WIS

MAY 2016

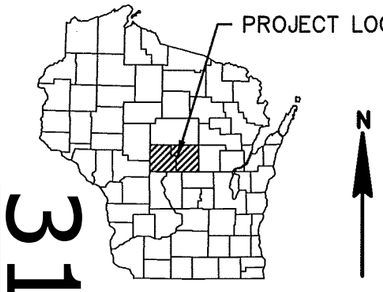
PROJECT ID: 1520-02-71

WITH: N/A

COUNTY: PORTAGE

ORDER OF SHEETS

TOTAL SHEETS = 230



31

DESIGN DESIGNATION

		STH 54	CTH U
A.A.D.T.	(2015)	= 13,500	2,230
A.A.D.T.	(2035)	= 16,150	2,450
D.H.V.		= 1,920	
D.D.		= 59/41	
T.		= 5.5%	
DESIGN SPEED		= 70 MPH	60 MPH
ESALS		=	

CONVENTIONAL SYMBOLS

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

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

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

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WISCONSIN RAPIDS - PLOVER

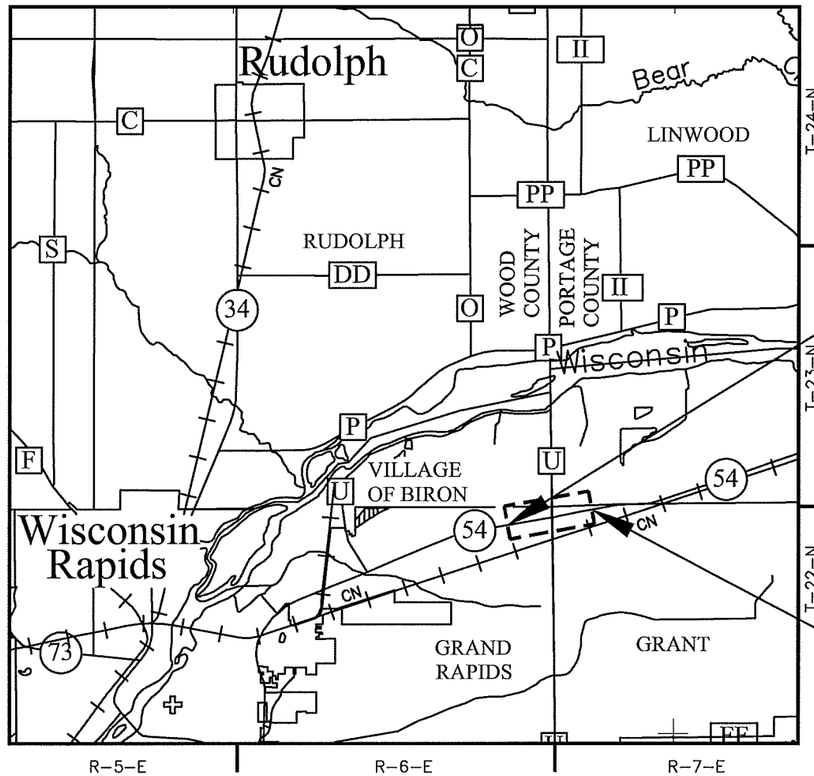
STH 54 & CTH U INTERSECTION

STH 54

PORTAGE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1520-02-71	WISC 2016174	1

STATE PROJECT NUMBER
1520-02-71



LAYOUT
SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.545 MILES

BEGIN PROJECT 1520-02-71
STA 385+18.60
Y=165,767.61
X=124,520.17

END PROJECT
STA 413+98.60
Y=166,241.01
X=127,359.44

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

ORIGINAL PLAN PREPARED BY

BECHER HOPPE
330 Fourth Street • PO Box 8000
Wausau, WI • 54402-8000
715.845.8000 • Fax 715.845.8008
becherhoppe.com

WISCONSIN SEAN M. SPROMBERG E-37771-008 SCHOFIELD, WI PROFESSIONAL ENGINEER

1-13-2016
(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	BECHER-HOPPE ASSOCIATES, INC.
Designer	BECHER-HOPPE ASSOCIATES, INC.
Project Manager	TIM HANLEY, PE
Regional Examiner	CHERYL SIMON, PE
Regional Supervisor	MIKE KRETSCHMER, PE

APPROVED FOR THE DEPARTMENT
DATE: 1-26-16 Timothy R Hanley (Signature)

E

2

GENERAL NOTES

BEARINGS SHOWN ON THE PLAN ARE TRUE BEARINGS TO THE NEAREST SECOND.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES. THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

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

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE FERTILIZED, SEEDED OR TEMPORARY SEEDED AS DIRECTED BY THE ENGINEER, INCIDENTAL TO CONTRACT WORK. ALL OTHER DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED, AND HAVE EROSION MAT INSTALLED AT THE CONTRACTOR'S EXPENSE.

ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE SUBGRADE ELEVATIONS AT THE CONSTRUCTION REFERENCE LINES.

CURVE DATA IS BASED ON RADIUS DEFINITION

ALL RADII ARE MEASURED TO THE FLANGE (FLAG) LINE UNLESS OTHERWISE NOTED.

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

BEFORE PLACING EMBANKMENT MATERIALS, REMOVE EXISTING TOPSOIL. WORK IS INCIDENTAL TO THE BORROW ITEM.

UTILITIES

COMMUNICATION
SOLARUS
440 E GRAND AVE
WISCONSIN RAPIDS, WI 54494
DENNIS PIERCE
PHONE: (715) 421-8172
MOBILE: (715) 572-0152
pierce@solarus.net

GAS
WE ENERGIES*
1921 8TH ST S
WISCONSIN RAPIDS, WI 54495
RYAN MIENTKE
PHONE: (715) 421-7249
MOBILE: (715) 421-9293
ryan.mientke@we-energies.com

ELECTRIC
WISCONSIN RAPIDS WATER WORKS AND LIGHT COMMISSION
221 16TH ST S
WISCONSIN RAPIDS, WI 54489
JACOB FRANCIS
PHONE: (715) 423-6328
MOBILE: (715) 323-4581
jacob.francis@wrwwlc.com

*NOTE: WE ENERGIES

SEND ALL WE ENERGIES CORRESPONDENCE TO:

WE ENERGIES GAS
ATTN: LATROY BRUMFIELD
333 W EVERETT ST A299
MILWAUKEE, WI 53203
PHONE: (414) 221-5617
latroy.brumfield@we-energies.com

SECTION 2 ORDER

DNR CONTACT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494
MARC HERSHFIELD
PHONE: (715) 421-7867
marc.hershfield@wisconsin.gov

AS-BUILT REFERENCE (YEAR)*

PROJECT: 1526-03-73 (1992)

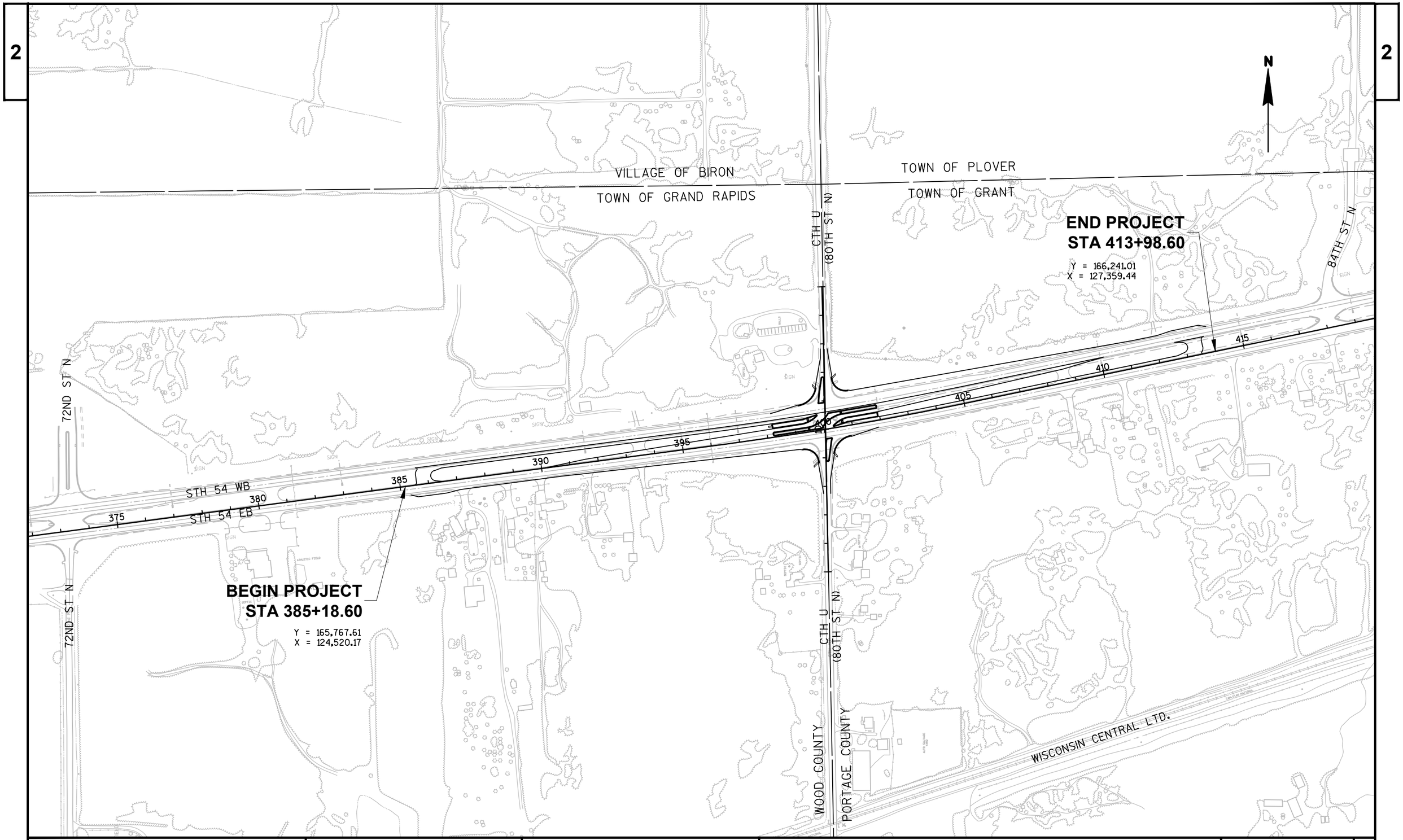
*PLAT APPROVAL YEAR (NOT CONSTRUCTION)

2

RUNOFF COEFFICIENT TABLE

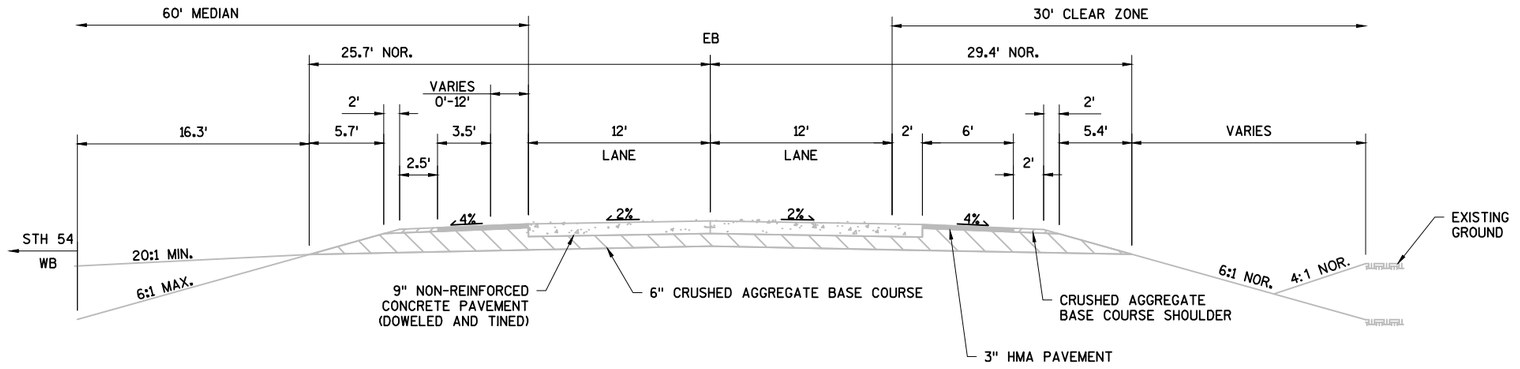
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .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 = 14.74 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 7.34 ACRES



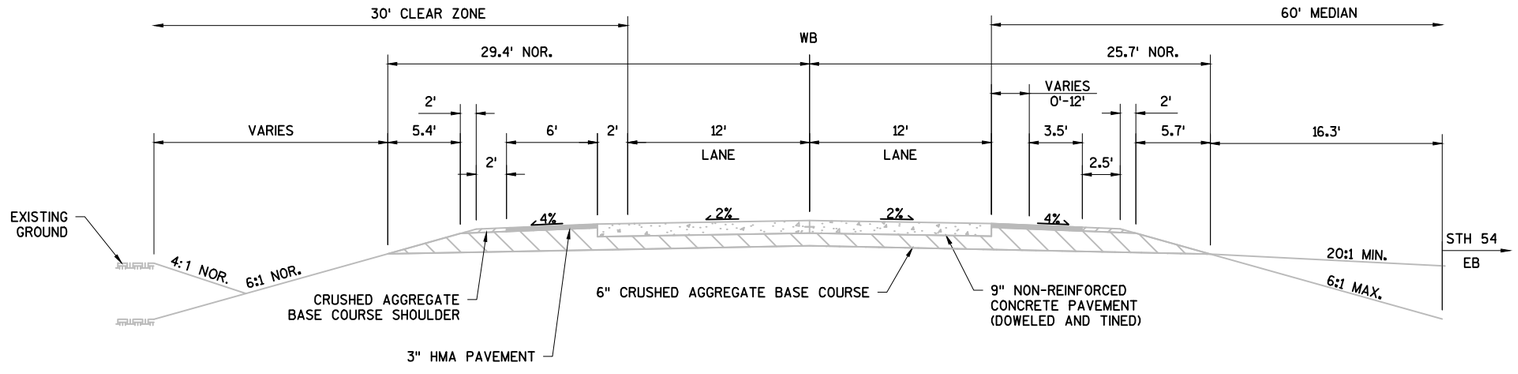
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PROJECT OVERVIEW	SHEET 3	E

2



EXISTING TYPICAL SECTION - STH 54 EB

STATION 385+33.60 – STATION 413+83.60

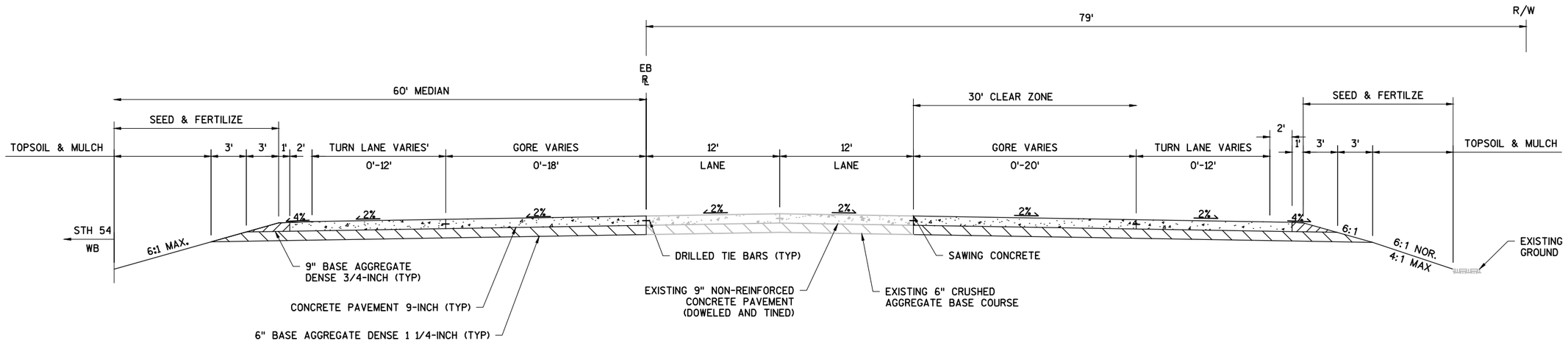


EXISTING TYPICAL SECTION - STH 54 WB

STATION 385+33.60 – STATION 413+83.60

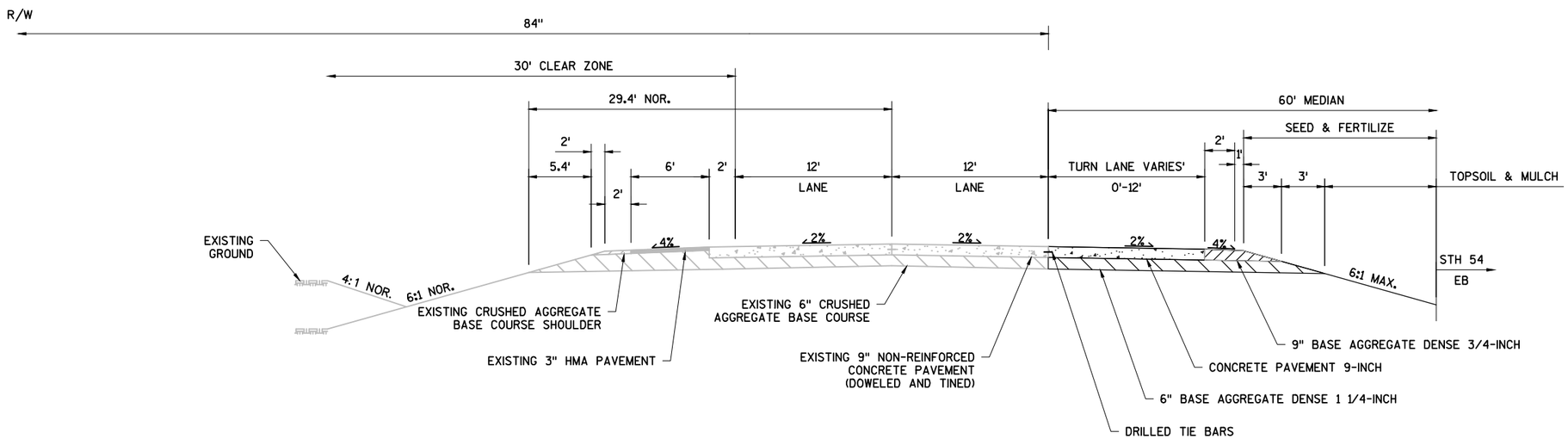
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\020301-TS.DWG PLOT DATE : 12/1/2015 5:34 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
WISDOT/CADDS SHEET 42



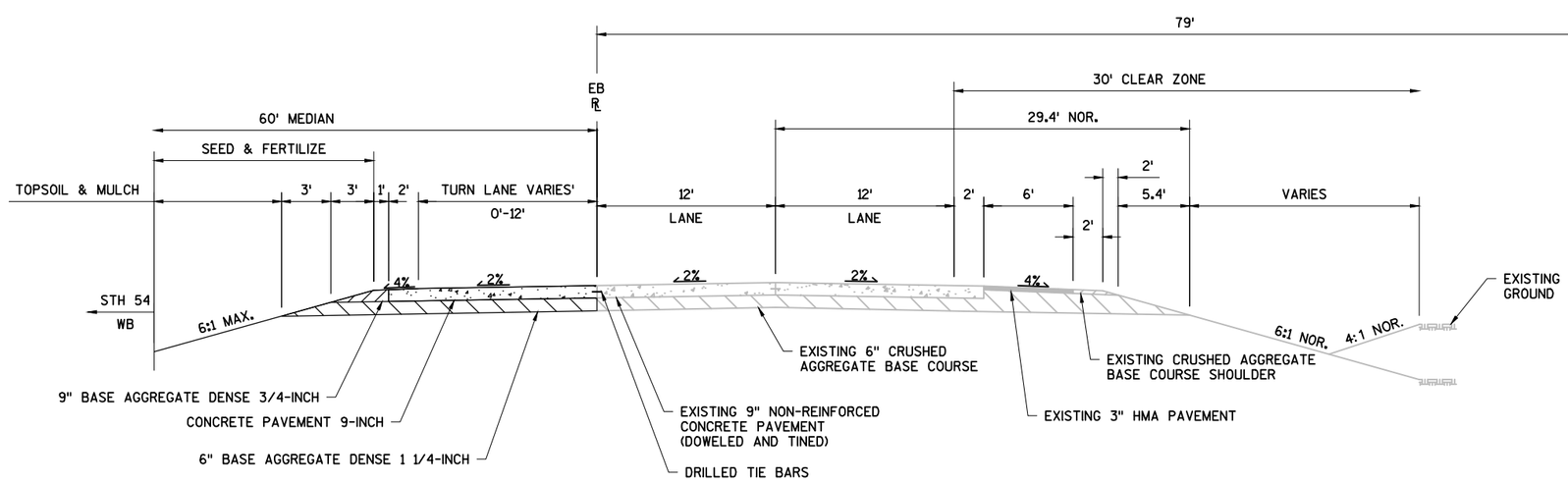
FINISHED TYPICAL SECTION - STH 54 EB

WEST OF CTH U
STATION 385+33.60 – STATION 399+15.43



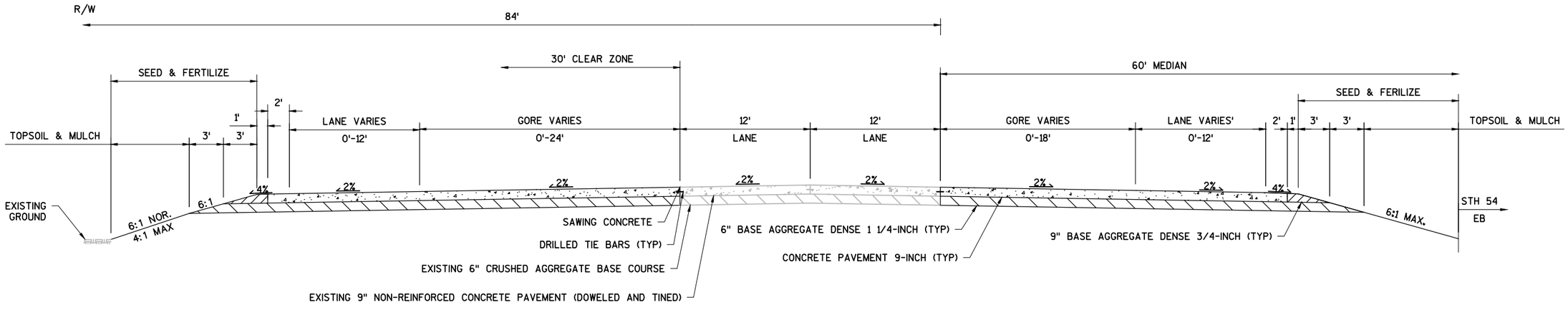
FINISHED TYPICAL SECTION - STH 54 WB

WEST OF CTH U
STATION 385+33.60 – STATION 399+15.43



FINISHED TYPICAL SECTION - STH 54 EB

EAST OF CTH U
STATION 400+90 – STATION 413+85



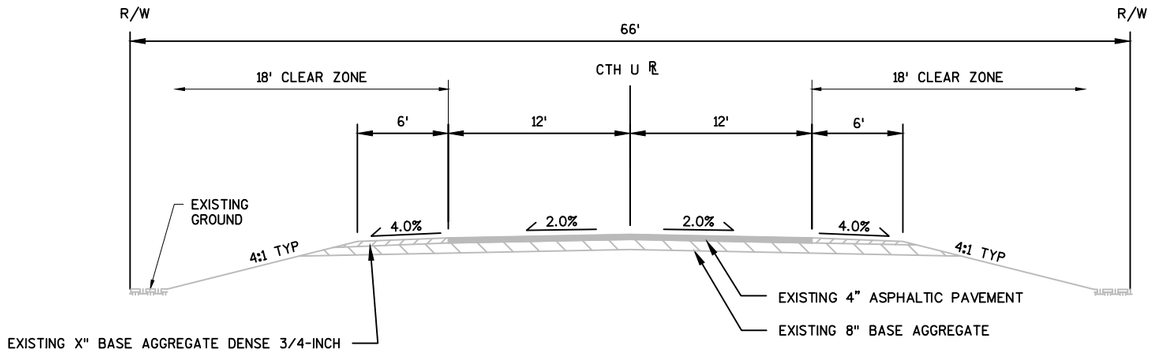
FINISHED TYPICAL SECTION - STH 54 WB

EAST OF CTH U
STATION 401+04.73 – STATION 413+83.60

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET	E

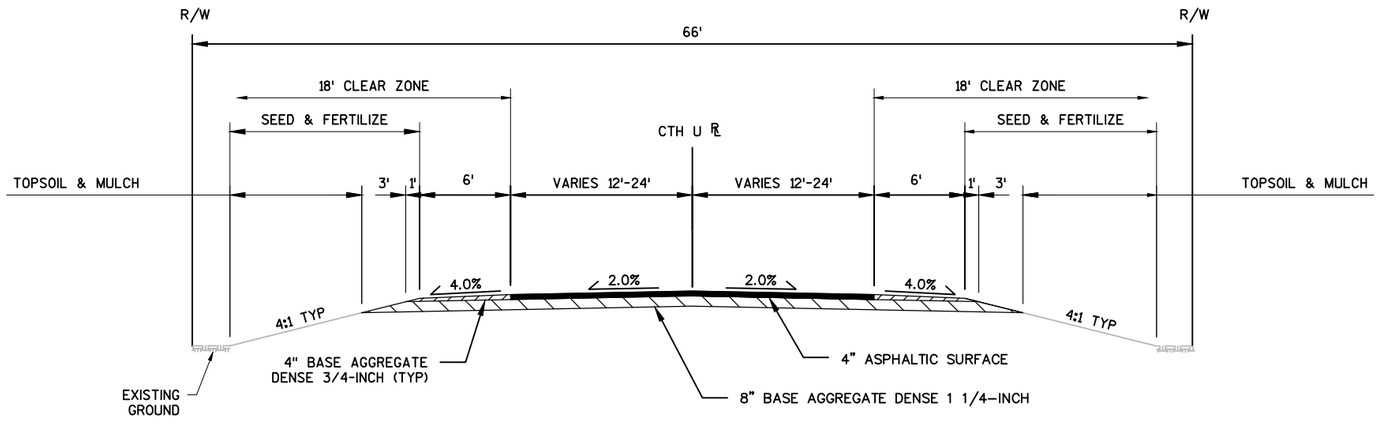
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\020301-TS.DWG PLOT DATE : 12/1/2015 5:35 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION – CTH U

STATION 7+74.91 – STATION 12+82.56



FINISHED TYPICAL SECTION – CTH U

STATION 7+74.91 – STATION 8+82.80
STATION 11+82.63 – STATION 12+82.56

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TYPICAL SECTIONS	SHEET	E

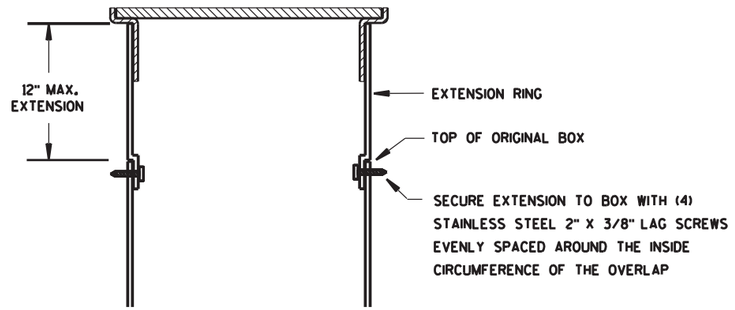
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\020301-TS.DWG PLOT DATE : 2/1/2016 3:52 PM PLOT BY : DANIEL J. GERLING PLOT NAME :
WISDOT/CADDS SHEET 42

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX DIAMETER ** (OUTSIDE)	B	25	25
BOX LENGTH	C	36	42
COVER	D	25 1/2	25 1/2
FRAME	E	27	27
FRAME	F	25 3/4	25 3/4
FRAME	G	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50

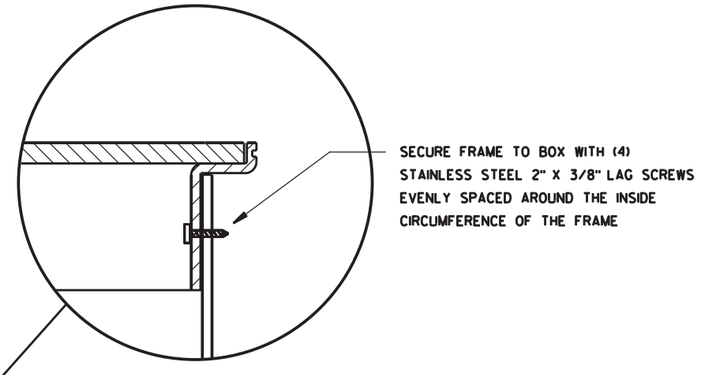
* THE ACTUAL WEIGHT OF THE COVER MAY VARY NOT TO EXCEED 100 LBS.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

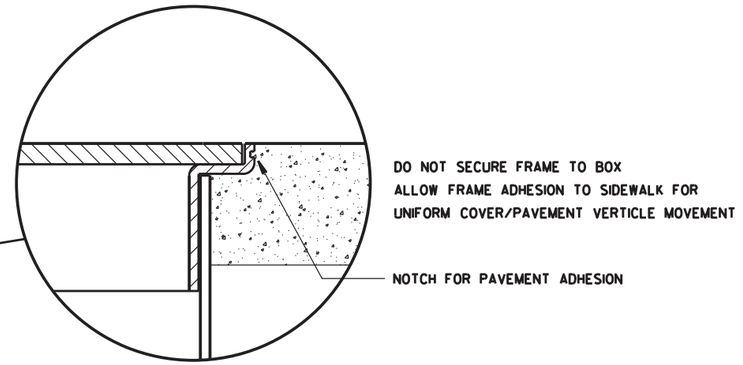


BOX EXTENSION

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



NON-CONDUCTIVE PULL BOX

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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".

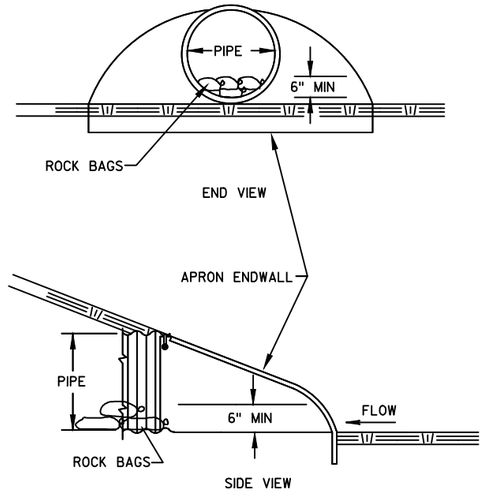
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

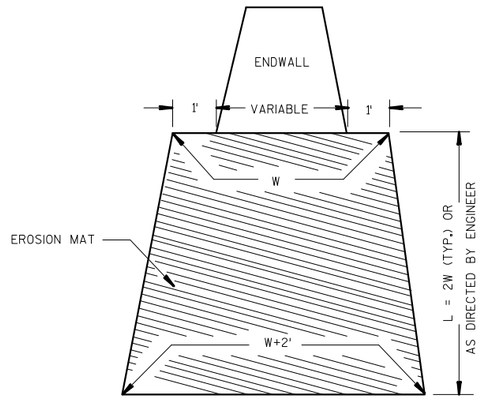
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS.

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

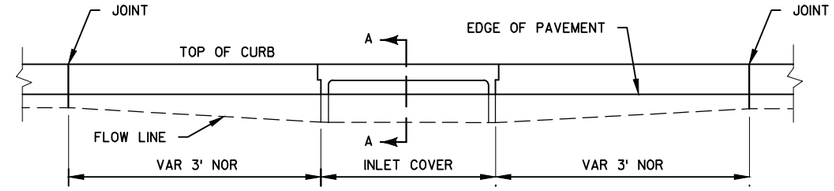
LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL OR LIGHTING SYSTEMS. "WISDOT COMMUNICATIONS" FOR COMMUNICATIONS SYSTEMS.



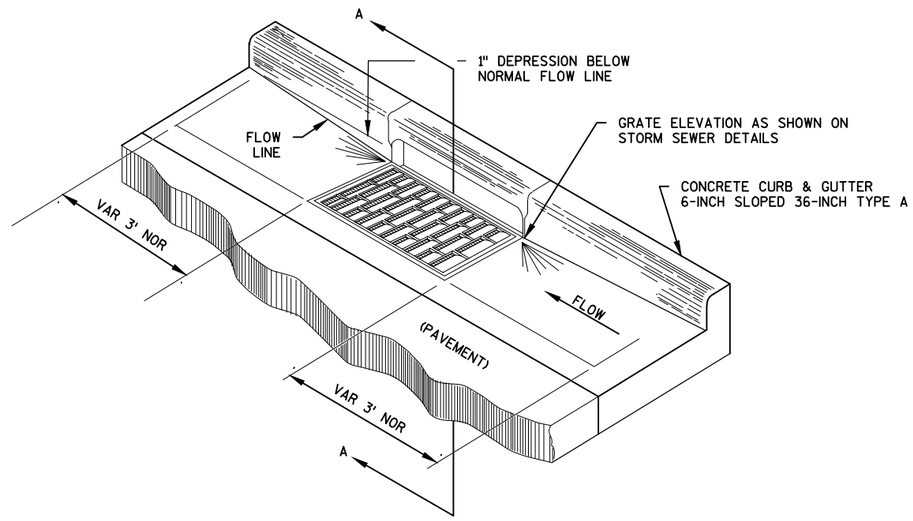
CULVERT PIPE CHECKS

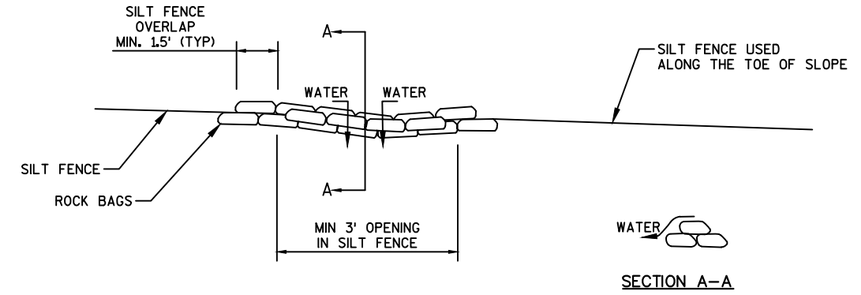


EROSION MAT TREATMENT AT CULVERTS



ELEVATION

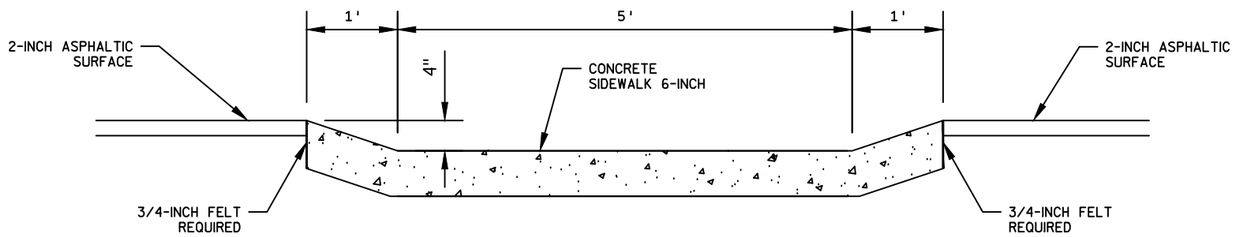




SECTION A–A

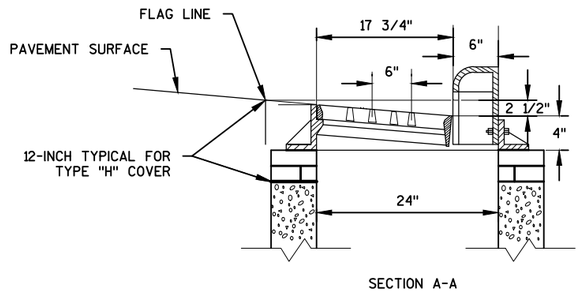
TOP VIEW

ROCK BAGS USED FOR SILT FENCE RELIEF



DEPRESSED SIDEWALK DETAIL

FOR MORE INFORMATION
SEE STANDARD DETAIL DRAWING "CURB RAMPS TYPE 5, 6, 7A, 7B &8"



SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS

(TYPE 3-H INLET SHOWN)

DATA TABLE

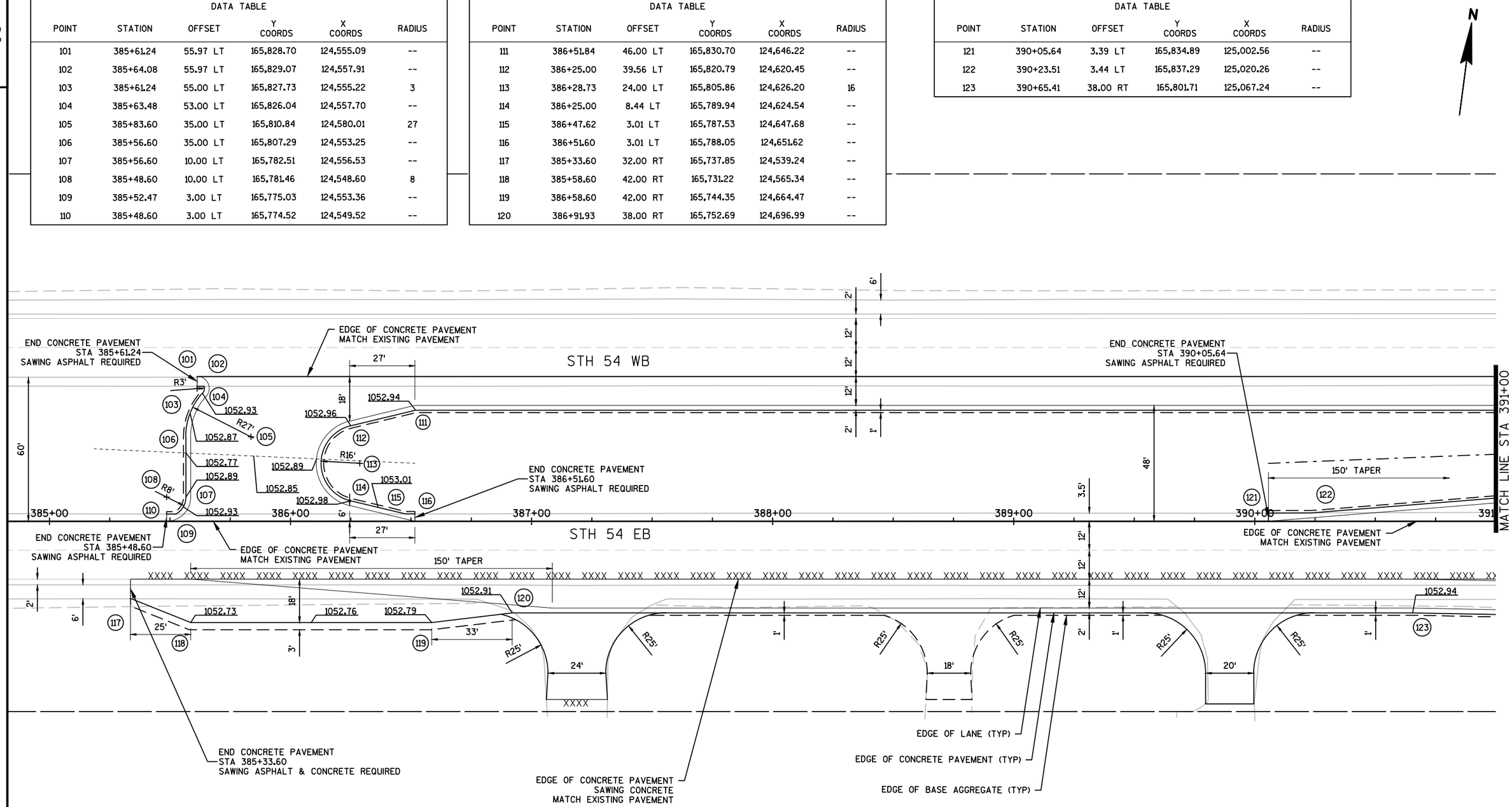
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
101	385+61.24	55.97 LT	165,828.70	124,555.09	--
102	385+64.08	55.97 LT	165,829.07	124,557.91	--
103	385+61.24	55.00 LT	165,827.73	124,555.22	3
104	385+63.48	53.00 LT	165,826.04	124,557.70	--
105	385+83.60	35.00 LT	165,810.84	124,580.01	27
106	385+56.60	35.00 LT	165,807.29	124,553.25	--
107	385+56.60	10.00 LT	165,782.51	124,556.53	--
108	385+48.60	10.00 LT	165,781.46	124,548.60	8
109	385+52.47	3.00 LT	165,775.03	124,553.36	--
110	385+48.60	3.00 LT	165,774.52	124,549.52	--

DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
111	386+51.84	46.00 LT	165,830.70	124,646.22	--
112	386+25.00	39.56 LT	165,820.79	124,620.45	--
113	386+28.73	24.00 LT	165,805.86	124,626.20	16
114	386+25.00	8.44 LT	165,789.94	124,624.54	--
115	386+47.62	3.01 LT	165,787.53	124,647.68	--
116	386+51.60	3.01 LT	165,788.05	124,651.62	--
117	385+33.60	32.00 RT	165,737.85	124,539.24	--
118	385+58.60	42.00 RT	165,731.22	124,565.34	--
119	386+58.60	42.00 RT	165,744.35	124,664.47	--
120	386+91.93	38.00 RT	165,752.69	124,696.99	--

DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
121	390+05.64	3.39 LT	165,834.89	125,002.56	--
122	390+23.51	3.44 LT	165,837.29	125,020.26	--
123	390+65.41	38.00 RT	165,801.71	125,067.24	--



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN DETAIL - STH 54	SHEET 10	E

2

N

STH 54 WB

MATCH LINE STA 391+00

MATCH LINE STA 397+00

150' TAPER

36'

201

1052.84

EDGE OF CONCRETE PAVEMENT
MATCH EXISTING PAVEMENT

6'
2'
12'
12'
12'
2'
1'

1'
2'
12'
GORE VARIES

PC: 396+53.84

392+00
393+00
394+00
395+00
396+00

STH 54 EB

12'
12'
12'
12'
1'
2'
GORE VARIES

R25'
R25'
16'
1'
R25'
R25'
18'

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

EDGE OF LANE (TYP)

EDGE OF CONCRETE PAVEMENT (TYP)

EDGE OF BASE AGGREGATE (TYP)

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

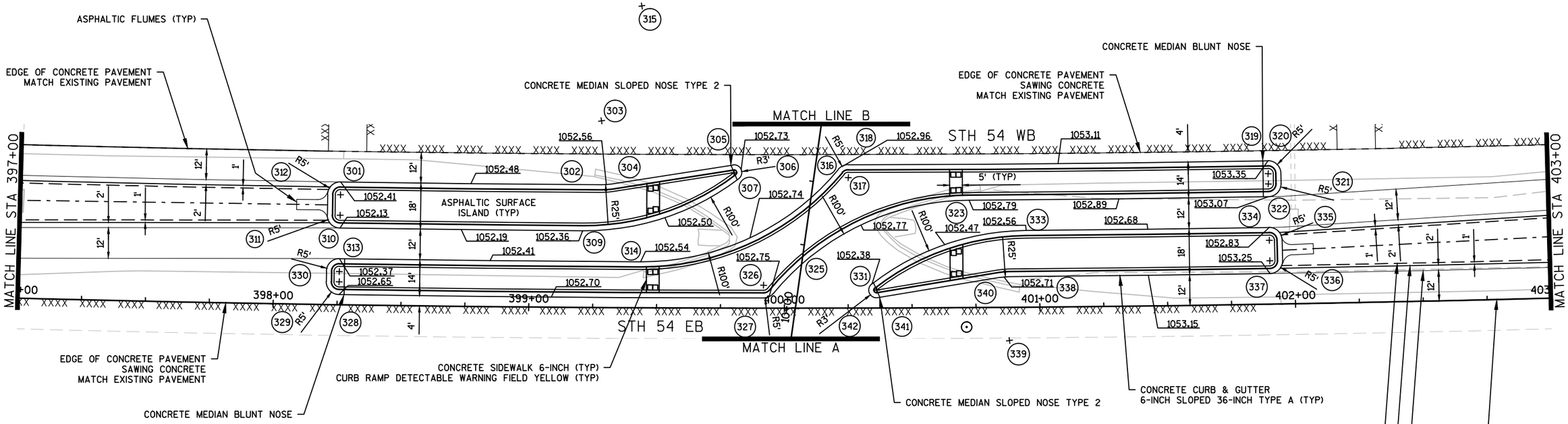
DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
201	391+55.54	14.00 LT	165,865.09	125,149.76	--

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
301	398+25.72	48.00 LT	165,987.93	125,808.80	--
302	399+28.04	48.00 LT	166,003.27	125,909.52	--
303	399+28.04	73.00 LT	166,027.97	125,905.65	25
304	399+32.06	48.32 LT	166,004.21	125,913.43	--
305	399+79.80	55.92 LT	166,019.19	125,959.16	--
306	399+80.27	52.95 LT	166,016.34	125,960.10	3
307	399+82.09	50.57 LT	166,014.27	125,962.27	--
308	399+20.86	130.00 LT	166,083.18	125,889.81	100
309	399+20.86	30.00 LT	165,984.38	125,905.24	--
310	398+25.72	30.00 LT	165,970.13	125,811.42	--

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
311	398+25.72	35.00 LT	165,975.07	125,810.69	5
312	398+25.72	43.00 LT	165,982.99	125,809.53	5
313	398+25.71	18.00 LT	165,958.25	125,813.17	--
314	399+43.70	18.00 LT	165,976.07	125,929.62	--
315	399+43.70	118.00 LT	166,074.84	125,913.99	100
316	400+21.29	54.20 LT	166,024.15	126,000.19	--
317	400+25.15	51.00 LT	166,021.62	126,004.50	5
318	400+25.15	56.00 LT	166,026.55	126,003.69	--
319	401+90.15	56.00 LT	166,054.53	126,165.47	--
320	401+90.15	51.00 LT	166,049.61	126,166.36	5

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
321	401+90.15	47.00 LT	166,045.67	126,167.07	5
322	401+90.15	42.00 LT	166,040.75	126,167.96	--
323	400+72.55	42.00 LT	166,020.55	126,052.55	--
324	400+72.55	58.00 RT	165,921.96	126,069.29	100
325	399+95.74	5.82 LT	165,972.28	125,982.88	--
326	399+91.88	9.00 LT	165,974.80	125,978.56	5
327	399+91.88	4.00 LT	165,969.87	125,979.36	--
328	398+25.71	4.00 LT	165,944.40	125,815.21	--
329	398+25.71	9.00 LT	165,949.35	125,814.48	5
330	398+25.71	13.00 LT	165,953.31	125,813.90	5

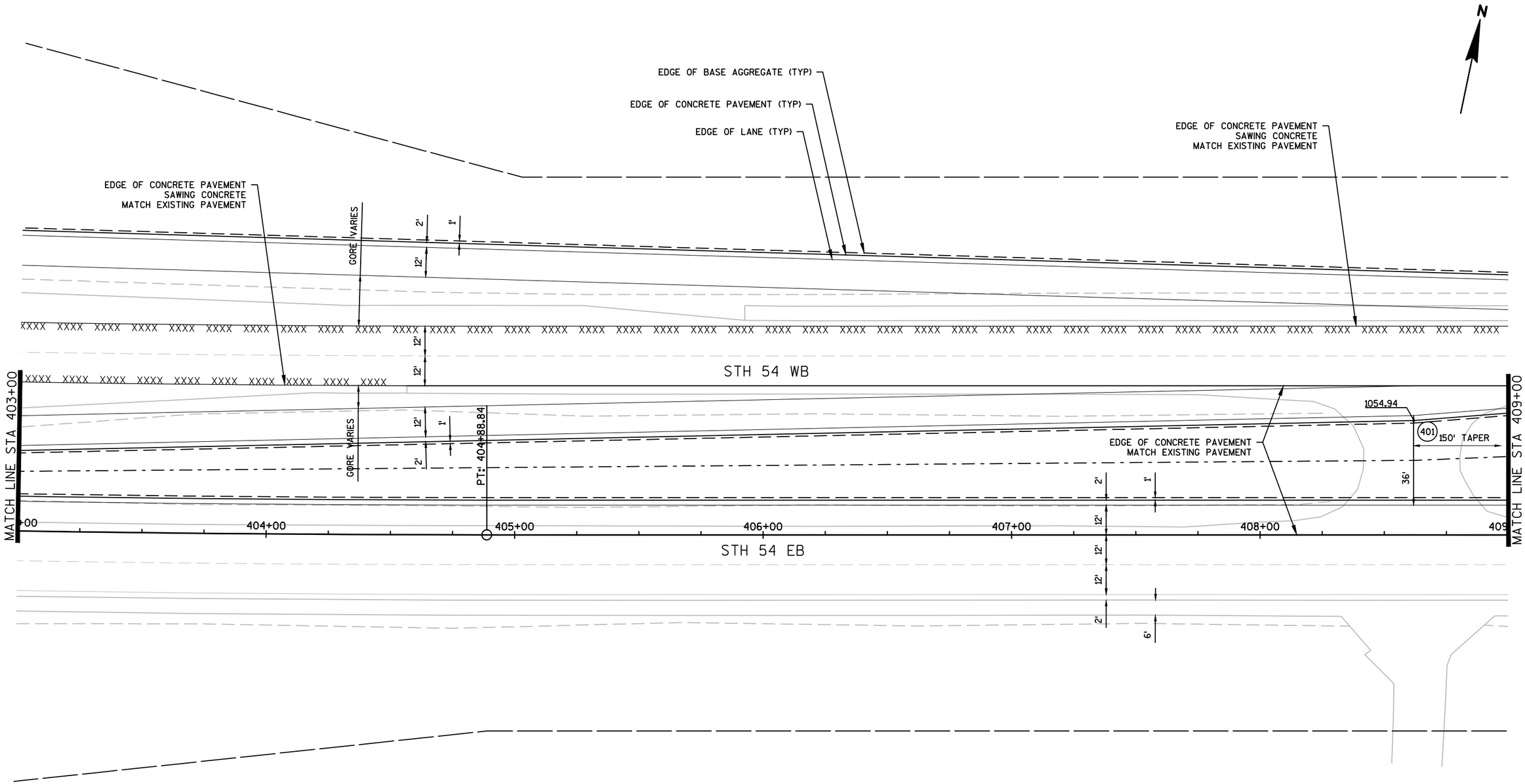


DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
331	400+34.31	9.43 LT	165,982.10	126,020.32	--
332	400+94.90	70.00 RT	165,913.91	126,093.47	100
333	400+94.90	30.00 LT	166,012.47	126,076.53	--
334	401+90.20	30.00 LT	166,028.95	126,170.15	--
335	401+90.20	25.00 LT	166,024.03	126,171.03	5
336	401+90.22	17.00 LT	166,016.16	126,172.47	5
337	401+90.22	12.00 LT	166,011.24	126,173.36	--
338	400+94.90	12.00 LT	165,994.73	126,079.58	--
339	400+88.03	13.00 RT	165,968.93	126,077.04	25
340	400+84.14	11.69 LT	165,992.61	126,069.03	--

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
341	400+36.62	4.09 LT	165,977.21	126,023.48	--
342	400+36.14	7.05 LT	165,980.06	126,022.52	3

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN DETAIL - STH 54	SHEET 12	E

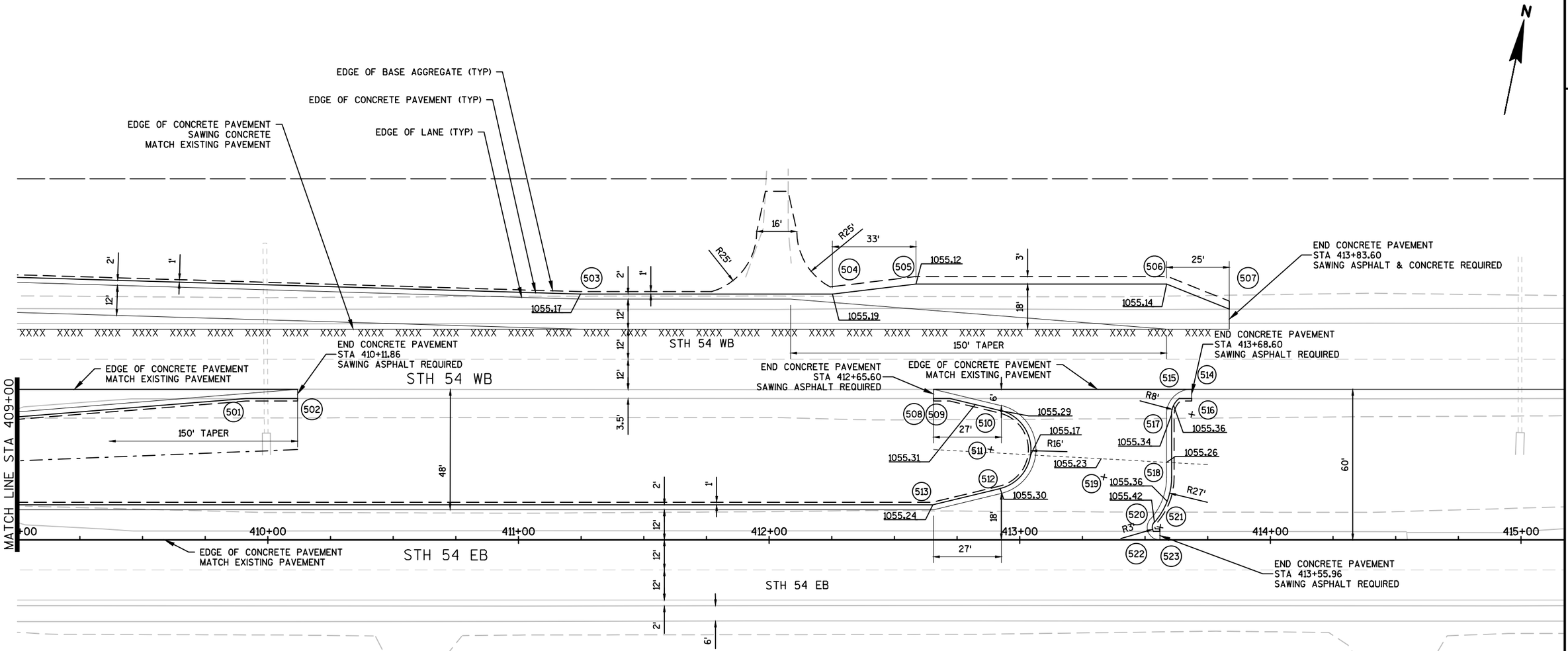
2



DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
401	408+61.96	46.00 LT	166,177.07	126,824.65	--

2



DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
501	409+91.26	56.35 LT	166,213.46	126,949.15	--
502	410+11.86	56.37 LT	166,217.67	126,969.32	--
503	411+24.76	98.00 LT	166,281.36	127,071.41	--
504	412+25.27	98.00 LT	166,301.77	127,169.82	--
505	412+58.60	102.00 LT	166,312.45	127,201.65	--
506	413+58.60	102.00 LT	166,332.76	127,299.56	--
507	413+83.60	92.00 LT	166,328.05	127,326.07	--
508	412+65.60	56.35 LT	166,269.18	127,217.77	--
509	412+72.21	56.36 LT	166,270.53	127,224.25	--
510	412+92.20	51.56 LT	166,269.89	127,244.80	--

DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
511	412+88.47	36.00 LT	166,253.90	127,244.30	16
512	412+92.20	20.44 LT	166,239.42	127,251.11	--
513	412+65.36	14.00 LT	166,227.66	127,226.14	--
514	413+68.60	56.36 LT	166,290.11	127,318.62	--
515	413+63.76	56.37 LT	166,289.13	127,313.88	--
516	413+68.60	50.00 LT	166,283.88	127,319.92	8
517	413+60.60	50.00 LT	166,282.25	127,312.08	--
518	413+60.60	25.00 LT	166,257.77	127,317.16	--
519	413+33.60	25.00 LT	166,252.29	127,290.72	27
520	413+53.72	7.00 LT	166,238.75	127,314.08	--

DATA TABLE

POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
521	413+55.96	5.00 LT	166,237.25	127,316.68	3
522	413+53.45	3.37 LT	166,235.14	127,314.55	--
523	413+55.96	3.36 LT	166,235.64	127,317.01	--

DATA TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
601	399+15.43	56.00 RT	9+32.35	80.64 LT	165,898.57	125,913.12	--
602	399+15.43	106.00 RT	8+82.80	74.00 LT	165,849.17	125,920.81	50
603	399+64.51	112.74 RT	8+82.80	24.00 LT	165,850.23	125,970.80	--
604	399+89.44	105.99 RT	8+92.96	0.00	165,860.91	125,994.58	--
605	399+96.49	55.60 RT	9+43.84	0.00	165,911.78	125,993.49	--
606	400+94.90	70.00 RT	9+43.84	100.00 RT	165,913.91	126,093.47	100
607	400+02.06	33.93 RT	9+66.09	2.51 RT	165,934.07	125,995.52	--
608	400+04.85	35.00 RT	9+65.42	5.43 RT	165,933.47	125,998.46	3
609	400+20.39	35.00 RT	9+67.62	20.86 RT	165,935.99	126,013.83	3
610	400+23.06	36.35 RT	9+66.66	23.70 RT	165,935.10	126,016.70	--

LEGEND

REVERSE SLOPE GUTTER

CONCRETE / ASPHALT JOINT

N

END CONCRETE PAVEMENT
STA 8+76.80

MATCH EXISTING
STA 7+74.91
SAWING ASPHALT REQUIRED

BP: 5+00.00

6+00 7+00 8+00 9+00

CTH U

STH 54 EB

MATCH LINE

CONCRETE MEDIAN
SLOPED NOSE
TYPE 2

ASPHALTIC SURFACE ISLAND

CONCRETE MEDIAN SLOPED NOSE TYPE 1

END CONCRETE PAVEMENT
STA 401+76.50
SAWING ASPHALT & CONCRETE REQUIRED

DATA TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
611	400+45.29	47.63 RT	9+58.69	47.39 RT	165,927.63	126,040.56	25
612	400+21.46	40.36 RT	9+62.46	22.68 RT	165,930.88	126,015.77	--
613	400+01.02	108.55 RT	8+92.06	11.93 RT	165,860.26	126,006.52	--
614	399+95.33	106.82 RT	8+92.96	6.00 RT	165,861.04	126,000.57	6
615	400+19.27	89.07 RT	9+13.94	27.41 RT	165,882.47	126,021.53	--
616	400+90.37	111.00 RT	9+02.62	101.55 RT	165,872.73	126,095.90	75
617	400+90.37	36.00 RT	9+76.80	90.46 RT	165,946.65	126,083.23	--
618	401+36.19	32.00 RT	9+87.63	135.30 RT	165,958.45	126,127.82	--
619	401+76.50	32.00 RT	9+93.84	175.24 RT	165,965.51	126,167.63	--
620	399+62.82	221.41 RT	7+74.91	10.82 LT	165,742.66	125,986.28	--

DATA TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
621	399+86.93	224.83 RT	7+74.91	14.00 RT	165,743.19	126,011.09	--
622	399+93.64	176.29 RT	8+23.94	14.00 RT	165,792.20	126,010.05	--

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN DETAIL - CTH U	SHEET 15	E

2

DATA TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
701	398+20.65	92.45 LT	10+67.40	193.57 LT	166,031.18	125,797.32	--
702	398+34.97	92.52 LT	10+69.25	179.49 LT	166,033.33	125,811.37	--
703	398+78.30	92.51 LT	10+74.72	136.86 LT	166,039.71	125,853.87	--
704	399+22.63	96.00 LT	10+83.96	93.73 LT	166,049.86	125,896.79	--
705	399+22.63	171.00 LT	11+58.29	103.73 LT	166,123.96	125,885.20	75
706	399+95.17	148.45 LT	11+45.72	29.80 LT	166,112.97	125,959.39	--
707	399+93.34	96.30 LT	10+93.82	24.32 LT	166,061.20	125,965.98	--
708	399+70.59	107.11 LT	11+01.40	48.14 LT	166,068.27	125,942.00	25
709	399+95.22	101.71 LT	10+99.44	23.22 LT	166,066.84	125,966.96	--
710	400+00.22	123.92 LT	11+22.12	21.43 LT	166,089.56	125,968.26	--

DATA TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
711	400+49.51	112.94 LT	11+18.19	28.41 RT	166,086.69	126,018.18	50
712	400+01.40	128.25 LT	11+26.57	20.88 LT	166,094.02	125,968.72	--
713	400+17.92	179.18 LT	11+79.29	11.92 LT	166,146.91	125,976.55	--
714	400+23.72	177.34 LT	11+78.28	6.00 LT	166,146.03	125,982.49	6
715	400+29.76	176.49 LT	11+78.28	0.00	166,146.16	125,988.49	--
716	400+20.99	116.25 LT	11+17.42	0.00	166,085.32	125,989.78	--
717	399+20.86	130.00 LT	11+17.42	100.00 LT	166,083.18	125,889.81	100
718	400+15.04	93.91 LT	10+94.47	2.67 LT	166,062.32	125,987.61	--
719	400+12.23	95.00 LT	10+95.16	5.59 LT	166,062.94	125,984.67	3
720	399+96.06	95.00 LT	10+92.91	21.46 LT	166,060.35	125,968.85	3

DATA TABLE

POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
721	400+54.51	177.35 LT	11+82.63	24.00 RT	166,151.03	126,012.39	--
722	401+04.73	170.00 LT	11+82.63	74.00 RT	166,152.09	126,062.38	50
723	401+04.73	120.00 LT	11+33.19	81.45 RT	166,102.82	126,070.88	--
724	400+28.12	249.55 LT	12+50.37	12.00 LT	166,217.98	125,974.95	--
725	400+32.78	281.35 LT	12+82.56	12.00 LT	166,250.10	125,974.23	--
726	400+57.14	278.03 LT	12+82.56	12.00 RT	166,250.75	125,998.22	--

END CONCRETE PAVEMENT
STA 398+34.97

CONCRETE MEDIAN SLOPED NOSE TYPE 1

CONCRETE MEDIAN SLOPED NOSE TYPE 2

ASPHALTIC SURFACE ISLAND

PI: 12+76.42

EP: 15+00.00

CTH U

MATCH LINE B

STH 54 WB

MATCH EXISTING
STA 12+82.56
SAWING ASPHALT REQUIRED

END CONCRETE PAVEMENT
STA 11+90.28

LEGEND

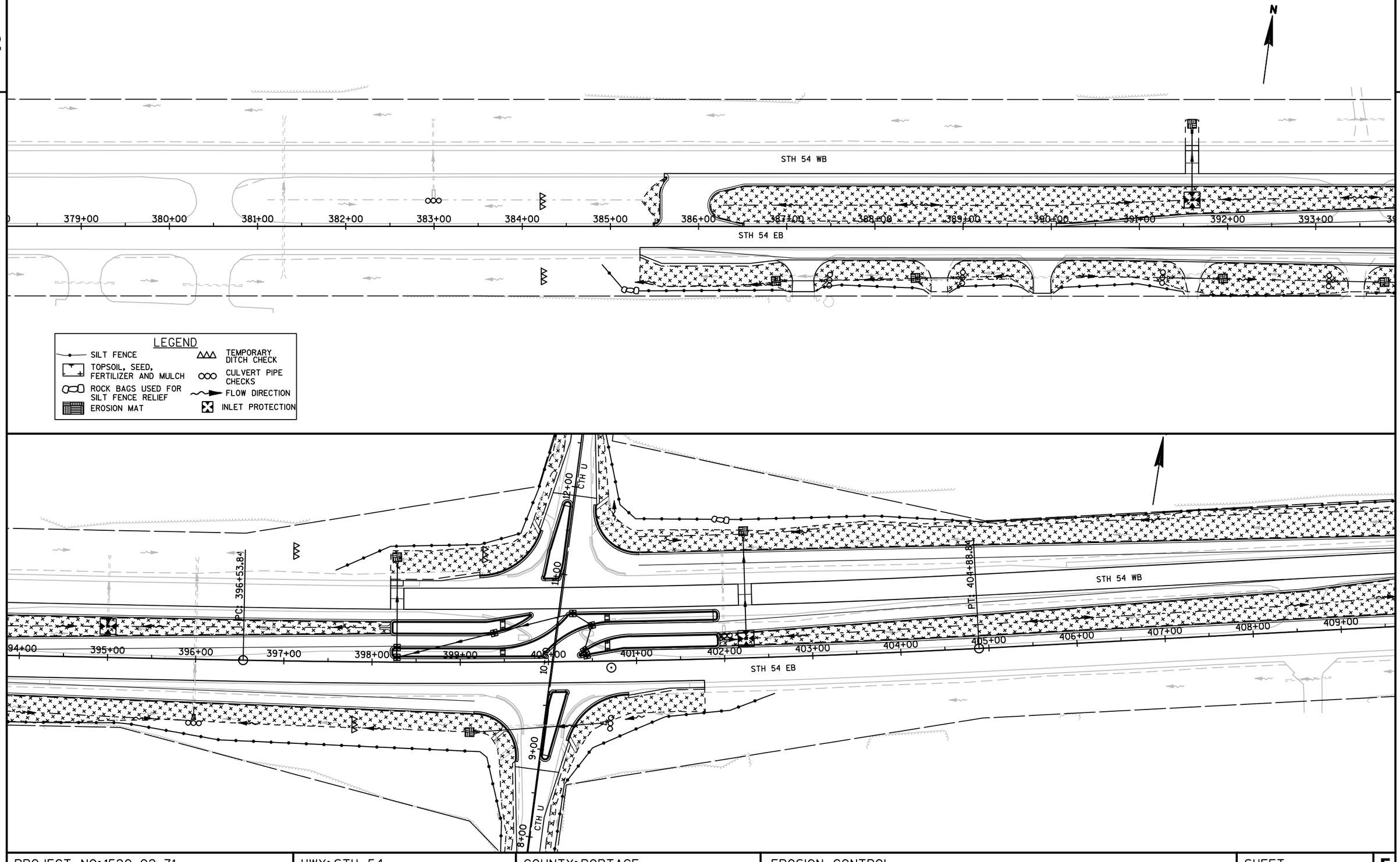
REVERSE SLOPE GUTTER

CONCRETE / ASPHALT JOINT

N

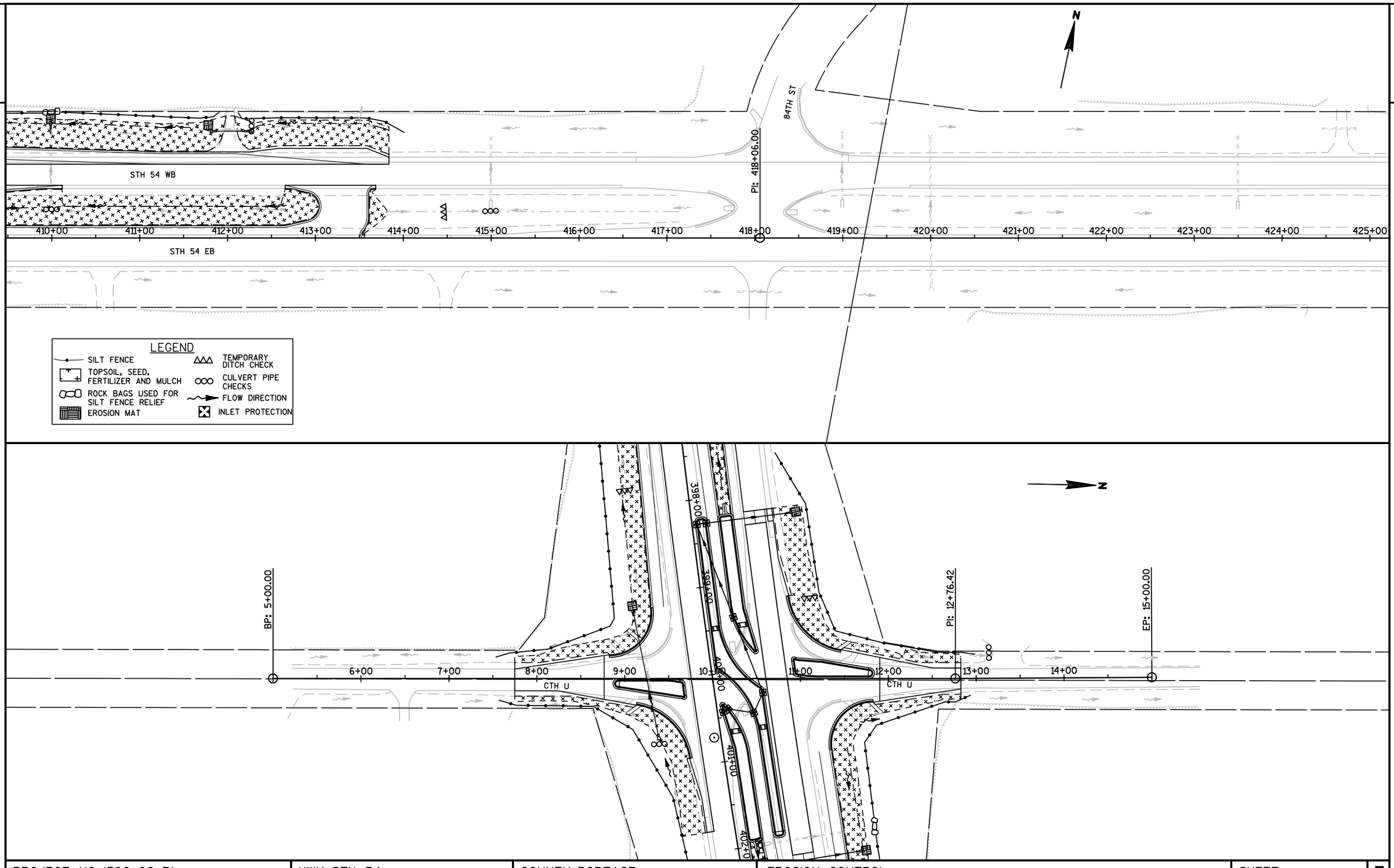
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	PLAN DETAIL - CTH U	SHEET 16	E

2



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET 17	E

2



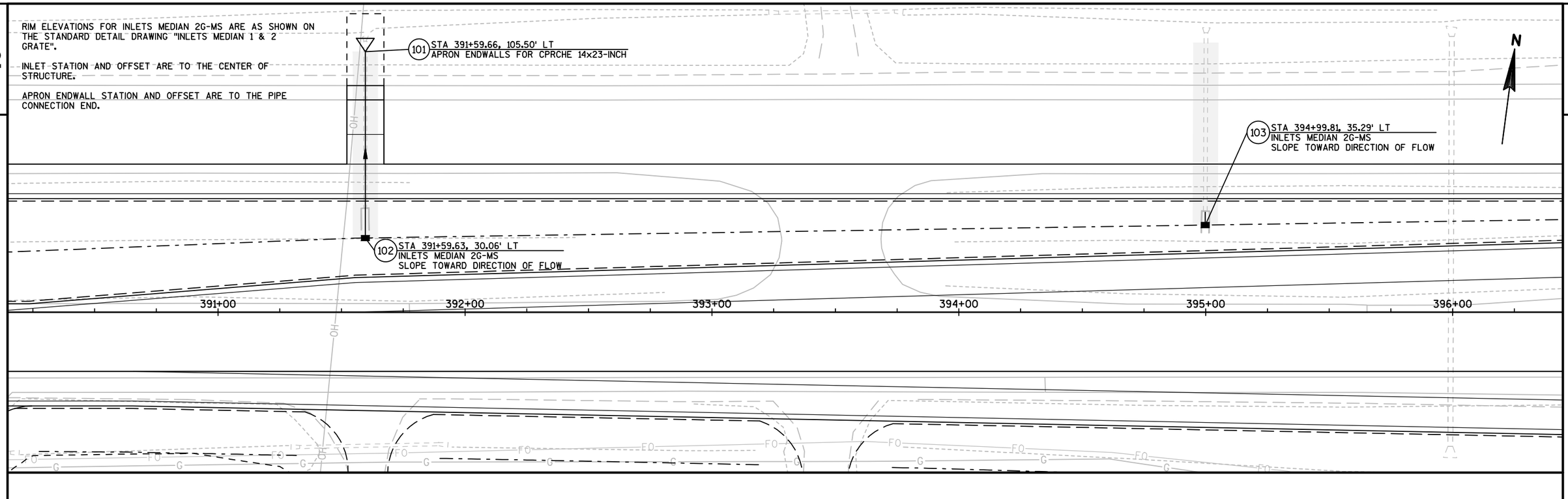
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	EROSION CONTROL	SHEET	E

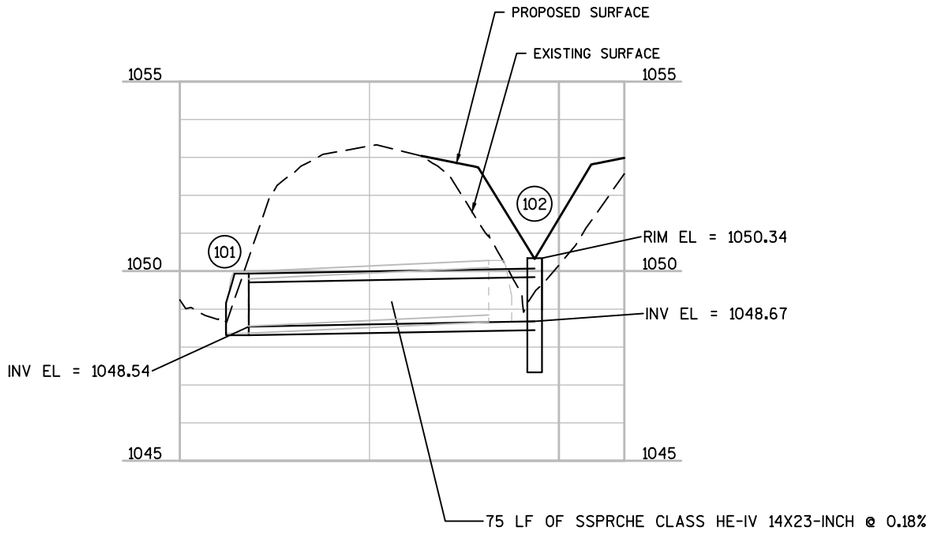
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - ****
PLOT DATE : 2/1/2016 6:43 PM
PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : **********
WISDOT/CADDS SHEET 44

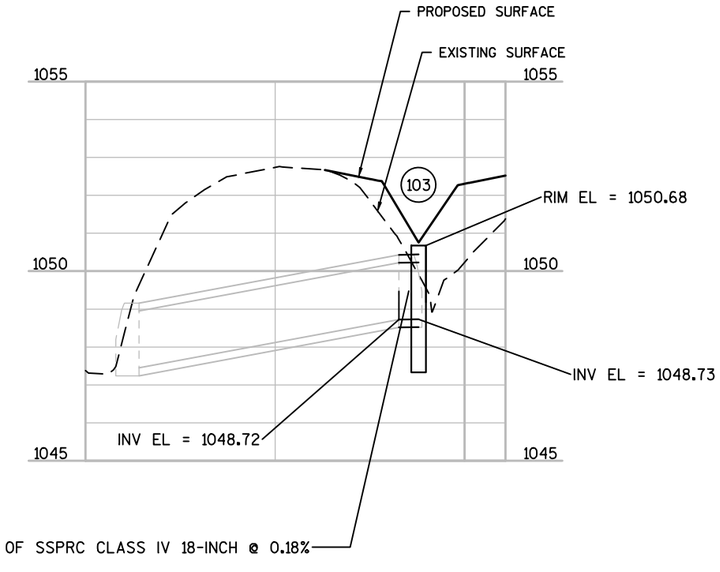
RIM ELEVATIONS FOR INLETS MEDIAN 2G-MS ARE AS SHOWN ON THE STANDARD DETAIL DRAWING "INLETS MEDIAN 1 & 2 GRATE".

INLET STATION AND OFFSET ARE TO THE CENTER OF STRUCTURE.

APRON ENDWALL STATION AND OFFSET ARE TO THE PIPE CONNECTION END.







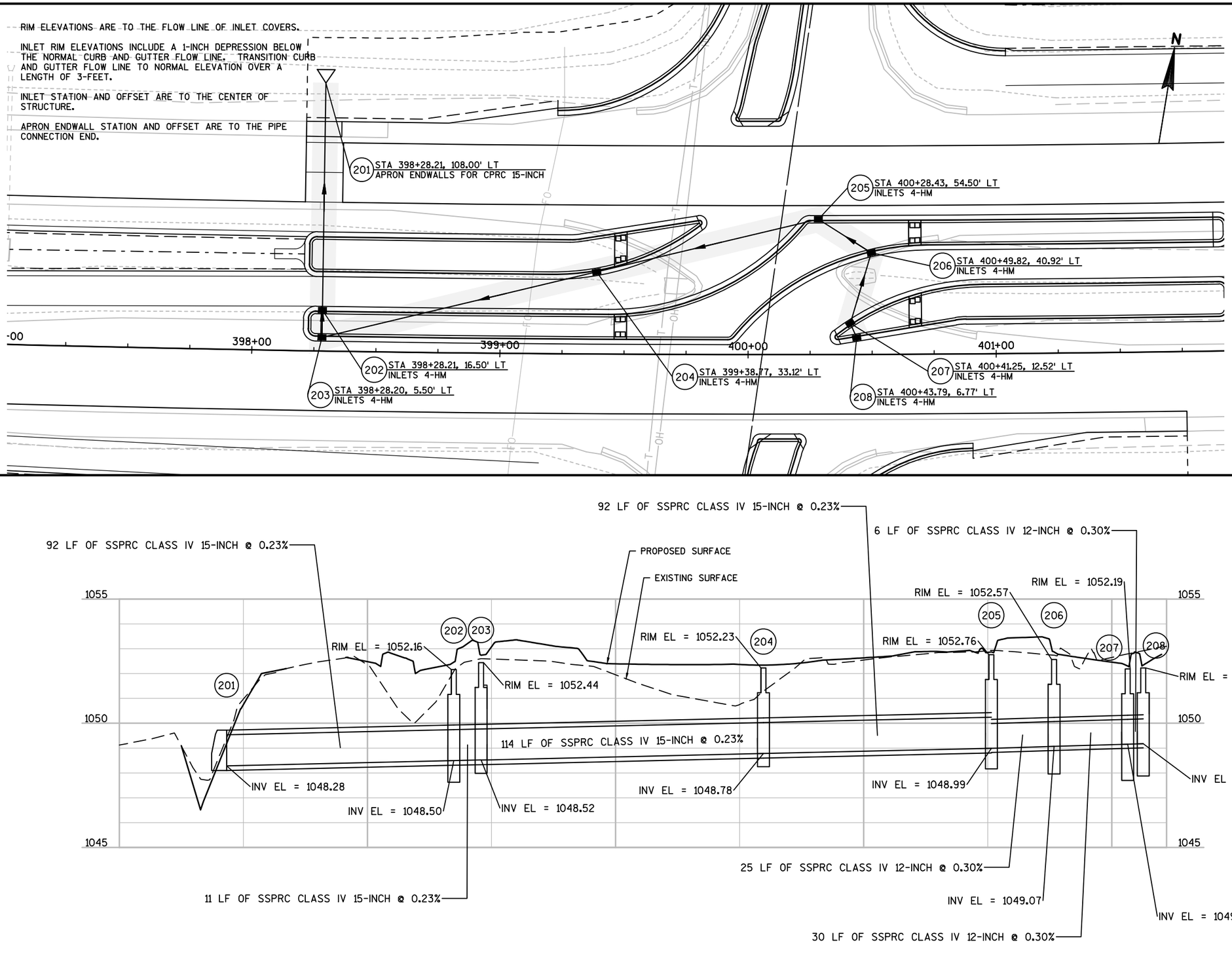
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	STORM SEWER	SHEET 19	E

RIM ELEVATIONS ARE TO THE FLOW LINE OF INLET COVERS.

INLET RIM ELEVATIONS INCLUDE A 1-INCH DEPRESSION BELOW THE NORMAL CURB AND GUTTER FLOW LINE. TRANSITION CURB AND GUTTER FLOW LINE TO NORMAL ELEVATION OVER A LENGTH OF 3-FEET.

INLET STATION AND OFFSET ARE TO THE CENTER OF STRUCTURE.

APRON ENDWALL STATION AND OFFSET ARE TO THE PIPE CONNECTION END.



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	STORM SEWER	SHEET 20	E

RIM ELEVATIONS FOR INLETS MEDIAN 2G-MS ARE AS SHOWN ON THE STANDARD DETAIL DRAWING "INLETS MEDIAN 1 & 2 GRATE".

INLET STATION AND OFFSET ARE TO THE CENTER OF STRUCTURE.

APRON ENDWALL STATION AND OFFSET ARE TO THE PIPE CONNECTION END.

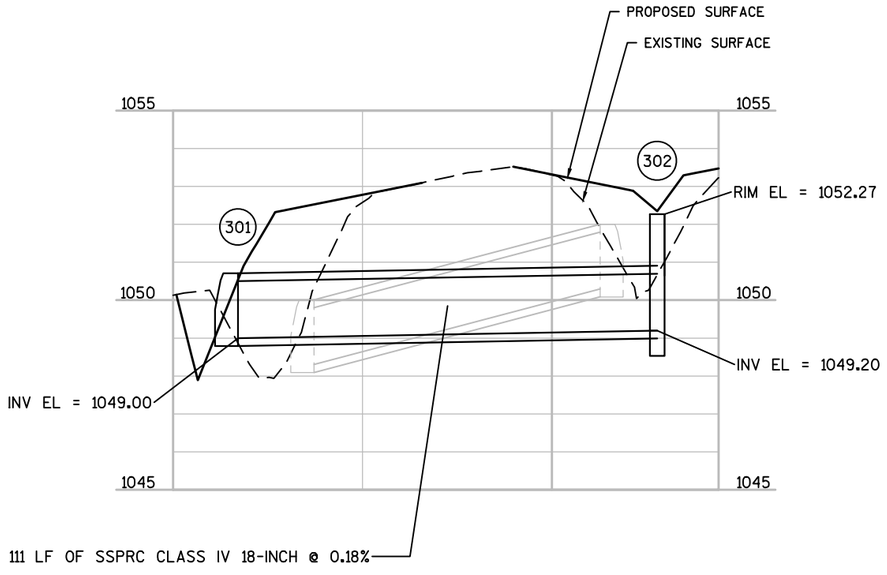
N

301 STA 402+25.00, 132.64' LT
APRON ENDWALLS FOR CPRC 18-INCH

302 STA 402+25.00, 21.96' LT
INLETS MEDIAN 2G-MS
SLOPE TOWARD DIRECTION OF FLOW

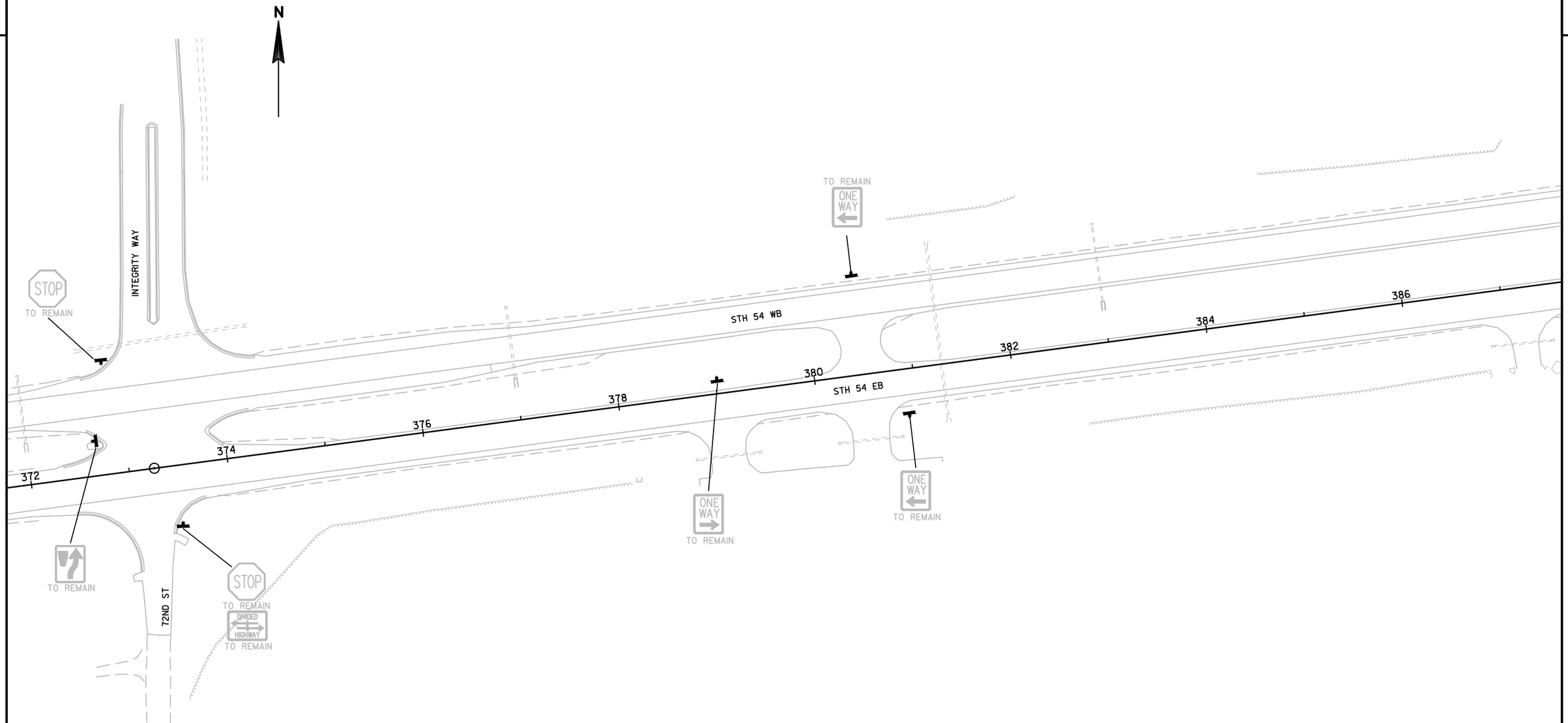
PT: 404+88.84

402+00 403+00 404+00 405+00 406+00 407+00



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	STORM SEWER	SHEET 21	E

2



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	SIGN REMOVALS	SHEET 22	E

2

N

STH 54 WB

STH 54 EB

388 390 392 394 396 398 400 402

CTH U

2-1 JCT M2-1
2-2 COUNTY U M1-5A
2-3 ONE WAY R6-2-L
2-4 South Wood County Park D7-68-R
2-5 Kellner D1-1
2-6 SPEED LIMIT 65 R2-1
2-7 SPONSOR BOYS & GIRLS CLUB OF PORTAGE CTY I55-56MOD
2-8 WRONG WAY R5-1A
2-9 SPONSOR COPPS FOOD CENTER EMPLOYEES I55-56MOD
2-10 SPONSOR WISCONSIN RAPIDS ROTARY SUNRISE I55-56MOD
2-11 WEST M3-4
2-12 54 M1-6
2-13 COUNTY U M1-5A
2-14 M6-4
2-15 DO NOT ENTER R5-1
2-16 R4-7
2-17 R4-7
2-18 COUNTY U M1-5A
2-19 M6-4
2-20 Wood Co I2-2
2-21 DO NOT ENTER R5-1
2-22 Portage Co I2-2
2-23 SPEED LIMIT 55 R2-1
2-24 COUNTY U M1-5A
2-25 Kellner Lake Wazeecha D1-2
2-26 SPONSOR LEAGUE OF WOMEN VOTERS I55-56MOD
2-27 STOP R1-1
2-28 DIVIDED HIGHWAY R6-3
2-29 54 M1-6
2-30 M6-4
2-31 STOP R1-1
2-32 DIVIDED HIGHWAY R6-3
2-33 54 M1-6
2-34 M6-4
2-35 ONE WAY R6-2-L
2-36 COUNTY U M1-5A

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	SIGN REMOVALS	SHEET 23	E

2

N

3-5
South Wood County Park
D7-68-L
3-6
Kellner
D1-1

3-7
ONE WAY
R6-2-L

3-8
JCT
M2-1
3-9
COUNTY U
M1-5A

3-3
WRONG WAY
R5-1A

STH 54 WB
STH 54 EB

404
406
408
410
412
414
416
418

84TH ST

STOP
TO REMAIN
DIVIDED HIGHWAY
TO REMAIN

ONE WAY
TO REMAIN

84th St
D1-1
3-11

ONE WAY
R6-2-L
3-10

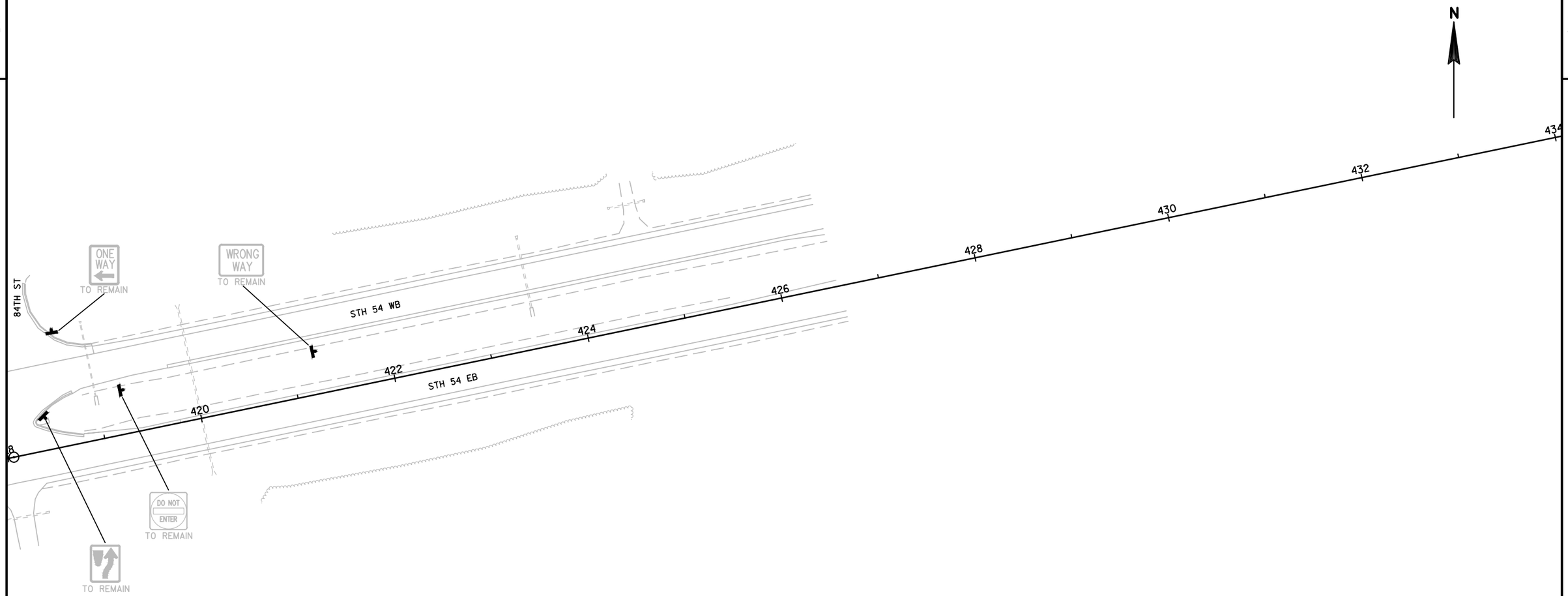
SPEED LIMIT 65
R2-1
3-4

EAST
M3-2
3-1

54
M1-6
3-2

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	SIGN REMOVALS	SHEET 24	E

2



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	SIGN REMOVALS	SHEET 25	E

2

2

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
  PROPOSED SIGN MOUNTED ON POST(S)
- X–X SIGN – MOVE
- X–X SIGN – REMOVE AND REPLACE
- X–X SIGN – REMOVE
- X–X SIGN – PLACE NEW
- X–X SIGN – EXISTING TO REMAIN

N

5–3 SPEED LIMIT 65 R2-1 36"X48"

5–6 JCT COUNTY U J1-1 36"X57"

5–7 WEST 54 J4-1 36"X54"

5–11 5–12 ONE WAY R6-1-L 54"X18" YIELD R1-2 48"X42"

5–16 5–17 ONE WAY R6-1-L 54"X18" YIELD R1-2 48"X42"

5–15 DO NOT ENTER R5-1 36"X36"

5–18 EAST SOUTH 54 COUNTY U J3-2 72"X84"

STH 54 WB

STH 54 EB

378 380 382 384 386 388 390 392

NORTH COUNTY U J3-1 36"X84" 5–19

Kellner D1-1 78"X21" 5–20

WRONG WAY R5-1A 42"X30" 5–4

JCT COUNTY U J1-1 36"X57" 5–5

R3-18 36"X36" 5–8

DO NOT ENTER R5-1 36"X36" 5–9

DO NOT ENTER R5-1 36"X36" 5–10

ONE WAY R6-2-L 36"X48" 5–14

WATCH FOR TURNING VEHICLES NEXT 1 MILE 84"X60" 5–1 5–2

U SOUTH USE FAR RIGHT LANE 54 EAST 114"X60" 5–13

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 26	E

2

N

EAST 54 SOUTH U WEST 54
USE FAR LEFT LANE
132"X66"
6-10

JCT 54
J1-1
24"X39"
6-54

RIGHT TURN ONLY
R3-53-R
24"X30"
6-52

NORTH COUNTY U
J4-1
24"X36"
6-53

ONE WAY
R6-1-L
54"X18"
6-18

YIELD
R1-2
48"X42"
6-19

W12-1R
24"X24"
6-51

NORTH COUNTY U
J3-1
36"X84"
6-24

ONE WAY
R6-1-L
54"X18"
6-20

YIELD
R1-2
48"X42"
6-21

W12-1D
36"X36"
6-25

WEST NORTH 54 COUNTY U
J2-2
72"X84"
6-26

South Wood County Park
D7-68-L
84"X42"
6-29

WRONG WAY
R5-1A
42"X30"
6-28B

54 COUNTY U
J12-2
48"X45"
6-50

ONE WAY
R6-1-R
36"X12"
6-48

ONE WAY
R6-1-R
36"X12"
6-46

STOP
R1-1
36"X36"
6-49

STOP
R1-1
36"X36"
6-47

R3-2
36"X36"
6-45B

R4-7
36"X48"
6-45

DO NOT ENTER
R5-1
36"X36"
6-17

R3-4
36"X36"
6-22B

CTH U

DO NOT ENTER
R5-1
36"X36"
6-16

ONE WAY
R6-1-R
36"X12"
6-13

EAST SOUTH 54 COUNTY U
J2-2
72"X84"
6-5

EAST SOUTH WEST 54 COUNTY U 54
J2-3
108"X84"
6-6

W12-1D
36"X36"
6-7

Wood Co
I2-2
6-4

Portage Co
I2-2
6-28

SOUTH COUNTY U
J3-1
36"X84"
6-31

408
406
404
402
400
398
396
394

STH 54 WB
STH 54 EB

WEST NORTH EAST 54 COUNTY U 54
J2-3
108"X84"
6-27

ONE WAY
R6-1-R
36"X12"
6-22

ONE WAY
R6-1-R
36"X12"
6-39

54 COUNTY U
J12-2
48"X45"
6-41

STOP
R1-1
36"X36"
6-40

W12-1R
24"X24"
6-38

RIGHT TURN ONLY
R3-53-R
24"X30"
6-34

WEST NORTH
54 U
EAST 54
USE FAR LEFT LANE
132"X66"
6-23

JCT 54
J1-1
24"X39"
6-33

CTH U

SOUTH COUNTY U
J4-1
24"X36"
6-35

Kellner
Lake Wazeecha
D1-2
6-36

ONE WAY
R6-1-R
36"X12"
6-42

STOP
R1-1
36"X36"
6-43

ONE WAY
R6-1-L
54"X18"
6-14

YIELD
R1-2
48"X42"
6-15

6-37

SPEED LIMIT 55
R2-1
24"X30"
6-32

6-10B

6-44B 6-44

R3-2
36"X36"

R4-7
36"X48"

ONE WAY
R6-1-L
54"X18"
6-11

YIELD
R1-2
48"X42"
6-12

SOUTH COUNTY U
J3-1
36"X84"
6-8

DO NOT ENTER
R5-1
36"X36"
6-9

R3-4
36"X36"

South Wood County Park
D7-68-R
84"X42"
6-2

ADOPT A HIGHWAY SPONSOR BOYS & GIRLS CLUB OF PORTAGE CTY
I55-56MOD
6-3

WRONG WAY
R5-1A
42"X30"
6-30

ADOPT A HIGHWAY SPONSOR LEAGUE OF WOMEN VOTERS
I55-56MOD

ADOPT A HIGHWAY SPONSOR COPPS FOOD CENTER EMPLOYEES
I55-56MOD

ADOPT A HIGHWAY SPONSOR WISCONSIN RAPIDS ROTARY SUNRISE
I55-56MOD

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 27	E

2

N

U NORTH
USE FAR RIGHT LANE
54 WEST
114"X60"
7-6

Kellner
D1-1
78"X21"
7-1

7-2
ONE WAY
R6-2-L
36"X48"

DO NOT ENTER
R5-1
36"X36"
7-7

DO NOT ENTER
R5-1
36"X36"
7-10

7-13
R3-18
36"X36"

7-14
JCT
COUNTY U
J1-1
36"X57"

7-17
WRONG WAY
R5-1A
42"X30"

84TH ST

STH 54 WB

STH 54 EB

410
412
414
416
418
420
422
424

JCT
COUNTY U
J1-1
36"X57"
7-15

SPEED LIMIT 65
R2-1
36"X48"
7-16

EAST
54
J4-1
36"X54"
7-20

WEST NORTH
54 COUNTY U
J3-2
72"X84"
7-18

DO NOT ENTER
R5-1
36"X36"
7-3

ONE WAY
R6-1-L
54"X18"
7-4

YIELD
R1-2
48"X42"
7-5

ONE WAY
R6-1-L
54"X18"
7-8

YIELD
R1-2
48"X42"
7-9

84th St
D1-1
7-12

WATCH FOR TURNING VEHICLES
NEXT 1 MILE
84"X60"
7-18 7-19

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PERMANENT SIGNING	SHEET 28	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - ****
PLOT DATE : 2/1/2016 6:35 PM
PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

LIGHTING CONTROL CABINET WITH METER BREAKER PEDESTAL

2" CONDUIT, NON-METALLIC (unless otherwise noted)

LIGHTING UNIT

PULL BOX 24" X 42"

UTILITY POLE

ELECTRIC, UNDERGROUND — E —

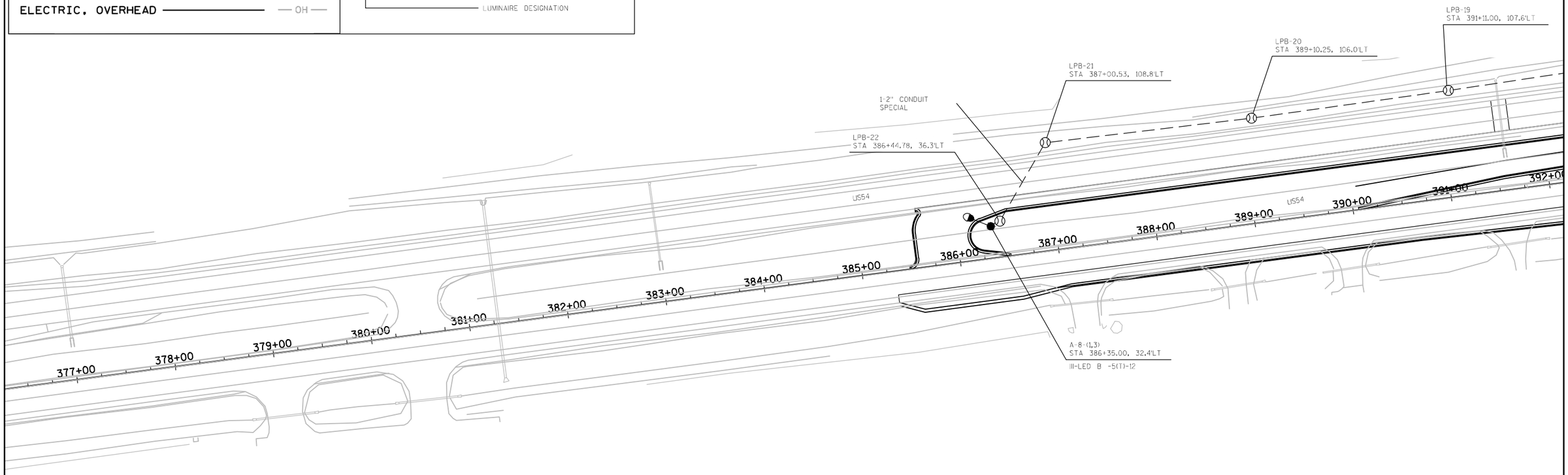
ELECTRIC, OVERHEAD — OH —

A-7-(1,3)
STA 865+55.00, 22.0'LT
250-5(T)-15

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUITS
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

GENERAL NOTES

1. INSTALL LIGHTING SYSTEM IN COORDINATION WITH CONSTRUCTION STAGES. SYSTEM CIRCUITS SHALL BE OPERATIONAL WITH THE COMPLETION OF EACH STAGE.
2. LIGHTING SYSTEM L71-2000.



N

0 50 100
scale in feet

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	LIGHTING PLAN: STH 54	SHEET 29	E

LEGEND

- LIGHTING CONTROL CABINET WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT
- PULL BOX 24" X 42"
- UTILITY POLE
- ELECTRIC, UNDERGROUND — E —
- ELECTRIC, OVERHEAD — OH —

A-7-(1,3)
STA 865+55.00, 22.0'LT
250-5(T)-15

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUITS
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

GENERAL NOTES

1. INSTALL LIGHTING SYSTEM IN COORDINATION WITH CONSTRUCTION STAGES. SYSTEM CIRCUITS SHALL BE OPERATIONAL WITH THE COMPLETION OF EACH STAGE.
2. LIGHTING SYSTEM L71-2000.

EP: 15+00.00
PI: 12+76.42
PC: 396+53.84
PT: 404+88.84
CTH U
US54
14+00
13+00
12+00
11+00
10+00
9+00
8+00
7+00
393+00
394+00
395+00
396+00
397+00
398+00
399+00
400+00
401+00
402+00
403+00
404+00
405+00
406+00
407+00
408+0

CONTROL CABINET "A"
STA 399+25.00, 175.0'LT

LPB-1
STA 399+34.20, 120.6'LT

LPB-2
STA 400+93.46, 149.0'LT

LPB-3
STA 403+14.05, 139.3'LT

LPB-4
STA 405+16.43, 131.1'LT

LPB-5
STA 407+21.51, 131.4'LT

LPB-9
STA 400+90.83, 20.9'LT

LPB-10
STA 402+93.83, 23.4'LT

LPB-11
STA 404+86.48, 23.2'LT

LPB-12
STA 399+25.98, 39.2'LT

LPB-13
STA 397+19.61, 38.2'LT

LPB-14
STA 395+33.86, 37.9'LT

LPB-15
STA 399+17.31, 66.2'RT

LPB-16
STA 397+55.12, 109.5'LT

LPB-17
STA 395+54.50, 109.6'LT

LPB-18
STA 393+11.22, 111.1'LT

A-1-(2,4)
STA 401+04.04, 134.8'LT
III-LED B -5(T)-12

A-3-(6,8)
STA 400+79.48, 19.7'LT
III-LED B -5(T)-12

A-4-(6,8)
STA 405+01.18, 26.7'LT
III-LED B -5(T)-12

A-5-(5,7)
STA 399+31.62, 72.4'RT
III-LED B -5(T)-12

A-6-(5,7)
STA 399+40.32, 41.1'LT
III-LED B -5(T)-12

A-7-(5,7)
STA 395+19.90, 36.8'LT
III-LED B -5(T)-12

2-3" CONDUIT

1-3" CONDUIT SPECIAL

N

0 50 100
scale in feet

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	LIGHTING PLAN: STH 54	SHEET 30	E

FILE NAME : M:\PROJECTS\8945\EE\PLANS\LIGHTING PLAN.DWG PLOT DATE : 12/30/2015 3:03 PM PLOT BY : BRENT JASPERSON PLOT NAME : _____ PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

LEGEND

LIGHTING CONTROL CABINET WITH METER BREAKER PEDESTAL

2" CONDUIT, NON-METALLIC (unless otherwise noted)

LIGHTING UNIT

PULL BOX 24" X 42"

UTILITY POLE

ELECTRIC, UNDERGROUND — E —

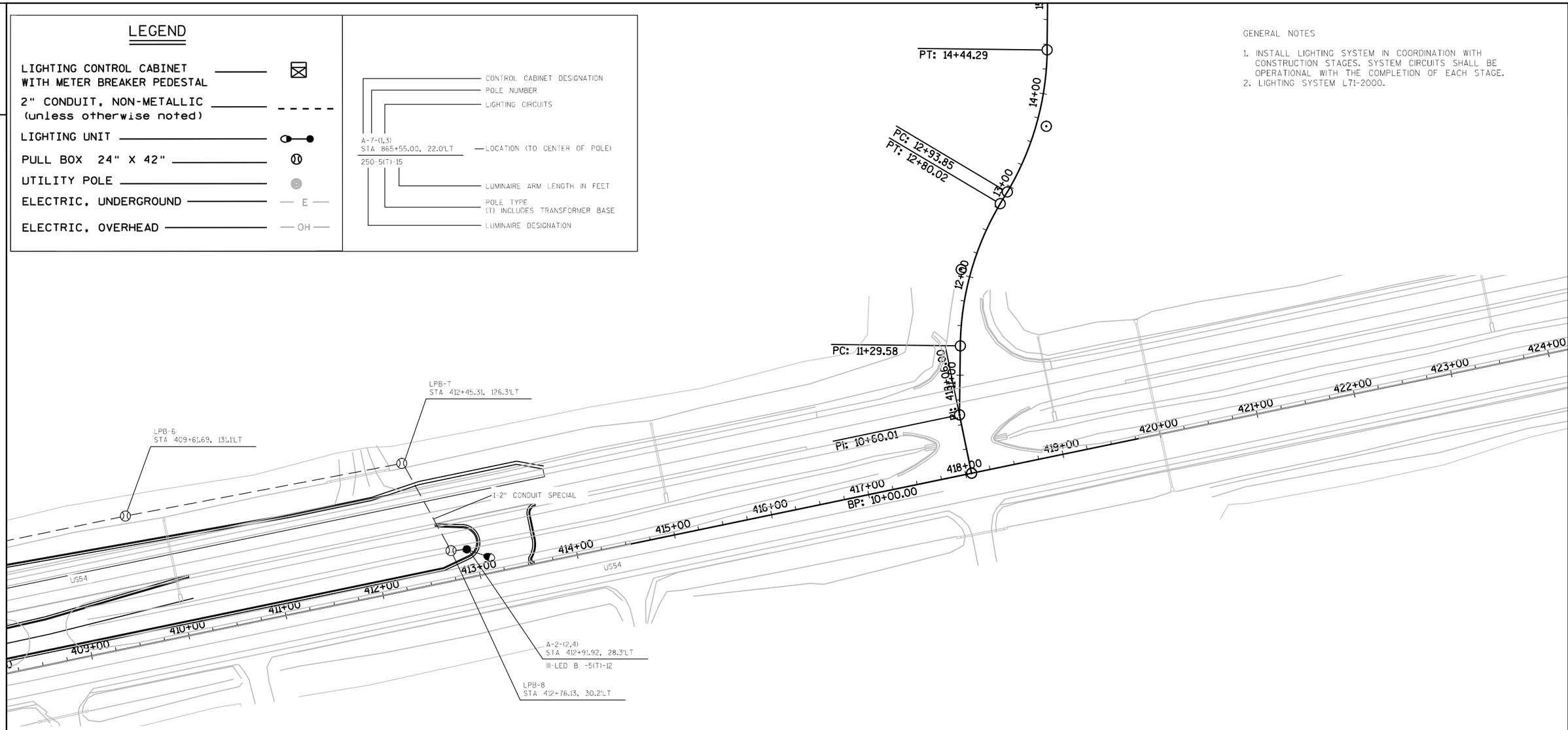
ELECTRIC, OVERHEAD — OH —

A-7-(1,3)
STA 865+55.00, 22.0'LT
250-5(T)-15

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUITS
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

GENERAL NOTES

1. INSTALL LIGHTING SYSTEM IN COORDINATION WITH CONSTRUCTION STAGES. SYSTEM CIRCUITS SHALL BE OPERATIONAL WITH THE COMPLETION OF EACH STAGE.
2. LIGHTING SYSTEM L71-2000.



N

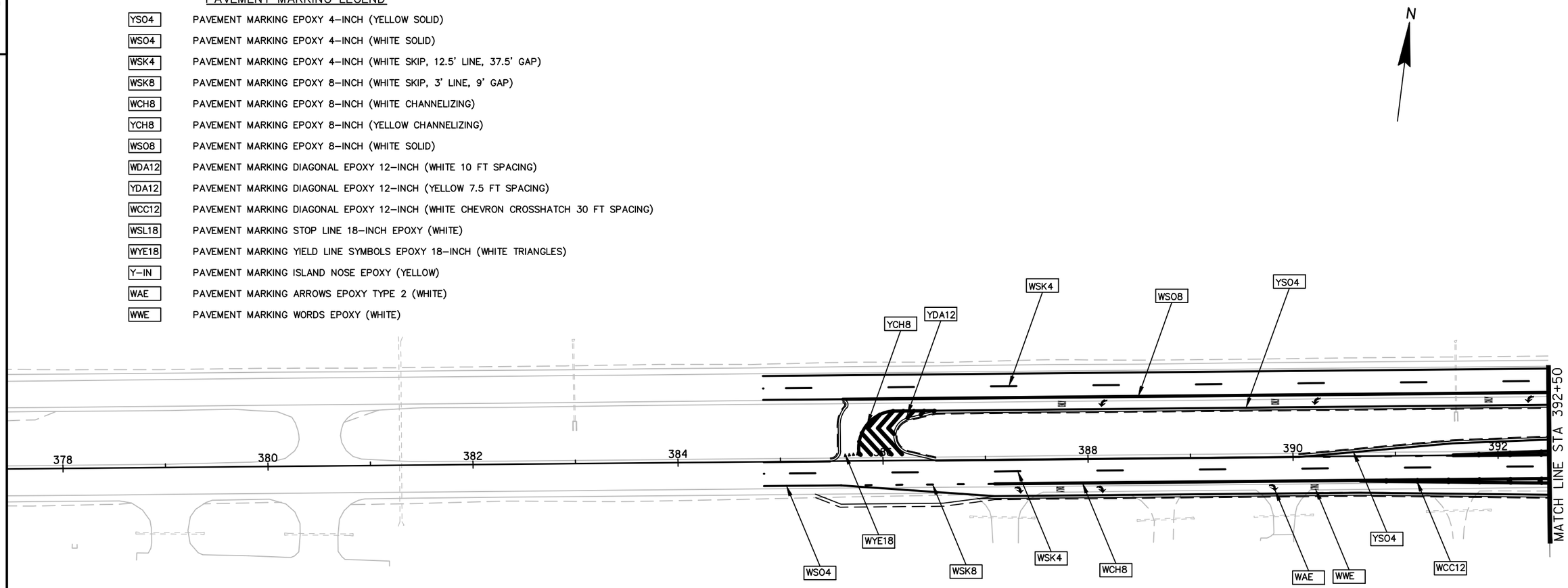
0 50 100
scale in feet

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	LIGHTING PLAN: STH 54	SHEET 31	E

2

PAVEMENT MARKING LEGEND

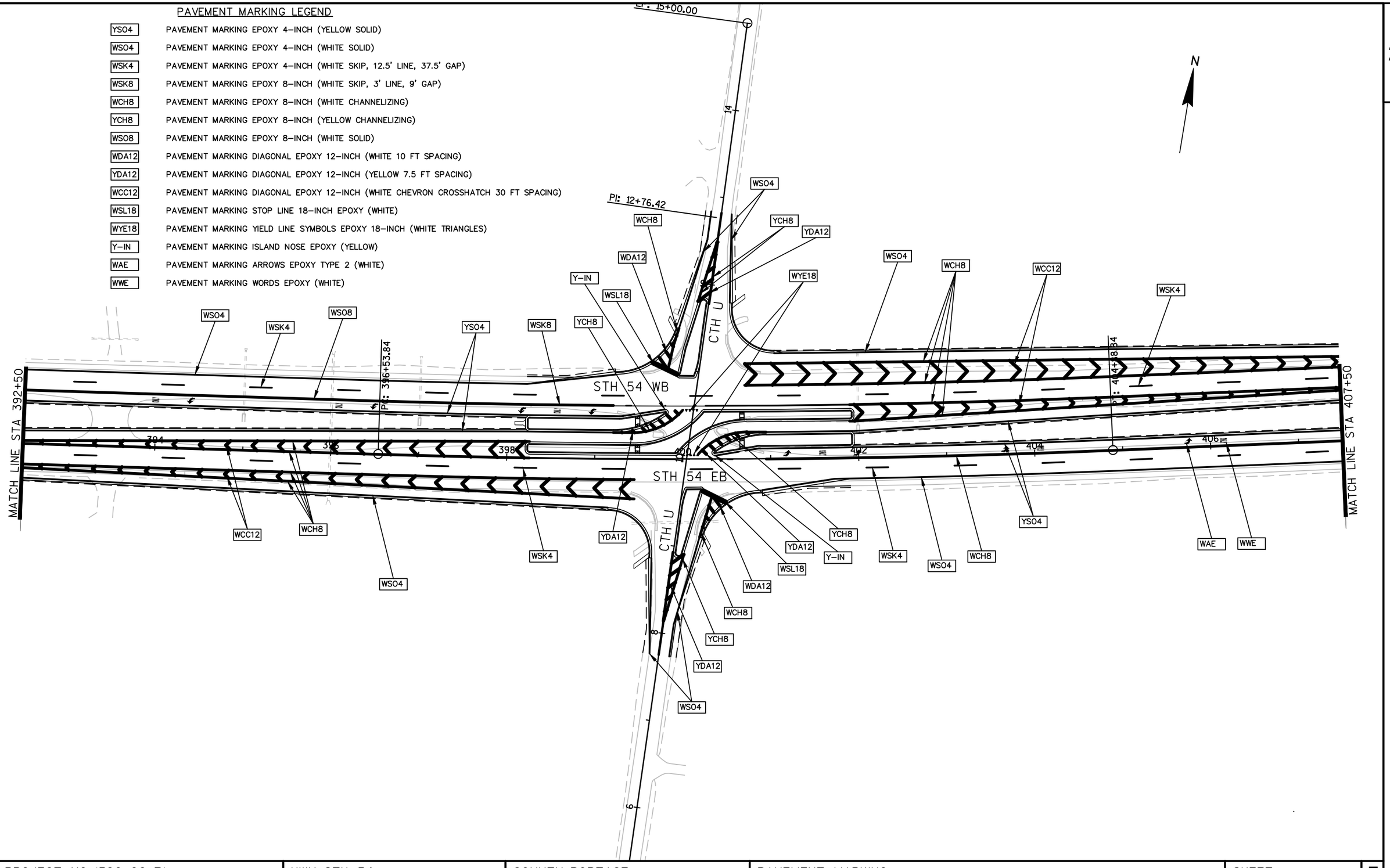
YSO4	PAVEMENT MARKING EPOXY 4–INCH (YELLOW SOLID)
WSO4	PAVEMENT MARKING EPOXY 4–INCH (WHITE SOLID)
WSK4	PAVEMENT MARKING EPOXY 4–INCH (WHITE SKIP, 12.5' LINE, 37.5' GAP)
WSK8	PAVEMENT MARKING EPOXY 8–INCH (WHITE SKIP, 3' LINE, 9' GAP)
WCH8	PAVEMENT MARKING EPOXY 8–INCH (WHITE CHANNELIZING)
YCH8	PAVEMENT MARKING EPOXY 8–INCH (YELLOW CHANNELIZING)
WSO8	PAVEMENT MARKING EPOXY 8–INCH (WHITE SOLID)
WDA12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (WHITE 10 FT SPACING)
YDA12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (YELLOW 7.5 FT SPACING)
WCC12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (WHITE CHEVRON CROSSHATCH 30 FT SPACING)
WSL18	PAVEMENT MARKING STOP LINE 18–INCH EPOXY (WHITE)
WYE18	PAVEMENT MARKING YIELD LINE SYMBOLS EPOXY 18–INCH (WHITE TRIANGLES)
Y–IN	PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
WAE	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
WWE	PAVEMENT MARKING WORDS EPOXY (WHITE)



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	PAVEMENT MARKING	SHEET 32 E

PAVEMENT MARKING LEGEND

YSO4	PAVEMENT MARKING EPOXY 4–INCH (YELLOW SOLID)
WSO4	PAVEMENT MARKING EPOXY 4–INCH (WHITE SOLID)
WSK4	PAVEMENT MARKING EPOXY 4–INCH (WHITE SKIP, 12.5' LINE, 37.5' GAP)
WSK8	PAVEMENT MARKING EPOXY 8–INCH (WHITE SKIP, 3' LINE, 9' GAP)
WCH8	PAVEMENT MARKING EPOXY 8–INCH (WHITE CHANNELIZING)
YCH8	PAVEMENT MARKING EPOXY 8–INCH (YELLOW CHANNELIZING)
WSO8	PAVEMENT MARKING EPOXY 8–INCH (WHITE SOLID)
WDA12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (WHITE 10 FT SPACING)
YDA12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (YELLOW 7.5 FT SPACING)
WCC12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (WHITE CHEVRON CROSSHATCH 30 FT SPACING)
WSL18	PAVEMENT MARKING STOP LINE 18–INCH EPOXY (WHITE)
WYE18	PAVEMENT MARKING YIELD LINE SYMBOLS EPOXY 18–INCH (WHITE TRIANGLES)
Y–IN	PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
WAE	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
WWE	PAVEMENT MARKING WORDS EPOXY (WHITE)



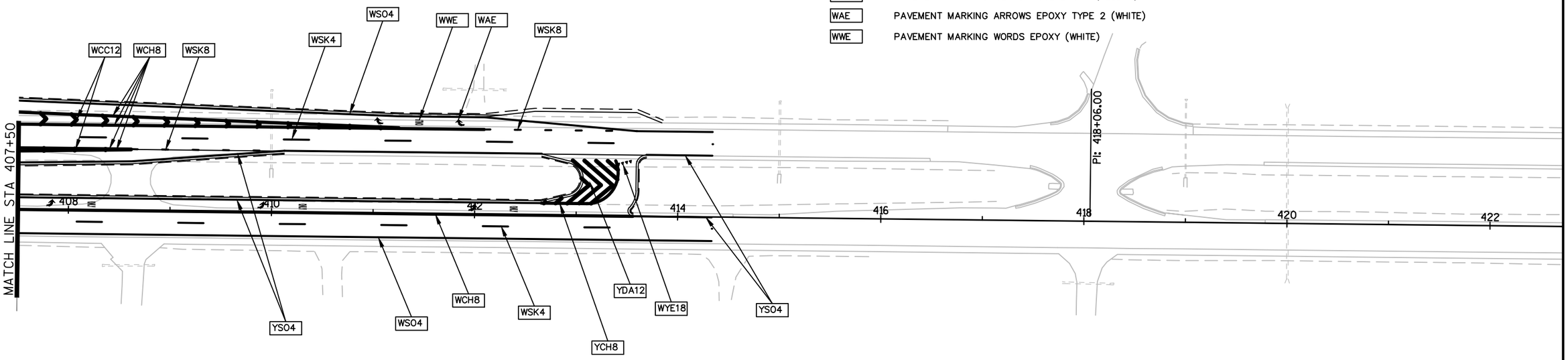
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 33

2

PAVEMENT MARKING LEGEND

YS04	PAVEMENT MARKING EPOXY 4–INCH (YELLOW SOLID)
WS04	PAVEMENT MARKING EPOXY 4–INCH (WHITE SOLID)
WSK4	PAVEMENT MARKING EPOXY 4–INCH (WHITE SKIP, 12.5' LINE, 37.5' GAP)
WSK8	PAVEMENT MARKING EPOXY 8–INCH (WHITE SKIP, 3' LINE, 9' GAP)
WCH8	PAVEMENT MARKING EPOXY 8–INCH (WHITE CHANNELIZING)
YCH8	PAVEMENT MARKING EPOXY 8–INCH (YELLOW CHANNELIZING)
WS08	PAVEMENT MARKING EPOXY 8–INCH (WHITE SOLID)
WDA12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (WHITE 10 FT SPACING)
YDA12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (YELLOW 7.5 FT SPACING)
WCC12	PAVEMENT MARKING DIAGONAL EPOXY 12–INCH (WHITE CHEVRON CROSSHATCH 30 FT SPACING)
WSL18	PAVEMENT MARKING STOP LINE 18–INCH EPOXY (WHITE)
WYE18	PAVEMENT MARKING YIELD LINE SYMBOLS EPOXY 18–INCH (WHITE TRIANGLES)
Y–IN	PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
WAE	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
WWE	PAVEMENT MARKING WORDS EPOXY (WHITE)

N



2

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PAVEMENT MARKING	SHEET 34	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - ****

PLOT DATE : 12/1/2015 5:41 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

GENERAL NOTES FOR CHANGEABLE MESSAGE BOARDS

PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING MESSAGE SIGNS. PLACE THE SIGNS SO THE DRIVER HAS A CLEAR VIEW OF THE MESSAGE FOR A MINIMUM OF 1,000 FEET.

