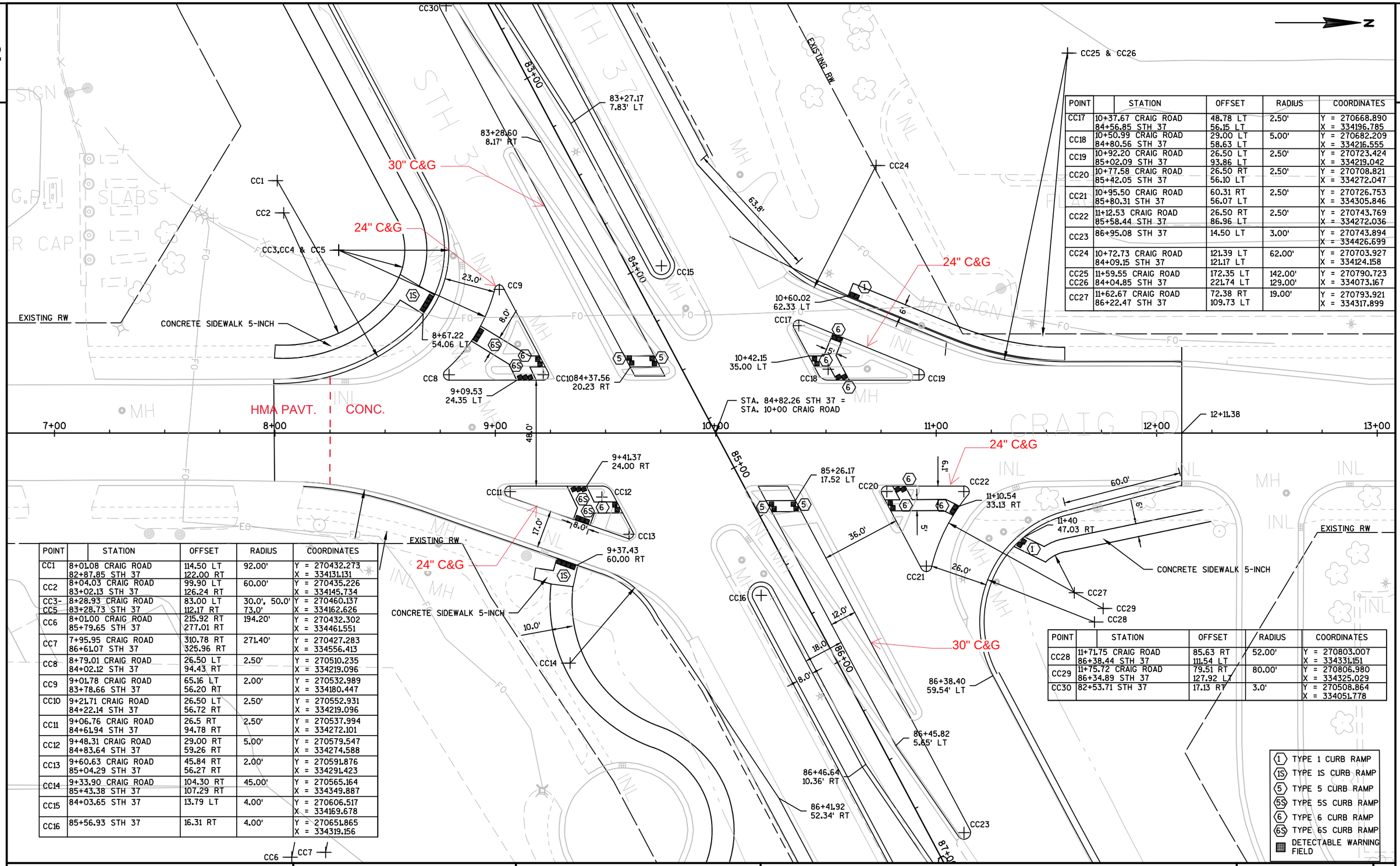
POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1 CC2	42+80.3 SHORT ST. 51+65.31 STH 37 SB	61.70 LT 213.21 LT	44.00' 26.00'	Y = 268827.073 X = 331390.648
CC3	43+50.21 SHORT ST. 52+19.62 STH 37 SB	120.05 LT 148.03 LT	82.00'	Y = 268847.896 X = 331472.892
CC4	43+52.55 SHORT ST. 52+23.45 STH 37 SB	123.92 LT 146.00 LT	102.00'	Y = 268850.479 X = 331476.385
CC5	43+71.48 SHORT ST. 49+61.52 STH 37 SB	138.00 RT 128.00 LT	98.00'	Y = 2686.06.470 X = 331379.464
CC6	43+77.05 SHORT ST. 49+57.34 STH 37 SB	142.20 RT 122.42 LT	115.00'	Y = 268600.292 X = 331382.692
CC7	43+97.52 SHORT ST. 50+73.12 STH 37 SB	26.50 RT 102.38 LT	2.50'	Y = 268696.049 X = 331450.780
CC8	44+62.89 SHORT ST. 50+70.86 STH 37 SB	29.00 RT 37.00 LT	5.00'	Y = 268665.772 X = 331508.770
CC9	44+65.26 SHORT ST. 50+35.29 STH 37 SB	64.58 RT 34.5 LT	2.50'	Y = 268632.613 X = 331495.659
CC10	44+31.89 SHORT ST. 51+26.24 STH 37 SB	26.50 LT 68.21 LT	2.50'	Y = 268729.205 X = 331504.544
CC11	44+65.77 SHORT ST. 51+72.72 STH 37 SB	72.85 LT 34.50 LT	2.50'	Y = 268756.554 X = 331555.026
CC12	44+63.11 SHORT ST. 51+28.86 STH 37 SB	29.00 LT 37.00 LT	5.00'	Y = 268718.081 X = 331533.826
CC13	51+76.49 STH 37 SB	21.32 LT	63.57'	Y = 268754.261 X = 331568.544
CC14	50+48.94 STH 37 SB	8.00 RT	4.00'	Y = 268626.562 X = 331539.885
CC15	51+49.91 STH 37 SB	32.00 RT	4.00'	Y = 268707.260 X = 331605.149

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC16	50+22.35 STH 37 NB	21.310 RT	63.57'	Y = 268579.549 X = 331576.475
CC17	25+32.75 HAMILTON AVE. 50+29.71 STH 37 NB	70.65 RT 33.50 RT	1.50'	Y = 268580.920 X = 331590.648
CC18	25+34.22 HAMILTON AVE. 50+73.86 STH 37 NB	26.50 RT 34.50 RT	2.50'	Y = 268520.313 X = 331610.626
CC19	25+62.87 HAMILTON AVE. 50+74.17 STH 37 SB	26.50 RT 63.15 RT	2.50'	Y = 268608.211 X = 331636.599
CC20	25+34.76 HAMILTON AVE. 51+27.12 STH 37 NB	26.76 LT 34.47 RT	2.50'	Y = 268668.359 X = 331633.608
CC21	25+78.90 HAMILTON AVE. 51+26.12 STH 37 NB	25.29 LT 78.63 RT	1.50'	Y = 268648.381 X = 331673.000
CC22	25+34.76 HAMILTON AVE. 51+55.78 STH 37 NB	55.41 LT 34.16 RT	2.50'	Y = 268694.332 X = 331645.709
CC23 CC24	26+18.15 HAMILTON AVE. 52+22.16 STH 37 NB	120.91 LT 116.85 RT	64.85' 85.00'	Y = 268718.485 X = 331748.959
CC25	26+25.79 HAMILTON AVE. 52+38.70 STH 37 NB	137.37 LT 124.32 RT	120.00'	Y = 268730.175 X = 331762.840
CC26	26+84.89 HAMILTON AVE. 53+48.73 STH 37 NB	238.82 LT 180.67 RT	120.00'	Y = 268797.178 X = 331859.257
CC27	26+37.69 SHORT ST. 49+77.98 STH 37 NB	123.50 RT 139.00 RT	98.00'	Y = 268488.690 X = 331663.449
CC28	26+44.83 HAMILTON AVE. 49+84.02 STH 37 NB	117.54 RT 146.08 RT	120.00'	Y = 268491.080 X = 331672.442

PC: 52+94.98
PC: 52+64.97
52+51.28 NB
10.00' LT
52+50 SB
14' RT
30" C&G
24" C&G
CC4
CC3
CC1 & CC2
CONCRETE SIDEWALK 5-INCH
42+40.6
38.40' LT
42+05
12' LT
SAWCUT
42+00
42+05
24'
43+00
44+00
44+36.07
66.21' LT
CC11
CC13
18'
44+49.76
49.42' LT
CC10
44+56.33
30.00' LT
CC12
STA. 51+00 STH 37 SB =
STA. 45+00 SHORT STREET
48+00
51+00
53+00
52+00
89'
12
14'
8'
CC15
6'
33'
43+44.04
CC7
CC8
38'
14'
CC9
CC5
CC6
93'
49+54.86 SB
49+55.16 NB
CC14
2'
14'
12'
8'
50+00
CC16
CC26
CC25
CC23 & CC24
CC22
25+49.51
44.74' LT
25+81.53
60.08' LT
26+61.53
33.67' LT
25+72.06
52.06' LT
17'
61'
CC20
CC21
5'
CONC.
HMA PAVT.
STA. 51+00 STH 37 NB =
STA. 25+00 HAMILTON AVE.
26+00
26+63
27+00
END CONSTRUCTION
SAWCUT REQUIRED
41'
6'
CC18
CC19
25+37.66
33.45' RT
25+51.87
41.65' RT
5'
19'
CC17
25+72.0
70.0' RT
CC28
CC27
EXISTING RW
SIGN

1 TYPE 1 CURB RAMP
1S TYPE 1S CURB RAMP
5 TYPE 5 CURB RAMP
5S TYPE 5S CURB RAMP
6 TYPE 6 CURB RAMP
6S TYPE 6S CURB RAMP
DETECTABLE WARNING FIELD

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	SHORT ST./HAMILTON AVE INTERSECTION LAYOUT	SHEET 17	E



POINT	STATION	OFFSET	RADIUS	COORDINATES
CC17	10+37.67 CRAIG ROAD 84+56.85 STH 37	48.78 LT 56.15 LT	2.50'	Y = 270668.890 X = 334196.785
CC18	10+50.99 CRAIG ROAD 84+80.56 STH 37	29.00 LT 58.63 LT	5.00'	Y = 270682.209 X = 334216.555
CC19	10+92.20 CRAIG ROAD 85+02.09 STH 37	26.50 LT 93.86 LT	2.50'	Y = 270723.424 X = 334219.042
CC20	10+77.58 CRAIG ROAD 85+42.05 STH 37	26.50 RT 56.10 LT	2.50'	Y = 270708.821 X = 334272.047
CC21	10+95.50 CRAIG ROAD 85+80.31 STH 37	60.31 RT 56.07 LT	2.50'	Y = 270726.753 X = 334305.846
CC22	11+12.53 CRAIG ROAD 85+58.44 STH 37	26.50 RT 86.96 LT	2.50'	Y = 270743.769 X = 334272.036
CC23	86+95.08 STH 37	14.50 LT	3.00'	Y = 270743.894 X = 334426.699
CC24	10+72.73 CRAIG ROAD 84+09.15 STH 37	121.39 LT 121.17 LT	62.00'	Y = 270703.927 X = 334124.158
CC25 CC26	11+59.55 CRAIG ROAD 84+04.85 STH 37	172.35 LT 221.74 LT	142.00' 129.00'	Y = 270790.723 X = 334073.167
CC27	11+62.67 CRAIG ROAD 86+22.47 STH 37	72.38 RT 109.73 LT	19.00'	Y = 270793.921 X = 334317.899

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	8+01.08 CRAIG ROAD 82+87.85 STH 37	114.50 LT 122.00 RT	92.00'	Y = 270432.273 X = 334131.131
CC2	8+04.03 CRAIG ROAD 83+02.13 STH 37	99.90 LT 126.24 RT	60.00'	Y = 270435.226 X = 334145.734
CC3-CC5	8+28.93 CRAIG ROAD 83+28.73 STH 37	83.00 LT 112.17 RT	30.0', 50.0' 73.0'	Y = 270460.137 X = 334162.626
CC6	8+01.00 CRAIG ROAD 85+79.65 STH 37	215.92 RT 277.01 RT	194.20'	Y = 270432.302 X = 334461.551
CC7	7+95.95 CRAIG ROAD 86+61.07 STH 37	310.78 RT 325.96 RT	271.40'	Y = 270427.283 X = 334556.413
CC8	8+79.01 CRAIG ROAD 84+02.12 STH 37	26.50 LT 94.43 RT	2.50'	Y = 270510.235 X = 334219.096
CC9	9+01.78 CRAIG ROAD 83+78.66 STH 37	65.16 LT 56.20 RT	2.00'	Y = 270532.989 X = 334180.447
CC10	9+21.71 CRAIG ROAD 84+22.14 STH 37	26.50 LT 56.72 RT	2.50'	Y = 270552.931 X = 334219.096
CC11	9+06.76 CRAIG ROAD 84+61.94 STH 37	26.5 RT 94.78 RT	2.50'	Y = 270537.994 X = 334272.101
CC12	9+48.31 CRAIG ROAD 84+83.64 STH 37	29.00 RT 59.26 RT	5.00'	Y = 270579.547 X = 334274.588
CC13	9+60.63 CRAIG ROAD 85+04.29 STH 37	45.84 RT 56.27 RT	2.00'	Y = 270591.876 X = 334291.423
CC14	9+33.90 CRAIG ROAD 85+43.38 STH 37	104.30 RT 107.29 RT	45.00'	Y = 270565.164 X = 334349.887
CC15	84+03.65 STH 37	13.79 LT	4.00'	Y = 270606.517 X = 334169.678
CC16	85+56.93 STH 37	16.31 RT	4.00'	Y = 270651.865 X = 334319.156

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC28	11+71.75 CRAIG ROAD 86+38.44 STH 37	85.63 RT 111.54 LT	52.00'	Y = 270803.007 X = 334331.151
CC29	11+75.72 CRAIG ROAD 86+34.89 STH 37	79.51 RT 127.92 LT	80.00'	Y = 270806.980 X = 334325.029
CC30	82+53.71 STH 37	17.13 RT	3.0'	Y = 270508.864 X = 334051.778

1 TYPE 1 CURB RAMP
1S TYPE 1S CURB RAMP
5 TYPE 5 CURB RAMP
5S TYPE 5S CURB RAMP
6 TYPE 6 CURB RAMP
6S TYPE 6S CURB RAMP
DETECTABLE WARNING FIELD

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CRAIG ROAD INTERSECTION LAYOUT	SHEET 18	E

2

N

CONCRETE SIDEWALK 5-INCH

added ped. button to existing pole

STA. 155+97.8
72.4' LT.

154+00 155+00 156+00 157+00 158+00 159+00

STA. 156+00.78

CONCRETE SAFETY ISLANDS SEE DETAIL

CONCRETE SIDEWALK 5-INCH

STA. 155+92.19
38.00' RT.

STA. 155+14.27
47.82' RT.

CC3

CC5

2'

10'

REMOVING CURB AND GUTTER

STA. 101+74.54
30.21' LT.

CONSTRUCTION JOINT

CC4

STA. 103+35.40 STH 37 =
STA. 156+52.83 USH 12

102+00

STA. 156+92.23
35.90' RT.

24" C&G

CONCRETE SIDEWALK 5-INCH

STA. 101+88.79
34.94' RT.

STA. 101+85.15

EXISTING RW

CC6

SAWCUT

CONCRETE SIDEWALK 5-INCH

CC1

CC2

CONCRETE CURB AND GUTTER
4-INCH SLOPED
36-INCH TYPE A

STA. 100+67.75
41.89' LT.

SAWCUT

101+00

SAWCUT

CONCRETE SIDEWALK 5-INCH

EXISTING RW

100+00

SHARED USE PATH

POINT	STATION	OFFSET	RADIUS	COORDINATES
CC1	155+14.27 USH 12 100+98.32 STH 37	110.00 RT 111.84 LT	62.00'	Y = 271866.335 X = 335087.307
CC2	155+18.93 USH 12 100+88.36 STH 37	121.22 RT 100.89 LT	90.00'	Y = 271855.211 X = 335092.188
CC3	155+64.07 USH 12 101+76.86 STH 37	40.50 RT 78.05 LT	2.5'	Y = 271936.814 X = 335135.711
CC4	156+01.90 USH 12 101+46.00 STH 37	80.37 RT 32.57 LT	2.5'	Y = 271897.701 X = 335174.326
CC5	156+07.33 USH 12 101+83.67 STH 37	43.00 RT 35.25 LT	5.0'	Y = 271935.176 X = 335179.012
CC6	157+72.51 USH 12 101+66.00 STH 37	97.24 RT 137.71 RT	20.0'	Y = 271884.237 X = 335345.241

1 TYPE 1 CURB RAMP
1S TYPE 1S CURB RAMP
5 TYPE 5 CURB RAMP
5S TYPE 5S CURB RAMP
6 TYPE 6 CURB RAMP
6S TYPE 6S CURB RAMP
DETECTABLE WARNING FIELD

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	USH 12 - CLAIREMONT AVENUE INTERSECTION LAYOUT	SHEET 19	E

2

N

PC: 52+94.98

PC: 52+64.97

52+51.28 NB
10.00' T

52+50 SB
14' RT

PT: 43+64.82

43+44.04

PC: 27+06.75

26+63

END CONSTRUCTION
SAWCUT REQUIRED

SEE S.D.D. CONCRETE PAVEMENT JOINTING FOR
JOINT SPACING AND OTHER DETAILS NOT SHOWN.

49+54.86 SB

49+55.16 NB

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	SHORT ST./HAMILTON AVE INTERSECTION LAYOUT	SHEET 20	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\INTERSECTION GRADES_RECOVER.DWG
LAYOUT NAME - SHORT-HAM INT

PLOT DATE : 10/18/2017 11:09 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

SEE S.D.D. CONCRETE PAVEMENT JOINTING FOR
JOINT SPACING AND OTHER DETAILS NOT SHOWN.

N

7+00 8+00 9+00 10+00 11+00 12+00 13+00

CRAIG RD

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CRAIG ROAD INTERSECTION LAYOUT	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\INTERSECTION GRADES_RECOVER.DWG
LAYOUT NAME - CRAIG INT

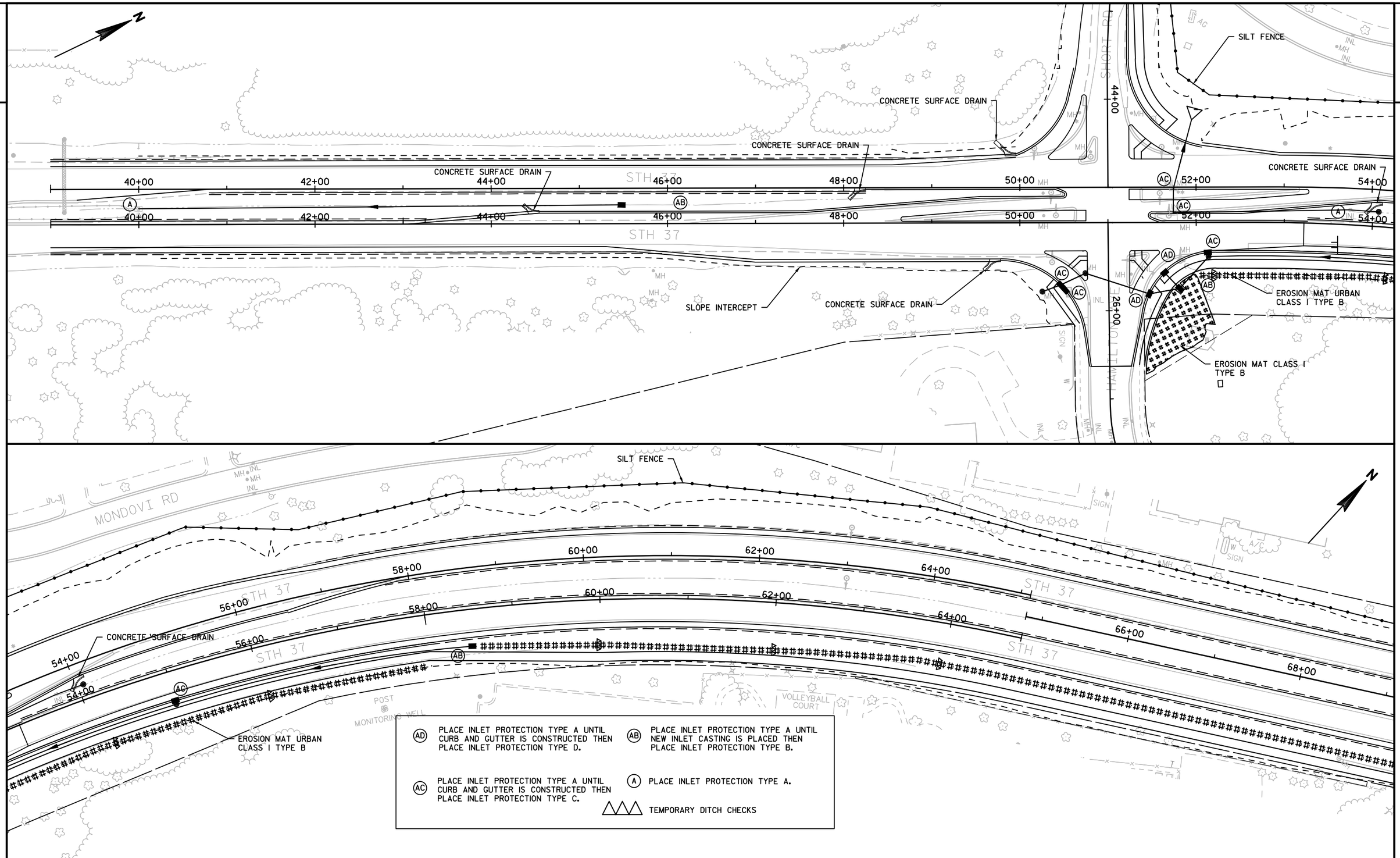
PLOT DATE : 10/18/2017 11:05 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 23	E

FILE NAME : N:\PDS\C3D\71100502\DESIGN\VIEWFRAMEGROUPS\EROSION CONTROL.DWG
LAYOUT NAME - 0201 - (1)

PLOT DATE : 10/18/2017 10:28 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

EROSION MAT CLASS I TYPE B

RIPRAP HEAVY

SILT FENCE

STH 37

70+00 72+00 74+00 76+00 78+00 80+00 82+00

CONCRETE SURFACE DRAIN

EROSION MAT URBAN CLASS I TYPE B

SILT FENCE

(AD) PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS CONSTRUCTED THEN PLACE INLET PROTECTION TYPE D.

(AB) PLACE INLET PROTECTION TYPE A UNTIL NEW INLET CASTING IS PLACED THEN PLACE INLET PROTECTION TYPE B.

(AC) PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS CONSTRUCTED THEN PLACE INLET PROTECTION TYPE C.

(A) PLACE INLET PROTECTION TYPE A.

TEMPORARY DITCH CHECKS

CULVERT PIPE CHECKS

CONCRETE SURFACE DRAIN

84+00 10+00 86+00 88+00 90+00 92+00 94+00 96+00 98+00

8+00 12+00 234+00 236+00 238+00 240+00 242+00 244+00 246+00

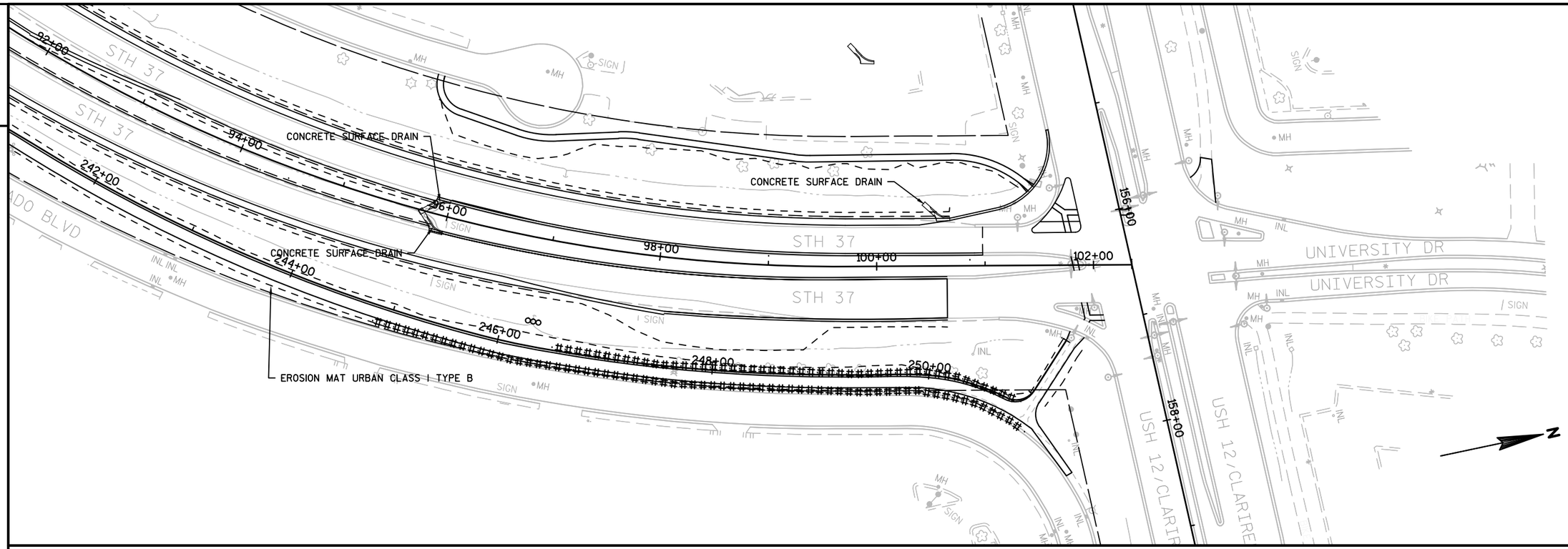
ATRIUM CT

ELDORADO BLVD

EROSION MAT URBAN CLASS I TYPE B

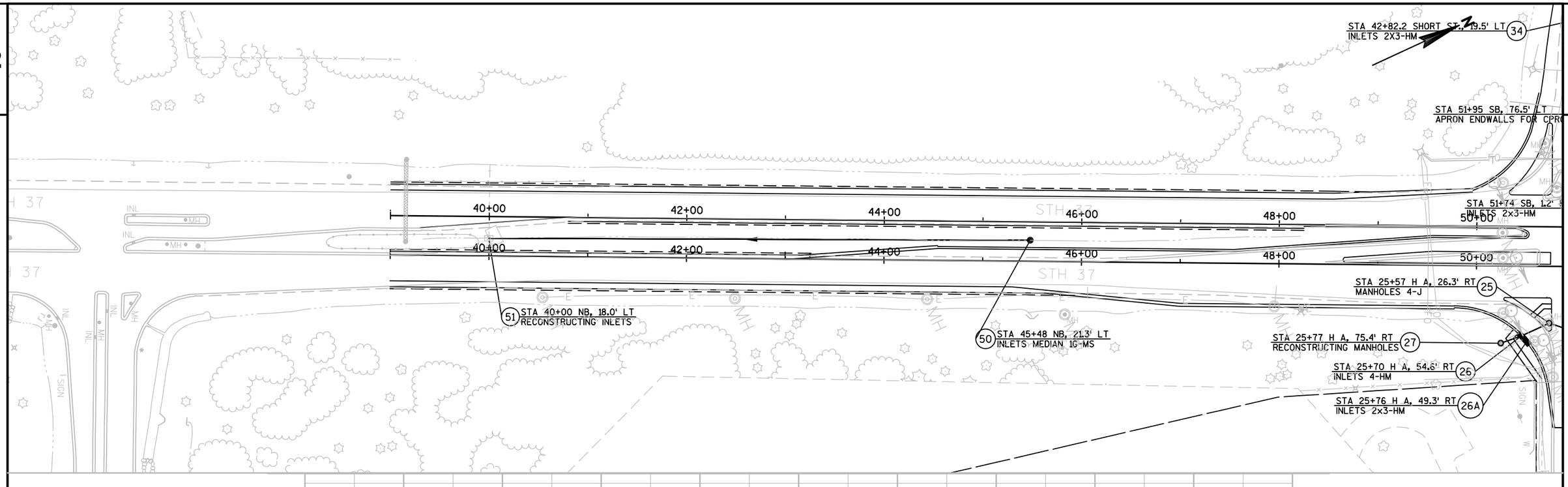
EROSION MAT URBAN CLASS I TYPE B

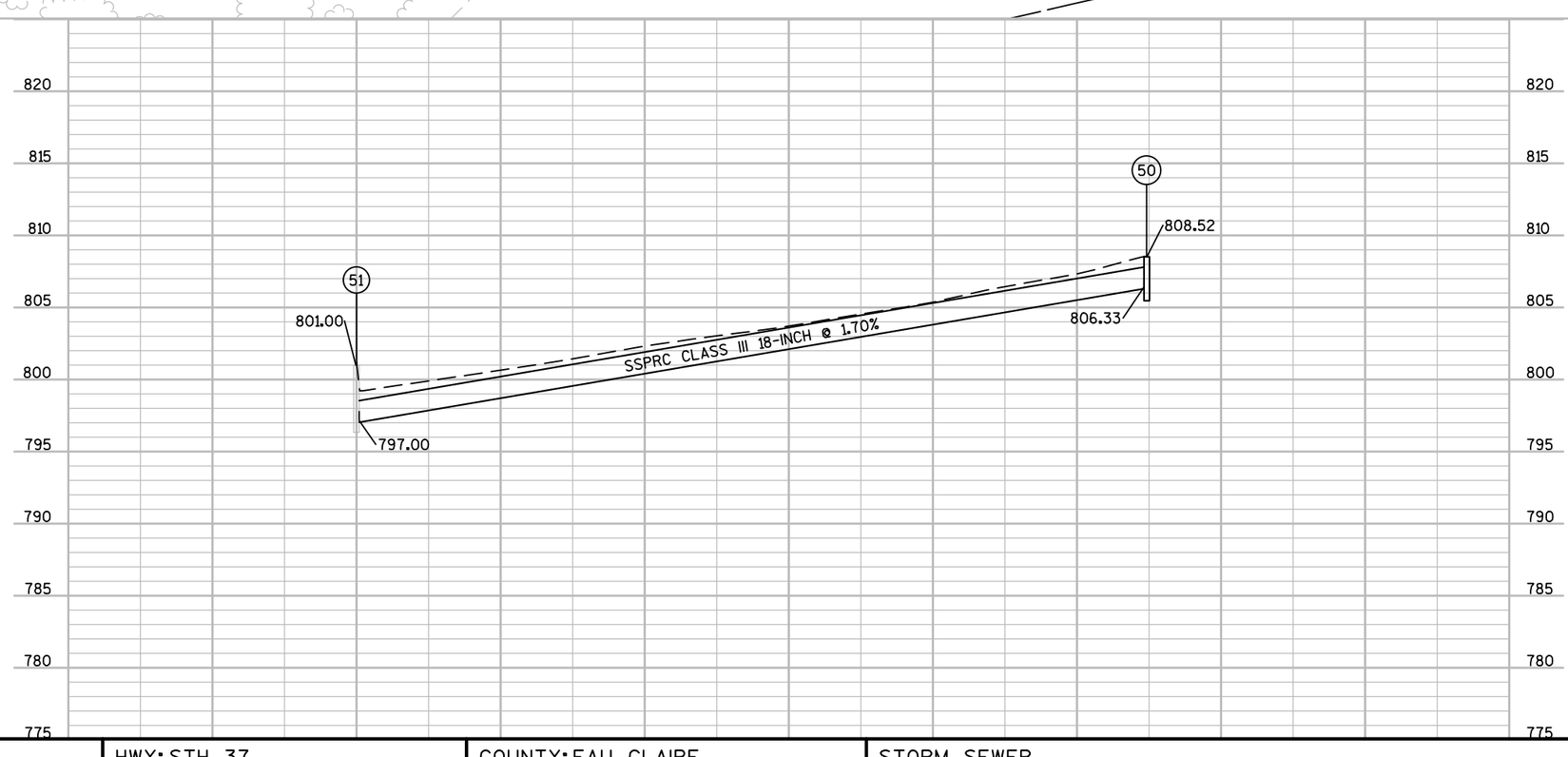
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EROSION CONTROL	SHEET 24	E



(AD)	PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS CONSTRUCTED THEN PLACE INLET PROTECTION TYPE D.
(AB)	PLACE INLET PROTECTION TYPE A UNTIL NEW INLET CASTING IS PLACED THEN PLACE INLET PROTECTION TYPE B.
(AC)	PLACE INLET PROTECTION TYPE A UNTIL CURB AND GUTTER IS CONSTRUCTED THEN PLACE INLET PROTECTION TYPE C.
(A)	PLACE INLET PROTECTION TYPE A.
◯◯◯	CULVERT PIPE CHECKS

2





PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	STORM SEWER	SHEET 26	E

STA 42+82.2 SHORT ST., 19.5' LT
INLETS 2X3-HM (34)

(35) STA 42+79.1 SHORT ST., 47.8' LT
APRON ENDWALLS FOR CPRC 12-INCH

STA 51+95 SB, 76.5' LT
APRON ENDWALLS FOR CPRC 18-INCH (33)

STA 51+74 SB, 1.2' RT
INLETS 2X3-HM (32)

(31) STA 51+74 SB, 29.0' RT
INLETS 2X3-HM

(30) STA 54+09, 25.2' RT
INLETS MEDIAN 1G-MS

EXISTING INLET

(22A) STA 52+~~13~~ 33 NB, 34.0' RT
INLETS 2X3-HM

(22) STA 52+~~14~~ 34 NB, 38.7' RT
MANHOLES 4-J

(21A) STA 55+00 NB, 33.5' RT
INLETS 2X3-HM

(21) STA 55+00 NB, 38.0' RT
MANHOLES 3-J

(20) STA 58+50 NB, 42.0' RT
INLETS MEDIAN 1G-MS

STA 25+57 H A, 26.3' RT
~~MANHOLES 4-J~~
INLET (25)

STA 25+77 H A, 75.4' RT
RECONSTRUCTING MANHOLES (27)

STA 25+70 H A, 54.6' RT
INLETS 4-HM (26)

STA 25+76 H A, 49.3' RT
INLETS 2X3-HM (26A)

(23A) STA 25+58 H A, 63.5' LT
INLETS 2X3-HM

(23) STA 25+76 H A, 80.4' LT
INLETS MEDIAN 2G-MS

(24) STA 25+81 H A, 46.0' LT
INLETS 4-HM

MONDOVI RD

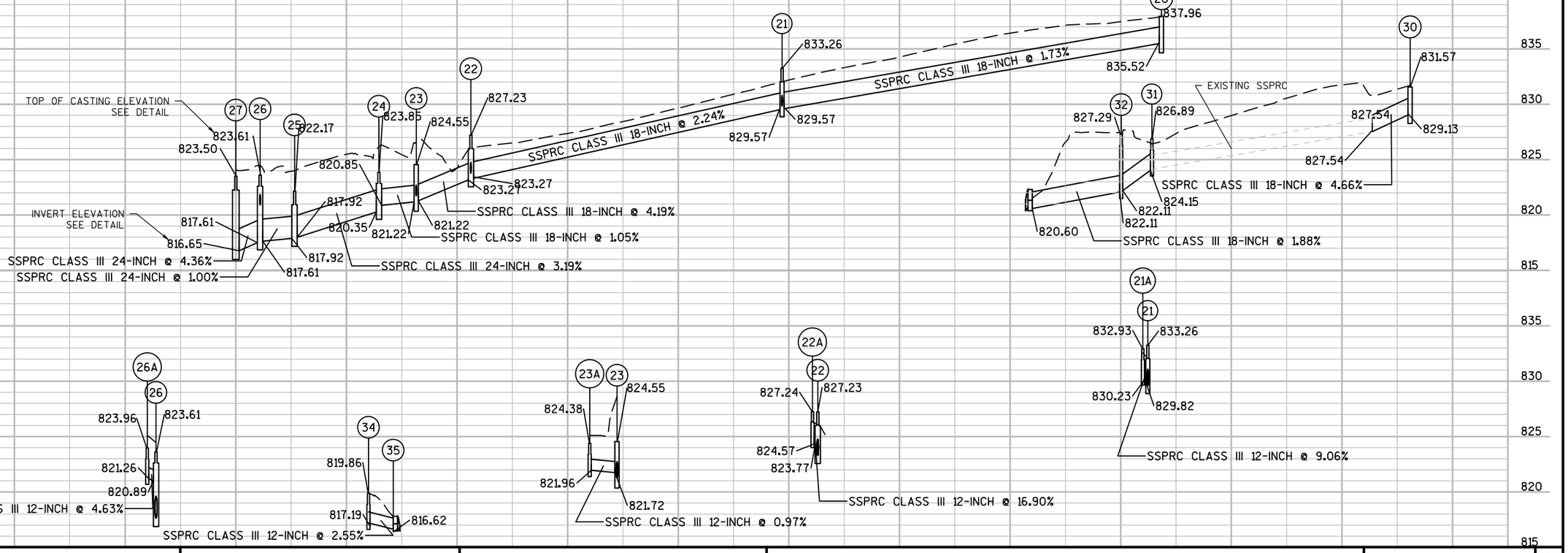
STH 37

POST MONITORING WELL

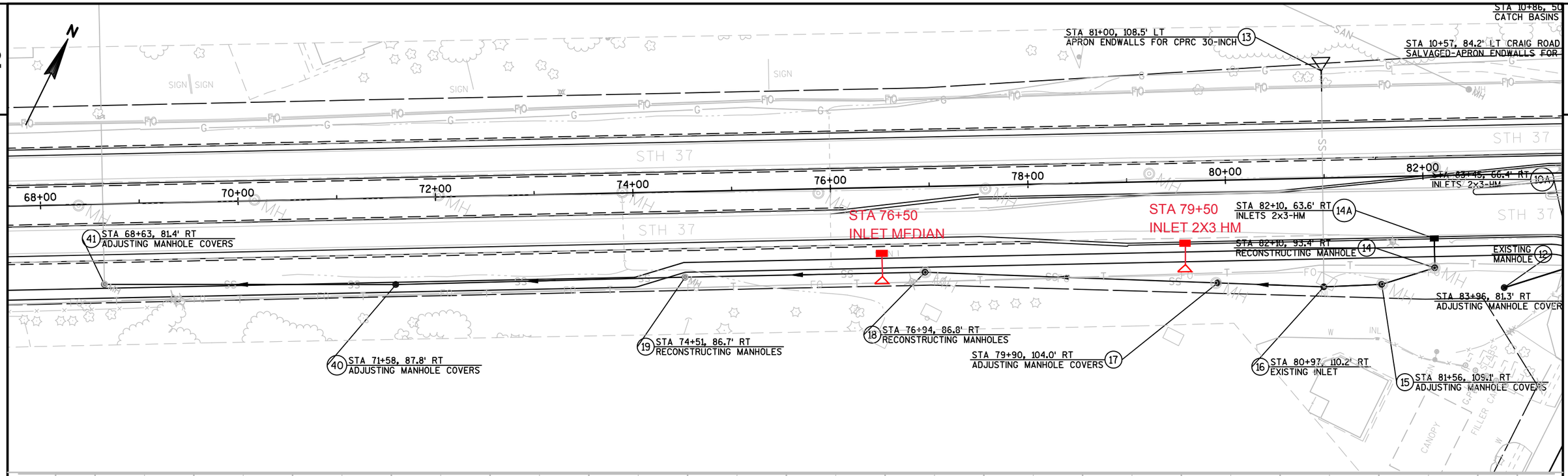
48+00 50+00 52+00 54+00 56+00 58+00 60+00 62+00

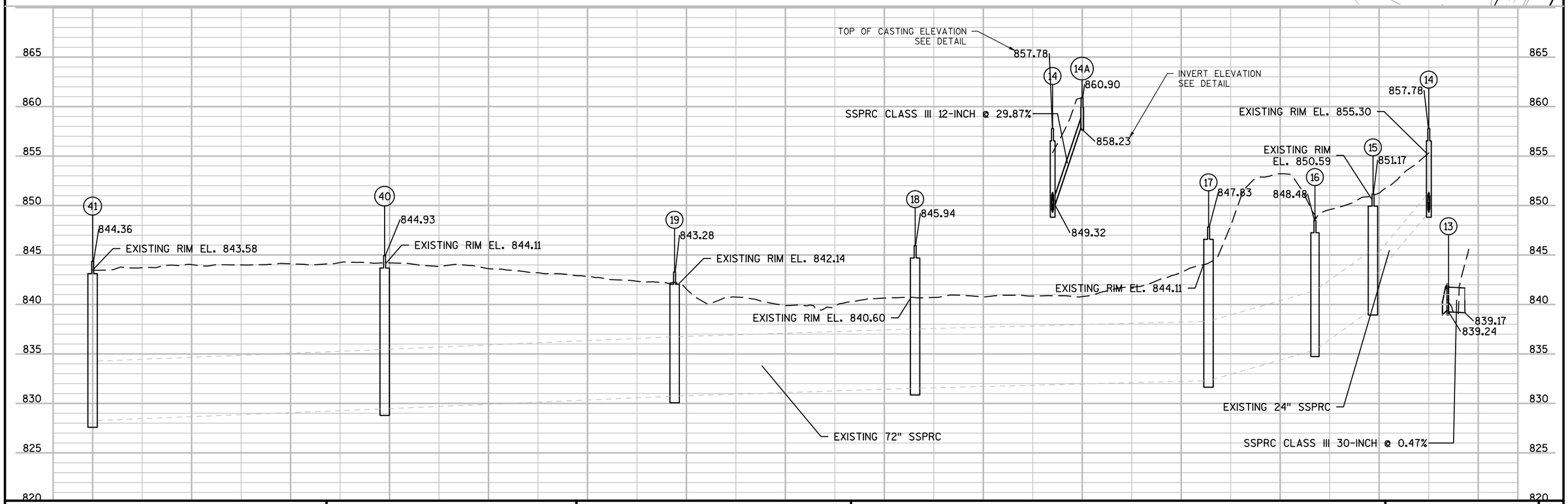
26H A+00

S+00



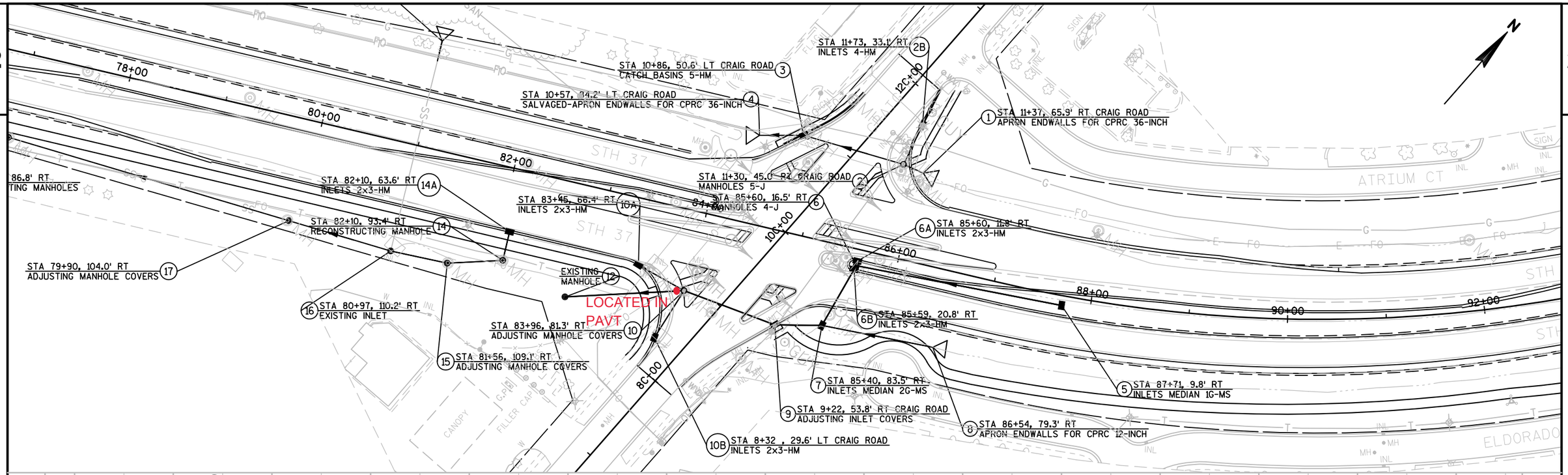
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	STORM SEWER	SHEET 27	E

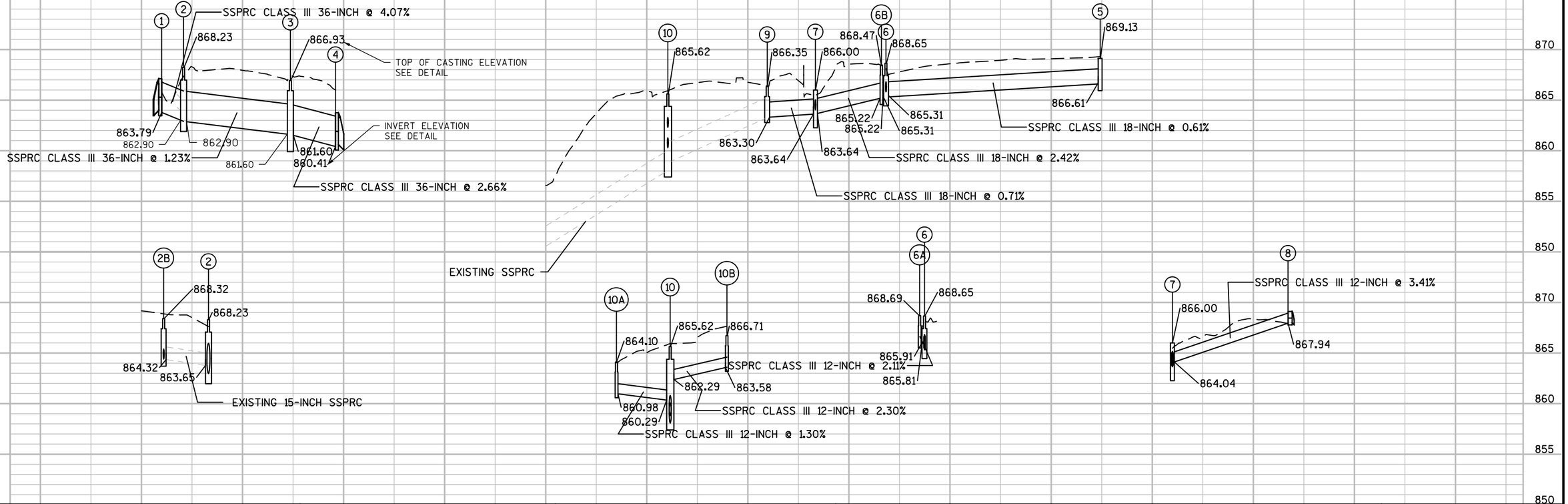




PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	STORM SEWER	SHEET 28 E

2





PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	STORM SEWER	SHEET 29 E

2

N

SPEED LIMIT 50 — SIGN TO REMAIN

BEGIN LEFT TURN LANE — R3-20-L 36"X54" — 1-2

1-31 *

WEST 94 — J3-1 36"X84" — SIGN TO REMAIN — 1-4

WEST EAST 94 94 — J3-2 72"X84" — 1-5

JCT 94 — J1-1 36"X57" — 1-7

JCT 94 — J1-1 36"X57" — 1-8

R4-7 24"X30" — 1-11

STOP — R1-1F 36"X36" — 1-12

REMOVE — REMOVE

1-13

STOP — R1-1F 36"X36"

DIVIDED HIGHWAY — R6-5 72"X24"

1-32 *

1-15

1-35

LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50 30"X36"

37 Hendrickson Dr — M1-94S 96"X18"

1-20

YIELD — R1-2 36"X31"

1-22

DO NOT ENTER — R5-1 36"X36"

ONE WAY — R6-2-L 36"X48"

1-23

LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50 30"X36"

S-18-609-03

S-18-609-02

PB4

40+00 42+00 44+00 46+00 48+00 50+00 52+00 54+00

STH 37

Hamilton Ave / Short St — M1-94H 84"X30"

1-33

LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50 30"X36"

1-16

S-18-609-04

PB1 PB2 PB3

1-17

S-18-609-01

1-36

Short St / Hamilton Ave — M1-94H 84"X30"

1-3

Short Street / Hamilton Avenue — D1-2 120"X36"

Eau Claire Soccer Park

SIGN TO REMAIN

NO ENGINE BRAKING EXCEPT IN EMERGENCY — WITHIN CITY = VILLAGE LIMITS — SIGN TO REMAIN

1-6

WRONG WAY — R5-1A 42"X30"

1-9

ONE WAY — R6-2-L 36"X48"

1-10

DO NOT ENTER — R5-1 36"X36"

1-14

YIELD — R1-2 36"X31"

LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-50 30"X36"

1-34

37 Hendrickson Dr — M1-94S 96"X18"

26+00

1-18

STOP — R1-1F 36"X36"

DIVIDED HIGHWAY — R6-5 30"X24"

1-19

1-21

STOP — R1-1 30"X30"

RIGHT TURN OBEY THIS SIGN — R1-53 24"X30"

R4-7 24"X30"

R10-3EL 9"X15" R10-3ER 9"X15"

LEGEND

- REMOVING SIGNS TYPE II
- PROPOSED SIGN(S) MOUNTED ON POST(S)
- PROPOSED SIGN NO POST
- REMOVING SMALL SIGN SUPPORTS
- SIGNS TYPE II
- MONOTUBE WITH BANDED SIGN
- SIGN TO BE MOUNTED ABOVE PEDESTRIAN PUSH BUTTON (PBx)

WRONG WAY — R5-1A 42"X30" — 1-24

BEGIN LEFT TURN LANE — R3-20-L 36"X54" — 1-26

Short Street / Hamilton Avenue — D1-2 120"X36" — 1-27

W3-3 36"X36" — 1-29

54+00 56+00 58+00 60+00 62+00 64+00 66+00 68+00

STH 37

POST MONITORING WELL

1-28

W3-3 36"X36"

CONSTRUCTION NOTES:

* SIGN TO BE MOVED FOR CONSTRUCTION AND RE-INSTALLED.

TRAFFIC SIGNAL STRUCTURE PLAQUES TO BE FURNISHED BY THE CONTRACTOR.

1-25 * — SPEED LIMIT 50

1-30 — Craig Road — D1-61 66"X30"

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 30	E

FILE NAME : N:\PDS\C3D\71100502\DESIGN\VIEWFRAMEGROUPS\SIGNING.DWG
LAYOUT NAME - 0201 - (1)
PLOT DATE : 10/24/2017 3:44 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

CONSTRUCTION NOTES:

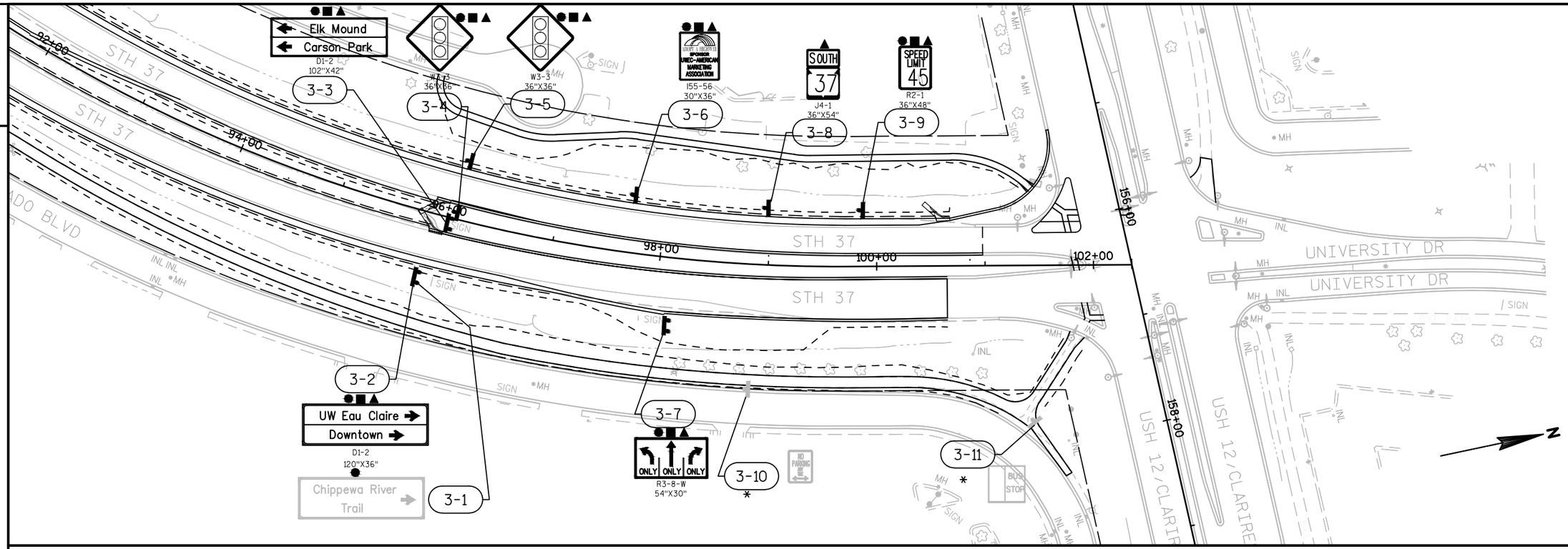
* SIGN TO BE MOVED FOR CONSTRUCTION AND RE-INSTALLED.

TRAFFIC SIGNAL STRUCTURE PLAQUES TO BE FURNISHED BY THE CONTRACTOR.

LEGEND

- REMOVING SIGNS TYPE II
- PROPOSED SIGN(S) MOUNTED ON POST(S)
- PROPOSED SIGN NO POST
- REMOVING SMALL SIGN SUPPORTS
- SIGNS TYPE II
- MONOTUBE WITH BANDED SIGN
- SIGN TO BE MOUNTED ABOVE PEDESTRIAN PUSH BUTTON (PBx)

STH 37 | Eau Claire | POPULATION 65,883 | I2-3 72"X24" | W3-3 36"X36" | R3-20-L 36"X54" | SPEED LIMIT 50 * | J4-1 36"X54" | SOUTH 37 | 2-1 | 2-2 | 2-3 | 2-4 | 2-5 | 2-6 | 2-7 | 2-8 | 2-9 | Eau Claire Soccer Park | WRONG WAY R5-1A 42"X30" | SPEED LIMIT 45 * | R4-7 24"X30" | Craig Rd M1-94H 60"X18" | 2-32 | M1-94H XX"X18" | STOP R1-1F 36"X36" | DIVIDED HIGHWAY R6-3 30"X24" | LEFT TURN YIELD ON FLASHING YELLOW ARROW R10-5G 30"X36" | R3-4 24"X24" | 2-13 | 2-14 | 2-16 | 2-18 | 2-19 | R1-2 36"X31" | DO NOT ENTER R5-1 36"X36" | 2-23 | ONE WAY R6-2-L 36"X48" | 2-24 | 2-26 | W3-3 36"X36" | 2-29 | Craig Road D1-61 66"X30" | 2-30 | Hendrickson Dr M1-94S 96"X18" | 2-12 | 2-21 | 2-10 | 2-15 | 2-11 | 2-17 | 2-20 | 2-22 | 2-33 | 2-34 | 2-25 | 2-27 | 2-28 | JCT 12 END 37 J1-2 72"X57" | SPEED LIMIT 45 R2-1 36"X48" | SIGN TO REMAIN | BUS STOP | ATRIUM CT | ELDORADO BLVD | BEGIN LEFT TURN LANE R3-20-L 36"X54" | 2-31 | NO PARKING | SLABS | FILLER CAP | CANOPY | 70+00 | 72+00 | 74+00 | 76+00 | 78+00 | 80+00 | 82+00 | 84+00 | 86+00 | 88+00 | 90+00 | 92+00 | 94+00 | 96+00 | 98+00 | 100+00 | 102+00 | 104+00 | 106+00 | 108+00 |



LEGEND

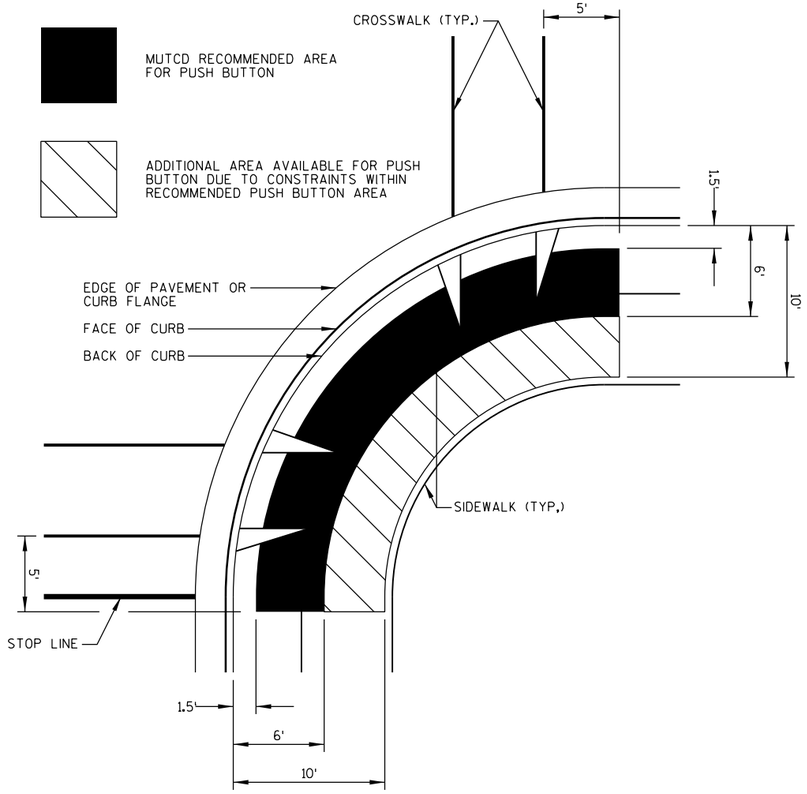
- REMOVING SIGNS TYPE II
- PROPOSED SIGN(S) MOUNTED ON POST(S)
- PROPOSED SIGN NO POST
- REMOVING SMALL SIGN SUPPORTS
- SIGNS TYPE II

CONSTRUCTION NOTES:

* SIGN TO BE MOVED FOR CONSTRUCTION AND RE-INSTALLED.

TRAFFIC SIGNAL STRUCTURE PLAQUES TO BE FURNISHED BY THE CONTRACTOR.

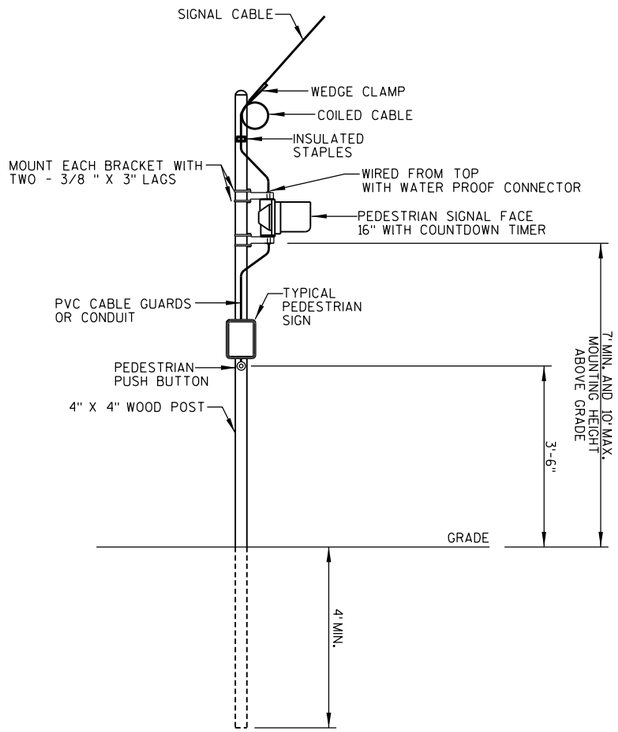
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET 32	E



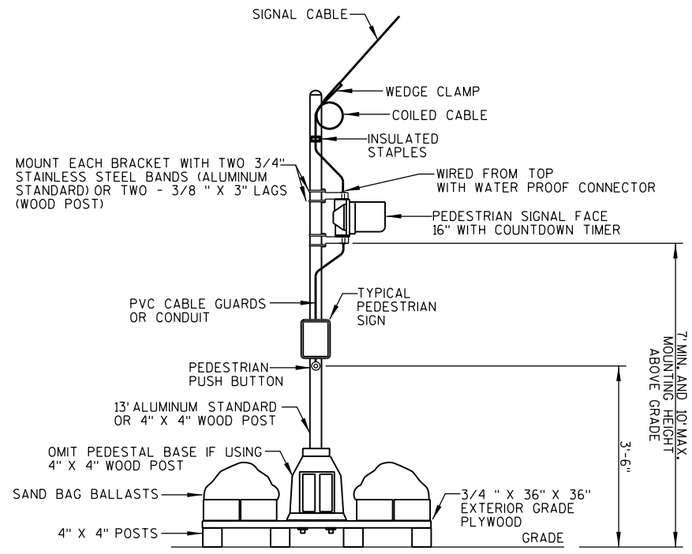
PUSH BUTTON LOCATION NOTES;

1. PUSHBUTTONS SHOULD BE CAPABLE OF EASY ACTIVATION AND CONVENIENTLY LOCATED NEAR EACH END OF CROSSWALK OR CROSSING AREA.
2. PUSHBUTTONS SHOULD BE PLACED UNOBSTRUCTED AND ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR.
3. PUSHBUTTONS SHOULD BE PLACED WHERE THERE IS AN ALL-WEATHER SURFACE, A WHEELCHAIR ACCESSIBLE ROUTE FROM THE PUSHBUTTON TO THE RAMP.
4. PUSHBUTTONS SHOULD BE PLACED BETWEEN THE EDGE OF THE CROSSWALK LINE (EXTENDED) FARTHEST FROM THE CENTER OF THE INTERSECTION AND THE SIDE OF A CURB RAMP (IF PRESENT), BUT NOT GREATER THAN 5-FEET FROM SAID CROSSWALK LINE.
5. PUSHBUTTONS SHOULD BE PLACED BETWEEN 1.5-FEET AND 6-FEET FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT. IF THERE ARE PHYSICAL CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5-FEET AND 6-FEET FORM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FARTHER THAN 10-FEET FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
6. PUSHBUTTONS SHOULD BE PLACED WITH THE FACE OF THE PUSH BUTTON PARALLEL TO THE CROSSWALK TO BE USED.
7. PUSHBUTTONS ON THE SAME CORNER OF AN INTERSECTION SHOULD BE SEPARATED BY A DISTANCE OF AT LEAST 10-FEET. WHERE THERE ARE PHYSICAL CONSTRAINTS ON A PARTICULAR CORNER THAN MAKE IT IMPRACTICAL TO PROVIDE THE 10-FOOT SEPARATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.
8. PUSHBUTTON POLES SHALL BE PLACED SO THAT ALL EQUIPMENT ATTACHED TO THE POLE (PEDESTRIAN SIGNAL HEAD, PUSHBUTTON, SIGN, ETC.) IS OUTSIDE THE MINIMUM LATERAL CLEARANCE DISTANCE OF 2-FEET FROM FACE OF CURB OR EDGE OF TRAVELED WAY.
9. PUSHBUTTONS SHOULD BE PLACED SO THE THE REACH DISTANCE FROM THE EDGE OF THE FLAT SURFACE ADJACENT TO THE PUSHBUTTON DOES NOT EXCEED THE MAXIMUM ADA REACH DISTANCE OF 2-FEET.

TEMPORARY PEDESTRIAN SIGNAL AREA



WOOD POST



SKID TYPE

TEMPORARY PEDESTRIAN SIGNAL NOTES;

1. SIGNAL DROP CABLES SHALL BE PLACED A MINIMUM OF 12-FEET ABOVE GROUND NOT SUBJECT TO VEHICULAR TRAFFIC.
2. SIGNAL DROP CABLES SHALL BE PLACED A MINIMUM OF 17-FEET ABOVE GROUND SUBJECT TO VEHICULAR TRAFFIC, INCLUDING CONSTRUCTION VEHICLES.
3. SKID TYPE TEMPORARY MAY BE USED FOR PEDESTRIAN PUSH BUTTONS AS LONG AS THE REACH DISTANCE FROM THE EDGE OF THE SKID TO THE PUSH BUTTON DOES NOT EXCEED THE MAXIMUM ADA REACH DISTANCE OF 2-FEET.
4. PUSHBUTTONS SHOULD BE PLACED AT A MOUNTING HEIGHT OF 3.5-FEET ABOVE THE WALKING SURFACE.
5. MAINTAIN ADA ACCESSIBLE ROUTE AND PEDESTRIAN ACCESSIBILITY REQUIREMENTS FOR ALL ACTIVE PEDESTRIAN SIGNAL INDICATION CROSSING AREAS.
6. MAINTAIN TEMPORARY PEDESTRIAN SIGNALS THROUGHOUT CONSTRUCTION TO ENSURE THAT THE PLACEMENT OF THE TEMPORARY PEDESTRIAN SIGNALS COMPLIES WITH ALL APPLICABLE ADA AND MUTCD SIGNAL PLACEMENT REQUIREMENTS.

TEMPORARY PEDESTRIAN SIGNAL

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, OVERHEAD MOUNT
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2 SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. WISDOT ELECTRICAL (715-225-0360) SHALL BE NOTIFIED WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
5. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.

STH 37 (HENDRICKSON DRIVE)

SHORT RD

HAMILTON AVE

WP1 WP2 WP3 WP4 WP5 WP6

48+00 49+00 50+00 51+00 52+00 53+00 54+00

44+00 26+00

SUMMARY OF MATERIALS	
CLASS IV WOOD POLES	6
HEADS	16
GUY WIRES	12
EVP DETECTOR HEADS	4
250W HPS LUMINAIRES	4
LUMINAIRE ARMS	4
TEMPORARY CONTROLLER CABINET	1
TEMPORARY CONTROLLER	1
ELECTRICAL SERVICE METER BREAKER PEDESTAL	1
WATERPROOF SPLICE BOX	1

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 1 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1A	SHEET 34	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 1A.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 1A - 023911_A
PLOT DATE : 1/11/2018 2:45 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING

STH 37 (HENDRICKSON DRIVE)

SHORT RD

HAMILTON AVE

SIGN

WP1 WP2 WP3 WP4 WP5 WP6

48+00 49+00 50+00 51+00 52+00 53+00 54+00

44+00 26+00

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PAGE 2 OF 10

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 35	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 1B.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 1B - 023911_B

PLOT DATE : 11/2/2017 1:19 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, OVERHEAD MOUNT
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING

SHORT RD

STH 37 (HENDRICKSON DRIVE)

HAMILTON AVE

WP1 WP2 WP3 WP4 WP5 WP6

48+00 49+00 50+00 51+00 52+00 53+00 54+00

44+00 26+00

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PAGE 3 OF 10

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 36 E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 1C.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 1C - 023911_C

PLOT DATE : 11/2/2017 1:20 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING

SHORT RD

STH 37 (HENDRICKSON DRIVE)

HAMILTON AVE

WP1 WP2 WP3 WP4 WP5 WP6

48+00 49+00 50+00 51+00 52+00 53+00 54+00

14+00 26+00

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 4 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 37	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 2A.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 2A - 023912_A

PLOT DATE : 11/2/2017 1:21 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

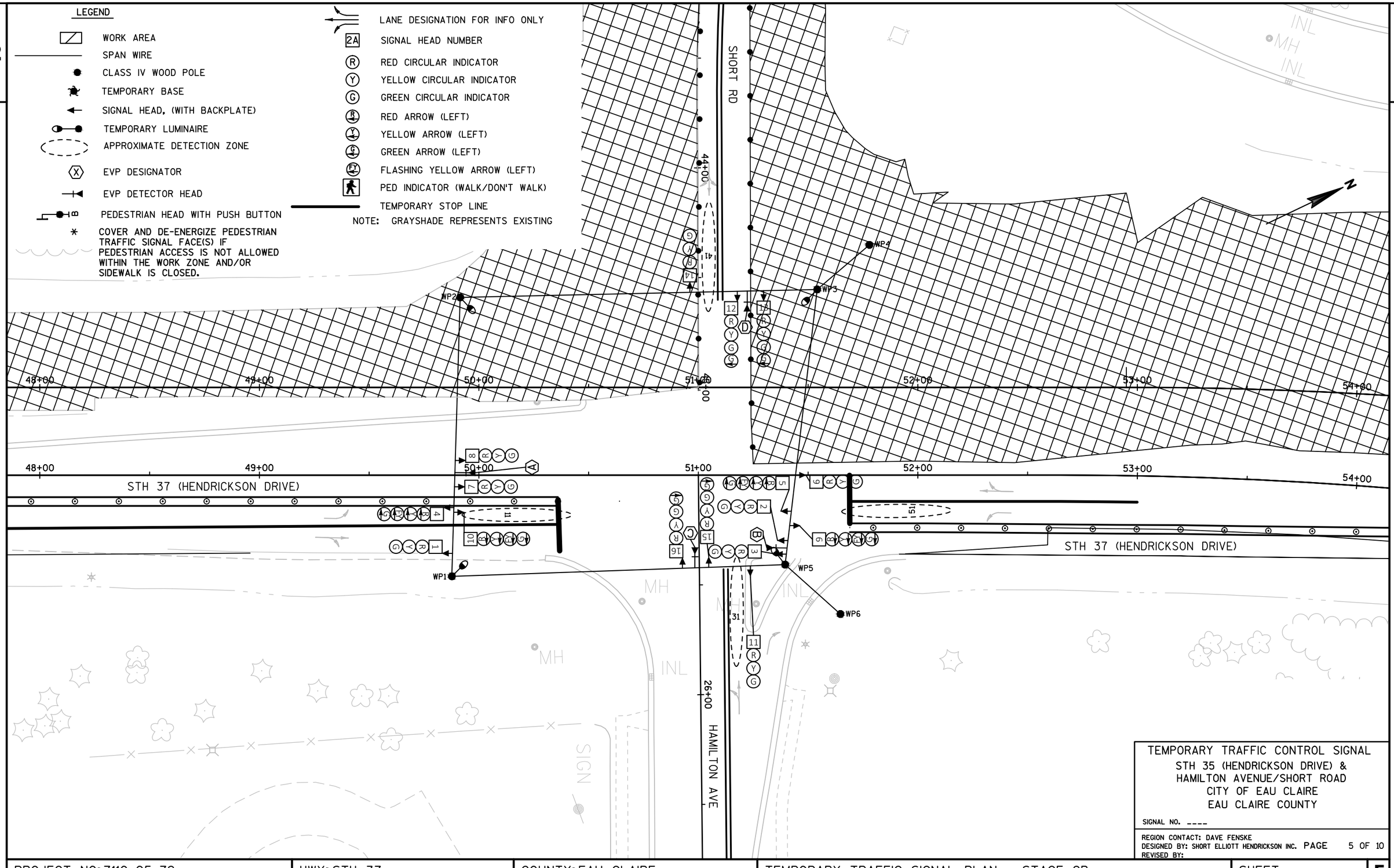
WISDOT/CADDS SHEET 42

LEGEND

- WORK AREA
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NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 38	E

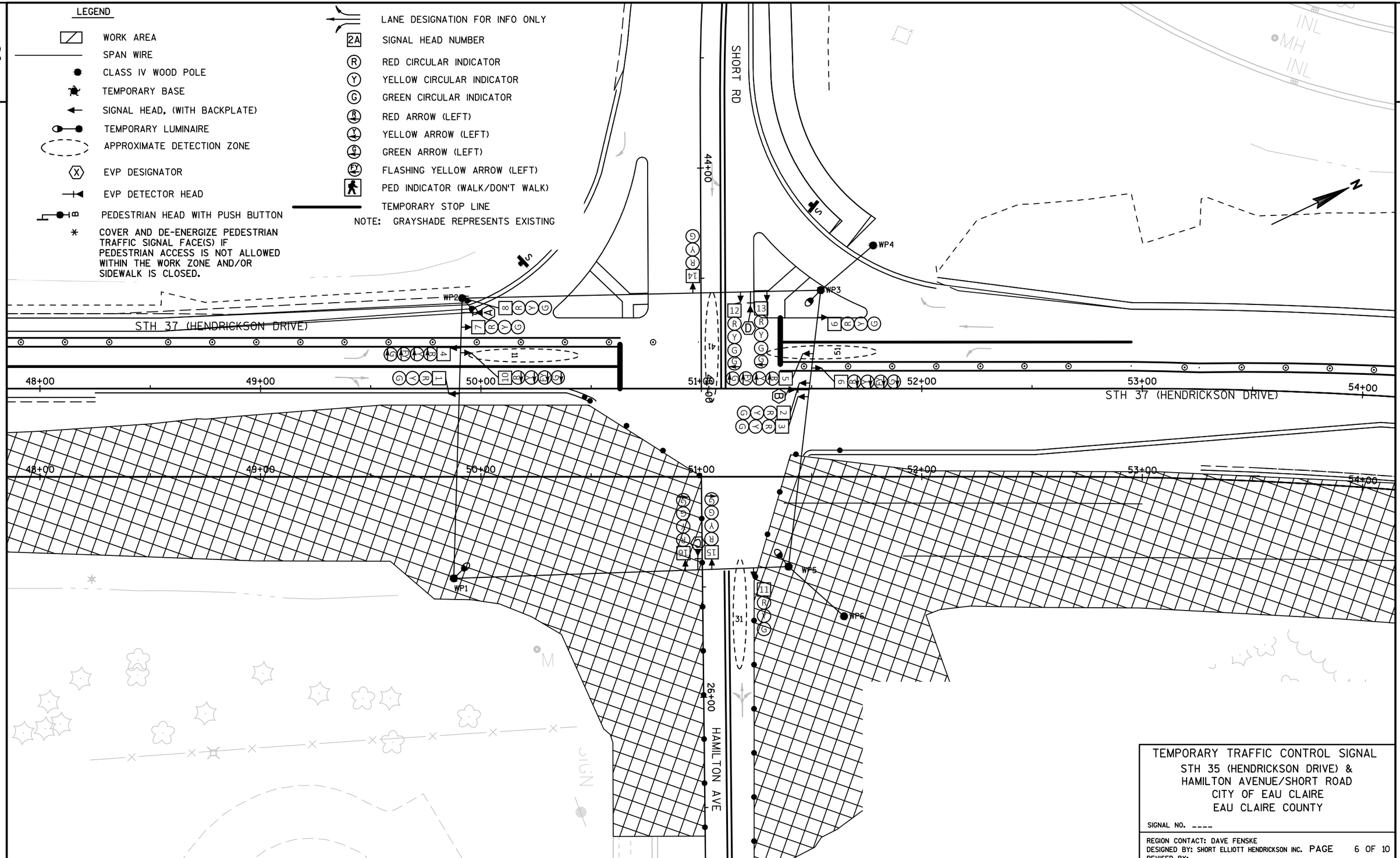
FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 2B.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 2B - 023912_B
PLOT DATE : 11/2/2017 1:23 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LEGEND

- WORK AREA
- SPAN WIRE
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- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
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NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PAGE 6 OF 10

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A	SHEET 39 E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 3A.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 3A - 023913_A

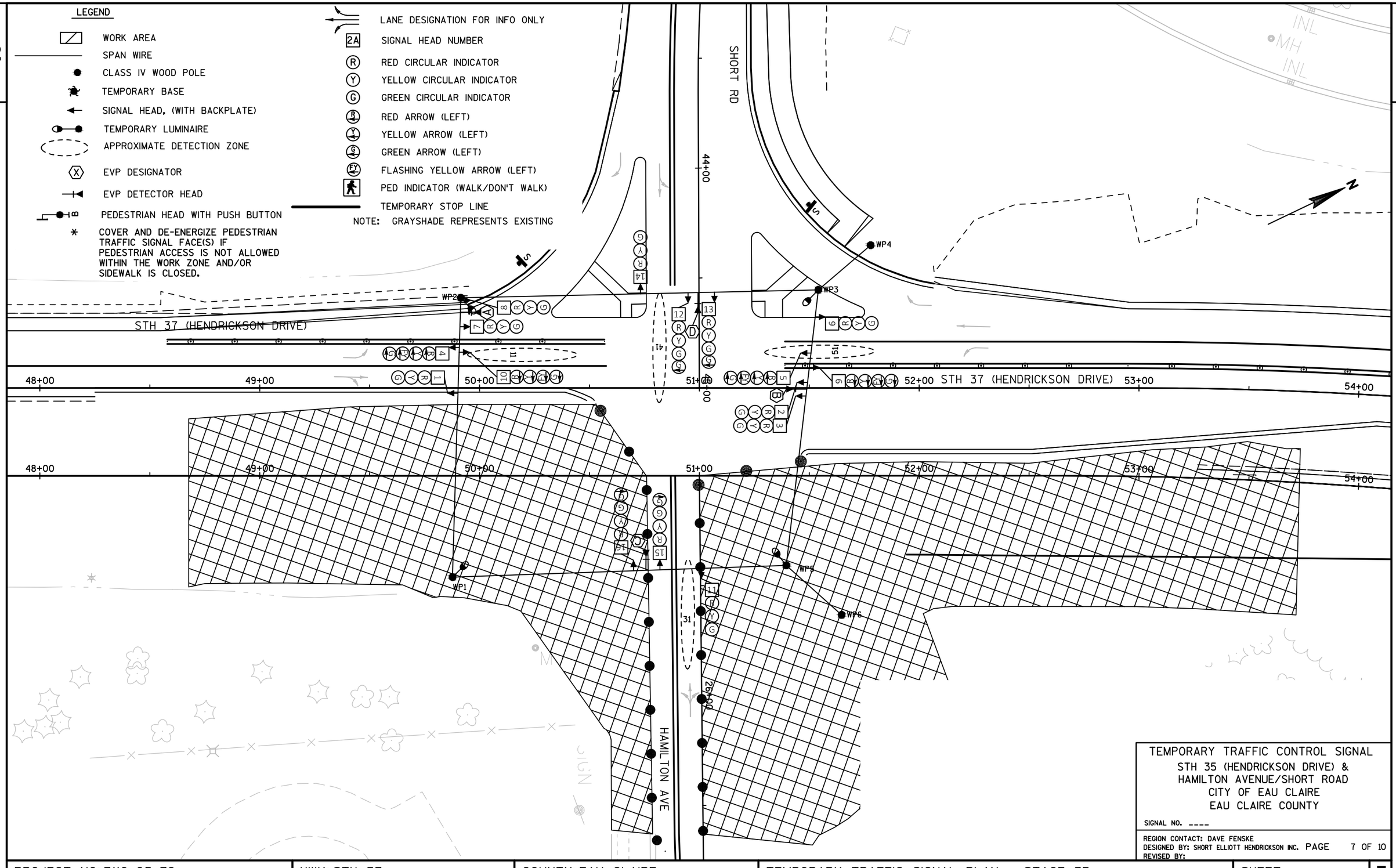
PLOT DATE : 11/2/2017 2:28 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
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TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 7 OF 10
REVISED BY:

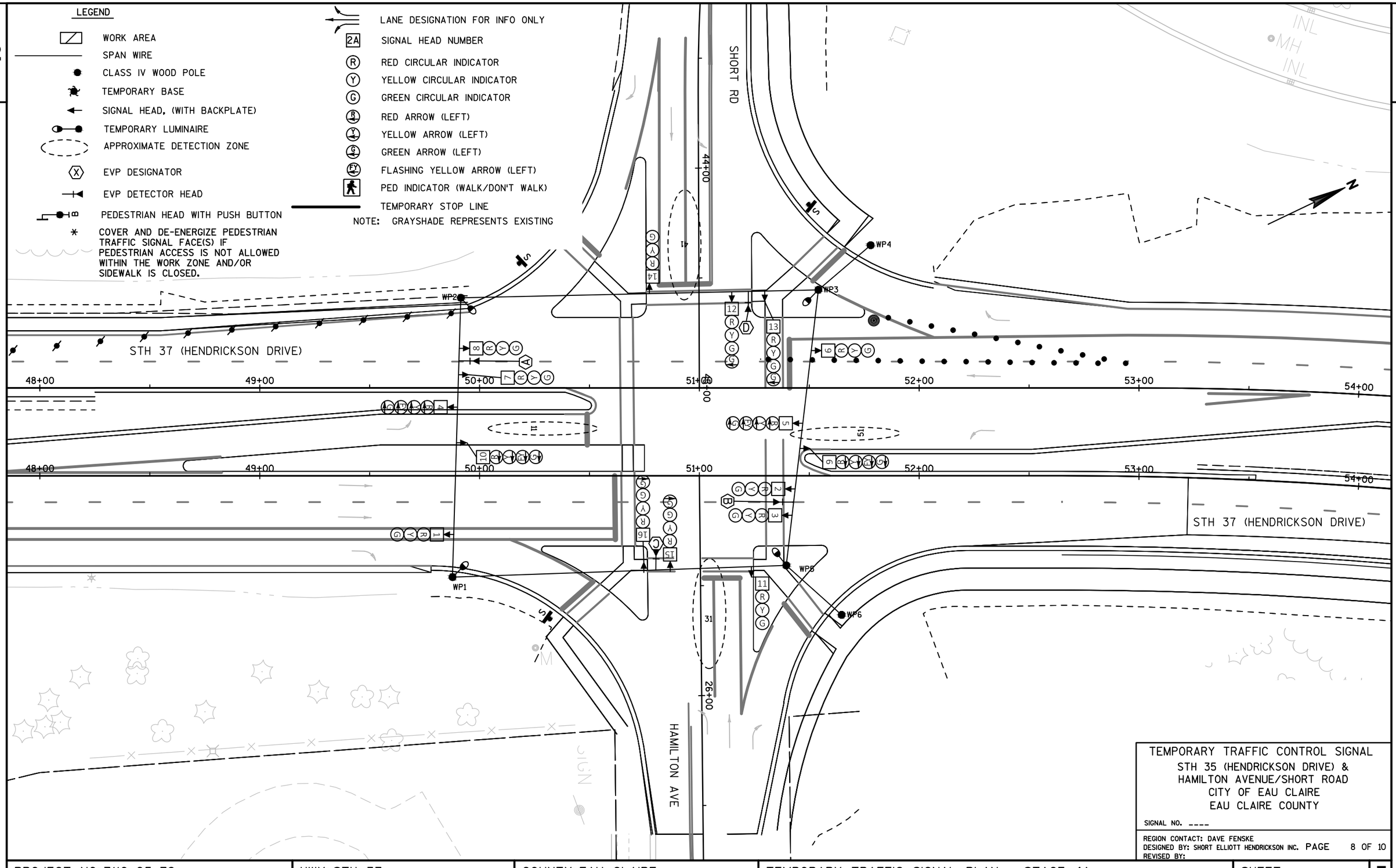
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET 40	E

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
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NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 8 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4A	SHEET 41	E

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
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NOTE: GRAYSHADE REPRESENTS EXISTING

STH 37 (HENDRICKSON DRIVE)

SHORT RD

HAMILTON AVE

WP1 WP2 WP3 WP4 WP5 WP6

48+00 49+00 50+00 51+00 52+00 53+00 54+00

44+00 26+00

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 35 (HENDRICKSON DRIVE) &
HAMILTON AVENUE/SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 9 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4B	SHEET 42	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 4B.DWG
LAYOUT NAME - 023914_B
PLOT DATE : 11/2/2017 1:33 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	4,5	G ←	- -	-	- -	-	- -	-	- -	-
Ø2	6,7,8	R	R R	G	Y R	R	R R	R	R R	R
Ø3	11,12,13	R	R R	R	R R	G,G ←	Y R	R	R R	R
Ø4	14,15,16	R	R R	R	R R	R	R R	G,G ←	Y R	R
Ø5	9,10	-	- -	-	- -	-	- -	-	- -	-
Ø6	1,2,3	R	R R	R	R R	R	R R	R	R R	R
Ø7										
Ø8										
OLE	4,5	-	Y R	FY ←	Y R ←	R ←	R R ←	R ←	R R ←	R ←
OLF										
OLG	9,10	R ←	R R ←	R ←	R R ←	R ←	R R ←	R ←	R R ←	R ←
OLH										
Ø2P										
Ø3P										
Ø4P										
Ø6P										

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	4,5	-	- -	-	- -				
Ø2	6,7,8	R	R R	R	R R				
Ø3	11,12,13	R	R R	R	R R				
Ø4	14,15,16	R	R R	R	R R				
Ø5	9,10	G ←	- -	-	- -				
Ø6	1,2,3	R	R R	G	Y R				
Ø7									
Ø8									
OLE	4,5	R ←	R R ←	R ←	R R ←				
OLF									
OLG	9,10	-	Y R ←	FY ←	Y R ←				
OLH									
Ø2P									
Ø3P									
Ø4P									
Ø6P									

BARRIER

NOT USED

NOT USED

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
11		X			1	1			
31		X			3	3			
41		X			4	4			
51		X			5	5			

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN.	X
3				X
4				X
5		2		X
6	X	2	MIN.	X
7				
8				

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLE	1	2
OLF		
OLG	5	6
OLH		

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM #:	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
3M	
TOMAR	
HARDWIRE	
OTHER	
QUEUE DETECTOR	
LIFT BRIDGE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4
2	5 OR 6	1,3,4
3	NONE	1,2,4,5,6
4	NONE	1,2,3,5,6
5	1 OR 2	3,4,6
6	1 OR 2	3,4,5
7		
8		

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

STH 37 (HENDRICKSON DRIVE) &
HAMILTON AVE / SHORT RD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0609

CONTROLLER TYPE: TEMP

DATE

FILE NAME : ...\023919_Temp_SP_PH.dgn PLOT DATE : 11/2/2017 1:33:05 PM PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

LEGEND

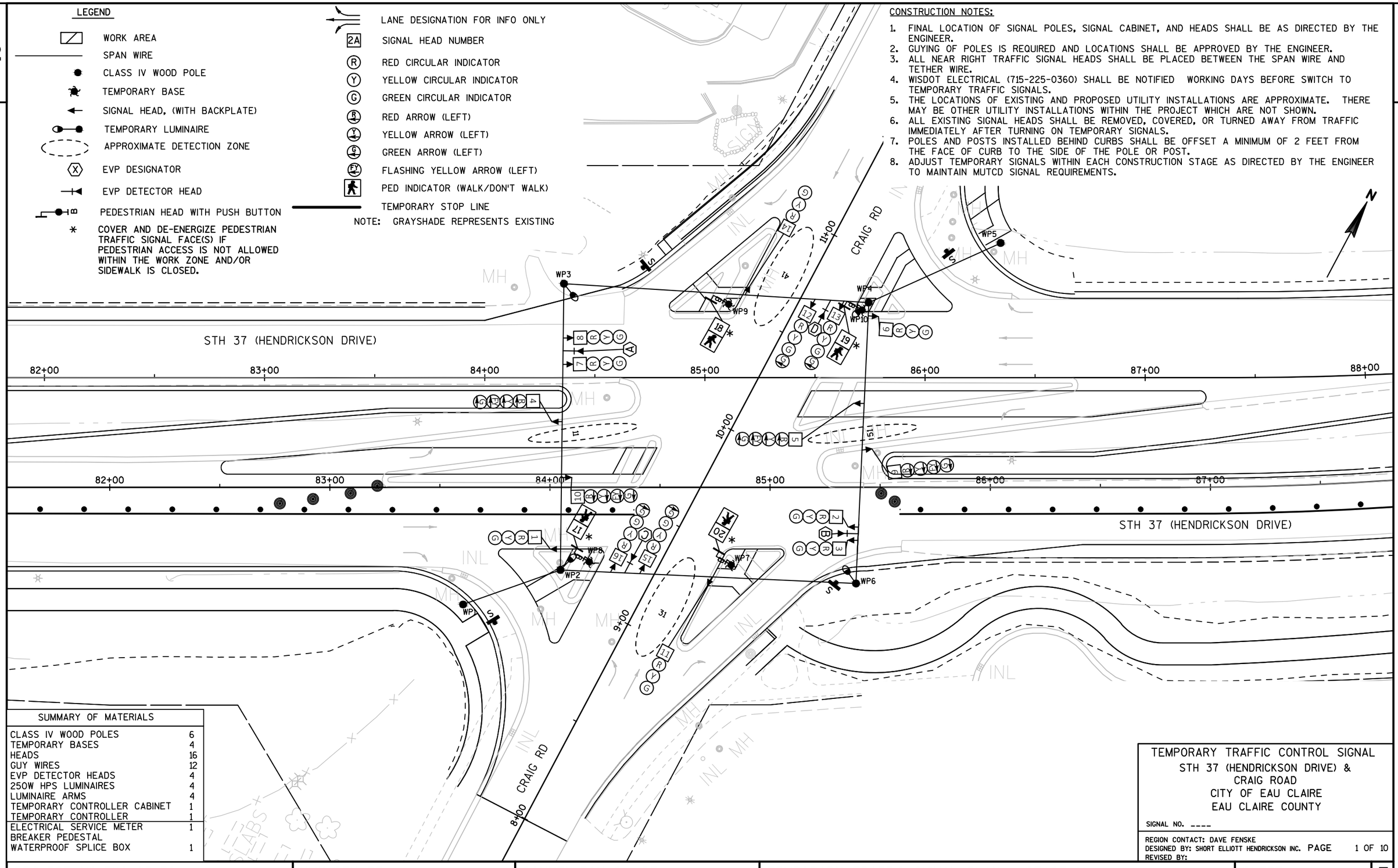
- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
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NOTE: GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. FINAL LOCATION OF SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE AS DIRECTED BY THE ENGINEER.
2. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
3. ALL NEAR RIGHT TRAFFIC SIGNAL HEADS SHALL BE PLACED BETWEEN THE SPAN WIRE AND TETHER WIRE.
4. WISDOT ELECTRICAL (715-225-0360) SHALL BE NOTIFIED WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
5. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
6. ALL EXISTING SIGNAL HEADS SHALL BE REMOVED, COVERED, OR TURNED AWAY FROM TRAFFIC IMMEDIATELY AFTER TURNING ON TEMPORARY SIGNALS.
7. POLES AND POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF CURB TO THE SIDE OF THE POLE OR POST.
8. ADJUST TEMPORARY SIGNALS WITHIN EACH CONSTRUCTION STAGE AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.



SUMMARY OF MATERIALS

CLASS IV WOOD POLES	6
TEMPORARY BASES	4
HEADS	16
GUY WIRES	12
EVP DETECTOR HEADS	4
250W HPS LUMINAIRES	4
LUMINAIRE ARMS	4
TEMPORARY CONTROLLER CABINET	1
TEMPORARY CONTROLLER	1
ELECTRICAL SERVICE METER BREAKER PEDESTAL	1
WATERPROOF SPLICE BOX	1

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 1 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1A	SHEET 44	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 1A.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 1A - 023921_A
PLOT DATE : 1/11/2018 2:46 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

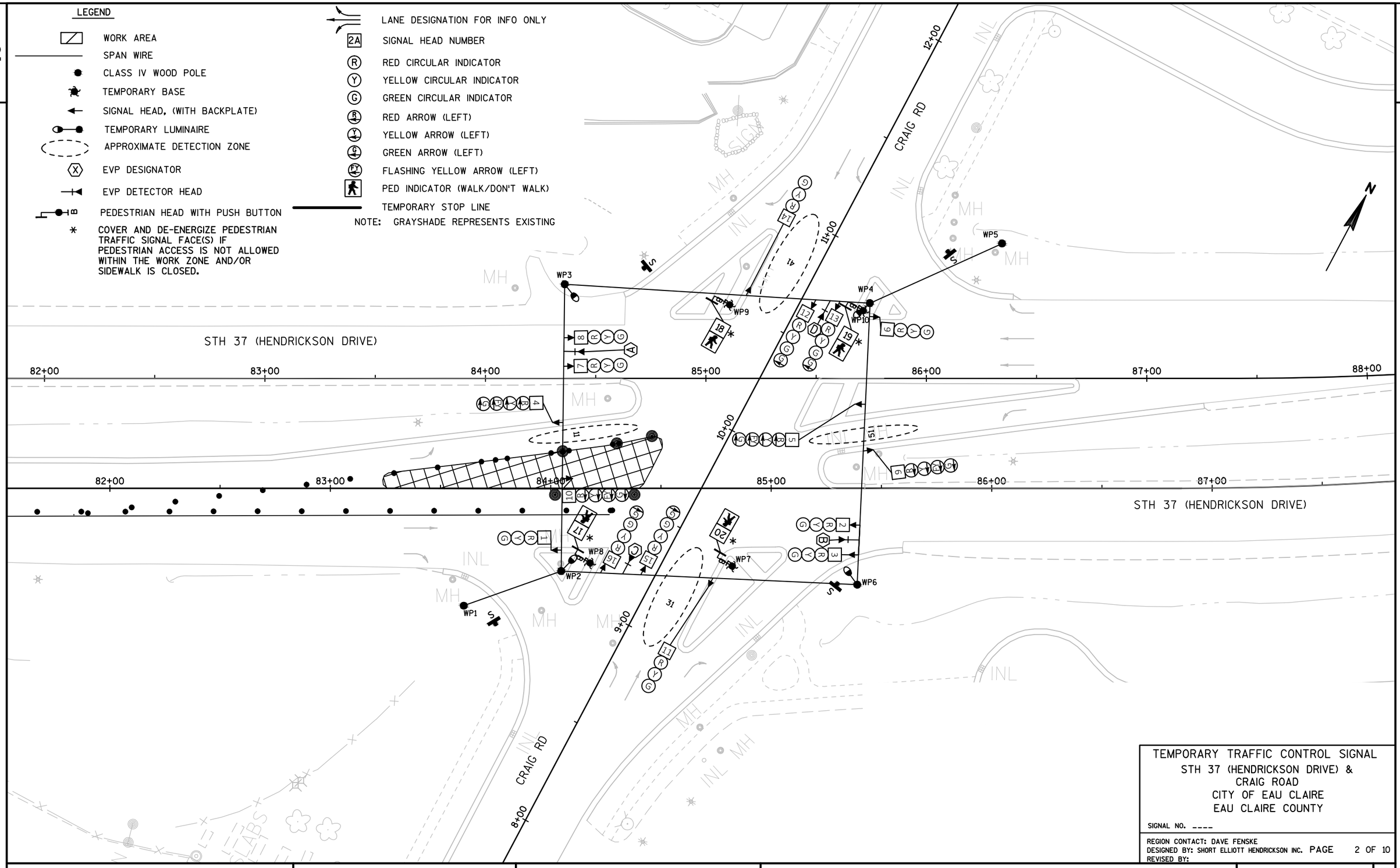
2

LEGEND

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TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

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REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 2 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1B	SHEET 45	E

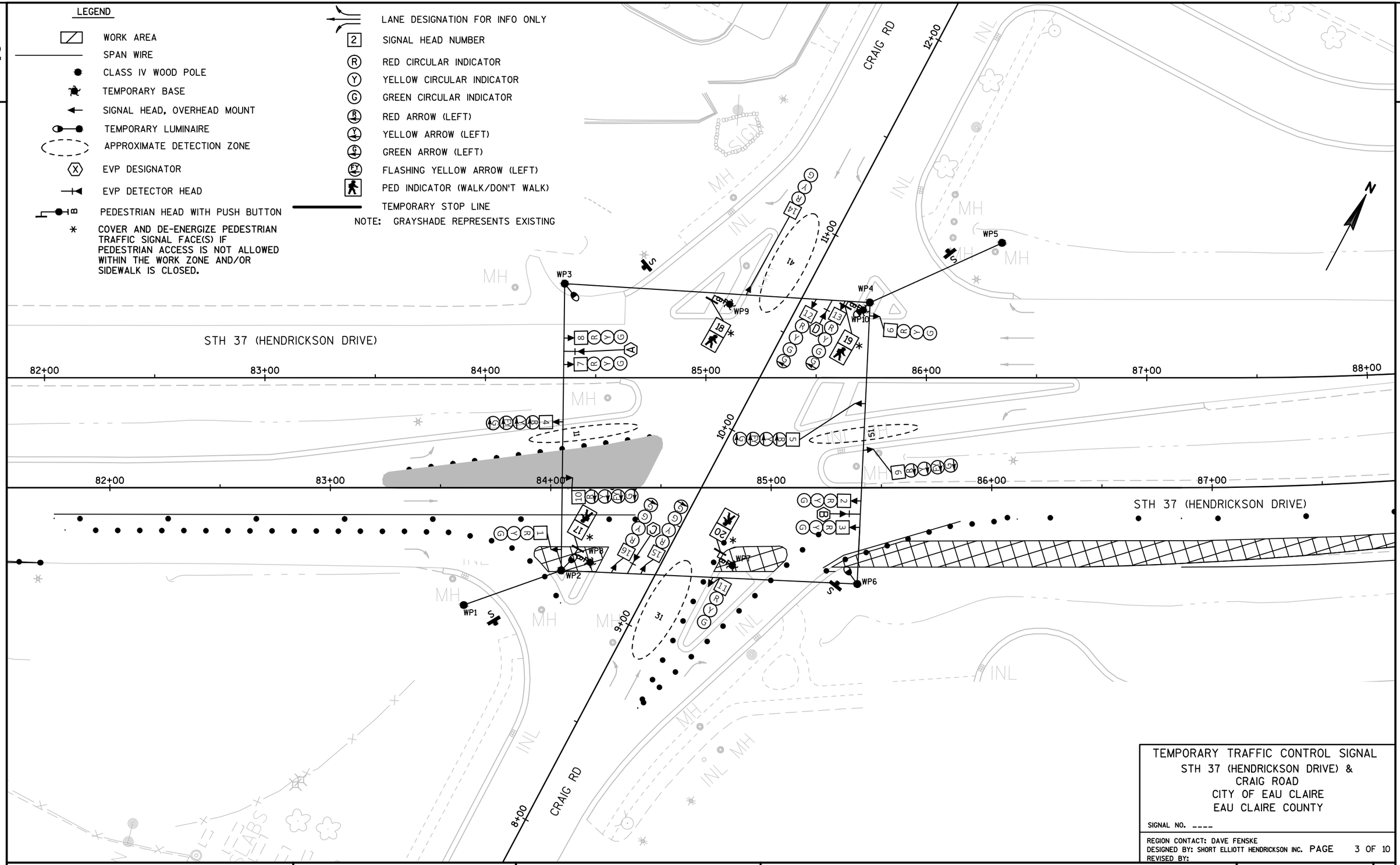
2

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, OVERHEAD MOUNT
- TEMPORARY LUMINAIRE
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- EVP DETECTOR HEAD
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TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 3 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 1C	SHEET 46	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 1C.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 1C - 023921_C
PLOT DATE : 11/2/2017 1:37 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

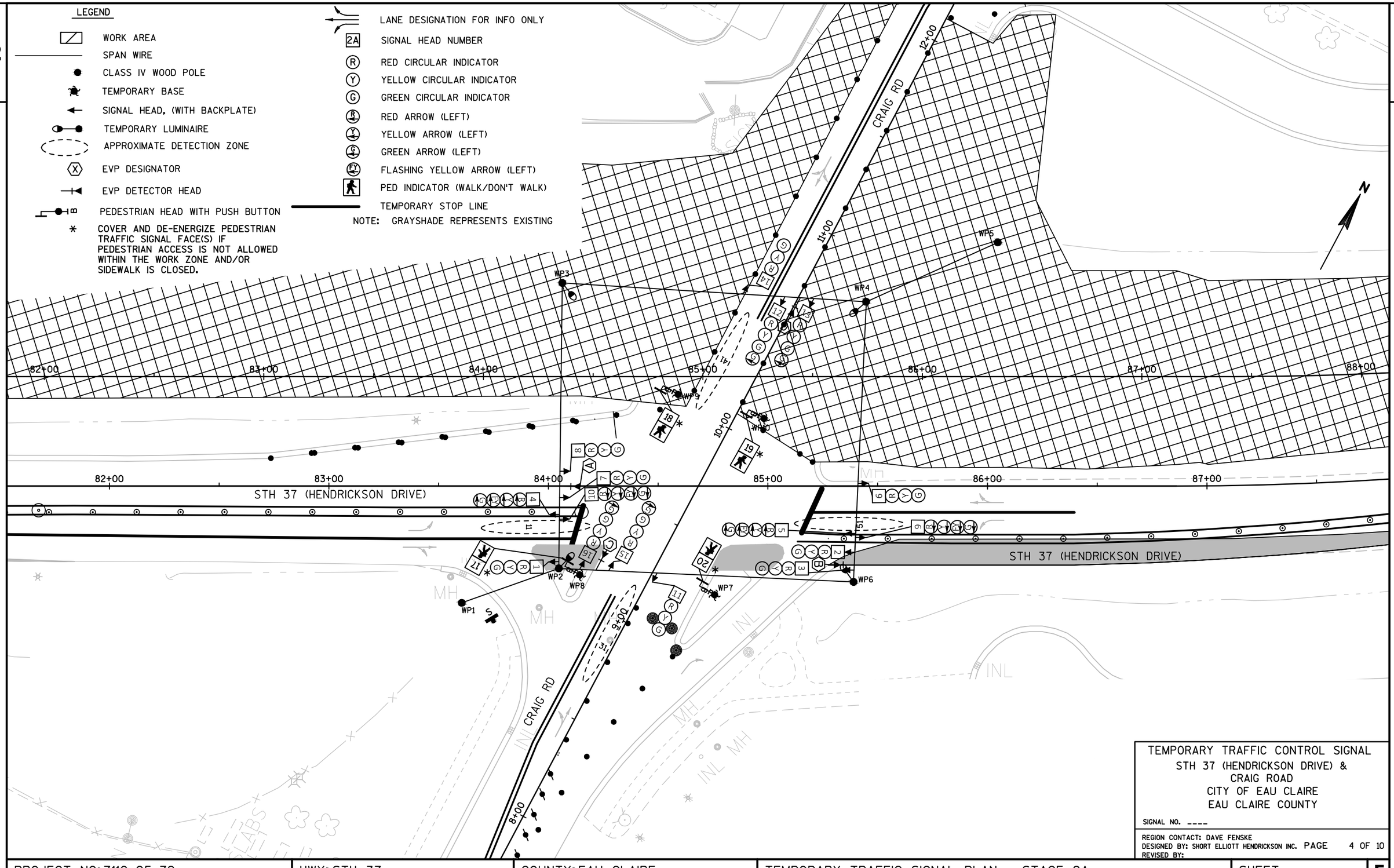
2

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PAGE 4 OF 10

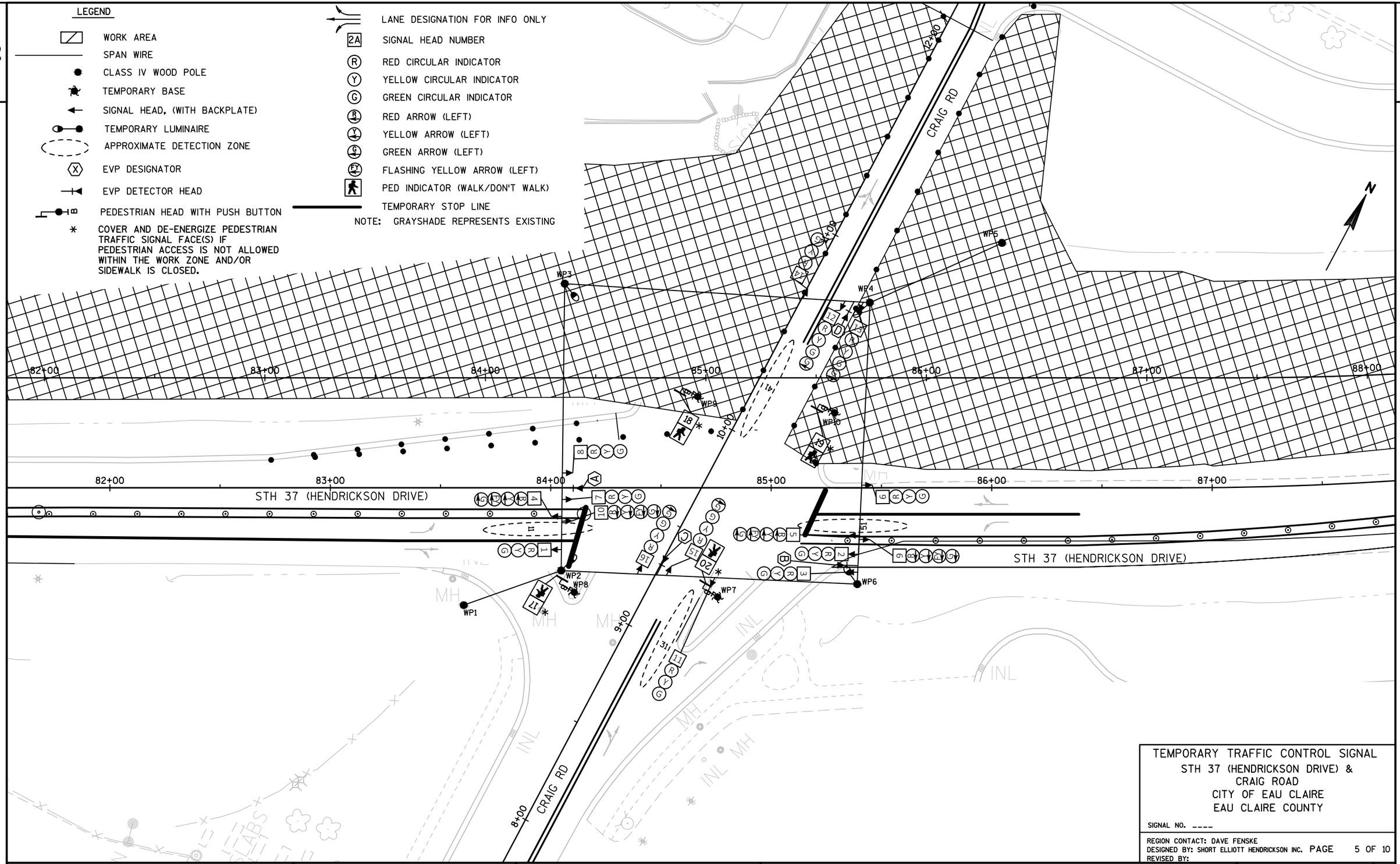
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2A	SHEET 47	E

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 5 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 2B	SHEET 48	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 2B.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 2B - 023922_B
PLOT DATE : 11/2/2017 1:40 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING

STH 37 (HENDRICKSON DRIVE)

CRAIG RD

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10

82+00 83+00 84+00 85+00 86+00 87+00 88+00

8+00 10+00 11+00 12+00

INL

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) & CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 6 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3A	SHEET 49	E

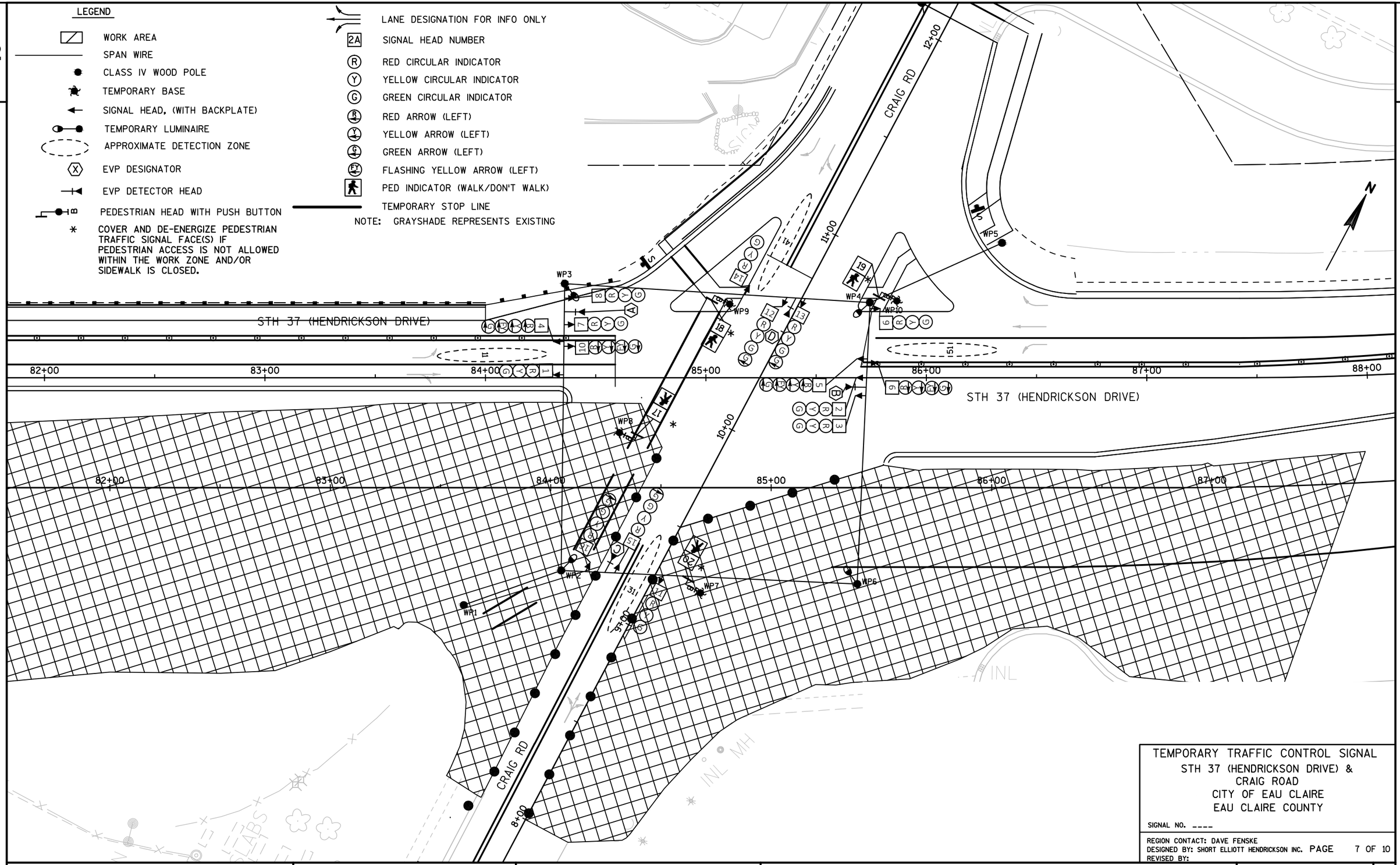
FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 3A.DWG
LAYOUT NAME - TEMPORARY SIGNALS STAGE 3A - 023923_A
PLOT DATE : 11/2/2017 2:29 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 7 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 3B	SHEET 50	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 3B.DWG
LAYOUT NAME - 023923_B
PLOT DATE : 11/2/2017 1:44 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING

STH 37 (HENDRICKSON DRIVE)

CRAIG RD

WP1 WP2 WP3 WP4 WP5 WP6 WP7 WP8 WP9 WP10

82+00 83+00 84+00 85+00 86+00 87+00 88+00

8+00 9+00 10+00 11+00 12+00

N

TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC.
REVISED BY:

PAGE 8 OF 10

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4A	SHEET 51 E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 4A.DWG
LAYOUT NAME - 023924_A

PLOT DATE : 11/2/2017 1:48 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

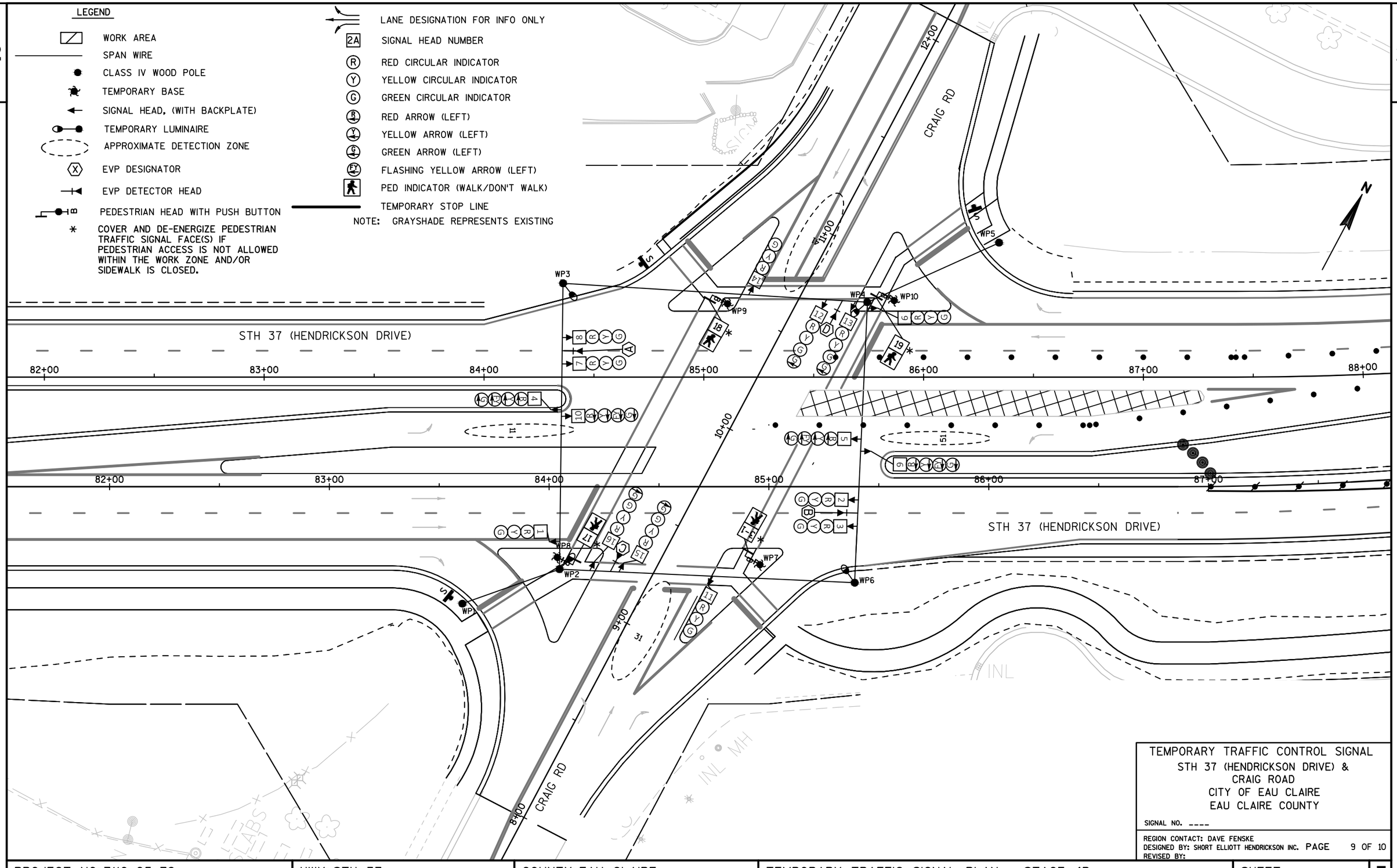
WISDOT/CADDS SHEET 42

LEGEND

- WORK AREA
- SPAN WIRE
- CLASS IV WOOD POLE
- TEMPORARY BASE
- SIGNAL HEAD, (WITH BACKPLATE)
- TEMPORARY LUMINAIRE
- APPROXIMATE DETECTION ZONE
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- PEDESTRIAN HEAD WITH PUSH BUTTON
- * COVER AND DE-ENERGIZE PEDESTRIAN TRAFFIC SIGNAL FACE(S) IF PEDESTRIAN ACCESS IS NOT ALLOWED WITHIN THE WORK ZONE AND/OR SIDEWALK IS CLOSED.

- LANE DESIGNATION FOR INFO ONLY
- 2A SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW (LEFT)
- YELLOW ARROW (LEFT)
- GREEN ARROW (LEFT)
- FLASHING YELLOW ARROW (LEFT)
- PED INDICATOR (WALK/DON'T WALK)
- TEMPORARY STOP LINE

NOTE: GRAYSHADE REPRESENTS EXISTING



TEMPORARY TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. ____

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SHORT ELLIOTT HENDRICKSON INC. PAGE 9 OF 10
REVISED BY:

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - STAGE 4B	SHEET 52	E

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	4,5	G ←	- -	-	- -	-	- -	-	- -	-
Ø2	6,7,8	R	R R	G	Y R	R	R R	R	R R	R
Ø3	11,12,13	R	R R	R	R R	G,G ←	Y R	R	R R	R
Ø4	14,15,16	R	R R	R	R R	R	R R	G,G ←	Y R	R
Ø5	9,10	-	- -	-	- -	-	- -	-	- -	-
Ø6	1,2,3	R	R R	R	R R	R	R R	R	R R	R
Ø7										
Ø8										
OLE	4,5	-	Y R	FY ←	Y R	R ←	R R ←	R ←	R R ←	R ←
OLF										
OLG	9,10	R ←	R R ←	R ←	R R ←	R ←	R R ←	R ←	R R ←	R ←
OLH										
Ø2P										
Ø3P	19,20	DW	DW DW	DW	DW DW	*	DW DW	DW	DW DW	
Ø4P	17,18	DW	DW DW	DW	DW DW	DW	DW DW	*	DW DW	
Ø6P										

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	4,5	-	- -	-	- -				
Ø2	6,7,8	R	R R	R	R R				
Ø3	11,12,13	R	R R	R	R R				
Ø4	14,15,16	R	R R	R	R R				
Ø5	9,10	G ←	- -	-	- -				
Ø6	1,2,3	R	R R	G	Y R				
Ø7									
Ø8									
OLE	4,5	R ←	R R ←	R ←	R R ←				
OLF									
OLG	9,10	-	Y R ←	FY ←	Y R ←				
OLH									
Ø2P									
Ø3P	19,20	DW	DW DW	DW	DW DW				
Ø4P	17,18	DW	DW DW	DW	DW DW				
Ø6P									

BARRIER

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
11		X			1	1			
31		X			3	3			
41		X			4	4			
51		X			5	5			

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN.	X
3				X
4				X
5		2		X
6	X	2	MIN.	X
7				
8				

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLE	1	2
OLF		
OLG	5	6
OLH		

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
LOCATION OF MASTER CONTROLLER NO:	
SIGNAL SYSTEM #:	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
3M	
TOMAR	
HARDWIRE	
OTHER	
QUEUE DETECTOR	
LIFT BRIDGE	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4
2	5 OR 6	1,3,4
3	NONE	1,2,4,5,6
4	NONE	1,2,3,5,6
5	1 OR 2	3,4,6
6	1 OR 2	3,4,5
7		
8		

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

STH 37 (HENDRICKSON DRIVE) & CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0241

CONTROLLER TYPE: TEMP

DATE

FILE NAME : ...\023929_Temp_SP_PH.dgn PLOT DATE : 11/2/2017 1:32:08 PM PLOT BY : SEH INC PLOT NAME : PLOT SCALE : Invalid expression

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- TRAFFIC SIGNAL INTERCONNECT CONDUIT 3", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55'
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 24" X 42"

CONSTRUCTION NOTES:

1. TEMPORARY SIGNAL CABINET LOCATION TO BE DETERMINED IN THE FIELD AND APPROVED BY THE WISDOT NW REGION ELECTRICAL FIELD UNIT PRIOR TO INSTALLATION.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATION OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. COORDINATE WITH WISDOT NW REGION ELECTRICAL FIELD UNIT (715-225-0360) A MINIMUM OF 5 WORKING DAYS BEFORE SWITCH TO TEMPORARY TRAFFIC SIGNALS.
5. MAST ARM SHALL ON SB17, TO BE INSTALLED BY WISDOT, MUST BE OPERATIONAL PRIOR TO REMOVAL OF SB18.
6. SB1 MAY BE REMOVED DURING THE TEMPORARY CONFIGURATION.
7. AT ANY GIVEN TIME THE CONTRACTOR SHALL BE PERMITTED TO HAVE A MAXIMUM OF 1 HEAD PER PHASE OFFLINE.
8. ALL NEW SIGNAL AND EVP CABLE PULLED DURING THE TEMPORARY CONFIGURATION SHALL HAVE 20 FEET OF SLACK IN THE TEMPORARY CONTROL CABINET AND 10 FEET OF SLACK IN THE FINAL PULL BOX.
9. CONTRACTOR TO INSTALL 2-21 CT. SIGNAL CABLES TO PB5 FROM TCB1 AND 2-21 CT. SIGNAL CABLES TO PB14 FROM TCB1.
10. CONTRACTOR TO INSTALL 2-10 UF CABLE FROM PROPOSED METER BREAKER PEDESTAL TO TCB1.
11. CONTRACTOR TO INSTALL PROPOSED METER BREAKER PEDESTAL AND CONDUIT IN SW CORNER TO POWER THE TEMPORARY SIGNAL CABINET.
12. CONTRACTOR TO SPLICE IN NEW LOOP LEAD-IN CABLES AT PB2 AND INSTALL TO TCB1.

STH 37 (HENDRICKSON DRIVE)

USH 12/CLAIREMONT AVE

MAST ARM, HEAD, AND EVP TO BE INSTALLED BY WISDOT

INTERCEPT EXISTING CONDUIT

PROPOSED METER BREAKER PEDESTAL

SHARED USE PATH

- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (R) RED ARROW
- (Y) YELLOW ARROW
- (G) GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

TRAFFIC CONTROL SIGNAL
USH 12 (CLAIREMONT AVENUE) &
STH 37 (HENDRICKSON DRIVE)
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO.

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TEMPORARY TRAFFIC SIGNAL PLAN - ALL STAGES	SHEET 54	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\TEMPORARY SIGNALS STAGE 1A.DWG
LAYOUT NAME - 023930

PLOT DATE : 1/11/2018 2:46 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

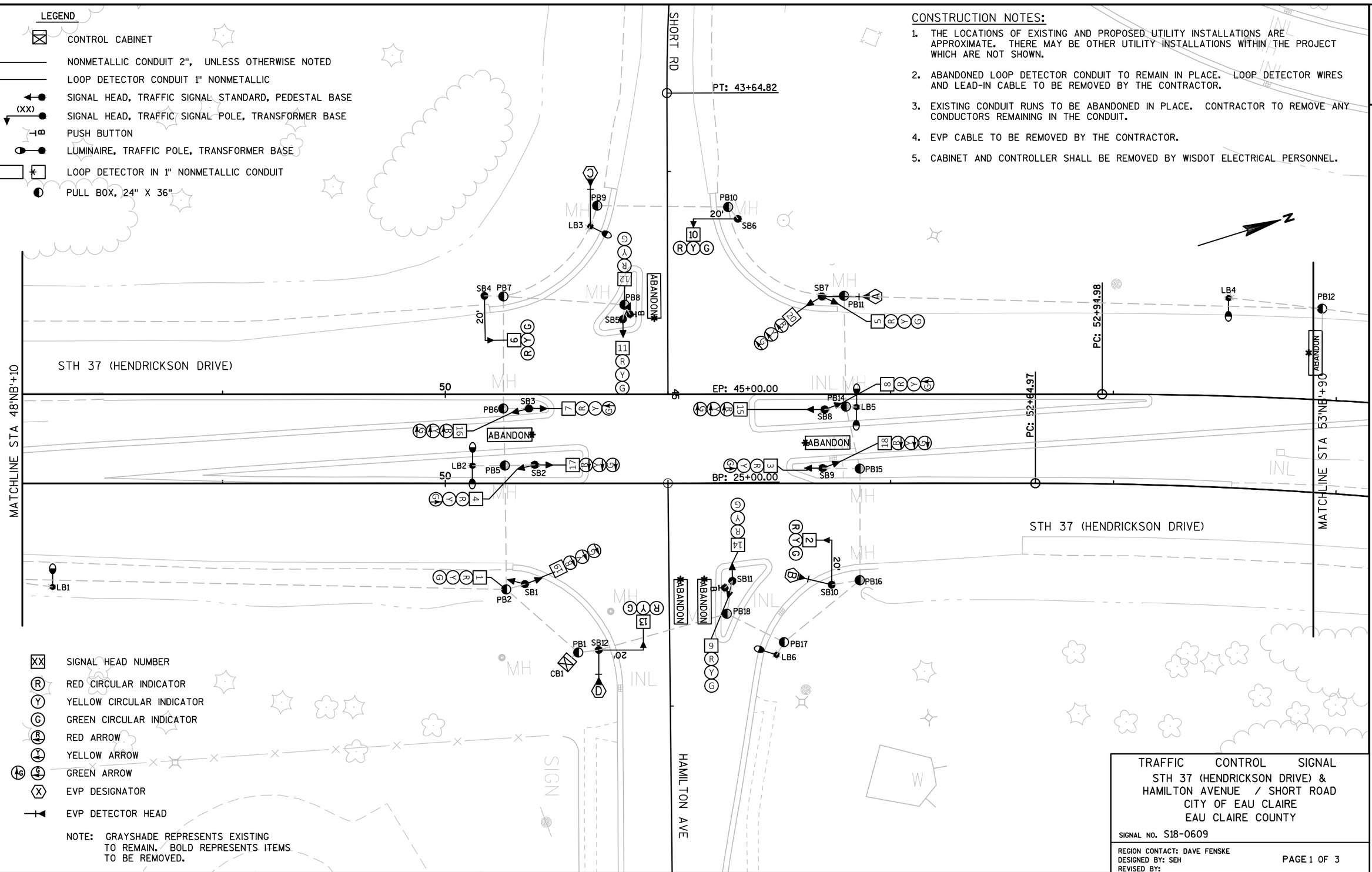
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRES AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
4. EVP CABLE TO BE REMOVED BY THE CONTRACTOR.
5. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.



- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- A6 G GREEN ARROW
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
HAMILTON AVENUE / SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0609

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 3

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 55	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP (REM).DWG
LAYOUT NAME - ****
PLOT DATE : 11/2/2017 1:52 PM
PLOT BY : JASON ISAACSON
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

ABANDON

ABANDON

PB4

MH

MH

MATCHLINE STA 48'NB'+10

PB3

2

N

PB12

ABANDON

PB13

ABANDON

55

55

MATCHLINE STA 53'NB'+90

TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
HAMILTON AVENUE / SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0609

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 56	E

2

2

N

MATCHLINE STA 60'NB'+41

A/C A/C

SB13

SB14

PP: 65+11.08

PP: 64+81.41

VOLLEYBALL COURT

SIGN

TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
HAMILTON AVENUE / SHORT ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0609

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 3 OF 3

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 57	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP (REM).DWG
LAYOUT NAME - 024013_REM

PLOT DATE : 1/12/2018 12:26 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

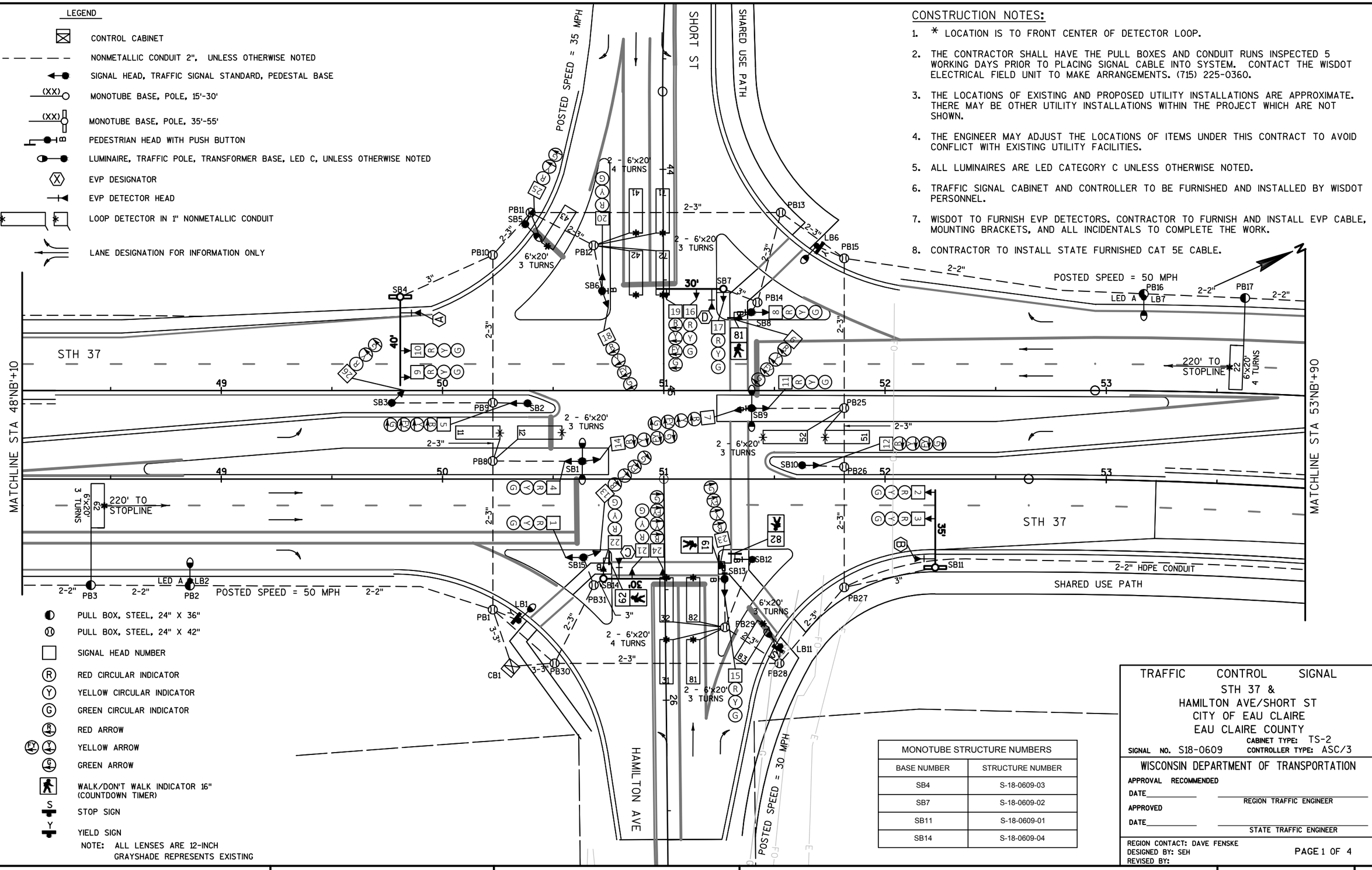
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30'
- (XX) B MONOTUBE BASE, POLE, 35'-55'
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE, LED C, UNLESS OTHERWISE NOTED
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- * * LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LANE DESIGNATION FOR INFORMATION ONLY

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (715) 225-0360.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
6. TRAFFIC SIGNAL CABINET AND CONTROLLER TO BE FURNISHED AND INSTALLED BY WISDOT PERSONNEL.
7. WISDOT TO FURNISH EVP DETECTORS. CONTRACTOR TO FURNISH AND INSTALL EVP CABLE, MOUNTING BRACKETS, AND ALL INCIDENTALS TO COMPLETE THE WORK.
8. CONTRACTOR TO INSTALL STATE FURNISHED CAT 5E CABLE.



- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURE NUMBERS

BASE NUMBER	STRUCTURE NUMBER
SB4	S-18-0609-03
SB7	S-18-0609-02
SB11	S-18-0609-01
SB14	S-18-0609-04

TRAFFIC CONTROL SIGNAL
STH 37 &
HAMILTON AVE/SHORT ST
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

CABINET TYPE: TS-2
SIGNAL NO. S18-0609 CONTROLLER TYPE: ASC/3

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE _____ REGION TRAFFIC ENGINEER
APPROVED
DATE _____ STATE TRAFFIC ENGINEER

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 58	E

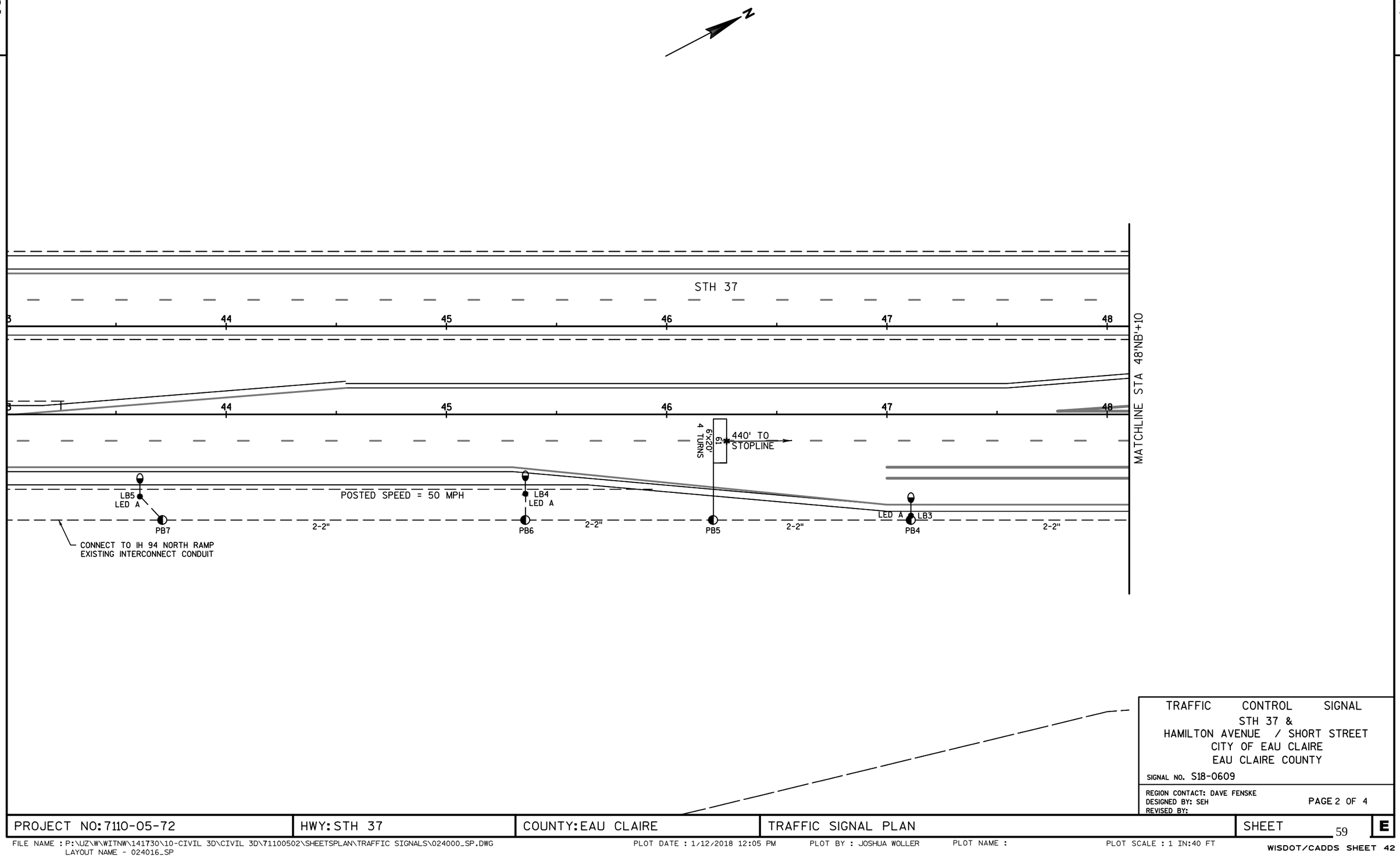
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LAYOUT NAME - 024015_SP

PLOT DATE : 1/12/2018 12:05 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2



TRAFFIC CONTROL SIGNAL
STH 37 &
HAMILTON AVENUE / SHORT STREET
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0609

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

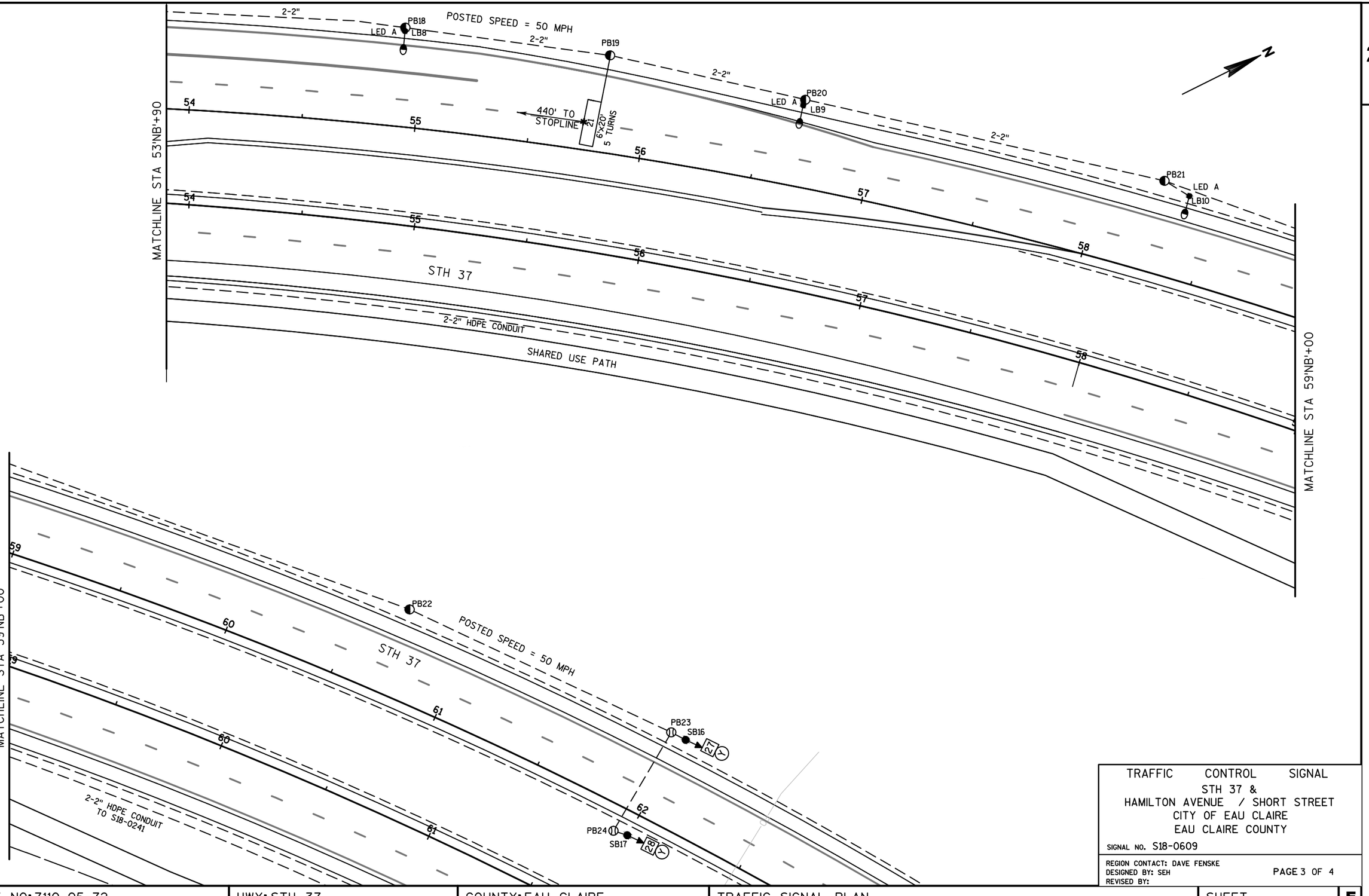
PAGE 2 OF 4

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 59	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP.DWG
LAYOUT NAME - 024016_SP

PLOT DATE : 1/12/2018 12:05 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



TRAFFIC CONTROL SIGNAL
STH 37 &
HAMILTON AVENUE / SHORT STREET
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

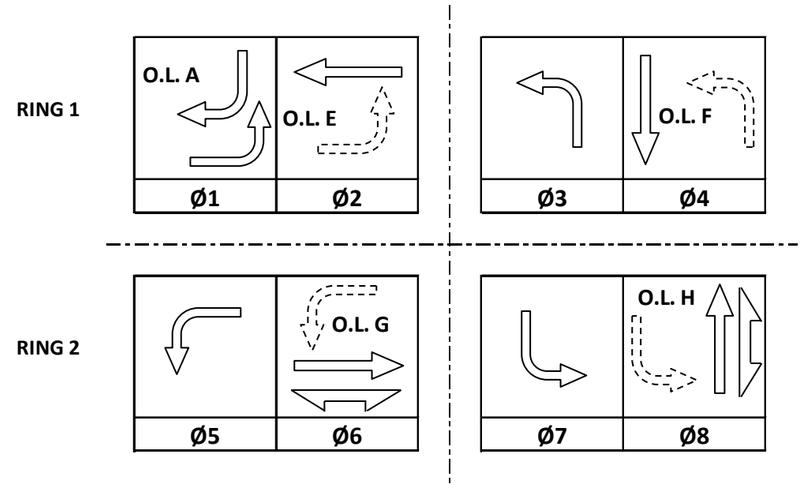
SIGNAL NO. S18-0609

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 3 OF 4

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 60	E

	HEAD NUMBERS	FLASH
Ø1	5,6,7	R ←
Ø2	8,9,10,11	R
Ø3	18,19	R ←
Ø4	20,21,22	R
Ø5	12,13,14	R
Ø6	1,2,3,4	R
Ø7	23,24	R ←
Ø8	15,16,17	R
Ø6P	61,62	
Ø8P	81,82	
OLA	25,26	R
OLE	5,6,7	-
OLF	18,19	-
OLG	12,13,14	-
OLH	23,24	-



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY. SEE CHART 1.
3. IF ANY OPPOSING THROUGH PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. USE SPARE CABINET BREAKER TO THE WIG-WAG FLASHERS ON THE SB SIGNAL AHEAD SIGNS.

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN.	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN.	X
7		4		X
8		4		X

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4,7,8
2	5 OR 6	1,3,4,7,8
3	7 OR 8	1,2,4,5,6
4	7 OR 8	1,2,3,5,6
5	1 OR 2	3,4,6,7,8
6	1 OR 2	3,4,5,7,8
7	3 OR 4	1,2,5,6,8
8	3 OR 4	1,2,5,6,7

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	X
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29
PLAN LOOP DETECTOR*(S)	11	21	31	41	43*	51	61	71	81	83*						
CALLED PHASE	1	2	3	4		5	6	7	8							
CALL OPTION	X	X	X	X		X	X	X	X							
DELAY TIME																
EXTENTION OPTION	X	X	X	X		X	X	X	X							
EXTEND TIME																
USE ADDED INITIAL	X	X	X	X		X	X	X	X							
CROSS SWITCH PHASE																

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30
PLAN LOOP DETECTOR*(S)	12	22	32	42		52	62	72	82							
CALLED PHASE	1	2	3	4		5	6	7	8							
CALL OPTION	X	X	X	X		X	X	X	X							
DELAY TIME																
EXTENTION OPTION	X	X	X	X		X	X	X	X							
EXTEND TIME																
USE ADDED INITIAL	X	X	X	X		X	X	X	X							
CROSS SWITCH PHASE																

*WIRED FOR FUTURE USE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
PREEMPTION CHANNEL	1	2	3	4
MOVEMENT				
DIRECTION	SB	NB	EB	WB
PHASE	2+5	6+1	4+7+OLA	8+3+OLC

NOTES: FULL CLEARANCE AND MINIMUM GREEN INTERVALS SHALL ALWAYS BE PROVIDED.

STH 37 (HENDRICKSON DRIVE) & HAMILTON AVE/SHORT ST
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY
SIGNAL NO: S18-0609 CABINET TYPE: TS2
CONTROLLER TYPE: ASC/3 - 1000
DATE: 01/18 PAGE NO. 4 OF 4

PROJECT ID:	7110-05-02
INTERSECTION:	STH 37 & HAMILTON AVE/SHORT RD

SIGNAL WIRE COLOR CODING			
	BLK - BLACK	RED - RED	GRN - GREEN
	WHT - WHITE	BLU - BLUE	ORG - ORANGE

CB_ TO	JUMPER	AWG 14 # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
					RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING> <YELLOW>	D/WALK	WALK		
SB1		12	4	6	RED	ORG	GRN								
			14	5				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
SB2		7	5	1				RED	ORG	GRN	BLK				
SB3		7	26	4	RED				ORG	GRN					
SB4		7	9	2	RED	ORG	GRN								
			10	2	RED	ORG	GRN								
SB5		7	25	4	RED				ORG	GRN					
SB6		12	18	3				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			20	4	RED	ORG	GRN								
SB7		12	16	8	RED	ORG	GRN								
			17	8	RED	ORG	GRN								
			19	3				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
SB8		12	6	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			8	2	RED	ORG	GRN								
			31	8 PED								BLK	BLU	WHT/BLK	
SB9		12	7	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			11	2	RED	ORG	GRN								
SB10		7	12	5				RED	ORG	GRN	BLU				
SB11		7	2	6	RED	ORG	GRN								
			3	6	RED	ORG	GRN								
SB12		7	32	8 PED								BLK	BLU	WHT/BLK	
SB13		12	15	8	RED	ORG	GRN								
			23	7				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			33	6 PED								BLK	BLU	WHT/BLK	
SB14		12	21	4	RED	ORG	GRN								
			22	4	RED	ORG	GRN								
			24	7				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			34	6 PED								BLK	BLU	WHT/BLK	
SB15		12	1	6	RED	ORG	GRN								
			13	5				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
SB16		7	27	N/A		ORG									
			28	N/A		ORG									
SB17		7	29	N/A		ORG									
			30	N/A		ORG									

EQUIPMENT GROUNDING	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	CB1
CB1	SB16
SB16	SB17
SB17	CB1

PULL BOX BONDING JUMPER 10 AWG	
FROM	TO
PB1	CB1
PB4	SB1
PB5	SB2
PB6	SB4
PB7	SB5
PB8	SB6
PB9	SB8
PB10	SB8
PB11	SB9
PB12	PB13
PB13	PB14
PB14	PB15
PB15	PB16
PB16	SB16
PB17	SB17
PB18	SB9
PB19	SB10
PB20	SB11
PB21	SB13
PB22	SB13
PB23	CB1
PB24	SB14

LIGHTING UF 2-12 AWG	
FROM	TO
CB1	LB1
LB1	SB1
LB1	LB2
LB2	SB5
LB2	LB3
CB1	LB7
LB7	SB9
LB7	LB5
LB5	LB6
LB5	LB4

EVP CABLE	
FROM	TO
CB1	SB4 (HEAD A)
CB1	SB11 (HEAD B)
CB1	SB14 (HEAD C)
CB1	SB7 (HEAD D)

STATE SUPPLIED CAT-5E CABLE	
FROM	TO
CB1	SB1 (LUMINAIRE ARM)
CB1	SB9 (LUMINAIRE ARM)

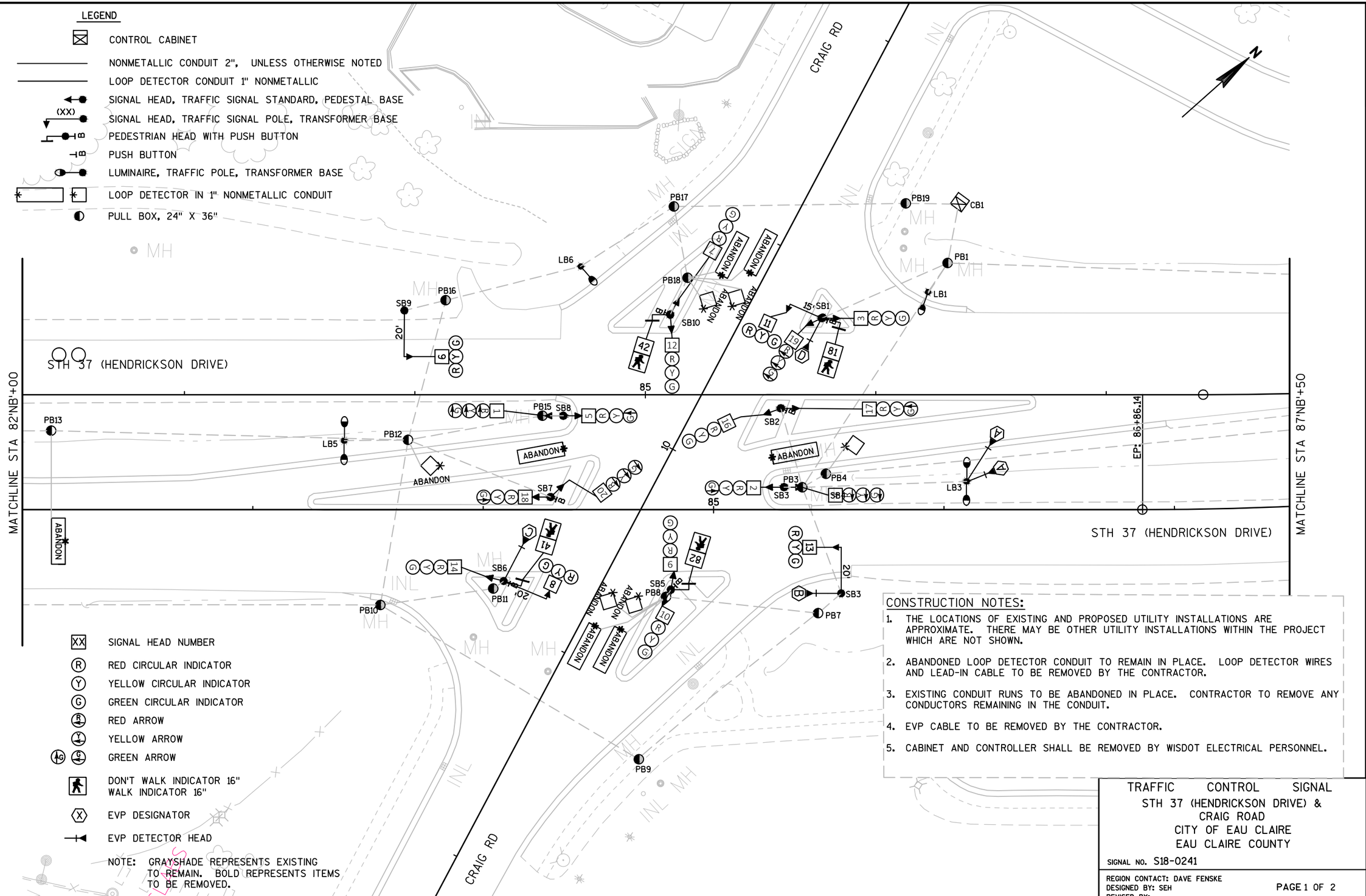
*USE THE WHITE CONDUCTOR IN THE CABLE ASSEMBLY AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
*AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRAIN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
"OTHER" COLUMN MAY INCLUDE SAHDOW BOX SIGN
*ALL CABLES SHALL BE LABELED WITH SIGNAL BASE NUMBER AT BOTH ENDS OF CABLE.

2

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"



- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- AG GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS ITEMS TO BE REMOVED.

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRES AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
4. EVP CABLE TO BE REMOVED BY THE CONTRACTOR.
5. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.

TRAFFIC CONTROL SIGNAL

STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

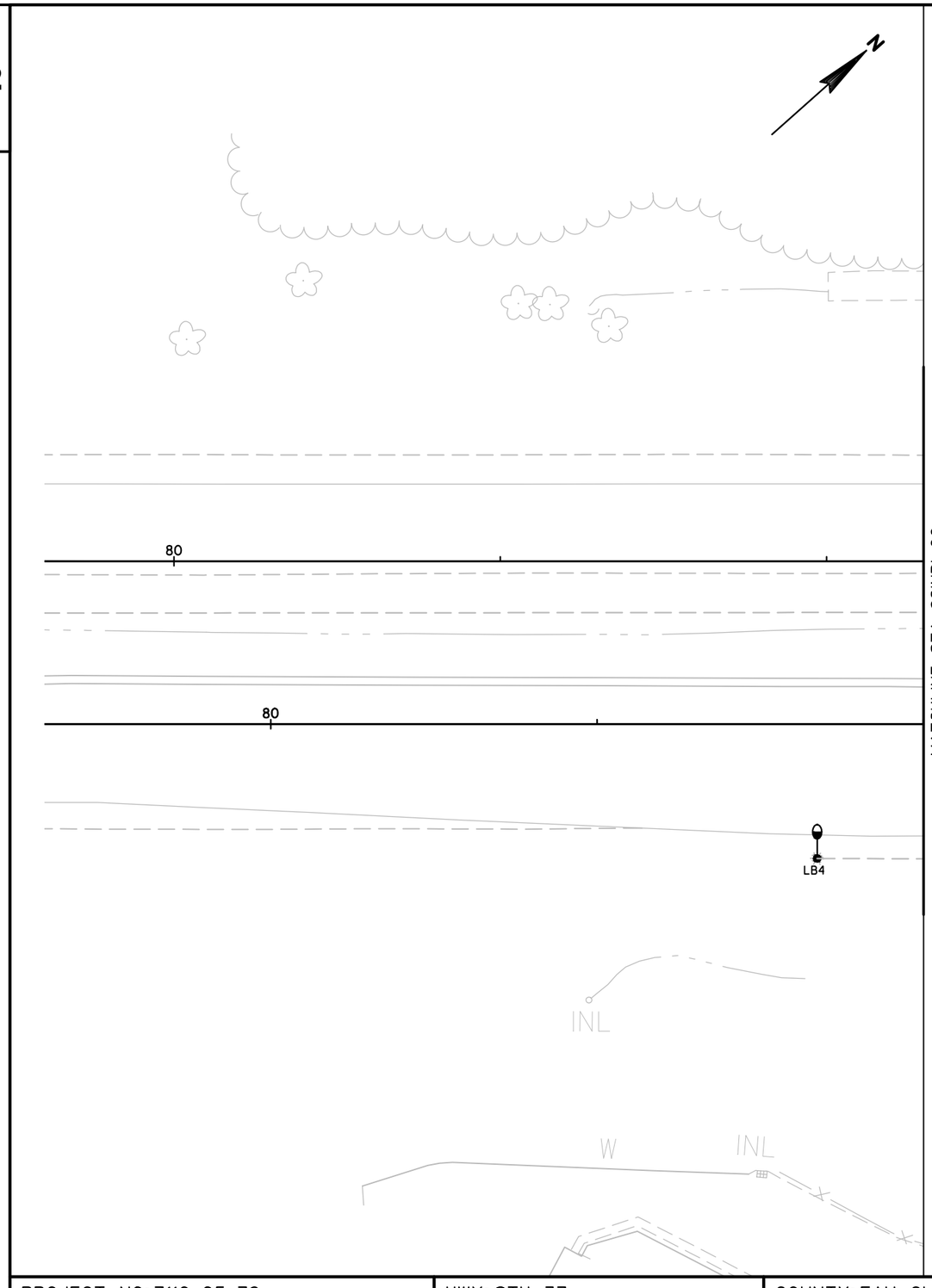
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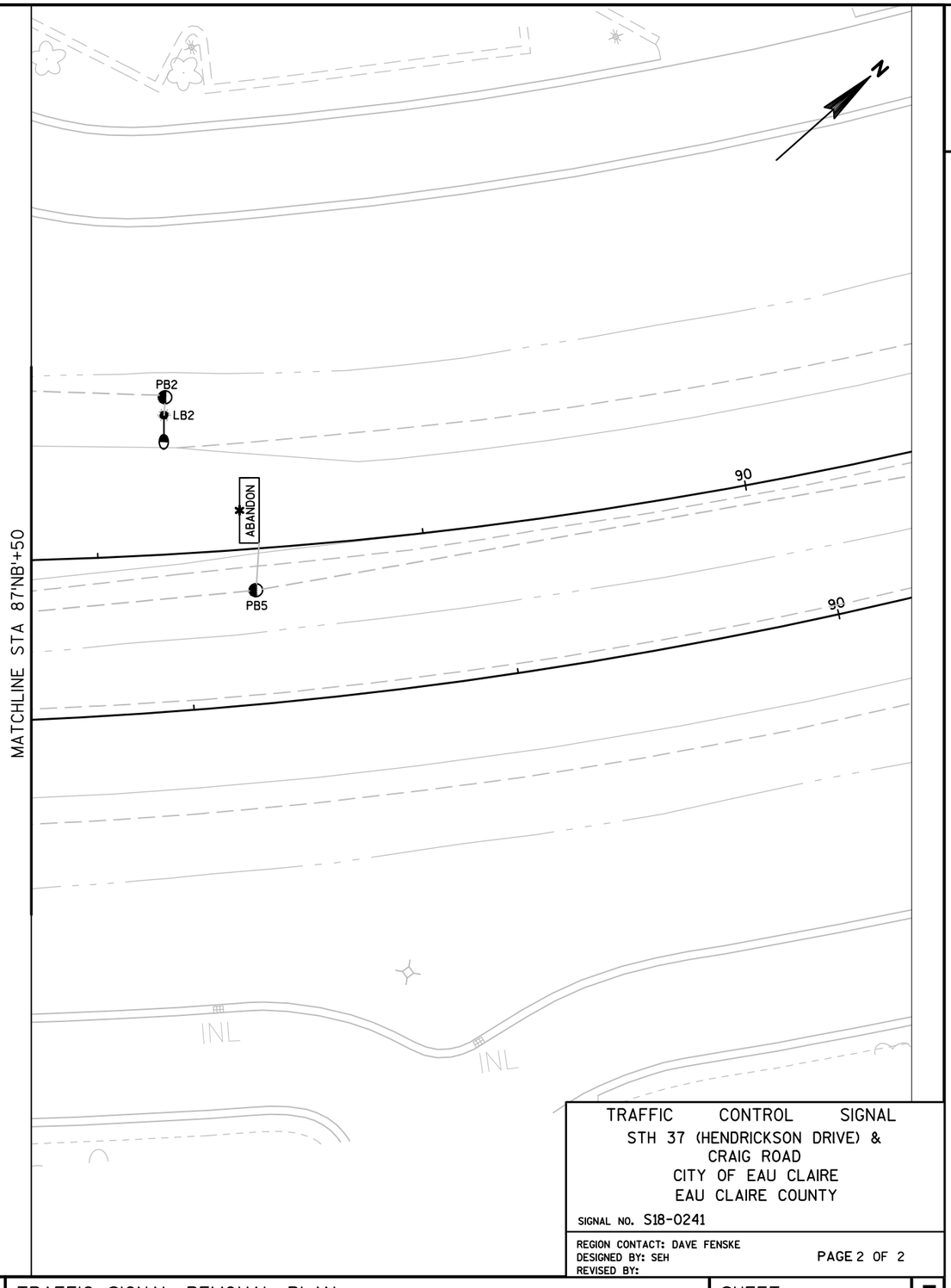
REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 2

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 63	E

2





2

TRAFFIC CONTROL SIGNAL
STH 37 (HENDRICKSON DRIVE) &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0241

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 64	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP (REM).DWG
LAYOUT NAME - ####

PLOT DATE : 11/2/2017 1:53 PM PLOT BY : JASON ISAACSON PLOT NAME : PLOT SCALE : 1 IN:40 FT

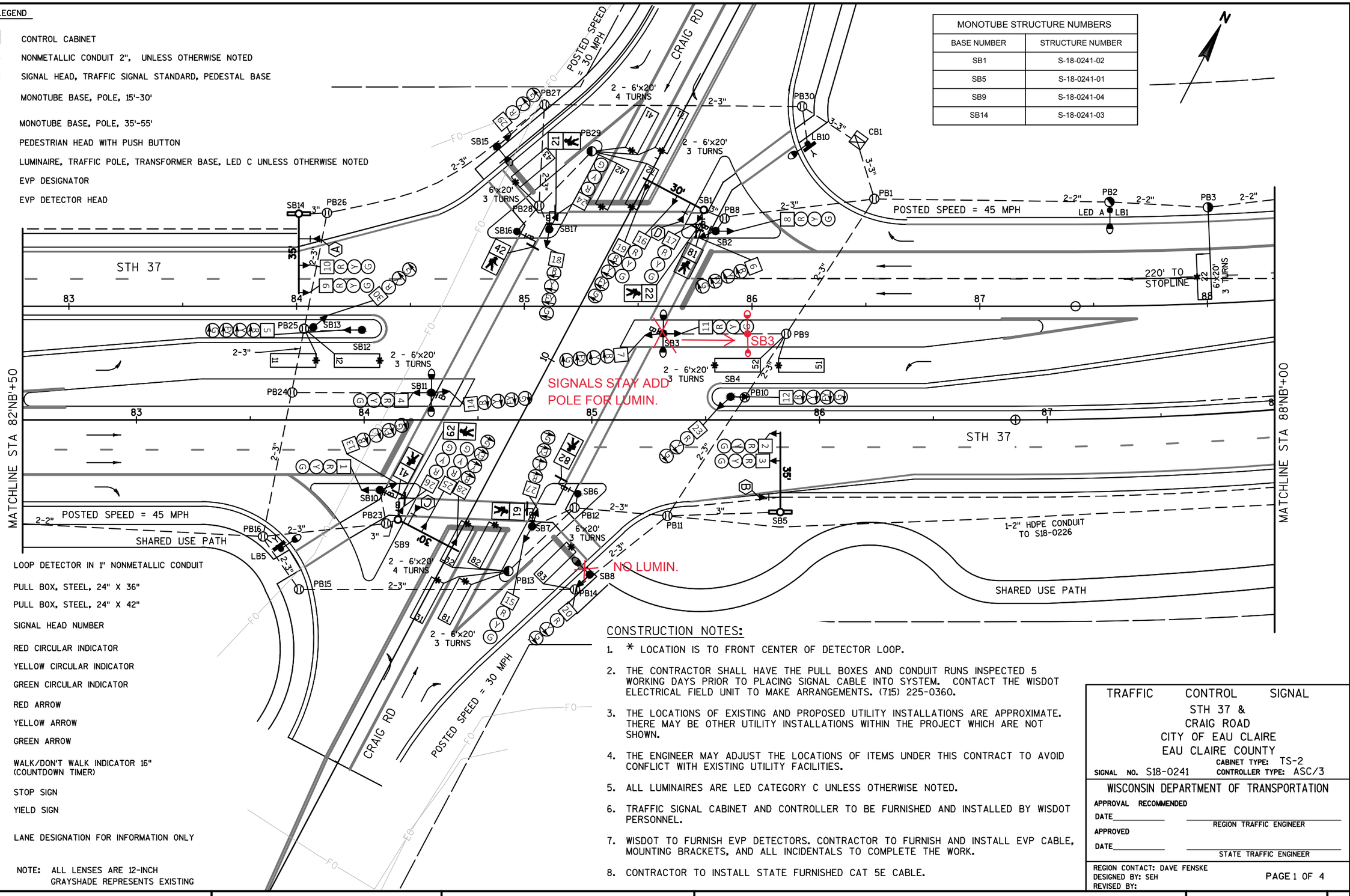
WISDOT/CADDS SHEET 42

2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 15'-30'
- (XX) MONOTUBE BASE, POLE, 35'-55'
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE, LED C UNLESS OTHERWISE NOTED
- EVP DESIGNATOR
- EVP DETECTOR HEAD

MONOTUBE STRUCTURE NUMBERS	
BASE NUMBER	STRUCTURE NUMBER
SB1	S-18-0241-02
SB5	S-18-0241-01
SB9	S-18-0241-04
SB14	S-18-0241-03



- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- S STOP SIGN
- Y YIELD SIGN
- LANE DESIGNATION FOR INFORMATION ONLY

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (715) 225-0360.
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4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.
6. TRAFFIC SIGNAL CABINET AND CONTROLLER TO BE FURNISHED AND INSTALLED BY WISDOT PERSONNEL.
7. WISDOT TO FURNISH EVP DETECTORS. CONTRACTOR TO FURNISH AND INSTALL EVP CABLE, MOUNTING BRACKETS, AND ALL INCIDENTALS TO COMPLETE THE WORK.
8. CONTRACTOR TO INSTALL STATE FURNISHED CAT 5E CABLE.

TRAFFIC CONTROL SIGNAL
STH 37 &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY
SIGNAL NO. S18-0241
CABINET TYPE: TS-2
CONTROLLER TYPE: ASC/3

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE _____ REGION TRAFFIC ENGINEER

APPROVED
DATE _____ STATE TRAFFIC ENGINEER

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 4

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 65	E

2

2

N

SAN

SAN

SAN

SAN

STH 37

78 79 80 81 82

77 78 79 80 81 82

MATCHLINE STA 82'NB'+50

6'X20' 5 TURNS 61 440' TO STOPLINE

6'X20' 4 TURNS 62 220' TO STOPLINE

LED A LB9 PB22 POSTED SPEED = 45 MPH 2-2"

LED A LB8 PB21 2-2"

PB20 2-2"

LED A LB7 PB19 SHARED USE PATH

2-2" POSTED SPEED = 45 MPH

PB18 2-2" LED A LB6 PB17

2-2" HDPE CONDUIT TO S18-0609

TRAFFIC CONTROL SIGNAL

STH 37 &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0241

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 4

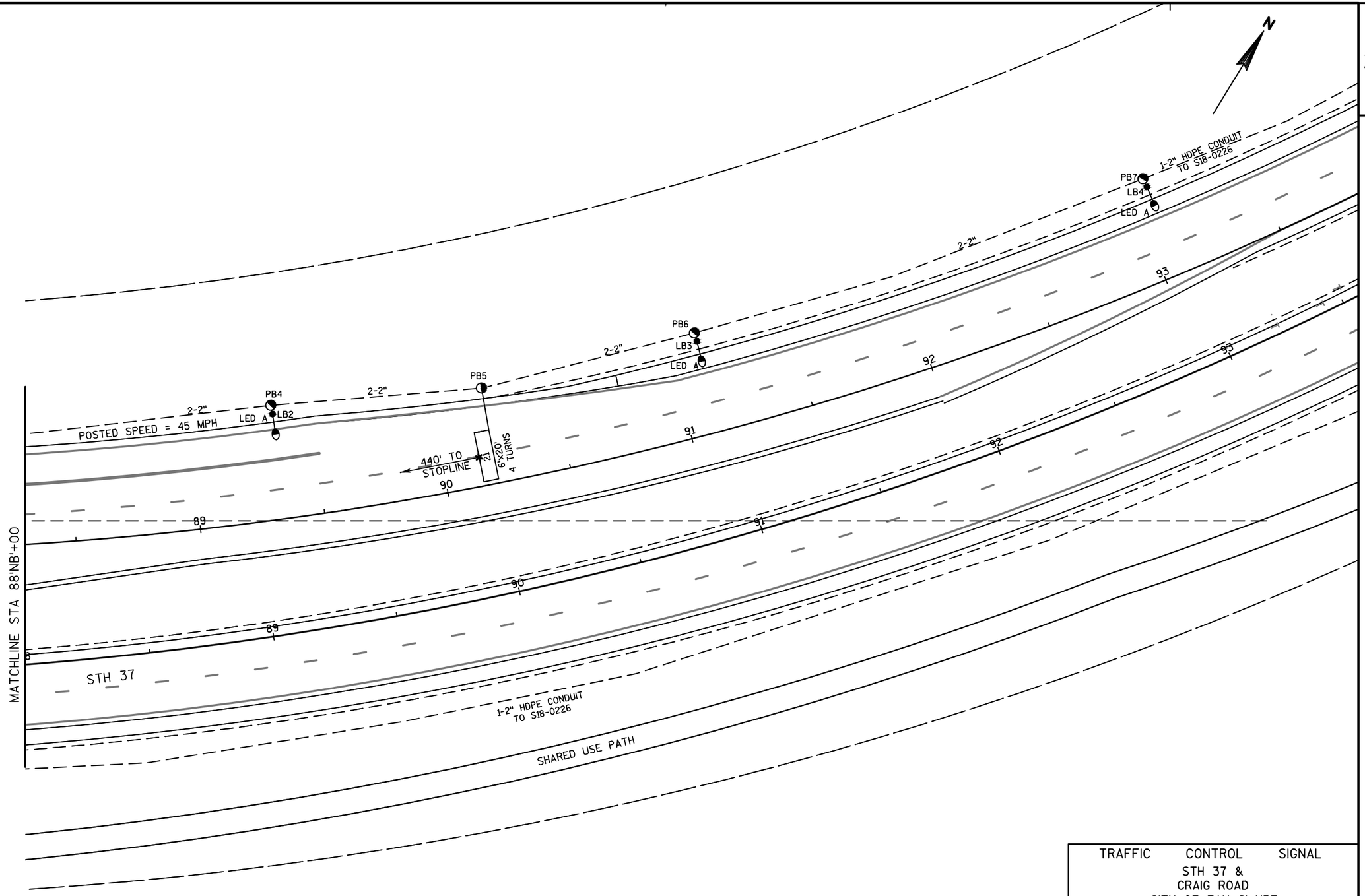
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP.DWG
LAYOUT NAME - 024026_SP

PLOT DATE : 1/12/2018 12:06 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL SIGNAL

STH 37 &
CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0241

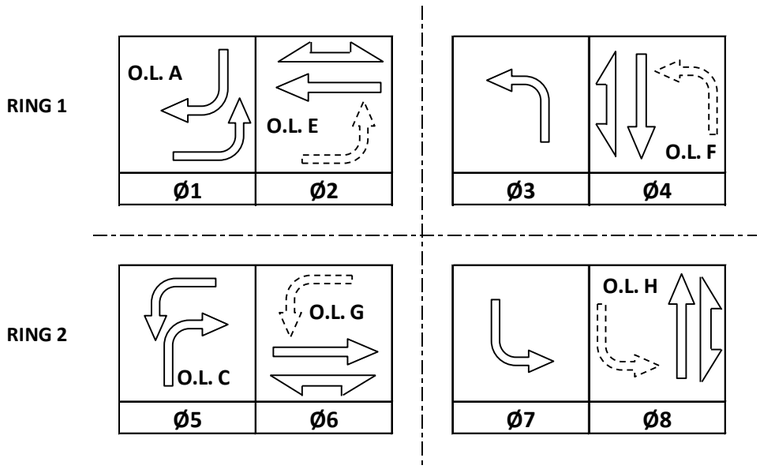
REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 3 OF 4

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 67	E

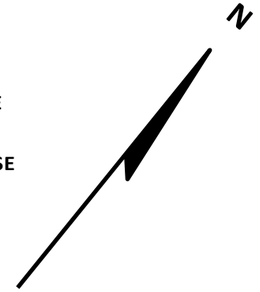
FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP.DWG
LAYOUT NAME - 024026_SP
PLOT DATE : 1/12/2018 12:06 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : **********
WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5,6,7	R ←
Ø2	8,9,10,11	R
Ø3	18,19	R ←
Ø4	24,25,26	R
Ø5	12,13,14	R ↓
Ø6	1,2,3,4	R
Ø7	27,28	R ←
Ø8	15,16,17	R
Ø2P	21,22	
Ø4P	41,42	
Ø6P	61,62	
Ø8P	81,82	
OLA	29,30	R
OLC	20,23	R
OLE	5,6,7	-
OLF	18,19	-
OLG	12,13,14	-
OLH	27,28	-



GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NON-CONFLICTING PHASE MAY START TIMING CONCURRENTLY. SEE CHART 1.
3. IF ANY OPPOSING THROUGH PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE DUE TO PERMISSIVE LEFT TURN CONFLICT.



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN.	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN.	X
7		4		X
8		4		X

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,3,4,7,8
2	5 OR 6	1,3,4,7,8
3	7 OR 8	1,2,4,5,6
4	7 OR 8	1,2,3,5,6
5	1 OR 2	3,4,6,7,8
6	1 OR 2	3,4,5,7,8
7	3 OR 4	1,2,5,6,8
8	3 OR 4	1,2,5,6,7

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	X
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS-

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	11	21	31	41	43*	52	62	72
CALLED PHASE	1	2	3	4		5	6	7
CALL OPTION	X	X	X	X		X	X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X		X	X	X
EXTEND TIME								
USE ADDED INITIAL	X	X	X	X		X	X	X
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
82								PLAN LOOP DETECTOR*(S)
8								CALLED PHASE
X								CALL OPTION
								DELAY TIME
X								EXTENTION OPTION
								EXTEND TIME
X								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	12	22	32	42	51	61	71	81
CALLED PHASE	1	2	3	4	5	6	7	8
CALL OPTION	X	X	X	X	X	X	X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME								
USE ADDED INITIAL	X	X	X	X	X	X	X	X
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
83*								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

*WIRED FOR FUTURE USE

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
PREEMPTION CHANNEL	1	2	3	4
MOVEMENT	←	→	↓	↑
DIRECTION	SB	NB	EB	WB
PHASE	2+5	6+1	4+7+OLA	8+3+OLC

NOTES: FULL CLEARANCE AND MINIMUM GREEN INTERVALS SHALL ALWAYS BE PROVIDED.

STH 37 (HENDRICKSON DRIVE) & CRAIG ROAD
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY
SIGNAL NO: S18-0241 CABINET TYPE: TS2
CONTROLLER TYPE: ASC/3 - 1000
DATE: 01/18 PAGE NO. 4 OF 4

2

PROJECT ID:	7110-05-02
INTERSECTION:	STH 37 & CRAIG ROAD

SIGNAL WIRE COLOR CODING			
	BLK - BLACK	RED - RED	GRN - GREEN
	WHT - WHITE	BLU - BLUE	ORG - ORANGE

					SIGNAL INDICATION WIRE COLOR										
CB_ TO	JUMPER	AWG 14 # OF COND.	HEAD NO.	PHASE	RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING> <YELLOW>	D/WALK	WALK	PED BUTTON	OTHER
SB1		12	16	8	RED	ORG	GRN								
			17	8	RED	ORG	GRN								
			19	3				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			36	2 PED								BLK	BLU	WHT/BLK	
SB2		12	6	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			8	2	RED	ORG	GRN								
			29	8 PED								BLK	BLU	WHT/BLK	
SB3		12	7	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			11	2	RED	ORG	GRN								
SB4		12	12	5				RED	ORG	GRN	BLU/BLK				
			21	8	RED/BLK				ORG/BLK	GRN/BLK					
SB5		7	2	6	RED	ORG	GRN								
			3	6	RED	ORG	GRN								
SB6		7	30	8 PED								BLK	BLU	WHT/BLK	
SB7		12	15	8	RED	ORG	GRN								
			25	7				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			31	6 PED								BLK	BLU	WHT/BLK	
SB8		7	20	8	RED				ORG	GRN					
SB9		12	23	4	RED	ORG	GRN								
			24	4	RED	ORG	GRN								
			26	7				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			32	6 PED								BLK	BLU	WHT/BLK	
SB10		12	1	6	RED	ORG	GRN								
			13	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			33	4 PED								BLK	BLU	WHT/BLK	
SB11		12	4	6	RED	ORG	GRN								
			14	5				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
SB12		7	5	1				RED	ORG	GRN	BLK				
SB13		7	28	4	RED				ORG	GRN					
SB14		7	9	2	RED	ORG	GRN								
			10	2	RED	ORG	GRN								
SB15		7	27	4	RED				ORG	GRN					
SB16		7	34	4 PED								BLK	BLU	WHT/BLK	
SB17		12	18	3	RED	ORG	GRN								
			22	4				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			35	2 PED								BLK	BLU	WHT/BLK	

EQUIPMENT GROUNDING	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	SB17
SB17	CB1

PULL BOX BONDING JUMPER 10 AWG	
FROM	TO
PB1	CB1
PB4	SB2
PB5	SB3
PB6	SB4
PB7	SB5
PB8	SB6
PB10	SB8
PB11	SB9
PB12	SB9
PB15	SB9
PB16	SB11
PB17	SB13
PB18	SB14
PB19	SB15
PB20	SB17
PB22	CB1

LIGHTING UF 2-12 AWG	
FROM	TO
CB1	SB3
SB3	LB1
LB1	LB2
LB1	SB8
SB8	LB3
CB1	LB6
LB6	SB15
SB15	LB4
LB4	LB5
LB4	SB11

EVP CABLE	
FROM	TO
CB1	SB14 (HEAD A)
CB1	SB5 (HEAD B)
CB1	SB9 (HEAD C)
CB1	SB1 (HEAD D)

STATE SUPPLIED CAT-5E CABLE	
FROM	TO
CB1	SB3 (LUMINAIRE ARM)
CB1	SB11 (LUMINAIRE ARM)

*USE THE WHITE CONDUCTOR IN THE CABLE ASSEMBLY AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
*AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRAIN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR.
"OTHER" COLUMN MAY INCLUDE SAHDOW BOX SIGN
*ALL CABLES SHALL BE LABELED WITH SIGNAL BASE NUMBER AT BOTH ENDS OF CABLE.

2

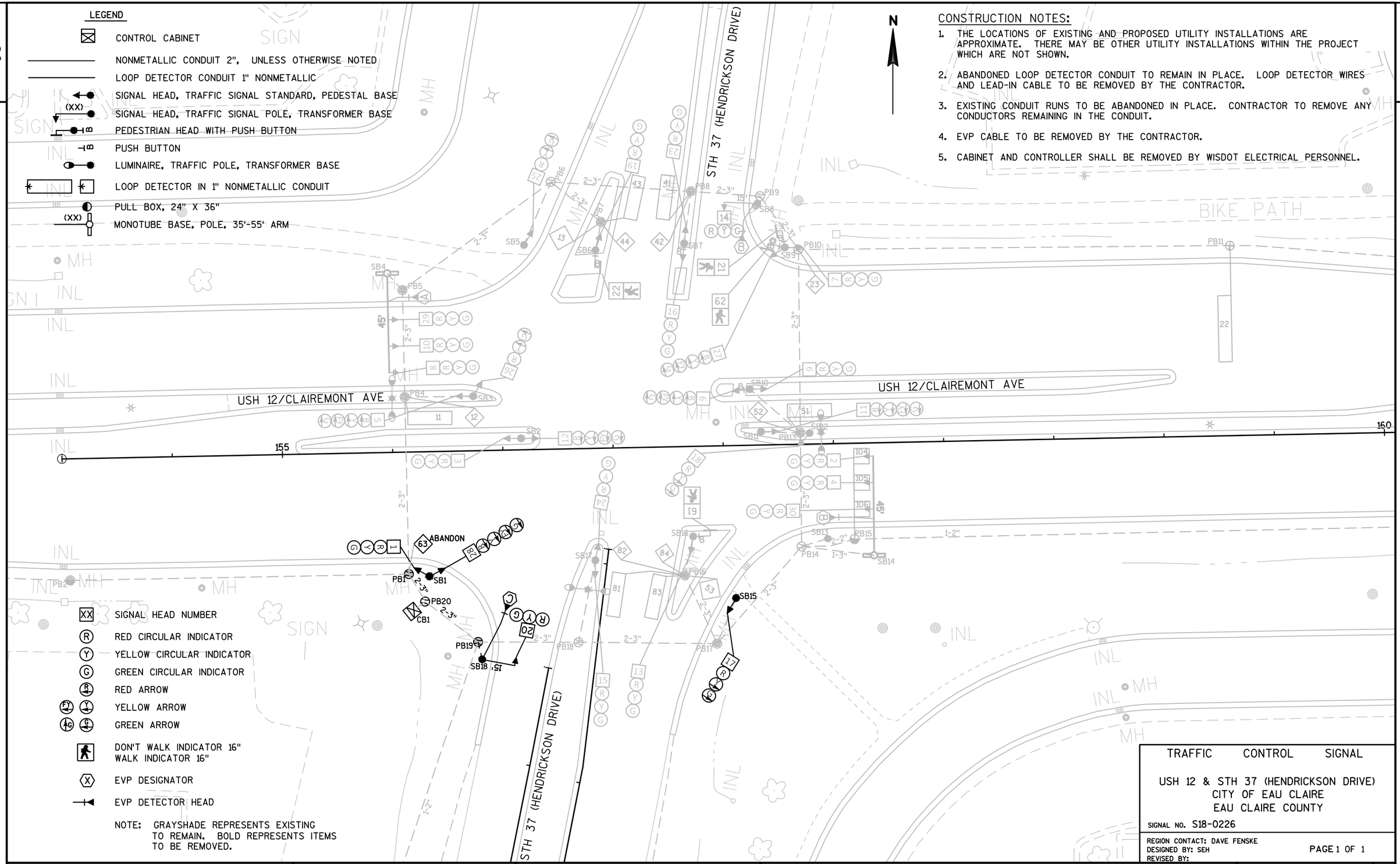
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM

N

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. ABANDONED LOOP DETECTOR CONDUIT TO REMAIN IN PLACE. LOOP DETECTOR WIRES AND LEAD-IN CABLE TO BE REMOVED BY THE CONTRACTOR.
3. EXISTING CONDUIT RUNS TO BE ABANDONED IN PLACE. CONTRACTOR TO REMOVE ANY CONDUCTORS REMAINING IN THE CONDUIT.
4. EVP CABLE TO BE REMOVED BY THE CONTRACTOR.
5. CABINET AND CONTROLLER SHALL BE REMOVED BY WISDOT ELECTRICAL PERSONNEL.



- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- RA RED ARROW
- YA YELLOW ARROW
- GA GREEN ARROW
- DON'T WALK INDICATOR 16"
  WALK INDICATOR 16"
- X EVP DESIGNATOR
- EVP DETECTOR HEAD

NOTE: GRAYSHADE REPRESENTS EXISTING TO REMAIN. BOLD REPRESENTS ITEMS TO BE REMOVED.

TRAFFIC CONTROL SIGNAL

USH 12 & STH 37 (HENDRICKSON DRIVE)
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0226

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 70	E

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- TRAFFIC SIGNAL INTERCONNECT CONDUIT 3", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55'
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, STEEL, 24" X 36"
- PULL BOX, STEEL, 24" X 42"

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (715) 225-0360.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
5. TRAFFIC SIGNAL CABINET AND CONTROLLER TO BE RELOCATED BY WISDOT PERSONNEL.
6. CONTRACTOR TO PULL AND SPLICE NEW SIGNAL CABLE TO ALL SIGNAL BASES. WISDOT PERSONNEL TO MAKE FINAL CONNECTIONS AT THE TRAFFIC SIGNAL CABINET.

N

USH 12/CLAIREMONT AVE

STH 37

MATCHLINE STA 154+04

MATCHLINE STA 159+66

METER BREAKER PEDESTAL

SHARED USE PATH

- SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y YELLOW ARROW
- G GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- Y YIELD SIGN

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

REVISION				
REV. NO.	RECONSTRUCT SW QUADRANT. ADD PHASE 4 AND PHASE 6 PEDESTRIAN CROSSINGS.			
	APPROVAL RECOMMENDED		APPROVED	
3	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY

TRAFFIC CONTROL SIGNAL
USH 12 & STH 37
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY
CABINET TYPE: TS-1
SIGNAL NO. S18-0226 CONTROLLER TYPE: ASC/3-2100

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 6-13-08 TIM MASON, REGION TRAFFIC ENGINEER

APPROVED
DATE 7-3-08 JOANNA L. BUSH, STATE TRAFFIC ENGINEER

REGION CONTACT: DAVE FENSKE
DESIGNED BY:
REVISED BY: SEH

PAGE 1 OF 3

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 71 E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP.DWG
LAYOUT NAME - 024035_SP

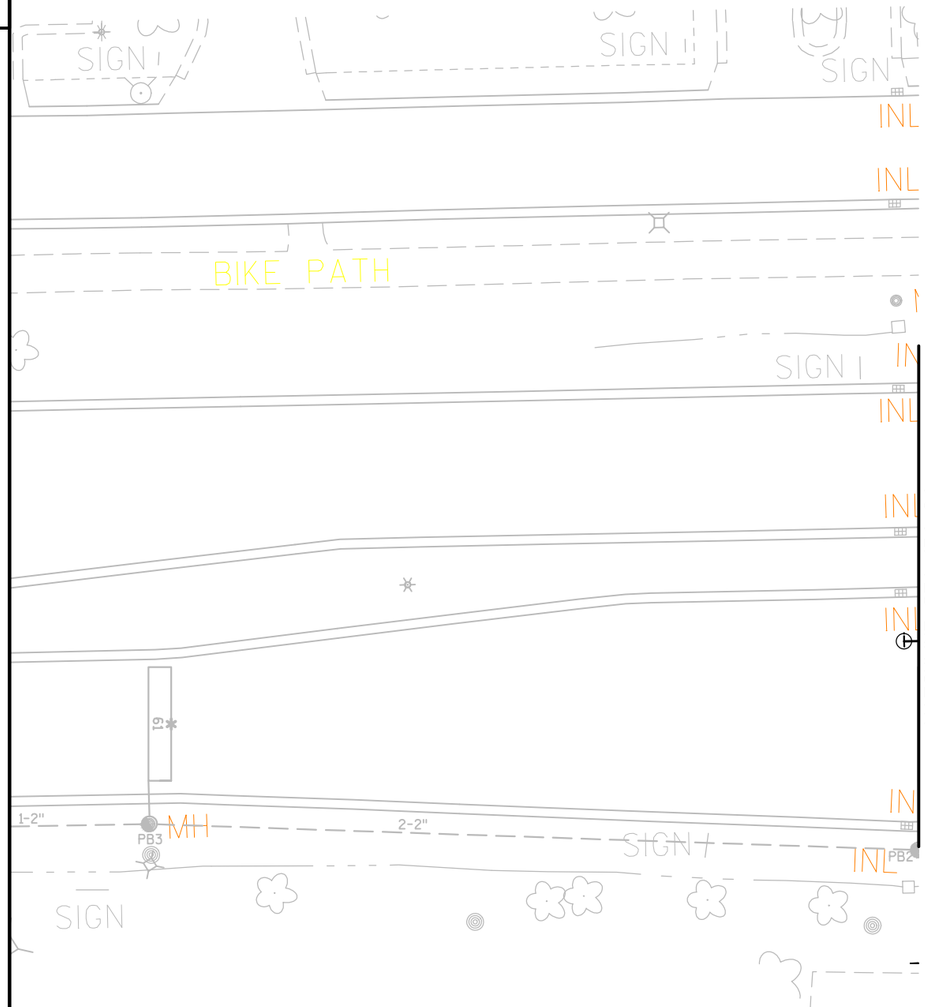
PLOT DATE : 1/12/2018 12:07 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

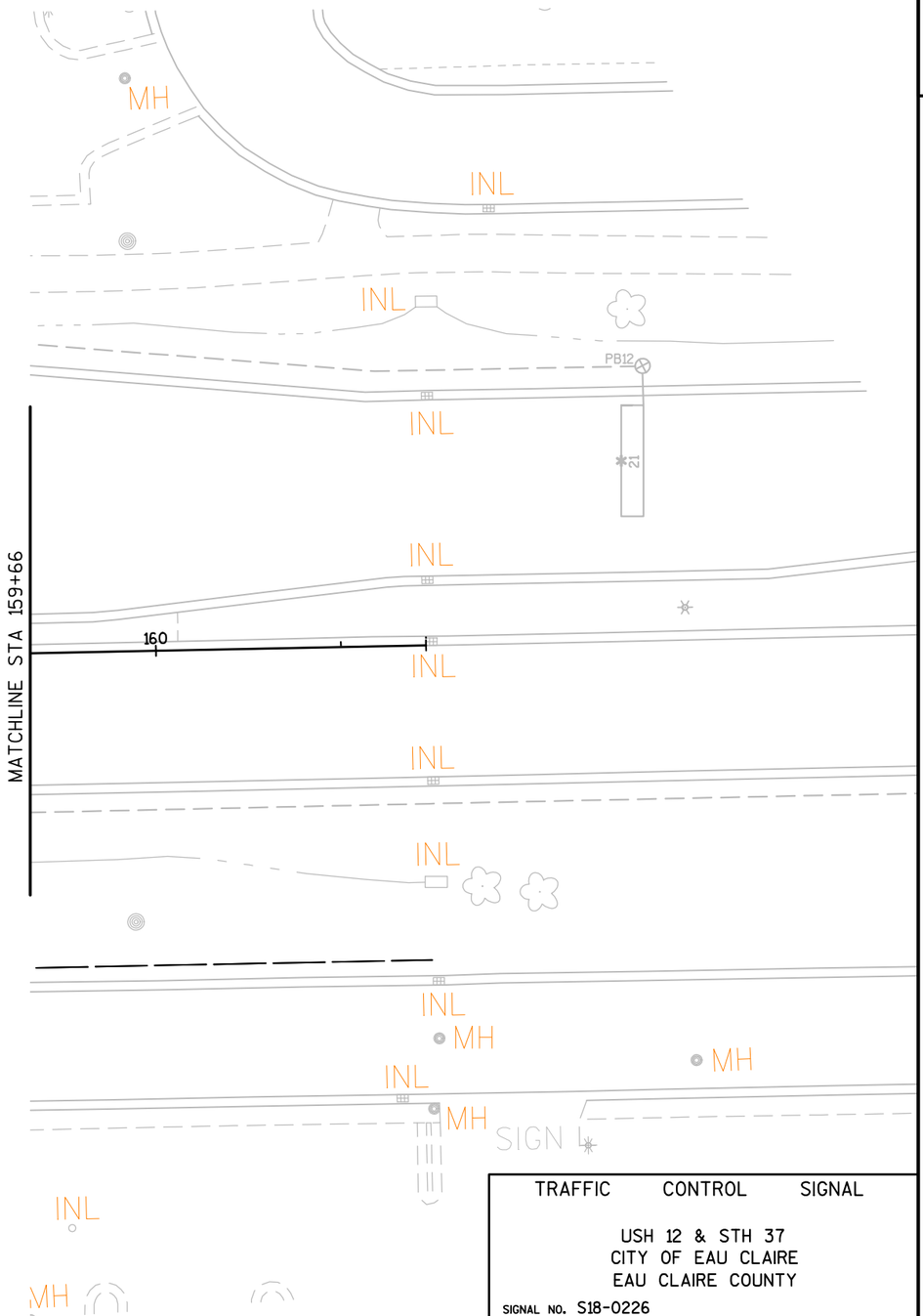
WISDOT/CADDS SHEET 42

2

2

N





TRAFFIC CONTROL SIGNAL

USH 12 & STH 37
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0226

REGION CONTACT: DAVE FENSKE
DESIGNED BY: SEH
REVISED BY:

PAGE 2 OF 3

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 72	E

FILE NAME : P:\UZ\W\WITNW\141730\10-CIVIL 3D\CIVIL 3D\71100502\SHEETSPLAN\TRAFFIC SIGNALS\024000_SP.DWG
LAYOUT NAME - 024036_SP

PLOT DATE : 1/12/2018 12:07 PM PLOT BY : JOSHUA WOLLER PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

SEQUENCE OF OPERATION

RING 1

	HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **	Ø2 R/W	Ø2 CLEAR TO **	Ø3 R/W	Ø3 CLEAR TO **	Ø4 R/W	Ø4 CLEAR TO **	FLASH
Ø1	5,6,27	G	Y R	-	- -			R	R R	R
Ø2	7,8,9,10,29	R	R R	G	Y R			R	R R	R
Ø3										
Ø4	19,20,23,24	R	R R	R	R R			G	Y R	R
Ø5	11,12,28	R	R R	R	R R			R	R R	R
Ø6	1,2,3,4,30	R	R R	R	R R			R	R R	R
Ø7										
Ø8	13,14,15,16	R	R R	R	R R			R	R R	R
OLB	25,26	G	Y R	R	R R			R	R R	R
OLD	17,18	R	R R	R	R R			R	R R	R
OLA	5,6,27	-	- -	FY	Y R			-	- -	
OLC	11,12,28	-	- -	-	- -			-	- -	
Ø2P	21,22	DW	DW DW	*	DW DW			DW	DW DW	
Ø4P	41,42	DW	DW DW	DW	DW DW			*	DW DW	
Ø6P	61,62	DW	DW DW	DW	DW DW			DW	DW DW	
Ø8P	81,82	DW	DW DW	DW	DW DW			DW	DW DW	

RING 2

	HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **	Ø6 R/W	Ø6 CLEAR TO **	Ø7 R/W	Ø7 CLEAR TO **	Ø8 R/W	Ø8 CLEAR TO **
Ø1	5,6,27	R	R R	R	R R			R	R R
Ø2	7,8,9,10,29	R	R R	R	R R			R	R R
Ø3									
Ø4	19,20,23,24	R	R R	R	R R			R	R R
Ø5	11,12,28	G	Y R	-	- -			R	R R
Ø6	1,2,3,4,30	R	R R	G	Y R			R	R R
Ø7									
Ø8	13,14,15,16	R	R R	R	R R			G	Y R
OLE	25,26	R	R R	R	R R			R	R R
OLF	17,18	G	Y R	R	R R			R	R R
OLG	5,6,27	-	- -	-	- -			-	- -
OLH	11,12,28	-	- -	FY	Y R			-	- -
Ø2P	21,22	DW	DW DW	DW	DW DW			DW	DW DW
Ø4P	41,42	DW	DW DW	DW	DW DW			DW	DW DW
Ø6P	61,62	DW	DW DW	*	DW DW			DW	DW DW
Ø8P	81,82	DW	DW DW	DW	DW DW			*	DW DW

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	LOOP SIZE	NUMBER OF TURNS
11	1	X			1	1				6X20	3
12	2	X			1	1				6X6	4
*13	3		(NOT	USED)						6X6	3
21	4	X			2	2				6X30	4
22	4	X			2	2				6X30	3
*23	5		(NOT	USED)						6X6	3
41	6	X			4	4				6X20	3
42	7	X			4	4				6X6	4
43	8	X			4	4				6X20	4
44	9	X			4	4				6X6	5
51	10	X			5	5				6X20	3
52	11	X			5	5				6X6	4
*53	12		(NOT	USED)						8X8	3
61	13	X			6	6				6X30	4
62	13	X			6	6				6X30	3
*63	14		(NOT	USED)						6X6	3
81	15	X			8	8				6X20	3
82	16	X			8	8				6X6	4
83	17	X			8	8				6X20	4
84	18	X			8	8				6X6	5
*104	19		(NOT	USED)						7X7	3
*105	20		(NOT	USED)						7X7	4
*106	21		(NOT	USED)						7X7	3

* WIRED IN CABINET FOR FUTURE USE

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1.)
3. WHEN OPPOSING THRU PHASES ARE TIMING CONCURRENTLY THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PHASE 1 CONSISTS OF THE EB LEFT MOVEMENT AND THE SB RIGHT MOVEMENT TIMING CONCURRENTLY.
5. PHASE 5 CONSISTS OF THE WB LEFT MOVEMENT AND THE NB RIGHT MOVEMENT TIMING CONCURRENTLY.
6. OL "B" TO TIME WITH PHASE 1 WHILE IN NORMAL OPERATION AND PHASE 4 WHEN THE SB (CHANNEL 3) EVP HAS BEEN ACTIVATED.
7. OL "D" TO TIME WITH PHASE 5 WHILE IN NORMAL OPERATION AND PHASE 8 WHEN THE NB (CHANNEL 4) EVP HAS BEEN ACTIVATED.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2,4,8
2	5 OR 6	1,4,8
3		
4	8	1,2,5,6
5	1 OR 2	4,6,8
6	1 OR 2	4,5,8
7		
8	4	1,2,5,6

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
QUEUE DETECTOR	
LIFT BRIDGE	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE RECALL
1		6		X
2	X	6	MIN.	X
3				
4		8		X
5		2		X
6	X	2	MIN.	X
7				
8		4		X

N

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLE	1	2
OLF		
OLG	5	6
OLH		

TYPE OF LIGHTING	
BY OTHER AGENCY	X
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
CLOSED LOOP TWISTED PAIR	
FIBER OPTIC (NETWORK)	X
INTERSECTION ONLY (CELL MODEM)*	
*LOCATION OF CELL MODEM CONTROLLER NO:	
SIGNAL SYSTEM #: SS-18-0132	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	CHANNEL A	CHANNEL B	CHANNEL C	CHANNEL D
MOVEMENT	←	→	↓	↑
DIRECTION	WB	EB	SB	NB
PHASE	2+5	6+1	4+OLB	8+OLD

NOTES:
FULL CLEARANCE AND MINIMUM GREEN INTERVALS SHALL ALWAYS BE PROVIDED

USH 12 & STH 37
CITY OF EAU CLAIRE
EAU CLAIRE COUNTY

SIGNAL NO. S18-0226

CONTROLLER TYPE: ASC/3-2100

DATE 01/18

PAGE NO. 3 OF 3

PROJECT ID:	**7110-05-02**
INTERSECTION:	**USH 12 & STH 37**

SIGNAL WIRE COLOR CODING	BLK - BLACK	RED - RED	GRN - GREEN
	WHT - WHITE	BLU - BLUE	ORG - ORANGE

					SIGNAL INDICATION WIRE COLOR										
CB_ TO	**JUMPER**	**AWG 14 # OF COND.**	**HEAD NO.**	**PHASE**	**RED**	**YELLOW**	**GREEN**	**<RED>**	**<YELLOW>**	**<GREEN>**	**<FLASHING> <YELLOW>**	**D/WALK**	**WALK**	**PED BUTTON**	**OTHER**
SB2		12	3	6	RED	ORG	GRN								
			12	5				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			BUTTON	4 PED										WHT/BLK	
SB3		12	5	1				RED	ORG	GRN	BLU/BLK				
			26	14	RED/BLK				ORG/BLK	GRN/BLK					
SB4		12	8	2	RED	ORG	GRN								
			10	2	RED	ORG	GRN								
			29	2	RED	ORG	GRN								
SB5		7	25	14	RED				ORG	GRN					
SB6		12	19	4	RED	ORG	GRN								
			22	2 PED								BLK	BLU		
			BUTTON	2 PED										WHT/BLK	
SB7		12	16	8	RED	ORG	GRN								
			23	4	RED/BLK	ORG/BLK	GRN/BLK								
			BUTTON	2 PED										WHT/BLK	
SB8		7	14	8	RED	ORG	GRN								
SB9		15	7	2	RED	ORG	GRN								
			21	2 PED								BLK	BLU		
			27	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			82	8 PED								RED/WHT	GRN/WHT		
			BUTTON	2 PED										WHT/BLK	
			BUTTON	8 PED										BLK/WHT	
SB10		12	6	1				RED/BLK	ORG/BLK	GRN/BLK	BLU/BLK				
			9	2	RED	ORG	GRN								
			BUTTON	8 PED										WHT/BLK	
SB11		7	11	5				RED	ORG	GRN	BLU/BLK				
SB12		7	18	16	RED				ORG	GRN					
SB14		12	2	6	RED	ORG	GRN								
			4	6	RED	ORG	GRN								
			30	6	RED	ORG	GRN								
SB15		7	17	16	RED				ORG	GRN					
SB16		12	13	8	RED	ORG	GRN								
			81	8 PED								BLK	BLU		
			BUTTON	8 PED										WHT/BLK	
SB17		12	15	8	RED	ORG	GRN								
			24	4	RED/BLK	ORG/BLK	GRN/BLK								
			BUTTON	6 PED										WHT/BLK	
SB18		7	41	4 PED								BLK	BLU		
			BUTTON	4 PED										WHT/BLK	
SB19		7	62	6 PED								BLK	BLU		
			BUTTON	6 PED										WHT/BLK	
SB20		7	20	4	RED	ORG	GRN								
SB21		7	61	6 PED								BLK	BLU		
			BUTTON	6 PED										WHT/BLK	
SB22		12	1	6	RED	ORG	GRN								
			28	5				RED/BLK	GRN/BLK	ORG/BLK	BLU/BLK				
			42	4 PED								BLK	BLU		
			BUTTON	4 PED										WHT/BLK	

EQUIPMENT GROUNDING	
FROM	TO
CB1	SB2
SB4	SB18
SB18	SB5
SB14	SB15
SB15	SB16
SB16	SB19
SB19	SB17
SB17	SB20
SB20	SB1
SB1	CB1

PULL BOX BONDING JUMPER 10 AWG	
FROM	TO
PB21	CB1
PB23	CB1
PB24	CB1
PB25	SB20

LIGHTING UF 2-12 AWG	
FROM	TO

EVP CABLE	
FROM	TO
CB1	SB4 (HEAD A)
CB1	SB14 (HEAD B)
CB1	SB20 (HEAD C)
CB1	SB8 (HEAD D)

*USE THE WHITE CONDUCTOR IN THE CABLE ASSEMBLY AS THE GROUNDED CONDUCTOR FOR ALL TRAFFIC SIGNAL INDICATIONS
*ENSURE THE GROUNDED CONDUCTOR IN THE FEEDER CABLE AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
*AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRAIN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR. "OTHER" COLUMN MAY INCLUDE SAHDOW BOX SIGN
*ALL CABLES SHALL BE LABELED WITH SIGNAL BASE NUMBER AT BOTH ENDS OF CABLE.