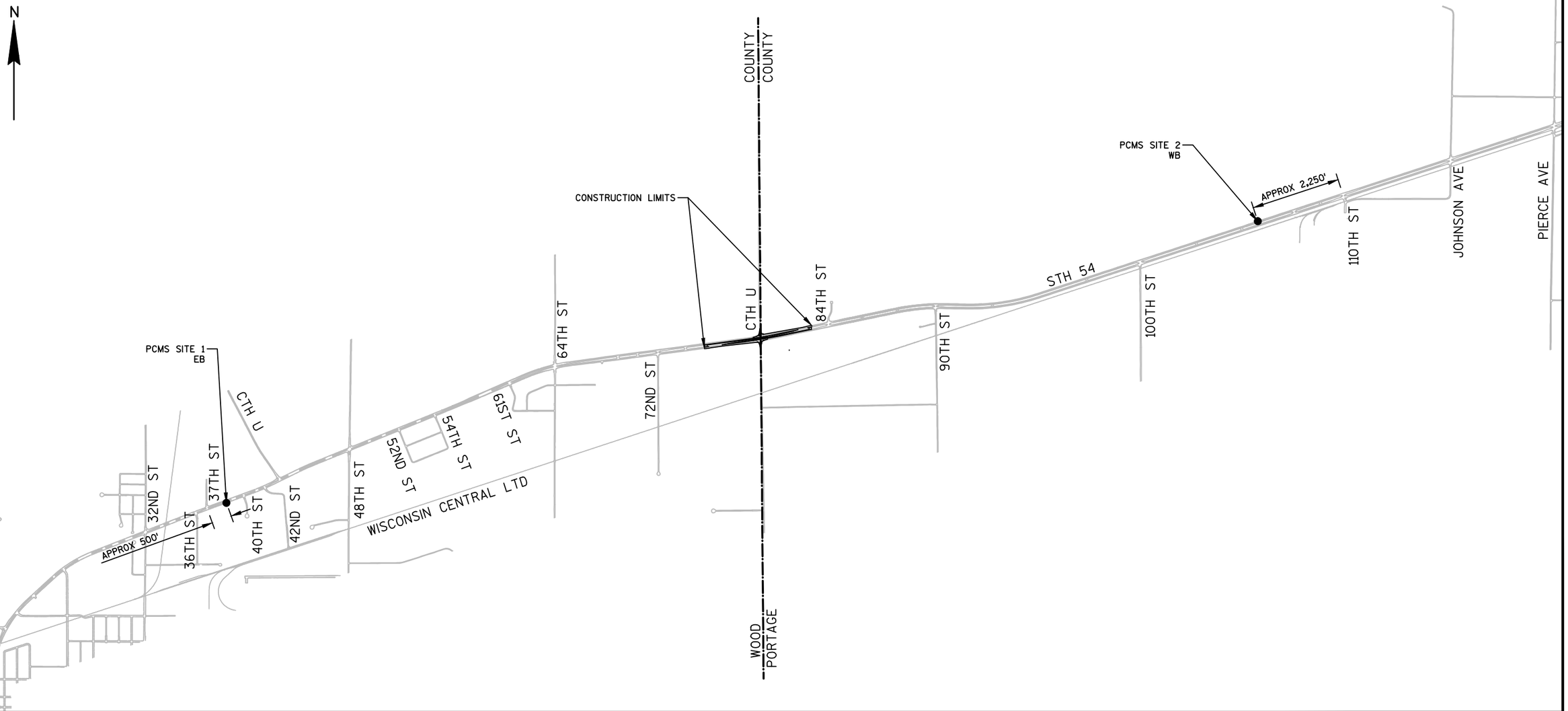
MESSAGE SIGNS SHOULD SHOULD BE PLACED AS FAR AWAY FROM LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY.

WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY AND MAINTENANCE CONSIDERATIONS. IF A PCMS IS PLACED ON THE SHOULDER, INSTALL A TAPER OF 5 TRAFFIC CONTROL DRUMS AT 10' SPACING AHEAD OF EACH PCMS PLACED ON A SHOULDER.

SITE 1 MESSAGE SIGN IS TO BE IN PLACE AND DISPLAYING THE "PRIOR TO CONSTRUCTION" MESSAGES FOR SEVEN DAYS PRIOR TO THE EXPECTED START OF WORK ON STH 54.

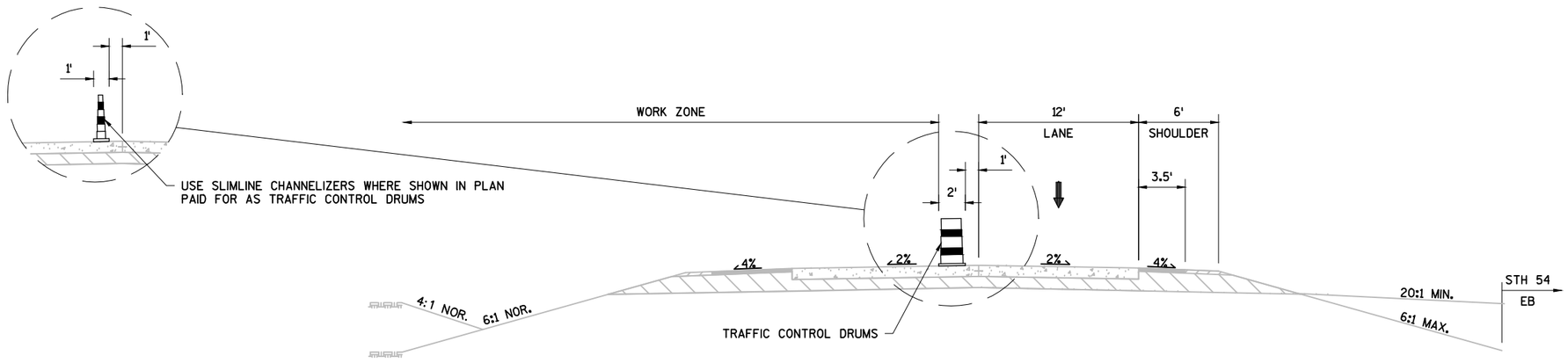
SITE 2 MESSAGE SIGN IS TO BE IN PLACE AND DISPLAYING THE "PRIOR TO CONSTRUCTION" MESSAGES FOR SEVEN DAYS PRIOR TO THE EXPECTED START OF WORK ON STH 54.

MESSAGE OVERVIEW									
SIGN OWNER	PCMS SITE NO. (DIR.)	7 DAYS PRIOR TO CONSTRUCTION		DURING OUTSIDE LANE CLOSURE*		DURING INSIDE LANE CLOSURE		*ADD DURING CTH U CLOSURE	
		FRAME 1 (2 SEC)	FRAME 2 (2 SEC)	FRAME 1 (2 SEC)	FRAME 2 (2 SEC)	FRAME 1 (2 SEC)	FRAME 2 (2 SEC)	FRAME 3 (2 SEC)	FRAME 4 (2 SEC)
CONTRACTOR	1 (EB)	SINGLE LANE TRAFFIC	MON. XX TO MON. XX	RIGHT LANE CLOSED	2 MILES MERGE LEFT	LEFT LANE CLOSED	2 MILES MERGE RIGHT	COUNTY U CLOSED AHEAD	USE ALT ROUTE
CONTRACTOR	2 (WB)	SINGLE LANE TRAFFIC	MON. XX TO MON. XX	RIGHT LANE CLOSED	2 MILES MERGE LEFT	LEFT LANE CLOSED	2 MILES MERGE RIGHT	COUNTY U CLOSED AHEAD	USE ALT ROUTE



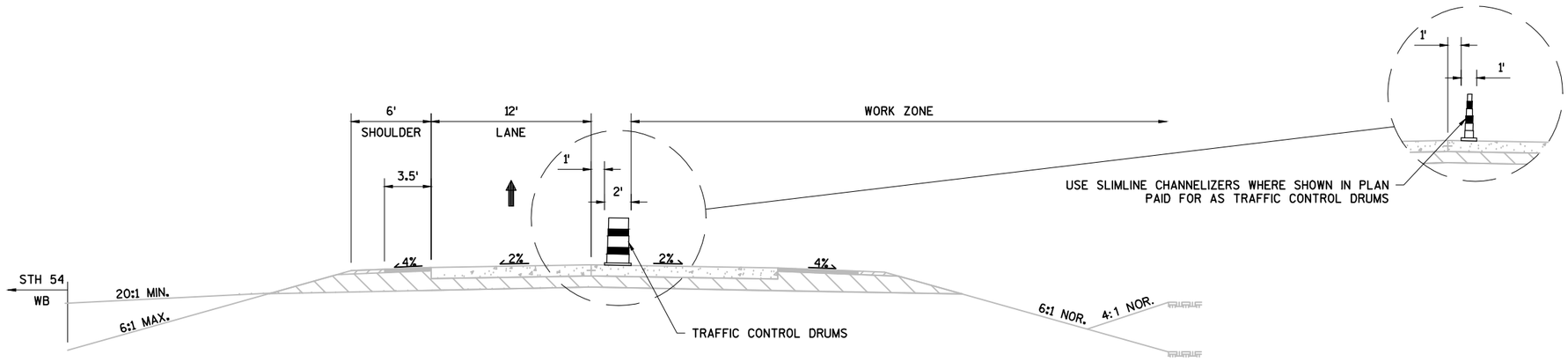
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - PCMS OVERVIEW	SHEET 35	E

2



TRAFFIC CONTROL TYPICAL SECTION - STH 54 WB

LOOKING EB



EXISTING TYPICAL SECTION - STH 54 EB

LOOKING EB

STAGE 1 TRAFFIC:
CLOSE THE OUTSIDE LANES ALONG STH 54.
STH 54 LEFT TURN LANES REMAIN OPEN.
STH 54 RIGHT TURN LANES REMAIN OPEN.

CONSTRUCTION:
CONSTRUCT OFFSET RIGHT TURN LANES ADJACENT TO STH 54.

INSTALL ELECTRICAL PULL BOXES, CONDUIT, AND WIRE ALONG THE NORTH SIDE OF STH 54. BORE THE CONDUIT ACROSS CTH U.

2

2

N

STH 54 WB

STH 54 EB

304'TC' 306'TC' 308'TC' 310'TC' 312'TC' 314'TC' 316'TC' 318'TC'

MATCH LINE STA 318'TC'+50

ROAD WORK 1 MILE

W20-1-T

54th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

SPEED LIMIT 50

SPEED LIMIT 50

SPEED LIMIT 50

MATCH LINE STA 318'TC'+50

STH 54 WB

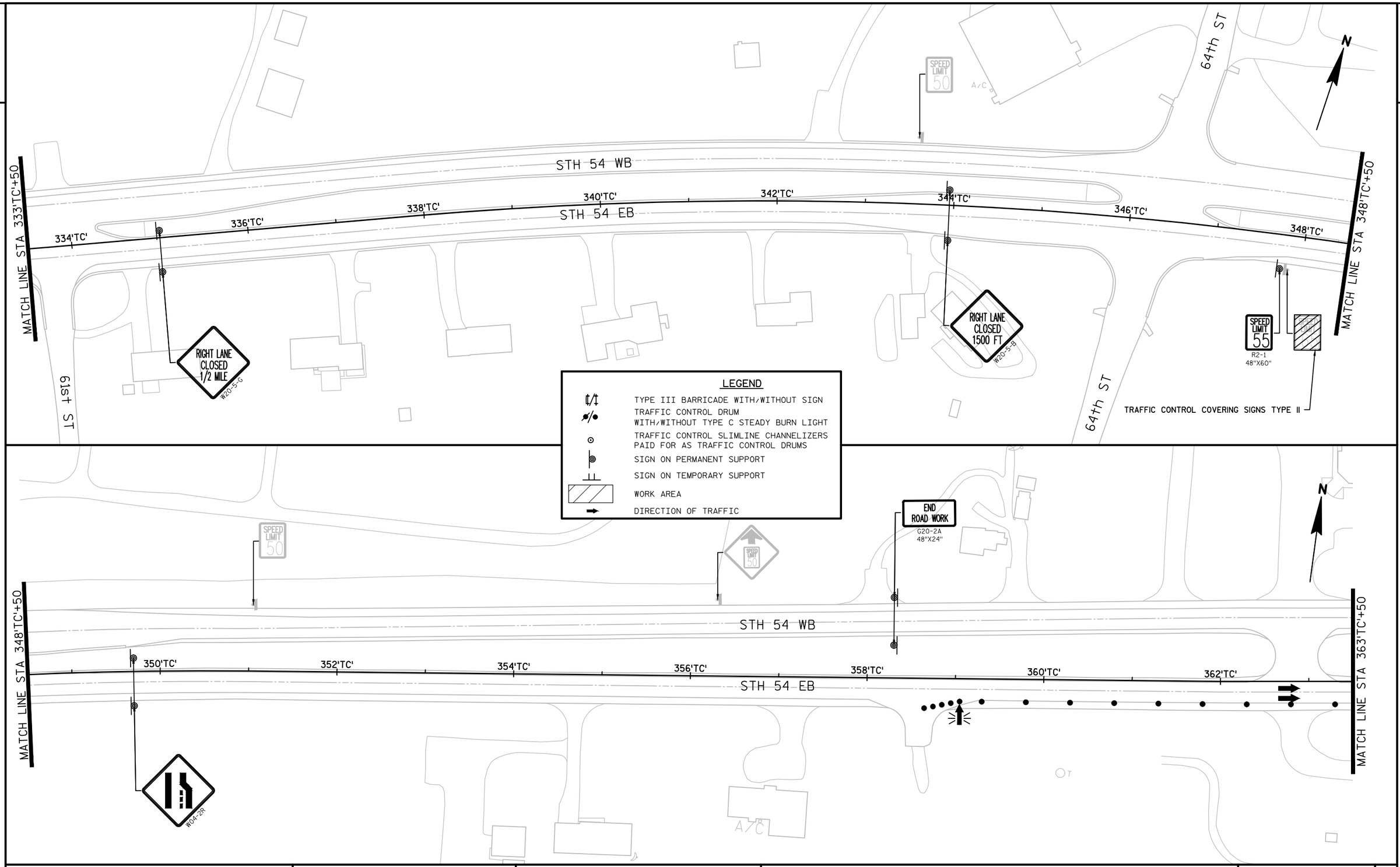
STH 54 EB

320'TC' 322'TC' 324'TC' 326'TC' 328'TC' 330'TC' 332'TC'

MATCH LINE STA 333'TC'+50

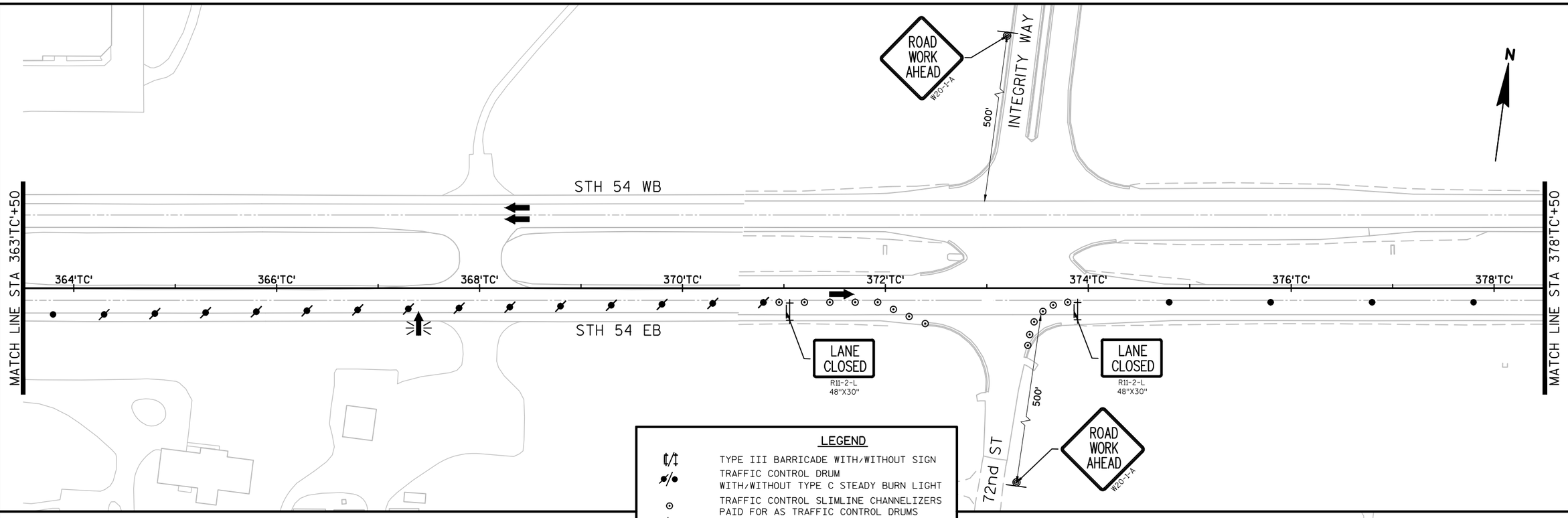
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 37	E

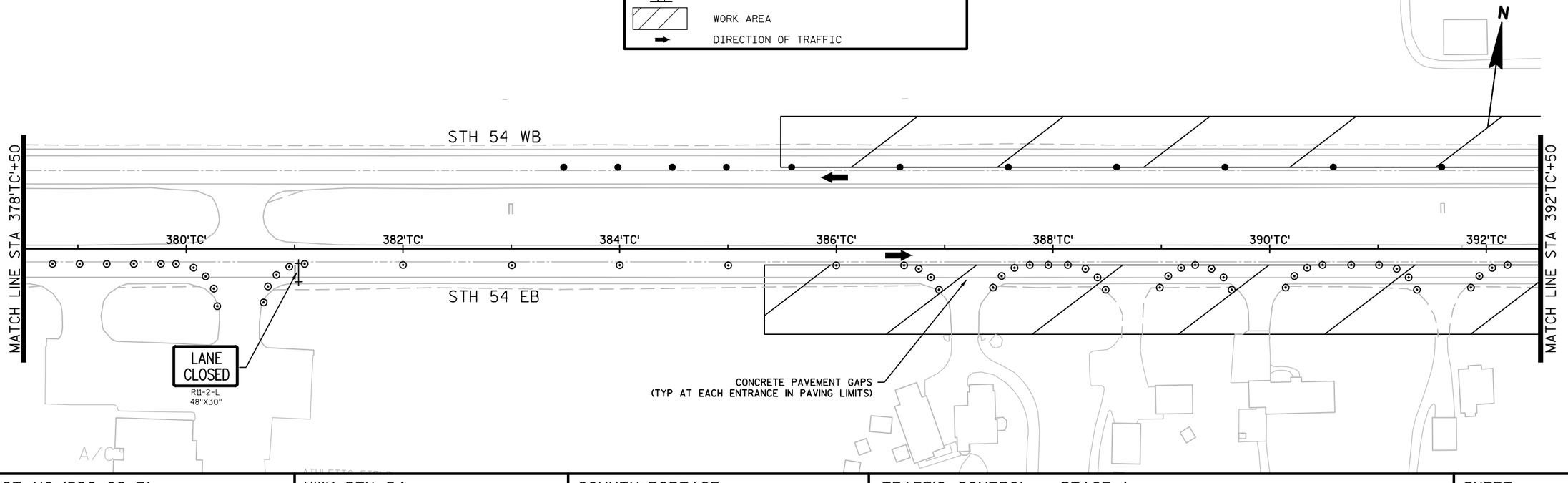
2



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 38	E

2





PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 39	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025002-TC-S1.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:28 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

ROAD WORK AHEAD
W20-1-A

CTH U

14'TC'

500'

12'TC'

TRAFFIC CONTROL COVERING SIGNS TYPE II

SPEED LIMIT 55
R2-1
48"X60"

LANE CLOSED
R11-2-L
48"X30"

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE
18-INCH

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

STH 54 WB

MATCH LINE STA 392'TC'+50

394'TC'

396'TC'

398'TC'

400'TC'

402'TC'

404'TC'

406'TC'

MATCH LINE STA 407'TC'+50

STH 54 EB

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

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE
18-INCH

8'TC'

500'

6'TC'

CTH U

ROAD WORK AHEAD
W20-1-A

LANE CLOSED
R11-2-L
48"X30"

SPEED LIMIT 55
R2-1
48"X60"

TRAFFIC CONTROL COVERING SIGNS TYPE II

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 40	E

2

CONCRETE PAVEMENT GAPS
(TYP AT EACH ENTRANCE IN PAVING LIMITS)

LANE CLOSED
R11-2-L
48"X30"

ROAD WORK AHEAD
W20-1-A

500'

84th ST

N

STH 54 WB

MATCH LINE STA 407'TC'+50

408'TC' 410'TC' 412'TC' 414'TC' 416'TC' 418'TC' 420'TC'

STH 54 EB

MATCH LINE STA 421'TC'+50

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

MATCH LINE STA 421'TC'+50

STH 54 WB

422'TC' 424'TC' 426'TC' 428'TC' 430'TC' 432'TC' 434'TC' 436'TC'

STH 54 EB

MATCH LINE STA 436'TC'+50

SPEED LIMIT 65
R2-1
48"X60"

END ROAD WORK
G20-2A
48"X24"

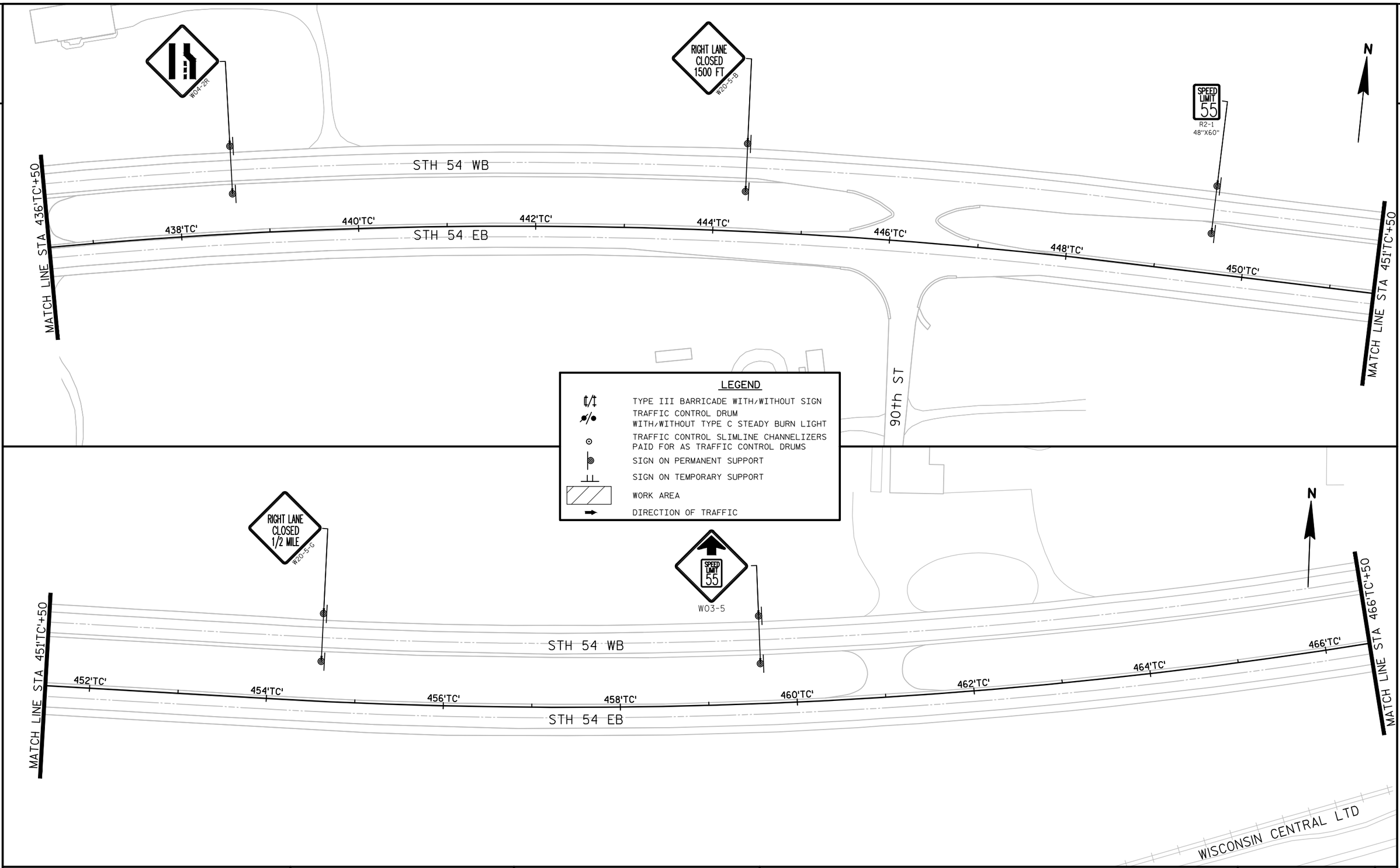
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 41	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025002-TC-S1.DWG
LAYOUT NAME - ****

PLOT DATE : 1/13/2016 5:29 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

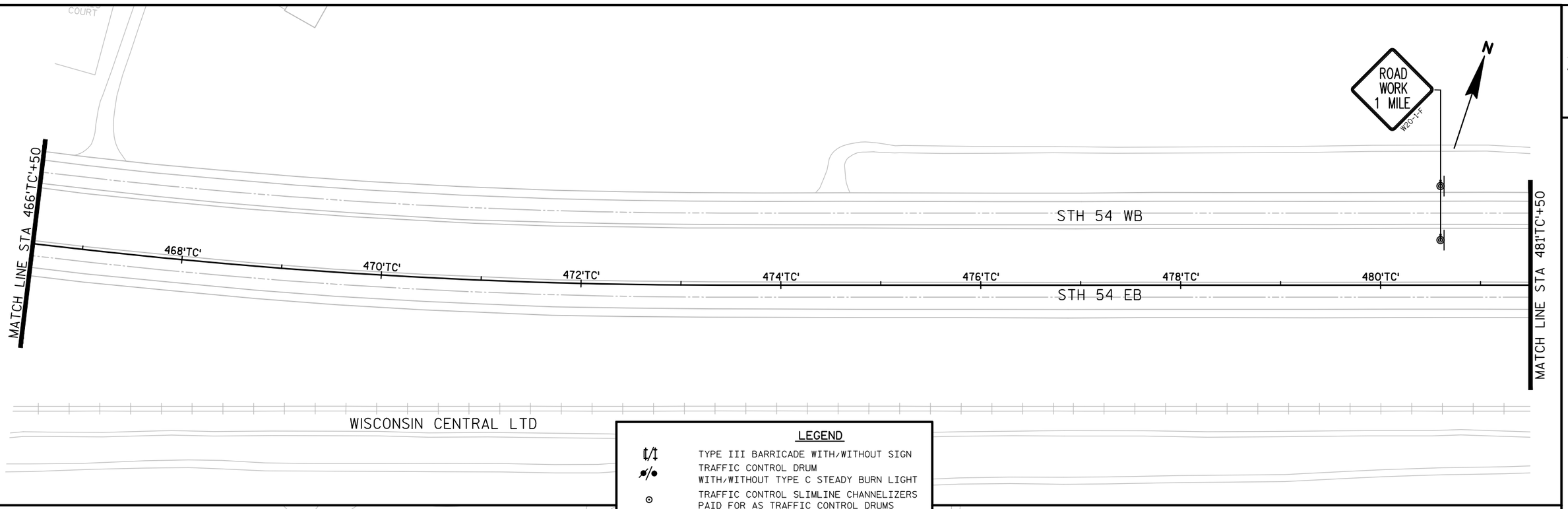
2



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 42	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025002-TC-S1.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:30 PM
PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



2

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1	SHEET 43	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025002-TC-S1.DWG
LAYOUT NAME - ****

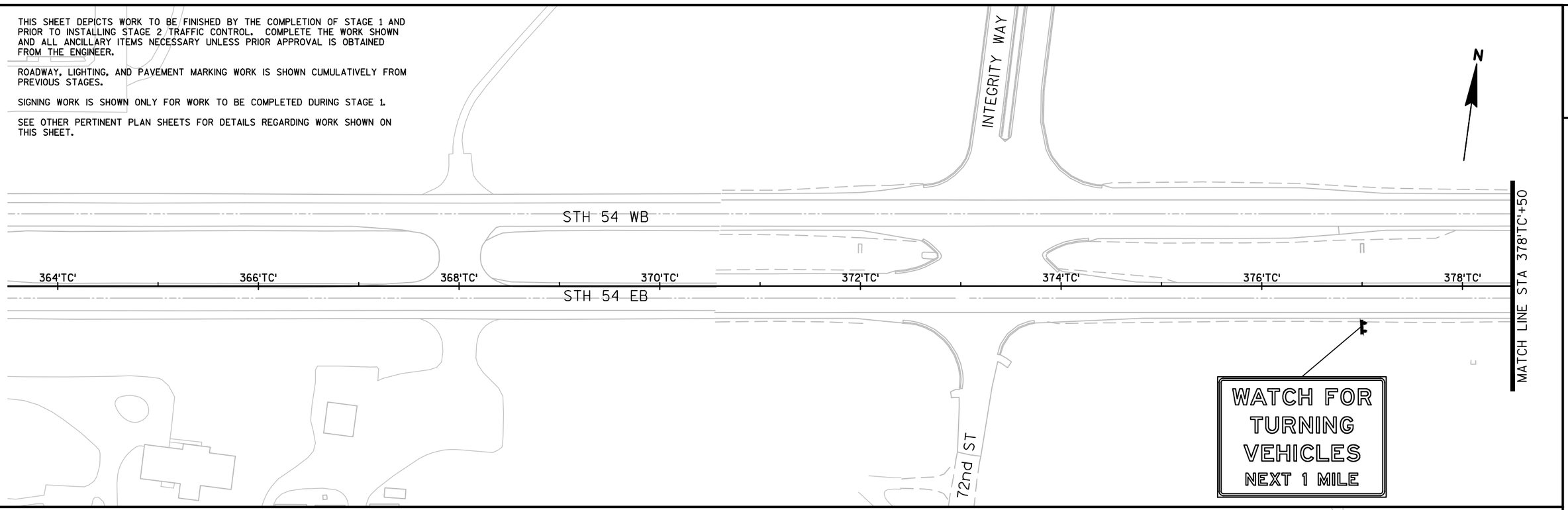
PLOT DATE : 1/13/2016 5:30 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

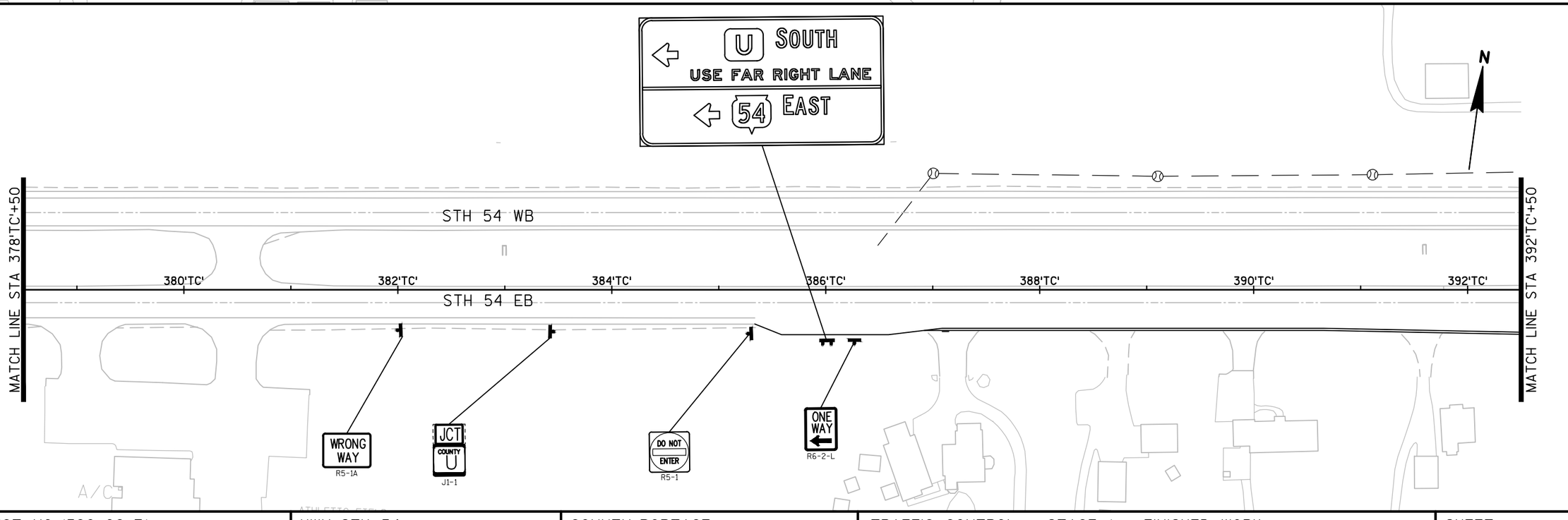
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 1 AND PRIOR TO INSTALLING STAGE 2 TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 1.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.





PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1 - FINISHED WORK	SHEET 44	E

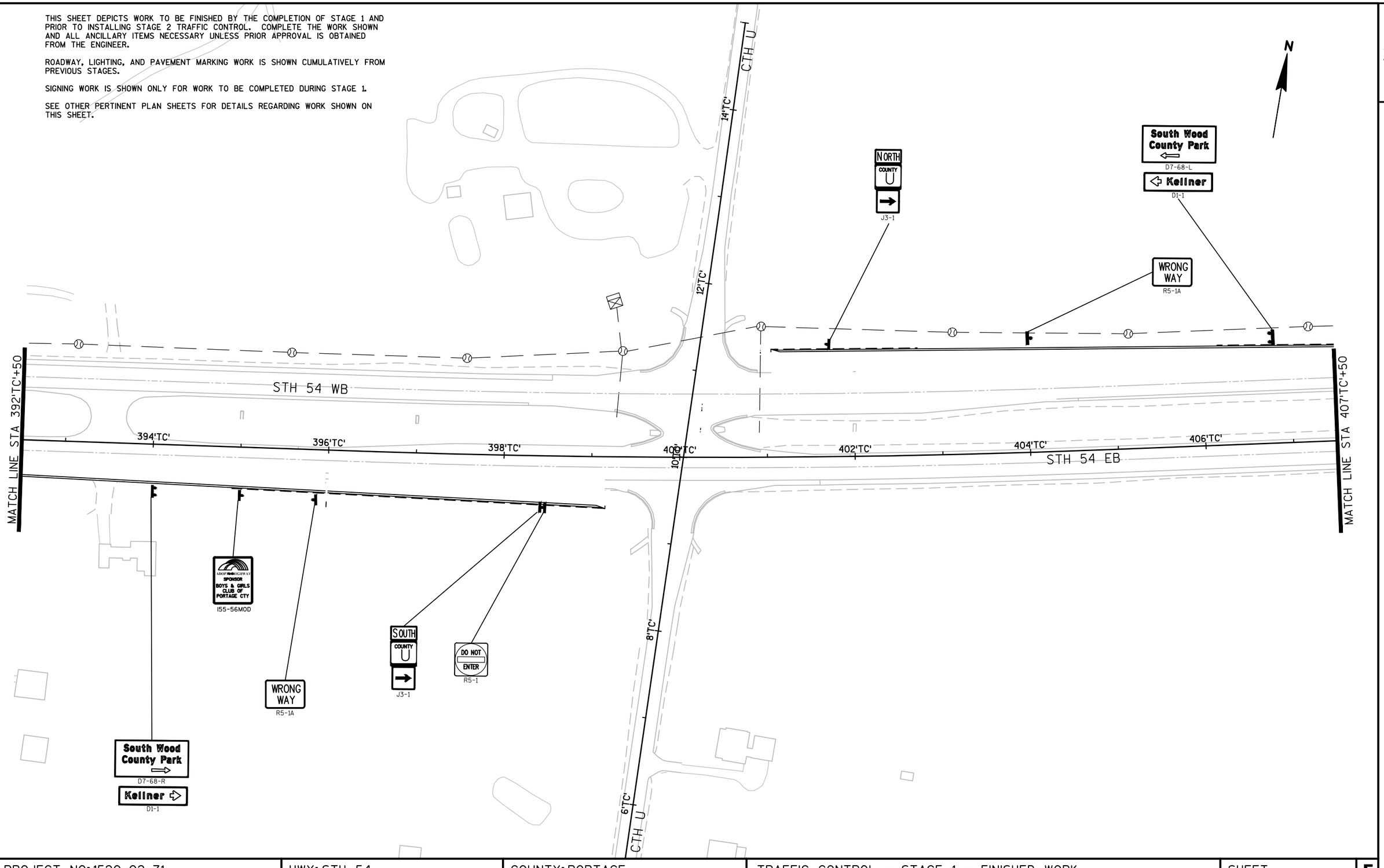
2

THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 1 AND PRIOR TO INSTALLING STAGE 2 TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 1.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.



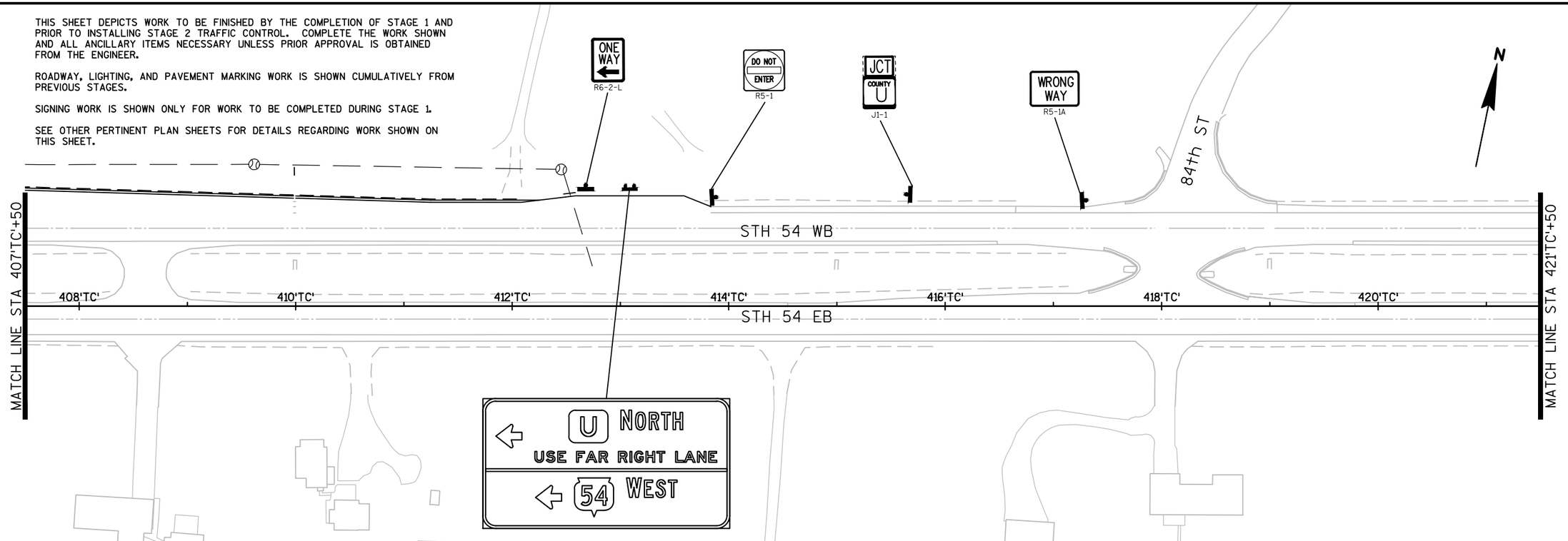
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1 - FINISHED WORK	SHEET 45	E

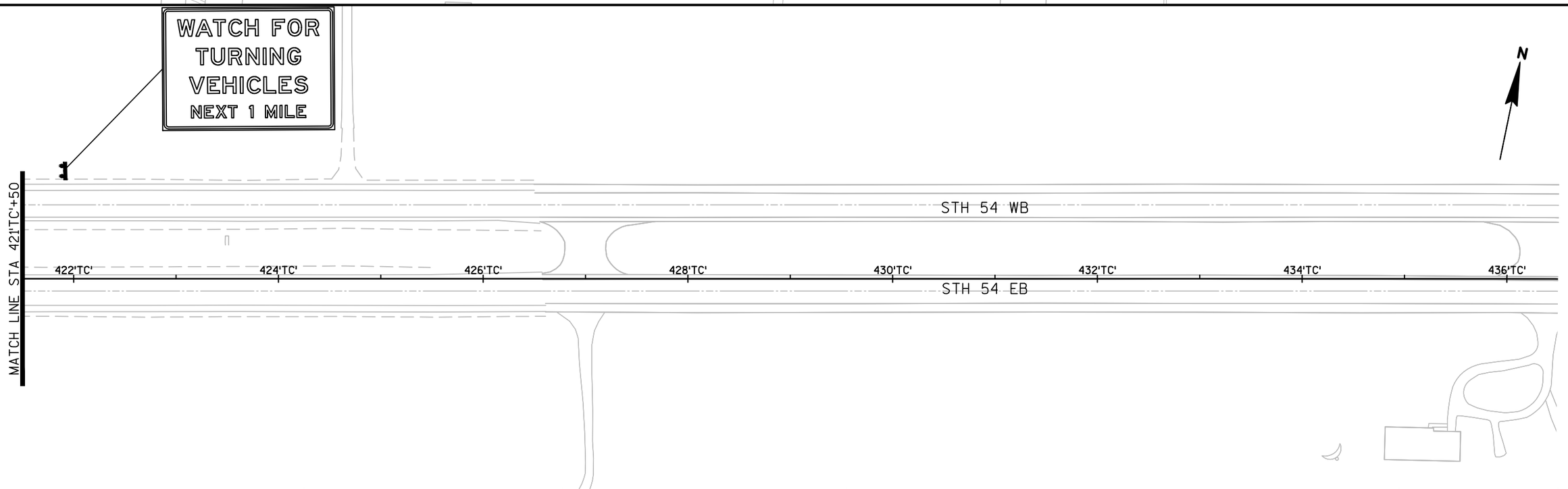
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 1 AND PRIOR TO INSTALLING STAGE 2 TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 1.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.



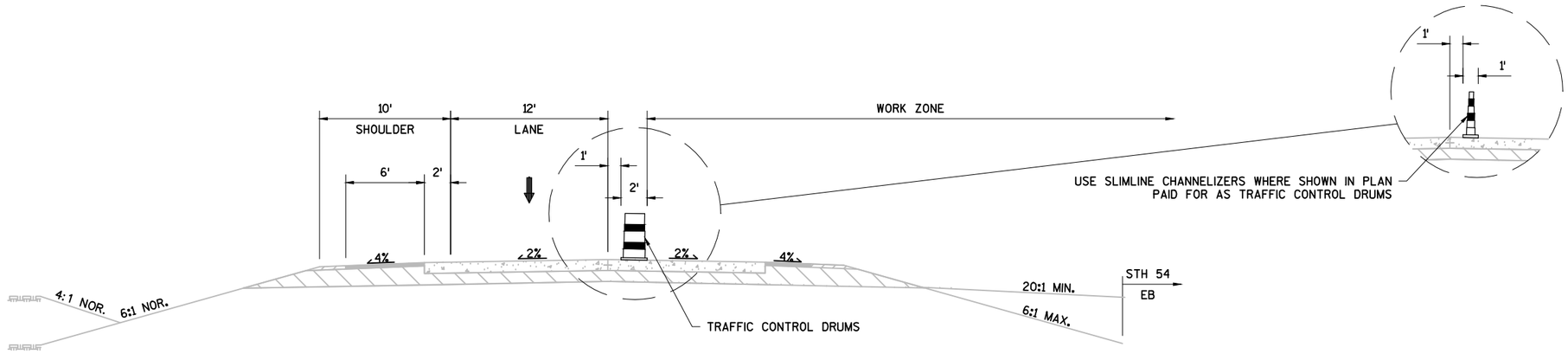


2

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 1 - FINISHED WORK	SHEET 46	E

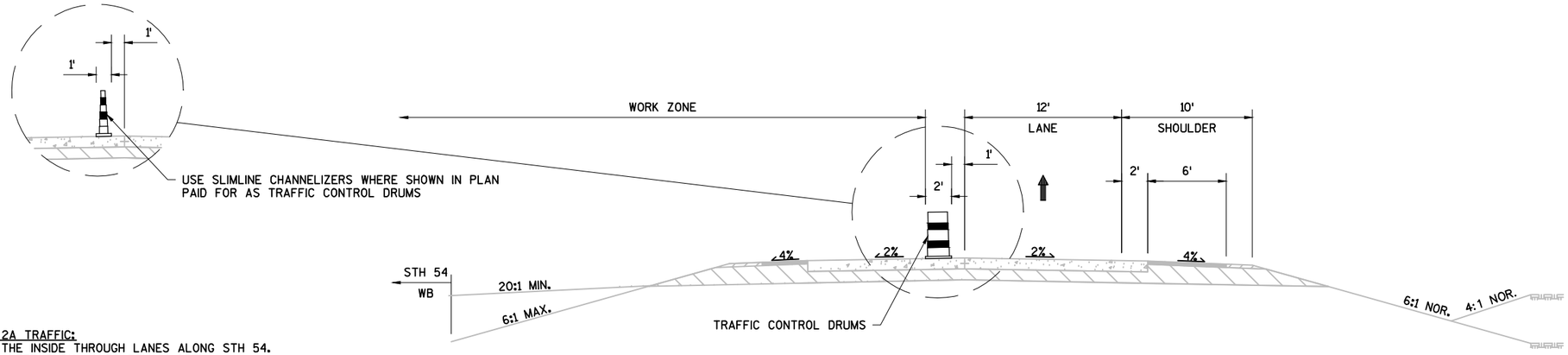
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025002-TC-S1-FW.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:33 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



TRAFFIC CONTROL TYPICAL SECTION - STH 54 WB

LOOKING EB



EXISTING TYPICAL SECTION - STH 54 EB

LOOKING EB

STAGE 2A TRAFFIC:
CLOSE THE INSIDE THROUGH LANES ALONG STH 54.
STH 54 LEFT TURN LANES REMAIN OPEN.
STH 54 RIGHT TURN LANES REMAIN OPEN.

CONSTRUCTION:
CONSTRUCT THE STH 54 MEDIAN U-TURN LANES AND A PORTION OF THE STH 54 LEFT TURN LANES.

STAGE 2B TRAFFIC:
CLOSE THE INSIDE THROUGH LANES ALONG STH 54.
CLOSE THE STH 54 LEFT TURN LANES.
STH 54 RIGHT TURN LANES REMAIN OPEN.

CONSTRUCTION:
CONSTRUCT THE REMAINING STH 54 LEFT TURN LANES.

2

2

STH 54 WB

STH 54 EB

304'TC' 306'TC' 308'TC' 310'TC' 312'TC' 314'TC' 316'TC' 318'TC'

MATCH LINE STA 318'TC'+50

ROAD WORK 1 MILE
W20-1-T

54th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

SPEED LIMIT 50

SPEED LIMIT 50

SPEED LIMIT 50

MATCH LINE STA 318'TC'+50

STH 54 WB

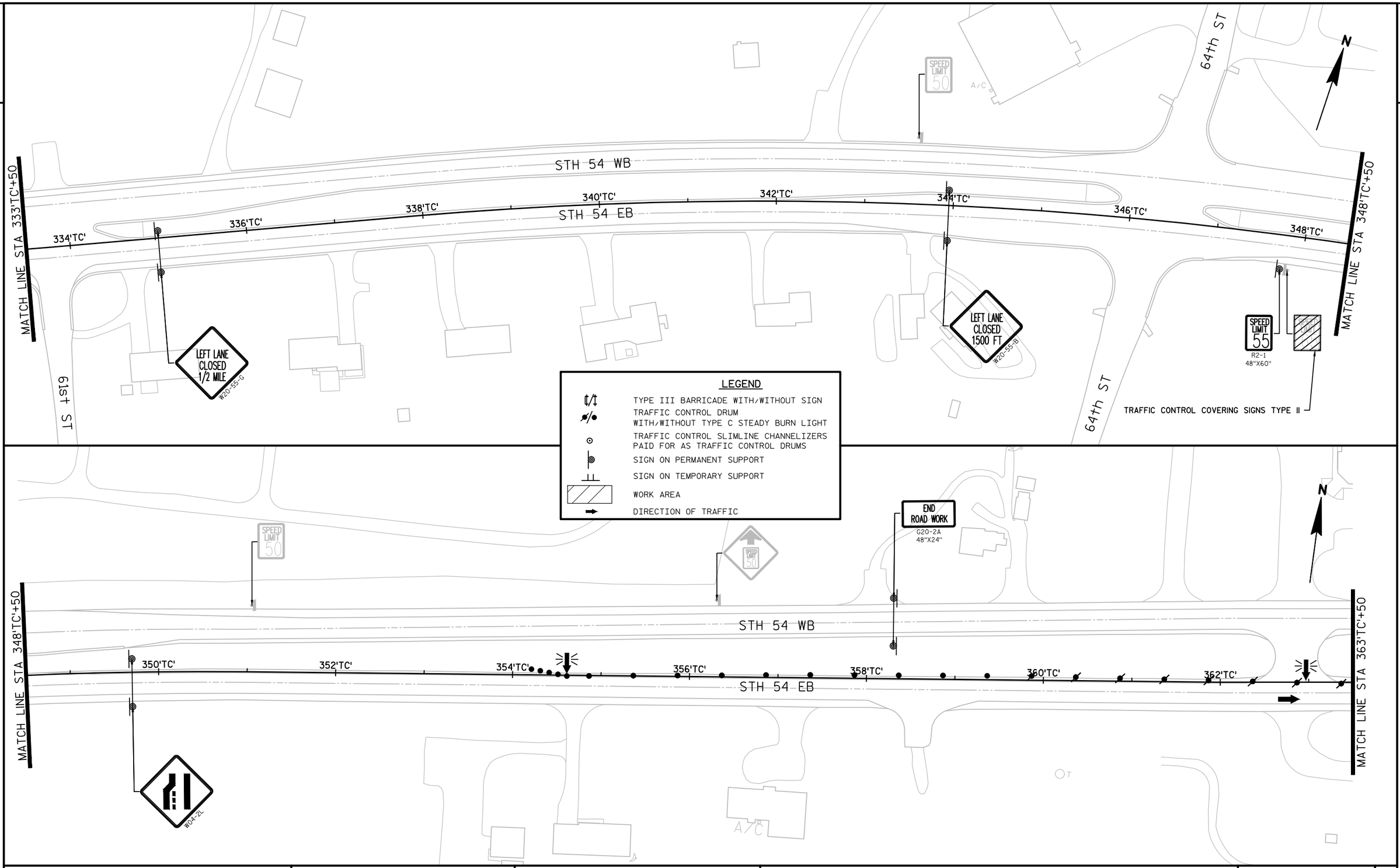
STH 54 EB

320'TC' 322'TC' 324'TC' 326'TC' 328'TC' 330'TC' 332'TC'

MATCH LINE STA 333'TC'+50

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 48	E

2



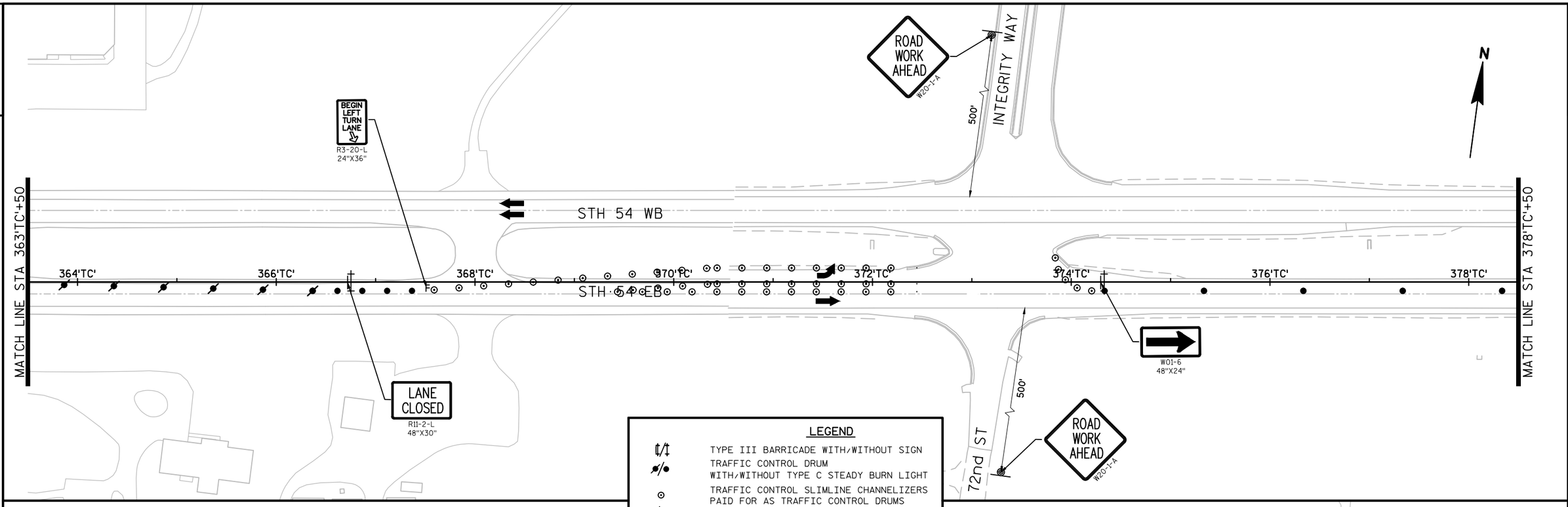
LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 49	E

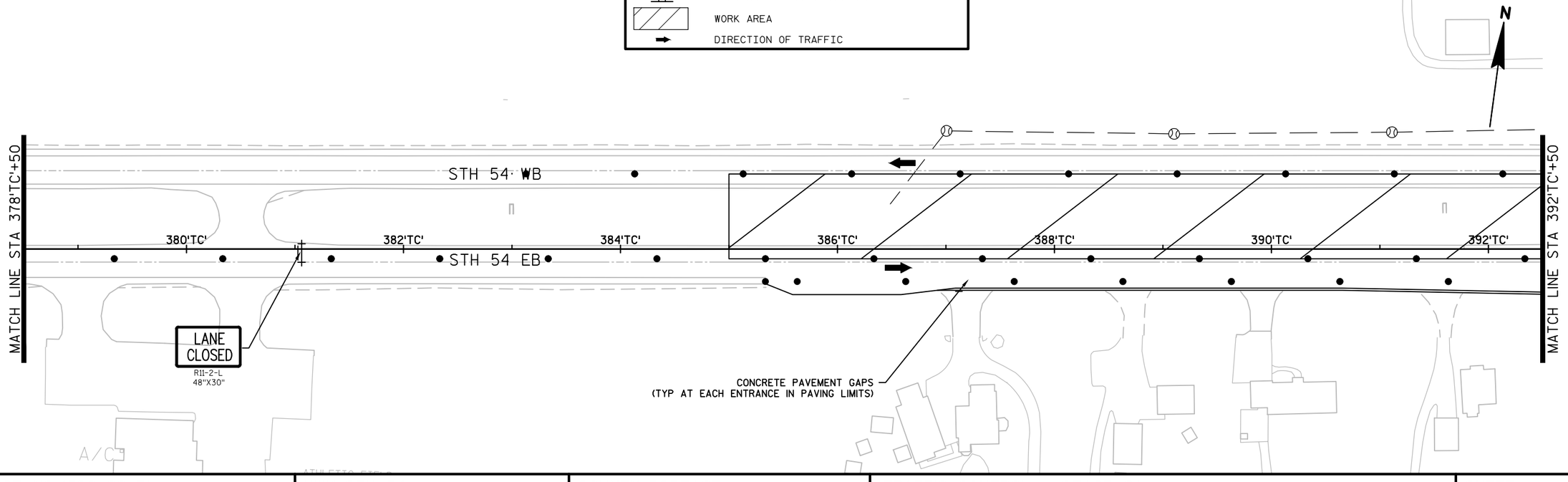
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025004-TC-S2A.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:34 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 50	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025004-TC-S2A.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:35 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

ROAD WORK AHEAD
W20-1-A

CTH U

14'TC'

12'TC'

500'

TRAFFIC CONTROL COVERING SIGNS TYPE II

SPEED LIMIT 55
R2-1
48"X60"

W01-6
48"X24"

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

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

MATCH LINE STA 392'TC'+50

STH 54 WB

394'TC'

396'TC'

398'TC'

400'TC'

402'TC'

404'TC'

406'TC'

STH 54 EB

MATCH LINE STA 407'TC'+50

LANE CLOSED
R11-2-L
48"X30"

8'TC'

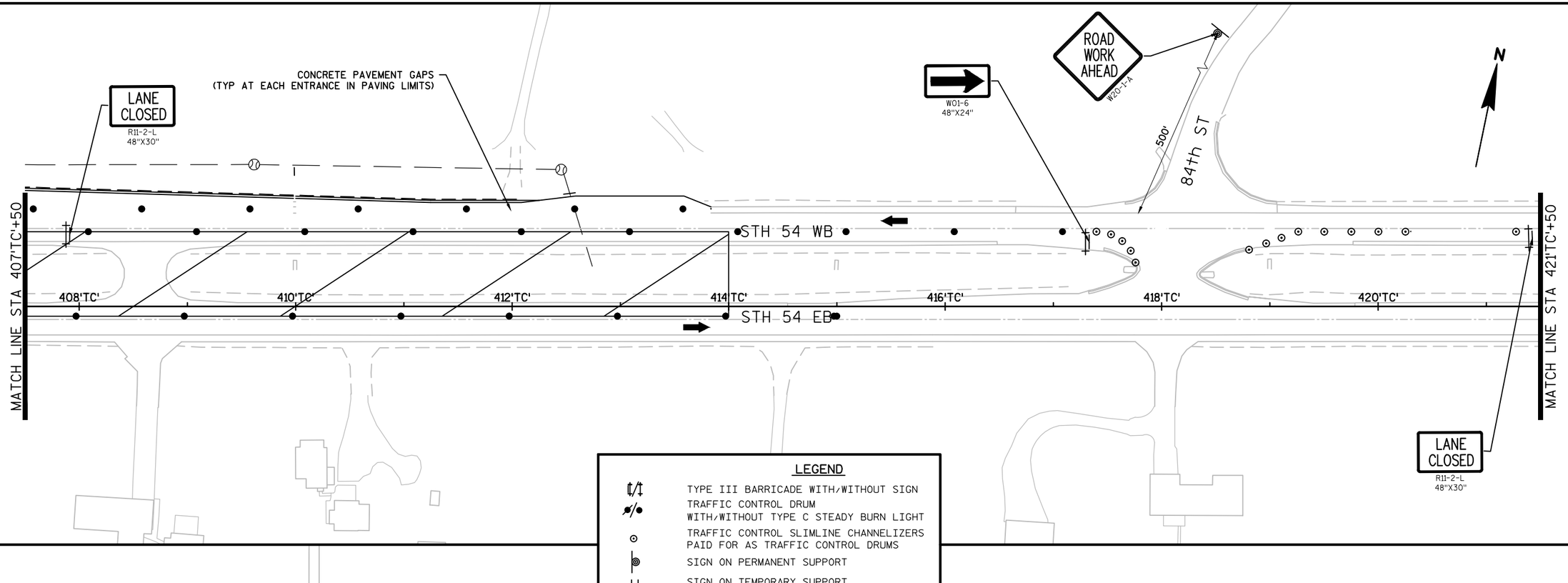
6'TC'

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

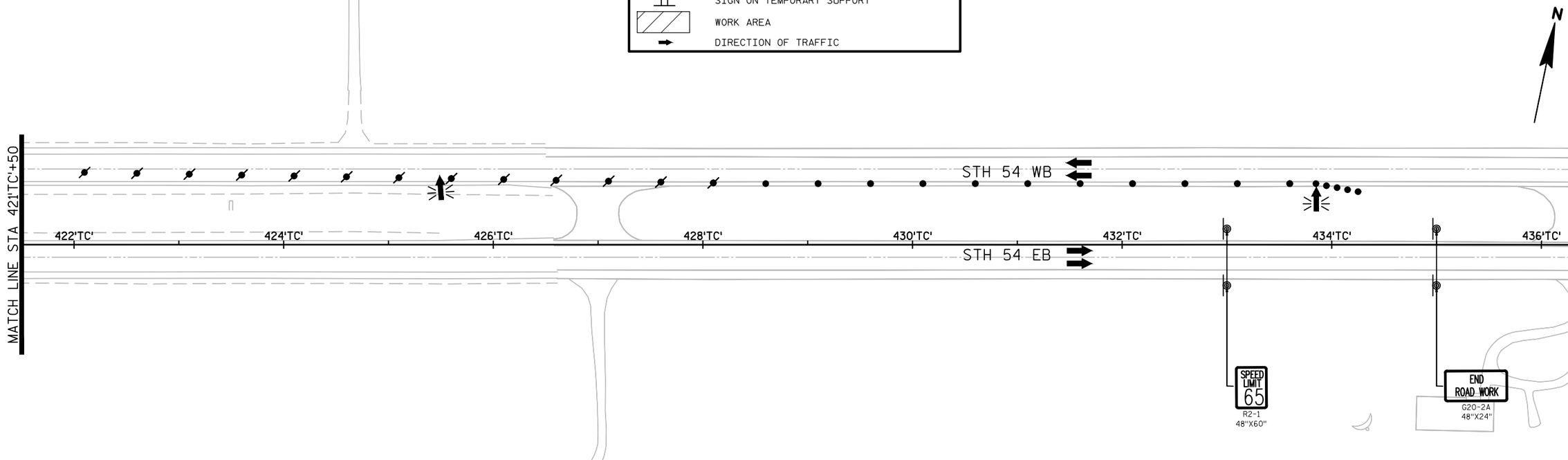
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 51	E

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 52	E

2

W04-2L

LEFT LANE CLOSED 1500 FT
W20-5S-B

SPEED LIMIT 55
R2-1
48"X60"

N

STH 54 WB

MATCH LINE STA 436'TC'+50

438'TC'

440'TC'

442'TC'

444'TC'

446'TC'

448'TC'

450'TC'

STH 54 EB

MATCH LINE STA 451'TC'+50

90th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

LEFT LANE CLOSED 1/2 MILE
W20-5S-C

SPEED LIMIT 55
W03-5

N

MATCH LINE STA 451'TC'+50

STH 54 WB

452'TC'

454'TC'

456'TC'

458'TC'

460'TC'

462'TC'

464'TC'

466'TC'

MATCH LINE STA 466'TC'+50

STH 54 EB

WISCONSIN CENTRAL LTD

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 53	E

2

COURT

ROAD WORK 1 MILE
W20-1-F

N

MATCH LINE STA 466'TC'+50

468'TC'

470'TC'

472'TC'

474'TC'

476'TC'

478'TC'

480'TC'

STH 54 WB

STH 54 EB

MATCH LINE STA 481'TC'+50

WISCONSIN CENTRAL LTD

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

MATCH LINE STA 481'TC'+50

STH 54 WB

482'TC'

484'TC'

486'TC'

488'TC'

490'TC'

492'TC'

494'TC'

496'TC'

STH 54 EB

WISCONSIN CENTRAL LTD

2

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A	SHEET 54	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025004-TC-S2A.DWG
LAYOUT NAME - ****

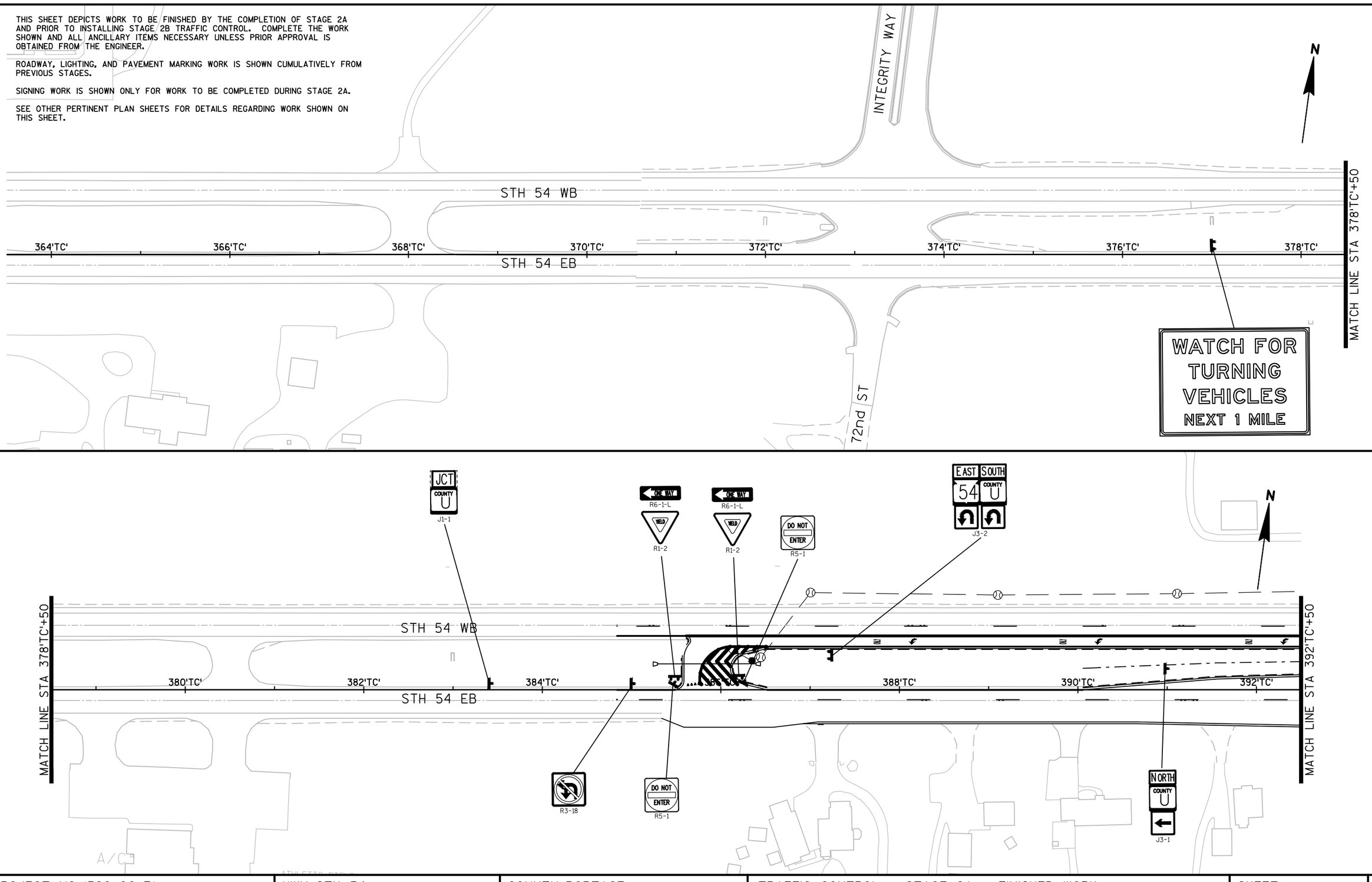
PLOT DATE : 1/13/2016 5:37 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 2A AND PRIOR TO INSTALLING STAGE 2B TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 2A.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 2A - FINISHED WORK	SHEET 55	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025004-TC-S2A-FW.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:38 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

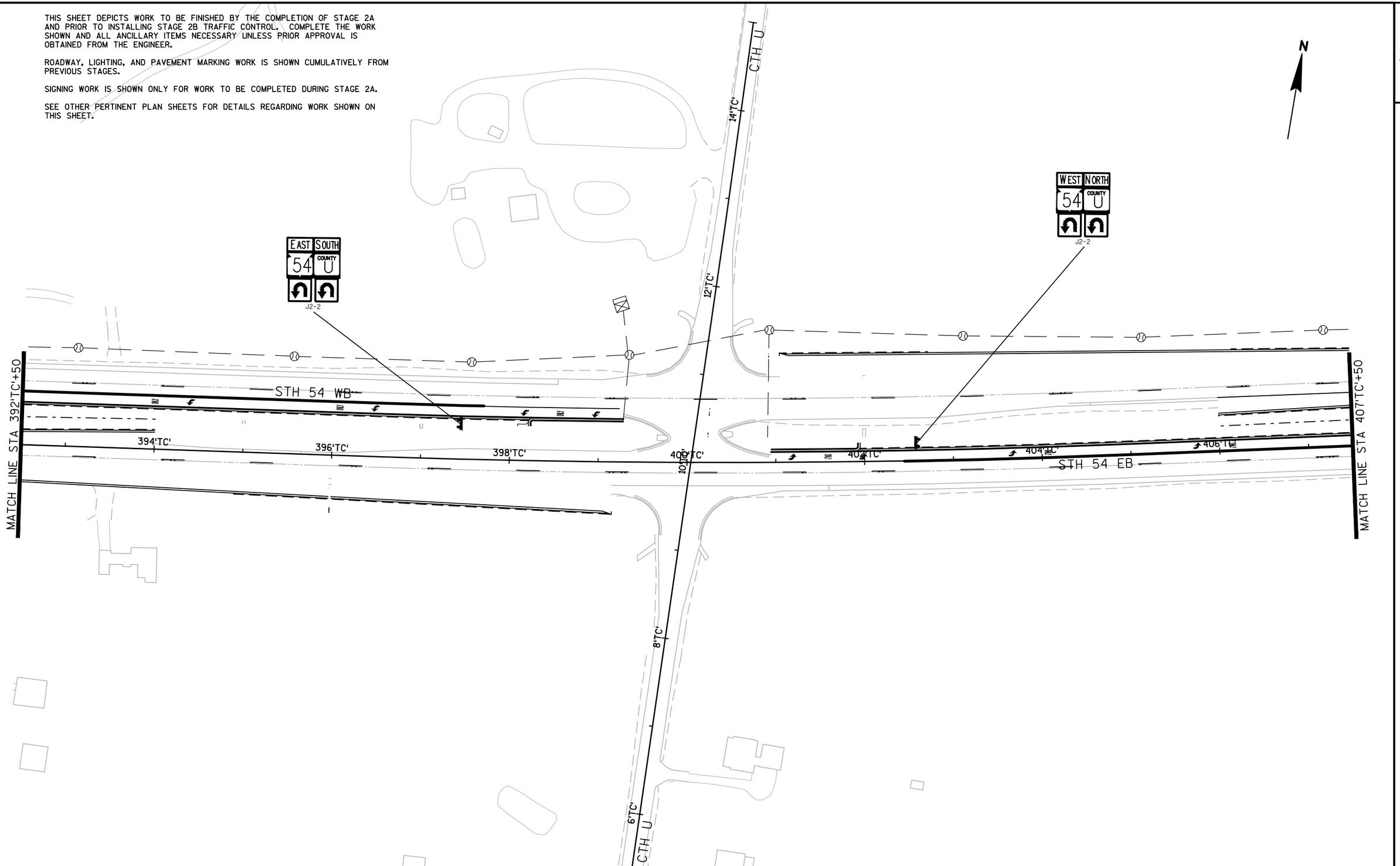
2

THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 2A AND PRIOR TO INSTALLING STAGE 2B TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 2A.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.



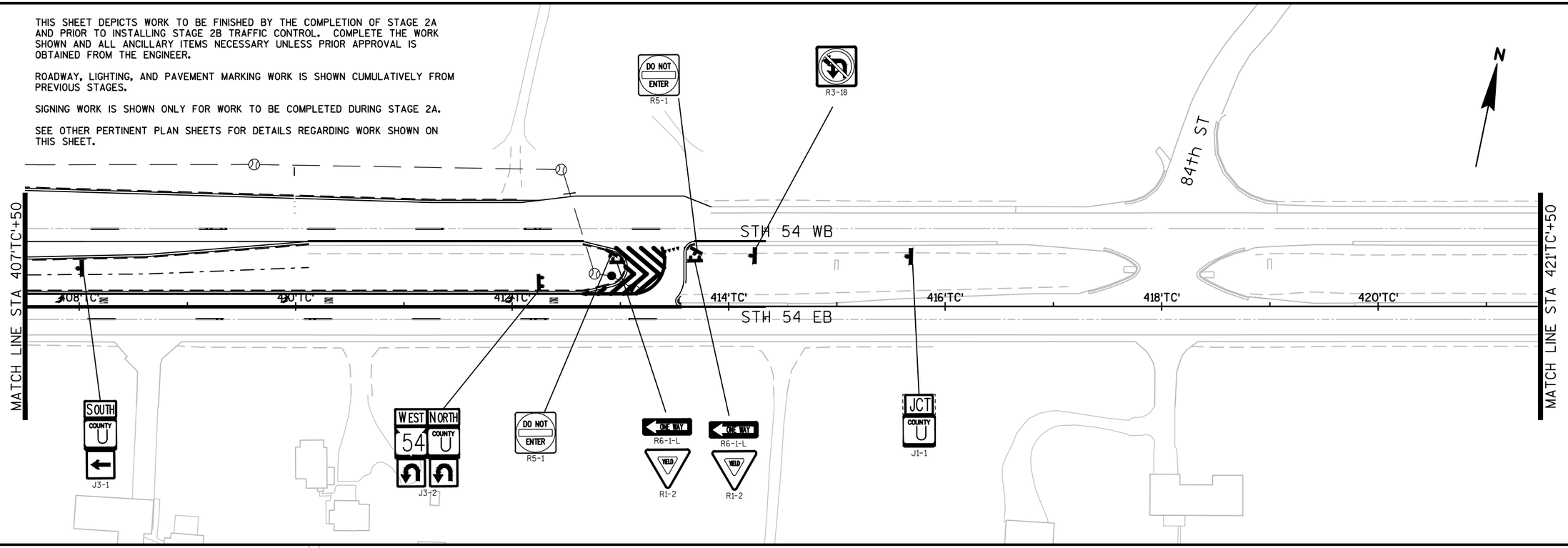
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A - FINISHED WORK	SHEET 56	E

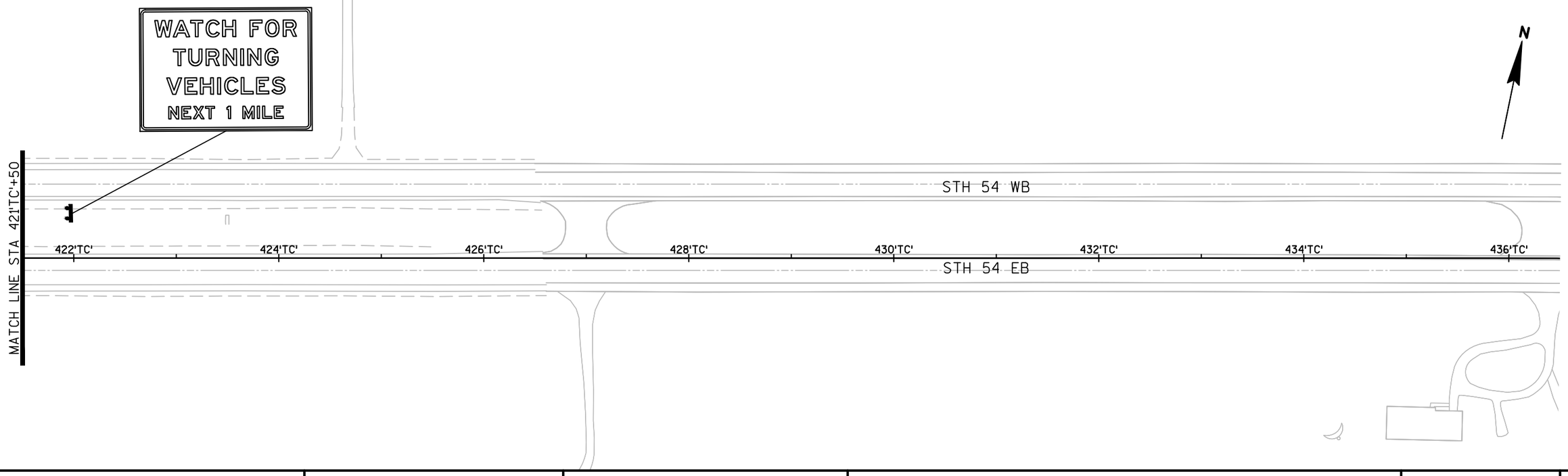
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 2A AND PRIOR TO INSTALLING STAGE 2B TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 2A.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.





PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2A - FINISHED WORK	SHEET 57	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025004-TC-S2A-FW.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:39 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

N

STH 54 WB

STH 54 EB

304'TC' 306'TC' 308'TC' 310'TC' 312'TC' 314'TC' 316'TC' 318'TC'

MATCH LINE STA 318'TC'+50

ROAD WORK 1 MILE

W20-1-T

54th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

SPEED LIMIT 50

SPEED LIMIT 50

SPEED LIMIT 50

MATCH LINE STA 318'TC'+50

STH 54 WB

STH 54 EB

320'TC' 322'TC' 324'TC' 326'TC' 328'TC' 330'TC' 332'TC'

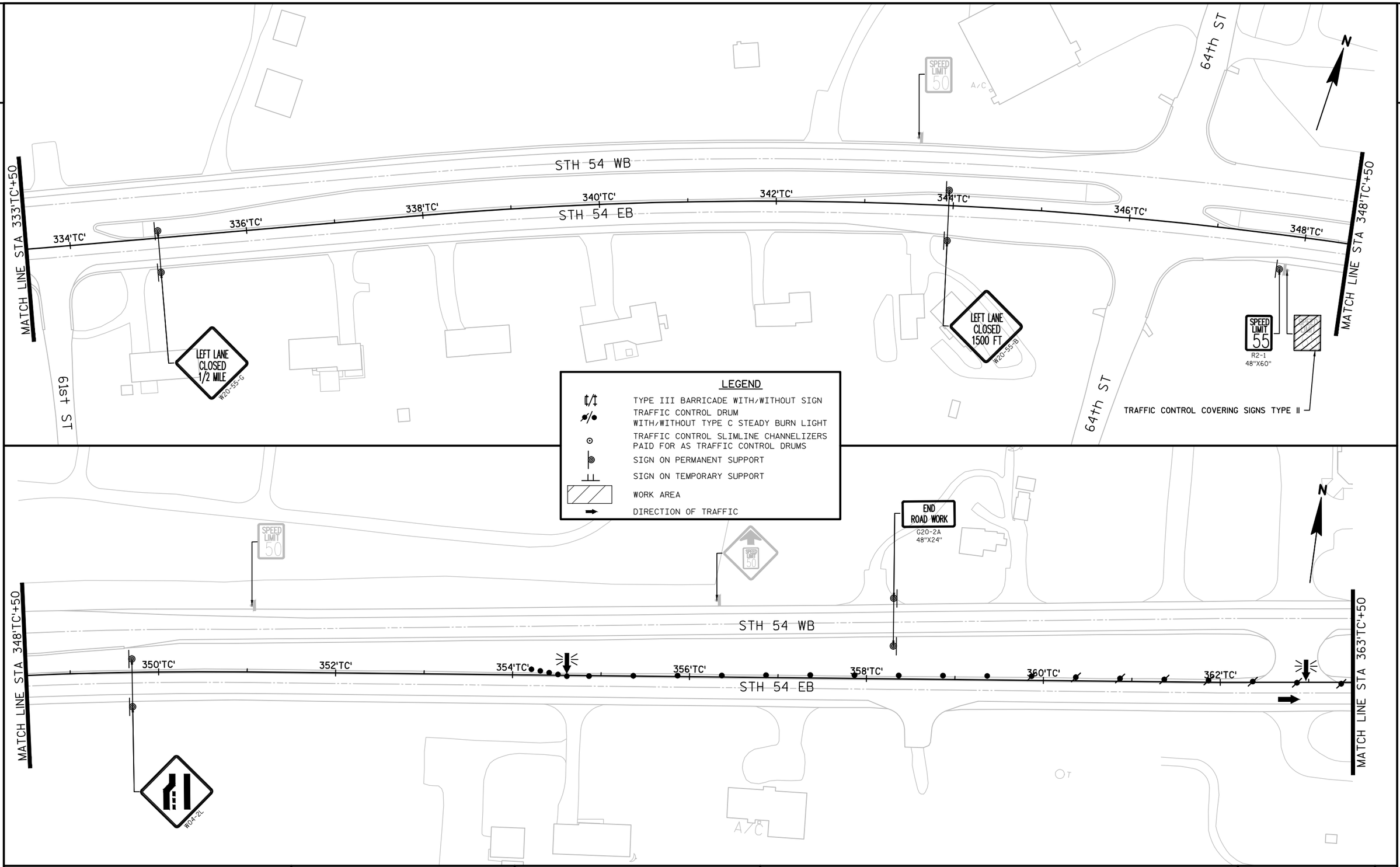
MATCH LINE STA 333'TC'+50

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 58	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025005-TC-S2B.DWG
LAYOUT NAME - ****

PLOT DATE : 1/13/2016 5:40 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



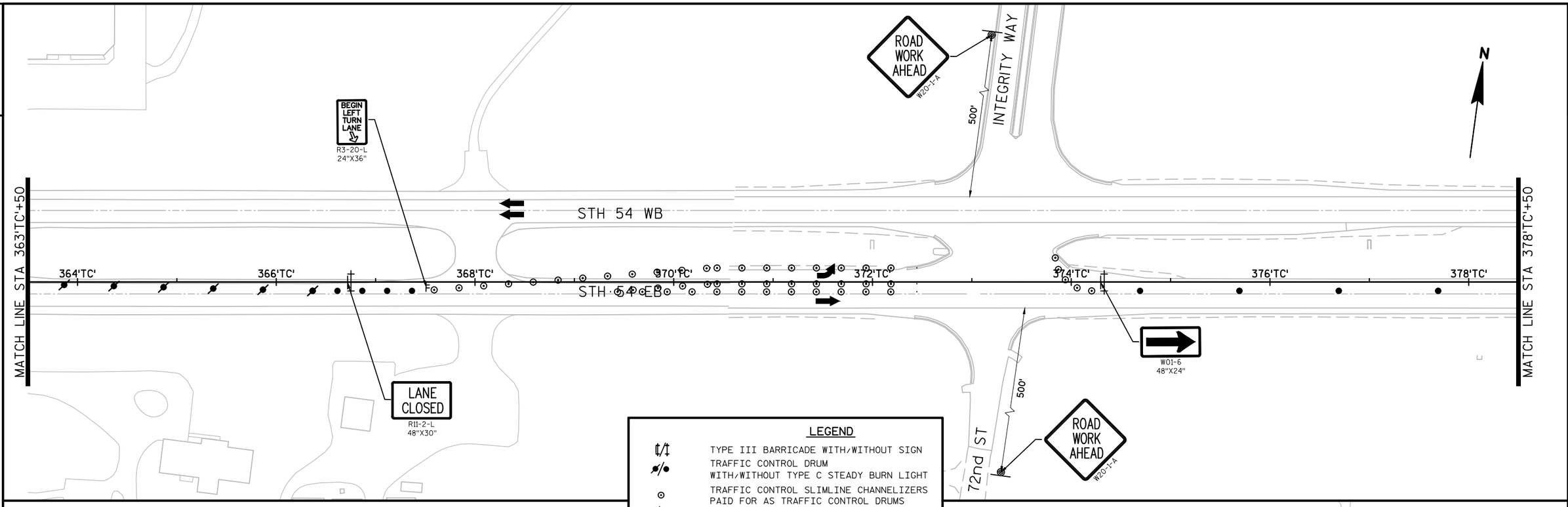
LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 59	E

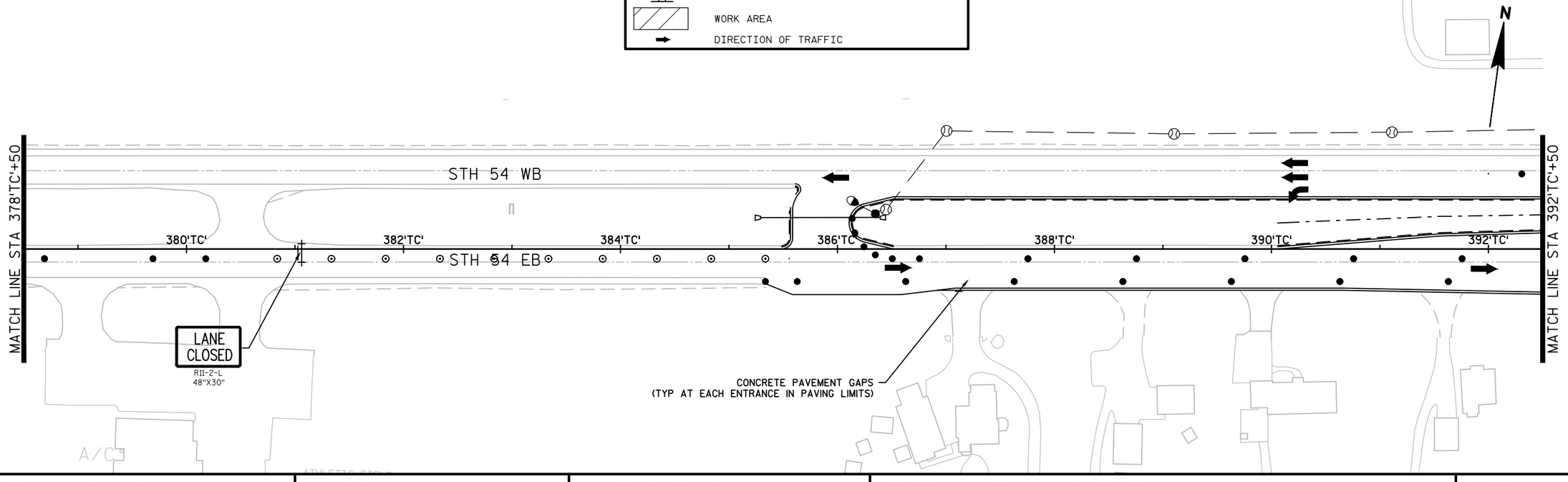
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025005-TC-S2B.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:40 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 60	E

2

2

N

ROAD WORK AHEAD
W20-1-A

CTH U

14'TC'

12'TC'

500'

TRAFFIC CONTROL COVERING SIGNS TYPE II

ONE WAY
R6-1-R
INSTALL ABOVE EXISTING STOP SIGN

54 COUNTY U
J12-2
INSTALL ON RIGHT SIDE OF EXISTING STOP SIGN

SPEED LIMIT 55
R2-1
48"X60"

W01-6
48"X24"

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

LINE STA 392'TC'+50

MATCH LINE

STH 54 WB

394'TC'

396'TC'

398'TC'

400'TC'

402'TC'

404'TC'

406'TC'

STH 54 EB

LINE STA 407'TC'+50

MATCH LINE

LANE CLOSED
R11-2-L
48"X30"

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

W01-6
48"X24"

54 COUNTY U
J12-2
INSTALL ON RIGHT SIDE OF EXISTING STOP SIGN

ONE WAY
R6-1-R
INSTALL ABOVE EXISTING STOP SIGN

SPEED LIMIT 55
R2-1
48"X60"

TRAFFIC CONTROL COVERING SIGNS TYPE II

8'TC'

500'

6'TC'

CTH U

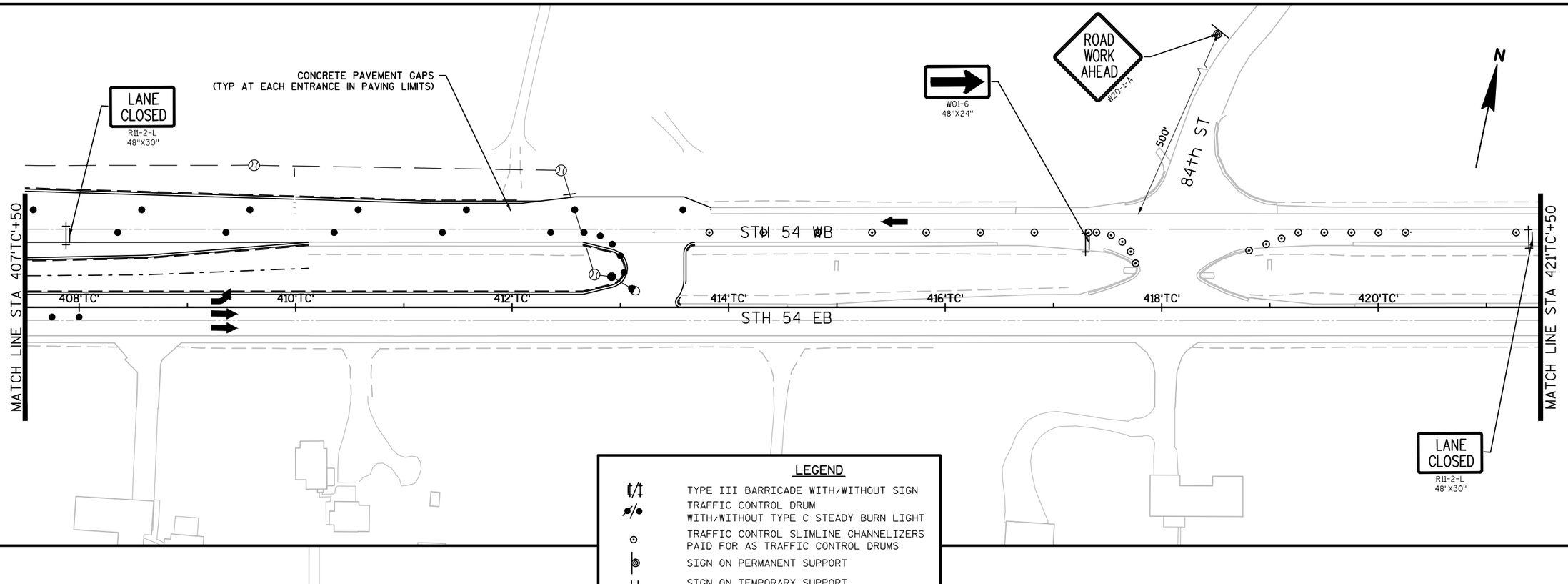
ROAD WORK AHEAD
W20-1-A

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

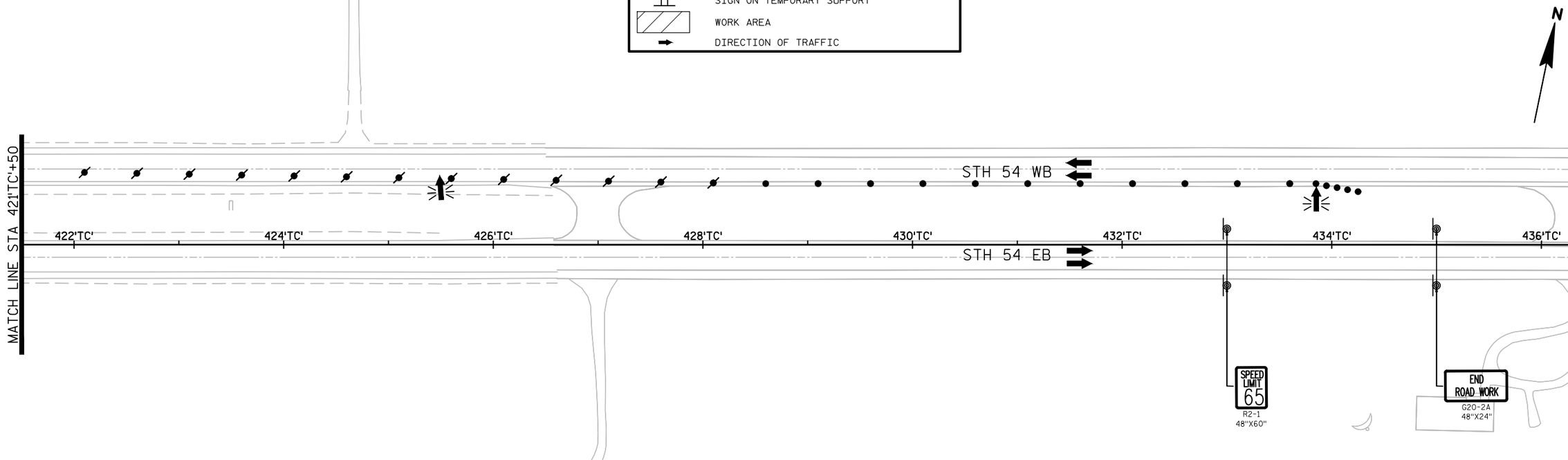
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 61	E

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 62	E

2

W04-2L

LEFT LANE CLOSED 1500 FT
W20-5S-B

SPEED LIMIT 55
R2-1
48"X60"

N

STH 54 WB

MATCH LINE STA 436'TC'+50

438'TC'

440'TC'

442'TC'

444'TC'

446'TC'

448'TC'

450'TC'

STH 54 EB

MATCH LINE STA 451'TC'+50

90th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

LEFT LANE CLOSED 1/2 MILE
W20-5S-C

SPEED LIMIT 55
W03-5

N

MATCH LINE STA 451'TC'+50

STH 54 WB

452'TC'

454'TC'

456'TC'

458'TC'

460'TC'

462'TC'

464'TC'

466'TC'

STH 54 EB

MATCH LINE STA 466'TC'+50

WISCONSIN CENTRAL LTD

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 63	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025005-TC-S2B.DWG
LAYOUT NAME - ****

PLOT DATE : 1/13/2016 5:43 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

COURT

ROAD WORK 1 MILE
W20-1-F

N

MATCH LINE STA 466'TC'+50

468'TC'

470'TC'

472'TC'

474'TC'

476'TC'

478'TC'

480'TC'

STH 54 WB

STH 54 EB

MATCH LINE STA 481'TC'+50

WISCONSIN CENTRAL LTD

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

MATCH LINE STA 481'TC'+50

STH 54 WB

482'TC'

484'TC'

486'TC'

488'TC'

490'TC'

492'TC'

494'TC'

496'TC'

STH 54 EB

WISCONSIN CENTRAL LTD

2

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B	SHEET 64	E

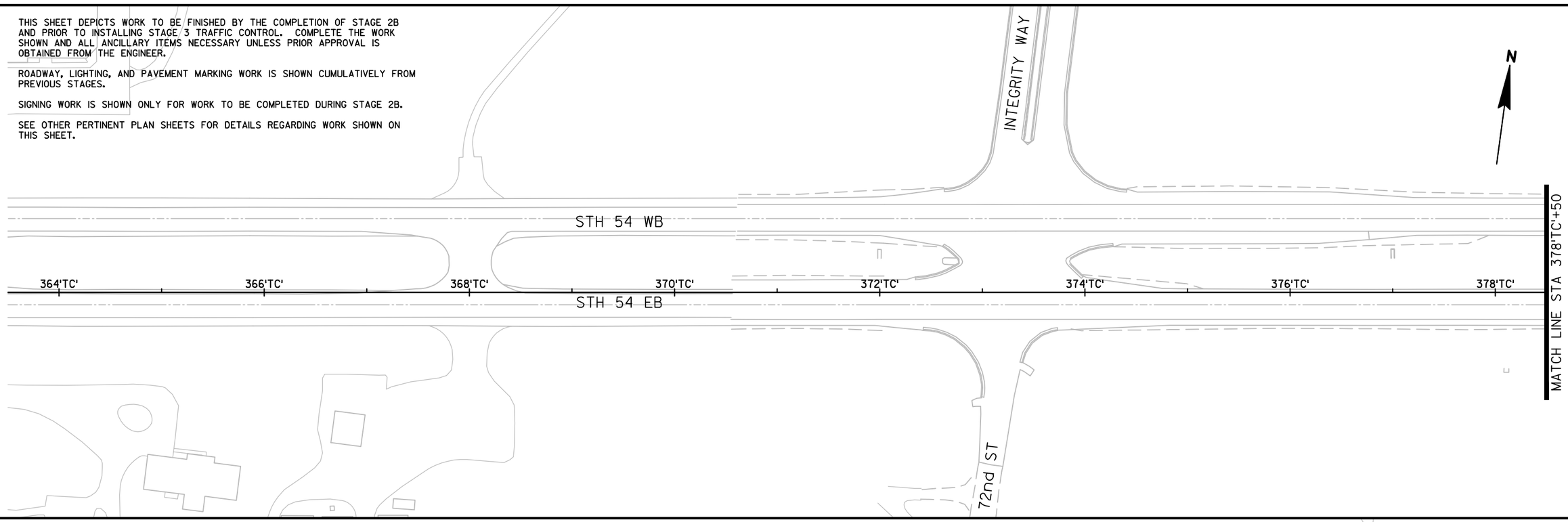
2

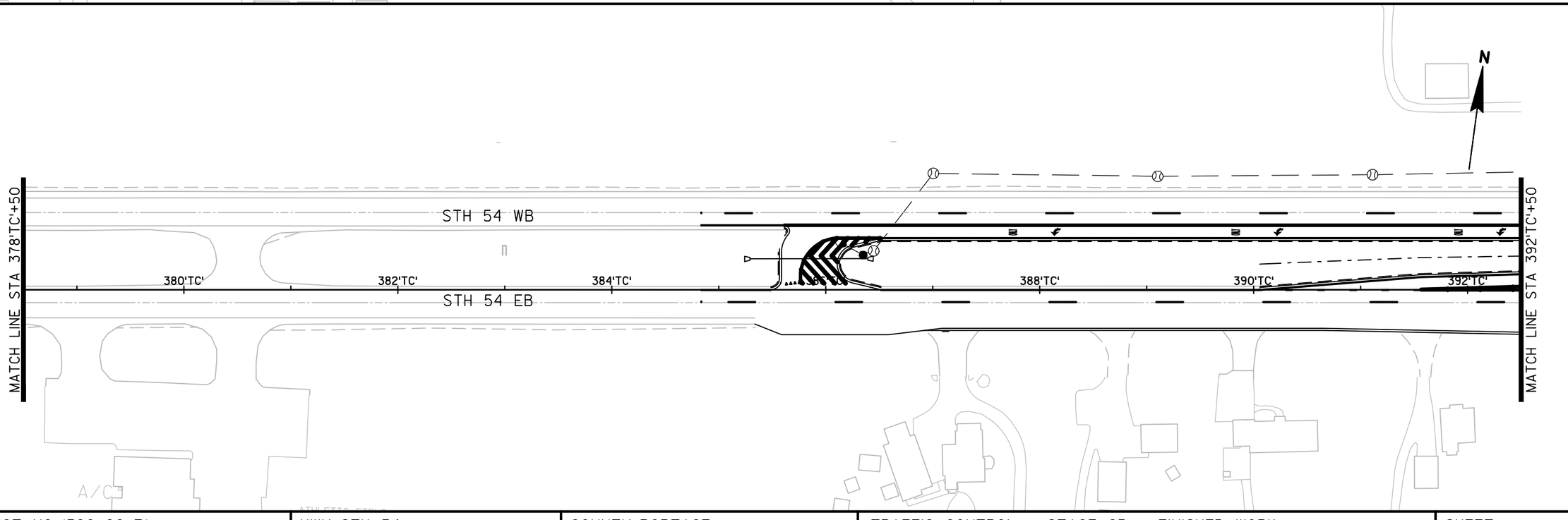
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 2B AND PRIOR TO INSTALLING STAGE 3 TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 2B.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.





PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B - FINISHED WORK	SHEET 65	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025005-TC-S2B-FW.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:44 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

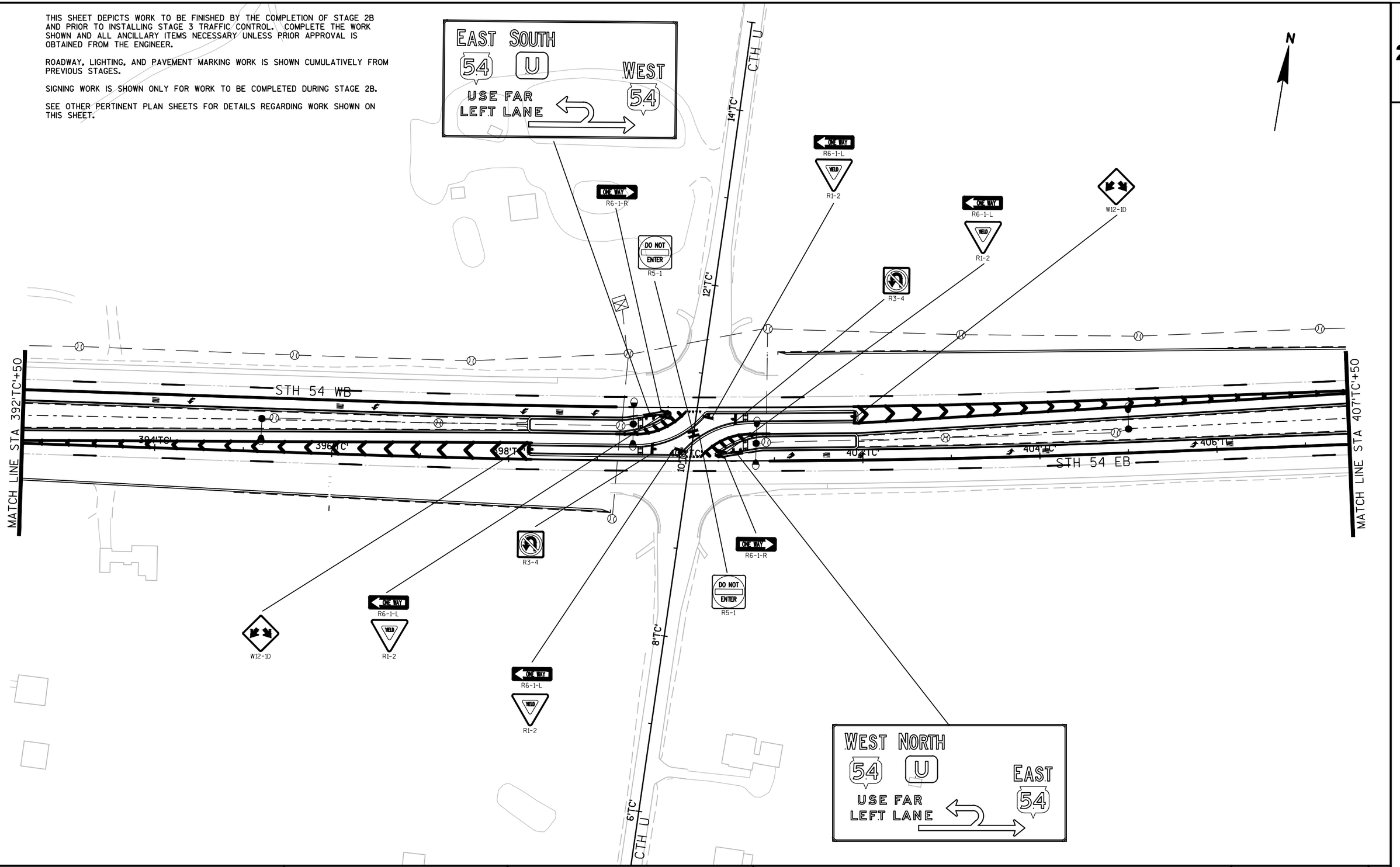
2

THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 2B AND PRIOR TO INSTALLING STAGE 3 TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 2B.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B - FINISHED WORK	SHEET 66	E

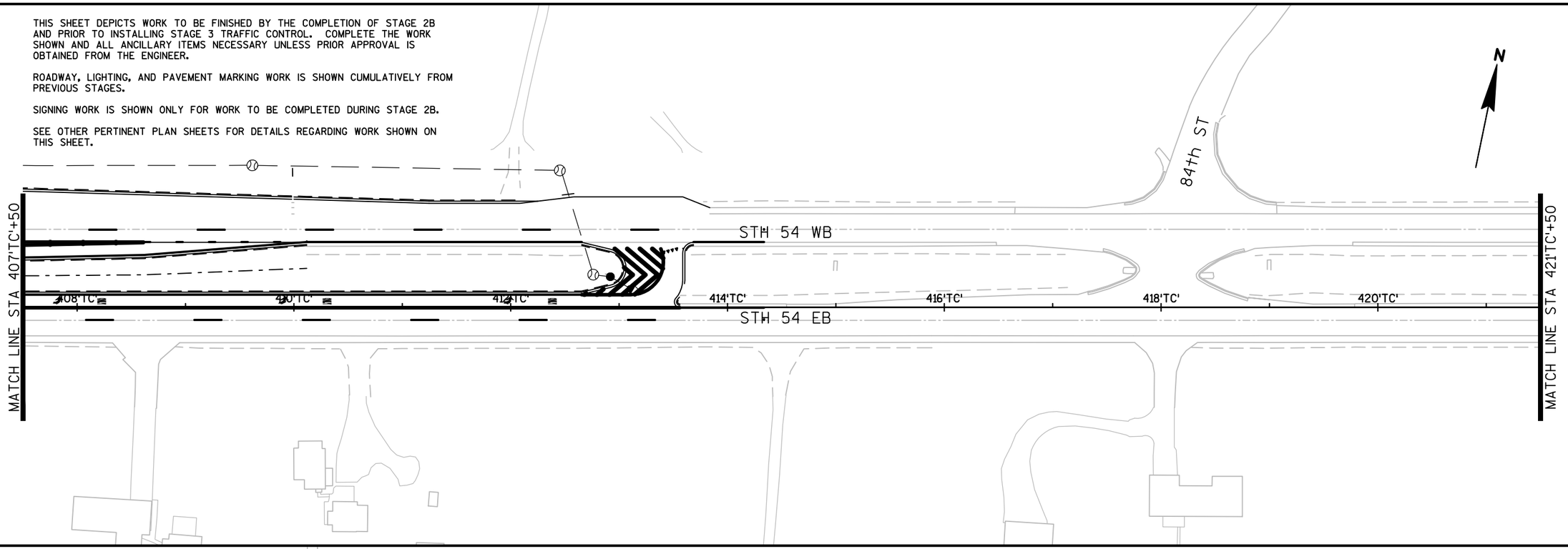
2

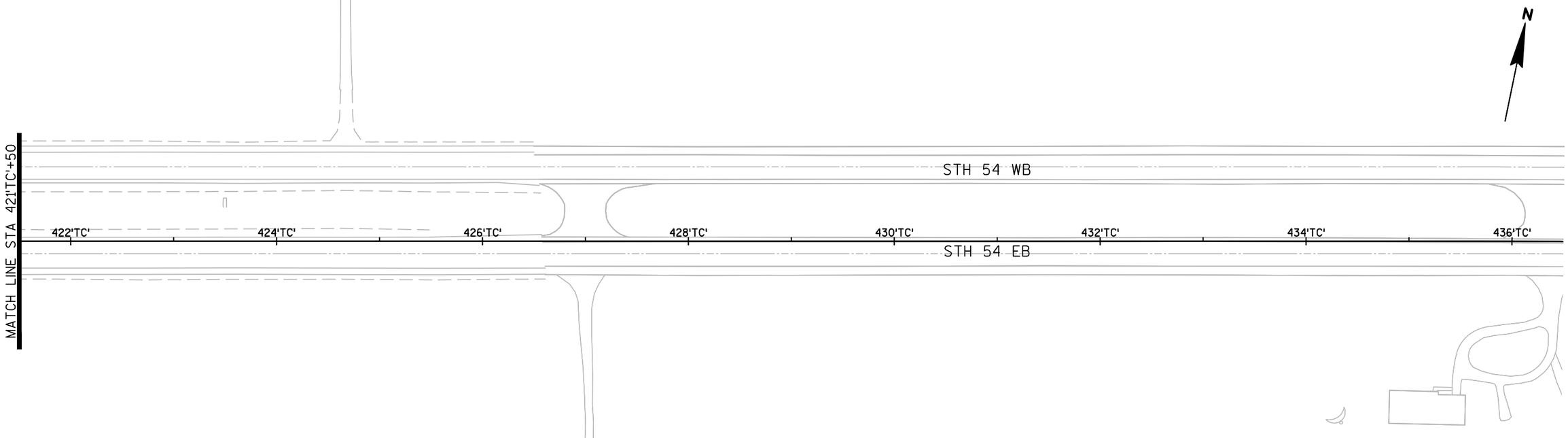
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 2B AND PRIOR TO INSTALLING STAGE 3 TRAFFIC CONTROL. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 2B.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.

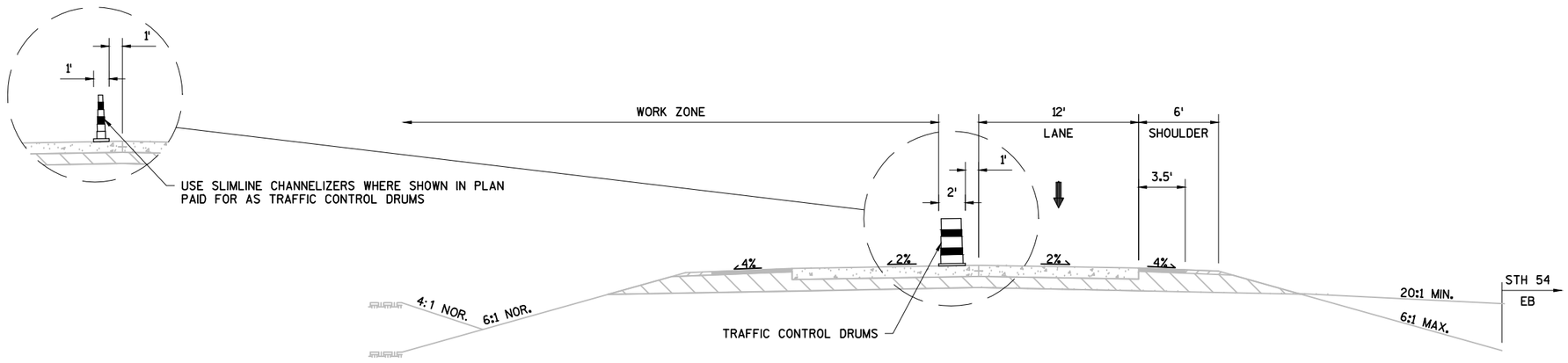




PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 2B - FINISHED WORK	SHEET 67	E

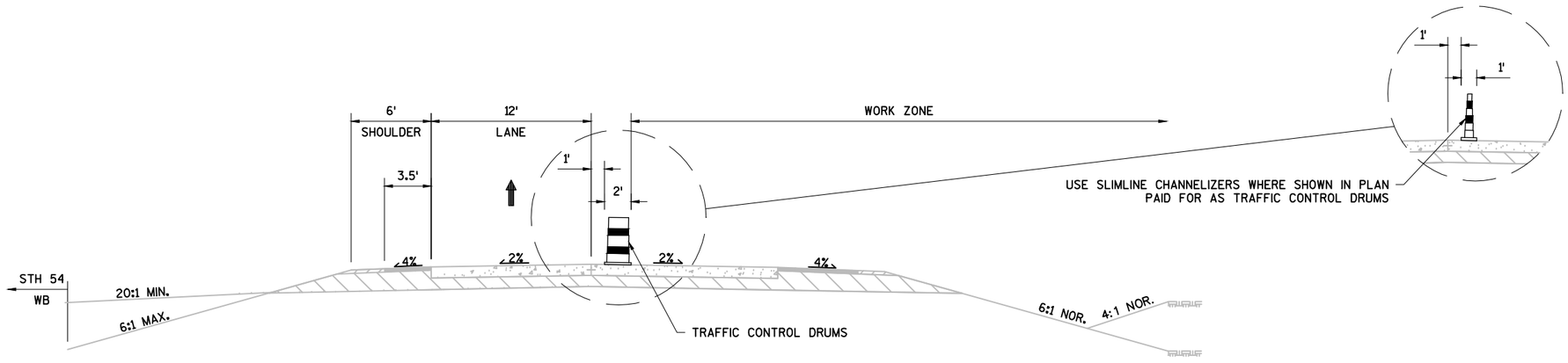
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025005-TC-S2B-FW.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:45 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



TRAFFIC CONTROL TYPICAL SECTION - STH 54 WB

LOOKING EB



EXISTING TYPICAL SECTION - STH 54 EB

LOOKING EB

STAGE 3 TRAFFIC:
CLOSE THE OUTSIDE THROUGH LANES ALONG STH 54.
CLOSE THE STH 54 LEFT TURN LANES.
CLOSE THE STH 54 RIGHT TURN LANES.
STH 54 MEDIAN U-TURN LANES REMAIN OPEN.

CONSTRUCTION:
CONSTRUCT CTH U SOUTH AND NORTH LEGS AND REMAINING APPURTENANCES.

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 68	E

2

2

N

STH 54 WB

STH 54 EB

304'TC' 306'TC' 308'TC' 310'TC' 312'TC' 314'TC' 316'TC' 318'TC'

MATCH LINE STA 318'TC'+50

ROAD WORK 1 MILE

W20-1-T

54th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

SPEED LIMIT 50

SPEED LIMIT 50

SPEED LIMIT 50

MATCH LINE STA 318'TC'+50

STH 54 WB

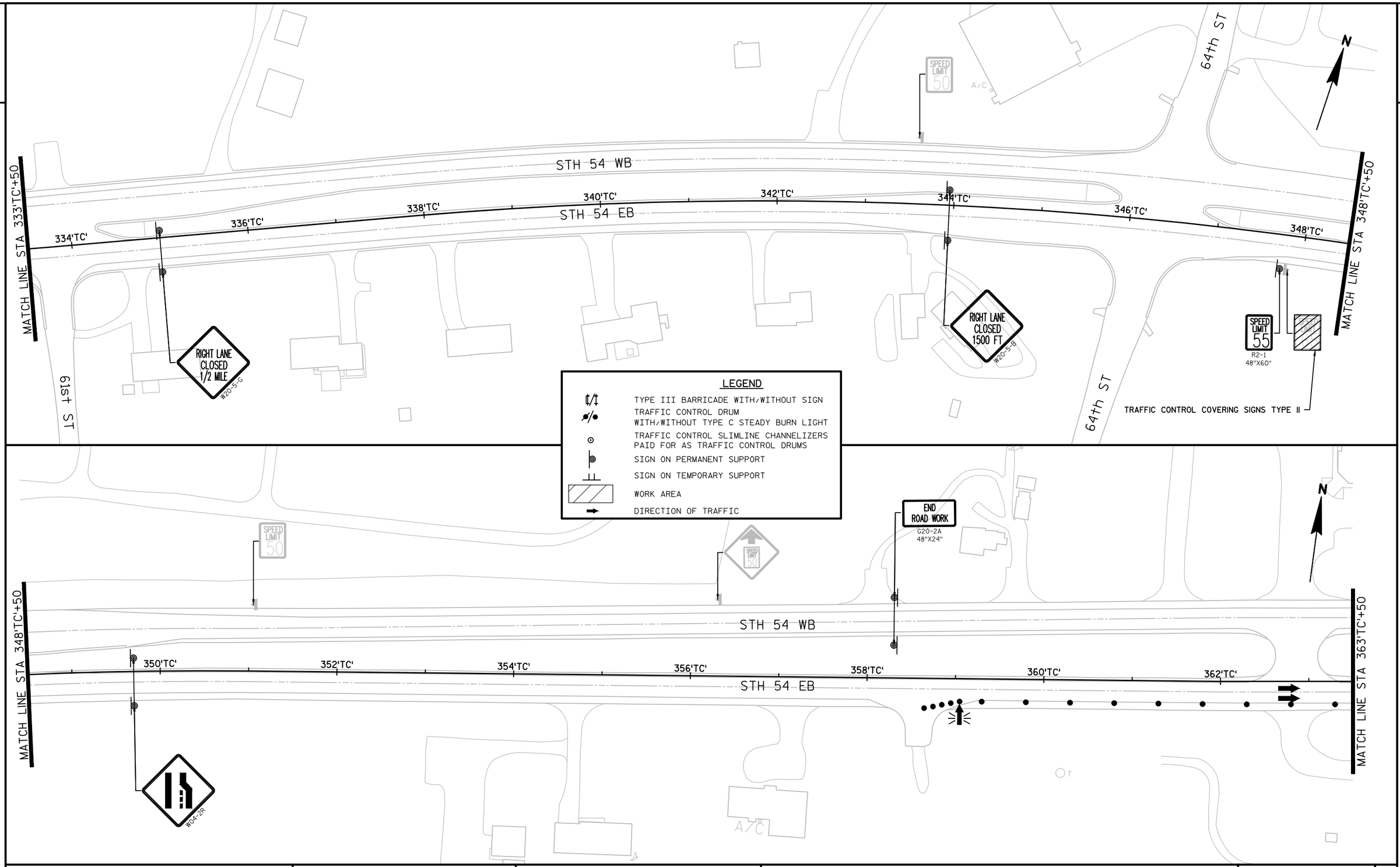
STH 54 EB

320'TC' 322'TC' 324'TC' 326'TC' 328'TC' 330'TC' 332'TC'

MATCH LINE STA 333'TC'+50

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 69	E

2



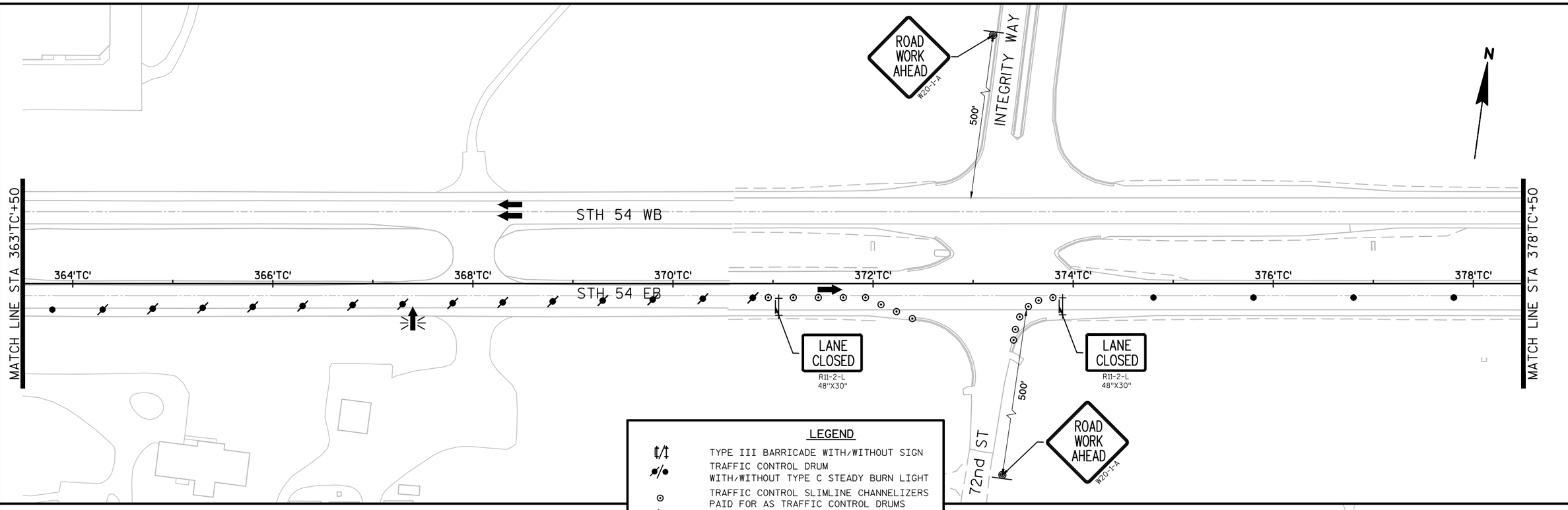
LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 70	E

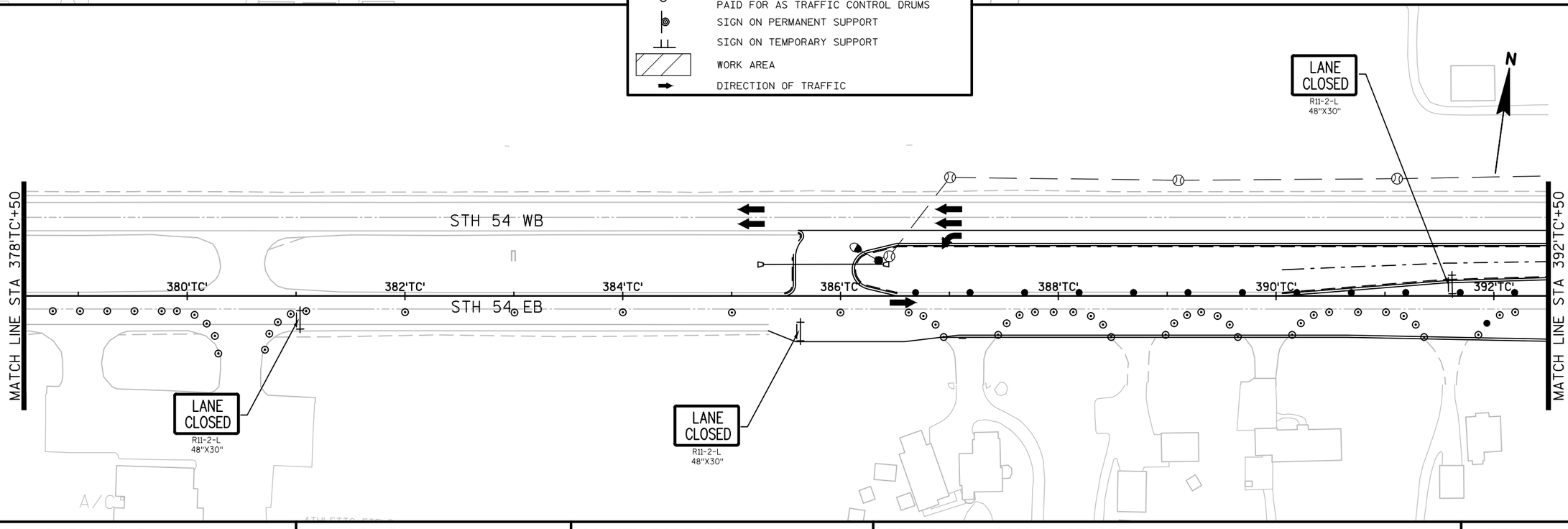
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025007-TC-S3.DWG
LAYOUT NAME - ****
PLOT DATE : 1/13/2016 5:47 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 71	E

2

N

ROAD CLOSED 500 FT
W20-3-D

CTH U

14'TC'

500'

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

LANE CLOSED
R11-2-L
48"X30"

LANE CLOSED
R11-2-L
48"X30"

TRAFFIC CONTROL COVERING SIGNS TYPE II

SPEED LIMIT 55
R2-1
48"X60"

LANE CLOSED
R11-2-L
48"X30"

12'TC'

STH 54 WB

394'TC'

396'TC'

398'TC'

400'TC'

402'TC'

404'TC'

406'TC'

STH 54 EB

MATCH LINE STA 392'TC'+50

MATCH LINE STA 407'TC'+50

LANE CLOSED
R11-2-L
48"X30"

LANE CLOSED
R11-2-L
48"X30"

LANE CLOSED
R11-2-L
48"X30"

ROAD CLOSED
R11-2
48"X30"

8'TC'

ROAD CLOSED
R11-2
48"X30"

500'

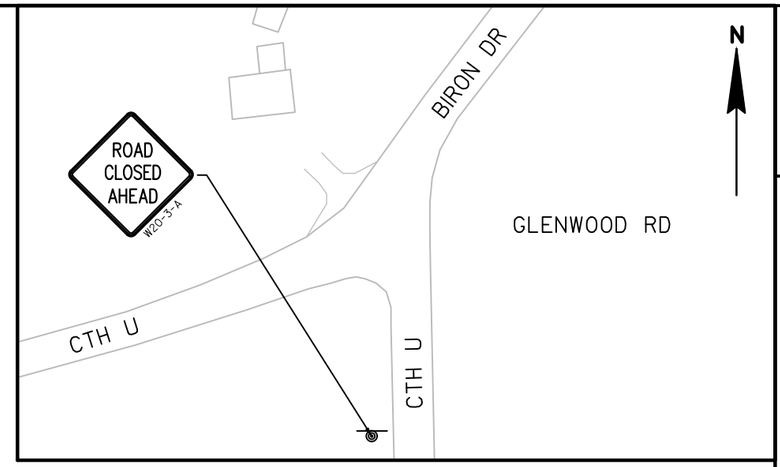
6'TC'

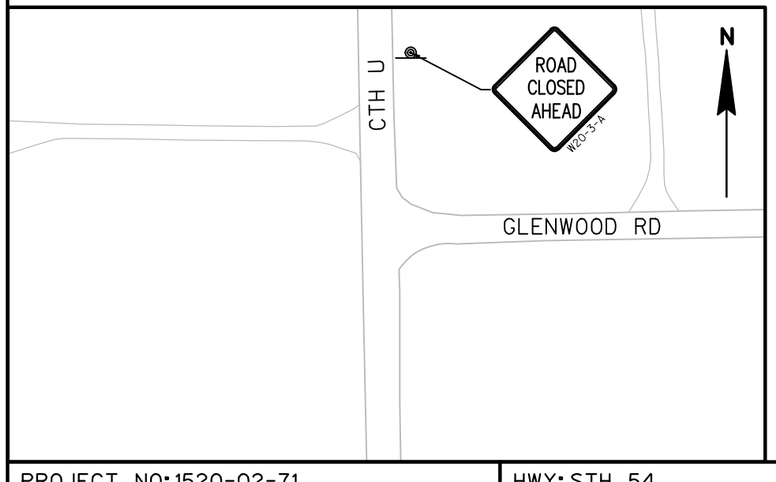
CTH U

ROAD CLOSED 500 FT
W20-3-D

SPEED LIMIT 55
R2-1
48"X60"

TRAFFIC CONTROL COVERING SIGNS TYPE II



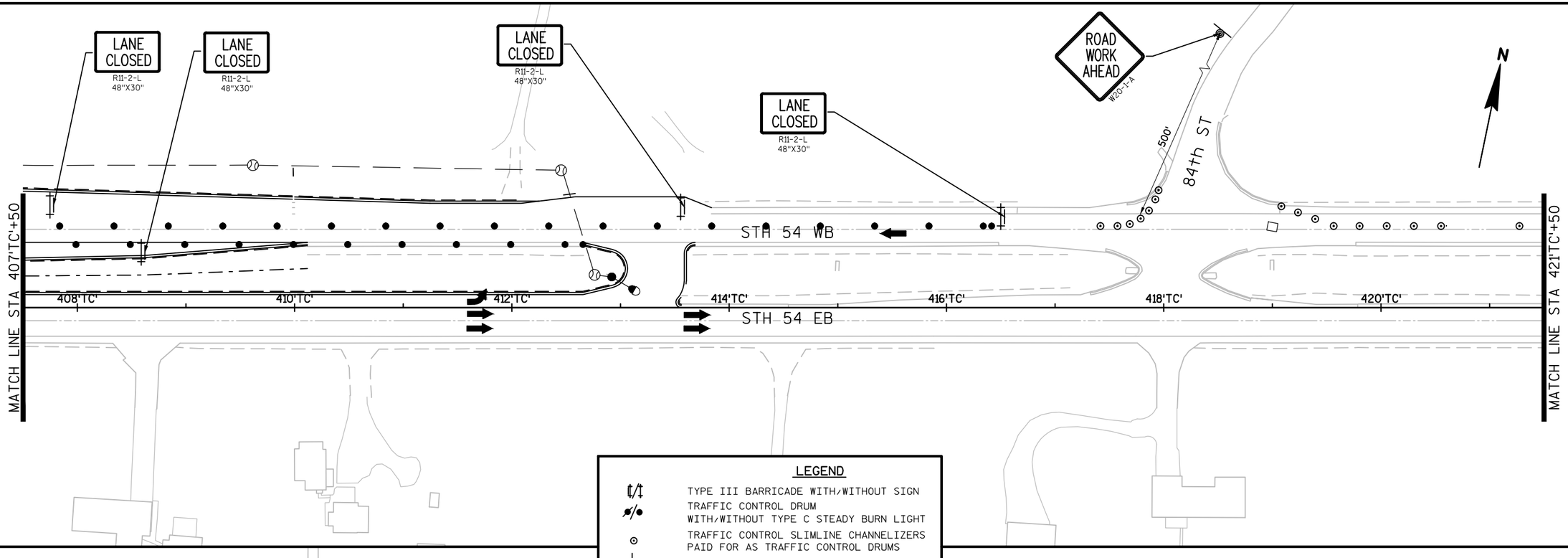


LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

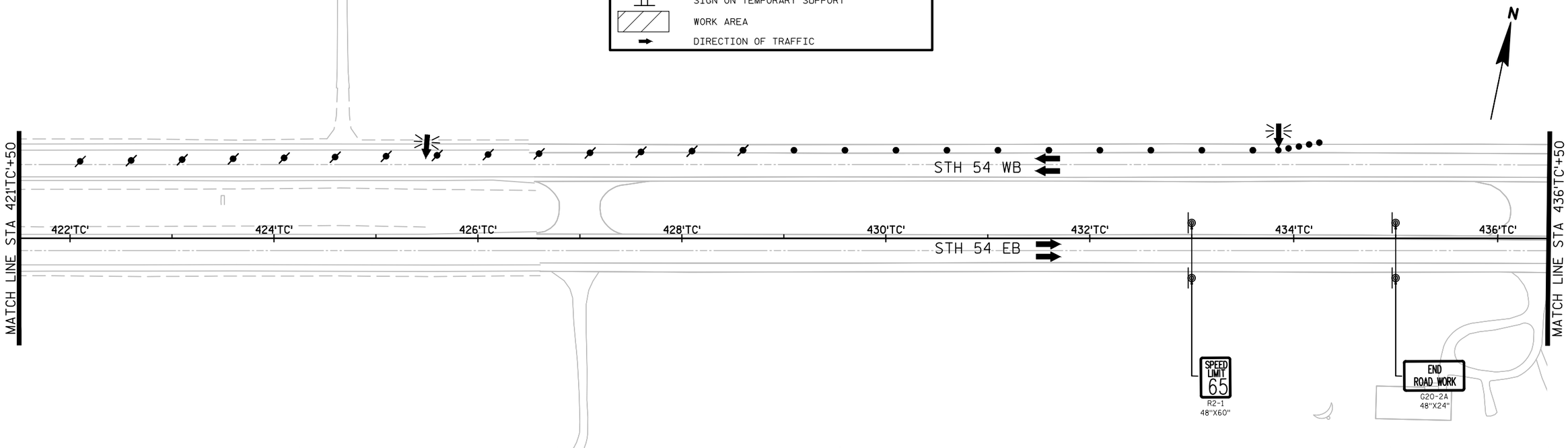
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 72	E

2



LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 73	E

2

W04-2R

RIGHT LANE CLOSED 1500 FT
W20-5-B

SPEED LIMIT 55
R2-1
48"X60"

N

STH 54 WB

MATCH LINE STA 436'TC'+50

438'TC'

440'TC'

442'TC'

444'TC'

446'TC'

448'TC'

450'TC'

STH 54 EB

MATCH LINE STA 451'TC'+50

90th ST

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

RIGHT LANE CLOSED 1/2 MILE
W20-5-G

SPEED LIMIT 55
W03-5

N

MATCH LINE STA 451'TC'+50

STH 54 WB

452'TC'

454'TC'

456'TC'

458'TC'

460'TC'

462'TC'

464'TC'

466'TC'

STH 54 EB

MATCH LINE STA 466'TC'+50

WISCONSIN CENTRAL LTD

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 74	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\025007-TC-S3.DWG
LAYOUT NAME - ****

PLOT DATE : 1/13/2016 5:50 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

COURT

ROAD WORK 1 MILE
W20-1-F

N

MATCH LINE STA 466'TC'+50

468'TC'

470'TC'

472'TC'

474'TC'

476'TC'

478'TC'

480'TC'

STH 54 WB

STH 54 EB

MATCH LINE STA 481'TC'+50

WISCONSIN CENTRAL LTD

LEGEND

- TYPE III BARRICADE WITH/WITHOUT SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL SLIMLINE CHANNELIZERS PAID FOR AS TRAFFIC CONTROL DRUMS
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

N

MATCH LINE STA 481'TC'+50

STH 54 WB

482'TC'

484'TC'

486'TC'

488'TC'

490'TC'

492'TC'

494'TC'

496'TC'

STH 54 EB

WISCONSIN CENTRAL LTD

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3	SHEET 75	E

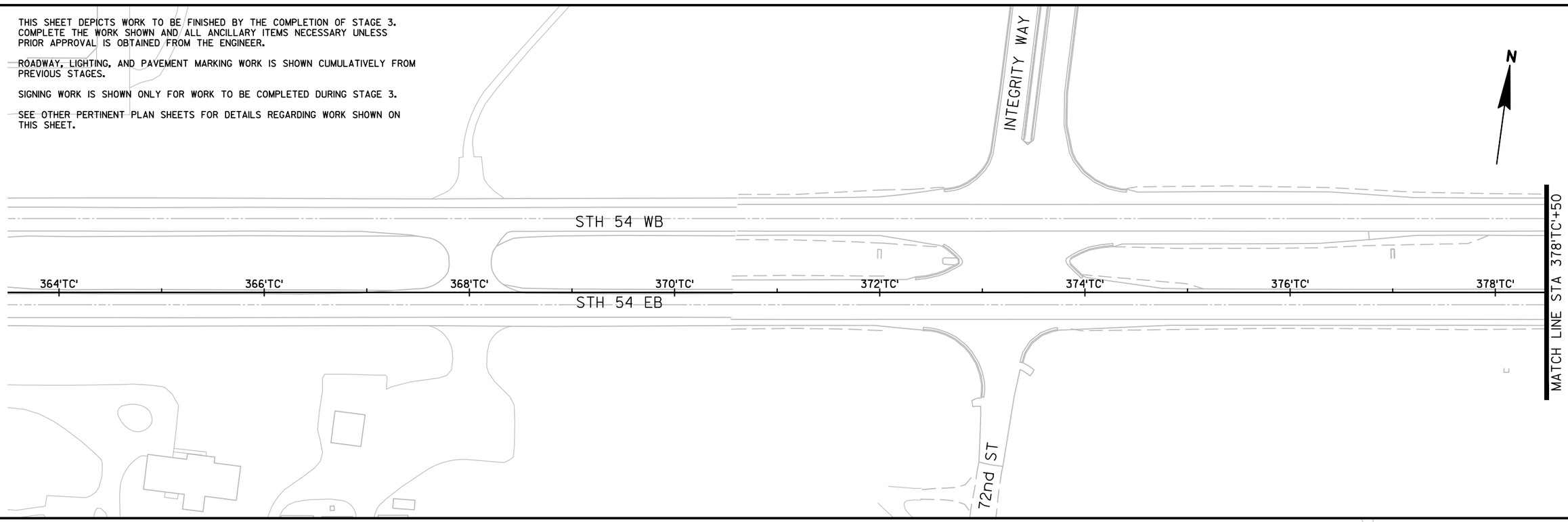
2

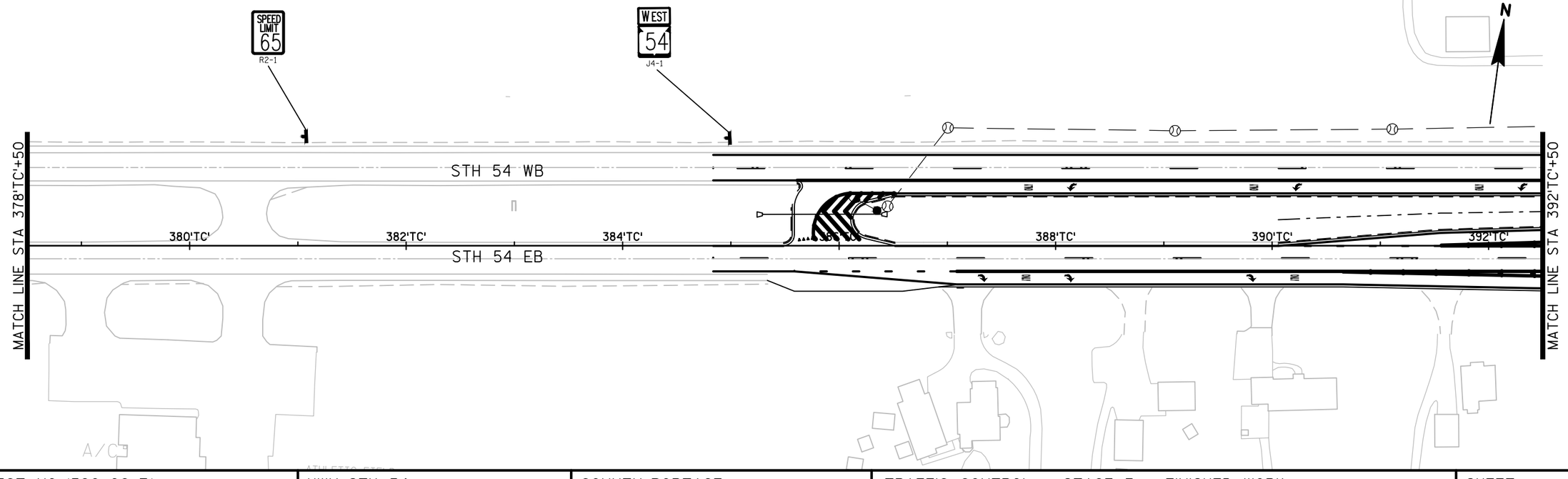
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 3. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 3.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.





PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	TRAFFIC CONTROL - STAGE 3 - FINISHED WORK	SHEET 76	E

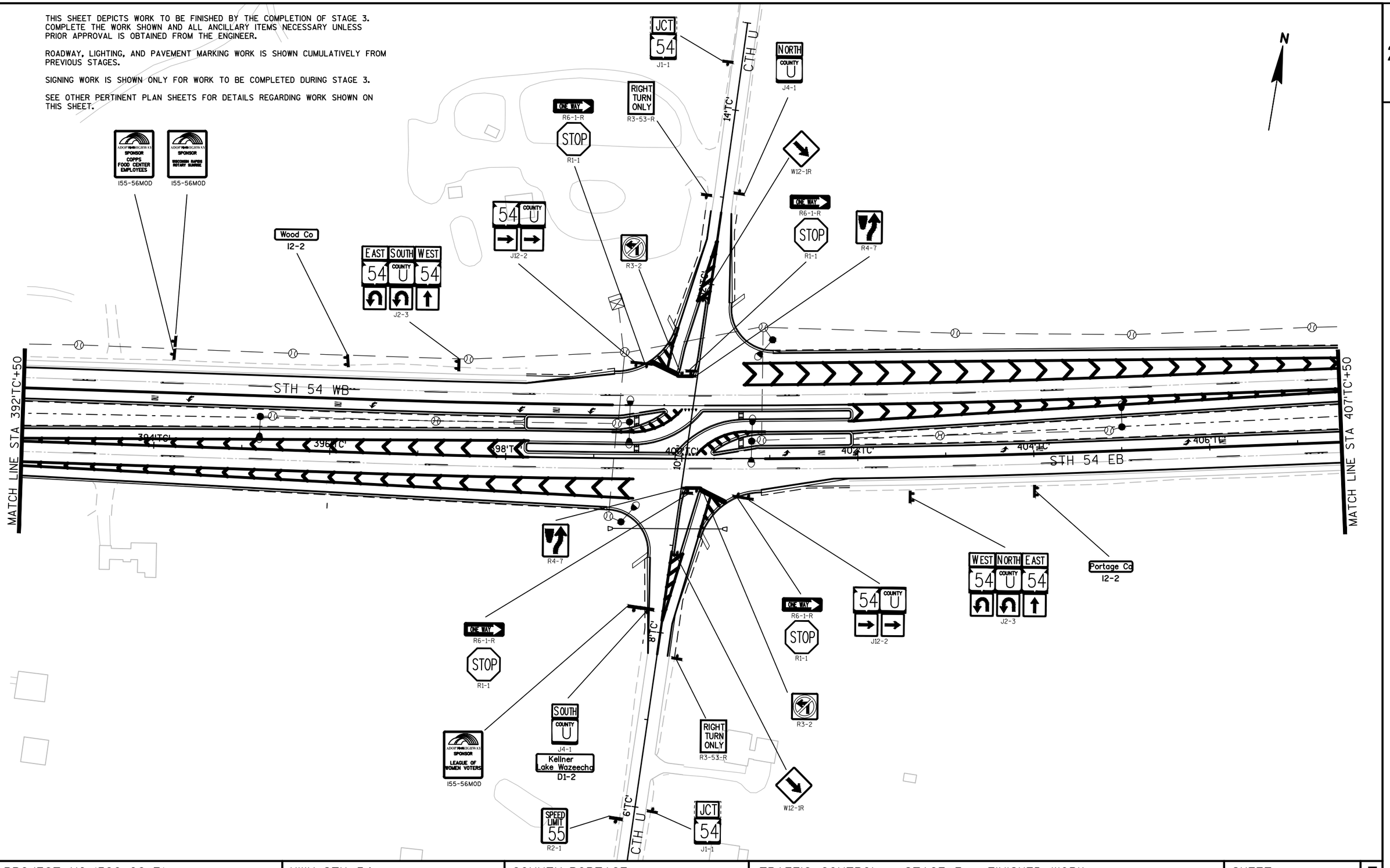
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 3. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 3.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.

2



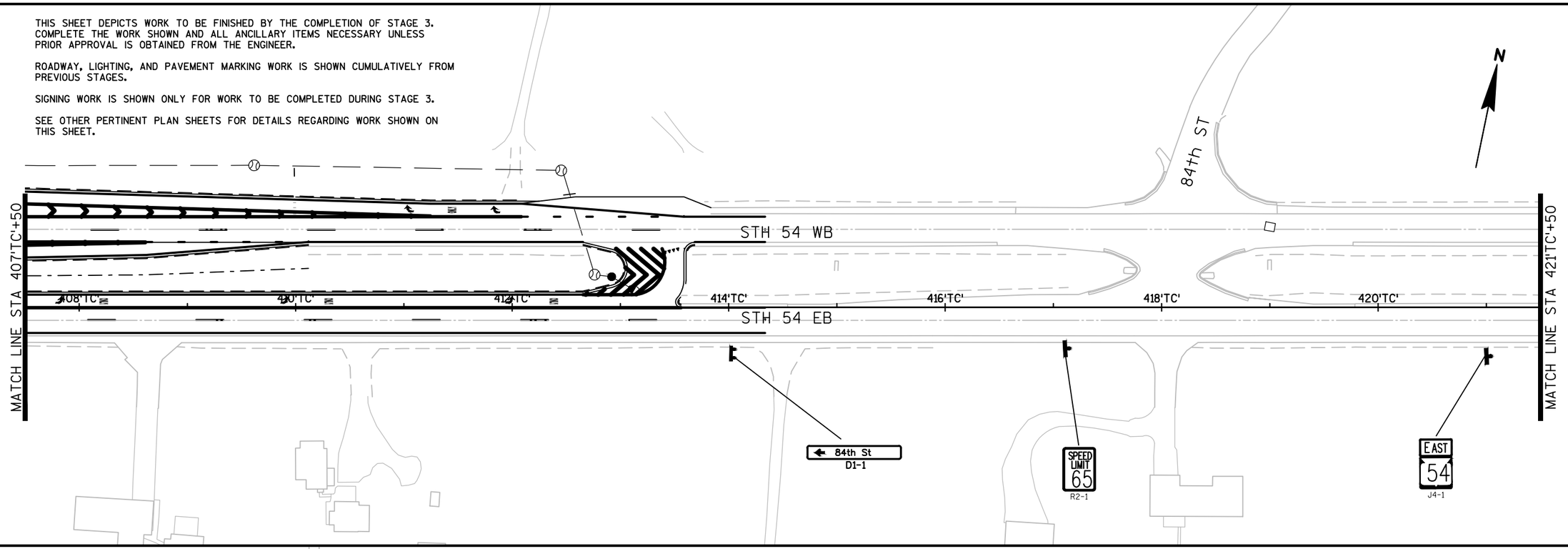
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 3 - FINISHED WORK	SHEET 77	E

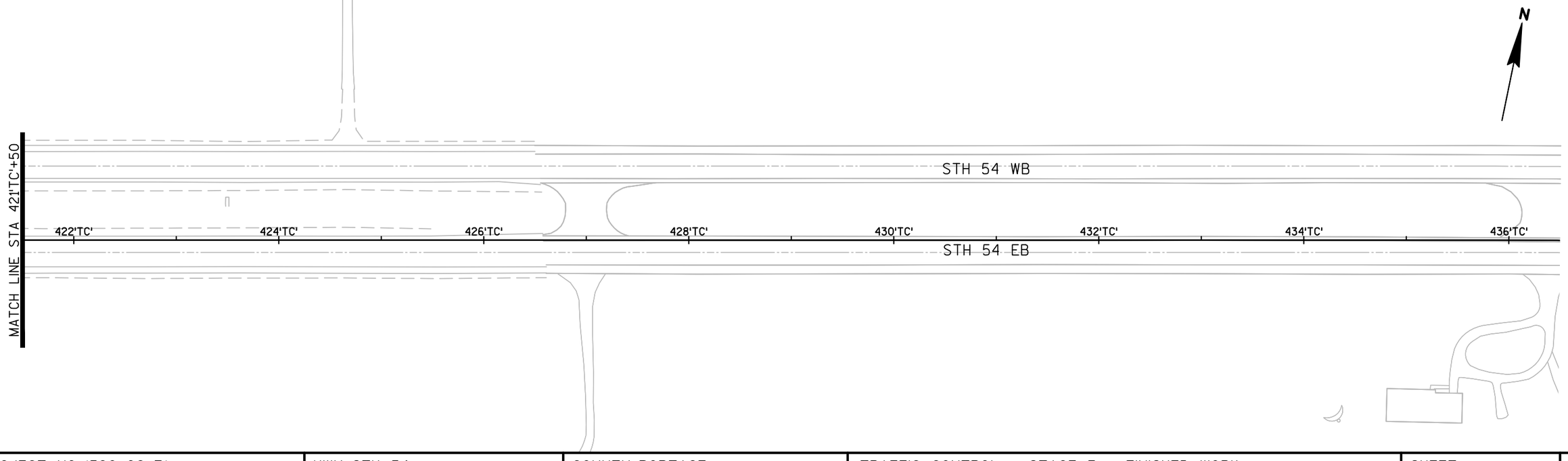
THIS SHEET DEPICTS WORK TO BE FINISHED BY THE COMPLETION OF STAGE 3. COMPLETE THE WORK SHOWN AND ALL ANCILLARY ITEMS NECESSARY UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ENGINEER.

ROADWAY, LIGHTING, AND PAVEMENT MARKING WORK IS SHOWN CUMULATIVELY FROM PREVIOUS STAGES.

SIGNING WORK IS SHOWN ONLY FOR WORK TO BE COMPLETED DURING STAGE 3.

SEE OTHER PERTINENT PLAN SHEETS FOR DETAILS REGARDING WORK SHOWN ON THIS SHEET.

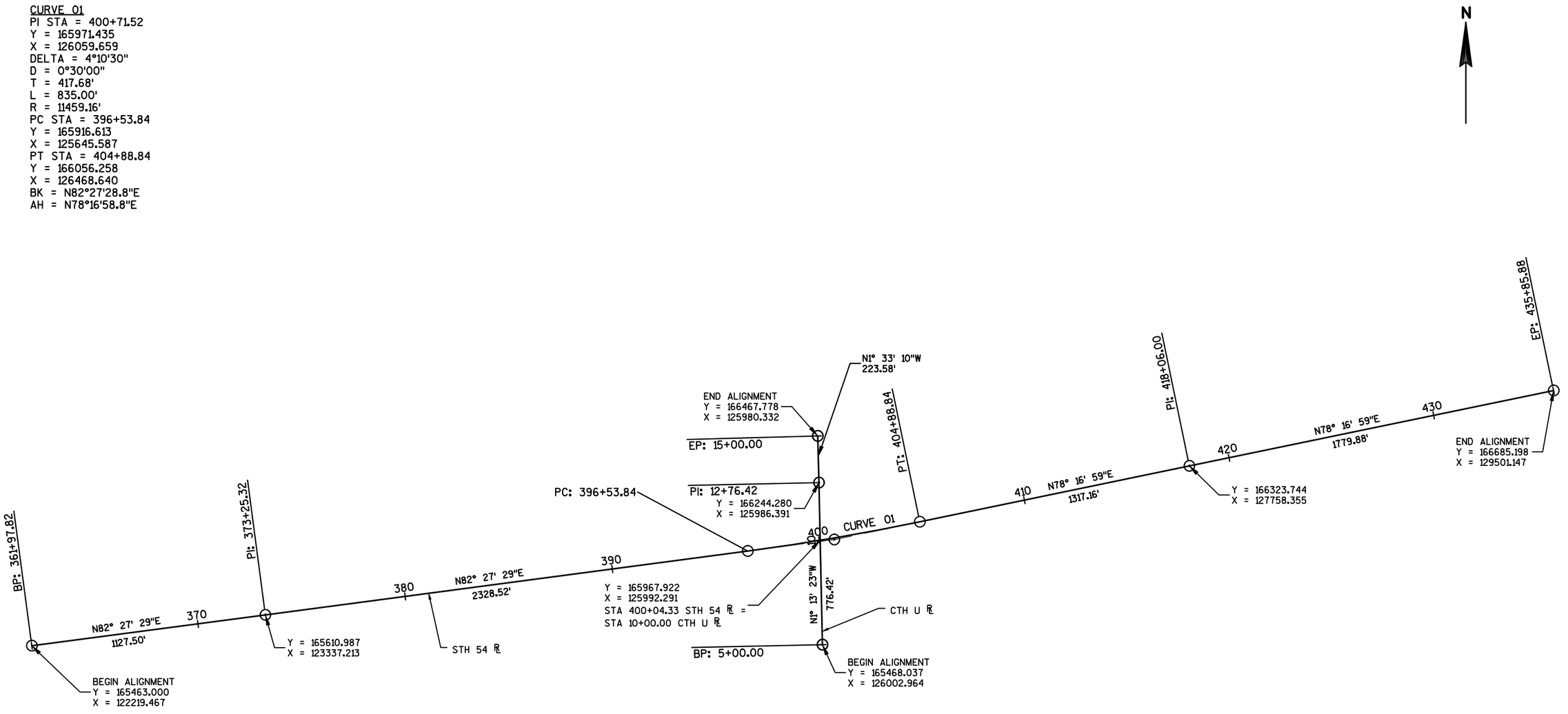




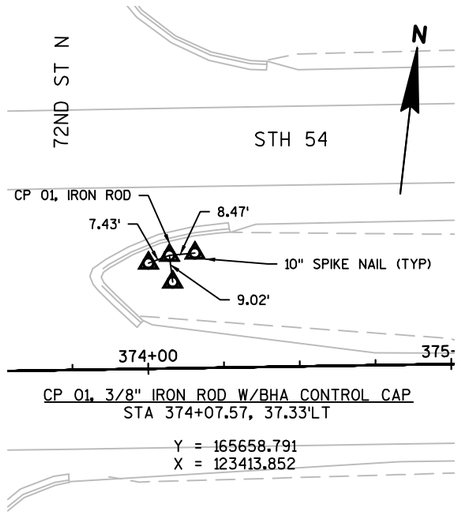
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	TRAFFIC CONTROL - STAGE 3 - FINISHED WORK	SHEET 78	E

2

CURVE 01
PI STA = 400+71.52
Y = 165971.435
X = 126059.659
DELTA = 4°10'30"
D = 0°30'00"
T = 417.68'
L = 835.00'
R = 11459.16'
PC STA = 396+53.84
Y = 165916.613
X = 125645.587
PT STA = 404+88.84
Y = 166056.258
X = 126468.640
BK = N82°27'28.8"E
AH = N78°16'58.8"E

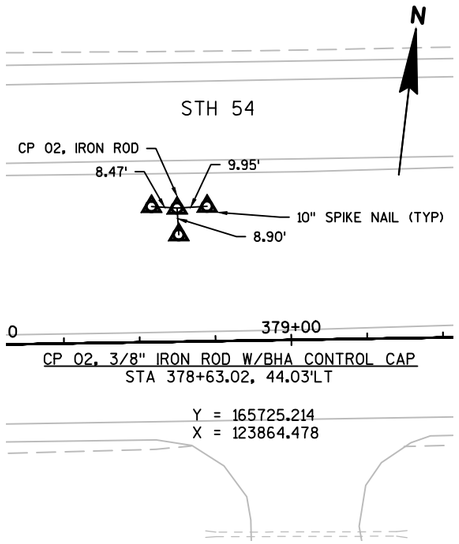


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	ALIGNMENT DIAGRAM	SHEET 79	E



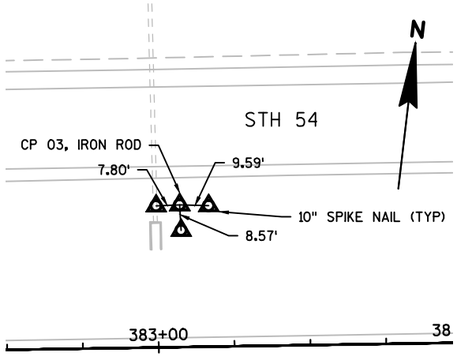
CP 01, 3/8" IRON ROD W/BHA CONTROL CAP
STA 374+07.57, 37.33'LT

Y = 165658.791
X = 123413.852



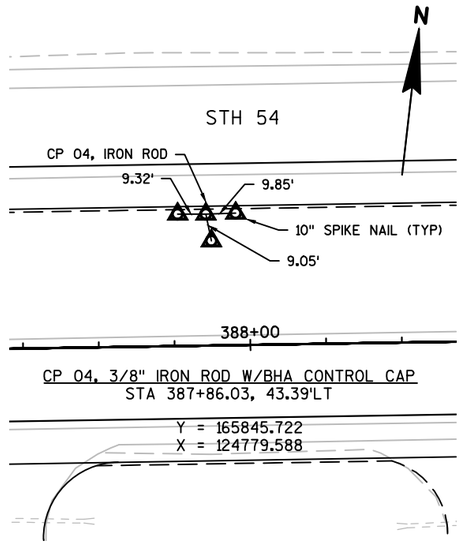
CP 02, 3/8" IRON ROD W/BHA CONTROL CAP
STA 378+63.02, 44.03'LT

Y = 165725.214
X = 123864.478



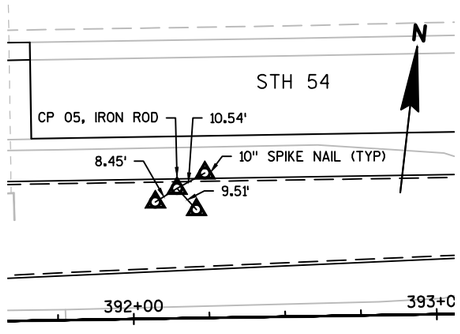
CP 03, 3/8" IRON ROD W/BHA CONTROL CAP
STA 383+07.64, 46.89'LT

Y = 165786.407
X = 124304.881



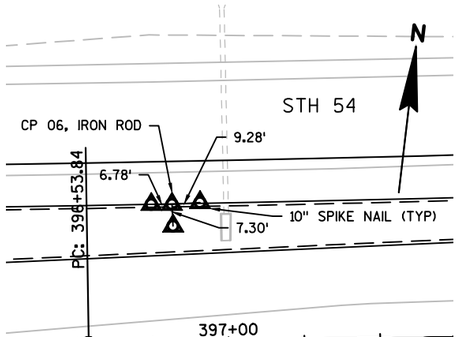
CP 04, 3/8" IRON ROD W/BHA CONTROL CAP
STA 387+86.03, 43.39'LT

Y = 165845.722
X = 124779.588



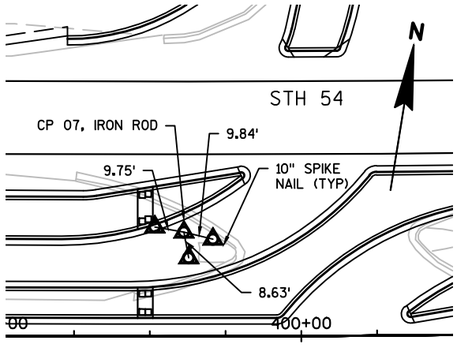
CP 05, 3/8" IRON ROD W/BHA CONTROL CAP
STA 392+14.95, 42.83'LT

Y = 165901.464
X = 125204.874



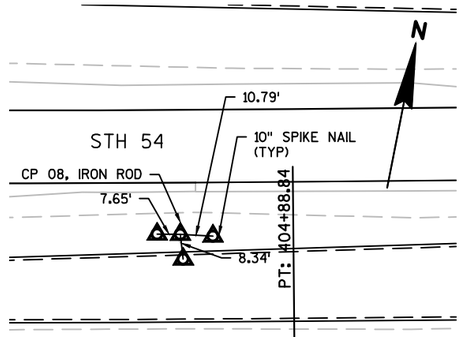
CP 06, 3/8" IRON ROD W/BHA CONTROL CAP
STA 396+82.10, 45.94'LT

Y = 165965.881
X = 125667.461



CP 07, 3/8" IRON ROD W/BHA CONTROL CAP
STA 399+61.28, 34.34'LT

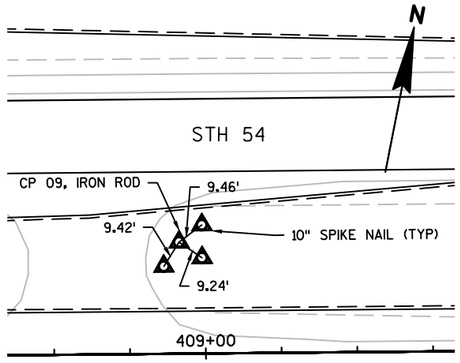
Y = 165994.962
X = 125944.376



CP 08, 3/8" IRON ROD W/BHA CONTROL CAP
STA 404+51.41, 43.01'LT

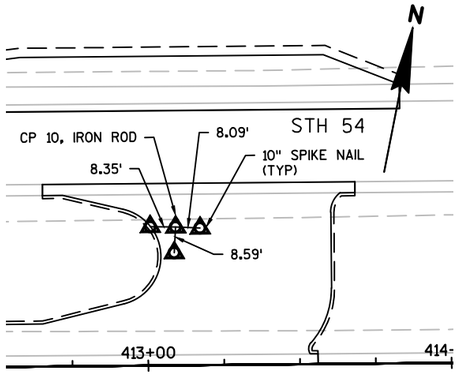
Y = 166090.861
X = 126423.385

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY:PORTAGE	CONTROL POINT DATA	SHEET 80	E



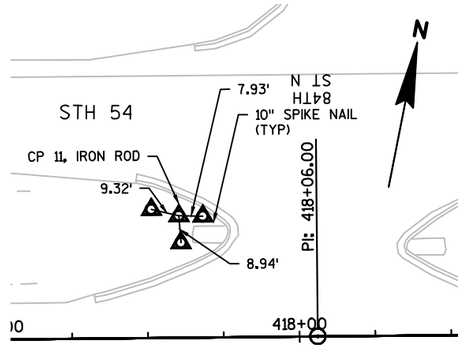
CP 09, 3/8" IRON ROD W/BHA CONTROL CAP
STA 408+91.47, 36.80'LT

Y = 166174.060
X = 126855.407



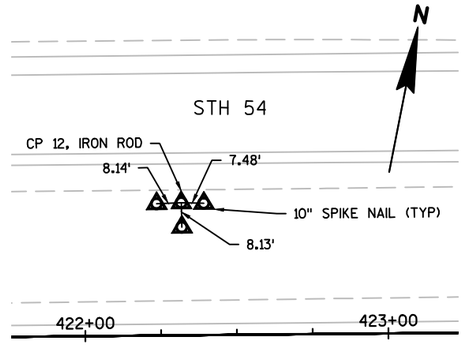
CP 10, 3/8" IRON ROD W/BHA CONTROL CAP
STA 413+09.37, 45.59'LT

Y = 166267.525
X = 127262.812



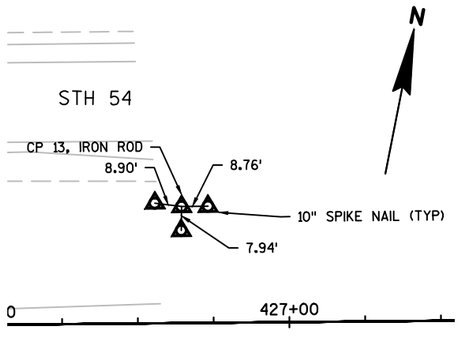
CP 11, 3/8" IRON ROD W/BHA CONTROL CAP
STA 417+60.54, 40.24'LT

Y = 166353.916
X = 127705.666



CP 12, 3/8" IRON ROD W/BHA CONTROL CAP
STA 422+32.06, 43.70'LT

Y = 166453.059
X = 128166.659



CP 13, 3/8" IRON ROD W/BHA CONTROL CAP
STA 426+64.76, 38.42'LT

Y = 166535.758
X = 128591.419

DATE 15MAR16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1520-02-71 QUANTITY
0010	203.0100	Removing Small Pipe Culverts	EACH	7.000	7.000
0020	204.0100	Removing Pavement	SY	2,860.000	2,860.000
0030	204.0150	Removing Curb & Gutter	LF	458.000	458.000
0040	204.0260	Abandoning Inlets	EACH	2.000	2.000
0050	204.0275	Closing Culvert Pipes	EACH	2.000	2.000
0060	205.0100	Excavation Common	CY	6,604.000	6,604.000
0070	208.0100	Borrow	CY	1,516.000	1,516.000
0080	213.0100	Finishing Roadway (project) 01. 1520-02-71	EACH	1.000	1.000
0090	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,777.000	1,777.000
0100	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	9,561.000	9,561.000
0110	415.0090	Concrete Pavement 9-Inch	SY	18,121.000	18,121.000
0120	415.0210	Concrete Pavement Gaps	EACH	5.000	5.000
0130	415.1090	Concrete Pavement HES 9-Inch	SY	130.000	130.000
0140	416.0610	Drilled Tie Bars	EACH	3,290.000	3,290.000
0150	416.0620	Drilled Dowel Bars	EACH	252.000	252.000
0160	416.1715	Concrete Pavement Repair SHES	SY	135.000	135.000
0170	465.0105	Asphaltic Surface	TON	287.000	287.000
0180	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	40.000	40.000
0190	465.0315	Asphaltic Flumes	SY	44.000	44.000
0200	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	10.000	10.000
0210	520.3418	Culvert Pipe Class III-A Non-metal 18-Inch	LF	192.000	192.000
0220	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000
0230	522.0318	Culvert Pipe Reinforced Concrete Class IV 18-Inch	LF	6.000	6.000
0240	522.0324	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	138.000	138.000
0250	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0260	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000
0270	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0280	523.0424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	8.000	8.000
0290	523.0514	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	1.000	1.000
0300	523.0524	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	1.000	1.000
0310	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	2,177.000	2,177.000
0320	602.0415	Concrete Sidewalk 6-Inch	SF	190.000	190.000
0330	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	64.000	64.000
0340	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	61.000	61.000
0350	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	309.000	309.000
0360	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	116.000	116.000

3

DATE 15MAR16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1520-02-71 QUANTITY
0370	610.0414	Storm Sewer Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 14x23-Inch	LF	75.000	75.000
0380	611.0627	Inlet Covers Type HM	EACH	7.000	7.000
0390	611.0642	Inlet Covers Type MS	EACH	6.000	6.000
0400	611.3004	Inlets 4-FT Diameter	EACH	7.000	7.000
0410	611.3902	Inlets Median 2 Grate	EACH	3.000	3.000
0420	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1520-02-71	EACH	1.000	1.000
0430	619.1000	Mobilization	EACH	1.000	1.000
0440	620.0200	Concrete Median Blunt Nose	SF	176.000	176.000
0450	620.0300	Concrete Median Sloped Nose	SF	234.000	234.000
0460	624.0100	Water	MGAL	227.000	227.000
0470	625.0100	Topsoil	SY	16,709.000	16,709.000
0480	627.0200	Mulching	SY	16,709.000	16,709.000
0490	628.1504	Silt Fence	LF	3,840.000	3,840.000
0500	628.1520	Silt Fence Maintenance	LF	5,760.000	5,760.000
0510	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0520	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0530	628.2008	Erosion Mat Urban Class I Type B	SY	119.000	119.000
0540	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0550	628.7015	Inlet Protection Type C	EACH	7.000	7.000
0560	628.7504	Temporary Ditch Checks	LF	190.000	190.000
0570	628.7555	Culvert Pipe Checks	EACH	65.000	65.000
0580	628.7570	Rock Bags	EACH	50.000	50.000
0590	629.0210	Fertilizer Type B	CWT	10.500	10.500
0600	630.0120	Seeding Mixture No. 20	LB	301.000	301.000
0610	633.5200	Markers Culvert End	EACH	8.000	8.000
0620	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	111.000	111.000
0630	637.2210	Signs Type II Reflective H	SF	1,326.720	1,326.720
0640	637.2230	Signs Type II Reflective F	SF	140.000	140.000
0650	638.2602	Removing Signs Type II	EACH	33.000	33.000
0660	638.3000	Removing Small Sign Supports	EACH	37.000	37.000
0670	642.5001	Field Office Type B	EACH	1.000	1.000
0680	643.0200	Traffic Control Surveillance and Maintenance (project) 01. 1520-02-71	DAY	67.000	67.000
0690	643.0300	Traffic Control Drums	DAY	19,007.000	19,007.000
0700	643.0420	Traffic Control Barricades Type III	DAY	977.000	977.000
0710	643.0705	Traffic Control Warning Lights Type A	DAY	1,566.000	1,566.000
0720	643.0715	Traffic Control Warning Lights Type C	DAY	1,876.000	1,876.000
0730	643.0800	Traffic Control Arrow Boards	DAY	268.000	268.000
0740	643.0900	Traffic Control Signs	DAY	3,296.000	3,296.000
0750	643.0920	Traffic Control Covering Signs Type II	EACH	3.000	3.000
0760	643.1050	Traffic Control Signs PCMS	DAY	148.000	148.000
0770	646.0106	Pavement Marking Epoxy 4-Inch	LF	13,357.000	13,357.000
0780	646.0126	Pavement Marking Epoxy 8-Inch	LF	10,339.000	10,339.000
0790	646.0600	Removing Pavement Markings	LF	416.000	416.000
0800	647.0166	Pavement Marking Arrows Epoxy Type 2	EACH	19.000	19.000
0810	647.0356	Pavement Marking Words Epoxy	EACH	15.000	15.000
0820	647.0526	Pavement Marking Yield Line Symbols Epoxy 18-Inch	EACH	40.000	40.000
0830	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	59.000	59.000
0840	647.0606	Pavement Marking Island Nose Epoxy	EACH	2.000	2.000
0850	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	2,716.000	2,716.000

3

DATE 15MAR16 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1520-02-71 QUANTITY
0860	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	3,960.000	3,960.000
0870	649.0506	Temporary Pavement Marking Removable Mask-Out Tape 6-Inch	LF	1,065.000	1,065.000
0880	649.1200	Temporary Pavement Marking Stop Line Removable Tape 18-Inch	LF	60.000	60.000
0890	650.4000	Construction Staking Storm Sewer	EACH	13.000	13.000
0900	650.4500	Construction Staking Subgrade	LF	8,447.000	8,447.000
0910	650.5000	Construction Staking Base	LF	8,447.000	8,447.000
0920	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,797.000	1,797.000
0930	650.6000	Construction Staking Pipe Culverts	EACH	7.000	7.000
0940	650.7000	Construction Staking Concrete Pavement	LF	8,256.000	8,256.000
0950	650.8500	Construction Staking Electrical Installations (project) 01. 1520-02-71	LS	1.000	1.000
0960	650.9910	Construction Staking Supplemental Control (project) 01. 1520-02-71	LS	1.000	1.000
0970	650.9920	Construction Staking Slope Stakes	LF	6,034.000	6,034.000
0980	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	3,285.000	3,285.000
0990	652.0605	Conduit Special 2-Inch	LF	194.000	194.000
1000	652.0615	Conduit Special 3-Inch	LF	570.000	570.000
1010	654.0105	Concrete Bases Type 5	EACH	8.000	8.000
1020	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
1030	655.0610	Electrical Wire Lighting 12 AWG	LF	1,160.000	1,160.000
1040	655.0615	Electrical Wire Lighting 10 AWG	LF	20,500.000	20,500.000
1050	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	8.000	8.000
1060	657.0322	Poles Type 5-Aluminum	EACH	8.000	8.000
1070	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	10.000	10.000
1080	659.1120	Luminaires Utility LED B	EACH	10.000	10.000
1090	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
1100	690.0150	Sawing Asphalt	LF	49.000	49.000
1110	690.0250	Sawing Concrete	LF	4,658.000	4,658.000
1120	715.0415	Incentive Strength Concrete Pavement	DOL	5,436.000	5,436.000
1130	ASP.1T0A	On-the-Job Training Apprentice at $5. 00/HR	HRS	1,200.000	1,200.000
1140	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000	600.000
1150	SPV.0060	Special 01. Pull Boxes Non-Conductive 24x42-Inch	EACH	22.000	22.000
1160	SPV.0105	Special 01. Concrete Pavement Joint Layout	LS	1.000	1.000

3

3

203.0100 REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	EACH	COMMENT
391+75	LT	1	18-INCH AEW ONLY
395+00	LT	1	18-INCH AEW ONLY
395+99	RT	1	24-INCH AEW ONLY
9+19	LT/RT	1	24-INCH
402+00	LT	1	18-INCH AEW ONLY
402+00	LT	1	18-INCH AEW ONLY
410+00	LT	1	18-INCH AEW ONLY
	TOTAL	**7**	

204.0100 REMOVING PAVEMENT

STATION	TO	STATION	LOCATION	SY	COMMENT
385+34	-	401+90	RT	1,450	9-INCH
398+22	-	413+84	LT	1,410	9-INCH
			TOTAL	**2,860**	

204.0150 REMOVING CURB & GUTTER

STATION	TO	STATION	LOCATION	LF	COMMENT
399+25	-	399+78	LT	95	36-INCH
399+42	-	399+70	RT	56	36-INCH
399+55	-	400+05	LT	78	36-INCH
400+15	-	400+52	RT	63	36-INCH
400+39	-	400+93	LT	103	36-INCH
400+50	-	400+90	LT	63	36-INCH
			TOTAL	**458**	

ABANDONING AND CLOSING

STATION	LOCATION	**204.0206** ABANDONING INLETS EACH	**204.0275** CLOSING CULVERT PIPES EACH	COMMENT
397+00	LT	1	1	INLET AND CROSS PIPE
402+00	LT	1	1	INLET AND CROSS PIPE
	TOTAL	**2**	**2**	

213.0100 FINISHING ROADWAY (PROJECT) 01. 1520-02-71

PROJECT	EACH	COMMENT
1520-02-71	1	-
TOTAL	**1**	

EARTHWORK SUMMARY

STATION	TO	STATION	**205.0100** EXCAVATION COMMON (1) CUT (2) CY	EBS CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (3) CY	AVAILABLE MATERIAL (4) CY	UNEXPANDED FILL CY	EXPANDED FILL (5) CY	MASS ORDINATE ± (6) CY	**208.0100** BORROW CY	COMMENTS:
7+75	-	9+00	153	0	46	107	46	58	49		CTH U
12+00	-	12+83	147	0	28	119	7	9	110		CTH U
385+00	-	414+00	6,304	0	999	5,305	5,584	6,980	-1,675		STH 54
		TOTAL	**6,604**	**0**	**1,073**	**5,531**	**5,637**	**7,047**	**-1,516**	**1,516**	

1) Excavation Common is the sum of the Cut and EBS Excavation columns. Item No. 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material
4) Available Material = Cut - Salvaged/Unusuable Pavement Material
5) Expanded Fill. Factor = 1.25
6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.

BASE AGGREAGTE

STATION	TO	STATION	LOCATION	**305.0110** BASE AGGREGATE DENSE 3/4-INCH TON	**305.0120** BASE AGGREGATE DENSE 1 1/4-INCH TON	**624.0100** WATER MGAL	COMMENT
385+33	-	399+77	RT	260	1,485	35	EB RT TRN LANE
400+31	-	401+90	RT	24	130	3	EB INTSCT TAPER
398+22	-	399+84	LT	24	130	3	WB INTSCT TAPER
400+40	-	413+84	LT	240	1,130	27	EB U TRN LANE
385+48	-	399+80	LT	255	1,205	29	WB U TRN LANE
390+05	-	401+90	LT	165	1,010	24	EB LT TRN LANE
-	391+60	-	LT	3	22	1	PIPE INSTALLATION
398+26	-	410+12	LT	165	965	23	WB LT TRN LANE
-	398+28	-	LT	3	22	1	PIPE INSTALLATION
-	402+25	-	LT	3	22	1	PIPE INSTALLATION
400+36	-	413+69	LT	245	1,680	39	WB RT TRN LANE
7+75	-	9+80	LT/RT	27	425	9	CTH U SOUTH LEG
10+80	-	12+83	LT/RT	33	415	9	CTH U NORTH LEG
398+24	-	401+92	LT	-	615	12	MEDIAN ISLAND
399+19	-	399+80	LT	-	75	2	EB LT TRN LANE MEDIAN ISLAND
400+36	-	400+96	LT	-	75	2	WB LT TRN LANE MEDIAN ISLAND
8+90	-	9+67	RT	-	70	1	CTH U SOUTH LEG MEDIAN ISLAND
10+92	-	11+81	LT	-	85	2	CTH U NORTH LEG MEDIAN ISLAND
DRIVEWAYS (PE)			LT/RT	330	-	7	
			TOTALS	**1,777**	**9,561**	**227**	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE PAVEMENT

STATION	TO	STATION	LOCATION	415.0090 CONCRETE PAVEMENT 9-INCH SY	415.1090 CONCRETE PAVEMENT HES 9-INCH SY	415.0210 CONCRETE PAVEMENT GAPS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	COMMENT
385+33	-	399+77	RT	3,325	-	-	-	-	EB RT TRN LANE
-	387+19	-	RT	-	-	1	-	-	PRIVATE ENTRANCE
-	388+73	-	RT	-	-	1	-	-	PRIVATE ENTRANCE
-	389+92	-	RT	-	-	1	-	-	PRIVATE ENTRANCE
400+31	-	401+90	RT	273	-	-	-	-	EB INTSCT TAPER
-	391+60	-	LT	-	45	-	42	-	PIPE INSTALLATION
-	391+61	-	RT	-	-	1	-	-	PRIVATE ENTRANCE
-	393+50	-	RT	-	-	1	-	-	PRIVATE ENTRANCE
398+22	-	399+84	LT	274	-	-	-	-	WB INTSCT TAPER
-	398+28	-	LT	-	45	-	42	-	PIPE INSTALLATION
400+40	-	413+84	LT	2,360	-	-	-	-	EB U TRN LANE
-	402+25	-	LT	-	40	-	42	-	PIPE INSTALLATION
385+48	-	399+80	LT	2,521	-	-	-	-	WB U TRN LANE
390+05	-	401+90	LT	2,316	-	-	-	-	EB LT TRN LANE
398+26	-	410+12	LT	2,181	-	-	-	-	WB LT TRN LANE
400+36	-	413+69	LT	3,986	-	-	-	-	WB RT TRN LANE
8+82	-	9+80	LT/RT	387	-	-	-	-	CTH U SOUTH LEG
10+80	-	12+00	LT/RT	498	-	-	-	-	CTH U NORTH LEG
	UNDISTRIBUTED		-	-	-	-	126	135	
			TOTAL	**18,121**	**130**	**5**	**252**	**135**	

416.0610 DRILLED TIE BARS

STATION	TO	STATION	LOCATION	EACH	COMMENT
385+33	-	401+90	RT	665	EB RT - RT TRN
385+48	-	386+52	LT	40	EB LT - U TURN
390+05	-	413+56	LT	940	EB LT - LT TURN & U TRN
385+61	-	410+12	LT	980	WB RT - LEFT TRN & U TRN
412+66	-	413+69	LT	40	WB RT - U TRN
398+22	-	413+84	LT	625	WB LT - RT TRN
			TOTAL	**3,290**	

ASPHALTIC SURFACE

STATION	TO	STATION	LOCATION	460.0105 ASPHALTIC SURFACE TON	COMMENT
-	391+60	-	LT	2	PIPE INSTALLATION - 3-INCH
-	398+28	-	LT	2	PIPE INSTALLATION - 3-INCH
-	-	-	LT/RT	110	CURB ISLANDS - 2-INCH
7+75	-	8+82	LT/RT	91	CTH U SOUTH - 4-INCH
12+00	-	12+80	LT/RT	82	CTH U NORTH - 4-INCH
			TOTAL	**287**	

465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STATION	LOCATION	TON	COMMENT
387+20	RT	20	PE
389+90	RT	20	PE
	TOTAL	**40**	

CULVERT PIPE

STATION	LOCATION	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.3418 CULVERT PIPE CLASS III-A NON METAL 18-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	522.0318 CULVERT PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	522.0324 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	523.0424 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH LF	523.0514 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14X23-INCH EACH	523.0524 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH EACH	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	633.5200 MARKERS CULVERT END EACH	COMMENT
387+19	RT	2	40	--	--	--	--	--	--	--	--	--	13	--	PRIVATE ENTRANCE
388+73	RT	2	32	--	--	--	--	--	--	--	--	--	13	--	PRIVATE ENTRANCE
391+60	LT	--	--	--	--	--	--	--	--	--	1	--	10	1	MEDIAN INLET
391+61	RT	2	46	--	--	--	--	--	--	--	--	--	13	--	PRIVATE ENTRANCE
393+46	RT	2	42	--	--	--	--	--	--	--	--	--	13	--	PRIVATE ENTRANCE
395+00	LT	--	--	1	--	--	--	--	--	--	--	--	--	1	MEDIAN INLET CONNECTION
396+00	RT	--	--	1	--	--	--	--	--	8	--	1	--	1	CROSS CULVERT EXTENSION
398+28	LT	--	--	--	--	--	1	--	--	--	--	--	10	1	STORM SEWER OUTLET
9+19	LT/RT	--	--	--	--	138	--	--	2	--	--	--	20	2	CTH U CROSS CULVERT
402+25	LT	--	--	--	--	--	--	1	--	--	--	--	7	1	MEDIAN INLET
410+00	LT	--	--	1	6	--	--	1	--	--	--	--	7	1	CROSS CULVERT EXTENSION
412+01	LT	2	32	--	--	--	--	--	--	--	--	--	13	--	PRIVATE ENTRANCE
	TOTALS	**10**	**192**	**3**	**6**	**138**	**1**	**2**	**2**	**8**	**1**	**1**	**119**	**8**	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER

STATION	TO	STATION	LOCATION	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	610.0414 STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS IV 14X23-INCH LF	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	COMMENT
--	391+60	--	LT	--	--	--	75	--	2	--	1	101 TO 102 - MEDIAN INLET
--	395+00	--	LT	--	--	5	--	--	2	--	1	103 - MEDIAN INLET
--	398+28	--	LT	--	92	--	--	1	--	1	--	201 TO 202 - CURB ISLAND INLET
--	398+28	--	LT	--	11	--	--	1	--	1	--	202 TO 203 - CURB ISLAND INLET
398+28	--	399+39	LT	--	114	--	--	1	--	1	--	203 TO 204 - CURB ISLAND INLET
399+39	--	400+28	LT	--	92	--	--	1	--	1	--	204 TO 205 - CURB ISLAND INLET
400+28	--	400+50	LT	25	--	--	--	1	--	1	--	205 TO 206 - CURB ISLAND INLET
400+50	--	400+41	LT	30	--	--	--	1	--	1	--	206 TO 207 - CURB ISLAND INLET
400+41	--	400+44	LT	6	--	--	--	1	--	1	--	207 TO 208 - CURB ISLAND INLET
--	402+25	--	LT	--	--	111	--	--	2	--	1	301 TO 302 - MEDIAN INLET
			TOTALS	**61**	**309**	**116**	**75**	**7**	**6**	**7**	**3**	

642.5001 FIELD OFFICE TYPE B

LOCATION	EACH
PROJECT	1

619.1000 MOBILIZATION

LOCATION	EACH
PROJECT	1

618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS 1520-02-71

LOCATION	EACH
PROJECT	1

465.0315 ASPHALTIC FLUMES

STATION	LOCATION	SY
398+15	LT	6
402+00	LT	6
9+10	LT	10
9+12	RT	7
11+47	LT	7
11+87	RT	8
	TOTAL	**44**

CURB MEDIAN NOSE

STATION	LOCATION	620.0200 CONCRETE MEDIAN BLUNT NOSE SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	COMMENT
398+25	LT	88	---	MEDIAN
401+90	LT	88	---	MEDIAN
399+80	LT	---	15	MEDIAN - TYPE 2
400+35	LT	---	15	MEDIAN - TYPE 2
8+91	RT	---	69	CTH U - TYPE 1
9+66	RT	---	18	CTH U - TYPE 2
9+68	RT	---	15	CTH U - TYPE 2
10+92	LT	---	15	CTH U - TYPE 2
10+95	LT	---	18	CTH U - TYPE 2
11+82	LT	---	69	CTH U - TYPE 1
	TOTAL	**176**	**234**	

CONCRETE CURB & GUTTER

STATION	TO	STATION	LOCATION	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	COMMENT
398+20	-	401+95	LT	777	STH 54 CENTRAL MEDIAN ISLAND
398+20	-	399+83	LT	334	STH 54 WEST MEDIAN ISLAND
400+33	-	401+95	LT	333	STH 54 EAST MEDIAN ISLAND
399+15	-	399+65	RT	82	CTH U SW RADIUS
400+19	-	400+90	RT	93	CTH U SE RADIUS
399+23	-	399+95	LT	93	CTH U NW RADIUS
400+54	-	401+05	LT	83	CTH U NE RADIUS
8+88	-	9+71	RT	180	CTH U SOUTH MEDIAN ISLAND
10+89	-	11+84	LT	202	CTH U NORTH MEDIAN ISLAND
			TOTAL	**2,177**	

CONCRETE SIDEWALK

STATION	TO	STATION	LOCATION	602.0415 6-INCH SF	COMMENT
399+48	-	399+48	LT	40	SIDEWALK CROSSING
399+48	-	399+48	LT	55	SIDEWALK CROSSING
400+67	-	400+67	LT	55	SIDEWALK CROSSING
400+67	-	400+67	LT	40	SIDEWALK CROSSING
			TOTAL	**190**	

CURB RAMP DETECTABLE WARNING FIELD

STATION	LOCATION	602.0505 YELLOW SF	COMMENT
399+50	LT	32	
400+70	LT	32	
	TOTAL	**64**	

SAWING

STATION	TO	STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF	COMMENT
--	7+75	--	LT/RT	25	--	
--	12+83	--	LT/RT	24	--	
--	391+60	--	LT	--	52	PIPE INSTALLATION
385+33	-	401+90	RT	--	1675	
395+65	-	401+95	LT	--	630	EB LT TRN LANE
398+22	-	413+84	LT	--	1575	
--	398+28	--	LT	--	52	PIPE INSTALLATION
398+35	-	404+57	LT	--	622	WB LT TRN LANE
--	402+25	--	LT	--	52	PIPE INSTALLATION
			TOTAL	**49**	**4,658**	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EROSION CONTROL & RESTORATION ITEMS

STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EACH	628.1910 MOBILIZATIONS EMERGENCY EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS (SILT FENCE RELIEF) EACH	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	COMMENT
383+00	-	383+00	LT	-	-	-	-	-	-	-	-	-	5	-	-	-	MEDIAN
384+23	-	384+23	LT & RT	-	-	-	-	-	-	-	-	30	-	-	-	-	CTH U & MEDIAN
385+18	-	400+50	LT	3,950	3,950	-	-	-	-	2	7	30	-	-	2.5	71	MEDIAN
385+33	-	399+65	RT	3,470	3,470	1,325	1,988	-	-	-	-	30	25	10	2.2	62	RT TURN LANE
400+54	-	413+84	LT	4,120	4,120	-	-	-	-	-	-	-	5	20	2.6	74	RT TURN LANE
401+00	-	414+50	LT	3,340	3,340	1,175	1,763	-	-	1	-	30	15	-	2.1	60	MEDIAN
7+75	-	8+80	LT	167	167	115	173	-	-	-	-	-	-	-	0.1	3	CTH U
7+75	-	9+95	RT	465	465	390	585	-	-	-	-	-	5	-	0.3	8	CTH U
10+69	-	12+83	LT	615	615	385	578	-	-	-	-	-	-	-	0.4	11	CTH U
11+83	-	12+83	RT	82	82	100	150	-	-	-	-	-	-	-	0.1	1	CTH U
UNDISTRIBUTED (PROJECT)				500	500	350	525	2	2	-	-	100	15	20	0.3	9	
			TOTALS	**16,709**	**16,709**	**3,840**	**5,760**	**2**	**2**	**3**	**7**	**190**	**65**	**50**	**10.5**	**301**	

TRAFFIC CONTROL

OPERATION	DURATION (DAYS)	643.0200.01 SURVEILLANCE AND MAINTENANCE 1520-02-71 EACH	643.0200.01 SURVEILLANCE AND MAINTENANCE 1520-02-71 DAY	643.0300 DRUMS EACH	643.0300 DRUMS DAY	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C DAY	643.0800 ARROW BOARDS EACH	643.0800 ARROW BOARDS DAY	643.0900 SIGNS EACH	643.0900 SIGNS DAY	643.0920 COVERING SIGNS TYPE II EACH	643.0920 COVERING SIGNS TYPE II NUMBER OF CYCLES	643.0920 COVERING SIGNS TYPE II NUMBER OF SIGNS	643.1050 SIGNS PCMS EACH	643.1050 SIGNS PCMS DAY
PRIOR TO CONSTRUCTION	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	14
STAGE 1	22	1	22	246	5,412	6	132	12	264	28	616	4	88	42	924	3	1	3	2	44
STAGE 2A	16	1	16	350	5600	10	160	20	320	28	448	4	64	49	784	--	--	--	2	32
STAGE 2B	13	1	13	263	3419	17	221	14	182	28	364	4	52	52	676	--	--	--	2	26
STAGE 3	16	1	16	286	4,576	29	464	50	800	28	448	4	64	57	912	--	--	--	2	32
	TOTAL		**67**		**19,007**		**977**		**1,566**		**1,876**		**268**		**3,296**	**3**				**148**

TEMPORARY PAVEMENT MARKING

OPERATION	649.0400 REMOVABLE TAPE 4-INCH LF	649.0506 REMOVABLE MASK-OUT TAPE 6-INCH (OVER C/L SKIPS) LF	649.1200 STOP LINE REMOVABLE TAPE 18-INCH LF	COMMENT
STAGE 1	1,320	355	60	12.5-FT WHITE SKIPS, CTH U STOP LINES
STAGE 2A	1,320	355	--	TAPER EDGE LINE (YELLOW)
STAGE 2B	--	--	--	12.5-FT WHITE SKIPS
STAGE 3	1,320	355	--	TAPER EDGE LINE (YELLOW)
TOTALS	**3,960**	**1,065**	**60**	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

REMOVING SIGNS

STATION	OFFSET	SIGN NO.	CODE NO.	DESCRIPTION	MESSAGE LINE 1	MESSAGE LINE 2	MESSAGE LINE 3	**638.2602** REMOVING SIGNS TYPE II EACH	**638.3000** REMOVING SMALL SIGN SUPPORTS EACH
391+00	RT	2-1	M2-1	Junction Marker	-	-	-	1	1
391+00	RT	2-2	M1-5A	County Marker	U	-	-	-	-
393+34	LT	2-3	R6-2L	One Way LEFT Arrow	-	-	-	1	1
394+33	RT	2-4	D7-68R	[Name County Park]/Arrow Right	South Wood	County Park	[LA]	1	2
394+33	RT	2-5	D1-1	One Destination (Arrow)	Kellner [RA]	-	-	-	-
394+82	LT	2-6	R2-1	Speed Limit __ MPH	65	-	-	1	1
395+84	RT	2-7	I55-56	Adopt-A-Highway [Sponser]	BOYS & GIRLS	CLUB OF	PORTAGE CTY	1	1
396+35	LT	2-8	R5-1A	Wrong Way	-	-	-	1	1
397+40	LT	2-9	I55-56	Adopt-A-Highway [Sponser]	COPPS	FOOD CENTER	EMPLOYEES	1	1
397+40	LT	2-10	I55-56	Adopt-A-Highway [Sponser]	WISCONSIN RAPIDS	ROTARY SERVICE	-	1	1
398+10	LT	2-11	M3-4	WEST Cardinal Route Marker	-	-	-	1	1
398+10	LT	2-12	M1-6	State Route Marker	54	-	-	-	-
398+45	RT	2-13	M1-5A	County Marker	U	-	-	1	1
398+45	RT	2-14	M6-4	Directional Arrows Left - Right	-	-	-	-	-
398+50	LT	2-15	R5-1	Do Not Enter	-	-	-	1	1
399+62	LT	2-16	R4-7	Keep Right	-	-	-	1	1
400+50	LT	2-17	R4-7	Keep Right	-	-	-	1	1
400+83	LT	2-18	I2-2	County Line Name	Wood Co	-	-	1	2
400+83	LT	2-19	M1-5A	County Marker	U			-	-
400+83	LT	2-20	M6-4	Directional Arrows Left - Right	-	-	-	-	-
400+94	LT	2-21	R5-1	Do Not Enter	-	-	-	1	1
401+97	RT	2-22	I2-2	County Line Name	Portage Co	-	-	1	2
5+80	LT	2-23	R2-1	Speed Limit __ MPH	55	-	-	1	1
8+21	LT	2-24	M1-5A	County Marker	U	-	-	1	1
8+21	LT	2-25	D1-2	Two Destinations (Arrows)	Kellner [UA]	Lake Wauzeecha	-	-	-
8+21	LT	2-26	I55-56	Adopt-A-Highway [Sponser]	LEAGUE OF	WOMEN VOTERS	-	1	1
9+37	RT	2-27	R1-1	Stop	-	-	-	1	1
9+37	RT	2-28	R6-3	Divided Highway Crossing Sign and Intersection	-	-	-	-	-
9+37	RT	2-29	M1-6	State Route Marker	54	-	-	1	1
9+37	RT	2-30	M6-4	Directional Arrows Left - Right	-	-	-	-	-
11+19	LT	2-31	R1-1	Stop	-	-	-	1	1
11+19	LT	2-32	R6-3	Divided Highway Crossing Sign and Intersection	-	-	-	-	-
11+19	LT	2-33	M1-6	State Route Marker	54	-	-	1	1
11+19	LT	2-34	M6-4	Directional Arrows Left - Right	-	-	-	-	-
11+19	LT	2-35	R6-2L	One Way LEFT Arrow	-	-	-	1	-
11+96	RT	2-36	M1-5A	County Marker	U	-	-	1	1
404+52	RT	3-1	M3-2	EAST Cardinal Route Marker	-	-	-	1	1
404+52	RT	3-2	M1-6	State Route Marker	54	-	-	-	-
404+62	LT	3-3	R5-1A	Wrong Way	-	-	-	1	1
406+50	RT	3-4	R2-1	Speed Limit __ MPH	65	-	-	1	1
406+83	LT	3-5	D7-68L	[Name County Park]/Arrow Left	South Wood	County Park	[LA]	-	2
406+83	LT	3-6	D1-1	One Destination (Arrow)	[LA] Kellner	-	-	1	-
408+66	LT	3-7	R6-2L	One Way LEFT Arrow	-	-	-	1	1
408+80	LT	3-8	M2-1	Junction Marker	-	-	-	1	1
408+80	LT	3-9	M1-5A	County Marker	U	-	-	-	-
408+96	RT	3-10	R6-2L	One Way LEFT Arrow	-	-	-	1	1
413+05	RT	3-11	D1-1	One Destination (Arrow)	[LA] 84th St	-	-	1	2
							TOTALS	**33**	**37**

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING SCHEDULE

STATION	OFFSET	SIGN NO.	CODE NO.	DESCRIPTION	MESSAGE LINE 1	MESSAGE LINE 2	MESSAGE LINE 3	SIZE IN	X	IN	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF
377+00	LT	5-1	---	Special Sign	WATCH FOR	TURNING	VEHICLES/NEXT 1 MILE	84	X	60	2	-	35.00
377+00	RT	5-2	---	Special Sign	WATCH FOR	TURNING	VEHICLES/NEXT 1 MILE	84	X	60	2	-	35.00
381+05	LT	5-3	R2-1	Speed Limit __ MPH	65	-	-	48	X	60	2	20.00	-
382+00	RT	5-4	R5-1A	Wrong Way	-	-	-	42	X	30	1	8.75	-
383+45	RT	5-5	J1-1	Junction or End Assembly	JCT	COUNTY U	-	36	X	57	1	14.25	-
383+45	LT	5-6	J1-1	Junction or End Assembly	JCT	COUNTY U	-	36	X	57	1	14.25	-
385+00	LT	5-7	J4-1	Reassurance Assembly	WEST	54	-	36	X	54	1	13.50	-
385+01	LT	5-8	R3-18	No Left / U-Turn Symbol	-	-	-	36	X	36	1	9.00	-
385+28	RT	5-9	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
385+50	LT	5-10	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
385+50	LT	5-11	R6-1L	One Way Left Arrow	-	-	-	54	X	18	2	6.75	-
385+50	LT	5-12	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
386+01	RT	5-13	---	Special Sign	COUNTY U / SOUTH	USE FAR RIGHT LANE	54 / EAST	114	X	60	2	47.50	-
386+25	RT	5-14	R6-2L	One Way LEFT Arrow	-	-	-	36	X	48	1	12.00	-
386+25	LT	5-15	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
386+25	LT	5-16	R6-1L	One Way Left Arrow	-	-	-	54	X	18	2	6.75	-
386+25	LT	5-17	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
387+23	LT	5-18	J3-2	Directional Assembly	EAST / SOUTH	54 / COUNTY U	[U-Turn] / [U-Turn]	72	X	84	2	42.00	-
391+00	LT	5-19	J3-1	Directional Assembly	NORTH	COUNTY U	[LA]	36	X	84	1	21.00	-
392+00	RT	5-20	D1-1	One Destination (Arrow)	Kellner [RA]	-	-	78	X	21	2	11.38	-
394+33	RT	6-2	D7-68R	[Name County Park]/Arrow Right	South Wood	County Park	[RA]	84	X	42	2	24.50	-
395+84	RT	6-3	I-55-56	Adopt-A-Highway [Sponser]	BOYS & GIRLS	CLUB OF	PORTAGE CTY	30	X	36	1	7.50	-
394+20	LT	6-3B	I-55-56	Adopt-A-Highway [Sponser]	COPPS	FOOD CENTER	EMPLOYEES	30	X	36	1	7.50	-
394+20	LT	6-3C	I-55-56	Adopt-A-Highway [Sponser]	WISCONSIN RAPIDS	ROTARY SUNRISE	-	30	X	36	1	7.50	-
395+85	RT	6-3D	R5-1A	Wrong Way	-	-	-	42	X	30	1	8.75	-
396+20	LT	6-4	I2-2	County Line Name	Wood Co	-	-	66	X	21	2	9.63	-
397+43	LT	6-5	J2-2	Route Turn Assembly	EAST / SOUTH	54 / COUNTY U	[U-Turn] / [U-Turn]	72	X	84	2	42.00	-
397+43	LT	6-6	J2-3	Route Turn Assembly	EAST / SOUTH / WEST	54 / COUNTY U / 54	[U-Turn] / [U-Turn] / [UA]	108	X	84	2	63.00	-
398+25	LT	6-7	W12-1D	Double Down Arrows	-	-	-	36	X	36	1	9.00	-
398+45	RT	6-8	J3-1	Directional Assembly	SOUTH	COUNTY U	[RA]	36	X	84	1	21.00	-
398+45	RT	6-9	R5-1	Do Not Enter	-	-	-	36	X	36	-	9.00	-
399+59	LT	6-10	---	Special Sign	-	-	-	132	X	66	3	60.50	-
399+65	LT	6-10B	R3-4	No U-Turn Symbol	-	-	-	36	X	36	1	9.00	-
399+76	LT	6-11	R6-1L	One Way Left Arrow	-	-	-	54	X	18	1	6.75	-
399+76	LT	6-12	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
399+76	LT	6-13	R6-1R	One Way Right Arrow	-	-	-	36	X	12	-	1.50	-
399+93	LT	6-14	R6-1L	One Way Left Arrow	-	-	-	54	X	18	1	6.75	-
399+93	LT	6-15	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
400+10	LT	6-16	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
400+10	LT	6-17	R5-1	Do Not Enter	-	-	-	36	X	36	-	9.00	-
400+26	LT	6-18	R6-1L	One Way Left Arrow	-	-	-	54	X	18	1	6.75	-
400+26	LT	6-19	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
400+41	LT	6-20	R6-1L	One Way Left Arrow	-	-	-	54	X	18	1	6.75	-
400+41	LT	6-21	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
400+41	LT	6-22	R6-1R	One Way Right Arrow	-	-	-	36	X	12	-	3.00	-
400+53	LT	6-22B	R3-4	No U-Turn Symbol	-	-	-	36	X	36	1	9.00	-
400+58	LT	6-23	---	Special Sign	-	-	-	132	X	66	3	60.50	-
401+71	LT	6-24	J3-1	Directional Assembly	NORTH	COUNTY U	[RA]	36	X	84	1	21.00	-
401+88	LT	6-25	W12-1D	Double Down Arrows	-	-	-	36	X	36	1	9.00	-
402+61	LT	6-26	J2-2	Route Turn Assembly	WEST / NORTH	54 / COUNTY U	[U-Turn] / [U-Turn]	72	X	84	2	42.00	-

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PERMANENT SIGNING SCHEDULE (CONTINUED)

STATION	OFFSET	SIGN NO.	CODE NO.	DESCRIPTION	MESSAGE LINE 1	MESSAGE LINE 2	MESSAGE LINE 3	SIZE IN	X	IN	634.0616 POSTS WOOD 4X6-INCH 16-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF
402+61	RT	6-27	J2-3	Route Turn Assembly	WEST / NORTH / EAST	54 / COUNTY U / 54	[U-Turn] / [U-Turn] / [UA]	108	X	84	2	63.00	-
404+00	RT	6-28	I2-2	County Line Name	Portage Co	-	-	84	X	21	2	12.25	-
404+03	LT	6-28B	R5-1A	Wrong Way	-	-	-	42	X	30	1	8.75	-
406+81	LT	6-29	D7-68L	[Name County Park]/Arrow Left	South Wood	County Park	[LA]	84	X	42	2	24.50	-
408+00	LT	6-31	J3-1	Directional Assembly	SOUTH	COUNTY U	[LA]	36	X	84	1	21.00	-
5+81	LT	6-32	R2-1	Speed Limit __ MPH	55	-	-	24	X	30	1	5.00	-
5+99	RT	6-33	J1-1	Junction or End Assembly	JCT	54	-	24	X	39	1	6.50	-
7+72	RT	6-34	R3-53R	Right Turn Only	-	-	-	24	X	30	1	5.00	-
8+21	LT	6-35	J4-1	Reassurance Assembly	SOUTH	COUNTY U	-	24	X	36	1	6.00	-
8+21	LT	6-36	D1-2	Two Destinations (Arrows)	[UA] Kellner	Lake Wazeecha	-	96	X	24	2	16.00	-
8+21	LT	6-37	I55-56	Adopt-A-Highway [Sponser]	LEAGUE OF	WOMEN VOTERS	-	30	X	36	1	7.50	-
8+93	RT	6-38	W12-1R	Down Arrow [RIGHT]	-	-	-	24	X	24	1	4.00	-
9+60	RT	6-39	R6-1R	One Way Right Arrow	-	-	-	36	X	12	1	3.00	-
9+60	RT	6-40	R1-1	Stop	-	-	-	36	X	36	-	7.46	-
9+60	RT	6-41	J12-2	Route Turn without Cardinal	54 / COUNTY U	[RA] / [RA]	-	48	X	45	1	15.00	-
9+64	RT	6-42	R6-1R	One Way Right Arrow	-	-	-	36	X	12	1	3.00	-
9+64	RT	6-43	R1-1	Stop	-	-	-	36	X	36	-	7.46	-
9+64	RT	6-44	R4-7	Keep Right	-	-	-	36	X	48	-	12.00	-
9+64	RT	6-44B	R3-2	No Left Turn Symbol	-	-	-	36	X	36	1	9.00	-
10+96	LT	6-45	R4-7	Keep Right	-	-	-	36	X	48	1	12.00	-
10+96	LT	6-45B	R3-2	No Left Turn Symbol	-	-	-	36	X	36	1	9.00	-
10+96	LT	6-46	R6-1R	One Way Right Arrow	-	-	-	36	X	12	-	3.00	-
10+96	LT	6-47	R1-1	Stop	-	-	-	36	X	36	-	7.46	-
11+00	LT	6-48	R6-1R	One Way Right Arrow	-	-	-	36	X	12	1	3.00	-
11+00	LT	6-49	R1-1	Stop	-	-	-	36	X	36	-	7.46	-
11+00	LT	6-50	J12-2	Route Turn without Cardinal	54 / COUNTY U	[RA] / [RA]	-	48	X	45	1	15.00	-
11+83	LT	6-51	W12-1R	Down Arrow [RIGHT]	-	-	-	24	X	24	1	4.00	-
12+96	LT	6-52	R3-53R	Right Turn Only	-	-	-	24	X	30	1	5.00	-
13+08	RT	6-53	J4-1	Reassurance Assembly	NORTH	COUNTY U	-	24	X	36	1	6.00	-
14+53	LT	6-54	J1-1	Junction or End Assembly	JCT	54	-	24	X	39	1	6.50	-
409+00	LT	7-1	D1-1	One Destination (Arrow)	Kellner [LA]	-	-	78	X	21	2	11.38	-
412+27	LT	7-1B	J3-2	Directional Assembly	WEST / NORTH	54 / COUNTY U	[U-Turn] / [U-Turn]	72	X	84	2	42.00	-
412+70	LT	7-2	R6-2L	One Way LEFT Arrow	-	-	-	36	X	48	1	12.00	-
412+94	LT	7-3	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
412+94	LT	7-4	R6-1L	One Way Left Arrow	-	-	-	54	X	18	2	6.75	-
412+94	LT	7-5	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
413+09	LT	7-6	---	Special Sign	COUNTY U / NORTH	USE FAR RIGHT LANE	54 / WEST	114	X	60	2	47.50	-
413+69	LT	7-7	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
413+69	LT	7-8	R6-1L	One Way Left Arrow	-	-	-	54	X	18	2	6.75	-
413+69	LT	7-9	R1-2	Yield	-	-	-	48	X	42	-	7.00	-
413+86	LT	7-10	R5-1	Do Not Enter	-	-	-	36	X	36	1	9.00	-
414+02	RT	7-12	D1-1	One Destination (Arrow)	[LA] 84th St	-	-	84	X	21	2	12.25	-
414+24	LT	7-13	R3-18	No Left / U-Turn Symbol	-	-	-	36	X	36	1	9.00	-
415+65	LT	7-14	J1-1	Junction or End Assembly	JCT	COUNTY U	-	36	X	57	1	14.25	-
415+65	LT	7-15	J1-1	Junction or End Assembly	JCT	COUNTY U	-	36	X	57	1	14.25	-
417+13	RT	7-16	R2-1	Speed Limit __ MPH	65	-	-	48	X	60	2	20.00	-
417+31	LT	7-17	R5-1A	Wrong Way	-	-	-	42	X	30	1	8.75	-
422+00	LT	7-18	---	Special Sign	WATCH FOR	TURNING	VEHICLES/NEXT 1 MILE	84	X	60	2	-	35.00
422+00	LT	7-19	---	Special Sign	WATCH FOR	TURNING	VEHICLES/NEXT 1 MILE	84	X	60	2	-	35.00
414+02	RT	7-20	J4-1	Reassurance Assembly	EAST	54	-	36	X	54	2	13.50	-
										TOTALS	**111**	**1326.72**	**140.00**

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PAVEMENT MARKING

STATION	TO	STATION	LOCATION	**646.0106** EPOXY 4-INCH	**646.0126** EPOXY 8-INCH	**646.0600** REMOVING PAVEMENT MARKINGS	**647.0166** ARROWS EPOXY TYPE 2	**647.0356** WORDS EPOXY	**647.0526** YIELD LINE SYMBOLS EPOXY 18-INCH	**647.0726** DIAGONAL EPOXY 12-INCH	**647.0566** STOP LINE EPOXY 18-INCH	**647.0606** ISLAND NOSE EPOXY	COMMENT
				LF	LF	LF	EACH	EACH	EACH	LF	LF	EACH	
362+70	-	371+00	RT	208	-	208	-	-	-	-	-	-	WHITE SKIP (12.5' LINE, 37.5' GAP)
384+83	-	399+16	RT	1,433	-	-	-	-	-	-	-	-	WHITE EDGE LINE
384+83	-	414+34	RT	738	-	-	-	-	-	-	-	-	WHITE SKIP (12.5' LINE, 37.5' GAP)
384+83	-	385+49	RT	66	-	-	-	-	-	-	-	-	YELLOW C/L
384+83	-	385+60	LT	77	-	-	-	-	-	-	-	-	YELLOW C/L
384+83	-	414+34	LT	738	-	-	-	-	-	-	-	-	WHITE SKIP (12.5' LINE, 37.5' GAP)
384+83	-	399+23	LT	1,440	-	-	-	-	-	-	-	-	WHITE EDGE LINE
385+35	-	387+03	LT	-	-	-	-	-	-	198	-	-	WHITE 10-FT SPACING
385+58	-	385+77	LT	-	-	-	-	-	9	-	-	-	WHITE YIELD SYMBOLS
385+59	-	387+08	RT	-	37	-	-	-	-	-	-	-	WHITE SKIP (3' LINE, 9' GAP)
385+60	-	397+66	LT	-	1,206	-	-	-	-	-	-	-	WHITE CHANNELIZING
385+77	-	386+52	LT	-	103	-	-	-	-	-	-	-	YELLOW CHANNELIZING
385+77	-	386+52	LT	-	-	-	-	-	-	152	-	-	YELLOW 10-FT SPACING
386+51	-	399+21	LT	1,270	-	-	-	-	-	-	-	-	YELLOW C/L
386+52	-	399+21	LT	1,269	-	-	-	-	-	-	-	-	YELLOW C/L
387+08	-	399+45	RT	-	1,237	-	-	-	-	-	-	-	WHITE CHANNELIZING
	387+34		RT	-	-	-	1	-	-	-	-	-	WHITE RIGHT ARROW
	387+73		RT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	387+76		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	388+13		RT	-	-	-	1	-	-	-	-	-	WHITE RIGHT ARROW
	388+16		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	389+82		RT	-	-	-	1	-	-	-	-	-	WHITE RIGHT ARROW
	389+84		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
390+05	-	391+56	RT	-	38	-	-	-	-	-	-	-	WHITE SKIP (3' LINE, 9' GAP)
	390+21		RT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	390+23		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
390+65	-	399+45	RT	-	880	-	-	-	-	-	-	-	WHITE CHANNELIZING
390+90	-	399+40	RT	-	-	-	-	-	-	414	-	-	WHITE CHEVRON CROSSHATCH
391+56	-	398+26	RT	-	670	-	-	-	-	-	-	-	WHITE CHANNELIZING
391+56	-	398+26	LT	-	670	-	-	-	-	-	-	-	WHITE CHANNELIZING
391+81	-	398+20	LT	-	-	-	-	-	-	327	-	-	WHITE CHEVRON CROSSHATCH
	391+92		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	392+31		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	394+00		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	394+39		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	396+08		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	396+47		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
397+66	-	399+80	LT	-	54	-	-	-	-	-	-	-	WHITE SKIP (3' LINE, 9' GAP)
	398+17		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
398+26	-	399+92	RT	166	-	-	-	-	-	-	-	-	WHITE EDGE LINE
	398+57		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	398+96		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
399+21	-	399+99	LT	-	85	-	-	-	-	-	-	-	YELLOW CHANNELIZING
399+30	-	399+95	LT	-	-	-	-	-	-	38	-	-	YELLOW 10-FT SPACING
399+81	-	-	LT	-	-	-	-	-	-	-	-	1	YELLOW ISLAND NOSE

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PAVEMENT MARKING (CONTINUED)

				646.0106 EPOXY 4-INCH	**646.0126** EPOXY 8-INCH	**646.0600** REMOVING PAVEMENT MARKINGS	**647.0166** ARROWS EPOXY TYPE 2	**647.0356** WORDS EPOXY	**647.0526** YIELD LINE SYMBOLS EPOXY 18-INCH	**647.0726** DIAGONAL EPOXY 12-INCH	**647.0566** STOP LINE EPOXY 18-INCH	**647.0606** ISLAND NOSE EPOXY	
STATION	TO	STATION	LOCATION	LF	LF	LF	EACH	EACH	EACH	LF	LF	EACH	COMMENT
399+95	-	400+18	LT	-	-	-	-	-	11	-	-	-	WHITE YIELD SYMBOLS
399+99	-	400+21	LT	-	-	-	-	-	11	-	-	-	WHITE YIELD SYMBOLS
400+18	-	400+95	LT	-	84	-	-	-	-	-	-	-	YELLOW CHANNELIZING
400+22	-	400+87	LT	-	-	-	-	-	-	37	-	-	YELLOW 10-FT SPACING
400+26	-	401+90	LT	164	-	-	-	-	-	-	-	-	WHITE EDGE LINE
400+35	-	-	LT	-	-	-	-	-	-	-	-	1	YELLOW ISLAND NOSE
400+36	-	402+50	RT	-	54	-	-	-	-	-	-	-	WHITE SKIP (3' LINE, 9' GAP)
400+70	-	412+08	LT	-	1,138	-	-	-	-	-	-	-	WHITE CHANNELIZING
400+70	-	411+25	LT	-	1,055	-	-	-	-	-	-	-	WHITE CHANNELIZING
400+70	-	411+07	LT	-	-	-	-	-	-	770	-	-	WHITE CHEVRON CROSSHATCH
400+72	-	414+34	RT	1,362	-	-	-	-	-	-	-	-	WHITE EDGE LINE
400+95	-	412+66	LT	1,171	-	-	-	-	-	-	-	-	YELLOW C/L
400+95	-	412+66	LT	1,171	-	-	-	-	-	-	-	-	YELLOW C/L
401+04	-	414+34	LT	1,330	-	-	-	-	-	-	-	-	WHITE EDGE LINE
	401+19		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	401+59		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
401+90	-	408+61	LT	-	671	-	-	-	-	-	-	-	WHITE CHANNELIZING
401+90	-	408+61	LT	-	671	-	-	-	-	-	-	-	WHITE CHANNELIZING
401+96	-	408+36	LT	-	-	-	-	-	-	269	-	-	WHITE CHEVRON CROSSHATCH
	401+98		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
402+50	-	413+56	RT	-	1,106	-	-	-	-	-	-	-	WHITE CHANNELIZING
	403+66		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	404+12		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	405+76		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	406+20		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	407+85		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
	408+24		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
408+61	-	410+12	LT	-	38	-	-	-	-	-	-	-	WHITE SKIP (3' LINE, 9' GAP)
	409+90		LT	-	-	-	1	-	-	-	-	-	WHITE RIGHT ARROW
	410+31		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	411+04		LT	-	-	-	1	-	-	-	-	-	WHITE RIGHT ARROW
	411+43		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
	411+83		LT	-	-	-	1	-	-	-	-	-	WHITE RIGHT ARROW
	412+00		LT	-	-	-	1	-	-	-	-	-	WHITE LEFT ARROW
412+08	-	413+58	LT	-	38	-	-	-	-	-	-	-	WHITE SKIP (3' LINE, 9' GAP)
412+14	-	413+81	LT	-	-	-	-	-	-	198	-	-	WHITE 10-FT SPACING
	412+38		LT	-	-	-	-	1	-	-	-	-	WHITE ONLY
412+66	-	413+41	LT	-	105	-	-	-	-	-	-	-	YELLOW CHANNELIZING
412+74	-	413+41	LT	-	-	-	-	-	-	153	-	-	YELLOW 10-FT SPACING
413+41	-	413+59	LT	-	-	-	-	-	9	-	-	-	WHITE YIELD SYMBOLS
413+56	-	414+34	RT	78	-	-	-	-	-	-	-	-	YELLOW C/L
413+68	-	414+34	LT	66	-	-	-	-	-	-	-	-	YELLOW C/L
422+00	-	430+30	LT	208	-	208	-	-	-	-	-	-	WHITE SKIP (12.5' LINE, 37.5' GAP)
7+75	-	8+83	LT	108	-	-	-	-	-	-	-	-	WHITE EDGE LINE
8+13	-	8+94	LT	-	81	-	-	-	-	-	-	-	YELLOW CHANNELIZING

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PAVEMENT MARKING (CONTINUED)

				646.0106 EPOXY 4-INCH	**646.0126** EPOXY 8-INCH	**646.0600** REMOVING PAVEMENT MARKINGS	**647.0166** ARROWS EPOXY TYPE 2	**647.0356** WORDS EPOXY	**647.0526** YIELD LINE SYMBOLS EPOXY 18-INCH	**647.0726** DIAGONAL EPOXY 12-INCH	**647.0566** STOP LINE EPOXY 18-INCH	**647.0606** ISLAND NOSE EPOXY	
STATION	TO	STATION	LOCATION	LF	LF	LF	EACH	EACH	EACH	LF	LF	EACH	COMMENT
8+13	-	8+94	RT	-	81	-	-	-	-	-	-	-	YELLOW CHANNELIZING
8+24	-	8+94	RT	-	-	-	-	-	-	53	-	-	YELLOW 10-FT SPACING
8+27	-	9+14	RT	87	-	-	-	-	-	-	-	-	WHITE EDGE LINE
9+14	-	9+63	RT	-	49	-	-	-	-	-	-	-	WHITE CHANNELIZING
9+25	-	9+63	RT	-	-	-	-	-	-	29	-	-	WHITE 10-FT SPACING
9+57	-	9+67	RT	-	-	-	-	-	-	-	29	-	WHITE STOP LINE
10+93	-	11+03	LT	-	-	-	-	-	-	-	30	-	DASHED C/L (NB & SB)
10+97	-	11+38	LT	-	-	-	-	-	-	30	-	-	WHITE 10-FT SPACING
10+97	-	11+45	LT	-	48	-	-	-	-	-	-	-	WHITE CHANNELIZING
11+45	-	12+51	LT	106	-	-	-	-	-	-	-	-	WHITE EDGE LINE
11+79	-	12+50	LT	-	71	-	-	-	-	-	-	-	YELLOW CHANNELIZING
11+79	-	12+50	RT	-	71	-	-	-	-	-	-	-	YELLOW CHANNELIZING
11+79	-	12+35	LT	-	-	-	-	-	-	48	-	-	YELLOW 10-FT SPACING
11+82	-	12+83	RT	101	-	-	-	-	-	-	-	-	WHITE EDGE LINE
			TOTALS	**13,357**	**10,339**	**416**	**19**	**15**	**40**	**2,716**	**59**	**2**	

3

3

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CONSTRUCTION STAKING

				650.4000 STORM SEWER	650.4500 SUBGRADE	650.5000 BASE	650.5500 CURB GUTTER AND CURB & GUTTER	650.6000 PIPE CULVERTS	650.7000 CONCRETE PAVEMENT	650.8500 ELECTRICAL INSTALLATIONS 1520-02-71	650.9910 SUPPLEMENTAL CONTROL 1520-02-71	650.9920 SLOPE STAKES	
STATION	TO	STATION	LOCATION	EACH	LF	LF	LF	EACH	LF	LS	LS	LF	COMMENT
--	PROJECT	--	--	--	--	--	--	--	--	1	1	--	
--	391+60	--	LT	2	--	--	--	--	--	--	--	--	
--	395+00	--	LT	1	--	--	--	--	--	--	--	--	
--	398+28	--	LT	3	--	--	--	--	--	--	--	--	
---	399+39	--	LT	1	--	--	--	--	--	--	--	--	
--	400+28	--	LT	4	--	--	--	--	--	--	--	--	
--	401+99	--	LT	2	--	--	--	--	--	--	--	--	
7+75	-	9+75	LT/RT	--	200	200	--	--	--	--	--	--	
8+83		9+75	LT/RT	--	--	--	--	--	92	--	--	--	
10+83	-	12+00	LT/RT	--	--	--	--	--	117	--	--	--	
10+83	-	12+83	LT/RT	--	200	200	--	--	--	--	--	--	
385+33	-	401+91	RT	--	1,658	1,658	--	--	1,658	--	--	--	
385+48	-	410+12	LT	--	2,464	2,464	--	--	2,464	--	--	--	
390+05	-	413+68	LT	--	2,363	2,363	--	--	2,363	--	--	--	
398+21	-	413+83	LT	--	1,562	1,562	--	--	1,562	--	--	--	
398+20	-	401+95	LT	--	--	--	777	--	--	--	--	--	
399+16	-	399+83	LT	--	--	--	144	--	--	--	--	--	
400+33	-	401+00	LT	--	--	--	143	--	--	--	--	--	
399+15	-	399+65	RT	--	--	--	82	--	--	--	--	--	
400+19	-	400+90	RT	--	--	--	93	--	--	--	--	--	
399+23	-	399+95	LT	--	--	--	93	--	--	--	--	--	
400+54	-	401+05	LT	--	--	--	83	--	--	--	--	--	
8+88	-	9+71	RT	--	--	--	180	--	--	--	--	--	
10+89	-	11+84	LT	--	--	--	202	--	--	--	--	--	
--	387+20	--	RT	--	--	--	--	1	--	--	--	--	
--	388+70	--	RT	--	--	--	--	1	--	--	--	--	
--	391+62	--	RT	--	--	--	--	1	--	--	--	--	
--	396+00	--	RT	--	--	--	--	1	--	--	--	--	
--	9+19	--	LT/RT	--	--	--	--	1	--	--	--	--	
--	410+00	--	LT	--	--	--	--	1	--	--	--	--	
--	412+01	--	LT	--	--	--	--	1	--	--	--	--	
--	385+19	--	LT	--	--	--	--	--	--	--	--	53	
385+33	-	39916	RT	--	--	--	--	--	--	--	--	1,383	
400+90	-	40190	RT	--	--	--	--	--	--	--	--	100	
386+16	-	39904	LT	--	--	--	--	--	--	--	--	1,288	
401+16	-	41302	LT	--	--	--	--	--	--	--	--	1,186	
398+21	-	39922	LT	--	--	--	--	--	--	--	--	101	
401+05	-	41384	LT	--	--	--	--	--	--	--	--	1,279	
--	414+00	--	LT	--	--	--	--	--	--	--	--	53	
7+75	-	9+13	LT	--	--	--	--	--	--	--	--	138	
7+75	-	9+27	RT	--	--	--	--	--	--	--	--	152	
11+17	-	12+83	LT	--	--	--	--	--	--	--	--	166	
11+48	-	12+83	RT	--	--	--	--	--	--	--	--	135	
			TOTAL	**13**	**8,447**	**8,447**	**1,797**	**7**	**8,256**	**1**	**1**	**6,034**	

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

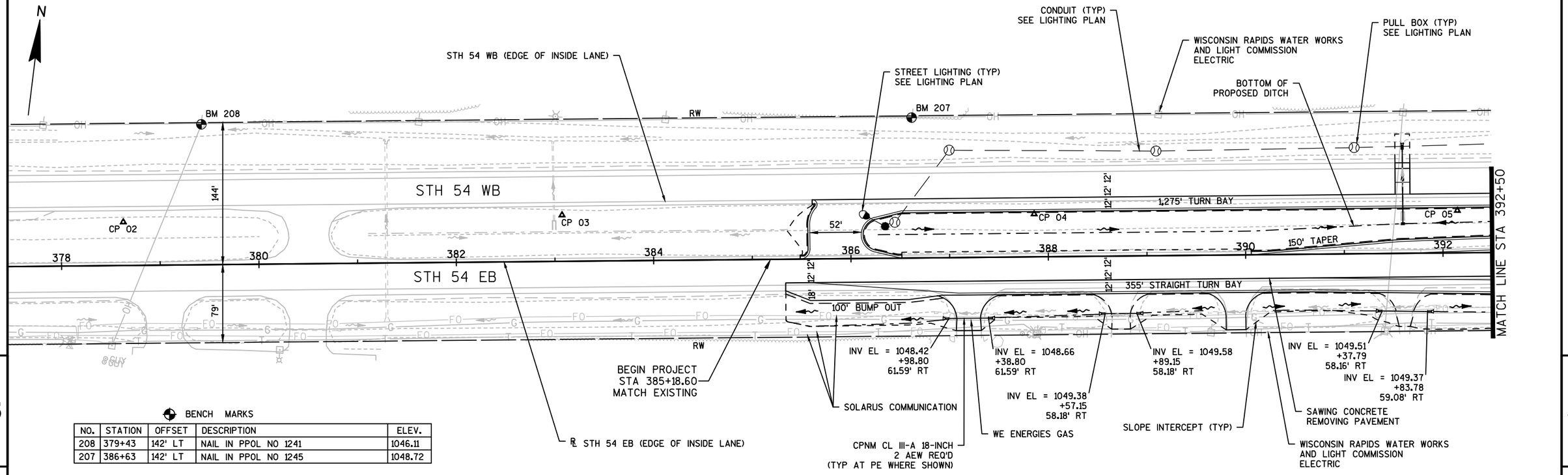
LIGHTING - LINEAR FOOT ITEMS

								652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	**652.0605** CONDUIT SPECIAL 2-INCH	**652.0615** CONDUIT SPECIAL 3-INCH	**655.0610** ELECTRICAL WIRE LIGHTING 12 AWG	**655.0615** ELECTRICAL WIRE LIGHTING 10 AWG
						LINEAR DISTANCE	CABLE SLACK					
FROM	STATION	LOCATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF
A-8	386+35.00	LT	LPB-1	399+34.20	LT	1332	36	1240	92	--	145	5472
LPB-1	399+34.20	LT	CONTROL CABINET "A"	399+25.00	LT	46	8	--	--	92	--	864
CONTROL CABINET "A"	399+25.00	LT	A-6	399+40.32	LT	97	12	15	--	82	145	436
LPB-12	399+25.98	LT	A-7	395+19.90	LT	406	14	406	--	--	145	2008
LPB-12	399+25.98	RT	A-5	399+31.62	RT	122	18	16	--	106	145	888
CONTROL CABINET "A"	399+25.00	LT	A-1	401+04.04	LT	179	14	18	--	161	145	772
LPB-2	400+93.46	LT	A-3	400+79.48	LT	141	18	12	--	129	145	1280
LPB-9	404+90.83	LT	A-4	405+01.18	LT	411	26	411	--	--	145	2908
LPB-2	400+93.46	LT	A-2	412+91.92	LT	1269	38	1167	102	--	145	5872
							TOTALS	**3285**	**194**	**570**	**1160**	**20500**

LIGHTING - EACH ITEMS

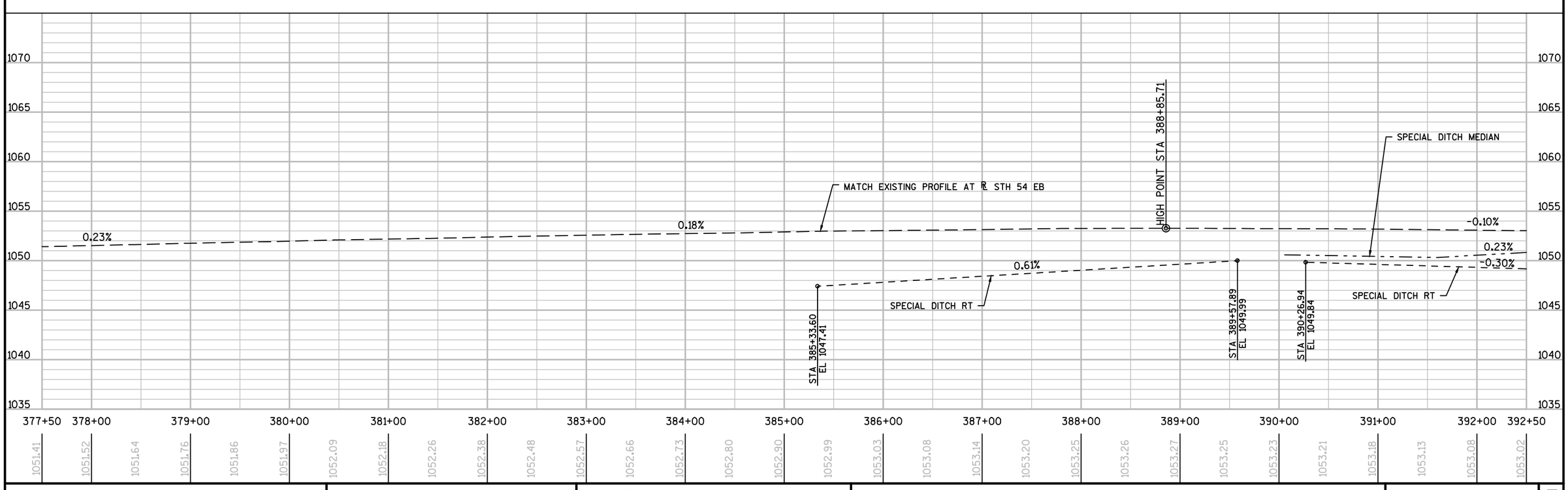
			654.0105 CONCRETE BASES TYPE 5	**654.0230** CONCRETE CONTROL CABINET BASES TYPE L30	**657.0255** TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	**657.0322** POLES TYPE 5 ALUMINUM	**657.0710** LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	**659.1120** LUMINAIRES UTILITY LED B	**659.2130** LIGHTING CONTROL CABINETS 120/240 30-INCH	**SPV.0060.01** PULL BOXES NON-CONDUCTIVE 24X42-INCH
ID	STATION	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
CONTROL CABINET "A"	399+25+00	LT	--	1	--	--	--	--	1	1
A-1	401+04.04	LT	1	--	1	1	1	1	--	1
A-2	412+91.92	LT	1	--	1	1	1	1	--	6
A-3	400+79.48	LT	1	--	1	1	2	2	--	1
A-4	405+01.18	LT	1	--	1	1	1	1	--	2
A-5	399+31.62	RT	1	--	1	1	1	1	--	1
A-6	399+40.32	LT	1	--	1	1	2	2	--	1
A-7	395+19.90	LT	1	--	1	1	1	1	--	2
A-8	386+35.00	LT	1	--	1	1	1	1	--	7
		TOTALS	**8**	**1**	**8**	**8**	**10**	**10**	**1**	**22**

ALL ITEMS AND QUANTITIES ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

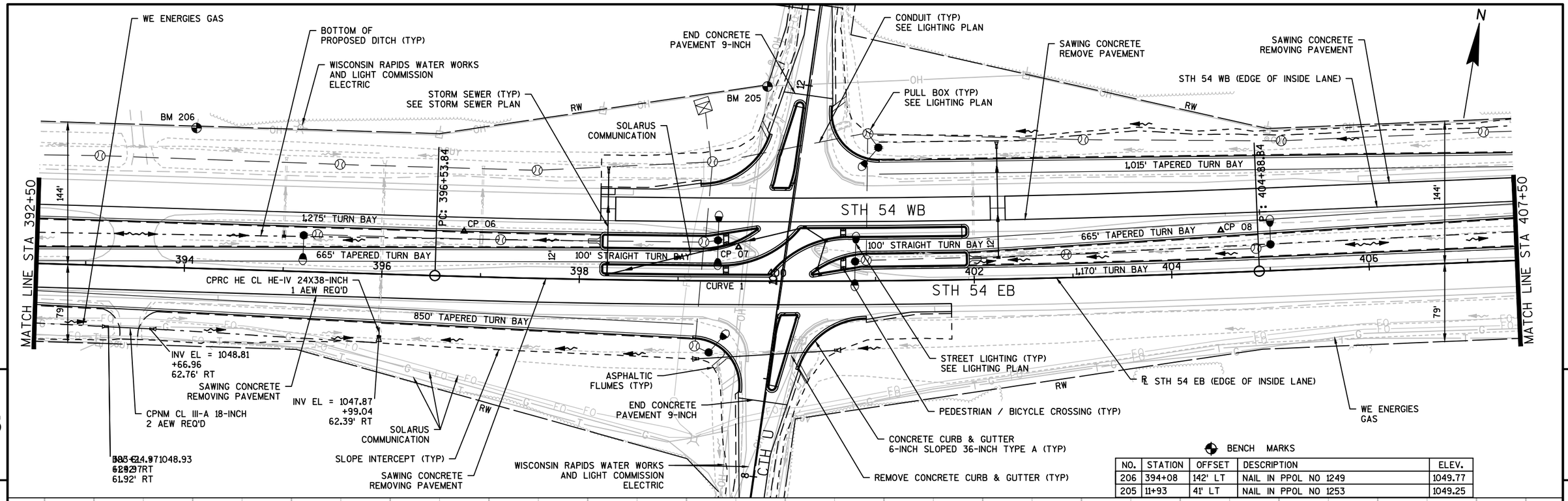


BENCH MARKS

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
208	379+43	142' LT	NAIL IN PPOL NO 1241	1046.11
207	386+63	142' LT	NAIL IN PPOL NO 1245	1048.72

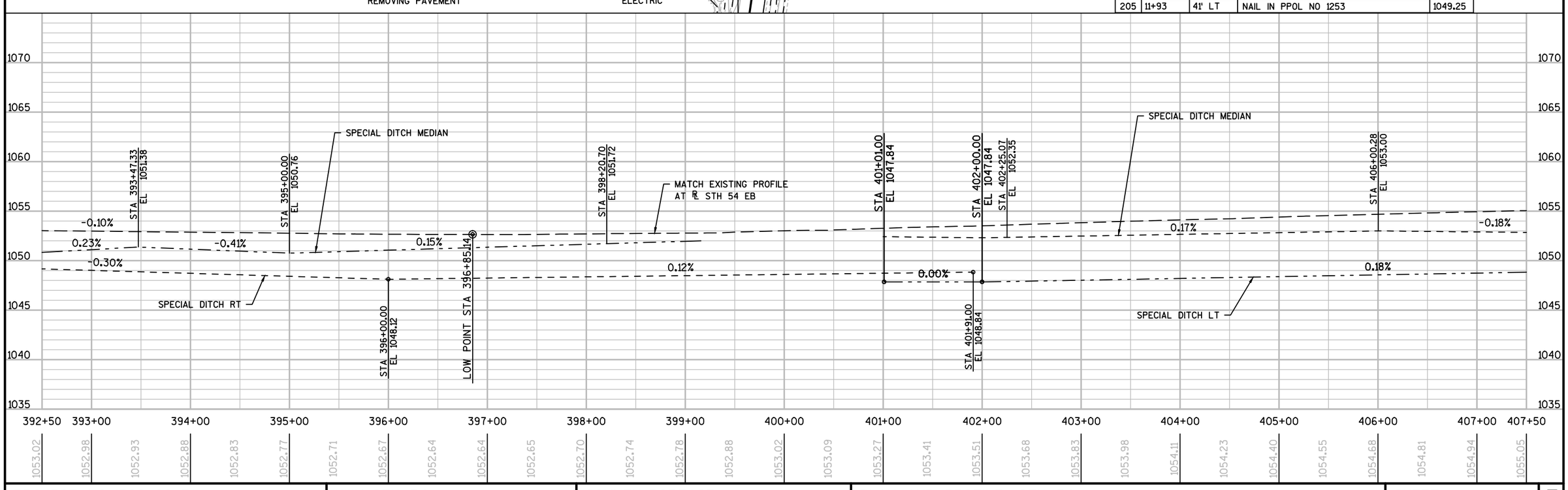


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN AND PROFILE: STH 54	SHEET 97	E



BENCH MARKS

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
206	394+08	142' LT	NAIL IN PPOL NO 1249	1049.77
205	11+93	41' LT	NAIL IN PPOL NO 1253	1049.25



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN AND PROFILE: STH 54	SHEET 98	E

WISCONSIN RAPIDS WATER WORKS AND LIGHT COMMISSION ELECTRIC

SLOPE INTERCEPT (TYP)

INV EL = 1049.28
+98.79
124.36' LT

INV EL = 1050.13
+87.08
121.54' LT

CPNM CL III-A 18-INCH
2 AEW REQ'D

INV EL = 1050.27
+19.08
121.54' LT

SAWING CONCRETE REMOVING PAVEMENT

CPRC CL IV 18-INCH
1 AEW REQ'D

STH 54 WB (EDGE OF INSIDE LANE)

84TH ST

N

BM 204

BM 203

RW

100' BUMP OUT

1,015' TAPERED TURN BAY

85' STRAIGHT TURN BAY

12' 12' 18'

12' 12' 12'

MATCH LINE STA 407+50

CP 09 △ 150' TAPER

CP 10 △ 52'

CP 11 △

CP 12 △

PI: 418+06.00

STH 54 WB

STH 54 EB

144'

79'

1,170' TURN BAY

408 410 412 414 416 418 420 422

CONDUIT (TYP)
SEE LIGHTING PLAN

STREET LIGHTING (TYP)
SEE LIGHTING PLAN

PULL BOX (TYP)
SEE LIGHTING PLAN

BEGIN PROJECT
STA 413+98.60
MATCH EXISTING

SOLARUS COMMUNICATION

WE ENERGIES GAS

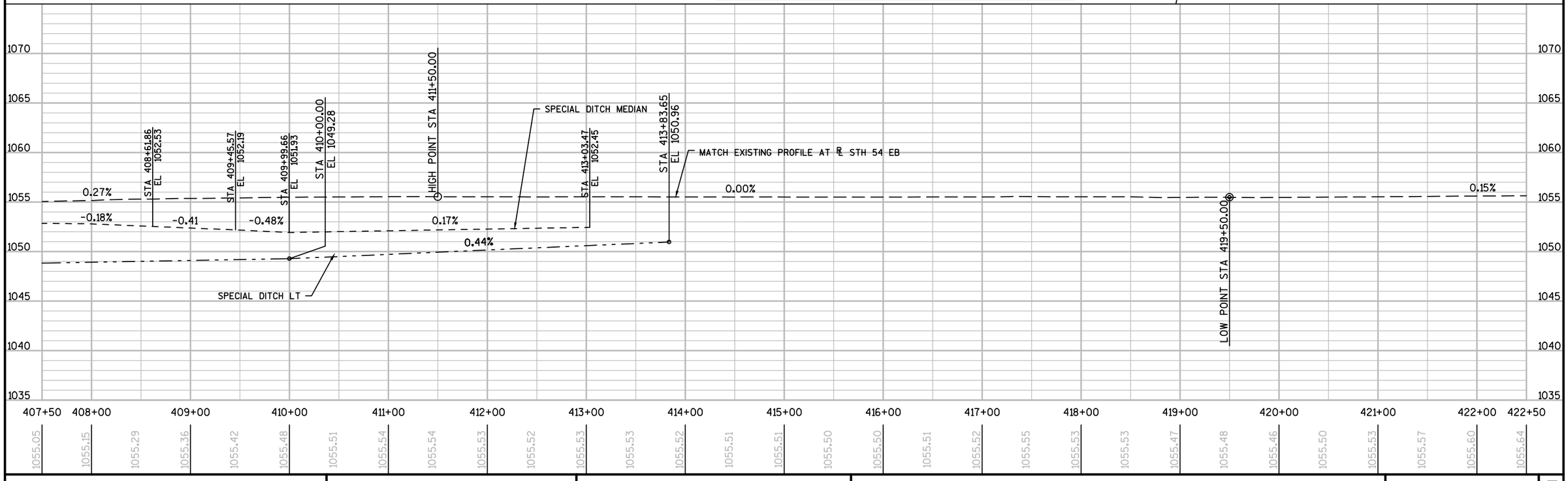
℄ STH 54 EB (EDGE OF INSIDE LANE)

BOTTOM OF PROPOSED DITCH

WISCONSIN RAPIDS WATER WORKS AND LIGHT COMMISSION ELECTRIC

BENCH MARKS

NO.	STATION	OFFSET	DESCRIPTION	ELEV.
204	412+52	143' LT	NAIL IN PPOL NO 3014	1051.50
203	420+02	147' LT	NAIL IN PPOL NO 3018	1051.50

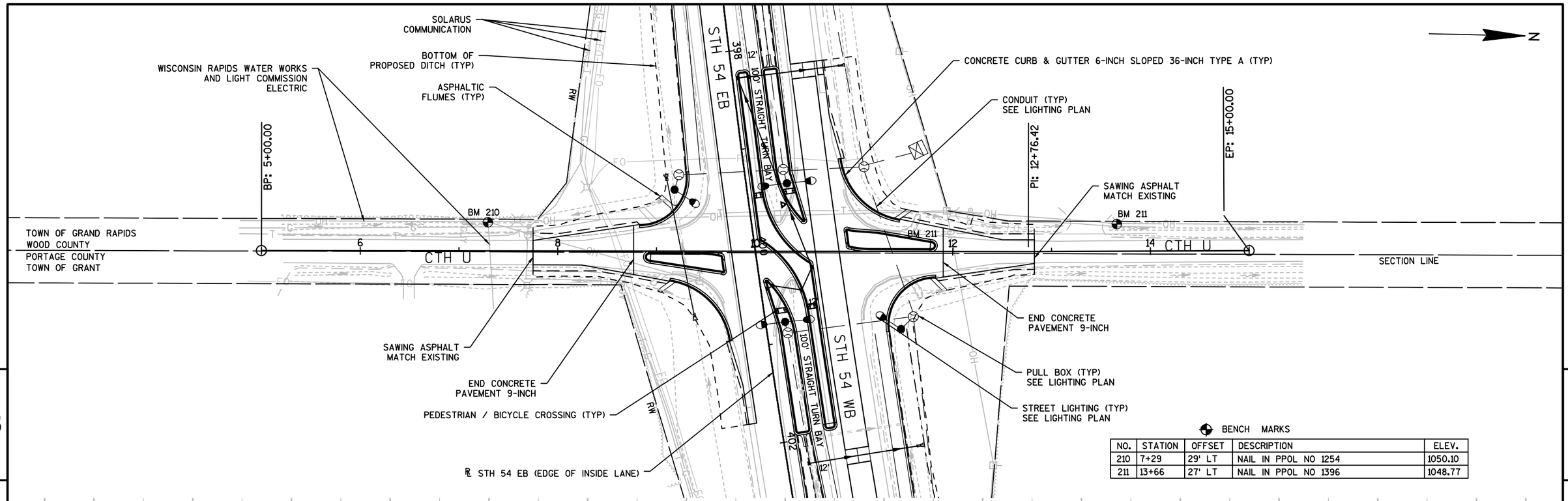


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN AND PROFILE: STH 54	SHEET 99	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - ****

PLOT DATE : 2/1/2016 5:40 PM PLOT BY : CHAD D. GRUNDEMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



NO.	STATION	OFFSET	DESCRIPTION	ELEV.
210	7+29	29' LT	NAIL IN PPOL NO 1254	1050.10
211	13+66	27' LT	NAIL IN PPOL NO 1396	1048.77

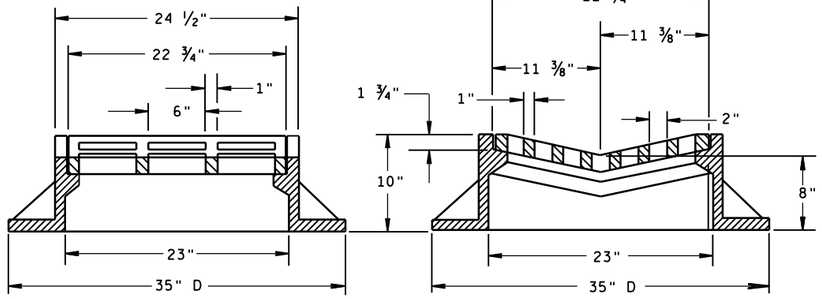
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	PLAN AND PROFILE: CTH U	SHEET 100 E

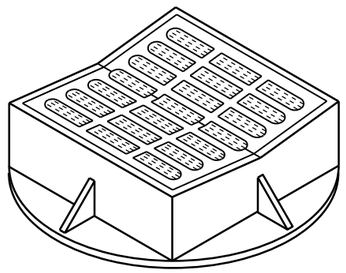
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - ****
PLOT DATE : 2/1/2016 5:41 PM
PLOT BY : CHAD D. GRUNDEMANN PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

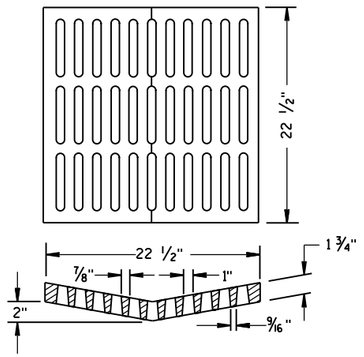
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08C06-01	INLETS 3-FT AND 4-FT DIAMETER
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-18	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-16A	CURB RAMPS TYPES 1 AND 1-A
08D05-16B	CURB RAMPS TYPES 2 AND 3
08D05-16C	CURB RAMPS TYPES 4A AND 4A1
08D05-16D	CURB RAMPS TYPE 4B AND 4B1
08D05-16E	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
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-09	CONDUIT
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-02	CONCRETE CONTROL CABINET BASE, TYPE L
09D04-02	LIGHTING CONTROL CABINET 120/240 VOLT
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
11B02-02	CONCRETE MEDIAN NOSE
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-13A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-13C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C11-11A	RURAL DOWELED CONCRETE PAVEMENT
13C11-11B	RURAL DOWELED CONCRETE PAVEMENT
13C18-03A	CONCRETE PAVEMENT JOINTING
13C18-03B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-03C	CONCRETE PAVEMENT JOINT TIES
13C18-03D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C08-16E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-16F	PAVEMENT MARKING (ISLANDS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C20-01	YIELD MARKING
15C32-01A	J TURN MEDIAN PAVEMENT MARKING
15C32-01B	J TURN LANE PAVEMENT MARKING
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-05A	TRAFFIC CONTROL, LANE CLOSURE
15D12-05B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D21-03	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-02	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

6



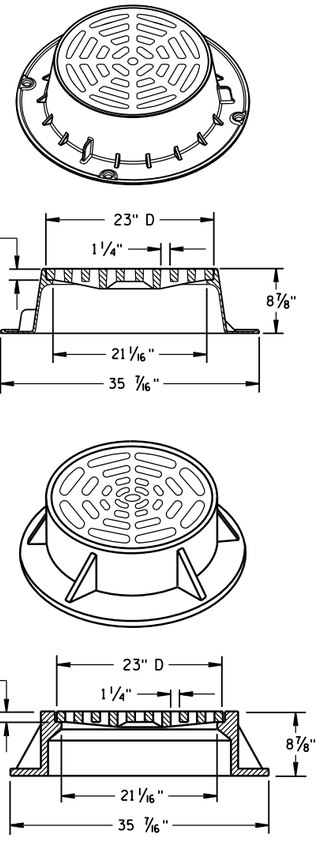


TYPE "B"



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"

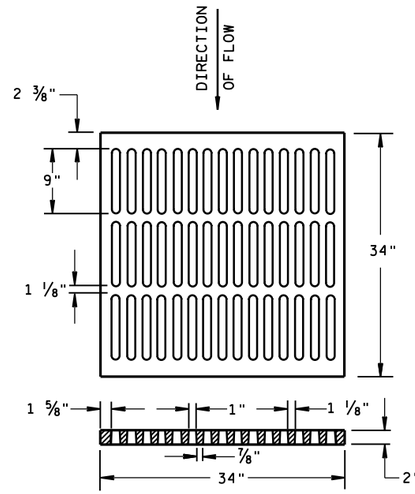
NOTE: EITHER CASTING IS ACCEPTABLE

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.