2

2

MARKING LINE EPOXY 8-INCH

MARKING LINE EPOXY 4-INCH DOUBLE YELLOW

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING ISLAND NOSE EPOXY

MARKING CURB EPOXY

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH YELLOW

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

MARKING CURB EPOXY

MARKING ISLAND NOSE EPOXY

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING LINE EPOXY 8-INCH

MARKING LINE EPOXY 4-INCH DOUBLE YELLOW

ONLY MARKING WORD EPOXY

MARKING ARROW EPOXY

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH

MARKING STOP LINE EPOXY 18-INCH

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

MARKING LINE GROOVED REFLECTIVE EPOXY 4-INCH YELLOW

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PAVEMENT MARKING	SHEET 76 E

FILE NAME : N:\PDS\C3D\71100502\DESIGN\VIEWFRAMEGROUPS\PM.DWG
LAYOUT NAME - 0201 - (1)

PLOT DATE : 10/18/2017 12:35 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MARKING LINE GROOVED
WET REFLECTIVE EPOXY 4-INCH WHITE

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH YELLOW

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

STH 37

70+00 72+00 74+00 76+00 78+00 80+00 82+00

SIGN

MH

INL

W

SLABS

FILLER CAP

CANOPY

G.P.[8]

MARKING WORD EPOXY

MARKING ARROW EPOXY

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH

MARKING STOP LINE EPOXY 18-INCH

MARKING LINE EPOXY 8-INCH

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING CURB EPOXY

MARKING ISLAND NOSE EPOXY

MARKING LINE EPOXY 4-INCH DOUBLE YELLOW

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING CURB EPOXY

MARKING ISLAND NOSE EPOXY

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

MARKING LINE EPOXY 8-INCH

MARKING LINE EPOXY 4-INCH DOUBLE YELLOW

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH YELLOW

MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE

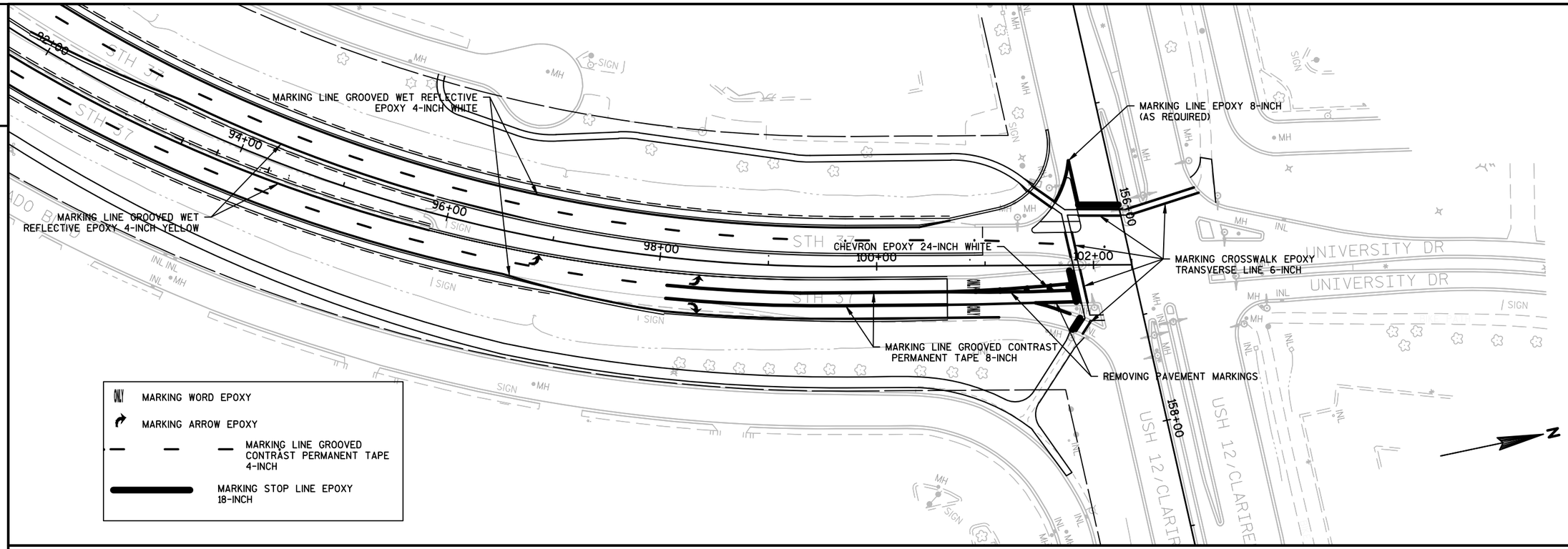
84+00 86+00 88+00 90+00 92+00 94+00 96+00 98+00 10+00 12+00 8+00

ATRIUM CT

ELDORADO BLVD

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PAVEMENT MARKING	SHEET 77	E

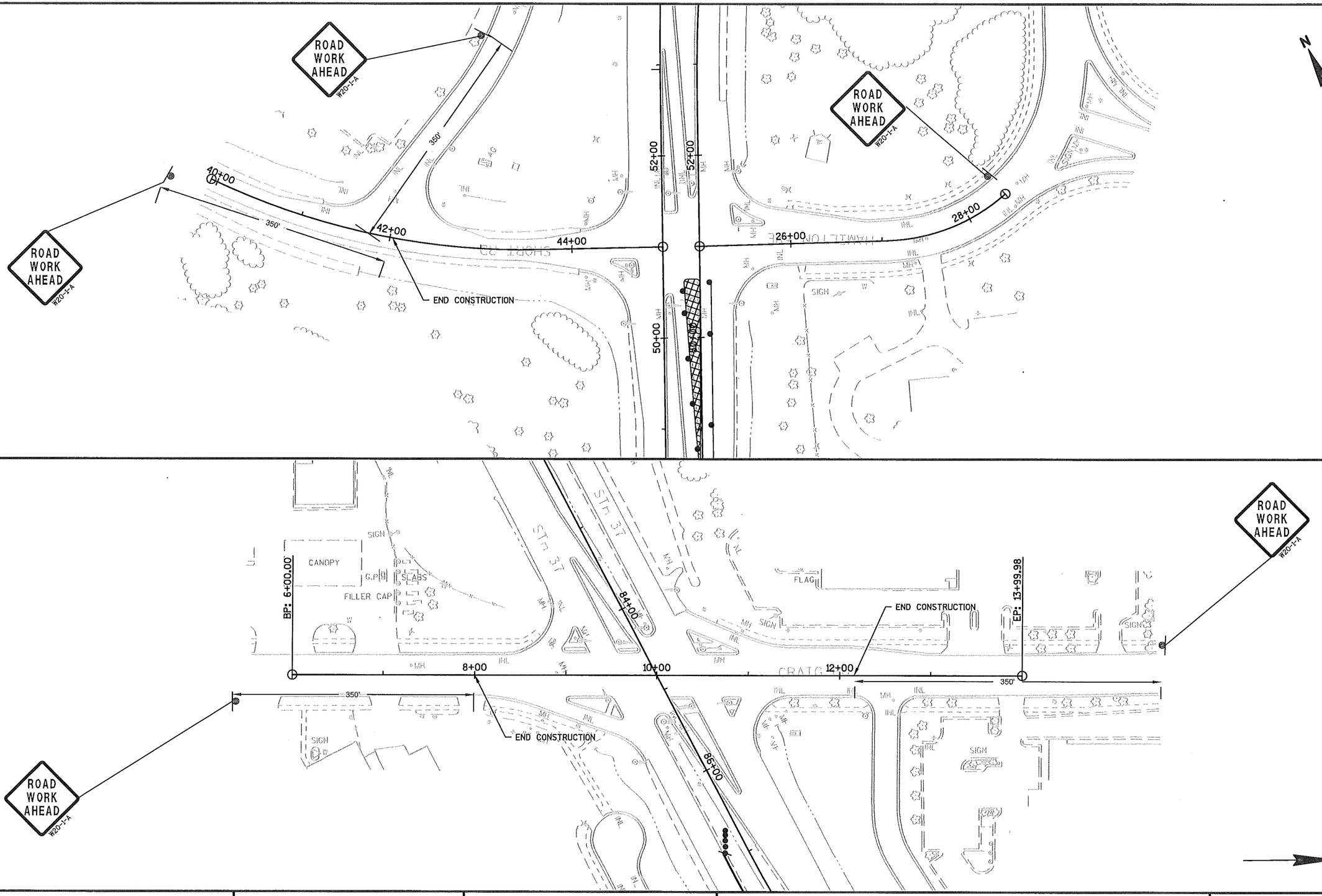
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PAVEMENT MARKING	SHEET 78	E

FILE NAME : N:\PDS\C3D\71100502\DESIGN\VIEWFRAMEGROUPS\PM.DWG
LAYOUT NAME - 0201 - (5)
PLOT DATE : 10/18/2017 12:41 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

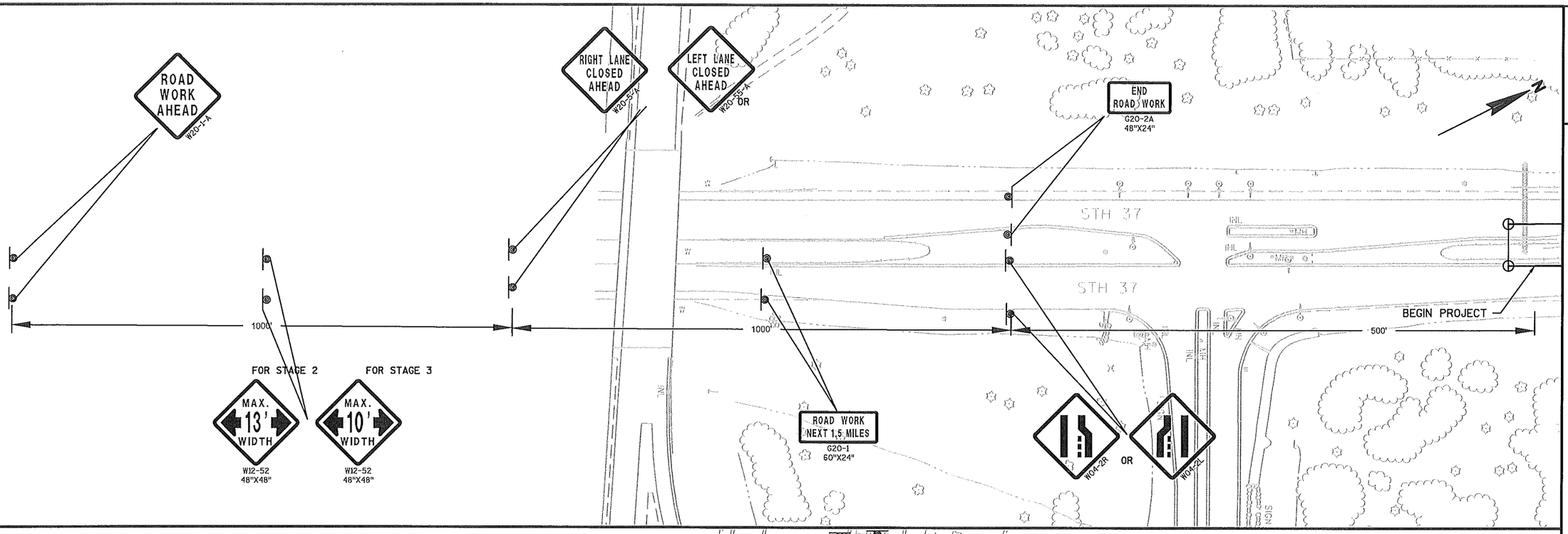


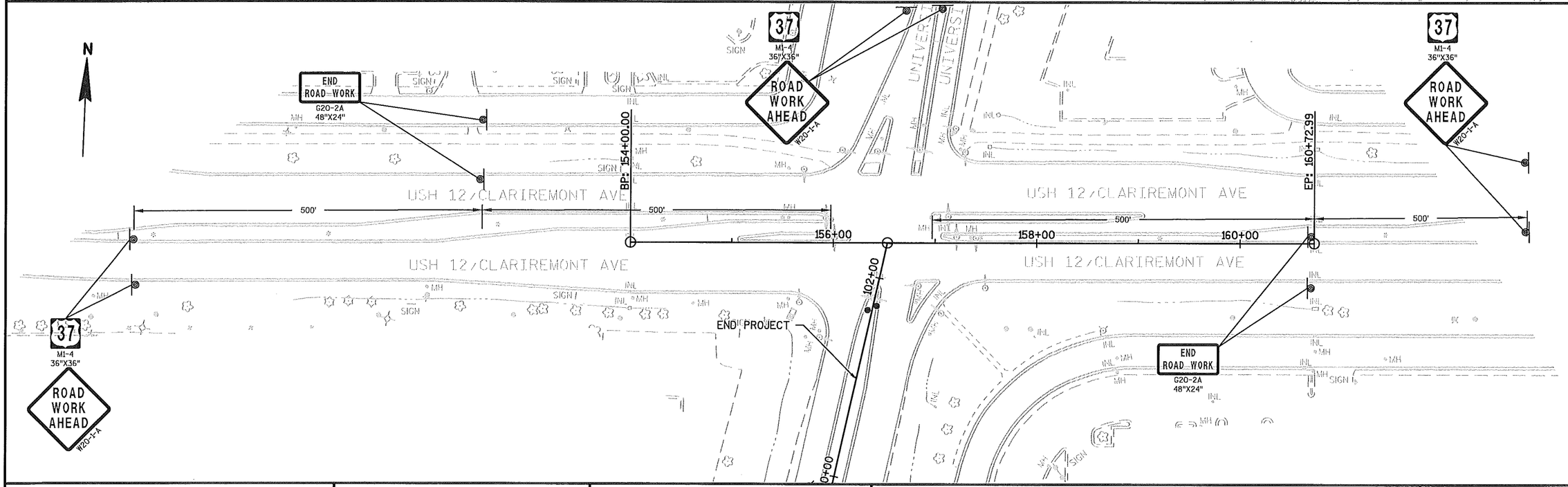
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - ALL STAGES	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 1.DWG
LAYOUT NAME - AW3

PLOT DATE : 11/3/2016 6:52 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

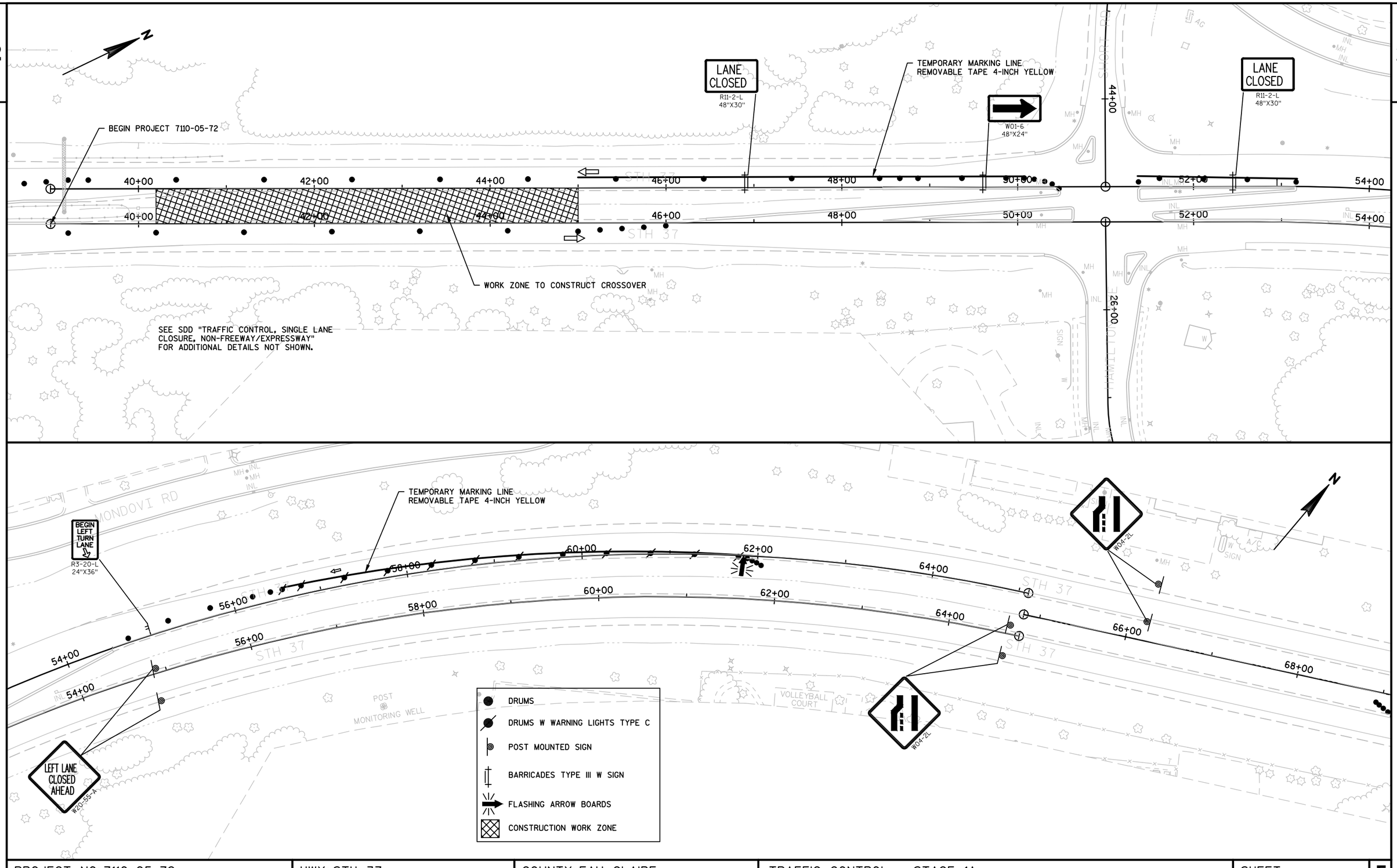
2





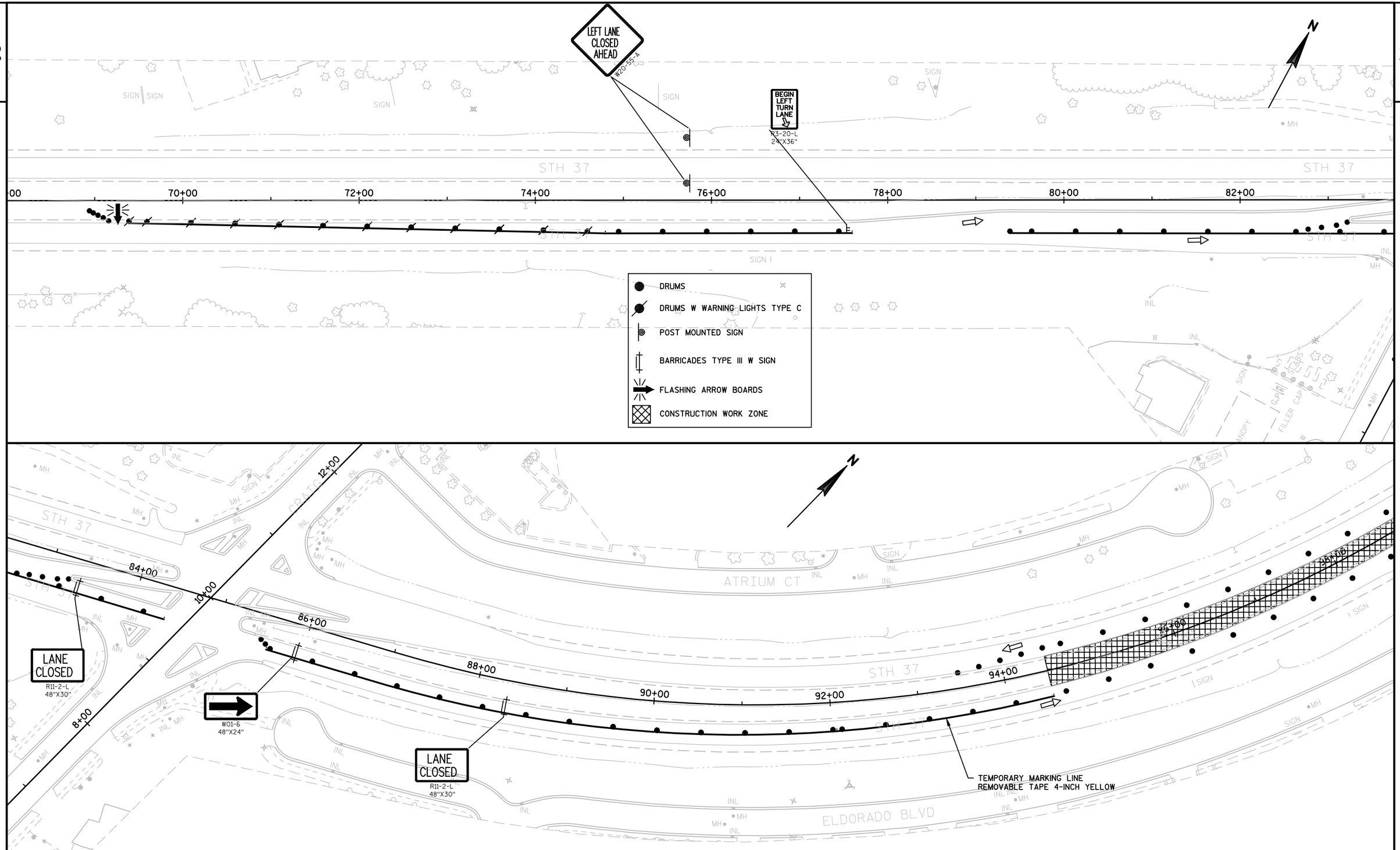
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - ALL STAGES	SHEET	E

2

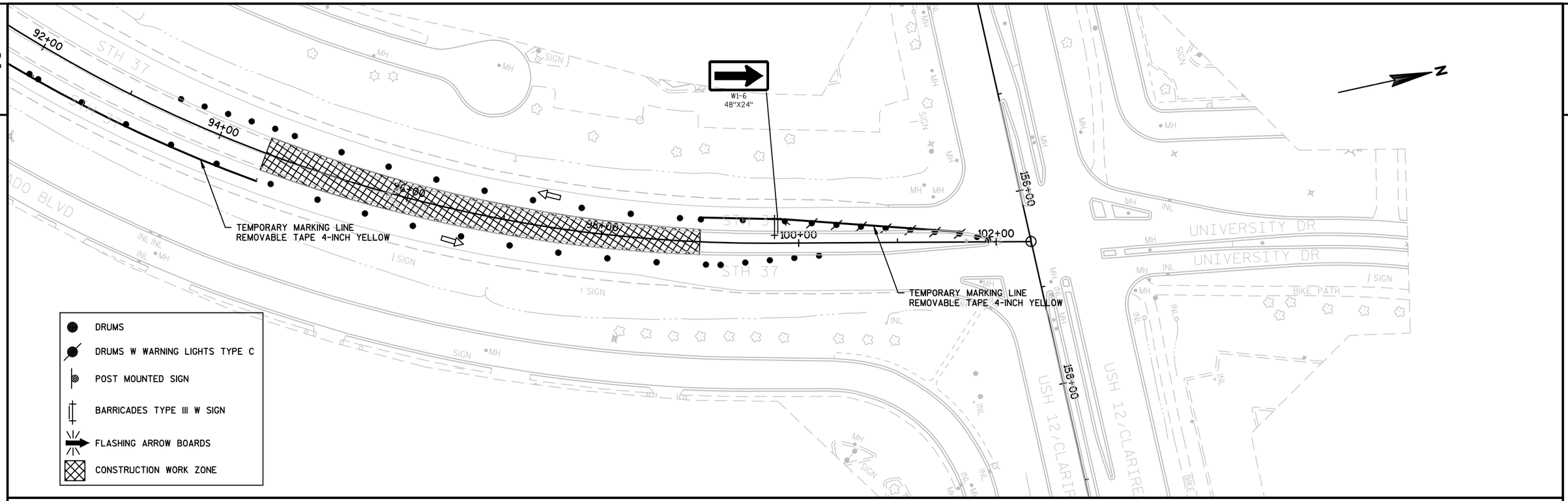


PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 1A	SHEET 81	E

2



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 1A	SHEET 82	E



2

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 1A	SHEET 83	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 1A.DWG
LAYOUT NAME - 0201 - (5)
PLOT DATE : 1/10/2018 1:53 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

N

BEGIN PROJECT 7110-05-72

ASPHALTIC SURFACE TEMPORARY

40+00 42+00 44+00 46+00 48+00 50+00 52+00 54+00

STH 37

WORK ZONE TO CONSTRUCT TURN LANE AND TAPER (BELOW CONCRETE PAVEMENT)

LANE CLOSED
R11-2-L
48"X30"

WORK ZONE TO REMOVE ISLAND ASPHALTIC SURFACE TEMPORARY REQ'D

LANE CLOSED
R11-2-L
48"X30"

SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL DETAILS NOT SHOWN.

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW

WORK ZONE TO REMOVE ISLAND ASPHALTIC SURFACE TEMPORARY REQ'D

44+00

26+00

W01-6
48"X24"

LANE CLOSED
R11-2-L
48"X30"

MONDOVI RD

BEGIN RIGHT TURN LANE
R3-20-RR
24"X36"

54+00 56+00 58+00 60+00 62+00 64+00 66+00 68+00

W04-2R

POST MONITORING WELL

VOLLEYBALL

DRUMS

DRUMS W WARNING LIGHTS TYPE C

POST MOUNTED SIGN

BARRICADES TYPE III W SIGN

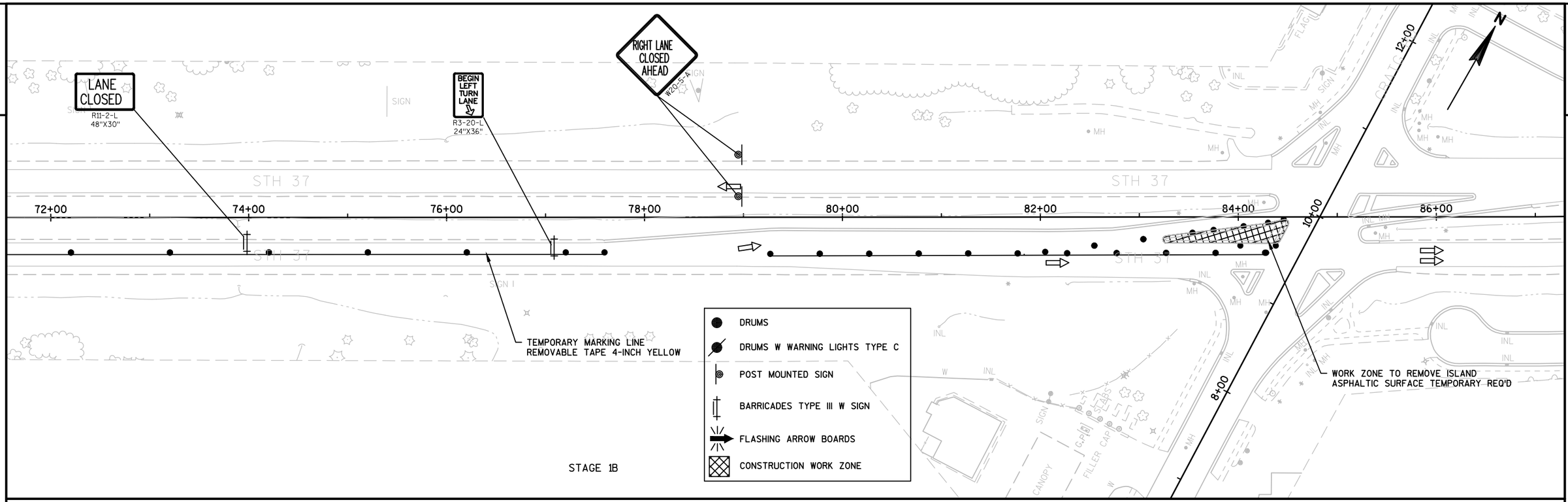
FLASHING ARROW BOARDS

CONSTRUCTION WORK ZONE

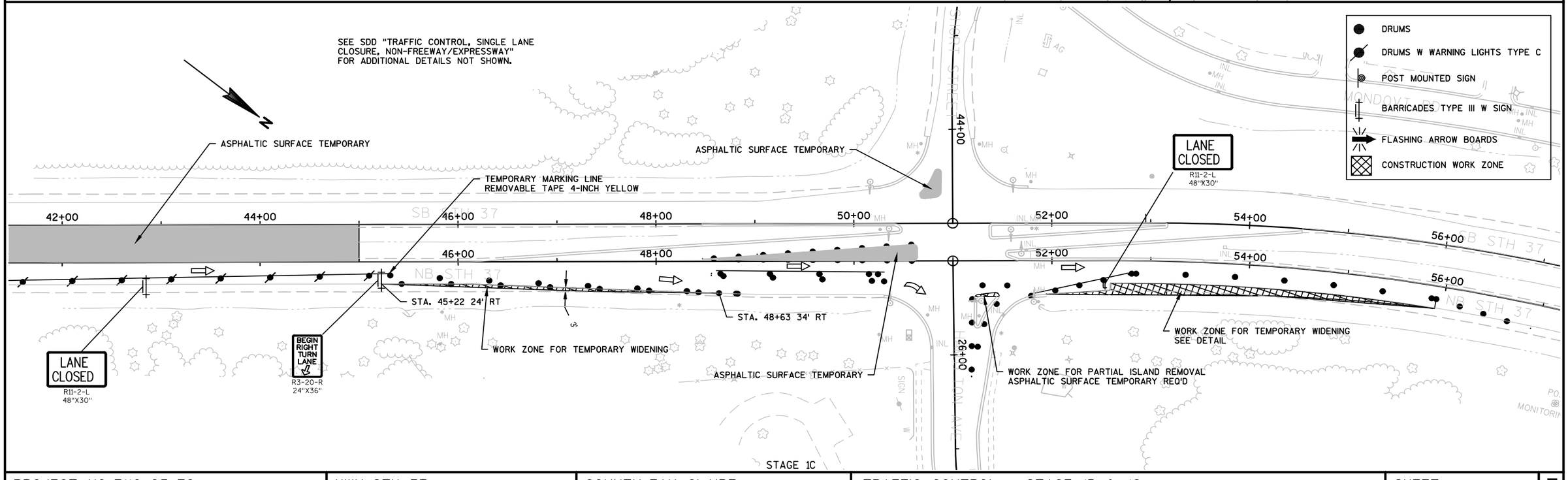
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 1B	SHEET 84	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 1B.DWG
LAYOUT NAME - 0201 - (1)
PLOT DATE : 1/10/2018 1:55 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



STAGE 1B

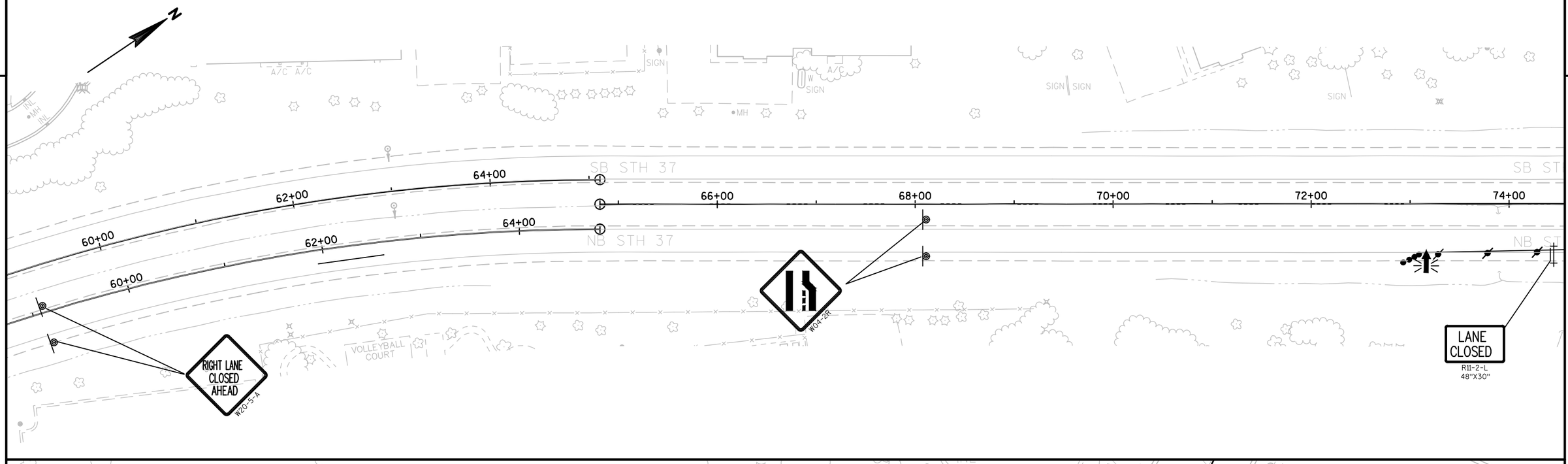


STAGE 1C

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 1B & 1C	SHEET 85	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 1B.DWG
LAYOUT NAME - 0201 - (3)
PLOT DATE : 1/10/2018 1:56 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 1C	SHEET 86	E

2

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

ROAD
CLOSED
R11-2
48"X30"

BEGIN
LEFT
TURN
LANE
R3-20-L
24"X36"

W01-4R

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

40+00
42+00
44+00
46+00
48+00
50+00
52+00
54+00

TEMPORARY MARKING LINE
PAINT 4-INCH YELLOW

TEMPORARY MARKING LINE
PAINT 8-INCH WHITE

TEMPORARY MARKING
ARROW PAINT

TEMPORARY MARKING
STOP LINE PAINT 18-INCH

ASPHALTIC SURFACE TEMPORARY

26+00

SEE SDD "TRAFFIC CONTROL, SINGLE LANE
CLOSURE, NON-FREEWAY/EXPRESSWAY"
AND SDD "TRAFFIC CONTROL, TWO LANE
TWO WAY OPERATION"
AND SDD "TRAFFIC CONTROL, SINGLE LANE
CROSSOVER"
FOR ADDITIONAL DETAILS NOT SHOWN

W06-3

NEXT
1.1 MILES
W057-51
48"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

MONDOVI RD

54+00
56+00
58+00
60+00
62+00
64+00
66+00
68+00

TEMPORARY MARKING LINE
PAINT 4-INCH YELLOW

ASPHALTIC SURFACE TEMPORARY

W06-3

DO
NOT
PASS
R4-1
24"X30"

DRUMS

DRUMS W WARNING LIGHTS TYPE C

POST MOUNTED SIGN

BARRICADES TYPE III W SIGN

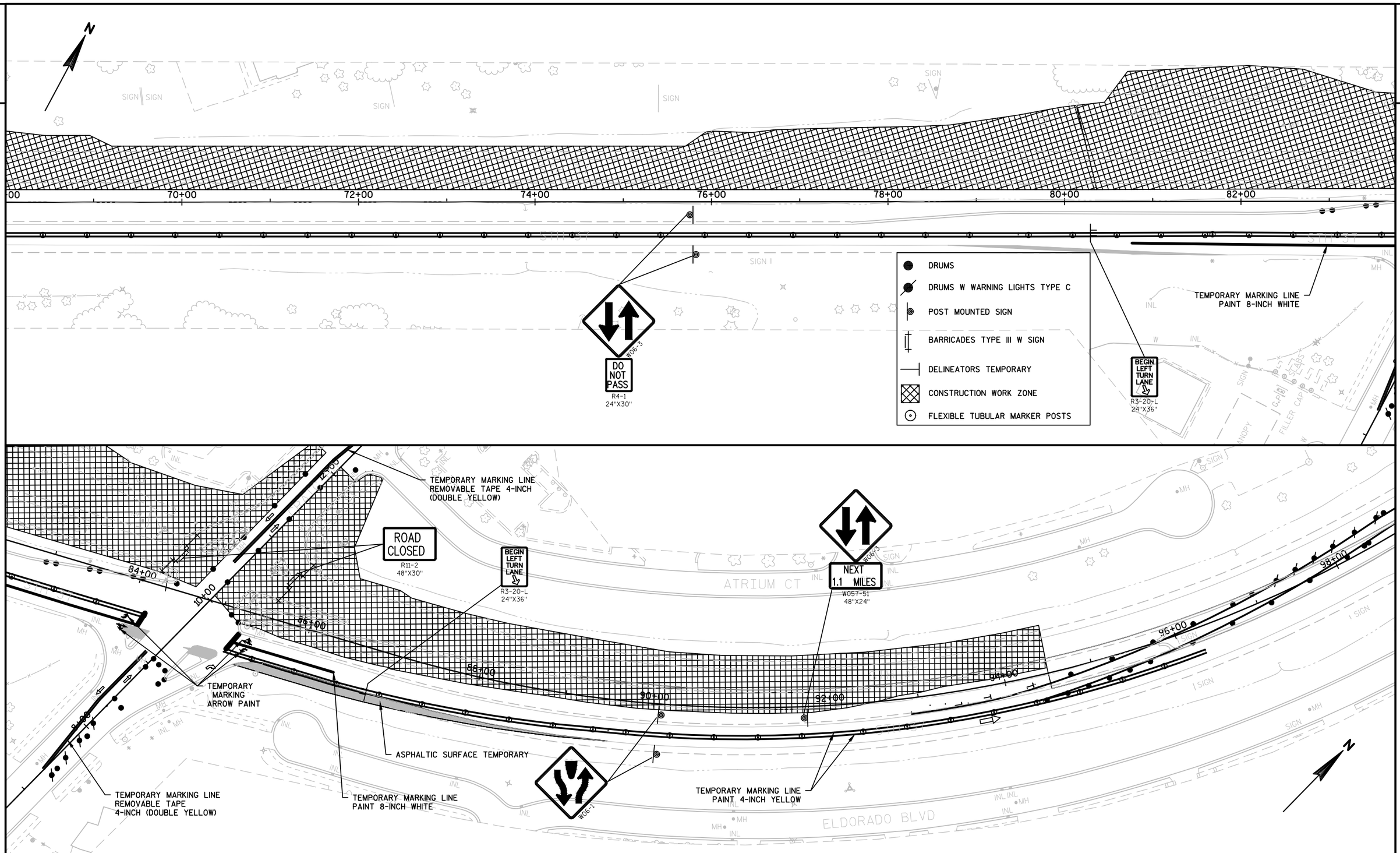
DELINEATORS TEMPORARY

CONSTRUCTION WORK ZONE

FLEXIBLE TUBULAR MARKER POSTS

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 2A	SHEET 87	E

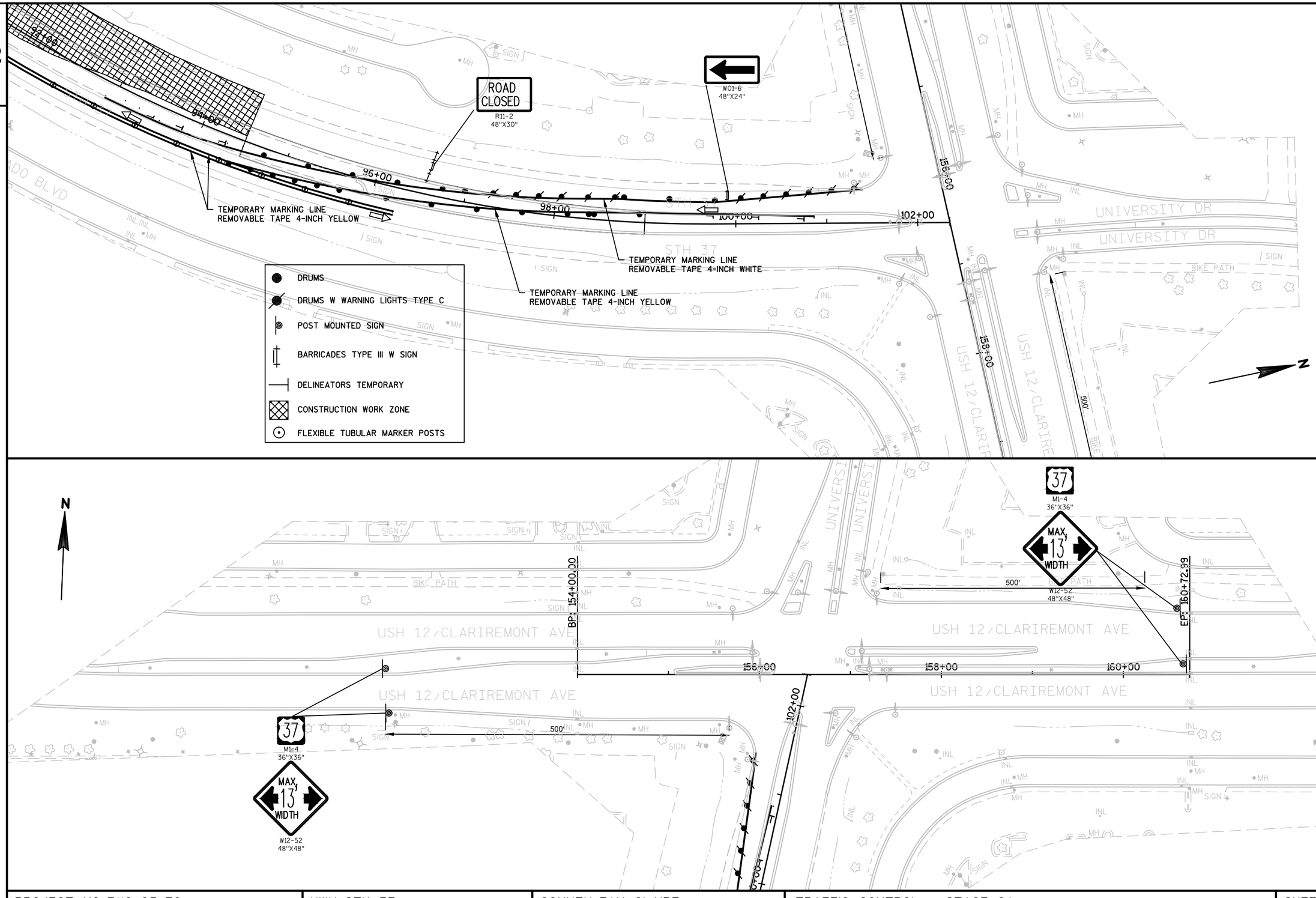
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 2A	SHEET 88	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 2.DWG
LAYOUT NAME - 0201 - (3)
PLOT DATE : 1/10/2018 1:59 PM
PLOT BY : KRUG, GARY W
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 2A	SHEET 89	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 2.DWG
LAYOUT NAME - 0201 - (5)

PLOT DATE : 1/10/2018 1:59 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

SIDEWALK CLOSED AHEAD
CROSS HERE
R9-11
SIZE

W11-2
30"X30"
W16-7L
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

84+00

85+00

86+00

TEMPORARY PEDESTRIAN
SAFETY FENCE

SIDEWALK CLOSED
CROSS HERE
R9-11-A
48"X24"

W11-2
30"X30"
AHEAD
W16-9P
24"X8"

7+00
8+00
9+00
10+00
11+00
12+00
13+00

TEMPORARY CURB RAMP

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH WHITE

SIGN LOCATIONS TO BE
DETERMINED BY THE ENGINEER

DRUMS
DRUMS W WARNING LIGHTS TYPE C
POST MOUNTED SIGN
BARRICADES TYPE III W SIGN
BARRICADES TYPE III
CONSTRUCTION WORK ZONE
SIGN ON TEMPORARY SUPPORT

LANE
CLOSED
R11-2-L
48"X30"

TEMPORARY PEDESTRIAN
SAFETY FENCE

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - PEDESTRIAN PLAN STAGE 2	SHEET 90 E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL_PEDESTRIANS AT_CRAIG 1 & 2.DWG
LAYOUT NAME - TC_CRAIG 4

PLOT DATE : 1/10/2018 2:03 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

SIDEWALK CLOSED R9-9 24"X12"

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH WHITE

BEGIN LEFT TURN LANE R3-20-L 24"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

BEGIN LEFT TURN LANE R3-20-L 24"X36"

W06-1

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW

TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH WHITE

40+00 42+00 44+00 46+00 48+00 50+00 52+00 54+00

TEMPORARY MARKING ARROW REMOVABLE TAPE

SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" AND SDD "TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION" AND SDD "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS NOT SHOWN

ROAD CLOSED R11-2 48"X30"

W06-3

NEXT 1.1 MILES W057-51 48"X24"

ROAD CLOSED R11-2 48"X30"

TEMPORARY MARKING ARROW REMOVABLE TAPE

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

SIDEWALK CLOSED R9-9 24"X12"

W06-3

DO NOT PASS R4-1 24"X30"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

MONDOVI RD

54+00 56+00 58+00 60+00 62+00 64+00 66+00 68+00

POST MONITORING WELL

VOLLEYBALL COURT

- DRUMS
- DRUMS W WARNING LIGHTS TYPE C
- POST MOUNTED SIGN
- BARRICADES TYPE III W SIGN
- DELINEATORS TEMPORARY
- CONSTRUCTION WORK ZONE
- FLEXIBLE TUBULAR MARKER POSTS

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 3A	SHEET 91	E

2

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

W06-3

DO NOT PASS
R4-1
24"X30"

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

MGS GUARDRAIL TEMPORARY

70+00 72+00 74+00 76+00 78+00 80+00 82+00

- DRUMS
- DRUMS W WARNING LIGHTS TYPE C
- POST MOUNTED SIGN
- BARRICADES TYPE III W SIGN
- FLASHING ARROW BOARDS
- CONSTRUCTION WORK ZONE

TEMPORARY MARKING
ARROW REMOVABLE TAPE

TEMPORARY MARKING STOP
LINE REMOVABLE TAPE 18-INCH

MGS GUARDRAIL
TEMPORARY
TERMINAL EXT

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

TEMPORARY MARKING
STOP LINE REMOVABLE TAPE
18-INCH

TEMPORARY MARKING
ARROW REMOVABLE TAPE

TEMPORARY MARKING LINE
REMOVABLE TAPE 8-INCH WHITE

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

W01-4R

W06-3

NEXT
1.1 MILES
W057-51
48"X24"

12+00 10+00 8+00 86+00 88+00 90+00 92+00 94+00 96+00 98+00

ATRIUM CT

ELDORADO BLVD

TEMPORARY MARKING LINE
REMOVABLE TAPE 8-INCH WHITE

ROAD CLOSED
R11-2
48"X30"

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

TEMPORARY MARKING LINE
REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 3A	SHEET 92	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 3-CROSSOVER.DWG
LAYOUT NAME - 0201 - (3)

PLOT DATE : 1/10/2018 2:07 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

W01-6
48"X24"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE

ROAD
CLOSED
R11-2
48"X30"

SIDEWALK
CLOSED
R9-9
24"X12"

SIDEWALK
CLOSED
R9-9
24"X12"

92+00
94+00
96+00
98+00
100+00
102+00
152+00
154+00
156+00
158+00
160+00

STH 37
USH 12/CLARIREMONT AVE
UNIVERSITY DR
BIKE PATH

- FLEXIBLE TUBULAR MARKER POSTS
- DRUMS
- DRUMS W WARNING LIGHTS TYPE C
- POST MOUNTED SIGN
- BARRICADES TYPE III W SIGN
- FLASHING ARROW BOARDS
- CONSTRUCTION WORK ZONE

N

37
M1-4
36"X36"

MAX.
10'
WIDTH
W12-52
48"X48"

500'

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 3A	SHEET 93	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL STAGE 3-CROSSOVER.DWG
LAYOUT NAME - 0201 - (5)

PLOT DATE : 1/10/2018 2:08 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

DRUMS
DRUMS W WARNING LIGHTS TYPE C
POST MOUNTED SIGN
BARRICADES TYPE III W SIGN
BARRICADES TYPE III
CONSTRUCTION WORK ZONE
SIGN ON TEMPORARY SUPPORT

SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER
* PLACE 150' FROM CROSSING

LANE CLOSED
R11-2-L
48"X30"

SIDEWALK CLOSED
R9-9
24"X12"

BEGIN RIGHT TURN LANE
R3-20-R
24"X36"

W11-2
30"X30"
W16-7L
24"X12"

W11-2
30"X30"
AHEAD
W16-9P
24"X8"

SIDEWALK CLOSED
CROSS HERE
R9-11-A
24"X12"

TEMPORARY CURB RAMP

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE

TEMPORARY PEDESTRIAN
SAFETY FENCE

41+00
42+00
43+00
44+00
45+00
51+00
52+00
26+00
27+00
7+00
8+00
9+00
10+00
11+00
12+00
13+00

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - PEDESTRIAN PLAN STAGE 3A	SHEET 94 E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\TRAFFIC CONTROL_PEDESTRIANS AT_CRAIG 3.DWG
LAYOUT NAME - TC_SHORT&CRAIG
PLOT DATE : 1/10/2018 2:09 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : **********

2

SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER

* PLACE 150' FROM CROSSING

TEMPORARY CURB RAMP

W11-2 30"X30"
W16-7L 24"X12"

W11-2 30"X30"
AHEAD
W16-9P 24"X8"

SIDEWALK CLOSED
R9-9 24"X12"

SIDEWALK CLOSED
CROSS HERE
R9-11-A 24"X12"

LANE CLOSED
R11-2-L 48"X30"

SIDEWALK CLOSED
R9-9 24"X12"

BEGIN RIGHT TURN LANE
R3-20-RR 24"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE

41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00 26+00 27+00

HAMILTON AVE

SHORT STREET

CRAIG RD

DRUMS

DRUMS W WARNING LIGHTS TYPE C

POST MOUNTED SIGN

BARRICADES TYPE III W SIGN

BARRICADES TYPE III

CONSTRUCTION WORK ZONE

SIGN ON TEMPORARY SUPPORT

TEMPORARY PEDESTRIAN SAFETY FENCE

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH WHITE

TEMPORARY MARKING LINE REMOVABLE 4-INCH WHITE

TEMPORARY CURB RAMP

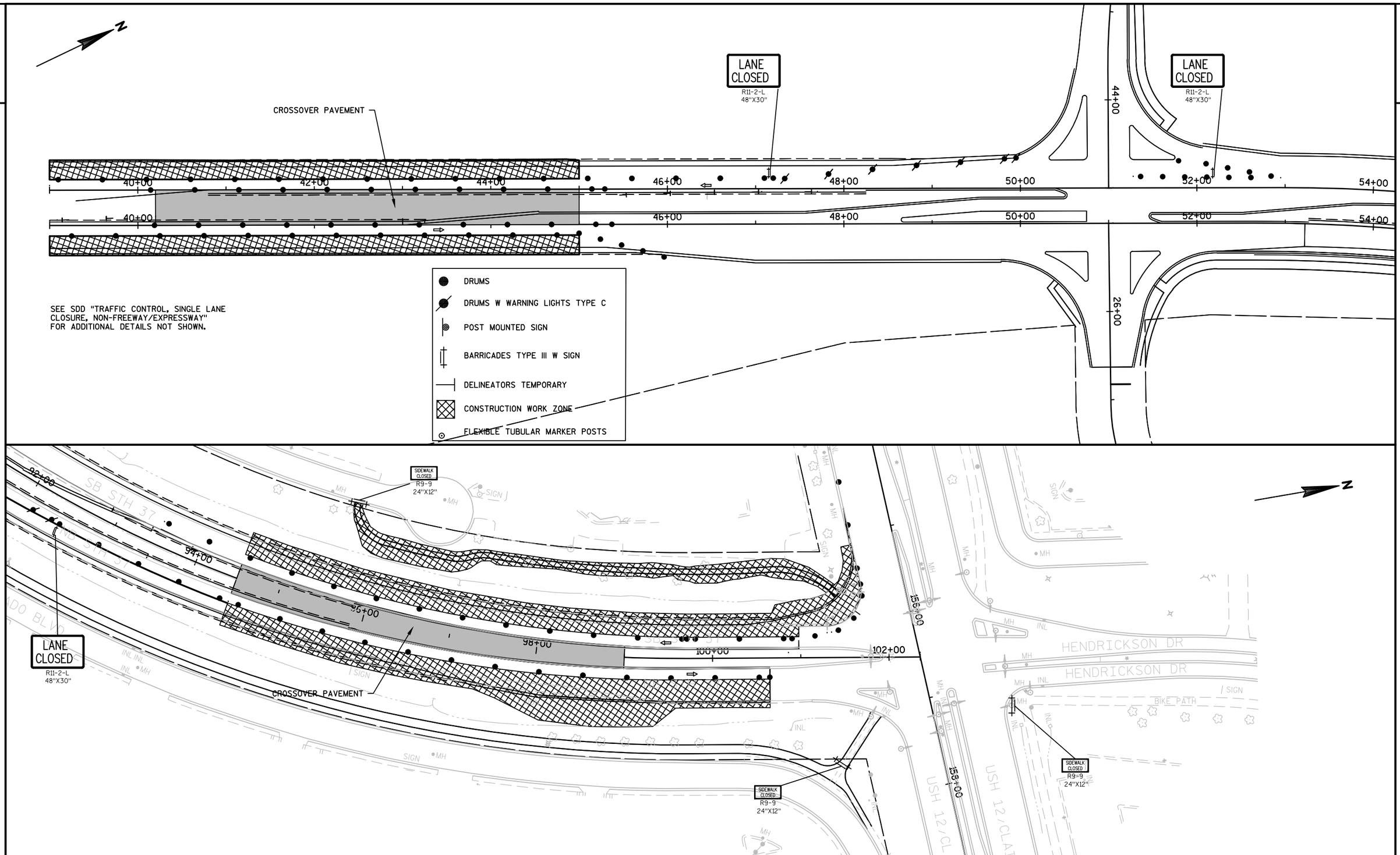
7+00 8+00 9+00 10+00 11+00 12+00 13+00 53+00 54+00 55+00 56+00

SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER

N

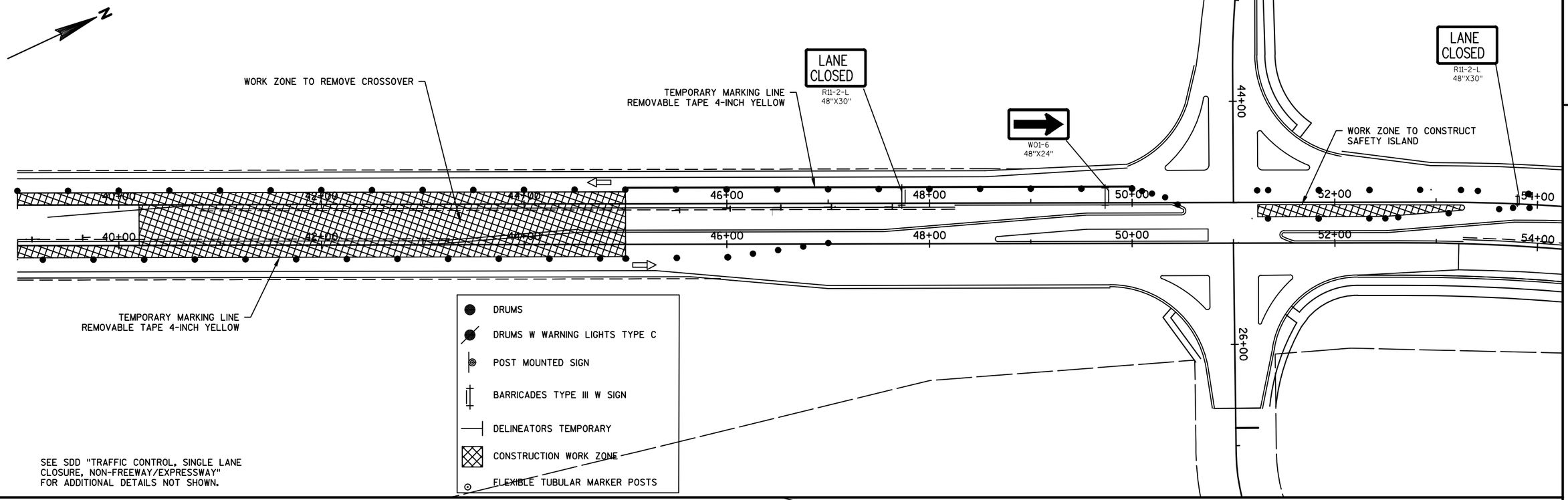
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - PEDESTRIAN PLAN STAGE 3B	SHEET 95 E

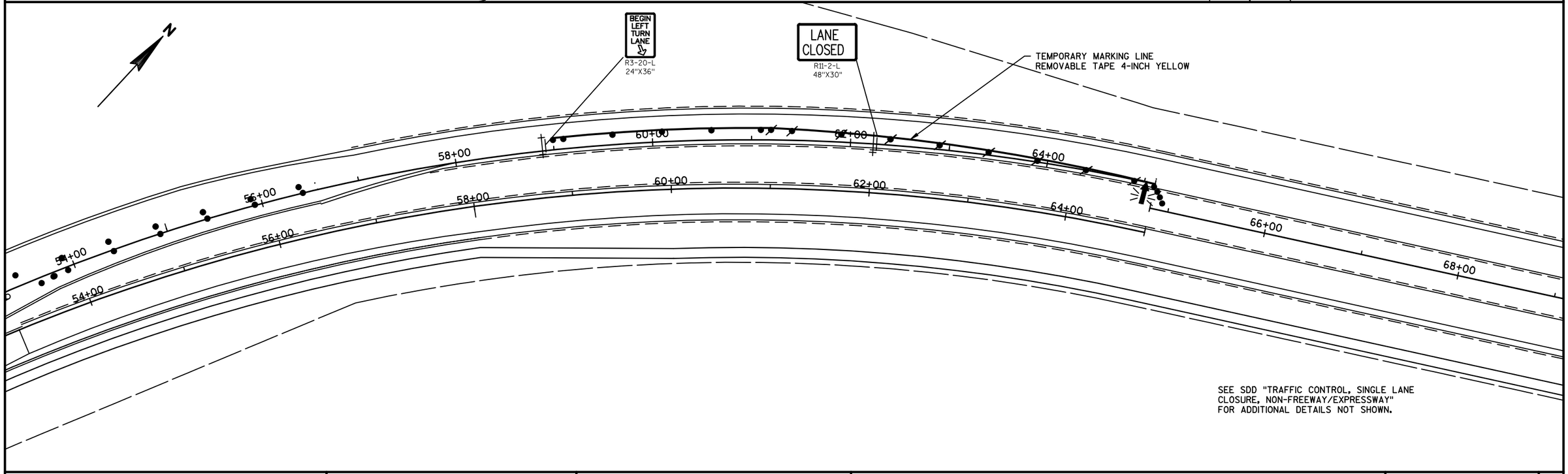
2



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 4A	SHEET 96	E

2





PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 4B	SHEET 97	E

2

LANE CLOSED
R11-2-L
48"X30"

WORK ZONE TO CONSTRUCT SAFETY ISLAND

BEGIN LEFT TURN LANE
R3-20-L
24"X36"

84+00
10+00
86+00
88+00
90+00
92+00
94+00
96+00
98+00
8+00

ATRIUM CT
SB STH 37
ELDORADO BLVD

SEE SDD "TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY" FOR ADDITIONAL DETAILS NOT SHOWN.

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

LANE CLOSED
R11-2-L
48"X30"

N

92+00
94+00
96+00
98+00
100+00
102+00

SIDEWALK CLOSED
R9-9
24"X12"

WO1-6
48"X24"

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH YELLOW

152+00
153+00

HENDRICKSON DR
HENDRICKSON DR
BIKE PATH
USH 12/CLAIREMONT AVE

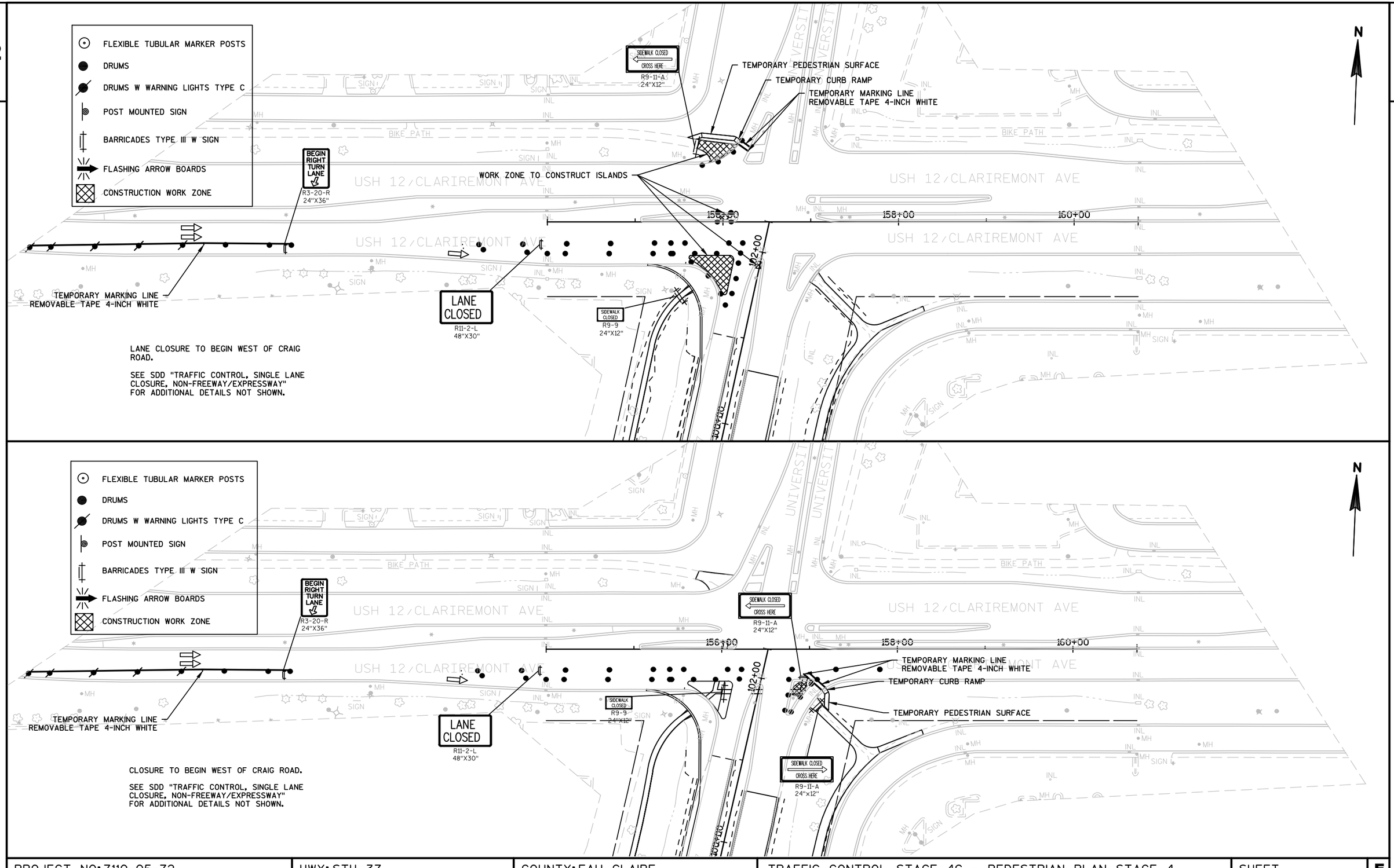
SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED
R9-9
24"X12"

N

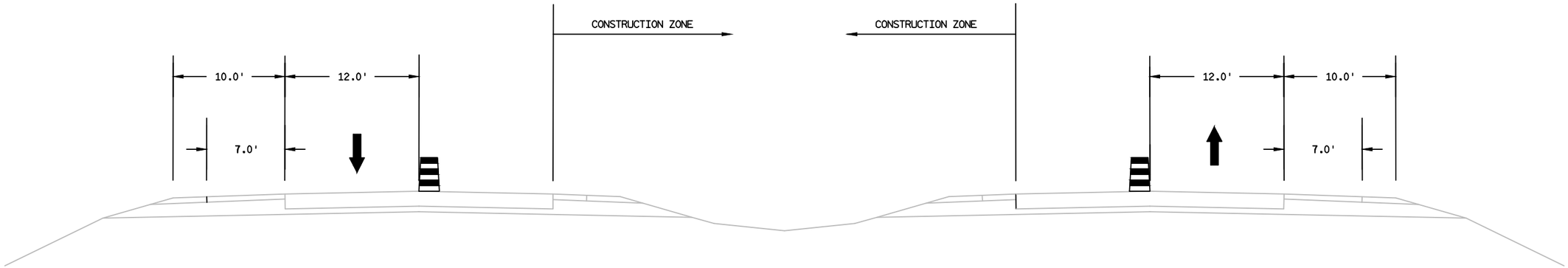
- FLEXIBLE TUBULAR MARKER POSTS
- DRUMS
- DRUMS W WARNING LIGHTS TYPE C
- POST MOUNTED SIGN
- BARRICADES TYPE III W SIGN
- FLASHING ARROW BOARDS
- CONSTRUCTION WORK ZONE

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL - STAGE 4B	SHEET 98	E

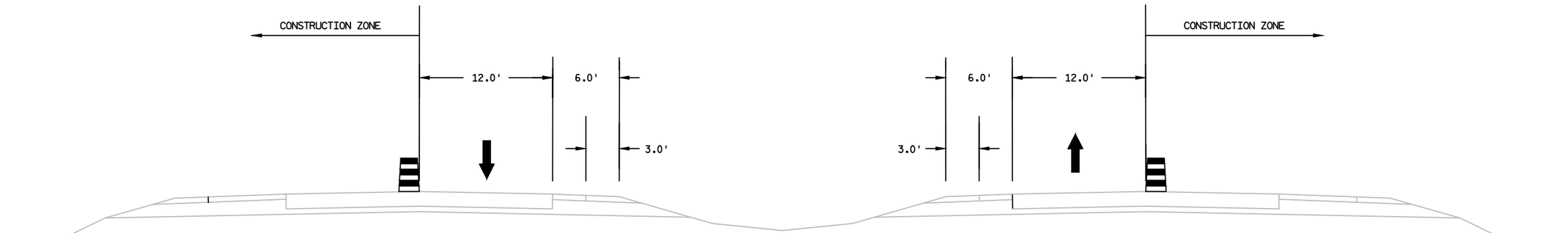


FLEXIBLE TUBULAR MARKER POSTS
DRUMS
DRUMS W WARNING LIGHTS TYPE C
POST MOUNTED SIGN
BARRICADES TYPE III W SIGN
FLASHING ARROW BOARDS
CONSTRUCTION WORK ZONE
SIDEWALK CLOSED
CROSS HERE
R9-11-A
24"X12"
TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE
TEMPORARY CURB RAMP
TEMPORARY PEDESTRIAN SURFACE
BEGIN
RIGHT
TURN
LANE
R3-20-R
24"X36"
USH 12/CLARIREMONT AVE
BIKE PATH
UNIVERSITY
156+00
158+00
160+00
102+00
LANE
CLOSED
R11-2-L
48"X30"
SIDEWALK
CLOSED
R9-9
24"X12"
TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH WHITE
CLOSURE TO BEGIN WEST OF CRAIG ROAD.
SEE SDD "TRAFFIC CONTROL, SINGLE LANE
CLOSURE, NON-FREEWAY/EXPRESSWAY"
FOR ADDITIONAL DETAILS NOT SHOWN.
N

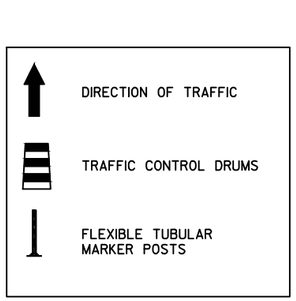
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGE 4C - PEDESTRIAN PLAN STAGE 4	SHEET 99	E

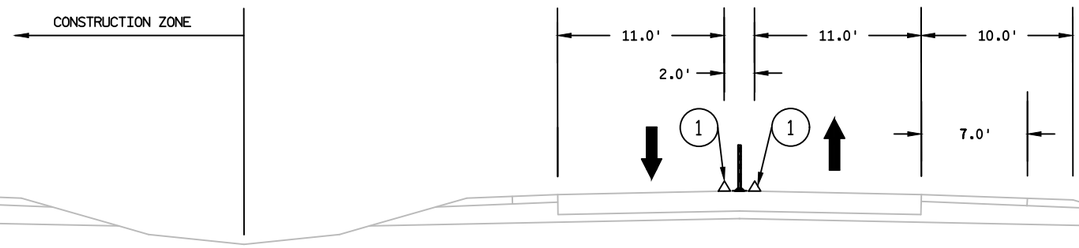


STAGE 1A, 1B & 4B MAINLINE
(LOOKING NORTH)



STAGE 1C & 4A MAINLINE
(LOOKING NORTH)





① TEMPORARY MARKING LINE 4-INCH YELLOW
② TEMPORARY MARKING LINE 4-INCH WHITE
③ TEMPORARY MARKING LINE 4-INCH WHITE (WHEN REQUIRED FOR WIDENINGS)
④ TEMPORARY MARKING LINE 8-INCH WHITE

STAGE 2A MAINLINE
(LOOKING NORTH)

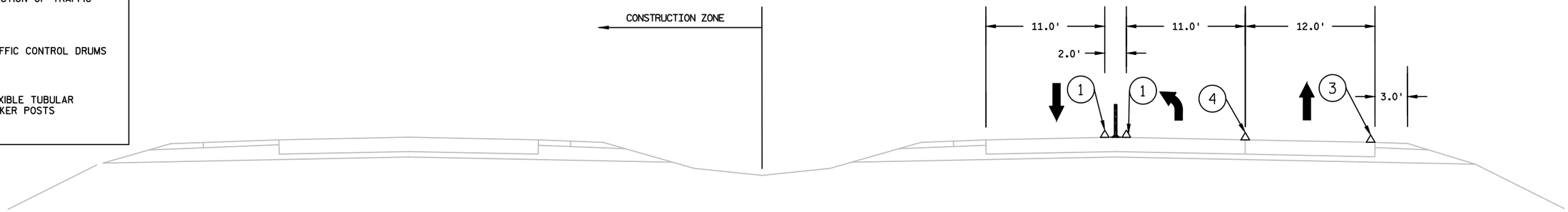
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGING	SHEET 100	E

2

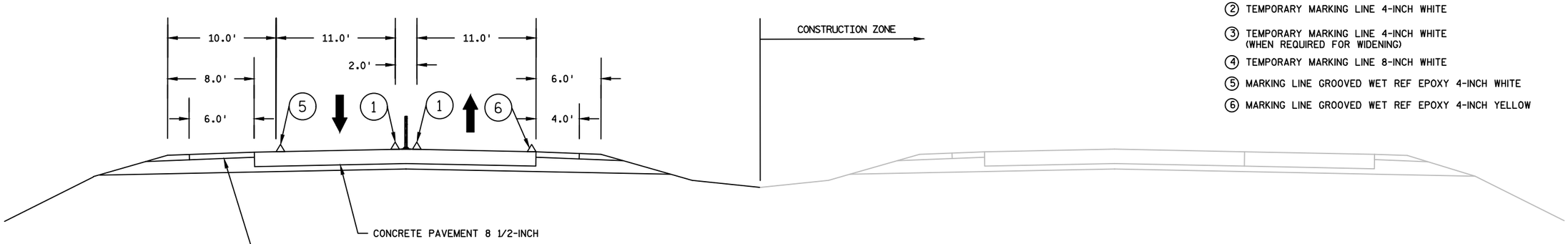
DIRECTION OF TRAFFIC

TRAFFIC CONTROL DRUMS

FLEXIBLE TUBULAR MARKER POSTS



STAGE 2A AT INTERSECTIONS
(LOOKING NORTH)



① TEMPORARY MARKING LINE 4-INCH YELLOW

② TEMPORARY MARKING LINE 4-INCH WHITE

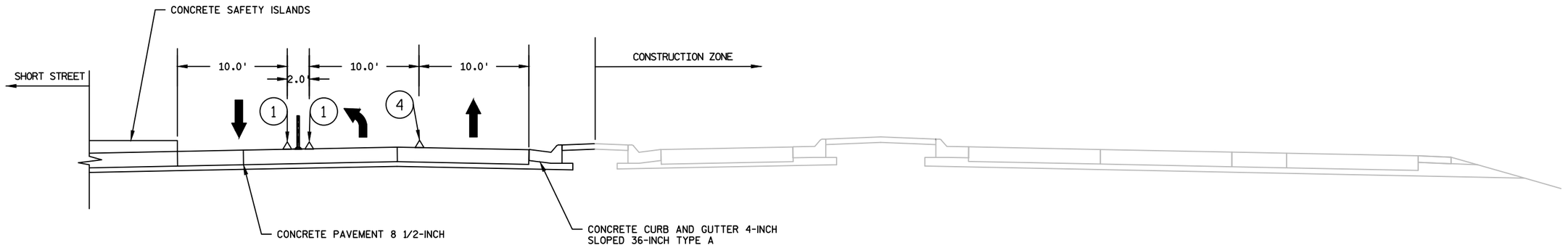
③ TEMPORARY MARKING LINE 4-INCH WHITE (WHEN REQUIRED FOR WIDENING)

④ TEMPORARY MARKING LINE 8-INCH WHITE

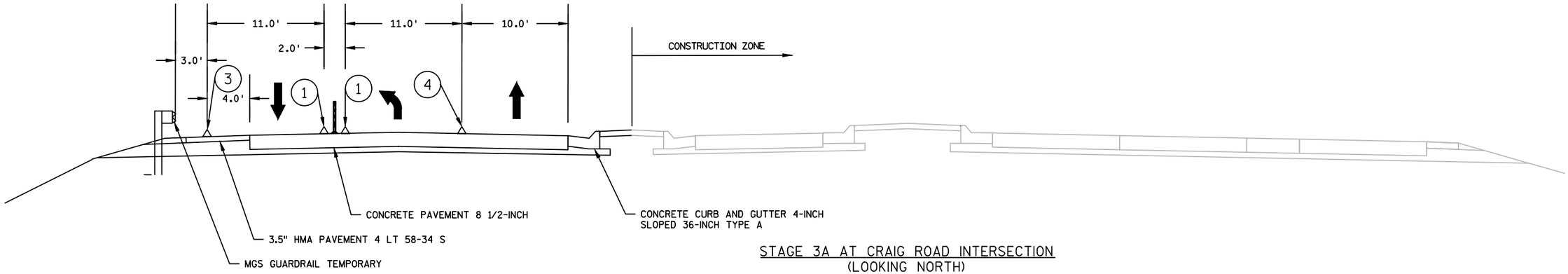
⑤ MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE

⑥ MARKING LINE GROOVED WET REF EPOXY 4-INCH YELLOW

STAGE 3A MAINLINE
(LOOKING NORTH)



STAGE 3A AT SHORT STREET INTERSECTION
(LOOKING NORTH)



STAGE 3A AT CRAIG ROAD INTERSECTION
(LOOKING NORTH)

2

① TEMPORARY MARKING LINE 4-INCH YELLOW

② TEMPORARY MARKING LINE 4-INCH WHITE

③ TEMPORARY MARKING LINE 4-INCH WHITE
(WHEN REQUIRED FOR WIDENINGS)

④ TEMPORARY MARKING LINE 8-INCH WHITE

DIRECTION OF TRAFFIC

TRAFFIC CONTROL DRUMS

FLEXIBLE TUBULAR
MARKER POSTS

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	TRAFFIC CONTROL STAGING	SHEET 102	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\026001_S1_TRAFFIC STAGING.DWG PLOT DATE : 1/8/2018 11:11 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

SHORT STREET NORTH
PI STA = 9+39.27
Y = 268801.394
X = 331346.385
DELTA = 61°24'21"
D = 130°13'04"
T = 26.13'
L = 47.16'
R = 44.00'
PC STA = 9+13.14
PT STA = 9+60.30

PI STA = 7+85.91
Y = 268721.501
X = 331510.286
DELTA = 80°12'44"
D = 56°10'20"
T = 85.91'
L = 142.80'
R = 102.00'
PC STA = 7+00.00
PT STA = 8+42.80

SHORT STREET SOUTH
PI STA = 5+96.93
Y = 268644.780
X = 331481.341
DELTA = 51°34'55"
D = 58°27'55"
T = 47.36'
L = 88.23'
R = 98.00'
PC STA = 5+49.57
PT STA = 6+37.80

PI STA = 59+24.40
Y = 269419.572
X = 331910.862
DELTA = 36°28'51"
D = 3°00'00"
T = 629.42'
L = 1216.02'
R = 1909.86'
PC STA = 52+94.98
PT STA = 65+11.00

PI STA = 58+94.62
Y = 269375.439
X = 331934.074
DELTA = 36°29'35"
D = 3°00'00"
T = 629.65'
L = 1216.43'
R = 1909.86'
PC STA = 52+64.97
PT STA = 64+81.41

HAMILTON AVENUE SOUTH
PI STA = 0+93.02
Y = 268605.914
X = 331610.959
DELTA = 80°32'25"
D = 58°27'54"
T = 83.02'
L = 137.76'
R = 98.00'
PC STA = 0+10.00
PT STA = 1+47.76

HAMILTON AVENUE NORTH
PI STA = 2+33.11
Y = 268690.297
X = 331641.344
DELTA = 80°32'07"
D = 67°24'24"
T = 72.00'
L = 119.48'
R = 85.00'
PC STA = 1+61.11
PT STA = 2+80.58

CRAIG ROAD SOUTHEAST
PI STA = 17+04.16
Y = 270475.189
X = 334269.937
DELTA = 16°32'49"
D = 26°57'22"
T = 30.91'
L = 61.39'
R = 212.55'
PC STA = 16+73.25
PT STA = 17+34.64

PI STA = 18+32.67
Y = 270596.644
X = 334313.208
DELTA = 42°49'17"
D = 127°19'26"
T = 17.64'
L = 33.63'
R = 45.00'
PC STA = 18+15.03
PT STA = 18+48.66

CRAIG ROAD NORTHWEST
PI STA = 25+80.90
Y = 270761.717
X = 334214.413
DELTA = 20°07'56"
D = 36°31'56"
T = 27.84'
L = 55.11'
R = 156.84'
PC STA = 25+53.06
PT STA = 26+08.16

PI STA = 26+78.07
Y = 270671.199
X = 334177.522
DELTA = 15°52'48"
D = 92°28'10"
T = 8.64'
L = 17.17'
R = 61.96'
PC STA = 26+69.43
PT STA = 26+86.60

CRAIG ROAD NORTHEAST
PI STA = 20+67.00
Y = 270725.184
X = 334295.861
DELTA = 104°57'57"
D = 109°58'17"
T = 67.86'
L = 95.45'
R = 52.10'
PC STA = 19+99.15
PT STA = 20+94.59

USH 12 SOUTHWEST
PI STA = 28+63.56
Y = 271929.456
X = 335149.627
DELTA = 91°08'46"
D = 91°57'36"
T = 63.56'
L = 99.11'
R = 62.31'
PC STA = 28+00.00
PT STA = 28+99.11

PI STA = 29+42.26
Y = 271822.756
X = 335149.985
DELTA = 4°02'06"
D = 28°38'52"
T = 7.05'
L = 14.09'
R = 200.00'
PC STA = 29+35.21
PT STA = 29+49.30

PI STA = 93+82.24
Y = 271053.517
X = 335040.329
DELTA = 50°48'49"
D = 4°00'00"
T = 680.36'
L = 1270.34'
R = 1432.39'
PC STA = 87+01.89
PT STA = 99+72.22

CRAIG ROAD SOUTHWEST
PI STA = 13+36.75
Y = 270521.531
X = 334171.652
DELTA = 72°38'07"
D = 114°35'50"
T = 36.75'
L = 63.38'
R = 50.00'
PC STA = 13+00.00
PT STA = 13+63.38

PI STA = 14+00.92
Y = 270468.276
X = 334223.431
DELTA = 42°48'40"
D = 59°49'48"
T = 37.54'
L = 71.55'
R = 95.76'
PC STA = 13+63.38
PT STA = 14+34.94

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	ALIGNMENT DIAGRAM	SHEET 103	E

7110-05-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	5.000	5.000
0004	201.0205	Grubbing	STA	5.000	5.000
0006	204.0100	Removing Pavement	SY	38,435.000	38,435.000
0008	204.0110	Removing Asphaltic Surface	SY	4,880.000	4,880.000
0010	204.0150	Removing Curb & Gutter	LF	1,374.000	1,374.000
0012	204.0155	Removing Concrete Sidewalk	SY	600.000	600.000
0014	204.0195	Removing Concrete Bases	EACH	42.000	42.000
0016	204.0210	Removing Manholes	EACH	3.000	3.000
0018	204.0220	Removing Inlets	EACH	12.000	12.000
0020	204.0245	Removing Storm Sewer (size) 01. 24-inch	LF	158.000	158.000
0022	204.0245	Removing Storm Sewer (size) 02. 18-inch	LF	161.000	161.000
0024	204.0245	Removing Storm Sewer (size) 03. 24-inch	LF	222.000	222.000
0026	204.0245	Removing Storm Sewer (size) 04. 36-inch	LF	169.000	169.000
0028	204.9060.S	Removing (item description) 01. Apron Endwall	EACH	6.000	6.000
0030	205.0100	Excavation Common	CY	13,155.000	13,155.000
0032	208.0100	Borrow	CY	9,905.000	9,905.000
0034	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 7110-05-72	LS	1.000	1.000
0036	211.0200	Prepare Foundation for Concrete Pavement (project) 01. 7110-05-72	LS	1.000	1.000
0038	211.0500	Prepare Foundation for Base Aggregate	STA	126.000	126.000
0040	213.0100	Finishing Roadway (project) 01. 7110-05-72	EACH	1.000	1.000
0042	305.0110	Base Aggregate Dense 3/4-Inch	TON	800.000	800.000
0044	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	17,870.000	17,870.000
0046	415.0085	Concrete Pavement 8 1/2-Inch	SY	49,045.000	49,045.000
0048	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000
0050	416.0610	Drilled Tie Bars	EACH	878.000	878.000
0052	416.0620	Drilled Dowel Bars	EACH	108.000	108.000
0054	416.1010	Concrete Surface Drains	CY	22.500	22.500
0056	416.1110	Concrete Shoulder Rumble Strips	LF	8,350.000	8,350.000
0058	455.0605	Tack Coat	GAL	765.000	765.000
0060	460.2000	Incentive Density HMA Pavement	DOL	1,225.000	1,225.000
0062	460.5244	HMA Pavement 4 LT 58-34 S	TON	1,915.000	1,915.000
0064	465.0105	Asphaltic Surface	TON	650.000	650.000
0066	465.0125	Asphaltic Surface Temporary	TON	1,550.000	1,550.000
0068	465.0400	Asphaltic Shoulder Rumble Strips	LF	7,800.000	7,800.000
0070	520.8700	Cleaning Culvert Pipes	EACH	3.000	3.000
0072	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	124.000	124.000
0074	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000

Line	Item	Item Description	Unit	Total	Qty
0076	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0078	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	3.000	3.000
0080	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	1.000	1.000
0082	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	1.000	1.000
0084	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	1.000	1.000
0086	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	520.000	520.000
0088	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	6,570.000	6,570.000
0090	602.0410	Concrete Sidewalk 5-Inch	SF	7,640.000	7,640.000
0092	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	472.000	472.000
0094	602.1000	Concrete Loading Zone	SF	8,460.000	8,460.000
0096	602.2400	Concrete Safety Islands	SF	8,610.000	8,610.000
0098	606.0300	Riprap Heavy	CY	360.000	360.000
0100	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	331.000	331.000
0102	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	1,663.000	1,663.000
0104	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	176.000	176.000
0106	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	16.000	16.000
0108	608.0336	Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	LF	172.000	172.000
0110	611.0420	Reconstructing Manholes	EACH	4.000	4.000
0112	611.0430	Reconstructing Inlets	EACH	1.000	1.000
0114	611.0530	Manhole Covers Type J	EACH	4.000	4.000
0116	611.0627	Inlet Covers Type HM	EACH	13.000	13.000
0118	611.0642	Inlet Covers Type MS	EACH	8.000	8.000
0120	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000
0122	611.2003	Manholes 3-FT Diameter	EACH	1.000	1.000
0124	611.2004	Manholes 4-FT Diameter	EACH	2.000	2.000
0126	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0128	611.3004	Inlets 4-FT Diameter	EACH	2.000	2.000
0130	611.3230	Inlets 2x3-FT	EACH	10.000	10.000
0132	611.3901	Inlets Median 1 Grate	EACH	4.000	4.000
0134	611.3902	Inlets Median 2 Grate	EACH	2.000	2.000
0136	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0138	611.8115	Adjusting Inlet Covers	EACH	3.000	3.000

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Line	Item	Item Description	Unit	Total	Qty
0140	611.9800.S	Pipe Grates	EACH	2.000	2.000
0142	614.1000	MGS Guardrail Temporary	LF	475.000	475.000
0144	614.1200	MGS Guardrail Temporary Terminal EAT	EACH	1.000	1.000
0146	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7110-05-72	EACH	1.000	1.000
0148	619.1000	Mobilization	EACH	1.000	1.000
0150	620.0300	Concrete Median Sloped Nose	SF	188.000	188.000
0152	624.0100	Water	MGAL	300.000	300.000
0154	625.0100	Topsoil	SY	4,580.000	4,580.000
0156	625.0500	Salvaged Topsoil	SY	22,100.000	22,100.000
0158	627.0200	Mulching	SY	18,620.000	18,620.000
0160	628.1504	Silt Fence	LF	4,175.000	4,175.000
0162	628.1520	Silt Fence Maintenance	LF	4,175.000	4,175.000
0164	628.1905	Mobilizations Erosion Control	EACH	6.000	6.000
0166	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0168	628.2004	Erosion Mat Class I Type B	SY	3,350.000	3,350.000
0170	628.2008	Erosion Mat Urban Class I Type B	SY	6,250.000	6,250.000
0172	628.7005	Inlet Protection Type A	EACH	25.000	25.000
0174	628.7010	Inlet Protection Type B	EACH	5.000	5.000
0176	628.7015	Inlet Protection Type C	EACH	13.000	13.000
0178	628.7020	Inlet Protection Type D	EACH	4.000	4.000
0180	628.7504	Temporary Ditch Checks	LF	108.000	108.000
0182	628.7555	Culvert Pipe Checks	EACH	30.000	30.000
0184	628.7560	Tracking Pads	EACH	2.000	2.000
0186	629.0210	Fertilizer Type B	CWT	19.000	19.000
0188	630.0171	Seeding Mixture No. 70A	LB	110.000	110.000
0190	630.0200	Seeding Temporary	LB	785.000	785.000
0192	633.1100	Delineators Temporary	EACH	12.000	12.000
0194	633.5200	Markers Culvert End	EACH	15.000	15.000
0196	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000	2.000
0198	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	28.000	28.000
0200	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	21.000	21.000
0202	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	4.000	4.000
0204	637.2210	Signs Type II Reflective H	SF	786.730	786.730
0206	637.2215	Signs Type II Reflective H Folding	SF	52.220	52.220
0208	637.2230	Signs Type II Reflective F	SF	72.000	72.000
0210	638.2102	Moving Signs Type II	EACH	7.000	7.000
0212	638.2602	Removing Signs Type II	EACH	60.000	60.000
0214	638.3000	Removing Small Sign Supports	EACH	36.000	36.000
0216	642.5201	Field Office Type C	EACH	1.000	1.000

Line	Item	Item Description	Unit	Total	Qty
0218	643.0300	Traffic Control Drums	DAY	24,640.000	24,640.000
0220	643.0420	Traffic Control Barricades Type III	DAY	3,270.000	3,270.000
0222	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	400.000	400.000
0224	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	400.000	400.000
0226	643.0705	Traffic Control Warning Lights Type A	DAY	6,540.000	6,540.000
0228	643.0715	Traffic Control Warning Lights Type C	DAY	6,460.000	6,460.000
0230	643.0800	Traffic Control Arrow Boards	DAY	270.000	270.000
0232	643.0900	Traffic Control Signs	DAY	13,240.000	13,240.000
0234	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	188.000	188.000
0236	643.5000	Traffic Control	EACH	1.000	1.000
0238	644.1420.S	Temporary Pedestrian Surface Plywood	SF	340.000	340.000
0240	644.1601.S	Temporary Curb Ramp	EACH	8.000	8.000
0242	644.1616.S	Temporary Pedestrian Safety Fence	LF	910.000	910.000
0244	645.0120	Geotextile Type HR	SY	670.000	670.000
0246	646.1020	Marking Line Epoxy 4-Inch	LF	1,245.000	1,245.000
0248	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	18,180.000	18,180.000
0250	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	3,050.000	3,050.000
0252	646.3020	Marking Line Epoxy 8-Inch	LF	1,045.000	1,045.000
0254	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	3,740.000	3,740.000
0256	646.5020	Marking Arrow Epoxy	EACH	7.000	7.000
0258	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0260	646.6120	Marking Stop Line Epoxy 18-Inch	LF	328.000	328.000
0262	646.7220	Marking Chevron Epoxy 24-Inch	LF	20.000	20.000
0264	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,546.000	1,546.000
0266	646.8120	Marking Curb Epoxy	LF	110.000	110.000
0268	646.8220	Marking Island Nose Epoxy	EACH	4.000	4.000
0270	646.9000	Marking Removal Line 4-Inch	LF	9,215.000	9,215.000
0272	649.0105	Temporary Marking Line Paint 4-Inch	LF	11,600.000	11,600.000
0274	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	36,191.000	36,191.000
0276	649.0205	Temporary Marking Line Paint 8-Inch	LF	860.000	860.000
0278	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	1,140.000	1,140.000
0280	649.0505	Temporary Marking Arrow Paint	EACH	8.000	8.000
0282	649.0550	Temporary Marking Arrow Removable Tape	EACH	8.000	8.000
0284	649.0805	Temporary Marking Stop Line Paint 18-Inch	LF	92.000	92.000
0286	649.0850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	92.000	92.000
0288	650.4000	Construction Staking Storm Sewer	EACH	28.000	28.000
0290	650.4500	Construction Staking Subgrade	LF	5,000.000	5,000.000
0292	650.5000	Construction Staking Base	LF	5,000.000	5,000.000
0294	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	7,090.000	7,090.000

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Line	Item	Item Description	Unit	Total	Qty
0296	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0298	650.7000	Construction Staking Concrete Pavement	LF	12,350.000	12,350.000
0300	650.8500	Construction Staking Electrical Installations (project) 01. 7110-05-72	LS	1.000	1.000
0302	650.9000	Construction Staking Curb Ramps	EACH	11.000	11.000
0304	650.9910	Construction Staking Supplemental Control (project) 01. 7110-05-72	LS	1.000	1.000
0306	650.9920	Construction Staking Slope Stakes	LF	9,355.000	9,355.000
0308	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	6,354.000	6,354.000
0310	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	4,196.000	4,196.000
0312	652.0615	Conduit Special 3-Inch	LF	189.000	189.000
0314	652.0700.S	Install Conduit into Existing Item	EACH	8.000	8.000
0316	652.0800	Conduit Loop Detector	LF	3,292.000	3,292.000
0318	653.0135	Pull Boxes Steel 24x36-Inch	EACH	28.000	28.000
0320	653.0140	Pull Boxes Steel 24x42-Inch	EACH	37.000	37.000
0322	653.0900	Adjusting Pull Boxes	EACH	7.000	7.000
0324	653.0905	Removing Pull Boxes	EACH	39.000	39.000
0326	654.0101	Concrete Bases Type 1	EACH	26.000	26.000
0328	654.0102	Concrete Bases Type 2	EACH	5.000	5.000
0330	654.0105	Concrete Bases Type 5	EACH	20.000	20.000
0332	654.0110	Concrete Bases Type 10	EACH	4.000	4.000
0334	654.0113	Concrete Bases Type 13	EACH	4.000	4.000
0336	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	3.000	3.000
0338	655.0230	Cable Traffic Signal 5-14 AWG	LF	1,452.000	1,452.000
0340	655.0240	Cable Traffic Signal 7-14 AWG	LF	10,953.000	10,953.000
0342	655.0260	Cable Traffic Signal 12-14 AWG	LF	7,557.000	7,557.000
0344	655.0270	Cable Traffic Signal 15-14 AWG	LF	447.000	447.000
0346	655.0290	Cable Traffic Signal 21-14 AWG	LF	1,012.000	1,012.000
0348	655.0320	Cable Type UF 2-10 AWG Grounded	LF	6,248.000	6,248.000
0350	655.0510	Electrical Wire Traffic Signals 12 AWG	LF	8,882.000	8,882.000
0352	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	13,222.000	13,222.000
0354	655.0615	Electrical Wire Lighting 10 AWG	LF	4,077.000	4,077.000
0356	655.0700	Loop Detector Lead In Cable	LF	17,557.000	17,557.000
0358	655.0800	Loop Detector Wire	LF	10,626.000	10,626.000
0360	655.0900	Traffic Signal EVP Detector Cable	LF	5,065.000	5,065.000
0362	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 37 & Hamilton Avenue	LS	1.000	1.000
0364	656.0200	Electrical Service Meter Breaker Pedestal (location) 02. STH 37 & Craig Road	LS	1.000	1.000
0366	656.0200	Electrical Service Meter Breaker Pedestal (location) 03. USH 12 & STH 37	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0368	657.0100	Pedestal Bases	EACH	23.000	23.000
0370	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	28.000	28.000
0372	657.0305	Poles Type 2	EACH	1.000	1.000
0374	657.0315	Poles Type 4	EACH	7.000	7.000
0376	657.0322	Poles Type 5-Aluminum	EACH	20.000	20.000
0378	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	3.000	3.000
0380	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	15.000	15.000
0382	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	5.000	5.000
0384	657.0585	Trombone Arms 15-FT	EACH	1.000	1.000
0386	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	11.000	11.000
0388	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	5.000	5.000
0390	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	15.000	15.000
0392	657.1345	Install Poles Type 9	EACH	4.000	4.000
0394	657.1355	Install Poles Type 12	EACH	4.000	4.000
0396	657.1525	Install Monotube Arms 25-FT	EACH	1.000	1.000
0398	657.1530	Install Monotube Arms 30-FT	EACH	3.000	3.000
0400	657.1535	Install Monotube Arms 35-FT	EACH	3.000	3.000
0402	657.1540	Install Monotube Arms 40-FT	EACH	1.000	1.000
0404	658.0171	Traffic Signal Face 1S 12-Inch	EACH	2.000	2.000
0406	658.0173	Traffic Signal Face 3S 12-Inch	EACH	37.000	37.000
0408	658.0174	Traffic Signal Face 4S 12-Inch	EACH	21.000	21.000
0410	658.0416	Pedestrian Signal Face 16-Inch	EACH	16.000	16.000
0412	658.0500	Pedestrian Push Buttons	EACH	22.000	22.000
0414	658.5069	Signal Mounting Hardware (location) 01. STH 37 & Hamilton Ave / Short Street	LS	1.000	1.000
0416	658.5069	Signal Mounting Hardware (location) 02. STH 37 & Craig Road	LS	1.000	1.000
0418	658.5069	Signal Mounting Hardware (location) 03. STH 37 & USH 12	LS	1.000	1.000
0420	659.1115	Luminaires Utility LED A	EACH	15.000	15.000
0422	659.1125	Luminaires Utility LED C	EACH	16.000	16.000
0424	661.0200	Temporary Traffic Signals for Intersections (location) 01. STH 37 & Hamilton Avenue	LS	1.000	1.000
0426	661.0200	Temporary Traffic Signals for Intersections (location) 02. STH 37 & Craig Road	LS	1.000	1.000
0428	661.0300	Generators 02. STH 37 & Craig Road	DAY	4.000	4.000
0430	671.0112	Conduit HDPE 1-Duct 2-Inch	LF	5,177.000	5,177.000
0432	671.0300	Fiber Optic Cable Marker	EACH	21.000	21.000
0434	678.0006	Install Fiber Optic Cable Outdoor Plant 6-CT	LF	6,896.000	6,896.000
0436	690.0150	Sawing Asphalt	LF	248.000	248.000
0438	690.0250	Sawing Concrete	LF	4,520.000	4,520.000

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Line	Item	Item Description	Unit	Total	Qty
0440	715.0415	Incentive Strength Concrete Pavement	DOL	14,700.000	14,700.000
0442	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	630.000	630.000
0444	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,000.000	2,000.000
0446	SPV.0090	Special 01. Install State Supplied Cat 5e Cable	LF	7,725.000	7,725.000
0448	SPV.0090	Special 02. Concrete Curb & Gutter Cure & Seal Treatment	LF	7,090.000	7,090.000
0450	SPV.0105	Special 01. Remove & Salvage Traffic Signals, STH 37 & Hamilton Avenue / Short Street	LS	1.000	1.000
0452	SPV.0105	Special 02. Remove & Salvage Traffic Signals, STH 37 & Craig Road	LS	1.000	1.000
0454	SPV.0105	Special 03. Remove & Salvage Traffic Signals, USH 12 & STH 37	LS	1.000	1.000
0456	SPV.0105	Special 04. Install State Furnished EVP Detector Heads, STH 37 & Hamilton Ave / Short St	LS	1.000	1.000
0458	SPV.0105	Special 05. Install State Furnished EVP Detector Heads, STH 37 & Craig Road	LS	1.000	1.000
0460	SPV.0105	Special 06. Temporary Vehicle Detection, STH 37 & Hamilton Ave / Short Street	LS	1.000	1.000
0462	SPV.0105	Special 07. Temporary Vehicle Detection, STH 37 & Craig Road	LS	1.000	1.000
0464	SPV.0105	Special 08. Temporary EVP system, STH 37 & Hamilton Avenue / Short Street	LS	1.000	1.000
0466	SPV.0105	Special 09. Temporary EVP System, STH 37 & Craig Road	LS	1.000	1.000
0468	SPV.0105	Special 10. Project Concrete Crack Mitigation & Repair Special	LS	1.000	1.000
0470	SPV.0105	Special 11. Construction Staking Concrete Pavement Joint Layout	LS	1.000	1.000
0472	SPV.0105	Special 12. Remove, Salvage & Reinstall Drainage Pipe, STA 83+71 LT	LS	1.000	1.000
0474	SPV.0165	Special 01. Concrete Loading Zone Cure & Seal Treatment	SF	8,460.000	8,460.000
0476	SPV.0165	Special 02. Concrete Sidewalk Cure & Seal Treatment	SF	7,640.000	7,640.000
0478	SPV.0165	Special 03. Concrete Median Slope Nose Cure & Seal Treatment	SF	188.000	188.000
0480	SPV.0165	Special 04. Concrete Safety Island Cure & Seal Treatment	SF	8,610.000	8,610.000
0482	SPV.0195	Special 01. Temporary Base Aggregate	TON	1,845.000	1,845.000

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201-CLEARING AND GRUBBING

CATEGORY	STATION TO	STATION	LOCATION	201.0105 STA	201.0205 STA
0010	79+00	- 84+00	SB LT	5	5
			TOTAL 0010	5	5

204-REMOVING STORM SEWER

CATEGORY	STATION TO	STATION	LOCATION	MANHOLES 204.0210 EACH	INLETS 204.0220 EACH	12-INCH 204.0245.01 LF	18-INCH 204.0245.02 LF	24-INCH 204.0245.03 LF	36-INCH 204.0245.04 LF	ENDWALLS 204.9060.S.01 EACH	REMARKS
0010		25+59	26' RT	1							HAMILTON AVE.
		25+92	22' RT		1						HAMILTON AVE.
		25+58	50' RT		1						HAMILTON AVE.
		51+74	NB 11 LT		1						
		51+74	SB 1' RT		1						
		51+88	NB 49' RT		1						
		25+61	32' RT		1						HAMILTON AVE.
		53+75	SB 24' RT		1						MEDIAN
		83+61	NB 40' RT		1						
		8+32	23' LT		1						CRAIG RD.
		85+32	NB 17' LT		1						
		10+87	46' LT		1						CRAIG RD.
		11+30	45' RT	1							CRAIG RD.
		11+36	24' RT		1						CRAIG RD.
		11+73	34' RT	1							CRAIG RD.
	25+92 -	25+93	HAMILTON AVE.			30					
	83+61 -	83+96	NB RT			39					CRAIG RD.
	8+32 -	8+88	CRAIG ROAD LT			58					
	85+32 -	85+38	NB LT			10					
	85+97 -	86+13	SB LT			21					
	85+38 -	85+59	NB LT				20				
		85+38	NB LT & RT				54				
		51+74	SB LT & RT				87				
	50+25 -	51+88	NB RT					166			HAMILTON AVE.
	82+10 -	82+25	NB RT					30			
	84+17 -	85+07	SB LT						63		CRAIG RD.
	84+93 -	85+20	NB RT					26			
	85+07 -	86+13	SB LT						106		CRAIG RD.
		81+74	58' SB LT							1	
		82+27	42' NB RT							1	
		85+22	70' NB RT							1	
		85+38	44' NB RT							1	
		85+60	14' NB LT							1	
		86+21	68' SB LT							1	
			TOTAL 0010	3	12	158	161	222	169	6	

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REMOVING PAVEMENT

CATEGORY	STATION TO	STATION	LOCATION	204.0100 SY	REMARKS
0010	39+25	- 100+82	NB STH 37	16,600	MAINLINE
	39+25	- 101+17	SB STH 37	16,700	MAINLINE
	46+00	- 50+30	NB STH 37	390	RT TURN LANE
	46+00	- 50+30	NB STH 37	535	LT TURN LANE
	49+00	- 50+00	SB STH 37	70	TAPER
	51+70	- 56+70	SB STH 37	490	RT TURN LANE
	51+70	- 54+50	SB STH 37	560	LT TURN LANE
	42+05	- 44+68	SHORT ST	400	
			MEDIAN	450	SHORT/HAMILTON
	77+60	- 84+55	NB STH 37	1,280	LT TURN LANE/ISLAND
	85+20	- 88+00	SB STH 37	590	LT TURN LANE/ISLAND
	99+00	- 100+82	NB STH 37	120	RT TURN LANE
	81+70	- 84+16	SB STH 37	250	DITCH BOTTOM
			TOTAL 0010	38,435	

REMOVING CONCRETE SIDEWALK

CATEGORY	LOCATION	204.0155 SY	REMARKS
0010	HAMILTON	13	RAMPS
	CRAIG RD/STH 37	20	SW QUAD
	CRAIG RD/STH 37	42	SE QUAD
	CRAIG RD/STH 37	74	NW QUAD
	CRAIG RD/STH 37	30	NE QUAD
	CRAIG RD/STH 37	48	NB ISLAND
	CRAIG RD/STH 37	80	NB ISLAND
	CRAIG RD/STH 37	76	SB ISLAND
	CRAIG RD/STH 37	23	SB ISLAND
	CLAIREMONT/STH 37	170	SE QUAD
	CLAIREMONT/STH 37	13	ISLAND
	CLAIREMONT	11	NW QUAD
	TOTAL 0010	600	

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION TO	STATION	LOCATION	204.0110 SY
0010	40+00	- 45+93	CROSSOVER A-B	2,300
	94+00	- 98+83	CROSSOVER C-D	1,600
	40+54	- 44+15	SHORT ST.	350
	52+00	- 56+00	NB	300
	85+50	- 89+50	NB	330
			TOTAL 0010	4,880

REMOVING CURB & GUTTER

CATEGORY	STATION TO	STATION	LOCATION	204.0150 LF	REMARKS
0010	25+37	- 26+63	HAMILTON AVE.	160	SE RADIUS
	25+37	- 26+63	HAMILTON AVE.	160	NE RADIUS
	25+36	- 25+72	HAMILTON AVE.	100	ISLAND
	397+60	- 398+51	CRAIG RD	100	RIGHT
	397+60	- 83+60	CRAIG RD/STH 37	170	SW RADIUS
	399+00	- 85+60	CRAIG RD/STH 37	145	SE RADIUS
	84+34	- 402+00	CRAIG RD/STH 37	175	NW RADIUS
	402+00	- 86+09	CRAIG RD/STH 37	130	NE RADIUS
	101+80	- 101+94	NB MEDIAN	14	
	101+80	- 101+94	SB MEDIAN	14	
	101+85	- 101+95	NB	10	RT TURN LANE
	101+88	- 102+14	ISLAND	36	3 SECTIONS
	155+20	- 101+15	CLAIREMONT/STH 37	125	
	155+85	- 156+18	CLAIREMONT	35	
			TOTAL 0010	1,374	

EARTHWORK SUMMARY

FILL FACTOR = 1.3

CATEGORY	STATION TO STATION	LOCATION	EXCAVATION COMMON 205.0100 CY	(1) AVAILABLE MATERIAL CY	EXPANDED FILL CY	BORROW 208.0100 CY	WASTE CY	REMARKS
0010	39+25 - 51+00	NB ROADWAY	660	590	120	0	470	
	51+00 - 84+00	NB ROADWAY	1,780	1,540	8,390	0	0	
	84+00 - 100+82	NB ROADWAY	1,000	880	150	0	730	
	39+25 - 51+00	SB ROADWAY	990	900	0	0	900	
	51+00 - 84+00	SB ROADWAY	3,190	2,910	3,910	1,000	0	
	84+00 - 101+12	SB ROADWAY	1,290	1,160	560	0	600	
	40+00 - 45+93	CROSSOVER	425	380	110	0	270	CONSTRUCTION
	94+36 - 99+00	CROSSOVER	660	620	0	0	620	CONSTRUCTION
	40+00 - 45+93	CROSSOVER	110	110	0	0	110	REMOVE AND RESTORE
	96+00 - 99+00	CROSSOVER	0	0	520	520	0	REMOVE AND RESTORE
		ISLAND REMOVALS	190	0	0	0	190	
		WIDENINGS	240	0	0	0	240	
	40+75 - 44+68	SHORT ST.	315	180	240	60	0	
	25+32 - 26+63	HAMILTON AVE.	1,180	1,080	110	0	970	
	8+00 - 12+11	CRAIG RD.	730	730	100	0	630	
		CLAIREMONT AVE.	80	80	10	0	70	
		TOTAL 0010	12,840	11,160	14,220	1,580	5,800	
0030	51+00 - 84+00	NB ROADWAY	0	0	0	6,850		
	233+69 - 251+66	SHARED PATH	135	135	735	600		
	40+75 - 44+68	SHORT ST.	120	120	920	800		
	95+50 - 101+25	SIDEWALK	60	60	135	75		
		TOTAL 0030	315			8,325		

(1) ASPHALTIC PAVEMENT IS INCLUDED IN THE QUANTITY OF EXCAVATION COMMON BUT NOT INCLUDED IN THE QUANTITY OF AVAILABLE MATERIAL.

PREPARE FOUNDATION FOR BASE AGGREGATE

CATEGORY	STATION TO STATION	LOCATION	211.0500 STA	REMARKS
0010	39+25 - 100+82	NB	62	
	39+25 - 101+12	SB	62	
	42+05 - 44+00	SHORT ST.	2	
		TOTAL 0010	126	

305-BASE AGGREGATE DENSE

CATEGORY	STATION TO STATION	LOCATION	305.0110 TON	305.0120 TON	WATER 624.0100 MGAL	REMARKS
0010	39+25 - 100+82	NB	375	6,600	150	
	39+25 - 101+12	SB	425	7,425	150	
	25+32 - 26+63	HAMILTON AVE		340		
	40+54 - 44+68	SHORT STREET		565		
	8+00 - 12+11	CRAIG ROAD		580		
		USH 12		55		
		TOTAL 0010	800	15,565	300	
0030	51+65 - 251+67	SHARED USE PATH		2,225		
		SHARED USE PATH		80		SHORT ST.
		TOTAL 0030	0	2305	0	

Replaced by "Revised Sheet 113"

Addendum No. 1
I.D. 7110-05-72
Revised sheet 113
March 6, 2018

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EARTHWORK SUMMARY

FILL FACTOR = 1.3

CATEGORY	STATION	TO	STATION	LOCATION	EXCAVATION COMMON 205.0100 CY	(1) AVAILABLE MATERIAL CY	EXPANDED FILL CY	BORROW 208.0100 CY	WASTE CY	REMARKS
0010	39+25	-	51+00	NB ROADWAY	1,900	850	120	0	730	
	51+00	-	84+00	NB ROADWAY	5,030	2,300	8,390	0	0	
	84+00	-	100+82	NB ROADWAY	2,590	1,230	150	0	1,080	
	39+25	-	51+00	SB ROADWAY	2,170	1,220	0	0	1,220	
	51+00	-	84+00	SB ROADWAY	6,010	3,980	3,910	0	70	
	84+00	-	101+12	SB ROADWAY	3,040	1,590	560	0	1,030	
	40+00	-	45+93	CROSSOVER	425	380	110	0	270	CONSTRUCTION
	94+36	-	99+00	CROSSOVER	660	620	0	0	620	CONSTRUCTION
	40+00	-	45+93	CROSSOVER	110	110	0	0	110	REMOVE AND RESTORE
	96+00	-	99+00	CROSSOVER	0	0	520	520	0	REMOVE AND RESTORE
				ISLAND REMOVALS	190	0	0	0	190	
				WIDENINGS	240	0	0	0	240	
	40+75	-	44+68	SHORT ST.	280	220	300	80	0	
	25+32	-	26+63	HAMILTON AVE.	1,180	1,080	110	0	970	
	8+00	-	12+11	CRAIG RD.	730	730	100	0	630	
				CLAIREMONT AVE.	80	80	10	0	70	
				TOTAL 0010	24,635	14,390	14,280	600	7,230	
0030	51+00	-	84+00	NB ROADWAY	0	0	0	6,090		
	233+69	-	251+66	SHARED PATH	135	135	735	600		
	40+75	-	44+68	SHORT ST.	220	140	920	780		
	95+50	-	101+25	SIDEWALK	60	60	135	75		
				TOTAL 0030	415			7,545		

(1) ASPHALTIC PAVEMENT AND CONCRETE PAVEMENT ARE INCLUDED IN THE QUANTITY OF EXCAVATION COMMON BUT NOT INCLUDED IN THE QUANTITY OF AVAILABLE MATERIAL.

PREPARE FOUNDATION FOR BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	211.0500 STA	REMARKS
0010	39+25	-	100+82	NB	62	
	39+25	-	101+12	SB	62	
	42+05	-	44+00	SHORT ST.	2	
				TOTAL 0010	126	

305-BASE AGGREGATE DENSE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 TON	305.0120 TON	WATER 624.0100 MGAL	REMARKS
0010	39+25	-	100+82	NB	375	6,600	150	
	39+25	-	101+12	SB	425	7,425	150	
	25+32	-	26+63	HAMILTON AVE		340		
	40+54	-	44+68	SHORT STREET		565		
	8+00	-	12+11	CRAIG ROAD		580		
				USH 12		55		
				TOTAL 0010	800	15,565	300	
0030	51+65	-	251+67	SHARED USE PATH		2,225		
				SHARED USE PATH		80		SHORT ST.
				TOTAL 0030	0	2305	0	

PROJECT NO:	HWY:	COUNTY:	MISCELLANEOUS QUANTITIES	SHEET:	E

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CONCRETE PAVEMENT 8 1/2-INCH

CATEGORY	STATION TO	STATION	LOCATION	415.0085 SY	REMARKS
0010	39+25	- 100+82	NB	17,787	
	39+25	- 101+15	SB	17,882	
	45+70	- 53+20	NB RT TURN	507	
	43+75	- 50+50	NB LT TURN	867	
	50+50	- 51+30	MEDIAN	201	
	25+32	- 26+63	HAMILTON AVE.	1,574	
	42+05	- 44+68	SHORT STR.	2,437	
	49+00	- 56+75	SB RT TURN	475	
	51+50	- 58+00	SB LT TURN	833	
	77+50	- 83+50	NB RT TURN	713	
	76+50	- 84+50	NB LT TURN	1,176	
	8+00	- 9+39	CRAIG RD SO	1,498	
	10+61	- 12+11	CRAIG RD NO	1,184	
	86+00	- 91+00	SB RT TURN	547	
	85+20	- 91+50	SB LT TURN	924	
	84+50	- 85+20	MEDIAN	310	
			SW RADIUS	130	USH 12
			TOTAL 0010	49,045	

CONCRETE PAVEMENT GAPS

CATEGORY	LOCATION	415.0210 EACH	REMARKS
0010	NB	1	
	NB	1	
	SB	1	
	SB	1	
	TOTAL 0010	4	

CONCRETE SHOULDER RUMBLE STRIPS

CATEGORY	STATION TO	STATION	LOCATION	416.1110 LF	REMARKS
0010	39+25	- 49+00	SB LT	975	
	39+25	- 45+00	NB RT	575	
	56+75	- 84+30	SB LT	2,755	
	58+00	- 77+50	NB RT	1,950	
	85+50	- 96+75	NB RT	1,125	
	91+00	- 100+70	SB LT	970	
			TOTAL 0010	8,350	

DRILLED DOWEL BARS

CATEGORY	STATION	LOCATION	416.0620 EACH	REMARKS
0010	39+25	NB	24	
	39+25	SB	24	
	100+82	NB	36	
	101+12	SB	24	
		TOTAL 0010	108	

CONCRETE SURFACE DRAINS

CATEGORY	STATION	LOCATION	416.1010 CY	REMARKS
0010	44+54	NB	2	
	48+25	SB	2.2	
	49+78	NB	2.2	
	54+13	SB	2.2	
	77+50	NB	2.2	
	79+00	NB	1.4	
	80+12	NB	2.4	
	84+33	SB	2.9	
	96+00	NB	2.5	
	96+00	SB	2.5	
		TOTAL 0010	22.5	

TACK COAT

CATEGORY	STATION TO	STATION	LOCATION	455.0605 GAL	REMARKS
0010			PROJECT	275	CROSSOVERS & WIDENINGS
	39+25	- 101+12	LT & RT	490	SHOULDERS
			TOTAL 0010	765	

DRILLED TIE BARS

CATEGORY	STATION TO	STATION	LOCATION	416.0610 EACH	REMARKS
0010			USH 12 INT.	68	SW QUAD.
	39+25	- 45+00	NB	192	
	39+25	- 45+00	SB	192	
	94+50	- 100+82	NB	210	
	94+50	- 100+98	SB	216	
			TOTAL 0010	878	

HMA PAVEMENT 4 LT 58-34 S

CATEGORY	STATION TO	STATION	LOCATION	460.5244 TON	REMARKS
0010	39+25	- 100+80	NB RIGHT	565	
	39+25	- 96+00	NB LEFT	330	
	39+25	- 96+00	SB RIGHT	330	
	39+25	- 100+70	SB LEFT	690	
			TOTAL 0010	1,915	

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ASPHALTIC SURFACE

CATEGORY	STATION TO	STATION	LOCATION	465.0105 TON	REMARKS
0030	51+50	- 101+50	SHARED USE PATH	630	
			SHARED USE PATH	20	SHORT ST.
			TOTAL 0030	650	

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION TO	STATION	LOCATION	465.0400 LF	REMARKS
0010	39+25	- 43+75	NB LT	450	
	39+25	- 48+25	SB RT	900	
	53+60	- 76+50	NB LT	2,290	
	58+00	- 84+20	SB RT	2,620	
	91+00	- 96+00	SB RT	500	
	85+60	- 96+00	NB LT	1,040	
			TOTAL 0010	7,800	

ASPHALTIC SURFACE TEMPORARY

CATEGORY	STATION TO	STATION	LOCATION	465.0125 TON	REMARKS
0010	40+00	- 45+93	CROSSOVER A & B	650	
	94+00	- 98+83	CROSSOVER C & D	450	
			NB	65	ISLAND REMOVAL
			SHORT ST.	15	ISLAND REMOVAL
			NB	55	ISLAND REMOVAL
	44+50	- 49+00	NB	90	TEMPORARY WIDENING
			HAMILTON AVE	5	ISLAND REMOVAL
	52+00	- 56+00	NB	85	TEMPORARY WIDENING
			NB	20	ISLAND REMOVAL
	78+50	- 81+75	NB	20	TEMPORARY WIDENING
	85+50	- 89+50	NB	95	TEMPORARY WIDENING
			TOTAL 0010	1,550	

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 EACH	REMARKS
0010	73+90	NB & MEDIAN	1	
	75+99	NB & SB	1	
	97+12	NB & SB	1	
		TOTAL 0010	3	

522-CULVERT PIPE REINFORCED CONCRETE

CATEGORY	STATION TO	STATION	LOCATION	CLASS III 24-INCH 522.0124 LF	APRON ENDWALLS 12-INCH 522.1012 EACH	APRON ENDWALLS 18-INCH 522.1018 EACH	APRON ENDWALLS 24-INCH 522.1024 EACH	APRON ENDWALLS 30-INCH 522.1030 EACH	APRON ENDWALLS 36-INCH 522.1036 EACH	APRON ENDWALLS SALVAGED 36-INCH 524.0636 EACH
0010		42+79	SHORT ST		1					
		51+97	SB LT			1				
		80+99	SB LT					1		
		86+42	SB LT						1	
		84+55	SB LT							1
		86+54	NB RT		1					
			TOTAL 0010	0	2	1	0	1	1	1
0030	74+29	- 75+25	NB RT	98						
		75+99	NB RT	26						
		74+29	NB RT				1			
		75+25	NB RT				1			
		75+99	NB RT				1			
			TOTAL 0030	124	0	0	3	0	0	0

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601-CONCRETE CURB & GUTTER

CATEGORY	STATION	TO STATION	LOCATION	30-INCH TYPE D 601.0411 LF	36-INCH TYPE A 601.0551 LF	CONSTRUCTION STAKING 650.5500 LF	CURE AND SEAL TREATMENT SPV.0090.02 LF
0010	44+54	- 50+53	NB		600	600	600
	48+75	- 50+53	SB		180	180	180
			SE HAMILTON AVE		175	175	175
			SW SHORT		130	130	130
	40+54	- 43+65	SHORT ST	310		310	310
			NE HAMILTON		180	180	180
			NW SHORT		145	145	145
	42+40	- 43+54	SHORT ST	110		110	110
	51+46	- 53+53	NB		205	205	205
	51+46	- 56+58	SB		510	510	510
	52+15	- 58+00	NB		585	585	585
	77+50	- 84+10	NB		660	660	660
	79+00	- 83+29	NB		430	430	430
	81+82	- 84+39	SB		260	260	260
			SW CRAIG		130	130	130
			NW CRAIG	50	85	135	135
			SE CRAIG		175	175	175
			NE CRAIG	50	105	155	155
	85+51	- 87+65	NB		215	215	215
	85+81	- 92+00	SB		620	620	620
	96+00	- 100+82	NB		480	480	480
	96+00	- 101+12	SB		510	510	510
			SW CLAIREMONT		140	140	140
			SE CLAIREMONT		15	15	15
			NW CLAIREMONT		35	35	35
			TOTAL 0010	520	6,570	7,090	7,090

602-CONCRETE LOADING ZONE

CATEGORY	STATION	TO STATION	LOCATION	602.1000 SF	CURE AND SEAL TREATMENT SPV.0165.01 SF	REMARKS
0010	48+65	- 50+75	NB LT	2,190	2,190	
	51+24	- 53+27	SB RT	2,180	2,180	
	82+50	- 84+45	NB LT	2,090	2,090	
	85+45	- 87+28	SB RT	2,000	2,000	
			TOTAL 0010	8,460	8,460	

602-CONCRETE SAFETY ISLANDS

CATEGORY	LOCATION	602.2400 SF	CURE AND SEAL TREATMENT SPV.0165.04 SF	REMARKS
0010	HAMILTON AVE. RT	810	810	
	SHORT ST. RT	1,430	1,430	
	HAMILTON AVE. LT	810	810	
	SHORT ST. LT	1,010	1,010	
	CRAIG RD. LT	1,050	1,050	
	CRAIG RD. LT	810	810	
	CRAIG RD. RT	720	720	
	CRAIG RD. RT	830	830	
	CLAIREMONT RT	1,140	1,140	
	TOTAL 0010	8,610	8,610	

602-CONCRETE SIDEWALK

CATEGORY	STATION	TO STATION	LOCATION	602.0410 SF	CURE AND SEAL TREATMENT SPV.0165.02 SF	REMARKS
0010	25+65	- 26+18	HAMILTON AVE. RT	380	380	
	25+65	- 26+62	HAMILTON AVE. LT	690	690	
		42+47	SHORT ST.	160	160	
		44+33	SHORT ST.	170	170	
	8+00	- 8+70	CRAIG RD LT	590	590	
	10+60	- 11+58	CRAIG RD LT	620	620	
	9+18	- 9+36	CRAIG RD. RT	160	160	
	11+35	- 12+25	CRAIG RD. RT	540	540	
	155+72	- 156+16	USH 12	540	540	
		156+01	USH 12	30	30	
	156+36	- 156+44	USH 12	40	40	
	156+77	- 156+99	USH 12	180	180	
			TOTAL 0010	4,100	4,100	
0030	95+79	- 100+97	SB LT	3,110	3,110	
			PATH	430	430	AT FRONTAGE ROAD
			TOTAL 0030	3,540	3,540	

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CURB RAMP DETECTABLE WARNING FIELD YELLOW

CATEGORY	LOCATION	602.0505 SF	REMARKS
0010	SE ISLAND	8	HAMILTON AVE. INT.
	SE ISLAND	8	HAMILTON AVE. INT.
	SE RADIUS	8	HAMILTON AVE. INT.
	NW RADIUS	16	SHORT ST. INT.
	NW ISLAND	16	SHORT ST. INT.
	NW ISLAND	16	SHORT ST. INT.
	SB MEDIAN	16	
	SB MEDIAN	16	
	NE ISLAND	16	HAMILTON AVE. INT.
	NE ISLAND	16	HAMILTON AVE. INT.
	NE ISLAND	8	HAMILTON AVE. INT.
	NE RADIUS	16	HAMILTON AVE. INT.
	SW RADIUS	16	CRAIG INT.
	SW ISLAND	8	CRAIG INT.
	SW ISLAND	16	CRAIG INT.
	SW ISLAND	16	CRAIG INT.
	SE RADIUS	16	CRAIG INT.
	SE ISLAND	16	CRAIG INT.
	SE ISLAND	16	CRAIG INT.
	SE ISLAND	8	CRAIG INT.
	NB MEDIAN	8	CRAIG INT.
	NB MEDIAN	8	CRAIG INT.
	NW RADIUS	8	CRAIG INT.
	NW ISLAND	8	CRAIG INT.
	NW ISLAND	8	CRAIG INT.
	SB MEDIAN	8	CRAIG INT.
	SB MEDIAN	8	CRAIG INT.
	NE RADIUS	8	CRAIG INT.
	NE ISLAND	8	CRAIG INT.
	NE ISLAND	8	CRAIG INT.
	SW RADIUS	8	CLAIREMONT INT.
	SW ISLAND	8	CLAIREMONT INT.
	SW ISLAND	8	CLAIREMONT INT.
	SW ISLAND	8	CLAIREMONT INT.
	EB MEDIAN	8	CLAIREMONT INT.
	EB MEDIAN	8	CLAIREMONT INT.
	SE RADIUS	16	CLAIREMONT INT.
	SE ISLAND	8	CLAIREMONT INT.
	SE ISLAND	8	CLAIREMONT INT.
	SE ISLAND	8	CLAIREMONT INT.
	WB MEDIAN	8	CLAIREMONT INT.
	WB MEDIAN	8	CLAIREMONT INT.
	NW RADIUS	16	CLAIREMONT INT.
TOTAL 0010		472	

606-RIPRAP

CATEGORY	STATION TO	STATION	LOCATION	HEAVY 606.0300 CY	GEOTEXTILE TYPE HR 645.0120 SY	REMARKS
0010	81+00	- 83+50	SB LT	360	670	
			TOTAL 0010	360	670	

608-STORM SEWER PIPE REINFORCED CONCRETE CLASS III

CATEGORY	STATION TO	STATION	LOCATION	12-INCH 608.0312 LF	18-INCH 608.0318 LF	24-INCH 608.0324 LF	30-INCH 608.0330 LF	36-INCH 608.0336 LF
0010	10+56	- 10+86	CRAIG RD. LT					44
	10+86	- 11+30	CRAIG RD. LT/RT					106
	11+31	- 11+37	CRAIG RD. RT					22
	40+00	- 45+48	MEDIAN		548			
		42+82	SHORT ST. LT	22				
	50+25	- 51+47	NB RT			130		
	50+46	- 50+51	NB RT	8				
	51+47	- 52+14	NB RT		84			
	51+64	- 51+81	NB RT	25				
	51+74	- 51+95	SB LT		80			
		52+14	NB RT	6				
	53+76	- 54+09	MEDIAN		32			
		55+00	NB RT	6				
		80+99	SB LT				16	
		82+10	NB RT	30				
	83+45	- 83+96	NB RT	53				
	8+32	- 8+88	CRAIG RD. LT	56				
	84+93	- 85+40	NB RT			46		
		85+60	NB LT	4				
	85+60	- 85+64	NB LT	6				
	85+60	- 87+71	MEDIAN		210			
	85+40	- 86+54	NB RT	115				
	85+40	- 85+60	NB LT & RT		74			
			TOTAL 0010	331	1028	176	16	172
0030	52+14	- 58+50	NB RT		635			
			TOTAL 0030	0	635	0	0	0

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611-MANHOLES AND INLETS

CATEGORY	STATION	LOCATION	RECONSTRUCTING MANHOLES 611.0420 EACH	RECONSTRUCTING INLETS 611.0430 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	INLET COVERS TYPE HM 611.0627 EACH	INLET COVERS TYPE MS 611.0642 EACH	CATCH BASINS 5-FT DIAMETER 611.1005 EACH	MANHOLES 3-FT DIAMETER 611.2003 EACH	MANHOLES 4-FT DIAMETER 611.2004 EACH	MANHOLES 5-FT DIAMETER 611.2005 EACH	INLETS 4-FT DIAMETER 611.3004 EACH	INLETS 2X3-FT 611.3230 EACH	INLETS MEDIAN 1 GRATE 611.3901 EACH	INLETS MEDIAN 2 GRATE 611.3902 EACH	ADJUSTING MANHOLE COVERS 611.8110 EACH	ADJUSTING INLET COVERS 611.8115 EACH	REMARKS
0010	40+00	MEDIAN		1														
	50+74	NB RT	1															STRUCTURE 25
	74+51	NB RT	1															STRUCTURE 19
	76+94	NB RT	1															STRUCTURE 18
	79+90	NB RT														1		STRUCTURE 17
	81+56	NB RT														1		STRUCTURE 15
	82+10	NB RT	1															STRUCTURE 14
	83+96	NB RT														1		STRUCTURE 10
	11+30	CRAIG ROAD			1						1							STRUCTURE 2
	51+74	MEDIAN															1	STRUCTURE 32
	51+74	MEDIAN															1	STRUCTURE 31
	82+10	NB RT				1							1					STRUCTURE 14A
	9+22	CRAIG ROAD															1	STRUCTURE 9
	52+14	NB RT			1					1								STRUCTURE 22
	55+00	NB RT			1				1									STRUCTURE 21
	85+60	MEDIAN			1					1								STRUCTURE 6
	25+70	HAMILTON AVE.				1						1						STRUCTURE 26
	25+76	HAMILTON AVE.				1							1					STRUCTURE 26A
	25+81	HAMILTON AVE.				1						1						STRUCTURE 24
	42+82	SHORT ST.				1							1					STRUCTURE 34
	52+13	NB RT				1							1					STRUCTURE 22A
	55+00	NB RT				1							1					STRUCTURE 21A
	83+45	NB RT				1							1					STRUCTURE 10A
	8+32	CRAIG ROAD				1							1					STRUCTURE 10B
	85+60	MEDIAN				1							1					STRUCTURE 6A
	85+59	MEDIAN				1							1					STRUCTURE 6B
	10+86	CRAIG ROAD				1		1										STRUCTURE 3
	11+51	CRAIG ROAD				1							1					STRUCTURE 2B
	46+00	MEDIAN					1							1				STRUCTURE 50
	25+76	HAMILTON AVE.					2								1			STRUCTURE 23
	54+09	MEDIAN					1							1				STRUCTURE 30
	58+50	NB RT					1							1				STRUCTURE 20
	85+40	NB RT					2								1			STRUCTURE 7
	87+71	MEDIAN					1							1				STRUCTURE 5
	68+83	NB RT														1		STRUCTURE 41
	71+58	NB RT														1		STRUCTURE 40
	26+12	HAMILTON AVE.														1		
	TOTAL 0010		4	1	4	13	8	1	1	2	1	2	10	4	2	6	3	

PIPE GRATES

CATEGORY	STATION	LOCATION	611.9800.S EACH	REMARKS
0010	84+55	SB LT	1	
0010	86+42	SB LT	1	
		TOTAL 0010	2	

MGS GUARDRAIL TEMPORARY

CATEGORY	STATION TO	STATION	LOCATION	614.1000 LF	REMARKS
0010	79+00	- 83+75	SB LT	475	
			TOTAL 0010	475	

MGS GUARDRAIL TEMPORARY TERMINAL EAT

CATEGORY	STATION	LOCATION	614.1200 EACH	REMARKS
0010	83+75	SB LT	1	
		TOTAL 0010	1	

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620-CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STATION TO	STATION	LOCATION	620.0300 SF	CURE AND SEAL TREATMENT SPV.0165.03 SF	REMARKS
0010		50+51	SB	70	70	
		51+48	NB	70	70	
		84+08	SB	24	24	
		85+53	NB	24	24	
			TOTAL 0010	188	188	

628-EROSION MAT

CATEGORY	STATION TO	STATION	LOCATION	CLASS I TYPE B 628.2004 SY	URBAN CLASS I TYPE B 628.2008 SY	REMARKS
0010	25+60	- 26+72	HAMILTON AVE.	500		
	79+70	- 84+23	SB LT.	1,525		
	80+70	- 84+19	SB LT.	825		
	52+00	- 58+00	PATH RT.		470	
	58+50	- 79+00	NB RT.		2,060	
	74+50	- 83+12	PATH RT.		2,080	
	85+30	- 85+80	NB RT.		130	
	89+00	- 95+60	PATH RT.		510	
	UNDISTRIBUTED			500	1,000	
			TOTAL 0010	3,350	6,250	

628-MOBILIZATIONS EROSION

CATEGORY	STATION	LOCATION	628.1905 EACH	EMERGENCY 628.1910 EACH	REMARKS
0010		PROJECT	6	4	
		TOTAL 0010	6	4	

TRACKING PADS

CATEGORY	LOCATION	628.7560 EACH
0010	PROJECT	2
	TOTAL 0010	2

625-LANDSCAPING

CATEGORY	STATION TO	STATION	LOCATION	TOPSOIL 625.0100 SY	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE # 70A 630.0171 LB	SEEDING TEMPORARY 630.0200 LB
0010	52+25	- 84+00	SB LT		10,500	7,080	6.6	40	285
	52+25	- 84+00	NB RT		4,750	2,200	3.0	17	130
	40+00	- 49+50	MEDIAN	1,250		1,250	0.8	5	35
	51+50	- 58+00	MEDIAN	430		430	0.3	2	10
	76+50	- 83+00	MEDIAN	400		400	0.3	1	10
	85+50	- 93+00	MEDIAN	1,000		1,000	0.6	5	30
	94+50	- 99+00	MEDIAN	1,100		1,100	0.7	5	30
	52+25	- 83+25	PATH RT		3,950	1,400	2.5	15	105
	233+75	- 251+68	PATH RT		1,300	790	0.8	5	35
	233+75	- 251+68	PATH LT		1,600	1,470	1.0	5	45
	UNDISTRIBUTED			400		1,500	2.0	10	70
			TOTAL 0010	4,580	22,100	18,620	19	110	785

628-INLET PROTECTION

CATEGORY	STATION	LOCATION	TYPE A 628.7005 EACH	TYPE B 628.7010 EACH	TYPE C 628.7015 EACH	TYPE D 628.7020 EACH	REMARKS
0010	40+00	MEDIAN	1				
	46+00	MEDIAN	1	1			
	25+70	HAMILTON AVE.	1		1		
	25+75	HAMILTON AVE.	1	1			
	25+76	HAMILTON AVE.	1		1		
	42+82	SHORT ST.	1		1		
	25+81	HAMILTON AVE.	1			1	
	25+58	HAMILTON AVE.	1			1	
	25+76	HAMILTON AVE.	1				
	51+75	SB	1		1		
	51+75	SB	1		1		
	52+13	NB	1		1		
	53+74	MEDIAN	1				
	55+00	NB	1		1		
	58+50	NB	1	1			
	82+10	NB	1		1		
	83+45	NB	1		1		
	8+32	CRAIG ROAD	1		1		
	9+22	CRAIG ROAD	1			1	
	10+86	CRAIG ROAD	1		1		
	11+51	CRAIG ROAD	1			1	
	85+40	NB	1	1			
	85+60	MEDIAN	1		1		
	85+64	MEDIAN	1		1		
	87+08	MEDIAN	1	1			
		TOTAL 0010	25	5	13	4	

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637-PERMANENT SIGNING

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	DESCRIPTION	SIGN SIZE	SIGNS TYPE II REFLECTIVE H 637.2210 SF	TYPE II REFLECTIVE H FOLDING 637.2215 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	POSTS WOOD 4X6-INCH X 18-FT 634.0618 EACH	POSTS WOOD 4X6-INCH X 20-FT 634.0620 EACH	MOVING SIGNS 638.2102 EACH	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH
0010	(1-2)	43+07	MEDIAN	R3-20-L	BEGIN LEFT TURN LANE	36 x 54	13.50					1			1	1
	(1-3)	44+02	NB	D1-2	TWO DESTINATIONS (ARROWS)	120 X 36	30.00					2				
	(1-4)	45+82	MEDIAN	J3-1	DIRECTIONAL ASSEMBLY (1 PANEL)	36 x 84	21.00						1		1	1
	(1-5)	45+82	SB	J3-2	DIRECTIONAL ASSEMBLY (2 PANEL)	72 x 84	42.00						2		1	2
	(1-6)	47+82	NB	R5-1A	WRONG WAY	42 x 30	8.75				1				1	
	(1-7)	48+72	MEDIAN	J1-1	JUNCTION ASSEMBLY	36 x 57	14.25					1			1	1
	(1-8)	48+72	SB	J1-1	JUNCTION ASSEMBLY	36 x 57	14.25					1			1	1
	(1-9)	49+82	NB	R6-2-L	ONE WAY LEFT ARROW	36 x 48	12.00								1	
	(1-10)	49+82	NB	R5-1	DO NOT ENTER	36 x 36	9.00					1			1	
	(1-11)	50+40	MEDIAN	R4-7	KEEP RIGHT	24 x 30	5.00								1	
	(1-12)	44+19	SHORT ST	R1-1F	STOP (FOLDING)	36 x 36		7.46			1				1	1
	(1-13)	43+49	SHORT ST												1	1
	(1-14)	25+79	HAMILTON AVE	R1-2	YIELD	36 x 31	3.88				1					
	(1-15)	44+28	SHORT ST	R1-1F	STOP (FOLDING)	36 x 36		7.46			1				1	
				R6-3	DIVIDED HIGHWAY CROSSING	30 x 24	5.00								1	
	(1-16)	50+72	MEDIAN	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50								1	
	(1-17)	51+30	MEDIAN	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50								1	
				R3-4	NO U-TURN	24 x 24	4.00									
	(1-18)	25+58	HAMILTON AVE	R1-1F	STOP (FOLDING)	36 x 36		7.46							1	
				R6-3	DIVIDED HIGHWAY CROSSING	30 x 24	5.00								1	
	(1-19)	51+56	MEDIAN	R4-7	KEEP RIGHT	24 x 30	5.00								1	
	(1-20)	44+35	SHORT ST	R1-2	YIELD	36 x 31	3.88				1					
	(1-21)	25+55	HAMILTON AVE	R1-1	STOP	36 x 36	7.46						1		1	1
				R1-53	RIGHT TURN OBEY THIS SIGN	24 x 30	5.00									
	(1-22)	52+03	SB	R5-1	DO NOT ENTER	36 x 36	9.00					1			1	
	(1-23)	52+03	SB	R6-2-L	ONE WAY LEFT ARROW	36 x 48	12.00								1	
	(1-24)	55+00	SB	R5-1A	WRONG WAY	42 x 30	8.75				1				1	
	(1-25)	55+00	NB											1		
	(1-26)	57+95	MEDIAN	R3-20-L	BEGIN LEFT TURN LANE	36 x 54	13.50					1			1	1
	(1-27)	57+95	SB	D1-2	TWO DESTINATIONS (ARROWS)	120 X 36	30.00				1	1				
	(1-28)	63+05	MEDIAN	W3-3	SIGNAL AHEAD	36 x 36			9.00						1	
	(1-29)	63+05	SB	W3-3	SIGNAL AHEAD	36 x 36			9.00						1	
	(1-30)	68+50	NB	D1-61	ADVANCED CROSSROAD NAME	66 X 30	13.75				2				1	1
	(1-31)	45+82	MEDIAN											1		
	(1-32)	42+50	SHORT ST											1		
	(1-33)	42+51	SB	M1-94H	CROSSROAD NAMES (ARROWS)	84 x 30	17.50									
	(1-34)	42+52	HAMILTON AVE	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50									
				M1-94S	CROSSROAD NAME	96 x 18	12.00									
	(1-35)	42+53	SHORT ST	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50									
				M1-94S	CROSSROAD NAME	96 x 18	12.00									
	(1-36)	42+54	NB	M1-94H	CROSSROAD NAMES (ARROWS)	84 x 30	17.50									
				PAGE 1 SUBTOTALS			**384.97**	**22.38**	**18.00**	**0.00**	**9.00**	**9.00**	**4.00**	**3.00**	**26.00**	**11.00**

637-PERMANENT SIGNING CONTINUED

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	DESCRIPTION	SIGN SIZE	SIGNS TYPE II REFLECTIVE H 637.2210 SF	TYPE II REFLECTIVE H FOLDING 637.2215 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	POSTS WOOD 4X6-INCH X 18-FT 634.0618 EACH	POSTS WOOD 4X6-INCH X 20-FT 634.0620 EACH	MOVING SIGNS 638.2102 EACH	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH
0010	(2-1)	71+40	NB	I2-3	COMMUNITY POPULATION	72 X 24	12.00				2				1	2
	(2-2)	74+20	NB	W3-3	SIGNAL AHEAD	36 x 36			9.00			1			1	1
	(2-3)	74+20	MEDIAN	W3-3	SIGNAL AHEAD	36 x 36			9.00			1			1	1
	(2-4)	76+05	NB											1		
	(2-5)	76+05	MEDIAN	R3-20-L	BEGIN LEFT TURN LANE	36 x 54	13.50					1			1	1
	(2-6)	76+05	SB											1		
	(2-7)	81+65	NB											1		
	(2-8)	82+00	NB	R5-1A	WRONG WAY	42 x 30	8.75			1					1	1
	(2-9)	83+00	SB	J4-1	REASSURANCE ASSEMBLY	36 x 54	13.50				1				1	
	(2-10)	83+30	NB	R6-2-L	ONE WAY LEFT ARROW	36 x 48	12.00								1	
	(2-11)	83+30	NB	R5-1	DO NOT ENTER	36 x 36	9.00					1			1	
	(2-12)	8+57	CRAIG RD	R1-2	YIELD	36 x 31	3.88				1					
	(2-13)	84+00	MEDIAN	R4-7	KEEP RIGHT	24 x 30	5.00								1	
	(2-14)	10+40	CRAIG RD	R1-1F	STOP (FOLDING)	36 x 36		7.46			1				1	1
	(2-15)	84+43	MEDIAN	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50								1	
				R3-4	NO U-TURN	24 x 24	4.00									
	(2-16)	10+70	CRAIG RD	R1-1F	STOP (FOLDING)	36 x 36		7.46							1	
				R6-3	DIVIDED HIGHWAY CROSSING	30 x 24	5.00								1	
	(2-17)	9+47	CRAIG RD	R1-1F	STOP (FOLDING)	36 x 36		7.46							1	
				R6-3	DIVIDED HIGHWAY CROSSING	30 x 24	5.00								1	
	(2-18)	85+20	MEDIAN	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50								1	
				R3-4	NO U-TURN	24 x 24	4.00									
	(2-19)	11+18	CRAIG RD	R1-2	YIELD	36 x 31	3.88				1				1	1
	(2-20)	9+50	CRAIG RD	R1-1F	STOP (FOLDING)	36 x 36		7.46			1				1	1
	(2-21)	11+36	CRAIG RD	R10-50	LEFT TURN YIELD ON FYA	24 x 30	5.00									
				M1-94S	CROSSROAD NAME	96 x 18	12.00									
	(2-22)	85+60	MEDIAN	R4-7	KEEP RIGHT	24 x 30	5.00								1	
	(2-23)	86+36	SB	R5-1	DO NOT ENTER	36 x 36	9.00				1				1	
	(2-24)	86+36	SB	R6-2-L	ONE WAY LEFT ARROW	36 x 48	12.00								1	
	(2-25)	86+94	NB	R2-1	SPEED LIMIT	36 x 48	12.00				1				1	1
	(2-26)	88+00	SB	R5-1A	WRONG WAY	42 x 30	8.75			1					1	1
	(2-27)	88+50	NB	J1-2	JUNCTION OR END ASSEMBLY	72 x 57	28.50					2			1	1
	(2-28)	91+90	NB	W3-3	SIGNAL AHEAD	36 x 36			9.00			1			1	1
	(2-29)	91+90	MEDIAN	W3-3	SIGNAL AHEAD	36 x 36			9.00			1			1	1
	(2-30)	91+90	SB	D1-61	ADVANCED CROSSROAD NAME	66 X 30	13.75				2				1	1
	(2-31)	93+40	MEDIAN	R3-20-L	BEGIN LEFT TURN LANE	36 x 54	13.50					1				
	(2-32)	8+73	SB	M1-94H	CROSSROAD NAME	60 x 18	7.50									
	(2-33)	8+74	NB	M1-94H	CROSSROAD NAME	60 x 18	7.50									
	(2-34)	8+75	CRAIG RD	R10-50	LEFT TURN YIELD ON FYA	30 x 36	7.50									
				M1-94S	CROSSROAD NAME	96 x 18	12.00									
				PAGE 2 SUBTOTALS			**268.51**	**29.84**	**36.00**	**2.00**	**11.00**	**9.00**	**0.00**	**3.00**	**27.00**	**15.00**

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637-PERMANENT SIGNING CONTINUED

CATEGORY	SIGN NUMBER	APPROXIMATE STATION	LOCATION	SIGN CODE	DESCRIPTION	SIGN SIZE	SIGNS TYPE II REFLECTIVE H 637.2210 SF	TYPE II REFLECTIVE H FOLDING 637.2215 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH	POSTS WOOD 4X6-INCH X 16-FT 634.0616 EACH	POSTS WOOD 4X6-INCH X 18-FT 634.0618 EACH	POSTS WOOD 4X6-INCH X 20-FT 634.0620 EACH	MOVING SIGNS 638.2102 EACH	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH
0010	(3-1)	95+85	NB												1	
	(3-2)	95+85	NB	D1-2	TWO DESTINATIONS (ARROWS)	120.00 120 X 36	30.00				1	1			1	2
	(3-3)	96+00	MEDIAN	D1-2	TWO DESTINATIONS (ARROWS)	102.00 102 X 42	29.75				2				1	2
	(3-4)	96+00	MEDIAN	W3-3	SIGNAL AHEAD	36.00 36 x 36	9.00		9.00		1				1	1
	(3-5)	96+00	MEDIAN	W3-3	SIGNAL AHEAD	36.00 36 x 36	9.00		9.00			1			1	1
	(3-6)	97+70	SB	I55-56	ADOPT-A-HIGHWAY	30.00 30 x 36	7.50				1				1	1
	(3-7)	98+10	NB	R3-8-W	LEFT ONLY/AHEAD/RIGHT ONLY	54.00 54 x 30	11.25				2				1	2
	(3-8)	99+00	SB	J4-1	REASSURANCE ASSEMBLY	36.00 36 x 54	13.50				1					
	(3-9)	99+90	SB	R2-1	SPEED LIMIT	36.00 36 x 48	12.00					1			1	1
	(3-10)	99+00	PATH											1		
	(3-11)	101+50	PATH													
	(PB1-12)			R10-3E	PUSH BUTTON INSTRUCTIONS	9 x 15	11.25									
					PAGE 3 SUBTOTALS		**133.25**	**0.00**	**18.00**	**0.00**	**8.00**	**3.00**	**0.00**	**1.00**	**7.00**	**10.00**
					TOTAL 0010		**786.73**	**52.22**	**72.00**	**2.00**	**28.00**	**21.00**	**4.00**	**7.00**	**60.00**	**36.00**

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643-TRAFFIC CONTROL

CATEGORY	STATION TO	STATION	LOCATION	DRUMS 643.0300 DAY	BARRICADES TYPE III 643.0420 DAY	FLEXIBLE TUBULAR MARKER POSTS 643.0500 EACH	FLEXIBLE TUBULAR MARKER BASES 643.0600 EACH	WARNING LIGHTS TYPE A 643.0705 DAY	WARNING LIGHTS TYPE C 643.0715 DAY	ARROW BOARDS 643.0800 DAY	SIGNS 643.0900 DAY	SIGNS PCMS WITH CELLULAR COMMUNICATIONS 643.1051 DAY	REMARKS
0010			PROJECT	2,250	100			200	430	40	240		STAGE 1A
			PROJECT	2,250	90			180	240	20	130		STAGE 1B
			PROJECT	1,600	70			140	240	20	140		STAGE 1C
	44+00	- 96+00	NB ROADWAY	5,300	1,120	200	200	2,240	1,800	60	2,300		STAGE 2
	43+50	- 96+00	SB ROADWAY	7,200	1,560	200	200	3,120	2,520	60	3,900		STAGE 3
			PROJECT	2,540	90			180	620	30	90		STAGE 4A
			PROJECT	3,000	200			400	510	30	200		STAGE 4B
			PROJECT	500	40			80	100	10	40		STAGE 4C
			PROJECT								6,200	188	ALL STAGES
			TOTAL 0010	24,640	3,270	400	400	6,540	6,460	270	13,240	188	

644-TEMPORARY PEDESTRIAN

CATEGORY	STATION TO	STATION	LOCATION	SURFACE PLYWOOD 644.1420.S SF	CURB RAMP 644.1601.S EACH	SAFETY FENCE 644.1616.S LF	REMARKS
0010		27+73	HAMILTON AVE. RT		1		STAGE 3
		27+77	HAMILTON AVE. LT		1		STAGE 3
		7+58	CRAIG RD. LT		1		STAGE 2 & 3
		7+58	CRAIG RD. RT		1		STAGE 2 & 3
	8+00	- 10+00	CRAIG RD. LT			200	STAGE 3
	8+60	- 9+90	CRAIG RD. LT			260	STAGE 3
	10+10	- 12+10	CRAIG RD. RT			200	STAGE 2
	10+10	- 11+40	CRAIG RD. RT			250	STAGE 2
		12+25	CRAIG RD. LT		1		STAGE 2 & 3
		12+25	CRAIG RD. RT		1		STAGE 2 & 3
	101+79	- 102+00	NB RT	90	1		STAGE 4B
	155+60	- 156+12	USH 12 LT	250	1		STAGE 4C
			TOTAL 0010	340	8	910	

DELINEATORS TEMPORARY

CATEGORY	STATION TO	STATION	LOCATION	633.1100 EACH	REMARKS
0010	46+00	- 48+00	CROSSOVER A	3	
	46+00	- 48+00	CROSSOVER B	3	
	93+00	- 94+00	CROSSOVER C	3	
	93+00	- 94+00	CROSSOVER D	3	
			TOTAL 0010	12	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 LF
0010	52+00	NB	8
	54+00	NB	8
	56+00	NB	8
	60+00	NB	12
	62+00	NB	12
	64+00	NB	12
	70+00	NB	12
	72+00	NB	12
	74+50	NB	8
	76+50	NB	8
	78+25	NB	8
		TOTAL 0010	108

628-SILT FENCE

CATEGORY	STATION TO	STATION	LOCATION	628.1504 LF	MAINTENANCE 628.1520 LF
0010	43+00	- 44+00	SHORT ST.	100	100
	52+25	- 69+50	SB LT	1,725	1,725
	74+00	- 83+50	NB RT	950	950
	75+00	- 84+00	SB LT	900	900
		UNDISTRIBUTED		500	500
			TOTAL 0010	4,175	4,175

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 EACH
0010	74+20	NB	7
	80+99	SB	9
	86+18	SB	9
	97+00	NB	5
		TOTAL 0010	30

3

MARKING LINE EPOXY 4-INCH

CATEGORY	STATION TO STATION	LOCATION	646.1020 LF	REMARKS
0010	25+47 - 26+63	HAMILTON AVE.	235	DOUBLE YELLOW
	42+05 - 44+55	SHORT ST.	500	DOUBLE YELLOW
	8+00 - 9+18	CRAIG RD.	240	DOUBLE YELLOW
	10+77 - 12+11	CRAIG RD.	270	DOUBLE YELLOW
		TOTAL 0010	1,245	

MARKING LINE GROOVED WET REF EPOXY 4-INCH

CATEGORY	STATION TO STATION	LOCATION	646.1040 LF	REMARKS
0010	39+00 - 49+78	NB RT	1,080	WHITE EDGE LINE
	39+00 - 44+55	NB LT	555	YELLOW EDGE LINE
	39+00 - 48+25	SB RT	925	YELLOW EDGE LINE
	39+00 - 49+95	SB LT	1,095	WHITE EDGE LINE
	52+07 - 84+33	SB LT	3,300	WHITE EDGE LINE
	53+27 - 77+50	NB LT	2,425	YELLOW EDGE LINE
	56+50 - 81+52	SB RT	2,525	YELLOW EDGE LINE
	58+00 - 79+00	NB RT	2,090	WHITE EDGE LINE
	85+43 - 100+82	NB RT	1,560	WHITE EDGE LINE
	86+38 - 100+85	SB LT	1,390	WHITE EDGE LINE
	87+65 - 96+00	NB LT	835	YELLOW EDGE LINE
	91+86 - 96+00	SB RT	400	YELLOW EDGE LINE
		TOTAL 0010	18,180	

MARKING LINE EPOXY 8-INCH

CATEGORY	STATION TO STATION	LOCATION	646.3020 LF	REMARKS
0010	43+41 - 44+55	SHORT ST.	115	CHANNELIZING
	43+41 - 44+55	SHORT ST.	115	CHANNELIZING
	43+41 - 44+11	SHORT ST.	70	RIGHT TURN GORE
	25+47 - 26+63	HAMILTON AVE	115	CHANNELIZING
	25+47 - 26+08	HAMILTON AVE	60	CHANNELIZING
	25+64 - 25+90	HAMILTON AVE	40	RIGHT TURN GORE
	8+00 - 9+26	CRAIG RD.	125	CHANNELIZING
	8+73 - 9+26	CRAIG RD.	55	CHANNELIZING
	8+73 - 9+18	CRAIG RD.	60	RIGHT TURN GORE
	10+71 - 12+11	CRAIG RD.	140	CHANNELIZING
	10+80 - 11+07	CRAIG RD.	60	RIGHT TURN GORE
	155+46 - 155+89	USH 12 RT	90	RIGHT TURN GORE
		TOTAL 0010	1,045	

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH

CATEGORY	STATION TO STATION	LOCATION	646.3555 LF	REMARKS
0010	47+00 - 50+60	NB RT	360	CHANNELIZING
	47+00 - 50+60	NB RT	360	CHANNELIZING
	47+77 - 48+82	NB LT	210	LEFT TURN GORE
	49+90 - 50+40	NB RT	60	RIGHT TURN GORE
	51+41 - 55+19	SB LT	385	CHANNELIZING
	51+63 - 52+07	SB LT	50	RIGHT TURN GORE
	53+10 - 53+75	SB RT	140	LEFT TURN GORE
	79+00 - 84+10	NB RT	510	CHANNELIZING
	81+40 - 82+69	NB LT	260	LEFT TURN GORE
	83+67 - 83+90	NB RT	30	RIGHT TURN GORE
	85+51 - 89+30	SB LT	370	CHANNELIZING
	85+77 - 86+00	SB LT	30	RIGHT TURN GORE
	86+81 - 87+41	SB RT	120	LEFT TURN GORE
	98+10 - 101+78	NB RT	370	CHANNELIZING
	98+10 - 101+78	NB RT	370	CHANNELIZING
	100+65 - 101+78	NB RT	115	CHANNELIZING
		TOTAL 0010	3,740	

MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH

CATEGORY	STATION TO STATION	LOCATION	646.1555 LF	REMARKS
0010	39+00 - 101+75	NB	1,570	CENTER LINE
	39+00 - 98+10	SB	1,480	CENTER LINE
		TOTAL 0010	3,050	

MARKING ARROW EPOXY

CATEGORY	STATION	LOCATION	646.5020 EACH	REMARKS
0010	43+50	SHORT ST.	1	LEFT TURN
	26+50	HAMILTON AVE.	1	LEFT TURN
	8+25	CRAIG RD.	1	LEFT TURN
	11+75	CRAIG RD.	1	LEFT TURN
	98+30	NB RT	1	RIGHT TURN
	96+85	NB RT	1	LEFT TURN
	98+30	NB RT	1	LEFT TURN
		TOTAL 0010	7	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH	REMARKS
0010	45+49	NB RT	1	
	42+78	SHORT ST.	1	
	51+95	SB LT	1	
	73+89	NB LT & RT	2	
	74+23	NB RT	1	
	75+31	NB RT	1	
	75+99	SB LT & NB RT	2	
	81+00	SB LT	1	
	84+34	SB LT	1	
	86+05	SB LT	1	
	86+54	NB RT	1	
	96+98	SB LT & NB RT	2	
		TOTAL 0010	15	

MARKING WORD EPOXY

CATEGORY	STATION	LOCATION	646.5120 EACH
0010	100+90	NB RT	1
	100+90	NB RT	1
		TOTAL 0010	2

3

MARKING STOP LINE EPOXY 18-INCH

CATEGORY	STATION	LOCATION	646.6120 LF	REMARKS
0010	50+49	NB LEFT TURN	14	
	50+62	NB	24	THROUGH LANE
	44+33	SHORT ST.	17	RIGHT TURN LANE
	44+53	SHORT ST.	24	THROUGH LANE
	25+46	HAMILTON AVE.	24	THROUGH LANE
	25+66	HAMILTON AVE.	18	RIGHT TURN LANE
	51+41	SB	24	THROUGH LANE
	84+15	NB	27	THROUGH LANE
	85+45	SB	27	THROUGH LANE
	9+23	CRAIG RD.	27	THROUGH LANE
	9+30	CRAIG RD.	17	RIGHT TURN LANE
	10+64	CRAIG RD.	16	RIGHT TURN LANE
	10+71	CRAIG RD.	27	THROUGH LANE
	101+79	NB	30	THROUGH LANE
	101+75	NB	12	RIGHT TURN LANE
		TOTAL 0010	328	

MARKING CURB EPOXY

CATEGORY	STATION	LOCATION	646.8120 LF	REMARKS
0010	50+50	MEDIAN	35	
	51+50	MEDIAN	35	
	84+10	MEDIAN	20	
	85+50	MEDIAN	20	
		TOTAL 0010	110	

MARKING ISLAND NOSE EPOXY

CATEGORY	STATION	LOCATION	646.8220 EACH	REMARKS
0010	50+49	MEDIAN	1	
	51+50	MEDIAN	1	
	84+04	MEDIAN	1	
	85+57	MEDIAN	1	
		TOTAL 0010	4	

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH

CATEGORY	STATION	LOCATION	646.7420 LF	REMARKS
0010	51+30	SB	68	THROUGH LANE
	51+30	NB	116	THROUGH LANE
	51+50	SB	38	RIGHT TURN LANE
	25+38	HAMILTON AVE.	96	THROUGH LANE
	50+47	NB	40	RIGHT TURN LANE
	25+56	HAMILTON AVE.	36	RIGHT TURN LANE
	83+80	NB	44	RIGHT TURN LANE
	84+20	NB	76	THROUGH LANE
	85+03	NB	134	THROUGH LANE
	84+50	SB	140	THROUGH LANE
	85+35	SB	80	THROUGH LANE
	9+23	CRAIG RD.	54	THROUGH LANE
	9+33	CRAIG RD.	34	RIGHT TURN LANE
	10+53	CRAIG RD.	32	RIGHT TURN LANE
	10+67	CRAIG RD.	108	THROUGH LANE
	85+75	SB	60	RIGHT TURN LANE
	101+99	SB	46	THROUGH LANE
	101+99	NB	60	THROUGH LANE
	102+00	NB	24	RIGHT TURN LANE
	155+72	USH 12	54	RIGHT TURN LANE
	155+96	USH 12	78	THROUGH LANE
	155+99	USH 12	128	THROUGH LANE
		TOTAL 0010	1,546	

MARKING REMOVAL LINE 4-INCH

CATEGORY	STATION TO	STATION	LOCATION	646.9000 LF	REMARKS
0010	39+25 -	101+00	NB	1,550	CENTER LINE
	39+25 -	101+00	SB	1,550	CENTER LINE
	39+25 -	44+00	SB RT	475	EDGE LINE
	39+25 -	47+00	NB LT	775	EDGE LINE
	44+00 -	49+00	NB RT	500	EDGE LINE
	51+00 -	56+00	NB RT	500	EDGE LINE
	94+00 -	101+00	SB RT	700	EDGE LINE
	93+00 -	98+00	NB LT	500	EDGE LINE
	7+25 -	9+25	CRAIG RD.	400	DOUBLE YELLOW CL
	10+50 -	13+10	CRAIG RD.	520	DOUBLE YELLOW CL
	40+50 -	44+50	SHORT ST.	800	DOUBLE YELLOW CL
	25+50 -	28+50	HAMILTON AVE.	600	DOUBLE YELLOW CL
	100+65 -	101+80	NB RT	115	CHANNELIZING
	100+65 -	101+80	NB RT	115	CHANNELIZING
	100+65 -	101+80	NB RT	115	CHANNELIZING
			TOTAL 0010	9,215	

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH

CATEGORY	STATION TO	STATION	LOCATION	649.0150 LF	REMARKS
0010	45+00 -	62+00	SB	1,090	STAGE 1A
	69+20 -	94+25	NB	2,230	STAGE 1A
	99+00 -	101+75	SB	265	STAGE 1A
	38+00 -	46+00	SB	790	STAGE 1B
	48+00 -	84+25	NB	2,830	STAGE 1B
	51+50 -	64+00	SB	1,100	STAGE 1B
	40+00 -	51+80	NB	810	STAGE 1C
	73+00 -	85+78	NB	885	STAGE 1C
	39+00 -	48+00	CROSS OVER	950	STAGE 2
	40+00 -	45+25	CROSS OVER	525	STAGE 2
	92+50 -	101+50	CROSS OVER	850	STAGE 2
	94+25	100+75	CROSS OVER	650	STAGE 2
		7+55	CRAIG RD.	86	CROSS WALK
	9+37 -	12+22	CRAIG RD.	590	CROSS WALK
		12+25	CRAIG RD.	96	CROSS WALK
	9+37 -	10+75	CRAIG RD.	288	CROSS WALK
	7+30 -	9+10	CRAIG RD.	350	DOUBLE YELLOW
	10+50 -	13+10	CRAIG RD.	520	DOUBLE YELLOW
	37+50 -	45+75	CROSS OVER	820	STAGE 3
	39+00 -	47+75	CROSS OVER	875	STAGE 3
	43+50 -	96+00	CENTER LINE	10,000	STAGE 3
	92+80 -	98+80	CROSS OVER	600	STAGE 3
	94+20 -	98+80	CROSS OVER	460	STAGE 3
	95+80	101+00	CROSS OVER	540	STAGE 3
	40+50 -	44+53	SHORT ST.	800	DOUBLE YELLOW
	25+43 -	28+48	HAMILTON AVE	610	DOUBLE YELLOW
		27+70	HAMILTON AVE	86	CROSS WALK
	6+50 -	9+20	CRAIG RD.	540	DOUBLE YELLOW
	10+80 -	13+10	CRAIG RD.	460	DOUBLE YELLOW
	7+60 -	10+40	CRAIG RD.	565	CROSS WALK
	33+60 -	39+00	NB	540	STAGE 4
	59+00 -	65+00	SB	600	STAGE 4
	87+00 -	94+50	NB	750	STAGE 4
	33+60 -	39+00	NB	540	STAGE 4
	45+00 -	50+00	SB	500	STAGE 4
	59+00 -	65+00	SB	610	STAGE 4
	87+00 -	94+50	NB	750	STAGE 4
	101+00 -	102+00	SB	100	STAGE 4
			USH 12	540	STAGE 4
			TOTAL 0010	36,191	

MARKING CHEVRON EPOXY 24-INCH

CATEGORY	STATION TO	STATION	LOCATION	646.7220 LF
0010	100+90 -	101+75	NB	20
			TOTAL 0010	20

3

649-TEMPORARY MARKING

CATEGORY	STATION TO STATION	LOCATION	LINE PAINT 4-INCH 649.0105 LF	LINE PAINT 8-INCH 649.0205 LF	LINE REMOVABLE TAPE 8-INCH 649.0250 LF	ARROW PAINT 649.0505 EACH	ARROW REMOVABLE TAPE 649.0550 EACH	STOP LINE PAINT 18-INCH 649.0805 LF	STOP LINE REMOVABLE TAPE 18-INCH 649.0850 LF	REMARKS
0010	44+00 - 96+25	NB	10,000							CENTER LINE
	44+50 - 48+50	NB	400							EDGE LINE
	52+00 - 56+00	NB	400							EDGE LINE
	78+00 - 82+00	NB	400							EDGE LINE
	83+50 - 87+50	NB	400							EDGE LINE
	47+64 - 50+36	NB		270						STAGE 2
	51+69 - 53+00	NB		130						STAGE 2
	80+76 - 84+15	NB		340						STAGE 2
	85+20 - 86+40	NB		120						STAGE 2
	47+84 - 50+63	SB			280					STAGE 3
	51+35 - 52+95	SB			160					STAGE 3
	80+50 - 83+90	SB			340					STAGE 3
	85+60 - 89+20	SB			360					STAGE 3
	50+20	NB				2				STAGE 2
	51+85	NB				2				STAGE 2
	83+95	NB				2				STAGE 2
	85+37	NB				2				STAGE 2
	50+38	SB					2			STAGE 3
	51+88	SB					2			STAGE 3
	83+52	SB					2			STAGE 3
	85+94	SB					2			STAGE 3
	50+36	NB						23		STAGE 2
	51+69	NB						23		STAGE 2
	84+15	NB						23		STAGE 2
	85+20	NB						23		STAGE 2
	50+63	SB							20	STAGE 3
	51+35	SB							20	STAGE 3
	83+90	SB							26	STAGE 3
	85+60	SB							26	STAGE 3
	TOTAL 0010		11,600	860	1,140	8	8	92	92	

CONSTRUCTION STAKING CONCRETE PAVEMENT

CATEGORY	STATION TO STATION	LOCATION	650.7000 LF
0010	39+25 - 100+82	NB	6,160
	39+25 - 101+12	SB	6,190
		TOTAL 0010	12,350

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT)

CATEGORY	LOCATION	650.8500 LS	REMARKS
0010	PROJECT	1	
	TOTAL 0010	1	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT)

CATEGORY	LOCATION	650.9910 LS	REMARKS
0010	PROJECT	1	
	TOTAL 0010	1	

CONSTRUCTION STAKING SUBGRADE

CATEGORY	STATION TO STATION	LOCATION	650.4500 LF
0010	51+65 - 83+60	SHARED USE PATH	3,200
	233+69 - 251+66	SHARED USE PATH	1,800
		TOTAL 0010	5,000

CONSTRUCTION STAKING BASE

CATEGORY	STATION TO STATION	LOCATION	650.5000 LF
0010	51+65 - 83+60	SHARED USE PATH	3,200
	233+69 - 251+66	SHARED USE PATH	1,800
		TOTAL 0010	5,000

CONSTRUCTION STAKING PIPE CULVERTS

CATEGORY	STATION TO STATION	LOCATION	650.6000 EACH
0010	74+29 - 75+25	NB RT	1
	75+99	NB RT	1
		TOTAL 0010	2

3

CONSTRUCTION STAKING SLOPE STAKES

CATEGORY	STATION TO STATION	LOCATION	650.9920 LF
0010	44+00 - 50+00	NB	600
	52+00 - 69+50	NB	1,750
	75+50 - 84+00	NB	850
	52+00 - 84+00	SB	3,200
	86+50 - 88+00	SB	150
	97+00 - 100+00	NB	300
	233+70 - 251+65	PATH	1,800
	42+05 - 44+75	SHORT ST.	270
	25+26 - 26+63	HAMILTON AVE.	140
	8+00 - 9+40	CRAIG RD.	140
	10+56 - 12+11	CRAIG RD.	155
		TOTAL 0010	9,355

ADJUSTING PULL BOXES

CATEGORY	STATION	LOCATION	653.0900 EACH
0020	53+92	SB LT	1
	56+04	SB LT	1
	59+59	SB LT	1
	62+95	SB LT	1
	82+42	SB RT	1
	82+78	SB LT	1
	84+13	SB LT	1
		TOTAL 0020	7

CONSTRUCTION STAKING CURB RAMPS

CATEGORY	STATION	LOCATION	650.9000 EACH	REMARKS
0010	42+47	36' LT	1	SHORT STREET
	44+33	62' LT	1	SHORT STREET
	25+65	60' RT	1	HAMILTON AVE.
	25+54	68' LT	1	HAMILTON AVE.
	8+69	59' LT	1	CRAIG ROAD
	9+32	59' RT	1	CRAIG ROAD
	10+63	62' LT	1	CRAIG ROAD
	11+39	50' RT	1	CRAIG ROAD
	101+40	68' LT	1	MEDIAN RL
	101+84	65' RT	1	MEDIAN RL
	156+02	78' LT	1	USH 12
		TOTAL 0010	11	

SAWING CONCRETE

CATEGORY	STATION TO STATION	LOCATION	690.0250 LF	REMARKS
0010	44+42 - 44+74	SHORT STREET	90	STAGE 1B
	48+47 - 50+64	NB ISLAND	450	STAGE 1B
	83+24 - 84+50	NB ISLAND	275	STAGE 1B
	84+00 - 85+30	CRAIG RD. ISLANDS	60	STAGE 1C
		SHORT STREET & SB	370	STAGE 2
		CRAIG ROAD & SB	80	STAGE 2
	45+00	SB	24	STAGE 2
	94+50	SB	24	STAGE 2
	45+00	NB	24	STAGE 3
	94+50	NB	24	STAGE 3
		HAMILTON AVE. & NB	120	STAGE 3
		CRAIG ROAD & NB	200	STAGE 3
	39+00 - 45+00	SB	625	STAGE 4A
	39+00 - 45+00	NB	625	STAGE 4A
	94+50 - 101+00	SB	665	STAGE 4A
	94+50 - 100+80	NB	648	STAGE 4A
	39+00	SB	12	STAGE 4B
	39+00	NB	12	STAGE 4B
	45+00	SB	12	STAGE 4B
	45+00	NB	12	STAGE 4B
	94+50	SB	12	STAGE 4B
	94+50	NB	12	STAGE 4B
	101+00	SB	12	STAGE 4B
	100+80	NB	12	STAGE 4B
	VARIOUS	USH 12	120	STAGE 4A & 4B
		TOTAL 0010	4,520	

SAWING ASPHALT

CATEGORY	STATION	LOCATION	690.0150 LF	REMARKS
0010	39+25	NB	8	
	39+25	SB	14	
	26+63	HAMILTON AVE	46	
	42+05	SHORT STREET	55	
	8+00	CRAIG ROAD	44	
	12+12	CRAIG ROAD	52	
	100+82	NB	3	
	51+30	NB	16	ISLAND
	156+05	USH 12	10	
		TOTAL 0010	248	

TEMPORARY BASE AGGREGATE

CATEGORY	STATION TO STATION	LOCATION	SPV.0195.01 TON	REMARKS
0010	40+00 - 45+93	CROSSOVER	1,030	
	94+00 - 99+00	CROSSOVER	720	
		NB	100	ISLAND REMOVAL
		SHORT ST.	20	ISLAND REMOVAL
	40+54 - 44+15	SHORT ST.	195	TEMPORARY WIDENING
		NB	90	ISLAND REMOVAL
	44+50 - 49+00	NB	20	TEMPORARY WIDENING
		HAMILTON AVE	5	ISLAND REMOVAL
	52+00 - 56+00	NB	175	TEMPORARY WIDENING
		NB	30	ISLAND REMOVAL
	78+50 - 81+75	NB	15	TEMPORARY WIDENING
	85+50 - 89+50	NB	185	TEMPORARY WIDENING
		TOTAL 0010	2,585	

CONCRETE BASE REMOVALS

EXISTING BASE NUMBER	204.0195 REMOVING CONCRETE BASES EACH
STH 37 & HAMILTON AVE / SHORT ST	
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
SB11	1
SB12	1
SB13	1
SB14	1
LB1	1
LB2	1
LB3	1
LB4	1
LB5	1
LB6	1
CB1	1
INTERSECTION TOTAL	21
STH 37 & CRAIG ROAD	
SB1	1
SB2	1
SB3	1
SB4	1
SB5	1
SB6	1
SB7	1
SB8	1
SB9	1
SB10	1
LB1	1
LB2	1
LB3	1
LB4	1
LB5	1
LB6	1
CB1	1
INTERSECTION TOTAL	17
USH 12 & STH 37	
SB1	1
SB15	1
SB18	1
CB1	1
INTERSECTION TOTAL	4
ITEM TOTALS	**42**

PULL BOXES STEEL

PULL BOX NUMBER	STATION	LOCATION	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0135 PULL BOXES STEEL 24 X 36 - INCH EACH	653.0140 PULL BOXES STEEL 24 X 42 - INCH EACH
STH 37 & HAMILTON AVE / SHORT ST					
PB1	50'NB'+22.7	59.1' RT	–	–	1
PB2	48'NB'+85.9	48.2' RT	–	1	–
PB3	48'NB'+41.1	48.0' RT	–	1	–
PB4	47'NB'+10.8	48.0' RT	–	1	–
PB5	46'NB'+21.1	48.0' RT	–	1	–
PB6	45'NB'+35.8	48.0' RT	–	1	–
PB7	43'NB'+71.0	48.0' RT	–	1	–
PB8	50'NB'+22.7	8.1' LT	–	–	1
PB9	50'NB'+22.7	34.5' LT	–	–	1
PB10	50'NB'+22.7	101.2' LT	–	–	1
PB11	50'NB'+39.8	120.4' LT	–	–	1
PB12	50'NB'+68.3	105.6' LT	–	–	1
PB13	51'NB'+52.9	120.5' LT	–	–	1
PB14	51'NB'+42.3	79.8' LT	–	–	1
PB15	51'NB'+81.6	99.8' LT	–	–	1
PB16	53'NB'+14.8	84.3' LT	–	1	–
PB17	53'NB'+58.6	84.2' LT	–	1	–
PB18	54'NB'+85.9	86.7' LT	–	1	–
PB19	55'NB'+73.2	87.1' LT	–	1	–
PB20	56'NB'+57.8	83.5' LT	–	1	–
PB21	58'NB'+13.4	87.6' LT	–	1	–
PB22	60'NB'+52.1	87.8' LT	–	1	–
PB23	61'NB'+74.2	88.4' LT	–	–	1
PB24	61'NB'+71.4	38.0' LT	–	–	1
PB25	51'NB'+81.6	32.0' LT	–	–	1
PB26	51'NB'+81.6	5.5' LT	–	–	1
PB27	51'NB'+81.6	49.0' RT	–	–	1
PB28	51'NB'+52.3	83.3' RT	–	–	1
PB29	51'NB'+27.7	67.1' RT	–	–	1
PB30	50'NB'+50.7	83.3' RT	–	–	1
PB31	50'NB'+68.4	48.0' RT	–	–	1
INTERSECTION TOTAL			0	13	18
STH 37 & CRAIG ROAD					
PB1	86'NB'+24.1	97.1' LT	–	–	1
PB2	87'NB'+30.2	95.1' LT	–	1	–
PB3	87'NB'+76.3	90.5' LT	–	1	–
PB4	89'NB'+13.3	91.6' LT	–	1	–
PB5	90'NB'+2.8	82.7' LT	–	1	–
PB6	90'NB'+96.0	83.0' LT	–	1	–
PB7	92'NB'+97.1	79.1' LT	–	1	–
PB8	85'NB'+58.3	88.4' LT	–	–	1
PB9	85'NB'+85.4	37.8' LT	–	–	1
PB10	85'NB'+67.2	9.7' LT	–	–	1
PB11	85'NB'+33.2	42.2' RT	–	–	1
PB12	84'NB'+92.5	38.6' RT	–	–	1
PB13	84'NB'+63.4	66.4' RT	–	1	–
PB14	84'NB'+92.7	74.5' RT	–	–	1
PB15	83'NB'+71.4	74.5' RT	–	–	1
PB16	83'NB'+55.6	51.2' RT	–	–	1
PB17	82'NB'+33.0	44.7' RT	–	1	–
PB18	81'NB'+89.2	41.8' RT	–	1	–
PB19	80'NB'+58.3	44.7' RT	–	1	–
PB20	79'NB'+69.2	41.7' RT	–	1	–
PB21	78'NB'+82.9	44.6' RT	–	1	–
PB22	77'NB'+09.2	40.7' RT	–	1	–
PB23	84'NB'+09.7	45.6' RT	–	–	1
PB24	83'NB'+68.5	12.0' LT	–	–	1
PB25	83'NB'+73.7	40.0' LT	–	–	1
PB26	83'NB'+83.8	90.9' LT	–	–	1
PB27	84'NB'+79.2	138.4' LT	–	–	1
PB28	84'NB'+76.9	94.3' LT	–	–	1
PB29	85'NB'+0.0	117.9' LT	–	1	–
PB30	85'NB'+92.4	137.6' LT	–	–	1
INTERSECTION TOTAL			0	14	16

PULL BOX NUMBER	STATION	LOCATION	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0135 PULL BOXES STEEL 24 X 36 - INCH EACH	653.0140 PULL BOXES STEEL 24 X 42 - INCH EACH
USH 12 & STH 37					
PB5	EXISTING		1	–	–
PB16	EXISTING		1	–	–
PB17	EXISTING		1	–	–
PB21	EXISTING		1	–	–
PB23	EXISTING		1	–	–
PB24	155+66.9	94.2' RT	–	–	1
PB25	155+97.3	56.6' RT	–	–	1
INTERSECTION TOTAL			5	0	2
USH 12 & STH 37 (TEMPORARY SIGNAL)					
PB5	EXISTING		1	–	–
PB9	EXISTING		1	–	–
PB10	EXISTING		1	–	–
PB21	155+45.1	64.6' RT	–	–	1
PB23	155+50.6	75.4' RT	–	–	1
PB22	155+47.9	73.7' LT	–	–	1
TEMP INTERSECTION TOTAL			3	0	3
ITEM TOTALS			**8**	**27**	**39**

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0122 CONDUIT HDPE 2-DUCT 2-INCH LF
STH 37 & HAMILTON AVE / SHORT ST						
CB1	PB1	--	81	--	--	--
PB1	PB2	278	--	--	--	--
PB1	PB8	--	134	--	--	--
PB2	PB3	90	--	--	--	--
PB3	PB4	260	--	--	--	--
PB4	PB5	180	--	--	--	--
PB5	PB6	170	--	--	--	--
PB6	PB7	330	--	--	--	--
PB8	PB9	--	52	--	--	--
PB9	PB10	--	134	--	--	--
PB10	PB11	--	52	--	--	--
PB11	PB12	--	64	--	--	--
PB11	PB13	--	226	--	--	--
PB13	PB14	--	84	--	--	--
PB13	PB15	--	70	--	--	--
PB15	PB16	274	--	--	--	--
PB15	PB25	--	136	--	--	--
PB16	PB17	92	--	--	--	--
PB17	PB18	266	--	--	--	--
PB18	PB19	182	--	--	--	--
PB19	PB20	176	--	--	--	--
PB20	PB21	326	--	--	--	--
PB21	PB22	250	--	--	--	--
PB22	PB23	128	--	--	--	--
PB23	PB24	50	--	--	--	--
PB25	PB26	--	54	--	--	--
PB26	PB27	--	108	--	--	--
PB27	PB28	--	90	--	--	--
PB28	PB29	--	58	--	--	--
PB28	PB30	--	204	--	--	--
PB30	PB31	--	78	--	--	--
PB31	PB1	37	--	--	--	--
PB31	CB1	--	57	--	--	--
PB1	LB1	13	--	--	--	--
PB2	LB2	2	--	--	--	--
PB4	LB3	2	--	--	--	--
PB6	LB4	12	--	--	--	--
PB7	LB5	15	--	--	--	--
PB8	SB1	41	--	--	--	--
PB9	SB2	16	--	--	--	--
PB9	SB3	46	--	--	--	--
PB10	SB4	--	46	--	--	--
PB11	SB5	6	--	--	--	--
PB12	SB6	21	--	--	--	--
PB14	SB7	--	17	--	--	--
PB14	SB8	5	--	--	--	--
PB15	LB6	14	--	--	--	--
PB16	LB7	2	--	--	--	--
PB18	LB8	2	--	--	--	--
PB20	LB9	2	--	--	--	--
PB21	LB10	13	--	--	--	--
PB23	SB16	7	--	--	--	--
PB24	SB17	6	--	--	--	--
PB25	SB9	42	--	--	--	--
PB26	SB10	19	--	--	--	--
PB27	SB11	--	42	--	--	--
PB28	LB11	8	--	--	--	--
PB29	SB12	33	--	--	--	--
PB29	SB13	22	--	--	--	--
PB31	SB14	--	5	--	--	--
PB31	SB15	13	--	--	--	--
INTERSECTION TOTAL		3451	1792	0	0	0

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0122 CONDUIT HDPE 2-DUCT 2-INCH LF
STH 37 & CRAIG ROAD						
CB1	PB1	--	78	--	--	--
PB1	PB2	206	--	--	--	--
PB1	PB8	--	132	--	--	--
PB1	PB9	--	142	--	--	--
PB2	PB3	86	--	--	--	--
PB3	PB4	256	--	--	--	--
PB4	PB5	170	--	--	--	--
PB5	PB6	176	--	--	--	--
PB6	PB7	190				
PB9	PB10	--	66	--	--	--
PB10	PB11	--	124	--	--	--
PB11	PB12	--	82	--	--	--
PB11	PB14	--	104	--	--	--
PB12	PB13	40	--	--	--	--
PB14	PB15	--	242	--	--	--
PB15	PB16	--	56	--	--	--
PB16	PB17	246	--	--	--	--
PB16	PB23	--	108	--	--	--
PB16	PB24	--	130	--	--	--
PB17	PB18	88	--	--	--	--
PB18	PB19	262	--	--	--	--
PB19	PB20	178	--	--	--	--
PB20	PB21	172	--	--	--	--
PB21	PB22	348	--	--	--	--
PB24	PB25	--	58	--	--	--
PB25	PB26	--	104	--	--	--
PB26	PB27	--	218	--	--	--
PB27	PB28	--	88	--	--	--
PB27	PB30	--	226	--	--	--
PB28	PB29	33	--	--	--	--
PB30	CB1	--	87	--	--	--
PB2	LB1	4	--	--	--	--
PB4	LB2	4	--	--	--	--
PB6	LB3	4	--	--	--	--
PB7	LB4	4				
PB8	SB1	--	10	--	--	--
PB8	SB2	7	--	--	--	--
PB9	SB3	54	--	--	--	--
PB10	SB4	6	--	--	--	--
PB11	SB5	--	50	--	--	--
PB12	SB6	6	--	--	--	--
PB12	SB7	20	--	--	--	--
PB14	SB8	9	--	--	--	--
PB16	LB5	10	--	--	--	--
PB17	LB6	4	--	--	--	--
PB19	LB7	4	--	--	--	--
PB21	LB8	4	--	--	--	--
PB22	LB9	4	--	--	--	--
PB23	SB9	--	5	--	--	--
PB23	SB10	15	--	--	--	--
PB24	SB11	61	--	--	--	--
PB25	SB12	25	--	--	--	--
PB25	SB13	4	--	--	--	--
PB26	SB14	--	12	--	--	--
PB27	SB15	28	--	--	--	--
PB28	SB16	15	--	--	--	--
PB28	SB17	11	--	--	--	--
PB30	LB10	17	--	--	--	--
INTERSECTION TOTAL		2771	2122	0	0	0

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	652.0615 CONDUIT SPECIAL 3-INCH LF	671.0112 CONDUIT HDPE 1-DUCT 2-INCH LF	671.0122 CONDUIT HDPE 2-DUCT 2-INCH LF
USH 12 & STH 37						
MP	CB1	26	--	--	--	--
CB1	PB23	--	48	--	--	--
PB23	PB21	--	13	--	--	--
PB24	PB25	--	96	--	--	--
PB24	CB1	--	33	--	--	--
EXT 1		--	42	--	--	--
EXT 2		--	42	--	--	--
PB5	SB18	35	--	--	--	--
PB17	SB15	18	--	--	--	--
PB6	SB19	5				
PB25	SB1	18	--	--	--	--
PB25	SB20	9	--	--	--	--
INTERSECTION TOTAL		111	274	0	0	0
USH 12 & STH 37 (TEMPORARY SIGNAL)						
TCB1	PB9	--	--	25	--	--
PB2	PB23	200	--	--	--	--
PB5	PB22	--	8	--	--	--
PB10	TCB1	--	--	26	--	--
PB21	PB22	--	--	138	--	--
MP	PB21	15	--	--	--	--
TEMP INTERSECTION TOTAL		215	8	189	0	0
INTERCONNECT						
INTERCEPT	PB7 (S18-0609)	700	--	--	--	--
PB27 (S18-0609)	PB22 (S18-0241)	--	--	--	--	5004
PB7 (S18-0241)	PB24 (S18-0226)	--	--	--	1000	--
PB11 (S18-0241)	PB17 (S18-0226)	--	--	--	1675	--
INTERCONNECT TOTAL		700	0	0	2675	5004
ITEM TOTALS		**7248**	**4196**	**189**	**2675**	**5004**

LOOP DETECTOR SCHEDULE

LOOP NUMBER	HOME RUN PB	STATION	LOCATION	SIZE (FT)X(FT)	NO. OF TURNS	PAVEMENT TYPE	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
STH 37 & HAMILTON AVE / SHORT ST										
11	PB9	50'NB'+26.0	21' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	120	216
12	PB9	50'NB'+54.0	21' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	120	246
21	PB19	55'NB'+66.5	56.3' LT	6X20	5	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	94	747	470
22	PB17	53'NB'+53.3	52.6' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	523	384
31	PB29	51'NB'+1.2	72.6' RT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	176	400
32	PB29	51'NB'+1.2	44.7' RT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	100	176	400
41	PB12	50'NB'+87.4	111.2' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	271	344
42	PB12	50'NB'+87.4	83.3' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	271	336
43	PB11	50'NB'+47.4	105.3' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	239	246
51	PB25	51'NB'+72.9	19.0' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	273	234
52	PB25	51'NB'+44.9	19.0' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	273	270
61	PB5	46'NB'+27.0	12.0' RT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	456	416
62	PB3	48'NB'+47.0	12.0' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	236	312
71	PB12	50'NB'+99.5	111.3' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	271	330
72	PB12	50'NB'+99.5	83.2' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	271	324
81	PB29	51'NB'+13.3	72.6' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	176	234
82	PB29	51'NB'+13.3	44.6' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	176	228
83	PB28	51'NB'+44.9	65.4' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	147	258
							INTERSECTION TOTAL	1630	4922	5648
STH 37 & CRAIG ROAD										
11	PB25	83'NB'+78.9	26.1' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	329	228
12	PB25	84'NB'+6.8	26.0' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	329	258
21	PB5	89'NB'+95.5	55.7' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	395	344
22	PB3	87'NB'+69.4	60.4' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	198	276
31	PB13	84'NB'+32.2	70.4' RT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	299	440
32	PB13	84'NB'+45.4	45.7' RT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	299	408
41	PB29	85'NB'+17.4	118.3' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	82	245	328
42	PB29	85'NB'+4.3	93.6' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	245	304
43	PB29	84'NB'+66.6	104.4' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	212	228
51	PB9	85'NB'+82.0	23.9' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	123	296
52	PB9	85'NB'+54.0	24.0' LT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	84	123	336
61	PB20	79'NB'+75.1	12.0' RT	6X20	5	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	810	460
62	PB18	81'NB'+95.2	12.0' RT	6X20	4	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	590	368
71	PB29	85'NB'+30.5	118.2' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	108	245	324
72	PB29	85'NB'+17.4	93.5' LT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	245	306
81	PB13	84'NB'+44.5	71.0' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	299	258
82	PB13	84'NB'+57.6	46.2' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	299	234
83	PB14	84'NB'+91.0	55.9' RT	6X20	3	ASPHALT	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	270	240
							INTERSECTION TOTAL	1582	5555	5636
USH 12 & STH 37										
11	PB4	EXISTING		6X20	--	CONCRETE	EXISTING	--	148	--
12	PB4	EXISTING		6X6	--	CONCRETE	EXISTING	--	148	--
13	PB7	EXISTING		6X6	--	CONCRETE	EXISTING	--	309	--
21	PB12	EXISTING		6X30	--	CONCRETE	EXISTING	--	758	--
22	PB13	EXISTING		6X30	--	CONCRETE	EXISTING	--	556	--
23	PB10	EXISTING		6X6	--	CONCRETE	EXISTING	--	360	--
41	PB8	EXISTING		6X20	--	CONCRETE	EXISTING	--	344	--
42	PB8	EXISTING		6X6	--	CONCRETE	EXISTING	--	344	--
43	PB7	EXISTING		6X20	--	CONCRETE	EXISTING	--	309	--
44	PB7	EXISTING		6X6	--	CONCRETE	EXISTING	--	309	--
51	PB13	EXISTING		6X20	--	CONCRETE	EXISTING	--	277	--
52	PB13	EXISTING		6X6	--	CONCRETE	EXISTING	--	277	--
53	PB16	EXISTING		6X6	--	CONCRETE	EXISTING	--	201	--
61	PB3	EXISTING		6X30	--	CONCRETE	EXISTING	--	400	--
62	PB2	EXISTING		6X30	--	CONCRETE	EXISTING	--	197	--
63	PB21	155+70.4	63.7' RT	6X20	3	CONCRETE	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	55	240
81	PB16	EXISTING		6X20	--	CONCRETE	EXISTING	--	201	--
82	PB16	EXISTING		6X6	--	CONCRETE	EXISTING	--	201	--
83	PB16	EXISTING		6X20	--	CONCRETE	EXISTING	--	201	--
84	PB16	EXISTING		6X6	--	CONCRETE	EXISTING	--	201	--
104	PB15	EXISTING		6X6	--	CONCRETE	EXISTING	--	249	--
105	PB15	EXISTING		6X6	--	CONCRETE	EXISTING	--	249	--
105	PB15	EXISTING		6X6	--	CONCRETE	EXISTING	--	249	--
							INTERSECTION TOTAL	80	6543	240
USH 12 & STH 37										
11	PB2	EXISTING		6X20	--	CONCRETE	EXISTING	--	537	--
							INTERSECTION TOTAL	0	537	0
							ITEM TOTALS	**3292**	**17557**	**11524**