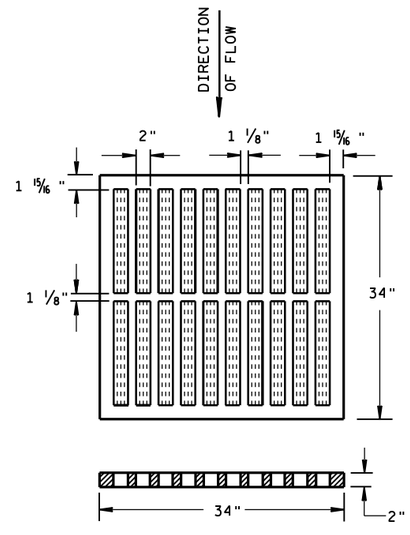
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



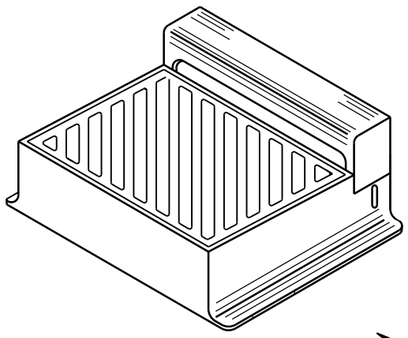
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

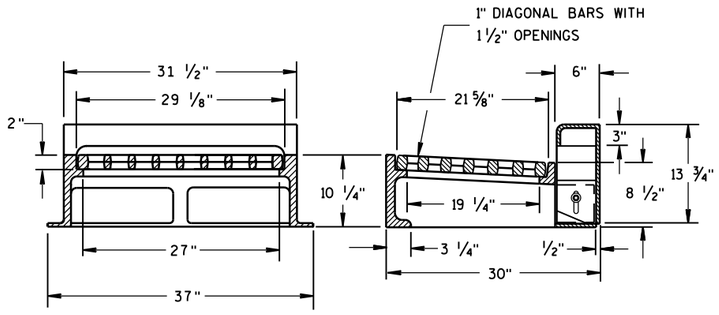


TYPE "MS"

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

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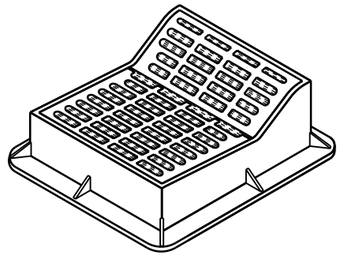
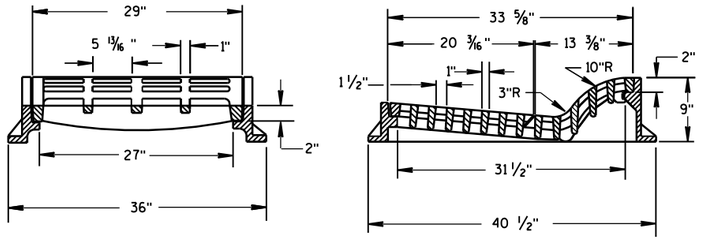
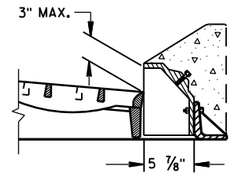
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

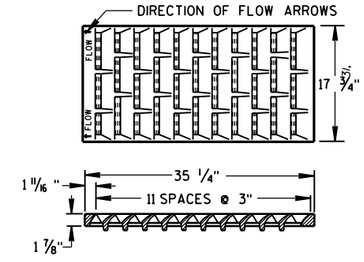
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

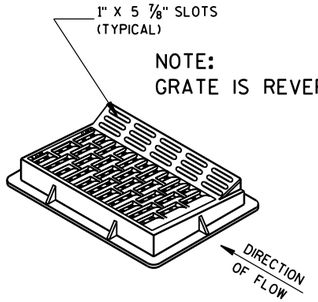
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

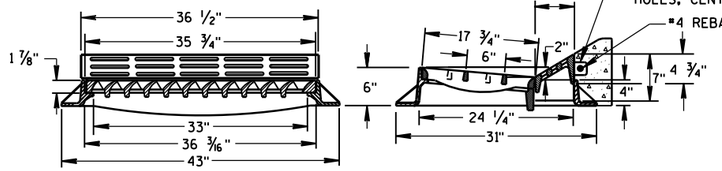
GENERAL NOTES

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.



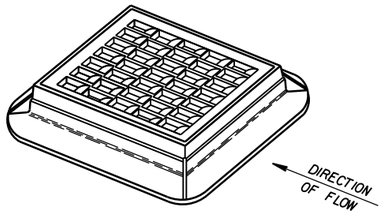


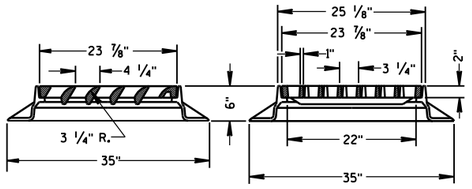


TYPE "HM"

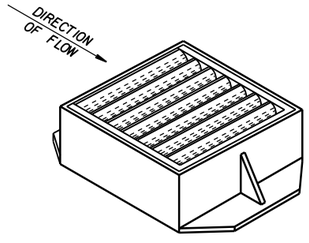
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

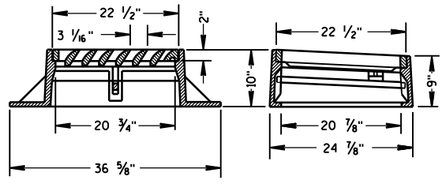
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



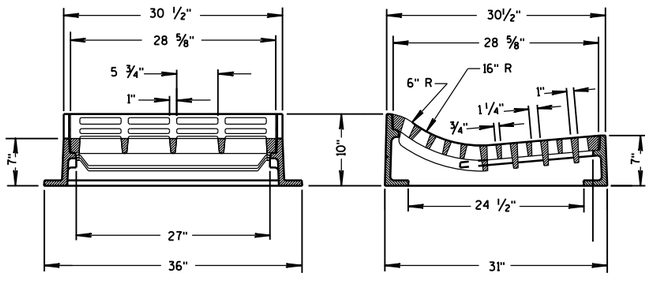


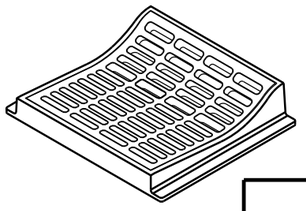
TYPE "S"





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

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11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

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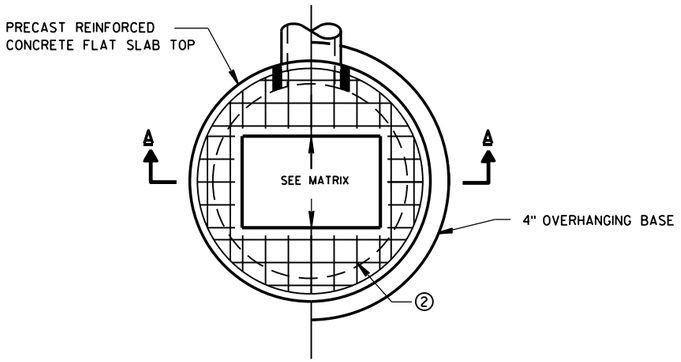
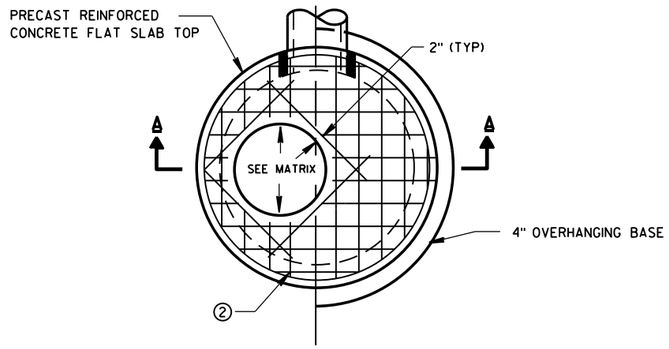
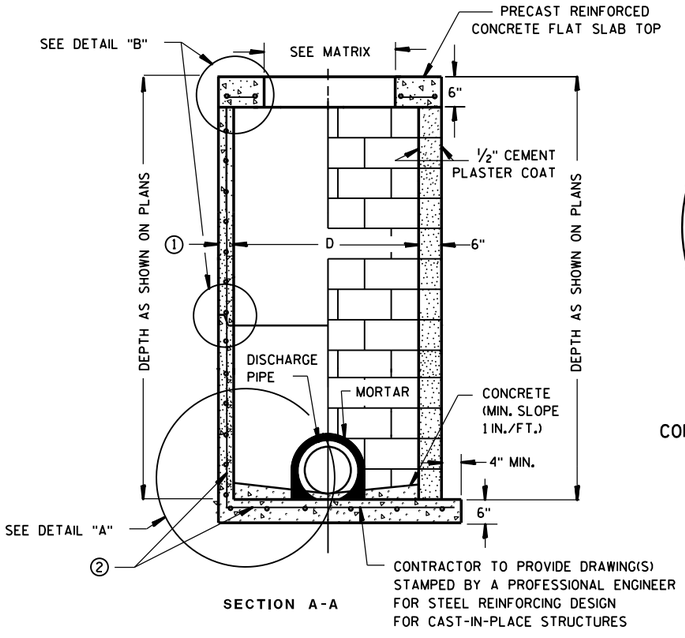


PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

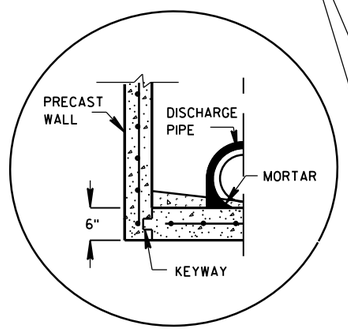


SECTION A-A

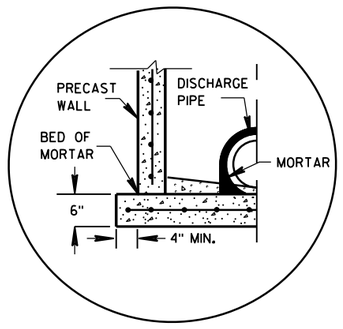
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

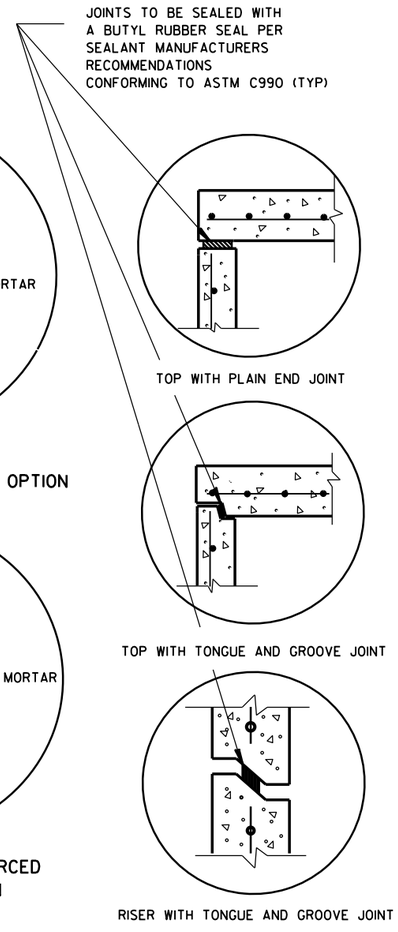


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

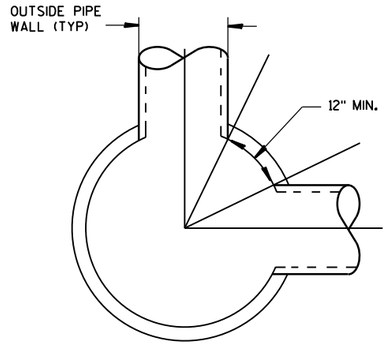
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

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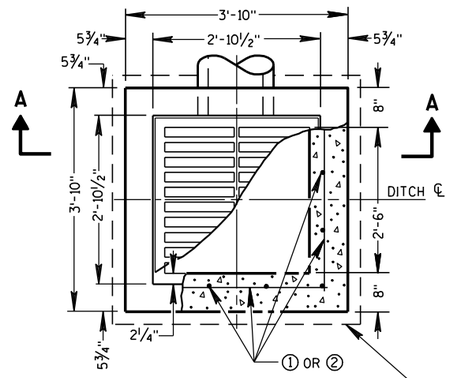
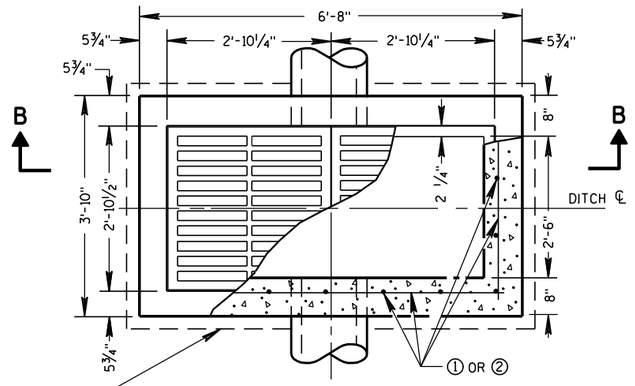
INLETS 3-FT AND 4-FT DIAMETER

6
S.D.D. 8 C 6-1

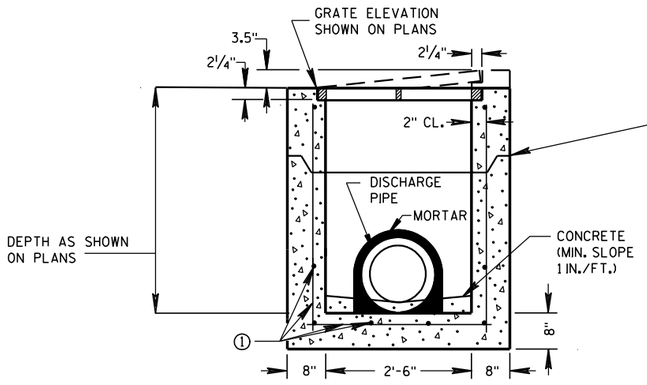


PLAN VIEW

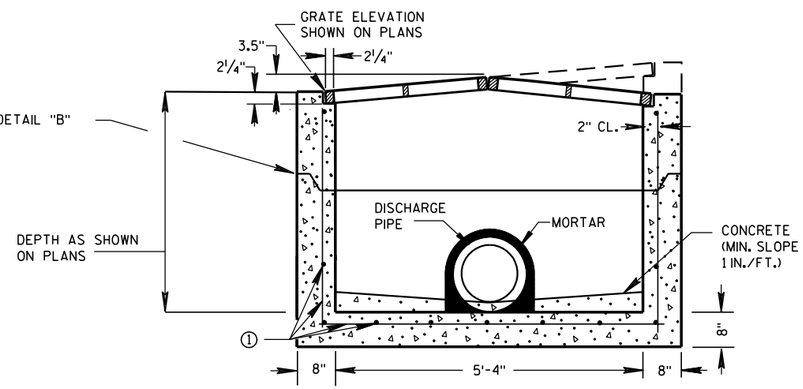


PLAN VIEW

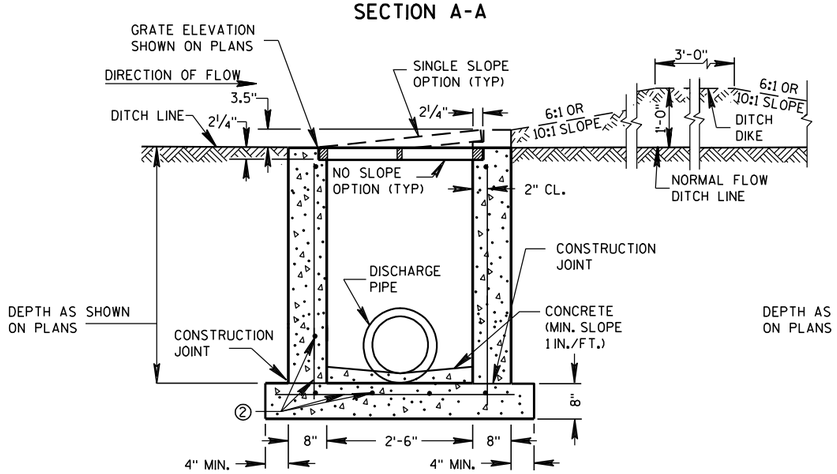
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



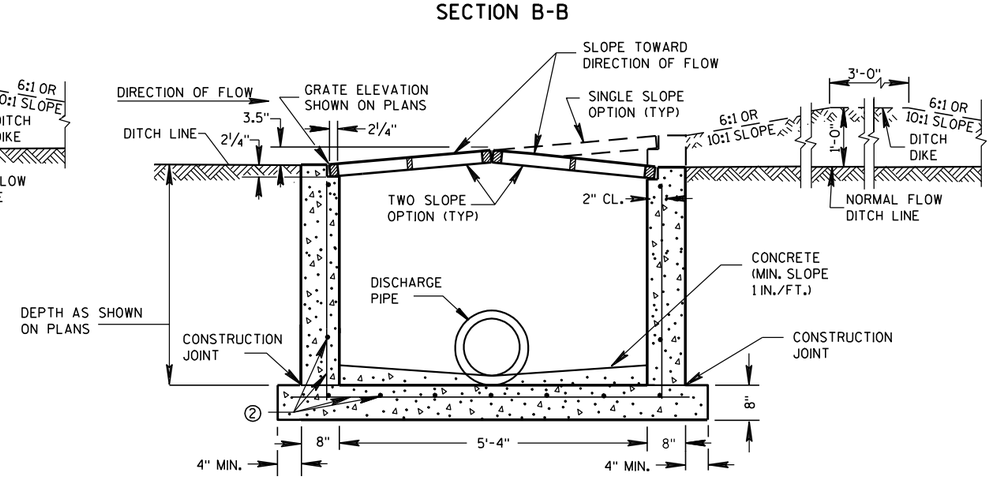
PRECAST REINFORCED CONCRETE SECTION A-A



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.

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.

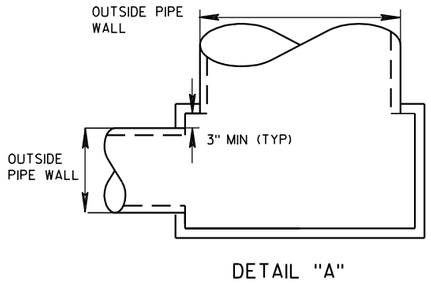
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

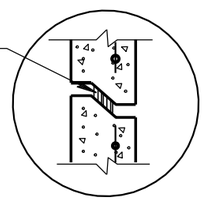
PIPE MATRIX

	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

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DATE

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ROADWAY STANDARDS DEVELOPMENT ENGINEER

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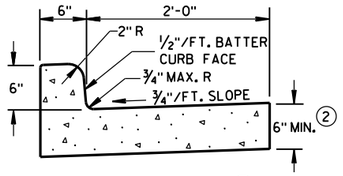
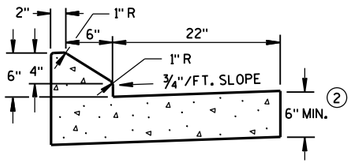
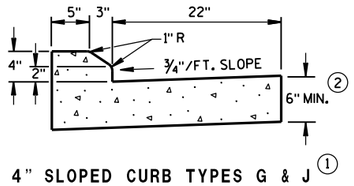
S.D.D. 8 C 8-1



TYPES A & D ①

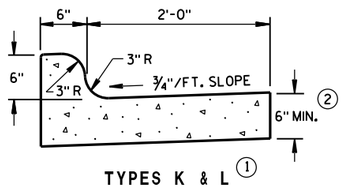


6" SLOPED CURB TYPES G & J ①

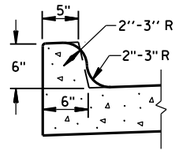


4" SLOPED CURB TYPES G & J ①

CONCRETE CURB & GUTTER 30"

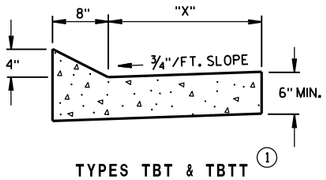


TYPES K & L ①



OPTIONAL CURB SHAPE FOR TYPES K & L ①

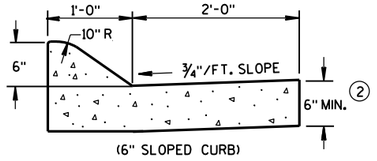
CONCRETE CURB & GUTTER 30"



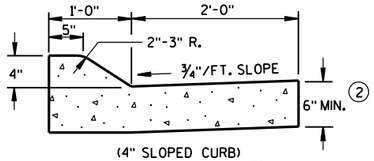
TYPES TBT & TBTT ①

CONCRETE CURB & GUTTER

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

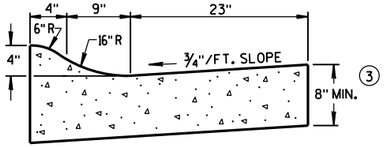


(6" SLOPED CURB)



(4" SLOPED CURB)

TYPES A & D ①



4" SLOPED CURB TYPES R & T ① ④

CONCRETE CURB & GUTTER 36"

GENERAL NOTES

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

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

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

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

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

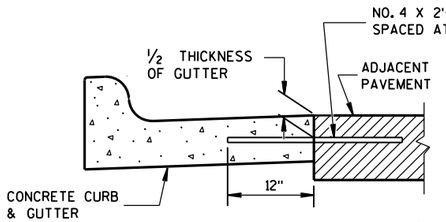
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K, R AND TBTT.

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

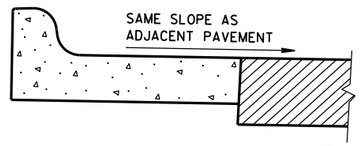
③ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

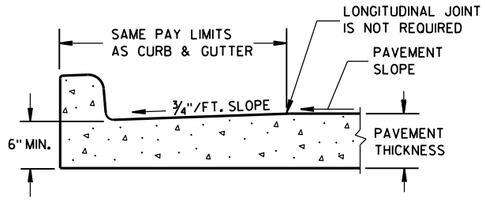
⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



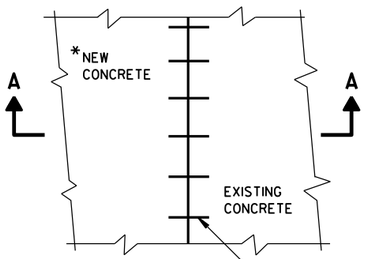
TYPICAL TIE BAR LOCATION ①



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

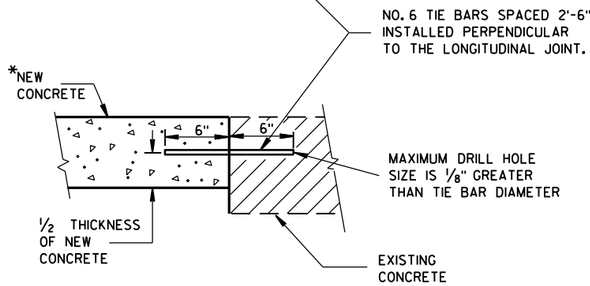


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



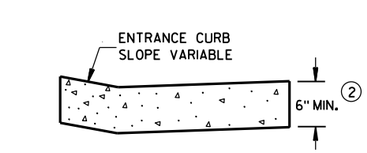
PLAN VIEW

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

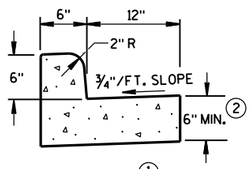


SECTION A-A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

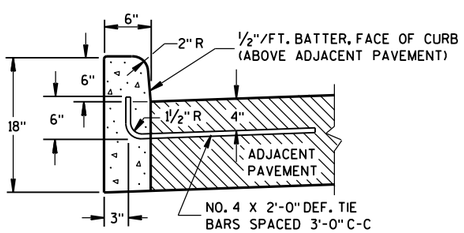


DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

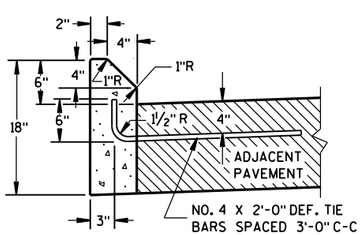


① TYPES A & D

CONCRETE CURB & GUTTER 18"

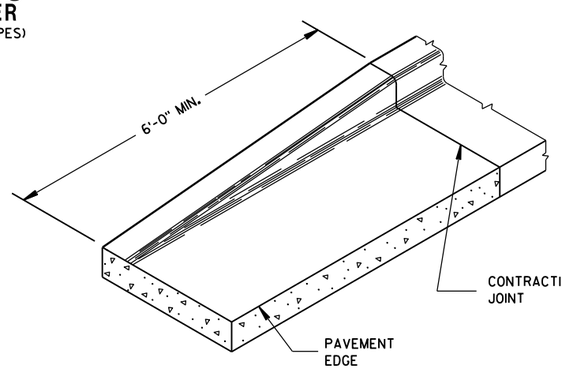


① TYPES A & D



① TYPES G & J

CONCRETE CURB



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

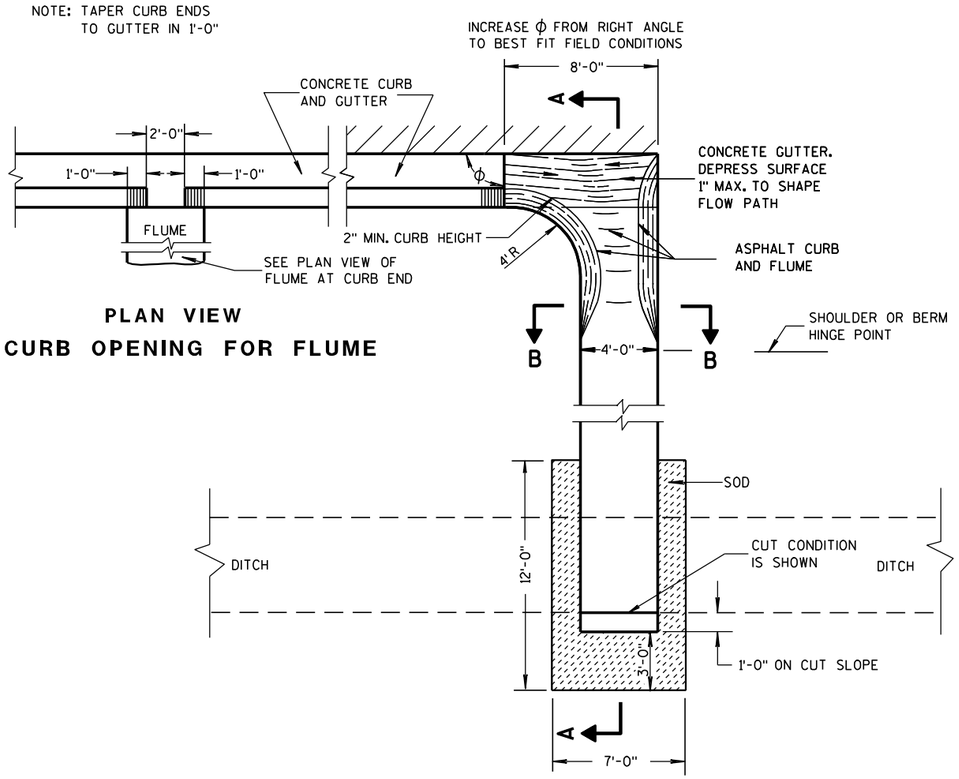
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

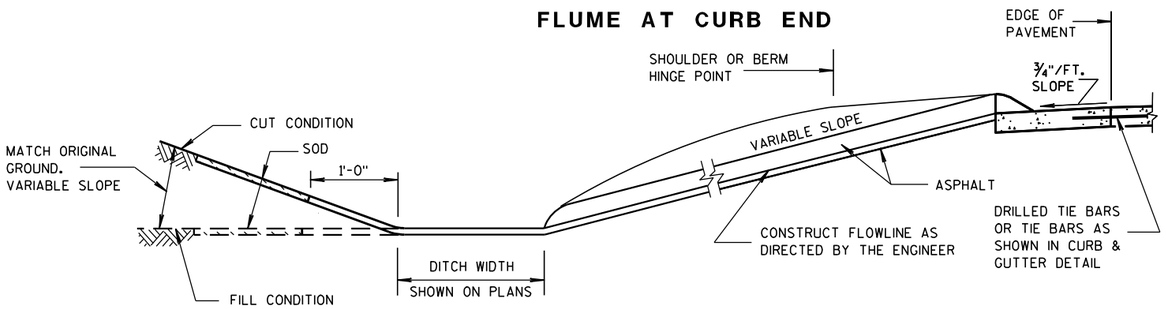
S.D.D. 8 D 1-18

ASPHALTIC FLUME

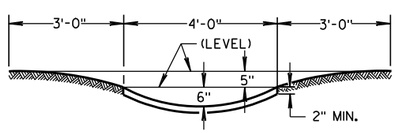


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

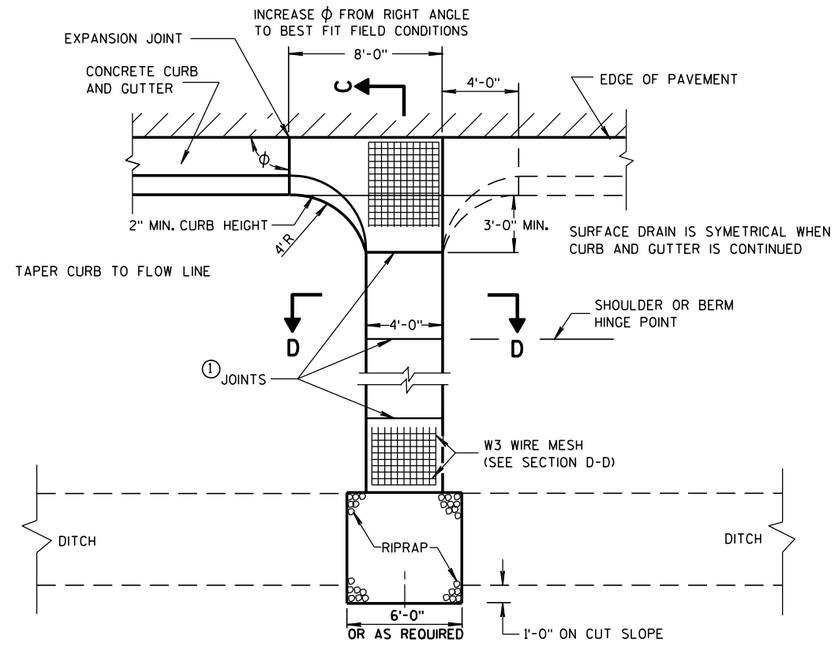
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

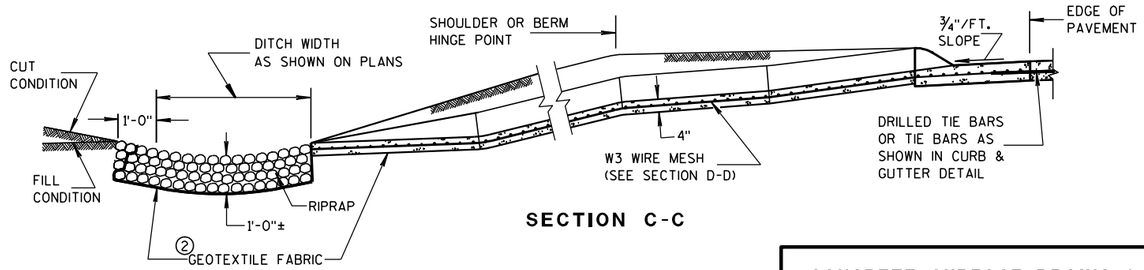
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

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

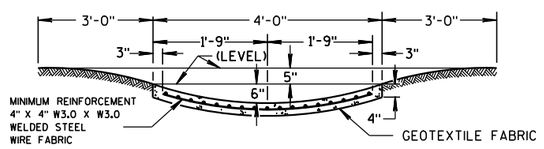
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

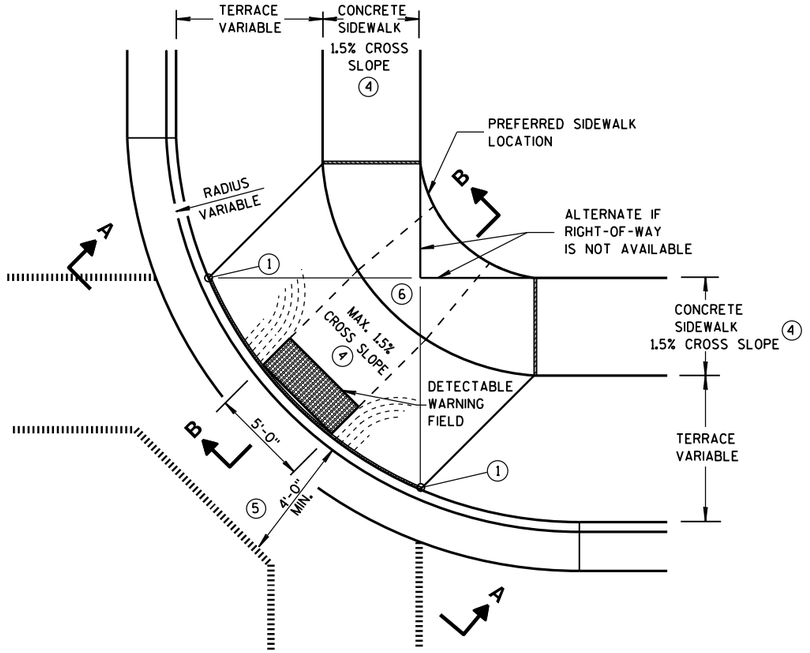
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

6

S.D.D. 8 D 4-5

6

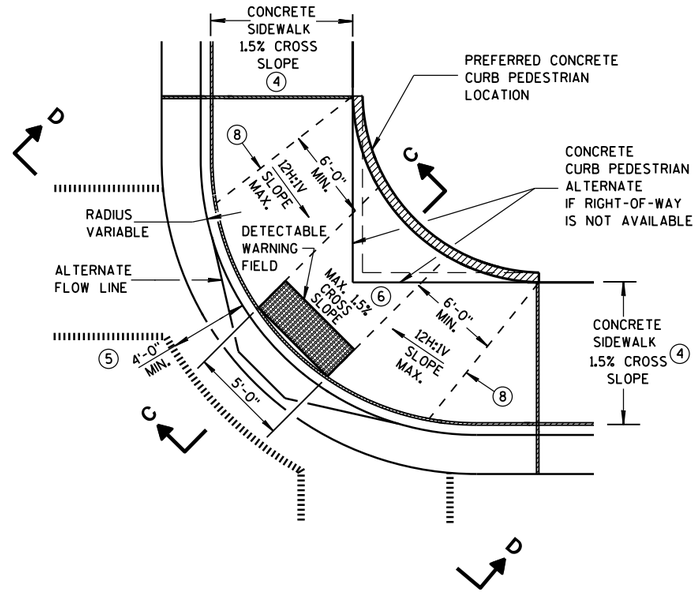
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

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.

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.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN $\frac{1}{4}$-INCH ARE ALLOWED.

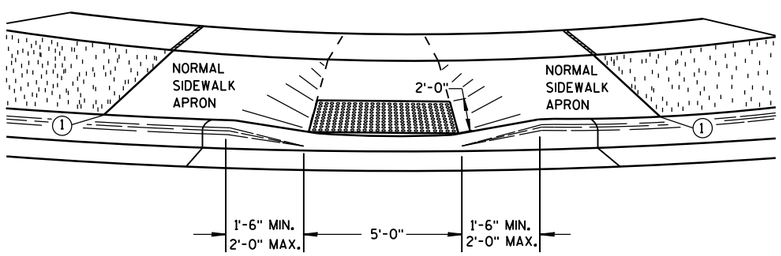
(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(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.

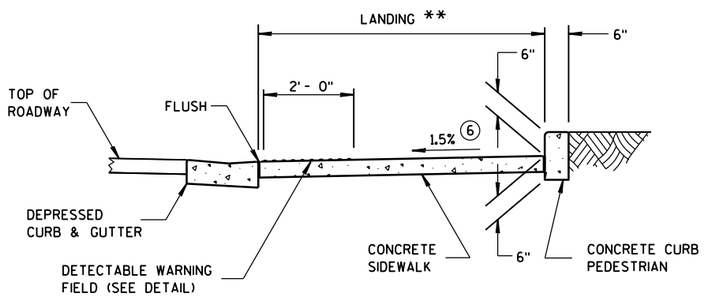
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.



VIEW A-A

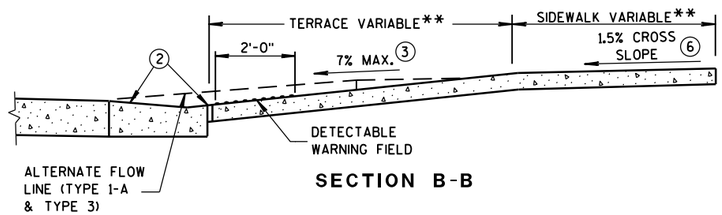
** WIDTH SHOWN ELSEWHERE IN THE PLANS



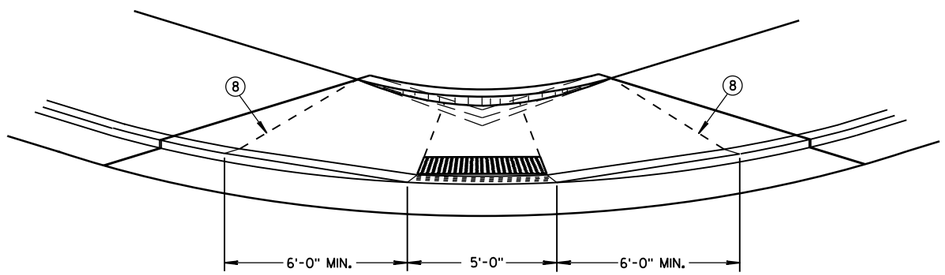
SECTION C-C

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



SECTION B-B



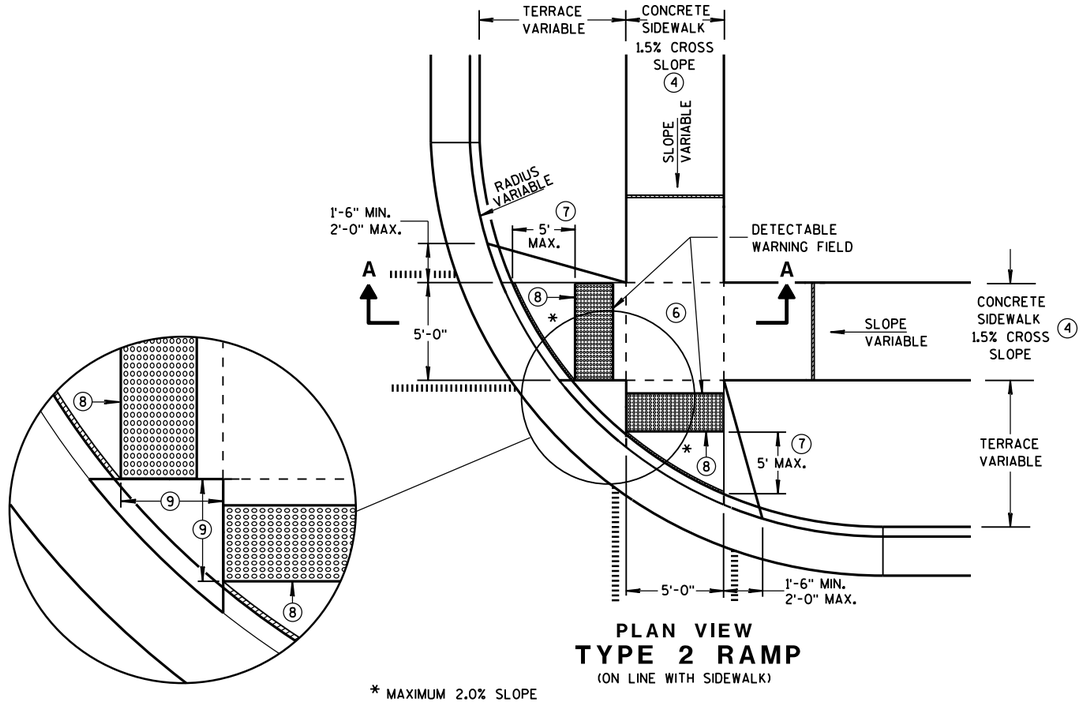
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-16a

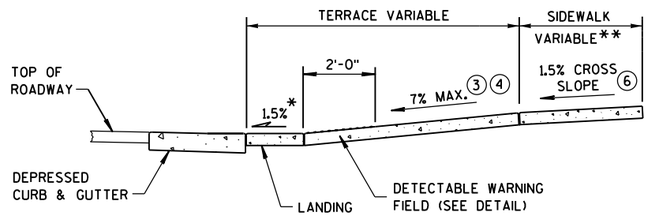


PLAN VIEW

TYPE 2 RAMP

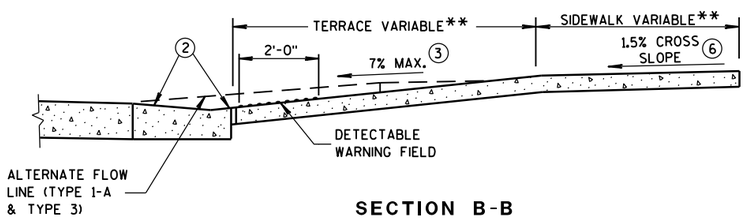
(ON LINE WITH SIDEWALK)

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



SECTION A-A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B-B

GENERAL NOTES

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

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(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 (MINIMUM 4 FEET X 4 FEET).

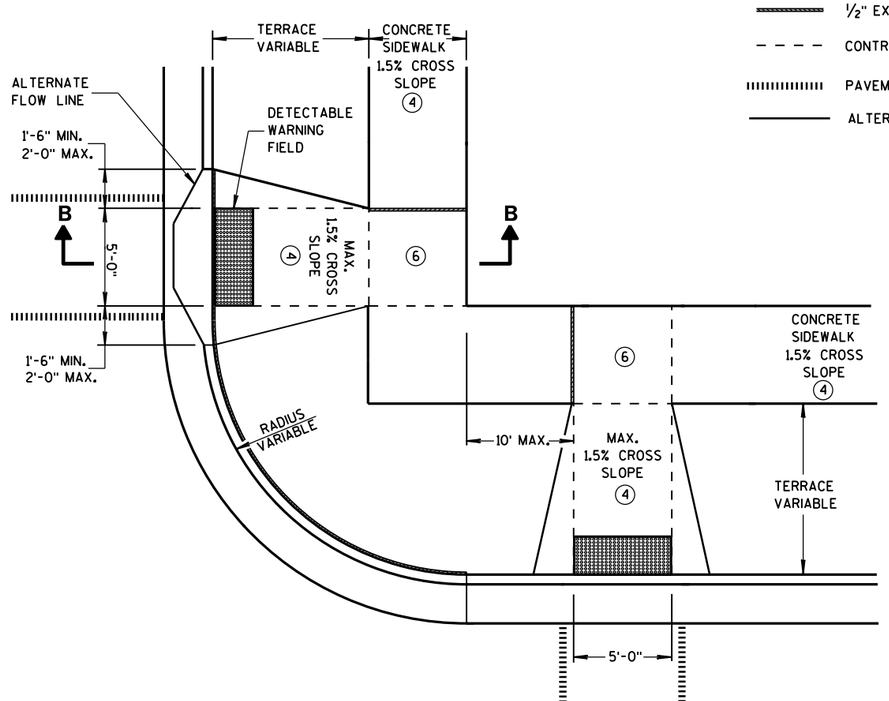
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(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. 2" MINIMUM CURB HEIGHT.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

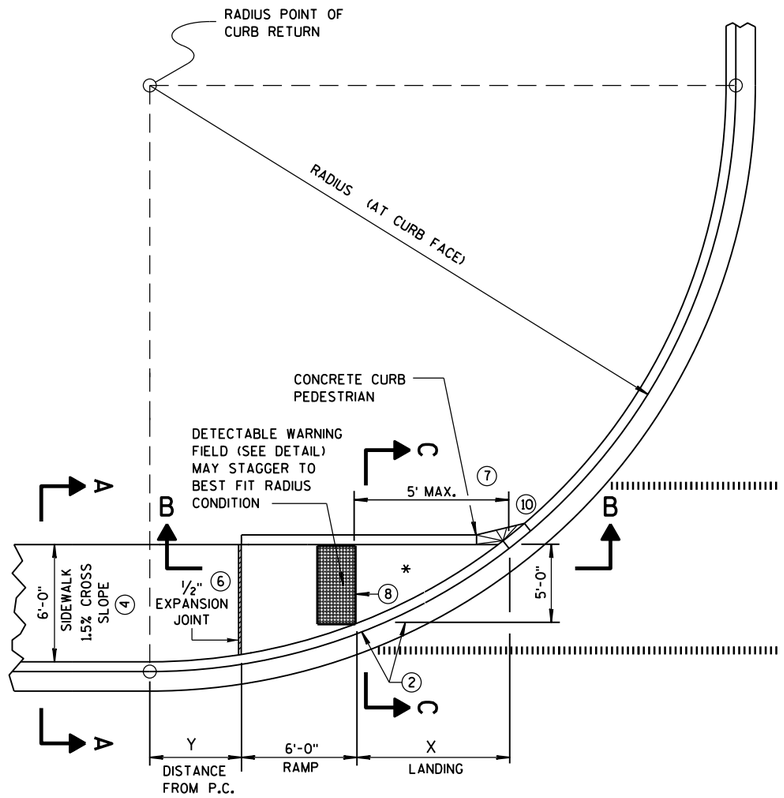
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

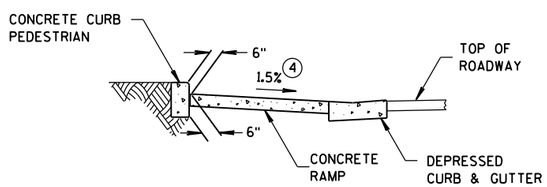
S.D.D. 8 D 5-16b



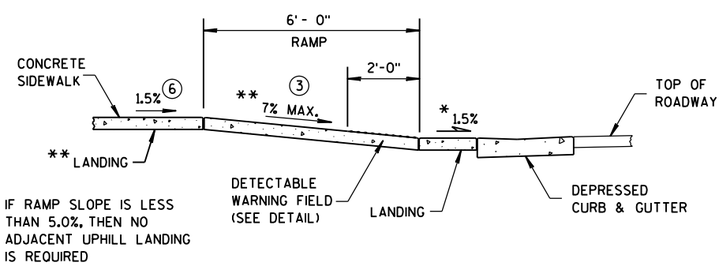
CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

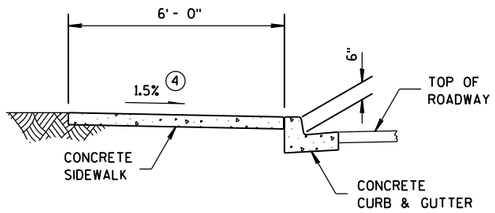
INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4A

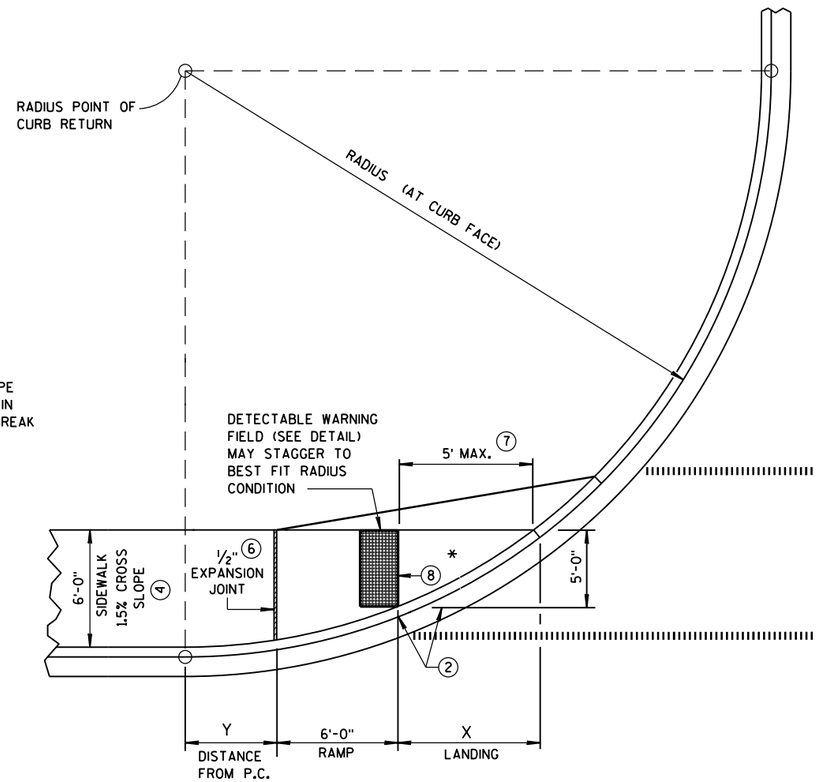


SECTION B-B FOR TYPE 4A



SECTION A-A FOR TYPE 4A

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK



CURB RAMP TYPE 4A1
PLAN VIEW

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

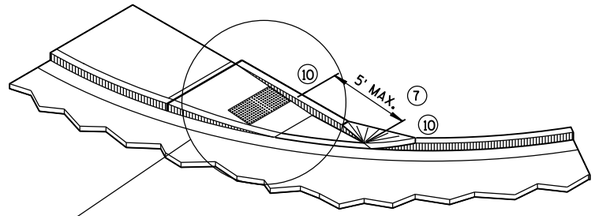
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

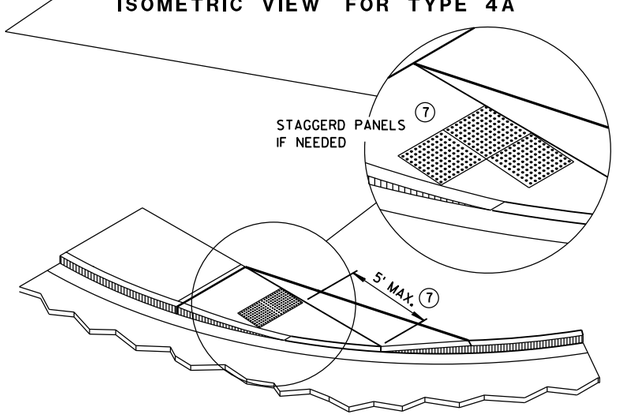
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(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



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

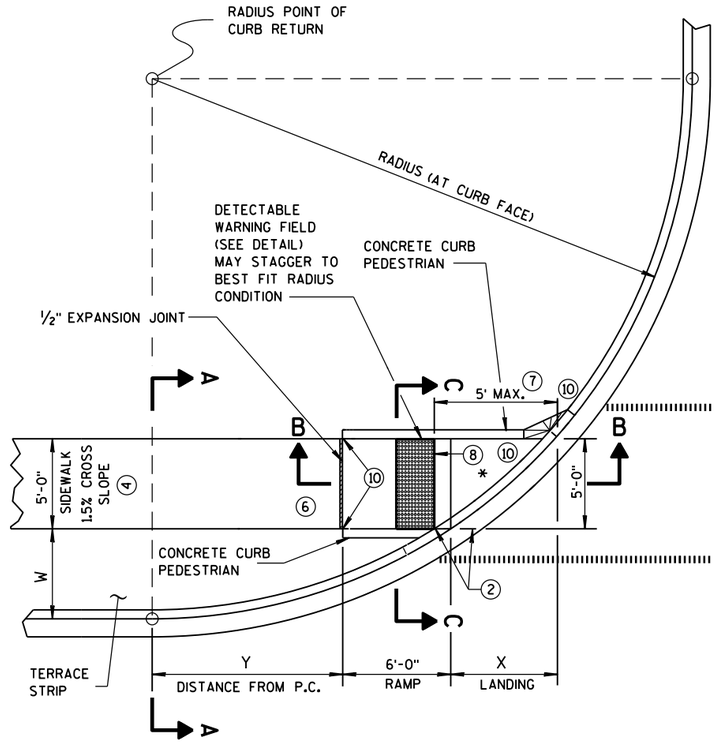
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPES 4A AND 4A1

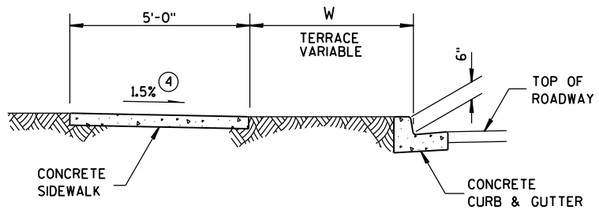
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

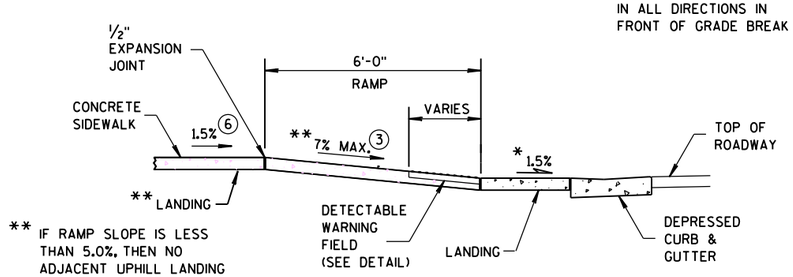
S.D.D. 8 D 5-16c



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

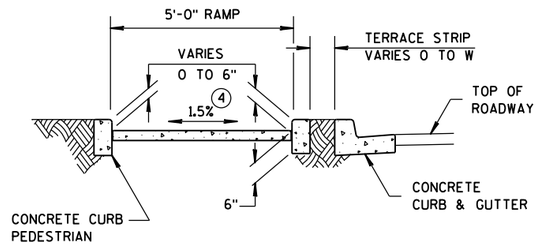
SECTION B-B FOR TYPE 4B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)



SECTION C-C FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3'-0"		W = 4'-0"		W = 5'-0"		W = 6'-0"		W = 7'-0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"

INTERMEDIATE RADII CAN BE INTERPOLATED

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED.

(3) ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

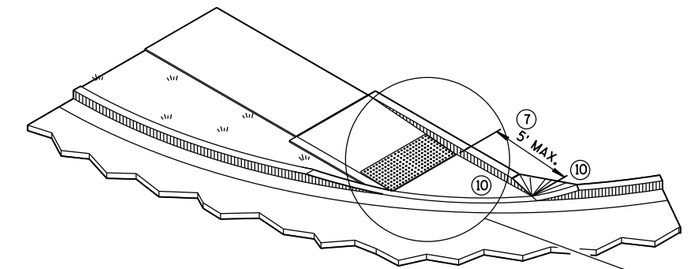
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

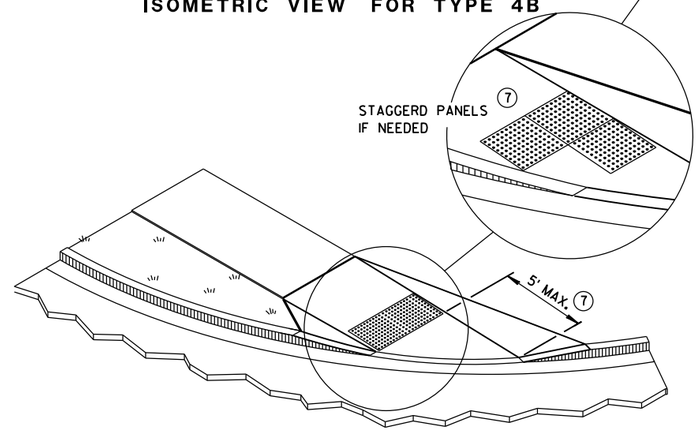
(7) WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

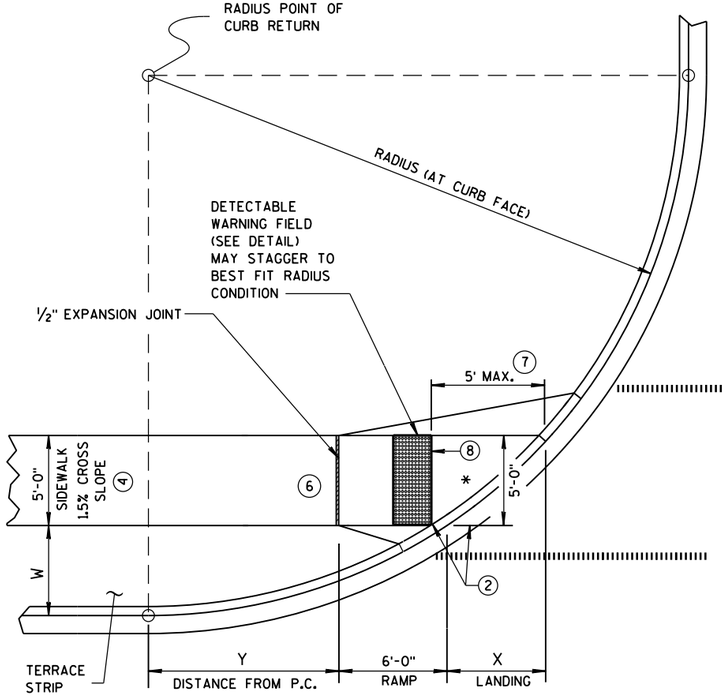
(10) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1



CURB RAMP TYPE 4B1
PLAN VIEW

CURB RAMPS
TYPE 4B AND 4B1

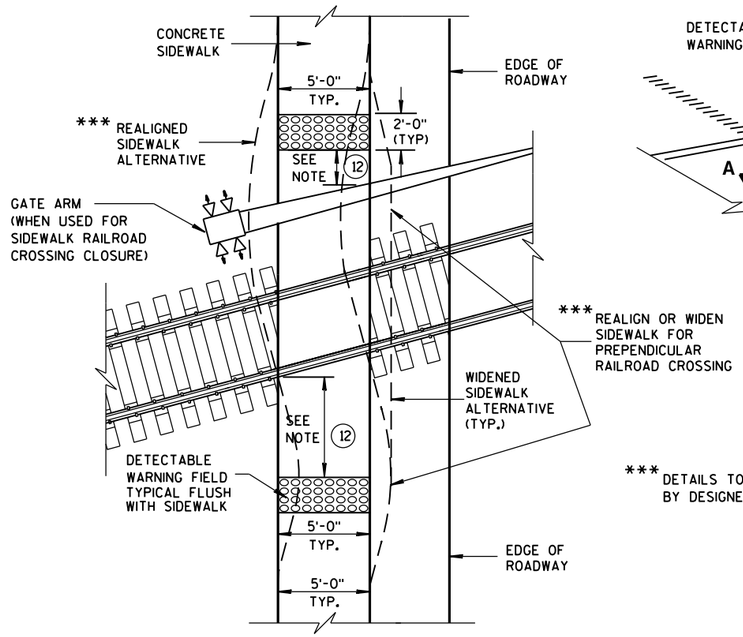
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 8 D 5-16d

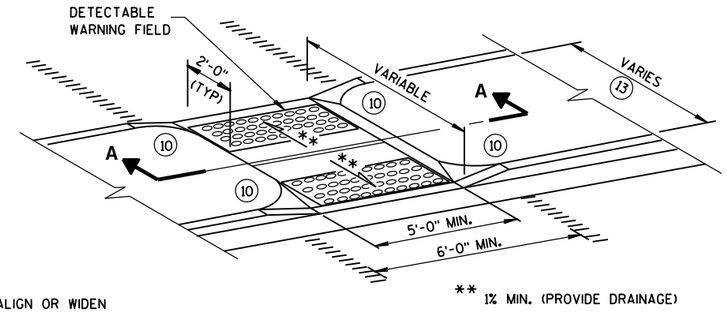
6

S.D.D. 8 D 5-16d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING

*** DETAILS TO BE DETERMINED BY DESIGNER



** 1% MIN. (PROVIDE DRAINAGE)

MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

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 DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.

(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.

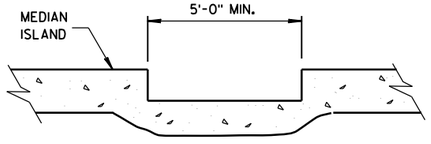
(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).

(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.

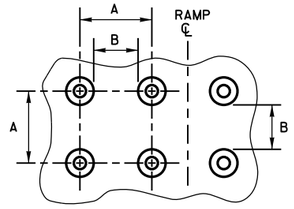
(13) DO NOT INSTALL DETECTABLE WARNING FIELDS IF MEDIAN WIDTH BETWEEN BACK OF CURBS IS LESS THAN 6 FEET.



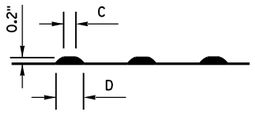
SECTION A-A

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

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

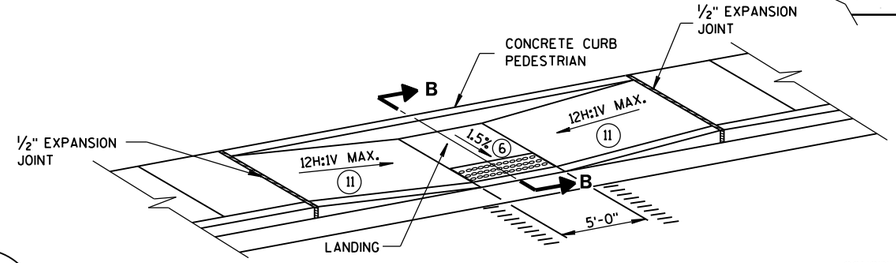


PLAN VIEW

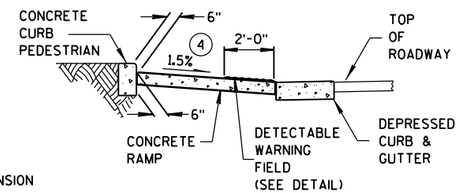


ELEVATION VIEW

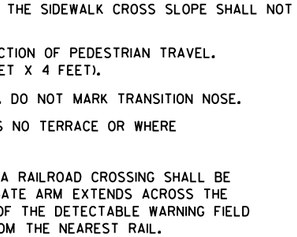
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



MID-BLOCK CROSSING
TYPE 7A



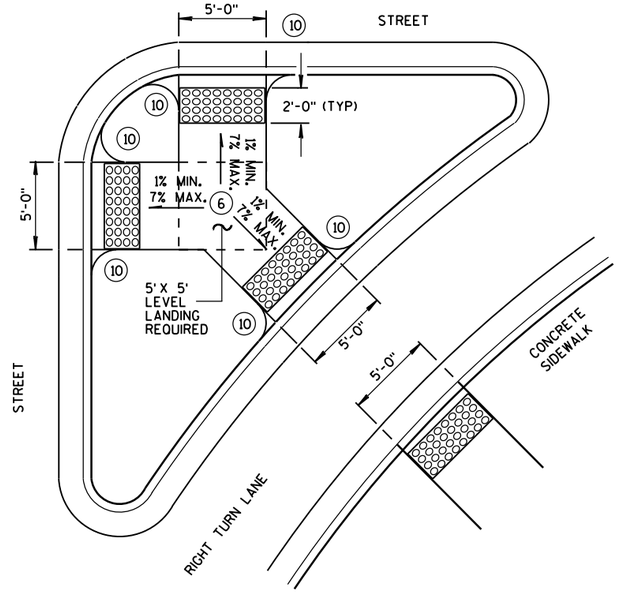
SECTION B-B



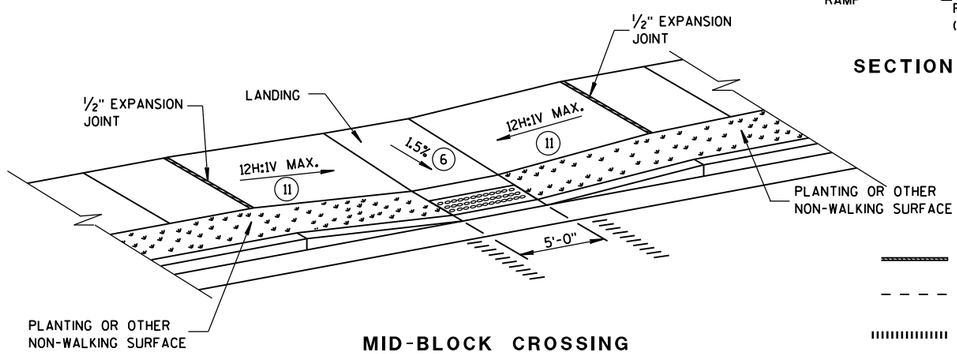
PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



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

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

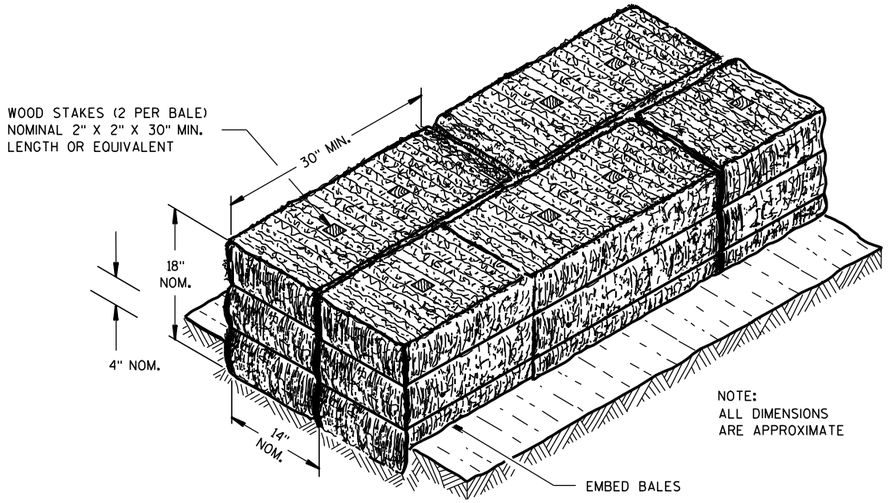
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

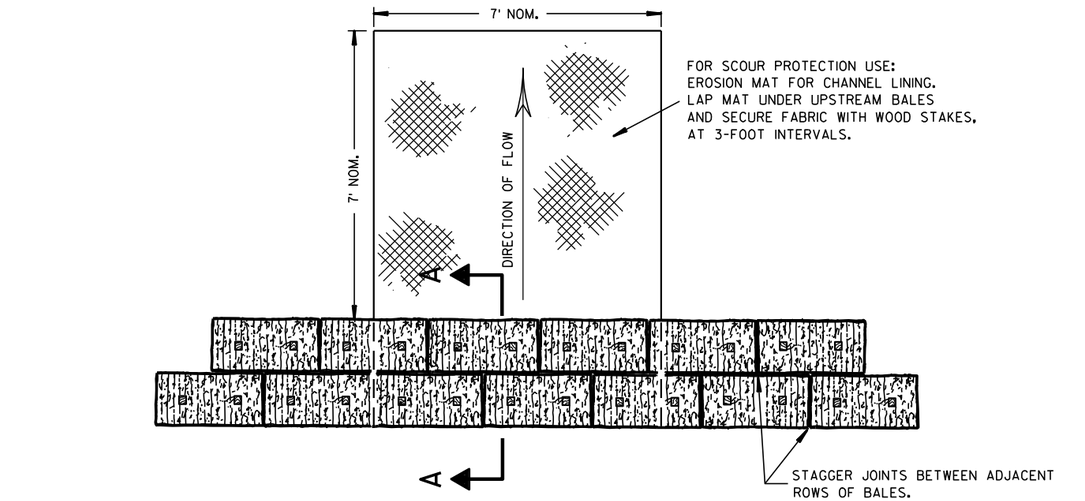
APPROVED
June, 2015 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS [illegible] ENGINEER
FHWA

6

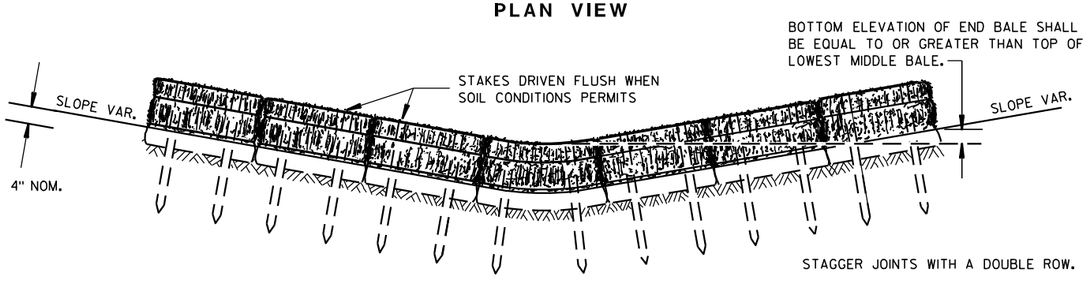
S.D.D. 8 D 5-16e



SECTION A-A



PLAN VIEW



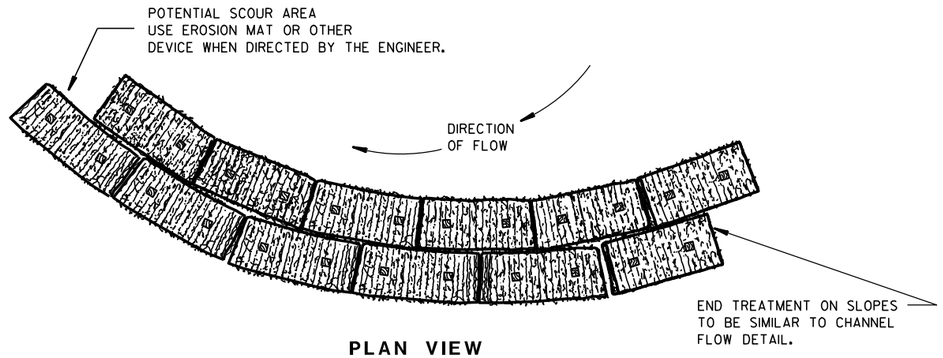
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

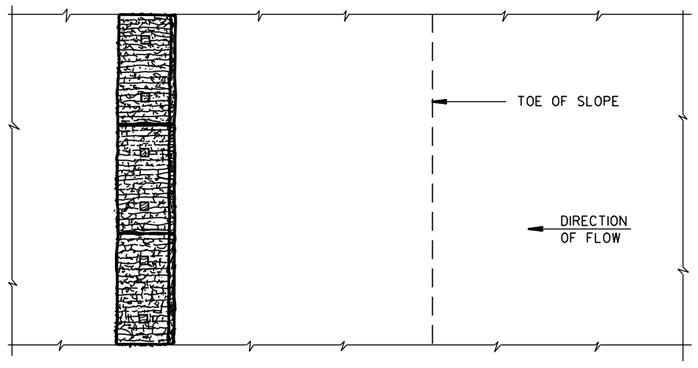
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

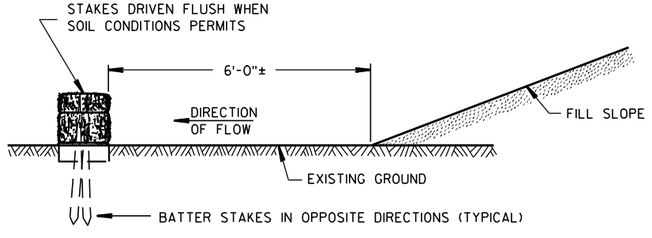


PLAN VIEW

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

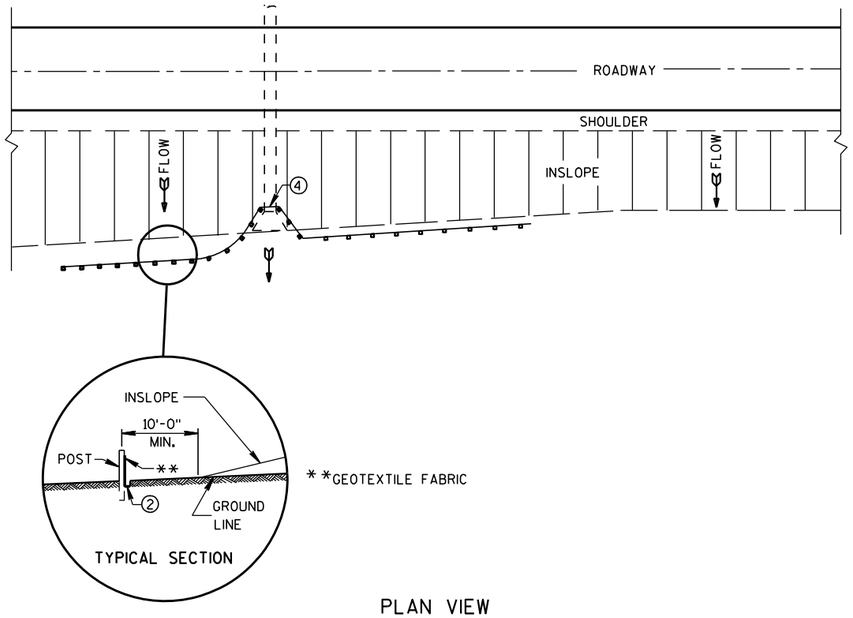
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

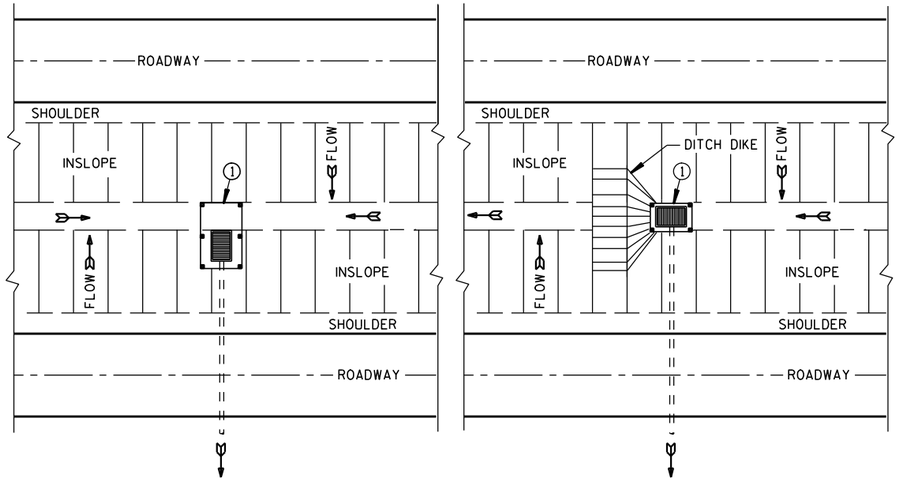
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

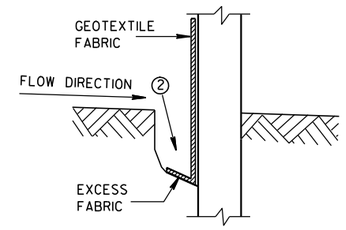
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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

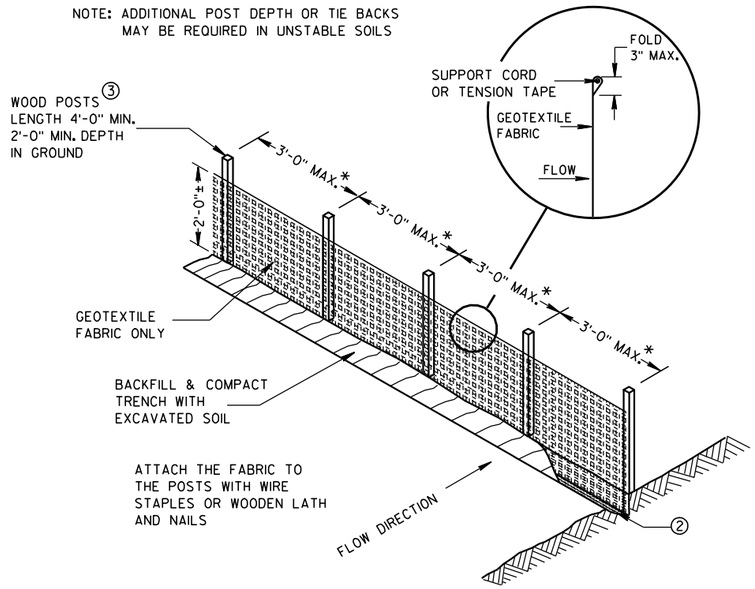
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

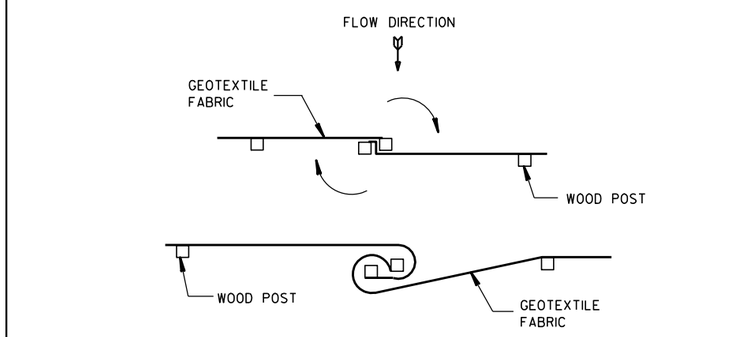
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



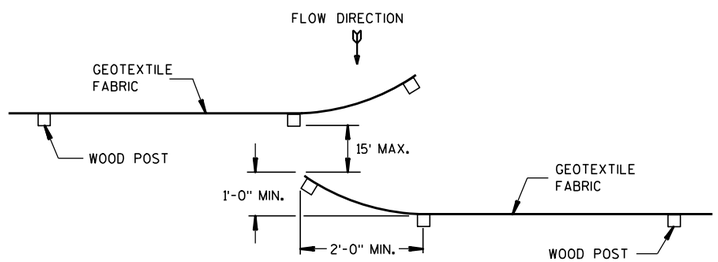
TRENCH DETAIL



SILT FENCE

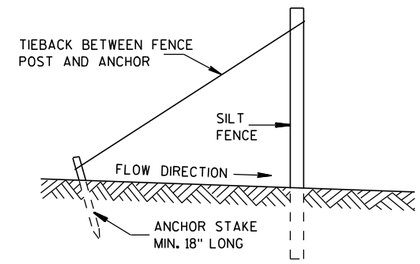


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

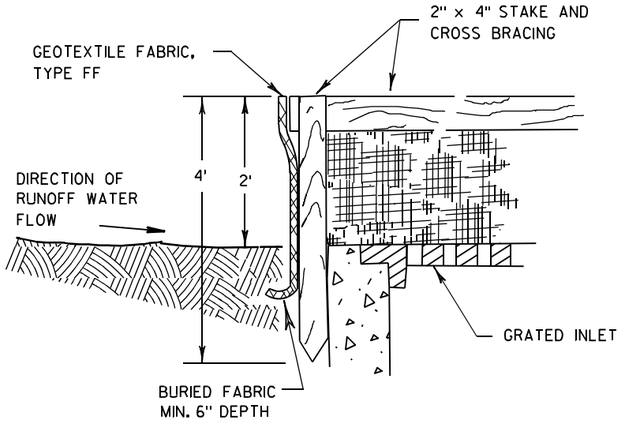
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

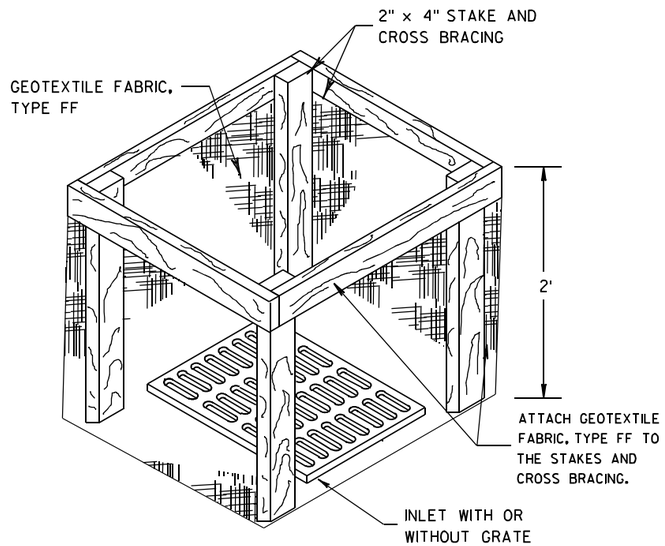
6

S.D.D. 8 E 9-6

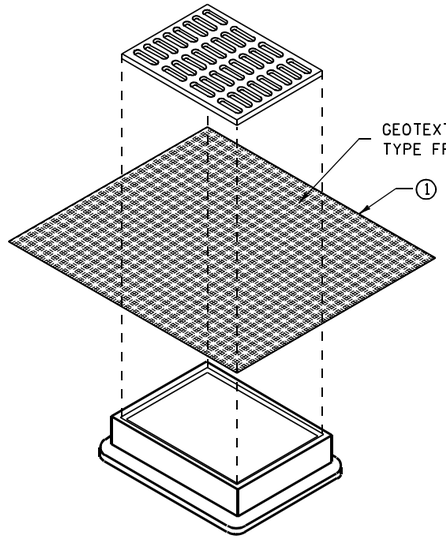
6

S.D.D. 8 E 9-6



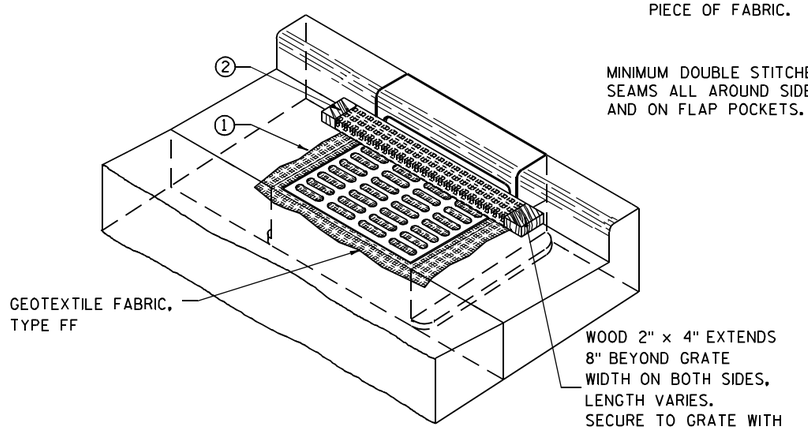


INLET PROTECTION, TYPE A

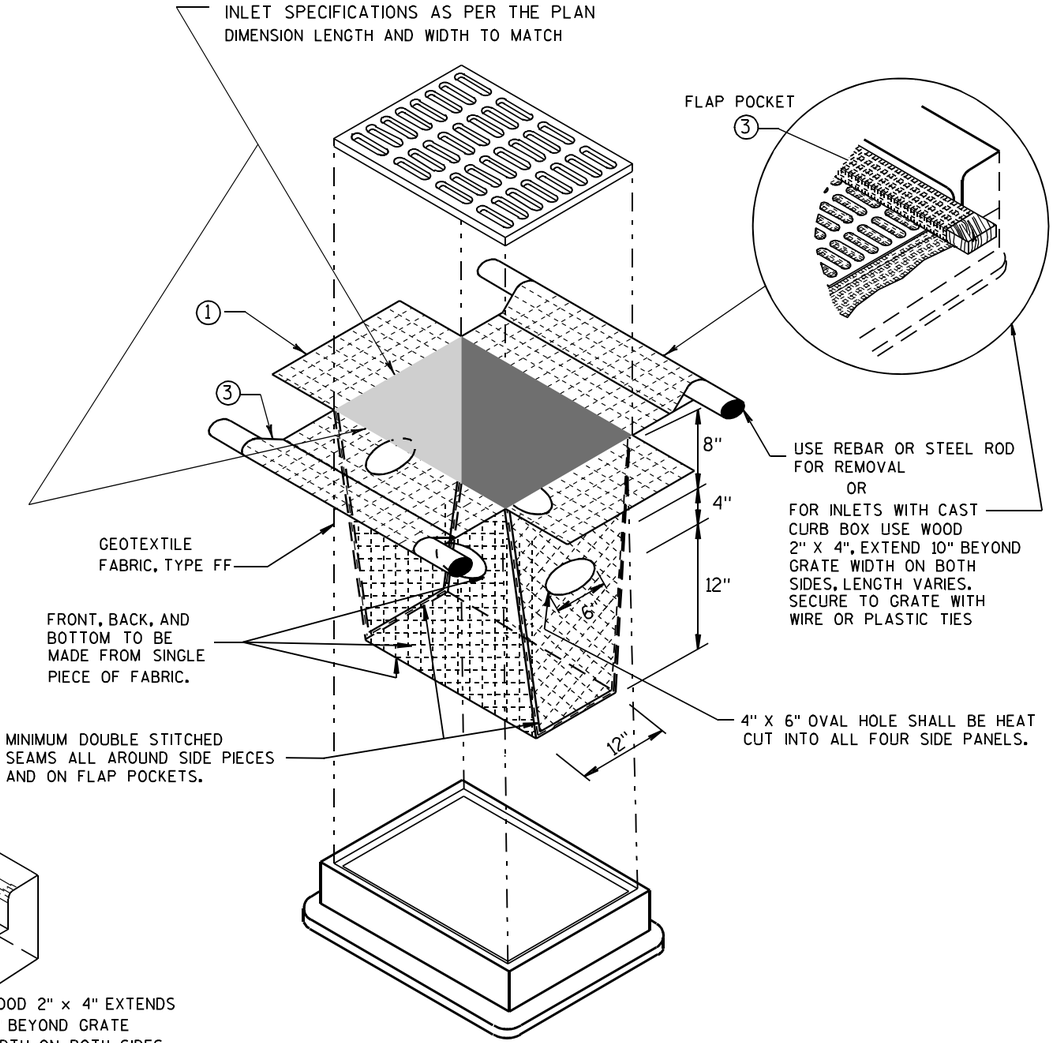


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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

METAL APRON ENDWALLS

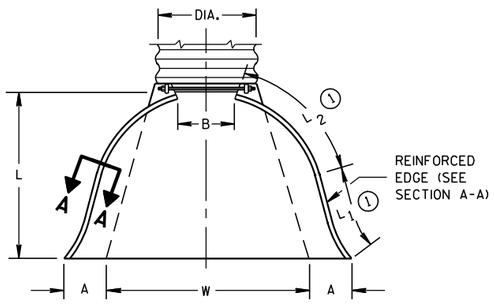
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

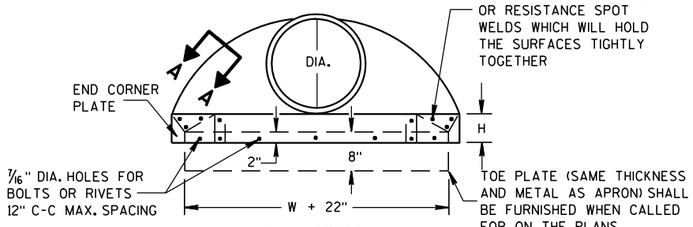
REINFORCED CONCRETE APRON ENDWALLS

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

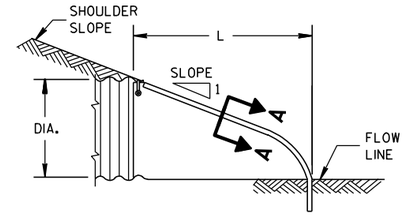
* MINIMUM
** MAXIMUM



PLAN VIEW

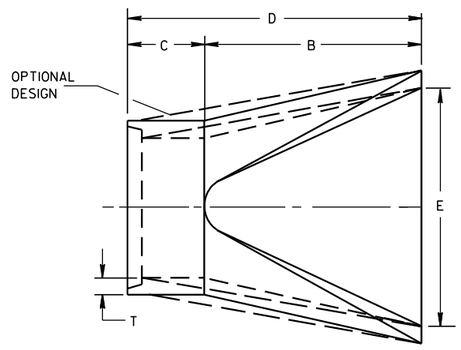


END VIEW

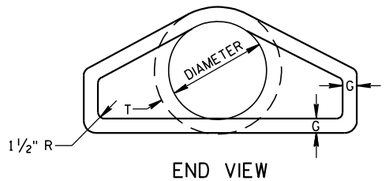


SIDE ELEVATION

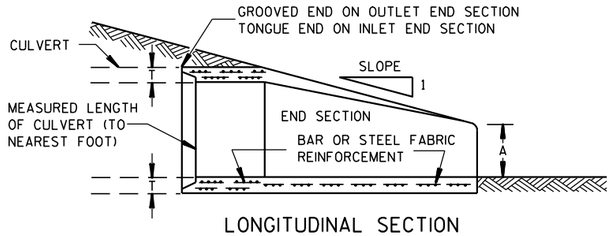
METAL ENDWALLS



PLAN

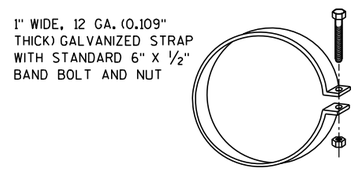


END VIEW



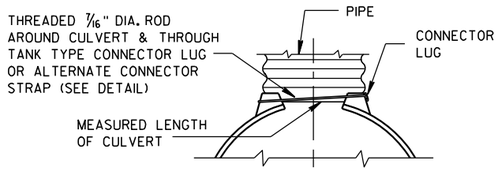
LONGITUDINAL SECTION

CONCRETE ENDWALLS

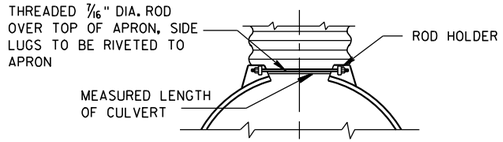


ALTERNATE FOR TYPE 1 CONNECTION

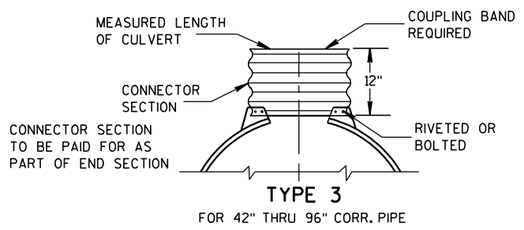
END SECTION CONNECTOR STRAP



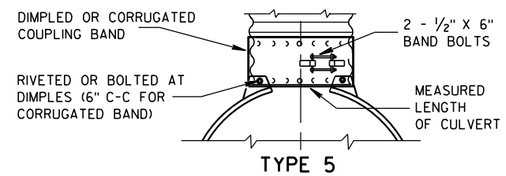
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

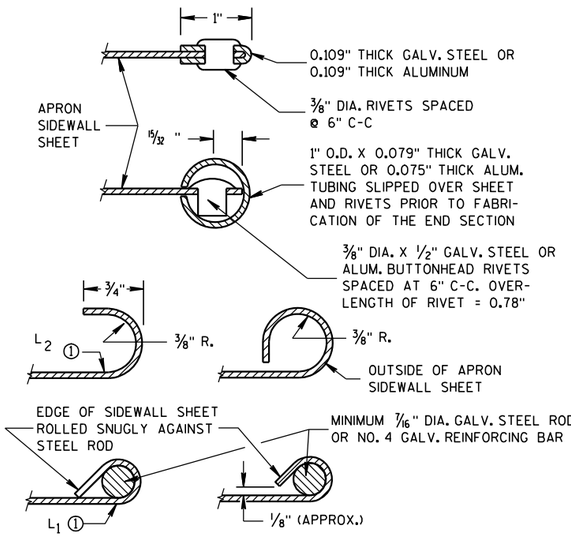
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

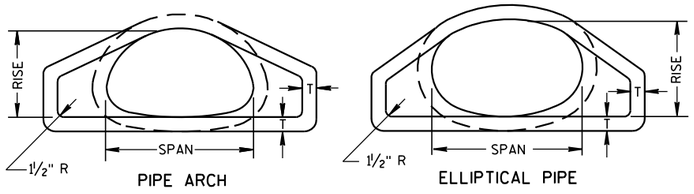
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

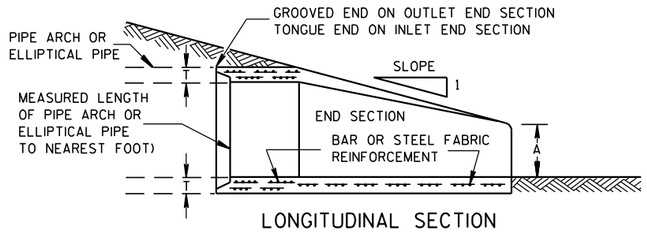
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

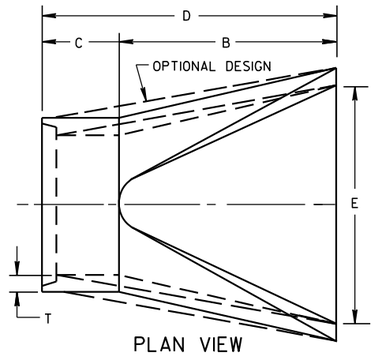
6
S.D.D. 8 F 1-11



END VIEW

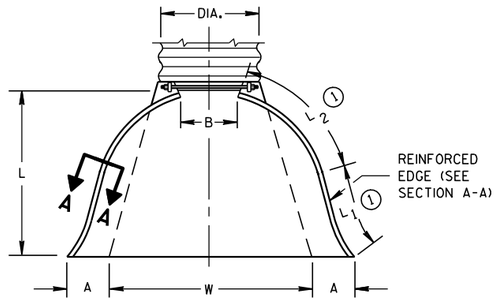


LONGITUDINAL SECTION

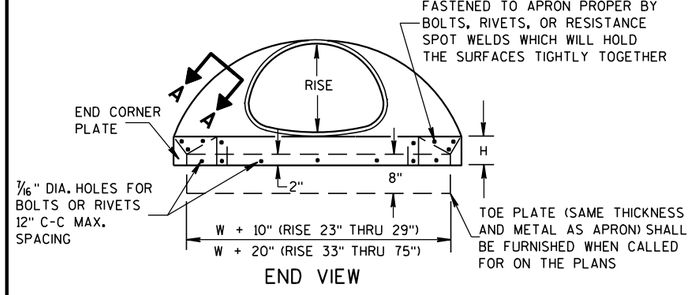


PLAN VIEW

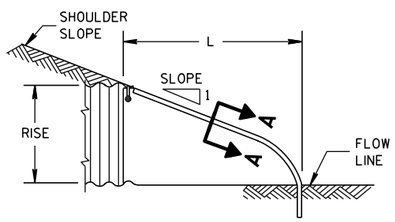
CONCRETE ENDWALLS



PLAN VIEW

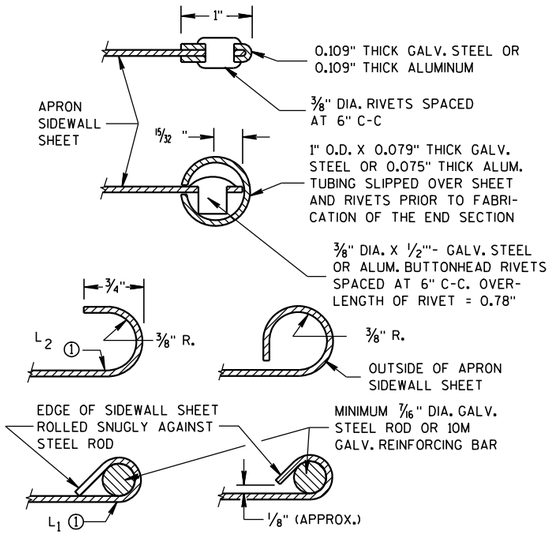


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

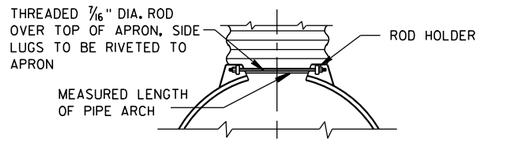
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

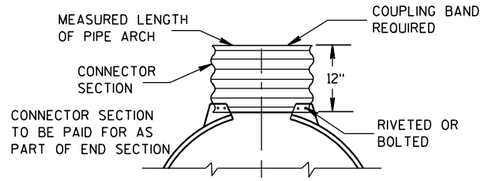
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



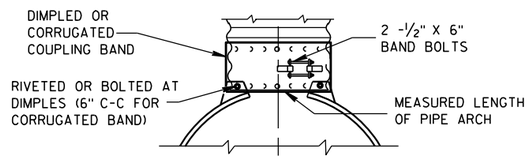
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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S.D.D. 8 F 2-1

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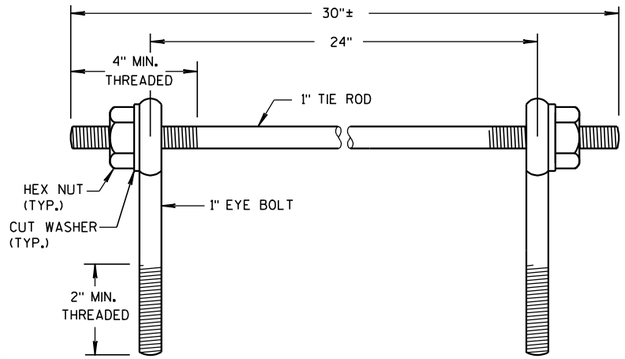
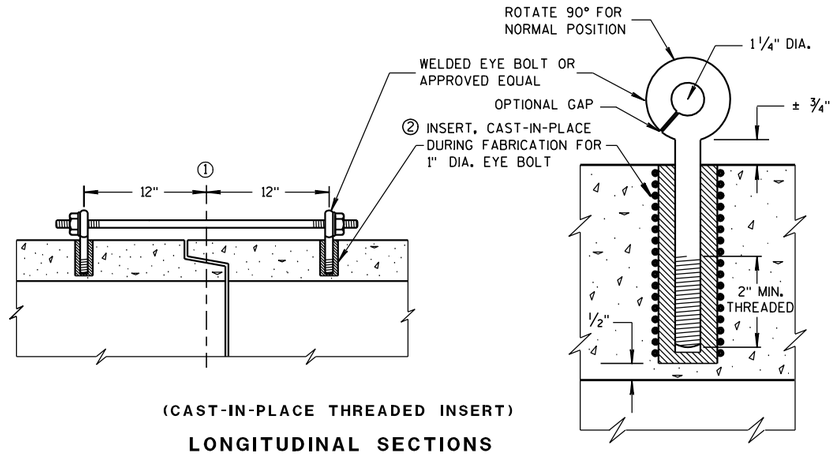
S.D.D. 8 F 2-1



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.

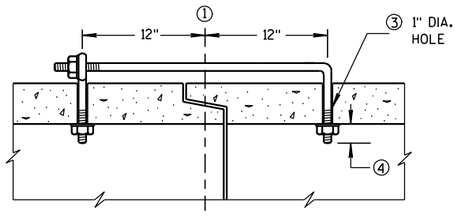
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

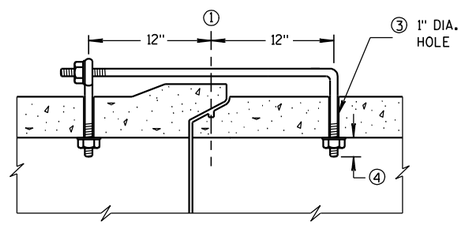
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

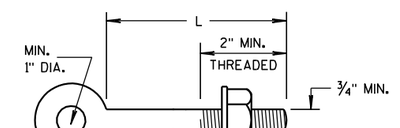


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

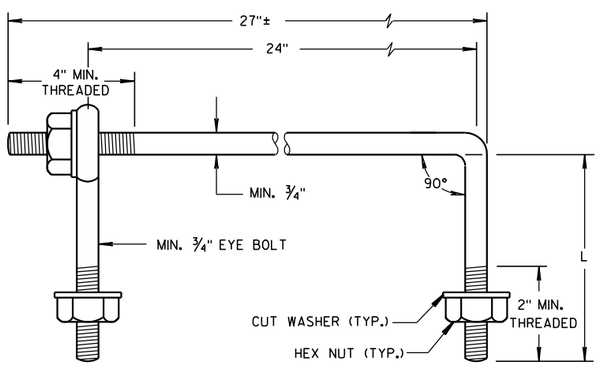
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

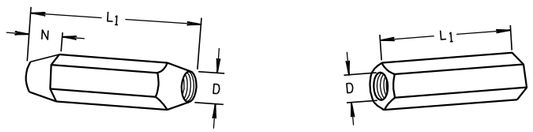
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

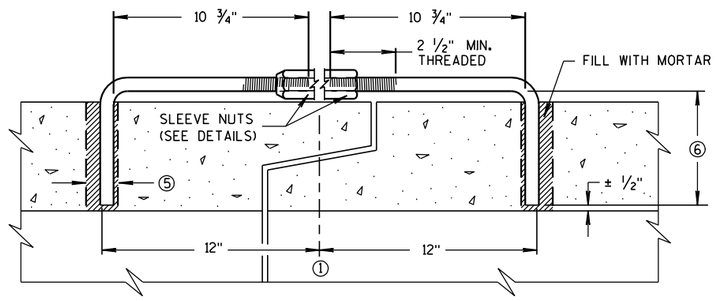
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

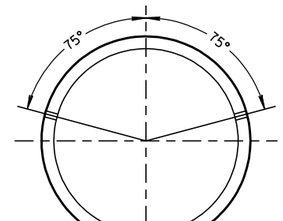
SLEEVE NUTS



LONGITUDINAL SECTION

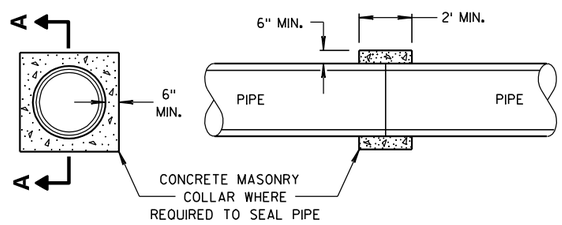
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
118
FHWA

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S.D.D. 8 F 4-7

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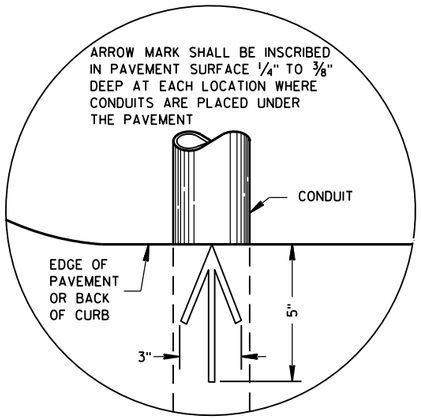
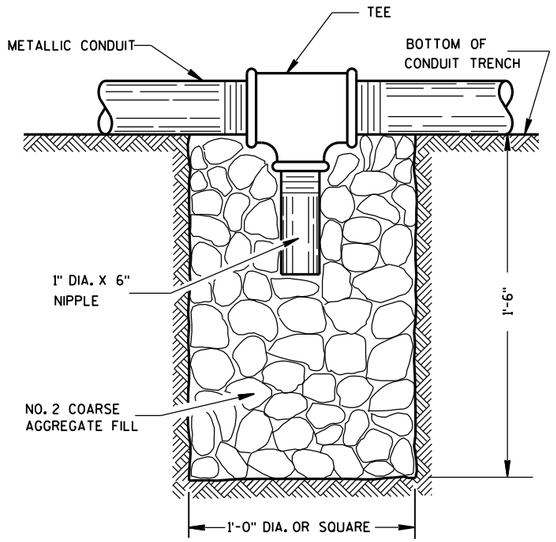
S.D.D. 8 F 4-7



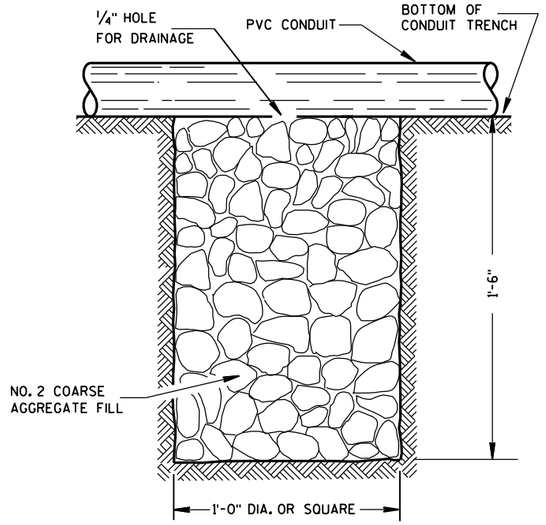
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

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.

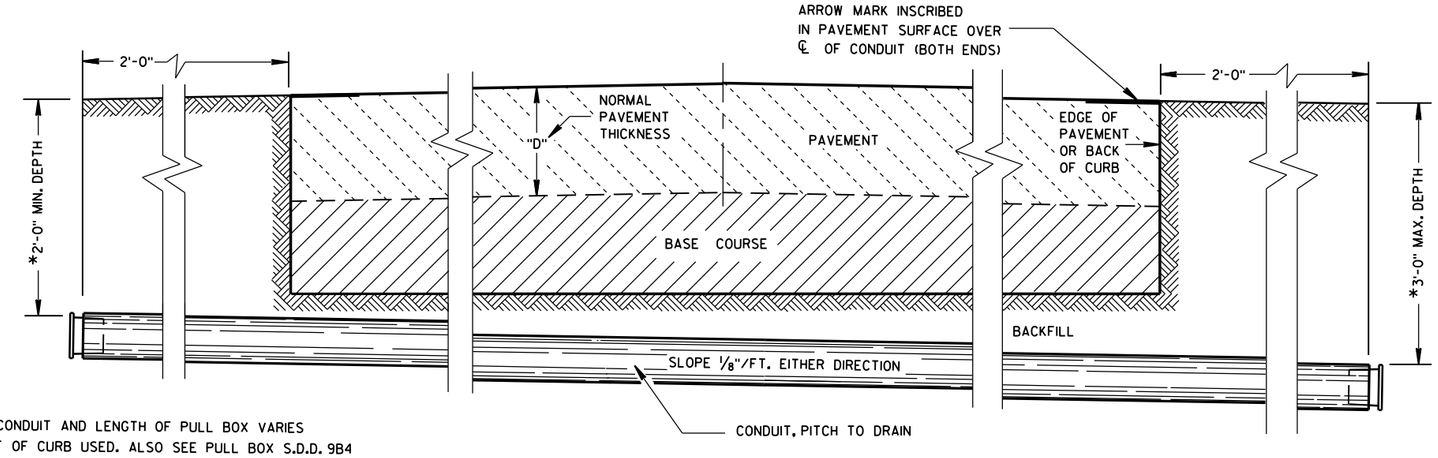
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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.



*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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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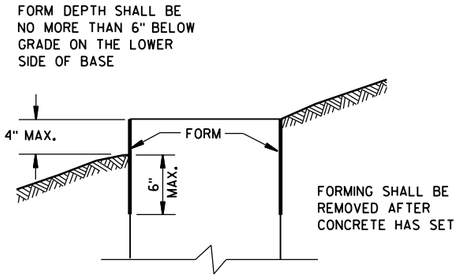
S.D.D. 9 B 2-9



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.

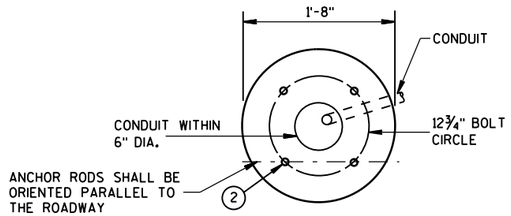
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

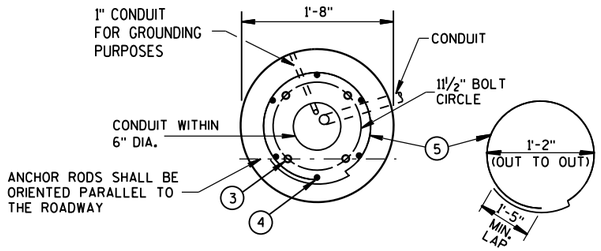
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

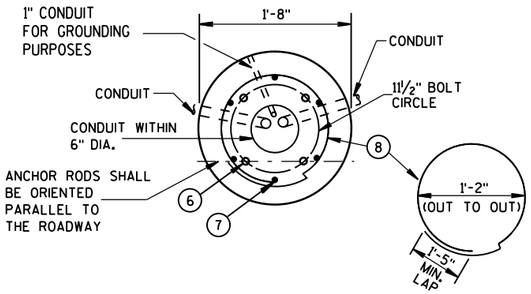
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

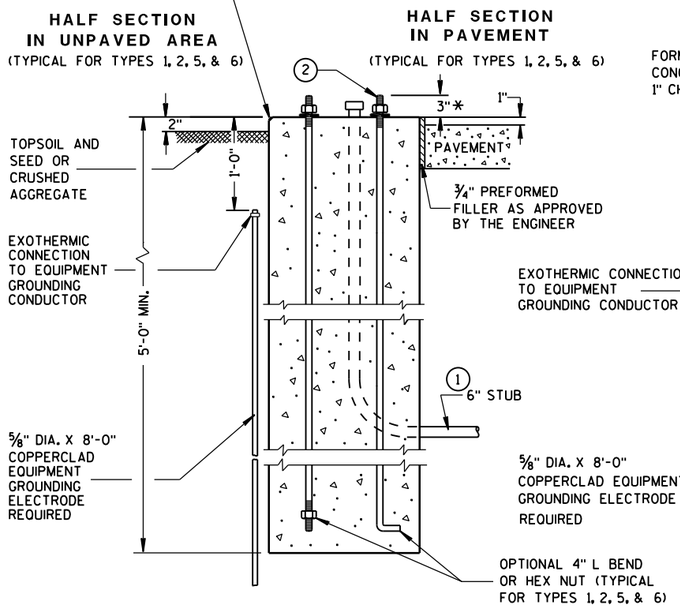






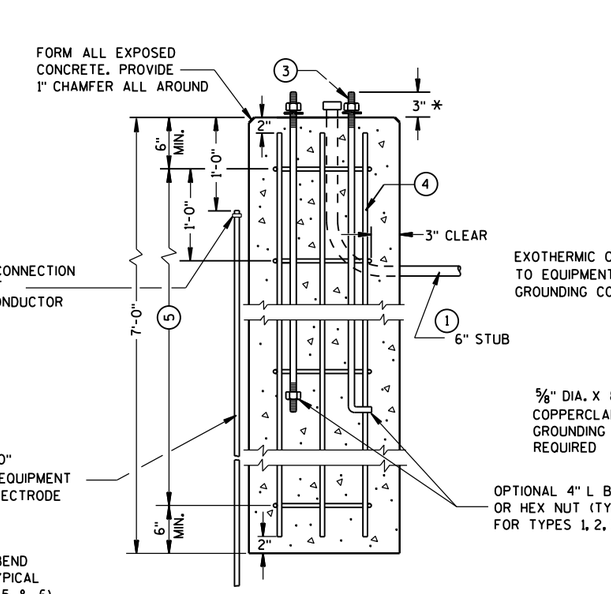
HALF SECTION IN UNPAVED AREA

(TYPICAL FOR TYPES 1, 2, 5, & 6)

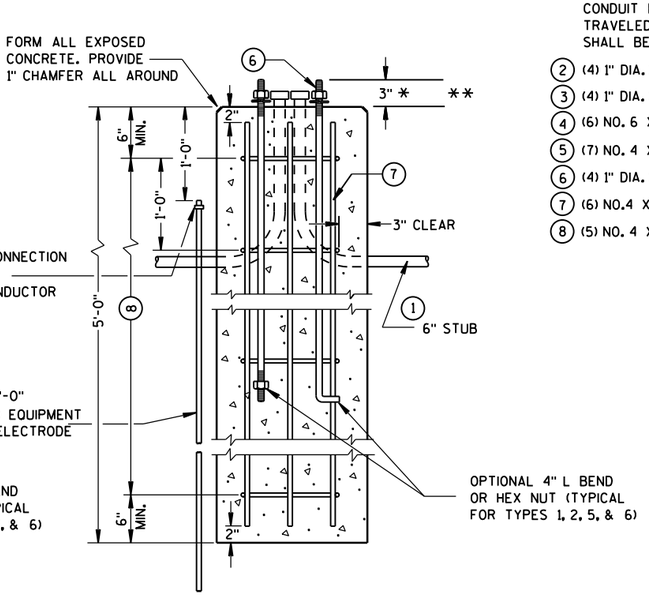


HALF SECTION IN PAVEMENT

(TYPICAL FOR TYPES 1, 2, 5, & 6)



TYPE 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

6

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.

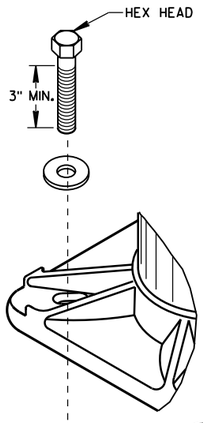
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

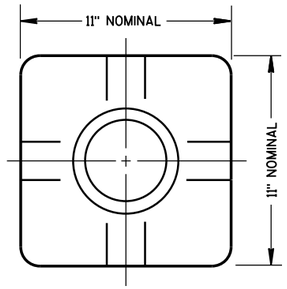
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

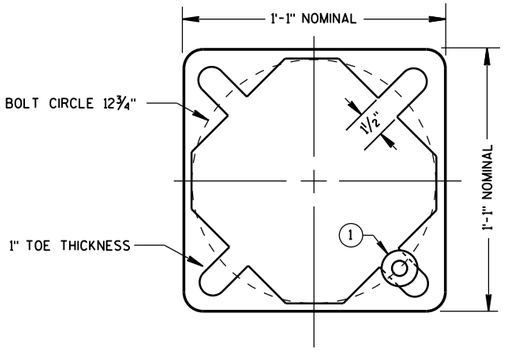
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

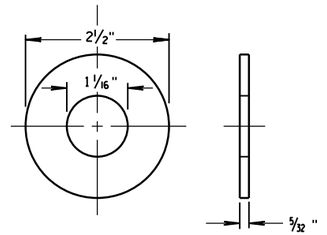




TOP VIEW
(PEDESTAL BASE)

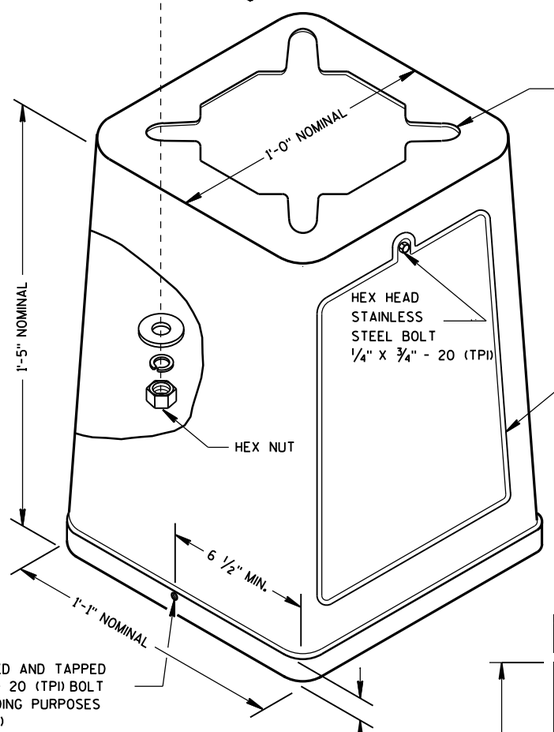


BOTTOM VIEW
(PEDESTAL BASE)

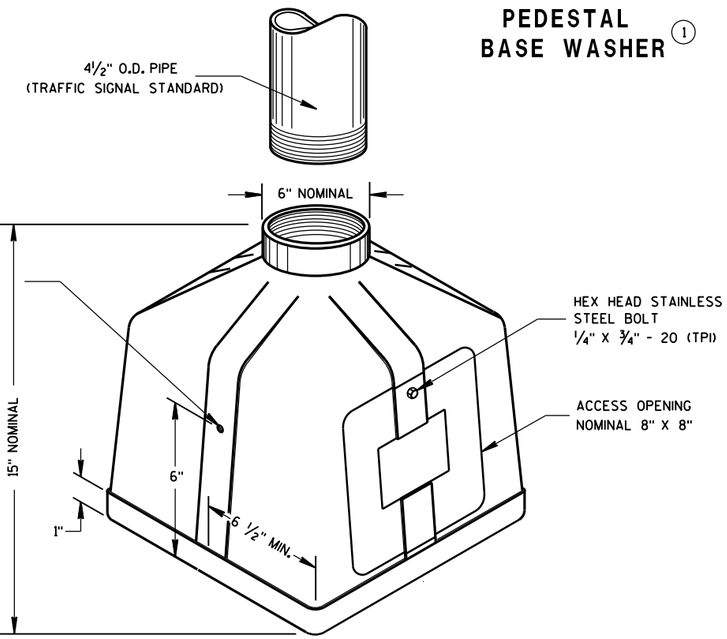


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

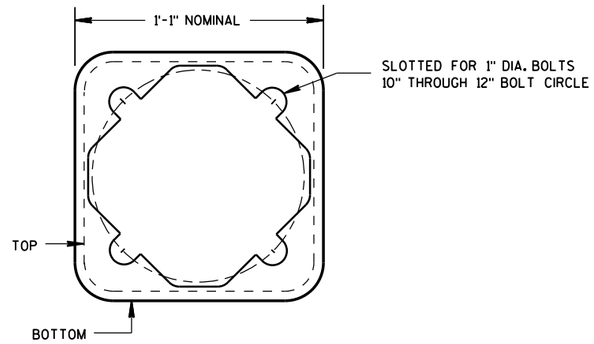


ISOMETRIC VIEW

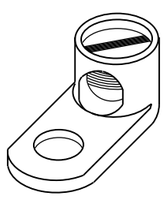


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

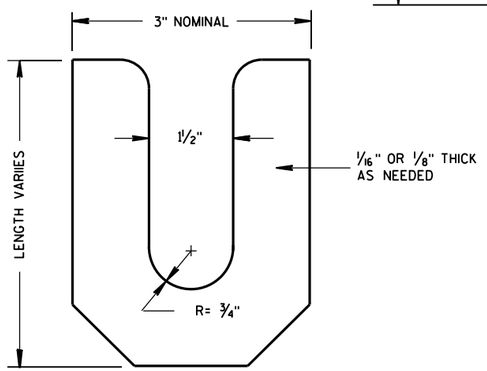


TYPICAL MECHANICAL CONNECTOR LUG

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
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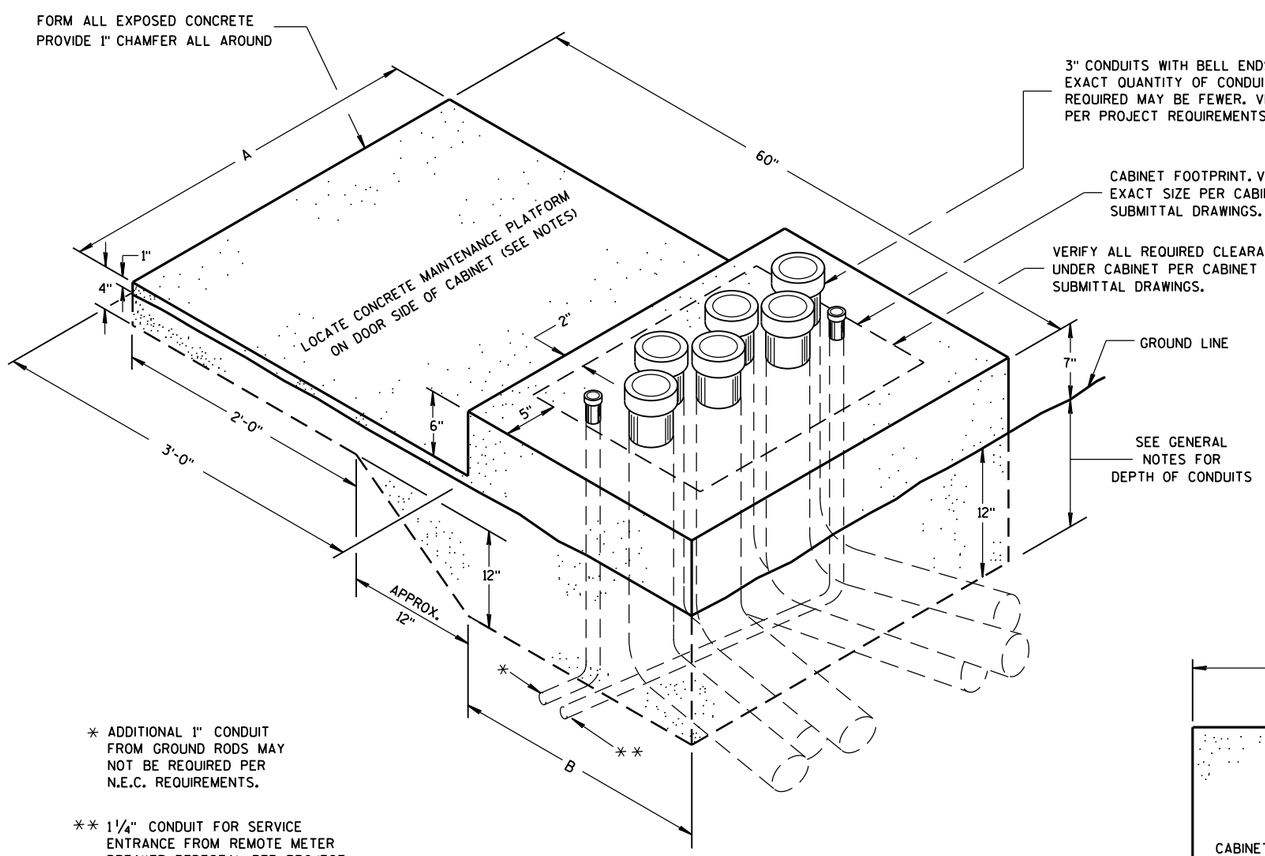


* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

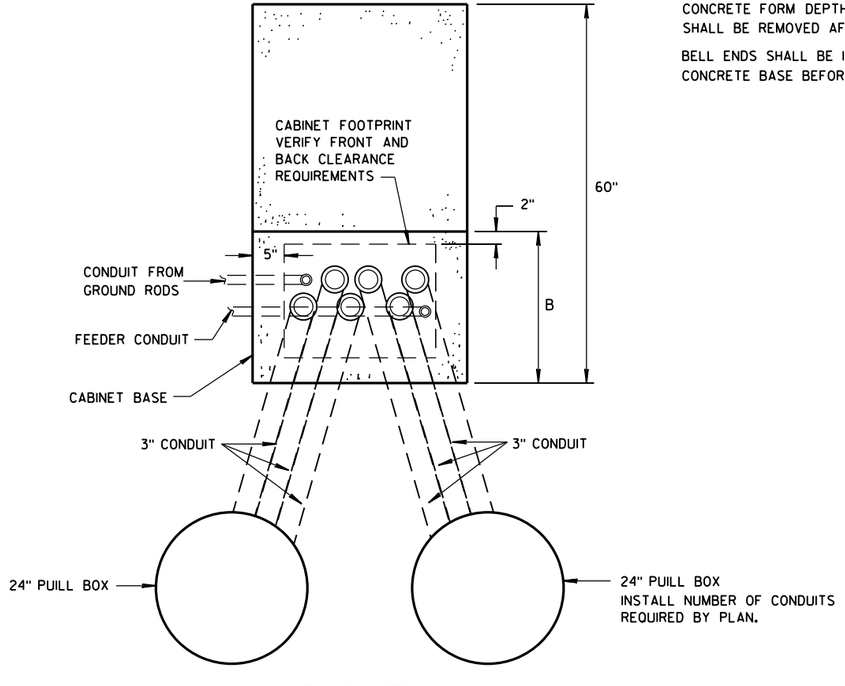
** 1¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS 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 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 L

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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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE-WIRED BY THE CABINET FABRICATOR.

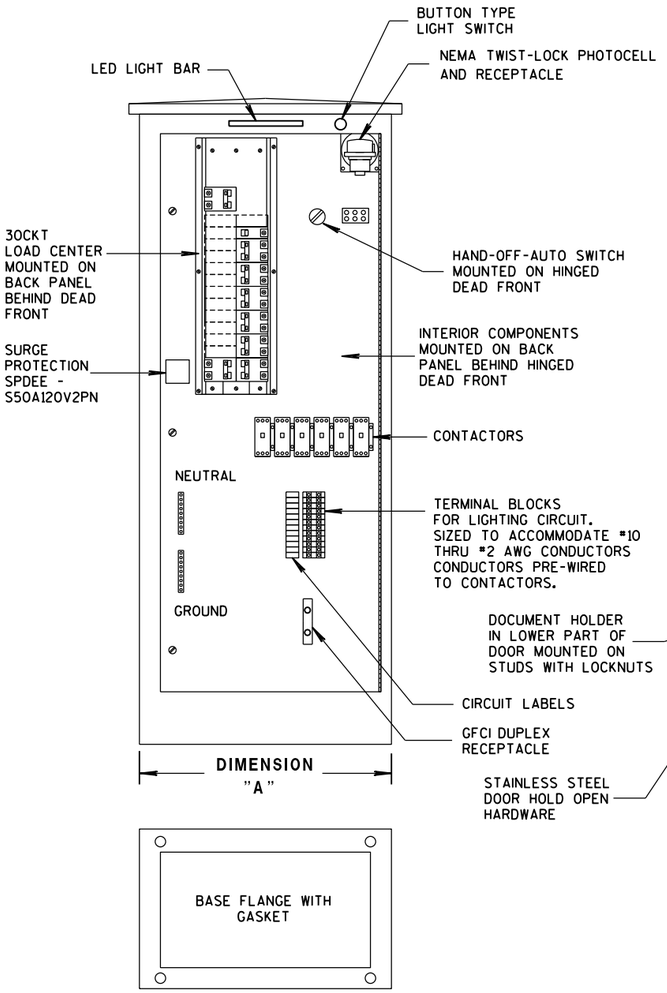
ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

FRONT INTERIOR ELEVATION



SIDE VIEW

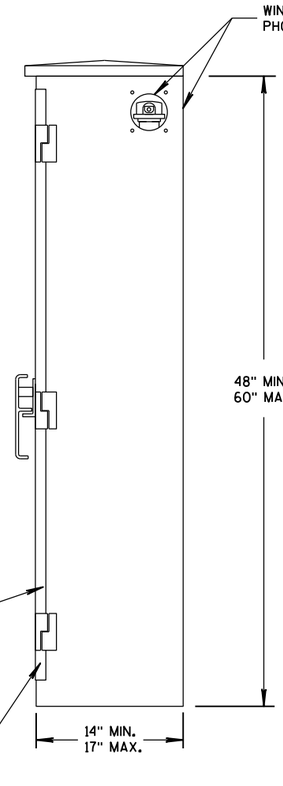
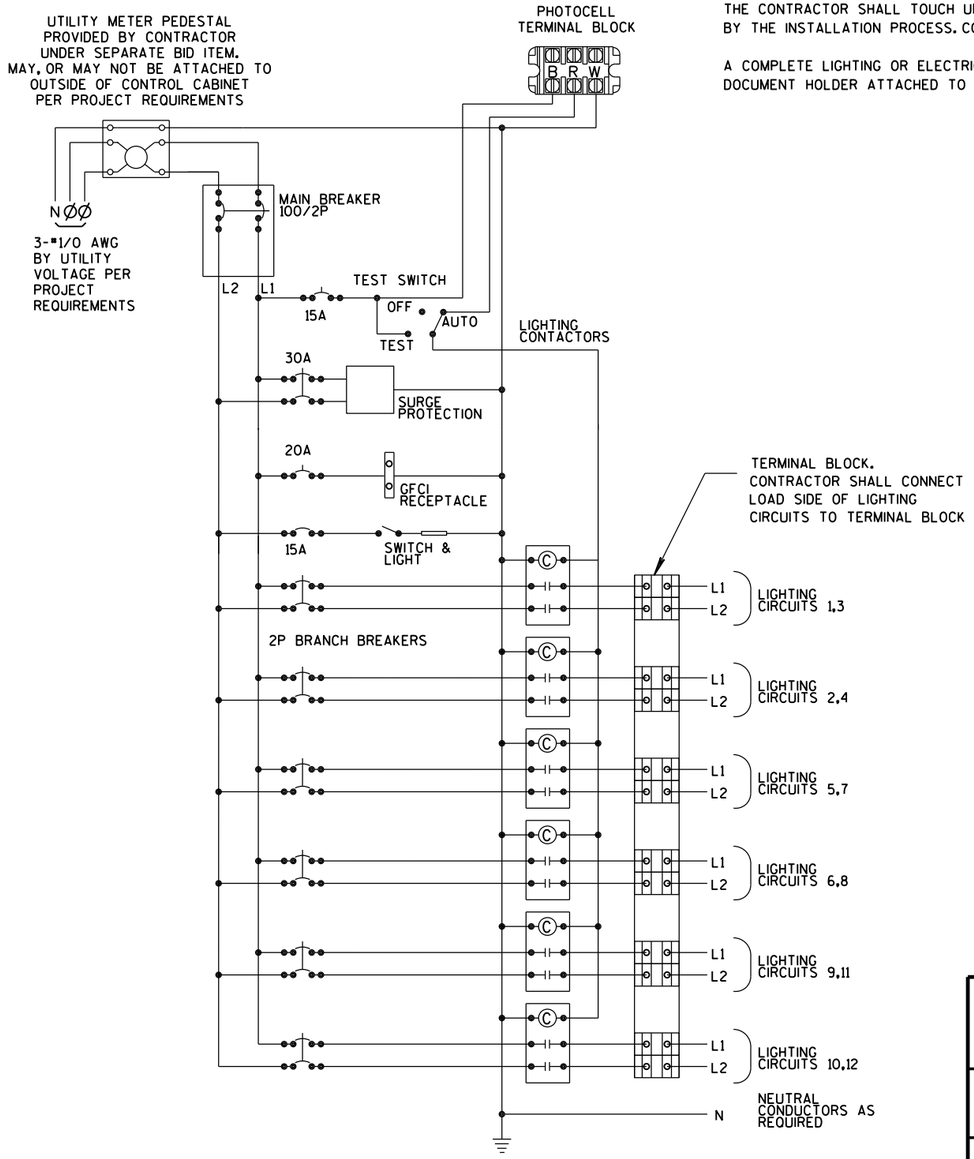


TABLE OF DIMENSIONS (INCHES)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

LIGHTING CONTROL CABINET 120/240 VOLT

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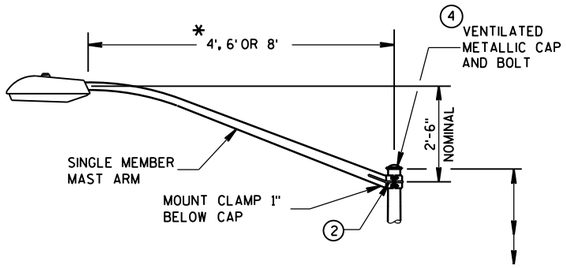
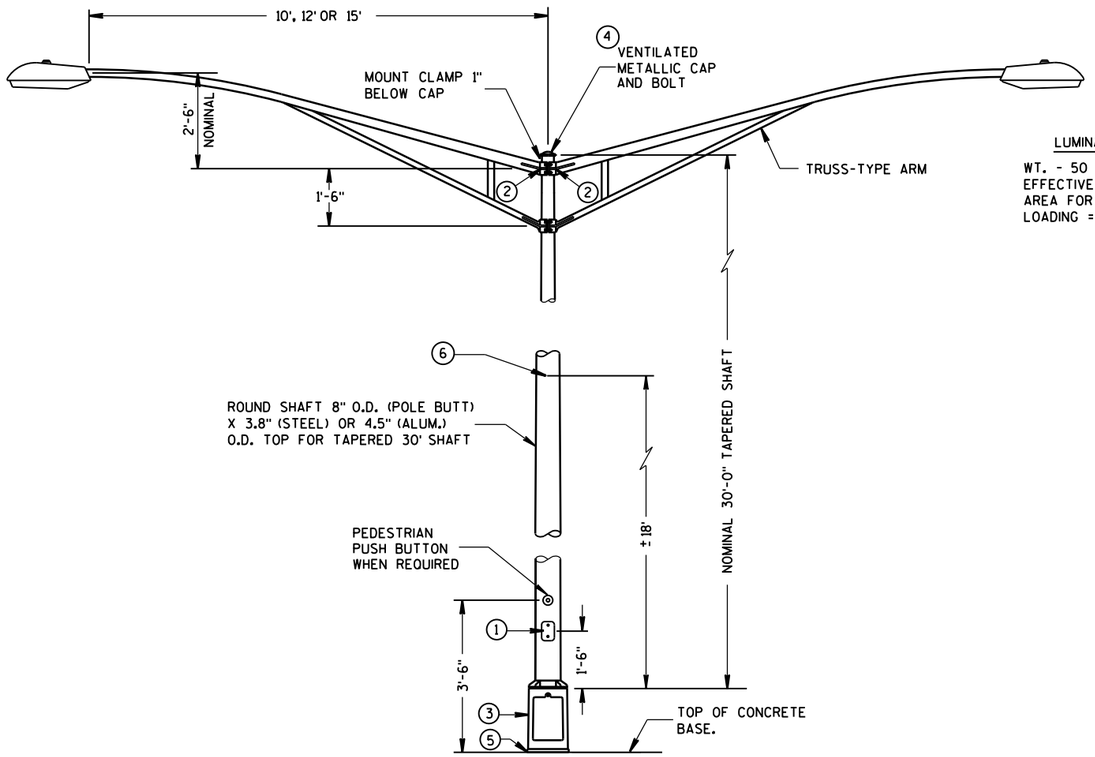
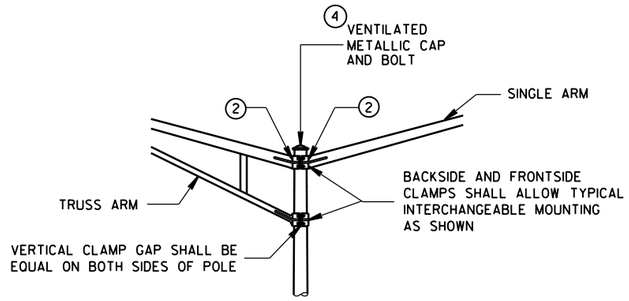
*RISE FOR 4' ARM SHALL BE 2'-0".





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.

POLE MONTINGS FOR
LIGHTING UNITS, TYPE 5
(30 FEET)

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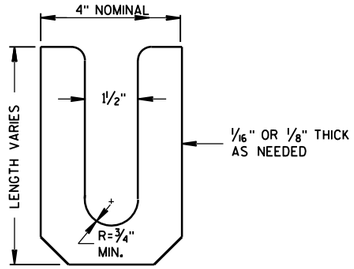
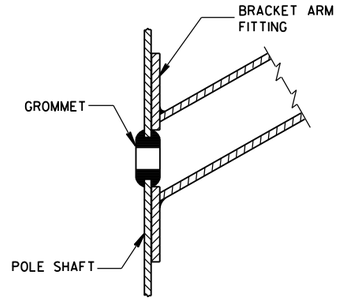
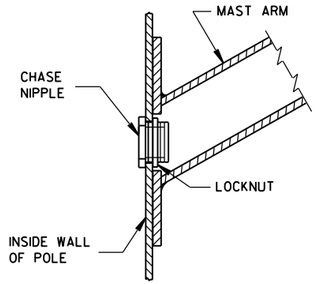


LEVELING SHIM (13)

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.

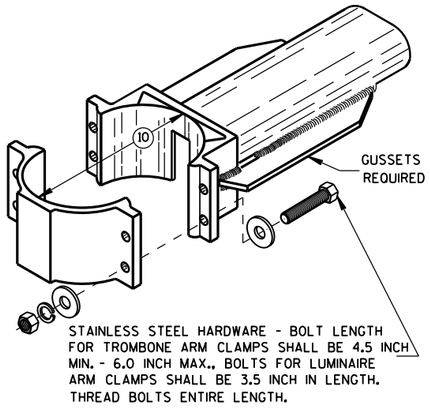
(10) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

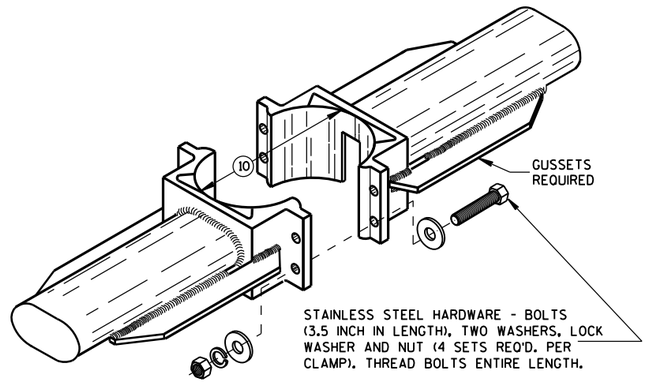
(12) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

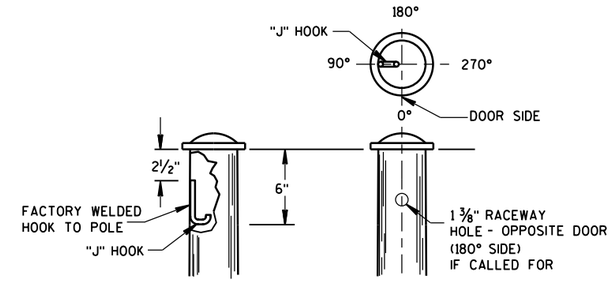
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



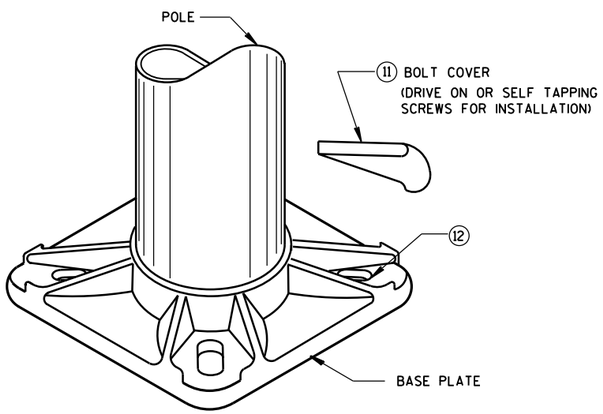
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



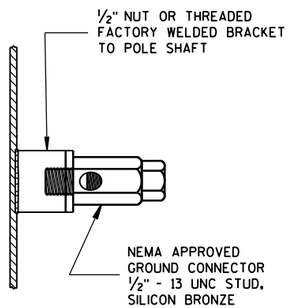
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

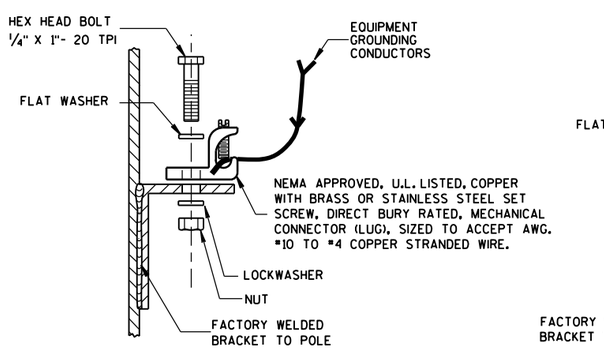


TYPICAL "J" HOOK LOCATION



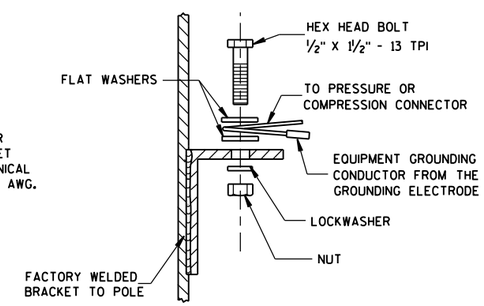
BASE PLATE





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
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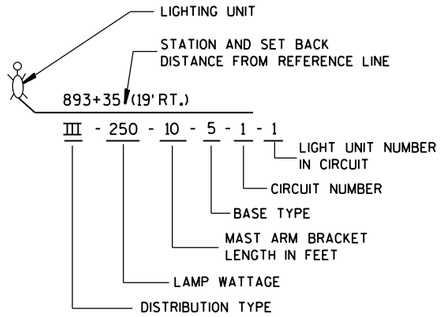
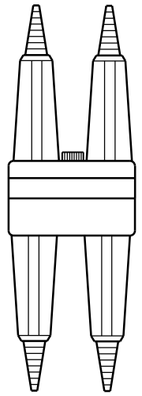
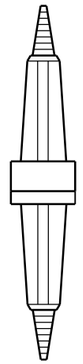


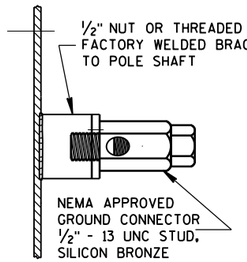
LIGHTING UNIT CODE
(TYPICAL)

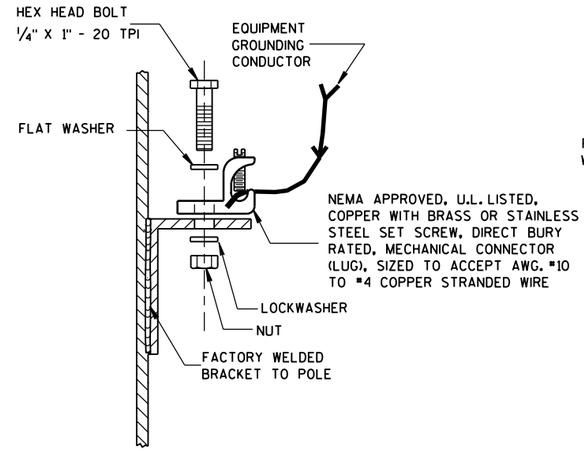


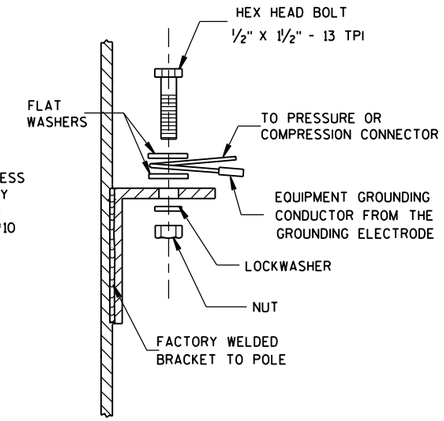
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



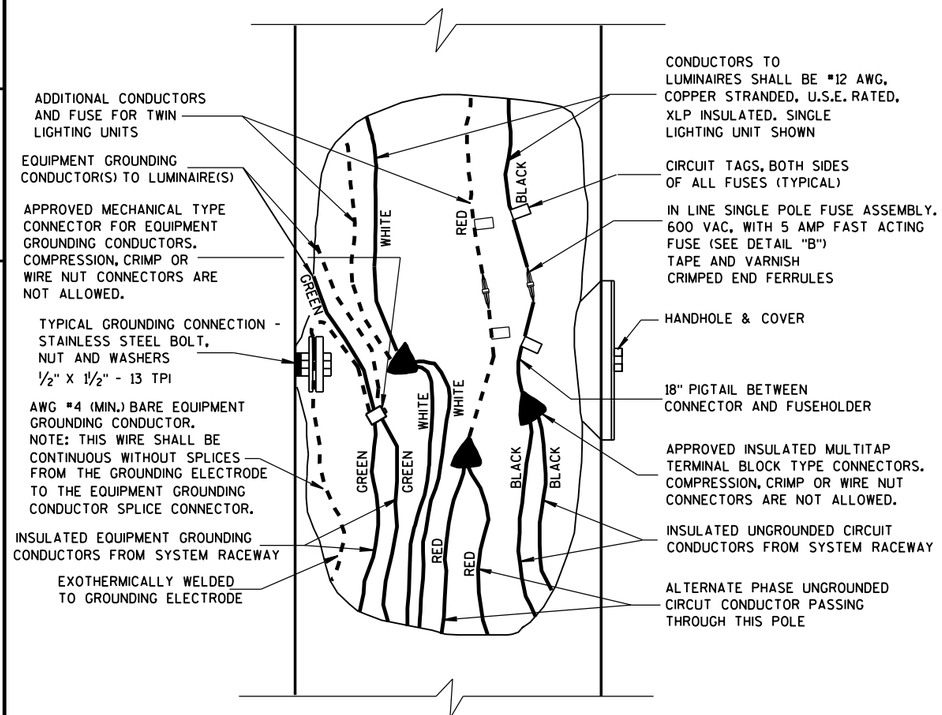
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



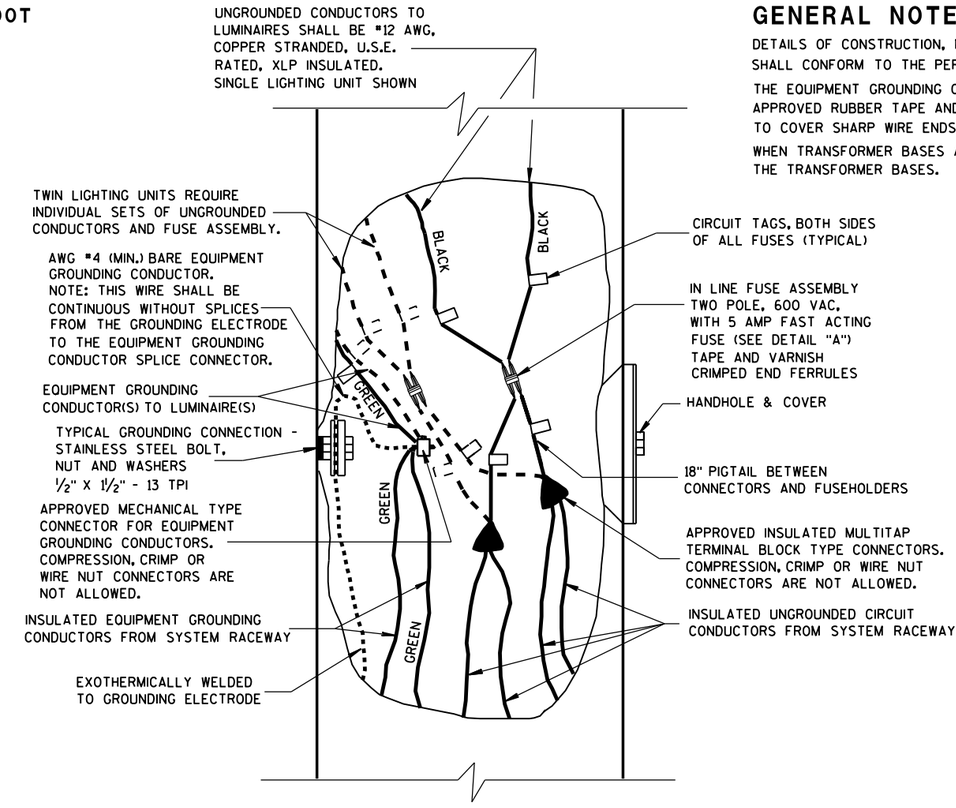




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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
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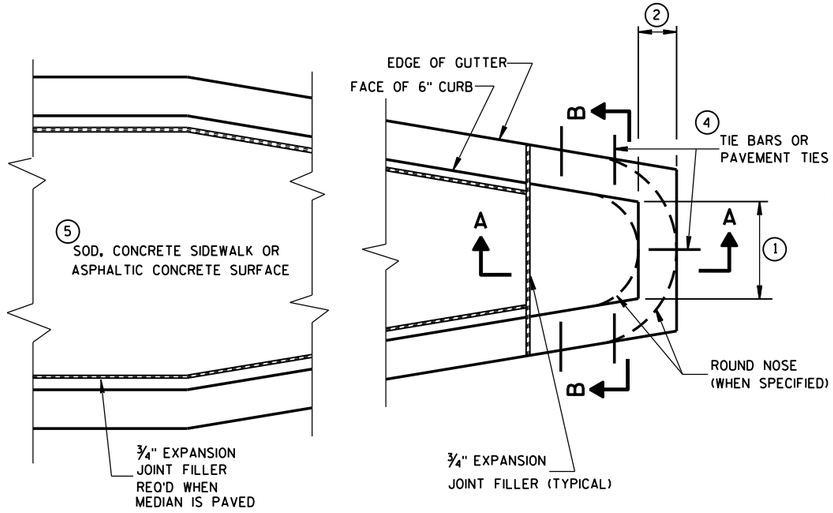
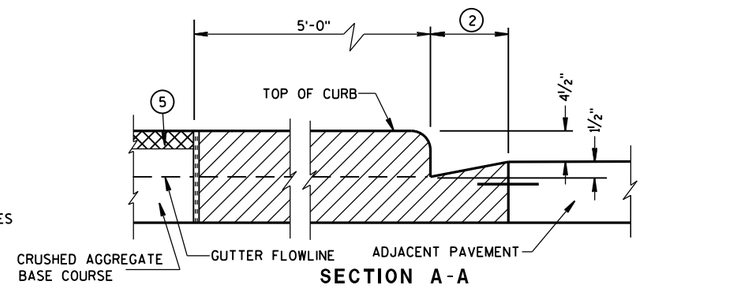
S.D.D. 9 E 3-5





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.

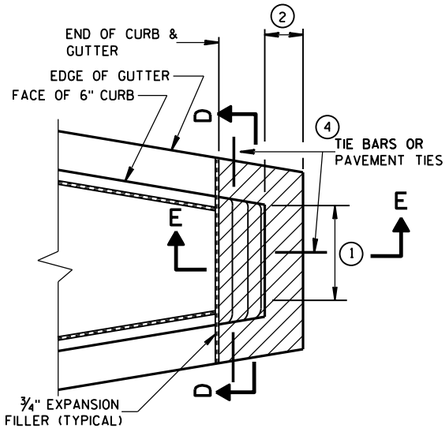
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

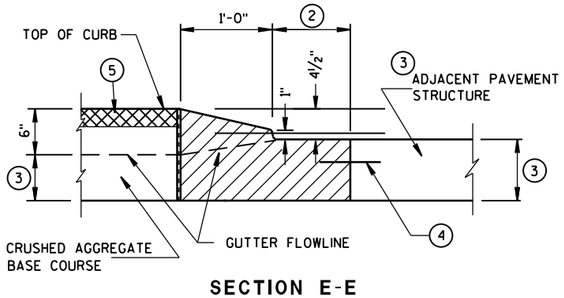
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

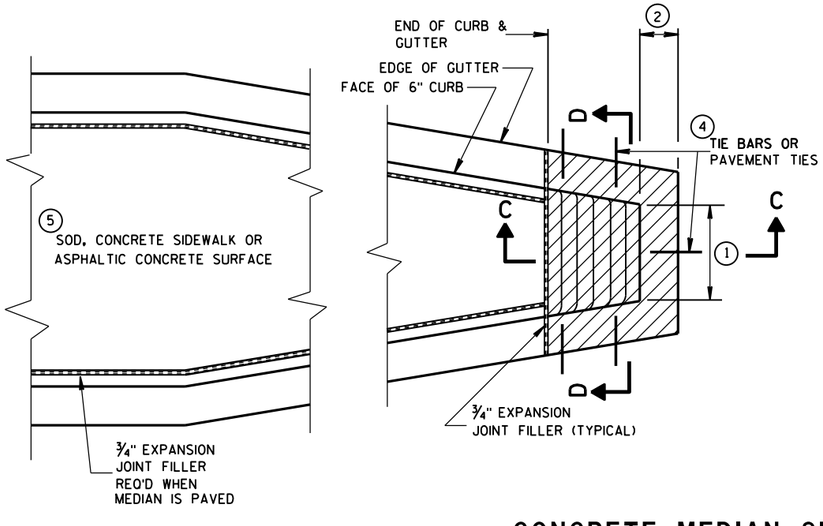
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

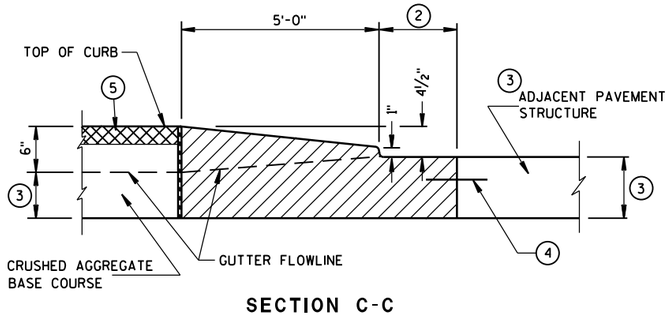




SECTION E-E

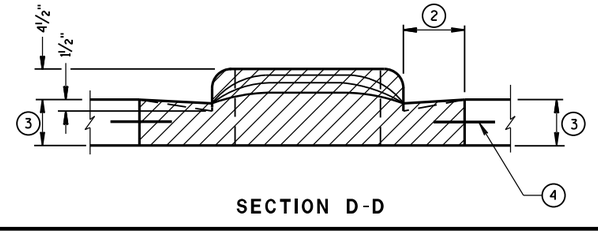
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

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

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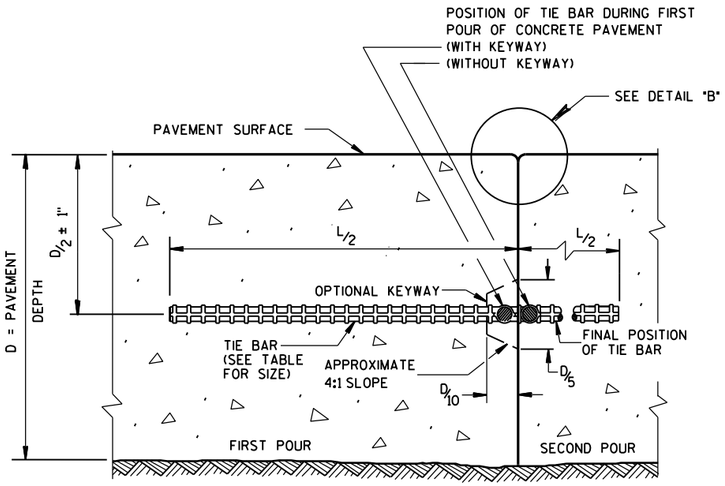
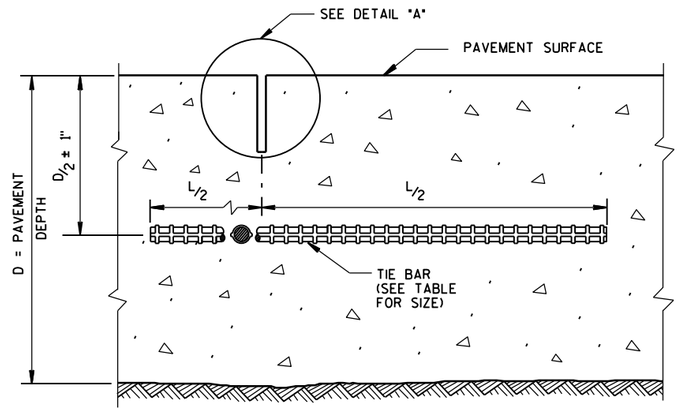
S.D.D. 11 B 2-2



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

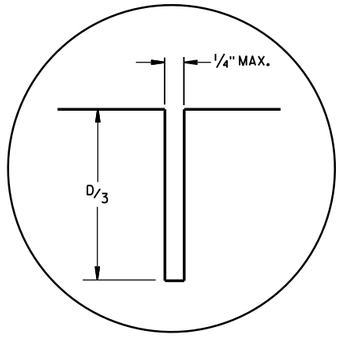
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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

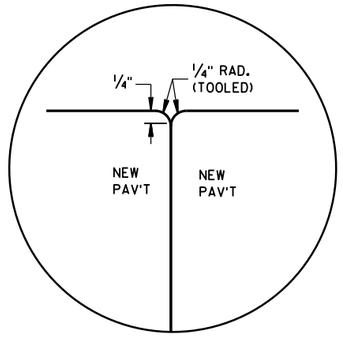
PLAN VIEW

SECTION A-A

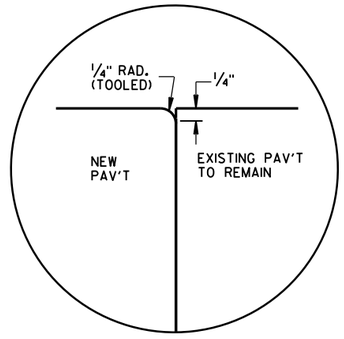
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



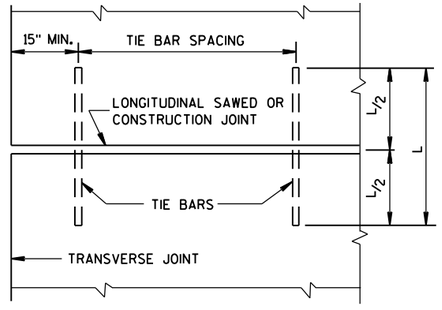
DETAIL "C"

TIE BAR TABLE

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

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 13 C 1-18

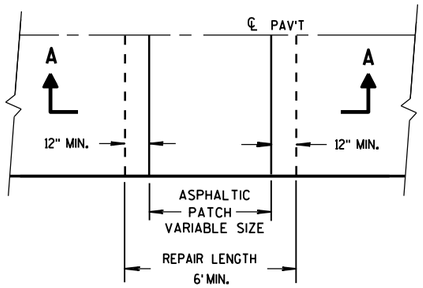
GENERAL NOTES

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

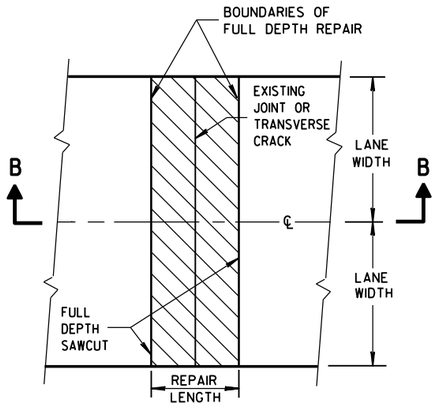
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

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

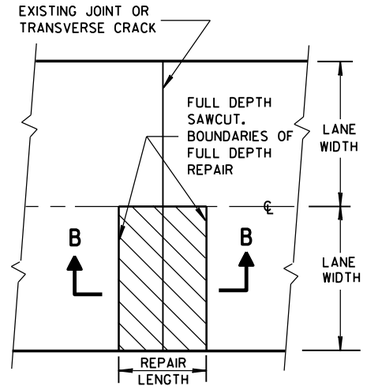
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

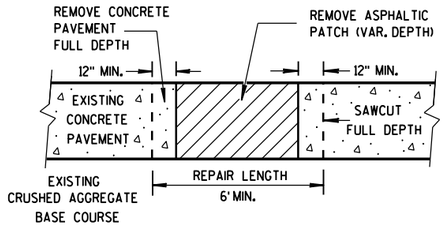


PLAN VIEW
(DOUBLE LANE REPAIR)



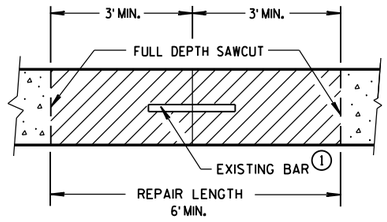
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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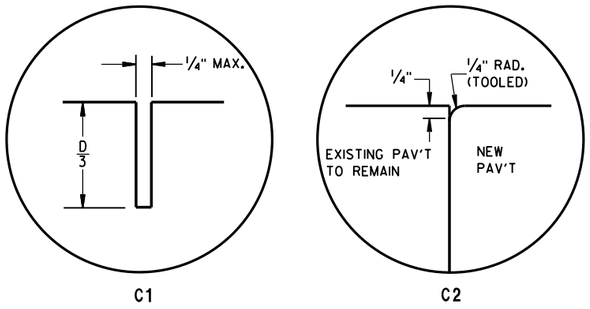
S.D.D. 13 C 9-13a



C1 C2

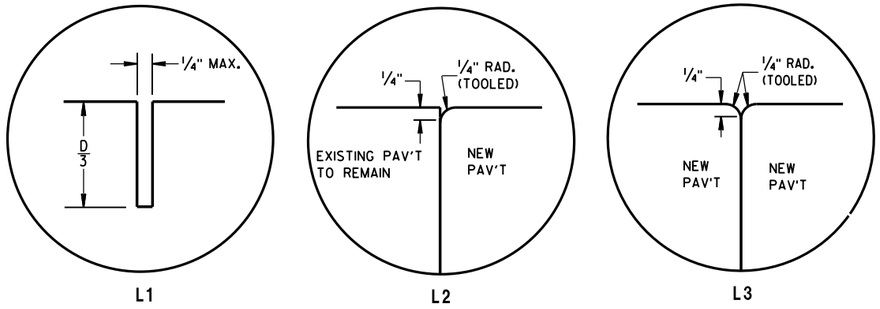
TRANSVERSE JOINTS

TIE BAR TABLE

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

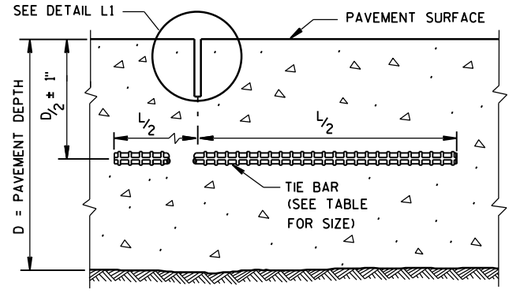
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

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

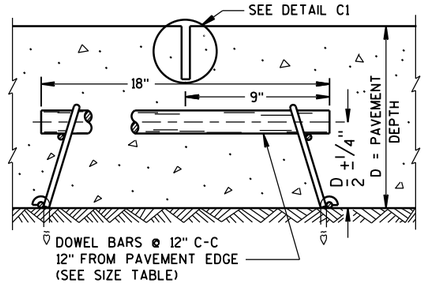
CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

DO NOT SEAL OR FILL JOINTS.

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

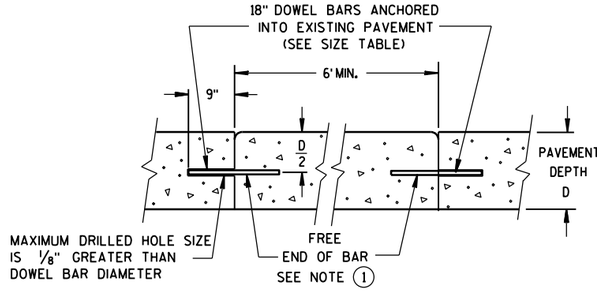
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

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

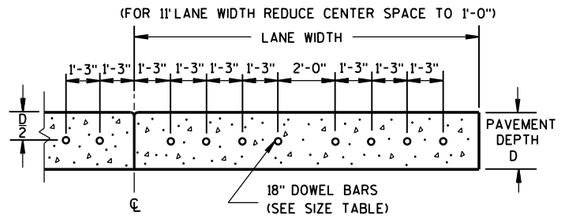


SECTION F-F

CONTRACTION JOINT



SECTION D-D

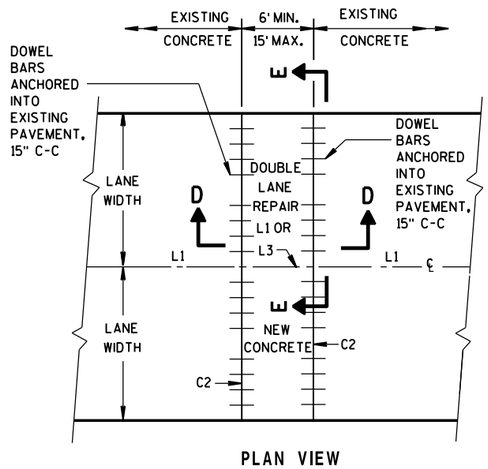


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

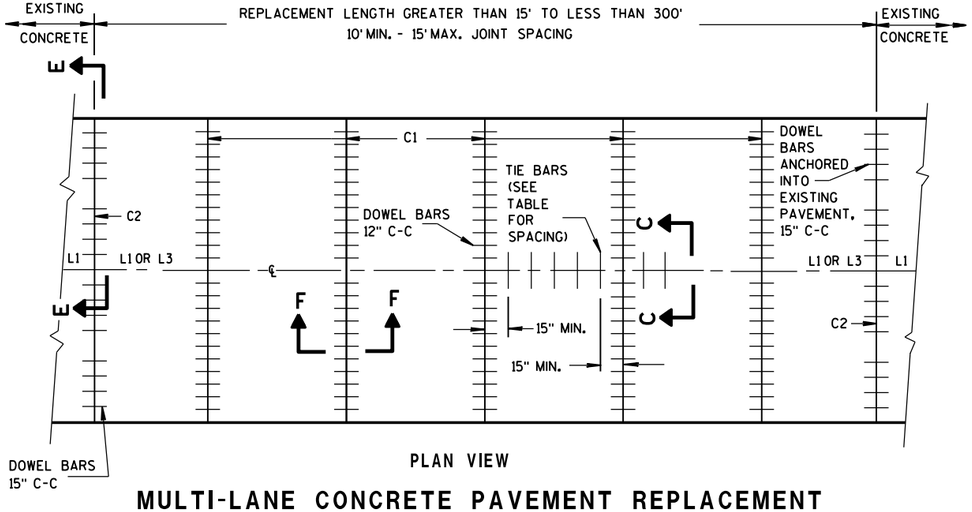
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

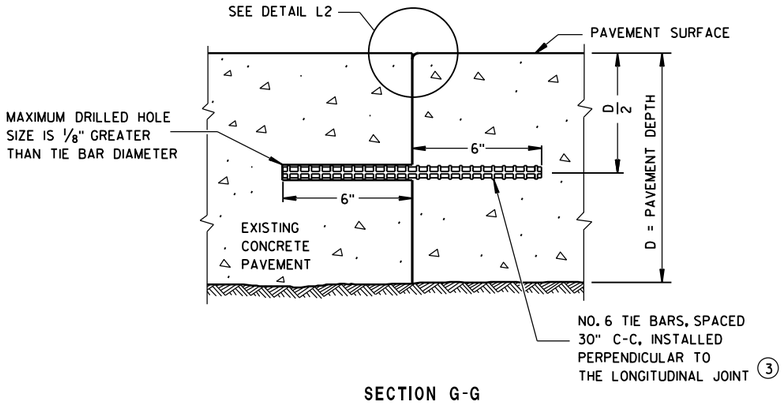
MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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



SECTION G-G

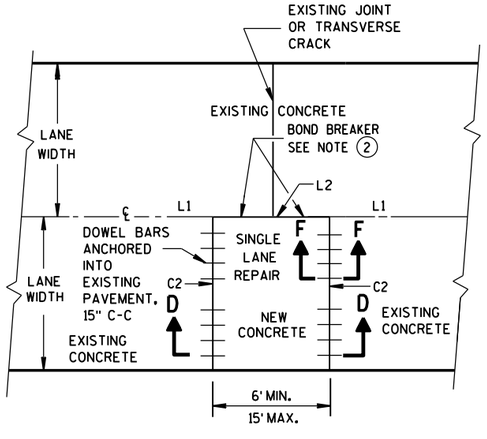
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

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

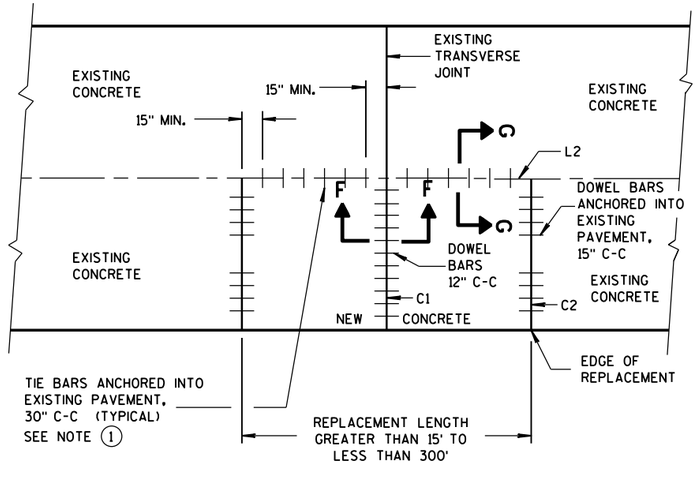
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

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



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

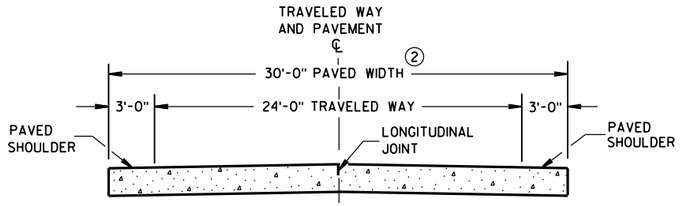
CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

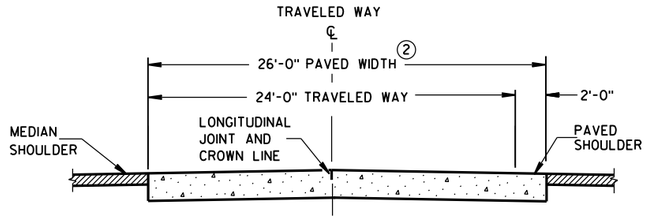
6

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

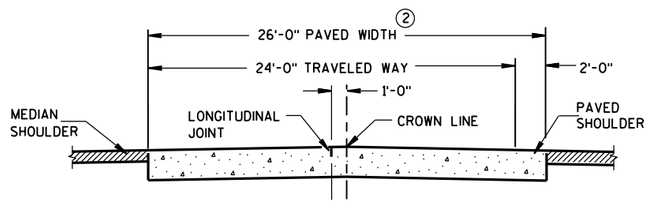


SECTION A-A ①

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

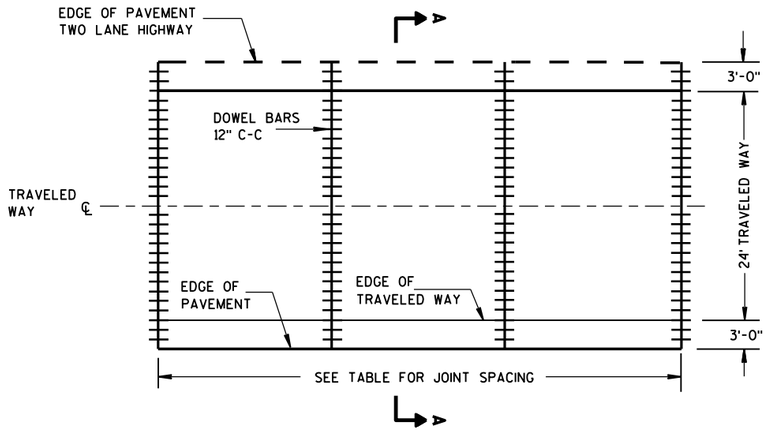
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

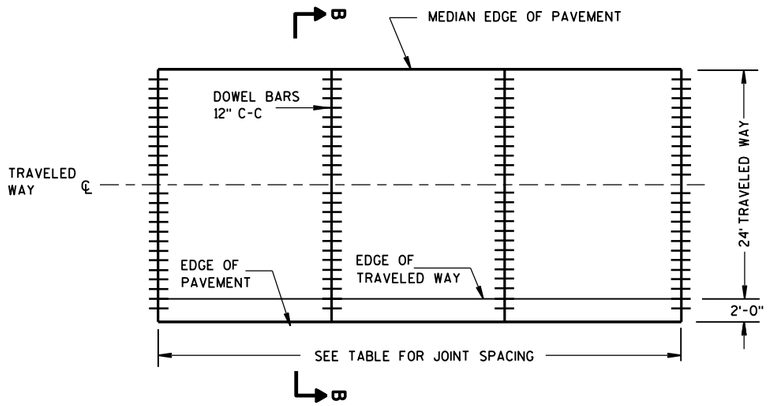
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

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



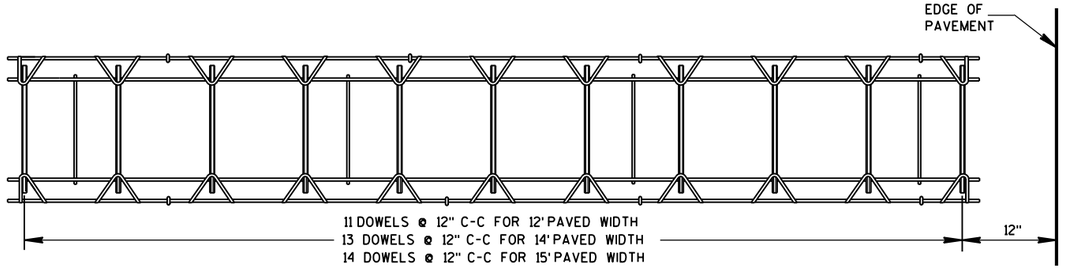
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

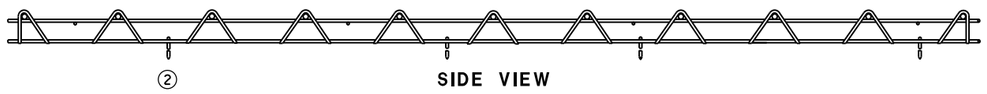
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 C 11-11a



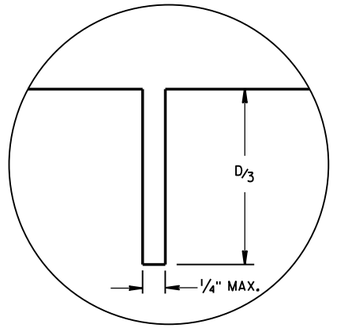
PLAN VIEW



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.

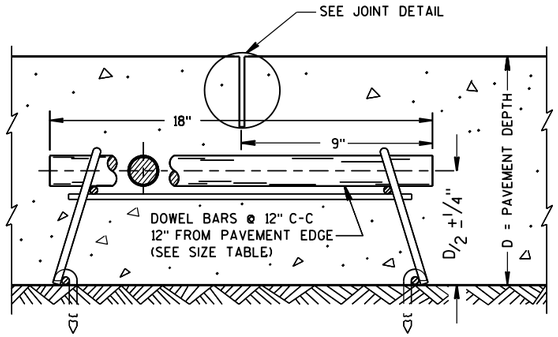
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

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

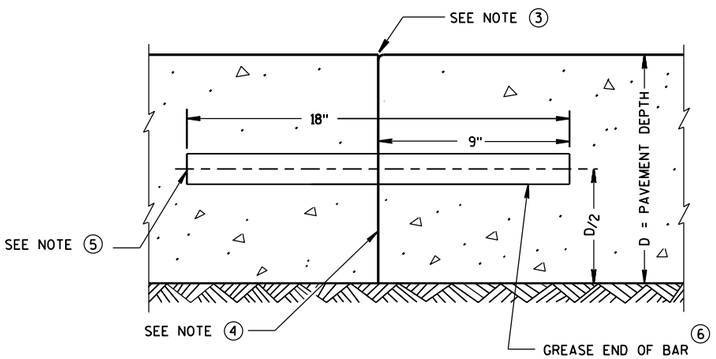
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL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

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

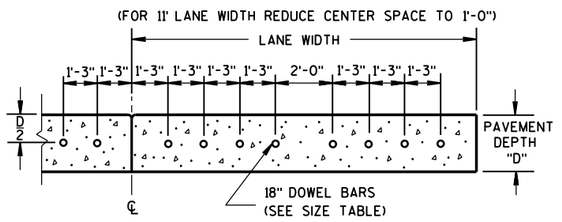
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



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 ...NEER
FHWA

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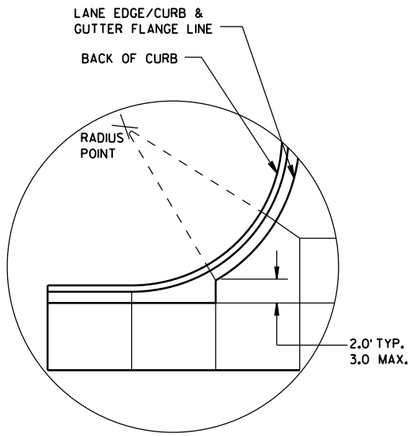
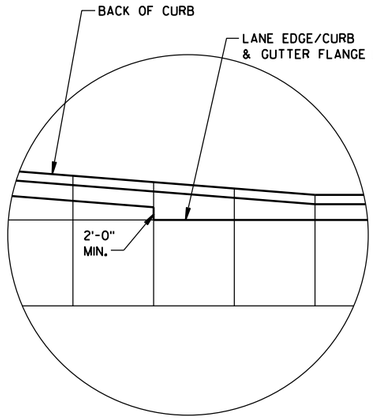
S.D.D. 13 C 11-11b

6

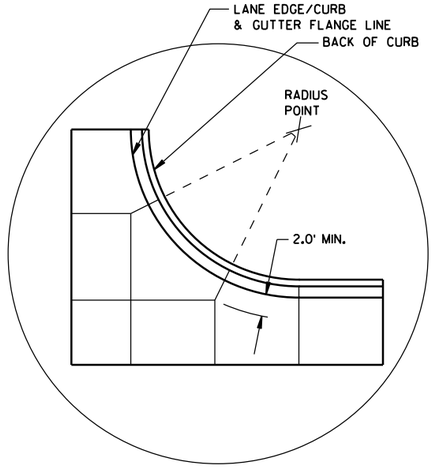
S.D.D. 13 C 11-11b



DETAIL "A"



DETAIL "B"



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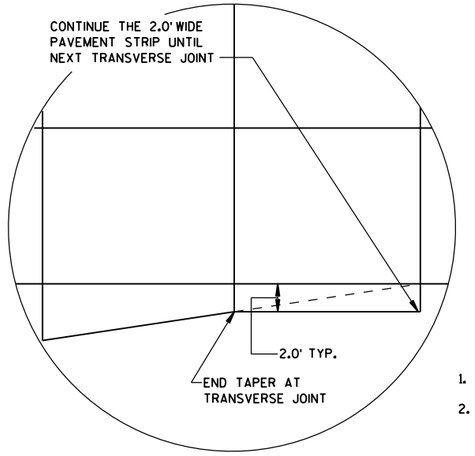


DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

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

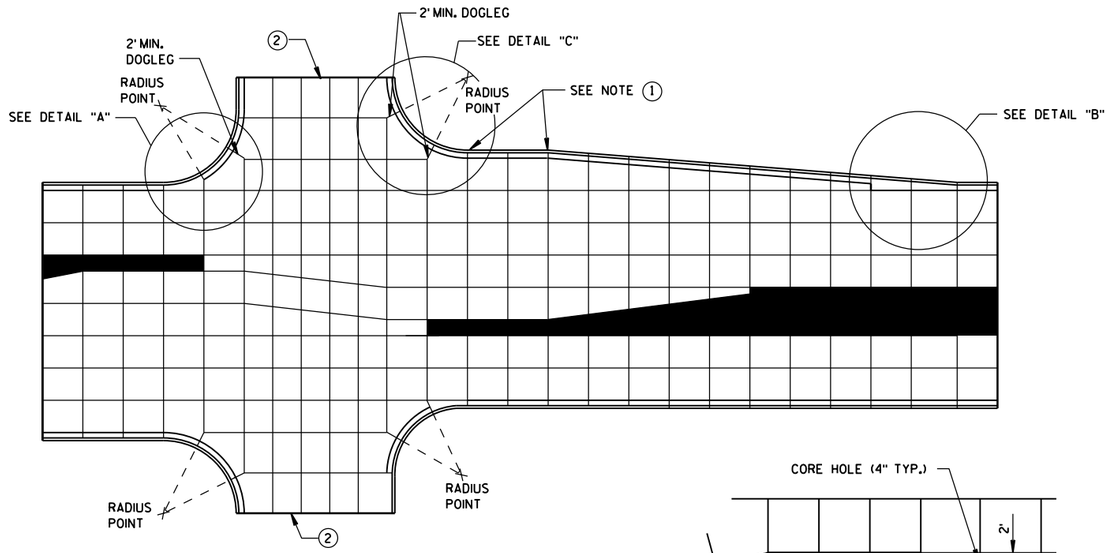
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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

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

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

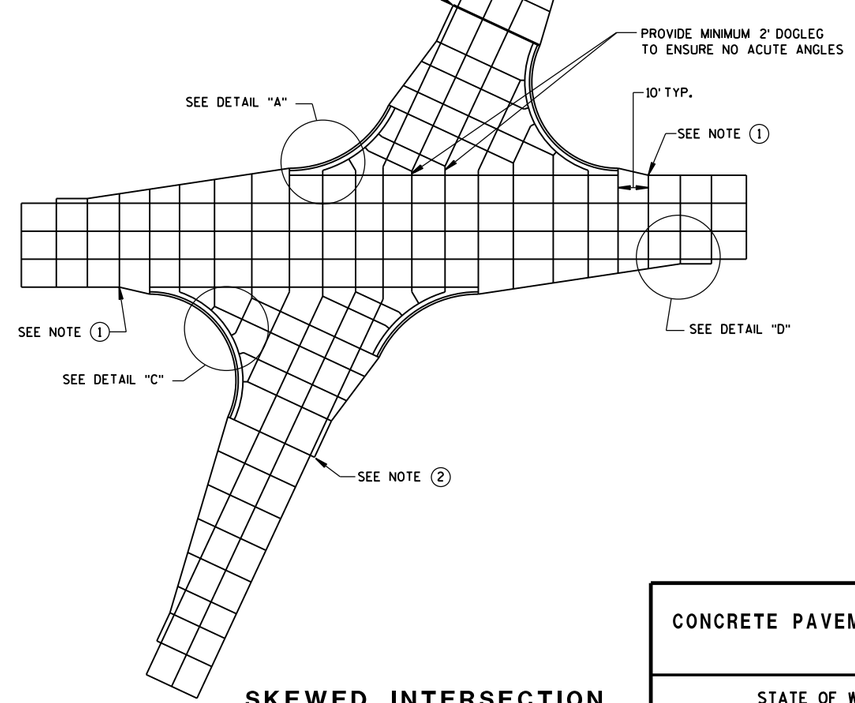
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM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



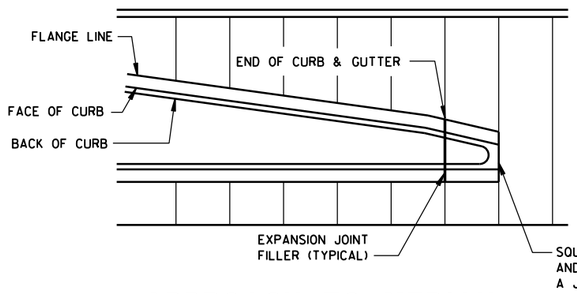
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

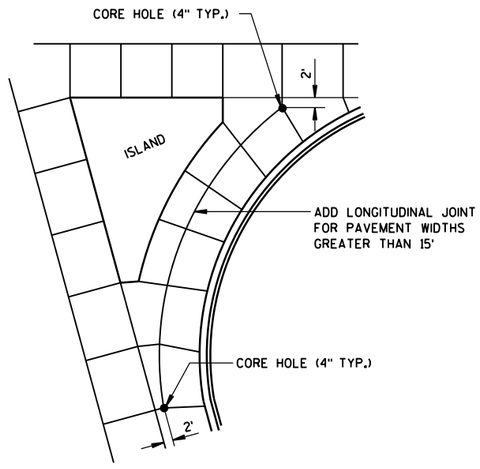
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 134

6

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

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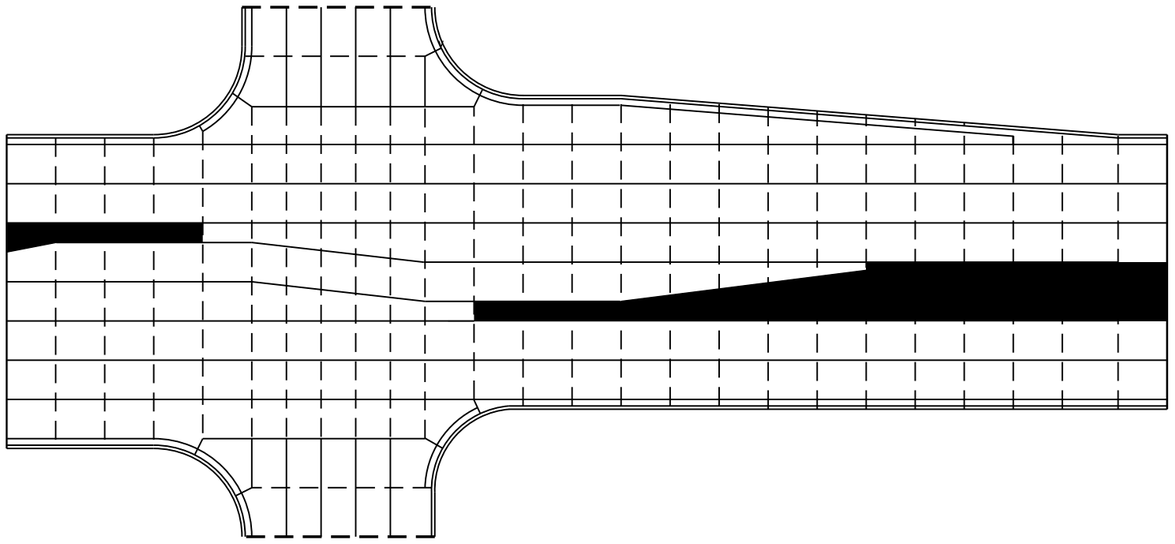
S.D.D. 13 C 18-3a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

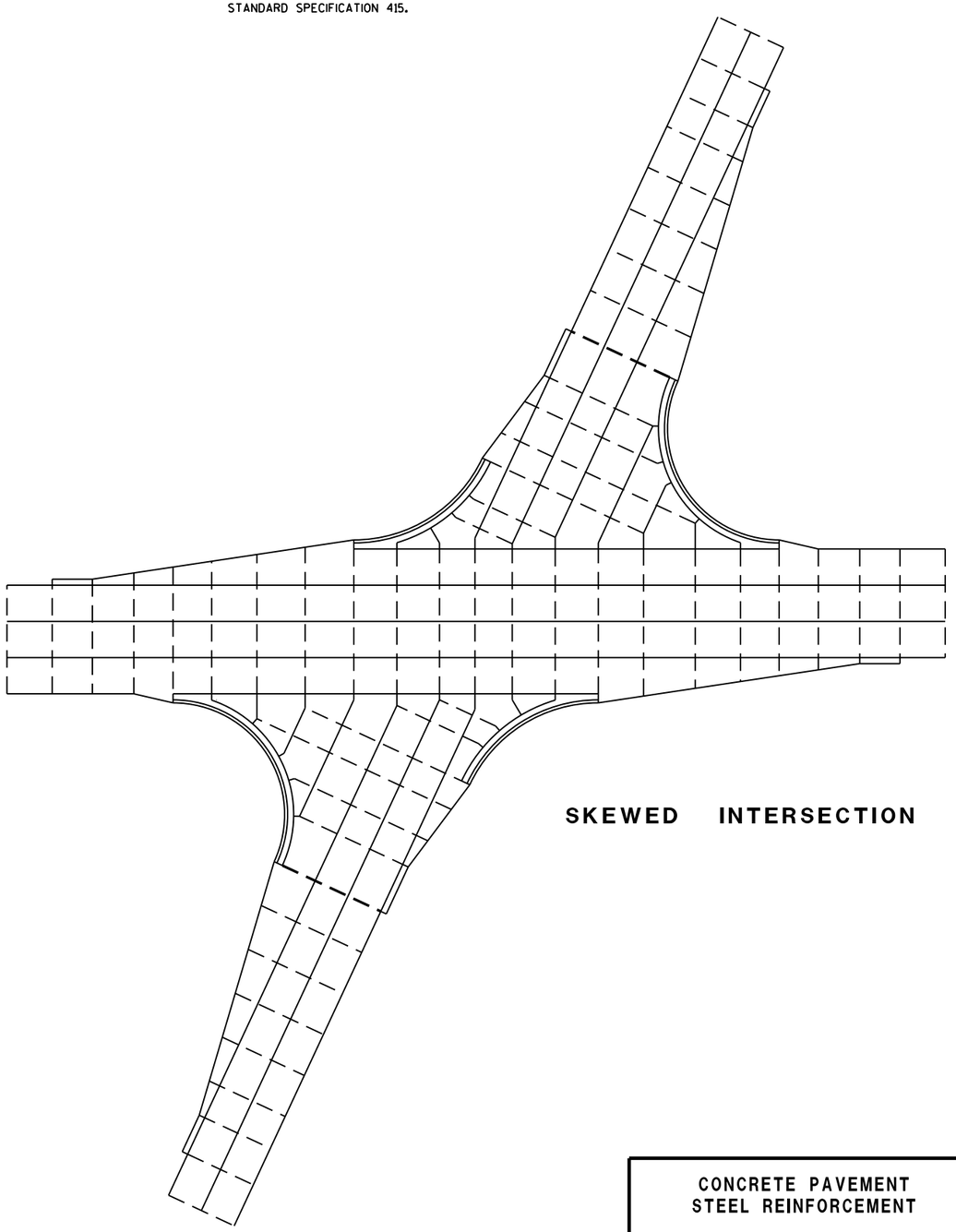
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

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



SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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

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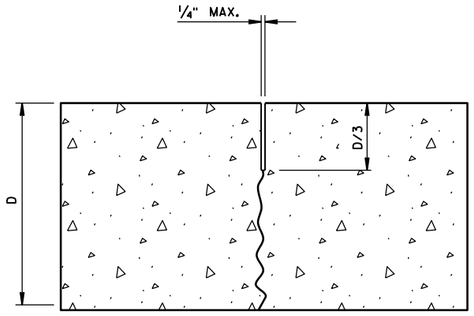
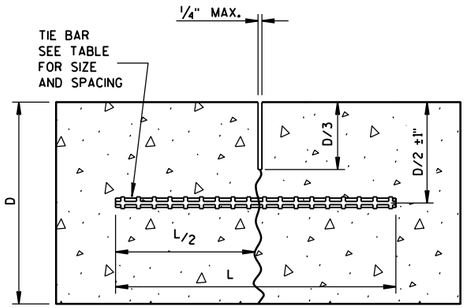
S.D.D. 13 C 18-3b



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

TIE BAR TABLE

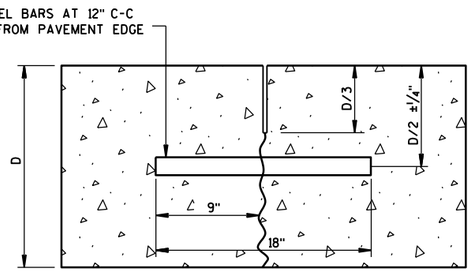
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* 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

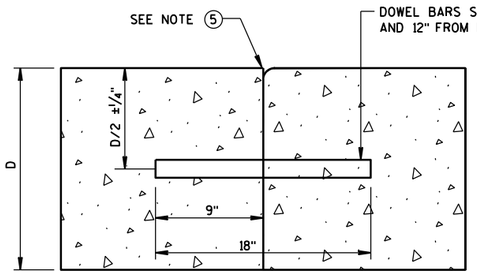
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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.



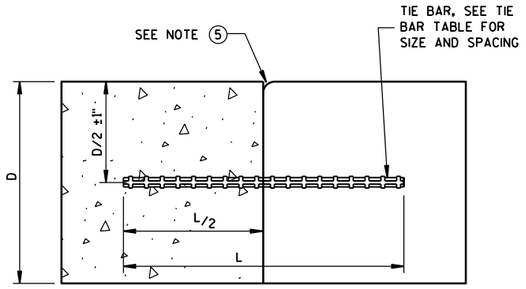
DOWELED-TRANSVERSE

CONTRACTION JOINTS

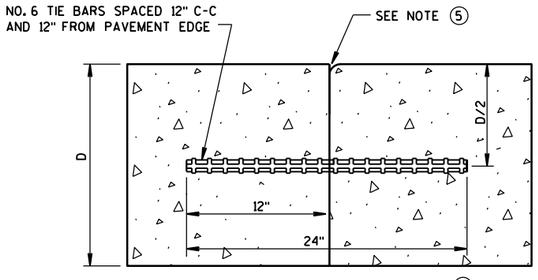
SEE NOTE (2)



DOWELED TRANSVERSE (3)

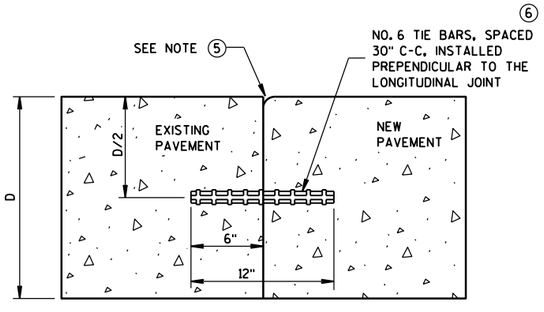


TIED LONGITUDINAL



TIED TRANSVERSE (3)

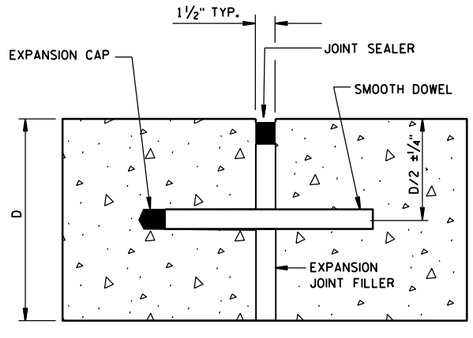
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

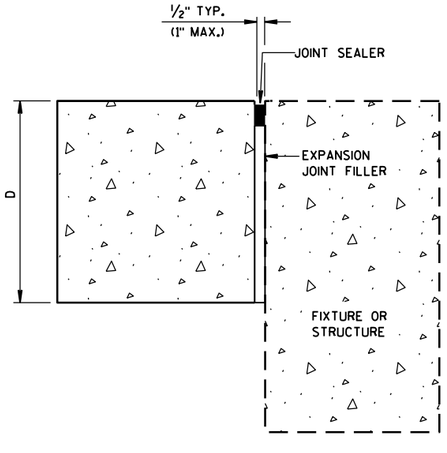
CONSTRUCTION JOINTS

SEE NOTE (4)



DOWELED-TRANSVERSE

SEE NOTE (1)



UNTIED-LONGITUDINAL

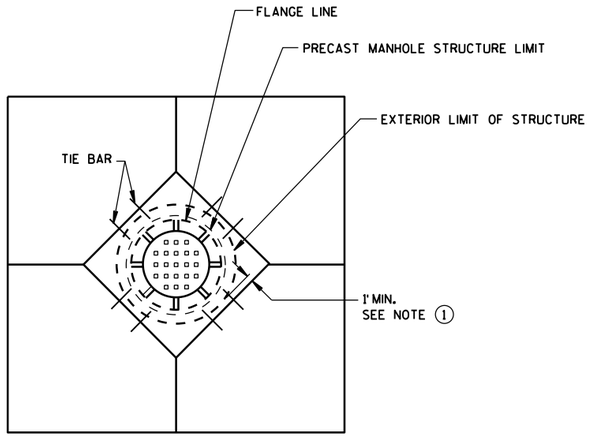
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

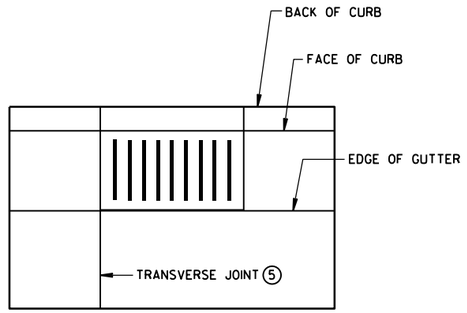
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

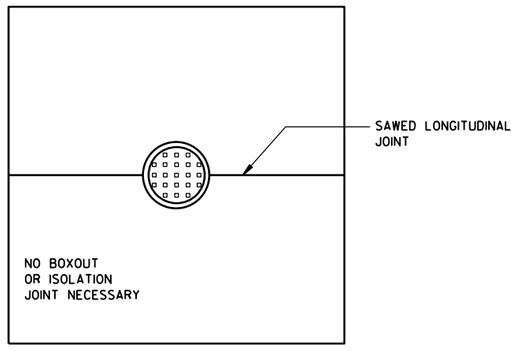
S.D.D. 13 C 18-3c



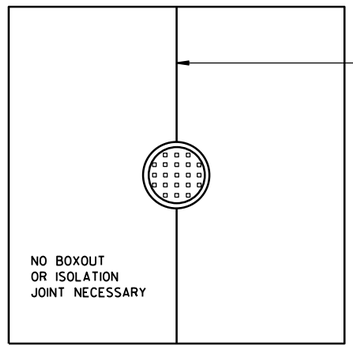
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



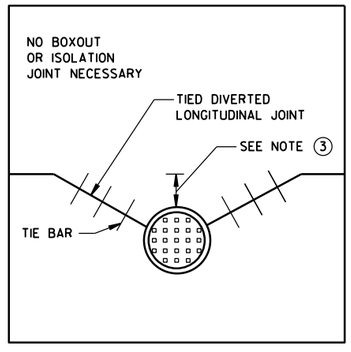
INLET WITH TRANSVERSE JOINT



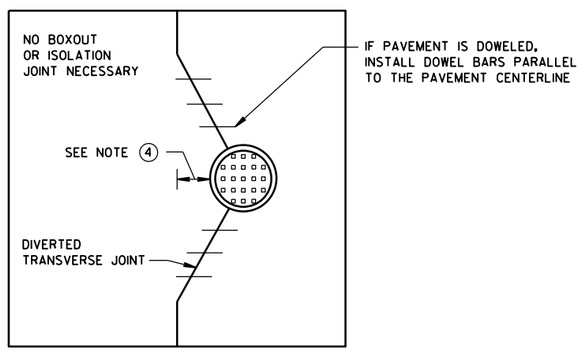
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

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

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

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

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

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

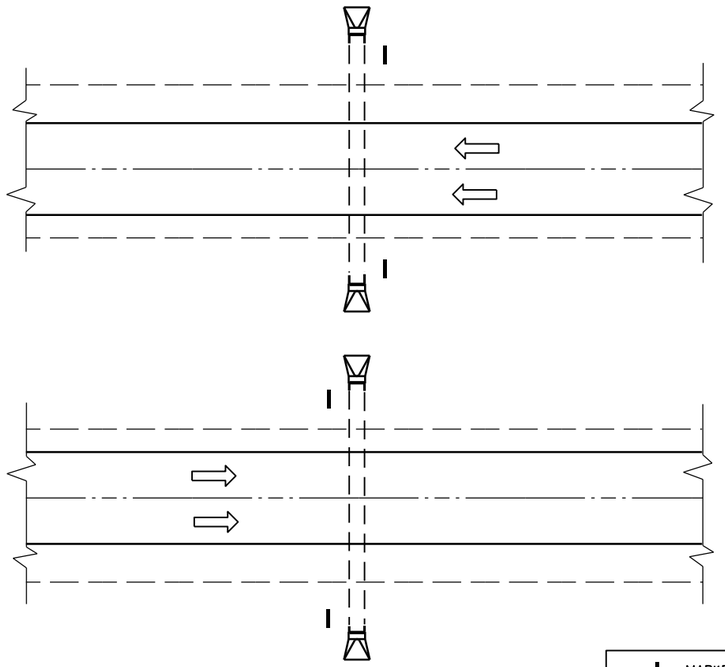
CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

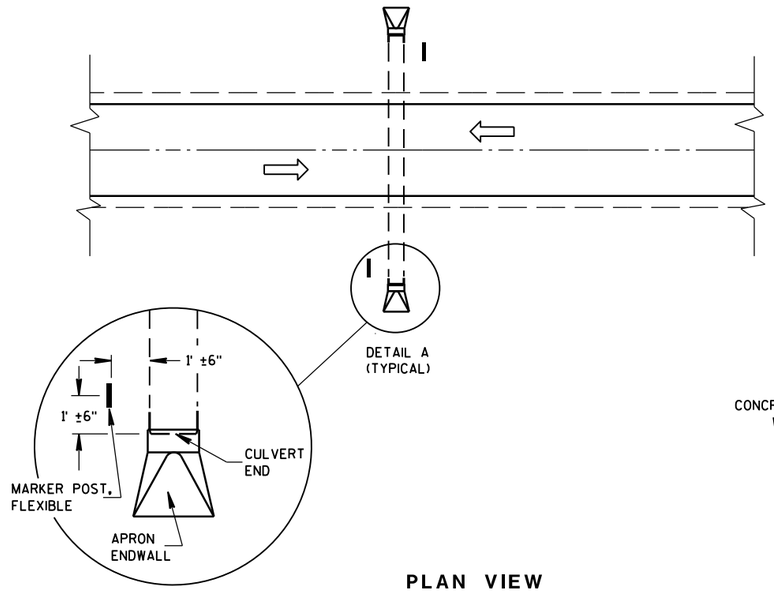
6

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



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

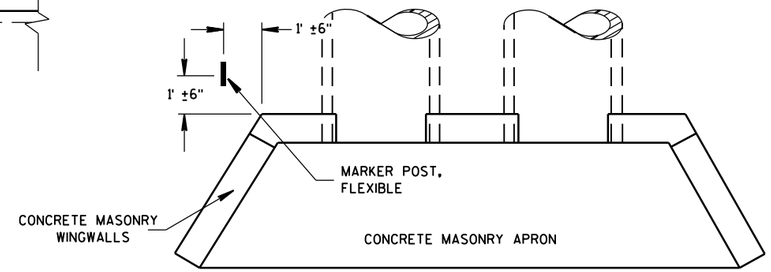
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

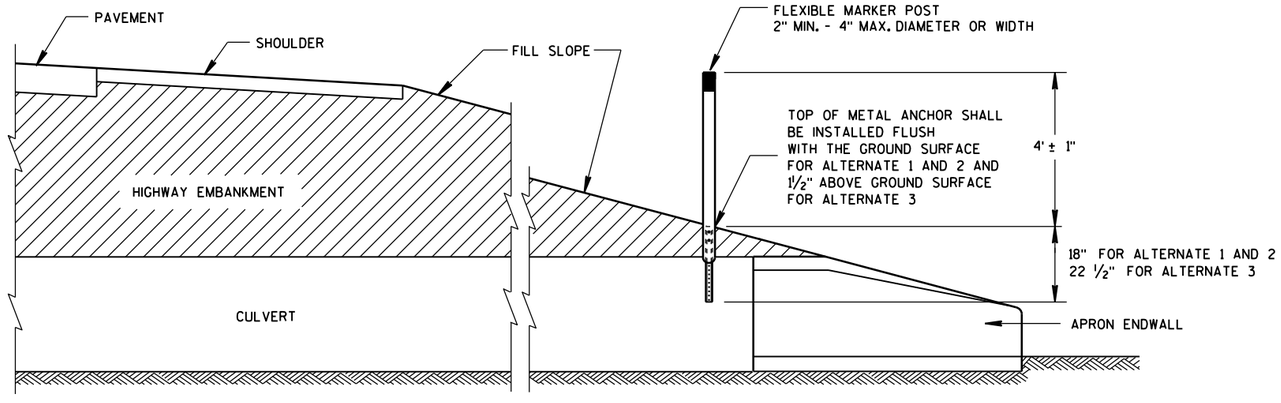
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

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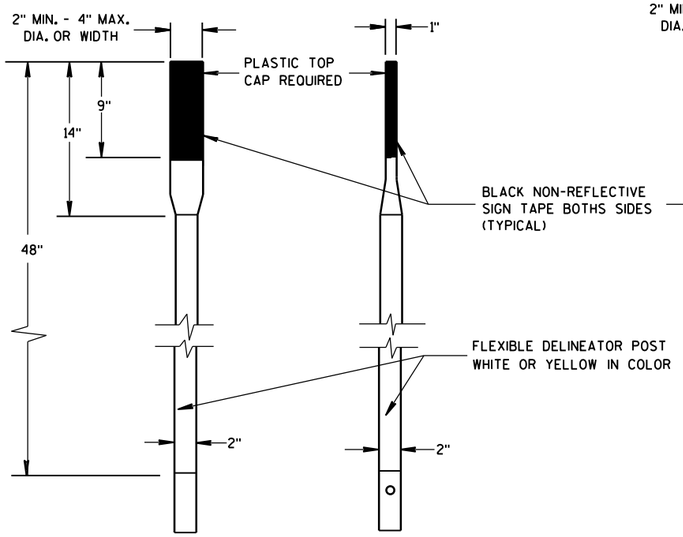
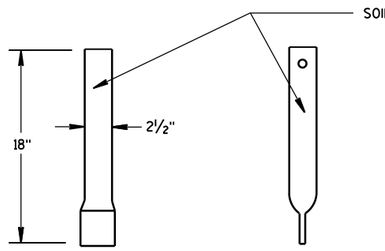
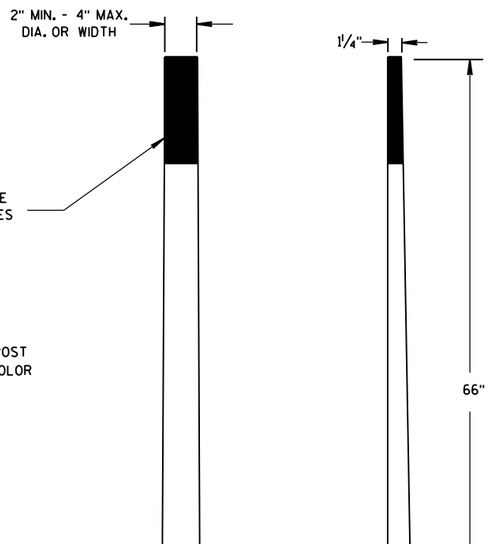
S.D.D. 15 A 3-2a





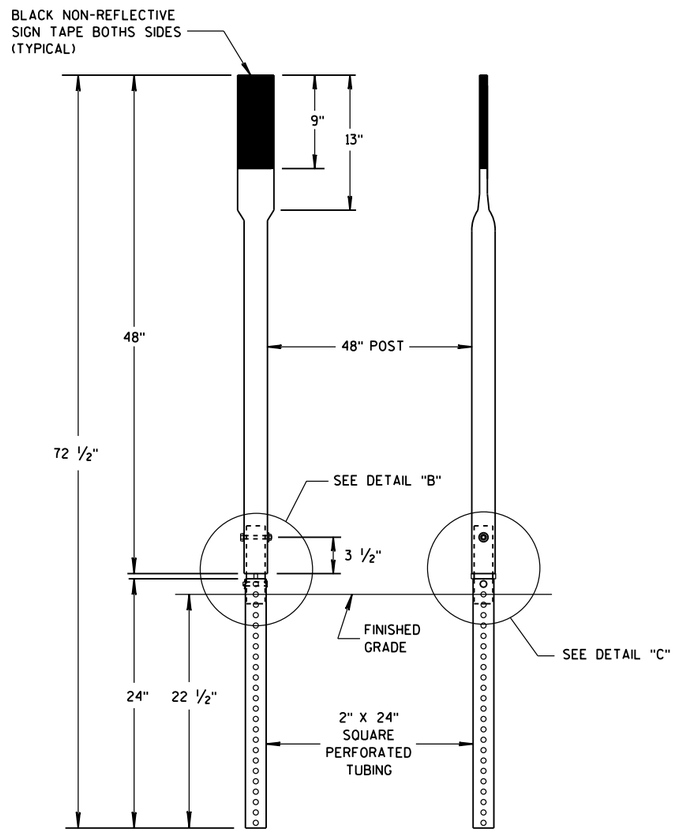
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

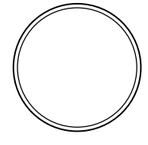
ALTERNATE 2



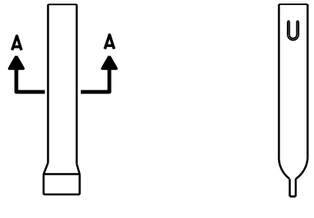
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

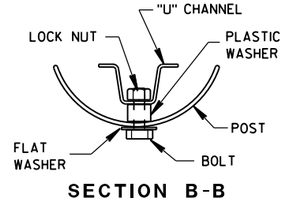


SECTION A-A

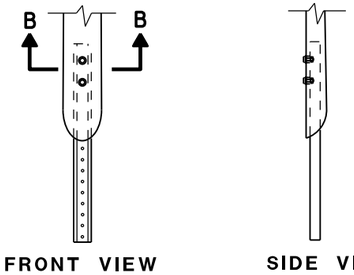


FRONT VIEW SIDE VIEW

ALTERNATE 1

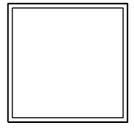


SECTION B-B

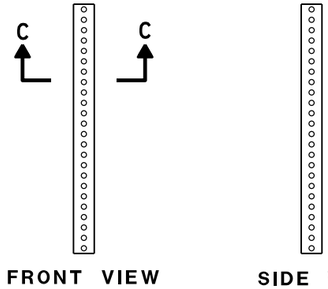


FRONT VIEW SIDE VIEW

ALTERNATE 2



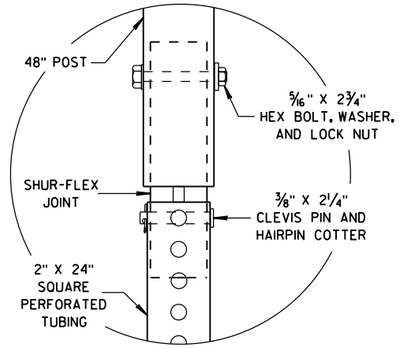
SECTION C-C



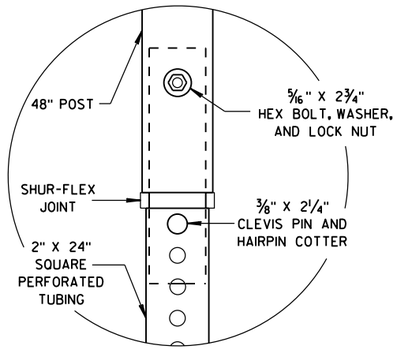
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

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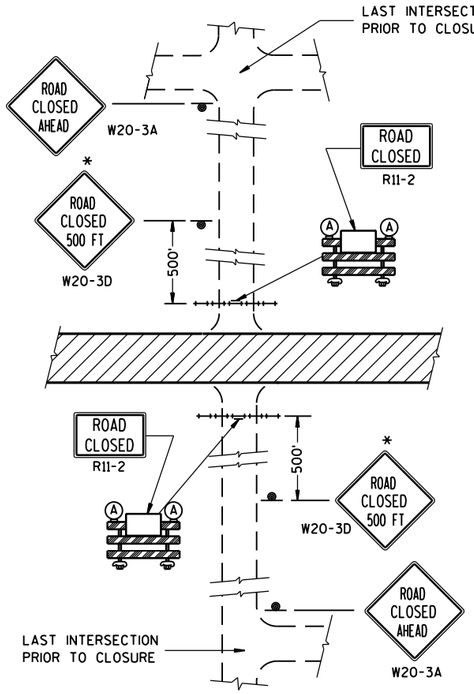
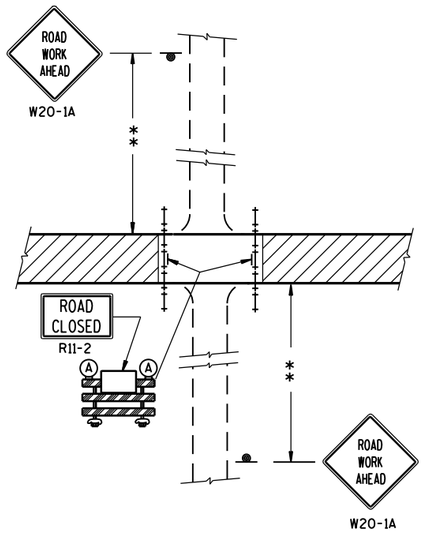
S.D.D. 15 A 3-2b



DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED.
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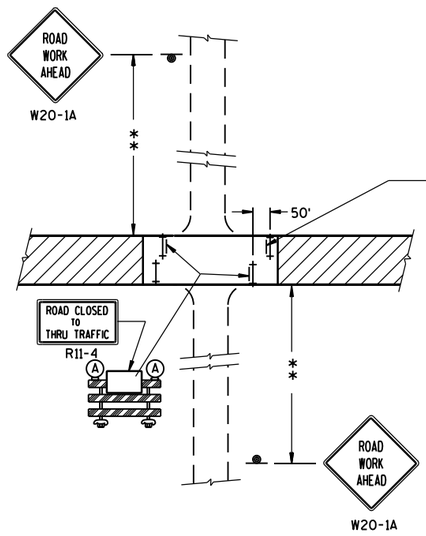
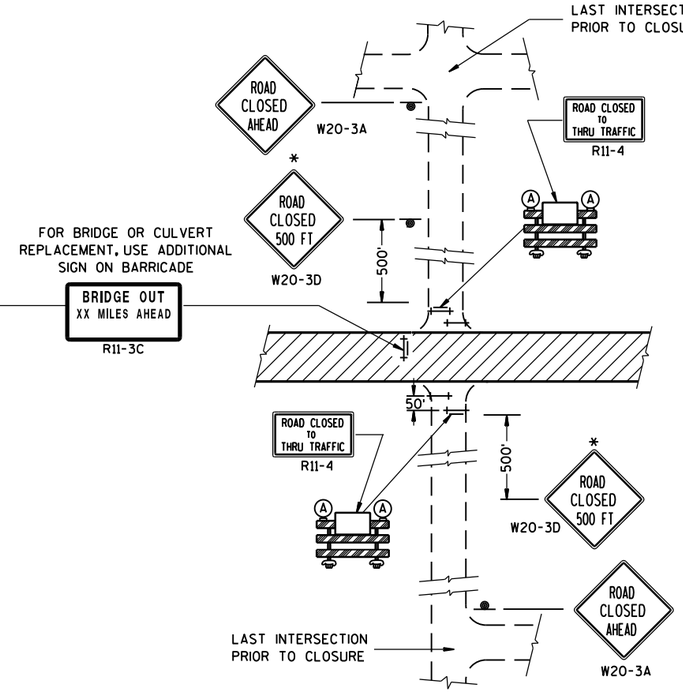


DETAIL 3

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



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

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

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

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

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

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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 — DATE
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible]FIC SAFETY ENGI[illegible]
FHWA

6

S.D.D. 15 C 3-3

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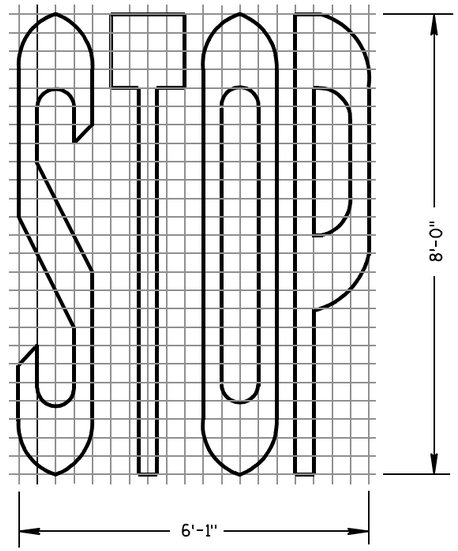
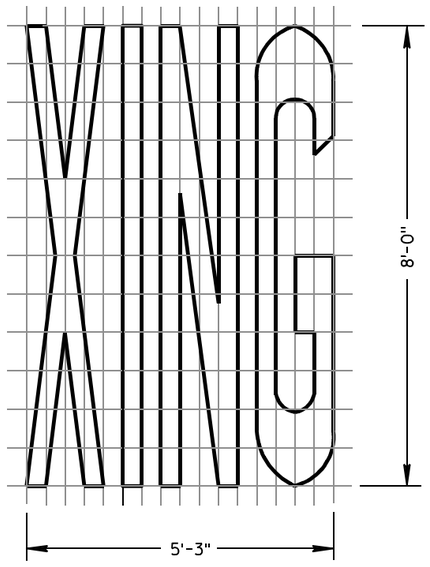
S.D.D. 15 C 3-3