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CONCRETE BASES

BASE NUMBER	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
STH 37 & HAMILTON AVE / SHORT ST								
SB1	50'NB'+63.2	8.0' LT	--	1	--	--	--	--
SB2	50'NB'+38.5	34.2' LT	1	--	--	--	--	--
SB3	49'NB'+77.0	34.4' LT	1	--	--	--	--	--
SB4	49'NB'+80.9	82.4' LT	--	--	--	--	1	--
SB5	50'NB'+37.4	115.2' LT	1	--	--	--	--	--
SB6	50'NB'+72.2	85.0' LT	1	--	--	--	--	--
SB7	51'NB'+27.0	86.0' LT	--	--	--	1	--	--
SB8	51'NB'+39.5	75.4' LT	1	--	--	--	--	--
SB9	51'NB'+39.7	32.0' LT	--	1	--	--	--	--
SB10	51'NB'+62.6	6.2' LT	1	--	--	--	--	--
SB11	52'NB'+22.7	40.0' RT	--	--	--	--	1	--
SB12	51'NB'+39.4	36.4' RT	1	--	--	--	--	--
SB13	51'NB'+27.5	45.2' RT	1	--	--	--	--	--
SB14	50'NB'+72.8	45.1' RT	--	--	--	1	--	--
SB15	50'NB'+63.7	34.5' RT	1	--	--	--	--	--
SB16	61'NB'+81.0	88.4' LT	1	--	--	--	--	--
SB17	61'NB'+77.7	39.1' LT	1	--	--	--	--	--
LB1	50'NB'+34.3	64.0' RT	--	--	1	--	--	--
LB2	48'NB'+85.9	46.2' RT	--	--	1	--	--	--
LB3	47'NB'+10.8	46.0' RT	--	--	1	--	--	--
LB4	45'NB'+36.0	36.0' RT	--	--	1	--	--	--
LB5	43'NB'+60.8	37.4' RT	--	--	1	--	--	--
LB6	51'NB'+69.0	105.5' LT	--	--	1	--	--	--
LB7	53'NB'+14.8	82.7' LT	--	--	1	--	--	--
LB8	54'NB'+86.1	85.3' LT	--	--	1	--	--	--
LB9	56'NB'+57.4	81.0' LT	--	--	1	--	--	--
LB10	58'NB'+25.2	84.3' LT	--	--	1	--	--	--
LB11	51'NB'+52.7	75.5' RT	--	--	1	--	--	--
CB1	50'NB'+31.3	84.7' RT	--	--	--	--	--	1
INTERSECTION TOTAL			11	2	11	2	2	1

BASE NUMBER	STATION	LOCATION	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
STH 37 & CRAIG ROAD								
SB1	85'NB'+49.2	92.2' LT	--	--	--	1	--	--
SB2	85'NB'+54.4	82.9' LT	1	--	--	--	--	--
SB3	85'NB'+31.4	37.8' LT	--	1	--	--	--	--
SB4	85'NB'+61.0	10.2' LT	1	--	--	--	--	--
SB5	85'NB'+82.8	40.5' RT	--	--	--	--	1	--
SB6	84'NB'+93.8	32.5' RT	1	--	--	--	--	--
SB7	84'NB'+73.8	46.8' RT	1	--	--	--	--	--
SB8	84'NB'+99.1	68.0' RT	1	--	--	--	--	--
SB9	84'NB'+14.9	43.9' RT	--	--	--	1	--	--
SB10	84'NB'+6.9	30.7' RT	1	--	--	--	--	--
SB11	84'NB'+29.6	11.8' LT	--	1	--	--	--	--
SB12	83'NB'+99.1	39.5' LT	1	--	--	--	--	--
SB13	83'NB'+77.7	40.7' LT	1	--	--	--	--	--
SB14	83'NB'+71.4	90.5' LT	--	--	--	--	1	--
SB15	84'NB'+58.3	120.0' LT	1	--	--	--	--	--
SB16	84'NB'+67.1	82.8' LT	1	--	--	--	--	--
SB17	84'NB'+81.3	83.7' LT	1	--	--	--	--	--
LB1	87'NB'+30.3	91.5' LT	--	--	1	--	--	--
LB2	89'NB'+13.5	88.0' LT	--	--	1	--	--	--
LB3	90'NB'+96.1	79.4' LT	--	--	1	--	--	--
LB4	92'NB'+97.2	74.8' LT	--	--	1	--	--	--
LB5	83'NB'+63.4	56.6' RT	--	--	1	--	--	--
LB6	82'NB'+32.8	41.2' RT	--	--	1	--	--	--
LB7	80'NB'+58.1	41.2' RT	--	--	1	--	--	--
LB8	78'NB'+82.7	41.2' RT	--	--	1	--	--	--
LB9	77'NB'+08.9	37.3' RT	--	--	1	--	--	--
LB10	85'NB'+94.7	121.2' LT	--	--	1	--	--	--
CB1	86'NB'+16.6	122.0' LT	--	--	--	--	--	1
INTERSECTION TOTAL			11	2	10	2	2	1
USH 12 & STH 37								
SB1	155+90.1	40.5' RT	1	--	--	--	--	--
SB15	157+02.6	72.8' RT	1	--	--	--	--	--
SB18	155+90.4	77.1' LT	1	--	--	--	--	--
SB19	156+84.5	54.3' RT	1	--	--	--	--	--
SB20	156+06.4	55.2' RT	--	1	--	--	--	--
CB1	155+56.8	89.6' RT	--	--	--	--	--	1
INTERSECTION TOTAL			4	1	0	0	0	1
ITEM TOTALS			**26**	**5**	**21**	**4**	**4**	**3**

3

PULL BOX REMOVALS

EXISTING PULL BOX NUMBER	653.0905 REMOVING PULL BOXES EACH
STH 37 & HAMILTON AVE / SHORT ST	
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
INTERSECTION TOTAL	18
STH 37 & CRAIG ROAD	
PB1	1
PB2	1
PB3	1
PB4	1
PB5	1
PB6	1
PB7	1
PB8	1
PB9	1
PB10	1
PB11	1
PB12	1
PB13	1
PB14	1
PB15	1
PB16	1
PB17	1
PB18	1
PB19	1
INTERSECTION TOTAL	19
USH 12 & STH 37	
PB1	1
PB19	1
INTERSECTION TOTAL	2
ITEM TOTALS	**39**

TRAFFIC SIGNAL CABLE NO. 14 (ABOVE GROUND)

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF
STH 37 & HAMILTON AVE / SHORT ST			
SB1	HEAD 4	19	--
SB1	HEAD 14	--	22
SB2	HEAD 5	--	22
SB3	HEAD 26	19	--
SB4	HEAD 9	64	--
SB4	HEAD 10	52	--
SB5	HEAD 25	19	--
SB6	HEAD 18	--	22
SB6	HEAD 20	19	--
SB7	HEAD 16	40	--
SB7	HEAD 17	19	--
SB7	HEAD 19	--	56
SB8	HEAD 6	--	22
SB8	HEAD 8	19	--
SB8	HEAD 31	15	--
SB9	HEAD 7	--	22
SB9	HEAD 11	19	--
SB10	HEAD 12	--	22
SB11	HEAD 2	62	--
SB11	HEAD 3	50	--
SB12	HEAD 32	15	--
SB13	HEAD 15	19	--
SB13	HEAD 23	--	22
SB13	HEAD 33	15	--
SB14	HEAD 21	41	--
SB14	HEAD 22	19	--
SB14	HEAD 24	--	57
SB14	HEAD 34	15	--
SB15	HEAD 1	19	--
SB15	HEAD 13	--	22
SB16	HEAD 27	19	--
SB16	HEAD 28	19	--
SB17	HEAD 29	19	--
SB17	HEAD 30	19	--
INTERSECTION TOTAL		635	289

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF
STH 37 & CRAIG ROAD			
SB1	HEAD 16	41	--
SB1	HEAD 17	19	--
SB1	HEAD 19	--	57
SB1	HEAD 36	15	--
SB2	HEAD 6	--	22
SB2	HEAD 8	19	--
SB2	HEAD 29	15	--
SB3	HEAD 7	--	22
SB3	HEAD 11	19	--
SB4	HEAD 12	--	22
SB4	HEAD 21	19	--
SB5	HEAD 2	63	--
SB5	HEAD 3	51	--
SB6	HEAD 30	15	--
SB7	HEAD 15	19	--
SB7	HEAD 25	--	22
SB7	HEAD 31	15	--
SB8	HEAD 20	19	--
SB9	HEAD 23	40	--
SB9	HEAD 24	19	--
SB9	HEAD 26	--	55
SB9	HEAD 32	15	--
SB10	HEAD 1	19	--
SB10	HEAD 13	--	22
SB10	HEAD 33	15	--
SB11	HEAD 4	19	--
SB11	HEAD 14	--	22
SB12	HEAD 5	--	22
SB13	HEAD 28	19	--
SB14	HEAD 9	63	--
SB14	HEAD 10	51	--
SB15	HEAD 27	19	--
SB16	HEAD 34	15	--
SB17	HEAD 18	--	22
SB17	HEAD 22	19	--
SB17	HEAD 35	15	--
INTERSECTION TOTAL		657	288

FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5 - 14 AWG LF	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF
USH 12 & STH 37			
SB15	HEAD 17	19	--
SB18	HEAD 41	15	--
SB19	HEAD 62	15	--
SB20	HEAD 20	40	--
SB20	HEAD 61	15	--
SB22	HEAD 1	19	--
SB22	HEAD 28	22	--
SB22	HEAD 42	15	--
INTERSECTION TOTAL		160	0
ITEM TOTALS		**1452**	**577**

TRAFFIC SIGNAL CABLE NO. 14 (BELOW GROUND)

FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12 - 14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15 - 14 AWG LF	655.0290 CABLE TRAFFIC SIGNAL 21 - 14 AWG LF
STH 37 & HAMILTON AVE / SHORT ST					
CB1	SB1	--	178	--	--
CB1	SB2	195	--	--	--
CB1	SB3	225	--	--	--
SB3	SB4	308	--	--	--
CB1	SB5	310	--	--	--
CB1	SB6	--	373	--	--
CB1	SB7	--	508	--	--
CB1	SB8	--	496	--	--
CB1	SB9	--	380	--	--
CB1	SB10	314	--	--	--
CB1	SB11	267	--	--	--
CB1	SB12	242	--	--	--
CB1	SB13	--	231	--	--
CB1	SB14	--	106	--	--
CB1	SB15	--	114	--	--
CB1	SB16	1544	--	--	--
CB1	SB17	1609	--	--	--
	INTERSECTION TOTAL	5014	2386	0	0
STH 37 & CRAIG ROAD					
CB1	SB1	--	145	--	--
CB1	SB2	--	142	--	--
CB1	SB3	--	194	--	--
CB1	SB4	--	195	--	--
CB1	SB5	317	--	--	--
CB1	SB6	330	--	--	--
CB1	SB7	--	344	--	--
CB1	SB8	344	--	--	--
CB1	SB9	--	579	--	--
CB1	SB10	--	589	--	--
CB1	SB11	--	484	--	--
CB1	SB12	403	--	--	--
CB1	SB13	382	--	--	--
CB1	SB14	322	--	--	--
CB1	SB15	213	--	--	--
CB1	SB16	260	--	--	--
CB1	SB17	--	256	--	--
	INTERSECTION TOTAL	2571	2928	0	0

FROM	TO	655.0240 CABLE TRAFFIC SIGNAL 7 - 14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12 - 14 AWG LF	655.0270 CABLE TRAFFIC SIGNAL 15 - 14 AWG LF	655.0290 CABLE TRAFFIC SIGNAL 21 - 14 AWG LF
USH 12 & STH 37					
CB1	SB1	--	120	--	--
CB1	SB2	--	216	--	--
CB1	SB3	--	191	--	--
CB1	SB4	235	--	--	--
CB1	SB5	355		--	--
CB1	SB6	--	382	--	--
CB1	SB7		428	--	--
CB1	SB8	455	--		--
CB1	SB9	--		447	--
CB1	SB10		372	--	--
CB1	SB11	360	--	--	--
CB1	SB12	346		--	--
CB1	SB14	307	--	--	--
CB1	SB15	218		--	--
CB1	SB16	--	268	--	--
CB1	SB17		155	--	--
CB1	SB18	260	--	--	--
CB1	SB19	255	--	--	--
CB1	SB20		111	--	--
	INTERSECTION TOTAL	2791	2243	447	0
USH 12 & STH 37 (TEMPORARY SIGNAL)					
TCB1	PB5**	--	--	--	574
TCB1	PB14**	--	--	--	438
	INTERSECTION TOTAL	0	0	0	1012
	ITEM TOTALS	**10376**	**7557**	**447**	**1012**

*SB1 TO BE INSTALLED AND ACTIVE PRIOR TO REMOVING SB18
**RUN TWO (2) 21-14 AWG FROM TCB1 TO EACH PULL BOX

3

LIGHTING WIRE

FROM	TO	655.0320 CABLE TYPE UF 2 - 10 AWG GROUNDED LF	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF
STH 37 & HAMILTON AVE / SHORT ST			
CB1	LB1	67	--
LB1	LUMIN	--	117
LB1	LB2	194	--
LB2	LUMIN	--	144
LB1	SB1	161	--
SB1	LUMIN	--	288
LB2	LB3	235	--
LB3	LUMIN	--	144
LB3	LB4	245	--
LB4	LUMIN	--	144
LB4	LB5	234	--
LB5	LUMIN	--	144
SB1	SB5	238	--
SB5	LUMIN	--	117
CB1	LB11	172	--
LB11	LUMIN	--	117
LB11	SB9	261	--
SB9	LUMIN	--	288
SB9	LB6	177	--
LB6	LUMIN	--	117
LB6	LB7	193	--
LB7	LUMIN	--	144
LB7	LB8	223	--
LB8	LUMIN	--	144
LB8	LB9	239	--
LB9	LUMIN	--	144
LB9	LB10	207	--
LB10	LUMIN	--	144
INTERSECTION TOTAL		2846	2196
STH 37 & CRAIG ROAD			
CB1	LB1	176	--
LB1	LUMIN	--	144
LB1	LB2	235	--
LB2	LUMIN	--	144
LB1	SB3	288	--
SB3	LUMIN	--	288
LB2	LB3	237	--
LB3	LUMIN	--	144
LB3	LB4	238	--
LB4	LUMIN	--	144
SB3	SB8	282	--
SB8	LUMIN	--	117
CB1	LB10	73	--
LB10	LUMIN	--	117
LB10	SB15	198	--
SB15	LUMIN	--	117
SB15	SB11	351	--
SB11	LUMIN	--	117
SB11	LB5	176	--
LB5	LUMIN	--	117
LB5	LB6	177	--
LB6	LUMIN	--	144
LB6	LB7	239	--
LB7	LUMIN	--	144
LB7	LB8	239	--
LB8	LUMIN	--	144
LB8	LB9	222	--
LB9	LUMIN	--	144
INTERSECTION TOTAL		3131	2025
USH 12 & STH 37 (TEMPORARY SIGNAL)			
SERVICE	TCB1	509	--
INTERSECTION TOTAL		509	0
ITEM TOTALS		**6486**	**4221**

ELECTRIC WIRE TRAFFIC SIGNALS, NO. 10

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
STH 37 & HAMILTON AVE / SHORT ST		
CB1	SB1	178
SB1	SB2	123
SB2	SB3	86
SB3	SB4	199
SB4	SB5	118
SB5	SB6	99
SB6	SB7	297
SB7	SB8	46
SB8	SB9	264
SB9	SB10	128
SB10	SB11	155
SB11	SB12	205
SB12	SB13	79
SB13	SB14	269
SB14	SB15	42
SB15	CB1	114
CB1	SB16	1544
SB16	SB17	103
SB17	CB1	1609
PB1	CB1	50
PB8	SB1	61
PB9	SB2	36
PB10	SB4	66
PB11	SB5	26
PB12	SB6	41
PB13	SB8	83
PB14	SB8	25
PB15	SB9	146
PB16	PB17	78
PB17	PB18	165
PB18	PB19	123
PB19	PB20	120
PB20	PB21	195
PB21	PB22	282
PB22	PB23	160
PB23	SB16	27
PB24	SB17	26
PB25	SB9	75
PB26	SB10	39
PB27	SB11	62
PB28	SB13	87
PB29	SB13	42
PB30	CB1	42
PB31	SB14	25
INTERSECTION TOTAL		7740

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
STH 37 & CRAIG ROAD		
CB1	SB1	145
SB1	SB2	41
SB2	SB3	254
SB3	SB4	133
SB4	SB5	158
SB5	SB6	137
SB6	SB7	50
SB7	SB8	178
SB8	SB9	289
SB9	SB10	44
SB10	SB11	251
SB11	SB12	155
SB12	SB13	53
SB13	SB14	108
SB14	SB15	189
SB15	SB16	127
SB16	SB17	50
SB17	CB1	256
PB1	CB1	49
PB8	SB2	27
PB9	SB3	74
PB10	SB4	26
PB11	SB5	70
PB12	SB6	26
PB14	SB8	29
PB15	SB9	139
PB16	SB9	95
PB23	SB9	25
PB24	SB11	81
PB25	SB13	24
PB26	SB14	32
PB27	SB15	48
PB28	SB17	31
PB30	CB1	52
INTERSECTION TOTAL		3446

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
USH 12 & STH 37		
CB1	SB2	216
SB4	SB18	69
SB18	SB5	189
SB14	SB15	149
SB15	SB16	110
SB16	SB19	47
SB19	SB17	192
SB17	SB20	214
SB20	SB1	51
SB1	CB1	123
PB21	CB1	68
PB23	CB1	39
PB24	CB1	34
PB25	SB20	29
INTERSECTION TOTAL		1530
USH 12 & STH 37 (TEMPORARY SIGNAL)		
CB1	PB5	287
CB1	PB14	219
INTERSECTION TOTAL		506
ITEM TOTALS		**13222**

TRAFFIC SIGNAL EVP DETECTOR CABLE

FROM	TO	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE LF
STH 37 & HAMILTON AVE / SHORT ST		
CB1	SB4 (HEAD A)	373
CB1	SB11 (HEAD B)	327
CB1	SB14 (HEAD C)	161
CB1	SB7 (HEAD D)	563
INTERSECTION TOTAL		1424
STH 37 & CRAIG ROAD		
CB1	SB14 (HEAD A)	382
CB1	SB5 (HEAD B)	377
CB1	SB9 (HEAD C)	629
CB1	SB1 (HEAD D)	200
INTERSECTION TOTAL		1588
USH 12 & STH 37		
CB1	SB4 (HEAD A)	305
CB1	SB14 (HEAD B)	377
CB1	SB20 (HEAD C)	151
CB1	SB8 (HEAD D)	495
INTERSECTION TOTAL		1328
USH 12 & STH 37 (TEMPORARY SIGNAL)		
TCB1	PB5	287
TCB1	PB14	219
TCB1	PB14	219
INTERSECTION TOTAL		725
ITEM TOTALS		**5065**

3

ELECTRICAL SERVICE METER BREAKER PEDESTAL

LOCATION	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	656.0200.02 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	656.0200.03 ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
STH 37 & HAMILTON AVE / SHORT ST	1	--	--
STH 37 & CRAIG ROAD	--	1	--
USH 12 & STH 37	--	--	1
ITEM TOTALS	**1**	**1**	**1**

SIGNAL MOUNTING HARDWARE

LOCATION	658.5069.01 SIGNAL MOUNTING HARDWARE LS	658.5069.02 SIGNAL MOUNTING HARDWARE LS	658.5069.03 SIGNAL MOUNTING HARDWARE LS
STH 37 & HAMILTON AVE / SHORT ST	1	--	--
STH 37 & CRAIG ROAD	--	1	--
USH 12 & STH 37	--	--	1
ITEM TOTALS*	**1**	**1**	**1**

*ORNAMENTAL MOUNTING HARDWARE NEEDED ON SIGNAL STANDARDS

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS

LOCATION	661.0200.01 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0200.02 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS LS	661.0300 GENERATORS DAY
STH 37 & HAMILTON AVE / SHORT ST	1	--	2
STH 37 & CRAIG ROAD	--	1	2
ITEM TOTALS	**1**	**1**	**4**

INSTALL FIBER OPTIC CABLE

FROM	TO	655.0510 ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG LF	*673.0200 TRACER WIRE MARKER POSTS EACH	678.0006 INSTALL FIBER OPTIC CABLE OUTDOOR PLANT 6-CT LF
INTERCONNECT				
CB1 (S18-1036)	CB1 (S18-0609)	1600	4	1750
CB1 (S18-0609)	CB1 (S18-0241)	3966	8	4222
CB1 (S18-0241)	CB1 (S18-0226)	1609	4	1753
PB11 (S18-0241)	PB17 (S18-0226)	1707	5	--
	ITEM TOTALS	**8882**	**21**	**7725**

*FINAL LOCATIONS TO BE DETERMINED IN THE FIELD

CAST BASES, POLES, MONOTUBE ARMS, LUMINAIRES

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 EACH	657.0315 POLES TYPE 4 EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10 - FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13 - FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15 - FT EACH	657.0585 TROMBONE ARMS 15-FT EACH	657.0614 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FOOT EACH	657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FOOT EACH	657.0714 LUMINAIRE ARMS TRUSS TYPE 4-INCH CLAMP 15-FOOT EACH	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FOOT EACH	657.1345 INSTALL POLES TYPE 9 EACH	657.1355 INSTALL POLES TYPE 12 EACH
USH 12 & STH 37															
SB1	1	--	--	--	--	--	--	1	--	--	--	--	--	--	--
SB2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB15	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--
SB17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB18	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
SB19	1	--	--	--	--	1	--	--	--	--	--	--	--	--	--
SB20	--	1	1	--	--	--	--	--	1	--	--	--	--	--	--
INTERSECTION TOTAL	4	1	1	0	0	2	1	1	1	0	0	0	0	0	0
ITEM TOTALS	**23**	**29**	**1**	**7**	**21**	**5**	**3**	**15**	**1**	**10**	**5**	**1**	**16**	**4**	**4**

CAST BASES, POLES, MONOTUBE ARMS, LUMINAIRES

SIGNAL BASE NUMBER	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 EACH	657.0315 POLES TYPE 4 EACH	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10 - FT EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13 - FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15 - FT EACH	657.0585 TROMBONE ARMS 15-FT EACH	657.0614 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 8-FOOT EACH	657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FOOT EACH	657.0714 LUMINAIRE ARMS TRUSS TYPE 4-INCH CLAMP 15-FOOT EACH	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FOOT EACH	657.1345 INSTALL POLES TYPE 9 EACH	657.1355 INSTALL POLES TYPE 12 EACH
STH 37 & HAMILTON AVE / SHORT ST															
SB1	–	1	–	1	–	–	–	–	–	2	–	–	–	–	–
SB2	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB3	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–
SB4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
SB5	–	1	–	1	–	–	–	–	–	1	–	–	–	–	–
SB6	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB7	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
SB8	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB9	–	1	–	1	–	–	–	–	–	2	–	–	–	–	–
SB10	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB11	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
SB12	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–
SB13	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB14	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
SB15	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB16	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB17	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
LB1	–	1	–	–	1	–	–	–	–	–	1	–	–	–	–
LB2	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB3	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB4	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB5	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB6	–	1	–	–	1	–	–	–	–	–	1	–	–	–	–
LB7	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB8	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB9	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB10	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB11	–	1	–	–	1	–	–	–	–	–	1	–	–	–	–
INTERSECTION TOTAL	10	14	0	3	11	1	1	8	0	5	3	0	8	2	2
STH 37 & CRAIG ROAD															
SB1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
SB2	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB3	–	1	–	1	–	–	–	–	–	2	–	–	–	–	–
SB4	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
SB6	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–
SB7	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB8	–	1	–	1	–	–	–	–	–	1	–	–	–	–	–
SB9	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
SB10	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB11	–	1	–	1	–	–	–	–	–	2	–	–	–	–	–
SB12	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
SB13	1	–	–	–	–	–	1	–	–	–	–	–	–	–	–
SB14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
SB15	–	1	–	1	–	–	–	–	–	–	–	1	–	–	–
SB16	1	–	–	–	–	1	–	–	–	–	–	–	–	–	–
SB17	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
LB1	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB2	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB3	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB4	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB5	–	1	–	–	1	–	–	–	–	–	1	–	–	–	–
LB6	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB7	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB8	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB9	–	1	–	–	1	–	–	–	–	–	–	–	1	–	–
LB10	–	1	–	–	1	–	–	–	–	–	1	–	–	–	–
INTERSECTION TOTAL	9	14	0	4	10	2	1	6	0	5	2	1	8	2	2

CAST BASES, POLES, MONOTUBE ARMS, LUMINAIRES

SIGNAL BASE NUMBER	657.1525 INSTALL MONOTUBE ARMS 25-FT EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1535 INSTALL MONOTUBE ARMS 35-FT EACH	657.1540 INSTALL MONOTUBE ARMS 40-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1115 LUMINAIRES UTILITY LED A EACH	659.1125 LUMINAIRES UTILITY LED C EACH
STH 37 & HAMILTON AVE / SHORT ST							
SB1	–	–	–	–	1	–	2
SB2	–	–	–	–	–	–	–
SB3	–	–	–	–	–	–	–
SB4	–	–	–	1	–	–	–
SB5	–	–	–	–	–	–	1
SB6	–	–	–	–	–	–	–
SB7	–	1	–	–	–	–	–
SB8	–	–	–	–	1	–	–
SB9	–	–	–	–	1	–	2
SB10	–	–	–	–	–	–	–
SB11	–	–	1	–	–	–	–
SB12	–	–	–	–	1	–	–
SB13	–	–	–	–	1	–	–
SB14	–	1	–	–	1	–	–
SB15	–	–	–	–	–	–	–
SB16	–	–	–	–	–	–	–
SB17	–	–	–	–	–	–	–
LB1	–	–	–	–	–	–	1
LB2	–	–	–	–	–	1	–
LB3	–	–	–	–	–	1	–
LB4	–	–	–	–	–	1	–
LB5	–	–	–	–	–	1	–
LB6	–	–	–	–	–	–	1
LB7	–	–	–	–	–	1	–
LB8	–	–	–	–	–	1	–
LB9	–	–	–	–	–	1	–
LB10	–	–	–	–	–	1	–
LB11	–	–	–	–	–	–	1
INTERSECTION TOTAL	0	2	1	1	6	8	8
STH 37 & CRAIG ROAD							
SB1	–	1	–	–	1	–	–
SB2	–	–	–	–	1	–	–
SB3	–	–	–	–	1	–	2
SB4	–	–	–	–	–	–	–
SB5	–	–	1	–	–	–	–
SB6	–	–	–	–	1	–	–
SB7	–	–	–	–	1	–	–
SB8	–	–	–	–	–	–	1
SB9	~~0~~	~~1~~	–	–	1	–	–
SB10	–	–	–	–	1	–	–
SB11	–	–	–	–	1	–	2
SB12	–	–	–	–	–	–	–
SB13	–	–	–	–	–	–	–
SB14	–	–	1	–	–	–	–
SB15	–	–	–	–	–	–	1
SB16	–	–	–	–	1	–	–
SB17	–	–	–	–	1	–	–
LB1	–	–	–	–	–	1	–
LB2	–	–	–	–	–	1	–
LB3	–	–	–	–	–	1	–
LB4	–	–	–	–	–	1	–
LB5	–	–	–	–	–	–	1
LB6	–	–	–	–	–	1	–
LB7	–	–	–	–	–	1	–
LB8	–	–	–	–	–	1	–
LB9	–	–	–	–	–	1	–
LB10	–	–	–	–	–	–	1
INTERSECTION TOTAL	1	1	2	0	10	8	8

SIGNAL BASE NUMBER	657.1525 INSTALL MONOTUBE ARMS 25-FT EACH	657.1530 INSTALL MONOTUBE ARMS 30-FT EACH	657.1535 INSTALL MONOTUBE ARMS 35-FT EACH	657.1540 INSTALL MONOTUBE ARMS 40-FT EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH	659.1115 LUMINAIRES UTILITY LED A EACH	659.1125 LUMINAIRES UTILITY LED C EACH
USH 12 & STH 37							
SB1	–	–	–	–	1	–	–
SB2	–	–	–	–	1	–	–
SB15	–	–	–	–	–	–	–
SB17	–	–	–	–	1	–	–
SB18	–	–	–	–	1	–	–
SB19	–	–	–	–	1	–	–
SB20	–	–	–	–	1	–	–
INTERSECTION TOTAL	0	0	0	0	6	0	0
ITEM TOTALS	**1**	**3**	**3**	**1**	**22**	**16**	**16**

TRAFFIC SIGNAL AND PEDESTRIAN FACES, PUSH BUTTONS, AND BACKPLATES

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0171 TRAFFIC SIGNAL FACE 1S-12 INCH EACH	658.0173 TRAFFIC SIGNAL FACE 3S-12 INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S-12 INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
STH 37 & HAMILTON AVE / SHORT ST					
1	15	–	1	–	–
2	11	–	1	–	–
3	11	–	1	–	–
4	1	–	1	–	–
5	2	–	–	1	–
6	8	–	–	1	–
7	9	–	–	1	–
8	8	–	1	–	–
9	4	–	1	–	–
10	4	–	1	–	–
11	9	–	1	–	–
12	10	–	–	1	–
13	15	–	–	1	–
14	1	–	–	1	–
15	13	–	1	–	–
16	7	–	1	–	–
17	7	–	1	–	–
18	6	–	–	1	–
19	7	–	–	1	–
20	6	–	1	–	–
21	14	–	1	–	–
22	14	–	1	–	–
23	13	–	–	1	–
24	14	–	–	1	–
25	5	–	1	–	–
26	3	–	1	–	–
27	16	1	–	–	–
28	17	1	–	–	–
61	13	–	–	–	1
62	14	–	–	–	1
81	8	–	–	–	1
82	12	–	–	–	1
INTERSECTION TOTAL		2	16	10	4

SIGNAL HEAD NUMBER	SIGNAL BASE NUMBER	658.0171 TRAFFIC SIGNAL FACE 1S-12 INCH EACH	658.0173 TRAFFIC SIGNAL FACE 3S-12 INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S-12 INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
STH 37 & CRAIG ROAD					
1	10	–	1	–	–
2	5	–	1	–	–
3	5	–	1	–	–
4	11	–	1	–	–
5	12	–	–	1	–
6	2	–	–	1	–
7	3	–	–	1	–
8	2	–	1	–	–
9	14	–	1	–	–
10	14	–	1	–	–
11	3	–	1	–	–
12	4	–	–	1	–
13	10	–	–	1	–
14	11	–	–	1	–
15	7	–	1	–	–
16	1	–	1	–	–
17	1	–	1	–	–
18	17	–	–	1	–
19	1	–	–	1	–
20	8	–	1	–	–
23	4	–	1	–	–
24	17	–	1	–	–
25	9	–	1	–	–
26	9	–	1	–	–
27	7	–	–	1	–
28	9	–	–	1	–
29	15	–	1	–	–
30	13	–	1	–	–
21	17	–	–	–	1
22	1	–	–	–	1
41	10	–	–	–	1
42	16	–	–	–	1
61	7	–	–	–	1
62	9	–	–	–	1
81	2	–	–	–	1
82	6	–	–	–	1
INTERSECTION TOTAL		0	18	10	8
USH 12 & STH 37					
1	SB1	–	1	–	–
17	SB15	–	1	–	–
20	SB20	–	1	–	–
28	SB1	–	–	1	–
41	SB18	–	–	–	1
42	SB1	–	–	–	1
61	SB20	–	–	–	1
62	SB19	–	–	–	1
INTERSECTION TOTAL		0	3	1	4
ITEM TOTALS		**0**	**23**	**27**	**22**

3

CAT 5E CABLE

FROM	TO	SPV.0090.01 INSTALL STATE SUPPLIED CAT-5E CABLE LF
STH 37 & HAMILTON AVE / SHORT ST		
CB1	SB1 (LUMINAIRE ARM)	214
CB1	SB9 (LUMINAIRE ARM)	429
INTERSECTION TOTAL		643
STH 37 & CRAIG ROAD		
CB1	SB3 (LUMINAIRE ARM)	231
CB1	SB11 (LUMINAIRE ARM)	450
INTERSECTION TOTAL		681
ITEM TOTALS		**1324**

REMOVE AND SALVAGE TRAFFIC SIGNALS

LOCATION	SPV.0105.01 REMOVE AND SALVAGE TRAFFIC SIGNALS LS	SPV.0105.02 REMOVE AND SALVAGE TRAFFIC SIGNALS LS	SPV.0105.03 REMOVE AND SALVAGE TRAFFIC SIGNALS LS
STH 37 & HAMILTON AVE / SHORT ST	1	--	--
STH 37 & CRAIG ROAD	--	1	--
USH 12 & STH 37	--	--	1
ITEM TOTALS	**1**	**1**	**1**

TEMPORARY EVP SYSTEM

	SPV.0105.08 TEMPORARY EVP SYSTEM LS	SPV.0105.09 TEMPORARY EVP SYSTEM LS
STH 37 & HAMILTON AVE / SHORT ST	1	--
STH 37 & CRAIG ROAD	--	1
ITEM TOTALS	**1**	**1**

INSTALL STATE FURNSIHED EVP DETECTOR HEADS

	SPV.0105.04 INSTALL STATE FURNISHED EVP DETECTOR HEADS LS	SPV.0105.05 INSTALL STATE FURNISHED EVP DETECTOR HEADS LS
STH 37 & HAMILTON AVE / SHORT ST	1	--
STH 37 & CRAIG ROAD	--	1
ITEM TOTALS	**1**	**1**

TEMPORARY VEHICLE DETECTION

	SPV.0105.06 TEMPORARY VEHICLE DETECTION LS	SPV.0105.07 TEMPORARY VEHICLE DETECTION LS
STH 37 & HAMILTON AVE / SHORT ST	1	--
STH 37 & CRAIG ROAD	--	1
ITEM TOTALS	**1**	**1**

N

5

5

BP: 154+00.00
X = 334970.938
Y = 271974.037

EP: 160+72.99

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE A

SAWCUT

REMOVING CURB AND GUTTER

CONCRETE SIDEWALK 5-INCH

REMOVING CONCRETE SIDEWALK

CL = STA. 156+52.83 USH 12 =
STA. 102+35.40 SIH 37

N88°51'29"E

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE A

REMOVING CURB AND GUTTER

SAWCUT

REMOVING PULLBOXES

SAWCUT

REMOVING CONCRETE MASONRY

SAWCUT

CONCRETE SIDEWALK 5-INCH

REMOVING CURB AND GUTTER

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE A

SAWCUT

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE A

REMOVING CURB AND GUTTER

CONCRETE SAFETY ISLANDS

USH 12/CLAIREMONT AVE

STH 37

UNIVERSITY DR

BIKE PATH

SIGN

MH

INL

PROJECT NO: 7110-05-72	HWY: US 12	COUNTY: EAU CLAIRE	PLAN: CLAIREMONT AVENUE	SHEET 140	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050101_PN.DWG
LAYOUT NAME - SHEET - (3)

PLOT DATE : 1/10/2018 3:55 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTE: SEE SHORT STREET/HAMILTON AVENUE INTERSECTION LAYOUT DETAIL SHEET

BP: 39+00.00

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A

SLOPE INTERCEPT

STA. 44+57 12' LT

STA. 43+04

STA. 45+30 BEGIN TAPER

SLOPE INTERCEPT

STA. 47+00 41' RT. END TAPER

CITY OF EAU CLAIRE STORM SEWER

REMOVING CURB AND GUTTER

REMOVING PULL BOXES

STA. 47+54 12' LT

REMOVING CURB AND GUTTER

STA. 48+67.7 4.5' LT. R = 2.5'

CONCRETE SAFETY ISLANDS

REMOVING PULL BOXES

CONCRETE SIDEWALK 5-INCH

REMOVING INLETS

ADJUSTING MANHOLE COVERS

REMOVING CONCRETE SIDEWALK

CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A

PHILLIPS MEDISIZE, COMMUNICATIONS

REMOVING CONCRETE SIDEWALK

REMOVING PULLBOXES

REMOVING MANHOLES

N25° 35' 39"E

REMOVING PULLBOXES

PC: 52+64.97

STA. 53+26.5

SHARED USE PATH

REMOVING INLETS

REMOVING STORM SEWER

REMOVING PULL BOXES

REMOVING CURB AND GUTTER

CONCRETE SIDEWALK 5-INCH

BEGIN PROJECT 7110-05-72
STATION 39+25
X = 331083.210
Y = 267599.083

EXISTING RW

40+00 42+00 44+00 N25° 35' 39"E 46+00 48+00 50+0 52+00

VCL = 800.00
K = 444.00

VPI STA 42+10.00
VPI EL 802.55

VPT STA 46+10.00
VPT EL 812.54

PROPOSED RL PROFILE

EXISTING RL PROFILE

2.50%

2.27%

STA 52+00.00
EL 827.28

STA 53+00.00
EL 829.55

GRADE BACK = 0.70%

830 820 810 800

39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

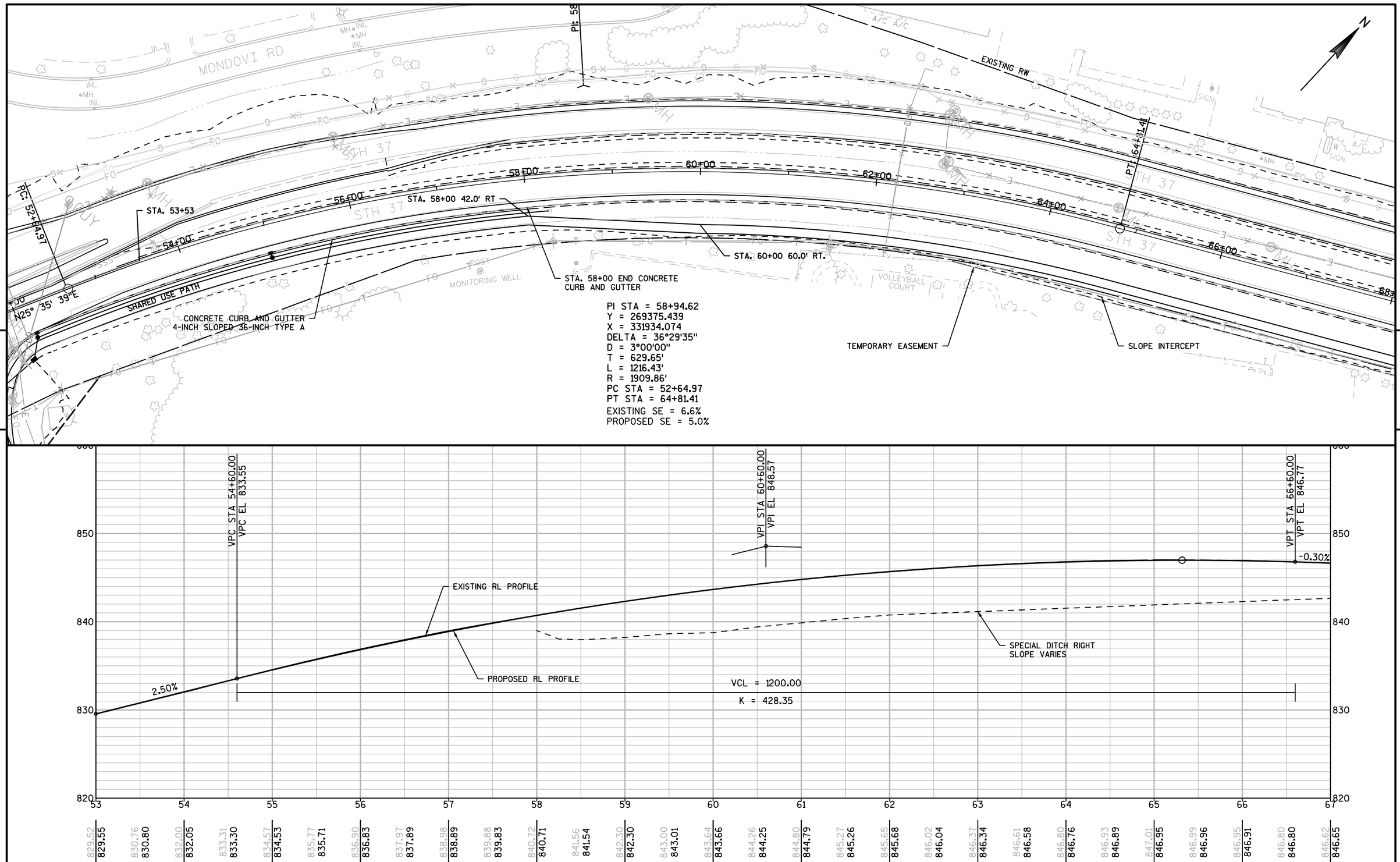
800.45	800.48	801.11	800.96	801.55	801.50	802.15	802.09	802.66	802.73	803.37	803.44	804.08	804.19	804.86	805.01	805.66	805.88	806.57	806.81	807.54	807.79	808.59	808.84	809.66	809.93	810.77	811.09	811.93	812.30	813.08	813.54	814.31	814.79	815.62	816.04	816.96	817.29	818.24	818.54	819.48	819.79	820.76	821.04	822.03	822.29	823.26	823.54	824.56	824.79	825.81	826.03	827.03	827.28	828.24	828.42	829.52	829.55

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: NB STH 37	SHEET 141 E

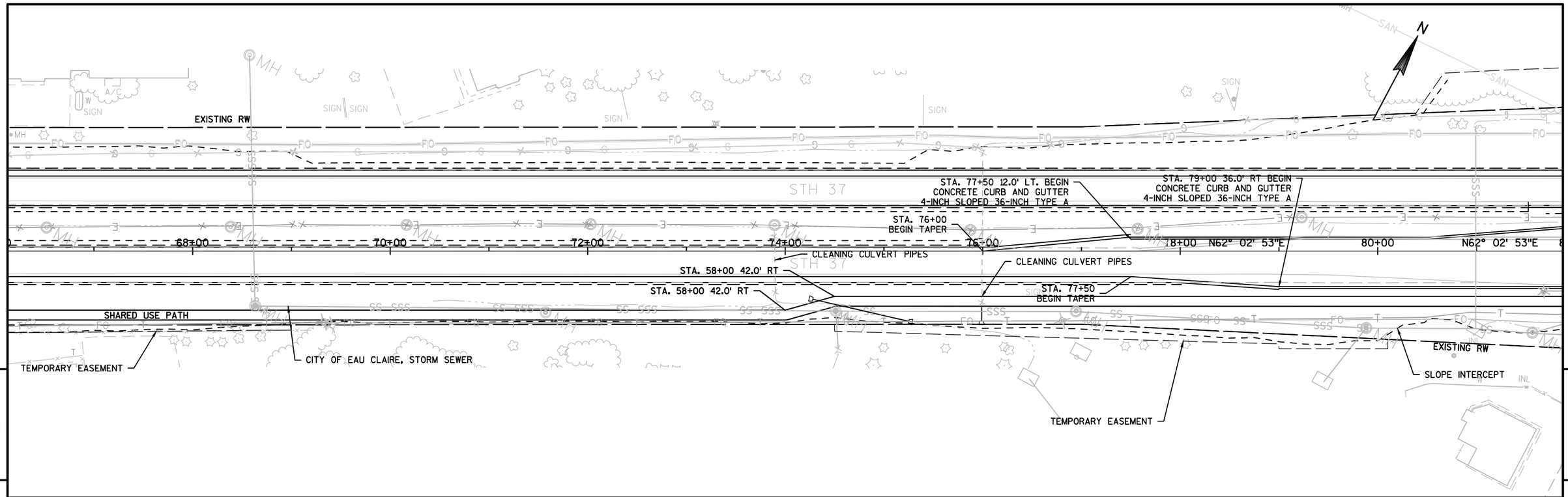
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - SHEET - (1)

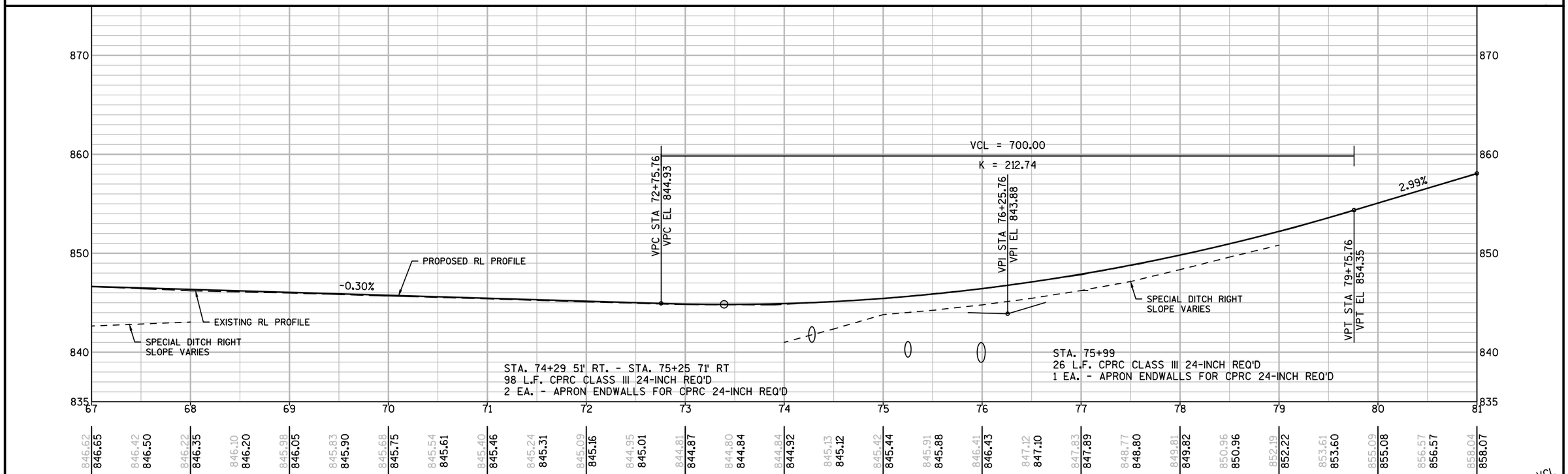
PLOT DATE : 1/10/2018 2:45 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

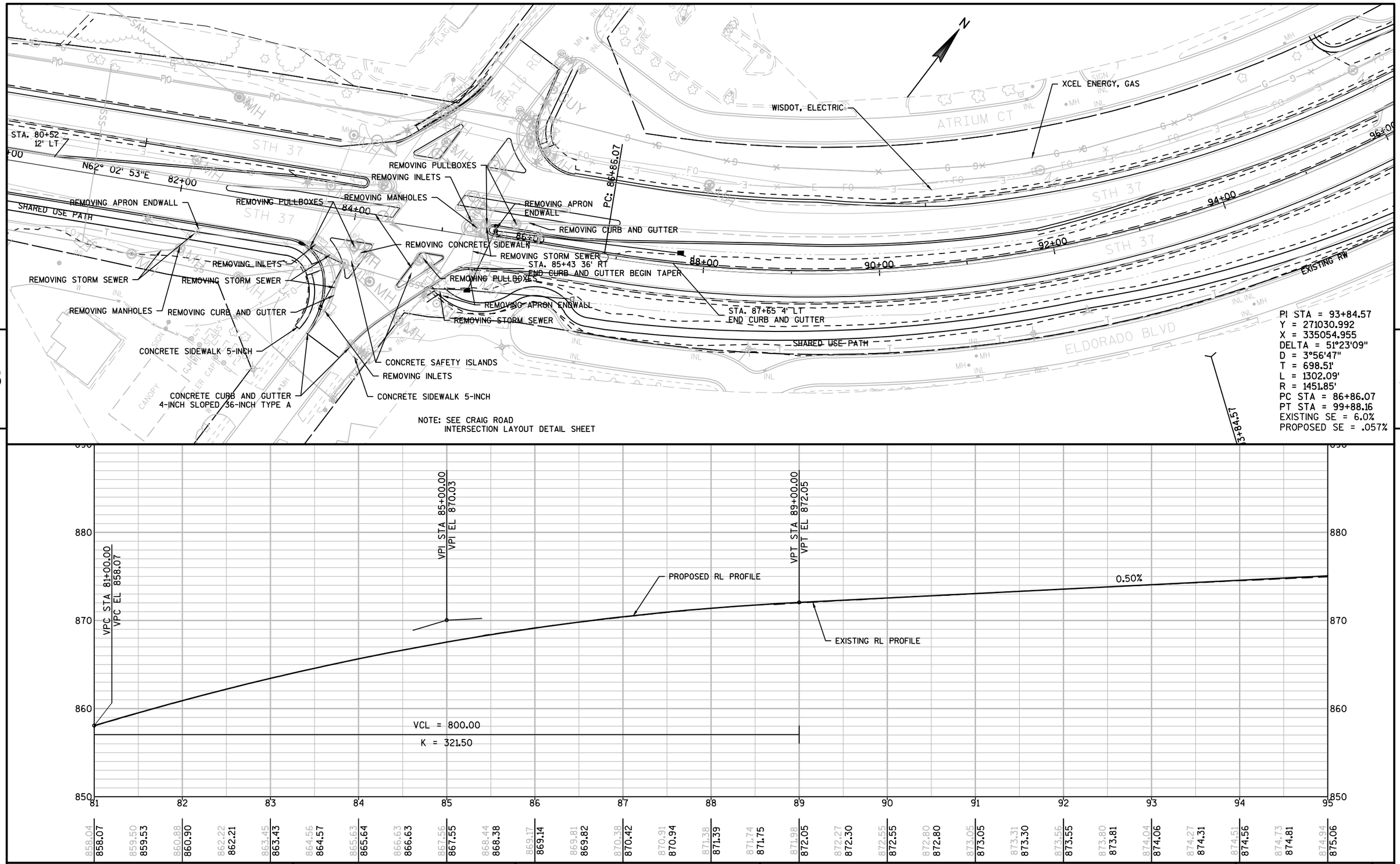


PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: NB STH 37	SHEET 142	E

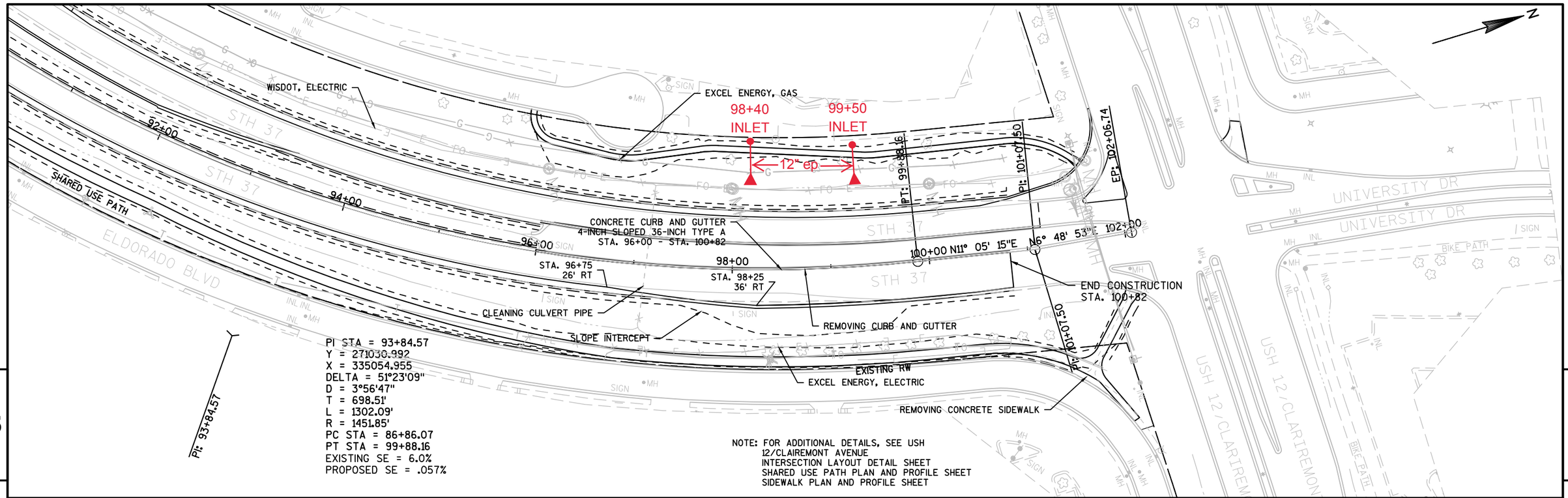


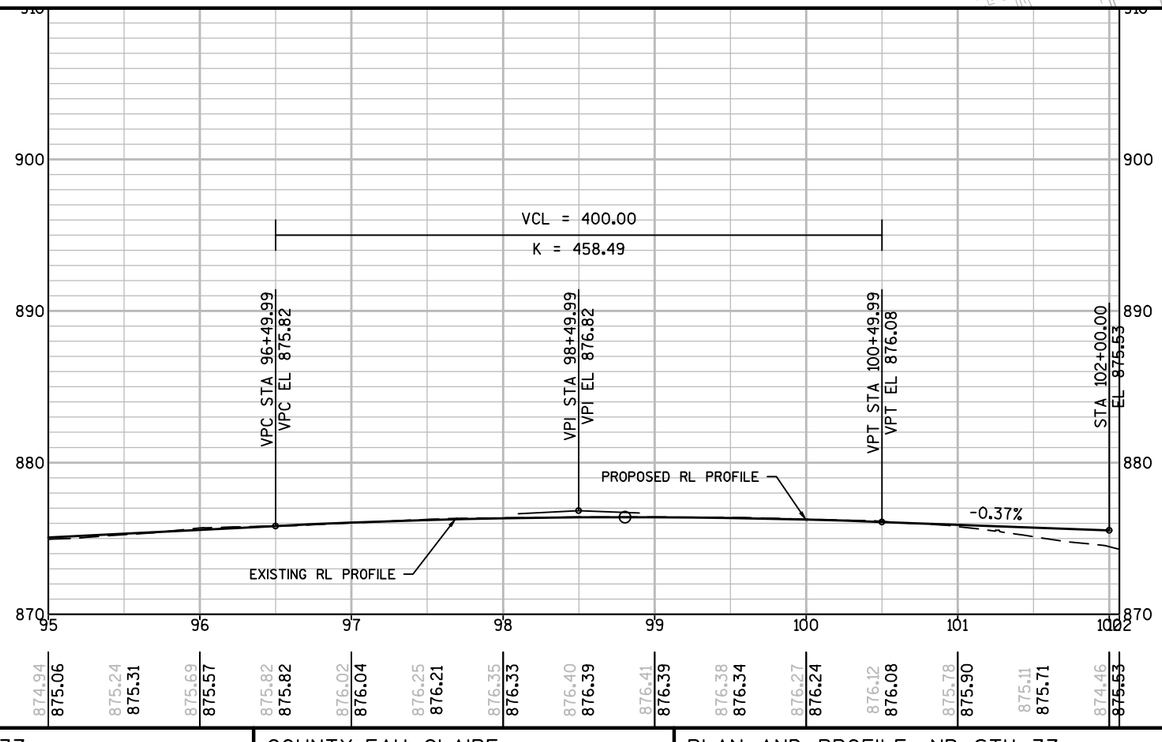


PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: NB STH 37	SHEET 143 E



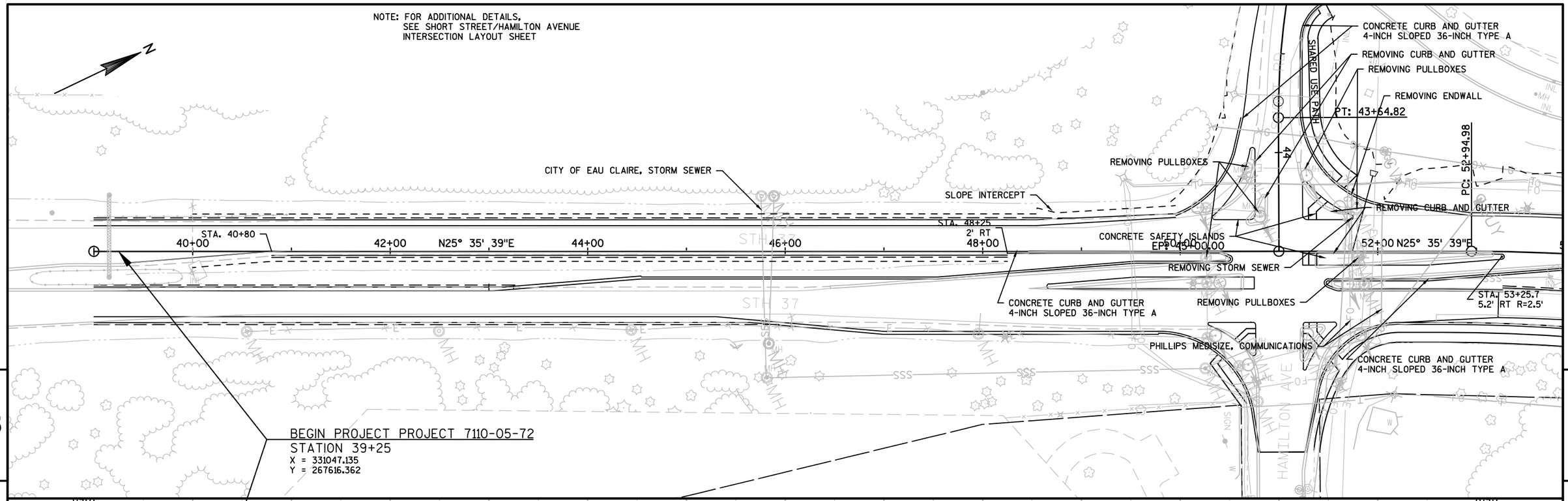
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: NB STH 37	SHEET 144 E





PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: NB STH 37	SHEET 145 E

NOTE: FOR ADDITIONAL DETAILS,
SEE SHORT STREET/HAMILTON AVENUE
INTERSECTION LAYOUT SHEET

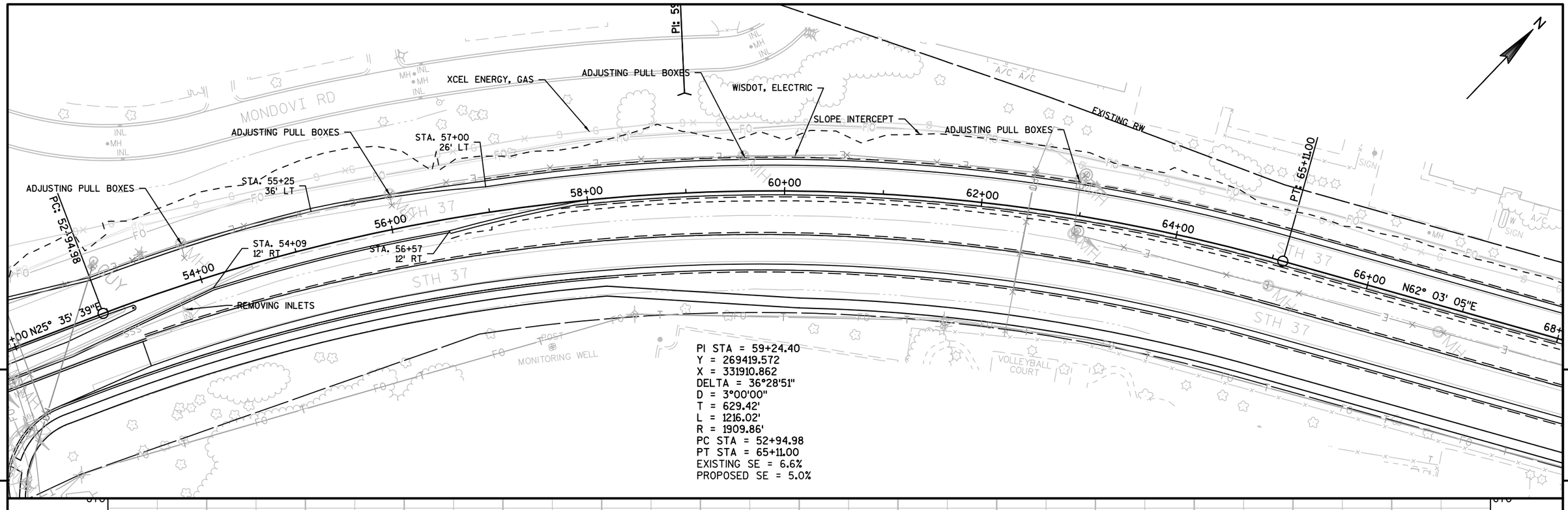


PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SB STH 37	SHEET 146 E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050201_PP.DWG
LAYOUT NAME - SHEET - (1)

PLOT DATE : 1/10/2018 2:52 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

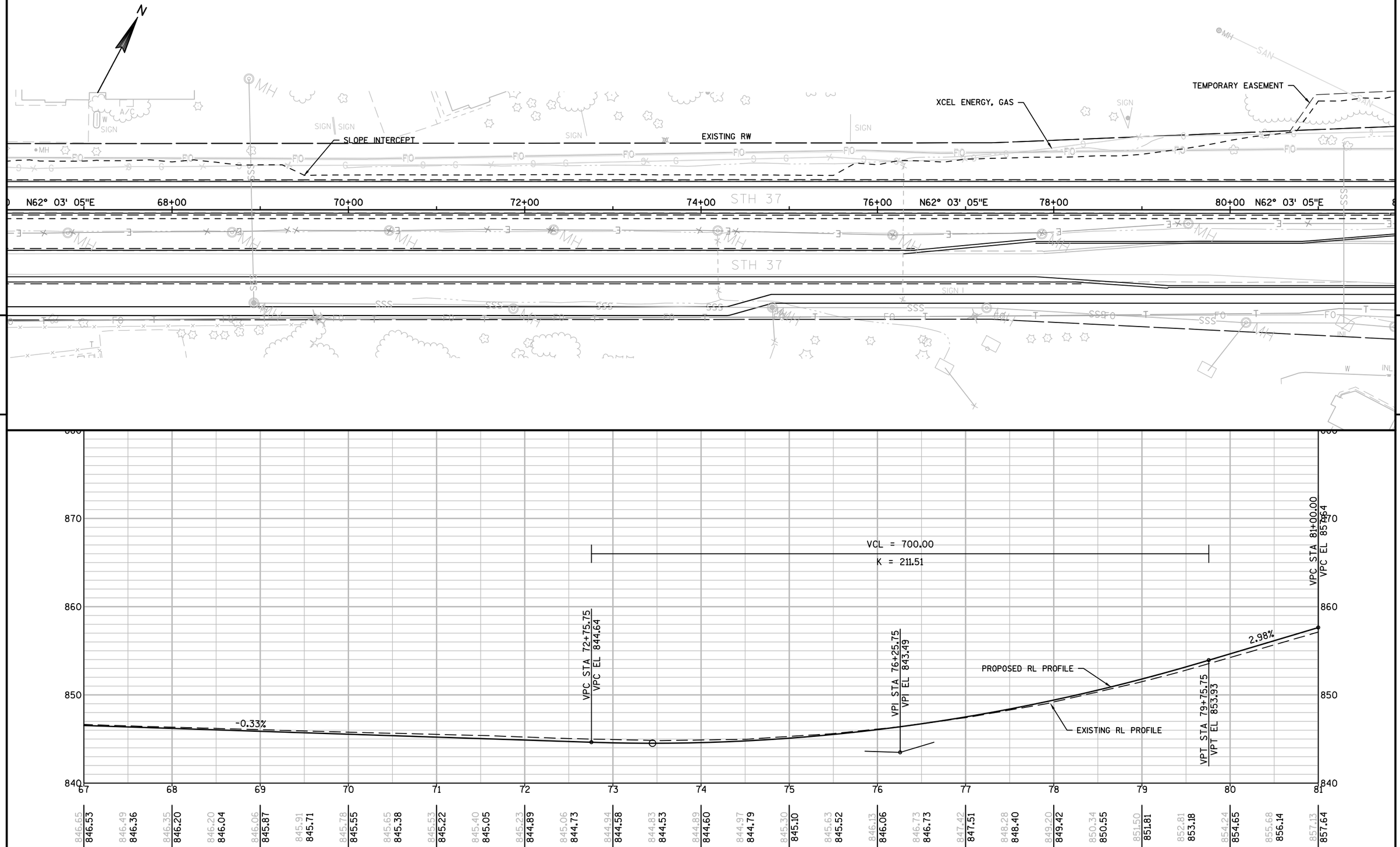


PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SB STH 37	SHEET 147	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050201_PP.DWG
LAYOUT NAME - SHEET - (2)

PLOT DATE : 10/31/2017 8:01 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SB STH 37	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050201_PP.DWG
LAYOUT NAME - SHEET - (3)
PLOT DATE : 10/31/2017 8:01 AM
PLOT BY : KRUG, GARY W
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

SLOPE INTERCEPT
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
REMOVING PAVEMENT
TEMPORARY EASEMENT
ADJUSTING PULL BOXES
CONCRETE SAFETY ISLANDS
REMOVING CURB AND GUTTER
CONCRETE SIDEWALK 5-INCH
REMOVING INLETS
REMOVING STORM SEWER
ADJUSTING PULL BOXES
REMOVING APRON ENDWALL
EXISTING RW
REMOVING PULLBOXES
ADJUSTING PULL BOXES
REMOVING PULLBOXES
REMOVING CONCRETE SIDEWALK
PC: 87+42.12
WISDOT, ELECTRIC
XCEL ENERGY, GAS
ATRIUM CT
STA. 89+51 36' LT
STA. 91+00 26' LT
STA. 92+00 42' RT
STA. 93+50
STA. 89+00 12' RT
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE A
ELDORADO BLVD
STH 37
N62° 03' 05"E
82+00
84+00
86+00
88+00
90+00
92+00
94+00
96+00
PI STA = 94+06.73
Y = 271071.510
X = 335024.987
DELTA = 50°17'11"
D = 4°02'47"
T = 654.60'
L = 1242.77'
R = 1416.00'
PC STA = 87+42.12
PT STA = 99+84.89
EXISTING SE = 6.0%
PROPOSED SE = 5.7%
PT: 94+06.73
NOTE: FOR ADDITIONAL DETAILS, SEE CRAIG ROAD INTERSECTION LAYOUT SHEET

VPC STA 81+00.00
VPC EL 857.64
VPI STA 85+00.00
VPI EL 869.56
VPT STA 89+00.00
VPT EL 871.68
EXISTING RL PROFILE
0.53%
0.58%
PROPOSED RL PROFILE
SPECIAL DITCH MEDIAN
VCL = 800.00
K = 326.12

| | | |

PI STA = 94+06.73
Y = 271071.510
X = 335024.987
DELTA = 50°17'11"
D = 4°02'47"
T = 664.60'
L = 1242.77'
R = 1416.00'
PC STA = 87+42.12
PT STA = 99+84.89
EXISTING SE = 6.0%
PROPOSED SE = 5.7%

WISDOT, ELECTRIC

XCEL ENERGY, GAS

CONCRETE SIDEWALK 5-INCH

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE A
STA. 96+00 - STA. 101+12

REMOVING CURB AND GUTTER

PT: 99+84.89

PI: 101+04.16

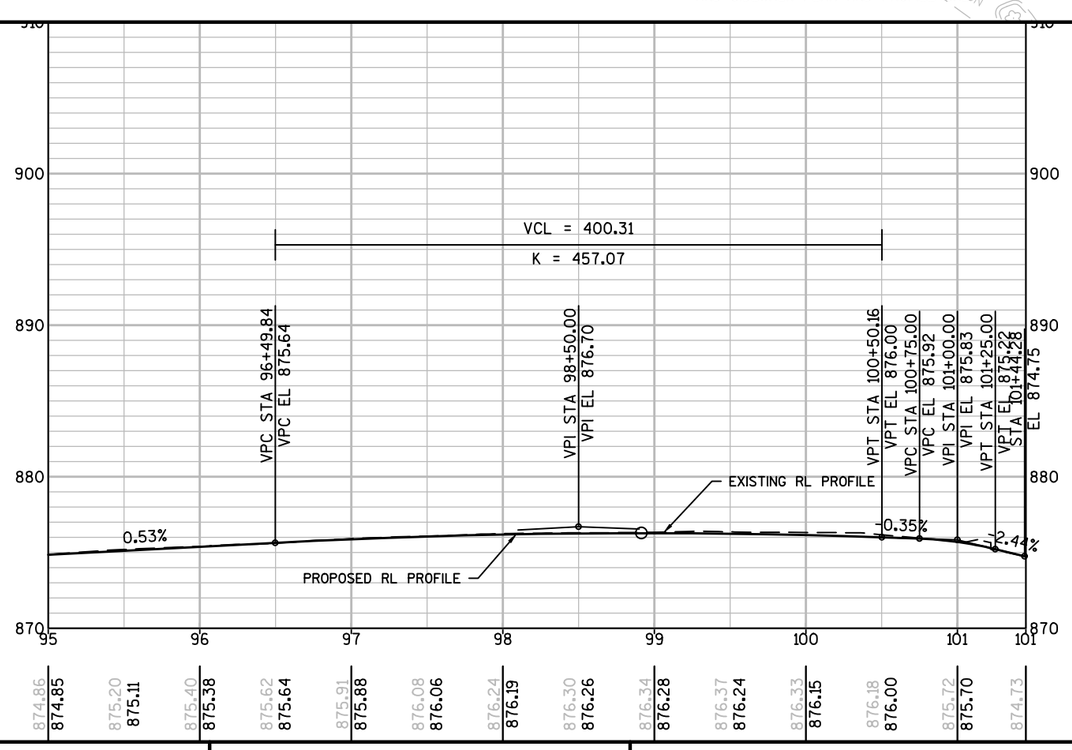
N11° 18' 49"E N10° 55' 21"E

PI: 101+04.16

END CONSTRUCTION
STATION 101+12

PI: 94+06.73

NOTE: FOR ADDITIONAL DETAILS,
SEE USH 12
INTERSECTION LAYOUT SHEET
AND SIDEWALK PLAN AND PROFILE SHEET

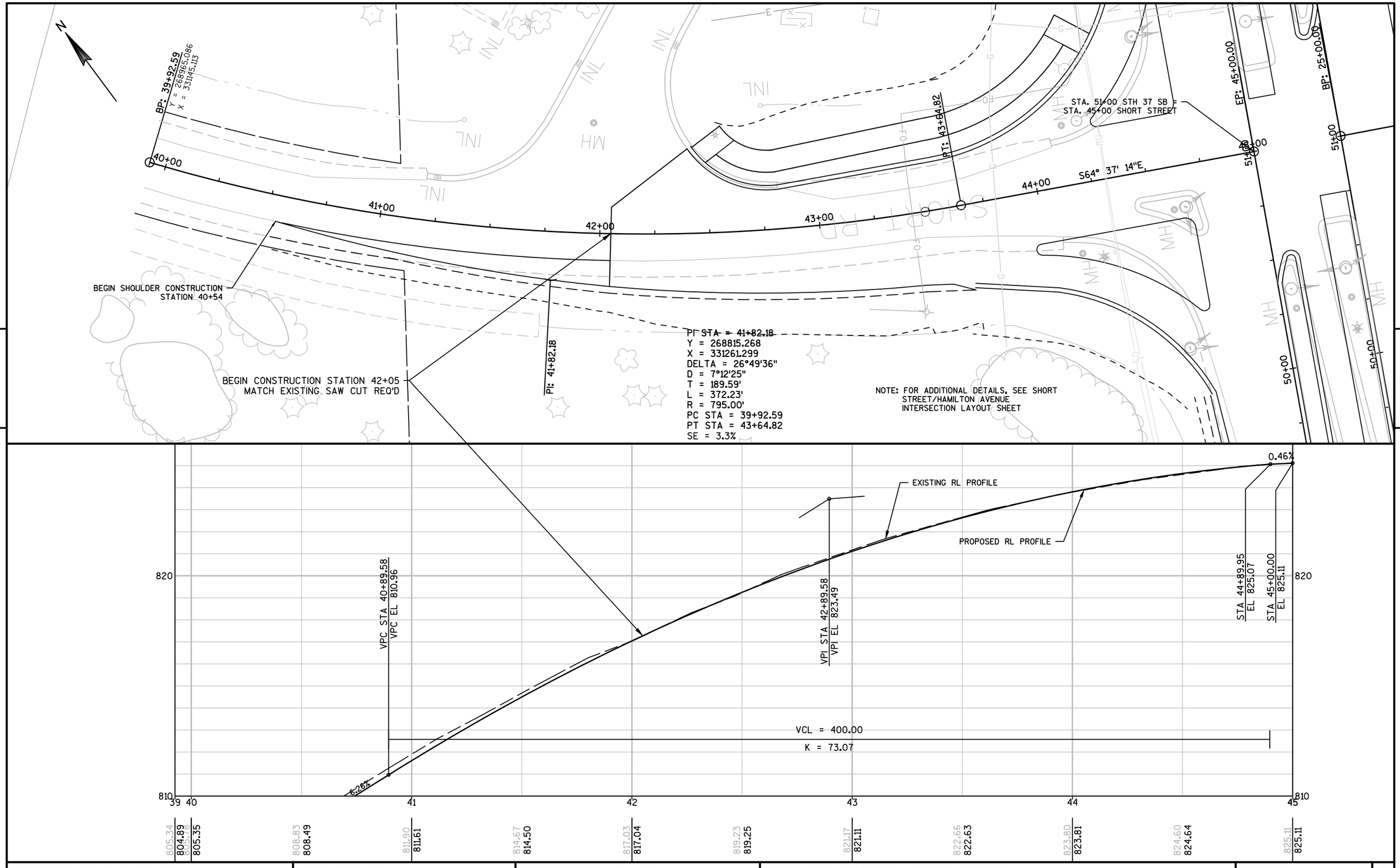


PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SB STH 37	SHEET 150 E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050201_PP.DWG
LAYOUT NAME - SHEET - (5)

PLOT DATE : 1/10/2018 2:52 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHORT STREET	SHEET 151	E

NOTE: FOR ADDITIONAL DETAILS, SEE SHORT STREET/HAMILTON AVENUE INTERSECTION LAYOUT SHEET

44+00 S64° 37' 14"E 51+00

EP: 45+00.00

BP: 25+00.00
Y = 268658.784
X = 331590.800

51+00 S65° 01' 07"E 26+00

STA. 51+00 STH 37 NB =
STA. 25+00 HAMILTON AVE.

EXISTING RW

PC: 27+06.75

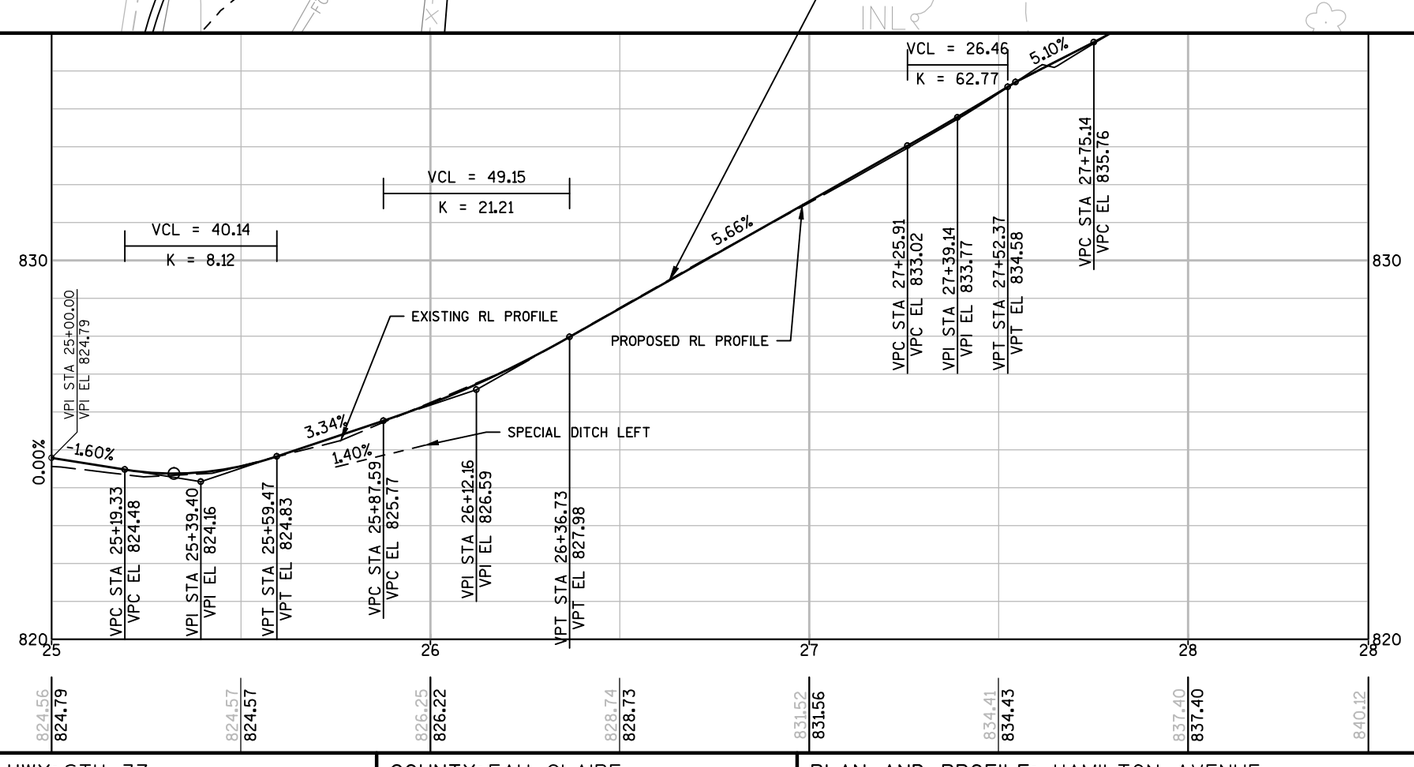
EP: 28+47.61

27+00 28+00

PT: 27+80.24

END CONSTRUCTION STATION 26+63
MATCH EXISTING, SAW CUT REQ'D

PI STA = 27+80.24
Y = 268540.433
X = 331844.822
DELTA = 40°21'11"
D = 28°38'52"
T = 73.49'
L = 140.86'
R = 200.00'
PC STA = 27+06.75
PT STA = 28+47.61
SE = 4.0%



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: HAMILTON AVENUE	SHEET 152	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - SHEET - (2)

PLOT DATE : 10/18/2017 3:53 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

NOTE: FOR ADDITIONAL DETAILS, SEE CRAIG ROAD INTERSECTION LAYOUT SHEET

BP: 6+50.00
Y = 270281.216
X = 334245.682

N0° 01' 06"W

7+00 8+00 9+00 10+00 11+00 12+00

STA. 84+82.26 STH 37 = STA. 10+00 CRAIG ROAD

84+00 85+00

CRAIG RD

EXISTING RW

BEGIN CONSTRUCTION STATION 8+00
MATCH EXISTING SAW CUT REQ'D

END CONSTRUCTION STATION 12+11.5
MATCH EXISTING SAW CUT REQ'D

BP: 233+68.79

234+47.02

VPI STA 6+68.84 VPI EL 869.05
VPT STA 6+88.84 VPT EL 868.89
VPC STA 7+90.80 VPC EL 868.05
VPI STA 8+10.80 VPI EL 867.89
VPT STA 8+30.80 VPT EL 867.67
STA 9+03.16 EL 866.88
STA 9+38.59 EL 866.66
STA 9+56.70 EL 866.98
STA 9+99.71 EL 866.99
STA 10+13.28 EL 867.25
STA 10+40.32 EL 867.78
STA 10+56.17 EL 867.68
STA 11+15.02 EL 868.13
STA 12+29.26 EL 869.63

PROPOSED RL PROFILE
EXISTING RL PROFILE

-0.82% -1.10% -0.61% 1.77% 0.02% 1.92% 1.96% -0.63% 0.77% 1.31%

VCL = 40.00
K = 126.61

VCL = 40.00
K = 144.16

870 860

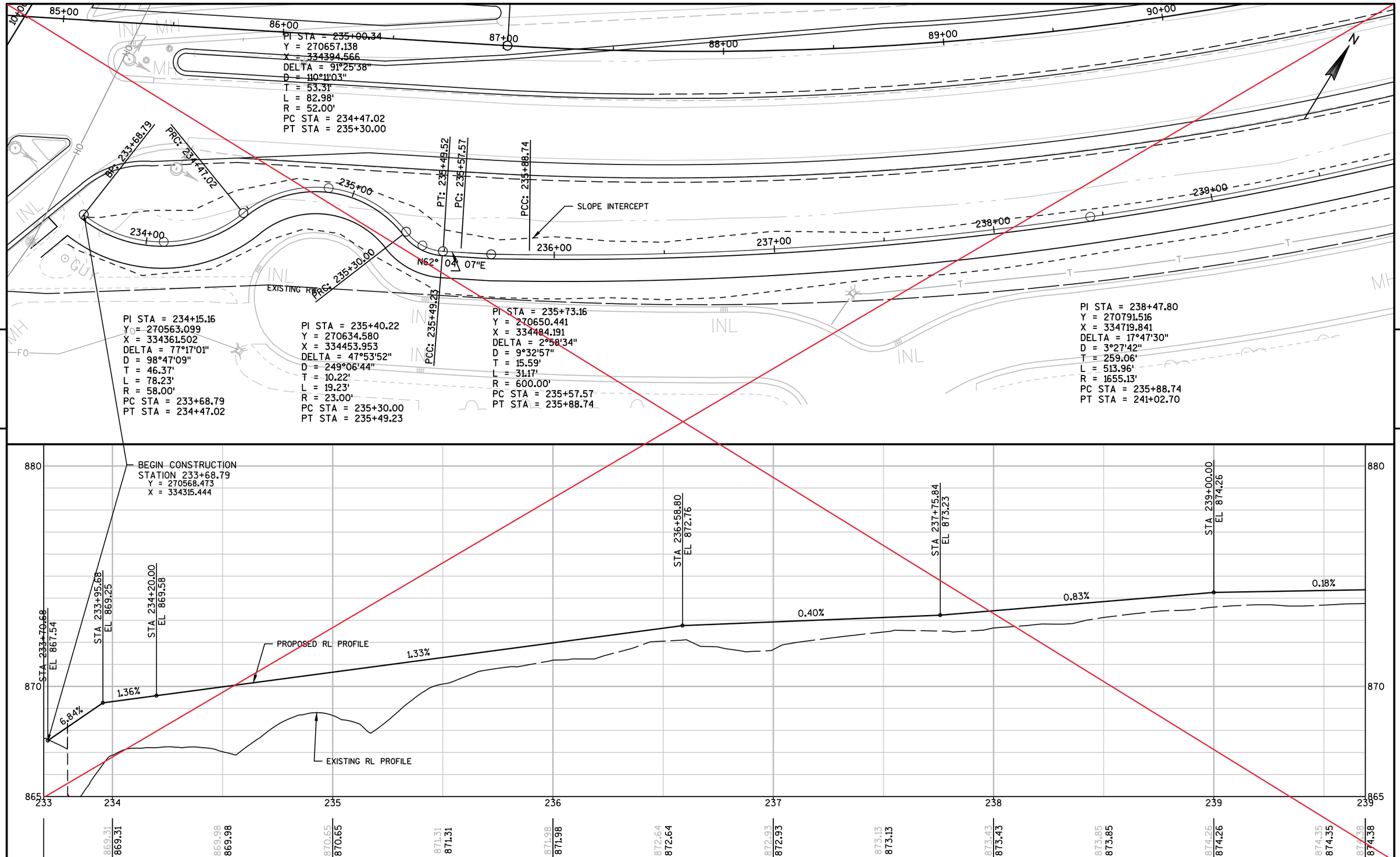
6 7 8 9 10 11 12

869.14 869.15 | 868.76 868.80 | 868.43 868.39 | 867.97 867.97 | 867.40 867.46 | 866.91 866.91 | 866.87 866.86 | 867.05 867.00 | 867.68 867.72 | 868.05 868.02 | 868.57 868.59 | 869.23 869.24 | 869.89 869.89

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: CRAIG ROAD	SHEET 153	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - CRAIG

PLOT DATE : 10/18/2017 3:54 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHARED USE PATH	SHEET 154	E

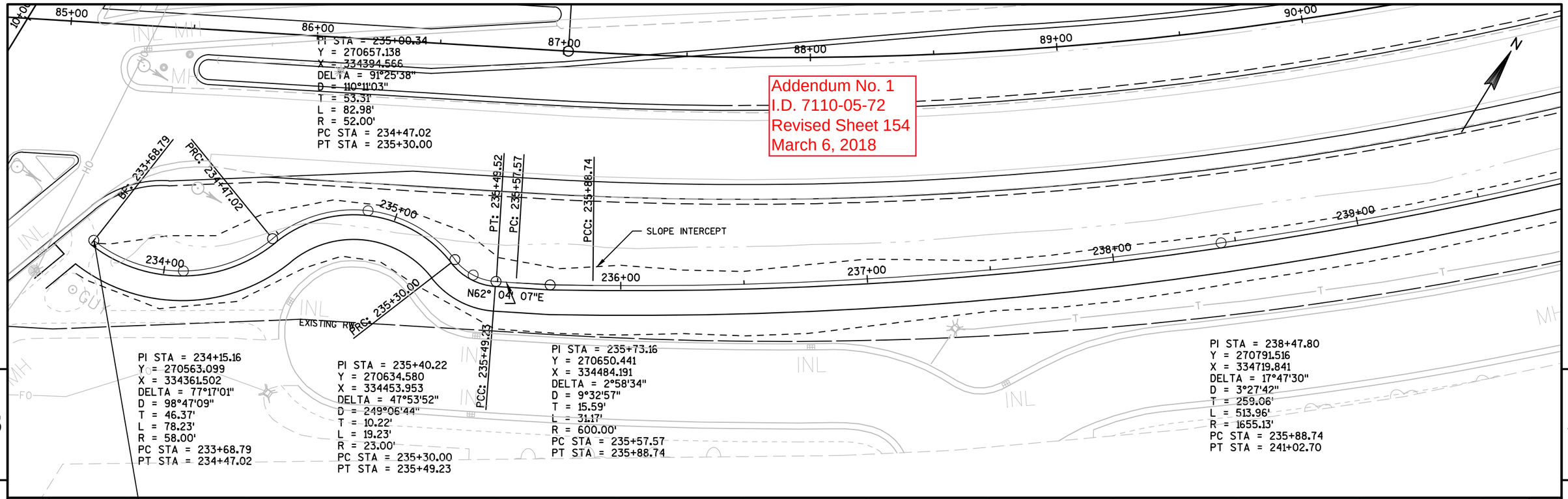
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - PATH (1)

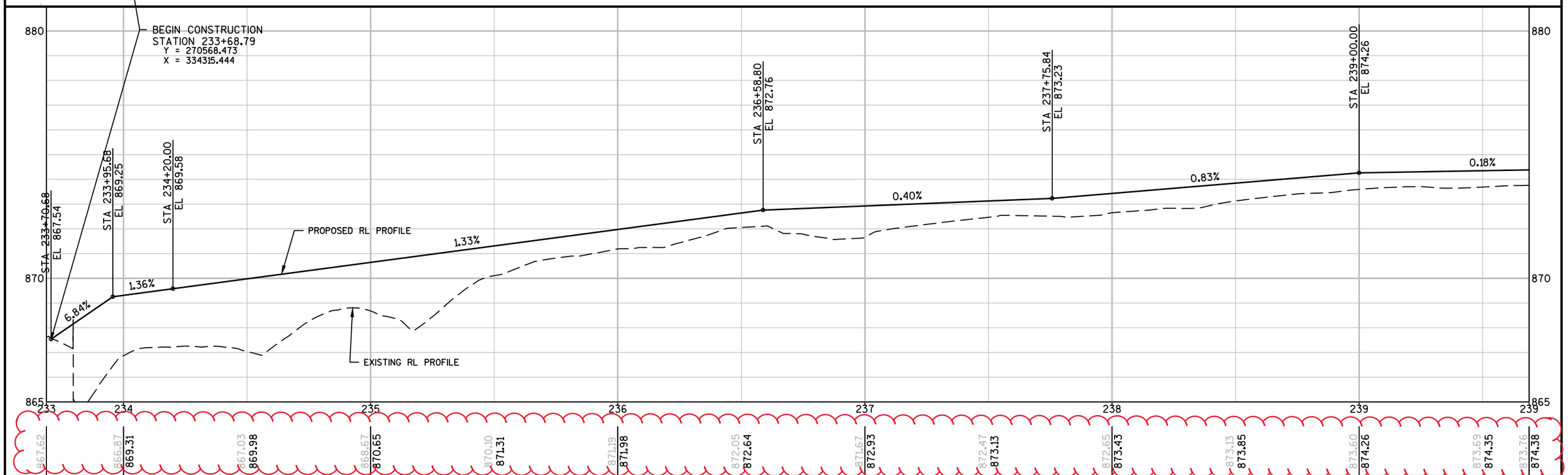
PLOT DATE : 10/18/2017 3:55 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

Replaced by "Revised Sheet 154"

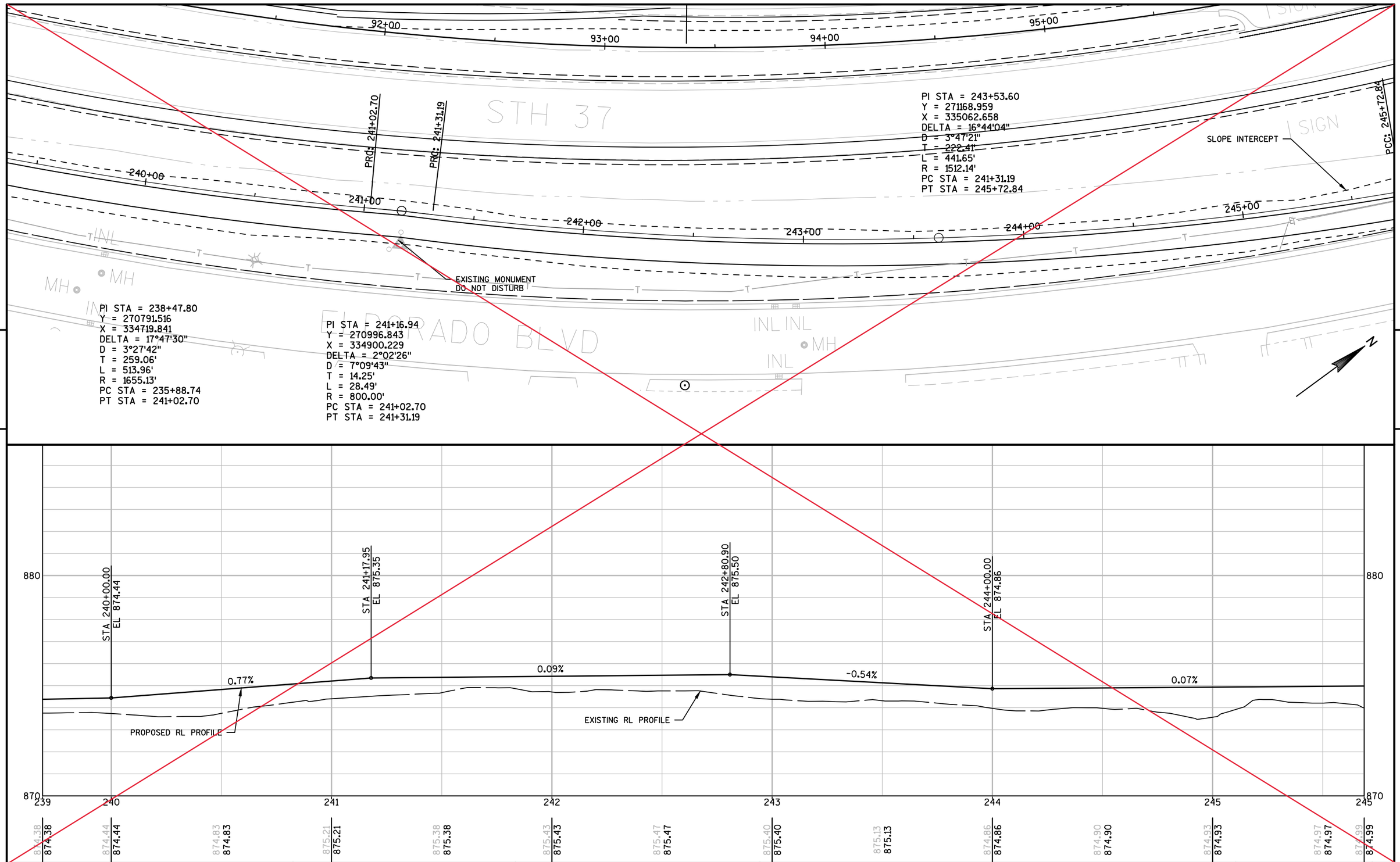
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 154
March 6, 2018





PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHARED USE PATH	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - PATH (1)
PLOT DATE : 2/27/2018 12:54 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHARED USE PATH	SHEET 155	E

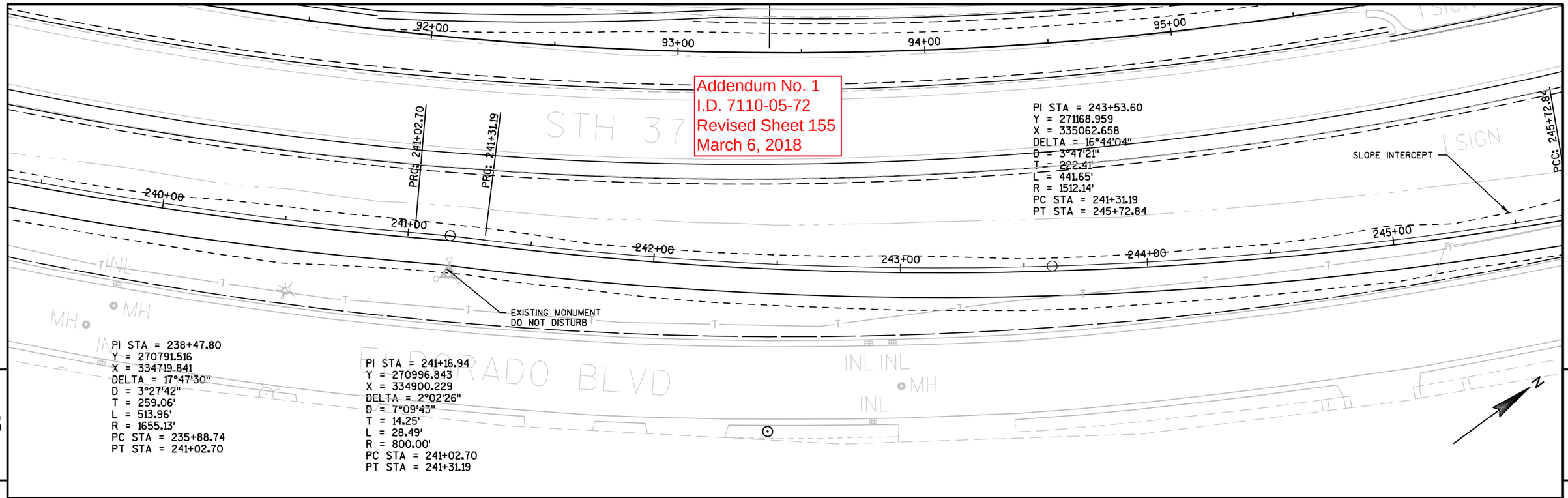
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - PATH (2)

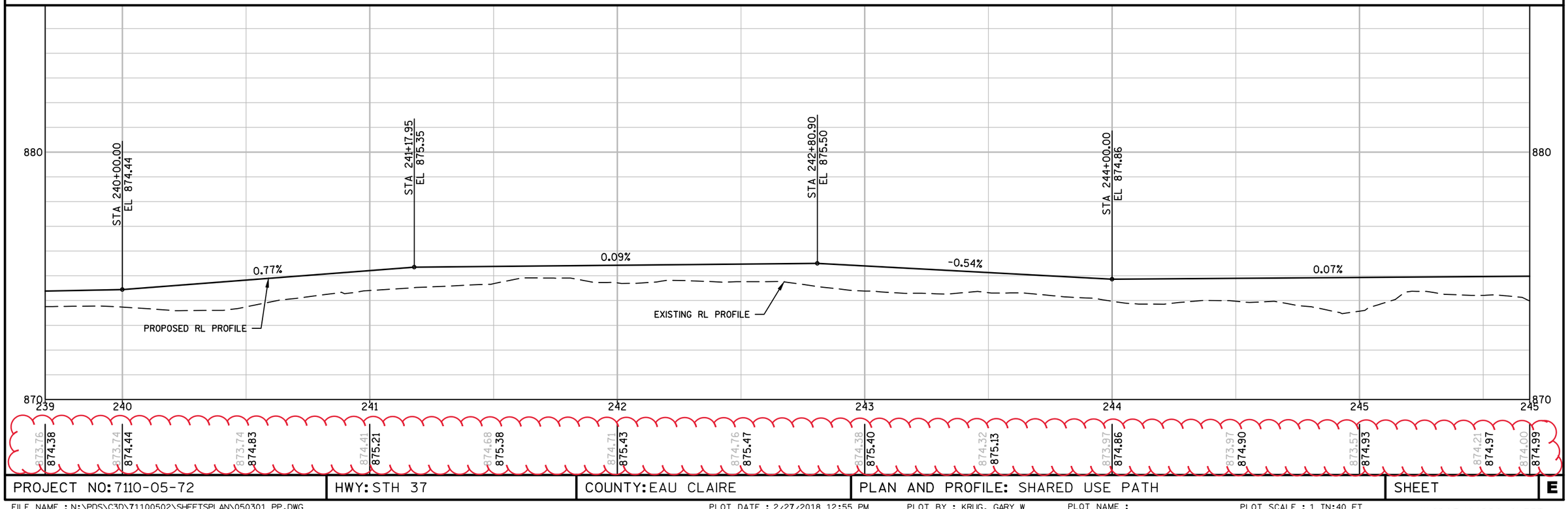
PLOT DATE : 10/18/2017 3:58 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

Replaced by "Revised Sheet 155"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 155
March 6, 2018

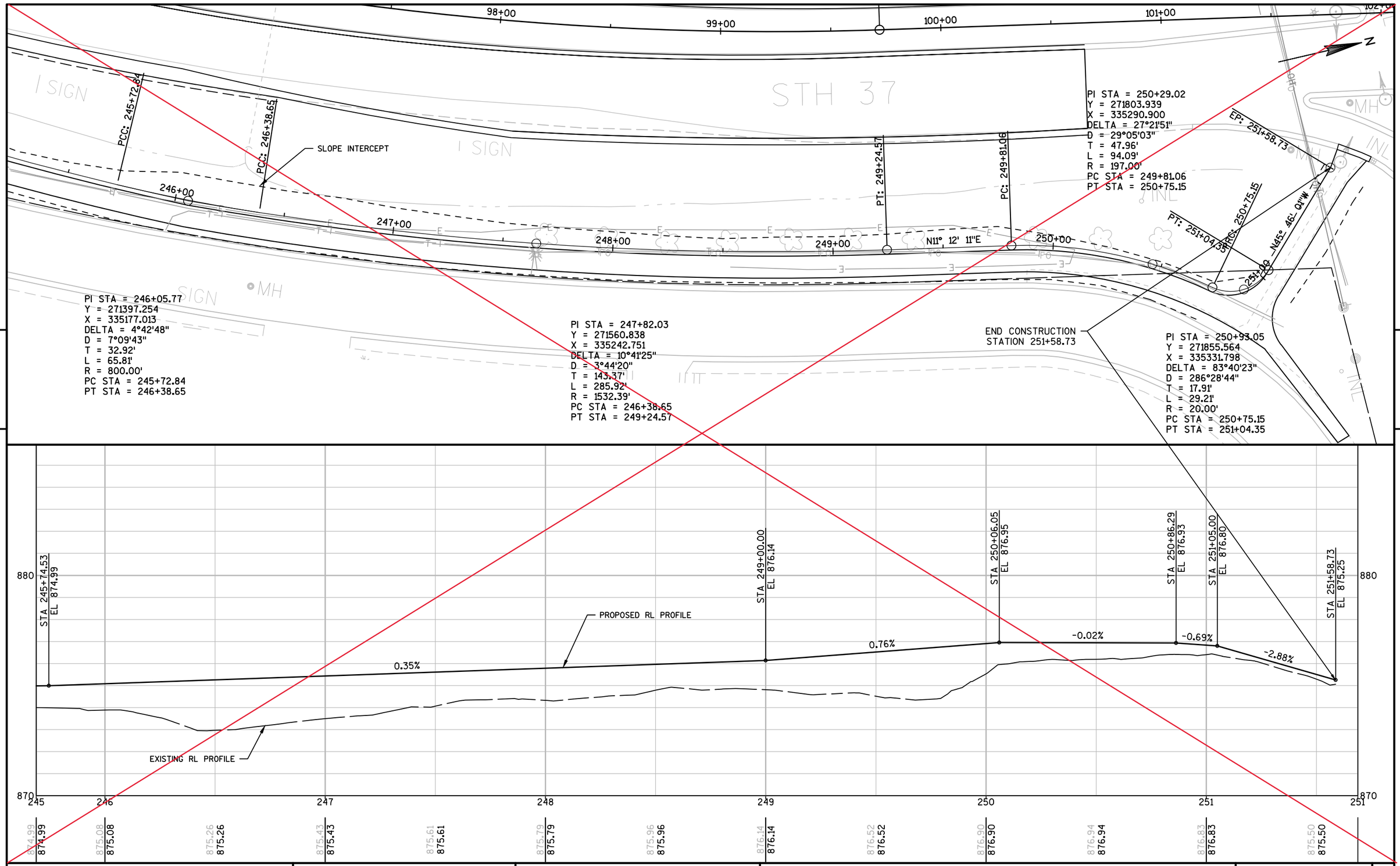




PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHARED USE PATH	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - PATH (2)
PLOT DATE : 2/27/2018 12:55 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

Revised Sheet 155



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHARED USE PATH	SHEET 156	E

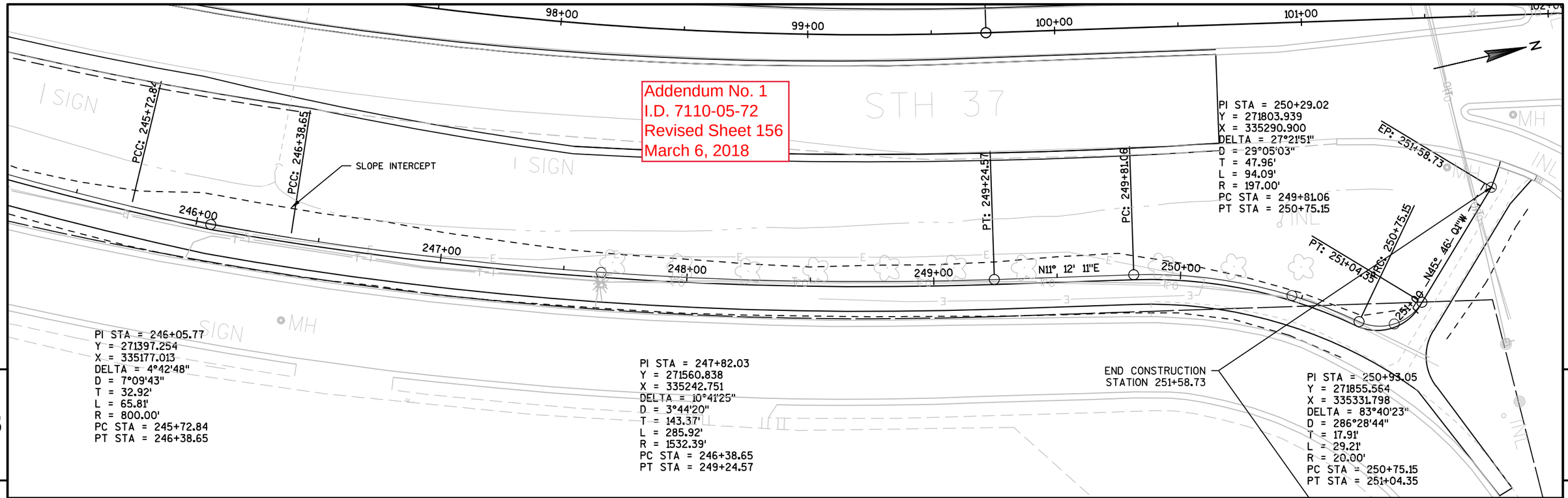
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - PATH (3)

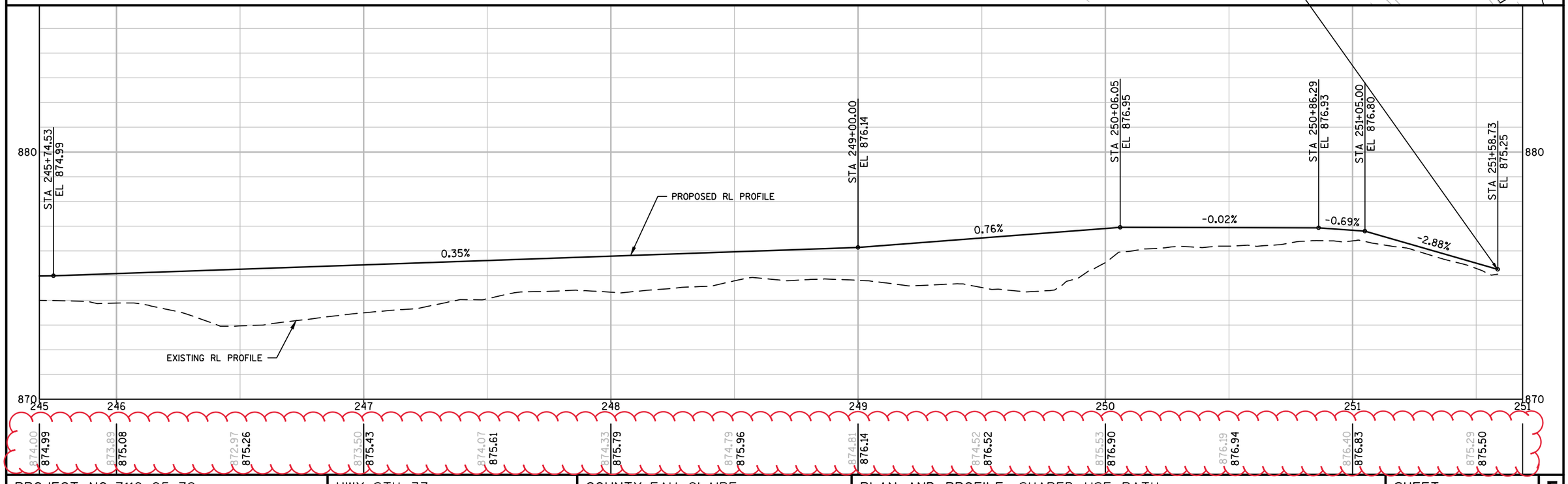
PLOT DATE : 10/18/2017 3:59 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

Replaced by "Revised Sheet 156"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 156
March 6, 2018





PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHARED USE PATH	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - PATH (3)
PLOT DATE : 2/27/2018 12:55 PM
PLOT BY : KRUG, GARY W
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

PI STA = 95+79.45
Y = 271373.410
X = 334948.912
DELTA = 88°56'48"
D = 190°59'09"
T = 29.45'
L = 46.57'
R = 30.00'
PC STA = 95+50.00
PT STA = 95+96.57

CURB RAMP TYPE 1
W DETECTABLE
WARNING FIELD

PT: 95+96.57

PC: 96+52.24

PT: 96+90.09

PC: 97+47.89

PI: 97+56.86

PT: 97+65.78

PC: 99+10.77

PT: 99+25.76

PI STA = 99+18.28
Y = 271700.017
X = 335069.817
DELTA = 8°35'28"
D = 57°17'45"
T = 7.51'
L = 14.99'
R = 100.00'
PC STA = 99+10.77
PT STA = 99+25.76

NOTE: FOR ADDITIONAL DETAILS, SEE USH 12
INTERSECTION LAYOUT SHEET

PC: 100+55.72

PI: 100+97.48

CURB RAMP TYPE 1
W DETECTABLE
WARNING FIELD

101+00'S'

EXISTING RW

N10° 50' 07"E 100+00'S'

98+00'S' N19° 25' 35"E

99+00'S'

96+00'S' N30° 51' 51"E

97+00'S' 89° 10' 47"E

95+79.45

SLOPE INTERCEPT

PI STA = 100+97.48
Y = 271876.052
X = 335103.510
DELTA = 45°20'06"
D = 57°17'45"
T = 41.76'
L = 79.12'
R = 100.00'
PC STA = 100+55.72
PT STA = 101+34.84

PI STA = 96+71.39
Y = 271462.919
X = 335002.406
DELTA = 21°41'05"
D = 57°17'45"
T = 19.15'
L = 37.85'
R = 100.00'
PC STA = 96+52.24
PT STA = 96+90.09

PI: 96+71.39

PI STA = 97+56.86
Y = 271547.742
X = 335016.114
DELTA = 10°14'48"
D = 57°17'45"
T = 8.97'
L = 17.88'
R = 100.00'
PC STA = 97+47.89
PT STA = 97+65.78

PI: 99+18.28

PT: 99+74.22

101+00

100+00

99+00

END SIDEWALK CONSTRUCTION
STATION 101+25'S'

BEGIN SIDEWALK CONSTRUCTION
STATION 95+50'S'
Y = 271388.052
X = 334923.356

STA 95+50.00
EL 874.15

STA 95+80.00
EL 875.40

STA 96+60.00
EL 875.08

STA 97+10.00
EL 875.20

STA 97+50.00
EL 876.00

STA 97+75.00
EL 875.90

STA 98+25.00
EL 875.03

STA 98+50.00
EL 875.90

STA 99+20.00
EL 874.90

STA 99+60.00
EL 875.75

STA 100+15.00
EL 876.00

STA 100+65.00
EL 874.10

STA 101+10.00
EL 874.30

STA 101+25.00
EL 874.20

PROPOSED RL PROFILE

EXISTING RL PROFILE

4.17% -0.40% 0.24% 2.00% -0.40% -1.74% 3.47% -1.43% 2.13% 0.45% -3.80% 0.44% -0.67%

880
870

95 96 97 98 99 100 101 101

874.55 874.15 874.20 875.32 873.46 875.12 874.23 875.18 874.77 876.00 874.91 875.47 874.84 875.90 875.36 875.19 875.52 875.54 875.38 875.93 874.48 874.67 873.83 874.26 874.21

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SIDEWALK	SHEET 157 E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\050301_PP.DWG
LAYOUT NAME - SIDEWALK

PLOT DATE : 10/18/2017 4:00 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

BEGIN ALIGNMENT CROSSOVER A
STATION 150+00
Y = 267465.356
X = 330968.151

PI STA = 152+26.78
Y = 267669.883
X = 331066.118
DELTA = 5°28'20"
D = 1°30'00"
T = 182.55'
L = 364.82'
R = 3819.72'
PC STA = 150+44.23
PT STA = 154+09.05

EXISTING STORM SEWER

PROPOSED CROSSOVER PAVEMENT

N25° 35' 39"E

ALIGNMENT SB RL

ALIGNMENT NB RL

STA. 40+19.75

BEGIN CROSSOVER CONSTRUCTION
STATION 40+00

N31° 03' 59"E
180.18'

N20° 07' 19"E
180.18'

PI STA = 172+26.78
Y = 267647.420
X = 331113.016
DELTA = 5°28'20"
D = 1°30'00"
T = 182.55'
L = 364.82'
R = 3819.72'
PC STA = 170+44.23
PT STA = 174+09.05

BEGIN ALIGNMENT CROSSOVER B
STATION 170+00
Y = 267442.893
X = 331015.049

PI STA = 177+71.78
Y = 268159.413
X = 331300.600
DELTA = 5°28'20"
D = 1°30'00"
T = 182.55'
L = 364.82'
R = 3819.72'
PC STA = 175+89.23
PT STA = 179+54.05

END ALIGNMENT CROSSOVER B

END ALIGNMENT CROSSOVER A

N20° 07' 19"E
180.18'

N25° 35' 39"E 180+00

N25° 35' 39"E 160+00

PI STA = 157+71.78
Y = 268136.950
X = 331347.498
DELTA = 5°28'20"
D = 1°30'00"
T = 182.55'
L = 364.82'
R = 3819.72'
PC STA = 155+89.23
PT STA = 159+54.05

PROJECT NO: 7011-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN: CROSSOVERS A & B	SHEET 158 E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\CROSSOVER LAYOUTS_RECOVER.DWG
LAYOUT NAME - SPLIT AB

PLOT DATE : 1/10/2018 2:54 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

PI STA = 190+28.68
Y = 271136.559
X = 334880.816
DELTA = 2°19'50"
D = 4°03'49"
T = 28.68'
L = 57.35'
R = 1410.00'
PC STA = 190+00.00
PT STA = 190+57.35

BEGIN ALIGNMENT CROSSOVER C
STATION 190+00
Y = 271114.421
X = 334862.581

PI STA = 190+99.70
Y = 271193.173
X = 334923.707
DELTA = 0°50'49"
D = 1°00'00"
T = 42.35'
L = 84.69'
R = 5729.58'
PC STA = 190+57.35
PT STA = 191+42.04

PI STA = 193+75.10
Y = 271410.211
X = 335093.240
DELTA = 18°28'57"
D = 4°00'00"
T = 233.06'
L = 462.07'
R = 1432.40'
PC STA = 191+42.04
PT STA = 196+04.11

ALIGNMENT SB RL
BEGIN ALIGNMENT CROSSOVER D
STATION 210+00
Y = 271092.136
X = 334909.028

ALIGNMENT NB RL

PROPOSED CROSSOVER PAVEMENT

REMOVING SURFACE DRAINS REQ'D

BEGIN CROSSOVER CONSTRUCTION
STATION 94+00 SB

PRC: 190+57.35
PI: 190+99.70
PRC: 191+42.04
PRC: 215+51.44
PI: 190+28.68
PCC: 211+35.54

PI STA = 210+32.73
Y = 271117.988
X = 334929.096
DELTA = 2°34'19"
D = 3°55'49"
T = 32.73'
L = 65.44'
R = 1457.85'
PC STA = 210+00.00
PT STA = 210+65.44

PI: 210+32.73
PCC: 210+65.44
PI: 211+00.54

PI STA = 211+00.54
Y = 271173.376
X = 334968.237
DELTA = 7°00'37"
D = 10°00'00"
T = 35.09'
L = 70.10'
R = 572.96'
PC STA = 210+65.44
PT STA = 211+35.54

STA. 96+00 - STA. 99+00 LT & RT
REMOVING CURB AND GUTTER REQ'D

PI: 213+44.97
PI: 213+75.10

PI STA = 213+44.97
Y = 271388.795
X = 335083.926
DELTA = 16°38'09"
D = 4°00'00"
T = 209.42'

PI STA = 217+44.56
Y = 271782.478
X = 335167.807
DELTA = 0°26'48"
D = 0°24'34"
T = 54.53'
L = 109.06'
R = 13990.66'
PC STA = 216+90.03
PT STA = 217+99.09

PRC: 215+51.44
PI: 216+20.74
PT: 99+84.89
PRC: 216+90.03
PI: 101+04.16

END ALIGNMENT CROSSOVER D

PI STA = 213+44.97
Y = 271388.795
X = 335083.926
DELTA = 16°38'09"
D = 4°00'00"
T = 209.42'
L = 415.90'
R = 1432.40'
PC STA = 211+35.54
PT STA = 215+51.44

END ALIGNMENT CROSSOVER C

PI STA = 216+20.74
Y = 271661.818
X = 335139.978
DELTA = 1°23'09"
D = 1°00'00"
T = 69.29'
L = 138.58'
R = 5729.58'
PC STA = 215+51.44
PT STA = 216+90.03

PT: 99+88.16
PI: 217+44.56
PI: 101+07.50

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PLAN: CROSSOVERS C & D	SHEET 159	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\CROSSOVER LAYOUTS_RECOVER.DWG
LAYOUT NAME - SPLIT CD
PLOT DATE : 5/8/2017 4:24 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:40 FT

Standard Detail Drawing List

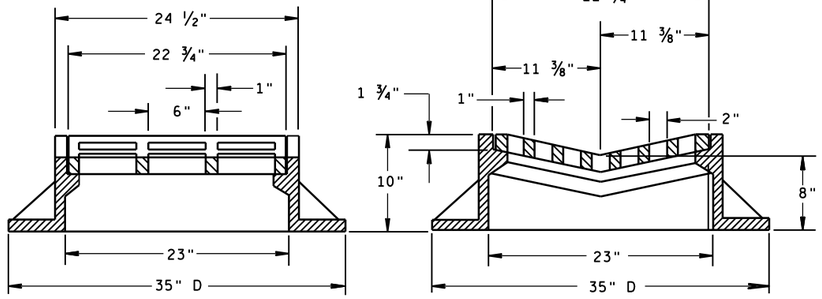
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09A	CONCRETE BASE TYPE 13
09C12-09B	CONCRETE BASE TYPE 13
09C13-02	CONCRETE BASE TYPE 10 & TYPE 13 EXTENSION
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-14C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-14D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-05	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-05	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-08A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-08C	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-08E	GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS
09F01-04	DETAILS FOR THE INSTALLATION OF TEMPORARY TRAFFIC SIGNAL LOOP DETECTOR WIRES IN ANY EXISTING PAVEMENT
09F09-04	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW CONCRETE PAVEMENT)
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09G01-04A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-04G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11B02-02	CONCRETE MEDIAN NOSE
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A03-06	CONCRETE PAVEMENT SHOULDERS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A10-01A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-01D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
14B42-05A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

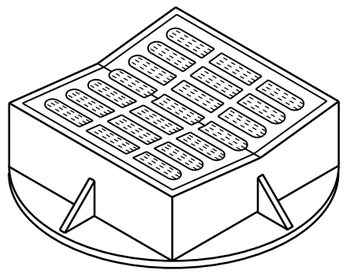
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Standard Detail Drawing List

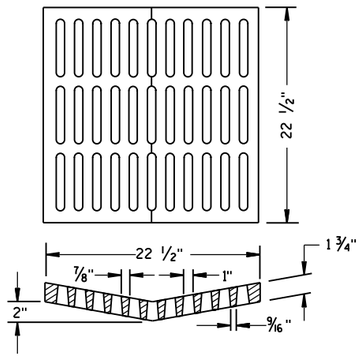
14B42-05B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-05D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-03A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-03C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A02-09	DELINEATOR POST, DELINEATOR REFLECTOR AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A04-03A	FLEXIBLE DELINEATOR POST
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-03	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D09-03	TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT
15D11-06	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

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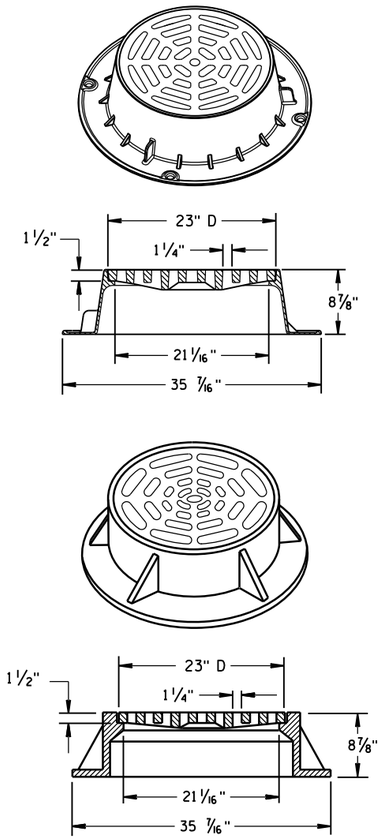


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

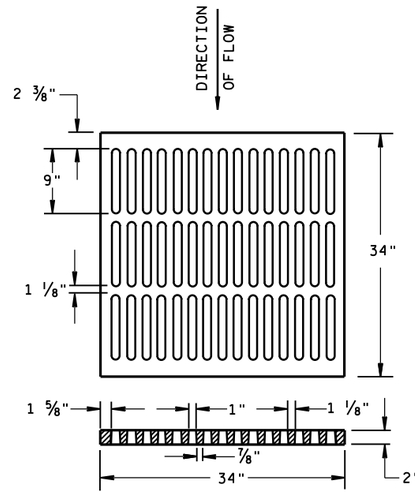
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

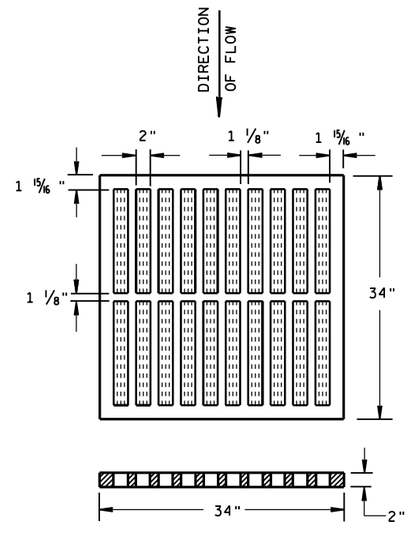
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



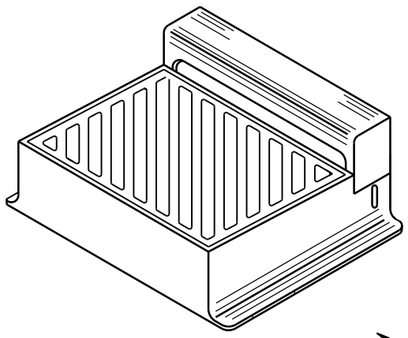
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

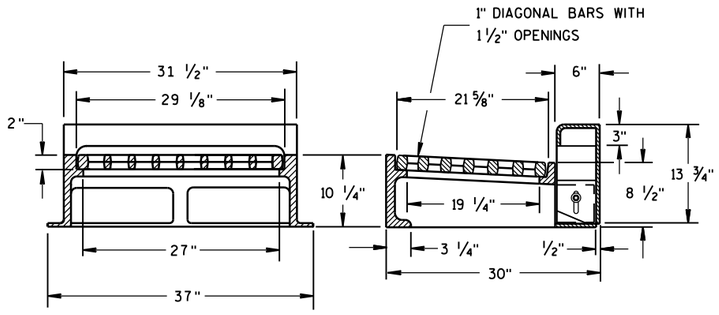


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

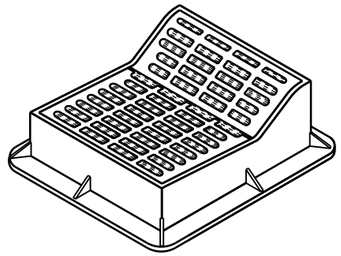
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

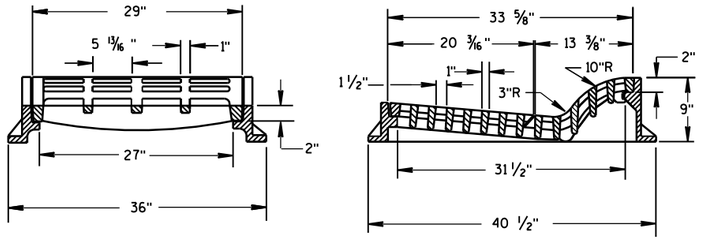
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

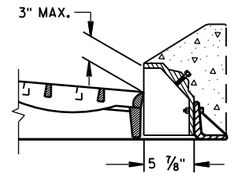
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

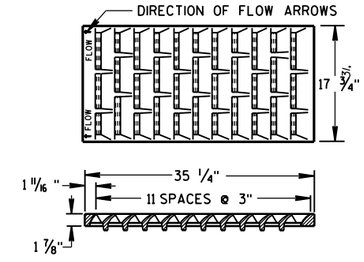
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

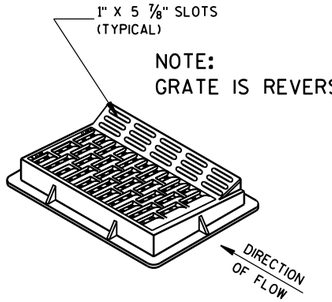
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

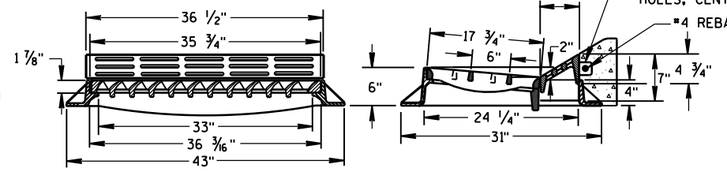
GENERAL NOTES

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.



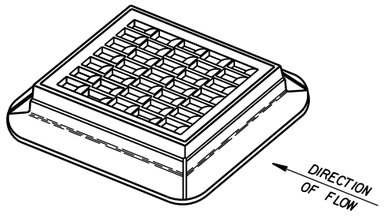


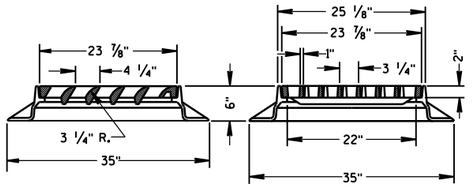


TYPE "HM"

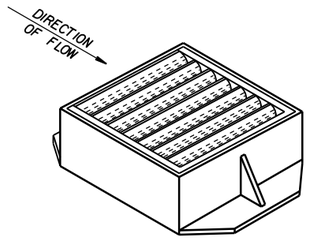
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

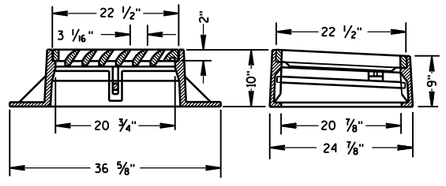
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



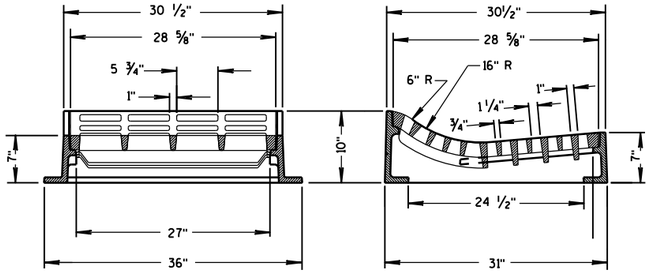


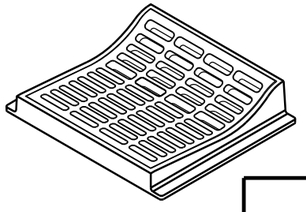
TYPE "S"





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

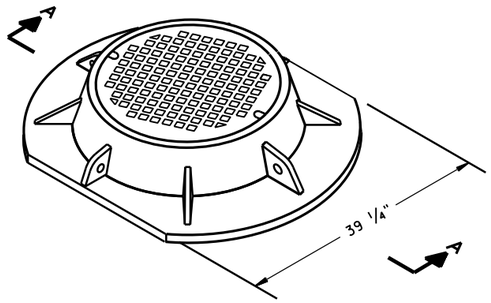
APPROVED
11/27/2013
DATE

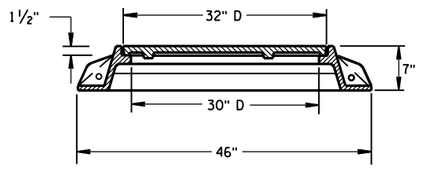
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

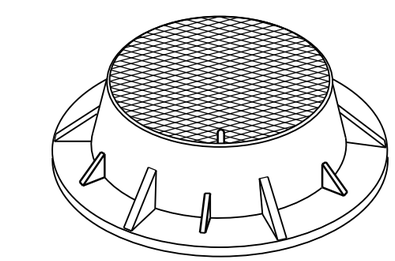
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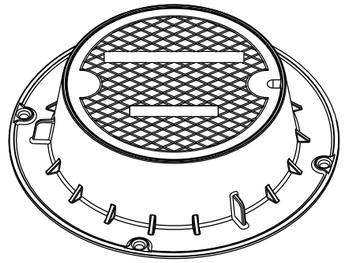
S.D.D. 8 A 5-19c

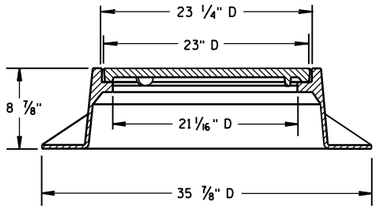


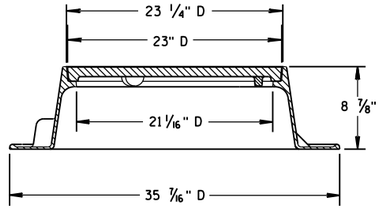


SECTION A-A
TYPE "K"









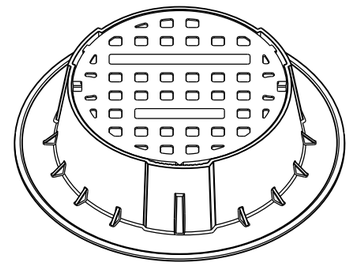
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

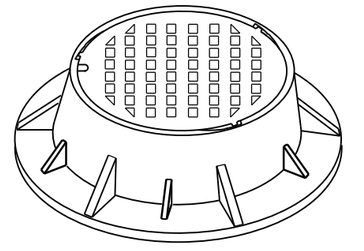
GENERAL NOTES

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.

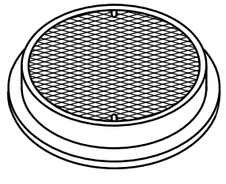
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

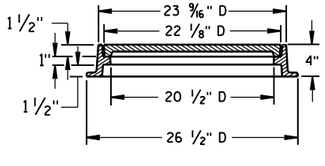
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



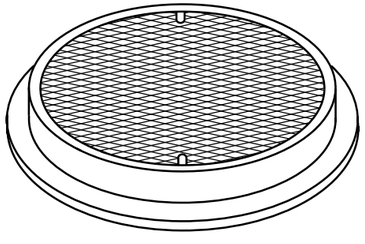


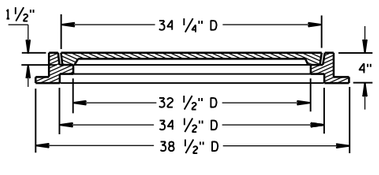
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



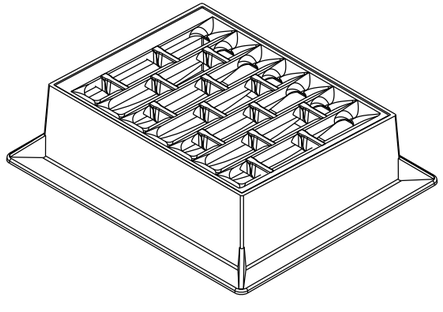


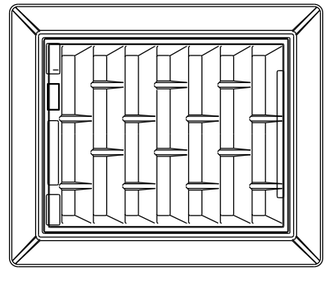
TYPE "L"

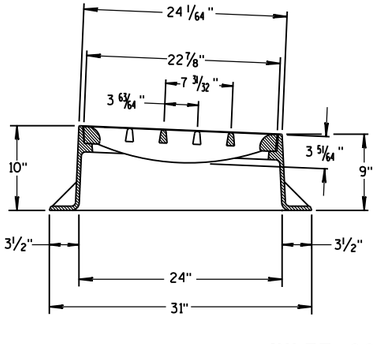


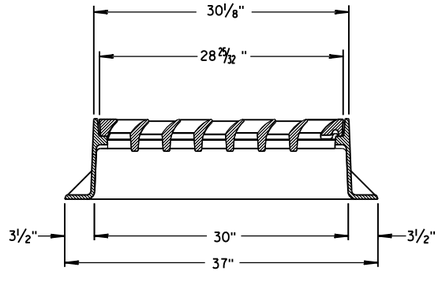


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

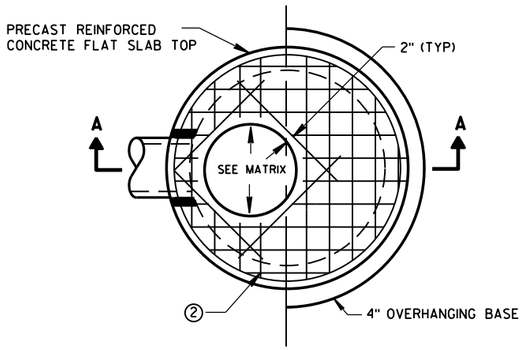
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

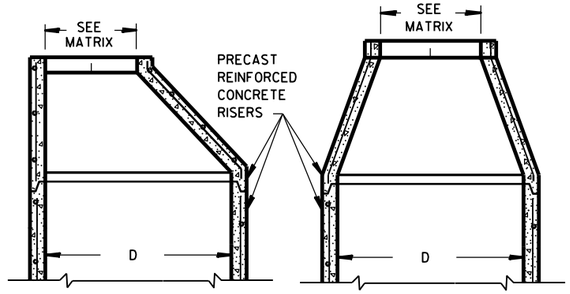
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

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

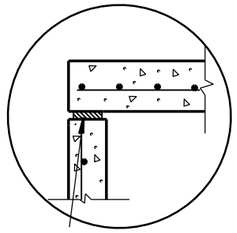


PLAN VIEW CIRCULAR OPENING

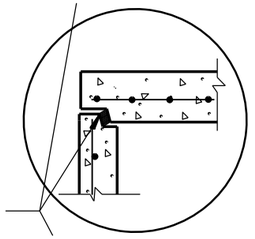


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

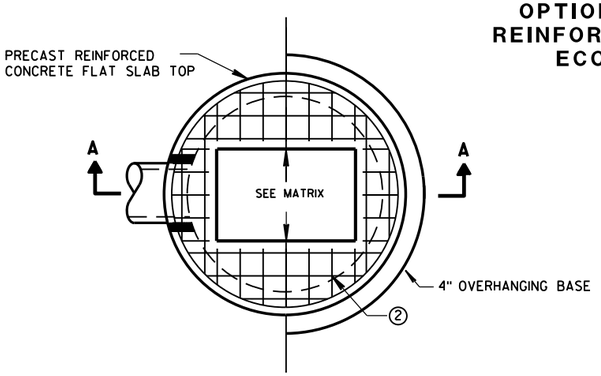
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



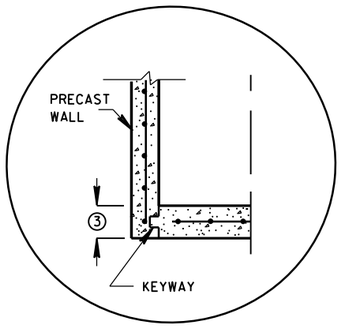
TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT

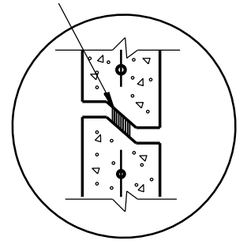


PLAN VIEW RECTANGULAR OPENING



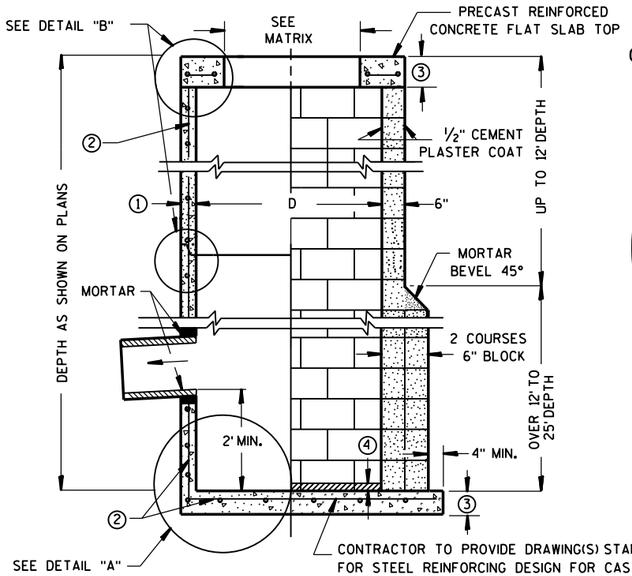
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



RISER WITH TONGUE AND GROOVE JOINT

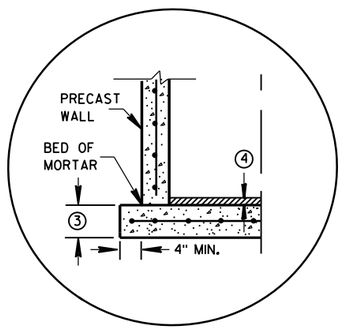
DETAIL "B"



SECTION A-A

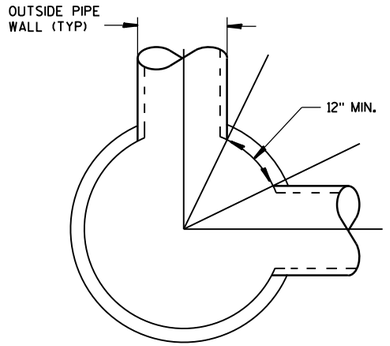
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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 CATCH BASIN 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 FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

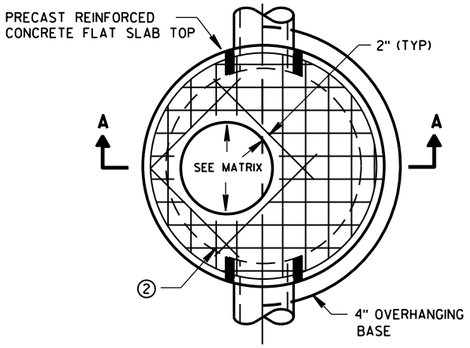
PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

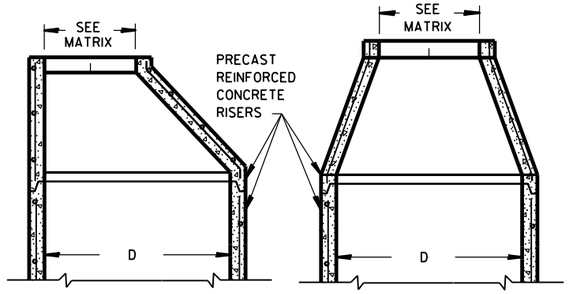
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI
FHWA

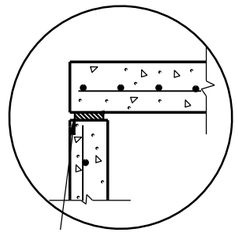


PLAN VIEW CIRCULAR OPENING

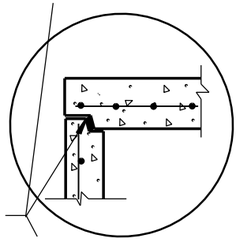


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

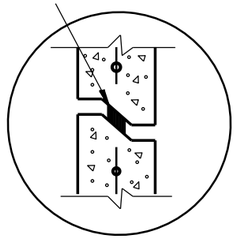


TOP WITH PLAIN END JOINT



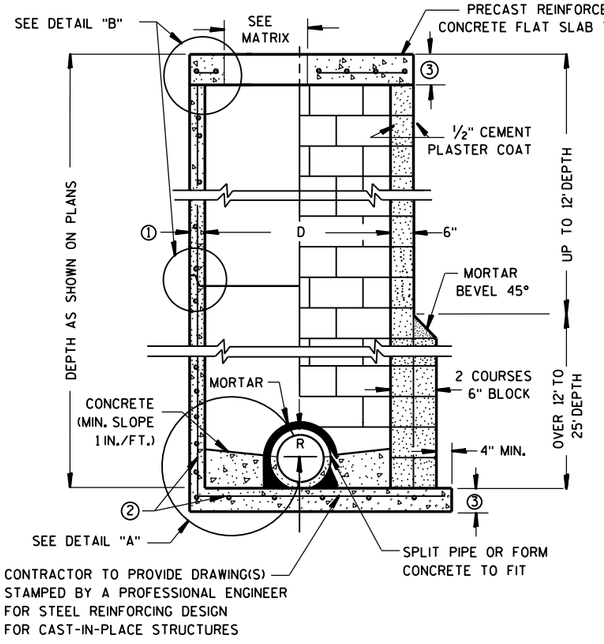
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



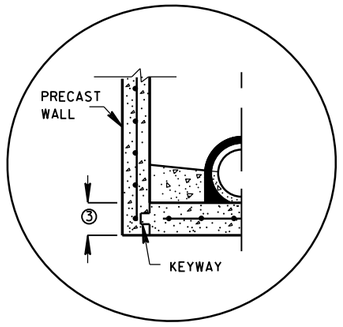
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

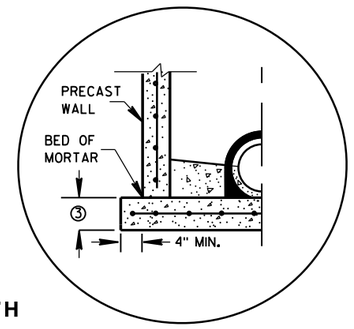


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

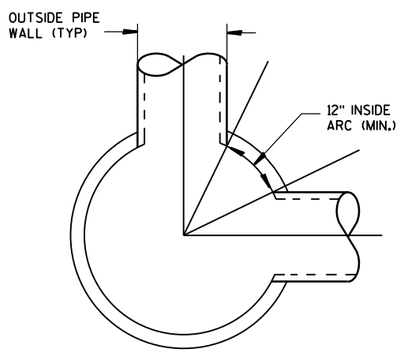


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
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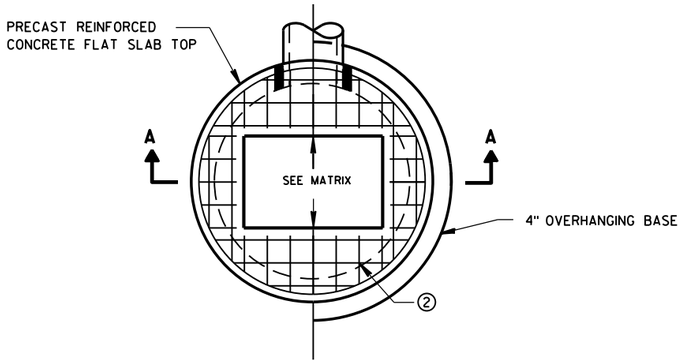
APPROVED

Sept., 2016
DATE

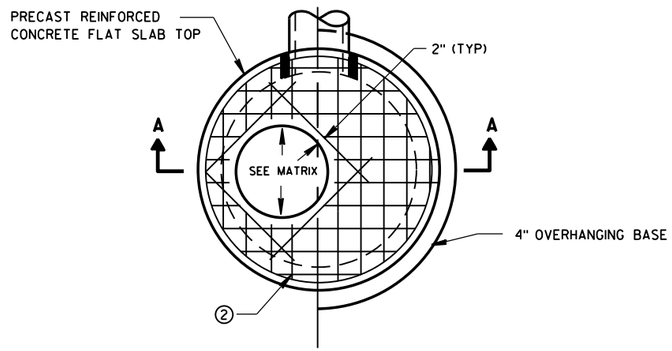
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
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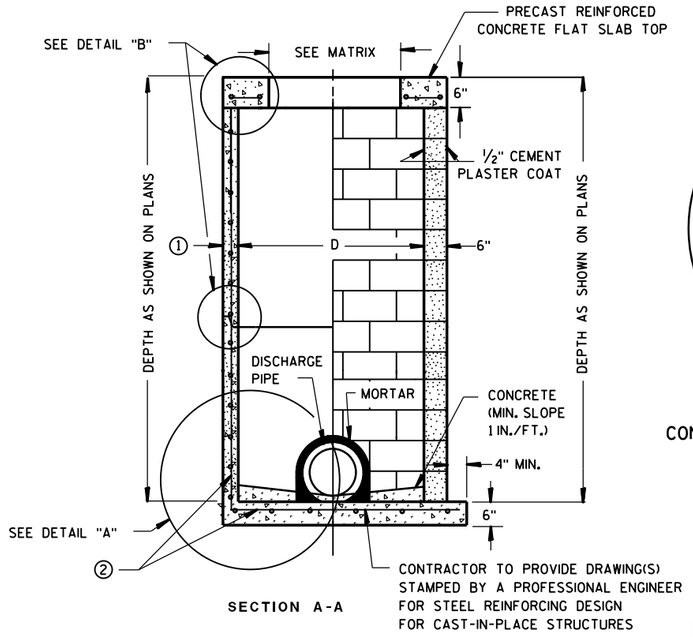
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S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

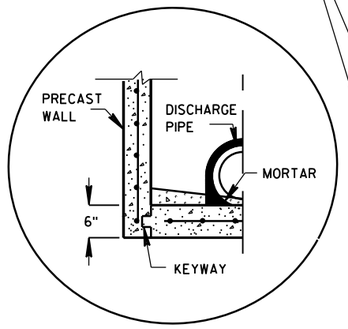


SECTION A-A

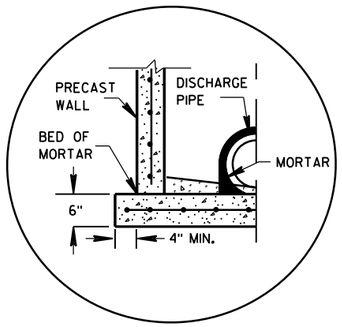
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

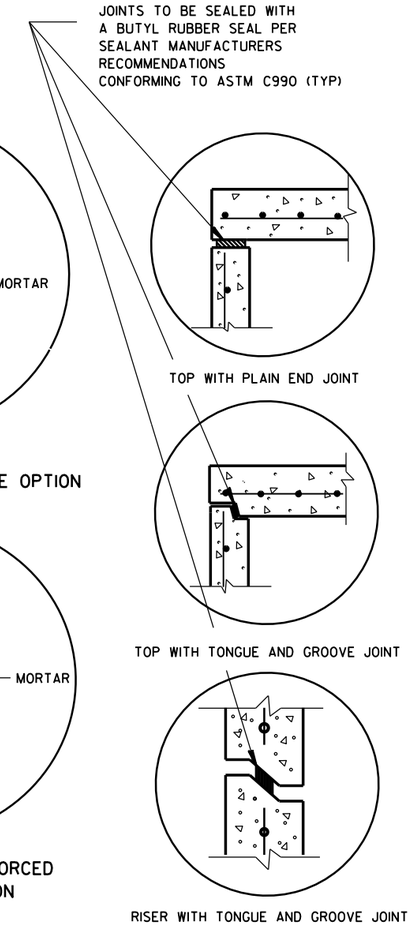


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

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 FOUNDATION 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.

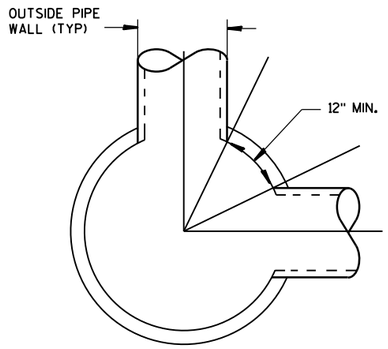
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

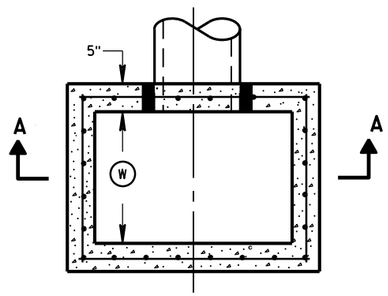
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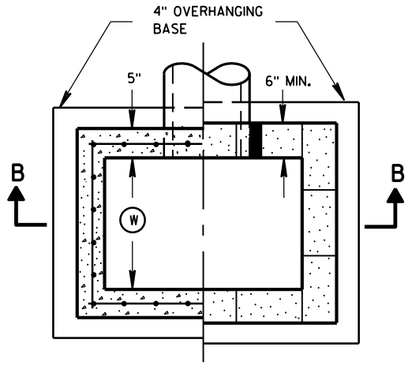
INLETS 3-FT AND 4-FT DIAMETER

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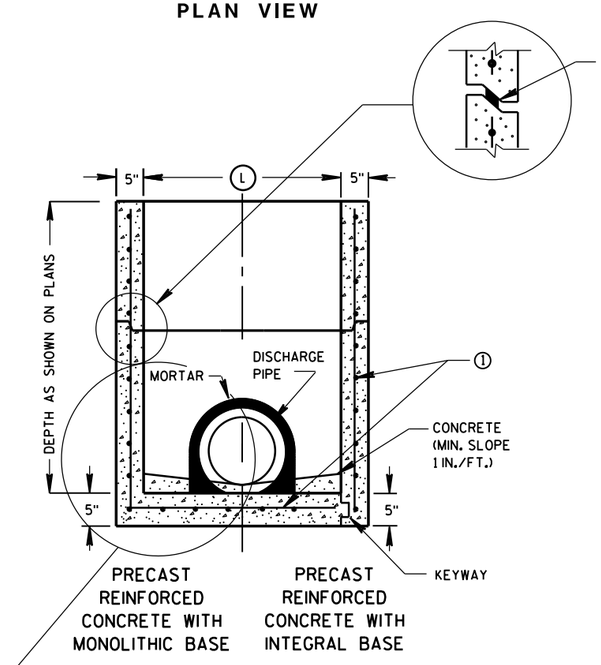
S.D.D. 8 C 6-2



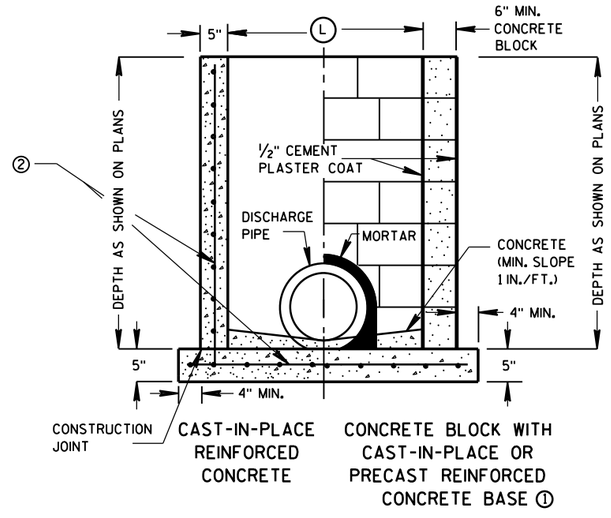
PLAN VIEW



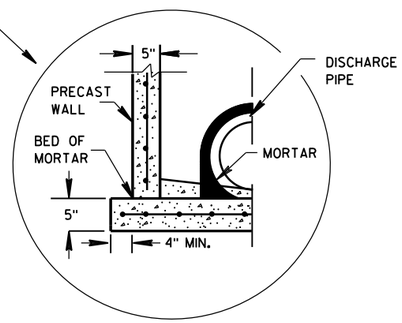
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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 PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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 FOUNDATION 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.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

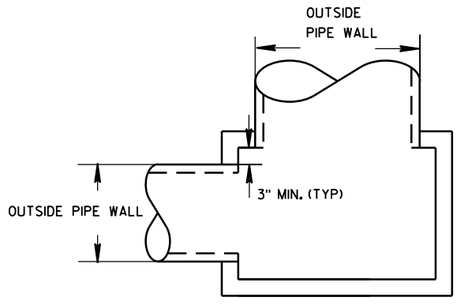
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



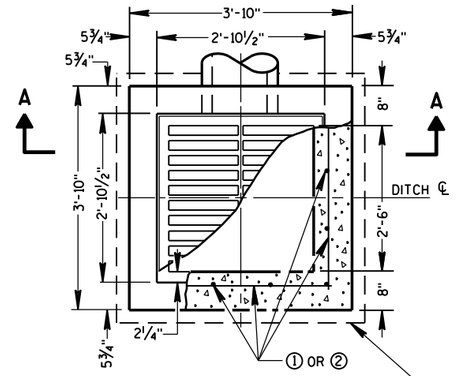
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

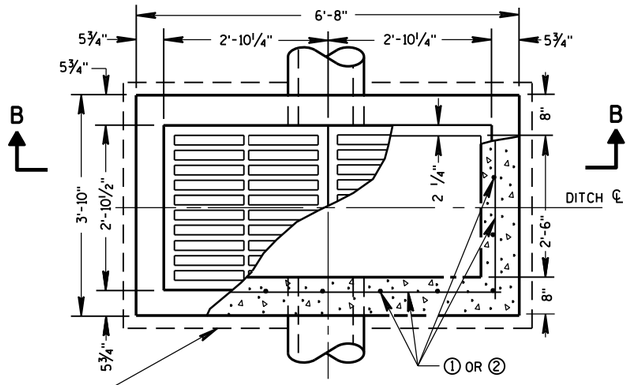
STATE OF WISCONSIN
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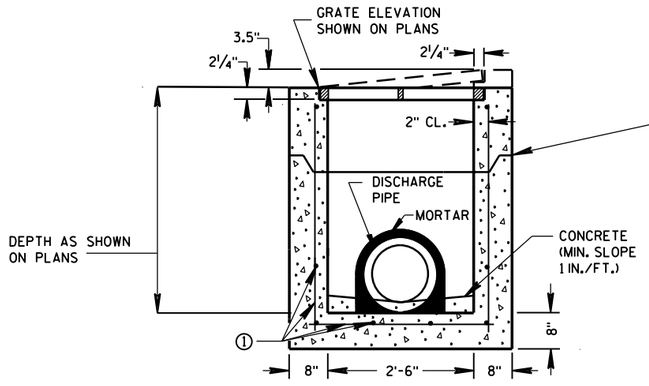


PLAN VIEW

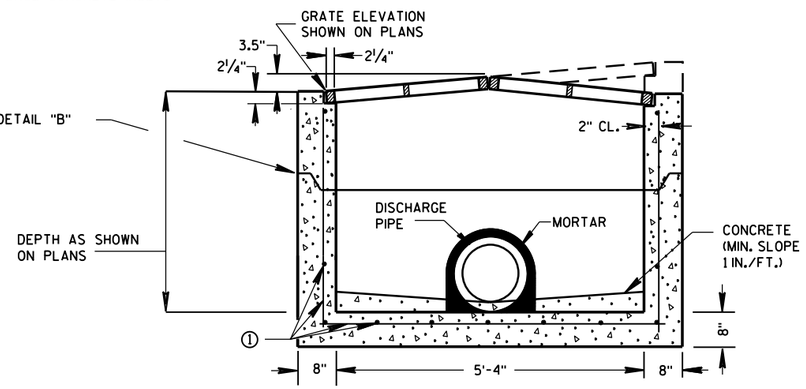


PLAN VIEW

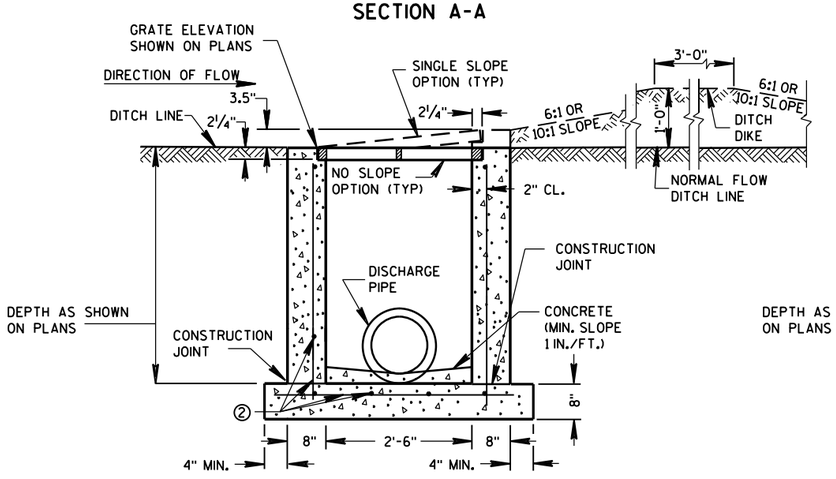
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



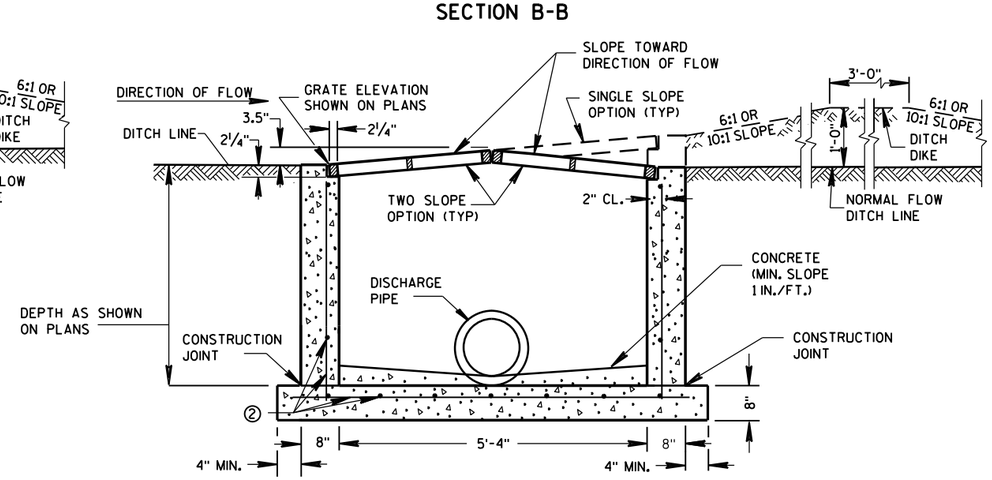
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

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 INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE 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 FOUNDATION 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.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

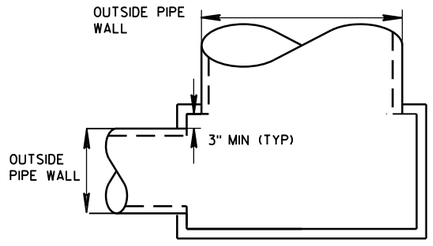
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

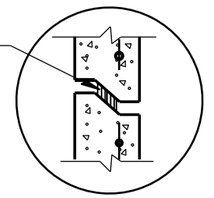
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



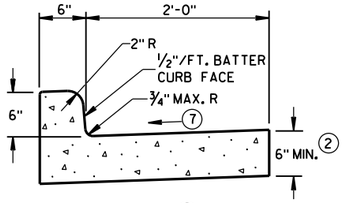
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

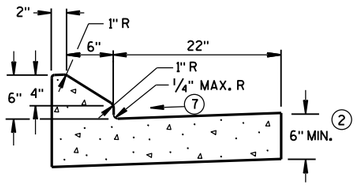
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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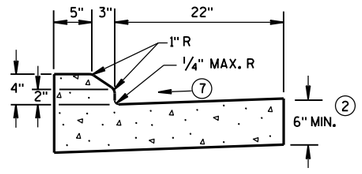
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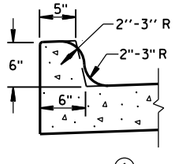
TYPES A (1) & D



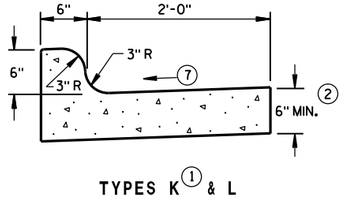
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

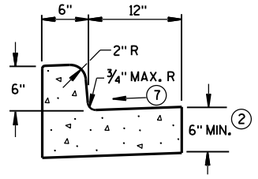


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



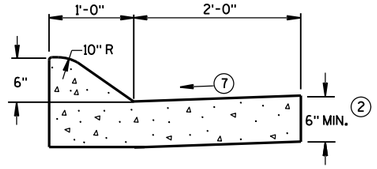
TYPES K (1) & L

CONCRETE CURB & GUTTER 30"

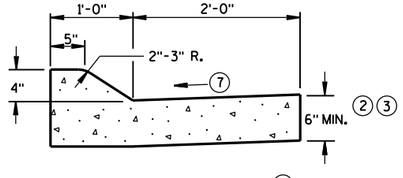


TYPES A (1) & D

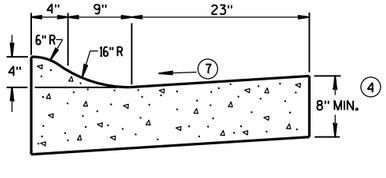
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

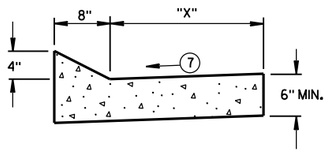


4" SLOPED CURB TYPES A (1) & D



4" SLOPED CURB TYPES R (1) & T (5)

CONCRETE CURB & GUTTER 36"



TYPES TBT & TBTT (1)

CONCRETE CURB & GUTTER

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

GENERAL NOTES

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

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

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

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

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

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

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

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

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

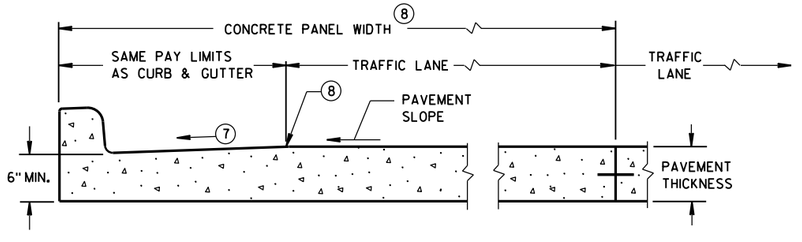
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

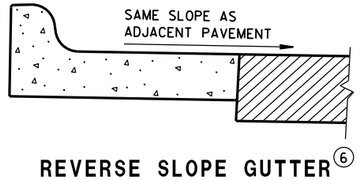
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB & GUTTER

* BIKE LANE IS NOT SHOWN.



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

CONCRETE CURB & GUTTER

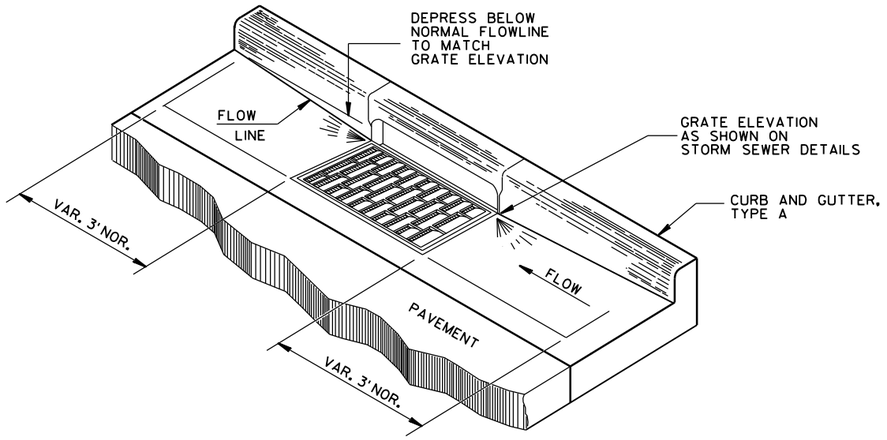
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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S.D.D. 8 D 1-20a

6

S.D.D. 8 D 1-20a



DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

GENERAL NOTES

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

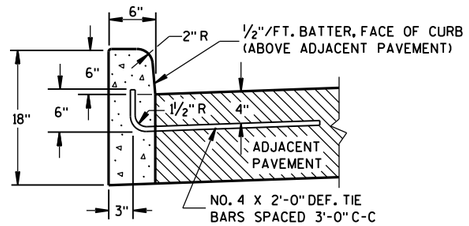
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

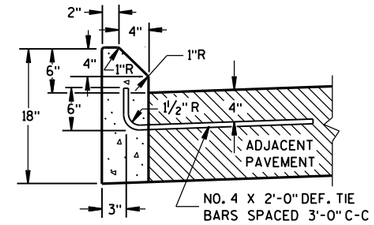
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

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

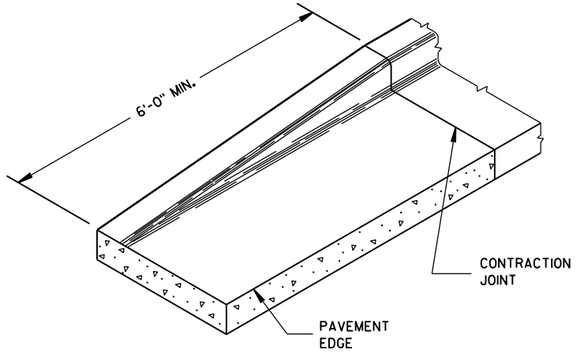


TYPES A(1) & D

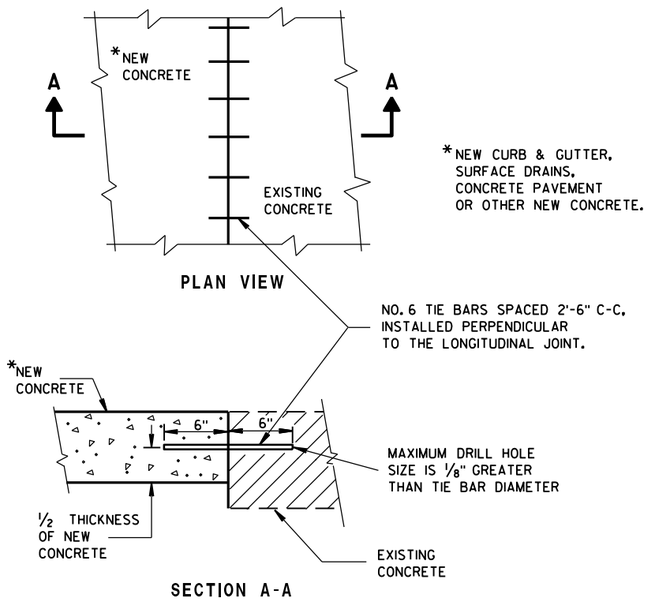


TYPES G(1) & J

CONCRETE CURB



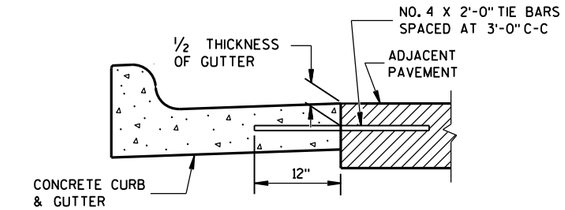
END SECTION CURB & GUTTER



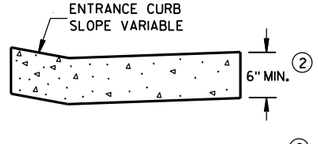
PLAN VIEW

SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

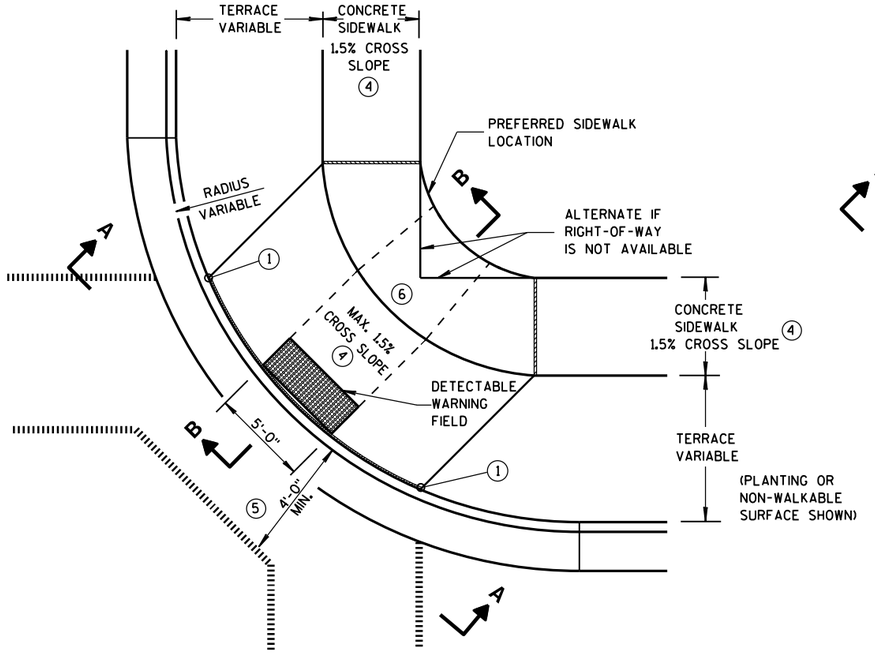
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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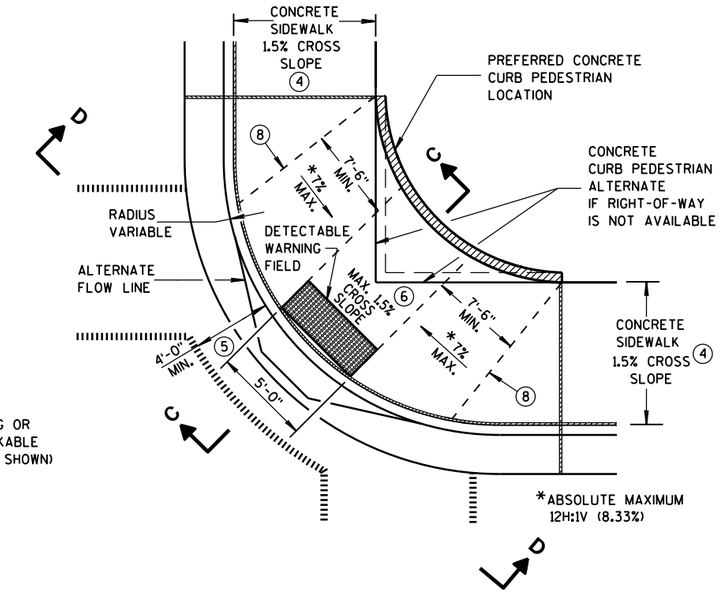
S.D.D. 8 D 1-20b



PLAN VIEW

TYPE 1 RAMP

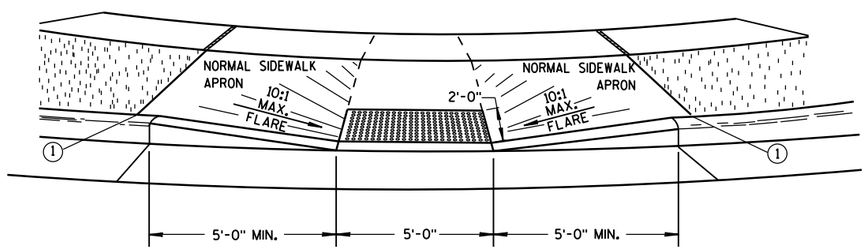
(CENTER OF CORNER RADIUS)



PLAN VIEW

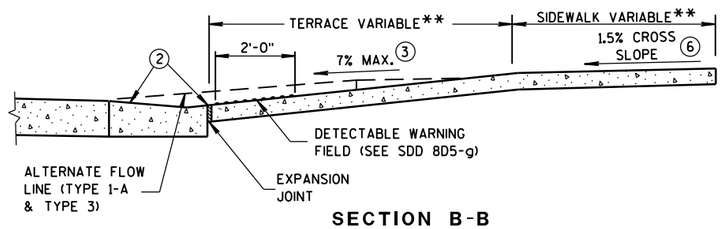
TYPE 1-A RAMP

(NO TERRACE)

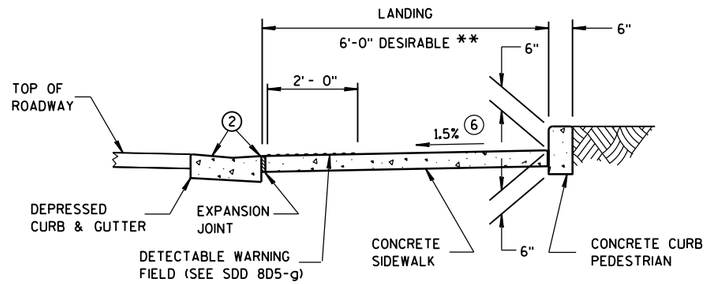


VIEW A-A

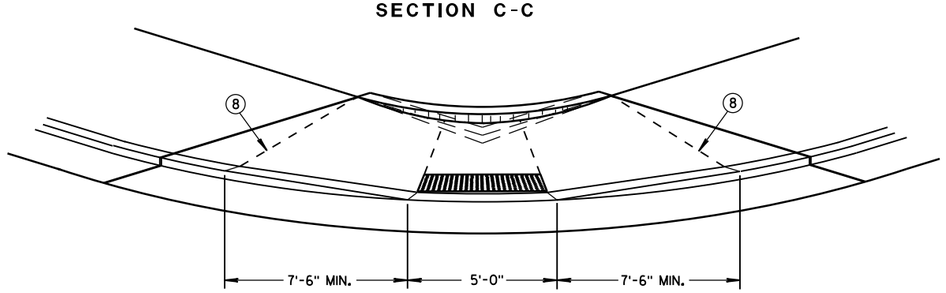
** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

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

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

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

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

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

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

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

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

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

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

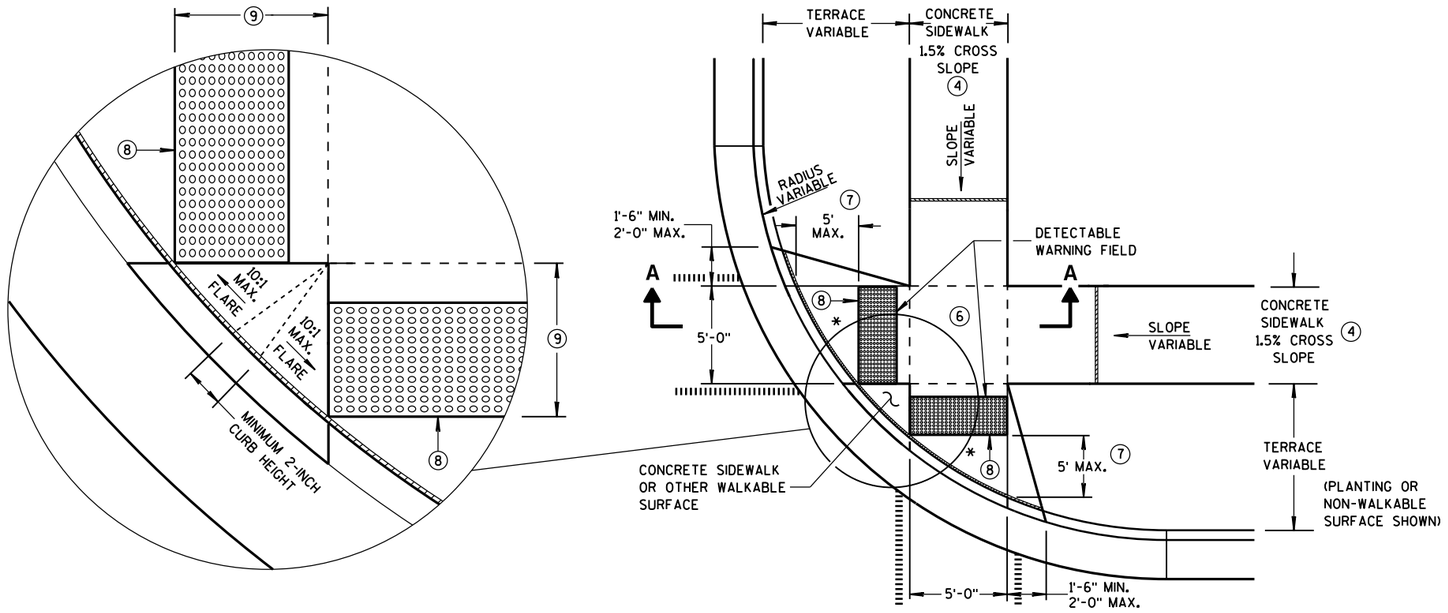
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

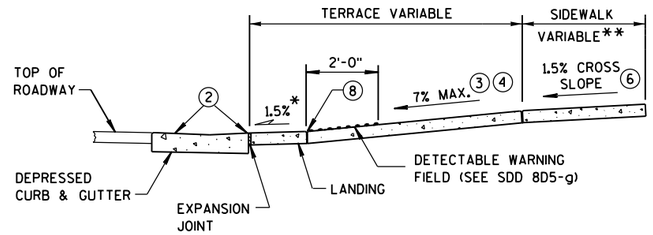
6

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



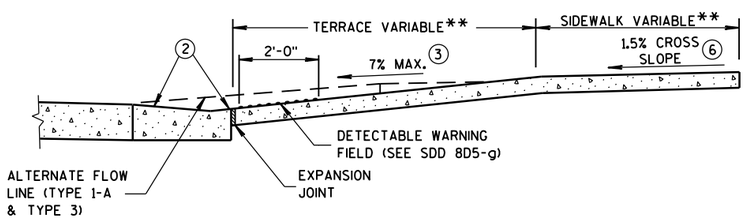
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

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

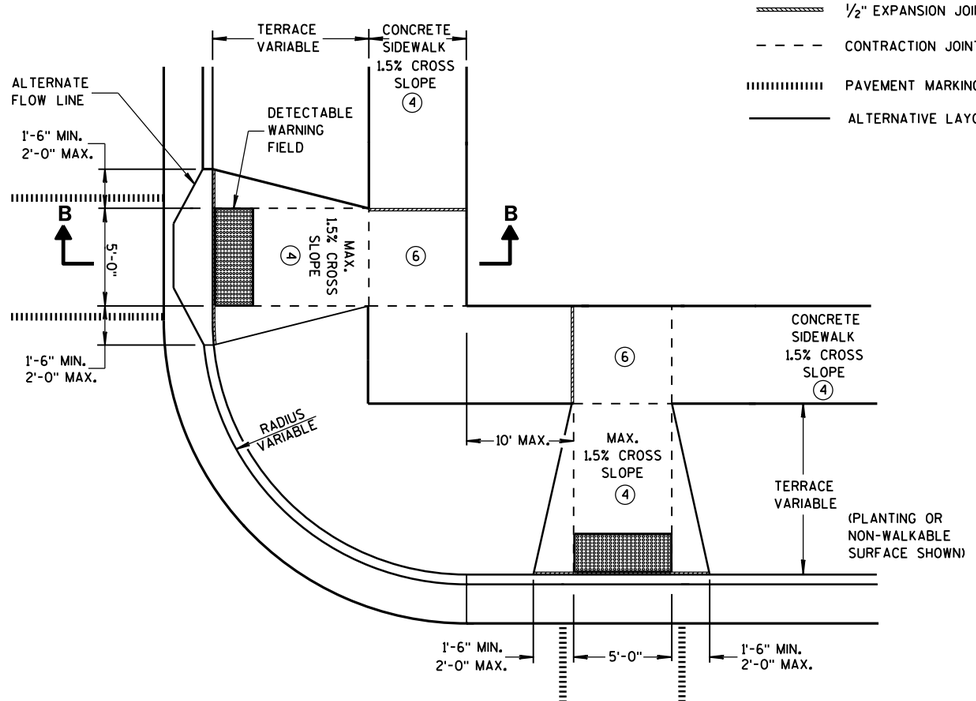


SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

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

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

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

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

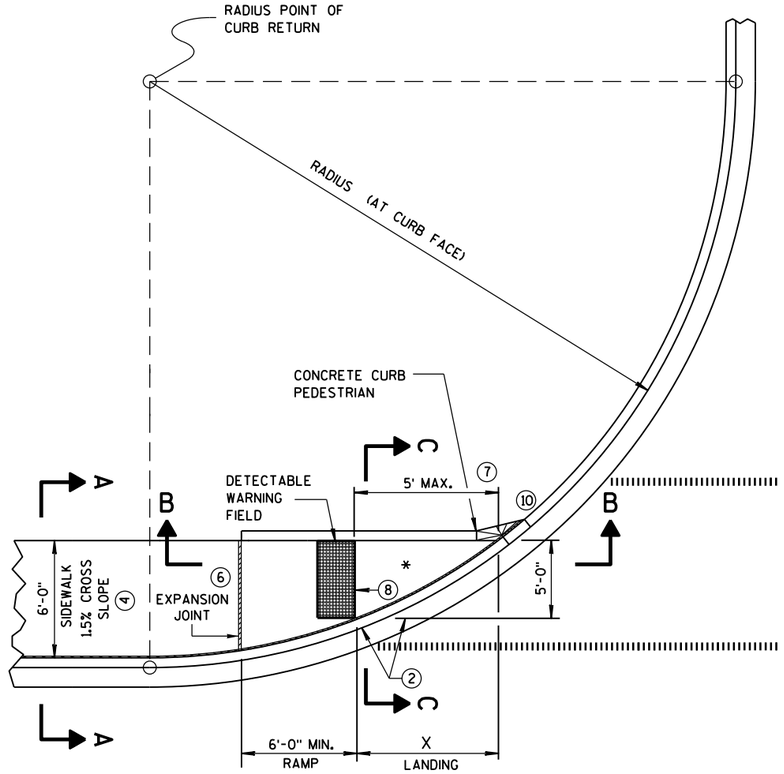
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

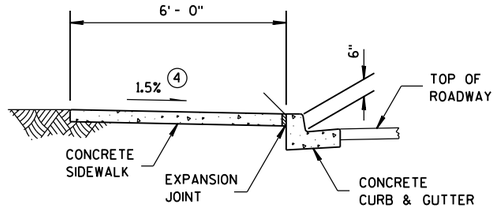
S.D.D. 8 D 5-19b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

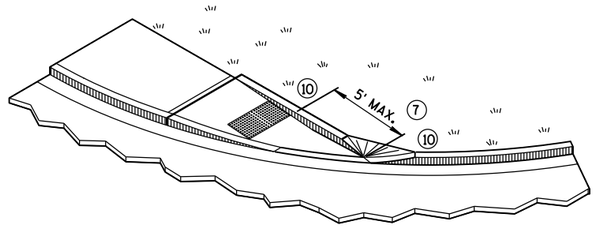
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

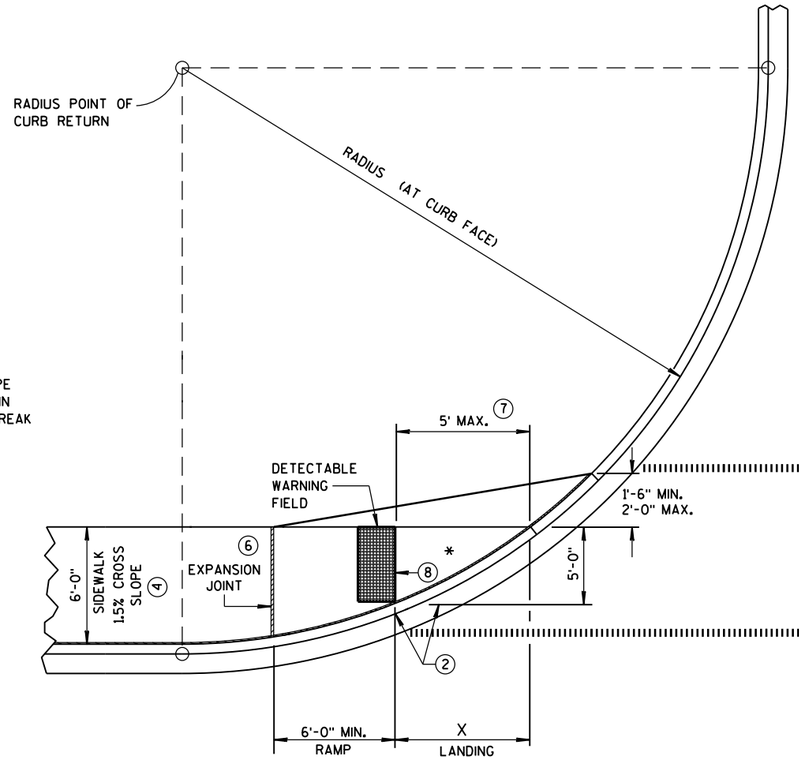
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

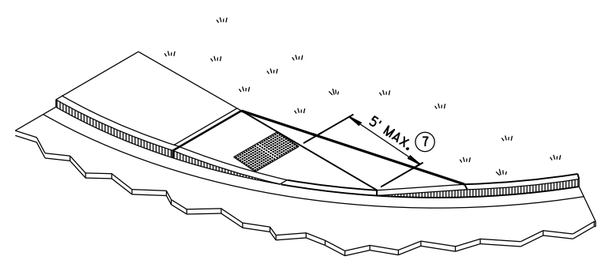
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



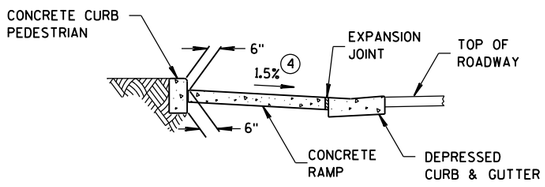
ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW

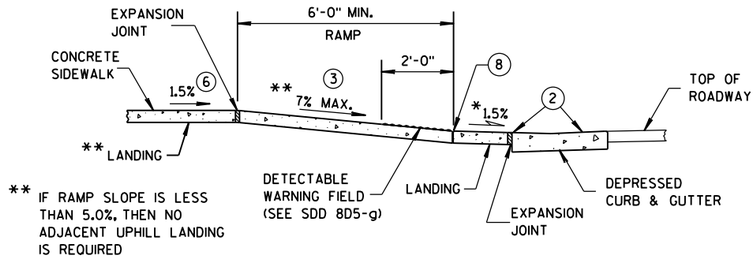


ISOMETRIC VIEW FOR TYPE 4A1



SECTION C-C FOR TYPE 4A

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



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

SECTION B-B FOR TYPE 4A

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

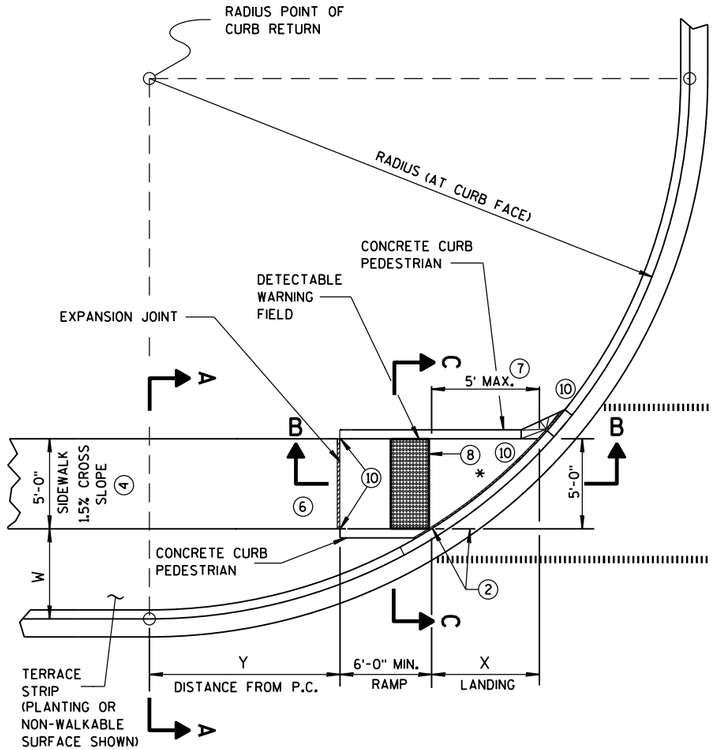
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

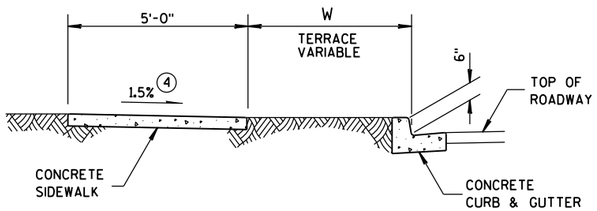
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

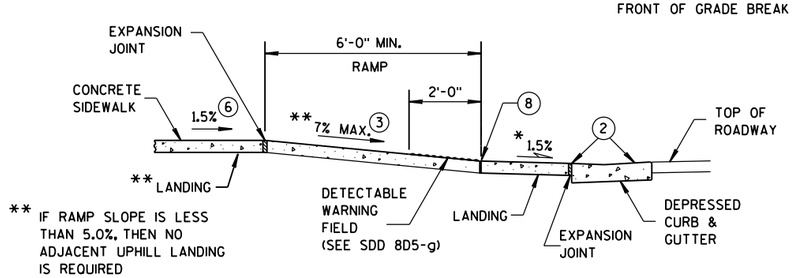
S.D.D. 8 D 5-19c



CURB RAMP TYPE 4B
PLAN VIEW



SECTION A-A FOR TYPE 4B



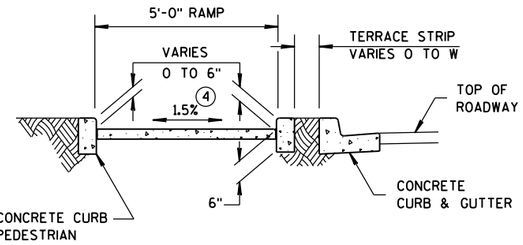
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

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

SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"		W = 8'-0"		W = 9'-0"		W = 10'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10¼"	0'-5"	2'-1"	1'-4½"	1'-5"	2'-1"	0'-10"	2'-7½"	0'-3¼"	3'-0¼"						
15 FEET	4'-6¾"	2'-1¾"	3'-9"	3'-5¼"	3'-1¼"	4'-6"	2'-6¾"	5'-4½"	2'-1"	6'-1"	1'-8"	6'-8½"	1'-3¼"	7'-2½"	0'-10¾"	7'-7¼"
20 FEET	5'-9¾"	3'-6½"	4'-11½"	5'-1¾"	4'-3¼"	6'-5½"	3'-8¾"	7'-7"	3'-3"	8'-6½"	2'-10"	9'-4½"	2'-5½"	10'-1¼"	2'-1¼"	10'-9"
30 FEET			6'-9¼"	7'-11¼"	6'-0¼"	9'-8"	5'-5"	11'-1¾"	4'-10¾"	12'-5¾"	4'-5½"	13'-7¾"	4'-0¾"	14'-8½"	3'-8½"	15'-8¼"
40 FEET									6'-1¾"	15'-8½"	5'-8"	17'-2"	5'-3"	18'-5¾"	4'-10¾"	19'-8¼"
50 FEET															5'-10¼"	23'-2"

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



SECTION C-C FOR TYPE 4B

GENERAL NOTES

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

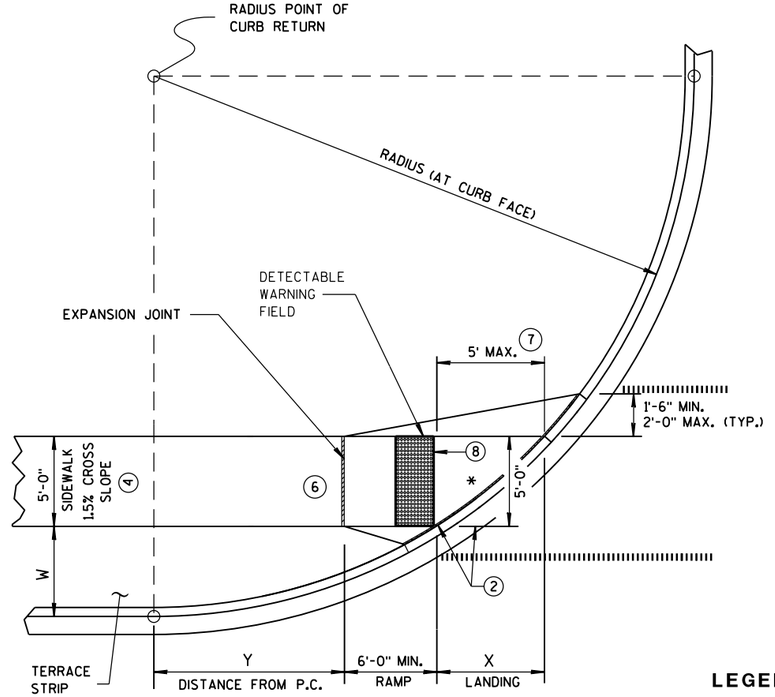
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

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

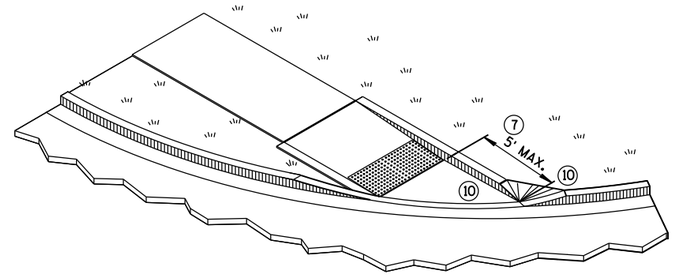
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

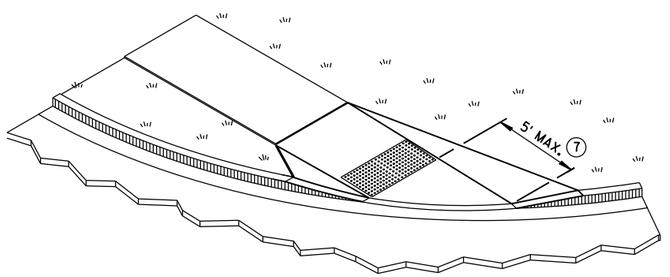
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

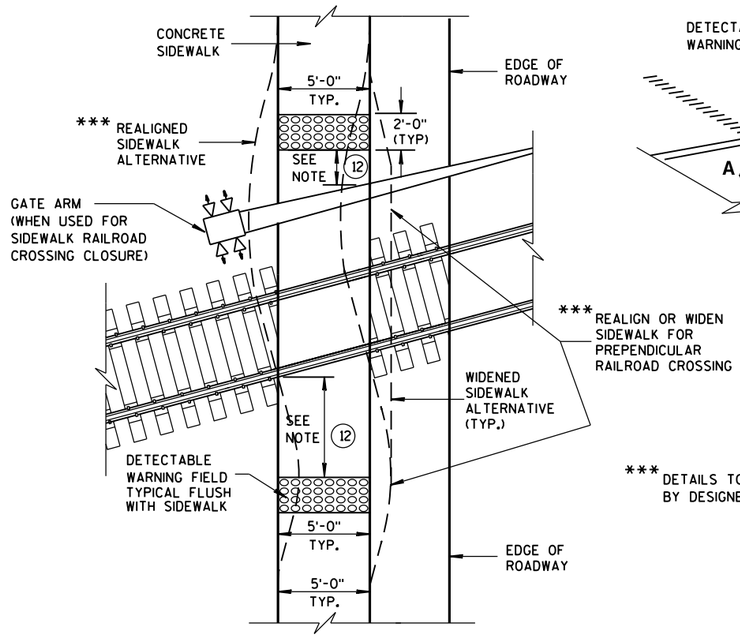
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

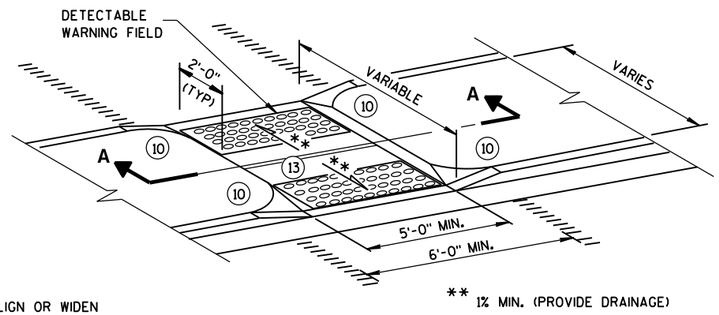
6

S.D.D. 8 D 5-19d



*** DETAILS TO BE DETERMINED BY DESIGNER

TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

GENERAL NOTES

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

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

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

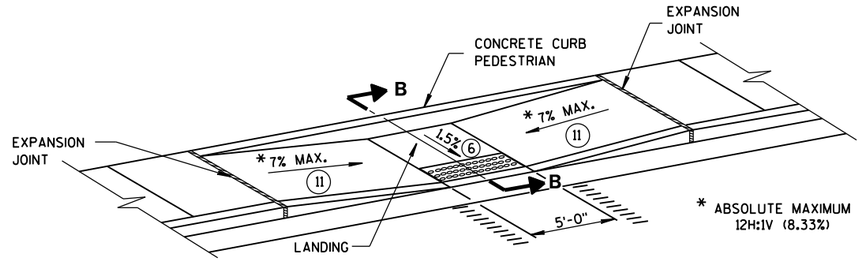
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.