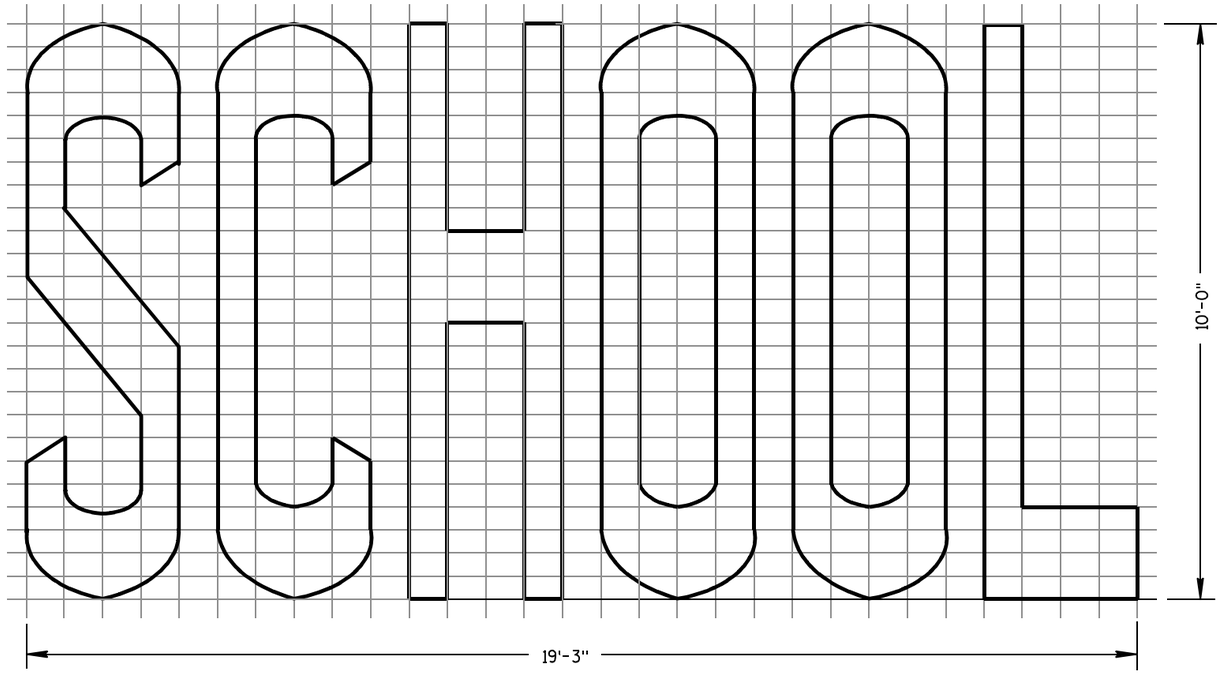
GENERAL NOTES

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

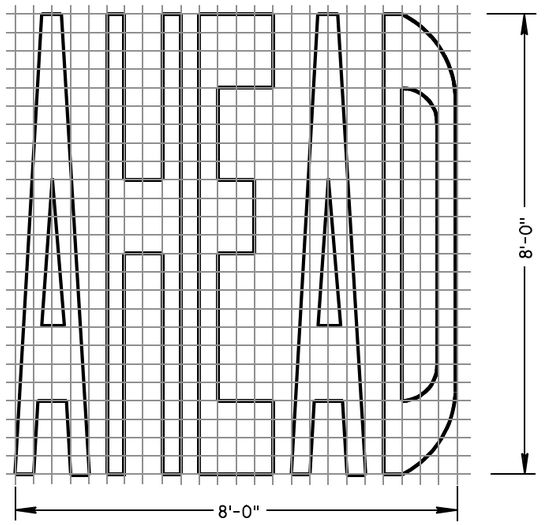
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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

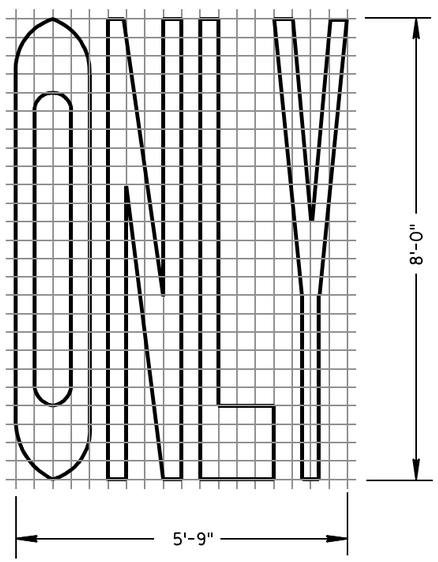


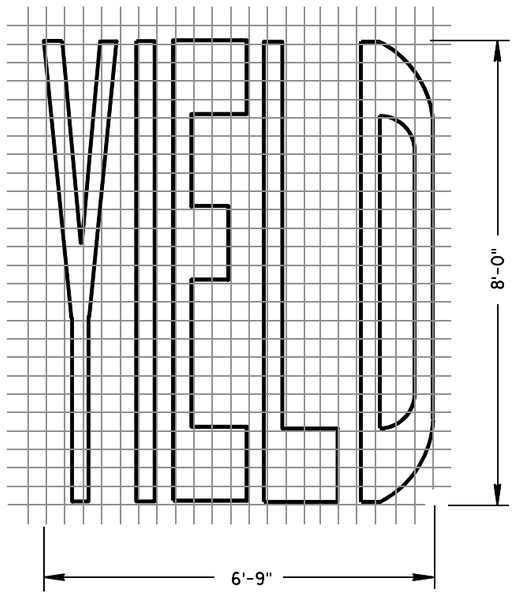


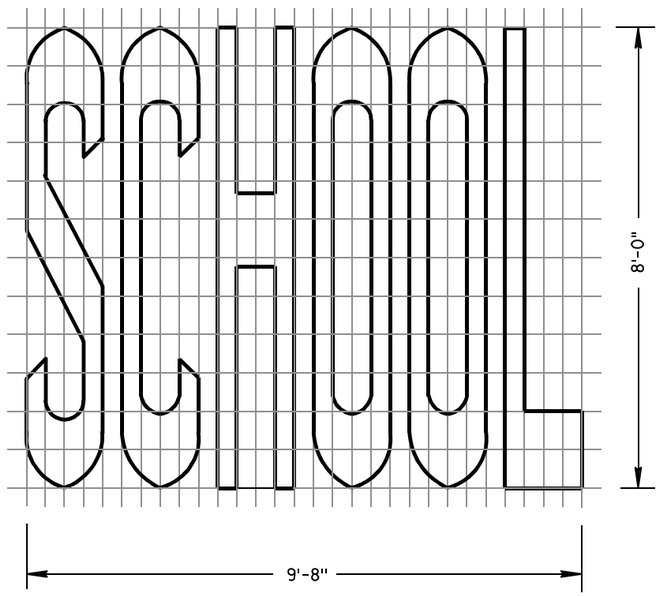


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

FHWA

6

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

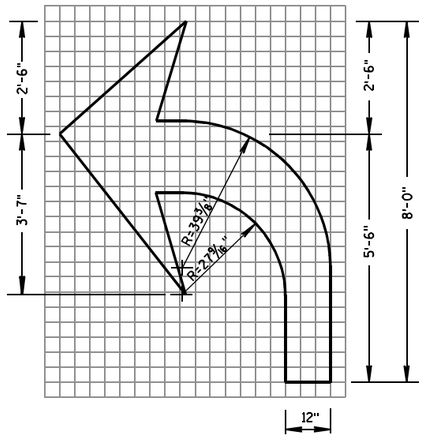
6

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

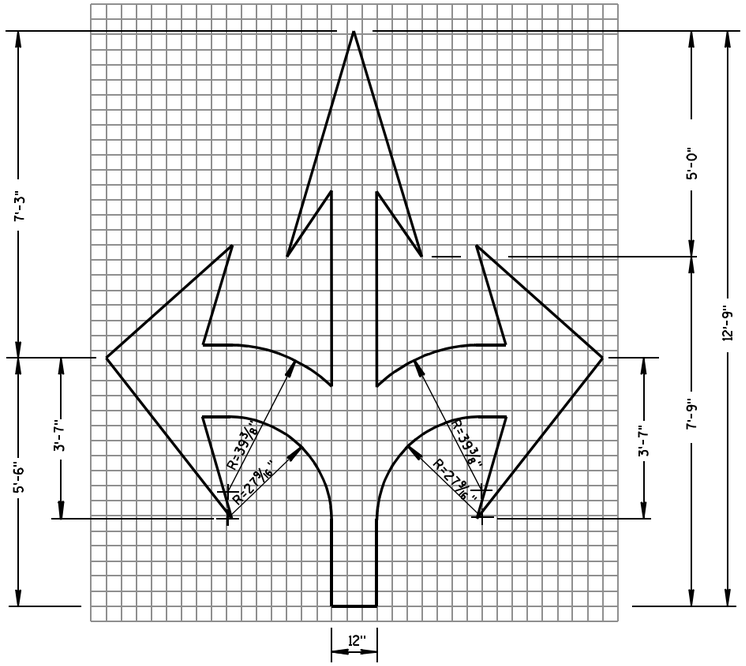
GENERAL NOTES

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

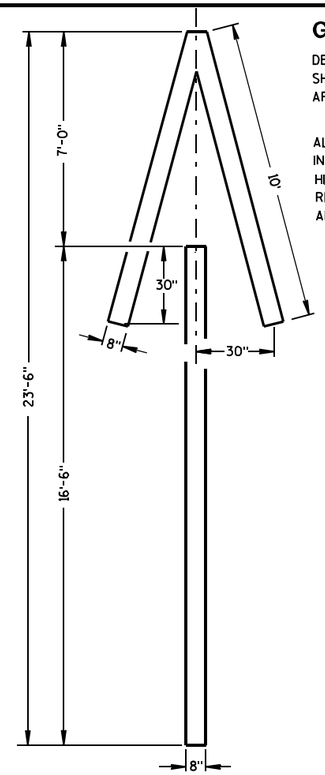
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES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



TYPE 2



TYPE 6



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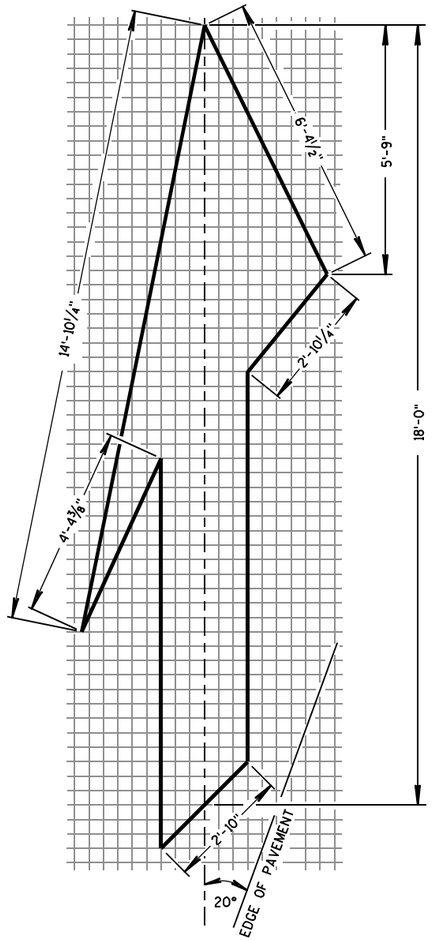
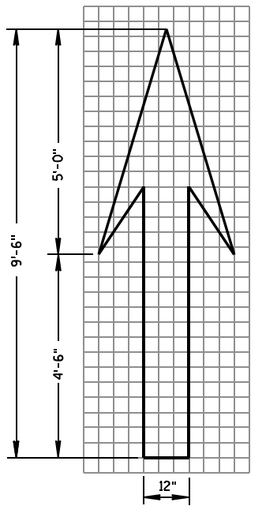
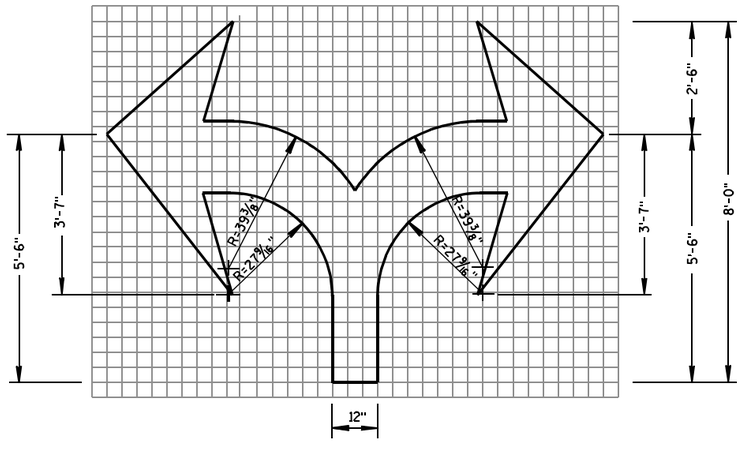


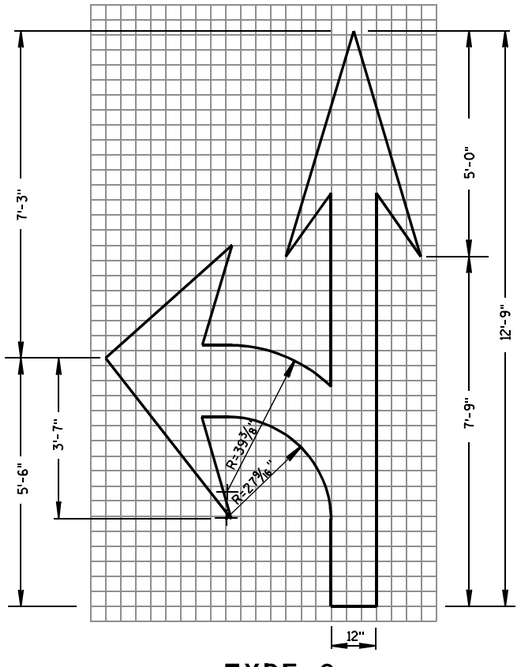
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

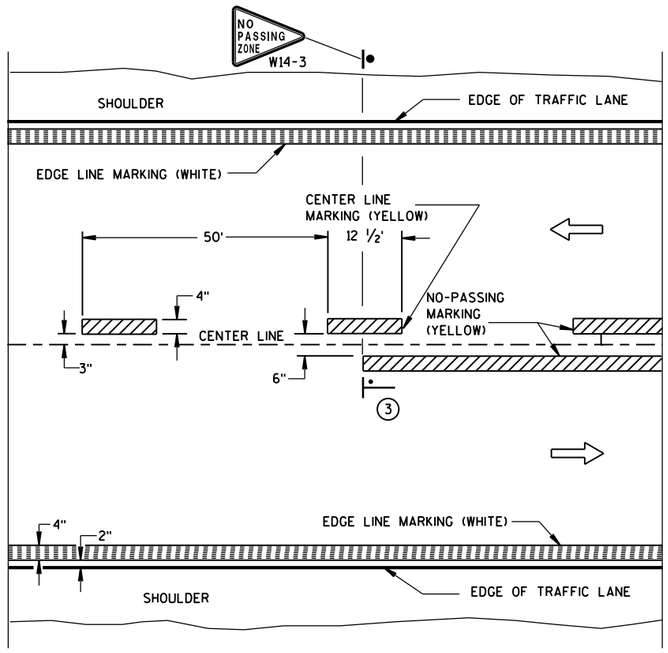
7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

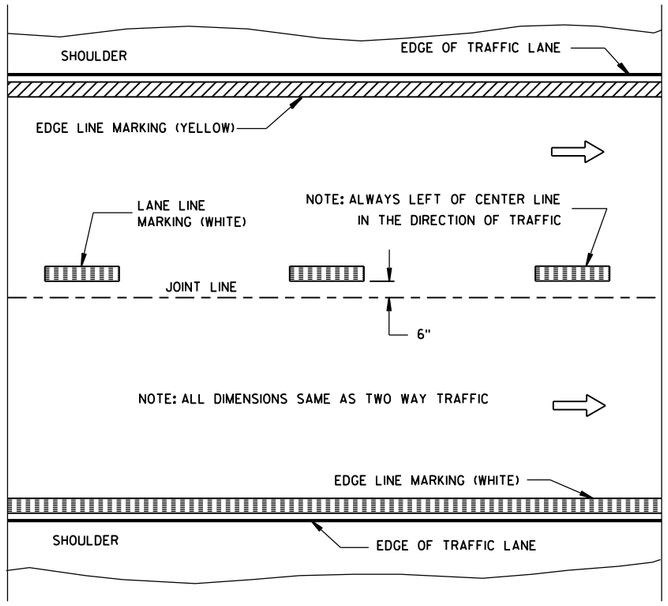
FHWA

6

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

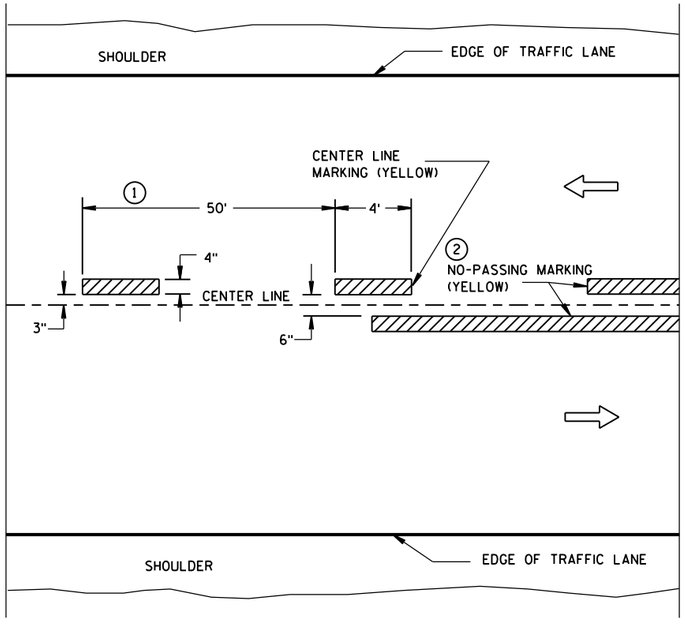


TWO WAY TRAFFIC

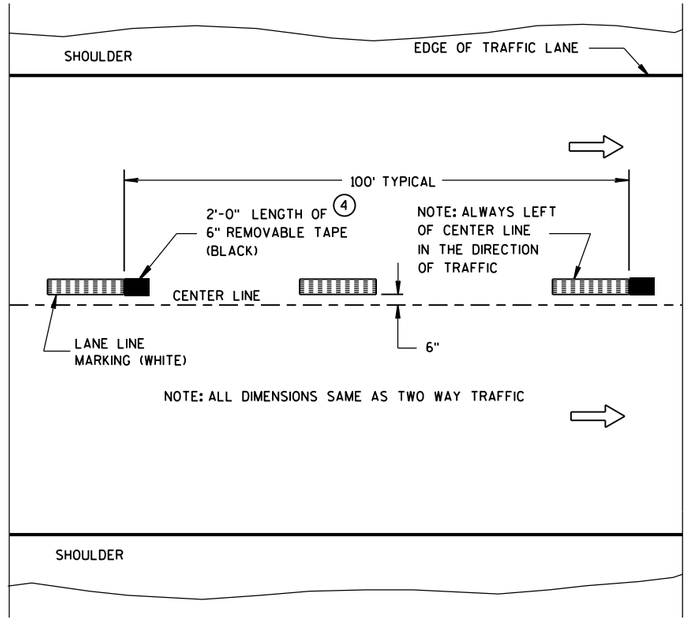


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

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

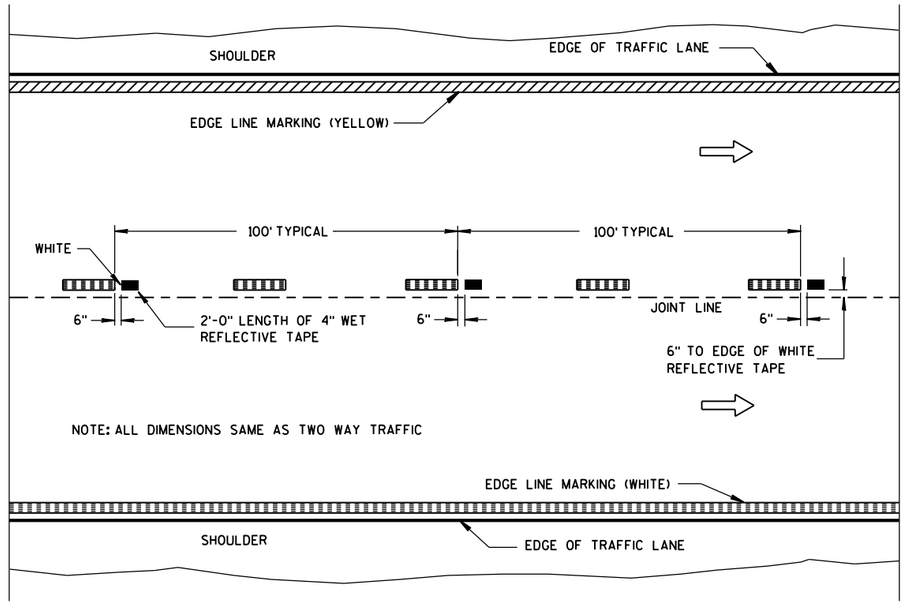
GENERAL NOTES

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

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

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013 DATE

/S/ Travis Feltes STATE TRAFFIC E

FHWA

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

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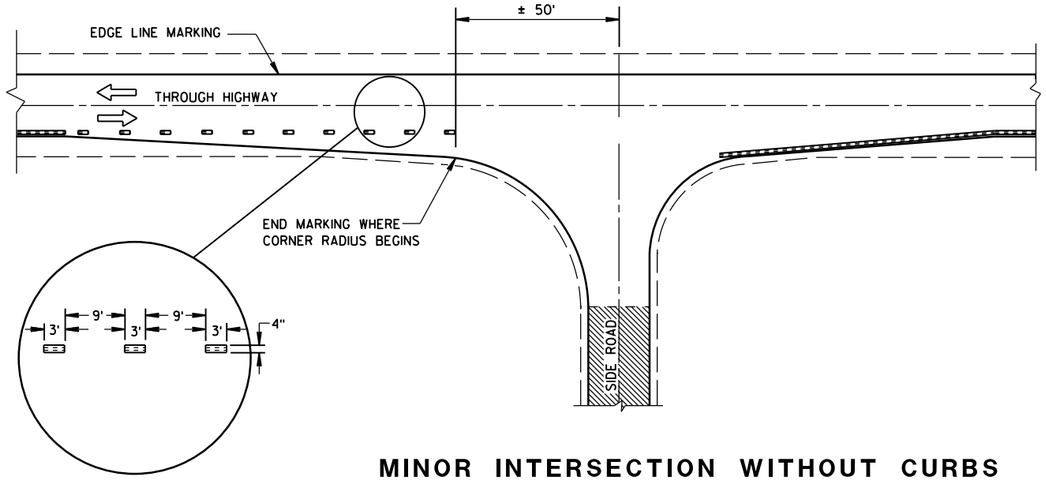
S.D.D. 15 C 8-16a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

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

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

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

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

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

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

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

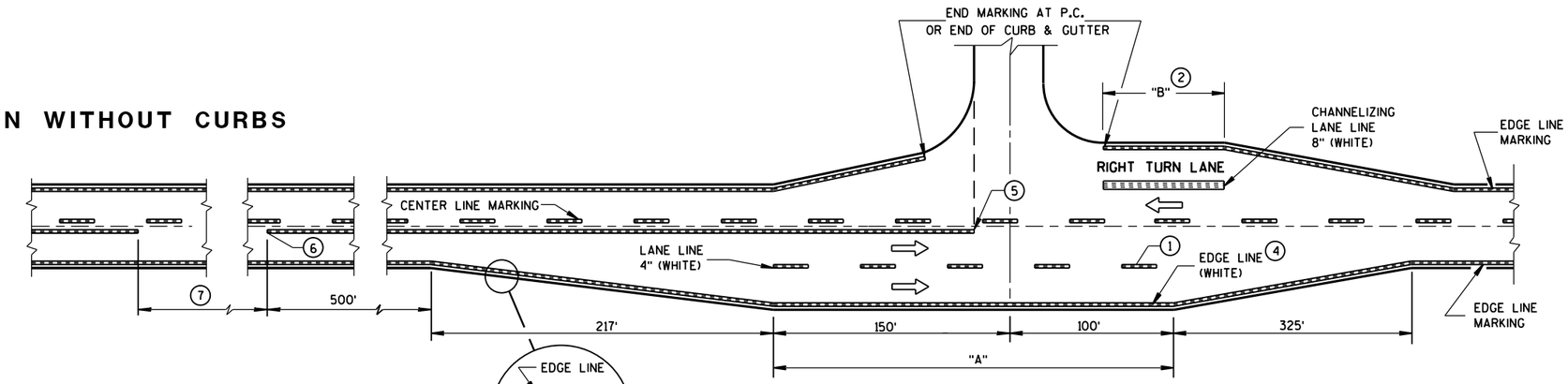
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

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

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

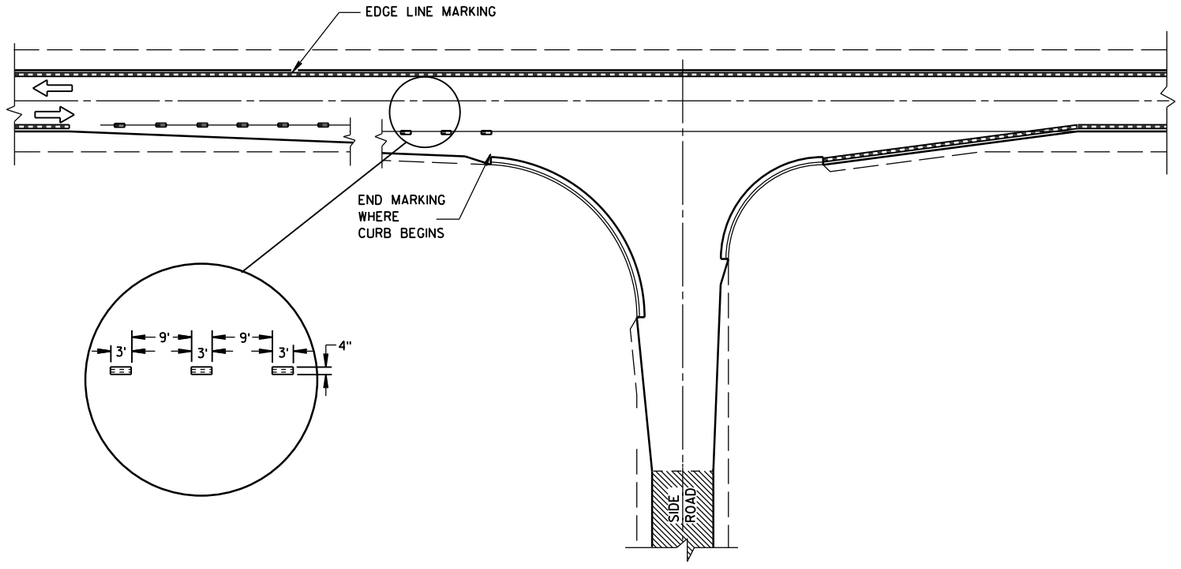
(7)

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



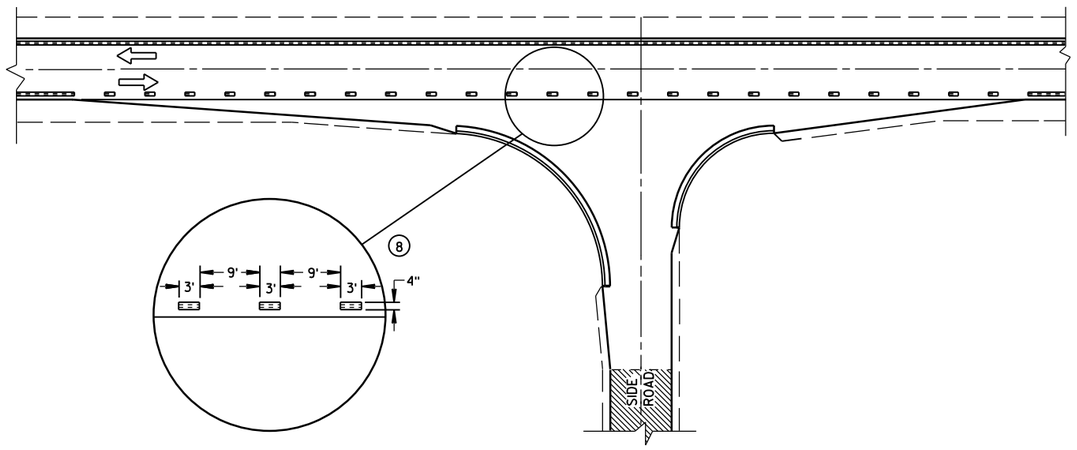
MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS

(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS

(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

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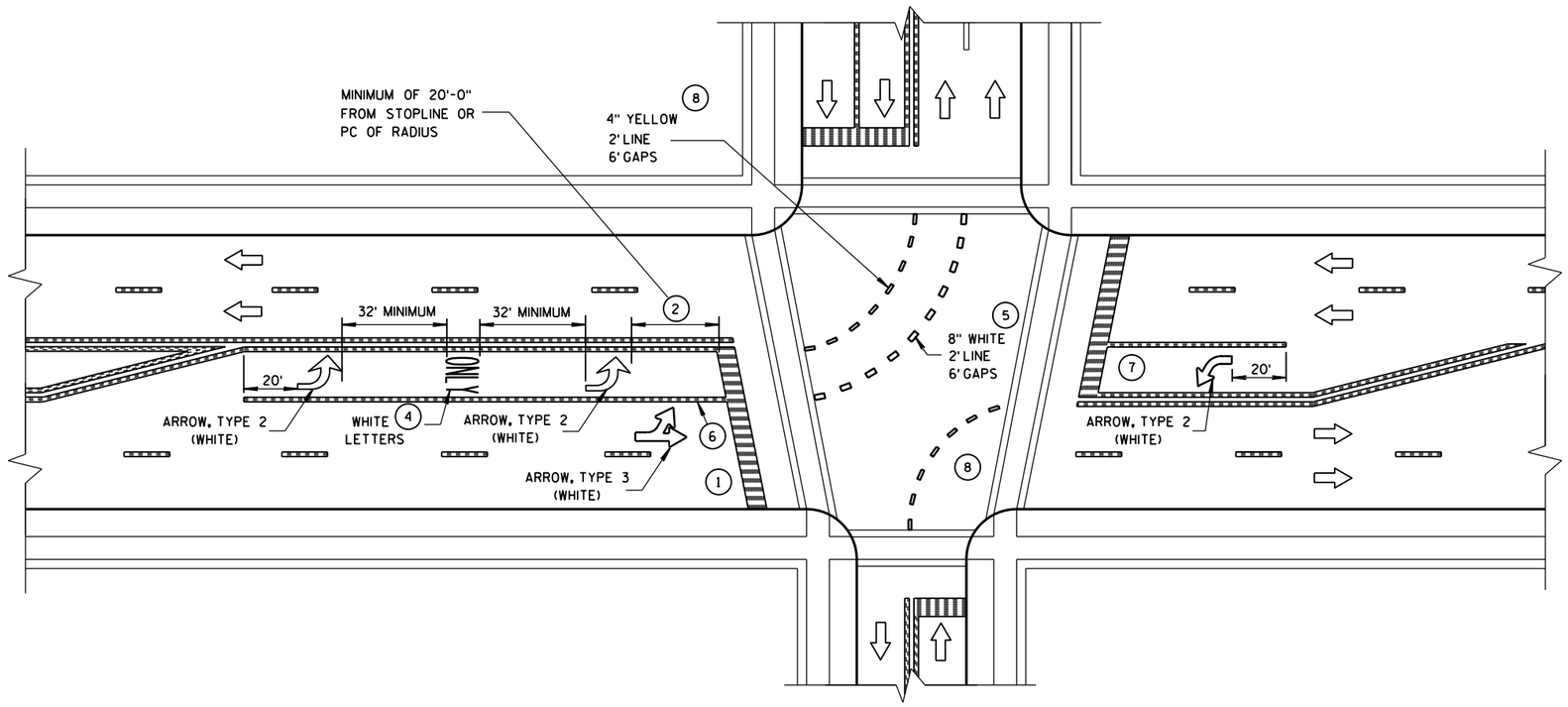
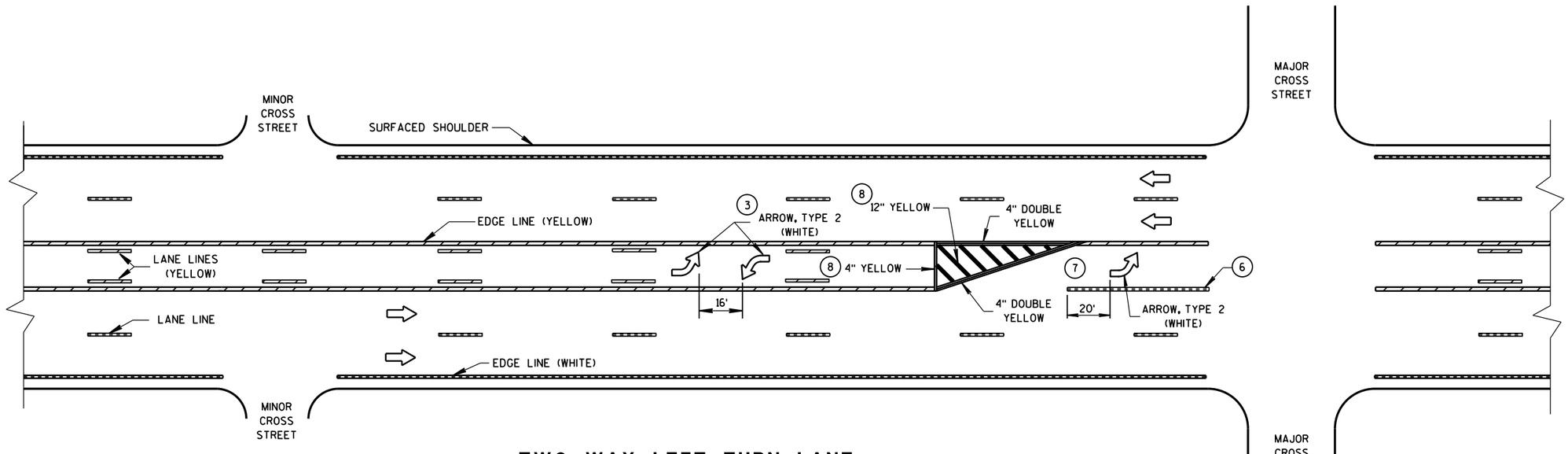
S.D.D. 15 C 8-16b



GENERAL NOTES

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

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

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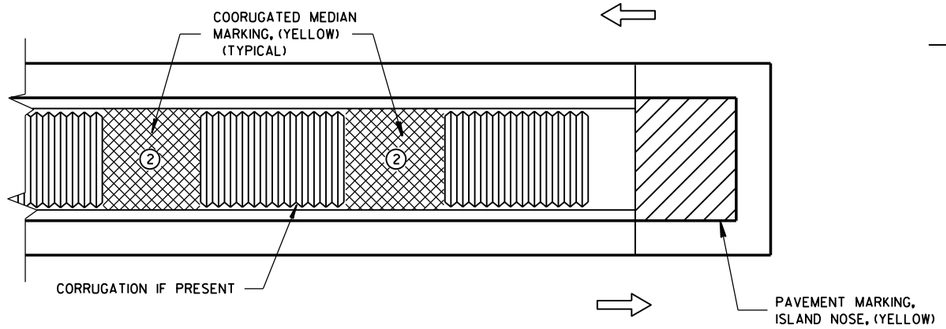
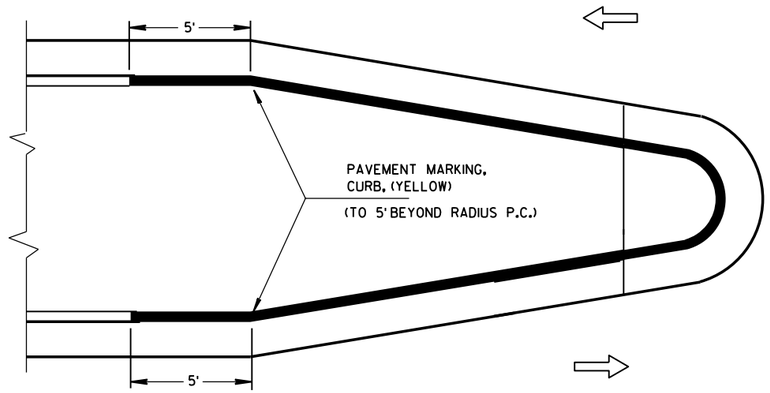
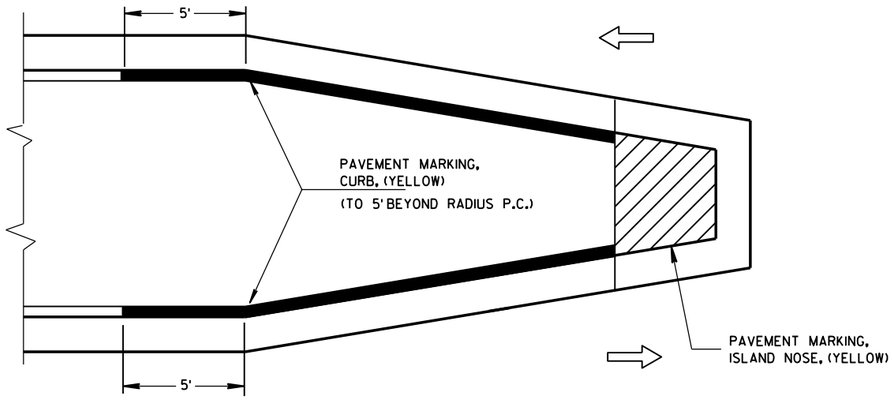
S.D.D. 15 C 8-16e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

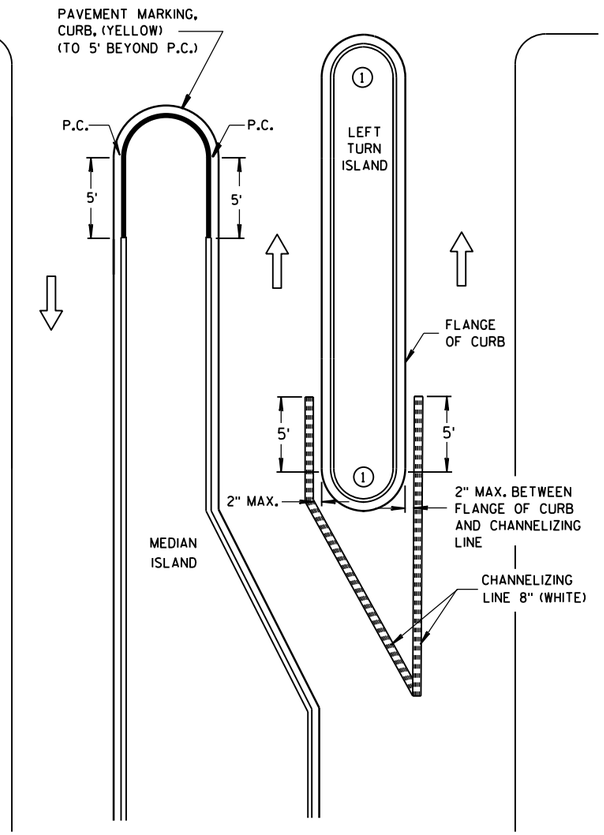


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

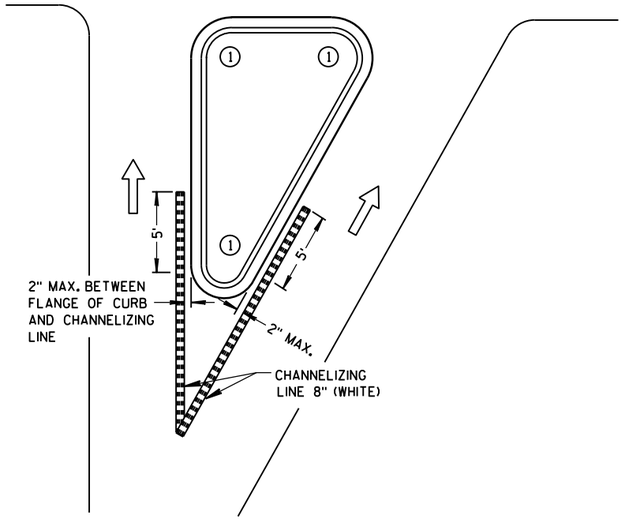


LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

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

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



RIGHT TURN ISLAND

LEGEND

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

PAVEMENT MARKING
(ISLANDS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

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

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

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA

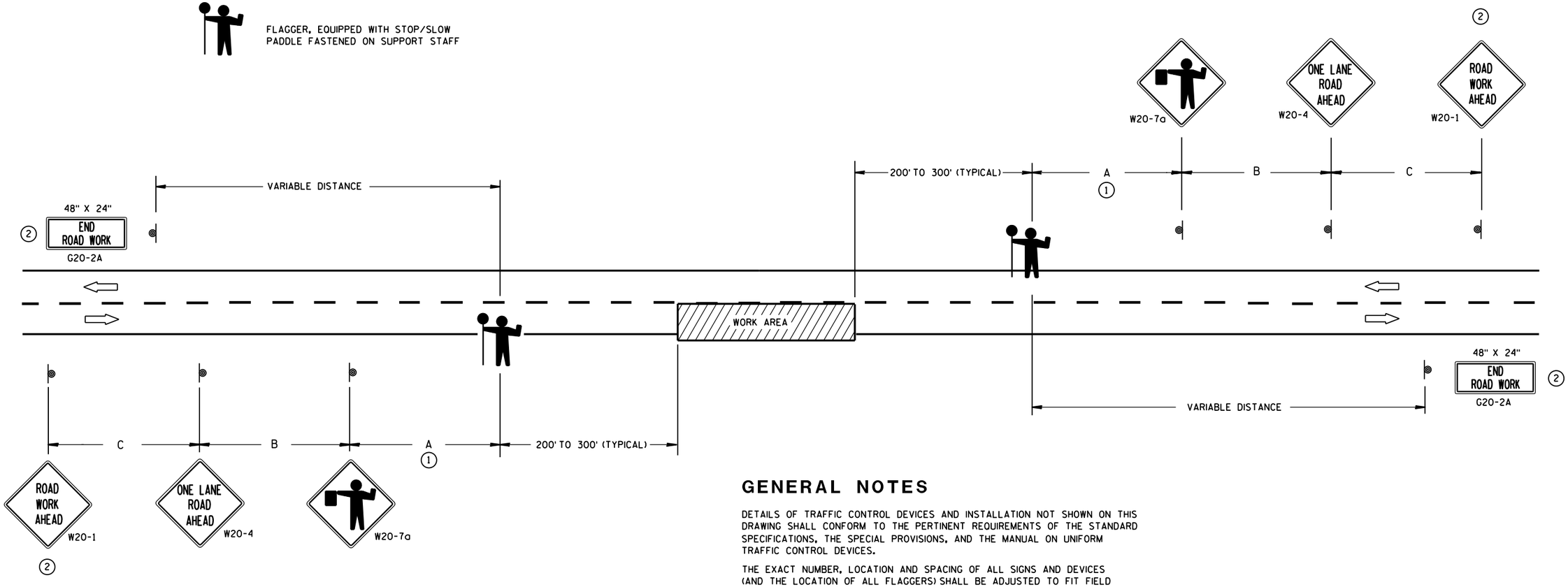
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN SPACING TABLE

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

W3-4

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



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

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

GENERAL NOTES

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

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

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

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

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

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

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

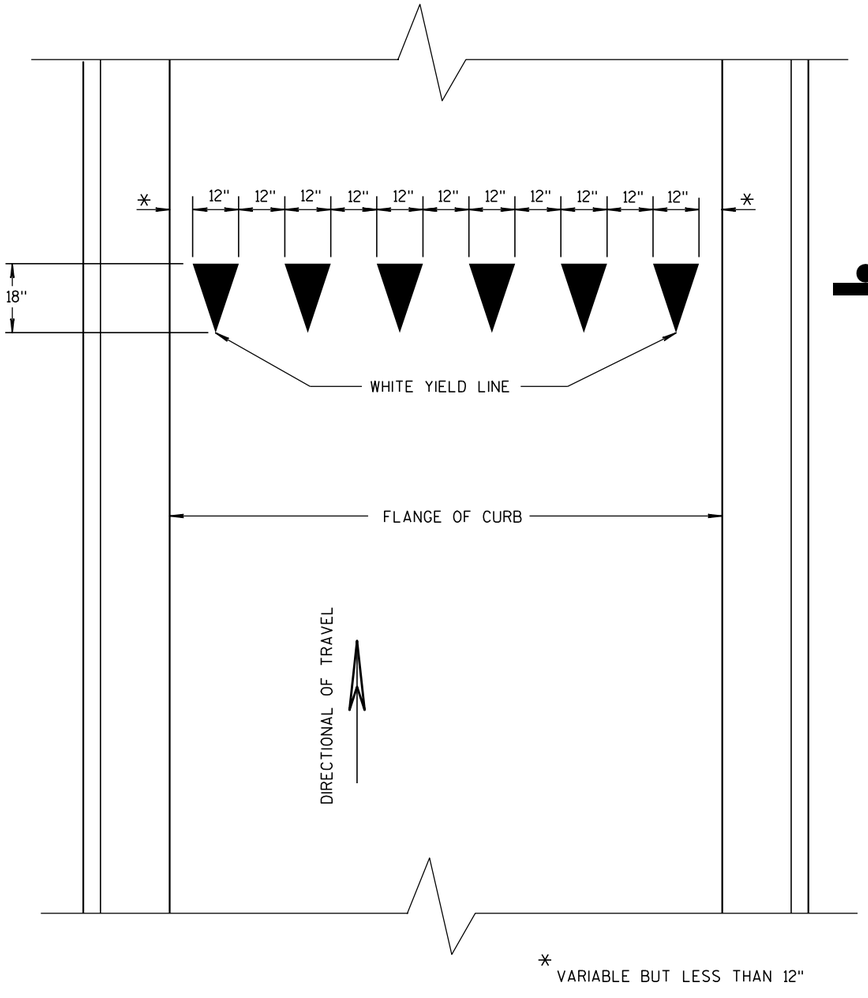
APPROVED
8/2013 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

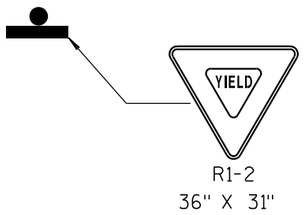
S.D.D. 15 C 12-4

6

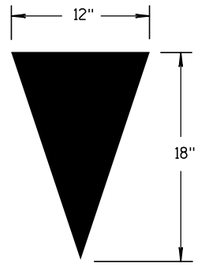
S.D.D. 15 C 12-4



YIELD LINE



R1-2
36" X 31"



YIELD TRIANGLE

6

S.D.D. 15 C 20-1

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

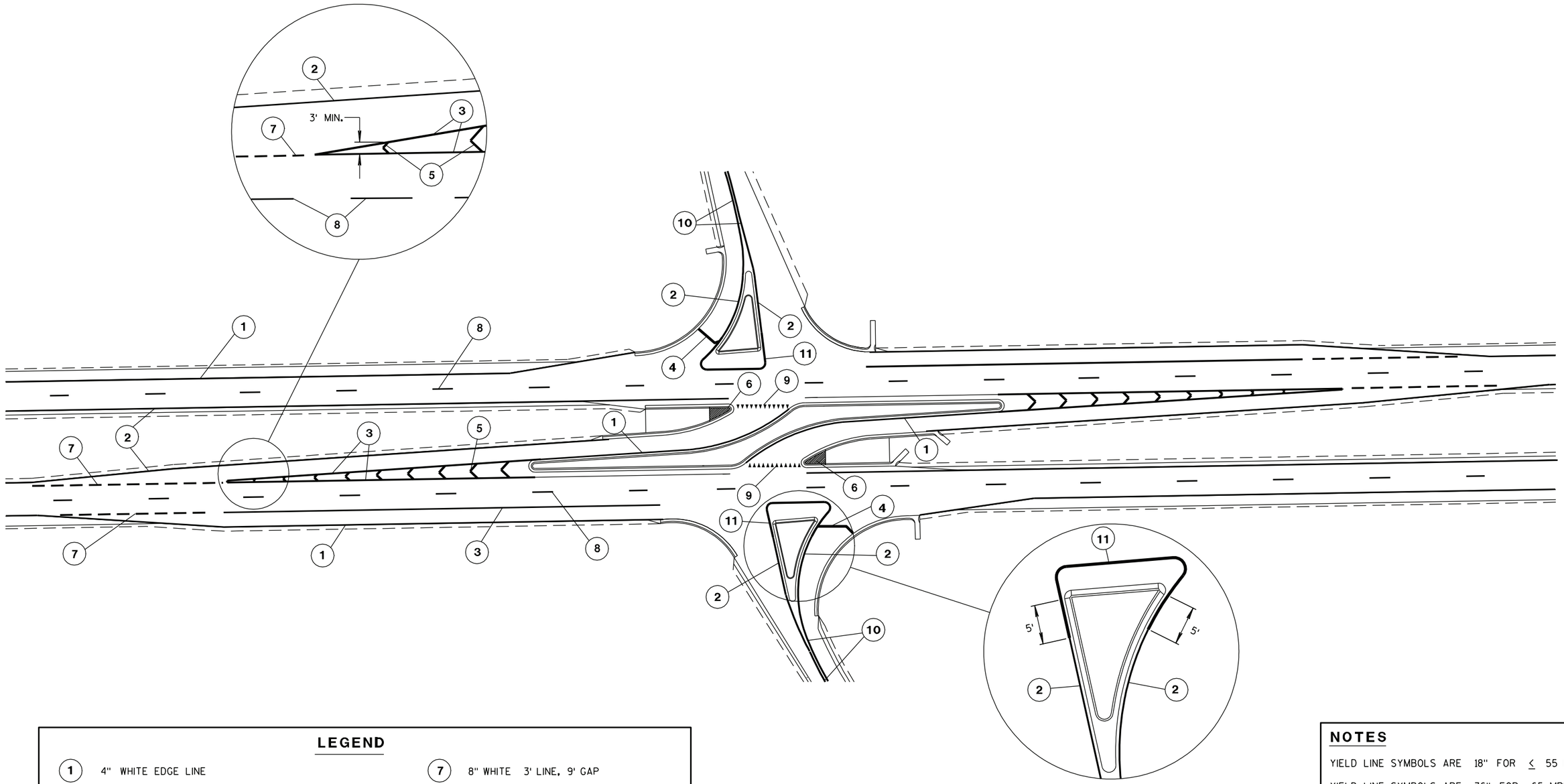
1/28/05 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 20-1



LEGEND

1. 4" WHITE EDGE LINE
2. 4" YELLOW EDGE LINE
3. 8" WHITE WET REFLECTIVE TAPE
4. 18" STOP LINE WHITE WHEN SPECIFIED IN THE CONTRACT
5. CHEVRON 24" WHITE 25' C-C
6. ISLAND NOSE EPOXY (SOLID YELLOW)
7. 8" WHITE 3' LINE, 9' GAP
8. 4" WHITE WET REFLECTIVE TAPE LANE LINE
9. YIELD LINE SYMBOLS 18" OR 36" WHITE WHEN SPECIFIED IN THE CONTRACT
10. 4" LINE YELLOW
11. 8" WHITE WHEN SPECIFIED IN THE CONTRACT

NOTES

YIELD LINE SYMBOLS ARE 18" FOR $\leq$ 55 MPH.

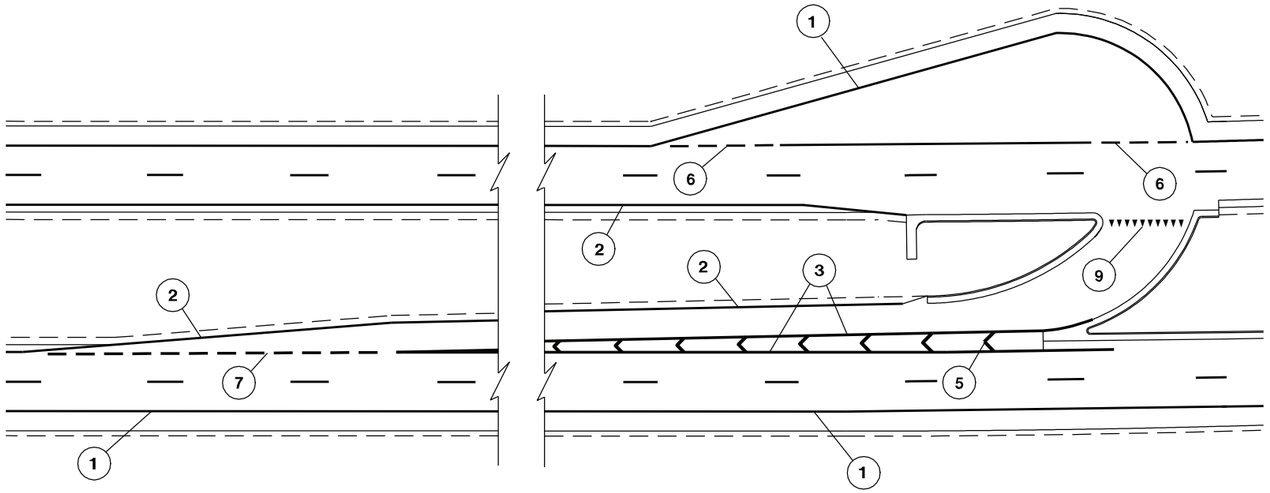
YIELD LINE SYMBOLS ARE 36" FOR 65 MPH.

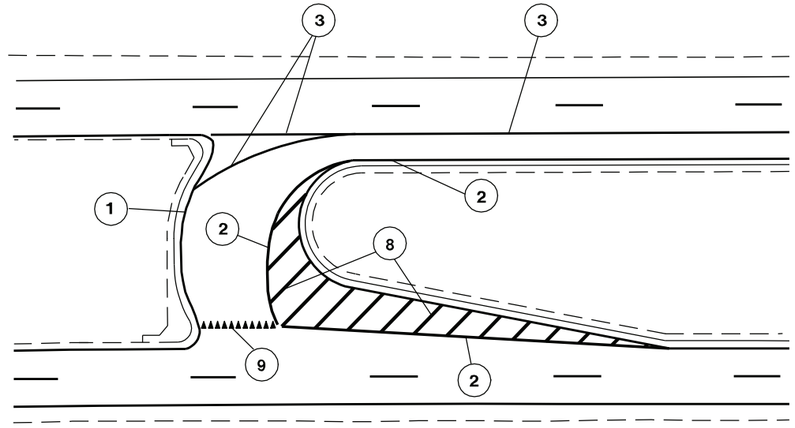
J TURN MEDIAN PAVEMENT MARKING

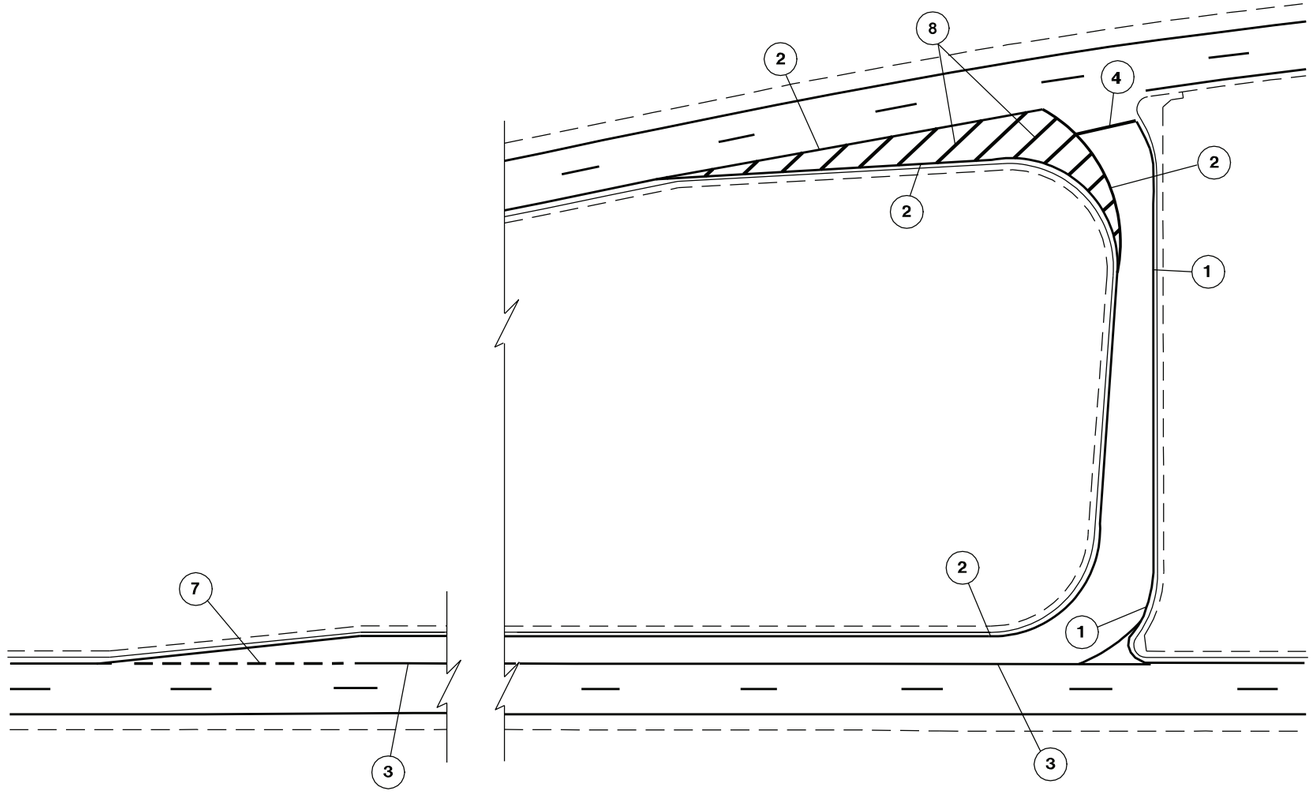
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 32-1a







NOTES

YIELD LINE SYMBOLS ARE 18" FOR ≤ 55 MPH.

YIELD LINE SYMBOLS ARE 36" FOR 65 MPH.

LEGEND

1. 4" WHITE EDGE LINE
2. 4" YELLOW EDGE LINE
3. 8" WHITE WET REFLECTIVE TAPE
4. 18" STOP LINE WHITE
5. CHEVRON 24" WHITE 25' C-C
6. 4" WHITE 3' LINE, 9' GAP
7. 8" WHITE 3' LINE, 9' GAP
8. 12" YELLOW AT 10' C-C WHEN SPECIFIED IN THE CONTRACT
9. YIELD LINE SYMBOLS 18" OR 36" WHITE

J TURN LANE PAVEMENT MARKING

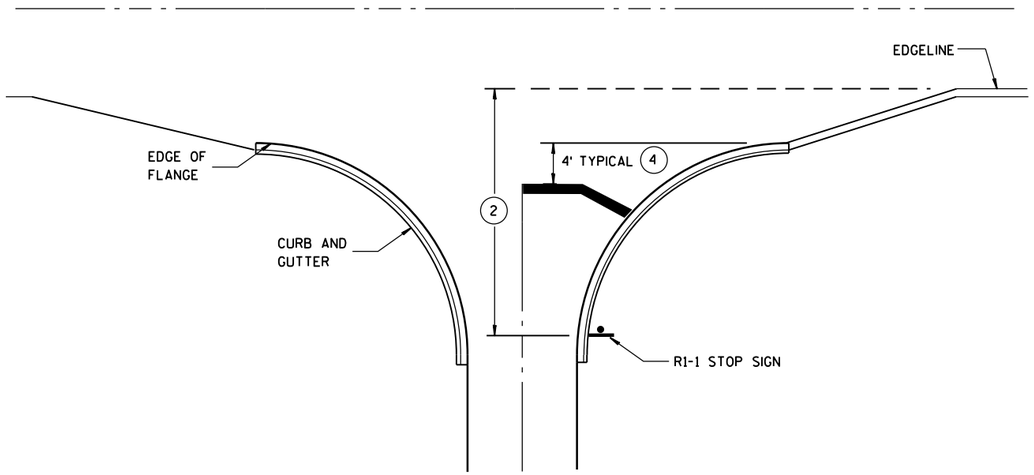
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

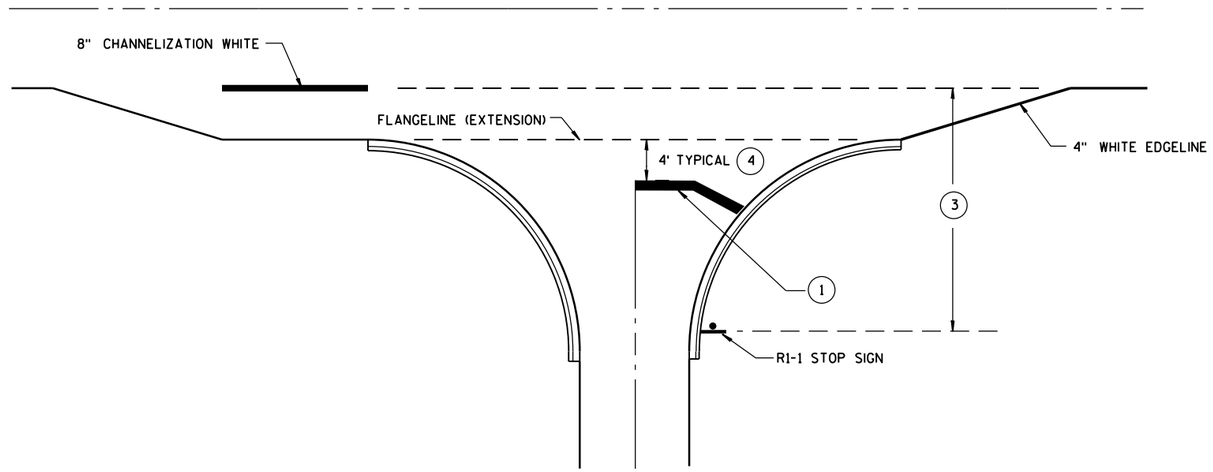
5/15/2012
DATE

/S/ Thomas N. Nottbusch
STATE TRAFFIC ENGINEER

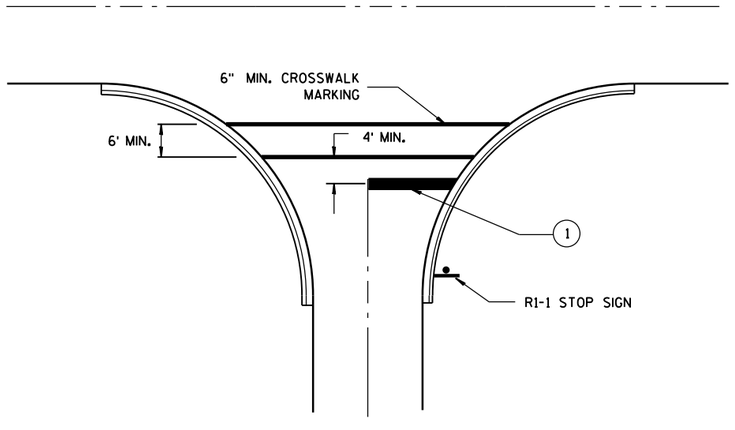
FHWA



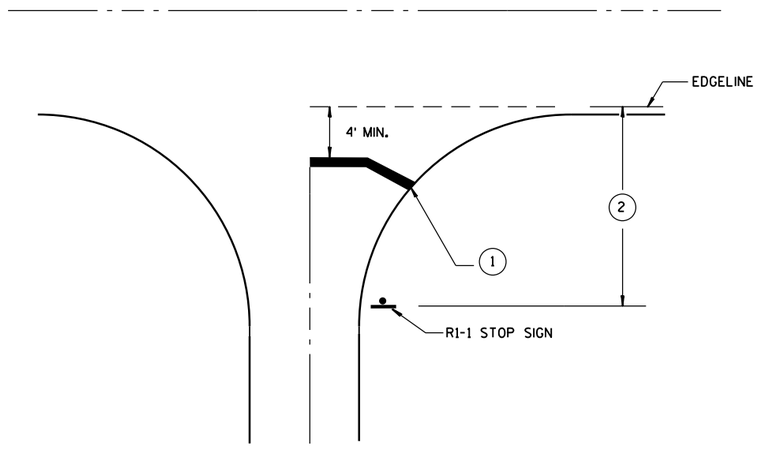
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

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

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4/30/2013
DATE

/S/ Travis Feltes
STATE TRAFFIC E

FHWA

6

S.D.D. 15 C 33-1

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

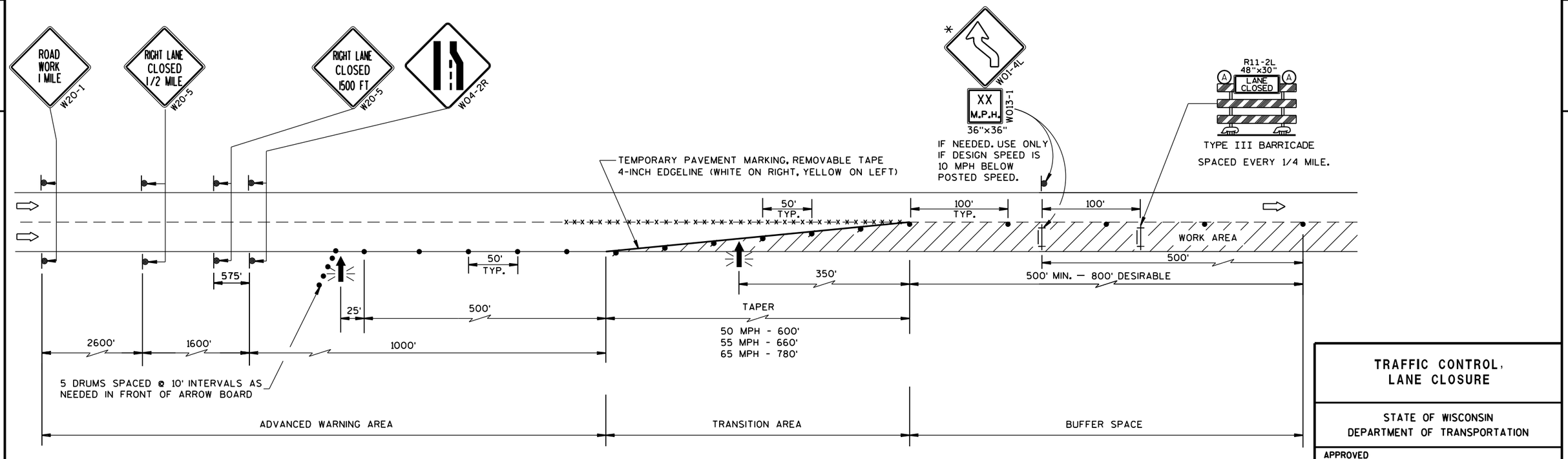
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 12-5a

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

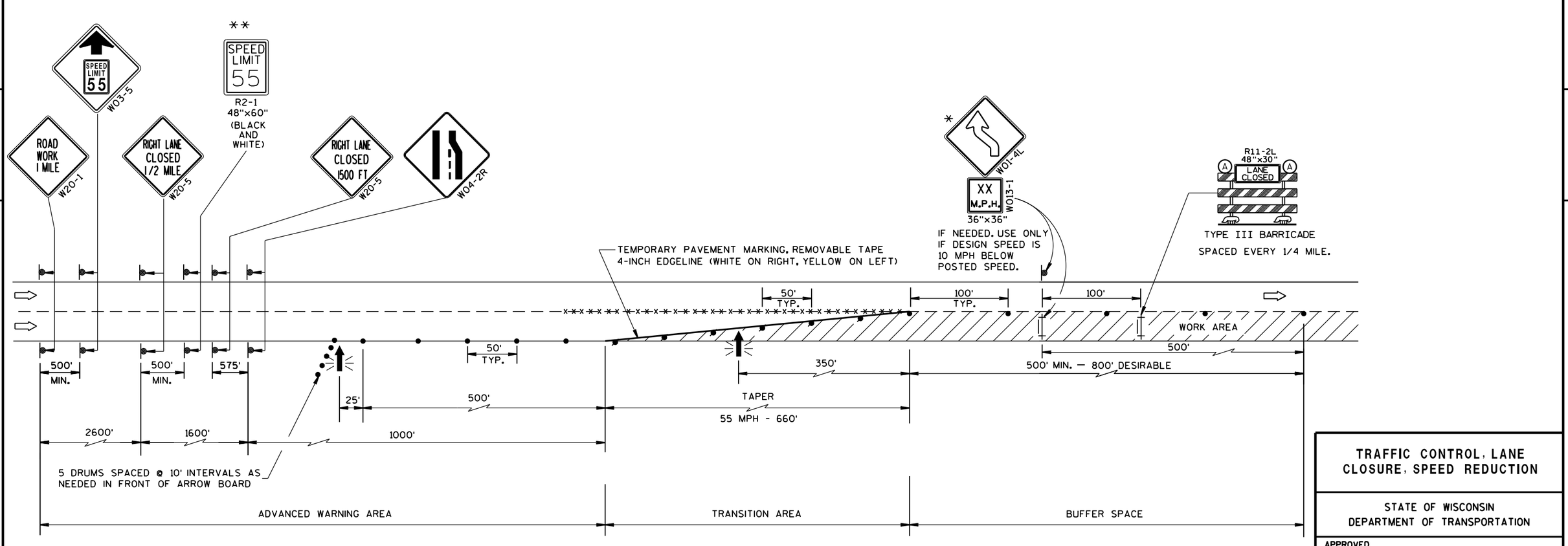
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A 65 MPH RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



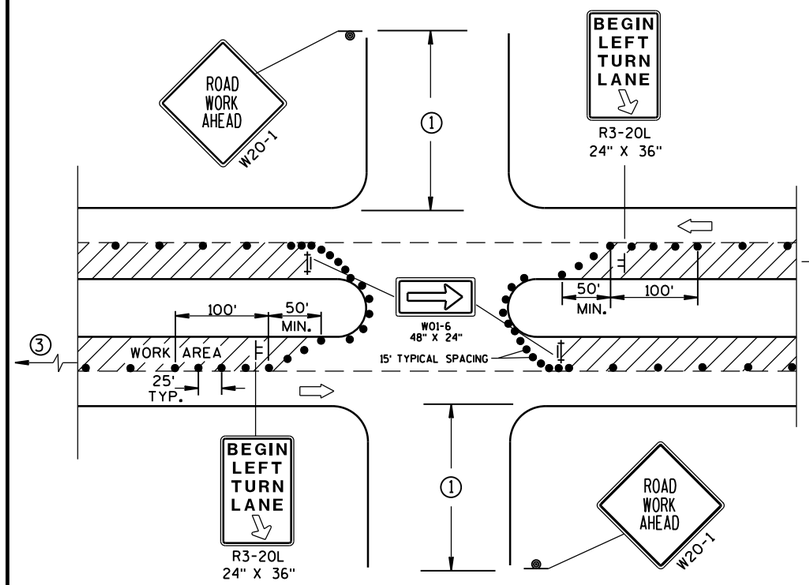
TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

S.D.D. 15 D 12-5b

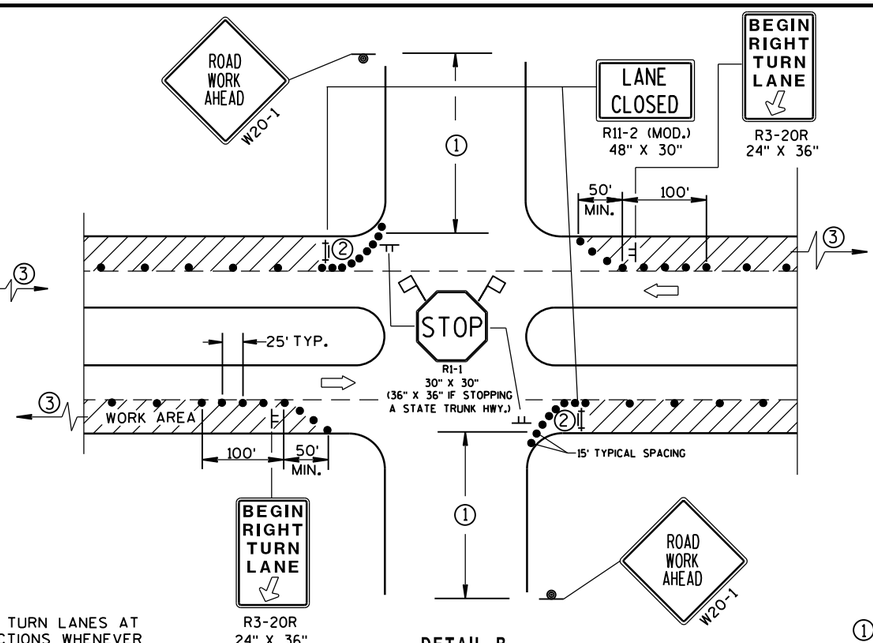
S.D.D. 15 D 12-5b



DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

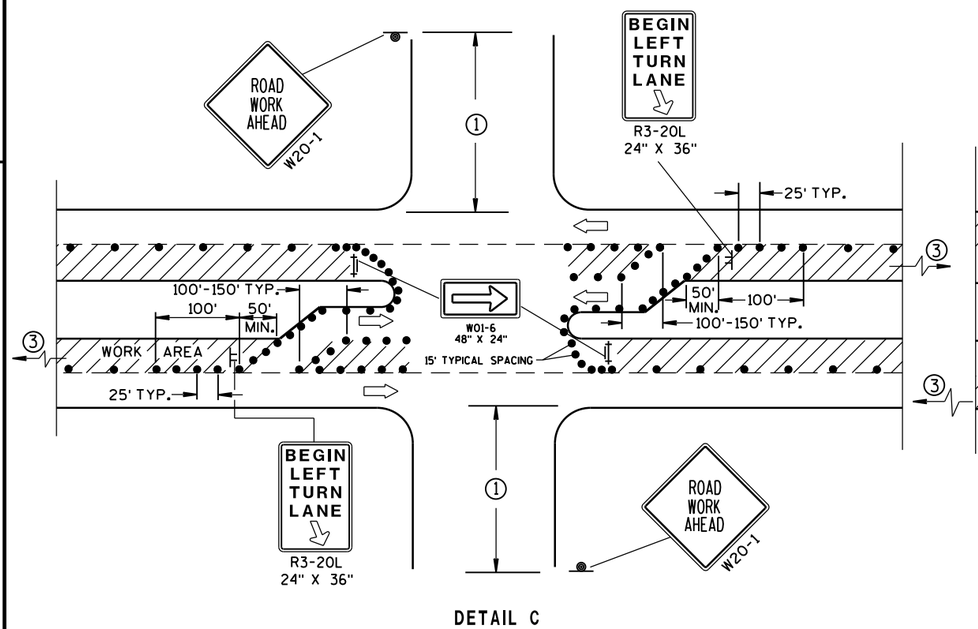
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

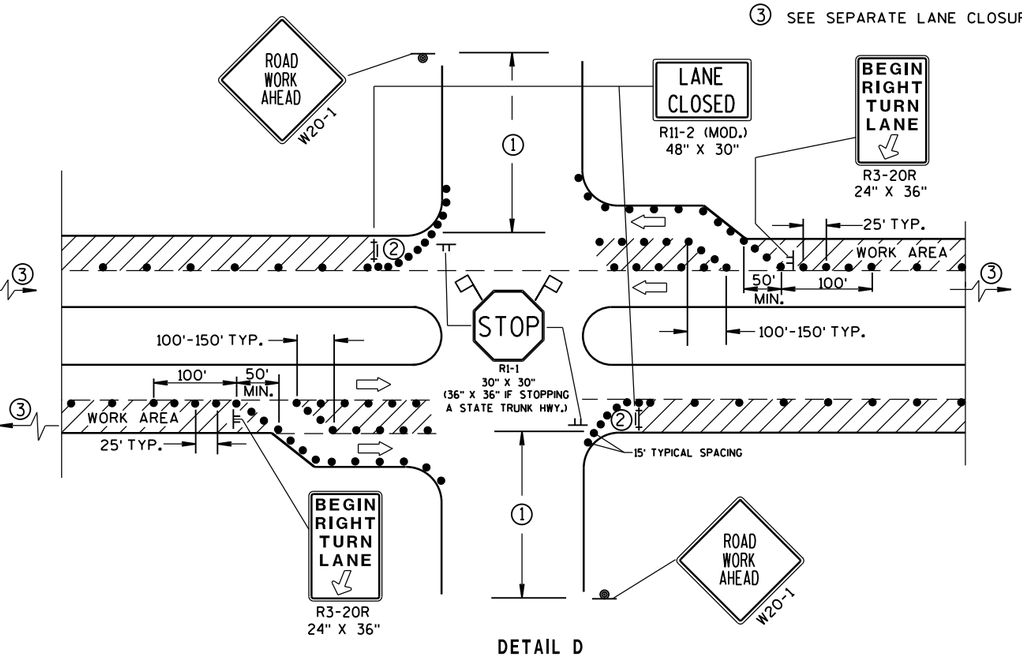
② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., (ORANGE)
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Nov. 2014 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 D 21-3

LEGEND

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

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

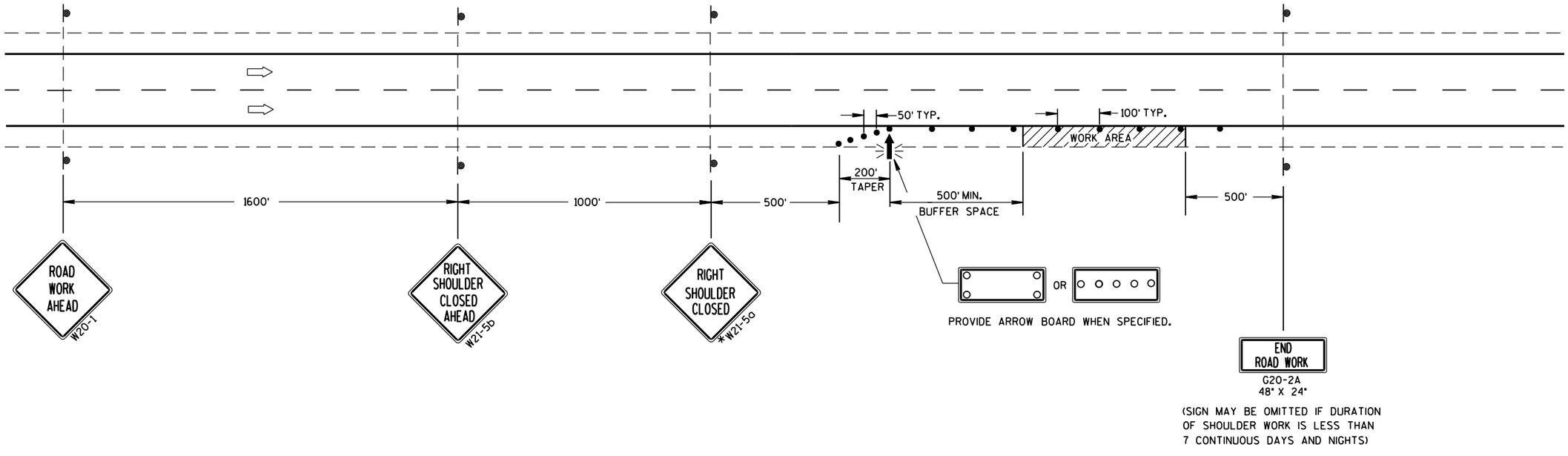
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/2013 DATE

/S/ Travis Feltes
STATE TRAFFIC ENGINEER

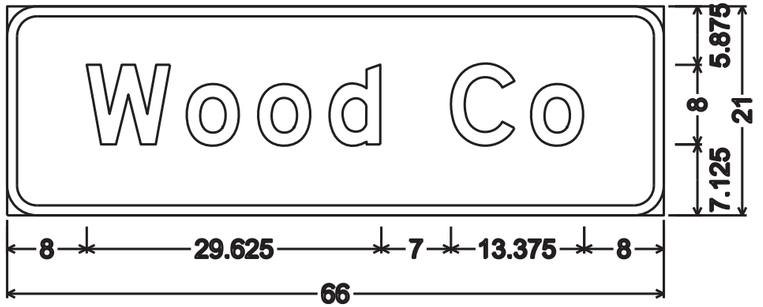
FHWA

6

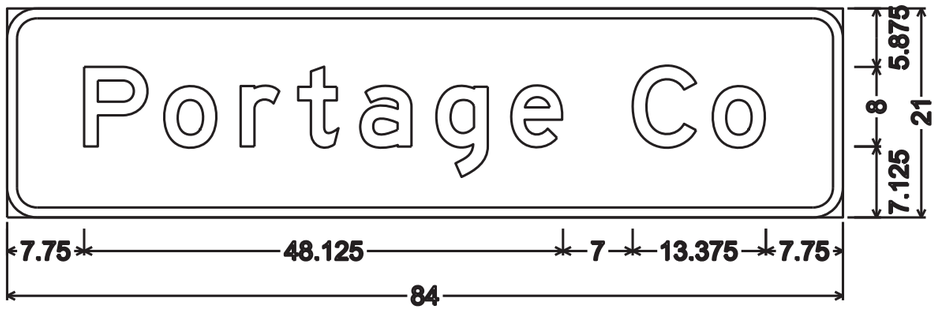
S.D.D. 15 D 27-2

NOTES

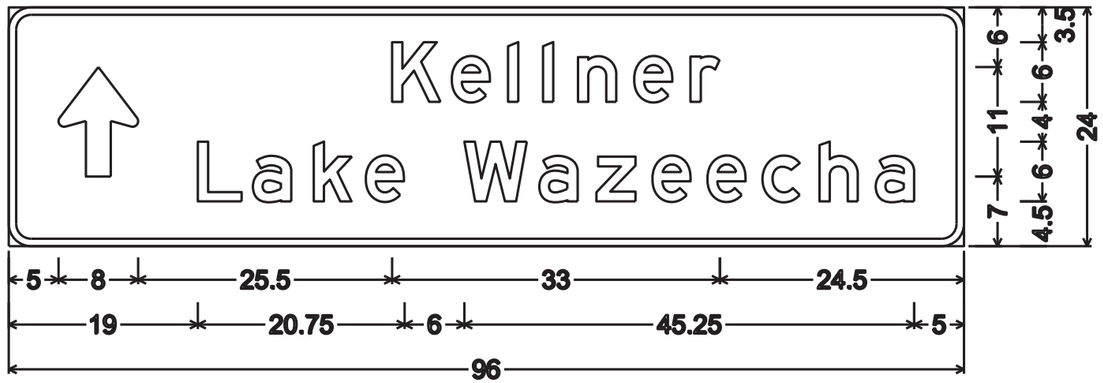
1. All Signs Type II - Type H Reflective except as noted
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E



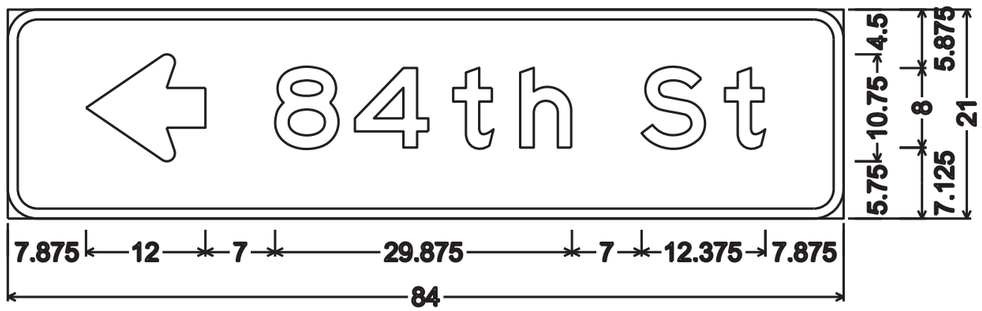
I2-2; 3.000" Radius, 1.000" Border



I2-2; 3.000" Radius, 1.000" Border



D1-2; 2.250" Radius, 0.750" Border



D1-1; 3.000" Radius, 1.000" Border

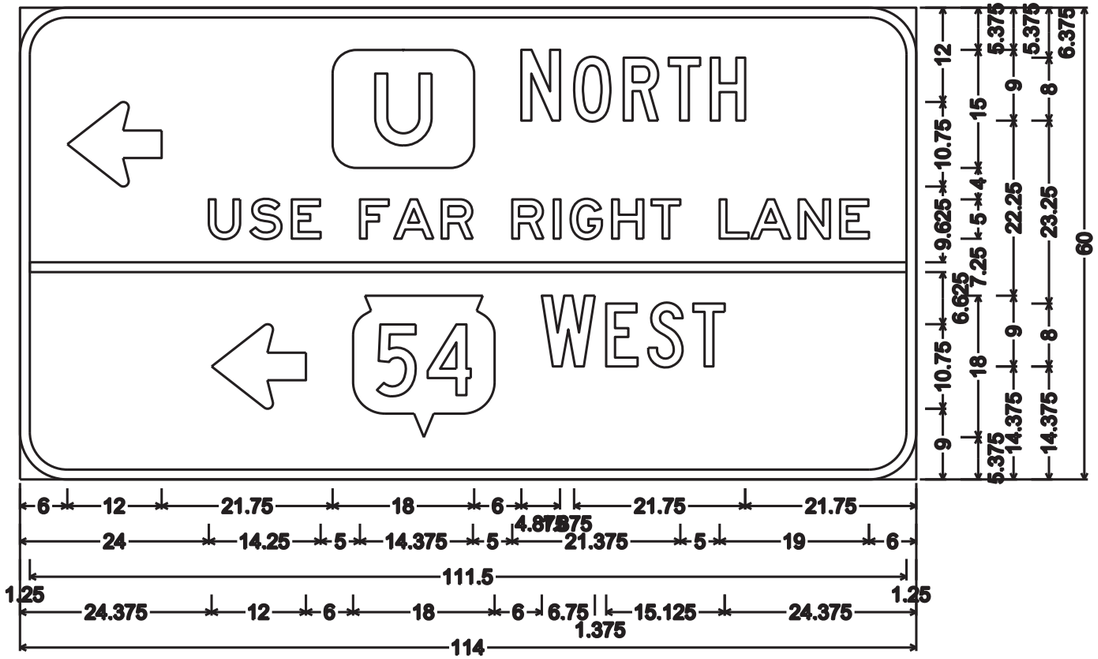
7

7

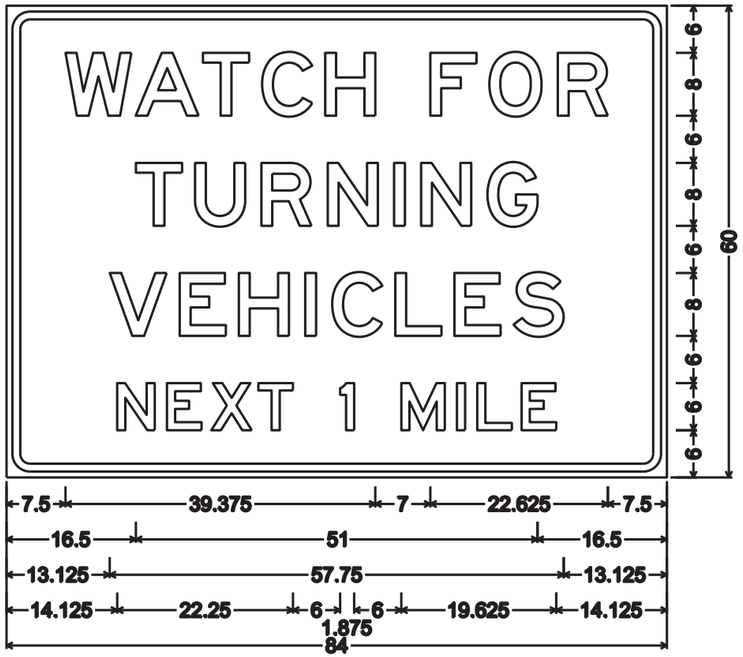
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: WOOD/PORTAGE	PERMANENT SIGNING	SHEET NO:	E

NOTES

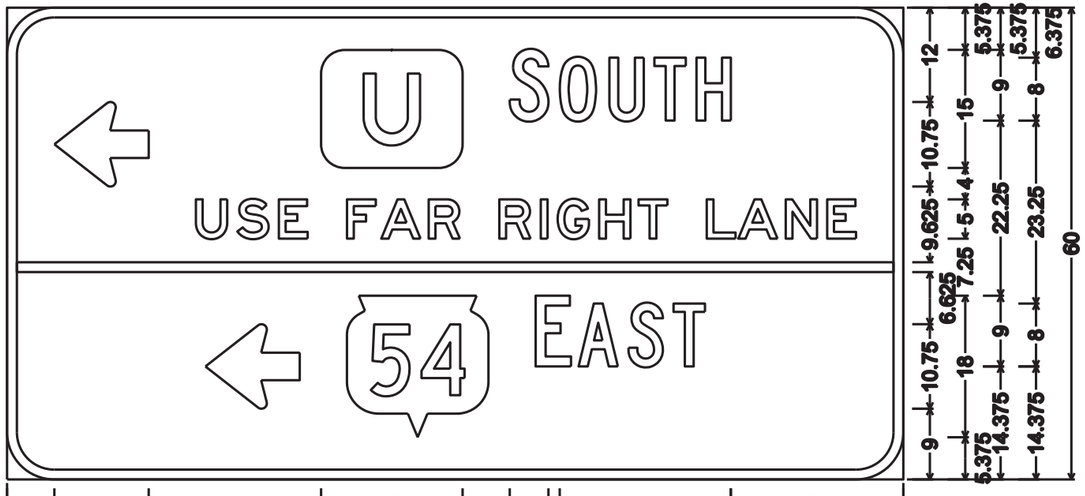
1. All Signs Type II - Type H Reflective except as noted
2. Color:
   Background - GREEN except as noted
   Message - WHITE except as noted
3. Message Series - E except as Shown



6.000" Radius, 1.250" Border
"NORTH" C; "USE" E; "FAR" E; "RIGHT" E; "LANE" E; "WEST" C;

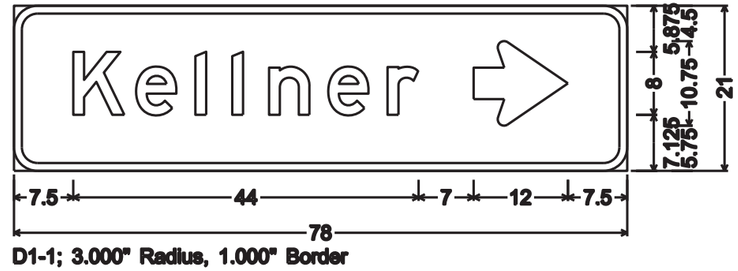


3.000" Radius, 1.000" Border, 0.750" Indent,
Black on Fluorescent yellow; TYPE F Reflective



6.000" Radius, 1.250" Border
"SOUTH" C; "USE" E; "FAR" E; "RIGHT" E; "LANE" E; "EAST" C;

D1-1; 3.000" Radius, 1.000" Border

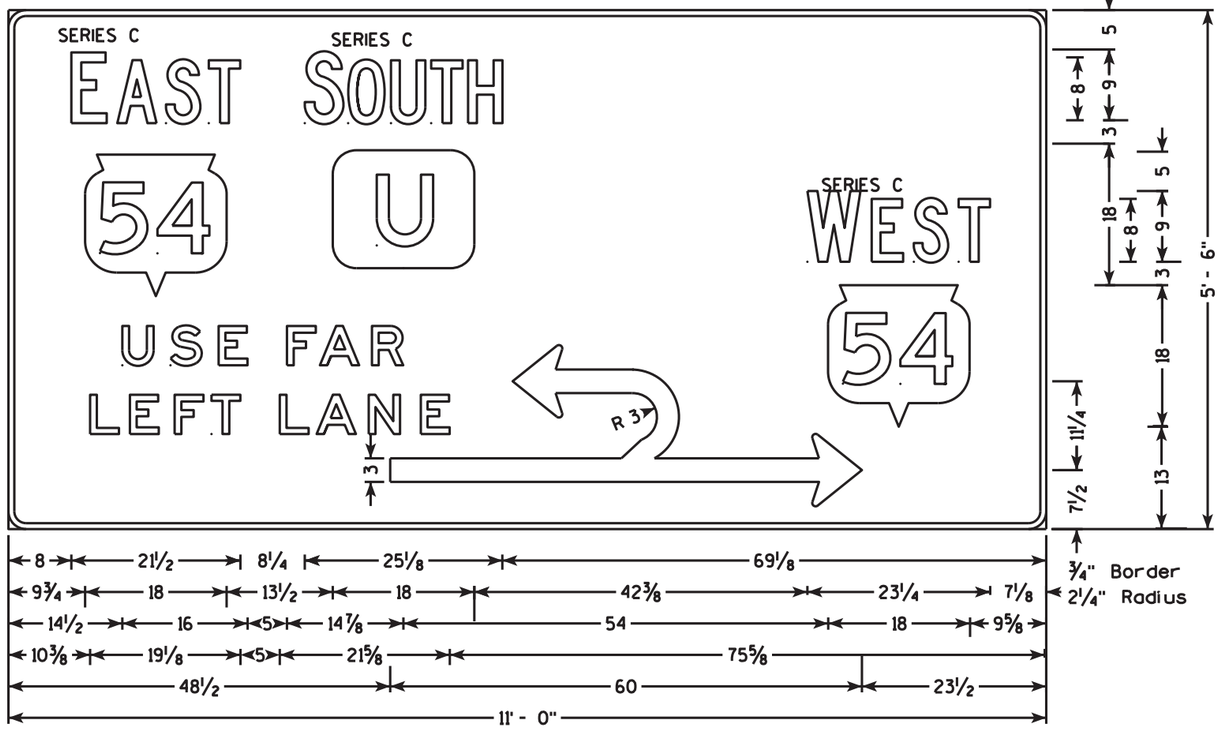


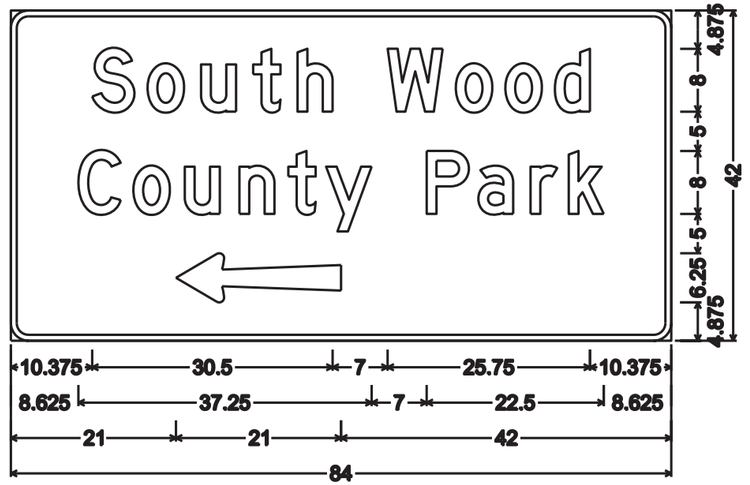
D1-1; 3.000" Radius, 1.000" Border

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: WOOD/PORTAGE	PERMANENT SIGNING	SHEET NO:	E

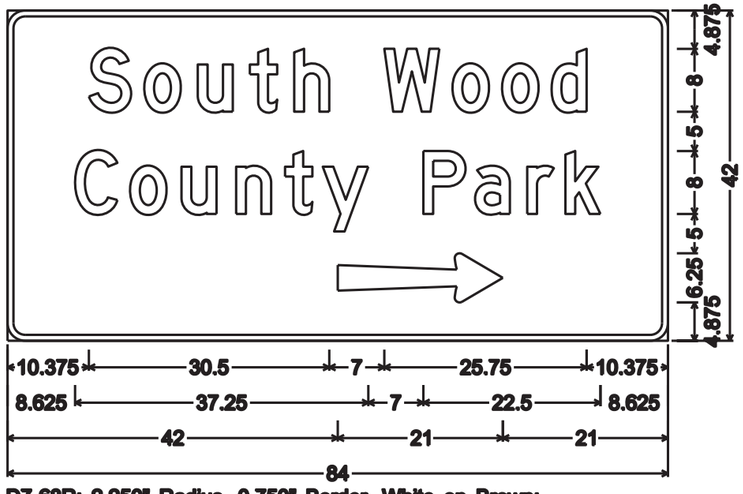
NOTES

1. All Signs Type II - Type H Reflective except as noted
2. Color:
   Background - GREEN except as noted
   Message - WHITE except as noted
3. Message Series - E except as Shown

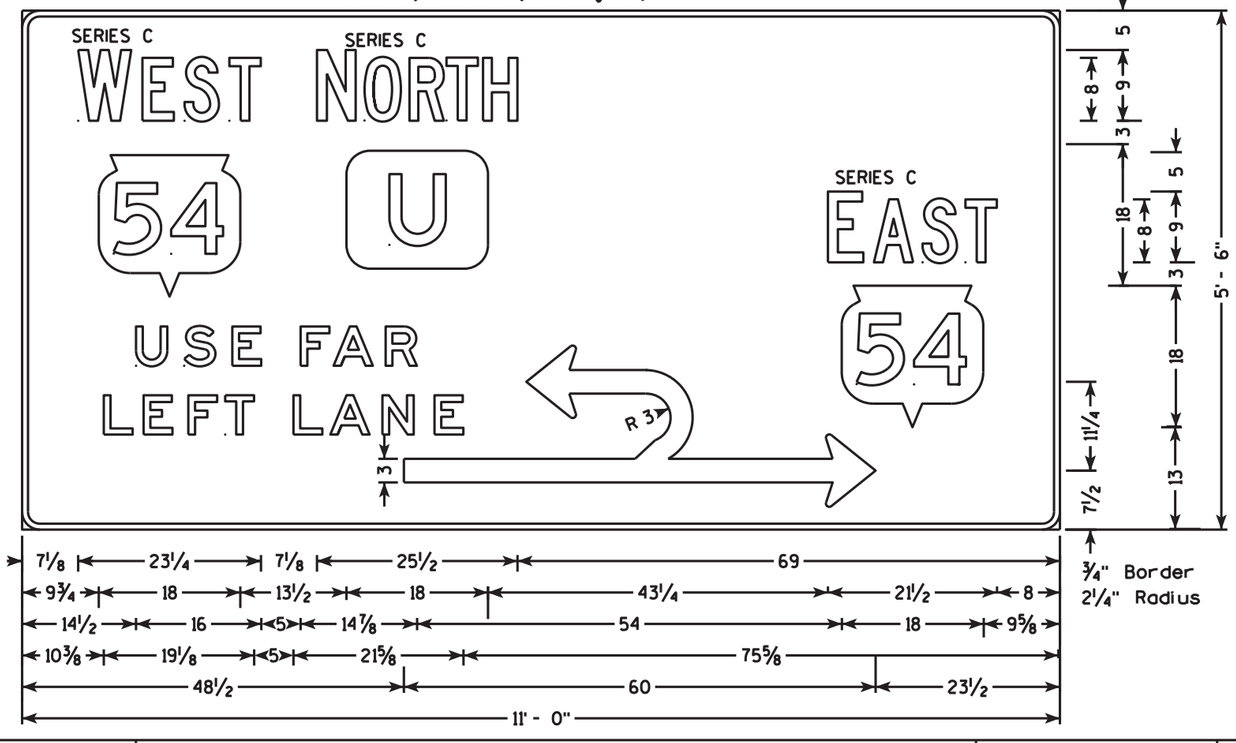




D7-68L; 2.250" Radius, 0.750" Border, White on Brown;
"South" D; "Wood" D; "County" D; "Park" D



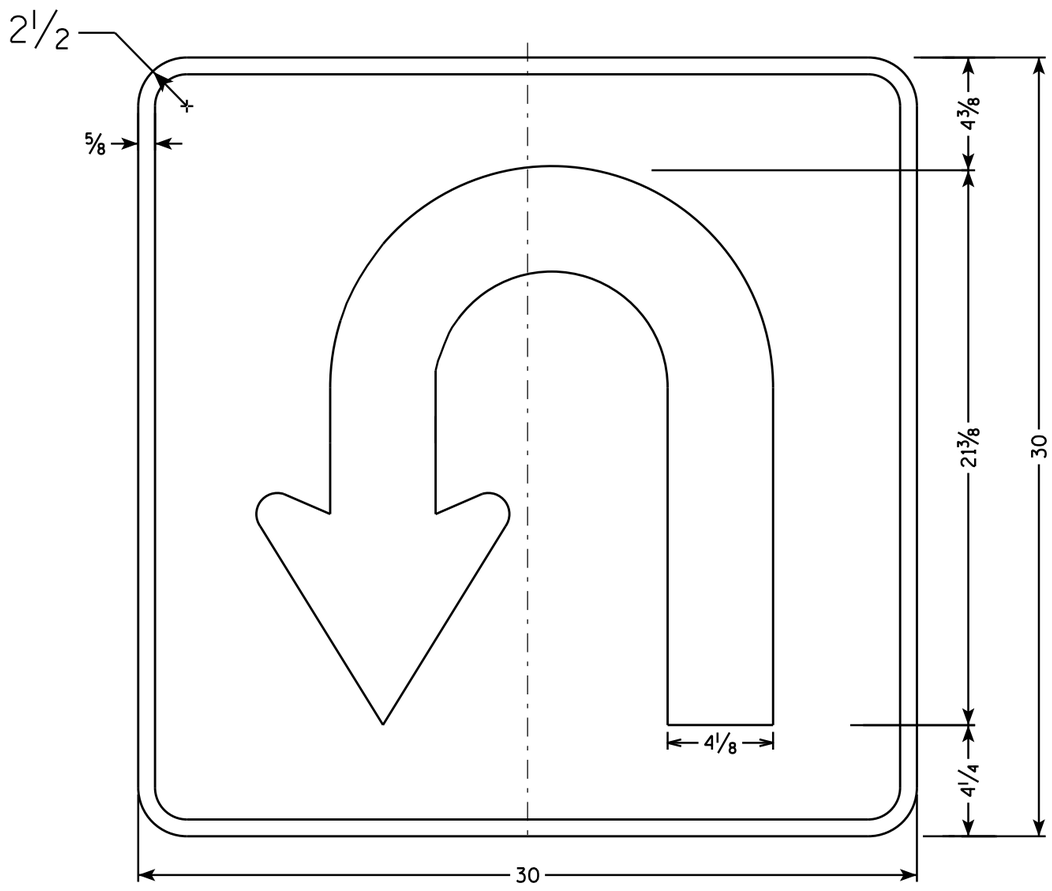
D7-68R; 2.250" Radius, 0.750" Border, White on Brown;
"South" D; "Wood" D; "County" D; "Park" D



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: WOOD/PORTAGE	PERMANENT SIGNING	SHEET NO:	E

NOTES

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



7

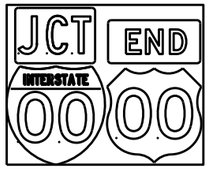
7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

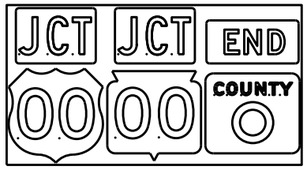
FILE NAME : C:\CAEfiles\Projects\tr_misc\UTURN.DGN PLOT DATE : 25-AUG-2015 07:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42

TYPICAL ASSEMBLIES

J1-1

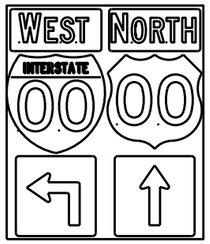


J1-2

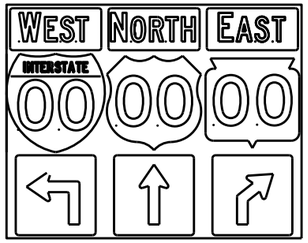


J1-3

J2-1



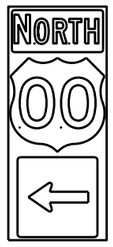
J2-2



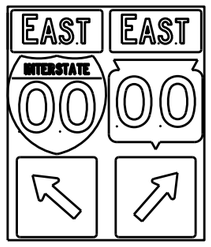
J2-3

JV

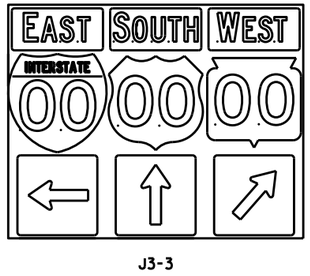
(Typical Vertical J-Assembly
See Note 10 and 11)



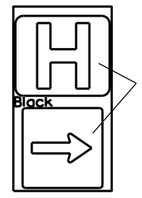
J3-1



J3-2

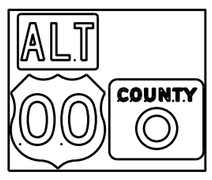


J3-3

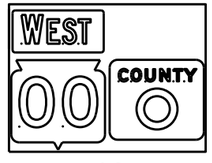


JH-1

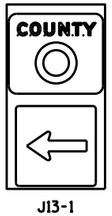
J4-1



J4-2



J4-2



J13-1

J12-1

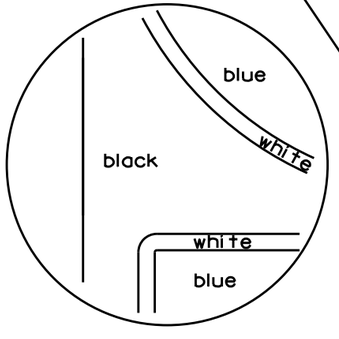
J32-1

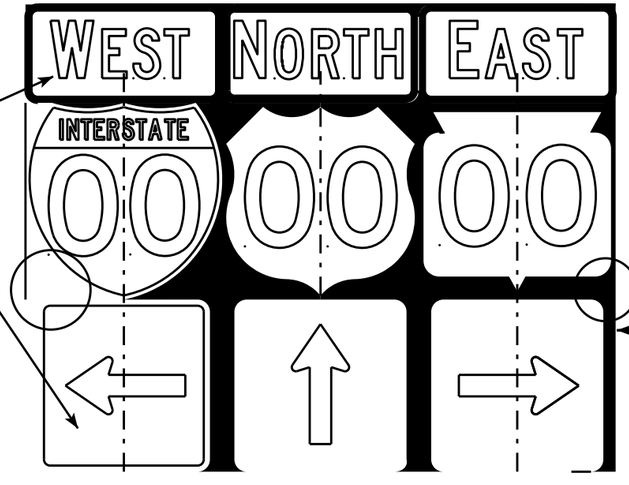
J33-1

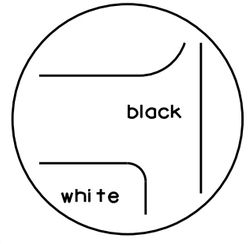
J23-1

J22-1

[blue background with interstate]







[black background]

NOTES

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

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

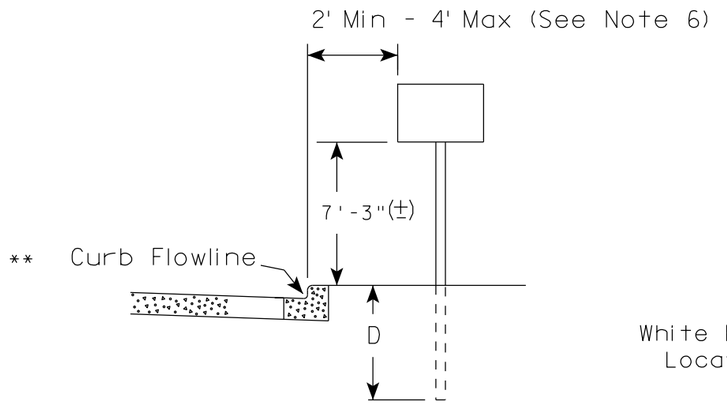
APPROVED Matthew R Rauch
for State Traffic Engineer

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

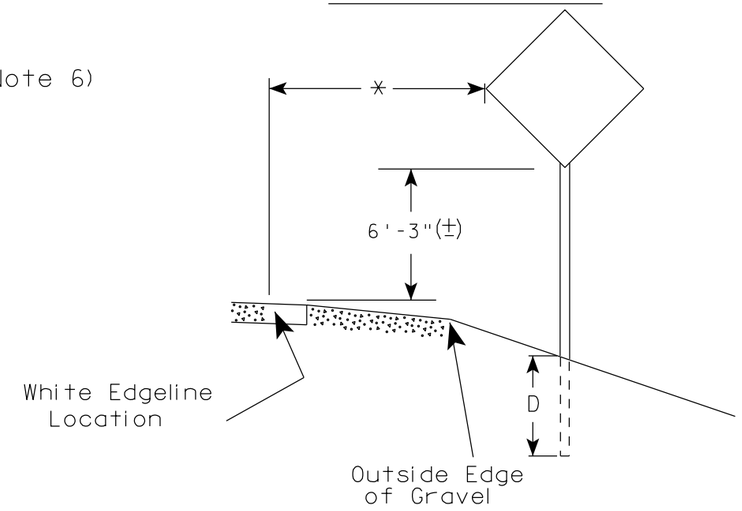
PROJECT NO: SHEET NO: E

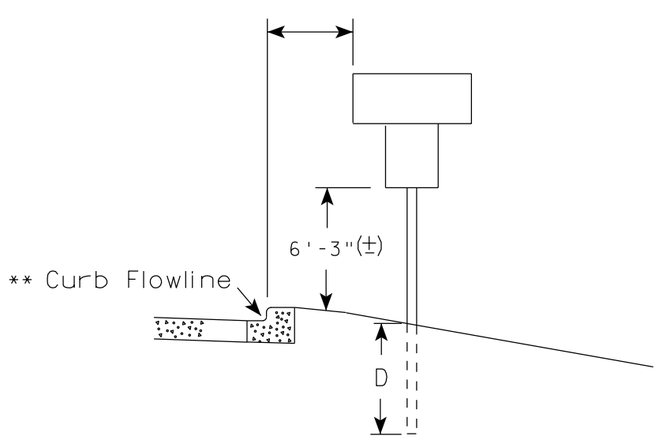
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :
WISDOT/CADDS SHEET 42

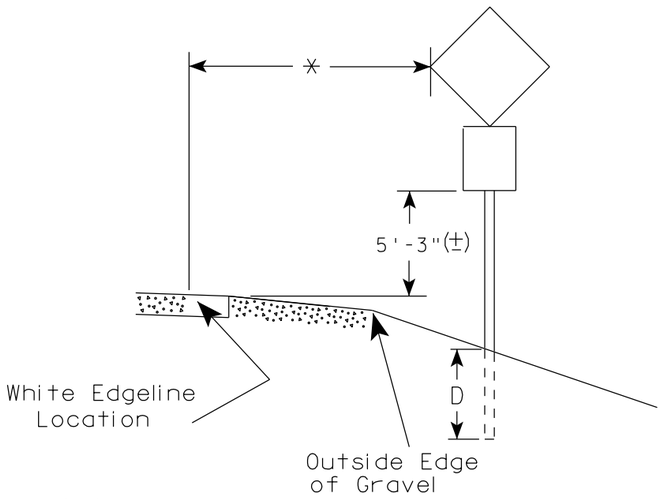
URBAN AREA



RURAL AREA (See Note 2)







** 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. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

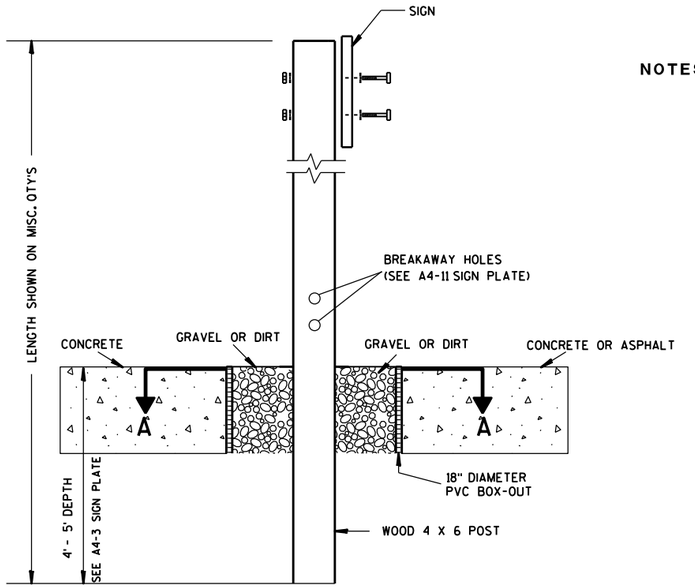
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

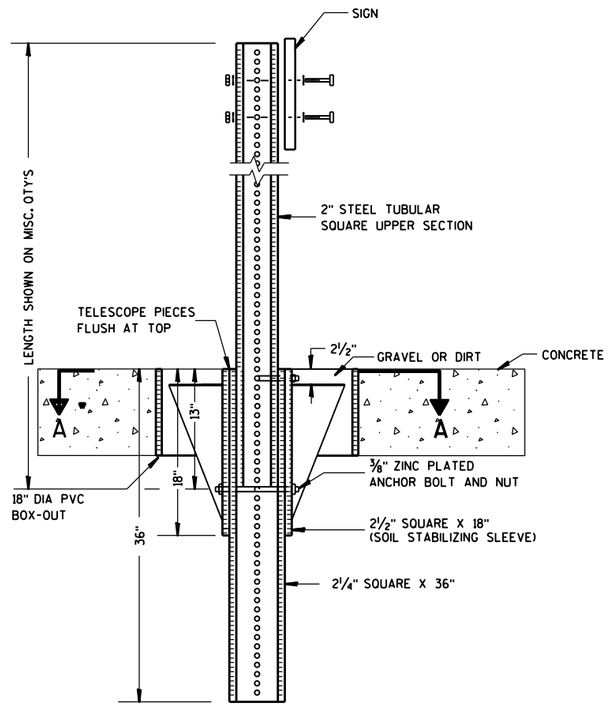
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



ELEVATION VIEW

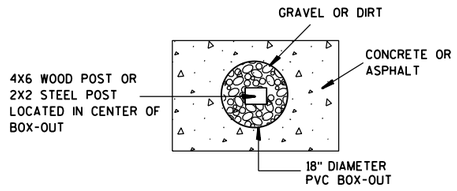
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

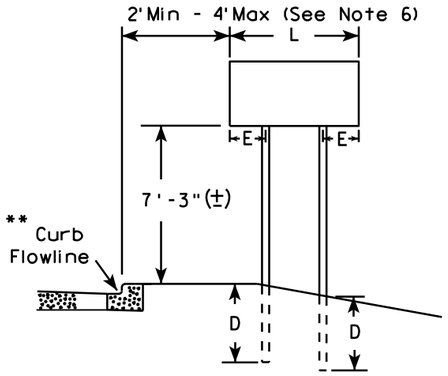
APPROVED Matthew R Rauch
for State Traffic Engineer

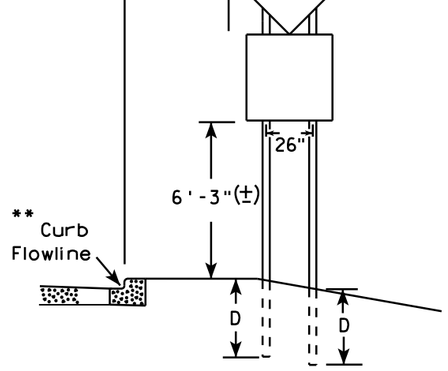
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

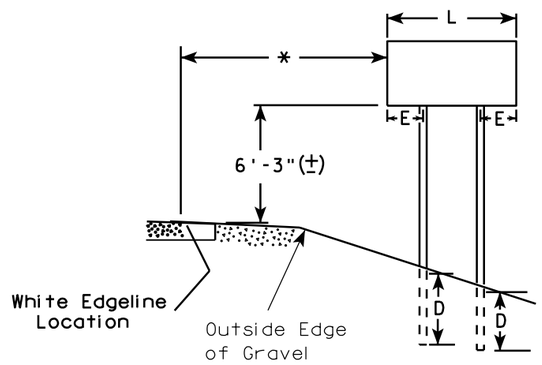
URBAN AREA

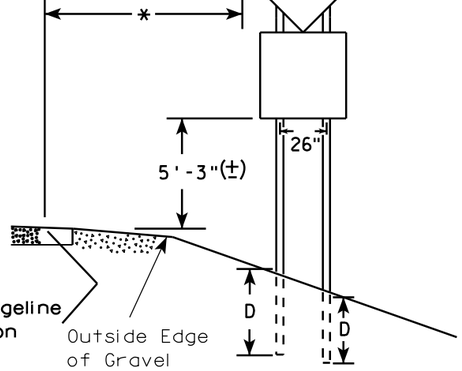




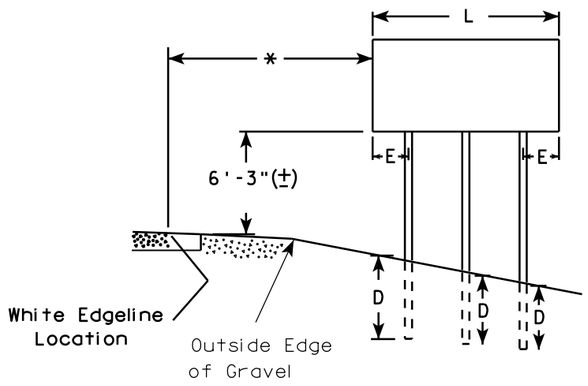
48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)