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

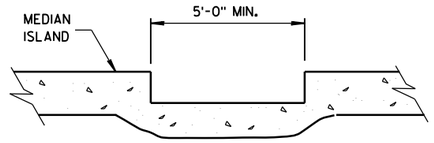
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

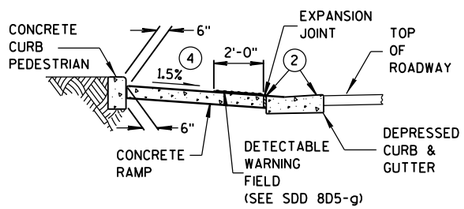
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



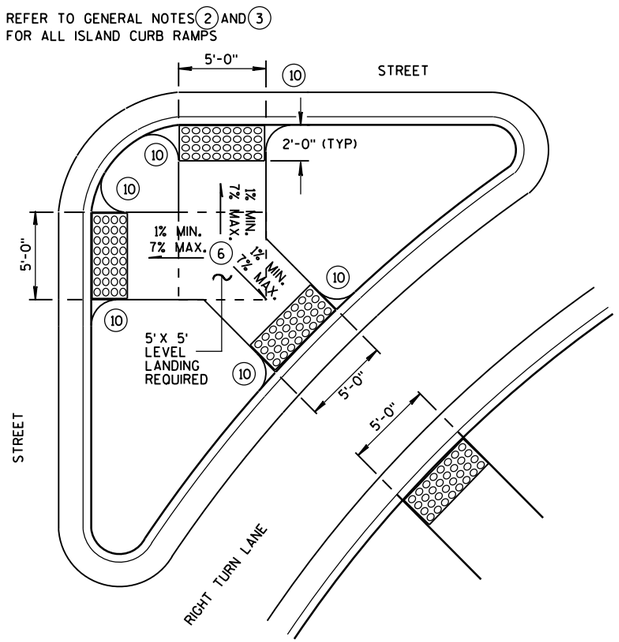
MID-BLOCK CROSSING
TYPE 7A



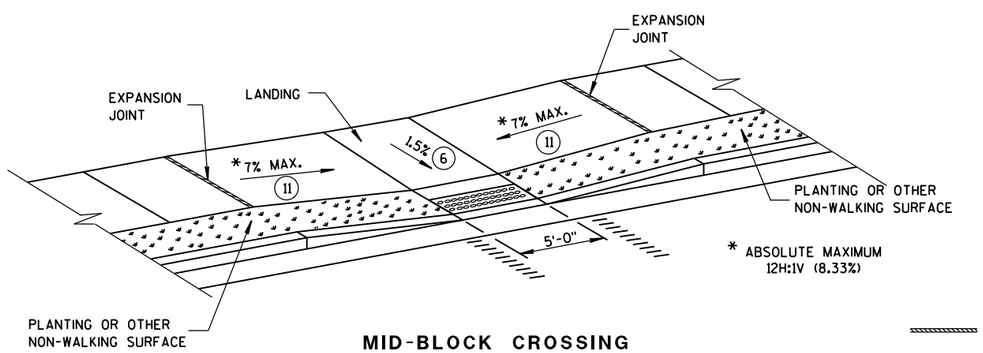
SECTION A-A



SECTION B-B



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

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

LEGEND

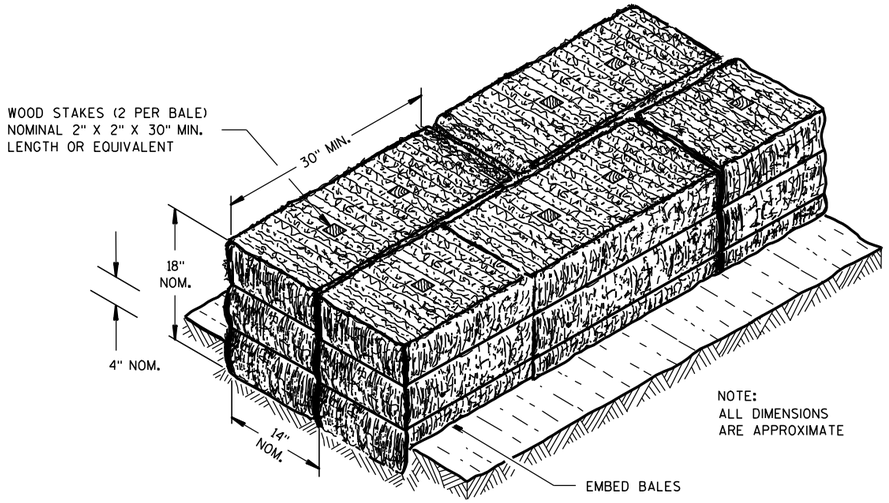
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

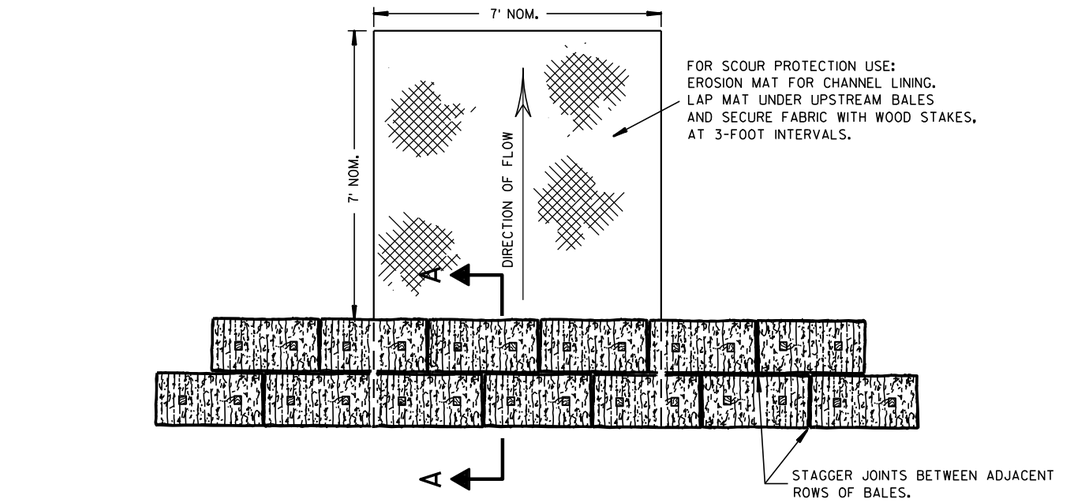
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

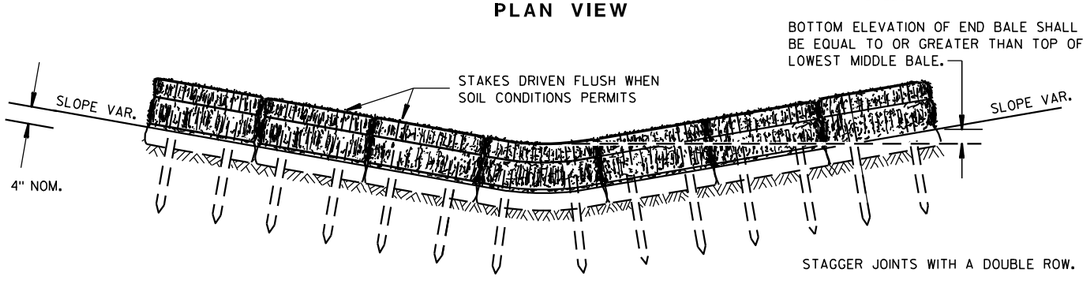
S.D.D. 8 D 5-19e



SECTION A-A



PLAN VIEW



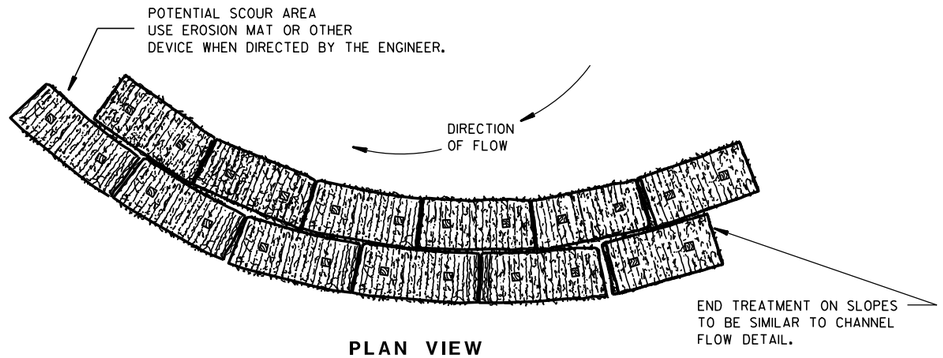
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

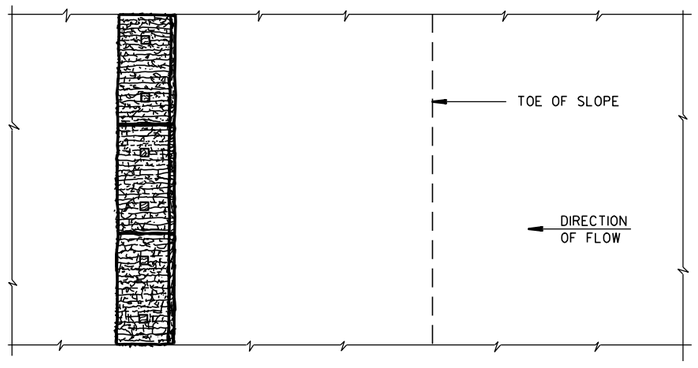
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

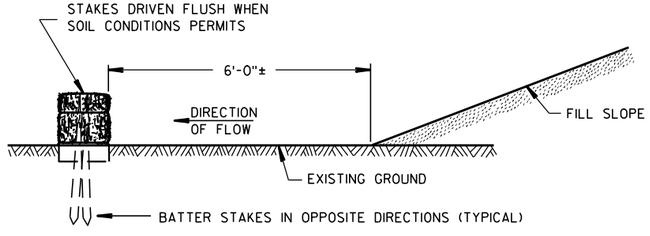


PLAN VIEW

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

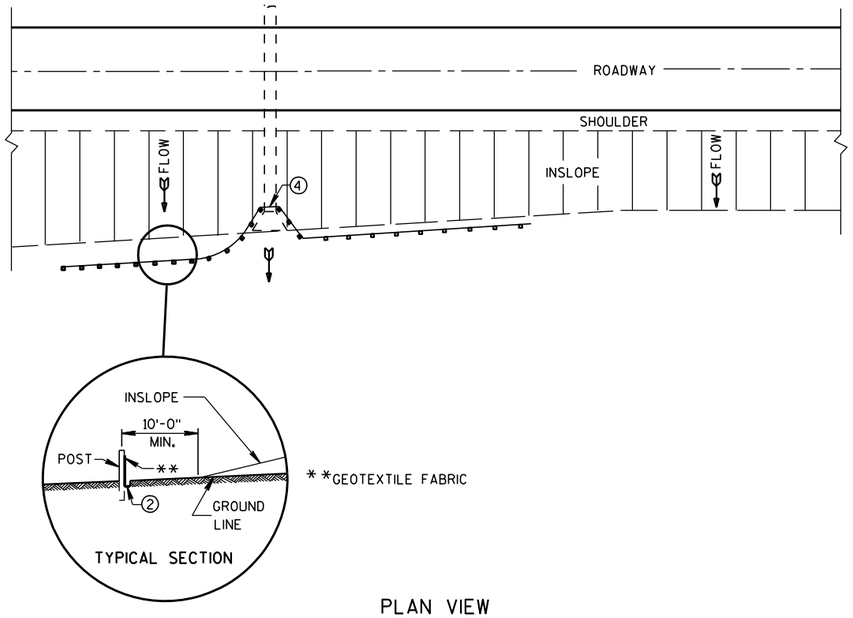
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

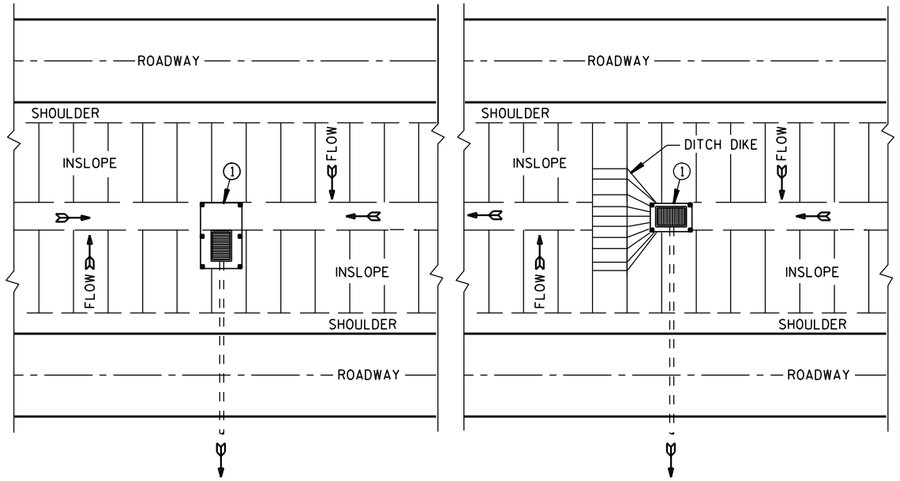
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S.D.D. 8 E 8-3



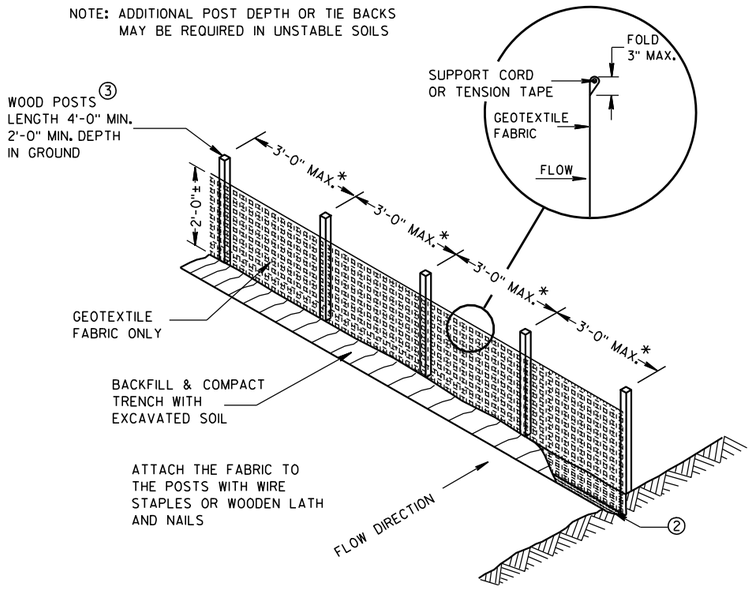
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE

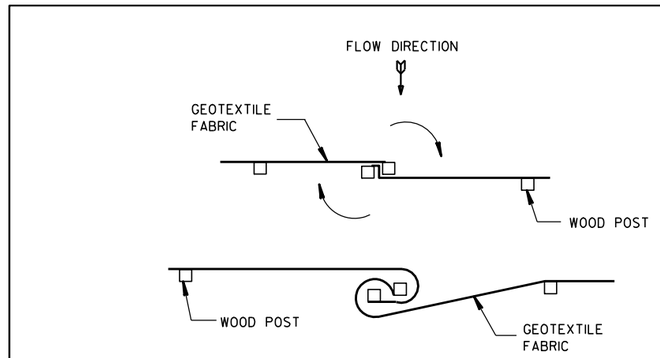


PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



SILT FENCE

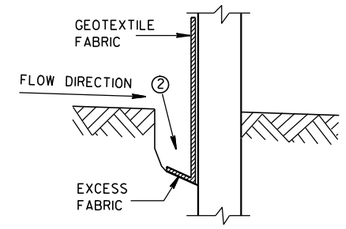


JOINING TWO LENGTHS OF SILT FENCE 5

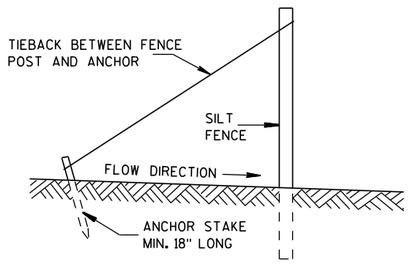
GENERAL NOTES

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 TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

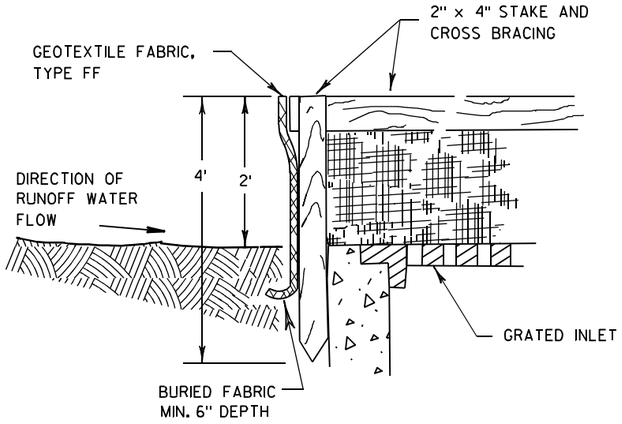
SILT FENCE

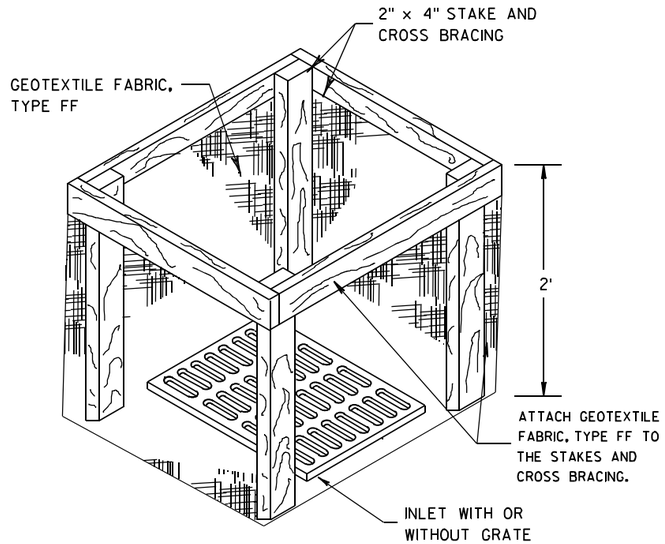
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

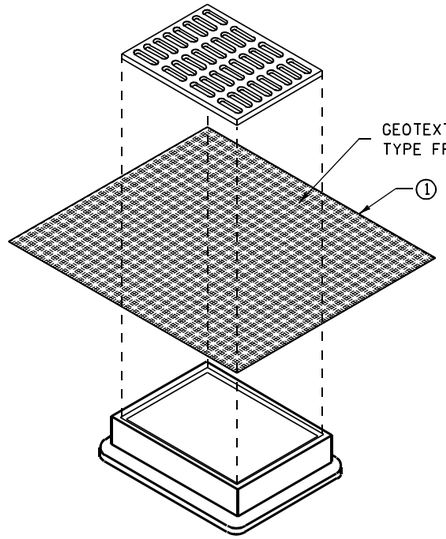
S.D.D. 8 E 9-6

6



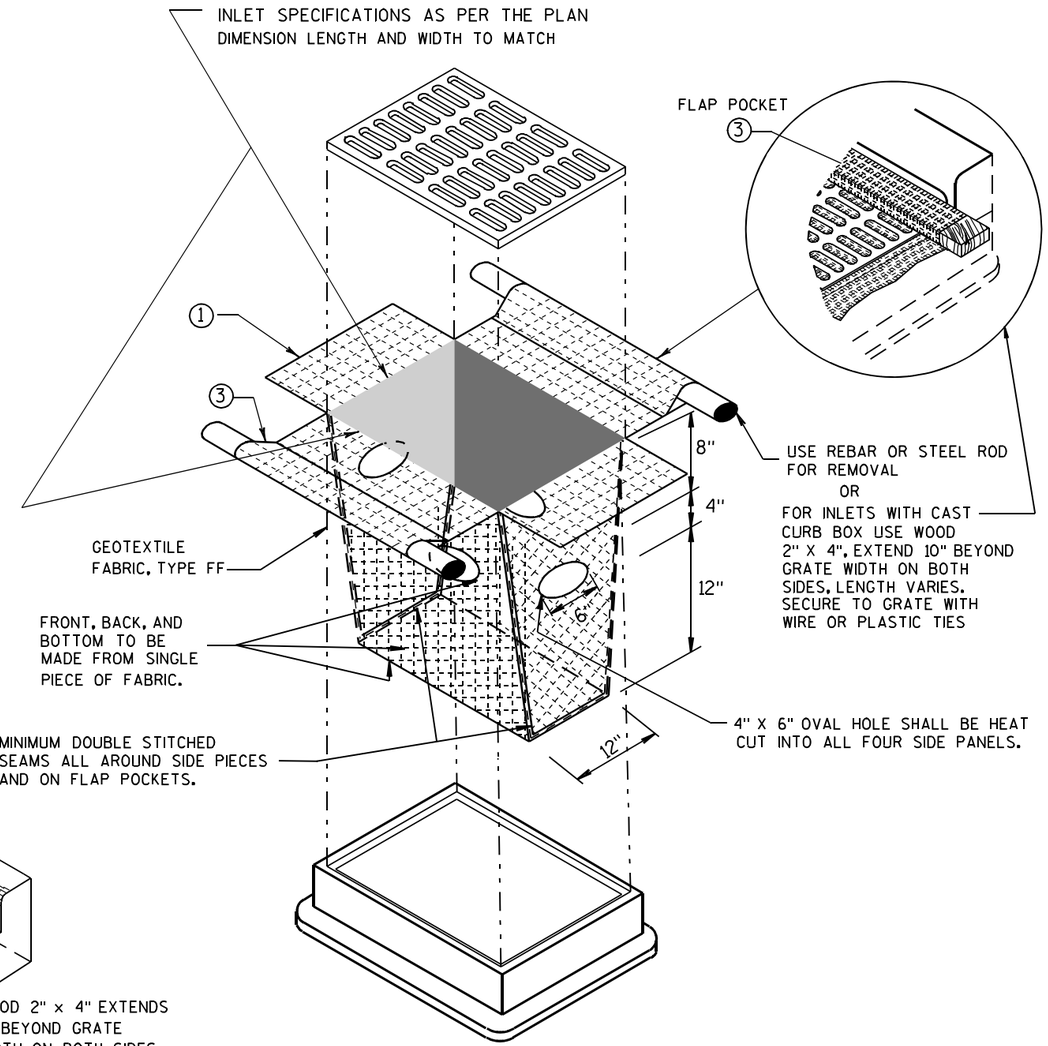


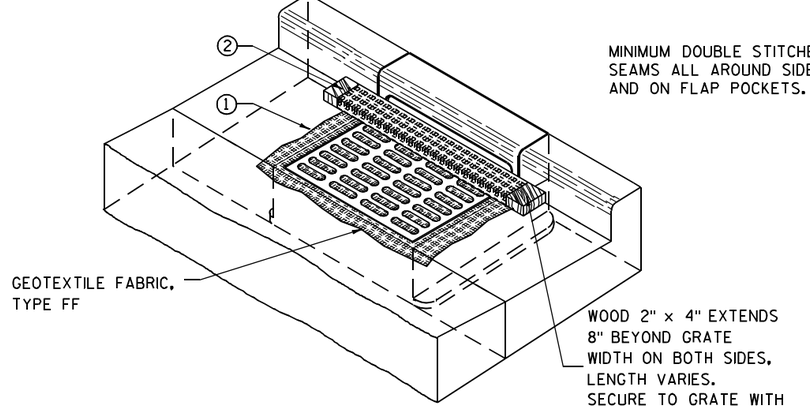
INLET PROTECTION, TYPE A



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.

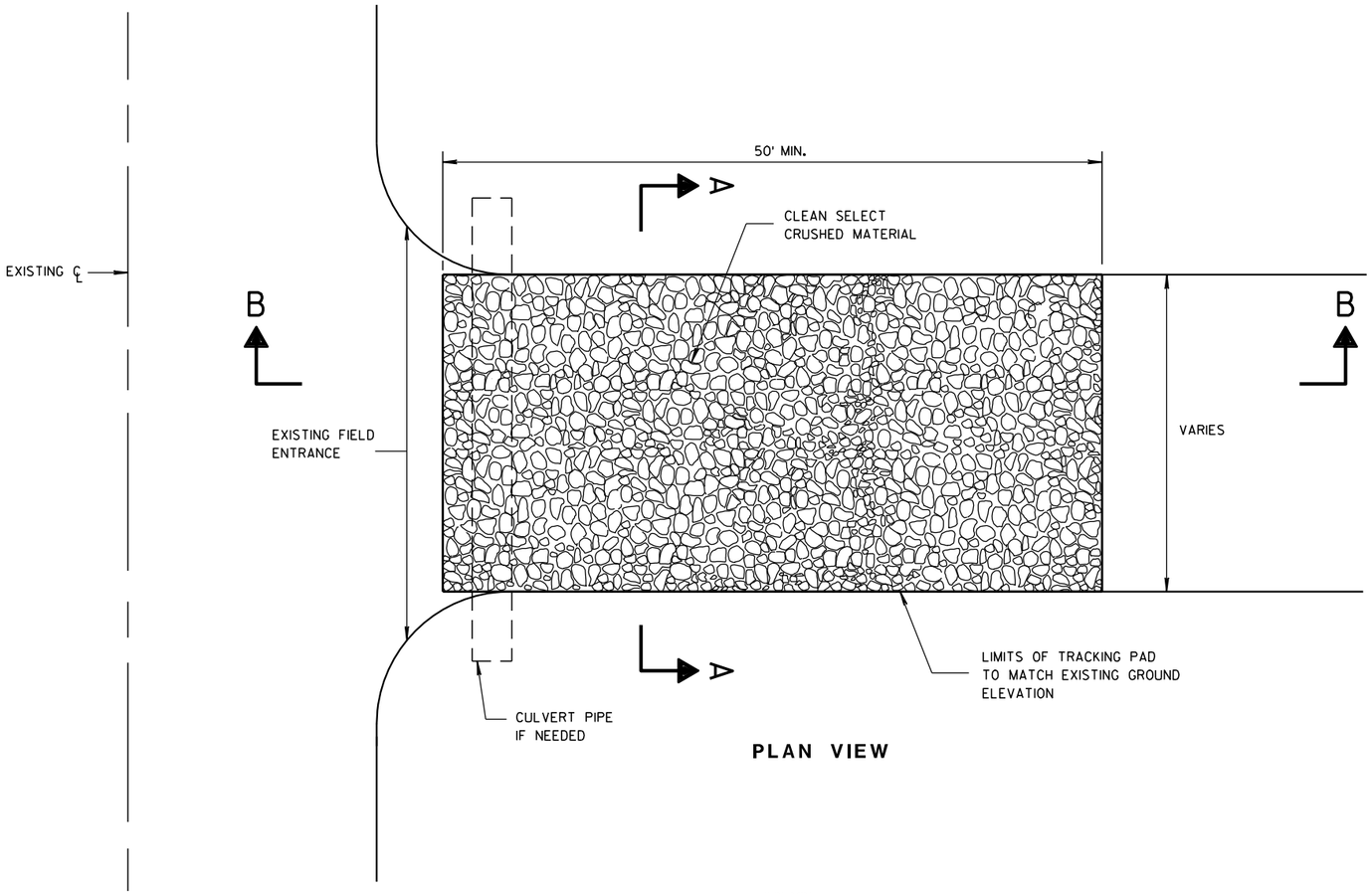
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

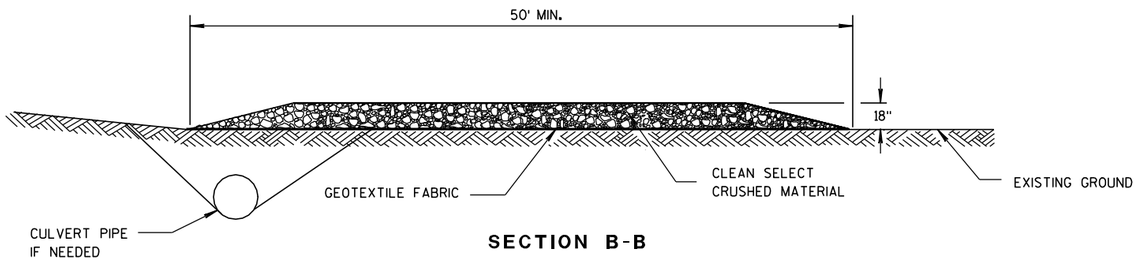
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



PLAN VIEW



SECTION B-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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

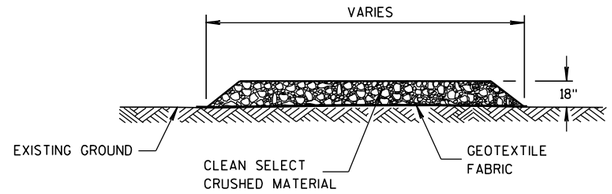
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS ENGINEER

FHWA

ENT

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

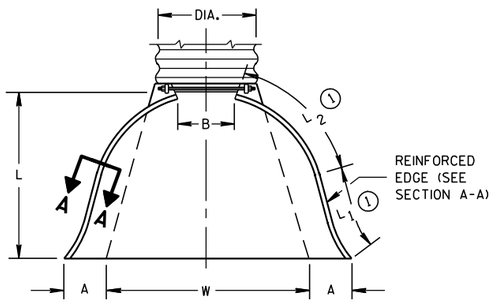
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

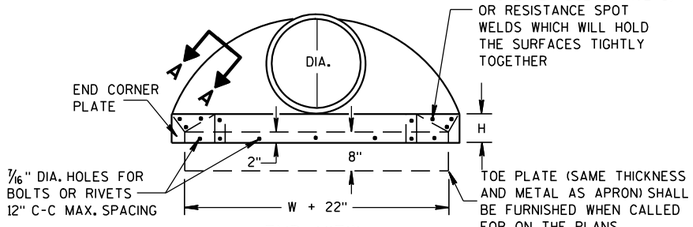
REINFORCED CONCRETE APRON ENDWALLS

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

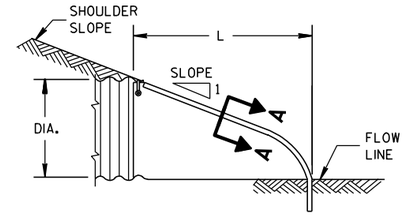
*MINIMUM
**MAXIMUM



PLAN VIEW

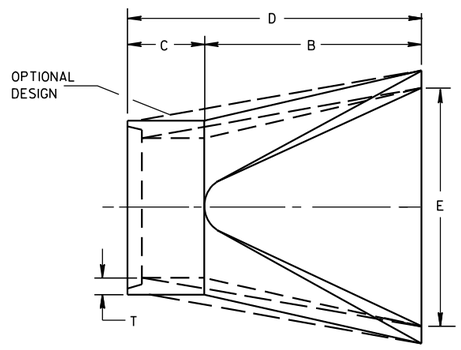


END VIEW

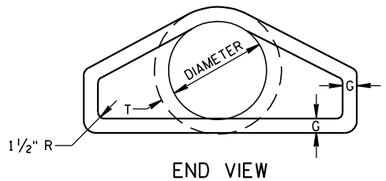


SIDE ELEVATION

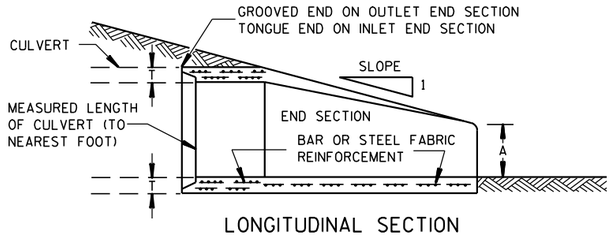
METAL ENDWALLS



PLAN

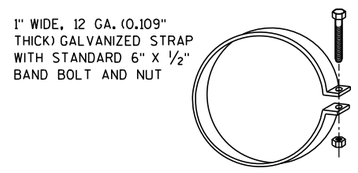


END VIEW



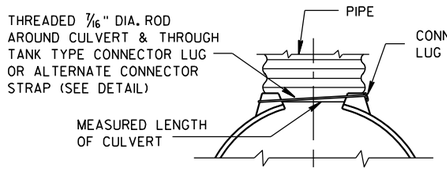
LONGITUDINAL SECTION

CONCRETE ENDWALLS

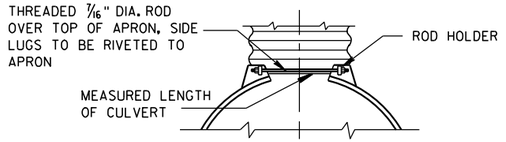


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

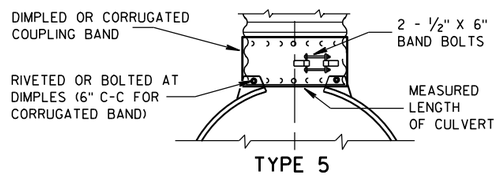


TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

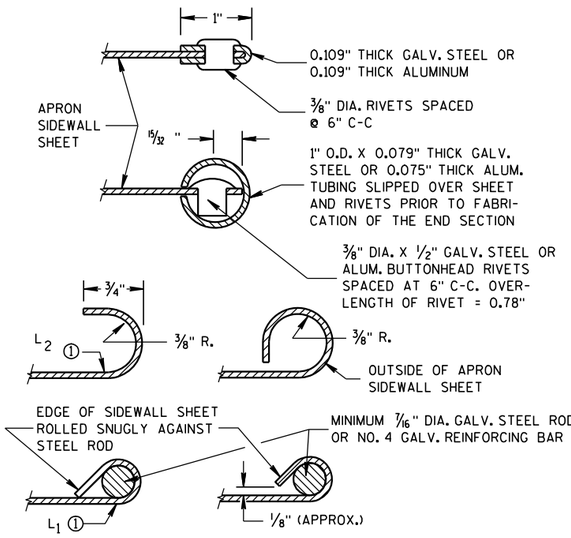
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

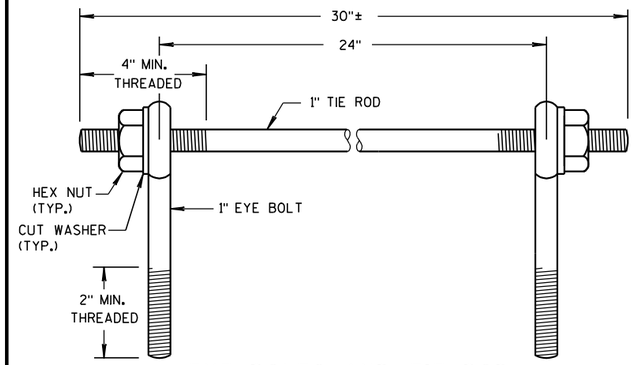
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

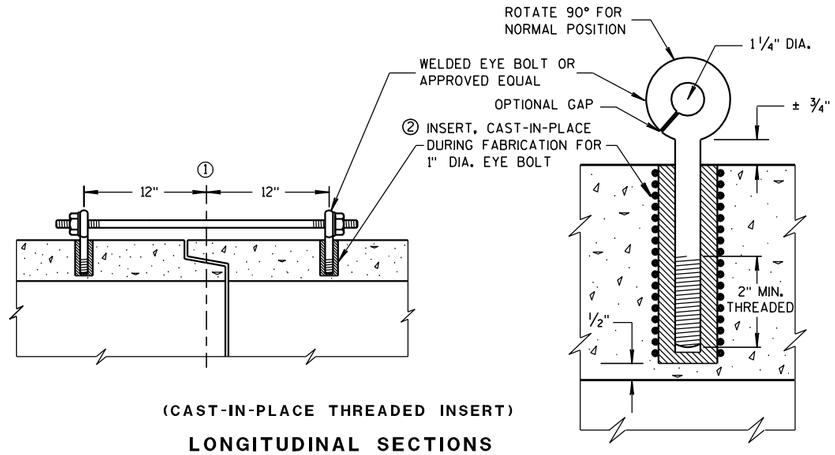
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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.

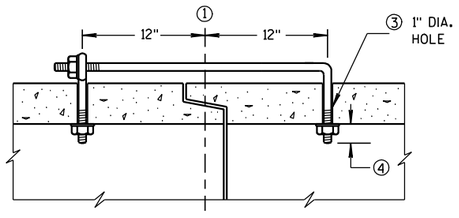
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

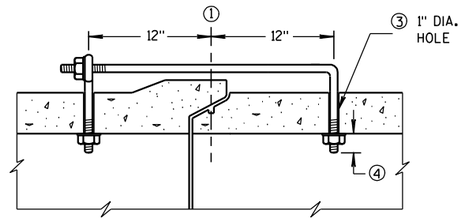
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

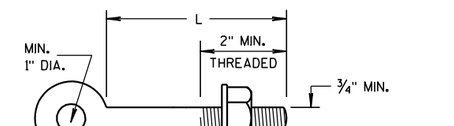


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

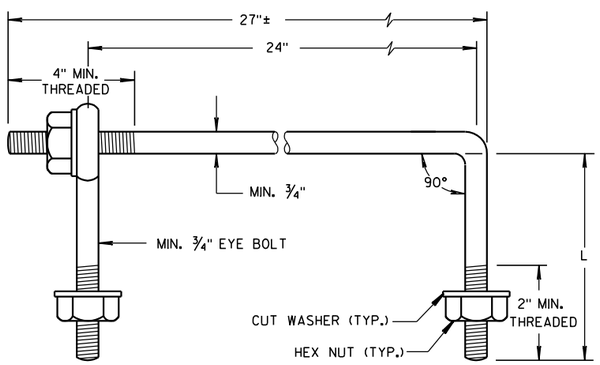
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

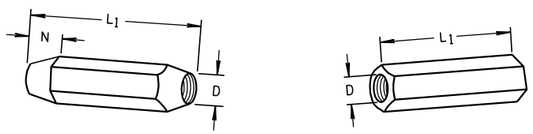
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

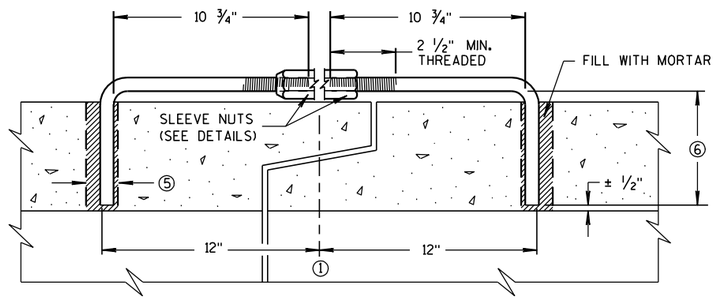
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

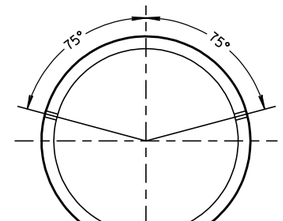
SLEEVE NUTS



LONGITUDINAL SECTION

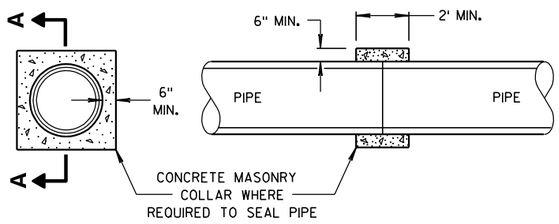
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

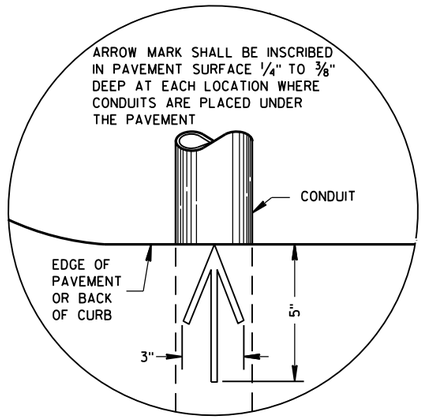
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
182
FHWA

6

S.D.D. 8 F 4-7

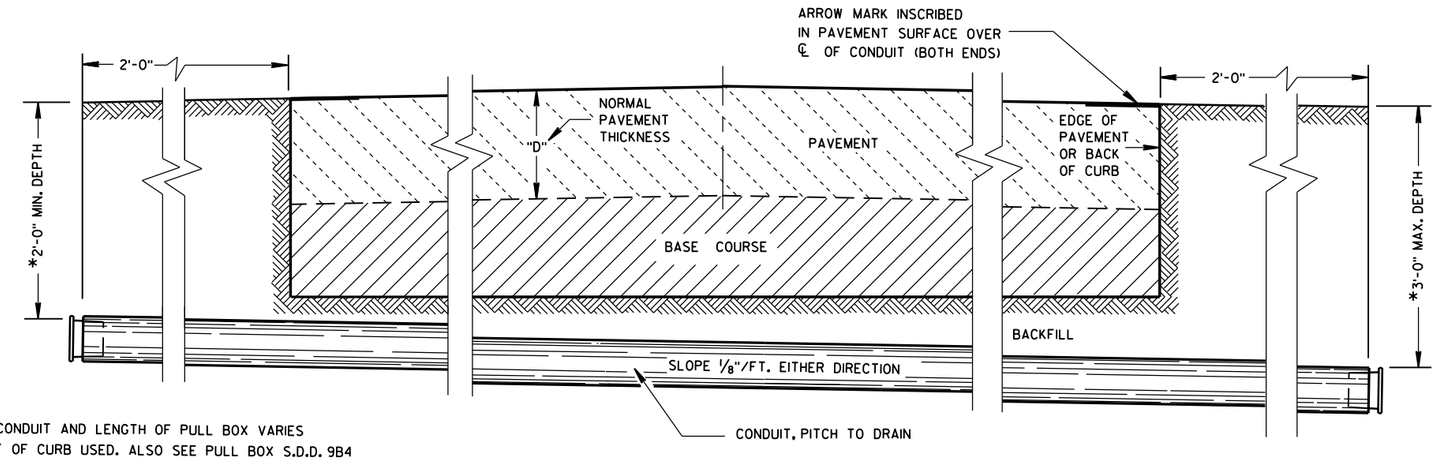
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S.D.D. 8 F 4-7



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

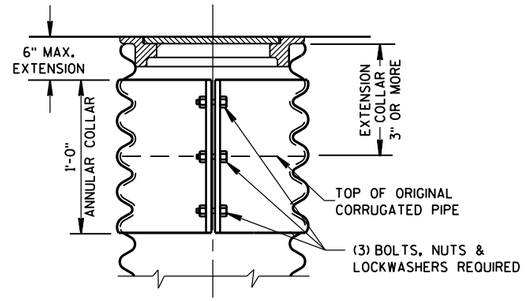
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

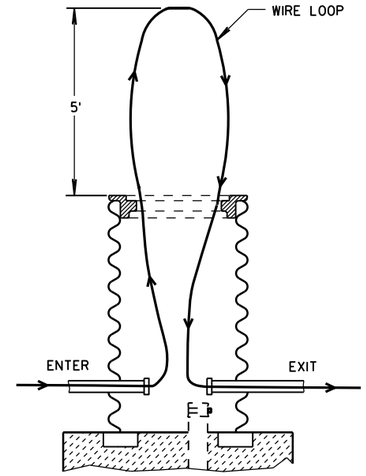
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

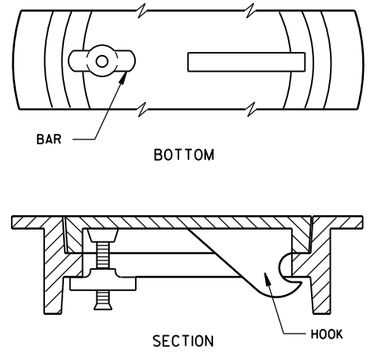
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

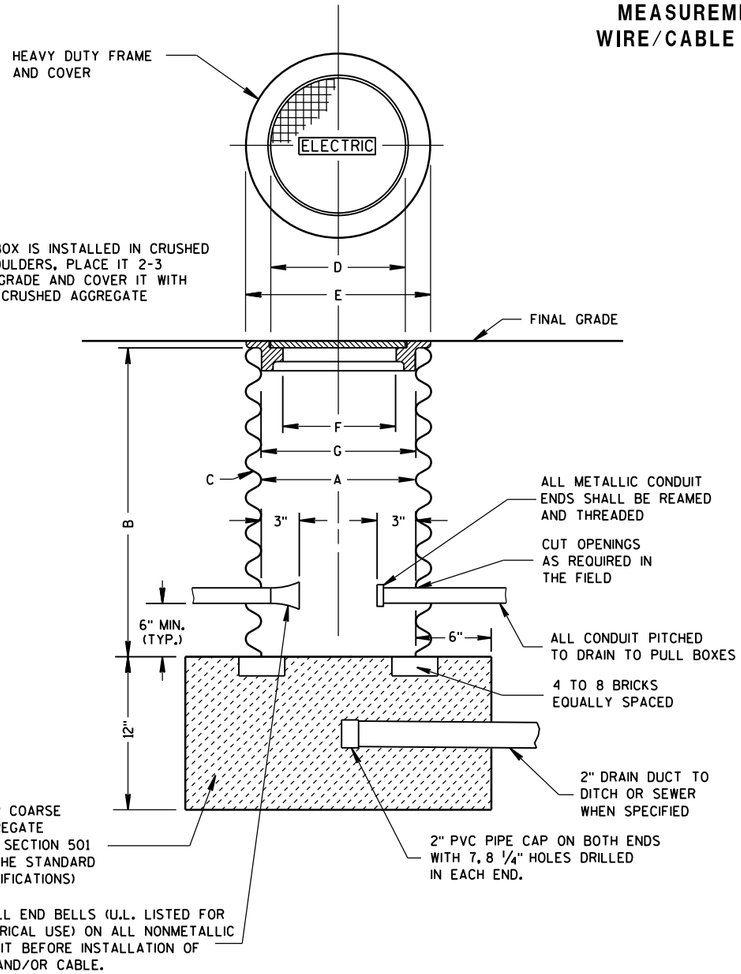


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



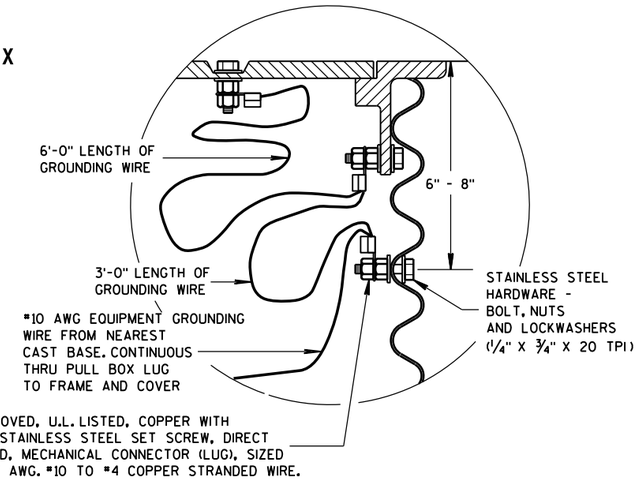
ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

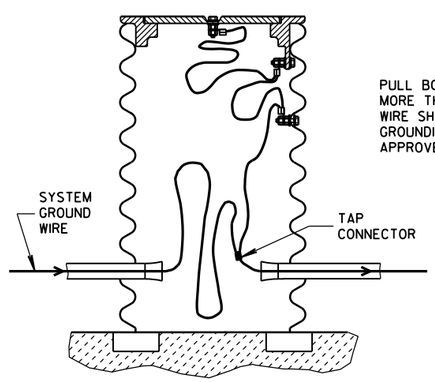


WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

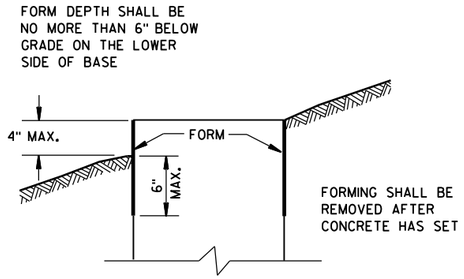
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 B 4-11



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

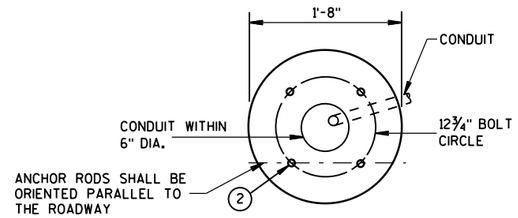
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

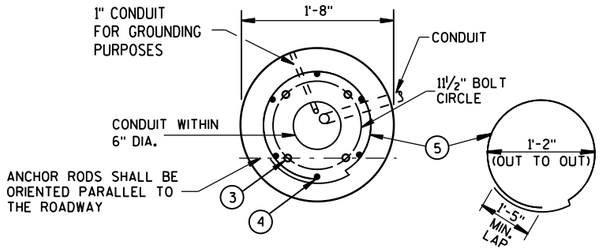
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

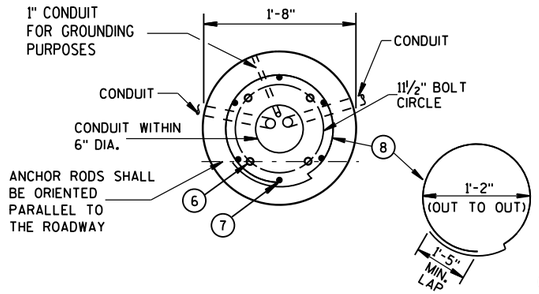
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.





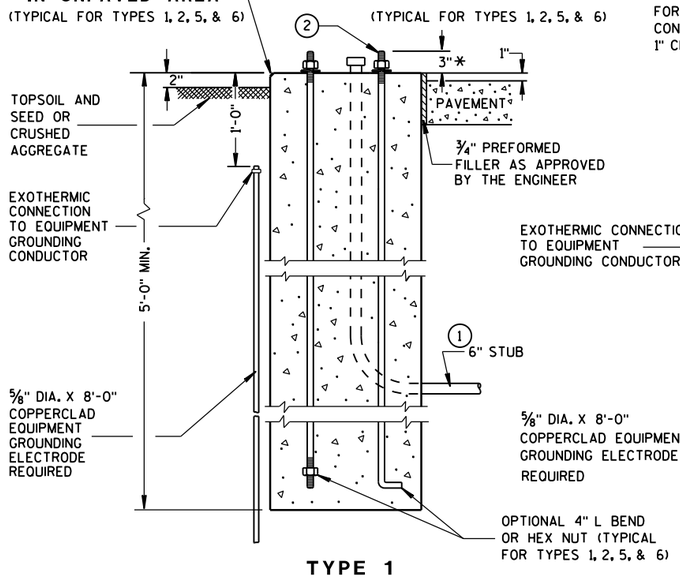


HALF SECTION IN UNPAVED AREA

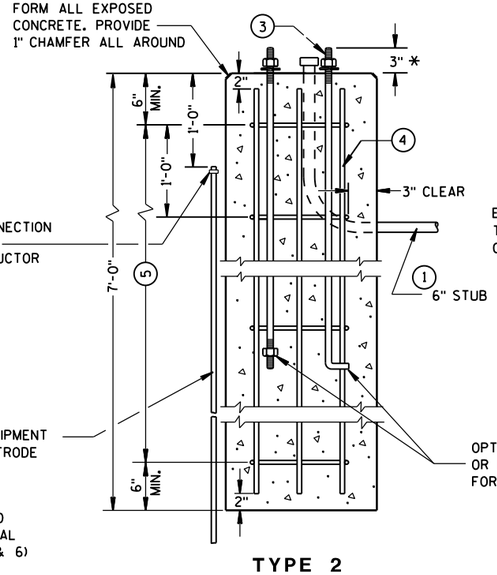
(TYPICAL FOR TYPES 1, 2, 5, & 6)

HALF SECTION IN PAVEMENT

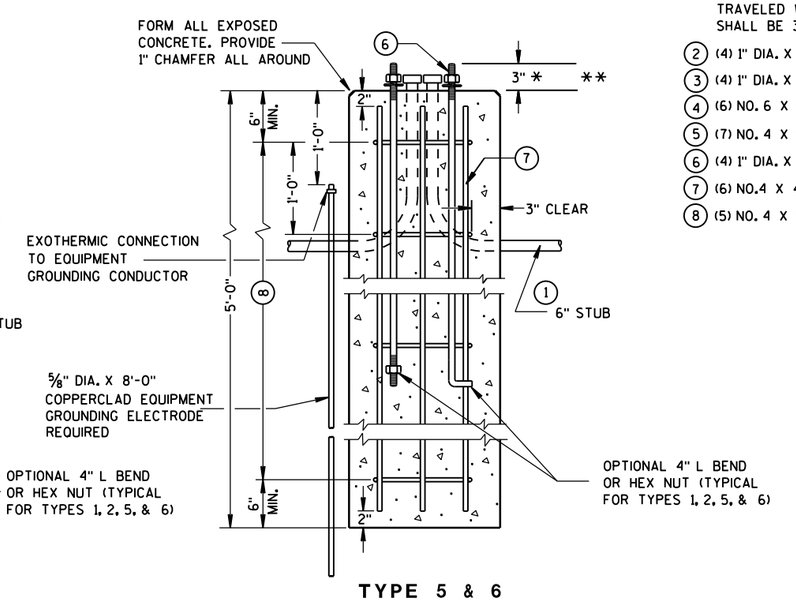
(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 2-7

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

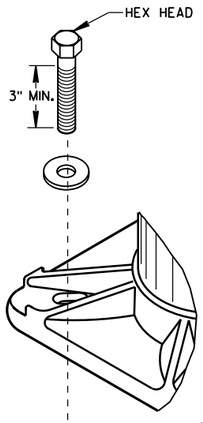
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

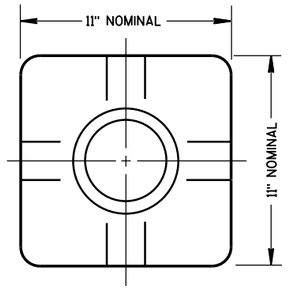
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

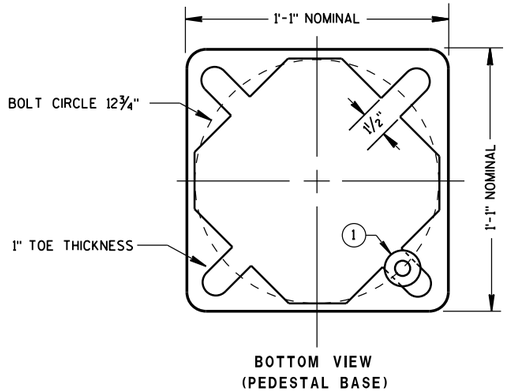
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

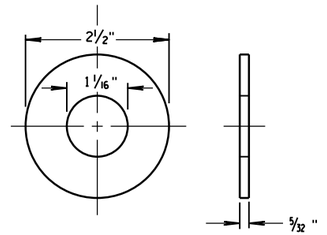




TOP VIEW
(PEDESTAL BASE)

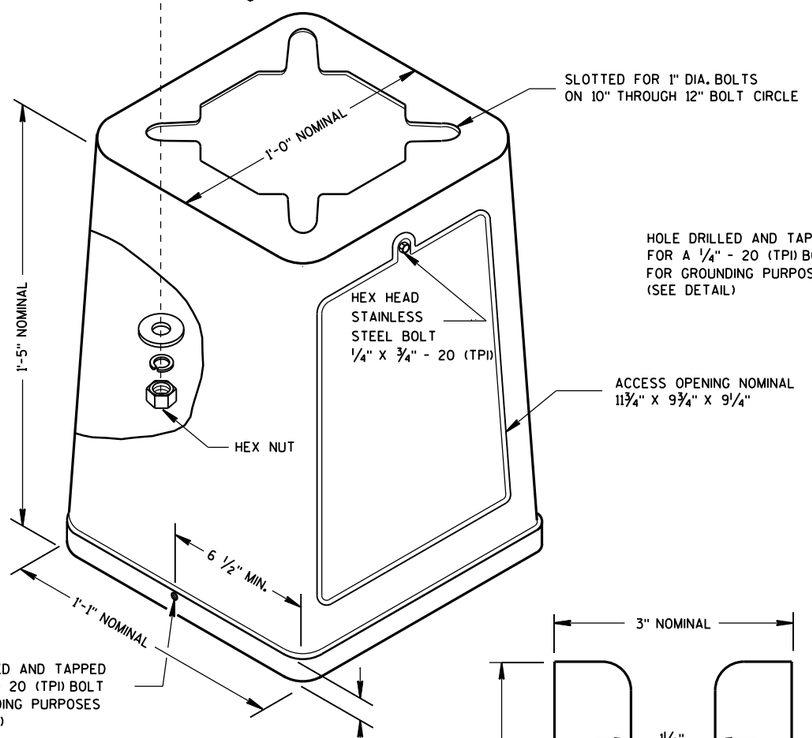


BOTTOM VIEW
(PEDESTAL BASE)

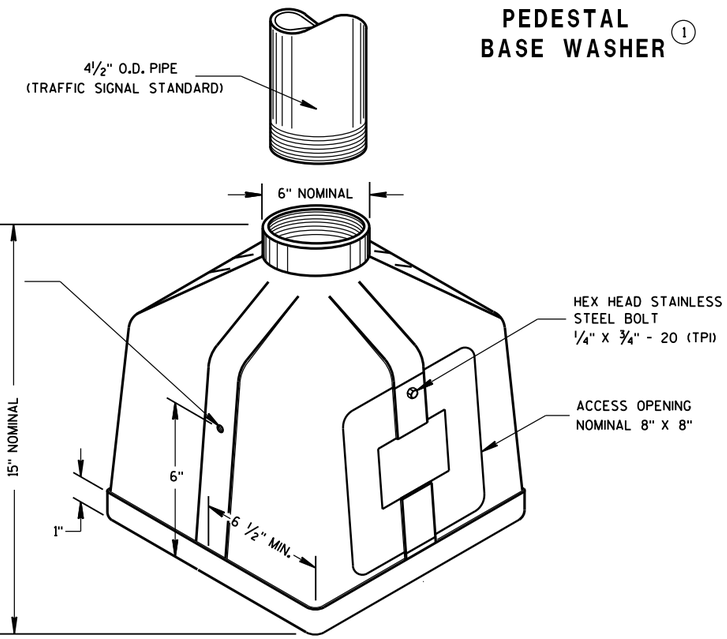


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

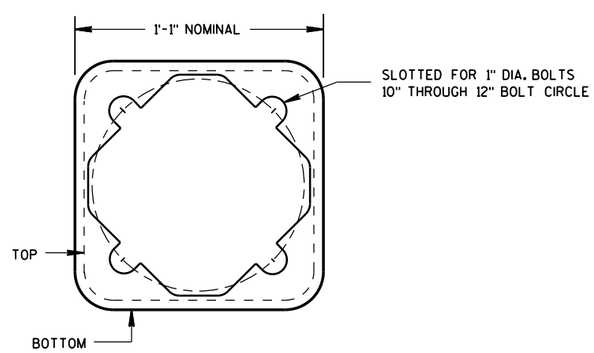


ISOMETRIC VIEW

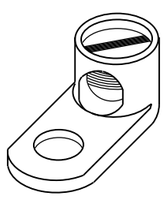


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

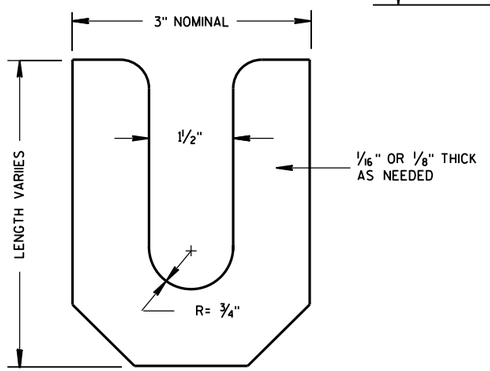


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



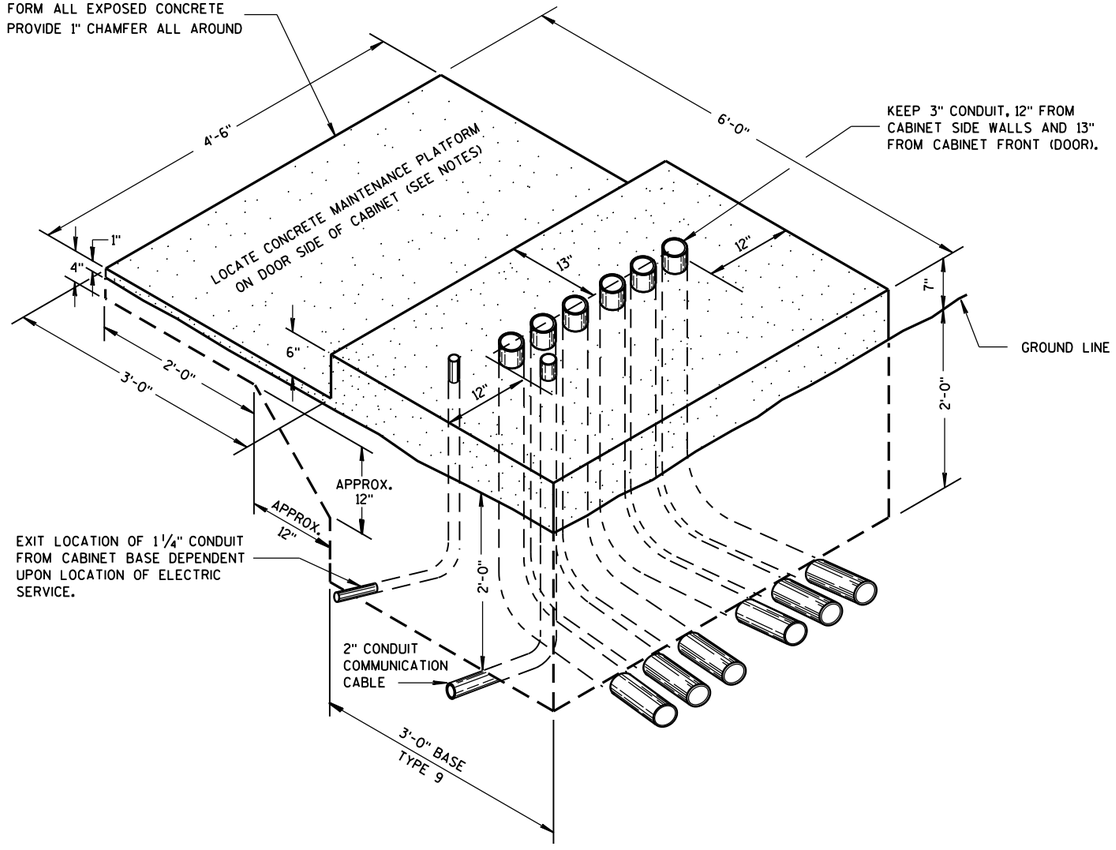
LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

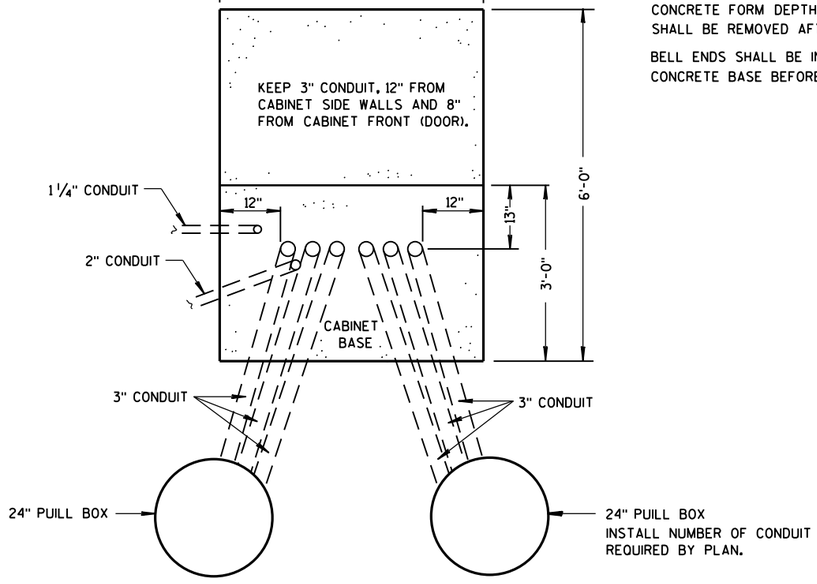
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S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

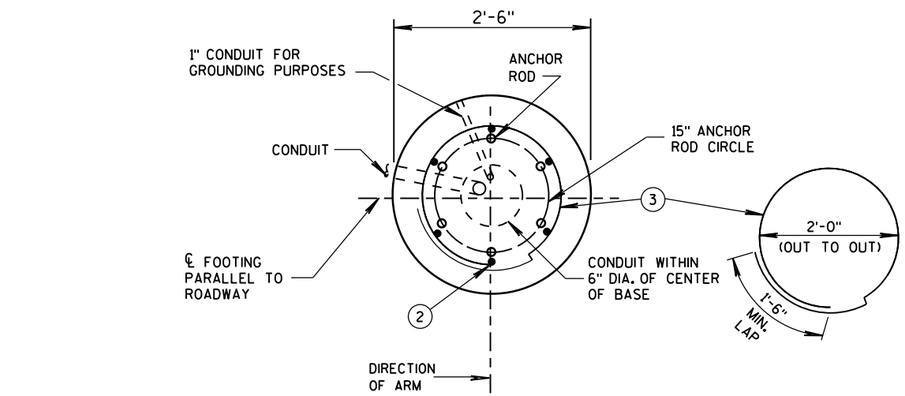
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

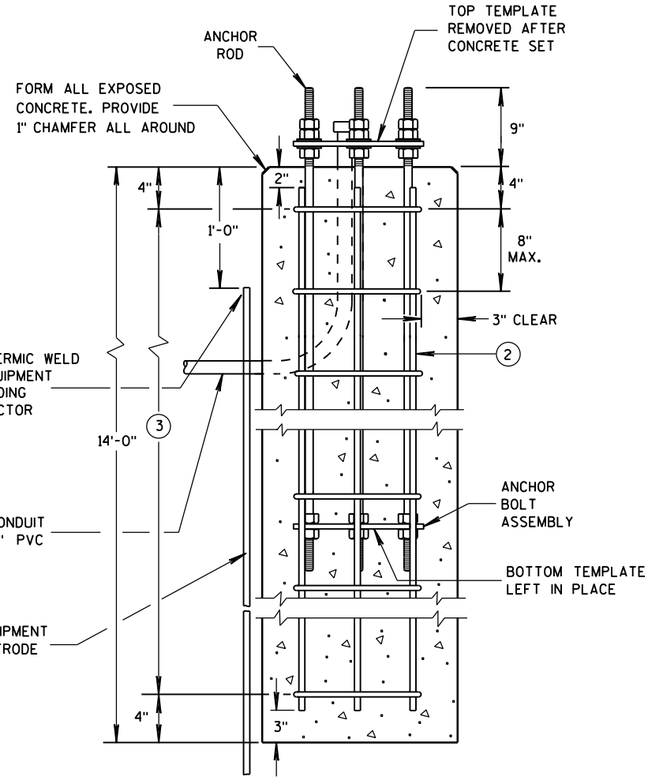
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES, (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

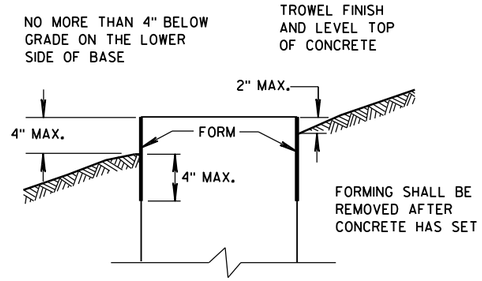
CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.



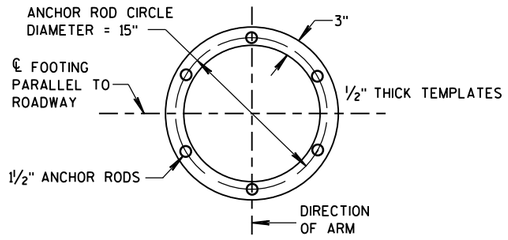


CONCRETE BASE TYPE 10
(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

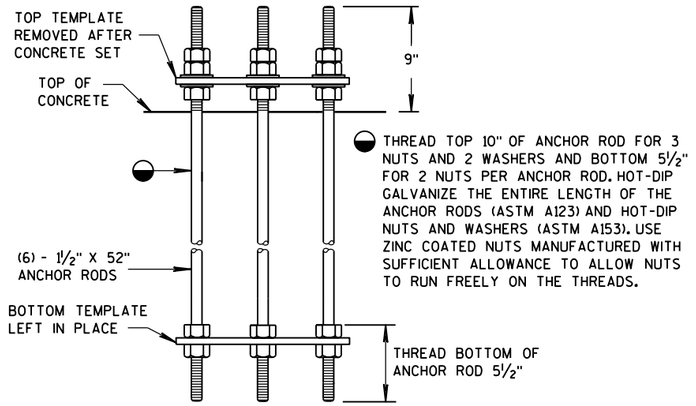
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

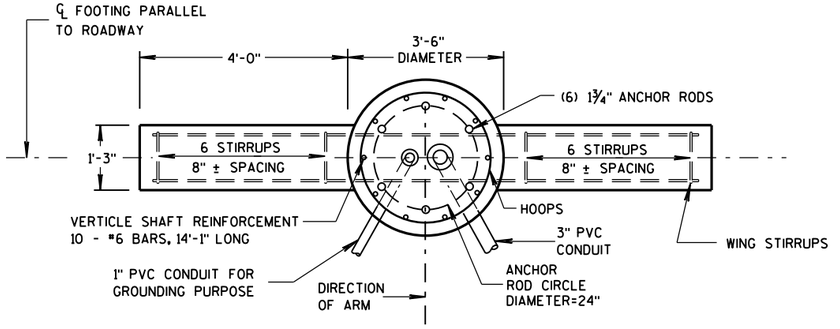
APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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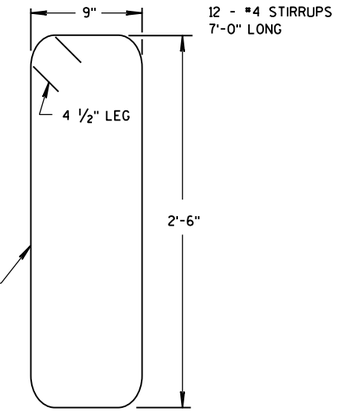
S.D.D. 9 C 11-10

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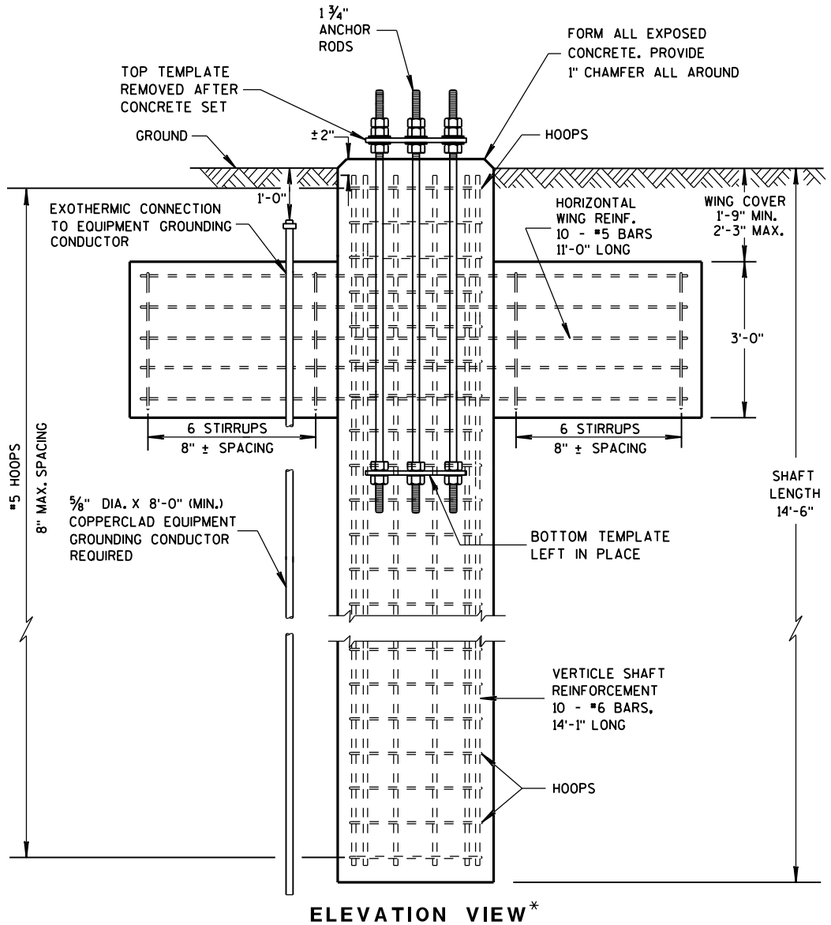
S.D.D. 9 C 11-10



PLAN VIEW

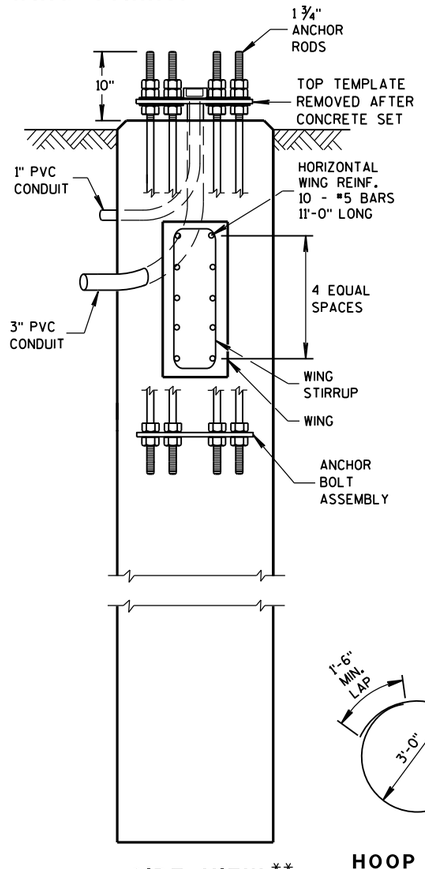


WING STIRRUP



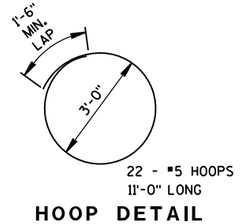
ELEVATION VIEW*

* CONDUITS ARE NOT SHOWN ON THIS VIEW FOR CLARITY



SIDE VIEW**

** HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY



HOOP DETAIL

GENERAL NOTES

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

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR ROD PROJECTION ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF THE UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BASES (SHAFT), BELOW THE WING, SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUNG THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZE AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASE SHALL BE 4½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF THE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTOR FITTINGS, UL LISTED FOR ELECTRICAL USE, SHALL BE USED.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1-INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4-FOOT COIL OF WIRE ABOVE THE CONCRETE BASE, THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVEL WAY SHALL BE 24-INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36-INCHES, (GREATER THAN 36-INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 641.2.2.3 OF THE STANDARD SPECIFICATIONS	fy=55,000 p.s.i.
TEMPLATES, ASTM A709 GRADE 36	fy=36,000 p.s.i.

(FOR TYPE 12 & 13 & OVER HEIGHT (OH) POLES)

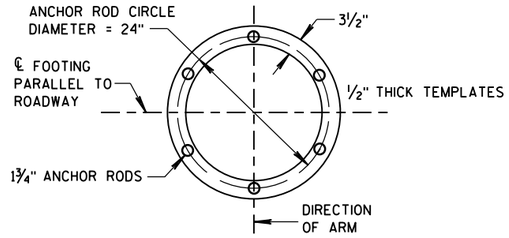
CONCRETE = 6.3 C.Y.
H.S. REINFORCEMENT = 635 LBS.

TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.
SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.

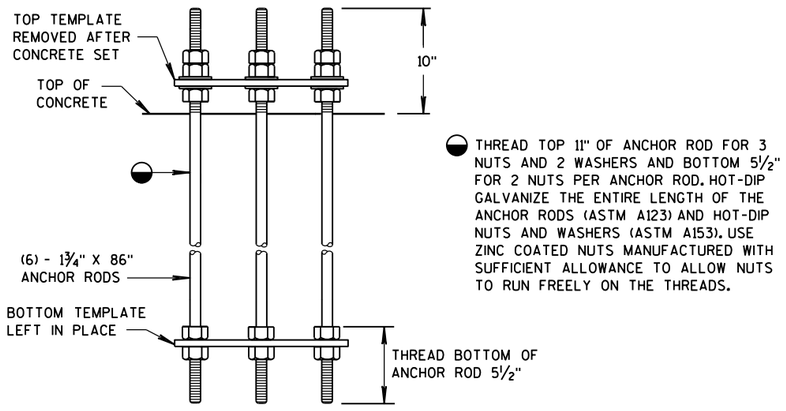
CONCRETE BASE TYPE 13

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 9 C 12-9a

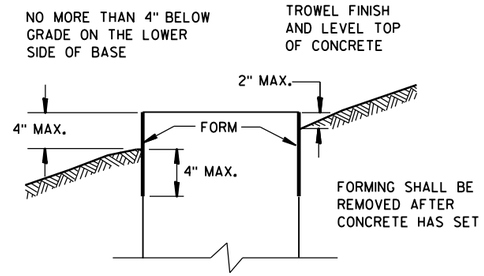


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

6

CONCRETE BASE TYPE 13

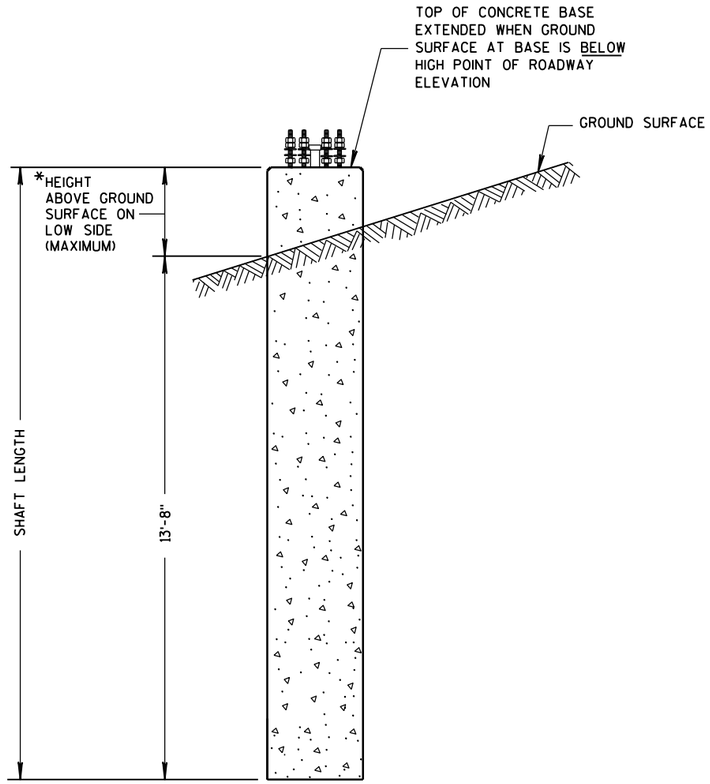
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 9 C 12-9b

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 CONCRETE BASE

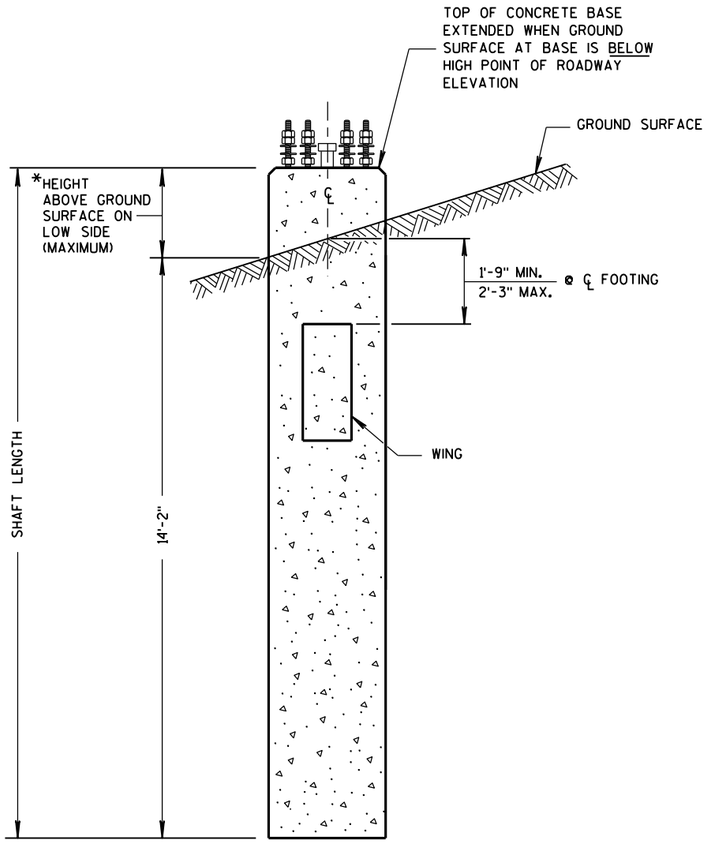
HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL BAR STEEL
>0" TO 6"	10"	14'-6"	14'-1"	16	2.6	78	127
>6" TO 1'-0"	1'-4"	15'-0"	14'-7"	16	2.7	78	131
>1'-0" TO 1'-6"	1'-10"	15'-6"	15'-1"	17	2.8	83	136
>1'-6" TO 2'-0"	2'-4"	16'-0"	15'-7"	17	2.9	83	141



CONCRETE BASE TYPE 10 (EXTENDED)

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 13 CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAXIMUM)	SHAFT LENGTH	LENGTH OF #6 VERTICAL REINF.	NO. OF #4 HOOPS	C.Y. OF CONCRETE	LBS. OF H.S. BAR STEEL
>0" TO 6"	10"	15'-0"	14'-7"	16	6.5	447
>6" TO 1'-0"	1'-4"	15'-6"	15'-1"	16	6.6	454
>1'-0" TO 1'-6"	1'-10"	16'-0"	15'-7"	17	6.8	469
>1'-6" TO 2'-0"	2'-4"	16'-6"	16'-1"	17	7.0	476



CONCRETE BASE TYPE 13 (EXTENDED)

CONCRETE BASE
TYPE 10 & TYPE 13 EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

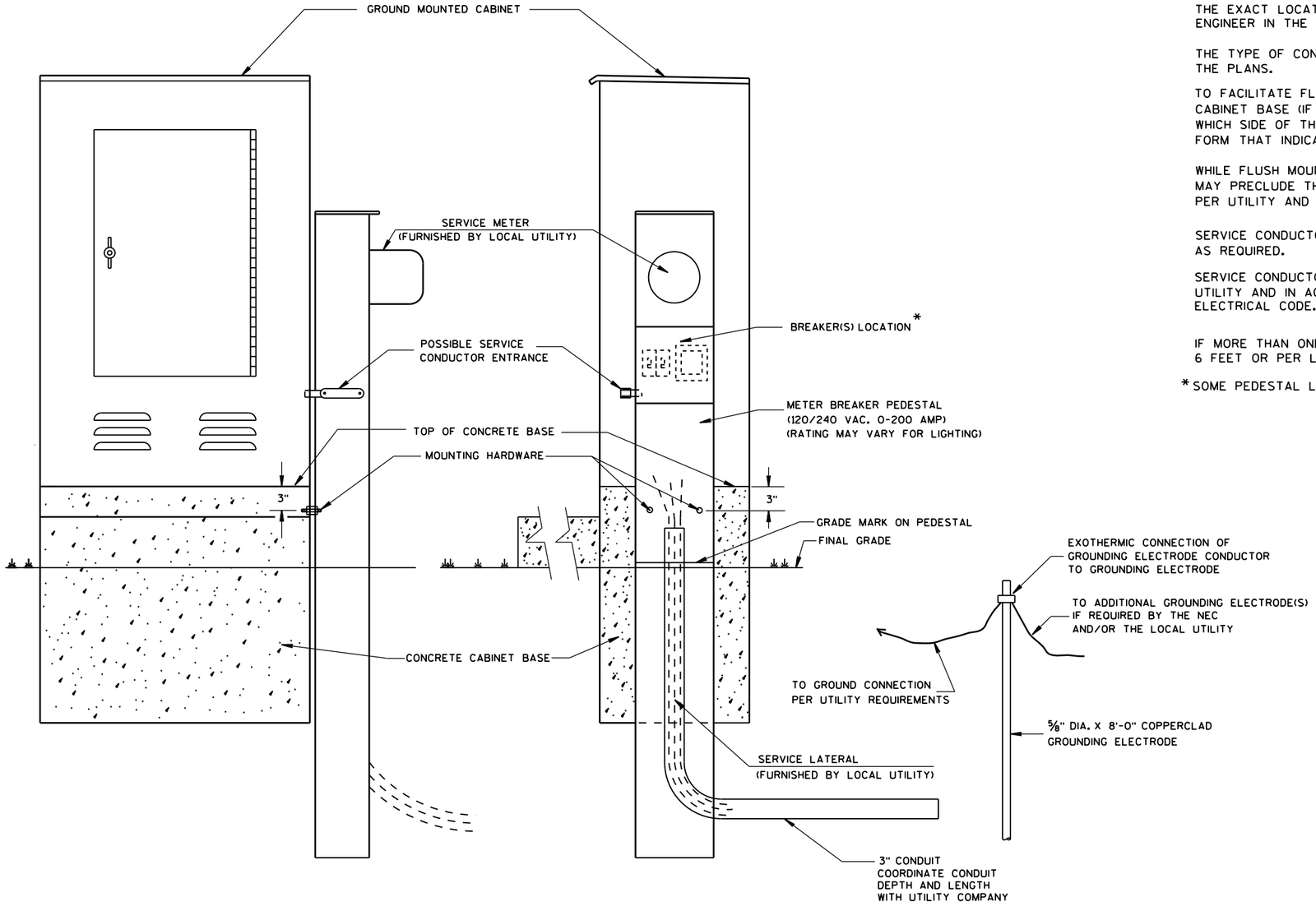
APPROVED
11-26-2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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S.D.D. 9 C 13-2

6

S.D.D. 9 C 13-2



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

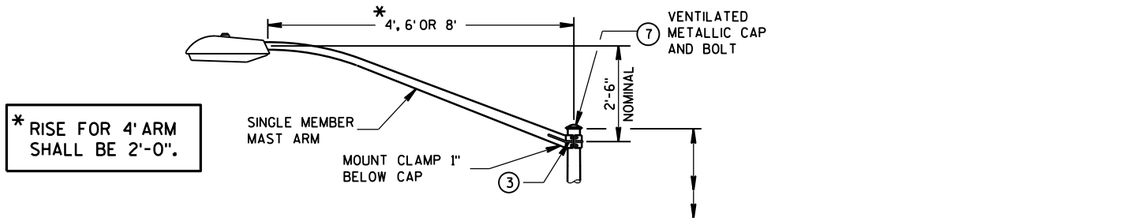
* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

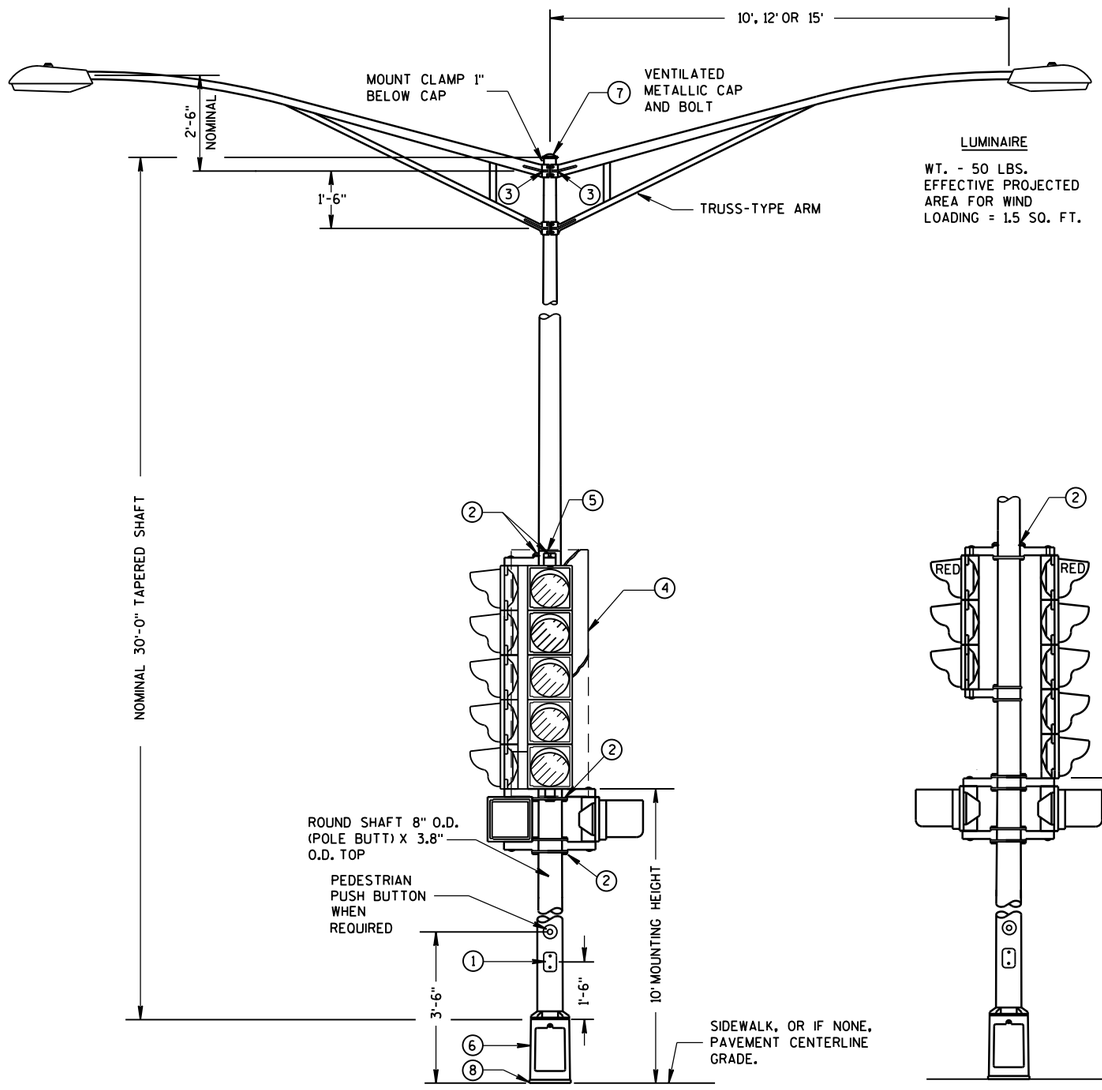
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 D 1-5

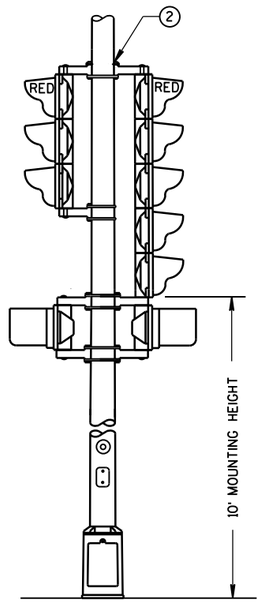




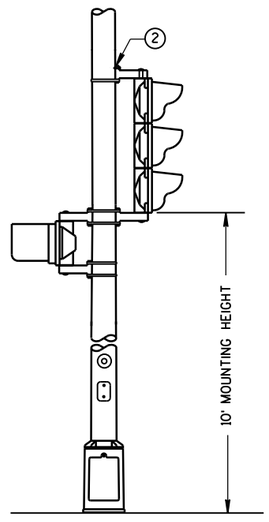
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

(MAXIMUM LOAD)

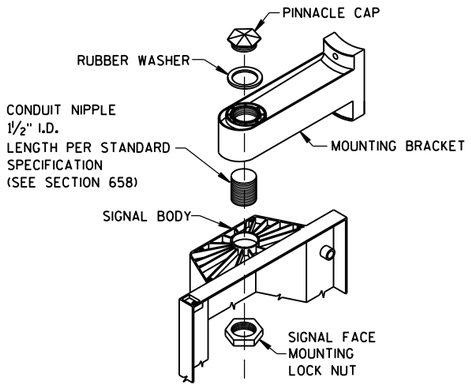


TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

TYPE 4 POLE MOUNTING CONFIGURATION



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658).

(3) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

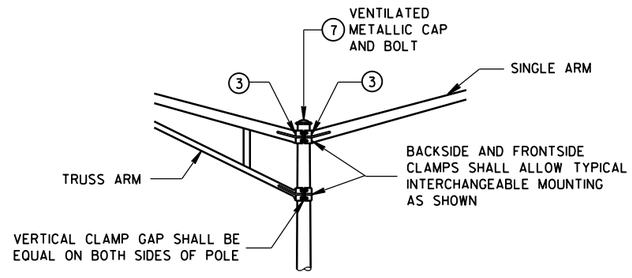
(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(7) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.



INTERCHANGEABLE MOUNTING DETAIL

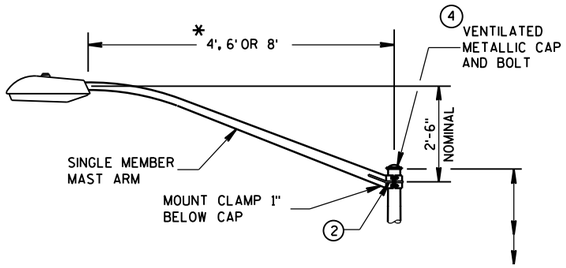
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

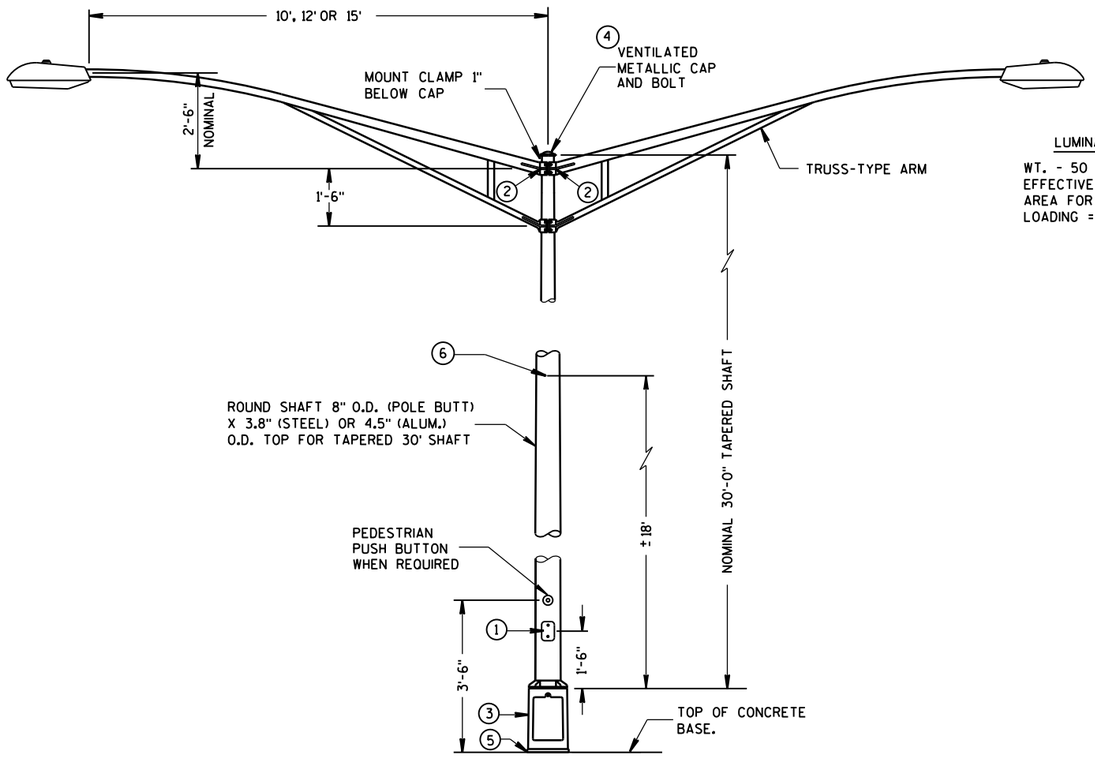
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

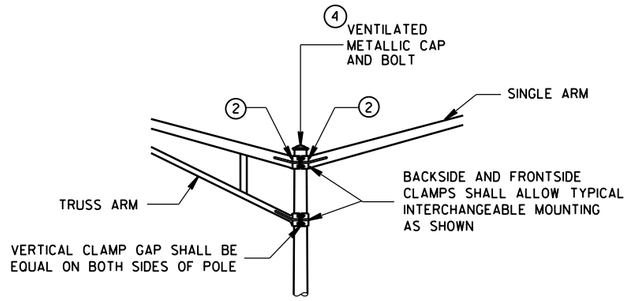
S.D.D. 9 E 1-14c

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED
AREA FOR WIND
LOADING = 1.5 SQ. FT.

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

6

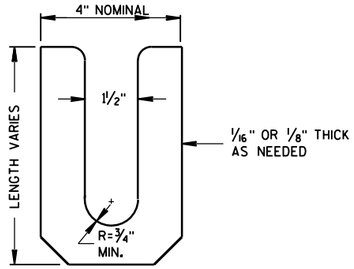
S.D.D. 9 E 1-14d

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

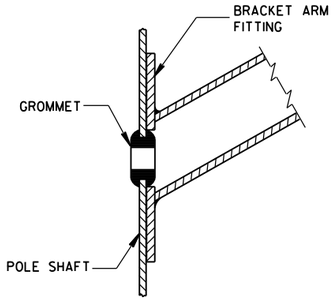
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S.D.D. 9 E 1-14d

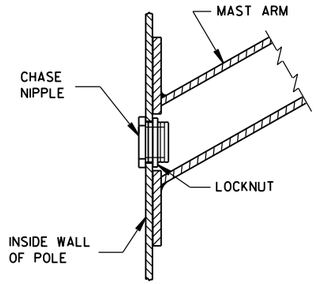


LEVELING SHIM (13)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

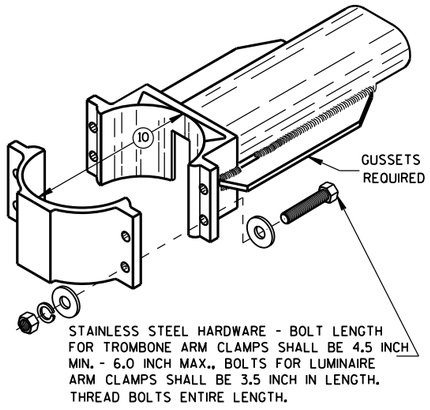
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

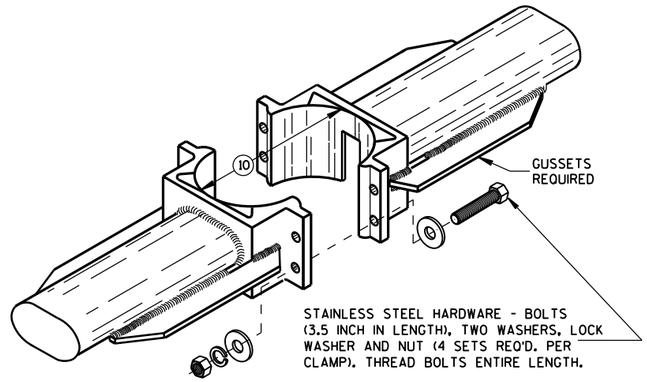
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

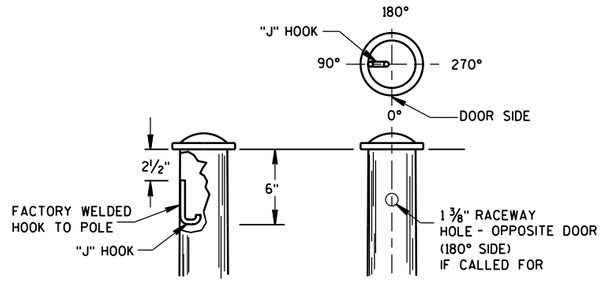
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



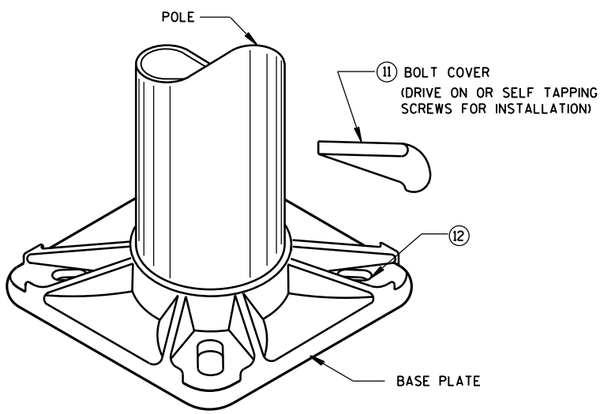
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



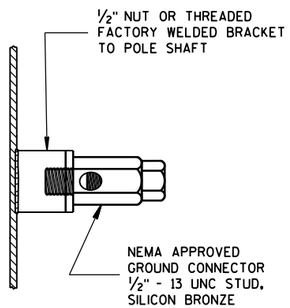
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

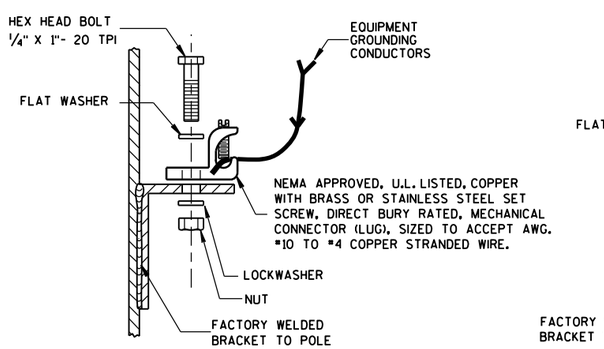


TYPICAL "J" HOOK LOCATION



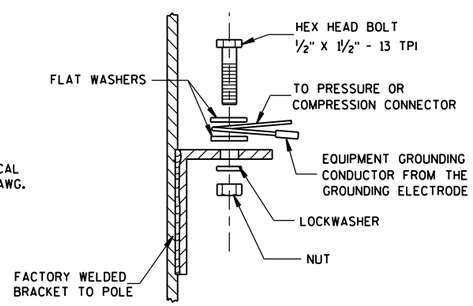
BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



HARDWARE DETAILS FOR POLE MOUNTINGS

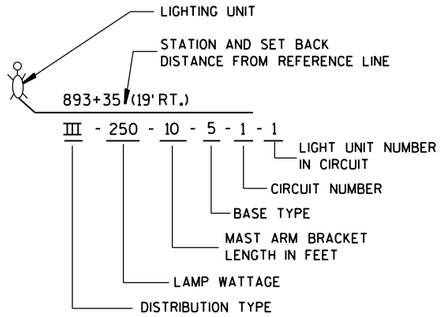
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE

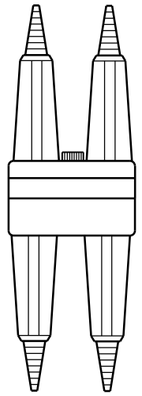
/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

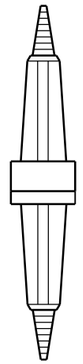
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S.D.D. 9 E 1-14g



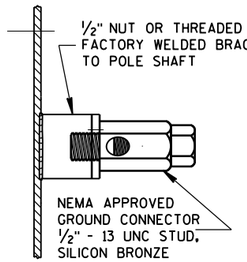
LIGHTING UNIT CODE
(TYPICAL)

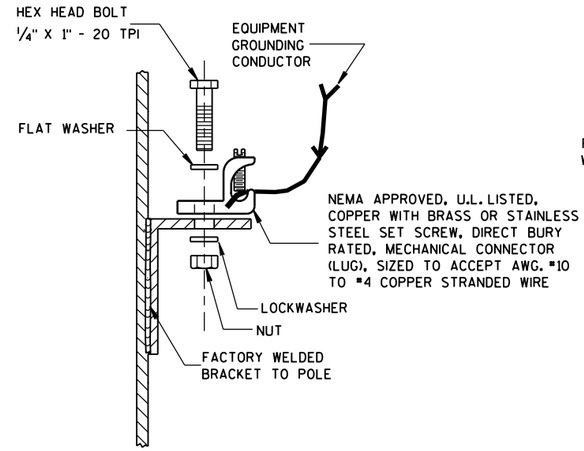


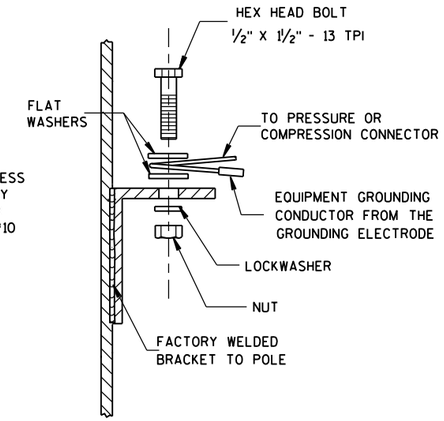
DETAIL "A"
BREAKAWY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



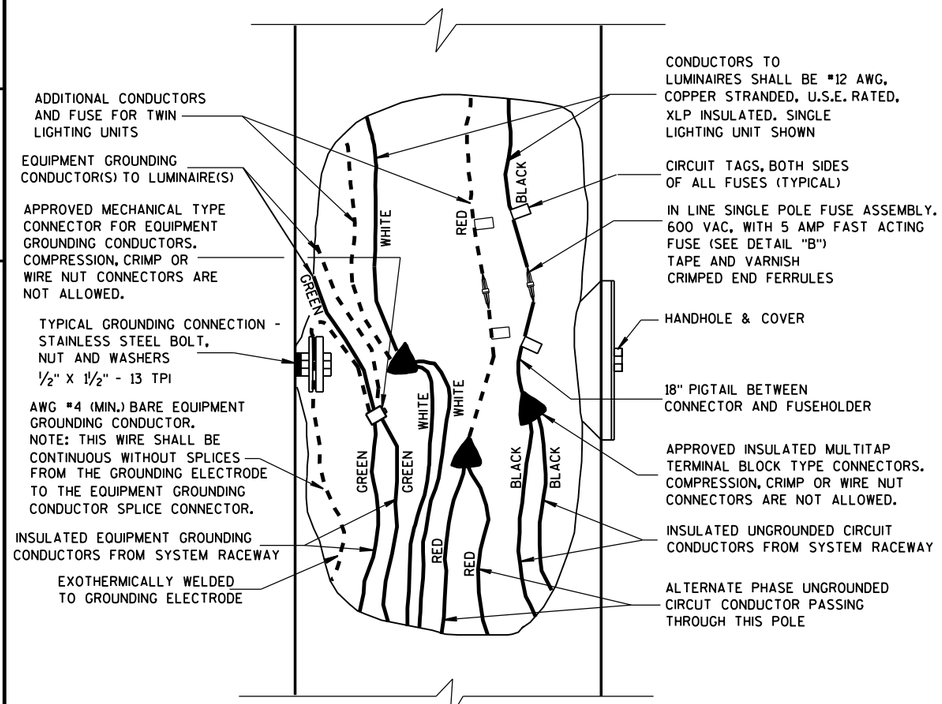
DETAIL "B"
BREAKAWY SINGLE POLE WITH WATERPROOF INSULATING BOOT



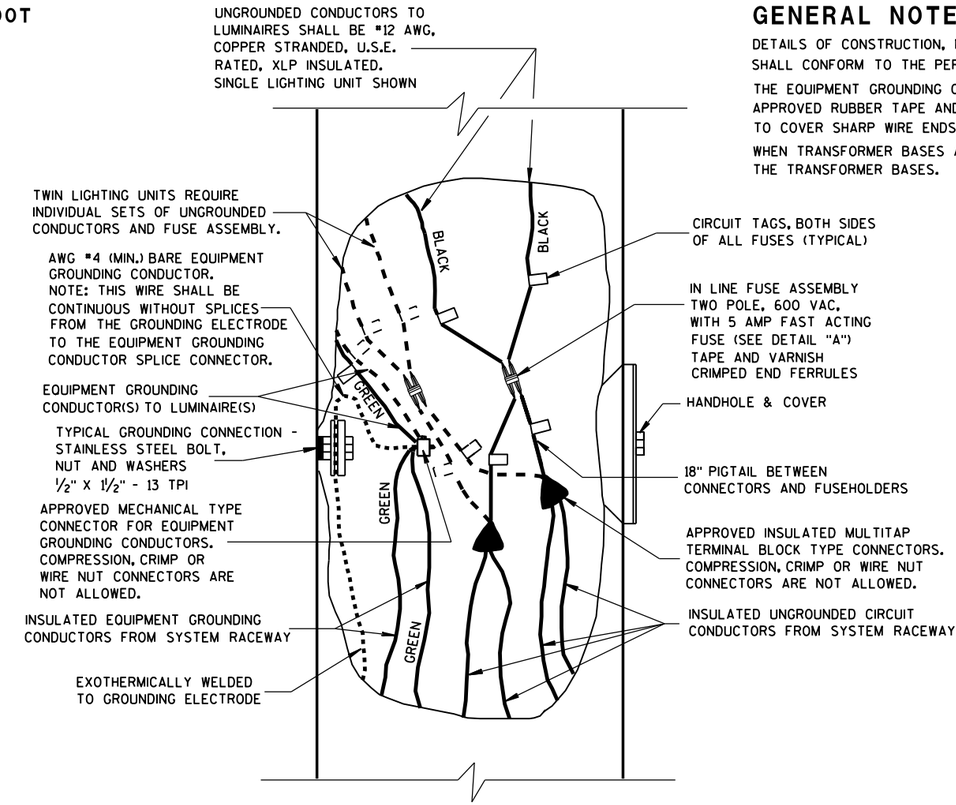




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

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

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

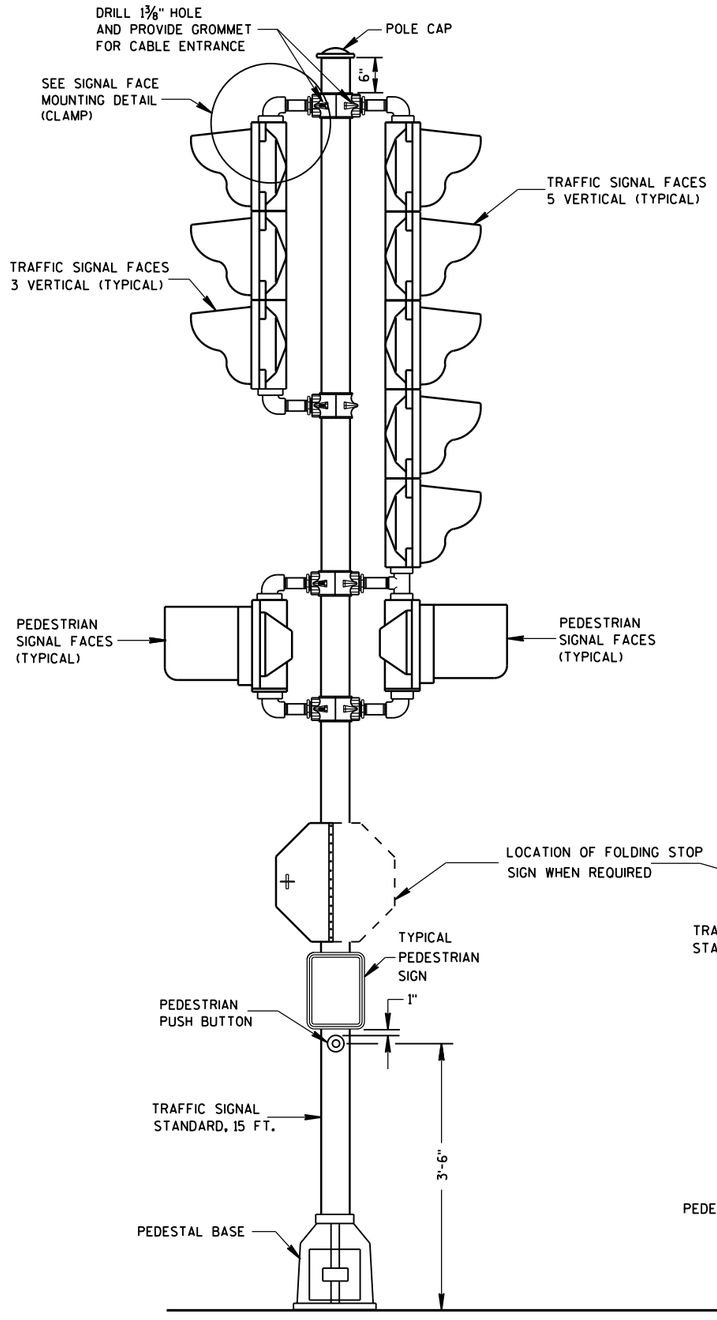
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

NON-FREEWAY LIGHTING UNIT POLE WIRING

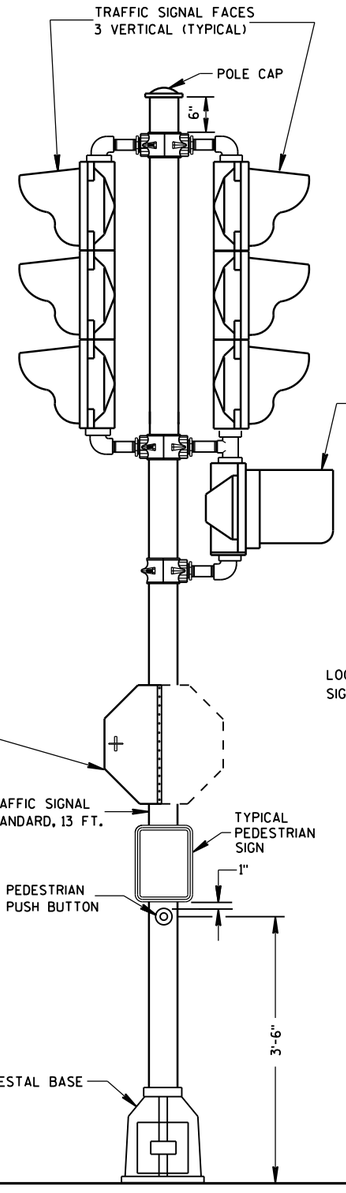
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

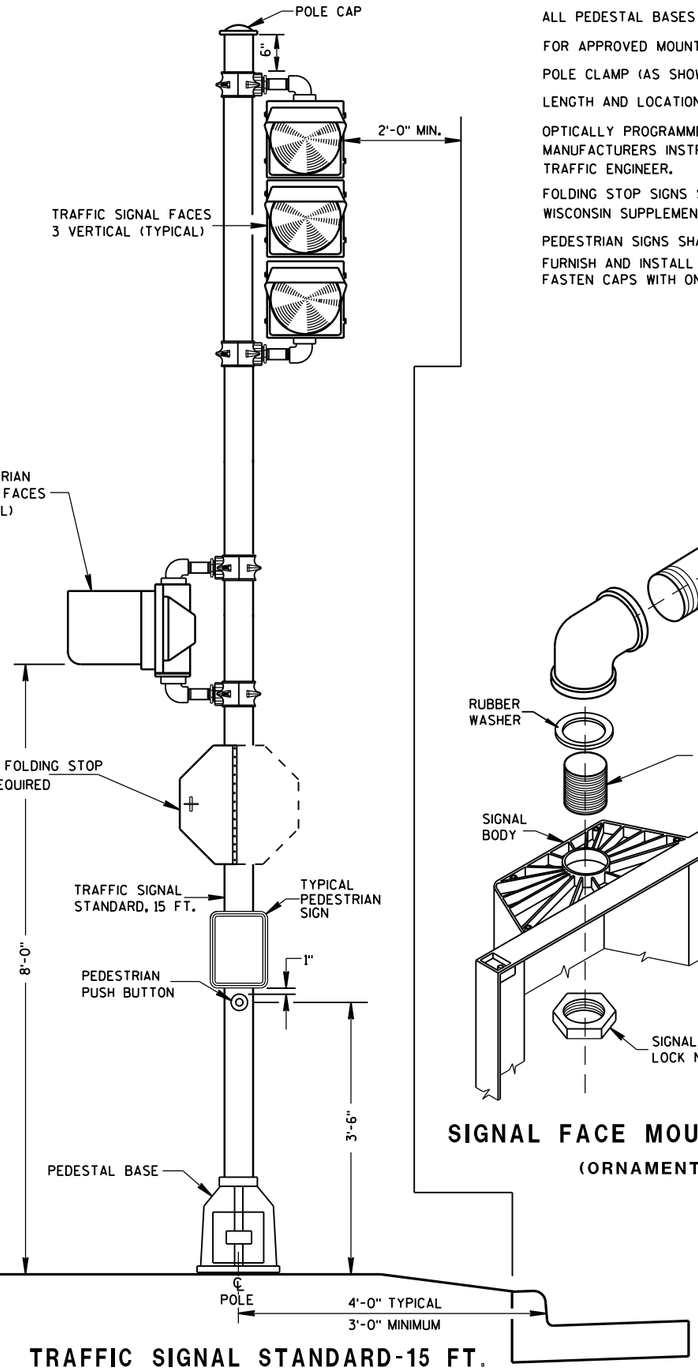
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S.D.D. 9 E 3-5



TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

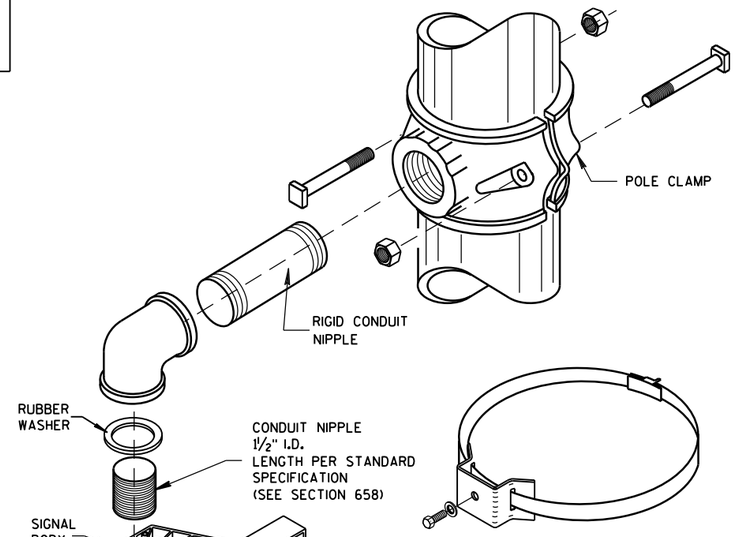
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

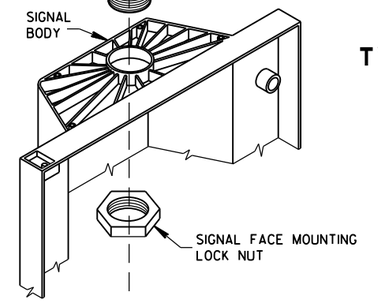
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

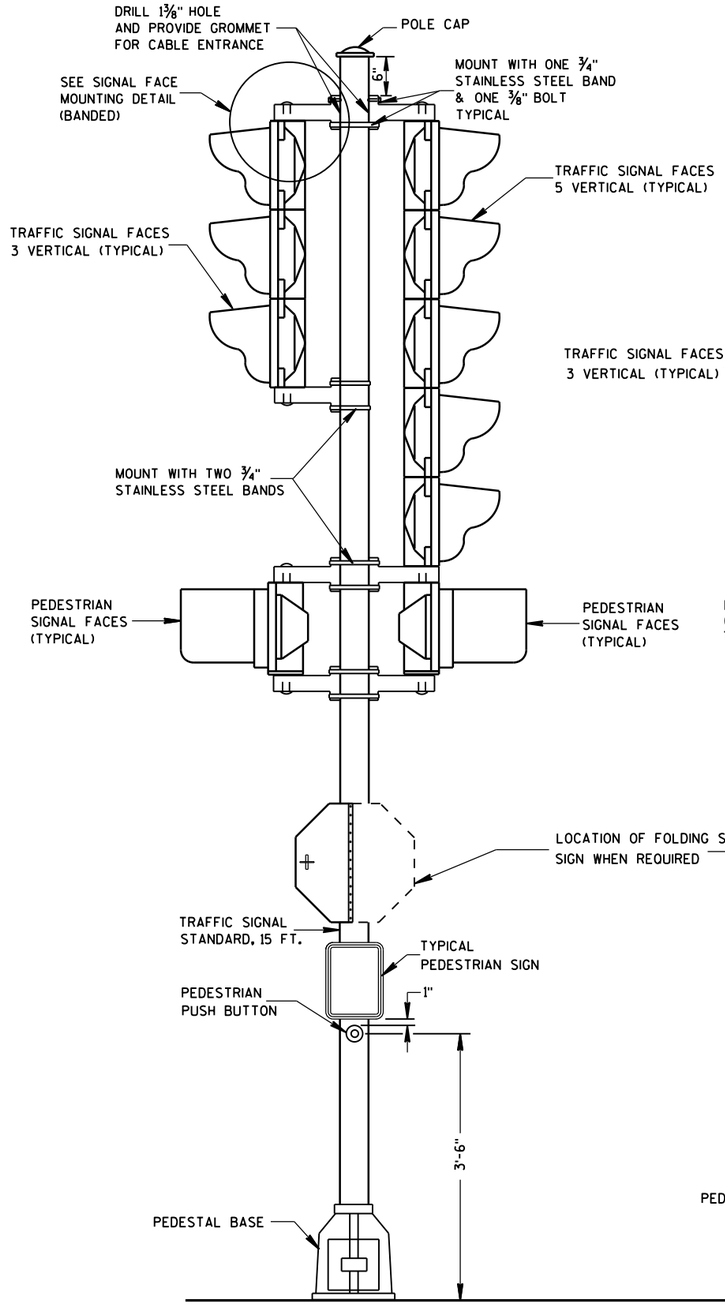
TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

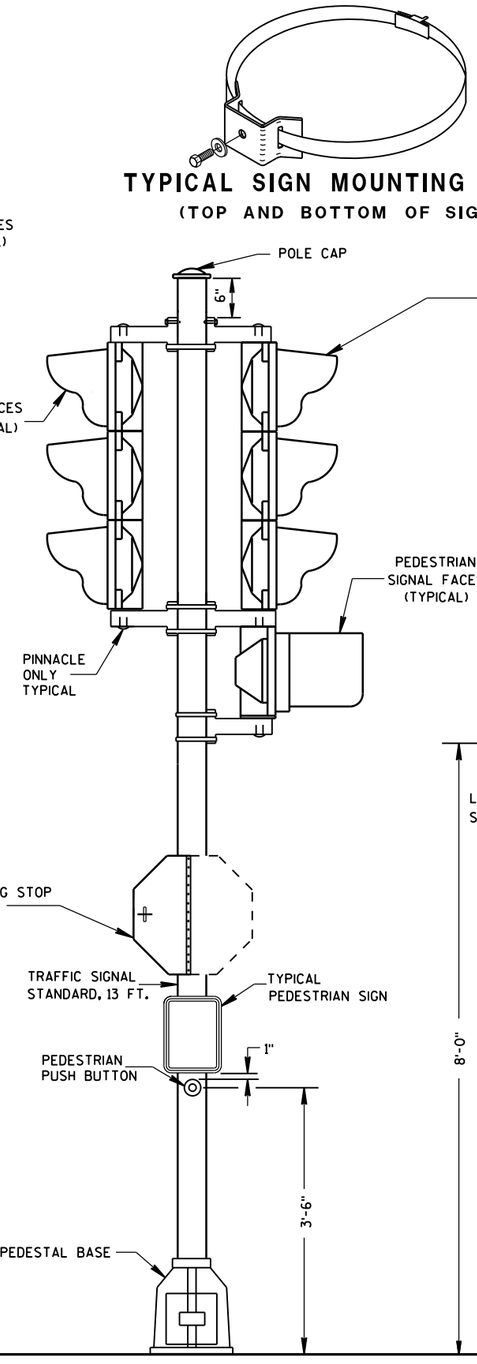
APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

S.D.D. 9 E 5-6

6
S.D.D. 9 E 5-6

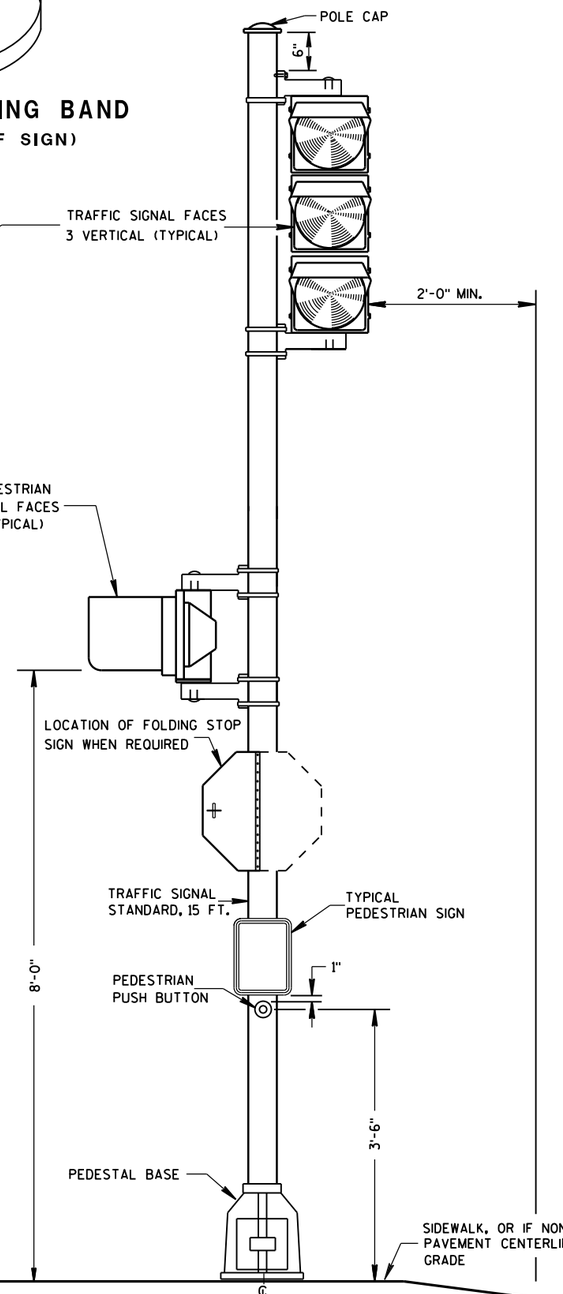


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

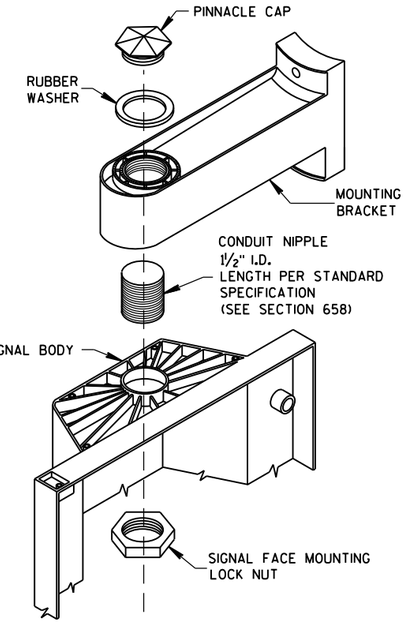
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

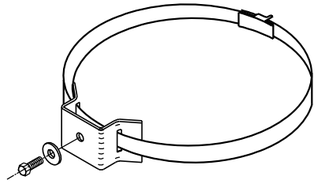
TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

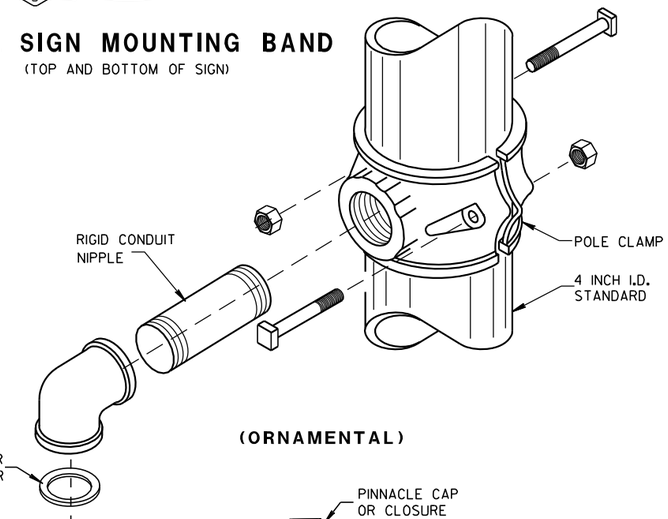
APPROVED
2/28/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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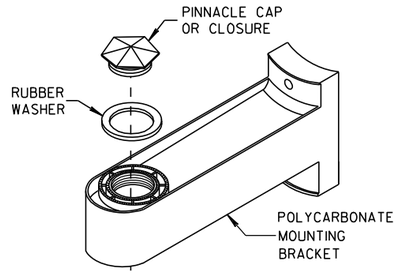
S.D.D. 9 E 6-5



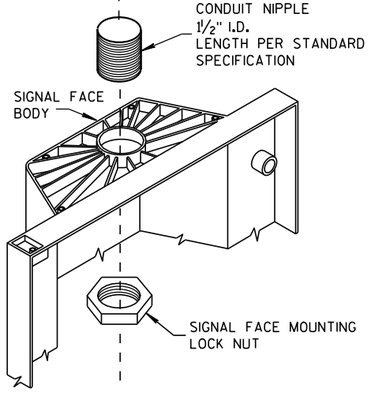
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



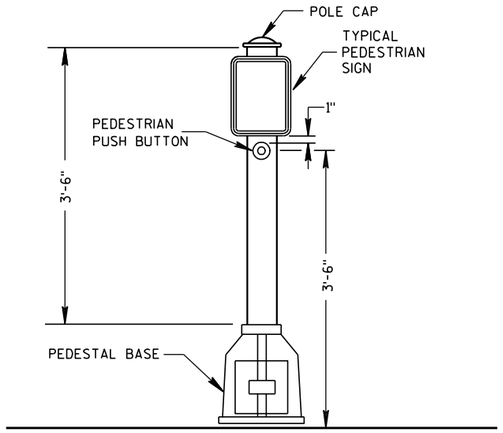
(ORNAMENTAL)



(BANDED)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

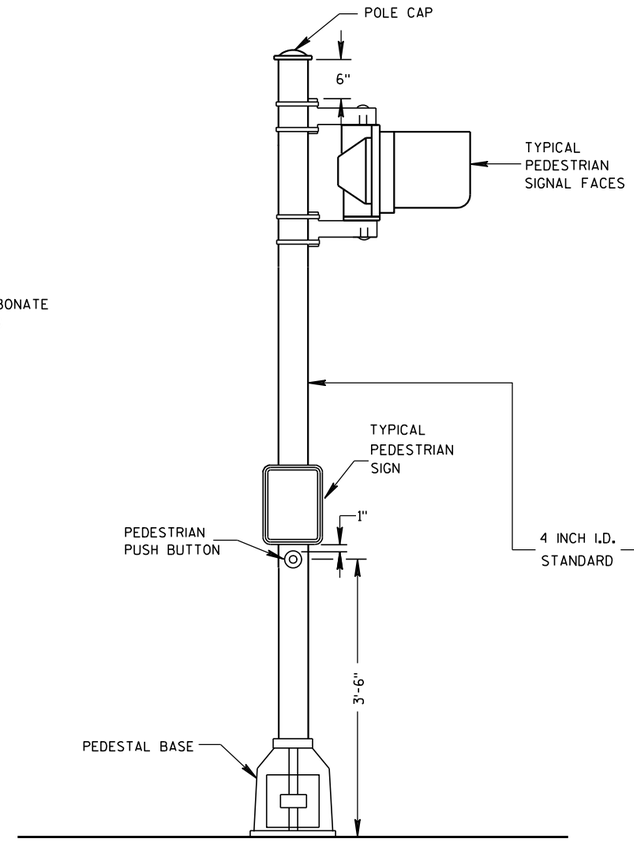
POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

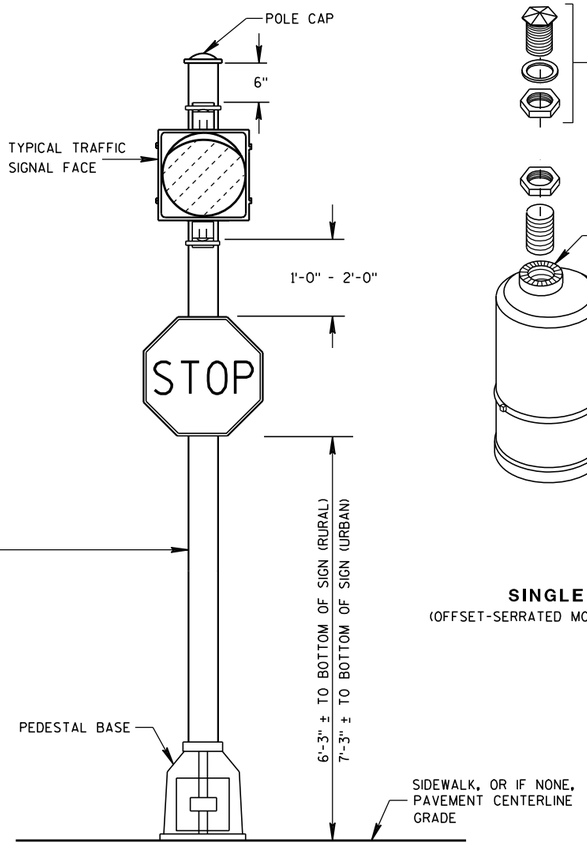
MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE DISTRICT TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

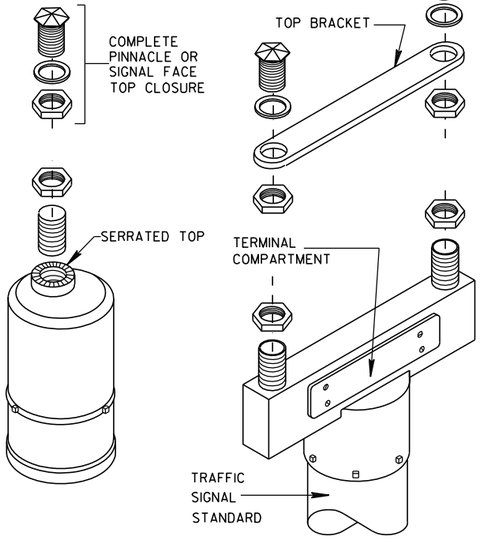
FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



PEDESTRIAN FACE STANDARD-10 FT.
(WALK-DON'T WALK)



STANDARD FLASHER.
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET-SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

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5/11/10
DATE

/S/ John Corbin
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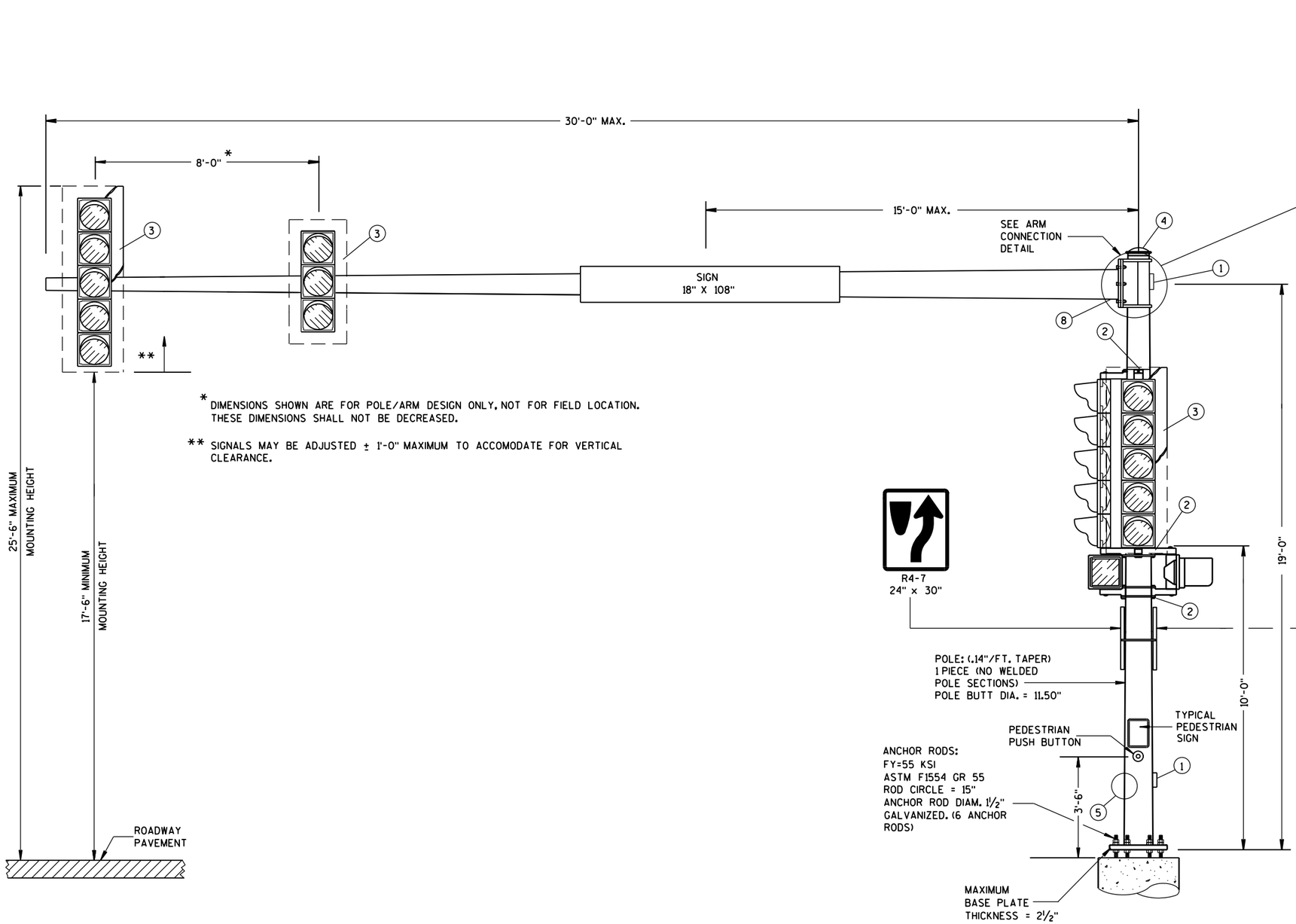
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S.D.D. 9 E 7-5

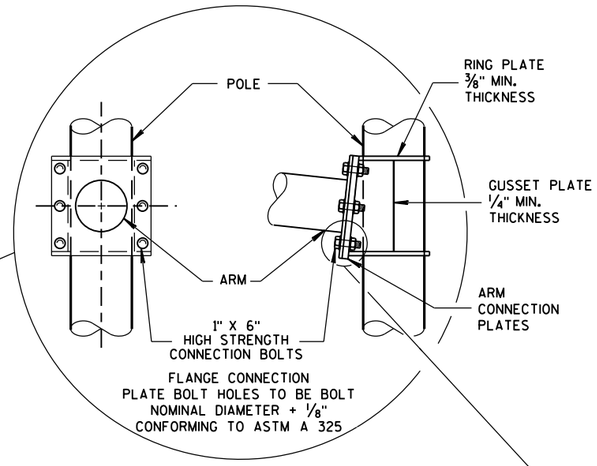
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S.D.D. 9 E 7-5

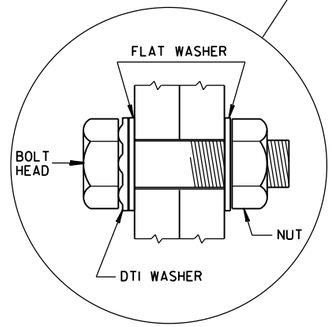


* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

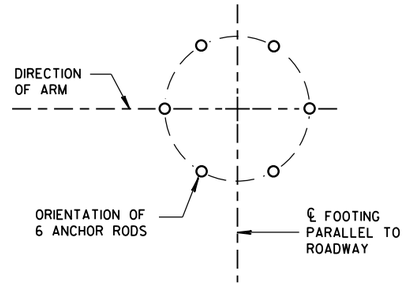
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 9 POLE 15'- 30' MONOTUBE ARM

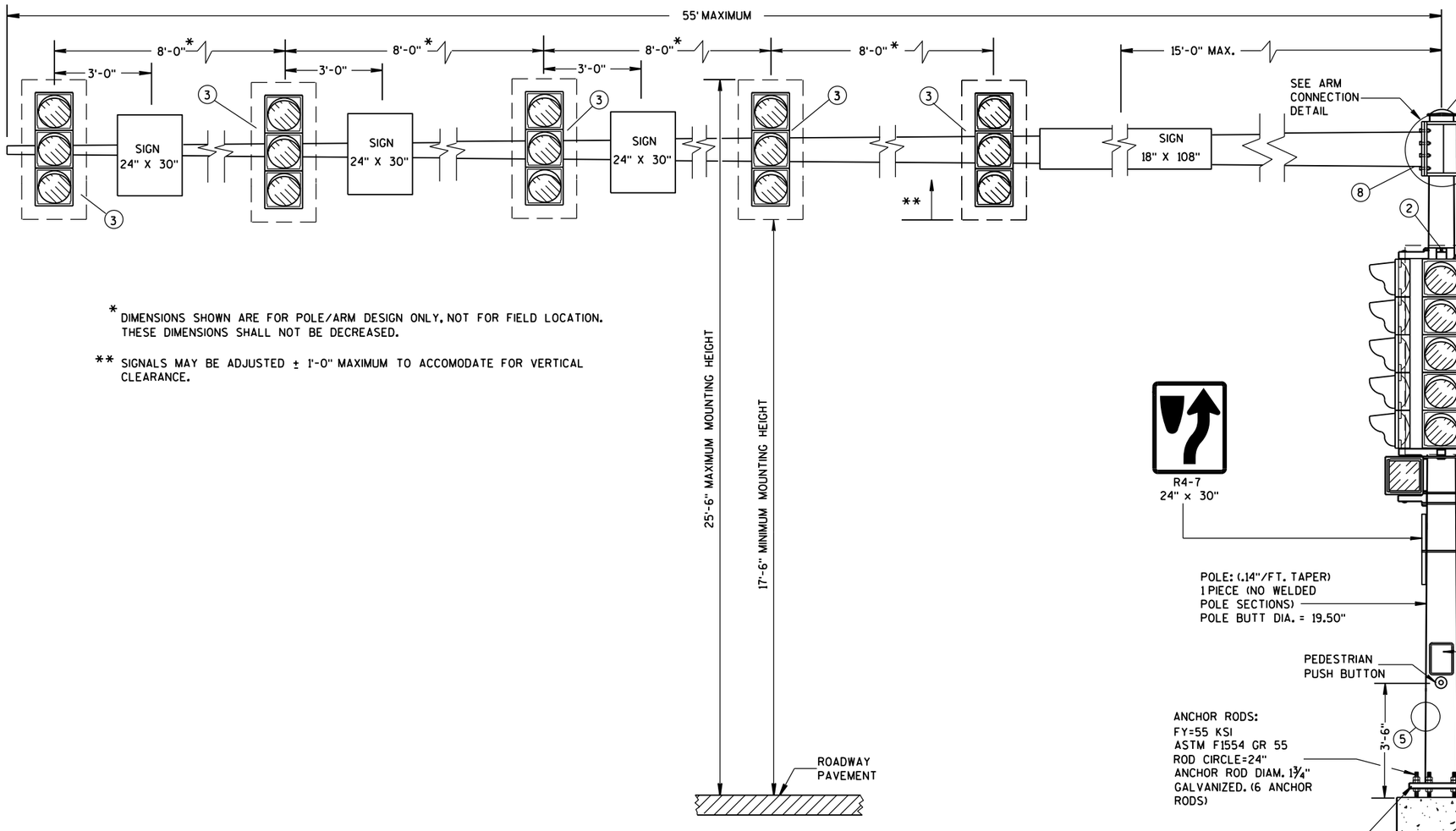
TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2016 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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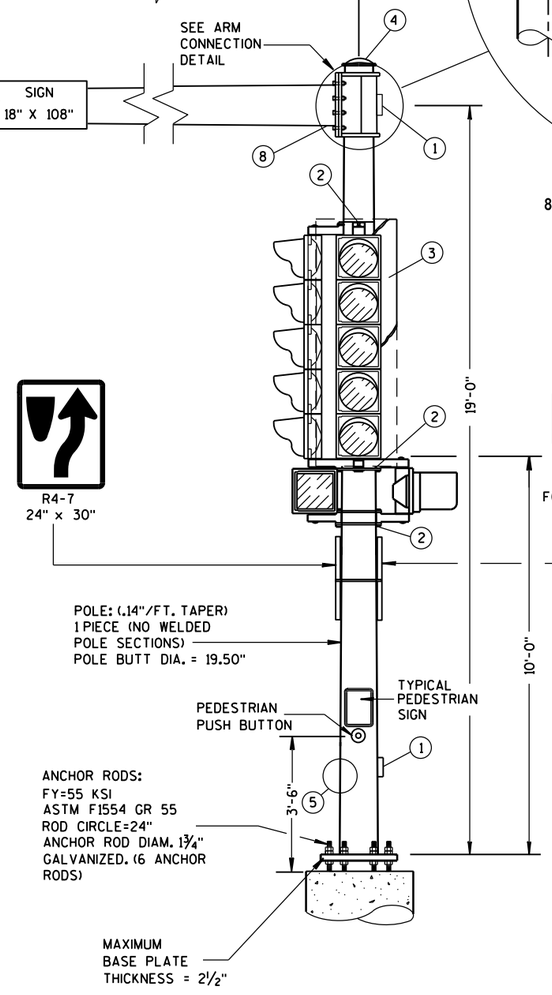
S.D.D. 9 E 8-8a

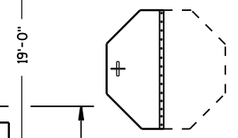
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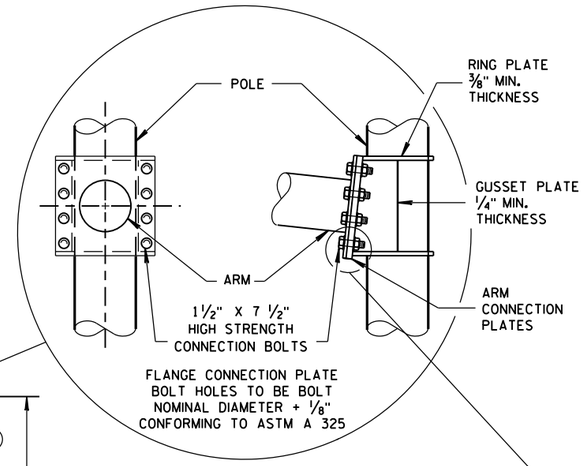


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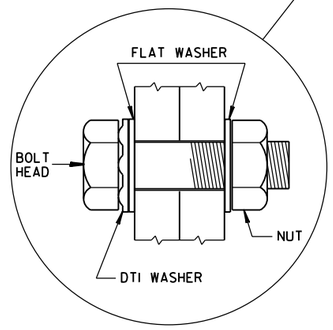
** SIGNALS MAY BE ADJUSTED ± 1'-0" MAXIMUM TO ACCOMODATE FOR VERTICAL CLEARANCE.



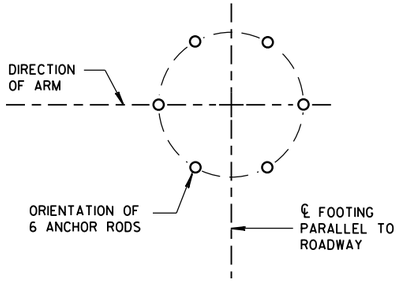




8 BOLT ARM CONNECTION DETAIL



RECOMMENDED
BOLT ASSEMBLY
DETAIL



ANCHOR ROD LOCATION

(MAXIMUM LOAD)

TYPE 12 POLE 35'- 55' MONOTUBE ARM

TYPE 12 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May, 2015
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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S.D.D. 9 E 8-8c

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15-FOOT TO 30-FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35-FOOT TO 55-FOOT.

MONOTUBE POLE AND ARM SHALL BE GALVANIZED STEEL.

RING-STIFFENED BUILT-UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE (1) PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3 % ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO 2013 6TH EDITION AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR TRAFFIC AND LIGHTING STRUCTURES AND AS FOLLOWS:

- CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.
- CATEGORY II FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 12 AND TYPE 13 STRUCTURES.
- 90 MPH (3-SECOND GUST) WIND SPEED AND A 50 YEAR DESIGN LIFE.

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" S.S. BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR AS DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEADS AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HANDHOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING, (SEE SPECIFICATIONS SEC. 658).

(3) SECURELY MOUNT BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE END OF THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY-WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HANDHOLE, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

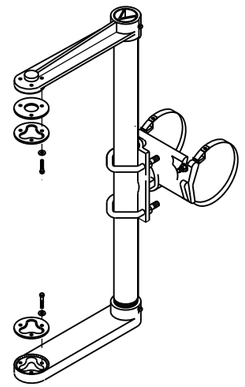
(6) FACTORY-WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

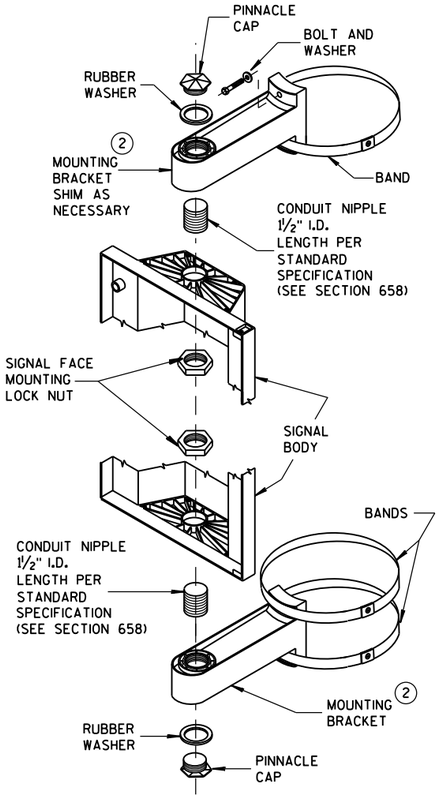
MOUNTING HEIGHT SHALL BE 6'-0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

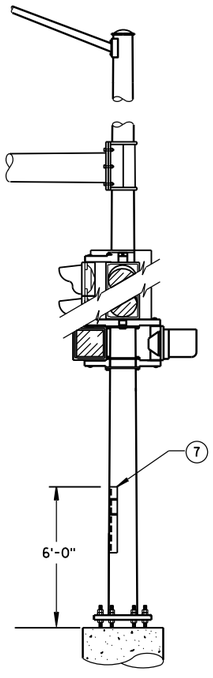


SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM

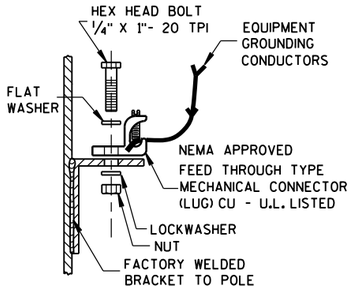
(MOUNT PER MANUFACTURER'S RECOMMENDATION)



SIGNAL FACE
VERTICAL MOUNTING DETAIL

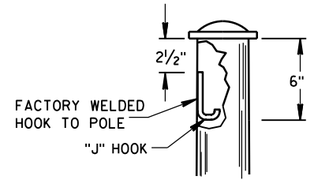


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT



TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



"J" HOOK WIRE SUPPORT (6)

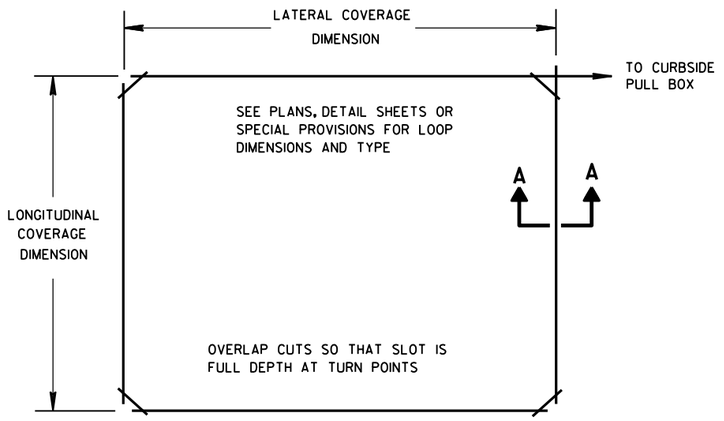
GENERAL NOTES AND HARDWARE DETAILS FOR TYPE 9, 10, 12 & 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

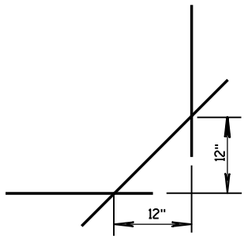
APPROVED
May 2016
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

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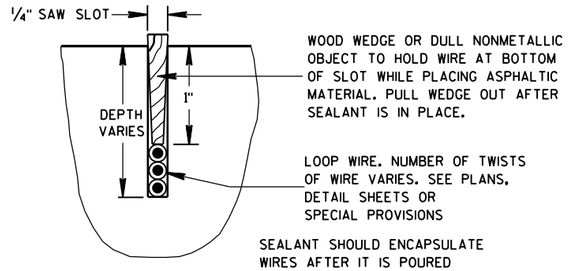
S.D.D. 9 E 8-8e



LOOP WIRE SLOT CONSTRUCTION

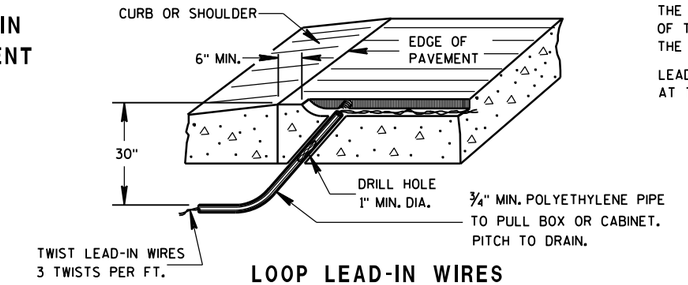


EXPANDED VIEW
SAW CUT CORNERS



SECTION A-A

LOOP AND LEAD-IN WIRES IN PAVEMENT



LOOP LEAD-IN WIRES THROUGH PAVEMENT

GENERAL NOTES

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

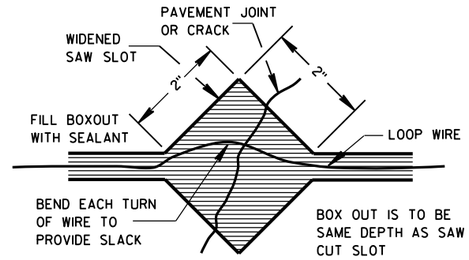
THE SLOTS IN THE PAVEMENT SHALL BE CUT TO DIMENSION WITH A SAW. THE SLOTS SHALL BE CLEANED FREE OF DIRT, DUST, MOISTURE AND DEBRIS PRIOR TO INSTALLATION OF THE WIRE.

AFTER PLACING THE WIRE IN THE SLOT, FILL THE SLOT WITH AN ASPHALTIC MATERIAL IN ACCORDANCE WITH THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D6690".

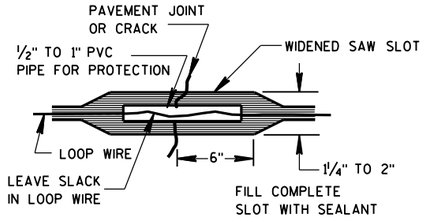
IN THE EVENT ASPHALTIC MATERIAL IS UNAVAILABLE, A FLEXIBLE TYPE EPOXY MAY BE USED AS A LOOP SLOT FILLER. THE LOOP SLOT SHALL BE CLEAN AND DRY BEFORE EPOXY IS INSTALLED. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED ONLY AFTER WRITTEN APPROVAL BY THE BY THE PROJECT ENGINEER.

THE TWO SINGLE CONDUCTOR LOOP WIRES SHALL BE TWISTED TOGETHER AT A RATE OF THREE TWISTS PER FOOT FROM THE PAVEMENT EDGE TO THE SPLICE CONNECTION WITH THE LOOP LEAD-IN CABLE.

LEAD-IN CABLES AND LOOP LEAD-IN WIRES SHALL BOTH BE CUT TO 6 FEET IN LENGTH AT THE SPLICING PULL BOX.

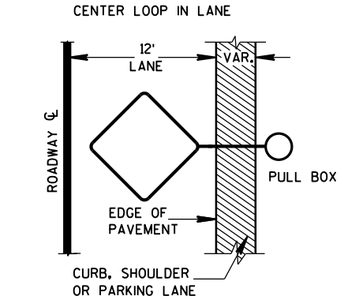


PLAN VIEW

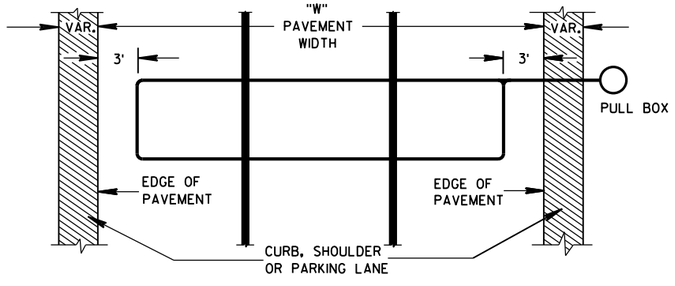


FRONT VIEW

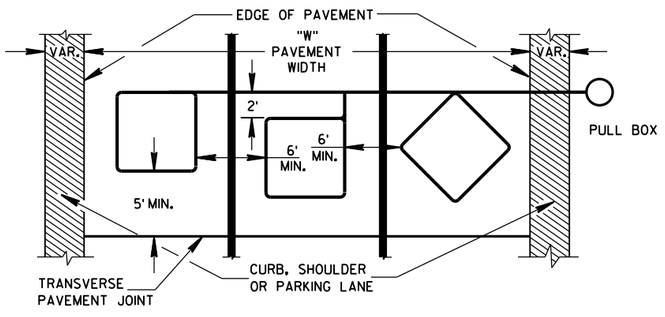
LOOP WIRE INSTALLATION ACROSS PAVEMENT JOINT OR CRACK



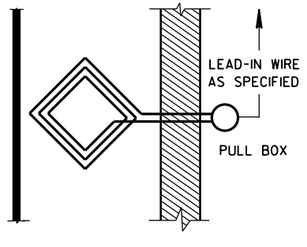
LOOP WIRE SLOT PLAN



LOOP WIRE SLOT PLAN

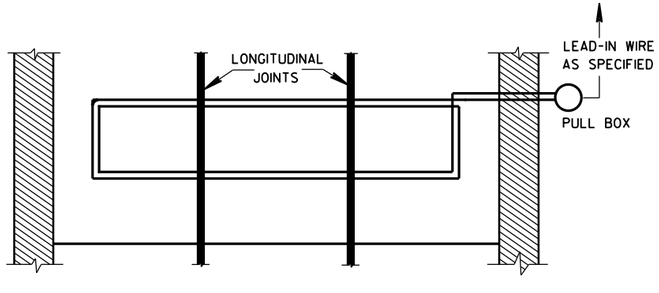


LOOP WIRE SLOT PLAN



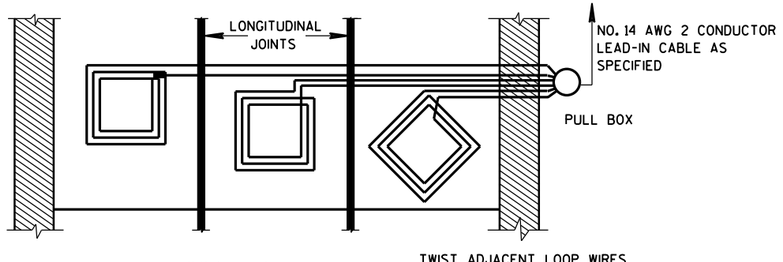
LOOP WIRE LAY CONSTRUCTION DETAILS

SINGLE LANE LOOP DETECTION



LOOP WIRE LAY CONSTRUCTION DETAILS

MULTIPLE LANE MASS LOOP DETECTION



LOOP WIRE LAY CONSTRUCTION DETAILS

MULTIPLE LANE DETECTION BY INDIVIDUAL LANES, TYPICAL TYPE LOOPS

DETAILS FOR THE INSTALLATION OF TEMPORARY TRAFFIC SIGNAL LOOP DETECTOR WIRES IN ANY EXISTING PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

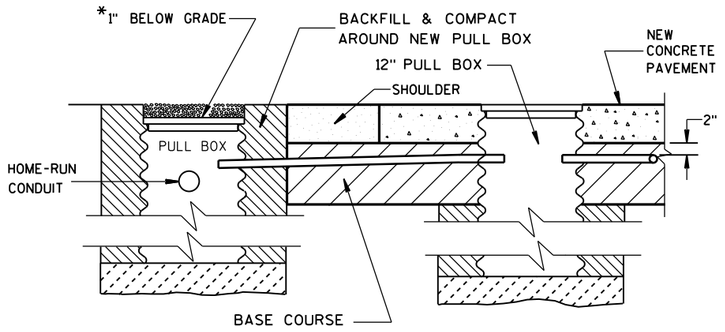
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June, 2015 — DATE
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SECTION A-A

NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS

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

GENERAL NOTES

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

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

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

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

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

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

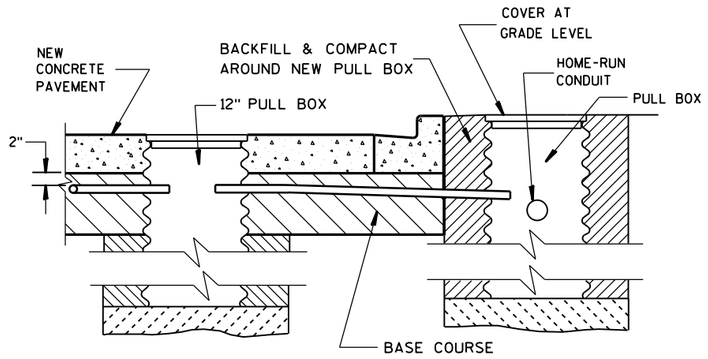
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

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

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

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

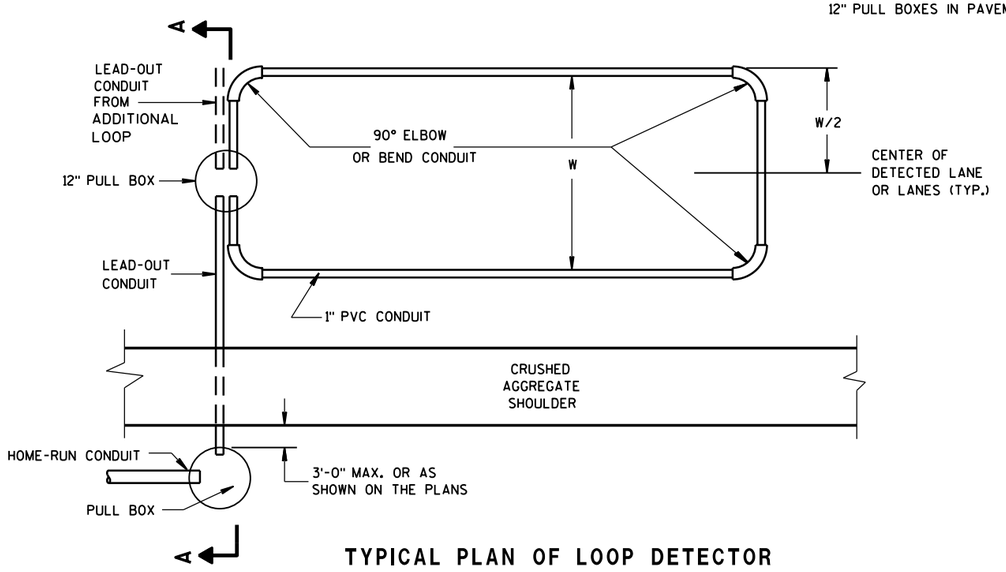
12" PULL BOXES IN PAVEMENT SHALL BE CORRUGATED STEEL ONLY.



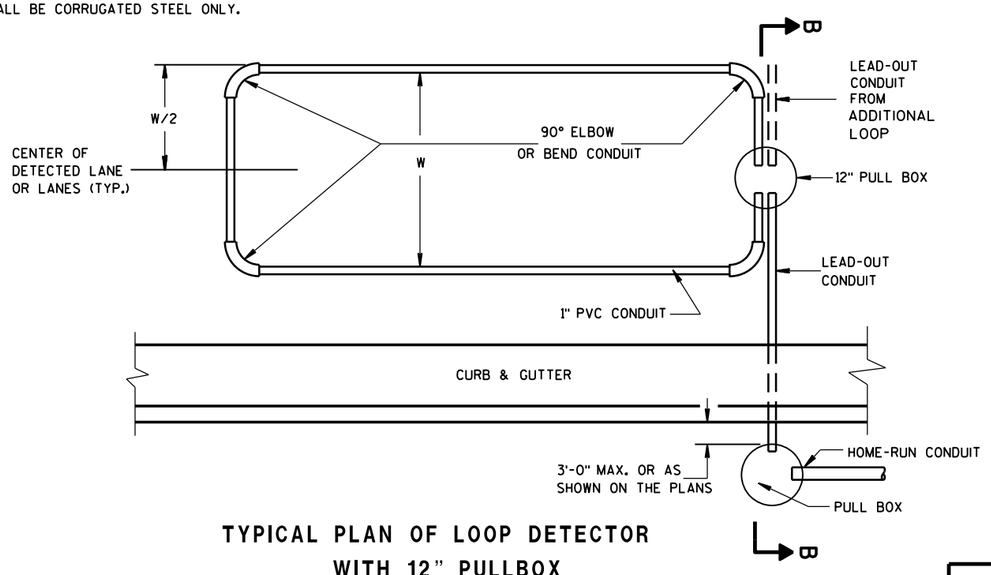
SECTION B-B

CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAILS



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX



TYPICAL PLAN OF LOOP DETECTOR WITH 12" PULLBOX

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

Sept. 2014 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL

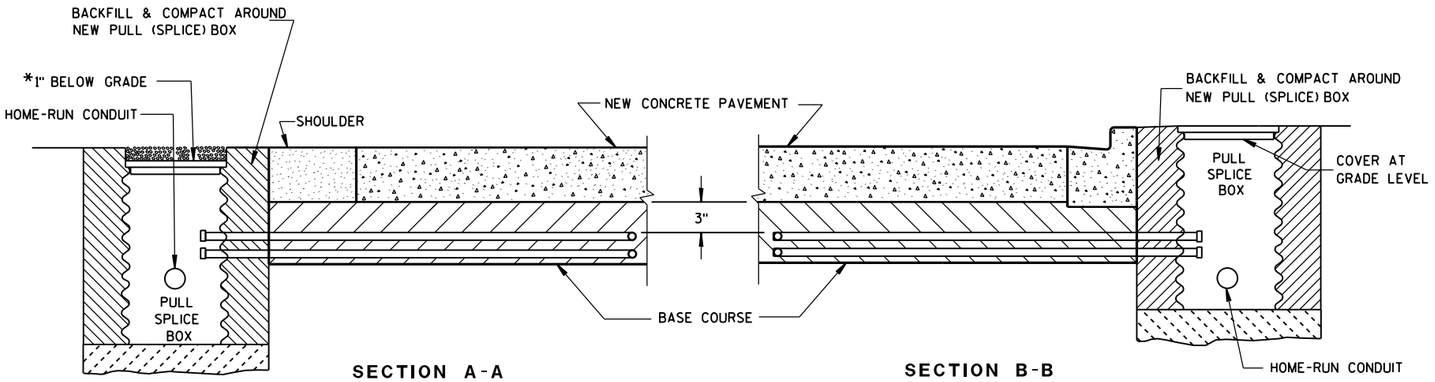
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S.D.D. 9 F 9-4



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

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

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

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

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

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

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

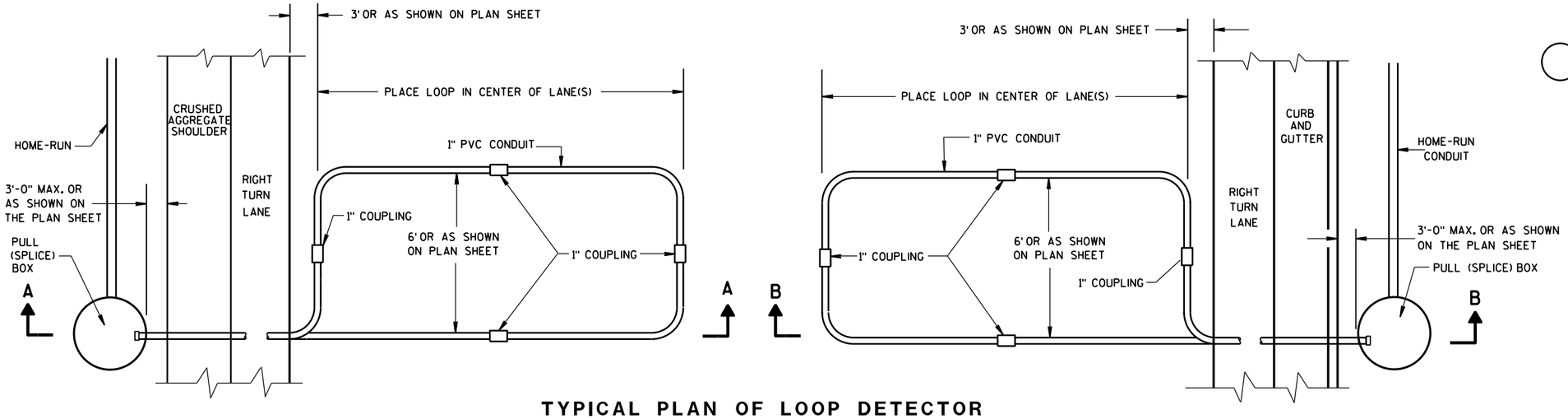
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

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

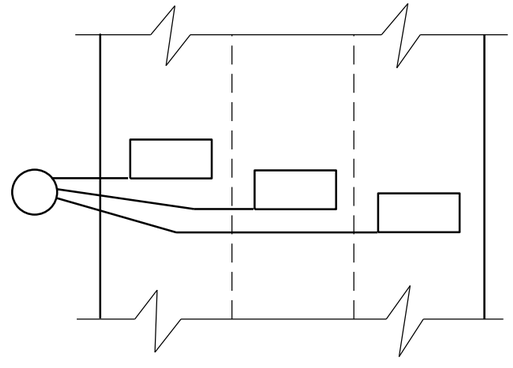
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 DATE — /S/ Ahmet Demirbilek STATE ELECTRICAL FHWA

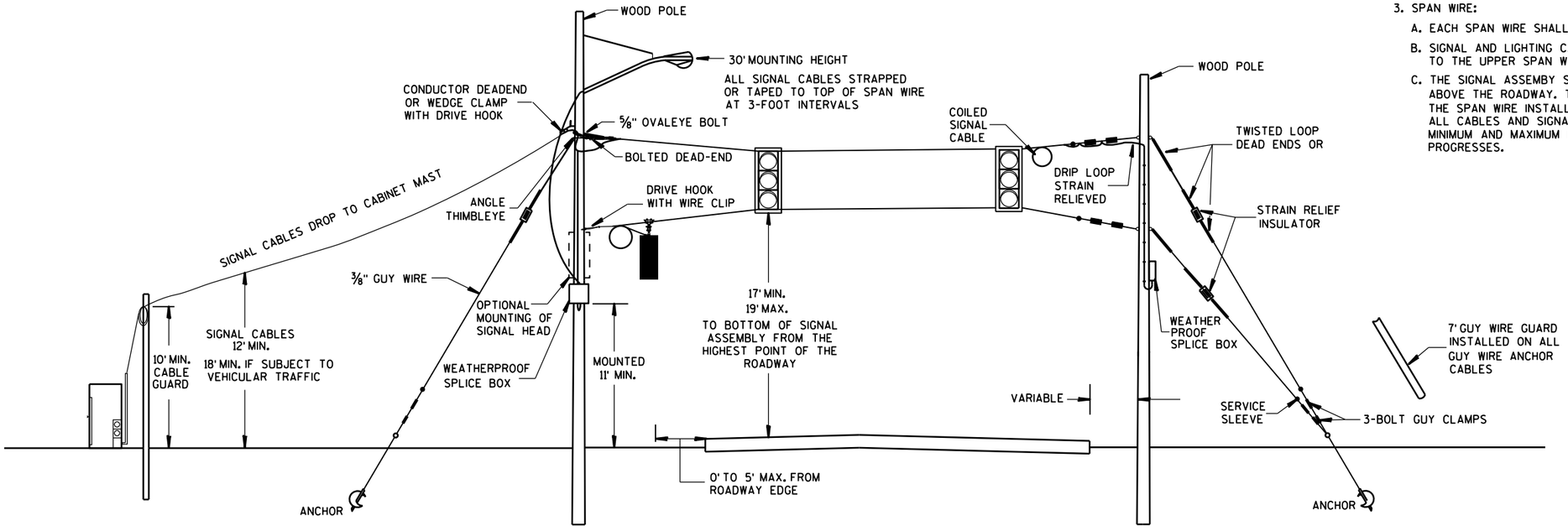
GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

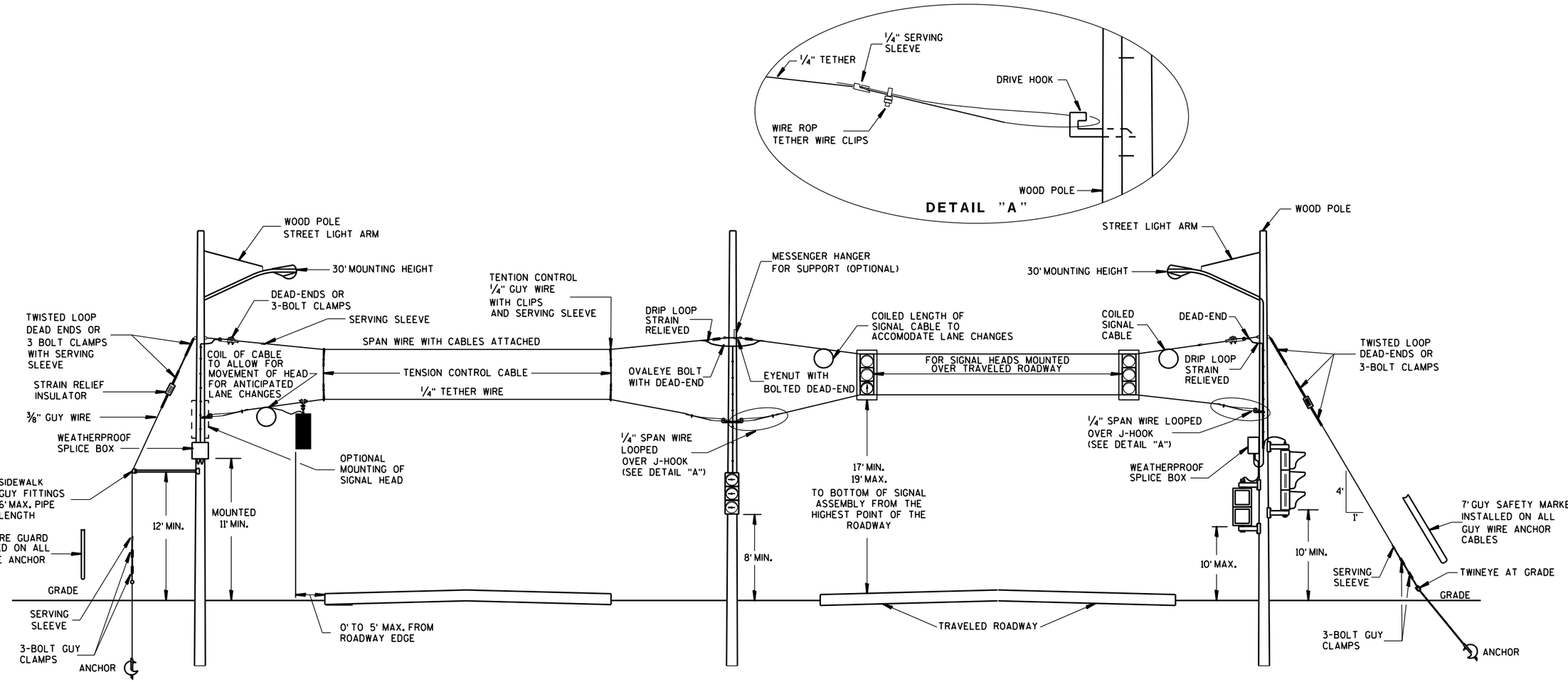
APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 G 1-4a



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

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

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

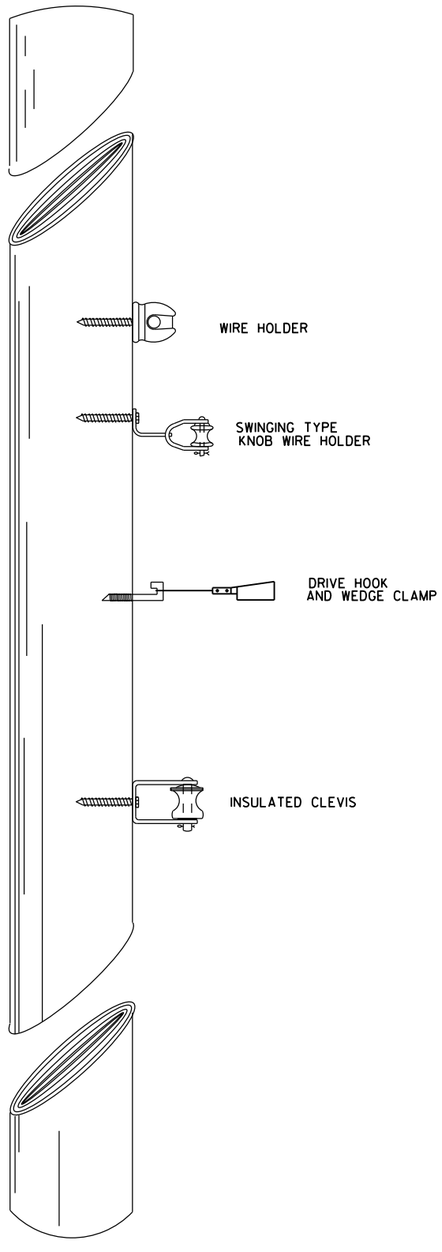
SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

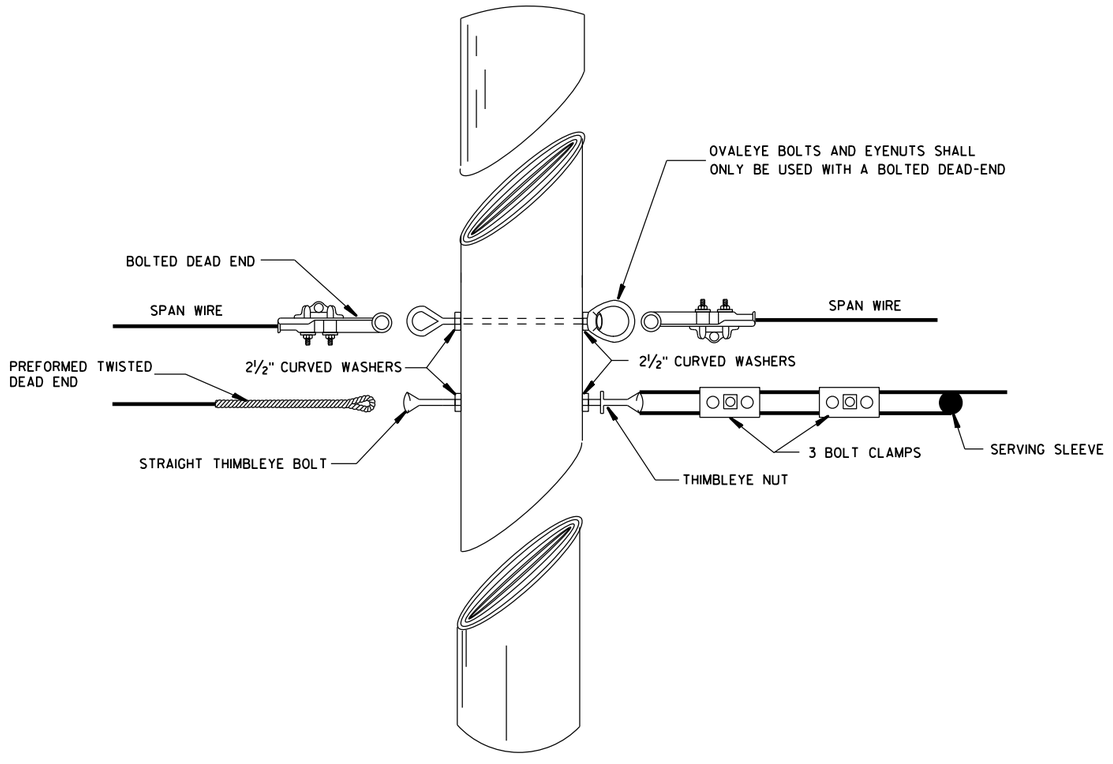
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S.D.D. 9 G 1-4c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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June, 2015
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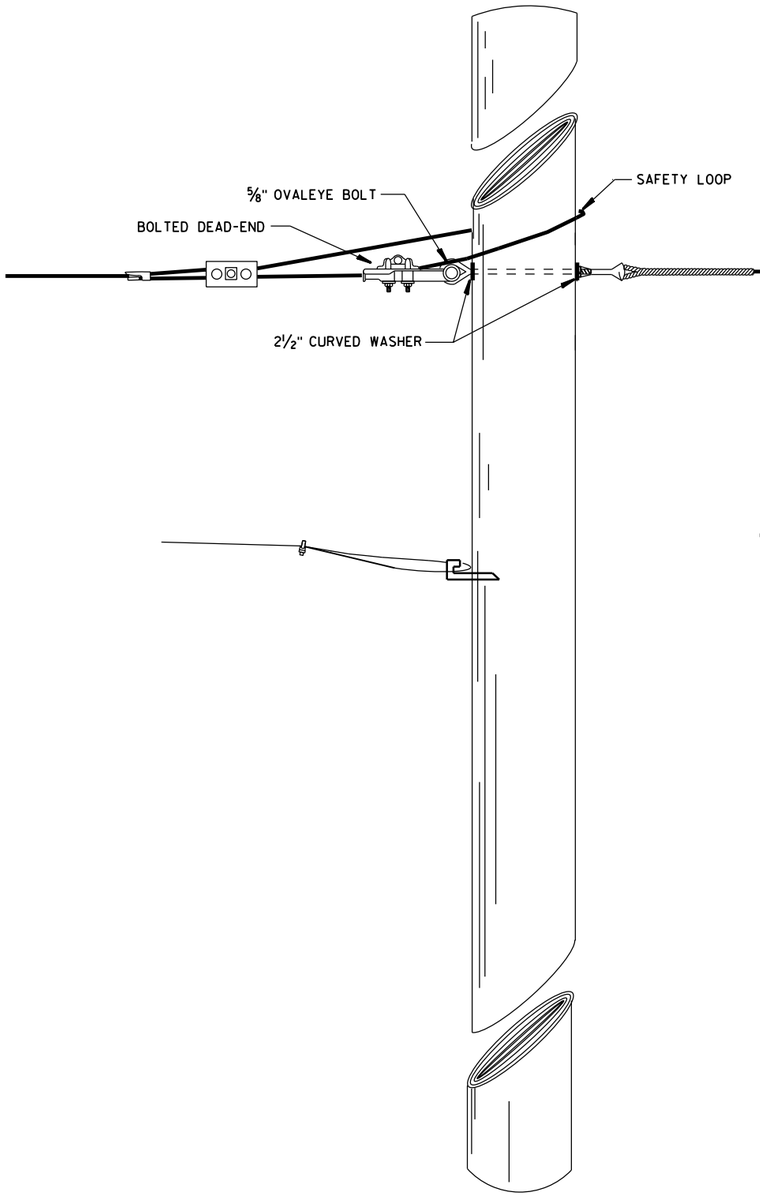
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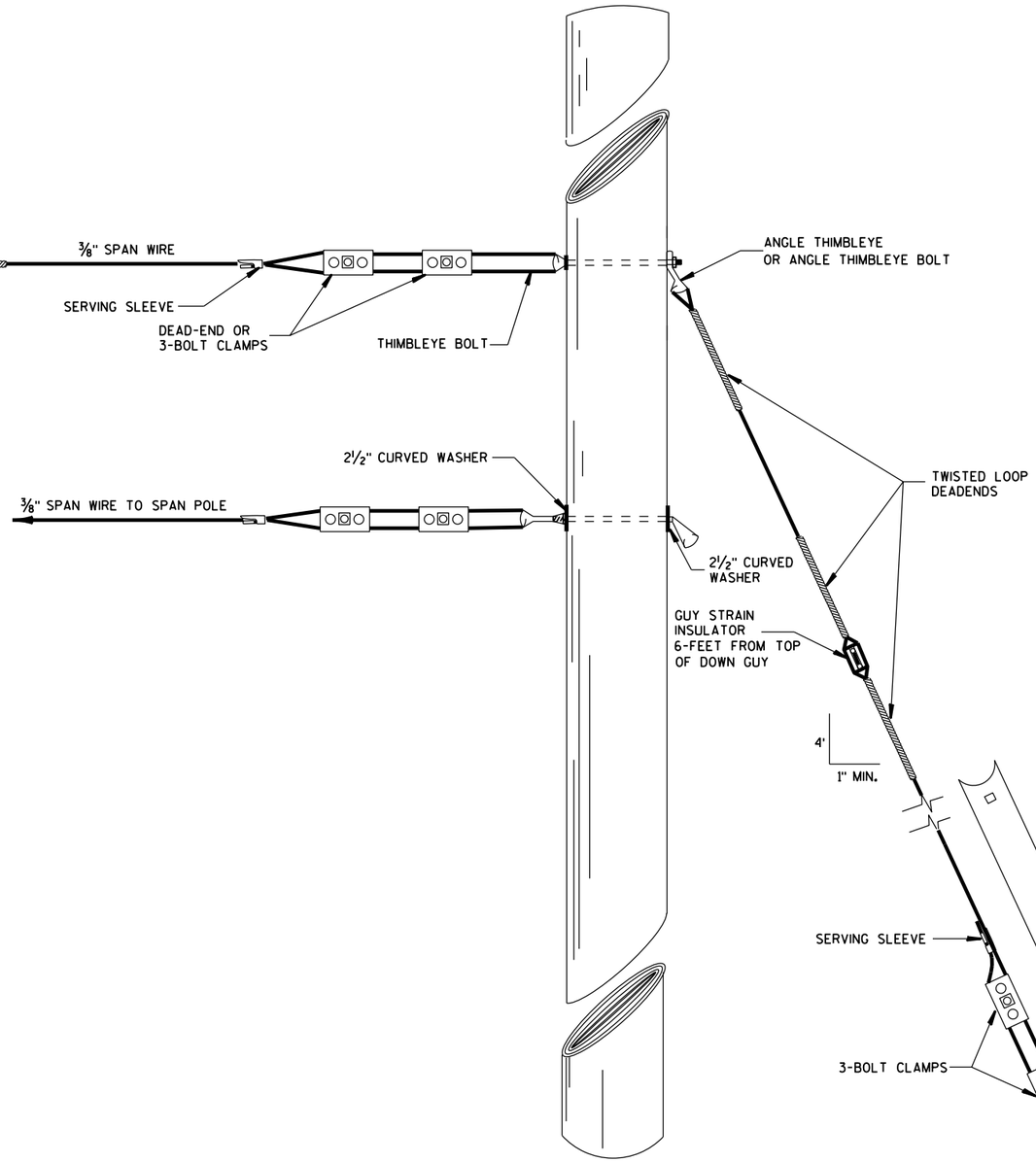
S.D.D. 9 G 1-4d

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



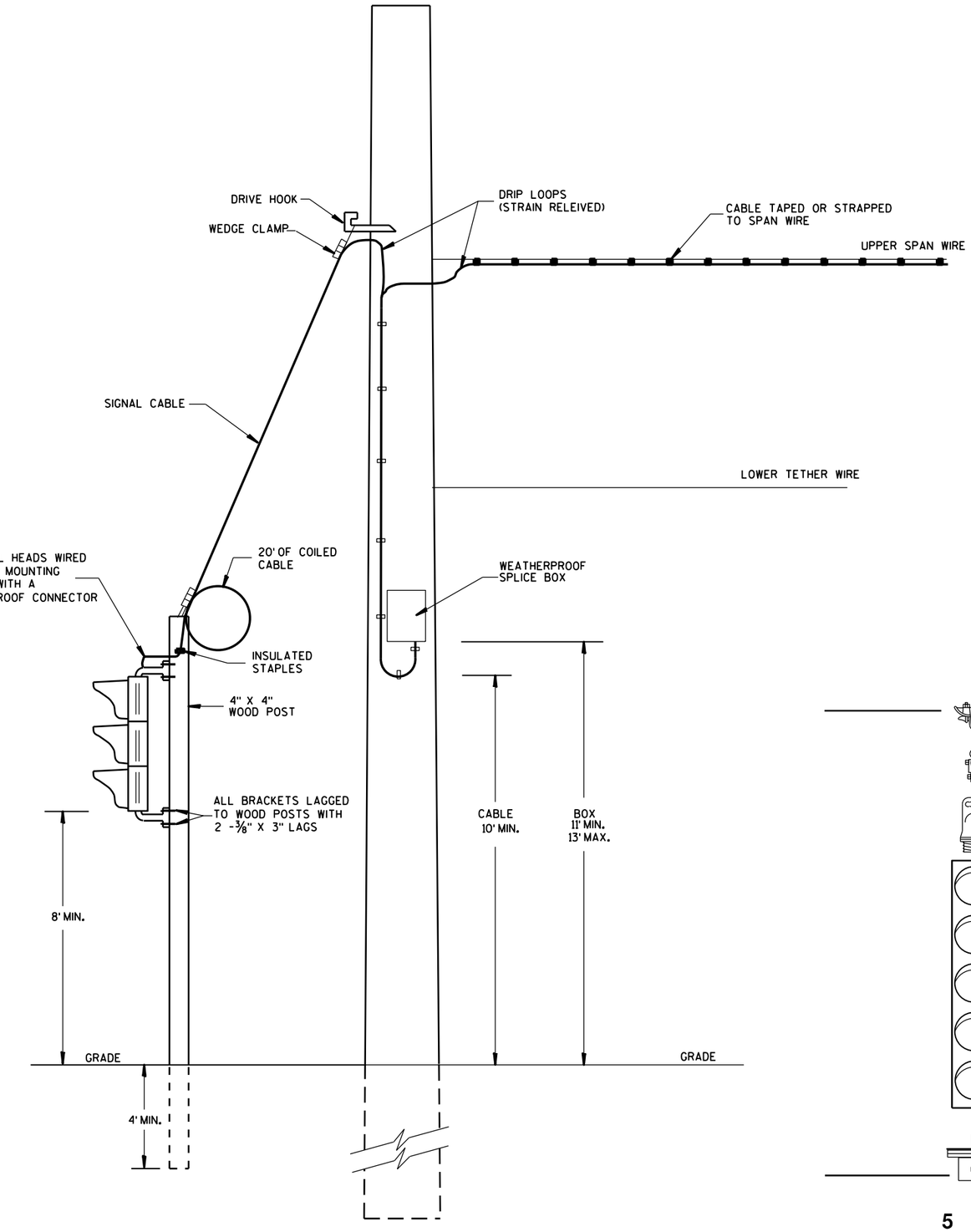
SPAN WIRE POLE



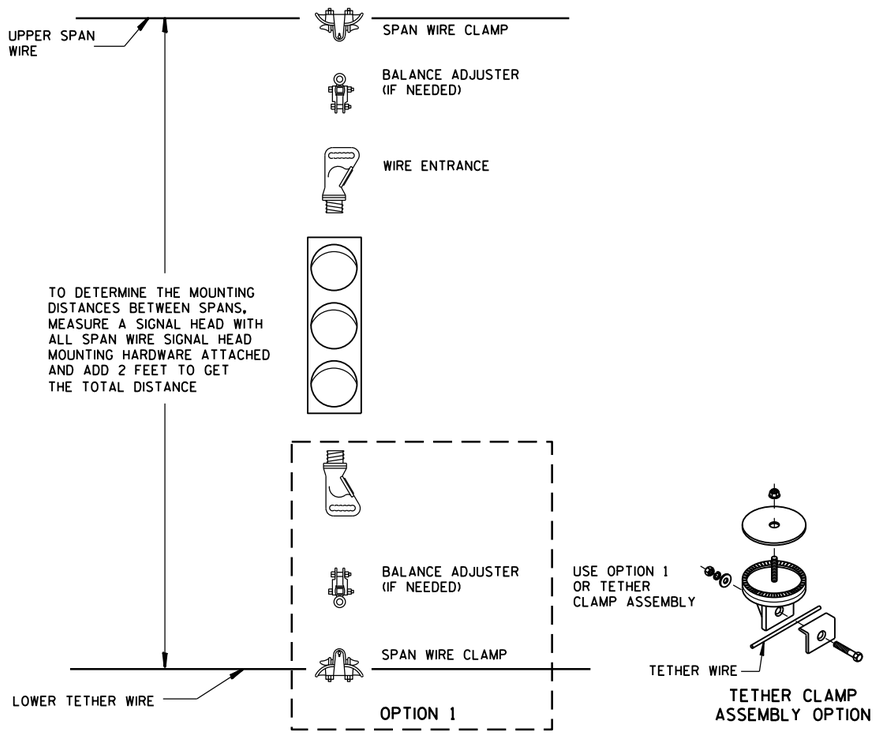
GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE TEMPORARY TRAFFIC SIGNAL
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED June. 2015 DATE /S/ Ahmet Demirbilek STATE ELECTRICAL FHWA

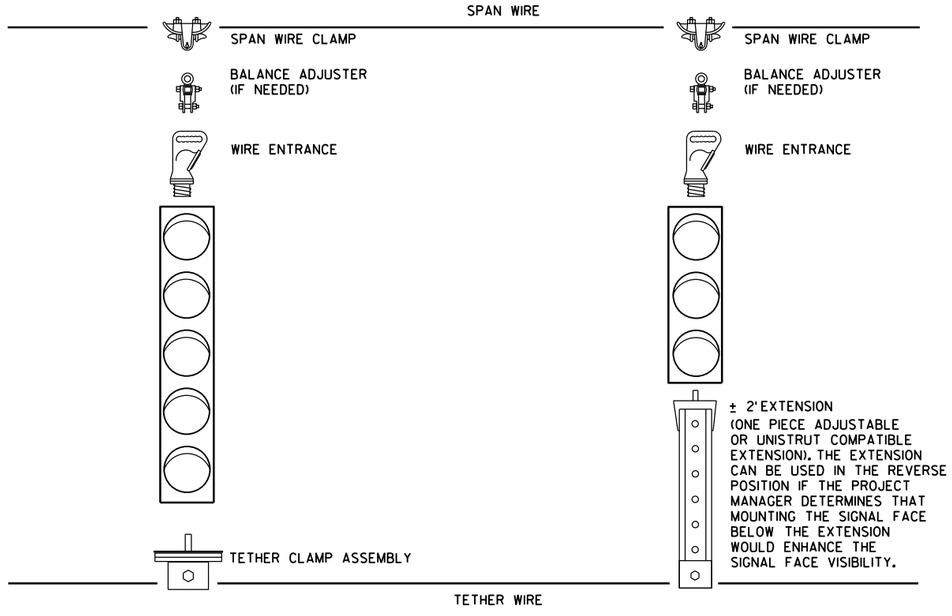


TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TETHER CLAMP ASSEMBLY OPTION

TYPICAL SPAN WIRE MOUNTING HARDWARE



5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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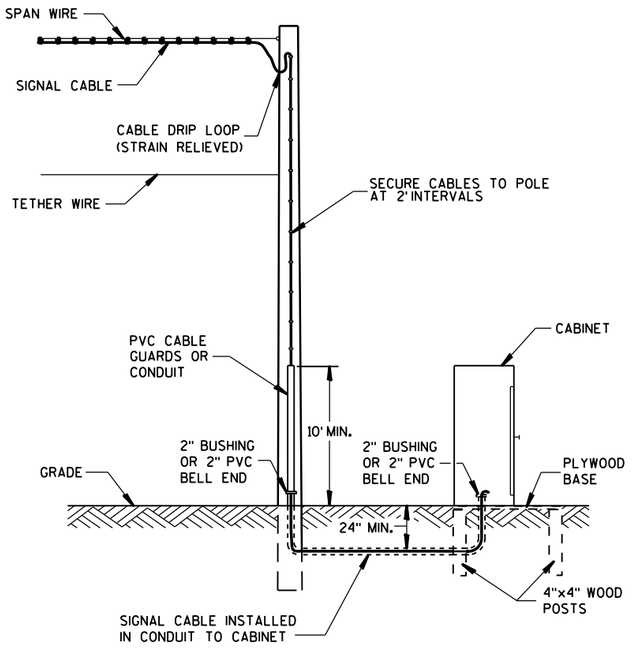
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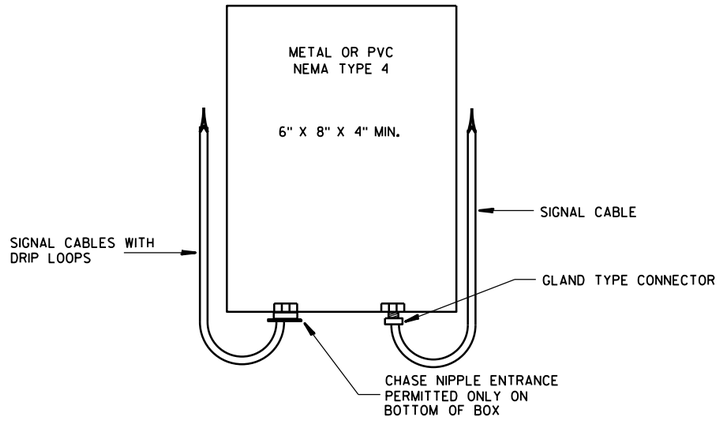
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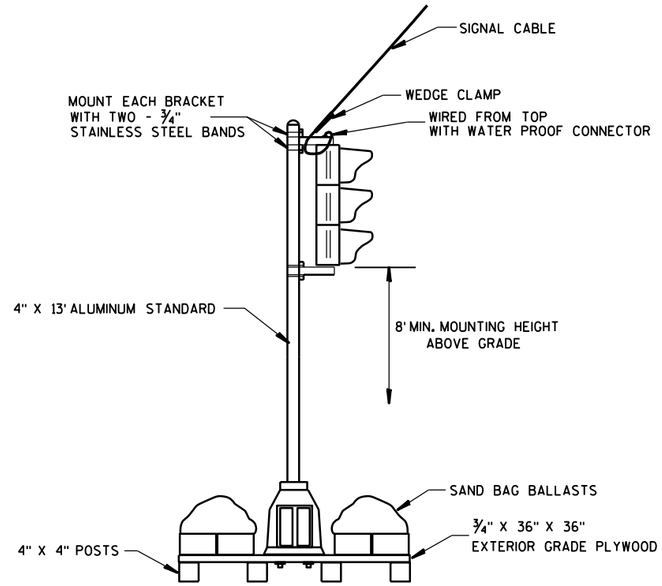
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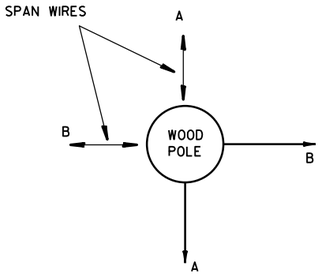




SPLICE BOX

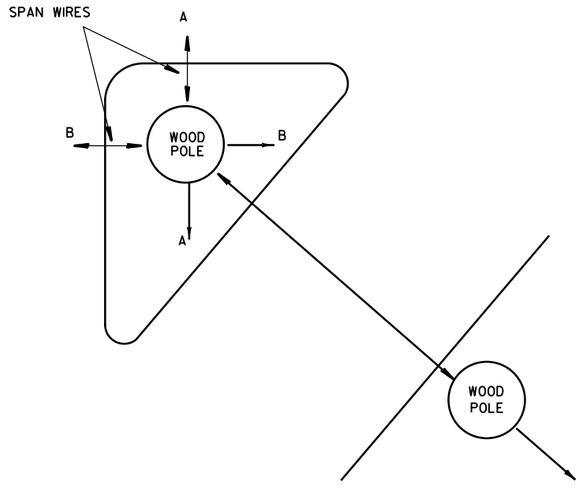


TYPICAL SKID TYPE TEMPORARY

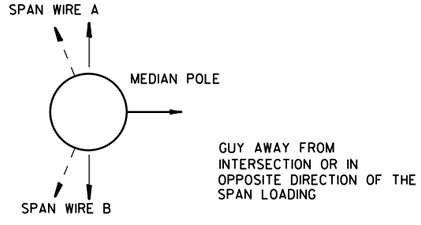


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

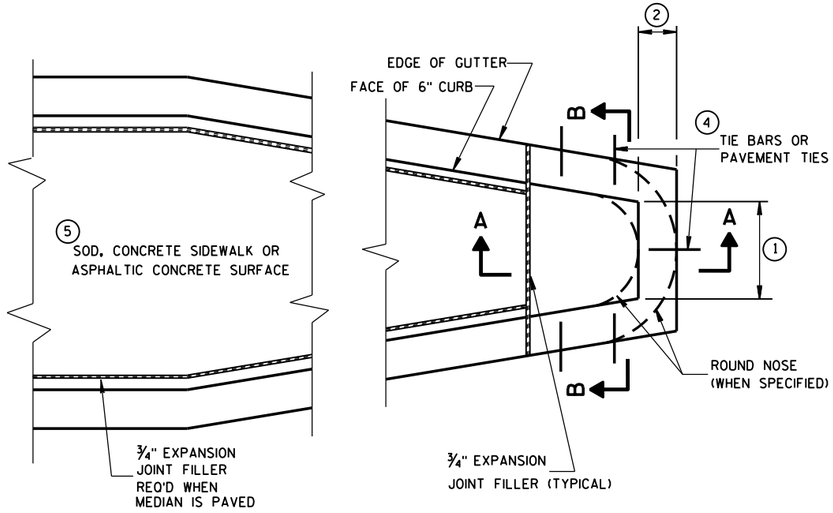
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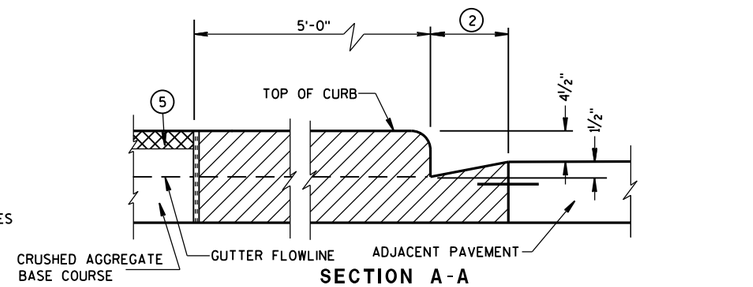
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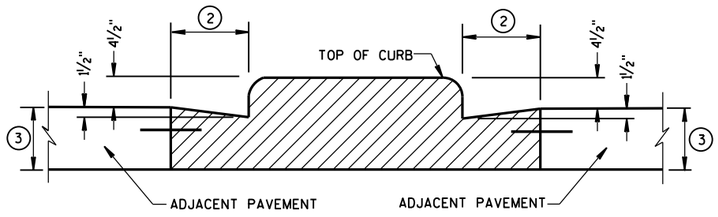
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CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

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

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

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

(1) NEW OR EXISTING CONCRETE PAVEMENT.

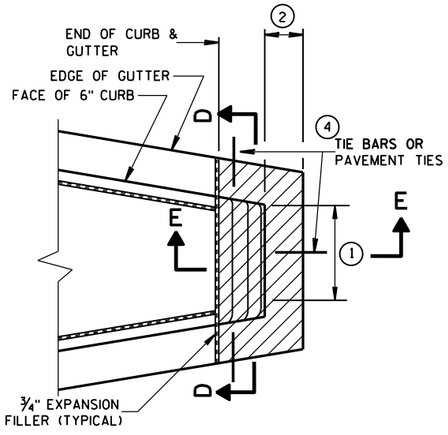
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

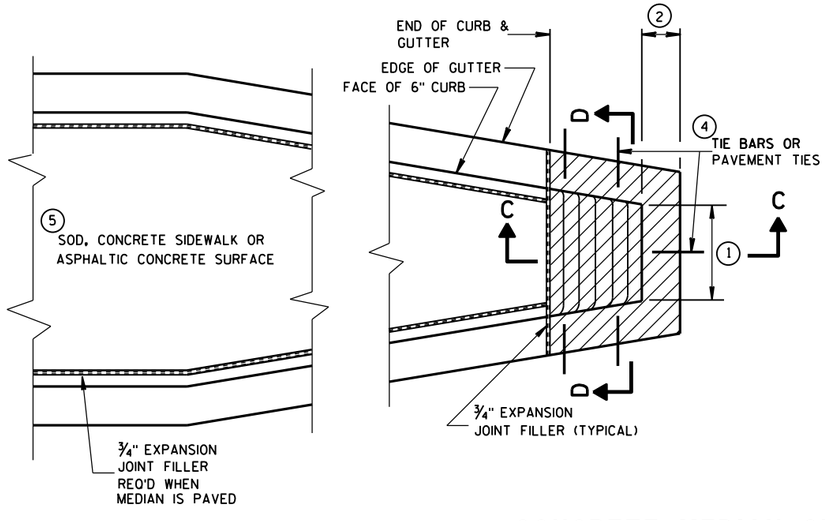
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

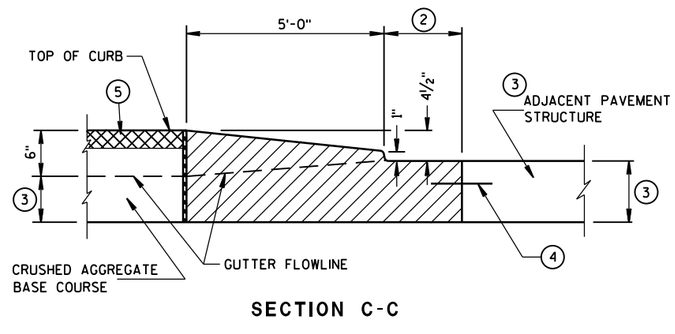
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

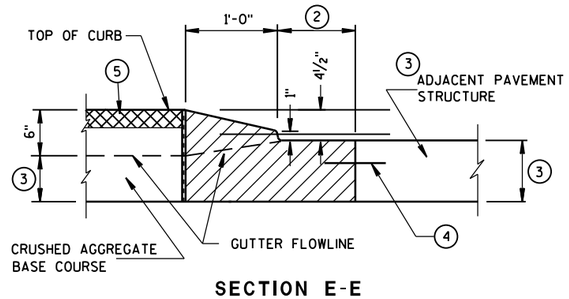
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

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



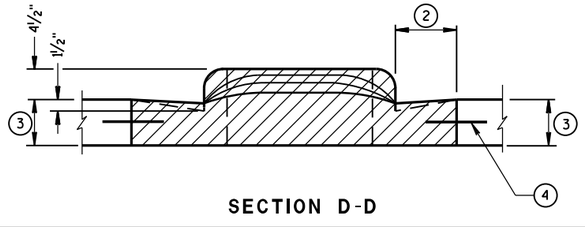






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER

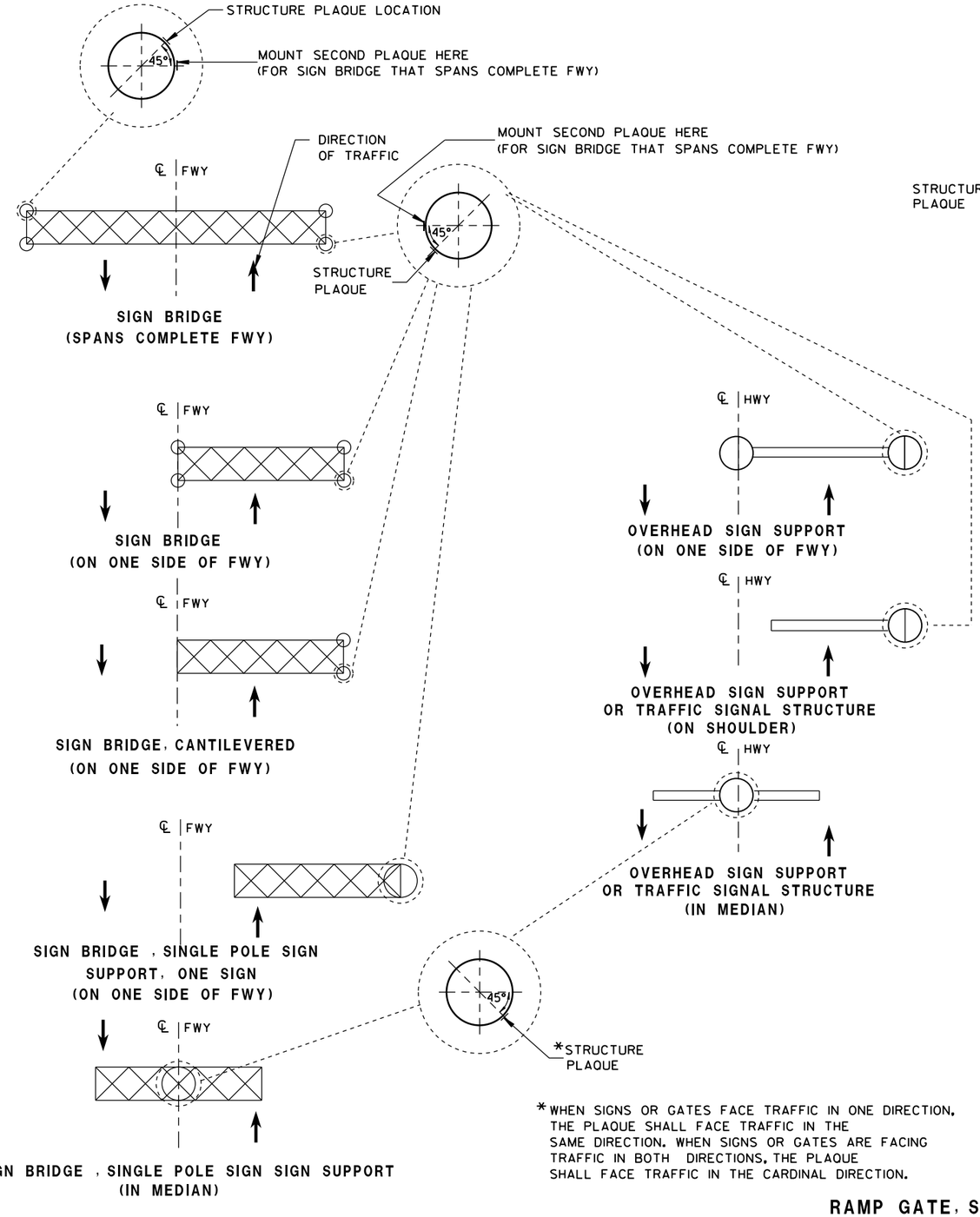
FHWA

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S.D.D. 11 B 2-2

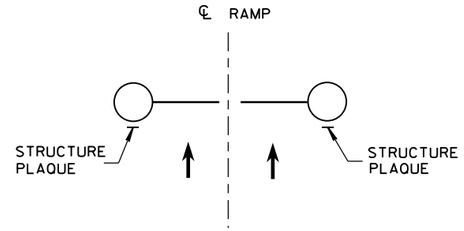
6

S.D.D. 11 B 2-2

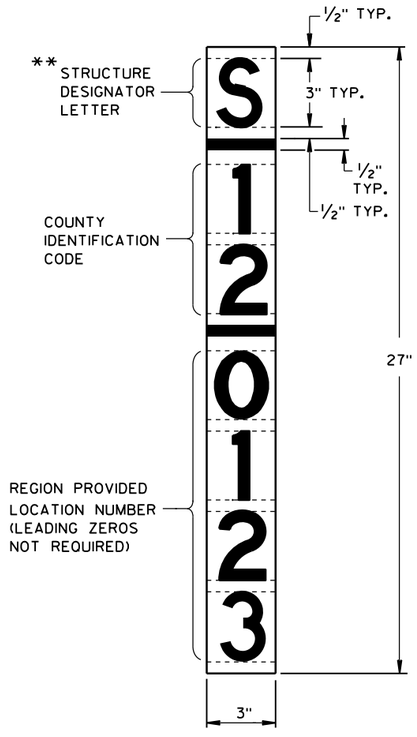


LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

*WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

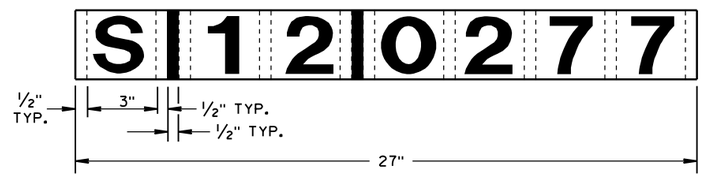
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

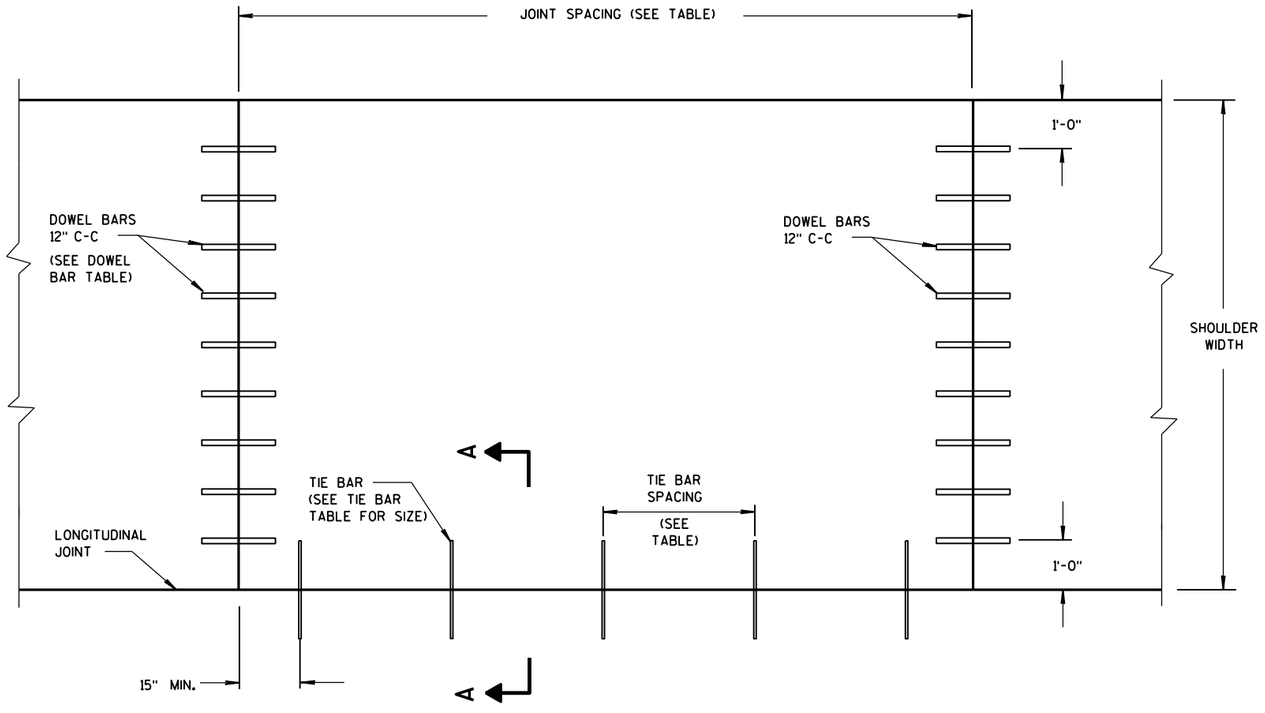
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

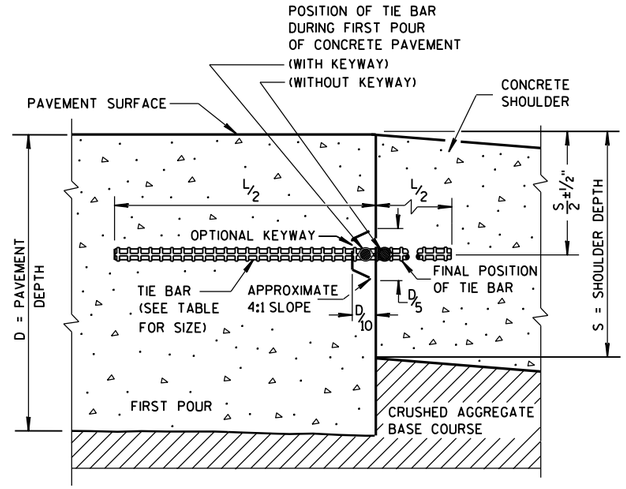
GENERAL NOTES

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.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

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

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

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

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

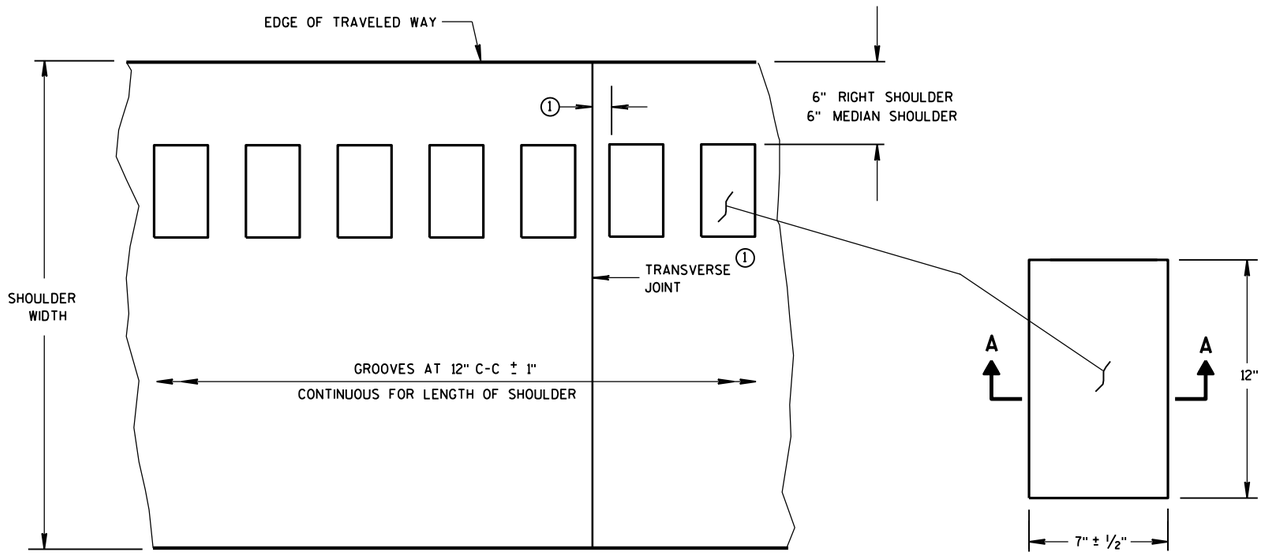
APPROVED
June. 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPER
FHWA

6

S.D.D. 13 A 3-6

6

S.D.D. 13 A 3-6



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

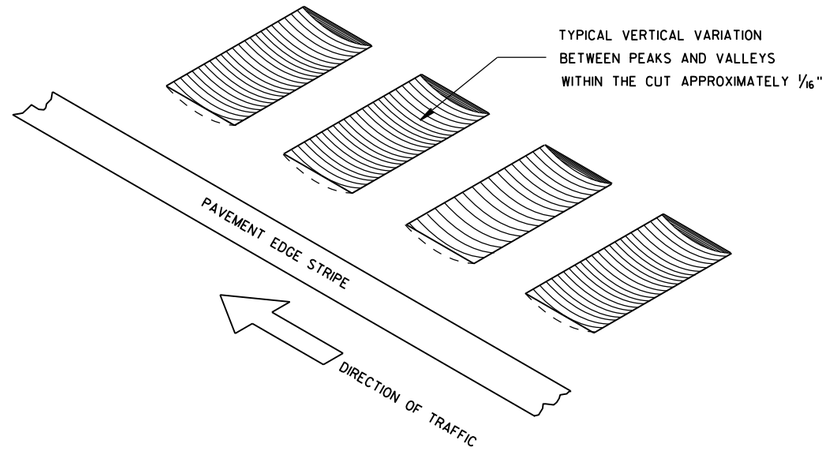
GENERAL NOTES

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

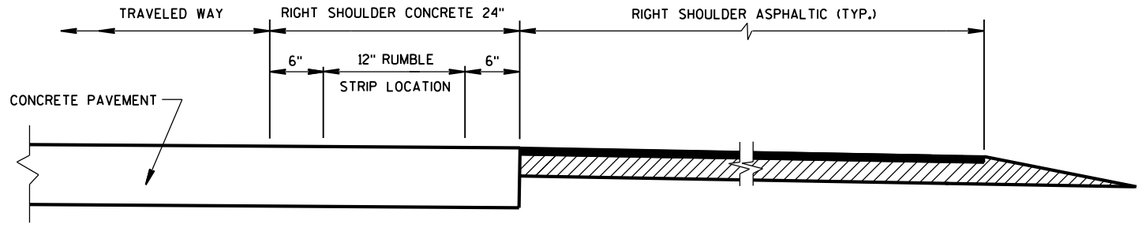
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

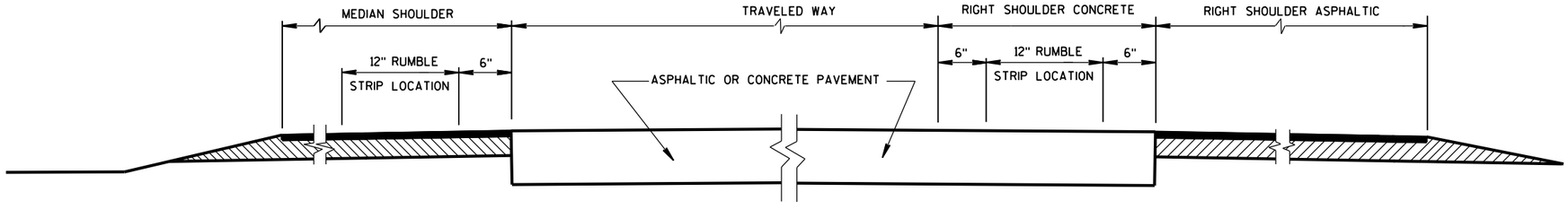
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



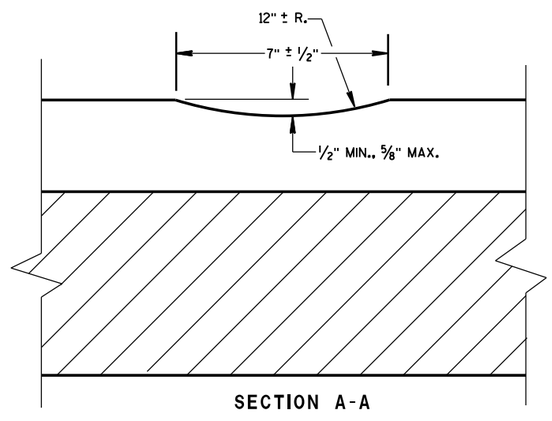
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

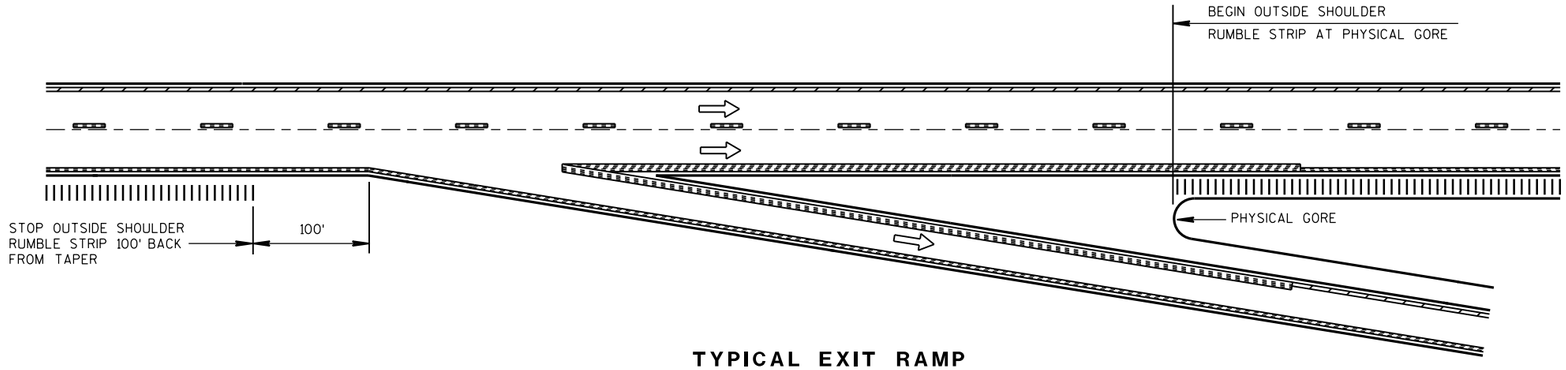
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



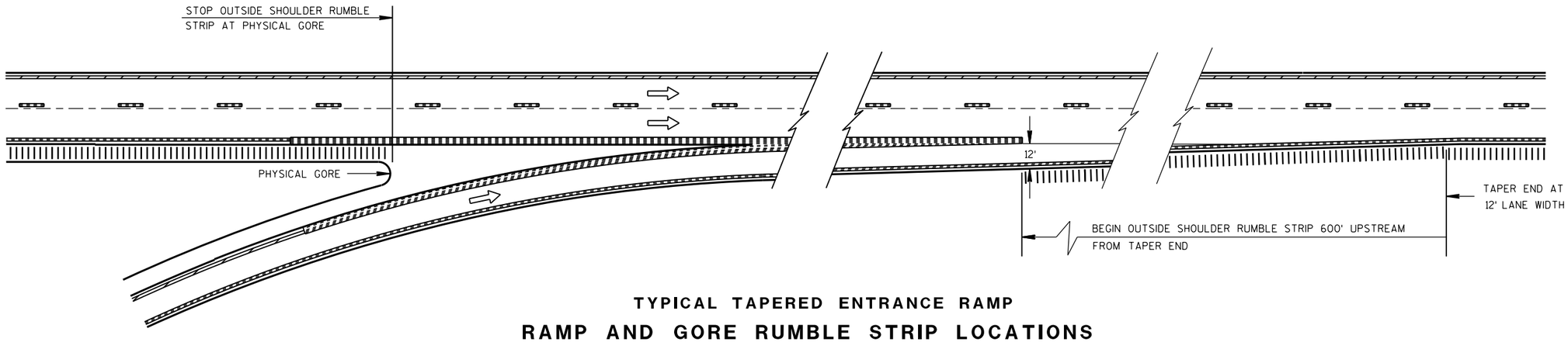
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

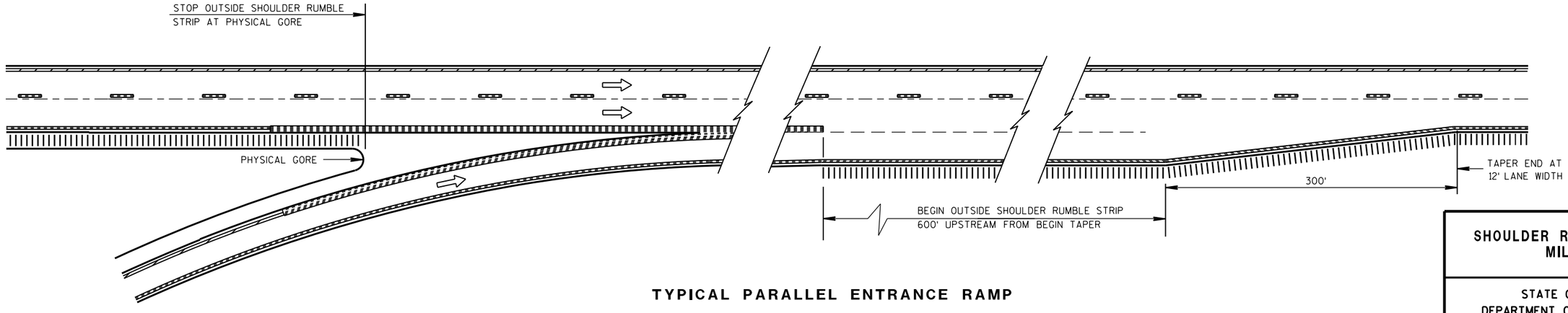
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

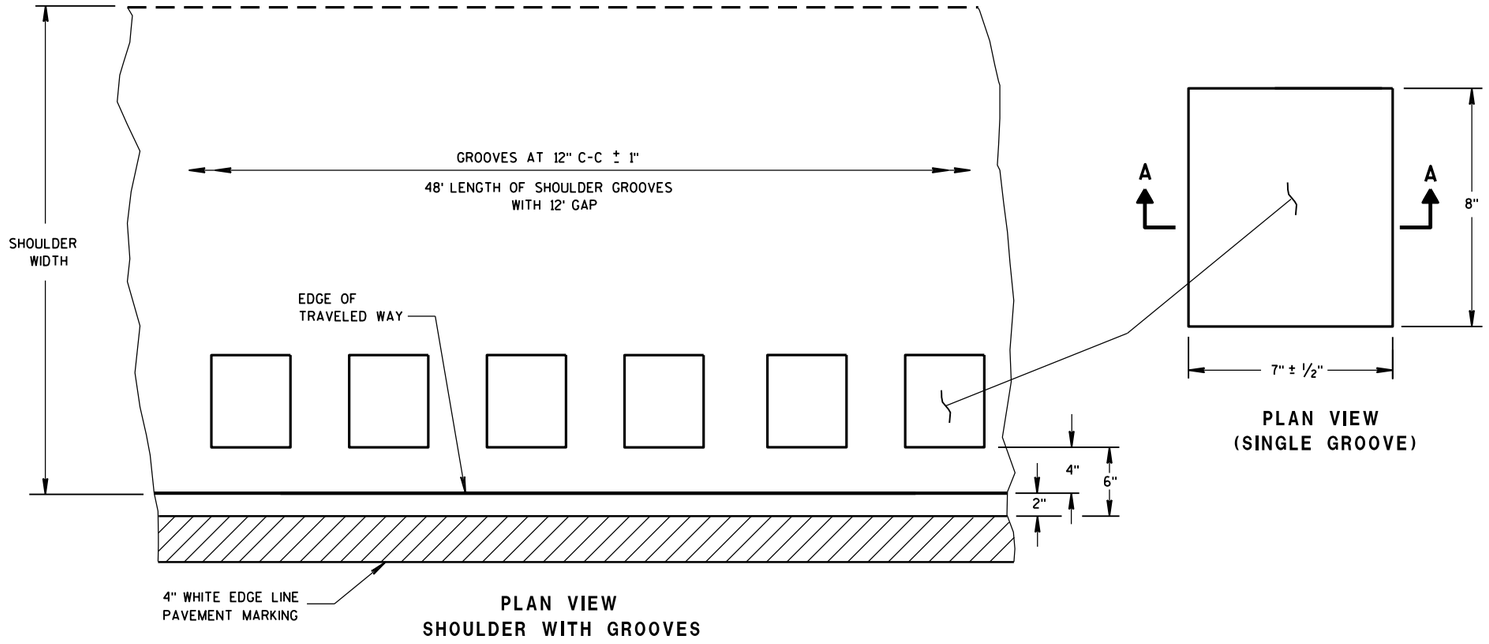
FHWA

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S.D.D. 13 A 5-5b

6

S.D.D. 13 A 5-5b



PLAN VIEW
SHOULDER WITH GROOVES

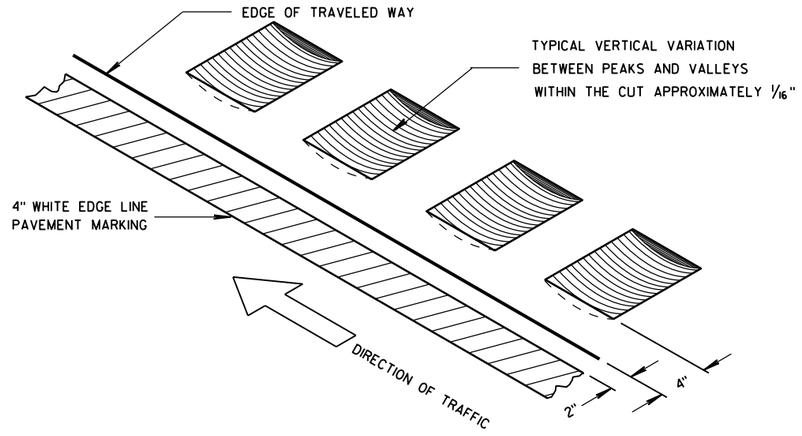
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

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

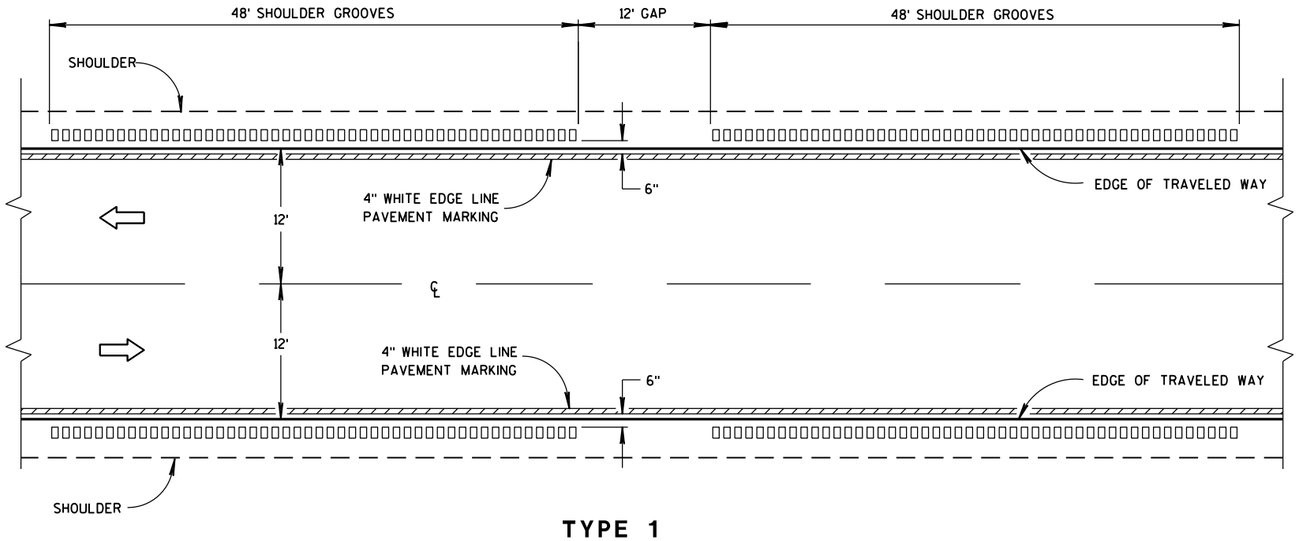
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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

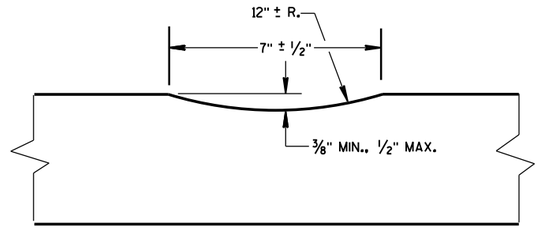


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2-LANE SHOULDER RUMBLE STRIP



SECTION A-A

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

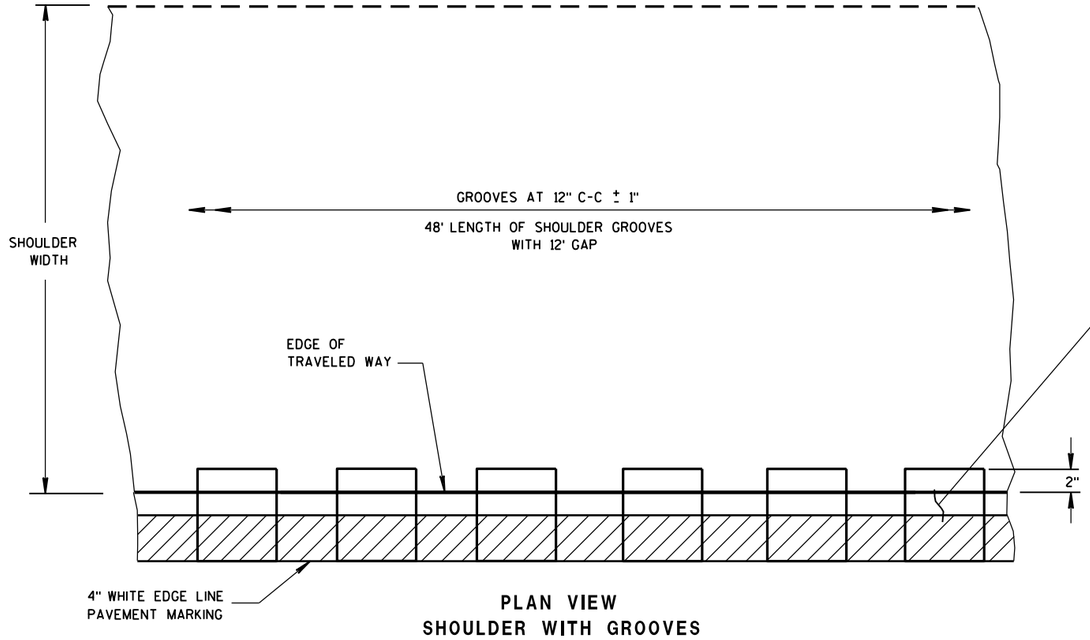
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

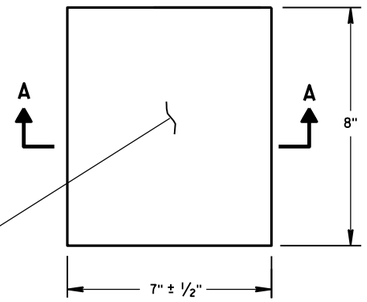
S.D.D. 13 A 10-1a

6

S.D.D. 13 A 10-1a



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

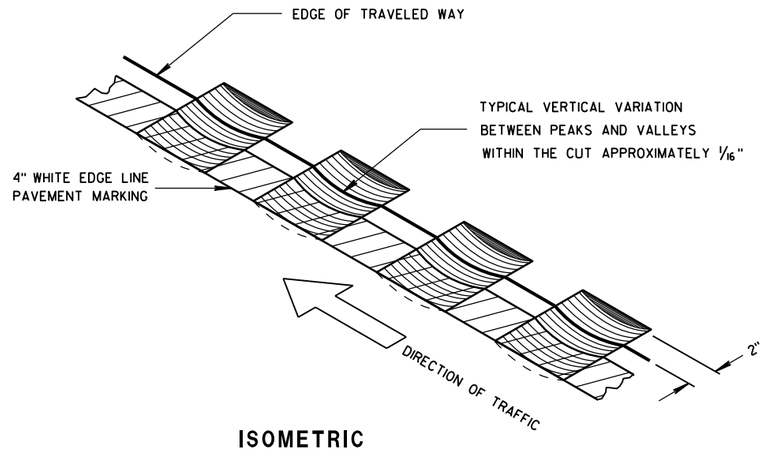
PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP

GENERAL NOTES

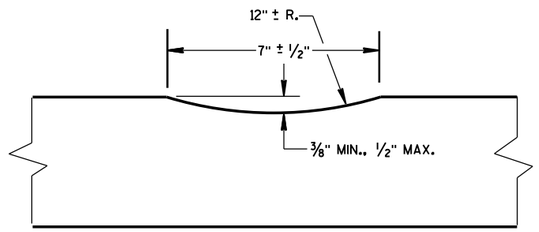
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

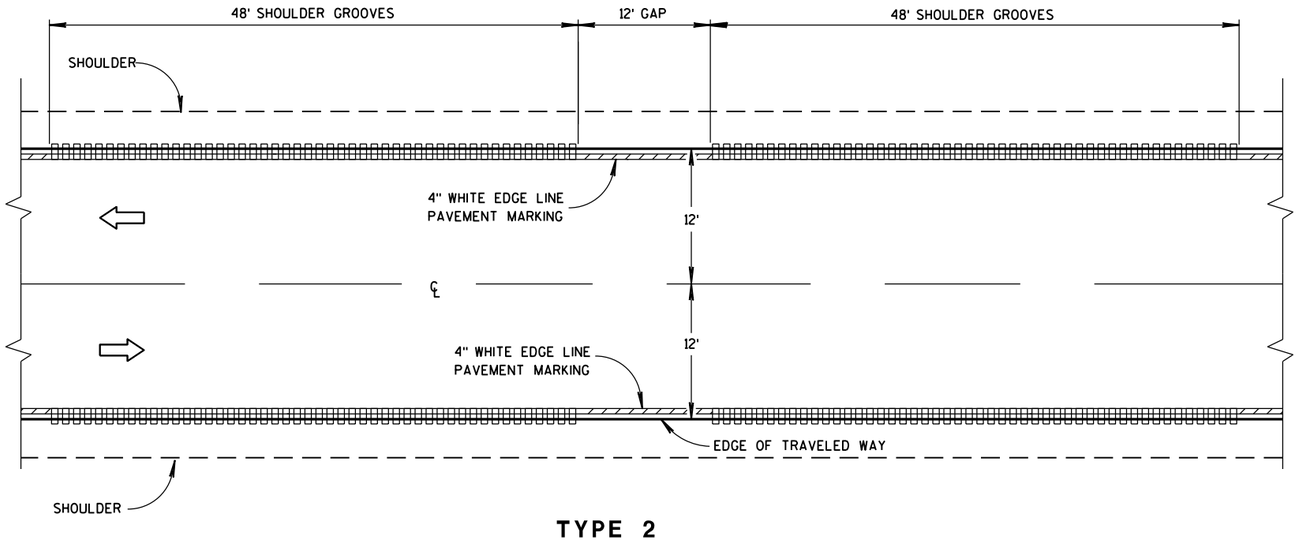
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



SECTION A-A



TYPE 2
2-LANE SHOULDER RUMBLE STRIP

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

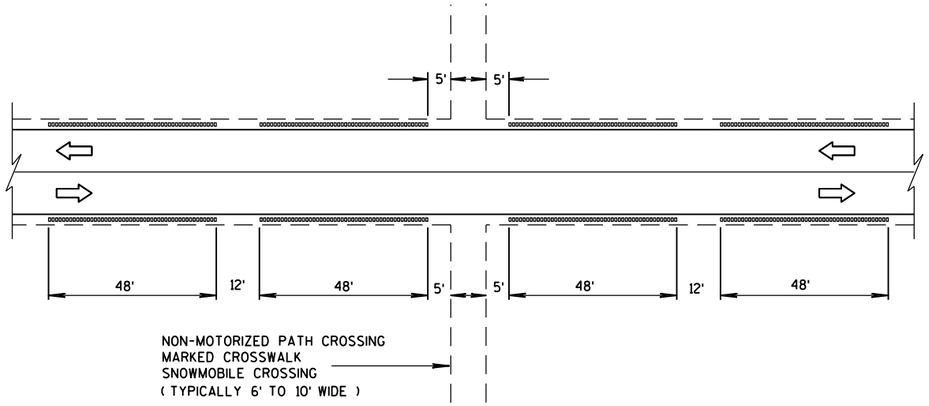
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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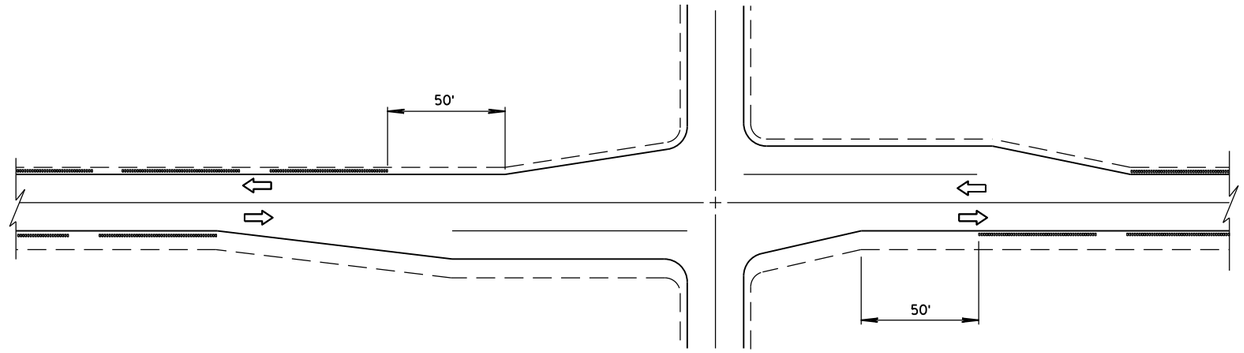
S.D.D. 13 A 10-1b

6

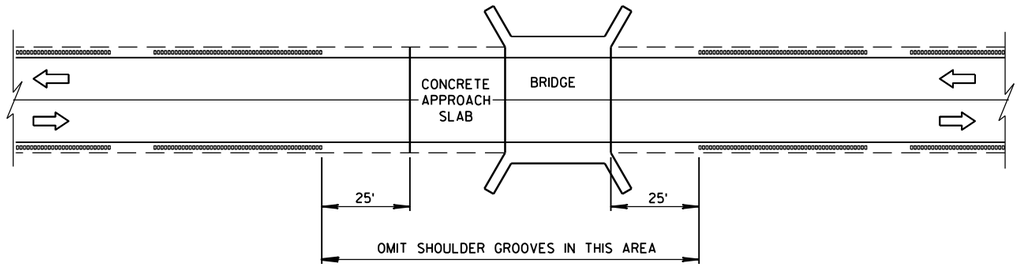
S.D.D. 13 A 10-1b



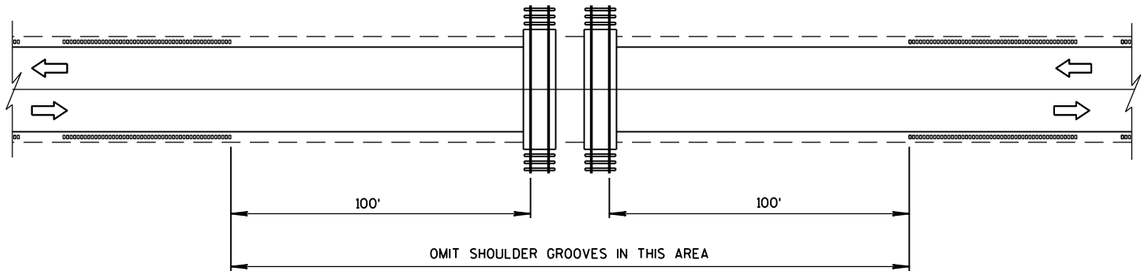
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



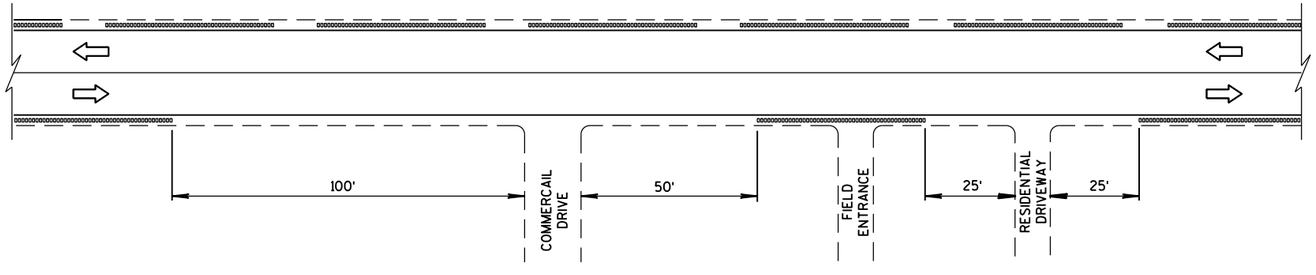
SHOULDER GROOVES AT INTERSECTIONS



SHOULDER GROOVES AT BRIDGES



SHOULDER GROOVES AT RAILROADS

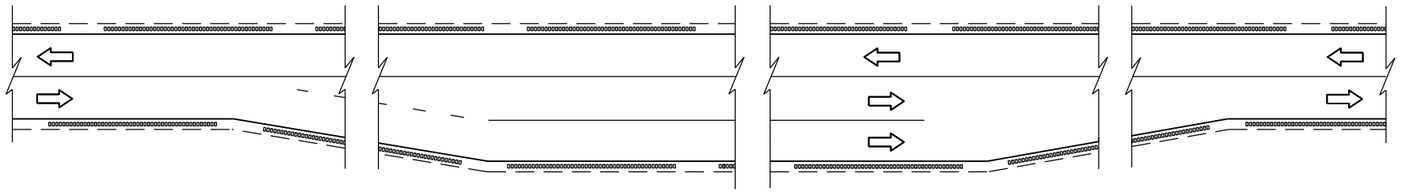


SHOULDER GROOVES AT DRIVEWAYS (1)

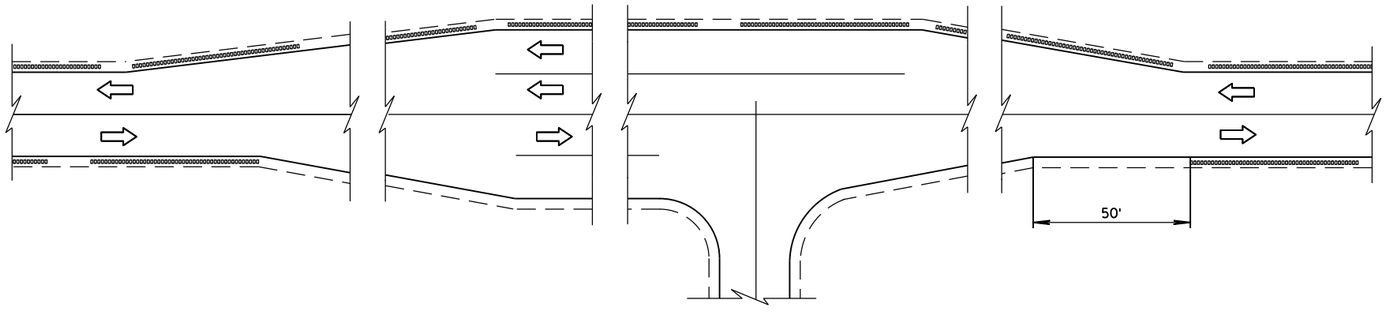
2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 13 A 10-1c



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

S.D.D. 13 A 10-1d

S.D.D. 13 A 10-1d

2-LANE RURAL
SHOULDER RUMBLE STRIP, MILLING

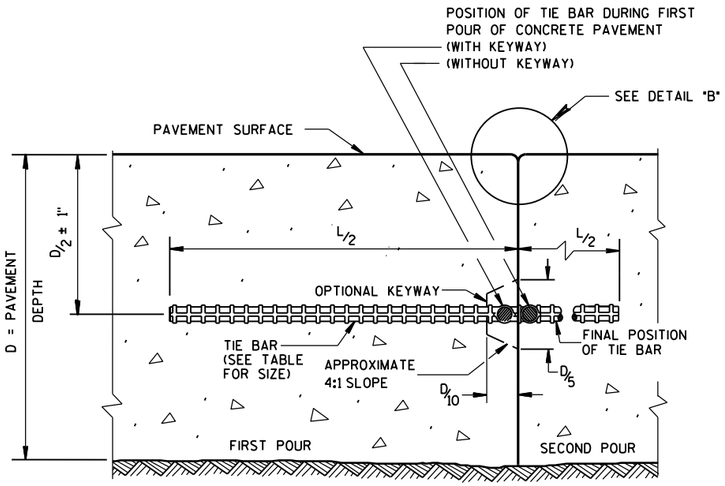
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

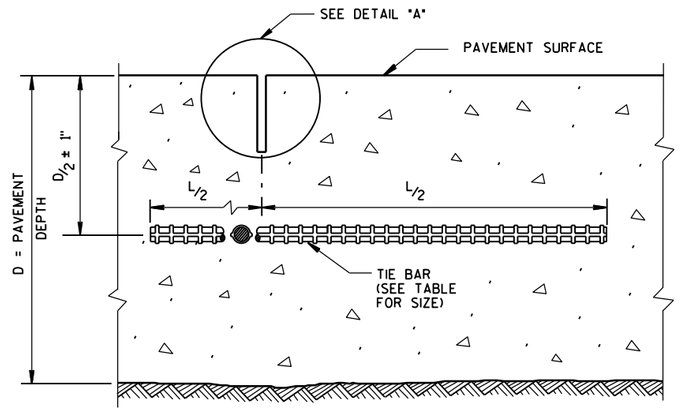
12/17/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

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

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

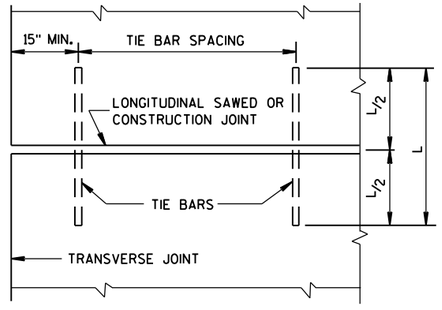
DETAIL "C"

TIE BAR TABLE

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

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

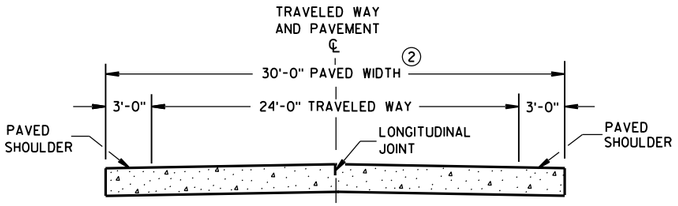
CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

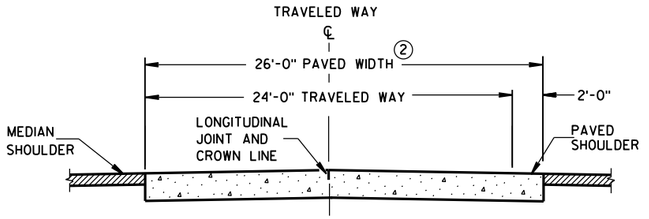
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S.D.D. 13 C 1-18

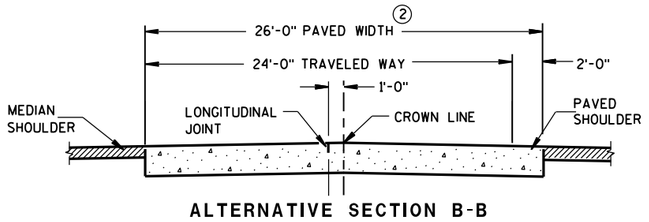


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B ①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

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

DO NOT SEAL OR FILL CONTRACTION JOINTS.

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

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

CONSTRUCTION JOINTS

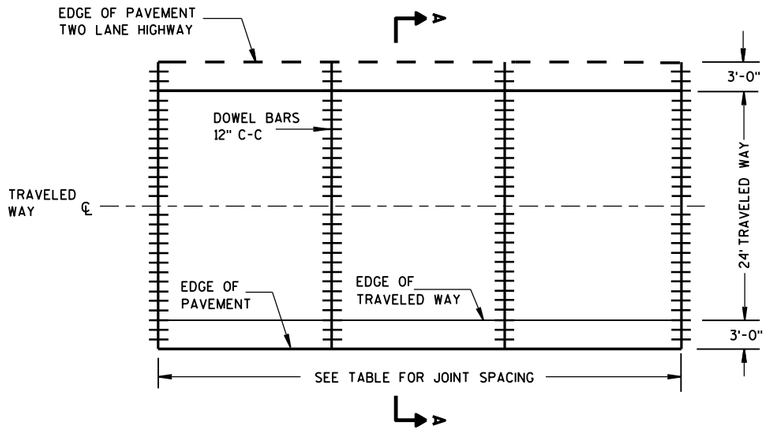
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

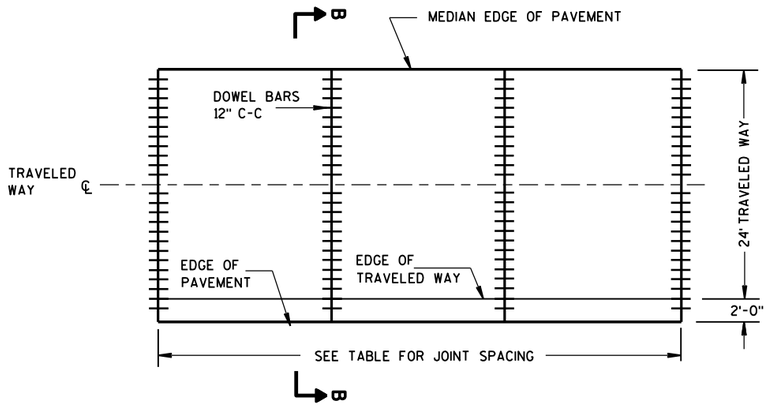
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



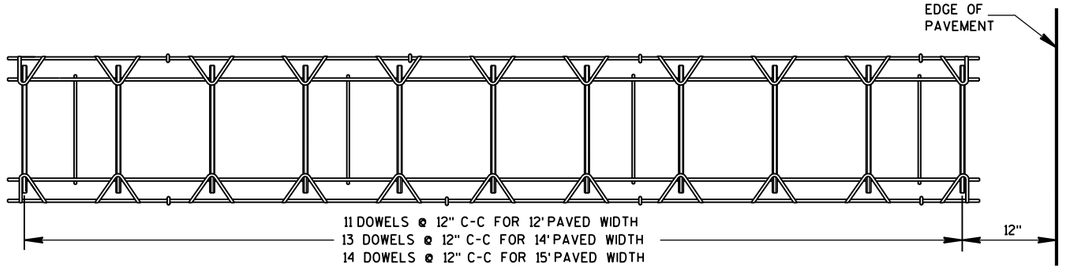
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

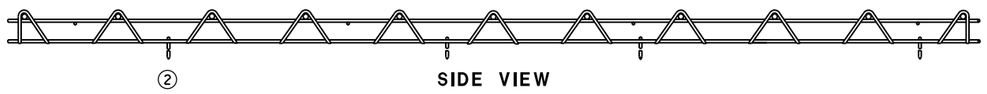
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 C 11-11a



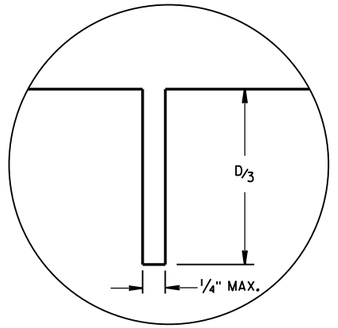
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

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

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

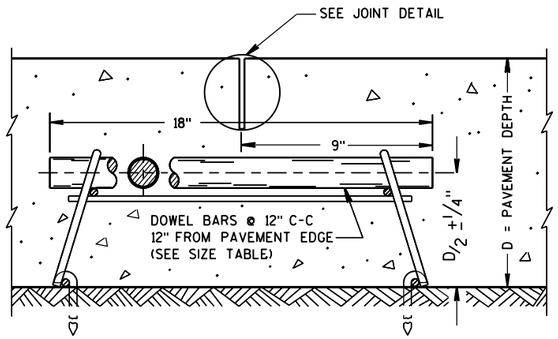
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

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

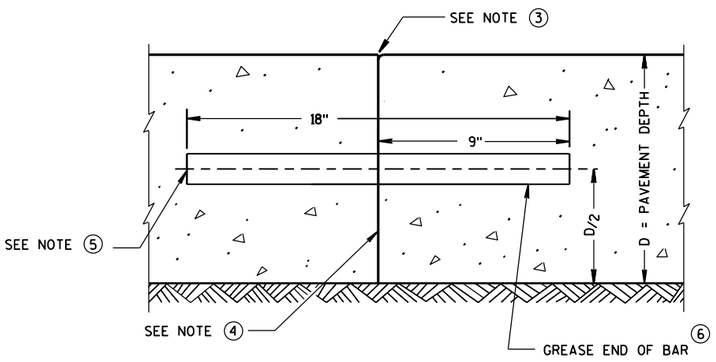
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL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

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

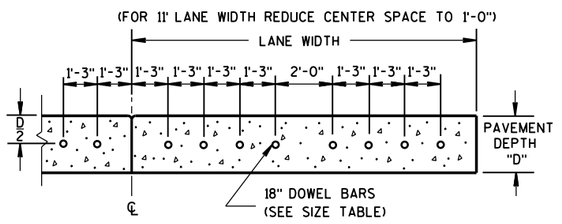
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/3/2013
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DE ENGINEER

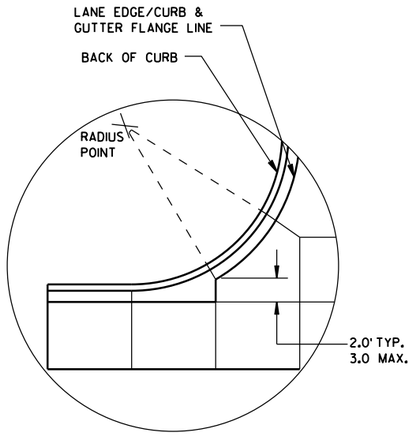
FHWA

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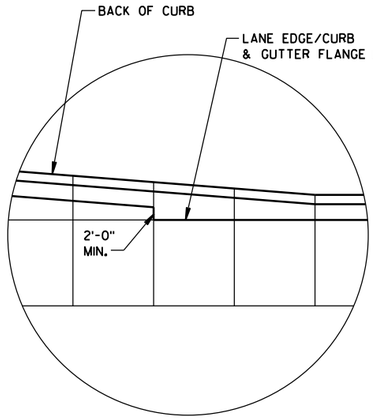
S.D.D. 13 C 11-11b

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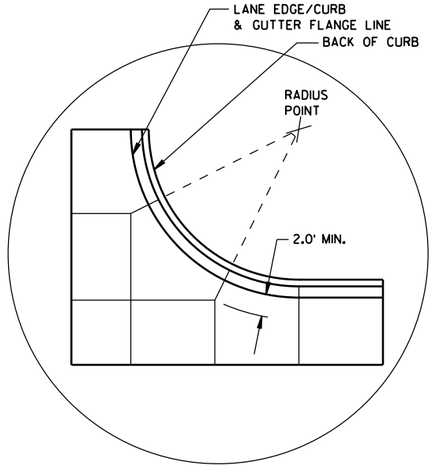
S.D.D. 13 C 11-11b



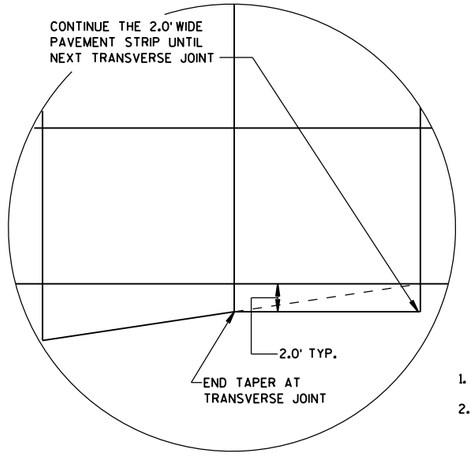
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

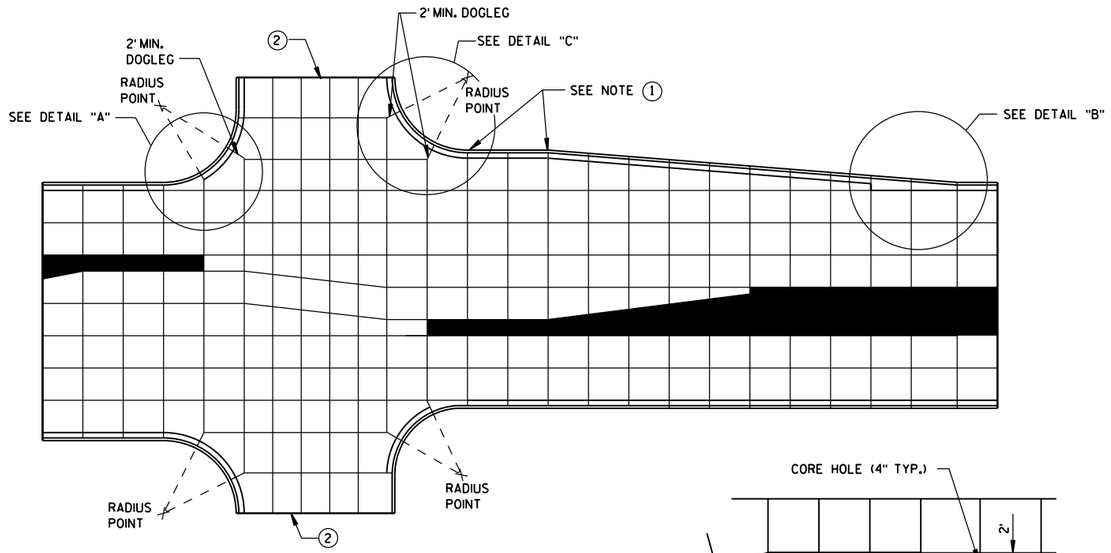
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

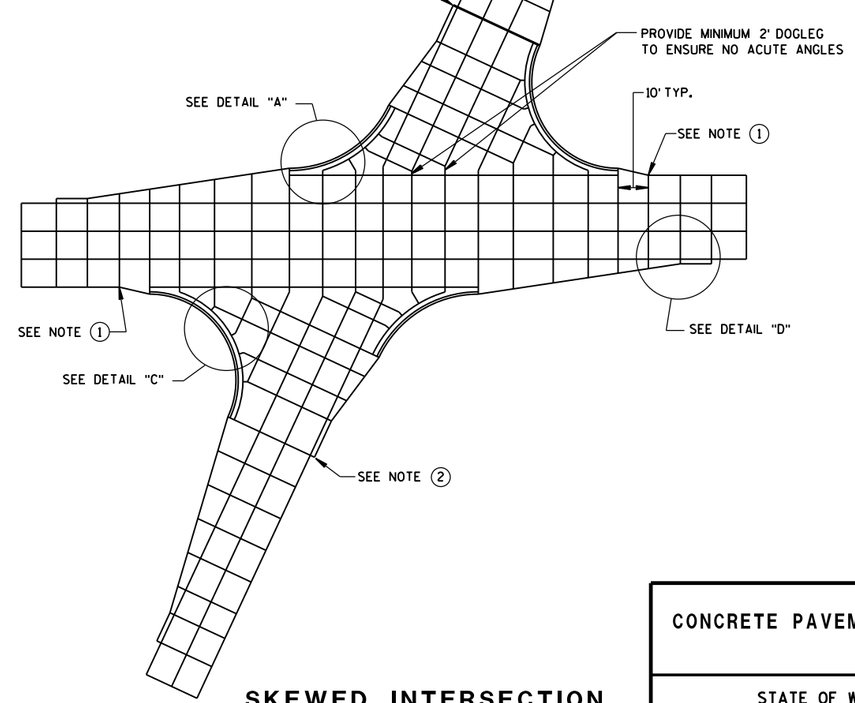
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



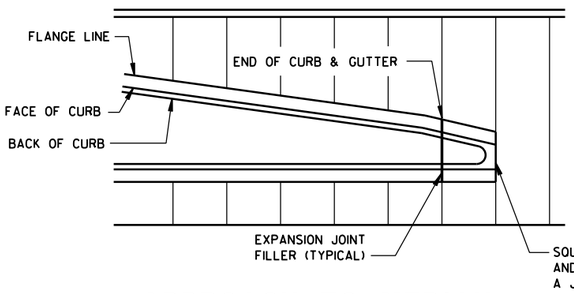
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

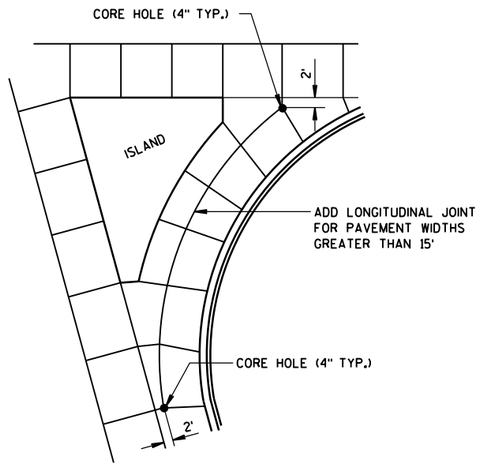
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 224

6

S.D.D. 13 C 18-5a

6

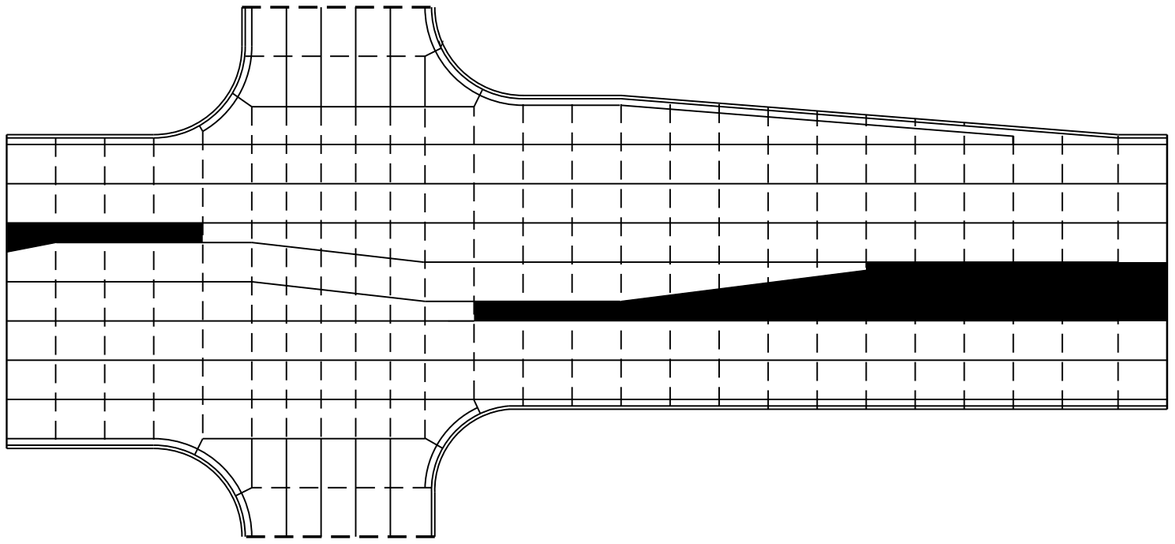
S.D.D. 13 C 18-5a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

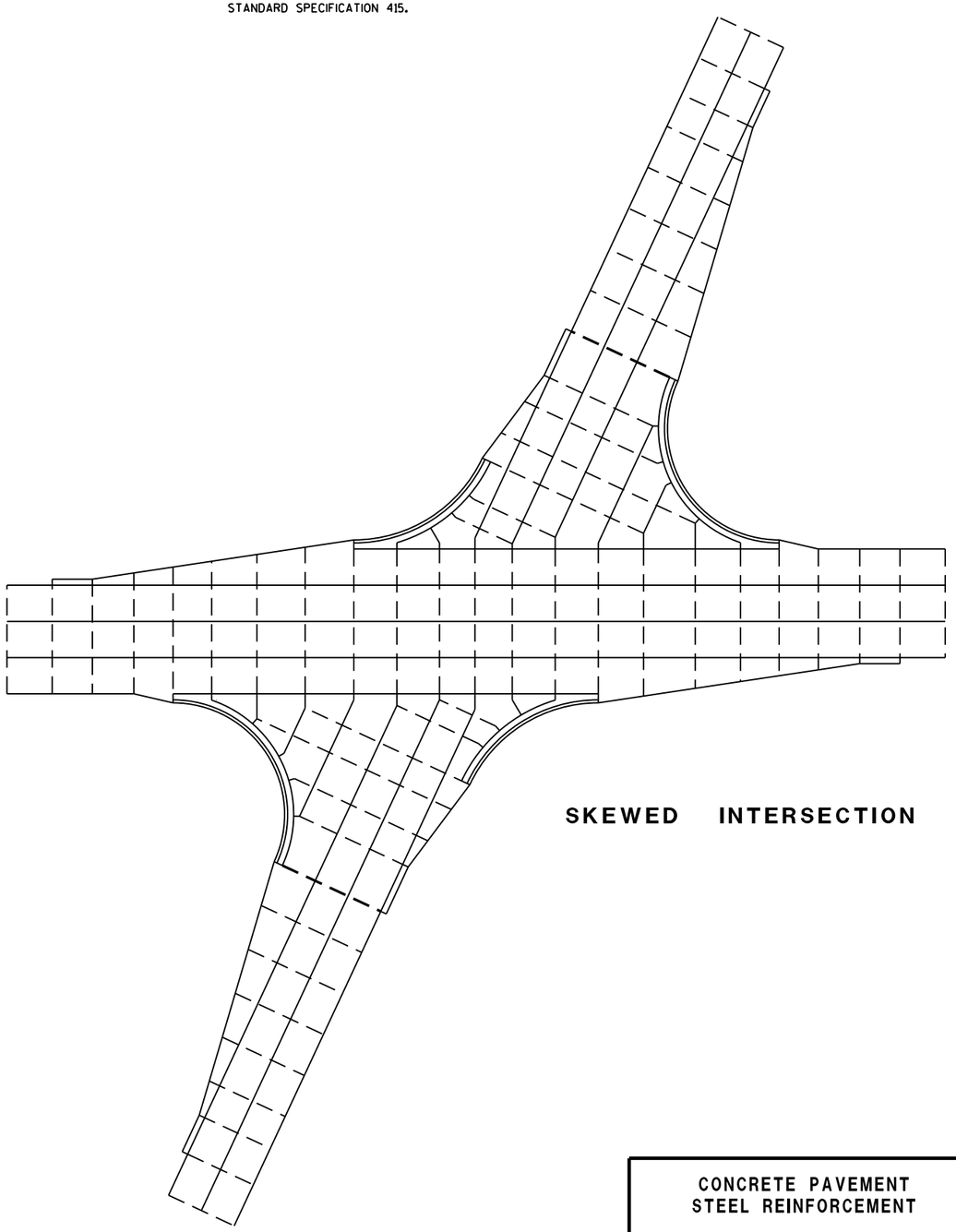
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

6

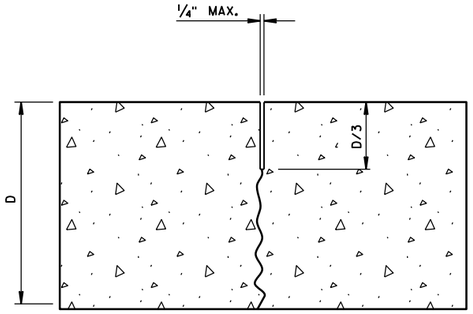
S.D.D. 13 C 18-5b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

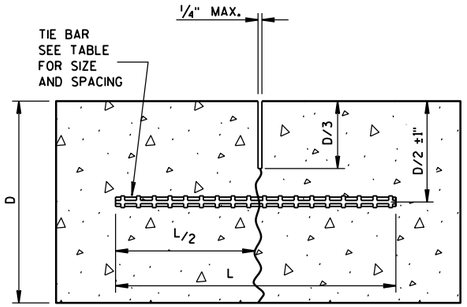
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 C 18-5b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

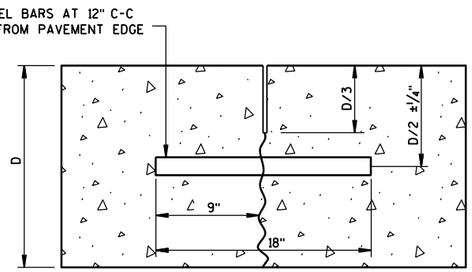
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

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

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

GENERAL NOTES

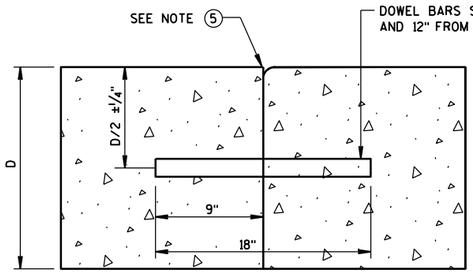
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF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



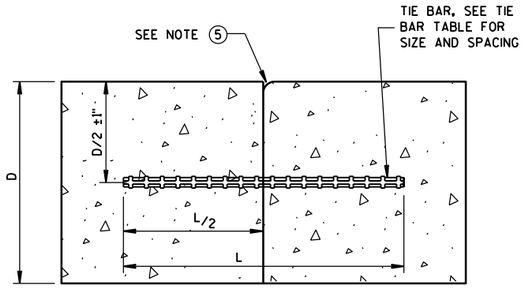
DOWELED-TRANSVERSE

CONTRACTION JOINTS

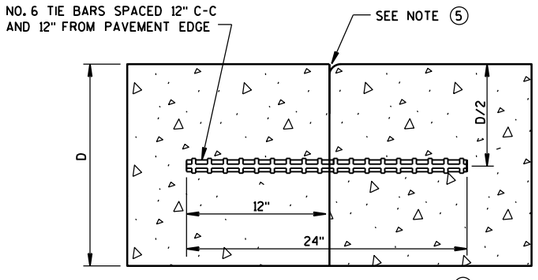
SEE NOTE (2)



DOWELED TRANSVERSE (3)

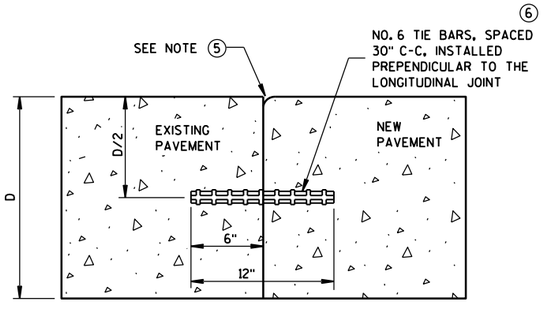


TIED LONGITUDINAL



TIED TRANSVERSE (3)

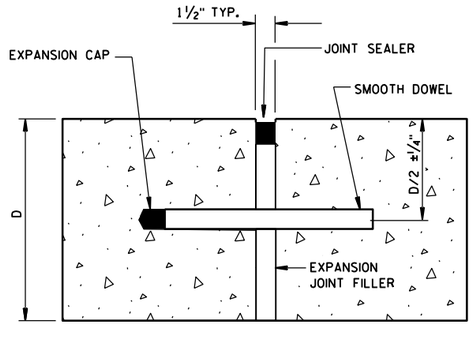
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

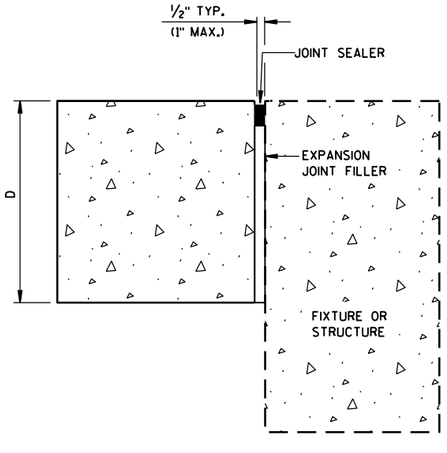
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

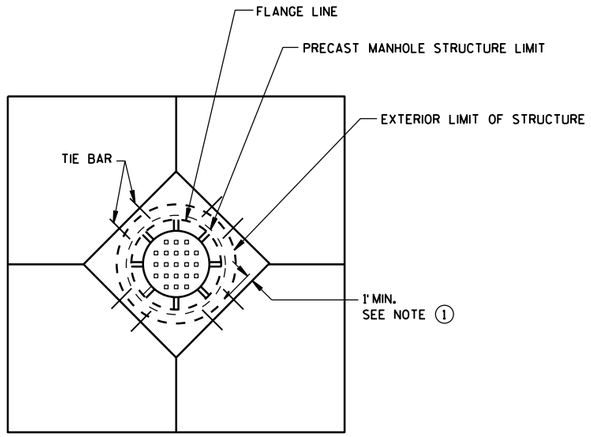
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

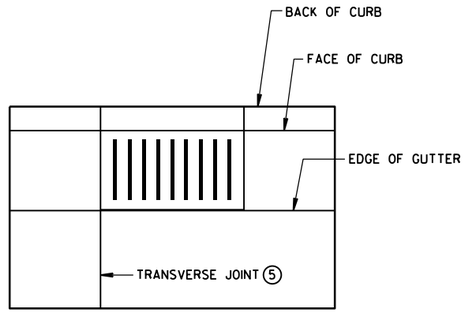
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

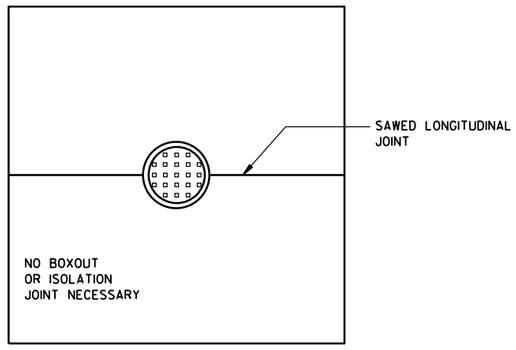
S.D.D. 13 C 18-5c



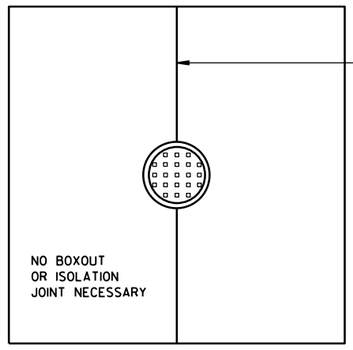
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



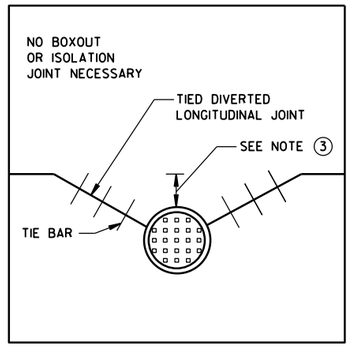
INLET WITH TRANSVERSE JOINT



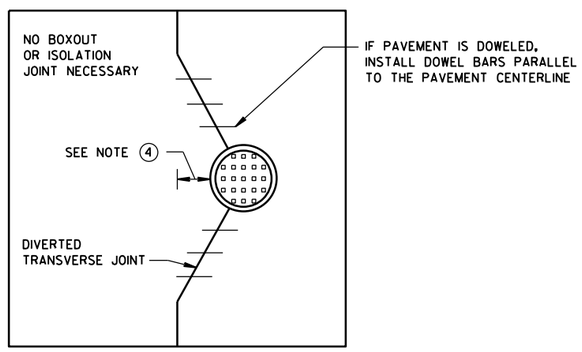
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

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

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

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

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

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

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — /S/ Peter Kemp, P.E.
DATE — PAVEMENT SUPEF
FHWA

6

S.D.D. 13 C 18-5d

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

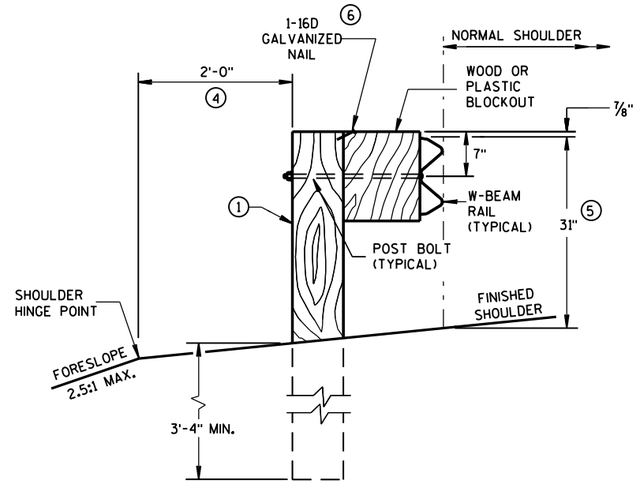
(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

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

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

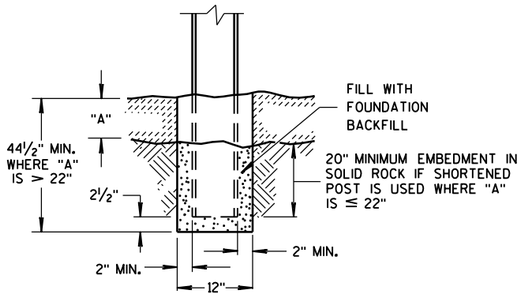
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".

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



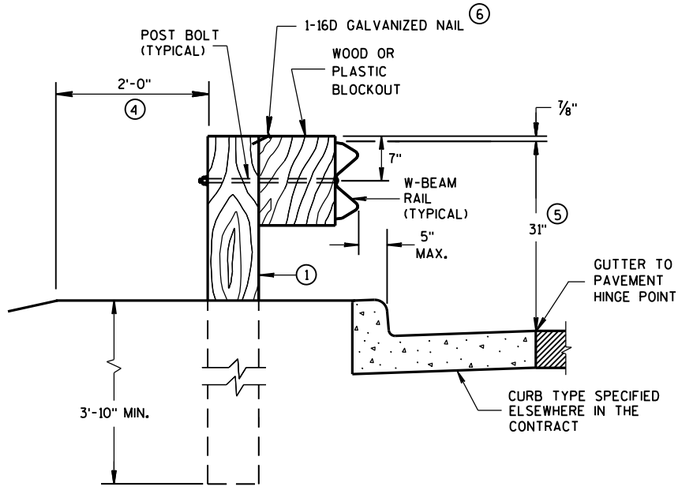
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



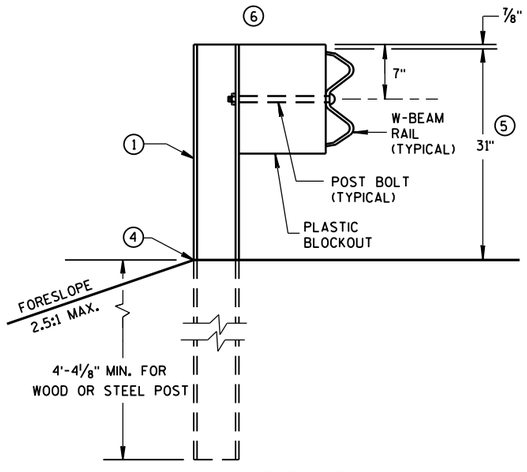
END VIEW

SETTING STEEL OR WOOD POST IN ROCK (3)



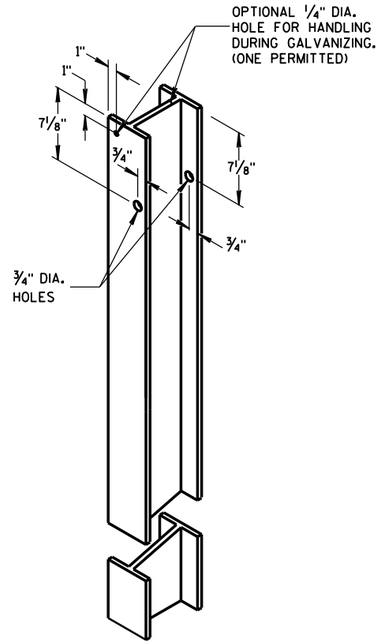
END VIEW

LOCATED ALONG A CURBED ROADWAY

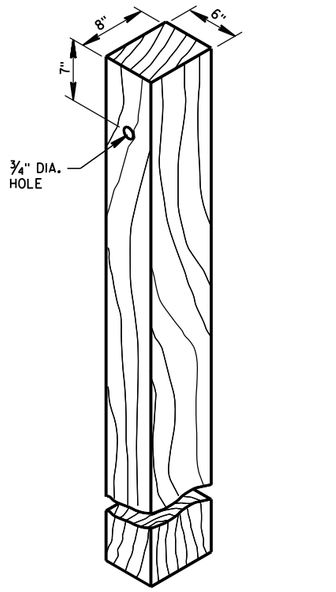


END VIEW

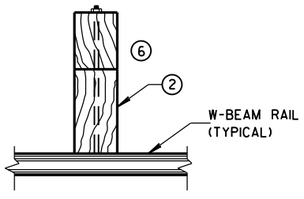
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



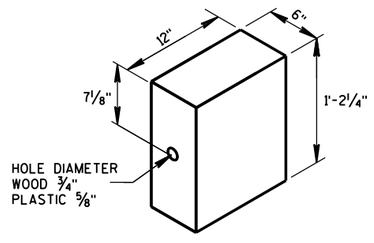
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)



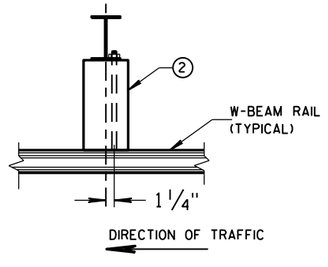
WOOD POST
(6" X 8") NOMINAL (1)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT (2)



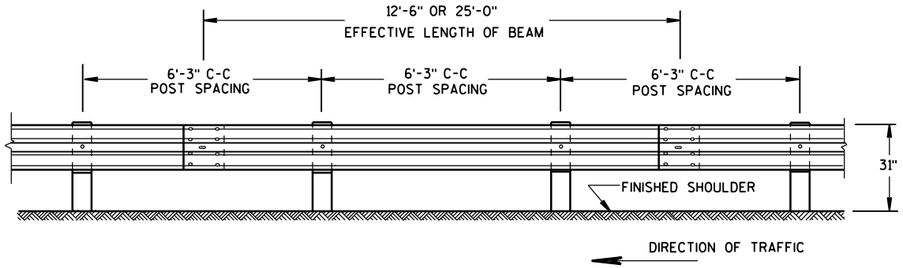
PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

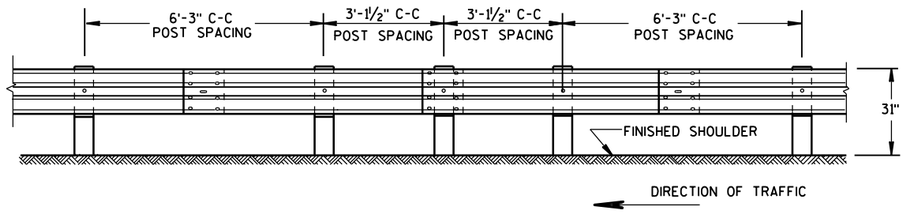
6

S.D.D. 14 B 42-5a



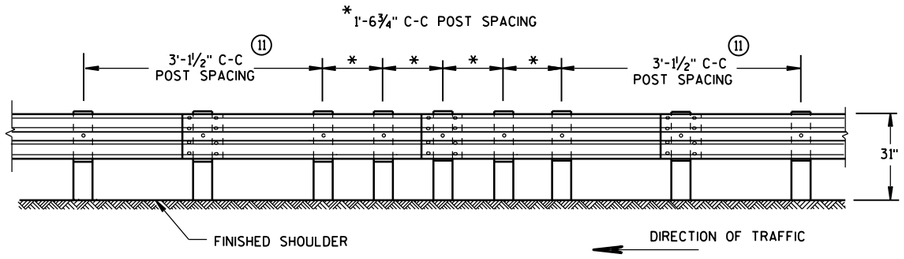
FRONT VIEW

POST SPACING STANDARD INSTALLATION



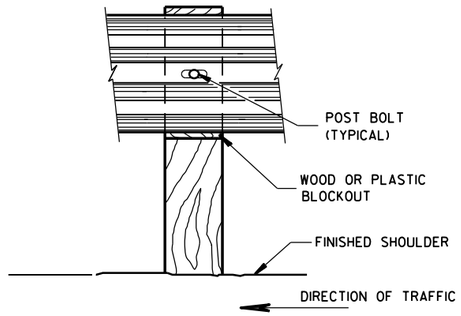
FRONT VIEW

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

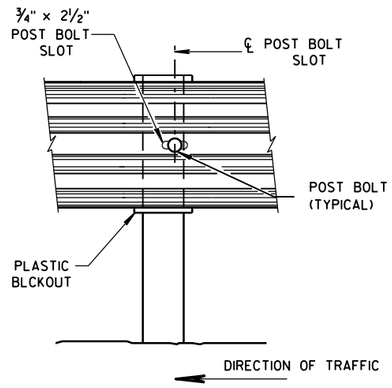


FRONT VIEW

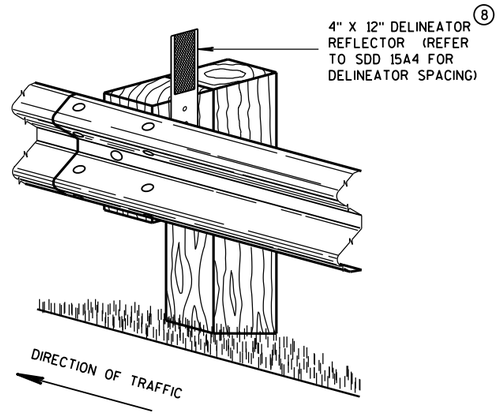
QUARTER POST SPACING (QS)



FRONT VIEW AT WOOD POST



FRONT VIEW AT STEEL POST



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

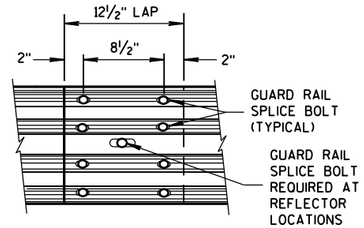
GENERAL NOTES

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

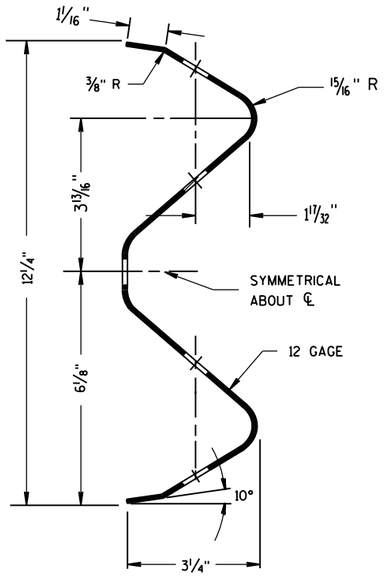
(11) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

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



FRONT VIEW
MID-SPAN BEAM SPLICE



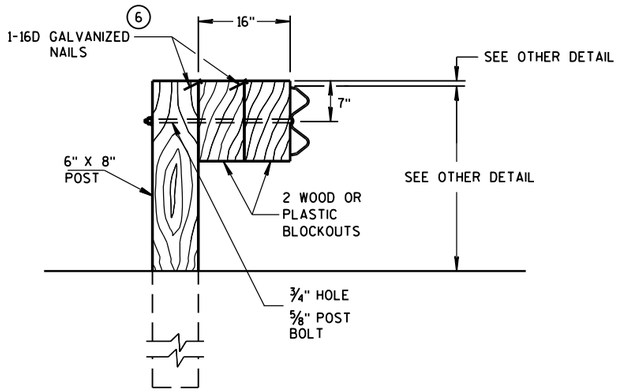
SECTION THRU W-BEAM RAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

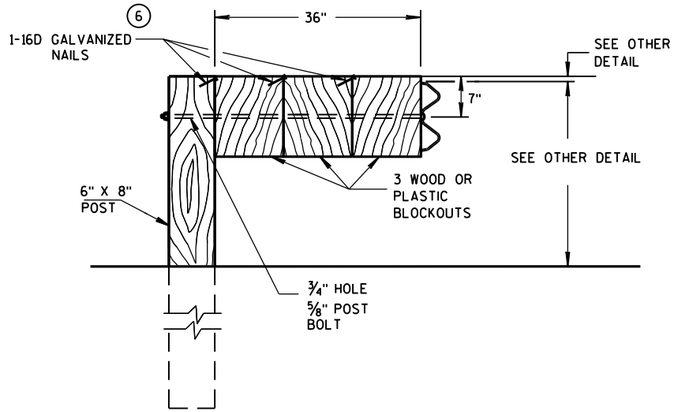
6

S.D.D. 14 B 42-5b



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.

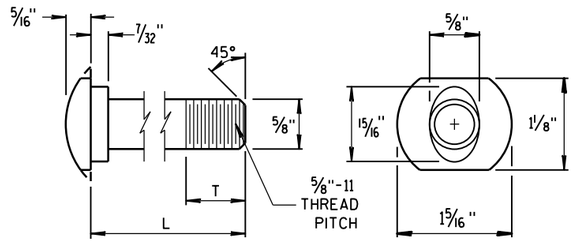


DETAIL FOR 36" BLOCKOUT DEPTH

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.

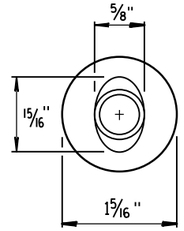
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

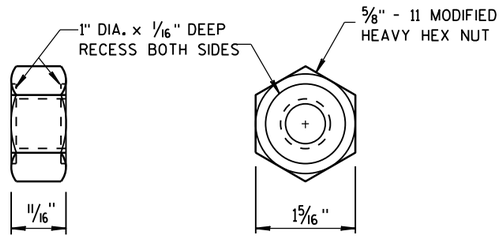


POST BOLT TABLE

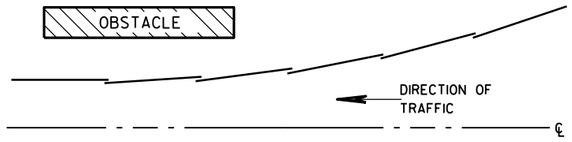
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

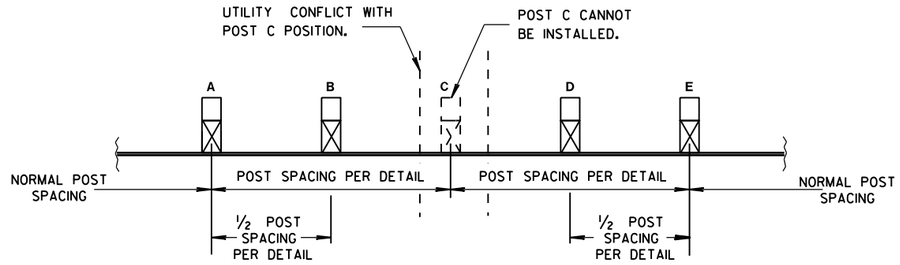


POST BOLT, SPLICE BOLT AND RECESS NUT

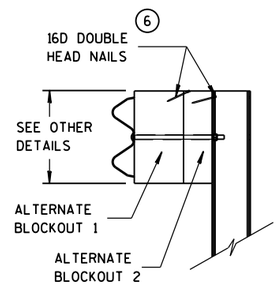


PLAN VIEW

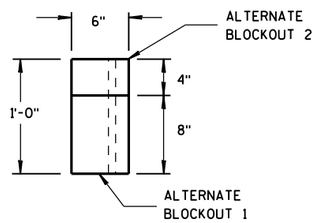
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

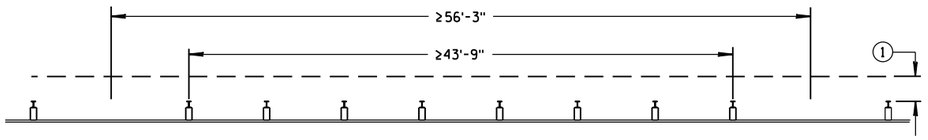
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

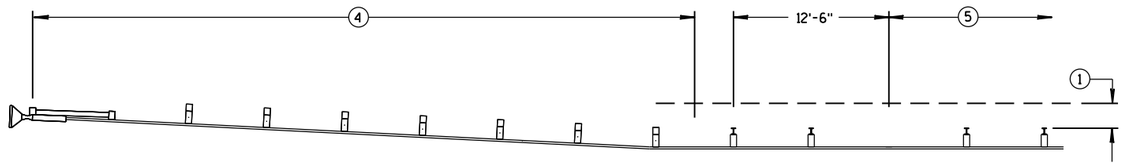
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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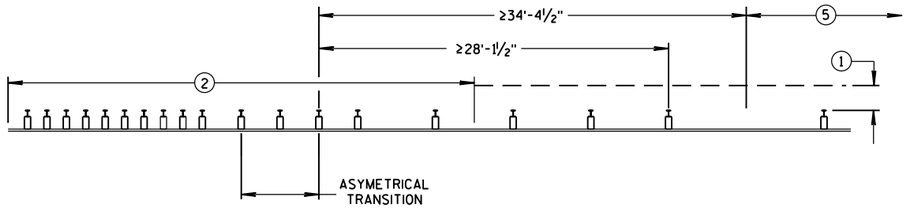
S.D.D. 14 B 42-5c



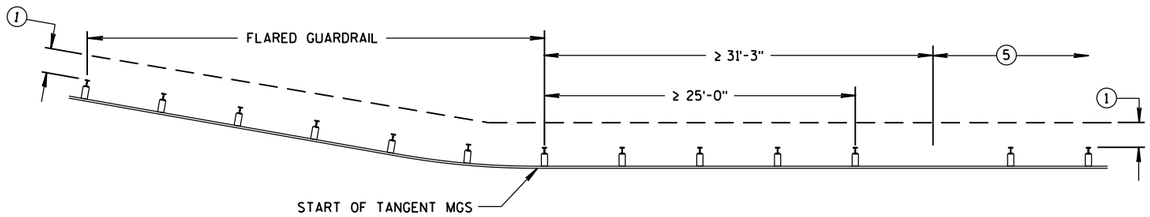
MISSING POST IN NORMAL BEAM GUARD RUN



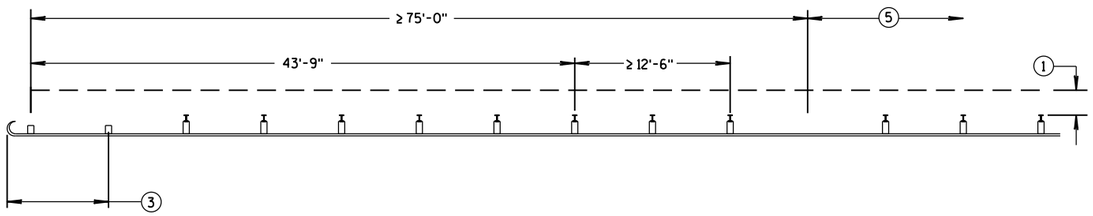
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



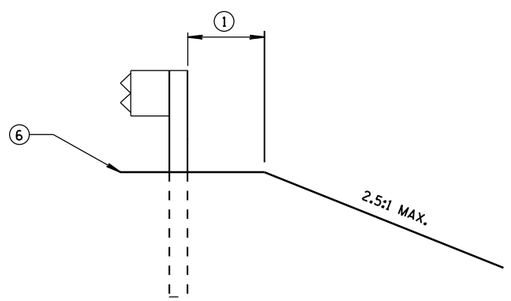
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

6

S.D.D. 14 B 42-5d

6

S.D.D. 14 B 42-5d

GENERAL NOTES

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

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

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

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

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

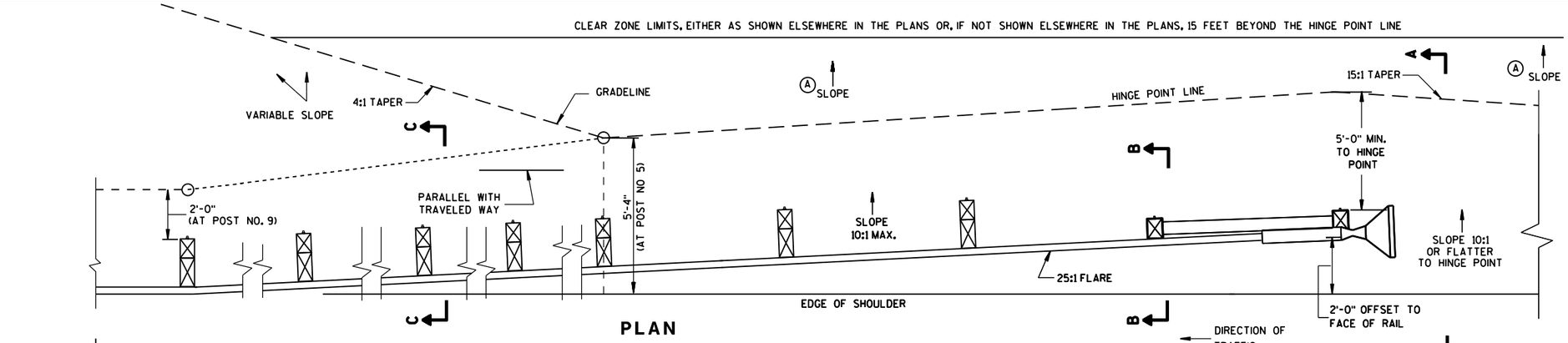
SEE SDD 14B42 FOR MORE INFORMATION.

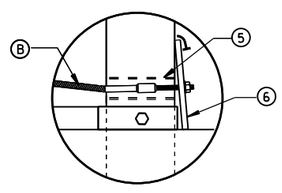
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

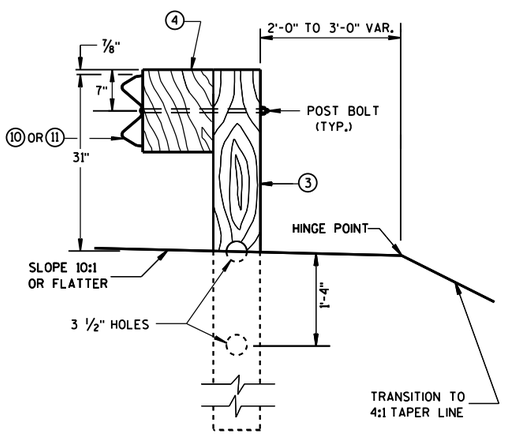
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

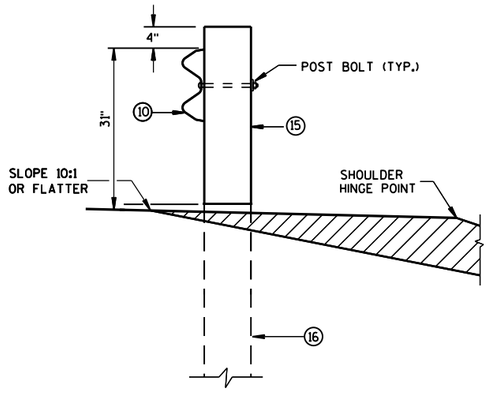
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

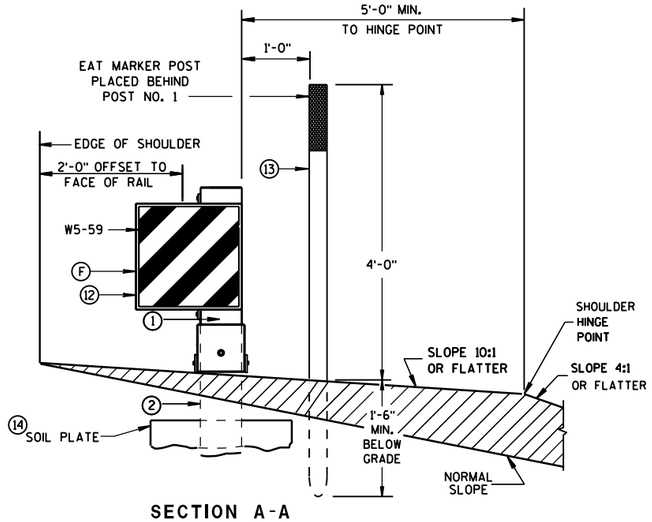
THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.

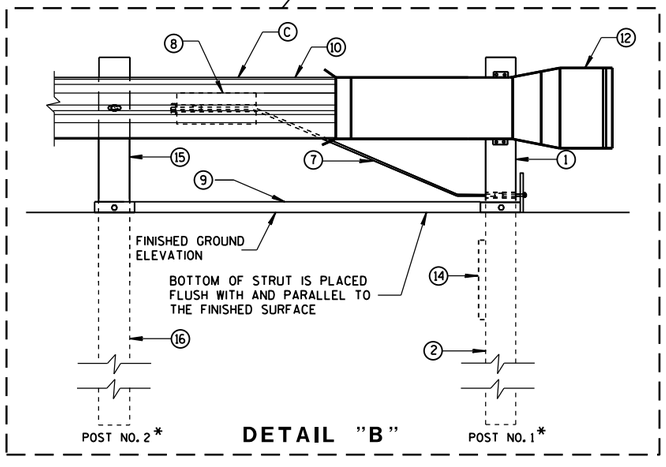








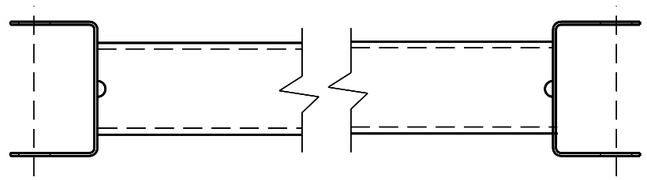




MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

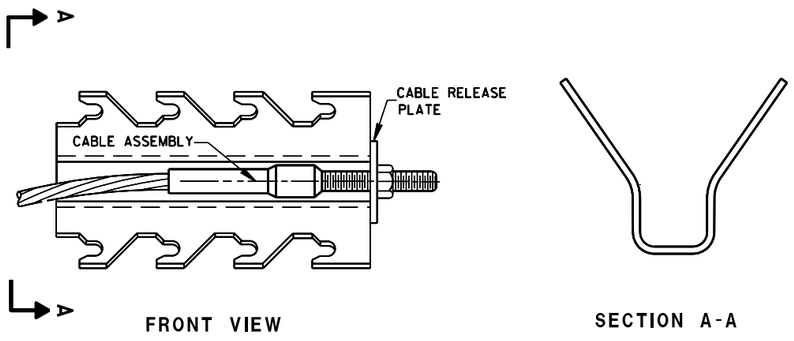
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6
S.D.D. 14 B 44-3a



(9) (H)

GENERIC GROUND STRUT



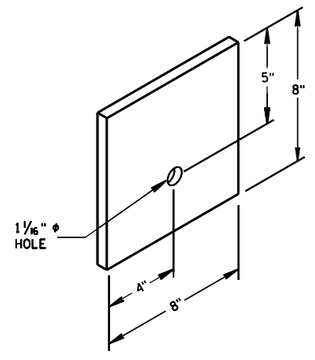
FRONT VIEW

SECTION A-A

GENERIC ANCHOR CABLE BOX (8) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(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)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



BEARING PLATE (6)

6

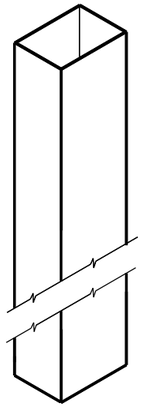
6

S.D.D. 14 B 44-3b

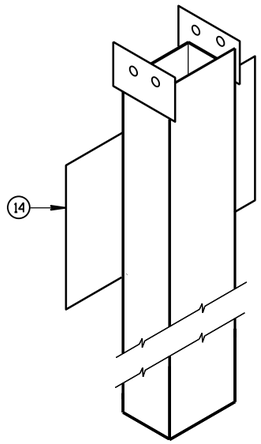
S.D.D. 14 B 44-3b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

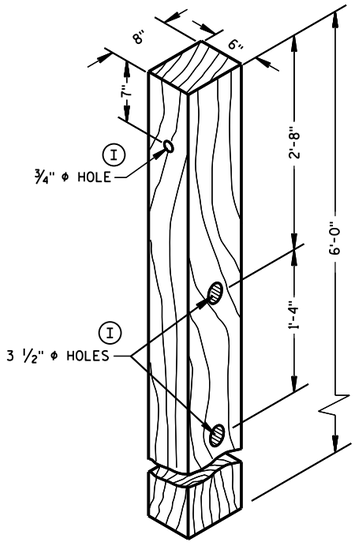
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



UPPER POST NO. 1 (1)

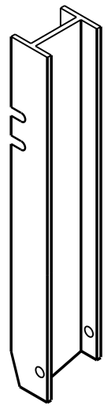


LOWER POST NO. 1 (2)

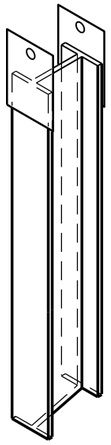


POSTS NUMBER 3-9

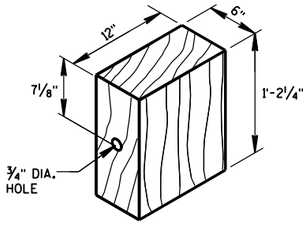
WOOD CRT POST (3)



UPPER POST NO. 2 (15)

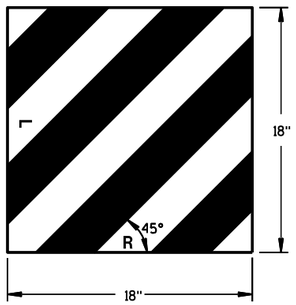


LOWER POST NO. 2 (16)



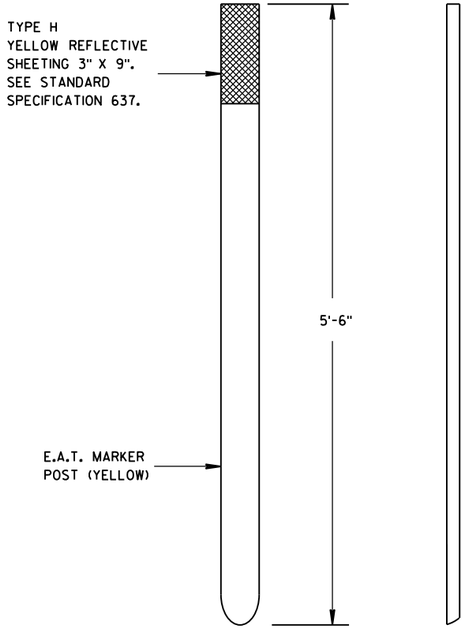
WOOD BLOCKOUT (4)

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



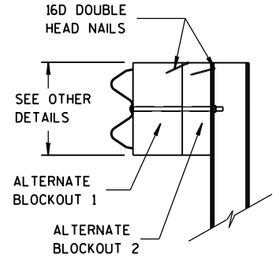
W5-59

REFLECTIVE SHEETING DETAIL (H)

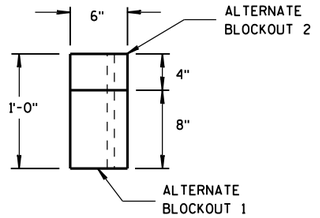


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

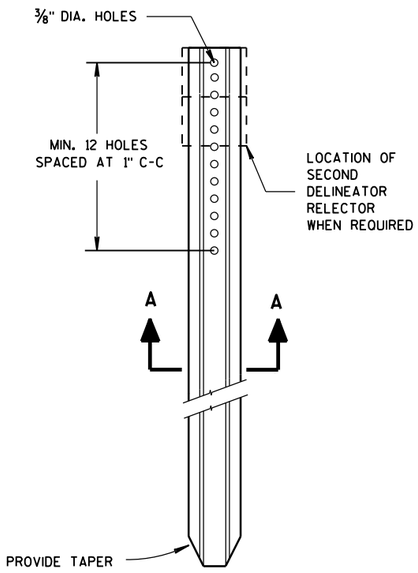
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERVISOR

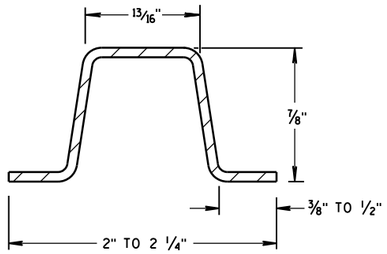
FHWA

6

S.D.D. 14 B 44-3c

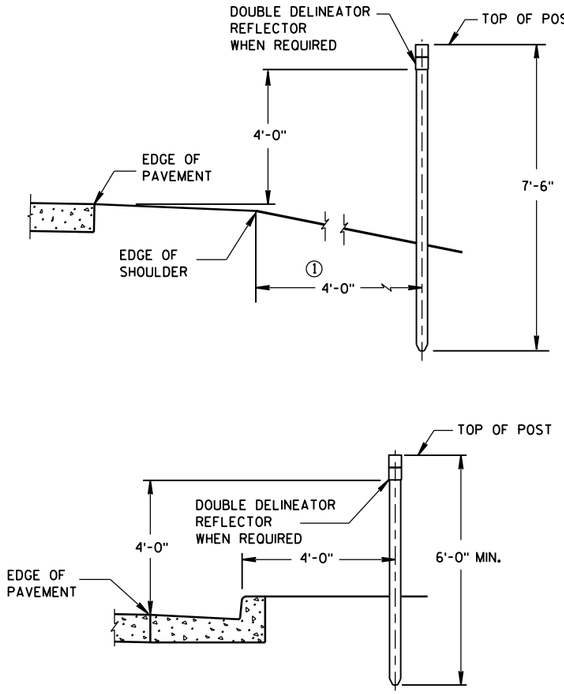


DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

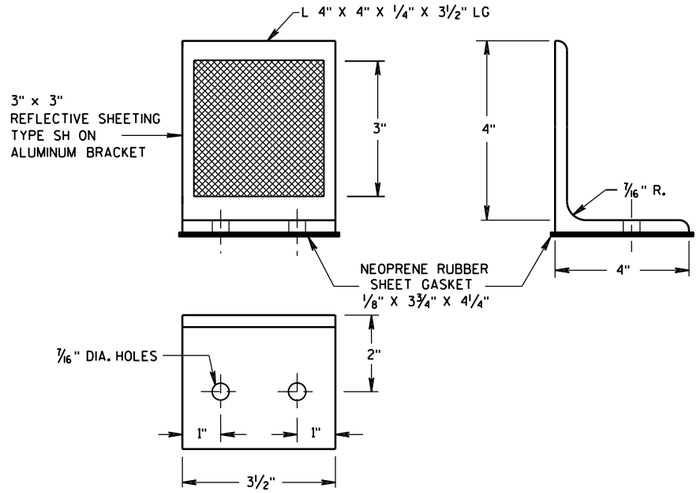


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

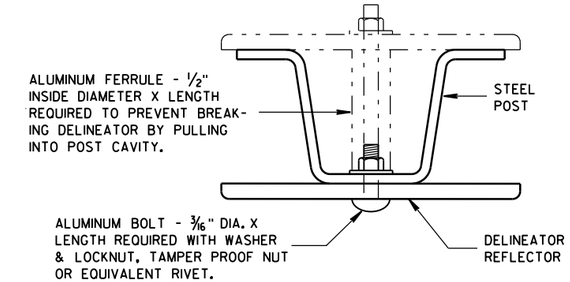
GENERAL NOTES

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

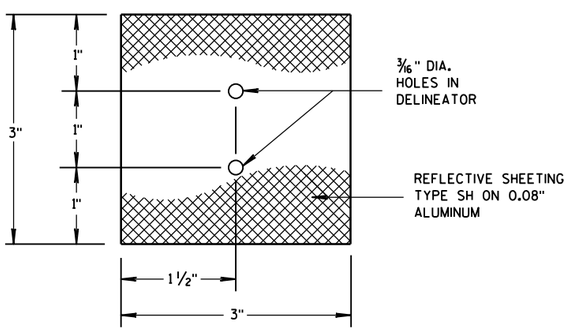
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



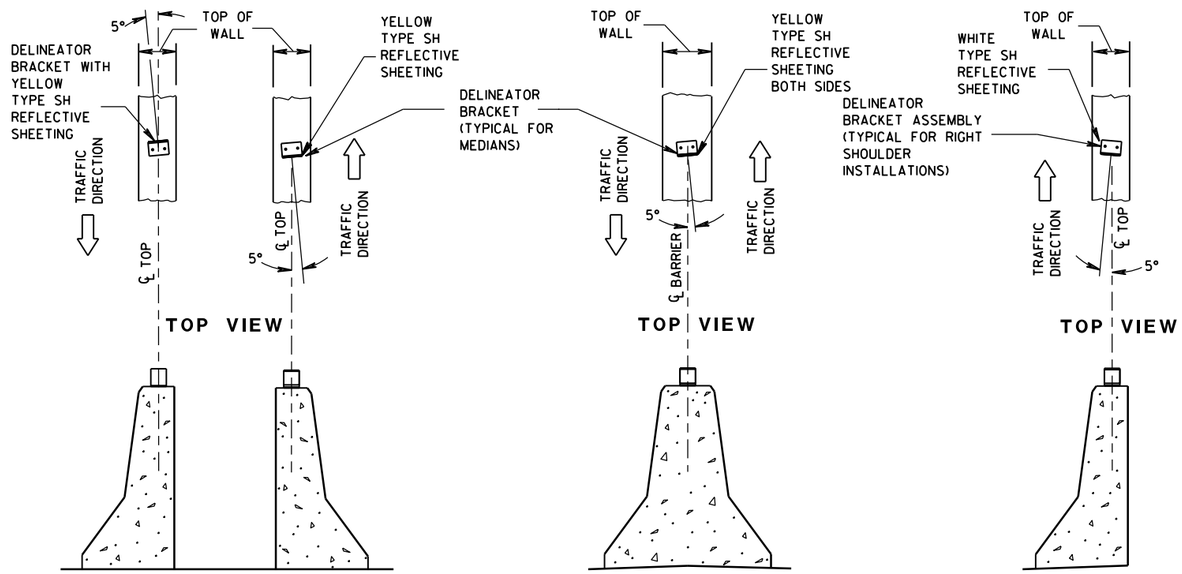
DELINEATOR BRACKET



MOUNTING DETAIL FOR DELINEATOR REFLECTOR

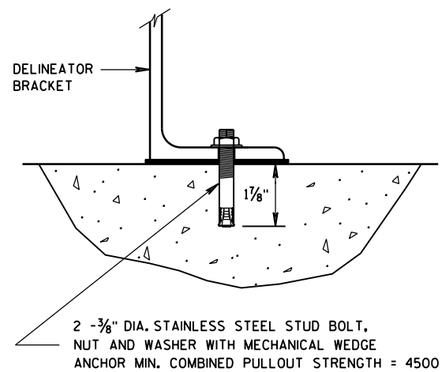


3"x 3" DELINEATOR REFLECTOR



DOUBLE BARRIERS IN MEDIAN | MEDIAN BARRIER | BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATOR BRACKETS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR REFLECTOR AND DELINEATOR BRACKET WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

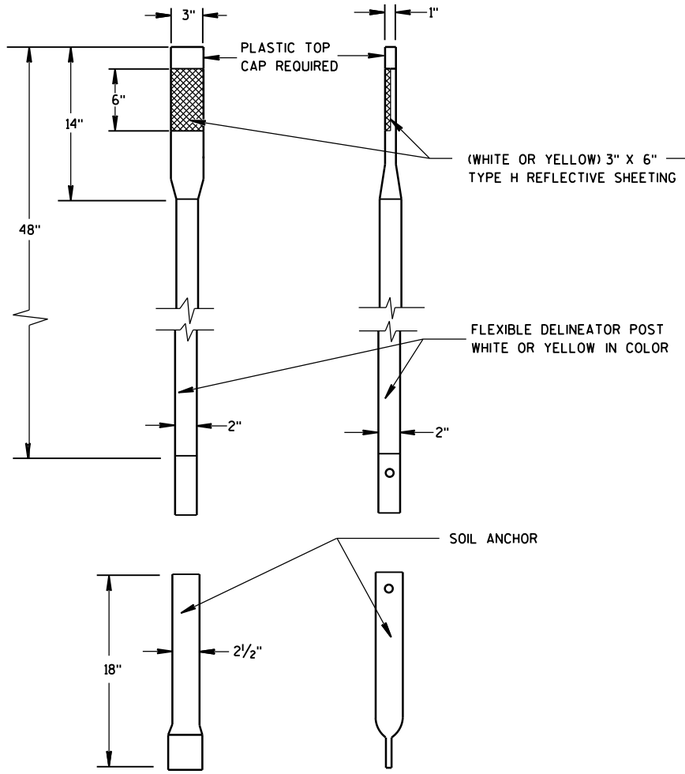
APPROVED
4-18-16 DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAR[illegible] GINEER
FHWA

6

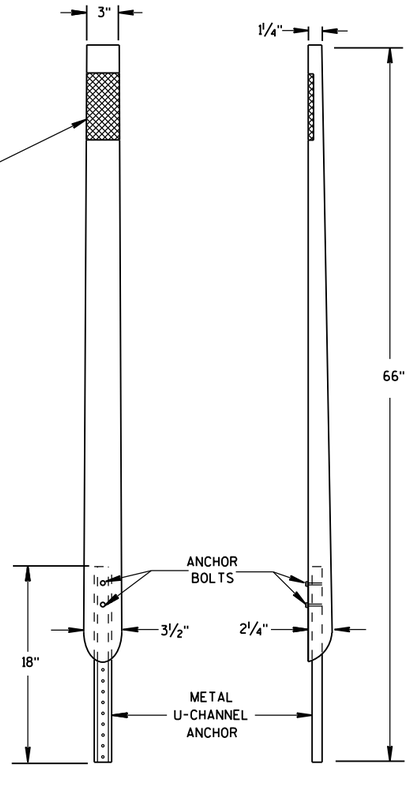
S.D.D. 15 A 2-9

6

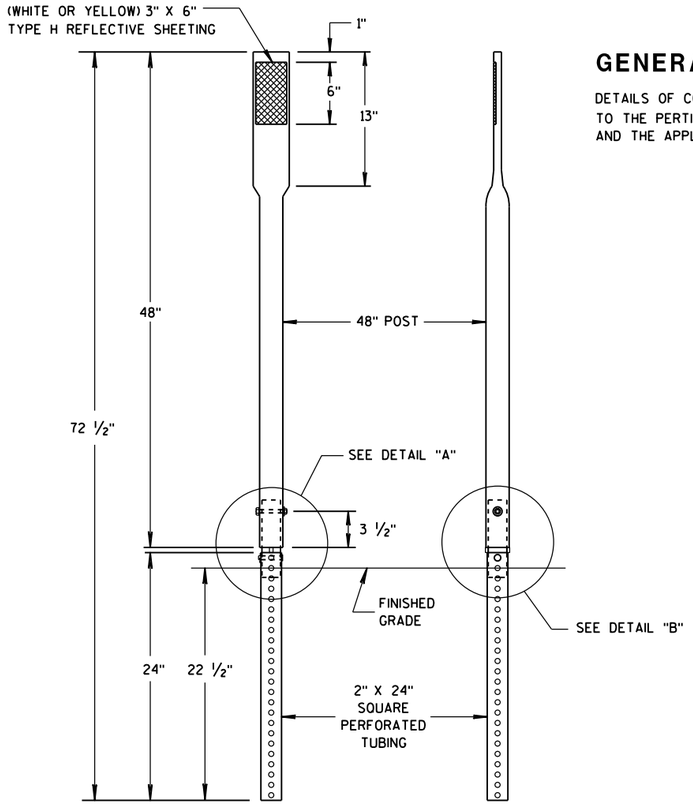
S.D.D. 15 A 2-9



ALTERNATE 1



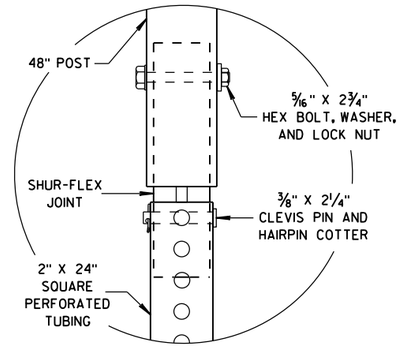
ALTERNATE 2
FLEXIBLE DELINEATOR POSTS



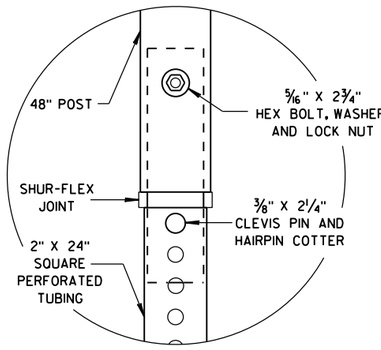
ALTERNATE 3

GENERAL NOTES

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



DETAIL A

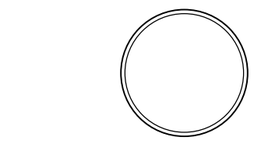


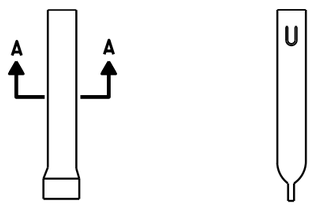
DETAIL B

REFLECTOR SPACING TABLE

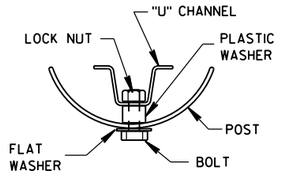
REFLECTOR SPACING	LOCATION
*100' C-C	RAMPS
400' C-C	MAINLINE

*START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER

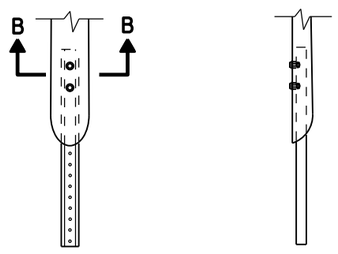




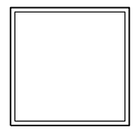
ALTERNATE 1



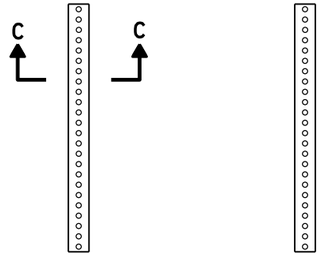
SECTION B-B



ALTERNATE 2
FLEXIBLE MARKER POST ANCHORS



SECTION C-C



ALTERNATE 3

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
STATE SIGNING AND MARKING ENGINEER
FHWA

6

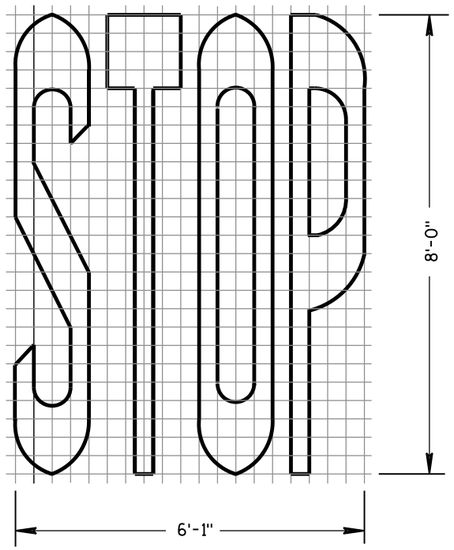
S.D.D. 15 A 4-3a

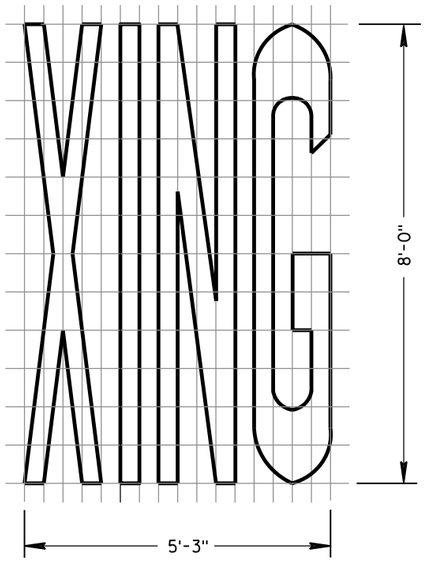
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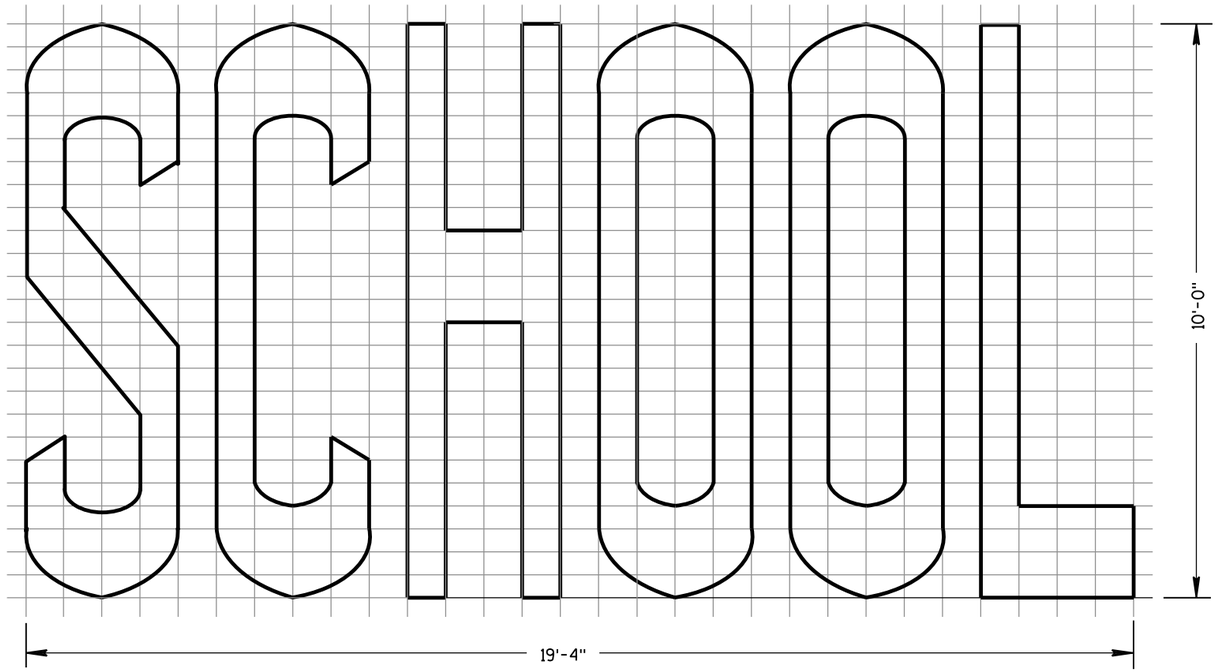
S.D.D. 15 A 4-3a

GENERAL NOTES

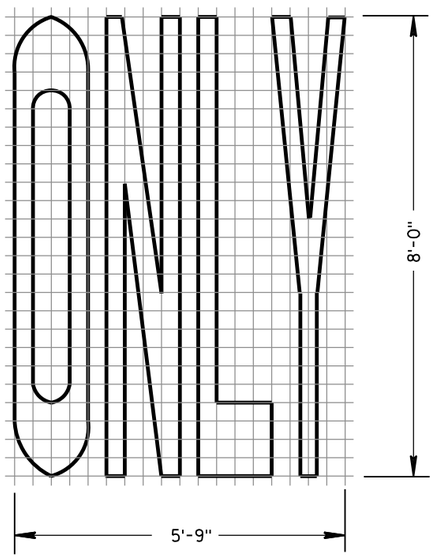
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

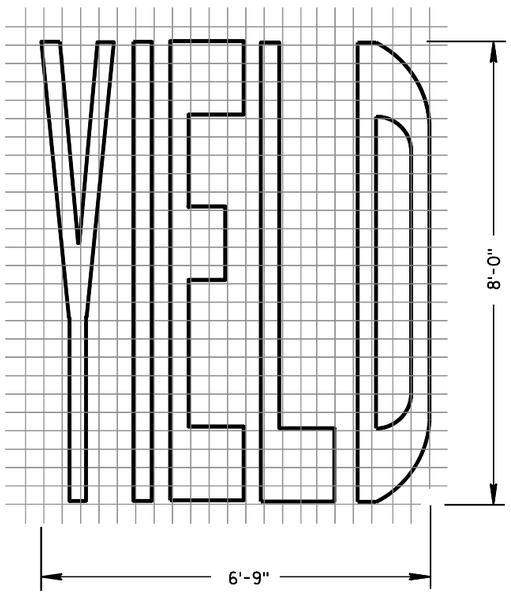


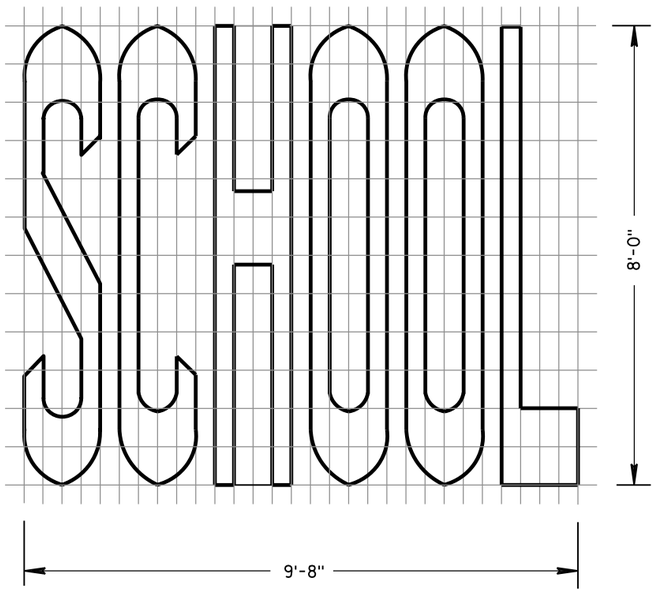




TWO-LANE







SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARK
237
EER
FHWA

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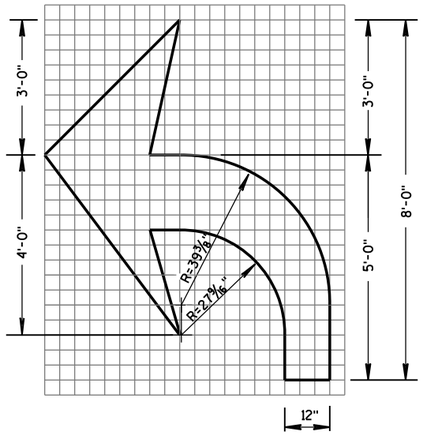
S.D.D. 15 C 7-14b

6

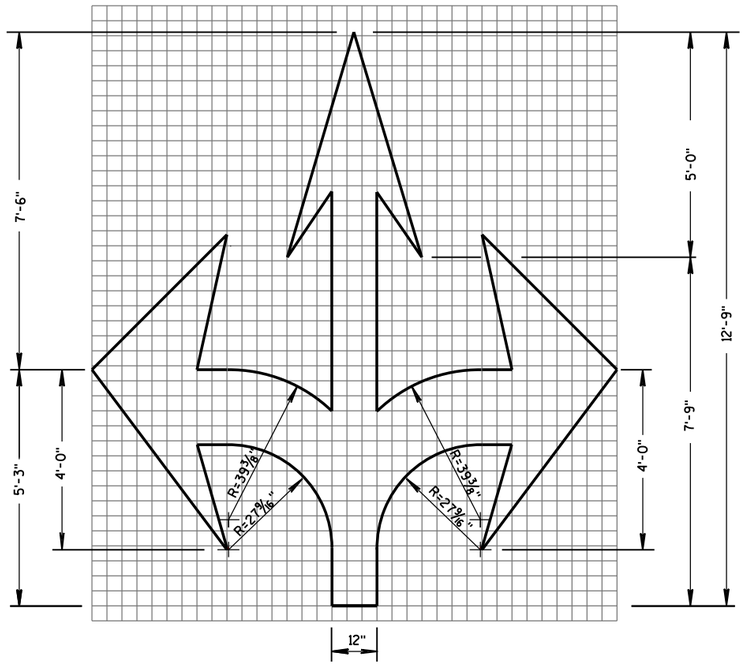
S.D.D. 15 C 7-14b

GENERAL NOTES

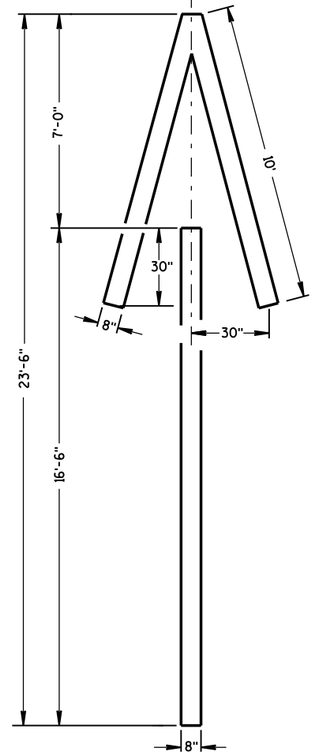
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



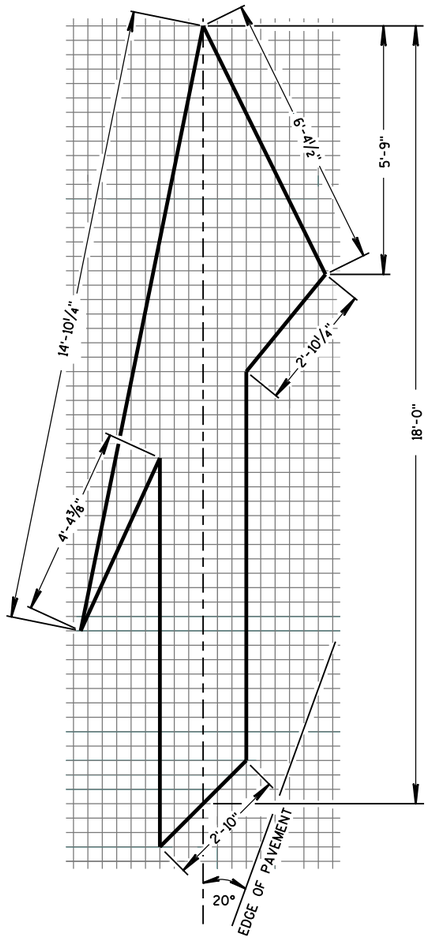
TYPE 2



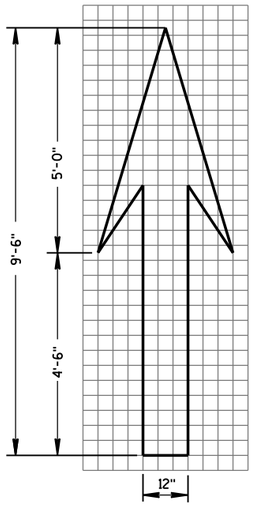
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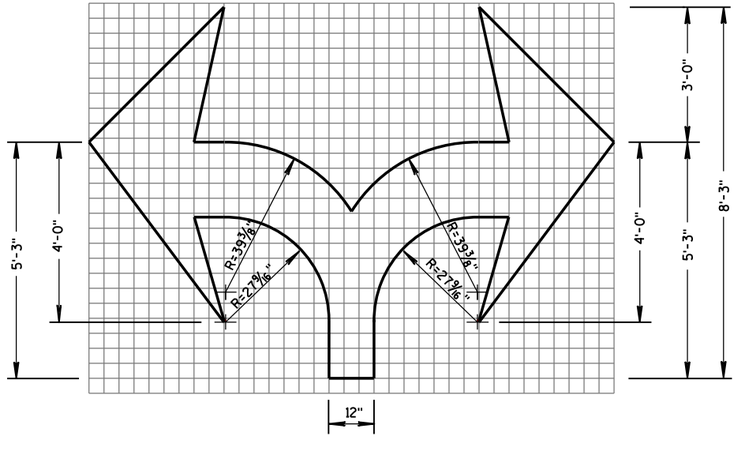
TYPE 4



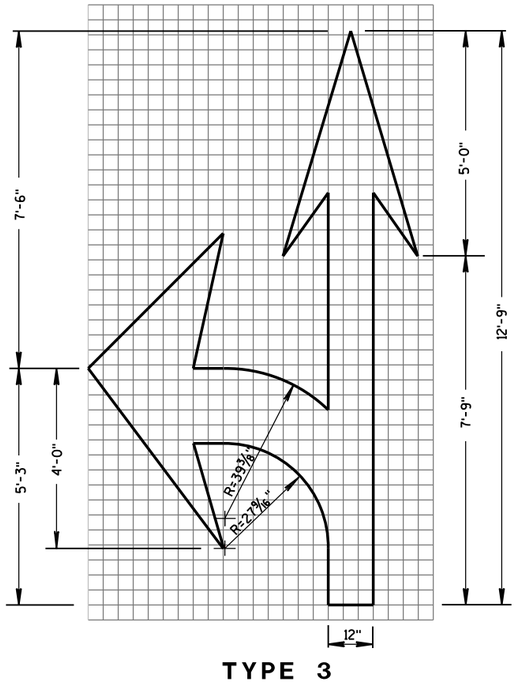
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

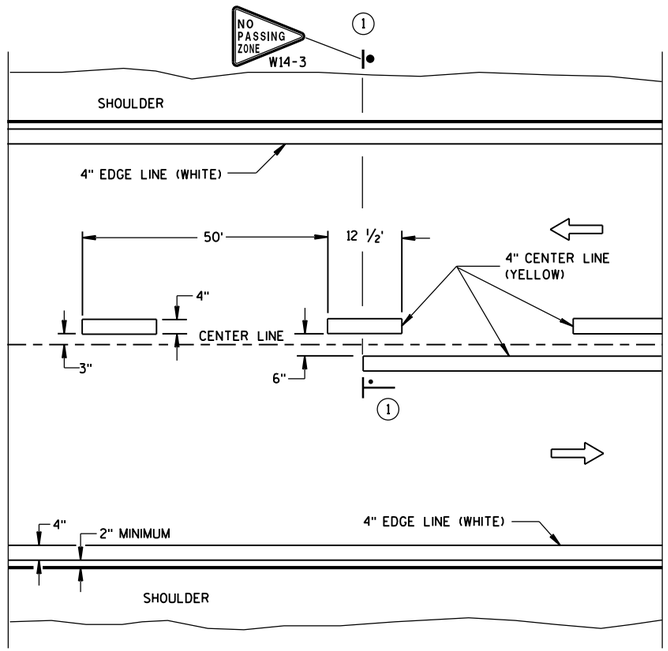
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR ENGINEER
FHWA

6

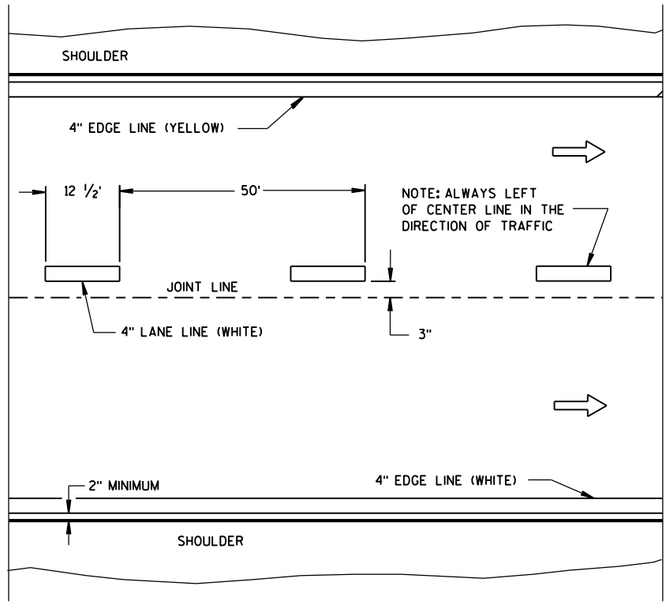
S.D.D. 15 C 7-14c

6

S.D.D. 15 C 7-14c



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

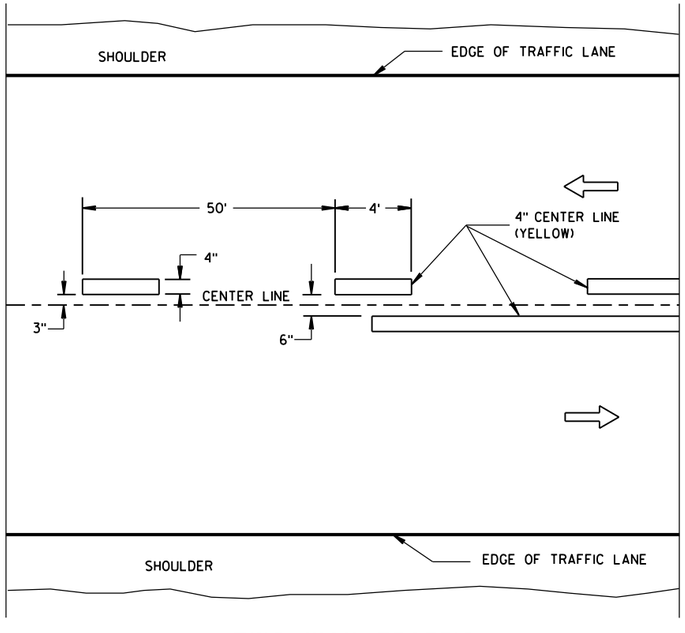
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

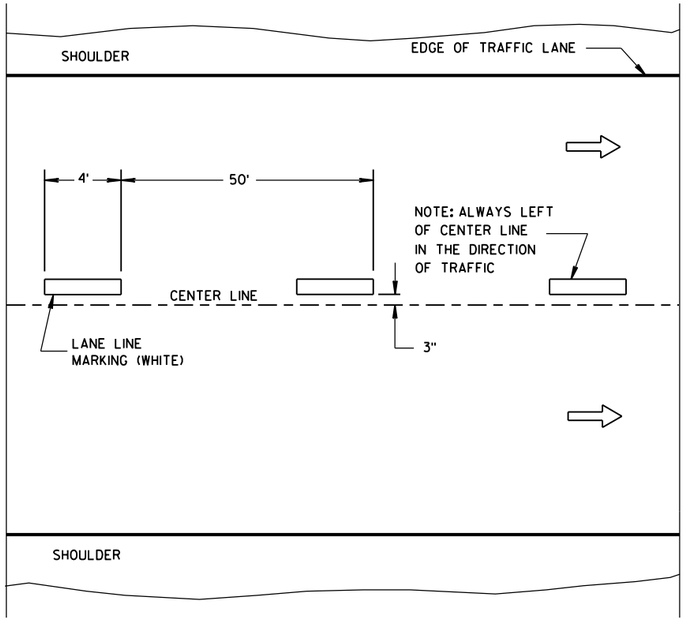
LEGEND

"T" MARKING

POST MOUNTED SIGN



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

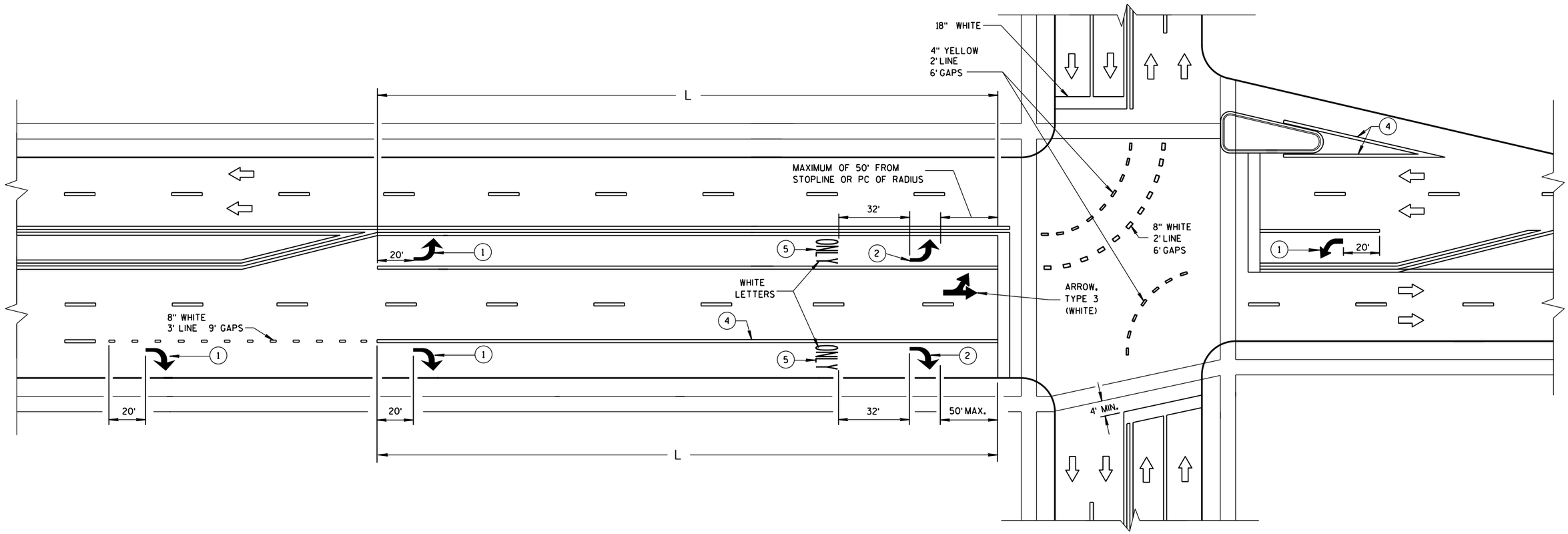
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR[illegible]INEER
FHWA

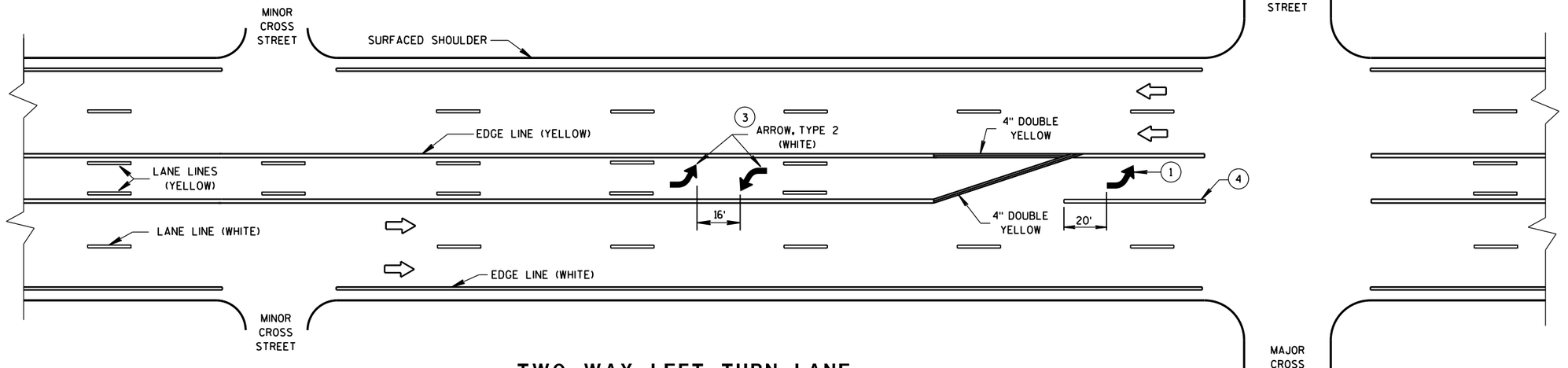
6

S.D.D. 15 C 8-18a

6

S.D.D. 15 C 8-18a





GENERAL NOTES

(1) REQUIRED ARROW, TYPE 2 (WHITE).

(2) REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.

(3) A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.

(4) 8" WHITE

(5) REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

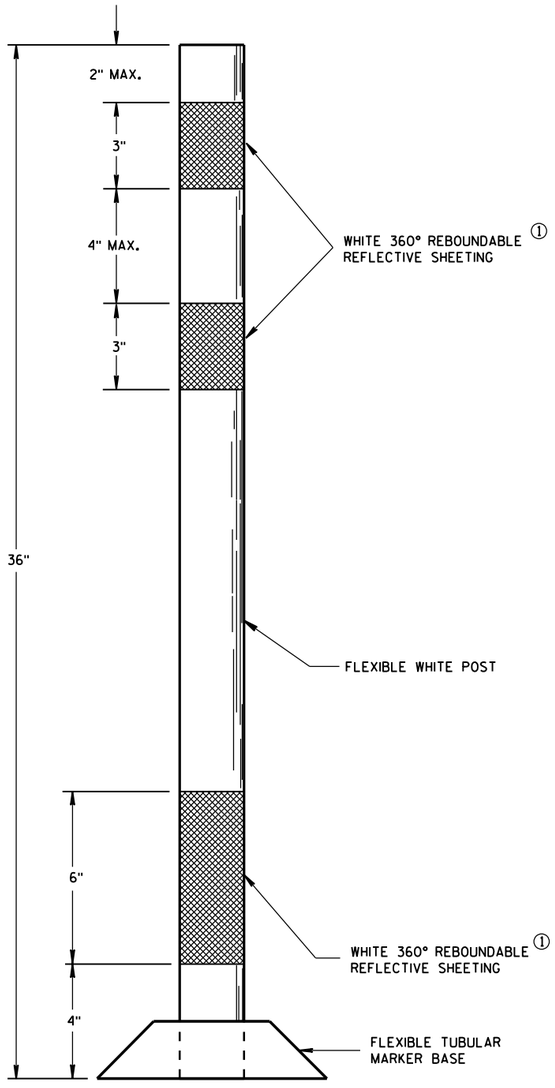
TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

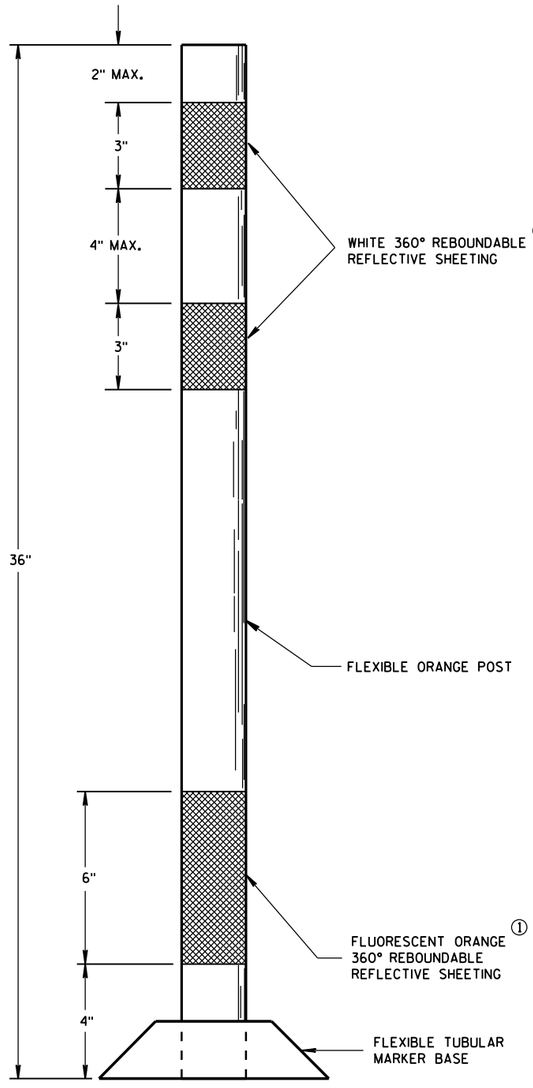
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 C 8-18b



FLEXIBLE
TUBULAR MARKER POST
PERMANENT CROSSOVER



FLEXIBLE
TUBULAR MARKER POST
WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

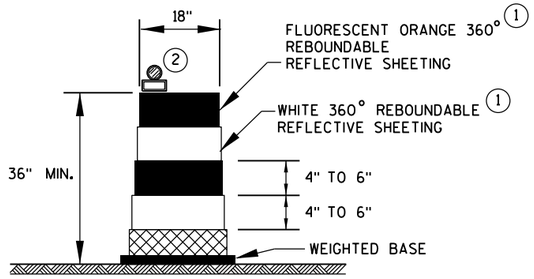
CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

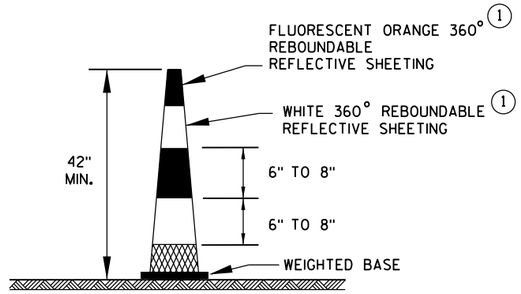
APPROVED
June 2017 — DATE
/S/ Andrew Heldtke — WORK ZONE ENGR
FHWA

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S.D.D. 15 C 11-7a



DRUM

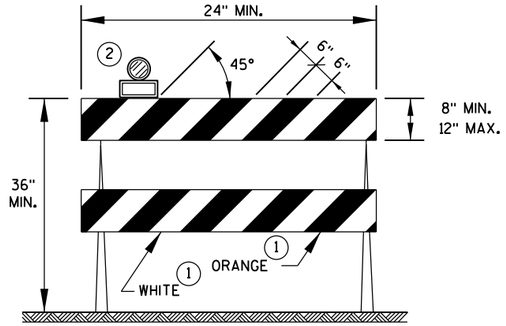


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

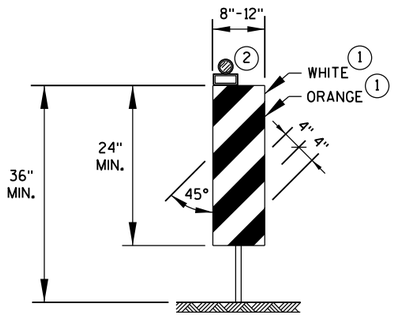
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



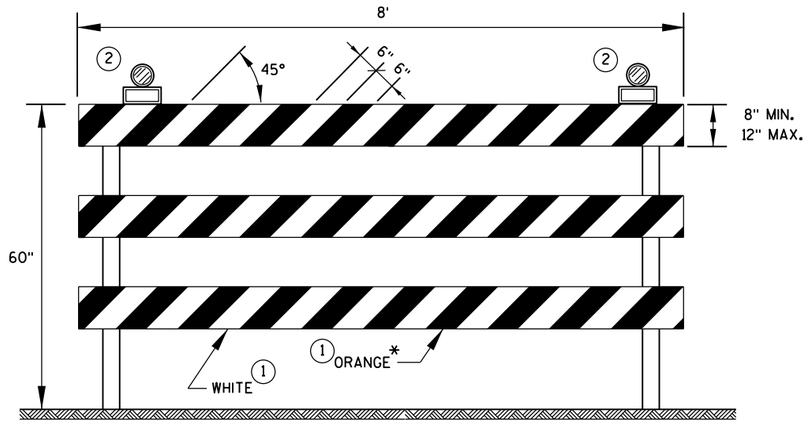
TYPE 2 BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



VERTICAL PANEL

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



TYPE 3 BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017	/S/ Andrew Heidtke
DATE	WORK ZONE ENG

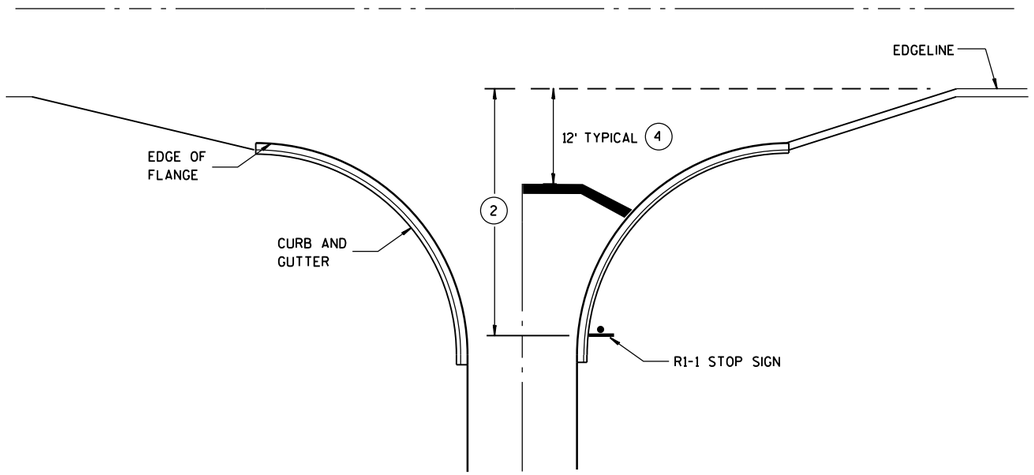
FHWA

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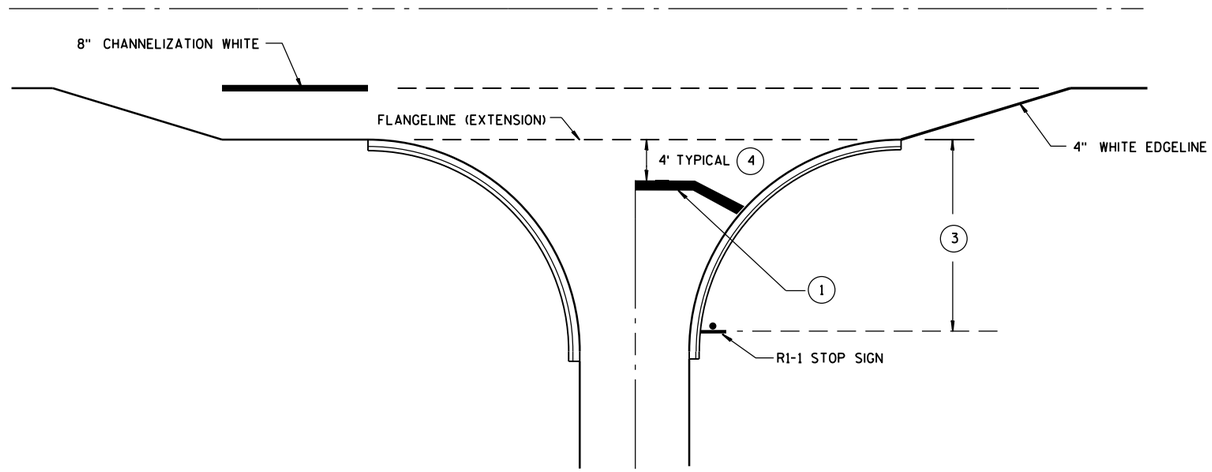
S.D.D. 15 C 11-7b

6

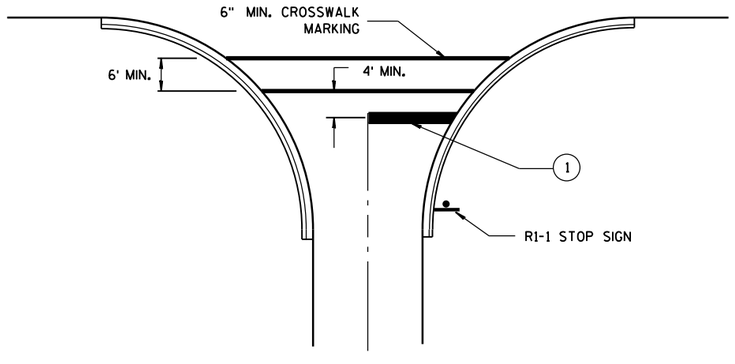
S.D.D. 15 C 11-7b



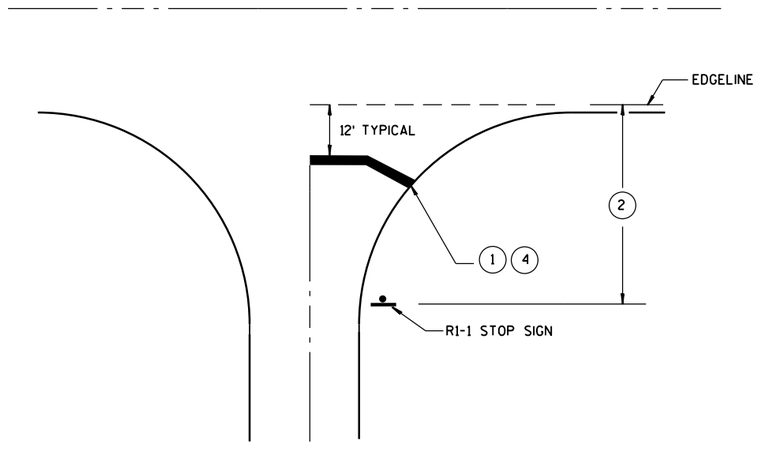
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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. (NO CLOSER THAN 4 FEET).

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

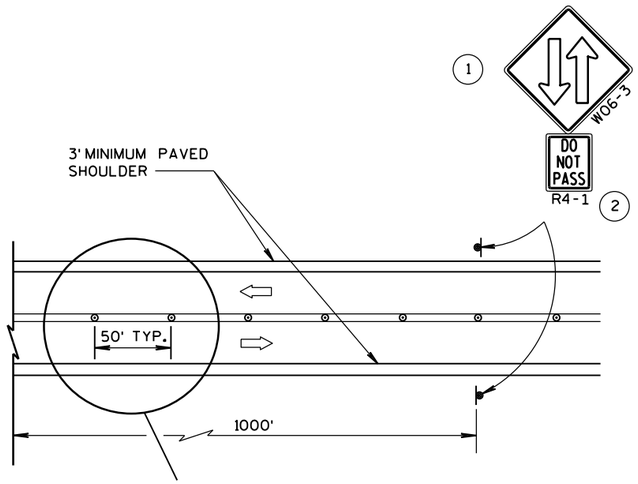
4-18-2016
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR 243 NEER

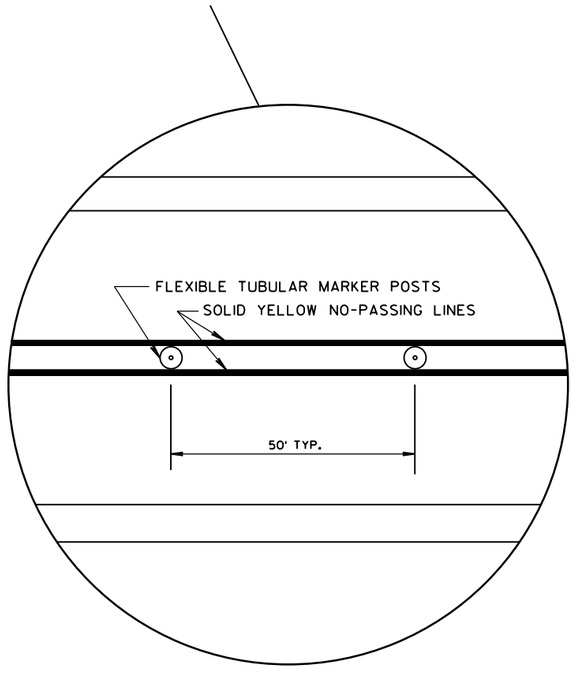
FHWA

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S.D.D. 15 C 33-2



TWO LANE, TWO WAY OPERATION



LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERS NOTED.

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

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

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50-FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW.

(1)



W057-51
48"x24"



R4-1 (2)

THE W06-3 WITH THE W057-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND/OR 500 FEET BEYOND ANY SIDEROAD. THE W06-3 WITH THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE W06-3 AND THE W057-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN W06-3 SIGNS.

(2) CONVENTIONAL: 24"x30"
FREEWAY AND EXPRESSWAY: 36"x48"

TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

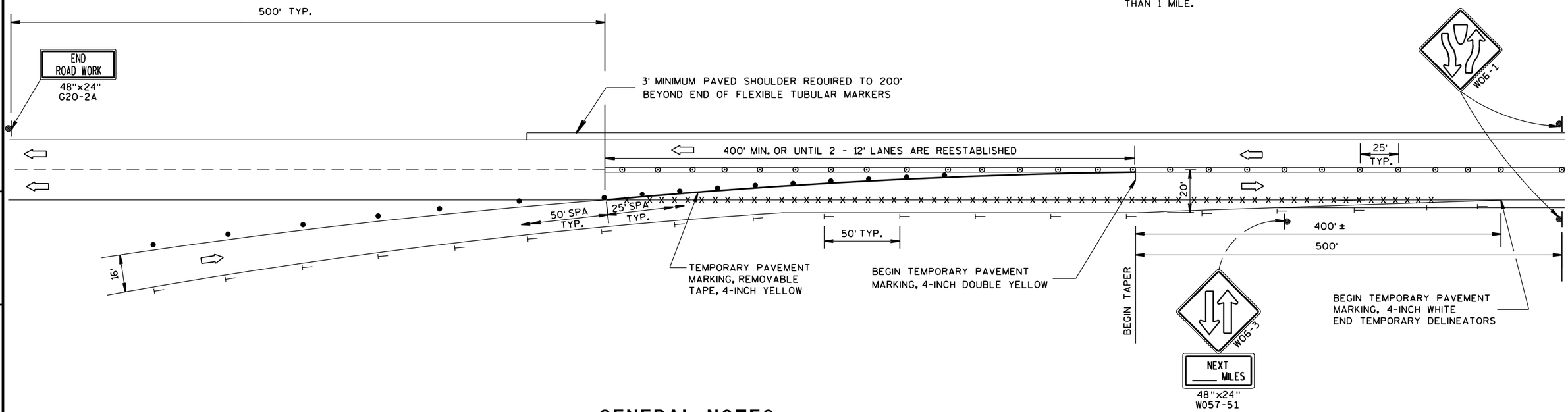
APPROVED
8/2013 DATE
/S/ Travis Feltes STATE TRAFFIC ENGINEER
SIGN
FHWA

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S.D.D. 15 D 6-3

LEGEND

- SIGN ON PERMANEMT SUPPORT
- TRAFFIC CONTROL DRUM
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC





24"x30"
R4-1

REPEAT EVERY 1/4 MILE IF PROJECT IS LONGER THAN 1 MILE.

GENERAL NOTES

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER.

TRAFFIC CONTROL, SINGLE LANE CROSSOVER EXIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

DESIGN

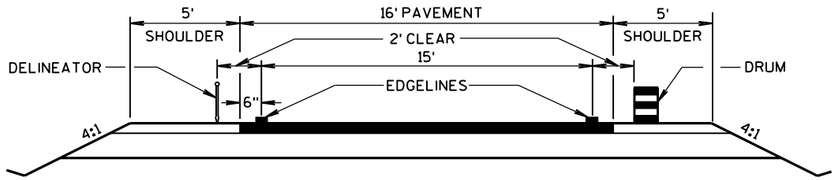
FHWA

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S.D.D. 15 D 9-3

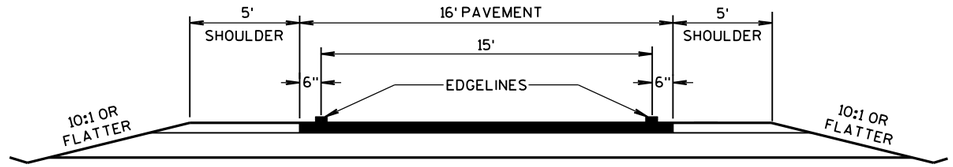
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S.D.D. 15 D 9-3



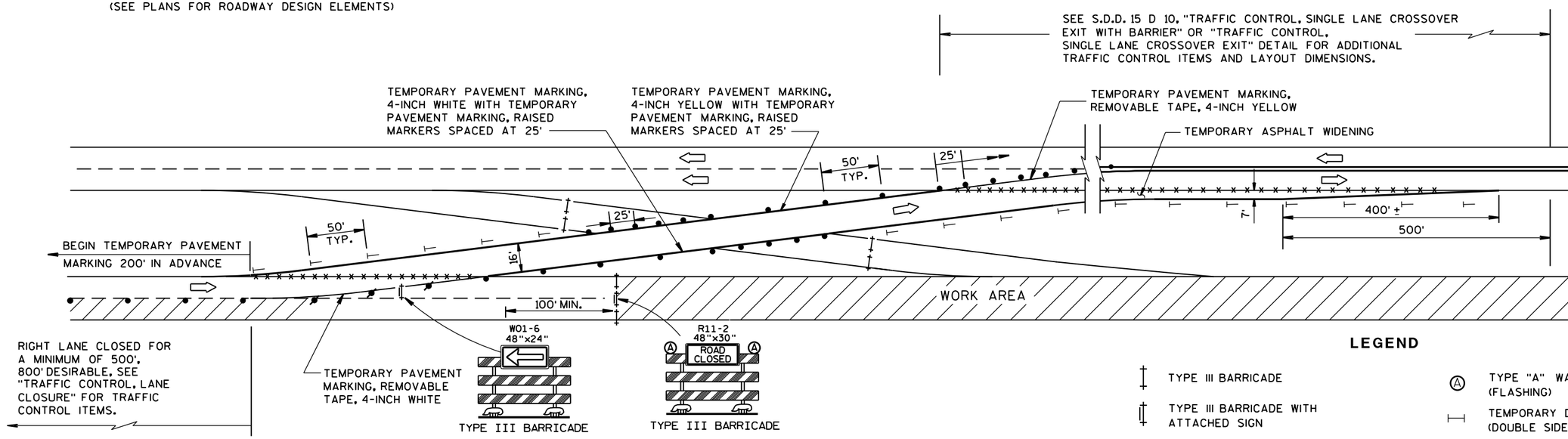
TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLANS FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLANS FOR ROADWAY DESIGN ELEMENTS)



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TYPE "A" WARNING LIGHT (FLASHING)
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- REMOVING PAVEMENT MARKINGS
- DELINEATOR FLEXIBLE/ TUBULAR MARKER
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

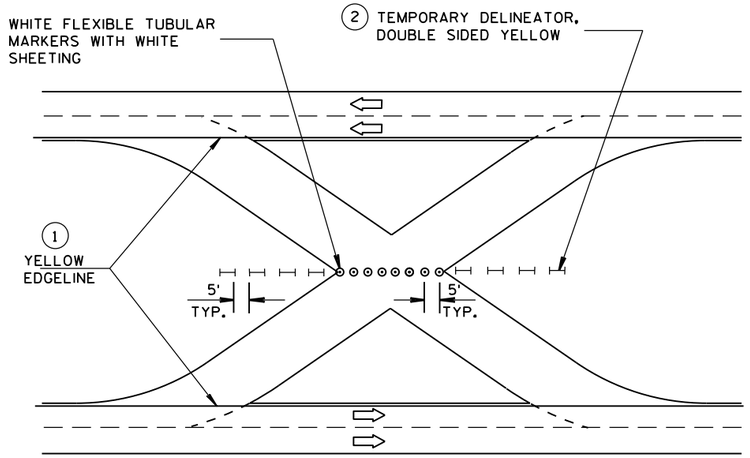
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

(1) FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.