48" DIAMOND WARNING SIGN



GENERAL NOTES

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

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

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

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

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

***

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

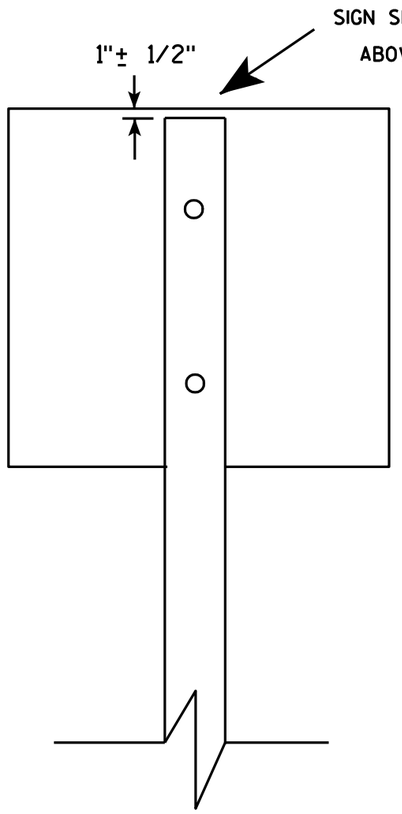
WISCONSIN DEPT OF TRANSPORTATION

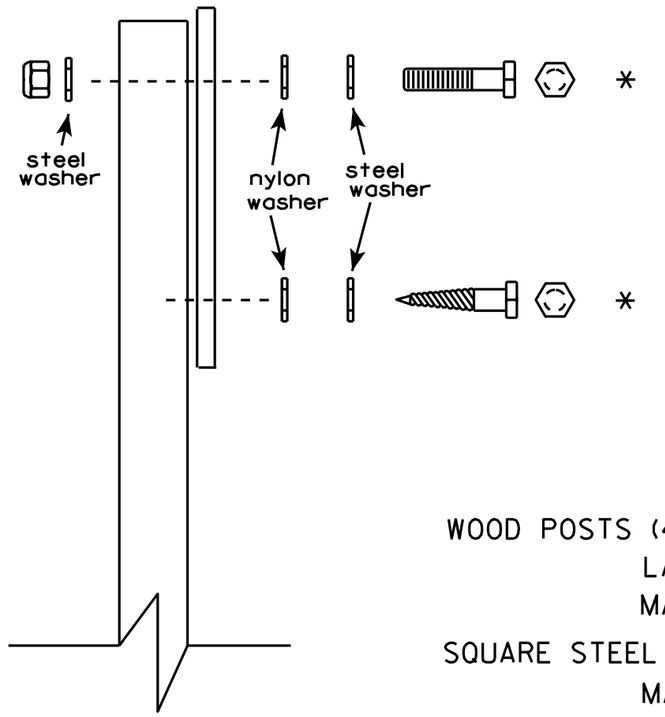
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A44.DGN PLOT DATE : 23-JUL-2015 15:23 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 107.021305:1.000000 WISDOT/CADDS SHEET 42





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

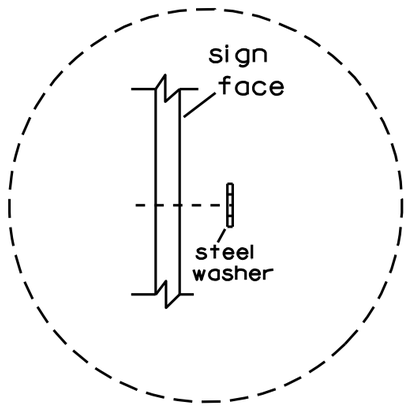
a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

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



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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

7

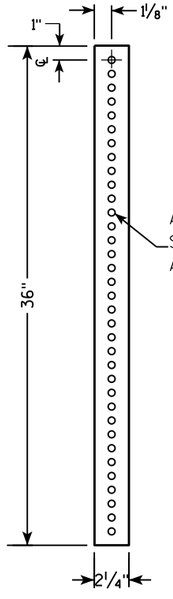
7

PROJECT NO:

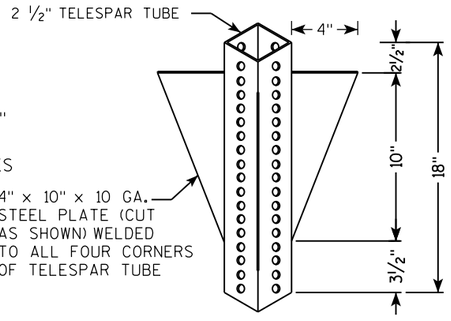
SHEET NO: 164 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

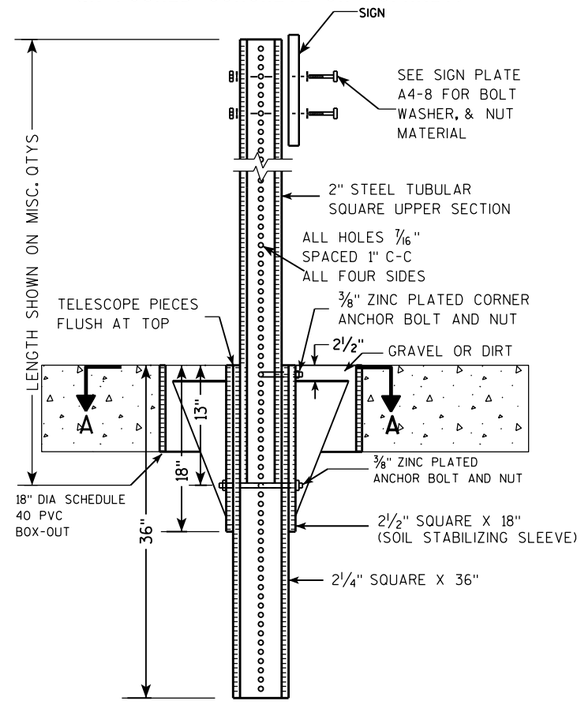
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



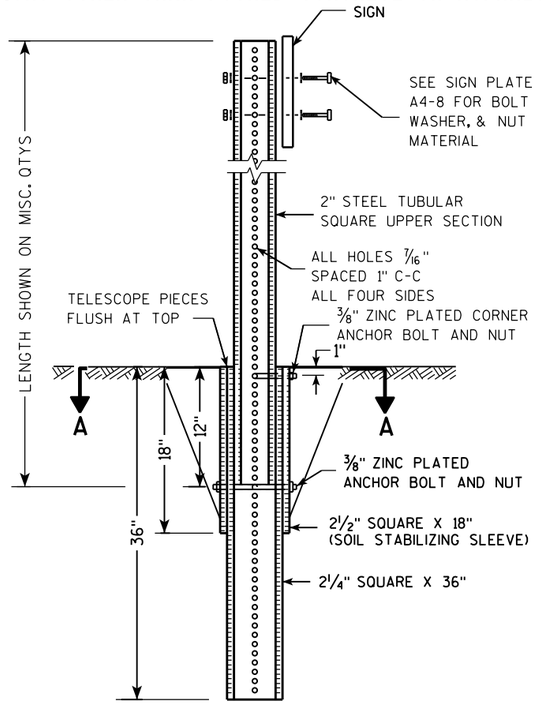
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

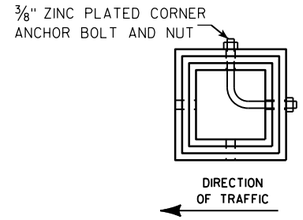


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

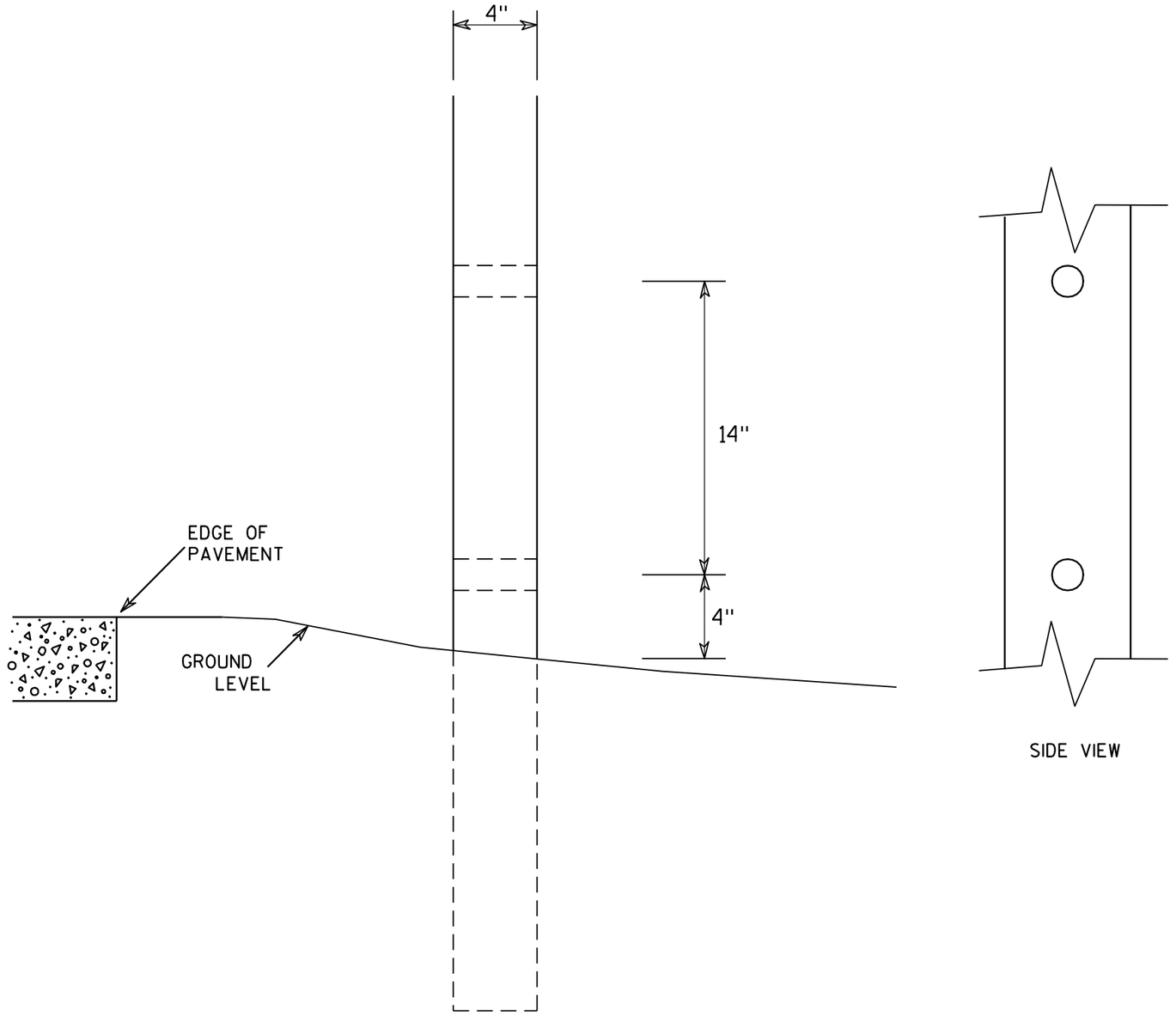
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

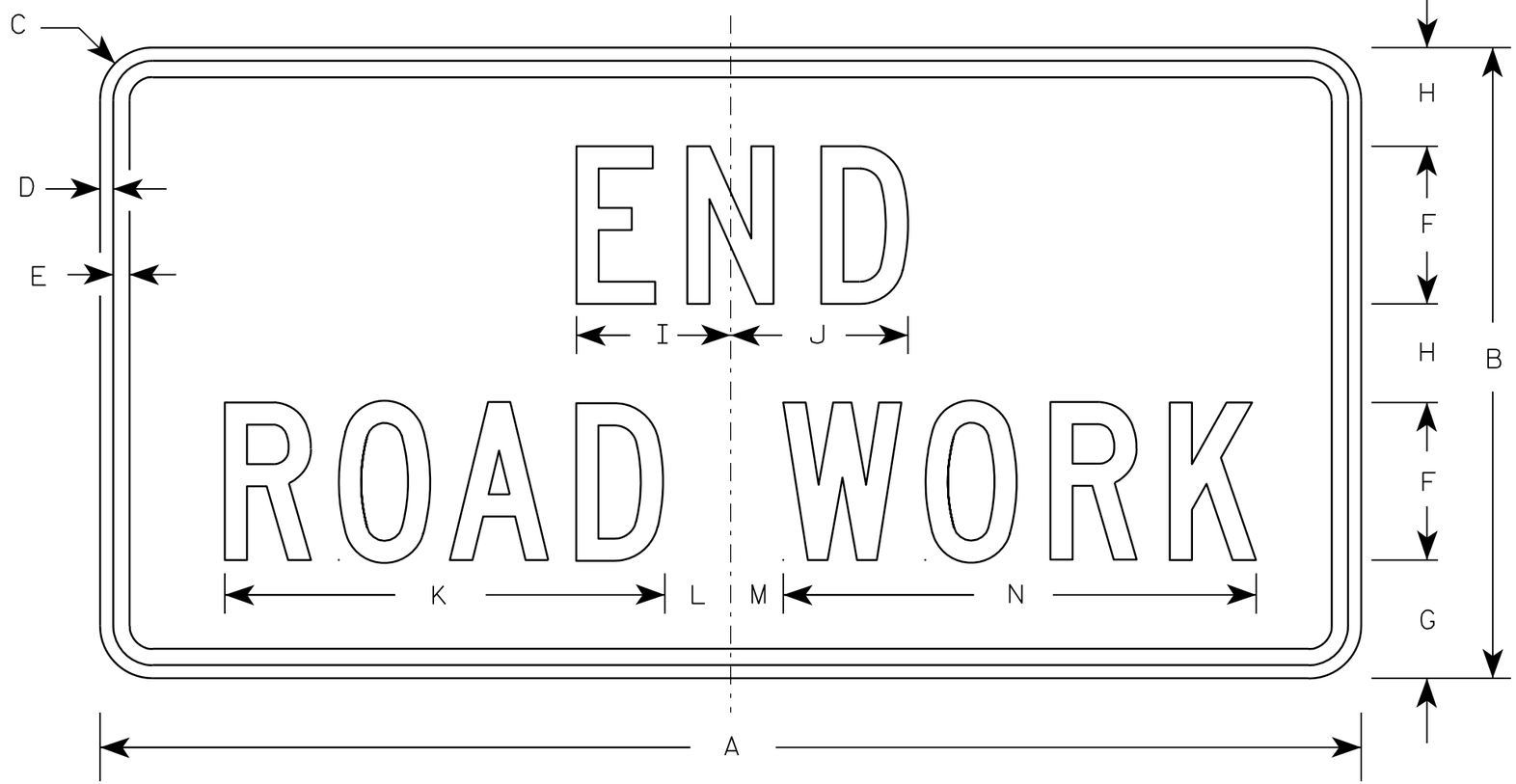
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	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

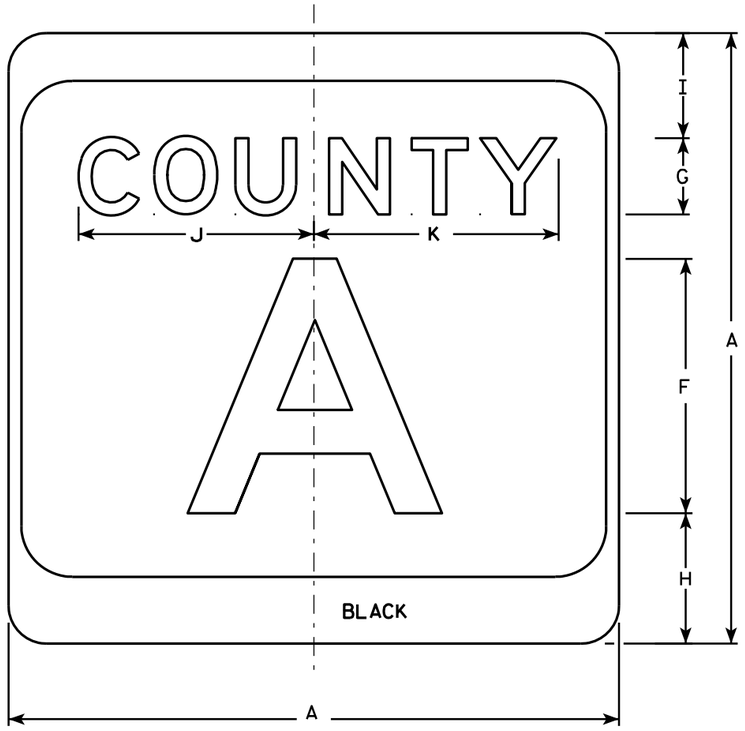
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

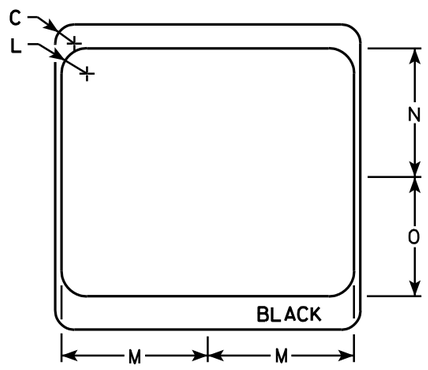
APPROVED Matthew R Rauch
for State Traffic Engineer

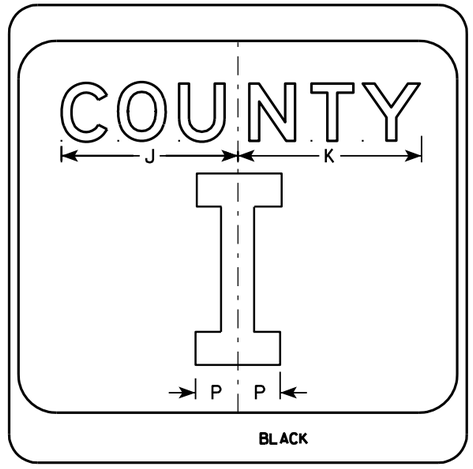
DATE 9/30/09 PLATE NO. G20-2A.8

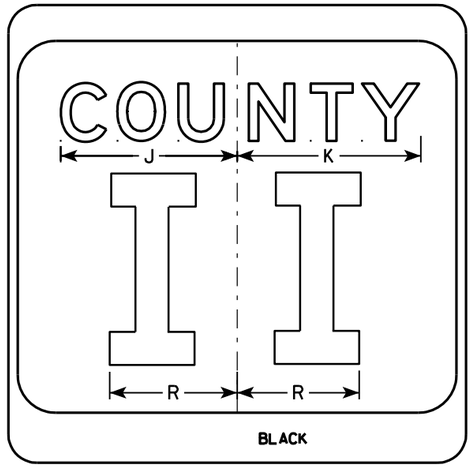
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 167	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

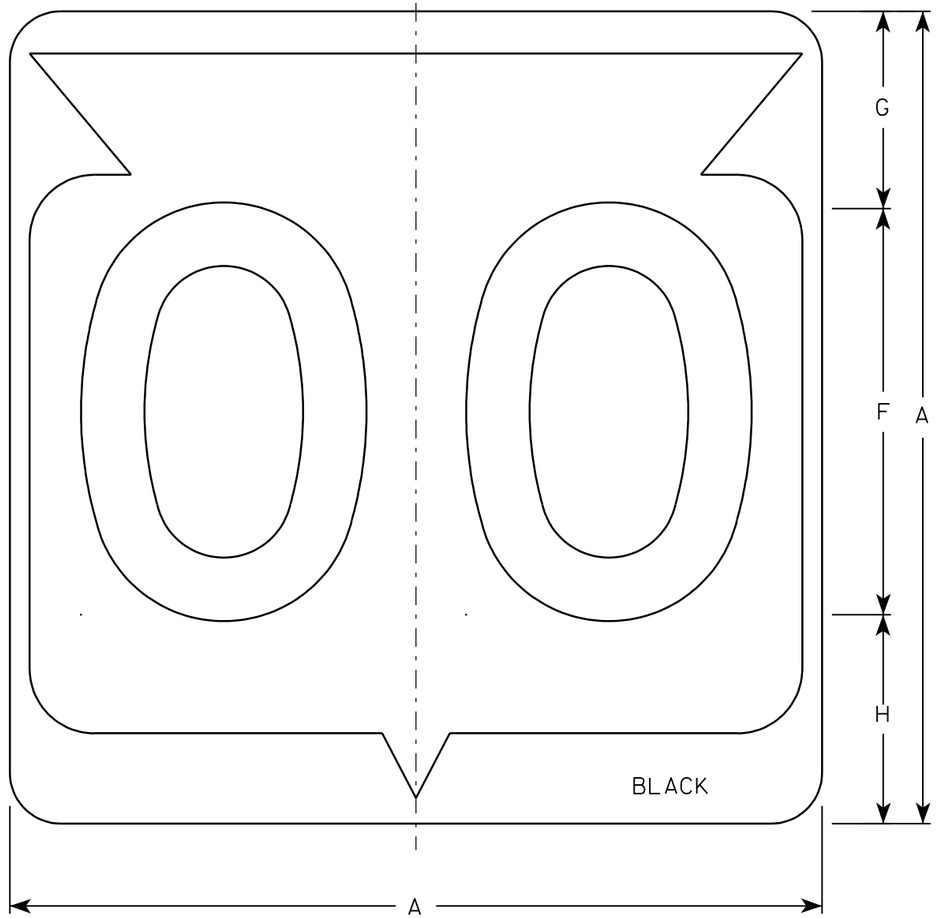
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

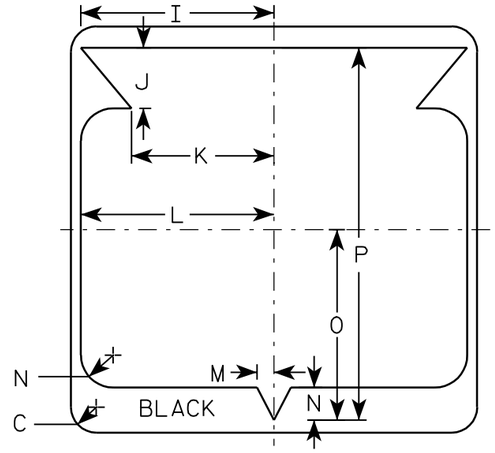
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 168	E



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

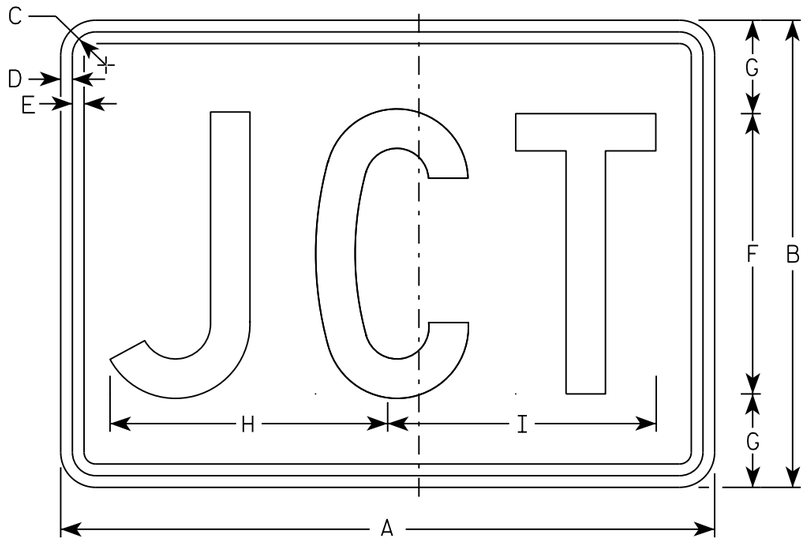
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

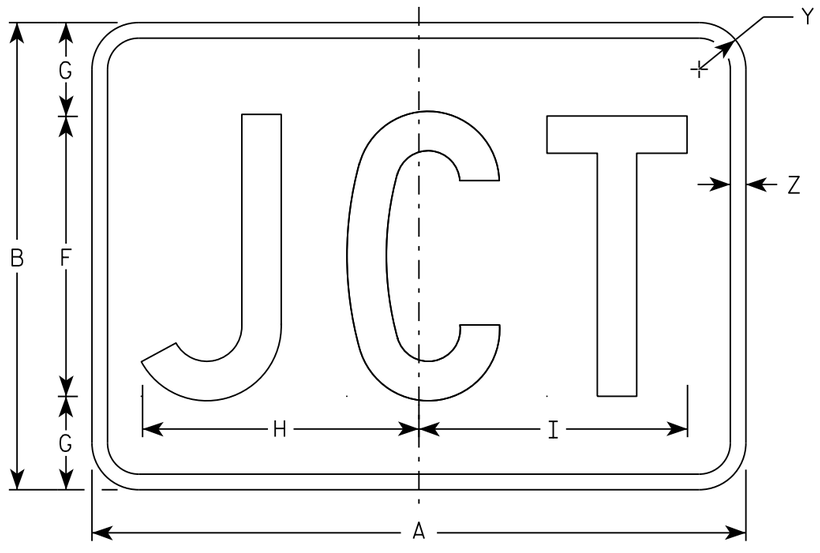
APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	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

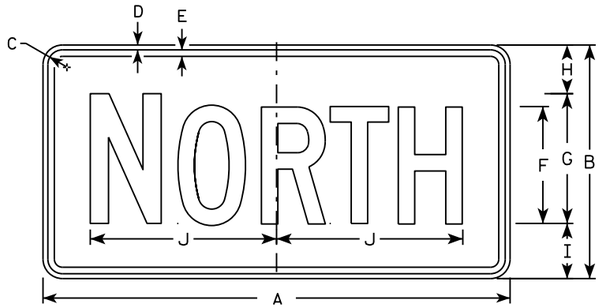
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

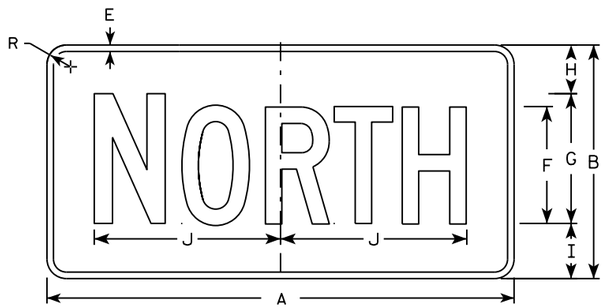
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 170 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



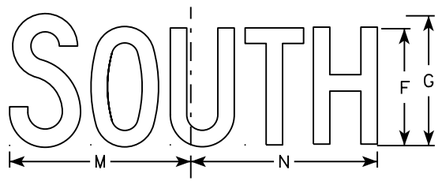
M3-1
MM3-1
MP3-1



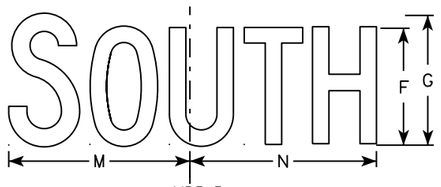
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

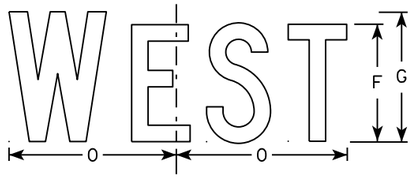
MB3-2
MK3-2
MN3-2



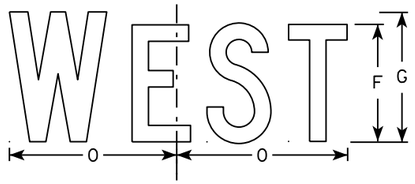
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

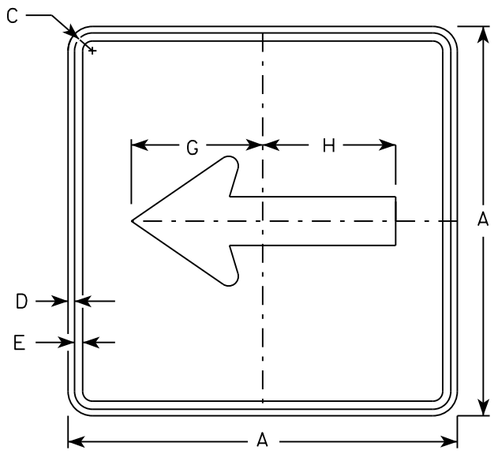
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

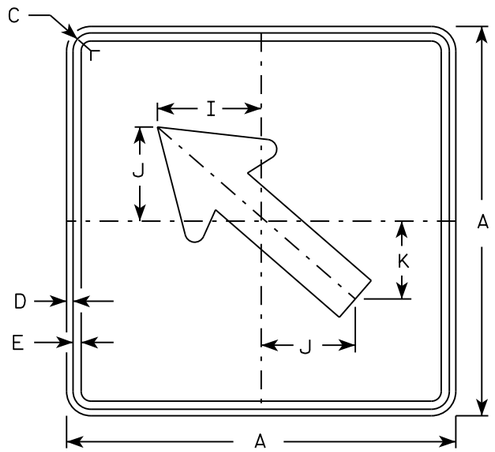
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



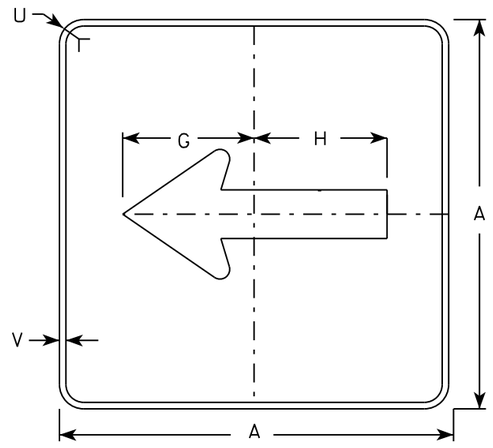
M6-1
MM6-1
MO6-1
MP6-1



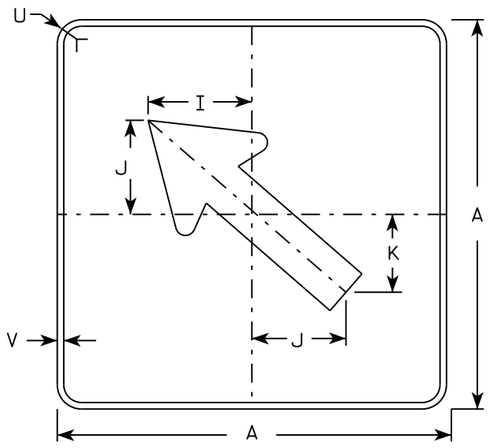
M6-2
MM6-2
MO6-2
MP6-2

NOTES

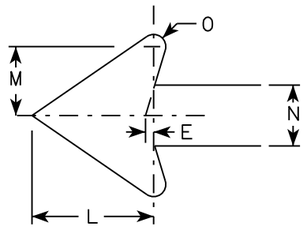
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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



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



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



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

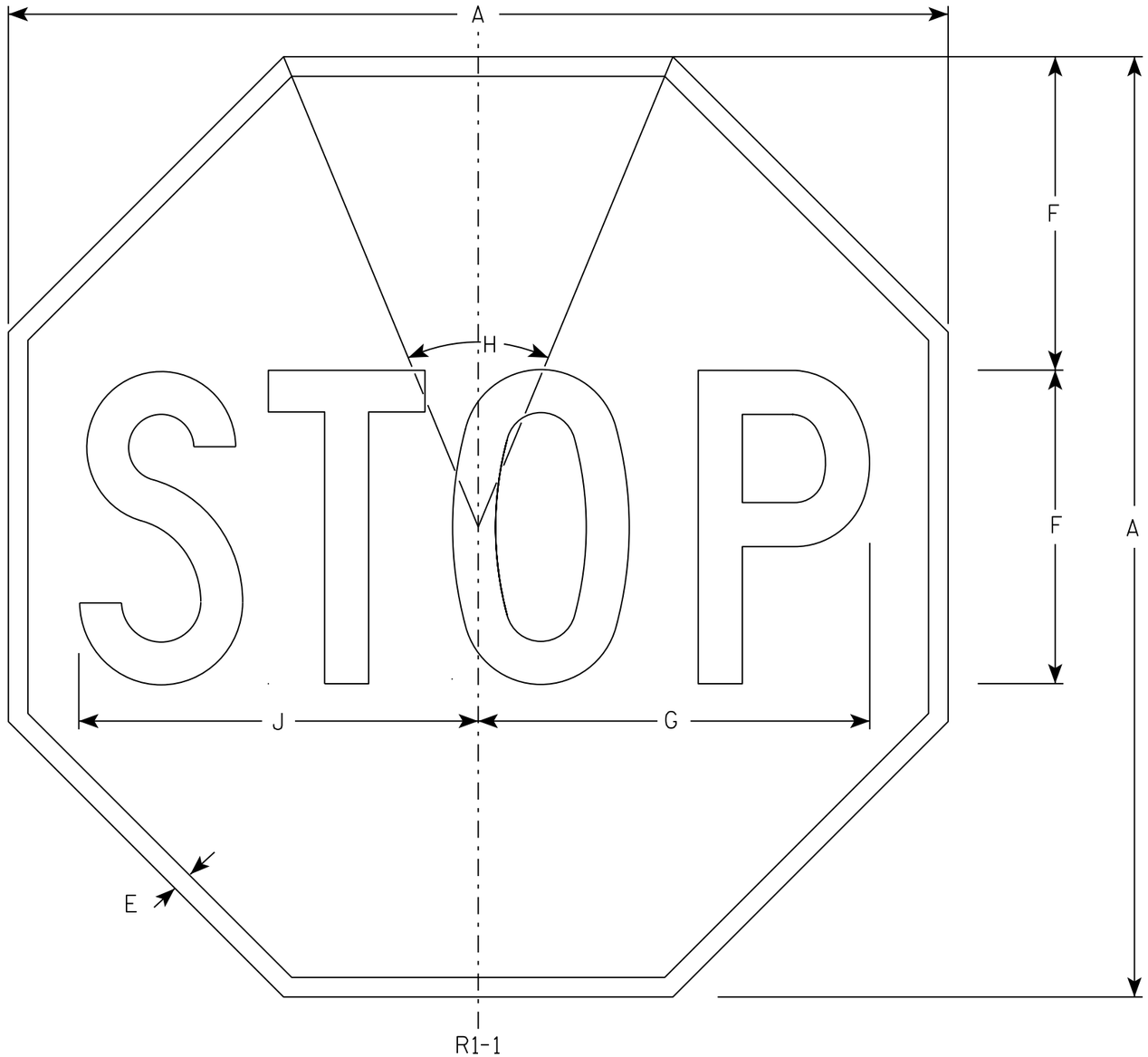
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 172 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R1-1

NOTES

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

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

STANDARD SIGN
R1-1

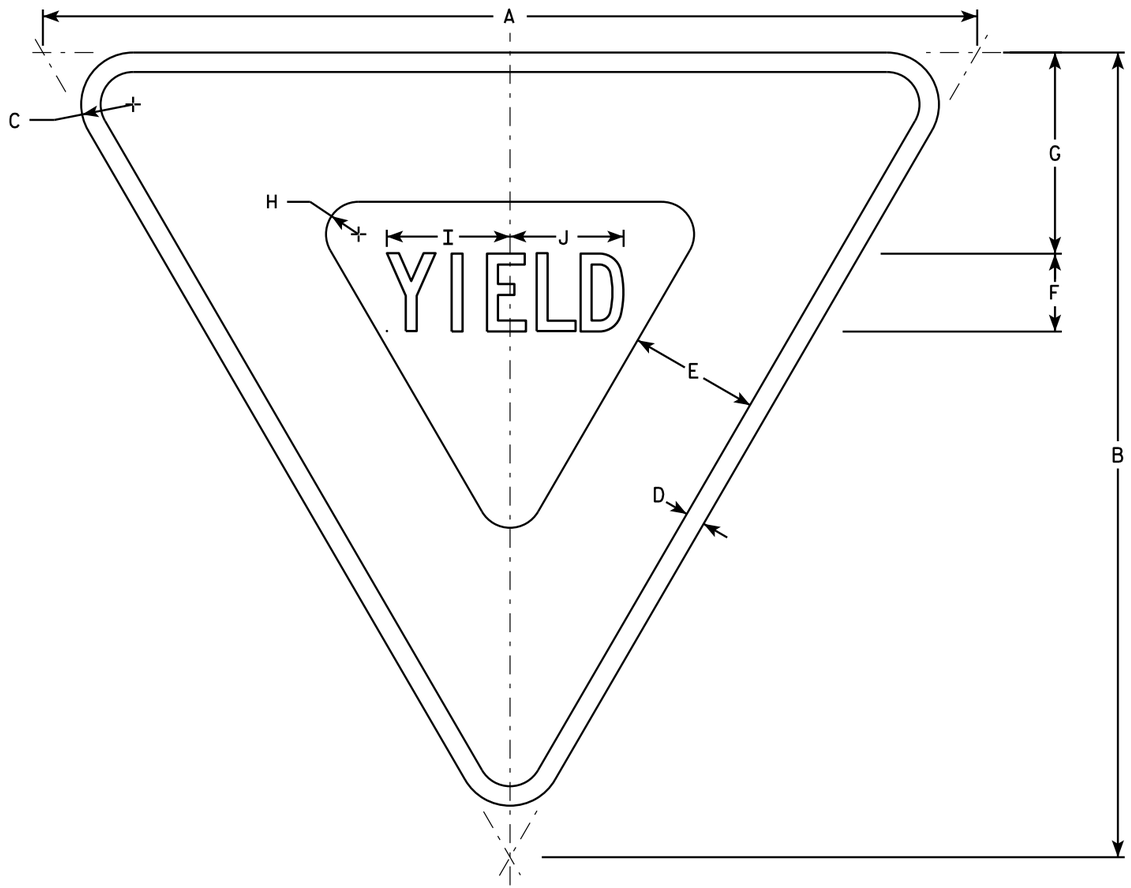
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE 173 R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R11.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.378143:1.000000



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

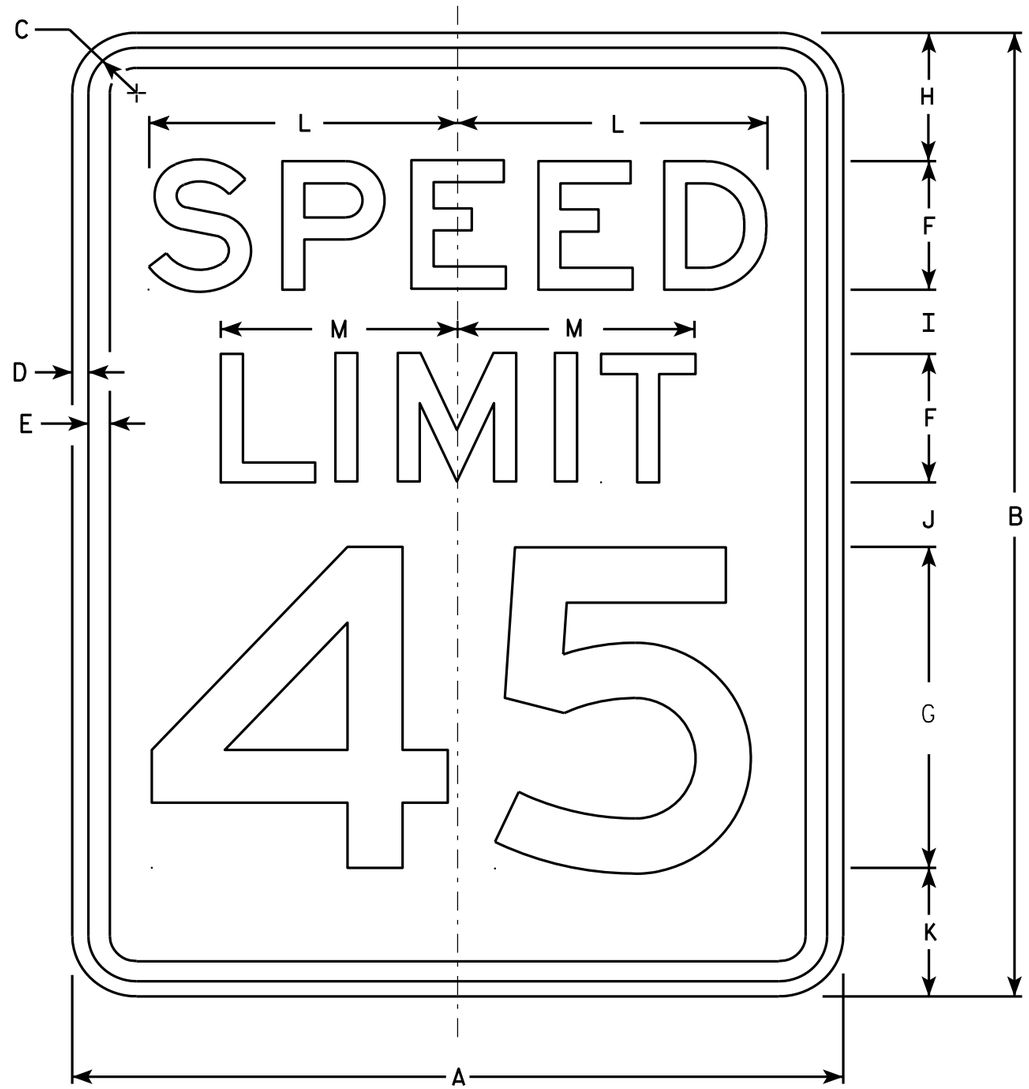
APPROVED Matthew R Rauch
for State Traffic Engineer

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



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

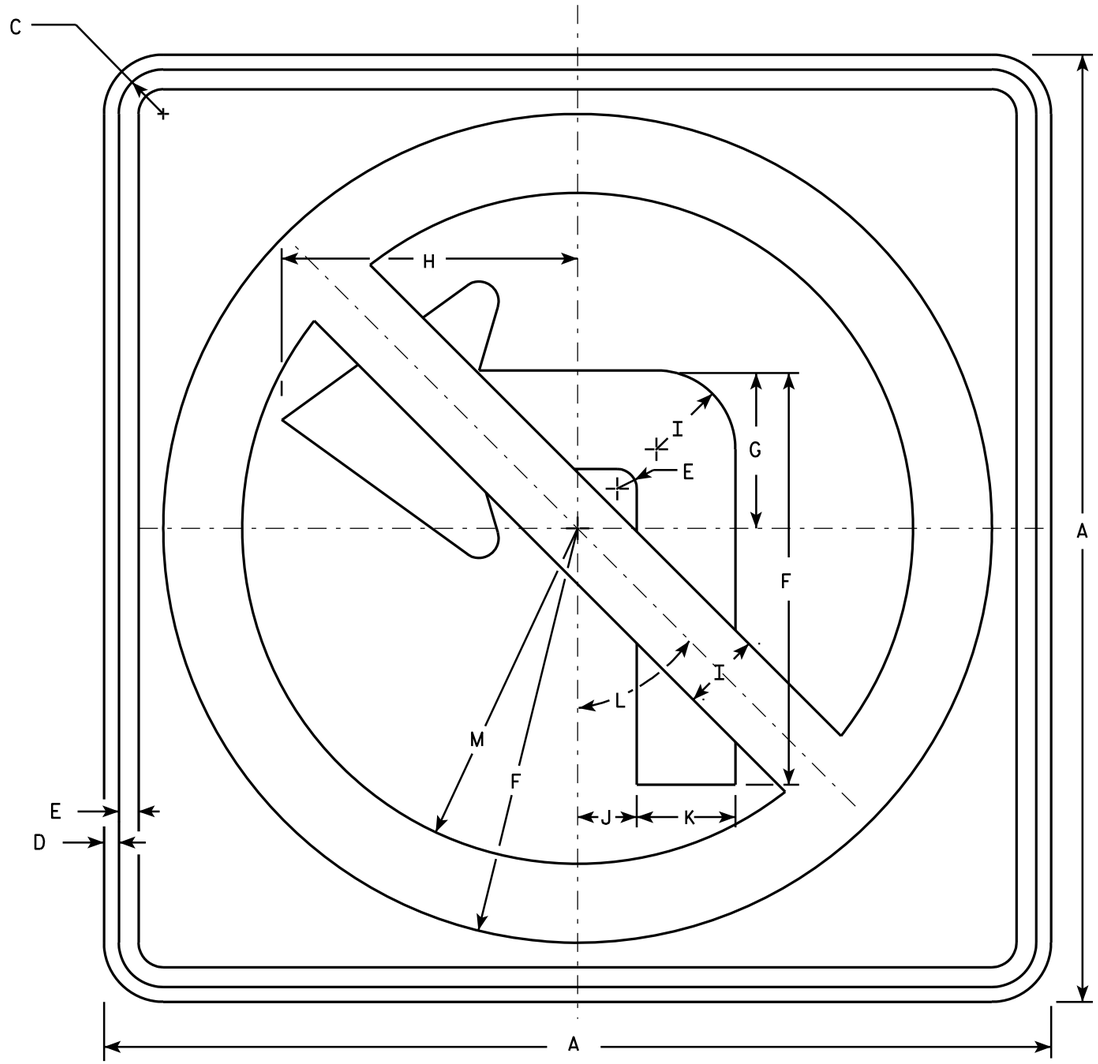
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 175 | E

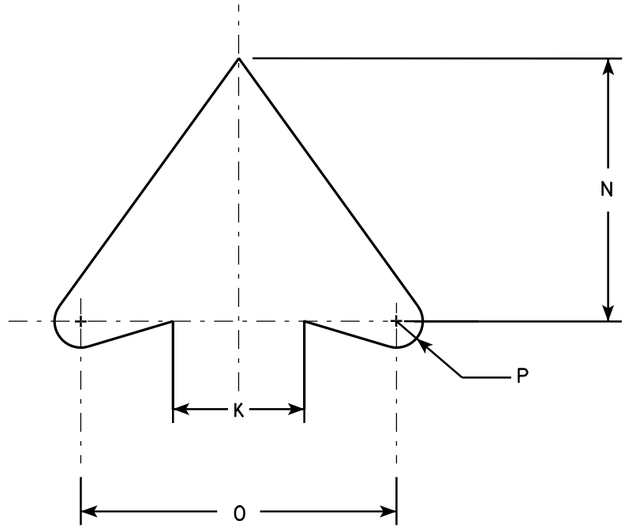
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000
WISDOT/CADDS SHEET 42



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

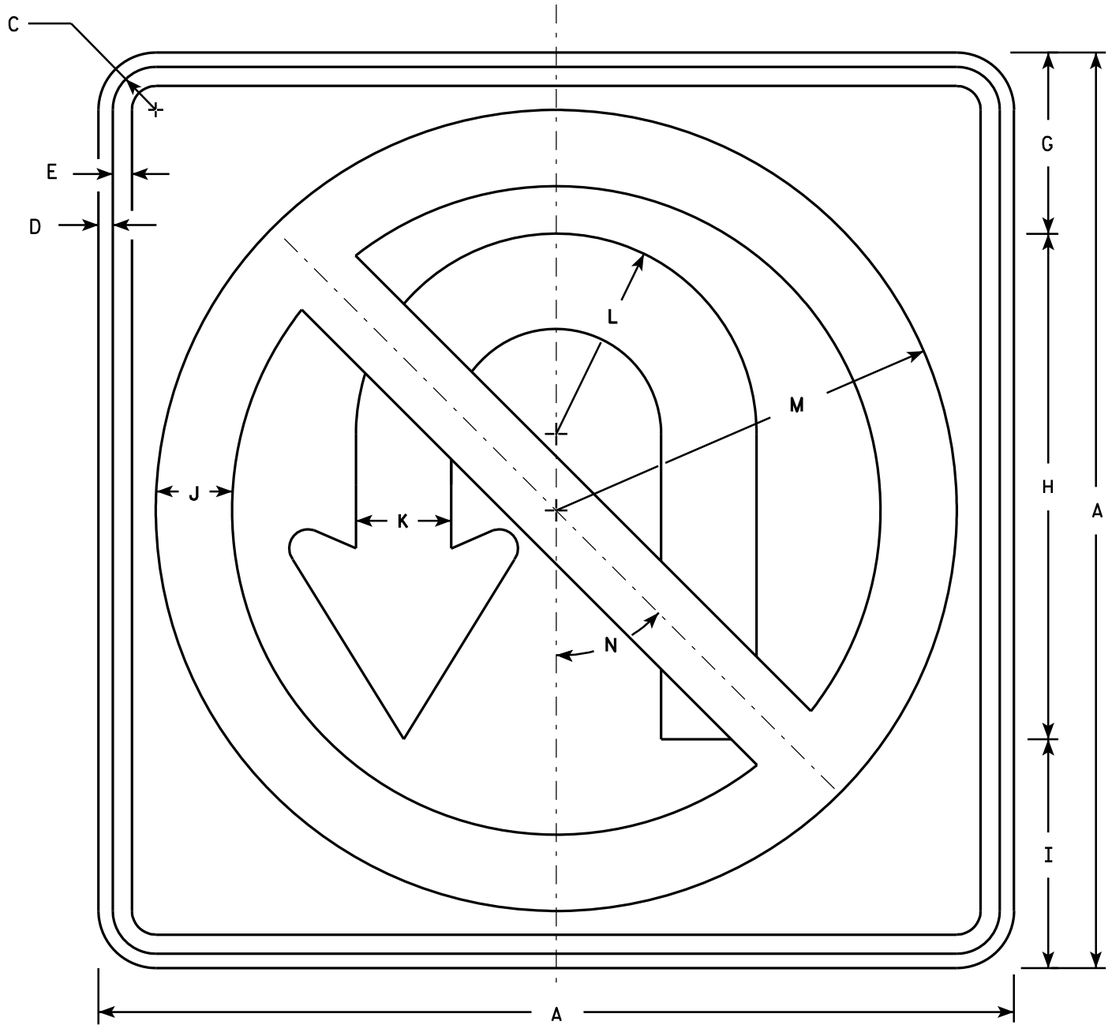
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

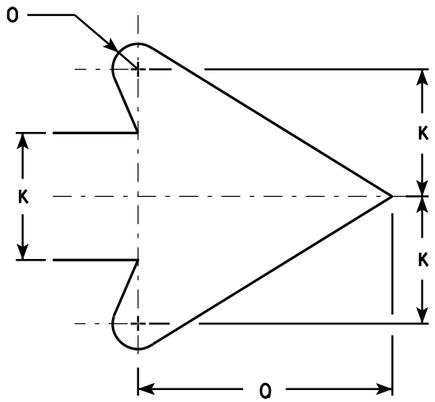
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 176	E



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	O	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

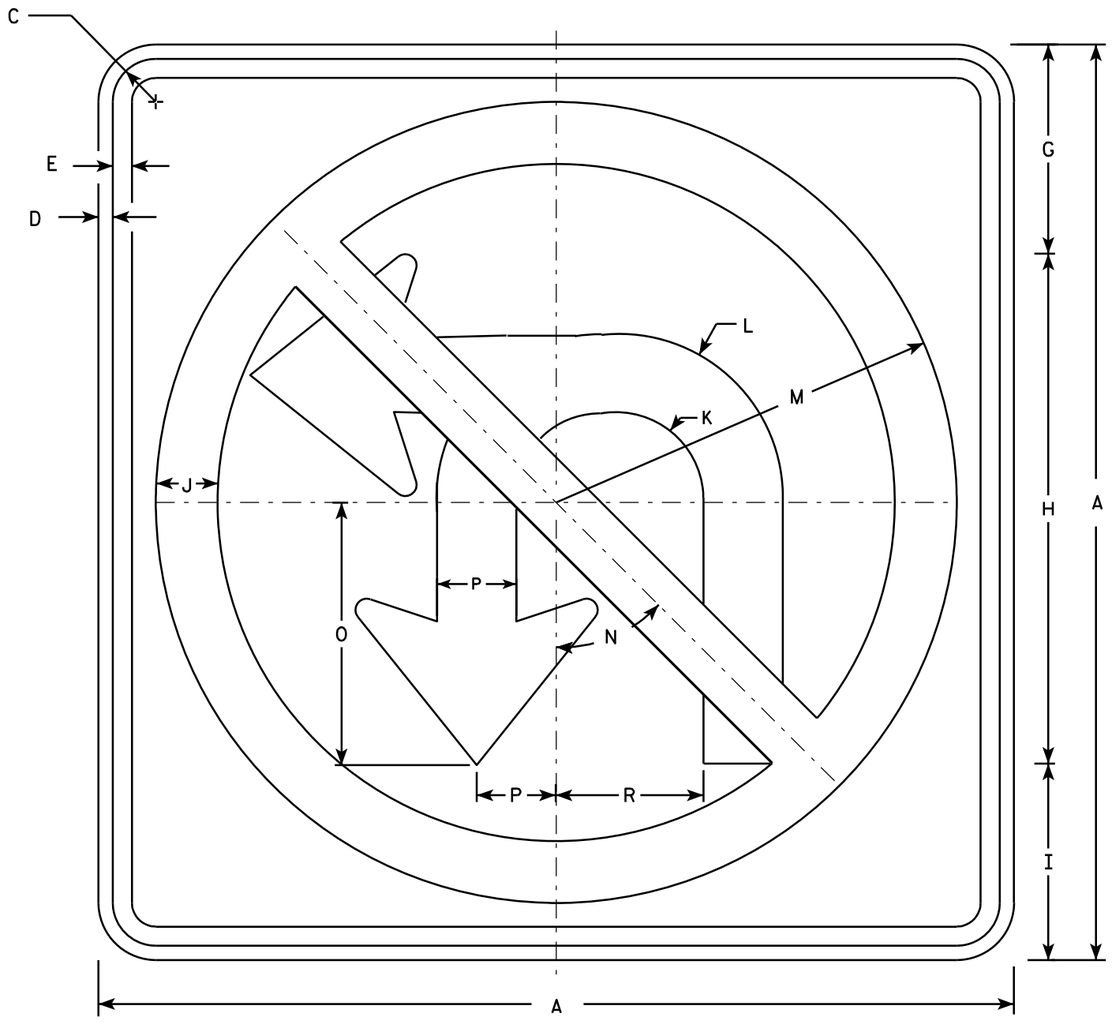
STANDARD SIGN
R3-4

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: 177	E



R3-18

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.

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		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

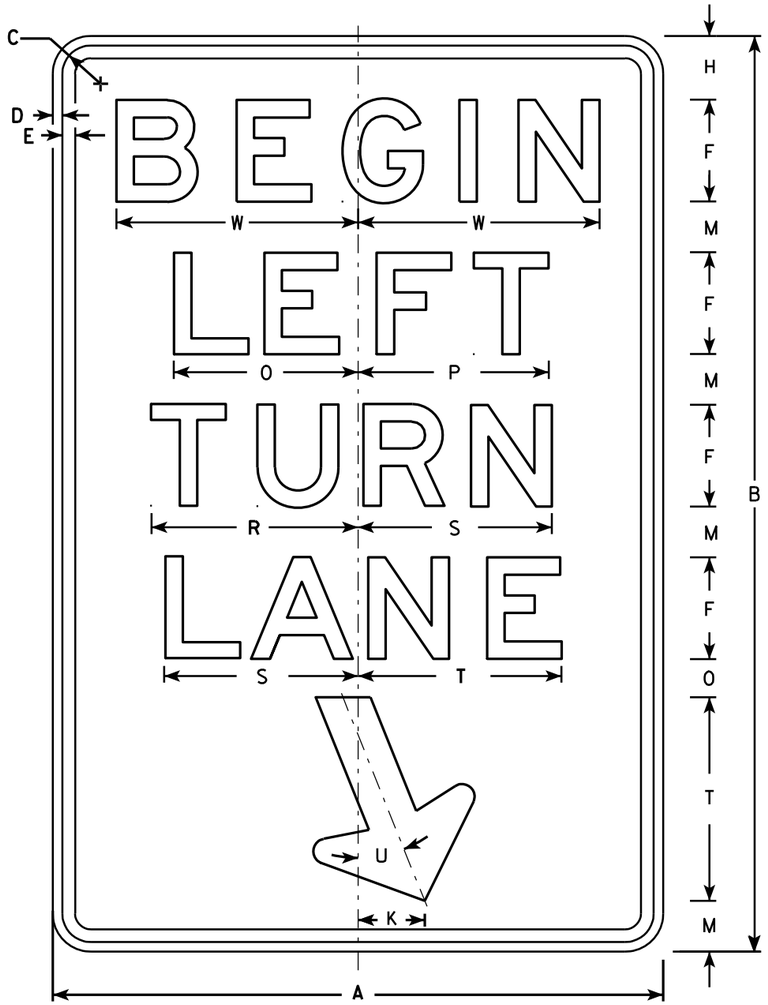
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

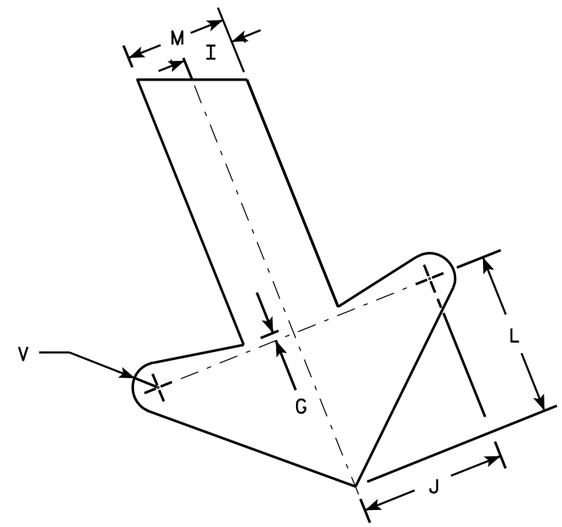
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 178	E



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																											

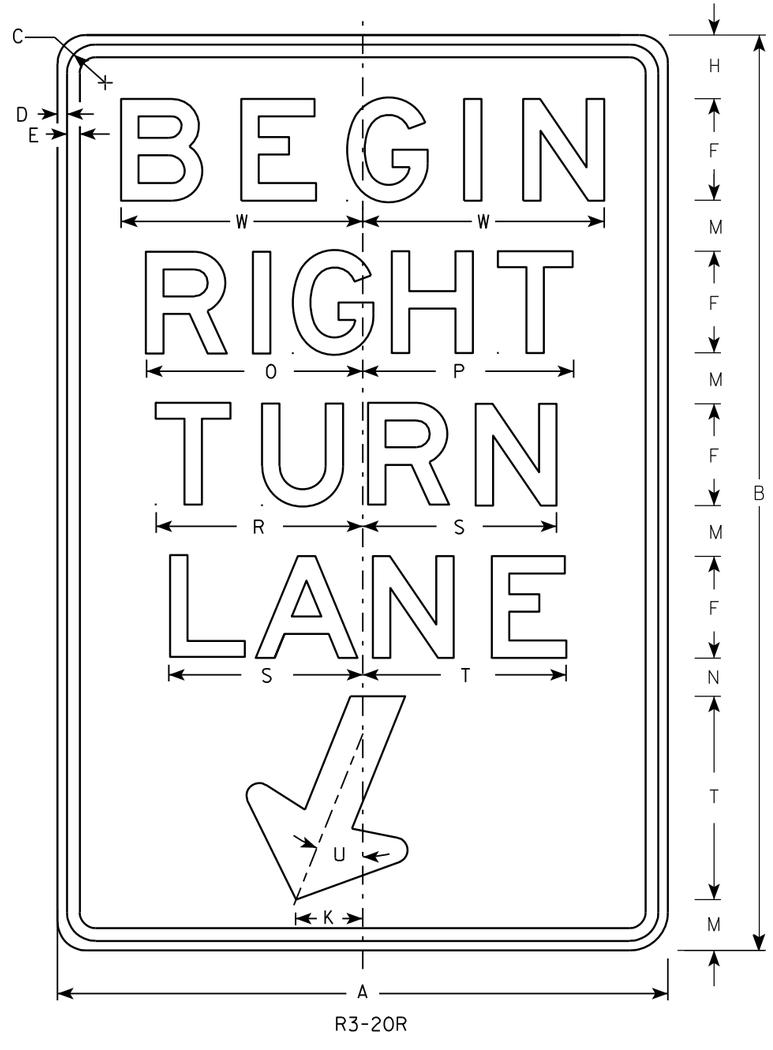
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

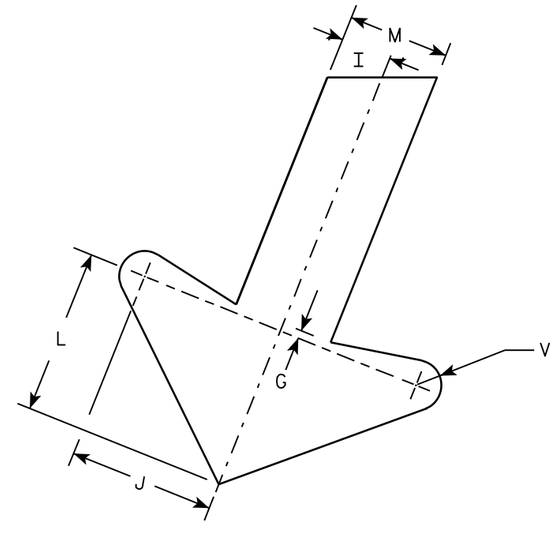
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E



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																											

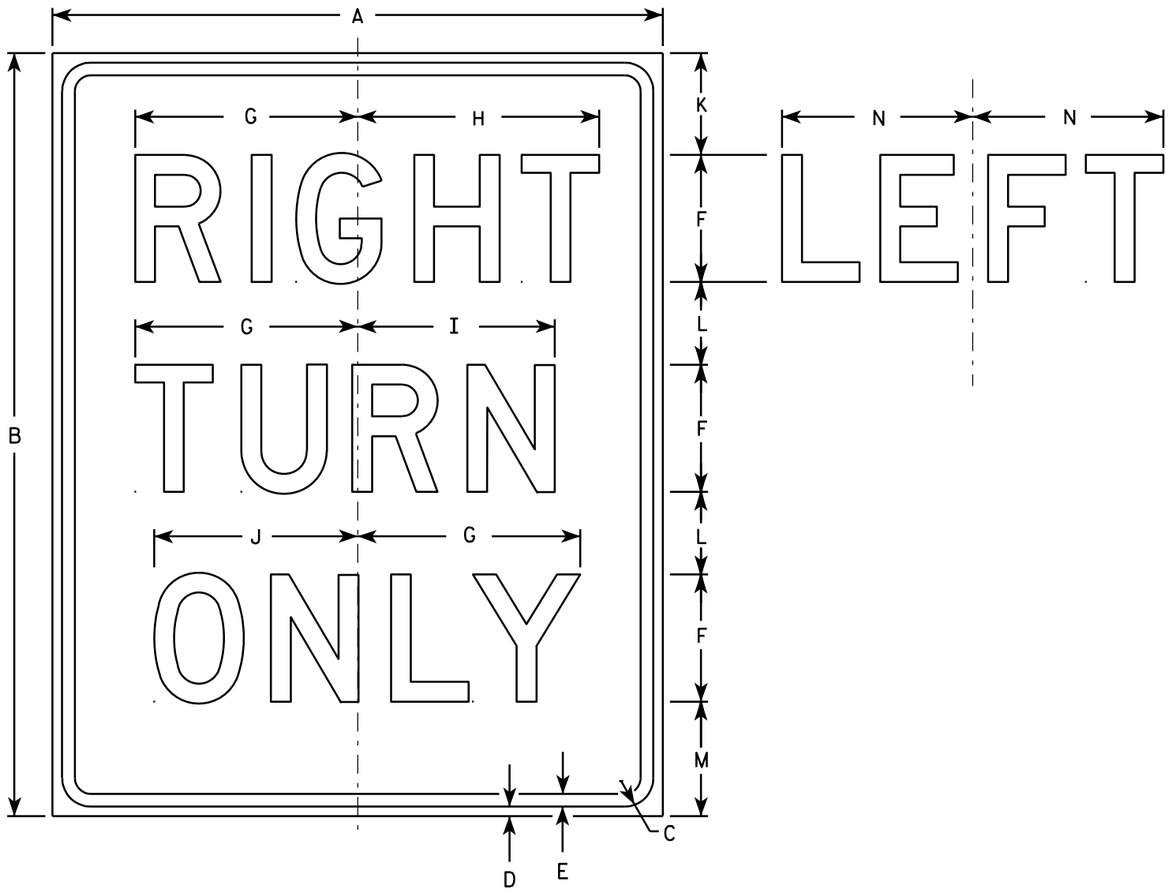
STANDARD SIGN
R3-20R

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: 180 | E



R3-53R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R3-53L same as R3-53R except LEFT is substituted for 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																											
2S	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
2M	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
3	24	30	1 1/8	3/8	1/2	5	8 3/4	9 1/2	7 3/4	8	4	3 1/4	4 1/2	7 1/2													5.0
4																											
5																											

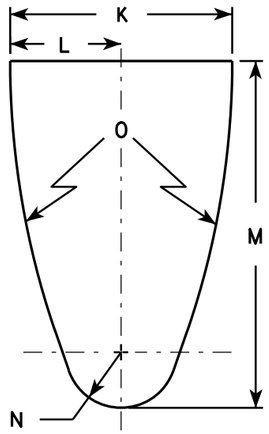
STANDARD SIGN
R3-53

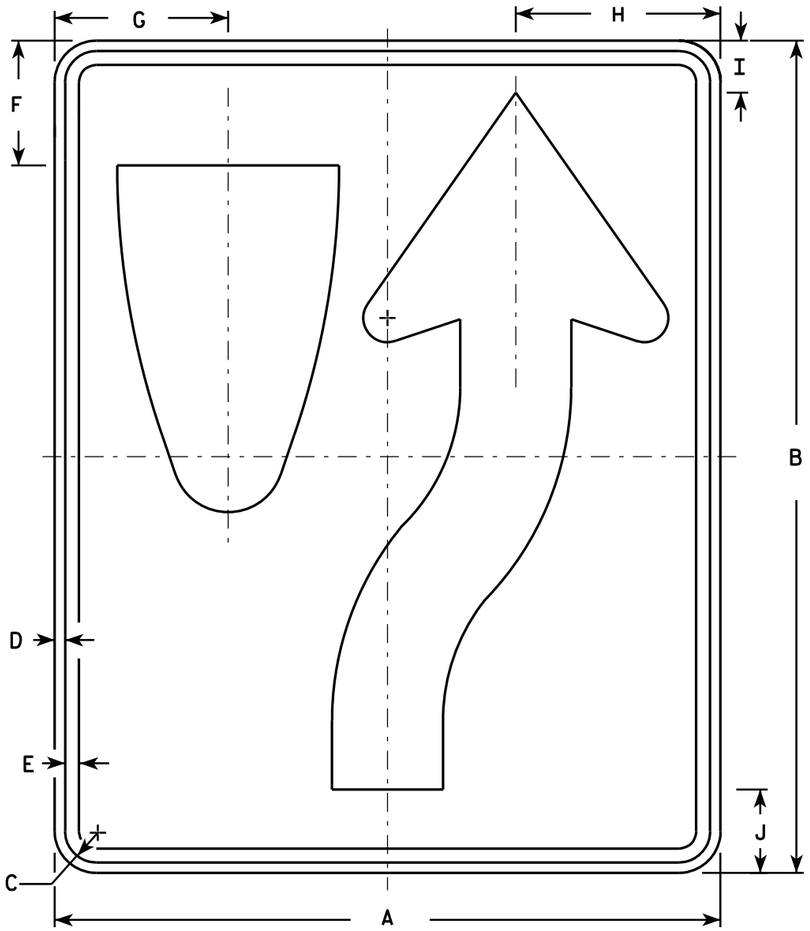
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 181	E

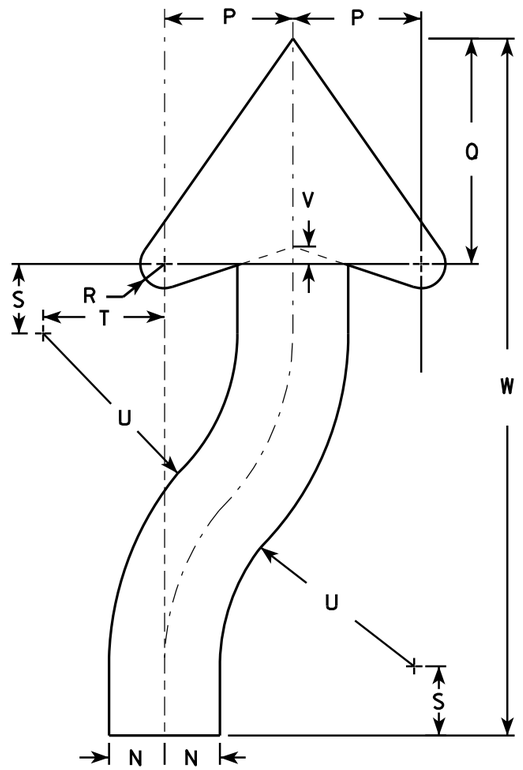




R4-7

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

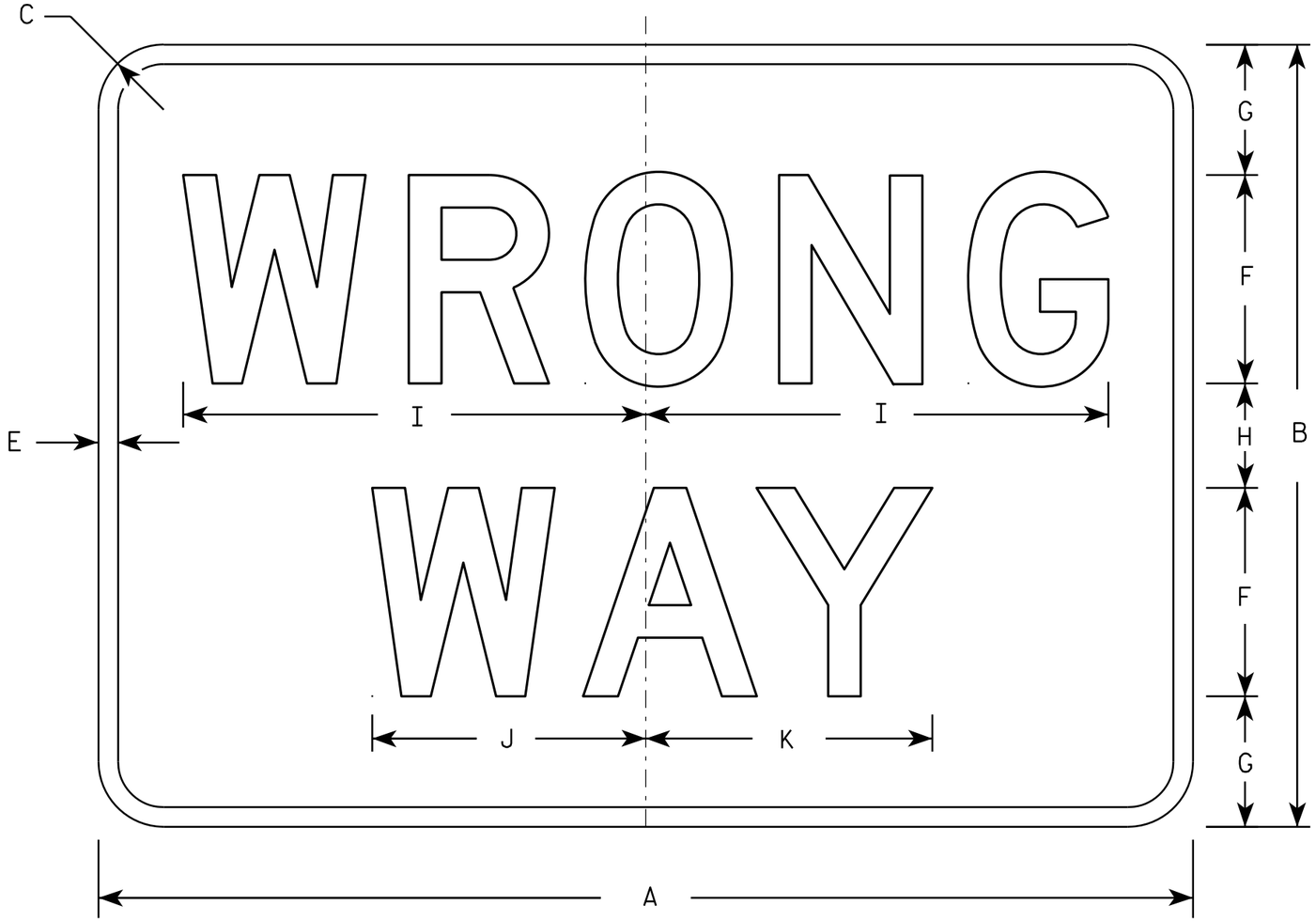
STANDARD SIGN
R4-7 & R4-8

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: 182	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

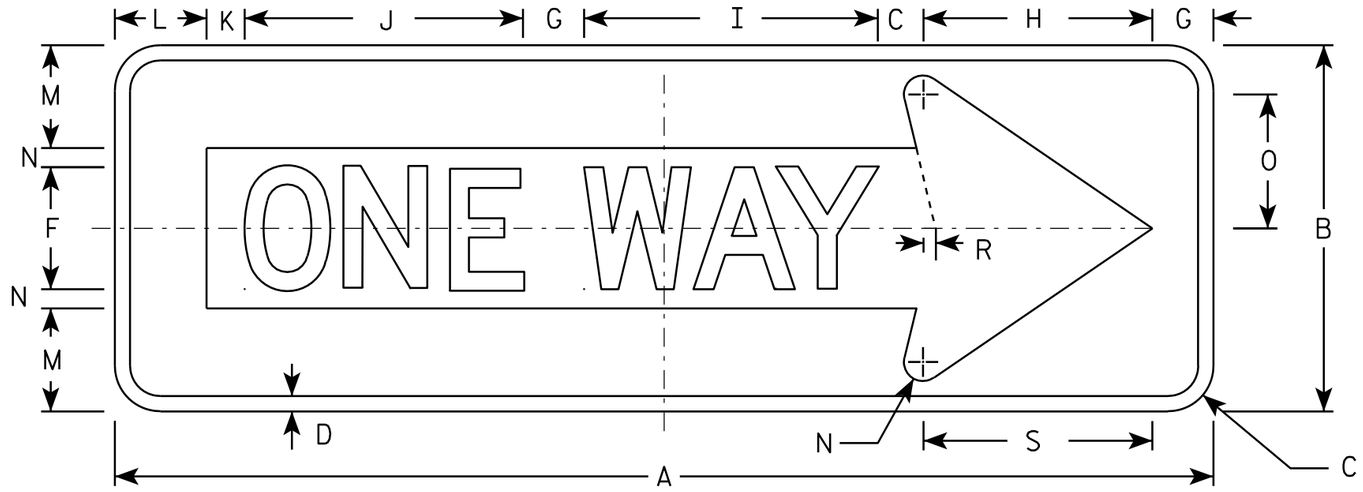
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

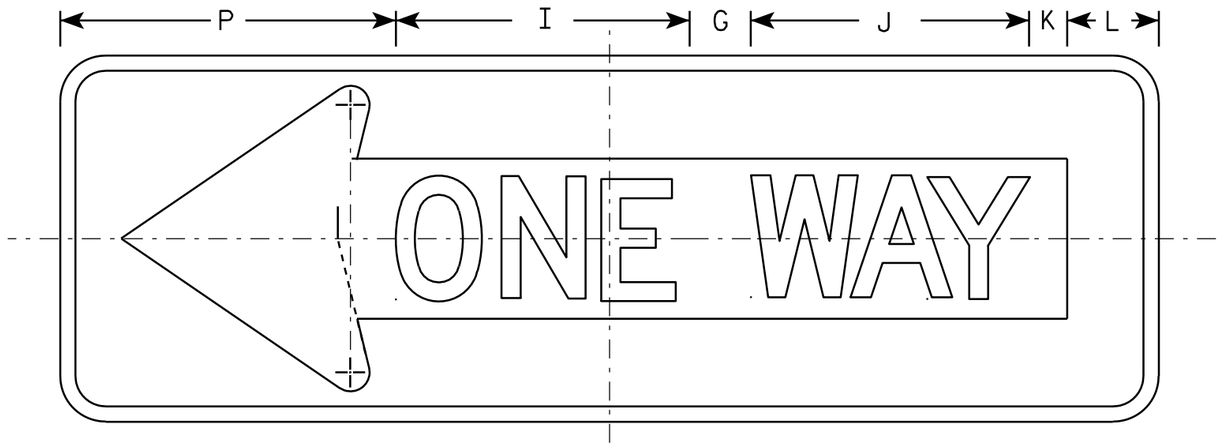
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
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.



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

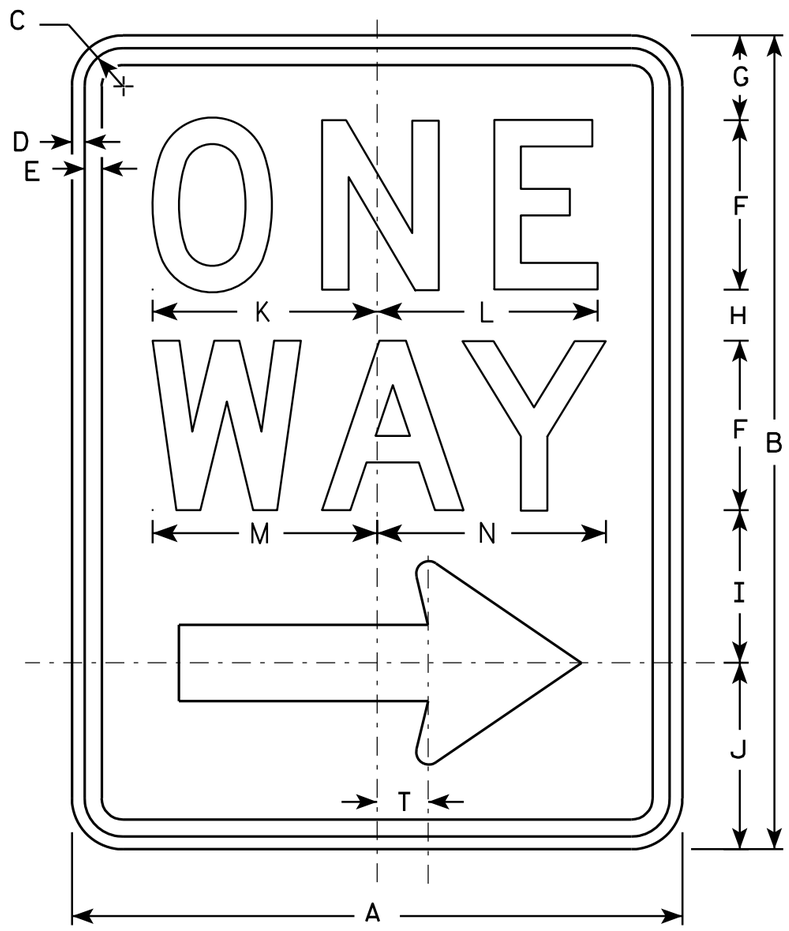
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

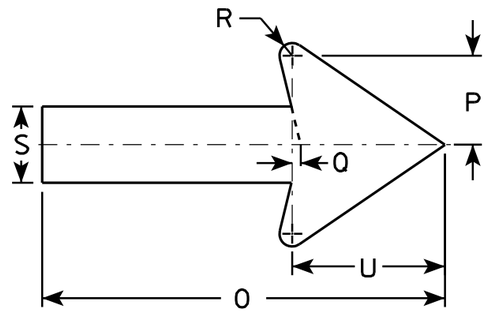
SHEET NO: 184 E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

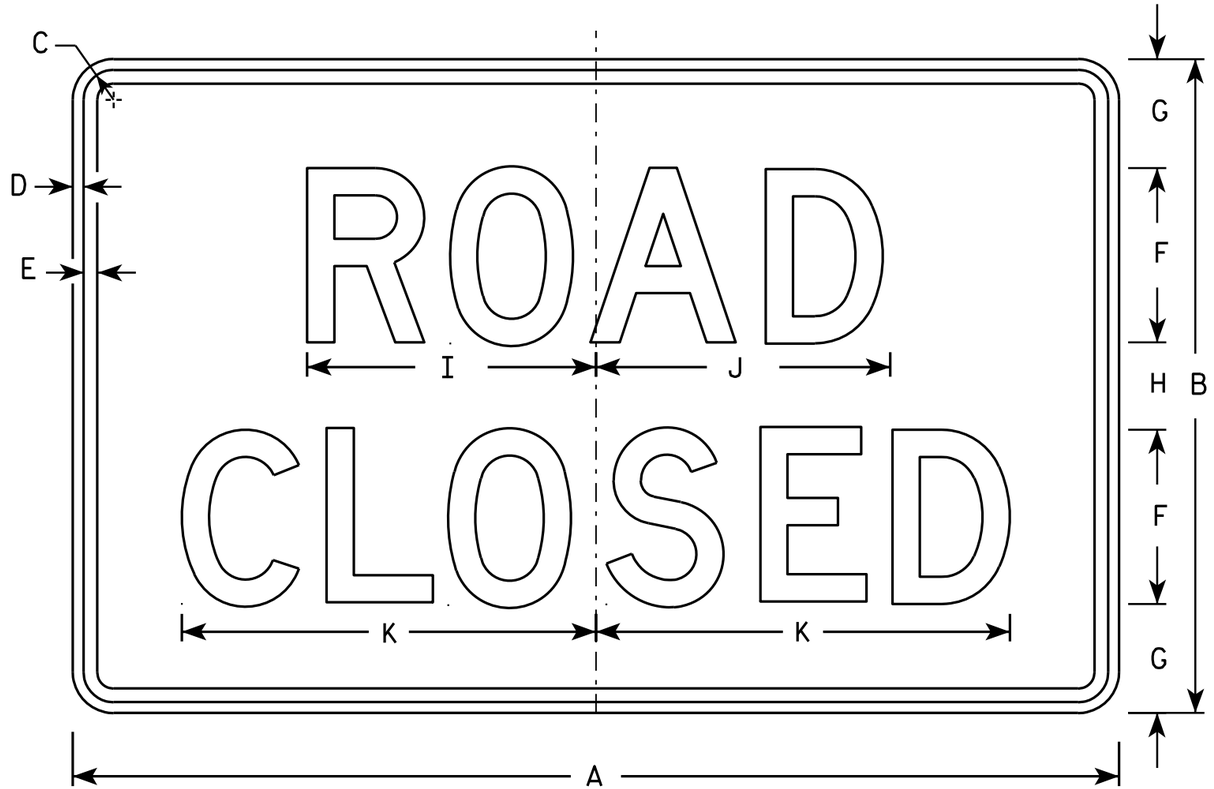
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

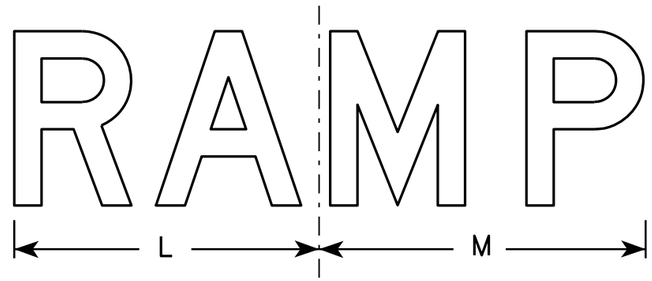
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 185 | E



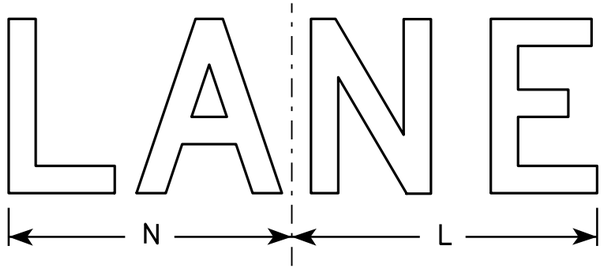
R11-2

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

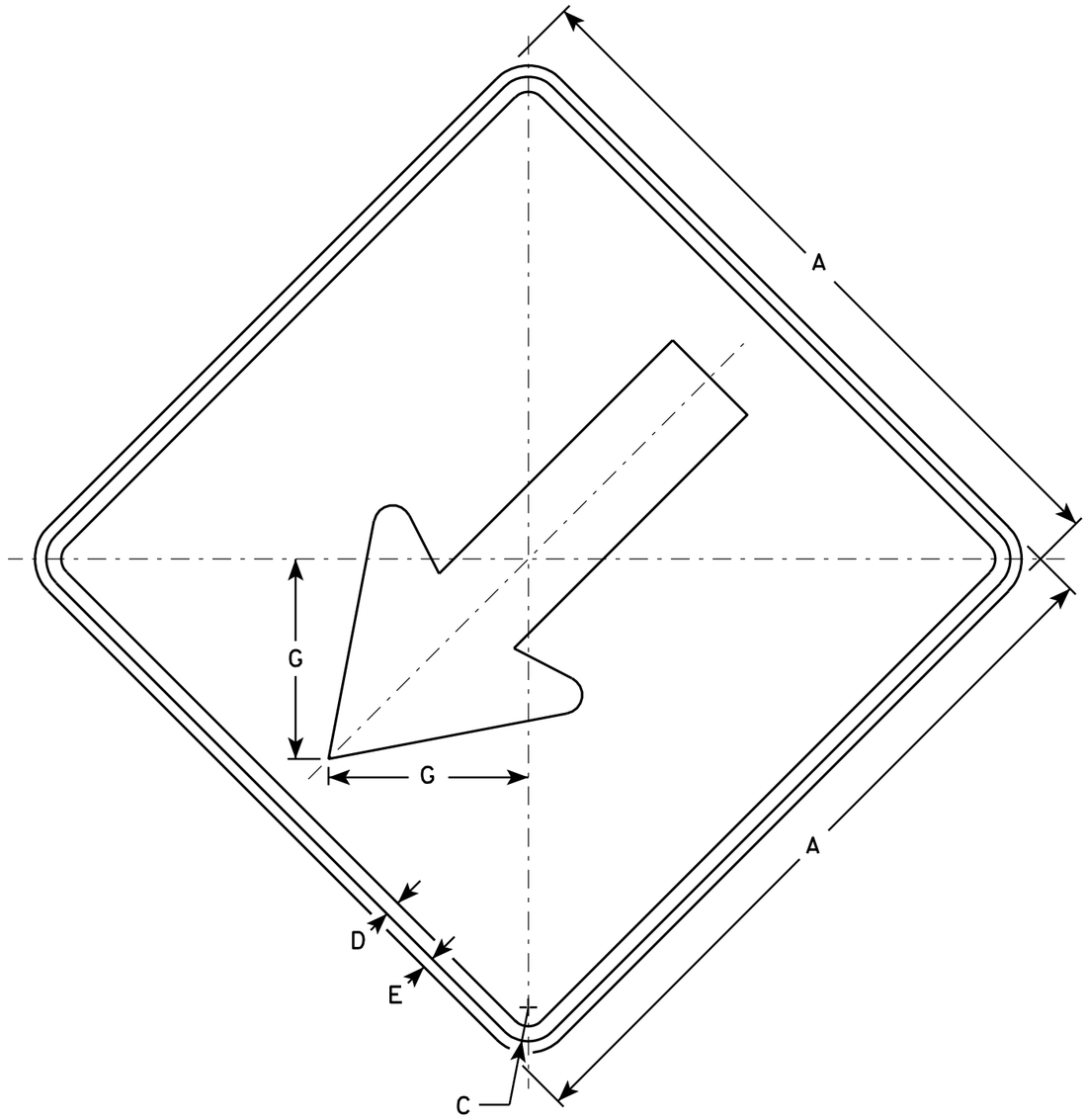
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

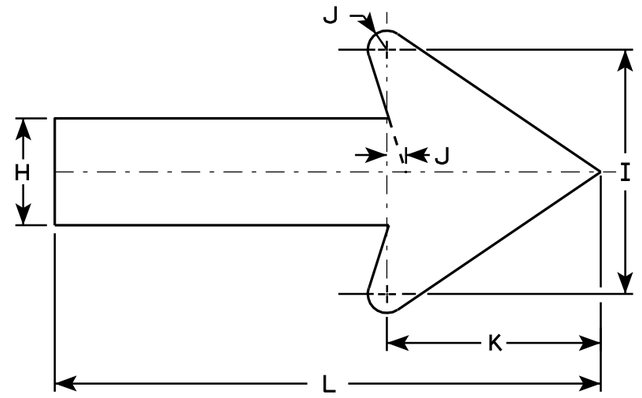
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 186 | E



W12-1

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
2M	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
3	30		1 3/8	5/8	1/2		8 1/4	4 3/8	10	3/4	8 3/4	22 3/8															6.25
4	36		1 3/4	3/4	5/8		10 3/8	5 1/2	12 1/2	1	11	27 7/8															9.0
5	48		2 1/4	3/4	1		12 1/2	6 5/8	15	1 1/4	13 1/4	33 1/2															16

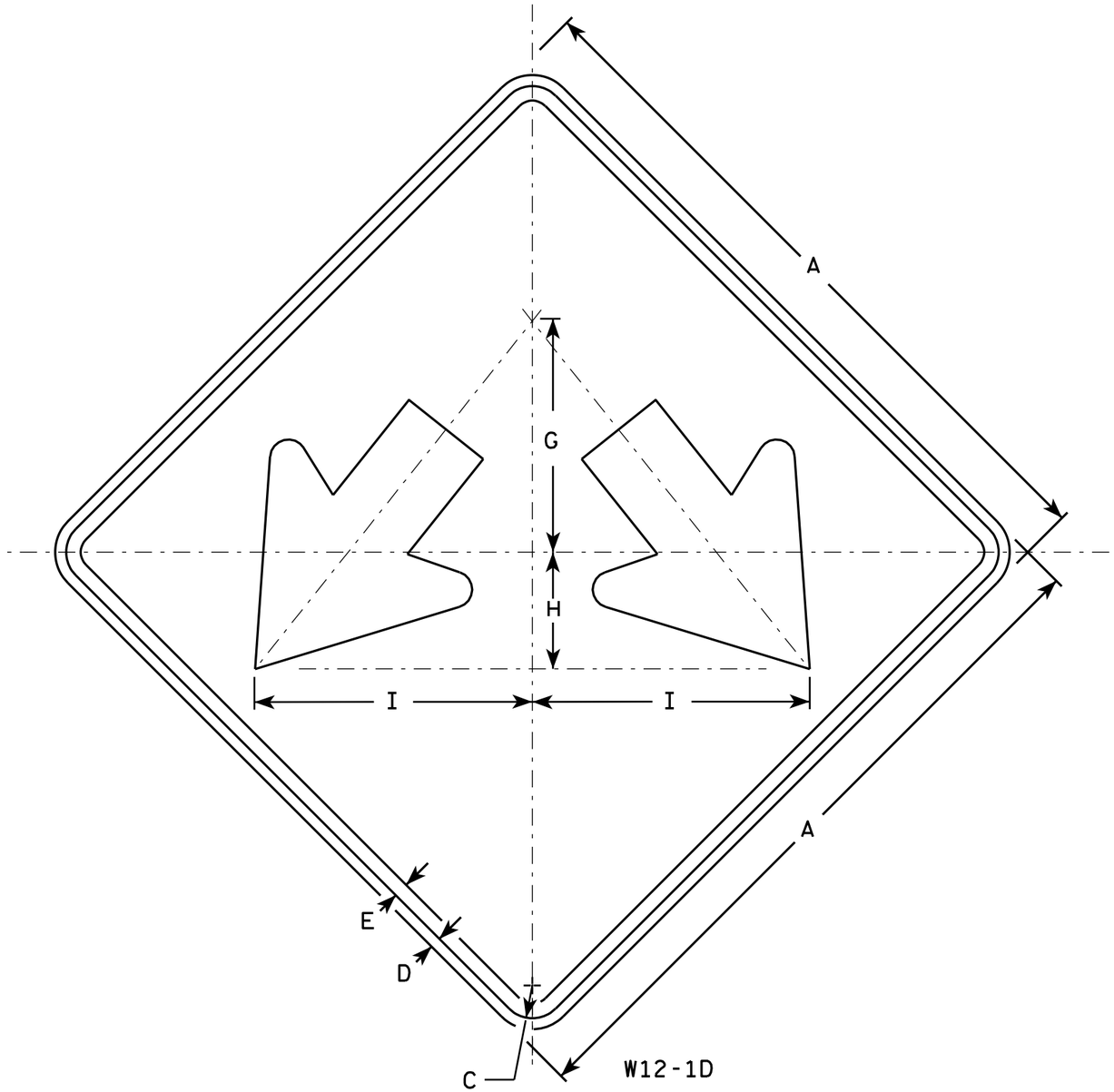
STANDARD SIGN
W12-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

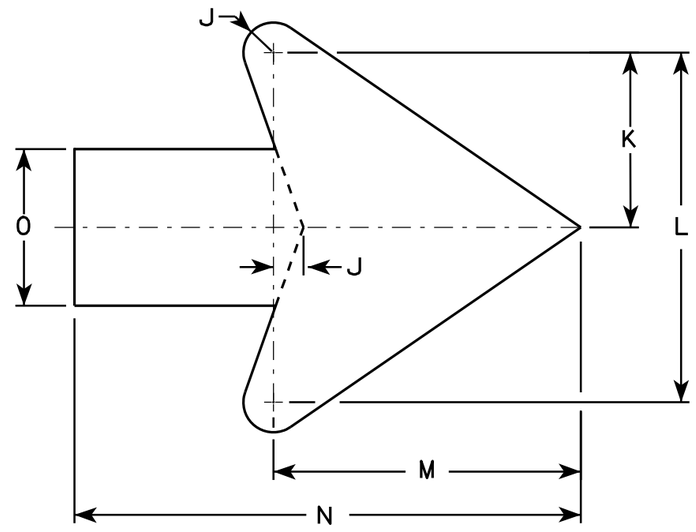
DATE 3/13/13 PLATE NO. W12-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E



NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

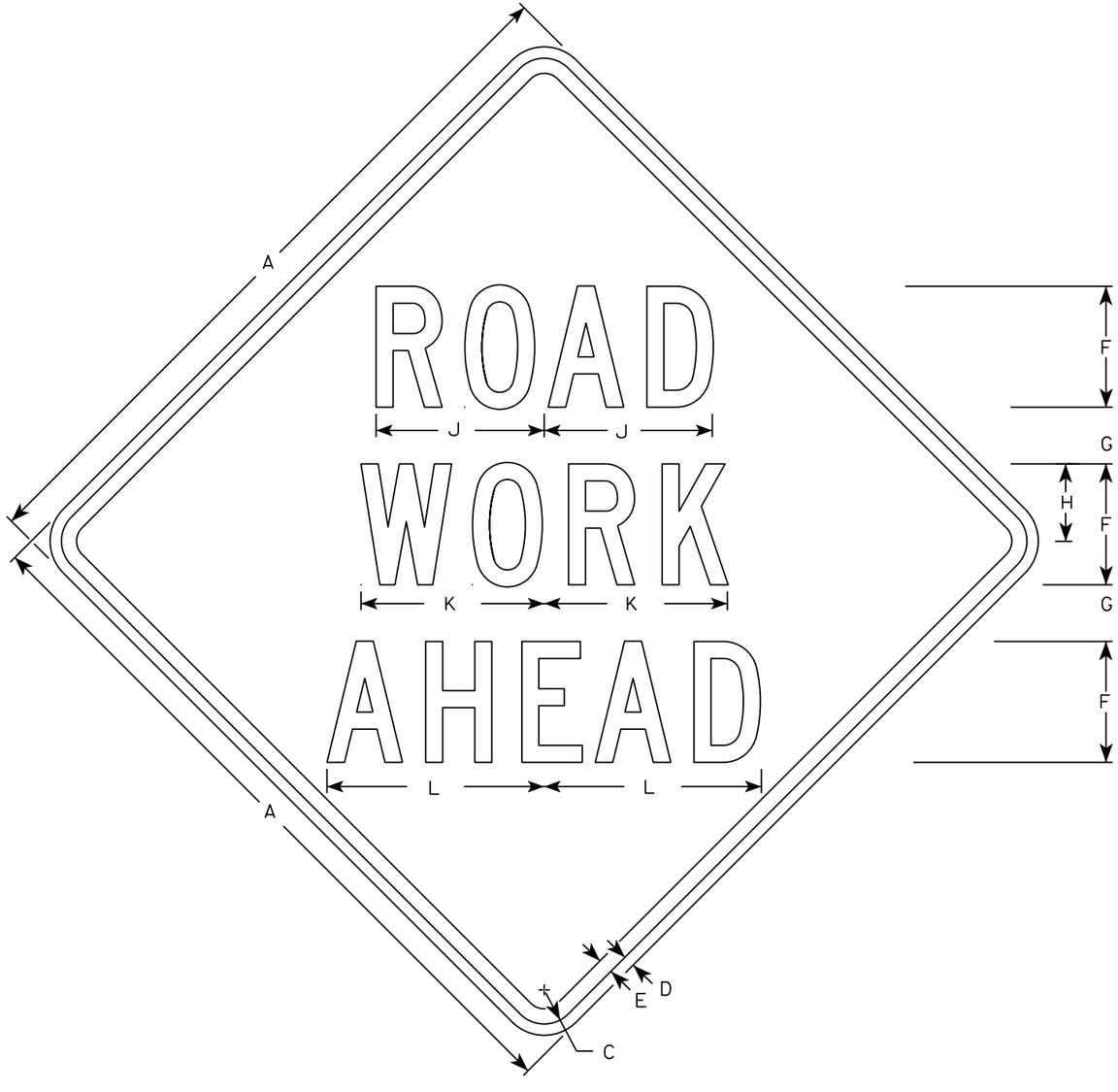
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

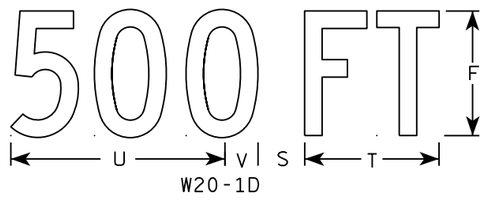
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

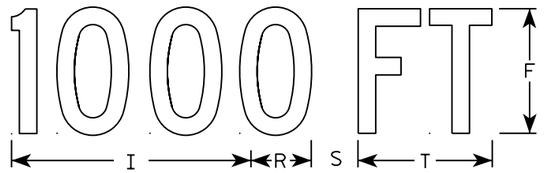
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 188	E



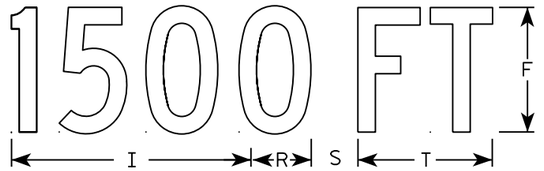
W20-1A



W20-1D

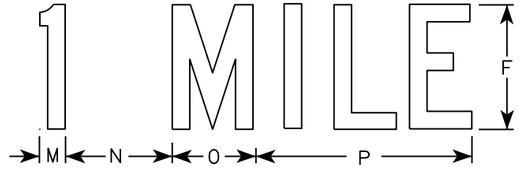


W20-1C

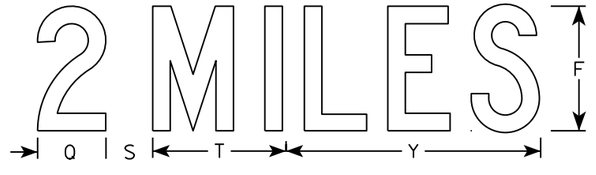


W20-1B

W20-1G



W20-1F



W20-1E

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

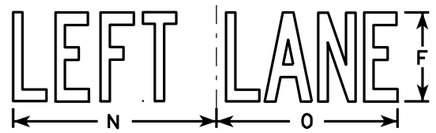
DATE 5/07/15 PLATE NO. W20-1.10

PROJECT NO:

SHEET NO: E

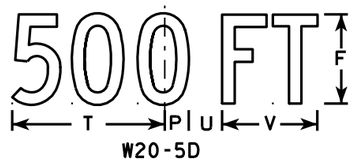
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 01-DEC-2015 18:24 PLOT BY : $$ plotuser $$

W20-56A

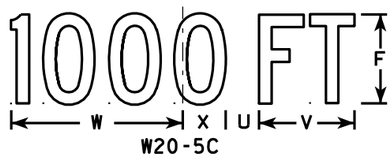


W20-55A

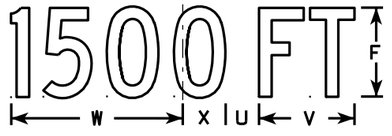
W20-5A



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

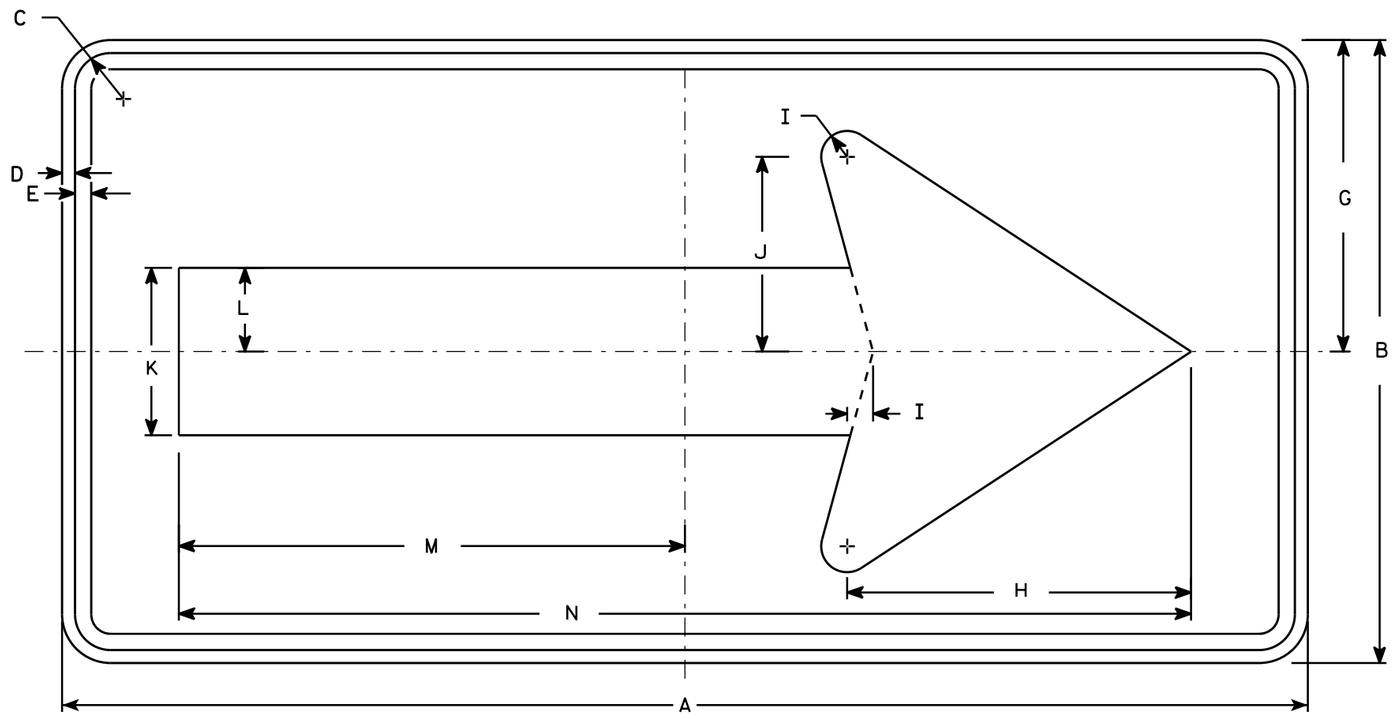
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E

7

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

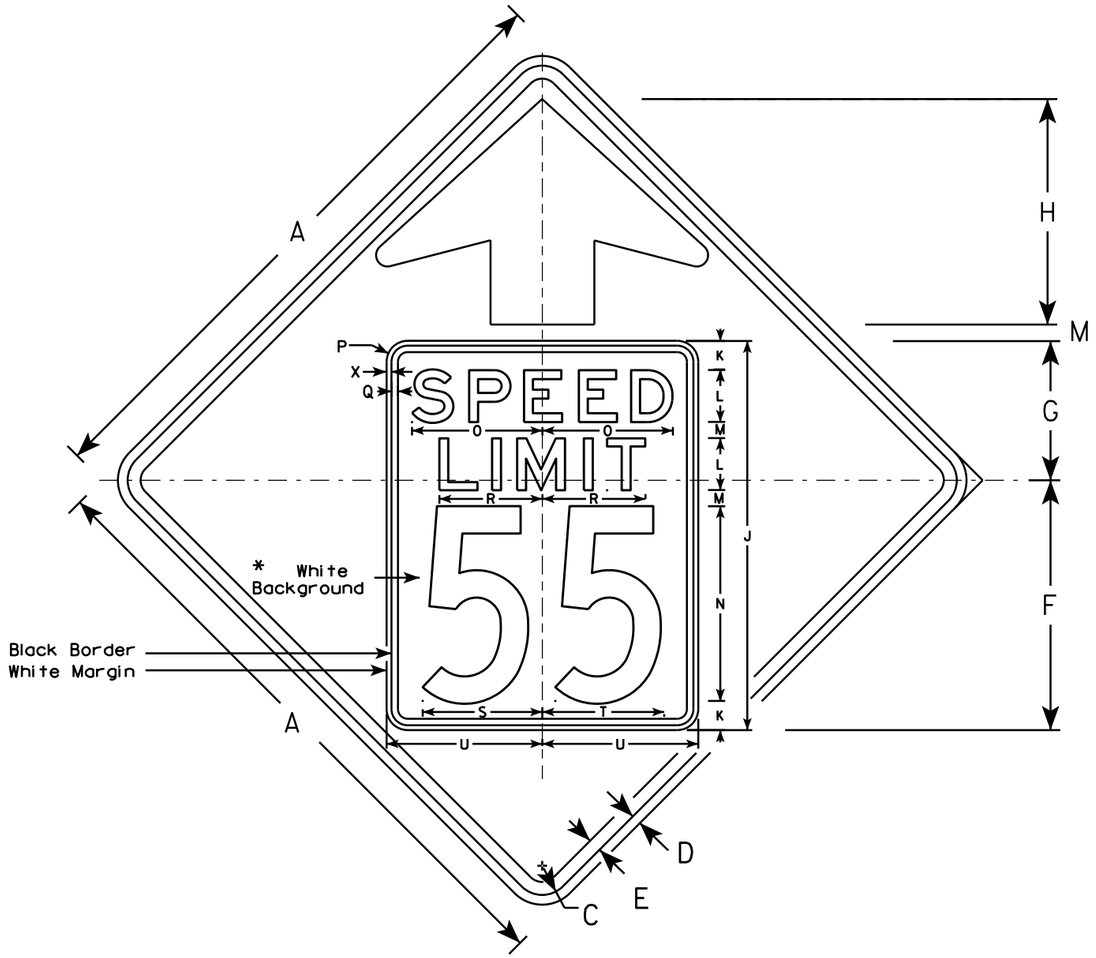
WISCONSIN DEPT OF TRANSPORTATION

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

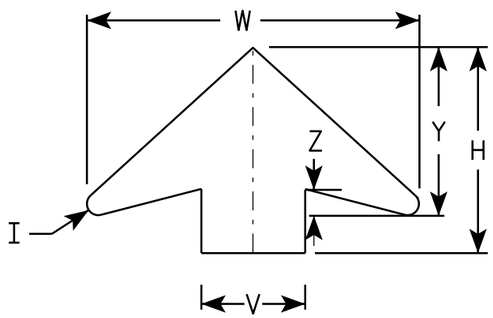


W03-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

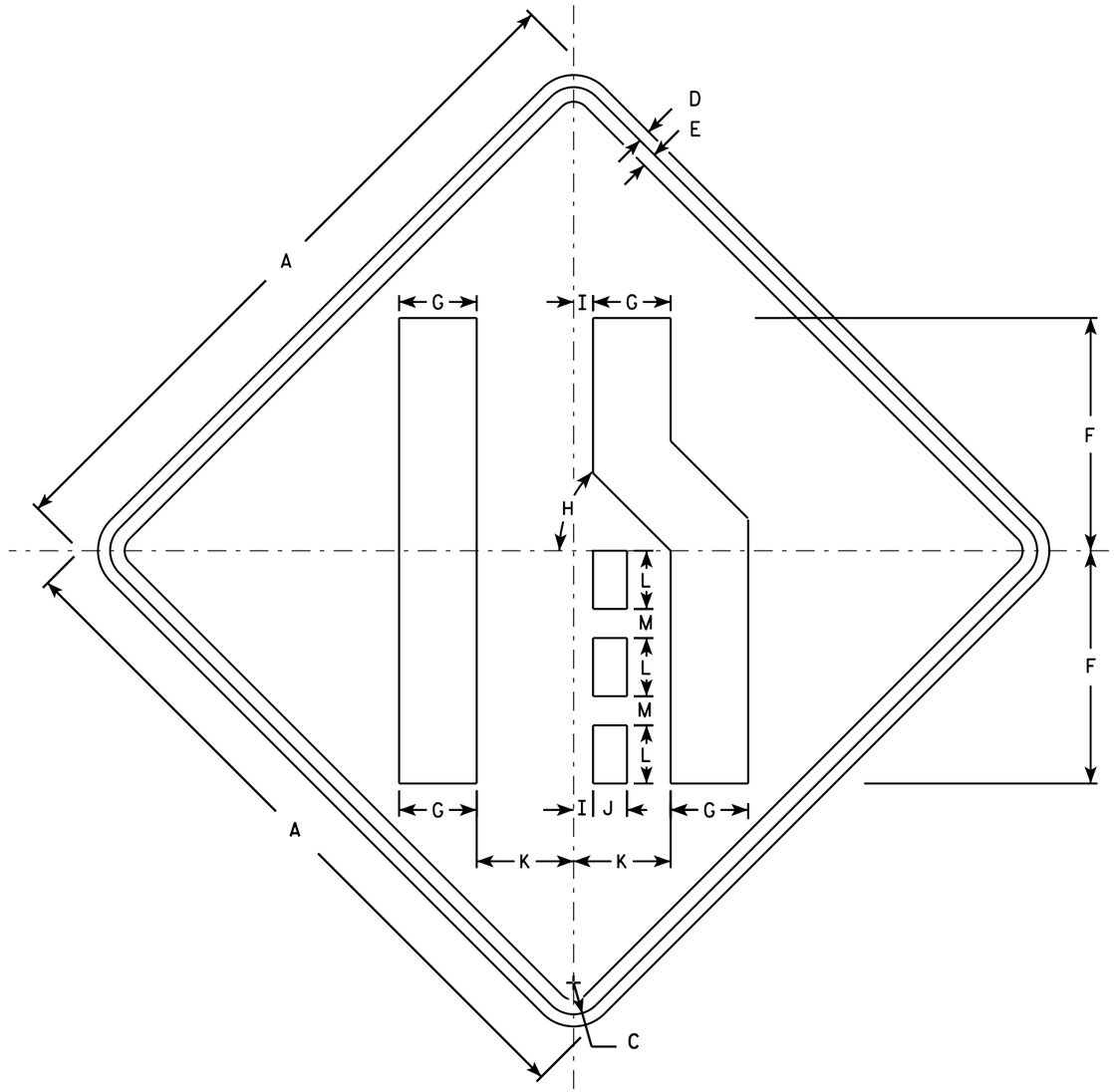
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

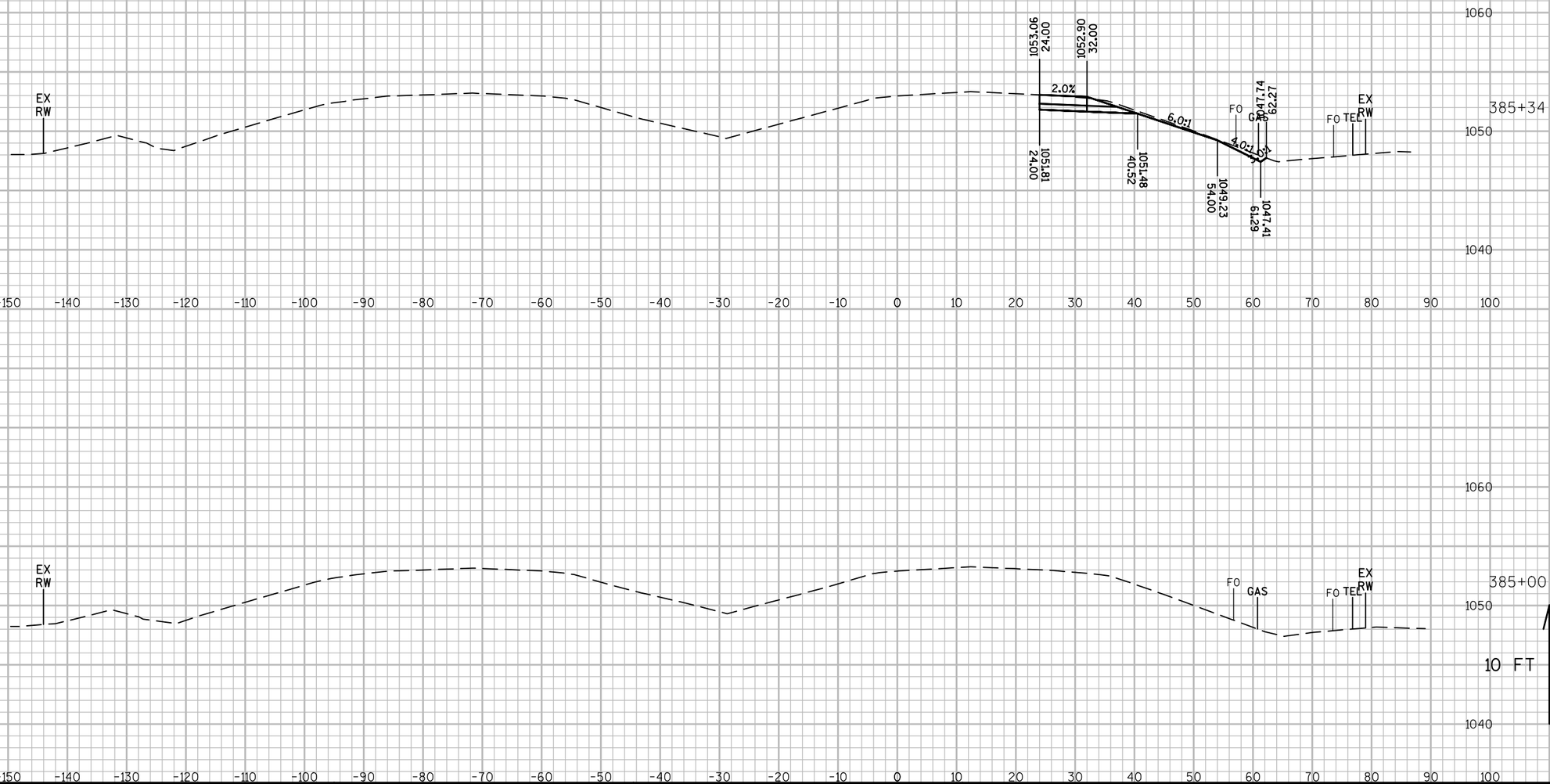
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 193 W04-2.1