(2) FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

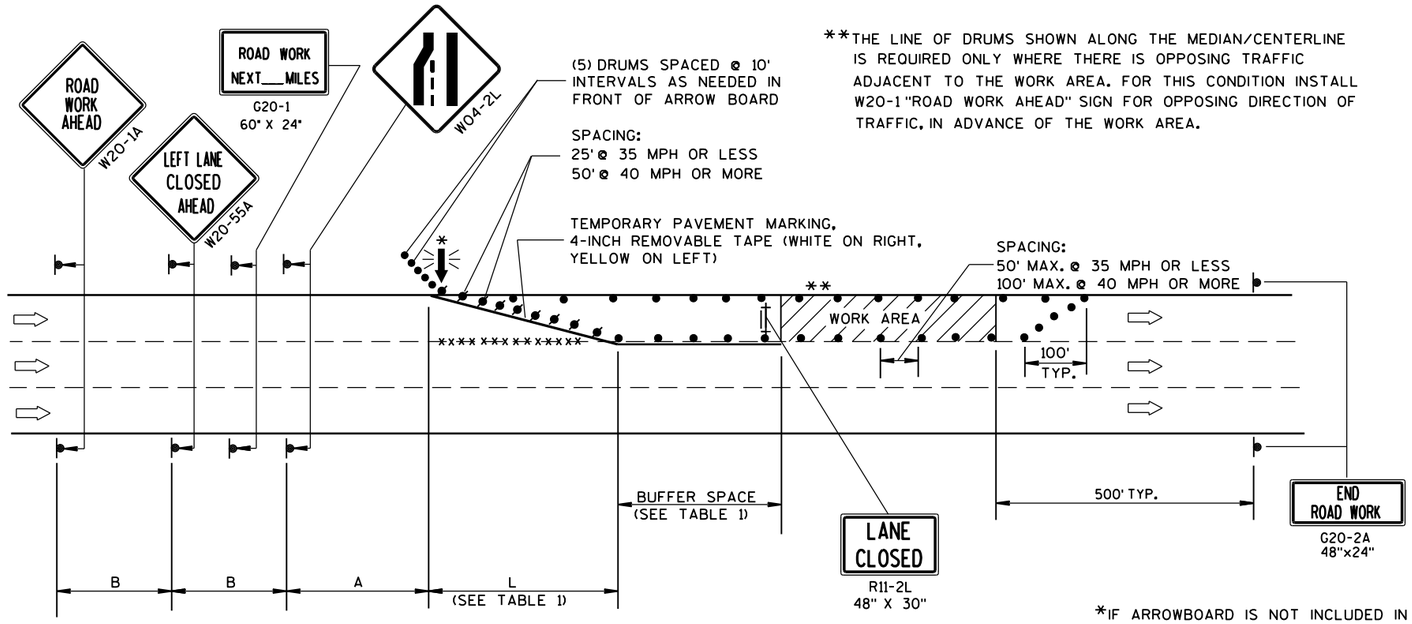
APPROVED
10-16-2015 DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

6

S.D.D. 15 D 11-6

6

S.D.D. 15 D 11-6



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

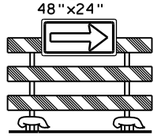


TABLE 1
TAPER AND BUFFER SPACE
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

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

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

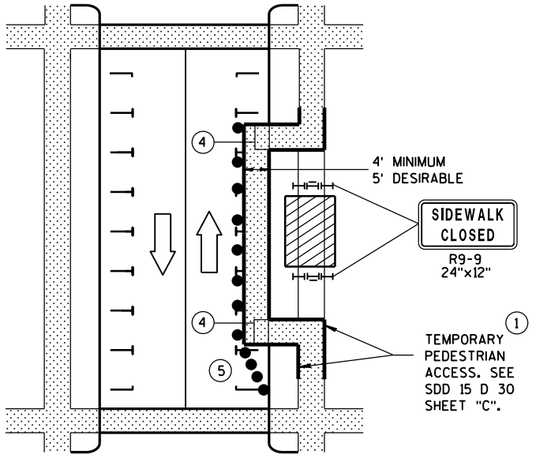
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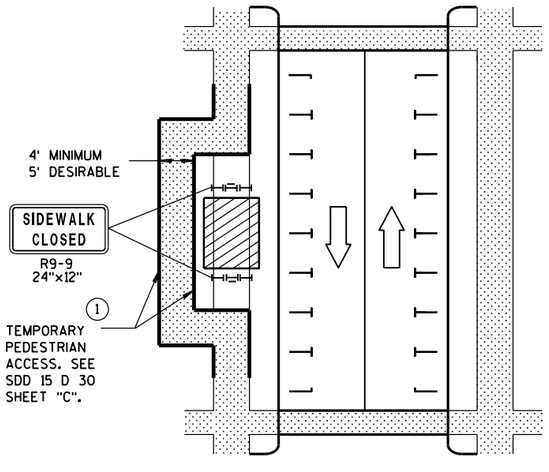
S.D.D. 15 D 20-4

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

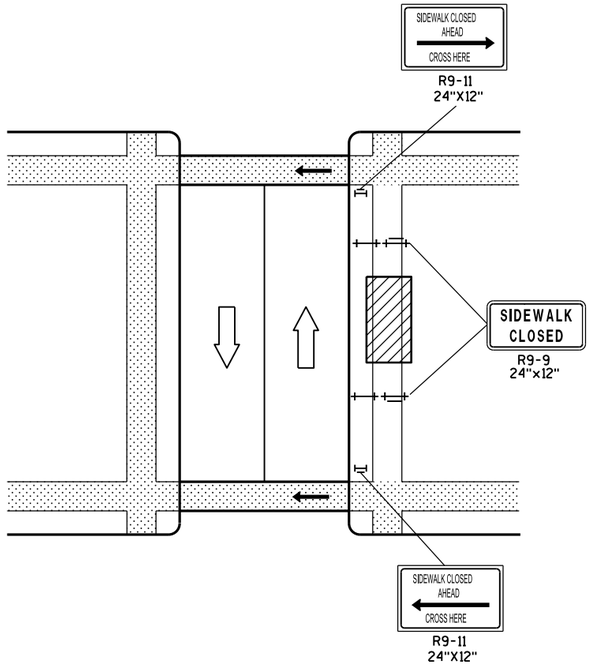


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

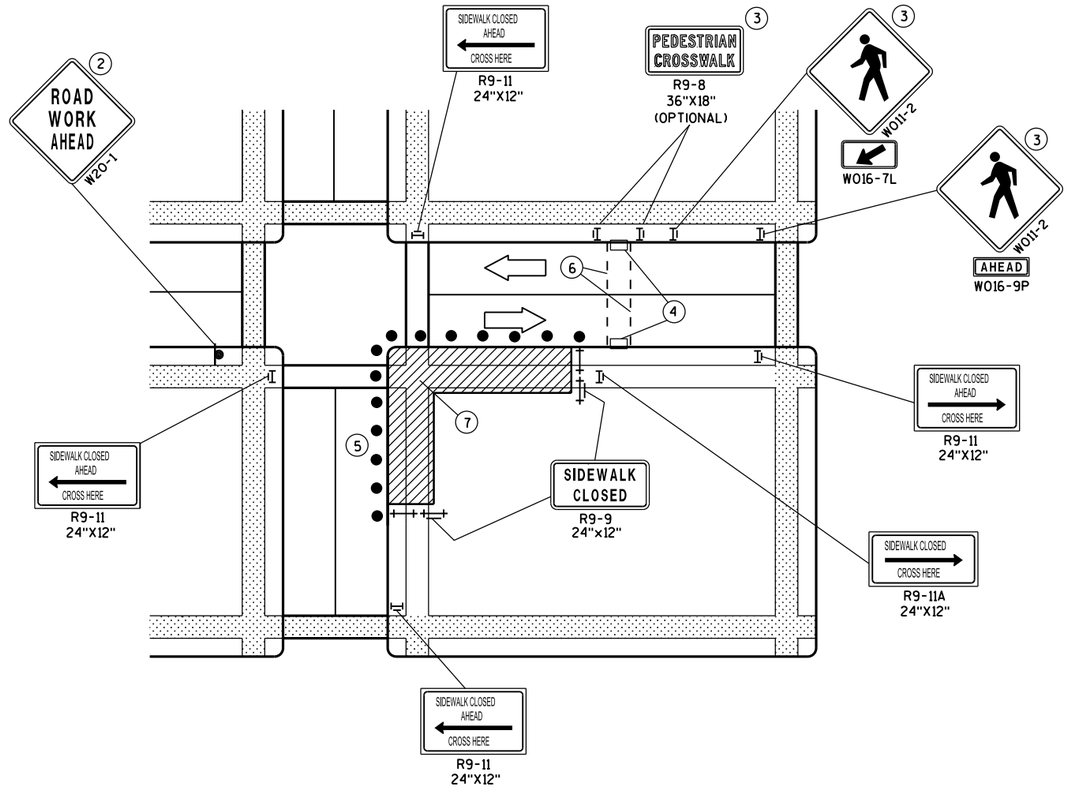
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

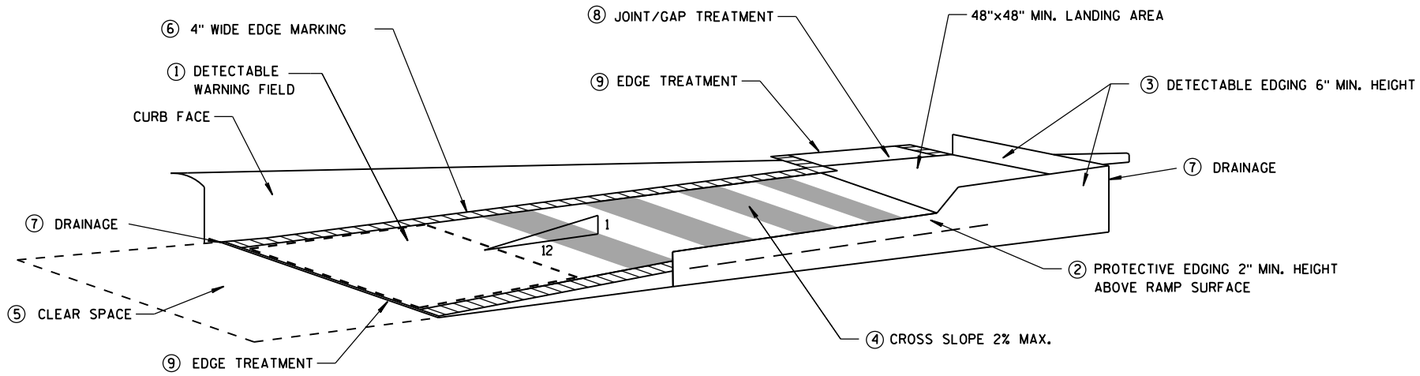
- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 D 30-3a



TEMPORARY CURB RAMP PARALLEL TO CURB

GENERAL NOTES

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".

② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

⑤ CLEAR SPACE OF 48"X48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

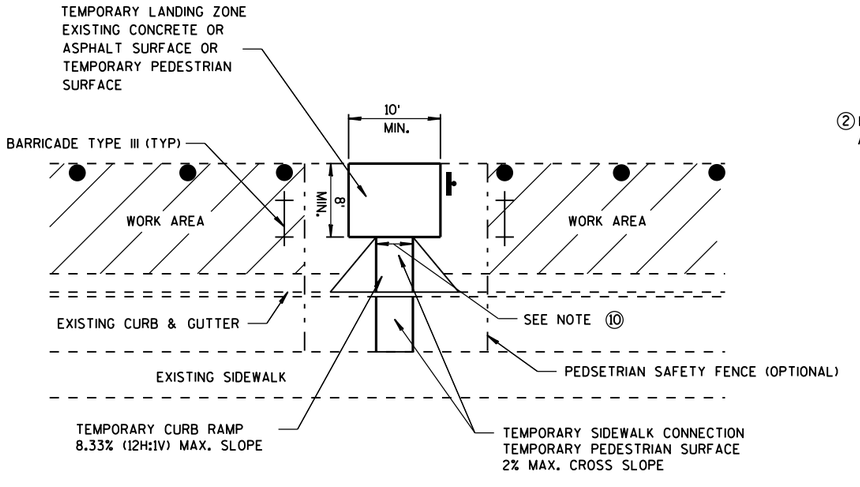
⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.

⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

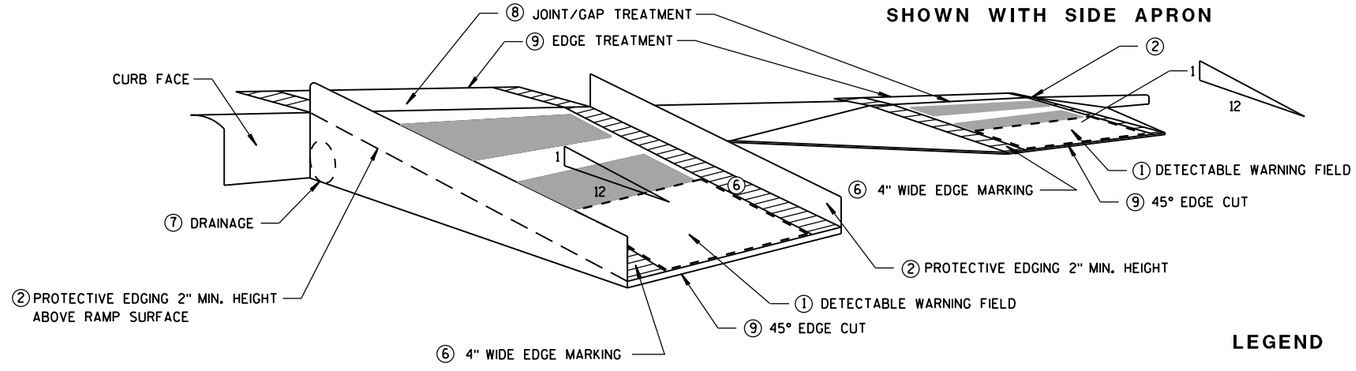
⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

⑩ 5' WIDE MIN. WITH PEDSETRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

LEGEND

WORK AREA

TYPE III BARRICADE

TRAFFIC CONTOL DRUM

TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

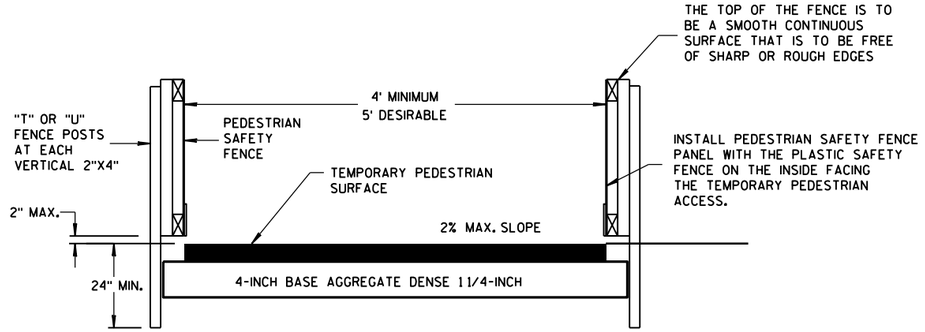
FHWA

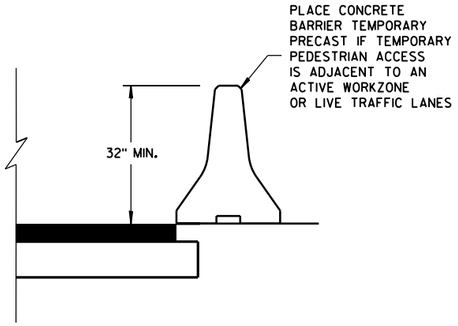
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S.D.D. 15 D 30-3b

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S.D.D. 15 D 30-3b

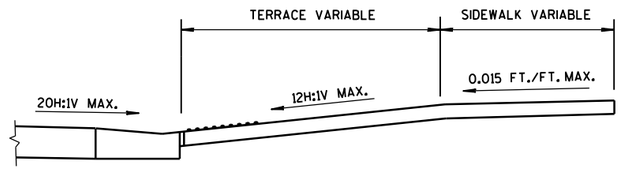




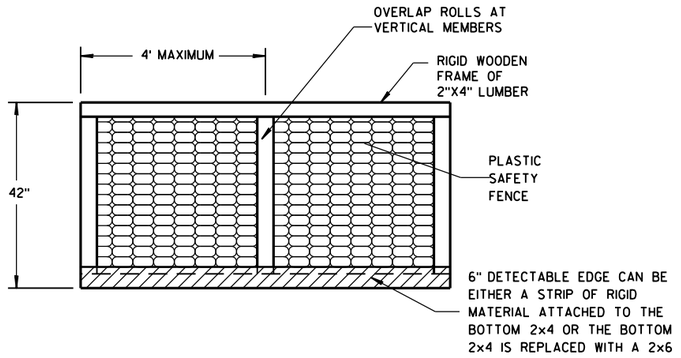
TEMPORARY PEDESTRIAN ACCESS

GENERAL NOTES

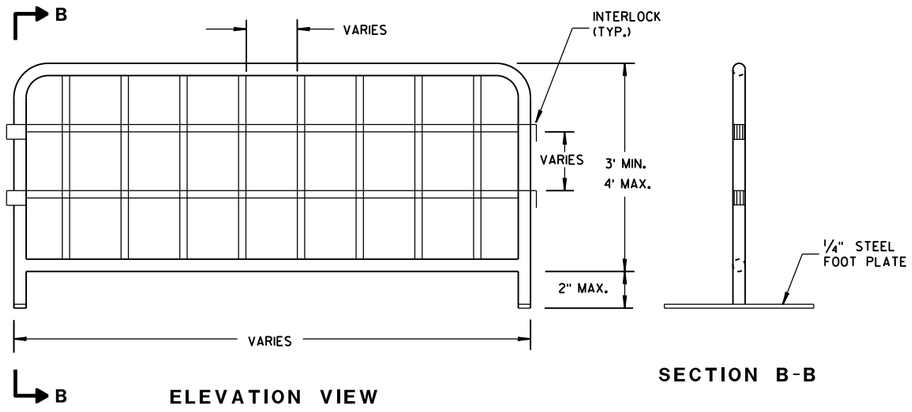
(1) INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



SECTION A-A



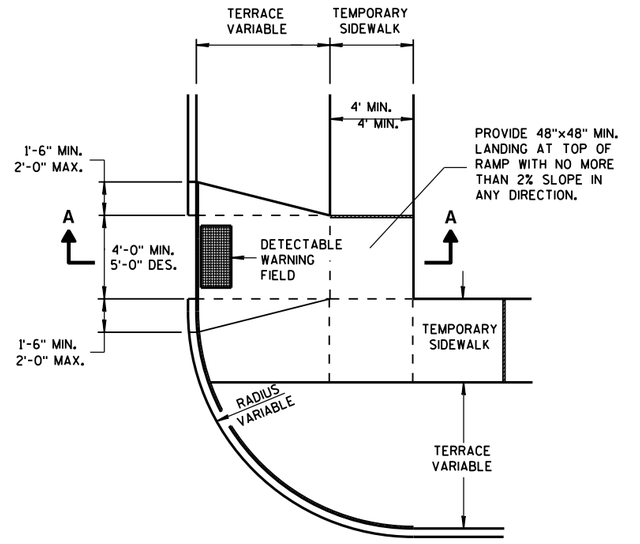
PEDESTRIAN SAFETY FENCE



ELEVATION VIEW

SECTION B-B

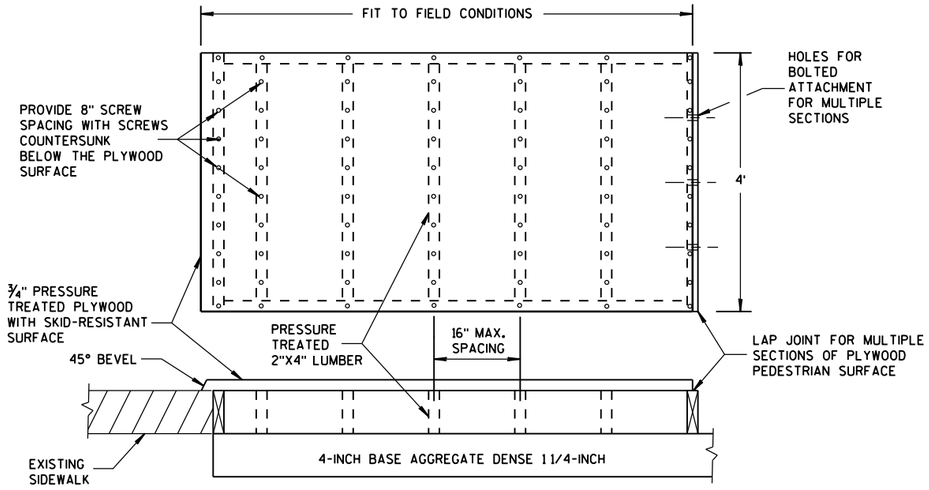
TEMPORARY PEDESTRIAN STEEL BARRICADE (1)



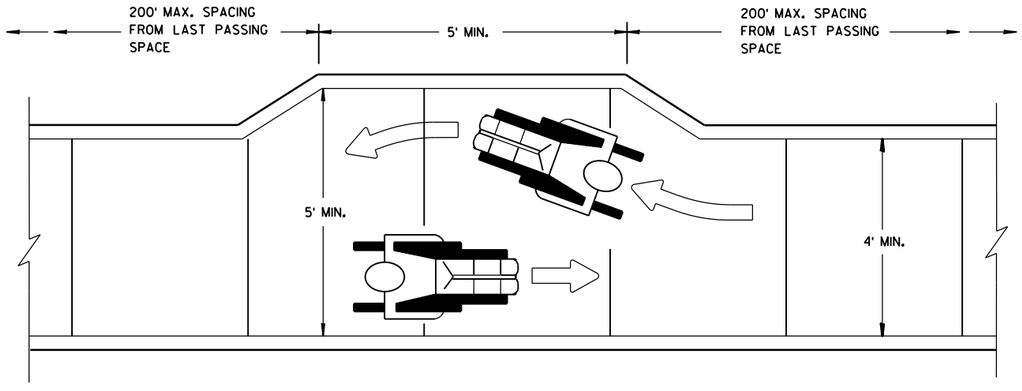
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

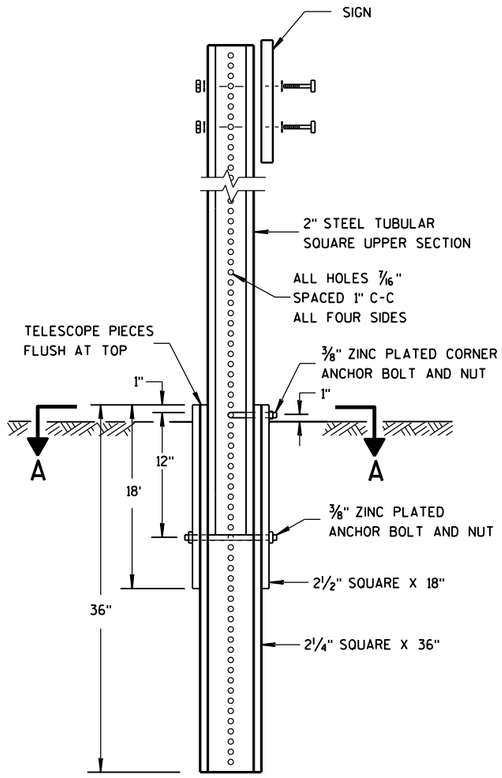
APPROVED
June 2016
DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZON SAFETY ENGIN IC
FHWA

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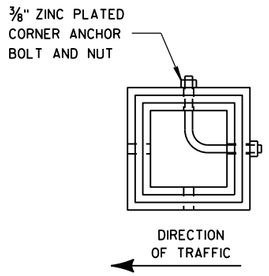
S.D.D. 15 D 30-3c

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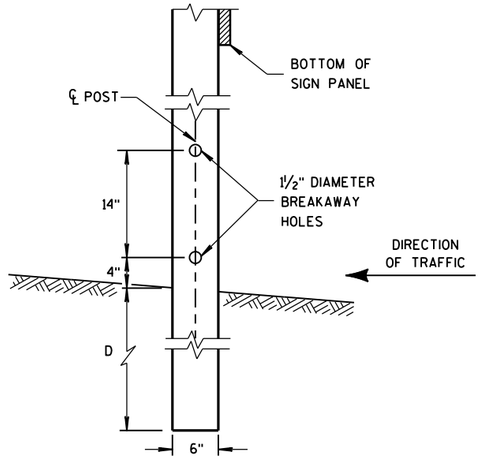
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DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



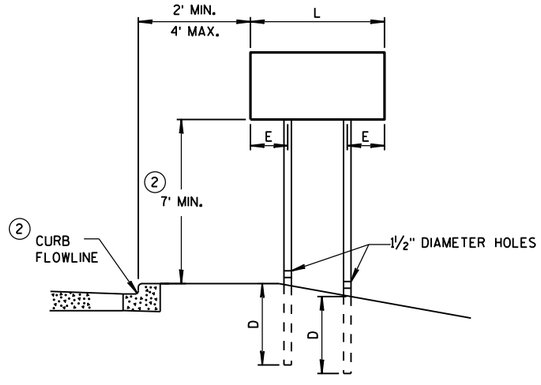
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

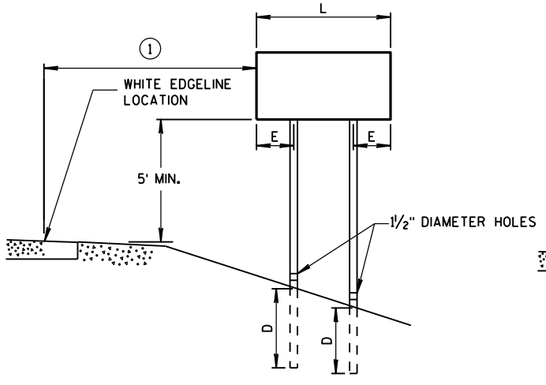
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

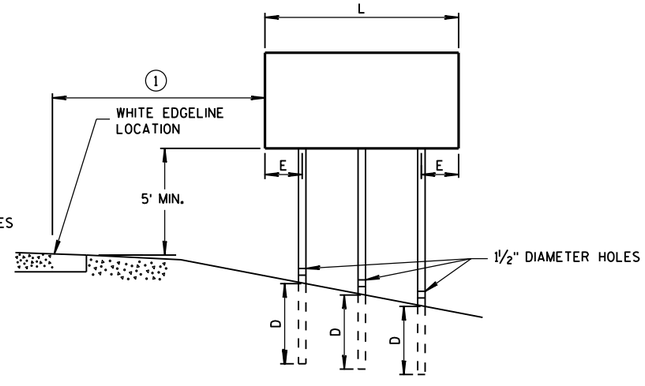
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

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

4" X 6" WOOD POST

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

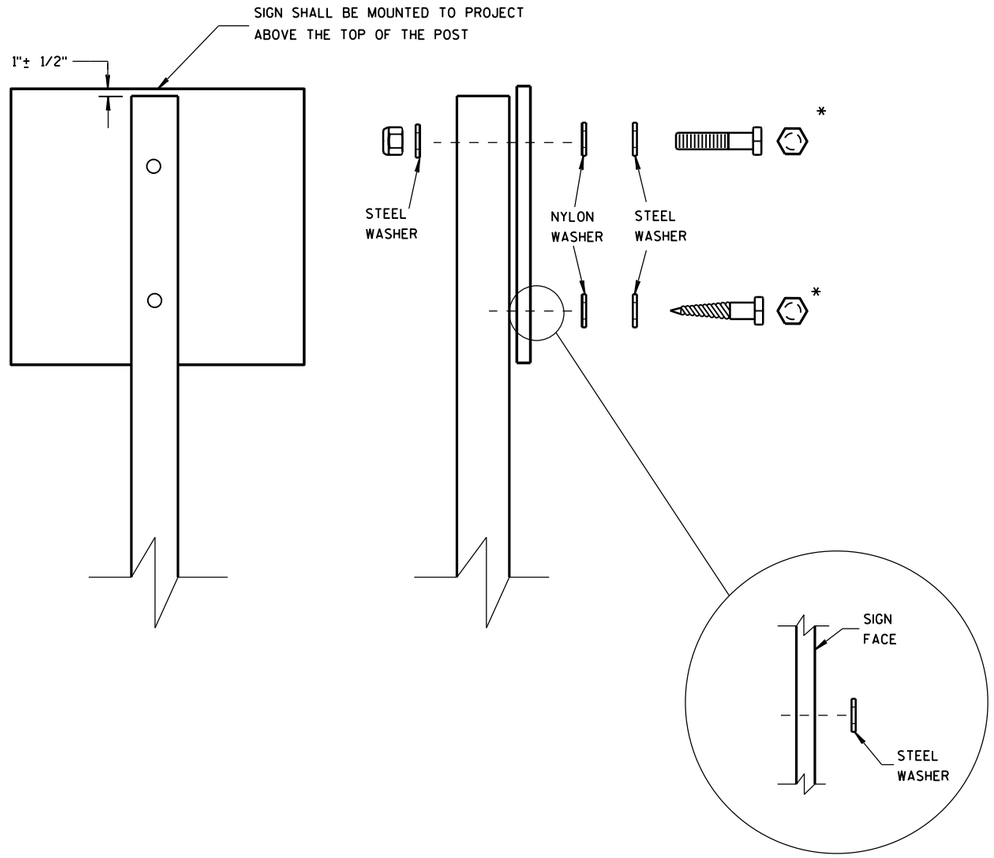
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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S.D.D. 15 D 38-2a



WASHER PLACEMENT WHEN SIGN HAS OTHER THAN TYPE H OR TYPE F FACE

NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3

B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POSTS (4" x 4" or 4" x 6")

LAG SCREWS - 3/8" X 3"

MACHINE BOLTS - 5/16" X 6-1/2" OR 7" LENGTH W/ NUTS

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" LENGTH W/ NUTS

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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S.D.D. 15 D 38-2b

S.D.D. 15 D 38-2b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
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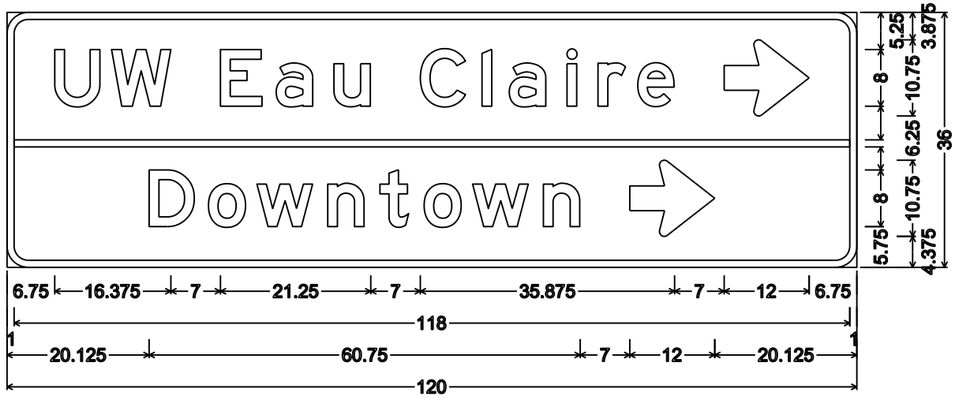
June 2017
DATE

/S/ Andrew Heldtke
WORK ZONE ENG

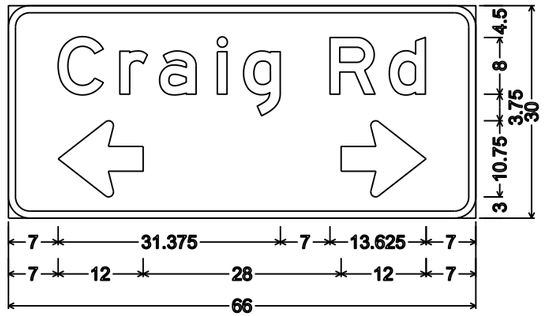
FHWA

NOTES

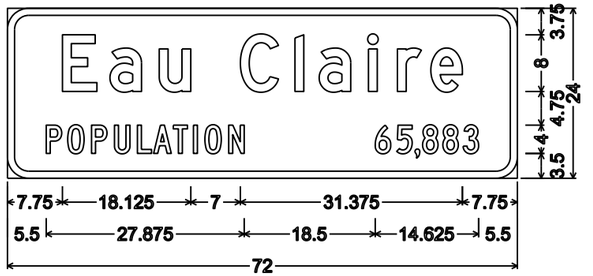
1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E except as noted



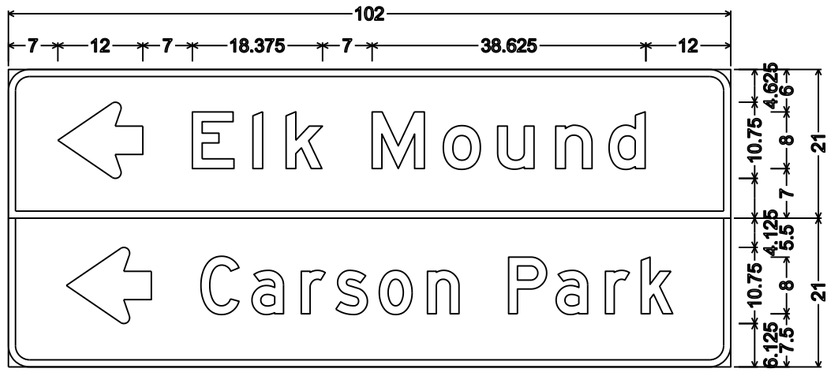
D1-2; 3.000" Radius, 1.000" Border



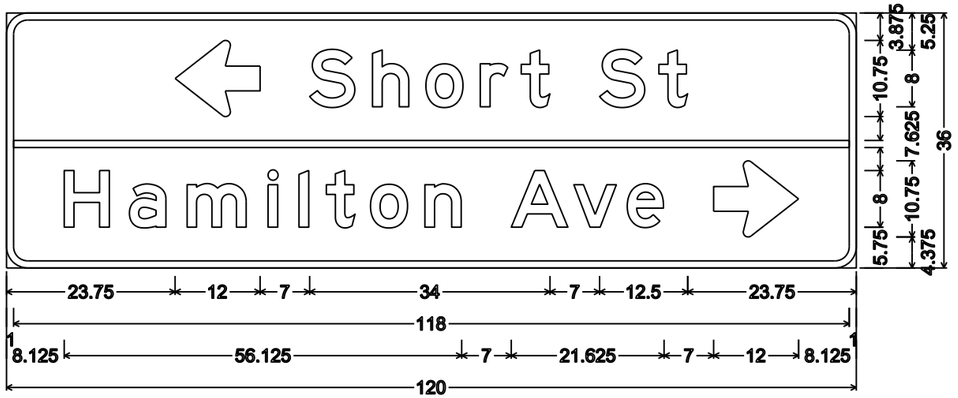
D1-61;
3.000" Radius, 1.000" Border



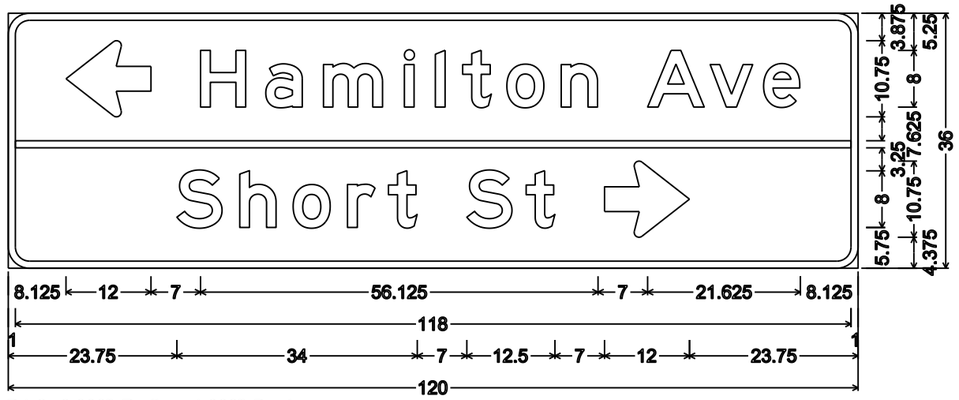
I2-3; 3.000" Radius, 1.000" Border,
"Eau" D; "Claire" D; "POPULATION" C; "65,883" C



D1-2; 3.000" Radius, 1.000" Border, White on Green;
"Elk" E; "Mound" E;
3.000" Radius, 1.000" Border, White on Brown;
"Carson" D; "Park" D



D1-2; 3.000" Radius, 1.000" Border

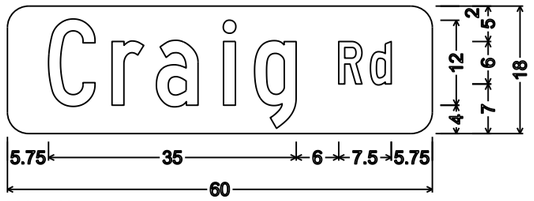


D1-2; 3.000" Radius, 1.000" Border

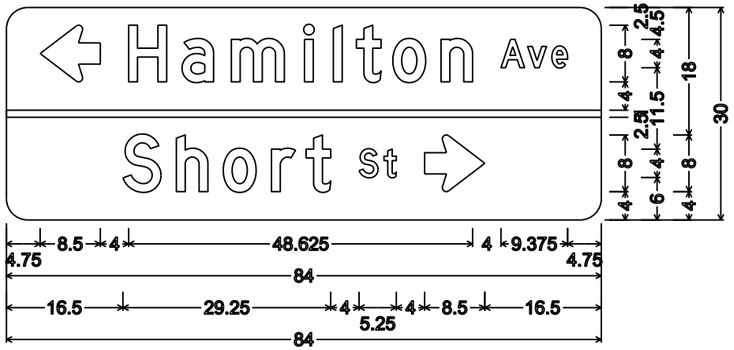
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 253	E

NOTES

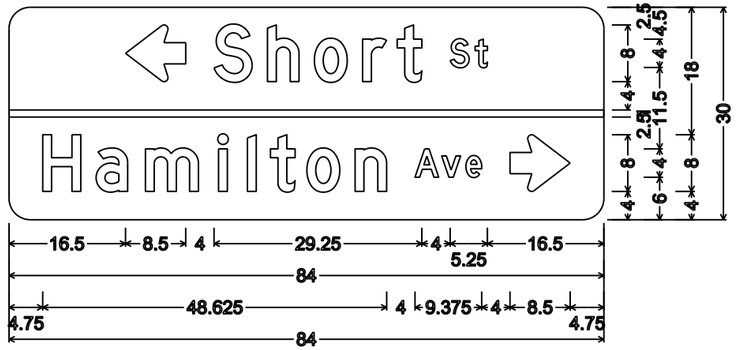
1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - D except as noted
4. Sign base material is .125" aluminum



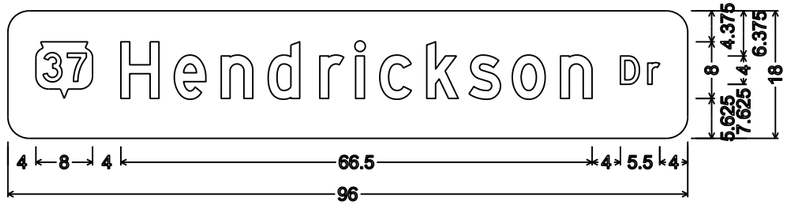
M1-94H;
3.000" Radius, No border,
"Craig" C; "Rd" C



M1-94H; 3.000" Radius, No border



M1-94H; 3.000" Radius, No border,



M1-94S; 3.000" Radius, No border

7

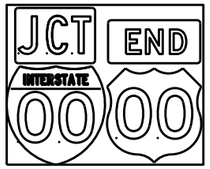
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	PERMANENT SIGNING	SHEET NO: 254	E

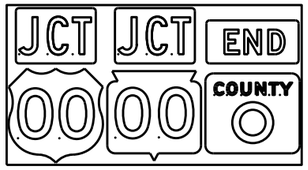
TYPICAL ASSEMBLIES



J1-1



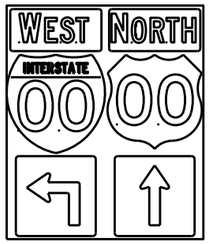
J1-2



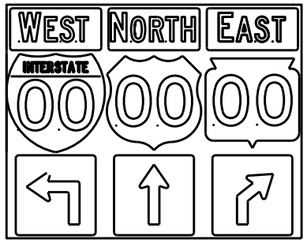
J1-3



J2-1



J2-2

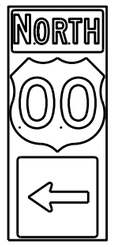


J2-3

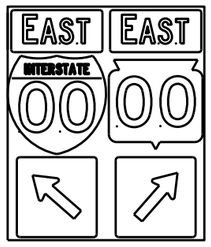


JV

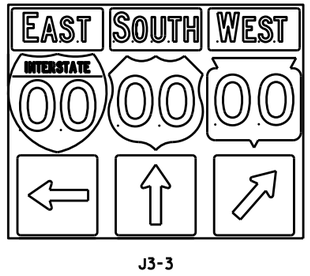
(Typical Vertical J-Assembly
See Note 10 and 11)



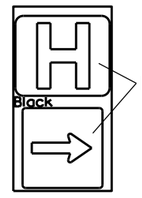
J3-1



J3-2



J3-3

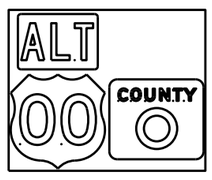


Blue Background

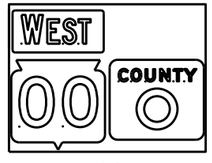
JH-1



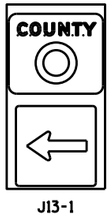
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

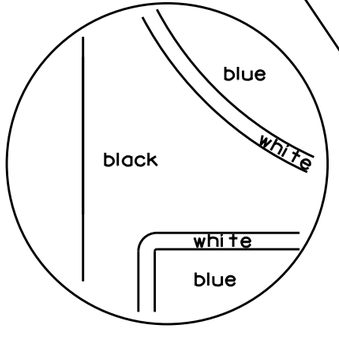


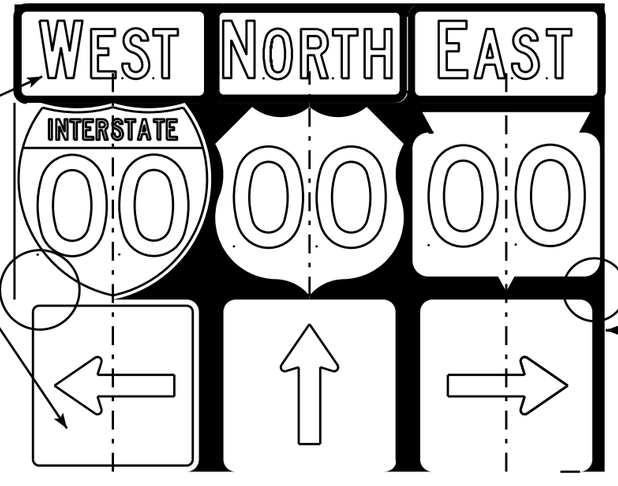
J23-1

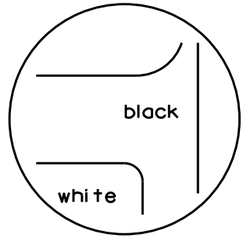


J22-1

[blue background with interstate]







[black background]

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

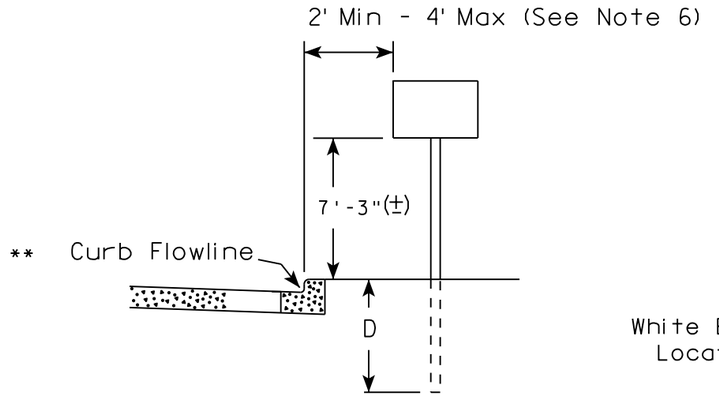
PROJECT NO:

SHEET NO: E

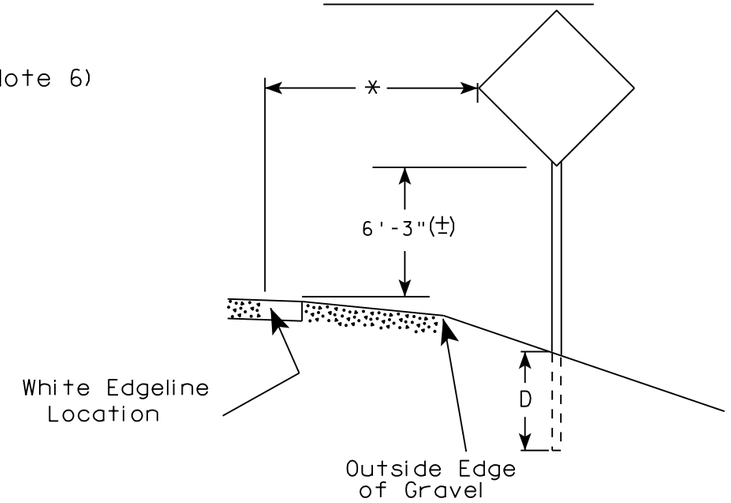
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

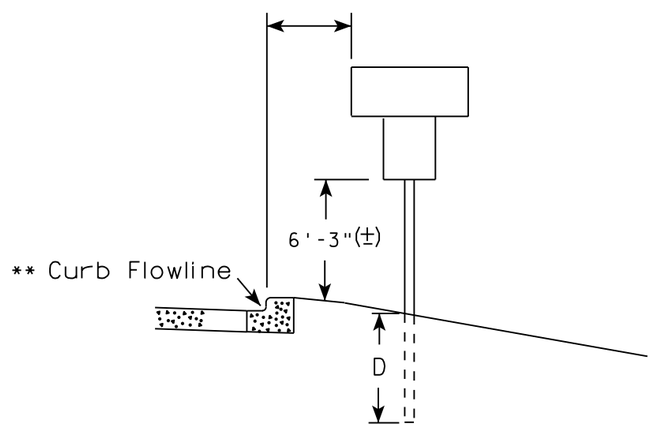
WISDOT/CADDS SHEET 42

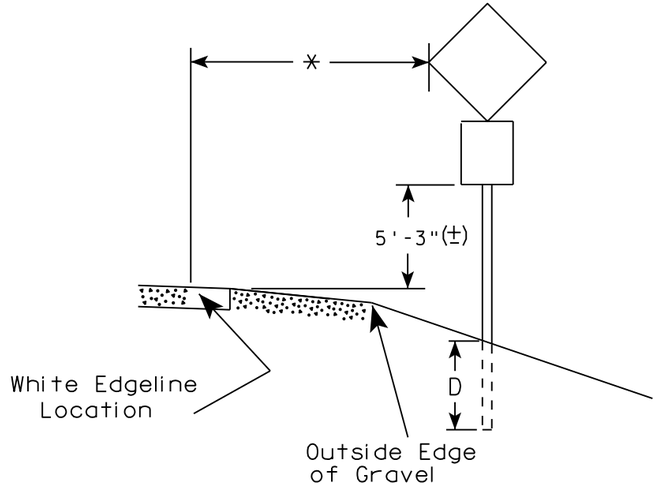
URBAN AREA



RURAL AREA (See Note 2)







** 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.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

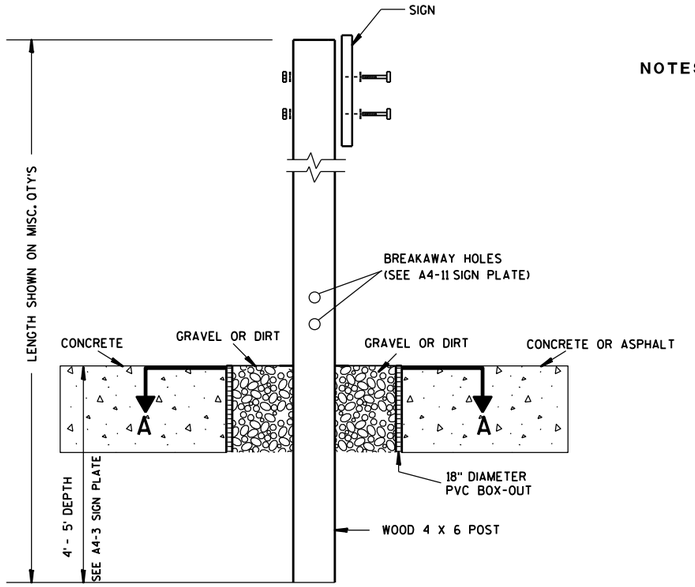
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies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

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

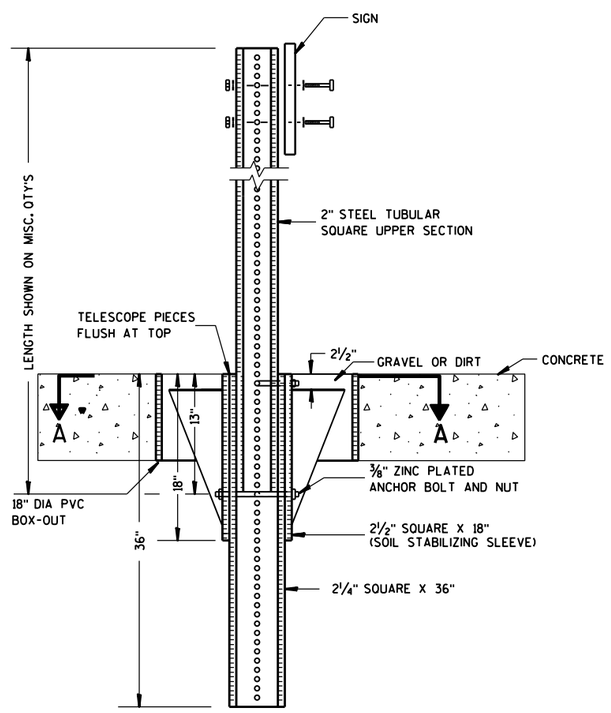
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

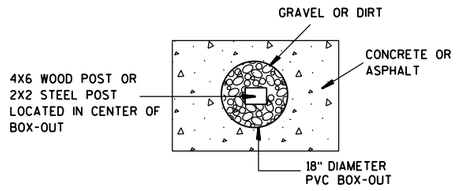
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

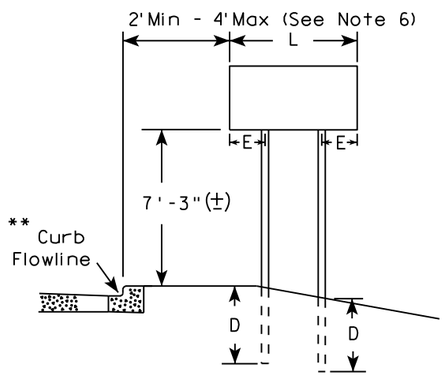
APPROVED Matthew R Rauch
for State Traffic Engineer

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

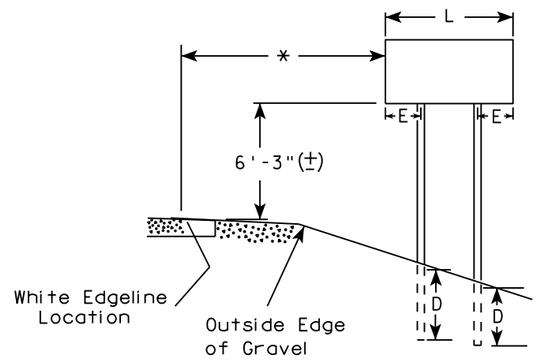
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

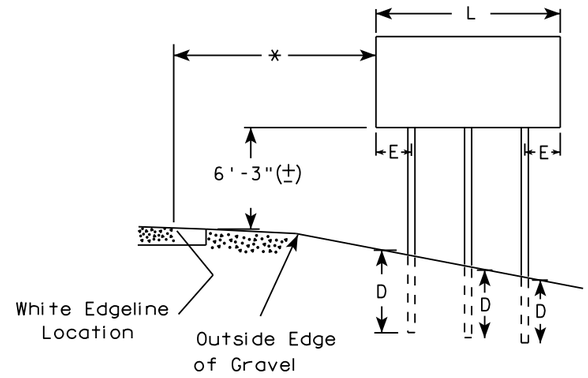
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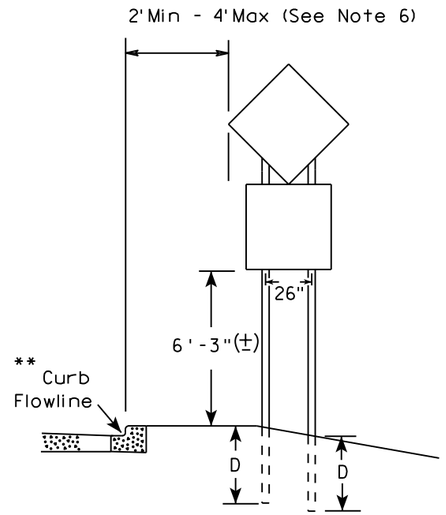
URBAN AREA



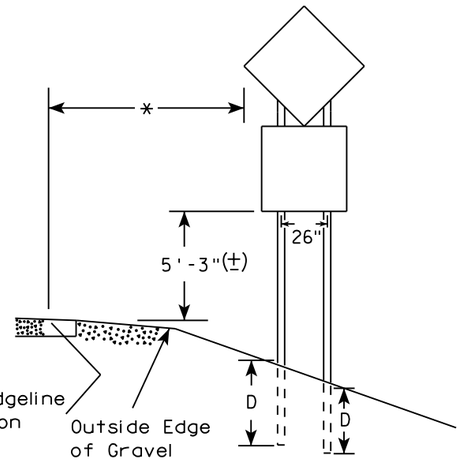
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

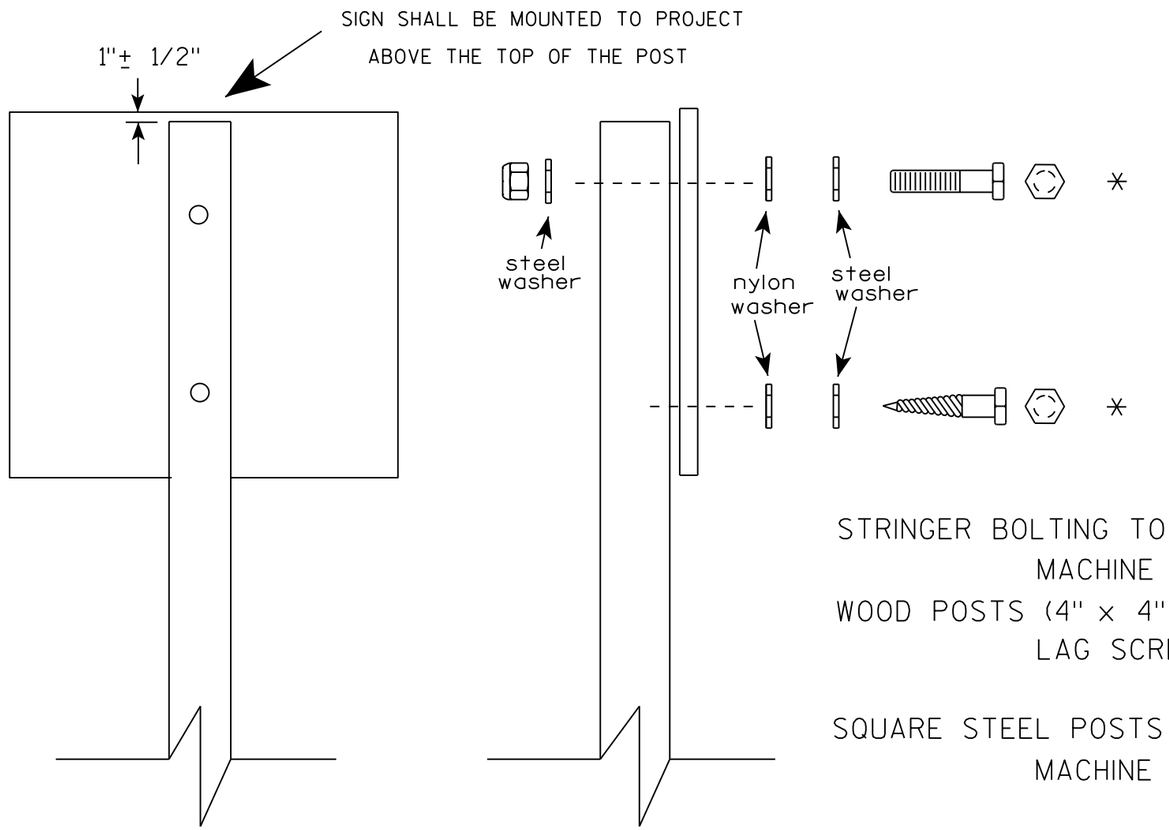
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 258	E



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

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

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)
SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

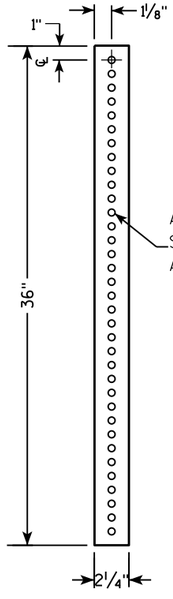
DATE 8/11/16 PLATE NO. A4-8.8

PROJECT NO: SHEET NO: E

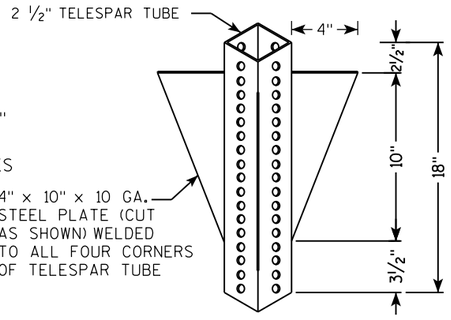
FILE NAME : C:\CADfiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 11-AUG-2016 11:35 PLOT BY : $$ plotuser $$

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

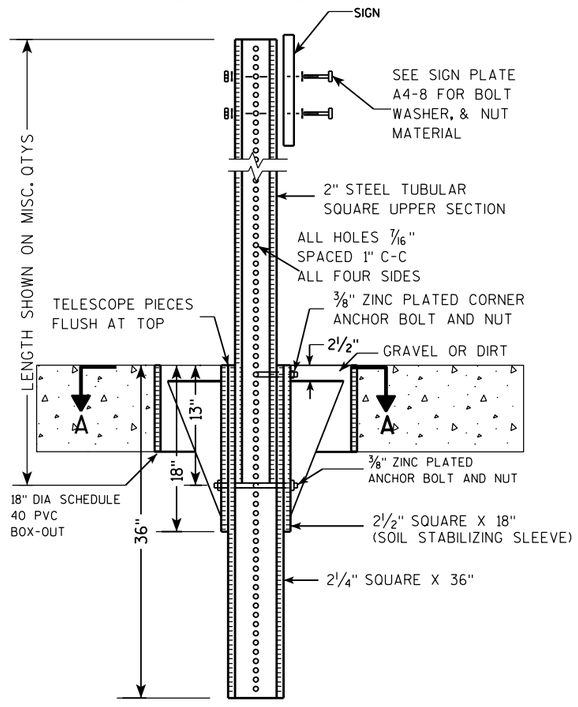
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



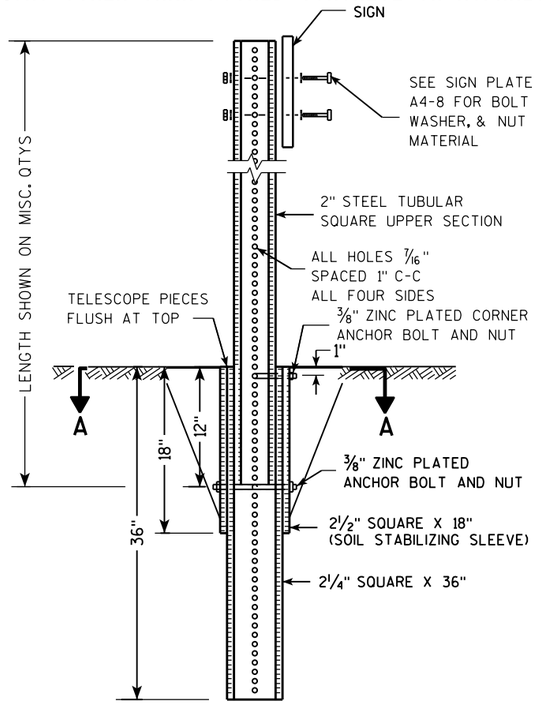
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

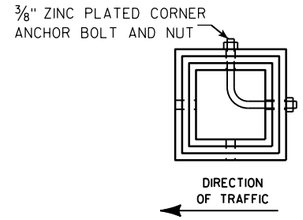


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

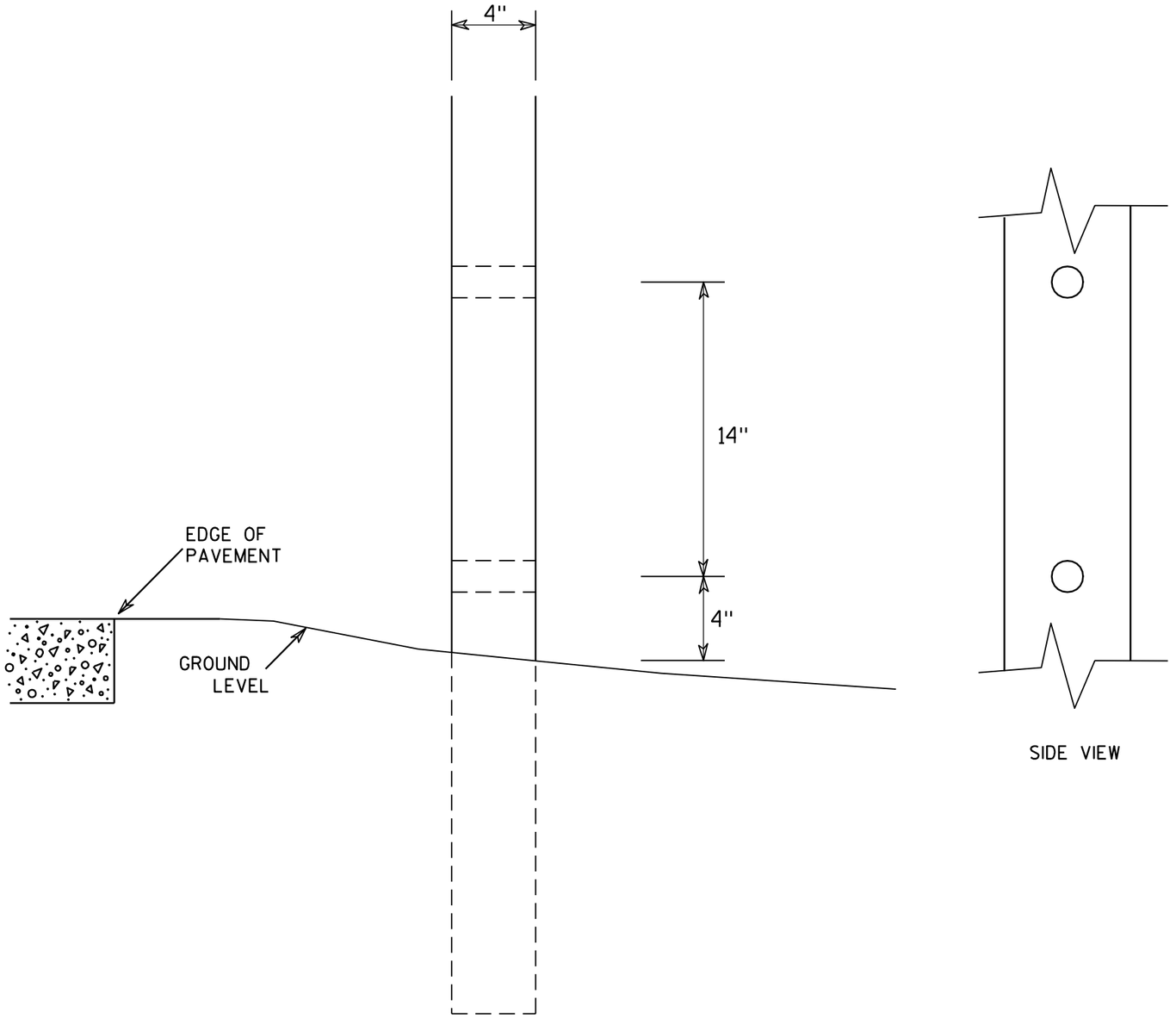
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 260 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

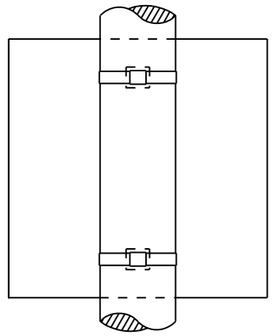
APPROVED Chester J Spang
for State Traffic Engineer

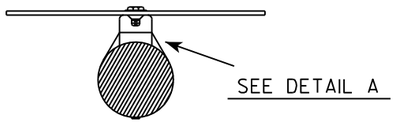
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 261	E

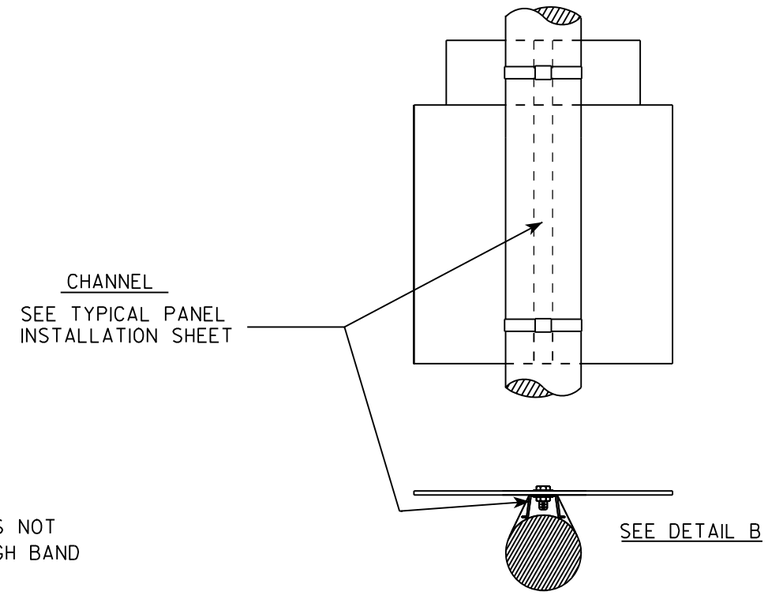
BANDING

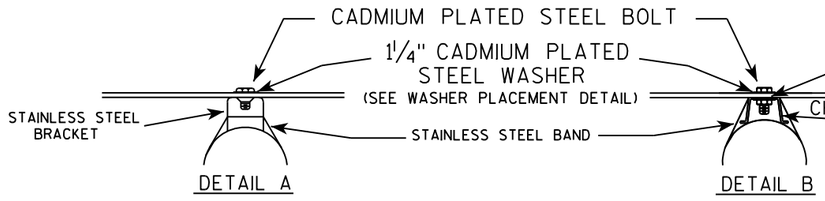
SINGLE SIGN



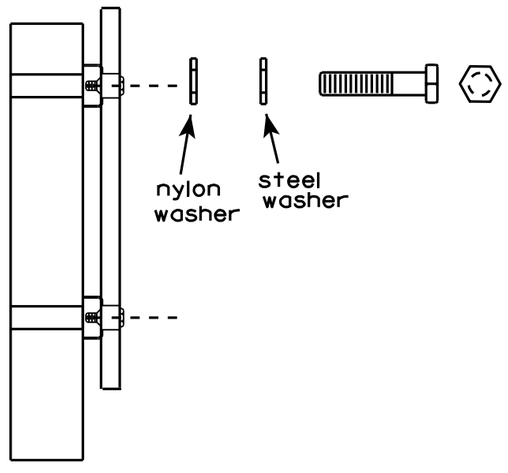


"J" ASSEMBLY





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.

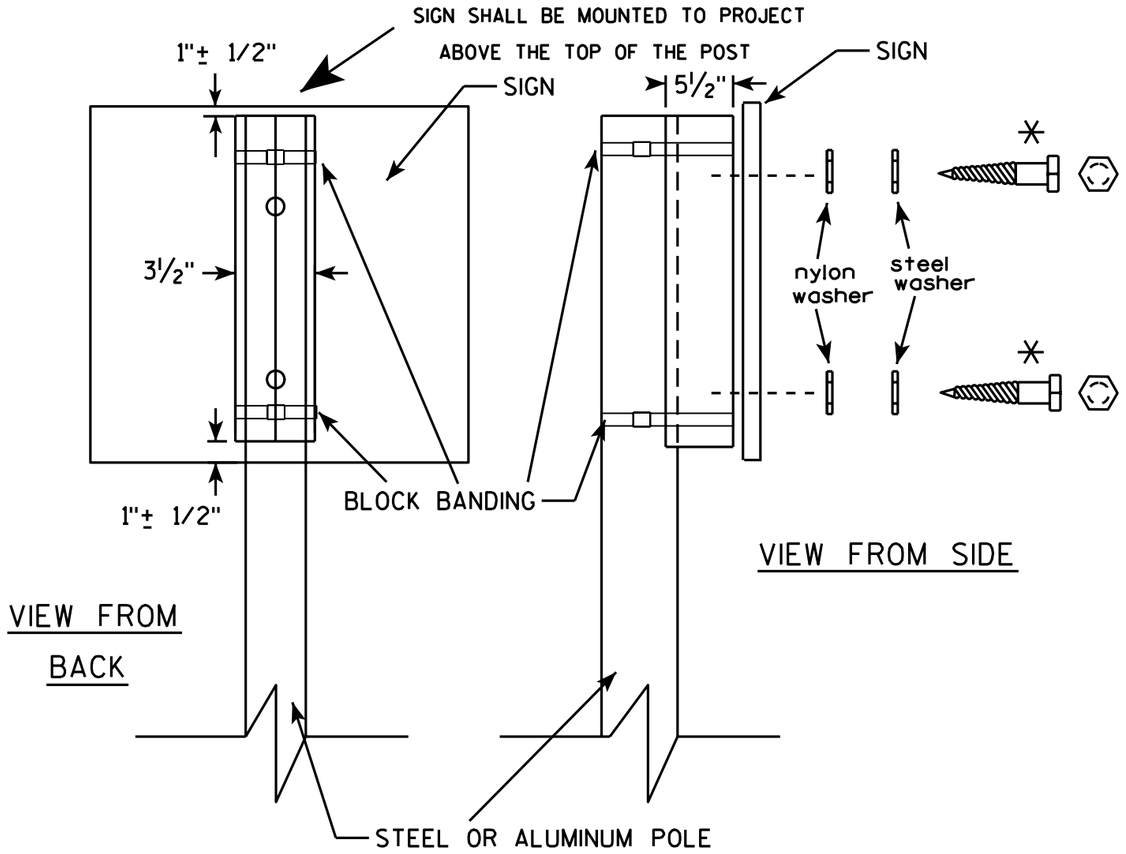
STANDARD SIGN
SIGN BANDING DETAILS

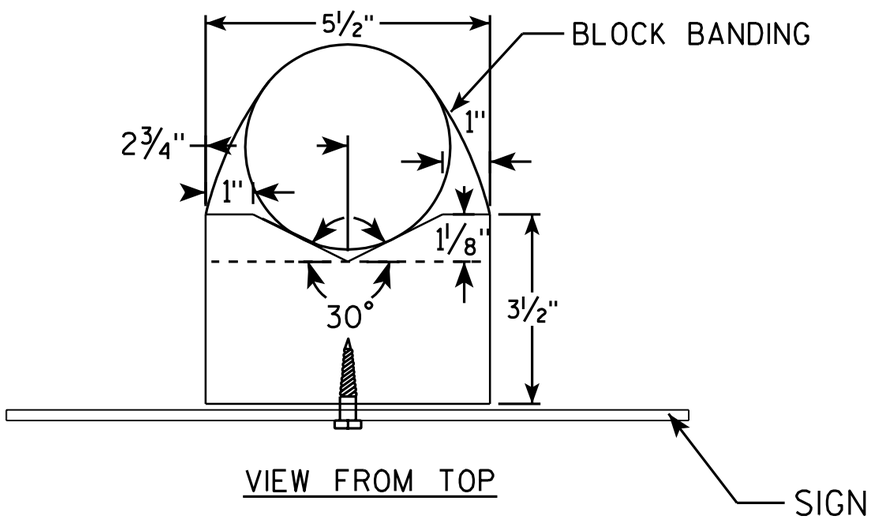
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 262	E





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
   b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
   c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

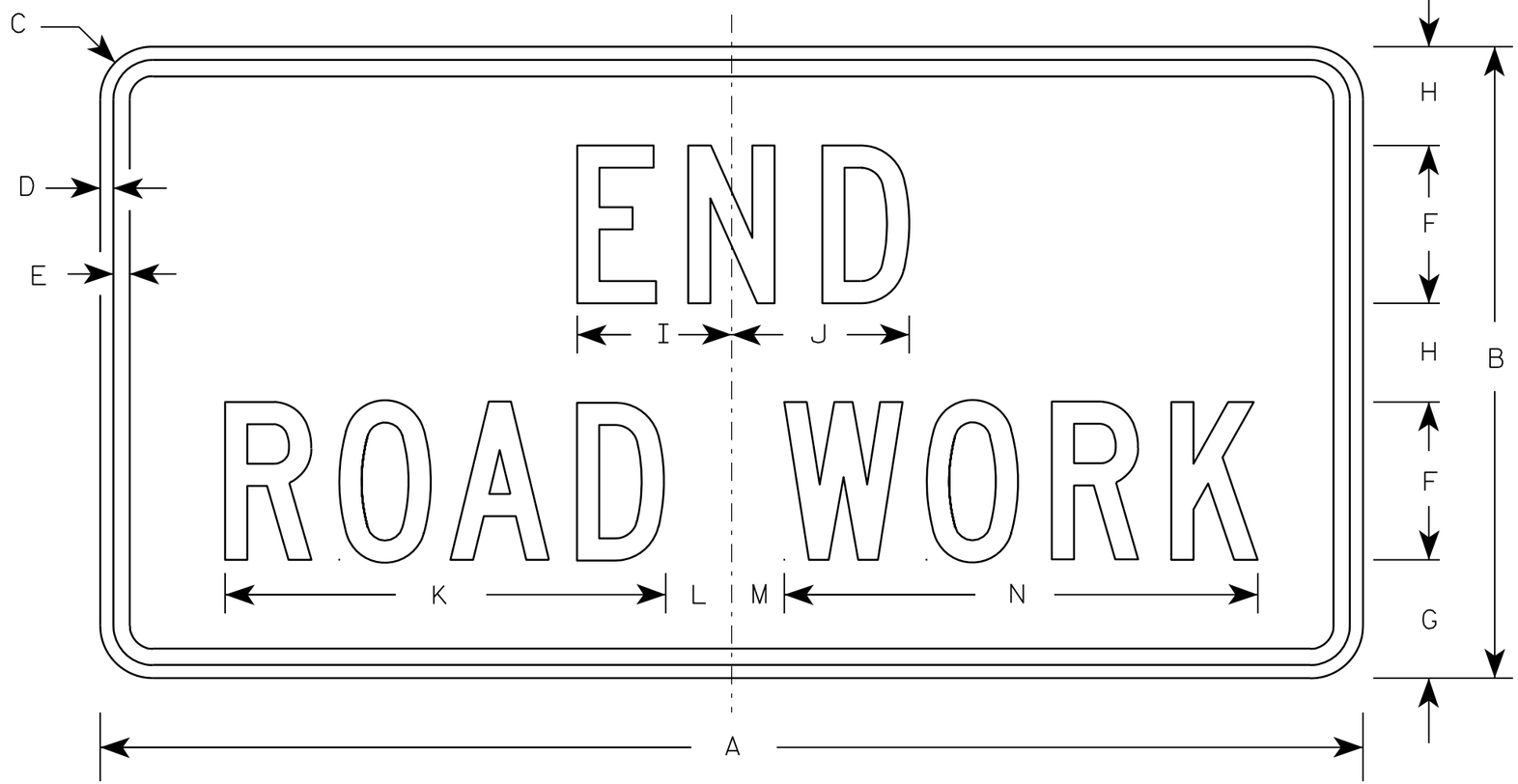
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO: 263 E



G20-2A

NOTES

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

Metric equivalent for this sign is:

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

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

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

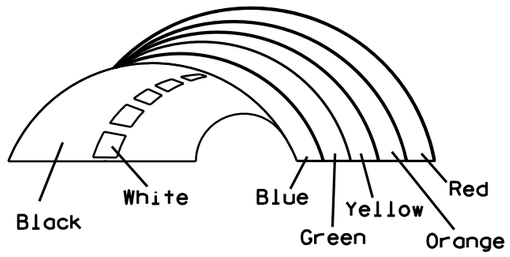
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 264	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

Background Colors of Symbol*



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

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

STANDARD SIGN
I55-56

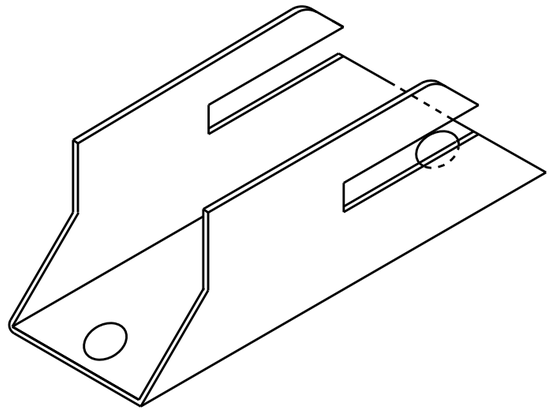
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 265

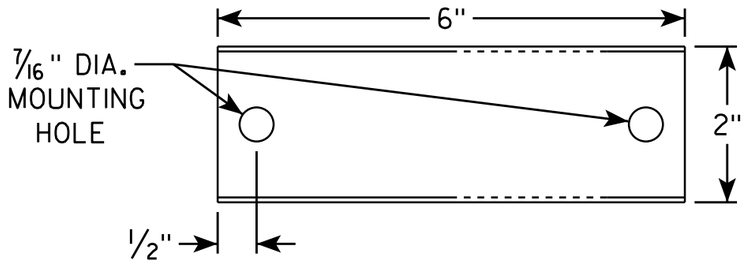
ISOMETRIC VIEW



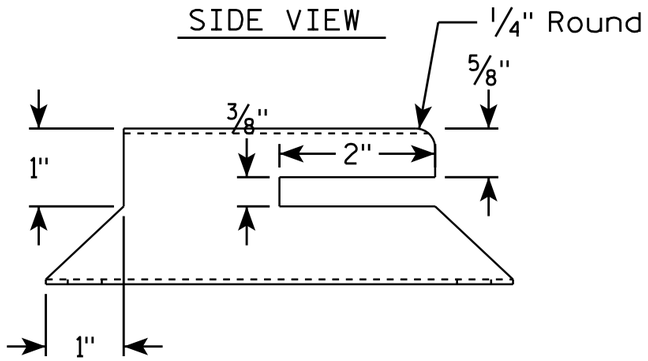
NOTES

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.

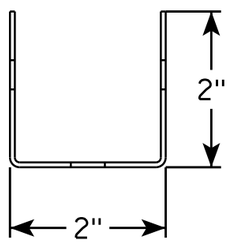
TOP VIEW



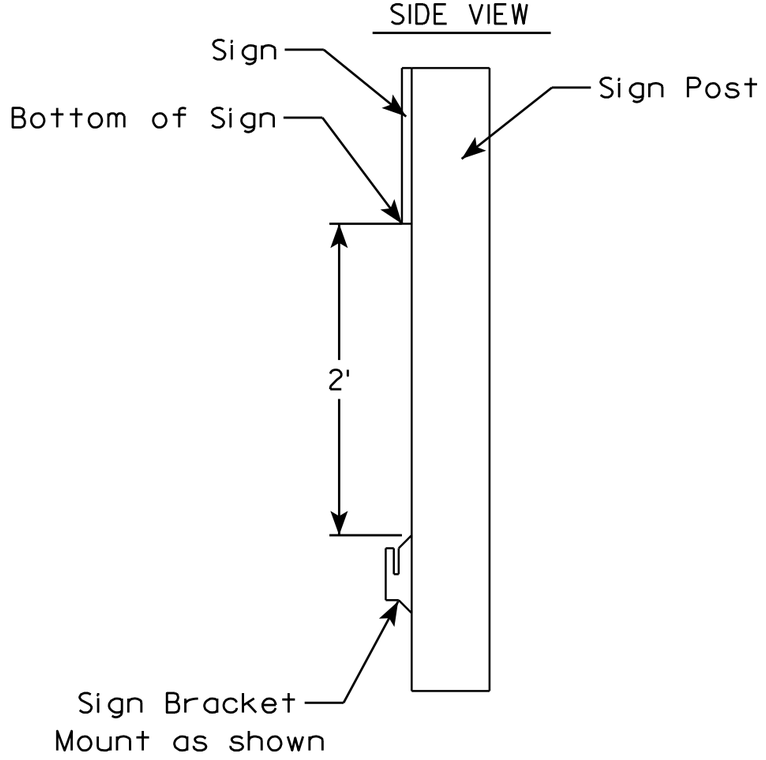
SIDE VIEW



END VIEW



SIDE VIEW



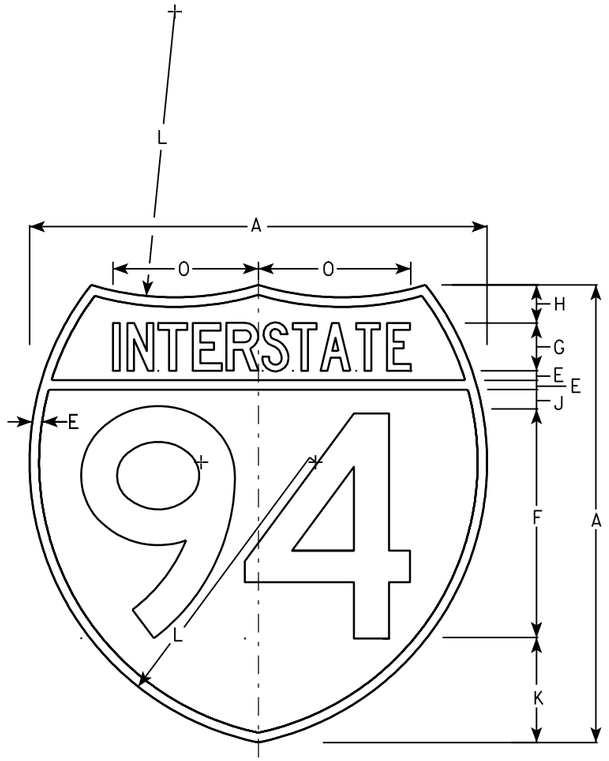
ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

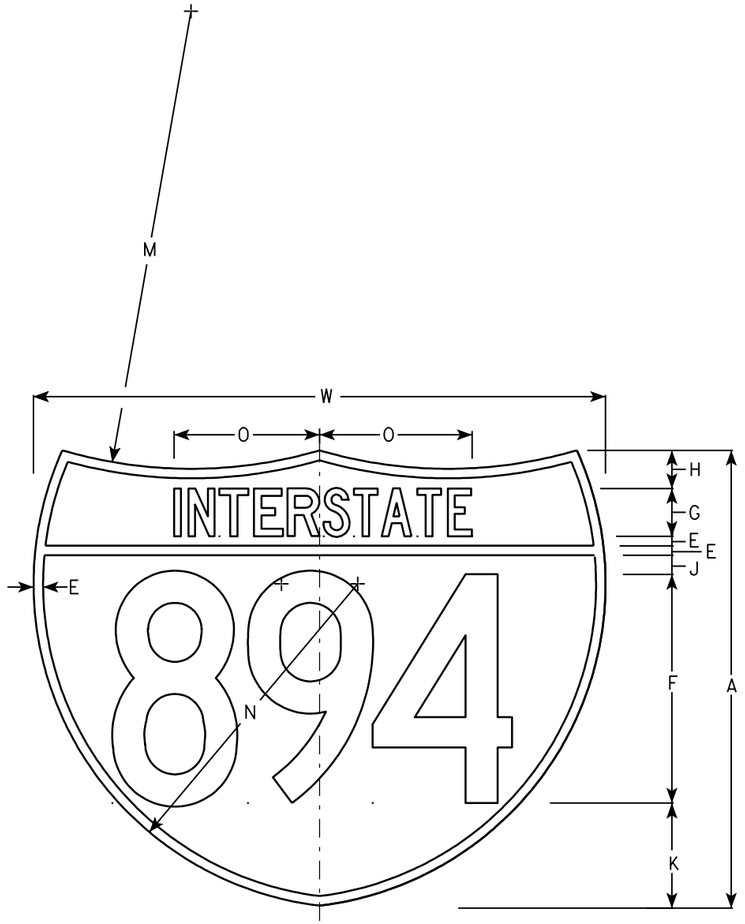
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/26/16 PLATE I55-56B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

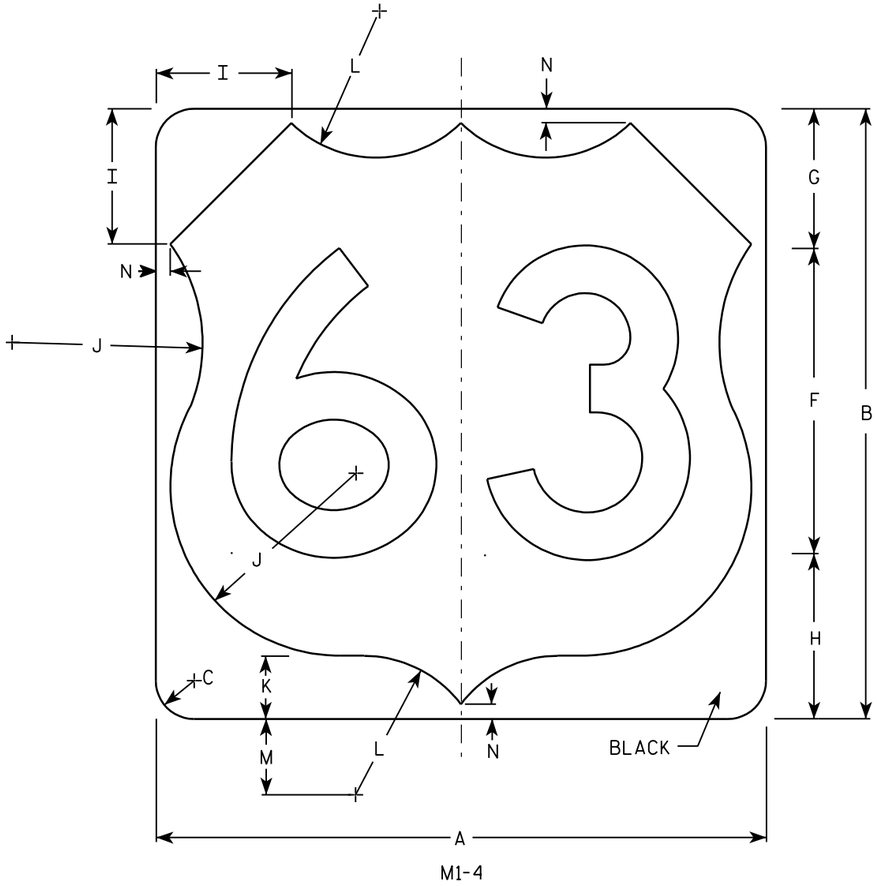
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

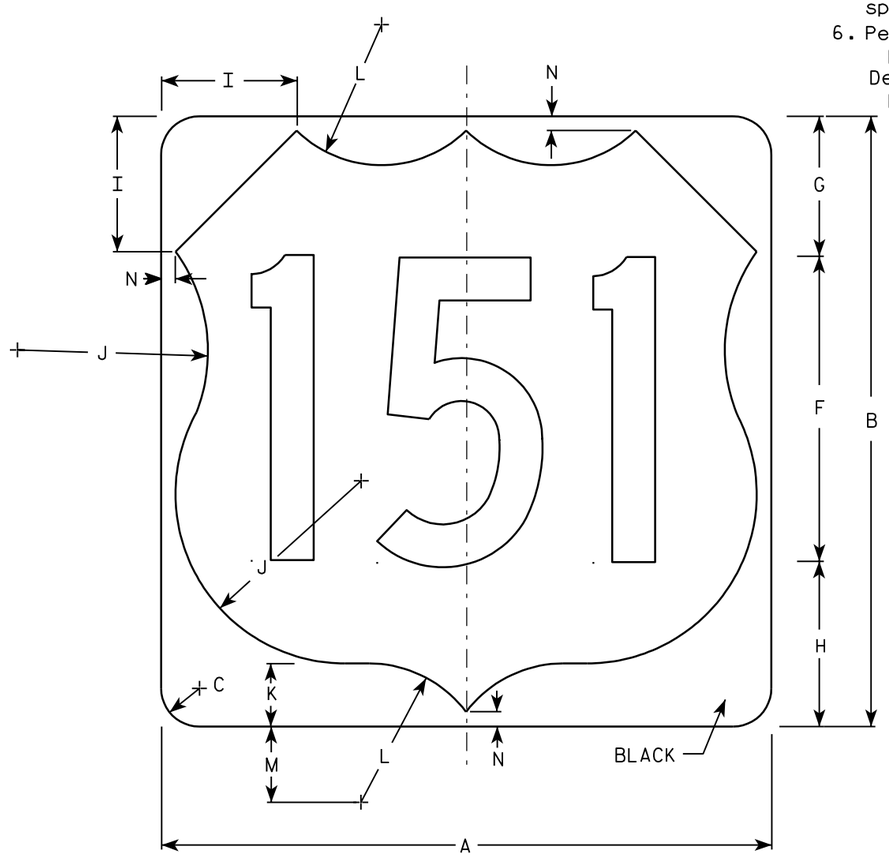
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 267	E

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	Areq sq. ft.	Area m2
1																												
2	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0	.36
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0	.81

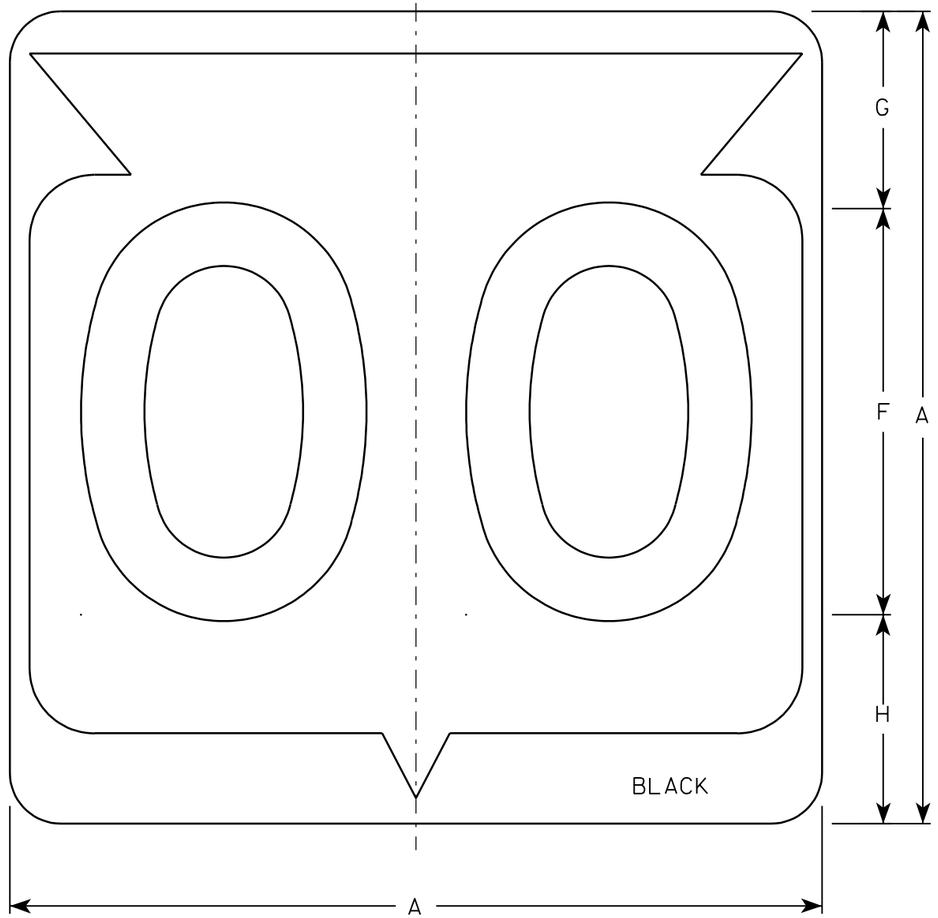
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 08/25/05 PLATE NO. M1-4.9

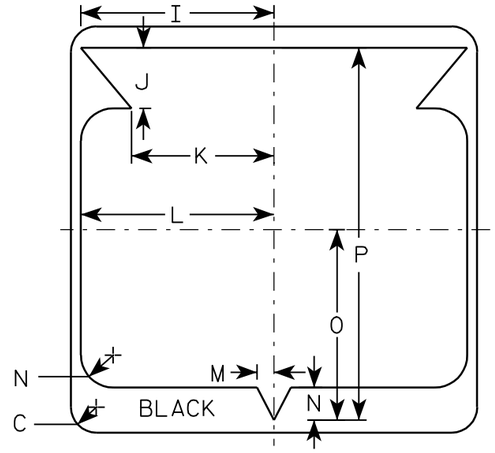
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 268	E



M1-6

NOTES

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



Metric equivalent for this sign is:

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

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

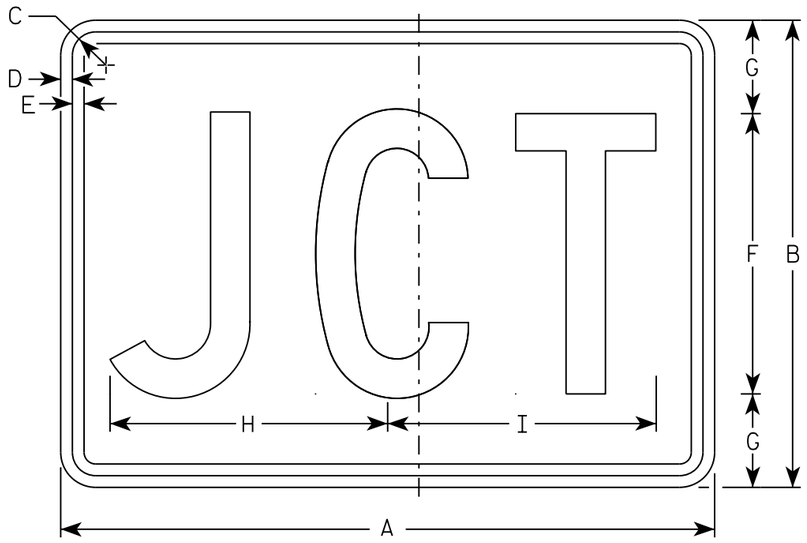
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

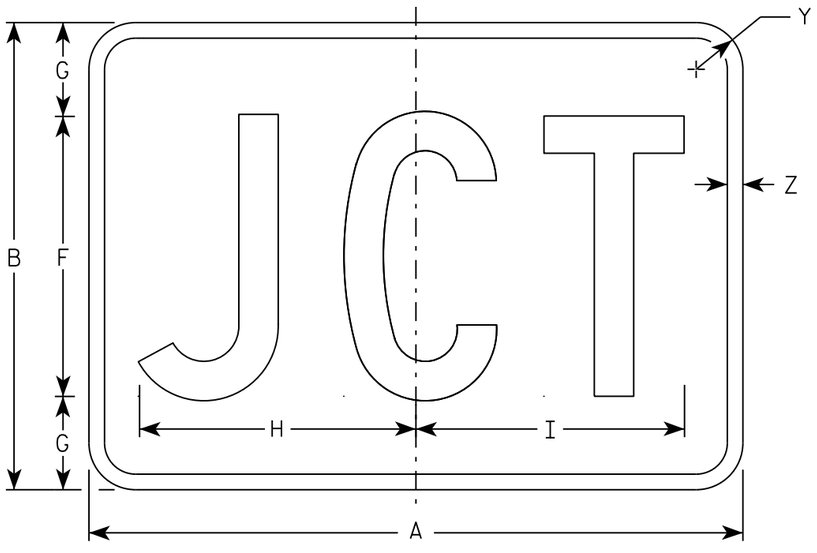
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 269	E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

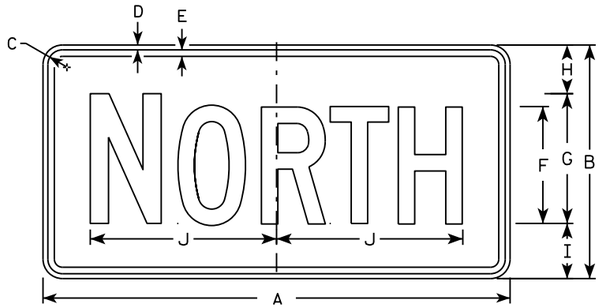
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

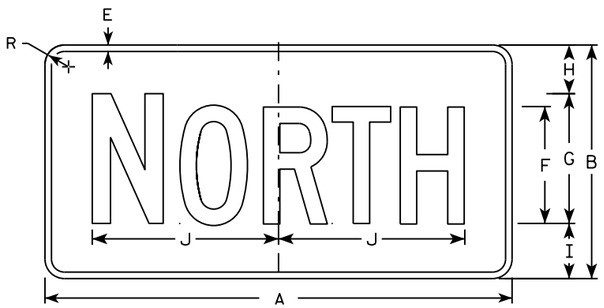
DATE 10/15/15 PLATE 270 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



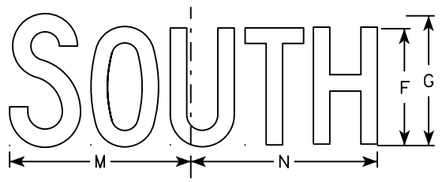
MB3-1
MK3-1
MN3-1



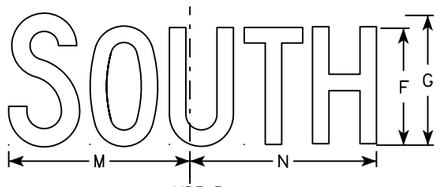
M3-2
MM3-2
MP3-2



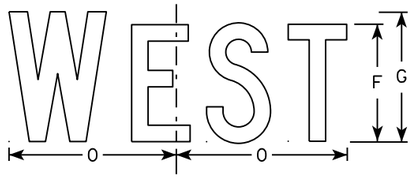
MB3-2
MK3-2
MN3-2



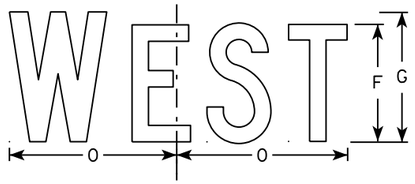
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

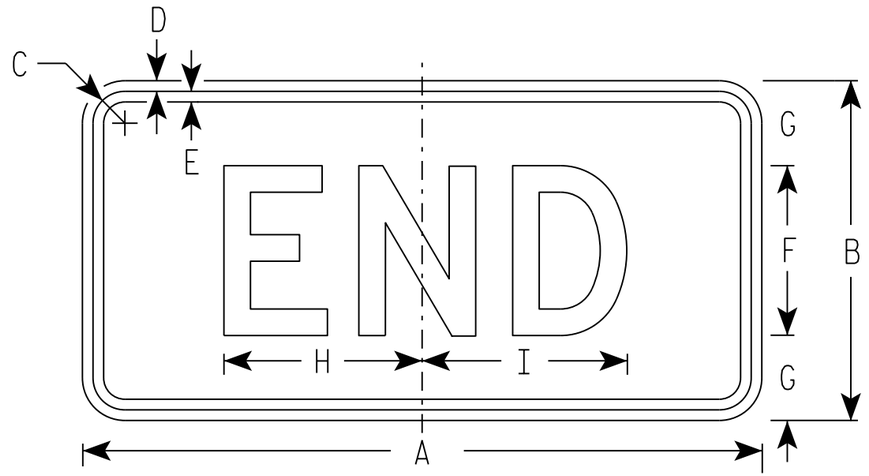
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

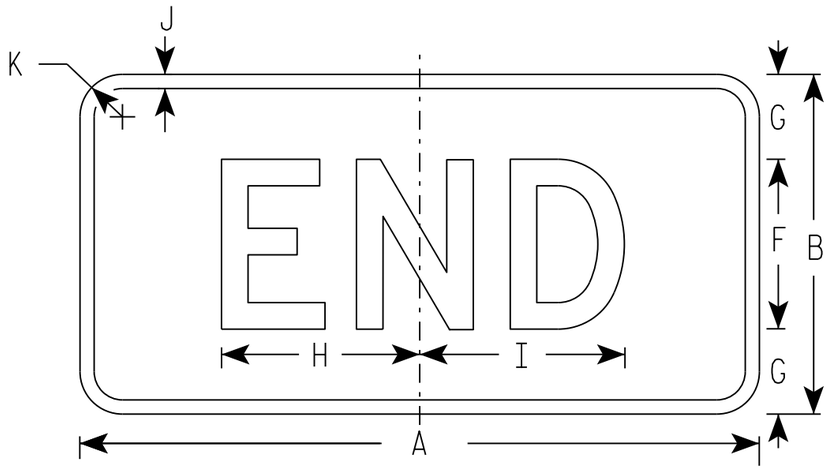
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-6
MM4-6
MP4-6



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

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-6 Background - White
   Message - Black

   MB4-6 Background - Blue
   Message - White

   MK4-6 Background - Green
   Message - White

   MM4-6 Background - White
   Message - Green

   MN4-6 Background - Brown
   Message - White

   MP4-6 Background - White
   Message - Blue

   MR4-6 Background - Brown
   Message - Yellow

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

STANDARD SIGN
M4-6

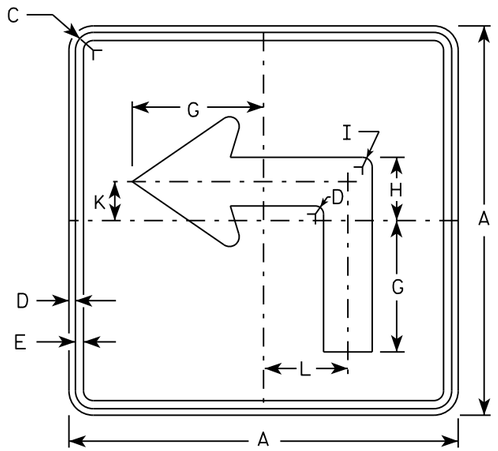
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

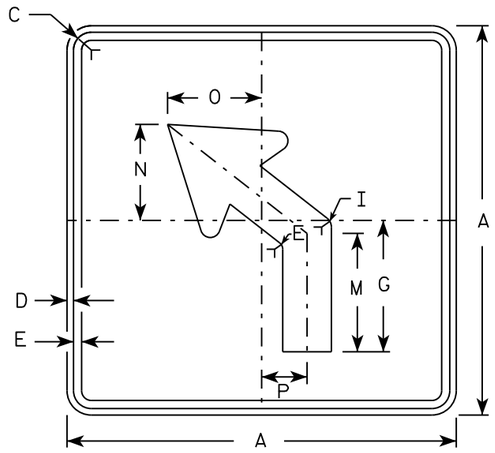
DATE 10/15/15 PLATE 272 '14-7.9

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

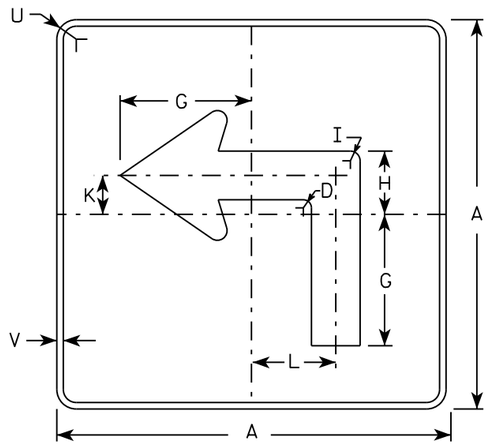
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M46.DGN PLOT DATE : 01-DEC-2015 17:55 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.351066:1.000000



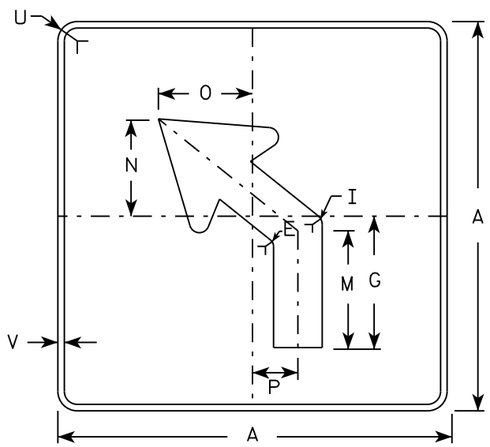
M5-1L
MM5-1L
MO5-1L
MP5-1L



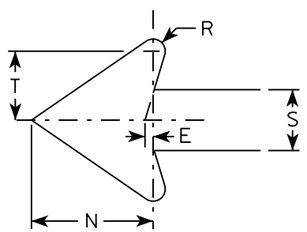
M5-2L
MM5-2L
MO5-2L
MP5-2L



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



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



NOTES

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

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

STANDARD SIGN
M5-1 & M5-2

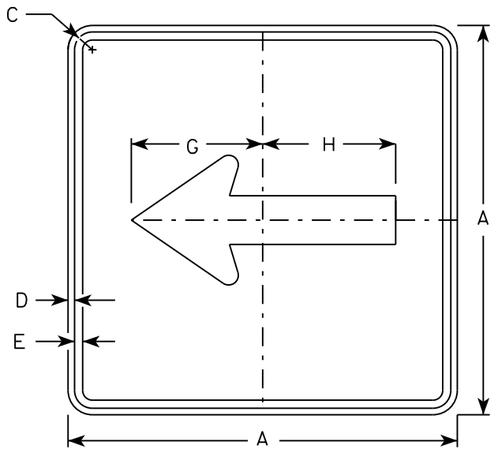
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

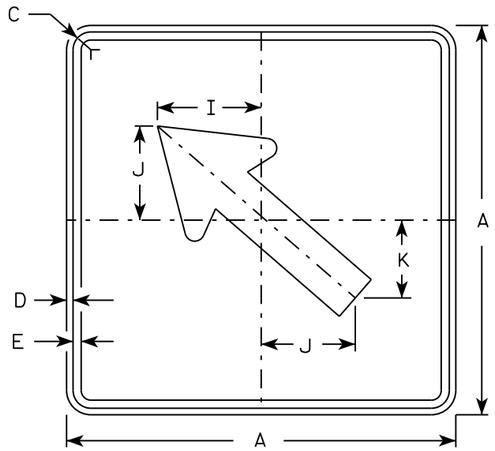
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



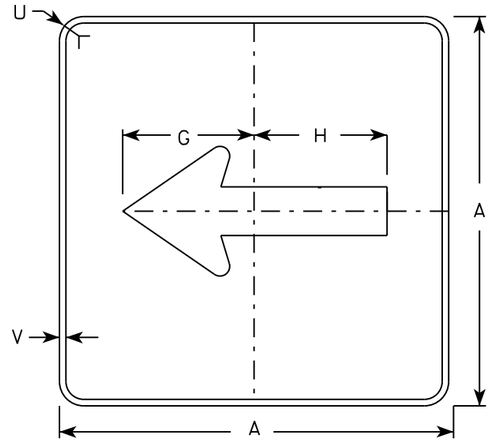
M6-1
MM6-1
MO6-1
MP6-1



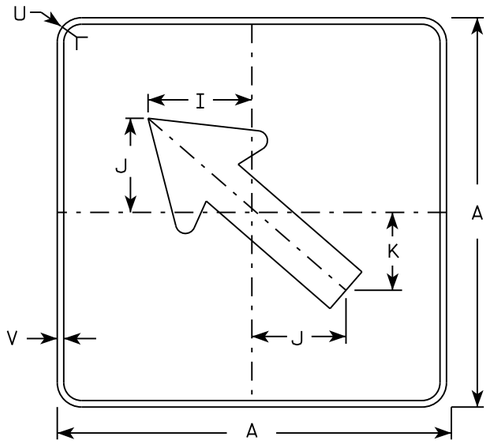
M6-2
MM6-2
MO6-2
MP6-2

NOTES

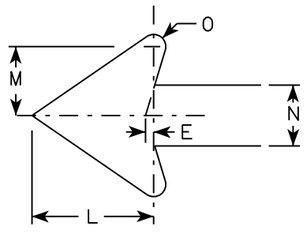
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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



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



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



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

STANDARD SIGN
M6-1 & M6-2
SERIES

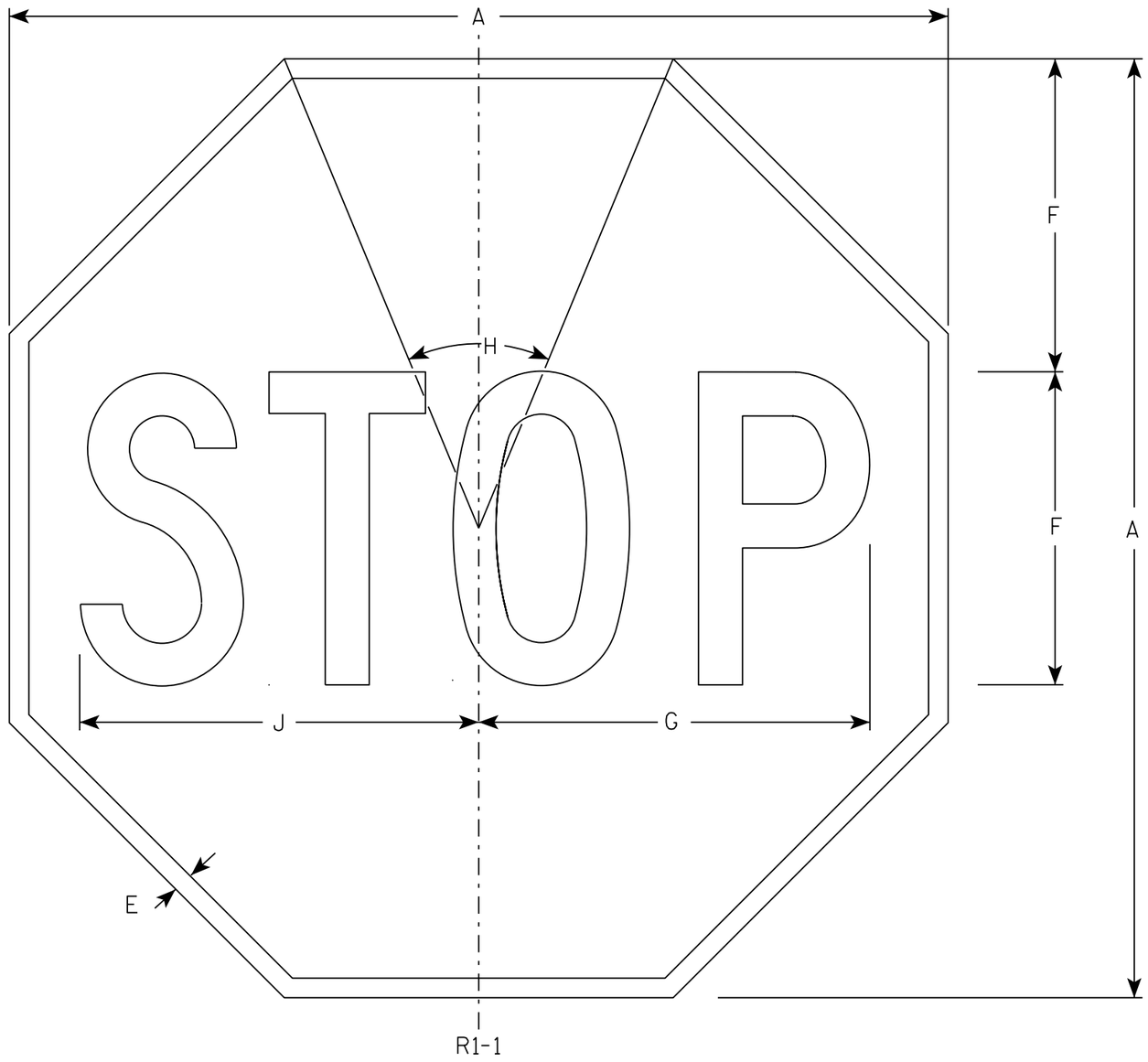
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATI 274 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ 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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

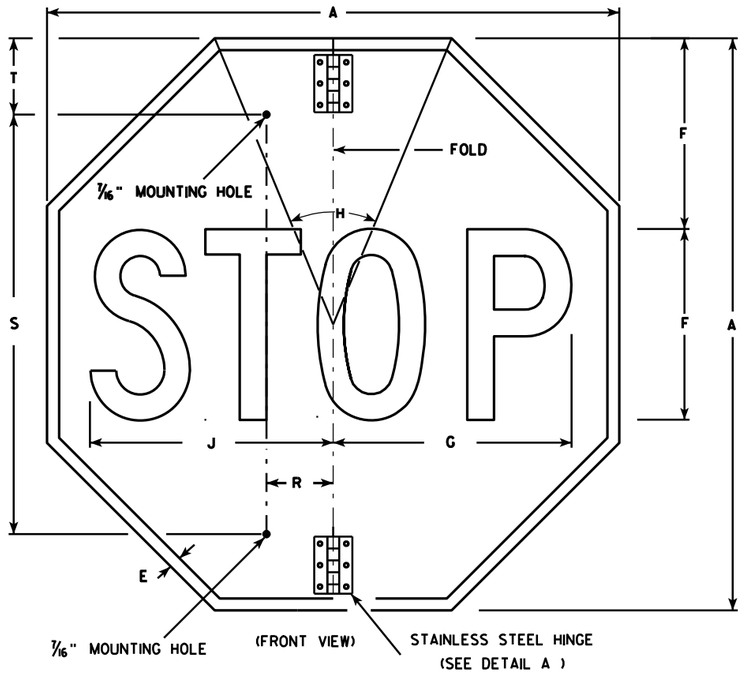
STANDARD SIGN
R1-1

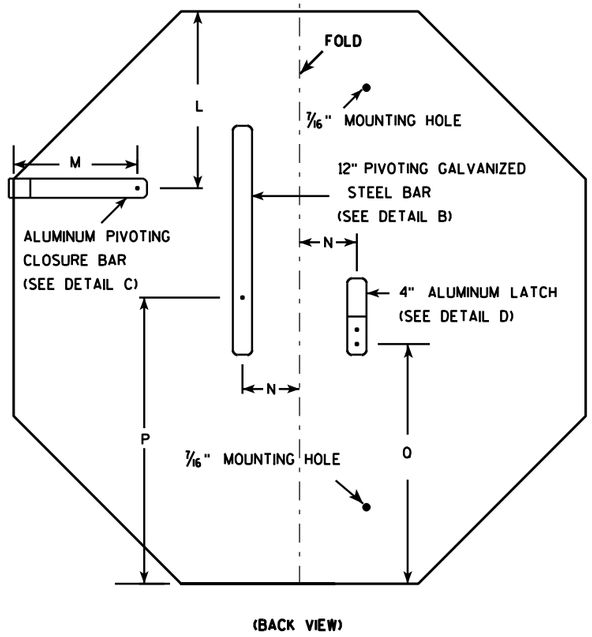
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

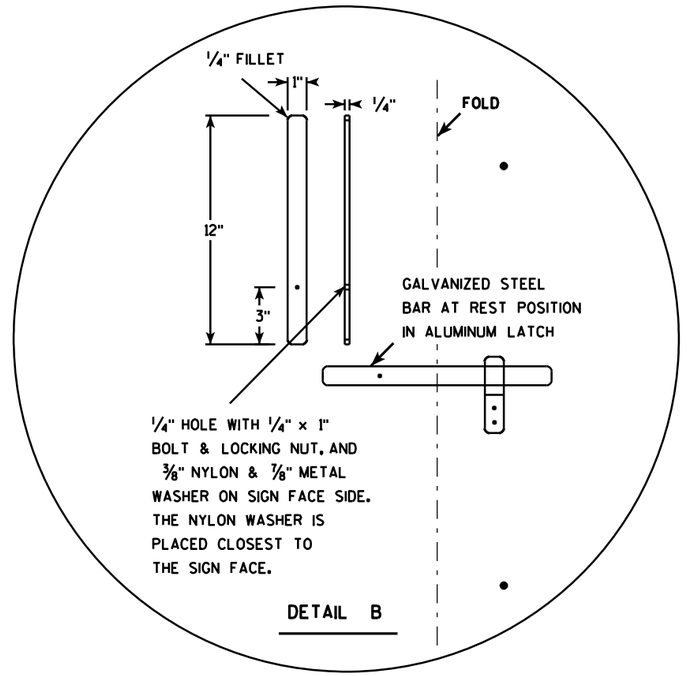
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 275	E

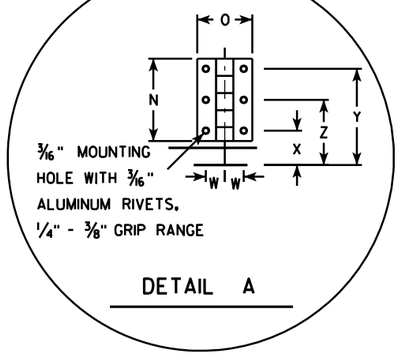


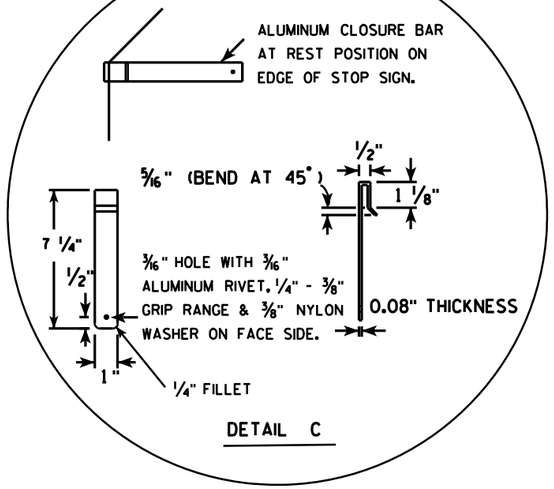


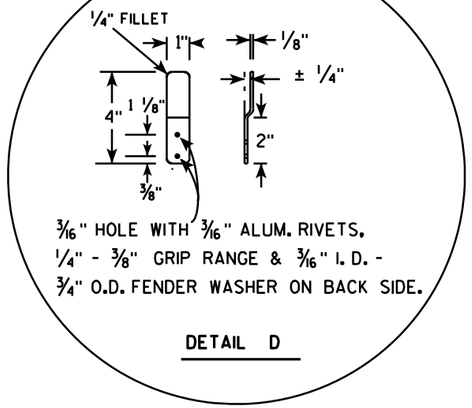
NOTES

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																											

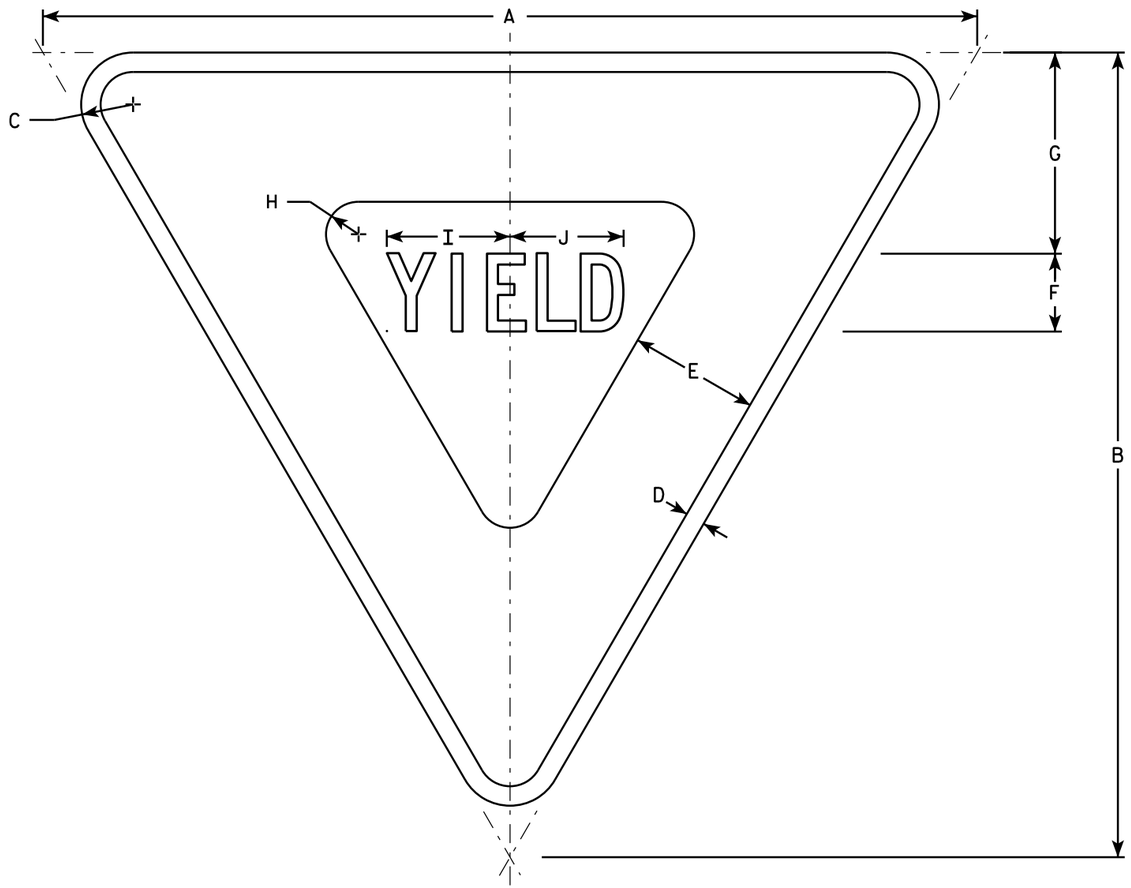
STANDARD SIGN
R1-1F

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: 276	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

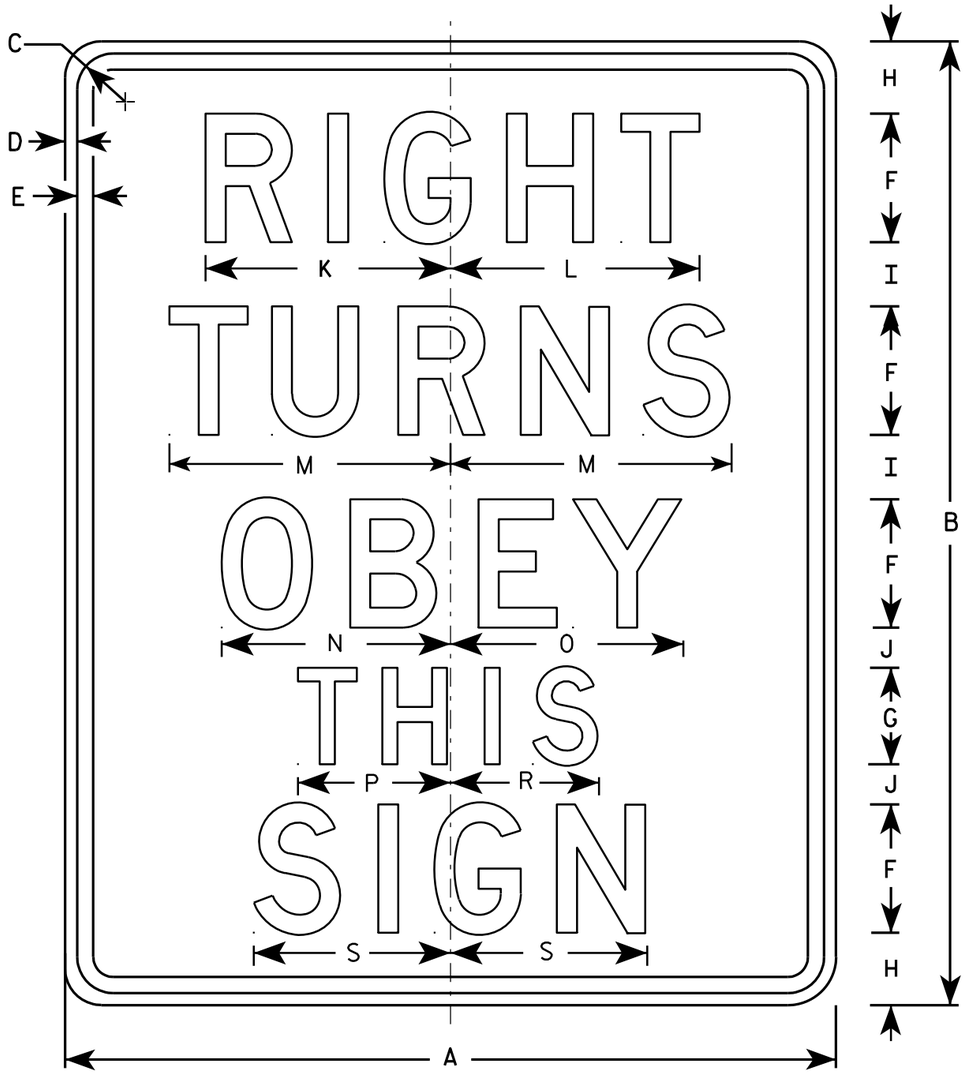
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R1-53

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
2M	24	30	1 1/8	3/8	1/2	4	3	2 1/4	2	1 1/4	7 5/8	7 3/4	8 3/4	7 1/8	7 1/4	4 3/4		4 5/8	6 1/8								5.0
3																											
4																											
5																											

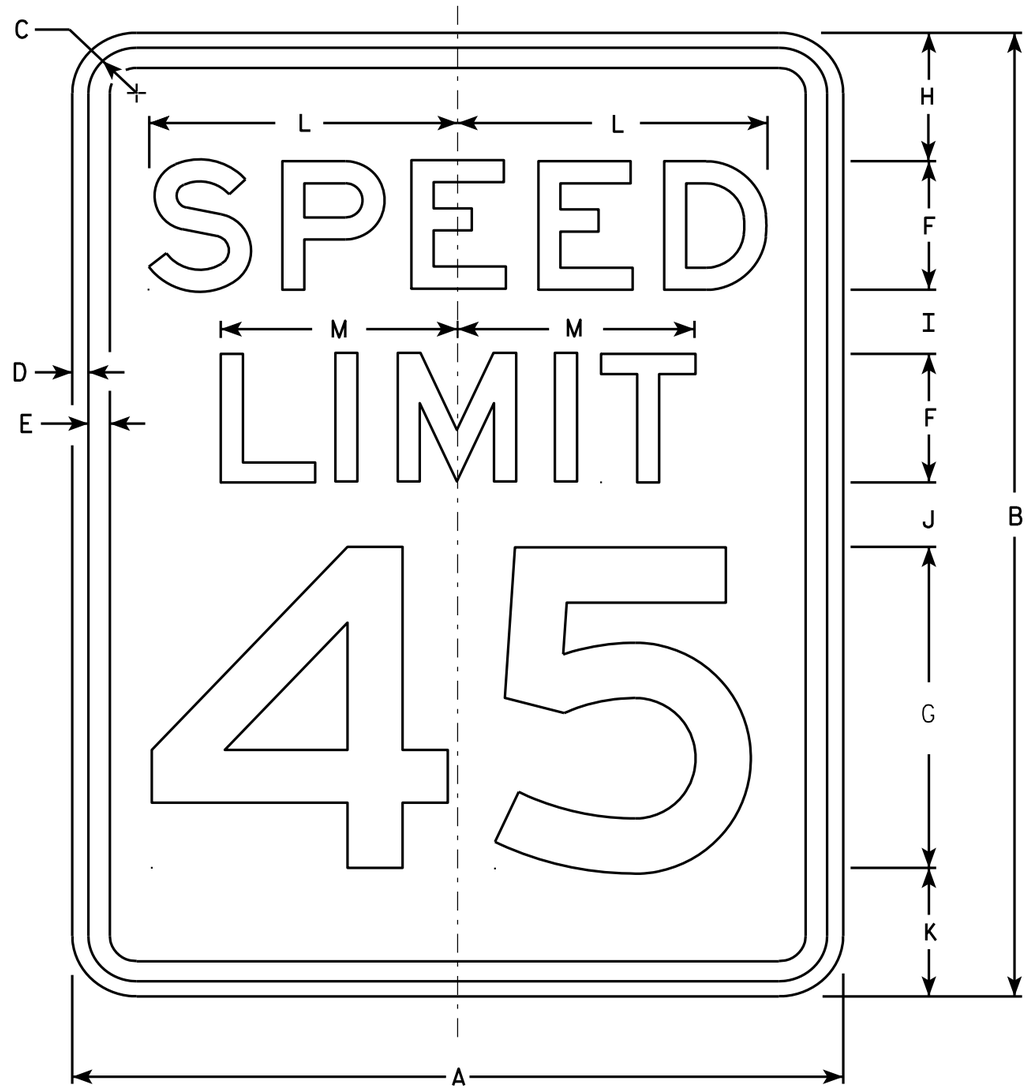
STANDARD SIGN
R1-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-53.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 278 | 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

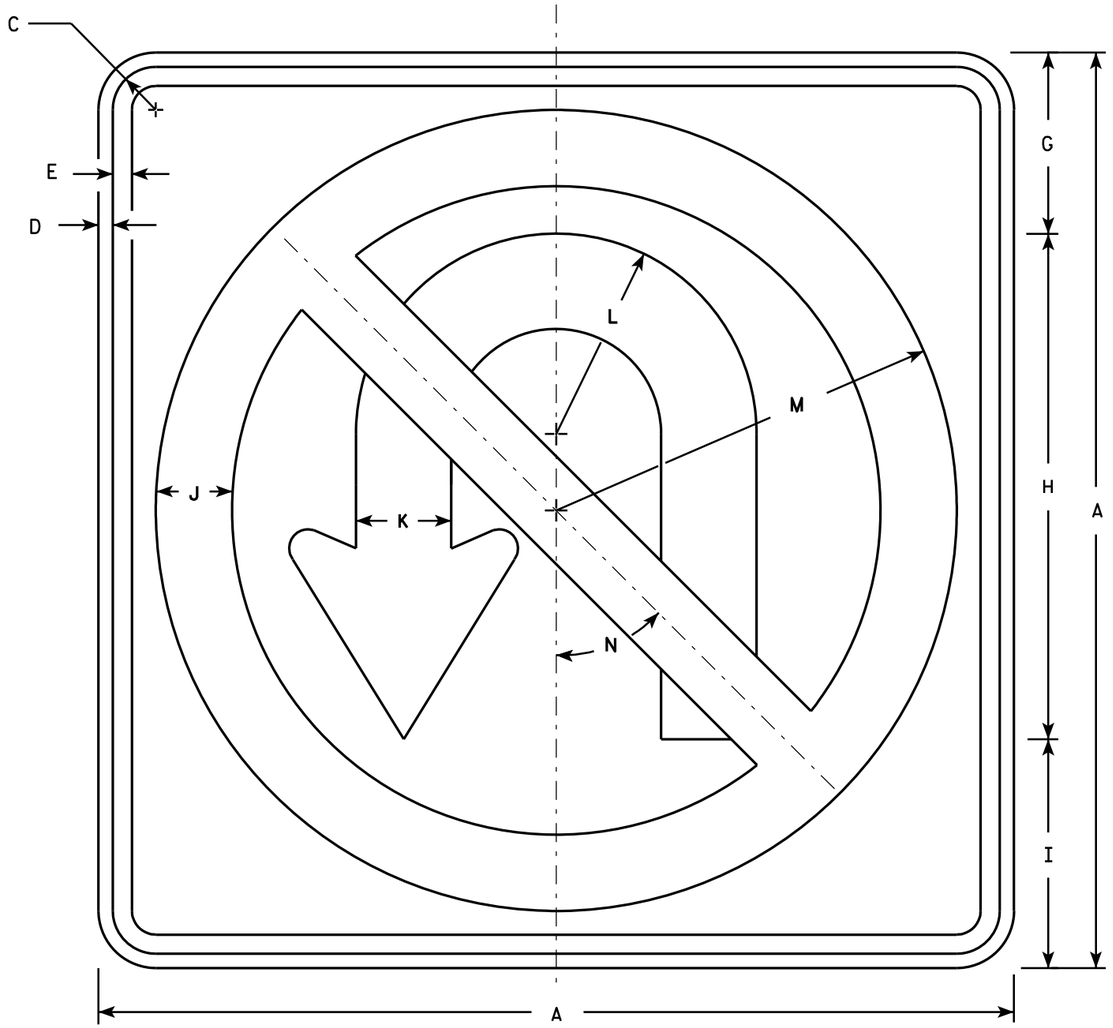
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 279 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

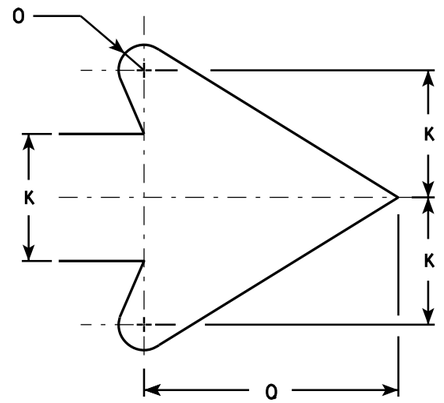
WISDOT/CADDS SHEET 42



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

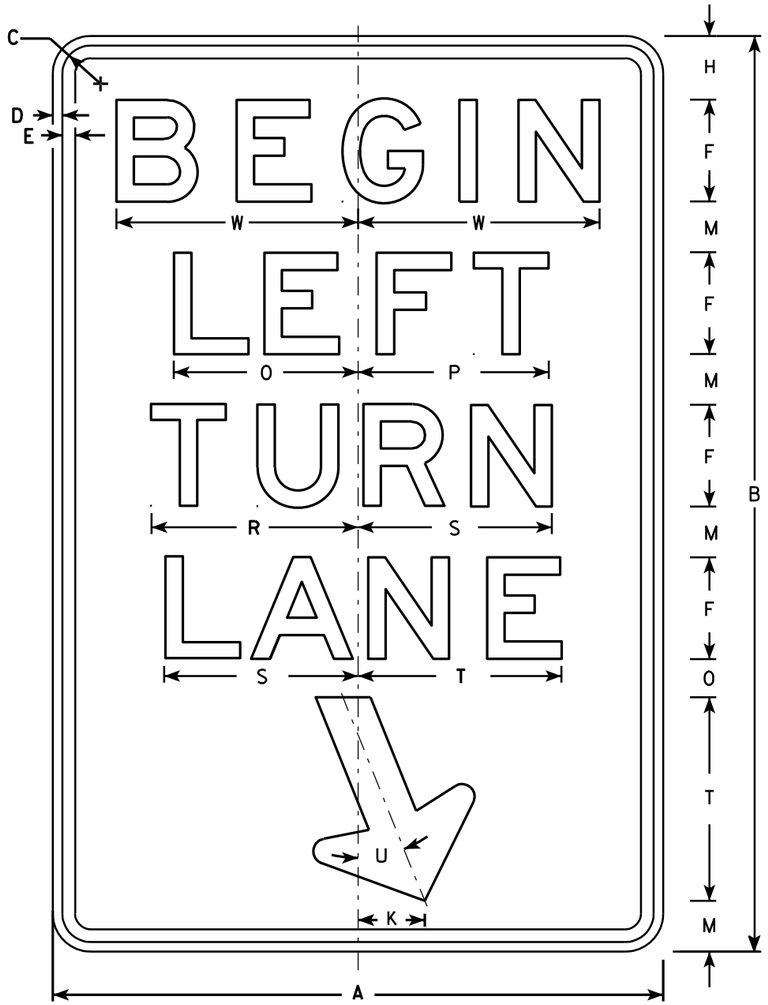
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

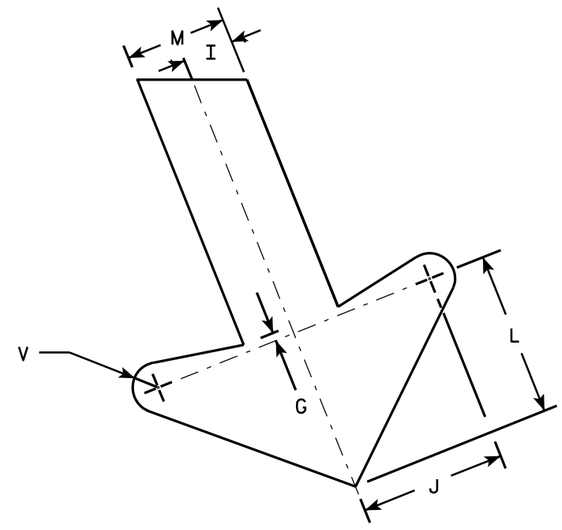
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 280	E



R3-20L

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

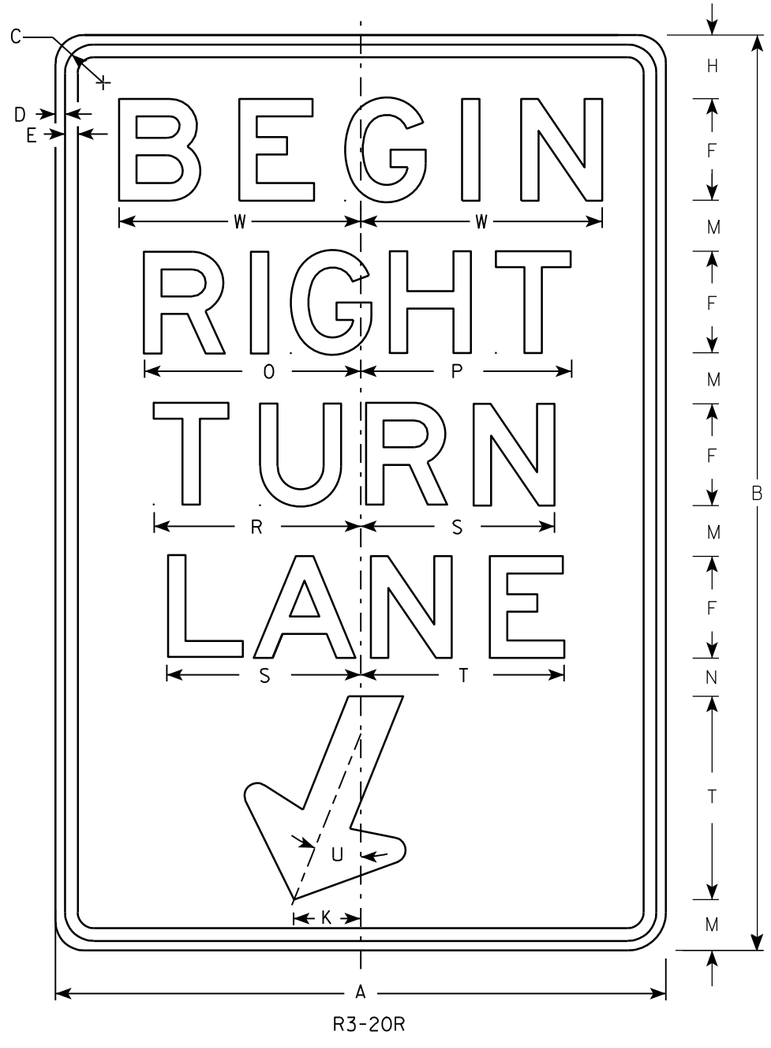
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

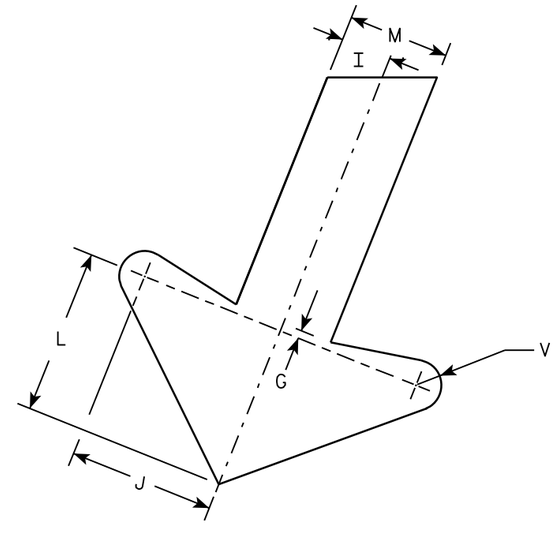
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 281 | E



R3-20R

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

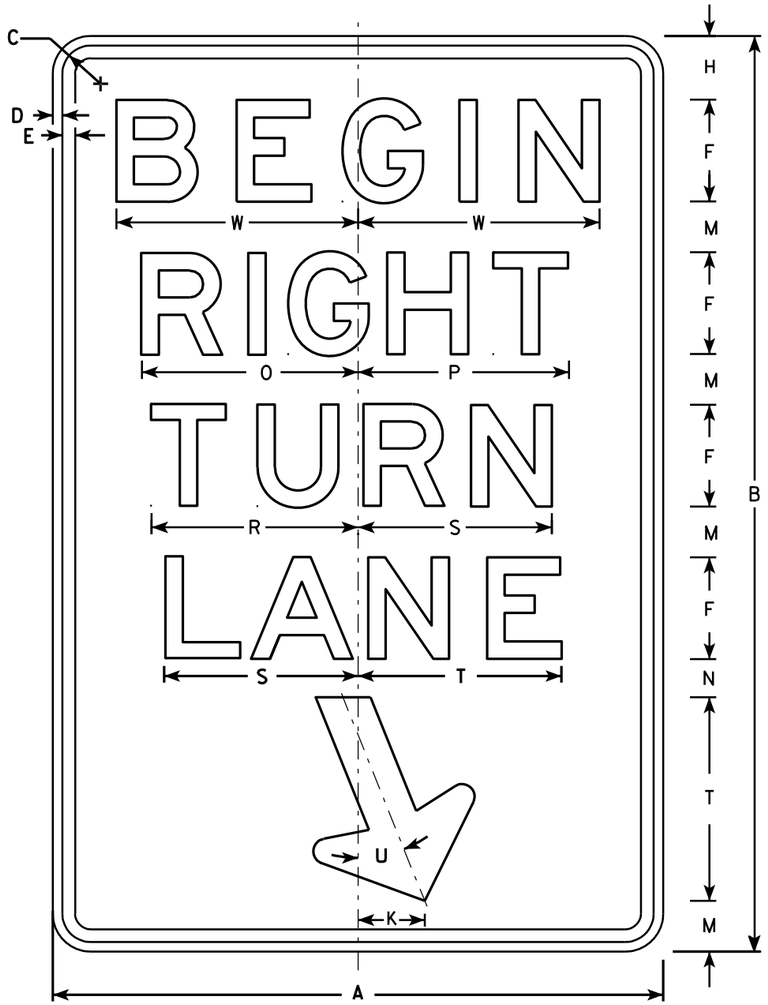
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

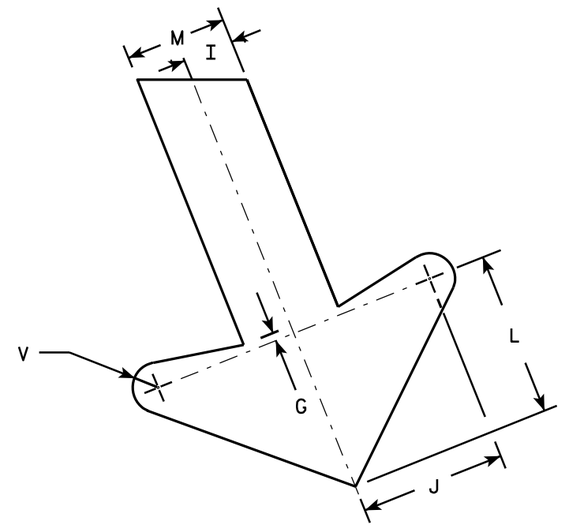
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 282 | E



R3-20RR

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

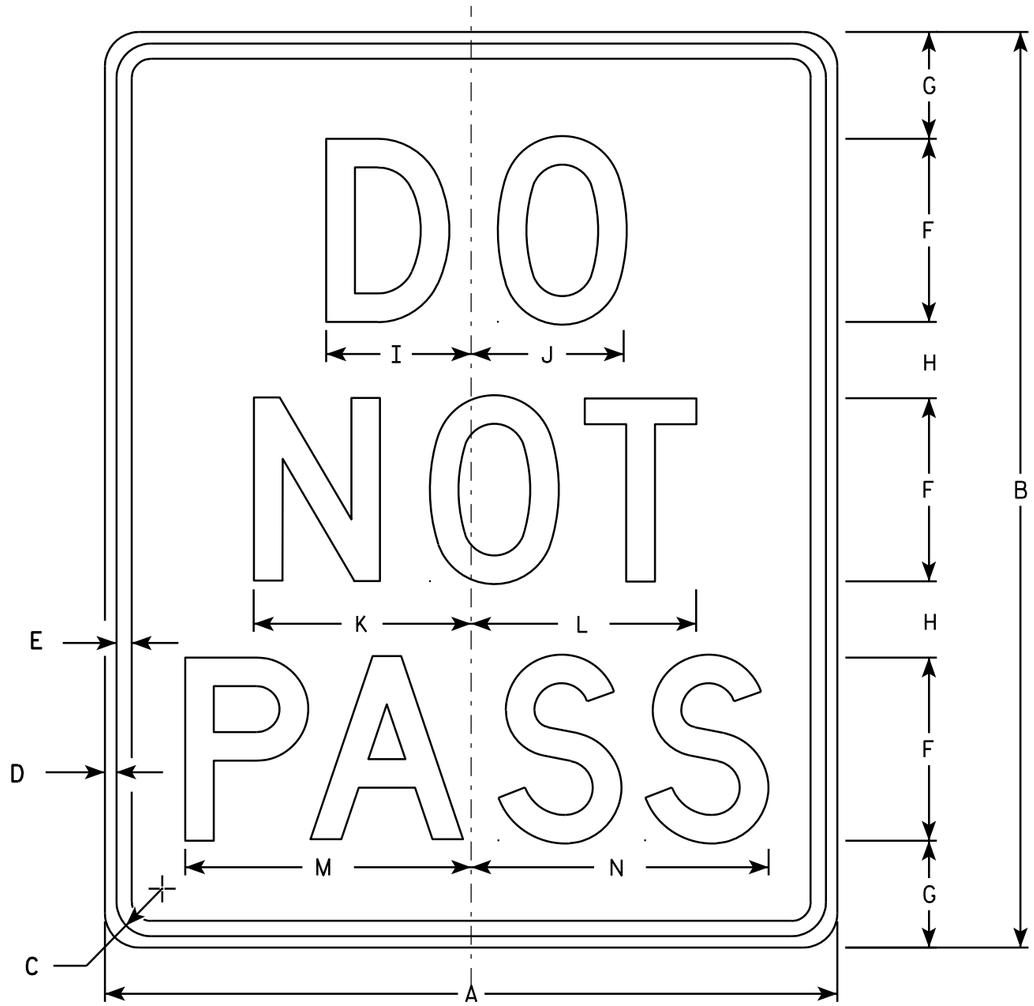
STANDARD SIGN
R3-20RR

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20RR.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 283 | E



R4-1

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 - 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	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

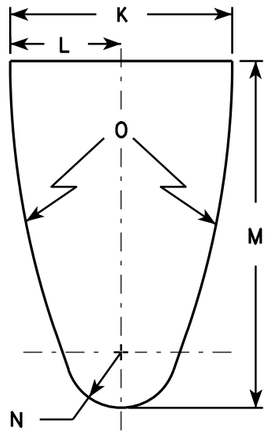
STANDARD SIGN
R4-1

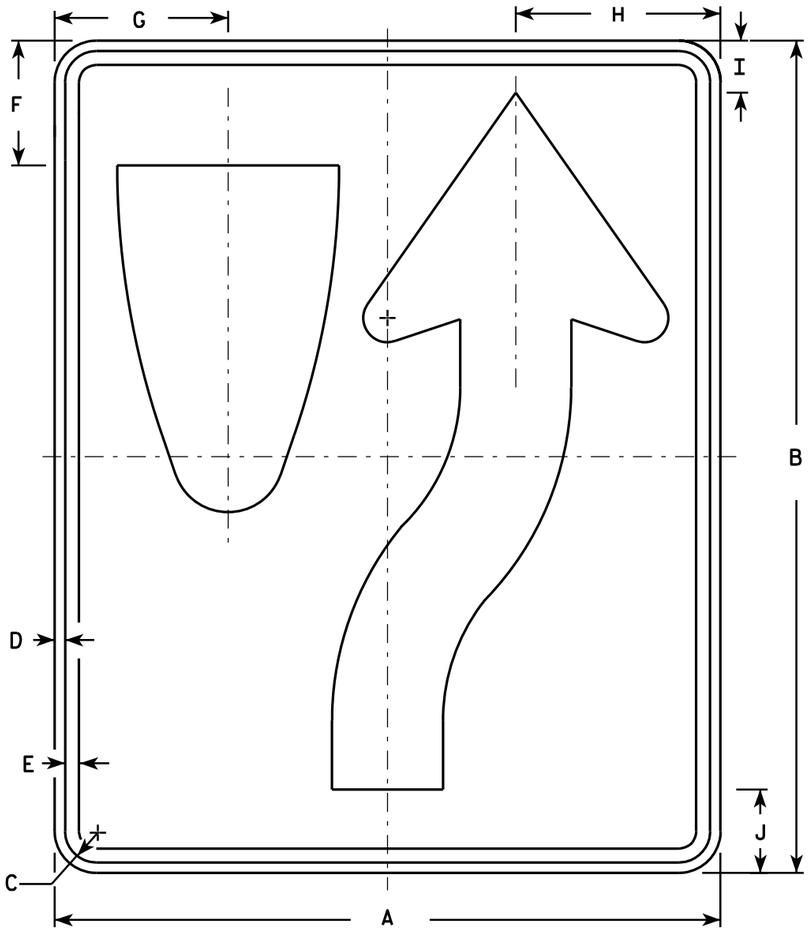
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 284 | E

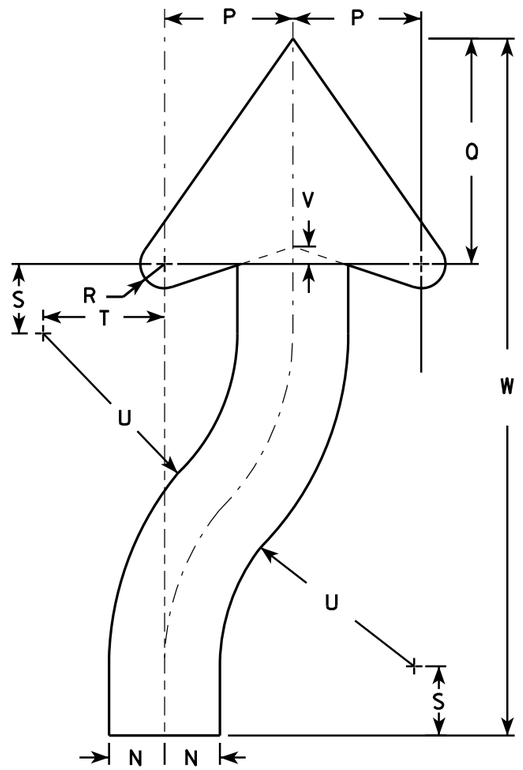




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

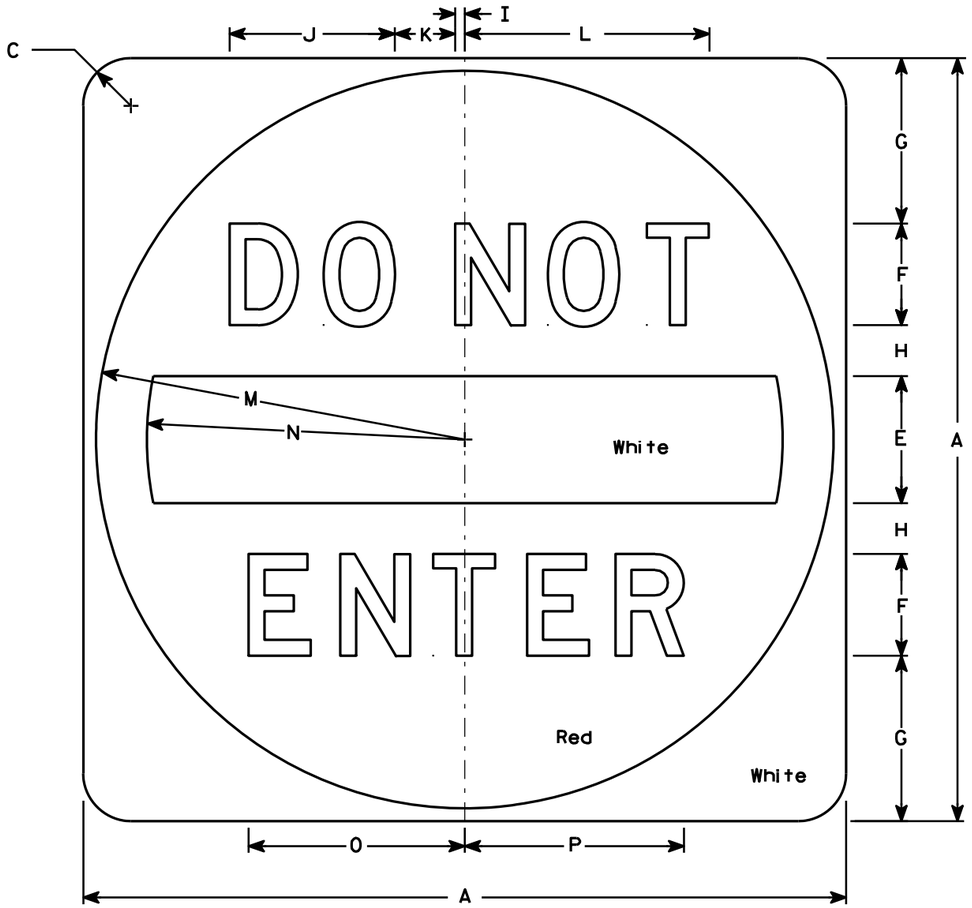
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 285	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

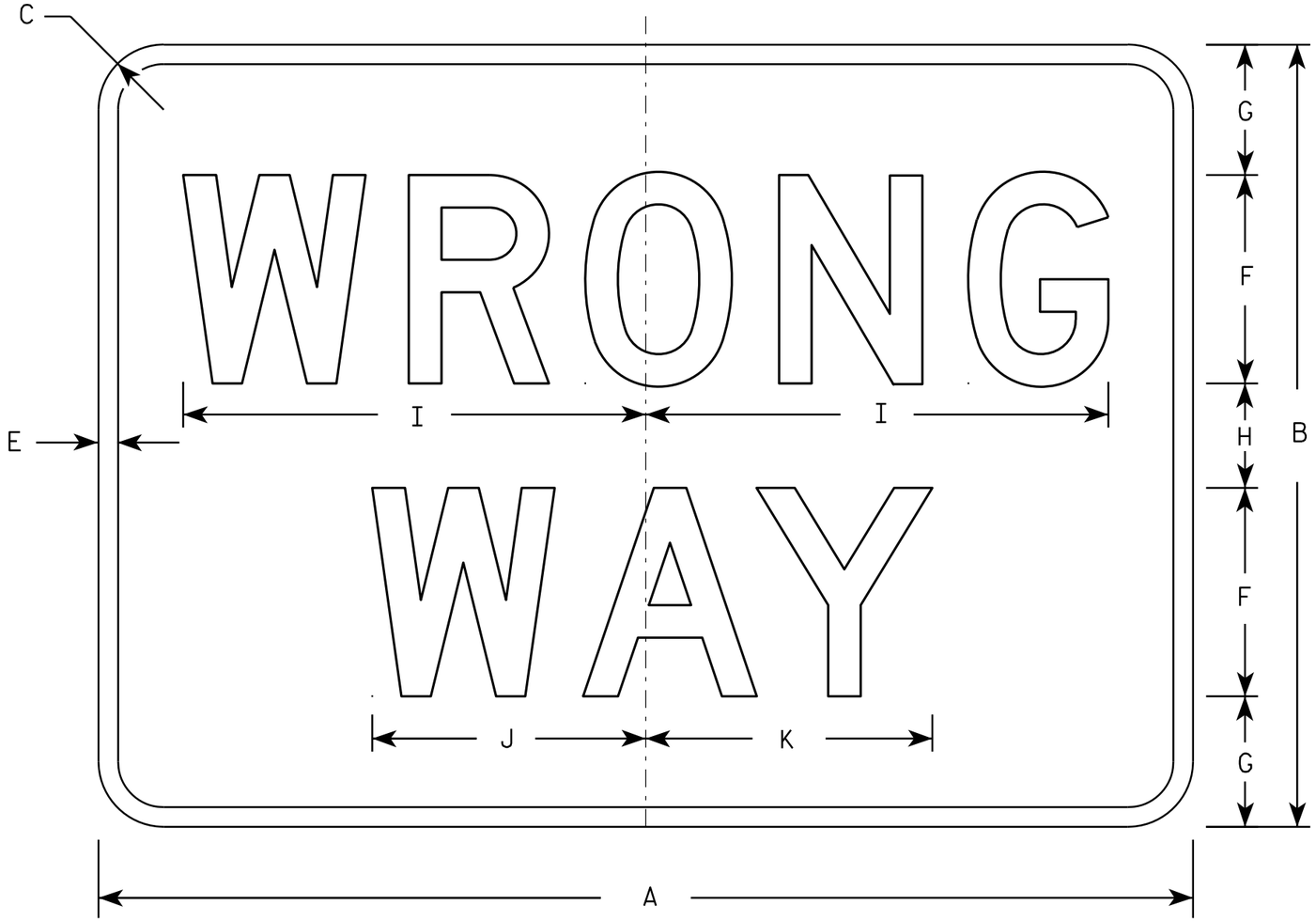
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 286 | E



R5-1A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

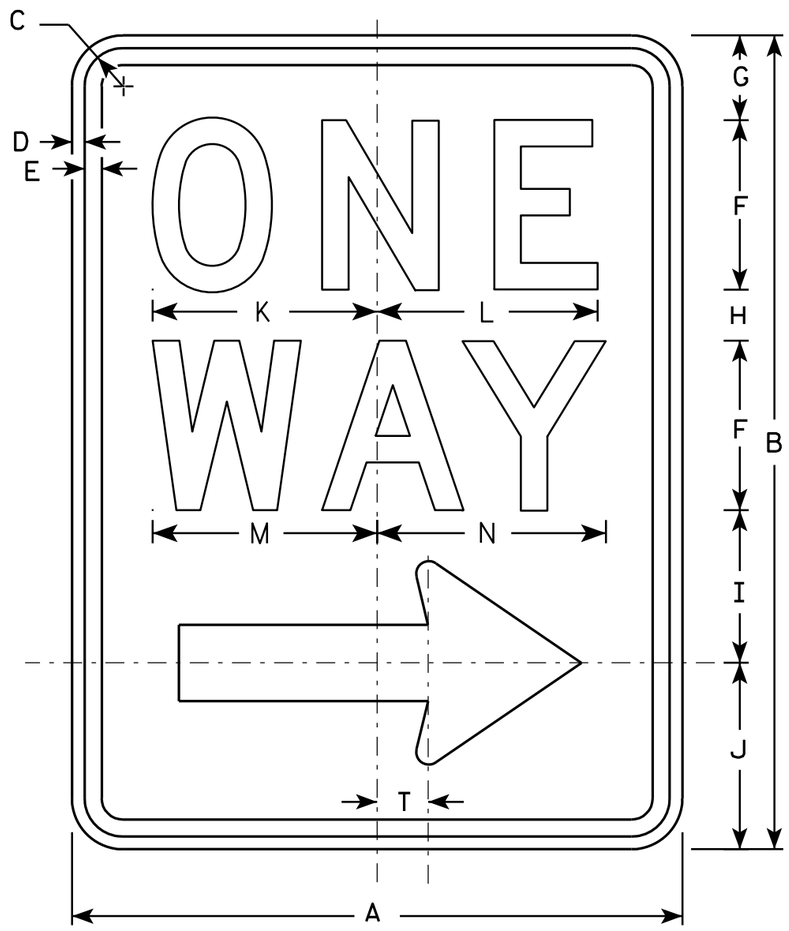
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

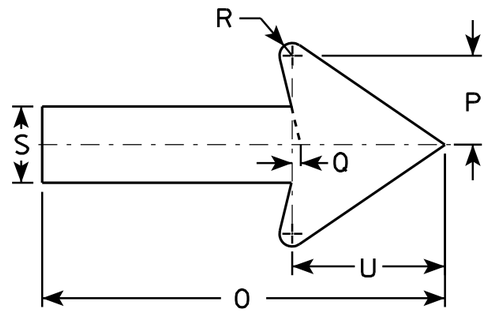
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 287 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

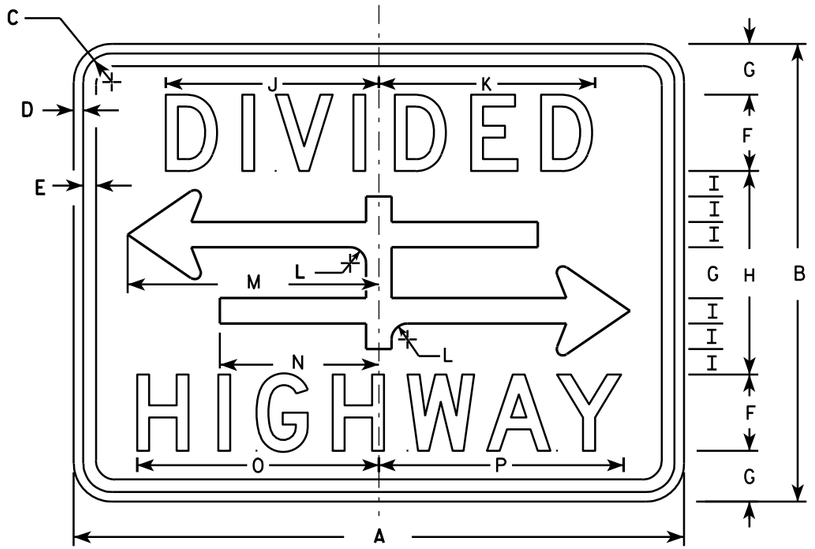
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

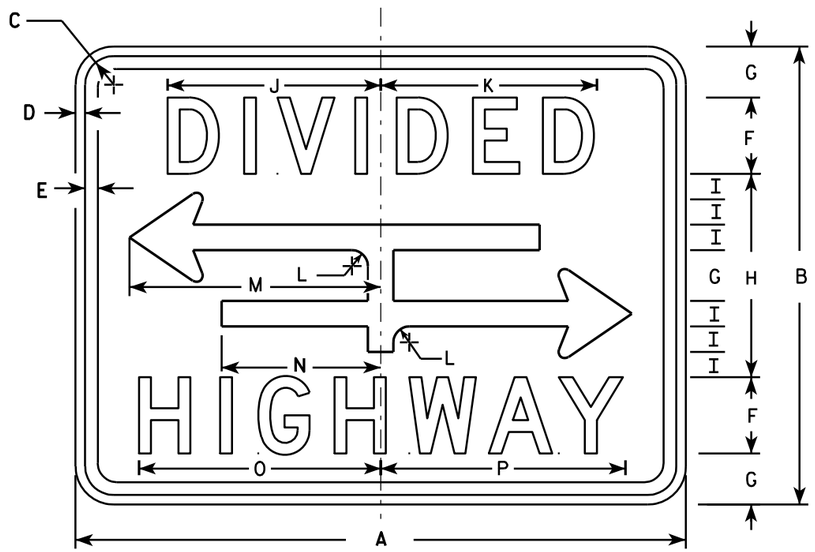
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 288	E



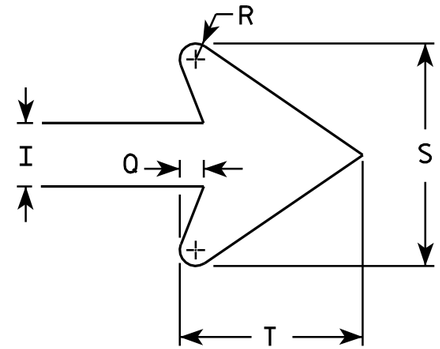
R6-3

NOTES

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



R6-3A



ARROW DETAIL

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

STANDARD SIGN
R6-3 & R6-3A

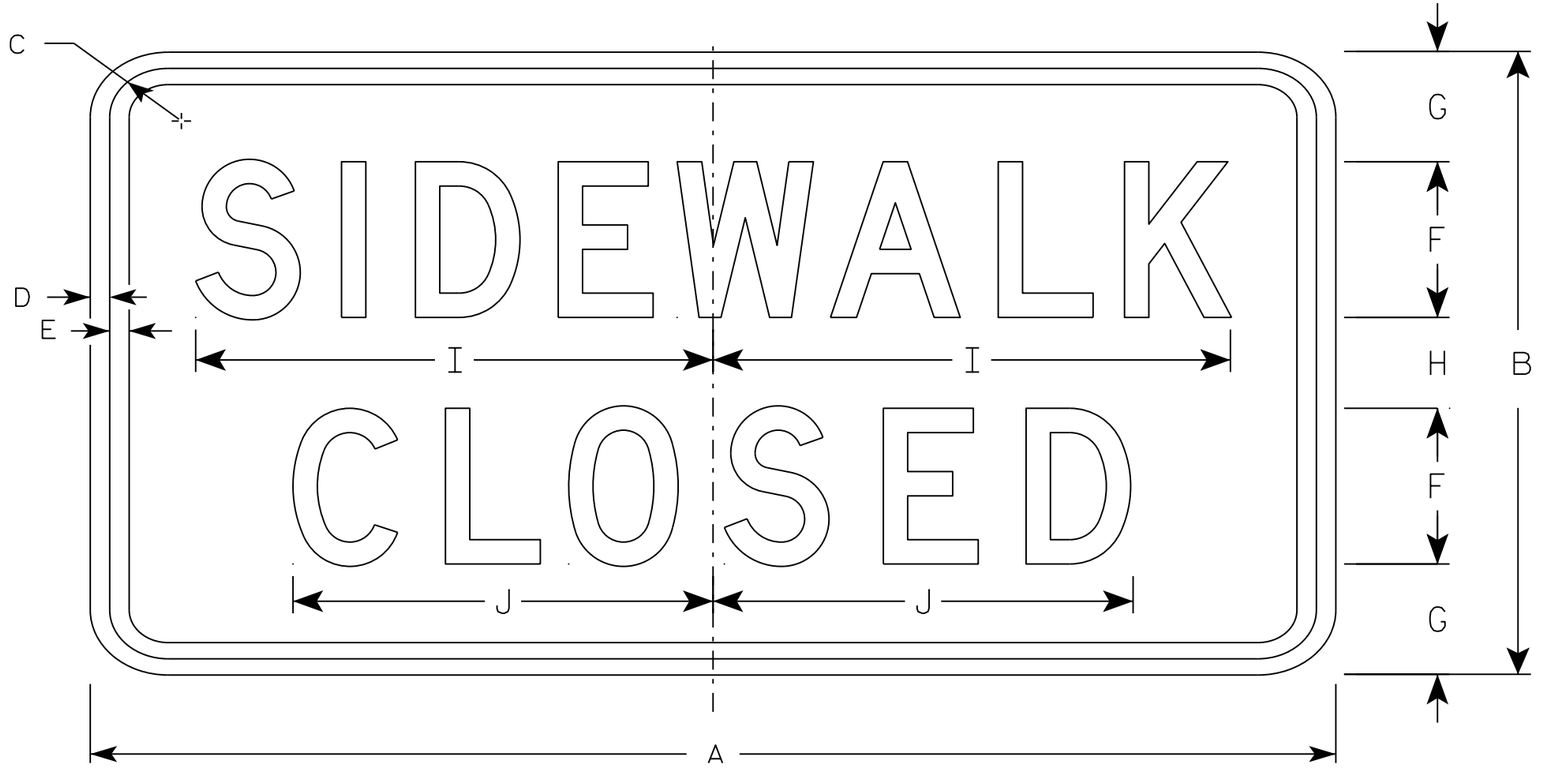
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 289 E



R9-9

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

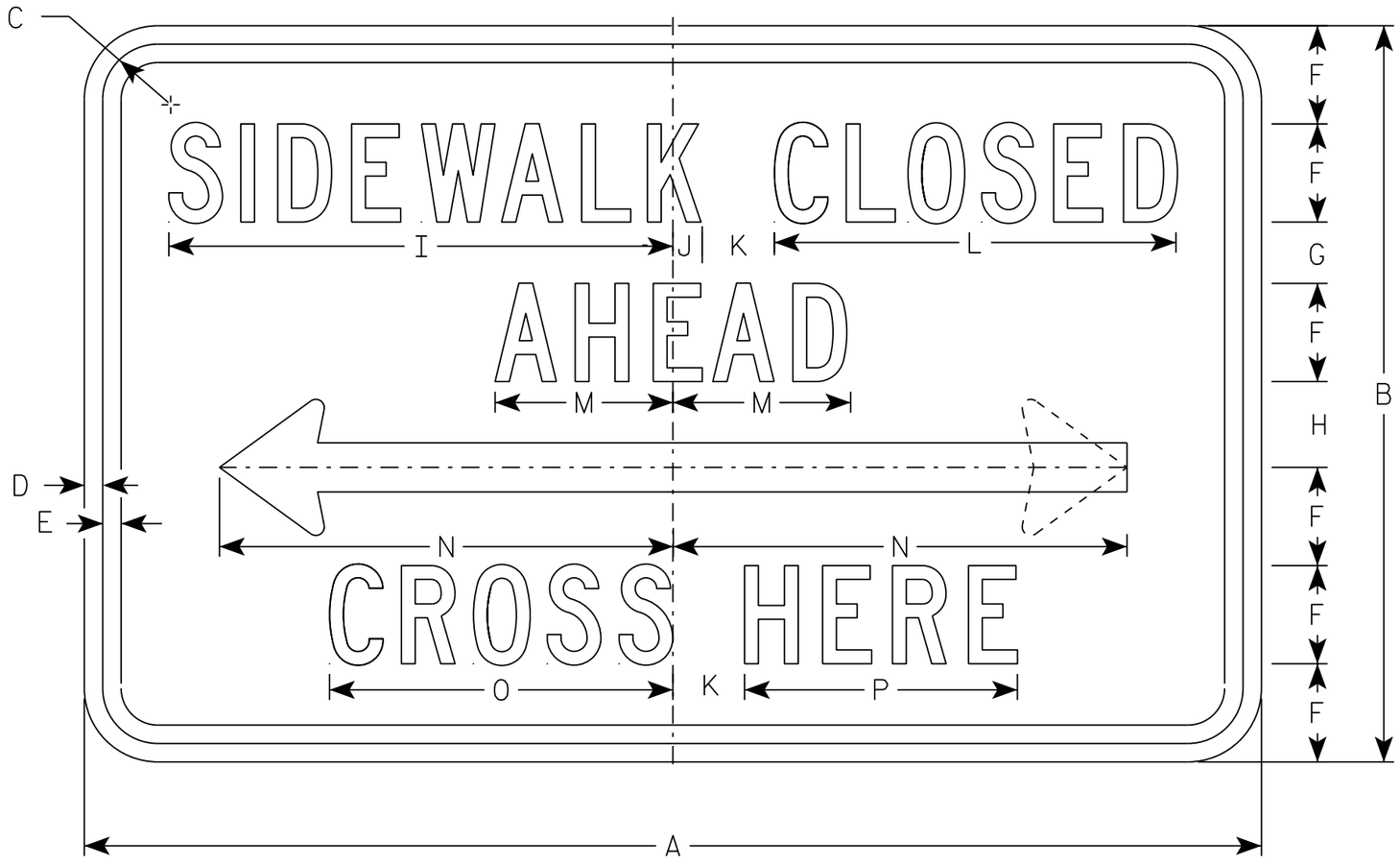
DATE 8/11/16 PLATE 290 R9-9.6

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

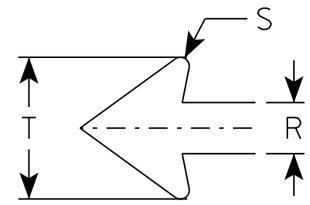
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.



R9-11



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	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

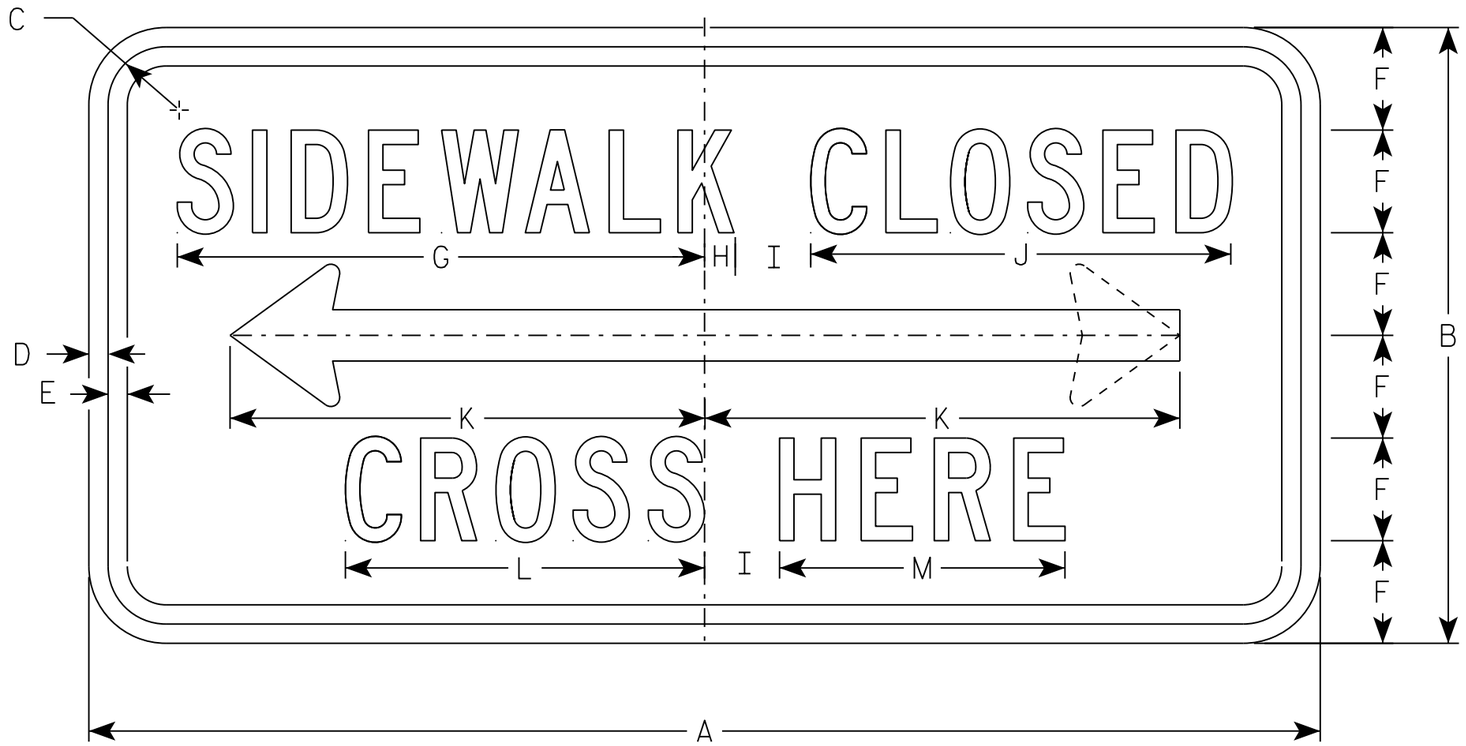
APPROVED Matthew R Rauch
for State Traffic Engineer

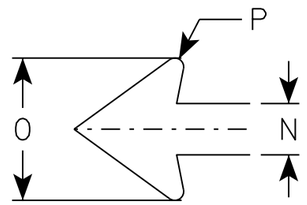
DATE 11/29/16 PLATE NO. R9-11.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 291	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for paths and Trails.





R9-11A

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	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
3	30	15	1 1/8	3/8	1/2	2	13	3/4	2	10 1/4	12 3/8	8 7/8	6 7/8	1 1/4	3 5/8	1/4											3.125
4																											
5																											

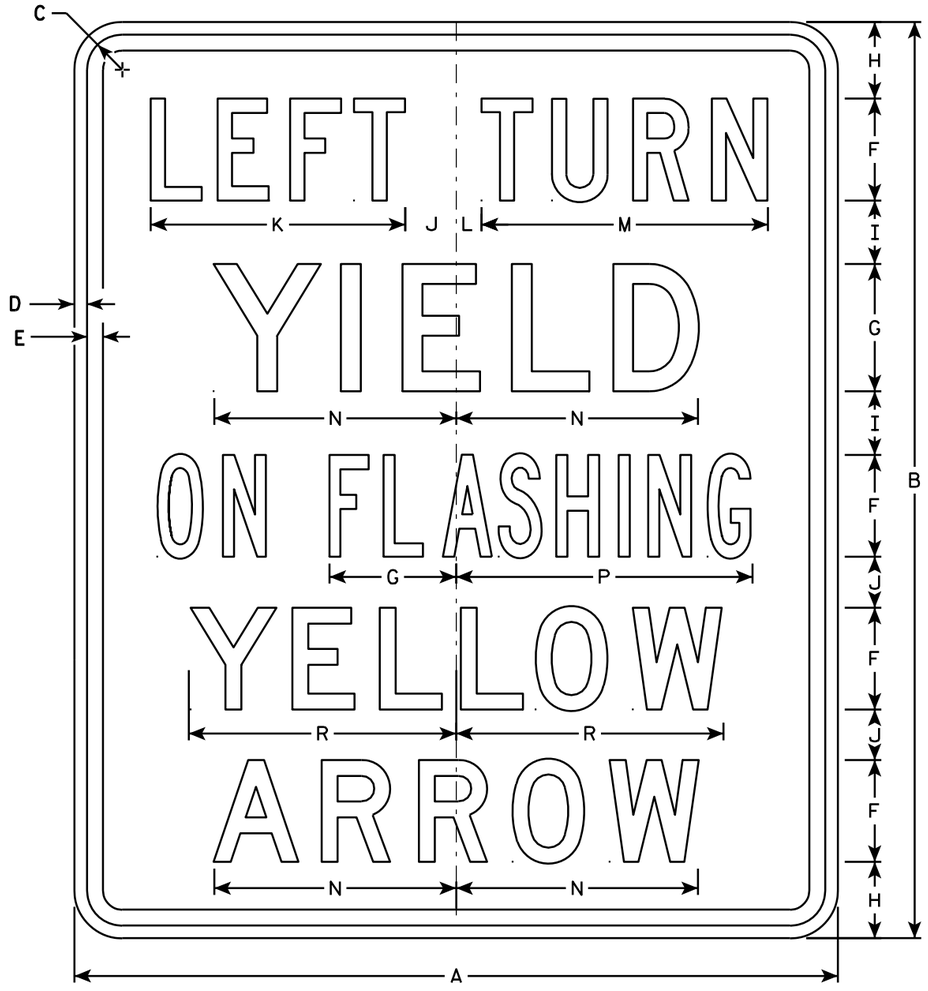
STANDARD SIGN
R9-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R9-11A.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 292 E

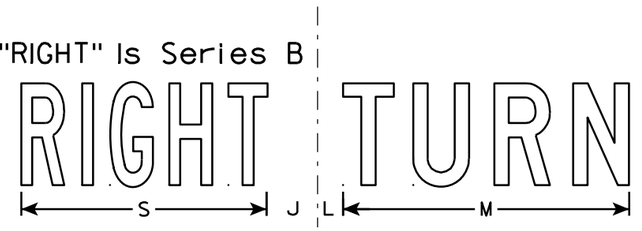


R10-50L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - 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, 4 and 5 are Series D.
   Line 3 is Series B.

"RIGHT" Is Series B



R10-50R

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
2M	30	36	1 3/8	1/2	5/8	4	5	3	2 1/2	2	10	1	11 1/4	9 1/2	4 1/4	11 5/8		10 1/2	9 5/8								7.5
3																											
4																											
5																											

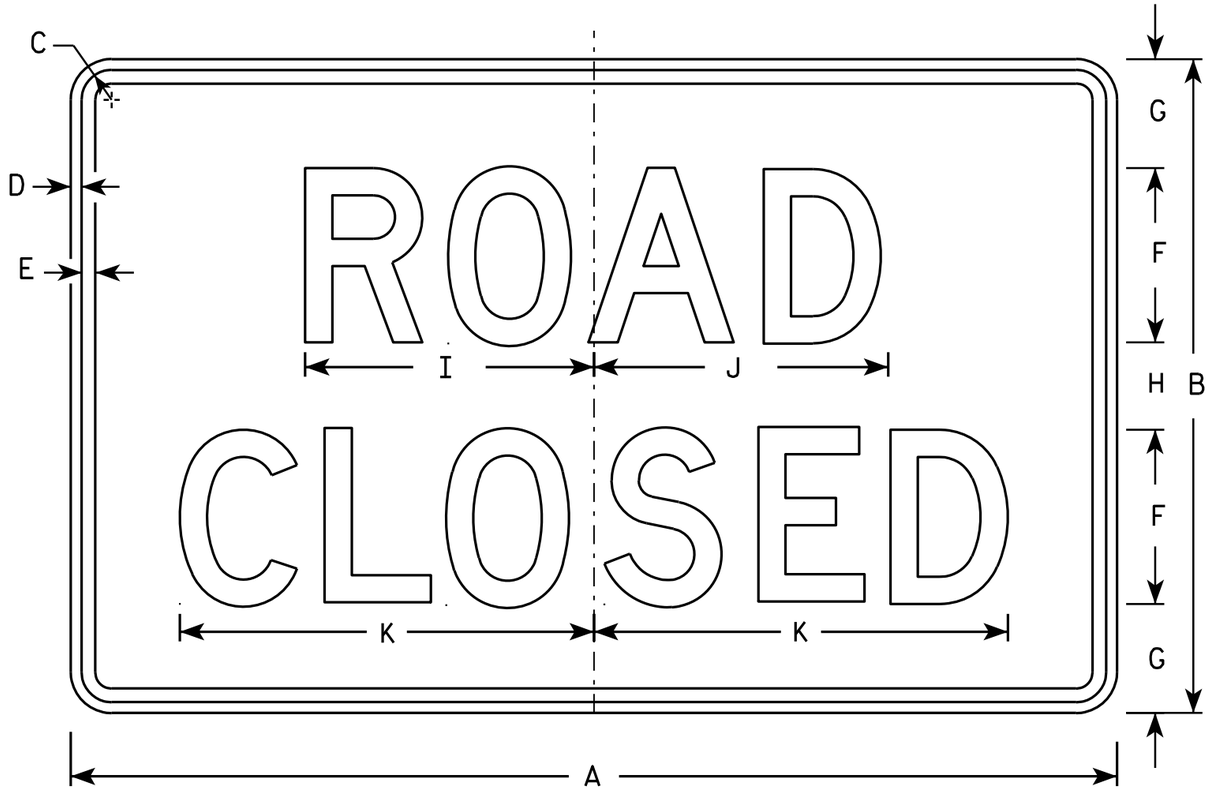
STANDARD SIGN
R10-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/11/13 PLATE NO. R10-50.2

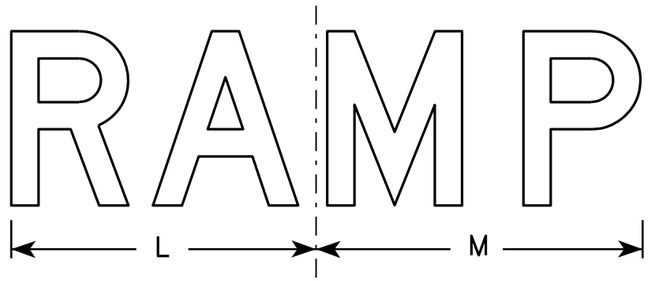
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 293	E



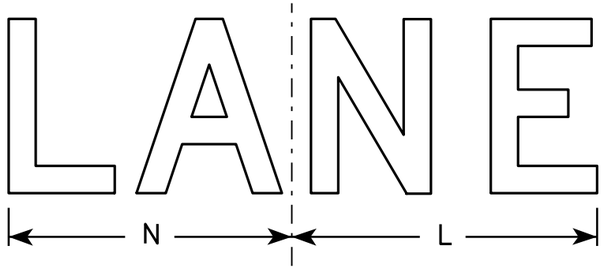
R11-2

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

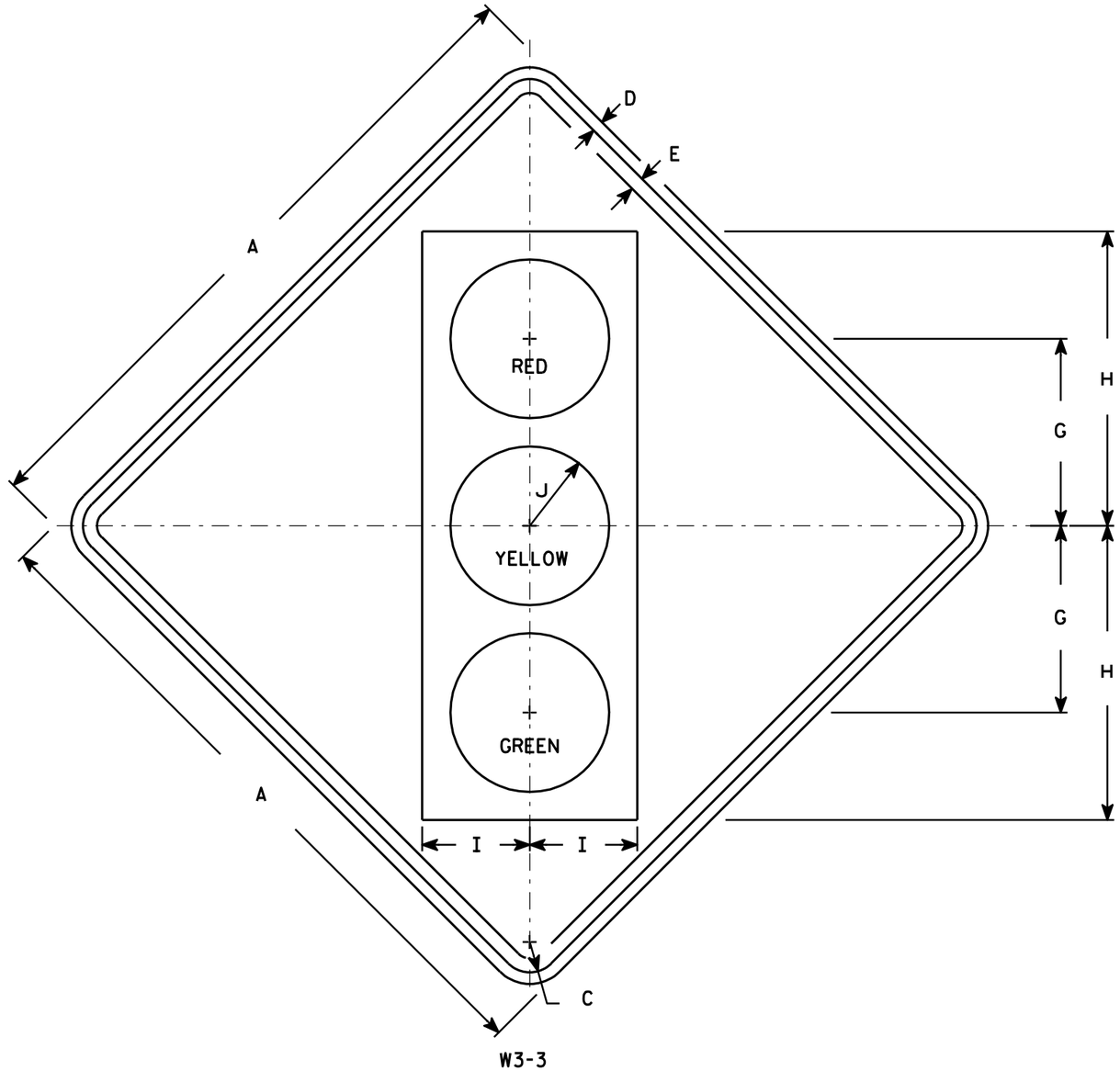
STANDARD SIGN
R11-2

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: 294	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

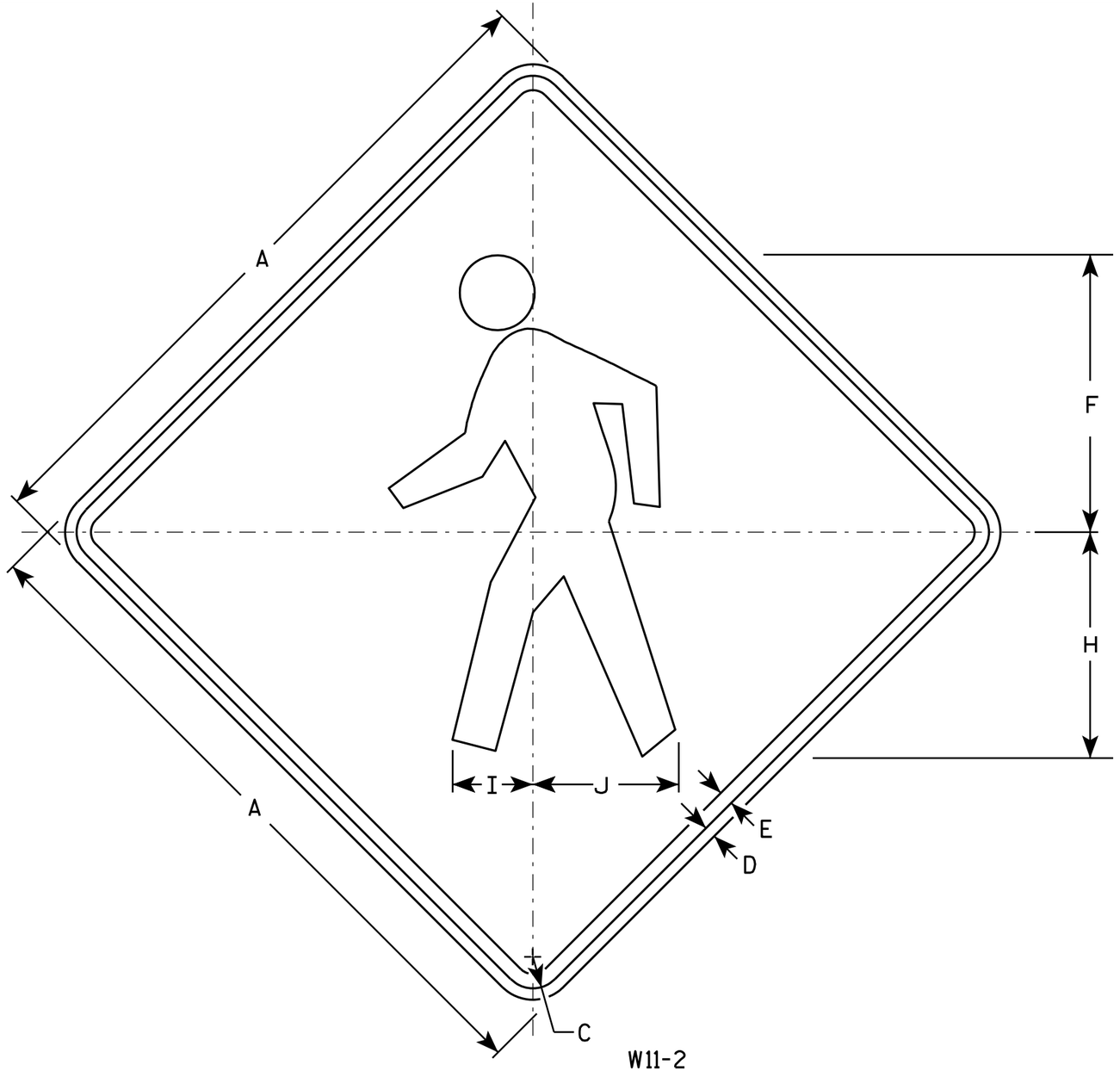
STANDARD SIGN
W3-3

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: 295 | E



W11-2

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	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

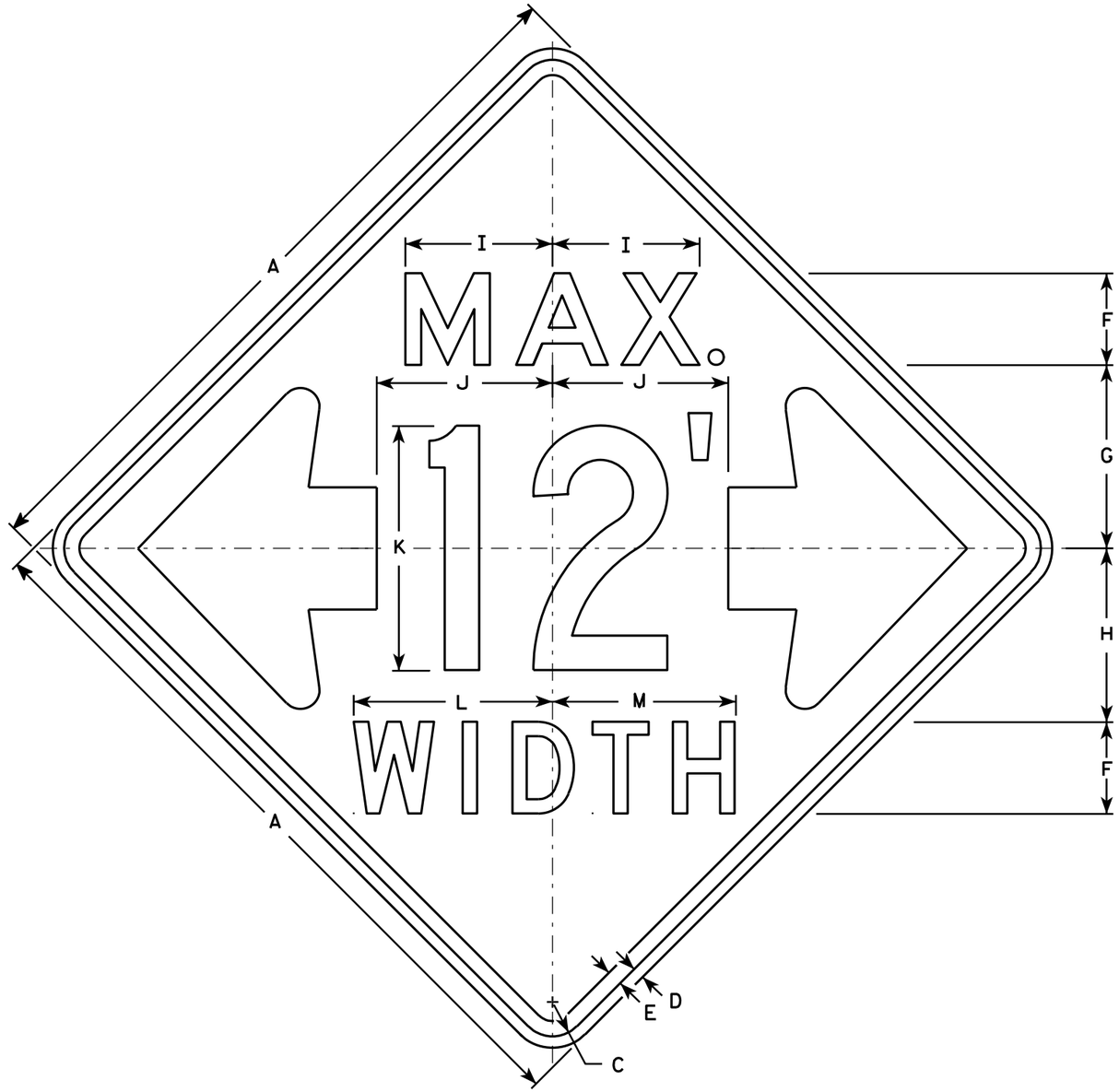
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

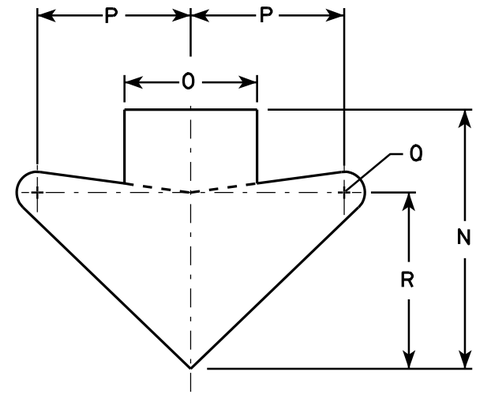
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 296	E



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

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

STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

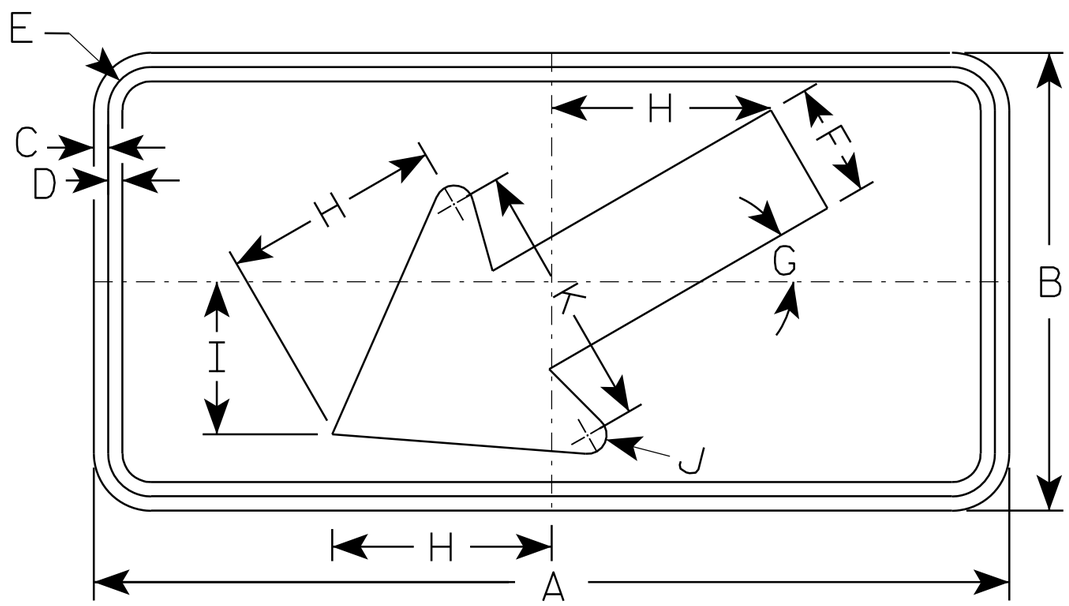
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 297 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W1252.DGN PLOT DATE : 16-MAR-2011 14:45 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.137199:1.000000



W16-7L

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. W16-7R is the same as W16-L 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																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

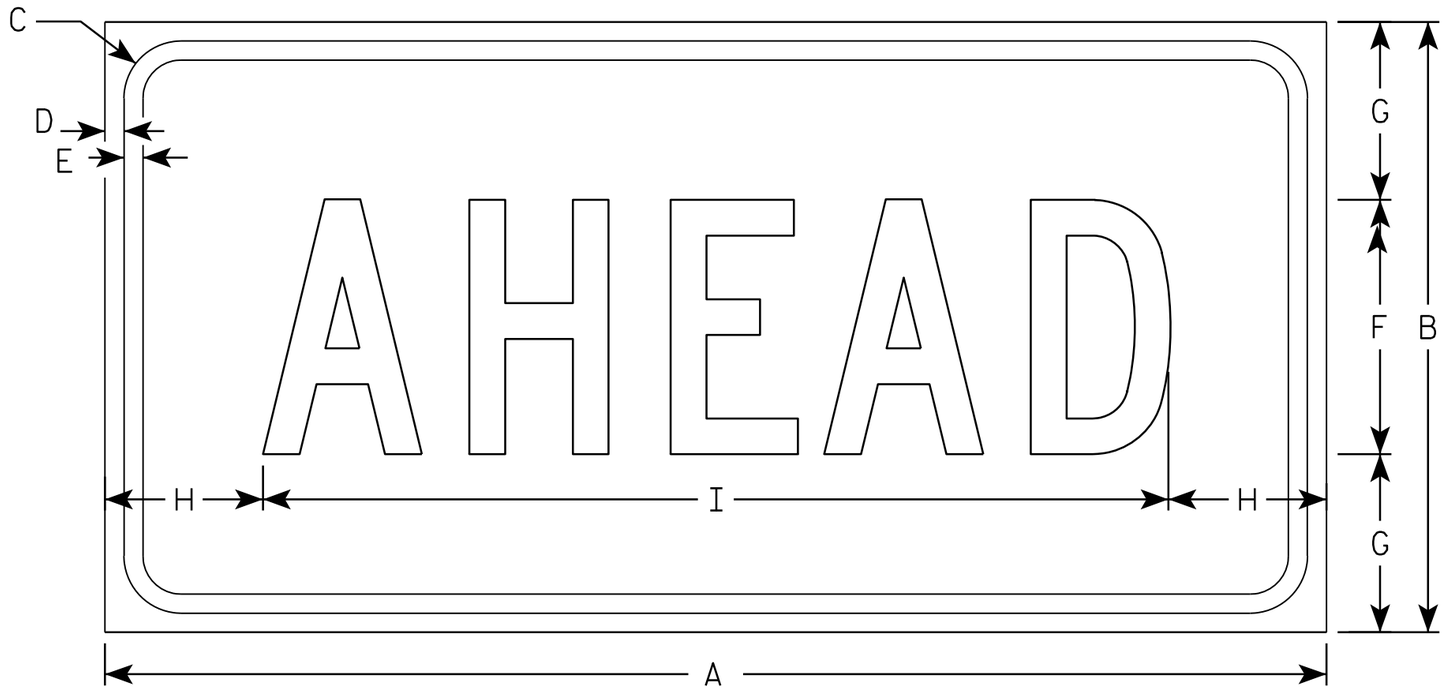
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 298	E



W16-9P

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																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

STANDARD SIGN
W16-9P

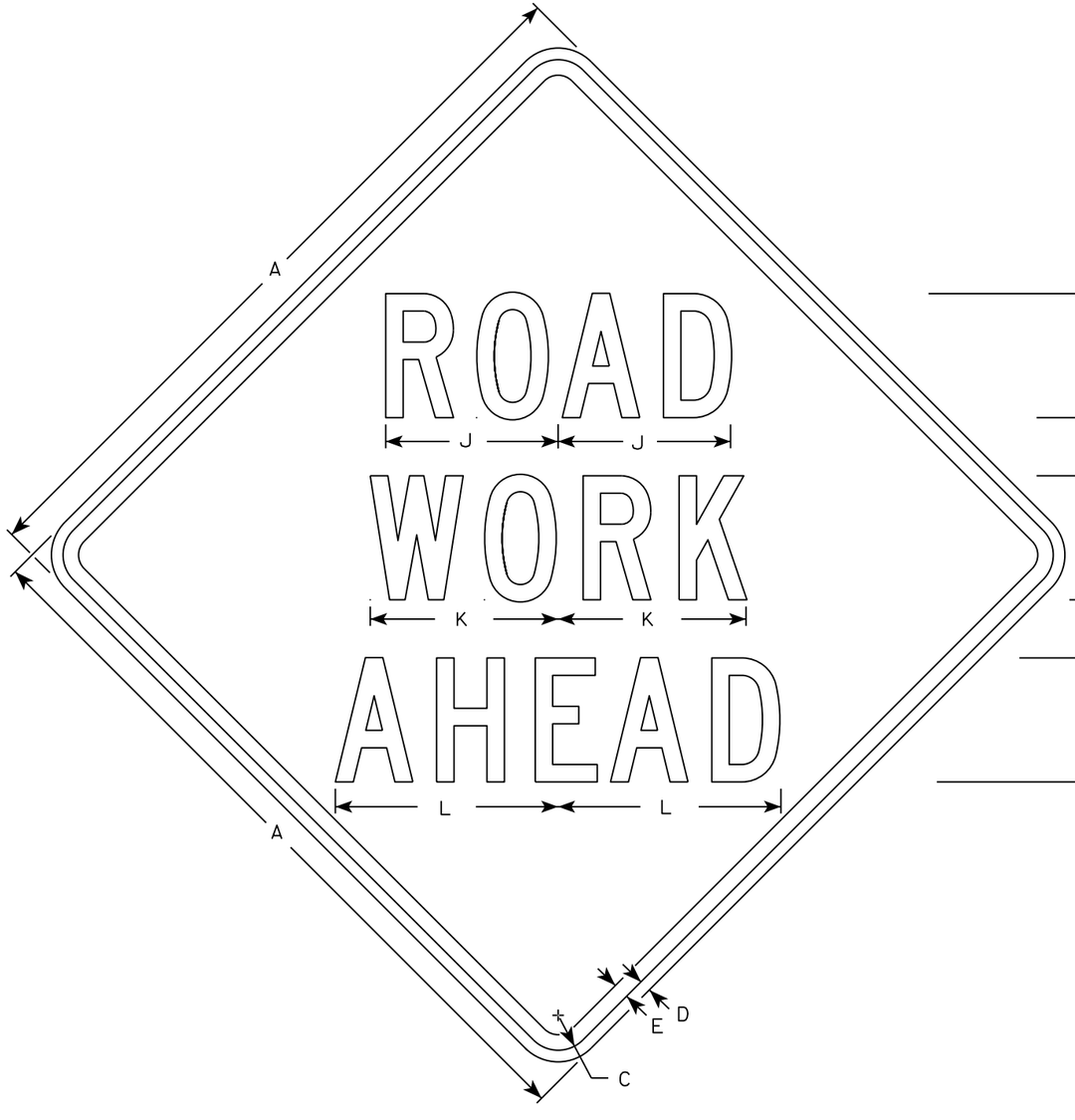
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

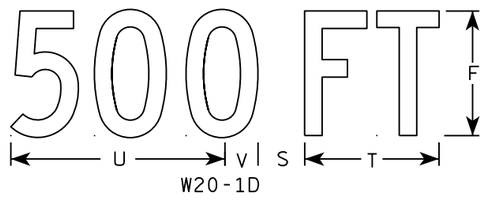
DATE 12/28/10 PLATE NO. W16-9P.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 299 | E

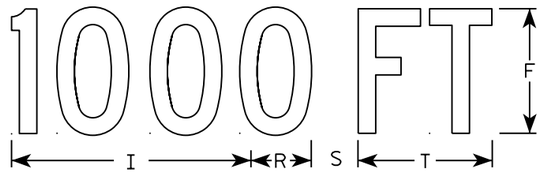
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W169P.DGN PLOT DATE : 28-DEC-2010 13:39 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 2.979524:1.000000



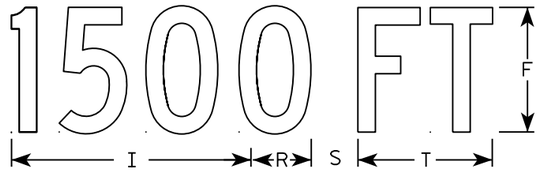
W20-1A



W20-1D



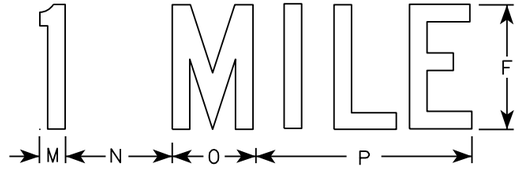
W20-1C



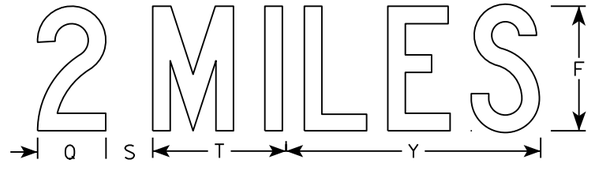
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

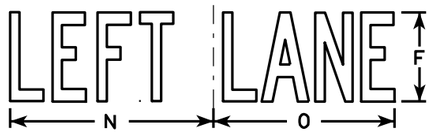
PROJECT NO:

SHEET NO: E

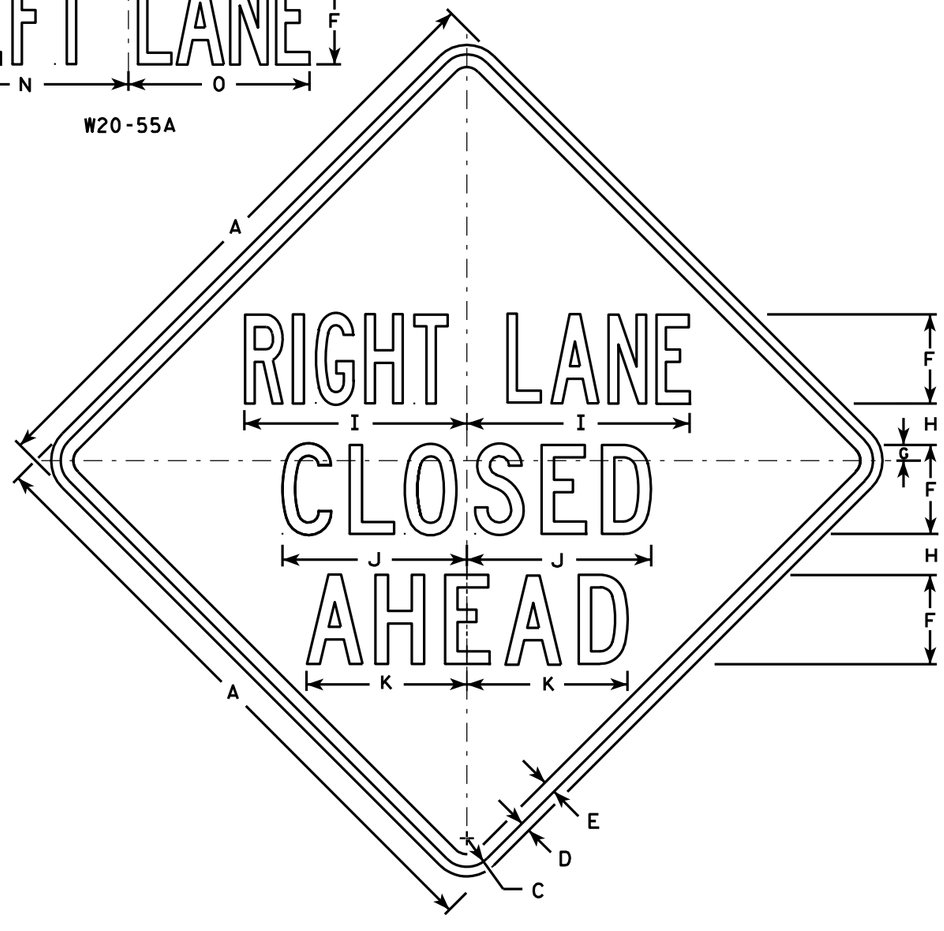
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$



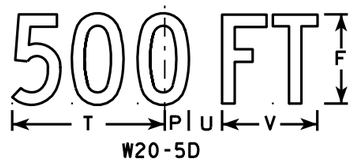
W20-56A



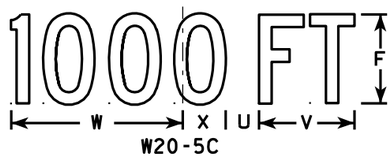
W20-55A



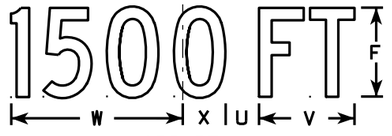
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

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. " _____ LANE" is Series B.
   All other copy is 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	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

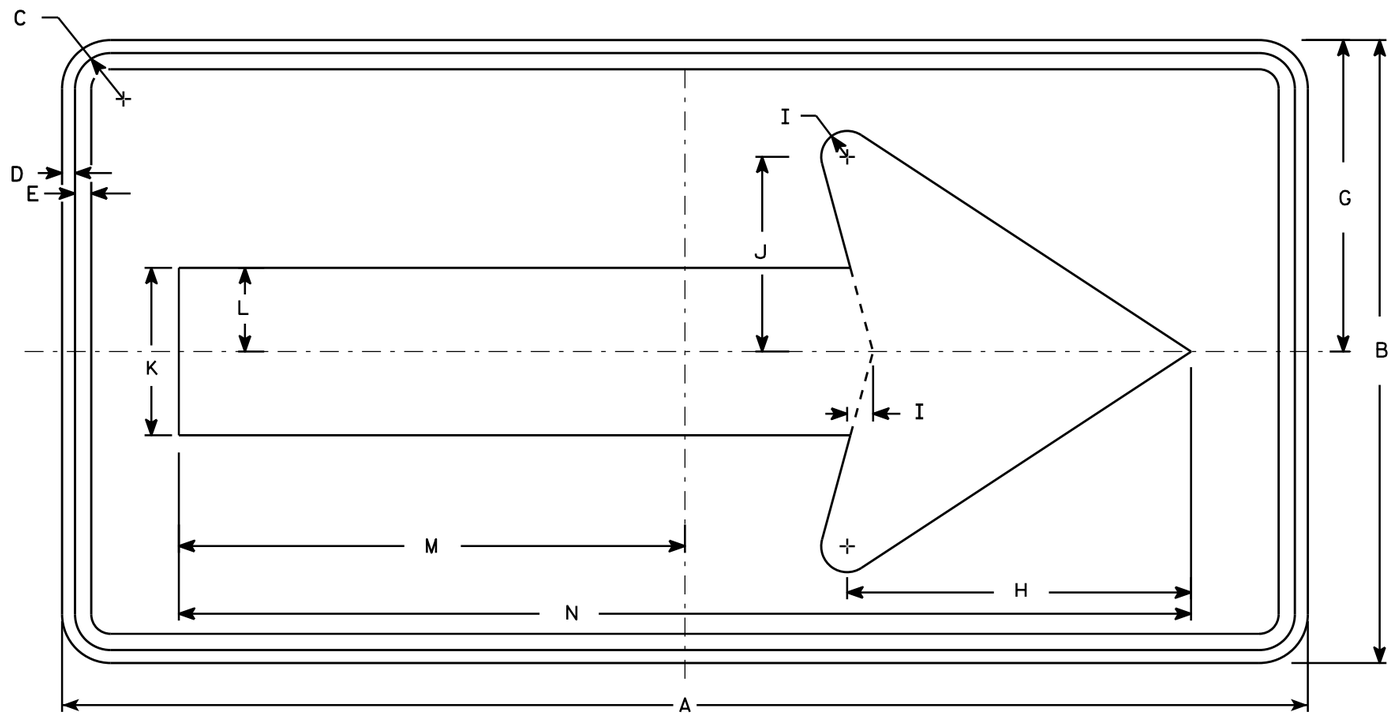
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 301 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

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

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

STANDARD SIGN
W01-6

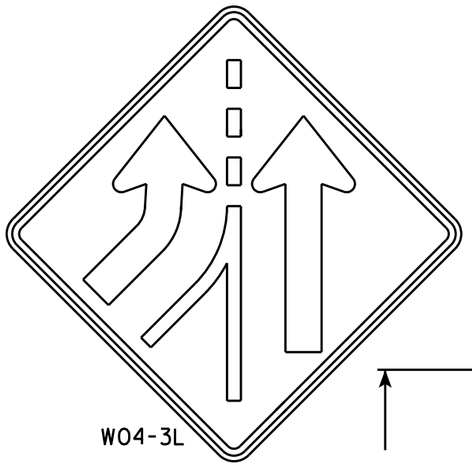
WISCONSIN DEPT OF TRANSPORTATION

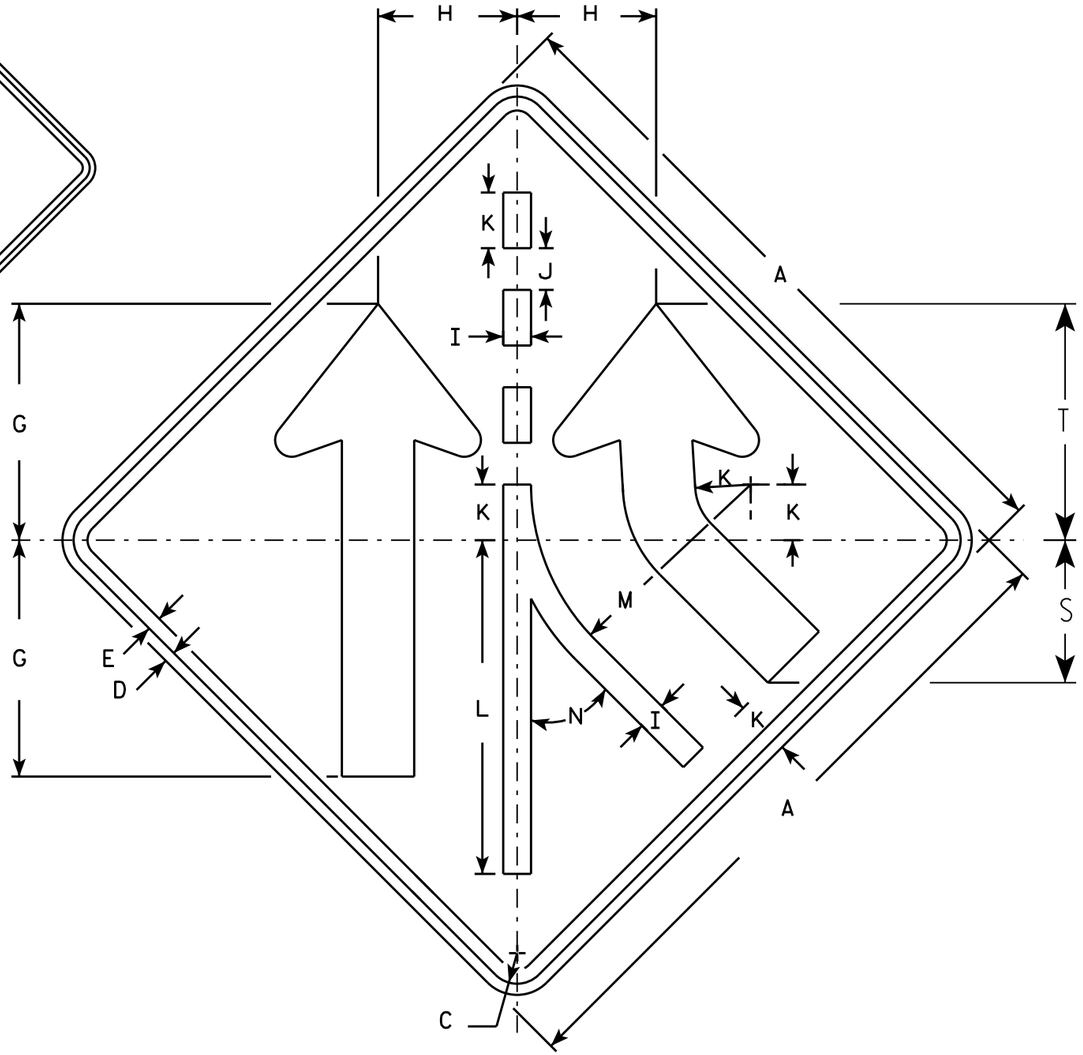
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE W01-6.1

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

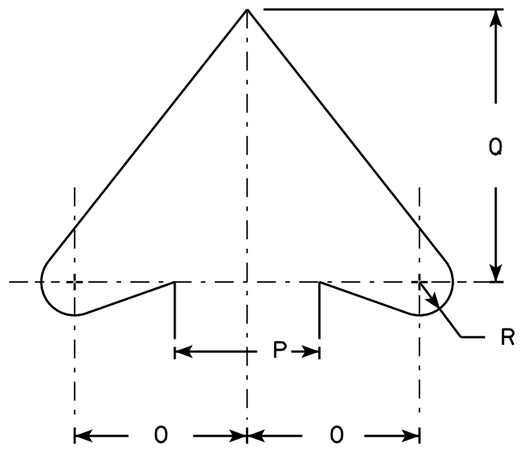
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42





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. W04-3 L is the same as W04-3 R except the arrow is 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 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2S	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
2M	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
3	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

STANDARD SIGN

W0433

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

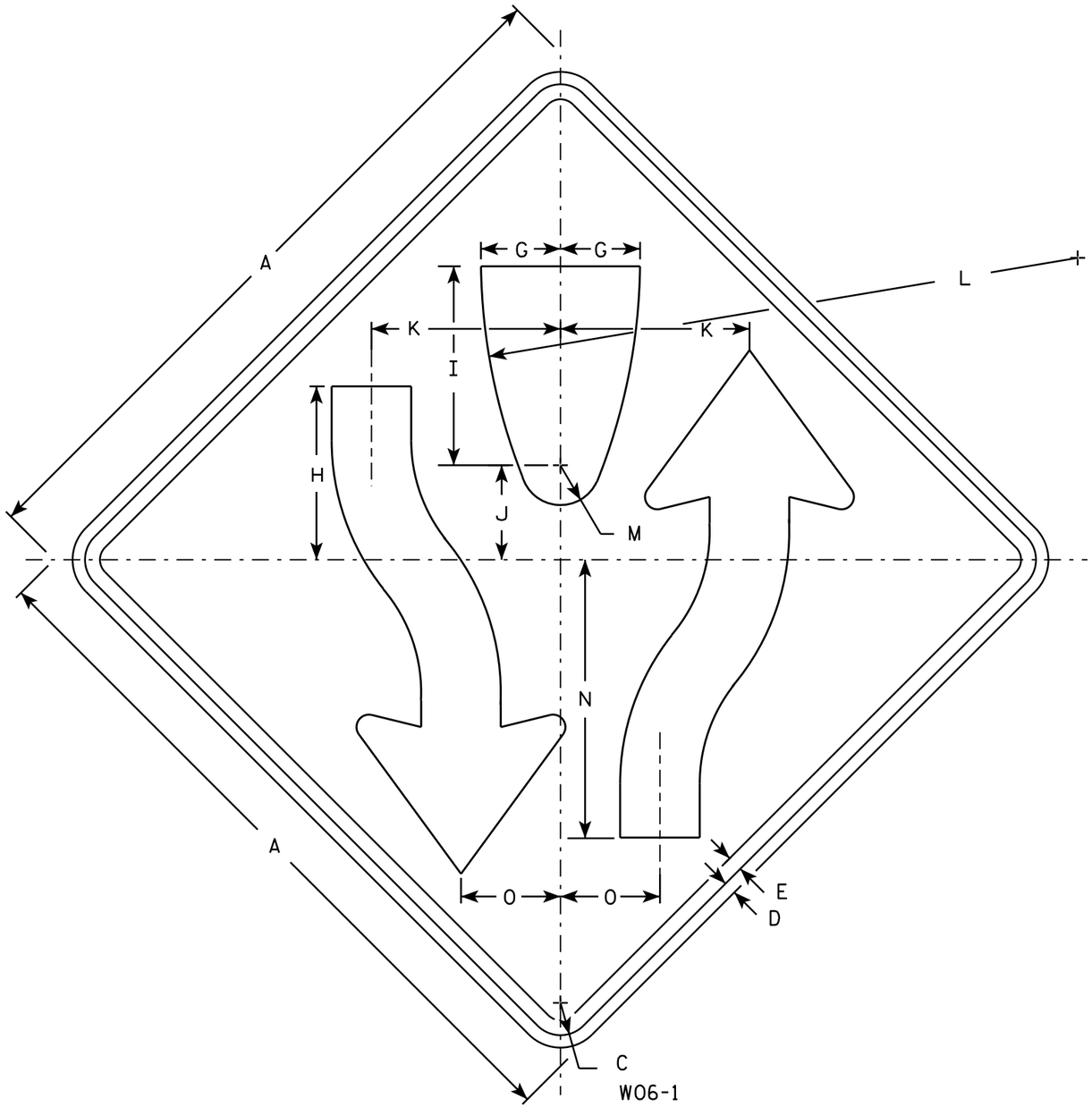
DATE 11/20/13 PLATE W04-3.1

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W043.DGN PLOT DATE : 20-NOV-2013 11:49 PLOT BY : mscsja 6.810449:1.000000

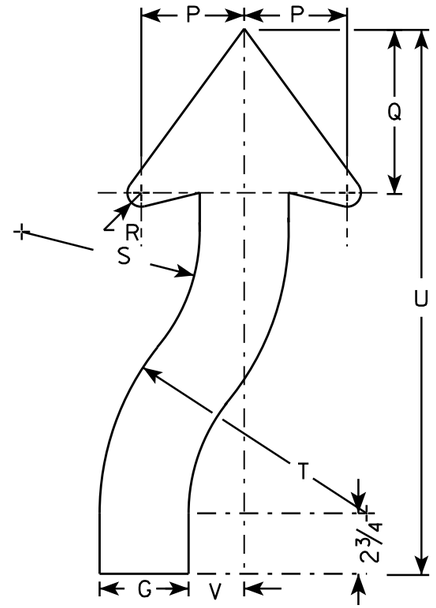
WISDOT/CADDS SHEET 42



W06-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. 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. W06-2 same as W06-1 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	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
2S	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
2M	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
3	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
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
W06-1 & W06-2

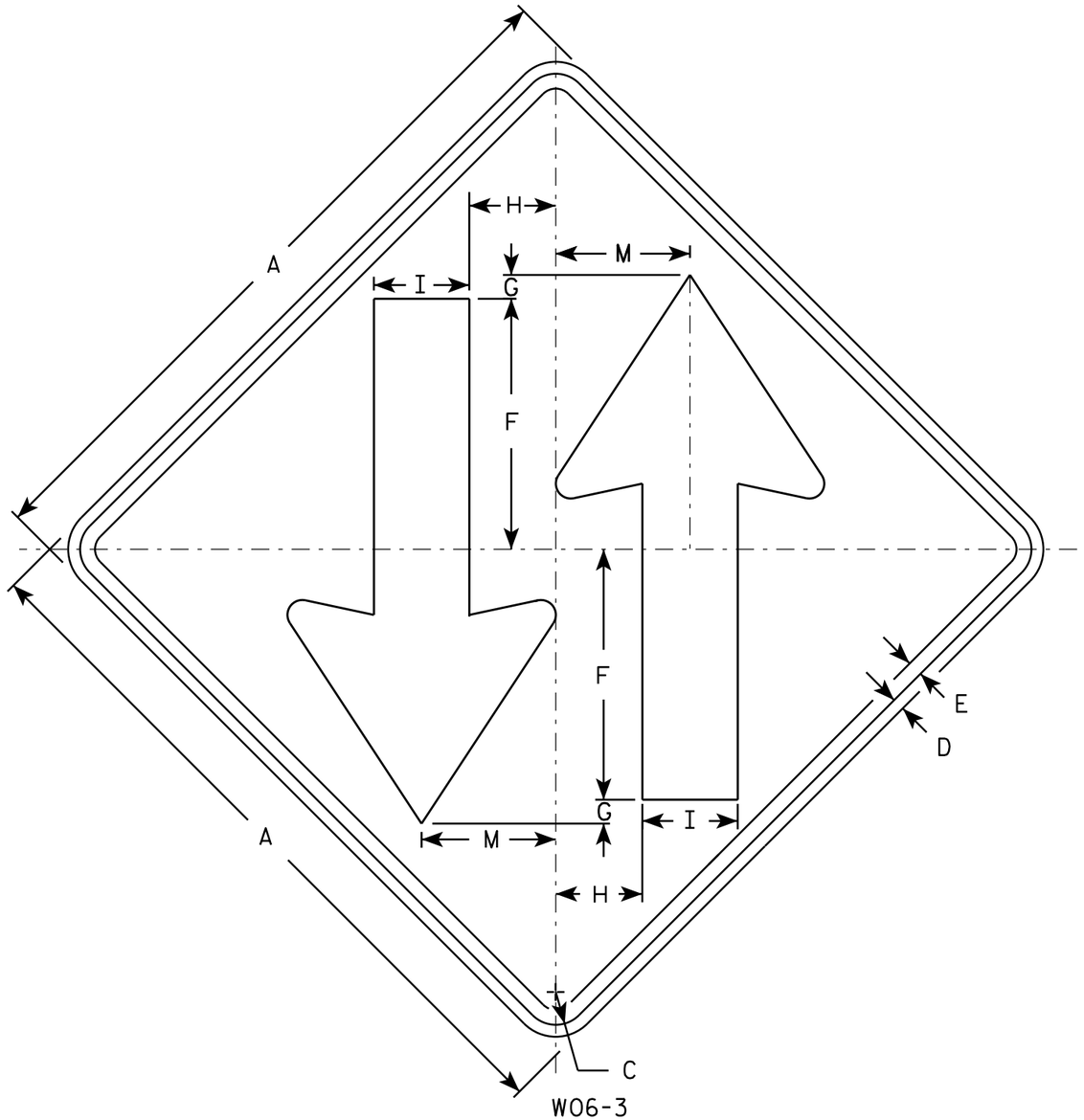
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

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

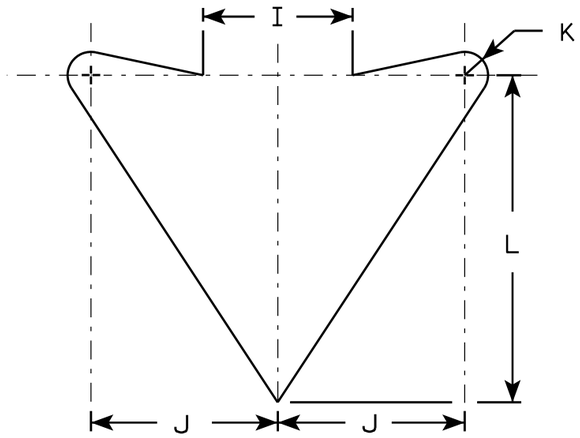
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W061.DGN PLOT DATE : 20-NOV-2013 12:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.810449:1.000000
WISDOT/CADDS SHEET 42



W06-3

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.



ARROW DETAIL

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

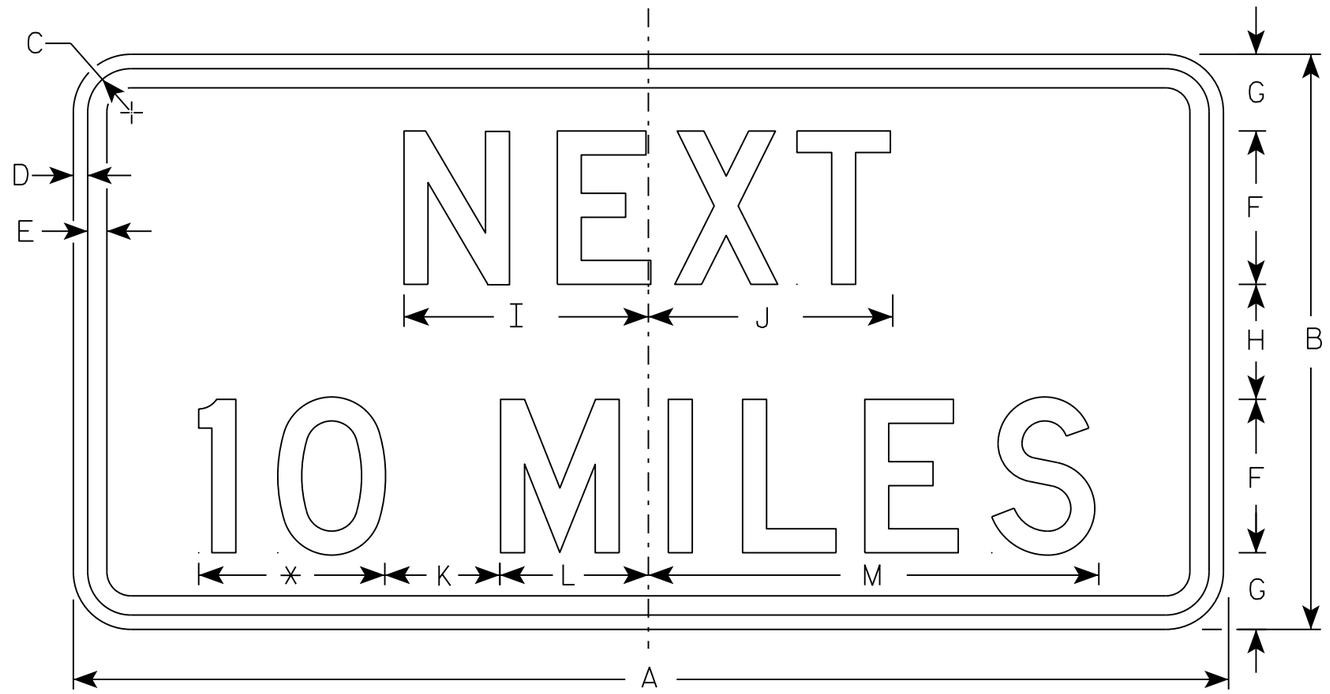
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 305 W06-3.1

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



W057-51

* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Round distance to the nearest whole Mile and 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	36	18	1 1/8	3/8	1/2	5	2 5/8	2 3/4	7 7/8	8	5	4 1/8	15 3/8														4.5
2S	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0
2M	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0
3	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0
4	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	3 1/2	5	10	10 1/8	6	5 5/8	19														8.0

STANDARD SIGN
W057-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/14/17 PLATE NO. W057-51.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 306	E

NORTH BOUND ROADWAY

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
39+25	28.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40+00	28.4	78.9	72.2	0.0	0.0	78.9	72.2	0.0	72.2
41+00	27.5	77.6	68.3	0.0	0.0	156.5	140.5	0.0	140.5
42+00	22.1	68.9	59.6	0.0	0.0	225.4	200.1	0.0	200.1
43+00	18.4	56.3	47.0	0.0	0.0	281.7	247.1	0.0	247.1
44+00	17.3	49.6	40.3	1.8	0.0	331.3	287.4	0.0	287.4
45+00	17.1	47.8	38.5	11.3	24.3	379.0	325.8	30.4	295.4
46+00	8.8	35.9	26.6	10.3	40.1	414.9	352.4	80.5	272.0
47+00	6.7	21.5	18.7	3.3	25.2	436.4	371.1	111.9	259.1
48+00	11.5	25.3	22.5	0.0	6.1	461.7	393.6	119.6	274.0
49+00	32.0	60.4	57.6	0.0	0.0	522.1	451.2	119.6	331.6
50+00	30.2	86.4	83.6	0.0	0.0	608.5	534.8	119.6	415.2
51+00	8.0	53.1	53.1	0.0	0.0	661.5	587.8	119.6	468.2
52+00	2.3	14.3	14.3	0.0	0.0	675.8	602.1	119.6	482.6
53+00	14.1	22.8	17.2	46.0	85.2	698.6	619.3	226.1	393.2
54+00	15.1	40.6	31.3	49.5	176.9	739.2	650.6	447.1	203.4
55+00	18.0	46.0	36.7	39.4	164.6	785.1	687.2	652.9	34.3
56+00	15.6	46.7	37.4	40.0	147.0	831.8	724.6	836.7	-112.1
57+00	16.6	44.7	35.4	36.7	142.0	876.5	760.0	1014.3	-254.2
58+00	12.9	41.0	31.7	40.0	142.0	917.5	791.7	1191.8	-400.1
59+00	17.3	41.9	32.6	29.0	127.8	959.4	824.3	1351.5	-527.2
60+00	12.9	42.0	32.7	11.9	75.7	1001.4	857.0	1446.2	-589.2
61+00	21.3	47.5	38.2	9.8	40.2	1049.0	895.3	1496.4	-601.2
62+00	13.5	48.3	39.0	6.6	30.4	1097.3	934.3	1534.4	-600.1
63+00	15.0	39.6	30.3	5.4	22.2	1136.9	964.6	1562.2	-597.6
64+00	14.3	40.7	31.4	39.7	83.5	1177.6	996.0	1666.6	-670.6
65+00	14.6	40.1	30.8	73.2	209.1	1217.7	1026.8	1927.9	-901.1
66+00	22.1	51.0	41.7	89.4	301.1	1268.7	1068.5	2304.3	-1235.8
67+00	17.1	54.4	45.1	75.1	304.6	1323.1	1113.6	2685.1	-1571.5
68+00	17.8	48.5	39.2	55.8	242.4	1371.6	1152.8	2988.1	-1835.3
69+00	23.9	57.9	48.6	5.4	113.3	1429.5	1201.4	3129.8	-1928.3
70+00	28.6	72.9	63.6	9.5	27.6	1502.4	1265.0	3164.3	-1899.2
71+00	33.7	86.5	77.2	2.0	21.3	1589.0	1342.3	3190.9	-1848.6
72+00	33.5	93.3	84.0	4.3	11.7	1682.3	1426.3	3205.5	-1779.2
73+00	38.6	100.1	90.8	2.2	12.0	1782.4	1517.1	3220.5	-1703.4
74+00	22.0	84.2	74.9	15.1	32.0	1866.6	1592.0	3260.6	-1668.5
75+00	19.5	57.6	48.3	66.6	151.3	1924.3	1640.4	3449.7	-1809.3
76+00	14.2	46.8	37.5	120.5	346.5	1971.1	1677.9	3882.8	-2204.9
77+00	17.4	43.9	34.6	122.0	449.1	2014.9	1712.4	4444.1	-2731.7
78+00	24.5	58.2	52.6	103.8	418.1	2073.1	1765.0	4966.8	-3201.8
79+00	21.6	64.0	58.4	222.8	604.8	2137.2	1823.5	5722.8	-3899.4
80+00	16.2	52.5	49.7	214.0	808.9	2189.7	1873.2	6733.9	-4860.8
81+00	18.5	48.2	48.2	158.3	689.4	2237.9	1921.4	7595.7	-5674.4
82+00	28.6	65.4	65.4	85.3	451.1	2303.3	1986.8	8159.6	-6172.9
83+00	22.2	70.6	70.6	33.4	219.8	2373.8	2057.3	8434.4	-6377.1
84+00	27.1	68.5	68.5	0.0	61.9	2442.3	2125.8	8511.7	-6385.9
85+00	14.6	57.9	57.9	0.0	0.0	2500.2	2183.7	8511.7	-6328.0
86+00	23.8	53.3	44.0	0.0	0.0	2553.6	2227.8	8511.7	-6284.0
87+00	24.9	67.6	58.3	0.0	0.0	2621.2	2286.1	8511.7	-6225.6
88+00	24.3	68.3	59.0	0.0	0.0	2689.5	2345.1	8511.7	-6166.6
89+00	25.2	68.8	59.5	0.0	0.0	2758.3	2404.6	8511.7	-6107.1
90+00	24.3	68.8	59.5	0.0	0.0	2827.0	2464.0	8511.7	-6047.7
91+00	23.4	66.3	57.0	0.0	0.0	2893.3	2521.0	8511.7	-5990.7
92+00	23.3	64.9	55.6	0.0	0.0	2958.1	2576.5	8511.7	-5935.2
93+00	23.4	64.9	55.6	0.0	0.0	3023.0	2632.1	8511.7	-5879.6
94+00	23.6	65.3	56.0	0.0	0.0	3088.3	2688.1	8511.7	-5823.6
95+00	23.8	65.8	56.5	0.0	0.0	3154.1	2744.6	8511.7	-5767.1
96+00	22.0	63.6	54.3	0.0	0.0	3217.7	2798.9	8511.7	-5712.8
97+00	20.7	59.3	53.7	0.0	0.0	3277.0	2852.6	8511.7	-5659.1
98+00	14.7	49.2	43.6	5.9	10.9	3326.2	2896.2	8525.4	-5629.2
99+00	17.1	44.2	41.4	26.0	59.1	3370.4	2937.6	8599.2	-5661.7
100+00	17.0	47.4	44.6	0.0	48.1	3417.7	2982.1	8659.4	-5677.3
100+50	0.0	23.6	20.8	0.0	0.0	3441.3	3002.9	8659.4	-5656.5

3

3

PROJECT NO: 7110-05-72 | HWY: STH 37 | COUNTY: EAU CLAIRE | EARTHWORK | SHEET: 307 | E

FILE NAME : N:\PDS\...\030200_mq.pptx PLOT DATE : June 14, 1911 PLOT BY : A.R.H. PLOT NAME : PLOT SCALE : 1:1

Replaced with "Revised Sheet 307"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 307
March 6, 2018

NORTH BOUND ROADWAY — FILL EXPANSION = 1.25

	Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
	39+25	46.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	40+00	57.7	144.6	87.9	0.0	0.0	144.6	72.2	0.0	72.2
	41+00	50.6	200.4	124.5	0.0	0.0	345.0	196.7	0.0	196.7
	42+00	45.2	177.4	101.4	0.0	0.0	522.4	298.1	0.0	298.1
	43+00	39.4	156.7	80.7	0.0	0.0	679.1	378.8	0.0	378.8
	44+00	36.7	140.8	64.8	1.8	0.0	819.9	443.7	0.0	443.7
	45+00	35.5	133.6	57.7	11.3	24.3	953.6	501.4	30.4	471.0
	46+00	33.4	127.6	39.1	10.3	40.1	1081.1	540.5	80.5	460.0
	47+00	39.6	135.2	25.5	3.3	25.2	1216.4	565.9	111.9	454.0
	48+00	52.3	170.2	31.3	0.0	6.1	1386.5	597.2	119.6	477.6
	49+00	57.7	203.6	75.8	0.0	0.0	1590.1	673.0	119.6	553.4
	50+00	42.4	185.4	99.3	0.0	0.0	1775.5	772.2	119.6	652.6
HAMILTON AVE	51+00	25.2	125.3	58.6	0.0	0.0	1900.8	830.9	119.6	711.3
	52+00	20.7	85.0	18.3	0.0	0.0	1985.8	849.2	119.6	729.6
	53+00	32.0	97.5	25.2	46.0	85.2	2083.3	874.4	226.1	648.4
	54+00	33.0	120.3	44.4	49.5	176.9	2203.6	918.8	447.1	471.7
	55+00	36.0	127.8	51.8	39.4	164.6	2331.4	970.6	652.9	317.7
	56+00	33.5	128.7	52.7	40.0	147.0	2460.1	1023.4	836.7	186.6
	57+00	34.8	126.4	50.4	36.7	142.0	2586.5	1073.8	1014.3	59.5
	58+00	31.2	122.1	46.1	40.0	142.0	2708.6	1119.9	1191.8	-71.9
	59+00	36.1	124.6	48.6	29.0	127.8	2833.1	1168.5	1351.5	-183.1
	60+00	31.9	125.9	49.9	11.9	75.7	2959.0	1218.4	1446.2	-227.8
	61+00	41.5	135.9	59.9	9.8	40.2	3094.9	1278.3	1496.4	-218.1
	62+00	34.8	141.3	65.3	6.6	30.4	3236.2	1343.6	1534.4	-190.8
	63+00	34.7	128.6	52.7	5.4	22.2	3364.8	1396.3	1562.2	-165.9
	64+00	34.0	127.1	51.2	39.7	83.5	3492.0	1447.5	1666.6	-219.1
	65+00	33.4	124.9	48.9	73.2	209.1	3616.8	1496.4	1927.9	-431.5
	66+00	36.3	129.1	53.1	89.4	301.1	3745.9	1549.5	2304.3	-754.8
	67+00	36.5	134.9	58.9	75.1	304.6	3880.8	1608.4	2685.1	-1076.7
	68+00	37.0	136.2	60.2	55.8	242.4	4017.0	1668.6	2988.1	-1319.5
	69+00	49.0	159.3	83.3	5.4	113.3	4176.3	1752.0	3129.8	-1377.8
	70+00	53.6	189.9	114.0	9.5	27.6	4366.2	1865.9	3164.3	-1298.3
	71+00	52.7	196.8	120.8	2.0	21.3	4563.0	1986.7	3190.9	-1204.2
	72+00	53.2	196.2	120.2	4.3	11.7	4759.1	2106.9	3205.5	-1098.5
	73+00	57.8	205.6	129.6	2.2	12.0	4964.8	2236.6	3220.5	-983.9
	74+00	41.2	183.4	107.4	15.1	32.0	5148.1	2344.0	3260.6	-916.6
	75+00	38.8	148.2	72.3	66.6	151.3	5296.4	2416.3	3449.7	-1033.4
	76+00	42.8	151.2	75.2	120.5	346.5	5447.6	2491.5	3882.8	-1391.3
	77+00	35.4	144.8	68.9	122.0	449.1	5592.4	2560.3	4444.1	-1883.8
	78+00	44.5	147.9	71.9	103.8	418.1	5740.3	2632.2	4966.8	-2334.6
	79+00	46.7	168.8	78.8	222.8	604.8	5909.1	2711.0	5722.8	-3011.8
	80+00	45.4	170.5	66.6	214.0	808.9	6079.6	2777.6	6733.9	-3956.3
	81+00	51.7	179.8	66.4	158.3	689.4	6259.4	2844.1	7595.7	-4751.7
	82+00	63.1	212.6	89.5	85.3	451.1	6472.0	2933.6	8159.6	-5226.1
	83+00	62.2	232.0	98.1	33.4	219.8	6704.1	3031.7	8434.4	-5402.7
CRAIG ROAD	84+00	58.8	224.0	95.3	0.0	61.9	6928.0	3127.0	8511.7	-5384.7
	85+00	63.5	226.5	79.3	0.0	0.0	7154.5	3206.3	8511.7	-5305.5
	86+00	40.8	193.2	61.6	0.0	0.0	7347.7	3267.9	8511.7	-5243.8
	87+00	41.5	152.4	76.5	0.0	0.0	7500.1	3344.4	8511.7	-5167.3
	88+00	43.0	156.5	80.5	0.0	0.0	7656.6	3424.9	8511.7	-5086.8
	89+00	42.3	157.9	81.9	0.0	0.0	7814.6	3506.9	8511.7	-5004.9
	90+00	43.2	158.3	82.4	0.0	0.0	7972.9	3589.2	8511.7	-4922.5
	91+00	42.3	158.3	82.4	0.0	0.0	8131.2	3671.6	8511.7	-4840.1
	92+00	41.4	155.0	79.0	0.0	0.0	8286.2	3750.6	8511.7	-4761.1
	93+00	41.3	153.1	77.2	0.0	0.0	8439.4	3827.8	8511.7	-4683.9
	94+00	41.4	153.1	77.2	0.0	0.0	8592.5	3905.0	8511.7	-4606.7
	95+00	41.6	153.7	77.7	0.0	0.0	8746.2	3982.7	8511.7	-4529.0
	96+00	41.8	154.4	78.5	0.0	0.0	8900.7	4061.2	8511.7	-4450.5
	97+00	40.0	151.5	79.2	0.0	0.0	9052.1	4140.4	8511.7	-4371.3
	98+00	38.7	145.7	73.5	5.9	10.9	9197.9	4213.9	8525.4	-4311.5
	99+00	32.7	132.2	62.8	26.0	59.1	9330.1	4276.6	8599.2	-4322.6
	100+00	35.1	125.6	56.1	0.0	48.1	9455.7	4332.7	8659.4	-4326.7
	100+50	35.0	64.9	28.8	0.0	0.0	9520.6	4361.5	8659.4	-4297.9

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EARTHWORK TABULATIONS	SHEET:	E

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FILE NAME : N:\PDS\...\030200_mq.pptx
PLOT DATE : June 14, 1911
PLOT BY : A.R.H.
PLOT NAME :
PLOT SCALE : 1:1

Revised Sheet 307

SOUTH BOUND ROADWAY

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
39+25	34.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40+00	34.0	94.4	87.7	0.0	0.0	94.4	87.7	0.0	87.7
41+00	34.1	94.6	85.3	0.0	0.0	189.0	173.0	0.0	173.0
42+00	33.3	93.6	84.3	0.0	0.0	282.6	257.3	0.0	257.3
43+00	32.0	90.7	81.4	0.0	0.0	373.3	338.7	0.0	338.7
44+00	30.6	86.9	77.6	0.0	0.0	460.3	416.4	0.0	416.4
45+00	31.8	86.7	77.4	0.0	0.0	546.9	493.7	0.0	493.7
46+00	33.0	90.0	80.7	0.0	0.0	636.9	574.4	0.0	574.4
47+00	31.1	89.0	79.7	0.0	0.0	726.0	654.2	0.0	654.2
48+00	29.8	84.6	75.3	0.0	0.0	810.6	729.5	0.0	729.5
49+00	28.8	81.4	75.8	0.0	0.0	891.9	805.2	0.0	805.2
50+00	16.0	62.2	59.4	0.0	0.0	954.2	864.7	0.0	864.7
51+00	8.9	34.6	34.6	0.0	0.0	988.8	899.3	0.0	899.3
52+00	14.4	32.4	32.4	0.0	0.0	1021.1	931.6	0.0	931.6
53+00	28.3	59.3	56.5	4.6	0.0	1080.4	988.1	0.0	988.1
54+00	37.8	91.8	86.2	8.7	24.6	1172.2	1074.3	30.8	1043.5
55+00	28.5	92.1	86.5	37.5	85.6	1264.3	1160.8	137.7	1023.1
56+00	34.0	86.8	77.5	43.4	149.8	1351.1	1238.3	325.0	913.3
57+00	43.8	108.1	98.8	0.0	80.4	1459.2	1337.1	425.5	911.6
58+00	42.6	120.0	110.7	1.0	1.8	1579.2	1447.8	427.7	1020.1
59+00	48.0	125.8	116.5	0.0	1.8	1705.0	1564.3	429.9	1134.4
60+00	43.7	127.4	118.1	0.0	0.0	1832.4	1682.4	429.9	1252.5
61+00	43.5	121.1	111.8	0.0	0.0	1953.5	1794.2	429.9	1364.3
62+00	60.6	144.6	135.3	0.0	0.0	2098.1	1929.5	429.9	1499.6
63+00	57.5	164.0	154.7	0.0	0.0	2262.1	2084.2	429.9	1654.3
64+00	51.1	150.8	141.5	0.0	0.0	2412.8	2225.6	429.9	1795.8
65+00	41.9	129.1	119.8	0.0	0.0	2541.9	2345.4	429.9	1915.6
66+00	40.3	114.2	104.9	0.0	0.0	2656.1	2450.3	429.9	2020.5
67+00	52.7	129.2	119.9	0.0	0.0	2785.3	2570.2	429.9	2140.3
68+00	49.4	141.8	132.5	0.0	0.0	2927.1	2702.7	429.9	2272.8
69+00	38.1	121.5	112.2	0.0	0.0	3048.6	2814.9	429.9	2385.1
70+00	34.8	101.3	92.0	0.0	0.0	3149.9	2906.9	429.9	2477.0
71+00	37.1	99.9	90.6	0.0	0.0	3249.7	2997.4	429.9	2567.6
72+00	38.7	105.3	96.0	0.0	0.0	3355.0	3093.4	429.9	2663.5
73+00	40.2	109.6	100.3	0.0	0.0	3464.6	3193.7	429.9	2763.8
74+00	37.3	107.6	98.3	0.0	0.0	3572.2	3292.0	429.9	2862.2
75+00	31.6	95.7	86.4	0.0	0.0	3667.9	3378.4	429.9	2948.6
76+00	30.6	86.4	77.1	0.0	0.0	3754.3	3455.5	429.9	3025.6
77+00	20.2	70.6	61.3	3.6	6.7	3824.9	3516.8	438.2	3078.6
78+00	11.7	44.3	35.0	6.1	18.0	3869.2	3551.8	460.6	3091.1
79+00	9.1	28.9	19.6	9.4	28.7	3898.1	3571.4	496.5	3074.8
80+00	3.8	17.9	8.6	27.1	67.6	3916.0	3580.0	581.0	2999.0
81+00	12.3	22.4	13.1	146.0	320.6	3938.3	3593.0	981.7	2611.3
82+00	37.7	69.4	60.1	174.4	593.3	4007.8	3653.2	1723.4	1929.8
83+00	17.1	76.1	66.8	352.0	974.8	4083.9	3720.0	2941.9	778.1
84+00	52.0	96.0	86.7	66.9	775.7	4179.9	3806.7	3911.6	-104.9
85+00	7.5	82.6	82.6	0.0	123.9	4262.5	3889.3	4066.4	-177.1
86+00	23.3	42.8	42.8	0.0	0.0	4305.3	3932.1	4066.4	-134.4
87+00	23.6	65.1	62.3	3.3	6.1	4370.4	3994.4	4074.1	-79.7
88+00	31.9	77.1	71.5	16.9	37.4	4447.5	4065.9	4120.8	-54.9
89+00	34.1	91.7	82.4	19.8	68.0	4539.2	4148.3	4205.8	-57.5
90+00	31.6	91.3	82.0	16.1	66.5	4630.4	4230.2	4288.9	-58.7
91+00	29.7	85.1	75.8	17.4	62.0	4715.6	4306.1	4366.4	-60.4
92+00	29.1	81.7	72.4	13.5	57.2	4797.2	4378.4	4438.0	-59.5
93+00	27.8	79.0	69.7	0.0	25.0	4876.3	4448.2	4469.2	-21.1
94+00	26.0	74.7	65.4	0.0	0.0	4951.0	4513.6	4469.2	44.4
95+00	23.1	68.2	58.9	0.0	0.0	5019.2	4572.5	4469.2	103.3
96+00	22.3	63.1	53.8	0.0	0.0	5082.2	4626.2	4469.2	157.0
97+00	20.5	59.4	50.1	0.0	0.0	5141.7	4676.4	4469.2	207.2
98+00	22.4	59.6	50.3	0.0	0.0	5201.3	4726.7	4469.2	257.4
99+00	33.3	77.4	68.1	0.0	0.0	5278.6	4794.7	4469.2	325.5
100+00	37.4	98.2	88.9	0.0	0.0	5376.8	4883.6	4469.2	414.4
101+00	28.1	91.0	81.7	0.0	0.0	5467.8	4965.3	4469.2	496.1

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EARTHWORK	SHEET: 308	E

FILE NAME : N:\PDS\...\030200_mq.pptx PLOT DATE : June 14, 1911 PLOT BY : A.R.H. PLOT NAME : PLOT SCALE : 1:1

Replaced with "Revised Sheet 308"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 308
March 6, 2018

SOUTH BOUND ROADWAY — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
39+25	65.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40+00	63.4	178.9	101.0	0.0	0.0	178.9	101.0	0.0	101.0
41+00	52.1	213.9	126.2	0.0	0.0	392.8	227.2	0.0	227.2
42+00	51.3	191.5	115.5	0.0	0.0	584.3	342.7	0.0	342.7
43+00	50.0	187.6	111.6	0.0	0.0	771.9	454.4	0.0	454.4
44+00	48.6	182.6	106.6	0.0	0.0	954.5	561.0	0.0	561.0
45+00	49.8	182.2	106.3	0.0	0.0	1136.7	667.3	0.0	667.3
46+00	51.0	186.7	110.7	0.0	0.0	1323.4	778.0	0.0	778.0
47+00	49.1	185.4	109.4	0.0	0.0	1508.7	887.4	0.0	887.4
48+00	47.8	179.4	103.5	0.0	0.0	1688.2	990.8	0.0	990.8
49+00	46.8	175.2	102.9	0.0	0.0	1863.4	1093.8	0.0	1093.8
50+00	41.4	163.3	80.2	0.0	0.0	2026.7	1173.9	0.0	1173.9
HAMILTON AVENUE 51+00	37.4	145.9	46.1	0.0	0.0	2172.6	1220.0	0.0	1220.0
52+00	41.4	145.9	43.1	0.0	0.0	2318.6	1263.2	0.0	1263.2
53+00	55.3	179.1	76.3	4.6	0.0	2497.6	1339.5	0.0	1339.5
54+00	64.8	222.4	116.8	8.7	24.6	2720.0	1456.3	30.8	1425.5
55+00	55.0	221.9	122.5	37.5	85.6	2941.9	1578.8	137.7	1441.1
56+00	52.8	199.6	111.8	43.4	149.8	3141.5	1690.6	325.0	1365.6
57+00	61.8	212.2	134.8	0.0	80.4	3353.7	1825.4	425.5	1399.9
58+00	60.6	226.7	150.7	1.0	1.8	3580.4	1976.1	427.7	1548.4
59+00	66.0	234.4	158.5	0.0	1.8	3814.9	2134.6	429.9	1704.7
60+00	61.7	236.5	160.5	0.0	0.0	4051.3	2295.1	429.9	1865.2
61+00	61.5	228.1	152.2	0.0	0.0	4279.5	2447.3	429.9	2017.4
62+00	78.6	259.4	183.5	0.0	0.0	4538.9	2630.7	429.9	2200.9
63+00	75.5	285.4	209.4	0.0	0.0	4824.3	2840.1	429.9	2410.3
64+00	69.1	267.7	191.7	0.0	0.0	5092.0	3031.9	429.9	2602.0
65+00	59.9	238.8	162.8	0.0	0.0	5330.8	3194.7	429.9	2764.8
66+00	58.3	218.9	142.9	0.0	0.0	5549.7	3337.6	429.9	2907.8
67+00	70.7	238.9	162.9	0.0	0.0	5788.6	3500.5	429.9	3070.7
68+00	67.4	255.7	179.8	0.0	0.0	6044.3	3680.3	429.9	3250.5
69+00	56.1	228.7	152.7	0.0	0.0	6273.0	3833.1	429.9	3403.2
70+00	52.8	201.7	125.7	0.0	0.0	6474.7	3958.8	429.9	3528.9
71+00	55.1	199.8	123.8	0.0	0.0	6674.5	4082.6	429.9	3652.7
72+00	56.7	207.0	131.1	0.0	0.0	6881.5	4213.7	429.9	3783.8
73+00	58.2	212.8	136.8	0.0	0.0	7094.3	4350.5	429.9	3920.6
74+00	55.3	210.2	134.2	0.0	0.0	7304.5	4484.7	429.9	4054.8
75+00	49.6	194.3	118.3	0.0	0.0	7498.7	4603.0	429.9	4173.1
76+00	48.6	181.9	105.9	0.0	0.0	7680.6	4708.9	429.9	4279.0
77+00	38.2	160.7	84.8	3.6	6.7	7841.3	4793.7	438.2	4355.5
78+00	29.7	125.7	49.8	6.1	18.0	7967.1	4843.4	460.6	4382.8
79+00	27.1	105.2	29.2	9.4	28.7	8072.3	4872.6	496.5	4376.1
80+00	21.8	90.6	14.6	27.1	67.6	8162.8	4887.2	581.0	4306.2
81+00	30.3	96.5	20.5	146.0	320.6	8259.3	4907.7	981.7	3926.0
82+00	55.7	159.3	83.3	174.4	593.3	8418.6	4991.0	1723.4	3267.7
CRAIG ROAD 83+00	35.1	168.1	92.2	352.0	974.8	8586.7	5083.2	2941.9	2141.3
84+00	70.0	194.6	118.7	66.9	775.7	8781.3	5201.9	3911.6	1290.3
85+00	36.0	196.3	110.2	0.0	123.9	8977.6	5312.1	4066.4	1245.6
86+00	53.3	165.4	57.0	0.0	0.0	9143.0	5369.1	4066.4	1302.7
87+00	59.6	209.1	84.1	3.3	6.1	9352.1	5453.2	4074.1	1379.1
88+00	60.9	223.1	97.2	16.9	37.4	9575.2	5550.3	4120.8	1429.5
89+00	52.1	209.3	112.9	19.8	68.0	9784.5	5663.3	4205.8	1457.5
90+00	49.6	188.3	112.4	16.1	66.5	9972.8	5775.6	4288.9	1486.7
91+00	47.7	180.2	104.2	17.4	62.0	10153.0	5879.8	4366.4	1513.4
92+00	47.1	175.6	99.6	13.5	57.2	10328.6	5979.4	4438.0	1541.5
93+00	45.8	172.0	96.1	0.0	25.0	10500.6	6075.5	4469.2	1606.3
94+00	44.0	166.3	90.3	0.0	0.0	10666.9	6165.8	4469.2	1696.6
95+00	41.1	157.6	81.6	0.0	0.0	10824.5	6247.5	4469.2	1778.2
96+00	40.3	150.7	74.8	0.0	0.0	10975.2	6322.2	4469.2	1853.0
97+00	38.5	145.9	70.0	0.0	0.0	11121.1	6392.2	4469.2	1923.0
98+00	40.4	146.1	70.1	0.0	0.0	11267.3	6462.3	4469.2	1993.1
99+00	51.3	169.8	93.8	0.0	0.0	11437.1	6556.2	4469.2	2087.0
100+00	55.4	197.6	121.6	0.0	0.0	11634.7	6677.8	4469.2	2208.6
101+00	46.1	188.0	112.0	0.0	0.0	11822.6	6789.8	4469.2	2320.6

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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	EARTHWORK TABULATIONS	SHEET:	E

FILE NAME : N:\PDS\...\030200_mq.pptx PLOT DATE : June 14, 1911 PLOT BY : A.R.H. PLOT NAME : PLOT SCALE : 1:1

Revised Sheet 308

SHARED PATH

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
234+00	0.6	0.0	0.0	28.5	0.0	0.0	0.0	0.0	0.0
235+00	0.0	1.1	1.1	32.1	112.2	1.1	1.1	140.3	-139.2
236+00	3.0	5.6	5.6	8.1	74.4	6.7	6.7	233.3	-226.7
237+00	0.7	6.9	6.9	10.8	35.0	13.5	13.5	277.1	-263.6
238+00	1.7	4.4	4.4	5.2	29.6	18.0	18.0	314.1	-296.2
239+00	2.4	7.6	7.6	4.3	17.6	25.6	25.6	336.1	-310.6
240+00	2.7	9.4	9.4	4.1	15.6	35.0	35.0	355.6	-320.6
241+00	4.4	13.1	13.1	3.7	14.4	48.1	48.1	373.6	-325.5
242+00	4.1	15.7	15.7	4.0	14.3	63.9	63.9	391.4	-327.5
243+00	0.0	7.6	7.6	6.7	19.8	71.5	71.5	416.2	-344.7
244+00	0.0	0.0	0.0	5.6	22.8	71.5	71.5	444.7	-373.2
245+00	0.0	0.0	0.0	10.8	30.4	71.5	71.5	482.6	-411.2
246+00	4.1	7.6	7.6	9.5	37.6	79.1	79.1	529.6	-450.6
247+00	0.8	9.1	9.1	15.1	45.6	88.1	88.1	586.6	-498.4
248+00	1.8	4.8	4.8	8.0	42.8	93.0	93.0	640.0	-547.1
249+00	3.6	10.0	10.0	6.6	27.0	103.0	103.0	673.8	-570.9
250+00	3.9	13.9	13.9	5.8	23.0	116.9	116.9	702.5	-585.7
251+00	3.6	13.9	13.9	3.4	17.0	130.7	130.7	723.8	-593.1
251+50	0.0	3.3	3.3	6.6	9.3	134.1	134.1	735.4	-601.3

SIDEWALK

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
96+00	2.10	0.0	0.0	11.70	0.0	0.0	0.0	0.0	0.0
97+00	2.50	8.5	8.5	7.40	35.4	8.5	8.5	44.2	-35.7
98+00	4.70	13.3	13.3	2.10	17.6	21.9	21.9	66.2	-44.4
99+00	6.30	20.4	20.4	1.10	5.9	42.2	42.2	73.6	-31.4
100+00	0.00	11.7	11.7	11.00	22.4	53.9	53.9	101.6	-47.7
101+00	2.10	3.9	3.9	2.72	25.4	57.8	57.8	133.4	-75.6

HAMILTON AVE. LEFT — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
1+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1+25	87.7	40.6	30.5	0.0	0.0	40.6	30.5	0.0	30.5
1+50	165.3	117.1	105.3	0.0	0.0	157.7	135.8	0.0	135.8
1+75	219.3	178.0	163.7	0.0	0.0	335.8	299.6	0.0	299.6
2+00	163.3	177.1	155.6	0.0	0.0	512.9	455.2	0.0	455.2
2+25	168.3	153.5	153.5	9.1	4.2	666.4	608.7	5.3	603.4
2+50	1.6	78.7	78.7	33.3	19.6	745.1	687.4	29.8	657.6
2+80	4.7	3.5	3.5	34.2	31.3	748.6	690.9	68.9	622.0

HAMILTON AVE. RIGHT — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
0+10	9.3	0.0	0.0	7.2	0.0	0.0	0.0	0.0	0.0
0+25	10.1	5.4	5.4	7.6	11.0	5.4	5.4	13.7	-8.3
0+50	21.4	16.4	16.4	8.6	15.0	21.8	21.8	32.5	-10.7
0+75	50.8	42.7	42.7	0.0	8.0	64.6	64.6	42.5	22.1
1+00	109.4	95.8	84.5	0.0	0.0	160.3	149.1	42.5	106.6
1+25	125.6	145.8	138.3	0.0	0.0	306.1	287.4	42.5	244.9
1+50	33.8	86.7	79.5	0.0	0.0	392.8	366.9	42.5	324.4
1+75	26.5	27.9	20.8	0.0	0.0	420.7	387.7	42.5	345.2
1+88	25.2	12.4	5.3	0.0	0.0	433.2	393.0	42.5	350.5

Replaced with "Revised Sheet 309"

SHARED PATH — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
234+00	0.6	0.0	0.0	28.5	0.0	0.0	0.0	0.0	0.0
235+00	0.0	1.1	1.1	32.1	112.2	1.1	1.1	140.3	-139.2
236+00	3.0	5.6	5.6	8.1	74.4	6.7	6.7	233.3	-226.7
237+00	0.7	6.9	6.9	10.8	35.0	13.5	13.5	277.1	-263.6
238+00	1.7	4.4	4.4	5.2	29.6	18.0	18.0	314.1	-296.2
239+00	2.4	7.6	7.6	4.3	17.6	25.6	25.6	336.1	-310.6
240+00	2.7	9.4	9.4	4.1	15.6	35.0	35.0	355.6	-320.6
241+00	4.4	13.1	13.1	3.7	14.4	48.1	48.1	373.6	-325.5
242+00	4.1	15.7	15.7	4.0	14.3	63.9	63.9	391.4	-327.5
243+00	0.0	7.6	7.6	6.7	19.8	71.5	71.5	416.2	-344.7
244+00	0.0	0.0	0.0	5.6	22.8	71.5	71.5	444.7	-373.2
245+00	0.0	0.0	0.0	10.8	30.4	71.5	71.5	482.6	-411.2
246+00	4.1	7.6	7.6	9.5	37.6	79.1	79.1	529.6	-450.6
247+00	0.8	9.1	9.1	15.1	45.6	88.1	88.1	586.6	-498.4
248+00	1.8	4.8	4.8	8.0	42.8	93.0	93.0	640.0	-547.1
249+00	3.6	10.0	10.0	6.6	27.0	103.0	103.0	673.8	-570.9
250+00	3.9	13.9	13.9	5.8	23.0	116.9	116.9	702.5	-585.7
251+00	3.6	13.9	13.9	3.4	17.0	130.7	130.7	723.8	-593.1
251+50	0.0	3.3	3.3	6.6	9.3	134.1	134.1	735.4	-601.3

SIDEWALK — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
96+00	2.10	0.0	0.0	11.70	0.0	0.0	0.0	0.0	0.0
97+00	2.50	8.5	8.5	7.40	35.4	8.5	8.5	44.2	-35.7
98+00	4.70	13.3	13.3	2.10	17.6	21.9	21.9	66.2	-44.4
99+00	6.30	20.4	20.4	1.10	5.9	42.2	42.2	73.6	-31.4
100+00	0.00	11.7	11.7	11.00	22.4	53.9	53.9	101.6	-47.7
101+00	2.10	3.9	3.9	2.72	25.4	57.8	57.8	133.4	-75.6

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 309
March 6, 2018

HAMILTON AVE. LEFT — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
1+00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1+25	87.7	40.6	30.5	0.0	0.0	40.6	30.5	0.0	30.5
1+50	165.3	117.1	105.3	0.0	0.0	157.7	135.8	0.0	135.8
1+75	219.3	178.0	163.7	0.0	0.0	335.8	299.6	0.0	299.6
2+00	163.3	177.1	155.6	0.0	0.0	512.9	455.2	0.0	455.2
2+25	168.3	153.5	153.5	9.1	4.2	666.4	608.7	5.3	603.4
2+50	1.6	78.7	78.7	33.3	19.6	745.1	687.4	29.8	657.6
2+80	4.7	3.5	3.5	34.2	31.3	748.6	690.9	68.9	622.0

HAMILTON AVE. RIGHT — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
0+10	9.3	0.0	0.0	7.2	0.0	0.0	0.0	0.0	0.0
0+25	10.1	5.4	5.4	7.6	11.0	5.4	5.4	13.7	-8.3
0+50	21.4	16.4	16.4	8.6	15.0	21.8	21.8	32.5	-10.7
0+75	50.8	42.7	42.7	0.0	8.0	64.6	64.6	42.5	22.1
1+00	109.4	95.8	84.5	0.0	0.0	160.3	149.1	42.5	106.6
1+25	125.6	145.8	138.3	0.0	0.0	306.1	287.4	42.5	244.9
1+50	33.8	86.7	79.5	0.0	0.0	392.8	366.9	42.5	324.4
1+75	26.5	27.9	20.8	0.0	0.0	420.7	387.7	42.5	345.2
1+88	25.2	12.4	5.3	0.0	0.0	433.2	393.0	42.5	350.5

SHORT STREET RIGHT

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
41+25	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42+00	2.3	12.8	12.8	0.2	0.3	12.8	12.8	0.3	12.4
43+00	10.2	11.6	11.6	12.0	11.3	24.4	24.4	14.5	9.9
43+50	6.4	15.4	15.4	21.8	31.3	39.7	39.7	53.6	-13.9
						39.7	39.7	53.6	-13.9
5+00	18.2	0.0	0.0	0.0	0.0	39.7	39.7	53.6	-13.9
5+50	31.6	46.1	46.1	22.2	20.6	85.8	85.8	79.3	6.6
6+00	35.6	62.2	62.2	56.0	72.4	148.1	148.1	169.8	-21.7
6+25	19.6	25.6	25.6	33.0	41.2	173.6	173.6	221.3	-47.7
6+36	19.0	7.9	7.9	29.8	12.8	181.5	181.5	237.3	-55.8

SHORT STREET LEFT

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
7+00	16.3	0.0	0.0	109.8	0.0	0.0	0.0	0.0	0.0
7+50	5.7	20.4	20.4	156.5	246.6	20.4	20.4	308.2	-287.8
8+00	9.0	13.6	13.6	84.2	222.9	34.0	34.0	586.8	-552.8
8+50	18.0	25.0	25.0	64.9	138.1	59.0	59.0	759.4	-700.4
9+00	15.3	30.8	30.8	33.4	91.0	89.8	89.8	873.1	-783.3
9+50	14.7	27.8	27.8	3.7	34.4	117.6	117.6	916.1	-798.5

CRAIG ROAD

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Unusable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
13+00	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13+50	19.6	28.7	28.7	0.0	0.0	28.7	28.7	0.0	28.7
14+00	49.6	64.1	64.1	0.0	0.0	92.8	92.8	0.0	92.8
14+25	32.3	37.9	37.9	0.0	0.0	130.7	130.7	0.0	130.7
	0.0	0.0	0.0	0.0	0.0	130.7	130.7	0.0	130.7
16+75	38.8	0.0	0.0	0.0	0.0	130.7	130.7	0.0	130.7
17+00	29.7	31.7	31.7	0.0	0.0	162.4	162.4	0.0	162.4
17+50	44.6	68.8	68.8	0.0	0.0	231.2	231.2	0.0	231.2
18+00	56.6	93.7	93.7	0.0	0.0	324.9	324.9	0.0	324.9
	0.0	0.0	0.0	0.0	0.0	324.9	324.9	0.0	324.9
20+25	18.9	0.0	0.0	18.4	0.0	324.9	324.9	0.0	324.9
20+50	46.6	30.3	30.3	47.8	30.6	355.2	355.2	38.3	316.9
21+00	36.6	77.0	77.0	2.2	46.3	432.3	432.3	96.2	336.1
21+25	40.0	35.5	35.5	0.0	2.0	467.7	467.7	98.7	369.0
			0.0	0.0	0.0	467.7	467.7	98.7	369.0
25+25	37.7	0.0	0.0	0.0	0.0	467.7	467.7	98.7	369.0
25+50	38.4	35.2	35.2	0.0	0.0	503.0	503.0	98.7	404.2
26+00	51.9	83.6	83.6	0.0	0.0	586.6	586.6	98.7	487.8
26+50	61.3	104.8	104.8	0.0	0.0	691.4	691.4	98.7	592.7
26+75	26.0	40.4	40.4	0.0	0.0	731.8	731.8	98.7	633.1

Replaced with "Revised Sheet 310"

3

SHORT STREET RIGHT — FILL EXPANSION = 1.25

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
40+75	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
41+00	15.8	14.1	14.1	0.0	0.1	14.1	14.1	0.1	14.0
42+00	11.5	50.6	50.6	0.2	22.6	64.7	64.7	28.4	36.3
43+00	19.8	58.0	58.0	12.0	62.5	122.6	122.7	106.6	16.1
43+25	17.8	17.4	17.4	21.8	10.1	140.0	140.1	119.2	20.9
5+00	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5+50	31.6	46.1	29.4	22.2	20.6	46.1	29.4	25.7	3.7
6+00	35.6	62.2	45.5	56.0	72.4	108.3	74.9	116.2	-41.3
6+25	19.6	25.6	8.9	33.0	41.2	133.9	83.8	167.7	-83.9
6+36	19.0	7.9	0.0	29.8	12.8	141.8	83.8	183.7	-99.9

SHORT STREET LEFT

Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
7+00	16.3	0.0	0.0	109.8	0.0	0.0	0.0	0.0	0.0
7+50	24.4	37.7	21.0	156.5	246.6	37.7	21.0	308.2	-287.2
8+00	23.2	44.1	27.4	84.2	222.9	81.8	48.4	586.8	-538.4
8+50	27.0	46.5	29.8	64.9	138.1	128.2	78.1	759.4	-681.2
9+00	24.3	47.5	30.8	33.4	91.0	175.7	108.9	873.1	-764.2
9+50	23.7	44.4	27.7	3.7	34.4	220.2	136.7	916.1	-779.4

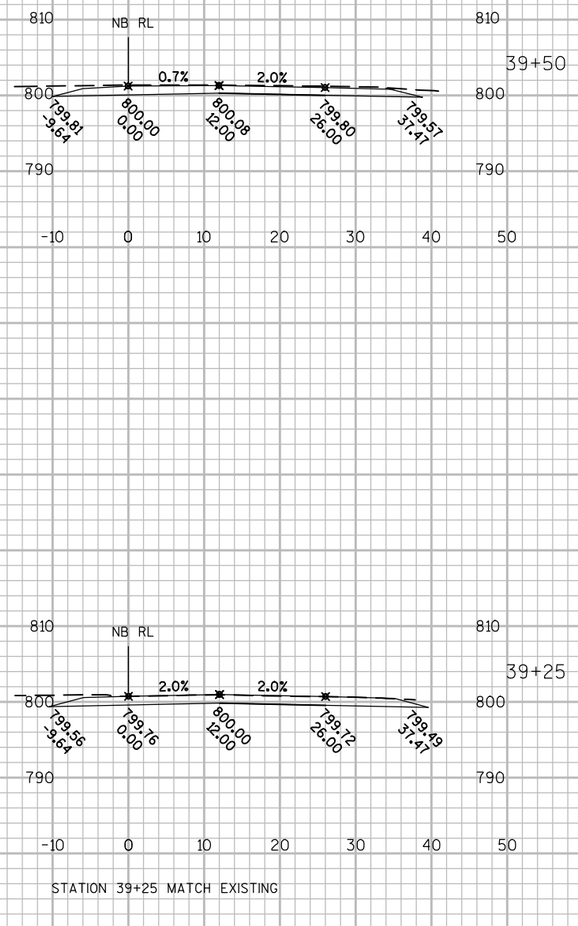
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 310
March 6, 2018

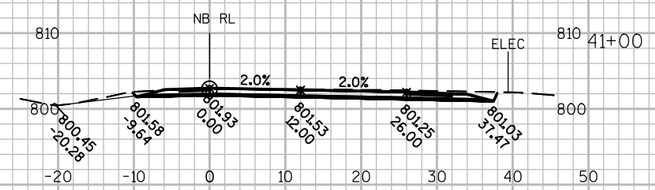
CRAIG ROAD — FILL EXPANSION = 1.25

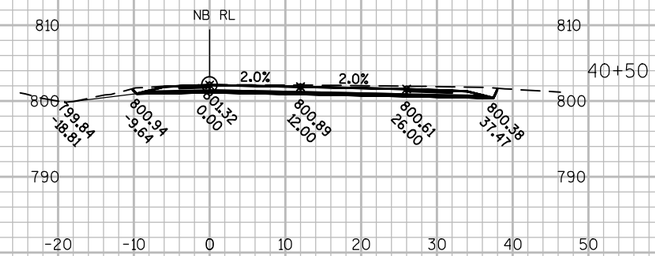
Station	Cut Area (SF)	Cut Volume (CY)	Usable Material (CY)	Fill Area (SF)	Fill Volume (CY)	Cum. Cut Vol. (CY)	Cum. Usable Vol. CY	Cum. Fill Vol. (CY)	Cum. Net Volu. (CY)
13+00	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13+50	19.6	28.7	28.7	0.0	0.0	28.7	28.7	0.0	28.7
14+00	49.6	64.1	64.1	0.0	0.0	92.8	92.8	0.0	92.8
14+25	32.3	37.9	37.9	0.0	0.0	130.7	130.7	0.0	130.7
	0.0	0.0	0.0	0.0	0.0	130.7	130.7	0.0	130.7
16+75	38.8	0.0	0.0	0.0	0.0	130.7	130.7	0.0	130.7
17+00	29.7	31.7	31.7	0.0	0.0	162.4	162.4	0.0	162.4
17+50	44.6	68.8	68.8	0.0	0.0	231.2	231.2	0.0	231.2
18+00	56.6	93.7	93.7	0.0	0.0	324.9	324.9	0.0	324.9
	0.0	0.0	0.0	0.0	0.0	324.9	324.9	0.0	324.9
20+25	18.9	0.0	0.0	18.4	0.0	324.9	324.9	0.0	324.9
20+50	46.6	30.3	30.3	47.8	30.6	355.2	355.2	38.3	316.9
21+00	36.6	77.0	77.0	2.2	46.3	432.3	432.3	96.2	336.1
21+25	40.0	35.5	35.5	0.0	2.0	467.7	467.7	98.7	369.0
			0.0	0.0	0.0	467.7	467.7	98.7	369.0
25+25	37.7	0.0	0.0	0.0	0.0	467.7	467.7	98.7	369.0
25+50	38.4	35.2	35.2	0.0	0.0	503.0	503.0	98.7	404.2
26+00	51.9	83.6	83.6	0.0	0.0	586.6	586.6	98.7	487.8
26+50	61.3	104.8	104.8	0.0	0.0	691.4	691.4	98.7	592.7
26+75	26.0	40.4	40.4	0.0	0.0	731.8	731.8	98.7	633.1

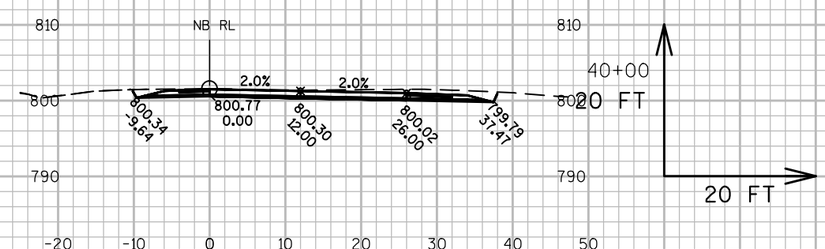
PROJECT NO:	HWY:	COUNTY:	MISCELLANEOUS QUANTITIES	SHEET:	E

Revised Sheet 310









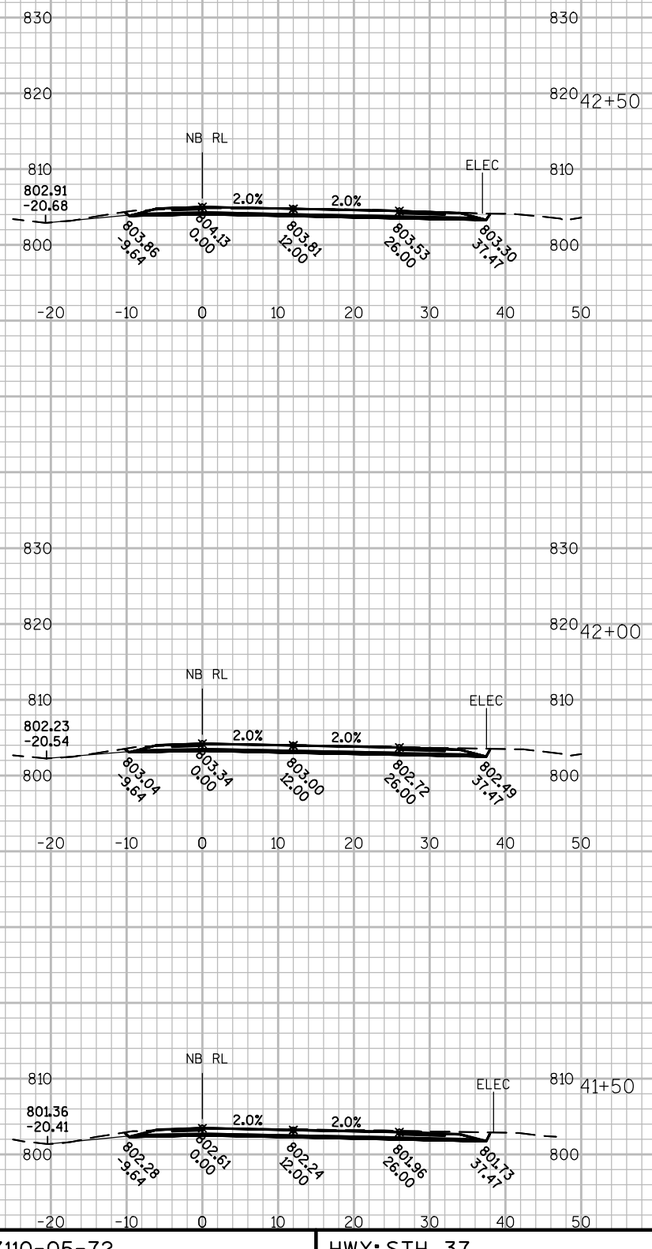
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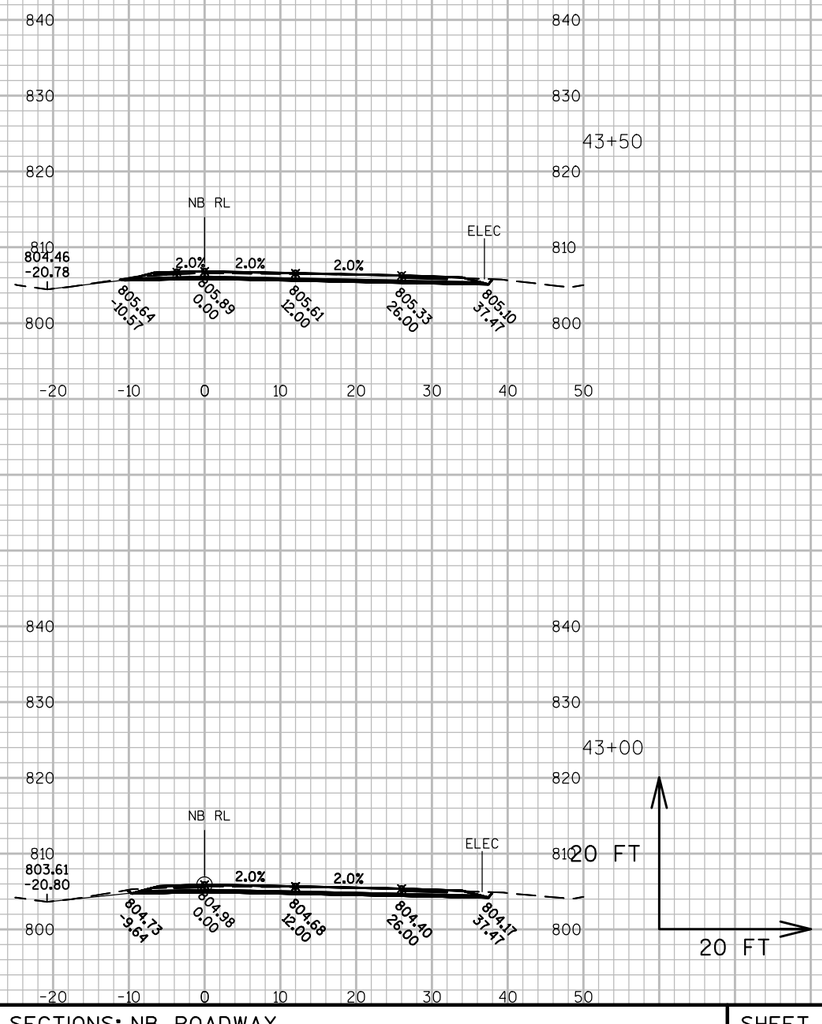
9

PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 311	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB.DWG
LAYOUT NAME - (1)

PLOT DATE : 10/24/2017 7:12 AM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

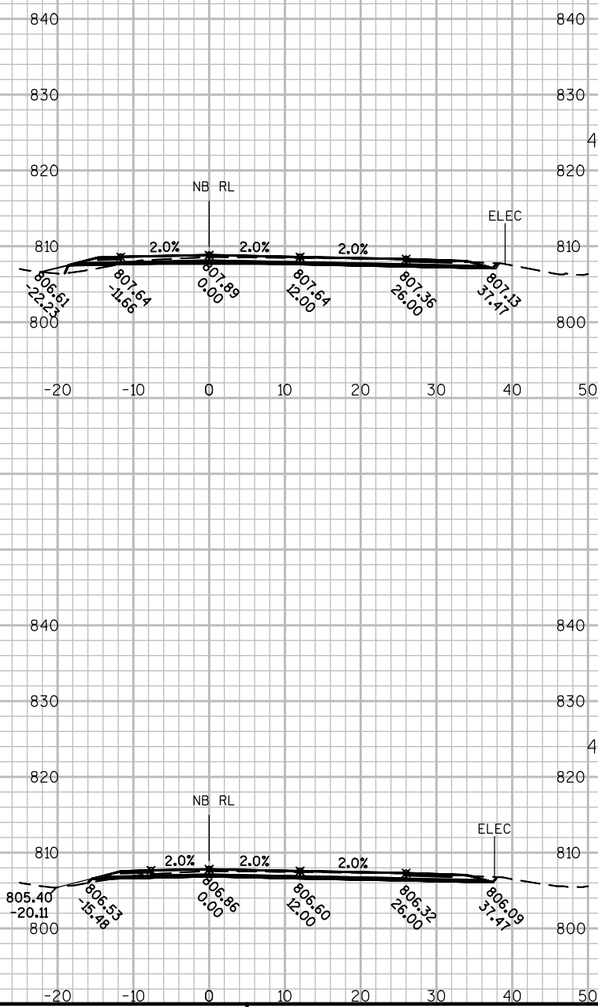


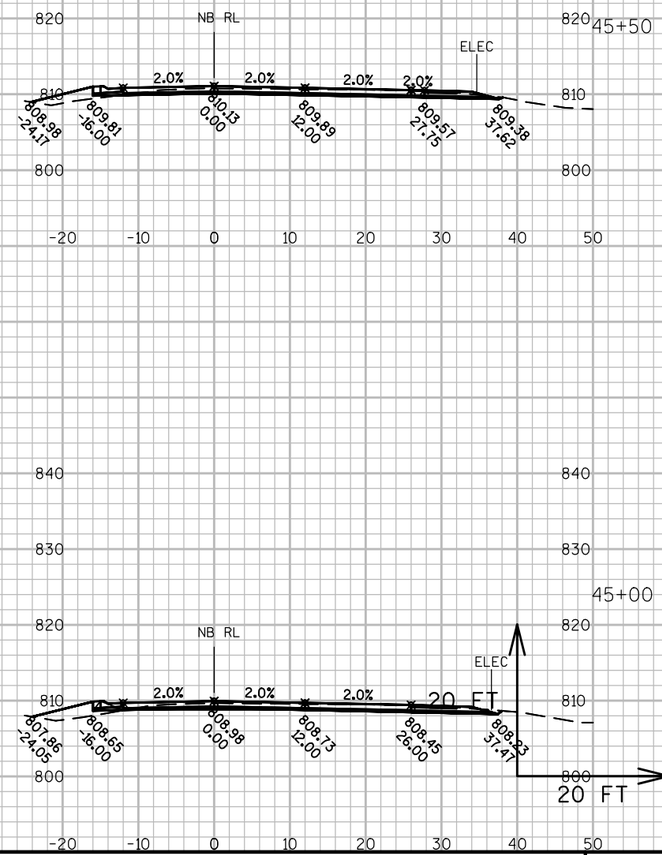


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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 312	E

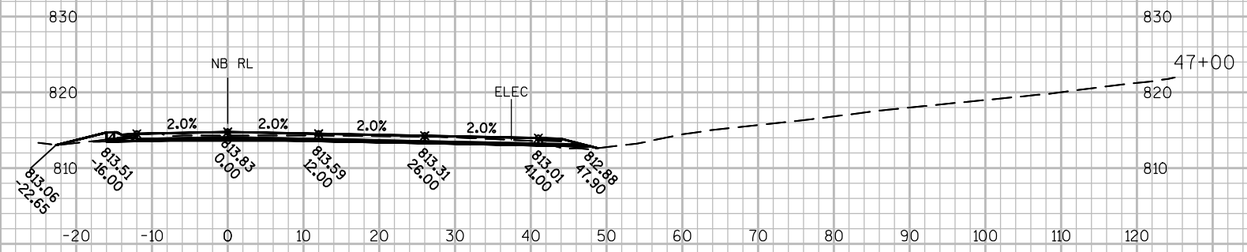


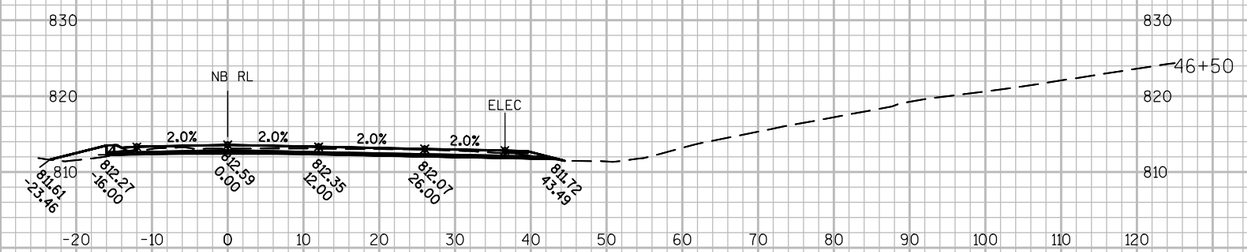


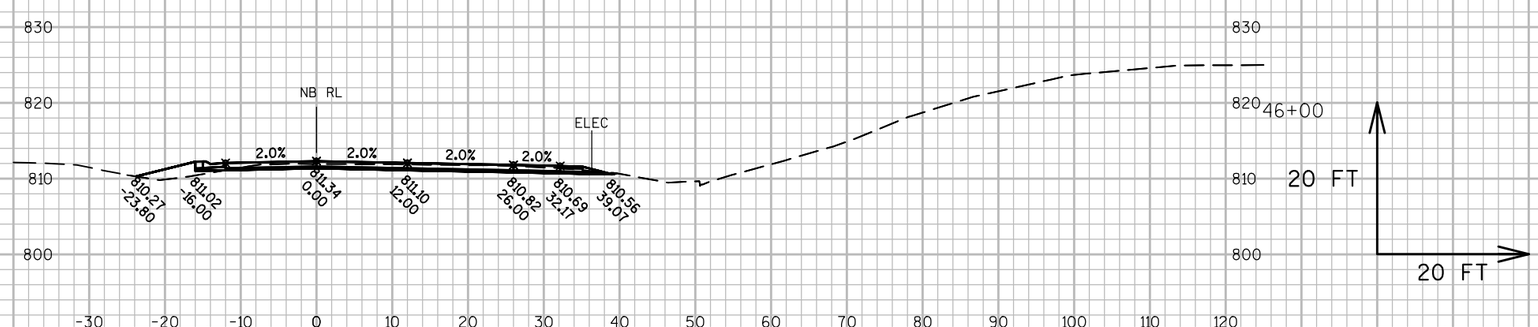
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 313	E







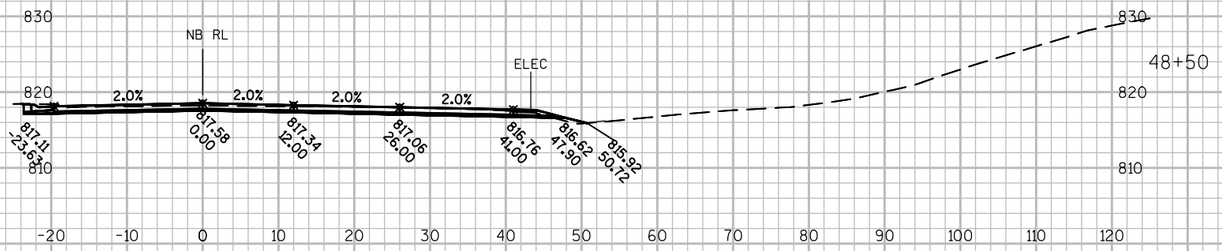
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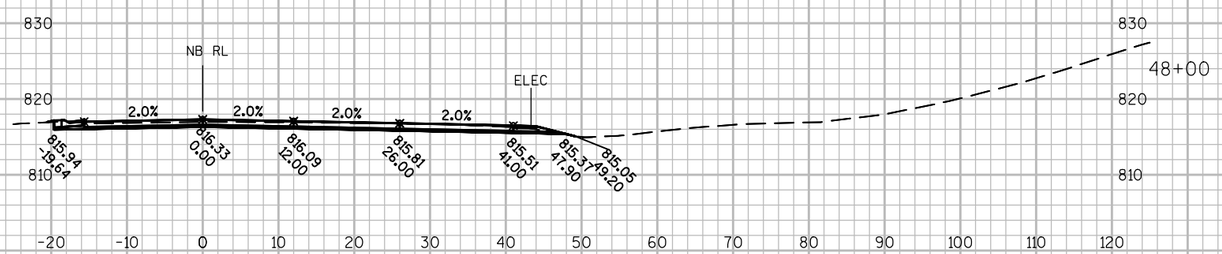
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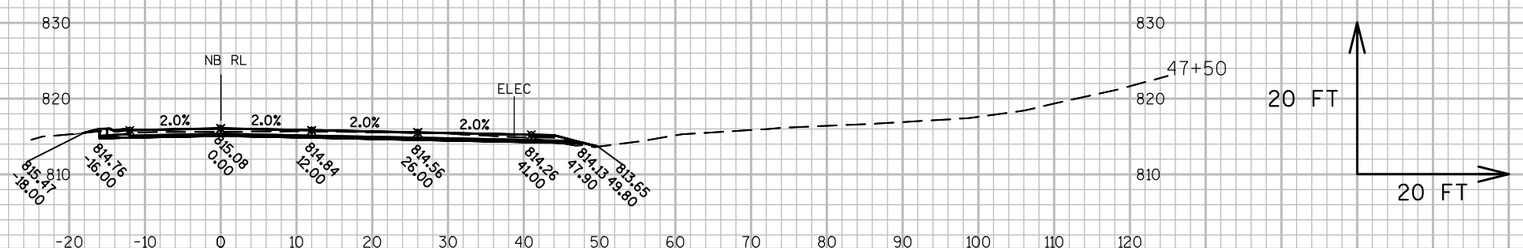
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 314	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (6)

PLOT DATE : 10/23/2017 1:00 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT







9

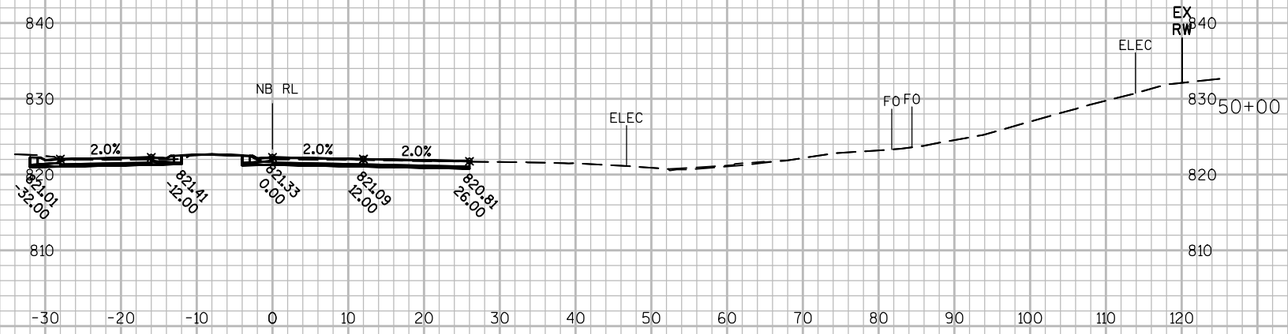
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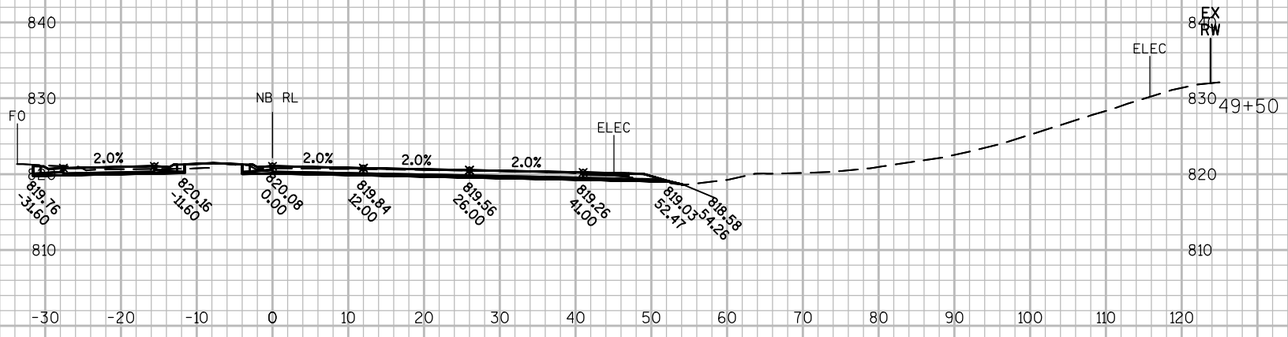
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 315	E

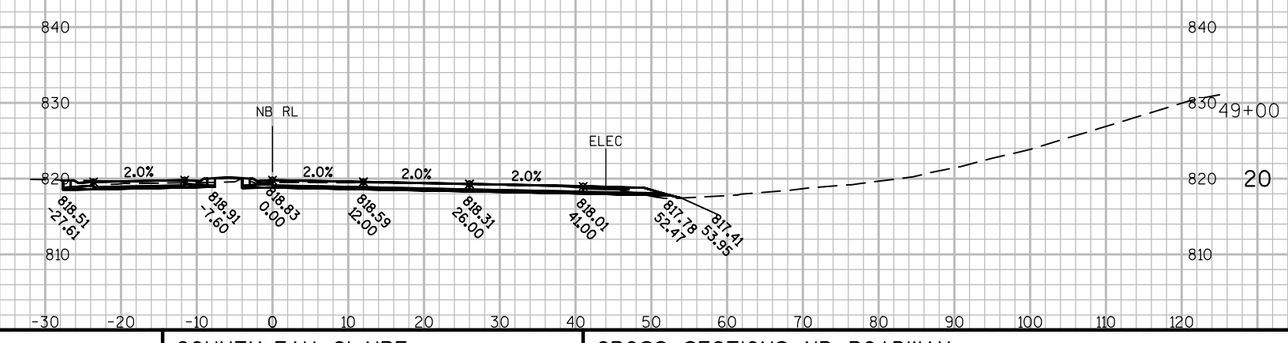
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LAYOUT NAME - (7)

PLOT DATE : 10/23/2017 1:00 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







9

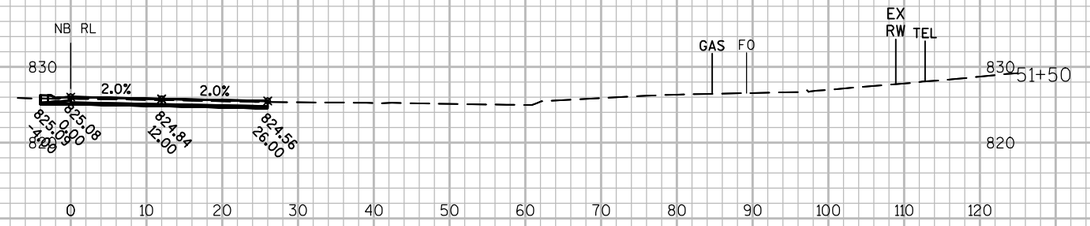
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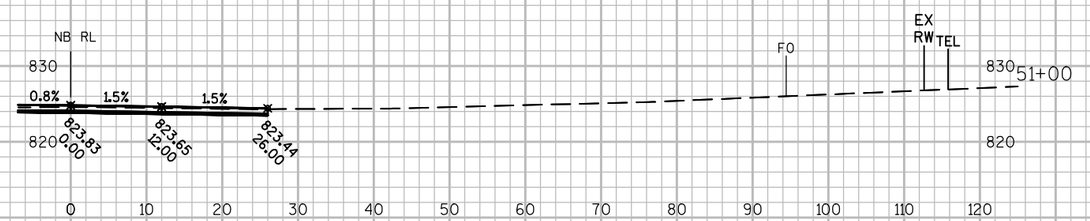
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 316	E

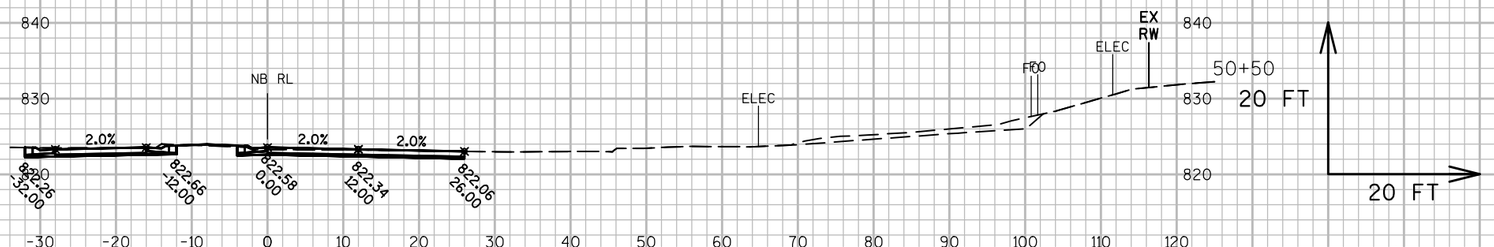
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LAYOUT NAME - (8)

PLOT DATE : 10/23/2017 1:00 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







9

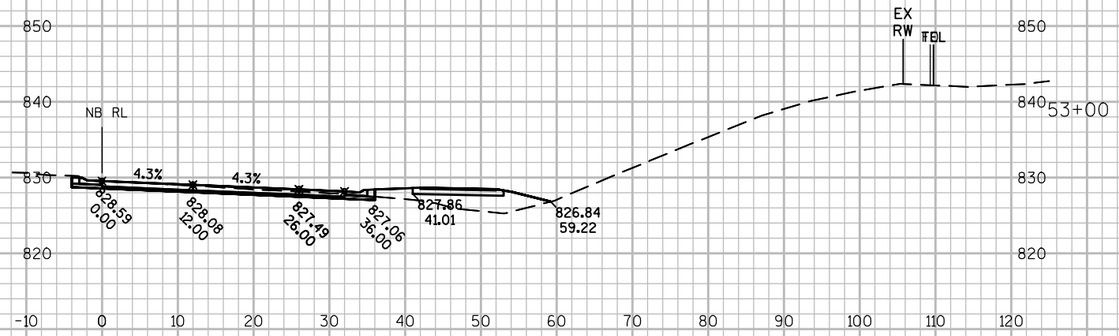
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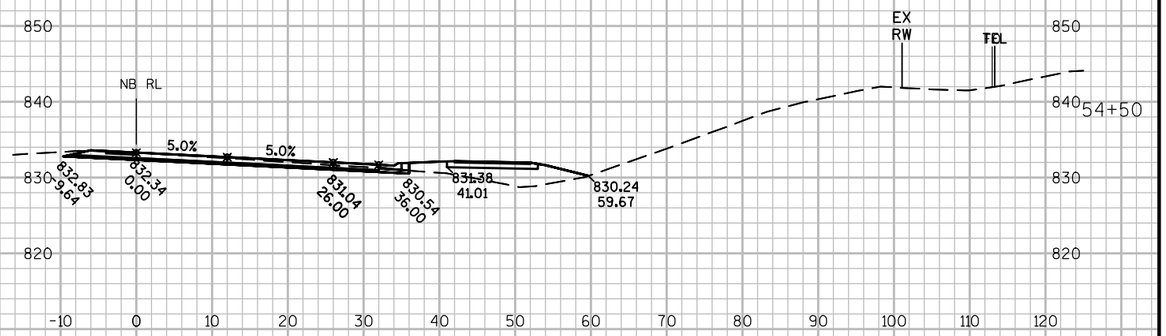
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 317	E

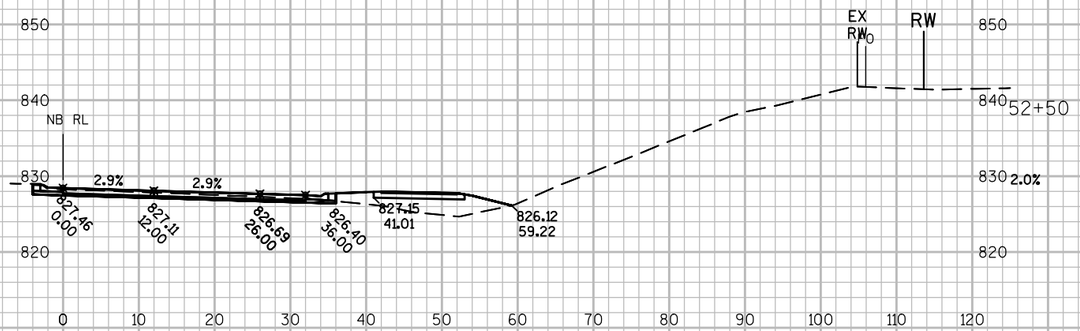
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LAYOUT NAME - (9)

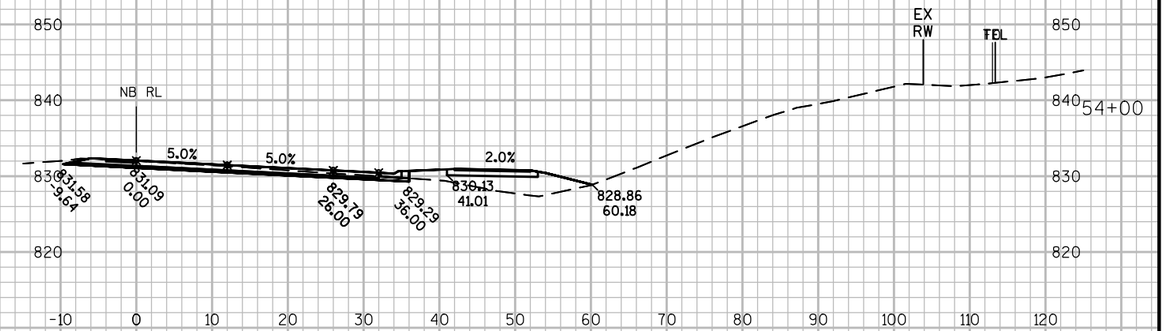
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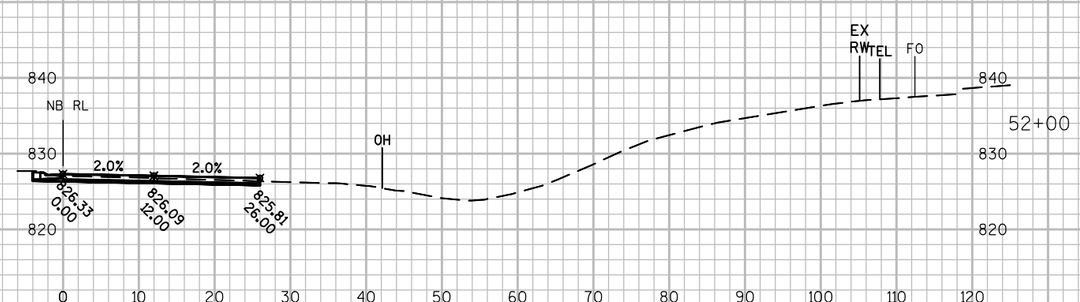
WISDOT/CADDS SHEET 49

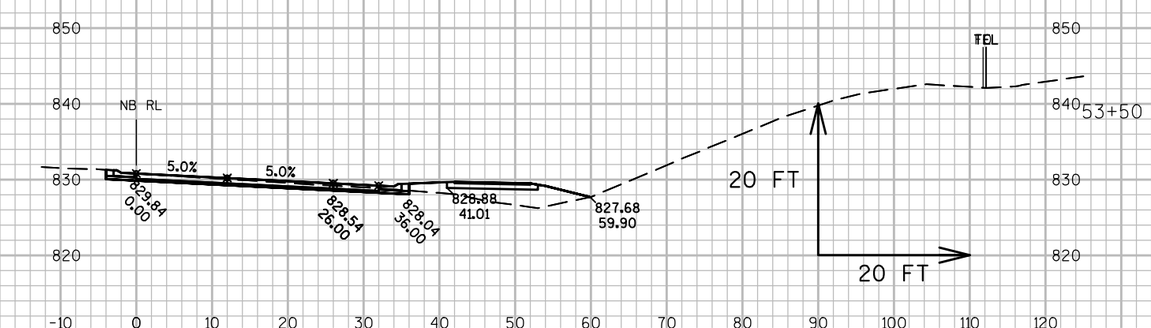








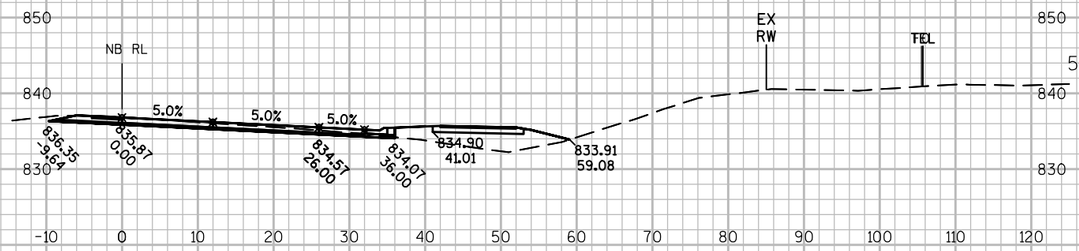


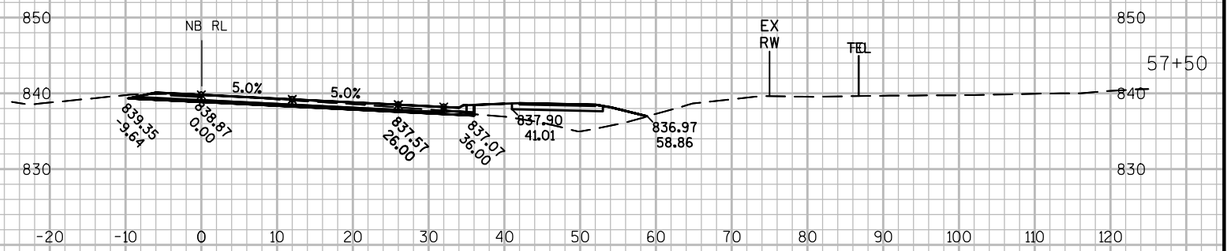


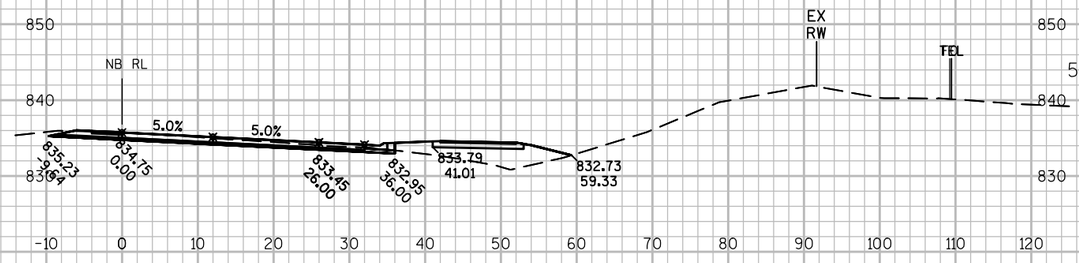
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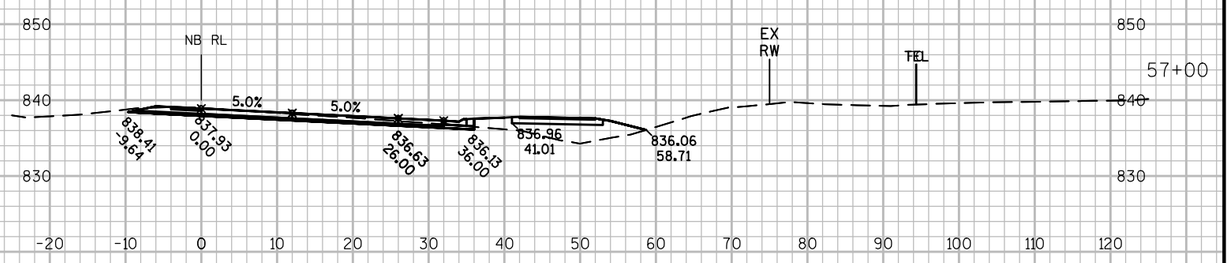
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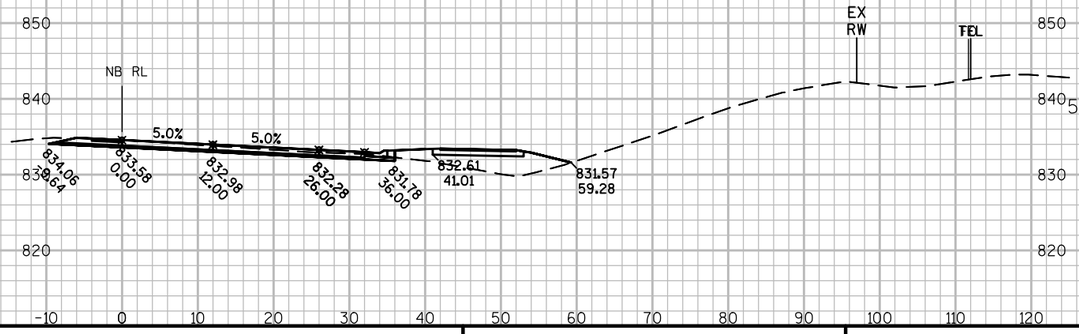
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 318	E

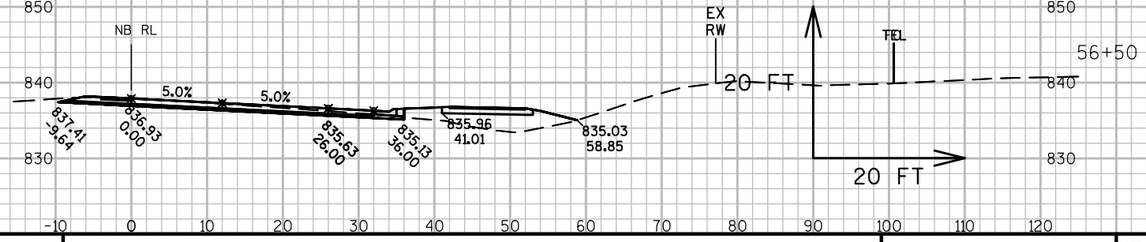












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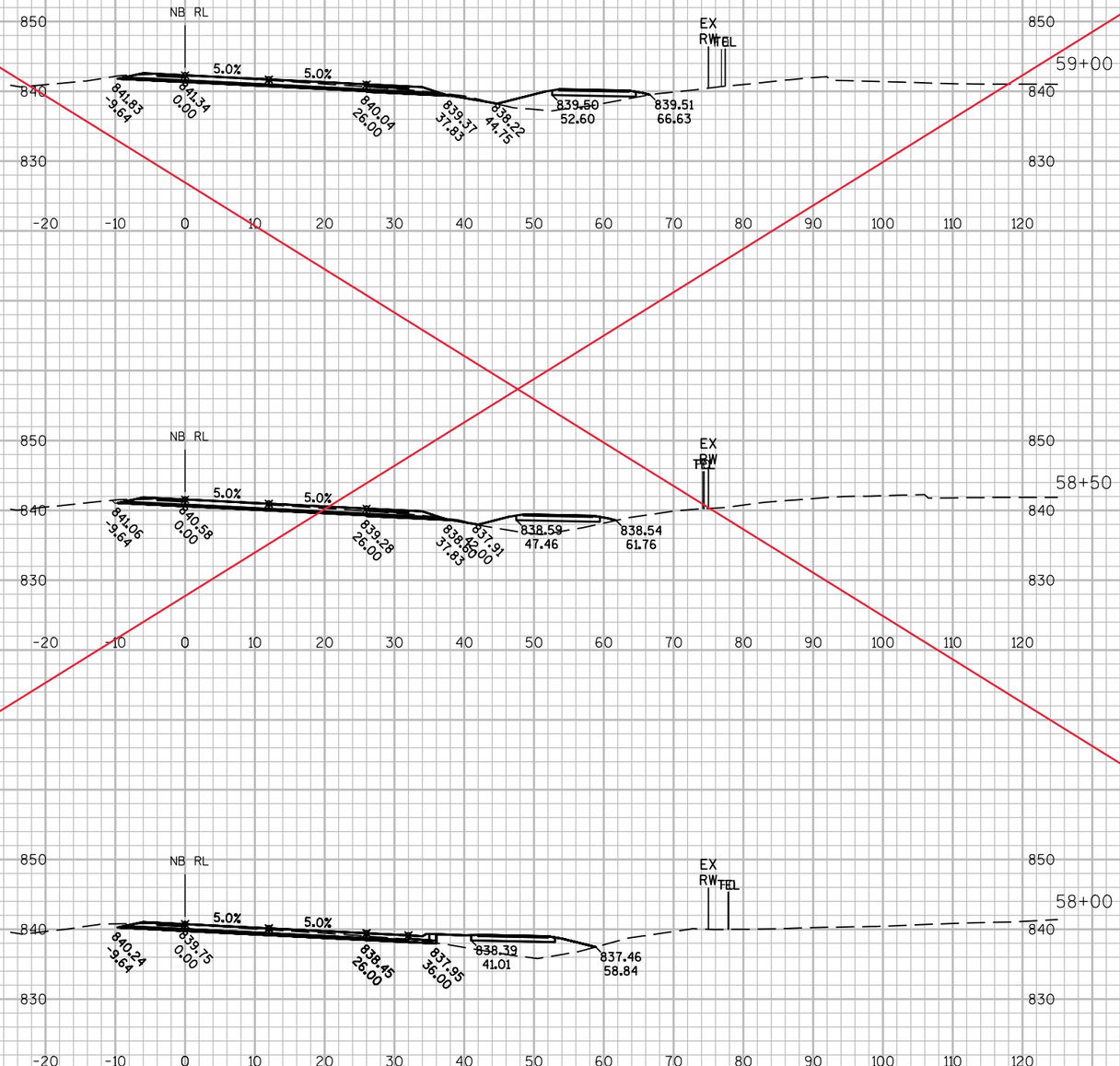
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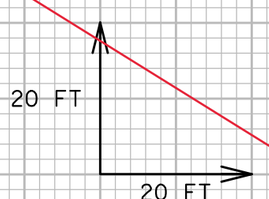
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 319	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (11)

PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49





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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 320	E

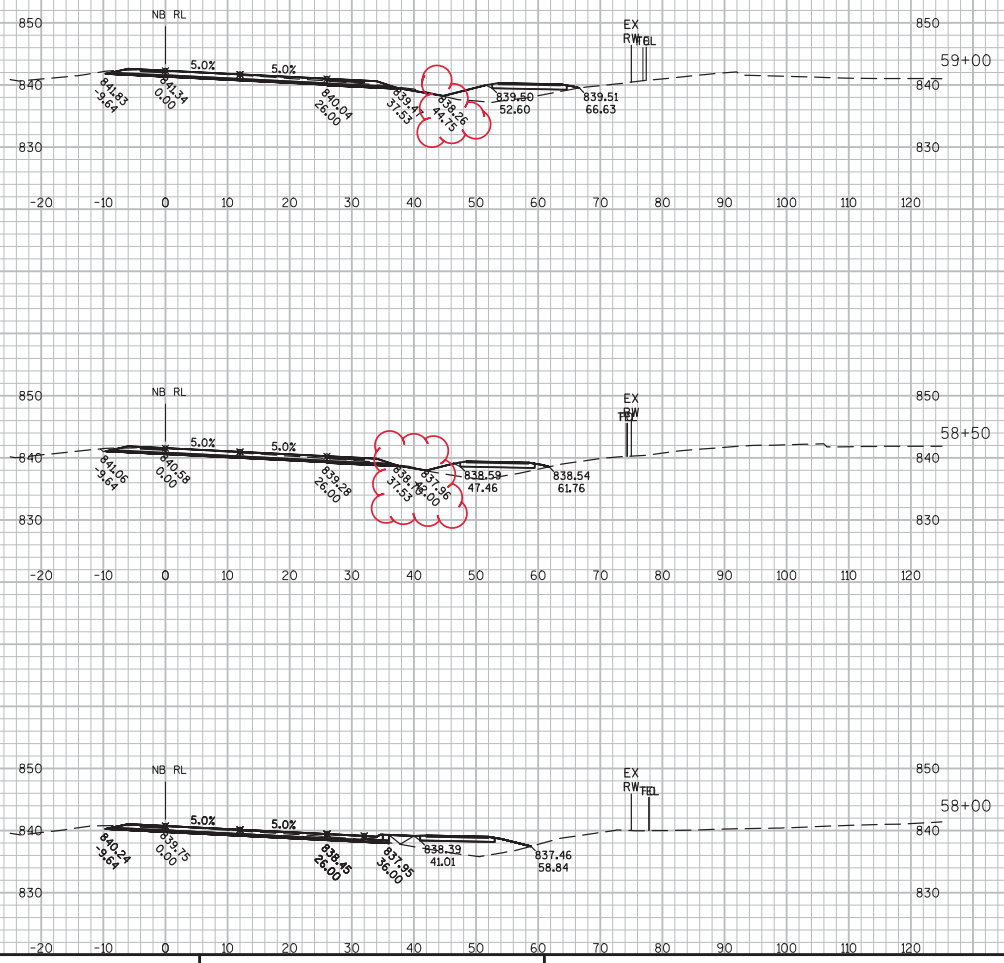
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LAYOUT NAME - (12)

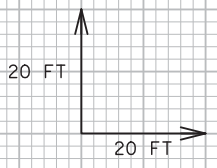
PLOT DATE : 10/23/2017 3:59 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Replaced with "Revised Sheet 320"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 320
March 6, 2018



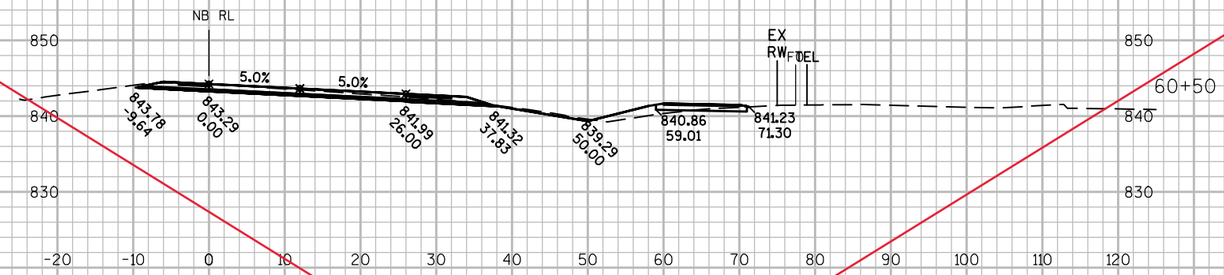


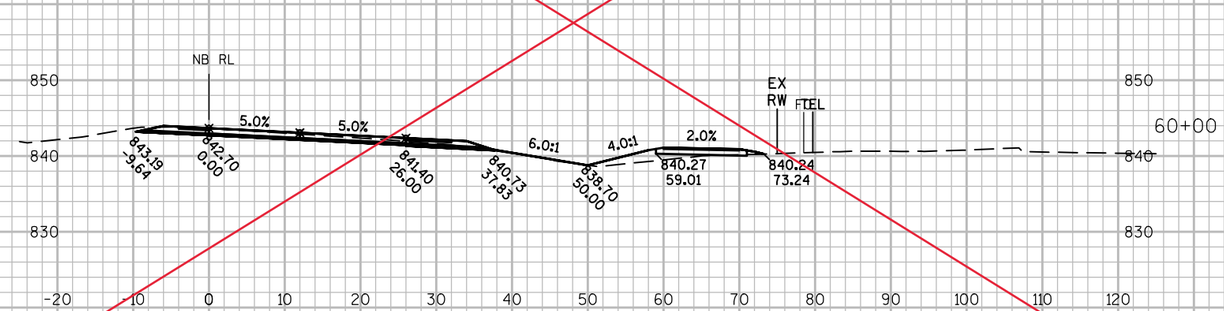
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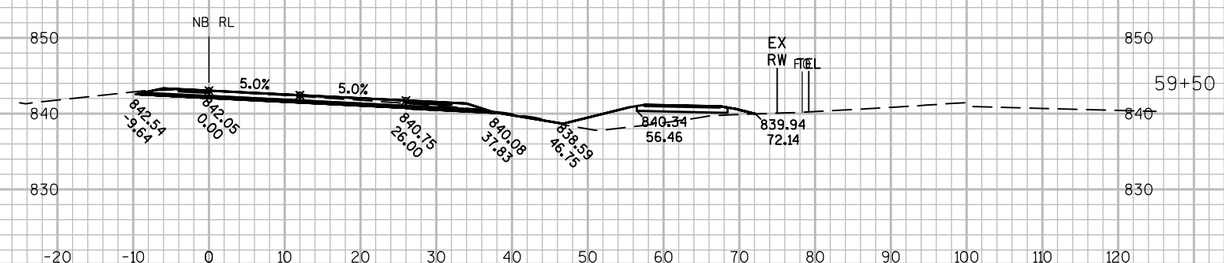
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

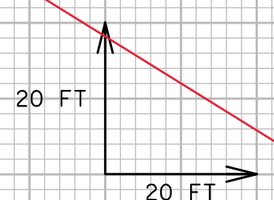
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LAYOUT NAME - (12)
PLOT DATE : 2/15/2018 2:16 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

Revised Sheet 320









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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 321	E

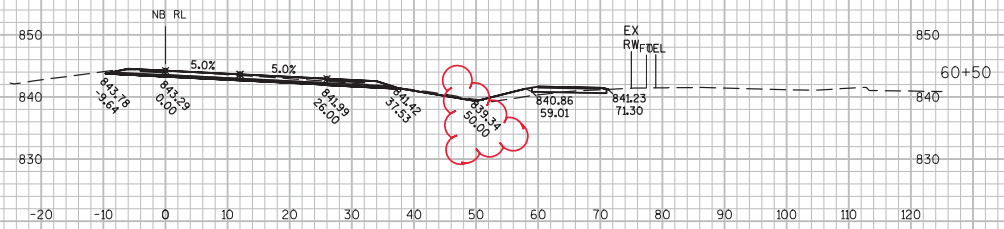
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LAYOUT NAME - (13)

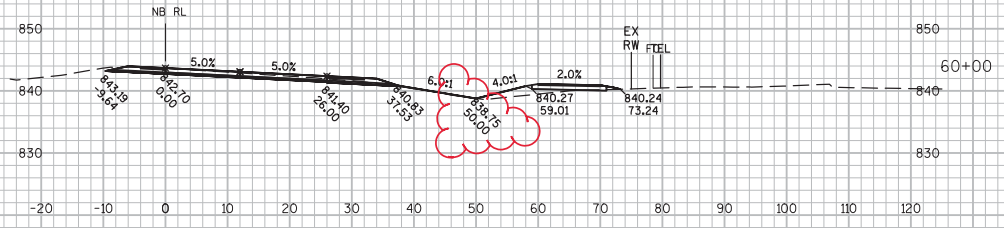
PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

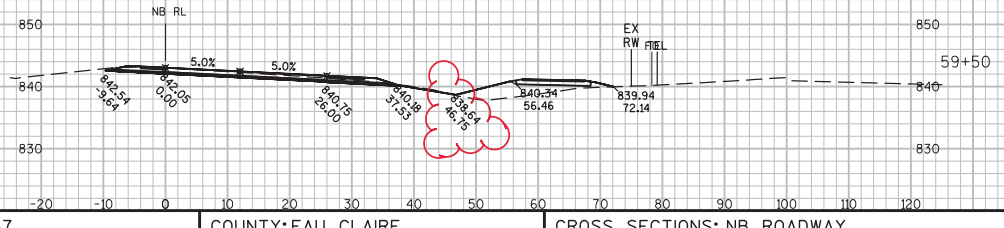
WISDOT/CADDS SHEET 49

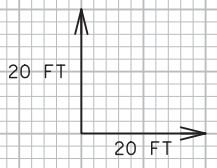
Replaced with "Revised Sheet 321"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 321
March 6, 2018







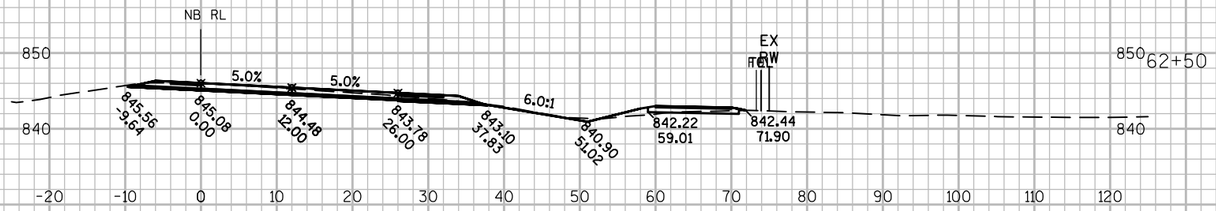


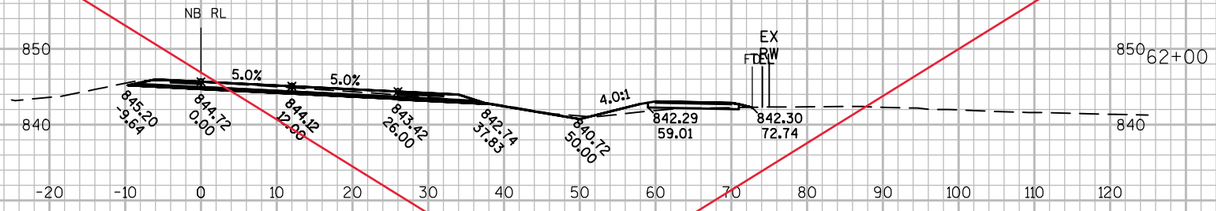
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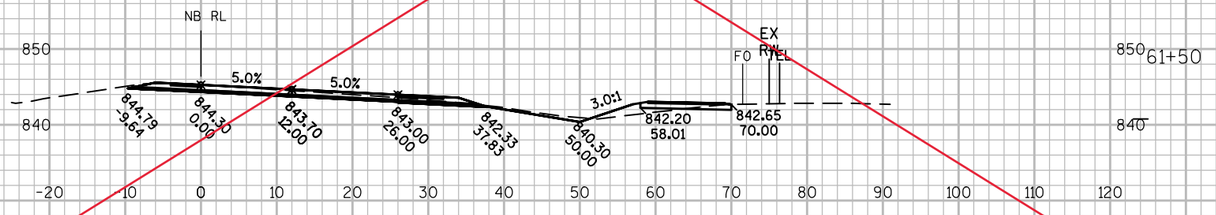
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

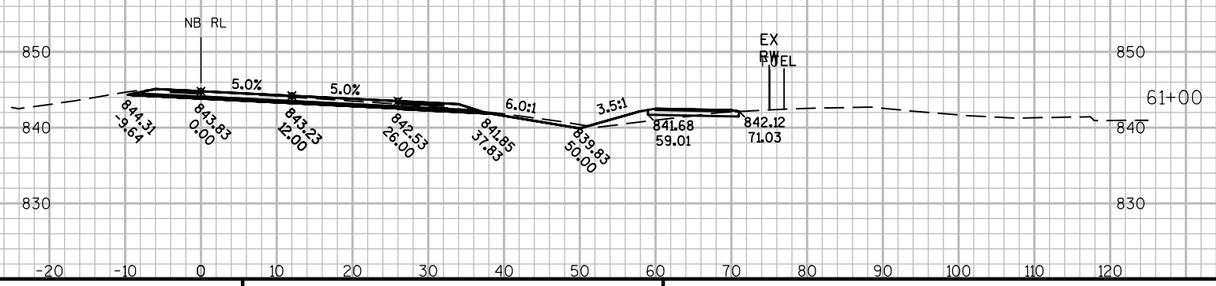
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LAYOUT NAME - (13)
PLOT DATE : 2/15/2018 2:17 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

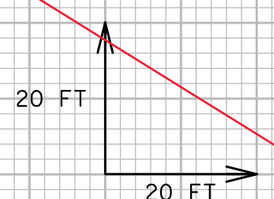
WISDOT/CADDS SHEET 49
Revised Sheet 321











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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 322	E

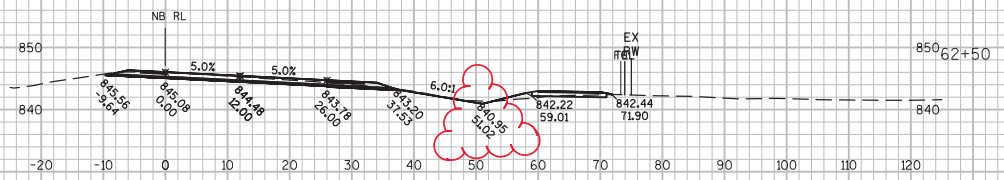
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LAYOUT NAME - (14)

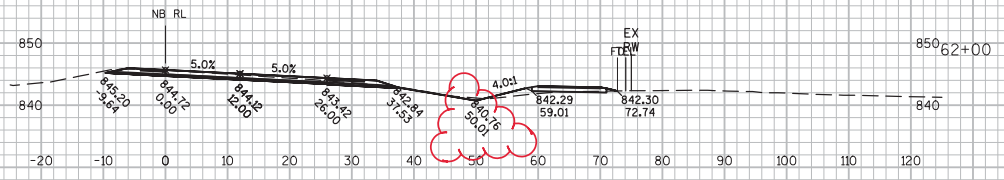
PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

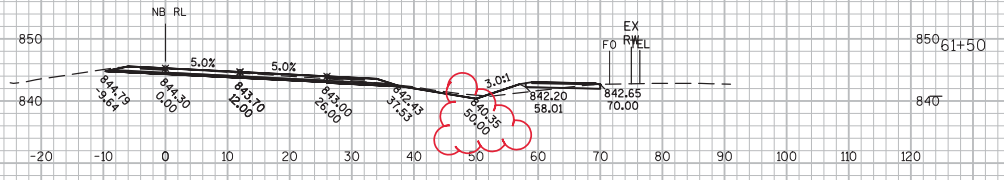
WISDOT/CADDS SHEET 49

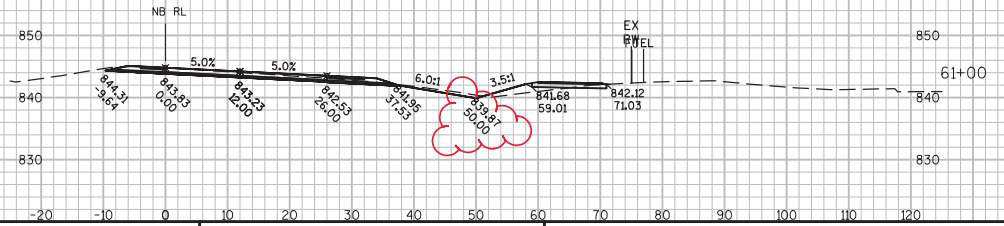
Replaced with "Revised Sheet 322"

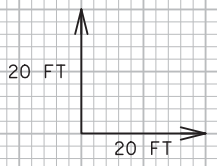
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 322
March 6, 2018









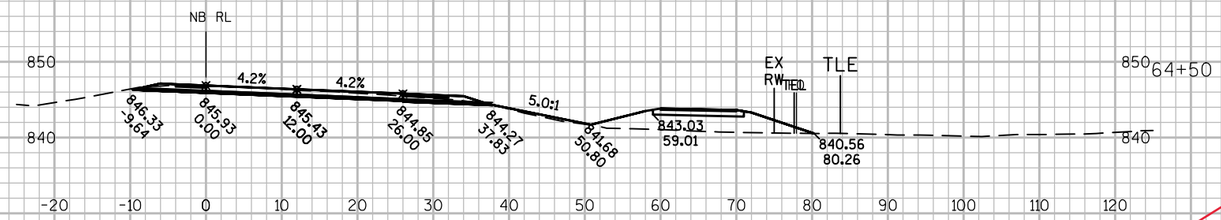


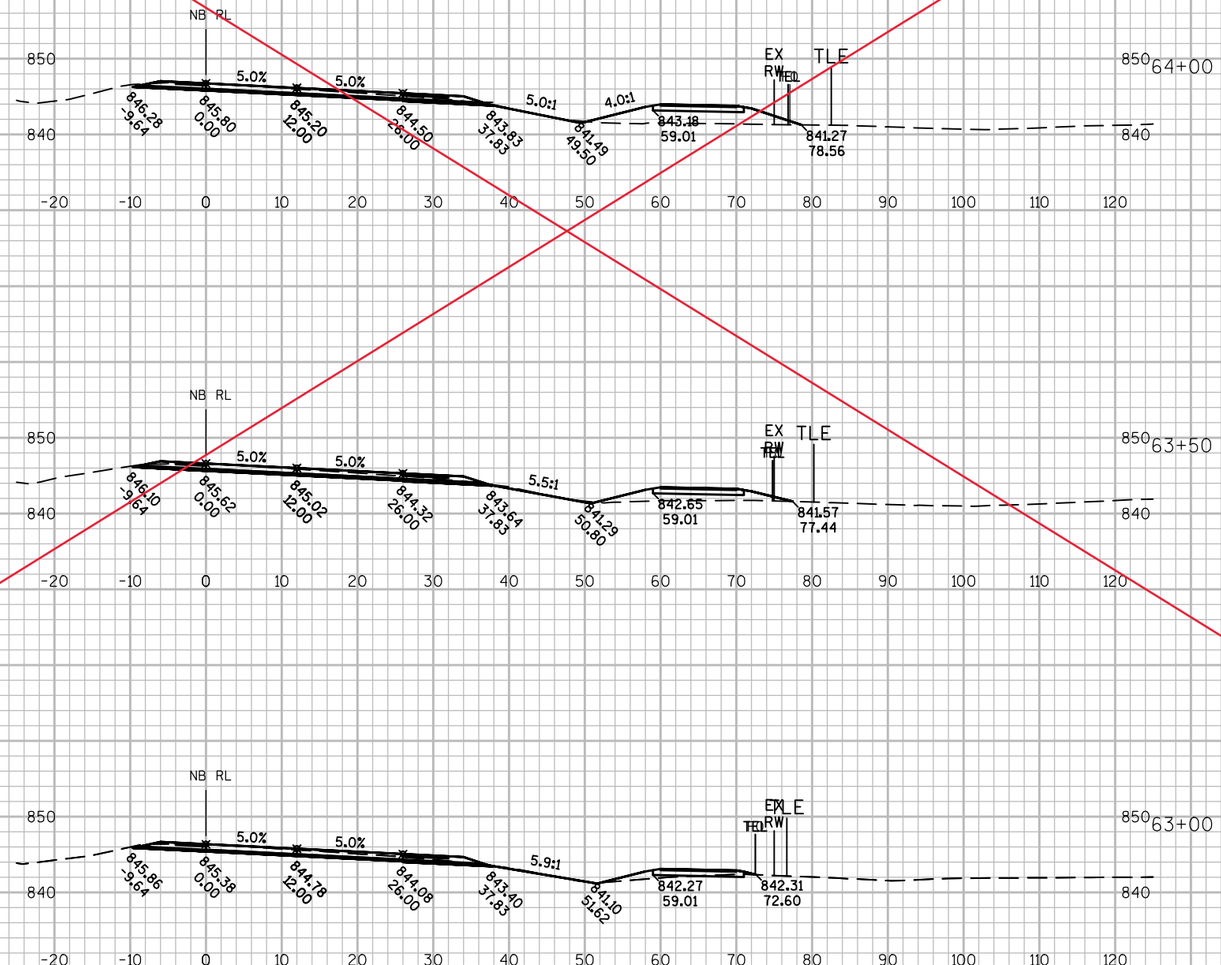
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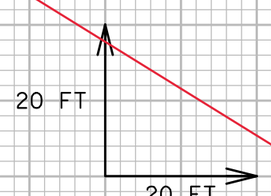
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB.DWG
LAYOUT NAME - (14)
PLOT DATE : 2/15/2018 2:17 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

Revised Sheet 322







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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 323	E

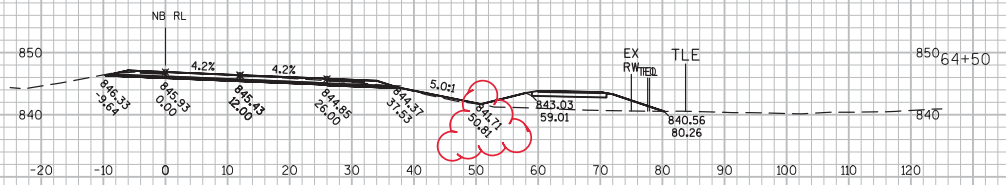
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LAYOUT NAME - (15)

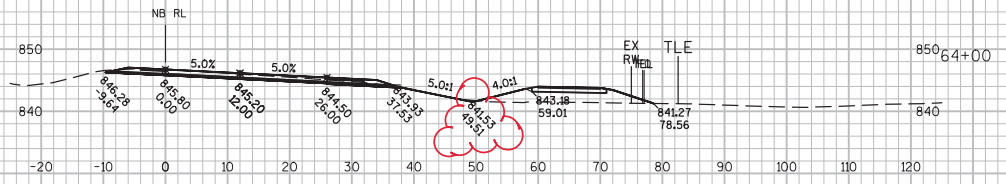
PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

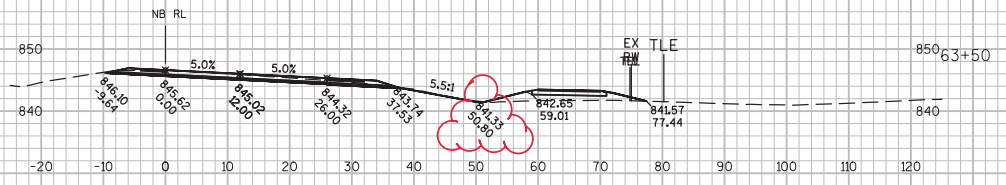
WISDOT/CADDS SHEET 49

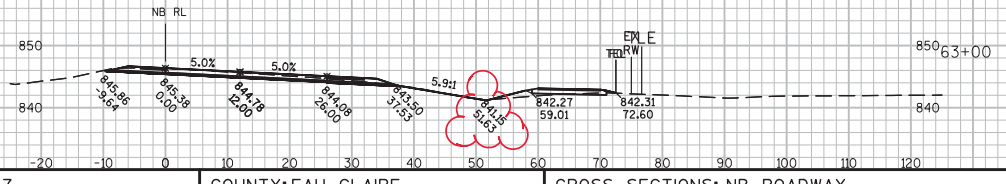
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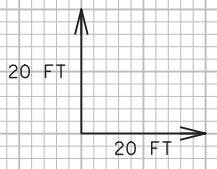
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 323
March 6, 2018









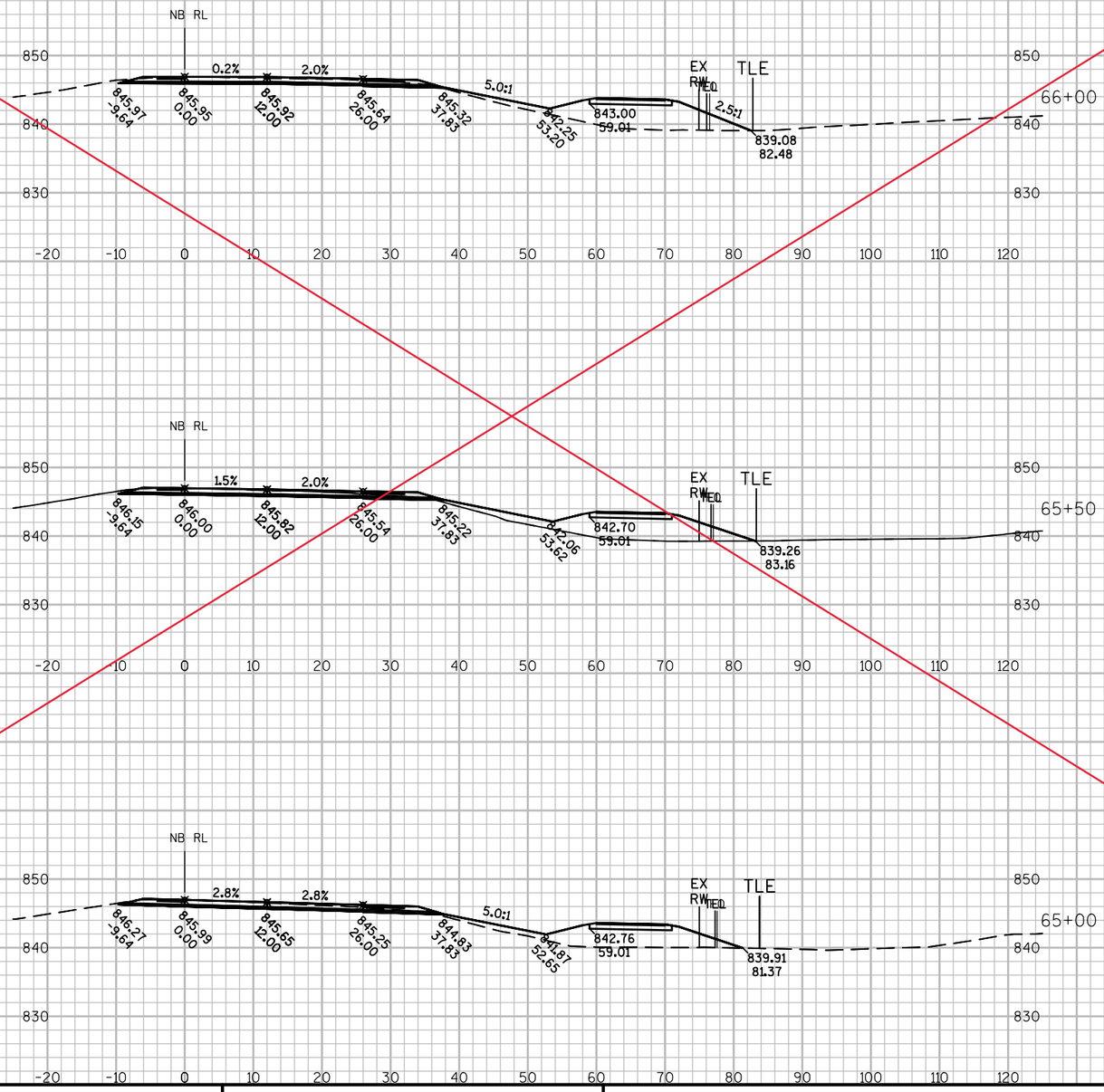


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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB.DWG
LAYOUT NAME - (15)
PLOT DATE : 2/15/2018 2:17 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49
Revised Sheet 323



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 324	E

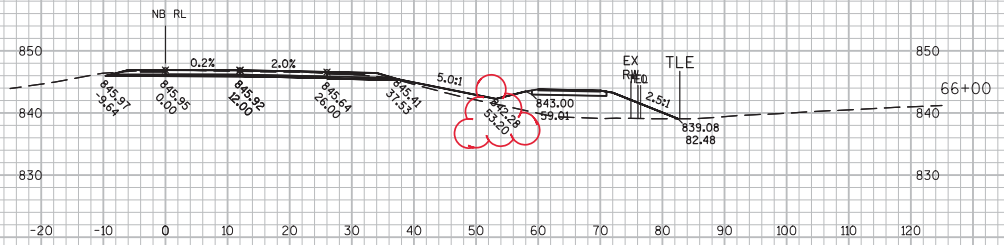
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LAYOUT NAME - (16)

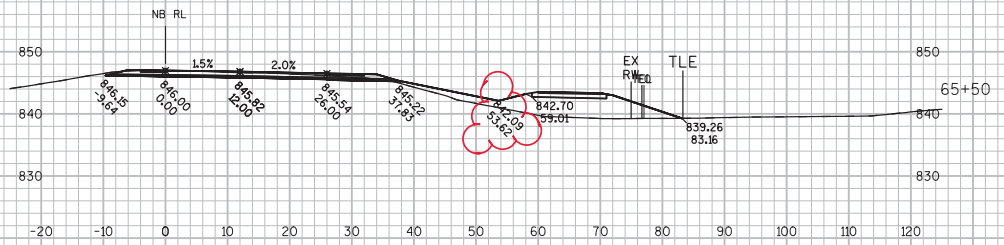
PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

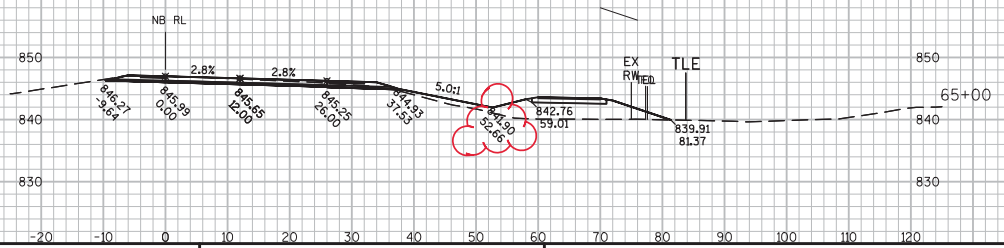
WISDOT/CADDS SHEET 49

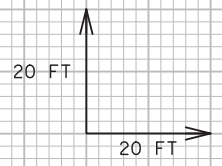
Replaced with "Revised Sheet 324"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 324
March 6, 2018







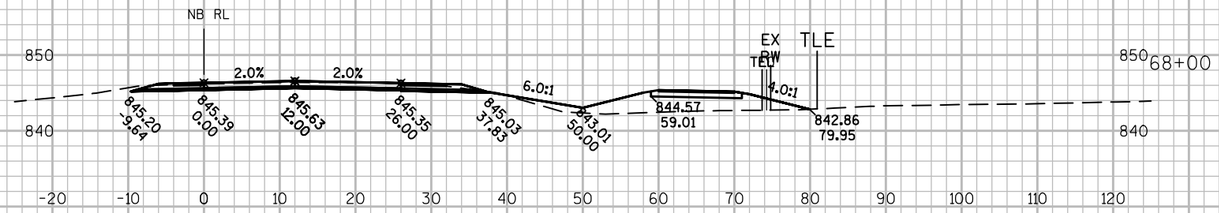


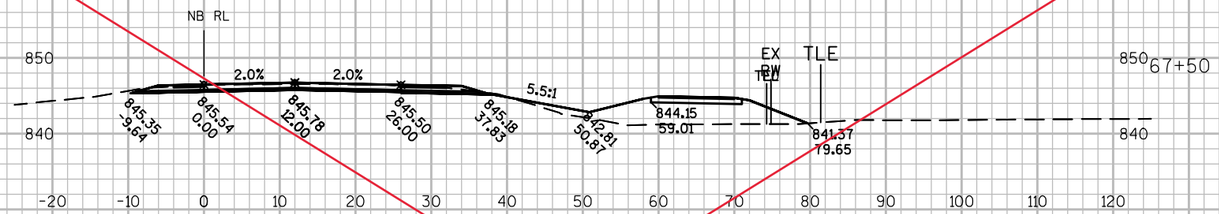
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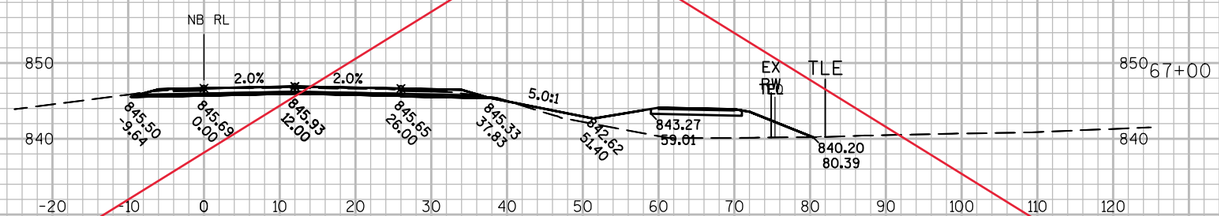
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

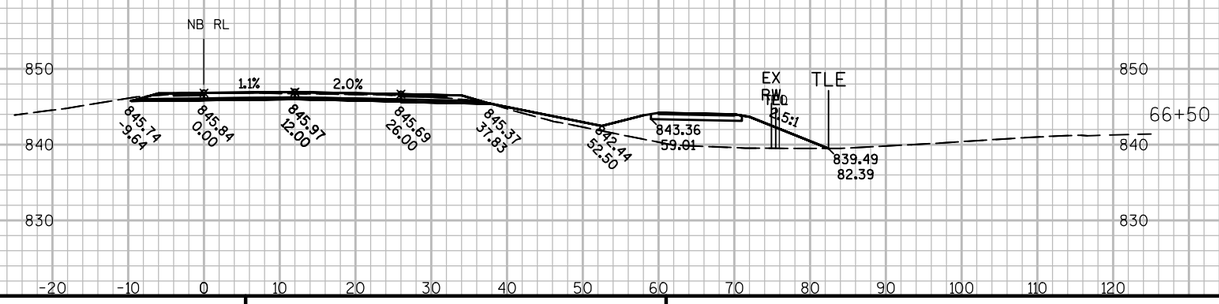
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LAYOUT NAME - (16)
PLOT DATE : 2/15/2018 2:18 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

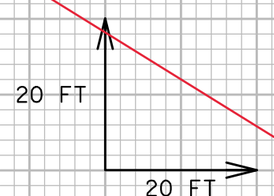
WISDOT/CADDS SHEET 49
Revised Sheet 324











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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 325	E

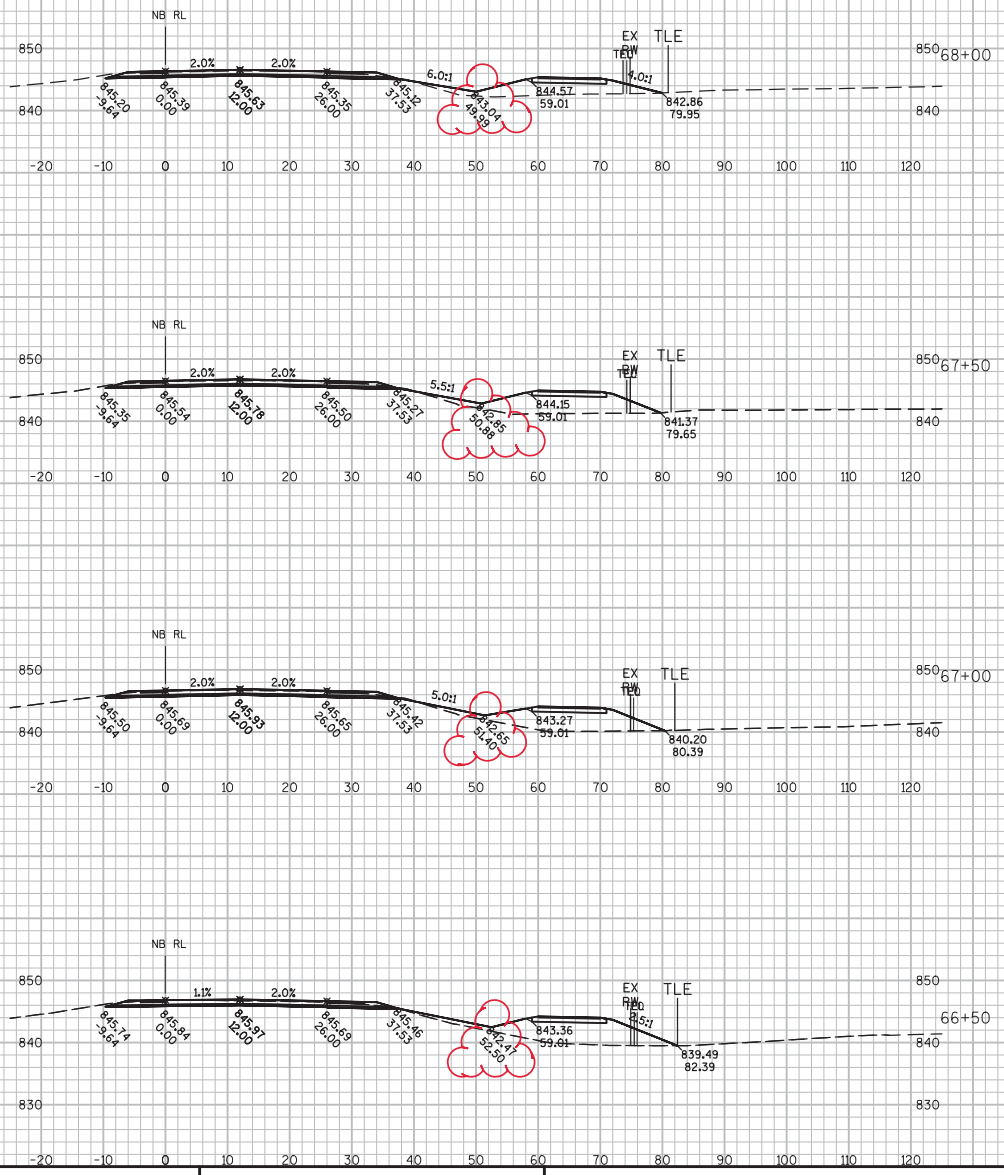
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (17)

PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Replaced with "Revised Sheet 325"

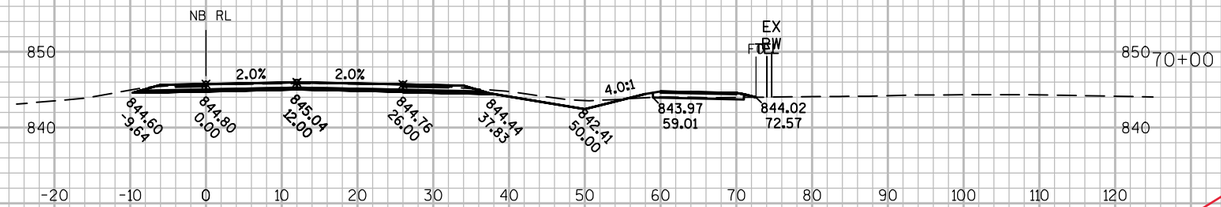
Addendum No. 1
I.D, 7110-05-72
Revised sheet 325
March 6, 2018

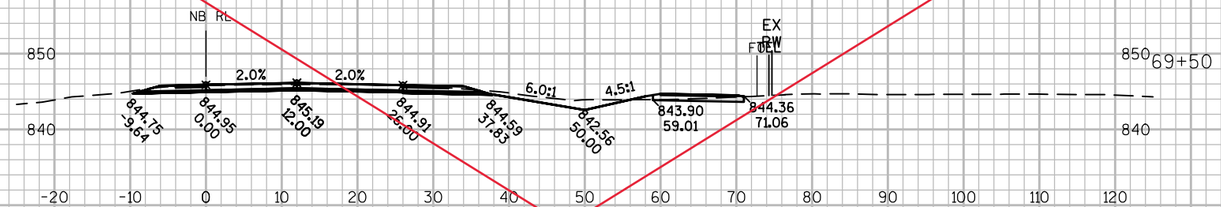


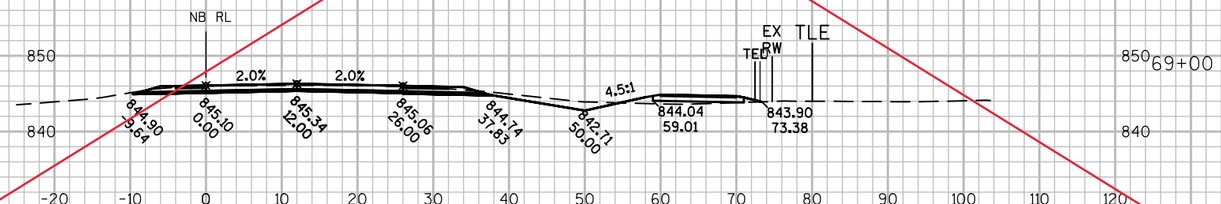
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

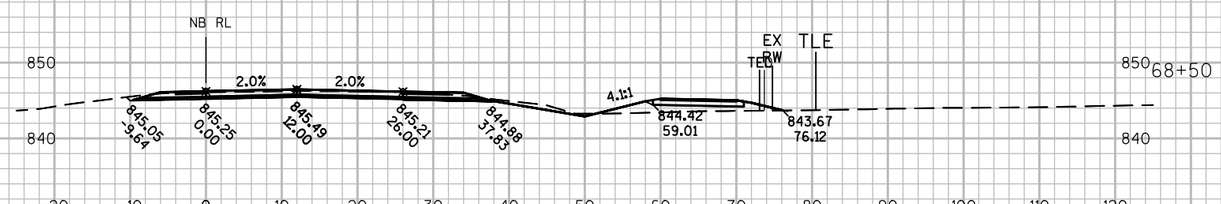
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LAYOUT NAME - (17)
PLOT DATE : 2/15/2018 2:18 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

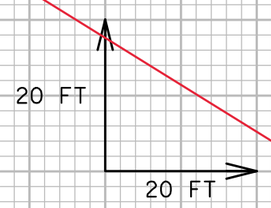
WISDOT/CADDS SHEET 49
Revised Sheet 325











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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 326	E

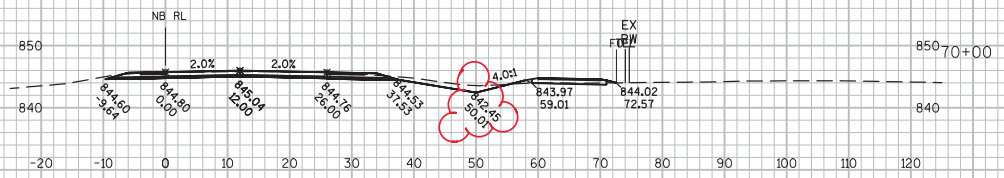
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LAYOUT NAME - (18)

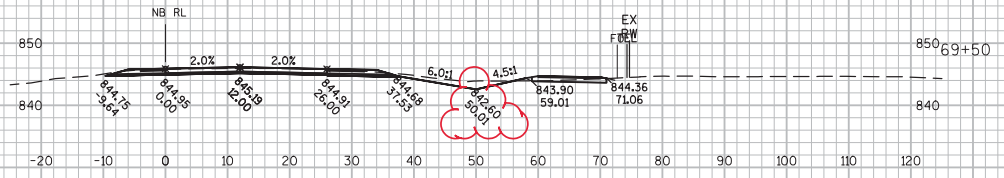
PLOT DATE : 10/23/2017 1:01 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

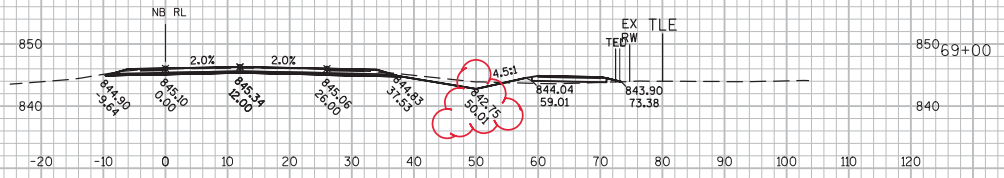
WISDOT/CADDS SHEET 49

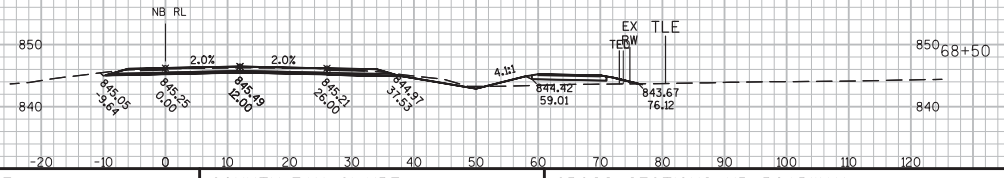
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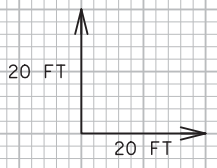
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 326
March 6, 2018









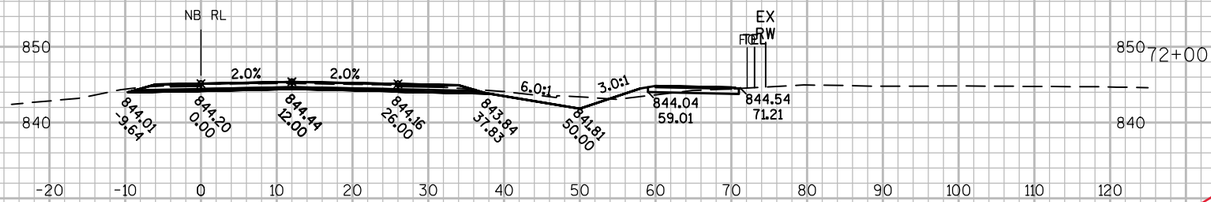


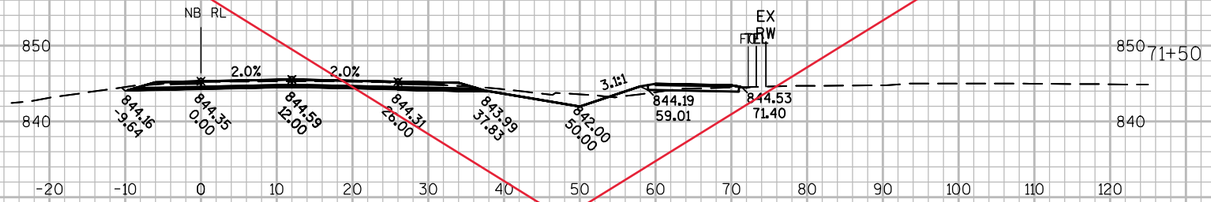
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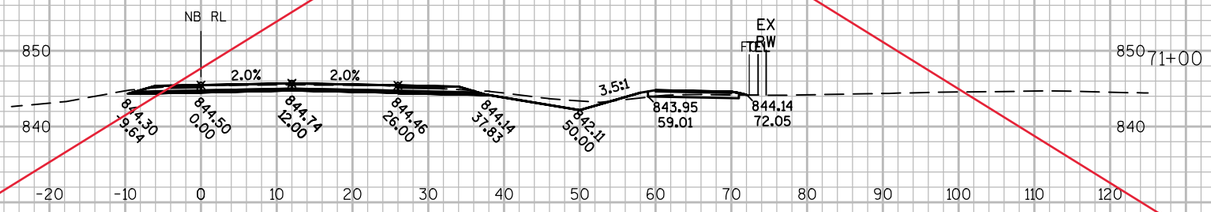
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

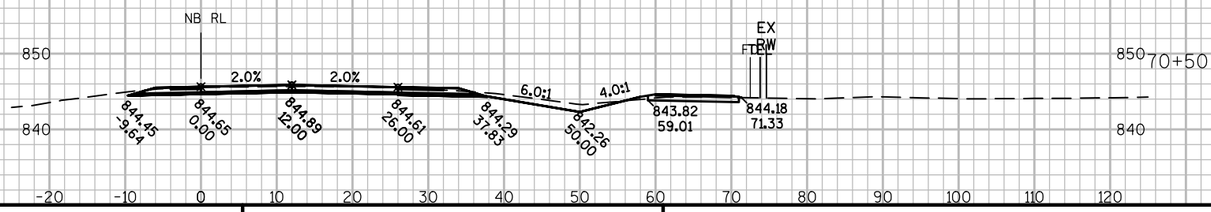
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB.DWG
LAYOUT NAME - (18)
PLOT DATE : 2/15/2018 2:18 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

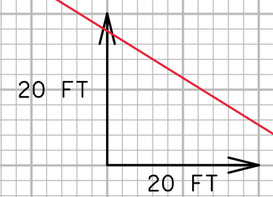
WISDOT/CADDS SHEET 49
Revised Sheet 326











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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 327	E

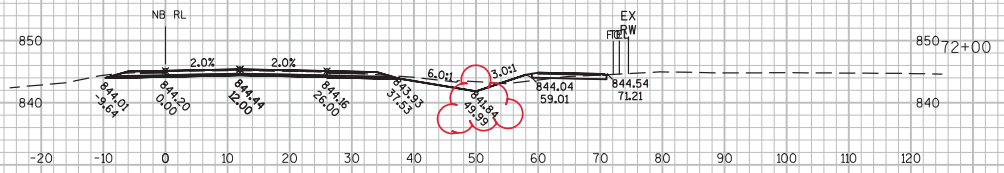
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LAYOUT NAME - (19)

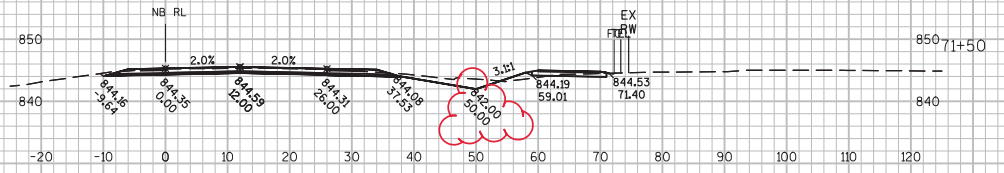
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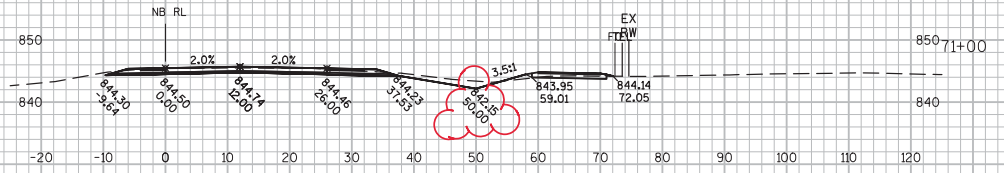
WISDOT/CADDS SHEET 49

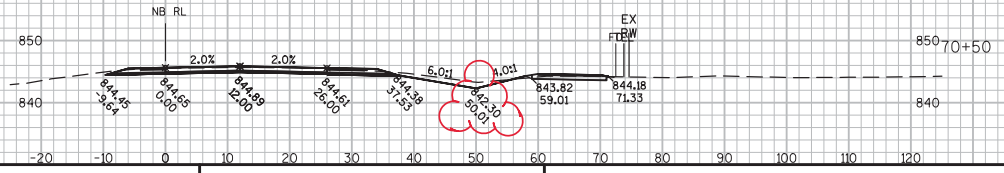
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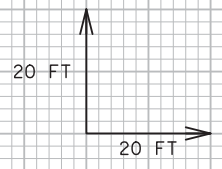
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 327
March 6, 2018











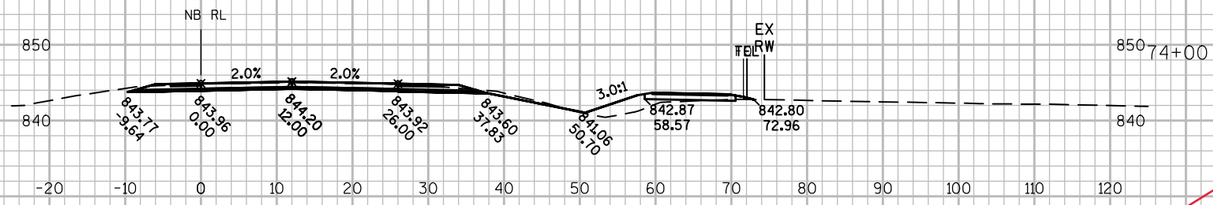
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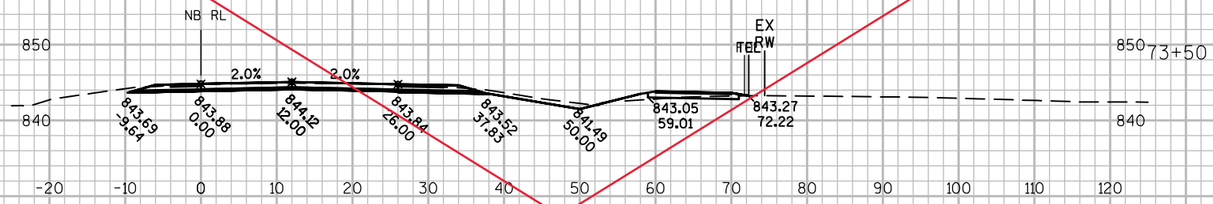
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

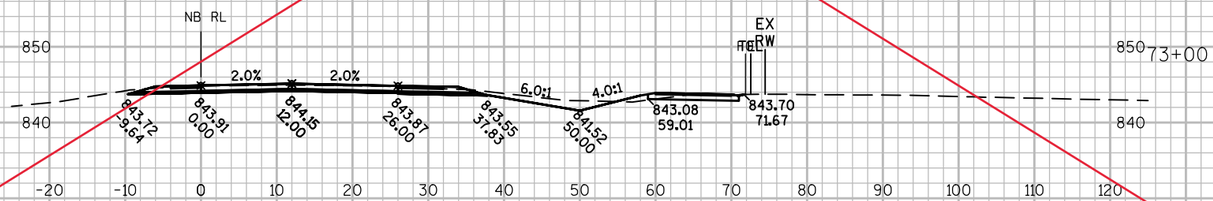
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LAYOUT NAME - (19)
PLOT DATE : 2/15/2018 2:19 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

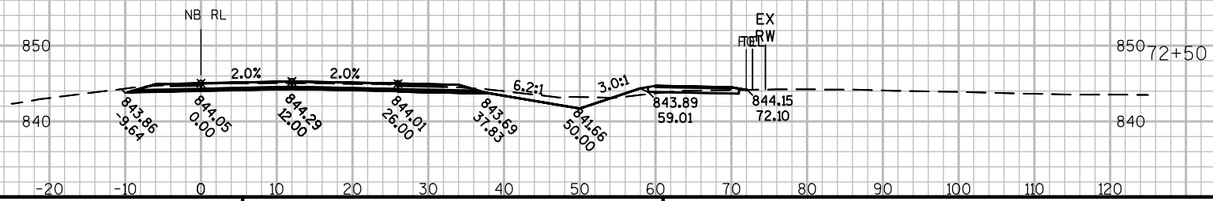
WISDOT/CADDS SHEET 49

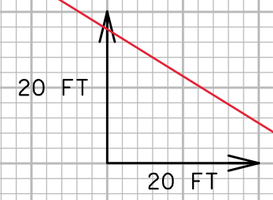
Revised Sheet 327











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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 328	E

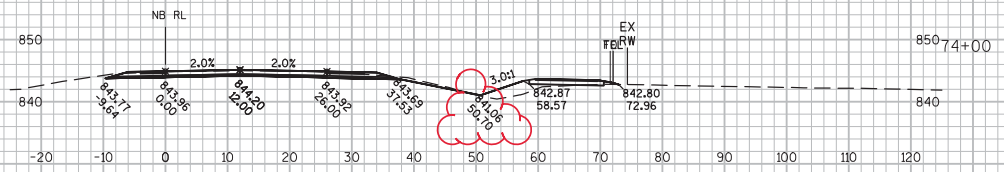
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LAYOUT NAME - (20)

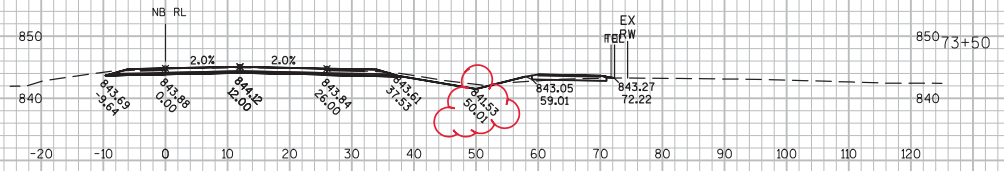
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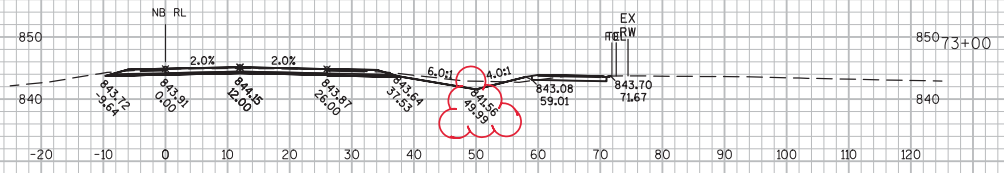
WISDOT/CADDS SHEET 49

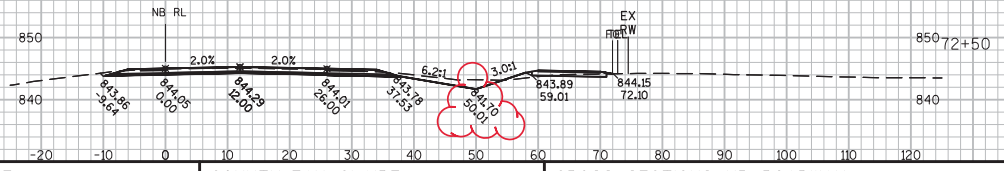
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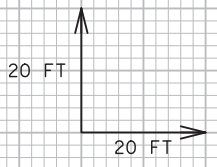
Addendum No. 1
I.D. 7110-05-72
Revised Sheet 328
March 6,2018









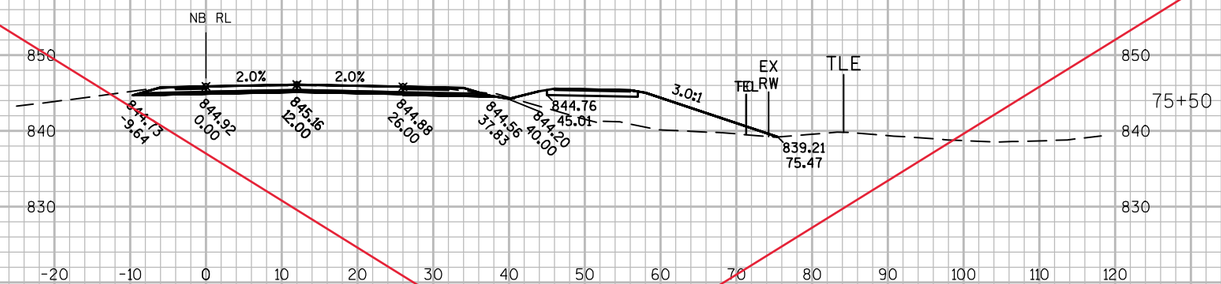


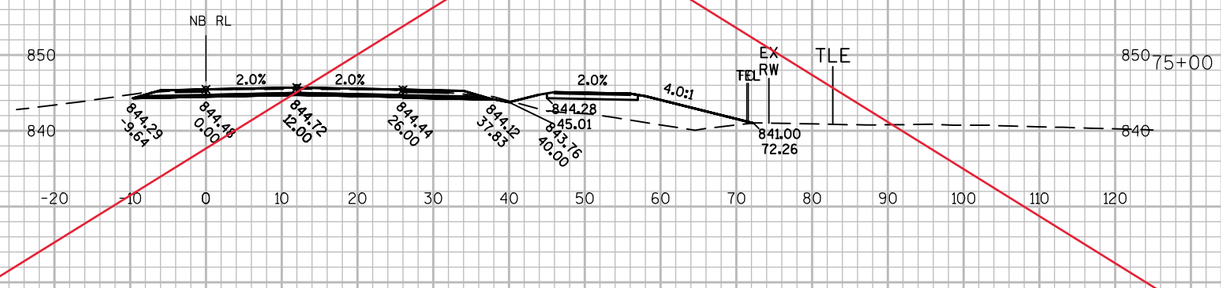
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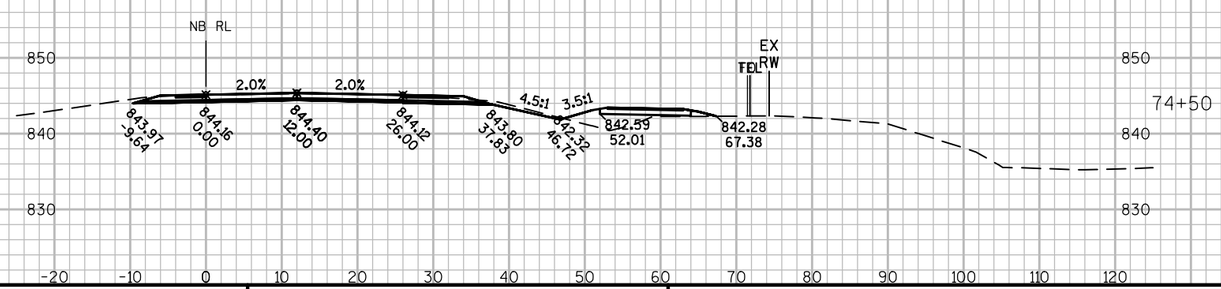
PROJECT NO:7110-05-72	HWY:STH 37	COUNTY:EAU CLAIRE	CROSS SECTIONS:NB ROADWAY	SHEET	E

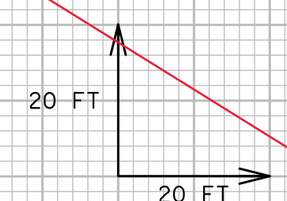
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LAYOUT NAME - (20)
PLOT DATE : 2/15/2018 2:19 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49
Revised Sheet 328









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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 329	E

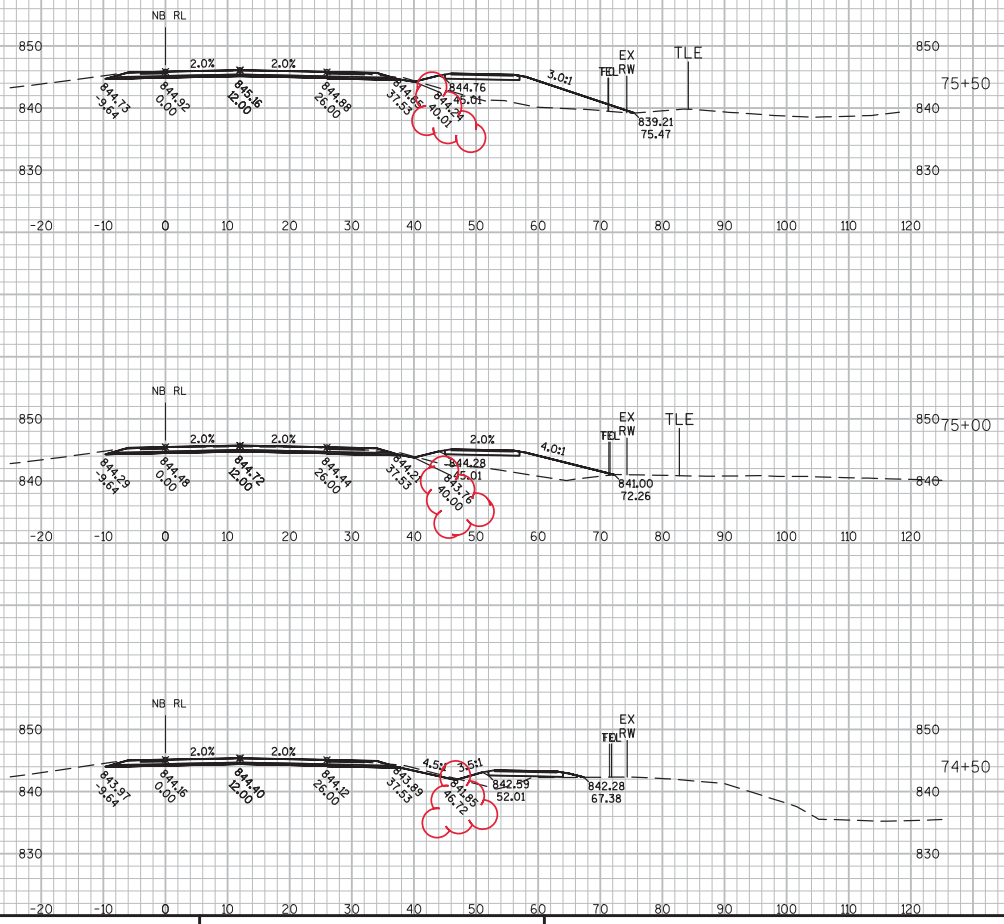
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LAYOUT NAME - (21)

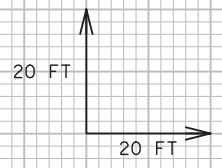
PLOT DATE : 10/23/2017 1:02 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Replaced with "Revised Sheet 329"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 329
March 6, 2018



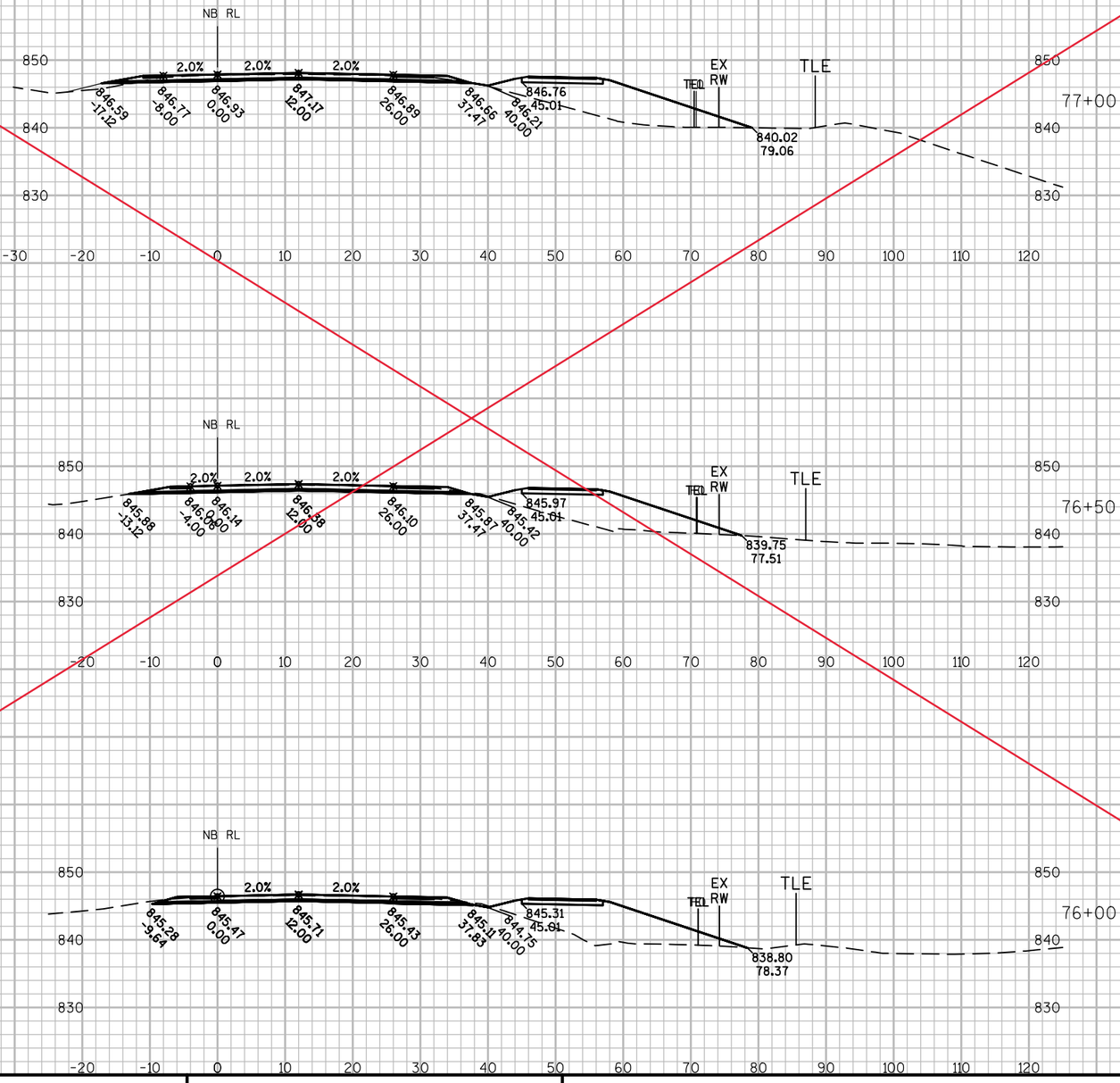


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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB.DWG
LAYOUT NAME - (21)
PLOT DATE : 2/15/2018 2:20 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

Revised Sheet 329



PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 330	E

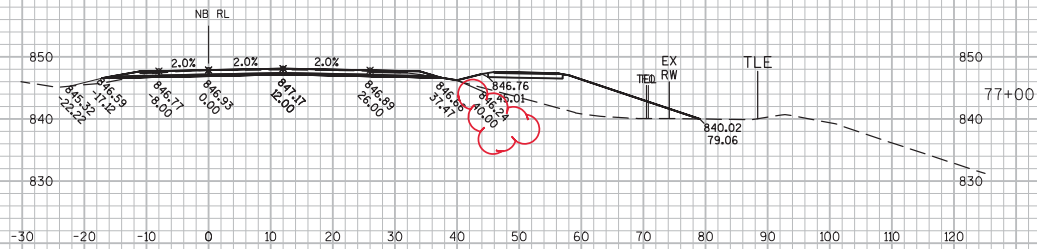
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LAYOUT NAME - (22)

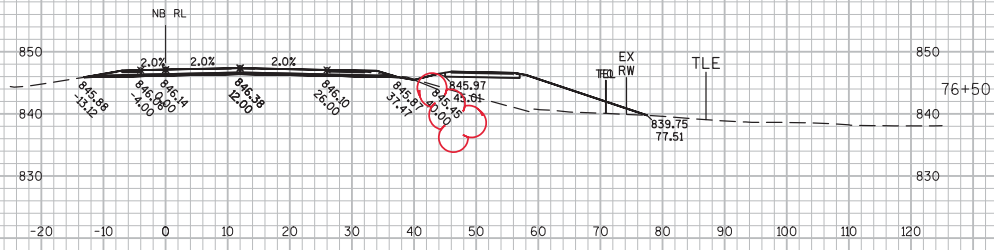
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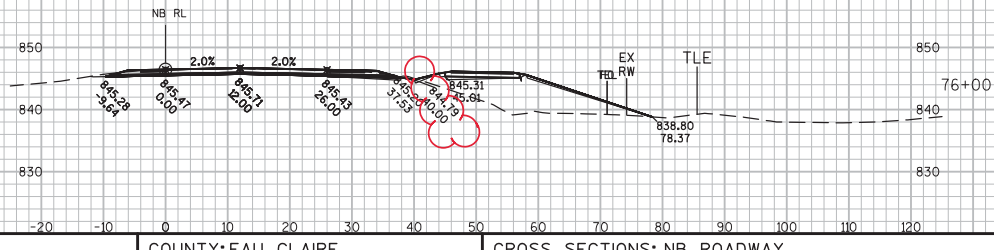
WISDOT/CADDS SHEET 49