PROJECT NO: | SHEET NO: E

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	MASS ORDINATE NOTE 5
385+00	---	0	0	0	0	---	---	---	---	---	---	---
385+34	34	20	0	0	0	13	0	0	0	13	0	13
385+50	16	20	5	42	0	12	1	13	0	25	16	8
385+59	9	21	5	78	0	7	2	19	0	31	40	-11
386+00	41	40	5	46	0	47	7	96	0	78	160	-92
386+59	59	32	5	70	0	78	10	126	0	156	317	-182
387+00	41	70	4	37	0	78	7	82	0	235	420	-212
387+19	19	85	4	34	0	55	3	25	0	289	451	-192
387+50	31	37	4	41	0	69	4	43	0	359	505	-181
388+00	50	31	4	44	0	62	7	79	0	421	604	-224
388+50	50	38	4	24	0	63	7	62	0	484	682	-246
388+73	23	70	4	23	0	46	3	20	0	531	707	-228
389+00	27	36	4	24	0	52	4	23	0	583	736	-209
389+50	50	33	4	37	0	64	7	56	0	647	806	-223
389+92	42	61	4	28	0	74	6	50	0	721	869	-218
390+00	8	62	4	27	0	18	1	8	0	738	879	-211
390+50	50	36	5	43	0	91	8	64	0	830	959	-208
391+00	50	39	5	50	0	69	9	85	0	899	1066	-254
391+50	50	98	5	43	0	127	9	86	0	1026	1173	-243
391+61	11	106	5	42	0	41	2	17	0	1067	1195	-226
392+00	39	65	5	35	0	123	7	56	0	1190	1264	-179
392+50	50	67	5	25	0	122	9	56	0	1312	1333	-135
393+00	50	79	5	10	0	135	9	33	0	1447	1375	-50
393+50	50	132	18	0	0	195	21	10	0	1643	1387	113
394+00	50	61	5	35	0	179	21	32	0	1821	1427	230
394+50	50	54	5	50	0	107	9	78	0	1928	1525	230
395+00	50	48	6	55	0	95	10	97	0	2023	1646	193
395+50	50	48	6	43	0	89	12	90	0	2112	1759	158
396+00	50	48	11	63	0	88	16	97	0	2201	1881	109
396+50	50	52	11	60	0	92	20	114	0	2293	2023	39
397+00	50	58	19	75	0	102	27	125	0	2395	2180	-43
397+50	50	66	19	51	0	115	35	117	0	2510	2326	-109
398+00	50	68	19	47	0	124	35	91	0	2633	2441	-135
398+21	21	69	19	40	0	53	14	33	0	2686	2482	-139
398+50	29	103	19	40	0	93	20	43	0	2779	2537	-120
399+00	50	106	19	56	0	193	35	89	0	2973	2648	-73
399+25	25	112	27	22	0	101	21	36	0	3073	2693	-39
400+95	170	111	27	49	0	702	170	223	0	3775	2971	215
401+00	5	108	27	51	0	21	5	9	0	3796	2983	219
401+50	50	124	22	65	0	215	45	107	0	4011	3117	255
401+95	45	77	19	76	0	168	34	118	0	4179	3264	242
402+00	5	73	19	87	0	13	3	15	0	4192	3282	233
402+50	50	71	19	88	0	133	35	162	0	4325	3485	129
403+00	50	63	19	92	0	124	35	167	0	4449	3694	9
403+50	50	54	14	106	0	109	31	183	0	4558	3923	-143
404+00	50	52	6	105	0	98	19	195	0	4656	4166	-307
404+50	50	54	6	100	0	98	12	190	0	4754	4404	-458
405+00	50	56	6	92	0	102	12	178	0	4857	4627	-590
405+50	50	57	6	92	0	105	12	170	0	4961	4840	-710
406+00	50	52	5	89	0	101	10	167	0	5062	5049	-828
406+50	50	51	5	84	0	95	9	160	0	5157	5249	-942
407+00	50	51	5	75	0	94	9	147	0	5251	5433	-1041
407+50	50	45	5	76	0	89	9	140	0	5340	5608	-1136
408+00	50	45	5	74	0	84	9	139	0	5424	5782	-1235
408+50	50	82	18	37	0	118	21	103	0	5541	5910	-1267
408+65	15	86	18	34	0	46	10	19	0	5587	5935	-1255
409+00	35	47	5	38	0	87	15	48	0	5674	5994	-1243
409+50	50	39	5	50	0	79	9	82	0	5753	6096	-1275
410+00	50	34	5	51	0	67	9	94	0	5820	6214	-1334
410+50	50	27	4	44	0	56	8	88	0	5876	6324	-1396
410+61	11	27	4	42	0	11	2	18	0	5887	6346	-1408
411+00	39	28	4	31	0	40	6	53	0	5927	6412	-1440
411+50	50	29	4	30	0	53	7	57	0	5979	6483	-1466
412+00	50	72	4	24	0	94	7	50	0	6074	6546	-1442
412+09	9	69	4	24	0	22	1	8	0	6096	6555	-1430
412+50	41	27	4	41	0	74	6	50	0	6170	6618	-1425
412+59	9	27	4	44	0	9	1	14	0	6178	6635	-1435
413+00	41	34	5	56	0	47	7	77	0	6225	6731	-1490
413+50	50	19	5	96	0	49	9	140	0	6274	6906	-1625
413+84	34	20	3	0	0	24	5	60	0	6298	6980	-1680
414+00	16	0	0	0	0	6	1	0	0	6304	6980	-1675
				COLUMN TOTALS		6304	999	5584	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)



9

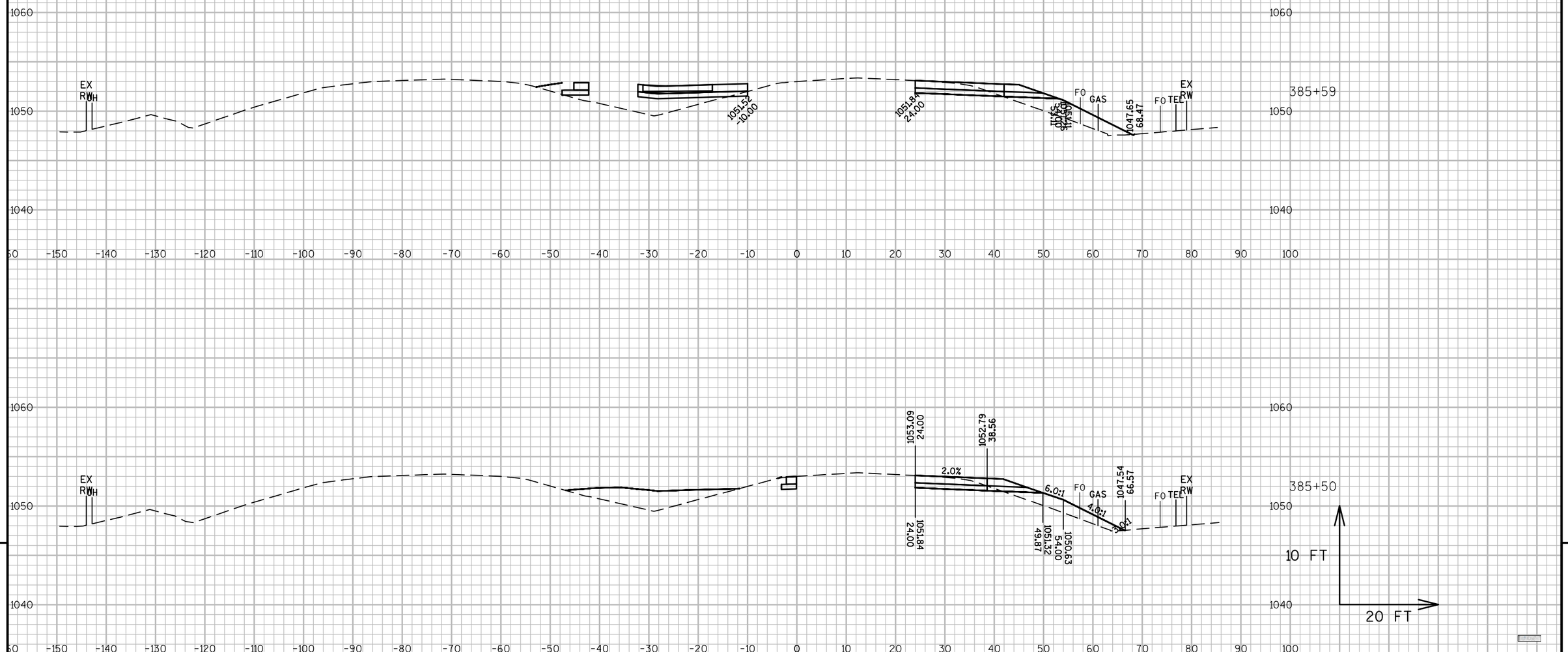
9

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 195	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (5)

PLOT DATE : 3/11/2016 11:29 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

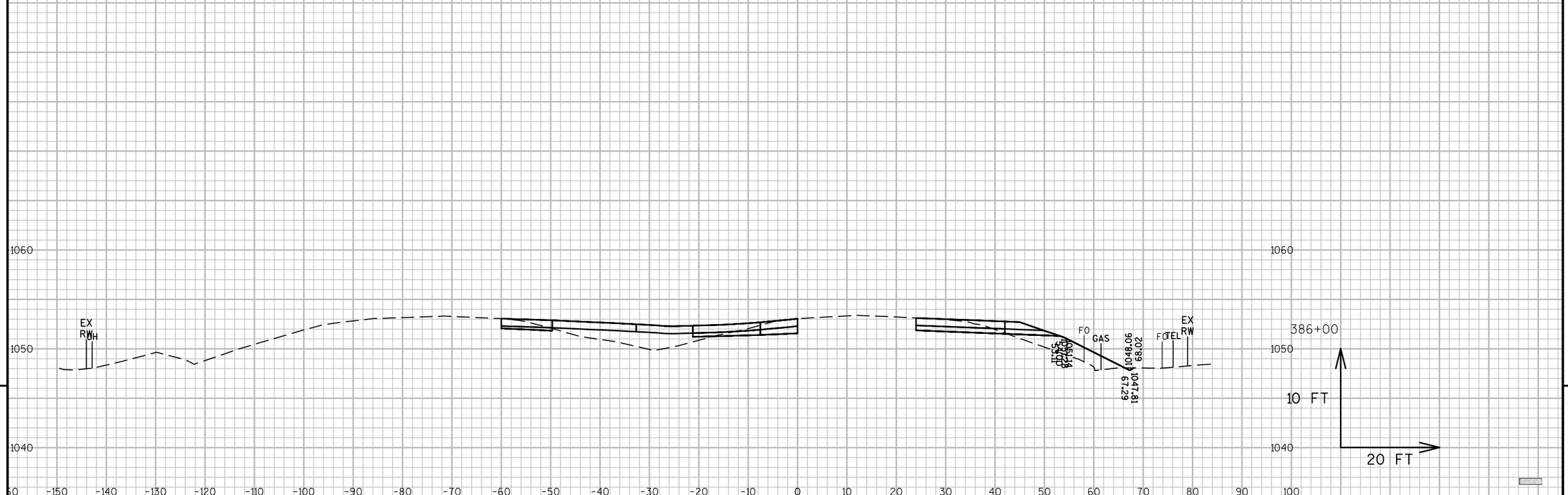
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 196	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (6)

PLOT DATE : 3/11/2016 11:30 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

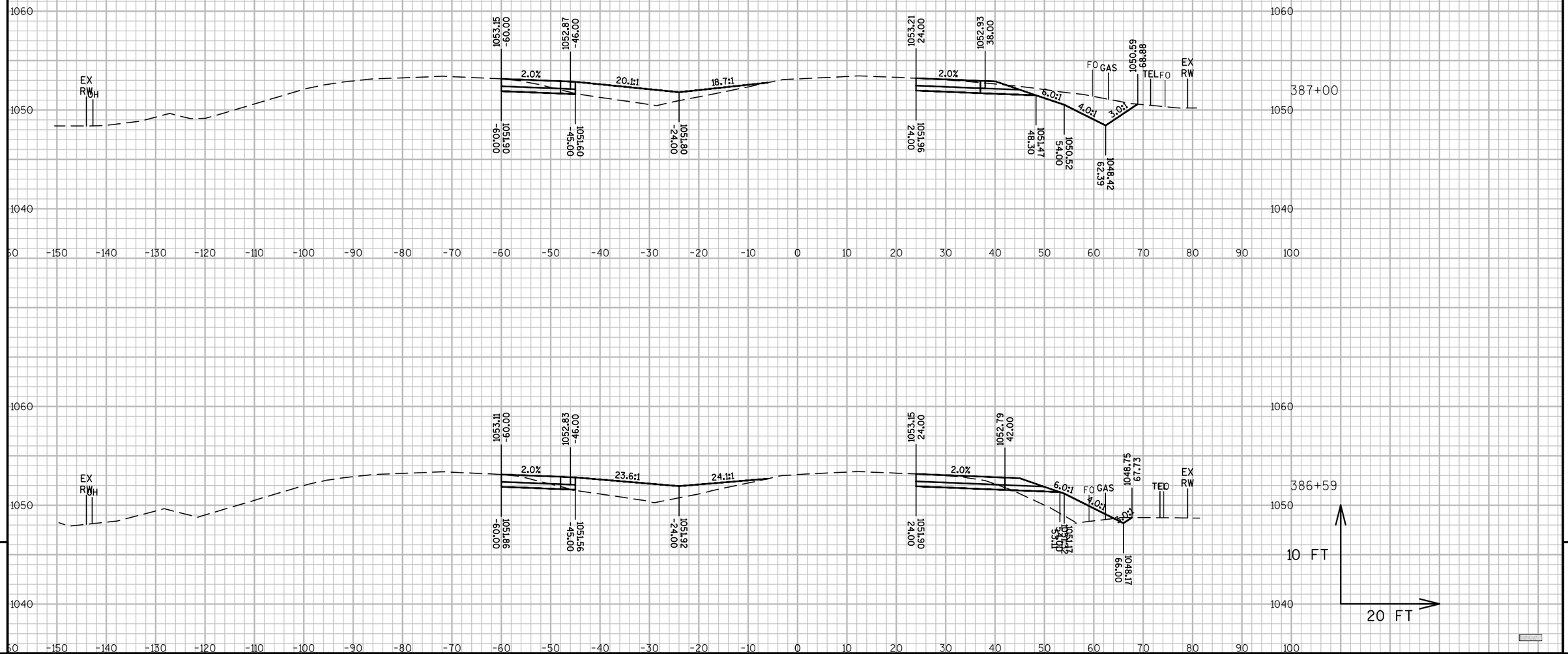
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 197	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (7)

PLOT DATE : 3/11/2016 11:30 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

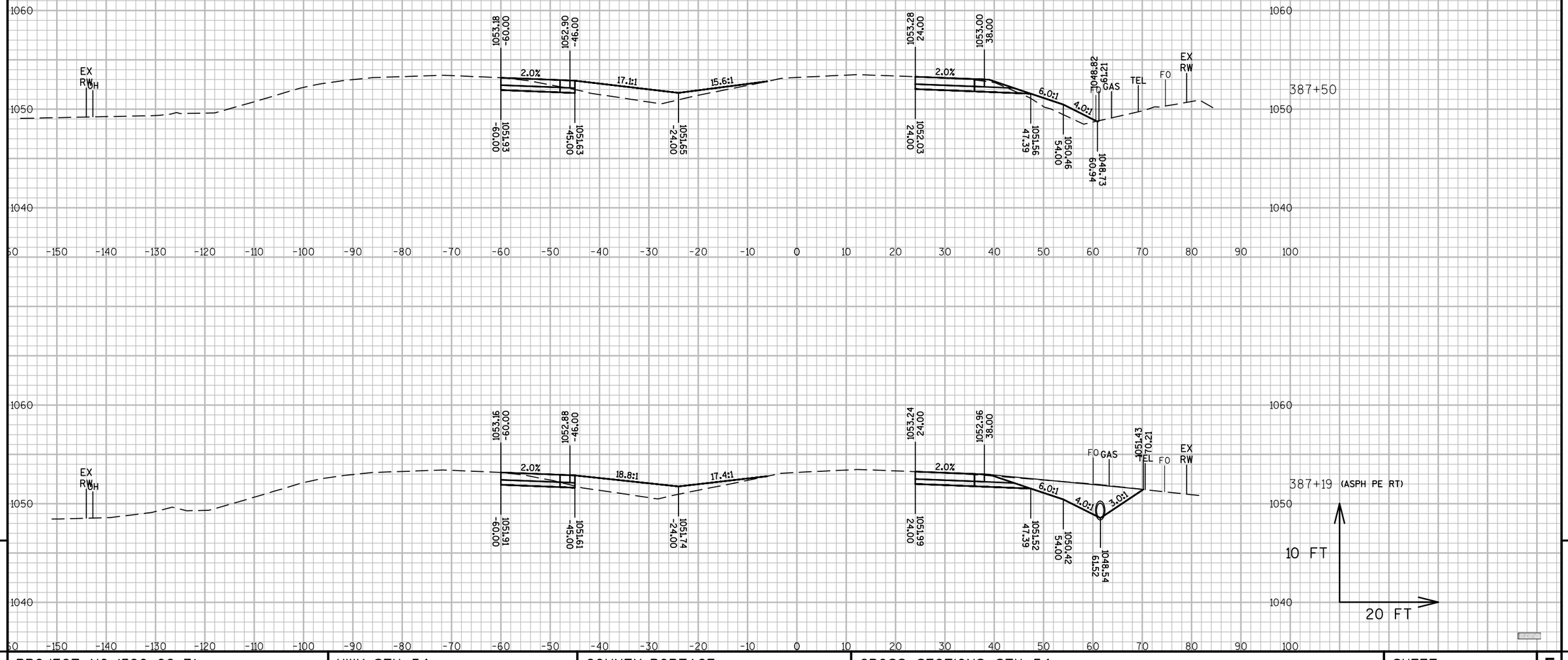
WISDOT/CADDS SHEET 49



9

9

PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 198	E

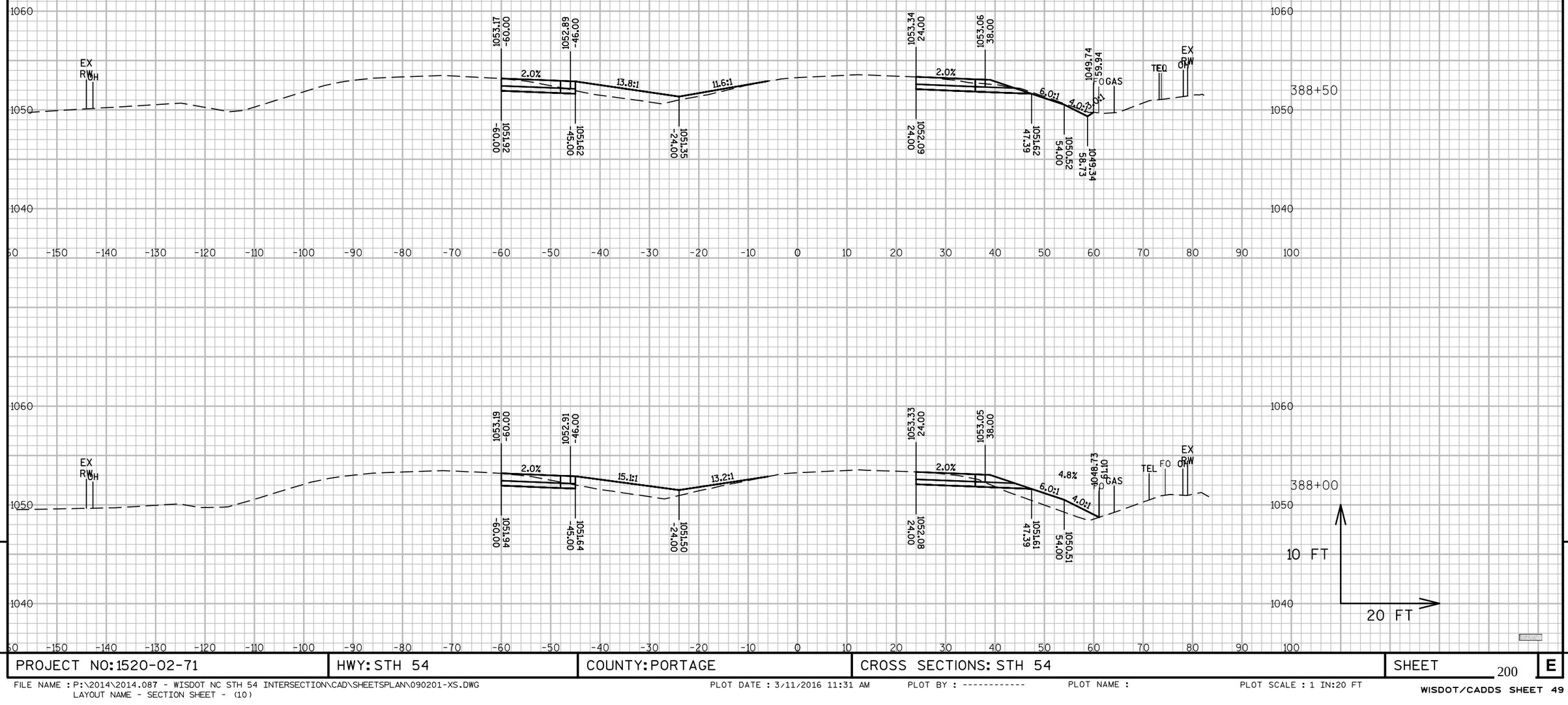


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 199	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (9)

PLOT DATE : 3/11/2016 11:31 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

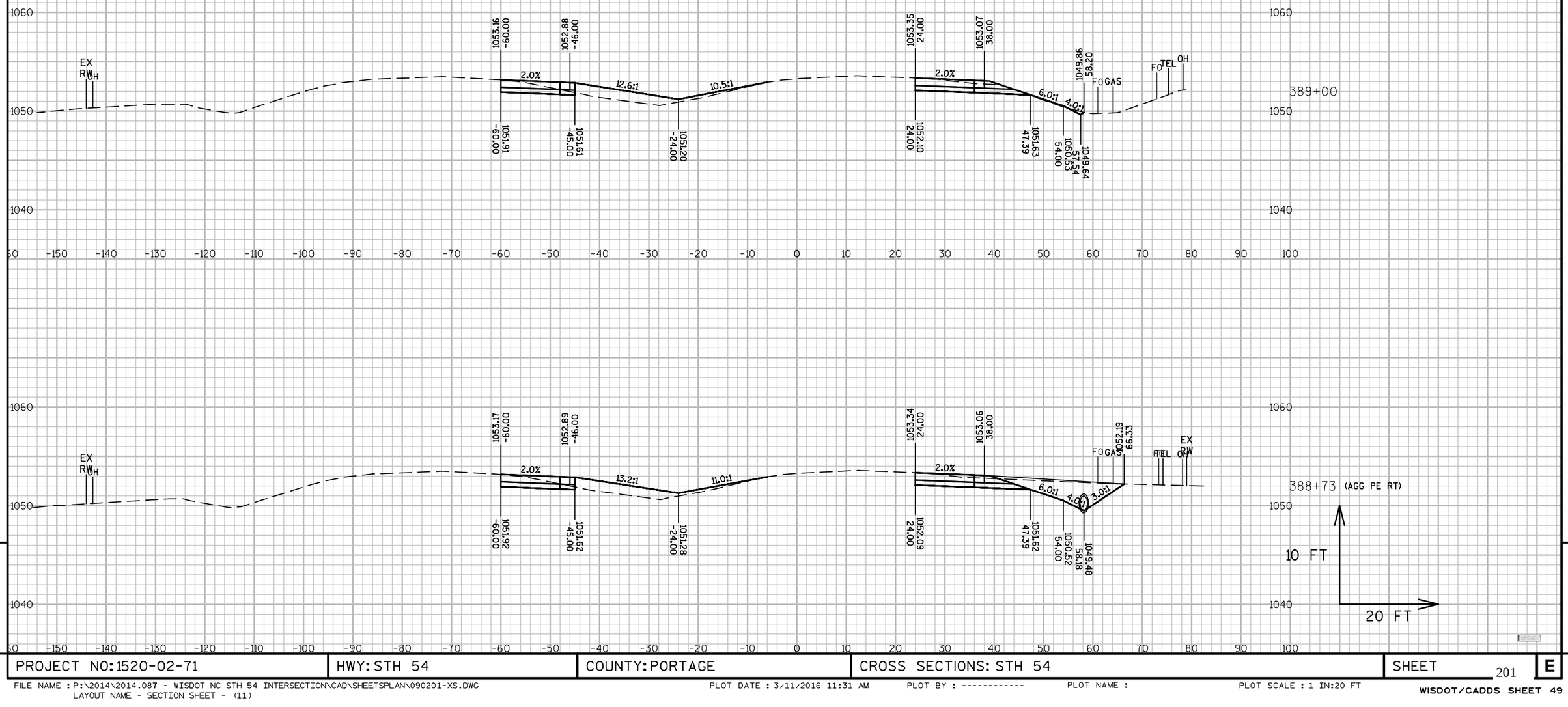


9

9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 200	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (10)
PLOT DATE : 3/11/2016 11:31 AM
PLOT BY : ----------
PLOT NAME :
PLOT SCALE : 1 IN:20 FT



9

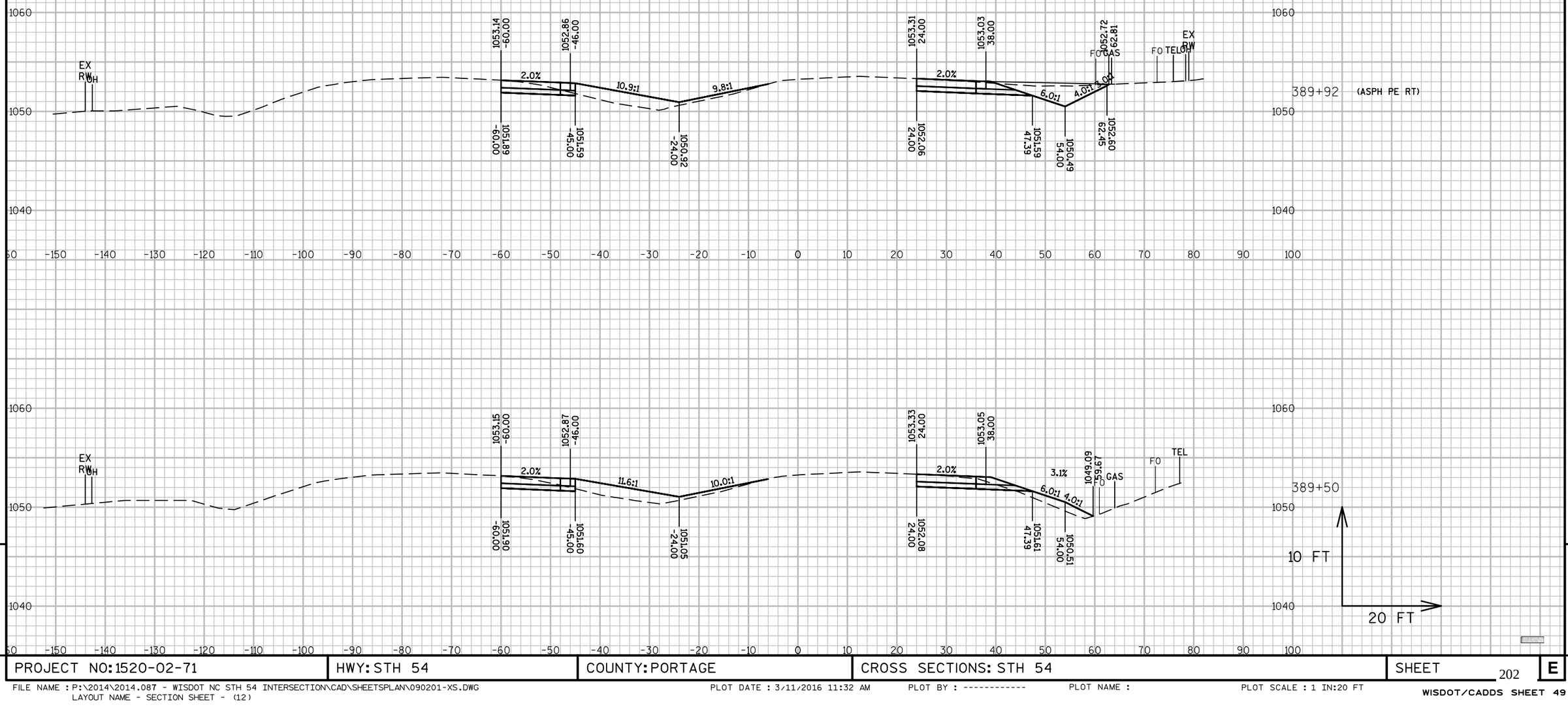
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 201	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (11)

PLOT DATE : 3/11/2016 11:31 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

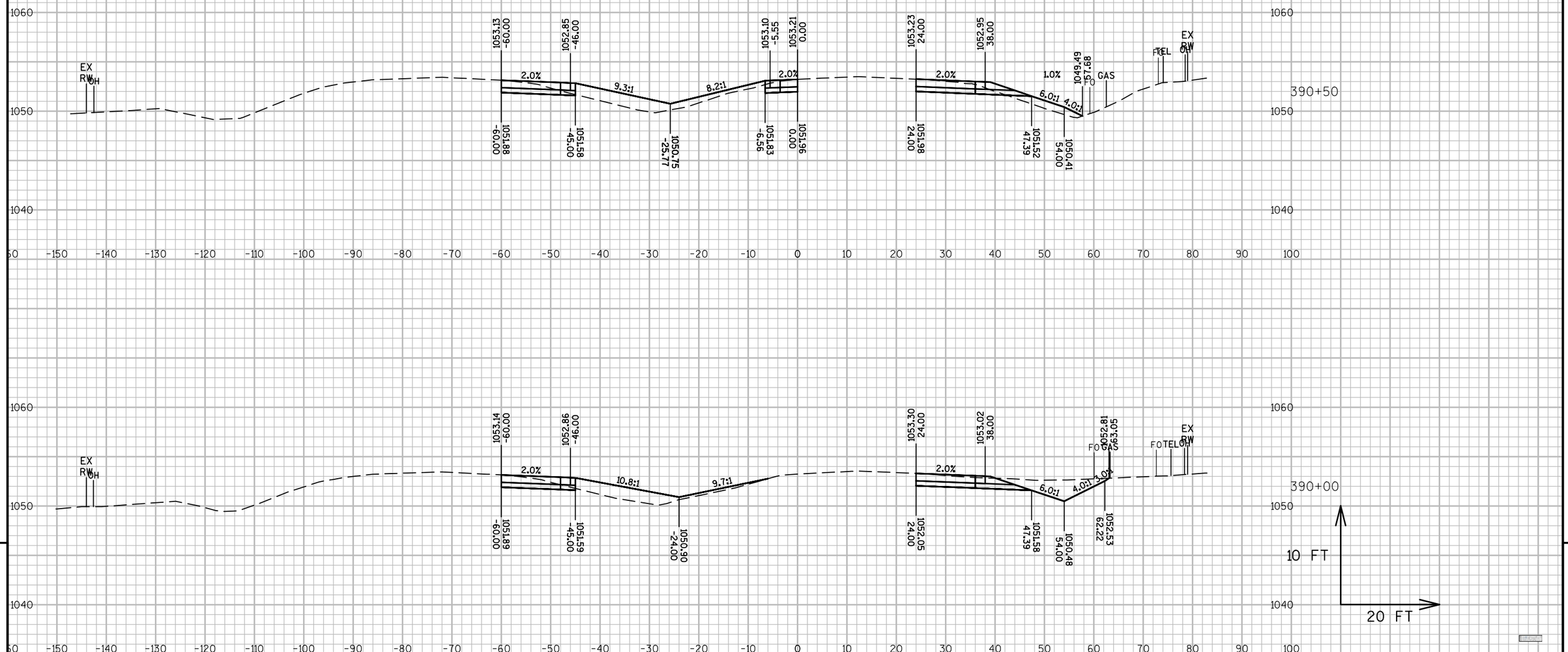


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 202 E

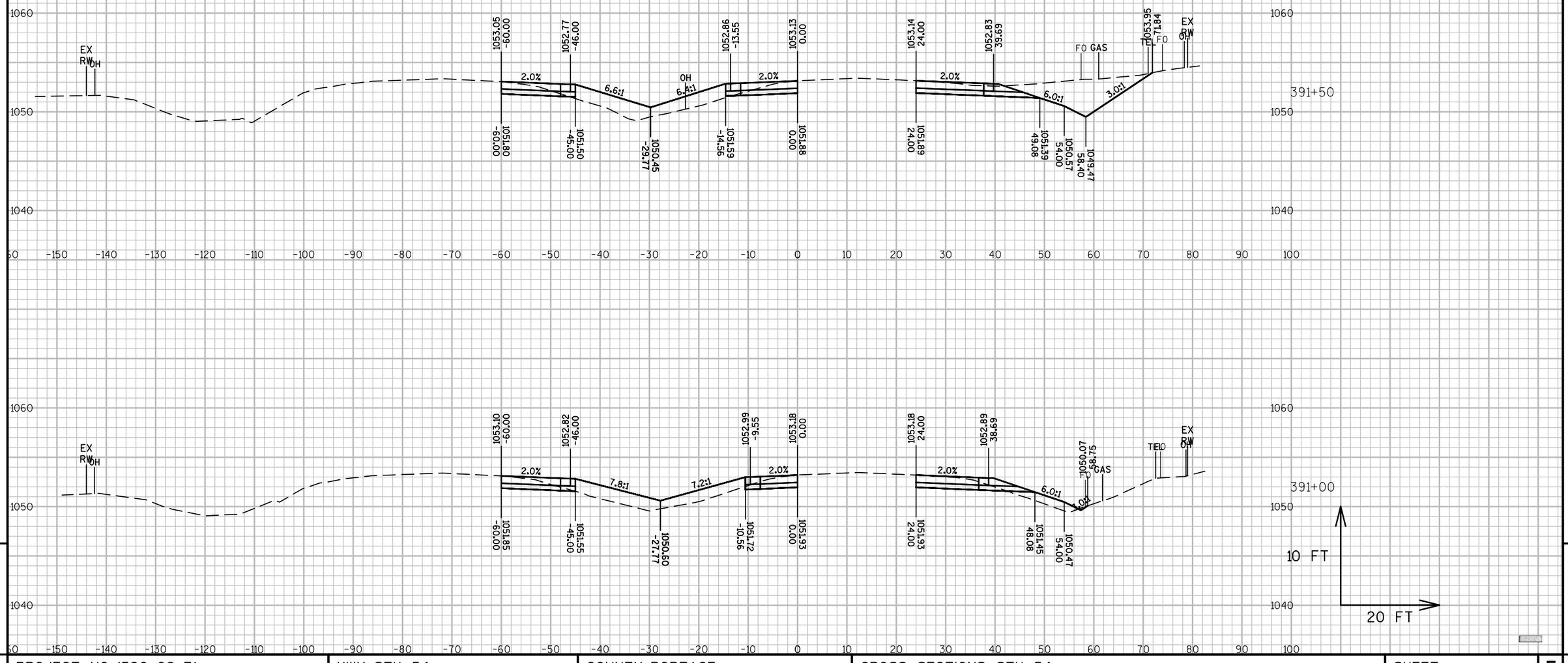
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (12)

PLOT DATE : 3/11/2016 11:32 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

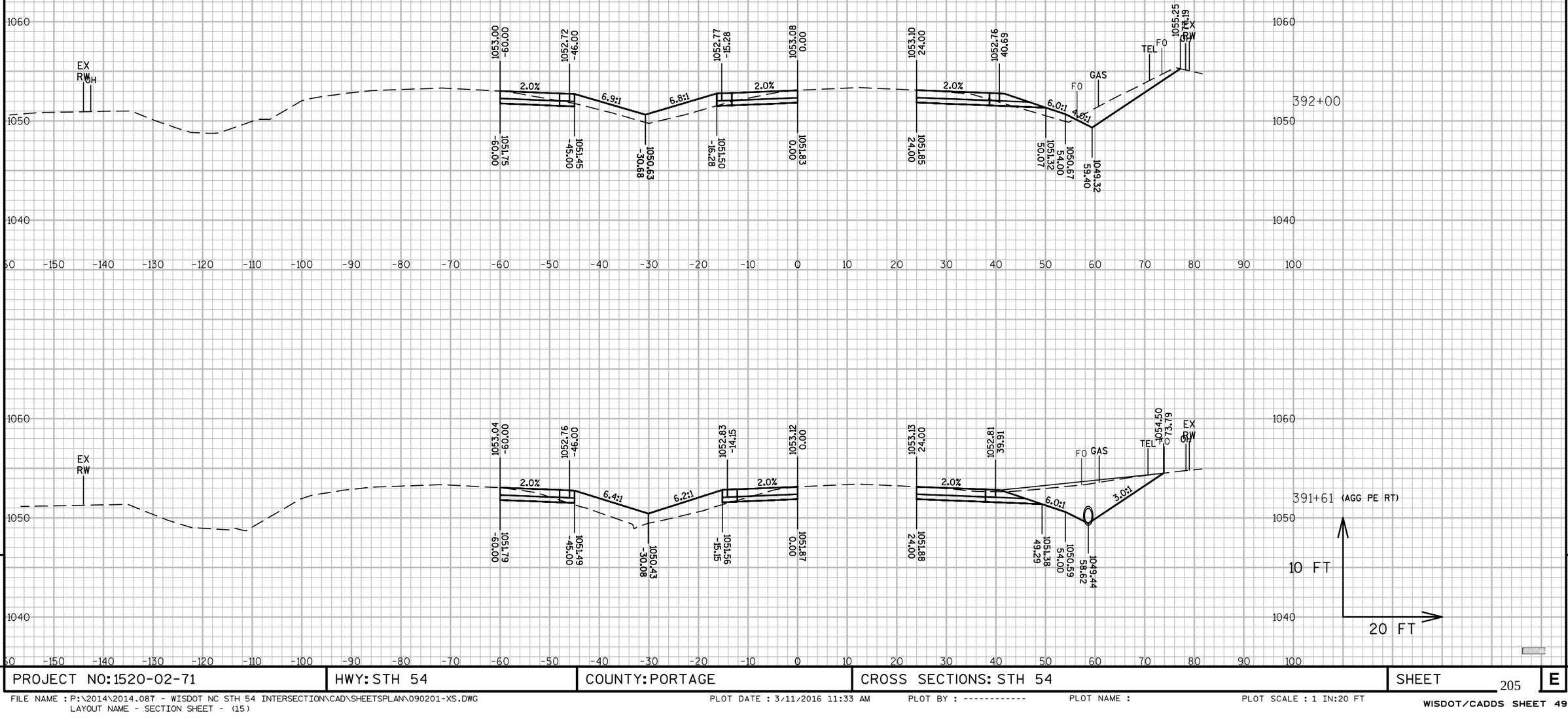
WISDOT/CADDS SHEET 49



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET	
				203	E



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 204	E



9

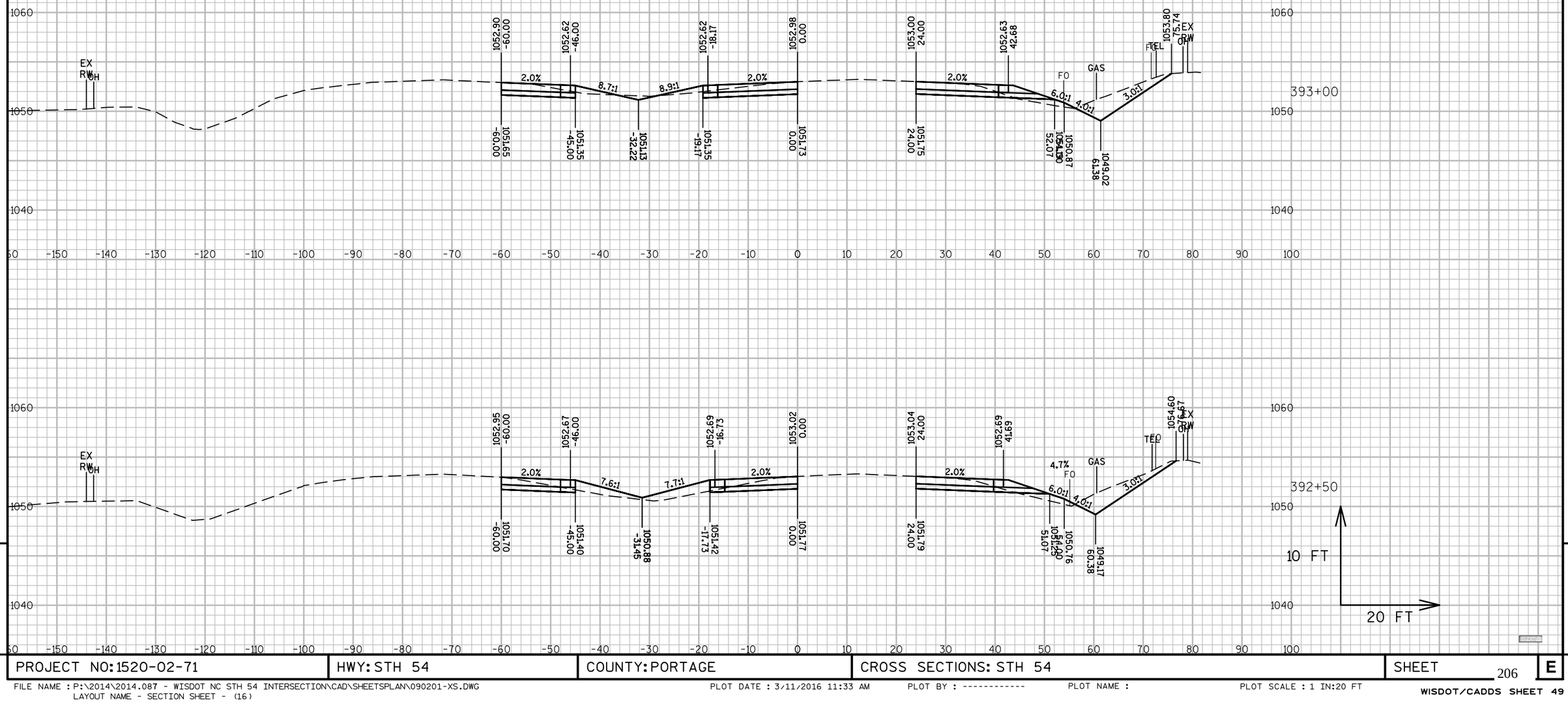
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 205	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (15)

PLOT DATE : 3/11/2016 11:33 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

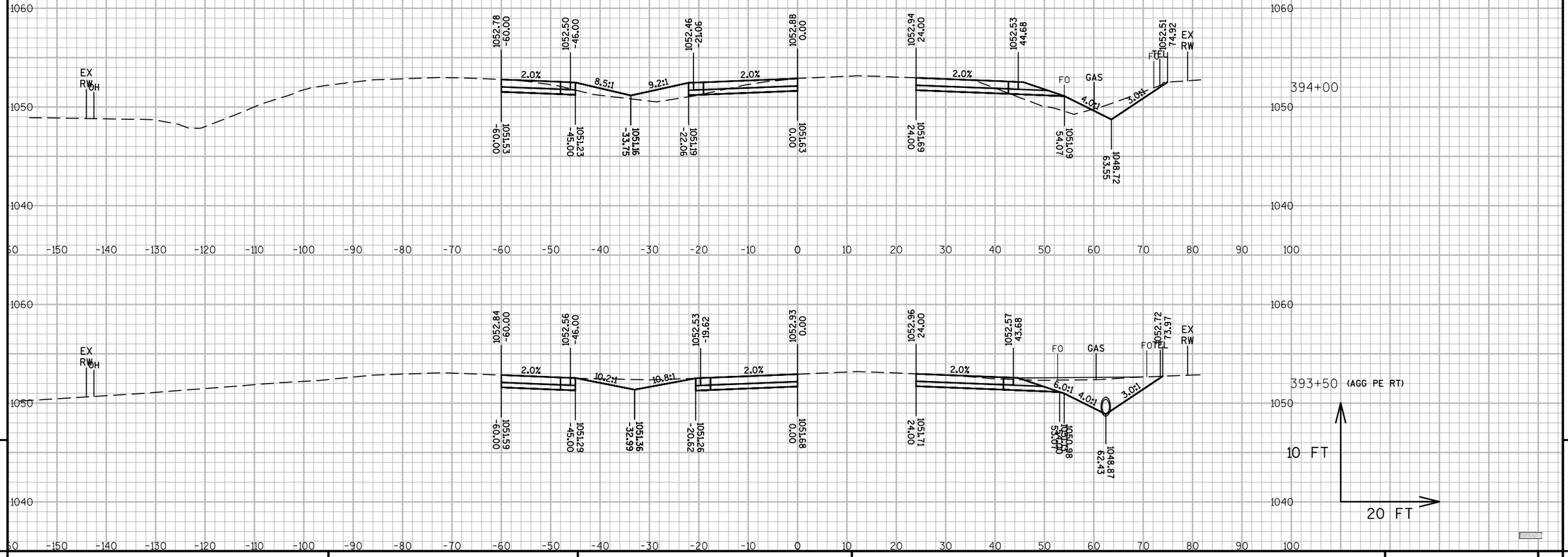


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 206 E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (16)

PLOT DATE : 3/11/2016 11:33 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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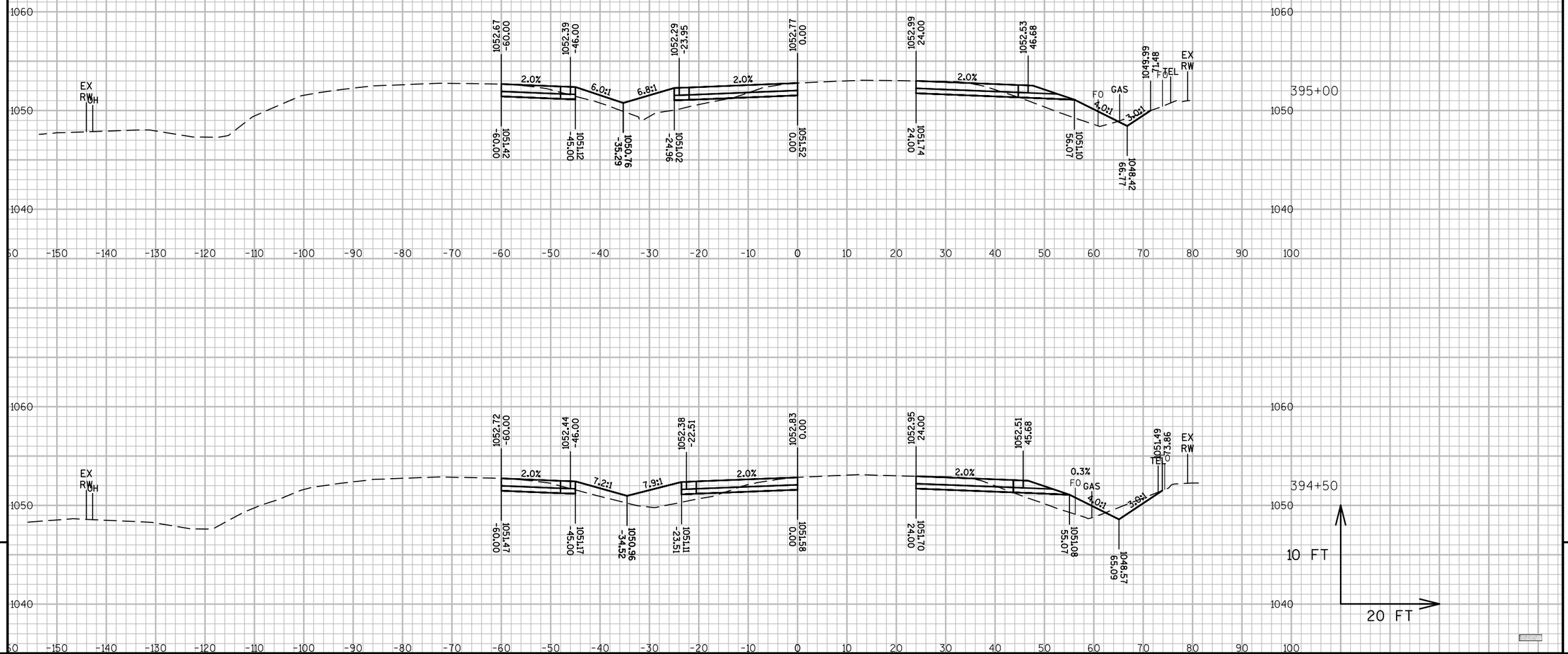
PROJECT NO:1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 207	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (17)

PLOT DATE : 3/11/2016 11:33 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



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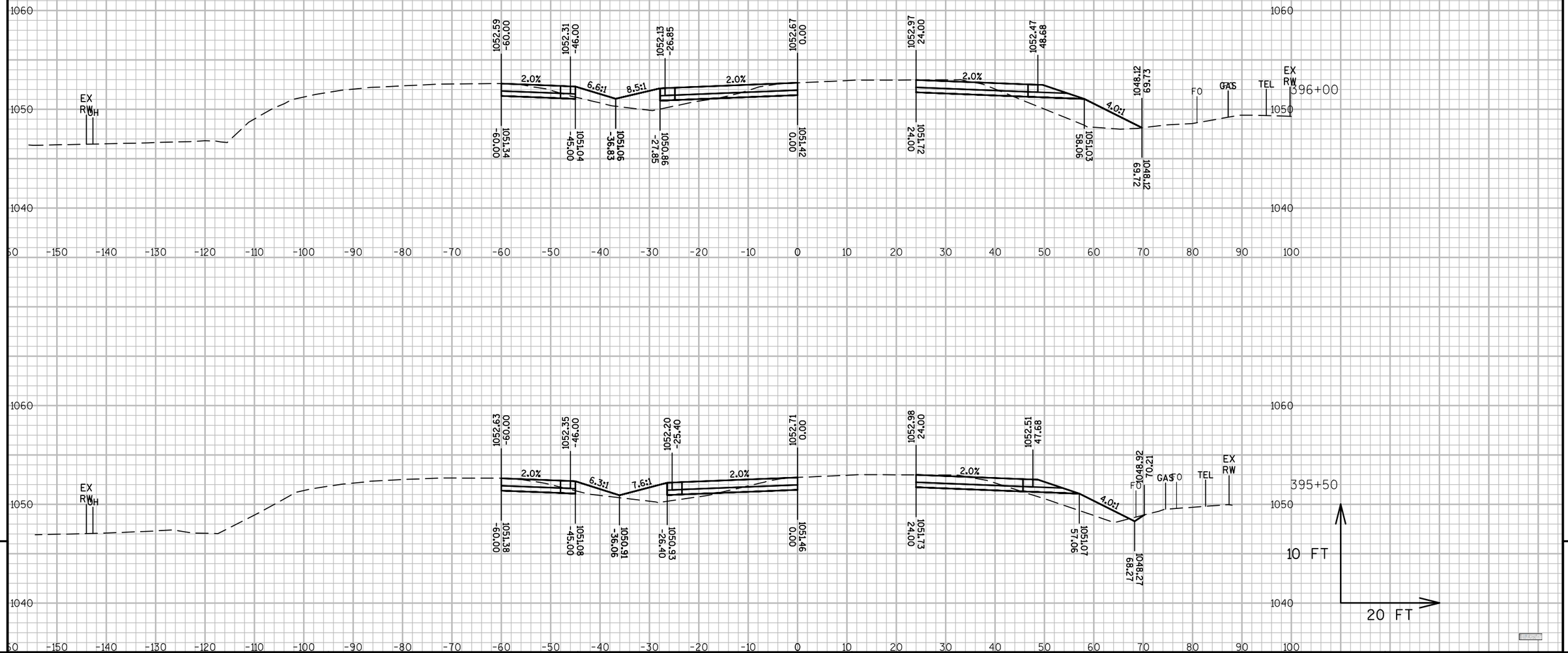
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 208	E



9

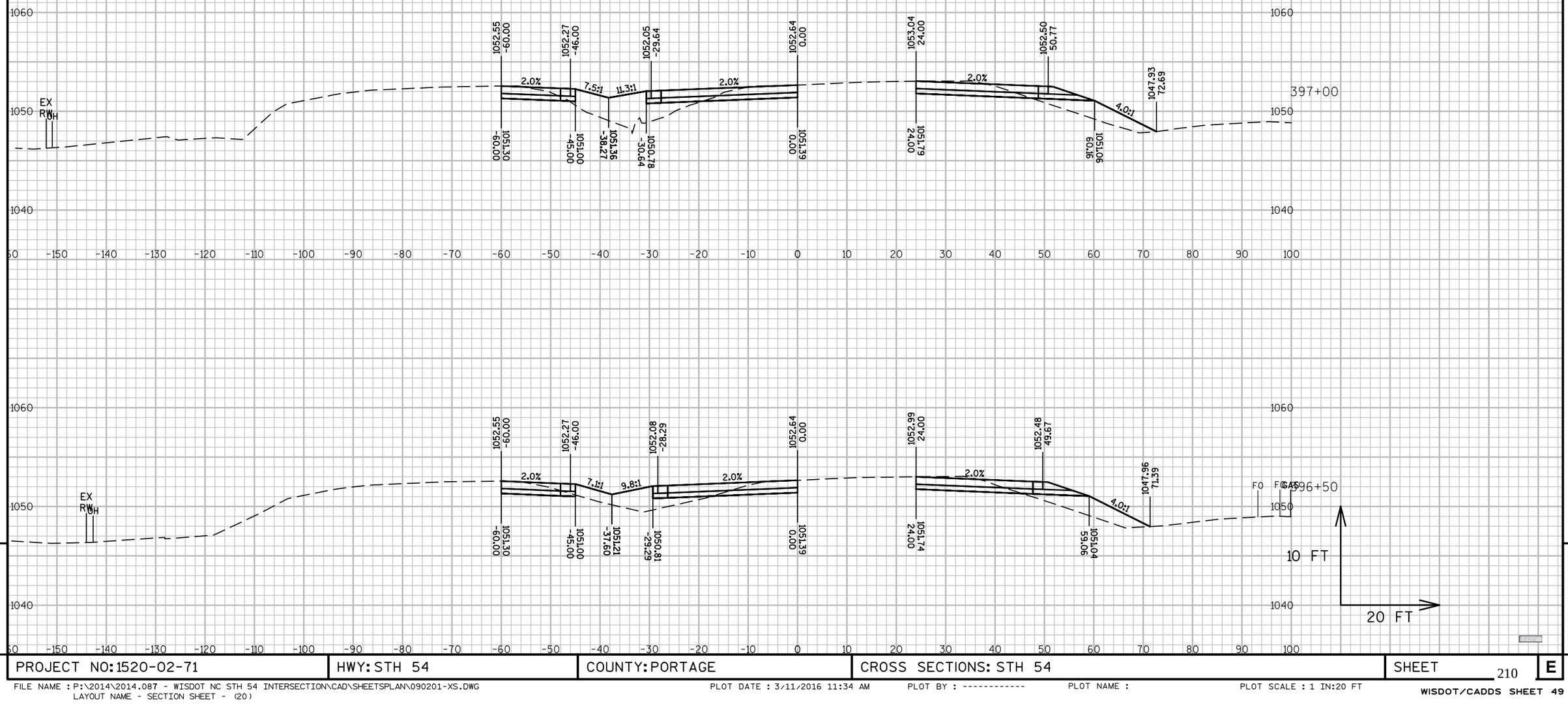
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 209	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (19)

PLOT DATE : 3/11/2016 11:34 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

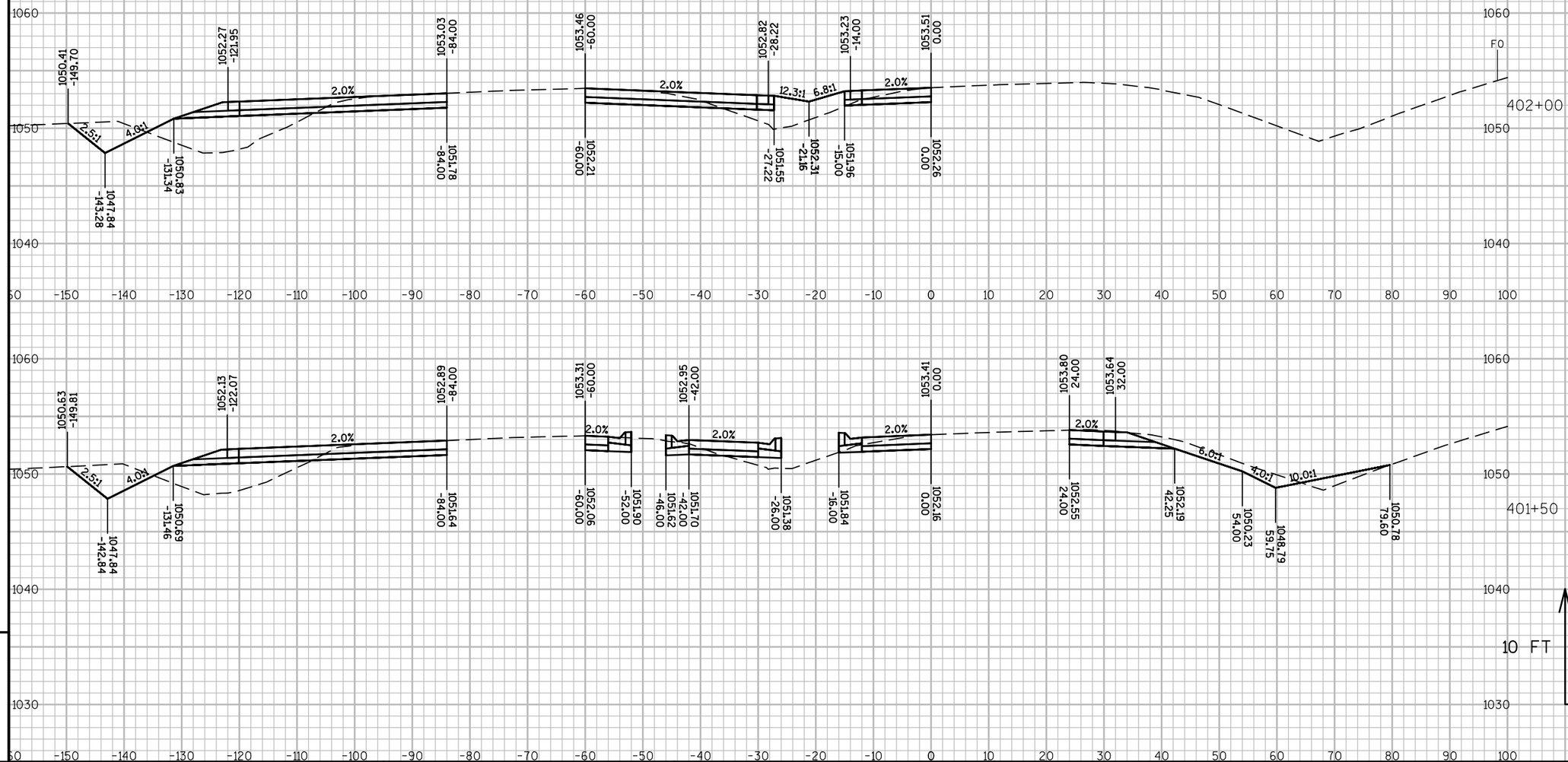
WISDOT/CADDS SHEET 49



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 210 E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (20)

PLOT DATE : 3/11/2016 11:34 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT



9

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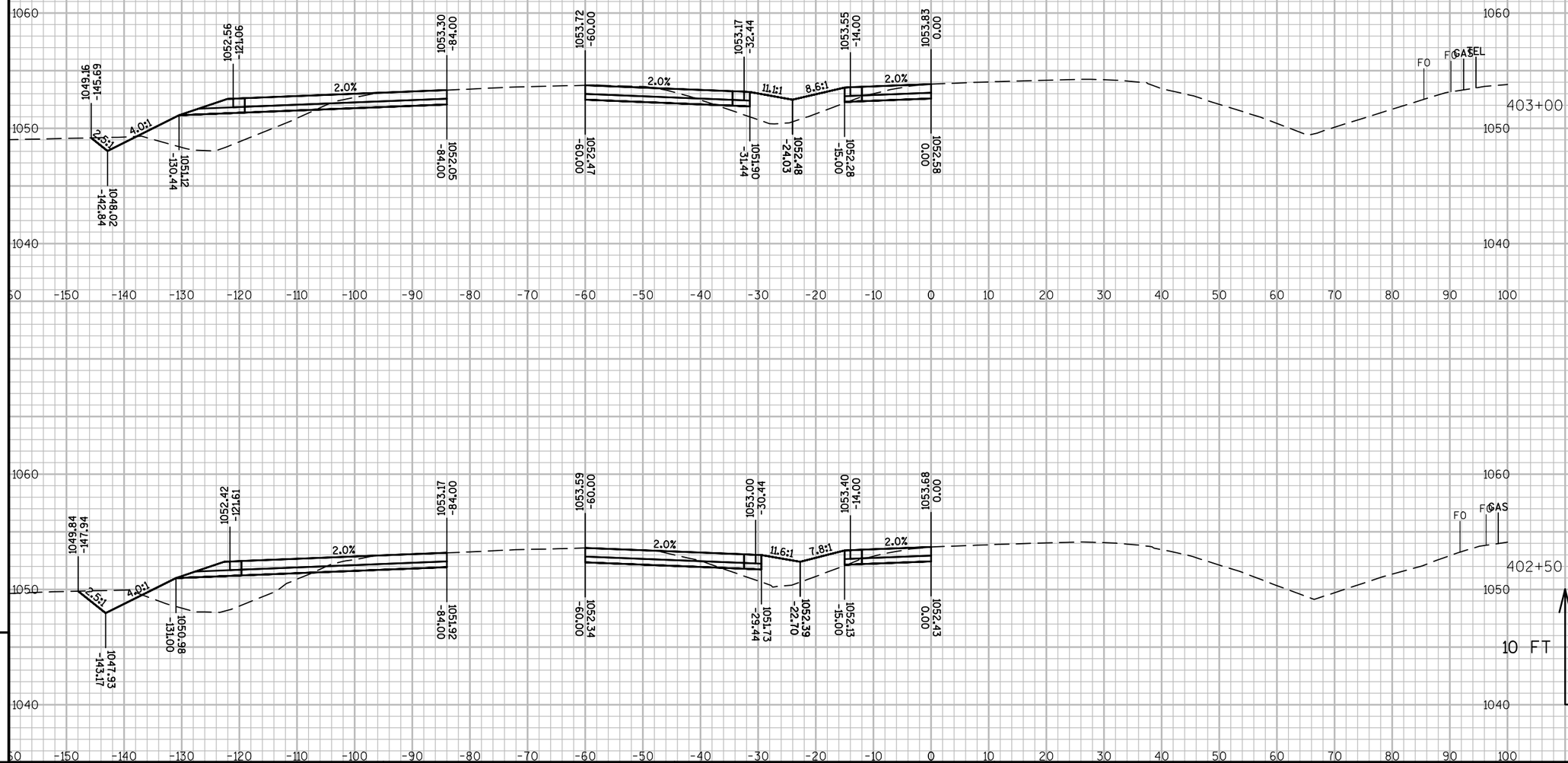
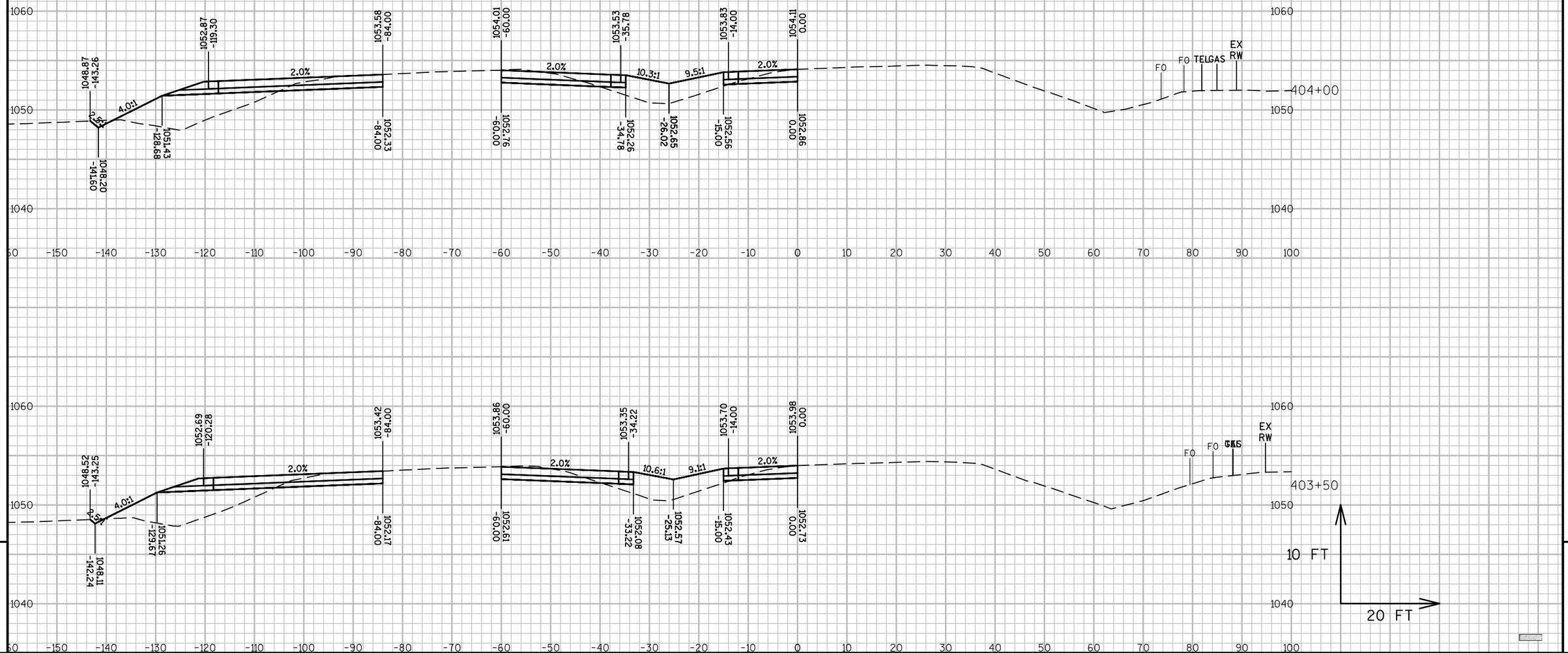
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 211	E



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 212	E



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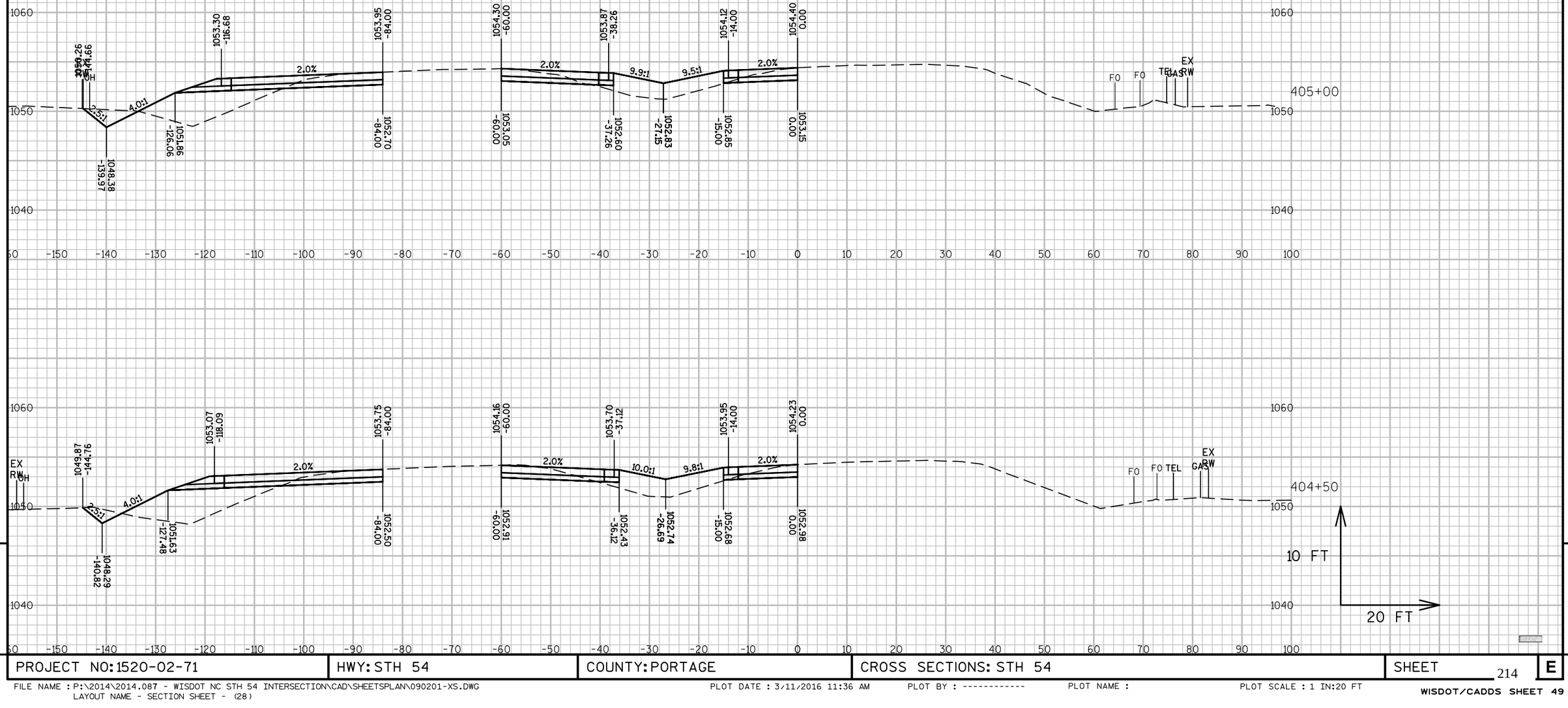
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 213	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (27)

PLOT DATE : 3/11/2016 11:35 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



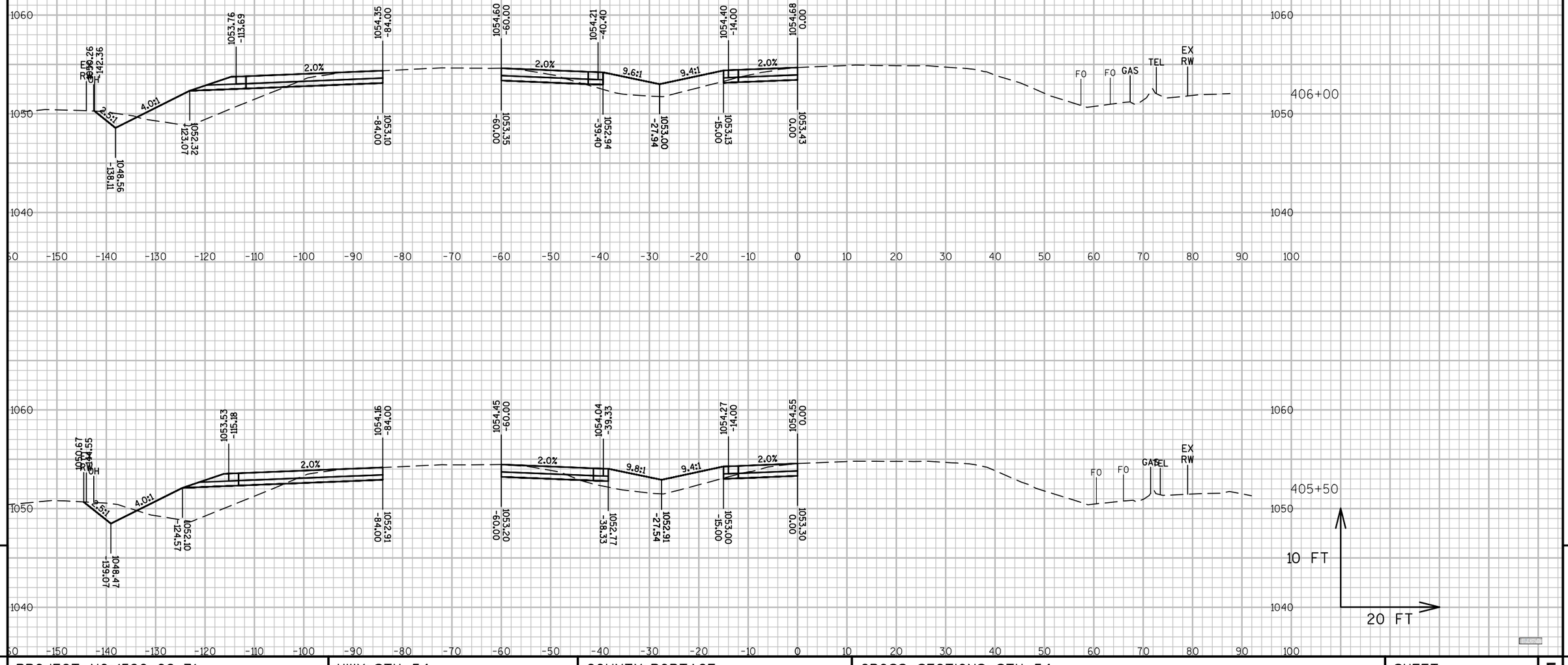
9

9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 214	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (28)

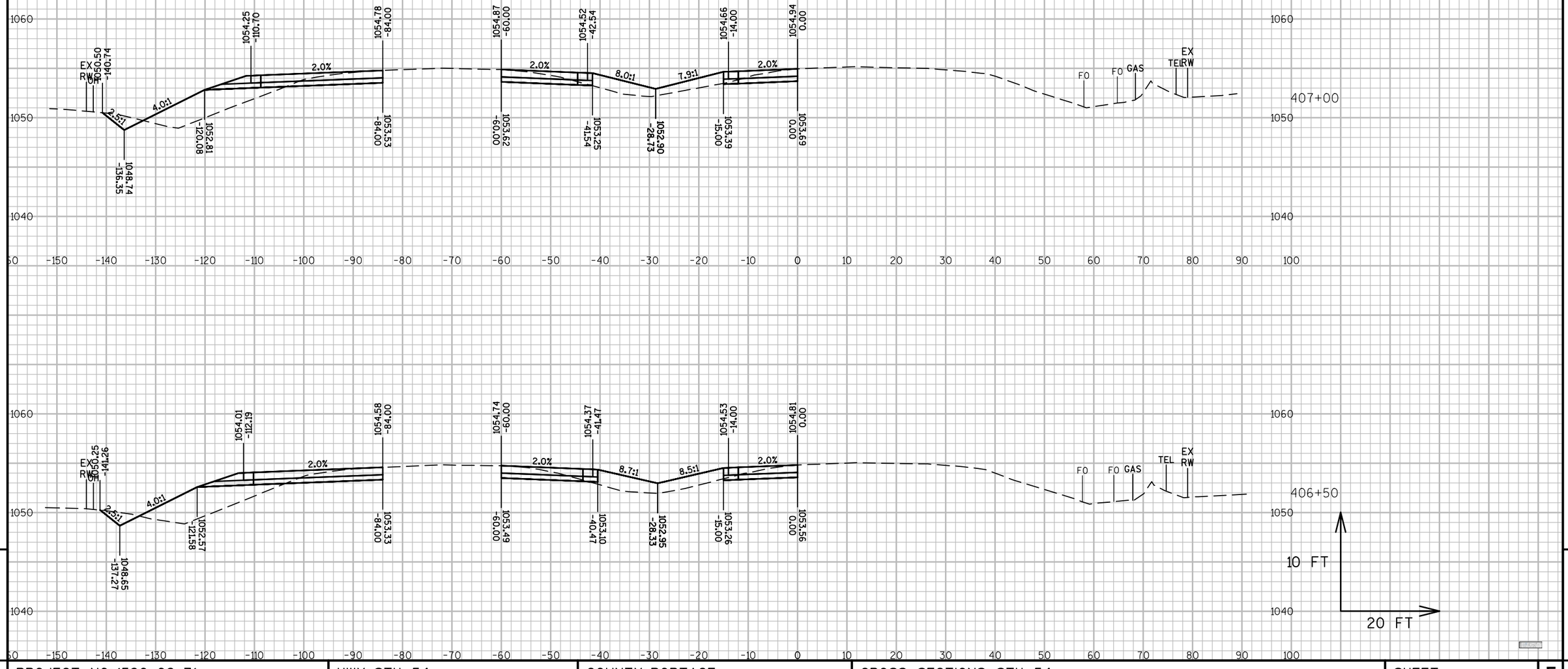
PLOT DATE : 3/11/2016 11:36 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT



9 9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 215	E

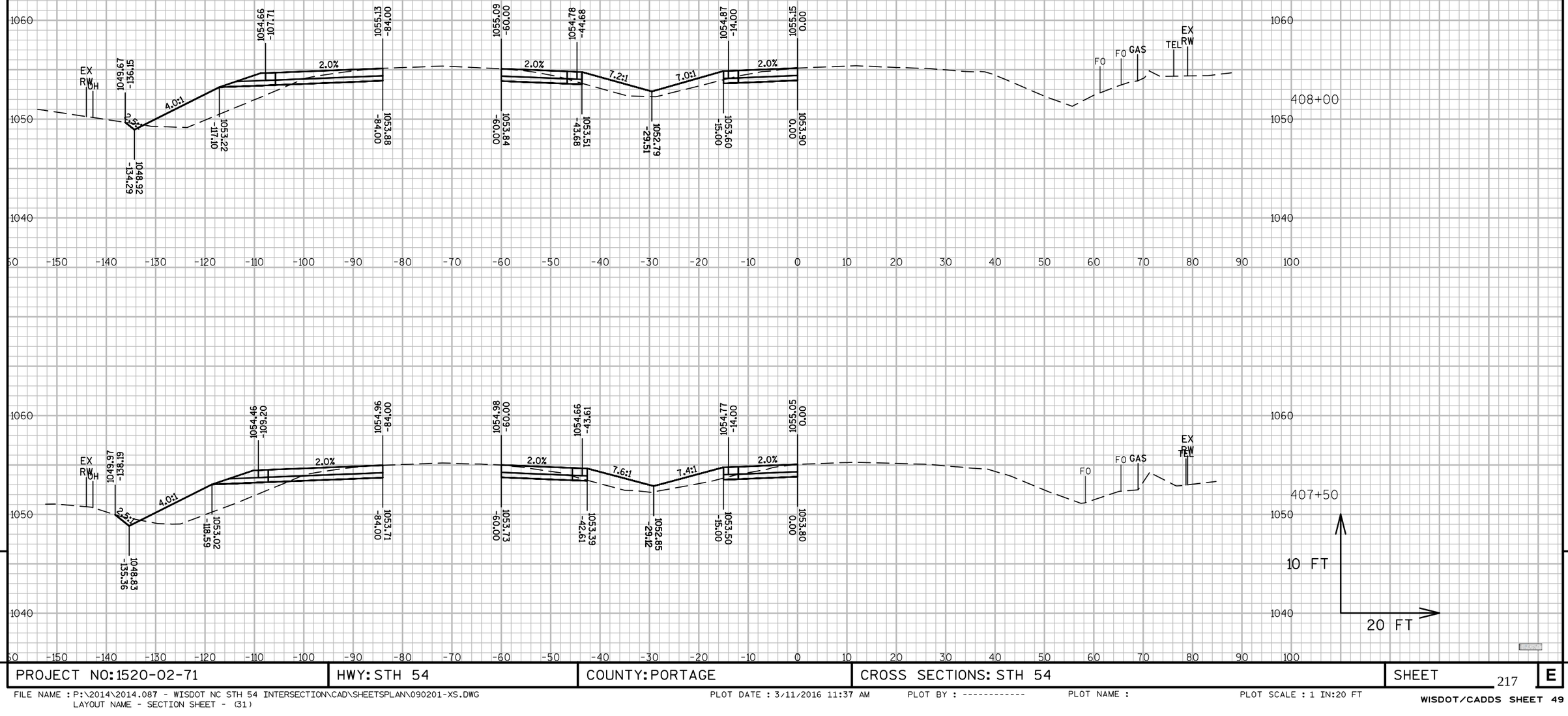
FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (29)
PLOT DATE : 3/11/2016 11:36 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 216	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (30)
PLOT DATE : 3/11/2016 11:36 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

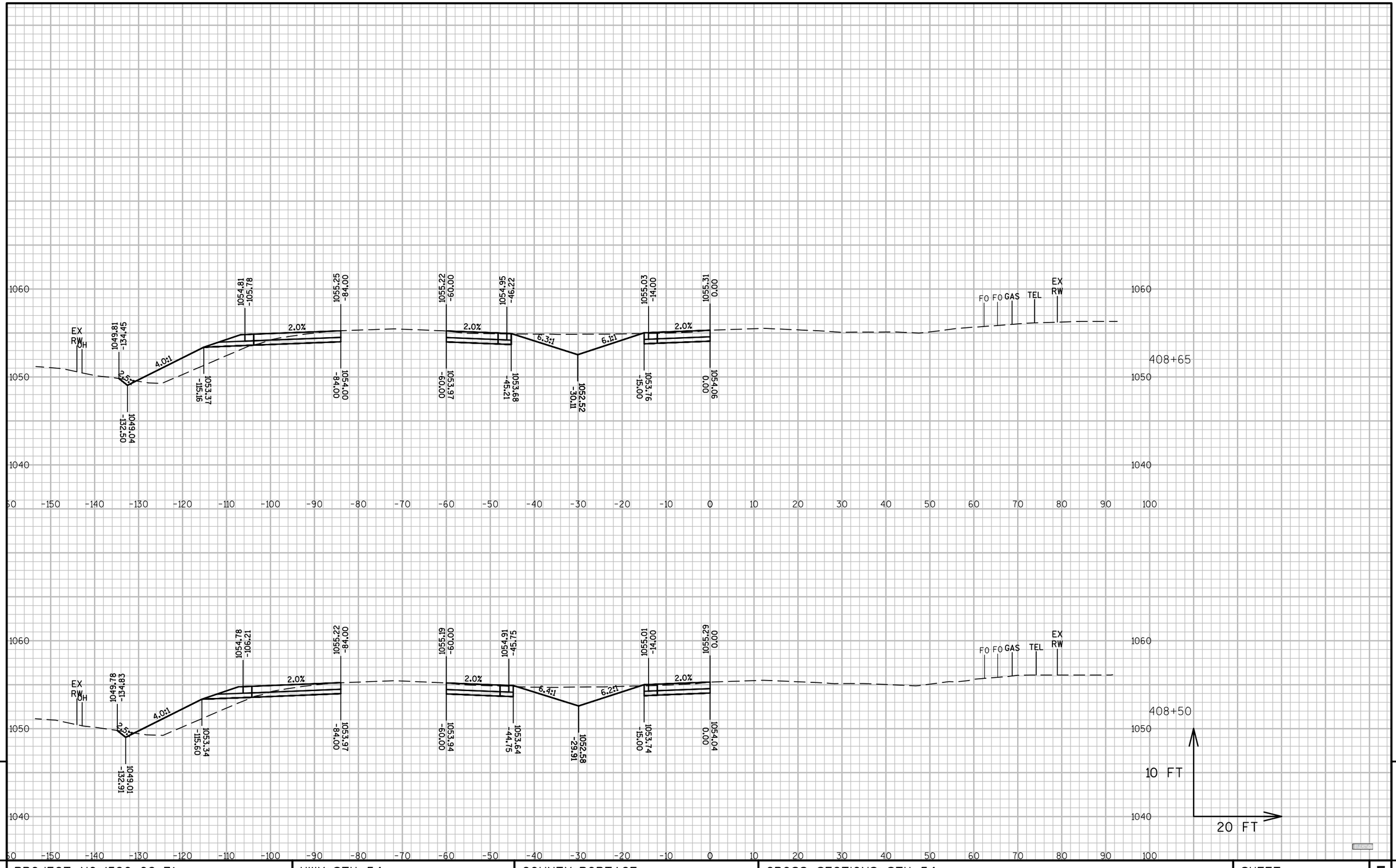


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 217 E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (31)

PLOT DATE : 3/11/2016 11:37 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49

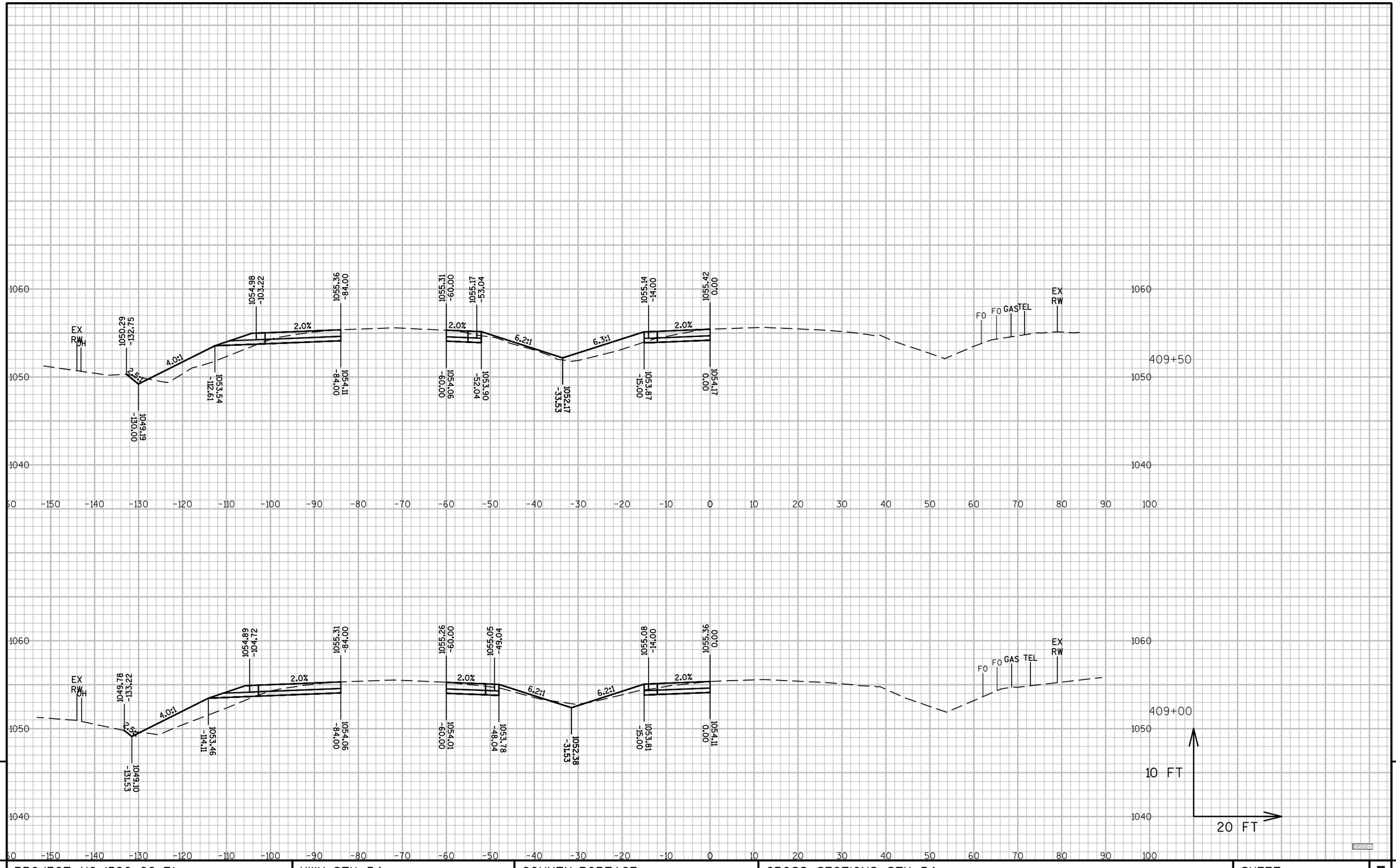


PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 218	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (32)

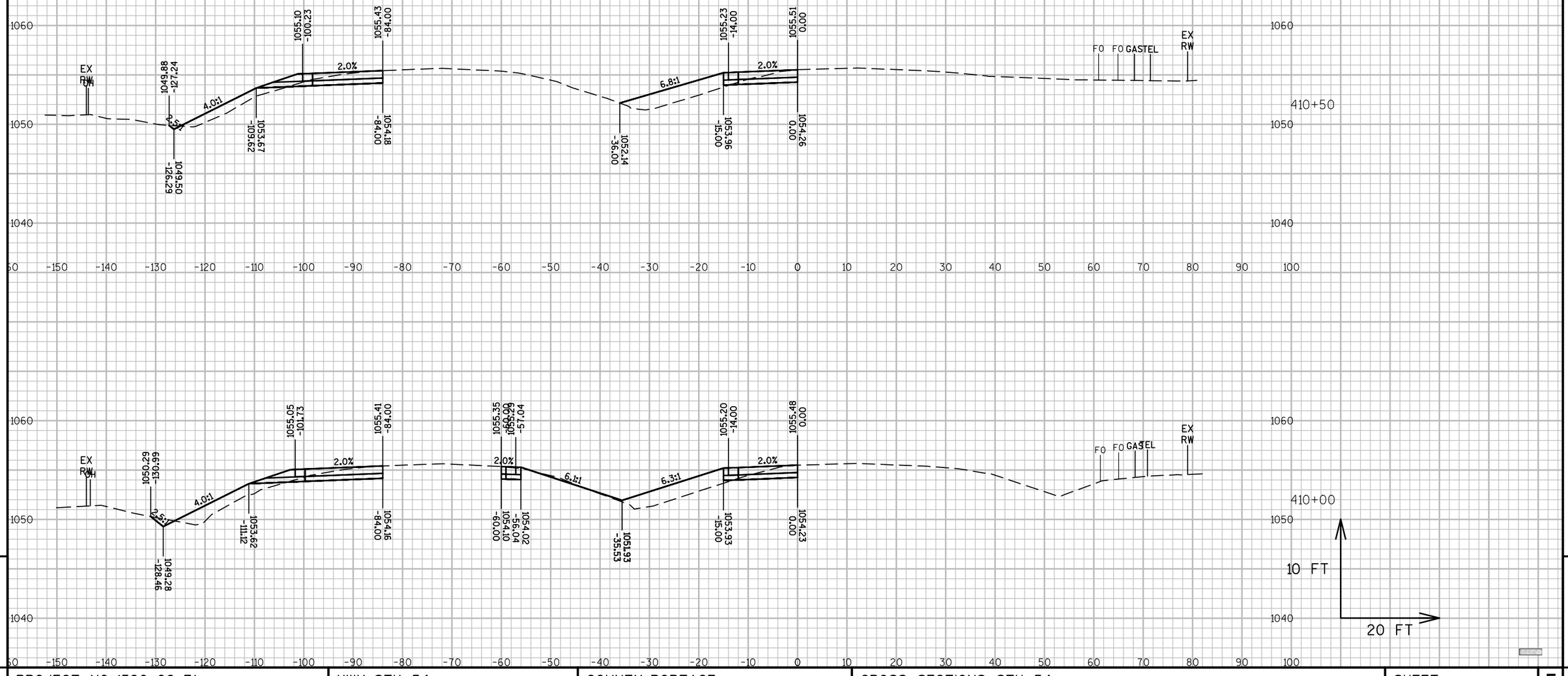
PLOT DATE : 3/11/2016 11:37 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 219	E



9

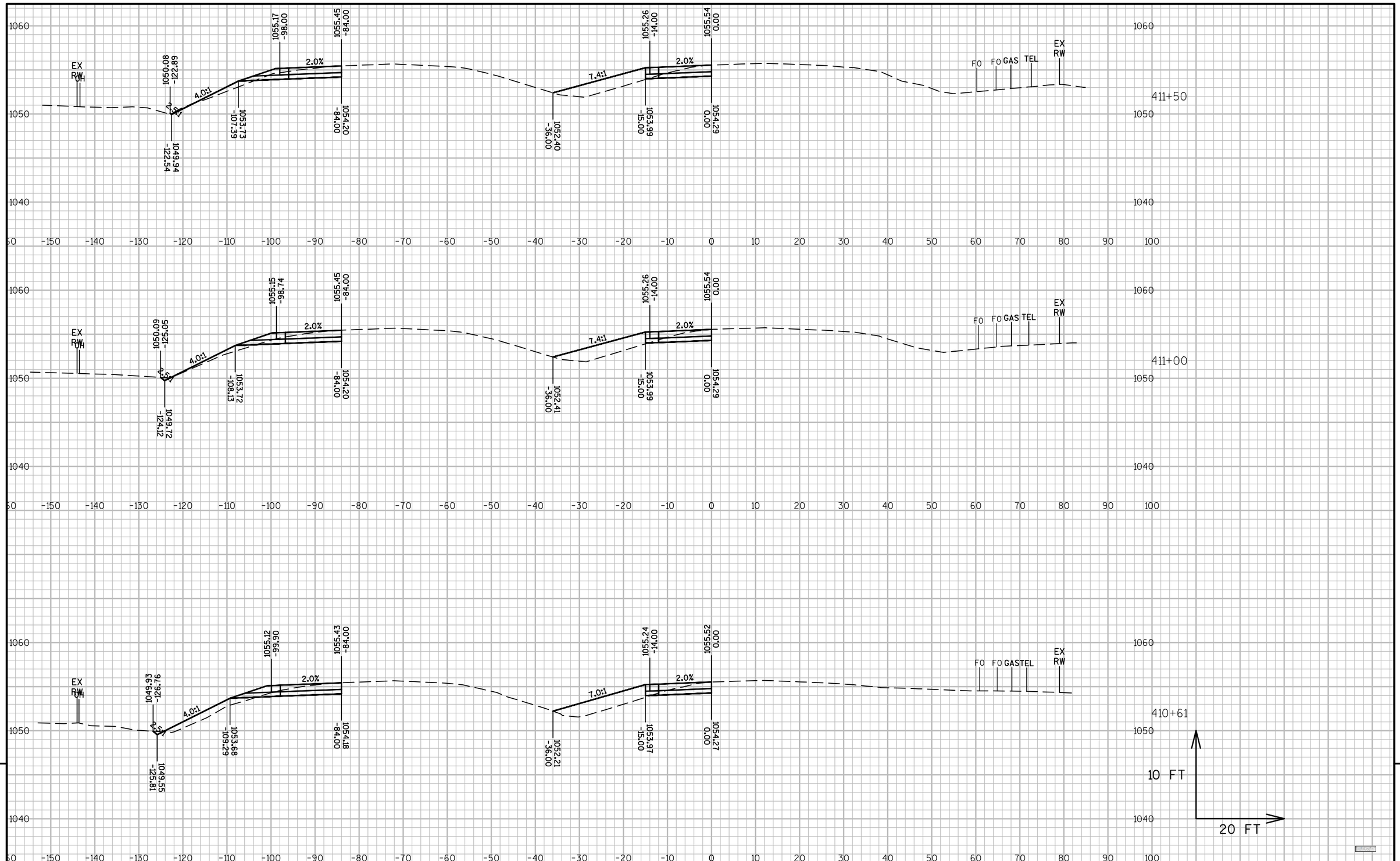
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 220	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - SECTION SHEET - (34)

PLOT DATE : 3/11/2016 11:38 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

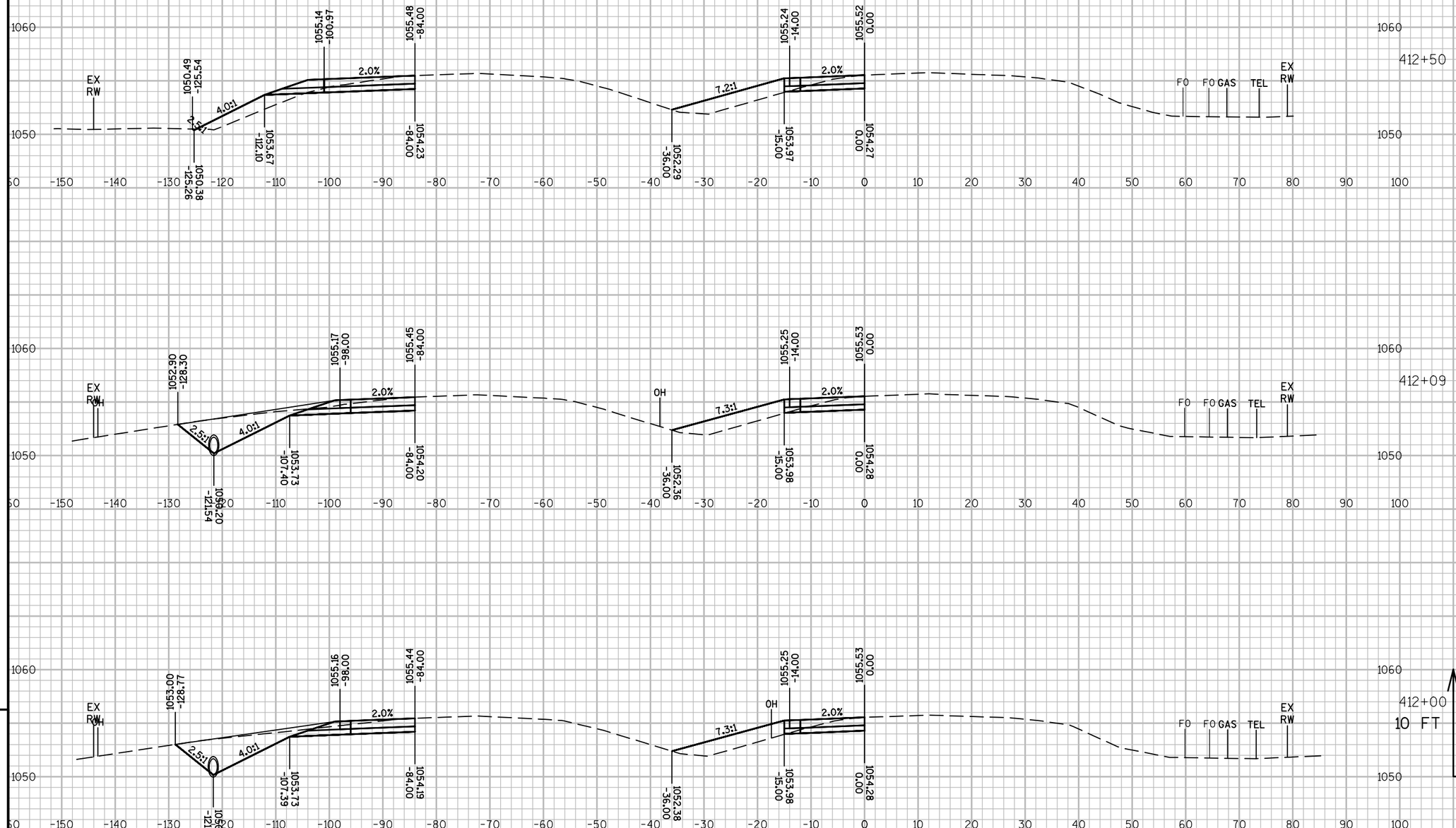
WISDOT/CADDS SHEET 49



9

9

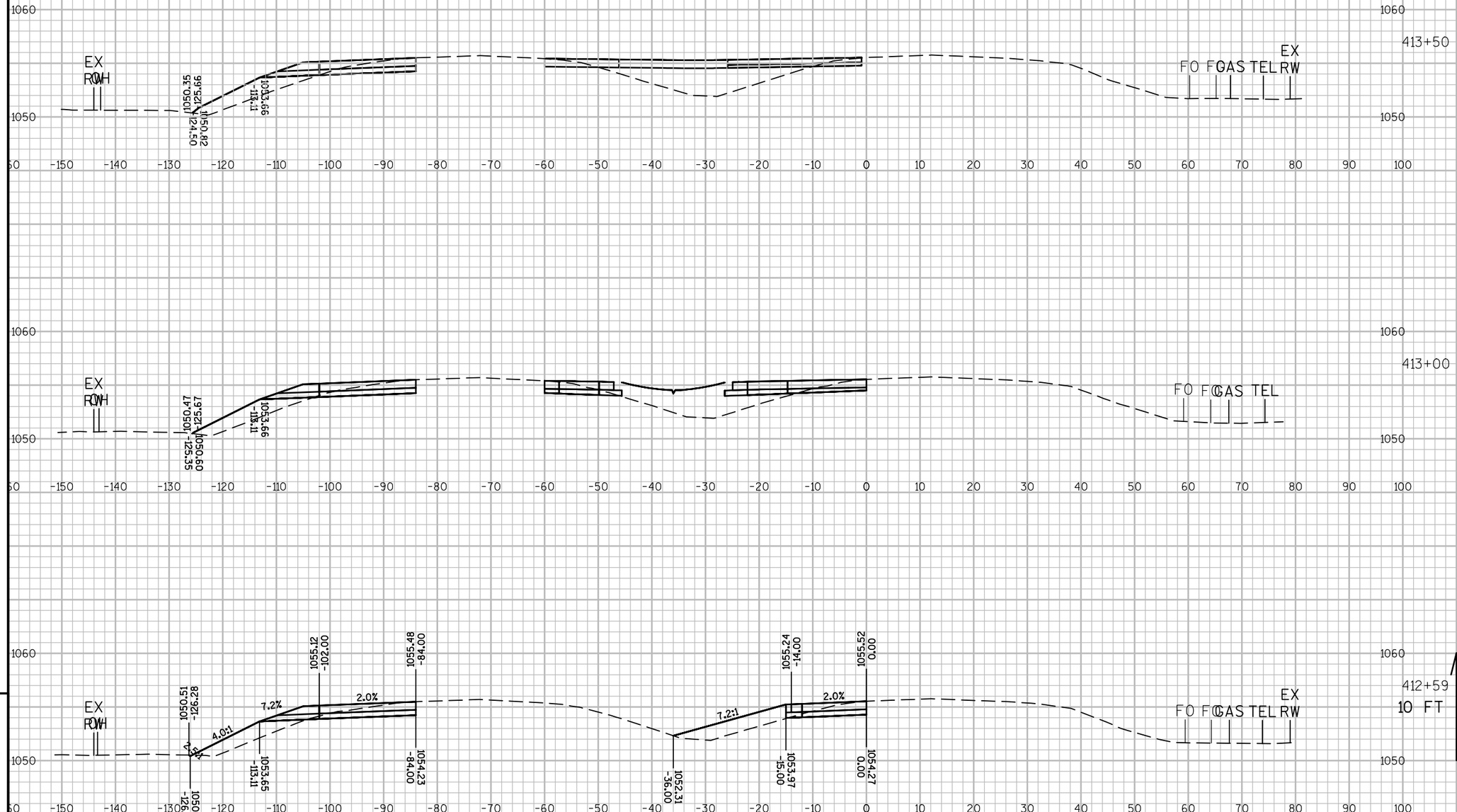
PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 221	E



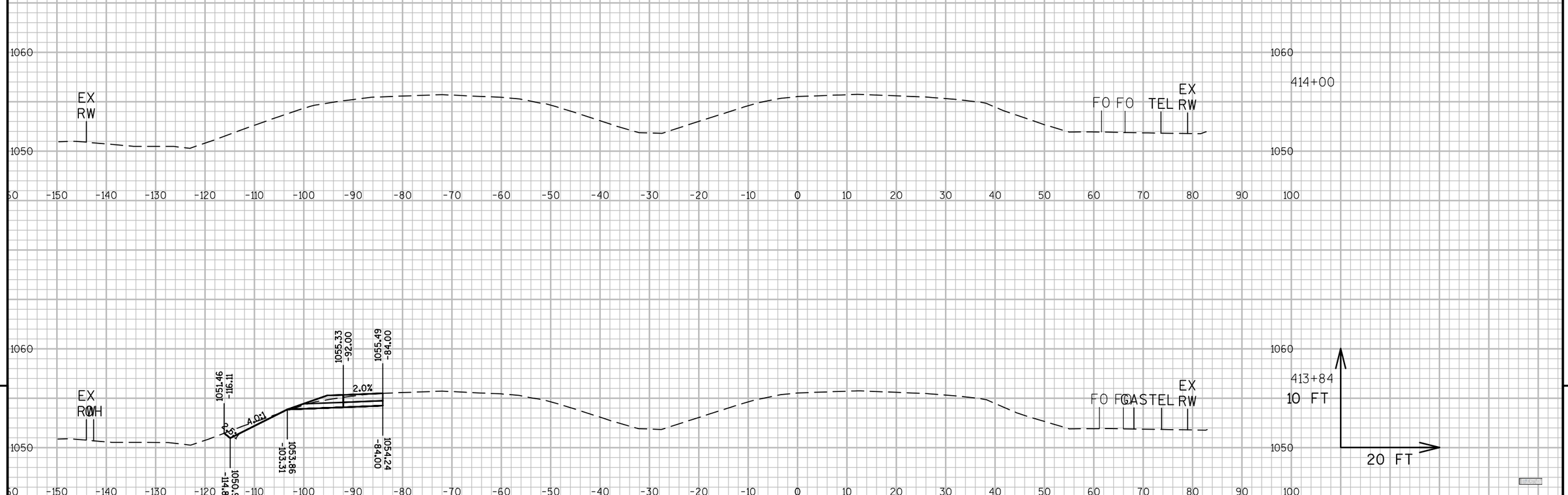
9

9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 222	E



PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 223 E



9

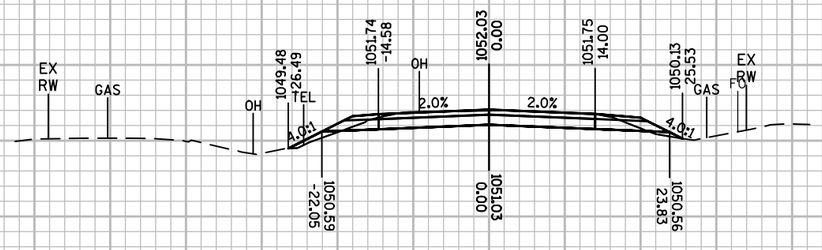
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: STH 54	SHEET 224	E

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	MASS ORDINATE NOTE 5
07+75	---	38	8	1	0	---	---	---	---	---	---	---
08+00	25	34	8	2	0	33	7	2	0	33	2	24
08+50	50	30	10	16	0	60	17	17	0	93	23	46
09+00	50	34	13	14	0	60	22	28	0	153	58	50
				COLUMN TOTALS		153	46	46	0			

STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)		
		CUT	UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT NOTE 1	UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	EBS	CUT 1.00 NOTE 1	EXPANDED FILL 1.25 NOTE 4	MASS ORDINATE NOTE 5
12+00	---	50	12	6	0	---	---	---	---	---	---	---
12+50	50	48	8	1	0	91	18	6	0	91	8	65
12+83	33	45	8	0	0	56	10	1	0	147	8	111
				COLUMN TOTALS		147	28	7	0			

NOTES:
1) CUT INCLUDES UNUSABLE PAVEMENT MATERIAL
2) UNUSABLE PAVEMENT MATERIAL DOES NOT APPEAR IN THE CROSS SECTIONS
3) FILL DOES NOT INCLUDE UNUSABLE PAVEMENT MATERIAL EXCAVATION VOLUME
4) EXPANDED FILL = UNEXPANDED FILL * EXPANDED FILL FACTOR. EXPANDED FILL FACTOR = 1.25
5) MASS ORDINATE = (CUT - UNUSABLE PAVEMENT MATERIAL) - (FILL * FILL FACTOR)



9

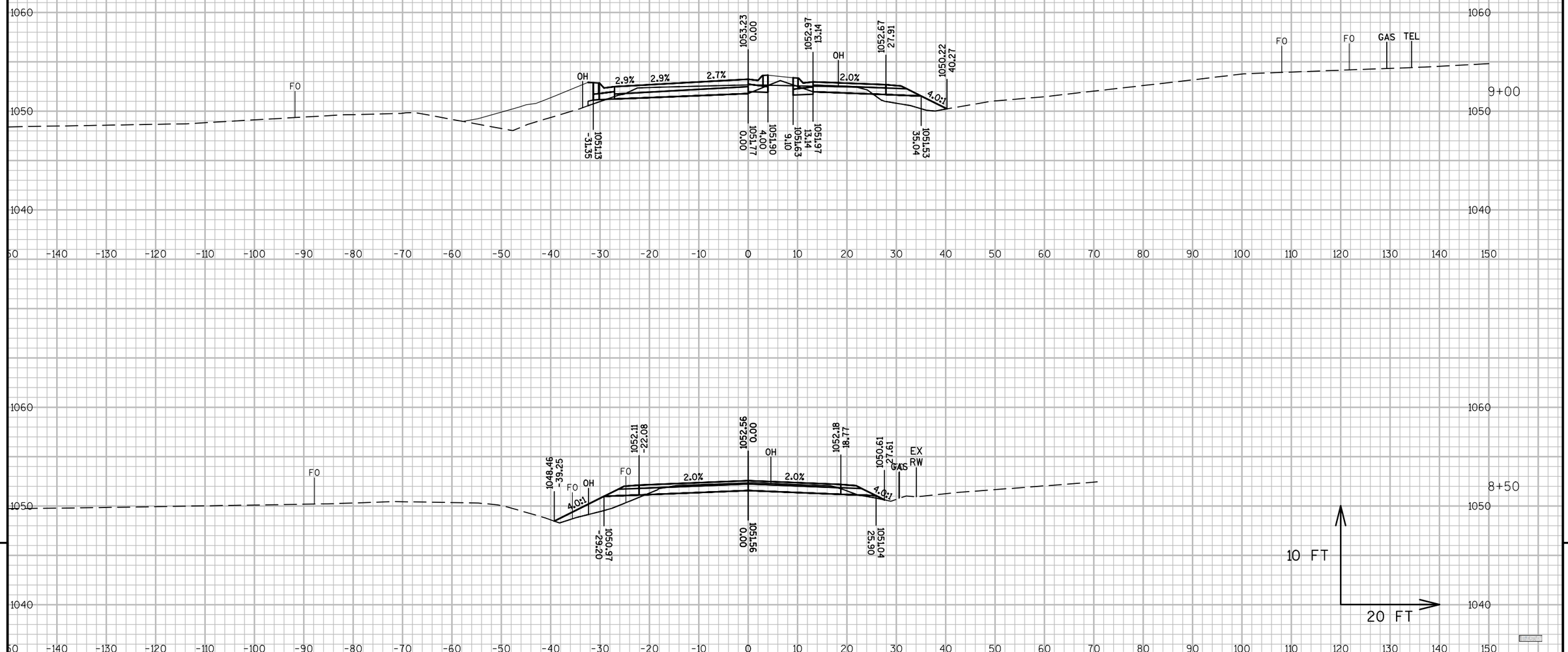
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: CTH U	SHEET 226	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (40)

PLOT DATE : 3/11/2016 11:42 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

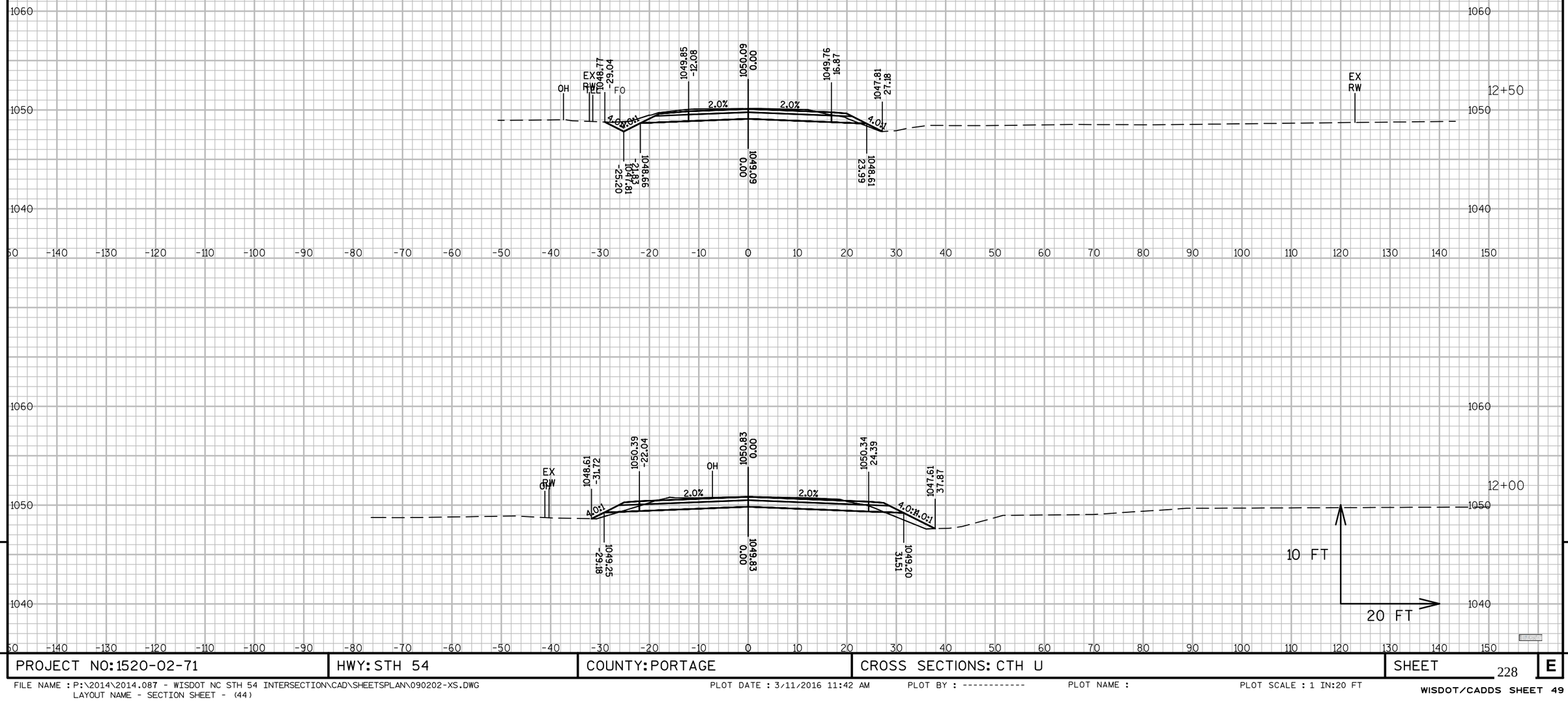
PROJECT NO: 1520-02-71 | HWY: STH 54 | COUNTY: PORTAGE | CROSS SECTIONS: CTH U | SHEET 227 | E

9

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (41)

PLOT DATE : 3/11/2016 11:42 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

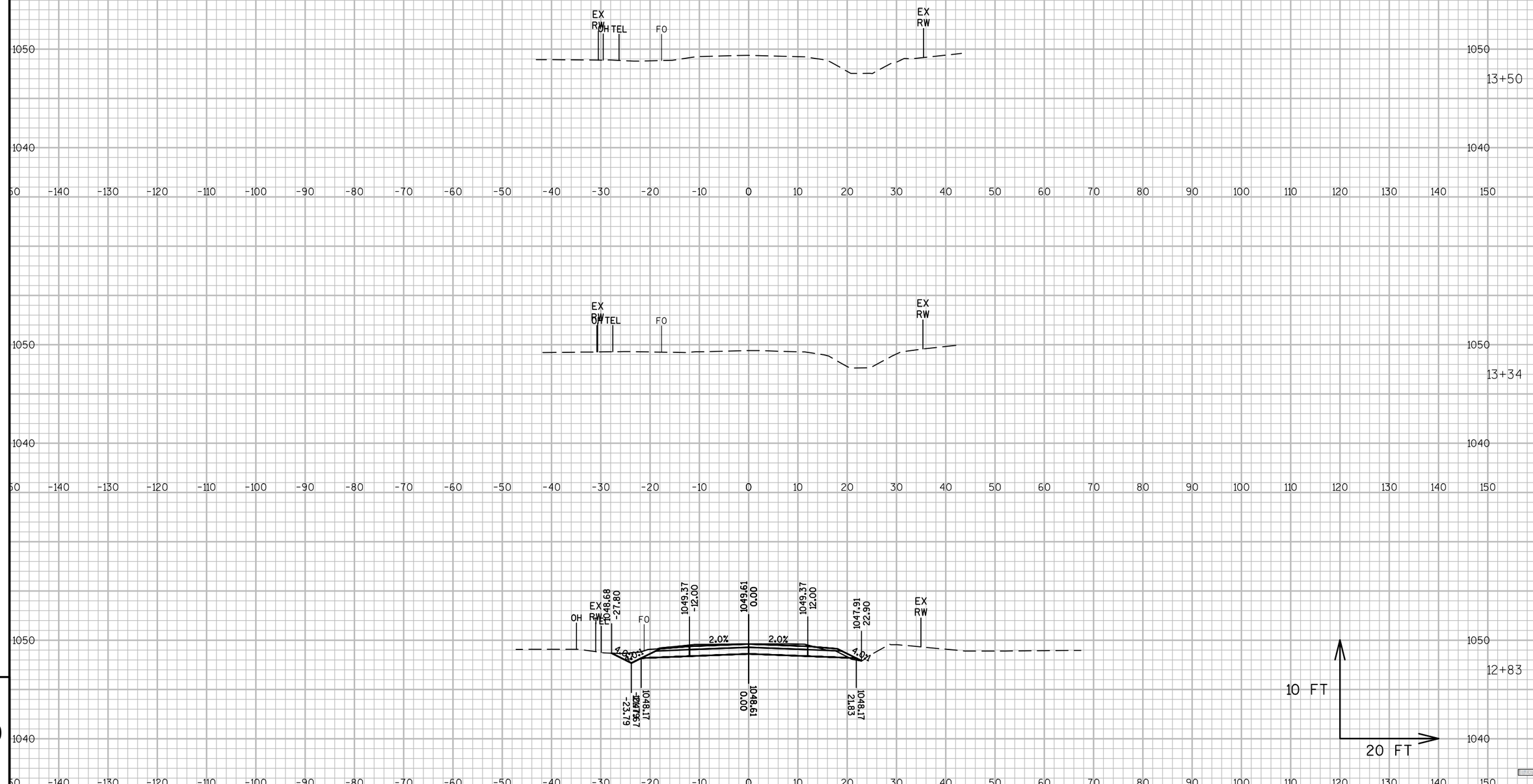
9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: CTH U	SHEET 228	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (44)

PLOT DATE : 3/11/2016 11:42 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1520-02-71	HWY: STH 54	COUNTY: PORTAGE	CROSS SECTIONS: CTH U	SHEET 229	E

FILE NAME : P:\2014\2014.087 - WISDOT NC STH 54 INTERSECTION\CAD\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - SECTION SHEET - (45)
PLOT DATE : 3/11/2016 11:42 AM PLOT BY : ---------- PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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