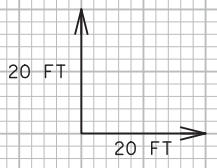
Replaced with "Revised Sheet 330"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 330
March 6, 2018









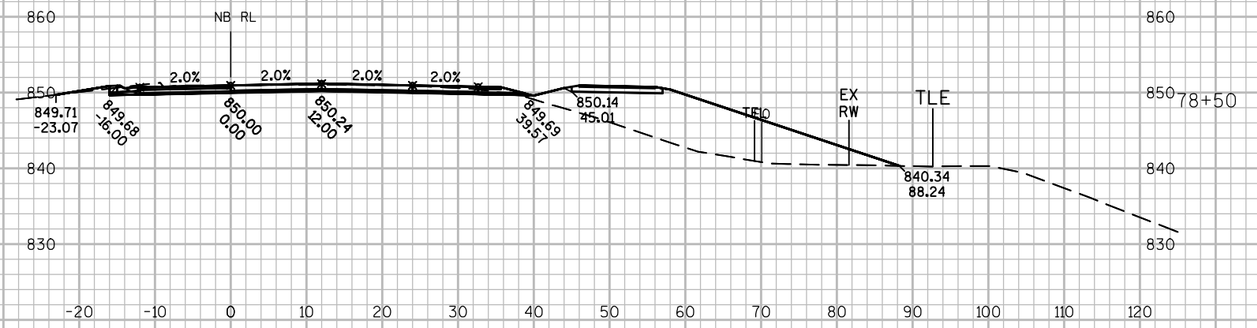
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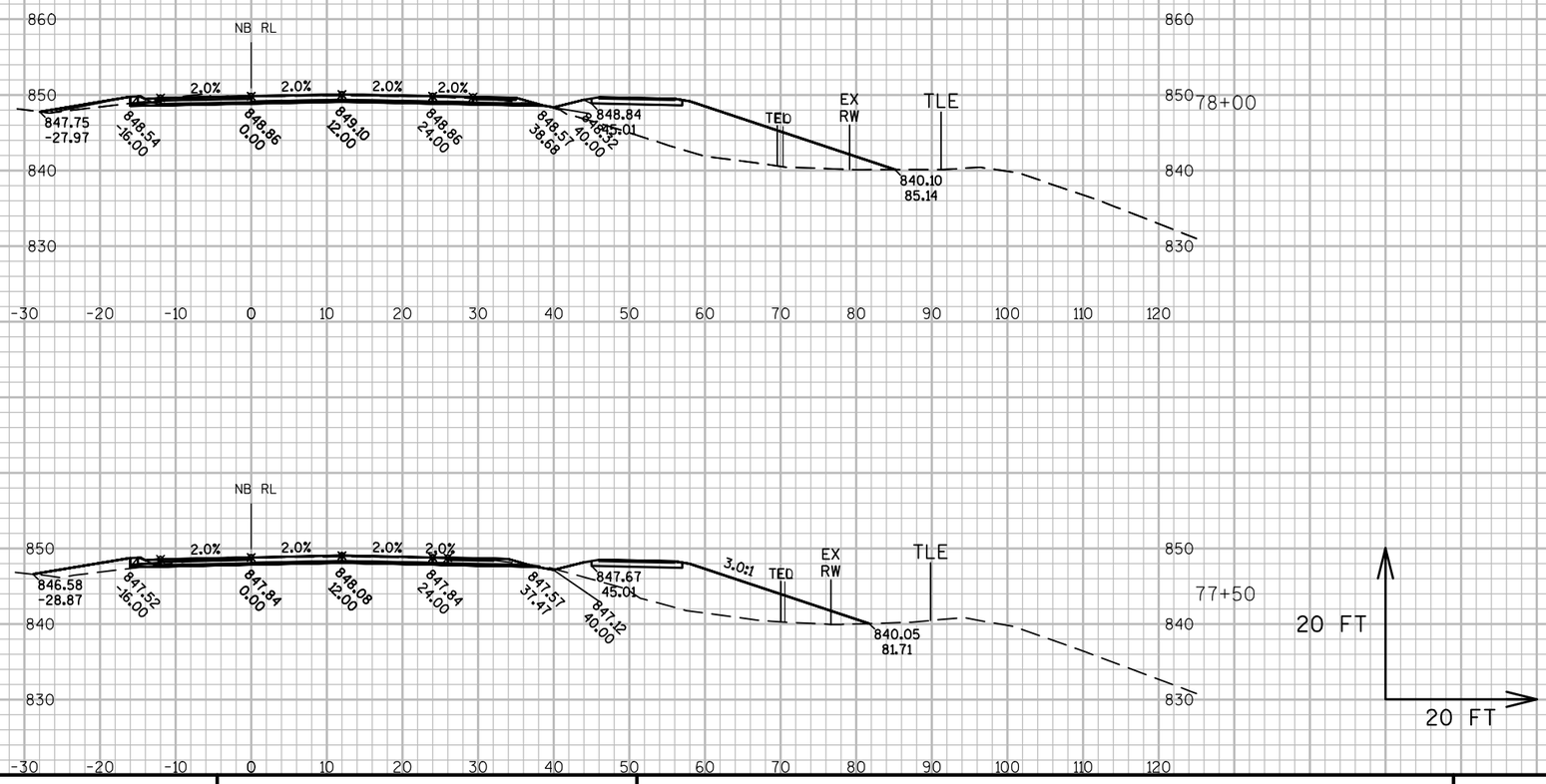
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB.DWG
LAYOUT NAME - (22)
PLOT DATE : 2/15/2018 2:20 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Revised Sheet 330





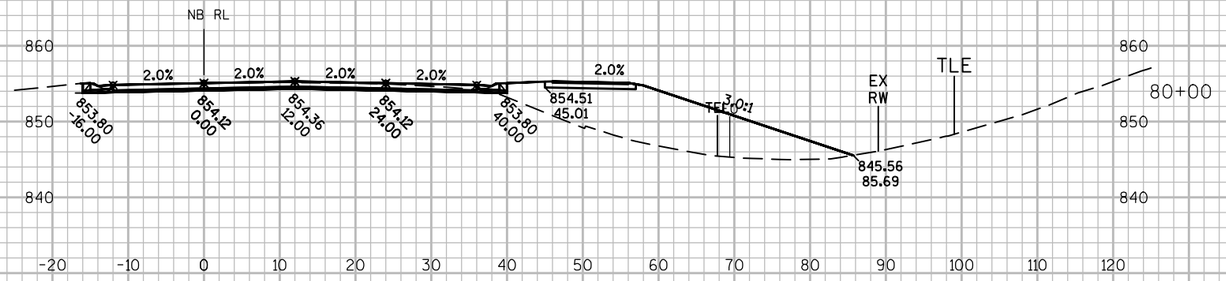
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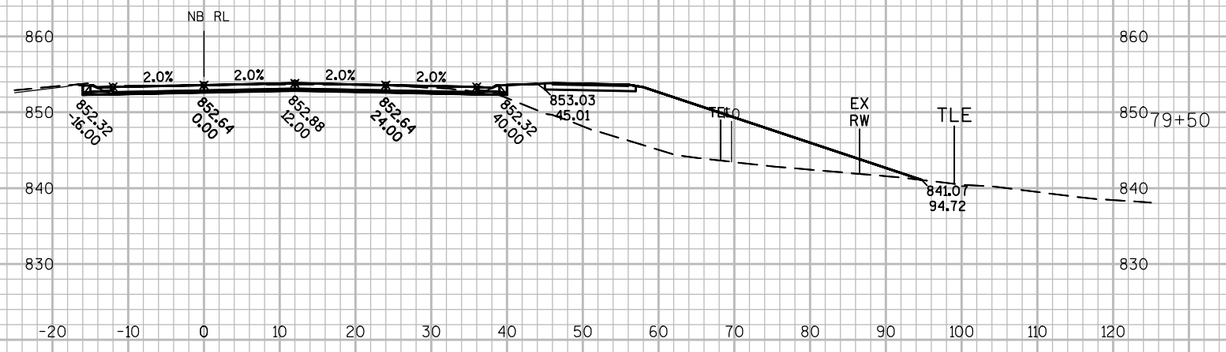
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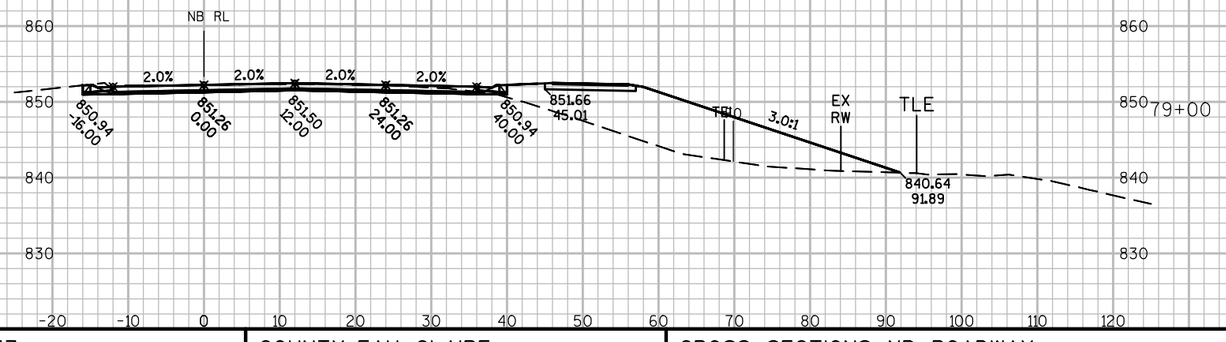
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 331	E

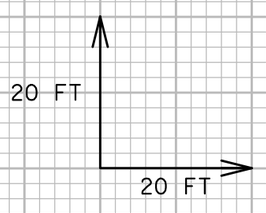
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LAYOUT NAME - (23)

PLOT DATE : 10/23/2017 1:02 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT









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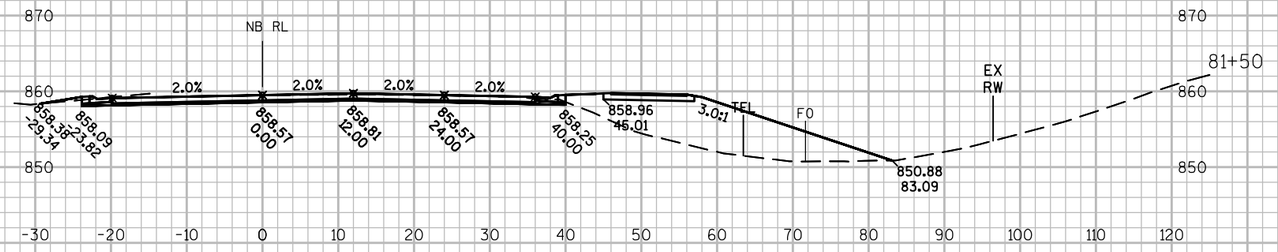
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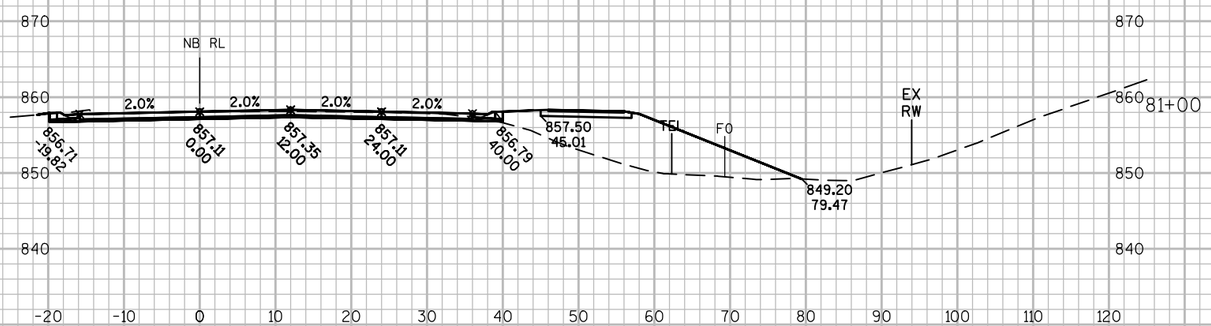
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 332	E

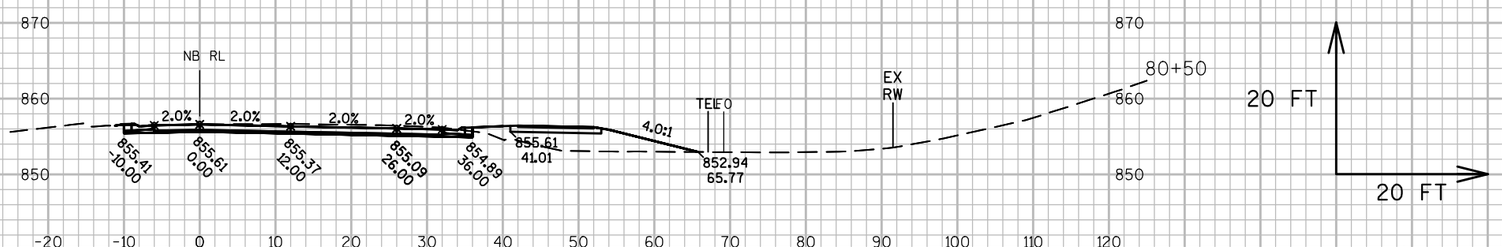
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LAYOUT NAME - (24)

PLOT DATE : 10/23/2017 1:02 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







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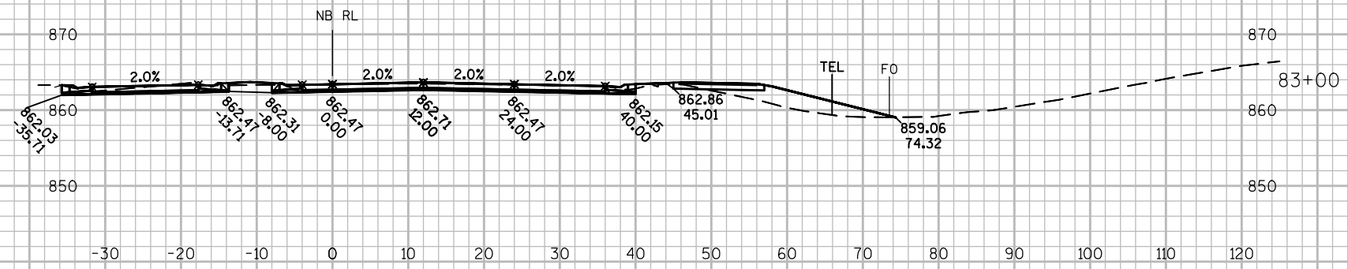
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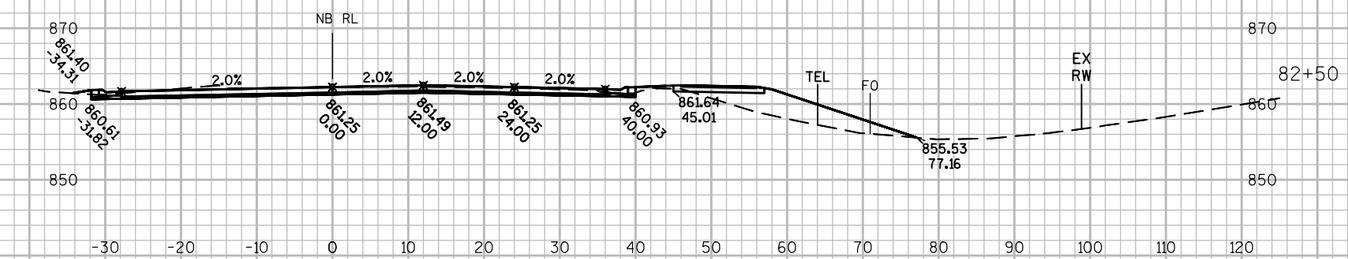
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 333	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (25)

PLOT DATE : 10/23/2017 1:02 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







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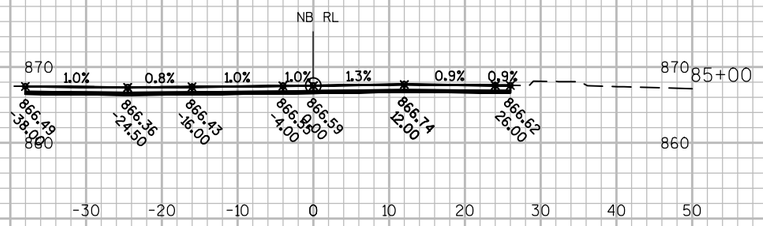
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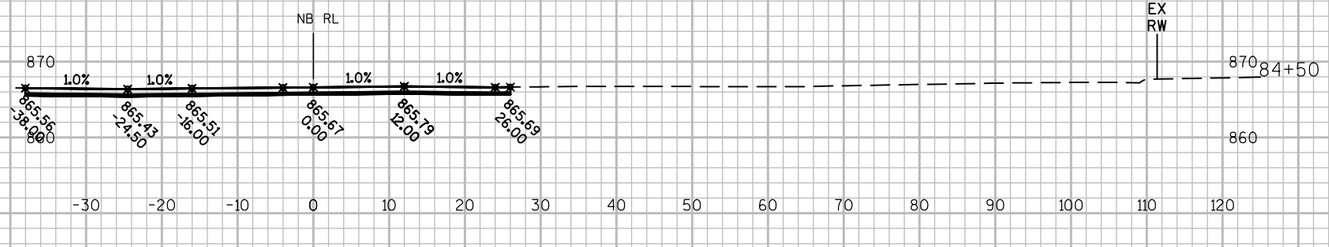
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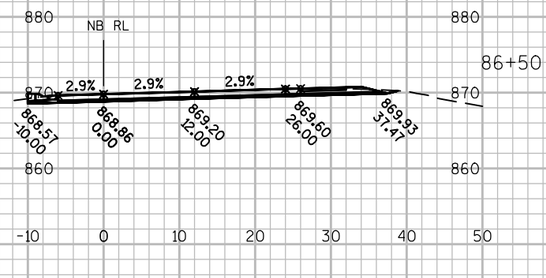
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LAYOUT NAME - (26)

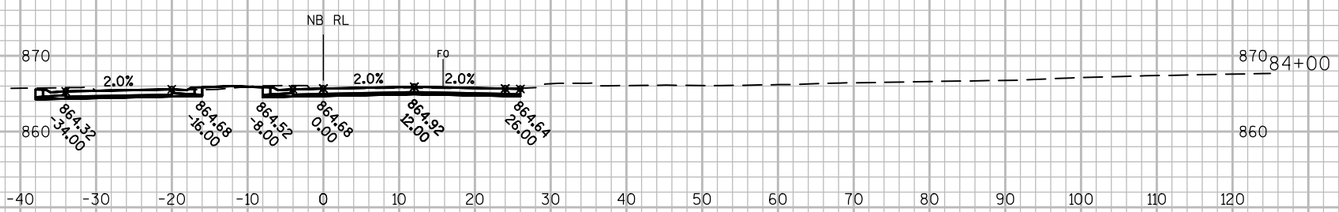
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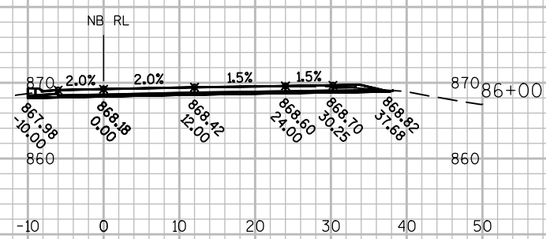
WISDOT/CADDS SHEET 49

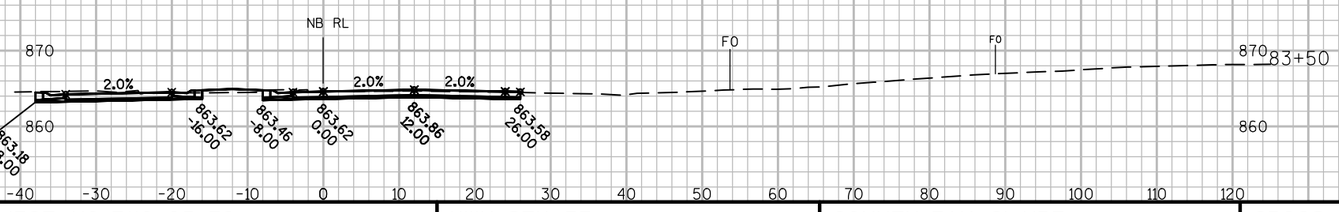


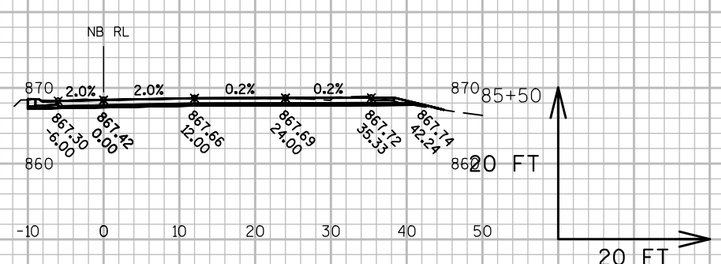












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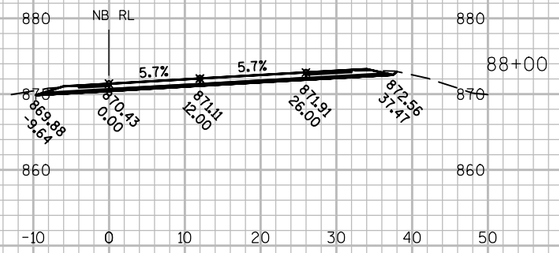
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 335	E

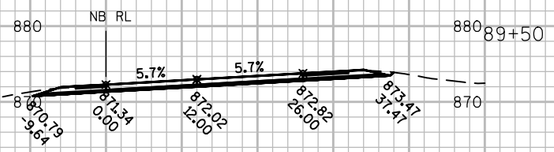
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LAYOUT NAME - (27)

PLOT DATE : 10/23/2017 1:02 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



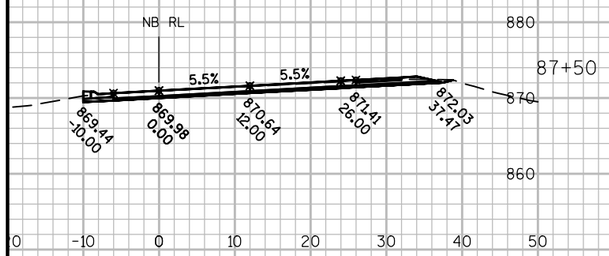
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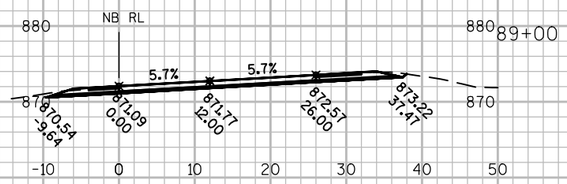
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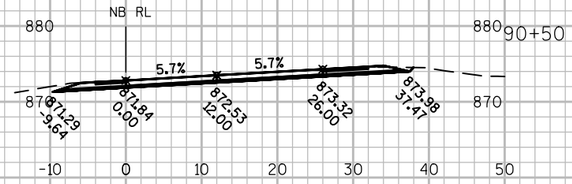
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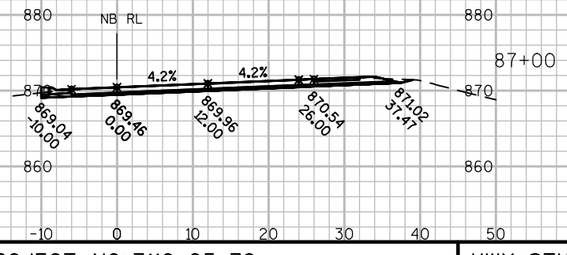
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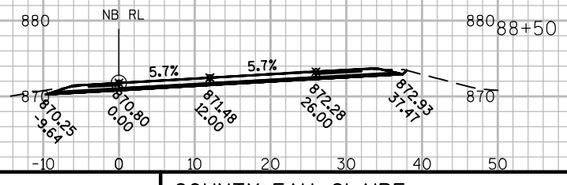
89+00



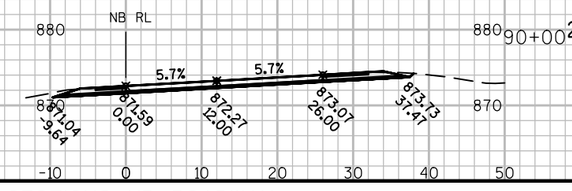
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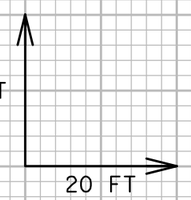
87+00



88+50



90+00



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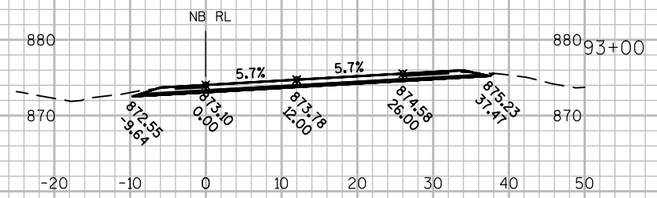
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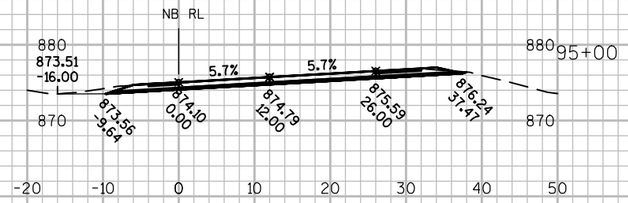
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 336	E

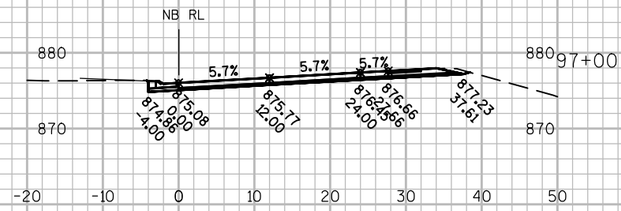
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (28)

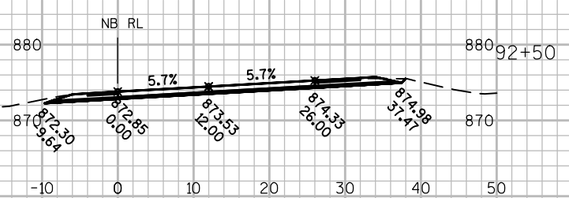
PLOT DATE : 10/23/2017 1:02 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

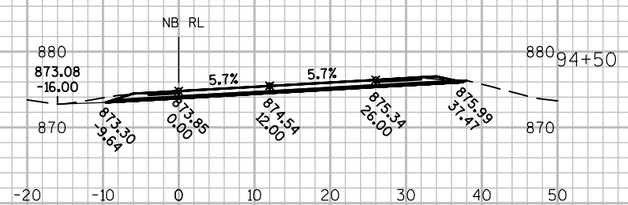
WISDOT/CADDS SHEET 49

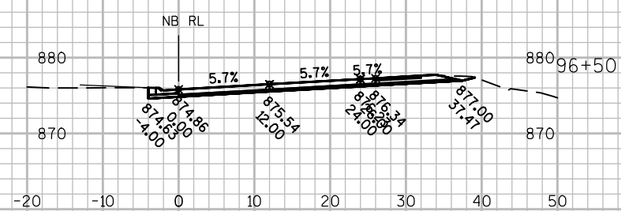


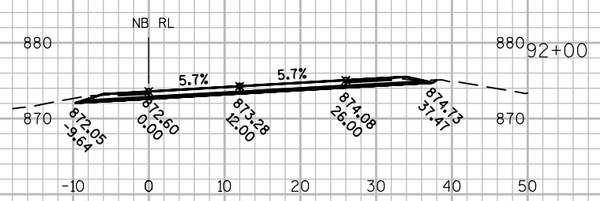


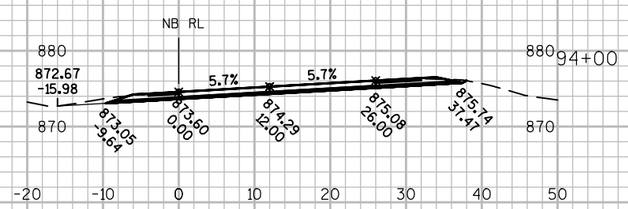


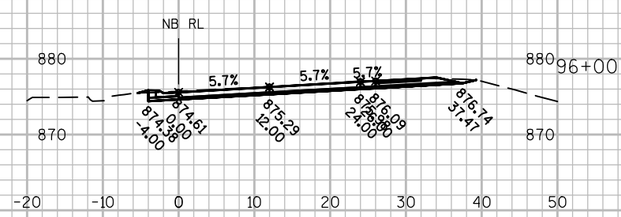


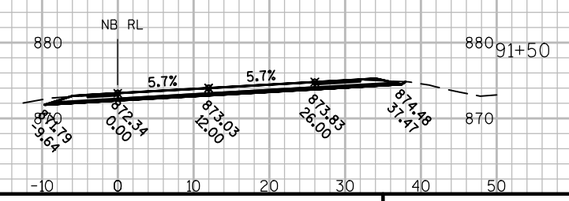


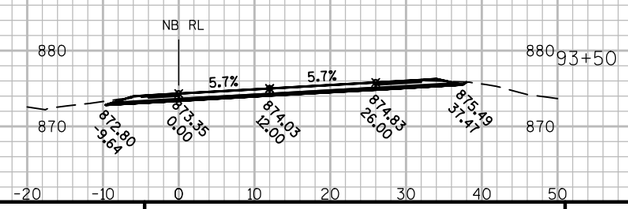


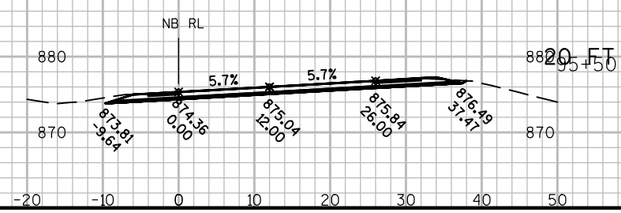


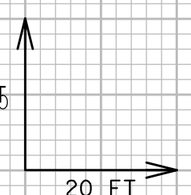










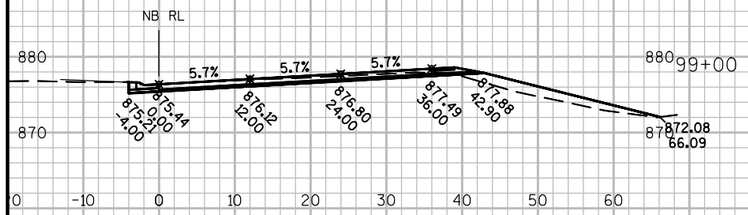


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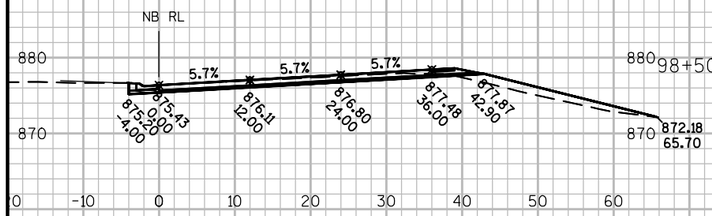
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 337	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (29)
PLOT DATE : 10/23/2017 1:03 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

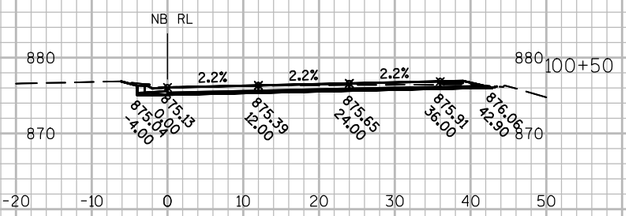


880 99+00

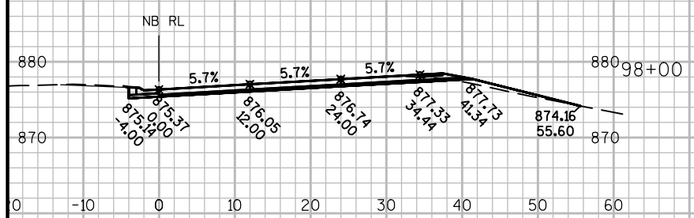
STATION 100+82 MATCH EXISTING



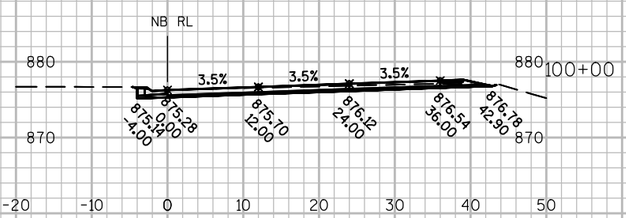
880 98+50



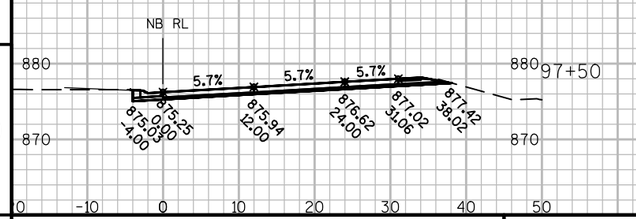
880 100+50



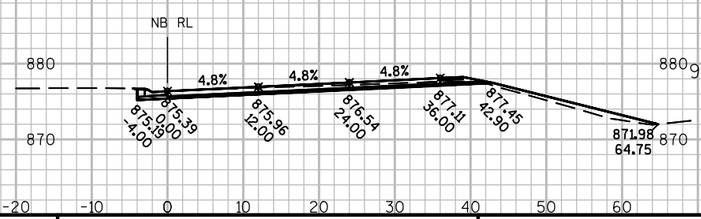
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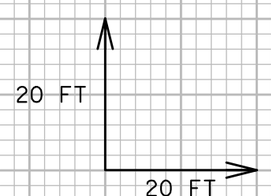
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880 97+50



880 99+50

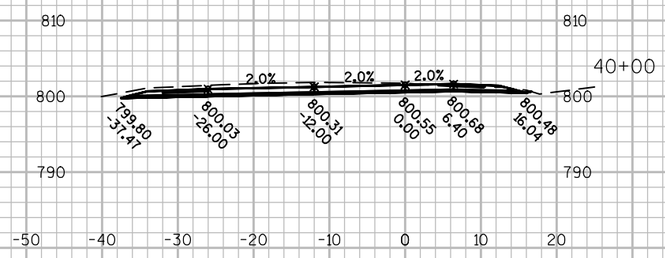


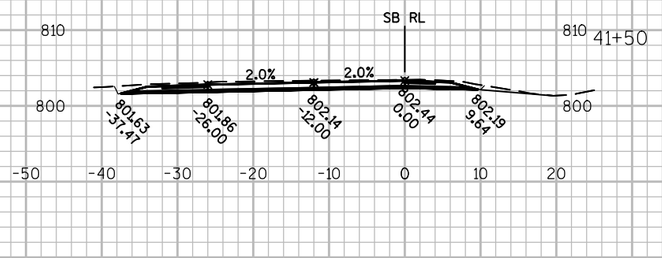
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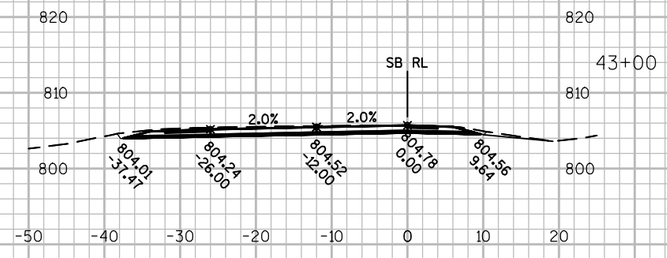
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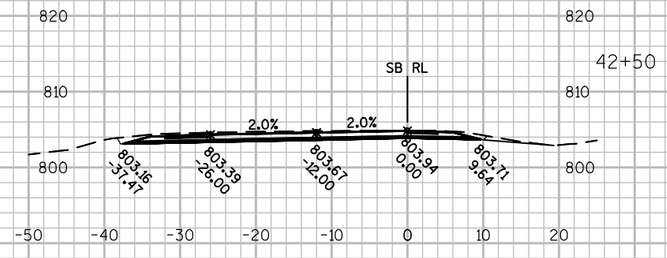
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: NB ROADWAY	SHEET 338	E

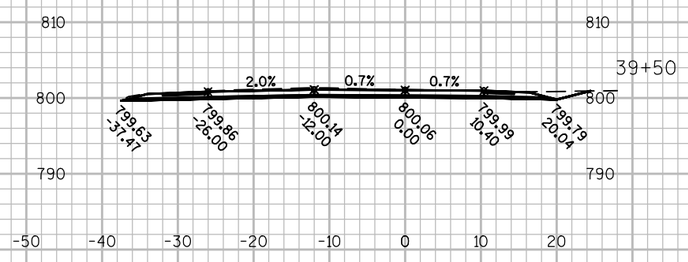
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 NB&SB.DWG
LAYOUT NAME - (30)
PLOT DATE : 10/23/2017 1:03 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

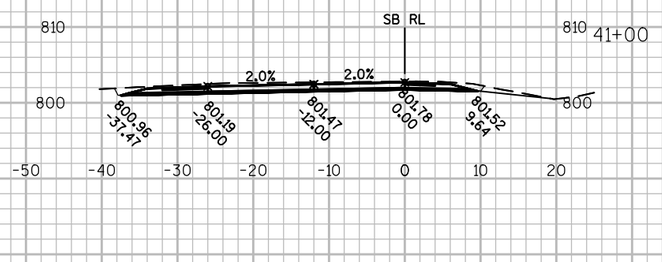


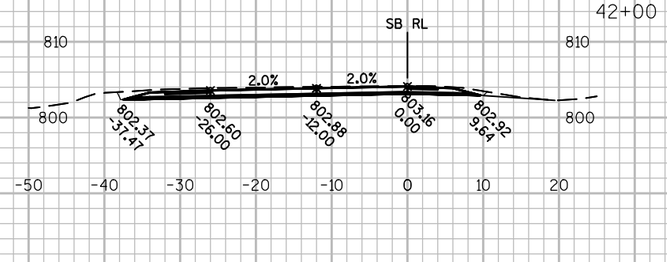


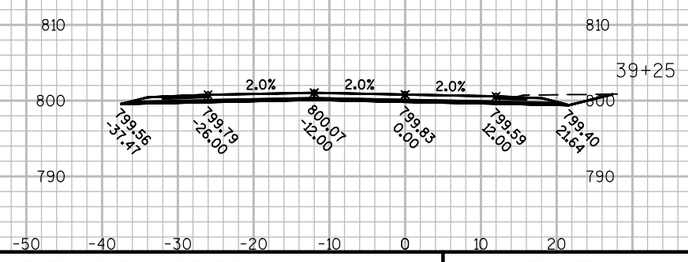


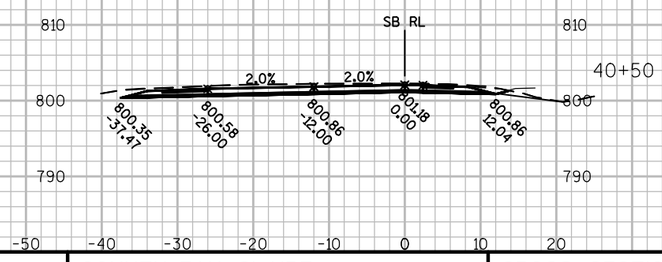


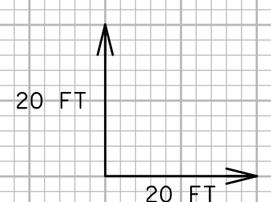












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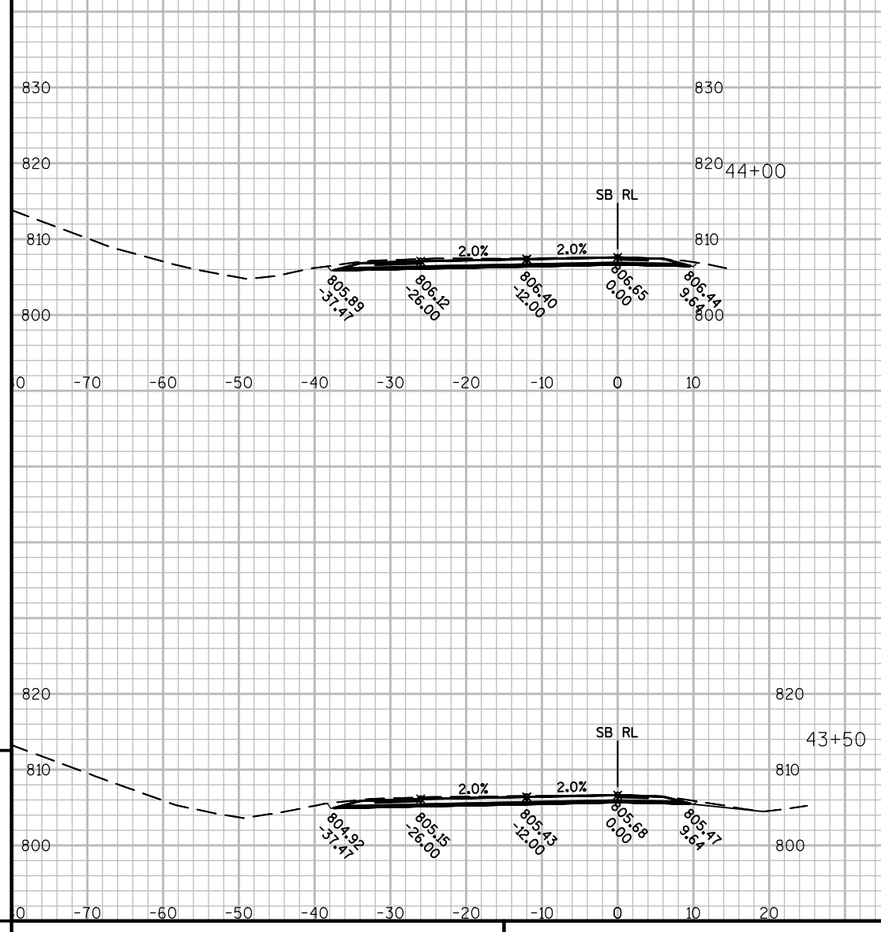
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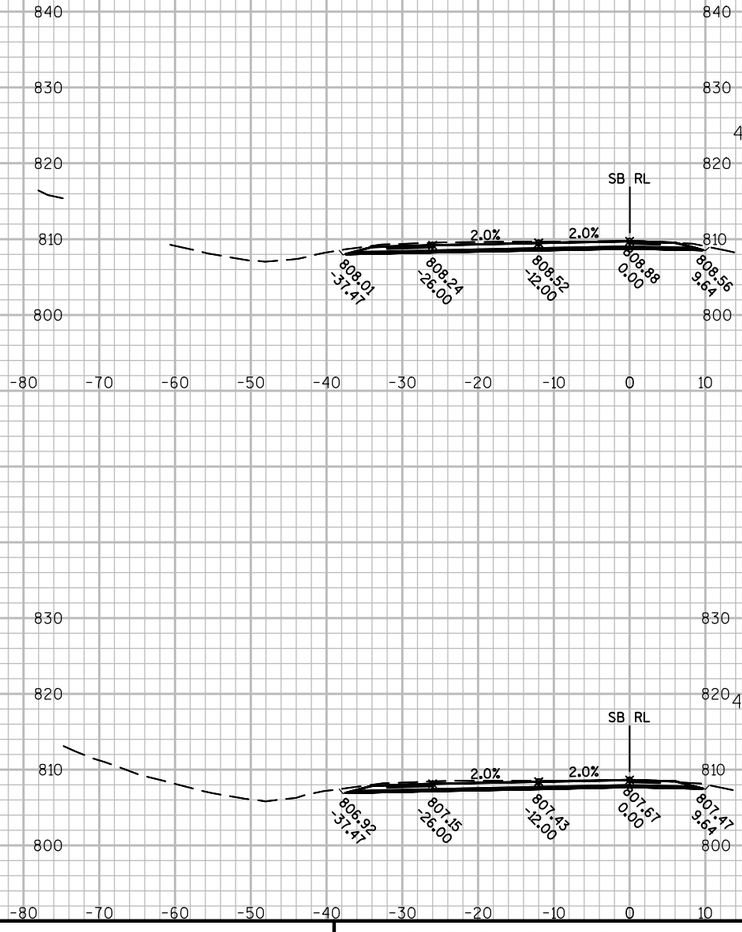
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 339	E

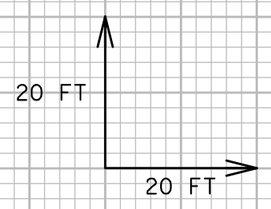
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LAYOUT NAME - (1)

PLOT DATE : 10/23/2017 1:04 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



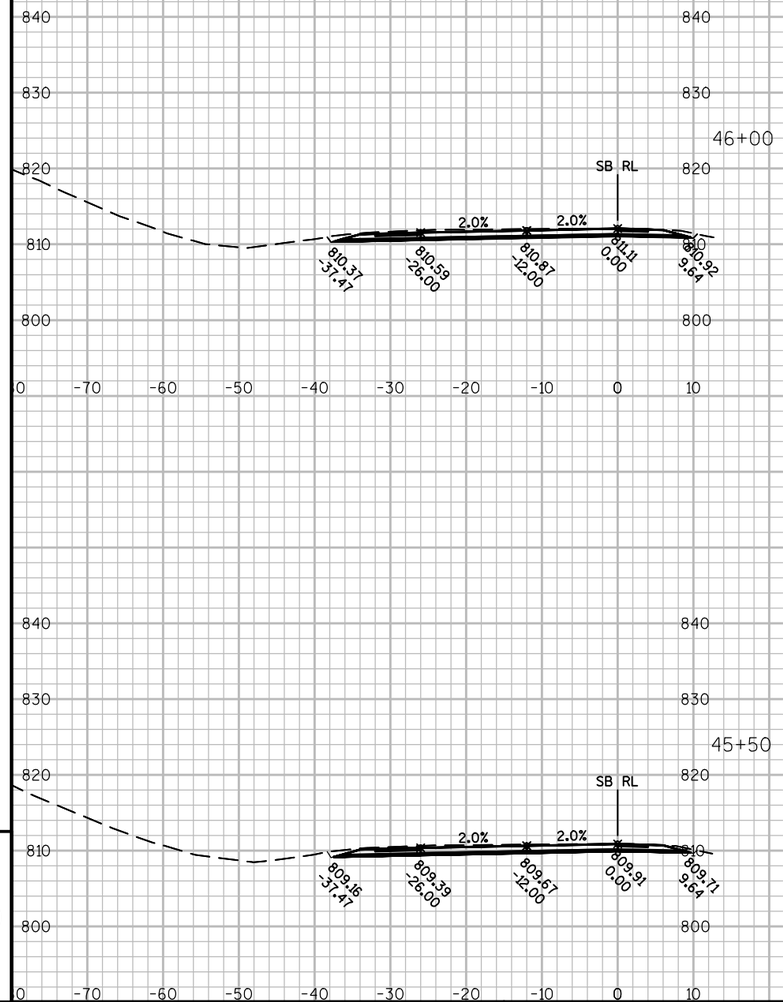


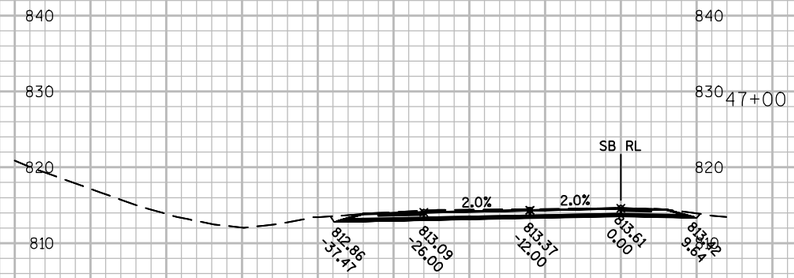


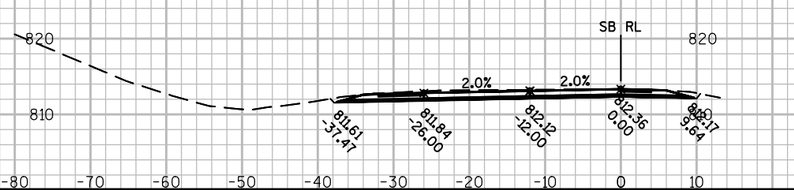
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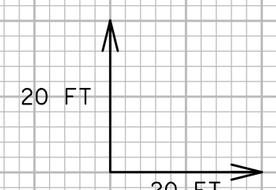
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 340	E









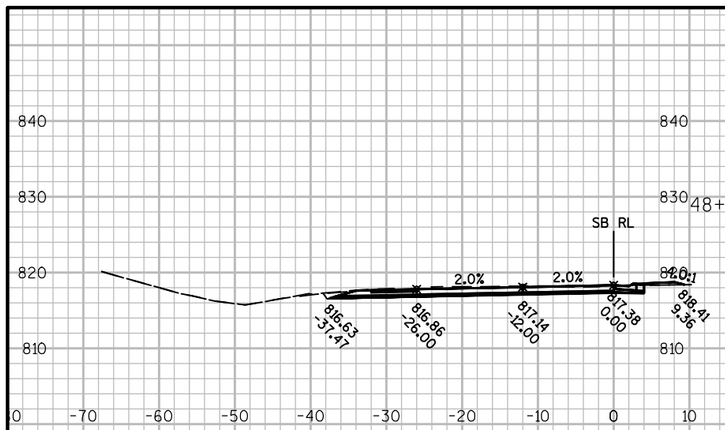
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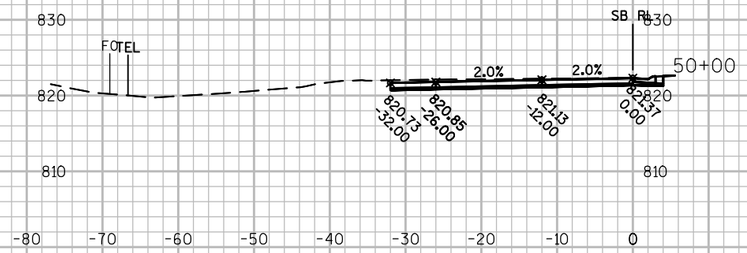
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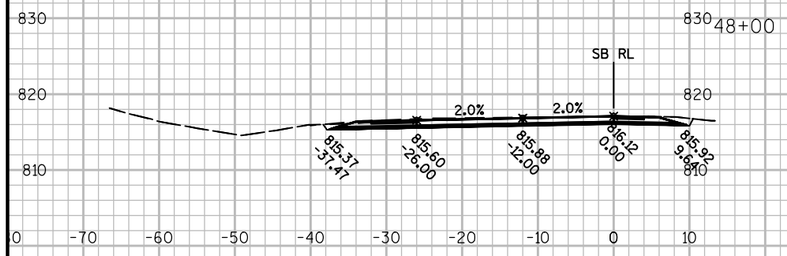
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 341	E

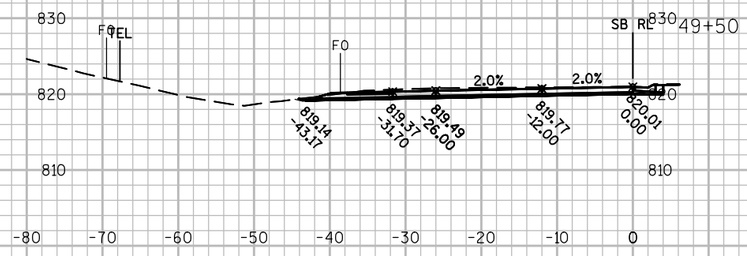
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 SB.DWG
LAYOUT NAME - (3)

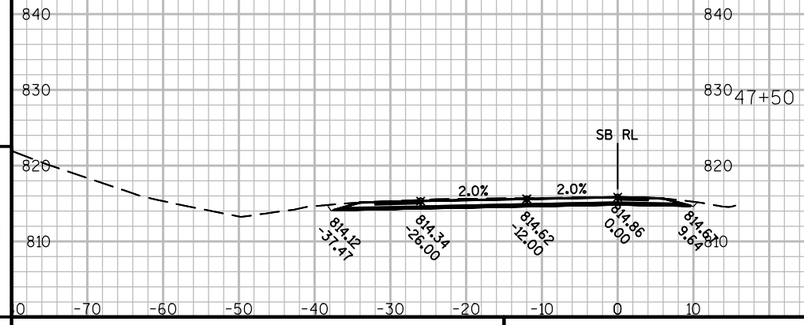
PLOT DATE : 10/23/2017 1:05 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

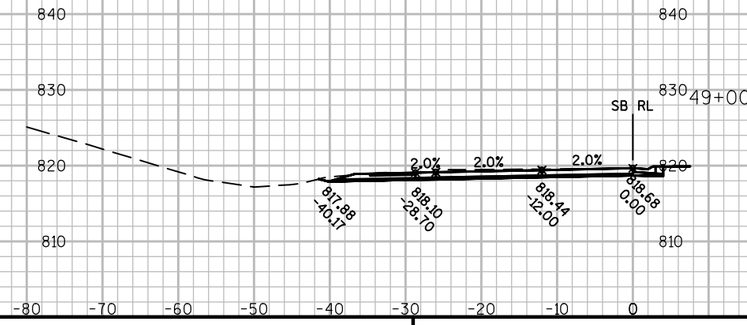


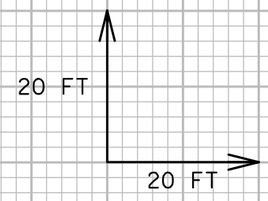












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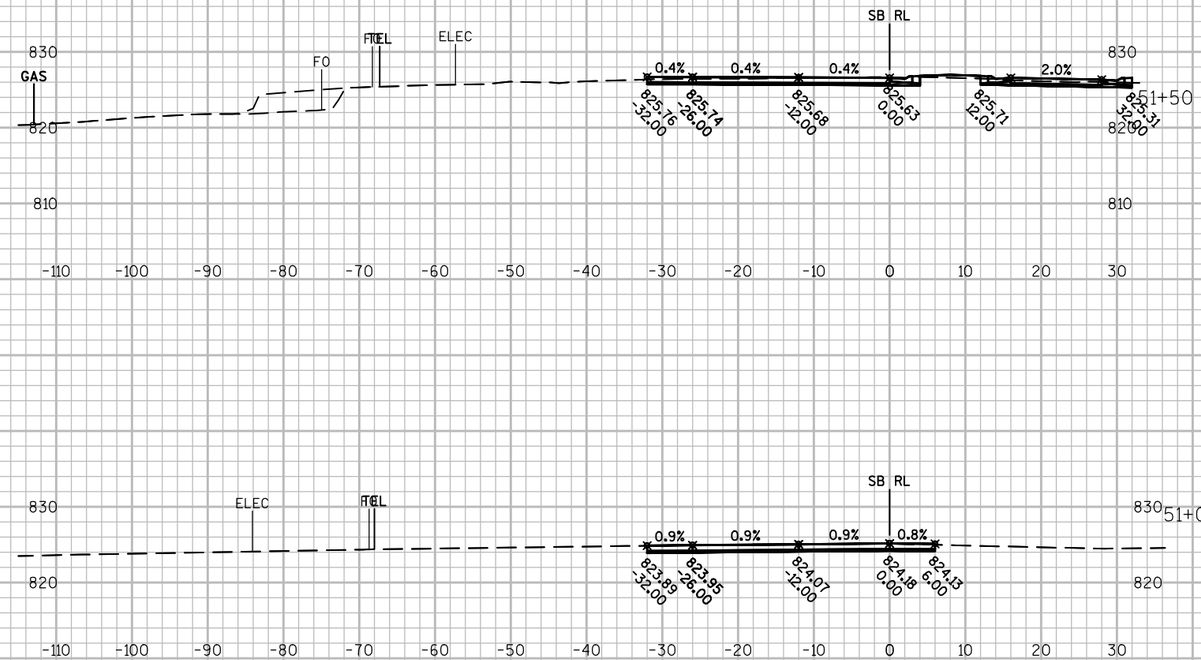
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 342	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 SB.DWG
LAYOUT NAME - (4)

PLOT DATE : 10/23/2017 1:05 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

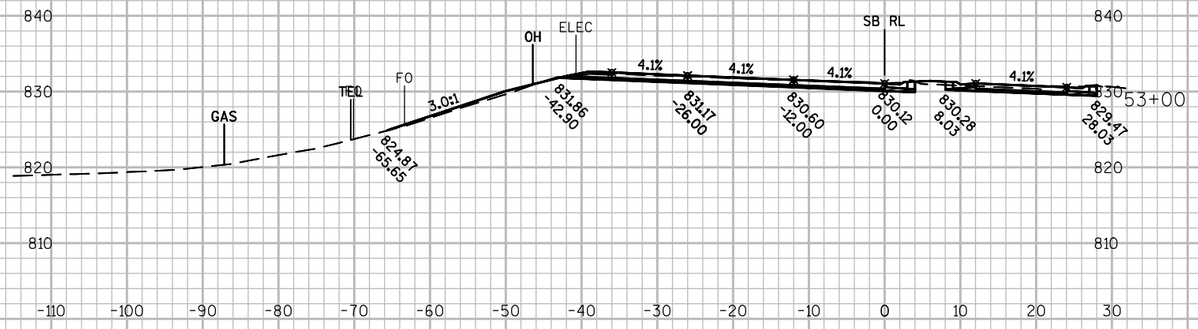


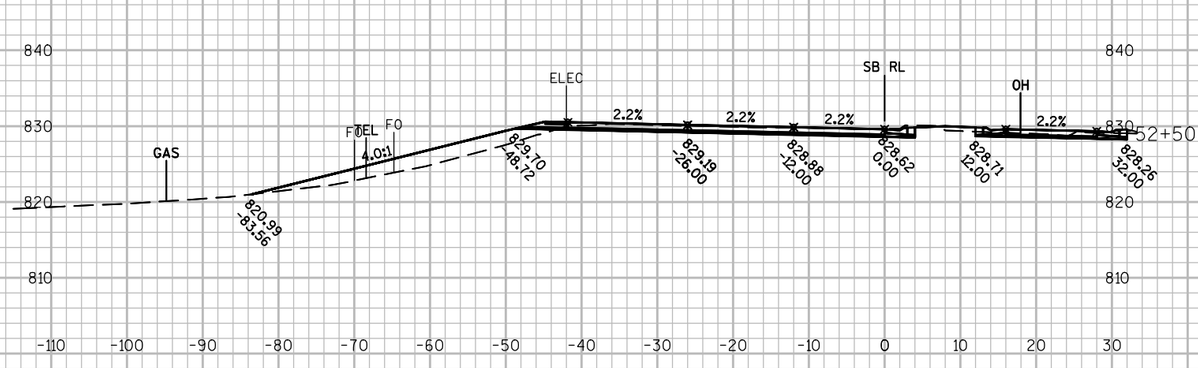
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 343	E

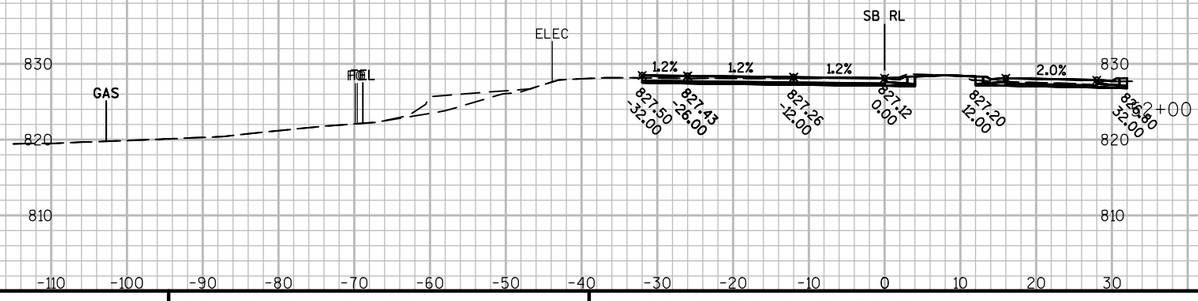
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LAYOUT NAME - (5)

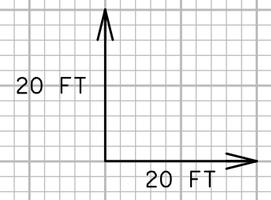
PLOT DATE : 10/23/2017 1:05 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49









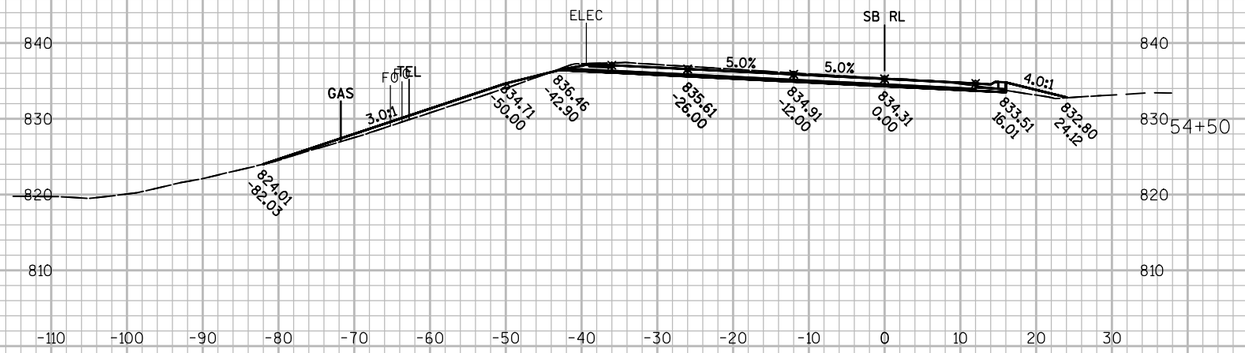
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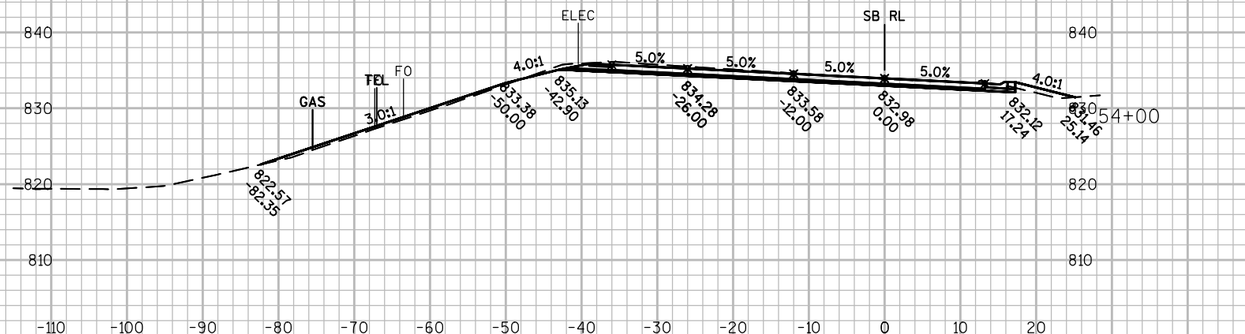
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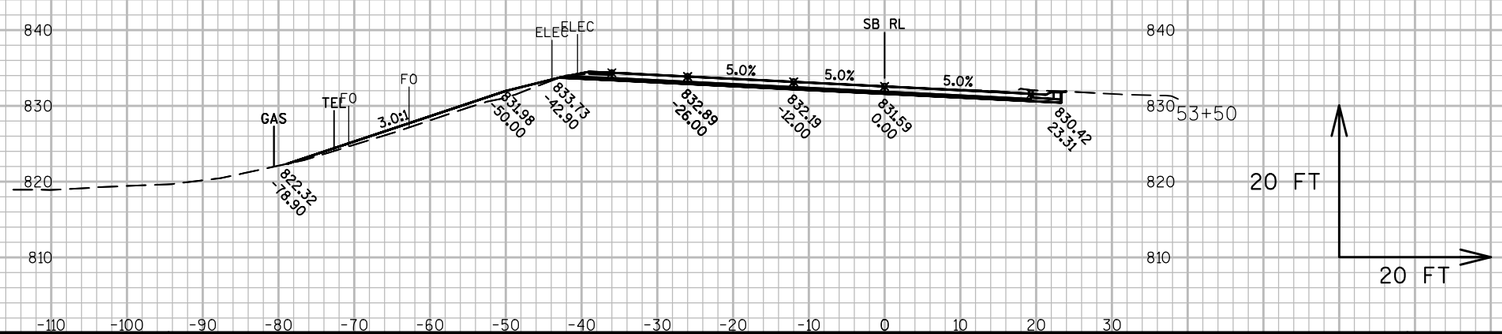
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FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 SB.DWG
LAYOUT NAME - (6)

PLOT DATE : 10/23/2017 1:05 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT





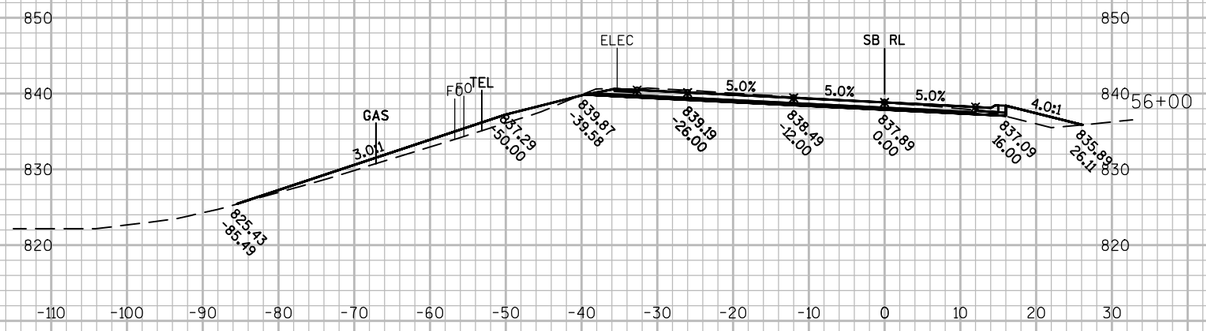


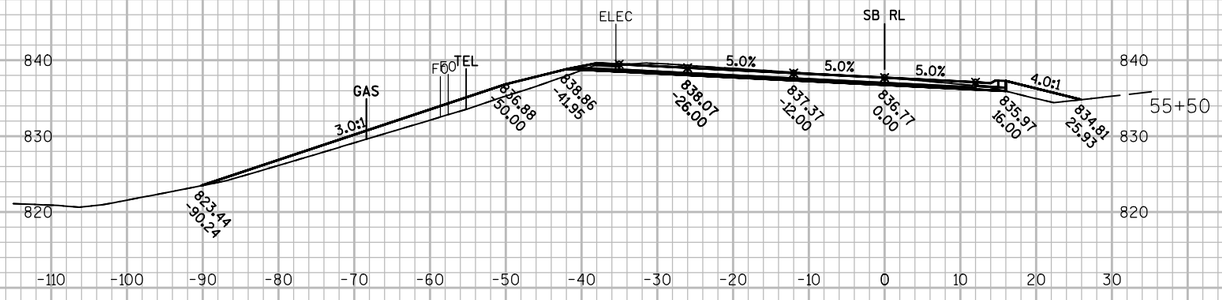
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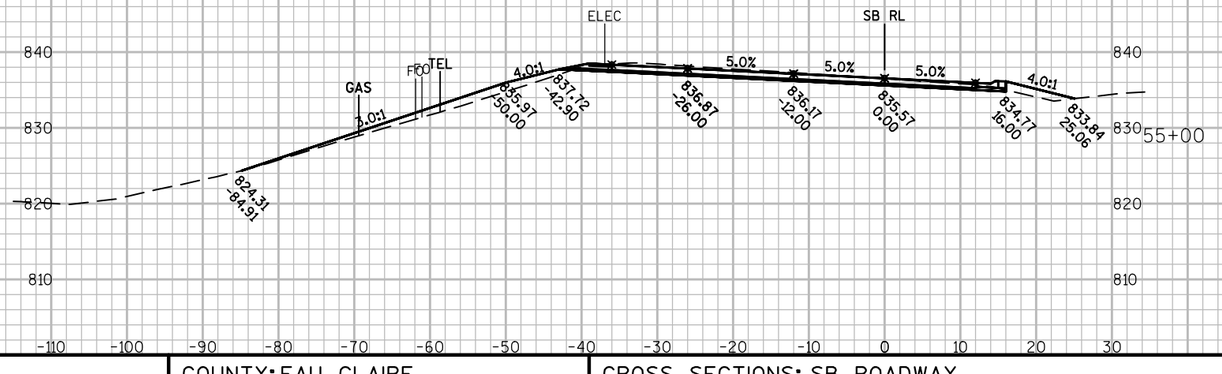
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LAYOUT NAME - (7)

PLOT DATE : 10/23/2017 1:05 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







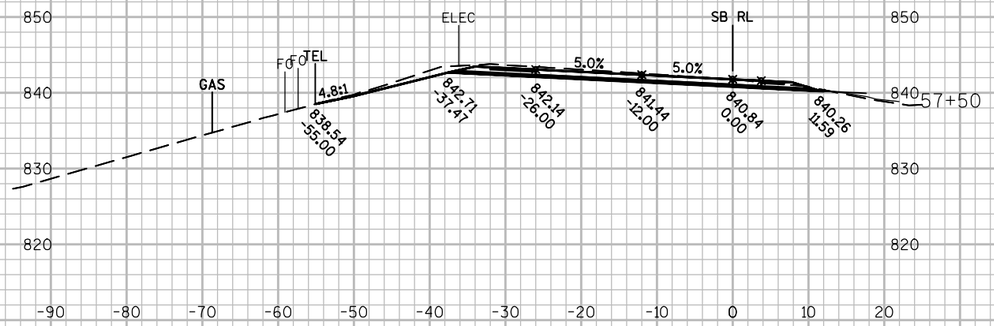
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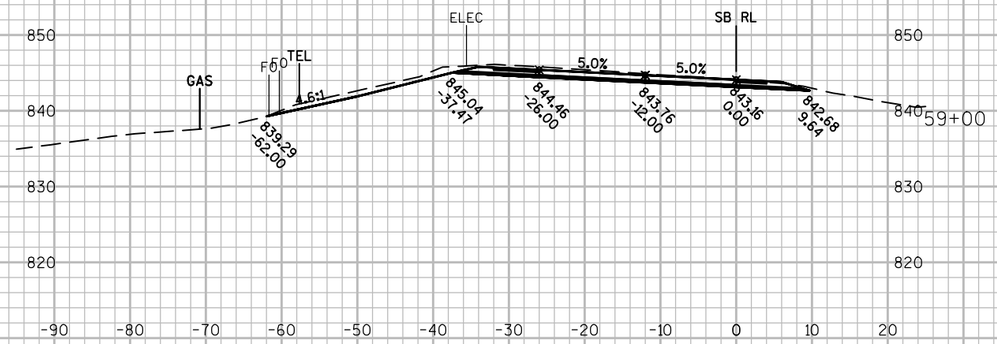
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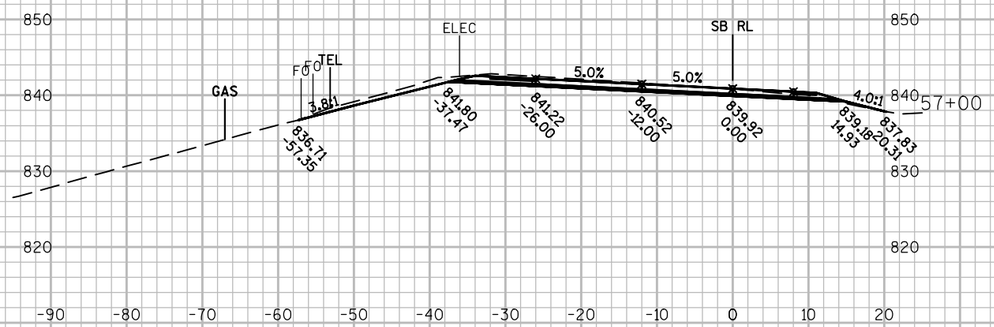
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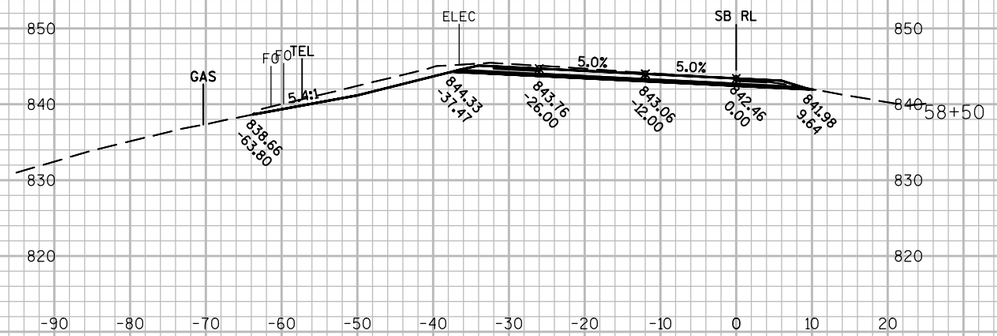
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LAYOUT NAME - (8)

PLOT DATE : 10/23/2017 1:06 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT













9

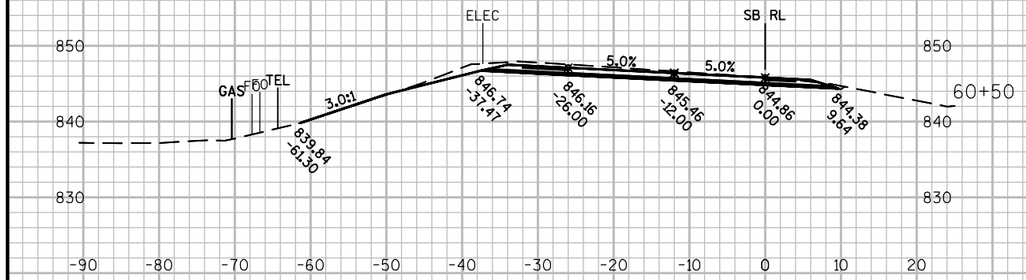
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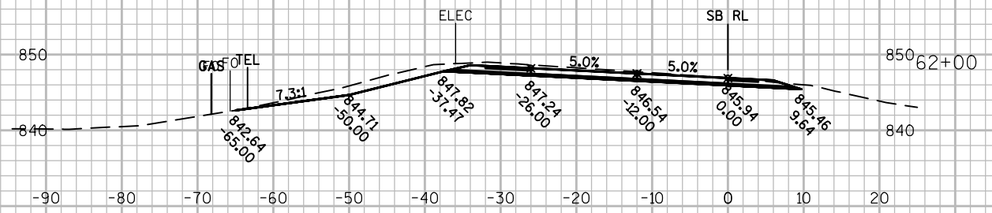
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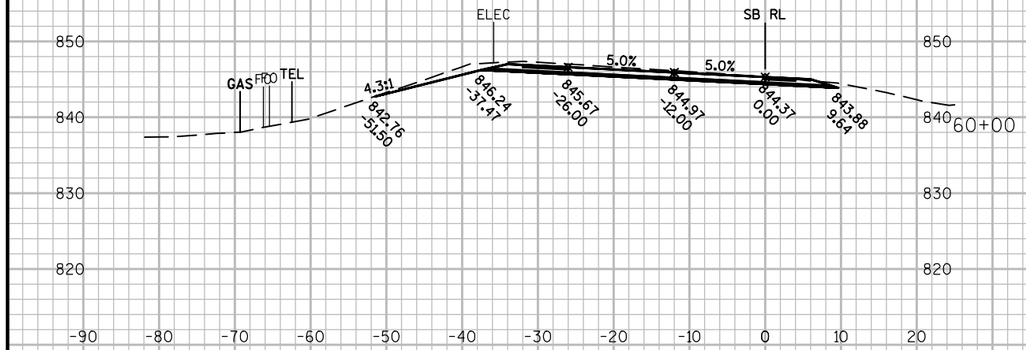
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LAYOUT NAME - (9)

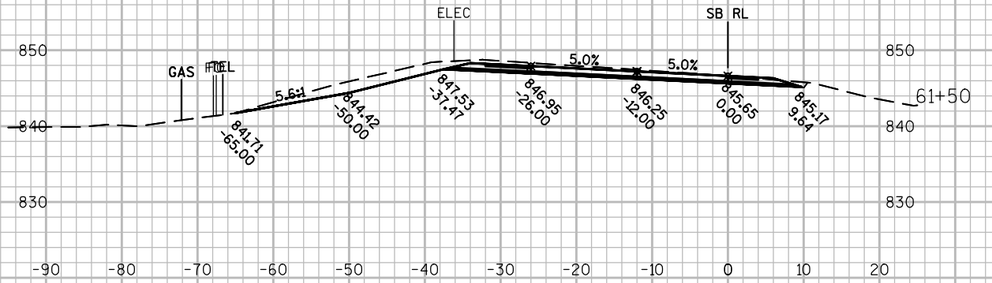
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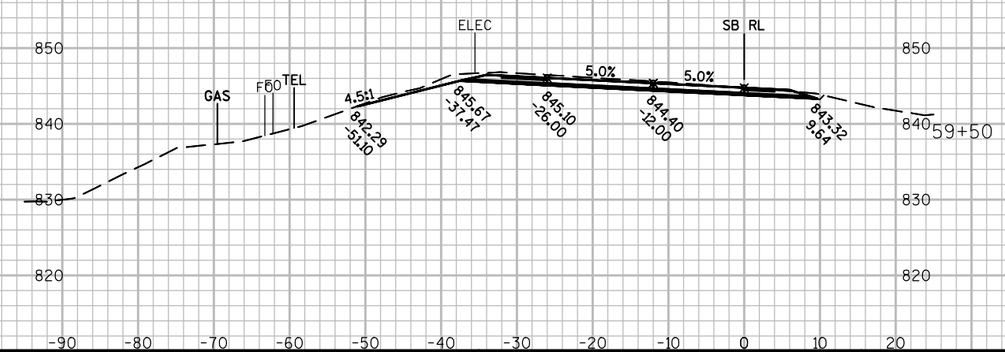
WISDOT/CADDS SHEET 49

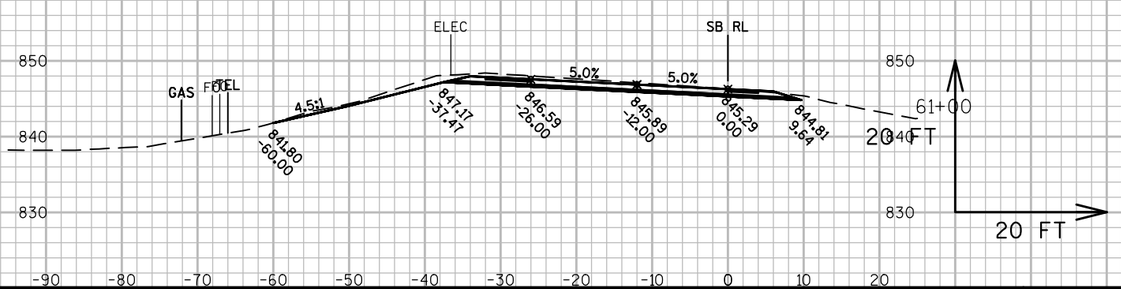








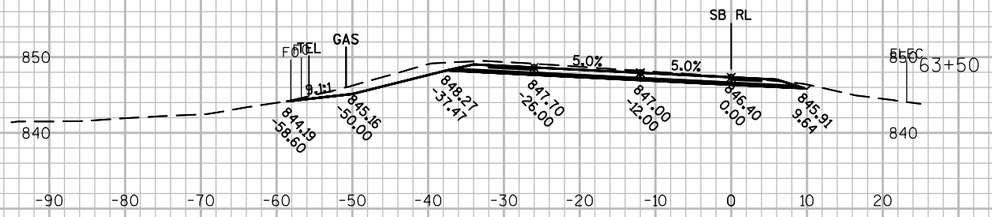


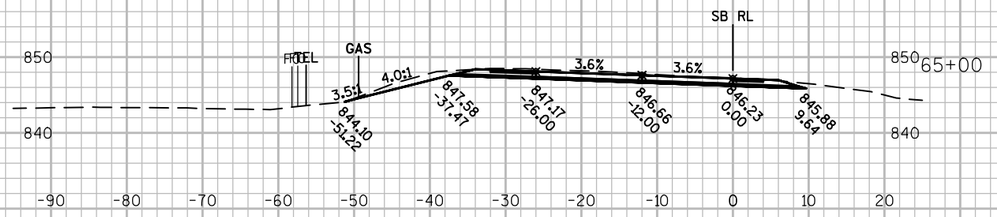


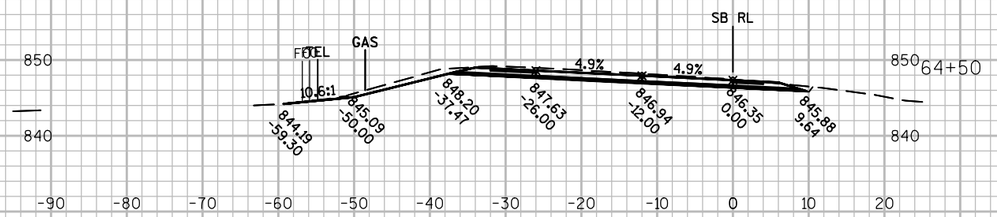
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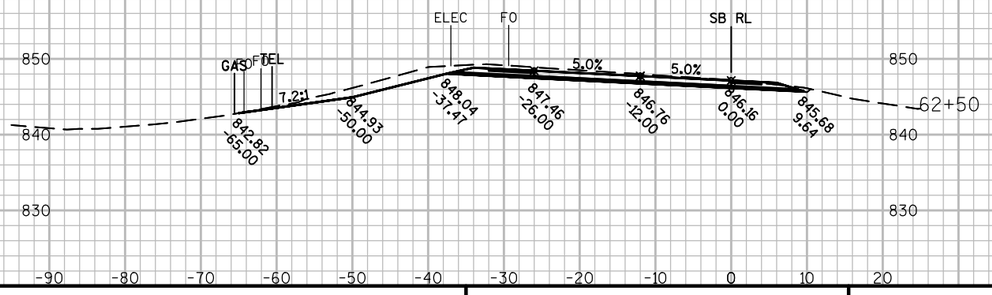
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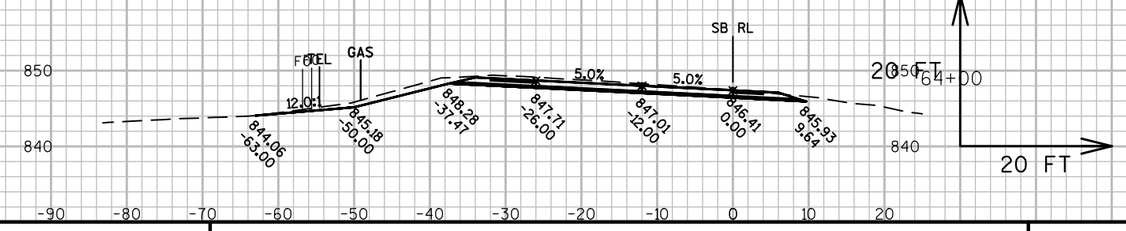
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 348	E











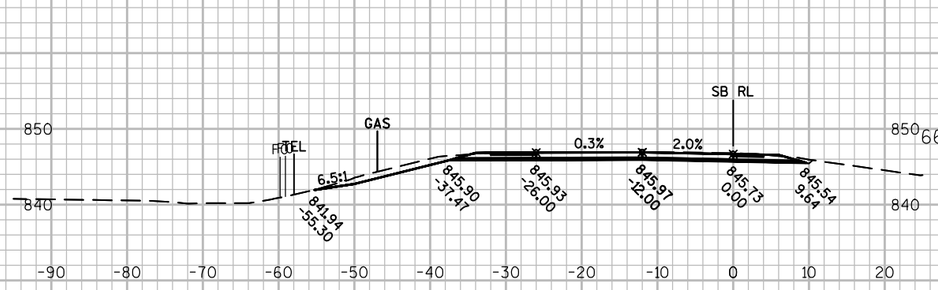
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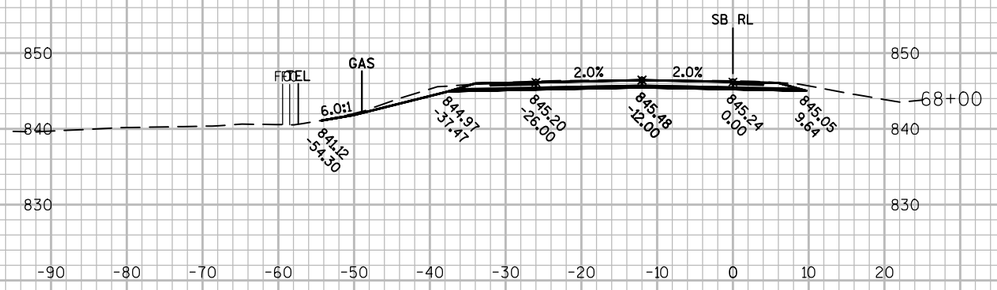
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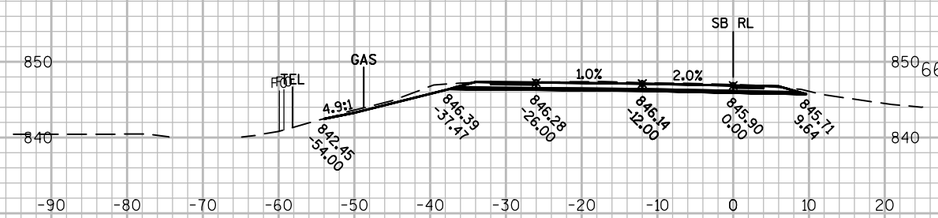
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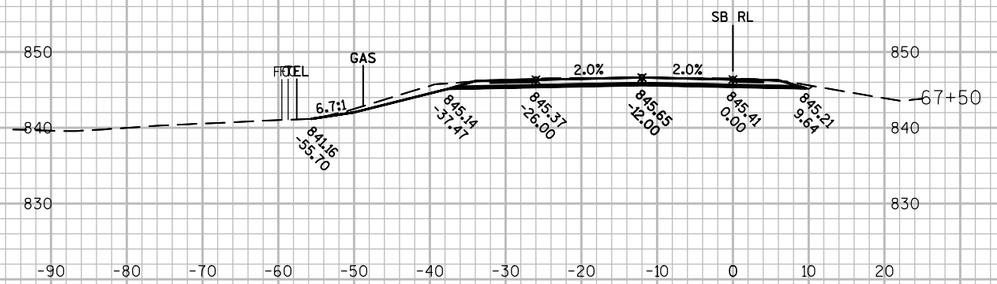
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LAYOUT NAME - (11)

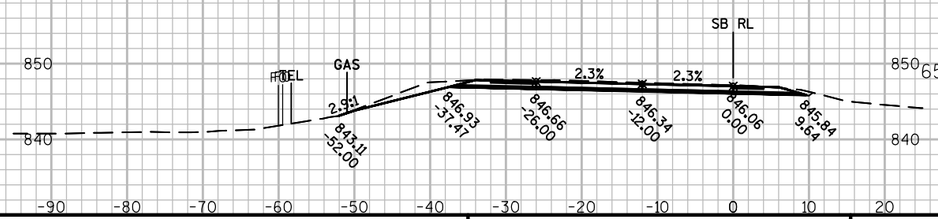
PLOT DATE : 10/23/2017 1:06 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

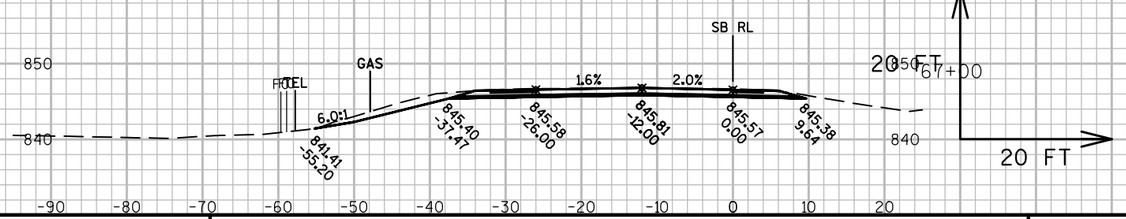












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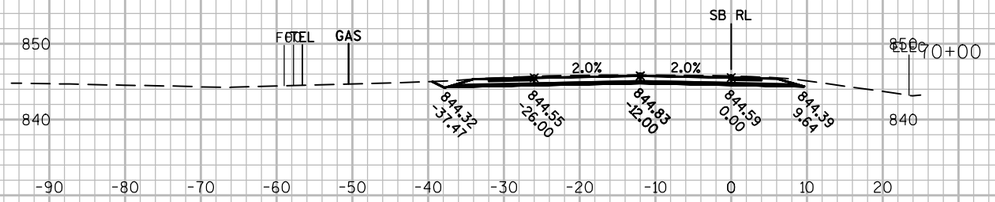
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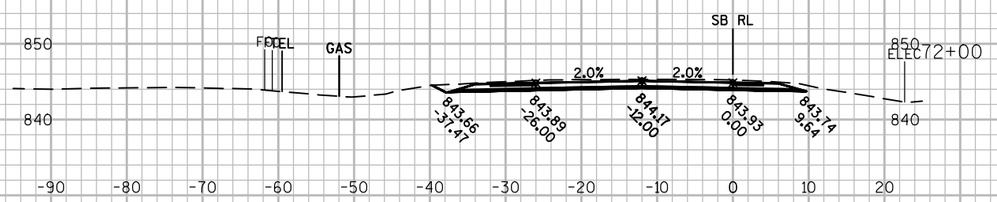
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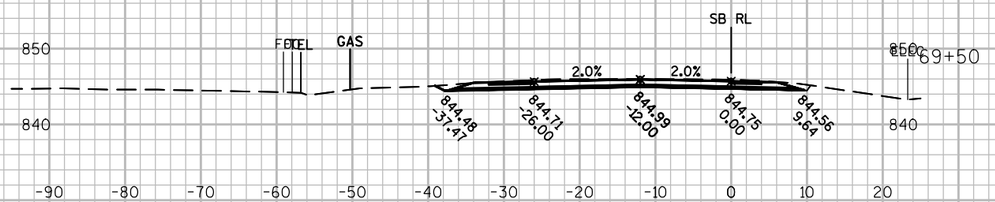
FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 SB.DWG
LAYOUT NAME - (12)

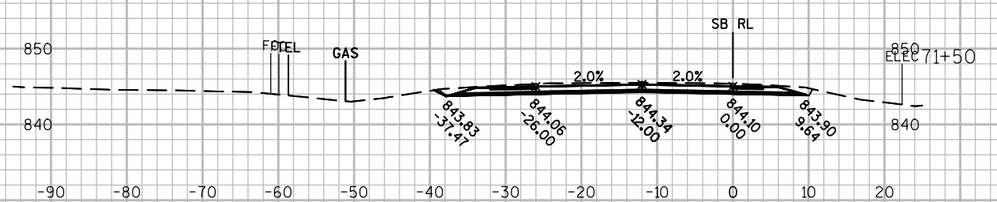
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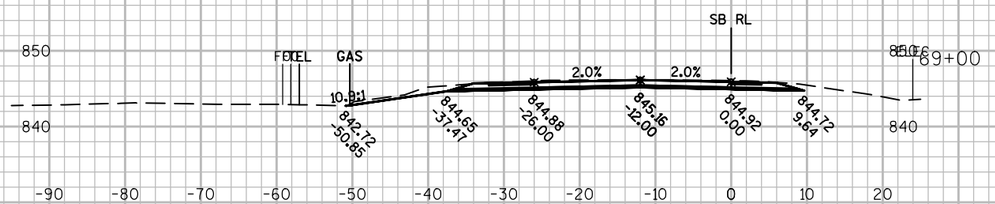
WISDOT/CADDS SHEET 49

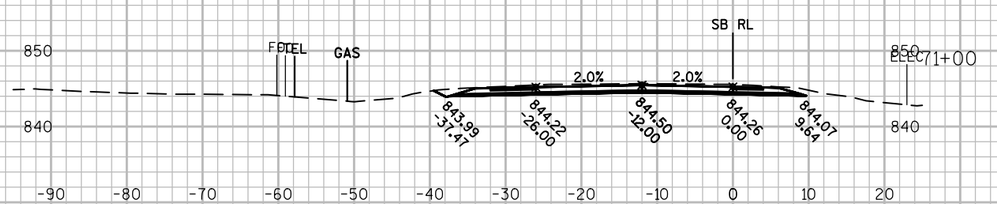


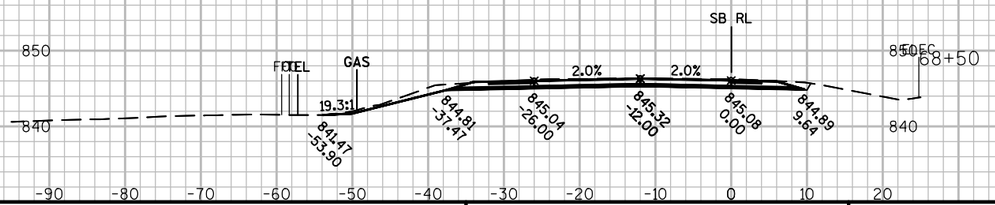


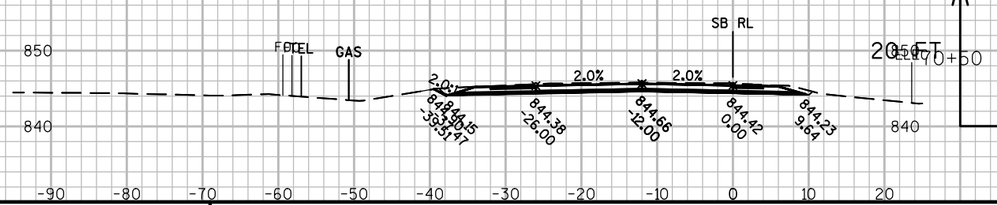












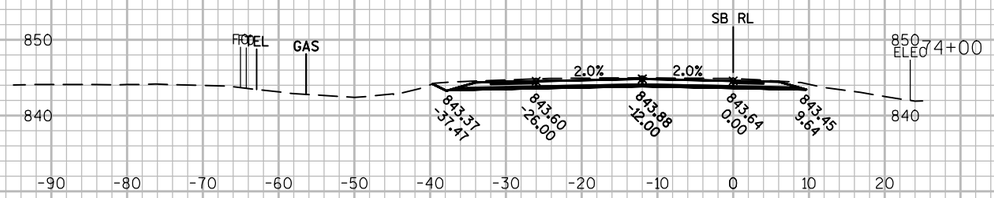
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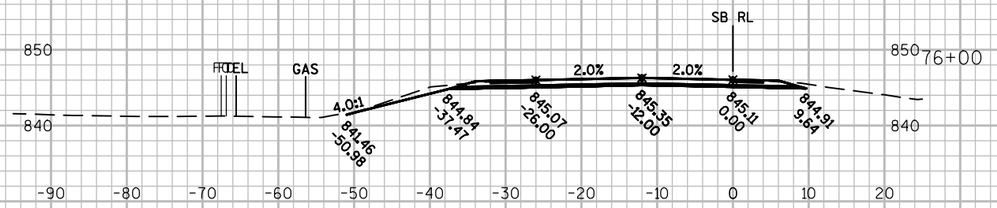
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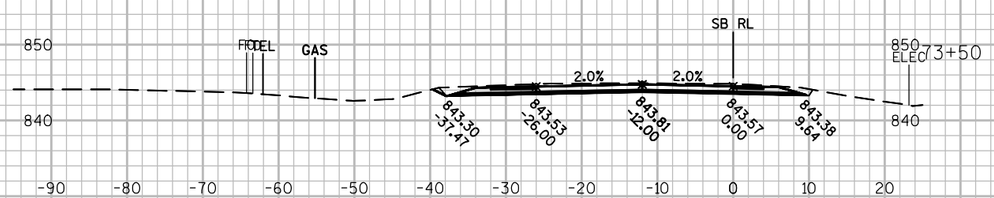
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 351	E

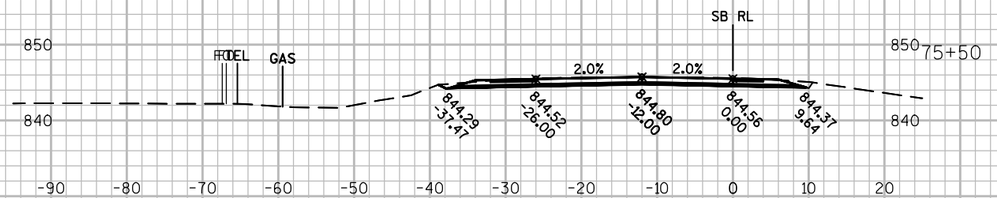
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LAYOUT NAME - (13)

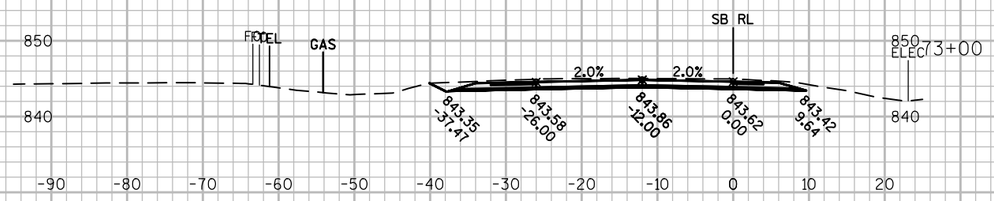
PLOT DATE : 10/23/2017 1:06 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

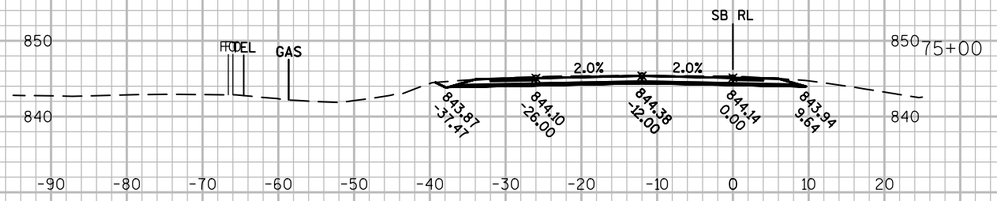
















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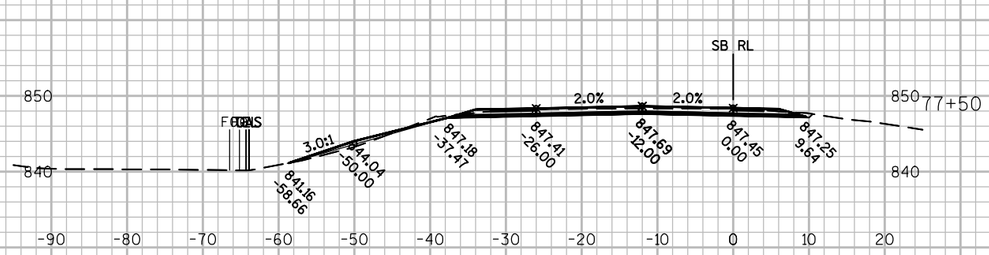
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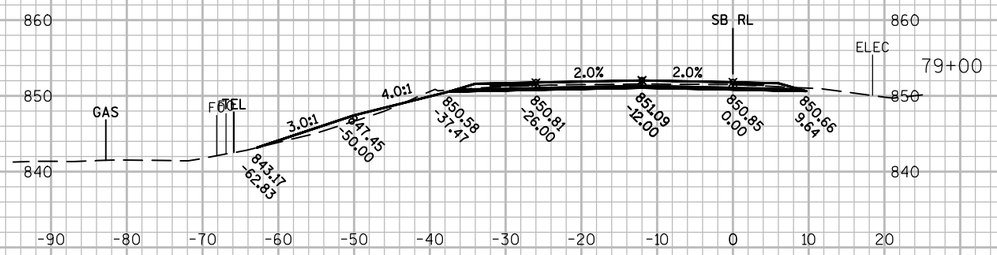
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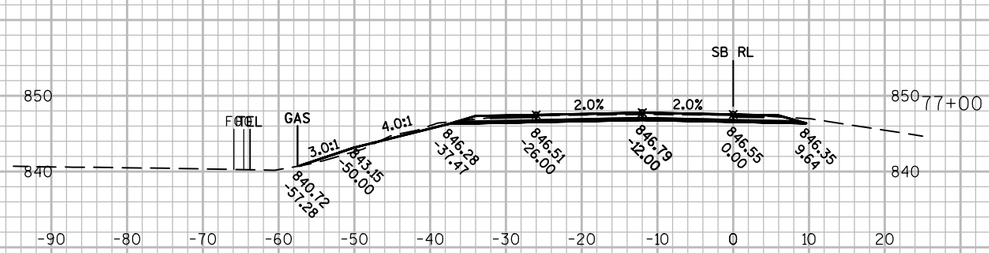
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LAYOUT NAME - (14)

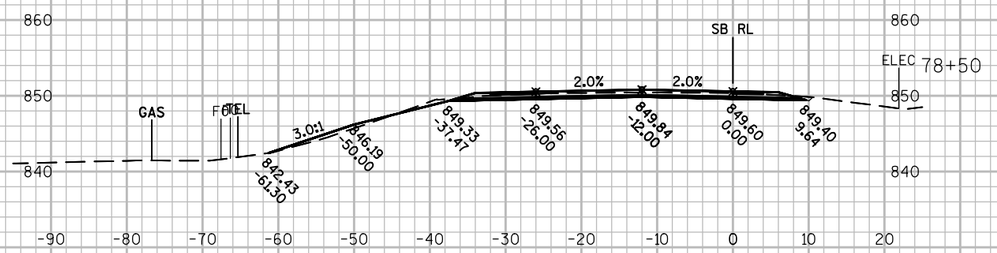
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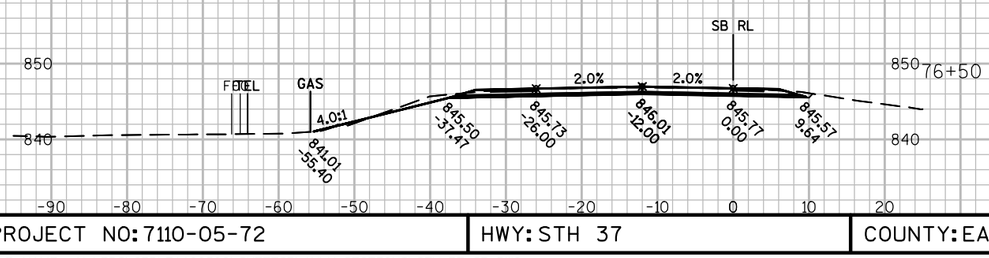
WISDOT/CADDS SHEET 49

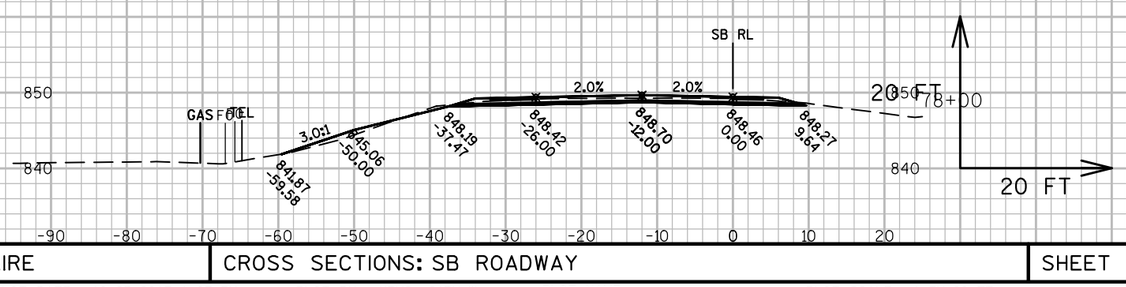












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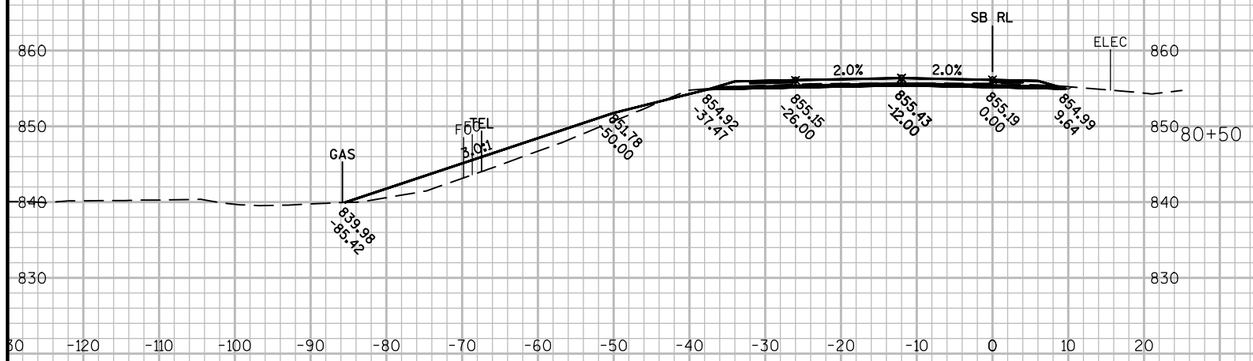
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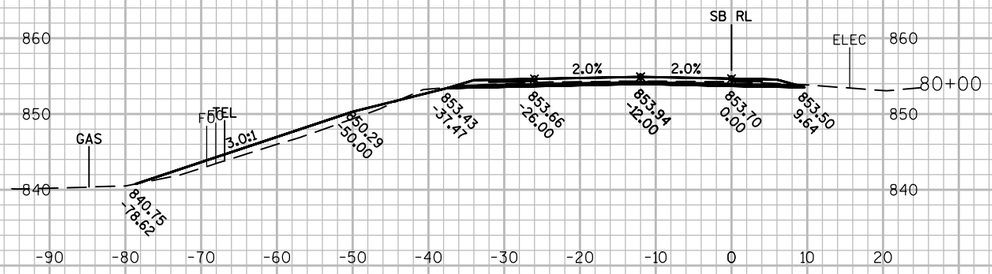
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 353	E

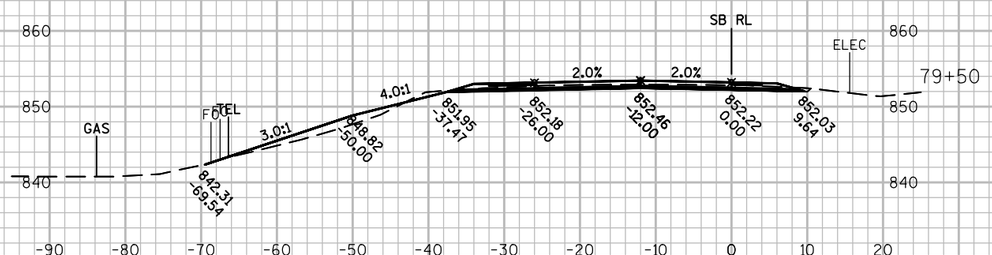
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LAYOUT NAME - (15)

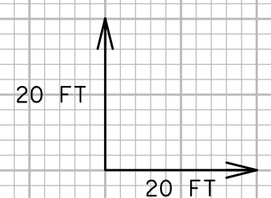
PLOT DATE : 10/23/2017 1:07 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49







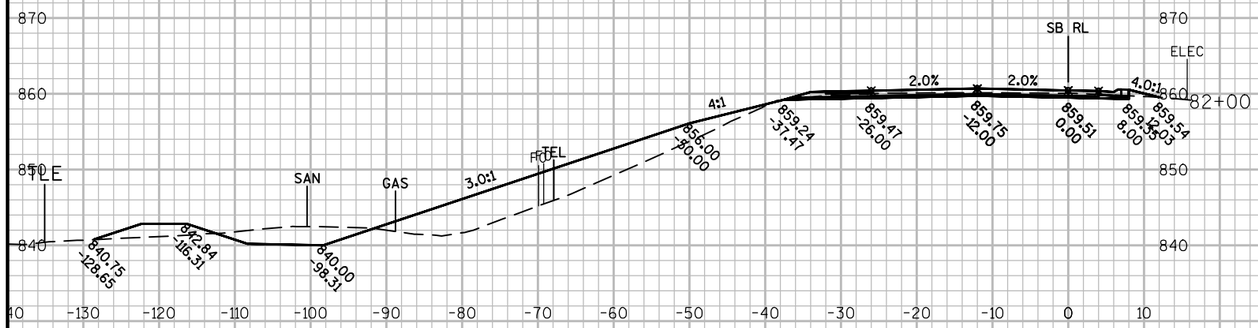


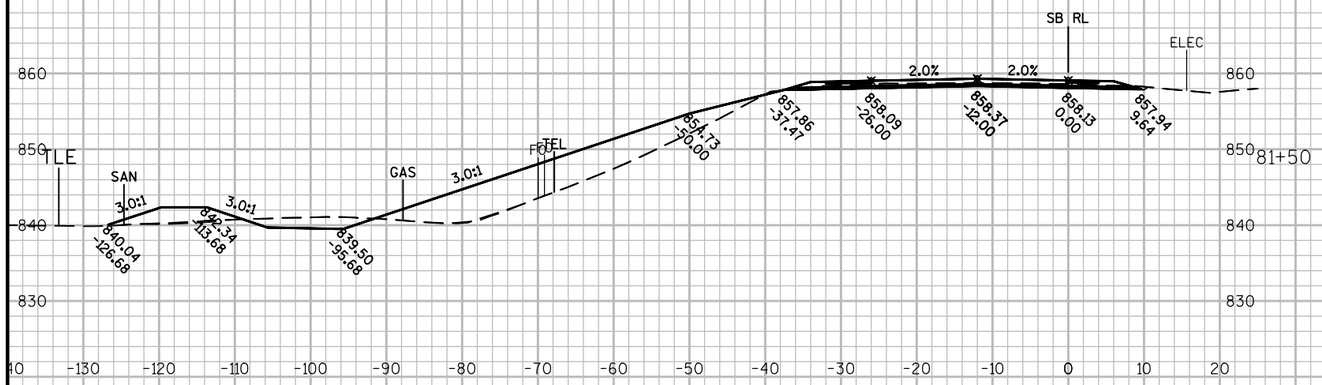
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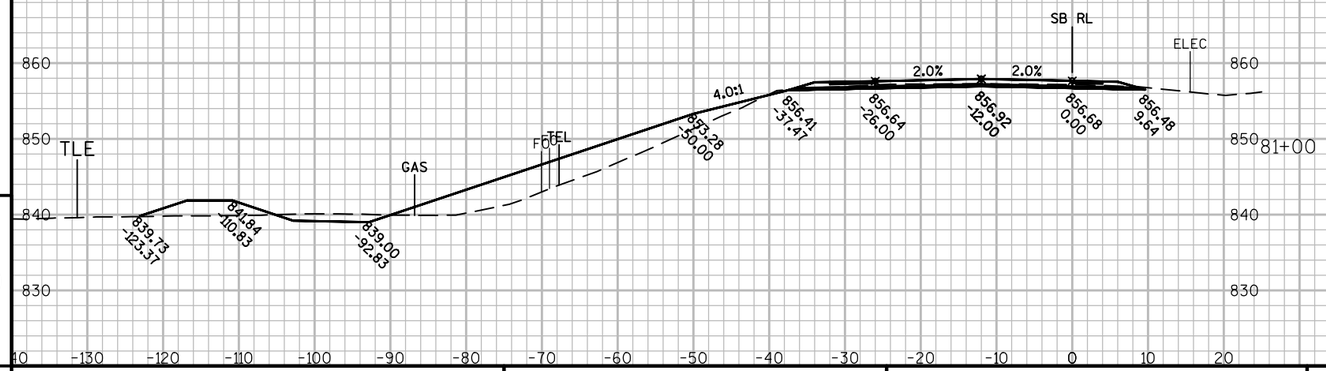
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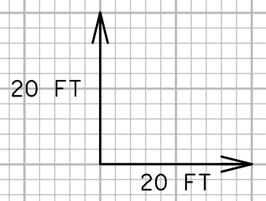
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 354	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 SB.DWG
LAYOUT NAME - (16)
PLOT DATE : 10/23/2017 1:07 PM
PLOT BY : KRUG, GARY W
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49





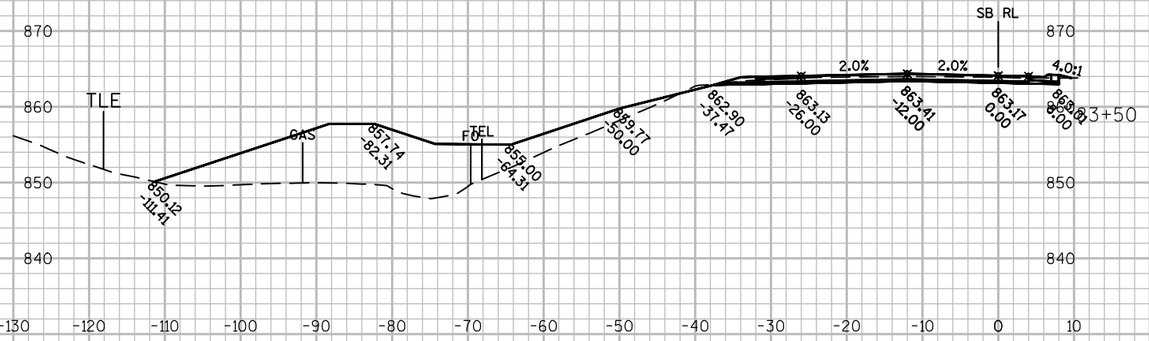


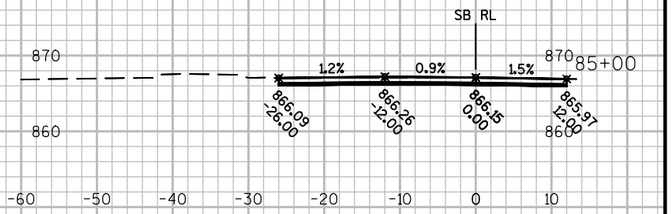


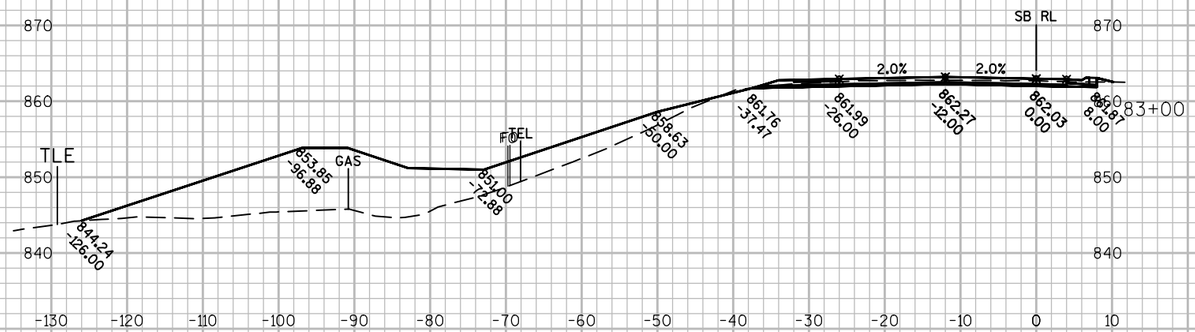
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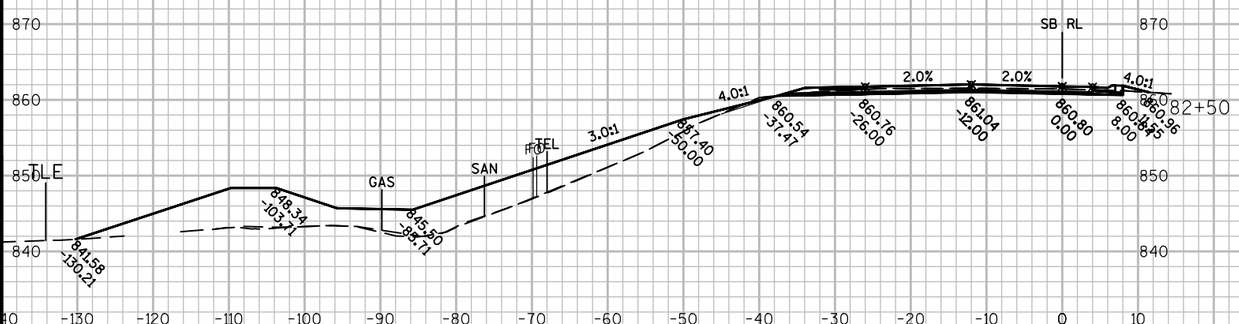
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 355	E

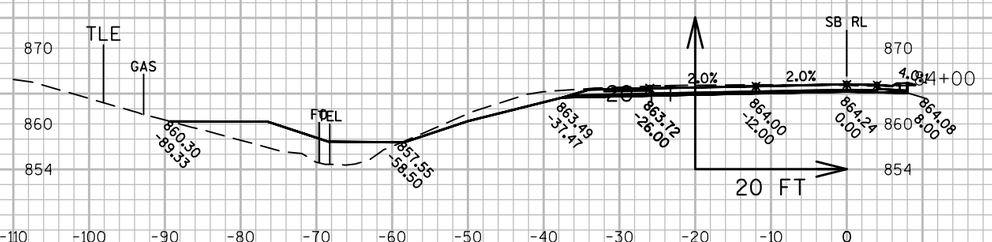










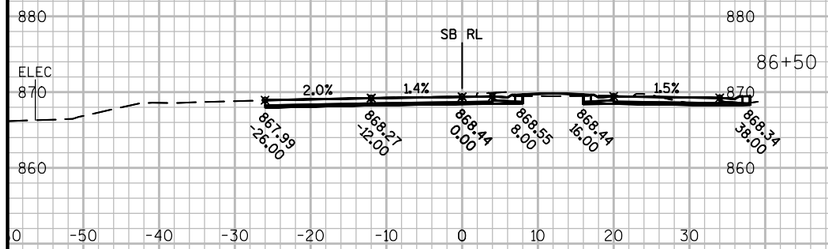


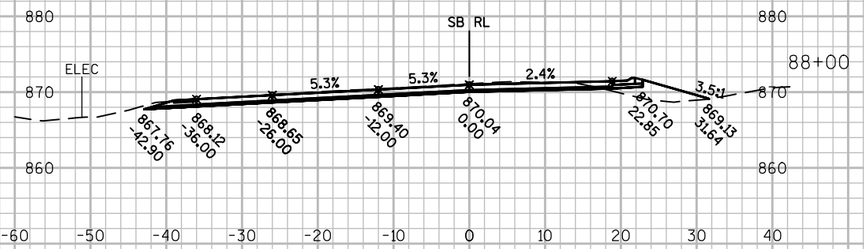
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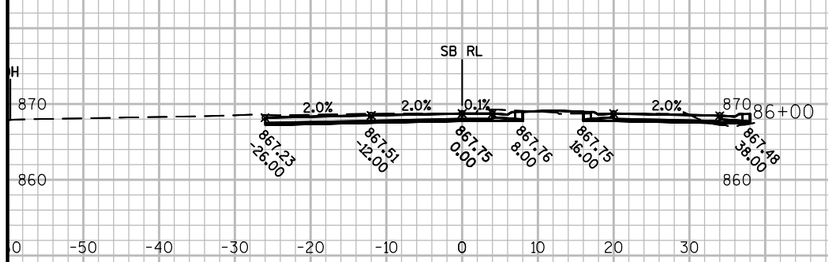
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LAYOUT NAME - (18)

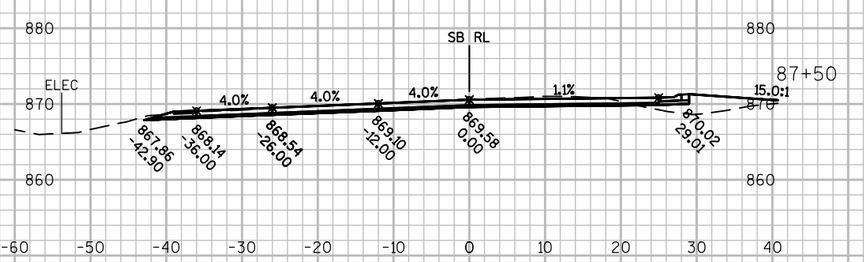
PLOT DATE : 10/23/2017 1:07 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

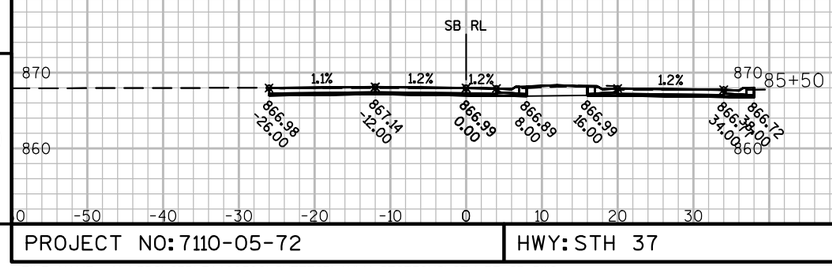
WISDOT/CADDS SHEET 49

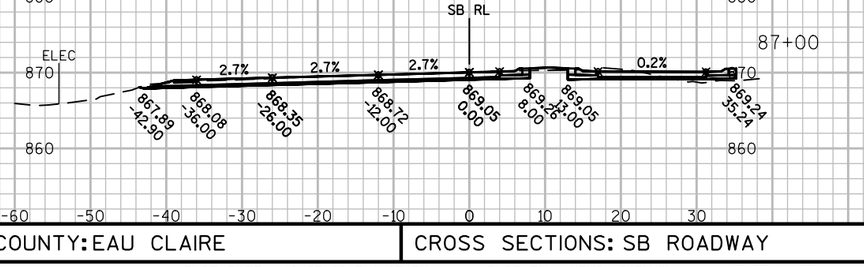


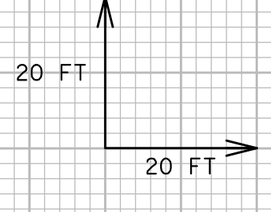












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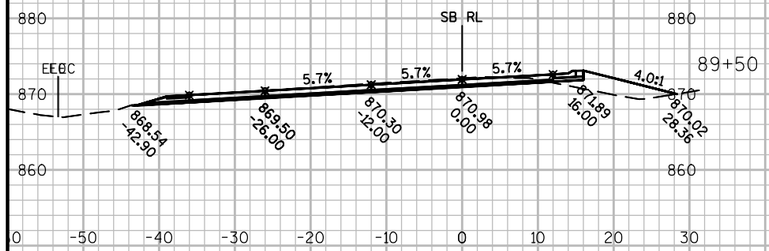
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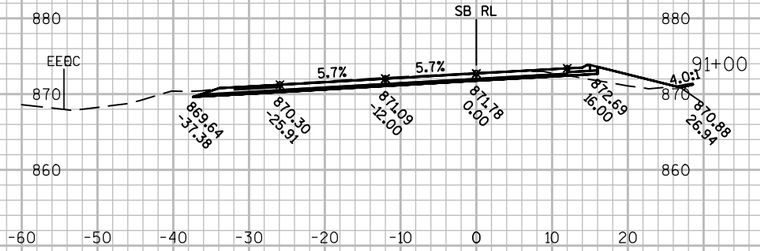
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 357	E

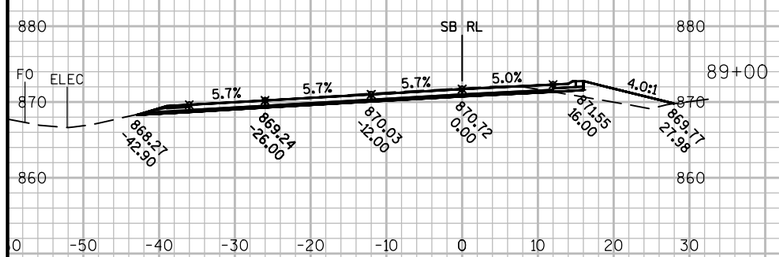
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LAYOUT NAME - (19)

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WISDOT/CADDS SHEET 49



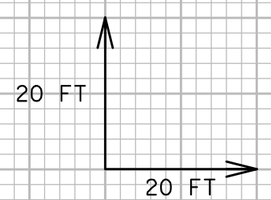












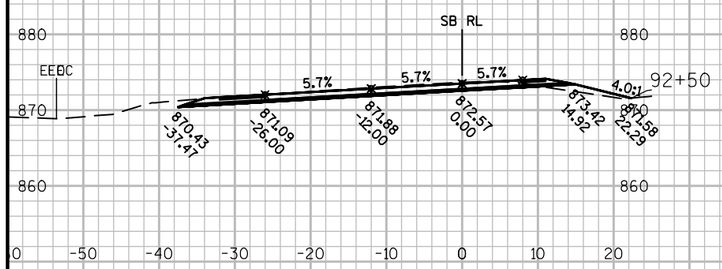
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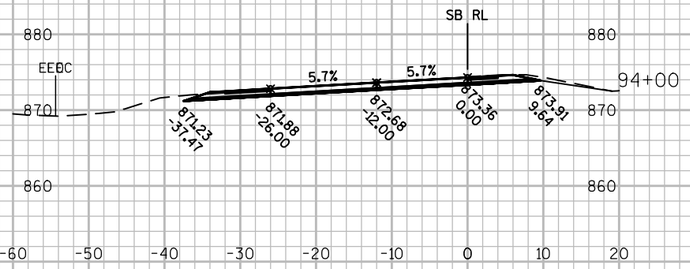
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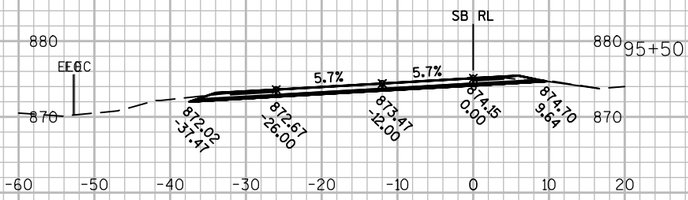
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 358	E

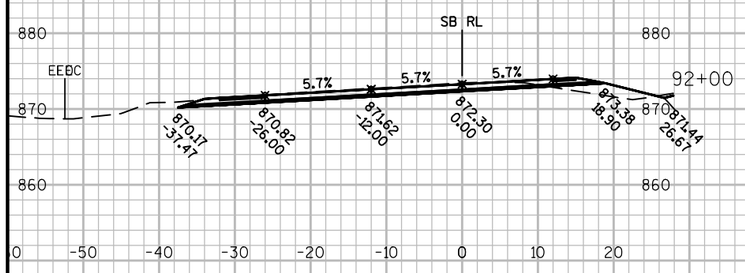
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LAYOUT NAME - (20)

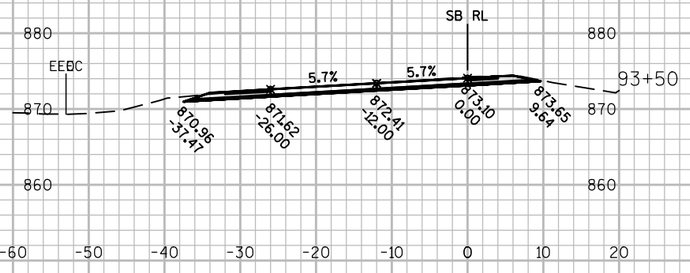
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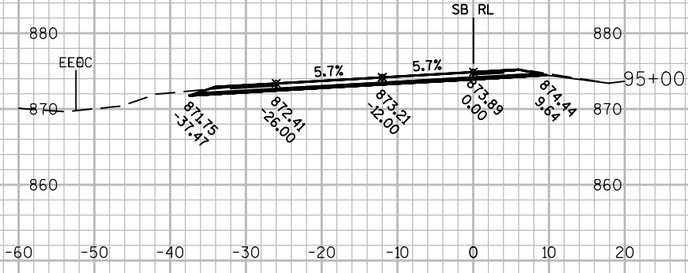






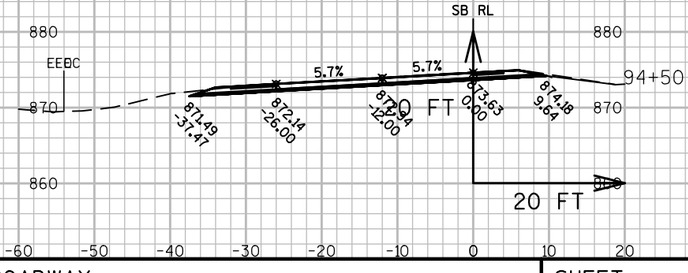












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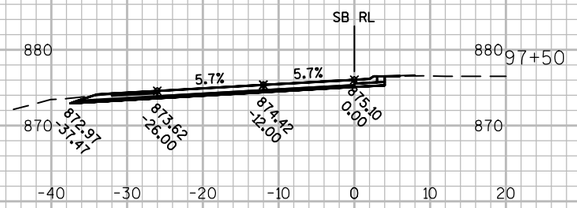
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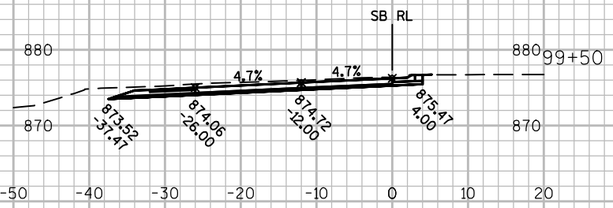
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 359	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\STH 37 SB.DWG
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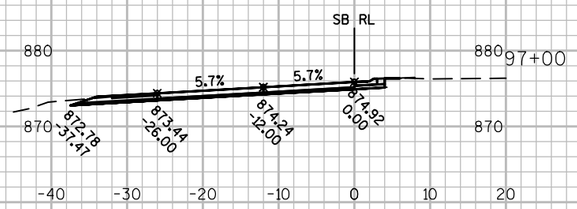
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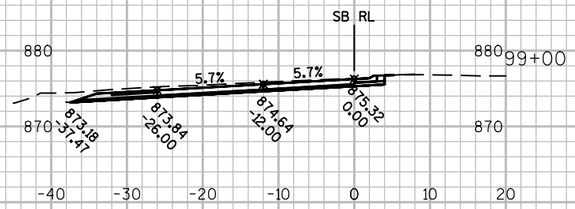
WISDOT/CADDS SHEET 49

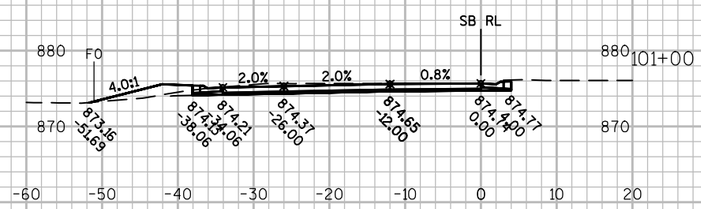


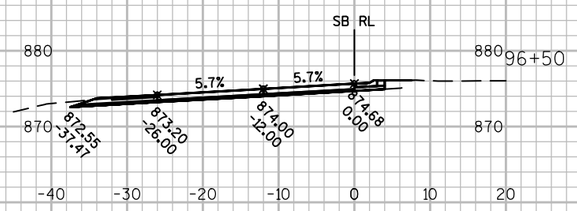


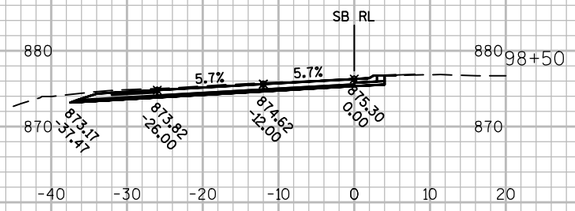
STATION 101+12 MATCH EXISTING



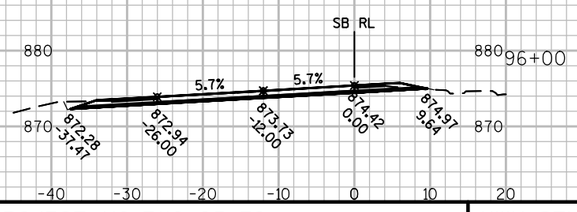


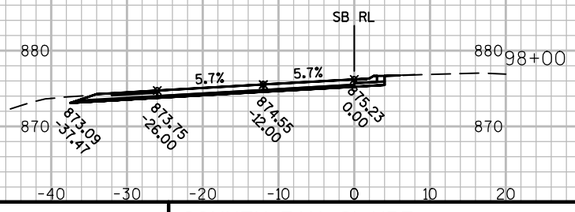














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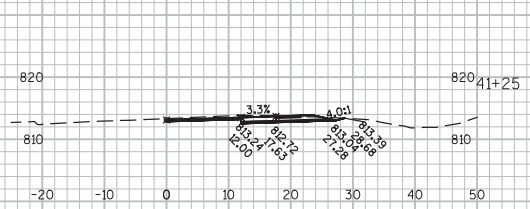
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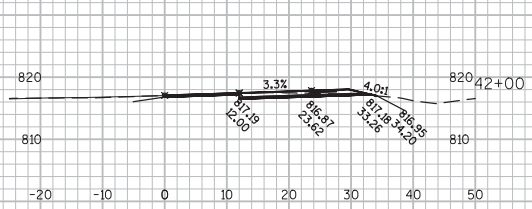
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SB ROADWAY	SHEET 360	E

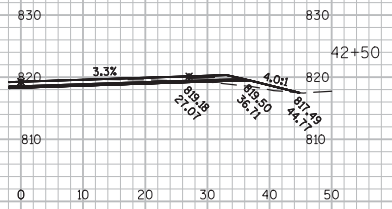
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LAYOUT NAME - (22)

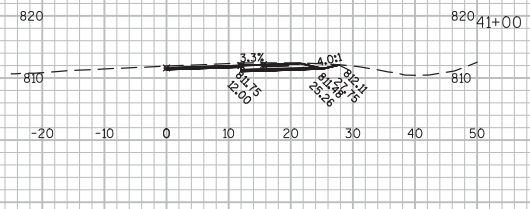
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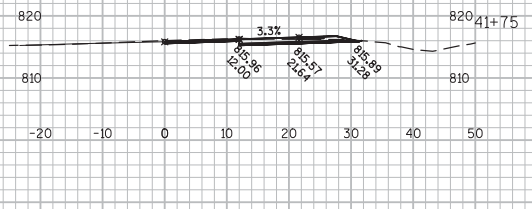
Addendum No. 1
I.D. 7110-05-72
Added Sheet 361A
March 6, 2018

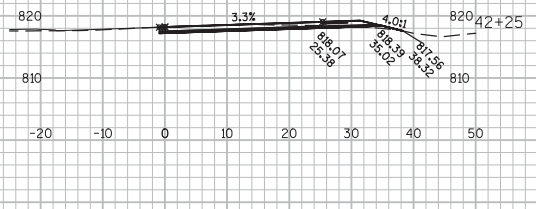


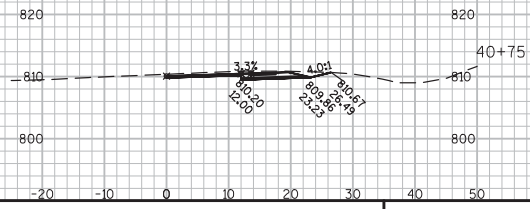


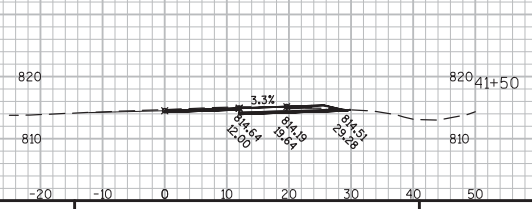


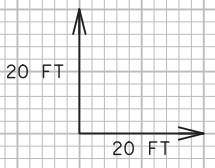












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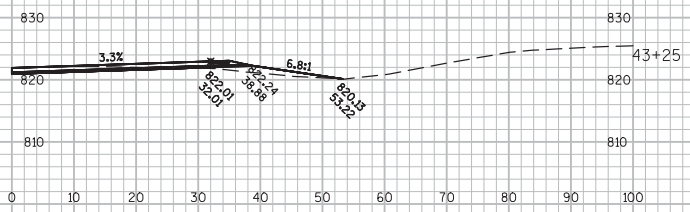
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SHORT STREET	SHEET	E

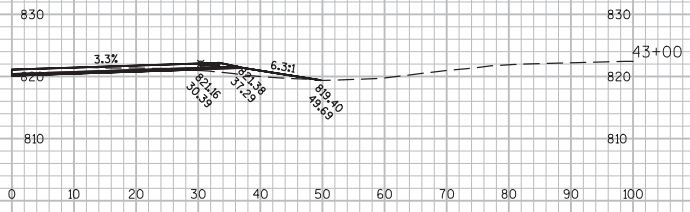
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LAYOUT NAME - ****
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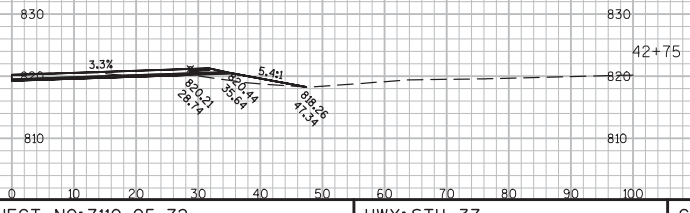
WISDOT/CADDS SHEET 49

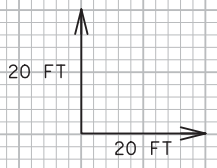
Added Sheet 360.A

Addendum No. 1
I.D. 7110-05-72
Added Sheet 361B
March 6, 2018









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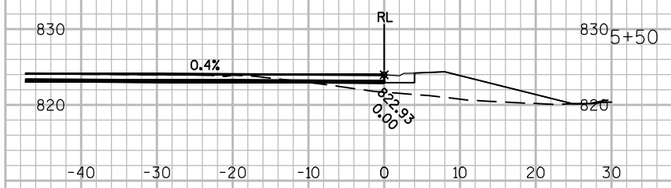
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FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\SIDEROAD SECTIONS.DWG
LAYOUT NAME - ****

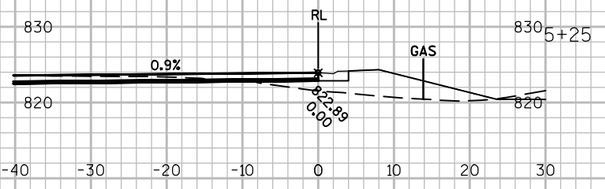
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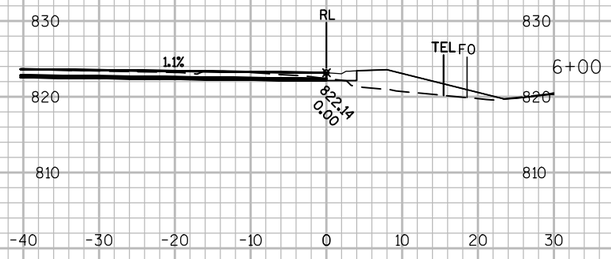
WISDOT/CADDS SHEET 49

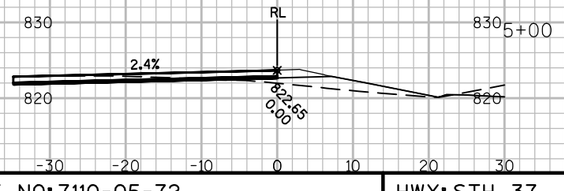
Added Sheet 360.B



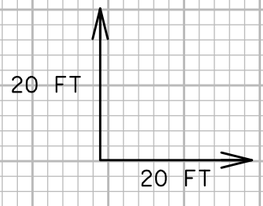












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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SHORT STREET-SOUTH QUADRANT	SHEET 361	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\SIDEROAD SECTIONS.DWG
LAYOUT NAME - SHORT STREET-SOUTH

PLOT DATE : 10/23/2017 2:37 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

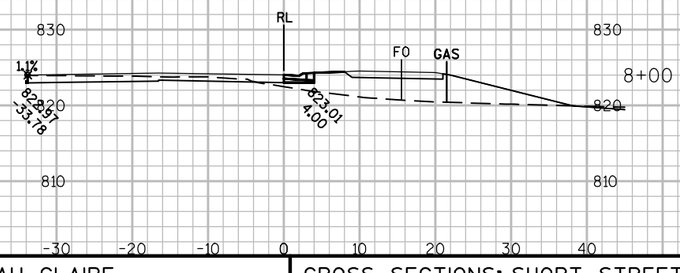
WISDOT/CADDS SHEET 49

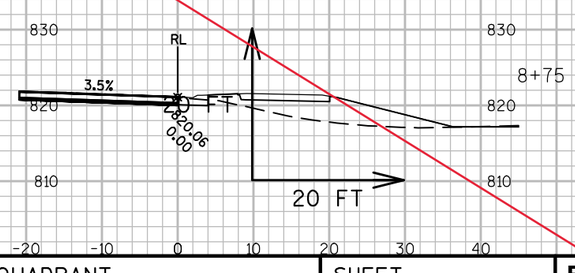












PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SHORT STREET-NORTH QUADRANT	SHEET 362	E

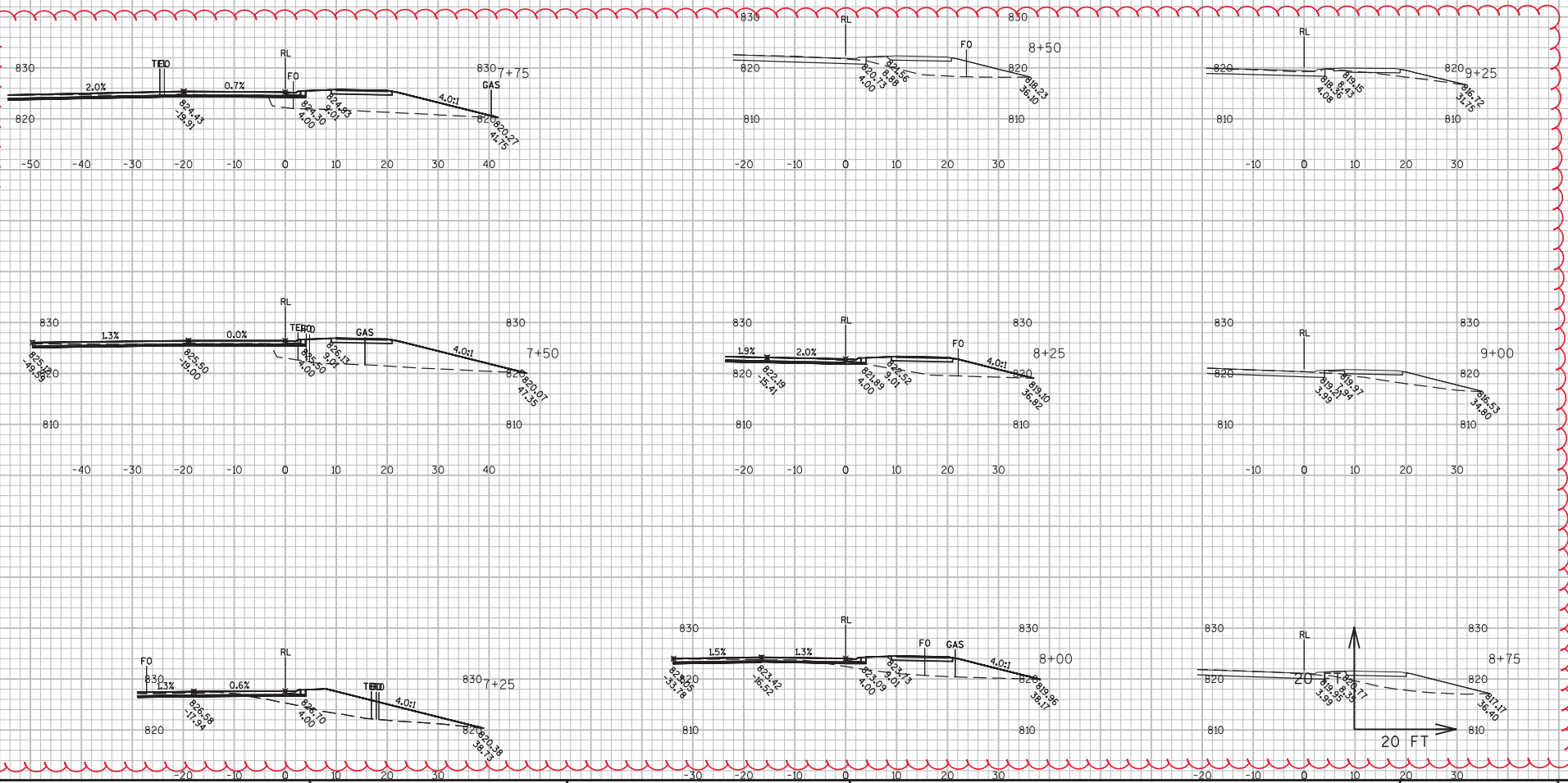
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LAYOUT NAME - ****

PLOT DATE : 10/23/2017 2:37 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

Replaced with "Revised Sheet 362"

Addendum No. 1
I.D. 7110-05-72
Revised Sheet 362
March 6, 2018



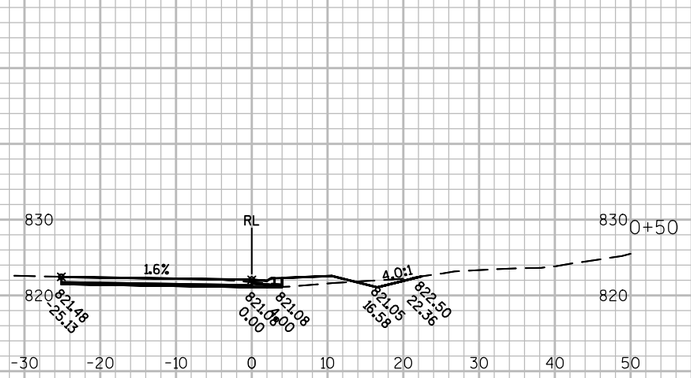
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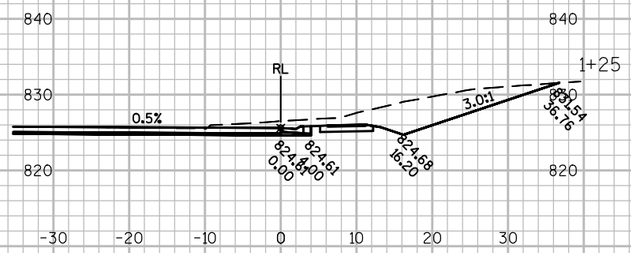
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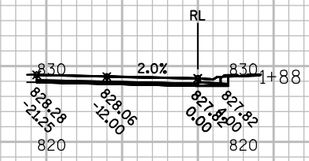
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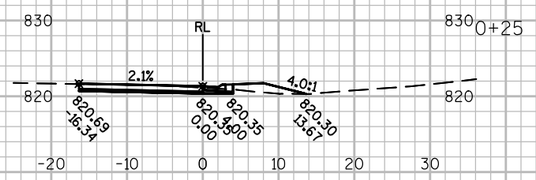
WISDOT/CADDS SHEET 49

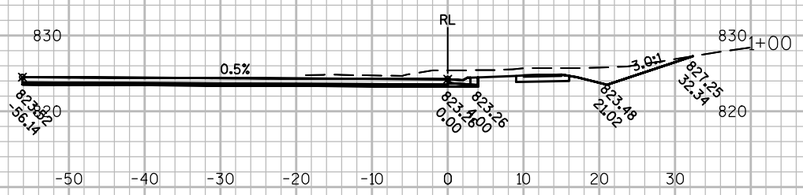
Revised Sheet 362

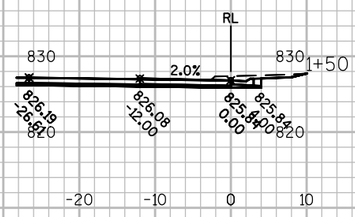




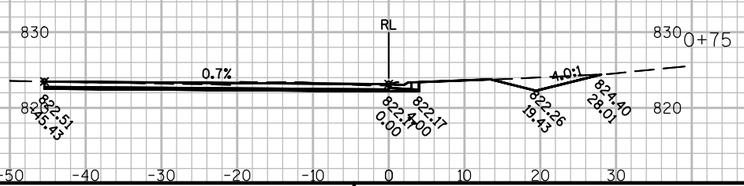


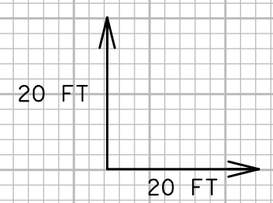








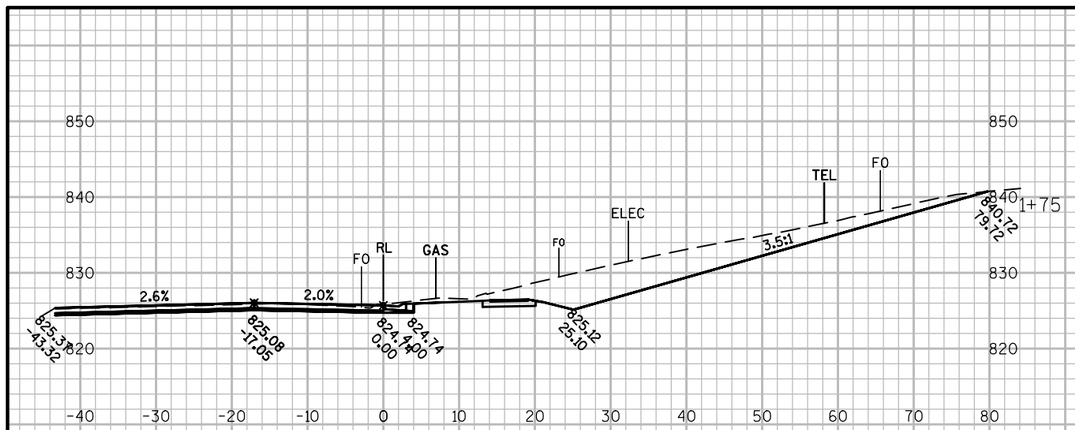


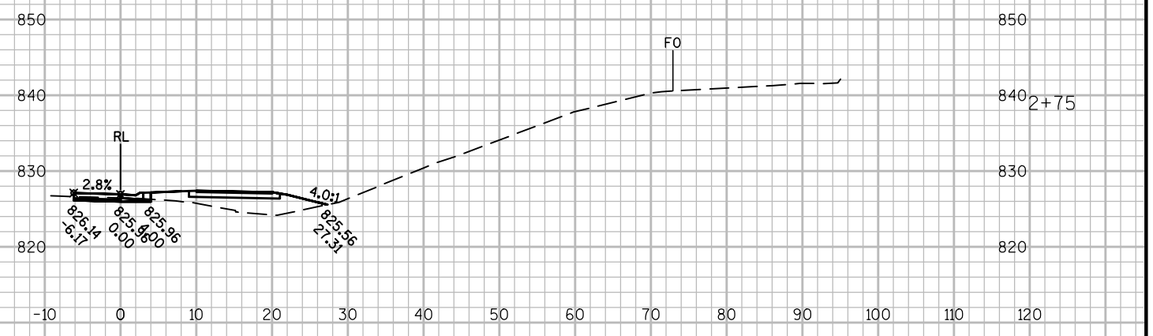


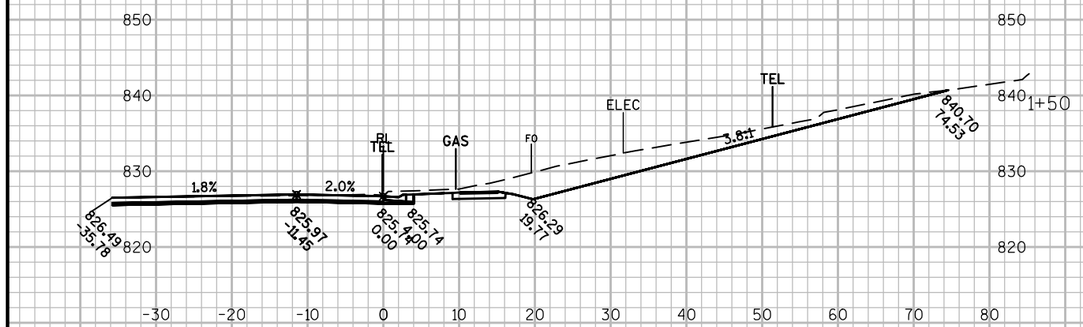
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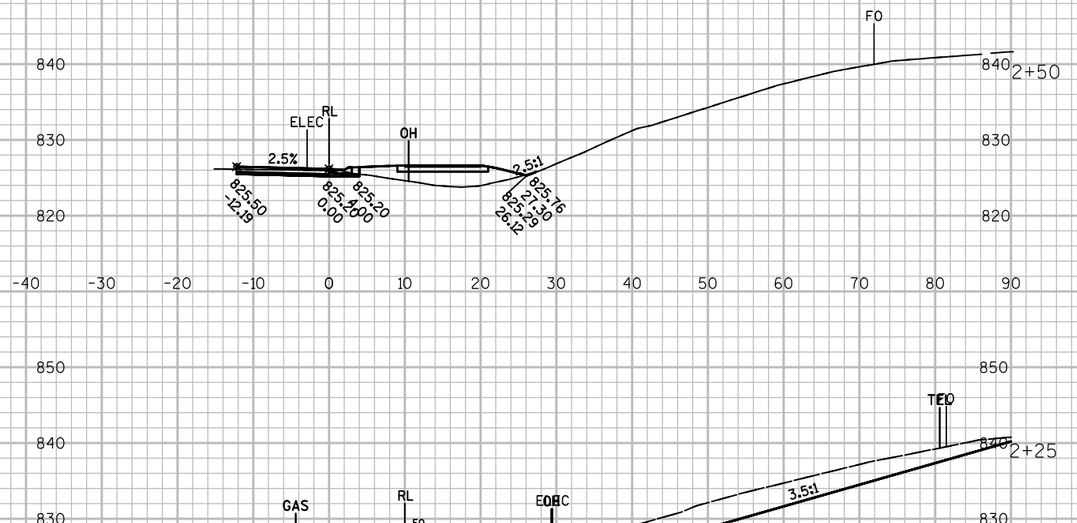
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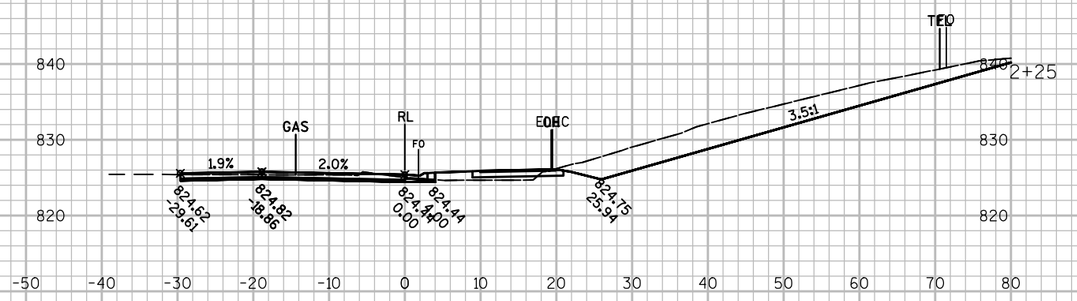
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: HAMILTON AVENUE-SOUTH QUADRANT	SHEET 363	E

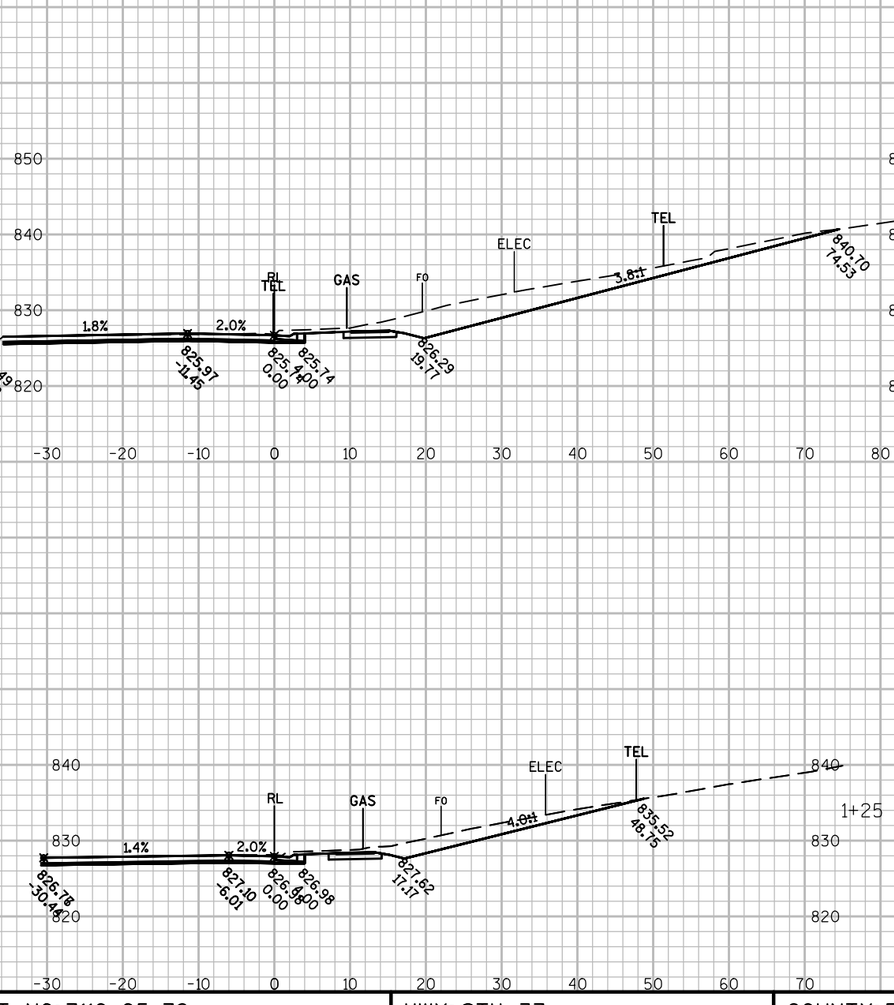


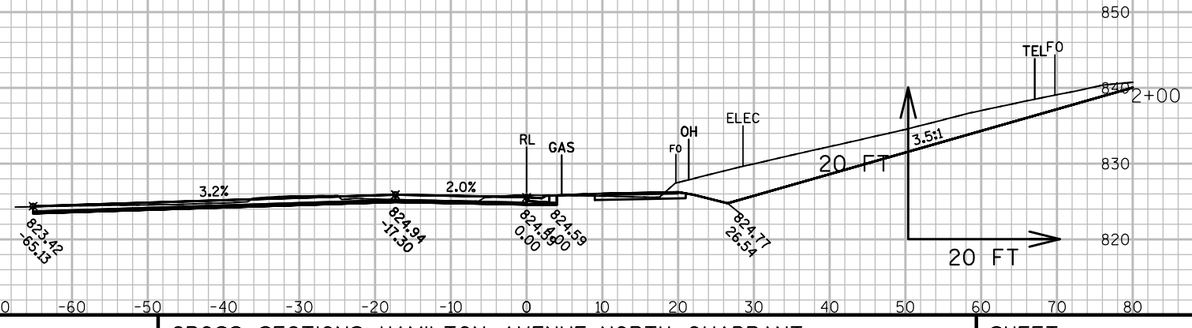








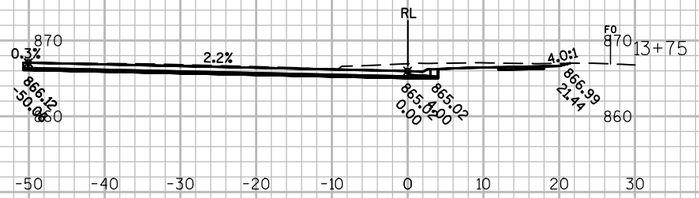


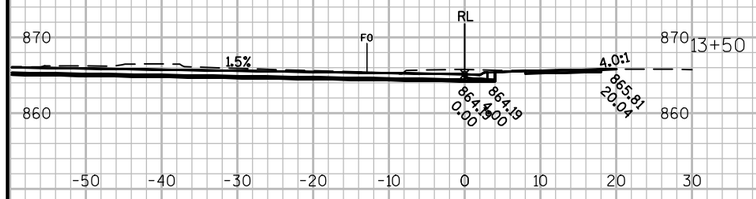


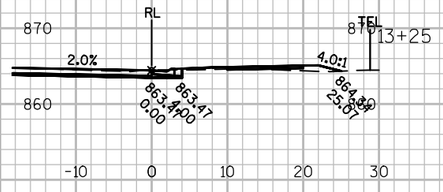
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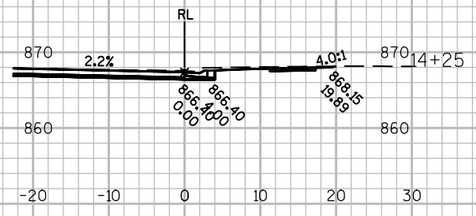
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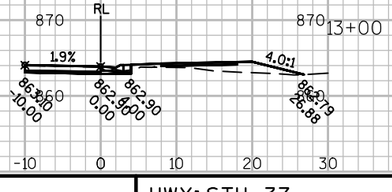
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: HAMILTON AVENUE-NORTH QUADRANT	SHEET 364	E

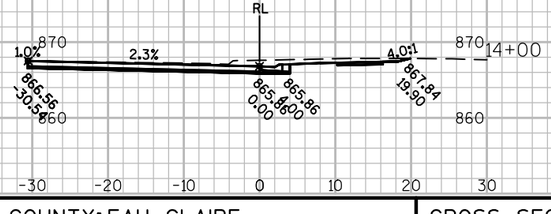


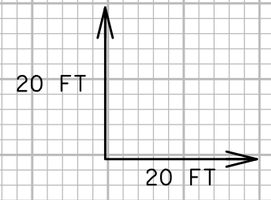












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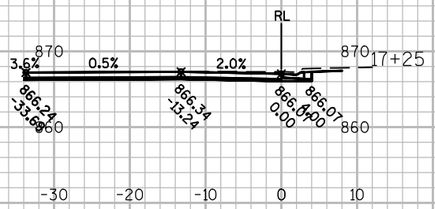
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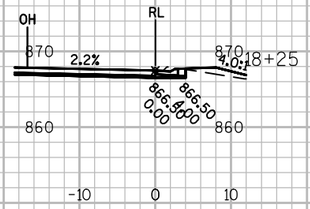
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: CRAIG ROAD-SOUTHWEST QUADRANT	SHEET 365	E

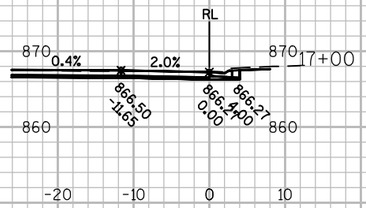
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LAYOUT NAME - CRAIG ROAD-SOUTH AND WEST

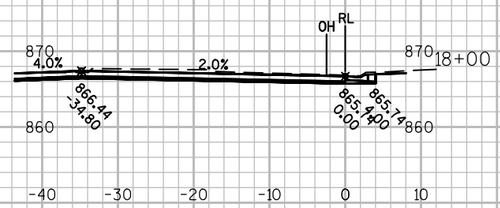
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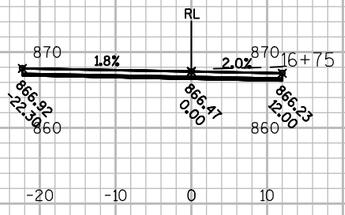
WISDOT/CADDS SHEET 49

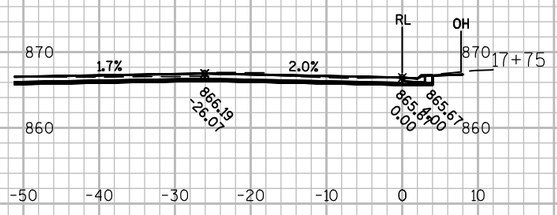


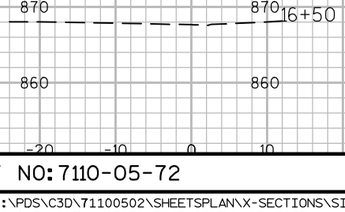


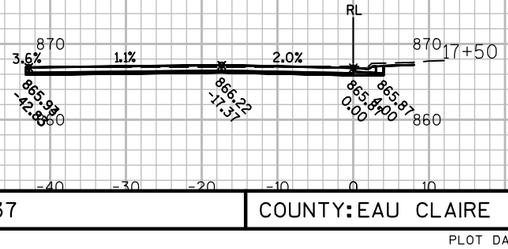


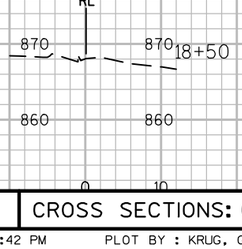


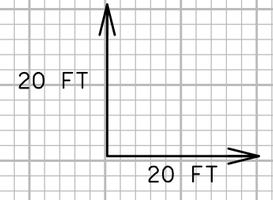












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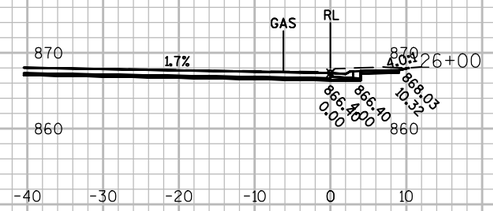
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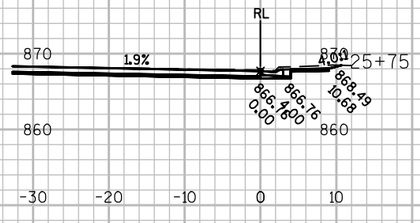
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: CRAIG ROAD-SOUTHEAST QUADRANT	SHEET 366	E

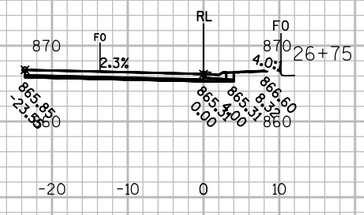
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LAYOUT NAME - CRAIG ROAD-SOUTH AND EAST

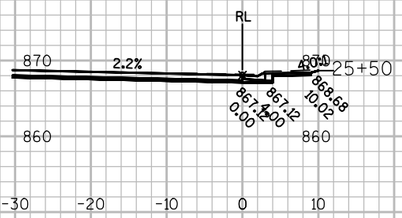
PLOT DATE : 10/23/2017 3:42 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

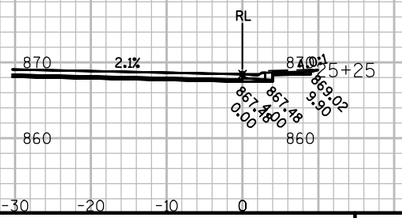




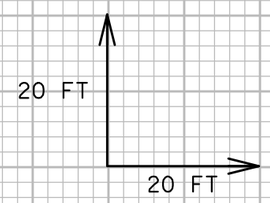












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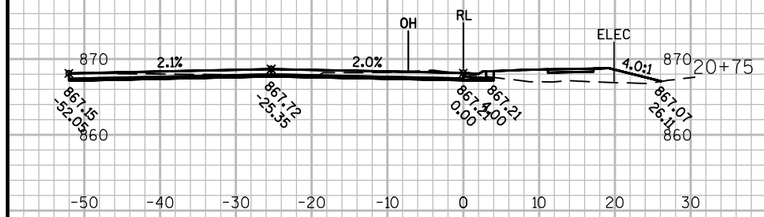
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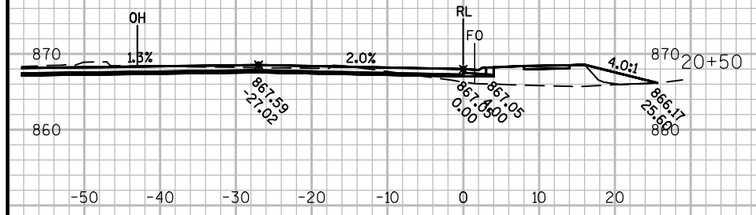
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: CRAIG ROAD-NORTHWEST QUADRANT	SHEET 367	E

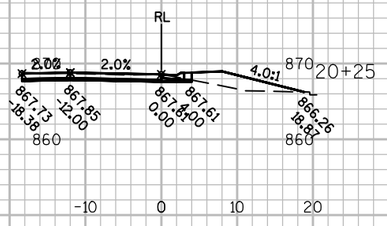
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LAYOUT NAME - CRAIG ROAD-NORTH AND WEST

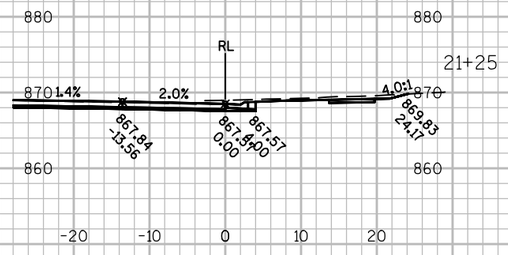
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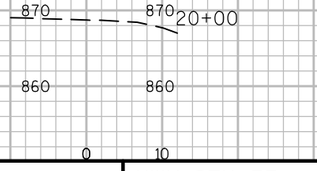
WISDOT/CADDS SHEET 49

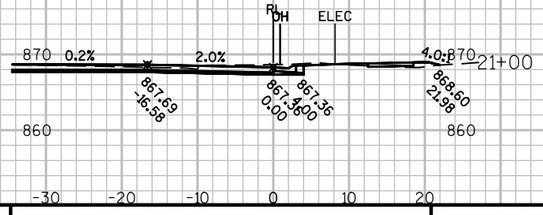


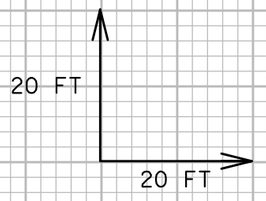












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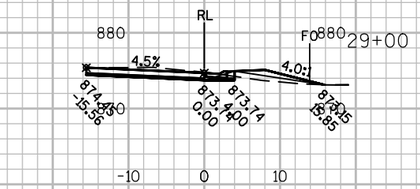
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: CRAIG ROAD-NORTHEAST QUADRANT	SHEET 368	E

FILE NAME : N:\PDS\C3D\71100502\SHEETSPLAN\X-SECTIONS\SIDEROAD SECTIONS.DWG
LAYOUT NAME - CRAIG ROAD-NORTH AND EAST

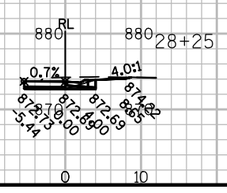
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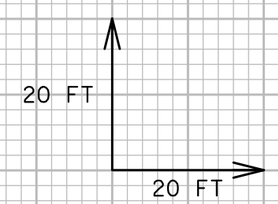
WISDOT/CADDS SHEET 49











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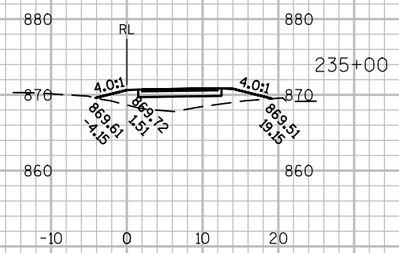
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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: US 12-SOUTHWEST QUADRANT	SHEET 369	E

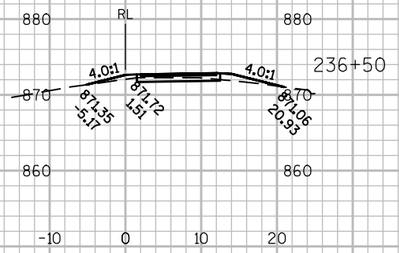
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LAYOUT NAME - US 12-SOUTH AND WEST

PLOT DATE : 10/23/2017 3:35 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

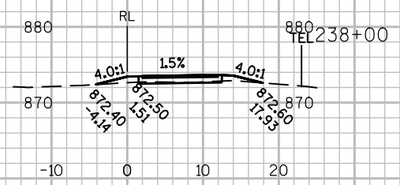
WISDOT/CADDS SHEET 49



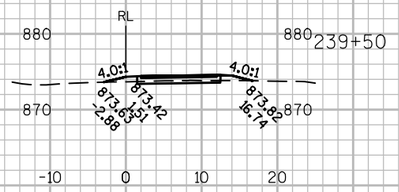
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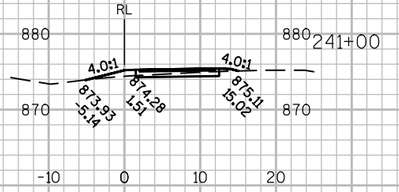
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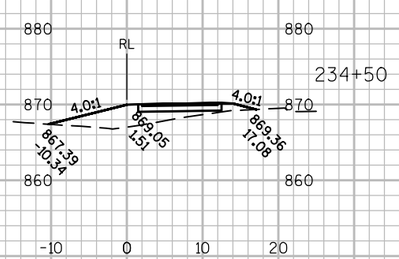
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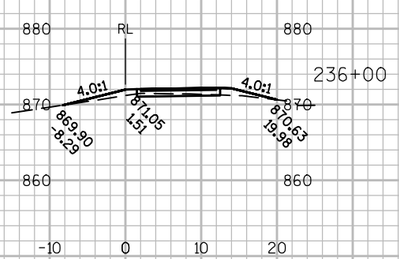
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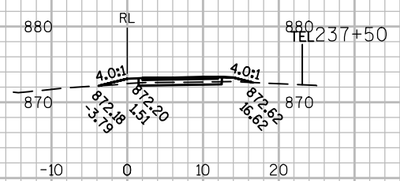
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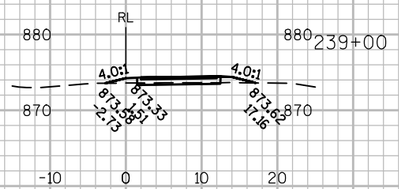
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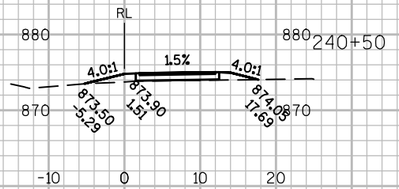
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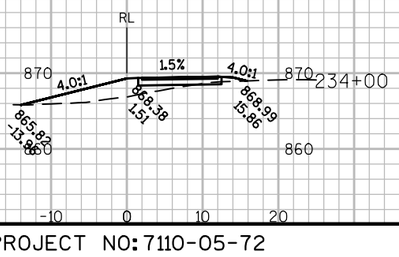


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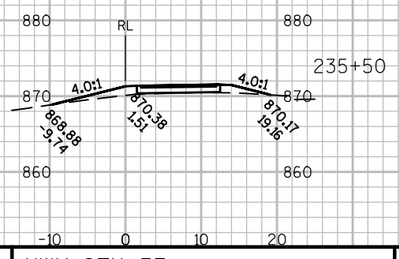


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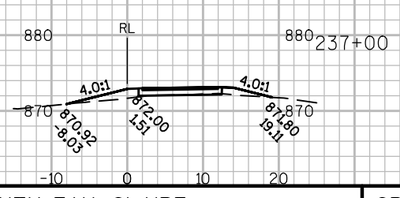
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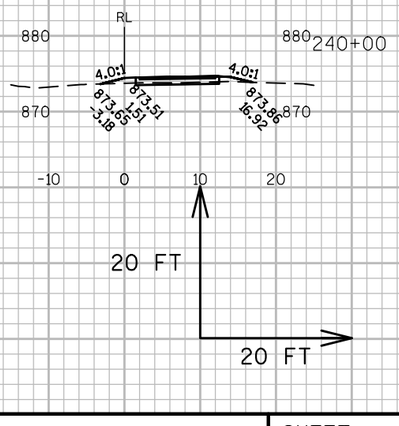
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237+00



238+50



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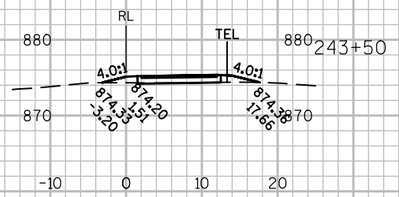
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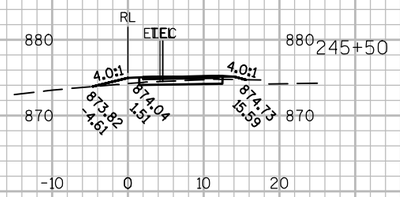
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SHARED USE PATH	SHEET 370	E

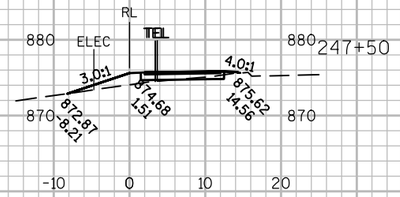
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LAYOUT NAME - SECTION SHEET - (4)

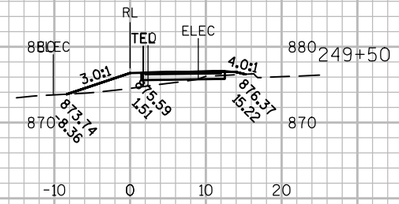
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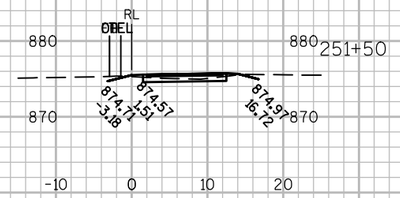
WISDOT/CADDS SHEET 49

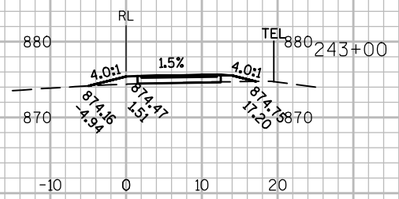


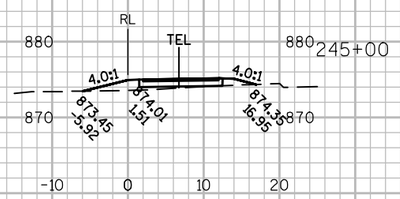


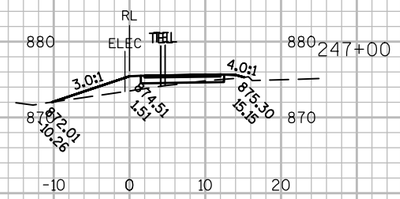


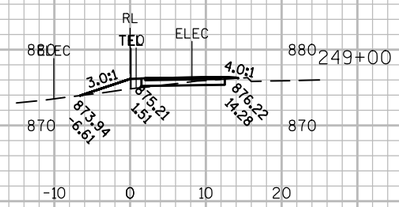


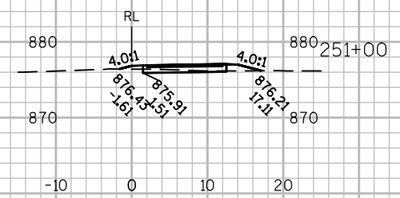


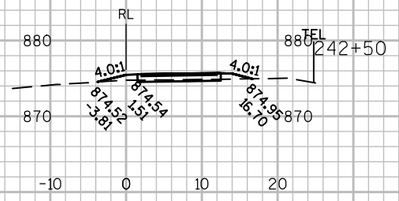


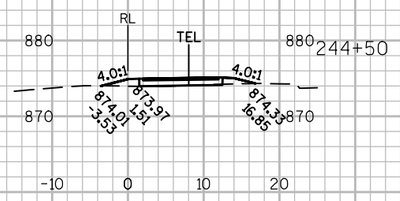




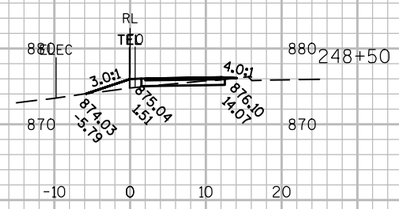


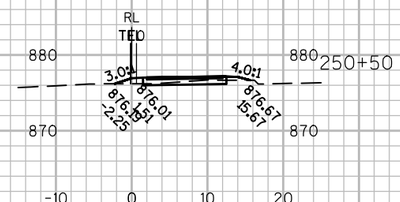




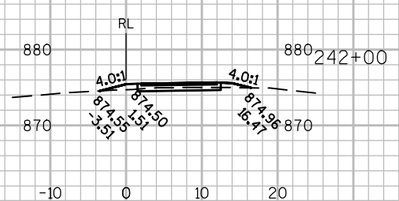


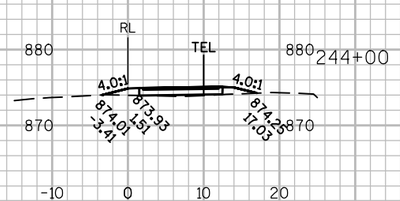


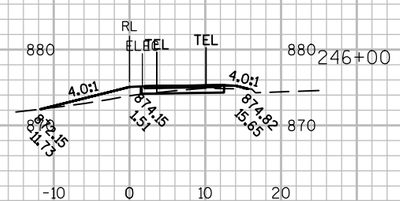


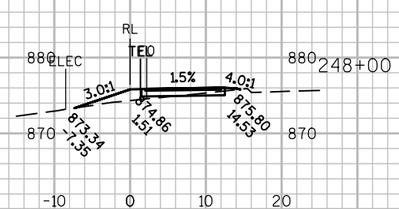


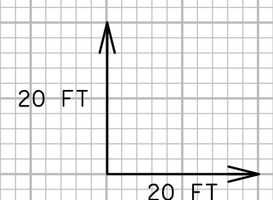












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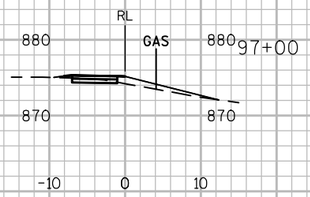
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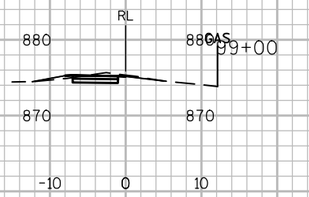
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SHARED USE PATH	SHEET 371	E

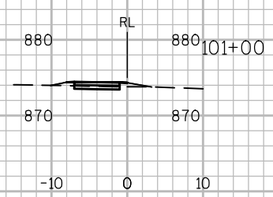
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LAYOUT NAME - SECTION SHEET - (5)

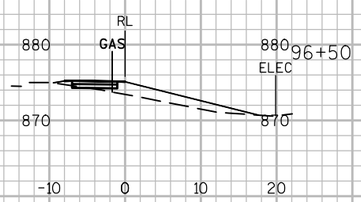
PLOT DATE : 10/23/2017 3:08 PM PLOT BY : KRUG, GARY W PLOT NAME : PLOT SCALE : 1 IN:20 FT

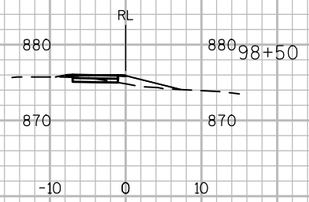
WISDOT/CADDS SHEET 49

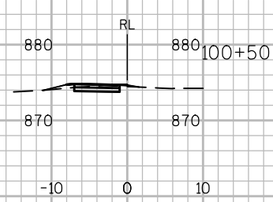


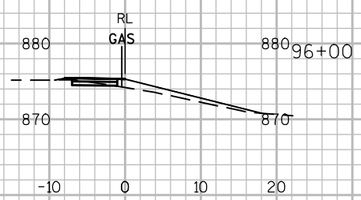


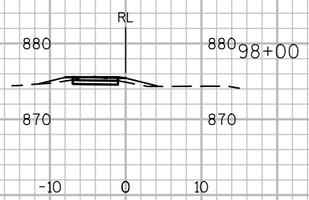


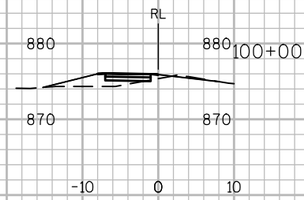


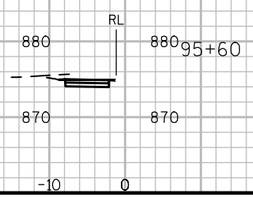


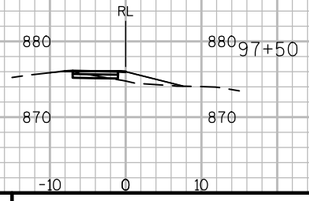


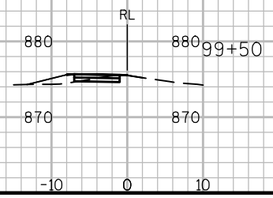


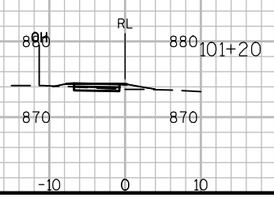


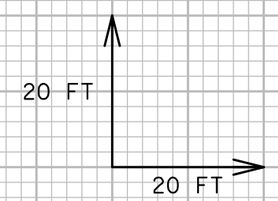












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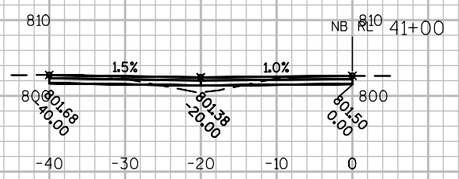
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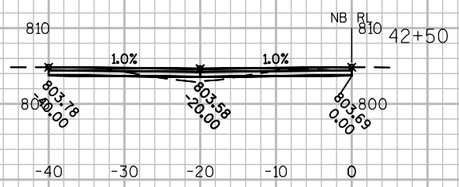
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: SIDEWALK	SHEET 372	E

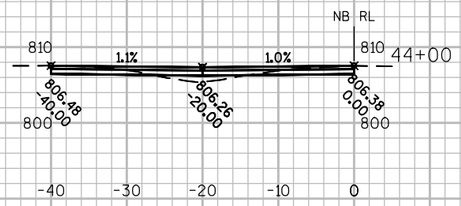
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LAYOUT NAME - SIDEWALK

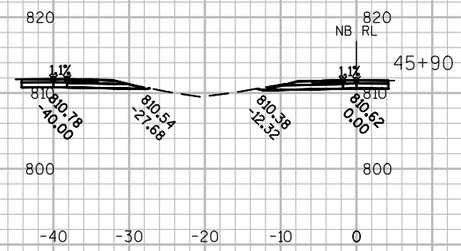
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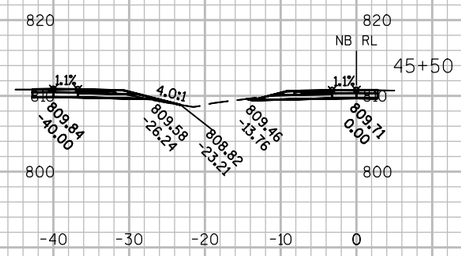
WISDOT/CADDS SHEET 49

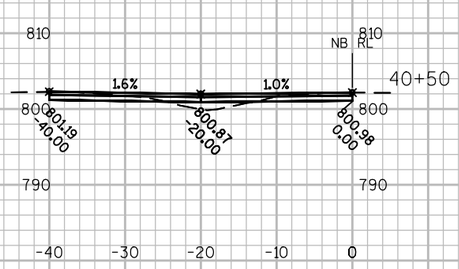


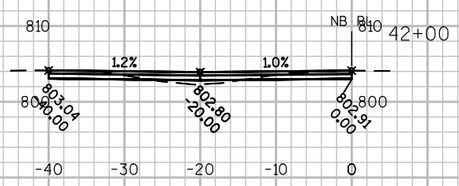


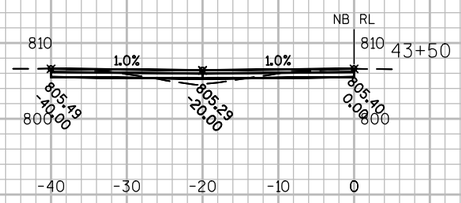


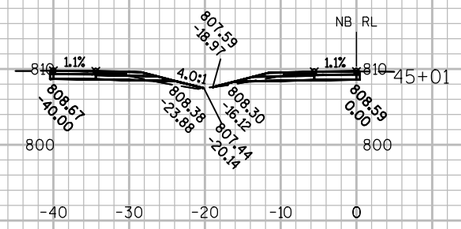


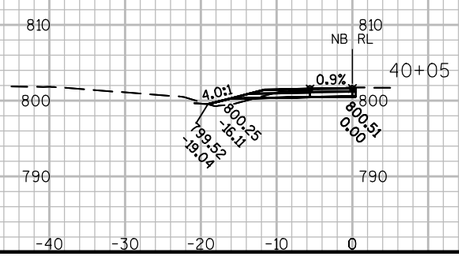


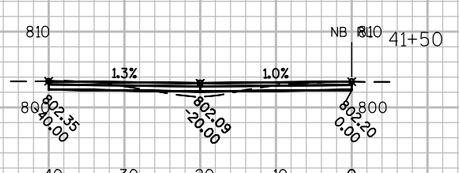


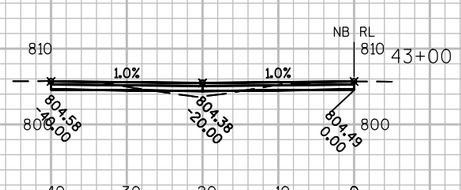


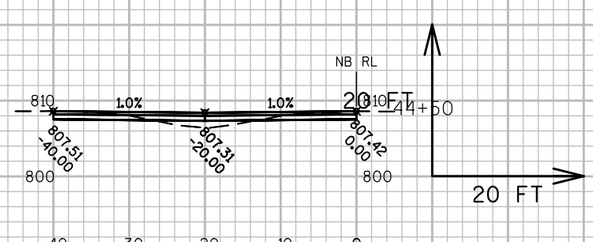












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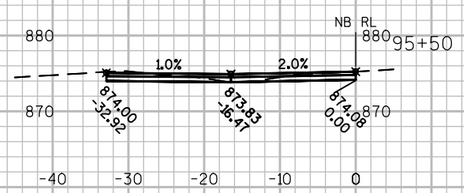
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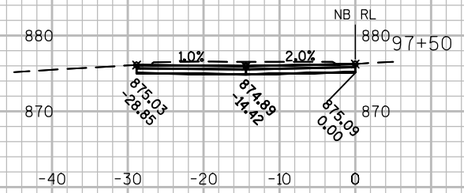
PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: CROSSOVER A-B	SHEET 373	E

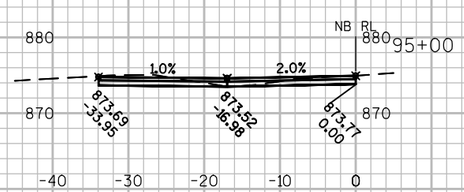
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LAYOUT NAME - SECTION SHEET - (1)

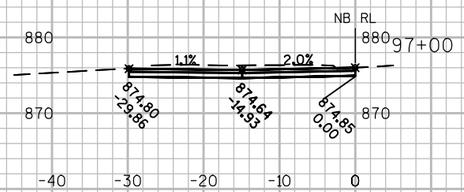
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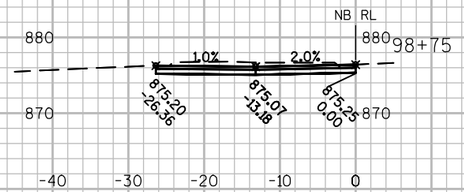
WISDOT/CADDS SHEET 49

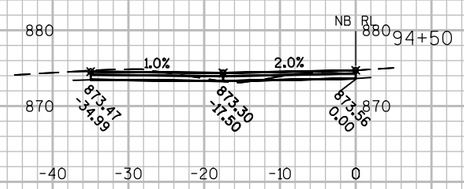


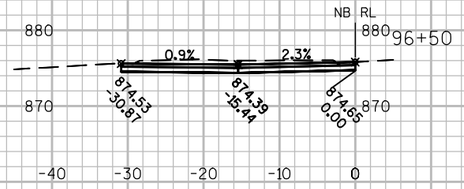






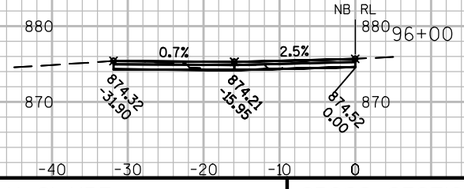


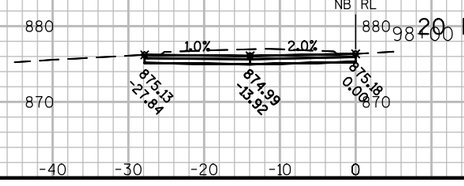


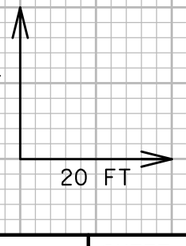












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PROJECT NO: 7110-05-72	HWY: STH 37	COUNTY: EAU CLAIRE	CROSS SECTIONS: CROSSOVERS C-D	SHEET 374	E

Notes

Wisconsin Department of Transportation

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